*Milford City Hall  Council Chambers  201 South Walnut Street  Milford DE 19963*

# CITY COUNCIL AGENDA
# September 25, 2023

Per the Limited Public Health Emergency Declaration issued by Governor John Carney on March 1, 2022, and the virtual meeting provisions provided in Senate Bill 94, Milford City Council Meetings and Workshops will be held in the Council Chambers at City Hall. Attendees are welcome to participate virtually as well. Public Comments are encouraged on the agenda items designated with a ℗. Virtual attendees may alert the City Clerk that they wish to speak by submitting their name, address, and agenda item via the Zoom Q&A function or by using the Raise Your Hand function during the meeting. Those attending in person may comment when the floor is opened for that purpose.
All written public comments received prior to the meeting will be read into the record.

*This meeting is also available for viewing by the public by accessing the following link:*
*https://zoom.us/j/94877121629*
*or*
*http://www.cityofmilford.com/553/Watch-Public-Meetings*

*Members of the public may also dial in by phone using the following number:*
*Call 301 715 8592  Webinar ID: 948 7712 1629*

**6:00 PM**
**15-Minute Public Comment Period***
Virtual attendees must register prior to start time of meeting by calling 302-422-1111 Extension 1300 or 1303, or by sending an email to cityclerk@milford-de.gov and providing your name, address, phone number, and item name and/or description you wish to comment on. Persons in attendance that wish to speak must sign up prior to the start of the Council Meeting.

# COUNCIL MEETING

Call to Order - Mayor Archie Campbell

Invocation

Pledge of Allegiance

Roll Call

Recognition
- New City Employee Recognition

Ordinance Final Action/Public Hearings/Public Comments ℗

- Adoption/ Ordinance 2023-33

Preliminary Conditional Use Site Plan Application of Helmick Milford – Fast Food
1.024 +/- acres of land located at the southwest
corner of Warner Road and US Route 113
Comprehensive Plan Designation: Commercial
Zoning District: C-3 (Highway Commercial District)
Present use: Vacant Proposed Use: Fast Food Restaurant & Drive-in Restaurant
Tax Parcel: MD-16-174.14-01-03.02

Adoption/Ordinance 2023-34
Preliminary Conditional Use Site Plan Application of Milford School District/Milford Middle School
23.97 +/- acres of land located on the
south side of Lakeview Avenue, approximately 875 feet east of the Route 113 Intersection
Address: 512 Lakeview Avenue
Comprehensive Plan Designation: Low Density Residential
Zoning District: R-1 (Single-Family Residential District)
Present and Proposed Use: Public School
Tax Parcel: 1-30-3.07-138.00 & 138.01

Adoption/Ordinance 2023-35
Conditional Use Application of Food Bank of Delaware
11.5 +/- acres of land
West Side of Delaware Veterans Boulevard within the Independence Commons Business Park
Address: 102 Delaware Veterans Boulevard
Comprehensive Plan Designation: Commercial
Zoning District: OC-1 (Office Complex District)
Present and Proposed Use: Charitable and Philanthropic Organization
Tax Parcel: MD-16-173.00-01-02.08

Adoption/Ordinance 2023-36
Conditional Use Application of James Purcell
0.31 +/- acres
South Side of Kings Highway between South Walnut Street and Polk Avenue
Address: 102 Kings Highway
Comprehensive Plan Designation: Low Density Residential
Zoning District: R-1 (Single-Family Residential District)
Present Use: Single-Family Dwelling
Proposed Use: Single Family Dwelling with Accessory Dwelling Unit
Tax Parcel: 1-30-3.08-063.00

Adoption/Ordinance 2023-37
Legal Owner Mispillion Realty LLC for a Change of Zone from
R-1 (Single-Family Residential District) to C-3 (Highway Commercial)
on 1.73 +/- acres of land located along the east side of S. Dupont Boulevard approximately 235 feet north of the Donovan Street Intersection
Address: 839 South DuPont Boulevard, Milford, DE
Present Use Single-family Detached Dwelling & Vacant Lot;
Proposed Use Single-family Detached Dwelling
Tax Map & Parcels 1-30-3.15-014.00 & 1-30-3.15-015.00

Communication & Correspondence

Monthly Finance Report

Unfinished Business

South Walnut Street Traffic Calming & Bike Pedestrian Study Presentation Ⓟ
Authorization/Downtown Public Restroom Purchase

New Business

Adoption/Resolution 2023-20/Lighthouse Estates Phase II/Acceptance of Right-of-Way Ⓟ
Adoption/Resolution 2023-21/Halloween Trick or Treat Observance Ⓟ
Introduction/Ordinance 2023-38/Removal of Electric Fees & Rates & Related Language [1]
Authorization/Bucket Truck/Chipper Body/Electric Capital Improvement Purchase [3]

Executive Session

Motion to Recess into Executive Session

Pursuant to 29 Del. C. §10004(b)(4) Strategy sessions, including those involving legal advice or opinion from an attorney-at-law, with respect to collective bargaining or pending or potential litigation [2]

Pursuant to 29 Del. C. §10004(b)(2) Preliminary discussions on site acquisitions for any publicly funded capital improvements, or sales or leases of real property

Return to Open Session

Potential Vote/Property Acquisition(s)
Vote/Collective Bargaining Agreement [2]

Adjournment

All items on the Council Meeting Agenda are subject to a potential vote.

**ALL SUPPORTING DOCUMENTS MUST BE SUBMITTED TO THE CITY CLERK IN ELECTRONIC FORMAT NO LATER THAN ONE WEEK PRIOR TO MEETING. NO PAPER DOCUMENTS WILL BE ACCEPTED, DISTRIBUTED, OR PRESENTED AT MEETING ONCE PACKET HAS BEEN POSTED ON THE CITY OF MILFORD WEBSITE. ANY MATERIALS UTILIZED DURING THE MEETING SHALL BE FROM THE COUNCIL PACKET AND REFERENCED BY PRESENTER USING AUDIO AND VISUAL MEANS TO ENSURE VIRTUAL PARTICIPATION BY ALL IN ATTENDANCE.**

*Time Limit is three minutes per speaker, not to exceed a total of fifteen minutes for all speakers prior to start of meeting/workshop.
Ⓟ Designated Items only; Public Comment, up to three minutes per person will be accepted.

061323 063023 070623 071023 072823 083123 090623 090823
[1] 092023 Electric Director/Late Addition/Time Sensitive Matter; Item transferred to 10/09/2023 Agenda
[2] 092223 Late Addition/City Manager/Collective Bargaining Agreement Action Required
[3] 092423 Late Addition/Public Works Director/Time Sensitive Matter



# CITY OF MILFORD
# NOTICE OF PUBLIC HEARINGS

Planning Commission Hearing: Tuesday, September 19, 2023 @ 6:00 p.m.
City Council Hearing: Monday, September 25, 2023 @ 6:00 p.m.

NOTICE IS HEREBY GIVEN that the proposed Ordinance is currently under review by the City of Milford Planning Commission and City Council. City Council has the option to approve or deny the application. By not adopting the ordinance, City Council will deny the application. By adopting the ordinance, City Council will approve the application and the reason for the language being written in the affirmative.
This form of writing is not used to influence any decision of City Council:

**ORDINANCE 2023-33**

Preliminary Conditional Use Site Plan Application of Helmick Milford – Fast Food
1.024 +/- acres of land located at the southwest
corner of Warner Road and US Route 113
Comprehensive Plan Designation: Commercial
Zoning District: C-3 (Highway Commercial District)
Present use: Vacant Proposed Use: Fast Food Restaurant & Drive-in Restaurant
Tax Parcel: MD-16-174.14-01-03.02

WHEREAS, the owner of the property as above described herein have petitioned the City of Milford for a Preliminary Conditional Use Site Plan for a two-unit/multi-use structure; and

WHEREAS, the City of Milford Planning Commission will consider the application at a Public Hearing on September 19, 2023; and

WHEREAS, Milford City Council will hold a Public Hearing on September 25, 2023 to allow for public comment and further review of the ordinance; and

WHEREAS, it is deemed in the best interest of the City of Milford to approve the Preliminary Conditional Use Site Plan, as herein described.

NOW, THEREFORE, the City of Milford hereby ordains as follows:

Section 1. Chapter 230-45 states "in any and all districts, multiple permitted uses or mixed use of a property shall be deemed a conditional use subject to special requirements," when approved by City Council.

Section 2. Fast-food restaurants and drive-in restaurants are permitted uses within the C-3 zoning district.

Section 3. Following adoption of Ordinance 2023-33, and upon the effective date, Helmick Milford, LLC is hereby granted a Preliminary Conditional Use Site Plan approval to construct a 4,812 square foot, 2-unit commercial structure, for use as a fast-food restaurant and a drive-thru restaurant, in accordance with the application, approved plans, and any conditions set forth at the Public Hearings.

Section 4. Preliminary approval from City Council shall be void after 24 months unless an extension is requested by the owner and approved for good cause by the Planning Commission prior to the expiration, otherwise the Preliminary Conditional Use Site Plan approval becomes void.

Section 5. Dates.
Planning Commission Review & Public Hearing: September 19, 2023

City Council Introduction: September 11, 2023
City Council Public Hearing: September 25, 2023
Effective: Ten days following Adoption by City Council

For additional information, please contact Rob Pierce in the Planning & Zoning Department either by e-mail at RPierce@milford-de.gov or by phone at 302.424.8396.

*Advertised: Delaware State News 09/03/2023*

PUBLIC WORKS FACILITY
180 Vickers Drive
Milford, DE 19963
www.cityofmilford.com

THE CITY of Milford DELAWARE

PLANNING DEPARTMENT
Planning, Economic Development,
Enforcement, and Inspections Office
O 302.424.8396 | F 302.424.3559

# DATA SHEET FOR HELMICK MILFORD – FAST FOOD

Planning Commission Meeting: September 19, 2023

| | | |
|---|---|---|
| **Application Number / Name** | : | 21-041 / Helmick Milford – Fast Food |
| **Applicant** | : | Helmick Milford, LLC<br>PO Box 162<br>Montchanin, DE 19710 |
| **Owner** | : | Same |
| **Application Type** | : | Preliminary Conditional Use Site Plan |
| **Comprehensive Plan Designation** | : | Commercial |
| **Zoning District** | : | C-3 (Highway Commercial District) |
| **Present Use** | : | Vacant |
| **Proposed Use** | : | Fast Food Restaurant & Drive-in Restaurant |
| **Area and Location** | : | 1.024 +/- acres of land located at the southwest corner of Warner Road and US Route 113, addressed as 997 N. Dupont Blvd. |
| **Property Identification Numbers** | : | MD-16-174.14-01-03.02 |

ENC: Staff Analysis Report
Exhibit A - Location & Zoning Map
Preliminary Site Plan

PUBLIC WORKS FACILITY
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THE CITY of Milford DELAWARE

PLANNING DEPARTMENT
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**STAFF ANALYSIS REPORT**
**August 28, 2023**

| | | |
|---|---|---|
| **Application Number / Name** | **:** | 21-041 / Helmick Milford – Fast Food |
| **Property Identification Numbers** | **:** | MD-16-174.14-01-03.02 |
| **Area and Location** | **:** | 1.024 +/- acres of land located at the southwest corner of Warner Road and US Route 113, addressed as 997 N. Dupont Blvd. |

## I. BACKGROUND INFORMATION:

- The applicant received preliminary site plan approval from the Planning Commission on January 18, 2022 and conditional use approval from City Council on January 24, 2022. Since the applicant did not obtain final site plan approval nor a preliminary site plan approval extension within 12 months, the preliminary approvals have expired.

- The applicant proposes to construct a 4,812 square foot, 2-unit commercial structure on the above referenced parcel as shown on the provided preliminary site plan. The applicant proposes a fast-food restaurant in one tenant space and a drive-in restaurant in the second tenant space.

- Per Chapter 230-45, "in any and all districts, multiple permitted uses or mixed use of a property shall be deemed a conditional use subject to special requirements." It should be noted "fast-food restaurants and drive-in restaurants" are permitted uses within the C-3 zoning district.

## II. STAFF ANALYSIS:

Based on the information presented, the City of Milford Code and the Comprehensive Plan, staff submits the following regarding the request for Preliminary Conditional Use Site Plan approval:

- The plans have been reviewed based on the updated zoning code and meet the minimum requirements for Chapter 230 Zoning and Chapter 200 Subdivision of Land. The applicant had to add a few additional trees and adjust the location of the islands within the parking lot. Otherwise, the plan remains the same from the previously approved Preliminary Conditional Use Site Plan.

- The updated plans have been reviewed for general compliance with the City's Standard Construction Specifications and the plan review comments from 2021 still apply. The applicant acknowledged plan review comments from the City Engineer and agrees to address these during the Final Site Plan submission process.

- Evaluation based on the criteria found under Chapter 230-48 Conditional Uses.

  A. The presence of adjoining similar uses.

     *The property is bound on the north and east by State maintained roads. The property to the west contains a movie theater and church and the property to the south contains a multiple tenant office building.*

  B. An adjoining district in which the use is permitted.

     *The proposed uses are permitted by-right within the C-3 zoning district when constructed individually.*

  C. There is a need for the use in the area proposed as established by the Comprehensive Plan.

     *The Comprehensive Plan designates the property as commercial for which the C-3 Highway Commercial zoning district is permissible. The purpose of the C-3 zoning district is to provide for larger-scale commercial uses that may require large amounts of parking space or have a high traffic impact. These uses generally require locations on major arterial routes and serve both local and regional customers.*

  D. There is sufficient area to screen the conditional use from adjacent different uses.

     *The property is surrounded by other similar commercial uses and does not need screening.*

  E. The use will not detract from permitted uses in the district.

     *The proposed use is consistent with the purpose and intent of the C-3 Highway Commercial zoning district and should not detract from similar adjacent commercial uses.*

  F. Sufficient safeguards, such as traffic control, parking, screening and setbacks, can be implemented to remove potential adverse influences on adjoining uses.

     *The subject parcel is the site of a former fast-food restaurant which was demolished within the past few years. The proposed redevelopment would not require screening from adjacent similar commercial uses and the preliminary site plan meets the minimum parking and setback requirements. The site would be served by existing entrances on Route 113 and Warner Road which are State maintained.*

- The following comments must be addressed prior to final site plan approval;
  - Final Site Plan approval will require approvals or no objection letters from DelDOT, State Fire Marshal's Office, and Kent Conservation District;
  - Applicant must address Preliminary Site Plan review comments dated October 14, 2021 (a copy is provided in the packet);
  - Applicant must obtain final approval of engineering plans from the City Engineer; and
  - Address additional department and agency comments outlined in Section III.

## III. AGENCY & DEPARTMENT COMMENTS:

- **DelDOT Planning, Development Coordination**
  No comments provided

- **Delaware Health and Social Services – Division of Public Health**
  No comments provided.

- **Department of Natural Resources and Environmental Control (DNREC), Division of Water, Surface Water Discharges Section (SWDS)**
  No comments provided.

- **Kent Conservation District**
  No comments provided.

- **Delaware State Fire Marshal's Office**
  See attached comments.

- **Carlisle Fire Company**
  No comments provided.

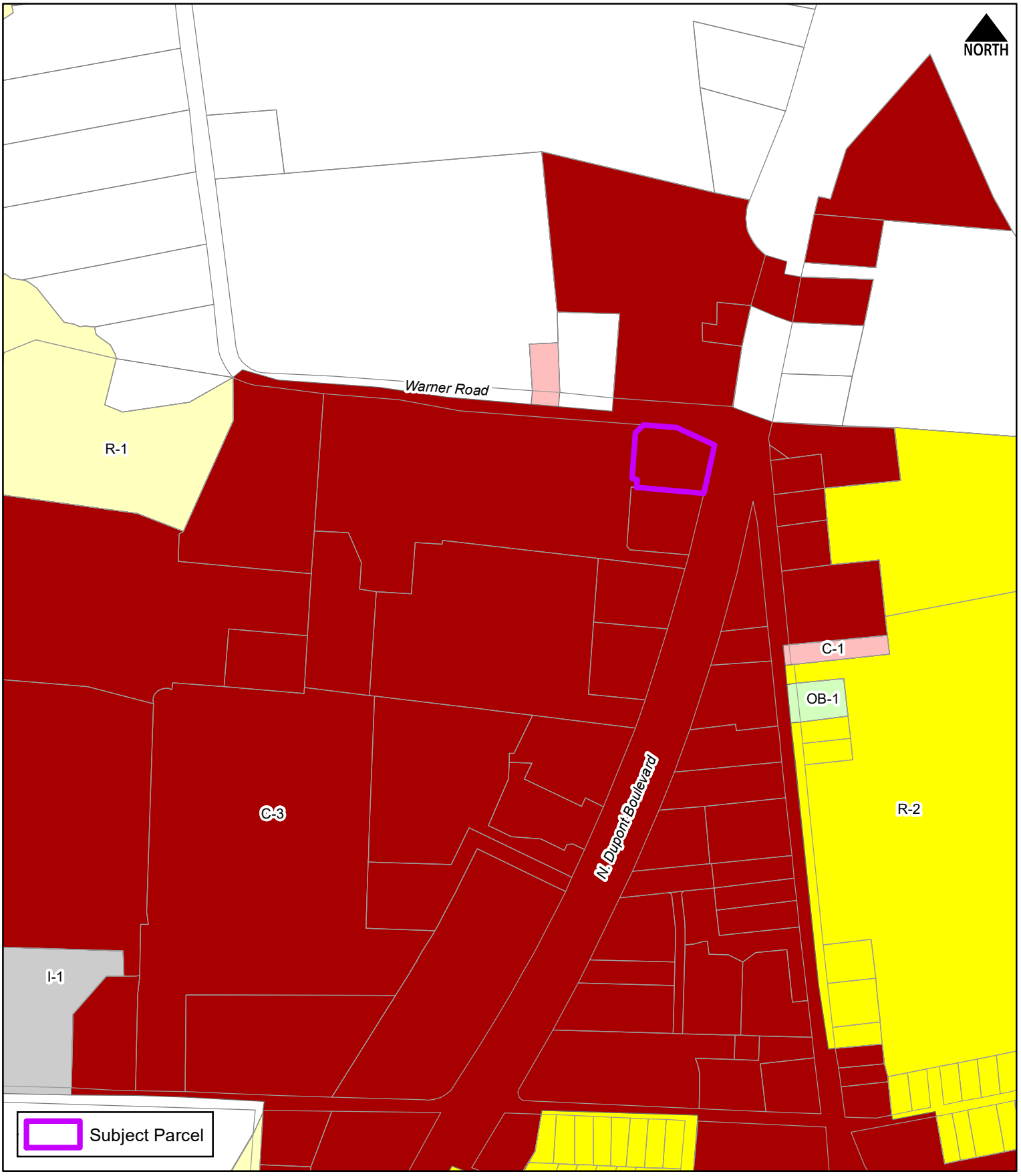
- **City Engineer**
  See attached Preliminary Site Plan review comments dated October 14, 2021 and the applicant's response.

- **City of Milford Public Works Department**
  No comments provided.

- **City of Milford Parks and Recreation Department**
  No comments provided.

- **City of Milford Police Department**
  No comments provided.

- **Milford School District**
  No comments provided.




THE CITY of Milford DELAWARE

Scale: 0 200 400 Feet

Drawn by: WRP

Date: 10/01/21

Filepath: PreSitePlan_HelmickMilford_FastFood.mxd

Title:

Preliminary Site Plan

**Helmick Milford, LLC - Fast Food**

Location & Zoning Map

## PLAN PURPOSE

THE PURPOSE OF THIS PLAN IS TO DEVELOP THE PARCEL WITH A FAST-FOOD AND DRIVE-IN RESTAURANT WITH ASSOCIATED DRIVE AISLES AND PARKING.

## GENERAL NOTES

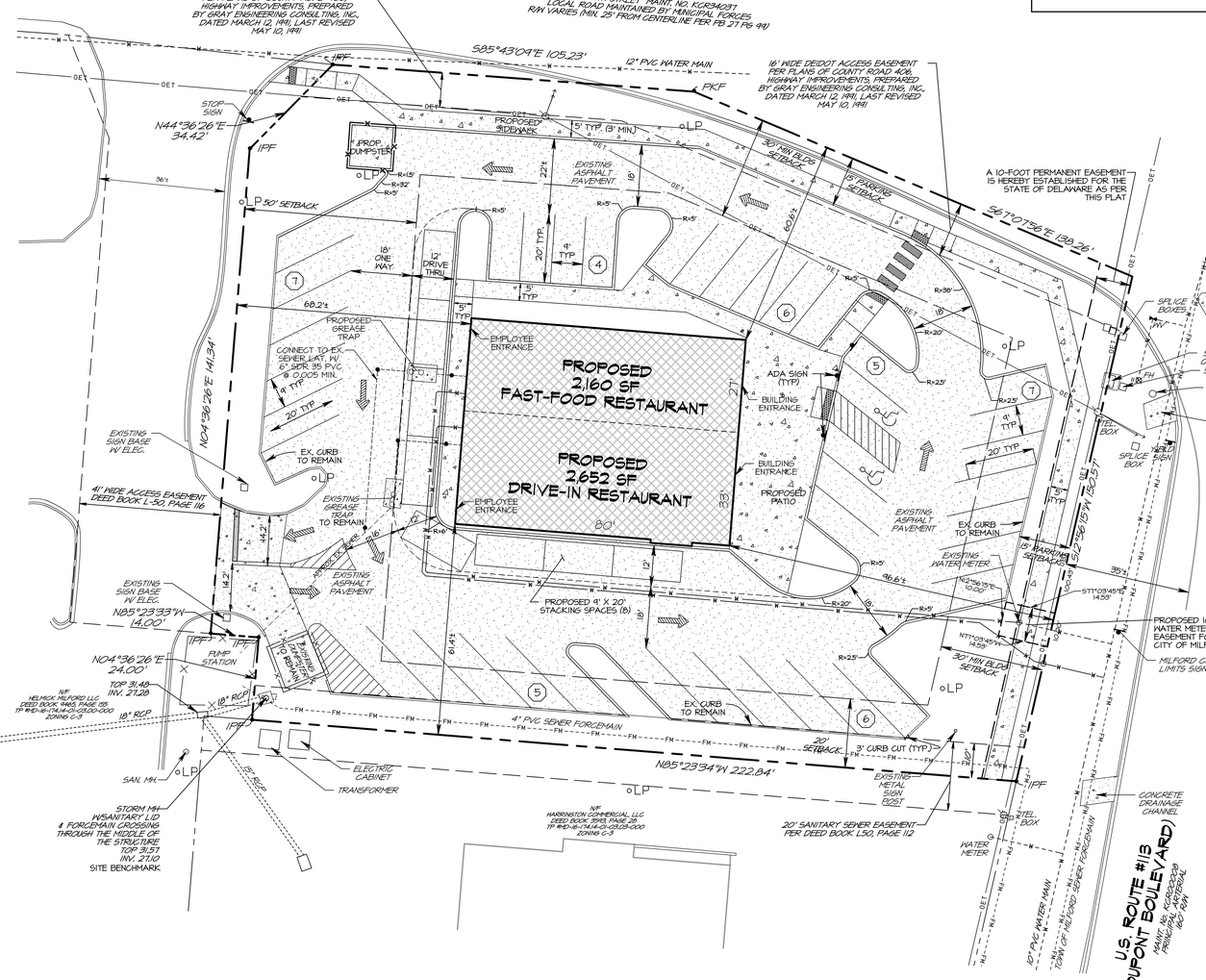
1. THE BOUNDARY INFORMATION SHOWN ON THESE DRAWINGS IS BASED ON A SURVEY PERFORMED BY HILLCREST ASSOCIATES, INC. ON AUGUST 2021.
2. HORIZONTAL DATUM IS BASED ON DELAWARE STATE GRID, NAD83/91, CONTROL MONUMENTS LEICA SMARTNET VIRTUAL RTK-VRN.
3. HYDRIC SOILS ARE NOT INDICATED AS BEING PRESENT ACCORDING TO THE SUSSEX COUNTY SOIL SURVEY.
4. EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION. COMPLETENESS OR CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES INVOLVED IN ORDER TO SECURE THE MOST ACCURATE INFORMATION AVAILABLE AS TO UTILITY LOCATION AND ELEVATION. NO CONSTRUCTION AROUND OR ADJACENT TO UTILITIES SHALL BEGIN WITHOUT NOTIFYING THEIR OWNERS AT LEAST 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE DONE TO THEM DUE TO HIS/HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE. TO LOCATE EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS UTILITY DELMARVA (800-282-8555) A MINIMUM OF THREE (3) CONSECUTIVE WORKING DAYS PRIOR TO ANY EXCAVATION.
5. ALL MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MATERIALS AND WORKMANSHIP SHALL MEET THE REQUIREMENTS OF THE CITY OF MILFORD STANDARD SPECIFICATIONS FOR INSTALLATION OF UTILITY CONSTRUCTION AND SUBDIVISION PAVEMENT DESIGN AND ALL APPLICABLE AGENCIES HAVING JURISDICTION OVER THE PROPOSED IMPROVEMENTS.
6. USE ONLY SUITABLE AND APPROVED GRANULAR MATERIAL FOR BACKFILLING TRENCHES.
7. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL RIGHT-OF-WAY LINES AND PROPERTY LINES TO HIS OWN SATISFACTION. ANY DISTURBED AREAS BEYOND THE RIGHT-OF-WAY OR EASEMENT LINES SHALL BE RESTORED IMMEDIATELY TO THEIR ORIGINAL CONDITION.
8. ALL VALVE CLOSURES AND CUT-INS SHALL BE COORDINATED WITH THE CITY. CITY OFFICIALS WILL CARRY OUT ALL NECESSARY VALVE CLOSURES. CONTRACTOR SHALL COORDINATE ISOLATION OF EXISTING WATER MAINS WITH THE CITY AND NOTIFY AFFECTED RESIDENTS AT LEAST 48 HOURS PRIOR TO CUT-IN.
9. PIPELINE DETECTION TAPE SHALL BE COLOR CODED, APPROPRIATELY LABELED, AND INSTALLED 18 INCHES BELOW THE GROUND SURFACE AND DIRECTLY ABOVE ALL PROPOSED NON-METALLIC WATER MAIN, SEWER MAIN, SEWER LATERALS, AND WATER SERVICES.
10. CONDUCTIVE TRACER WIRE SHALL BE INSTALLED WITH ALL NON-METALLIC WATER PIPE AND SERVICES; AND ALONG ALL SEWER LATERALS AND FORCEMAIN. WIRE SHALL BE SECURED TO THE PIPE AND SHALL BE SECURELY BONDED TOGETHER AT ALL WIRE JOINTS WITH APPROVED WATERTIGHT CONNECTORS. TRACER WIRE SHALL BE ACCESSIBLE AT ALL VALVE BOXES, METER PITS, CLEANOUTS, AND AIR RELEASE VALVES.
11. PRIOR TO ISOLATION AND CUT-IN PROCEDURES, CONTRACTOR SHALL EXCAVATE, LOCATE, AND OBSERVE FUNCTION OF ALL EXISTING VALVES TO ASSIST IN THE SYSTEM ISOLATION.
12. SHOP DRAWINGS FOR ANY ITEM(S) WHICH WILL EVENTUALLY BE TAKEN OVER BY THE CITY SHALL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE ORDERING OF AND/OR INSTALLATION OF THE ITEM(S).
13. ALL SANITARY SEWER MAINS AND FORCEMAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES AND ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 42 INCHES AS MEASURED FROM THE TOP OF PIPE TO PROPOSED GRADE. SEWER LATERALS SHALL HAVE MINIMUM DIAMETER OF SIX (6) INCHES AND HAVE A MINIMUM COVER OF 36 INCHES.
14. THERE SHALL BE A MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER MAINS AND FORCEMAINS OF 10 FEET, AS MEASURED FROM EDGE OF PIPE TO EDGE OF PIPE. THERE SHALL BE A MINIMUM VERTICAL SEPARATION OF 18 INCHES BETWEEN WATER MAINS AND SANITARY SEWERS OR FORCEMAINS AT CROSSINGS. ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE AT CROSSINGS.
15. THERE SHALL BE A MINIMUM VERTICAL SEPARATION OF 12 INCHES BETWEEN ANY STORM DRAINPIPE AND ANY WATER MAIN OR SEWER MAIN. IF 12 INCHES CANNOT BE MAINTAINED, A MINIMUM OF SIX (6) INCHES IS REQUIRED AND PROVISIONS SHALL BE MADE ACCEPTABLE TO THE CITY OF MILFORD FOR PROPERLY ENCASING THE PIPE IN CONCRETE.
16. BASED UPON F.E.M.A. FLOOD INSURANCE RATE MAP 10005C0041K, WITH EFFECTIVE DATE ON MARCH 16, 2015, THIS SITE IS NOT LOCATED WITHIN A FEMA FLOOD ZONE.ALL ROADWAYS ARE TO BE SWEPT FREE OF SEDIMENT ON A DAILY BASIS.
17. THE CONTRACTOR SHALL REMOVE AND IMMEDIATELY REPLACE, RELOCATE, RESET OR RECONSTRUCT ALL OBSTRUCTIONS IN THE WORK AREA, INCLUDING, BUT NOT LIMITED TO, MAILBOXES, SIGNS, LANDSCAPING, LIGHTING, PLANTERS, CULVERTS, DRIVEWAYS, PARKING AREAS, CURBS, GUTTERS, FENCES, OR OTHER NATURAL OR MAN-MADE OBSTRUCTIONS. TRAFFIC CONTROL REGULATORY, WARNING AND INFORMATIONAL SIGNS SHALL REMAIN FUNCTIONAL AND VISIBLE TO THE APPROPRIATE LANES OF TRAFFIC AT ALL TIMES WITH THEIR RELOCATION KEPT TO A MINIMUM DISTANCE.
18. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT PAVING IS INSTALLED TO THE ELEVATIONS SHOWN AND THAT NO PONDING OF WATER WILL OCCUR AFTER PAVING IS COMPLETE.
19. ALL FIRE LANES, FIRE HYDRANTS, EXITS, AND STANDPIPES WILL BE MARKED IN ACCORDANCE WITH STATE FIRE PREVENTION REGULATIONS.
20. DELAWARE REGULATIONS PROHIBIT THE BURIAL OF CONSTRUCTION DEMOLITION DEBRIS, INCLUDING TREES AND STUMPS ON CONSTRUCTION SITES. ANY SOLID WASTE FOUND DURING THE EXCAVATION FOR STRUCTURES AND UTILITY LINES ON AND OFF SITE MUST BE REMOVED AND PROPERLY DISCARDED. ANY REMEDIAL ACTION REQUIRED IS THE RESPONSIBILITY OF THE OWNER.
21. DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED AND ALL RULES AND REGULATIONS THERETO APPURTENANT.
22. CONTRACTOR SHALL GRADE, TOPSOIL, SEED AND MULCH ALL DISTURBED AREAS OF CONSTRUCTION, INCLUDING PIPE INSTALLATION OR DITCH CONSTRUCTION. EROSION CONTROL MATTING SHALL BE PROVIDED ON ALL SLOPES GREATER THAN 3:1.
23. THE OWNER AND/OR THEIR CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE SERVICES OF A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF DELAWARE FOR THE PERMANENTLY RE-ESTABLISHING OF ANY PROPERTY MARKERS OR MONUMENTS DISTURBED DURING CONSTRUCTION. A SURVEY AND METES AND BOUNDS THAT INCLUDES THE RE-ESTABLISHED MARKER(S) OR MONUMENT(S) SHALL BE PRESENTED TO THE PROPERTY OWNER FOR COMPARISON WITH THE ORIGINAL PLAT, FOR VERIFICATION.
24. THE OWNER SHALL BE RESPONSIBLE FOR THE SHORT-TERM MAINTENANCE OF THE ANY AND ALL STORMWATER MANAGEMENT FACILITIES AND STORM SEWER SYSTEMS UNTIL SUCH TIME THAT THE LONG-TERM MAINTENANCE RESPONSIBILITIES CAN BE TRANSFERRED TO A LEGALLY-ESTABLISHED HOMEOWNERS ASSOCIATION OR OTHER RESPONSIBLE ENTITY.
25. THE CITY OF MILFORD WILL ASSUME OWNERSHIP AND MAINTENANCE RESPONSIBILITY OF WATER AND SEWER PIPES AND APPURTENANCES, INSTALLED WITHIN CITY RIGHT-OF-WAY AND EASEMENTS DEDICATED TO THE CITY, STORM SEWER PIPES AND CATCH BASINS, INSTALLED FULLY WITHIN CITY RIGHT-OF-WAY; ONCE THE FOLLOWING CONDITIONS HAVE BEEN MET:
    A. ALL ITEMS HAVE PASSED CITY INSPECTION;
    B. THE CITY HAS RECEIVED AND APPROVED DIGITAL AND HARD COPIES OF THE RECORD DRAWINGS; AND
    C. THE RIGHTS-OF-WAY AND/OR EASEMENTS HAVE BEEN DEEDED TO THE CITY AND RECORDED WITH THE RECORDER OF DEEDS.
26. SEWER AND WATER CAPACITY ARE NOT GUARANTEED UNTIL BUILDING PERMITS ARE ISSUED, ALL FEES ARE PAID AND SUITABLE UTILITIES ARE IN PLACE FOR PROPER CONVEYANCE, TREATMENT AND DISPOSAL.
27. PRELIMINARY APPROVAL FROM PLANNING COMMISSION SHALL BE VOID AFTER ONE (1) YEAR, UNLESS AN EXTENSION IS REQUESTED BY THE OWNER AND APPROVED, FOR GOOD CAUSE, BY THE PLANNING COMMISSION PRIOR TO THE DATE OF EXPIRATION.
28. THE APPROVAL OF A CONDITIONAL USE IS VALID FOR ONE YEAR. UNLESS PERMITS ARE OBTAINED OR CONSTRUCTION OR USE IS SUBSTANTIALLY UNDERWAY, ALL PROVISIONS OF THE CONDITIONAL USE ARE AUTOMATICALLY RESCINDED.
29. FINAL APPROVAL FROM THE CITY SHALL BECOME VOID IF THE FINAL RECORD PLAT IS NOT RECORDED WITHIN 90 DAYS OF THE DATE OF PLANNING COMMISSION'S GRANTING OF FINAL APPROVAL. IF CONSTRUCTION OF THE APPROVED IMPROVEMENTS IS NOT SUBSTANTIALLY UNDERTAKEN WITHIN ONE (1) YEAR OF FINAL SITE PLAN APPROVAL, THE SITE PLAN APPROVAL SHALL BE VOID. THE APPLICANT MAY REQUEST A ONE (1) YEAR EXTENSION FROM THE PLANNING COMMISSION FOR GOOD CAUSE.
30. THE APPLICANT IS RESPONSIBLE TO ENSURE THAT ALL CITY AND/OR AGENCY CONSTRUCTION PERMIT APPLICATIONS HAVE BEEN COMPLETED, SUBMITTED, AND ALL APPLICABLE FEES HAVE BEEN PAID PRIOR TO COMMENCING CONSTRUCTION. THE CITY SHALL NOT BE HELD RESPONSIBLE FOR AN ANTICIPATED CONSTRUCTION START DATE THAT IS NOT MET DUE TO THE APPLICANT OR HIS/HER CONTRACTOR NOT HAVING MET THE CONSTRUCTION PERMITTING REQUIREMENTS.
31. AS A CONDITION OF THE APPROVAL OF THE CONSTRUCTION DRAWINGS, AND PRIOR TO THE START OF CONSTRUCTION, THE APPLICANT MAY BE REQUIRED TO ENTER INTO A FORMAL PUBLIC WORKS AGREEMENT WITH THE CITY AND/OR TO POST A COMPLETION GUARANTY FOR ANY IMPROVEMENTS WHICH WILL EVENTUALLY BE TAKEN OVER BY THE CITY. THE GUARANTY SHALL BE IN AN AMOUNT EQUAL TO 150% OF THE COST OF THE IMPROVEMENTS AS ESTIMATED OR APPROVED BY THE CITY ENGINEER. THE GUARANTY SHALL BE IN THE FORM OF A BOND OR FUNDS DEPOSITED IN AN ESCROW ACCOUNT. THE PUBLIC WORKS AGREEMENT AND THE GUARANTY SHALL BE REVIEWED AND APPROVED BY THE CITY SOLICITOR. THE COMPLETION GUARANTEE SHALL NOT BE RELEASED UNTIL A MAINTENANCE BOND IN THE AMOUNT OF 10% OF THE IMPROVEMENTS HAS BEEN SUBMITTED.
32. A MAINTENANCE BOND IN THE AMOUNT OF 10% OF THE CONSTRUCTION VALUE FOR ANY CONSTRUCTED IMPROVEMENTS AND A PERFORMANCE BOND IN THE AMOUNT OF 125% OF THE CONSTRUCTION VALUE FOR ANY UNCOMPLETED WORK SHALL BE PROVIDED IN ORDER TO ACHIEVE FINAL COMPLETION OF THE IMPROVEMENTS AND RELEASE OF ANY COMPLETION GUARANTY. THE MAINTENANCE PERIOD SHALL BE A MINIMUM OF ONE YEAR AND ALL CONSTRUCTION VALUES MUST BE SUBMITTED TO, REVIEWED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE ISSUANCE OF ANY BONDS.
33. UPON COMPLETION OF THE CONSTRUCTION IMPROVEMENTS AND PRIOR TO THE RELEASE OF ANY DEVELOPER'S COMPLETION GUARANTEE, THE DEVELOPER SHALL PROVIDE THE CITY ENGINEER A DRAFT PAPER SET OF DETAILED RECORD PLANS (PLAN VIEW AND PROFILE SHEETS). RECORD INFORMATION SHALL BE PLACED ON THE APPROPRIATE APPROVED DRAWINGS. ORIGINAL DESIGN ELEVATION AND/OR DISTANCE INFORMATION SHALL BE STRUCK THROUGH WITH A FINE LINE AND THE RECORD INFORMATION SHALL BE INSERTED NEXT TO IT. WHEN THE DRAFT SET OF DRAWINGS HAS BEEN APPROVED BY THE CITY, THREE (3) FINAL PAPER COPIES SHALL BE SUBMITTED, SIGNED AND SEALED BY THE OWNER'S ENGINEER OR SURVEYOR. ADDITIONALLY, A CD SHALL BE PROVIDED WITH DIGITAL RECORD INFORMATION IN AUTOCAD FORMAT (VERSION 2018 OR LATER). THE DIGITAL INFORMATION SHALL BE ON DELAWARE STATE PLANE, NAD 83 HORIZONTAL CONTROL AND NAVD88 VERTICAL CONTROL. RECORD PLAN INFORMATION SHALL INCLUDE SURVEYED AS-BUILT ELEVATIONS AND HORIZONTAL LOCATIONS OF THE FOLLOWING:
    A. ALL PROPERTY MONUMENTS/MARKERS;
    B. SEWER MANHOLE RIM & INVERT ELEVATIONS, WITH ASSOCIATED PIPE SIZES & MATERIALS NOTED, PUMP STATION RIM, BOTTOM & INVERT ELEVATIONS WITH ASSOCIATED PIPE SIZES & MATERIALS NOTED, FORCEMAIN INVERT ELEVATIONS EVERY 50 FEET, FORCEMAIN AIR RELEASE VALVE RIM & INVERT ELEVATIONS, SEWER CLEANOUT RIM & INVERT ELEVATIONS, AND GREASE TRAP RIM, BOTTOM & INVERT ELEVATIONS;
    C. WATER VALVES, FIRE HYDRANTS, METER VAULTS, METER PITS, AND CURB STOPS;
    D. STORM SEWER CATCH BASIN AND/OR MANHOLE GRATE RIM & INVERT ELEVATIONS WITH ASSOCIATED PIPE SIZES & MATERIALS NOTED; AND
    E. ANY OTHER ITEM WHICH WILL BE TAKEN OVER BY THE CITY.
34. THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT AT (302) 422-1110 A MINIMUM OF TWO WEEKS PRIOR TO THE START OF CONSTRUCTION AND SCHEDULE A PRE-CONSTRUCTION MEETING. THE SITE CONTRACTOR AND THE OWNER, OR HIS/HER REPRESENTATIVE SHALL BE IN ATTENDANCE.
35. ACCORDING TO KENT COUNTY ONLINE MAPPING NO WATER RESOURCE PROTECTION AREA EXISTS ON THIS PARCEL.
36. ACCORDING TO KENT COUNTY ONLINE MAPPING NO STATE OR FEDERAL WETLANDS EXIST ON THE PARCEL, HOWEVER NO WETLAND DELINEATION WAS PERFORMED AS PART OF PREPARING THIS PLAN.

## DRAWING INDEX:

| DWG # | PLAN |
|---|---|
| 1 of 2 | PRELIMINARY SITE PLAN |
| 2 of 2 | EXISTING CONDITIONS/DEMOLITION PLAN |

## CONDITIONAL USE APPLICATION NUMBER 21-041

A CONDITIONAL USE WAS APPROVED BY THE CITY COUNCIL ON JANUARY 24, 2022 TO PERMIT MULTIPLE PERMITTED USES OR MIXED USES OF A PROPERTY WITHIN THE C-2 (HIGHWAY COMMERCIAL) ZONING DISTRICT.




0 5 10 20 40 60
GRAPHIC SCALE

BEFORE YOU DIG
ANYWHERE IN *DELAWARE*
STOP CALL 1-800-282-8555
OUTSIDE DELAWARE CALL 1-800-441-8355
REQUIRES 3 WORKING DAYS NOTICE BEFORE YOU EXCAVATE
MISS UTILITY OF DELMARVA

## ENGINEER STATEMENT

I HEREBY STATE THAT I AM A REGISTERED ENGINEER IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ENGINEERING PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

8-14-23

R. MATTHEW LONGO, P.E. — DATE
DE LICENSE NO. 13748

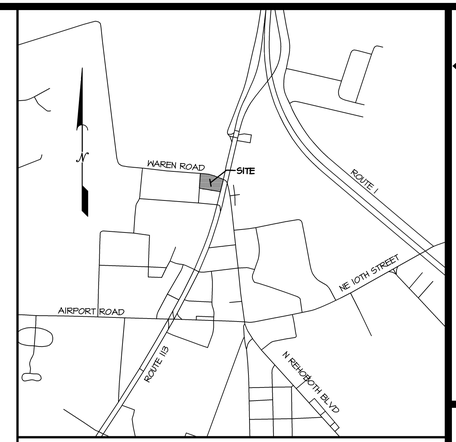
## OWNER/DEVELOPER CERTIFICATION

WE HEREBY CERTIFY THAT WE ARE THE OWNER OF THE PROPERTY SHOWN ON THIS PLAN, THAT THE PLAN WAS MADE AT OUR DIRECTION AND WE ACKNOWLEDGE THE SAME TO BE OUR ACT, AND DESIRE THE PLAN TO BE DEVELOPED AS SHOWN IN ACORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.

ART HELMICK, MANAGING MEMBER
HELMICK MILFORD LLC

## LEGEND

- PROPERTY BOUNDARY
- ADJOINING PROPERTY
- EXISTING EASEMENT
- EXISTING EDGE OF PAEMENT
- EXISTING FENCE
- BUILDING SETBACK LINE
- EXISITING CURB
- EXISTING PAVEMENT
- EXISTING FORCE MAIN (FM)
- EXISTING STORM PIPE WITH INLET
- PROPOSED BUILDING
- PROPOSED EDGE OF PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED CURB
- PROPOSED PARKING COUNT (7)




LOCATION MAP — SCALE: 1"= 2000'

## DATA COLUMN

| | | |
|---|---|---|
| 1. | TAX PARCEL NUMBER(S): | MD-16-174.14-01-03.02-000 |
| | SITE ADDRESS | 987 N DUPONT BLVD MILFORD, DE 19963 |
| | DEED REFERENCE: | DEED BOOK 4742, PAGE 248 |
| | OWNER/ DEVELOPER: | HELMICK MILFORD LLC PO BOX 162 MONTCHANIN, DE 19710 (302) 530-5151 |
| 2. | TOTAL TRACT AREA: | 1.024 ACRES |
| 3. | CURRENT ZONING DISTRICT: | C3 (HIGHWAY COMMERCIAL DISTRICT) |
| 4. | EXISTIING USE: | DRIVE-IN RESTAURANT |
| 5. | PROPOSED USE: | DRIVE-IN RESTAURANT AND FAST-FOOD RESTAURANT |

## AREA AND BULK TABULATION

| | | REQUIRED (C3) | PROPOSED |
|---|---|---|---|
| A. | MINIMUM LOT AREA: | 1 ACRE | 1.024 ACRES |
| B. | MAXIMUM LOT COVERAGE: | 80% | 73.1% |
| C. | MINIMUM LOT WIDTH: INTERIOR: | 150 FT | EX. 150 FT |
| | CORNER: | 170 FT | |
| D. | MAXIMUM HEIGHT OF BUILDING: | 35 FT OR THREE STORIES | 20 FT. |
| E. | MINIMUM BUILDING SETBACK: | 30 FT | 96.6 FT ± |
| F. | MINIMUM SIDE YARD: | 20 FT MIN. 50 FT AGG. | 60.6 FT ± |
| G. | MINIMUM REAR YARD: | 50 FT | 68.2 FT ± |
| H. | PARKING SETBACK: STREET LINE: | 15 FT | 15 FT |

## PARKING TABULATION

OFF STREET PARKING REQUIRED:
RESTAURANTS: 1 SPACE PER 3 SEATING ACCOMODATIONS + 1 SPACE PER 2 EMPLOYEES ON SHIFT OF THE GREATEST EMPLOYMENT
TOTAL REQUIRED: 200 SEATS / 3) + (14 EMPLOYEES / 2) =
40 PARKING SPACES (MINIMUM 2 ADA SPACES WITH 1 VAN ACCESSIBLE)

TOTAL PROVIDED: 40 PARKING SPACES (2 ADA SPACES WITH 1 VAN ACCESSIBLE SPACE)
(ALSO 8 STACKING SPACES)

## WASTEWATER GENERATION

RESTAURANTS AND EATING PLACES, WITH RESTROOMS
1 EDU = (6 FIXUNITS) ÷ 2.5 FIXUNITS PER TENANT
2 TENANTS X 2.5 = 5 EDU'S

## UTILITY PROVIDERS

CITY OF MILFORD
ELECTRIC
WATER
WASTEWATER
VERIZON
CHESAPEAKE UTILITIES

## CITY OF MILFORD APPROVAL

MARK WHITFIELD — CITY MANAGER — DATE

## CITY PLANNING DEPARTMENT APPROVAL

PLANS HAVE BEEN REVIEWED AND ARE FOUND TO BE IN GENERAL CONFORMANCE WITH THE MOST RECENTLY ADOPTED AND CERTIFIED VERSIONS OF THE CITY OF MILFORD'S CODE OF ORDINANCES AND COMPREHENSIVE LAND USE PLAN. THE OWNER AND THEIR ENGINEER AND/OR SURVEYOR ASSUME ALL RESPONSIBILITY FOR THE DESIGN AS CONTEMPLATED HEREIN AND ACCURACY OF ALL INFORMATION SHOWN HEREON.

## CITY ENGINEER APPROVAL

CONSTRUCTION IMPROVEMENTS PLANS HAVE BEEN REVIEWED AND ARE FOUND TO BE IN GENERAL CONFORMANCE WITH THE CITY OF MILFORD'S STANDARD SPECIFICATIONS FOR INSTALLATION OF UTILITY CONSTRUCTION PROJECTS AND SUBDIVISION PAVEMENT DESIGN. THE OWNER AND THEIR ENGINEER AND/OR SURVEYOR ASSUME ALL RESPONSIBILITY FOR THE DESIGN AS CONTEMPLATED HEREIN AND ACCURACY OF ALL INFORMATION SHOWN HEREON.

CITY ENGINEER — DATE


HILLCREST ASSOCIATES
ARCHITECTURE • ENGINEERING • LAND PLANNING • SURVEYING
P.O. BOX 1180
HOCKESSIN, DE 19707
PH: 610.274.8813
FAX: 610.274.0567


SEAL

| DATE | REVISION | |
|---|---|---|
| 8/15/23 | REVISED PARKING LAYOUT | TAS |

DATE: 8-3-23
DRAWN BY: TAS
CHECKD. BY: RML
PROJ. NO.: 4707
SCALE: 1"=20'
CAD FILE NAME: 4707EDSITE

# PRELIMINARY SITE PLAN
997 N DUPONT BLVD
CITY OF MILFORD
KENT COUNTY, DELAWARE

DWG. NO.
1 OF 2

## DELDOT GENERAL NOTES:

(AS REVISED MARCH 21, 2019)

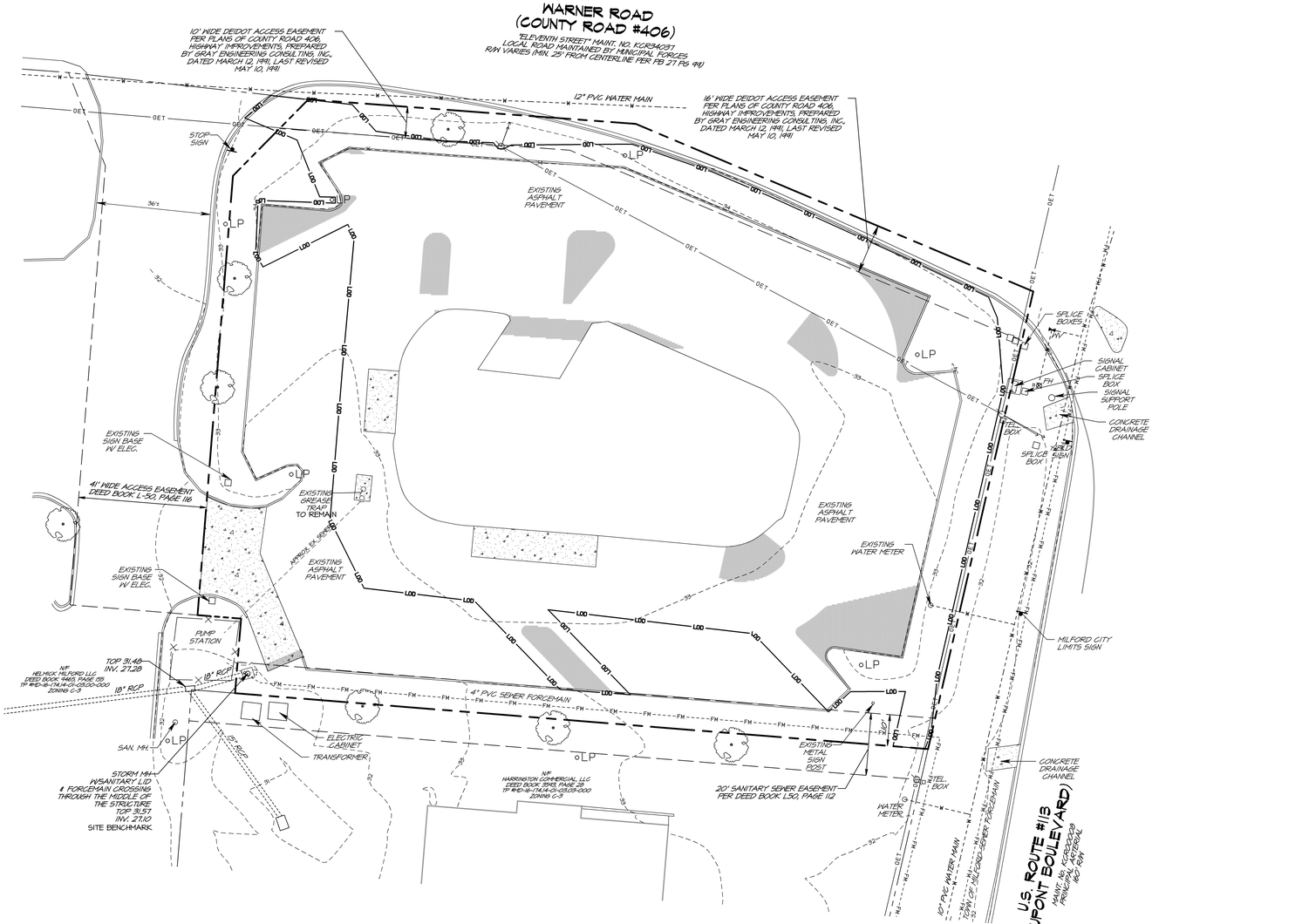
1. ALL ENTRANCES SHALL CONFORM TO THE DELAWARE DEPARTMENT OF TRANSPORTATION'S (DELDOT'S) CURRENT DEVELOPMENT COORDINATION MANUAL AND SHALL BE SUBJECT TO ITS APPROVAL.
2. NO LANDSCAPING SHALL BE ALLOWED WITHIN THE RIGHT-OF-WAY UNLESS THE PLANS ARE COMPLIANT WITH SECTION 3.7 OF THE DEVELOPMENT COORDINATION MANUAL.
3. SHRUBBERY, PLANTINGS, SIGNS AND/OR OTHER VISUAL BARRIERS THAT COULD OBSTRUCT THE SIGHT DISTANCE OF A DRIVER PREPARING TO ENTER THE ROADWAY ARE PROHIBITED WITHIN THE DEFINED DEPARTURE SIGHT TRIANGLE AREA ESTABLISHED ON THIS PLAN. IF THE ESTABLISHED DEPARTURE SIGHT TRIANGLE AREA IS OUTSIDE THE RIGHT-OF-WAY OR PROJECTS ONTO AN ADJACENT PROPERTY OWNER'S LAND, A SIGHT EASEMENT SHOULD BE ESTABLISHED AND RECORDED WITH ALL AFFECTED PROPERTY OWNERS TO MAINTAIN THE REQUIRED SIGHT DISTANCE.
4. UPON COMPLETION OF THE CONSTRUCTION OF THE SIDEWALK OR SHARED-USE PATH ACROSS THIS PROJECT'S FRONTAGE AND PHYSICAL CONNECTION TO ADJACENT EXISTING FACILITIES, THE DEVELOPER, THE PROPERTY OWNERS OR BOTH ASSOCIATED WITH THIS PROJECT, SHALL BE RESPONSIBLE TO REMOVE ANY EXISTING ROAD TIE-IN CONNECTIONS LOCATED ALONG ADJACENT PROPERTIES, AND RESTORE THE AREA TO GRASS. SUCH ACTIONS SHALL BE COMPLETED AT DELDOT'S DISCRETION, AND IN CONFORMANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
5. PRIVATE STREETS CONSTRUCTED WITHIN THIS SUBDIVISION SHALL BE MAINTAINED BY THE DEVELOPER, THE PROPERTY OWNERS WITHIN THIS SUBDIVISION OR BOTH (TITLE 17, 131). DELDOT ASSUMES NO RESPONSIBILITIES FOR THE FUTURE MAINTENANCE OF THESE STREETS.
6. THE SIDEWALK SHALL BE THE RESPONSIBILITY OF THE DEVELOPER, THE PROPERTY OWNERS OR BOTH WITHIN THIS SUBDIVISION. THE STATE OF DELAWARE ASSUMES NO RESPONSIBILITY FOR THE FUTURE MAINTENANCE FOR THE SIDEWALK.
7. DRIVEWAYS WILL NOT BE PERMITTED TO BE PLACED AT CATCH BASIN LOCATIONS.
8. TO MINIMIZE RUTTING AND EROSION OF THE ROADSIDE DUE TO ON-STREET PARKING, DRIVEWAY AND BUILDING LAYOUTS MUST BE CONFIGURED TO ALLOW FOR VEHICLES TO BE STORED IN THE DRIVEWAY BEYOND THE RIGHT-OF-WAY, WITHOUT INTERFERING WITH SIDEWALK ACCESS AND CLEARANCE.
9. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MONUMENTS IN ACCORDANCE WITH DELDOT'S DEVELOPMENT COORDINATION MANUAL.
10. THE DEVELOPER SHALL BE REQUIRED TO FURNISH AND PLACE RIGHT-OF-WAY MARKERS TO PROVIDE A PERMANENT REFERENCE FOR RE-ESTABLISHING THE RIGHT-OF-WAY AND PROPERTY CORNERS ON LOCAL AND HIGHER ORDER FRONTAGE ROADS. RIGHT-OF-WAY MARKERS SHALL BE SET AND/OR PLACED ALONG THE FRONTAGE ROAD RIGHT-OF-WAY AT PROPERTY CORNERS AND AT EACH CHANGE IN RIGHT-OF-WAY ALIGNMENT IN ACCORDANCE WITH SECTION 3.2.4.2 OF THE DEVELOPMENT COORDINATION MANUAL.
11. CONSTRUCTION WILL NOT BE PERMITTED UNTIL CONSTRUCTION PLANS HAVE BEEN APPROVED, SURETY HAS BEEN RECEIVED AND THE TRAFFIC SIGNAL AGREEMENT IS COMPLETE. AT DELDOT'S DISCRETION, A TEMPORARY CONSTRUCTION ENTRANCE PERMIT MAY BE ISSUED FOR CLEARING, GRUBBING, TEMPORARY ENTRANCE CONSTRUCTION, BULK &
12. THIS COMMERCIAL PARCEL HAS DIRECT FRONTAGE ALONG KG00008 (US ROUTE 113) DUPONT BLVD, WHICH HAS A FUNCTIONAL CLASSIFICATION OF PRINCIPAL ARTERIAL/FREEWAY/INTERSTATE AS DEFINED BY THE STATE OF DELAWARE'S DEPARTMENT OF TRANSPORTATION. PER SECTION 3.6.1 OF THE DELDOT DEVELOPMENT COORDINATION MANUAL (DCM), IT IS THE DEVELOPER'S RESPONSIBILITY TO EVALUATE NOISE LEVELS AND THEIR IMPACTS ON PROPOSED DEVELOPMENT. FOR PROJECTS ADJACENT TO EXISTING TRANSPORTATION FACILITIES WITH THIS FUNCTIONAL CLASSIFICATION, ROADWAYS WITH THIS CLASSIFICATION CAN BE EXPECTED TO GENERATE ELEVATED LEVELS OF ROAD AND TRAFFIC RELATED NOISE, SIMILAR TO WHAT CAN BE EXPECTED IN URBAN AREAS. A DETAILED NOISE ANALYSIS PER DCM 3.6.15 TYPICALLY RECOMMENDED TO HELP GAUGE THE ACTUAL IMPACTS THAT ROADWAY RELATED NOISE MAY HAVE ON VARIOUS POTENTIAL LAND-USES (SUCH AS THOSE DESCRIBED IN DCM FIGURE 3.6.3-A. NOISE ABATEMENT CRITERIA). WITH THE INCLUSION OF THIS NOTE, THE DEVELOPER IS ACKNOWLEDGING THAT THE PROPOSED SITE AND/OR BUILDING LOCATION CAN BE EXPECTED TO EXCEED THE SPECIFIC MAXIMUM NOISE LEVELS FOR CERTAIN COMMERCIAL AND NON-RESIDENTIAL USES AS SHOWN IN DCM FIGURE 3.6.3-A. THE DEVELOPER'S WAIVER OF THE NOISE ANALYSIS AND REVIEW OF POTENTIAL NOISE MITIGATION MEASURES ARE SUPPORTED BY THE INFEASIBILITY OF APPLYING NOISE MITIGATION MEASURES, BASED ON ENGINEERING CONSIDERATIONS AND FACTORS THAT WOULD LIMIT THE ABILITY TO ACHIEVE SUBSTANTIAL NOISE REDUCTION RELATED TO THE COMMERCIAL USE OF THE SITE AND/OR BUILDINGS. THIS WAIVER ACKNOWLEDGES THAT THE DECIBEL LEVEL FOR THIS PARCEL MAY EXCEED THE APPLICABLE LIMITS FOR SOME CURRENT OR FUTURE PROPOSED USES. THE USE OF THIS NOTE SIGNIFIES THE SUBDIVISION ENGINEER'S CONCURRENCE WITH WAIVING THE DEVELOPER'S COMPLETION OF A DETAILED NOISE STUDY AND SUBSEQUENT REVIEW OF RESULTING NOISE ABATEMENT FINDINGS OR MITIGATION MEASURES. ANY FUTURE COMPLAINTS RELATING TO EXISTING OR FUTURE NOISE LEVELS IMPACTING PROPOSED USES ON THIS SITE AND ALONG THIS EXISTING TRANSPORTATION FACILITY SHALL BE THE RESPONSIBILITY OF THE DEVELOPER OR LAND OWNER OR BOTH.

### SOIL LEGEND

| SYMBOL | NAME | HSG |
|---|---|---|
| HbA | HAMBROOK SANDY LOAM, 0 TO 2 PERCENT SLOPES | B |
| SadB | SASSAFRAS SANDY LAON, 2 TO 5 PERCENT SLOPES, NORTHERN TIDEWATER AREA | B |

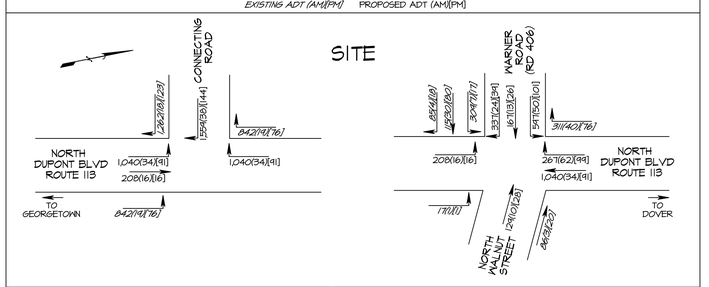
### LEGEND

- PROPERTY BOUNDARY
- ADJOINING PROPERTY
- EXISTING EASEMENT
- EXISTING EDGE OF PAEMENT
- EXISTING FENCE
- BUILDING SETBACK LINE
- EXISIITING CURB
- EXISTING PAVEMENT
- EXISTING FORCE MAIN (FM)
- EXISTING STORM PIPE WITH INLET
- EXISTING TREES
- EXISTING PAVEMENT TO BE REMOVED




### TRAFFIC GENERATION DIAGRAM

EXISTING ADT (AM)[PM] PROPOSED ADT (AM)[PM]




**ROAD TRAFFIC DATA - WARNER ROAD (KG-00406-F)**

FUNCTIONAL CLASSIFICATION: LOCAL
POSTED SPEED LIMIT: 45 MPH
AADT: 716 TRIPS (FROM 2014 DELDOT TRAFFIC SUMMARY)
10 YEAR PROJECTED AADT: 716 X 1.16= 831 TRIPS
10 YEAR PROJECTED AADT + SITE ADT = 2,813 TRIPS
TRAFFIC PATTERN GROUP (FROM 2014 DELDOT TRAFFIC SUMMARY): 4
K-FACTOR: 12.0% - D-FACTOR: 61.3% - TRUCK%: 8.06%
DESIGN HOURLY VOLUME: 12.0% X 2,813 = 340 TRIPS

**ROAD TRAFFIC DATA - NORTH DUPONT BLVD ROUTE 113 (KG-00008-R)**

FUNCTIONAL CLASSIFICATION: OTHER PRINCIPAL ARTERIALS
POSTED SPEED LIMIT: 45 MPH
AADT: 30,198 TRIPS (FROM 2014 DELDOT TRAFFIC SUMMARY)
10 YEAR PROJECTED AADT: 30,198 X 1.16= 35,030 TRIPS
10 YEAR PROJECTED AADT + SITE ACT = 371,012 TRIPS
TRAFFIC PATTERN GROUP (FROM 2014 DELDOT TRAFFIC SUMMARY): 2
K-FACTOR: 9.72 - D-FACTOR: 59.67 - TRUCK%: 9.62%
DESIGN HOURLY VOLUME: 9.72% X 371,012 = 3,548 TRIPS

**EXISTING SITE TRAFFIC DATA:**

2,760 SF FASTFOOD WITH DRIVE-THROUGH.
(HAS NOT BEEN OPERATIONAL IN THE PAST 3 YEARS AS SUCH, NO EXSITING TRAFFIC IS ACCOUNTED FOR.)

NOTE: SITE TRAFFIC DATA BASED ON INDUSTRY STANDARD PROJECTIONS AND MAY NOT REFLECT ACTUAL SITE CONDITIONS.

WARNER ROAD DIAGRAM TURNING MOVEMENTS WERE CALCULATED USING HISTORICAL COUNT DATA. SOUTHERN CONNECTING ROAD DIAGRAM TURNING MOVEMENTS WERE CALCULATED USING ITE TRIP GENERATION MANUAL 10TH EDITION.

**PROPOSED SITE TRAFFIC DATA:**

SOURCE: ITE TRIP GENERATION MANUAL 10TH EDITION
2,160 SF FAST FOOD WITHOUT DRIVE-THROUGH (LUC 933)
ADT: 748 TRIPS
AM: 35 TRIPS (21IN/14OUT)
PM: 61 TRIPS (30IN/31OUT)
2,652 SF FAST FOOD WITH DRIVE-THROUGH (LUC 934)
ADT: 1,234 TRIPS
AM: 105 TRIPS (53IN/52OUT)
PM: 86 TRIPS (45IN/41OUT)
TOTAL SITE ADT: (748 + 1,234)= 1,982 TRIPS
DESIGN VEHICLE - SU30

ENTRANCES
1) NORTHERN INTERSECTION (WARNER RD) - FULL MOVEMENT
2) SOUTHERN INTERSECTION (CONNECTOR) - RIGHTS-IN / RIGHTS & LEFTS-OUT

DIRECTION DISTRIBUTION IN (SOUTHERN INTERSECTION):
20% LEFT FROM SOUTH BOUND ROUTE 113 - 346(15)[15] ADT
20% RIGHT FROM NORTH BOUND ROUTE 113- 346(15)[15] ADT

DIRECTION DISTRIBUTION IN (NORTHERN INTERSECTION):
10% STRAIGHT FROM NORTH WALNUT STREET - 199(7)[8] ADT
20% LEFT FROM SOUTH BOUND ROUTE 113 - 346(15)[15] ADT
30% RIGHT FROM SOUTH BOUND ROUTE 113 - 545(22)[22] ADT

DIRECTION DISTRIBUTION OUT (SOUTHERN INTERSECTION:
30% RIGHT TO SOUTH BOUND ROUTE 113- 544(20),[21] ADT

DIRECTION DISTRIBUTION OUT (NORTHERN INTERSECTION:
10% STRAIGHT TO NORTH WALNUT STREET - 199(6),[4] ADT
30% LEFT TO NORTH BOUND ROUTE 113 - 545 (20)[21] ADT
30% RIGHT TO SOUTH BOUND ROUTE 113 - 544(20),[21] ADT

HEAVY VEHICLES LEFT FROM NORTH BOUND ROUTE 113: 0.0862 X 346= 35 TRUCKS
HEAVY VEHICLES LEFT FROM SOUTH BOUND ROUTE 113: 0.0862 X 436= 38 TRUCKS


HILLCREST ASSOCIATES
ARCHITECTURE • ENGINEERING • LAND PLANNING • SURVEYING
P.O. BOX 1180 HOCKESSIN, DE 19707
PH: 610.274.8613 FAX: 610.274.0567


SEAL

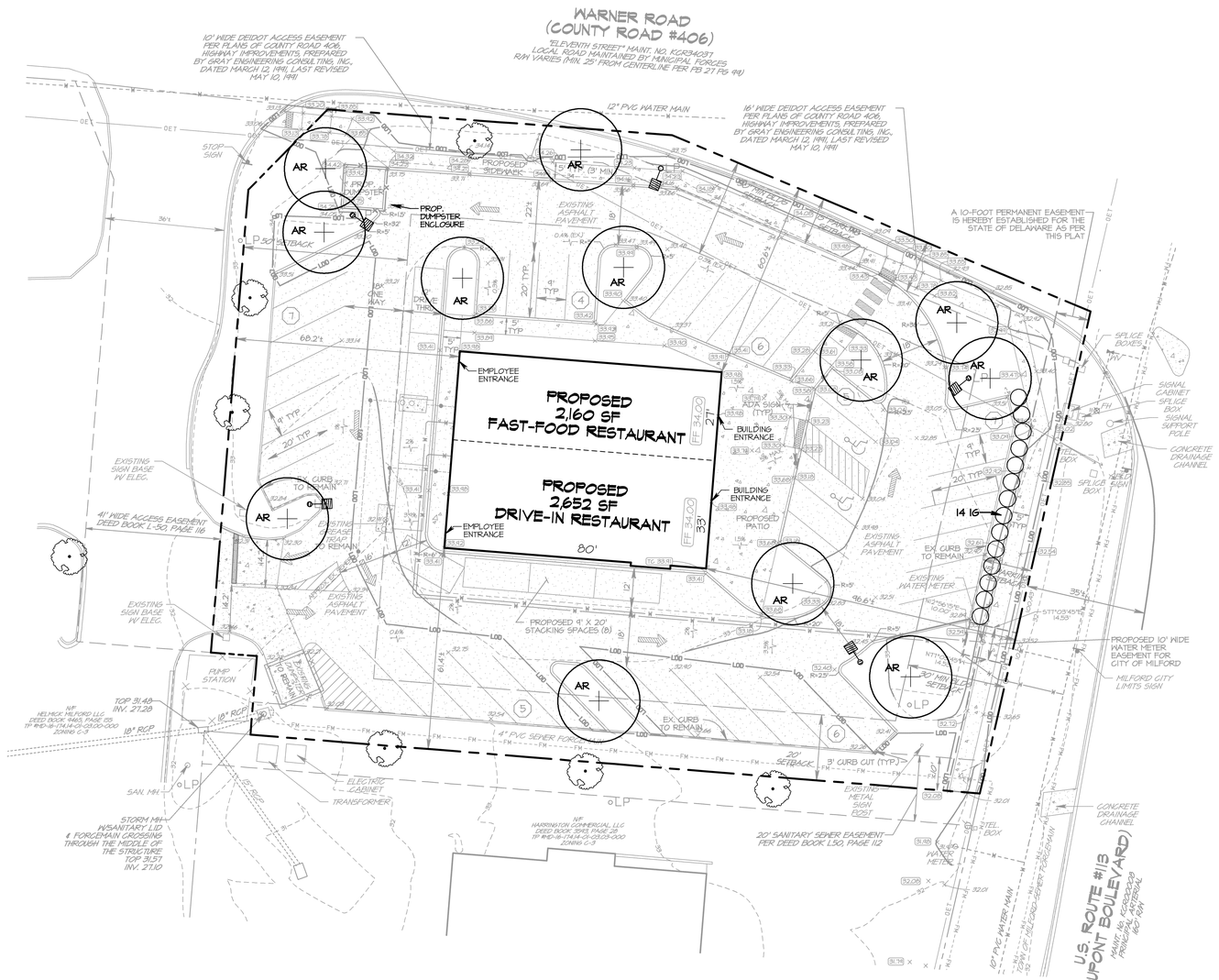
# EXISTING CONDITIONS / DEMOLITION PLAN

997 N DUPONT HWY
CITY OF MILFORD
KENT COUNTY, DELAWARE

| DATE | REVISION | |
|---|---|---|
| 8/15/23 | REVISED PARKING LAYOUT | TAS |

DATE: 8-3-23
DRAWN BY: TAS
CHECKD. BY: RM-L
PROJ. NO.: 4TIOT
SCALE: 1"=30'
CAD FILE NAME: 4TIOTDTRO

DWG. NO.
2 OF 2




## DATA COLUMN

| | | |
|---|---|---|
| 1. | TAX PARCEL NUMBER(S): | MD-16-174.14-01-03.02-000 |
| | SITE ADDRESS | 997 N DUPONT BLVD<br>MILFORD, DE 19963 |
| | DEED REFERENCE: | DEED BOOK 4742, PAGE 248 |
| | OWNER/ DEVELOPER: | HELMICK MILFORD LLC<br>PO BOX 162<br>MONTCHANIN, DE 19710<br>(302) 530-5151 |
| 2. | TOTAL TRACT AREA: | 1.024 ACRES |
| 3. | CURRENT ZONING DISTRICT: | C3 (HIGHWAY COMMERCIAL DISTRICT) |
| 4. | EXISTING USE: | DRIVE-IN RESTAURANT |
| 5. | PROPOSED USE: | DRIVE-IN RESTAURANT AND FAST-FOOD RESTAURANT |

## GENERAL NOTES

1. EXISTING VEGETATION SHOWN IS TO REMAIN UNLESS OTHERWISE INDICATED ON THIS, OR THE RECORD PLAN.

## CONSTRUCTION NOTES

1. COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES OR STRUCTURES CANNOT BE GUARANTEED. THE CONTRACTOR MUST VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES AND FACILITIES PRIOR TO BEGINNING CONSTRUCTION. THEY SHALL ALSO TAKE NECESSARY PRECAUTIONS TO PROTECT UTILITIES DURING DEMOLITION AND CONSTRUCTION TO MAINTAIN UN-INTERRUPTED SERVICE. ANY DAMAGE TO EXISTING UTILITIES DUE TO CONTRACTOR'S NEGLECT SHALL BE IMMEDIATELY REPAIRED AT THE CONTRACTOR'S EXPENSE.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO BIDDING. COMMENCEMENT OF WORK SHALL CONSTITUTE ACCEPTANCE OF CONDITIONS. LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR EXISTING CONDITIONS OR THE ACCURATE MEASUREMENT OF SOME.
3. IT IS THE RESPONSIBILITY OF THE OWNER, DEVELOPER OR CONTRACTOR TO OBTAIN ANY AND ALL PERMITS OR APPROVALS REQUIRED FOR THE CONSTRUCTION OR DEMOLITION SHOWN ON THESE PLANS. ANY DECISIONS MADE BY THE OWNER, DEVELOPER OR CONTRACTOR TO CIRCUMVENT THE NORMAL PERMITTING PROCESS SHALL BE AT THEIR SOLE RISK.
4. THE LANDSCAPE PLAN IS TO BE CONSIDERED A PART OF THE SITE OR RECORD PLAN. ALL INFORMATION SHOWN ON THE SITE/RECORD PLAN SHALL BE STRICTLY ADHERED TO, AND ANY DISCREPANCIES BETWEEN THE SITE/RECORD PLAN AND LANDSCAPE PLAN SHALL BE BROUGHT TO THE ATTENTION OF LANDSCAPE ARCHITECT OR OWNER IMMEDIATELY.
5. NO CHANGES OR DEVIATION FROM THESE PLANS IS PERMITTED UNLESS SUCH CHANGE HAS BEEN APPROVED BY THE LANDSCAPE ARCHITECT IN WRITING. CHANGES MADE INDEPENDENTLY BY THE OWNER, OR CONTRACTOR SHALL RELEASE THE LANDSCAPE ARCHITECT FROM ALL LIABILITY RELATED THERETO.
6. OWNER OR CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUBSURFACE CONDITIONS AND SOIL CONDITIONS. LANDSCAPE ARCHITECT MAKES NO REPRESENTATIONS REGARDING SUBSURFACE CONDITIONS OR SOIL CONDITION, INCLUDING SUITABILITY FOR PLANTING.
7. LANDSCAPE ARCHITECT SHALL NOT CONTROL OR BE RESPONSIBLE FOR ANOTHER'S MEANS, METHODS, TECHNIQUES, SCHEDULES, SEQUENCES OR PROCEDURES, OR FOR CONSTRUCTION SAFETY OR ANY OTHER RELATED PROGRAMS, OR FOR ANOTHER'S FAILURE TO COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
8. LANDSCAPE ARCHITECT MAINTAINS THE RIGHT BUT NOT THE DUTY TO RECOMMEND THAT OWNER REJECT WORK THAT DOES NOT APPEAR TO CONFORM GENERALLY TO THE PLANS AND SPECIFICATIONS, AND LANDSCAPE ARCHITECT SHALL NOT HAVE ANY LIABILITY FOR RECOMMENDATIONS MADE IN GOOD FAITH.
9. A LACK OF OR IMPROPER MAINTENCE IN AREAS SUCH AS, BUT NOT LIMITED TO, PAVING AND WALKWAYS, STRUCTURES, FACILITIES, SIGNAGE, NATURAL AREAS AND LANDSCAPING, MAY RESULT IN DAMAGE TO PROPERTY OR PERSONS. OWNER ACKNOWLEDGES AND AGREES THAT PROPER PROJECT MAINTENANCE IS REQUIRED AFTER THE PROJECT COMPLETION, THAT OWNER IS SOLELY RESPONSIBLE FOR PROPER MAINTENANCE, AND THAT OWNER IS SOLELY RESPONSIBLE FOR THE RESULTS OF ANY LACK OF OR IMPROPER MAINTENANCE.

## PLANTING NOTES

1. ALL PLANTS SHALL BE CERTIFIED TO BE THE SPECIES VARIETY OR CULTIVAR SPECIFIED. NO SUBSTITUTION SHALL BE ACCEPTED WITHOUT PRE-APPROVED, WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT
2. PLANT CALIPER EQUALS THE DIAMETER OF A TREE TRUNK AS MEASURED AT SIX (6) INCHES ABOVE THE ROOT BALL (OR JUST ABOVE THE TRUCK FLARE FOR TREE 14 IN. CAL.)
3. UNLESS OTHERWISE NOTED, PLANT SIZE REFERS TO HEIGHT OF A PLANT AS MEASURED FROM THE TOP OF THE ROOT BALL TO THE HIGHEST BRANCH.
4. PLANTS FOR WHICH NO VARIETY OR CULTIVAR IS SPECIFIED SHALL BE THE STRAIGHT SPECIES, OR A CULTIVAR THAT IS TYPICAL OF THE SPECIES IN BOTH FORM AND SIZE AT MATURITY.
5. PLANTING BED PREPARATION AND MULCHING: PROPOSED PLANTING BEDS SHALL BE TILLED TO A MIN. DEPTH OF 8 INCHES. AFTER TILLING, INCORPORATE YARD WASTE COMPOST INTO THE SOIL AT THE RATE OF 1 CU. YARD COMPOST PER 150 SF. OF BED AREA. AFTER BED PREPARATION AND PLANTING, BEDS SHALL BE MULCHED WITH A UNIFORM 2 TO 2.5 IN. DEEP LAYER OF SHREDDED HARDWOOD BARK MULCH.
6. ALL PROPOSED PLANT LOCATIONS ARE TO BE DETERMINED BY THE INSTALLER BY SCALING OFF OF THE PLAN, AND MEASURING IN THE FIELD FROM KNOWN LOCATIONS (BUILDINGS, CURBS, WALKWAYS, ETC.)
7. THE INSTALLER SHALL BE RESPONSIBLE FOR ENSURING THAT NO STREET OR CANOPY TREE IS PLANTED UNDER OR WITHIN 10 LATERAL FEET OF ANY OVERHEAD UTILITY WIRE, OR OVER OR WITHIN 5 LATERAL FEET OF ANY UNDERGROUND WATER LINE, SEWER LINE TRANSMISSION LINE, OR OTHER UTILITY. IN THE EVENT THAT A TREE'S PROPOSED LOCATION CONFLICTS WITH THESE RESTRICTIONS, THE INSTALLER SHALL STOP WORK, AND NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY, SO THAT SOLUTION CAN BE DETERMINED.

## PLANTING REQUIREMENTS

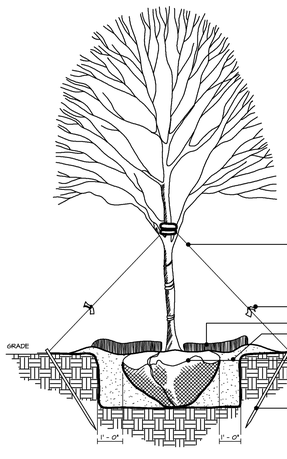
TREE DENSITY. FOR EACH PROPERTY REQUIRED TO SUBMIT A TREE PRESERVATION AND PLANTING PLAN, A DEVELOPMENT AREA AS DEFINED IN THIS SECTION SHALL BE DELINEATED WITHIN THE NONWOODLAND AREA OF THE PROPERTY. WITHIN THIS DEVELOPMENT AREA, EXISTING TREES MAY BE RETAINED AND NEW TREES SHALL BE PLANTED SUCH THAT THE DEVELOPMENT AREA SHALL ATTAIN OR EXCEED A TREE DENSITY OF ONE TREE PER 3,000 SQUARE FEET OR FRACTION THEREOF.

REQUIRED: 44,594 SF / 3,000 = 14.8 TREES REQUIRED

PROVIDED: 3 EXISTING TREES, 12 PROPOSED TREES = 15 TREES

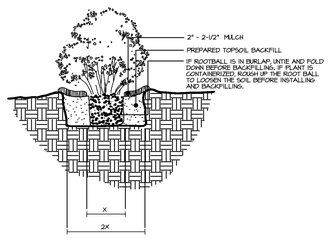
## PLANT LIST

| SYMBOL | QUANTITY | BOTANICAL NAME | COMMON NAME | REMARKS |
|---|---|---|---|---|
| STREET TREES | | | | |
| AR | 12 | ACER RUBRUM | RED MAPLE | B&B<br>2.5" TO 3" CAL.<br>10' TO 12' HIGH, MIN. |
| SHRUBS | | | | |
| ○ IG | 14 | ILEX GLABRA | INKBERRY | 2'-3', B&B |




TREE PLANTING DETAIL

NOT TO SCALE




SHRUB PLANTING DETAIL

NOT TO SCALE

## PLANTING SPECIFICATIONS:

SECTION 1: SCOPE OF WORK

1.1 Contractor shall furnish, deliver, and install all plant material specified in the plant schedules in accordance with the plans, details and specifications of the Landscape Plan, or as directed by the Owner or Landscape Architect (hereunder referred to as L.A.). The term plant material shall mean trees, shrubs, groundcovers and other growing plants to the extent shown on the plant schedule(s).

1.2 Contractor shall be liable for any damages to property caused by construction/planting operations, and all areas disturbed by such operations shall be restored to their original conditions to the satisfaction of L.A. or Owner.

SECTION 2: PLANT MATERIAL

2.1 All plants shall be certified to be the species, variety and/or cultivar specified in the plant schedules. All plants shall be typical of the species, variety or cultivar listed, unless otherwise specified, and NO substitutions shall be permitted except by pre-arranged, written permission of the L.A. and approved by the Owner.

2.2 All plants shall be nursery grown, delivered in a healthy, disease and insect free condition and conform with the sizes, calipers and conditions outlined in the plant schedule. They shall be sound, healthy vigorous plants free from defects and shall meet the minimum standards for health, form and root conditions as outlined in American Association of Nurserymen (AAN) Standards. In addition, all woody plants (excluding seedling whips) shall have been grown under the same climatic conditions as the location of the project for a period of at least 2 years prior to the date of installation.

2.3 Both L.A. and Owner reserve the right to refuse plants which, in their opinion, are damaged, in poor health, of substandard quality, or do not conform to these specifications, or those of the plant list. Rejected plants shall be removed from the site immediately, one replaced with acceptable plants at no additional cost.

SECTION 3: PLANT INSTALLATION

3.1 At least 2 weeks prior to the anticipated installation date, Contractor shall notify L.A. and Owner of such date so that they can arrange to review staked plant locations, be present to inspect plants, and/or conduct inspections. Failure to give proper notice to both L.A. and Owner may result in delaying Contractor's scheduled installation, and Contractor shall assume all responsibility and liability for any losses suffered.

3.2 Unless otherwise directed by the L.A., planting shall only occur from March 1 through May 1, or from September 15 through December 1. Plants shall be installed on the day of delivery. Plants which cannot be same-day installed shall be adequately protected from drying by being watered and "heeled-in" to moist soil or mulch.

3.3 All plants shall be installed in accordance with the plans, details and specifications of the Landscape Plan. Workmanship that fails to meet the highest standards will be rejected, and Contractor shall assume all costs for reinstalling improperly planted plants, improperly located plants, and replacing damaged plants.

3.4 Contractor shall determine and stake proposed plant locations by scaling off the plan, and measuring in the field from known, verified locations such as existing buildings, paving, and curbs. Unless otherwise directed by the L.A. or Owner, no plants shall be installed until L.A. or Owner approves Contractor staking.

3.5 Plant pits shall be dug a minimum of two times (2x) the diameter of root balls. Each plant shall be planted in an individual pit, and all pits shall have vertical sides, and a horizontal bottom.

3.6 All plants shall be installed plumb, and such that the top of the root ball is equal to, or just above, the elevation of the surrounding grade. On slopes, the top of the root ball shall be level with the grade found mid-way between the uphill and downhill limits of the root ball. To achieve this, additional excavation shall occur uphill of the root ball and soil mounding shall occur downhill of the root ball to prevent top burial, and side exposure, respectively.

3.7 After the plant has been set properly, and soil firmed thoroughly under the root ball, all ropes, stones, materials, and other foreign matter shall be removed from the plant pit. For B&B plants, the burlap shall be carefully pulled back from the upper three-fourths of the root ball, cut off, and disposed of offsite. Any remaining burlap shall be adjusted to prevent the formation of air pockets. If a wire basket is present, it shall be clipped and removed from the upper three-fourths of the root ball, and any remaining wire adjusted so as not to impede root growth.

3.8 Prior to backfilling, Contractor shall examine the top of the root ball and remove any soil that may have been deposited at the nursery. The trunk flare, and tops of the main roots of the trunk should be exposed (and shall remain exposed after planting) and any soil above this level should be removed. In the west that soil is removed during this process, Contractor shall adjust plant elevation as needed for compliance with item 3.6 above.

3.9 Material used for backfilling shall be the excavated native soil only, and no ammendments shall be added. If in the opinion of the contractor the excavated material is unsuitable as backfill, Contractor shall notify landscape architect to discuss potential soil ammendments or procedures, and possible changes to scope of contract.

3.10 When backfilling, soil shall be deposited in 6 to 8 inch lifts, and firmed thoroughly by tamping. Bare root plants shall be centered in the pit after firming soil in the pit bottom. Roots shall be arranged in their natural position and loose topsoil carefully worked in among them and firmed. Care shall be taken not to bruise or break roots. Any roots which are bruised or broken shall be pruned properly, making a clean cut before planting.

3.11 A soil saucer sufficient to catch and hold water shall be provided for each tree and shrub. Saucers shall be 3 to 4 inches high, and constructed of the excavated (backfill) material. On level or slightly sloping ground, they shall be located exterior of the plant pit, and completely encircle it. On steeper slopes they shall only be provided to the downhill side of the plant, and constructed in a manner that catches and holds water flowing downhill from above.

3.12 After plant installation and final grading, Contractor shall rake over finished planting areas, and apply mulch. The mulch shall be a uniform, 2 to 2.5 inch layer of well aged (min. 6 mo. to 1 yr) commercial shredded hardwood bark mulch. Mulch shall cover the entirety of proposed plant beds, and all exposed soil around individual plants including, soil saucers and mounds on slopes. Once applied, the mulch shall be pulled back from all woody stems and trunks so as not to be in contact with them.

SECTION 4: STAKING AND GUYING

4.1 Staking & guying shall be done when required by wind conditions, or as directed by L.A. Stakes shall be set exterior of the plant pit and driven in to undisturbed soil as specified. Stakes shall be of the material & dimensions specified and shall have a minimum deflection of 10%. Stakes shall be set parallel to all contours, curbs & walks.

4.2 All trees requiring staking & guying shall be staked according to the following minimum standards:
- Trees <10 ft. high = Provide two, 1.5 in. x 8 ft. hardwood stakes, driven a min. 24 in. in to soil.
- Trees 1.5 to 3 in. cal. = Provide two, 2 in. x 6 ft. hardwood stakes, driven a min. 24 in. in to soil.
- Trees 3 to 5 in. cal. = Provide three, 3 in. x 8 ft. hardwood stakes, driven a min. 36 in. in to soil.
- Trees >5 in. cal. = Provide four, 3 in. x 8 ft. hardwood stakes, driven a min. 36 in. in to soil.

4.3 Guying shall be done immediately after staking. Stakes shall be fastened to trees with doubled, No. 12 gauge annealed galvanized steel wire run through a suitable length of new, reinforced, 1/2-inch rubber hose. All guying shall be flagged for visibility for the duration of its service. Guying shall not be permitted where there is possible pedestrian or vehicular liability. (Note: Proprietary guying systems may be used with L.A. approval)

4.4 Contractor shall remove and properly dispose of all stakes, guy wires, and rubber hoses after one year, or at the end of any guarantee period unless otherwise directed by the L.A. or Owner.

SECTION 5: WATERING, PRUNING, SITE CLEAN-UP, AND INSTALLATION APPROVAL

5.1 Contractor shall thoroughly water all plants immediately after planting (i.e. the same day). If installation requires several days, he shall also provide water to all plants installed during the course of the project before leaving the site on the last day.

5.2 After installation, brown or bruised branches shall be pruned. If desired, Contractor may thin up to 1/4 of the wood of deciduous plants to prevent desiccation. Pruning shall be done in a manner which retains each plant's natural character. No leaders shall be cut. Evergreens shall not be pruned or sheared unless directed by L.A.

5.3 Upon completion of all work, Contractor shall police the grounds and remove all trash, construction material, and debris for which he is responsible. He shall properly dispose of such material off-site, and shall leave the site in a neat and orderly condition.

5.4 Upon completion of all work, Contractor shall contact Owner and request installation approval. Deviations from the plans, details, and specifications herein, and any deficiencies in workmanship shall be rejected, and Contractor shall assume all costs for rectification. When all work is approved in writing by Owner, the date of such approval shall initiate any guarantee period, and Contractor may request final payment for all work completed.

0 5 10 20 40 60
GRAPHIC SCALE

BEFORE YOU DIG
ANYWHERE IN *DELAWARE*
STOP CALL 1-800-282-8555
OUTSIDE DELAWARE CALL 1-800-441-8355
REQUIRES 3 WORKING DAYS NOTICE BEFORE YOU EXCAVATE
MISS UTILITY OF DELMARVA

PROPERTY OWNER SIGNATURE:

ARTHUR HELMICK, OWNER
HELMICK MILFORD, LLC — DATE

LANDSCAPE PLAN PREPARED BY:

THOMAS A. SCHREIER, RLA — DATE

HILLCREST ASSOCIATES
ARCHITECTURE • ENGINEERING • LAND PLANNING • SURVEYING
PO BOX 1435
HOCKESSIN, DE 19707
PH: 610.274.0567
FAX:

SEAL

LANDSCAPE PLAN
997 N DUPONT BLVD
CITY OF MILFORD
KENT COUNTY, DELAWARE

| DATE | REVISION |
|---|---|
| | |

DATE: 8-14-23
DRAWN BY: TAS
CHECKD. BY: TAS
PROJ. NO.: 4707
SCALE: 1"=20'
CAD FILE NAME: 4707TEDPRO

DWG. NO.
L1

PUBLIC WORKS FACILITY
180 Vickers Drive
Milford, DE 19963
www.cityofmilford.com

THE CITY of Milford DELAWARE

PLANNING DEPARTMENT
Planning, Economic Development,
Enforcement, and Inspections Office
O 302.424.8396 | F 302.424.3559

January 25, 2022

Helmick Milford, LLC
PO Box 162
Montchanin, DE 19710

RE: Application Number: 21-041
Application Name: Helmick Milford – Fast Food
Application Type: Preliminary Site Plan & Conditional Use
Tax Parcel Number(s): MD-16-174.14-01-03.02

Mr. Helmick,

According to our records, the City of Milford Planning Commission approved the Preliminary Site Plan for the Helmick Milford – Fast Food application on January 18, 2022. Per the Code of the City of Milford, Chapter 230-52, Zoning, A (4), "*Preliminary approval from the Planning Commission shall be void after one year, unless an extension is requested by the owner and approved for good cause by the Planning Commission prior to the expiration."* Final Site Plan approval or an extension must be obtained prior to January 18, 2023 in order to avoid expiration of the preliminary approval.

In addition, City Council approved the Conditional Use application for "multiple permitted uses or mixed use of a property" within a C-3 (Highway Commercial) zoning district on January 24, 2022. Per the Code of the City of Milford, Chapter 230-49, Conditional Uses, F, *"The approval of a conditional use is valid for one year. Unless permits are obtained or construction is substantially underway, all provisions of the conditional use are automatically rescinded."* The applicant shall obtain permits or begin construction prior to January 24, 2023 to avoid expiration of the conditional use approval.

Feel free to contact me at 302-424-8396 or via email at rpierce@milford-de.gov should you have any questions.

Sincerely,

William R. Pierce II

Rob Pierce, AICP
Planning Director

cc: Thomas Schreier, RLA – Hillcrest Associates
James Puddicombe, P.E. – City Engineer

HILLCREST ASSOCIATES

ARCHITECTURE
CIVIL ENGINEERING
LAND PLANNING
SURVEYING

November 12, 2021

*Via Email Only*

City of Milford
Attention: Rob Pierce
201 South Walnut Street
Milford, Delaware 19963

Subject: Conditional Use Narrative
997 N Dupont Boulevard
Tax Parcel No.: 5-16-174.14-01-03.02-000

Dear Mr. Pierce,

The above referenced is seeking a conditional use pursuant to Section 230.45, which states that in any and all zoning districts, multiple permitted uses or mixed use of a property shall be deemed a conditional use subject to special requirements.

997 N Dupont Boulevard is currently proposing a re-development of a former single tenant fast food restaurant, whereas the proposal is to have a fast-food restaurant and a drive-in restaurant within the same building. Our current site plans depict a layout that utilizes several areas of existing curbing with improvements to parking lot layout and circulation. Our goal is to create an aestheticly pleasing site with attractive landscaping and appealing architecture, as it is located along a main corridor. At this time the tenant is not defined and therefore we are limited to information pertaining to signage, hours of operation, number of employees, etc. However, it is our assumption, based upon other uses alike that signage will be placed on the building facades facing the road frontages, as well as a free-standing sign along the corridor of Route 113. Typical hours of operation for uses alike are from 10 am to 10 pm with approximately 8 employees on the largest shift for each tenant. Below is a summary table of the area and bulk requirements as set forth within the C3 zoning district and off-street parking.

Section 230-14.D

| | Required | Proposed |
|---|---|---|
| Minimum Lot Area | 1 Acre | 1.024 Acres |
| Maximum Lot Coverage | 80% | 72.7% |
| Minimum Lot Width | 170 Ft. ( Corner Lot) | 394 Ft. |
| Maximum Height of Building | 35 Ft. or 3 Stories | 20 Ft. |
| Minimum Building Setback | 30 Ft. | 62.2 Ft. |
| Minimum Side Yard | 20 Ft. Min./ 50 Ft. Agg. | 59.8 Ft. |
| Minimum Rear Yard | 50 Ft. | 68.2 Ft. |
| Parking Setback (Street) | 15 Ft. | 15 Ft. |

Section 230-21.B
Restaurants, taverns and similar uses: 1 parking space per 3 seating accommodations, plus 1 parking space per 2 employees on the shift of greatest employment.

41 Seats per tenant (102 total seats)/ 3 = 34 required parking spaces
8 Employees per tenant (16 total employees) / 2 = 8 required parking spaces
42 Total required parking spaces

42 provides spaces (2 handicap spaces) + 8 stacking spaces

With this information we hope that you feel this proposal is desirable for this location and utilizes the property in manner that assures neither an adverse impact upon adjoining properties nor the creation of a public nuisance. If you have any questions or need additional information, please feel free to contact me immediately by phone at (610) 274-8613 or by email at Tom@HillcrestAssoc.com.

Sincerely,

T. Schr

Thomas Schreier, RLA
Vice President, Hillcrest Associates

C. Helmick Milford, LLC
H/C file #4707

KCI TECHNOLOGIES
ISO 9001:2015 CERTIFIED
ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS
1352 Marrows Road, Suite 100 • Newark, DE 19711 • Phone 302-731-9176 • Fax 302-731-7807

December 2, 2021

City of Milford
201 South Walnut Street
Milford, Delaware 19963

Attention: Rob Pierce

**Subject:** **Fast Food Restaurant (997 N Dupont Boulevard) – Preliminary Site Plan**
KCI Job No. 131803632 – Task 39

Dear Mr. Pierce,

As requested, KCI Technologies performed a review of the Preliminary Site Plan for the Fast Food Restaurant located at 997 North Dupont Boulevard. This review was performed on the basis of the City of Milford's Standard Specifications, Codes and general engineering best practices. The plan was submitted by Hillcrest Associates and is dated November 12, 2021.

**We find the plans generally acceptable, subject to the comments below. These comments may be addressed when final plans are submitted.**

1. Address the following to the general notes:
    a. Add the note "A topographic survey was performed by _____ of _____, Delaware on _____. Elevations are based on control monument _____, with an elevation of _____ NGVD88." **Addressed.**
    b. There are two notes within note 16. Revise general note 16 on the plan to be two separate notes. **Addressed.**
2. Update the City of Milford approval block. The City Manager is now Mark Whitfield. **Addressed.**
3. Provide an existing conditions/demolition plan. **Addressed with Comment – Address the following to the existing conditions/demolition plan:**
    a. **Add all of the existing utilities to the plan (water, sanitary sewer, storm).**
    b. **Remove the "Proposed 10' wide waterline easement" from the existing conditions/demolition plan. This should only be on the proposed sheet.**

4. Add an Index of Sheets to the cover sheet. **Addressed.**
5. Revise the projected sanitary sewer flow per Chapter 128 of the Kent County Code. **Addressed.**
6. Verify if gas will service the building and list the gas provider on the plan. **Addressed.**
7. Per Chapter 230-45, "In any and all zoning districts, multiple permitted uses or mixed use of a property shall be deemed a conditional use subject to special requirements." Since there appears to be two tenant spaces within the building, please submit a conditional use application to accompany the preliminary site plan application. Due to the project being a conditional use, the project will be subject to public hearings with both the Planning Commission and City Council. **Addressed.**
8. Delineate the stacking spaces of the drive thru on the site plan and list the number of stacking spaces in the parking tabulation. **Addressed.**
9. Add the proposed building height to the plan. **Addressed.**
10. Add ADA signage for the ADA parking spaces. **Addressed.**
11. Currently, there is a dashed line represented two tenants of the building. Revise the plan accordingly to label each tenant and the square footage of each tenant. **Addressed.**
12. Show the building entrances on the plan. The ADA parking spaces shall be close to the entrances for convenience. **Comment Remains – Per ADA Standards, handicap parking spaces that service a particular building shall be located on the shortest accessible route from parking to the entrance. We recommend reconsidering the location of the handicap parking spaces and entrances to comply with ADA Standards.**
13. Label the 15' parking lot setback on the plan. **Addressed.**
14. Add traffic flow arrows to the parking lot to demonstrate the flow of traffic. **Addressed.**
15. Add a stop sign to the exit of the site and a "do not enter" sign for traffic entering the site that want to turn left. **Addressed.**
16. Clarify if the existing business sign is to remain or if a new sign will be proposed. The Planning Commission has the ability to approve a comprehensive signage plan as a part of the site plan review process, otherwise, any business signage on the building will have to meet the City Code or the applicant may need to revisit the Planning Commission and City Counsel for any deviations from the code.
17. Clarify what landscaping will remain and if there will be any proposed landscaping on the plan. **Comment Remains – Provide a Landscape Plan when final plans are submitted.**
18. Currently, the proposed dumpster pad is within the 20' sanitary sewer easement. Revise the location of the dumpster pad to be outside of the easement. In addition, details on the

dumpster pad and screening will have to be provided when construction plans are submitted. **Addressed with Comment – Provide the screening of the dumpster pad when final plans are submitted.**

19. Provide sidewalk along Warner Road and Route 113. The sidewalk shall extend to the site's property boundaries and shall provide direct pedestrian access to the proposed building. Keep in mind that there appears to be two existing drainage channels along Route 113 and an existing swale that runs along the grass area east of the site. This work will have to be approved by DelDOT. **Addressed with Comment – Provide DelDOT approval for the disturbance and proposed work in DelDOT's right-of-way. Verify whether or not DelDOT will require a Shared Use Path along Route 113.**
20. All sidewalk shall be ADA compliant. Handicap ramps will have to be provided where sidewalk leads pedestrians to the edge of pavement around the building. **Addressed.**
21. Dimension all sidewalk widths. **Addressed.**
22. Warner Road is labeled as a county road. However, there are DelDOT easements along the right-of-way. Verify that this is a county road. **Addressed.**
23. Specify whom owns/maintains Route 113 and Warner Road (i.e. State Maintained) on the plan. **Addressed.**
24. Add all existing and proposed utilities to the plan. This includes the water, sanitary, and storm sewer on site and where the proposed utilities tie into the existing utilities. **Comment Remains – Add the existing water main along Route 113 to the plan.**
25. There is an existing storm drain pipe adjacent to the dumpster pad that abruptly ends. Verify if this is correct or show the rest of the storm drain pipe on the plan. **Comment Remains.**
26. Currently, it appears that there is an existing water meter on the plan. Clarify if there will be one water service to the building and then split to each tenant inside the building. If there are two separate water services outside of the building, then a water meter will have to be provided for each tenant. In addition, an easement will have to be provided for the water meter if the location is to remain the same since it is not within the right-of-way. **Addressed with Comment – Provide an update on the water meter situation when final plans are submitted.**
27. Clarify if the existing lighting fixtures will remain or if there will be new lighting fixtures proposed. A lighting plan will be required for final approval. **Addressed.**
28. Clarify if the grease trap is to remain or if it will be replaced. Also, if there are two tenants in the proposed building, clarify if both tenants will be utilizing the same grease trap when construction plans are submitted. **Addressed with Comment – The existing grease trap is labeled to remain. However, it does not appear that the existing sanitary sewer laterals enter/exit the grease trap properly. Please verify the location**

**of the existing sanitary sewer lateral. If there are any proposed sanitary sewer laterals, it should be shown as proposed on the plan.**

29. There is an existing grease trap located on the plan. Contact Kent County Public Works Department to register with their grease trap program and provide calculations for review when construction plans are submitted. **Comment Remains.**
30. Provide the following approvals for final approval:
    a. Kent Conservation District. **Comment Remains.**
    b. Fire Marshal. **Comment Remains.**
    c. DelDOT. **Comment Remains.**

If you have any questions or comments regarding this letter, please do not hesitate to contact us any time.

Sincerely,



Eric T. Gibson,
Engineer in Training



Jason McClafferty, P.E.
Project Manager

HILLCREST ASSOCIATES

ARCHITECTURE
CIVIL ENGINEERING
LAND PLANNING
SURVEYING

November 12, 2021

*Via Email Only*

City of Milford
201 South Walnut Street
Milford, Delaware 19963

Attention: Rob Pierce

Subject: Fast Food Restaurant (997 N Dupont Boulevard) – Preliminary Site Plan
KCI Job No. 131803632 – Task 39

Dear Mr. Pierce,
We are pleased to provide at this time the following documents for the above referenced project:

- 1 Copy of By-right/ Conditional Use Site Plan, last revised 11-12-21.
- Conditional Use Application
- Conditional Use Narrative

Provided under separate cover.

- $700.00 check made payable to "City of Milford"

Below is our point-by-point response (in bold) to your comments (quoted in italics) per KCI's letter dated October 14, 2021, for the above referenced project.

1. *Address the following to the general notes:*
    a. *Add the note "A topographic survey was performed by__of,_____ Delaware on__. Elevations are based on controlmonument_____, with an elevation of___NGVD88."*
    **This above referenced text has been added to General Note No. 2**

    b. *There are two notes within note 16. Revise general note 16 on the plan to be twoseparate notes.*
    **General Note No. 16 has been split into two notes. These notes are now No. 17 & 18.**

2. *Update the City of Milford approval block. The City Manager is now Mark Whitfield.*
**The City Manager has been updated.**

3. *Provide an existing conditions/demolition plan.*
**An existing conditions/ demolition plan has been enclosed with this submission.**

4. *Add an Index of Sheets to the cover sheet.*
**An index of sheets has been added to the Cover Sheet.**

5. *Revise the projected sanitary sewer flow per Chapter 128 of the Kent County Code.*
**The projected sanitary sewer flow has been updated per Chapter 128.**

6. *Verify if gas will service the building and list the gas provider on the plan.*
**Gas will be provided to the building. We are currently working with Chesapeake Utility to determine the best route for connection. The gas provider has been added to the plan.**

7. *Per Chapter 230-45, "In any and all zoning districts, multiple permitted uses or mixed useof a property shall be deemed a conditional use subject to special requirements." Since there appears to be two tenant spaces within the building, please submit a conditional use application to accompany the preliminary site plan application. Due to the project beinga conditional use, the project will be subject to public hearings with both the Planning Commission and City Council.*
   **A conditional use application and fee has been enclosed with this submission.**

8. *Delineate the stacking spaces of the drive thru on the site plan and list the number ofstacking spaces in the parking tabulation.*
   **The stacking spaces have been delineated and the parking tabulations updated to reflect those spaces.**

9. *Add the proposed building height to the plan.*
   **The building height has been adde**

10. *Add ADA signage for the ADA parking spaces.*
    **ADA signage has been added to the ADA parking spaces.**

11. *Currently, there is a dashed line represented two tenants of the building. Revise the planaccordingly to label each tenant and the square footage of each tenant.*
    **The building label has been updated accordingly.**

12. *Show the building entrances on the plan. The ADA parking spaces shall be close to theentrances for convenience.*
    **The building entrances have been labeled on the plan. As the architectural plans are still being developed these are assumed entrances.**

13. *Label the 15' parking lot setback on the plan.*
    **The 15' parking lot setback has been added to the plan.**

14. *Add traffic flow arrows to the parking lot to demonstrate the flow of traffic.*
    **Traffic flow arrows have been added to the plan.**

15. *Add a stop sign to the exit of the site and a "do not enter" sign for traffic entering the sitethat want to turn left.*
    **A stop sign and do not enter signs have been added to the plan.**

16. *Clarify if the existing business sign is to remain or if a new sign will be proposed. The Planning Commission has the ability to approve a comprehensive signage plan as a part of the site plan review process, otherwise, any business signage on the building will haveto meet the City Code or the applicant may need to revisit the Planning Commission andCity Counsel for any deviations from the code.*
    **At the current stage of this project, the existing business signs are to remain and will be replaced with proposed tenant signage. If the proposal deviates from this additional information will be provided.**

17. *Clarify what landscaping will remain and if there will be any proposed landscaping onthe plan.*
    **All landscaping is anticipated to remain, additional landscaping will be provided as part of construction plan stage.**

18. *Currently, the proposed dumpster pad is within the 20' sanitary sewer easement. Revise the location of the dumpster pad to be outside of the easement. In addition, details on thedumpster pad and screening will have to be provided when construction plans are submitted.*
    **This is an existing dumpster pad; however, it has been relocated to be outside the sanitary sewer easement.**

19. *Provide sidewalk along Warner Road and Route 113. The sidewalk shall extend to the site's property boundaries and shall provide direct pedestrian access to the proposed building. Keep in mind that there appears to be two existing drainage channels along Route 113 and an existing swale that runs along the grass area east of the site. This workwill have to be approved by DelDOT.*
    **Sidewalk along Warner Road and Route 113 has been added to the plan with direct pedestrian access to the proposed building.**

20. *All sidewalk shall be ADA compliant. Handicap ramps will have to be provided wheresidewalk leads pedestrians to the edge of pavement around the building.*
    **Handicap ramps have been added to the plan.**

21. *Dimension all sidewalk widths.*
    **Dimensions to all sidewalks have been added.**

22. *Warner Road is labeled as a county road. However, there are DelDOT easements alongthe right-of-way. Verify that this is a county road.*
    **Warner Road label has been revised.**

23. *Specify whom owns/maintains Route 113 and Warner Road (i.e. State Maintained) on theplan.*
    **Maintenance labels have been added to each road label.**

24. *Add all existing and proposed utilities to the plan. This includes the water, sanitary, and storm sewer on site and where the proposed utilities tie into the existing utilities.*
    **All utilities have been added to the site. As we are reducing impervious coverage, no storm sewer is proposed.**

25. *There is an existing storm drain pipe adjacent to the dumpster pad that abruptly ends.Verify if this is correct or show the rest of the storm drain pipe on the plan.*
    **We are working with our survey department to determine where this pipe runs to.**

26. *Currently, it appears that there is an existing water meter on the plan. Clarify if there willbe one water service to the building and then split to each tenant inside the building. If there are two separate water services outside of the building, then a water meter will haveto be provided for each tenant. In addition, an easement will have to be provided for the water meter if the location is to remain the same since it is not within the right-of-way.*
    **We are working with the water provider to determine how many services we can have. At this time**

**it is proposed to have a single service that will split within the building. An easement has been provided around the water meter pit.**

27. *Clarify if the existing lighting fixtures will remain or if there will be new lighting fixturesproposed. A lighting plan will be required for final approval.*
**Existing lighting fixtures are to remain, with the exception of one pole which will need to be relocated due to the installation of the sidewalk along Warner Road.**

28. *Clarify if the grease trap is to remain or if it will be replaced. Also, if there are two tenants in the proposed building, clarify if both tenants will be utilizing the same greasetrap when construction plans are submitted.*
**Existing grease trap is to remain with both tenants utilizing the same.**

29. *There is an existing grease trap located on the plan. Contact Kent County Public Works Department to register with their grease trap program and provide calculations for reviewwhen construction plans are submitted.*
**We will work with Kent County Public Works Department to register the existing grease trap.**

30. *Provide the following approvals for final approval:*
    a. *Kent Conservation District.*
    b. *Fire Marshal.*
    c. *DelDOT.*

    **Approvals from the above are forthcoming.**

If you have any questions or need additional information, please feel free to contact me immediately by phone at (610) 274-8613 or by email at Tom@HillcrestAssoc.com.

Sincerely,

T. Schr

Thomas Schreier, RLA
Vice President, Hillcrest Associates

C. Helmick Milford, LLC
H/C file #4707

# KENT CONSERVATION DISTRICT

1679 SOUTH DUPONT HIGHWAY • DOVER, DELAWARE 19901• (302) 608-5370 • WWW.KENTCD.ORG


**CITY OF MILFORD**
**DEVELOPMENT ADVISORY COMMITTEE**
**APPLICATION REVIEW COMMENTARY**
**OCTOBER 20, 2021**

---

**APPLICATION:** Helmick Milford – Fast Food

**FILE #:** 21-041

**REVIEWING AGENCY:** Kent Conservation District


**CONTACT PERSON:** Kate Owens
**PHONE:** (302) 608 – 5370
**EMAIL:** stormwater@delaware.gov


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THE SUBJECT PROPOSAL HAS BEEN REVIEWED FOR CODE COMPLIANCE, PLAN CONFORMITY AND COMPLETENESS IN ACCORDANCE WITH THIS AGENCY'S AUTHORITY AND AREA OF EXPERTISE. THE FOLLOWING ITEMS HAVE BEEN IDENTIFIED AS ELEMENTS WHICH NEED TO BE ADDRESSED BY THE APPLICANT:

Source: 2019 Delaware Sediment and Stormwater Regulations

CITY AND STATE CODE REQUIREMENTS:

1. As the disturbance for this site will exceed 5,000 square feet, a sediment and stormwater plan must be reviewed and approved by our office prior to any land disturbing activity (i.e. clearing, grubbing, filling, grading, etc.). This plan qualifies as a Non-Residential Standard Plan.
2. A complete and signed application for a Non-Residential Standard Plan with application fee are due at the time of plan submittal to the District's office.
3. The following notes must appear on the record plan:
   - The Kent Conservation District reserves the right to enter private property for purposes of periodic site inspection.
   - The Kent Conservation District reserves the right to add, modify, of delete any erosion or sediment control measure, as it deems necessary.
   - A clear statement of defined maintenance responsibility for stormwater management facilities.

ADVISORY COMMENTS TO THE APPLICANT:

1. The Non-Residential Standard Plan application form and the most current fee schedule can be accessed through the District's website at www.kentcd.org.
2. The approved application is the permit for the project and must be kept on site at all times during construction.

# City of Milford, Delaware
Development Advisory Committee

Comment Sheet

**********

DATE OF REVIEW: October 5, 2021

REVIEWING AGENCY: **Delaware State Fire Marshal's Office, Sussex Office**

INDIVIDUAL REVIEWERS: **Duane T. Fox, CFPS, CFPE, CFI, Asst. Chief Technical Services**
**William C. Kelly, CFI, Sr. Fire Protection Specialist**

AGENCY PHONE NUMBERS: **302-739-4394, Fax: 302-739-3696**

RE: HELMICK MILFORD – FAST FOOD (21-041)

*The reasons and conditions applied to this project and their sources are itemized below:*

**********

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. **Fire Protection Water Requirements**:
   - Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly)
   - Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. **Fire Protection Features:**
   - All structures over 10,000 sqft aggregate will require automatic sprinkler protection installed.
   - Buildings greater than 10,000 sqft, 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.
   - Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
   - Show Fire Lanes and Sign Detail as shown in DSFPR
   - NFPA 101 now requires all restaurants to be protected throughout by an automatic sprinkler system.

c. **Accessibility**
   - All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This

means that the access road to the subdivision from Warner Road must be constructed so fire department apparatus may negotiate it.

- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead-end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

d. **Gas Piping and System Information:**
   - Provide type of fuel proposed and show locations of bulk containers on plan.

e. **Required Notes**:
   - Provide a note on the final plans submitted for review to read "All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations"
   - Proposed Use
   - Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
   - Square footage of each structure (Total of all Floors)
   - National Fire Protection Association (NFPA) Construction Type
   - Maximum Height of Buildings (including number of stories)
   - Note indicating if building is to be sprinklered
   - Name of Water Provider
   - Letter from Water Provider approving the system layout
   - Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
   - Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

***THIS DOCUMENT IS INFORMATIONAL ONLY, AND DOES NOT CONSTITUTE ANY TYPE OF APPROVAL FROM THE DELAWARE STATE FIRE MARSHAL'S OFFICE***

# CITY OF MILFORD
# NOTICE OF PUBLIC HEARINGS

Planning Commission Hearing: Tuesday, September 19, 2023 @ 6:00 p.m.
City Council Hearing: Monday, September 25, 2023 @ 6:00 p.m.

NOTICE IS HEREBY GIVEN that the proposed Ordinance is currently under review by the City of Milford Planning Commission and City Council. City Council has the option to approve or deny the application. By not adopting the ordinance, City Council will deny the application. By adopting the ordinance, City Council will approve the application and the reason for the language being written in the affirmative.
This form of writing is not used to influence any decision of City Council:

**ORDINANCE 2023-33**

Preliminary Conditional Use Site Plan Application of Helmick Milford – Fast Food
1.024 +/- acres of land located at the southwest
corner of Warner Road and US Route 113
Comprehensive Plan Designation: Commercial
Zoning District: C-3 (Highway Commercial District)
Present use: Vacant Proposed Use: Fast Food Restaurant & Drive-in Restaurant
Tax Parcel: MD-16-174.14-01-03.02

WHEREAS, the owner of the property as above described herein have petitioned the City of Milford for a Preliminary Conditional Use Site Plan for a two-unit/multi-use structure; and

WHEREAS, the City of Milford Planning Commission will consider the application at a Public Hearing on September 19, 2023; and

WHEREAS, Milford City Council will hold a Public Hearing on September 25, 2023 to allow for public comment and further review of the ordinance; and

WHEREAS, it is deemed in the best interest of the City of Milford to approve the Preliminary Conditional Use Site Plan, as herein described.

NOW, THEREFORE, the City of Milford hereby ordains as follows:

Section 1. Chapter 230-45 states "in any and all districts, multiple permitted uses or mixed use of a property shall be deemed a conditional use subject to special requirements," when approved by City Council.

Section 2. Fast-food restaurants and drive-in restaurants are permitted uses within the C-3 zoning district.

Section 3. Following adoption of Ordinance 2023-33, and upon the effective date, Helmick Milford, LLC is hereby granted a Preliminary Conditional Use Site Plan approval to construct a 4,812 square foot, 2-unit commercial structure, for use as a fast-food restaurant and a drive-thru restaurant, in accordance with the application, approved plans, and any conditions set forth at the Public Hearings.

Section 4. Preliminary approval from City Council shall be void after 24 months unless an extension is requested by the owner and approved for good cause by the Planning Commission prior to the expiration, otherwise the Preliminary Conditional Use Site Plan approval becomes void.

Section 5. Dates.
Planning Commission Review & Public Hearing: September 19, 2023

City Council Introduction: September 11, 2023
City Council Public Hearing: September 25, 2023
Effective: Ten days following Adoption by City Council

For additional information, please contact Rob Pierce in the Planning & Zoning Department either by e-mail at RPierce@milford-de.gov or by phone at 302.424.8396.

*Advertised: Delaware State News 09/03/2023*

# CITY OF MILFORD
# NOTICE OF PUBLIC HEARINGS

Planning Commission Hearing: Tuesday, September 19, 2023 @ 6:00 p.m.
City Council Hearing: Monday, September 25, 2023 @ 6:00 p.m.

NOTICE IS HEREBY GIVEN that the proposed Ordinance is currently under review by the City of Milford Planning Commission and City Council. City Council has the option to approve or deny the application. By not adopting the ordinance, City Council will deny the application. By adopting the ordinance, City Council will approve the application and the reason for the language being written in the affirmative.
This form of writing is not used to influence any decision of City Council:

**ORDINANCE 2023-34**

Preliminary Conditional Use Site Plan Application of Milford School District/Milford Middle School
23.97 +/- acres of land located on the
south side of Lakeview Avenue, approximately 875 feet east of the Route 113 Intersection
Address: 512 Lakeview Avenue
Comprehensive Plan Designation: Low Density Residential
Zoning District: R-1 (Single-Family Residential District)
Present and Proposed Use: Public School
Tax Parcel: 1-30-3.07-138.00 & 138.01

WHEREAS, the owner of the property as above described herein have petitioned the City of Milford for a Preliminary Conditional Use Site Plan to construct a public school; and

WHEREAS, the City of Milford Planning Commission will consider the application at a Public Hearing on September 19, 2023; and

WHEREAS, Milford City Council will hold a Public Hearing on September 25, 2023 to allow for public comment and further review of the ordinance; and

WHEREAS, it is deemed in the best interest of the City of Milford to approve the Preliminary Conditional Use Site Plan, as herein described.

NOW, THEREFORE, the City of Milford hereby ordains as follows:

Section 1. Chapter 230-9(C)(2) states “public and private elementary, junior or senior high schools” are permitted with the approval of a conditional use permit by City Council.

Section 2. Following adoption of Ordinance 2023-34, and upon the effective date, the Milford Public School District is hereby granted a Preliminary Conditional Use Site Plan approval to construct and redevelop a 127,000 square foot public school at 512 Lakeview Avenue.

Section 3. Preliminary approval from City Council shall be void after 24 months unless an extension is requested by the owner and approved for good cause by the Planning Commission prior to the expiration, otherwise the Preliminary Conditional Use Site Plan approval becomes void.

Section 4. Dates.
Planning Commission Review & Public Hearing: September 19, 2023
City Council Introduction: September 11, 2023
City Council Public Hearing: September 25, 2023
Effective: Ten Days following Adoption

For additional information, please contact Rob Pierce in the Planning & Zoning Department either by e-mail at RPierce@milford-de.gov or by phone at 302.424.8396.

*Advertised: Delaware State News 09/03/2023*

PUBLIC WORKS FACILITY
180 Vickers Drive
Milford, DE 19963
www.cityofmilford.com

THE CITY of Milford DELAWARE

PLANNING DEPARTMENT
Planning, Economic Development,
Enforcement, and Inspections Office
O 302.424.8396 | F 302.424.3559

# DATA SHEET FOR MILFORD MIDDLE SCHOOL

Development Advisory Committee: March 15, 2023

Planning Commission Meeting: TBD

| | | |
|---|---|---|
| **Application Number / Name** | : | 23-012 / Milford Middle School |
| **Applicant** | : | Milford School District<br>906 Lakeview Avenue<br>Milford, DE 19963 |
| **Owner** | : | Same |
| **Application Type** | : | Preliminary Conditional Use Site Plan |
| **Present Comprehensive Plan Map Designation** | : | Low Density Residential |
| **Present Zoning District** | : | R-1 (Single-family Residential District) |
| **Present Use** | : | Public School |
| **Proposed Use** | : | Public School |
| **Size and Location** | : | 23.97 +/- acres of land located along the south side of Lakeview Avenue approximately 875 feet east of the Route 113 intersection, addressed as 512 Lakeview Avenue. |
| **Tax Map & Parcel** | : | 1-30-3.07-138.00 & 138.01 |

ENC: Staff Analysis Report
Exhibit A – Location & Zoning Map
Exhibit B – Preliminary Site Plan

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THE CITY of Milford DELAWARE

PLANNING DEPARTMENT
Planning, Economic Development,
Enforcement, and Inspections Office
O 302.424.8396 | F 302.424.3559

**STAFF REPORT**
**August 28, 2023**

| | | |
|---|---|---|
| **Application Number / Name** | **:** | 23-012 / Milford Middle School |
| **Tax Map & Parcel** | **:** | 1-30-3.07-138.00 & 138.01 |
| **Size and Location** | **:** | 23.97 +/- acres of land located along the south side of Lakeview Avenue approximately 875 feet east of the Route 113 intersection, addressed as 512 Lakeview Avenue. |

## I. BACKGROUND INFORMATION:

- The applicant proposes to redevelop the Milford Middle School property into a 127,000 square foot school as shown on the provided preliminary site plans.

- Chapter 230-9(C)(2) states "public and private elementary, junior or senior high schools" are permitted with the approval of a conditional use permit by City Council.

## II. STAFF ANALYSIS:

Based on the information presented, the City of Milford Code, and the Comprehensive Plan, staff submits the following regarding the request for the Preliminary Conditional Use Site Plan:

- The Preliminary Site Plan meets the minimum standards for Chapter 230 Zoning and Chapter 200 Subdivision of Land.

- The plans have been reviewed for general compliance with the City's Construction Standards and Specifications.

- The student drop-off and pick-up plan is shown on the site plan sheets to illustrate the anticipated traffic circulation during these hours.

- The Tree Preservation and Advisory Council discussed the Middle School project at their February 15, 2023 quarterly meeting, specifically the condition and status of the Cherry trees located along Lakeview Avenue. The Advisory Council discussed and voted, that if the trees were deemed to be healthy enough after inspection from the City Arborist, then they would like to see the trees remain as part of the remodeling of the school and be incorporated into

the overall landscape plan and design. See enclosed memo from Brad Dennehy, Parks and Recreation Director, dated March 14, 2023. The landscaping plan (Sheet L101) shows these Cherry trees being removed.

- Evaluation based on the criteria found under Chapter 230-48 Conditional Uses.

A. The presence of adjoining similar uses.

*The property is the site of the former Middle School which has been vacant for several years. The property is located within an existing low-density residential area containing primarily single-family detached dwellings on lots ranging in size from 10,000 square feet to 30,000 square feet. The property is bordered on the west by Lakeview Avenue, the north by School Place, the east by Seabury Avenue and the south by Kent Place.*

B. An adjoining district in which the use is permitted.

*The proposed use is permitted by conditional use approval from City Council within the residential zoning districts.*

C. There is a need for the use in the area proposed as established by the Comprehensive Plan.

*The Comprehensive Plan designates this area as Low Density Residential. The proposed use is consistent with the land use plan for the Comprehensive Plan and addresses additional goals and objectives related to the redevelopment of vacant buildings and properties within the City.*

D. There is sufficient area to screen the conditional use from adjacent different uses.

*The property is the former site of the Milford Middle School and is located within an existing low density residential area. The general building footprint is being reduced and the new building will be situated towards the south side of the property along Kent Place. Access points to parking lots generally remain the same. The applicant is providing some additional screening in the form of shrubbery at the head of parking spaces that are located directly across from residential properties, to reduce negative impacts from headlights. Additional trees will be planted along School Place, Seabury Avenue and Kent Place to fill-in the existing street trees.*

E. The use will not detract from permitted uses in the district.

*The property is the former site of the Milford Middle School and is located within an existing low density residential area. The general building footprint is being reduced and the new building will be situated towards the south side of the property along Kent Place. Access points to parking lots generally remain the same. The applicant is providing some additional screening in the form of shrubbery at the head of parking spaces that are located directly across from residential properties, to reduce negative impacts from headlights. A student drop-off and pick-up plan shows access coming from Kent Place with internal stacking within the parking lot area for approximately 50 vehicles.*

F. Sufficient safeguards, such as traffic control, parking, screening and setbacks, can be implemented to remove potential adverse influences on adjoining uses.

*The property is the former site of the Milford Middle School. The general building footprint is being reduced and the new building will be situated towards the south side of the property along Kent Place. Access points to the parking lots generally remain the same. The applicant is providing some additional landscaping along the streets and around the parking lot areas to reduce impacts on residential neighbors. The project meets the minimum setbacks for the principal building and off-street parking for the R-1 district.*

- The following comments must be addressed prior to final site plan approval:
  - Final Site Plan approval will require approvals or no objection letters from DelDOT, the State Fire Marshal's Office and DNREC Sediment & Stormwater Management Program;
  - Address Preliminary Conditional Use Site Plan review comments (a copy of which is provided in the packet);
  - Applicant must obtain final approval of engineering plans from the City Engineer; and,
  - Additional department and agency comments outlined in Section III.

## III. AGENCY COMMENTS:

- **Office of State Planning Coordination**
  See attached PLUS comments and the corresponding responses from the applicant.

- **DelDOT Planning, Development Coordination**
  No comments provided.

- **Delaware Health and Social Services – Division of Public Health**
  No comments provided.

- **Department of Natural Resources and Environmental Control (DNREC), Division of Water, Surface Water Discharges Section (SWDS)**
  No comments provided.

- **State of Delaware, Sediment and Stormwater Management Program**
  See attached comments.

- **Delaware State Fire Marshal's Office**
  See attached comments.

- **Carlisle Fire Company**
  No comments provided.

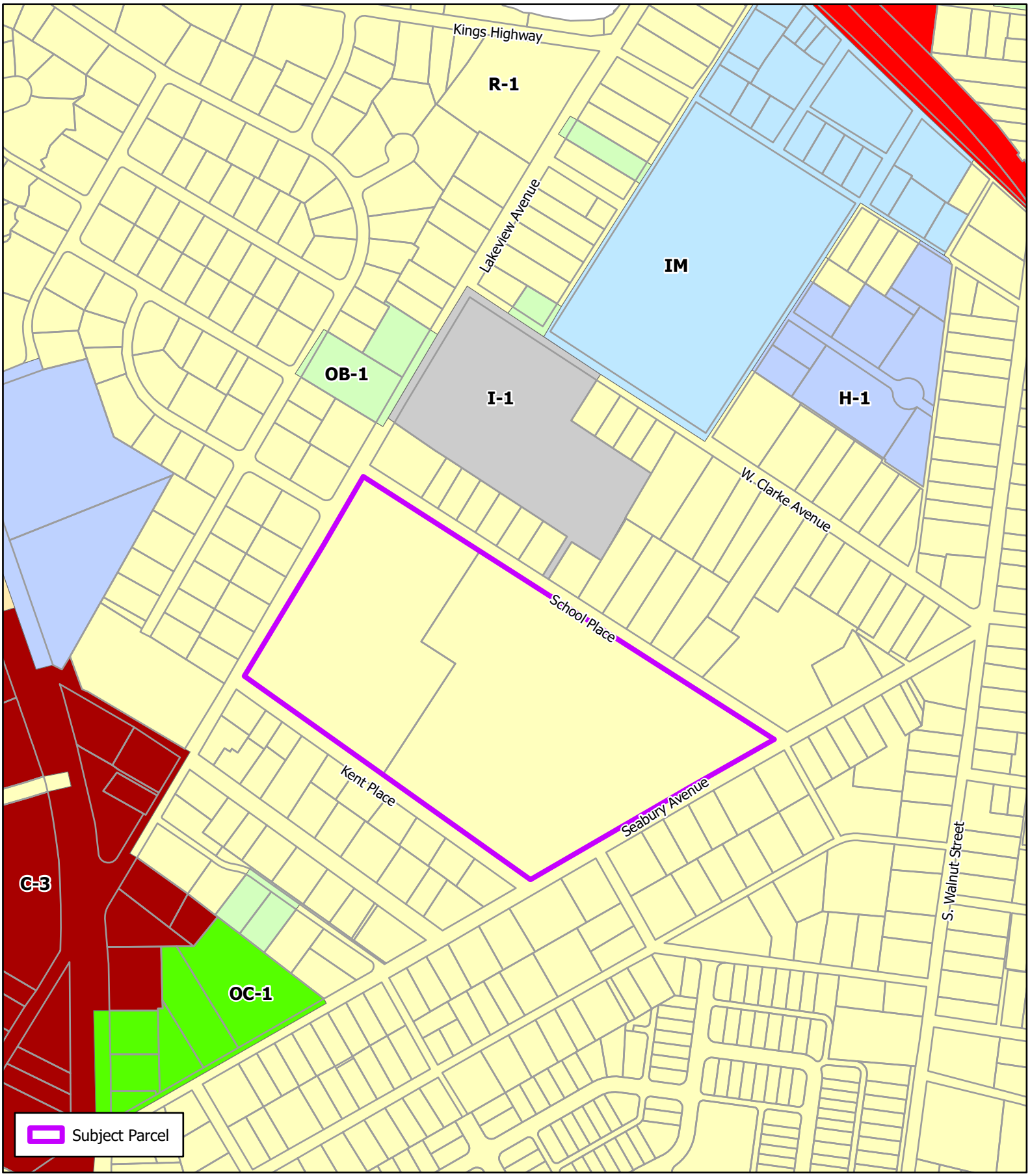
- **City Engineer**
  See attached Preliminary Site Plan review comments dated July 28, 2023 and the applicant's comment response letter dated July 18, 2023.

- **City of Milford Public Works Department**
  No comments provided.

- **City of Milford Parks and Recreation Department**
  See enclosed correspondence from the City's Tree Preservation and Advisory Council dated March 14, 2023

- **City of Milford Police Department**
  No comments provided.

- **Milford School District**
  No comments provided.




THE CITY of Milford DELAWARE

Scale: 0 240 480 Feet

Drawn by: WRP

Date: 02/22/23

Filepath: CUSite_MilfordMiddleSchool.aprx

Title:

Conditional Use Site Plan

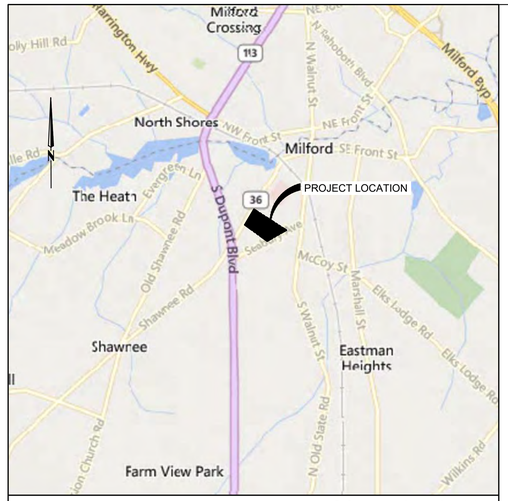
**Milford Middle School**

Location & Zoning Map

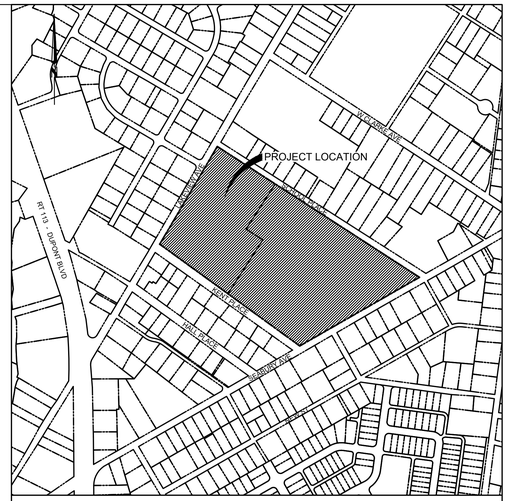
# MILFORD MIDDLE SCHOOL

## LAKEVIEW AVENUE
## CITY OF MILFORD
## SUSSEX COUNTY, DELAWARE

**DBF PROJECT NO. 1022A017**
**OCTOBER 2022**




**LOCATION MAP** **SCALE: 1" = 2,500'**




**VICINITY MAP** **SCALE: 1" = 400'**

## INDEX OF SHEETS


C001 TITLE SHEET
C002 CIVIL NOTES
C051 EXISTING CONDITIONS
C052 DEMOLITION PLAN
C101 OVERALL SITE PLAN
C102 SITE PLAN
C103 SITE PLAN
C301 OVERALL GRADING PLAN
C302 GRADING PLAN
C303 GRADING PLAN
C401 SEDIMENT AND SWM COVERSHEET
C402 PRE-CONSTRUCTION SITE SWM PLAN
C403 CONSTRUCTION SITE SWM PLAN
C404 OVERALL POST CONSTRUCTION SWM PLAN
C405 POST CONSTRUCTION SWM PLAN, FACILITY 1
C406 STORM DRAIN PROFILES
C407 CONSTRUCTION SITE DETAILS AND NOTES
C408 CONSTRUCTION SITE DETAILS
C501 UTILITY PLAN
C502 FIRE PROTECTION PLAN
C503 UTILITY PROFILES
C601 CONSTRUCTION DETAILS
C602 CONSTRUCTION DETAILS
C603 CONSTRUCTION DETAILS
L101 LANDSCAPE PLAN


## GENERAL NOTES

1. THE EXISTING UTILITIES SHOWN IN THESE DRAWINGS IS BASED ON BEST AVAILABLE INFORMATION. NO GUARANTEE TO THE ACCURACY OF THE LOCATION (HORIZONTAL OR VERTICAL) IS MADE BY THE ENGINEER. CONTRACTOR TO FIELD VERIFY AND TEST PIT AS NEEDED TO VERIFY THE LOCATION OF THE EXISTING UTILITIES. THIS SHALL BE DONE AS PART OF THE CONTRACT FOR THE WORK SHOWN IN THESE DRAWINGS. ANY DAMAGE INCURRED TO SUCH UTILITIES SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTORS EXPENSE.

2. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING TWO (2) WEEKS PRIOR TO THE START OF CONSTRUCTION AND SHALL COORDINATE CONSTRUCTION WITH THE UTILITY COMPANIES INVOLVED:

| | |
|---|---|
| DAVIS BOWEN & FRIEDEL, INC. | 410-543-9091 |
| SUSSEX CONSERVATION DISTRICT | 302-856-2105 |
| CITY OF MILFORD PUBLIC WORKS DEPARTMENT | 302-422-1110 X1107 |
| CITY OF MILFORD ELECTRIC DEPARTMENT | 302-422-1110 X1137 |
| MISS UTILITY OF DELMARVA | 1-800-282-8555 |

3. THE CONTRACTOR SHALL CONTACT THE CITY OF MILFORD AT LEAST TWO (2) WEEKS PRIOR TO THE START OF CONSTRUCTION TO SCHEDULE A PRE-CONSTRUCTION MEETING.

4. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, LABOR, AND MATERIALS FOR ANY MISCELLANEOUS OR TEST PIT EXCAVATIONS REQUIRED BY THE ENGINEER. CONTRACTOR SHALL TEST PIT TO CONFIRM THE ACTUAL LOCATION OF ANY AND ALL EXISTING SANITARY DISTRICT FACILITIES AT EACH AND EVERY CROSSING AND TIE-IN.

5. ALL CONSTRUCTION SHALL BE MARKED FOR TRAFFIC AND PEDESTRIAN SAFETY. ALL SIGNS SHALL BE PLACED IN ACCORDANCE WITH SECTION VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

6. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE CITY OF MILFORD DESIGN STANDARDS.

7. THE CONTRACTOR ASSUMES ALL RESPONSIBILITIES FOR ANY DEVIATIONS FROM THESE PLANS, UNLESS SAID DEVIATION IS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL RECEIVE WRITTEN PERMISSION FROM THE ENGINEER IS A DEVIATION OF THE PLAN IS NECESSARY.

8. ALL DISTURBED AREAS SHALL BE SMOOTHLY GRADED TO PROVIDE POSITIVE DRAINAGE IN THE DIRECTION OF FLOW ARROWS HEREIN AND STABILIZED WITH TOPSOIL, SEED, AND MULCH. IF SETTLEMENT OCCURS, TOPSOIL, SEEDING, AND MULCHING SHALL BE REPEATED UNTIL SETTLEMENT SUBSIDES (SEE EROSION AND SEDIMENT CONTROL SPECIFICATIONS).

9. ALL TRASH, TRESS, DEMOLITION DEBRIS, AND UNDERBRUSH ARE TO BE CLEARED AND REMOVED OFF SITE TO AN APPROVED DUMP SITE BY THE CONTRACTOR.

10. ANY EXCESS EXCAVATED MATERIAL PLACED OUTSIDE OF THOSE AREAS DESIGNATED ON THIS PLAN SHALL MEET APPROVAL OF SUSSEX SOIL CONSERVATION.

11. ANY EXISTING SURVEY MONUMENTATION THAT IS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A REGISTERED SURVEYOR AT THE CONTRACTOR'S EXPENSE.

12. ALL FILL AREAS WITHIN LIMITS OF BUILDING CONSTRUCTION AND PARKING AREAS AS DESIGNATED ON THESE PLANS SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY AND LAID AND COMPACTED IN 8" MAXIMUM LIFTS.

13. ALL SIDEWALKS, HANDICAP RAMPS, HANDICAP PARKING SPACES, AND ACCESSIBLE ROUTES SHALL COMPLY WITH APPLICABLE ADA CRITERIA.

14. IF POSSIBLE, TRENCHES SHALL NOT REMAIN OPEN OVERNIGHT. IF IT IS NECESSARY FOR TRENCHES TO REMAIN OPEN, STEEL PLATES, CAPABLE OF BEARING TRAFFIC, SHALL BE USED TO COMPLETELY COVER THE TRENCH.

15. A MINIMUM OF ONE-WAY TRAFFIC SHALL BE MAINTAINED ON ADJACENT ROADWAYS DURING HOURS OF CONSTRUCTION, AND TWO WAY TRAFFIC AT ALL OTHER TIMES.

16. ON-SITE TOPOGRAPHIC SURVEY PERFORMED BY DAVIS, BOWEN, & FRIEDEL, INC., DATED SEPTEMBER, 2022. HORIZONTAL DATUM IS DELAWARE STATE PLANE, NAD 83. VERTICAL DATUM IS NAVD 88.

PROJECT BENCHMARKS (NAVD 88).

| ID | COORDINATES | ELEVATION | DESCRIPTION |
|---|---|---|---|
| 1 | LAT:38.905205<br>LON:75.437102 | 26.48' | IRCS |
| 2 | LAT:38.904808<br>LON:75.435047 | 24.97' | IRCS |
| 3 | LAT:38.902790<br>LON:75.436082 | 25.30' | IRCS |
| 4 | LAT:38.902418<br>LON:75.433871 | 28.84' | IRCS |

## SITE DATA

| | |
|---|---|
| OWNER: | MILFORD SCHOOL DISTRICT BOARD OF EDUCATION<br>906 LAKEVIEW AVENUE<br>MILFORD, DELAWARE 19963<br>PHONE: (302)-422-1600 |
| ENGINEER: | DAVIS, BOWEN, & FRIEDEL, INC.<br>501 E. MAIN ST., SUITE 100<br>SALISBURY, MARYLAND 21804<br>PHONE: 410-543-9091<br>FAX: 410-543-4172 |
| PROPERTY ADDRESS: | 512 LAKEVIEW AVENUE<br>MILFORD, DELAWARE 19963 |
| TAX MAP ID: | 130-3.07-138.00 |
| DEED REF.: | 399/97 |
| ZONING: | R-1 - SINGLE-FAMILY RESIDENTIAL DISTRICT |

| | MINIMUM REQUIREMENTS: | PROVIDED |
|---|---|---|
| FRONT SETBACK: | 25 FEET | 25 FEET |
| SIDE SETBACK: | 12 FEET | 12 FEET |
| REAR SETBACK: | 25 FEET | 25 FEET |
| MIN. LOT WIDTH: | 80 FEET | 739.5± FEET |
| MIN. LOT S.F.: | 10,000 SF | 23.288± ACRES |

| | |
|---|---|
| MAX BUILDING HEIGHT: | 35' |
| EXISTING USE: | SCHOOL |
| PROPOSED USE: | SCHOOL |
| TOTAL SITE AREA: | 23.42 ACRES± |
| MAX. LOT COVERAGE: | 40% |
| EX. IMPERVIOUS SURFACE: | 6.261 AC. (26.1%) |
| EX. BUILDING COVERAGE: | 1.91 AC. (7.9%) |
| PRO. IMPERVIOUS SURFACE: | 5.670 AC. (23.7%) |
| PRO. BUILDING COVERAGE: | 1.82 AC. (7.6%) |
| PARKING REQUIRED: | 1 SPACE / 8 SEATS IN AUDITORIUM, CAFETERIA, OR GYMNASIUM<br>GYMNASIUM CAPACITY = 1,000 / 8 = 125 SPACES |
| PARKING PROVIDED: | 283 SPACES (INCLUDING 7 HANDICAP) & 18 BUSES |
| BICYCLE PARKING REQUIRED: | 5 SPACES PLUS 1 PER EVERY 20 PARKING SPACES =<br>(283 / 20) + 5 = 19.15 SPACES |
| BICYCLE PARKING PROVIDED: | 22 SPACES |
| FLOOD ZONE: | ZONE X - OUTSIDE FLOODPLAIN<br>(FIRM MAP 24011C0227D, DATED JANUARY 16, 2015) |
| WETLANDS: | NOT PRESENT ON SITE |
| SOURCE WATER PROTECTION AREA: | NOT PRESENT ON SITE |
| WATER: | CITY OF MILFORD |
| SEWER: | CITY OF MILFORD |
| ELECTRIC: | CITY OF MILFORD |
| SOLID WASTE: | PRIVATE |
| EXISTING EDU'S: | 1 EDU + 1 EDU PER 25 STUDENTS<br>1 + (1,100 STUDENTS / 25)<br>45 EDU |
| PROJECTED EDU'S: | 1 EDU + 1 EDU PER 25 STUDENTS<br>1 + (1,100 STUDENTS / 25)<br>41 EDU |
| PROJECTED GPD: | 41 EDU X 250 GPD<br>10,250 GPD (AVERAGE) |
| HORIZONTAL DATA | NAD 83 |
| VERTICAL DATA | NAVD 88 |
| LIMIT OF DISTURBANCE: | 10.802 AC. |

DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS - ENGINEERS - SURVEYORS
EASTON, MARYLAND 410.770.4744 | MILFORD, DELAWARE 302.424.1444 | SALISBURY, MARYLAND 410.543.9091

## LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | PROPERTY LINE OR RIGHT-OF-WAY LINE | |
| X | FENCE | X |
| 24 | CONTOUR | 24 |
| ×24.24 ×24.74 TC ×24.24 | SPOT ELEVATIONS: SURFACE, TOP OF CURB, BOTTOM OF CURB | 24.24 24.74 T.C. 24.24 B.C. |
| | SWALE | |
| | EDGE OF WOODS, LIMITS OF CLEARING LINE | |
| UGE | UNDERGROUND ELECTRIC LINE | |
| OH/E | OVERHEAD ELECTRIC LINE | |
| T | UNDERGROUND TELEPHONE LINE | |
| UGG | UNDERGROUND GAS LINE | 2G 2G |
| EX-8SS | SEWER MAIN, MANHOLE, AND CLEANOUT | 8SS C.O. |
| EX-6W | WATER MAIN, HYDRANT, VALVE, AND METER | 6W W.M. |
| ST | STORMDRAIN, MANHOLE, AND INLET | |
| | CURB, CURB AND GUTTER | |
| | CONCRETE SIDEWALK, CONCRETE PAD, OR CONCRETE PAVING | |
| | BITUMINOUS PAVING | |
| | BUILDING | |
| | ITEMS TO BE DEMOLISHED | |
| | DECIDUOUS TREE, EVERGREEN TREE, AND SHRUBS | |
| | ROAD SIGN, MAIL BOX | |
| | LIGHT POLE | |
| | UTILITY POLE WITH GUY WIRES | |

## ABBREVIATIONS

| | |
|---|---|
| PR | PROPOSED |
| EX | EXISTING |
| D.I. | DUCTILE IRON |

**CITY OF MILFORD APPROVAL**

MARK WHITFIELD CITY MANAGER DATE

**CITY PLANNING DEPARTMENT APPROVAL**

PLANS HAVE BEEN REVIEWED AND ARE FOUND TO BE IN GENERAL CONFORMANCE WITH THE MOST RECENTLY ADOPTED AND/OR CERTIFIED VERSIONS OF THE CITY OF MILFORD'S CODE OF ORDINANCES AND COMPREHENSIVE LAND USE PLAN. THE OWNER AND THEIR ENGINEER AND/OR SURVEYOR ASSUME ALL RESPONSIBILITY FOR THE DESIGN AS CONTEMPLATED HEREIN AND ACCURACY OF ALL INFORMATION SHOWN HEREON.

**CITY ENGINEER APPROVAL**

CONSTRUCTION IMPROVEMENTS PLANS HAVE BEEN REVIEWED AND ARE FOUND TO BE IN GENERAL CONFORMANCE WITH THE CITY OF MILFORD'S STANDARD SPECIFICATIONS FOR INSTALLATION OF UTILITY CONSTRUCTION PROJECTS AND SUBDIVISION PAVEMENT DESIGN. THE OWNER AND THEIR ENGINEER AND/OR SURVEYOR ASSUME ALL RESPONSIBILITY FOR THE DESIGN AS CONTEMPLATED HEREIN AND ACCURACY OF ALL INFORMATION SHOWN HEREON.

CITY ENGINEER DATE

**OWNER'S STATEMENT**

I, THE UNDERSIGNED, HEREBY STATE THAT I AM THE OWNER OF THE PROPERTY DESCRIBED AND SHOWN ON THIS PLAN, THE PLAN WAS MADE AT MY DIRECTION. I ACKNOWLEDGE THE SAME TO BE MY ACT AND DESIRE THE PLAN BE RECORDED ACCORDING TO LAW.

MILFORD SCHOOL DISTRICT BOARD OF EDUCATION DATE
906 LAKESIDE AVENUE
MILFORD, DE 19963

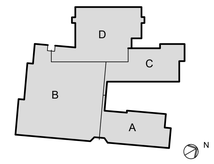
**ENGINEER'S STATEMENT**

I, HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLIES WITH THE APPLICABLE STATE AND LOCAL REGULATIONS AND ORDINANCES.

W. ZACHARY CROUCH, P.E. DATE
LICENSE NO. 12734
EXPIRATION DATE: 06/30/24
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DE 19963

PRELIMINARY - NOT FOR CONSTRUCTION

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN

Milford SCHOOL DISTRICT
HOME of the BUCCANEERS


OWNER:
MILFORD SCHOOL DISTRICT
906 LAKEVIEW AVENUE
MILFORD, DE 19963

STRUCTURAL ENGINEER:
PILOTTOWN ENGINEERING
17858 NASSAU COMMONS BLVD, UNIT 3
LEWES, DE 19958
P: 302.703.1770

MEP ENGINEER:
FURLOW ASSOCIATES, INC.
650 NAAMANS ROAD
CLAYMONT, DE 19703
P: 302.798.3515

CIVIL ENGINEER:
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DE 19962
P: 302.424.1441

KITCHEN CONSULTANT:
CORSI ASSOCIATES, LLC
1489 BALTIMORE PIKE, STE 109
SPRINGFIELD, PA 19064
P: 866.267.7447

THEATER PLANNING:
STAGES CONSULTANTS, LLC
300 RARITAN AVENUE, 2ND FLR
HIGHLAND PARK, NJ 08904
P: 732.333.8003

TECHNOLOGY CONSULTANT:
EDUCATIONAL SYSTEM PLANNING
2448 HOLLY AVENUE, STE 302
ANNAPOLIS, MD 21401
P: 410.573.9148

B S A + A
Buck Simpers Architect + Associates, Inc.
954 Justison St.
Wilmington, DE 19801
302 658-9300
Fax 658-1125


JOB NO. 22.018

# MILFORD MIDDLE SCHOOL

612 LAKEVIEW AVENUE,
MILFORD, DE 19963

**TITLE SHEET**

# C001


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# CITY OF MILFORD GENERAL NOTES

1. THE BOUNDARY INFORMATION SHOWN ON THESE DRAWINGS IS BASED ON A SURVEY PERFORMED BY DAVIS BOWEN AND FRIEDEL, INC, IN MAY 18, 2021.
2. A TOPOGRAPHIC SURVEY WAS PERFORMED BY DAVIS, BOWEN & FRIEDEL, INC. OF MILFORD, DELAWARE IN SEPTEMBER, 2022. ELEVATIONS ARE BASED ON CONTROL MONUMENT IRON CAP, WITH AN ELEVATION OF 26.48' NGVD88.
3. HORIZONTAL DATUM IS BASED ON DELAWARE STATE GRID, NAD83/91, CONTROL MONUMENTS IRCS BENCHMARK LOCATED ON LAKEVIEW AVENUE, ELEVATION 26.48'.
4. HYDRIC SOILS ARE NOT INDICATED AS BEING PRESENT ACCORDING TO THE SUSSEX COUNTY SOIL SURVEY.
5. EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION. COMPLETENESS OR CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES INVOLVED IN ORDER TO SECURE THE MOST ACCURATE INFORMATION AVAILABLE AS TO UTILITY LOCATION AND ELEVATION. NO CONSTRUCTION AROUND OR ADJACENT TO UTILITIES SHALL BEGIN WITHOUT NOTIFYING THEIR OWNERS AT LEAST 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE DONE TO THEM DUE TO HIS/HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE. TO LOCATE EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS UTILITY DELMARVA (800-282-8555) A MINIMUM OF THREE (3) CONSECUTIVE WORKING DAYS PRIOR TO ANY EXCAVATION.
6. ALL MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MATERIALS AND WORKMANSHIP SHALL MEET THE REQUIREMENTS OF THE CITY OF MILFORD STANDARD SPECIFICATIONS FOR INSTALLATION OF UTILITY CONSTRUCTION AND SUBDIVISION PAVEMENT DESIGN, AND ALL APPLICABLE AGENCIES HAVING JURISDICTION OVER THE PROPOSED IMPROVEMENTS.
7. USE ONLY SUITABLE AND APPROVED GRANULAR MATERIAL FOR BACKFILLING TRENCHES.
8. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL RIGHT-OF-WAY LINES AND PROPERTY LINES TO HIS OWN SATISFACTION. ANY DISTURBED AREAS BEYOND THE RIGHT-OF-WAY OR EASEMENT LINES SHALL BE RESTORED IMMEDIATELY TO THEIR ORIGINAL CONDITION.
9. ALL VALVE CLOSURES AND CUT-INS SHALL BE COORDINATED WITH THE CITY. CITY OFFICIALS WILL CARRY OUT ALL NECESSARY VALVE CLOSURES. CONTRACTOR SHALL COORDINATE ISOLATION OF EXISTING WATER MAINS WITH THE CITY AND NOTIFY AFFECTED RESIDENTS AT LEAST 48 HOURS PRIOR TO CUT-IN.
10. PIPELINE DETECTION TAPE SHALL BE COLOR CODED, APPROPRIATELY LABELED, AND INSTALLED 18 INCHES BELOW THE GROUND SURFACE AND DIRECTLY ABOVE ALL PROPOSED NON-METALLIC WATER MAIN, SEWER MAIN, SEWER LATERALS, AND WATER SERVICES.
11. CONDUCTIVE TRACER WIRE SHALL BE INSTALLED WITH ALL NON-METALLIC WATER PIPE AND SERVICES; AND ALONG ALL SEWER LATERALS AND FORCEMAIN. WIRE SHALL BE SECURED TO THE PIPE AND SHALL BE SECURELY BONDED TOGETHER AT ALL WIRE JOINTS WITH APPROVED WATERTIGHT CONNECTORS. TRACER WIRE SHALL BE ACCESSIBLE AT ALL VALVE BOXES, METER PITS, CLEANOUTS, AND AIR RELEASE VALVES.
12. PRIOR TO ISOLATION AND CUT-IN PROCEDURES, CONTRACTOR SHALL EXCAVATE, LOCATE, AND OBSERVE FUNCTION OF ALL EXISTING VALVES TO ASSIST IN THE SYSTEM ISOLATION.
13. SHOP DRAWINGS FOR ANY ITEM(S) WHICH WILL EVENTUALLY BE TAKEN OVER BY THE CITY SHALL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE ORDERING OF AND/OR INSTALLATION OF THE ITEM(S).
14. ALL SANITARY SEWER MAINS AND FORCEMAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES AND ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 42 INCHES AS MEASURED FROM THE TOP OF PIPE TO PROPOSED GRADE. SEWER LATERALS SHALL HAVE A MINIMUM DIAMETER OF SIX (6) INCHES AND HAVE A MINIMUM COVER OF 36 INCHES.
15. THERE SHALL BE A MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER MAINS AND FORCEMAINS OF 10 FEET, AS MEASURED FROM EDGE OF PIPE TO EDGE OF PIPE. THERE SHALL BE A MINIMUM VERTICAL SEPARATION OF 18 INCHES BETWEEN WATER MAINS AND SANITARY SEWER MAINS OR FORCEMAINS AT CROSSINGS. ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE AT CROSSINGS.
16. THERE SHALL BE A MINIMUM VERTICAL SEPARATION OF 12 INCHES BETWEEN ANY STORM DRAIN PIPE AND ANY WATER MAIN OR SEWER MAIN. IF 12 INCHES CANNOT BE MAINTAINED, A MINIMUM OF SIX (6) INCHES IS REQUIRED AND PROVISIONS SHALL BE MADE ACCEPTABLE TO THE CITY OF MILFORD FOR PROPERLY ENCASING THE PIPE IN CONCRETE.
17. THE FEMA FLOODPLAIN CLASSIFICATION FOR THIS SITE IS ZONE X PER MAP 1240110227D, DATED JANUARY 16, 2015.
18. ALL ROADWAYS ARE TO BE SWEPT FREE OF SEDIMENT ON A DAILY BASIS.
19. THE CONTRACTOR SHALL REMOVE AND IMMEDIATELY REPLACE, RELOCATE, RESET OR RECONSTRUCT ALL OBSTRUCTIONS IN THE WORK AREA, INCLUDING, BUT NOT LIMITED TO, MAILBOXES, SIGNS, LANDSCAPING, LIGHTING, PLANTERS, CULVERTS, DRIVEWAYS, PARKING AREAS, CURBS, GUTTERS, FENCES, OR OTHER NATURAL OR MAN-MADE OBSTRUCTIONS. TRAFFIC CONTROL REGULATORY, WARNING AND INFORMATIONAL SIGNS SHALL REMAIN FUNCTIONAL AND VISIBLE TO THE APPROPRIATE LANES OF TRAFFIC AT ALL TIMES, WITH THEIR RELOCATION KEPT TO A MINIMUM DISTANCE.
20. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT PAVING IS INSTALLED TO THE ELEVATIONS SHOWN AND THAT NO PONDING OF WATER WILL OCCUR AFTER PAVING IS COMPLETE.
21. THE STORM DRAINAGE SYSTEM HAS BEEN DESIGNED USING THE CRITERIA OF THE STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION DEVELOPMENT COORDINATION MANUAL, LATEST EDITION.
22. ALL FIRE LANES, FIRE HYDRANTS, EXITS, AND STANDPIPES WILL BE MARKED IN ACCORDANCE WITH STATE FIRE PREVENTION REGULATIONS.
23. DELAWARE REGULATIONS PROHIBIT THE BURIAL OF CONSTRUCTION DEMOLITION DEBRIS, INCLUDING TREES AND STUMPS ON CONSTRUCTION SITES. ANY SOLID WASTE FOUND DURING THE EXCAVATION FOR STRUCTURES AND UTILITY LINES ON AND OFF SITE MUST BE REMOVED AND PROPERLY DISCARDED. ANY REMEDIAL ACTION REQUIRED IS THE RESPONSIBILITY OF THE OWNER.
24. DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED AND ALL RULES AND REGULATIONS THERETO APPURTENANT.
25. CONTRACTOR SHALL GRADE, TOPSOIL, SEED AND MULCH ALL DISTURBED AREAS OF CONSTRUCTION, INCLUDING PIPE INSTALLATION OR DITCH CONSTRUCTION. EROSION CONTROL MATTING SHALL BE PROVIDED ON ALL SLOPES GREATER THAN 3:1.
26. THE OWNER AND/OR THEIR CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE SERVICES OF A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF DELAWARE FOR THE PERMANENTLY RE-ESTABLISHING OF ANY PROPERTY MARKERS OR MONUMENTS DISTURBED DURING CONSTRUCTION. A SURVEY AND METES AND BOUNDS THAT INCLUDES THE RE-ESTABLISHED MARKER(S) OR MONUMENT(S) SHALL BE PRESENTED TO THE PROPERTY OWNER FOR COMPARISON WITH THE ORIGINAL PLAT, FOR VERIFICATION.
27. THE OWNER SHALL BE RESPONSIBLE FOR THE SHORT-TERM MAINTENANCE OF THE ANY AND ALL STORMWATER MANAGEMENT FACILITIES AND STORM SEWER SYSTEMS UNTIL SUCH TIME THAT THE LONG-TERM MAINTENANCE RESPONSIBILITIES CAN BE TRANSFERRED TO A LEGALLY-ESTABLISHED HOMEOWNERS ASSOCIATION OR OTHER RESPONSIBLE ENTITY.
28. THE CITY OF MILFORD WILL ASSUME OWNERSHIP AND MAINTENANCE RESPONSIBILITY OF WATER AND SEWER PIPES AND APPURTENANCES, INSTALLED WITHIN CITY RIGHT-OF-WAY AND EASEMENTS DEDICATED TO THE CITY, STORM SEWER PIPES AND CATCH BASINS, INSTALLED FULLY WITHIN CITY RIGHT-OF-WAY; ONCE THE FOLLOWING CONDITIONS HAVE BEEN MET:
    A. ALL ITEMS HAVE PASSED CITY INSPECTION;
    B. THE CITY HAS RECEIVED AND APPROVED DIGITAL AND HARD COPIES OF THE RECORD DRAWINGS; AND
    C. THE RIGHTS-OF-WAY AND/OR EASEMENTS HAVE BEEN DEEDED TO THE CITY AND RECORDED WITH THE RECORDER OF DEEDS
29. SEWER AND WATER CAPACITY ARE NOT GUARANTEED UNTIL BUILDING PERMITS ARE ISSUED, ALL FEES ARE PAID AND SUITABLE UTILITIES ARE IN PLACE FOR PROPER CONVEYANCE, TREATMENT AND DISPOSAL.
30. PRELIMINARY APPROVAL FROM PLANNING COMMISSION SHALL BE VOID AFTER TWENTY-FOUR (24) MONTHS, UNLESS AN EXTENSION IS REQUESTED BY THE OWNER AND APPROVED, FOR GOOD CAUSE, BY THE PLANNING COMMISSION PRIOR TO THE DATE OF EXPIRATION.
31. THE APPROVAL OF A CONDITIONAL USE IN CONJUNCTION WITH A SITE PLAN APPLICATION SHALL EXPIRE UPON EXPIRATION OF THE ASSOCIATED SITE PLAN.
32. FINAL APPROVAL FROM THE CITY SHALL BECOME VOID IF THE FINAL RECORD PLAT IS NOT RECORDED WITHIN 90 DAYS OF THE DATE OF PLANNING COMMISSION'S GRANTING OF FINAL APPROVAL. IF CONSTRUCTION OF THE APPROVED IMPROVEMENTS IS NOT SUBSTANTIALLY UNDERTAKEN WITHIN EIGHTEEN (18) MONTHS OF FINAL SITE PLAN APPROVAL, THE SITE PLAN APPROVAL SHALL BE VOID. THE APPLICANT MAY REQUEST A ONE (1) YEAR EXTENSION FROM THE PLANNING COMMISSION FOR GOOD CAUSE.
33. THE APPLICANT IS RESPONSIBLE TO ENSURE THAT ALL CITY AND/OR AGENCY CONSTRUCTION PERMIT APPLICATIONS HAVE BEEN COMPLETED, SUBMITTED, AND ALL APPLICABLE FEES HAVE BEEN PAID PRIOR TO COMMENCING CONSTRUCTION. THE CITY SHALL NOT BE HELD RESPONSIBLE FOR AN ANTICIPATED CONSTRUCTION START DATE THAT IS NOT MET DUE TO THE APPLICANT OR HIS/HER CONTRACTOR NOT HAVING MET THE CONSTRUCTION PERMITTING REQUIREMENTS.
34. AS A CONDITION OF THE APPROVAL OF THE CONSTRUCTION DRAWINGS, AND PRIOR TO THE ISSUANCE OF THE FIRST BUILDING PERMIT, THE APPLICANT SHALL POST A COMPLETION GUARANTY IN THE AMOUNT OF 125% OF THE COST OF INSTALLATION FOR THE CONSTRUCTION OF RECREATIONAL AND OPEN SPCAE AMENITIES, INCLUDING BUT NOT LIMITED TO COMMUNITY BUILDINGS, PLAYGROUNDS, WALKING PATHS, LANDSCAPING AND LANDSCAPE SCREENING. THE GUARANTY SHALL BE IN AN AMOUNT EQUAL TO 150% OF THE COST OF THE IMPROVEMENTS AS ESTIMATED OR APPROVED BY THE CITY ENGINEER. THE GUARANTY SHALL BE IN THE FORM OF A BOND OR FUNDS DEPOSITED IN AN ESCROW ACCOUNT.
35. A MAINTENANCE BOND IN THE AMOUNT OF 10% OF THE CONSTRUCTION VALUE FOR ANY CONSTRUCTED IMPROVEMENTS AND A PERFORMANCE BOND IN THE AMOUNT OF 125% OF THE CONSTRUCTION VALUE FOR ANY UNCOMPLETED WORK SHALL BE PROVIDED IN ORDER TO OBTAIN CERTIFICATES IF OCCUPANCY AND ACHIEVE FINAL COMPLETION OF THE IMPROVEMENTS AND RELEASE OF ANY COMPLETION GUARANTY. THE MAINTENANCE PERIOD SHALL BE A MINIMUM OF ONE YEAR AND ALL CONSTRUCTION VALUES MUST BE SUBMITTED TO, REVIEWED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE ISSUANCE OF ANY BONDS.
36. UPON COMPLETION OF THE CONSTRUCTION IMPROVEMENTS AND PRIOR TO THE RELEASE OF ANY DEVELOPER'S COMPLETION GUARANTEE, THE DEVELOPER SHALL PROVIDE THE CITY ENGINEER A DRAFT PAPER SET OF DETAILED RECORD PLANS (PLAN VIEW AND PROFILE SHEETS). RECORD INFORMATION SHALL BE PLACED ON THE APPROPRIATE APPROVED DRAWINGS. ORIGINAL DESIGN ELEVATION AND/OR DISTANCE INFORMATION SHALL BE STRUCK THROUGH WITH A FINE LINE AND THE RECORD INFORMATION SHALL BE INSERTED NEXT TO IT. WHEN THE DRAFT SET OF DRAWINGS HAS BEEN APPROVED BY THE CITY, THREE (3) FINAL PAPER COPIES SHALL BE SUBMITTED, SIGNED AND SEALED BY THE OWNER'S ENGINEER OR SURVEYOR. ADDITIONALLY, A CD SHALL BE PROVIDED WITH DIGITAL RECORD INFORMATION IN AUTOCAD FORMAT (VERSION 2018 OR LATER). THE DIGITAL INFORMATION SHALL BE ON DELAWARE STATE PLANE, NAD 83 HORIZONTAL CONTROL AND NAVD88 VERTICAL CONTROL. RECORD PLAN INFORMATION SHALL INCLUDE SURVEYED AS-BUILT ELEVATIONS AND HORIZONTAL LOCATIONS OF THE FOLLOWING:
    A. ALL PROPERTY MONUMENTS/MARKERS;
    B. SEWER MANHOLE RIM & INVERT ELEVATIONS, WITH ASSOCIATED PIPE SIZES & MATERIALS NOTED, PUMP STATION RIM, BOTTOM & INVERT ELEVATIONS WITH ASSOCIATED PIPE SIZES & MATERIALS NOTED, FORCEMAIN INVERT ELEVATIONS EVERY 50 FEET, FORCEMAIN AIR RELEASE VALVE RIM & INVERT ELEVATIONS, SEWER CLEANOUT RIM & INVERT ELEVATIONS, AND GREASE TRAP RIM, BOTTOM & INVERT ELEVATIONS;
    C. WATER VALVES, FIRE HYDRANTS, METER VAULTS, METER PITS, AND CURB STOPS;
    D. STORM SEWER CATCH BASIN AND/OR MANHOLE GRATE, RIM & INVERT ELEVATIONS WITH ASSOCIATED PIPE SIZES & MATERIALS NOTED; AND
    E. ANY OTHER ITEM WHICH WILL BE TAKEN OVER BY THE CITY.
37. THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT AT (302) 422-1110 A MINIMUM OF TWO WEEKS PRIOR TO THE START OF CONSTRUCTION AND SCHEDULE A PRE-CONSTRUCTION MEETING. THE SITE CONTRACTOR AND THE OWNER, OR HIS/HER REPRESENTATIVE SHALL BE IN ATTENDANCE.
38. SOURCE WATER PROTECTION AREAS ARE NOT PRESENT ON SITE.
39. STATE OR FEDERALLY REGULATED WETLANDS ARE NOT PRESENT ON SITE.

# CIVIL PLAN GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING TWO WEEKS PRIOR TO THE START OF CONSTRUCTION AND SHALL APPRISE AND COORDINATE DURING ALL PHASES OF CONSTRUCTION:
    1.1 DAVIS, BOWEN & FRIEDEL, INC.: 302-424-1441.
    1.2 KENT CONSERVATION DISTRICT: 302-608-5370
    1.3 CITY OF MILFORD PUBLIC WORKS DEPARTMENT: 302-422-1110, EXT. 1110.
    1.4 CITY OF MILFORD ELECTRIC DEPARTMENT: 302-422-1110, EXT. 1135.
    1.5 DEPARTMENT OF TRANSPORTATION, CENTRAL DISTRICT PERMITS SUPERVISOR: 302-760-2433.
2. THE CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY DEVIATION FROM THESE PLANS UNLESS WRITTEN APPROVAL HAS BEEN PROVIDED BY THE ENGINEER.
3. FINAL APPROVED SET OF PLANS AND SPECIFICATIONS SHALL BE MAINTAINED ON THE JOB SITE. FAILURE TO COMPLY WITH THIS PROVISION SHALL BE CONSIDERED CAUSE TO STOP THE WORK.
4. THE CONTRACTOR SHALL MAINTAIN ONE COMPLETE SET OF CONTRACT DRAWINGS ON WHICH HE SHALL NOTE, IN RED, THE ALIGNMENTS AND INVERTS OF ALL UNDERGROUND UTILITIES INSTALLED OR ENCOUNTERED DURING THE PROSECUTION OF THE WORK, ALL DISCREPANCIES BETWEEN THE PLAN LOCATIONS AND ELEVATIONS OF BOTH THE EXISTING AND PROPOSED UTILITIES SHALL BE SHOWN ON THE AS-BUILT DRAWINGS TO BE MAINTAINED BY THE CONTRACTOR IN THE FIELD. FINAL SET OF APPROVED CONSTRUCTION PLANS AND SPECIFICATIONS SHALL BE MAINTAINED ON THE JOB SITE AT ALL TIMES. FAILURE TO COMPLY WITH THIS PROVISION SHALL BE CONSIDERED CAUSE TO STOP THE WORK.
5. THE CONTRACTOR SHALL USE ONLY NEW MATERIALS, PARTS, AND PRODUCTS. ALL MATERIALS SHALL BE STORED SO AS TO ASSURE THE PRESERVATION OF THEIR QUALITY AND FITNESS FOR THE INTENDED WORK.
6. ROUTINE PERIODIC INSPECTIONS DURING CONSTRUCTION WILL BE PROVIDED BY THE OWNER AND THE CITY. THESE INSPECTIONS DO NOT RELIEVE THE CONTRACTOR FROM HIS OBLIGATION AND RESPONSIBILITY FOR CONSTRUCTING ALL WORK IN STRICT ACCORDANCE WITH ALL STANDARDS AND SPECIFICATIONS AND CONSTRUCTION DOCUMENTS.
7. CONTRACTOR SHALL PROVIDE STAKEOUT SURVEY NECESSARY FOR THE INSTALLATION OF UTILITY WORK AND APPURTENANES AS REQUIRED PER THE CITY OF MILFORD STANDARDS AND SPECIFICATIONS.

# DEMOLITION AND SAFETY GENERAL NOTES

1. MISS UTILITY OF DELMARVA SHALL BE NOTIFIED THREE (3) CONSECUTIVE WORKING DAYS PRIOR TO EXCAVATION, AT 1-800-282-8555.
2. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY AND PROTECTION.
3. THE CONTRACTOR SHALL OPEN ONLY THAT SECTION OF TRENCH OR ACCESS PITS WHICH CAN BE BACKFILLED AND STABILIZED AT THE END OF EACH WORKING DAY. STEEL PLATES SHALL BE USED ON ANY TRENCH OR ACCESS PITS WHICH MUST REMAIN OPEN OVERNIGHT. THIS REQUIREMENT DOES NOT APPLY TO AREAS COMPLETELY CLOSED AND SECURE FROM VEHICULAR OR PEDESTRIAN TRAFFIC.

# POTABLE WATER DISTRIBUTION GENERAL NOTES

1. ALL WATER DISTRIBUTION WORK SHALL COMPLY WITH THE CITY OF MILFORD WATER MAIN CONSTRUCTION SPECIFICATIONS, LATEST EDITION. CONTRACTOR SHALL OBTAIN A COPY FROM CITY OF MILFORD PRIOR TO BIDDING ON THE JOB. FAILURE TO OBTAIN A COPY OF THE SPECIFICATIONS SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY. ANY ADDITIONAL COSTS CAUSED BY THE FAILURE TO FOLLOW THE SPECIFICATIONS SHALL BE AT THE SOLE COST OF THE CONTRACTOR.
2. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING WATER LATERALS TO WHICH NEW CONSTRUCTION WILL CONNECT.
4. DIFFERING SITE CONDITIONS AND/OR DIFFERING MATERIAL PROPERTIES SHALL REQUIRE CITY OF MILFORD OR DESIGNEE APPROVAL OF SPECIAL DESIGN DETAILS PREPARED BY THE DESIGN ENGINEER PRIOR TO INITIATING OR RESUMING CONSTRUCTION ACTIVITIES.
5. THE CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOLLOWING EXCAVATIONS FOR INSPECTION AND EVALUATION OF EXISTING SOIL SUBGRADE CONDITIONS BY CITY OF MILFORD OR DESIGNEE. CITY OF MILFORD OR DESIGNEE SHALL INSPECT ALL LATERAL SUBGRADES FOLLOWING EXCAVATION AND PRIOR TO CONSTRUCTION OF NEW WORK TO CONFIRM DESIGN CONDITIONS ARE MET AND SUBGRADE CONDITIONS ARE SUITABLE FOR CONSTRUCTION. IN THE EVENT THE SOIL BEARING CAPACITY IS LESS THAN THE MINIMUM DESIGN VALUE, CITY OF MILFORD OR DESIGNEE SHALL CAUSE AFFECTED CONSTRUCTION TO CEASE AND SHALL NOTIFY THE DESIGN ENGINEER FOR RE-DESIGN TO ACCOMMODATE THE REDUCED SOIL BEARING CAPACITY.
6. IN THE EVENT THE SUBGRADE CONDITION IS UNSTABLE, DUE TO UNSUITABLE MATERIALS AND/OR GROUNDWATER INFILTRATION/INTRUSION INTO THE SURROUNDING SOILS, AS DETERMINED BY CITY OF MILFORD OR DESIGNEE, THE CONTRACTOR SHALL, AS DIRECTED BY CITY OF MILFORD OR DESIGNEE, REMOVE THE UNSUITABLE MATERIAL AND FILL WITH SUITABLE APPROVED GRANULAR FILL MATERIAL.
7. CONTRACTOR SHALL EXTEND LATERAL BELOW ANY CONFLICTS OR OBSTRUCTIONS TO PROVIDE REQUIRED CLEARANCES. COST SHALL BE INCLUDED IN THE PRICE OF THE CONTRACT.
8. THROUGHOUT THE PROJECT, WHERE WATER MAINS ARE LOCATED IN, ACROSS OR ADJACENT TO DRAINAGE DITCHES AND SWALES, THE CONTRACTOR SHALL RESTORE DISTURBED AREAS TO THEIR ORIGINAL CONDITION AND VEGETATE AS REQUIRED.
9. ALL WATER MAINS SHALL BE HYDROSTATICALLY TESTED AND DISINFECTED IN ACCORDANCE WITH CITY OF MILFORD STANDARDS AND SPECIFICATIONS BEFORE ACCEPTANCE.
10. THE CONTRACTOR WILL INSTALL THE WATER SERVICE TO THE GROUND MARKER AS SHOWN ON THE STANDARD DETAILS. THE WATER METER AND PIT ASSEMBLY WILL BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CITY OF MILFORD.
11. ALL FITTINGS SHALL BE DUCTILE IRON, MECHANICAL JOINT RESTRAINT AND AWWA APPROVED. SEE THE CITY OF MILFORD STANDARDS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL FITTINGS SHALL BE THRUST RESTRAINED AS SHOWN ON THE STANDARD DETAILS.
12. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO LOCATE PROPERTY LINES, EASEMENTS, AND RIGHT-OF-WAY LINES PRIOR TO CONSTRUCTION AND AVOID CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY AND/OR RIGHTS OF WAYS WHERE SAID CONSTRUCTION IS PROHIBITED. THE CONTRACTOR MAY CONDUCT CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY PROVIDED HE HAS OBTAINED PRIOR WRITTEN PERMISSION FROM THE PROPERTY OWNER AND HAS SUBMITTED A COPY OF SAID WRITTEN PERMISSION TO THE CITY OF MILFORD. ANY DISTURBED AREAS BEYOND THE RIGHT-OF-WAY OR EASEMENT LINES SHALL BE RESTORED IMMEDIATELY TO THEIR ORIGINAL CONDITION. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE COST OF ITEMS BID.

# SANITARY SEWER GENERAL NOTES

1. SANITARY SEWER CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE CITY OF MILFORD STANDARDS AND SPECIFICATIONS, AND DETAILS.
2. ALL SANITARY SEWER MATERIALS AND APPURTENANCES SHALL MEET OR EXCEED THOSE REQUIRED BY THE CITY OF MILFORD STANDARDS AND SPECIFICATIONS, AND DETAILS.
3. SANITARY SEWER LATERAL SHALL BE 6" PVC. SEWER LATERAL SHALL INCLUDE A 8" CLEANOUT, WYE, AND CAP JUST BEHIND THE ACCESS EASEMENT LINE.
4. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
5. TOP OF MANHOLE ELEVATIONS ARE TOP OF MANHOLE FRAME AND COVER.
6. PIPE SPAN LENGTHS ARE MEASURED FROM C/L OF STRUCTURE TO C/L OF STRUCTURE, WHERE APPLICABLE ARE ROUNDED TO THE NEAREST FOOT.
7. THE CONTRACTOR SHALL FIELD VERIFY INVERTS AND LOCATION OF EXISTING SANITARY SEWER MAINS OR MANHOLES TO WHICH NEW CONSTRUCTION WILL CONNECT.
8. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO LOCATE PROPERTY LINES, EASEMENTS, AND RIGHT-OF-WAY LINES PRIOR TO CONSTRUCTION AND AVOID CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY AND/OR RIGHTS OF WAYS WHERE SAID CONSTRUCTION IS PROHIBITED. THE CONTRACTOR MAY CONDUCT CONSTRUCTION ACTIVITIES ON PRIVATE PROPERTY PROVIDED HE HAS OBTAINED PRIOR WRITTEN PERMISSION FROM THE PROPERTY OWNER AND HAS SUBMITTED A COPY OF SAID WRITTEN PERMISSION TO THE CITY OF MILFORD. ANY DISTURBED AREAS BEYOND THE RIGHT-OF-WAY OR EASEMENT LINES SHALL BE RESTORED IMMEDIATELY TO THEIR ORIGINAL CONDITION. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE COST OF ITEMS BID.
9. DIFFERING SITE CONDITIONS AND/OR DIFFERING MATERIAL PROPERTIES SHALL REQUIRE CITY OF MILFORD APPROVAL OF SPECIAL DESIGN DETAILS PREPARED BY THE DESIGN ENGINEER PRIOR TO INITIATING OR RESUMING CONSTRUCTION ACTIVITIES.
10. THE CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOLLOWING EXCAVATIONS FOR INSPECTION AND EVALUATION OF EXISTING SOIL SUBGRADE CONDITIONS BY THE CITY OF MILFORD OR HIS/HER DESIGNEE. THE CITY OF MILFORD SHALL INSPECT ALL SUBGRADES FOLLOWING EXCAVATION AND PRIOR TO CONSTRUCTION OF NEW WORK TO CONFIRM DESIGN CONDITIONS ARE MET AND SUBGRADE CONDITIONS ARE SUITABLE FOR CONSTRUCTION. IN THE EVENT THE SOIL BEARING CAPACITY IS LESS THAN THE MINIMUM DESIGN VALUE, THE CITY OF MILFORD ENGINEER SHALL CAUSE AFFECTED CONSTRUCTION TO CEASE AND SHALL NOTIFY THE DESIGN ENGINEER FOR RE-DESIGN TO ACCOMMODATE THE REDUCED SOIL BEARING CAPACITY.
11. IN THE EVENT THE SUBGRADE CONDITION IS UNSTABLE, DUE TO UNSUITABLE MATERIALS AND/OR GROUNDWATER INFILTRATION/INTRUSION INTO THE SURROUNDING SOILS, AS DETERMINED BY THE CITY OF MILFORD, THE CONTRACTOR SHALL, AS DIRECTED BY THE CITY OF MILFORD ENGINEER, REMOVE THE UNSUITABLE MATERIAL AND FILL WITH SUITABLE APPROVED GRANULAR FILL MATERIAL.

# INTERNAL PAVING NOTES

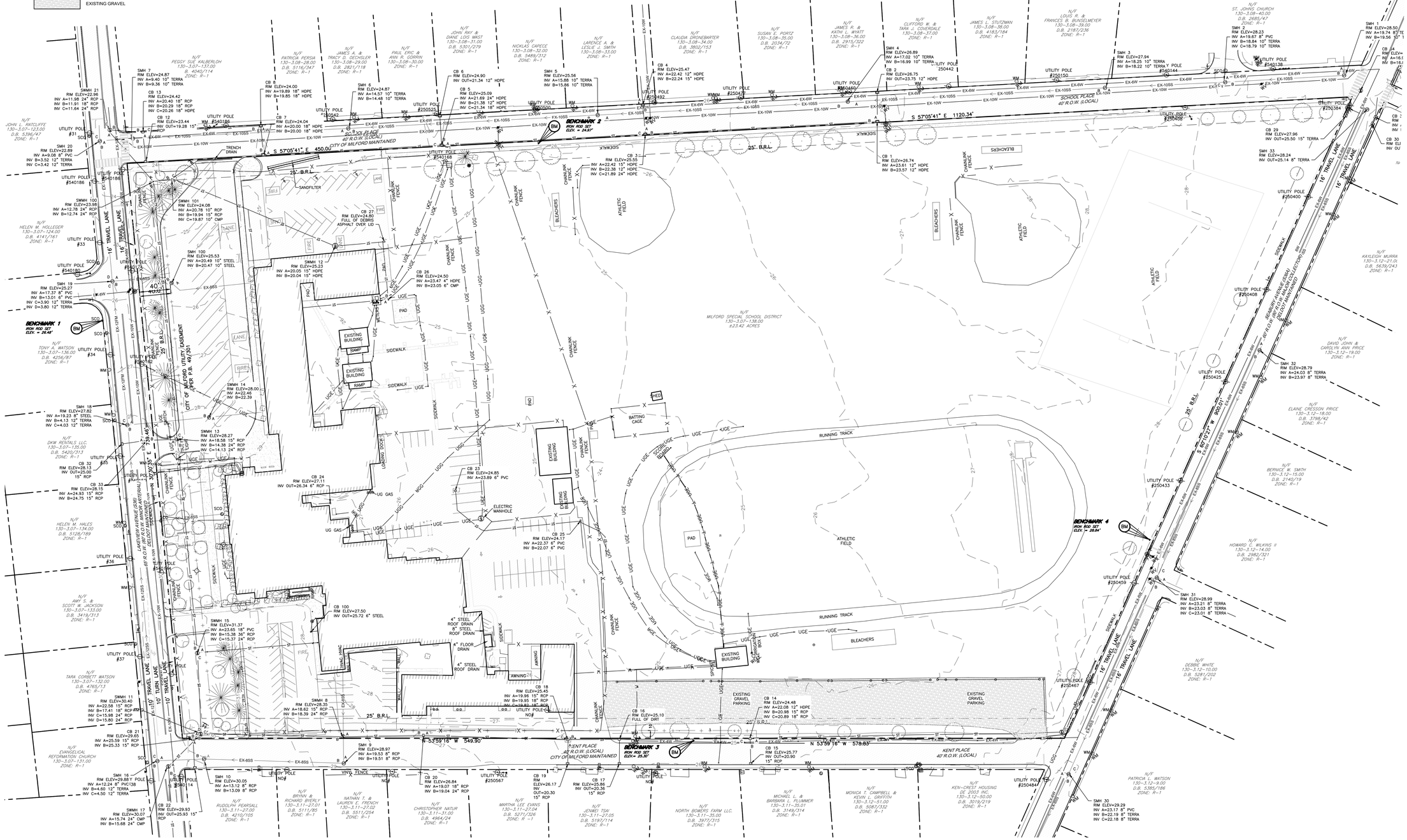
1. BITUMINOUS CONCRETE ASPHALT SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT DelDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION TO INCLUDE SPECIAL PROVISIONS:
    1.1. SECTION 1011 FOR PLACEMENT OF TACK COAT
    1.2. SECTION 401 FOR PLACEMENT OF BITUMINOUS CONCRETE ASPHALT
    1.3. BITUMINOUS CONCRETE ASPHALT SHALL BE FROM A DelDOT APPROVED PLANT.
    1.4. BITUMINOUS CONCRETE ASPHALT SHALL NOT BE APPLIED WHEN BELOW TEMPERATURES SPECIFIED IN SECTION 401.03.F.
2. ALL DISTURBED AREAS NOT COVERED WITH IMPERVIOUS MATERIAL, SHALL BE TOPSOILED (6" MINIMUM), FERTILIZED, SEEDED AND MULCHED.
3. ALL SIGNING AND MAINTENANCE OF TRAFFIC IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL FOLLOW THE 2011 DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION).
4. DESIGN, FABRICATION, AND INSTALLATION OF ALL PERMANENT SIGNING SHALL BE AS OUTLINED IN THE 2011 DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION).
5. FOR FINAL PERMANENT PAVEMENT MARKINGS, EPOXY RESIN PAINT SHALL BE REQUIRED FOR LONG LINE STRIPING AND THERMO WILL BE REQUIRED FOR SHORT LINE STRIPING, i.e. SYMBOLS/LEGENDS.
6. ALL TRAFFIC CONTROL DEVICES SHALL BE IN NEW OR REFURBISHED CONDITION, SHALL COMPLY WITH THE 2011 DELAWARE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION), AND SHALL BE NCHRP - 350 APPROVED AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. TRAFFIC CONTROL DEVICES SHALL BE MAINTAINED IN GOOD CONDITION FOR DURATION OF USE.
7. BREAKAWAY POSTS SHALL BE USED WHEN INSTALLING ALL SIGNS. DETAIL CAN BE FOUND IN DelDOT'S STANDARD CONSTRUCTION DETAILS.
8. PLAN LOCATION AND DIMENSIONS SHALL BE STRICTLY ADHERED TO UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
9. OPEN-CUT TRENCHES AND PROVIDE PAVEMENT RESTORATION IN ACCORDANCE WITH THE APPROPRIATE JURISDICTION'S STANDARDS AND SPECIFICATIONS. USE ONLY SUITABLE AND APPROVED GRANULAR MATERIALS FOR BACKFILLING TRENCHES.

# DRAINAGE, GRADING AND SEDIMENT CONTROL NOTES

1. ALL STORM DRAIN PIPING, INLET, MANHOLE AND END SECTION INSTALLATION WITHIN THE STATE OF DELAWARE RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION STANDARDS SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AUGUST 2016.
2. ALL ROOF DRAIN PIPING TO BE 6" DIAMETER CAST IRON HUB & SPIGOT SOIL PIPE & FITTINGS MEETING ASTM A74 STANDARDS. INSTALL AT MINIMUM 1% SLOPE. COORDINATE DOWNSPOUT LOCATIONS WITH ARCHITECTURAL DRAWINGS.
3. THE CONTRACTOR SHALL PROVIDE SEDIMENT CONTROL MEASURES TO PROTECT STOCKPILE AREAS AND STORAGE AREAS. ALL AREAS USED BY THE CONTRACTOR FOR STAGING OPERATIONS SHALL BE FULLY RESTORED BY THE CONTRACTOR UPON COMPLETION OF THE PROJECT. IF THE STAGING AREA IS PAVED, IT SHALL BE RESTORED TO ITS ORIGINAL CONDITION. IF TH

## PAVEMENT LEGEND

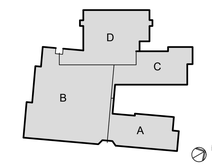
- EXISTING ASPHALT PAVEMENT
- EXISTING CONCRETE SIDEWALK, PAD, OR PAVING
- EXISTING GRAVEL




## EXISTING CONDITIONS PLAN

SCALE: 1" = 50'

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN

Milford SCHOOL DISTRICT
HOME of the BUCCANEERS

OWNER:
MILFORD SCHOOL DISTRICT
906 LAKEVIEW AVENUE
MILFORD, DE 19963

STRUCTURAL ENGINEER:
PILOTTOWN ENGINEERING
17858 NASSAU COMMONS BLVD, UNIT 3
LEWES, DE 19958
P: 302.703.1770

MEP ENGINEER:
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650 NAAMANS ROAD
CLAYMONT, DE 19703
P: 302.798.3515

CIVIL ENGINEER:
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DE 19962
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KITCHEN CONSULTANT:
CORSI ASSOCIATES, LLC
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SPRINGFIELD, PA 19064
P: 866.267.7447

THEATER PLANNING:
STAGES CONSULTANTS, LLC
300 RARITAN AVENUE, 2ND FLR
HIGHLAND PARK, NJ 08904
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TECHNOLOGY CONSULTANT:
EDUCATIONAL SYSTEM PLANNING
2448 HOLLY AVENUE, STE 302
ANNAPOLIS, MD 21401
P: 410.573.9148

BSA + A


Buck Simpers Architect
+ Associates, Inc.
954 Justison St.
Wilmington, DE 19801
302 658-9300
Fax 658-1125


JOB NO. 22.018

# MILFORD MIDDLE SCHOOL

612 LAKEVIEW AVENUE,
MILFORD, DE 19963

**EXISTING CONDITIONS**

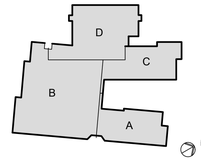
0' 50' 100' 150'
SCALE: 1" = 50'

**C051**


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## LEGEND

- BUILDING TO BE REMOVED / RELOCATED
- PAVEMENT TO BE REMOVED
- SIDEWALK TO BE REMOVED
- LANDSCAPE FEATURES TO BE REMOVED / RELOCATED

## DEMOLITION & GENERAL NOTES

1. MISS UTILITY OF DELMARVA SHALL BE NOTIFIED THREE CONSECUTIVE WORKING DAYS PRIOR TO EXCAVATION, AT 1-800-282-8555.
2. EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION. COMPLETENESS OR CORRECTNESS THEREOF IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE UTILITY COMPANIES INVOLVED IN ORDER TO SECURE THE MOST ACCURATE INFORMATION AVAILABLE AS TO UTILITY LOCATION AND ELEVATION. NO CONSTRUCTION AROUND OR ADJACENT TO UTILITIES SHALL BEGIN WITHOUT NOTIFYING THEIR OWNERS AT LEAST 48 HOURS IN ADVANCE. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE DONE TO THEM DUE TO HIS/HER NEGLIGENCE SHALL BE IMMEDIATELY AND COMPLETELY REPAIRED AT THE CONTRACTOR'S EXPENSE. TO LOCATE EXISTING UTILITIES IN THE FIELD PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL CONTACT MISS UTILITY OF DELMARVA.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL AND DISPOSING IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL ABOVE GROUND STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE SPECIFICATIONS.
4. THE CONTRACTOR SHALL REMOVE AND IMMEDIATELY REPLACE, RELOCATE, RESET OR RECONSTRUCT ALL OBSTRUCTIONS IN THE ROAD WAY, INCLUDING, BUT NOT LIMITED TO, MAILBOXES, SIGNS, LANDSCAPING, LIGHTING, PLANTERS, CULVERTS, DRIVEWAYS, PARKING AREAS, CURBS, GUTTERS, FENCES, OR OTHER NATURAL OR MAN-MADE OBSTRUCTIONS. TRAFFIC CONTROL, REGULATORY, WARNING AND INFORMATIONAL SIGNS SHALL REMAIN FUNCTIONAL AND VISIBLE TO THE APPROPRIATE LANE OF TRAFFIC AT ALL TIMES, WITH THEIR RELOCATION KEPT TO A MINIMUM DISTANCE, THE COST SHALL BE INCLUDED IN THE COST OF ITEMS BID.
5. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS AND ORDERS OF ANY PUBLIC BODY HAVING JURISDICTION. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR SAFETY AND PROTECTION.
6. DELAWARE REGULATIONS PROHIBIT THE BURIAL OF CONSTRUCTION DEMOLITION DEBRIS, INCLUDING TREES AND STUMPS ON CONSTRUCTION SITES. ANY SOLID WASTE FOUND DURING THE EXCAVATION FOR STRUCTURES AND UTILITY LINES ON AND OFF SITE MUST BE REMOVED AND PROPERLY DISCARDED. ANY REMEDIAL ACTION REQUIRED IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM. ADDITIONAL COSTS WILL BE NEGOTIATED WITH THE OWNER.
7. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES, PERMITS AND CHARGES.
8. DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL WORK MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AS AMENDED AND ALL RULES AND REGULATIONS THERETO APPURTENANT.
9. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC., TO THE BEST PRACTICES.
10. COORDINATE WITH OWNER THE REMOVAL AND SALVAGE OF ALL EXISTING SITE FURNISHINGS.
11. PRIOR TO DEMOLITION OCCURRING, EROSION CONTROL DEVICES ARE TO BE INSTALLED AS DETAILED ON THE SEQUENCE OF CONSTRUCTION.

## DEMOLITION PLAN

SCALE: 1" = 50'

## DEMO KEY NOTES

1. REMOVE EXISTING BUILDING, FULL DEPTH
2. REMOVE SIDEWALK / CONCRETE PAD, FULL DEPTH
3. REMOVE PAVEMENT, FULL DEPTH
4. REMOVE CURB & GUTTER FULL DEPTH
5. REMOVE CONCRETE WALL, FULL DEPTH
6. EXISTING CHAIN LINK FENCE TO BE REMOVED / RELOCATED
7. EXISTING LANDSCAPE FEATURES TO BE REMOVED / RELOCATED
8. EXISTING BUILDING TO BE RELOCATED
9. REMOVE POST / BOLLARD
10. REMOVE BENCH
11. REMOVE SAND FILTER SYSTEM
12. REMOVE STORM PIPE OR STRUCTURE

0' ### ##### ####

SCALE: #########

JOB NO. 22.018

# MILFORD MIDDLE SCHOOL

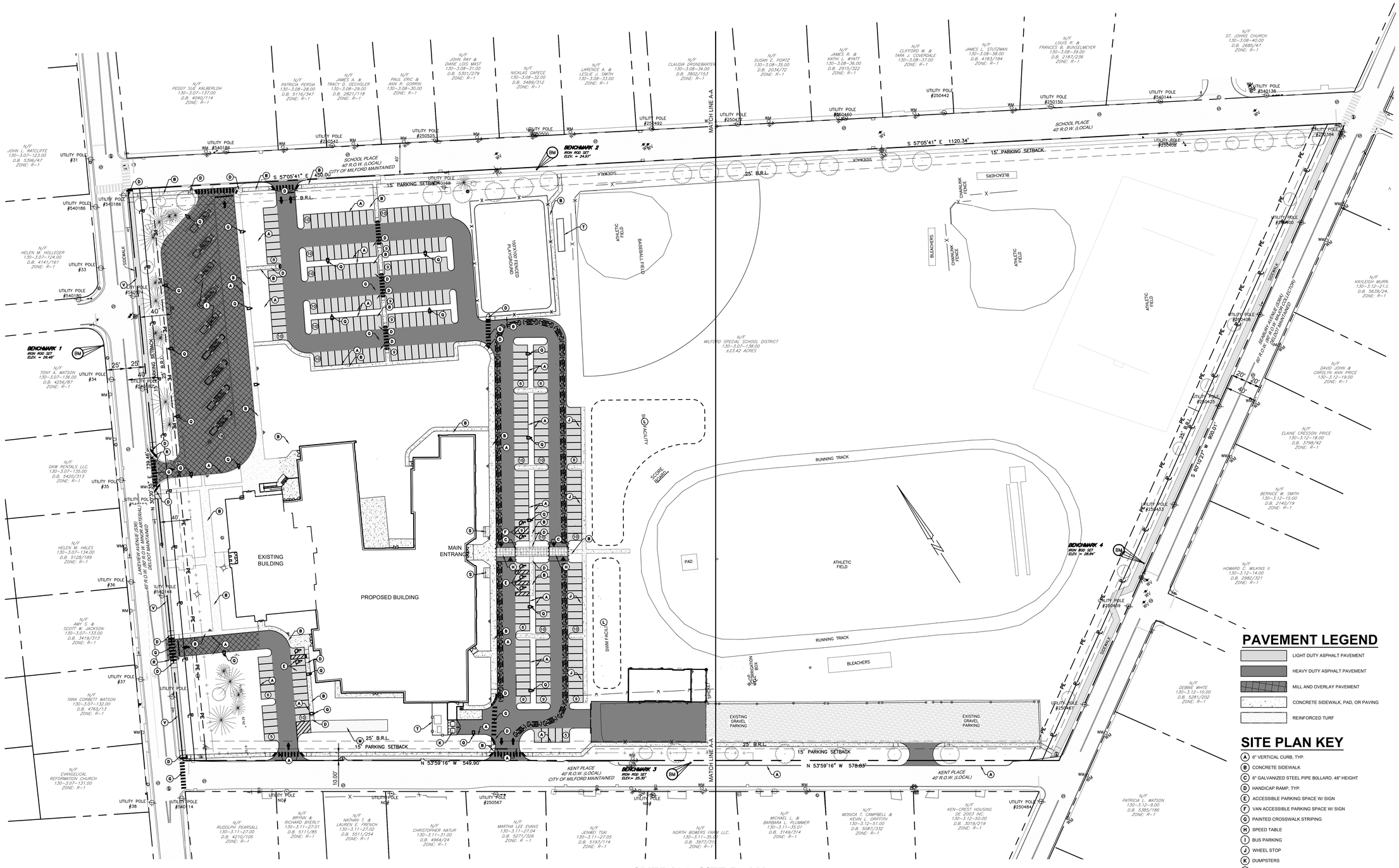
612 LAKEVIEW AVENUE,
MILFORD, DE 19963

**DEMOLITION PLAN**

**C052**

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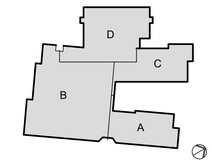
PRELIMINARY - NOT FOR CONSTRUCTION




## OVERALL SITE PLAN

SCALE: 1" = 50'

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN

## PAVEMENT LEGEND

- LIGHT DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- MILL AND OVERLAY PAVEMENT
- CONCRETE SIDEWALK, PAD, OR PAVING
- REINFORCED TURF

## SITE PLAN KEY

- (A) 6" VERTICAL CURB, TYP.
- (B) CONCRETE SIDEWALK
- (C) 6" GALVANIZED STEEL PIPE BOLLARD, 48" HEIGHT
- (D) HANDICAP RAMP, TYP.
- (E) ACCESSIBLE PARKING SPACE W/ SIGN
- (F) VAN ACCESSIBLE PARKING SPACE W/ SIGN
- (G) PAINTED CROSSWALK STRIPING
- (H) SPEED TABLE
- (I) BUS PARKING
- (J) WHEEL STOP
- (K) DUMPSTERS
- (L) STORMWATER MANAGEMENT FACILITY
- (M) REINFORCED TURF FOR FIRE ACCESS
- (N) POLE BUILDING
- (O) 6' BLACK VINYL COATED STEEL CHAIN LINK SECURITY FENCE
- (P) CHAIN LINK CANTILEVER SLIDING GATE, BLACK
- (Q) SITE LIGHT FIXTURE (SEE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION)
- (R) REPLACE EXISTING CURBING
- (S) LOOP STYLE BIKE RACK , 11 SPACE
- (T) 6 FEET TALL CHAIN LINK FENCE W/ PRIVACY SLATS
- (U) RELOCATED BLEACHERS
- (V) SHARED USE PATH, 8'-0" WIDE

NOTES
1. MULTIPLE SIDEWALK PANELS ALONG LAKEVIEW AVENUE ARE DAMAGED AND WILL NEED TO BE REPLACED. LOCATIONS TO BE DETERMINED IN THE FIELD PER DELDOT GUIDANCE.
2. MANY TRIPPING HAZARDS HAVE BEEN IDENTIFIED ALONG THE SIDEWALK (VERTICAL LEDGE GREATER THAN 1/4") WHICH ARE TO BE REPAIRED. LOCATIONS TO BE DETERMINED IN THE FIELD PER DELDOT GUIDANCE.

0' 50' 100' 150'
SCALE: 1" = 50'

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HIGHLAND PARK, NJ 08904
P: 732.333.8003

TECHNOLOGY CONSULTANT:
EDUCATIONAL SYSTEM PLANNING
2448 HOLLY AVENUE, STE 302
ANNAPOLIS, MD 21401
P: 410.573.9148

BSA + A

Buck Simpers Architect + Associates, Inc.
954 Justison St.
Wilmington, DE 19801
302 658-9300
Fax 658-1125

JOB NO. 22.018

# MILFORD MIDDLE SCHOOL

612 LAKEVIEW AVENUE,
MILFORD, DE 19963

**OVERALL SITE PLAN**

**C101**

PRELIMINARY - NOT FOR CONSTRUCTION

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## SITE PLAN

SCALE: 1" = 30'

0' 30' 60' 90'

SCALE: 1" = 30'

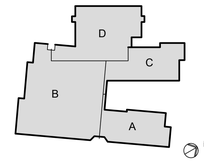
## PAVEMENT LEGEND

- LIGHT DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- MILL AND OVERLAY PAVEMENT
- CONCRETE SIDEWALK, PAD, OR PAVING
- REINFORCED TURF

## SITE PLAN KEY

- (A) 6" VERTICAL CURB, TYP.
- (B) CONCRETE SIDEWALK
- (C) 6" GALVANIZED STEEL PIPE BOLLARD, 48" HEIGHT
- (D) ADA ACCESSIBLE RAMP, TYP.
- (E) ACCESSIBLE PARKING SPACE W/ SIGN
- (F) VAN ACCESSIBLE PARKING SPACE W/ SIGN
- (G) PAINTED CROSSWALK STRIPING
- (H) SPEED TABLE
- (I) BUS PARKING
- (J) WHEEL STOP
- (K) DUMPSTER ENCLOSURE
- (L) STORMWATER MANAGEMENT FACILITY
- (M) REINFORCED TURF FOR FIRE ACCESS
- (N) POLE BUILDING
- (O) 6' BLACK VINYL COATED STEEL CHAIN LINK SECURITY FENCE
- (P) CHAIN LINK CANTILEVER SLIDING GATE, BLACK
- (Q) SITE LIGHT FIXTURE (SEE ELECTRICAL PLANS FOR ADDITIONAL INFORMATION)
- (R) LOOP STYLE BIKE RACK, 11 SPACE
- (S) 6 FEET TALL CHAIN LINK FENCE W/ PRIVACY SLATS
- (T) RELOCATED BLEACHERS
- (U) SHARED USE PATH, 8'-0" WIDE
- (V) CURB OPENING
- (W) 5'-0" BLACK ALUMINUM DECORATIVE FENCE
- (X) GENERATOR
- (Y) TRANSFORMER

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN

Milford SCHOOL DISTRICT
HOME of the BUCCANEERS

OWNER:
MILFORD SCHOOL DISTRICT
906 LAKEVIEW AVENUE
MILFORD, DE 19963

STRUCTURAL ENGINEER:
PILOTTOWN ENGINEERING
17858 NASSAU COMMONS BLVD, UNIT 3
LEWES, DE 19958
P: 302.703.1770

MEP ENGINEER:
FURLOW ASSOCIATES, INC.
650 NAAMANS ROAD
CLAYMONT, DE 19703
P: 302.798.3515

CIVIL ENGINEER:
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DE 19962
P: 302.424.1441

KITCHEN CONSULTANT:
CORSI ASSOCIATES, LLC
1489 BALTIMORE PIKE, STE 109
SPRINGFIELD, PA 19064
P: 866.267.7447

THEATER PLANNING:
STAGES CONSULTANTS, LLC
300 RARITAN AVENUE, 2ND FLR
HIGHLAND PARK, NJ 08904
P: 732.333.8003

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JOB NO. 22.018

# MILFORD MIDDLE SCHOOL

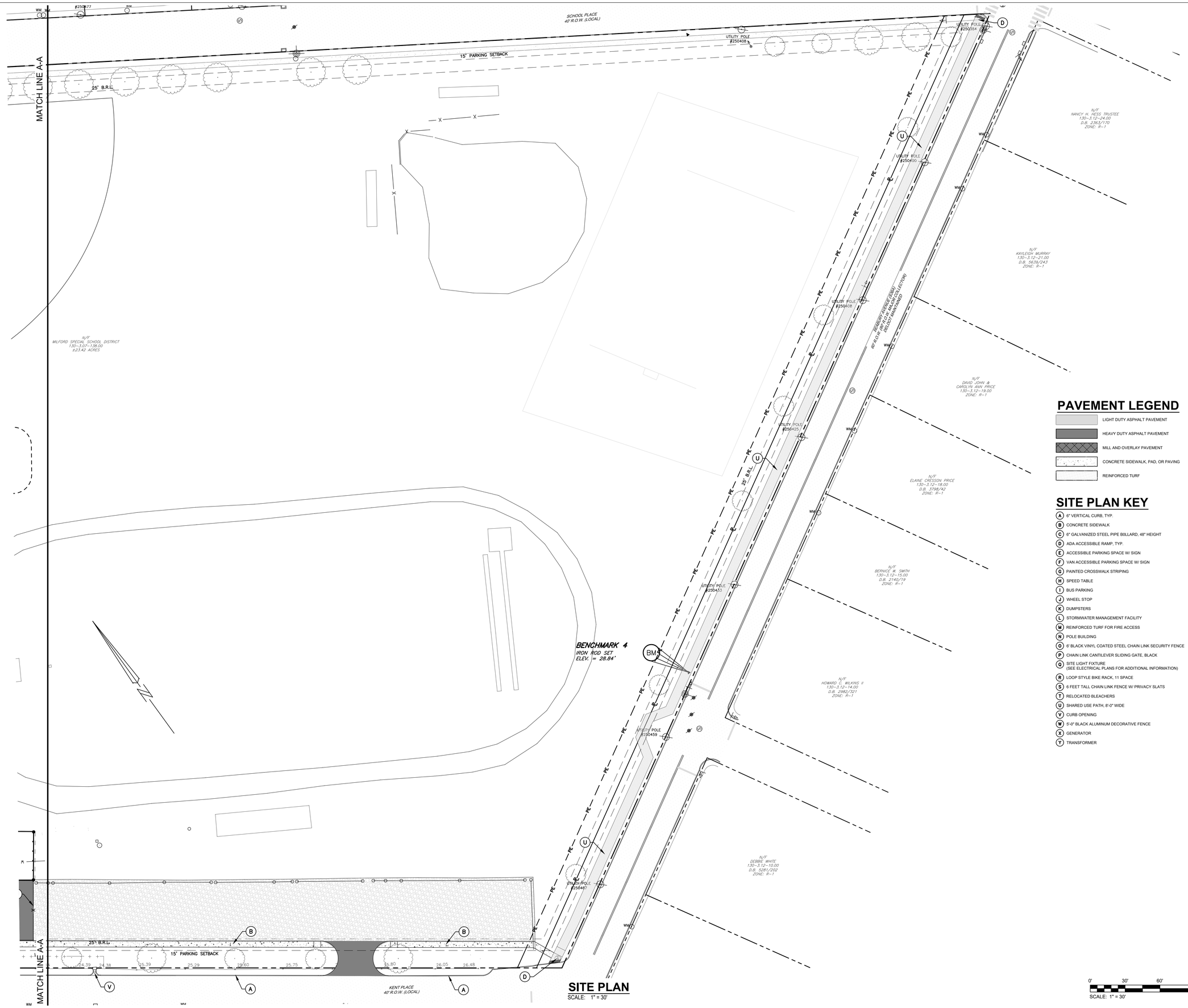
612 LAKEVIEW AVENUE,
MILFORD, DE 19963

**SITE PLAN**

**C102**

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PRELIMINARY - NOT FOR CONSTRUCTION




## SITE PLAN
SCALE: 1" = 30'

## PAVEMENT LEGEND

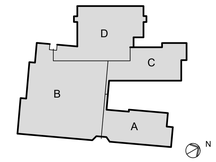
- LIGHT DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- MILL AND OVERLAY PAVEMENT
- CONCRETE SIDEWALK, PAD, OR PAVING
- REINFORCED TURF

## SITE PLAN KEY

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- (W) 5'-0" BLACK ALUMINUM DECORATIVE FENCE
- (X) GENERATOR
- (Y) TRANSFORMER

0' 30' 60' 90'
SCALE: 1" = 30'

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN

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17858 NASSAU COMMONS BLVD, UNIT 3
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JOB NO. 22.018

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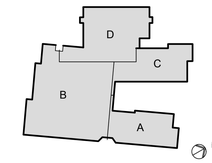
**SITE PLAN**

**C103**

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## OVERALL GRADING PLAN

SCALE: 1" = 50'

0' 50' 100' 150'
SCALE: 1" = 50'

JOB NO. 22.018

# MILFORD MIDDLE SCHOOL

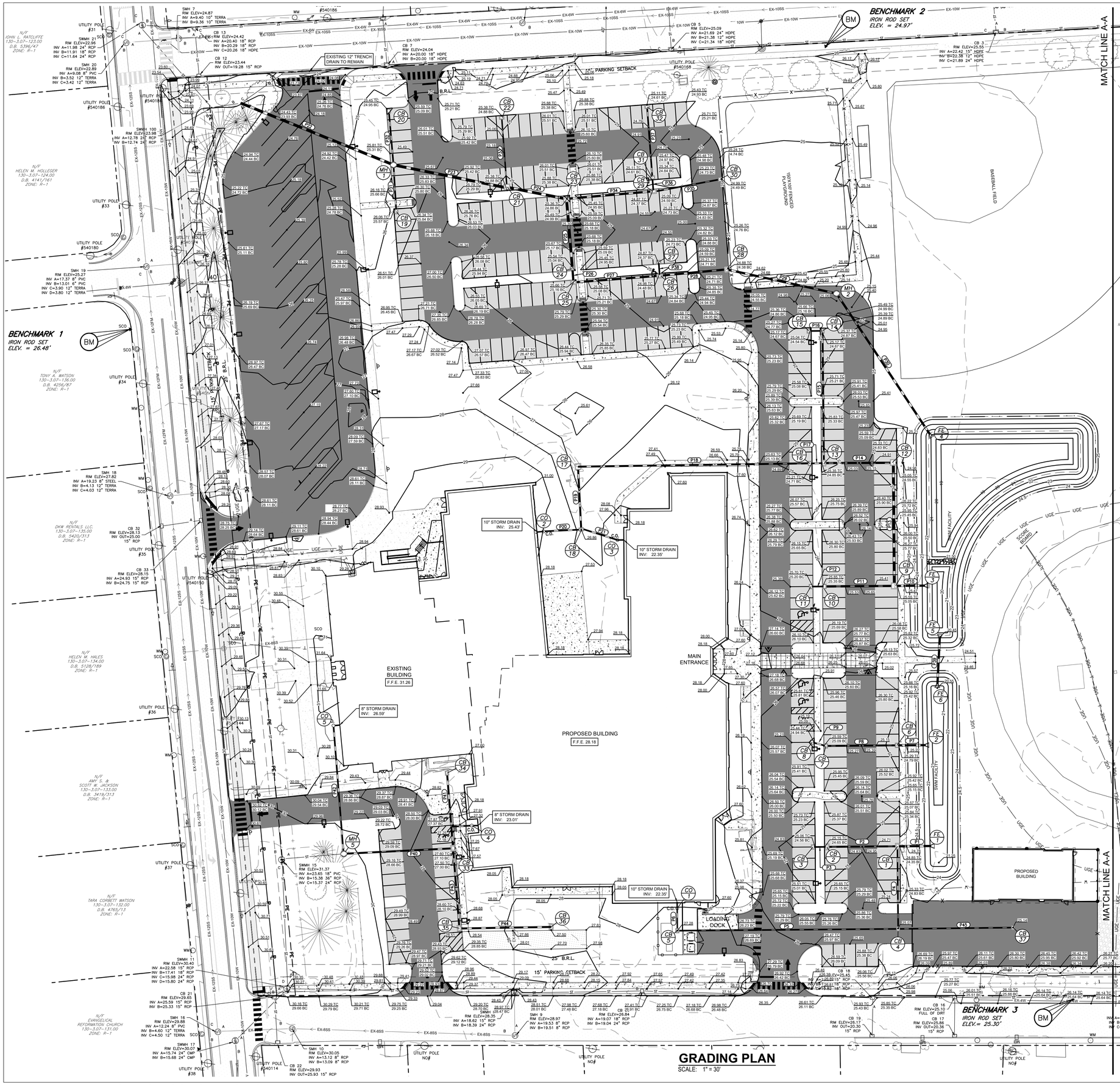
612 LAKEVIEW AVENUE,
MILFORD, DE 19963

**OVERALL GRADING PLAN**

**C301**

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PRELIMINARY - NOT FOR CONSTRUCTION



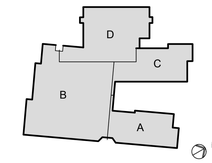

## PIPE SCHEDULE

| LABEL | FROM | TO | SIZE | TYPE | CLASS | LENGTH (ft.) | SLOPE % | INV. UP | INV. DN |
|---|---|---|---|---|---|---|---|---|---|
| P1 | CB1 | FE1 | 18" | HDPE | N-12 | 23 | 0.22% | 21.30 | 21.25 |
| P2 | CB2 | CB1 | 18" | HDPE | N-12 | 57 | 0.18% | 21.50 | 21.40 |
| P3 | CB3 | CB2 | 12" | HDPE | N-12 | 11 | 0.45% | 21.65 | 21.60 |
| P4 | CB4 | CB1 | 18" | HDPE | N-12 | 66 | 0.50% | 21.73 | 21.40 |
| P5 | CB5 | CB4 | 15" | HDPE | N-12 | 178 | 0.13% | 22.07 | 21.83 |
| P6 | CO1 | CB5 | 12" | HDPE | N-12 | 18 | 0.44% | 22.25 | 22.17 |
| P7 | CB6 | FE2 | 15" | HDPE | N-12 | 23 | 0.43% | 22.30 | 22.20 |
| P8 | CB7 | CB6 | 12" | HDPE | N-12 | 57 | 0.35% | 22.60 | 22.40 |
| P9 | CB8 | CB7 | 12" | HDPE | N-12 | 11 | 0.45% | 22.75 | 22.70 |
| P10 | CB9 | FE3 | 24" | HDPE | N-12 | 23 | 0.13% | 20.88 | 20.85 |
| P11 | CB10 | CB9 | 15" | HDPE | N-12 | 57 | 0.26% | 22.85 | 22.70 |
| P12 | CB11 | CB10 | 12" | HDPE | N-12 | 11 | 0.45% | 23.00 | 22.95 |
| P13 | CB12 | CB9 | 18" | HDPE | N-12 | 99 | 0.20% | 21.18 | 20.98 |
| P14 | CB13 | CB12 | 18" | HDPE | N-12 | 55 | 0.22% | 21.40 | 21.28 |
| P15 | CB14 | CB13 | 12" | HDPE | N-12 | 106 | 0.33% | 21.85 | 21.50 |
| P16 | CB15 | CB14 | 12" | HDPE | N-12 | 11 | 0.45% | 22.00 | 21.95 |
| P17 | CB16 | CB13 | 18" | HDPE | N-12 | 12 | 0.25% | 21.53 | 21.50 |
| P18 | CB17 | CB16 | 18" | HDPE | N-12 | 186 | 0.15% | 21.90 | 21.63 |
| P19 | CB18 | CB17 | 15" | HDPE | N-12 | 51 | 0.24% | 22.12 | 22.00 |
| P20 | CO2 | CB18 | 12" | HDPE | N-12 | 30 | 3.87% | 25.35 | 24.19 |
| P21 | CO3 | CB18 | 12" | HDPE | N-12 | 30 | 0.27% | 22.30 | 22.22 |
| P22 | MH1 | EXSMH101 | 24" | HDPE | N-12 | 132 | 0.12% | 20.10 | 19.94 |
| P23 | CB21 | MH1 | 24" | HDPE | N-12 | 93 | 0.11% | 20.30 | 20.20 |
| P24 | CB23 | CB21 | 24" | HDPE | N-12 | 40 | 0.13% | 20.45 | 20.40 |
| P25 | CB24 | CB23 | 18" | HDPE | N-12 | 55 | 0.20% | 20.66 | 20.55 |
| P26 | CB25 | CB24 | 18" | HDPE | N-12 | 13 | 0.38% | 20.81 | 20.76 |
| P27 | CB26 | CB25 | 18" | HDPE | N-12 | 78 | 0.14% | 21.02 | 20.91 |
| P28 | CB28 | CB26 | 18" | HDPE | N-12 | 53 | 0.13% | 21.19 | 21.12 |
| P29 | MH2 | CB28 | 18" | HDPE | N-12 | 91 | 0.12% | 21.40 | 21.29 |
| P30 | FE4 | MH2 | 18" | HDPE | N-12 | 138 | 0.12% | 21.66 | 21.50 |
| P31 | CB19 | MH1 | 10" | HDPE | N-12 | 38 | 0.39% | 20.35 | 20.20 |
| P32 | CB20 | MH1 | 10" | HDPE | N-12 | 43 | 0.35% | 20.35 | 20.20 |
| P33 | CB22 | CB21 | 10" | HDPE | N-12 | 57 | 0.35% | 20.60 | 20.40 |
| P34 | CB29 | CB23 | 15" | HDPE | N-12 | 79 | 0.25% | 20.95 | 20.75 |
| P35 | CB30 | CB29 | 10" | HDPE | N-12 | 54 | 0.37% | 21.25 | 21.05 |
| P36 | CB31 | CB29 | 12" | HDPE | N-12 | 12 | 0.42% | 21.10 | 21.05 |
| P37 | CB32 | CB31 | 10" | HDPE | N-12 | 57 | 0.35% | 21.40 | 21.20 |
| P38 | CB27 | CB26 | 12" | HDPE | N-12 | 13 | 0.31% | 21.16 | 21.12 |
| P39 | FE6 | FE5 | 18" | HDPE | N-12 | 35 | 0.29% | 20.55 | 20.45 |
| P40 | CB33 | MH3 | 18" | HDPE | N-12 | 88 | 0.17% | 24.15 | 24.00 |
| P41 | CB34 | CB33 | 12" | HDPE | N-12 | 61 | 0.49% | 24.55 | 24.25 |
| P42 | CO4 | MH3 | 12" | HDPE | N-12 | 103 | 0.34% | 26.50 | 26.15 |
| P43 | CB35 | CB33 | 12" | HDPE | N-12 | 58 | 0.29% | 24.42 | 24.25 |
| P44 | CB36 | CB35 | 12" | HDPE | N-12 | 75 | 0.31% | 24.75 | 24.52 |
| P45 | CB37 | CB4 | 12" | HDPE | N-12 | 92 | 0.30% | 22.11 | 21.83 |

## STRUCTURES SCHEDULE

| LABEL | DESCRIPTION | | | T.G. EL. | INVERT ELEVATION | | | |
|---|---|---|---|---|---|---|---|---|
| | BOX SIZE | BOX TOP | GRATE | | IN | IN | IN | OUT |
| CB1 | 34 x 24 | TYPE C | TYPE 1 | 23.84 | ---- | 21.40 | 21.40 | 21.30 |
| CB2 | 48 x 30 | TYPE C | TYPE 1 | 24.08 | ---- | ---- | 21.60 | 21.50 |
| CB3 | 34 x 24 | TYPE C | TYPE 1 | 24.56 | ---- | ---- | ---- | 21.65 |
| CB4 | 34 x 24 | TYPE C | TYPE 1 | 25.07 | ---- | 21.83 | 21.83 | 21.73 |
| CB5 | 34 x 24 | TYPE C | TYPE 1 | 27.28 | ---- | ---- | 22.17 | 22.07 |
| CB6 | 34 x 24 | TYPE C | TYPE 1 | 24.15 | ---- | ---- | 22.40 | 22.30 |
| CB7 | 34 x 24 | TYPE C | TYPE 1 | 24.39 | ---- | ---- | 22.70 | 22.60 |
| CB8 | 34 x 24 | TYPE C | TYPE 1 | 24.94 | ---- | ---- | ---- | 22.75 |
| CB9 | 48 x 30 | TYPE C | TYPE 1 | 24.32 | ---- | ---- | 22.70 | 22.60 |
| CB10 | 34 x 24 | TYPE C | TYPE 1 | 24.69 | ---- | ---- | 22.95 | 22.85 |
| CB11 | 34 x 24 | TYPE C | TYPE 1 | 25.20 | ---- | ---- | ---- | 23.00 |
| CB12 | 48 x 30 | TYPE C | TYPE 1 | 24.35 | ---- | ---- | 21.28 | 21.18 |
| CB13 | 48 x 30 | TYPE C | TYPE 1 | 24.32 | ---- | 21.50 | 21.50 | 21.40 |
| CB14 | 48 x 30 | TYPE C | TYPE 1 | 24.34 | ---- | ---- | 21.95 | 21.85 |
| CB15 | 34 x 24 | TYPE C | TYPE 1 | 24.58 | ---- | ---- | ---- | 22.00 |
| CB16 | 34 x 24 | TYPE C | TYPE 1 | 24.73 | ---- | ---- | 21.63 | 21.53 |
| CB17 | 34 x 24 | TYPE C | TYPE 1 | 26.57 | ---- | ---- | 22.00 | 21.90 |
| CB18 | 34 x 24 | TYPE C | TYPE 1 | 27.70 | ---- | 22.22 | 22.22 | 22.12 |
| CB19 | 48 x 48 | TYPE C | TYPE 1 | 25.57 | ---- | ---- | ---- | 20.35 |
| CB20 | 48 x 30 | TYPE C | TYPE 1 | 24.95 | ---- | ---- | ---- | 20.35 |
| CB21 | 48 x 48 | TYPE C | TYPE 1 | 24.88 | ---- | 20.40 | 20.40 | 20.30 |
| CB22 | 48 x 30 | TYPE C | TYPE 1 | 24.88 | ---- | ---- | ---- | 20.60 |
| CB23 | 48 x 30 | TYPE C | TYPE 1 | 24.95 | ---- | 20.55 | 20.55 | 20.45 |
| CB24 | 34 x 24 | TYPE C | TYPE 1 | 25.13 | ---- | ---- | 20.76 | 20.66 |
| CB25 | 48 x 30 | TYPE C | TYPE 1 | 25.24 | ---- | ---- | 20.91 | 20.81 |
| CB26 | 34 x 24 | TYPE C | TYPE 1 | 24.48 | ---- | 21.12 | 21.12 | 21.02 |
| CB27 | 34 x 24 | TYPE C | TYPE 1 | 24.37 | ---- | ---- | ---- | 21.16 |
| CB28 | 34 x 24 | TYPE C | TYPE 1 | 24.38 | ---- | ---- | 21.29 | 21.19 |
| CB29 | 34 x 24 | TYPE C | TYPE 1 | 24.37 | ---- | 21.05 | 21.05 | 20.95 |
| CB30 | 34 x 24 | TYPE C | TYPE 1 | 24.49 | ---- | ---- | ---- | 21.25 |
| CB31 | 34 x 24 | TYPE C | TYPE 1 | 24.61 | ---- | ---- | 21.20 | 21.10 |
| CB32 | 34 x 24 | TYPE C | TYPE 1 | 24.61 | ---- | ---- | ---- | 21.40 |
| CB33 | 34 x 24 | TYPE C | TYPE 1 | 27.04 | ---- | ---- | 24.25 | 24.15 |
| CB34 | 34 x 24 | TYPE C | TYPE 1 | 28.56 | ---- | ---- | ---- | 24.55 |
| CB35 | 34 x 24 | TYPE C | TYPE 1 | 28.45 | ---- | ---- | 24.52 | 24.42 |
| CB36 | 34 x 24 | TYPE C | TYPE 1 | 27.50 | ---- | ---- | ---- | 24.75 |
| CB37 | 34 x 24 | TYPE C | TYPE 1 | 25.14 | ---- | ---- | ---- | 22.11 |
| MH1 | 60" DIA | --- | SOLID | 25.42 | 20.20 | 20.20 | 20.20 | 20.10 |
| MH2 | 48" DIA | --- | SOLID | 24.75 | ---- | ---- | 21.50 | 21.40 |
| MH3 | 48" DIA. DOGHOUSE MANHOLE | | SOLID | 30.04 | ---- | 26.15 | 24.00 | 23.75 |
| FE1 | 18" HDPE END SECTION W/ SAFETY GRATE | | | ---- | ---- | ---- | ---- | 21.25 |
| FE2 | 15" HDPE END SECTION W/ SAFETY GRATE | | | ---- | ---- | ---- | ---- | 22.20 |
| FE3 | 24" HDPE END SECTION W/ SAFETY GRATE | | | ---- | ---- | ---- | ---- | 22.50 |
| FE4 | 18" HDPE END SECTION W/ SAFETY GRATE | | | ---- | ---- | ---- | 21.66 | ---- |
| FE5 | 18" HDPE END SECTION | | | ---- | ---- | ---- | ---- | 21.25 |
| FE6 | 18" HDPE END SECTION | | | ---- | ---- | ---- | 21.35 | ---- |
| CO1 | 12" INLINE DRAIN w/ SOLID COVER | | | ---- | ---- | ---- | 22.25 | 22.25 |
| CO2 | 12" INLINE DRAIN w/ SOLID COVER | | | ---- | ---- | ---- | 25.35 | 25.35 |
| CO3 | 12" INLINE DRAIN w/ SOLID COVER | | | ---- | ---- | ---- | 22.30 | 22.30 |
| CO4 | 12" INLINE DRAIN w/ SOLID COVER | | | ---- | ---- | ---- | 26.50 | 26.50 |

| No. | Description | Date |
|---|---|---|
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JOB NO. 22.018

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**GRADING PLAN**

# C302


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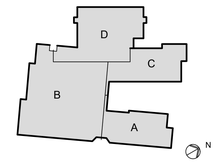



## GRADING PLAN
SCALE: 1" = 30'

0' 30' 60' 90'
SCALE: 1" = 30'

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P: 302.424.1441

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TECHNOLOGY CONSULTANT:
EDUCATIONAL SYSTEM PLANNING
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P: 410.573.9148


Buck Simpers Architect
+ Associates, Inc.
954 Justison St.
Wilmington, DE 19801
302 658-9300
Fax 658-1125


JOB NO. 22.018

# MILFORD MIDDLE SCHOOL

612 LAKEVIEW AVENUE,
MILFORD, DE 19963

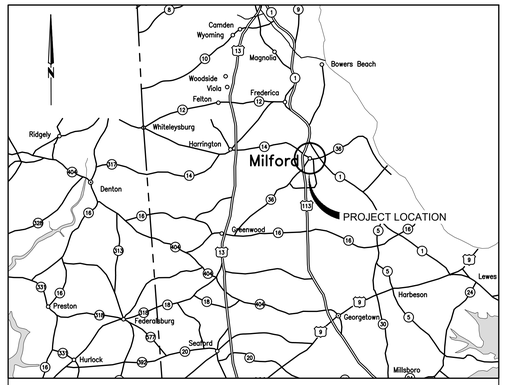
**GRADING PLAN**

**C303**

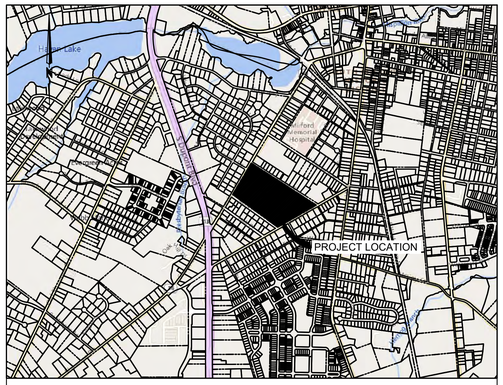
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# MILFORD MIDDLE SCHOOL
# SEDIMENT & STORMWATER MANAGEMENT PLANS
## MISPILLION RIVER WATERSHED
## LAKEVIEW AVENUE
## CITY OF MILFORD
## SUSSEX COUNTY, DELAWARE

**DBF PROJECT NO. 1022A017**
**OCTOBER 2022**




**VICINITY MAP** SCALE: 1" = 6 MILES




**LOCATION MAP** SCALE: 1" = 1,250'

## GENERAL NOTES

1. THE DNREC DIVISION OF WATERSHED STEWARDSHIP SEDIMENT AND STORMWATER PROGRAM MUST BE NOTIFIED IN WRITING FIVE (5) DAYS PRIOR TO COMMENCING WITH CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
2. REVIEW AND APPROVAL OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES FOR COMPLIANCE WITH THE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM ERRORS OR OMISSIONS IN THE APPROVED PLAN.
3. IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE DNREC DIVISION OF WATERSHED STEWARDSHIP SEDIMENT AND STORMWATER PROGRAM.
4. FOLLOWING SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED FOR ALL PERIMETER SEDIMENT CONTROLS, SOIL STOCKPILES, AND ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE WITHIN 14 CALENDAR DAYS UNLESS MORE RESTRICTIVE FEDERAL REQUIREMENTS APPLY.
5. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL COMPLY WITH THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
6. AT ANY TIME A DEWATERING OPERATION IS USED, IT SHALL BE PREVIOUSLY APPROVED BY THE AGENCY CONSTRUCTION SITE REVIEWER FOR A NON-EROSIVE POINT OF DISCHARGE; AND A DEWATERING PERMIT SHALL BE APPROVED BY THE DNREC WELL PERMITTING BRANCH.
7. APPROVED PLANS REMAIN VALID FOR 5 YEARS FROM THE DATE OF APPROVAL.
8. POST CONSTRUCTION VERIFICATION DOCUMENTS ARE TO BE SUBMITTED TO THE DNREC DIVISION OF WATERSHED STEWARDSHIP SEDIMENT AND STORMWATER PROGRAM WITHIN 60 DAYS OF STORMWATER MANAGEMENT FACILITY COMPLETION.
9. APPROVAL OF A SEDIMENT AND STORMWATER PLAN DOES NOT GRANT OR IMPLY A RIGHT TO DISCHARGE STORMWATER RUNOFF. THE OWNER/DEVELOPER IS RESPONSIBLE FOR ACQUIRING ANY AND ALL AGREEMENTS, EASEMENTS, ETC., NECESSARY TO COMPLY WITH STATE DRAINAGE AND OTHER APPLICABLE LAWS.
10. THE NOTICE OF INTENT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER A NPDES GENERAL PERMIT FOR THIS PROJECT IS I.D. #2055. AT ANY TIME THE OWNERSHIP FOR THIS PROJECT CHANGES, A TRANSFER OF AUTHORIZATION OR A CO-PERMITTEE APPLICATION MUST BE SUBMITTED TO DNREC. THE PERMITTEE OF RECORD SHALL NOT BE RELIEVED OF THEIR RESPONSIBILITIES UNTIL A NOTICE OF TERMINATION HAS BEEN PROCESSED BY DNREC.
11. THE OWNER SHALL BE FAMILIAR WITH AND COMPLY WITH ALL ASPECTS OF THE NPDES CONSTRUCTION GENERAL PERMIT ASSOCIATED WITH THE PROJECT, INCLUDING, BUT NOT LIMITED TO, PERFORMING WEEKLY SITE INSPECTIONS DURING CONSTRUCTION AND AFTER RAIN EVENTS, AND MAINTAINING WRITTEN LOGS OF THESE INSPECTIONS.
12. BEFORE ANY EARTHWORK OR EXCAVATION TAKES PLACE, THE CONTRACTOR SHALL CALL MISS UTILITY AT 811 OR 1-800-282-8555 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, TO HAVE ALL EXISTING UTILITIES MARKED ONSITE.
13. THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT OR DEBRIS LADEN RUNOFF OR WIND FROM LEAVING THE SITE. PERIMETER CONTROLS SHOULD BE CHECKED DAILY AND ADJUSTED AND/OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENT FROM LEAVING THE SITE. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST OR ALTER MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE AGENCY CONSTRUCTION SITE INSPECTOR.
14. BEST AVAILABLE TECHNOLOGY (BAT) SHALL BE EMPLOYED TO MANAGE TURBID DISCHARGES IN ACCORDANCE WITH REQUIREMENTS OF 7. DELC. CH 60, AND THE CURRENT DELAWARE CONSTRUCTION GENERAL PERMIT (CGP).
15. DOCUMENTATION OF SOIL TESTING AND MATERIALS USED FOR TEMPORARY OR PERMANENT STABILIZATION INCLUDING BUT NOT LIMITED TO SOIL TEST RESULTS, SEED TAGS, SOIL AMENDMENT TAGS, ETC. SHALL BE PROVIDED TO THE DEPARTMENT OR DELEGATED AGENCY TO VERIFY THAT THE PERMANENT OR TEMPORARY STABILIZATION HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLAN. THE DNREC DIVISION OF WATERSHED STEWARDSHIP SEDIMENT AND STORMWATER PROGRAM MAY REQUIRE ADDITIONAL SOIL TESTING AND REAPPLICATION OF PERMANENT OR TEMPORARY STABILIZATION IN ACCORDANCE WITH THE SPECIFICATIONS PROVIDED IN THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, OR ALTERNATIVE MEASURES THAT PROVIDE FUNCTIONAL EQUIVALENCY
16. THE SITE CONTRACTOR, UNDER THE DIRECTION OF THE OWNER SHALL MAINTAIN AND REPAIR ALL EROSION AND SEDIMENT CONTROL AND STORMWATER MANAGEMENT PRACTICES DURING UTILITY INSTALLATION.
17. UPON COMPLETION OF THE PROJECT, THE OWNER WILL BE RESPONSIBLE FOR PERPETUAL MAINTENANCE OF THE STORMWATER FACILITIES.
18. ALL AREAS NOT COVERED BY BUILDING OR PAVEMENT WILL BE SEEDED USING PERMANENT SEED MIXTURE SHOWN ON THIS PLAN.
19. PROVIDE EROSION CONTROL MATTING ON ALL SLOPES 3:1 OR GREATER, AND IN ALL AREAS OF CONCENTRATED FLOW. PROVIDE EROSION CONTROL FABRIC BENEATH ALL STONE APPLICATIONS WITH THE EXCEPTION OF CHECK DAMS.
20. UPON COMPLETION OF STOCKPILING TOPSOIL, SEED AND MULCH USING TEMPORARY SEED MIXTURE #5 IF TO REMAIN IN PLACE LONGER THAN FOURTEEN (14) DAYS.
21. TEMPORARY STABILIZATION:
    A. TEMPORARY SEEDING STABILIZATION IS TO BE CONDUCTED WITHIN 14 DAYS OF DISTURBANCE AND IS NOT LIMITED TO SPECIFIC DATES.
    B. SEEDBED PREPARATION: SEEDBED SHALL BE WELL PREPARED, LOOSE, UNIFORM, AND FREE OF LARGE CLODS, ROCKS, AND OTHER OBJECTIONABLE MATERIAL. THE SOIL SURFACE SHOULD NOT BE COMPACTED OR CRUSTED.
    C. SEEDING: APPLY 4 LBS. PER 1000 SQ. FT. OF RYE GRASS. REFER TO FIGURE 3.4-3 ON SHEET C407 FOR TEMPORARY SEEDING GUIDELINES AND OPTIMUM SEEDING DATES.
    D. MULCH: STRAW SHALL BE UNROTTED SMALL GRAIN STRAW APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE, OR 70 TO 90 LBS. (TWO BALES) PER 1000 SQ. FT. MULCH MATERIALS SHALL BE RELATIVELY FREE OF WEEDS AND SHALL BE FREE OF NOXIOUS WEEDS SUCH AS: THISTLES, JOHNSON GRASS, AND QUACKGRASS. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY. MULCH MUST BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER, ANCHORING SHALL BE COMPLETED BY THE CRIMPING OR ANCHORING METHOD WHERE APPLICABLE.
22. SEEDING (PERMANENT):
    A. SHALL BE CONDUCTED AS SOON AS WEATHER PERMITS.
    B. THE APPLICATION RATES OF FERTILIZER AND LIME SHOULD BE ACCORDING TO THE RECOMMENDATION OF THE ON SITE SOIL TESTS. IF THE SOIL TESTING IS NOT AVAILABLE, THEN THE FOLLOWING SPECIFIED RATES MAY BE USED.
    C. SEEDBED PREPARATION: APPLY 14 LBS. OF 10-10-10 FERTILIZER PER 1000 SQ. FT.; HARROW OR DISC INTO THE TOP 4 TO 6 INCHES OF SOIL; APPLY DOLOMITIC LIMESTONE AT 92 LBS. PER 1000 SQ. FT.
    D. SEEDING: APPLY 3.5 LBS. PER 1000 SQ. FT. OF SEED MIX #7 ON A MOIST SEED BED WITH SUITABLE EQUIPMENT. MINIMUM COVERAGE IS 1/4 INCH. REFER TO FIGURE 3.4-3 ON SHEET SWM10 FOR SEEDING GUIDELINES AND OPTIMUM SEEDING DATES.
    E. MULCHING: IMMEDIATELY AFTER SEEDING, UNIFORMLY MULCH ENTIRE AREA WITH UNROTTED SMALL GRAIN STRAW APPLIED AT THE RATE IN 1-1/2 TO 2 TONS PER ACRE, OR 70 TO 90 LBS. (TWO BALES) PER 1000 SQ. FT. MULCH MATERIALS SHALL BE RELATIVELY FREE OF WEEDS AND SHALL BE FREE OF NOXIOUS WEEDS SUCH AS: THISTLES, JOHNSON GRASS, AND QUACKGRASS. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY. MULCH MUST BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER, ANCHORING SHALL BE COMPLETED BY THE CRIMPING OR ANCHORING METHOD WHERE APPLICABLE
23. IF TEMPORARY STABILIZATION IS REQUESTED, PERMANENT SEEDING SHALL BE PERFORMED DURING THE NEXT APPLICABLE PERIOD PER PARAGRAPH 22 (D) ABOVE.
24. ALL FILL SLOPE AREAS SHOWN HEREON ARE TO BE STABILIZED PER PARAGRAPHS 21 OR 22 ABOVE IMMEDIATELY AFTER COMPLETION OF GRADING OPERATIONS FOR THESE SLOPES.
25. TEMPORARY VEGETATIVE COVER, MULCHING, AND/OR SPRINKLING WITH WATER SHALL BE THE METHODS USED AS NECESSARY TO CONTROL DUST.
26. THE DNREC DIVISION OF WATERSHED STEWARDSHIP SEDIMENT AND STORMWATER PROGRAM RESERVES THE RIGHT TO ENTER PRIVATE PROPERTY FOR PURPOSES OF PERIODIC SITE INSPECTION.
27. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION IS ESTABLISHED.
28. TOTAL AREA OF DISTURBANCE: 10.802 ACRES

## SITE DATA

| | |
|---|---|
| OWNER: | MILFORD SCHOOL DISTRICT<br>BOARD OF EDUCATION<br>906 LAKESIDE AVENUE<br>MILFORD, DELAWARE 19963<br>PHONE: (302)-422-1600 |
| ENGINEER: | DAVIS, BOWEN, & FRIEDEL, INC.<br>601 E. MAIN ST., SUITE 100<br>SALISBURY, MARYLAND 21804<br>PHONE: 410-543-9091<br>FAX: 410-543-4172 |
| PROPERTY ADDRESS: | 512 LAKEVIEW AVENUE<br>MILFORD, DELAWARE 19963 |
| DNREC # | 2023-020 |
| TAX MAP ID: | 130-3.07-138.00 |
| DEED REF.: | 399/97 |
| ZONING: | R-1 - SINGLE-FAMILY RESIDENTIAL DISTRICT |
| BUILDING SETBACKS: | 25' FRONT<br>25' REAR<br>10' SIDE |
| MAX BUILDING HEIGHT: | 35' |
| PROPOSED USE: | SCHOOL |
| TOTAL SITE AREA: | 23.42 ACRES± |
| EX. IMPERVIOUS SURFACE: | 6.261 ACRES |
| EX. IMPERVIOUS %: | 70.3% |
| EX. BUILDING COVERAGE: | 21.9% (1.91 Ac.) |
| PRO. IMPERVIOUS SURFACE: | 5.670 AC. (23.7%) |
| PRO. BUILDING COVERAGE: | 1.82 AC. (7.6%) |
| FLOOD ZONE: | ZONE X - OUTSIDE FLOODPLAIN<br>(FIRM MAP 24011C0227D,<br>DATED JANUARY 16, 2015) |
| WETLANDS: | NOT PRESENT ON SITE |
| WATER: | CITY OF MILFORD |
| SEWER: | CITY OF MILFORD |
| ELECTRIC: | CITY OF MILFORD |
| SOLID WASTE: | CITY OF MILFORD |
| HORIZONTAL DATA | NAD 83 |
| VERTICAL DATA | NAVD 88 |
| LIMIT OF DISTURBANCE: | 10.802 AC. |
| SITE LOCATION: | NORTHWEST SITE CORNER<br>LAT:38.905601<br>LON:75.436597 |
| STORMWATER DISCHARGE LOCATION: | CITY OF MILFORD STORM SEWER<br>LAT:38.905494<br>LON:75.436549 |

PROJECT BENCHMARKS (NAVD 88)

| ID | COORDINATES | ELEVATION | DESCRIPTION |
|---|---|---|---|
| 1 | LAT:38.905205<br>LON:75.437102 | 26.48' | IRCS |
| 2 | LAT:38.904808<br>LON:75.435047 | 24.97' | IRCS |
| 3 | LAT:38.902790<br>LON:75.436062 | 25.30' | IRCS |
| 4 | LAT:38.902418<br>LON:75.433871 | 28.84' | IRCS |

## INDEX OF SHEETS


C-401 SEDIMENT AND SWM COVERSHEET
C-402 SCHEMATIC PRE-CONSTRUCTION SITE SWM PLAN
C-403 SCHEMATIC CONSTRUCTION SITE SWM PLAN
C-404 BMP CONTRIBUTING DRAINAGE AREA PLAN
C-405 PRE DEVELOPED SUBAREA LOD DRAINAGE AREA PLAN


DAVIS BOWEN & FRIEDEL, INC.
ARCHITECTS · ENGINEERS · SURVEYORS
EASTON, MARYLAND 410.770.4744 | MILFORD, DELAWARE 302.424.1444 | SALISBURY, MARYLAND 410.543.9091

## LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | PROPERTY LINE OR RIGHT-OF-WAY LINE | |
| X | FENCE | X |
| 24 | CONTOUR | 24 |
| ×24.24 ×24.74 TC ×24.24 | SPOT ELEVATIONS: SURFACE, TOP OF CURB / BOTTOM OF CURB | 24.24 / 24.74 T.C. 24.24 B.C. |
| | SWALE | |
| | EDGE OF WOODS, LIMITS OF CLEARING LINE | |
| E | UNDERGROUND ELECTRIC LINE | |
| OH/E | OVERHEAD ELECTRIC LINE | |
| T | UNDERGROUND TELEPHONE LINE | |
| G | UNDERGROUND GAS LINE | 2G 2G |
| | SEWER MAIN, MANHOLE, AND CLEANOUT | SSS C.O. |
| | WATER MAIN, HYDRANT, VALVE, AND METER | W.M. |
| | STORMDRAIN, MANHOLE, AND INLET | |
| | CURB, CURB AND GUTTER | |
| | CONCRETE SIDEWALK, CONCRETE PAD, OR CONCRETE PAVING | |
| | BITUMINOUS PAVING | |
| | BUILDING | |
| | ITEMS TO BE DEMOLISHED | |
| | DECIDUOUS TREE, EVERGREEN TREE, AND SHRUBS | |
| | ROAD SIGN, MAIL BOX | |
| | LIGHT POLE | |
| | UTILITY POLE WITH GUY WIRES | |
| | LIMIT OF DISTURBANCE | LOD |
| | SWALE | |
| | SOIL BOUNDARY | |
| | SOIL IDENTIFICATION | GuB |
| | DRAINAGE AREA | |
| | PROPOSED SILT FENCE | SF |
| | PROPOSED SUPER SILT FENCE | SSF |
| | CONSTRUCTION FENCE | |
| | STABILIZED CONSTRUCTION ENTRANCE | SCE |
| | CONCRETE WASHOUT | CW |
| | INLET PROTECTION TYPE | IP2 |
| | SOIL BORING LOCATION | S-1 |

## ENGINEER'S STATEMENT

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE COMPLIES WITH THE APPLICABLE STATE AND LOCAL REGULATIONS AND ORDINANCES.

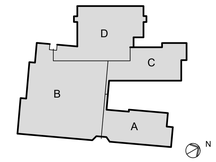
SIGNATURE: _____
W. ZACHARY CROUCH, P.E.
LICENSE NO. 12734
EXPIRATION DATE: 06/30/24

## OWNER'S STATEMENT

I, THE UNDERSIGNED, CERTIFY THAT ALL LAND CLEARING, CONSTRUCTION AND DEVELOPMENT SHOULD BE DONE PURSUANT TO THE APPROVED PLAN AND THAT RESPONSIBLE PERSONNEL (I.E., BLUE CARD HOLDER) INVOLVED IN THE LAND DISTURBANCE WILL HAVE A CERTIFICATION OF TRAINING PRIOR TO INITIATION OF THE PROJECT, AT A DNREC SPONSORED OR APPROVED TRAINING COURSE FOR THE CONTROL OF EROSION AND SEDIMENT DURING CONSTRUCTION. IN ADDITION, I GRANT THE DNREC SEDIMENT AND STORMWATER PROGRAM AND/OR THE RELEVANT DELEGATED AGENCY THE RIGHT TO CONDUCT ONSITE REVIEWS, AND I UNDERSTAND MY RESPONSIBILITIES UNDER THE NPDES CONSTRUCTION GENERAL PERMIT, AS REFERENCED ON THIS COVERSHEET.

_____ _____
MILFORD SCHOOL DISTRICT BOARD OF EDUCATION DATE
906 LAKESIDE AVENUE
MILFORD, DELAWARE 19963

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN

Milford SCHOOL DISTRICT
HOME of the BUCCANEERS

OWNER:
MILFORD SCHOOL DISTRICT
906 LAKEVIEW AVENUE
MILFORD, DE 19963

STRUCTURAL ENGINEER:
PILOTTOWN ENGINEERING
17858 NASSAU COMMONS BLVD, UNIT 3
LEWES, DE 19958
P: 302.703.1770

MEP ENGINEER:
FURLOW ASSOCIATES, INC.
650 NAAMANS ROAD
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P: 302.798.3515

CIVIL ENGINEER:
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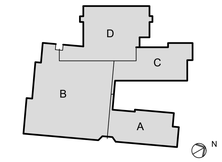
**SEDIMENT AND SWM COVERSHEET**

**C401**

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PRELIMINARY - NOT FOR CONSTRUCTION

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B S A + A
Buck Simpers Architect + Associates, Inc.
954 Justison St.
Wilmington, DE 19801
302 658-9300
Fax 658-1125


## PRE-CONSTRUCTION SITE SWM PLAN

SCALE: 1" = 50'

PST-1: PIPE OUTLET SEDIMENT TRAP DATA
DRAINAGE AREA: 4.88 AC
TOP ELEVATION: 24.5'
BOTTOM ELEVATION: 21.0'
REQUIRED VOLUME: 17,568 CF
PROVIDED VOLUME: 18,304 CF
PIPE DIAMETER: 12"
RISER DIMENSIONS: 34"x24"
TRAP DIMENSIONS: 250'(L)x36'(W)x3.5'(D)
STORAGE ELEVATION: 21' TO 24.5'

## LEGEND

- SOILS TYPE SYMBOL
- IuB — SOILS TYPE DIVISION LINE
- PROPERTY LINE OR RIGHT-OF-WAY
- 24 — EXISTING CONTOUR
- LOD — LIMIT OF DISTURBANCE
- SF — SILT FENCE
- CFL — COMPOST FILTER LOG
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- ROP2 — RIPRAP OUTLET PROTECTION
- IP1 IP2 IP3 — INLET PROTECTION
- SWM-7 — SOIL BORING LOCATION

## PAVEMENT LEGEND

- EXISTING ASPHALT PAVEMENT
- EXISTING CONCRETE SIDEWALK, PAD, OR PAVING
- EXISTING GRAVEL

## SOILS LEGEND

| CLASSIFICATION | GROUP | DESCRIPTION |
|---|---|---|
| DnA | (A) | DOWNER LOAMY SAND, 0-2% SLOPES |
| DuB | (A) | DOWNER-URBAN LAND COMPLEX, 0-5% SLOPES |

SOIL CLASSIFICATIONS OBTAINED FROM WEB SOIL SURVEY PREPARED BY THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE, VERSION 23, ISSUED SEPTEMBER 14, 2022.

## DEMO KEY NOTES

1. REMOVE EXISTING BUILDING, FULL DEPTH
2. REMOVE SIDEWALK / CONCRETE PAD, FULL DEPTH
3. REMOVE PAVEMENT, FULL DEPTH
4. REMOVE CURB & GUTTER FULL DEPTH
5. REMOVE CONCRETE WALL, FULL DEPTH
6. EXISTING CHAIN LINK FENCE TO BE REMOVED / RELOCATED
7. EXISTING LANDSCAPE FEATURES TO BE REMOVED / RELOCATED
8. EXISTING BUILDING TO BE RELOCATED
9. REMOVE POST / BOLLARD
10. REMOVE BENCH
11. REMOVE SAND FILTER SYSTEM
12. REMOVE STORM PIPE OR STRUCTURE

0' 50' 100' 150'
SCALE: 1" = 50'

**SEDIMENT & STORMWATER MANAGEMENT PLANS**

JOB NO. 22.018

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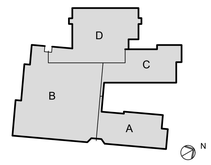
**SCHEMATIC PRE-CONSTRUCTION SITE SWM PLAN**

**C402**

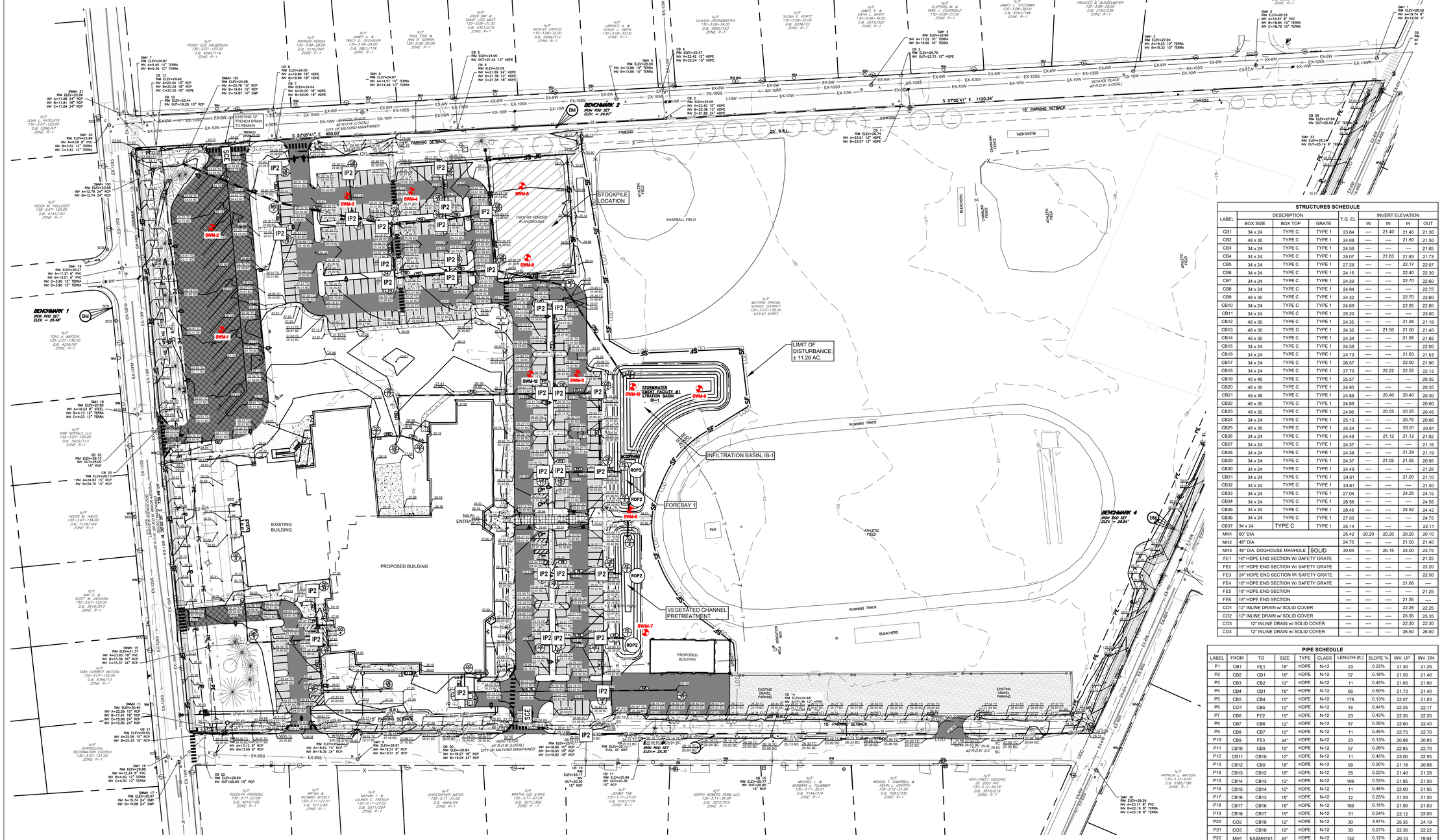

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PRELIMINARY - NOT FOR CONSTRUCTION

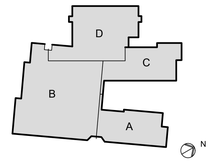
| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN


BENCHMARK 1
IRON ROD SET
ELEV. = 26.49'
BENCHMARK 2
IRON ROD SET
ELEV. = 24.97'
BENCHMARK 3
IRON ROD SET
ELEV. = 25.30'
BENCHMARK 4
IRON ROD SET
ELEV. = 28.24'
S 57°05'41" E 450.00'
S 57°05'41" E 1120.34'
25' B.R.L.
15' PARKING SETBACK
SCHOOL PLACE
40' R.O.W. (LOCAL)
CITY OF MILFORD MAINTAINED
SCHOOL PLACE
40' R.O.W. (LOCAL)
CITY OF MILFORD MAINTAINED
SCHOOL PLACE
40' R.O.W. (LOCAL)
STOCKPILE LOCATION
LIMIT OF DISTURBANCE: ± 11.26 AC.
INFILTRATION BASIN, IB-1
STORMWATER CHEMT FACILITY #1 LTRATION BASIN IB-1
FOREBAY 1
VEGETATED CHANNEL PRETREATMENT
EXISTING BUILDING
PROPOSED BUILDING
MAIN ENTRANCE
BASEBALL FIELD
ATHLETIC FIELD
RUNNING TRACK
BLEACHERS
100'X100' FENCED PLAYGROUND
EXISTING GRAVEL PARKING
MILFORD SPECIAL SCHOOL DISTRICT 1.53'-3.07'-138.00 ±23.42 ACRES
N/F JOHN L. WATLYFE 130--3.07--123.00 D.B. 5396/47 ZONE: R--1
N/F PEGGY SUE KALBERLOH 130--3.07--137.50 D.B. 4043/114 ZONE: R--1
N/F PATRICIA PERSIA 130--3.08--28.00 D.B. 5116/347 ZONE: R--1
N/F JAMES A. & TRACY G. DECHSLER 130--3.08--29.00 D.B. 3821/118 ZONE: R--1
N/F PAUL ERIC & ANNA L. DORAN 130--3.08--30.00 ZONE: R--1
N/F JOHN RAY & DANE LOIS MIST 130--3.08--31.00 D.B. 5301/279 ZONE: R--1
N/F NICHOLAS CARECE 130--3.08--32.00 D.B. 5489/312 ZONE: R--1
N/F LAWRENCE A. & LESLIE L. SMITH 130--3.08--33.00 ZONE: R--1
N/F CLAUDIA SHONEMARTER 130--3.08--34.00 D.B. 3802/153 ZONE: R--1
N/F SUSAN E. PORTZ 130--3.08--35.00 D.B. 203M/72 ZONE: R--1
N/F JAMES R. & KATHI L. WYATT 130--3.08--36.00 D.B. 2915/322 ZONE: R--1
N/F CLIFFORD W. & TARA J. COVERDALE 130--3.08--37.00 ZONE: R--1
N/F JAMES L. STUTZMAN 130--3.08--38.00 D.B. 4182/184 ZONE: R--1
N/F LOUIS D. & FRANCES R. BUNSOMEYER 130--3.08--39.00 D.B. 2185/224 ZONE: R--1
N/F ST. JOHNS CHURCH 130--3.08--40.00 D.B. 2585/47 ZONE: R--1
N/F HELEN W. HOLLEGER 130--3.07--124.00 D.B. 4141/161 ZONE: R--1
N/F TONY A. MATSON 130--3.07--136.00 D.B. 4256/97 ZONE: R--1
N/F DKM RENTALS, LLC 130--3.07--135.00 D.B. 5420/213 ZONE: R--1
N/F HELEN M. HALES 130--3.07--134.00 D.B. 5126/189 ZONE: R--1
N/F ANN C. & SCOTT A. MORDEN 130--3.07--133.00 D.B. 3418/213 ZONE: R--1
N/F TARA CORBETT WATSON 130--3.07--132.00 D.B. 4760/213 ZONE: R--1
N/F EVANGELICAL REFORMATION CHURCH 130--3.07--131.00 ZONE: R--1
N/F RUDOLPH FEARSALL 130--3.11--27.00 D.B. 4210/105 ZONE: R--1
N/F BRYAN & RICHARD BYERLY 130--3.11--27.01 D.B. 5111/85 ZONE: R--1
N/F NATHAN T. & LAUREN E. FRENCH 130--3.11--27.02 D.B. 5511/254 ZONE: R--1
N/F CHRISTOPHER NATUR 130--3.11--27.03 D.B. 4964/24 ZONE: R--1
N/F MARTHA ANN F. EVANS 130--3.11--27.04 D.B. 5271/326 ZONE: R--1
N/F NORTH BOWERS FARM, LLC. 130--3.11--55.00 D.B. 3977/315 ZONE: R--1
N/F MICHAEL L. & BARBARA A. SUMMER 130--3.11--55.01 D.B. 3149/314 ZONE: R--1
N/F MONICA Y. CAMPBELL & KEVIN T. CAMPBELL 130--3.12--31.00 D.B. 5087/332 ZONE: R--1
N/F KENSINGTON HOUSING DE 2003 INC. 130--3.12--50.00 D.B. 3019/219 ZONE: R--1
N/F PATRICIA L. WATSON 130--3.12--9.00 D.B. 5385/186 ZONE: R--1
SMH 1 RIM ELEV=28.50 INV A=19.74 8" INV B=19.56 15"
SMH 2 RIM ELEV=28.23 INV A=18.87 8" PVC INV B=18.84 15" TERRA INV C=18.79 15" TERRA
SMH 2 RIM ELEV=27.94 INV A=18.25 15" TERRA INV B=18.22 15" TERRA
SMH 3 RIM ELEV=27.28 INV A=17.02 12" HDPE INV B=16.99 10" TERRA
SMH 4 RIM ELEV=26.75 INV OUT=23.75 12" HDPE
SMH 5 RIM ELEV=25.55 INV A=15.88 10" TERRA INV B=15.86 10" TERRA
SMH 6 RIM ELEV=24.87 INV A=14.57 10" TERRA INV B=14.46 10" TERRA
SMH 7 RIM ELEV=24.87 INV A=9.40 10" TERRA INV B=9.36 10" TERRA
SMH 20 RIM ELEV=22.89 INV A=9.08 8" PVC INV B=3.52 12" TERRA INV C=3.42 12" TERRA
SMH 21 RIM ELEV=23.66 INV A=11.93 18" RCP INV B=11.91 18" RCP INV C=11.84 24" RCP
SMH 100 RIM ELEV=23.98 INV A=12.78 24" RCP INV B=12.74 24" RCP
SMH 19 RIM ELEV=25.27 INV A=17.37 8" PVC INV B=13.01 6" PVC INV C=3.90 12" TERRA INV D=3.80 12" TERRA
SMH 18 RIM ELEV=27.82 INV A=19.23 8" STEEL INV B=14.13 12" TERRA INV C=14.03 12" TERRA
SMH 16 RIM ELEV=29.66 INV A=12.24 8" PVC INV B=4.60 12" TERRA INV C=4.50 12" TERRA
SMH 17 RIM ELEV=30.07 INV A=15.74 24" CMP INV B=15.68 24" CMP
SMH 15 RIM ELEV=31.37 INV A=23.65 18" PVC INV B=15.36 36" RCP INV C=15.37 24" RCP
SMH 11 RIM ELEV=30.40 INV A=22.58 15" RCP INV B=17.41 30" RCP INV C=15.98 24" RCP INV D=15.88 24" RCP
CB 21 RIM ELEV=29.65 INV A=25.59 15" RCP INV B=25.33 15" RCP
CB 22 RIM ELEV=29.83 INV OUT=25.93 15" RCP
CB 32 RIM ELEV=28.03 INV OUT=24.03 15" RCP
CB 33 RIM ELEV=28.15 INV A=24.85 15" RCP INV B=24.75 15" RCP
CB 29 RIM ELEV=27.84 INV OUT=25.50 15" TERRA
SMH 33 RIM ELEV=28.47 INV OUT=25.14 8" TERRA
CB 1 RIM ELEV=26.74 INV A=23.61 12" HDPE INV B=23.57 12" HDPE
CB 2 RIM ELEV=24.45 INV A=21.04 12" HDPE INV B=20.99 12" HDPE
CB 3 RIM ELEV=25.55 INV A=22.42 15" HDPE INV B=22.38 12" HDPE INV C=21.89 24" HDPE
CB 4 RIM ELEV=25.47 INV A=22.42 12" HDPE INV B=22.24 15" HDPE
CB 5 RIM ELEV=25.09 INV A=21.89 24" HDPE INV B=21.38 12" HDPE INV C=21.24 18" HDPE
CB 6 RIM ELEV=24.90 INV OUT=21.34 12" HDPE
CB 7 RIM ELEV=24.04 INV A=20.00 18" HDPE INV B=20.00 18" HDPE
CB 8 RIM ELEV=24.00 INV A=19.89 18" HDPE INV B=19.85 18" HDPE
CB 12 RIM ELEV=23.44 INV OUT=19.28 15" RCP
CB 13 RIM ELEV=24.42 INV A=20.40 18" RCP INV B=20.29 18" RCP INV C=20.28 18" HDPE
SMMH 101 RIM ELEV=24.08 INV A=20.78 10" RCP INV B=19.91 10" RCP INV C=19.81 10" CMP
EXISTING 12" TRENCH DRAIN TO REMAIN
TRENCH DRAIN
CB 14 RIM ELEV=24.45 INV A=21.04 12" HDPE INV B=20.99 12" HDPE
CB 16 RIM ELEV=26.17 INV OUT=20.30 15" RCP
CB 17 RIM ELEV=25.88 INV OUT=20.36 15" RCP
CB 18 RIM ELEV=26.07 INV OUT=20.70 15" RCP
CB 15 RIM ELEV=25.77 INV OUT=20.90 15" RCP
CB 30 RIM ELEV=26.84 INV A=19.07 15" RCP INV B=19.04 24" RCP
SWM-1
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SWM-5
SWM-6
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SWM-11
SWM-12
IP1
IP2
IP3
ROP2
SCE
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EX-10W
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| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN


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JOB NO. 22.018

# MILFORD MIDDLE SCHOOL

612 LAKEVIEW AVENUE,
MILFORD, DE 19963

**OVERALL POST CONSTRUCTION SWM PLAN**

**C404**

## OVERALL POST CONSTRUCTION SWM PLAN

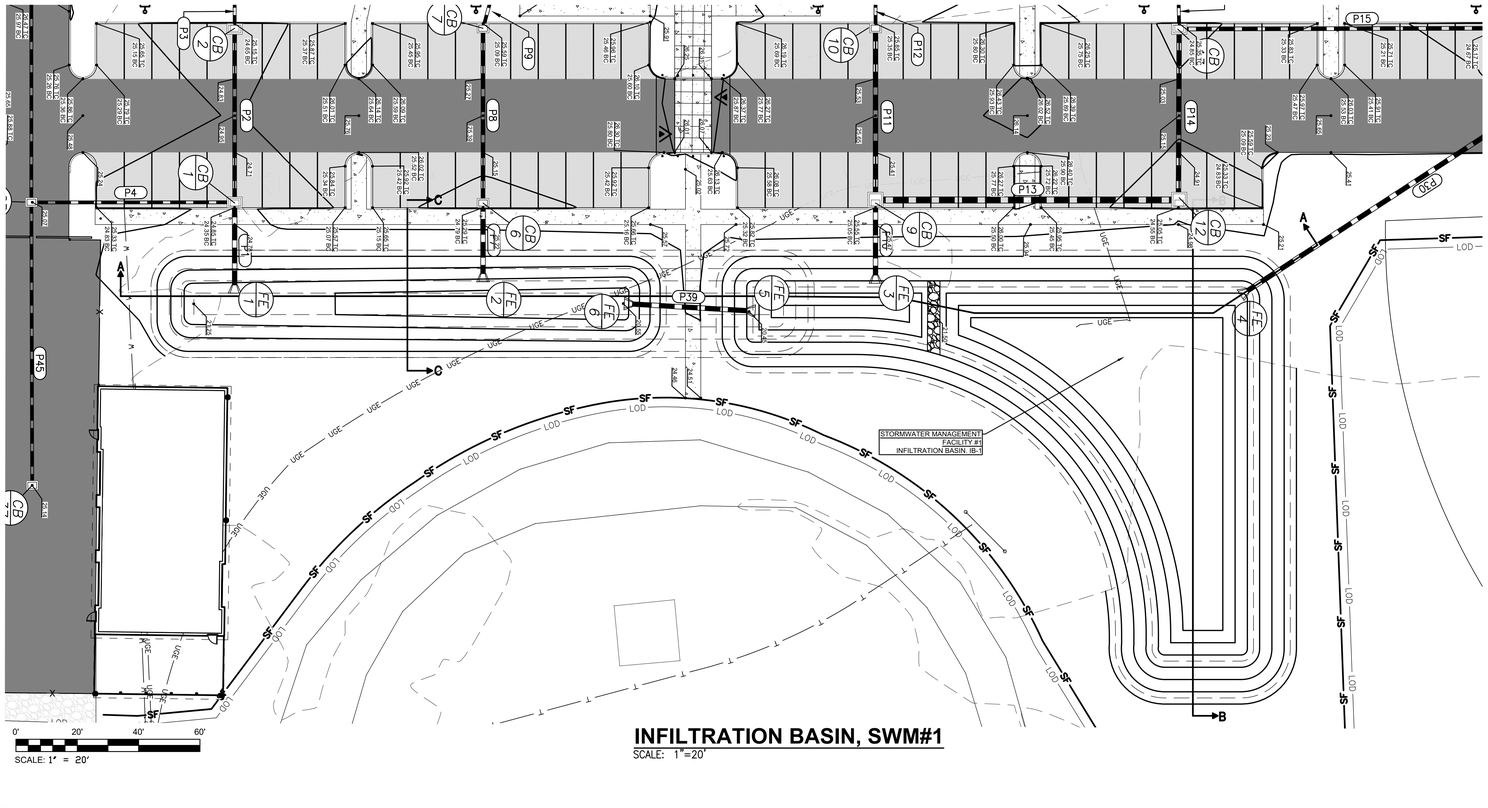
SCALE: 1" = 50'

0' 50' 100' 150'
SCALE: 1" = 50'

**SEDIMENT & STORMWATER MANAGEMENT PLANS**

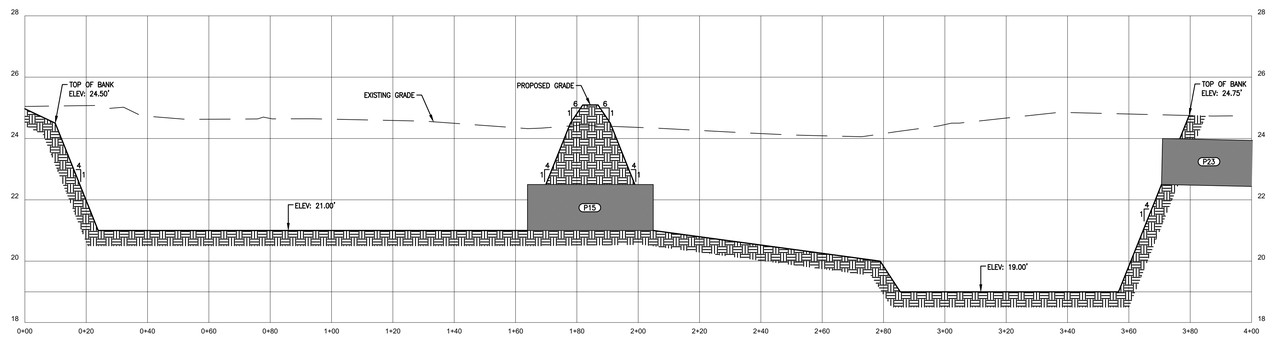
PRELIMINARY - NOT FOR CONSTRUCTION

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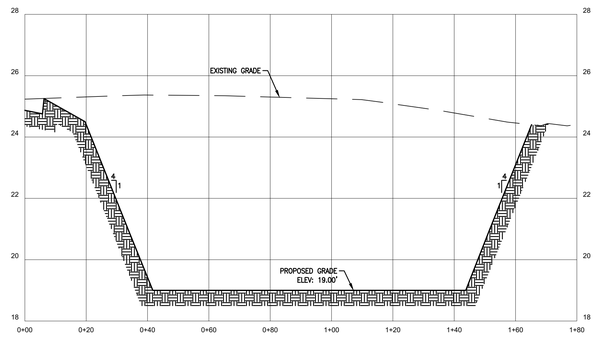

## INFILTRATION BASIN, SWM#1

SCALE: 1"=20'



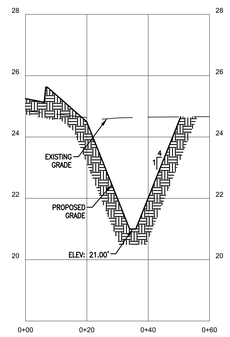

## INFILTRATION BASIN PROFILE A-A

SCALE: 1"=20' HORIZ.
1"= 2' VERT.




## INFILTRATION BASIN PROFILE B-B

SCALE: 1"=20' HORIZ.
1"= 2' VERT.




## INFILTRATION BASIN PROFILE C-C

SCALE: 1"=20' HORIZ.
1"= 2' VERT.

# OPERATION AND MAINTENANCE NOTES

1. THE DNREC SEDIMENT AND STORMWATER PROGRAM AND/OR THE SUSSEX CONSERVATION DISTRICT RESERVES THE RIGHT TO ENTER PRIVATE PROPERTY FOR PURPOSES OF PERIODIC SITE REVIEWS.
2. THE SUSSEX CONSERVATION DISTRICT SHOULD BE NOTIFIED WITHIN 30 BUSINESS DAYS IF THE PROPERTY OWNERSHIP IS TRANSFERRED TO A NEW PERSON OR ENTITY.
3. THE DNREC SEDIMENT AND STORMWATER PROGRAM AND/OR SUSSEX CONSERVATION DISTRICT MAY SEEK ENFORCEMENT ACTION AGAINST ANY OWNER DEEMED NEGLIGENT IN FULFILLING THE OPERATION AND MAINTENANCE REQUIREMENTS OF THE DELAWARE SEDIMENT AND STORMWATER REGULATIONS.
4. THE SUSSEX CONSERVATION DISTRICT SHOULD BE CONTACTED IF A CONCERN ARISES REGARDING A STORMWATER MANAGEMENT FACILITY, BEFORE ANY NON-ROUTINE MAINTENANCE, OR IF MODIFICATIONS TO THE FACILITY ARE DESIRED.
5. ANY DESIGN MODIFICATIONS MADE TO THE STORMWATER SYSTEM SHALL REQUIRE THE CREATION OF A NEW POST CONSTRUCTION STORMWATER MANAGEMENT PLAN AND/OR OPERATIONS AND MAINTENANCE PLAN, WITH APPROVAL OF THE PLAN(S) BY THE SUSSEX CONSERVATION DISTRICT.
6. FOR ALL STORMWATER EASEMENT AREAS (I.E., ACCESS, MAINTENANCE, OR OFFSITE) AND THE MINIMUM 15-WIDE ACCESSWAYS TO ALL STORMWATER FACILITIES AND THEIR STRUCTURAL COMPONENTS, REGULAR MOWING SHOULD BE PERFORMED TO KEEP THE GRASS 6 INCHES OR LESS; NO TREES OR SHRUBS SHOULD BE PLANTED, AND ANY FOUND GROWING SHOULD BE REMOVED; AND NO PERMANENT STRUCTURES, SUCH AS FENCES OR SHEDS, SHOULD BE LOCATED WITHIN THE EASEMENT OR ACCESSWAY.
7. TREES SHOULD NOT BE PLANTED, AND SHOULD BE REMOVED IF FOUND GROWING, ON AND WITHIN 15 FEET OF THE TREATMENT FACILITY, AND WITHIN 10 FEET OF STRUCTURAL COMPONENTS, SUCH AS PIPE INLETS.
8. WHEN THE FACILITY IS EXCAVATED TO REMOVE ACCUMULATED SEDIMENT, THE DISPOSAL AREA SHALL BE PERMANENTLY STABILIZED SO THAT IT DOES NOT RECREATE AN EROSION PROBLEM. ANY MATERIAL TAKEN OFFSITE SHALL STILL BE USED OR DISPOSED OF IN AN APPROVED DNREC MANNER.
9. BEFORE ANY EARTHWORK OR EXCAVATION TAKES PLACE, THE CONTRACTOR SHOULD CALL MISS UTILITY AT 811 OR 1-800-282-8555 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, TO HAVE ALL EXISTING UTILITIES MARKED ONSITE.
10. IF UPON VISUAL INSPECTION IT IS FOUND THAT SEDIMENT HAS ACCUMULATED, A STADIA ROD SHOULD BE INSERTED INTO INSPECTION PORTS TO DETERMINE THE DEPTH OF SEDIMENT. WHEN THE AVERAGE DEPTH OF SEDIMENT EXCEEDS 3 INCHES THROUGHOUT THE LENGTH OF THE ISOLATOR ROW PLUS, CLEAN-OUT SHOULD BE PERFORMED.
11. INSPECT AND CLEAN CATCH BASINS AND MANHOLES UPSTREAM OF THE INFILTRATION BASIN, REMOVE TRASH AND DEBRIS ON A REGULAR BASIS. IT IS ESPECIALLY IMPORTANT TO REMOVE DEBRIS FROM ALL INLETS AND OUTFALL STRUCTURES.
12. HIRE A PROFESSIONAL FOR; REPAIR OR REPLACEMENT OF DETERIORATING PIPES; OR STRUCTURAL COMPONENTS; REMOVAL OF ACCUMULATED SEDIMENT.
13. THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL STORMWATER FACILITIES.

# INFILTRATION BASIN SEQUENCE OF CONSTRUCTION

1. INFILTRATION BASIN SHOULD ONLY BE CONSTRUCTED AFTER THE CONTRIBUTING DRAINAGE AREA IS COMPLETELY STABILIZED. THE PROPOSED INFILTRATION BASIN SHALL BE USED AS A SEDIMENT BASIN DURING THE CONSTRUCTION PHASE. THE BASIN SHALL BE EXCAVATED TO 1 FOOT ABOVE THE DESIGN ELEVATION WHILE ACTING AS A SEDIMENT BASIN. THE FACILITY MUST BE DEWATERED, DREDGED, AND RE-GRADED TO DESIGN DIMENSIONS AFTER THE ORIGINAL SITE CONSTRUCTION IS COMPLETE. THE INFILTRATION BASIN IS NOT TO BE CONVERTED TO ITS FINAL DEPTH UNTIL THE DRAINAGE AREA HAS BEEN CONSTRUCTED AND STABILIZED.
2. ASSEMBLE CONSTRUCTION MATERIALS ON-SITE, MAKE SURE THEY MEET DESIGN SPECIFICATIONS, AND PREPARE ANY STAGING AREAS. ENSURE THAT APPROPRIATE COMPACTION AND DEWATERING EQUIPMENT IS AVAILABLE. LOCATE THE PROJECT BENCHMARK AND IF NECESSARY TRANSFER A BENCHMARK NEARER TO INFILTRATION BASIN LOCATION FOR USE DURING CONSTRUCTION.
3. INSTALL EROSION AND SEDIMENT CONTROLS PRIOR TO CONSTRUCTION, INCLUDING TEMPORARY DE-WATERING DEVICES AND STORMWATER DIVERSION PRACTICES. ALL AREAS SURROUNDING THE BASIN THAT ARE GRADED OR DENUDED DURING CONSTRUCTION MUST BE PLANTED WITH TURF GRASS, NATIVE PLANTINGS, OR OTHER APPROVED METHODS OF SOIL STABILIZATION.
4. EXCAVATE THE INFILTRATION PRACTICE TO THE DESIGN DIMENSIONS FROM THE SIDE, USING A BACKHOE OR EXCAVATION. GRADE UNTIL THE APPROPRIATE ELEVATION AND DESIRED CONTOURS ARE ACHIEVED FOR THE BOTTOM AND SIDE SLOPES OF THE INFILTRATION BASIN. CONSTRUCT FOREBAYS AT THE PROPOSED INFLOW POINTS.
5. STABILIZE EXPOSED SOILS WITH THE APPROVED SEED MIXTURES IN ACCORDANCE WITH THE VEGETATIVE STABILIZATION SPECIFICATIONS. PLANT THE USE SOD, WHERE APPLICABLE TO ESTABLISH A DENSE TURF COVER FOR AT LEAST 10 FEET AROUND THE SIDES OF THE INFILTRATION PRACTICE, TO REDUCE EROSION AND SLOUGHING.
6. DURING SITE CONSTRUCTION; THE FOLLOWING STEPS ARE ABSOLUTELY CRITICAL:
   A) EXCAVATION OF THE FACILITY MUST BE DONE FROM THE SIDES TO AVOID COMPACTION AND PREVENTING HEAVY CONSTRUCTION EQUIPMENT AND VEHICLES FROM TRAVELING OVER THE PROPOSED LOCATION OF THE INFILTRATION PRACTICE USING "SENSITIVE AREA PROTECTION" GUIDELINES DURING CONSTRUCTION.
   B) REMOVE CHOKING SEDIMENT FROM THE FACILITY, TILLING THE BASIN, AND PERFORMING ADDITIONAL GEOLOGICAL SITE INVESTIGATIONS TO DETERMINE THAT THE INFILTRATION RATE HAS BEEN MAINTAINED. ADDITIONAL INFILTRATION TESTING SHALL BE CONDUCTED IF REQUESTED BY DNREC SEDIMENT AND STORMWATER PROGRAM.
7. ONCE THE BASIN IS EXCAVATED TO ITS FINAL DESIGN DEPTH THE BOTTOM SHALL BE STABILIZED WITH 1" OF PNEUMATICALLY BLOWN COMPOST IN LIEU OF TOPSOIL TO PREVENT EQUIPMENT FROM TRAVERSING THE BASIN BOTTOM. COMPOST BLANKET SHALL BE LOOSELY AND UNIFORMLY APPLIED (100% SOIL COVERAGE) AND INCLUDE APPROVED SEED MIXTURE TO PROMOTE GERMINATION.
8. FOLLOWING CONSTRUCTION, THE ACTUAL DEPTH OF EACH FOREBAY AND THE BASIN ITSELF, MUST BE MEASURED, MARKED, GEO-REFERENCED ON THE POST CONSTRUCTION VERIFICATION SURVEY DOCUMENT. THIS SIMPLE DATA SET WILL ENABLE MAINTENANCE REVIEWERS TO DETERMINE SEDIMENT DEPOSITION RATES IN ORDER TO SCHEDULE SEDIMENT CLEANOUTS.

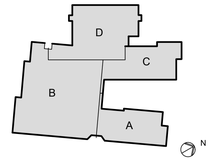
# INFILTRATION MAINTENANCE TASKS & FREQUENCY

| FREQUENCY | MAINTENANCE ITEMS |
|---|---|
| AS NEEDED | • REPLACE TOPSOIL AND TOP SURFACE FILTER FABRIC (WHEN CLOGGED)<br>• MOW VEGETATED FILTER STRIPS AS NECESSARY AND REMOVE CLIPPINGS |
| QUARTERLY OR AFTER MAJOR STORMS (>1 INCH OF RAINFALL) | • ENSURE THAT THE CONTRIBUTING DRAINAGE AREA, INLETS, AND FACILITY SURFACE ARE CLEAR OF DEBRIS.<br>• ENSURE THAT THE CONTRIBUTING DRAINAGE AREA IS STABILIZED. PERFORM SPOT-RESEEDING WHERE NEEDED.<br>• REMOVE SEDIMENT AND OIL/GREASE FROM INLETS, PRE-TREATMENT DEVICES, FLOW DIVERSION STRUCTURES, STORAGE PRACTICES AND OVERFLOW STRUCTURES.<br>• REPAIR UNDERCUT AND ERODED AREAS AT INFLOW AND OUTFLOW STRUCTURES. |
| SEMI-ANNUALLY | • CHECK INSPECTION PORTS 3 DAYS AFTER A STORM EVENT IN EXCESS OF 1/2 INCH IN DEPTH. STANDING WATER OBSERVED IN THE OBSERVATION PORT AFTER THREE DAYS IS A CLEAR INDICATION OF CLOGGING.<br>• INSPECT PRETREATMENT DEVICES AND DIVERSION STRUCTURES FOR SEDIMENT BUILD-UP AND STRUCTURAL DAMAGE.<br>• REMOVE TREES THAT START TO GROW IN THE VICINITY OF THE INFILTRATION FACILITY THAT MAY DROP LEAF LITTER, FRUITS AND OTHER VEGETATIVE MATERIALS THAT COULD CLOG THE INFILTRATION DEVICE. |
| ANNUALLY | • CLEAN OUT ACCUMULATED SEDIMENTS FROM THE PRETREATMENT CELL. |

# INFILTRATION OPERATION & MAINTENANCE GUIDELINE

| | |
|---|---|
| FUNCTION | THESE STORMWATER FACILITIES ARE DESIGNED TO INFILTRATE STORMWATER AND SHOULD NOT HOLD WATER FOR MORE THAN 48 HOUR (Cv EVENT). |
| INSPECTION | SELF INSPECT SEMI-ANNUALLY (SPRING AND FALL) AND AFTER STORM EVENTS OF 2 INCHES OR MORE. |
| TRASH AND DEBRIS | REMOVE TRASH AND DEBRIS ON A REGULAR BASIS. IT IS ESPECIALLY IMPORTANT TO REMOVE DEBRIS FROM ALL INLETS AND OUTFALL STRUCTURES. |
| SOIL | SOILS ON SIDE SLOPES OF POND SHOULD BE TESTED ANNUALLY TO ENSURE PROPER PH AND FERTILITY INCLUDING: ORGANIC MATTER, MAGNESIUM (MG), PHOSPHORUS (P2O5), NITROGEN (N), POTASSIUM (K2O), AND SOLUBLE SALTS. IF REQUIRED, FERTILIZERS SHOULD ONLY BE APPLIED IN THE FALL. |
| EROSION | IF BARE SOIL EXISTS ON POND SIDE SLOPES OR EMBANKMENT, RESEED AND/OR REPLANT AS REQUIRED BASED UPON INSPECTION FINDINGS. STABILIZE APPLICABLE ERODED AREAS WITH REINFORCING EROSION CONTROL PRODUCTS (RECP) OR TURF REINFORCING MATS (TRM), AS REQUIRED. IF RECP IS APPLIED, IT IS RECOMMENDED TO USE TRULY BIODEGRADABLE PRODUCTS TO AID IN MOWING MAINTENANCE AND DETER WILDLIFE ENTANGLEMENT. THESE PRODUCTS CAN BE RECOGNIZED AS HAVING "BN" FOR BIONETTING OR "B" FOR BIODEGRADABLE. |
| MOWING | MOW AROUND BASIN WEEKLY DURING PEAK GROWING SEASON (APRIL–NOVEMBER). MOW 10-FOOT WIDE ACCESS PATH TO ALL INLET AND OUTLET STRUCTURES; ALSO MOWING AROUND THESE STRUCTURES REGULARLY. USE MULCHING MOWER TO ENSURE THAT NUTRIENTS ARE RECYCLED. FOR WARM SEASON GRASSES, THE PREVIOUS SEASON'S STALKS SHOULD BE CUT DOWN TO 8-12 INCHES IN EARLY SPRING (MID MARCH), BEFORE NEW SEASON'S GROWTH EMERGES. |
| BUFFERS: | NA |
| FENCING | FENCING IS NOT RECOMMENDED AND NOT REQUIRED, HOWEVER, IF A FENCE IS PREFERRED, ENSURE THAT IT IS IN GOOD REPAIR AND PROVIDES ACCESS FOR MAINTENANCE AND INSPECTIONS. |
| SPECIAL | INFILTRATION BASINS ARE DESIGNED TO INFILTRATE WATER AND REMOVE POLLUTANTS FROM STORMWATER. CONSIDERATIONS DO NOT COMPACT FACILITY IN ANY WAY. THIS INCLUDES THE USE OF HEAVY EQUIPMENT OR MACHINERY. COMPACTION MAY LEAD TO SYSTEM FAILURE. |
| HIRE A PROFESSIONAL | IF FACILITY DOES NOT DRAIN WITHIN 48 HOURS; REPAIR OF SEVERE EROSION; REPLACEMENT OF DETERIORATING PIPES OR STRUCTURAL COMPONENTS; IF MOSQUITOES ARE SUSPECTED TO BE PROBLEMATIC; RECONSTRUCTION OF EMBANKMENT AN OUTLET STRUCTURE; REMOVAL OF ACCUMULATED SEDIMENT; AQUATIC VEGETATION CONTROL (CHEMICAL APPLICATION) IF LICENSING REQUIRED BY DE DEPARTMENT OF AGRICULTURE; IF DREDGING (SEDIMENT REMOVAL) IS REQUIRED. |

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN

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HOME of the BUCCANEERS


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JOB NO. 22.018

MILFORD MIDDLE SCHOOL

612 LAKEVIEW AVENUE,
MILFORD, DE 19963

**POST CONSTRUCTION SWM PLAN, FACILITY 1**

**C405**

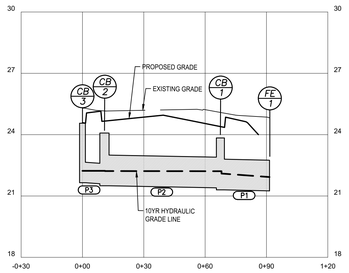
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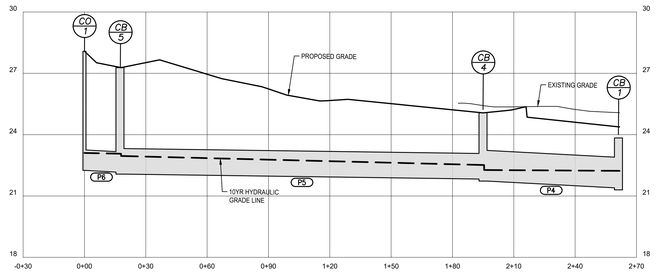
**SEDIMENT & STORMWATER MANAGEMENT PLANS**

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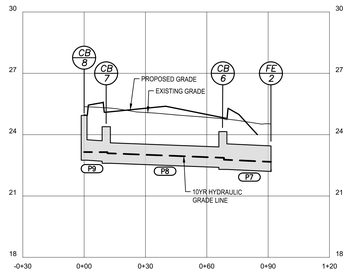
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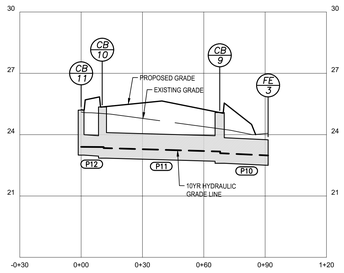

## CB3 TO FE1 PROFILE
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1"= 3' VERT.



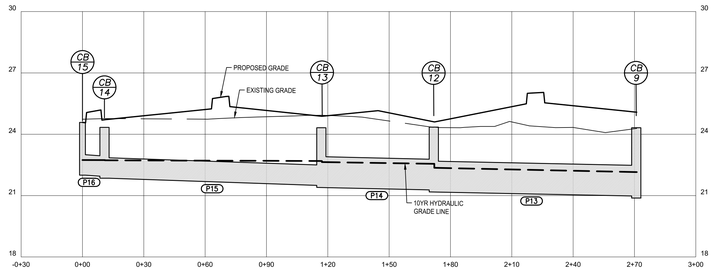

## CO1 TO CB1 PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.



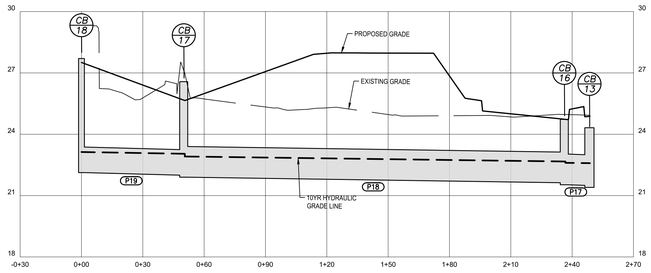

## CB8 TO FE2 PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.



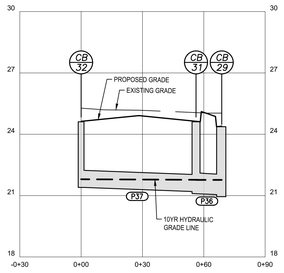

## CB11 TO FE3 PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.



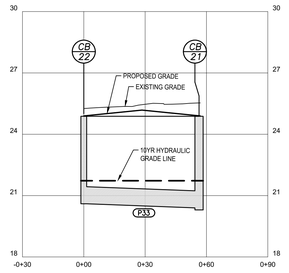

## CB15 TO FE4 PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.



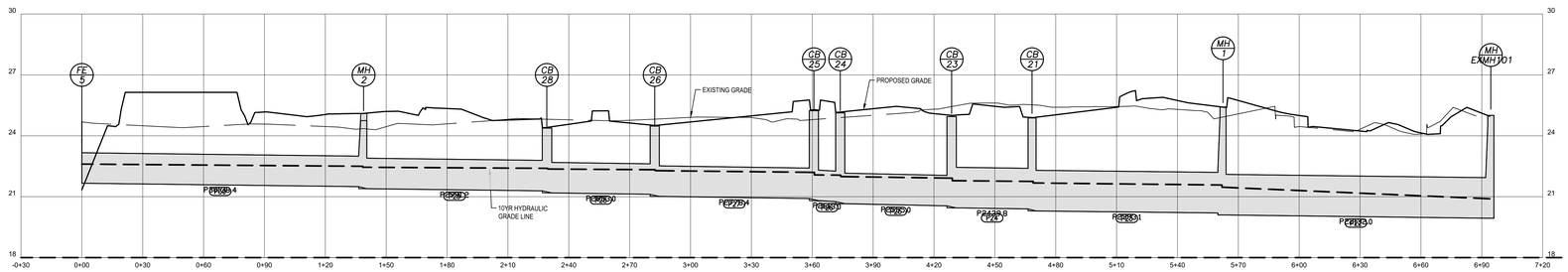

## CB18 TO CB13 PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.



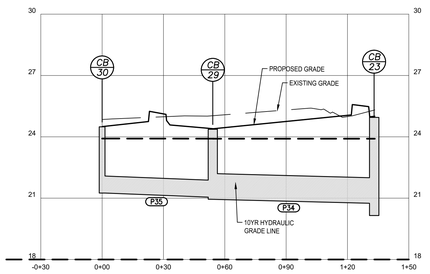

## CB32 TO CB29 PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.



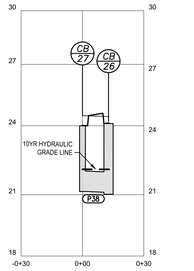

## CB22 TO CB21 PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.



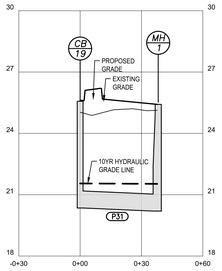

## FE5 TO EXMH PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.



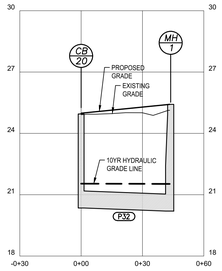

## CB30 TO CB23 PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.



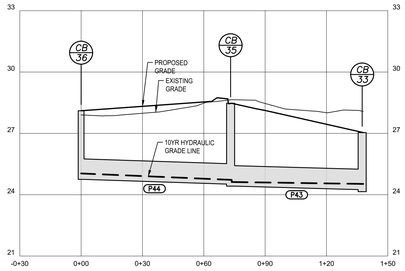

## CB27 TO CB26 PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.



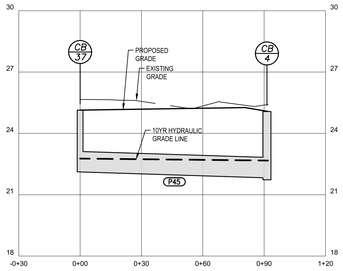

## CB19 TO MH1 PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.




## CB20 TO MH1 PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.



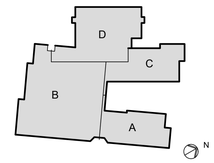

## CB26 TO CB33 PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.




## CB37 TO CB4 PROFILE
SCALE: 1"=30' HORIZ.
1"= 3' VERT.

PRELIMINARY - NOT FOR CONSTRUCTION

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN

Milford SCHOOL DISTRICT
HOME of the BUCCANEERS


OWNER:
MILFORD SCHOOL DISTRICT
906 LAKEVIEW AVENUE
MILFORD, DE 19963

STRUCTURAL ENGINEER:
PILOTTOWN ENGINEERING
17858 NASSAU COMMONS BLVD, UNIT 3
LEWES, DE 19958
P: 302.703.1770

MEP ENGINEER:
FURLOW ASSOCIATES, INC.
650 NAAMANS ROAD
CLAYMONT, DE 19703
P: 302.798.3515

CIVIL ENGINEER:
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DE 19962
P: 302.424.1441

KITCHEN CONSULTANT:
CORSI ASSOCIATES, LLC
1489 BALTIMORE PIKE, STE 109
SPRINGFIELD, PA 19064
P: 866.267.7447

THEATER PLANNING:
STAGES CONSULTANTS, LLC
300 RARITAN AVENUE, 2ND FLR
HIGHLAND PARK, NJ 08904
P: 732.333.8003

TECHNOLOGY CONSULTANT:
EDUCATIONAL SYSTEM PLANNING
2448 HOLLY AVENUE, STE 302
ANNAPOLIS, MD 21401
P: 410.573.9148

B S A + A
Buck Simpers Architect + Associates, Inc.
954 Justison St.
Wilmington, DE 19801
302 658-9300
Fax 658-1125


JOB NO. 22.018

# MILFORD MIDDLE SCHOOL

612 LAKEVIEW AVENUE,
MILFORD, DE 19963

**STORM DRAIN PROFILES**

**SEDIMENT & STORMWATER MANAGEMENT PLANS**

**C406**

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Standard Detail & Specifications

## Topsoiling

### Construction Notes:

1. **Site Preparation** (Where Topsoil is to be added)

   Note: When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, waterways and sediment basins.

   a. Grading - Grades on the areas to be topsoiled which have been previously established shall be maintained.

   b. Liming - Where the topsoil is either highly acid or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet). Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

   c. Tilling - After the areas to be topsoiled have been brought to grade, and immediately prior to dumping and spreading the topsoil, the subgrade shall be loosened by discing or by scarifying to a depth of a least 3 inches to permit bonding of the topsoil to the subsoil. Pack by passing a bulldozer up and down over the entire surface area of the slope to create horizontal erosion check slots to prevent topsoil from sliding down the slope.

2. **Topsoil Material and Application**

   Note: Topsoil salvaged from the existing site may often be used but it should meet the same standards as set forth in these specifications. The depth of topsoil to be salvaged shall be no more than the depth described as a representative profile for that particular soil type as described in the soil survey published by USDA-SCS in cooperation with Delaware Agricultural Experimental Station.

| Source: | Symbol: | Detail No. |
|---|---|---|
| USDA - NRCS | | **DE-ESC-3.4.1** Sheet 1 of 2 Effective July 2023 |

Standard Detail & Specifications

## Topsoiling

### Construction Notes (cont.)

a. Materials - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand or other soil as approved by an agronomist or soil scientist. It shall not have a mixture of contrasting textured subsoil and contain no more than 5 percent by volume of cinders, stones, slag, coarse fragment, gravel, sticks, roots, trash or other extraneous materials larger than 1-1/2 inches in diameter. Topsoil must be free of plants or plant parts of bermudagrass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistles, or others as specified. All topsoil shall be tested by a reputable laboratory for organic matter content, pH and soluble salts. A pH of 6.0 to 7.5 and an organic content of not less than 1.5 percent by weight is required. If pH value is less than 6.0 lime shall be applied and incorporated with the topsoil to adjust the pH to 6.5 or higher. Topsoil containing soluble salts greater than 500 parts per million shall not be used.

Note: No sod or seed shall be placed on soil which has been treated with soil sterilant or chemicals used for weed control until sufficient time has elapsed to permit dissipation of toxic materials.

b. Grading - The topsoil shall be uniformly distributed and compacted to a minimum of four (4) inches. Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets. Topsoil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

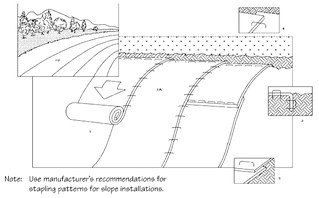
Note: Topsoil substitutes or amendments as approved by a qualified agronomist or soil scientist, may be used in lieu of natural topsoil. Compost material used to improve the percentage of organic matter shall be provided by a certified supplier.

Compost amendments that are intended to meet specific post-construction stormwater management goals shall further meet the requirements of **Appendix 3.06.2 Post Construction Stormwater Management BMP Standards and Specifications, Section 14.0 Soil Amendments.**

| Source: | Symbol: | Detail No. |
|---|---|---|
| USDA - NRCS | | **DE-ESC-3.4.1** Sheet 2 of 2 Effective July 2023 |

Standard Detail & Specifications

## Stabilization Matting - Slope



Note: Use manufacturer's recommendations for stapling patterns for slope installations.

Perspective

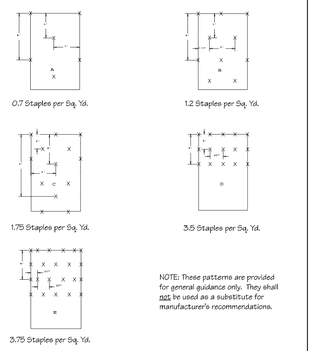
### Construction Notes:

1. Prepare soil before installing matting, including application of lime, fertilizer, and seed.
2. Begin at the top of the slope by anchoring the mat in a 6" deep X 6" wide trench. Backfill and compact trench after stapling.
3. Roll the mats (A) down or (B) horizontally across the slope.
4. The edges of parrallel mats must be stapled with approx. 2" overlap.
5. When mats must be spliced down the slope, place mats end over end (shingle style) with approx. 4" overlap. Staple through overlapped area, approx. 12" apart.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from North American Green, Inc. | SM-S | **DE-ESC-3.4.6.1** Sheet 1 of 2 Effective July 2023 |

Standard Detail & Specifications

## Stabilization Matting - Slope

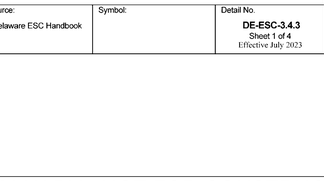



Stapling Patterns

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from North American Green, Inc. | SM-S | **DE-ESC-3.4.6.1** Sheet 2 of 2 Effective July 2023 |

Standard Detail & Specifications

## Stabilized Construction Entrance




Plan




Profile

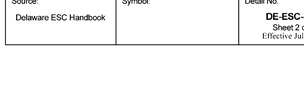



Section A-A (Std.)

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from VA ESC Handbook | SCE | **DE-ESC-3.4.7** Sheet 1 of 2 Effective July 2023 |

Standard Detail & Specifications

## Stabilized Construction Entrance




Section A-A (Opt.)

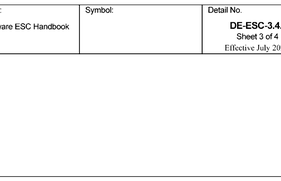
### Construction Notes:

1. Stone size - Use DE #3 stone.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than size (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Geotextile - Type GS-I, placed over the entire area prior to placing of stone.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Vehicle wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Inspection - Periodic inspection and needed maintenance shall be provided after each rain.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from VA ESC Handbook | SCE | **DE-ESC-3.4.7** Sheet 2 of 2 Effective July 2023 |

Standard Detail & Specifications

## Inlet Protection - Type 1




Plan




Section A-A

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from Erosion Draw Manual J. McCullah & Assoc. | IP-1 | **DE-ESC-3.1.5.1** Sheet 1 of 2 Effective July 2023 |

Standard Detail & Specifications

## Inlet Protection - Type 1

### Construction Notes:

1. Excavate completely around inlet to a depth of 18" below grate elevation.
2. Drive 2" x 4" post 1' into ground at four corners of inlet. Place nail strips between posts on ends of inlet. Assemble top portion of 2" x 4" frame using overlap joint shown. Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.
3. Stretch wire mesh tightly around frame and fasten securely. Ends must meet at post.
4. Stretch geotextile fabric tightly over wire mesh, the cloth must extend from top of frame to 18" below inlet grate elevation. Fasten securely to frame. Ends must meet at post, be overlapped and folded, then fastened down.
5. Backfill around inlet in compacted 6" layers until at least 12" of geotextile fabric is buried.
6. If the inlet is not in a low point, construct a compacted earth dike in the ditchline below it. The top of this dike is to be at least 6" higher than the top of frame (weir).
7. This structure must be inspected frequently and the filter fabric replaced when clogged.

### Materials:

1. Wooden frame is to be constructed of 2" x 4" construction grade lumber.
2. Wire mesh must be of sufficient strength to support filter fabric with water fully impounded against it.
3. Geotextile fabric: Type GD-II

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted. from Erosion Draw Manual J. McCullah & Assoc. | IP-1 | **DE-ESC-3.1.5.1** Sheet 2 of 2 Effective July 2023 |

Standard Detail & Specifications

## Vegetative Stabilization

**TEMPORARY SEEDING BY RATES, DEPTHS AND DATES**

| Mx # | Species[2] | Seeding Rate | Optimum Seeding Dates [1] O = Optimum Planting Period; A = Acceptable Planting Period | | | | | | | | Planting Depth[3] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Coastal Plain | | | Piedmont | | | All | | |
| | Certified Seed | lb/Ac[4] | lb/1000 sq.ft. | 2/1-4/30 | 5/1-8/14 | 8/15-10/31 | 3/1-4/30 | 5/1-7/31 | 8/1-10/31 | 10/31-2/1 | |
| 1 | Barley | 125 | 4 | O | A | O | O | A | O | | 1-2 inches 2-3" sandy soils |
| 2 | Oats | 125 | 4 | O | A | A | O | A | A | | 1-2 inches 2-3" sandy soils |
| 3 | Rye | 125 | 4 | O | A | O | O | A | O | A | 1-2 inches 2-3" sandy soils |
| 4 | Perennial Ryegrass | 125 | 4 | O | A | O | O | A | O | | 0.5 inches 1-2" sandy soils |
| 5 | Annual Ryegrass | 125 | 4 | O | A | O | O | A | O | A | 0.5 inches 1-2" sandy soils |
| 6 | Winter Wheat | 125 | 4 | O | A | O | O | A | O | A | 1-2 inches 2-3" sandy soils |
| 7 | Foxtail Millet | 30 PLS | 0.7 | | O | | | O | | | 0.5 inches 1-2" sandy soils |
| 8 | Pearl Millet | 20 PLS | 0.5 | | O | | | O | | | 0.5 inches 1-2" sandy soils |

RECOMMENDED

1. Winter seeding requires 3 tons per acre of straw mulch for proper stabilization.
2. May be planted throughout summer if soil moisture is adequate or seeded area can be irrigated.
3. Applicable on slopes 3:1 or less.
4. Use varieties currently recommended for Delaware. Contact a County Extension Office for information.
5. Warm season grasses such as Millet may be used between 5/1 and 9/1 if desired. Seed at 3-5 lbs. per acre. Good on low fertility and acid areas. Seed after frost through summer at a depth of 0.5".

NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Delaware ESC Handbook | | **DE-ESC-3.4.3** Sheet 1 of 4 Effective July 2023 |

Standard Detail & Specifications

## Vegetative Stabilization

**PERMANENT SEEDING AND SEEDING DATES**

| Mx No. | Seeding Mixtures: Certified Seed[2] | Seeding Rate[4] | Optimum Seeding Dates [1] O = Optimum Planting Period; A = Acceptable Planting Period | | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Coastal Plain | | | Piedmont | | | All[5] | | |
| | Well Drained Soils | lb/Ac | lb/1000 sq.ft. | 2/1-4/30 | 5/1-8/14 | 8/15-10/31 | 3/1-4/30 | 5/1-7/31 | 8/1-10/31 | 10/31-2/1 | |
| 1 | Tall Fescue<br>Cenacle Wild Rye | 140<br>10 | 3.2<br>0.23 | O | A | O | A | A | O | A | Add 100 lbs./ac Winter Rye | Good erosion control mix<br>Tolerant of low fertility soils<br>Good for droughty sites |
| 2 | Deertongue<br>Orchard Grass<br>White Clover | 30<br>30<br>10 | 0.69<br>0.69<br>0.35 | A | O | A | A | A | O | A | Add 100 lbs./ac Winter Rye | Good erosion control mix<br>Tolerant of low fertility soils<br>Legume that frees atmospheric N into soil |
| 3 | Tall Fescue (Turf-type) or<br>Strong Creeping Red Fescue or<br>Perennial Ryegrass<br>plus Flatpea[3] | 50<br>50<br>50<br>15 | 1.15<br>1.15<br>1.15<br>0.34 | O | A* | O | O | A* | O | A* | O | Add 100 lbs./ac Winter Rye | High value, high maintenance, high traffic, irrigation necessary<br>Tall Fescue for droughty conditions. Creeping Red Fescue for heavy shade. Flatpea to suppress woody vegetation |
| 4 | Strong Creeping Red Fescue<br>Kentucky Bluegrass<br>Perennial Ryegrass or Redtop<br>plus White Clover[3] | 100<br>70<br>70<br>5<br>3 | 2.3<br>1.61<br>1.61<br>0.11<br>0.07 | O | A* | O | O | A* | O | A* | O | Add 100 lbs./ac Winter Rye | Durable waterway mix<br>Cenacle Bluegrass more shade tolerant<br>Use Redtop for increased drought tolerance. |
| 5 | Switchgrass[6] or<br>Coastal Panicgrass<br>Big Bluestem<br>Little Bluestem<br>Indian Grass | 10<br>10<br>5<br>5<br>5 | 0.23<br>0.23<br>0.11<br>0.11<br>0.1 | | O | | | O | | | | Native warm season mixture<br>Tolerant of low fertility soils.<br>Drought tolerant<br>Poor shade tolerance.<br>N fertilizer discouraged - weeds. |
| 6 | Tall Fescue (turftype)<br>(blend of 3 cultivars) | 150 | 3.5 | O | A* | O | O | A* | O | A* | O | | Managed Mix strip for nutrient uptake |
| 7 | Tall Fescue<br>Ky. Bluegrass (Blend)<br>Perennial Ryegrass | 150<br>20<br>20 | 3.5<br>0.46<br>0.46 | O | A* | O | O | A* | O | A* | O | | Three cultivars of Kentucky Bluegrass. Traffic tolerant |
| 8 | Big Bluestem[7]<br>Indian Grass[7]<br>Little Bluestem[7]<br>Deer and Bird Fescue<br>(Pure live seed)<br>Partridge Pea<br>Bush Clover<br>Wild Indigo<br>Showy Tick-Trefoil | 10<br>10<br>8<br>30<br>5<br>3<br>3<br>2 | 0.23<br>0.23<br>0.18<br>0.69<br>0.11<br>0.07<br>0.07<br>0.05 | O | A* | | O | A* | | | | All species are native.<br>Indian Grass and Bluestem have fluffy seeds. Plant with a specialized native seed drill.<br>Creeping Red Fescue will provide erosion protection while the warm season grasses get established. |

1. When hydroseeding is the chosen method of application, the total rate of seed should be increased by 25%.
2. Winter seeding requires 3 tons per acre of straw mulch. Planting dates listed above are average for Delaware. These dates may require adjustment to reflect local conditions.
3. All seed shall meet the minimum purity and minimum germination percentages recommended by the Delaware Department of Agriculture. The maximum % of weed seeds shall be in accordance with Chapter 15, Title 3 of the Delaware Code.
4. Turf-type species may be planted throughout summer if soil moisture is adequate or seeded area can be irrigated.
5. It is recommended that all leguminous seed be inoculated.
6. Warm season grass mix and Switchgrass cannot be mowed more than 4 times per year.
7. Warm season grasses require a soil temperature of at least 50 degrees in order to germinate and will remain dormant until then.

RECOMMENDED

NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Delaware ESC Handbook | | **DE-ESC-3.4.3** Sheet 2 of 4 Effective July 2023 |

Standard Detail & Specifications

## Vegetative Stabilization

**PERMANENT SEEDING AND SEEDING DATES (cont.)**

| Mx No. | Seeding Mixtures: Certified Seed[2] | Seeding Rate[4] | Optimum Seeding Dates [1] O = Optimum Planting Period; A = Acceptable Planting Period | | | | | | | | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Coastal Plain | | | Piedmont | | | All[5] | | |
| | Poorly Drained Soils | lb/Ac | lb/1000 sq.ft. | 2/1-4/30 | 5/1-8/14 | 8/15-10/31 | 3/1-4/30 | 5/1-7/31 | 8/1-10/31 | 10/31-2/1 | |
| 9 | Redtop<br>Creeping Bentgrass<br>Meadow Fescue<br>Rough Bluegrass | 75<br>30<br>30<br>45 | 1.72<br>0.69<br>0.69<br>1 | O | A* | O | O | A* | O | A* | O | Add 100 lbs./ac Winter Rye | Quick stabilization of disturbed sites and waterways |
| 10 | Switchgrass[6] | 10 | 0.23 | A | | O | A | | O | | | | Good erosion control, wildlife cover and wetland revegetation. |
| | Residential Lawns | | | | | | | | | | |
| 11 | Tall Fescue<br>Perennial Ryegrass<br>Kentucky Bluegrass Blend | 100<br>25<br>30 | 2.3<br>0.57<br>0.69 | O | A* | O | O | A* | O | A* | O | | High value, high maintenance, high traffic, irrigation necessary<br>Well drained soils. full sun. |
| 12 | Tall Fescue<br>Perennial Ryegrass<br>Sheep Fescue | 100<br>25<br>25 | 2.3<br>0.57<br>0.57 | O | A* | O | O | A* | O | A* | O | | Moderate value, low maintenance, traffic tolerant. |
| 13 | Creeping Red Fescue<br>Chewings Fescue<br>Rough Bluegrass<br>Kentucky Bluegrass | 50<br>50<br>20<br>20 | 1.15<br>1.15<br>0.4<br>0.4 | O | A* | O | O | A* | O | A* | O | | Shade tolerant, moderate traffic tolerance, moderate maintenance. |
| 14 | Creeping Red Fescue<br>Rough Bluegrass or<br>Chewings Fescue | 50<br>50 | 1.15<br>2.1 | O | A* | O | O | A* | O | A* | O | | Shade tolerant, moisture tolerant. |
| 15 | K-31 Tall Fescue | 150 | 3.5 | O | A* | O | O | A* | O | | | | Monoculture, but performs well alone in lawns. Discouraged. |

1. When hydroseeding is the chosen method of application, the total rate of seed should be increased by 25%.
2. Winter seeding requires 3 tons per acre of straw mulch. Planting dates listed above are average for Delaware. These dates may require adjustment to reflect local conditions.
3. All seed shall meet the minimum purity and minimum germination percentages recommended by the Delaware Department of Agriculture. The maximum % of weed seeds shall be in accordance with Chapter 15, Title 3 of the Delaware Code.
4. Turf-type species may be planted throughout summer if soil moisture is adequate or seeded area can be irrigated.
5. It is recommended that all leguminous seed be inoculated.
6. Warm season grass mix and Switchgrass cannot be mowed more than 4 times per year.
7. Warm season grasses require a soil temperature of at least 50 degrees in order to germinate and will remain dormant until then.

NOTE: Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Delaware ESC Handbook | | **DE-ESC-3.4.3** Sheet 3 of 4 Effective July 2023 |

Standard Detail & Specifications

## Vegetative Stabilization

### Construction Notes:

1. Site Preparation
   a. Prior to seeding, install needed erosion and sediment control practices such as diversions, grade stabilization structures, berms, dikes, grassed waterways, and sediment basins.
   b. Final grading and shaping is not necessary for temporary seedings.
2. Seedbed Preparation

   It is important to prepare a good seedbed to ensure the success of establishing vegetation. The seedbed should be well prepared, loose, uniform, and free of large clods, rocks, and other objectionable material. The soil surface should not be compacted or crusted.
3. Soil Amendments
   a. Lime - Apply liming materials based on the recommendations of a **soil test** in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply dolomitic limestone **at the rate** of 1 to 2 tons per acre. Apply limestone uniformly and incorporate into the top 4 to 6 inches of soil.
   b. Fertilizer - Apply fertilizer based on the recommendations of a **soil test** in accordance with the approved nutrient management plan. If a nutrient management plan is not required, apply a formulation of 10-10-10 at the rate of 600 pounds per acre. Apply fertilizer uniformly and incorporate into the top 4 to 6 inches of soils.
4. Seeding
   a. For **temporary stabilization**, select a mixture from **Sheet 1 .** For a **permanent stabilization**, select a mixture from **Sheet 2** or **Sheet 3** depending on the conditions. Alternative seed mixes may be used with prior approval from the Department or Delegated Agency.
   b. Apply seed uniformly with a broadcast seeder, drill, cultipacker seeder or hydroseeder. All seed will be applied at the recommended rate and planting depth.
   c. Seed that has been broadcast should be covered by raking or dragging and then lightly tamped into place using a roller or cultipacker. If hydroseeding is used and the seed and fertilizer is mixed, they will be mixed on site and the seeding shall be done immediately and without interruption.
5. Mulching

   All mulching shall be done in accordance with detail **DE-ESC-3.4.5**.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Delaware ESC Handbook | | **DE-ESC-3.4.3** Sheet 4 of 4 Effective July 2023 |

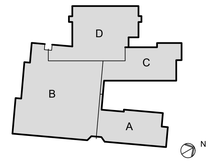
# SEQUENCE OF CONSTRUCTION

1. NOTIFY THE DNREC DIVISION OF WATERSHED STEWARDSHIP SEDIMENT AND STORMWATER PROGRAM IN WRITING AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
2. PRIOR TO ANY CLEARING, INSTALLATION OF SEDIMENT CONTROL MEASURES OR GRADING, A PRE-CONSTRUCTION MEETING MUST BE SCHEDULED AND CONDUCTED WITH THE DNREC DIVISION OF WATERSHED STEWARDSHIP SEDIMENT AND STORMWATER PROGRAM CONSTRUCTION SITE INSPECTOR. THE LANDOWNER/DEVELOPER, CONTRACTOR, AND CERTIFIED CONSTRUCTION REVIEWER ARE REQUIRED TO BE IN ATTENDANCE AT THE PRE-CONSTRUCTION MEETING; THE DESIGNER IS RECOMMENDED TO ATTEND.
3. ALL PERIMETER CONTROLS ARE TO BE REVIEWED BY THE DNREC DIVISION OF WATERSHED STEWARDSHIP SEDIMENT AND STORMWATER PROGRAM SITE INSPECTOR AND APPROVED PRIOR TO PROCEEDING WITH FURTHER SITE DISTURBANCE OR CONSTRUCTION.
4. THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT OR DEBRIS LADEN RUNOFF OR WIND LEAVING THE SITE. PERIMETER CONTROLS SHOULD BE CHECKED DAILY AND ADJUSTED AND/OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENTATION ON THE SITE. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST OR REPAIR MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE DNREC DIVISION OF WATERSHED STEWARDSHIP SEDIMENT AND STORMWATER PROGRAM SITE INSPECTOR.
5. NOTIFY THE DNREC DIVISION OF WATERSHED STEWARDSHIP SEDIMENT AND STORMWATER PROGRAM SITE INSPECTOR A MINIMUM OF THREE (3) DAYS PRIOR TO THE START OF THE STORMWATER SYSTEM CONSTRUCTION; STORMWATER FACILITIES MUST BE REVIEWED THROUGHOUT THEIR CONSTRUCTION.
6. CLEAR AND GRUB ALL AREAS NECESSARY FOR THE INSTALLATION OF PERIMETER CONTROLS.
7. INSTALL PERIMETER SILT FENCE AND STABILIZED CONSTRUCTION ENTRANCES.
8. INSTALL SILT FENCE FOR PROTECTION OF INFILTRATION AREAS DURING CONSTRUCTION.
9. ESTABLISH TEMPORARY STOCKPILE, CONCRETE WASHOUT AND PETROLEUM, OIL AND LUBRICANTS (POL) STORAGE AREAS.
9. INSTALL TEMPORARY SEDIMENT TRAPS SST-1 AND SST-2 AND ASSOCIATED DRAINAGE PIPES TO BE USED DURING CONSTRUCTION
10. INSTALL DRAIN INLET PROTECTION, TYPE-1
11. INSTALL STABILIZATION MATTING (SSM-II) TEMPORARY CHANNEL LINING TO BE NORTH AMERICAN GREEN'S S150BN OR EQUAL. SLOPE STABILIZATION (2:1 OR FLATTER) TO BE NORTH AMERICAN GREEN'S S150BN
12. CLEAR AND GRUB ALL AREAS NECESSARY FOR CONSTRUCTION.
13. BEGIN ROAD GRADING AND GENERAL GRADING OF SITE.
14. BEGIN CONSTRUCTION OF UTILITIES: INSTALL PROPOSED SANITARY SEWER MAIN; INSTALL PROPOSED WATER MAIN; INSTALL PROPOSED TELECOMMUNICATIONS; INSTALL STORMWATER INLETS AND PIPING
15. CONSTRUCT BUILDING PADS.
16. EXCAVATE AND BEGIN CONSTRUCTION OF UNDERGROUND INFILTRATION BASIN, SWM#1 AND SWM#2. REFER TO FACILITY SEQUENCE OF CONSTRUCTION SHEETS C7.7 THROUGH C7.9.
17. BEGIN CONSTRUCTION OF ROADWAY AND PARKING AREAS, FINE GRADE PAVED AREAS AND INSTALL AGGREGATE BASE COURSE.
18. EXCAVATE AND BEGIN CONSTRUCTION OF PERMEABLE PAVEMENT AREAS, PP#1 TO PP#3. REFER TO FACILITY SEQUENCE OF CONSTRUCTION SHEETS C7.6.
19. CONVERT DRAIN INLET PROTECTION TO TYPE-2 AS NECESSARY.
20. ENCLOSE ALL BUILDINGS, INCLUDING ALL EXTERIOR FINISHES.
21. STABILIZE REMAINING SITE WITH TEMPORARY SEEDING.
22. FINE GRADING, INSTALL ALL LANDSCAPING, REDISTRIBUTE TOPSOIL AND STABILIZE WITH PERMANENT SEEDING. INSTALL SIGNS AND OTHER DECORATIONS.
23. INSPECT PAVED AREAS FOR SEDIMENT BEFORE INSTALLING FINAL PAVING SURFACE.
24. CONVERT DRAIN INLET PROTECTION TO TYPE-3 AS NECESSARY.
25. PRIOR TO COMMENCING A NEW PHASE OF CONSTRUCTION, THE CONTRACTOR SHALL RECEIVE APPROVAL FROM THE DNREC DIVISION OF WATERSHED STEWARDSHIP SEDIMENT AND STORMWATER PROGRAM INSPECTOR THAT THE PREVIOUS PHASE HAS BEEN SUFFICIENTLY STABILIZED.
26. REMOVE ALL REMAINING EROSION AND SEDIMENT CONTROL PRACTICES AND CONVERT TEMPORARY SEDIMENT BASINS TO STORMWATER MANAGEMENT FACILITIES PER DESIGN SPECIFICATIONS.
27. EROSION AND SEDIMENT CONTROL DEVICES SHOULD BE REMOVED ONLY AFTER WORK IN AN AREA HAS BEEN COMPLETED AND STABILIZED, WITH WRITTEN APPROVAL FROM THE AGENCY CONSTRUCTION SITE REVIEWER.
28. CONTACT THE DNREC DIVISION OF WATERSHED STEWARDSHIP SEDIMENT AND STORMWATER PROGRAM FOR PROJECT CLOSE-OUT.
29. THE TERMINATION OF THE CONSTRUCTION GENERAL PERMIT WILL REQUIRE SUBMISSION AND ACCEPTANCE OF THE POST CONSTRUCTION VERIFICATION DOCUMENTS, INCLUDING FINAL STABILIZATION THROUGHOUT THE SITE, ALL ELEMENTS OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN IMPLEMENTED, AND ACCEPTANCE OF THE FINAL OPERATION AND MAINTENANCE PLAN.
30. FILE NOTICE OF TERMINATION FOR NPDES PERMIT WITH THE DNREC DIVISION OF WATERSHED STEWARDSHIP SEDIMENT AND STORMWATER PROGRAM.

# EROSION AND SEDIMENT CONTROL NOTES

1. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND REPAIR ALL EROSION, SEDIMENT CONTROL AND STORMWATER MANAGEMENT PRACTICES DURING UTILITY INSTALLATION AND SITE CONSTRUCTION.
2. IT SHALL BE THE SOLE RESPONSIBILITY OF THE OWNER TO MAINTAIN AND REPAIR ALL EROSION, SEDIMENT CONTROL AND STORMWATER MANAGEMENT PRACTICES AFTER COMPLETION AND APPROVAL OF ALL STORMWATER MANAGEMENT PRACTICES.
3. TEMPORARY VEGETATIVE COVER, MULCHING AND/OR SPRINKLING WITH WATER SHALL BE THE METHODS USED AS NECESSARY TO CONTROL DUST. SEE THIS SHEET FOR DETAILS.
4. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION IS ESTABLISHED.
5. ALL DISTURBED AREAS NOT COVERED BY PAVEMENT WILL BE SEEDED USING PERMANENT STABILIZATION.
6. PERMANENT STABILIZATION: SHALL BE PERFORMED IN ACCORDANCE WITH STANDARD DETAIL 3.4.3 SHOWN ON SHEET C7.8, USING SEED MIX #9.
7. TEMPORARY STABILIZATION: SHALL BE PERFORMED IN ACCORDANCE WITH STANDARD DETAIL 3.4.3 SHOWN ON SHEET C7.8, USING SEED MIX #5.
8. EROSION CONTROL MATTING (SSM-II) IS REQUIRED IN ALL OPEN CHANNELS AND ON ALL SLOPES 3:1 OR GREATER. MATTING TO BE NORTH AMERICAN GREEN'S S150BN OR EQUAL.
9. ALL STONE, WITH EXCEPTION OF CHECK DAMS, MUST BE UNDERLAIN WITH A GEOTEXTILE FABRIC TYPE GS-1, MIRAFI 600X OR APPROVED EQUAL.
10. UPON COMPLETION OF THE PROJECT, THE OWNER WILL BE RESPONSIBLE FOR PERPETUAL MAINTENANCE OF THE STORMWATER FACILITIES.

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN

Milford SCHOOL DISTRICT
HOME of the BUCCANEERS

OWNER:
MILFORD SCHOOL DISTRICT
906 LAKEVIEW AVENUE
MILFORD, DE 19963

STRUCTURAL ENGINEER:
PILOTTOWN ENGINEERING
17858 NASSAU COMMONS BLVD, UNIT 3
LEWES, DE 19958
P: 302.703.1770

MEP ENGINEER:
FURLOW ASSOCIATES, INC.
650 NAAMANS ROAD
CLAYMONT, DE 19703
P: 302.798.3515

CIVIL ENGINEER:
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DE 19962
P: 302.424.1441

KITCHEN CONSULTANT:
CORSI ASSOCIATES, LLC
1489 BALTIMORE PIKE, STE 109
SPRINGFIELD, PA 19064
P: 866.267.7447

THEATER PLANNING:
STAGES CONSULTANTS, LLC
300 RARITAN AVENUE, 2ND FLR
HIGHLAND PARK, NJ 08904
P: 732.333.8003

TECHNOLOGY CONSULTANT:
EDUCATIONAL SYSTEM PLANNING
2448 HOLLY AVENUE, STE 302
ANNAPOLIS, MD 21401
P: 410.573.9148

BSA+A

Buck Simpers Architect + Associates, Inc.
954 Justison St.
Wilmington, DE 19801
302 658-9300
Fax 658-1125

JOB NO. 22.018

# MILFORD MIDDLE SCHOOL

612 LAKEVIEW AVENUE,
MILFORD, DE 19963

**CONSTRUCTION SITE DETAILS AND NOTES**

**C407**

**SEDIMENT & STORMWATER MANAGEMENT PLANS**

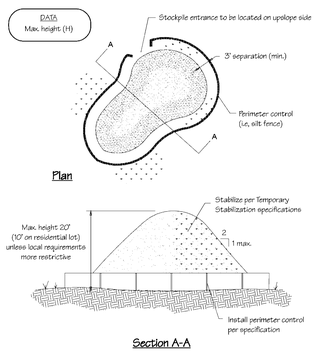
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PRELIMINARY - NOT FOR CONSTRUCTION

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |

Standard Detail & Specifications

## Soil Stockpile




| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3 | SP | DE-ESC-3.7.3 Sheet 1 of 2 Effective July 2023 |

Standard Detail & Specifications

## Soil Stockpile

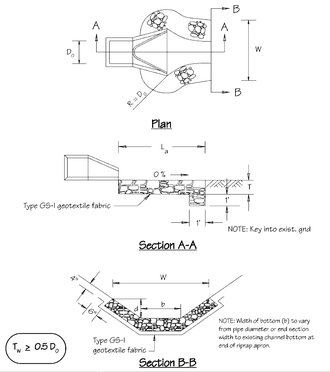
### Construction Notes:

1. Locate stockpiles so that they are 50 feet from any storm drain inlet, open channel, wetland or waterbody. Redirect any concentrated flow around the stockpile using an approved erosion and sediment control measure.
2. Secure the perimeter of the stockpile with an approved erosion and sediment control perimeter device.
3. If stockpile is to remain inactive for more than 14 calendar days, the stockpile must be vegetated. Follow the temporary vegetation specifications. The vegetation chosen shall last the duration of the stockpile; the stockpile shall be restabilized if the temporary vegetation dies or erosion results.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3 | SP | DE-ESC-3.7.3 Sheet 2 of 2 Effective July 2023 |

Standard Detail & Specifications

## Riprap Outlet Protection - 2




| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from MD E&S Manual | ROP-2 | DE-ESC-3.3.10.2 Sheet 1 of 2 Effective July 2023 |

Standard Detail & Specifications

## Riprap Outlet Protection - 2

DATA

Pipe diameter ($D_o$)
Apron length ($L_a$)
Apron width (W)
Bottom width (b)
Riprap depth (d)
Riprap size (R No.)
Riprap thickness (T)

### Construction Notes:

1. The subgrade for the riprap shall be prepared to the required lines and grades as shown on the plan. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.
2. The riprap shall conform to the grading limits as shown on the plan.
3. Filter cloth shall be protected from punching, cutting or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of cloth over the damaged area. All connecting joints should overlap a minimum of 1 ft. If the damage is extensive, replace the entire filter cloth.
4. Stone for the riprap or gabion outlets may be placed by equipment. Riprap shall be placed in a manner to prevent damage to the filter cloth. Hand placement will be required to the extent necessary to prevent damage to the conduits, structures, etc.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from MD E&S Manual | ROP-2 | DE-ESC-3.3.10.2 Sheet 2 of 2 Effective July 2023 |

Standard Detail & Specifications

## Dust Control

**Temporary Methods:**

1. Mulches - See **DE-ESC-3.4.5**, Standard Detail and Specifications for Mulching.
2. Vegetative cover - See **DE-ESC-3.4.3**, Std. Detail and Specifications for Vegetative Stabilization.
3. Adhesives - Use on mineral soils only (not effective on muck soils). Keep traffic off these areas. The following table may be used for general guidance.

| Type of Emulsion | Water Dilution | Type of Nozzle | Apply Gal/Ac. |
|---|---|---|---|
| Latex emulsion | 12.5:1 | Fine spray | 235 |
| Resin-in-water emulsion | 4:1 | Fine spray | 300 |
| Acrylic emulsion (non-traffic) | 7:1 | Coarse spray | 450 |
| Acrylic emulsion (traffic) | 3.5:1 | Coarse spray | 350 |

4. Tillage - For emergency temporary treatment, scarify the soil surface to prevent or reduce the amount of blowing dust until a more appropriate solution can be implemented. Begin the tillage operation on the windward side of the site using a chisel-type plow for best results.
5. Sprinkling - Sprinkle site with water until the surface is moist . Repeat as needed.
6. Calcium Chloride - Apply as flakes or granular material with a spreader at a rate that will keep the soil surface moist. Re-apply as necessary.
7. Barriers - Place barriers such as solid board fences, snow fences, hay bales, etc. at right angles to the prevailing air currents at intervals of approx. 10X their height.

**Permanent Methods:**

1. Vegetative cover - See **DE-ESC-3.4.3**, Std. Detail and Specifications for Vegetative Stabilization.
2. Stone - Apply layer of crushed stone or coarse gravel to protect soil surface.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from VA ESC Handbook | | DE-ESC-3.4.8 Sheet 1 of 1 Effective July 2023 |

Standard Detail & Specifications

## Construction Site Pollution Prevention

**Delaware NPDES Discharge Permit**
**General Permit for Discharge of Stormwater from Construction Activities**

((Project Name))

((NOI Permit Number))

((Agency Plan Approval ID))

((Contact Name & Number for Additional Site Information))

((Contact Name & Number to Obtain Copy of Approved Plan))

If you observe indicators of stormwater pollutants in the discharge or in the receiving waterbody, call the DNREC Spill Notification 24 HR Hotline at

**1-800-662-8802**

Example Construction General Permit (CGP) Signage

NOTES:
1. Minimum sign size 2' x 2'
2. Minimum text size 1"
3. Sign must be posted at a safe, publicly accessible location close to construction site
4. Sign must be visible from the public road nearest the active construction site
5. Signs posted within a DelDOT or other public road right-of-way (ROW) must be in accordance with all local and/or State requirements in regards to safety, location, orientation, etc.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Delaware ESC Handbook | | DE-ESC-3.6.1 Sheet 1 of 4 Effective July 2023 |

Standard Detail & Specifications

## Construction Site Pollution Prevention

### Notes:

The Construction Site Pollution Prevention Plan includes the following elements:

1. **Material Inventory**

   Document the storage and use of the following materials:

   a. Concrete
   b. Detergents
   c. Paints (enamel and latex)
   d. Cleaning solvents
   e. Pesticides
   f. Wood scraps
   g. Fertilizers
   h. Petroleum based products

2. **Good housekeeping practices**
   a. Store only enough product required to do the job.
   b. Store all materials in a neat, orderly manner in their original labeled containers and covered.
   c. Do not mix different substances.
   d. When possible, use all of a product prior to disposal of the container.
   e. Manufacturers' instructions for disposal should be strictly adhered to.
   f. Designate someone to inspect all BMPs daily.
3. **Waste management practices**
   a. Collect and store all waste materials in securely lidded dumpsters in a location that does not drain to a waterbody.
   b. Salvage and/or recycle waste materials whenever possible.
   c. The dumpsters shall be emptied a minimum of twice per week, or more if necessary. The licensed trash hauler is responsible for cleaning out dumpsters.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from USEPA Pub. 840-B-92-002 | | DE-ESC-3.6.1 Sheet 2 of 4 Effective July 2023 |

Standard Detail & Specifications

## Construction Site Pollution Prevention

### Notes (cont.)

   d. Dispose of all trash in accordance with all applicable Delaware laws.
   e. Littering is strictly prohibited. Trash cans should be placed at all lunch spots and recycle bins should be placed near the construction trailer.
   f. If fertilizer bags can not be stored in a weather-proof location, they should be kept on a pallet and covered with plastic sheeting which is overlapped and anchored.
4. **Equipment maintenance practices**
   a. If possible, equipment should be taken to off-site commercial facilities for washing and maintenance.
   b. If performed on-site, wash vehicles with high-pressure water spray without detergents in an area contained by an impervious berm.
   c. Use drip pans for all equipment maintenance.
   d. Inspect equipment for leaks on a daily basis.
   e. Direct washout from concrete trucks into a temporary pit for hardening and proper disposal.
   f. Equip fuel nozzles with automatic shut-off valves.
   g. Dispose of all used products such as oil, antifreeze, solvents and tires in accordance with manufacturers' recommendations and local, state and federal laws and regulations.
5. **Spill prevention practices**
   a. Identify potential spill areas and contain them in covered areas with no connection to the storm drain system.
   b. Post warning signs in hazardous material storage areas.
   c. Perform preventive maintenance on all tanks, valves, pumps, pipes and other equipment as necessary.
   d. Prioritize low or non-toxic substances for use.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from USEPA Pub. 840-B-92-002 | | DE-ESC-3.6.1 Sheet 4 of 4 Effective July 2023 |

Standard Detail & Specifications

## Construction Site Pollution Prevention

### Notes (cont.)

   e. Prominently post contact information for reporting spills through the DNREC 24-Hour Toll Free Number.
6. **Education**
   a. Include Best Management Practices (BMPs) for construction site pollution control as part of regular progress meetings.
   b. Information regarding waste management, equipment maintenance and spill prevention should be prominently posted in the construction trailer.

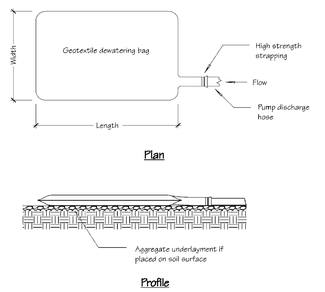
**CONTACT INFORMATION**

| | |
|---|---|
| **DNREC 24-Hour Toll Free Number** | **800-662-8802** |
| **DNREC Solid & Hazardous Waste Management Section** | **302-739-9403** |

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from USEPA Pub. 840-B-92-002 | | DE-ESC-3.6.1 Sheet 4 of 4 Effective July 2023 |

Standard Detail & Specifications

## Geotextile Dewatering Bag




NOTE: Pre-manufactured products installed in accordance with manufacturer's recommendations may be used as an equivalent substitute with Departmental approval.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from ACF Products, Inc. | GB | DE-ESC-3.2.1.2 Sheet 1 of 2 Effective July 2023 |

Standard Detail & Specifications

## Geotextile Dewatering Bag

### Construction Notes:

1. The dewatering bag should be placed so the incoming water flows into and through the bag, and then flow off the site without creating more erosion. The neck should be tied off tightly to stop the water from flowing out of the bag without going through the walls. The dewatering bag should be placed on a gravel bed to allow water to flow in all directions.
2. The dewatering bag is considered full and should be disposed when it is impractical for the bag to filter the sediment out at a reasonable flow rate. At this point, it should be replaced with a new bag.
3. Disposal may be accomplished as directed by the construction reviewer. If the site allows, the bag may be buried on site and seeded, visible fabric removed and seeded or removed from site to a proper disposal area.

### Materials:

1. The geotextile fabric shall be a Type GD-IV.
2. The dewatering bag shall be sewn with a double needle machine using high strength thread. All structural seams will be sewn with high strength, double stitched "J" type. Seam strength test will have the following minimum average roll values:

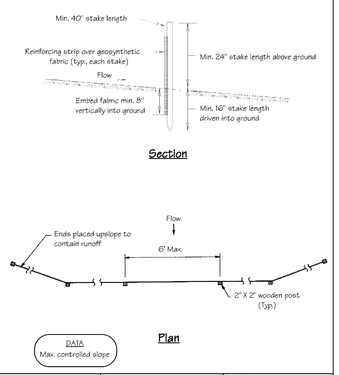
| Type | TEST METHOD | TEST RESULT |
|---|---|---|
| Heavy duty | ASTM D-4884 | 100 lb / in |

3. The dewatering bag shall have an opening large enough to accommodate a four (4) inch discharge hose with attached strap to tie off the hose to prevent the pumped water from escaping from the bag without being filtered.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from ACF Products, Inc. | GB | DE-ESC-3.2.1.2 Sheet 2 of 2 Effective July 2023 |

Standard Detail & Specifications

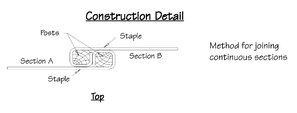
## Silt Fence




| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from MD Stds. & Specs. for ESC | SF | DE-ESC-3.1.2.1 Sheet 1 of 2 Effective July 2023 |

Standard Detail & Specifications

## Silt Fence




### ConstructionNotes:

1. Geosynthetic fabric to be fastened securely to fence posts with wire ties or staples.
2. When two sections of filter cloth adjoin each other they shall be overlapped by six inches and folded.
3. Maintenance shall be performed as needed and material removed when "bulges" develop in the silt fence.

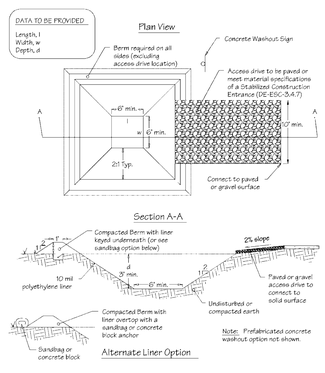
### Materials:

1. Stakes: Steel (either T or U) or 2" x 2" hardwood
2. Geosynthetic Fabric: Type GD-I
3. Reinforcing strip: Wooden lath or plastic strip

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from MD Stds. & Specs. for ESC | SF | DE-ESC-3.1.2.1 Sheet 2 of 2 Effective July 2023 |

Standard Detail & Specifications

## Concrete Washout




| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3 | CW | DE-ESC-3.6.2 Sheet 1 of 2 Effective July 2023 |

Standard Detail & Specifications

## Concrete Washout

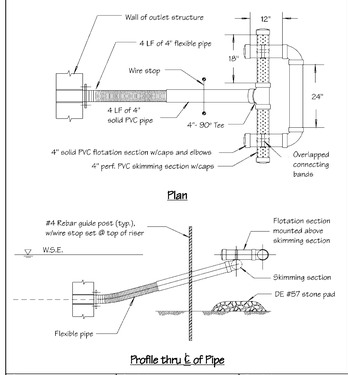
### Construction Notes:

1. Locate washout area a minimum of 50 feet from open channels, stormdrain inlets, wetlands or waterbodies.
2. Locate washout area so that it is accessible to concrete equipment (service with a minimum 10 foot wide gravel accessway), but so it is not in a highly active construction area causing accidental damage.
3. Minimum dimensions for prefabricated units are 4 feet by 4 feet by 1 foot deep with a minimum 4mil polyethylene plastic liner. Minimum dimensions for constructed concrete washout areas are 6 feet by 6 feet by 3 feet deep, with a minimum 10mil polyethylene liner, 2:1 side slopes, and a 1 foot high by 1 foot wide compacted fill berm.
4. The liner must be free of tears or holes and placed over smooth surfaces to prevent puncturing. For excavated washouts, anchor the liner underneath the berm or overtop with sandbags or concrete blocks to hold in place.
5. Provide a sign designating the washout area, and for large construction sites, provide signs throughout directing traffic to its location.
6. Allow washed out concrete mixture to harden through evaporation of the wastewater. Once the facility has reached 75 percent of its capacity, remove the hardened concrete by reusing the broken aggregate onsite, recycling, or disposing of offsite. The hardened material can be buried on site with minimum of 1 foot of clean, compacted fill.
7. Apply a new liner before reusing the station for additional washouts after maintenance has occurred.

| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3 | CW | DE-ESC-3.6.2 Sheet 2 of 2 Effective July 2023 |

Standard Detail & Specifications

## Skimmer Dewatering Device




| Source: | Symbol: | Detail No. |
|---|---|---|
| Adapted from drawing by Vandemark & Lynch, Inc. | SDD | DE-ESC-3.2.3.1 Sheet 1 of 2 Effective July 2023 |

Standard Detail & Specifications

## Skimmer Dewatering Device

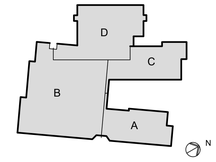
### Construction Notes:

1. Pipe flotation section shall be solvent welded to ensure an airtight assembly. Contractor to conduct a test to check for leaks prior to installation.
2. Skimmer section shall have (12) rows of 1/2" dia. holes, 1-1/4" on center. If additional filtration is necessary, the filtering media shall consist of a Type GD-II geotextile fabric wrapped around the perforated portion of the skimmer and attached with plastic snap ties, bands, etc.
3. Flexible pipe shall be inserted into solid pipe and fastened with (2) #8 wood screws.
4. At a minimum, the structure shall be inspected after each rain and repairs made as needed. If vandalism is a problem, more frequent inspection may be necessary.
5. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
6. The structure shall only be removed when the contributing drainage area has been properly stabilized.

### Materials:

1. Solid pipe - 4" Sched. 40 PVC
2. Perforated pipe - 4" Sched. 40 PVC
3. 90° Tee (1 ea.) - 4" Sched. 40 PVC
4. 90° Elbow (2 ea.) - 4" Sched. 40 PVC
5. Cap (4 ea.) - 4" Sched. 40 PVC, solid
6. Flexible pipe - 4" corrugated plastic tubing (non-perforated)

| Source: | Symbol: | Detail No. |
|---|---|---|
| Delaware ESC Handbook | SDD | DE-ESC-3.2.3.1 Sheet 2 of 2 Effective July 2023 |




KEYPLAN

Milford SCHOOL DISTRICT
HOME of the BUCCANEERS


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MILFORD SCHOOL DISTRICT
906 LAKEVIEW AVENUE
MILFORD, DE 19963

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JOB NO. 22.018

# MILFORD MIDDLE SCHOOL

612 LAKEVIEW AVENUE,
MILFORD, DE 19963

**CONSTRUCTION SITE DETAILS**

**C408**

**SEDIMENT & STORMWATER MANAGEMENT PLANS**

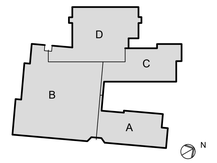
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# UTILITY GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY THE CITY PUBLIC WORKS DEPARTMENT AT (302) 422-1110 A MINIMUM OF TWO WEEKS PRIOR TO THE START OF CONSTRUCTION AND SCHEDULE A PRE-CONSTRUCTION MEETING. THE SITE CONTRACTOR AND THE OWNER, OR HIS/HER REPRESENTATIVE SHALL BE IN ATTENDANCE.
2. USE ONLY SUITABLE AND APPROVED GRANULAR MATERIAL FOR BACKFILLING TRENCHES.
3. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL RIGHT-OF-WAY LINES AND PROPERTY LINES TO HIS OWN SATISFACTION. ANY DISTURBED AREAS BEYOND THE RIGHT-OF-WAY OR EASEMENT LINES SHALL BE RESTORED IMMEDIATELY TO THEIR ORIGINAL CONDITION.
4. ALL MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MATERIALS AND WORKMANSHIP SHALL MEET THE REQUIREMENTS OF THE CITY OF MILFORD STANDARD SPECIFICATIONS FOR INSTALLATION OF UTILITY CONSTRUCTION AND SUBDIVISION PAVEMENT DESIGN, AND ALL APPLICABLE AGENCIES HAVING JURISDICTION OVER THE PROPOSED IMPROVEMENTS.
5. ALL VALVE CLOSURES AND CUT-INS SHALL BE COORDINATED WITH THE CITY. CITY OFFICIALS WILL CARRY OUT ALL NECESSARY VALVE CLOSURES. CONTRACTOR SHALL COORDINATE ISOLATION OF EXISTING WATER MAINS WITH THE CITY AND NOTIFY AFFECTED RESIDENTS AT LEAST 48 HOURS PRIOR TO CUT-IN.
6. PIPELINE DETECTION TAPE SHALL BE COLOR CODED, APPROPRIATELY LABELED, AND INSTALLED 18 INCHES BELOW THE GROUND SURFACE AND DIRECTLY ABOVE ALL PROPOSED NON-METALLIC WATER MAIN, SEWER MAIN, SEWER LATERALS, AND WATER SERVICES.
7. CONDUCTIVE TRACER WIRE SHALL BE INSTALLED WITH ALL NON-METALLIC WATER PIPE AND SERVICES AND ALONG ALL SEWER LATERALS AND FORCEMAIN. WIRE SHALL BE SECURED TO THE PIPE AND SHALL BE SECURELY BONDED TOGETHER AT ALL WIRE JOINTS WITH APPROVED WATERTIGHT CONNECTORS. TRACER WIRE SHALL BE ACCESSIBLE AT ALL VALVE BOXES, METER PITS, CLEANOUTS, AND AIR RELEASE VALVES.
8. PRIOR TO ISOLATION AND CUT-IN PROCEDURES, CONTRACTOR SHALL EXCAVATE, LOCATE, AND OBSERVE FUNCTION OF ALL EXISTING VALVES TO ASSIST IN THE SYSTEM ISOLATION.
9. SHOP DRAWINGS FOR ANY ITEM(S) WHICH WILL EVENTUALLY BE TAKEN OVER BY THE CITY SHALL BE SUBMITTED TO THE CITY ENGINEER FOR REVIEW AND APPROVAL PRIOR TO THE ORDERING OF AND/OR INSTALLATION OF THE ITEM(S).
10. ALL SANITARY SEWER MAINS AND FORCEMAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES AND ALL WATER MAINS SHALL HAVE A MINIMUM COVER OF 42 INCHES AS MEASURED FROM THE TOP OF PIPE TO PROPOSED GRADE. SEWER LATERALS SHALL HAVE A MINIMUM DIAMETER OF SIX (6) INCHES AND HAVE A MINIMUM COVER OF 36 INCHES.
11. THERE SHALL BE A MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND SANITARY SEWER MAINS AND FORCEMAINS OF 10 FEET, AS MEASURED FROM EDGE OF PIPE TO EDGE OF PIPE. THERE SHALL BE A MINIMUM VERTICAL SEPARATION OF 18 INCHES BETWEEN WATER MAINS AND SANITARY SEWER MAINS OR FORCEMAINS AT CROSSINGS. ONE FULL LENGTH OF WATER PIPE SHALL BE LOCATED SO THAT BOTH JOINTS WILL BE AS FROM THE SEWER AS POSSIBLE AT CROSSINGS.
12. THERE SHALL BE A MINIMUM VERTICAL SEPARATION OF 12 INCHES BETWEEN ANY STORM DRAIN PIPE AND ANY WATER MAIN OR SEWER MAIN. IF 12 INCHES CANNOT BE MAINTAINED, A MINIMUM OF SIX (6) INCHES IS REQUIRED AND PROVISIONS SHALL BE MADE ACCEPTABLE TO THE CITY OF MILFORD FOR PROPERLY ENCASING THE PIPE IN CONCRETE.
13. ALL ROADWAYS ARE TO BE SWEPT FREE OF SEDIMENT ON A DAILY BASIS.
14. THE CONTRACTOR SHALL REMOVE AND IMMEDIATELY REPLACE, RELOCATE, RESET OR RECONSTRUCT ALL OBSTRUCTIONS IN THE WORK AREA, INCLUDING, BUT NOT LIMITED TO, MAILBOXES, SIGNS, LANDSCAPING, LIGHTING, PLANTERS, CULVERTS, DRIVEWAYS, PARKING AREAS, CURBS, GUTTERS, FENCES, OR OTHER NATURAL OR MAN-MADE OBSTRUCTIONS. TRAFFIC CONTROL REGULATORY, WARNING AND INFORMATIONAL SIGNS SHALL REMAIN FUNCTIONAL AND VISIBLE TO THE APPROPRIATE LANES OF TRAFFIC AT ALL TIMES, WITH THEIR RELOCATION KEPT TO A MINIMUM DISTANCE.
15. ALL FIRE LANES, FIRE HYDRANTS, EXITS, AND STANDPIPES WILL BE MARKED IN ACCORDANCE WITH STATE FIRE PREVENTION REGULATIONS.
16. DELAWARE REGULATIONS PROHIBIT THE BURIAL OF CONSTRUCTION DEMOLITION DEBRIS, INCLUDING TREES AND STUMPS ON CONSTRUCTION SITES. ANY SOLID WASTE FOUND DURING THE EXCAVATION FOR STRUCTURES AND UTILITY LINES ON AND OFF SITE MUST BE REMOVED AND PROPERLY DISCARDED. ANY REMEDIAL ACTION REQUIRED IS THE RESPONSIBILITY OF THE OWNER.
17. A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF DELAWARE SHALL BE RESPONSIBLE FOR PERMANENTLY RE-ESTABLISHING ANY PROPERTY MARKERS OR MONUMENTS DISTURBED DURING CONSTRUCTION. A SURVEY AND METES AND BOUNDS THAT INCLUDES THE RE-ESTABLISHED MARKER(S) OR MONUMENT(S) SHALL BE PRESENTED TO THE PROPERTY OWNER FOR COMPARISON WITH THE ORIGINAL PLAT, FOR VERIFICATION.
18. THE CITY OF MILFORD WILL ASSUME OWNERSHIP AND MAINTENANCE RESPONSIBILITY OF WATER AND SEWER PIPES AND APPURTENANCES, INSTALLED WITHIN CITY RIGHT-OF-WAY AND EASEMENTS DEDICATED TO THE CITY. STORM SEWER PIPES AND CATCH BASINS, INSTALLED FULLY WITHIN CITY RIGHT-OF-WAY; ONCE THE FOLLOWING CONDITIONS HAVE BEEN MET:
    A. ALL ITEMS HAVE PASSED CITY INSPECTION;
    B. THE CITY HAS RECEIVED AND APPROVED DIGITAL AND HARD COPIES OF THE RECORD DRAWINGS; AND
    C. THE RIGHTS-OF-WAY AND/OR EASEMENTS HAVE BEEN DEEDED TO THE CITY AND RECORDED WITH THE RECORDER OF DEEDS.
19. SEWER AND WATER CAPACITY ARE NOT GUARANTEED UNTIL BUILDING PERMITS ARE ISSUED. ALL FEES ARE PAID AND SUITABLE UTILITIES ARE IN PLACE FOR PROPER CONVEYANCE, TREATMENT AND DISPOSAL.
20. THE APPLICANT IS RESPONSIBLE TO ENSURE THAT ALL CITY AND/OR AGENCY CONSTRUCTION PERMIT APPLICATIONS HAVE BEEN COMPLETED, SUBMITTED, AND ALL APPLICABLE FEES HAVE BEEN PAID PRIOR TO COMMENCING CONSTRUCTION. THE CITY SHALL NOT BE HELD RESPONSIBLE FOR AN ANTICIPATED CONSTRUCTION START DATE THAT IS NOT MET DUE TO THE APPLICANT OR HIS/HER CONTRACTOR NOT HAVING MET THE CONSTRUCTION PERMITTING REQUIREMENTS.

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN

Milford SCHOOL DISTRICT
HOME of the BUCCANEERS

OWNER:
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STRUCTURAL ENGINEER:
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Fax 658-1125

JOB NO. 22.018

MILFORD MIDDLE SCHOOL

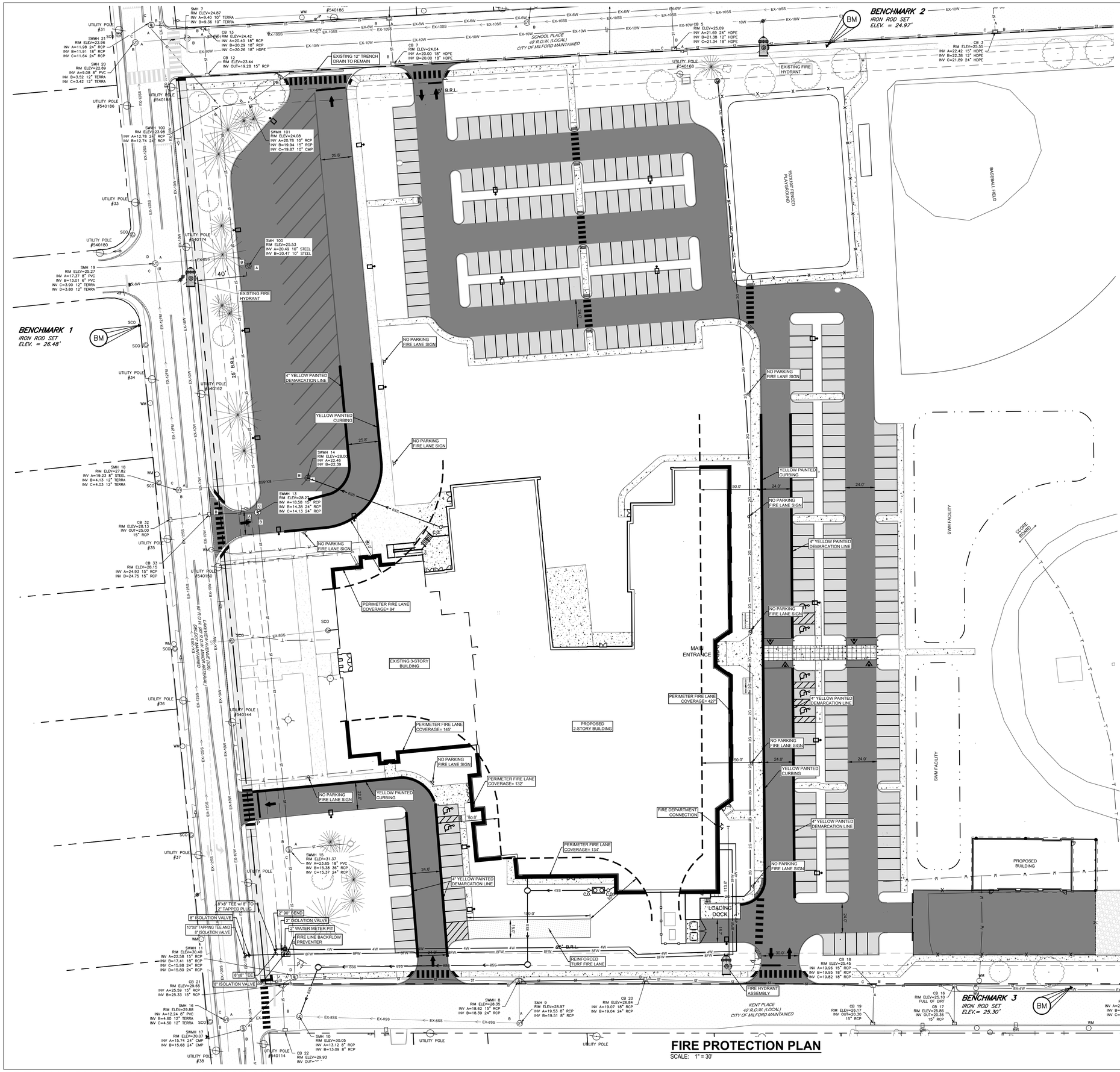
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**UTILITY PLAN**

**C501**

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PRELIMINARY - NOT FOR CONSTRUCTION




## FIRE PROTECTION PLAN
SCALE: 1" = 30'

## FIRE PROTECTION NOTES:

1. BUILDING PERIMETER= 1,733'
   FIRE LANE PERCENTAGE REQUIRED (50%)= 867'
   FIRE LANE COVERAGE= 922'
   PERIMETER ACCESS PERCENTAGE= N/A
2. ALL FIRE LANES, FIRE HYDRANTS, AND FIRE DEPARTMENT CONNECTIONS SHALL BE MARKED IN ACCORDANCE WITH THE DELAWARE STATE FIRE PREVENTION REGULATIONS.
3. PROPOSED BUILDING CONSTRUCTION IS NFPA TYPE II
4. INTENDED USE: EDUCATIONAL
5. EXISTING 3-STORY BUILDING HEIGHT= 43.5'
   PROPOSED 2-STORY BUILDING HEIGHT= 27'
6. THE PROPOSED BUILDING SHALL BE SERVED WITH AN AUTOMATIC SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH NFPA 13.
7. THE WATER IS SUPPLIED BY THE CITY OF MILFORD.
8. PROPOSED BUILDING COVERAGE AREA= 74,703 S.F.
9. KNOX BOXES SHALL BE INSTALLED AS RECOMMENDED BY THE CITY OF MILFORD FIRE CHIEF.




R7-107g

NOTES:
1. THE SIGN SHALL HAVE A WHITE SCOTCHLITE BACKGROUND WITH RED SCOTCHLITE LETTERS, EXCEPT FOR THE WORD "NO" WHICH SHALL HAVE THE COLOR SCHEME REVERSED.
2. ALL LETTERING SHALL BE 3" IN HEIGHT, EXCEPT FOR THE WORD "PARKING" WHICH SHALL BE 2" IN HEIGHT.
3. ALL SIGNS SHALL BE LOCATED NO LESS THAN SIX FEET AND NO HIGHER THAN EIGHT FEET ABOVE THE PAVEMENT.

COLORS:
LEGEND=BLACK (NON-REFLECTING)
BACKGROUND=WHITE (REFLECTING)



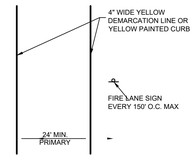
R7-201g

## 12" x 18" FIRE SIGN DETAIL
NOT TO SCALE

FIRE DEPT. CONNECTION AUTOSPRK

12"X18" RED SCOTCHLITE "FIRE DEPT. CONNECTION AUTOSPRK" ON WHITE SCOTCHLITE BACKGROUND

## FIRE CONNECTION SIGN DETAIL
NOT TO SCALE




## FIRE LANE DETAIL
NOT TO SCALE

## Hydrant Flow Test Report

**Test Date** 1/10/2023 **Test Time** 11:00 AM

**Location**
LAKEVIEW AVE, OLD MIDDLE SCHOOL
S-172 STATIC
S-173 FLOW

**Tested by**

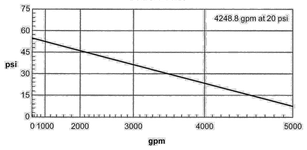
**Notes**
BRANDON BROWN
ERIC LUCIANO

**Read Hydrant**
55 psi **static pressure**
52 psi **residual pressure**
**hydrant elevation**

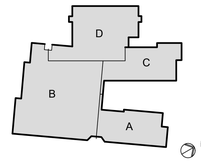
**Flow Hydrant(s)**

| Outlet | Elev | Size | C | Pitot Pressure | Flow |
|---|---|---|---|---|---|
| #1 | | 2.5 | .90 | 45 | 1126 gpm |

**Flow Graph**




| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
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JOB NO. 22.018

# MILFORD MIDDLE SCHOOL

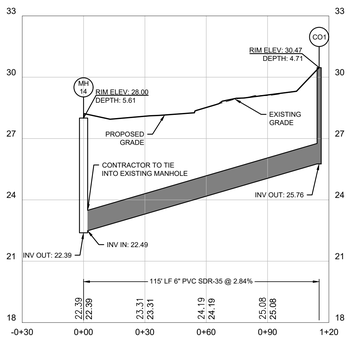
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MILFORD, DE 19963

**FIRE PROTECTION PLAN**

# C502

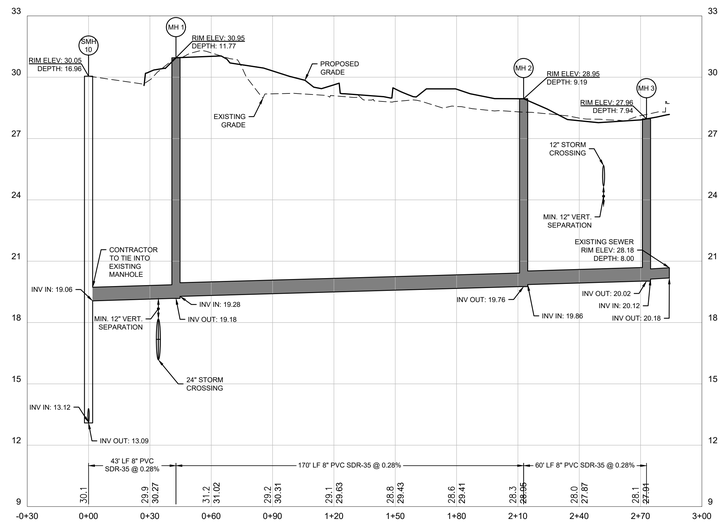

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## SANITARY SEWER
## CO1 - EXMH PROFILE

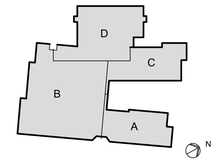
SCALE: 1" = 30' HORIZ.
1" = 3' VERT.




## SANITARY SEWER
## MH3 - EXMH PROFILE

SCALE: 1" = 30' HORIZ.
1" = 3' VERT.

| No. | Description | Date |
|---|---|---|
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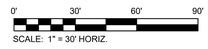
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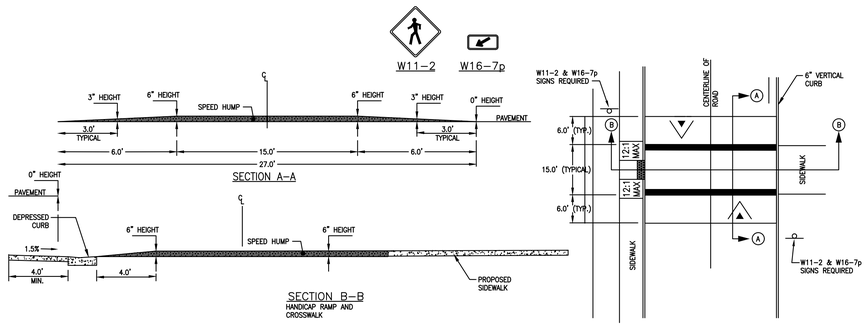
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**UTILITY PROFILES**

# C503

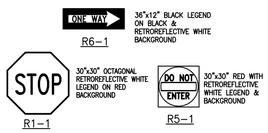
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PRELIMINARY - NOT FOR CONSTRUCTION

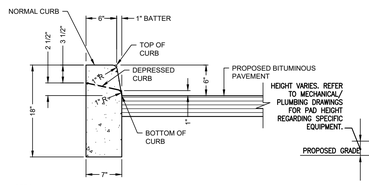



## SPEED TABLE DETAIL

NOT TO SCALE




## SIGN DETAILS

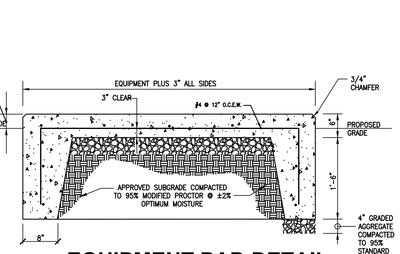



NOTES:

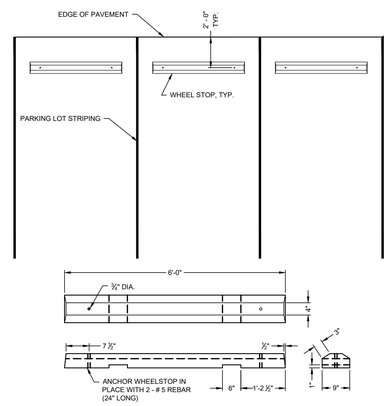
1. ALL CONCRETE USED FOR CURB SHALL BE PORTLAND CEMENT CONCRETE MIX NO. 7. SEE DETAIL 4202.
2. CURB & GUTTER SHALL HAVE CONTRACTION JOINTS EVERY 10'-0", AND EXPANSION JOINTS EVERY 40'-0". EXTRUDED CONCRETE CURB & GUTTER SHALL HAVE CONTRACTION JOINTS EVERY 10'-0", AND EXPANSION JOINTS EVERY 100'-0" AND AT POINTS OF TANGENCY OR POINTS OF CURVATURE.
3. DEPRESSED CURB AND GUTTER SHALL BE UTILIZED AT HANDICAP RAMPS WHEN TRANSITIONING FROM STANDARD CURB AND GUTTER.
4. MAXIMUM GUTTER SLOPE ON CURB RETURNS SHALL BE 1% WHERE HANDICAP RAMPS ARE REQUIRED.
5. WHEN ADJACENT TO CONCRETE SIDEWALK, PAVEMENT OR OTHER STRUCTURE INSTALL APPROVED EXPANSION JOINT.

## 6" VERTICAL CURB

NOT TO SCALE

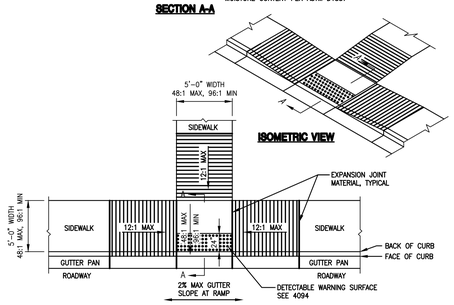



## EQUIPMENT PAD DETAIL




## CONCRETE WHEELSTOP DETAIL

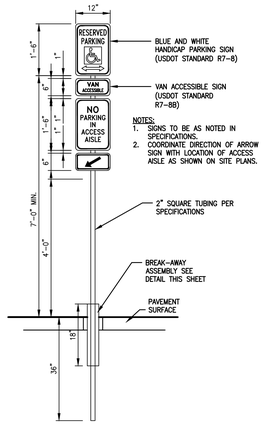
NOT TO SCALE




NOTES:

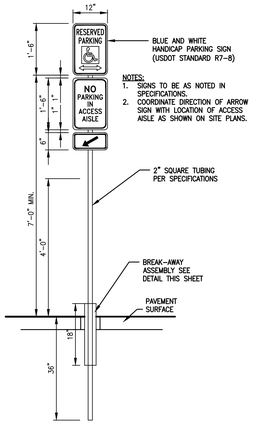
1. SURFACE TEXTURE OF RAMPS SHALL BE COARSE BROOMING OR NON-SKID TYPE SURFACE.
2. NO TRAVERSABLE SLOPE ON THE RAMP OR SIDEWALK SHALL EXCEED 12:1 IN THE DIRECTION OF PEDESTRIAN TRAVEL, OR 48:1 (2%) PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAVEL.
3. TO BE USED WHERE SIDEWALK IS DIRECTLY ADJACENT AND PERPENDICULAR TO THE CURB IN A PARKING LOT OR ALONG A STREET.
4. HANDICAPPED RAMPS SHALL BE REINFORCED WITH 6x6 WELDED WIRE MESH AND BE 4,000 PSI CONCRETE.
5. AT NO POINT SHALL THE SLOPE OF THE LANDING BE GREATER THAN 48:1 (2%), INCLUDING DIAGONAL.
6. THERE SHALL BE A LANDING PRIOR TO THE RAMPS. THE LANDING SHALL BE 36" IN LENGTH, MINIMUM.

## HANDICAP RAMP



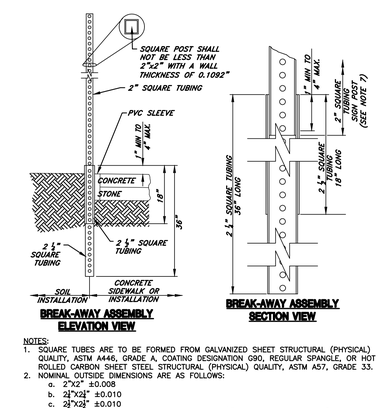

## VAN ADA ACCESSIBLE SPACE SIGNAGE

NOT TO SCALE




## NON-VAN ADA ACCESSIBLE SPACE SIGNAGE

NOT TO SCALE

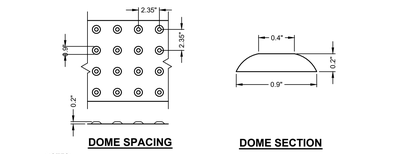



NOTES:

1. SQUARE TUBES ARE TO BE FORMED FROM GALVANIZED SHEET STRUCTURAL (PHYSICAL) QUALITY, ASTM A446, GRADE A, COATING DESIGNATION G90, REGULAR SPANGLE, OR HOT ROLLED CARBON SHEET STEEL STRUCTURAL (PHYSICAL) QUALITY, ASTM A57, GRADE 33.
2. NOMINAL OUTSIDE DIMENSIONS ARE AS FOLLOWS:
   a. 2"X2" ±0.008
   b. 2½"X2½" ±0.010
   c. 2¾"X2¾" ±0.010
3. ALL FOUR SIDES ARE TO HAVE EVENLY SPACED ⅝" DIAMETER HOLES ON 1" CENTERS THE ENTIRE LENGTH OF THE TUBE.
4. STANDARD CORNER RADIUS SHALL BE ⅝".
5. THE FASTENERS TO BE SUPPLIED UNDER THIS SPECIFICATION SHALL BE ⅝", GRADE 5 UNC CORNER BOLTS WITH CADMIUM OR ZINC PLATING. INSTALLATION OF SIGNS SHALL BE WITH ⅝"X2¾" BOLT WITH LOCKNUT AND WASHER.
6. THE CONTRACTOR SHALL PROVIDE AND INSTALL PVC SLEEVES (4" INSIDE DIAMETER MINIMUM, 6" INSIDE DIAMETER MAXIMUM) IN PROPOSED CONCRETE SIDEWALKS, ISLANDS, AND MEDIANS FOR FUTURE TRAFFIC SIGN POSTS AS DIRECTED BY THE ENGINEER. THE LOWER END OF THE SLEEVE SHALL BE SET ON TOP OF THE SOIL.
7. THE SIGN POST SHALL EXTEND A MINIMUM OF 4" INTO THE 2½" SQUARE TUBING.

## BREAKAWAY SIGN POST DETAIL

NOT TO SCALE

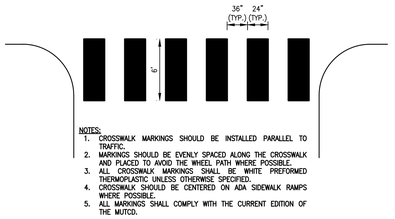



**DOME SPACING** **DOME SECTION**

NOTES:

1. THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 TO 8 INCHES FROM THE FACE OF CURB.
2. FOR SKEWED APPLICATIONS DETECTABLE WARNING SHALL BE PLACED SUCH THAT THE DOMES CLOSEST TO THE BACK OF CURB ARE NO LESS THAN 0.5" AND NO MORE THAN 3.0" FROM THE BACK OF CURB. TRUNCATED DOME SURFACES SHALL BE FABRICATED TO PROVIDE FULL DOMES ONLY.

## TRUNCATED DOME DETAIL

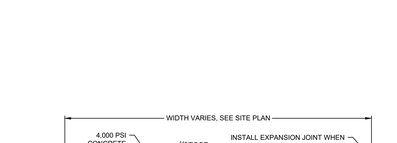



NOTES:

1. CROSSWALK MARKINGS SHOULD BE INSTALLED PARALLEL TO TRAFFIC.
2. MARKINGS SHOULD BE EVENLY SPACED ALONG THE CROSSWALK AND PLACED TO AVOID THE WHEEL PATH WHERE POSSIBLE.
3. ALL CROSSWALK MARKINGS SHALL BE WHITE PREFORMED THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.
4. CROSSWALK SHOULD BE CENTERED ON ADA SIDEWALK RAMPS WHERE POSSIBLE.
5. ALL MARKINGS SHALL COMPLY WITH THE CURRENT EDITION OF THE MUTCD.

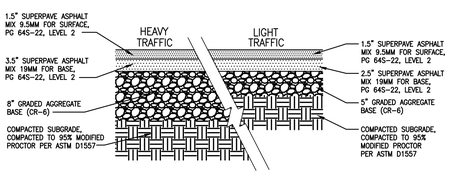
## CROSSWALK STRIPING DETAIL

NOT TO SCALE



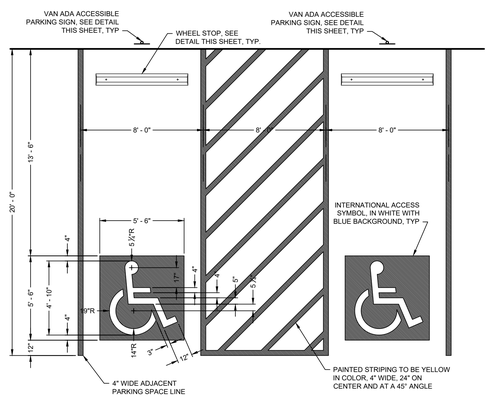

## CONCRETE SIDEWALK DETAIL

NOT TO SCALE



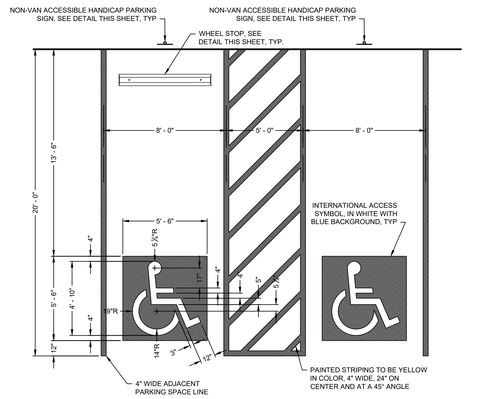

## HEAVY TRAFFIC PAVING SECTION

## LIGHT TRAFFIC PAVING SECTION




## VAN ADA ACCESSIBLE SPACE DETAIL

NOT TO SCALE

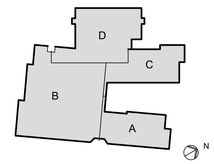



## NON-VAN ADA ACCESSIBLE SPACES DETAIL

NOT TO SCALE

PRELIMINARY - NOT FOR CONSTRUCTION

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN

Milford SCHOOL DISTRICT
HOME of the BUCCANEERS

OWNER:
MILFORD SCHOOL DISTRICT
906 LAKEVIEW AVENUE
MILFORD, DE 19963

STRUCTURAL ENGINEER:
PILOTTOWN ENGINEERING
17858 NASSAU COMMONS BLVD, UNIT 3
LEWES, DE 19958
P: 302.703.1770

MEP ENGINEER:
FURLOW ASSOCIATES, INC.
650 NAAMANS ROAD
CLAYMONT, DE 19703
P: 302.798.3515

CIVIL ENGINEER:
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DE 19962
P: 302.424.1441

KITCHEN CONSULTANT:
CORSI ASSOCIATES, LLC
1489 BALTIMORE PIKE, STE 109
SPRINGFIELD, PA 19064
P: 866.267.7447

THEATER PLANNING:
STAGES CONSULTANTS, LLC
300 RARITAN AVENUE, 2ND FLR
HIGHLAND PARK, NJ 08904
P: 732.333.8003

TECHNOLOGY CONSULTANT:
EDUCATIONAL SYSTEM PLANNING
2448 HOLLY AVENUE, STE 302
ANNAPOLIS, MD 21401
P: 410.573.9148

BSA + A

Buck Simpers Architect
+ Associates, Inc.
954 Justison St.
Wilmington, DE 19801
302 658-9300
Fax 658-1125

JOB NO. 22.018

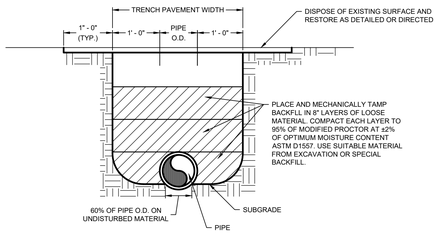
MILFORD MIDDLE SCHOOL

612 LAKEVIEW AVENUE,
MILFORD, DE 19963

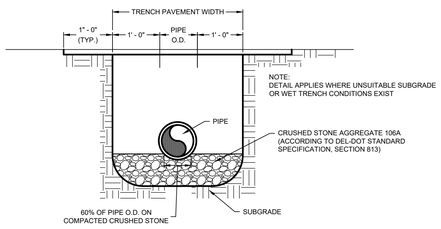
**CONSTRUCTION DETAILS**

# C601

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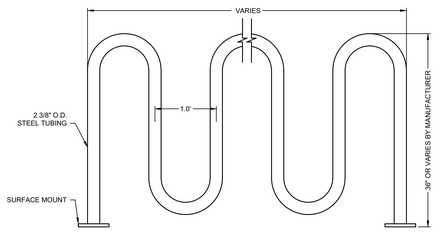

TRENCH BACKFILL




CRUSHED STONE BEDDING

## TRENCH BACKFILL & PIPE BEDDING DETAIL

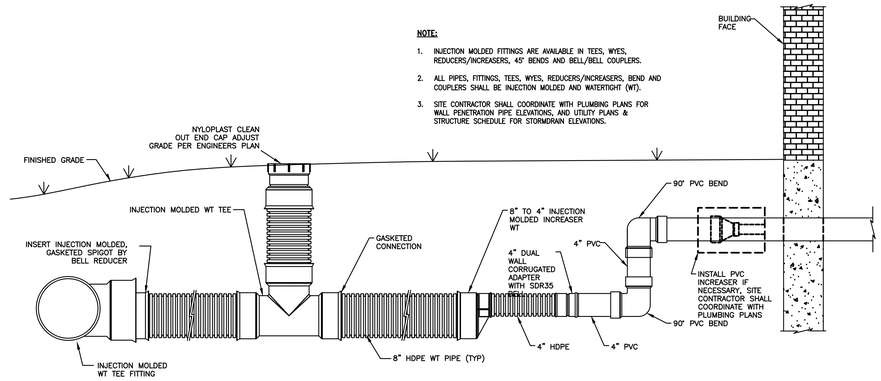
NOT TO SCALE




NOTES:
1. BICYCLE SPACE ARE PER LOOP.

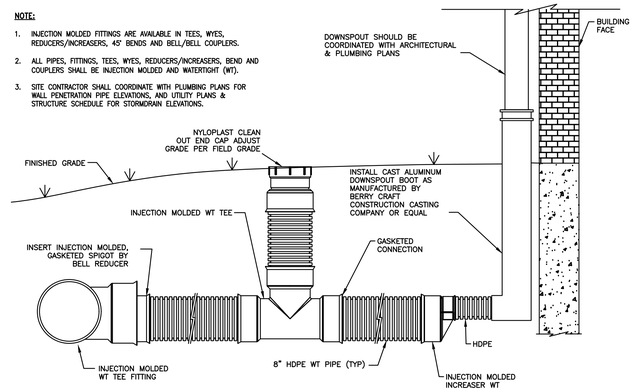
## LOOP STYLE BIKE RACK DETAIL

NOT TO SCALE



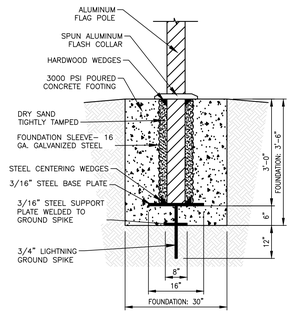

## ROOF DRAIN DETAIL WITH CLEANOUT

NOT TO SCALE (AS MANUFACTURED BY ADS OR EQUAL)



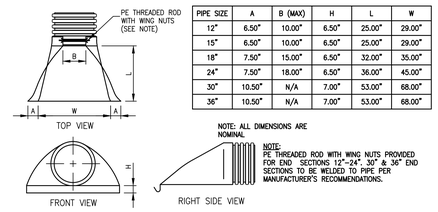

## DOWNSPOUT DETAIL WITH CLEANOUT

NOT TO SCALE (AS MANUFACTURED BY ADS OR EQUAL)




## FLAGPOLE FOUNDATION DETAIL

NOT TO SCALE

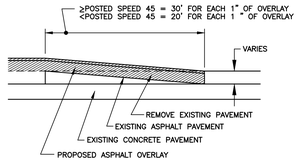



| PIPE SIZE | A | B (MAX) | H | L | W |
|---|---|---|---|---|---|
| 12" | 6.50" | 10.00" | 6.50" | 25.00" | 29.00" |
| 15" | 6.50" | 10.00" | 6.50" | 25.00" | 29.00" |
| 18" | 7.50" | 15.00" | 6.50" | 32.00" | 35.00" |
| 24" | 7.50" | 18.00" | 6.50" | 36.00" | 45.00" |
| 30" | 10.50" | N/A | 7.00" | 53.00" | 68.00" |
| 36" | 10.50" | N/A | 7.00" | 53.00" | 68.00" |

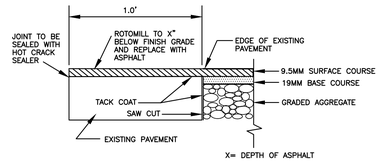
NOTE: ALL DIMENSIONS ARE NOMINAL

NOTE:
PE THREADED ROD WITH WING NUTS PROVIDED FOR END SECTIONS 12"-24", 30" & 36" END SECTIONS TO BE WELDED TO PIPE PER MANUFACTURER'S RECOMMENDATIONS.

## HDPE END SECTION DETAILS

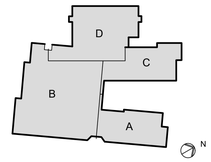



## BUTT JOINT DETAIL

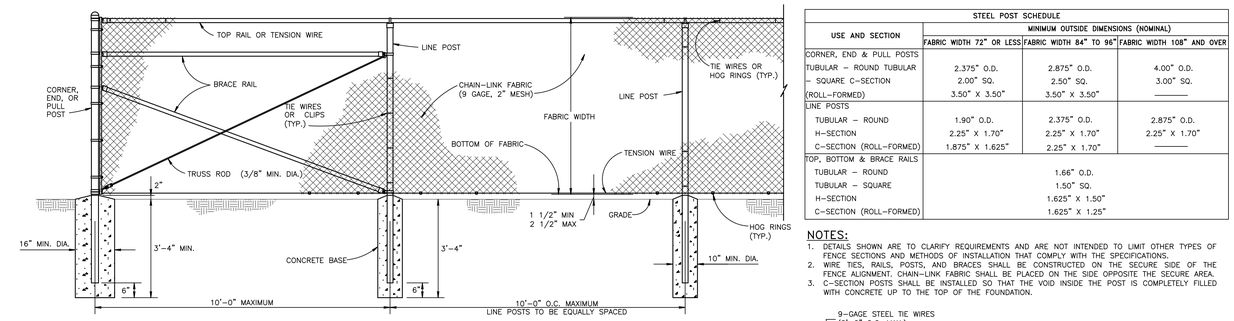



## TYPICAL PAVEMENT TIE-IN DETAIL

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |

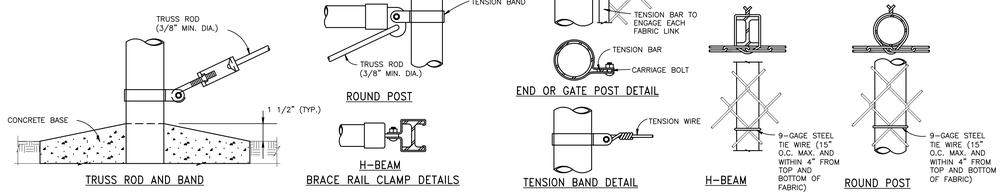



KEYPLAN




| STEEL POST SCHEDULE | | | |
|---|---|---|---|
| USE AND SECTION | MINIMUM OUTSIDE DIMENSIONS (NOMINAL) | | |
| | FABRIC WIDTH 72" OR LESS | FABRIC WIDTH 84" TO 96" | FABRIC WIDTH 108" AND OVER |
| CORNER, END & PULL POSTS | | | |
| TUBULAR – ROUND TUBULAR | 2.375" O.D. | 2.875" O.D. | 4.00" O.D. |
| – SQUARE C–SECTION | 2.00" SQ. | 2.50" SQ. | 3.00" SQ. |
| (ROLL–FORMED) | 3.50" X 3.50" | 3.50" X 3.50" | ——— |
| LINE POSTS | | | |
| TUBULAR – ROUND | 1.90" O.D. | 2.375" O.D. | 2.875" O.D. |
| H–SECTION | 2.25" X 1.70" | 2.25" X 1.70" | 2.25" X 1.70" |
| C–SECTION (ROLL–FORMED) | 1.875" X 1.625" | 2.25" X 1.70" | ——— |
| TOP, BOTTOM & BRACE RAILS | | | |
| TUBULAR – ROUND | 1.66" O.D. | | |
| TUBULAR – SQUARE | 1.50" SQ. | | |
| H–SECTION | 1.625" X 1.50" | | |
| C–SECTION (ROLL–FORMED) | 1.625" X 1.25" | | |

NOTES:
1. DETAILS SHOWN ARE TO CLARIFY REQUIREMENTS AND ARE NOT INTENDED TO LIMIT OTHER TYPES OF FENCE SECTIONS AND METHODS OF INSTALLATION THAT COMPLY WITH THE SPECIFICATIONS.
2. WIRE TIES, RAILS, POSTS, AND BRACES SHALL BE CONSTRUCTED ON THE SECURE SIDE OF THE FENCE ALIGNMENT. CHAIN–LINK FABRIC SHALL BE PLACED ON THE SIDE OPPOSITE THE SECURE AREA.
3. C–SECTION POSTS SHALL BE INSTALLED SO THAT THE VOID INSIDE THE POST IS COMPLETELY FILLED WITH CONCRETE UP TO THE TOP OF THE FOUNDATION.




NOTE:
1. FINISH AS NOTED ON SITE PLANS.

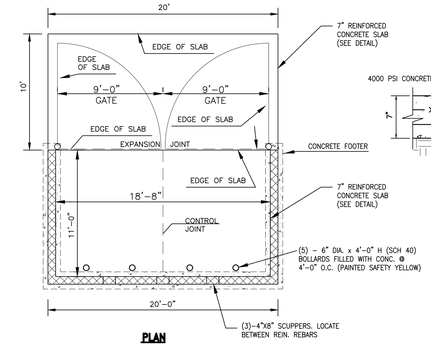
## STEEL CHAIN LINK SECURITY FENCE DETAIL

| MIX NO. | 28 DAY SPECIFIED DESIGN COMPRESSIVE STRENGTH (PSI) | MIN. CEMENT FACTOR | COARSE AGGREGATE AASHTO M43 SIZE | MAX WATER CEMENT RATIO | SLUMP (IN) |
|---|---|---|---|---|---|
| 1 | 2500 | 455 | 57 OR 67 | 0.55 | 2–5 |
| 2 | 3000 | 530 | 57 OR 67 | 0.50 | 2–5 |
| 3 | 3500 | 580 | 57 OR 67 | 0.45 | 2–4 |
| 7 | 4200 | 611 | 57 OR 67 | 0.45 | 2–4 |

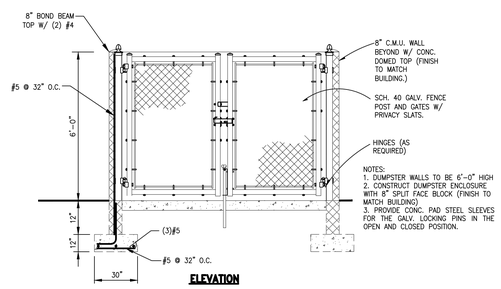
| MIX NO. | TOTAL AIR CONTENT (%) | CONCRETE TEMPERATURE (F) |
|---|---|---|
| 1 | 5–8 | 70 ± 20 |
| 2 | 5–8 | 70 ± 20 |
| 3 | 5–8 | 70 ± 20 |
| 7 | 5–8 | 70 ± 20 |

NOTE:
1. STATE CERTIFIED CONCRETE MANUFACTURER.

## PORTLAND CEMENT CONCRETE MIXTURES



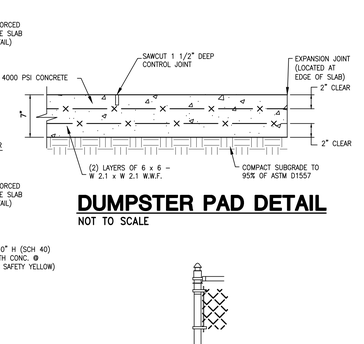

PLAN




ELEVATION

## DUMPSTER PAD DETAIL

NOT TO SCALE




GATE POST DETAIL

## DOUBLE DUMPSTER ENCLOSURE DETAIL

NOT TO SCALE

OWNER:
MILFORD SCHOOL DISTRICT
906 LAKEVIEW AVENUE
MILFORD, DE 19963

STRUCTURAL ENGINEER:
PILOTTOWN ENGINEERING
17858 NASSAU COMMONS BLVD, UNIT 3
LEWES, DE 19958
P: 302.703.1770

MEP ENGINEER:
FURLOW ASSOCIATES, INC.
650 NAAMANS ROAD
CLAYMONT, DE 19703
P: 302.798.3515

CIVIL ENGINEER:
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DE 19962
P: 302.424.1441

KITCHEN CONSULTANT:
CORSI ASSOCIATES, LLC
1489 BALTIMORE PIKE, STE 109
SPRINGFIELD, PA 19064
P: 866.267.7447

THEATER PLANNING:
STAGES CONSULTANTS, LLC
300 RARITAN AVENUE, 2ND FLR
HIGHLAND PARK, NJ 08904
P: 732.333.8003

TECHNOLOGY CONSULTANT:
EDUCATIONAL SYSTEM PLANNING
2448 HOLLY AVENUE, STE 302
ANNAPOLIS, MD 21401
P: 410.573.9148


Buck Simpers Architect + Associates, Inc.
954 Justison St.
Wilmington, DE 19801
302 658-9300
Fax 658-1125


JOB NO. 22.018

MILFORD MIDDLE SCHOOL

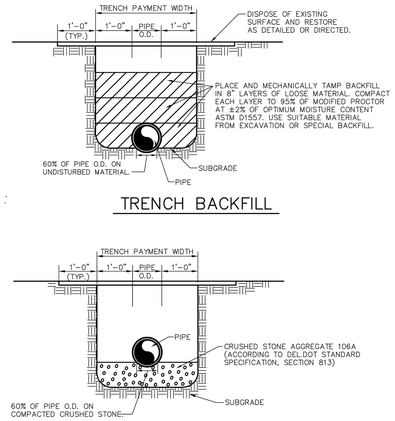
612 LAKEVIEW AVENUE,
MILFORD, DE 19963

**CONSTRUCTION DETAILS**

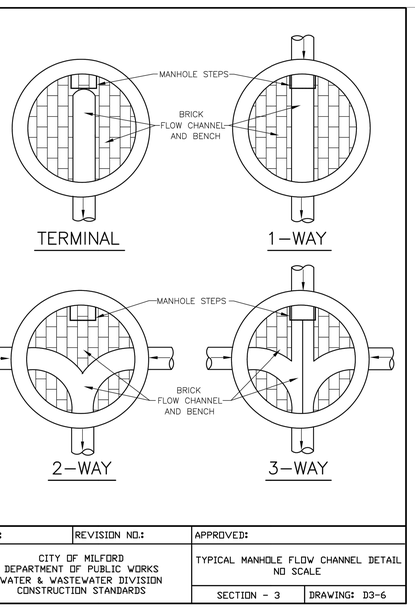
# C602


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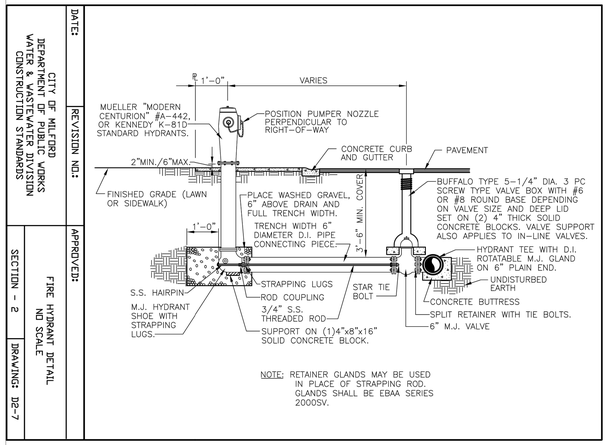

PRELIMINARY - NOT FOR CONSTRUCTION




| DATE: | REVISION NO.: | APPROVED: |
|---|---|---|
| CITY OF MILFORD<br>DEPARTMENT OF PUBLIC WORKS<br>WATER & WASTEWATER DIVISION<br>CONSTRUCTION STANDARDS | | TRENCH BACKFILL & PIPE BEDDING DETAIL<br>NO SCALE |
| | | SECTION - 1 / DRAWING: D1-1 |

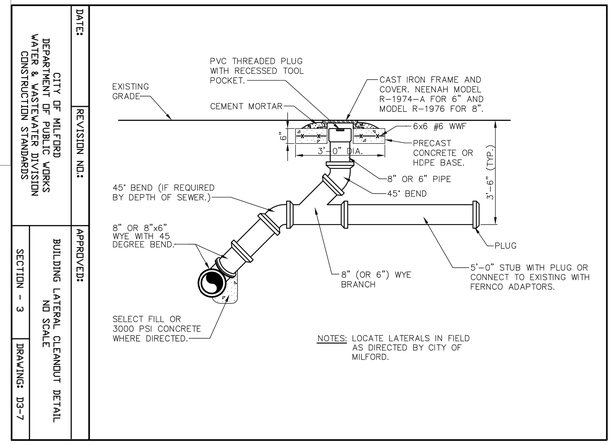



| DATE: | REVISION NO.: | APPROVED: |
|---|---|---|
| CITY OF MILFORD<br>DEPARTMENT OF PUBLIC WORKS<br>WATER & WASTEWATER DIVISION<br>CONSTRUCTION STANDARDS | | TYPICAL MANHOLE FLOW CHANNEL DETAIL<br>NO SCALE |
| | | SECTION - 3 / DRAWING: D3-6 |



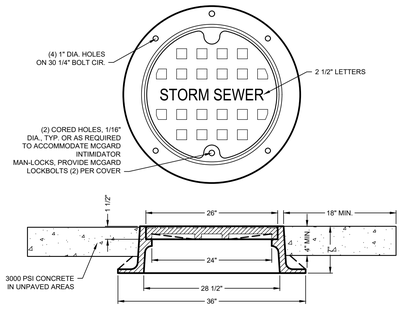

NOTE: RETAINER GLANDS MAY BE USED IN PLACE OF STRAPPING ROD. GLANDS SHALL BE EBAA SERIES 2000SV.

| DATE: | REVISION NO.: | APPROVED: |
|---|---|---|
| CITY OF MILFORD<br>DEPARTMENT OF PUBLIC WORKS<br>WATER & WASTEWATER DIVISION<br>CONSTRUCTION STANDARDS | | FIRE HYDRANT DETAIL<br>NO SCALE |
| | | SECTION - 2 / DRAWING: D2-7 |




NOTES: LOCATE LATERALS IN FIELD AS DIRECTED BY CITY OF MILFORD.

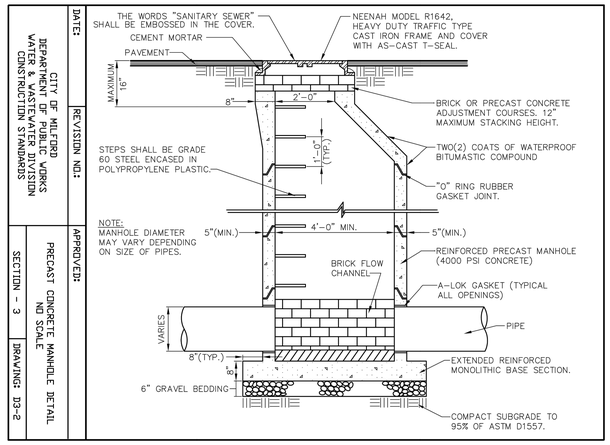
| DATE: | REVISION NO.: | APPROVED: |
|---|---|---|
| CITY OF MILFORD<br>DEPARTMENT OF PUBLIC WORKS<br>WATER & WASTEWATER DIVISION<br>CONSTRUCTION STANDARDS | | BUILDING LATERAL CLEANOUT DETAIL<br>NO SCALE |
| | | SECTION - 3 / DRAWING: D3-7 |



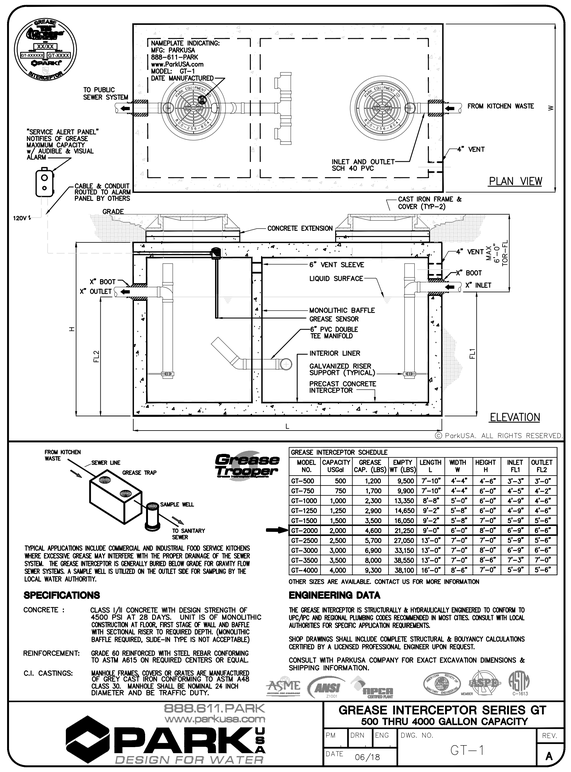

EAST JORDAN IRON WORKS - PRODUCT # 00104007L01

## MANHOLE COVER DETAIL

NOT TO SCALE




| DATE: | REVISION NO.: | APPROVED: |
|---|---|---|
| CITY OF MILFORD<br>DEPARTMENT OF PUBLIC WORKS<br>WATER & WASTEWATER DIVISION<br>CONSTRUCTION STANDARDS | | PRECAST CONCRETE MANHOLE DETAIL<br>NO SCALE |
| | | SECTION - 3 / DRAWING: D3-2 |







TYPICAL APPLICATIONS INCLUDE COMMERCIAL AND INDUSTRIAL FOOD SERVICE KITCHENS WHERE EXCESSIVE GREASE MAY INTERFERE WITH THE PROPER DRAINAGE OF THE SEWER SYSTEM. THE GREASE INTERCEPTOR IS IDEALLY BURIED BELOW GRADE FOR GRAVITY FLOW SEWER SYSTEMS. A SAMPLE WELL IS UTILIZED ON THE OUTLET SIDE FOR SAMPLING BY THE LOCAL WATER AUTHORITY.

**SPECIFICATIONS**

CONCRETE : CLASS I/II CONCRETE WITH DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR, FIRST STAGE OF WALL AND BAFFLE WITH SECTIONAL RISER TO REQUIRED DEPTH. (MONOLITHIC BAFFLE REQUIRED, SLIDE-IN TYPE IS NOT ACCEPTABLE)

REINFORCEMENT: GRADE 60 REINFORCED WITH STEEL REBAR CONFORMING TO ASTM A615 ON REQUIRED CENTERS OR EQUAL.

C.I. CASTINGS: MANHOLE FRAMES, COVERS OR GRATES ARE MANUFACTURED OF GREY CAST IRON CONFORMING TO ASTM A48 CLASS 30. MANHOLE SHALL BE NOMINAL 24 INCH DIAMETER AND BE TRAFFIC DUTY.

| GREASE INTERCEPTOR SCHEDULE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MODEL NO. | CAPACITY USGal | GREASE CAP. (LBS) | EMPTY WT (LBS) | LENGTH L | WIDTH W | HEIGHT H | INLET FL1 | OUTLET FL2 |
| GT-500 | 500 | 1,200 | 8,500 | 7'-10" | 4'-4" | 6'-6" | 3'-3" | 3'-0" |
| GT-750 | 750 | 1,700 | 9,900 | 7'-10" | 4'-4" | 6'-0" | 4'-5" | 4'-2" |
| GT-1000 | 1,000 | 2,300 | 13,350 | 8'-8" | 5'-0" | 6'-0" | 4'-9" | 4'-6" |
| GT-1250 | 1,250 | 2,900 | 14,650 | 9'-2" | 5'-8" | 6'-0" | 4'-9" | 4'-6" |
| GT-1500 | 1,500 | 3,500 | 16,050 | 9'-2" | 5'-8" | 7'-0" | 5'-9" | 5'-6" |
| GT-2000 | 2,000 | 4,600 | 21,250 | 9'-0" | 6'-0" | 8'-0" | 6'-9" | 6'-6" |
| GT-2500 | 2,500 | 5,700 | 27,050 | 13'-0" | 7'-0" | 7'-0" | 5'-9" | 5'-6" |
| GT-3000 | 3,000 | 6,900 | 33,150 | 13'-0" | 7'-0" | 8'-0" | 6'-9" | 6'-6" |
| GT-3500 | 3,500 | 8,000 | 38,550 | 13'-0" | 7'-0" | 8'-6" | 7'-3" | 7'-0" |
| GT-4000 | 4,000 | 9,300 | 38,100 | 16'-0" | 8'-6" | 7'-0" | 5'-9" | 5'-6" |

OTHER SIZES ARE AVAILABLE. CONTACT US FOR MORE INFORMATION

**ENGINEERING DATA**

THE GREASE INTERCEPTOR IS STRUCTURALLY & HYDRAULICALLY ENGINEERED TO CONFORM TO UPC/PC AND REGIONAL PLUMBING CODES RECOMMENDED IN MOST CITIES. CONSULT WITH LOCAL AUTHORITIES FOR SPECIFIC APPLICATION REQUIREMENTS.

SHOP DRAWINGS SHALL INCLUDE COMPLETE STRUCTURAL & BOUYANCY CALCULATIONS CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER UPON REQUEST.

CONSULT WITH PARKUSA COMPANY FOR EXACT EXCAVATION DIMENSIONS & SHIPPING INFORMATION.

888.811.PARK
www.parkusa.com
PARK USA
DESIGN FOR WATER

**GREASE INTERCEPTOR SERIES GT**
**500 THRU 4000 GALLON CAPACITY**

| PM | DRN | ENG | DWG. NO. | REV. |
|---|---|---|---|---|
| DATE 06/18 | | | GT-1 | A |

## 2,000 GALLON PRECAST GREASE INTERCEPTOR

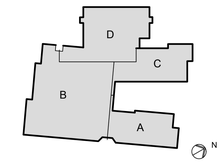
NOT TO SCALE

GREASE INTERCEPTOR SIZING:
GREASE INTERCEPTOR IS TO SERVE MULTIPLE FIXTURES AND SHALL BE SIZED FOR THE PROJECTED SEWER FLOW:

PROJECTED SEWER FLOW TO GREASE INTERCEPTOR = 3.2 EDU
PROJECTED AVERAGE FLOW = 3.2 EDU X 300 GPD = 960 GPD

PROVIDE A 1,000 GALLON GREASE INTERCEPTOR PER THE ABOVE CALCULATIONS AND KENT COUNTY MINIMUM STANDARDS.

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN

Milford SCHOOL DISTRICT
HOME of the BUCCANEERS

OWNER:
MILFORD SCHOOL DISTRICT
906 LAKEVIEW AVENUE
MILFORD, DE 19963

STRUCTURAL ENGINEER:
PILOTTOWN ENGINEERING
17858 NASSAU COMMONS BLVD, UNIT 3
LEWES, DE 19958
P: 302.703.1770

MEP ENGINEER:
FURLOW ASSOCIATES, INC.
650 NAAMANS ROAD
CLAYMONT, DE 19703
P: 302.798.3515

CIVIL ENGINEER:
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DE 19962
P: 302.424.1441

KITCHEN CONSULTANT:
CORSI ASSOCIATES, LLC
1489 BALTIMORE PIKE, STE 109
SPRINGFIELD, PA 19064
P: 866.267.7447

THEATER PLANNING:
STAGES CONSULTANTS, LLC
300 RARITAN AVENUE, 2ND FLR
HIGHLAND PARK, NJ 08904
P: 732.333.8003

TECHNOLOGY CONSULTANT:
EDUCATIONAL SYSTEM PLANNING
2448 HOLLY AVENUE, STE 302
ANNAPOLIS, MD 21401
P: 410.573.9148

B S A + A

Buck Simpers Architect
+ Associates, Inc.
954 Justison St.
Wilmington, DE 19801
302 658-9300
Fax 658-1125

JOB NO. 22.018

MILFORD MIDDLE SCHOOL

612 LAKEVIEW AVENUE,
MILFORD, DE 19963

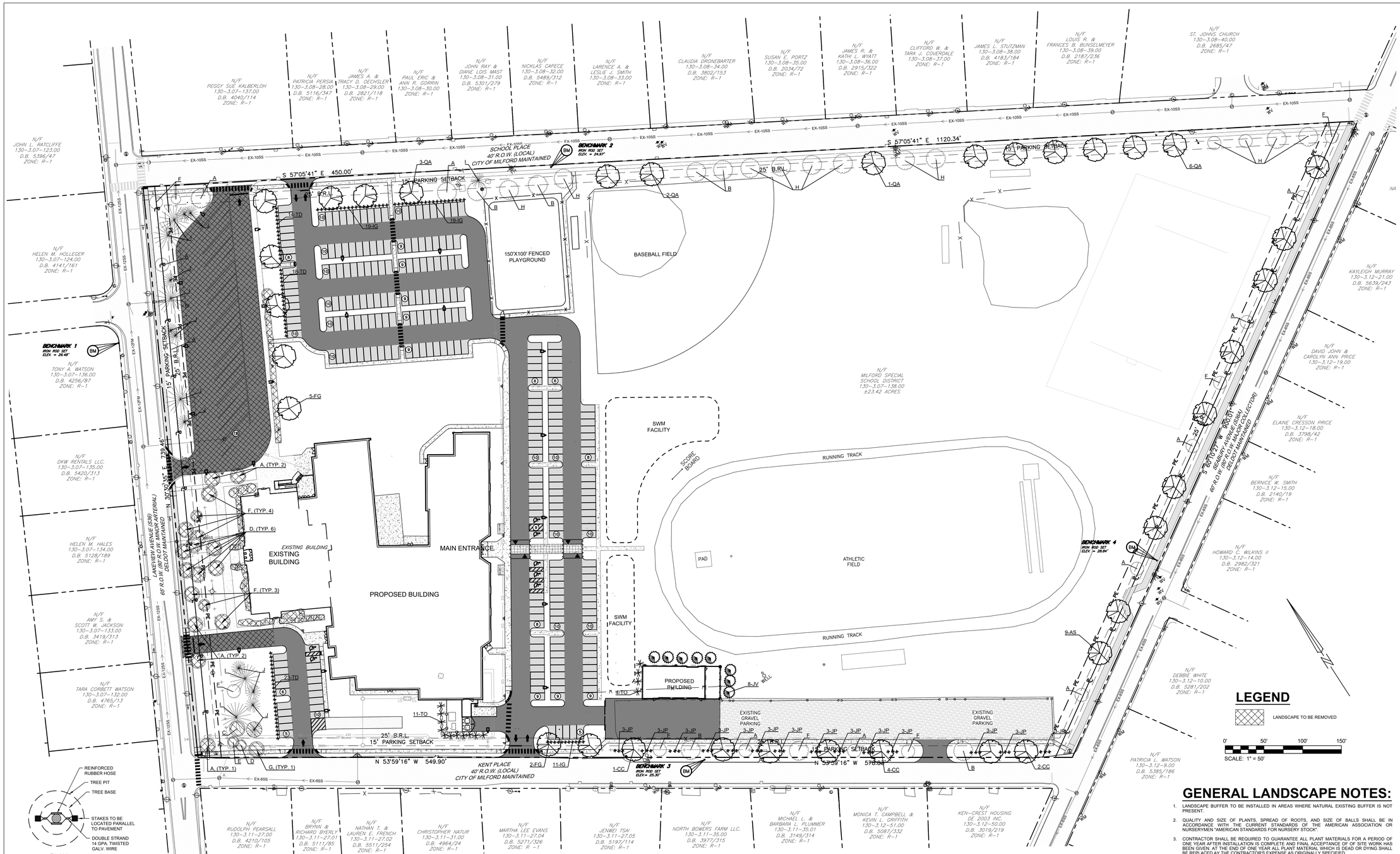
**CONSTRUCTION DETAILS**

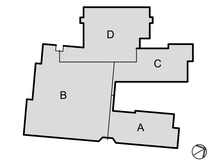
# C603

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PRELIMINARY - NOT FOR CONSTRUCTION

| No. | Description | Date |
|---|---|---|
| 1 | ISSUED FOR PRICING | 03/20/2023 |
| 2 | DFM SUBMISSION | 05/22/2023 |




KEYPLAN

Milford SCHOOL DISTRICT
HOME of the BUCCANEERS

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17858 NASSAU COMMONS BLVD, UNIT 3
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BSA + A

Buck Simpers Architect + Associates, Inc.
954 Justison St.
Wilmington, DE 19801
302 658-9300
Fax 658-1125

## LEGEND

LANDSCAPE TO BE REMOVED

0' 50' 100' 150'
SCALE: 1" = 50'

## GENERAL LANDSCAPE NOTES:

1. LANDSCAPE BUFFER TO BE INSTALLED IN AREAS WHERE NATURAL EXISTING BUFFER IS NOT PRESENT.
2. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN "AMERICAN STANDARDS FOR NURSERY STOCK".
3. CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR AFTER INSTALLATION IS COMPLETE AND FINAL ACCEPTANCE OF OF SITE WORK HAS BEEN GIVEN. AT THE END OF ONE YEAR ALL PLANT MATERIAL WHICH IS DEAD OR DYING SHALL BE REPLACED AY THE CONTRACTOR'S EXPENSE AS ORIGINALLY SPECIFIED.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND MAY MAKE MINOR ADJUSTMENTS IN SPACING AND/OR LOCATION OF PLANT MATERIALS. CONTRACTOR TO VERIFY "AS-BUILT" LOCATION OF ALL UTILITIES.
5. NO SUBSTITUTIONS SHALL BE MADE WITHOUT APPROVAL OF THE OWNER.
6. ALL AREAS NOT STABILIZED IN PAVING OR PLANT MATERIALS SHOULD BE SEEDED AND MULCHED.
7. EVERGREEN TREES SHALL HAVE A FULL, WELL-BRANCHED, CONICAL FORM TYPICAL OF THE SPECIES
8. ALL DECIDUOUS SHADE TREES SHALL BRANCH A MINIMUM OF 7'-0" ABOVE GROUND LEVEL. TREES SHALL BE PLANTED AND STAKED IN ACCORDANCE WITH THE STAKING DETAIL SHOWN.
9. THE FULL EXTENT OF ALL PLANTING BEDS SHALL RECEIVE 4" OF TOPSOIL AND 3" OF BARK MULCH PER SPECIFICATIONS.
10. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTINGS SHOWN ON THIS DRAWINGS AND AS SPECIFIED.
11. ALL PLANTS SHALL BEAR THE SAME RELATIONSHIPS TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING.
12. THE CONTRACTOR SHALL WATER ALL PLANTS THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING, AND THEN WEEKLY OR MORE OFTEN, IF NECESSARY, DURING THE FIRST GROWING SEASON.

## DATA COLUMN

| | |
|---|---|
| TAX MAP ID | : 130-3.07-138.00 & 130-3.07-138.01 |
| EXISTING ZONING<br>EXISTING USE<br>PROPOSED USE | : R-1, SINGLE FAMILY RESIDENTIAL<br>: FORMER MIDDLE SCHOOL<br>: MIDDLE SCHOOL |
| TOTAL SITE AREA | : 23.957 AC |
| TOTAL LIMIT OF DISTURBANCE | : 10.80 AC / 470,450 SF |
| TREES REQUIRED | : 1 TREE / 5,000 SF AREA TO BE DEVELOPED<br>470,450 SF / 5,000 SF = 94 TREES |
| EXISTING TREES TO REMAIN | : 53 TREES |
| PROPOSED TREES | : 43 TREES |
| TOTAL TREES PROVIDED | : 96 TREES |

## LANDSCAPE ARCHITECT'S STATEMENT

I, TIMOTHY M. METZNER, HEREBY STATE THAT I AM A REGISTERED LANDSCAPE ARCHITECT IN THE STATE OF DELAWARE, THAT THE INFORMATION SHOWN HEREON HAS BEEN PREPARED UNDER MY SUPERVISION AND TO THE MY BEST KNOWLEDGE AND BELIEF REPRESENTS GOOD ARCHITECTURAL PRACTICES AS REQUIRED BY THE APPLICABLE LAWS OF THE STATE OF DELAWARE.

TIMOTHY M. METZNER, RLA — DATE
DAVIS, BOWEN & FRIEDEL, INC.
1 PARK AVENUE
MILFORD, DELAWARE 19963

JOB NO. 22.018

MILFORD MIDDLE SCHOOL

612 LAKEVIEW AVENUE,
MILFORD, DE 19963

**LANDSCAPE PLAN**

**L101**

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## LANDSCAPE PLAN

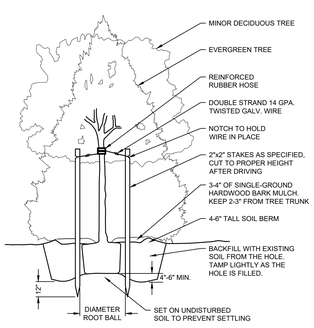
SCALE: 1" = 50'

## EXISTING LANDSCAPE SCHEDULE

| SYMBOL | KEY | BOTANICAL NAME | COMMON NAME | QUANTITY |
|---|---|---|---|---|
| | | **DECIDUOUS TREE** | | |
| | A | ACER SP. | MAPLE | 11 |
| | B | QUERCUS SP. | OAK | 6 |
| | C | CERCIS SP. | REDBUD | 1 |
| | D | PRUNUS SP. | CHERRY | 1 |
| | E | CORNUS SP. | DOGWOOD | 1 |
| | F | TILIA SP. | LINDEN | 8 |
| | G | FRAXINUS SP. | ASH | - |
| | H | LIRIODENDRON SP. | TULIP | 12 |
| | | **EVERGREEN TREE** | | |
| | I | PINUS SP. | PINE | 7 |
| | J | ILEX SP. | HOLLY | 10 |

## PROPOSED LANDSCAPE SCHEDULE

| SYMBOL | KEY | BOTANICAL NAME | COMMON NAME | SIZE | QUANTITY |
|---|---|---|---|---|---|
| | | **DECIDUOUS TREE** | | | |
| | AS | ACER SACCHARUM 'GREEN MOUNTAIN' | SUGAR MAPLE | 1 3/4" - 2" CAL. | 9 |
| | CC | CERCIS CANADENSIS | EASTERN REDBUD | 6-8' HT. | 7 |
| | FG | FAGUS GRANDIFOLIA | AMERICAN BEECH | 1 3/4" - 2" CAL. | 7 |
| | QA | QUERCUS ALBA | WHITE OAK | 1 3/4" - 2" CAL. | 12 |
| | | **EVERGREEN TREE** | | | |
| | JV | JUNIPERUS VIRGINIANA | EASTERN RED CEDAR | 5-6' HT. | 8 |
| | | **EVERGREEN SHRUB** | | | |
| | IG | ILEX GLABRA 'COMPACTA' | COMPACT INKBERRY | 2-3' HT. | 49 |
| | TO | THUJA OCCIDENTALIS 'EMERALD GREEN' | EMERALD GREEN ARBORVITAE | 2-3' HT. | 15 |
| | JP | JUNIPERUS CHINENSIS 'PFITIERIANA COMPACTA' | COMPACT PFITZER JUNIPER | 2-3' HT. | 42 |
| | TD | TAXUS X MEDIA 'DENSIFORMIS' | DENSE YEW | 2-3' HT. | 55 |




PLAN

## STAKING DETAIL

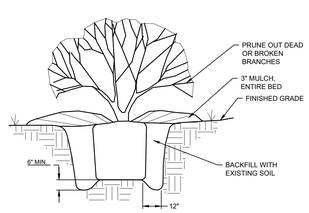
NOT TO SCALE




SECTION

## SHRUB PLANTING DETAIL

NOT TO SCALE




PRELIMINARY - NOT FOR CONSTRUCTION

PARKS & RECREATION DEPARTMENT
207 Franklin Street
Milford, DE 19963

PHONE 302.422.1104
FAX 302.422.0409
www.cityofmilford.com

TO: Rob Pierce-Planning Director

FROM: Brad Dennehy-Parks and Recreation Director

DATE: March 14, 2023

RE: Preliminary Conditional Use Site Plan Milford Middle School property at 512 Lakeview Avenue.

---

The Milford Tree Preservation and Advisory Council is a City of Milford appointed board of volunteers. The goal of the Tree Preservation & Advisory Council is to ensure the City will realize the benefits of trees by proposed policies, regulations, and standards necessary to:

1. Establish and maintain the appropriate amount of tree cover on public lands and to maintain an inventory of its City trees.
2. Maintain City trees in a healthy and nonhazardous condition through good arboricultural practices.
3. Establish and maintain diversity toward native tree species and age classes to provide a healthy and stable urban forest.
4. Study, investigate, develop and/or update, and administer a written plan for the care, preservation, pruning, planting, replanting, removal or disposition of trees and shrubs in parks, along streets and in other public areas. Such plan will be presented to the City Council and, upon its acceptance and approval, shall constitute the official comprehensive tree plan for the City of Milford.
5. Prepare and submit a tree planting/maintenance budget to Council for approval.
6. Advise the City Manager on making application for and receiving grants or contributions of money, technical assistance and labor from any person, organization or agency, and, on the expenditure of such grants or contributions for specific projects relating to the planning, management, care, planting and preservation of trees in the community forest and for the beautification of the City of Milford.
7. Assist and work with individuals and businesses developing new residential, commercial, or industrial sites to preserve existing trees or oversee proper replacement of trees removed from the site being developed.
8. Educate the public about the benefits of trees and their proper care.

On February 15th, the Milford Tree Preservation and Advisory Council met for their quarterly meeting.

One of the items on the agenda was the proposed plan for the rehabilitation of the old Milford Middle School located on Lakeview Avenue and specifically the existing trees on the Milford School District property.

The Advisory Council discussed at length the proposed plan by Milford School District to remodel the school. The plan which was shared with the public depicts the removal of the established Cherry trees from the existing entrance facing Lakeview Avenue for apparently aesthetic reasons.

As the Director who oversees the City of Milford Arborist, I was instructed by the Advisory Council to investigate the health of the Cherry trees. In the opinion of the arborist the Cherry trees for the most part are in acceptable health, however they need some pruning and care.

The Advisory Council discussed and voted, that if the trees were deemed to be healthy enough after inspection from the arborist, then they would like a letter sent to the Development Advisory Committee. As part of the preliminary conditional use site plan review, the Milford Tree Preservation and Advisory Council is requesting that the trees remain as part of the remodeling of the school and be incorporated into the overall landscape plan and design.

Also please note that the chairman of the Tree Preservation and Advisory Council chairperson removed himself from all discussions pertaining to this matter.

DAVIS BOWEN & FRIEDEL, INC.

ARCHITECTS • ENGINEERS • SURVEYORS

*Ring W. Lardner, P.E.*
*W. Zachary Crouch, P.E.*
*Michael E. Wheedleton, AIA, LEED GA*
*Jason P. Loar, P.E.*
*Jamie L. Sechler, P.E.*

July 18, 2023

City of Milford
180 Vickers Drive
Milford, DE 19963

Attn: Rob Pierce
Planning & Economic Development Director

Re: Milford Middle School Revitalization
Preliminary Site Plan
Tax Map# 1-30-3.07-138.00
DBF #: 1022A017

Dear Mr. Pierce:

We received your comment letter via email for the above reference project dated July 07, 2023, and offer the following responses:

**General :**

1. Provide a tree preservation and landscaping plan per Chapter 230-19.8. In addition, show the required landscaping outlined in Chapter 230-20(L) on the landscaping plan.
   **Addressed with Comment – Label the existing trees to remain and to be removed on the Landscaping Plan.**
   ***Landscape Plan sheet L101 has been revised accordingly.***
2. Provide a lighting plan with final site plan submission for review.
   **Comment Remains.**
   ***Site lighting locations are shown on the plan, full lighting design will be provided with final site plan submission.***
3. Provide SFMO, DelDOT and SCD approvals with the final site plan submission.
   **Comment Remains.**
   ***Approvals will be provided once received.***
4. Provide a lot consolidation or lot line adjustment plan for review. All the school improvements, including buildings and parking lots, must be located on the same tax parcel.
   **Addressed.**
5. Coordinate electric needs to the site with the Electric Department during final site plan review.
   **Comment Noted.**
6. The Tree Preservation and Advisory Council (see attached letter) is requesting that the cherry trees from the existing entrance facing Lakeview Avenue remain as part of the remodeling of the school and be incorporated into the overall landscape plan and design.
   **Comment Remains – Please label the existing cherry trees on the Landscaping**

**plan and revise the plan accordingly. In addition, City Council as part of the conditional use site plan will need to determine which trees can be removed.**

***Landscape Plan has been revised accordingly.***

**Data Column:**

7. Update the general site plan notes with the attached.

   **Addressed with comment – Complete note 4 and revise the plan accordingly.**

   ***Notes have been revised accordingly.***
8. Currently, the side setback is listed as 10'. According to City of Milford Zoning section 230-9 – R-1 the side setbacks are 12' each. Revise the plans accordingly.

   **Addressed.**
9. Provide the minimum required and actual lot area.

   **Addressed.**
10. Provide the minimum required and actual lot width.

    **Comment Remains – Provide actual lot width.**

    ***Actual lot width has been provided on the Data Column.***
11. Provide the calculations for the parking spaces that are listed on the Site Data.

    **Comment Remain – The total number of parking spaces do not match the number of spaces in sheet C101. Revise the plans accordingly so the total number of parking spaces in the site data column match the number of parking spaces on the plan.**

    ***Parking spaces and Data Column have been revised accordingly.***
12. Verify if the City of Milford provides solid waste collection for the school.

    **Comment Remains – The data column is still showing City of Milford as solid waste collection provider for the school, revise accordingly.**

    ***The data column has been revised to show solid waste service as "Private"***
13. Provide a minimum of two benchmarks.

    **Addressed.**
14. Provide the impervious coverage for each impacted property.

    **Addressed.**

**Sheet C-002:**

15. Update the general construction notes with the attached.

    **Addressed with comment – Complete note 4 and revise the plan accordingly.**

    ***Notes have been revised accordingly.***

**Sheet C-051:**

16. Label all existing paved and concrete areas in the site.

    **Addressed.**
17. Label all existing utilities on the site.

    **Addressed.**
18. Label the zoning of the adjacent properties.

    **Addressed.**
19. Fix overlapping text along the front of the school near lakeview avenue.

    **Addressed.**
20. Revise the plan accordingly to label the right-of-way and pavement widths for Lakeview

Avenue, School Place, Kent Place, and Seabury Avenue. In addition, label Lakeview Avenue and Seabury Avenue as State maintained, and School Place and Kent Place as City maintained. **Addressed.**

**Sheet C-052:**

21. Provide a tree preservation and planting plan per Chapter 230-19.8. No trees can be removed until City Council has granted approval of the tree preservation and planting plan.
    **Addressed with comment – label the existing trees to remain and add them to Landscape schedule.**
    ***Landscaping Plan (L101) has been revised to label existing trees to remain.***

**Sheet C-101:**

22. Label/dimension all setback lines.
    **Addressed.**
23. Provide the zoning for all adjacent properties.
    **Addressed.**
24. Revise the plan accordingly to label the right-of-way and pavement widths and who owns/maintains (i.e., state owned/maintained) Lakeview Avenue, School Place, Kent Place, and Seabury Avenue.
    **Addressed.**
25. Add required landscaping per Chapter 230-20(F) to screen parking lots from residential properties across streets. This pertains to the parking lot facing School Place along the north side of the school, the parking lot facing Kent Place to the south and east of the school building, the proposed parking lot near the intersection of Lakeview Avenue and Kent Place facing Lakeview Avenue and the existing parking lot for the running track facing Kent Place.
    **Comment remains – Screening shall be provided for the parking lot facing Lakeview Avenue at the southwest corner of the property and for the gravel parking lot facing Kent Place. The purpose of the screening is to reduce highlights shining towards the residential properties.**
    ***Landscaping Plan (L101) has been revised to provide additional screening.***
26. Show the 15' off-street parking setback and ensure all parking lots meet this requirement.
    **Addressed.**
27. Add bicycle parking per City of Milford zoning Chapter 230-20(M).
    **Comment Remains – Provide the number of spaces on each bicycle rack. Based on City of Milford Zoning Code, for parking facilities with 10 or more parking spaces, five bicycle spaces plus on for every twenty parking spaces shall be provided.**
    ***Bicycle parking spaces have been added to the Data Column on Title Sheet C001 and Site Plan Key on sheet C102. A detail has also been provided on Construction Details C602.***
28. Show the existing all-way stop conditions and pedestrian crosswalks on Seabury Avenue and revise the plan accordingly.
    **Addressed.**
29. Investigate the feasibility of installing all-way stop conditions at either Kent Place and

Lakeview Avenue and/or School Place and Lakeview Avenue depending on the student drop-off/pick-up plan.

**Comment Noted.**

30. Add a shared use path along Lakeview Avenue per the City's Comprehensive Plan and Bicycle Master Plan. In addition, add a shared use path along Kent Place and revise the plans accordingly.

    **Comment Remains – Currently label "b" is for "Concrete Sidewalk" along Lakeview Avenue, revise accordingly.**

    ***Site plan key was revised to be labeled as shared use path.***

31. Add a shared use path along Seabury Avenue and remove existing sidewalk per the City's Comprehensive Plan and Bicycle Master Plan.

    **Comment Remains – Currently label "B" is for "Concrete Sidewalk" along Seabury Avenue, revise accordingly.**

    ***Site plan key was revised to be labeled as shared use path.***

32. Provide a 36-foot-wide roadway along Kent Place from Lakeview Avenue to the proposed second entrance to this site. The 36 feet would allow for two travel lanes and on-street parking on both sides of the road. Then from the second entrance to Seabury Avenue, provide a 26-foot-wide roadway. Installation of a new curb line along Kent Place for the entire length of school's frontage is also required. Revise the plans accordingly.

    **Addressed with comment – continue the curb line and edge of pavement on Kent Place.**

    ***Curbing has been provided the entire length of Kent Place.***

33. Move the existing entrance to the gravel parking lot for the running track further to the west away from the Seabury Avenue intersection. The applicant may want to consider connecting this parking lot with the proposed lot to the rear of the school and paving for convenience of the users of these facilities. The parking lot should be appropriately striped to meet the City's parking lot requirements and ADA requirements.

    **Addressed.**

34. Remove the property line in the middle of the site so the improvements for parking lot and school redevelopment are on one single parcel.

    **Addressed.**

35. Add trees along School Place and Seabury Avenue to fill in the gap of street trees.

    **Addressed.**

**Sheet C-102:**

36. Move the proposed dumpster location to the rear of the school, potentially in the parking lot near the right field corner of the existing baseball field to minimize impacts on neighboring properties. In addition, provide screening around the trash enclosure and provide details.

    **Comment Noted.**

37. Label the proposed sidewalk along School place east of bus loading parking to tie-in to the existing sidewalk.

    **Addressed.**

38. Extend the sidewalk heading north through the middle of the parking lot so that it connects with the sidewalk along School Place.

    **Addressed.**

39. Dimension the typical sidewalk widths. All sidewalks must be minimum 5' in width.
    **Addressed.**
40. The City recommends adding a sidewalk from the crosswalk near the playground to the east between the baseball field and the playground to School Place.
    **Addressed.**
41. Shift the second entrance east of Lakeview Avenue along School Place to the east side of the parking lot near the playground. Chapter 230-20(I) requires 75 feet of separation between entrances.
    **Addressed.**
42. Provide a student drop-off/pick-up plan showing vehicle and bus stacking and anticipated movements for review.
    **Comment Noted.**
43. Per Chapter 230-20(K) of City of Milford Zoning, all permanent parking areas shall be enclosed with upright concrete curbing at least six inches in height. This may be relaxed for a portion of the parking area where there is a demonstrated need to convey stormwater to a stormwater management area.
    **Addressed.**
44. Provide the height of any proposed fences on the site.
    **Addressed.**
45. Provide a loading space for the building in the parking lot area.
    **Addressed.**
46. Indicate any school signage locations and types. Will the school be requesting the use of an Electronic Messaging Center? If so, this requires a conditional use approval from City Council in a residential zone.
    **Comment Noted.**
47. Provide additional information regarding the existing well near the running track.
    **Comment Remains.**
    ***It has been confirmed that the existing well at the running track is for irrigation purposes and it is to remain for future use.***

**Sheet C-302:**

48. Provide spot elevations at all corners of the proposed building so positive drainage away from the building can be verified.
    **Comment Remains – Currently the spot elevations at the corner of the building are shown lower than the surrounding area on the south of the building along Kent Place. Revise the grading plans so building elevation is higher than the surrounding grade.**
    ***In this area a portion of the building is to remain so the building elevation/ finish floor cannot be altered. The area has been regraded to direct runoff away from the building and a drainage inlet added to collect runoff.***
49. Currently, there is no drainage provided for the school bus area. Provide drainage for the school bus area.
    **Comment Noted.**
50. Provide storm drain pipe profiles including the material and size with the final submission.
    **Addressed with comment – Remove label P35 near CB22.**

***Label has been removed.***

51. Currently, the existing storm drain pipe from proposed MH1 to the existing SWM 101 is not showing on the plan. Revise the plans so this pipe is showing.

    **Comment Noted.**

**Sheet C-502:**

52. Provide utility profiles with the final submission with the size and materials so the vertical separation can be verified.

    **Comment Remains.**

    ***Additional utility profiles have been provided on sheet C503.***

53. There are several water services and sewer services that are shown on this plan that appear to go nowhere. Any unused utility services will need to be appropriately abandoned at the water or sewer mains.

    **Addressed.**

54. Show all existing utilities in the project area. There appears to be a missing water main not being shown on Kent Place.

    **Comment Remains – the water main along Kent Place is not shown.**

    ***All known utilities are shown and appropriately labeled. The water main along Kent Place runs from Seabury Ave outside of the roadway in the grassed area where it terminates near the end of the existing gravel lot.***

55. The 12" sanitary sewer line exiting the south side of the building appears to interconnect with the storm drain along Kent Place.

    **Comment Remains – Remove existing sanitary sewer pipe that has been bored through the existing storm drain manhole and install a new sanitary sewer pipe with a minimum 10' horizontal separation from the storm drain pipe. The storm drain manhole also needs to be replaced.**

    ***The existing and proposed sewer laterals have been revised to reroute the service around the existing storm sewer. The existing sewer pipe shall be abandoned in place.***

56. Currently, it doesn't appear any sanitary sewer connects to the proposed building. Show sanitary sewer connection to the proposed building and revise the plans accordingly.

    **Addressed.**

57. Show a water meter and a water valve close to the property line and provide an easement so the City can have access.

    **Comment Remains – Provide easement for the water meter and revise the plans accordingly.**

    ***Water meter and valve have been relocated into the recorded permanent easement.***

58. Provide a note indicating how the water is tapping to the existing 10" water main.

    **Addressed**

**Sheet C-601:**

59. Provide a trash enclosure detail.

    **Addressed.**

**Sheet V-104:**

60. Provide City approval statements.
    **Addressed.**
61. Provide Site Data on the record plan.
    **Addressed.**
62. Provide the zoning of the adjacent properties.
    **Addressed.**

**New Comments:**

63. Currently, there are a few rows of parking spaces that are more than 10 spaces in a row. Based on City of Milford zoning Article IV Section 230-20, L(b), one island or peninsula (minimum of 9'x18') is required for every contiguous spaces. Revised the plans accordingly.
    ***Plans were revised accordingly.***
64. Currently, the number of FG (Fagus Grandifolia) listed on the landscape schedule do not match the number of FG in the plan when added, revised accordingly.
    ***The quantity of FG was verified to match the amount on the plan.***
65. Show all proposed and existing fire hydrants.
    ***Proposed and existing fire hydrants have been labeled.***
66. Turn-on the water line on the Fire Protection Plan.
    ***Water line is shown on Fire Protection Plan.***

If you should have any questions, please feel free to contact me at 410-543-9091 or email spn@dbfinc.com.

Sincerely,
DAVIS, BOWEN AND FRIEDEL, INC.



Steven P. Nichols, PE
Civil Engineer

Enclosures

KCI TECHNOLOGIES
ISO 9001:2015 CERTIFIED
ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS
1352 Marrows Road, Suite 100 • Newark, DE 19711 • Phone 302-731-9176 • Fax 302-731-7807

July 28, 2023

City of Milford
201 South Walnut Street
Milford, Delaware 19963

Attention: Rob Pierce

**Subject:** **Milford Middle School – Preliminary Site Plan**
KCI Job No. 131803632 – Task 56

Dear Mr. Pierce,

As requested, KCI Technologies reviewed the Preliminary Site Plans for Milford Middle School per the City of Milford's Standard Specifications, codes, and general engineering best practices. These plans were submitted by Davis Bowen & Friedel, Inc. and are dated October 2022 revised May 22, 2023.

**We offer the following comments for your consideration. Submit Final plans with your next submission.**

**General:**

1. Provide a tree preservation and landscaping plan per Chapter 230-19.8. In addition, show the required landscaping outlined in Chapter 230-20(L) on the landscaping plan. Addressed with Comment – Label the existing trees to remain and to be removed on the Landscaping Plan. **Addressed.**
2. Provide a lighting plan with final site plan submission for review. Comment Remains. **Comment Remains – Provide a full lighting plan with your final submission.**
3. Provide SFMO, DelDOT and SCD approvals with the final site plan submission. Comment Remains. **Comment Remains.**
4. The Tree Preservation and Advisory Council (see attached letter) is requesting that the cherry trees from the existing entrance facing Lakeview Avenue remain as part of the remodeling of the school and be incorporated into the overall landscape plan and design. Comment Remains – Please label the existing cherry trees on the Landscaping plan and revise the plan accordingly. In addition, City Council as part of the conditional use site plan will need to determine which trees can be removed. **Addressed with Comment –**

**The quantities for the existing trees on the landscaping plan don't match the quantities on the schedule, revise accordingly.**

**Data Column:**

5. Update the general site plan notes with the attached. Addressed with comment – Complete note 4 and revise the plan accordingly. **Addressed.**
6. Provide the minimum required and actual lot width. Comment Remains – Provide actual lot width. **Addressed.**
7. Provide the calculations for the parking spaces that are listed on the Site Data. Comment Remains – The total number of parking spaces do not match the number of spaces in sheet C101. Revise the plans accordingly so the total number of parking spaces in the site data column match the number of parking spaces on the plan. **Addressed.**
8. Verify if the City of Milford provides solid waste collection for the school. Comment Remains – The data column is still showing City of Milford as solid waste collection provider for the school, revise accordingly. **Addressed.**

**Sheet C-002:**

9. Update the general construction notes with the attached. Addressed with comment – Complete note 4 and revise the plan accordingly. **Addressed.**

**Sheet C-052:**

10. Provide a tree preservation and planting plan per Chapter 230-19.8. No trees can be removed until City Council has granted approval of the tree preservation and planting plan. Addressed with comment – label the existing trees to remain and add them to Landscape schedule. **Addressed with Comment – The quantities for the existing trees on the landscaping plan don't match the quantities on the schedule, revise accordingly.**

**Sheet C-101:**

11. Add required landscaping per Chapter 230-20(F) to screen parking lots from residential properties across streets. This pertains to the parking lot facing School Place along the north side of the school, the parking lot facing Kent Place to the south and east of the school building, the proposed parking lot near the intersection of Lakeview Avenue and Kent Place facing Lakeview Avenue and the existing parking lot for the running track facing Kent Place. Comment remains – Screening shall be provided for the parking lot facing Lakeview Avenue at the southwest corner of the property and for the gravel parking lot facing Kent Place. The purpose of the screening is to reduce highlights shining towards the residential properties. **Addressed.**
12. Add bicycle parking per City of Milford zoning Chapter 230-20(M). Comment Remains – Provide the number of spaces on each bicycle rack. Based on City of Milford Zoning Code, for parking facilities with 10 or more parking spaces, five bicycle spaces plus one for every twenty parking spaces shall be provided. **Addressed.**

13. Add a shared use path along Lakeview Avenue per the City's Comprehensive Plan and Bicycle Master Plan. In addition, add a shared use path along Kent Place and revise the plans accordingly. Comment Remains - Currently label "B" is for "Concrete sidewalk" along Lakeview Avenue, revise accordingly. **Addressed.**
14. Add a shared use path along Seabury Avenue and remove existing sidewalk per the City's Comprehensive Plan and Bicycle Master Plan. Comment Remains – Currently label "B" is for "concrete sidewalk" along Seabury Avenue, revise accordingly. **Addressed.**
15. Provide a 36-foot-wide roadway along Kent Place from Lakeview Avenue to the proposed second entrance to this site. The 36 feet would allow for two travel lanes and on-street parking on both sides of the road. Then from the second entrance to Seabury Avenue, provide a 26-foot-wide roadway. Installation of a new curb line along Kent Place for the entire length of school's frontage is also required. Revise the plans accordingly. Addressed with comment – continue the curb line and edge of pavement on Kent Place. **Addressed.**

**Sheet C-102:**

16. Provide additional information regarding the existing well near the running track. Comment Remains. **Comment Remains - Please label the well to remain undisturbed in the site plan.**

**Sheet C-302:**

17. Provide spot elevations at all corners of the proposed building so positive drainage away from the building can be verified. Comment Remains – Currently, the spot elevations at the corners of the building are shown lower than the surrounding area on the south of the building along Kent Place. Revise the grading plans so building elevation is higher than the surrounding grade. **Comment Remains – The southeast building corner (adjacent to the proposed loading dock), northeast building corner (as well as the 26.66, 26.59 spot grades along the sidewalk), and along the west side of the building closest to catch basin 'CB-34' still are lower than the adjacent grading. All grading shall be revised to promote positive drainage away from the building and shall not create any low spots unless a proposed structure is also proposed.**
18. Provide storm drainpipe profiles including the material and size with the final submission. Addressed with comment – Remove label P35 near CB22. **Addressed.**

**Sheet C-502:**

19. Provide utility profiles with the final submission with the size and materials so the vertical separation can be verified. Comment Remains. **Comment Remains – Show 8" sanitary sewer crossing between CB-35 and CB-36. In addition, show water lines crossing CB-4 and CB-5 on sheet C406 and revise the plan accordingly. All utility crossings shall be shown on the storm drain profiles so the vertical separation can be verified. Also show water crossings sanitary sewer between SMH-2 and SMH-3.**

20. Show all existing utilities in the project area. There appears to be a missing water main not being shown on Kent Place. Comment Remains – the water main at Kent Place is not shown. **Comment Noted.**
21. The 12" sanitary sewer line exiting the south side of the building appears to interconnect with the storm drain along Kent Place. Comment Remains – Remove existing sanitary sewer pipe that has been bored through the existing storm drain manhole and install a new sanitary sewer pipe with minimum 10' horizontal separation from the storm drainpipe. The storm drain manhole also need to be replaced. **Addressed.**
22. Show a water meter and a water valve close to the property line and provide an easement so the City can have access. Comment Remains – Provide easement for the water meter and revise the plans accordingly**. Comment Remains – Show permanent easements on the utility plans and revise the plans accordingly.**
23. Currently, there are a few rows of parking spaces that are more than 10 spaces in a row. Based on City of Milford zoning Article IV Section 230-20, L(b), one island or peninsula (minimum of 9'x18') is required for every 10 contiguous spaces. Revise the plans accordingly. **Addressed.**
24. Currently, the number of FG (Fagus Grandifolia) listed on the landscape schedule do not match the number of FG in the plan when added, revise accordingly. **Addressed.**
25. Show all proposed and existing fire hydrants. **Addressed.**
26. Turn-on the water line on the Fire Protection Plan. **Addressed.**

If you have any questions or comments regarding this letter, please do not hesitate to contact us any time.

Sincerely,

Ardalan Faghri,
Project Designer

Thomas K. Fruehstorfer
Senior Project Manager

STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

October 24, 2022

Timothy Metzner
Davis, Bowen & Friedel, Inc.
1 Park Avenue
Milford, DE 19963

RE: PLUS review – 2022-09-11; Milford Middle School

Dear Mr. Metzner:

Thank you for meeting with State agency planners on September 28, 2022 to discuss the proposed plans for the Milford Middle School. According to the information received, you are seeking review of a site plan for the renovation and expansion of the existing Milford Middle School with a proposed gross square footage of 132,910 SF to serve grades 5 and 6 (approximately 1000 students).

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State, and local regulations regarding this property. We also note that as the City of Milford is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the Town.**

## Strategies for State Policies and Spending

This project is located in a Level 1 investment area, which is consistent with the 2020 Strategies for State Policies and Spending.

Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy. Development in Level 1 is consistent with the 2020 Strategies for State Policies and Spending; therefore, the Office of State Planning Coordination has no objections to this site plan provided it meets the relevant codes and ordinances of the City of Milford.

## Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Stephen Bayer 302-760-4834

- The site accesses on Lakeview Avenue/ Causey Avenue (Delaware Route 36) must be designed in accordance with DelDOT's Development Coordination Manual, which is available at http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes.

- Pursuant to Section 1.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review. The form needed to request the meeting and guidance on what will be covered there and how to prepare for it is located at https://www.deldot.gov/Business/subdivisions/pdfs/Meeting_Request_Form.pdf?08022017. The project coordination meeting held on 7/21/2022 is not sufficient for this purpose.

- Section 1.7 of the Manual addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.

- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. Using the 11th edition of the Institute of Transportation Engineers' Trip Generation Manual, DelDOT estimates that the subject development, consisting of 1,000 students for a middle school, would generate 2,102 vehicle trip ends per day and estimates the weekday morning and evening peak hour trip ends at 670 and 150, respectively. Therefore, a TIS would be required.

    - The purpose of a TIS, per DelDOT regulations, is to determine the offsite improvements for which the developer should be responsible to build or contribute toward. In addition to whatever other offsite improvements may be identified, DelDOT anticipates requiring the developer to improve Delaware Route 36 within the limits of their frontage, to meet DelDOT's standards associated with their Functional Classifications. Delaware Route 36 is a Minor Arterial, for which the standard includes 12-foot lanes and 8-foot shoulders. DelDOT anticipates requiring the developer to improve Seabury Avenue (SCR 36A) within the limits of their frontage, to meet DelDOT's standards associated with their Functional Classifications. Seabury Avenue is a Major Collector, for which the standard includes 12-foot lanes and 8-foot shoulders. Frontage, as defined in Section 1.8 of the Manual, includes the length of roadway perpendicular to lines created by the projection of the outside parcel corners to the roadway.

- Questions regarding the requirement to improve the site frontage should be directed to the Sussex County Review Coordinator, Mr. Kevin Hickman. Mr. Hickman may be reached at Kevin.Hickman@delaware.gov or (302) 760-2461.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline of Delaware Route 36. This dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline of Seabury Avenue. The following right-of-way dedication note is required, "**An X-foot wide strip of right-of-way from the centerline is hereby dedicated in fee simple to the State of Delaware, acting by and through the Delaware Department of Transportation.**"

- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, "**A 15-foot wide permanent easement is hereby dedicated in fee simple to the State of Delaware, acting by and through the Delaware Department of Transportation.**"

- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:

  - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.

  - Depiction of all existing entrances within 450 feet of the proposed entrance on Delaware Route 36.

  - Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.

- Section 3.5.4.2 of the Manual addresses requirements for Shared Use Paths (SUP) and sidewalks. For projects in Level 1 and 2 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is required. DelDOT anticipates suggesting the City require sidewalk or shared use path along the site's frontage on School Place and Kent Place as they are roads maintained by the City.

- Section 3.5.4.3 of the Manual addresses walkways, non-residential developments shall provide a system of internal pedestrian connections to encourage safe and convenient pedestrian movement within the site. These pedestrian connections, known as walkways, shall also link the site with the public street sidewalk, transit facilities and shared-use trail system, where they exist.

- In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along Delaware Route 36 and Seabury Avenue.

- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at http://www.deldot.gov/Business/subdivisions/index.shtml.

- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at http://www.deldot.gov/Business/subdivisions/index.shtml.

- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.

Department of Natural Resources and Environmental Control – Contact Clare Quinlan 302-735-3480

**Disclaimer Clause:** Staff from the Delaware Department of Natural Resources and Environmental Control (DNREC) reviewed the project submitted for PLUS review. The absence of comments regarding specific resources does not indicate that there are not additional constraints or environmental issues on site, nor does it indicate DNREC support of a project.

**Concerns Identified Within the Development Footprint**

**Stormwater Management**

This application proposes greater than 5000 square feet of land disturbing activities, therefore, this project will be subject to Delaware's *Sediment and Stormwater Regulations*.

Requirements:

- A Sediment and Stormwater Plan must be developed, then approved by the appropriate plan review agency prior to any land disturbing activity taking place on the site. For this project, the plan review agency is the DNREC Sediment and Stormwater Program.

- Additionally, to address federal requirements, construction activities that exceed 1.0 acre of land disturbance require Construction General Permit coverage through submittal of an

electronic Notice of Intent for Stormwater Discharges Associated with Construction Activity. This form must be submitted electronically (https://apps.dnrec.delaware.gov/enoi/, select Construction Stormwater General Permit) to the DNREC Division of Watershed Stewardship, along with the $195 fee.

- Schedule a project application meeting with the appropriate plan review agency prior to moving forward with the stormwater and site design. As part of this process, you must submit a Stormwater Assessment Study.

Plan review agency contact: DNREC Sediment and Stormwater Program at (302) 739-9921.
E-mail: DNREC.Stormwater@delaware.gov
Website: https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/

General stormwater contact: DNREC Sediment and Stormwater Program at (302) 739-9921.
E-mail: DNREC.Stormwater@delaware.gov.
Website: https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/

**Nutrient Management Plan**
This project proposes open space of 17 acres.

Requirements:

- A nutrient management plan is required for all persons or entities who apply nutrients to lands or areas of open space of 10 acres or more.

Contact: Delaware Department of Agriculture's Nutrient Management Program at (302) 698-4558. Website: https://agriculture.delaware.gov/nutrient-management/

Delaware Emergency Management Agency – Contact Phillip Cane 302-659-2325

**Proposed Project Parcel Flood Concern**

- This/These parcel(s) is/are located within an area of **Minimal Flood Concern of 1000 years or greater.**

**Parcel Status within County Evacuation Zone Location**

- The parcel(s) is located within **Sussex County** and **Not** a part of an Evacuation Zone.

State Historic Preservation Office – Contact Carlton Hall 302-736-7400

- There are no known archaeological sites or known National Register-listed or eligible properties on the parcel.

- The Delaware SHPO appreciates the Milford School District for preserving historic elements of the middle school. The area has been previously disturbed from the construction of the existing middle school and is unlikely to contain intact archaeological resources associated with the parcel.

Delaware State Fire Marshall's Office – Contact Duane Fox 302-739-4394
This document is for information purposes only and does not constitute any type of approval from the Delaware State Fire Marshal's Office.

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

**Fire Protection Water Requirements**

- Water distribution system capable of delivering at least 1,000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers.

- Where a water distribution system is proposed for business occupancy sites, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

**Fire Protection Features**

- All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.

- Buildings greater than 10,000 Sq. Ft., 3-stories or more, over 35 feet in height, or classified as High Hazard are required to meet fire lane marking requirements.

- Show Fire Department Connection location (must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.

- Show Fire Lanes and Sign Detail as shown in DSFPR.

- 75% of building perimeter required to be accessible by fire lanes per DSFPR.

**Accessibility**

- All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates

and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the site must be constructed so fire department apparatus may negotiate it. If a "center island" is placed at an entrance road, it shall be arranged in such a manner that it will not adversely affect quick and unimpeded travel of fire apparatus into the site.

- Any dead-end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet.
    - The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.

- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.

- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

**Gas Piping and System Information**

- Provide type of fuel proposed and show locations of bulk containers on plan.

**Required Notes**

- Provide a note on the final plans submitted for review to read "All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations"
- Proposed Use
- Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
- Square footage of each structure (Total of all Floors)
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Note indicating if building is to be sprinklered
- Name of Water Provider
- Letter from Water Provider approving the system layout
- Provide Lock Box Note (as detailed in DSFPR)
- Provide Road Names, even for County Roads

## Recommendations/Additional Information

This section includes a list of site-specific suggestions that are intended to enhance the project. These suggestions have been generated by the State Agencies based on their expertise and

subject area knowledge. **These suggestions do not represent State code requirements.** They are offered here in order to provide proactive ideas to help the applicant enhance the site design, and it is hoped **(but in no way required)** that the applicant will open a dialogue with the relevant agencies to discuss how these suggestions can benefit the project.

Department of Transportation – Contact Stephen Bayer 302-760-4834

- The applicant is encouraged to work with our Safe Routes to School Program. Information about the program can be found at Safe Routes to School Program - Delaware Department of Transportation (deldot.gov) and any questions can be directed at Thomas Kneaval at Thomas.kneaval@delaware.gov.

- The applicant should expect a requirement that any substation and/or wastewater facilities will be required to have access from an internal driveway with no direct access to Delaware Route 36.

- The applicant should expect a requirement that all PLUS and Technical Advisory Committee (TAC) comments be addressed prior to submitting plans for review.

- Please be advised that the Standard General Notes have been updated and posted to the DelDOT website. Please begin using the new versions and look for the revision dates of March 21, 2019 and March 16, 2022. The notes can be found at https://www.deldot.gov/Business/subdivisions/

Department of Natural Resources and Environmental Control – Contact Clare Quinlan 302-735-3480

**Stormwater Management**

- Where the site and soil conditions allow, integrate runoff reduction techniques including infiltration basins, bioretention (rain gardens), filter strips, and pavers to encourage on-site stormwater infiltration and reduce runoff.

- For improved stormwater management, preserve existing trees, wetlands, and passive open space.

Plan review agency contact: DNREC Sediment and Stormwater Program at (302) 739-9921.
E-mail: DNREC.Stormwater@delaware.gov
Website: https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/

General stormwater contact: DNREC Sediment and Stormwater Program at (302) 739-9921.
E-mail: DNREC.Stormwater@delaware.gov.
Website: https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/

**Drainage**

- All existing drainage ditches on the property should be evaluated for function and cleaned, if needed, prior to the construction of the project.

- Environmental permits or exemptions may be required by the County Conservation District (Standard Plan), the DNREC Sediment and Stormwater Program (eNOI/NOT), Army Corp of Engineers, and/or DNREC Wetlands and Subaqueous Lands Section prior to clearing and/or excavating ditch channels.

- All precautions should be taken to ensure the project does not hinder any off-site drainage upstream of the project or create any off-site drainage problems downstream by the release of on-site storm water.

Contact: DNREC Drainage Program at (302) 855-1930.
Website: https://dnrec.alpha.delaware.gov/drainage-stormwater/

**Water Quality (Pollution Control Strategies)**
This site lies within the Mispillion River Watershed. Surface water quality in this watershed does not meet Federal and/or State Water Quality Standards and a Pollution Control Strategy is in place for this watershed.

- Reduce impervious surfaces on the project site by eliminating areas of impervious pavement and/or using pervious pavement where practicable. Break up large parking lots with planted islands.

- Reduce stormwater runoff by integrating infiltration basins, bioretention (rain gardens), filter strips, and by preserving existing trees, wetlands, and passive open space.

- Reduce the necessity for nutrient application by maintaining open space as meadow or forest planted exclusively with native plants. Native plants are well-suited to our climate and require limited maintenance.

Contact: DNREC Division of Watershed Stewardship's Watershed Assessment Section at (302) 739-9939. https://dnrec.alpha.delaware.gov/watershed-stewardship/

**Additional Sustainable Practices**

- Install electric vehicle charging stations for staff, faculty, and visitors. Installation costs can vary significantly depending on the parking and electricity distribution at a given location, so it is often easier and cheaper to plan for the installation at construction, rather

than doing costly retrofits later. The DNREC Division of Climate, Coastal and Energy offers rebates of up to 90% of the cost of the charging station for commercial, multi-unit dwelling and other public properties. These programs address climate change goals of reducing greenhouse gas emissions and improving overall air quality (https://dnrec.alpha.delaware.gov/climate-coastal-energy/clean-transportation/).

- Consider using renewable energy infrastructure such as solar or geothermal to reduce energy costs and further reduce pollution created from offsite generation. Grant funds and incentives are available for Delmarva Power customers through the DNREC Green Energy Fund, which includes several funding types through the state's major electric utilities (https://dnrec.alpha.delaware.gov/climate-coastal-energy/renewable/assistance/).

- Include space for recycling dumpsters within the preliminary site design stage. These can be placed adjacent to trash dumpsters.

- Incorporate nonmotorized connectivity and install bicycle racks where feasible to help facilitate non-vehicular travel modes.

- Use efficient Energy Star rated products and materials in construction and redevelopment. Energy efficient appliances use less energy over time. This saves consumers and businesses money, while also helping to reduce pollution from power generation.

- Use structural paint coatings that are low in Volatile Organic Compounds to help protect air quality. Air pollution from new construction is generated through the use of maintenance equipment, paints, and consumer products like roof coatings and primers.

- Use recycled materials, such as reclaimed asphalt pavement, to reduce heat island effects on paved surfaces, prevent landfill waste, and lower material costs.

Contact: DNREC Division of Climate, Coastal & Energy at (302) 735-3480.
Website: https://dnrec.alpha.delaware.gov/climate-coastal-energy/

Delaware Emergency Management Agency – Contact Phillip Cane 302-659-2325

**Population**

- The county has a population density of **265.60** per square mile based on the US 2020 Census report, an increase from 2010 at **208.90** persons per square mile.

- The specific census block(s) the project is located on has a total population of 0, though, with development, this will undoubtedly change.

- The adjacent blocks aggregate brings the area to a total population of 445.

**FEMA National Risk Index**

- The FEMA National Risk Index is an online mapping application that identifies communities most at risk of 18 natural hazards: Avalanche, Coastal Flooding, Cold Wave, Drought, Earthquake, Hal, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Riverine Flooding, Strong Wind, Tornado, Tsunami, Volcanic Activity, Wildfire, and Winter Weather. The FEMA National Risk Index is calculated by multiplying the Expected Annual Loss times the Social Vulnerability and dividing that by the Community Resilience.

Expected Annual Loss
× Social Vulnerability
÷ Community Resilience
= Risk Index

- According to FEMA's National Risk Index, the parcel(s) **is** considered **very low** for overall natural hazard risks.

- Community Resilience is a consequence reduction risk component and a community risk factor that represents the ability of a community to prepare for anticipated natural hazards, adapt to changing conditions, and withstand/recover rapidly from disruptions. Social Vulnerability is a consequence-enhancing risk factor that represents the susceptibility of social groups to the adverse impacts of natural hazards.

- Its community resilience is rated as **relatively moderate**. In contrast, its social vulnerability is rated as **relatively moderate**.

**Potential Parcel Solar Panel Capabilities**

- Regarding energy use and consumption, the parcel utilizes **electricity**. as the predominant fuel for heating purposes.

- However, for electricity generation via solar panels, the parcels have an average photovoltaic power potential of **1496 kWh/kWp**. As such, should solar panels be utilized, we recommend an optimum tilt of the photovoltaic modules at approximately **35°**, which could provide a potential of **1811 kWh/m2.**

**Renewable Energy Commitment**

- DEMA strongly encourages the use of renewable energies and high-efficiency appliances and utilities.

- Regarding utilities, DEMA suggests incorporating 90% series furnaces/HVAC systems; the closer to 99%, the better, as well as A/C units of 20 Seer or greater. DEMA recommends using tankless water heaters, and battery backup systems for sump pumps to reduce potential water damage from power failure.

- Lastly, DEMA encourages the integration of modern and emerging technologies, such as the potential for electric vehicles in garages/parking lots, green roofs where applicable and allowable, and the like.

Delaware State Fire Marshall's Office – Contact Duane Fox 302-739-4394

- Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

**Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason, therefore.**

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

David L. Edgell, AICP
Director, Office of State Planning Coordination

CC: City of Milford

DAVIS BOWEN & FRIEDEL, INC.

ARCHITECTS • ENGINEERS • SURVEYORS

*Ring W. Lardner, P.E.*
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*Michael E. Wheedleton, AIA, LEED GA*
*Jason P. Loar, P.E.*
*Jamie L. Sechler, P.E.*

February 14, 2023

Office of State Planning Coordination
122 Martin Luther King Jr, Blvd, Third Floor
Dover, DE 19901

Attn: Mr. David L. Edgell, AICP
Director

Re: PLUS review – 2022-09-11; Milford Middle School
Tax Parcel No: 130-3.07-138.00 & 130-3.07-138.01
City of Milford
DBF# 1022A017

Dear Mr. Edgell,

We are pleased to submit the following responses to the Office of State Planning Coordination's review letter dated October 24, 2022.

## Strategies for State Policies and Spending

This project is located in a Level 1 investment area, which is consistent with the 2020 Strategies for State Policies and Spending.

Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy. Development in Level 1 is consistent with the 2020 Strategies for State Policies and Spending; therefore, the Office of State Planning Coordination has no objections to this site plan provided it meets the relevant codes and ordinances of the City of Milford.
Understood.

## Code Requirements/Agency Permitting Requirements

### Department of Transportation – Contact Stephen Bayer 302-760-4834

- The site accesses on Lakeview Avenue / Causey Avenue (Delaware Route 36) must be designed in accordance with DelDOT's Development Coordination Manual, which is available at http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes.
  We will design the site access in accordance with DelDOT's Development Coordination Manual.

- Pursuant to Section 1.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review. The form needed to request the meeting and guidance on what will be covered there and how to prepare for it is located at https://www.deldot.gov/Business/subdivisions/pdfs/Meeting_Request_Form.pdf?0802

2017. The project coordination meeting held on 7/21/2022 is not sufficient for this purpose.
A Pre-Submittal Meeting will be requested in the near future.

- Section 1.7 of the Manual addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.
  It has been determined this project falls under the LONC submission process, therefore an Initial Stage and Construction Stage fees are not required.

- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. Using the 11th edition of the Institute of Transportation Engineers' Trip Generation Manual, DelDOT estimates that the subject development, consisting of 1,000 students for a middle school, would generate 2,102 vehicle trip ends per day and estimates the weekday morning and evening peak hour trip ends at 670 and 150, respectively. Therefore, a TIS would be required.
  Per further discussion, a TIS is no longer required.

    - The purpose of a TIS, per DelDOT regulations, is to determine the offsite improvements for which the developer should be responsible to build or contribute toward. In addition to whatever other offsite improvements may be identified, DelDOT anticipates requiring the developer to improve Delaware Route 36 within the limits of their frontage, to meet DelDOT's standards associated with their Functional Classifications. Delaware Route 36 is a Minor Arterial, for which the standard includes 12-foot lanes and 8-foot shoulders. DelDOT anticipates requiring the developer to improve Seabury Avenue (SCR 36A) within the limits of their frontage, to meet DelDOT's standards associated with their Functional Classifications. Seabury Avenue is a Major Collector, for which the standard includes 12-foot lanes and 8-foot shoulders. Frontage, as defined in Section 1.8 of the Manual, includes the length of roadway perpendicular to lines created by the projection of the outside parcel corners to the roadway.
      As stated above, a TIS is no longer required.

    - Questions regarding the requirement to improve the site frontage should be directed to the Sussex County Review Coordinator, Mr. Kevin Hickman. Mr. Hickman may be reached at Kevin.Hickman@delaware.gov or (302) 760-2461.
      Understood.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline of Delaware Route 36. This dedication is to provide a minimum of

40 feet of right-of-way from the physical centerline of Seabury Avenue. The following right-of-way dedication note is required, **"An X-foot wide strip of right-of-way from the centerline is hereby dedicated in fee simple to the State of Delaware, acting by and through the Delaware Department of Transportation."**
We acknowledge the ROW required along the frontage of DE Route 36.

- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, **"A 15-foot wide permanent easement is hereby dedicated in fee simple to the State of Delaware, acting by and through the Delaware Department of Transportation."**
  We acknowledge the permanent easement required along the property frontage outside the limits of the ultimate ROW.

- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:

  - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
    A Traffic Generation Diagram will be provided.

  - Depiction of all existing entrances within 450 feet of the proposed entrance on Delaware Route 36.
    All existing entrances within 450 feet of our proposed entrance will be shown on the plan.

  - Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.
    We acknowledge notes of any off-site improvements, agreements, and contributions will be required.

- Section 3.5.4.2 of the Manual addresses requirements for Shared Use Paths (SUP) and sidewalks. For projects in Level 1 and 2 Investment Areas, installation of paths or sidewalks along the frontage on State-maintained roads is required. DelDOT anticipates suggesting the City require sidewalk or shared use path along the site's frontage on School Place and Kent Place as they are roads maintained by the City.
  Understood. We also acknowledge the requirements for Shared Used Paths and sidewalks.

- Section 3.5.4.3 of the Manual addresses walkways, non-residential developments shall provide a system of internal pedestrian connections to encourage safe and convenient pedestrian movement within the site. These pedestrian connections, known as walkways, shall also link the site with the public street sidewalk, transit facilities and shared-use trail system, where they exist.

Understood. We also acknowledge the requirements of walkways within the site.

- In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along Delaware Route 36 and Seabury Avenue.
  We acknowledge the setback requirements of stormwater treatment methods.

- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrances and how long those lanes should be. The worksheet can be found at http://www.deldot.gov/Business/subdivisions/index.shtml.
  We will provide an Auxiliary Lane Worksheet.

- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at http://www.deldot.gov/Business/subdivisions/index.shtml.
  We acknowledge that sight distance triangles are required, and we will provide the spreadsheet provided.

- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.
  We will show all existing utilities on the plan.

**Department of Natural Resources and Environmental Control – Contact Clare Quinlan 302-735-3480**

Concerns Identified Within the Development Footprint

**Stormwater Management**

This application proposes greater than 5000 square feet of land disturbing activities, therefore, this project will be subject to Delaware's Sediment and Stormwater Regulations.
We acknowledge that the project will be subjected to Delaware's Sediment and Stormwater Regulations.

- A Sediment and Stormwater Plan must be developed, then approved by the appropriate plan review agency prior to any land disturbing activity taking place on the site. For this project, the plan review agency is the DNREC Sediment and Stormwater Program.
  Understood. DNREC Sediment and Stormwater Program will be contacted for review for the Sediment and Stormwater Plan.

- Additionally, to address federal requirements, construction activities that exceed 1.0 acre of land disturbance require Construction General Permit coverage through submittal of an electronic Notice of Intent for Stormwater Discharges Associated with Construction Activity. This form must be submitted electronically

(https://apps.dnrec.delaware.gov/enoi/, select Construction Stormwater General Permit) to the DNREC Division of Watershed Stewardship, along with the $195 fee.
We acknowledge to submit a Construction General Permit via electronically with the fee.

- Schedule a project application meeting with the appropriate plan review agency prior to moving forward with the stormwater and site design. As part of this process, you must submit a Stormwater Assessment Study.
Understood. We acknowledge to submit a Stormwater Assessment Study with the submittal.

Plan review agency contact: DNREC Sediment and Stormwater Program at (302) 739-9921.
E-mail: DNREC.Stormwater@delaware.gov
Website: https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/

General stormwater contact: DNREC Sediment and Stormwater Program at (302) 739-9921.
E-mail: DNREC.Stormwater@delaware.gov
Website: https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/

**Nutrient Management Plan**
This project proposes open space of 17 acres. Requirements:

- A nutrient management plan is required for all persons or entities who apply nutrients to lands or areas of open space of 10 acres or more.
Understood. We acknowledge that a nutrient management plan is required for application of nutrients to lands or areas of open space of 10 acres or more.

Contact: Delaware Department of Agriculture's Nutrient Management Program at (302) 698- 4558.
Website: https://agriculture.delaware.gov/nutrient-management/

**Delaware Emergency Management Agency – Contact Phillip Cane 302-659-2325**
**Proposed Project Parcel Flood Concern**

- This/These parcel(s) is/are located within an area of Minimal Flood Concern of 1000 years or greater.
We acknowledge that the site is located within an area of Minimal Flood Concern of 1,000 years of greater.

**Parcel Status within County Evacuation Zone Location**

- The parcel(s) is located within **Sussex County and Not** a part of an Evacuation Zone.
We acknowledge that the parcel is located within Sussex County and **Not** a part of an Evacuation Zone.

**State Historic Preservation Office – Contact Carlton Hall 302-736-7400**

- There are no known archaeological sites or known National Register-listed or eligible properties on the parcel.
  We acknowledge that there are no known archaeological sites or known National Register listed or eligible properties on the parcel.

- The Delaware SHPO appreciates the Milford School District for preserving historic elements of the middle school. The area has been previously disturbed from the construction of the existing middle school and is unlikely to contain intact archaeological resources associated with the parcel.
  We acknowledge your appreciation of preserving historic elements of the existing middle school.

**Delaware State Fire Marshall's Office – Contact Duane Fox 302-739-4394**

This document is for information purposes only and does not constitute any type of approval from the Delaware State Fire Marshal's Office.
Understood.

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):
Understood. We acknowledge to provide a completed application, fee and three sets of plans at the time of formal submission.

**Fire Protection Water Requirements**

- Water distribution system capable of delivering at least 1,000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers.
  We acknowledged the requirements of the proposed water distribution system and that fire hydrants must be within 800 feet on centers.

- Where a water distribution system is proposed for business occupancy sites, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.
  We acknowledge the requirements for fire protection mains.

**Fire Protection Features**

- All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.
  We acknowledge the requirements for automatic sprinkler protections.

- Buildings greater than 10,000 Sq. Ft., 3-stories or more, over 35 feet in height, or classified as High Hazard are required to meet fire lane marking requirements.
  We acknowledge the requirements for fire lane markings.

- Show Fire Department Connection location (must be within 300 feet of fire hydrant),

and detail as shown in the DSFPR.
We acknowledge the requirements for Fire Department Connections.

- Show Fire Lanes and Sign Detail as shown in DSFPR.
We acknowledge Fire Lanes & Sign Detail will be shown on the plan.

- 75% of building perimeter required to be accessible by fire lanes per DSFPR.
We acknowledge the requirements for percentage of building to be accessible by fire lanes.

**Accessibility**

- All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the site must be constructed so fire department apparatus may negotiate it. If a "center island" is placed at an entrance road, it shall be arranged in such a manner that it will not adversely affect quick and unimpeded travel of fire apparatus into the site.
Understood. We acknowledge the need of accessibility to fire apparatus.

- Any dead-end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet.
Understood. We also acknowledge that if a dead-end road is more than 300 feet, a cul-de-sac or turn-around is required.

- The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
Understood. We also acknowledge dimensions will be shown on the plan and the parking is prohibited in the cul-de-sac.

- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
We acknowledge that if traffic speed reduction measures are used, they must be in accordance with DOT requirements.

- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.
We acknowledge that the local Fire Chief shall approve the used of gates into and out of the site.

**Gas Piping and System Information**

- Provide type of fuel proposed and show locations of bulk containers on plan.
We acknowledge that if gas piping is proposed, we will show it and the locations of

any bulk containers in the plan.

**Required Notes**

- Provide a note on the final plans submitted for review to read "All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations"
- Proposed Use
- Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
- Square footage of each structure (Total of all Floors)
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Note indicating if building is to be sprinklered
- Name of Water Provider
- Letter from Water Provider approving the system layout
- Provide Lock Box Note (as detailed in DSFPR)
- Provide Road Names, even for County Roads

  The above referenced notes will be provided on the plans.

## Recommendations/Additional Information

This section includes a list of site-specific suggestions that are intended to enhance the project. These suggestions have been generated by the State Agencies based on their expertise and subject area knowledge. **These suggestions do not represent State code requirements.** They are offered here in order to provide proactive ideas to help the applicant enhance the site design, and it is hoped **(but in no way required)** that the applicant will open a dialogue with the relevant agencies to discuss how these suggestions can benefit the project.

**Department of Transportation – Contact Stephen Bayer 302-760-4834**

- The applicant is encouraged to work with our Safe Routes to School Program. Information about the program can be found at Safe Routes to School Program - Delaware Department of Transportation (deldot.gov) and any questions can be directed at Thomas Kneaval at Thomas.kneaval@delaware.gov.

  Understood.

- The applicant should expect a requirement that any substation and/or wastewater facilities will be required to have access from an internal driveway with no direct access to Delaware Route 36.

  We acknowledge the access requirements for a substation and/or wastewater facility.

- The applicant should expect a requirement that all PLUS and Technical Advisory Committee (TAC) comments be addressed prior to submitting plans for review.

  We acknowledge that all comments be addressed prior to submitting plans for review.

- Please be advised that the Standard General Notes have been updated and posted to the DelDOT website. Please begin using the new versions and look for the revision dates of March 21, 2019 and March 16, 2022. The notes can be found at

https://www.deldot.gov/Business/subdivisions/
Understood.

**Department of Natural Resources and Environmental Control – Contact Clare Quinlan 302-735-3480**

**Stormwater Management**

- Where the site and soil conditions allow, integrate runoff reduction techniques including infiltration basins, bioretention (rain gardens), filter strips, and pavers to encourage on-site stormwater infiltration and reduce runoff.
  We acknowledge the need for runoff reduction techniques if site and soil condition permits.

- For improved stormwater management, preserve existing trees, wetlands, and passive open space.
  We acknowledge the need for improving stormwater management by keeping existing tress, wetlands, and passive open space.

  Plan review agency contact: DNREC Sediment and Stormwater Program at (302) 739-9921.
  E-mail: DNREC.Stormwater@delaware.gov
  Website: https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/

  General stormwater contact: DNREC Sediment and Stormwater Program at (302) 739-9921.
  E-mail: DNREC.Stormwater@delaware.gov
  Website: https://dnrec.alpha.delaware.gov/watershed-stewardship/sediment-stormwater/

**Drainage**

- All existing drainage ditches on the property should be evaluated for function and cleaned, if needed, prior to the construction of the project.
  We acknowledge the need to evaluate existing drainage ditches on the property.

- Environmental permits or exemptions may be required by the County Conservation District (Standard Plan), the DNREC Sediment and Stormwater Program (eNOI/NOT), Army Corp of Engineers, and/or DNREC Wetlands and Subaqueous Lands Section prior to clearing and/or excavating ditch channels.
  We acknowledge that a permit or exemption may be required by the reviewing agencies prior to clearing and/or excavating ditch channels.

- All precautions should be taken to ensure the project does not hinder any off-site drainage upstream of the project or create any off-site drainage problems downstream by the release of on-site storm water.
  We acknowledge that all precautions should be taken to prevent any offsite drainage problems downstream.

Contact: DNREC Drainage Program at (302) 855-1930.
Website: https://dnrec.alpha.delaware.gov/drainage-stormwater/

**Water Quality (Pollution Control Strategies)**

- This site lies within the Mispillion River Watershed. Surface water quality in this watershed does not meet Federal and/or State Water Quality Standards and a Pollution Control Strategy is in place for this watershed.
  Understood. Sussex Conservation District will be contacted to review plans on determining if stricter standards may apply.

- Reduce impervious surfaces on the project site by eliminating areas of impervious pavement and/or using pervious pavement where practicable. Break up large parking lots with planted islands.
  We acknowledge to reduce impervious areas with pervious improvements. We also acknowledge the need to break parking lots with planted islands.

- Reduce stormwater runoff by integrating infiltration basins, bioretention (rain gardens), filter strips, and by preserving existing trees, wetlands, and passive open space.
  We acknowledge the need to integrate stormwater management facilities and by preserving existing trees, wetlands, and passive open space.

- Reduce the necessity for nutrient application by maintaining open space as meadow or forest planted exclusively with native plants. Native plants are well-suited to our climate and require limited maintenance.
  We acknowledge the need to reduce the necessity for nutrient application. We also acknowledge to implement exclusive native plants.

  Contact: DNREC Division of Watershed Stewardship's Watershed Assessment Section at (302) 739-9939.
  Website: https://dnrec.alpha.delaware.gov/watershed-stewardship/

**Additional Sustainable Practices**

- Install electric vehicle charging stations for staff, faculty, and visitors. Installation costs can vary significantly depending on the parking and electricity distribution at a given location, so it is often easier and cheaper to plan for the installation at construction, rather than doing costly retrofits later. The DNREC Division of Climate, Coastal and Energy offers rebates of up to 90% of the cost of the charging station for commercial, multi-unit dwelling and other public properties. These programs address climate change goals of reducing greenhouse gas emissions and improving overall air quality (https://dnrec.alpha.delaware.gov/climate-coastal-energy/clean-transportation/).
  Understood. Discussion is underway with the owner.

- Consider using renewable energy infrastructure such as solar or geothermal to reduce

energy costs and further reduce pollution created from offsite generation. Grant funds and incentives are available for Delmarva Power customers through the DNREC Green Energy Fund, which includes several funding types through the state's major electric utilities (https://dnrec.alpha.delaware.gov/climate-coastal-energy/renewable/assistance/).
Understood. Discussion is underway with the owner.

- Include space for recycling dumpsters within the preliminary site design stage. These can be placed adjacent to trash dumpsters.
  We acknowledge the need for recycling dumpsters within the preliminary site design stage.

- Incorporate nonmotorized connectivity and install bicycle racks where feasible to help facilitate non-vehicular travel modes.
  We acknowledge the need for nonmotorized connectivity and installing bicycle racks where feasible.

- Use efficient Energy Star rated products and materials in construction and redevelopment. Energy efficient appliances use less energy over time. This saves consumers and businesses money, while also helping to reduce pollution from power generation.
  We acknowledge the need for energy efficient appliances.

- Use structural paint coatings that are low in Volatile Organic Compounds to help protect air quality. Air pollution from new construction is generated through the use of maintenance equipment, paints, and consumer products like roof coatings and primers.
  We acknowledge the need for paint coatings low in Volatile Organic Compounds to protect air quality.

- Use recycled materials, such as reclaimed asphalt pavement, to reduce heat island effects on paved surfaces, prevent landfill waste, and lower material costs.
  We acknowledge the need for reclaimed asphalt pavement to reduce heat island effects on paved surfaces.

  Contact: DNREC Division of Climate, Coastal & Energy at (302) 735-3480.
  Website: https://dnrec.alpha.delaware.gov/climate-coastal-energy/

**Delaware Emergency Management Agency – Contact Phillip Cane 302-659-2325**

**Population**

- The county has a population density of 265.60 per square mile based on the US 2020 Census report, an increase from 2010 at 208.90 persons per square mile.
  We acknowledge that the population density has significantly increased per Census report.

- The specific census block(s) the project is located on has a total population of 0, though, with development, this will undoubtedly change.

Understood.

- The adjacent blocks aggregate brings the area to a total population of 445.
  Understood.

**FEMA National Risk Index**

- The FEMA National Risk Index is an online mapping application that identifies communities most at risk of 18 natural hazards: Avalanche, Coastal Flooding, Cold Wave, Drought, Earthquake, Hal, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Riverine Flooding, Strong Wind, Tornado, Tsunami, Volcanic Activity, Wildfire, and Winter Weather. The FEMA National Risk Index is calculated by multiplying the Expected Annual Loss times the Social Vulnerability and dividing that by the Community Resilience.

$$\frac{\text{Expected Annual Loss} \times \text{Social Vulnerability}}{\text{Community Resilience}} = \text{Risk Index}$$

  Understood.

- According to FEMA's National Risk Index, the parcel(s) is considered **very low** for overall natural hazard risks.
  We acknowledge that the parcel is considered very low for overall natural hazard risks.

- Community Resilience is a consequence reduction risk component and a community risk factor that represents the ability of a community to prepare for anticipated natural hazards, adapt to changing conditions, and withstand/recover rapidly from disruptions. Social Vulnerability is a consequence-enhancing risk factor that represents the susceptibility of social groups to the adverse impacts of natural hazards.
  Understood.

- Its community resilience is rated as relatively moderate. In contrast, its social vulnerability is rated as relatively moderate.
  We acknowledge that both community resilience & social vulnerability are rated as relatively moderate.

**Potential Parcel Solar Panel Capabilities**

- Regarding energy use and consumption, the parcel utilizes electricity. as the predominant fuel for heating purposes.
  Understood.

- However, for electricity generation via solar panels, the parcels have an average photovoltaic power potential of 1496 kWh/kWp. As such, should solar panels be utilized, we recommend an optimum tilt of the photovoltaic modules at approximately 35°, which could provide a potential of 1811 kWh/m2.
  Understood. Discussion is underway with the owner.

**Renewable Energy Commitment**

- DEMA strongly encourages the use of renewable energies and high-efficiency appliances and utilities.
  We acknowledge that the use of renewable energies and high-efficiency appliances and utilities are encouraged.

- Regarding utilities, DEMA suggests incorporating 90% series furnaces/HVAC systems; the closer to 99%, the better, as well as A/C units of 20 Seer or greater. DEMA recommends using tankless water heaters, and battery backup systems for sump pumps to reduce potential water damage from power failure.
  We acknowledge the need to have furnaces/HVAC systems to be about 90%. We also acknowledge the need to take preventive measures to avoid potential water damage from power failure.

- Lastly, DEMA encourages the integration of modem and emerging technologies, such as the potential for electric vehicles in garages/parking lots, green roofs where applicable and allowable, and the like.
  We acknowledge the need to integrate modern and emerging technologies where applicable and allowable.

**Delaware State Fire Marshall's Office – Contact Duane Fox 302-739-4394**

- Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications, or brochures.
  Understood.

Should you have any questions or need additional information, please call.

Sincerely,
DAVIS, BOWEN AND FRIEDEL, INC.



Timothy M. Metzner, RLA, LEED AP ND
Associate / Sr. Landscape Architect

Enclosures

TMM
\\Atlas\sal\CIVIL\1022\1022A017 - Milford Middle School\submit\PLUS\2023-02-14\Response Letter.docx

cc: City of Milford – Mr. Rob Pierce, Planning Director

# City of Milford, Delaware
Development Advisory Committee

Comment Sheet

**********

DATE OF REVIEW: March 6, 2023

REVIEWING AGENCY: **Delaware State Fire Marshal's Office, Sussex Office**

INDIVIDUAL REVIEWERS: **Duane T. Fox, CFPS, CFPE, CFI, Asst. Chief Technical Services**
**Dennett E. Pridgeon, CFPS, CFPE, CFI, Sr. Fire Protection Specialist**
**Jefferson L. Cerri, CFI, Sr. Fire Protection Specialist**
**Desiree B. McCall, CFI, Sr. Fire Protection Specialist**
**John A. Colpo, Fire Protection Specialist**

AGENCY PHONE NUMBERS: **302-856-5298, Fax: 302-856-5800**

RE: MILFORD MIDDLE SCHOOL REVITALIZATION (23-012)

*The reasons and conditions applied to this project and their sources are itemized below:*

**********

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. **Fire Protection Water Requirements**:
- Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Education)
- Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. **Fire Protection Features:**
- All structures over 10,000 sqft aggregate will require automatic sprinkler protection installed.
- Buildings greater than 10,000 sqft, 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.
- Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
- Show Fire Lanes and Sign Detail as shown in DSFPR

c. **Accessibility**
- All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This

means that the access road to the subdivision from Lakeview Avenue must be constructed so fire department apparatus may negotiate it.

- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead-end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

d. **Gas Piping and System Information:**
   - Provide type of fuel proposed and show locations of bulk containers on plan.

e. **Required Notes**:
   - Provide a note on the final plans submitted for review to read "All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations"
   - Proposed Use
   - Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
   - Square footage of each structure (Total of all Floors)
   - National Fire Protection Association (NFPA) Construction Type
   - Maximum Height of Buildings (including number of stories)
   - Note indicating if building is to be sprinklered
   - Name of Water Provider
   - Letter from Water Provider approving the system layout
   - Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
   - Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

***THIS DOCUMENT IS INFORMATIONAL ONLY, AND DOES NOT CONSTITUTE ANY TYPE OF APPROVAL FROM THE DELAWARE STATE FIRE MARSHAL'S OFFICE***

STATE OF DELAWARE
**DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL**
DIVISION OF WATERSHED STEWARDSHIP
ENTERPRISE BUSINESS PARK
285 BEISER BOULEVARD, SUITE 102
DOVER, DELAWARE 19904

**CONSERVATION PROGRAMS SECTION**

PHONE: (302) 739-9921
FAX: (302) 739-6724

# MEMORANDUM

TO: Steven Nichols, P.E., Civil Engineer
Davis, Bowen & Friedel, Inc.

FROM: Elaine Z. Webb, P.E., Engineer VI
DNREC Sediment and Stormwater Program

DATE: August 2, 2023

SUBJECT: Milford Middle School
512 Lakeview Avenue, Milford, DE
DNREC Project 2023-030

CC: Sara Hale, Chief Operating Officer, Milford School District
Rob Pierce, City of Milford
Bonnie Arvay, Acting Program Manager II, Sediment and Stormwater Program

The DNREC Sediment and Stormwater Program has reviewed the Sediment and Stormwater Management Step 2 plan submittal made July 10, 2023 for the above referenced project.

Please address the following comments:

1. Please submit DURMM files in Excel format and HydroCAD files in .hcp format with the next submittal.
2. The narrative of the geotechnical report indicates that 12" single ring infiltrometer tests were conducted for SMW-4 through SWM-12 but the test logs are labeled as 4" ring tests.
3. Provide a copy of the notice to the City of Milford for the intent to discharge to their stormwater system.
4. Provide a north arrow on the plan.
5. Update the DNREC Project Number on the coversheet to 2023-030. It seems that we made an error with the number included on the Project Application Meeting notes document.
6. Provide the printed name of the individual that will be signing the owner's certification.

7. The project level DURMM states that the pre-developed imperviousness within the LOD is 6.73 ac while the coversheet site data states the existing impervious is 6.261 acres. Confirm the existing and proposed impervious surface numbers in the site data on the coversheet because they conflict with the RPv computations. Likewise, the limit of disturbance on the coversheet does not agree with the LOD in DURMM.
8. In the Summary Table for RPv Site Compliance, the total site RPv requirement to be managed has been computed in Section 1, so the required runoff to be managed for DA1.2 need not be included. The HydroCAD routing shows over 20,000 cf of runoff being infiltrated in the infiltration basin in the RPv event, far exceeding the total site RPv management requirement. Adjust the Summary Table entries and include it in the narrative under the RPv compliance section.
9. Provide the numeric discharge hydrograph table from HydroCAD for the Pond IB1: Infiltration Basin with the RPv, Cv, and Fv routings.
10. Sheet C402 shows a pipe outlet sediment trap for management of 4.88 acres of drainage area. The pipe outlet is not indicated on the plan nor the discharge location. The scaled dimensions of the depression shown on the plans does not match the dimensions listed in the PST-1 data block.
11. The infiltration basin outlet pipe must be a minimum of 24" in diameter if an emergency spillway is not provided.
12. Confirm that the minimum maintenance access of 15 feet is provided to the perimeter and outlet structure of the infiltration basin.

Please provide and item by item response to these comments including how and where each comment was addressed when resubmitting. DNREC Sediment and Stormwater Program is satisfied that the Step 2 requirements have been met. Please address the above comments and proceed with preparation of the plan and report to address the Step 3 plan review checklist.

Submittals should be directed to DNREC.Stormwater@delaware.gov so that files may be retrieved, filed, and tracked properly for the most efficient review. Please reference the DNREC project number in the subject line of the submittal email.

If you should have any questions, please do not hesitate to contact me at Elaine.Webb@delaware.gov.

## § 200-8. General requirements and design standards.

The following shall be deemed to be minimum requirements and may be varied or waived by the Commission only under circumstances set forth in § 200-6:

A. Streets.

(1) The layout, character, extent, width, grade and location of proposed streets shall be established with due regard to:

(a) Public convenience and safety.

(b) Proposed uses of the land to be served by said streets.

(c) Proper relation and connection with and continuation and projection of streets in the adjacent areas, whether these streets are existing or proposed in another subdivision in a neighborhood plan, in the development plan or in the Official Map, as approved or adopted by the Commission.

(d) Topography and other land features.

(2) The layout of proposed streets shall furthermore be arranged in a manner acceptable to the Commission and City Council.

(3) Local streets shall be laid out so as to discourage their use by through traffic.

(4) Where a subdivision abuts or contains an existing or proposed arterial street, limited-access highway or railroad, the City Council may require marginal access or service streets, reverse frontage with screen planting contained in a nonaccess reservation along the rear property line and deep lots with rear service alleys or other treatment, such as parks, which may be necessary for the protection of residential properties and for separation of through and local traffic, with due regard for the requirements of future approach grades and grade separations.

(5) Where a tract of land is subdivided into lots substantially larger than the minimum size required in the zoning district in which a subdivision is located, the Commission may require that streets and lots be laid out so as to permit future resubdivision in accordance with the requirements of this chapter.

(6) Reserve strips controlling access to streets shall be prohibited except where the control and disposal of land comprising such strips has been placed in the governing body under conditions approved by the City Council such as provided in Subsection A(4) above.

(7) Certain proposed streets may be required to be extended to the boundary line of the subdivision to provide access to tracts which may be subdivided in the future. Wherever necessary, when a street is carried to the boundary line of the subdivision, the City Council may require a temporary turnaround improved to the satisfaction of the City Engineer and of the size specified in Subsection A(16) below at the stub end.

(8) The creation of interconnected streets will be encouraged wherever the City Council finds that such layout will not interfere with traffic convenience and safety. The City Council shall determine the number of connections of streets in the proposed subdivision with existing streets. At least two such connections shall be provided, except where a proposed subdivision only contains one dead-end street.

(9) Street jogs shall be prohibited. Street intersections, where center lines do not meet, shall have center-line offsets of 150 feet or more.

(10) A tangent at least 100 feet long shall be introduced between reverse curves on arterial and collector streets and may be required on all other streets.

(11) Street right-of-way lines deflecting from each other at any point shall be connected with a curve, the radius of which for the inner right-of-way lines shall not be less than 500 feet on arterial streets, 300 feet on collector streets and 100 feet on local streets. The outer right-of-way line shall be parallel to said inner right-of-way line.

(12) Streets shall be laid out so as to intersect as nearly as possible at right angles. The inner right-of-way line of a street intersecting another street at an angle of less than 90° shall be tangent to and follow a curve with a minimum radius of 150 feet centered on the nearest right-of-way line of the intersecting street. The outer right-of-way line shall be parallel to said inner right-of-way line.

(13) Street right-of-way lines at intersections shall be connected with a curve, the radius of which shall be 25 feet.

(14) Street rights-of-way and roadway widths shall be as shown on the official map or development plan and, if not shown thereon, said widths for the various street types, shall not be less than as follows:

(a)

| Street Type (feet) | Right-of-Way Width (feet) | Pavement Width (feet) | Pavement Width with Parking One-Side (feet) | Pavement Width with Parking Both Sides (feet) |
|---|---|---|---|---|
| Arterial | 80 to 110 | 60 to 80 | N/A | N/A |
| Collector | 60 | 38 | 38 | 38 |
| Local for all residential areas | 60 | 24 | 30 | 36 |
| Local for commercial areas | 60 | 26 | 32 | 38 |
| Cul-de-sac and Dead-ends | 60 | 24 | 30 | 36 |
| Marginal access | 60 | 24 | 30 | 36 |
| *Alley, one-way | 20 | 12 | 18 | 24 |

Note:

* The City reserves the right to modify the minimum right-of-way and roadway widths where utilities or other items exist which would necessitate a wider access.

(b) Proposed subdivision streets serving lots with a lot width of less than 60 feet shall be required to provide on-street parking as outlined Chapter 200-8(A)(14)(a). On-street parking for each side of the street shall be determined based on the proposed minimum lot width for each side of the street.

(15) Half streets shall be prohibited except where essential to the reasonable development of a subdivision in conformity with the requirements of this chapter and where the Commission finds that it shall be practicable to require the dedication of the other half when the abutting property is subdivided. Wherever an approved half street shall be adjacent to a subdivision, the other half of the street shall be platted within said subdivision.

(16) Dead-end streets, designed to be so permanently, shall not be longer than 400 feet and shall be provided at the closed end with a turnaround having an outside roadway diameter of 80 feet and a street right-of-way diameter of 100 feet. Dead-end streets are prohibited in alleys where public services are to be provided.

(17) Street names.

(a) Street names shall be selected so as not to duplicate or be confused with the names of existing streets. Street names shall be subject to the approval of the Commission. It is recommended that all new streets shall be named in the following manner:

| General direction | Long | Short (under 1,000 feet) |
|---|---|---|
| North and south | Streets | Places |
| East and west | Avenues | Courts |
| Diagonal | Roads | Ways |
| Curving | Drives | Lanes or Circles |
| Arterial Streets shall be named Boulevards | | |

(18) Street grades shall not exceed 5%.

(19) Street grades shall be not less than 0.5% wherever feasible.

(20) Changes in street grades shall be connected by vertical curves of suitable length.

(21) The width of streets adjacent to areas designed, proposed or zoned for nonresidential use shall be increased by such amount as may be deemed necessary by the Commission to assure the free flow of through traffic without interference by parked or parking cars and to provide adequate and safe parking space.

(22) All required roads shall be constructed in accordance with the City Standard Construction Specifications.

B. Sidewalks, curbs and shared-use paths.

(1) Sidewalks shall be required in all subdivisions on both sides of the street and shall have a minimum width of 5 feet.

(2) Curbs shall be required in all subdivisions to ensure proper drainage of stormwater.

(a) Where rolled curb is proposed, a minimum 3-foot-wide reserve grass strip shall be required between the sidewalk and the curb.

(b) Sidewalk may be placed directly against upright curb.

(3) All required sidewalks shall be constructed in accordance with the City Standard Construction Specifications.

(4) Shared-use paths shall be connected with existing paths and shall be consistent with the City's Bicycle Master Plan and Comprehensive Plan.

C. Easements.

(1) A stormwater or drainage right-of-way with adequate width shall be provided where a subdivision is traversed by a watercourse, drainageway, channel, pipe or stream. Parallel streets, parkways or greenways may be required in relation thereto.

(2) Each lot in a proposed subdivision shall provide a 5-foot-wide general utility easement on each side lot line, a 10-foot-wide general utility easement along the rear property line, and a 15-foot general utility easement along the frontage of the lot for the installation of City utilities and conveyance of drainage.

D. Blocks.

(1) The lengths, widths and shapes of blocks shall be determined with due regard to:

(a) The provision of building sites suitable to the needs of the type of use contemplated.

(b) Zoning requirements as to lot sizes and dimensions.

(c) The control, safety and convenience of pedestrian and vehicular traffic.

(d) The characteristics of topography.

(2) Block length shall not exceed 1,200 feet or be less than 500 feet in length between street lines.

(3) Block widths shall be not less than 275 feet nor more than 450 feet and shall be planned to provide two rows of lots.

(4) Pedestrian walkways other than those adjacent to streets may be required where deemed essential to provide for circulation or access to schools, playgrounds, shopping centers, transportation and other community facilities. Said walkways shall be not less than five feet wide.

E. Lots.

(1) Lot width, depth, shape and orientation and the building setback lines shall be appropriate for the location of the subdivision, for the type of development and for the use contemplated.

(2) Lot sizes shall conform to the requirements of Chapter 230, Zoning.

(3) Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to comply with the off-street parking and loading requirements contained in Chapter 230, Zoning.

(4) Corner lots shall have sufficient width to provide an adequate building site within all the yard requirements. Corner lots shall have two front yard setbacks fronting each street, one side yard setback, and one rear yard setback.

(5) All lots in a subdivision shall have frontage on a public street meeting the minimum lot width requirements of the zoning code.

(6) Double-frontage lots shall be avoided. Reverse-frontage lots shall be provided where necessary for protection of residential properties from through traffic and adverse nonresidential uses, for separation of through and local traffic and to overcome difficulties of topography or other specific conditions. Screen planting and a fence or wall shall be provided along the rear property line within an easement 10 feet or more in width, across which there shall be no right of access.

(7) Side lot lines shall be at right angles or radial to street lines.

(8) No lots shall be platted on land subject to flooding by the 100-year flood elevation for residential or any other use where danger to life or property or an aggravation of flood hazard may result. Such land should be set aside for uses which would not be endangered by periodic or occasional inundations.

(9) No lots shall be platted within 25 feet of land under the jurisdiction of the U.S. Army Corps of Engineers.

F. General grading.

(1) No final slope on the property shall exceed the normal angle of repose of the soil of said slope as determined by the City Engineer, except where said slope consists of a natural rock formation or is supported by a retaining wall or equivalent of a design acceptable to the City Engineer.

G. Improvements.

(1) In major subdivisions the following improvements are required:

(a) Paved streets.

(b) Street signs meeting the State of Delaware, Department of Transportation, Manual on Uniform Traffic Control Devices, latest edition.

(c) Curbs and gutters. Curbs shall be required on both sides of proposed streets as per the City Standard Construction Specifications.

(d) Sidewalks or shared use paths located on both sides of the street.

(e) Streetlighting.

(f) Shade trees. Shade trees 150 feet on center each side of the road shall be located so as not to interfere with utilities or sidewalks and shall be of the types recommended by a Registered Landscape Architect.

(g) Topsoil protection. No topsoil shall be removed from the site or used as spoil. Topsoil moved during the course of construction shall be redistributed so as to provide at least six inches of cover to all areas of the subdivision and shall be stabilized by seeding or planting.

(h) Monuments. Permanent monuments shall be placed on each corner of any building lot by the developer and along the project boundary and the right-of-way at all corners and tangent points prior to final settlement for the property.

(i) Water mains, culverts, storm sewers and sanitary sewers.

[1] All water installations shall be looped; all sewer and storm sewer systems shall be extended at minimum slope, maximum depth, and connected with an approved method and shall be adequate to handle all present and probable future development.

[2] Water and sewer services shall be made available to all adjacent properties.

[3] Utility easements shall be required to be granted and recorded by the subdivider to allow extension of utilities to neighboring properties.

[4] No underground utility installation shall be covered until inspected and approved by the City.

(2) The developer shall complete all utilities and street improvements not specifically waived by City Council in accordance with the City Standard Construction Specifications and with any additional requirements specified by the City Council. (3) The developer shall pay the review and inspection fees as set forth in Chapter 230, Zoning, § 230-57, Planning, Zoning and Engineering Fees. The cost for each segment or phase of the development shall be paid prior to commencement of utility construction.

[Ord. No. 2013-7, § 1, 9-23-2013; Ord. No. 2019-13, § 1, 7-22-2019; Ord. No. 2022-05, § 3, 1-24-2022]

## § 230-9. R-1 Single-Family Residential District.

In an R-1 District no building or premises shall be used and no building shall be erected or altered which is arranged, intended or designed to be used except for one or more of the following uses and complying with the requirements so indicated.

A. Purpose. The intent of the R-1 Residential District is to preserve the spacious residential atmosphere and quality of living of existing low-density residential development, to provide for the orderly and appropriate development of new low-density housing and to allow related uses that would not be detrimental to the residential character of the district.

B. Permitted uses. Permitted uses for the R-1 District shall be as follows:

(1) A single-family detached residential dwelling.

(2) Farming, agricultural activities and roadside stands for the sale of farm and nursery products produced on the property where offered for sale.

(3) Municipal and public services and facilities, including City Hall, water storage towers, water reservoirs, water pumping stations, water treatment plants, sewage pumping stations, sewers (storm and sanitary), street rights-of-way, utility transmission and distribution lines, public transportation bus or transit stops, police and fire stations and substations for electric, gas and telephone facilities.

(4) Parks, playgrounds, athletic fields, recreation buildings, swimming pools and community centers operated on a noncommercial basis for recreation purposes.

(5) Customary residential accessory uses, such as private garages, swimming pools and storage sheds, may be located in any required side or rear yard provided:

(a) The primary residence must exist or be under construction.

(b) All such buildings in the aggregate shall not occupy more than 30 percent of the area of the required rear and side yard.

(c) An accessory structure may not dominate in area, extent or purpose to the principal use or structure. The area of the principal structure shall be calculated using the definition of floor area in this chapter with the inclusion of attached garages.

(d) Such buildings shall be setback five feet from any lot line and shall not be located less than five feet from a principal structure.

(6) Home occupational/office (subject to the following special requirements):

(a) The business activity shall be compatible with the residential zoning of the property and surrounding uses.

(b) The use is carried on entirely by the inhabitants of the dwelling, and shall employ no employees other than family members residing in the dwelling.

(c) The use does not involve any customer, client, or patient visits, whether vehicular or pedestrian, to the dwelling.

(d) Such use involves no pickup, delivery, or removal functions to or from the premises in excess of those normally associated with the residential use.

(e) There shall be no display or sale of retail goods and no stockpiling or inventory of a substantial nature.

(f) There shall be no outside appearance of a business use, including, but not limited to, parking, signs or lights.

(g) The business activity may not use any equipment or process which creates noise, vibration, glare, fumes, odors or electrical or electronic interference detectable to normal senses beyond the property in excess of levels customarily generated by a residential use.

(h) The business activity may not generate any solid waste or sewage discharge, in volume or type, which is not normally associated with residential use in the neighborhood.

(i) The business activity shall only be conducted within the dwelling and the floor area devoted to such use shall not exceed 30 percent of the total floor area for the principal residential structure.

(j) As long as all other criteria is met, more than one home occupation shall be permitted per lot or dwelling.

(k) The practice of a home occupation shall be conducted entirely within the dwelling which is the bona fide residence and under ownership of the principal practitioner or contained entirely within an accessory building and located on the same lot as the dwelling.

(l) There shall be no change in the exterior appearance of the dwelling, any accessory building and/or the lot, which would cause the premises to differ from its residential character.

(m) There shall be no storage or use upon the premises (beyond normal household use) of toxic, explosive, polluting, dangerous, or other substances defined as hazardous by DNREC, or through applicable regulations.

(n) There shall be no unenclosed exterior storage of material or refuse resulting from the home occupation.

(o) Prohibited minor home occupations. Minor home occupations shall not include the following uses:

[1] Animal shelter, commercial kennel or veterinary office;

[2] Rooming or boarding home;

[3] Bed and Breakfast;

[4] Funeral home;

[5] Restaurant;

[6] Outdoor café;

[7] Club or lodge;

[8] Medical or dental office;

[9] Retail shop;

[10] Rental business;

[11] Furniture stripping;

[12] Auto or small engine repair;

[13] Painting of vehicles, trailers, or boats;

[14] Manufacturing, repairing or other mechanical work performed in connection with the home occupation performed in any outdoor area;

[15] Private school with organized classes; private schools are defined as any building or groups of buildings, the use of which meets state requirements for elementary, secondary or higher education and which does not secure the major part of its funding from any governmental agency;

[16] Welding shop;

[17] Other uses of similar character to those listed above.

(7) Family day care home. An occupied residence in which a person provides care for children other than his/her own family and the children of close relatives for compensation. Such care in a family day care home is limited to that care given to six or fewer children with a maximum of three children allowed for after school care. Such child care facility shall be permitted as an accessory use.

C. Conditional uses subject to special regulations. The following uses may be permitted with the approval of a conditional use permit by the Milford City Council in accordance with the provisions in Article IX of this chapter:

(1) Churches and other places of worship and cemeteries.

(2) Public and private elementary, junior or senior high schools.

(3) Day-care facilities, including large family day cares involving more than six children.

(4) Conversion of a one-family dwelling into multiple dwelling units, if such dwelling is structurally sound but too large to be in demand for one-family use and if that conversion would not impair the character of the neighborhood, subject to conformance with the following requirements:

(a) There shall be a lot area of at least 2,000 square feet for each unit to be accommodated.

(b) There shall be a gross leasable floor area, computed as the sum of those areas enclosed by the outside faces of all exterior walls surrounding each story used for the residence, exclusive of any area for any accessory private garage, of at least 500 square feet per family to be accommodated.

(c) Fire escapes and outside stairways leading to a second or higher story shall, where practicable, be located on the rear of the building and shall not be located on any building wall facing a street.

(5) Accessory dwelling units. Accessory dwelling units include accessory apartments and accessory cottages and are subject to the following requirements;

(a) One dwelling unit on the property shall be owner-occupied. A notice and declaration of land use restriction to this effect shall be signed and recorded prior to issuance of a certificate of use and/or building permit for the accessory dwelling unit.

(b) Only one accessory dwelling unit (either apartment or cottage) shall be permitted per property.

(c) Accessory Apartments.

[1] Accessory apartments are only permitted within single-family detached dwellings.

[2] The floor area of an accessory apartment shall not exceed 35% of the single-family detached dwelling.

(d) Accessory Cottages.

[1] An accessory cottage shall contain at least 220 square feet of floor area. The floor area of an accessory cottage shall not exceed 40% of the floor area of the single-family detached dwelling to which it is accessory or 1,200 square feet, whichever is greater.

[2] For an accessory cottage which will be a new structure, the exterior materials, roof form, and window spacing and proportions of the accessory cottage shall approximate those of the existing or proposed single-family detached dwelling.

[3] For an accessory cottage located within an existing garage or other outbuilding, the structure is not required to approximate the exterior features of the existing single-family detached dwelling, but any exterior modification should be consistent with the architectural style of that structure unless the building is upgraded per the requirements for new structures.

[4] Accessory cottages shall comply with the principal structure setbacks for the respective zoning district, unless the accessory cottage is located within an existing garage or other outbuilding, for which the structure must meet the accessory structure setbacks for the respective zoning district.

(6) Major Home Occupation. A home occupation that does not meet one or more of the criteria for a minor home occupation shall be defined as a major home occupation and subject to the following requirements:

(a) Major home occupations shall be permitted only in single-family detached dwellings or an accessory structure to a single-family detached dwelling

(b) The area used for a major home occupation shall not exceed 30 percent or 600 square feet of the total floor area of the principal residential structure or accessory structure.

(c) No more than one person, other than resident members of the immediate family may be employed or subcontracted at the residence. Use of nonresident employees must have prior approval from City Council.

(d) No more than two clients at any one given time shall be permitted to visit the premises to conduct business related to the major home occupation.

(e) No articles shall be sold or offered for sale except those produced on the premises. Such sales must have prior approval from City Council.

(f) Where employees or customer visits are anticipated, off-street parking shall be provided in a sufficient capacity to prevent interference with normal residential parking in the neighborhood. Minimum off-street parking shall apply as outlined in Article IV Off-street Parking and Loading Standards.

(g) Beauty parlors and barber shops may be permitted as a major home occupation provided that no more than two stylist or barber chairs are provided and all other provisions of this ordinance are met.

(h) Instructional services may be permitted as a major home occupation provided that a maximum of three students may be instructed at any one time, and there shall be no more than two trips per hour.

(i) The practice of a home occupation shall be conducted entirely within the dwelling which is the bona fide residence and under ownership of the principal practitioner or contained entirely within an accessory building and located on the same lot as the dwelling.

(j) There shall be no change in the exterior appearance of the dwelling, any accessory building and/or the lot, which would cause the premises to differ from its residential character.

(k) The business activity may not use any equipment or process which creates noise, vibration, glare, fumes, odors or electrical or electronic interference detectable to normal senses beyond the property in excess of levels customarily generated by a residential use.

(l) Deliveries from major commercial suppliers which may be disruptive to the neighborhood shall not be made between the hours of 8:00 pm prevailing time and 8:00 am prevailing time.

(m) There shall be no storage or use upon the premises (beyond normal household use) of toxic, explosive, polluting, dangerous, or other substances defined as hazardous by DNREC, or through applicable regulations.

(n) There shall be no unenclosed exterior storage of material or refuse resulting from the home occupation.

(o) All commercial vehicles shall be parked on the same lot as the home occupation, and only one commercial vehicle may be parked outside of a garage, enclosed structure, or screened parking space within the lot boundaries. Such a commercial vehicle shall have no more than two axles. There shall be not storage of tractor-trailers on the lot on which the home occupation is located.

(p) Prohibited major home occupations. Major home occupations shall not include the following uses:

[1] Animal shelter, commercial kennel or veterinary office;

[2] Rooming or boarding home;

[3] Bed and Breakfast;

[4] Funeral home;

[5] Restaurant;

[6] Outdoor café;

[7] Club or lodge;

[8] Medical or dental clinic (two or more doctors or dentists);

[9] Retail shop;

[10] Rental business;

[11] Furniture stripping;

[12] Auto or small engine repair;

[13] Painting of vehicles, trailers, or boats;

[14] Manufacturing, repairing or other mechanical work performed in connection with the home occupation performed in any outdoor area;

[15] Private school with organized classes; private schools are defined as any building or groups of buildings, the use of which meets state requirements for elementary, secondary or higher education and which does not secure the major part of its funding from any governmental agency;

[16] Welding shop;

[17] Other uses of similar character to those listed above.

(7) Social club or fraternal, social service, union or civic organization.

(8) Cultural facilities, including a library, museum or art gallery.

(9) Country club, regulation golf course, including customary accessory uses, provided that all buildings have a minimum setback of 120 feet from all street and property lines.

(10) Planned unit development, see requirements in Chapter 230-19.9.

(11) Bed-and-breakfast, subject to the following requirements:

(a) The bed-and-breakfast establishment does not adversely affect the residential character of the neighborhood and such use is carried on in an existing residential structure.

(b) The building proposed for use as a bed-and-breakfast must have the owner of the bed-and-breakfast residing in the building as his/her principal residence.

(c) The serving of meals shall be limited to breakfast and afternoon tea for overnight guests and customers.

(d) Rooms used for sleeping shall be part of the primary residential structure and shall not have been specifically constructed for rental purposes.

(e) No exterior alterations other than a sign and those required by law to ensure the safety of the structure shall be made.

(f) The bed-and-breakfast operation shall not use more than 50% of the floor area of the principal residence. Common areas such as the kitchen, foyer, living room or dining room are not included in this calculation.

(g) No areas shall be floodlit. Drives and parking areas shall not be illuminated by lighting fixtures higher than 20 feet. Sidewalks shall not be illuminated by lighting fixtures higher than 15 feet. Exterior lighting shall be so shaded as to prevent illumination off-site. All external lighting, except for demonstrated security needs, shall be extinguished by 10:00 p.m.

(12) Funeral Home or undertaker

D. Area regulations.

(1) Minimum lot area shall be 10,000 square feet. Minimum interior lot shall be 10,000 square feet. Minimum corner lot shall be 13,000 square feet.

(2) Maximum lot coverage shall be 40%.

(3) Minimum lot width shall be 80 feet.

(4) Height of buildings shall not exceed 35 feet. Accessory buildings shall not exceed 15 feet in height.

(5) Minimum front yard setback line shall be 25 feet.

(6) Minimum rear yard shall be 25 feet. For corner lots the rear yard may be reduced 20% in depth to allow for skewing of a residential dwelling on the lot.

(7) Side yards shall be provided as follows: each lot shall have two side yards with a minimum of 12 feet each.

(8) Parking shall comply with the requirements provided in Article IV of this chapter.

(9) Signs shall comply with the requirements provided in Article VI of this chapter.

(10) Landscape screening shall comply with the requirements provided in Article V of this chapter.

(11) Open space and recreational requirements shall comply with Chapter 230-19.7.

(12) Accessory structures for non-residential uses in aggregate shall occupy no more than 30 percent of the required rear and side yard of the lot area and may not dominate in area, extent or purpose to the principal use or structure. The area of the principal structure shall be calculated using the definition of floor area in this chapter.

(13) Accessory structures for non-residential uses shall be located in the side and rear lot areas.

(14) Accessory structures for non-residential uses shall meet the principal use setbacks and shall not be located less than 5 feet from a principal structure.

[Ord. No. 2022-06, 1-24-2022]

## § 230-19.8. Tree Planting and Preservation.

A. Purpose. The purpose of this section is to establish standards and requirements for the protection and planting of trees and woodlands because it is recognized that woodlands and trees are not only desirable, but are essential to the health, safety, and welfare of the population in that they provide oxygen, reduce carbon dioxide, stabilize soil, cleanse the air by transpiring clean water into the atmosphere, cleanse water passing into the ground through the root system, provide protection for wildlife and their habitats, provide shade, reduce noise and glare, increase property values, and provide an important physical, aesthetic, and psychological balance to the built environment.

B. Definitions.

CALIPER DIMENSION — The term "caliper dimension" means an outside diameter measurement of the trunk of a tree measured at a vertical distance of three feet above grade.

CLEARING — The removal of trees from an area of 5,000 square feet or greater, whether by cutting or other means. The term "clearing" shall not include the removal of trees for landscaping purposes by individual lot owners.

DESIGN PROFESSIONAL — The term "design professional" shall be any person licensed as a landscape architect or architect, or Delaware certified nursery professional.

DEVELOPMENT AREA — The area containing all new site features (buildings, parking and drive areas, pedestrian walks, stormwater management areas, buffer areas etc. but not underground utilities) proposed by a plan. The development area shall be delineated using property lines and lines run straight across the property from one property line to another without bending or curving.

DRIPLINE — A line on the ground established by a vertical plane extending from a tree's outermost branch tips to the ground, i.e., the line enclosing the area directly beneath the tree's crown, from which rainfall would drip.

TREE — Any self-supporting, woody perennial plant, usually having a main stem or trunk and many branches and at maturity normally attaining a trunk diameter greater than three inches at any point and height of over ten feet.

TREE PROTECTION AREA — Any portion of a site wherein are located existing trees which are proposed to be retained in order to comply with the requirements of this section. The tree protection area shall include no less than the total area beneath the tree canopy as defined by the dripline of the tree or group of trees collectively.

WOODLAND — An area of contiguous wooded vegetation (7,500 square feet or greater), where trees exist at a density of at least one tree with a caliper dimension of six inches or greater per 375 square feet of land and where the tree branches form a contiguous canopy.

C. Applicability. The terms and provisions of this section shall apply to any activity on real property which requires conditional use, site plan or subdivision approval of the Planning Commission or City Council as set forth in Chapter 200 and Chapter 230, except the provisions in [sub]section 19.8(D) which shall apply to all real property.

D. Tree preservation.

(1) Trees required by the City to be replaced. Trees required by the City as a part of a conditional use, subdivision, or site plan approval shall not be removed unless they are diseased or infested, or present a danger to life and property. In cases where such trees are removed, they must be replaced with a tree planting in accordance with the table of trees standards kept in the Planning Department.

(2) Trees of special value. Trees having a historic value, as determined by the state historic preservation officer, or that are of an outstanding nature due to type or species, age, or other professional criteria, may be required by the City to be preserved. Such trees may be prohibited from being removed by the Planning Director until such time that the City has granted approval to remove such trees.

(3) Tree preservation in wetlands. No portions of wetland areas shall be developed or cleared of vegetation unless granted permission under state and/or federal permit; and they shall remain as essentially undisturbed areas protected under the provisions set forth in Chapter 230.

(4) Clearing prohibited without approval. Clearing, as defined by this section, for any purpose whatsoever, except the establishment of trails and pathways (not greater than eight feet in width) and open yard areas, shall be prohibited unless approved by the City through the site plan, conditional use, or subdivision review process.

E. Woodland preservation.

(1) Tree preservation and selective clearing plan required. All site development proposals which involve the development of woodland areas and require City approval shall include a tree preservation and selective clearing plan as part of the preliminary submission plan. The tree preservation and selective clearing plan shall be prepared in accordance with the provisions of subsection 19.8(E), subsection 19.8(G) and subsection 19.8(H) of this section.

(2) Limited clearing for site development allowed. Generally, site development plans for the construction of a new building within existing woodland areas shall limit clearing of the land to those areas necessary to provide for the placement of the building or group of buildings, adequate access onto the property and to the proposed building or group of buildings, utility placement, off-street parking and yard areas to allow for daylight infiltration and building maintenance. When woodland areas are proposed to be cleared to allow for new construction, clearing within the area of the proposed construction shall be limited to an area of 30 feet from proposed building foundation, and 15 feet from off-street parking lots, and utility placement.

(3) Maximum clearing requirement. Specifically, no more than 50 percent of a lot, parcel or tract of land occupied by woodland vegetation may be cleared for any purpose.

F. Tree preservation and planting in nonwoodlands.

(1) Tree preservation and planting plan required. All developments requiring approval of the City shall be required to submit, with its application and plans, a tree preservation and planting plan as set forth in subsection 19.8(H), and shall conform with the following provisions.

(2) Tree density. For each property required to submit a tree preservation and planting plan, a development area as defined in this section shall be delineated within the nonwoodland area of the property. Within this development area, existing trees may be retained and new trees shall be planted such that the development area shall attain or exceed a tree density of one tree per 3,000 square feet or fraction thereof.

(3) Minimum standards for new trees. For new trees to be counted toward the required tree density, they must be of a species and size as set forth in the table of trees approved by the City and kept on file in the office of the Planning Director, or be of an alternate species found acceptable by the City.

(4) Minimum standards for existing trees. For existing trees to be counted toward the required tree density, the tree shall have a minimum caliper dimension of two inches. No trees over eight inches in caliper dimension shall be removed unless within an area of 30 feet from the proposed building foundation, off-street parking lot, and utility placement.

G. Tree protection and planting requirements.

(1) Application. The following guidelines and standards shall apply to activities regulated under Chapter 200 or Chapter 230:

(2) Protection required. To protect the required trees or woodland and their critical root zone, a tree protection area delineated by the dripline of a tree or group of trees to be retained, shall be established. The protection area shall not be disturbed by site utility and grading work, by construction activities such as parking, material storage, concrete washout, sedimentation intrusion or erosion, or other activity. Damage to trees or woodlands and their critical root zones shall require tree plans to be revised to compensate for the loss as determined by the City Arborist or a qualified professional/consultant.

(3) Protection measures. Tree protection areas shall be protected by fencing, staking, or continuous ribbon and, where necessary, silt screens which shall be situated to coincide with the dripline of the tree or group of trees to be preserved. Protection measures shall be erected prior to construction, and must remain until final landscaping is installed.

(4) Planting requirements. New trees proposed to be planted for credit toward the density requirement shall have spacing that is compatible with the spatial site limitations and with responsible consideration toward species size when mature. Species selected for planting must be ecologically compatible with the specifically intended growing site. Trees selected for planting shall be free from injury, pest, disease, and disorders.

H. Tree preservation, planting and selective clearing plans.

(1) Plan specifications. A tree preservation and planting plan or a preservation and selective clearing plan, prepared by or in conjunction with a design professional, shall be shown on a copy of a preliminary major subdivision plat, or site plan, as appropriate to the proposed development, drawn to the same scale and covering the same area as the other plan documents prepared for the Planning Commission or City Council meeting. The plan may be combined with a required buffer and landscape plan for the project, at the option of the developer. The plan shall provide sufficient information and detail to clearly demonstrate that all applicable requirements and standards of this section will be fully satisfied.

I. Tree mitigation.

(1) City Council or Planning Commission waiver. The City Council or Planning Commission may waive the provisions of subsections 19.8(E)(2), 19.8(E)(3), and 19.8(F)(2), and require replacement planting for mitigation purposes should the City Council or Planning Commission determine, after demonstration by the applicant, that due to physical limitations of the land which would otherwise prohibit the reasonable use of the land, or for purposes of preserving, protecting and promoting the interest of

public health, safety, welfare and/or public convenience. All tree mitigation plantings must occur within the corporate limits of the City of Milford. Tree mitigation may occur off-site in accordance with the provisions listed below in this ordinance:

(a) If a waiver is sought from the provisions of subsection 19.8(F)(2), new tree plantings are required at a rate of 1:1. All new tree plantings shall meet the minimum size at planting requirements of the City of Milford table of trees.

(b) If a waiver is sought from the provisions of subsection 19.8(E)(2) and/or subsection 19.8(E)(3), then mitigation must be in the form of newly created woodland areas. New woodlands shall be created at a rate of 1.25 times the amount of woodlands to be removed. A woodland mitigation plan shall be prepared by a licensed forester, landscape architect, or certified nursery professional, for the consideration of the City Council or Planning Commission.

(c) All tree mitigation must occur on-site unless an off-site location is specifically approved by the City Council or Planning Commission. When considering off-site locations for tree mitigation, the City Council or Planning Commission shall consider:

[1] A physical hardship related to the land which would otherwise prohibit compliance on the subject site.

[2] Whether the mitigation plan proposed by the applicant is superior in terms of environmental benefits, tree quality, or aesthetic qualities compared to strict compliance with the ordinance on-site.

(2) Tree mitigation required for unauthorized clearing. In the event that trees or woodland areas to be preserved under this ordinance or as a condition of a site plan, subdivision, or conditional use approval are illegally removed, tree mitigation shall be required. All tree mitigation plantings must be placed on the same lot, parcel, or tract on which the illegal clearing occurred. All replacement trees must be of the same or a similar variety as the trees illegally removed.

(a) If trees have been removed from non-woodland areas, new tree plantings shall be provided in accordance with the table below:

| Caliper Dimension of Trees Removed | Number of Trees Required | Caliper dimension at Planting |
|---|---|---|
| 25″ or larger | 5 trees | 3″ |
| 17″ to 24″ | 3 trees | 3″ |
| 9″ to 16″ | 3 trees | 3″ |
| 8″ or less | 2 trees | 3″ |

* Note—All trees replanted must be guaranteed to survive a minimum of one year.

(b) If trees have been removed from woodland areas, then mitigation must be in the form of newly created woodland areas. New woodlands shall be created at a rate of 1.75 times the amount of woodlands that were illegally removed. The woodland unlawfully removed must be replanted to satisfy a portion of this requirement. A woodland mitigation plan shall be prepared by a licensed forester, landscape architect, or certified nursery professional, for review and approval by the Planning Director.

(c) If the applicant wishes to provide replacement plantings on any property other than the one on which illegal clearing occurred, the mitigation plan must be reviewed and approved by the City Council or Planning Commission. When considering off-site locations for tree mitigation, the City Council or Planning Commission shall consider:

[1] A physical hardship related to the land which would otherwise prohibit compliance on the subject site.

[2] Whether the mitigation plan proposed by the applicant is superior in terms of environmental benefits, tree quality, or aesthetic qualities compared to strict compliance with the ordinance on-site.

(3) The City Council or Planning Commission may require tree mitigation areas to be planted in permanent conservation through deed restrictions, conservation easements, or donations to land trusts.

[Ord. No. 2022-06, 1-24-2022]

## § 230-20. General provisions.

A. Parking space size. Parking space sizes shall be in accordance with § 230-21.

B. Parking spaces in residential driveways and garages. Driveways and garages shall be considered as constituting off-street parking space for one-family detached, semidetached, townhouse and multi-family dwellings , provided that the driveway shall be a minimum of 10 feet in width with a curb cut no greater than 20 feet in width and such driveways and garages meet the minimum requirements for off-street parking outlined in this section. Residential driveways must be constructed with an approved dustless surface such as asphalt, concrete, pavers or other material that will not wash away or emit dust into the air. Residential driveways shall provide a minimum of two feet of separation between the driveway and the side property line, unless a cross-access easement agreement is provided between property owners for a shared driveway. Driveways for corner lots shall be located off of the street with a lesser road classification as determined by the Planning Director and shall be located as far away from the intersection as practically possible. Curb cuts shall be constructed as required by the City Construction Standards and shall be limited to the frontage of the lot served.

C. Location of parking spaces within parking lots. All parking spaces shall be set back 15 feet from any street line and 5 feet from any property line. Parking spaces shall be located so that no spaces are a greater distance than 600 feet from the building or use to which they are assigned, provided that this requirement shall not apply to parking spaces for auditoriums, stadiums, assembly halls, gymnasiums and other places of assembly or industrial, wholesaling and manufacturing establishments.

D. Parking spaces assigned to more than one use. Parking spaces for separate buildings or uses in all zoning districts may be combined in a single lot, provided that the number of parking spaces in the lot shall equal the sum of the parking spaces required for each building and use, except that the parking spaces required for places of assembly may include parking spaces assigned to other uses, provided that the place of assembly shall not be used at a time when the other uses are carried on.

E. No off-street parking required in the C-2 Central Business District. No on-site, off-street parking shall be required in the C-2 District for newly constructed establishments or existing structures. Existing municipal parking facilities shall provide the necessary parking in this zoning district.

F. Parking lots. Whenever a parking lot is located across the street from a residential use, it shall be edged with low-profile evergreen hedge planting located along a line drawn parallel to the street and a distance of 10 feet therefrom, such hedge to be interrupted only at points of ingress and egress. The open area between such hedge and the street shall be landscaped in harmony with the landscaping prevailing on neighboring properties fronting on the same street. Ground cover, shrubs, trees and landscape screening shall be located and maintained so as not to interfere with vehicular and pedestrian traffic on the property or with sight clearance and exits.

G. Fractional spaces. When the application of a unit of measurement for parking space or loading space to a particular use or structure results in a fractional space, any fraction under 1/2 shall be disregarded and fractions of 1/2 or over shall be counted as one parking space or loading space.

H. Boat, trailer, bus and van parking. In any residential district, no house trailer, camper, boat trailer, bus or boat shall be parked in the front yard. Parking is allowed in the side or rear yards five feet from the property line if it does not take up space normally occupied by an automobile. All vehicles requiring a trailer for transportation must be stored on a registered trailer.

I. Non-residential points of ingress and egress. Only one accessway shall be permitted for each 100 feet of frontage upon a public road. Such accessway shall be not less than 24 feet and not more than 32 feet in width when the entrance requires two-way traffic, unless otherwise approved by the State of Delaware Department of Transportation for an entrance on a State maintained road. Such accessway shall not be less than 12 feet in width when the entrance is for one-way traffic, unless otherwise approved by the State of Delaware Department of Transportation for an entrance on a State maintained road. No two accessways on the same lot shall be placed within 75 feet of each other. The entrance shall be setback 5 feet from any adjoining property line unless otherwise noted under the conditional use requirements.

J. All parking spaces for use in conjunction with public parking lots, garages, storage areas operated on a commercial basis and parking areas accessory to multifamily, commercial, industrial and office uses shall be appropriately paved and striped.

K. All permanent parking areas shall be enclosed with upright concrete curbing at least six inches in height. The Planning Director may relax this requirement for a portion of a parking area when there is a demonstrated need to convey stormwater to a proposed or approved stormwater management area. Parking blocks are required at the head of all parking spaces where curb is not provided. Curbing shall not be required for loading areas, handicapped access and for parking spaces accessory to a one-family or two-family residence. Buildings and sidewalk shall be protected by upright concrete curing at least six inches in height, bollards or other object approved by the Planning Director that demonstrates protection of pedestrians and property.

L. Parking Lots: Interior Landscaping. To reduce the visual impact of large expanses of parking and to create a more pedestrian-friendly environment, interior parking lot landscaping is required. Green space in the form of landscape islands and/or peninsulas are required to break up rows of parking spaces as follows:

(1) If the total number of parking spaces is less than 100, the minimum requirement is:

(a) Islands at both ends of each row of parking (minimum of 9' x 18').

(b) One island or peninsula (minimum of 9' x 18') for every 10 contiguous spaces.

(c) No more than two (2) contiguous bays (four total rows) without a 9' wide island separating the two (2) bays from additional parking bays or drive aisles.

(d) Minimum of one (1) 2-1/2" caliper shade tree with a mature height of 12 feet shall be provided per 200 square feet of interior green space within the parking lot islands.

(2) If the total number of parking spaces is 100 or greater, the minimum requirement is:

(a) Islands at both ends of each row of parking (minimum of 9' x 18').

(b) One island or peninsula (minimum of 9' x 18') for every 12 contiguous spaces.

(c) No more than three (3) contiguous bays (six total rows) without a 9' wide island separating the three (3) bays from additional parking bays or drive aisles.

(d) Minimum of one (1) 2-1/2" caliper shade tree with a mature height of 12 feet shall be provided per 200 square feet of interior green space within the parking lot islands.

M. Bicycle Parking Facilities. All parking facilities containing less than ten (10) parking spaces shall provide one bicycle rack with no less than five (5) spaces. For parking facilities with ten (10) or more parking spaces, five (5) bicycle spaces plus one (1) per every twenty (20) parking spaces shall be provided, not to exceed more than twenty (20) bicycle parking spaces in any one facility. The Planning Commission or City Council may waive the requirement for the bicycle parking if it is demonstrated that bicycle parking would not be appropriate for safety reasons or due to the nature of the use of the site.

N. Illumination. Parking lots shall be property illuminated per the most recent version of the Illuminating Engineering Society (IES) Standards.

O. Parking of vehicles on unpaved surfaces within the front yard of all districts shall be prohibited. Exception: emergency vehicles.

P. Garbage Enclosure. Commercial, industrial, institutional or residential multi-family sites shall provide trash enclosures to adequately serve the proposed uses. Enclosures shall be conveniently placed on the site for commercial or residential tenants to use and shall be no farther than 300 feet from the intended users. Trash enclosures shall be constructed with similar materials to other buildings on the site. Receptacles shall be situated at an appropriate location as to not constitute a nuisance for users of the property and adjoining property owners and shall be appropriately screened to improve the appearance of the area.

[Ord. No. 2022-06, 1-24-2022]

## § 230-21. Parking and loading standards.

A. Design standards.

(1) Parking spaces and aisle ways shall be designed in accordance with the following dimensional standards:

| Parking Angle | Stall Width (feet) | Aisle Way to Curb (feet) | Aisle Way Width |
|---|---|---|---|
| 90° | 9 | 18 | 20 feet (one-way)<br>24 feet (two-way) |
| 60° | 9 | 20 | 18 feet (one-way)<br>22 feet (two-way) |
| 45° | 9 | 18 | 14 feet (one-way)<br>22 feet (two-way) |
| Parallel | 10 | 20 | 14 feet (one-way)<br>22 feet (two-way) |

(2) All spaces reserved for handicapped accessibility shall conform to the requirements set forth by the federal standards provided by the ADA (Americans with Disabilities Act).

B. Use standards. All uses permitted in this chapter shall be subject to the following minimum off-street parking requirements in addition to any special requirements as indicated in each zoning district.

| Types and Uses | Required Off-Street Parking Spaces |
|---|---|
| Auditorium, stadium, assembly hall, gymnasium, theater (excluding drive-in) and community or recreation center | 1 space per 4 seats or 1 space per each 40 square feet of floor area available for the accommodation of movable seats in the assembly room, whichever applies |

| | |
|---|---|
| Automotive Repair | 3 spaces per service bay |
| Automotive or Outdoor Sales | 1 space per 200 square feet of floor area in the main display room plus 1 space per each 1,500 square feet of outdoor display area plus 1 space for each employee on the shift of greatest employment |
| Bed and Breakfast | 1 space per guestroom plus required parking for family residence |
| Community Residential Treatment Program | 1 space per 4 residents plus 1 space per employee |
| Daycare, Nursery School or Kindergarten | 1 space per 10 children plus 1 space per employee on the shift of greatest employment |
| Elementary or Junior High School | 1 space for each 8 seats in auditorium, cafeteria or gymnasium |
| High School, Technical School, College or University | 1 space for each classroom plus 1 parking space for each employee or 1 space for each 5 auditorium seats, whichever is greater |
| Fire station | 1 space per employee on the maximum shift or 1 space for each 40 square feet of floor area available for the accommodation of movable seats in the assembly room, whichever is greater |
| General Offices | 1 space per 250 square feet of gross floor area |
| Medical and Dental Offices | 1 space per 200 square feet of gross floor area |
| Hospitals, Nursing Home or Sanatorium | 1 space per 3 beds |
| Hotel and motel | 1 space for each guest room plus 75% of the normal spaces required for accessory uses (e.g. banquet rooms, meeting rooms, restaurants, etc.) |
| Indoor and commercial outdoor recreation | 1 space for each 150 square feet of gross floor area or 1 per 4 seats of facilities available for patron use, whichever is applicable |
| Industrial, manufacturing or wholesaling establishment | 1 space per 2 employees on the shift of the greatest employment, plus 1 per 200 square feet of floor area devoted to sales |
| Museum, Art Gallery, Library and similar use | 1 space per 300 square feet of gross floor area |
| Places of Worship | 1 space per 4 seats or 1 space for each 40 square feet of floor area available for the accommodation of movable seats in the assembly room, whichever applies |
| Professional Home Occupation | 1 space per 300 square feet of floor area devoted to a business plus 1 space per each outside employee, if there is one |
| Restaurants, fast food, taverns and similar uses | 1 space per 3 seating accommodations |
| Retail or Service | 1 space per 200 square feet of gross floor area |
| Rooming and boarding house or converted unit | 1 space per bedroom |
| Dwelling, single-family detached, semi-detached, townhouse, mobile home, or multi-family dwelling unit | 2 ½ spaces per dwelling unit |
| Accessory Dwelling Unit | 1 ½ spaces per dwelling unit |
| Social club and fraternal, social service, union and civic organization building | 1 space per 4 seats or 1 space for each 40 square feet of floor area available for the accommodation of movable seats in the assembly room, whichever applies |
| Undertaker or Funeral Home | 1 space per 4 seats in the largest assembly room plus 1 space per employee |

(1) Reduction in the required number of off street parking spaces in the case of developments such as shopping centers or other commercial developments required to provide more than 50 off-street parking space.

The developer must set aside space to accommodate 100% of the area necessary to provide the parking requirements established by this Ordinance, but, upon the request of the developer, if agreed by the City of Milford, the developer may be permitted to set aside space to accommodate 100% of the area necessary to provide the parking requirements established by this chapter but not be required to construct more than 80% of the required parking spaces. In the event the developer is permitted to construct fewer than the required parking spaces, the remainder of the parking area set aside must be kept free of all construction and be planted and maintained as a grassy area and designated as Future Parking Space. The City of Milford may require construction of the remaining parking spaces at any time by the then owner of the premises upon giving the owner not less than six months' advance written notice. In the event of the granting of the waiver herein described, the fact of the grant as well as the requirement that the owner maintain the space set aside as a level grass area and that the City of Milford has reserved the right to require construction of the remaining parking spaces upon six months' notice to the owner of the site must be reflected in a note appearing on the subdivision or site development plans recorded.

C. Loading spaces.

(1) No building or structure shall be erected in any district for the uses listed below unless loading space for the accommodation of trucks is provided on the premises in accordance with the following requirements:

(a) For retail stores, markets, wholesale and jobbing establishments and storage warehouses, the number of berths based on the gross floor area devoted to such use shall be as follows:

[1] Five thousand to 7,999 square feet of floor area: one berth.

[2] Eight thousand to 19,999 square feet of floor area: two berths.

[3] Each additional 20,000 square feet or major fraction thereof up to a maximum of 60,000 square feet of floor area: one additional berth.

(b) For hotels and motels, the number of berths based on the gross floor area devoted to such uses shall be as follows:

[1] Eight thousand to 20,000 square feet of floor area: one berth.

[2] Each additional 50,000 square feet or major fraction thereof up to a maximum of 120,000 square feet of floor area: one additional berth.

(c) Each manufacturing, office research and industrial establishment with a total of 5,000 square feet or more of gross floor area devoted to manufacturing, research and/or industrial uses shall provide loading space adequate to accommodate the normal demands for loading and unloading incidental to the type of use proposed on the premises.

(2) Loading berths must be functionally related to the building, and be situated where actual loading and unloading activities are intended to occur. Loading berths located remotely from the building will not be permitted, unless the applicant can demonstrate the utility of such berths. Loading berths are not permitted between the street and building, except where a property fronts three or more streets. This section of the ordinance shall not preclude the designation of an area in front of the building for parcel pick-up, mail deliveries, or passenger loading.

(3) One required off-street loading berth shall have minimum dimensions of 12 feet wide and 60 feet long. If more than one loading berth is required, subsequent berths may have minimum dimensions of 12

feet wide and 40 feet long. At no time shall any part of a truck or van be allowed to extend into a public right-of-way or thoroughfare while the truck or van is being loaded or unloaded.

(4) Adequate off-street truck maneuvering space shall be provided on-lot and not within any public street right-of-way or other public lands. Internal site circulation lanes are to be designed with adequate turning radii to accommodate the size and efficient maneuvering of delivery vehicles.

[Ord. No. 2022-06, 1-24-2022]

# *ARTICLE V Landscape Screening*

## § 230-22. District requirements.

A. Residential districts.

(1) In any R-1, R-2, R-3 and R-8 District, a landscape screen and/or fence or wall a minimum of six feet in height shall be planted and/or erected to separate any permitted nonresidential use from any existing residential use on a contiguous lot. Such landscape screen and/or fence or wall may extend into the lot setback, side yard and rear yard.

(2) In any R-3 or R-8 District, for any lot developed for garden apartments or townhouses, a landscape screen and/or fence or wall a minimum of six feet in height shall be planted or erected to separate any contiguous lot developed as a single-family detached or semidetached residential dwelling on any contiguous lot zoned R-1 or R-2. Such landscape screen and/or fence or wall may extend into the lot setback, side yard and rear yard.

(3) Buffers along arterial streets. Where development proposals front on an arterial street, a landscape buffer shall be required along the arterial road frontage. These buffer areas shall be a minimum of 30 feet in depth, measured from the right-of-way line of the arterial street, and shall, at the time of development of the property, be planted with a variety of trees, shrubs and ground cover so as to create a distinctive and consistent visual character of the arterial street. The landscape design and planting plan for these arterial street buffer areas shall be subject to the approval of the Planning Commission or City Council as an integral part of the site development plan. When it can be demonstrated to the satisfaction of the Commission or City Council through the plan review process that, due to specific constraints related to existing lot size, lot configuration or the orientation of existing buildings on adjoining properties, compliance with this section would severely limit the development potential of the property or would cause the property to be out of character with the surrounding built environment, the Commission or City Council may approve a lesser amount of buffering, provided that the basic objective of establishing landscaped green space along arterial roadways is achieved.

B. Commercial districts. In any C-1, OB-1, OC-1, C-2 or C-3 District, a fifteen-foot visual and sound buffer area shall be provided on non-residential use properties (other than agricultural uses) when abutting a residential use. Screening shall consist of an opaque barrier at least six feet in height accompanied by landscaping.

(1) Opaque barrier options. The requirement for the opaque barrier may be met by choosing one of the following:

(a) An opaque wooden fence.

(b) A wall constructed of masonry materials, either stucco, brick, split-faced block, or decorative concrete.

(c) An earthen berm (4:1 maximum side slopes).

(d) Dense, durable and continuous evergreen tree planted screen of at least six feet in height at the time of planting and arranged to effectively achieve an opaque visual buffer.

(e) Any combination of fencing, landscaping and/or berming that achieves a six-foot-high opaque barrier.

C. Institutional, Industrial and Business Park Districts: H-1, IM, IS, I-1, I-2, and BP.

(1) Each use established in these districts shall set aside at least 20 feet in width immediately adjacent to any street upon which the lot has frontage, and extending for the full frontage of the lot, for purposes of providing for proper site distance and buffering from the public road. Within such area, the owner shall establish and maintain a planting of grass and/or horticultural ground cover. Other landscape materials may be incorporated, provided that there is no obstruction to vision, other than a tree trunk, in the area between two feet and seven feet above ground level.

(2) Each use established in these districts shall provide a 50-foot visual and sound buffer area on non-residential use properties (other than agricultural uses) when abutting a residential use. Screening shall consist of an opaque barrier at least six feet in height accompanied by landscaping.

(a) Opaque barrier options. The requirement for the opaque barrier may be met by choosing one of the following:

[1] An opaque wooden fence.

[2] A wall constructed of masonry materials, either stucco, brick, split-faced block, or decorative concrete.

[3] An earthen berm (4:1 maximum side slopes).

[4] Dense, durable and continuous evergreen tree planted screen of at least six feet in height at the time of planting and arranged to effectively achieve an opaque visual buffer.

[5] Any combination of fencing, landscaping and/or berming that achieves a six-foot-high opaque barrier.

[Ord. No. 2022-06, 1-24-2022]

## § 230-23. Maintenance.

It shall be the responsibility of the property owner of record or his delegated representative(s) to properly maintain and care for any landscape plan planted or erected.

[Ord. No. 2022-06, 1-24-2022]

# CITY OF MILFORD
# NOTICE OF PUBLIC HEARINGS

Planning Commission Hearing: Tuesday, September 19, 2023 @ 6:00 p.m.
City Council Hearing: Monday, September 25, 2023 @ 6:00 p.m.

NOTICE IS HEREBY GIVEN that the proposed Ordinance is currently under review by the City of Milford Planning Commission and City Council. City Council has the option to approve or deny the application. By not adopting the ordinance, City Council will deny the application. By adopting the ordinance, City Council will approve the application and the reason for the language being written in the affirmative.
This form of writing is not used to influence any decision of City Council:

**ORDINANCE 2023-34**

Preliminary Conditional Use Site Plan Application of Milford School District/Milford Middle School
23.97 +/- acres of land located on the
south side of Lakeview Avenue, approximately 875 feet east of the Route 113 Intersection
Address: 512 Lakeview Avenue
Comprehensive Plan Designation: Low Density Residential
Zoning District: R-1 (Single-Family Residential District)
Present and Proposed Use: Public School
Tax Parcel: 1-30-3.07-138.00 & 138.01

WHEREAS, the owner of the property as above described herein have petitioned the City of Milford for a Preliminary Conditional Use Site Plan to construct a public school; and

WHEREAS, the City of Milford Planning Commission will consider the application at a Public Hearing on September 19, 2023; and

WHEREAS, Milford City Council will hold a Public Hearing on September 25, 2023 to allow for public comment and further review of the ordinance; and

WHEREAS, it is deemed in the best interest of the City of Milford to approve the Preliminary Conditional Use Site Plan, as herein described.

NOW, THEREFORE, the City of Milford hereby ordains as follows:

Section 1. Chapter 230-9(C)(2) states “public and private elementary, junior or senior high schools” are permitted with the approval of a conditional use permit by City Council.

Section 2. Following adoption of Ordinance 2023-34, and upon the effective date, the Milford Public School District is hereby granted a Preliminary Conditional Use Site Plan approval to construct and redevelop a 127,000 square foot public school at 512 Lakeview Avenue.

Section 3. Preliminary approval from City Council shall be void after 24 months unless an extension is requested by the owner and approved for good cause by the Planning Commission prior to the expiration, otherwise the Preliminary Conditional Use Site Plan approval becomes void.

Section 4. Dates.
Planning Commission Review & Public Hearing: September 19, 2023
City Council Introduction: September 11, 2023
City Council Public Hearing: September 25, 2023
Effective: Ten Days following Adoption

For additional information, please contact Rob Pierce in the Planning & Zoning Department either by e-mail at RPierce@milford-de.gov or by phone at 302.424.8396.

*Advertised: Delaware State News 09/03/2023*

# CITY OF MILFORD
# NOTICE OF PUBLIC HEARINGS

Planning Commission Hearing: Tuesday, September 19, 2023 @ 6:00 p.m.
City Council Hearing: Monday, September 25, 2023 @ 6:00 p.m.

NOTICE IS HEREBY GIVEN that the proposed Ordinance is currently under review by the City of Milford Planning Commission and City Council. City Council has the option to approve or deny the application. By not adopting the ordinance, City Council will deny the application. By adopting the ordinance, City Council will approve the application and the reason for the language being written in the affirmative.
This form of writing is not used to influence any decision of City Council:

**ORDINANCE 2023-35**
Conditional Use Application of Food Bank of Delaware
11.5 +/- acres of land
West Side of Delaware Veterans Boulevard within the Independence Commons Business Park
Address: 102 Delaware Veterans Boulevard
Comprehensive Plan Designation: Commercial
Zoning District: OC-1 (Office Complex District)
Present and Proposed Use: Charitable and Philanthropic Organization
Tax Parcel: MD-16-173.00-01-02.08

WHEREAS, the owners of the property as above described herein have petitioned the City of Milford for a Conditional Use to construct Electronic Message Center Monument Sign and a Comprehensive Sign Plan approval; and

WHEREAS, the City of Milford Planning Commission will consider the application at a Public Hearing on September 19, 2023; and

WHEREAS, Milford City Council will hold a Public Hearing on September 25, 2023 to allow for public comment and further review of the ordinance; and

WHEREAS, it is deemed in the best interest of the City of Milford to approve the Conditional Use, as herein described.

NOW, THEREFORE, the City of Milford hereby ordains as follows:

Section 1. Chapter 230-24.14 states Electronic Message Centers are prohibited unless permitted by a conditional use approval from City Council on properties used for (c) Social clubs or fraternal, social service, union, or civic organizations.

Section 2. Chapter 230-24.25 permits a Comprehensive Sign Plan review for larger scale projects and developments.

Section 3. Following adoption of Ordinance 2023-35, and upon the effective date, the Food Bank of Delaware is hereby granted a Conditional Use to allow an Electronic Message Sign and other signage outlined in the Comprehensive Sign Plan application at 102 Delaware Veterans Boulevard.

Section 4. Construction or operation shall commence within eighteen months of the date of issuance of the permit otherwise the conditional use becomes void.

Section 5. Dates.
Planning Commission Review & Public Hearing: September 19, 2023
City Council Introduction: September 11, 2023
City Council Public Hearing: September 25, 2023
Effective: Ten Days following Adoption

For additional information, please contact Rob Pierce in the Planning & Zoning Department either by e-mail at RPierce@milford-de.gov or by phone at 302.424.8396.

*Advertised: Delaware State News 09/03/2023*

PUBLIC WORKS FACILITY
180 Vickers Drive
Milford, DE 19963
www.cityofmilford.com

THE CITY of Milford DELAWARE

PLANNING DEPARTMENT
Planning, Economic Development,
Enforcement, and Inspections Office
O 302.424.8396 | F 302.424.3559

# DATA SHEET FOR FOOD BANK OF DELAWARE

Planning Commission Meeting: September 19, 2023

| | | |
|---|---|---|
| **Application Number / Name** | : | 23-026 / Food Bank of Delaware |
| **Applicant** | : | Food Bank of Delaware<br>222 Lake Drive<br>Newark, DE 19702 |
| **Owner** | : | Same |
| **Application Type** | : | Comprehensive Sign Plan |
| **Comprehensive Plan Designation** | : | Commercial |
| **Zoning District** | : | OC-1 (Office Complex District) |
| **Present Use** | : | Charitable and Philanthropic Organization |
| **Proposed Use** | : | Charitable and Philanthropic Organization |
| **Area and Location** | : | 11.5 +/- acres of land located along the west side of Delaware Veterans Boulevard within the Independence Commons Business Park, addressed as 102 Delaware Veterans Boulevard. |
| **Property Identification Numbers** | : | MD-16-173.00-01-02.08 |

ENC: Staff Analysis Report
Exhibit A - Location & Zoning Map
Comprehensive Sign Plan

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Milford, DE 19963
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THE CITY of Milford DELAWARE

PLANNING DEPARTMENT
Planning, Economic Development,
Enforcement, and Inspections Office
O 302.424.8396 | F 302.424.3559

**STAFF ANALYSIS REPORT**
**September 6, 2023**

| | | |
|---|---|---|
| **Application Number / Name** | **:** | 23-026 / Food Bank of Delaware |
| **Application Type** | **:** | Comprehensive Sign Plan / Conditional Use |
| **Property Identification Numbers** | **:** | MD-16-173.00-01-02.08 |
| **Area and Location** | **:** | 11.5 +/- acres of land located along the west side of Delaware Veterans Boulevard within the Independence Commons Business Park, addressed as 102 Delaware Veterans Boulevard. |

## I. BACKGROUND INFORMATION:

- The Planning Commission granted final site plan approval for the project on August 17, 2022 for the construction of a 60,000 square foot facility, a 2-acre community garden space and associated accessory buildings.

- The applicant is seeking a Conditional Use approval to construct an **Electric Message Center** monument sign. Chapter 230-24.14 states "Electronic Message Centers are prohibited except that electronic message centers may be permitted by conditional use approval from City Council on properties used for any of the following uses; (a) Public and private schools; (b) Churches and other places of worship; (c) Social clubs or fraternal, social service, union, or civic organizations." The Food Bank is seeking approval under "Social Service" organization.

- The applicant is also seeking a **Comprehensive Sign Plan** approval for the construction of building and onsite directional signage that does not comply with the general requirements for commercial signage in the OC-1 zoning district found under Chapter 230-24.14.

- Per Chapter 230-24.25, Comprehensive Sign Plans may be submitted in conjunction with larger scale projects and developments.

- The proposed signage plan is not consistent with the deed restrictions for the Independence Commons Business Park recorded under VL-8104 PG-278 with the Kent County Recorder of Deeds. A proposed amendment to the deed restrictions has been prepared for City Council consideration that would allow a Comprehensive Sign Plan conditional use submission for larger scale projects.

## II. STAFF ANALYSIS:

- Chapter 230-24.25, Comprehensive Signage for Major Subdivisions and Complexes recognizes that large developments and complexes have signage needs that may not be adequately addressed by the standard sign regulations of Chapter 230 and Chapter 230-24.25 is specifically intended to establish an optional procedure for approval of comprehensive signage plans for such projects.

- Chapter 230-24.25(C) states **comprehensive signage plans** must comply with the following:

  (1) If approved, comprehensive signage plans may not be held to the size, height, numbers, and area regulations for signs found in other sections of this article provided that the number, type, and size of signs proposed shall not be excessive and must be in proportion to the scale of the buildings and the uses planned for the site.

  *Staff Response:*

  *Freestanding Sign – The proposed freestanding sign is 6 feet in height and 48 square feet in area, which meets the requirements for the OC-1 zoning district. The Electronic Message Center sign requires a conditional use approval in the OC-1 district if it is associated with a social service, fraternal, union or civic organization. The original deed restrictions for Independence Commons limits monument signs to individually mounted reverse pan channel letters with internal lighting no more than 50 square feet in area. The deed restrictions also restrict flashing or moving signs.*

  *Building Signage – The package includes a building sign located above the entrance mounted to the entrance overhang which would not exceed the 10% allowance for the OC-1 zoning category. The package also includes window decals for the packing barn and main building and loading dock identification numbers as shown on the provided site plan. The original deed restrictions for Independence Commons states wall or building signs must be integral with or attached flat against the building and must face the major thoroughfare that abuts the property. The proposed building sign faces Delaware Veterans Boulevard but does not sit flush with and is not integral with the building, as it is mounted on top of the entrance overhang as shown on the provided architectural elevation. The original deed restrictions limit additional signage to 5% of the building façade. The proposed window decals and loading dock numbers do not exceed this limit.*

  *Directional Signs – There are several directional signs proposed for the site which are shown on the provided site plan. This includes one (1) Large Building Pedestrian Directional Sign which is 8.5 feet tall and 40 square feet in area, one (1) Small Building Pedestrian Directional Sign which is 7 feet tall and 24 square feet, two (2) Vehicular Entrance Directional Signs which are 7 feet tall and 12 square feet each and three (3) Tall Pedestrian Directional Sign which are 7 feet tall and 9 square feet each. The original deed restrictions for Independence Commons limits directional signs to one (1) sign no more than two (2) square feet in area.*

  *Miscellaneous Signs – The sign package includes freestanding and building mounted donor signs that would not exceed 6 feet in height and 6 square feet in area. The locations of the donor signs are shown on the provided site plan.*

  (2) All proposed signage shall be designed and coordinated with the overall architectural concept for the buildings on the site. Sign type, color scheme, size, and illumination shall be coordinated and compatible with the architecture of the development so as to formulate a thematic sign plan for the site.

  *Staff Response: The applicant has provided an architectural section view of the proposed signs and the Food Bank project buildings for review.*

(3) Wall-mounted signs shall be coordinated with the overall design theme of the site and designed as an integral component of the facades of buildings.

*Staff Response: The sign package includes a building sign located above the entrance mounted to the entrance overhang which would not exceed the 10% allowance for the OC-1 zoning district. The original deed restrictions for Independence Commons states wall or building signs must be integral with or attached flat against the building and must face the major thoroughfare that abuts the property. The proposed building sign faces Delaware Veterans Boulevard but does not sit flush with and is not integral with the building, as it is mounted on top of the entrance overhang as shown on the provided architectural elevation. The package also includes wall-mounted signs identifying the loading docks along the south side of the building which will be backlit and visible at night.*

(4) Site landscaping shall be designed to complement and not conflict with sign placements.

*Staff Response: Sheet SS-01 provides locations of the proposed signage and landscaping. The proposed landscaping does not conflict with the sign placements.*

(5) No off-premises signage will be permitted as part of an application for a comprehensive signage plan.

*Staff Response: No off-premise signage is proposed; however, the applicant is proposing donor signs on the site that are not visible from the public right-of-way.*

- Evaluation of the 3'x 5' (15 square foot) **Electronic Message Center** sign request based on the criteria found under Chapter 230-48 Conditional Uses.

A. The presence of adjoining similar uses.

*The property is located within the Independence Commons Business Park. Other uses in the immediate vicinity include professional offices, medical offices, Delaware Veterans Home, Delaware Hospice and the Milford Boys and Girls Club. There are no other Electronic Message Center signs within Independence Commons.*

B. An adjoining district in which the use is permitted.

*Electronic Message Center signs are permitted by conditional use approval from City Council within the OC-1 and BP zoning districts. There are no other adjoining districts.*

C. There is a need for the use in the area proposed as established by the Comprehensive Plan.

*The Comprehensive Plan designates this area as Commercial and does directly address the need for Electronic Message Center signs or other signage within the City.*

D. There is sufficient area to screen the conditional use from adjacent different uses.

*The project is located within the Independence Commons Business Park and is surrounded by professional and medical offices, indoor recreation, and long-term or end of life care facilities. The proposed Electronic Message Center sign is located along Delaware Veterans Boulevard and would be visible by the surrounding properties, including the Delaware Veterans Home and Boys and Girls Club. The sign would not be screened from view since the purpose of commercial signage is to advertise the use located on the property from the public right-of-way.*

E. The use will not detract from permitted uses in the district.

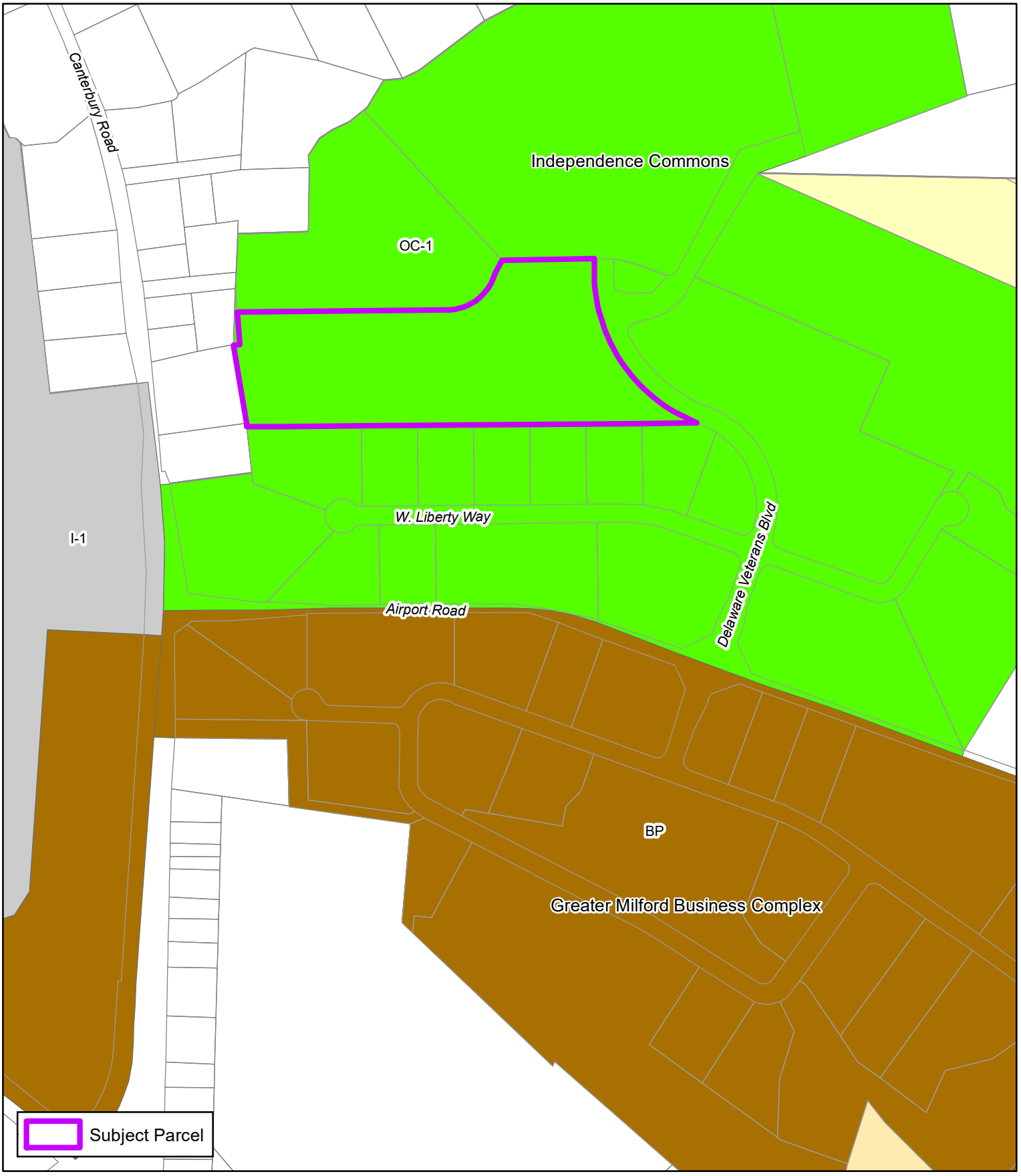
*The proposed Electronic Message Center sign could negatively impact the Delaware Veterans Home to the north due to the changing messaging and lighting at night. If City Council elects to permit the construction of an Electronic Message Center sign, staff recommends limiting the message portion of the sign to the southern facing side.*

F. Sufficient safeguards, such as traffic control, parking, screening and setbacks, can be implemented to remove potential adverse influences on adjoining uses.

*The project is located within the Independence Commons Business Park and is surrounded by professional and medical offices, indoor recreation, and long-term or end of life care facilities. The proposed Electronic Message Center could negatively impact the Delaware Veterans Home located to the north. There are no impacts pertaining to traffic control or parking. Limiting the sign to a southern facing message center could remove or limit potential adverse influences on adjoining uses.*

## III. AGENCY & DEPARTMENT COMMENTS:

**None Requested**




THE CITY of Milford DELAWARE

Scale: Feet
0 200 400

Drawn by: WRP

Date: 03/30/22

Filepath: PreliminarySitePlan_FoodBank.mxd

Title:

Conditional Use

**Food Bank**

Location & Zoning Map




Type 5:
Large Building Pedestrian
Directional Sign

Type 2:
Small Building Pedestrian
Directional Sign

Type 3:
Vehicular Entrance
Directional Sign

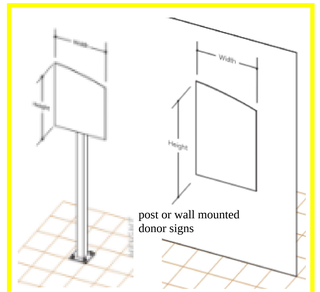
Type 4:
Tall Pedestrian
Directional Signt




DECAL LETTERS AT EXTERIOR ENTRANCES

## LANDSCAPE NOTES

| | |
|---|---|
| L-01 | INSTALL VEGO-GARDEN 17" 10-IN-ONE RAISED GARDEN BED IN 5.5'X6.5' CONFIGURATION. (26 IN TOTAL) |
| L-02 | INSTALL 3X FLAG POLES WITH UPLIGHTING. REFER TO FLAGPOLE DETAIL SHEET L-001 |
| L-03 | PREPARE WILDFLOWER BED. TILL AND AMEND BED PER SPEC. BROADCAST WILDFLOWER SEED MIX PER RECOMMENDED RATE. |
| L-04 | INSTALL VEGO-GARDEN 32" 10-IN-ONE RAISED GARDEN BED IN L CONFIGURATION. (4 IN TOTAL) |
| L-05 | INSTALL VEGO-GARDEN 17" HGT 24" DIAM RAISED GARDEN BED. (18 IN TOTAL) |
| L-06 | CONSTRUCT BULK MATERIAL STORAGE AREA. 5' HIGH REINFORCED VINYL FENCING, FORMING TWO 12' X 12' STORAGE BAYS. |
| L-07 | CONSTRUCT COMPACTED DECOMPOSED GRANITE PATHWAY PER PLAN. SEE DETAIL SHEET L-001 |
| L-08 | ADD ALTERNATE: PREPARE FOOD PLOTS. TILL AND AMEND BED PER SPEC. |
| L-09 | ADD ALTERNATE: PREPARE ORCHARD PLOT PER SPEC. |
| L-10 | WOOD CHIP MULCH BETWEEN RAISED PLANTERS AND PATHWAYS. |
| L-11 | CONSTRUCT COMPACTED DECOMPOSED GRANITE FIRE LANE PER PLAN. SEE DETAIL SHEET L-001 |
| L-12 | INSTALL 6' BACKLESS BENCH - SURFACE MOUNT - (10 IN TOTAL) |




VOLUNTEER ROOM
STAFF PARKING
PANTRY LOADING

VOLUNTEER LETTERING ON GLASS

PANTRY LETTERING ON GLASS

CAFE LETTERING ON GLASS

MARKET SIGN ON GLASS

PACKING BARN VOLUNTEER LETTERING ON GLASS

MAIN ENTRANCE
PANTRY
CAFE/MARKET
VOLUNTEER ROOM,
PACKING BARN
MEMORIAL GARDEN

ELECTRONIC SITE SIGN

double sided electronic message sign

GATE TO LOADING AREA

MAIN ENTRANCE
PANTRY
CAFE/MARKET
VOLUNTEER ROOM
PACKING BARN
MEMORIAL GARDEN

MAIN ENTRANCE
LOADING DOCK
VISITOR/STAFF PARKING

MAIN ENTRANCE
PANTRY
CAFE/MARKET
VOLUNTEER ROOM
PACKING BARN
MEMORIAL GARDEN

MATCHLINE SHEET L-102

PATRIOTS WAY
(CITY OF MILFORD MAINTAINED)
(RIGHT-OF-WAY VARIES)

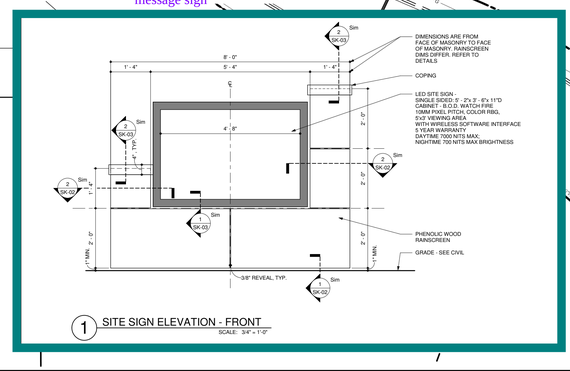
DELAWARE VETERANS BLVD.
(WIDTH VARIES)

N.OF.
CITY OF MILFORD
MD-16-173.00-01-02.15-000
ZONED OC-1

N.OF.
CITY OF MILFORD
ID# MD-16-173.00-01-02.14-000
ZONED OC-1

CITY OF MILFORD
ID# MD-16-173.00-01-02.13-000
ZONED OC-1

N.OF.
MID-DELAWARE PROFESSIONAL, LLC
ID# MD-16-173.00-01-02.11-000
ZONED OC-1





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8160 WASHINGTON BOULEVARD, SUITE 200
JESSUP, MARYLAND 20794
410-792-8447 | 301-483-6266

**THE WHITING TURNER CONTRACTING COMPANY**
CONSTRUCTION MANAGER
131 CONTINENTAL DRIVE, SUITE 404
NEWARK, DELAWARE 19713
302-292-0676 fax: 302-292-0683


PROJECT TITLE

# FOOD BANK OF DELAWARE - MILFORD FACILITY

INDEPENDENCE COMMONS,
LOT 4
DELAWARE VETERANS
BOULEVARD
MILFORD, DE 19963

ISSUED
CONFORMED CONSTRUCTION SET
ISSUED: 07/08/2022

SHEET TITLE

Exterior Site
Signage Plan

SCALE: 1" = 30'

| Mark | Date | Description |
|---|---|---|
| 1 | 05/31/22 | Rev. per City of Milford Comments |

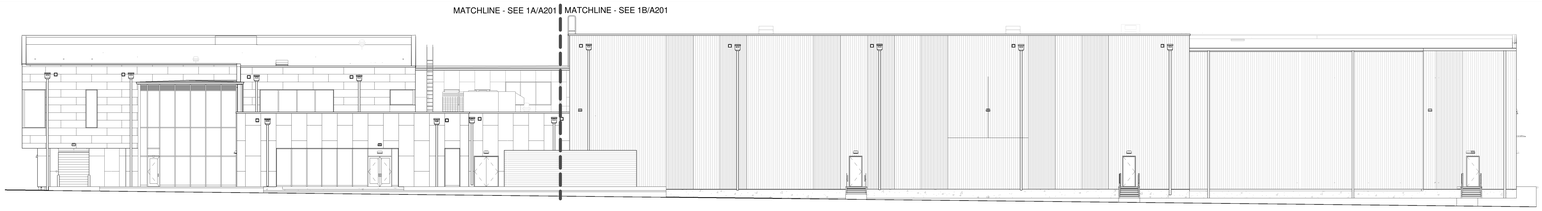
| | |
|---|---|
| PROJECT NO: | 2021236.00 |
| DATE: | 05/24/2023 |
| SCALE: | 1" = 30' |
| DRAWN BY: CDC | PROJ MGR: ALS |

SS-101

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F:\AutoCAD\Projects\2021\2021236\DWG\2021236-LSCAPE.dwg, Jul 08, 2022 - 3:47pm

3/18/2022, 8:18:21 AM BIM 360://Food Bank of Delaware/2021236_MainBldg.rvt

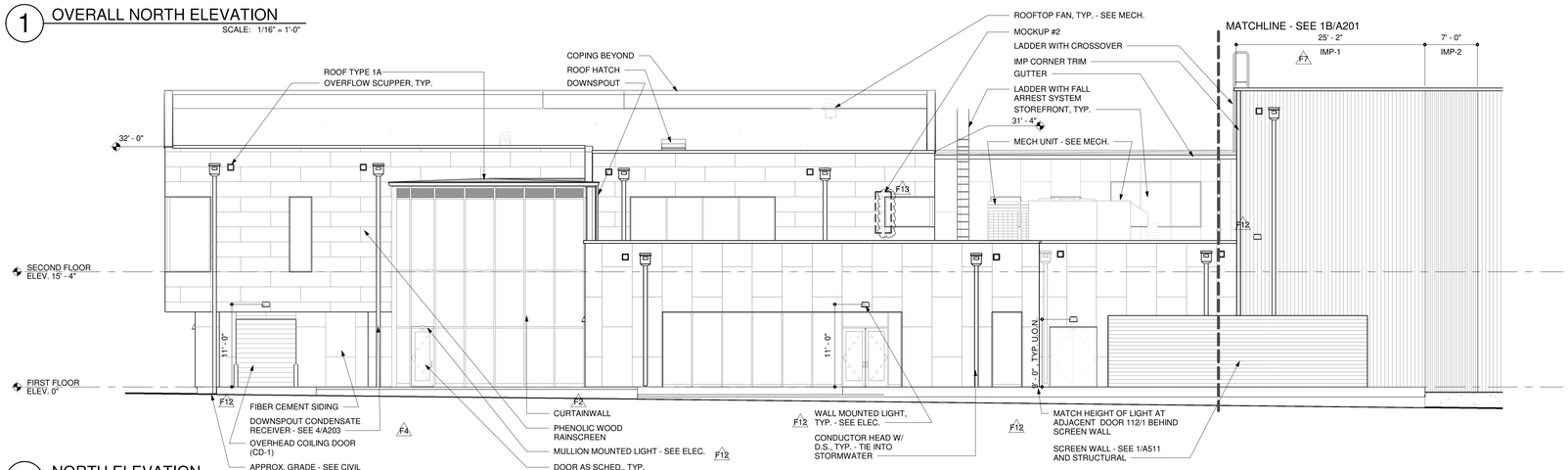



## GENERAL NOTES

1. THE INTENDED MOCKUPS ARE LOCATED AT THE FOLLOWING LOCATIONS:
   A. MOCKUP #1: 3/A202
   B. MOCKUP #2: 1A/A201
   C. MOCKUP #3: 4/A202
2. REFER TO A000-SERIES DRAWINGS FOR SLAB AND OTHER CONSTRUCTION TYPES AND TYPICAL DETAILS.
3. SEE A203 FOR ENLARGED ELEVATION DETAILS.
4. GRADE SHOWN APPROXIMATELY. SEE CIVIL FOR ACTUAL GRADING.
5. SEE A600s FOR DOOR, STOREFRONT AND CURTAINWALL TYPES.
6. SEE ENLARGED PLANS AND ELEVATIONS FOR DOCK ACCESSORIES.
7. COORDINATE REQUIREMENTS OF WORK WITH ALL OTHER TRADES.

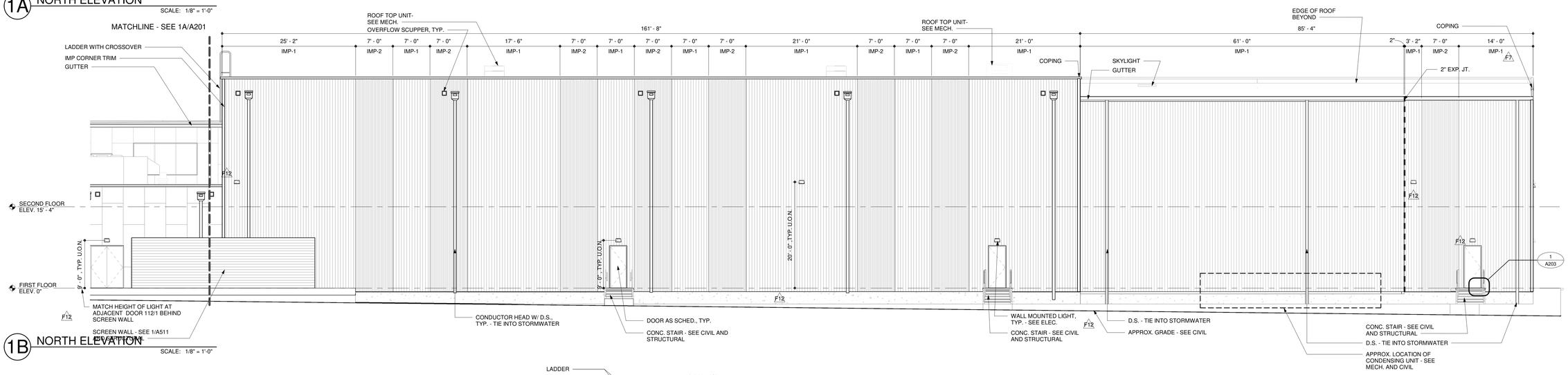
## 1 OVERALL NORTH ELEVATION

SCALE: 1/16" = 1'-0"



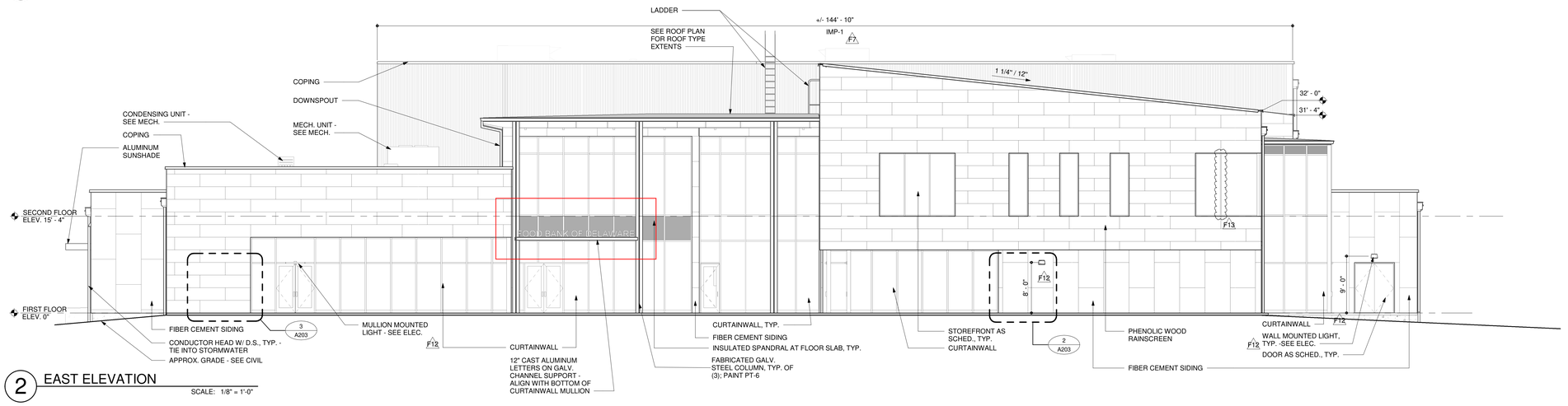

## 1A NORTH ELEVATION

SCALE: 1/8" = 1'-0"




## 1B NORTH ELEVATION

SCALE: 1/8" = 1'-0"




## 2 EAST ELEVATION

SCALE: 1/8" = 1'-0"

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ENGINEERING

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309 S Governors Ave
Dover, DE 19904
302.734.7950

The Tower at STAR Campus
100 Discovery Boulevard, Suite 102
Newark, DE 19713
302.369.3700

Maryland
312 West Main St, Suite 300
Salisbury, MD 21801
410.546.9100

North Carolina
3333 Jaeckle Drive, Suite 120
Wilmington, NC 28403
910.341.7600

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STRUCTURAL ENGINEER
17585 NASSAU BOULEVARD, UNIT 3
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302-703-1770

**DEDC, LLC**
FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL ENGINEER
315 SOUTH CHAPEL STREET
NEWARK, DELAWARE 19711
302-738-7172 fax: 302-738-7175

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CONSTRUCTION MANAGER
131 CONTINENTAL DRIVE, SUITE 404
NEWARK, DELAWARE 19713
302-292-0676 fax: 302-292-0683

PROJECT TITLE

# FOOD BANK OF DELAWARE - MILFORD FACILITY

INDEPENDENCE COMMONS, LOT 4
DELAWARE VETERANS BOULEVARD
MILFORD, DE 19963

ISSUED
FOR CONSTRUCTION
CONFORMED SET
ISSUED: 09/08/2022

SHEET TITLE

# EXTERIOR ELEVATIONS - NORTH AND EAST

0' 8' 16' 32'
SCALE: 1/16" = 1'-0"

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

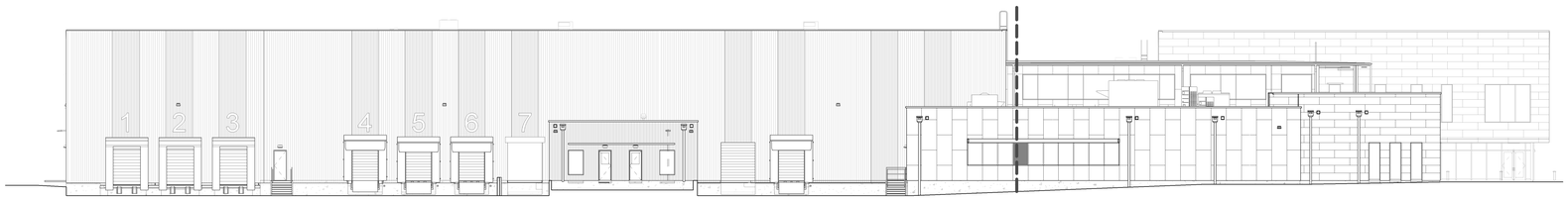
| Mark | Date | Description |
|---|---|---|
| F13 | 02/08/2023 | FIELD BULLETIN #13 |
| F12 | 01/20/2023 | FIELD BULLETIN #12 |
| F7 | 11/16/2022 | FIELD BULLETIN #7 |
| F4 | 10/07/2022 | FIELD BULLETIN #4 |
| F2 | 09/08/2022 | FIELD BULLETIN #2 |

PROJECT NO: 2021236.00
DATE: 09/08/2022
SCALE: As indicated
DRAWN BY: BPD | PROJ MGR: BDF

A201

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2/9/2023 11:13:00 AM Autodesk Docs://Food Bank of Delaware/20212360_MainBldg.rvt

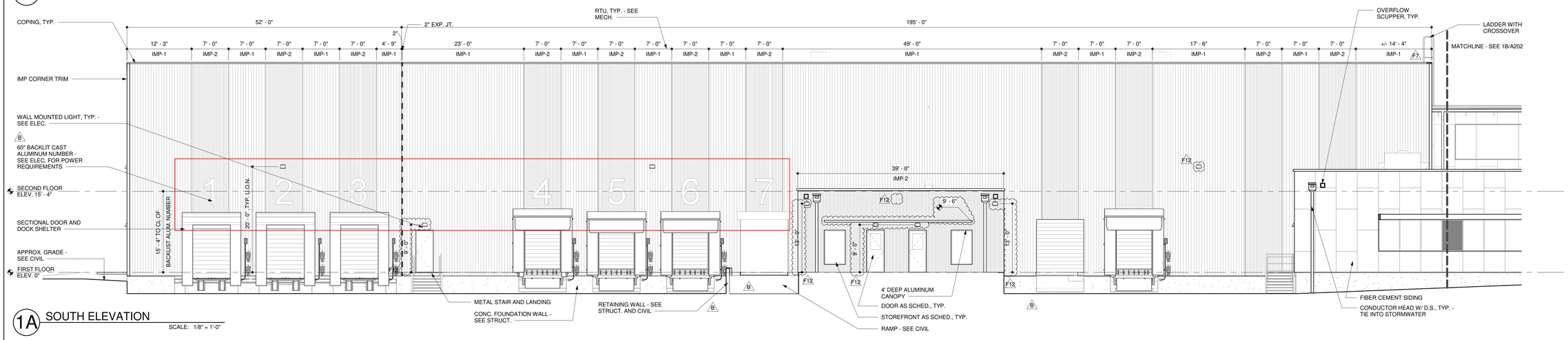


## GENERAL NOTES

1. THE INTENDED MOCKUPS ARE LOCATED AT THE FOLLOWING LOCATIONS:
   A. MOCKUP #1: 3/A202
   B. MOCKUP #2: 1A/A201
   C. MOCKUP #3: 4/A202
2. REFER TO A000-SERIES DRAWINGS FOR SLAB AND OTHER CONSTRUCTION TYPES AND TYPICAL DETAILS.
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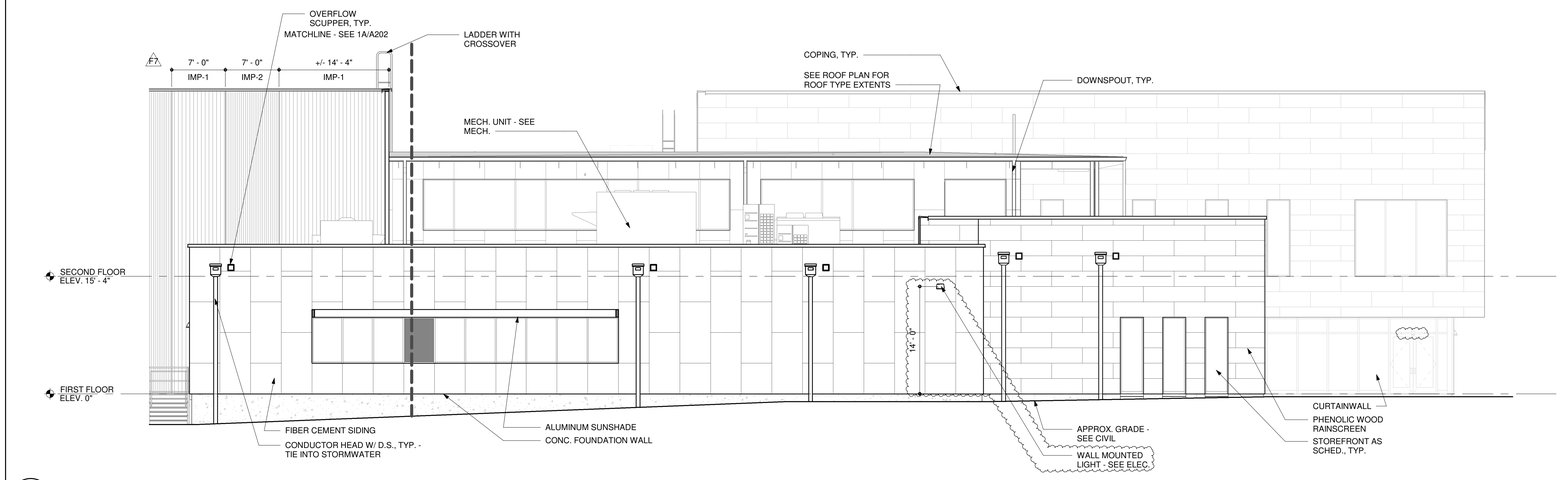
## 1 OVERALL SOUTH ELEVATION

SCALE: 1/16" = 1'-0"



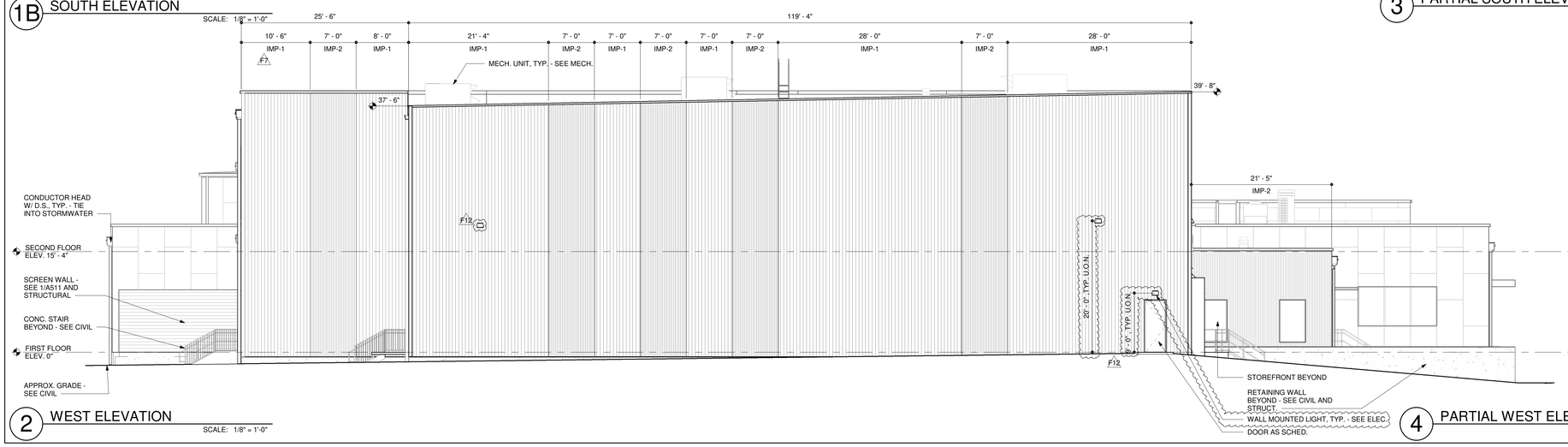

## 1A SOUTH ELEVATION

SCALE: 1/8" = 1'-0"



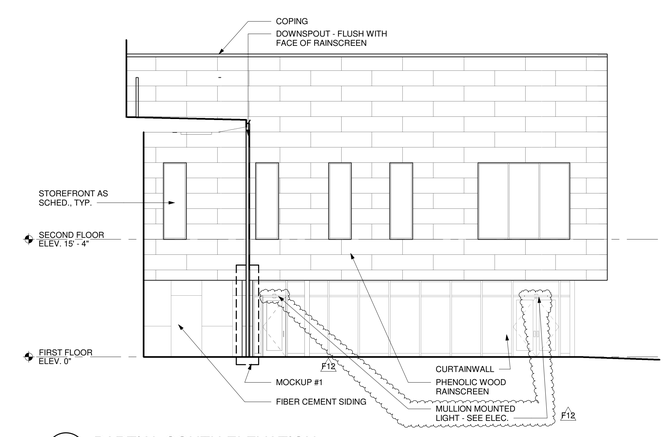

## 1B SOUTH ELEVATION

SCALE: 1/8" = 1'-0"



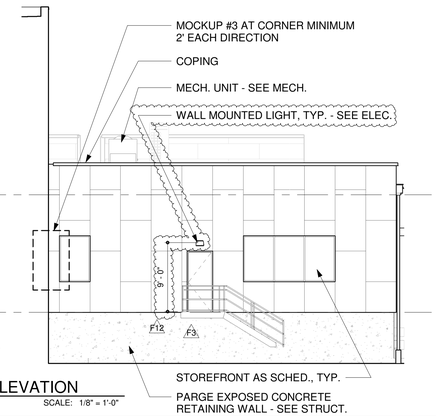

## 2 WEST ELEVATION

SCALE: 1/8" = 1'-0"




## 3 PARTIAL SOUTH ELEVATION

SCALE: 1/8" = 1'-0"




## 4 PARTIAL WEST ELEVATION

SCALE: 1/8" = 1'-0"


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PROJECT TITLE

# FOOD BANK OF DELAWARE - MILFORD FACILITY

INDEPENDENCE COMMONS, LOT 4
DELAWARE VETERANS BOULEVARD
MILFORD, DE 19963

ISSUED
FOR CONSTRUCTION
CONFORMED SET
ISSUED: 09/08/2022

SHEET TITLE

## EXTERIOR ELEVATIONS - SOUTH AND WEST

0' 8' 16' 32'
SCALE: 1/16" = 1'-0"

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

| Mark | Date | Description |
|---|---|---|
| F12 | 01/20/2023 | FIELD BULLETIN #12 |
| F7 | 11/16/2022 | FIELD BULLETIN #7 |
| F3 | 09/30/2022 | FIELD BULLETIN #3 |
| B | 05/20/2022 | ADDENDUM B |

PROJECT NO: 2021236.00
DATE: 09/08/2022
SCALE: As indicated
DRAWN BY: BPD PROJ MGR: BDF

A202

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1/23/2023 4:55:02 PM Autodesk Docs://Food Bank of Delaware/2021236\00_MainBldg.rvt

# Entry Vinyl

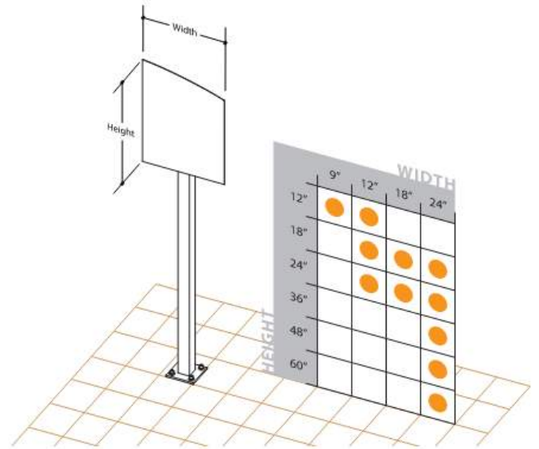
## Exterior Donor

Single Post & Panel

- Single ~~or double~~ sided
- Letter options
- ~~vinyl~~
- dimensional letters

Type 4 Signify 01 Quad

Type 4.a = 24" x 36"
Type 4.b = 18" x 24"
Type 4.c = 12" x 18"
Type 4.d = 9" x 12"



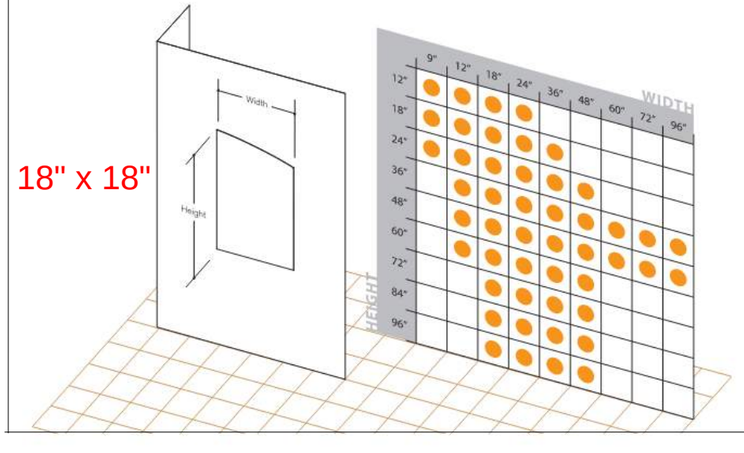

~~Wall Mount Panel~~

- ~~Vertical or horizontal mount~~
- Letter options
- ~~Vinyl~~
- dimensional letters

Type 5 Signify 01 Quad

Type 5 = 18" x 24"

18" x 18"





BECKER MORGAN GROUP
ARCHITECTURE ENGINEERING

takeform
11601 Maple Ridge Rd, Medina, NY, 14103
P 800.528.1398 F 585.798.8889
www.takeform.net


Ethos
LETTERS & LOGOS

Project:
Food Bank of Delaware

Date: 05.05.23
Drawn By: JA

Filename:
FOO0013_209923_XCR

Revisions:

Scale:
3/8" = 1'-0"

Notes:

Verify Mounting Conditions

Site Survey Required

**Product Approval**

NO CHANGES
Approved By: _____
Date: _____

WITH CHANGES AS NOTED
Approved By: _____
Date: _____

Product will be manufactured as indicated on this document. Please review carefully.

# Directionals
Design Options

BECKER MORGAN GROUP
ARCHITECTURE ENGINEERING

takeform
11601 Maple Ridge Rd, Medina, NY, 14103
P 800.528.1398 F 585.798.8889
www.takeform.net

Signify
EXTERIOR SIGNAGE

Project:
Food Bank of Delaware

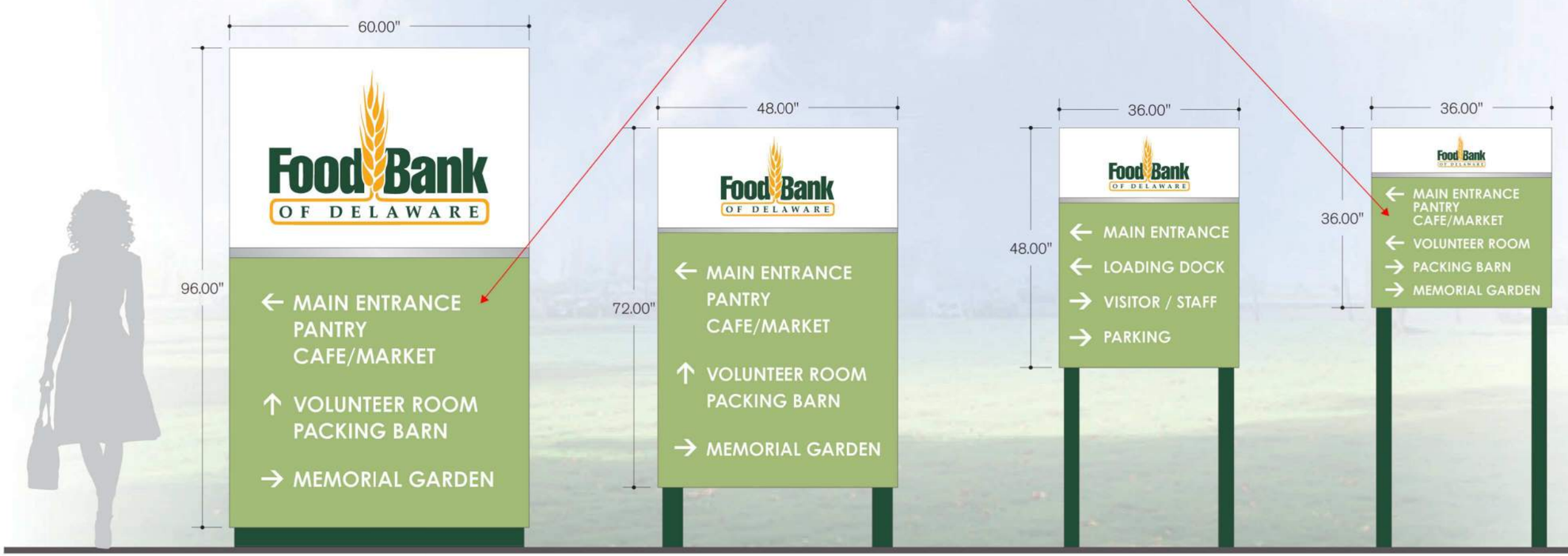
Date: 05.05.23
Drawn By: JA

Filename:
FOO0013_209923_XCR

Revisions:

## Option A

Color is to coordinate with interior signage (typical)




Type 5:
Large Building Pedestrian
Directional Sign

Type 2:
Small Building Pedestrian
Directional Sign

Type 3:
Vehicular Entrance
Directional Sign

Type 4:
Tall Pedestrian
Directional Signt

Scale:
1/2" = 1'-0"

Notes:

Verify Mounting Conditions

Site Survey Required

**Product Approval**

NO CHANGES
Approved By: _____
Date: _____

WITH CHANGES AS NOTED
Approved By: _____
Date: _____

Product will be manufactured as indicated on this document. Please review carefully.

Food Bank OF DELAWARE | Delaware Food Works

*A community free of hunger*
www.fbd.org

August 17, 2023

The Honorable Arthur J. Campbell
Mayor
City of Milford
201 S Walnut Street
Milford, DE 19963

Dear Mayor Campbell,

As you are well aware, the Food Bank of Delaware is currently constructing a new facility at 102 Delaware Veterans Boulevard (Parcel ID: MD-16-173.00-01-02.08-000) in the Independence Commons Business Park. The City of Milford has been a stalwart partner throughout this construction and we appreciate the time and energy from all the City staff that have gotten this project to this point.

Recently, we have been working on our Comprehensive Signage Plan application and it has been determined that we will need additional assistance from the City in carrying out our intended plan. The deed restrictions for the Independence Commons Business Park lay out specific requirements for signage. Based on our intended usage of the facility and to ensure that it is welcoming to the myriad of visitors that will utilize it, our signage needs are greater than what is currently allowed in the deed restrictions. We are aware that Resolution 2016-05, adopted by the City of Milford City Council, lays out the "Declaration of Covenants, Conditions and Restrictions and Easements" for Independence Commons. Included in this document in Exhibit A, Article 2 is the Sign Requirements. As outlined there, the deed restrictions call for illuminated pan letters in the monument sign and directional signage that is limited to one (1) sign that is no more that two (2) square feet in size. The Food Bank of Delaware plan would create a monument sign that includes an electronic message center and five (5) directional signs throughout the property that are twelve (12) square feet in size. These changes would allow full and complete messaging with all those that visit the Food Bank of Delaware on a daily basis.

As outlined in Exhibit A, Article 5 of Resolution 2016-05, the Declaration of Covenants, Conditions and Restrictions and Easements "may, from time to time, be amended by Resolution," of a majority vote of the City of Milford City Council.

The Food Bank of Delaware respectfully requests that the City Council of the City of Milford make an amendment to the sign requirements for our property and that we be allowed to construct the signage that will best serve the thousands of constituents we assist each year.

We look forward further discussions and, if necessary, discussing this issue with City Council at an upcoming meeting. Should you have any questions, please feel free to contact me by phone at (302) 393-2010 or by e-mail at crobinson@fbd.org.

Thank you in advance!

Sincerely,

Chad Robinson
Vice President of External Affairs

CC: Mr. Mark Whitfield, City Manager
Mr. Rob Pierce, Planning Director

**Tax Parcel #** MD-16-173.00-01-20.00-000; MD-16-173.00-01-02.24-000
MD-16-173.00-01-02.23-000; MD-16-173.00-01-02.22-000
MD-16-173.00-01-02.21-000; MD-16-173.00-01-02.20-000
MD-16-173.00-01-02.19-000; MD-16-173.00-01-02.18-000
MD-16-173.00-01-02.17-000; MD-16-173.00-01-02-16-000
MD-16-173.00-01-02.15-000; MD-16-173.00-01-02.14-000
MD-16-173.00-01-02.13-000; MD-16-173.00-01-02.12-000
MD-16-173.00-01-02.11-000; MD-16-173.00-01-02.10-000
MD-16-173.00-01-02.08-000; MD-16-173.00-01-02.07-000
MD-16-173.00-01-02.06-000; MD-16-173.00-01-02.05-000
MD-16-173.00-01-02.03-000; MD-16-173.00-01-02.02-000
MD-16-173.00-01-02.00-000

**Prepared By & Return To:**
**City of Milford**
**201 S Walnut Street**
**Milford, DE 19963**

**RESOLUTION 2023-xx**

THE CITY of Milford DELAWARE

**DECLARATION OF COVENANTS,**
**CONDITIONS AND RESTRICTIONS**
**Independence Commons in the City of Milford, Kent County, Delaware**

WHEREAS, in 1998, the City of Milford ("City") purchased and subdivided 211 +/- acres of property on the north and south sides of County Road 409 (Airport Road and east side of State Route 15 (Canterbury Road) for economic development benefits; and

WHEREAS, the City of Milford initially sold the property for $24,000 an acre with appraisals of the properties completed in 2006, 2008 and 2016; and

WHEREAS, it is deemed to be in the best interest of the City of Milford and its taxpayers to sell the land in accordance with its most recent appraisals; and

WHEREAS, as the owner of the subdivision and infrastructure shown and described in Exhibit B, attached hereto, and known as Independence Commons ("property"), the City intends that this property continue to provide employment opportunities and economic benefits to all City residents; and

WHEREAS, the City desires to create, establish, preserve and maintain a unified commercial development upon the property and finds it appropriate to subject the property to certain easement, covenants and other restrictions for the orderly development and operation of the property and mutual benefit of all owners of the property as a unified commercial development, regardless of time of purchase or zoning district; and

WHEREAS, the City deems it desirable and in the best interest of all present and future owners of the property and all portions thereof, to subject the property to this Declaration.

NOW, THEREFORE, the City hereby declares that the real property described in Exhibit B, effective September 11, 2023, is and will be held, conveyed, acquired and encumbered subject to the terms and provisions of the Declaration, all of which shall run with the land and binds any respective successors, heirs and assigns.

NOW, THEREFORE, IT IS HEREBY RESOLVED by the Mayor and Council of the City of Milford:

1) City Council approves the Declaration of Covenants, Conditions, Restrictions and Easements attached as Exhibit A.
2) This Resolution shall supersede Resolutions passed by the majority of City Council on February 13, 2006, March 12, 2007, September 22, 2008 and March 14, 2016 in relation to Independence Commons.
3) This Resolution shall supersede Deed Book RE, Volume 8104, Page 278 recorded with Kent County Recorder of Deeds on May 25, 2016.

_____ _____

Mayor City Clerk

Adopted: September 11, 2023

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**EXHIBIT A**
**Declaration of Covenants, Conditions, Restrictions and Easements**

## Article 1
OC – 1 Office Complex District

A. The Property is zoned OC-1. The purpose of an OC-1 Office Complex District shall be to provide locations for the development of general and professional offices and office parks in areas of high accessibility and visibility. Also, this district will facilitate the expansion of the City's service industries in attractive environments.
B. The Property shall be developed in accordance with this declaration and the terms of the OC-1 zoning district that are in place at the time the Property is purchased. The City shall provide a copy of the OC-1 regulations to the purchaser prior to settlement.

## Article 2
Sign Requirements

A. Each office structure may have one sign which pertains only to the permitted use on the premises and shall indicate only the name, insignia and/or address of the use.
B. Wall signs must be integral with or attached flat against the building. (The sign must face the major thoroughfare that the property abuts).
C. The monument signs for this development shall incorporate architectural features and colors common to the buildings. Monument signs shall include individually mounted reverse pan channel letters with internal lighting. Metal cabinets with white Plexiglas shall not be allowed. All signs shall require separate sign permit review and approval.
D. Signs allowed under this section may be a maximum of fifty (50) square feet and may only be indirectly illuminated with non-color light, shall not be flashing or moving, shall be constructed of stone or brick. Signs constructed of other material will be reviewed and approved by the City Planner and the Planning Commission for conformance and architectural appearance with the Independence Commons concept. No more than 5% of the façade may be used for additional signage.
E. One free standing directional sign of no more than two (2) square feet may be hung at the office driveway entrance.
F. Signs may not overhang the street right-of-way nor otherwise obstruct or impair the safety of pedestrians or motorists.
G. Portable signs and commercial vehicles serving as portable signs are prohibited.
**H. Signage may differ from these sign requirements if approved by City Council as part of a**

DRAFT

**Comprehensive Sign Plan conditional use application as outlined in Chapter 230 Zoning.**

## Article 3
Easements

A. Easements to Facilitate Construction, Installation and Maintenance. The City of Milford hereby reserves to itself and it successors and assigns, a non-exclusive blanket easement over and through each lot twenty-five (25) feet of any boundary line of such lot to the extent such boundary line runs along any roadway or the 100 year flood plain, and otherwise fifteen (15) feet of any boundary line of such lot, for all purposes reasonably related to the development, installation, completion, maintenance and operation On Community Features on the Property, including without limitation: temporary slope and construction easements; and drainage, erosion control and storm and sanitary sewer easements (including the right to cut or remove trees, bushes or shrubbery, to regrade the soil and to take any similar actions reasonable necessary; provided, however, that thereafter The City of Milford shall cause to be restored the affected area as near as practicable to its original condition; easements for the storage (in a slightly manner) of reasonable supplies of building materials and equipment necessary to complete, repair, operation or maintain such Community Features; and easements for the construction, installation, and Upkeep of improvements (e.g. structures, landscaping, street lights, signage, sidewalks, etc.) on the Property or reasonably necessary to serve the Property.

B. Storm water Management Easement. The City Of Milford hereby reserves to itself and its successors and assigns an easement and the right to grant and reserve easements over and through each lot within twenty-five (25) feet of any boundary line of such lot to the extent such boundary line runs along any roadway or the 100 year flood plain, and fifteen (15) feet of all other boundary lines of such lot, for the construction installation, maintenance, repair, operation and replacement of storm water management facilities, including storm water retention areas, which are Community Features. The City of Milford shall assign its right, title and interest therein to the Association. Storm water shall be conveyed across lots only by means of storm sewers and appurtenant facilities and piping which shall be designed, installed and maintained in accordance with the requirements of state and local government authorities having jurisdiction and not by means of trenches, ditches and swales. Each Owner shall bear the cost of installation of pipes necessary to provide underground conveyance features on adjoining lots. The City of Milford and/or the Association shall also have the right to allow adjacent properties to connect their storm water management facilities into the Storm water Facility for the Property; provided, however that the Owners of such adjacent properties shall be required to agree to bear a portion of the expense of Upkeep for the storm water management facilities for the Property in such amount as may be deemed appropriate by The City of Milford and/or the Association. No such use shall be such as to prevent the Owners

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of each of the lots from enjoying and making full use of the Storm water Facilities in accordance with their applicable design and capacity requirements under applicable laws and regulations.

C. Easements for Utilities and Related Services. A non-exclusive perpetual blanket easement is hereby granted over and through each lot within twenty-five (25) feet of any boundary line of such lot to the extent such boundary line runs along any roadway or the 100 year flood plain, and fifteen (15) feet of any other boundary line of such lot, for ingress, egress and for installation and Upkeep of the facilities for providing as Community Features for any portion of the Property, and utilities, including without limitation water, sewer, drainage. Gas, electricity, cable, fiber optic, telephone and television service, whether public or private, to any person installing or providing Upkeep for the aforesaid services. By virtue of this easement, it shall be expressly permissible and proper for The City of Milford or the Person providing the service to install and maintain the necessary equipment on the Property within the area of such easement and to affix and maintain wires, circuits, conduits, installations and other features and facilities underground. Any pipes, conduits, lines, wires, transformers and any other apparatus necessary for the provision of metering of any utility may be installed, maintained or relocated where contemplated on any site plan approved by the City of Milford, within the easement areas described above. No water, sewer, gas, telephone, electrical, television, or communication lines, systems or facilities may be installed or relocated unless approved by The City of Milford. Should any Person providing utilities or services covered by the foregoing general easement request a specific easement by separate recordable document, The City of Milford shall have, and is hereby given, the right and authority to grant such easement without conflicting with the terms hereof, and, if so requested, the Owner of each lot to be burdened thereby shall join in such document without charge or consideration. Any Person using the easement created herein shall use its best efforts to install and maintain the utilities and services provided for herein with minimal disturbance to the Owners; complete its installation and Upkeep activities as promptly and expeditiously as possible; and restore the surface of the ground to substantially its original condition after completion.

## Article 4

Common Expenses

A. Each Owner of any parcel, by acceptance of a deed, agrees to pay to the City of Milford an annual fee for the maintenance of storm water management areas, open space, landscaping and landscaped buffers. Said such fee is set at $400.00 per lot.

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## Article 5

General Conditions

A. Each Owner shall be responsible for the management and upkeep of all parking areas, landscaping, entrance features, project signage, storm water management facilities and structures, utilities facilities and associated lighting and irrigation systems located on its lot that are not part of the Community Features.

B. The City of Milford shall be responsible for the management and upkeep of all the Community Features, the cost of which shall be assessed as Common Expense. The City of Milford shall not have any responsibility for the Upkeep of any other portion of the lots (except those lots of which The City of Milford is an Owner) except for the Community Features. The City of Milford shall establish the standard for Upkeep of Community Features in its sole discretion.

C. Each Owner shall keep such Owner's lot and all improvements located on the lot in good order, condition and repair and in a clean and sanitary condition, including without limitation all necessary grounds maintenance, except to the extent maintained by The City of Milford. Each Owner shall perform this responsibility in such manner as shall not unreasonably disturb or interfere with the other Owners. If any Owner shall fail to keep such Owner's lot in as good repair and condition as when acquired and in neat and orderly condition, consistent with such Rules and Regulations as The City of Milford may promulgate, then The City of Milford may give notice to that Owner of the condition complained of, specifying generally the action to be taken to rectify that condition. If the Owner fails to take the actions specified by The City of Milford or to otherwise rectify the condition within thirty (30) days after the date of notice is given, or such other period as may be specified in the notice if the circumstances warrant a different period, The City of Milford shall have the right to rectify that condition by taking such action as was specified in the notice. The costs incurred in rectifying the condition shall be assessed against such Owner's lot.

D. Sidewalks. If the public right-of-way adjacent to any lot is improved by a concrete sidewalk or similar structure, the Owner of such lot must maintain the sidewalk adjacent to such Owner's lot to the extent not maintained by The City of Milford as a Community Feature or by the appropriate governmental agency.

E. No person shall make any additions, alteration or improvement in or to any portion of the Property (other than normal Upkeep) which is visible from the exterior of such portion of the Property, without the prior written consent of The City of Milford.

F. No lot may be subdivided or its boundaries otherwise relocated without the approval of The City of Milford, and Mortgagee of the affected lots, any Owner affected and the appropriate governmental entity. No portion less than all of any lot shall be conveyed or transferred by an Owner without the prior written approval of The City of Milford.

G. Any person obtaining approval of The City of Milford shall commence construction or alteration

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in accordance with plans and specifications approved within six (6) months after date of approval and shall substantially complete any construction or alteration within such period as within six months after approval, or such other time period determined by The City of Milford, then approval shall lapse.

H. In the event that any purchaser of land within the Property shall not commence construction of a building thereon within two years from the date of settlement, The City of Milford shall have the option of purchasing said land from the owner at any time prior to the commencement of said construction at the purchase price paid therefore as shown in the Owner's settlement sheet.

I. Trash. Except in connection with construction activities, no burning of any trash and no accumulation of storage of litter, refuse, bulk materials, building materials or trash of any other kind shall be permitted on any lot. Trash containers shall not be permitted to remain in public view from another lot except on days of trash collection. Trash containers and refuse disposal systems must be maintained in enclosures or screened in compliance with the Rules and Regulations. No portion of the lot shall be used as an auto junk yard or salvage yard.

J. It is prohibited to have any outdoor storage buildings and outdoor storage of any kind, located on the property.

## Article 6
Architectural Review

A. The City of Milford shall develop Design Guidelines. Such Guidelines are hereby incorporated by this reference and shall be enforceable as if set forth herein in full. Such Guidelines include:
   1. Exterior front and side walls are subject to site plan approval and must be finished on the exterior with the following:
      a. Architectural masonry units, excluding concrete block and cinder block
      b. Natural stone
      c. Precast concrete
      d. Steel
      e. Aluminum
      f. Glass materials or the equivalent
      g. Vinyl siding

## Article 7
Reconstruction and Repair

A. If a building or other major improvement located upon a lot is damaged or destroyed, the Owner thereof shall restore the site either by repairing or reconstructing such building or other major improvements or by clearing away the debris and restoring the site to an acceptable condition

compatible with the remainder of the Property. Unless The City of Milford permits a longer time period, such work must be commenced within six months after the casualty and substantially within twenty-four months after the casualty.

**Article 8**

Compliance

A. Failure to comply with any of the terms hereof or the Design Guidelines or the Rules of Regulations shall be grounds for relief, including without limitation, of an action to recover any sums due for money damages, injunctive relief, foreclosure of the lien for payment of all assessments, any other relief provided for herein and any other relief afforded by a court of competent jurisdiction, including attorneys' fees, all of which relief may be sought by The City of Milford and/or its managing agent. Before an action may be sought, the City shall notify the Owner against whom such action would be brought, the reason for the action, and shall be given an opportunity to be heard in a public hearing before the Board of Adjustment.

**Article 9**

Amendments

This Declaration of Covenants, Conditions, Restrictions and Easements, as herein stated, may, from time to time, be amended by Resolution. Such amendment, supplement, or change shall not become effective except by majority vote of City Council

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**IN WITNESS WHEREOF,** the City of Milford, has caused this Resolution to be executed this 11th day of September, 2023.

**CITY OF MILFORD**

_____ _____(SEAL)
Attest/City Clerk By: Mayor Arthur J. Campbell

STATE OF DELAWARE )
) SS.
COUNTY OF SUSSEX )

On this 11th day of September 2023, before me, a Notary Public in and for said County, personally came Arthur J. Campbell, Mayor of the City of Milford, Delaware, a Municipal Corporation, to me personally known to be the respective officer of said Municipal Corporation and the identical person whose name is affixed to the foregoing instrument.

WITNESS my hand and Notarial Seal the day and year last above written.

_____
Notary Public

_____
Date Commission Expires

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**EXHIBIT B**
**Legal Description**

**LANDS OF MILFORD INDEPENDENCE COMMONS**

September 19, 2008

**ALL** that piece or parcel of land, hereinafter described, situate, lying and being on the northerly side of Airport Road, the easterly side of Canterbury Road and being located in Milford Hundred, Kent County, Delaware, being all of Parcels 3,4,5,6,7,8,9,10,11, 12,13,14,15,16,17,18, lands of the City of Milford, lands of the State of Delaware, Delaware Veterans Boulevard, Patriots Way, West Liberty Way and East Liberty Way as shown on a plat entitled "Milford Independence Commons", completed by Davis, Bowen & Friedel, Inc., dated July 2005 and revised September 2008; said piece or parcel of land being more particularly described as follows:

**BEGINNING** at a point formed by the intersection of the northerly right-of-way line of Airport Road, (County Road 407) 60 feet wide, with the easterly right-of-way line of Delaware Veterans Boulevard, width varies, said point being the southerly end of a daylight easement to Airport Road,

1) Thence, leaving said right-of-way line of Delaware Veterans Boulevard and coincident with said right-of-way line of Airport Road the following (5) courses and distances, North 69 degrees 39 minutes 23 seconds West 488.77 feet to a point,

2) Thence, along a curve to the left having a radius of 860.89 feet, an arc length of 308.55 feet and a chord bearing and distance of North 79 degrees 52 minutes 40 seconds West 306.91 feet to a point,

3) Thence, South 89 degrees 50 minutes 48 seconds West 625.08 feet to a point,

4) Thence, North 85 degrees 22 minutes 25 seconds West 113.11 feet to a point,

5) Thence, South 89 degrees 51 minutes 46 seconds West 250.00 feet to a point at the southerly end of a daylight easement to Canterbury Road, (Delaware Route 15) width varies,

6) Thence, leaving said right-of-way line of Airport Road and coincident with said daylight easement North 54 degrees 03 minutes 53 seconds West 58.55 feet to a point on the easterly right-of-way line of aforementioned Canterbury Road,

7) Thence, coincident with said right-of-way line of Canterbury Road the following (2) courses and distances, along a curve to the left, having a radius of 2580.67 feet, an arc distance of 254.27 and a chord bearing and distance of North 01 degrees 49 minutes 13 seconds West 254.17 feet to a point,

8) Thence, North 16 degrees 51 minutes 33 seconds West 64.34 feet to a point on the southerly line of lands of, now or formerly Donald B. & Renee A. Smith as recorded in the Office of the Recorder of

Deeds in and for Kent County and the State of Delaware in deed book D-485, page 249,

9) Thence, leaving aforementioned right-of-way of Canterbury Road and coincident with said Smith lands, the following (2) courses and distances, North 83 degrees 51 minutes 24 seconds East 268.17 feet to a point,

10) Thence, North 06 degrees 09 minutes 25 seconds West 160.12 feet to a point, on the easterly line of lands of, now or formerly Beverly H. Messick, as recorded in the aforementioned Office of the Recorder of Deeds in deed book D-681, page 186,

11) Thence, leaving said Smith lands and coincident with said Messick Lands North 06 degrees 09 minutes 50 seconds West 275.24 feet to a point, on the easterly line of lands of, now or formerly Richard F. & Emma I. Farley, as recorded in the aforementioned Office of the Recorder of Deeds in deed book D-424, page 69,

12) Thence, leaving said Messick lands and coincident with said Farley lands, North 03 degrees 36 minutes 52 seconds West 165.08 feet to a point at the easterly end of a private road,

13) Thence, leaving said Farley lands and coincident with said end of private road and in part coincident with lands of, now or formerly Kevin J. & Christine I. Docherty, as recorded in the aforementioned Office of the Recorder of Deeds in deed book M-42, page 62, North 03 degrees 03 minutes 55 seconds East 143.13 feet to a point, on the southerly line of lands of, now or formerly Paynter A. & Joyce E. Lynch, as recorded in the aforementioned Office of the Recorder of Deeds in deed book D-424, page 273,

14) Thence, leaving said Docherty lands and coincident with said Lynch lands the following (2) courses and distances, South 87 degrees 07 minutes 56 seconds East 221.36 feet to a point,

15) Thence, North 02 degrees 49 minutes 41 seconds East 197.76 feet to a point on the easterly line of lands of, now or formerly Dr. Brent & Gwendlyn Elliott, as recorded in the aforementioned Office of the Recorder of Deeds in deed book B-33, page 117, said point also being in the centerline of Swan Creek Branch,

16) Thence, leaving said Lynch lands and coincident by and with the centerline of said branch also coincident with said Elliott lands also coincident with lands of now or formerly Ronald & Debbie Lavere as recorded in the aforementioned Office of the Recorder of Deeds in deed book, A-46 page 229, also coincident with lands of, now or formerly Edward Ripper as recorded in the aforementioned Office of the Recorder of Deeds in deed book P-49, page 239, also coincident with lands of, now or formerly Marty A. & Robin Lavere Messick as recorded in the aforementioned Office of the Recorder of Deeds in deed book 2123, page 193, also coincident with lands of, now or formerly Roger & Ruth Ann Minner as recorded in the aforementioned Office of the Recorder of Deeds in deed book I-30, page 53, also coincident with lands of, now or formerly James A. Bowman as recorded in the aforementioned Office of the Recorder of Deeds in deed book D-397, page 3, the following (20)

courses and distances, North 02 degrees 36 minutes 13 seconds West 24.24 feet to a point,

17) Thence, North 26 degrees 41 minutes 21 seconds East 74.64 feet to a point,

18) Thence, North 73 degrees 46 minutes 40 seconds East 40.42 feet to a point,

19) Thence, North 60 degrees 55 minutes 03 seconds East 45.25 feet to a point,

20) Thence, North 64 degrees 17 minutes 03 seconds East 70.86 feet to a point,

21) Thence, North 31 degrees 59 minutes 01 seconds East 40.16 feet to a point,

22) Thence, North 33 degrees 34 minutes 30 seconds East 52.71 feet to a point,

23) Thence, North 37 degrees 04 minutes 53 seconds East 56.03 feet to a point,

24) Thence, North 01 degrees 26 minutes 29 seconds West 27.35 feet to a point,

25) Thence, North 84 degrees 23 minutes 10 seconds East 69.26 feet to a point,

26) Thence, North 56 degrees 08 minutes 29 seconds East 357.40 feet to a point,

27) Thence, North 05 degrees 30 minutes 15 seconds East 30.70 feet to a point,

28) Thence, North 43 degrees 22 minutes 30 seconds East 137.43 feet to a point,

29) Thence, North 38 degrees 15 minutes 15 seconds East 111.56 feet to a point,

30) Thence, North 84 degrees 35 minutes 41 seconds East 160.76 feet to a point,

31) Thence, North 65 degrees 09 minutes 48 seconds East 148.49 feet to a point,

32) Thence, North 27 degrees 47 minutes 42 seconds East 92.54 feet to a point,

33) Thence, North 46 degrees 29 minutes 11 seconds East 146.05 feet to a point,

34) Thence, North 81 degrees 54 minutes 47 seconds East 126.16 feet to a point,

35) Thence, North 73 degrees 40 minutes 00 seconds East 19.83 feet to a point on the westerly line of lands of, now or formerly Delaware Hospice, Inc. as shown on aforementioned plat of "Milford Independence Commons"

36) Thence, leaving the centerline of aforementioned Swan Creek Branch and coincident with said



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Delaware Hospice lands, South 11 degrees 05 minutes 32 seconds East 937.30 feet to a point on the northerly line of lands of, now or formerly Darren J. & Judith M. Sobota as recorded in the aforementioned Office of the Recorder of Deeds in deed book D-170, page 321,

37) Thence, leaving said Delaware Hospice lands and coincident with said Sobota lands South 73 degrees 28 minutes 51 seconds West 178.71 feet to a point on the southerly line of lands of, now or formerly P.J. Walker as recorded in the aforementioned Office of the Recorder of Deeds in deed book D-543, page132,

38) Thence, leaving said Sobota lands and coincident with said Walker lands, also coincident with lands of, now or formerly Melody Booker-Gardner as recorded in the aforementioned Office of the Recorder of Deeds in deed book D-704, page 292, also coincident with lands of, now or formerly Randy E. Marvel, as recorded in the aforementioned Office of the Recorder of Deeds in deed book D-543, page 128, South 65 degrees 33 minutes 59 seconds East 1525.85 feet to a point on the westerly line of lands of, now or formerly John K. & Joseph A. Huber as recorded in the aforementioned Office of the Recorder of Deeds in deed book Q-51, page 151,

39) Thence, leaving said Marvel lands and coincident with said Huber lands, also coincident with lands of, now or formerly Anthony & Elizabeth Cadiz as recorded in the aforementioned Office of the Recorder of Deeds in deed book Z-53, page 310, also coincident with lands of, now or formerly Henry F. & Barbara G. Traute as recorded in the aforementioned Office of the Recorder of Deeds in deed book D-152, page 219, also in part coincident with lands of, now or formerly Raymond D. & Marianne Flavin Jr. as recorded in the Office of the Recorder of Deeds in deed book I-54, page 27, South 31 degrees 53 minutes 34 seconds West 850.72 feet to a point on the northerly line of lands of, now or formerly Tim Johnson as recorded in the aforementioned Office of the Recorder of Deeds in deed book D-286, page 59, being designated as Parcel 2 on aforementioned plat of "Milford Independence Commons"

40) Thence, leaving said Flavin lands and coincident with said Parcel 2, also coincident with other lands of, now or formerly Tim Johnson as recorded in the aforementioned Office of the Recorder of Deeds in deed book D-592, page 1, being designated as Parcel 1 on aforementioned plat of "Milford Independence Commons" the following (9) courses and distances, North 58 degrees 09 minutes 09 seconds West 420.55 feet to a point,

41) Thence, South 31 degrees 42 minutes 14 seconds West 214.19 feet to a point,

42) Thence, along a curve to the right, having a radius of 95.00 feet, an arc distance of 130.17 and a chord bearing and distance of South 70 degrees 57 minutes 28 seconds West 120.22 feet to a point,

43) Thence, North 69 degrees 47 minutes 16 seconds West 323.55 feet to a point,

44) Thence, along a curve to the left, having a radius of 30.00 feet, an arc distance of 47.12 and a chord bearing and distance of South 65 degrees 12 minutes 44 seconds West 42.43 feet to a point,

45) Thence, South 20 degrees 12 minutes 44 seconds West 110.55 feet to a point,

46) Thence, South 12 degrees 20 minutes 44 seconds West 75.74 feet to a point,

47) Thence, South 20 degrees 20 minutes 58 seconds West 47.82 feet to a point,

48) Thence, South 24 degrees 39 minutes 02 seconds East 106.01 feet to the point and place of beginning; **CONTAINING** 98.25 acres of land, more or less.

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## § 230-24.14. Standards in business park and office zones.

A. General standards and sign features: Permanent on-premise signs in the Business Park and Office Zones, as identified herein, shall be subject to the standards set forth in this section.

(1) BP Business Park District.

(2) OC-1 Office Complex District.

B. Subject to the regulations in this section, Business Park and Office Zone properties are limited to a combination of two signs per street frontage.

(1) Freestanding Signs

(a) Freestanding signs shall be limited to one per street frontage.

(b) Freestanding signs shall not exceed 10 feet in height and shall not exceed 48 square feet of sign area per side.

(c) Freestanding signs shall have a minimum setback of 10 feet from the front lot line and a minimum setback of 15 feet from adjacent property lines.

(2) Projecting Signs: Prohibited.

(3) Building Signs.

(a) Building signs include wall or fascia signs, and signs otherwise permanently applied to walls or other building surfaces.

(b) The total sign area of all parallel wall signs applied to any given façade shall not exceed 10% of the building façade in elevation view, including window and door areas and cornices to which they are affixed or applied.

(4) Canopy Signs: Prohibited.

(5) Awning Signs: Prohibited.

(6) Electronic Message Centers are prohibited except that electronic message centers may be permitted by conditional use approval from City Council on properties used for any of the following uses

(a) Public and private schools.

(b) Churches and other places of worship.

(c) Social clubs or fraternal, social service, union, or civic organizations.

## § 230-24.20. Electronic message centers.

A. General Electronic Message Center regulations

(1) An Electronic Message Center may consist of a portion of a building sign or freestanding sign, subject to the following limitations;

(a) For a sign with a sign area of 32 square feet or less, all of the sign can be comprised of an Electronic Message Center.

(b) For a sign with a sign area of greater than 32 square feet, the electronic message center portion of the sign cannot exceed 70% of the sign area or 100 square feet per sign, whichever is less.

(2) All Electronic Message Centers shall have automatic dimming controls, either by photocell (hardwired) or via software settings, in order to bring the Electronic Message Center lighting level at night into compliance with Section 230-24.21, Sign Illumination Standards. The owner of the Electronic Message Center shall provide a certification by an independent contractor of the lumens showing compliance with the Illumination Standards at the time of building permit issuance.

(3) The owner of the Electronic Message Center shall provide the City with contact information for a person who is available at any time to turn off the Electronic Message Center promptly if a malfunction occurs.

(4) All Electronic Message Center display features and functions are permitted, except that the following features and functions are prohibited:

(a) Flashing.

(b) Full motion video or film display via an electronic file imported into the Electronic Message Center software or streamed in real time into the Electronic Message Center.

## § 230-24.21. Sign illumination standards.

Signs may be illuminated consistent with the following standards:

A. A sign in any Zone may be illuminated at night. Signs that are illuminated at night may not exceed a maximum luminance level of 750 cd/m2 or Nits, regardless of the method of illumination.

B. The following signs are prohibited:

(1) Signs which are not effectively shielded as to prevent beams or rays of light from being directed at any portion of any roadway or residential area.

(2) Signs which are of such intensity or brilliance as to cause glare or to impair the vision of any resident or the driver of any motor vehicle or which otherwise interfere with any driver's operation of a motor vehicle.

(3) Signs which are so illuminated that they interfere with the effectiveness of or obscures an official traffic sign, device or signal.

C. Signs that have external illumination, whether the lighting is mounted above or below the sign face or panel, shall have lighting fixtures or luminaries that are fully shielded to focus light only on the sign.

D. All illuminated signs must comply with the maximum luminance level of 750 cd/m2 or Nits at least one-half hour before Apparent Sunset, as determined by the National Oceanic and Atmospheric Administration (NOAA), US Department of Commerce, for the specific geographic location and date. All illuminated signs must comply with this maximum luminance level throughout the night, if the sign is energized, until Apparent Sunrise, as determined by the NOAA, at which time the sign may resume luminance levels appropriate for daylight conditions, when required or appropriate.

E. No illuminated sign, including Electronic Message Centers, shall have a maximum illuminance level greater than 0.30 foot candle above ambient light, as measured using a foot candle meter, or similar technology, at a preset distance. Preset distances to measure the foot candle impact vary with expected viewing distances of each sign size. Measurement shall be based upon the sign area using the following formula:

| Sign Area (in square feet) | Measurement Distance (in feet) |
|---|---|
| 10 | 32 |
| 50 | 71 |

| | |
|---|---|
| 100 | 100 |
| 200 | 141 |
| 300 | 173 |

Notes: For signs with a sign area in square feet other than those measurements specifically listed in the table above, the measurement distance shall be calculated with the following formula:

Measurement Distance = Sign Area in Square Feet x 100

F. On-premise signs shall not be used as a form of outdoor lighting at night for security purposes or egress illumination.

## § 230-24.25. Comprehensive signage for major subdivisions and complexes.

A. Purpose. In recognition that large developments and complexes have signage needs that may not be adequately addressed by the standard sign regulations of Chapter 230, this section is specifically intended to establish an optional procedure for approval of comprehensive signage plans for such projects.

B. Qualifications. Comprehensive signage plans may only be submitted in conjunction with the following types of development projects:

(1) Major subdivisions and residential developments involving more than one entrance or involving 200 or more dwelling units;

(2) Planned unit developments;

(3) Shopping centers;

(4) Groups of three or more nonresidential principal structures under common management and located on one or more contiguous properties; or

(5) Any institutional complex, professional office, medical or educational campus, or business park.

C. Standards. Comprehensive signage plans shall comply with the following standards:

(1) If approved, comprehensive signage plans may not be held to the size, height, numbers, and area regulations for signs found in other sections of this article provided that the number, type, and size of signs proposed shall not be excessive and must be in proportion to the scale of the buildings and the uses planned for the site.

(2) All proposed signage shall be designed and coordinated with the overall architectural concept for the buildings on the site. Sign type, color scheme, size, and illumination shall be coordinated and compatible with the architecture of the development so as to formulate a thematic sign plan for the site.

(3) Wall-mounted signs shall be coordinated with the overall design theme of the site and designed as an integral component of the facades of buildings.

(4) Site landscaping shall be designed to complement and not conflict with sign placements.

(5) No off-premises signage will be permitted as part of an application for a comprehensive signage plan.

D. Approval process.

(1) Comprehensive signage plans shall be submitted for review by the Planning Commission for the purpose of providing commentary and recommendation to the City Council, if applicable. The City Council shall have authority to approve or deny the comprehensive signage plans, except for

applications that are not required to be reviewed by City Council, in which case the Planning Commission shall have the authority to approve or deny the comprehensive signage plans.

(2) Applicants may submit a comprehensive signage plan in conjunction with, and as a component of, any Preliminary Site Plan or Preliminary Major Subdivision application, for review and consideration by the Planning Commission and City Council, if applicable.

(3) Owners of existing developments or previously approved but not completed developments, or successors in interest thereto, including but not limited to legally created homeowners associations, that own and control subdivision identification signage in subdivision that meet the qualifications of Chapter 230-24.25(B) may submit a comprehensive signage plan for consideration as a conditional use site plan in accordance with the procedures set forth in Chapter 230 of this Code.

(4) Sign permits shall be obtained for each sign approved for installation as part of a comprehensive signage plan prior to the installation or placement of the sign.

E. Submission requirements. The following minimum submission materials shall accompany any request for consideration of a comprehensive signage plan.

(1) A site plan which details the signage proposed to include the physical location of all existing and proposed signs on the property and their relationship to all existing and proposed buildings, structures, streets, parking areas, stormwater management ponds, and all other physical features of the site.

(2) Fully dimensioned elevation drawings of each proposed sign. Proposed wall-mounted signs shall be illustrated as a component of the architectural elevation drawing of the building façade.

(3) Colored renderings of each proposed sign.

(4) Miscellaneous specifications to include proposed illumination type, mounting details, and materials proposed.

F. Planning Commission and City Council considerations. In considering approval of comprehensive signage plans, the Planning Commission and City Council shall take into consideration the public health, safety, and welfare, the comfort and convenience of the public in general, and the residents, businesses, and property owners in the immediate vicinity in particular, and shall ensure that qualifying developments are afforded adequate, but not excessive, signage.

## § 230-48. Criteria for evaluation.

The following criteria shall be used as a guide in evaluating a proposed conditional use:

A. The presence of adjoining similar uses.

B. An adjoining district in which the use is permitted.

C. There is a need for the use in the area proposed as established by the Comprehensive Plan.

D. There is sufficient area to screen the conditional use from adjacent different uses.

E. The use will not detract from permitted uses in the district.

F. Sufficient safeguards, such as traffic control, parking, screening and setbacks, can be implemented to remove potential adverse influences on adjoining uses.

## § 230-49. Conditions for approval; expiration.

A. In granting any conditional use permit, the City Council may designate such conditions as will, in its opinion, assure that the use will conform to the requirements as stated in § 230-48 and that such use will continue to do so.

B. A conditional use approval in conjunction with a Site Plan review shall expire upon expiration of the associated Site Plan.

C. A conditional use approval in conjunction with a Major Subdivision application shall expire upon expiration of the associated Major Subdivision.

D. A standalone conditional use permit shall expire within eighteen months of the date of issuance unless construction or operation of said use has commenced.

E. A reapplication for a conditional use permit for the same lot or use shall not be considered by the City Council within a period of one-year from its last consideration. This provision, however, shall not impair the right of the Council to propose a conditional use permit on its own motion.

# CITY OF MILFORD
# NOTICE OF PUBLIC HEARINGS

Planning Commission Hearing: Tuesday, September 19, 2023 @ 6:00 p.m.
City Council Hearing: Monday, September 25, 2023 @ 6:00 p.m.

NOTICE IS HEREBY GIVEN that the proposed Ordinance is currently under review by the City of Milford Planning Commission and City Council. City Council has the option to approve or deny the application. By not adopting the ordinance, City Council will deny the application. By adopting the ordinance, City Council will approve the application and the reason for the language being written in the affirmative.
This form of writing is not used to influence any decision of City Council:

**ORDINANCE 2023-35**
Conditional Use Application of Food Bank of Delaware
11.5 +/- acres of land
West Side of Delaware Veterans Boulevard within the Independence Commons Business Park
Address: 102 Delaware Veterans Boulevard
Comprehensive Plan Designation: Commercial
Zoning District: OC-1 (Office Complex District)
Present and Proposed Use: Charitable and Philanthropic Organization
Tax Parcel: MD-16-173.00-01-02.08

WHEREAS, the owners of the property as above described herein have petitioned the City of Milford for a Conditional Use to construct Electronic Message Center Monument Sign and a Comprehensive Sig Plan approval; and

WHEREAS, the City of Milford Planning Commission will consider the application at a Public Hearing on September 19, 2023; and

WHEREAS, Milford City Council will hold a Public Hearing on September 25, 2023 to allow for public comment and further review of the ordinance; and

WHEREAS, it is deemed in the best interest of the City of Milford to approve the Conditional Use, as herein described.

NOW, THEREFORE, the City of Milford hereby ordains as follows:

Section 1. Chapter 230-24.14 states Electronic Message Centers are prohibited unless permitted by a conditional use approval from City Council on properties used for (c) Social clubs or fraternal, social service, union, or civic organizations.

Section 2. Chapter 230-24.25 permits a Comprehensive Sign Plan review for larger scale projects and developments.

Section 3. Following adoption of Ordinance 2023-35, and upon the effective date, the Food Bank of Delaware is hereby granted a Conditional Use to allow an Electronic Message Sign and other signage outlined in the Comprehensive Sign Plan application at 102 Delaware Veterans Boulevard.

Section 4. Construction or operation shall commence within eighteen months of the date of issuance of the permit otherwise the conditional use becomes void.

Section 5. Dates.
Planning Commission Review & Public Hearing: September 19, 2023
City Council Introduction: September 11, 2023
City Council Public Hearing: September 25, 2023
Effective: Ten Days following Adoption

For additional information, please contact Rob Pierce in the Planning & Zoning Department either by e-mail at RPierce@milford-de.gov or by phone at 302.424.8396.

*Advertised: Delaware State News 09/03/2023*

# CITY OF MILFORD
# NOTICE OF PUBLIC HEARINGS

Planning Commission Hearing: Tuesday, September 19, 2023 @ 6:00 p.m.
City Council Hearing: Monday, September 25, 2023 @ 6:00 p.m.

NOTICE IS HEREBY GIVEN that the proposed Ordinance is currently under review by the City of Milford Planning Commission and City Council. City Council has the option to approve or deny the application. By not adopting the ordinance, City Council will deny the application. By adopting the ordinance, City Council will approve the application and the reason for the language being written in the affirmative.
This form of writing is not used to influence any decision of City Council:

**ORDINANCE 2023-36**
Conditional Use Application of James Purcell
0.31 +/- acres
South Side of Kings Highway between South Walnut Street and Polk Avenue
Address: 102 Kings Highway
Comprehensive Plan Designation: Low Density Residential
Zoning District: R-1 (Single-Family Residential District)
Present Use: Single-Family Dwelling
Proposed Use: Single Family Dwelling with Accessory Dwelling Unit
Tax Parcel: 1-30-3.08-063.00

WHEREAS, the owner of the property as above described herein have petitioned the City of Milford for a Conditional Use to construct an accessory dwelling; and

WHEREAS, the City of Milford Planning Commission will consider the application at a Public Hearing on September 19, 2023; and

WHEREAS, Milford City Council will hold a Public Hearing on September 25, 2023 to allow for public comment and further review of the ordinance; and

WHEREAS, it is deemed in the best interest of the City of Milford to approve the Conditional Use, as herein described.

NOW, THEREFORE, the City of Milford hereby ordains as follows:

Section 1. Chapter 230-9(C)(5) states accessory dwellings are allowed upon conditional use approval from City Council subject to conditions.

Section 2. Following adoption of Ordinance 2023-36, and upon the effective date, James Purcell is hereby granted a Conditional Use to construct a 672 square foot accessory cottage at 102 Kings Highway.

Section 3. Construction or operation shall commence within eighteen months of the date of issuance of the permit otherwise the conditional use becomes void.

Section 4. Dates.
Planning Commission Review & Public Hearing: September 19, 2023
City Council Introduction: September 11, 2023
City Council Public Hearing: September 25, 2023
Effective: Ten Days following Adoption

For additional information, please contact Rob Pierce in the Planning & Zoning Department either by e-mail at RPierce@milford-de.gov or by phone at 302.424.8396.

*Advertised: Delaware State News 09/03/2023*

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THE CITY of Milford DELAWARE

PLANNING DEPARTMENT
Planning, Economic Development,
Enforcement, and Inspections Office
O 302.424.8396 | F 302.424.3559

# DATA SHEET FOR LANDS OF JAMES PURCELL

Planning Commission Meeting: September 19, 2023

| | | |
|---|---|---|
| **Application Number / Name** | : | 23-024 / Lands of James Purcell |
| **Applicant** | : | James Purcell<br>102 Kings Highway<br>Milford, DE 19963 |
| **Owner** | : | Same |
| **Application Type** | : | Conditional Use |
| **Present Comprehensive Plan Map Designation** | : | Low Density Residential |
| **Present Zoning District** | : | R-1 (Single-family Residential District) |
| **Present Use** | : | Single-family Detached Dwelling |
| **Proposed Use** | : | Single-family Detached Dwelling with an Accessory Dwelling Unit |
| **Size and Location** | : | 0.31 +/- acres located along the south side of Kings Highway between S. Walnut Street and Polk Avenue, addressed as 102 Kings Highway. |
| **Tax Map & Parcel** | : | 1-30-3.08-063.00 |

ENC: Staff Analysis Report
Exhibit A – Location & Zoning Map
Exhibit B – Survey

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PLANNING DEPARTMENT
Planning, Economic Development,
Enforcement, and Inspections Office
O 302.424.8396 | F 302.424.3559

**STAFF REPORT**
**August 28, 2023**

| | | |
|---|---|---|
| **Application Number / Name** | **:** | 23-024 / Lands of James Purcell |
| **Tax Map & Parcel** | **:** | 1-30-3.08-063.00 |
| **Size and Location** | **:** | 0.31 +/- acres located along the south side of Kings Highway between S. Walnut Street and Polk Avenue, addressed as 102 Kings Highway. |

## I. BACKGROUND INFORMATION:

- The applicant proposes to construct a 672 square foot accessory cottage on the above referenced parcel as shown on the provided survey.

- Chapter 230-9(C)(5) states accessory dwelling are allowed upon conditional use approval from City Council subject to the conditions outlined in Section II of the staff report.

- Chapter 230 defines an accessory dwelling unit as "an accessory apartment or accessory cottage" and defines an accessory cottage as "a separate and subordinate dwelling unit that is located on the same lot as a single-family detached dwelling but is contained in a detached garage or other outbuilding."

## II. STAFF ANALYSIS:

Based on the information presented, the City of Milford Code, and the Comprehensive Plan, staff submits the following regarding the request for the Conditional Use:

- Chapter 230-21(B) states that single-family detached dwellings require 2.5 parking spaces per unit and accessory dwelling units require 1.5 parking spaces per unit; therefore the applicant is required to provide 4 off-street parking spaces on the property. There is adequate space within the existing driveway to accommodate 4 vehicles.

- Evaluation based on the criteria found under Chapter 230-9(C)(5) Accessory Dwelling Units;

  A. One dwelling unit on the property shall be owner-occupied. A notice and declaration of land use restriction to this effect shall be signed and recorded prior to issuance of a certificate of use and/or building permit for the accessory dwelling unit.

*Staff Response: The applicant/owner occupies the main residence on the subject parcel.*

B. Only one accessory dwelling unit (either apartment or cottage) shall be permitted per property.

*Staff Response: The applicant is only proposing one accessory cottage.*

C. Accessory Apartments.

*Staff Response: Not applicable.*

D. Accessory Cottages.

[1] An accessory cottage shall contain at least 220 square feet of floor area. The floor area of an accessory cottage shall not exceed 40% of the floor area of the single-family detached dwelling to which it is accessory or 1,200 square feet, whichever is greater.

*Staff Response: According to City assessment records, the existing single-family detached dwelling contains 1,747 square feet of living space (40% equals 699 square feet). The accessory cottage would need to be at least 220 square feet and no larger than 1,200 square feet based on the zoning ordinance. The applicant is proposing a 672 square foot accessory cottage.*

[2] For an accessory cottage which will be a new structure, the exterior materials, roof form, and window spacing and proportions of the accessory cottage shall approximate those of the existing or proposed single-family detached dwelling.

*Staff Response: This will be reviewed by the City at the time of building permit issuance.*

[3] For an accessory cottage located within an existing garage or other outbuilding, the structure is not required to approximate the exterior features of the existing single-family detached dwelling, but any exterior modification should be consistent with the architectural style of that structure unless the building is upgraded per the requirements for new structures.

*Staff Response: N/A.*

[4] Accessory cottages shall comply with the principal structure setbacks for the respective zoning district, unless the accessory cottage is located within an existing garage or other outbuilding, for which the structure must meet the accessory structure setbacks for the respective zoning district.

*Staff Response: The proposed accessory cottage would be 25 feet from the rear property line and 12 feet from the side property line, which meets the setback requirements of the R-1 zoning district.*

- Evaluation based on the criteria found under Chapter 230-48 Conditional Uses.

  A. The presence of adjoining similar uses.

     *The immediate vicinity is characterized by a mixture of uses including similar single-family detached dwellings on similar sized parcels, a wellness village containing various medical service uses, smaller individual medical office buildings and homes converted into medical and professional offices.*

  B. An adjoining district in which the use is permitted.

     *Accessory Cottages are allowed by conditional use within the residential zoning districts.*

  C. There is a need for the use in the area proposed as established by the Comprehensive Plan.

     *The Comprehensive Plan designates this area as Low Density Residential for which the R-1 zoning district is a permitted zoning category. Allowing accessory dwelling units would provide additional affordable housing options within the City of Milford. Promoting opportunities for the creation of new, clean, safe and affordable housing is a goal of the 2018 Comprehensive Plan.*

  D. There is sufficient area to screen the conditional use from adjacent different uses.

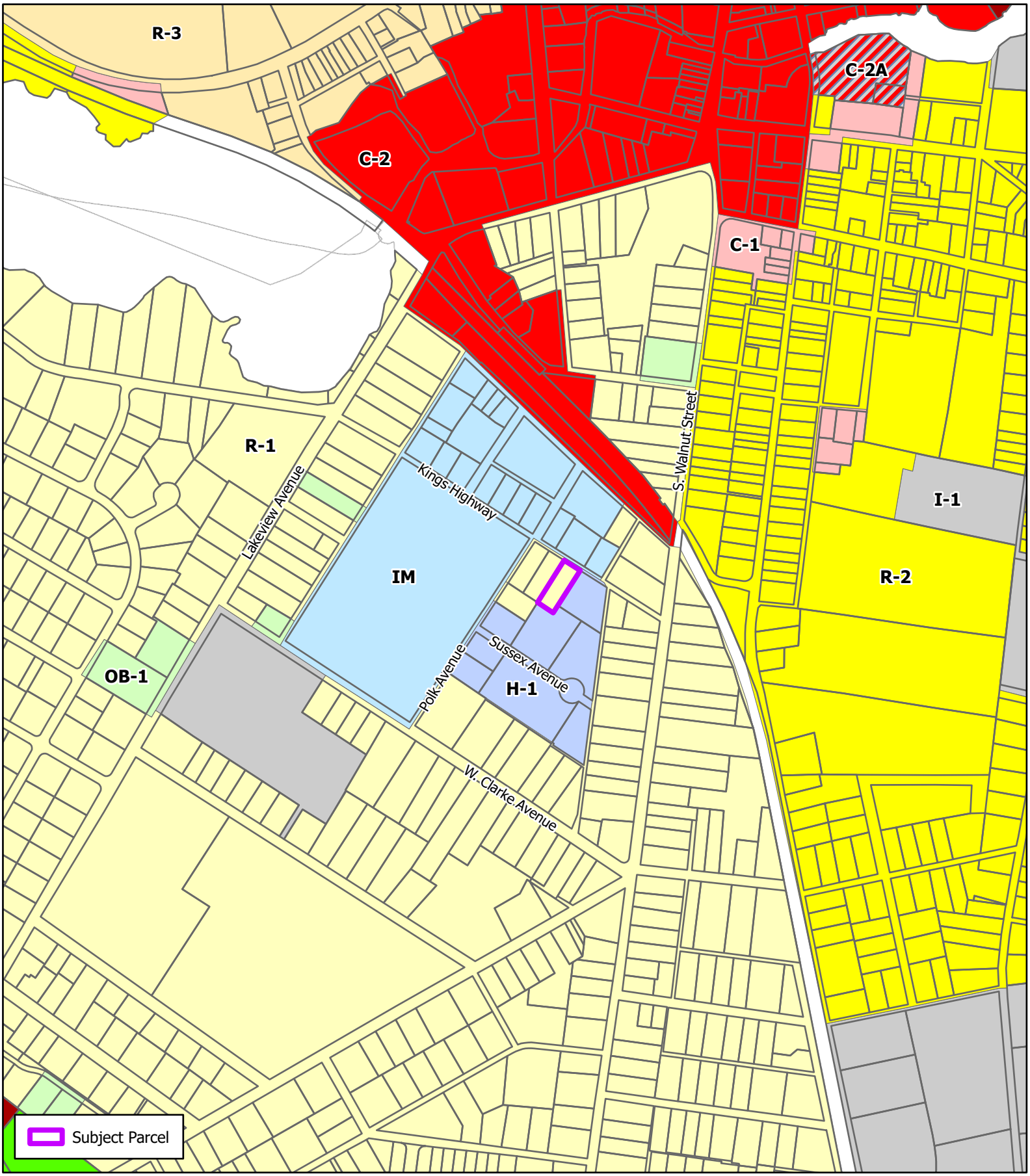
     *The proposed accessory dwelling unit would meet the principal setback requirements for the R-1 zoning district and would be constructed 12 feet from the side property line and 25 feet from the rear property line. No screening is proposed.*

  E. The use will not detract from permitted uses in the district.

     *The proposed use should not detract from permitted uses within the district. The property is located in an area with some low-density residential housing that is surrounded by medical and professional office uses. The properties to the east and south are zoned H-1 and contain a offices. The properties across the street are zoned IM and contain houses that have been converted to office space. The property to the west contains a single-family detached dwelling on a similarly sized property.*

  F. Sufficient safeguards, such as traffic control, parking, screening and setbacks, can be implemented to remove potential adverse influences on adjoining uses.

     *The proposed accessory dwelling unit would be constructed 12 feet from the side property line and 25 feet from the rear property line, meeting the principal setbacks for the R-1 zoning district. The applicant has provided enough off-street parking to meet the requirements of Chapter 230 Zoning.*




THE CITY of Milford DELAWARE

Scale: 0 300 600 Feet

Drawn by: WRP

Date: 08/24/23

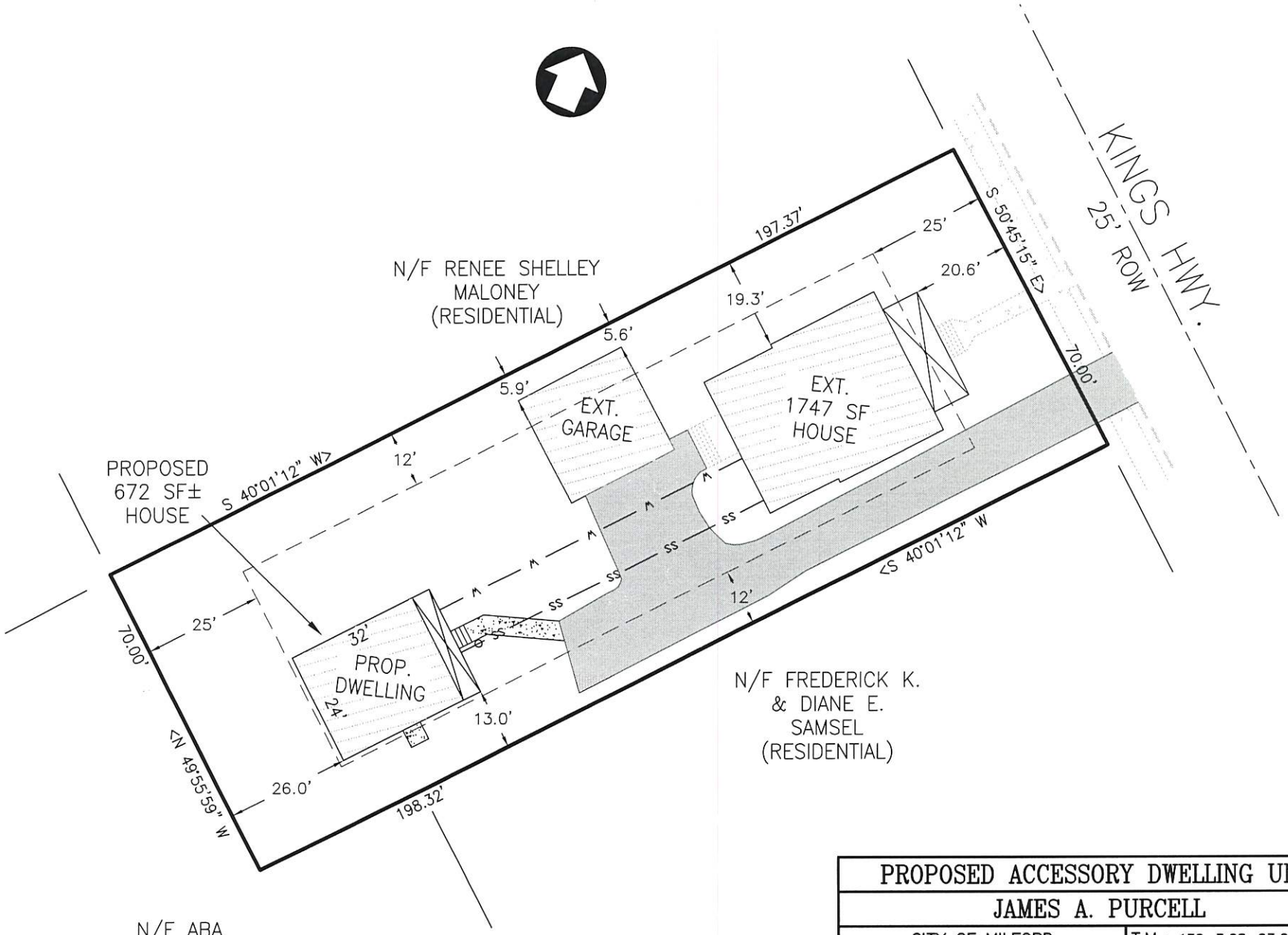
Filepath: CU_Purcell.aprx

Title:

Conditional Use

**Lands of James Purcell**

Location & Zoning Map




# PROPOSED ACCESSORY DWELLING UNIT

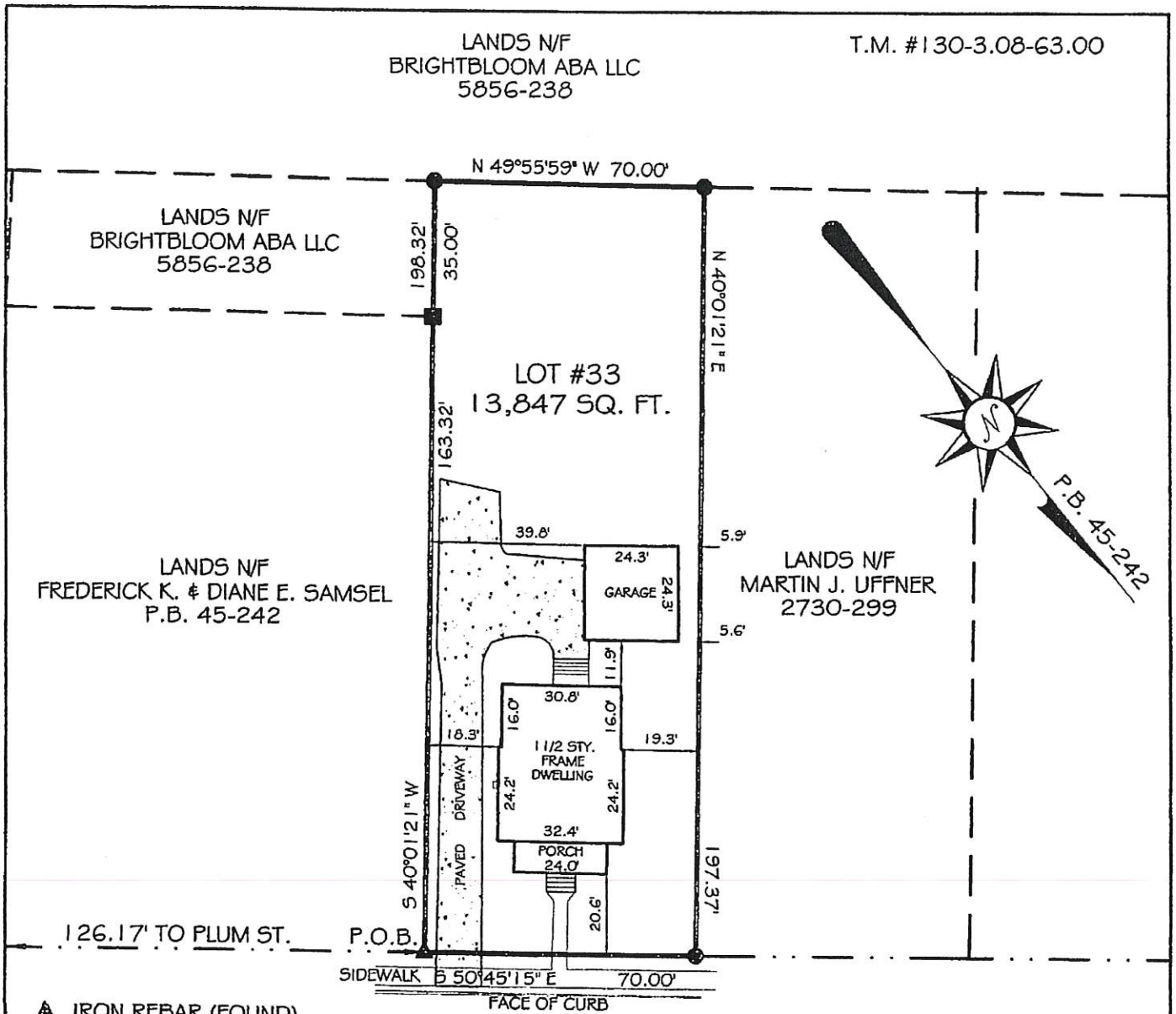
## JAMES A. PURCELL

CITY OF MILFORD
SUSSEX COUNTY, DELAWARE

T.M.: 130-3.08-63.00

MHDC
977 East Masten Circle
Milford, Delaware 19963
(302) 422-8255

DRAWN BY: RBA
DATE: JUL 12, 2023
FILE: Purcell
SCALE: 1" = 30'




SEE PLOT BOOK 179 PAGE 36 FOR EASEMENT RESERVATIONS. THIS SURVEY AND PLAT DOES NOT VERIFY THE EXISTENCE OR NON-EXISTENCE OF RIGHTS-OF-WAY OR EASEMENTS CROSSING THIS PROPERTY OTHER THAN THOSE SHOWN. NO TITLE SEARCH PROVIDED OR STIPULATED.

I, DONALD K. MILLER REGISTERED AS A PROFESSIONAL LAND SURVEYOR IN THE STATE OF DELAWARE, HEREBY STATE THAT THE INFORMATION SHOWN ON THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND MEETS THE STANDARDS OF PRACTICE AS ESTABLISHED BY THE STATE OF DELAWARE BOARD OF PROFESSIONAL LAND SURVEYORS. ANY CHANGES TO THE PROPERTY CONDITIONS, IMPROVEMENTS, BOUNDARY OR PROPERTY CORNERS AFTER THE DATE SHOWN HEREON SHALL NECESSITATE A NEW REVIEW AND CERTIFICATION FOR ANY OFFICIAL OR LEGAL USE.

DONALD K. MILLER, PLS 407 — DATE 5/16/23

SURVEY CLASS: SUBURBAN

# BOUNDARY SURVEY FOR

## JAMES A. PURCELL

102 KINGS HWY., MILFORD, DE. 19963
LOT #33, BLOCK H OF "CAUSEY ADDTN. TO SOUTH MILFORD" DEV.
CITY OF MILFORD
CEDAR CREEK HUNDRED SUSSEX COUNTY
STATE OF DELAWARE
SCALE 1" =40' MAY 1, 2023

PREPARED BY:
MILLER LEWIS, INC.
LAND SURVEYING
1560 MIDDLEFORD RD. • SEAFORD, DE. 19973
PH: 302-629-9895
FAX: 302-629-2391

**Conditional Use Summary for James Purcell Accessory Cottage**

Parcel TM: 130-3.08-63.00

Owner: James A. Pucell

Zone: R-1

The owner is seeking conditional use approval for a 672 sf accessory cottage to be placed in the rear of the lot per zoning code 230-9, C (5)(d) (d):

Accessory Cottages.

[1]

An accessory cottage shall contain at least 220 square feet of floor area. The floor area of an accessory cottage shall not exceed 40% of the floor area of the single-family detached dwelling to which it is accessory or 1,200 square feet, whichever is greater.

[2]

For an accessory cottage which will be a new structure, the exterior materials, roof form, and window spacing and proportions of the accessory cottage shall approximate those of the existing or proposed single-family detached dwelling.

[3]

For an accessory cottage located within an existing garage or other outbuilding, the structure is not required to approximate the exterior features of the existing single-family detached dwelling, but any exterior modification should be consistent with the architectural style of that structure unless the building is upgraded per the requirements for new structures.

[4]

Accessory cottages shall comply with the principal structure setbacks for the respective zoning district, unless the accessory cottage is located within an existing garage or other outbuilding, for which the structure must meet the accessory structure setbacks for the respective zoning district.

The structure will be used by a family member. All utility connections (except electric) will come from the existing house. The existing house livable area is 1747 sf. x 40% = 699 sf max. The proposed cottage area will be 672 sf.

## § 230-9. R-1 Single-Family Residential District.

In an R-1 District no building or premises shall be used and no building shall be erected or altered which is arranged, intended or designed to be used except for one or more of the following uses and complying with the requirements so indicated.

A. Purpose. The intent of the R-1 Residential District is to preserve the spacious residential atmosphere and quality of living of existing low-density residential development, to provide for the orderly and appropriate development of new low-density housing and to allow related uses that would not be detrimental to the residential character of the district.

C. Conditional uses subject to special regulations. The following uses may be permitted with the approval of a conditional use permit by the Milford City Council in accordance with the provisions in Article IX of this chapter:

(1) Churches and other places of worship and cemeteries.

(2) Public and private elementary, junior or senior high schools.

(3) Day-care facilities, including large family day cares involving more than six children.

(4) Conversion of a one-family dwelling into multiple dwelling units, if such dwelling is structurally sound but too large to be in demand for one-family use and if that conversion would not impair the character of the neighborhood, subject to conformance with the following requirements:

(a) There shall be a lot area of at least 2,000 square feet for each unit to be accommodated.

(b) There shall be a gross leasable floor area, computed as the sum of those areas enclosed by the outside faces of all exterior walls surrounding each story used for the residence, exclusive of any area for any accessory private garage, of at least 500 square feet per family to be accommodated.

(c) Fire escapes and outside stairways leading to a second or higher story shall, where practicable, be located on the rear of the building and shall not be located on any building wall facing a street.

(5) Accessory dwelling units. Accessory dwelling units include accessory apartments and accessory cottages and are subject to the following requirements;

(a) One dwelling unit on the property shall be owner-occupied. A notice and declaration of land use restriction to this effect shall be signed and recorded prior to issuance of a certificate of use and/or building permit for the accessory dwelling unit.

(b) Only one accessory dwelling unit (either apartment or cottage) shall be permitted per property.

(c) Accessory Apartments.

[1] Accessory apartments are only permitted within single-family detached dwellings.

[2] The floor area of an accessory apartment shall not exceed 35% of the single-family detached dwelling.

(d) Accessory Cottages.

[1] An accessory cottage shall contain at least 220 square feet of floor area. The floor area of an accessory cottage shall not exceed 40% of the floor area of the

single-family detached dwelling to which it is accessory or 1,200 square feet, whichever is greater.

[2] For an accessory cottage which will be a new structure, the exterior materials, roof form, and window spacing and proportions of the accessory cottage shall approximate those of the existing or proposed single-family detached dwelling.

[3] For an accessory cottage located within an existing garage or other outbuilding, the structure is not required to approximate the exterior features of the existing single-family detached dwelling, but any exterior modification should be consistent with the architectural style of that structure unless the building is upgraded per the requirements for new structures.

[4] Accessory cottages shall comply with the principal structure setbacks for the respective zoning district, unless the accessory cottage is located within an existing garage or other outbuilding, for which the structure must meet the accessory structure setbacks for the respective zoning district.

D. Area regulations.

(1) Minimum lot area shall be 10,000 square feet. Minimum interior lot shall be 10,000 square feet. Minimum corner lot shall be 13,000 square feet.

(2) Maximum lot coverage shall be 40%.

(3) Minimum lot width shall be 80 feet.

(4) Height of buildings shall not exceed 35 feet. Accessory buildings shall not exceed 15 feet in height.

(5) Minimum front yard setback line shall be 25 feet.

(6) Minimum rear yard shall be 25 feet. For corner lots the rear yard may be reduced 20% in depth to allow for skewing of a residential dwelling on the lot.

(7) Side yards shall be provided as follows: each lot shall have two side yards with a minimum of 12 feet each.

(8) Parking shall comply with the requirements provided in Article IV of this chapter.

(9) Signs shall comply with the requirements provided in Article VI of this chapter.

(10) Landscape screening shall comply with the requirements provided in Article V of this chapter.

(11) Open space and recreational requirements shall comply with Chapter 230-19.7.

(12) Accessory structures for non-residential uses in aggregate shall occupy no more than 30 percent of the required rear and side yard of the lot area and may not dominate in area, extent or purpose to the principal use or structure. The area of the principal structure shall be calculated using the definition of floor area in this chapter.

(13) Accessory structures for non-residential uses shall be located in the side and rear lot areas.

(14) Accessory structures for non-residential uses shall meet the principal use setbacks and shall not be located less than 5 feet from a principal structure.

# CITY OF MILFORD
# NOTICE OF PUBLIC HEARINGS

Planning Commission Hearing: Tuesday, September 19, 2023 @ 6:00 p.m.
City Council Hearing: Monday, September 25, 2023 @ 6:00 p.m.

NOTICE IS HEREBY GIVEN that the proposed Ordinance is currently under review by the City of Milford Planning Commission and City Council. City Council has the option to approve or deny the application. By not adopting the ordinance, City Council will deny the application. By adopting the ordinance, City Council will approve the application and the reason for the language being written in the affirmative.
This form of writing is not used to influence any decision of City Council:

**ORDINANCE 2023-36**
Conditional Use Application of James Purcell
0.31 +/- acres
South Side of Kings Highway between South Walnut Street and Polk Avenue
Address: 102 Kings Highway
Comprehensive Plan Designation: Low Density Residential
Zoning District: R-1 (Single-Family Residential District)
Present Use: Single-Family Dwelling
Proposed Use: Single Family Dwelling with Accessory Dwelling Unit
Tax Parcel: 1-30-3.08-063.00

WHEREAS, the owner of the property as above described herein have petitioned the City of Milford for a Conditional Use to construct an accessory dwelling; and

WHEREAS, the City of Milford Planning Commission will consider the application at a Public Hearing on September 19, 2023; and

WHEREAS, Milford City Council will hold a Public Hearing on September 25, 2023 to allow for public comment and further review of the ordinance; and

WHEREAS, it is deemed in the best interest of the City of Milford to approve the Conditional Use, as herein described.

NOW, THEREFORE, the City of Milford hereby ordains as follows:

Section 1. Chapter 230-9(C)(5) states accessory dwellings are allowed upon conditional use approval from City Council subject to conditions.

Section 2. Following adoption of Ordinance 2023-36, and upon the effective date, James Purcell is hereby granted a Conditional Use to construct a 672 square foot accessory cottage at 102 Kings Highway.

Section 3. Construction or operation shall commence within eighteen months of the date of issuance of the permit otherwise the conditional use becomes void.

Section 4. Dates.
Planning Commission Review & Public Hearing: September 19, 2023
City Council Introduction: September 11, 2023
City Council Public Hearing: September 25, 2023
Effective: Ten Days following Adoption

For additional information, please contact Rob Pierce in the Planning & Zoning Department either by e-mail at RPierce@milford-de.gov or by phone at 302.424.8396.

*Advertised: Delaware State News 09/03/2023*

# CITY OF MILFORD
# NOTICE OF PUBLIC HEARINGS

Planning Commission Hearing: Tuesday, September 19, 2023 @ 6:00 p.m.
City Council Hearing: Monday, September 25, 2023 @ 6:00 p.m.

NOTICE IS HEREBY GIVEN that the proposed Ordinance is currently under review by the City of Milford Planning Commission and City Council. City Council has the option to approve or deny the application. By not adopting the ordinance, City Council will deny the application. By adopting the ordinance, City Council will approve the application and the reason for the language being written in the affirmative. This form of writing is not used to influence any decision of City Council:

**ORDINANCE 2023-37**
Legal Owner Mispillion Realty LLC for a Change of Zone from
R-1 (Single-Family Residential District) to C-3 (Highway Commercial)
on 1.73 +/- acres of land located along the east side of S. Dupont Boulevard
approximately 235 feet north of the Donovan Street Intersection
Address: 839 South DuPont Boulevard, Milford, DE
Present Use Single-family Detached Dwelling & Vacant Lot;
Proposed Use Single-family Detached Dwelling
Tax Map & Parcels 1-30-3.15-014.00 & 1-30-3.15-015.00

WHEREAS, the property owner has petitioned the City of Milford Planning and Zoning Office for a Change of Zone from R-1 to C-3 on 1.73 +/- acres of land at 839 South DuPont Boulevard; and

WHEREAS, the Change of Zone request to Commercial is consistent with the Adopted 2018 Comprehensive Plan Future Land Use Map, as amended; and

WHEREAS, the City of Milford Planning Commission considered the application during their regular meeting on September 19, 2023, at which time interested parties had the opportunity to comment on the application to assist in an informed recommendation to City Council; and

WHEREAS, Milford City Council held a Public Hearing on September 25, 2023 to allow additional public comment, after which City Council made a final determination; and

WHEREAS, as required by Chapter 230, the Public Notice was published in the Delaware State News on September 3, 2023 and provided to property owners within 200 feet of the subject parcel; and

WHEREAS, this Ordinance becomes effective ten days following the date of its adoption by City Council.

NOW, THEREFORE, BE IT RESOLVED the City of Milford hereby ordains as follows:

Section 1. Chapter 230 states the purpose of the C-3 district is to provide for larger-scale commercial uses that may require large amounts of parking space or have a high traffic impact, and generally require locations on major arterial routes and serve both local and regional customers.

Section 2. A Single-Family Detached Dwelling is a permitted use within the C-3 Zoning District.

Section 3. The adoption of this Ordinance grants Mispillion Realty LLC a Change of Zone to C-3 on 1.73 +/- acres of land at 839 South DuPont Boulevard in Sussex County, Milford, Delaware, Tax Map/Parcels 1-30-3.15-014.00 & 1-30-3.15-015.00.

Section 4. Any future use of the property must comply with Chapter 230 (Zoning Code) and the C-3 (Highway Commercial District) uses and area regulations.

Section 5. Dates.

Planning Commission Review & Public Hearing: September 19, 2023
City Council Introduction: September 11, 2023
City Council Public Hearing: September 25, 2023
Effective: Ten Days following Adoption

For additional information, please contact Rob Pierce in the Planning & Zoning Department either by e-mail at RPierce@milford-de.gov or by phone at 302.424.8396.

Published: Delaware State News 09/03/2023

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THE CITY of Milford DELAWARE

PLANNING DEPARTMENT
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O 302.424.8396 | F 302.424.3559

# DATA SHEET FOR MISPILLION REALTY, LLC

Planning Commission Meeting: September 19, 2023

| | | |
|---|---|---|
| **Application Number / Name** | : | 23-025 / Mispillion Realty, LLC |
| **Applicant** | : | Mispillion Realty, LLC<br>6103 S. Rehoboth Blvd<br>Milford, DE 19963 |
| **Owner** | : | Same |
| **Application Type** | : | Change of Zone |
| **Present Comprehensive Plan Map Designation** | : | Commercial (Transition Area) |
| **Present Zoning District(s)** | : | R-1 (Single-family Residential District) |
| **Proposed Zoning District(s)** | : | C-3 (Highway Commercial) |
| **Present Use** | : | Single-family Detached Dwelling & Vacant Lot |
| **Proposed Use** | : | Single-family Detached Dwelling |
| **Size and Location** | : | 1.73 +/- acres of land located along the east side of S. Dupont Boulevard approximately 235 feet north of the Donovan Street intersection, addressed as 839 S. Dupont Boulevard. |
| **Tax Map & Parcel(s)** | : | 1-30-3.15-014.00<br>1-30-3.15-015.00 |

ENC: Staff Analysis Report
Exhibit A – Location & Zoning Map
Exhibit B – Survey

PUBLIC WORKS FACILITY
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THE CITY of Milford DELAWARE

PLANNING DEPARTMENT
Planning, Economic Development,
Enforcement, and Inspections Office
O 302.424.8396 | F 302.424.3559

**STAFF REPORT**
**August 28, 2023**

| | | |
|---|---|---|
| **Application Number / Name** | **:** | 23-025 / Mispillion Realty, LLC |
| **Size and Location** | **:** | 1.73 +/- acres of land located along the east side of S. Dupont Boulevard approximately 235 feet north of the Donovan Street intersection, addressed as 839 S. Dupont Boulevard. |
| **Tax Map & Parcel(s)** | **:** | 1-30-3.15-014.00<br>1-30-3.15-015.00 |

## I. BACKGROUND INFORMATION:

- The property owner is requesting to rezone the above referenced parcels from R-1 (Single-family Residential District) to C-3 (Highway Commercial District). Parcel 014.00 currently contains a single-family detached dwelling and parcel 015.00 is vacant.

- The applicant will need to consolidate the two properties in order to meet the minimum lot area requirement of 1 acre within the C-3 zoning district.

## II. STAFF ANALYSIS:

Based on the information presented, the City of Milford Code, and the Comprehensive Plan, staff submits the following regarding the request to amend the Zoning Map:

- The Change of Zone request is consistent with the adopted 2018 Comprehensive Plan Future Land Use maps. The Future Land Use designation for the property is Commercial, for which C-3 (Highway Commercial) is a suitable zoning designation. See attached Land Use & Zoning Link table from the comprehensive plan document.

- Per the 2018 Comprehensive Plan, "the commercial category allows for different levels of commercial development intensity. This category includes neighborhood commercial, central business district, highway development, office buildings and medical services. Future Land Use and Urban Growth Boundary map designates all commercial areas in one category, but the individual characteristics of each site would be considered before identifying the level of commercial development that is suitable for each property. Each level of commercial use differs by the size and the site and use intensity. The land use is similar to the C-1, C-2, C-

2A, C-3, BP, OC-1 and H-1 zoning districts found in the Milford Zoning Ordinance. Regular Highway Commercial for the city is located along major state transportation routes, including DE 1, US 113, Route 14 and Business 1."

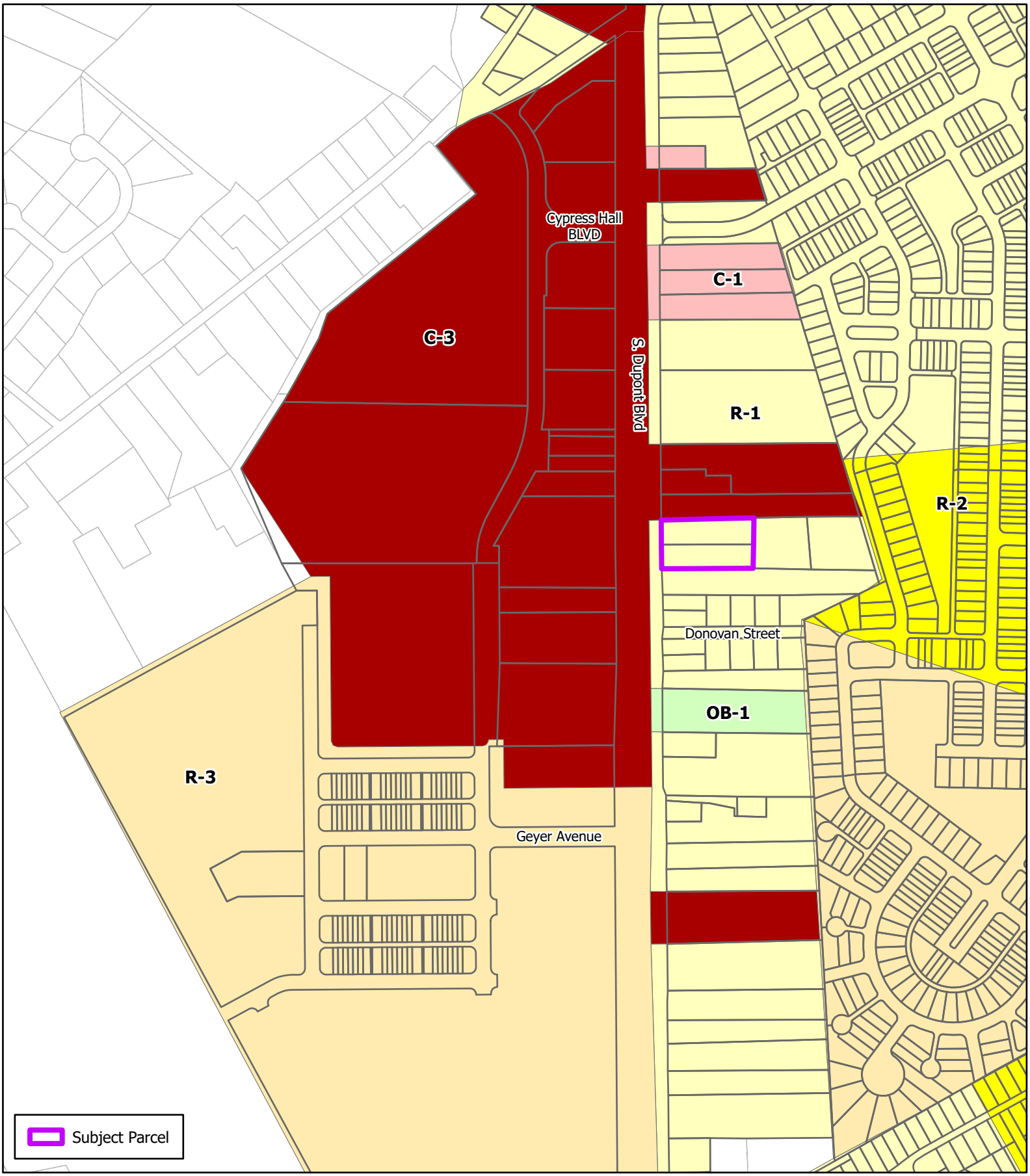
- Chapter 230 states, the purpose of the C-3 district is to "provide for larger-scale commercial uses that may require large amounts of parking space or have a high traffic impact. These uses generally require locations on major arterial routes and serve both local and regional customers."

- "A Single-family detached dwelling" is a permitted use within the C-3 zoning district.

- Any future use of the property must comply with Chapter 230 and the C-3 (Highway Commercial District) zoning use and area regulations. Enclosed is a copy of the current permitted and conditional uses within the C-3 District.

## III. AGENCY COMMENTS:

- DelDOT – No comments solicited
- Kent Conservation District – No comments solicited.
- State Fire Marshall – No comments solicited.




THE CITY of Milford DELAWARE

Scale: 0 300 600 Feet

Drawn by: WRP

Date: 08/24/23

Filepath: COZ_MispillionRealty.aprx

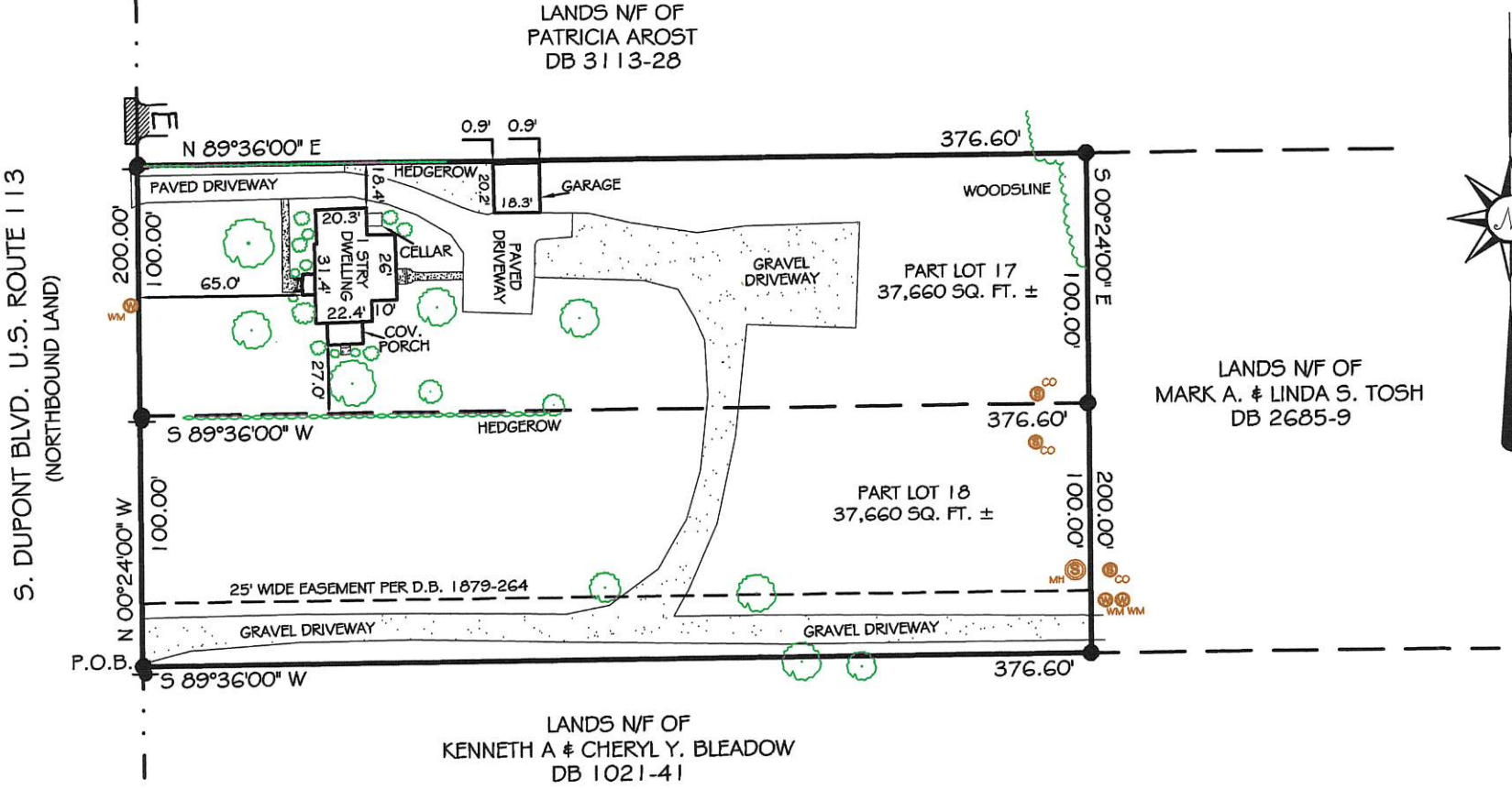
Title:

Change of Zone

**Mispillion Realty, LLC**

Location & Zoning Map

T.M. #130-3.15-14.00, 15.00




THIS SURVEY AND PLAT DOES NOT VERIFY THE EXISTENCE OR NON-EXISTENCE OF RIGHTS-OF-WAY OR EASEMENTS CROSSING THIS PROPERTY OTHER THAN THOSE SHOWN. NO TITLE SEARCH PROVIDED OR STIPULATED.

I, STEPHEN M. SELLERS REGISTERED AS A PROFESSIONAL LAND SURVEYOR IN THE STATE OF DELAWARE, HEREBY STATE THAT THE INFORMATION SHOWN ON THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND MEETS THE STANDARDS OF PRACTICE AS ESTABLISHED BY THE STATE OF DELAWARE BOARD OF PROFESSIONAL LAND SURVEYORS. ANY CHANGES TO THE PROPERTY CONDITIONS, IMPROVEMENTS, BOUNDARY OR PROPERTY CORNERS AFTER THE DATE SHOWN HEREON SHALL NECESSITATE A NEW REVIEW AND CERTIFICATION FOR ANY OFFICIAL OR LEGAL USE.

STEPHEN M. SELLERS PLS 566 — DATE 8/2/2023

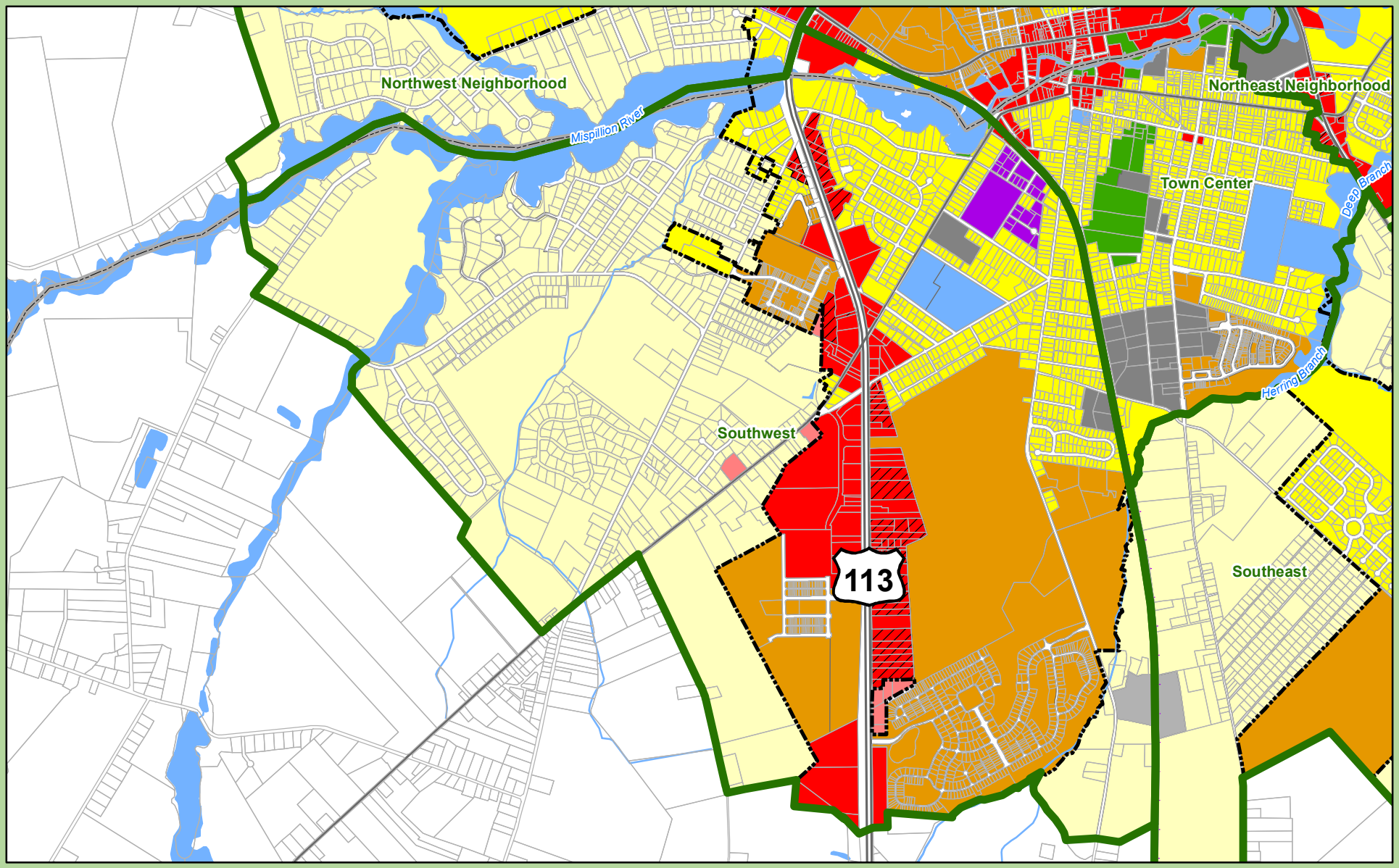
SURVEY CLASS: SUBURBAN

ENTRANCE
IRON PIPE (FOUND)
UTILITY POLE
WM WATER METER
BUSH
TREE
MH SANITARY MANHOLE
CO SANITARY CLEANOUT

# BOUNDARY SURVEY PLAN FOR
# MISPILLION REALTY, LLC

839 S. DUPONT HWY, MILFORD DE 19963
LOTS #17 P/O & #18 P/O OF "SIMPSON FARM" SUBDIV.
CEDAR CREEK HUNDRED SUSSEX COUNTY
STATE OF DELAWARE
SCALE 1" = 70' JULY 26, 2023

PREPARED BY:
MILLER LEWIS, INC. LAND SURVEYING
PH: 302-629-9895
FAX: 302-629-2391
1560 MIDDLEFORD RD. • SEAFORD, DE. 19973




Neighborhoods

**Land Use Type**

- Open Space
- Proposed Open Space
- Low Density Residential
- Proposed Low Density Residential
- Moderate Density Residential
- Proposed Moderate Density Residential
- Employment
- Proposed Employment
- Institutional
- Commercial
- Proposed Commercial
- Industrial
- Proposed Industrial
- Transition Area
- Municipal Boundary
- County Boundaries
- State Parcels
- Routes
- Rail Lines
- Hydrology
- Bodies of Water

# *City of Milford, Delaware*

## Future Land Use

### *Southwest*

*Adopted Jan. 22, 2018, Certified TBD*

0 0.1 0.2 0.4 0.6 0.8 Miles

*Sources:*

*Municipal Boundaries - Delaware Office of State Planning Coordination, FirstMap 10/17.*
*DRAFT Future Landuse - City of Milford, Delaware 01/18.*
*Road and Rail Network - Delaware Department of Transportation, FirstMap 01/18.*
*Hydrology - USGS and EPA, FirstMap 01/18.*

*Note:This map is provided by the University of Delaware, Institute for Public Administration (IPA) solely for display and reference purposes and is subject to change without notice. No claims, either real or assumed, as to the absolute accuracy or precision of any data contained herein are made by IPA, nor will IPA be held responsible for any use of this document for purposes other than which it was intended.*

THE CITY of Milford DELAWARE

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right to do so). The city's future land use map is largely a reflection of its understanding of likely growth and development. Wherever possible, the future land use attempts to anticipate likely changes. A key feature of the 2017 Comprehensive Plan Update is the "transition" future land use category.

The "transition" future land use designation, conceptually, helps with all three key considerations. It is straightforward and simple to see on the overall and neighborhood maps. It limits the potential need for plan amendments, in that each time a residential property requests rezoning to a commercial or industrial use, it will still be in compliance with the existing future land use map. It maintains flexibility in the identified areas. If and when properties petition for rezoning, procedural changes can be made to the zoning ordinance without it conflicting with the Milford Comprehensive Plan.

The transitional future land use classification has the added benefit of allowing the existing, largely residential uses, as by-right uses to ensure that existing property owners who wish to remain residential are not classified as non-conforming uses.

# 10-4. Land Use and Zoning

## 10-4a. Future Land Use Categories

### Employment

The employment category is intended to serve as a primary location for a large employer to bring jobs and economic development to the city. Potential uses include schools and healthcare-related uses that would provide many jobs and services for the region. This land use category is similar to the H-1, IM, and IS zoning districts found in the Milford Zoning Ordinance.

### Commercial

The commercial category allows for different levels of commercial development intensity. This category includes neighborhood commercial, central business district, highway development, office buildings, and medical services. The *Future Land Use and Urban Growth Boundary* map designates all commercial areas in one category, but the individual characteristics of each site would be considered before identifying the level of commercial development that is suitable for each property. Each level of commercial use differs by the size of the site and use intensity. This land use is similar to the C-1, C-2, C-2A, C-3, BP, OC-1, and H-1 zoning districts found in the Milford Zoning Ordinance.

Regular Highway Commercial for the city is located along major state transportation routes, including DE 1, US 113, Route 14 and Business 1.

### Industrial

The industrial category is intended to serve as a primary location for light to moderate industrial and manufacturing uses. This land use is similar to the I-1 and I-2 zoning districts found in the Milford Zoning Ordinance.

### Institutional

The institutional category includes government, civic, and community facilities such as libraries, schools, colleges, hospitals, medical facilities, community centers, places of worship, nursing homes, assisted living facilities, and other similar uses. Institutional uses may be found within residential, commercial, and employment areas.

### Low Density Residential

The Low Density Residential District represents typical single-family detached dwellings and duplex development. These units receive full urban services. Other dwelling types may be allowed as part of a density bonus by providing additional open space and amenities of development or through a conditional use of a Planned Unit Development by Milford City Council. Neighborhood commercial and office-type uses that do not detract from the residential character of the area may be found in this area as well. This land use is similar to the R-1, R-2, C-1, and OB-1 zoning districts found in the Milford Zoning Ordinance.

### Moderate-Density Residential

The Moderate Density Residential District represents typical single-family detached dwellings, attached single-family dwelling units, patio homes, duplexes, triplexes, quadplexes, townhomes/row houses, condominiums, apartments, and loft-style units. Availability of open space and walkable sidewalks are also key components. Neighborhood commercial and office-type uses that do not detract from the residential character of the area may be found in this area as well. This land use is similar to the R-3, R-8, C-1, and OB-1 zoning districts and the PUD conditional use for residential development found in the Milford Zoning Ordinance.

### Transitional Commercial and Industrial Areas

These areas are designed to allow for a migration from residential to the underlying future land use categories depicted on the *Future Land Use and Urban Growth Boundary* map. There are two main transitional areas, commercial and industrial. The commercial transition areas are located along major roadways, including US 113 and Rehoboth Boulevard (Route 1A). The Industrial transition area is located along Route 14 between Routes 1A and 1.

The transitional areas will allow the property owners to maintain their current residential zoning until such time they wish to change their zoning to either commercial or industrial. This will allow the area to transition slowly along these corridors, without forcefully rezoning properties and potentially creating non-conforming properties and uses. Once the property owner changes the zoning of the property from residential to commercial or industrial, the property will remain industrial or commercial unless there is an amendment to the Milford Comprehensive Plan that would allow otherwise. The Comprehensive Plan will be reviewed again in five years, where the future land use exhibits can be updated to permanently show the properties that have transitioned from the residential categories to the more intense uses, and reduce the footprint of the transitional area on the maps.

## Open Space

The Open Space category includes both existing open space owned by the city as well as the large area of open space located east of DE 1. Milford may elect to annex existing developed residential properties within the proposed Open Space future land use areas at the lowest intensity residential zoning category and provide services if deemed cost effective.

One of the recommendations of the Milford Comprehensive Plan is to prepare an Open Space Preservation Plan. Local governments and conservation groups offer many tools to preserve farmland and other open space. Some rely on the donation or sale of property development rights by a property owner, while other tools may include marketing assistance or protective planning and zoning. The primary goals of the Open Space designation east of DE 1 are the following:

- Promote the Transfer of Development Rights (TDR) – A TDR is a legal agreement that allows a developer who wants to build at a higher density than is permitted to purchase or trade for additional development rights from a willing seller who owns land in an area designated for preservation. The goal of the Open Space designation is to use the land as a sending area either into designated areas of the City of Milford or designated areas of Sussex County, thus protecting the open space area.
- Promote Conservation Easements – A conservation easement is a legal agreement between a landowner and a land trust or government agency whereby a landowner sells or donates the rights to develop his or her property to a conservation organization.
- Protective Rural Zoning – This type of zoning allows a very low density per acre. This is one of the most effective ways to protect rural and agricultural land and maintain a mass of land required to support agriculture economies without buying conservation easements.

- Purchase of Land – In the interest of Milford City Council to protect our recharge areas, funding could be used to protect our recharge areas and preserve open space.

## 10-4b. Land Use and Zoning Link

The link between land use and zoning is important because Title 22, Section 702(c) of the Delaware Code requires that Milford:

*"…within 18 months of the adoption of a comprehensive development plan or revision thereof, amend its official zoning map to rezone all lands within the municipality in accordance with the uses of land provided for in the comprehensive development plan."*

Table 27 shows the link between the future land use designations depicted on the *Future Landuse and Urban Growth Boundary* map and the zoning districts summarized in Table 28. Table 27 provides guidance as to the zoning districts that would be considered consistent with each land use designation.

*Table 27. Land Use and Zoning Link*

| Future Land Use Designation | Corresponding Zoning District(s) |
|---|---|
| **Employment** | H-1 – Institutional Development |
| | IM – Institutional Medical |
| | IS – Institutional Service |
| **Commercial** | C-1 – Community Commercial |
| | C-2 – Central Business |
| | C-2A – Riverfront Development |
| | C-3 – Highway Commercial |
| | OC-1 – Office Complex |
| | BP – Business Park |
| | H-1 – Institutional Development |
| **Industrial** | I-1 – Limited Industrial |
| | I-2 – General Industrial |
| **Institutional** | Institutional uses may be permitted or conditionally permitted in residential, commercial, and employment zones |

| Future Land Use Designation | Corresponding Zoning District(s) |
|---|---|
| **Low Density Residential** | R-1 – Single Family Residential |
| | R-2 - Residential |
| | C-1 – Community Commercial |
| | OB-1 – Office Building |
| **Moderate Density Residential** | R-3 – Garden Apartment & Townhouse |
| | R-8 – Garden Apartment & Townhouse |
| | C-1 – Community Commercial |
| | OB-1 – Office Building |
| **Open Space** | Designed for preservation. Existing residential properties may be zoned R-1. |

*Disclaimer: Table 27 shows the relationship between the future land use designations depicted on the future land use map and the zoning districts summarized in Table 28. This table describes how Milford's zoning districts might match up with the land uses recommended on the future land use map. These match ups are intended as guidance for the Milford City Council to consider during the rezoning process. They are not intended to preclude the development of new zoning districts or revisions to the zoning ordinance, the subdivision ordinance, or any other land use regulations.*

## 10-4c. Zoning Districts

The current zoning map depicts Milford's zoning districts, and Table 28 provides a list of the current zoning classifications.

As of the date of the plan adoption, Table 28 and the existing zoning exhibit represent a fixed period in time and Milford reserves the right to create new zoning categories and change property zonings as long as the intent of the Comprehensive Plan is upheld. This table and section is for informational purposes only.

Zoning is the chief means for implementing the Milford Comprehensive Plan, consisting of a written document and a series of maps. The maps show a number of districts or zones into which the municipality is divided to regulate the use of land. The document specifies the types of activities (uses) that can occur in each district either as a matter of right (in all circumstances) or under certain conditions (conditional uses). It also regulates building height, lot sizes, setbacks, yards and green space, the number and sizes of signs, and space for off-street parking. Some municipalities incorporate environmental protection standards in zoning ordinances, while others have stand-alone ordinances with cross-references to zoning standards.

## *Table 28. Milford Zoning Districts*

| Zoning District |
|---|
| BP – Business Park |
| R-1 – Single Family Residential |
| R-2 – Residential |
| R-3 – Garden Apartment & Townhouse |
| R-8 – Garden Apartment & Townhouse |
| C-1 – Community Commercial |
| C-2 – Central Business |
| C-2A – Riverfront Development |
| C-3 – Highway Commercial |
| H-1 – Institutional Development |
| IM – Institutional Medical |
| IS – Institutional Service |
| I-1 – Limited Industrial |
| I-2 – General Industrial |
| OB-1 – Office Building |
| OC-1 – Office Complex |

Zoning works with subdivision regulations. Subdivision refers to the process of splitting up or assembling land for development. The regulations governing this process designate utility locations, street rights-of-way, open space, and common areas. They also outline the services, such as water, sewer, gas, and electricity and amenities that a developer must supply prior to sale of subdivided (or assembled) land.

Increasingly, the distinction between zoning and subdivision regulations is becoming blurred.

Development plan approvals cannot take place without making sure that plans are in compliance with zoning and subdivision codes. Over the past several years, a number of Delaware municipalities have consolidated subdivision and zoning regulations into a single land use code.

## 10-5. Land Use and Growth Management Goals and Recommendations

Milford has, and continues to, work diligently to build its economic and employment base through development of all types. It has also made significant efforts to include relevant state agencies, county and municipal governments, school districts, property owners, and development interests. Milford has successfully utilized a master planning approach for its southeastern area and now envisions undertaking a similar initiative for potential growth, development, and redevelopment in its Northeastern area.

### GOAL

Encourage compatible, resilient, connected development, redevelopment, and growth within Milford's municipal boundary and entertain annexation or growth opportunities within the municipality's established Urban Growth Boundary, provided cost-effective services can be provided.

### OBJECTIVES

- Create a variety of suitable zoning categories and targeted land use areas within the city to accommodate the assortment of business sectors.
- Update the zoning ordinance to reflect the objectives of the city's Comprehensive Plan.
- Refer to the Milford Comprehensive Plan for rezoning and annexation agreements.
- See the State Strategy mapping to guide growth.
- Ensure that the design of new developments complement and enhance the city's unique character by developing and implementing architectural review standards for major residential and commercial developments.
- Encourage infill and redevelopment of vacant, underutilized, or in-need-of-repair properties, particularly within the Downtown Development District.
- Prioritize growth on the significant developable and vacant areas within the existing municipal boundaries.
- Establish a process to review comprehensive plan amendment requests once a year, which may be needed to harmonize proposed development plans with the Milford Comprehensive Plan.

(3) Minimum lot width shall be 50 feet.

(4) Maximum lot coverage shall be 60%

(5) Minimum front yard setback shall be 15 feet minimum

(6) Side yard setback shall be 14 feet aggregate total with a minimum of 6 feet.

(7) Minimum rear yard setback shall be 20 feet.

(8) Height of buildings shall not exceed 50 feet.

(9) Minimum separation distance between dwelling structures on the same lot shall not be less than 15 feet.

(10) Parking shall comply with the requirements provided in Article IV of this chapter.

(11) Signs shall comply with the requirements provided in Article VI of this chapter.

(12) For mixed use residential and commercial projects, off-street parking, parking beneath buildings, front, side and rear setbacks, landscaping and buffering, lot coverage, number of units per building and building separation shall be as determined by the Planning Commission.

(13) Landscape screening shall comply with the requirements provided in Article V of this chapter.

(14) Accessory structures in aggregate shall occupy no more than 30 percent of the required rear and side yard of the lot area and may not dominate in area, extent or purpose to the principal use or structure. The area of the principal structure shall be calculated using the definition of floor area in this chapter.

(15) Accessory structures shall be located in the side and rear lot areas.

(16) Accessory structures for residential and non-residential uses shall be located at least 5 feet from the rear lot line and at least 5 feet from the side lot line and shall not be located less than 5 feet from a principal structure.

**§ 230-14. - C-3 Highway Commercial District.**

In a C-3 District no building or premises shall be used and no building shall be erected or altered which is arranged, intended or designed to be used except for one or more of the following uses and complying with the requirements so indicated.

A. Purpose. The purpose of the C-3 District is to provide for larger-scale commercial uses that may require large amounts of parking space or have a high traffic impact. These uses generally require locations on major arterial routes and serve both local and regional customers.

B. Permitted uses. Permitted uses for the C-3 District shall be as follows:

(1) Those permitted uses in the C-2 District.

(2) Warehouses.

(3) Large retail outlets.

(4) Indoor storage accessory building.

(5) Fast-food restaurants and drive-in restaurants.

(6) Supermarkets.

(7) Truck and trailer rentals.

(8) Roadside produce market.

(9) Outdoor commercial recreational facilities, not motorized vehicles.

(10) Swimming club.

(11) Indoor facility for amusement or assembly.

(12) Bus station.

**(13) Motels or hotels.**

**(14) Commercial greenhouse.**

**(15) Wholesale establishment.**

**(16) Contractors', craftsmen's or general service shops, including welding and similar shops.**

**(17) Laboratory, testing and research.**

**(18) Car wash.**

C. Conditional uses subject to special requirements. All uses specified as conditional uses in the C-2 zoning district and the following uses are permitted subject to receiving a conditional use permit by the City Council as provided in Article IX of this chapter:

~~(1) Motels or hotels.~~

~~(2) Commercial greenhouse.~~

~~(3) Wholesale establishment.~~

~~(4) Contractors', craftsmen's or general service shops, including welding and similar shops.~~

~~(5) Laboratory, testing and research.~~

(1~~6~~) Automotive sales.

(2~~7~~) Automotive repair, subject to the following special requirements:

(a) All facilities shall be located and all services shall be conducted on the lot.

(b) All repair work shall be conducted within an entirely enclosed building.

(c) No equipment for the service of gasoline or oil shall be placed closer to any street or property line than 20 feet.

(d) No portion of such structure or its equipment shall be located within 500 feet of the premises of any school, hospital, church or public recreation building.

(e) No service station shall be located within 800 feet of another service station on the same side of the street within the same block.

(f) Any such use shall be permitted only where it is determined that it will not materially interfere with the main pedestrian movement in conjunction with a compact retail area.

(3~~8~~) Shopping center, subject to the following site requirements:

~~(a) The total shall not be less than one acre.~~

(a~~b~~) Traffic and parking.

~~[1] The internal circulation of traffic shall be separated from the external street system, and pedestrian and vehicular traffic shall be separated through traffic control devices and appropriate site design.~~

[1~~2~~] The minimum distance between accessways and a residential district shall be 50 feet.

[2~~3~~] Spacing of accessway.

[a] From adjoining property: 50 feet.

[b] From minor intersections: 50 feet.

[c] From major intersections: 100 to 150 feet.

(b~~c~~) Setback.

~~[1] From street right-of-way: 15 feet.~~

[1~~2~~] From nonresidential districts: 15 feet.

[2~~3~~] From residential districts: 100 feet.

~~(9) Car wash.~~

(4~~10~~) All uses permitted in the R-3 Zoning District subject to its area regulations.

(5~~11~~) Business, commercial or industrial uses that do not adversely affect neighboring properties.

(6~~12~~) Aquarium.

**(7) Community energy generating facility.**

**(a) The footprint of the solar array, as defined as the by the outer limit of the panels and exclusive of buffers shall be no larger than fifty (50) acres in size.**

**(b) No more than one Community Solar Energy Facility (SEF) shall be permitted on a parcel. All separate parcels in existence on June 1, 2023, shall be considered original parcels. Future subdivision of an original parcel shall not enable the development of additional Community Solar Energy Facilities.**

**(c) Facility location and siting shall be in accordance with the requirements of Title 26 Public Utilities of the Delaware Administrative Code, 3001 (Rules for Certification and Regulation of Electric Suppliers) as amended.**

**(d) Setbacks for the Facility shall be:**

**[1] Front setback shall be 75 feet.**

**[2] Side setback shall be 50 feet.**

**[3] Rear setback shall be 50 feet.**

**[4] Distance from any off-site dwelling unit shall be 100 feet.**

**[5] Distance from any State recognized Scenic Byway shall be 150 feet.**

[6] Distance from any wetlands shall be 100 feet.

(e) The site area shall be planted to achieve a minimum six (6) foot high four-season visual barrier in accordance with the following guidelines:

[1] Include a variety of native evergreen trees. Existing native vegetation may be used to achieve the required planted buffer.
[2] A minimum of two (2) rows shall be installed and trees shall be planted in staggered rows. Plantings shall be placed at maximum 20 feet apart within the same row and 10 feet apart from the adjacent, staggered row.
[3] Include groundcover to minimize growth of invasive species or provide a mowing schedule until the area is fully established in a natural condition.
[4] The buffer shall be maintained to prevent disease from spreading and any trees that don't survive shall be replaced.
[5] A raised berm with a 1:4 side slope and flat top may be used to achieve minimum height at planting.

(f) The required buffer may be counted toward planting requirements included in this Chapter.

(g) If topsoil is removed for improvements, it shall remain on the site.

(h) Noninvasive, perennial vegetative ground cover must be maintained or established in all areas containing solar arrays and in required setbacks to prevent erosion and manage run-off. A seed mix will be used to promote the growth of a ground cover that is favorable to future use of the land by animals. The height of the vegetation growth shall be maintained as to reduce the possibility of the airborne spreading of weeds and seeds transmitted to other adjacent lands.

(i) A soils study establishing the presence of any contaminants shall be completed prior to construction and every five (5) years thereafter. Surface Soil samples shall be collected from the first six inches of soil. One composite sample shall be collected every 5 acres of SEF footprint. The composite sample should be a maximum of 10 aliquots collected from evenly spaced locations throughout the 5-acre footprint. A baseline sample shall be collected prior to the start of the SEF construction. The composite sample should be analyzed for the primary component of the installed solar panel via the prevailing EPA method for Inorganic Compounds. A letter report of findings shall be submitted within 45 days from receipt of the laboratory results to the City and shall include a summary table showing current and past results and the original certified laboratory results. A sketch showing the sample locations should be provided with the letter report. The full report shall be kept on file by the applicant and available for review by the City. If contaminate levels appear to exceed the baseline, the City will forward the report to DNREC to determine appropriate mitigation measures. If the 5 year and 10 year tests do not show material increase in the metal constituents tested, then testing interval may be extended to every 10 years.

(j) Signage, not to exceed six (6) square feet, identifying the operator, its contact numbers, 911 address and emergency contact information shall be posted at each entrance or exit of the property.

(k) Abandonment. A Community Energy Generating Facility that does not produce energy for a continuous period of one year or more shall be presumed to have been abandoned. The Applicant may request a Good Cause Exemption that may not be unreasonably withheld so long as all Real Estate and Personal Property Taxes are in Good Standing. Any Facility that has been abandoned without attaining a Good Cause Exemption must be decommissioned and removed within 180 days. Decommissioning must consist of:

[1] Physical removal of all solar photovoltaic facilities, structures, equipment, security barriers and transmission lines from the site.

[2] Recycling or disposal of all solid and hazardous waste in accordance with local, state, and federal regulations.

[3] Stabilization or re- vegetation of the site as necessary to minimize erosion. The Planning Director is authorized to allow the owner or operator to leave landscaping or designated below-grade foundations in place in order to minimize erosion and disruption to vegetation and/or agriculture.

(l) Decommissioning plan.

[1] A decommissioning plan outlining the anticipated means and costs of removing the solar facility must be submitted, with the application.

[2] The decommissioning plan should ensure that the owner or operator properly removes the equipment and facilities upon the end of project life or after their useful life. The plan must include provisions for the removal of all structures and foundations, the removal of all electrical transmission components and the restoration of soil and vegetation.

[3] The owner/operator must provide a present-day decommissioning cost estimate and identify the parties responsible for decommissioning.

(m) Financial Assurance. The operator or property owner shall provide a bond, surety, letter of credit, or other financial assurance in a form and amount acceptable to the Department to secure payment of one hundred (100) percent of the anticipated cost of removal of all associated site improvements and restoration of the site to its pre-development condition. The financial assurance shall remain in full force and effect as long as the solar Facility remains in place. The financial assurance shall be reviewed and renewed every five (5) years to ensure the amount reflects the current market.

(8) Energy system utility scale solar & wind.

(a) The following are conditions specific to Solar Facilities:

[1] Setbacks for a Solar facility shall be:

[a] Front setback shall be 100 feet.

[b] Side setback shall be 75 feet.

[c] Rear setback shall be 75 feet.

[d] Distance from any off-site dwelling unit shall be 100 feet.

[e] Distance from any State recognized Scenic Byway shall be 150 feet.

[f] Distance from any wetlands shall be 100 feet.

[2] The required setback shall be planted to achieve a minimum six (6) foot high four-season visual barrier in accordance with the following guidelines:

[a] Include a variety of native evergreen trees. Existing native vegetation may be used to achieve the required planted buffer.

[b] A minimum of two (2) rows shall be installed and trees shall be planted in staggered rows. Plantings shall be placed at maximum 20 feet apart within the same row and 10 feet apart from the adjacent, staggered row.

[c] Include groundcover to minimize growth of invasive species or provide a mowing schedule until the area is fully established in a natural condition.

[d] The buffer shall be maintained to prevent disease from spreading and any trees that don't survive shall be replaced.

[e] A raised berm with a 1:4 side slope and flat top may be used to achieve minimum height at planting.

[3] A soils study establishing the presence of any contaminants shall be completed prior to construction and every five (5) years thereafter. Surface Soil samples shall be collected from the first six inches of soil. One composite sample shall be collected every 5 acres of SEF footprint. The composite sample should be a maximum of 10 aliquots collected from evenly spaced locations throughout the 5-acre footprint. A baseline sample shall be collected prior to the start of the SEF construction. The composite sample should be analyzed for the primary component of the installed solar panel via the prevailing EPA method for Inorganic Compounds. A letter report of findings shall be submitted within 45 days from receipt of the laboratory results to the City and shall include a summary table showing current and past results and the original certified laboratory results. A sketch showing the sample locations should be provided with the letter report. The full report shall be kept on file by the applicant and available for review by the City. If contaminate levels appear to exceed the baseline, the City will forward the report to DNREC to determine appropriate mitigation measures. If the 5 year and 10 year tests do not show material increase in the metal constituents tested, then testing interval may be extended to every 10 years.

[4] Signage, not to exceed six (6) square feet, identifying the operator, its contact numbers, 911 address and emergency contact information shall be posted at each entrance or exit of the property.

(b) The following are conditions specific to Wind Facilities:

[1] Setbacks for a Wind Facility shall be:

[a] Front setback shall be 800 feet.

[b] Side setback shall be 800 feet.

[c] Rear setback shall be 800 feet.

[d] Distance from any off-site dwelling unit shall be 1,000 feet.

[e] Distance from any State recognized Scenic Byway shall be 800 feet.

[f] Distance from any wetlands shall be 100 feet.

[2] No climbing pegs or tower ladders shall be located closer than 12 feet to the ground level at the base of the structure for freestanding single poles.

[3] The facility shall be designed to prevent unauthorized external access to electrical and mechanical components and shall have access doors that are kept securely locked.

[4] All access roads shall be gated and locked.

[5] All power transmission lines from the tower to any other building or other structure shall be located underground to the maximum extent practical.

[6] No tower shall be lit except to comply with Federal Aviation Administration requirements. Minimum-security lighting for ground level facilities shall be allowed as approved on the site plan. Security lighting shall be designed to minimize light pollution, including the use of light hoods, low-glare fixtures, and directing lights at the ground.

[7] All structures in a project shall be finished in a single, non-reflective, matte color or a camouflage scheme.

[8] Signs

[a] No advertising signs are allowed on any part of the WECS, including fencing and support structures.

[b] No lettering, company insignia, advertising, or graphics shall be on any part of the tower, hub, or blades.

[c] Appropriate warning signs shall be posted. At least one sign shall be posted at the base of the tower warning of electrical shock or high voltage. A sign shall be posted on the entry area of the fence around each tower or group of towers and any building (or on the tower or building if there is no fence) containing emergency contact information, 911 address, including a local telephone number with 24-hour, 7-days-a-week coverage. The City may require additional signs based on safety needs.

[9] Noise level shall not exceed 50 dBA, including constructive interference at existing off-site residences, businesses, and public buildings.

(c) The following are conditions required for all Utility Solar and Wind Energy Facilities

[1] Required buffers may be counted toward planting requirements included in this Chapter.

[2] If topsoil is removed for improvements, it shall remain on the site.

[3] Noninvasive, perennial vegetative ground cover must be maintained or established in all areas containing solar arrays and in required setbacks to prevent erosion and manage run-off. A seed mix will be used to promote the growth of a ground cover that is favorable to future use of the land by animals. The height of the vegetation growth shall be maintained as to reduce the possibility of the airborne spreading of weeds and seeds transmitted to other adjacent lands.

[4] Abandonment. A Utility Solar or Wind Facility that does not produce energy for a continuous period of one year or more shall be presumed to have been abandoned. The Applicant may request a Good Cause Exemption that may not be unreasonably withheld so long as all Real Estate and Personal Property Taxes are in Good Standing. Any Utility Solar Facility that has been abandoned without attaining a Good Cause Exemption must be decommissioned and removed within 180 days. Decommissioning must consist of:

[a] Physical removal of all solar photovoltaic facilities, wind turbines, structures, equipment, security barriers and transmission lines from the site.

[b] Recycling or disposal of all solid and hazardous waste in accordance with local, state, and federal regulations.

[c] Stabilization or re-vegetation of the site as necessary to minimize erosion. The Planning Director is authorized to allow the owner or operator to leave landscaping or designated below-grade foundations in place in order to minimize erosion and disruption to vegetation.

[5] Decommissioning plan.

[a] A decommissioning plan outlining the anticipated means and costs of removing the facility must be submitted, with the application.

[b] The decommissioning plan should ensure that the owner or operator properly removes the equipment and facilities upon the end of project life or after their useful life. The plan must include provisions for the removal of all structures and foundations, the removal of all electrical transmission components and the restoration of soil and vegetation and/or agriculture.

[c] The owner/operator must provide a present-day decommissioning cost estimate and identify the parties responsible for decommissioning.

[6] Financial Assurance. Prior to final plan approval, the operator or property owner shall provide a bond, surety, letter of credit, or other financial assurance in a form and amount acceptable to the Department to secure

**payment of one hundred (100) percent of the anticipated cost of removal of all associated site improvements and restoration of the site to its pre-development condition. The financial assurance shall remain in full force and effect as long as the facility remains in place. The financial assurance shall be reviewed and renewed every five (5) years to ensure the amount reflects the current market.**

**(9) Emergency shelter facility.**

**(a) The lot on which an emergency shelter facility is located shall not be within 500 feet of a lot on which another emergency shelter facility or group home is located.**

**(b) All state licenses and permits for such a facility have been obtained.**

D. Area regulations.

(1) Minimum lot area shall be one acre.

(2) Maximum lot coverage shall be 80%.

(3) Minimum lot width shall be as follows: for an interior lot 150 feet and for a corner lot 170 feet.

(4) Height of buildings shall not exceed 35 feet, with the following exception: a motel, hotel, or aquarium may be erected to a height not exceeding 60 feet.

(5) Minimum front yard setback shall be 30 feet.

(6) Side yards shall be provided as follows: each lot shall have two side yards a minimum of 20 feet with a minimum aggregate width of two side yards of 50 feet.

(7) Minimum rear yard shall be 50 feet.

(8) Parking shall comply with the requirements provided in Article IV of this chapter.

(9) Landscape screening shall comply with the requirements provided in Article V of this chapter.

(10) Signs shall comply with the requirements provided in Article VI of this chapter.

(11) Accessory structures in aggregate shall occupy no more than 30 percent of the required rear and side yard of the lot area and may not dominate in area, extent or purpose to the principal use or structure. The area of the principal structure shall be calculated using the definition of floor area in this chapter.

(12) Accessory structures shall be located in the side and rear lot areas.

(13) Accessory structures for residential uses shall be located at least 5 feet from the rear lot line and at least 5 feet from the side lot line and shall not be located less than 10 feet from a principal structure.

(14) Accessory structures for non-residential uses shall meet the principal use setbacks and shall not be located less than 5 feet from a principal structure.

**§ 230-15. - H-1 Institutional Development District.**

In an H-1 District no building or premises shall be used and no building shall be erected or altered which is arranged, intended or designed to be used except for one or more of the following uses and complying with the requirements so indicated.

# CITY OF MILFORD
# NOTICE OF PUBLIC HEARINGS

Planning Commission Hearing: Tuesday, September 19, 2023 @ 6:00 p.m.
City Council Hearing: Monday, September 25, 2023 @ 6:00 p.m.

NOTICE IS HEREBY GIVEN that the proposed Ordinance is currently under review by the City of Milford Planning Commission and City Council. City Council has the option to approve or deny the application. By not adopting the ordinance, City Council will deny the application. By adopting the ordinance, City Council will approve the application and the reason for the language being written in the affirmative. This form of writing is not used to influence any decision of City Council:

**ORDINANCE 2023-37**
Legal Owner Mispillion Realty LLC for a Change of Zone from
R-1 (Single-Family Residential District) to C-3 (Highway Commercial)
on 1.73 +/- acres of land located along the east side of S. Dupont Boulevard
approximately 235 feet north of the Donovan Street Intersection
Address: 839 South DuPont Boulevard, Milford, DE
Present Use Single-family Detached Dwelling & Vacant Lot;
Proposed Use Single-family Detached Dwelling
Tax Map & Parcels 1-30-3.15-014.00 & 1-30-3.15-015.00

WHEREAS, the property owner has petitioned the City of Milford Planning and Zoning Office for a Change of Zone from R-1 to C-3 on 1.73 +/- acres of land at 839 South DuPont Boulevard; and

WHEREAS, the Change of Zone request to Commercial is consistent with the Adopted 2018 Comprehensive Plan Future Land Use Map, as amended; and

WHEREAS, the City of Milford Planning Commission considered the application during their regular meeting on September 19, 2023, at which time interested parties had the opportunity to comment on the application to assist in an informed recommendation to City Council; and

WHEREAS, Milford City Council held a Public Hearing on September 25, 2023 to allow additional public comment, after which City Council made a final determination; and

WHEREAS, as required by Chapter 230, the Public Notice was published in the Delaware State News on September 3, 2023 and provided to property owners within 200 feet of the subject parcel; and

WHEREAS, this Ordinance becomes effective ten days following the date of its adoption by City Council.

NOW, THEREFORE, BE IT RESOLVED the City of Milford hereby ordains as follows:

Section 1. Chapter 230 states the purpose of the C-3 district is to provide for larger-scale commercial uses that may require large amounts of parking space or have a high traffic impact, and generally require locations on major arterial routes and serve both local and regional customers.

Section 2. A Single-Family Detached Dwelling is a permitted use within the C-3 Zoning District.

Section 3. The adoption of this Ordinance grants Mispillion Realty LLC a Change of Zone to C-3 on 1.73 +/- acres of land at 839 South DuPont Boulevard in Sussex County, Milford, Delaware, Tax Map/Parcels 1-30-3.15-014.00 & 1-30-3.15-015.00.

Section 4. Any future use of the property must comply with Chapter 230 (Zoning Code) and the C-3 (Highway Commercial District) uses and area regulations.

Section 5. Dates.

Planning Commission Review & Public Hearing: September 19, 2023
City Council Introduction: September 11, 2023
City Council Public Hearing: September 25, 2023
Effective: Ten Days following Adoption

For additional information, please contact Rob Pierce in the Planning & Zoning Department either by e-mail at RPierce@milford-de.gov or by phone at 302.424.8396.

Published: Delaware State News 09/03/2023

# Sussex County Association of Towns

*37 The Circle, Georgetown, Delaware 19947*

*Town of Bethany Beach*
*Town of Bethel*
*Town of Blades*
*Town of Bridgeville*
*Town of Dagsboro*
*Town of Delmar*
*Town of Dewey Beach*
*Town of Ellendale*
*Town of Fenwick Island*
*Town of Frankford*
*Town of Georgetown*
*Town of Greenwood*
*Town of Henlopen Acres*
*Town of Laurel*
*City of Lewes*
*City of Milford*
*Town of Millsboro*
*Town of Millville*
*Town of Milton*
*Town of Ocean View*
*City of Rehoboth Beach*
*City of Seaford*
*Town of Selbyville*
*Town of Slaughter Beach*
*Town of South Bethany*
*Sussex County Council*

## S.C.A.T. Dinner for Wednesday, October 4, 2023

LOCATION: Ross Station Event Center
585 N Market St Ext
Seaford, DE 19973

TIME: 5:00 pm – Cocktail Hour (Cash Bar) / Ross Mansion Tours
6:00 pm – Dinner

HOST: City of Seaford

SPEAKER: Scott Thomas, Southern Delaware Tourism

COST: **$38.00** per person Buffet:

MENU: **Caesar Salad**

**Choice of two (2) Entrees:**
Stuffed Top Chicken w/ Cream Sauce
Roast Beef w/ Gravy

**Choice of two (2) Starches:**
Twice Baked Pot. Casserole.

**Vegetable:**
Corn
Lima Beans
Tomatoes

For reservations, please contact Ashley Blalock at
(302) 629-9173 or by email: ablalock@seafordde.com
no later than **September 26th at 3:00 PM.**

Please make checks payable to **City of Seaford**
Mail to: City of Seaford
Attn: Ashley Heinicke
PO Box 1100
Seaford, DE 19973

THE CITY of Milford DELAWARE

# Financial Reporting Package

As of and For the Period Ended August 31, 2023

Net Cash and Funding Availability Summary *(in thousands)*

Cash & Investment Balance Rollforward

Restricted Cash Reserves Report

Enterprise Funds YTD Revenue & Expenditure Report

General Fund YTD Revenue & Expenditure Report

Appendix: ARPA Funding Plan vs Actual Expenses

Appendix: Milford Police Facility Project Spending vs Budget

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*Legacy* Revenue Report with MTD & YTD vs Annual Budget

*Legacy* Expenditure Report with MTD & YTD vs Annual Budget

*Legacy* Interservice Department Cost Allocation

# City of Milford, Delaware

## Net Cash and Funding Availability Summary *(in thousands)* [1]

## For the Period Ended August 31, 2023

### Operating Cash Balances

▼ *Marks Ref Closing Bal* [3]

| Description | Opening Balance (Jul 31, 2023) | | Closing Balance (Aug 31, 2023) | Projected Cashflows | Commitments & Restrictions | Minimum Cash Requirement/ERR | Uncommitted / Unrestricted |
|---|---|---|---|---|---|---|---|
| General Fund | $ 1,990 | ↑ | $ 2,252 | $ 72 | $ (487) | $ (1,509) | $ 329 |
| Electric Fund | 3,992 | → | 3,853 | 140 | (1,328) | (1,652) | 1,012 |
| Water Fund | 3,448 | → | 3,620 | 100 | (2,211) | (294) | 1,215 |
| Sewer Fund | 2,088 | → | 2,264 | 60 | (1,645) | (205) | 474 |
| Solid Waste Fund | 373 | → | 407 | 10 | (132) | (190) | 95 |
| **Operating Cash Totals** [3] | **$ 11,892** | ● | **$ 12,396** | **$ 382** | **$ (5,803)** | **$ (3,849)** | **$ 3,126** |

### Federal, State and Other Special Purpose Cash Balances

| Description | Opening Balance (Jul 31, 2023) | | Closing Balance (Aug 31, 2023) | Projected Cashflows | Commitments & Restrictions | Minimum Cash Requirement/ERR | Uncommitted / Unrestricted |
|---|---|---|---|---|---|---|---|
| General Improvement | $ 1,502 | → | $ 1,398 | $ - | $ (1,398) | $ - | $ - |
| Municipal Street Aid (MSA) | 656 | → | 656 | - | (656) | - | - |
| Realty Transfer Tax (RTT) | 659 | → | 704 | 5,690 | (4,205) | (1,280) | 910 |
| Economic Development | 515 | → | 515 | 89 | (419) | - | 185 |
| Lodging Tax Fund | 633 | → | 639 | 99 | (738) | - | - |
| ARPA Grant Fund | 453 | → | 443 | - | (443) | - | - |
| **Special Purpose Cash Totals** [3] | **$ 4,418** | ● | **$ 4,356** | **$ 5,878** | **$ (7,859)** | **$ (1,280)** | **$ 1,095** |

### Reserve Fund Cash Balances [1]

| Description | Opening Balance (Jul 31, 2023) | | Closing Balance (Aug 31, 2023) | Projected Cashflows | Commitments & Restrictions | Minimum Cash Requirement/ERR | Uncommitted / Unrestricted |
|---|---|---|---|---|---|---|---|
| General Fund Capital Reserves | $ 2,026 | → | $ 2,016 | $ 2,947 | $ (4,686) | $ (249) | $ 28 |
| Water Fund Capital Reserves | 2,073 | → | 2,058 | 2,211 | (1,423) | (2,758) | 88 |
| Sewer Fund Capital Reserves | 4,519 | → | 4,504 | 1,645 | (1,866) | (3,887) | 396 |
| Solid Waste Fund Capital Reserves | 133 | → | 126 | 142 | (227) | (40) | 2 |
| Electric Fund Capital Reserves [2] | 12,307 | → | 12,280 | 3,828 | (7,704) | (7,018) | 1,386 |
| **Operating Cash Totals** [3] | **$ 21,058** | ● | **$ 20,985** | **$ 10,773** | **$ (15,905)** | **$ (13,952)** | **$ 1,900** |

### Impact Fees and Police/General Facilities Cash Balances

| Description | Opening Balance (Jul 31, 2023) | | Closing Balance (Aug 31, 2023) | Projected Cashflows | Commitments & Restrictions | Minimum Cash Requirement/ERR | Uncommitted / Unrestricted |
|---|---|---|---|---|---|---|---|
| Police & General Gov't Facilities | $ 475 | → | $ 508 | $ 336 | $ (844) | $ - | $ - |
| Carlisle Fire Co Permit Fund | 702 | → | 713 | 112 | (825) | - | - |
| Parks & Recreation Facilities | 151 | → | 151 | 4 | (155) | - | - |
| Water Impact Fee Reserves | 5,348 | → | 5,520 | 1,725 | (7,245) | - | - |
| Sewer Impact Fee Reserves | 3,038 | → | 3,129 | 911 | (4,040) | - | - |
| Electric Impact Fee Reserves | 1,231 | → | 1,233 | 18 | (1,251) | - | - |
| **Impact Fees & Police/GF Totals** [3] | **$ 10,944** | ● | **$ 11,255** | **$ 3,106** | **$ (14,361)** | **$ -** | **$ -** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Grand Totals** [3] | **$ 48,313** | ▲ | **$ 48,992** | **$ 20,139** | **$ (43,928)** | **$ (19,081)** | **$ 6,122** |

[1] New report merges Cash Roll (p.2) and Restricted Reserves (p.3) into one single reference for net funds available after commitments & restrictions.

[2] Realty Transfer Taxes (RTT) and Electric Fund Reserves totaling $7.5 million are being temporarily consumed to offset interest costs associated with the PD Facility construction. The recovery of the funds through project financing is reflected in the Projected Cashflows columns for RTT and Electric ($5 million and $2.5 million, respectively).

[3] Closing Balance Indicator sets ***Red,*** ***Yellow*** and ***Green*** signify month-to-month cash variance as follows:



**-10% ≤ Variance ≤ 10%**



**-5% ≤ Variance ≤ 5%**



**-2.5% ≤ Variance ≤ 2.5%**

# City of Milford, Delaware

## Cash and Investment Balance[1] Rollforward

## For the Period Ended August 31, 2023

### Operating Cash Balances

▼*Marks Ref Closing Bal*[4]

| Description | Opening Balance (Jul 31, 2023) | Receipts | Interest Earned | Disbursements | Closing Balance (Aug 31, 2023) |
|---|---|---|---|---|---|
| General Fund[2] | $ 1,990,346 | $ 957,009 | $ 7,292 | $ (702,191) | $ 2,252,457 |
| Electric Fund | 3,992,096 | 2,756,414 | 14,043 | (2,909,971) | 3,852,582 |
| Water Fund | 3,447,821 | 291,112 | 11,479 | (130,751) | 3,619,661 |
| Sewer Fund | 2,088,017 | 469,514 | 7,413 | (300,795) | 2,264,149 |
| Solid Waste Fund | 373,355 | 137,833 | 1,200 | (105,050) | 407,338 |
| **Operating Cash Totals[4]** | **$ 11,891,635** | **$ 4,611,883** | **$ 41,428** | **$ (4,148,758)** | **$ 12,396,187** |

### Federal, State and Other Special Purpose Cash Balances

| Description | Opening Balance (Jul 31, 2023) | Receipts | Interest Earned | Disbursements[3] | Closing Balance (Aug 31, 2023) |
|---|---|---|---|---|---|
| General Improvement | $ 1,502,470 | $ - | $ - | $ (104,307) | $ 1,398,163 |
| Municipal Street Aid (MSA) | 656,012 | - | - | - | 656,012 |
| Realty Transfer Tax (RTT) | 658,838 | 62,083 | - | (16,667) | 704,254 |
| Economic Development | 515,247 | - | - | - | 515,247 |
| Lodging Tax Fund | 632,991 | 5,892 | - | - | 638,884 |
| ARPA Grant Fund[3] | 452,927 | - | - | (9,628) | 443,299 |
| **Special Purpose Cash Totals[4]** | **$ 4,418,485** | **$ 67,976** | **$ -** | **$ (130,602)** | **$ 4,355,859** |

### Reserve Fund Cash Balances

| Description | Opening Balance (Jul 31, 2023) | Receipts | Interest Earned | Disbursements[3] | Closing Balance (Aug 31, 2023) |
|---|---|---|---|---|---|
| General Fund Capital Reserves | $ 2,025,934 | $ - | $ - | $ (9,627) | $ 2,016,307 |
| Water Fund Capital Reserves | 2,072,615 | - | - | (14,334) | 2,058,281 |
| Sewer Fund Capital Reserves | 4,518,748 | - | - | (14,334) | 4,504,414 |
| Solid Waste Fund Capital Reserves | 133,485 | - | - | (7,353) | 126,132 |
| Electric Fund Capital Reserves[2] | 12,307,333 | - | - | (27,737) | 12,279,596 |
| **Reserve Fund Cash Totals[4]** | **$ 21,058,116** | **$ -** | **$ -** | **$ (73,385)** | **$ 20,984,731** |

### Impact Fees and Police/General Facilities Cash Balances

| Description | Opening Balance (Jul 31, 2023) | Receipts | Interest Earned | Disbursements | Closing Balance (Aug 31, 2023) |
|---|---|---|---|---|---|
| Police & General Gov't Facilities[3] | $ 474,893 | $ 33,605 | $ - | $ (293) | $ 508,205 |
| Carlisle Fire Co Permit Fund | 701,935 | 11,202 | - | - | 713,137 |
| Parks & Recreation Facilities | 150,900 | 400 | - | - | 151,300 |
| Water Impact Fee Reserves | 5,347,762 | 172,454 | - | - | 5,520,216 |
| Sewer Impact Fee Reserves | 3,037,996 | 91,117 | - | - | 3,129,113 |
| Electric Impact Fee Reserves | 1,230,990 | 1,800 | - | - | 1,232,790 |
| **Impact Fees & Police/GF Totals[4]** | **$ 10,944,476** | **$ 310,578** | **$ -** | **$ (293)** | **$ 11,254,762** |

| **Grand Totals[4]** | **$ 48,312,713** | **$ 4,990,437** | **$ 41,428** | **$ (4,353,037)** | **$ 48,991,539** |
|---|---|---|---|---|---|

[1]Balances are not indicative of funding availability; see enclosed Restricted Cash Reserves and Net Cash & Funding Availability Reports for detail.

[2]General Fund Operating Cash (Row 3) reached its trailing 12-month low in August and has begun to reverse course. Sept-Oct will rebound with tax receipts.

[3]$10k in ARPA funding (Line 16) is related to FY23 security/data projects. $73k disbursed from reserves (lines 20-24) is attributable to the ERP project, while line 11 reflects ongoing parks & rec projects funded through a mix of state grant programs.

[4]Closing Balance Indicator sets ***Red,*** ***Yellow*** and ***Green*** signify month-to-month cash variance as follows:



**-10% ≤ Variance ≤ 10%**



**-5% ≤ Variance ≤ 5%**



**-2.5% ≤ Variance ≤ 2.5%**

# City of Milford, Delaware

## Restricted Cash Reserves Report

## As of August 31, 2023

| General Fund Capital Reserves | | Amount |
|---|---|---|
| Cash/Investment Balance (8/31/23) | $ | 2,016,307 |
| Expected Contributions & Interest | | 946,913 |
| Restricted Funds: | | |
| Vehicle & Equipment Replacement | | (640,677) |
| Street Repair | | (1,115,364) |
| Parking Enhancements | | (320,000) |
| Parkland, Trails & Recreation | | (943,612) |
| Other Proj, Incl MCC Design | | (668,196) |
| OpEx Support (PD R/M) | | (998,036) |
| Support Policy with RTT[1] | | 2,000,000 |
| Reserve (MCR) Policy[6] | | - |
| Equipment Replacement Reserve[2] | | (248,870) |
| **Uncommitted Reserve Balance** | **$** | **28,465** |

| Water Fund Capital Reserves | | Amount |
|---|---|---|
| Cash/Investment Balance (8/31/23) | $ | 2,058,281 |
| Expected Contributions & Interest | | 2,210,753 |
| Restricted Funds: | | |
| Vehicle & Equipment Replacement | | (136,859) |
| Street-Utility Engineering/Infra | | (606,000) |
| | | - |
| Milford Business Campus | | - |
| Reserve-Funded Projects | | (679,846) |
| Reserve (MCR) Policy[3,6] | | (2,607,752) |
| Equipment Replacement Reserve[3] | | (150,545) |
| **Uncommitted Reserve Balance** | **$** | **88,032** |

| Sewer Fund Capital Reserves | | Amount |
|---|---|---|
| Cash/Investment Balance (8/31/23) | $ | 4,504,414 |
| Expected Contributions & Interest | | 1,645,122 |
| Restricted Funds: | | |
| Sewer Vehicles & Equipment | | (48,112) |
| Citywide Projects & Engineering | | (2,869) |
| Utility Engineering | | - |
| Reserve-Funded Projects | | (1,815,290) |
| Reserve (MCR) Policy[3,6] | | (3,834,077) |
| Equipment Replacement Reserve[3] | | (52,923) |
| **Uncommitted Reserve Balance** | **$** | **396,265** |

| Electric Fund Capital Reserves | | Amount |
|---|---|---|
| Cash/Investment Balance (8/31/23) | $ | 12,279,596 |
| Expected Contributions & Interest | | 3,828,489 |
| Restricted Funds: | | |
| Electric Vehicles & Equipment | | (359,306) |
| Lighting & System Improvements | | (584,637) |
| Traffic Signal Upgrades | | (289,464) |
| Citywide Projects | | (2,410,174) |
| Redeem / Defease Bond[7] | | (4,060,000) |
| Reserve (MCR) Policy[3,6] | | (6,623,223) |
| Equipment Replacement Reserve[3] | | (395,237) |
| **Uncommitted Reserve Balance** | **$** | **1,386,045** |

| Solid Waste Reserves | | Amount |
|---|---|---|
| Cash/Investment Balance (8/31/23) | $ | 126,132 |
| Expected Contributions & Interest | | 141,924 |
| Restricted Funds: | | |
| Solid Waste Vehicles & Equipment[4] | | (150,760) |
| Solid Waste Alloc of PW Projects | | (76,063) |
| Reserve (MCR) Policy[4] | | - |
| Equipment Replacement Reserve[4] | | (39,582) |
| **Uncommitted Reserve Balance** | **$** | **1,651** |

| MSA & RTT Reserves | Amount |
|---|---|
| RTT Balance (8/31/23) | 704,254 |
| MSA Balance (8/31/23) | 656,012 |
| MSA & RTT Est Receipts thru FY24: | 5,690,427 |
| MSA: Street & Bridge Improvements | (1,190,958) |
| RTT: Transfer to Police Dept | (166,667) |
| RTT: Sidewalk Project Funding | (632,170) |
| MSA & RTT: 2020 Combined St-Util | (871,000) |
| | - |
| RTT: Support GF Policies[1] | (2,000,000) |
| RTT: Reserve Policy[5] | (1,280,031) |
| **Uncommitted Reserve Balance** | **$ 909,868** |

[1]Approved GF Reserve Policies permit support from an eligible funding source; portion of RTT balance pledged to support GF Reserves for forseeable future

[2]Approved GF Reserve Policies recommend MCR of 45 days OpEx & Equip Repl Res minimum of 110% of upcoming CIP budget

[3]Approved Reserve Policies split Minimum Cash Req'd from COS study into new MCR & Equip Repl Reserve (20% of CIP)

[4]Solid Waste Reserves initiated in FY22 with seed funding from interfund loan forgiveness. Funds accumulated through FY23 used for collection equipment; 100% being reserved in FY24+.

[5]Approved Reserve Policies recommend dynamic MCR based on average of trailing-three-year RTT receipts; FY24 increase related to strong FY23 vs FY20, which fell out of T3 Avg

[6]The Days Operating Expenditures (Days OpEx) piece of MCRs reclassified from Reserve balances here to Operating Cash; the Total MCR has not changed

[7]This funding has been deployed, but will remain in the City's cash balance through the life of the underlying bonds. Interest rate increases and land investments prompted a revised strategy to economically neutralized the debt without redeeming it. This resulted in greater value for both the electric and sewer funds.

# City of Milford, Delaware

## Enterprise Funds: Statement of Revenues & Expenditures

## For the YTD Period Ended August 31, 2023 vs Prior FYTD & Current Budget (in thousands)

| | Enterprise Funds Profit & Loss (P&L) Statement | Electric | Water | Sewer | Solid Waste | Total | FY24 Total *(as % of Rev)* | FY23 Total *(as % of Rev)* |
|---|---|---|---|---|---|---|---|---|
| 1 | Operating Revenue | $ 5,278 | $ 437 | $ 632 | $ 258 | $ 6,606 | 100.0% | 100.0% |
| 2 | Cost of Revenue[1] | (4,125) | (68) | (232) | (57) | (4,482) | -67.9% | -70.1% |
| 3 | Gross Margin | 1,153 | 369 | 400 | 201 | 2,124 | 32.1% | 29.9% |
| 4 | Operating Expenses | | | | | | | |
| 5 | Operations & Maintenance | (131) | (48) | (44) | (24) | (246) | -3.7% | -3.6% |
| 6 | Personnel | (238) | (56) | (55) | (58) | (406) | -6.2% | -4.0% |
| 7 | Total Operating Expenses | (369) | (104) | (98) | (81) | (653) | -9.9% | -7.6% |
| 8 | **Operating Income** | **$ 784** | **$ 265** | **$ 302** | **$ 120** | **$ 1,471** | **22.3%** | **22.3%** |
| 9 | Non-Operating Revenue (Expense) | 1 | - | 45 | - | 46 | 0.7% | 0.2% |
| 10 | Surplus (Deficit) for debt service & capital | 785 | 265 | 347 | 120 | 1,517 | 23.0% | 22.5% |
| 11 | Debt Service - Principal & Interest | - | - | (13) | - | (13) | -0.2% | -0.2% |
| 12 | Capital Spending / Contributions from (to) Reserves | - | - | (5) | - | (5) | -0.1% | 0.0% |
| 13 | Surplus (deficit) available for transfers | 785 | 265 | 329 | 120 | 1,499 | 22.7% | 22.3% |
| 14 | Transfers Out | (542) | (50) | (25) | - | (617) | -9.3% | -7.6% |
| 15 | **Net Surplus (Deficit) - FYTD through Aug 2023** | **$ 243** | **$ 215** | **$ 304** | **$ 120** | **$ 883** | **13.4%** | **14.7%** |
| 16 | ***Net Surplus (Deficit) - FYTD through Aug 2022*** | *$ 290* | *$ 317* | *$ 402* | *$ 96* | *$ 1,106* | *14.7%* | |
| 17 | *Current vs Prior - Favorable (Unfavorable)*[2] | *$ (47)* | *$ (102)* | *$ (98)* | *$ 24* | *$ (223)* | *-1.3%* | |
| 18 | ***Net Surplus (Deficit) - Current FYTD Budget*** | *$ 159* | *$ 153* | *$ 128* | *$ 17* | *$ 457* | *6.8%* | |
| 19 | *Current vs Budget - Favorable (Unfavorable)*[2] | *$ 85* | *$ 63* | *$ 176* | *$ 103* | *$ 426* | *6.5%* | |

[1]Cost of Revenue reported in the electric fund reflects wholesale cost of power and serves as an ideal revenue offset to arrive at gross margin. Cost of revenue in the water, sewer and solid waste funds are estimated based on a limited set of known, direct inputs to the cost of providing the utility services billed. Aside from Kent County sewer treatment charges, costs of revenue in the water, sewer and solid waste funds are likely understated.

[2]Comparative Indicators ***Green*** , ***Yellow*** and ***Red*** signify favorable variance greater than 5%, marginal variance within ±5%, and unfavorable variance below -5%, respectively, for departmental comparisons. Total variance carries tighter bounds of >2.5%, ±2.5% and <2.5%, while the percentage variance uses >1.0%, ±1.0% and <1.0%, respectively.

# City of Milford, Delaware

## General Fund: Statement of Revenues & Expenditures[1]

### For the YTD Period Ended August 31, 2023 vs Prior FYTD & Current Budget (in thousands)

| | General Fund Sources and Uses of Funding | Admin & Council | Public Safety | Parks & Rec | Planning & All Other | Total | FY24 Total (as % of Rev) | FY23 Total[2] (as % of Rev) |
|---|---|---|---|---|---|---|---|---|
| 1 | ***Sources of Funding:*** | | | | | | | |
| 2 | Real Estate (Property) Taxes | $ 5,673 | $ - | $ - | $ - | $ 5,673 | 87.2% | 87.7% |
| 3 | Permits, Licensing & Franchise Fees | 50 | - | - | 51 | 101 | 1.5% | 1.6% |
| 4 | Fines, Fees & Misc Revenue | 0 | 52 | - | - | 52 | 0.8% | 0.6% |
| 5 | General Revenue Subtotal | 5,724 | 52 | 0 | 51 | 5,826 | 89.5% | 89.8% |
| 6 | Utility Transfers & Cost Allocation | 642 | - | - | - | 642 | 9.9% | 9.3% |
| 7 | Grant Revenue | 0 | (311) | 115 | - | (196) | -3.0% | 0.0% |
| 8 | Application of Reserve Balances | 203 | 33 | - | - | 237 | 3.6% | 0.9% |
| 9 | General Fund Operating Support | 845 | (2772) -36 | 115 | 0 | 683 | 10.5% | 10.2% |
| 10 | **Total Sources of Funding** | **$ 6,569** | **$ (225)** | **$ 115** | **$ 51** | **$ 6,509** | **100.0%** | **100.0%** |
| 11 | ***Uses of Funding:*** | | | | | | | |
| 12 | Operations & Maintenance | 34 | 162 | 77 | 89 | 362 | 5.6% | 10.2% |
| 13 | Personnel | 161 | 750 | 116 | 291 | 1,318 | 20.3% | 18.6% |
| 14 | Total Operating Expenses | 194 | 912 | 194 | 380 | 1,681 | 25.8% | 28.8% |
| 15 | **Surplus (Deficit) for Debt Svc & Capital** | **$ 6,375** | **$ (1,138)** | **$ (79)** | **$ (329)** | **$ 4,829** | **74.2%** | **71.2%** |
| 16 | Debt Service - Principal & Interest | - | - | - | - | - | 0.0% | 0.0% |
| 17 | Capital Spending / Transfers from (to) Reserves | 73 | 343 | 221 | 34 | 671 | 10.3% | 1.8% |
| 18 | **Net Surplus (Deficit) - FYTD through Aug 2023** | **$ 6,302** | **$ (1,481)** | **$ (299)** | **$ (363)** | **$ 4,158** | **63.9%** | **69.4%** |
| 19 | ***Net Surplus (Deficit) - FYTD through Aug 2022*** | *$ 5,117* | *$ (826)* | *$ (164)* | *$ (262)* | *$ 3,864* | 69.4% | |
| 20 | *Current vs Prior - Favorable (Unfavorable)[2]* | ↑ *$ 1,185* | ↓ *$ (655)* | ↓ *$ (134)* | ↓ *$ (101)* | ↑ *$ 294* | ↓ *-5.5%* | |
| 21 | ***Net Surplus (Deficit) - Current FYTD Budget*** | *$ 6,510* | *$ (857)* | *$ (197)* | *$ (381)* | *$ 5,075* | 69.8% | |
| 22 | *Current vs Budget - Favorable (Unfavorable)[3]* | → *$ (208)* | ↓ *$ (624)* | ↓ *$ (102)* | ↑ *$ 18* | ↓ *$ (917)* | ↓ *-5.9%* | |

[1]This Statement presents the same general fund financial performance available in the legacy Revenue and Expenditure Reports in a one-page consolidated executive summary. The common size reporting (two rightmost columns) benefits readers in two ways; first, each line is scaled with total revenue to add context, and second, the common size format is comparable across fiscal years and budgets. This report should be considered a working draft that will be improved over time to improve its usefulness to readers.

[2]This format presents expeditures in the context of funding sources while comparing subtotals (rightmost column) and the net surplus (deficit) to the prior YTD period (rows 19 & 20)

[3]Comparative Indicators ***Green*** , ***Yellow*** and ***Red*** signify favorable variance greater than 5%, marginal variance within ±5%, and unfavorable variance below -5%, respectively, for departmental comparisons. Total variance carries tighter bounds of >2.5%, ±2.5% and <2.5%, while the percentage variance uses >1.0%, ±1.0% and <1.0%, respectively.

# Appendix: Planned Use of Funding vs Spending by Category
# American Rescue Plan Act of 2021 ("ARPA")

| | *Actual Spending by Category vs Plan, as Amended* | | | | | |
|---|---|---|---|---|---|---|
| **ARPA Eligibility Categories** | **Plan (4/30/23)[1]** | **Actual (7/31/23)** | **Actual (8/31/23)** | **Jul 2023 Activity** | **Remaining** | **Notes** |
| **COVID-19 Health Impact** | **$ 1,133,568** | **$ 1,056,370** | **$ 1,056,370** | **$ -** | **$ 77,198** | |
| Operational Facilities | 778,000 | 778,000 | 778,000 | - | - | PD Vehicles, City Hall/IT Upgrades |
| Administering COVID-19 Response | 29,258 | 24,510 | 24,510 | - | 4,748 | Pro Rata portion of DE Treasury ARPA Attorney |
| Behavioral Health Care | 180,000 | 180,000 | 180,000 | - | - | Primarily Personnel Costs |
| Air Quality & Ventilation | 145,712 | 73,262 | 73,262 | - | 72,450 | HVAC Repair in Finc & P&R Offices; PW Areas Tentative |
| COVID-19 Mitigation | 598 | 598 | 598 | - | - | Vaccination Incentive; COVID test kits |
| **COVID-19 Economic Impact** | **$ 855,992** | **$ 855,992** | **$ 855,992** | **$ -** | **$ -** | |
| Assistance to Community (Annual) | 322,114 | 322,114 | 322,114 | - | - | DMI, Armory, Museum, CFC (Misp Art Lg R/C to Signage) |
| Assistance to Community & Households | 255,394 | 255,394 | 255,394 | - | - | MHDC, CFC, Food Bank, Library |
| Critical Ops Staffing / Retention | 236,476 | 236,476 | 236,476 | - | - | December 2021 Initiative |
| Aid Tourism Recovery | 24,709 | 24,709 | 24,709 | - | - | Signage / Banner Upgrade, Parks & Planning Revenue Recov |
| Operational Facilities | 14,674 | 14,674 | 14,674 | - | - | City Hall Access Panel Upgrades |
| Parks & Rec Programming | 2,625 | 2,625 | 2,625 | - | - | Signage cost share with DMI |
| **Infrastructure** | **$ 4,329,459** | **$ 3,697,979** | **$ 3,707,607** | **$ 9,628** | **$ 621,852** | |
| Water Quality | 2,877,074 | 2,827,074 | 2,827,074 | - | 50,000 | Misp St Proj; NE Front St Water Line Replacement; 2020 Combined Utilities / Streets Proj |
| Flood/Pollution Control | 724,527 | 212,729 | 212,729 | - | 511,798 | 4th St Drainage & Mispillion St Project |
| Improve Resilience to Disasters | 435,000 | 365,318 | 374,946 | 9,628 | 60,054 | Pump Station Upgrades, Spare Pumps & IT Initiatives |
| Improve Wastewater Treatment | 292,858 | 292,858 | 292,858 | - | - | Sewer part of Mispillion St Proj; NW Front Sewer |
| **Revenue Recovery** | **$ 14,874** | $ 14,874 | **$ 14,874** | **$ -** | **$ -** | |
| Parks & Rec Programming | 7,112 | 7,112 | 7,112 | - | - | |
| Economic Development | 7,762 | 7,762 | 7,762 | - | - | |
| Public Safety Operations | - | - | - | - | - | Public Safety Revenue Recovery reassigned to Vehicles |
| **Grand Total** | **$ 6,333,893** | **$ 5,625,214** | **$ 5,634,842** | **$ 9,628** | **$ 699,050** | |

[1]Adjusted to reflect funding available through the CARES act, Sussex County RTT funds and Council approval of additional vehicle funding

# Appendix: Milford Police Facility Project Spending vs Budget

Project Inception through August 31, 2023

| *Actual Spending by Category & Subcategory vs Budget* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Bid Category** | **Awarded Contracts / Budget** | **Project Activity** | **Less: Retainage** | **Total Payable** | **PNC BAN Payments** | **Facility Fund Payments** | **General Fund Payments** | **Notes** |
| **Pre-Construction** | **$ 835,265** | **$ 827,603** | **$ -** | **$ 827,603** | **$ -** | **$ (790,371)** | **$ (29,671)** | |
| Design / Architecture | 805,594 | 797,932 | - | 797,932 | - | (790,371) | - | FY19-FY23 |
| Referendum / Administrative | 29,671 | 29,671 | - | 29,671 | - | - | (29,671) | FY19-FY22 |
| **Construction Management** | **$ 649,392** | **$ 495,956** | **$ -** | **$ 495,956** | **$ (363,865)** | **$ -** | **$ -** | |
| Fixed/On-Stie Construction Mgmt: RYJ | 266,260 | 287,349 | - | 287,349 | (215,512) | - | - | FY23 |
| Variable Const Mgmt Fees: RYJ | 383,132 | 208,607 | - | 208,607 | (148,353) | - | - | FY23 |
| **Construction: 16 Core Contracts** | **$ 13,305,809** | **$ 10,913,190** | **$ 545,660** | **$ 10,367,530** | **$ (9,856,800)** | **$ -** | **$ -** | |
| Sitework: Zack Excavating | 1,976,508 | 1,394,048 | 69,702 | 1,324,345 | (1,235,119) | - | - | FY23 / Current |
| Concrete: Gullwing | 293,000 | 293,000 | 14,650 | 278,350 | (278,350) | - | - | FY23 / Current |
| Masonry: L. Wilson | 790,000 | 788,500 | 39,425 | 749,075 | (749,075) | - | - | FY23 / Current |
| Steel Work: R.C. Fabricators | 868,000 | 856,082 | 42,804 | 813,278 | (813,278) | - | - | June (FY22) - Current |
| Carpentry & Gen: Conventional | 1,076,360 | 684,359 | 34,218 | 650,141 | (566,583) | - | - | Sept (FY22) - Current |
| Roofing: Quality Exteriors | 933,252 | 887,452 | 44,373 | 843,079 | (843,079) | - | - | June (FY22) - Current |
| Hardware: Precision | 232,231 | 132,582 | 6,629 | 125,953 | (125,953) | - | - | Jan (FY23) - Current |
| Glasswork: Walker & LaBarge | 183,600 | 172,500 | 8,625 | 163,875 | (163,875) | - | - | Oct (FY22) - Current |
| Drywall/Stud: Peninsula | 1,317,000 | 1,238,211 | 61,911 | 1,176,300 | (1,176,300) | - | - | FY23 / Current |
| Acoustical: Master Interiors | 259,080 | 235,522 | 11,776 | 223,746 | (142,728) | - | - | June (FY22) - Current |
| Floor Covering: Tri-State | 492,124 | 177,858 | 8,893 | 168,965 | (168,965) | - | - | June (FY22) - Current |
| Caulk & Paint: M&S Painting | 66,570 | 41,836 | 2,092 | 39,744 | (39,744) | - | - | Feb (FY23) - Current |
| Casework: Modular Concepts | 108,125 | 113,873 | 5,694 | 108,179 | - | - | - | |
| Mechanical: J.F Sobieski | 2,081,649 | 1,752,596 | 87,630 | 1,664,966 | (1,664,966) | - | - | June (FY22) - Current |
| Fire Sprinkler: Bear Industries | 98,780 | 88,780 | 4,439 | 84,341 | (84,341) | - | - | FY23 / Current |
| Electrical: Filec Services | 2,529,530 | 2,055,991 | 102,800 | 1,953,192 | (1,804,443) | - | - | FY23 / Current |
| **Construction: Other Activity** | **$ 600,000** | **$ 93,837** | **$ -** | **$ 93,837** | **$ (23,837)** | **$ -** | **$ (23,837)** | |
| Technology | 150,000 | - | - | - | - | - | - | |
| Furniture, Fixtures & Equip | 450,000 | 93,837 | - | 93,837 | (23,837) | - | (23,837) | |
| **Post-Construction / Contingencies** | **$ 1,109,534** | **$ 847,017** | **$ 661,614** | **$ 185,403** | **$ (185,403)** | **$ -** | **$ -** | |
| Builder's Contingency[1] | 520,062 | 331,629 | 331,629 | - | - | - | - | Jan/Feb (FY23) - Current |
| Owner's Contingency[2] | 589,472 | 515,388 | 329,985 | 185,403 | (185,403) | - | - | FY22 - Current |
| **Grand Total** | **$ 16,500,000** | **$ 13,177,603** | **$ 1,207,274** | **$ 11,970,329** | **$ (10,429,905)** | **$ (790,371)** | **$ (53,508)** | |

[1,2]Builder's and Owner's Contingency were established to account for anticipated but unknown project expenditures arising at the site as construction unfolded (Builder's) and a mix of known and unknown project expenditures related to project financing, permitting and administration. About $270k of Builder's Contingency arose from Jan-Feb 2023 and was presented to Council February 27, 2023.

[1]About $270k of Builder's Contingency was related to the facility's electric service emerging in Jan-Feb 2023 and was presented to Council February 27, 2023.

[2]$160k of Owner's Contingency consists primarily of interest on temporary financing and is paid monthly with loan proceeds, while about $330k is the estimated cost of the communications upgrade.

# City of Milford, Delaware

## Legacy Revenue Report: MTD and YTD Actual vs Annual Budget

## For the YTD Period Ended August 31, 2023

*16.7% of Year Elapsed*

| | Account / Function | FY24 Budget, as Approved | MTD Actual | YTD Actual | YTD Actual as % of Annual Budget |
|---|---|---|---|---|---|
| 1 | **General Fund:** | | | | |
| 2 | Economic Development Fund[1] | $ 105,860 | $ 8,822 | $ 17,643 | 16.7% |
| 3 | General Fund Reserves | 1,114,525 | 92,877 | 185,754 | 16.7% |
| 4 | ARPA Funding - Operating Support | 21,245 | - | - | 0.0% |
| 5 | Realty Transfer Tax - Police | 200,000 | 16,667 | 33,333 | 16.7% |
| 6 | Real Estate Tax | 5,732,358 | 5,671,906 | 5,673,301 | 99.0% |
| 7 | Business License | 67,000 | 1,345 | 3,615 | 5.4% |
| 8 | Rental License | 120,000 | 475 | 1,375 | 1.1% |
| 9 | Building Permits | 250,000 | 80 | 35,655 | 14.3% |
| 10 | Planning & Zoning | 65,000 | 740 | 7,644 | 11.8% |
| 11 | Leases and Franchise Fees[1] | 430,069 | 24,659 | 49,821 | 11.6% |
| 12 | Grasscutting Revenue | 20,000 | 1,333 | 2,667 | 13.3% |
| 13 | Police Revenues | 523,680 | 22,121 | 51,912 | 9.9% |
| 14 | Misc. Revenues[1] | 20,500 | - | 470 | 2.3% |
| 15 | Transfers In | 5,221,976 | 320,833 | 641,667 | 12.3% |
| 16 | **Total General Fund Revenue** | **$ 13,892,213** | **$ 6,161,857** | **$ 6,704,857** | **48.3%** |
| 17 | **Enterprise Funds:** | | | | |
| 18 | Water Fund Revenues | $ 3,601,227 | $ 266,445 | $ 587,240 | 16.3% |
| 19 | Sewer Fund Revenues | 3,271,974 | 250,375 | 523,108 | 16.0% |
| 20 | Kent County Sewer | 2,533,811 | 209,776 | 411,002 | 16.2% |
| 21 | Solid Waste Fund Revenues | 1,710,494 | 140,105 | 280,337 | 16.4% |
| 22 | Electric Fund Revenues | 28,893,293 | 2,650,857 | 5,279,623 | 18.3% |
| 23 | **Total Enterprise Fund Revenue** | **$ 40,010,799** | **$ 3,517,558** | **$ 7,081,311** | **17.7%** |
| 24 | Other Enterprise Revenue | $ - | $ 165 | $ 1,005 | |
| 25 | Other Enterprise Expense | - | 10,787 | 20,356 | |
| 26 | **Total General & Enterprise Fund Revenue** | **$ 53,903,012** | **$ 9,690,368** | **$ 13,807,529** | **25.6%** |

[1]Recurring, budgeted revenue such as franchise fees, tower leases and pole attachment fees reclassified from miscellaneous revenues (line 14) to leases and franchise fees (line 11)

# City of Milford, Delaware

## Legacy Expenditure Report: MTD and YTD Actual vs Annual Budget

## For the YTD Period Ended August 31, 2023

*16.7% of Year Elapsed*

| | Fund / Account / Divisional Groupings | FY24 Budget, as Approved | MTD Actual | YTD Actual | YTD Actual as % of Annual Budget | Unexpended Balance |
|---|---|---|---|---|---|---|
| 1 | **General Fund** | | | | | |
| 2 | City Administration | | | | | |
| 3 | Personnel | $ 621,570 | $ 57,691 | $ 105,228 | 16.9% | $ 516,342 |
| 4 | Operation & Maintenance (O&M) | 137,511 | 5,502 | 10,470 | 7.6% | 127,041 |
| 5 | Capital | - | - | - | | - |
| 6 | Subtotal: City Administration | 759,081 | 63,193 | 115,698 | 15.2% | 643,382 |
| 7 | City Clerks | | | | | |
| 8 | Personnel | $ 337,869 | $ 26,159 | $ 52,199 | 15.4% | $ 285,670 |
| 9 | Operation & Maintenance (O&M) | 81,851 | 1,060 | 2,837 | 3.5% | 79,014 |
| 10 | Capital | - | - | - | | - |
| 11 | Subtotal: City Clerks | 419,720 | 27,219 | 55,036 | 13.1% | 364,684 |
| 7 | Planning & Zoning | | | | | |
| 8 | Personnel | $ 676,580 | 28,983 | 85,830 | 12.7% | 590,750 |
| 9 | O&M | 154,432 | 16,171 | 16,810 | 10.9% | 137,622 |
| 10 | Capital | 70,000 | - | - | 0.0% | 70,000 |
| 11 | Subtotal: Planning & Zoning | 901,012 | 45,154 | 102,639 | 11.4% | 798,373 |
| 12 | Council | | | | | |
| 13 | Personnel | 54,990 | 1,593 | 3,143 | 5.7% | 51,847 |
| 14 | Legal | 30,150 | 2,513 | 5,025 | 16.7% | 25,125 |
| 15 | City Hall Building Expense | 38,961 | - | 3,247 | 8.3% | 35,714 |
| 16 | Insurance | 17,650 | - | 444 | 2.5% | 17,206 |
| 17 | Council Expense | 40,000 | 300 | 1,588 | 4.0% | 38,412 |
| 18 | Codification | 18,000 | - | 3,618 | 20.1% | 14,382 |
| 19 | Carlisle Fire Company | 205,000 | - | - | 0.0% | 205,000 |
| 20 | Museum | 40,000 | - | - | 0.0% | 40,000 |
| 21 | Downtown Milford, Inc. | 50,000 | - | - | 0.0% | 50,000 |
| 22 | Milford Public Library | 28,000 | - | - | 0.0% | 28,000 |
| 23 | Armory Expenses | 25,000 | - | 1,154 | 4.6% | 23,846 |
| 24 | Community Festivals | 70,000 | - | - | 0.0% | 70,000 |
| 25 | Election Expense | - | - | - | | - |
| 26 | Other O&M | 76,390 | 5,080 | 5,159 | 6.8% | 71,231 |
| 27 | Emergency Operations | 50,000 | - | - | 0.0% | 50,000 |
| 28 | Subtotal: Council | 744,141 | 9,485 | 23,378 | 3.1% | 720,763 |

# City of Milford, Delaware

## Legacy Expenditure Report: MTD and YTD Actual vs Annual Budget

## For the YTD Period Ended August 31, 2023

*16.7% of Year Elapsed*

| | Fund / Account / Divisional Groupings | FY24 Budget, as Approved | MTD Actual | YTD Actual | YTD Actual as % of Annual Budget | Unexpended Balance |
|---|---|---|---|---|---|---|
| 29 | Finance | | | | | |
| 30 | Personnel | 643,770 | 25,593 | 78,029 | 12.1% | 565,741 |
| 31 | O&M | 35,080 | 3,728 | 8,506 | 24.2% | 26,574 |
| 32 | Capital | - | - | - | | - |
| 33 | Subtotal: Finance | 678,850 | 29,321 | 86,535 | 12.7% | 592,315 |
| 34 | Information Technology | | | | | |
| 35 | Personnel | 482,545 | 27,259 | 65,475 | 13.6% | 417,071 |
| 36 | O&M | 524,445 | 26,855 | 27,184 | 5.2% | 497,261 |
| 37 | Capital | 973,743 | 72,957 | 72,957 | 7.5% | 900,785 |
| 38 | Subtotal: Information Technology | 1,980,733 | 127,071 | 165,615 | 8.4% | 1,815,117 |
| 39 | Police Department | | | | | |
| 40 | Personnel | 5,530,716 | 222,020 | 750,238 | 13.6% | 4,780,478 |
| 41 | O&M | 1,388,456 | 91,328 | 141,249 | 10.2% | 1,247,207 |
| 42 | Capital | - | 120,440 | 454,984 | | (454,984) |
| 43 | Subtotal: Police Department | 6,919,172 | 433,788 | 1,346,470 | 19.5% | 5,572,701 |
| 44 | Streets & Grounds Division | | | | | |
| 45 | Personnel | 425,400 | 27,539 | 61,835 | 14.5% | 363,565 |
| 46 | O&M | 565,968 | 25,495 | 36,503 | 6.4% | 529,465 |
| 47 | Capital | 182,330 | 33,669 | 33,669 | 18.5% | 148,661 |
| 48 | Subtotal: Streets & Grounds Division | 1,173,699 | 86,702 | 132,008 | 11.2% | 1,041,691 |
| 49 | Parks & Recreation | | | | | |
| 50 | Personnel | 790,970 | 32,982 | 116,341 | 14.7% | 674,629 |
| 51 | O&M | 701,910 | 33,721 | 77,445 | 11.0% | 624,465 |
| 52 | Capital | 1,034,676 | 105,185 | 220,646 | 21.3% | 814,031 |
| 53 | Subtotal: Parks & Recreation | 2,527,556 | 171,888 | 414,431 | 16.4% | 2,113,125 |
| 54 | **Total General Fund Expenditures** | **$ 15,684,243** | **$ 966,602** | **$ 2,386,775** | **15.2%** | **$ 13,297,467** |

# City of Milford, Delaware

## Legacy Expenditure Report: MTD and YTD Actual vs Annual Budget

## For the YTD Period Ended August 31, 2023

*16.7% of Year Elapsed*

| Fund / Account / Divisional Groupings | FY24 Budget, as Approved | MTD Actual | YTD Actual | YTD Actual as % of Annual Budget | Unexpended Balance |
|---|---|---|---|---|---|
| **Enterprise Funds:** | | | | | |
| Water Division | | | | | |
| Personnel | $ 412,740 | $ 25,865 | $ 66,737 | 16.2% | $ 346,003 |
| O&M | 1,787,676 | 49,126 | 116,154 | 6.5% | 1,671,523 |
| Transfer to General Fund | 300,000 | 25,000 | 50,000 | 16.7% | 250,000 |
| Capital | 735,536 | 6,900 | 6,900 | 0.9% | 728,636 |
| Debt Service | 365,275 | - | - | 0.0% | 365,275 |
| Subtotal: Water Division | 3,601,227 | 106,891 | 239,791 | 6.7% | 3,361,436 |
| Sewer Division | | | | | |
| Personnel | $ 402,430 | 25,197 | 65,564 | 16.3% | 336,866 |
| O&M | 1,928,765 | 86,208 | 148,007 | 7.7% | 1,780,758 |
| Transfer to General Fund | 300,000 | 25,000 | 50,000 | 16.7% | 250,000 |
| Capital | 231,927 | 5,298 | 5,298 | 2.3% | 226,629 |
| Debt Service | 408,853 | 12,735 | 12,735 | 3.1% | 396,117 |
| Subtotal: Sewer Division (excl. Kent County) | 3,271,974 | 154,439 | 281,604 | 8.6% | 2,990,370 |
| Kent County Sewer | 2,533,811 | 210,510 | 411,784 | 16.3% | 2,122,027 |
| Subtotal: Sewer Division (Comprehensive) | 5,805,785 | 364,949 | 693,388 | 11.9% | 5,112,397 |
| Solid Waste Division | | | | | |
| Personnel | 403,570 | 34,202 | 69,453 | 17.2% | 334,117 |
| O&M | 1,306,924 | 51,207 | 80,591 | 6.2% | 1,226,333 |
| Capital | - | - | - | | - |
| Subtotal: Solid Waste Division | 1,710,494 | 85,409 | 150,044 | 8.8% | 1,560,450 |
| Subtotal: Water, Sewer & Solid Waste | 11,117,506 | 557,249 | 1,083,223 | 9.7% | 10,034,283 |
| Electric Division | | | | | |
| Personnel | $ 1,803,070 | 159,744 | 285,908 | 15.9% | 1,517,162 |
| O&M | 3,018,229 | 66,760 | 130,846 | 4.3% | 2,887,384 |
| Transfer to General Fund | 3,250,000 | 270,833 | 541,667 | 16.7% | 2,708,333 |
| Capital | 993,014 | - | - | 0.0% | 993,014 |
| Debt Service | 322,590 | - | - | 0.0% | 322,590 |
| Subtotal: Electric Division (excl. Power) | 9,386,904 | 497,338 | 958,420 | 10.2% | 8,428,483 |
| Power Purchased | 20,492,823 | 2,004,790 | 4,125,412 | 20.1% | 16,367,411 |
| Subtotal: Electric Division (Comprehensive) | 29,879,727 | 2,502,128 | 5,083,832 | 17.0% | 24,795,894 |
| **Total Enterprise Fund Expenditures** | **$ 40,997,232** | **$ 3,059,377** | **$ 6,167,055** | **15.0%** | **$ 34,830,177** |
| **Grand Total Operating Budget** | **$ 56,681,475** | **$ 4,025,979** | **$ 8,553,831** | **15.1%** | **$ 48,127,644** |

# City of Milford, Delaware

## Legacy Interservice Department Expenditures: MTD and YTD Actual vs Annual Budget

## For the YTD Period Ended August 31, 2023

*16.7% of Year Elapsed*

| Account / Divisional Groupings | FY24 Budget, as Approved | MTD Actual | YTD Actual | YTD Actual as % of Annual Budget | Unexpended Balance |
|---|---|---|---|---|---|
| **Interservice Departments** | | | | | |
| Garage | | | | | |
| Personnel | $ 178,430 | $ 19,523 | $ 25,239 | 14.1% | $ 153,191 |
| Operation & Maintenance (O&M) | 134,410 | 1,751 | 14,211 | 10.6% | 120,199 |
| Capital | - | - | - | | - |
| Subtotal: Garage | 312,840 | 21,274 | 39,450 | 12.6% | 273,390 |
| Public Works | | | | | |
| Personnel | 921,530 | 107,389 | 138,910 | 15.1% | 782,620 |
| O&M | 265,540 | 16,074 | 34,922 | 13.2% | 230,618 |
| Capital | - | - | - | | - |
| Subtotal: Public Works | 1,187,070 | 123,463 | 173,832 | 14.6% | 1,013,238 |
| Tech Services | | | | | |
| Personnel | 304,930 | 34,095 | 44,556 | 14.6% | 260,375 |
| O&M | 509,816 | 33,624 | 36,453 | 7.2% | 473,363 |
| Capital | - | - | - | | - |
| Subtotal: Tech Services | 814,746 | 67,719 | 81,008 | 9.9% | 733,738 |
| Billing & Collections | | | | | |
| Personnel | 800,480 | 82,780 | 106,643 | 13.3% | 693,837 |
| O&M | 451,020 | 17,497 | 31,914 | 7.1% | 419,107 |
| Capital | - | - | - | | - |
| Subtotal: Billing & Collections | 1,251,500 | 100,277 | 138,557 | 11.1% | 1,112,944 |
| City Hall Cost Allocation | | | | | |
| O&M | 83,600 | 3,237 | 12,105 | 14.5% | 71,495 |
| Capital | - | - | - | | - |
| Subtotal: City Hall Cost Allocation | 83,600 | 3,237 | 12,105 | 14.5% | 71,495 |
| **Interdepartmental Cost Allocation** | **$ (3,649,757)** | **$ (315,969)** | **$ (444,952)** | **12.2%** | **$ (3,204,804)** |
| **Net Interdepartmental Costs[1]** | **$ -** | **$ -** | **$ -** | | **$ -** |

[1]All costs reported here are allocated to and entirely funded by the various departments that use the services provided internally by these shared departments.

# Milford: South Walnut Street Traffic Calming and Bicycle/Pedestrian Improvement Project



September 19, 2023

Prepared for:

THE CITY of Milford DELAWARE

Prepared by:

CENTURY ENGINEERING
A Kleinfelder Company

# Milford: South Walnut Street Traffic Calming and Bicycle/Pedestrian Improvement Project

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THE CITY of Milford DELAWARE

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# Milford: South Walnut Street Traffic Calming and Bicycle/Pedestrian Improvement Project

## Executive Summary

The South Walnut Street Traffic Calming and Bicycle/Pedestrian Improvement Project is focused on developing strategies for traffic calming and improving bicycle/pedestrian movements along South Walnut Street between McCoy Street and South Maple Avenue. South Walnut Street is primarily a residential street with no traffic signals or stop signs and is generally straight with wide travel lanes. The community along the corridor report concerns with speeding and crashes. The sidewalks going northbound and southbound on South Walnut Street are disconnected in some areas.

The goal of the project is to improve bicycle and pedestrian connectivity along South Walnut Street, as well as provide traffic calming measures to reduce vehicular speeds and the number or severity of crashes. Improving the pedestrian crossing at Seabury Avenue and West Clarke Avenue is also a priority along with improving the intersection on South Walnut Street at the railroad crossing.

This study evaluated intersection modifications to improve mobility for pedestrians, cyclists, and motorists in compliance with the recently adopted Milford Bicycle Master Plan and Milford's Comprehensive Plan. This study also addressed traffic calming measures to reduce speeds and crashes.

Extensive data gathering occurred throughout the project, including traffic volumes, speeds, and crash statistics. The speed data is consistent with community reports of speeding and supports the need for additional traffic calming measures beyond the existing 25 MPH speed limit signs. Different traffic calming measures for intersections and road segments were analyzed. It has been determined that some intersections and road segments on South Walnut Street would benefit from the implementation of traffic calming measures. Reviewing three-year crash data reveals that crashes are highest in the afternoon and evening, which corresponds to the time traffic volumes are highest. The installation of multiway stop signs was also studied at three intersections within the study area. Based on the analysis it was concluded that stop sign installation is not warranted based on the traffic patterns of the intersections.

This project incorporated community outreach and engagement through two community workshops in order to collect input from residents on two options developed for the corridor's improvement. In addition to the community workshops, feedback has been gathered through questionnaires, comment forms, and conversations both during and subsequent to the two public workshops.

Two options proposing traffic calming measures, connecting the sidewalk gaps, and creating a separate low stress bicycle facility were presented to the community in the first public workshop. Option 2 was preferred and is recommended to move forward for further study. The main difference between the options is that Option 1 minimally affects the right of way, if at all, but removes all existing parking along South Walnut Street. Option 2 reduces, but does not completely remove parking. Option 2 affects more right of way than Option 1. Option 2 had overwhelming support from the community members at the workshops. Some revisions have been made based on feedback.

# Milford: South Walnut Street Traffic Calming and Bicycle/Pedestrian Improvement Project

## Introduction

The South Walnut Street Traffic Calming and Bicycle/Pedestrian Improvement Project focused on implementing traffic calming and improving bicycle/pedestrian movements along South Walnut Street between McCoy Street and South Maple Avenue. Concerns along this road are characterized by speeding and crash concerns. The City of Milford engaged Century Engineering to evaluate the corridor for possible improvements to reduce traveling speeds and improve mobility for pedestrians, cyclists, and motorists. The street is primarily residential with multiple schools as well as the Milford School District building in the surrounding vicinity. This project supports the goals and recommendations of the Milford Comprehensive Plan and the Milford Bicycle Master Plan. Milford is committed to implementing both the Comprehensive Plan and the Bicycle Master Plan.

### Study Location and Study Area

The study area is located in the City of Milford along South Walnut Street between McCoy Street to the south and South Maple Avenue to the north. Existing sidewalks are not continuous throughout the study area, which leads to safety concerns for pedestrians and bicyclists. It is a primarily residential street with private properties within the study area, however the route, which turns into Old State Road south of the City, serves as a regional connector route and an alternate to US113. There are no traffic signals or stop signs within the corridor along the study area. A railroad crossing is located at Jefferson Avenue. The study area is located just west of the Milford Little League fields and east of Milford Lakeview School. See **Figure 1**.




*Figure 1 - Study Area Map*

# Milford: South Walnut Street Traffic Calming and Bicycle/Pedestrian Improvement Project

## Purpose and Need

The purpose and need of this study is to improve bicycle and pedestrian connectivity along South Walnut Street, reduce traffic speeds, provide traffic calming, improve pedestrian crossings at Seabury Avenue and West Clarke Avenue, and improve the South Walnut Street intersection with the railroad.

This project supports the City of Milford Comprehensive Plan Transportation goal "To enable the safe the efficient mobility of residents utilizing all modes of travel, be they pedestrians, cyclists, drivers, or transit riders, via a safe and interconnected transportation system".

# Existing Conditions, Proposed & Committed Development, and Future Traffic with Development

## Existing Roadway Conditions

South Walnut Street is a bi-directional road compromised of one lane in each direction. There are no traffic signals or stop signs along the road in the study area. Side streets turning onto South Walnut Street are stop controlled. It is a primarily residential street with a posted speed limit of 25 mph. There are sidewalk gaps throughout the corridor with some areas of sidewalk being in good condition while others are narrower with cracking. The sidewalk landings at some of the crosswalks have sediment residue, which indicates that rainwater puddles there. There is a railroad crossing on the northern portion of study area at Jefferson Avenue. The community has expressed concerns about the complexity of this intersection and driver confusion. The community has also expressed concerns about the safety of the intersection of Seabury Avenue and West Clarke Avenue. It is difficult for pedestrians to cross at this side road, which also leads to Milford Lakeview School. Large trucks travel along Seabury Avenue and make a right turn onto South Walnut Street. Many of these trucks then turn left at McCoy Street.

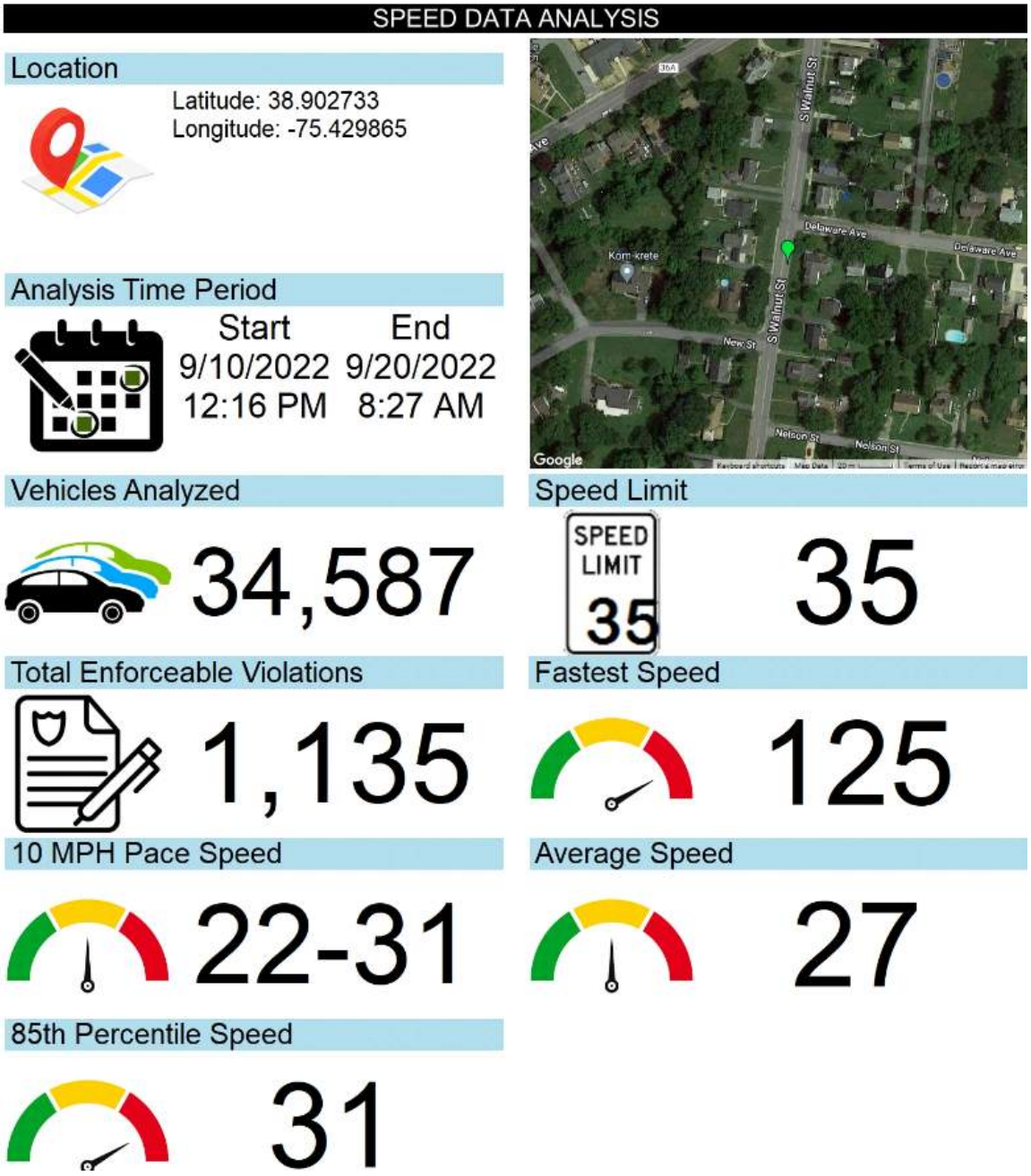
## Traffic Analysis

Traffic counts for this project were completed between September 10 and September 20, 2022, and also between January 15 and January 22, 2020 utilizing automatic traffic recorders. These counts did not include bicycles or pedestrian counts because the project was improving facilities for these transportation modes regardless of count results. The counts were used to determine vehicle volumes and speed data. Traffic Count data can be found in Appendix A.

Turning movement counts were completed on March 20, 2023 and March 21, 2023 to supplement existing data for the Stop Sign Warrant Analysis. These counts did include bicycles and pedestrians, however the resulting counts for bicycles and pedestrians did not show much activity those particular days. While count days show minimal numbers of pedestrians or bicycles at the time of the count, it is important to understand and recognize that this is a "snapshot" of the area at a particular time and day. The stop sign warrant analysis locations are not currently close enough to a large pedestrian generator to affect the stop sign warrant results. The traffic data collected was only one data set used in the analysis and development of the proposed alternatives. Qualitative data gathered from the walking/cycling community who use this corridor, many of which attended the two public workshops, was used to refine the options considered. It should also be noted that the preferred option that has resulted from this study does not

preclude the addition of 4-way stop signs at any of the intersections along the corridor. Turning Movement Count data can be found in Appendix A.

A summary of volume/speed counts from September 2022 are shown below:




Conditions and speeds along the corridor are not only hazardous to motor vehicles, but especially hazardous for non-motorized traffic and pedestrians who are more vulnerable. The collected data aligns

with the feedback from the first community workshop where community members expressed concern with safely walking and cycling along South Walnut Street.

The first step in determining recommendations to reduce speeds along this corridor is a speed analysis utilizing the NCHRP Report 966 Speed Limit Setting Tool to review whether any changes to the existing speed limit should be recommended. The analysis combines existing speed data with the results of a USLIMITS2 analysis. USLIMITS2 is an expert system tool designed to aid the conduction of engineering studies for setting the optimal speed limit for a road segment. This tool is web based and applicable to all types of roads with minimal exceptions, such as school and construction zones. Results of this analysis indicate that the appropriate speed limit for South Walnut Street is 25 MPH, which matches the speed limit already posted. See **Figure 2**.

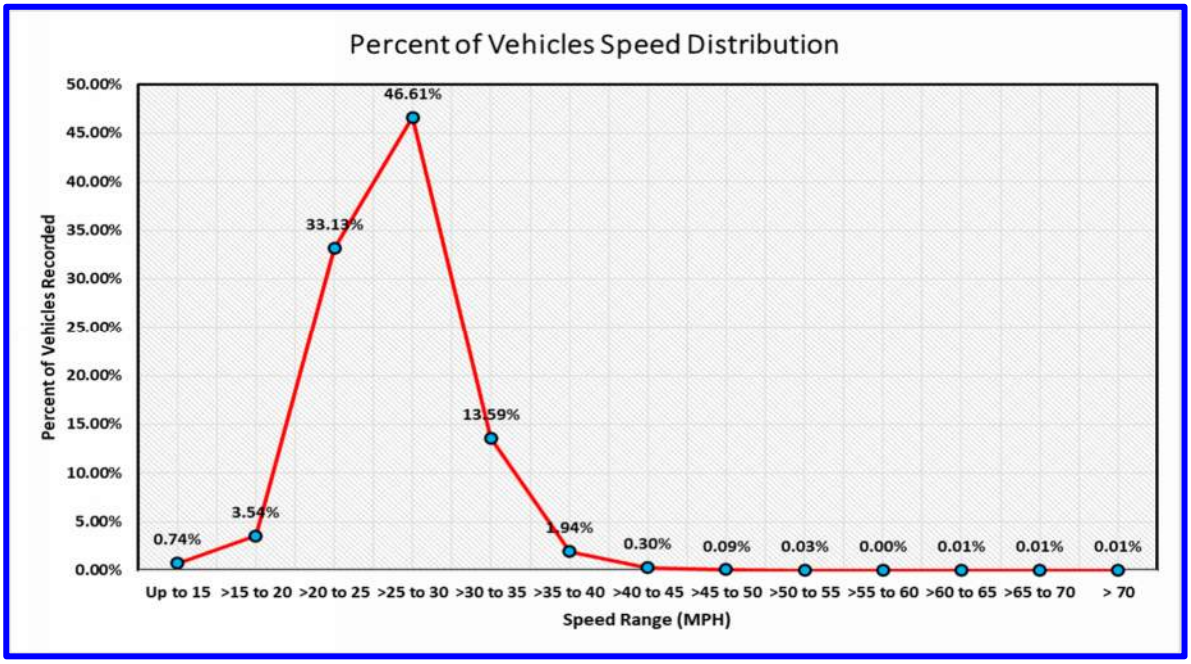



*Figure 2- Percent of Vehicles Speed Distribution*

The collected speed data indicated that some vehicles are traveling above the posted speed limit and that additional measures to control speeds should be considered. Several traffic calming measures were evaluated as a method to reduce speeds. The goal of traffic calming measures is to reduce negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users. These traffic calming measures can be implemented through physical alterations to the roadway, such as vertical deflections, horizontal shifts, and roadway narrowing to reduce vehicle speeds. they can also include psychological measures such as signage, road markings, buildings, trees, and gateway treatments to introduce the driver to a change in roadway type or land use, such as a wide open roadway in commercial or industrial area that transitions to a narrower, residential area.

**Table 1** depicts the different types of traffic calming measures suggested for analysis on this corridor.

| Milford S. Walnut Street Speed and Safety Evaluation | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Type | Name | Potential Effectiveness for Speed Reduction (FHWA PSCI) | Potential for Crash Reduction (-) /Increase (+) (FHWA PSCI) | Potential Crash Reduction (-) /Increase (+) (HSM) | Considered? Why/why not? | Rank |
| Road Segment Treatment | | | | | | | |
| 1 | Vertical | Speed Humps | -6 mph | -40% to -48% (All Severities, All Crashes) | 1. Treated Road = -40% (Injury Crashes, All Crash Types) 2. Adjacent Roads = -5% (Injury Crashes, All Crash Types) | No, speed humps are not preferred due to issues with emergency vehicles etc. | 1 |
| 2 | Vertical | Speed Table | -4 mph | -36% to -64% (All Severities, All Crashes) | | No, speeds tables are not preferred due to issues with emergency vehicles etc. | 2 |
| Intersections Treatment | | | | | | | |
| 3 | Horizontal | Modern Roundabouts | -4 mph to -8 mph | | -78% (All Severities, All Crash Types) | No, due to right of way constraints | 1 |
| 4 | Horizontal | Realigned Intersections | | | | Yes, intersection improvements at S. Walnut/Seabury and S. Walnut and the R/R were recommended to assist in improving driver clarity | 2 |
| Road Segment Treatment | | | | | | | |
| 5 | Horizontal | Chicanes | -9 mph | | | No, roadway width that could be utilized for chicanes was utilized to add the shared use path | 1 |
| 6 | Horizontal | Lateral Shifts | Less than Chicanes | | | Yes, S. Walnut Street is recommended for a lateral shift between Delaware Ave and Clarke Ave | 2 |
| Road Segment Treatment: Road Width Reduction | | | | | | | |
| 7 | Width Reduction | Median Islands (Raised) | -3 mph | -39% (All Crashes) -44% (Fatal and Injury Crashes) | -39% (Injury Crashes, All Crash Types) | No, roadway width was narrowed to fit a new shared use path leaving no additional space for a median island | 1 |
| 8 | Width Reduction | Striping/Lane Markings | Reduction possible | Potential for less severe crash types | Potential for less severe crash types | Yes, lane widths were narrowed to 11' and shoulders/parking areas were reduced or eliminated | |
| Road Segment Treatment: Dynamic Signing | | | | | | | |
| 9 | Dynamic Signing | Radar Speed Signs | -2 mph to -5 mph | | -46% (All Severities, All Crashes) | Potentially, coordinating with City of Milford | 1 |

*Table 1- Traffic Calming Measures Evaluation*

A review of Traffic Calming Measures results in the following recommendations:

- ✓ Vertical measures such as speed humps and speed tables have been ruled out due to concerns about emergency vehicles response times if vertical measures were implemented.
- ✓ Existing right of way along South Walnut Street and the minor approach roads is restrictive and therefore rules out the introduction of a roundabout.
- ✓ Intersection realignments are recommended at two intersections. Based on community feedback, and field observations, improvements to South Walnut Street at the minor approaches at Seabury Avenue/West Clark Avenue, as well as, Jefferson Avenue could improve driver clarity, as well as, pedestrian and bicycle movements.
- ✓ A lateral shift along South Walnut Street from Delaware Avenue to Seabury Avenue is recommended to assist in reducing travel speeds.
- ✓ A 1' lane width reduction is recommended. The available data suggest that reducing lane widths with pavement markings reduces the potential for some severe crash types.
- ✓ New green space between the travel lane and the existing curb line is also recommended. This will assist in adjusting the perception of the drivers that the road is narrowed and assist in reducing speeds. These areas will also provide locations for beautification and landscaping. It is recommended during final design efforts to determine if the green space locations can be altered such that green space is added to both sides of the road alternatively creating in essence chicanes which will reduce vehicular speeds even further. This effort will need to be coordinated with the City of Milford's Electric Department for relocation of the existing utility poles.
- ✓ Enforcement and radar speed signs are also recommended. The data also shows a 2-5 MPH reduction in speed can occur when radar speed signs, which display the speed of drivers traveling over the threshold with the message "YOUR SPEED XX", are used. While the police force has numerous requests that are very similar for enforcement of speed limit signs, an occasional police vehicle parked in this area while officers are completing paperwork may be enough of a deterrent to reduce speeds.

## Crash Evaluation

Crash data obtained from DelDOT was analyzed corresponding to a three-year period from September 27, 2019, through September 27, 2022, along South Walnut Street within the study limits. There were 18 reported crashes during this time. None of the crashes were fatal.

The primary contributing factor for crashes along the project limits during the study period is driver inattention, distraction, or fatigue, followed by improper passing. It should be noted that both pedestrian crashes that occurred are bicycle-vehicle collisions. Physical improvements will not correct the primary reason of crashes, driver inattention, distraction, or fatigue. However, the next two primary reasons of crashes, improper passing and pedestrian may be prevented by improving road conditions, signage, and overall safety. Figure 3 shows a breakdown of crash types for this study area during the study period.

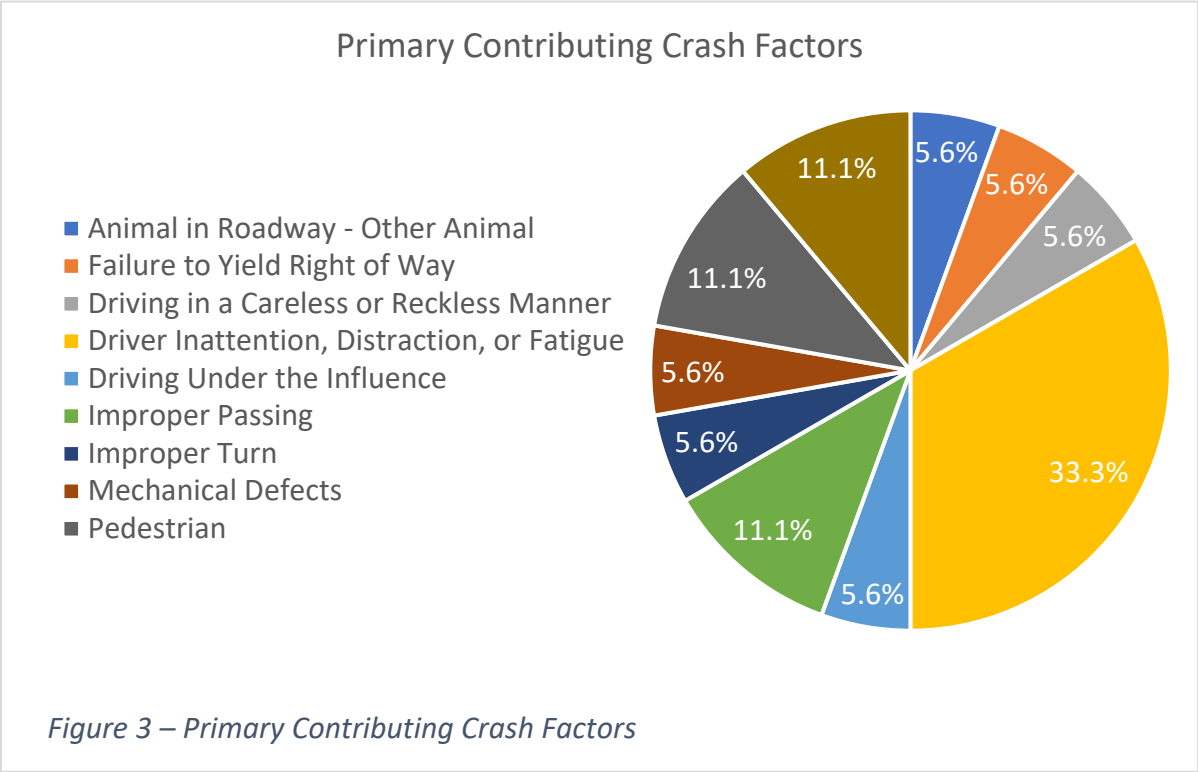



*Figure 3 – Primary Contributing Crash Factors*

Most of the reported crashes occurred during daylight conditions, clear weather, and dry road surface conditions. Fifteen out of the 18 reported crashes, approximately 83.4%, occurred under daylight conditions, followed by an additional 3 crashes at low-light conditions. An in-depth review of the time of day of crashes indicates that they are not confined to any particular time of day within the study limits. It appears that lighting is not a problem associated with crashes within the study limits. See **Figure 4**.

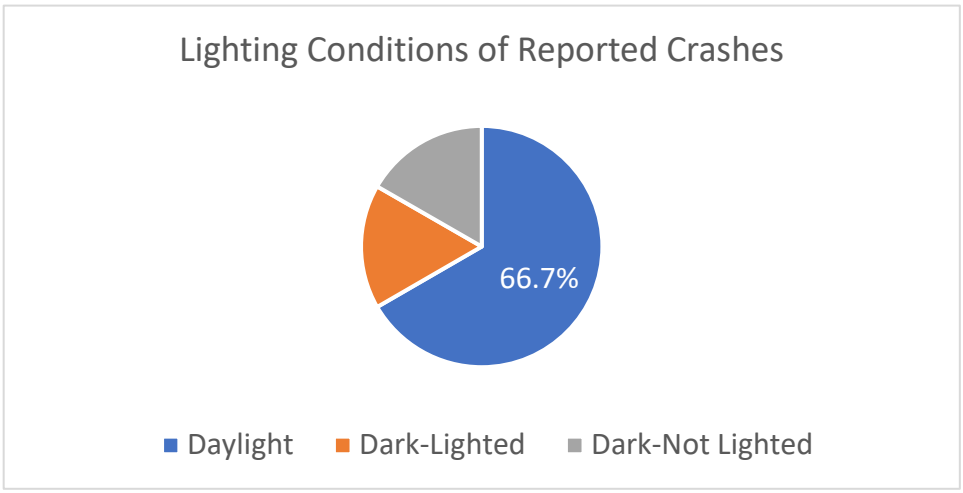



*Figure 4 – Lighting Conditions of Reported Crashes*

Crashes, as shown in **Figure 5**, are highest between 2:00 PM and 8:00 PM, peaking at 4:00 PM. The spike at 4:00 PM may correlate to the evening rush hour. However, the times of crashes is relatively consistent throughout the afternoon and early evening, which may be related to sun glare or sunsetting light levels.

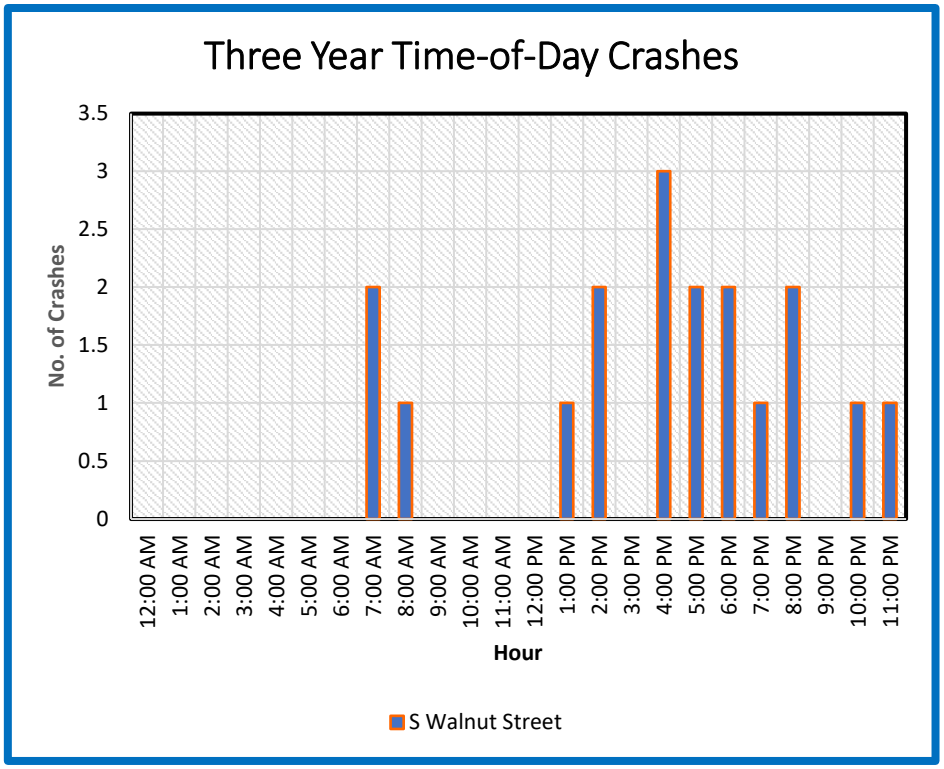



*Figure 5 - Time-of-Day Crash Data (Three Year Period)*

The highest number of annual crashes during the study period, as shown in **Figure 6,** is recorded during the 2020-2021 period, which saw a 5% increase over the 6 crashes between 2019 and 2020. This increase may be the result of more vehicles within the study limits as a result of the Covid-19 Restrictions ending. The final year of the study, 2021 – 2022, was marked by an approximate 11% decrease from the preceding year, down from seven crashes to five crashes.

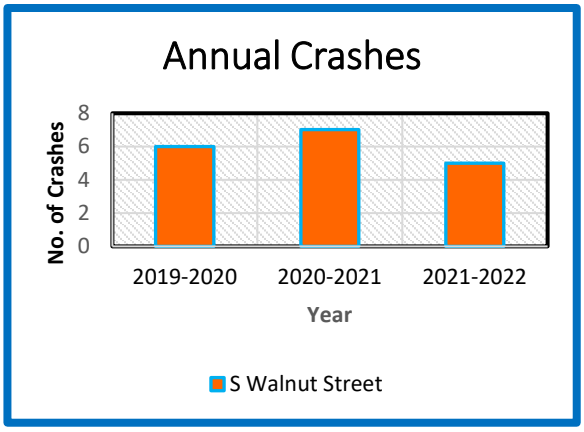



*Figure 6 - Annual Crashes*

Figure 7 depicts the location of several crash clusters located at South Walnut Street's intersections with Jefferson Avenue and Seabury Avenue / W. Clarke Avenue.

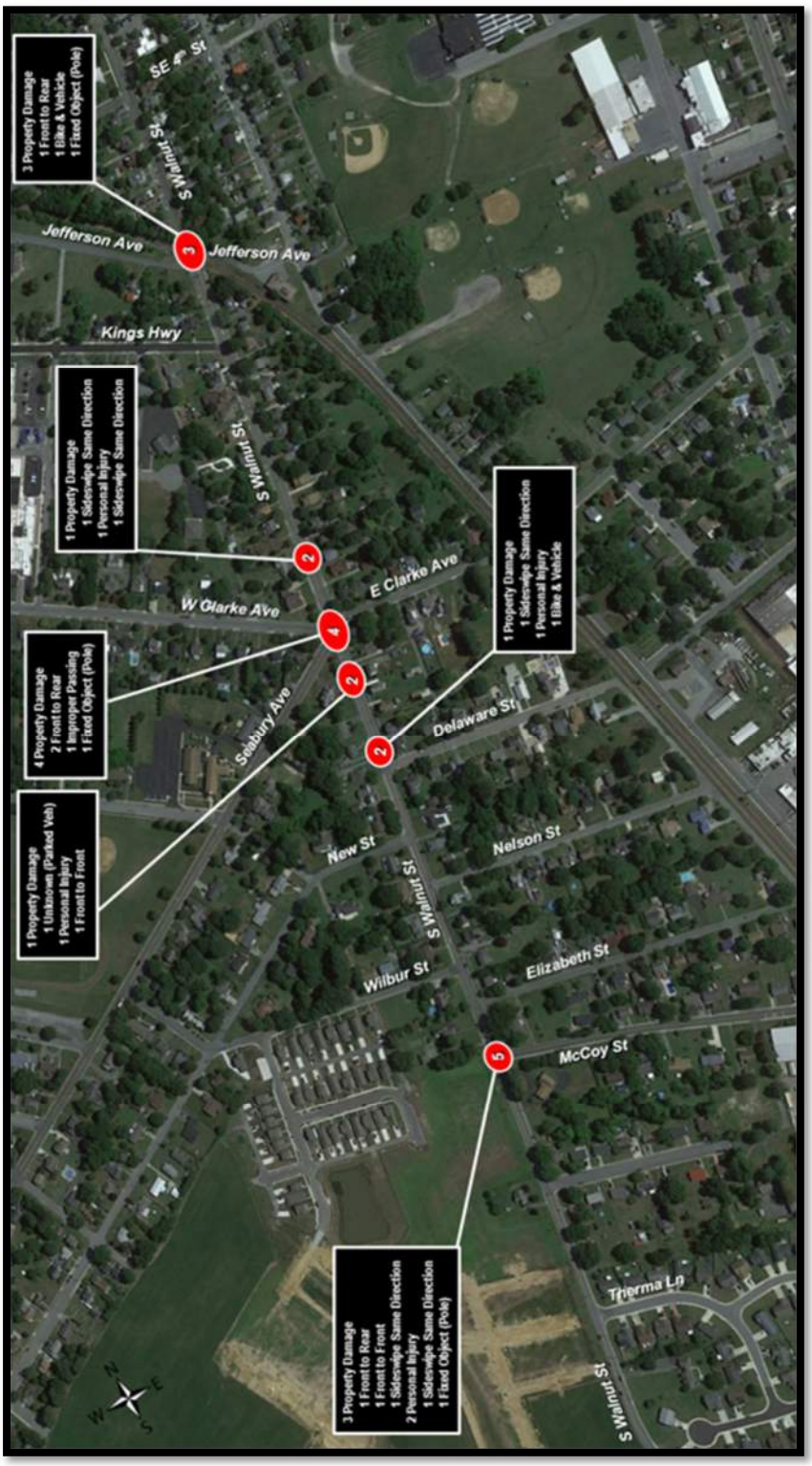



*Figure 7- Crash Data Summary*



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## Stop Sign Warrant Analysis

In addition to traffic calming measures, a stop sign warrant analysis was completed to determine if multiway (all-way, 4-way) stop signs should be installed along the corridor. Three intersections were studied: South Walnut Street and McCoy Road, South Walnut Street and West Clarke Avenue, and South Walnut Street and Kings Highway. There are three categories of analysis considered in a stop sign warrant analysis: crash analysis, volume analysis, and other criteria.

### Crash Analysis

Crash analysis takes into account the number of right and left turn collisions as well as right angle collisions at intersections. If there are more than 5 of those types of crashes, installing a multiway stop sign is considered. **Table 2** below shows that there is less than 5 of these types of crashes, so a stop sign is not warranted based on this criteria.

| S. Walnut Street and McCoy Road | S. Walnut Street and W. Clarke Avenue | S. Walnut Street and Kings Highway |
|---|---|---|
| 0 | 1 | 1 |
| Stop Sign Not Warranted | Stop Sign Not Warranted | Stop Sign Not Warranted |

*Table 2- Crash Analysis Results*

### Volume Analysis

For the volume analysis, a major street must have at least 300 vehicles per hour, for any 8 hours of an average day. For minor streets, total traffic volumes must average at least 200 vehicles per hour for the same 8 hours. Total traffic in this instance combines vehicular, pedestrian, and bicycle traffic. The average delay of minor street vehicular traffic must be at least 30 seconds per vehicle during the highest volume hour. **Table 3, 4, and 5** below show that these criteria are not met for any of the three intersections, so multiway stop signs are not warranted based on traffic volumes.

Major Street: S Walnut Street — Orientation: North/South
Minor Street: McCoy Street — Orientation: East/West

**ENTER TRAFFIC VOLUMES IN THE TABLE BELOW**

| Time | S Walnut Street | | | McCoy Street | | | |
|---|---|---|---|---|---|---|---|
| | North | South | Total | East | West | Pedestrians/Bicycles | Total |
| 6 - 7 AM | 82 | 181 | 263 | 0 | 109 | 0 | 109 |
| 7 - 8 AM | 82 | 181 | 263 | 0 | 109 | 0 | 109 |
| 8 - 9 AM | 41 | 112 | 153 | 0 | 80 | 0 | 80 |
| 9 - 10 AM | 50 | 143 | 193 | 0 | 104 | 0 | 104 |
| 10 - 11 AM | 50 | 143 | 193 | 0 | 104 | 0 | 104 |
| 11 AM - 12 PM | 59 | 174 | 233 | 0 | 128 | 1 | 129 |
| 12 - 1 PM | 64 | 162 | 226 | 0 | 114 | 3 | 117 |
| 1 - 2 PM | 56 | 185 | 241 | 0 | 98 | 1 | 99 |
| 2 - 3 PM | 66 | 216 | 282 | 0 | 116 | 0 | 116 |
| 3 - 4 PM | 76 | 246 | 322 | 0 | 133 | 1 | 134 |
| 4 -5 PM | 66 | 250 | 316 | 0 | 165 | 4 | 169 |
| 5 - 6 PM | 14 | 187 | 201 | 0 | 133 | 2 | 135 |

**Condition C.1 and C.2**

| | | |
|---|---|---|
| A minimum of | 300 | vehicles per hour required on the major street and |
| A minimum of | 200 | units per hour required on the minor street |
| A total of | 0 | hours meet conditions C.1 and C.2 |

**Multiway Stop Control is not warranted based on conditions C.1 and C.2**

*Table 3- Volume Analysis Results at South Walnut Street and McCoy Road*

Major Street: S Walnut Street
Minor Street: Clarke Avenue

Orientation: North/South
Orientation: East/West

**ENTER TRAFFIC VOLUMES IN THE TABLE BELOW**

| Time | S Walnut Street | | | Clarke Avenue | | | |
|---|---|---|---|---|---|---|---|
| | North | South | Total | East | West | Pedestrians/Bicycles | Total |
| 6 - 7 AM | *173* | *120* | 293 | *35* | *25* | 0 | 60 |
| 7 - 8 AM | 173 | 120 | 293 | 35 | 25 | 0 | 60 |
| 8 - 9 AM | 157 | 135 | 292 | 28 | 14 | 0 | 42 |
| 9 - 10 AM | *146* | *142* | 288 | *28* | *17* | 0 | 45 |
| 10 - 11 AM | *146* | *142* | 288 | *28* | *17* | 0 | 45 |
| 11 AM - 12 PM | 134 | 149 | 283 | 28 | 20 | 0 | 48 |
| 12 - 1 PM | 135 | 161 | 296 | 50 | 15 | 0 | 65 |
| 1 - 2 PM | 141 | 164 | 305 | 40 | 32 | 0 | 72 |
| 2 - 3 PM | *156* | *188* | 343 | *42* | *37* | 0 | 78 |
| 3 - 4 PM | 170 | 211 | 381 | 43 | 41 | 1 | 85 |
| 4 -5 PM | 171 | 203 | 374 | 35 | 42 | 0 | 77 |
| 5 - 6 PM | *171* | *203* | 374 | *35* | *42* | 0 | 77 |

**Condition C.1 and C.2**

| | | |
|---|---|---|
| A minimum of | 300 | vehicles per hour required on the major street and |
| A minimum of | 200 | units per hour required on the minor street |
| A total of | **0** | hours meet conditions C.1 and C.2 |

**Multiway Stop Control is not warranted based on conditions C.1 and C.2**

*Table 4- Volume Analysis Results at South Walnut Street and West Clarke Avenue*

Major Street: S Walnut Street
Minor Street: Kings Highway

Orientation: North/South
Orientation: East/West

**ENTER TRAFFIC VOLUMES IN THE TABLE BELOW**

| Time | S Walnut Street | | | Kings Highway | | | |
|---|---|---|---|---|---|---|---|
| | North | South | Total | East | West | Pedestrians/Bicycles | Total |
| 6 - 7 AM | *136* | *180* | 316 | *63* | 0 | 0 | 63 |
| 7 - 8 AM | 136 | 180 | 316 | 63 | 0 | 1 | 64 |
| 8 - 9 AM | 135 | 155 | 290 | 46 | 0 | 3 | 49 |
| 9 - 10 AM | *130* | *138* | *268* | *50* | 0 | 0 | 50 |
| 10 - 11 AM | *130* | *138* | *268* | *50* | 0 | 0 | 50 |
| 11 AM - 12 PM | 124 | 121 | 245 | 54 | 0 | 0 | 54 |
| 12 - 1 PM | 144 | 141 | 285 | 43 | 0 | 0 | 43 |
| 1 - 2 PM | 131 | 127 | 258 | 59 | 0 | 0 | 59 |
| 2 - 3 PM | *156* | *144* | *300* | *64* | 0 | 0 | 64 |
| 3 - 4 PM | 180 | 161 | 341 | 69 | 0 | 0 | 69 |
| 4 -5 PM | 181 | 168 | 349 | 68 | 0 | 0 | 68 |
| 5 - 6 PM | 173 | 176 | 349 | 61 | 0 | 0 | 61 |

**Condition C.1 and C.2**

| | | |
|---|---|---|
| A minimum of | 300 | vehicles per hour required on the major street and |
| A minimum of | 200 | units per hour required on the minor street |
| A total of | **0** | hours meet conditions C.1 and C.2 |

**Multiway Stop Control is not warranted based on conditions C.1 and C.2**

## Other Criteria

For the analysis of other criteria, metrics such as left turn conflicts, pedestrian volumes, and visibility of cross traffic are considered. All three intersections presented no issues with any of these metrics, so therefore multiway stop signs are not warranted based on this criterion.

### Non-Warranted Stop Sign Consequences

As defined above, installing multiway stop signs at the three studied intersections is not warranted. When stop signs are implemented where not warranted, the results can have negative consequences. Motorist's behavior can become more abrupt and aggressive in order to make up for "lost time" or they do not comply with the stop sign. Specific to this study area, queues backing up at the Kings Highway approach of South Walnut Street could extend back to the railroad tracks. As an alternative to installing multiway stops signs, traffic speeds can be reduced with traffic calming measures such as narrowing lanes and introducing roadway curves. Speed limits can also be enforced by local law enforcement. The recommendations from the traffic calming analysis do not preclude the addition of stop signs if the City of Milford prefers the addition of stop signs in addition to the recommendations. Coordination with DelDOT will be required.

## Public Involvement

Public involvement is an integral element of any successful planning study. Public involvement and community outreach are important components of the Milford South Walnut Street Traffic Calming and Bicycle/Pedestrian Improvement Project. Residents, the business community, state, and local stakeholders provided input throughout the project. The following summarizes public involvement and outreach that occurred throughout the study and helped guide the development of conceptual improvement alternatives:

### Community Workshop 1 — December 15, 2022

- Location: Milford's City Hall
- Advertised through the City of Milford and the Dover/Kent MPO
- Century Engineering presented numerous boards with information including the study area, project goals, traffic calming study results, crash data, speed study evaluation, and comparison of two concept plan options that alleviate speeding.
- 26 Attendees
- Feedback was gathered from attendees through conversations with Century Engineering personnel, questionnaires, and comment forms.
- The boards presented were posted on the City of Milford's website so community members who did not attend could review the material and offer feedback
- See *Appendix B* for Public Involvement Summaries

### Community Workshop 2 — April 4, 2023

- Location: Milford's City Hall
- Advertised through the City of Milford and the Dover/Kent MPO
- Century Engineering presented numerous display boards with information including the study area, project goals, traffic calming study results, crash data, speed study evaluation, option 2 with revised with comments from the first public workshop, and stop sign analysis results.
- Feedback was gathered from attendees through conversations with Century Engineering personnel, questionnaires, and comment forms.

- 27 Attendees
- See *Appendix B* for Public Involvement Summaries

## Alternatives Considered/Preferred Alternative

Two options, incorporating the traffic calming recommendations, for this study were initially proposed. Both options add a shared use path on the southbound side of South Walnut Street, as well as, complete all sidewalk gaps on the northbound side. Both options also have the same traffic calming measures, such as realigned/reconfigured intersections, a lateral shift of South Walnut Street, lane width reduction, and striping/lane markings. The intersection of Seabury Avenue and W. Clarke Street with South Walnut Street and the intersection of the railroad tracks and Jefferson Avenue will be improved to aid in reducing driver confusion. The lateral shift and lane width reduction will help create more space for the multi-use path. Both options also recognize the existing historic region that begins north of the railroad tracks. To respect the historic characteristics of this portion of the study area the proposed shared use path is recommended to be brick versus asphalt or concrete.

Option 1 has minimal right of way impacts and minimal utility impacts. However, this option includes the removal of all parking along South Walnut Street and lacks a grass buffer to separate pedestrians from the road. Green space will be added to areas where existing sidewalk is replaced with the shared use path.

Option 2 will require temporary construction easements and permanent easements. The number of parking spaces along South Walnut Street will be reduced, but not completely eliminated, as in option 1. Both travel lanes will be 11 feet wide. Where there is street parking, the width of the proposed parking lane will be 10 feet. For green space, a three feet wide grass buffer will be added throughout the project limits. The areas between the parking spaces accommodate additional green space.

The intersections of South Walnut Street with Seabury Avenue/W. Clarke Avenue, and Walnut Street will be slightly realigned while preserving green space and parking. The intersection at the railroad tracks and Jefferson Avenue will also be realigned, and have a brick multi use path added north of the railroad within the historic area.

Option 2 is the preferred option. The majority of community members prefer option 2 due to the added crosswalks and grass buffer to promote safety as well as the overall beautification of the area. One recommendation to accompany Option 2 as it moves forward for future study is to determine if the additional green areas between parking spaces/utility pole placement can be alternated between east/west sides of the street to act as chicane to further slow traffic.

Conceptual plans are provided in *Appendix C* of this report.

## Cost Estimates

Conceptual cost estimates were developed for Preferred Option 2. The following provides a summary of the conceptual cost estimates:

### Preferred Option 2

| | |
|---|---|
| Preliminary Engineering | $554,885.78 |
| Right-of-Way | $75,000 |
| Construction Engineering | $416,164.33 |
| Construction | $2,774,428.89 |
| **Total Cost** | **$3,820,479.00 **Round to $4,000,000** |

Conceptual cost estimate is provided in *Appendix D* of this report.

# Milford: South Walnut Street Traffic Calming and Bike/Pedestrian Improvement Project

## Appendix A: Traffic Analysis Results

# S Walnut Street Conceptual Plan from McCoy Street to Railroad Crossing): Speed and Safety Evaluation

## INTRODUCTION

This project is for the conceptual design of traffic calming on S Walnut Street from McCoy Road to Railroad / Jefferson Avenue. This 0.55-mile segment of S Walnut Street has functional classification of major collector. The study area falls entirely within Investment Level 1 of the Delaware Strategies for State Policies and Spending (DSSPS). The State desires local government land use policies that promote higher densities and mixed-use type development which foster complete communities in Investment Level 1 areas. Per the DSSPS, in investment Level 1 Areas, state investments and policies should encourage a wide range of uses and densities, **promote a variety of transportation options**, foster efficient use of existing public and private investments, and enhance community identity and integrity. Overall, it is the State's intent to use its spending and management tools to maintain and enhance character and promote well-designed and efficient new growth in Investment Level 1 Areas.

In line with this one of the goals in the 2022 Comprehensive Plan Amendment for City of Milford (COM) is to work with DelDOT and the Dover/Kent County Metropolitan Transportation Organization (MPO) to advance the city's efforts to promote non-motorized transportation. This project falls under this effort, and DelDOT has proposed a variety of traffic calming measures the city could consider implementing. To assist in the decision-making process of selecting an appropriate option, a speed and safety evaluation was conducted to help assess the safety benefits of the proposed traffic calming measures. This evaluation is presented in the ensuing.

## SPEED AND CRASH EVALUATION/ANALYSES

### Current Speed Data/Conditions and Implications

S Walnut Street within the study limits has a posted speed limit of 25 MPH. Speed data for the S Walnut Street study segment was obtained for a full 7-day week from September 11, 2022, through September 19, 2022, at a location between the intersection with Seabury Avenue / Clarke Street and the intersection with McCoy Street. From the data, the average speed is 27 MPH and the 85$^{th}$ percentile speed is 31 MPH. **Figure 1** presents the vehicle speed distribution in increments of 5MPH ranges for the one full week of recorded data. The distribution affirms the average and 85$^{th}$ percentile speeds. **Figure 2** presents percent distribution of vehicles over the same 5 MPH increments. As shown in **Figure 2**, less than 40%, approximately 37.4% of all recorded vehicles were traveling at or below the 25 MPH posted speed limit. Over 60%, approximately 62.6% of all recorded vehicles were traveling at speeds greater than the posted speed limit of 25 MPH. Approximately 16% and 2.4% of the recorded vehicles were respectively traveling at speeds greater than 5 MPH and greater than 10 MPH above the posted speed limit. A **maximum speed of 125 MPH was also recorded.**

The relationship between impact speed and a pedestrian's risk of death has been studied extensively, and it is an established fact that driving speed is a key risk factor in severe pedestrian crashes. Data covering this topic was obtained from the book "*Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices, Tenth Edition, 2020*" by the National Highway Traffic Safety Administration (NHTSA). Results from one of the most robust studies according to the book, show that the average risk of severe injury for a pedestrian struck by a vehicle reaches 10% at an impact speed of 16 mph, 25% at 23 mph, 50% at 31 mph, 75% at 39 mph, and 90% at 46 mph. The average risk of death for a pedestrian reaches 10% at an impact speed of 23 mph, 25% at 32 mph, 50% at 42 mph, 75% at 50 mph, and 90% at 58 mph. Risks vary significantly by age. For example, the average risk of severe injury or death for a 70-year-old pedestrian struck by a car traveling at 25 mph is similar to the risk for a 30-year-old pedestrian struck at 35 mph.

Given these statistics, the residential nature of the developments along S Walnut Street within the study limits, and the proposed/committed future residential growth expected, it is imperative that effective traffic

calming measures are implemented to ensure that no motorist can reach anywhere close to the excessive maximum speed of 125 MPH recorded. From the data, this is not only hazardous to other motorized traffic, but could especially have fatal consequences for the more vulnerable non-motorized traffic that must be safely and adequately accommodated in accordance with the COM Comprehensive Plan and the DSSPS.

**Figure 1**: One Week Recorded Vehicles Speed Distribution

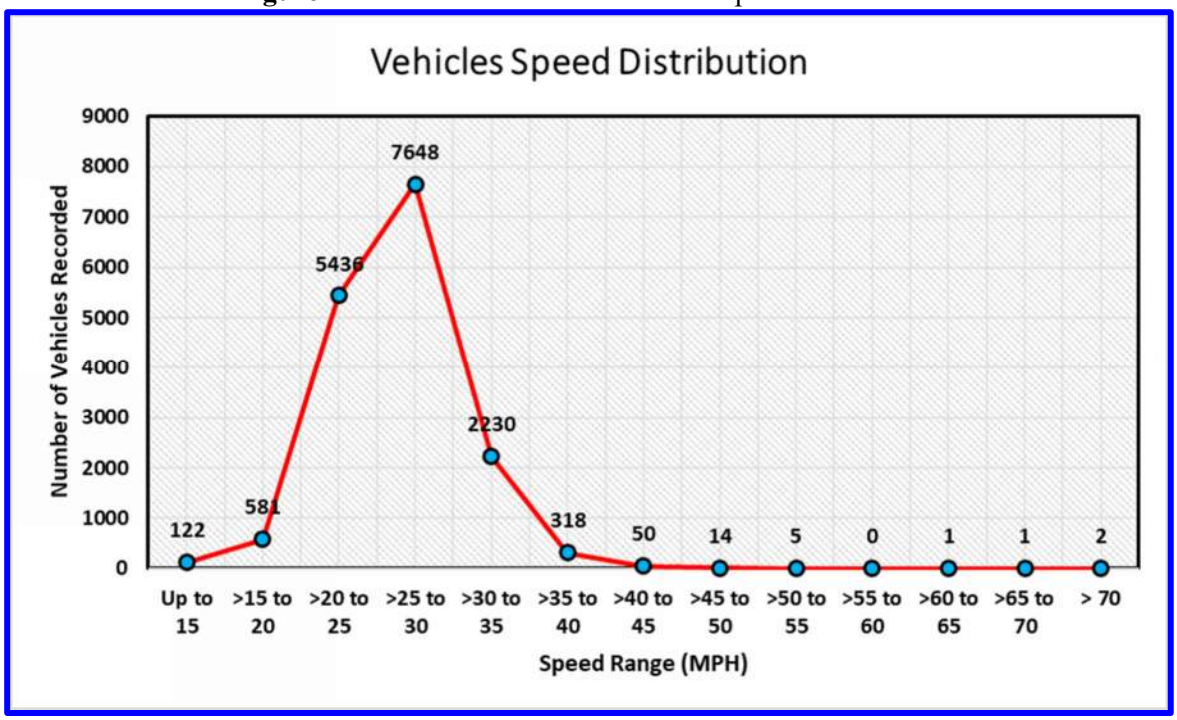
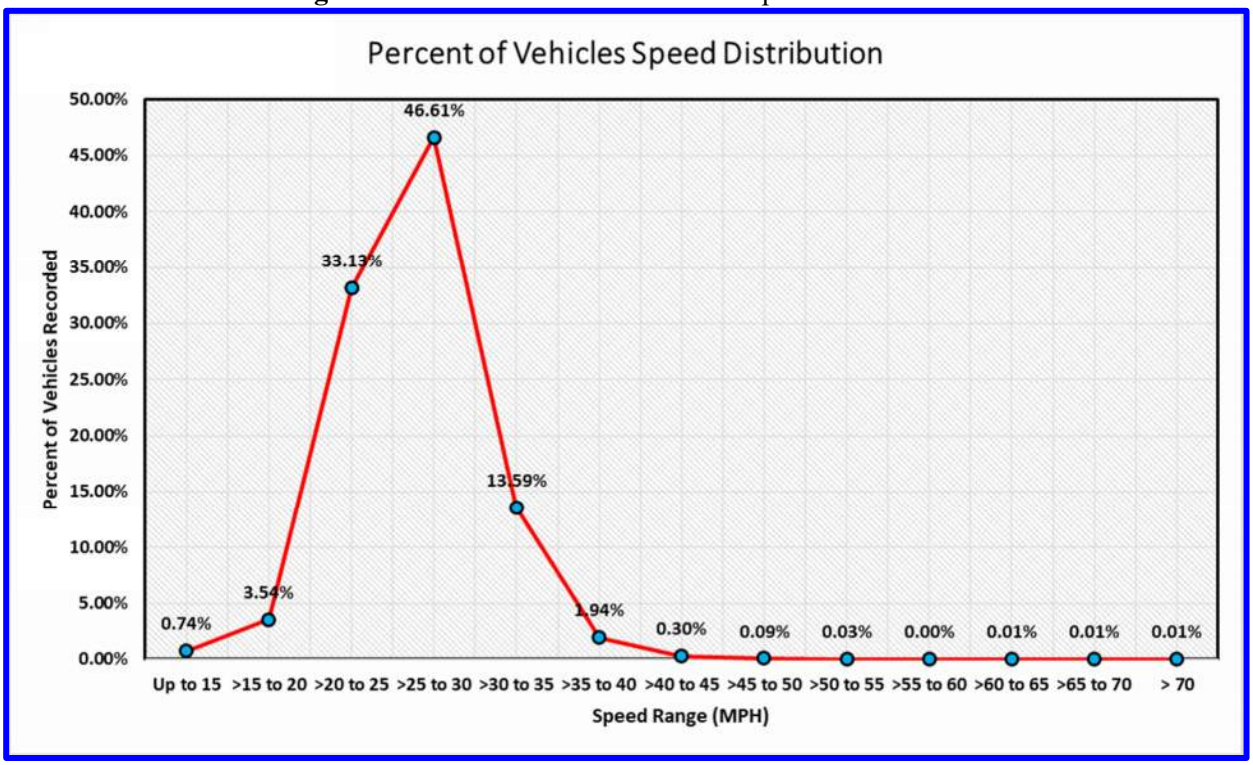



**Figure 2**: One Week Percent Vehicles Speed Distribution



## S Walnut Street Conceptual Plan from McCoy Street to Railroad Crossing): Speed and Safety Evaluation

### Current Crash History/Conditions and Implications

Three-year crash data covering the period from September 27, 2019, to September 27, 2022, for the S walnut Street study segment show eighteen (18) reported crashes for that period. The approximate crash locations, number of crashes, type and severity are presented on the map in **Figure 3**. As shown in the figure, half (nine) of all the crashes occurred at the two main intersections of S Walnut Street and McCoy Street (five), and at S Walnut Street and Seabury Avenue/Clarke Avenue (four). **Table 1** summarizes the crash classifications/severity by collision type. Five (approximately 28%) collisions not between two vehicles were reported, making this the most frequent crash type. Sideswipe same direction was the second most frequent type of crash reported, with four (22%) occurring within the three-year period.

**Table 2** summarizes the primary reasons reported for the crashes. The most frequent reason was reported as driver inattention, distraction and fatigue. This accounted for six or one-third of the three-year total crashes. As shown in the table, two (40%) of the collisions not between vehicles involved pedestrians. It should be noted that both pedestrian crashes involved a bicycle-vehicle collision. One of the pedestrian crashes resulted in personal injury and the other was reported as resulting in property damage only. **Table 3** provides the road surface, lighting and weather conditions under which the crashes occurred. As shown in the table, most of the crashes occurred under dry, daylight and clear weather conditions so the natural elements and lighting do not appear to be a problem.

**Figure 4** presents the crashes per each 12-month period/year. As shown, crashes increased by 16.7% from six during the 2019-2020 period to seven during the 2020-2021 period. Crashes decreased by 28.6% from seven during the 2020-2021 period to five during the 2021-2022 period. No distinct crash trend can therefore be inferred from the current three-year data.

**Figure 5** presents the crashes by time of day. As shown, the crashes are not clustered within a specific time of day but are distributed over the between 7:00 A.M. and midnight in line with the hours of expected traffic activity for a collector road serving residential neighborhoods. There are two defined peaks in the crash coinciding with the A.M. and P.M. peak hours, again, as is expected for a collector road serving residential neighborhoods.

**Table 1:** Crash Classification and Collision Type

| Collision Type | Crash Classification | | | | | | | | | Crash Classification | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Property Damage | Personal Injury | Total | Property Damage | Personal Injury | Total | Property Damage | Personal Injury | Total | Property Damage | Personal Injury | Total # of Crashes | % of Total Crashes |
| | September 27, 2019 - September 27, 2020 | | | September 27, 2020 - September 27, 2021 | | | September 27, 2021 - September 27, 2022 | | | 3-Year Totals | | | |
| Front to Front | 0 | 0 | **0** | 1 | 0 | **1** | 1 | 1 | **2** | 2 | 1 | **3** | 16.7% |
| Front to Rear | 3 | 0 | **3** | 0 | 0 | **0** | 0 | 0 | **0** | 3 | 0 | **3** | 16.7% |
| Angle | 0 | 0 | **0** | 0 | 0 | **0** | 1 | 0 | **1** | 1 | 0 | **1** | 5.6% |
| Sideswipe, Same Direction | 0 | 1 | **1** | 2 | 1 | **3** | 0 | 0 | **0** | 2 | 2 | **4** | 22.2% |
| Sideswipe, Opposite Direction | 0 | 0 | **0** | 0 | 0 | **0** | 0 | 0 | **0** | 0 | 0 | **0** | 0.0% |
| Not a Collision Between Two Vehicles | 0 | 0 | **0** | 2 | 1 | **3** | 1 | 1 | **2** | 3 | 2 | **5** | 27.8% |
| Unknown | 1 | 0 | **1** | 0 | 0 | **0** | 0 | 0 | **0** | 1 | 0 | **1** | 5.6% |
| Other | 1 | 0 | **1** | 0 | 0 | **0** | 0 | 0 | **0** | 1 | 0 | **1** | 5.6% |
| **Total** | **5** | **1** | **6** | **5** | **2** | **7** | **3** | **2** | **5** | **13** | **5** | **18** | **100.0%** |

**Figure 3**: Crash Map

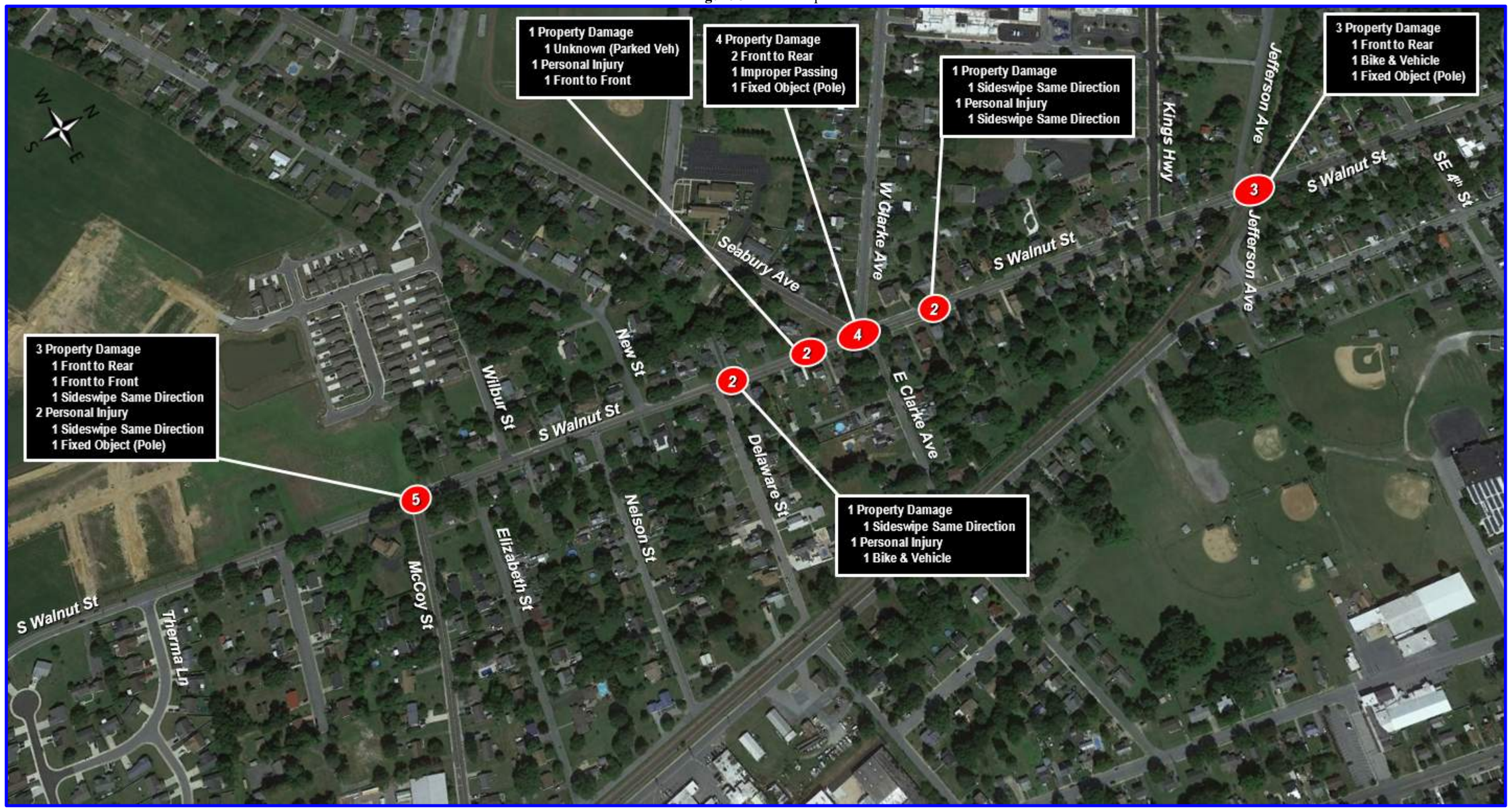


**Table 2:** Primary Reason for Crashes

| Primary Reason for Crash | | |
|---|---|---|
| **Description** | **No. of Crashes** | **% Crash** |
| Animal in Roadway - Other Animal | 1 | 5.6% |
| Failure to Yield Right of Way | 1 | 5.6% |
| Driving in a Careless or Reckless Manner | 1 | 5.6% |
| Driver Inattention, Distraction, or Fatigue | 6 | 33.3% |
| Driving Under the Influence | 1 | 5.6% |
| Improper Passing | 2 | 11.1% |
| Improper Turn | 1 | 5.6% |
| Mechanical Defects | 1 | 5.6% |
| Pedestrian | 2 | 11.1% |
| Unknown | 2 | 11.1% |
| **Total** | **18** | **100.0%** |

**Table 3:** Crash Surface, Lighting and Weather Conditions

| Surface Conditions | | | Lighting Conditions | | | Weather Conditons | | |
|---|---|---|---|---|---|---|---|---|
| **Description** | **# of Crashes** | **% of Total Crashes** | **Description** | **# of Crashes** | **% of Total Crashes** | **Description** | **# of Crashes** | **% of Total Crashes** |
| Dry | 17 | 94.4% | Daylight | 12 | 66.7% | Clear | 15 | 83.3% |
| Wet | 1 | 5.6% | Dark-Lighted | 3 | 16.7% | Cloudy | 2 | 11.1% |
| Ice/Frost | 0 | 0.0% | Dark-Not Lighted | 3 | 16.7% | Rain | 1 | 5.6% |
| **Total** | **18** | **100.0%** | **Total** | **18** | **100.0%** | **Total** | **18** | **100.0%** |

**Figure 4:** Crashes Per Year

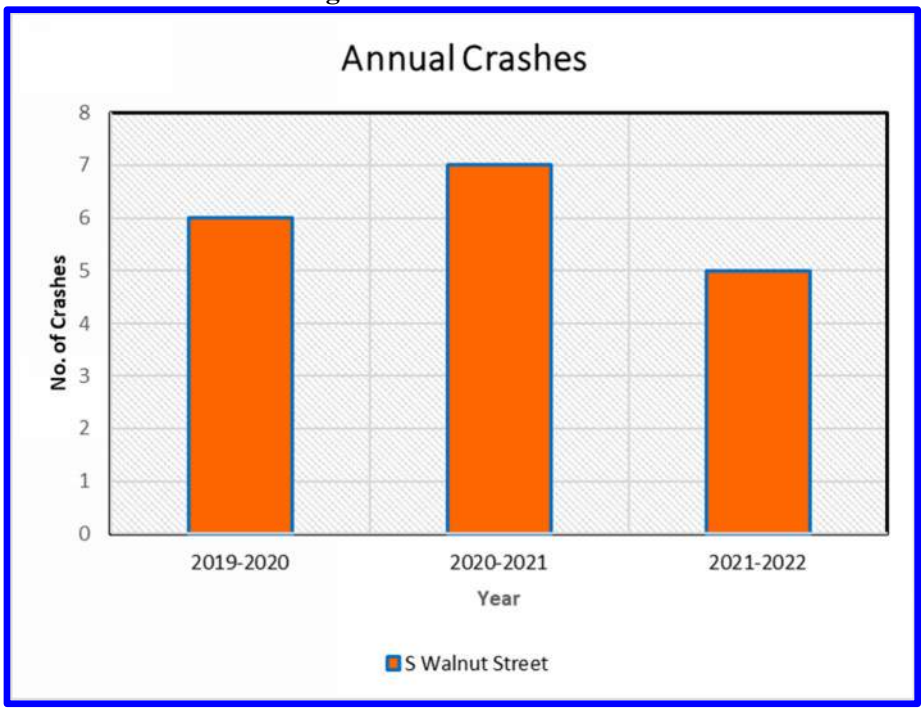
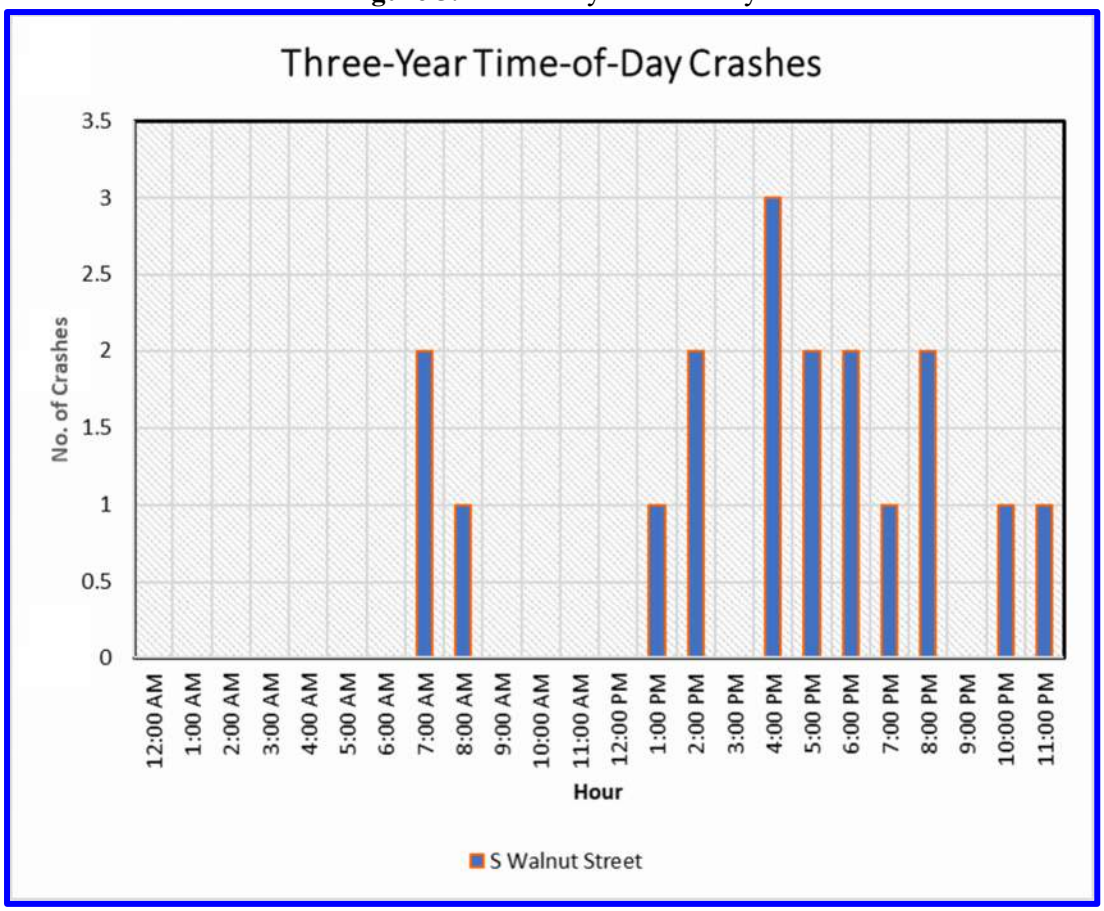


**Figure 5:** Crashes By Time of Day




Crash rates measured in crashes per million vehicle miles (C/MVMT) was computed for this 0.55-mile urban major collector study segment of S Walnut Street for 2019, 2020, and 2021. These crash rates were compared to those for urban major collectors in Sussex County and Statewide. **Table 4** presents the crash rates, and **Table 5** presents how the study segment crash rates compare to the county and state rates for the same year. As shown in **Table 5**, the crash rates for this segment of S Walnut are between 9.93 and 21.43 times higher than those for similar roads in Sussex County, and between 7.09 to 15.74 times higher than those for similar roads within the state of Delaware.

**Table 4:** Crash Rates

| Road | Crash Rate (C/MVMT) | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| S Walnut St, McCoy St to Jefferson Ave | 9.43 | 17.79 | 17.41 |
| Sussex County 2-Lane Urban Major Collector | 0.95 | 0.83 | 0.86 |
| Statewide 2-Lane Urban Major Collector | 1.33 | 1.13 | 1.12 |

**Table 5:** How McCoy Street Crash Rates Compare to County and State Rates

| McCoy Street Compared to: | Crash Rate Comparison | | |
|---|---|---|---|
| | 2019 | 2020 | 2021 |
| Sussex County 2-Lane Urban Major Collector | 9.93 Times | 21.43 Times | 20.24 Times |
| Statewide 2-Lane Urban Major Collector | 7.09 Times | 15.74 Times | 15.54 Times |

## Speed Limit Analysis

To ascertain how appropriate the posted speed limit is for this segment of S Walnut Street based on the three-year crash history, functional class, traffic characteristics and nature of anticipated developments along the segment, the DelDOT Traffic Studies recommended method, USLimits2 analysis, was performed. This analysis recommended a posted speed of 25 MPH, which is the same as the current posted speed. The analyses estimated an overall crash rate of 1547 crashes per 100 million vehicle miles travelled (MVMT) for the study segment of S Walnut Street. This is approximately 2.46 times the rate for similar roadways nationally. The study segment's estimated injury crash rate of 430 per MVMT is approximately 1.72 times the rate for similar roadways nationally.

Additional speed analysis was performed with NCHRP Report 966 Speed Limit Setting Tool. This study corroborated the results of the USLimits2 analysis, suggesting an appropriate speed limit of 25 MPH and identical overall and injury crash rates for the segment of S Walnut Street from McCoy Street to Jefferson Avenue.

## TRAFFIC CALMING MEASURES

DelDOT provided nine traffic calming measures for the City of Milford to consider choosing from to address the speed/safety issues outlined in the preceding sections of this evaluation. The measures include vertical, horizontal, road width reduction and dynamic signing methods of traffic calming. The measures for which crash modification factors are provided in the 2010 AASHTO Highway Safety Manual were assessed / analyzed with provisions from the manual. Additionally, for the traffic calming measures for which data could be found for similar roadways under the Federal Highway Administration (FHWA) Proven Safety Countermeasures Initiative (PSCI), the measures were assessed based on the provisions therein. The horizontal traffic calming measures included those for road segments and those for intersections. The traffic calming measures evaluation is summarized in **Table 6**.

**Table 6:** Traffic Calming Measures Evaluation

| | Type | Name | Applicability & Acceptability for Functional Class (FHWA PSCI) | Potential Effectiveness for Speed Reduction (FHWA PSCI) | Potential for Crash Reduction (-) / Increase (+) (FHWA PSCI) | Potential Crash Reduction (-) / Increase (+) (HSM) | RANK |
|---|---|---|---|---|---|---|---|
| **Road Segment Treatment** | | | | | | | |
| 1. | Vertical | Speed Humps | 5 | -6 mph | -40% to -48% (All Severities, All Crashes) | 1. Treated Rd = -40% (Injury Crashes, All Crash Types)<br>2. Adjacent Rds = -5% (Injury Crashes, All Crash Types) | **1** |
| 2. | Vertical | Speed Table | 5 | -4 mph | -36% to -64% (All Severities, All Crashes) | No Data | **2** |
| **Intersections Treatment** | | | | | | | |
| 3. | Horizontal | Modern Roundabouts | 3 | -4 mph to -8 mph | No data for small to moderate (Modern) roundabout | -78% (All Severities, All Crash Types) | **1** |
| 4. | Horizontal | Realigned Intersections | 5 | No Data | No Data | No Data | **2** |
| **Road Segment Treatment** | | | | | | | |
| 5. | Horizontal | Chicanes | 5 | -9 mph | No Data | No Data | **1** |
| 6. | Horizontal | Lateral Shifts | 5 | Less than for chicanes** | No Data | No Data | **2** |
| **Road Segment Treatment: Road Width Reduction** | | | | | | | |
| 7. | Width Reduction | Median Islands (Raised) | 5 | -3 mph | -39% (All Crashes)<br>-44% (fatal & Injury Crashes) | -39% (Injury Crashes, All Crash Types) | **1** |
| 8. | Width Reduction | Striping/Lane Markings | 5# | | No Data | | **None** |
| **Road Segment Treatment: Dynamic Signing** | | | | | | | |
| 9. | Dynamic Signing | Radar Speed Signs | 5# | -2 mph to -5 mph^ | No Data | -46% (All Severities, All Crashes) | **1** |

**LEGEND**

FHWA PSCI = Federal Highway Administration Proven Safety Countermeasures Initiative

HSM = ASHTO Highway Safety Manual (2010)

5 Traffic Calming Measure may be appropriate

3 Caution, Traffic Calming Measure could be appropriate

\# No data found. Deemed may be appropriate based solely on DelDOT's inclusion in Traffic Calming Measures for this location.

** No actual value provided in data for speed reduction

* For single vehicle run-off-the-road, & multiple vehicle head-on, sideswipe same direction and sideswipe opposite direction.

^ Signs in studies displayed a feedback "YOUR SPEED XX" for drivers traveling over the threshold speed.

## CONCLUSION

### Speed Limit

Both speed limit setting analyses performed indicate that 25 MPH is an appropriate speed limit for the segment of S Walnut Street analyzed in this study. The posted speed limit of 25 MPH appears to therefore be appropriate and should be maintained.

### Intersections Traffic Calming Measures

As shown in **Table 6**, no data was available from the sources provided above for realigned intersections. That does not necessarily preclude it from being an effective safety measure as some jurisdictions have implemented it and not reported any adverse effects as an intersection safety measure. For the intersections within the study limits, the 5-leg intersection of S Walnut Street at Seabury Avenue / Clarke Street would benefit most from a roundabout conversion. With the estimated 78% reduction in all crash types at roundabouts as shown in **Table 6**, the four (4) reported crashes at the intersection would be reduced to approximately one (1). The 3-Leg intersection of S Walnut Street and McCoy Street may be suited to a realigned intersection. While there is no available data to estimate the percentage of crash reduction or the extent of speed reduction that would occur, the realignment would slow down motorized traffic. And as previously provided in this evaluation, lower speeds would lead to less crash severity at a minimum, even if there is no reduction in the number of crashes.

### Road Segments Traffic Calming Measures

Regarding the treatments for the road segments, it appears from evaluation of the available data that lane width reduction exclusively with striping/pavement markings does not provide any apparent speed or crash reduction and may have to be used in combination with one of the other horizontal traffic calming measures to achieve those objectives. As a standalone treatment, the HSM analysis indicates that for an existing 12-foot lanes roadway, an increase from 5% for reduction to 11-foot lanes to 50% for reduction to 9-foot lanes is estimated for single vehicle run-off-the-road, and multiple vehicles head-on, same direction sideswipe, and opposite direction sideswipe crashes, all of which are currently experienced on S Walnut Street.

Regarding dynamic speed signing (radar speed signs) studies in Delaware show observed reduction in speed of 3 MPH, corroborating the range of 2 MPH to 5 MPH reduction from the FHWA PSCI data. Radar speed signs would therefore be an appropriate It should be noted that the radar speed signs for the FHWA PSCI study sites used in this evaluation were speed feedback signs which display the speed of drivers traveling over the threshold with the message “YOUR SPEED XX”. The HSM, however does not specify the exact type of dynamic / changeable speed warning signs.

### General

It should be noted that the ranking for each identified group of traffic calming measures is bases solely on their estimated effectiveness at speed reduction and / or crash reduction and the availability of data for assessment or lack thereof from the sources identified. The decision as to which traffic calming measures should be implemented for the study segment of S Walnut Street will not only be based on this evaluation, but also on other considerations including but not limited to cost effectiveness, right-of way availability, and utility and drainage features relocation limitations.

# Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589


Intersection: Walnut St at McCoy St
Counted By: Brandan Martine
Date: 03-09-23
Weather: Clear 50

File Name : 23-03-09 Walnut at Mccoy
Site Code : 00000000
Start Date : 3/9/2023
Page No : 1

Groups Printed- Cars - Trucks - Bikes

| | S WALNUT ST From North | | | | | MCCOY ST From East | | | | | S WALNUT ST From South | | | | | MCCOY ST From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM | 24 | 9 | 0 | 0 | 33 | 2 | 0 | 16 | 0 | 18 | 0 | 18 | 5 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 74 |
| 07:15 AM | 38 | 10 | 0 | 0 | 48 | 7 | 0 | 25 | 0 | 32 | 0 | 14 | 11 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 105 |
| 07:30 AM | 34 | 17 | 0 | 0 | 51 | 2 | 0 | 26 | 0 | 28 | 0 | 16 | 4 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 99 |
| 07:45 AM | 34 | 15 | 0 | 0 | 49 | 5 | 0 | 26 | 0 | 31 | 0 | 9 | 5 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 94 |
| Total | 130 | 51 | 0 | 0 | 181 | 16 | 0 | 93 | 0 | 109 | 0 | 57 | 25 | 0 | 82 | 0 | 0 | 0 | 0 | 0 | 372 |
| 08:00 AM | 20 | 11 | 0 | 0 | 31 | 2 | 0 | 14 | 0 | 16 | 0 | 10 | 1 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 58 |
| 08:15 AM | 25 | 10 | 0 | 0 | 35 | 2 | 0 | 15 | 0 | 17 | 0 | 10 | 2 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 64 |
| 08:30 AM | 12 | 8 | 0 | 0 | 20 | 2 | 0 | 20 | 0 | 22 | 0 | 5 | 3 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 50 |
| 08:45 AM | 18 | 8 | 0 | 0 | 26 | 0 | 0 | 25 | 0 | 25 | 0 | 8 | 2 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 61 |
| Total | 75 | 37 | 0 | 0 | 112 | 6 | 0 | 74 | 0 | 80 | 0 | 33 | 8 | 0 | 41 | 0 | 0 | 0 | 0 | 0 | 233 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| 11:00 AM | 25 | 17 | 0 | 0 | 42 | 3 | 0 | 21 | 0 | 24 | 0 | 10 | 3 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 79 |
| 11:15 AM | 30 | 14 | 0 | 0 | 44 | 2 | 0 | 38 | 0 | 40 | 0 | 13 | 7 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 104 |
| 11:30 AM | 28 | 13 | 0 | 0 | 41 | 2 | 0 | 35 | 0 | 37 | 0 | 8 | 2 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 88 |
| 11:45 AM | 37 | 10 | 0 | 0 | 47 | 2 | 0 | 25 | 0 | 27 | 0 | 9 | 6 | 1 | 16 | 0 | 0 | 0 | 0 | 0 | 90 |
| Total | 120 | 54 | 0 | 0 | 174 | 9 | 0 | 119 | 0 | 128 | 0 | 40 | 18 | 1 | 59 | 0 | 0 | 0 | 0 | 0 | 361 |
| 12:00 PM | 27 | 26 | 0 | 0 | 53 | 3 | 0 | 24 | 0 | 27 | 0 | 17 | 3 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 100 |
| 12:15 PM | 28 | 9 | 0 | 3 | 40 | 2 | 0 | 25 | 0 | 27 | 0 | 19 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 86 |
| 12:30 PM | 33 | 10 | 0 | 0 | 43 | 5 | 0 | 30 | 0 | 35 | 0 | 13 | 2 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 93 |
| 12:45 PM | 18 | 8 | 0 | 0 | 26 | 0 | 0 | 25 | 0 | 25 | 0 | 9 | 1 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 61 |
| Total | 106 | 53 | 0 | 3 | 162 | 10 | 0 | 104 | 0 | 114 | 0 | 58 | 6 | 0 | 64 | 0 | 0 | 0 | 0 | 0 | 340 |
| 01:00 PM | 37 | 19 | 0 | 0 | 56 | 0 | 0 | 20 | 0 | 20 | 0 | 12 | 4 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 92 |
| 01:15 PM | 27 | 14 | 0 | 0 | 41 | 3 | 0 | 26 | 0 | 29 | 0 | 12 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 82 |
| 01:30 PM | 26 | 20 | 0 | 0 | 46 | 3 | 0 | 19 | 0 | 22 | 0 | 8 | 3 | 1 | 12 | 0 | 0 | 1 | 0 | 1 | 81 |
| 01:45 PM | 27 | 15 | 0 | 0 | 42 | 5 | 0 | 22 | 0 | 27 | 0 | 11 | 5 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 85 |
| Total | 117 | 68 | 0 | 0 | 185 | 11 | 0 | 87 | 0 | 98 | 0 | 43 | 12 | 1 | 56 | 0 | 0 | 1 | 0 | 1 | 340 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| 03:00 PM | 53 | 20 | 0 | 0 | 73 | 3 | 0 | 33 | 0 | 36 | 0 | 11 | 3 | 1 | 15 | 0 | 1 | 0 | 0 | 1 | 125 |
| 03:15 PM | 32 | 16 | 0 | 0 | 48 | 4 | 0 | 26 | 0 | 30 | 0 | 9 | 4 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 91 |
| 03:30 PM | 31 | 31 | 0 | 0 | 62 | 2 | 0 | 35 | 0 | 37 | 0 | 19 | 8 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 126 |
| 03:45 PM | 32 | 31 | 0 | 0 | 63 | 4 | 0 | 26 | 0 | 30 | 0 | 15 | 6 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 114 |
| Total | 148 | 98 | 0 | 0 | 246 | 13 | 0 | 120 | 0 | 133 | 0 | 54 | 21 | 1 | 76 | 0 | 1 | 0 | 0 | 1 | 456 |
| 04:00 PM | 26 | 24 | 0 | 2 | 52 | 3 | 0 | 29 | 0 | 32 | 0 | 14 | 5 | 1 | 20 | 0 | 0 | 0 | 0 | 0 | 104 |
| 04:15 PM | 32 | 19 | 0 | 0 | 51 | 9 | 0 | 28 | 0 | 37 | 0 | 16 | 2 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 106 |
| 04:30 PM | 27 | 20 | 0 | 1 | 48 | 6 | 0 | 39 | 0 | 45 | 0 | 16 | 3 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 112 |
| 04:45 PM | 64 | 35 | 0 | 0 | 99 | 2 | 0 | 49 | 0 | 51 | 0 | 7 | 2 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 159 |
| Total | 149 | 98 | 0 | 3 | 250 | 20 | 0 | 145 | 0 | 165 | 0 | 53 | 12 | 1 | 66 | 0 | 0 | 0 | 0 | 0 | 481 |
| 05:00 PM | 30 | 15 | 0 | 0 | 45 | 6 | 0 | 30 | 0 | 36 | 0 | 13 | 3 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 97 |
| 05:15 PM | 21 | 28 | 0 | 0 | 49 | 2 | 0 | 31 | 0 | 33 | 0 | 10 | 2 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 94 |
| 05:30 PM | 26 | 20 | 0 | 2 | 48 | 5 | 0 | 22 | 0 | 27 | 0 | 16 | 3 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 94 |
| 05:45 PM | 25 | 20 | 0 | 0 | 45 | 8 | 0 | 29 | 0 | 37 | 0 | 11 | 3 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 96 |
| Total | 102 | 83 | 0 | 2 | 187 | 21 | 0 | 112 | 0 | 133 | 0 | 50 | 11 | 0 | 61 | 0 | 0 | 0 | 0 | 0 | 381 |
| Grand Total | 947 | 542 | 0 | 8 | 1497 | 106 | 0 | 854 | 0 | 960 | 0 | 388 | 113 | 4 | 505 | 0 | 1 | 1 | 0 | 2 | 2964 |
| Apprch % | 63.3 | 36.2 | 0 | 0.5 | | 11 | 0 | 89 | 0 | | 0 | 76.8 | 22.4 | 0.8 | | 0 | 50 | 50 | 0 | | |
| Total % | 32 | 18.3 | 0 | 0.3 | 50.5 | 3.6 | 0 | 28.8 | 0 | 32.4 | 0 | 13.1 | 3.8 | 0.1 | 17 | 0 | 0 | 0 | 0 | 0.1 | |

# Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589


Intersection: S Walnut St & Clarke Ave
Counted By: Kyle Newcomb
Date: 3/21/2023
Weather: Clear 50

File Name : 23-03-21 Walnut St and Clarke Ave
Site Code : 00000000
Start Date : 3/21/2023
Page No : 1

Groups Printed- Cars - Trucks - Bikes

| | W Clarke Ave From North | | | | | S Walnut St From East | | | | | Seabury Ave From South | | | | | S Walnut St From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM | 0 | 0 | 4 | 0 | 4 | 13 | 27 | 0 | 0 | 40 | 8 | 0 | 5 | 0 | 13 | 1 | 22 | 6 | 0 | 29 | 86 |
| 07:15 AM | 0 | 1 | 6 | 0 | 7 | 18 | 31 | 0 | 0 | 49 | 6 | 0 | 3 | 0 | 9 | 0 | 26 | 10 | 0 | 36 | 101 |
| 07:30 AM | 0 | 0 | 3 | 0 | 3 | 10 | 39 | 0 | 0 | 49 | 4 | 0 | 2 | 0 | 6 | 0 | 17 | 9 | 0 | 26 | 84 |
| 07:45 AM | 6 | 0 | 5 | 0 | 11 | 6 | 29 | 0 | 0 | 35 | 3 | 0 | 4 | 0 | 7 | 0 | 21 | 8 | 0 | 29 | 82 |
| Total | 6 | 1 | 18 | 0 | 25 | 47 | 126 | 0 | 0 | 173 | 21 | 0 | 14 | 0 | 35 | 1 | 86 | 33 | 0 | 120 | 353 |
| 08:00 AM | 1 | 0 | 3 | 0 | 4 | 9 | 31 | 1 | 0 | 41 | 6 | 0 | 3 | 0 | 9 | 1 | 19 | 6 | 0 | 26 | 80 |
| 08:15 AM | 3 | 0 | 2 | 0 | 5 | 9 | 28 | 0 | 0 | 37 | 3 | 0 | 2 | 0 | 5 | 0 | 29 | 6 | 0 | 35 | 82 |
| 08:30 AM | 0 | 0 | 1 | 0 | 1 | 4 | 33 | 1 | 0 | 38 | 9 | 0 | 2 | 0 | 11 | 0 | 38 | 5 | 0 | 43 | 93 |
| 08:45 AM | 0 | 0 | 4 | 0 | 4 | 6 | 34 | 1 | 0 | 41 | 2 | 0 | 1 | 0 | 3 | 0 | 26 | 5 | 0 | 31 | 79 |
| Total | 4 | 0 | 10 | 0 | 14 | 28 | 126 | 3 | 0 | 157 | 20 | 0 | 8 | 0 | 28 | 1 | 112 | 22 | 0 | 135 | 334 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| 11:00 AM | 0 | 0 | 5 | 0 | 5 | 10 | 17 | 0 | 0 | 27 | 6 | 0 | 1 | 0 | 7 | 0 | 28 | 6 | 0 | 34 | 73 |
| 11:15 AM | 2 | 0 | 5 | 0 | 7 | 12 | 22 | 0 | 0 | 34 | 5 | 0 | 1 | 0 | 6 | 0 | 31 | 8 | 0 | 39 | 86 |
| 11:30 AM | 1 | 0 | 4 | 0 | 5 | 8 | 24 | 0 | 0 | 32 | 5 | 0 | 2 | 0 | 7 | 0 | 38 | 8 | 0 | 46 | 90 |
| 11:45 AM | 1 | 0 | 2 | 0 | 3 | 15 | 26 | 0 | 0 | 41 | 6 | 0 | 2 | 0 | 8 | 0 | 23 | 7 | 0 | 30 | 82 |
| Total | 4 | 0 | 16 | 0 | 20 | 45 | 89 | 0 | 0 | 134 | 22 | 0 | 6 | 0 | 28 | 0 | 120 | 29 | 0 | 149 | 331 |
| 12:00 PM | 1 | 0 | 2 | 0 | 3 | 9 | 26 | 0 | 0 | 35 | 7 | 0 | 3 | 0 | 10 | 1 | 32 | 11 | 0 | 44 | 92 |
| 12:15 PM | 1 | 0 | 3 | 0 | 4 | 14 | 27 | 1 | 0 | 42 | 9 | 0 | 8 | 0 | 17 | 0 | 30 | 12 | 0 | 42 | 105 |
| 12:30 PM | 1 | 1 | 2 | 0 | 4 | 7 | 25 | 0 | 0 | 32 | 8 | 0 | 3 | 0 | 11 | 0 | 34 | 5 | 0 | 39 | 86 |
| 12:45 PM | 1 | 0 | 3 | 0 | 4 | 4 | 22 | 0 | 0 | 26 | 6 | 0 | 6 | 0 | 12 | 0 | 31 | 5 | 0 | 36 | 78 |
| Total | 4 | 1 | 10 | 0 | 15 | 34 | 100 | 1 | 0 | 135 | 30 | 0 | 20 | 0 | 50 | 1 | 127 | 33 | 0 | 161 | 361 |
| 01:00 PM | 0 | 0 | 2 | 0 | 2 | 12 | 13 | 0 | 0 | 25 | 10 | 0 | 2 | 0 | 12 | 1 | 26 | 9 | 0 | 36 | 75 |
| 01:15 PM | 0 | 0 | 1 | 0 | 1 | 5 | 18 | 0 | 0 | 23 | 6 | 0 | 3 | 0 | 9 | 0 | 34 | 7 | 0 | 41 | 74 |
| 01:30 PM | 5 | 1 | 15 | 0 | 21 | 16 | 34 | 0 | 0 | 50 | 6 | 0 | 5 | 0 | 11 | 0 | 36 | 10 | 0 | 46 | 128 |
| 01:45 PM | 2 | 0 | 6 | 0 | 8 | 13 | 30 | 0 | 0 | 43 | 5 | 0 | 3 | 0 | 8 | 0 | 32 | 9 | 0 | 41 | 100 |
| Total | 7 | 1 | 24 | 0 | 32 | 46 | 95 | 0 | 0 | 141 | 27 | 0 | 13 | 0 | 40 | 1 | 128 | 35 | 0 | 164 | 377 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| 03:00 PM | 3 | 0 | 13 | 0 | 16 | 8 | 23 | 1 | 0 | 32 | 9 | 0 | 4 | 0 | 13 | 4 | 47 | 13 | 0 | 64 | 125 |
| 03:15 PM | 0 | 0 | 8 | 0 | 8 | 10 | 41 | 0 | 0 | 51 | 9 | 0 | 4 | 0 | 13 | 1 | 37 | 6 | 1 | 45 | 117 |
| 03:30 PM | 1 | 0 | 8 | 0 | 9 | 10 | 30 | 0 | 0 | 40 | 5 | 0 | 3 | 0 | 8 | 1 | 45 | 9 | 0 | 55 | 112 |
| 03:45 PM | 0 | 0 | 8 | 0 | 8 | 12 | 35 | 0 | 0 | 47 | 4 | 0 | 5 | 0 | 9 | 0 | 38 | 9 | 0 | 47 | 111 |
| Total | 4 | 0 | 37 | 0 | 41 | 40 | 129 | 1 | 0 | 170 | 27 | 0 | 16 | 0 | 43 | 6 | 167 | 37 | 1 | 211 | 465 |
| 04:00 PM | 2 | 0 | 8 | 0 | 10 | 12 | 38 | 1 | 0 | 51 | 6 | 0 | 5 | 0 | 11 | 1 | 45 | 4 | 0 | 50 | 122 |
| 04:15 PM | 3 | 0 | 3 | 0 | 6 | 6 | 37 | 0 | 0 | 43 | 2 | 0 | 2 | 0 | 4 | 1 | 41 | 4 | 0 | 46 | 99 |
| 04:30 PM | 4 | 0 | 9 | 0 | 13 | 6 | 29 | 0 | 0 | 35 | 6 | 0 | 4 | 0 | 10 | 0 | 40 | 7 | 0 | 47 | 105 |
| 04:45 PM | 0 | 0 | 13 | 0 | 13 | 10 | 32 | 0 | 0 | 42 | 6 | 0 | 4 | 0 | 10 | 1 | 52 | 7 | 0 | 60 | 125 |
| Total | 9 | 0 | 33 | 0 | 42 | 34 | 136 | 1 | 0 | 171 | 20 | 0 | 15 | 0 | 35 | 3 | 178 | 22 | 0 | 203 | 451 |
| 05:00 PM | 2 | 0 | 3 | 0 | 5 | 3 | 30 | 0 | 0 | 33 | 8 | 0 | 4 | 0 | 12 | 0 | 45 | 12 | 0 | 57 | 107 |
| 05:15 PM | 4 | 0 | 3 | 0 | 7 | 10 | 37 | 1 | 0 | 48 | 8 | 0 | 2 | 0 | 10 | 1 | 37 | 7 | 0 | 45 | 110 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| Total | 6 | 0 | 6 | 0 | 12 | 13 | 67 | 1 | 0 | 81 | 16 | 0 | 6 | 0 | 22 | 1 | 82 | 19 | 0 | 102 | 217 |
| Grand Total | 44 | 3 | 154 | 0 | 201 | 287 | 868 | 7 | 0 | 1162 | 183 | 0 | 98 | 0 | 281 | 14 | 1000 | 230 | 1 | 1245 | 2889 |
| Apprch % | 21.9 | 1.5 | 76.6 | 0 | | 24.7 | 74.7 | 0.6 | 0 | | 65.1 | 0 | 34.9 | 0 | | 1.1 | 80.3 | 18.5 | 0.1 | | |
| Total % | 1.5 | 0.1 | 5.3 | 0 | 7 | 9.9 | 30 | 0.2 | 0 | 40.2 | 6.3 | 0 | 3.4 | 0 | 9.7 | 0.5 | 34.6 | 8 | 0 | 43.1 | |

# Century Engineering, LLC. A Kleinfelder Company

550 S Bay Rd, Dover DE

Phone: 302-734-9188 Fax: 302-734-4589


Intersection: Kings Hwy at S Walnut St
Counted By: Mark G
Date: 03/20/2023
Weather: Clear 50

File Name : 23-03-20 Kings Hwy at S Walnut
Site Code : 00000000
Start Date : 3/20/2023
Page No : 1

Groups Printed- Cars - Trucks - Bikes

| | S Walnut St From North | | | | | From East | | | | | S Walnut St From South | | | | | Kings Hwy From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Left | Thru | Right | Peds | App. Total | Int. Total |
| 07:00 AM | 0 | 27 | 4 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 3 | 56 | 0 | 0 | 59 | 9 | 0 | 8 | 0 | 17 | 107 |
| 07:15 AM | 0 | 27 | 9 | 0 | 36 | 0 | 0 | 0 | 1 | 1 | 8 | 27 | 0 | 0 | 35 | 10 | 0 | 7 | 0 | 17 | 89 |
| 07:30 AM | 0 | 28 | 9 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 5 | 38 | 0 | 0 | 43 | 7 | 0 | 10 | 0 | 17 | 97 |
| 07:45 AM | 1 | 26 | 5 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 12 | 31 | 0 | 0 | 43 | 8 | 0 | 4 | 0 | 12 | 87 |
| Total | 1 | 108 | 27 | 0 | 136 | 0 | 0 | 0 | 1 | 1 | 28 | 152 | 0 | 0 | 180 | 34 | 0 | 29 | 0 | 63 | 380 |
| 08:00 AM | 1 | 22 | 8 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 6 | 35 | 1 | 0 | 42 | 1 | 0 | 11 | 0 | 12 | 85 |
| 08:15 AM | 0 | 23 | 7 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 5 | 35 | 0 | 0 | 40 | 4 | 0 | 6 | 1 | 11 | 81 |
| 08:30 AM | 0 | 29 | 8 | 0 | 37 | 0 | 0 | 0 | 2 | 2 | 7 | 30 | 0 | 0 | 37 | 4 | 0 | 8 | 0 | 12 | 88 |
| 08:45 AM | 0 | 34 | 3 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 7 | 29 | 0 | 0 | 36 | 4 | 0 | 7 | 0 | 11 | 84 |
| Total | 1 | 108 | 26 | 0 | 135 | 0 | 0 | 0 | 2 | 2 | 25 | 129 | 1 | 0 | 155 | 13 | 0 | 32 | 1 | 46 | 338 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| 11:00 AM | 0 | 31 | 1 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 9 | 32 | 0 | 0 | 41 | 3 | 0 | 4 | 0 | 7 | 80 |
| 11:15 AM | 0 | 28 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 3 | 20 | 0 | 0 | 23 | 3 | 0 | 6 | 0 | 9 | 60 |
| 11:30 AM | 0 | 27 | 2 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 3 | 25 | 0 | 0 | 28 | 5 | 0 | 13 | 0 | 18 | 75 |
| 11:45 AM | 0 | 32 | 3 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 3 | 26 | 0 | 0 | 29 | 9 | 0 | 11 | 0 | 20 | 84 |
| Total | 0 | 118 | 6 | 0 | 124 | 0 | 0 | 0 | 0 | 0 | 18 | 103 | 0 | 0 | 121 | 20 | 0 | 34 | 0 | 54 | 299 |
| 12:00 PM | 0 | 28 | 3 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 8 | 29 | 0 | 0 | 37 | 1 | 0 | 6 | 0 | 7 | 75 |
| 12:15 PM | 0 | 43 | 6 | 0 | 49 | 0 | 0 | 0 | 0 | 0 | 7 | 29 | 0 | 0 | 36 | 3 | 0 | 5 | 0 | 8 | 93 |
| 12:30 PM | 0 | 31 | 2 | 0 | 33 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 30 | 6 | 0 | 10 | 0 | 16 | 79 |
| 12:45 PM | 0 | 29 | 2 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 7 | 31 | 0 | 0 | 38 | 1 | 0 | 11 | 0 | 12 | 81 |
| Total | 0 | 131 | 13 | 0 | 144 | 0 | 0 | 0 | 0 | 0 | 22 | 119 | 0 | 0 | 141 | 11 | 0 | 32 | 0 | 43 | 328 |
| 01:00 PM | 0 | 30 | 5 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 3 | 31 | 0 | 0 | 34 | 1 | 0 | 7 | 0 | 8 | 77 |
| 01:15 PM | 0 | 25 | 3 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 4 | 18 | 0 | 0 | 22 | 3 | 0 | 10 | 0 | 13 | 63 |
| 01:30 PM | 0 | 35 | 3 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 1 | 29 | 0 | 0 | 30 | 5 | 0 | 7 | 0 | 12 | 80 |
| 01:45 PM | 0 | 26 | 4 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 6 | 35 | 0 | 0 | 41 | 8 | 0 | 18 | 0 | 26 | 97 |
| Total | 0 | 116 | 15 | 0 | 131 | 0 | 0 | 0 | 0 | 0 | 14 | 113 | 0 | 0 | 127 | 17 | 0 | 42 | 0 | 59 | 317 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| 03:00 PM | 0 | 39 | 6 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 5 | 34 | 0 | 0 | 39 | 4 | 0 | 7 | 0 | 11 | 95 |
| 03:15 PM | 0 | 47 | 3 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 3 | 27 | 0 | 0 | 30 | 5 | 0 | 11 | 0 | 16 | 96 |
| 03:30 PM | 0 | 37 | 3 | 0 | 40 | 0 | 0 | 0 | 0 | 0 | 11 | 44 | 0 | 0 | 55 | 9 | 0 | 14 | 0 | 23 | 118 |
| 03:45 PM | 0 | 42 | 3 | 0 | 45 | 0 | 0 | 0 | 0 | 0 | 4 | 33 | 0 | 0 | 37 | 5 | 0 | 14 | 0 | 19 | 101 |
| Total | 0 | 165 | 15 | 0 | 180 | 0 | 0 | 0 | 0 | 0 | 23 | 138 | 0 | 0 | 161 | 23 | 0 | 46 | 0 | 69 | 410 |
| 04:00 PM | 0 | 40 | 3 | 0 | 43 | 0 | 0 | 0 | 0 | 0 | 6 | 30 | 0 | 0 | 36 | 7 | 0 | 7 | 0 | 14 | 93 |
| 04:15 PM | 0 | 45 | 8 | 0 | 53 | 0 | 0 | 0 | 0 | 0 | 7 | 44 | 0 | 0 | 51 | 9 | 0 | 11 | 0 | 20 | 124 |
| 04:30 PM | 0 | 35 | 2 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 5 | 38 | 0 | 0 | 43 | 5 | 0 | 11 | 0 | 16 | 96 |
| 04:45 PM | 0 | 42 | 6 | 0 | 48 | 0 | 0 | 0 | 0 | 0 | 3 | 35 | 0 | 0 | 38 | 9 | 0 | 9 | 0 | 18 | 104 |
| Total | 0 | 162 | 19 | 0 | 181 | 0 | 0 | 0 | 0 | 0 | 21 | 147 | 0 | 0 | 168 | 30 | 0 | 38 | 0 | 68 | 417 |
| 05:00 PM | 0 | 45 | 5 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 6 | 33 | 0 | 0 | 39 | 3 | 0 | 13 | 0 | 16 | 105 |
| 05:15 PM | 0 | 45 | 2 | 0 | 47 | 0 | 0 | 0 | 0 | 0 | 6 | 41 | 0 | 0 | 47 | 2 | 0 | 8 | 0 | 10 | 104 |
| 05:30 PM | 0 | 36 | 2 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 7 | 40 | 0 | 0 | 47 | 3 | 1 | 15 | 0 | 19 | 104 |
| 05:45 PM | 0 | 36 | 2 | 0 | 38 | 0 | 0 | 0 | 0 | 0 | 4 | 39 | 0 | 0 | 43 | 5 | 0 | 11 | 0 | 16 | 97 |
| Total | 0 | 162 | 11 | 0 | 173 | 0 | 0 | 0 | 0 | 0 | 23 | 153 | 0 | 0 | 176 | 13 | 1 | 47 | 0 | 61 | 410 |
| Grand Total | 2 | 1070 | 132 | 0 | 1204 | 0 | 0 | 0 | 3 | 3 | 174 | 1054 | 1 | 0 | 1229 | 161 | 1 | 300 | 1 | 463 | 2899 |
| Apprch % | 0.2 | 88.9 | 11 | 0 | | 0 | 0 | 0 | 100 | | 14.2 | 85.8 | 0.1 | 0 | | 34.8 | 0.2 | 64.8 | 0.2 | | |
| Total % | 0.1 | 36.9 | 4.6 | 0 | 41.5 | 0 | 0 | 0 | 0.1 | 0.1 | 6 | 36.4 | 0 | 0 | 42.4 | 5.6 | 0 | 10.3 | 0 | 16 | |

# Traffic Engineering and Management
# Supplemental Multiway Stop Control Evaluation Form

Delaware Department of Transportation

**Location:**

**Date:** March 30, 2023

**County:** Sussex

**Analyst:** B. Martine

***The decision to install multiway stop control should be based on an engineering study.***
*The following criteria should be consideered in the engineering study for a multiway STOP sign installation.*

**PART 1.**

A. *Where traffic control signals are justified, the multiway stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*

Question 1: Is a traffic signal being considered at this intersection? No

***Proceed to Section B***

Question 2: Is the traffic signal warranted at this intersection? No

***Proceed to Part B***

Question 3: Will a multiway stop control improve the safety and/or capacity of the intersection Yes

**Multiway Stop Control is not warranted, proceed to Section B**

B. *A crash problem, as indicated by 5 or more reported crashes in a 12-month period that are susceptible to correction by a multiway stop installation. Such crashes include right- and left-turn collisions as well as right angle collisions.*

Number of collisions that have occurred within a 12-month period that are susceptible to correction by a multiway stop control. **0**

**Multiway Stop Control is not warranted, proceed to Section C**

C. *Minimum Volumes:*

1. *The vehicular volume entering the intersction from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, and*
2. *The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approach (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour, but*
3. *If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the above values.*

Major Street: S Walnut Street — Orientation: North/South

Minor Street: McCoy Street — Orientation: East/West

**ENTER TRAFFIC VOLUMES IN THE TABLE BELOW**

| Time | S Walnut Street | | | McCoy Street | | | |
|---|---|---|---|---|---|---|---|
| | North | South | Total | East | West | Pedestrians/Bicycles | Total |
| 6 - 7 AM | 82 | 181 | 263 | 0 | 109 | 0 | 109 |
| 7 - 8 AM | 82 | 181 | 263 | 0 | 109 | 0 | 109 |
| 8 - 9 AM | 41 | 112 | 153 | 0 | 80 | 0 | 80 |
| 9 - 10 AM | 50 | 143 | 193 | 0 | 104 | 0 | 104 |
| 10 - 11 AM | 50 | 143 | 193 | 0 | 104 | 0 | 104 |
| 11 AM - 12 PM | 59 | 174 | 233 | 0 | 128 | 1 | 129 |
| 12 - 1 PM | 64 | 162 | 226 | 0 | 114 | 3 | 117 |
| 1 - 2 PM | 56 | 185 | 241 | 0 | 98 | 1 | 99 |
| 2 - 3 PM | 66 | 216 | 282 | 0 | 116 | 0 | 116 |
| 3 - 4 PM | 76 | 246 | 322 | 0 | 133 | 1 | 134 |
| 4 -5 PM | 66 | 250 | 316 | 0 | 165 | 4 | 169 |
| 5 - 6 PM | 14 | 187 | 201 | 0 | 133 | 2 | 135 |

**Condition C.1 and C.2**

| | | |
|---|---|---|
| A minimum of | 300 | vehicles per hour required on the major street and |
| A minimum of | 200 | units per hour required on the minor street |
| A total of | **0** | hours meet conditions C.1 and C.2 |

**Multiway Stop Control is not warranted based on conditions C.1 and C.2**

**Condition C.3** Does the 85th-percentile approach speed of major-street traffic exceed **40 mph**? No

***Proceed to Section D***

| | | |
|---|---|---|
| A minimum of | 210 | vehicles per hour required on the major street and |
| A minimum of | 140 | units per hour required on the minor street |
| A total of | **N/A** | hours meets condition C.3 |

## Multiway Stop Control is not warranted based on Condition C.3

*D. Where no single criterion is satisfied, but where Criteria B, C.1 and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.*

Is a multiway stop control warranted from the criteria set forth in either sections A, B or C? No

***Proceed to next criteria***

Step 1 Number of collisions that have occurred within a 12-month period that are susceptible to correction by a multiway stop control 0

***Multiway Stop Control is not warranted, proceed to Part 2***

Step 2

| | | |
|---|---|---|
| A minimum of | 240 | vehicles per hour required on the major street and |
| A minimum of | 160 | units per hour required on the minor street |
| A total of | **N/A** | hours meets condition D.2 |

## Multiway Stop Control is not warranted based on Section D

## Multiway Stop Control is not warranted based on Sections A - D, proceed to Part 2

**PART 2.**

*Other criteria that may be considered in an engineering study include:*

*A. The need to control left-turn conflicts;*
*B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;*
*C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonbly safely negotiate the intersection unless conflicting cross traffic is also required to stop; and*
*D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multiway stop control would improve traffic operational characteristics of the intersection.*

Question A: Is there a need to control left-turn conflicts? No

Question B: Is this intersection near an area that generates high pedestrian volumes (i.e., church, school, etc.) No

Question C.1 Is sight distance restricted for vehicles on the minor-street approach? No

***Proceed to Question D.1***

Question C.2 Have adequate improvements been implemented to improve sight distance?

Question C.3 Have these improvements worked?

Question D.1 Is this the intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics? No

***Proceed to end of worksheet***

Question D.2 Will a multiway stop control improve traffic operational characteristics of the intersection (NOTE: Capacity analyses must be performed in order to answer this question)? No

Existing Two-Way Stop Control Level of Service (minor street approaches)

| | | | | |
|---|---|---|---|---|
| *East* | LOS | | Delay | sec/veh |
| *West* | LOS | | Delay | sec/veh |

Proposed Multi-way Stop Control Level of Service (entire intersection)

LOS _____ Delay _____ sec/veh

## Multiway Stop Control should not be considered at this intersection

# Traffic Engineering and Management
# Supplemental Multiway Stop Control Evaluation Form

Delaware Department of Transportation

**Location:**

**Date:** March 30, 2023

**County:** Sussex

**Analyst:** Century

***The decision to install multiway stop control should be based on an engineering study.***
*The following criteria should be consideered in the engineering study for a multiway STOP sign installation.*

**PART 1.**

A. *Where traffic control signals are justified, the multiway stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*

Question 1: Is a traffic signal being considered at this intersection? No

***Proceed to Section B***

Question 2: Is the traffic signal warranted at this intersection? No

***Proceed to Part B***

Question 3: Will a multiway stop control improve the safety and/or capacity of the intersection Yes

**Multiway Stop Control is not warranted, proceed to Section B**

B. *A crash problem, as indicated by 5 or more reported crashes in a 12-month period that are susceptible to correction by a multiway stop installation. Such crashes include right- and left-turn collisions as well as right angle collisions.*

Number of collisions that have occurred within a 12-month period that are susceptible to correction by a multiway stop control. **1**

**Multiway Stop Control is not warranted, proceed to Section C**

C. *Minimum Volumes:*

1. *The vehicular volume entering the intersction from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, and*
2. *The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approach (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour, but*
3. *If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the above values.*

Major Street: S Walnut Street — Orientation: North/South

Minor Street: Clarke Avenue — Orientation: East/West

**ENTER TRAFFIC VOLUMES IN THE TABLE BELOW**

| Time | S Walnut Street | | | Clarke Avenue | | | |
|---|---|---|---|---|---|---|---|
| | North | South | Total | East | West | Pedestrians/Bicycles | Total |
| 6 - 7 AM | *173* | *120* | 293 | *35* | *25* | 0 | 60 |
| 7 - 8 AM | 173 | 120 | 293 | 35 | 25 | 0 | 60 |
| 8 - 9 AM | 157 | 135 | 292 | 28 | 14 | 0 | 42 |
| 9 - 10 AM | *146* | *142* | 288 | *28* | *17* | 0 | 45 |
| 10 - 11 AM | *146* | *142* | 288 | *28* | *17* | 0 | 45 |
| 11 AM - 12 PM | 134 | 149 | 283 | 28 | 20 | 0 | 48 |
| 12 - 1 PM | 135 | 161 | 296 | 50 | 15 | 0 | 65 |
| 1 - 2 PM | 141 | 164 | 305 | 40 | 32 | 0 | 72 |
| 2 - 3 PM | *156* | *188* | 343 | *42* | *37* | 0 | 78 |
| 3 - 4 PM | 170 | 211 | 381 | 43 | 41 | 1 | 85 |
| 4 -5 PM | 171 | 203 | 374 | 35 | 42 | 0 | 77 |
| 5 - 6 PM | *171* | *203* | 374 | *35* | *42* | 0 | 77 |

**Condition C.1 and C.2**

| | | |
|---|---|---|
| A minimum of | 300 | vehicles per hour required on the major street and |
| A minimum of | 200 | units per hour required on the minor street |
| A total of | **0** | hours meet conditions C.1 and C.2 |

**Multiway Stop Control is not warranted based on conditions C.1 and C.2**

**Condition C.3** Does the 85th-percentile approach speed of major-street traffic exceed **40 mph**? No

***Proceed to Section D***

| | | |
|---|---|---|
| A minimum of | 210 | vehicles per hour required on the major street and |
| A minimum of | 140 | units per hour required on the minor street |
| A total of | **N/A** | hours meets condition C.3 |

## Multiway Stop Control is not warranted based on Condition C.3

*D. Where no single criterion is satisfied, but where Criteria B, C.1 and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.*

Is a multiway stop control warranted from the criteria set forth in either sections A, B or C? No

***Proceed to next criteria***

Step 1 Number of collisions that have occurred within a 12-month period that are susceptible to correction by a multiway stop control 1

***Multiway Stop Control is not warranted, proceed to Part 2***

Step 2

| | | |
|---|---|---|
| A minimum of | 240 | vehicles per hour required on the major street and |
| A minimum of | 160 | units per hour required on the minor street |
| A total of | **N/A** | hours meets condition D.2 |

## Multiway Stop Control is not warranted based on Section D

## Multiway Stop Control is not warranted based on Sections A - D, proceed to Part 2

**PART 2.**

*Other criteria that may be considered in an engineering study include:*

*A. The need to control left-turn conflicts;*

*B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;*

*C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonbly safely negotiate the intersection unless conflicting cross traffic is also required to stop; and*

*D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multiway stop control would improve traffic operational characteristics of the intersection.*

Question A: Is there a need to control left-turn conflicts? No

Question B: Is this intersection near an area that generates high pedestrian volumes (i.e., church, school, etc.) No

Question C.1 Is sight distance restricted for vehicles on the minor-street approach? No

***Proceed to Question D.1***

Question C.2 Have adequate improvements been implemented to improve sight distance?

Question C.3 Have these improvements worked?

Question D.1 Is this the intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics? No

***Proceed to end of worksheet***

Question D.2 Will a multiway stop control improve traffic operational characteristics of the intersection (NOTE: Capacity analyses must be performed in order to answer this question)? No

Existing Two-Way Stop Control Level of Service (minor street approaches)

| | | | | |
|---|---|---|---|---|
| *East* | LOS | | Delay | sec/veh |
| *West* | LOS | | Delay | sec/veh |

Proposed Multi-way Stop Control Level of Service (entire intersection)

LOS _____ Delay _____ sec/veh

## Multiway Stop Control should not be considered at this intersection

# Traffic Engineering and Management
# Supplemental Multiway Stop Control Evaluation Form

Delaware Department of Transportation

**Location:**

**Date:** March 30, 2023

**County:** Sussex

**Analyst:** Century/KLF

***The decision to install multiway stop control should be based on an engineering study.***
*The following criteria should be consideered in the engineering study for a multiway STOP sign installation.*

**PART 1.**

A. *Where traffic control signals are justified, the multiway stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*

Question 1: Is a traffic signal being considered at this intersection? No

***Proceed to Section B***

Question 2: Is the traffic signal warranted at this intersection? No

***Proceed to Part B***

Question 3: Will a multiway stop control improve the safety and/or capacity of the intersection Yes

**Multiway Stop Control is not warranted, proceed to Section B**

B. *A crash problem, as indicated by 5 or more reported crashes in a 12-month period that are susceptible to correction by a multiway stop installation. Such crashes include right- and left-turn collisions as well as right angle collisions.*

Number of collisions that have occurred within a 12-month period that are susceptible to correction by a multiway stop control. **1**

**Multiway Stop Control is not warranted, proceed to Section C**

C. *Minimum Volumes:*

1. *The vehicular volume entering the intersction from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, and*
2. *The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approach (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour, but*
3. *If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the above values.*

Major Street: S Walnut Street — Orientation: North/South

Minor Street: Kings Highway — Orientation: East/West

**ENTER TRAFFIC VOLUMES IN THE TABLE BELOW**

| Time | S Walnut Street | | | Kings Highway | | | |
|---|---|---|---|---|---|---|---|
| | North | South | Total | East | West | Pedestrians/Bicycles | Total |
| 6 - 7 AM | *136* | *180* | 316 | *63* | 0 | 0 | 63 |
| 7 - 8 AM | 136 | 180 | 316 | 63 | 0 | 1 | 64 |
| 8 - 9 AM | 135 | 155 | 290 | 46 | 0 | 3 | 49 |
| 9 - 10 AM | *130* | *138* | *268* | *50* | 0 | 0 | 50 |
| 10 - 11 AM | *130* | *138* | *268* | *50* | 0 | 0 | 50 |
| 11 AM - 12 PM | 124 | 121 | 245 | 54 | 0 | 0 | 54 |
| 12 - 1 PM | 144 | 141 | 285 | 43 | 0 | 0 | 43 |
| 1 - 2 PM | 131 | 127 | 258 | 59 | 0 | 0 | 59 |
| 2 - 3 PM | *156* | *144* | *300* | *64* | 0 | 0 | 64 |
| 3 - 4 PM | 180 | 161 | 341 | 69 | 0 | 0 | 69 |
| 4 -5 PM | 181 | 168 | 349 | 68 | 0 | 0 | 68 |
| 5 - 6 PM | 173 | 176 | 349 | 61 | 0 | 0 | 61 |

**Condition C.1 and C.2**

A minimum of 300 vehicles per hour required on the major street and

A minimum of 200 units per hour required on the minor street

A total of **0** hours meet conditions C.1 and C.2

**Multiway Stop Control is not warranted based on conditions C.1 and C.2**

**Condition C.3** Does the 85th-percentile approach speed of major-street traffic exceed **40 mph**? No

***Proceed to Section D***

| | | |
|---|---|---|
| A minimum of | 210 | vehicles per hour required on the major street and |
| A minimum of | 140 | units per hour required on the minor street |
| A total of | **N/A** | hours meets condition C.3 |

## Multiway Stop Control is not warranted based on Condition C.3

*D. Where no single criterion is satisfied, but where Criteria B, C.1 and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.*

Is a multiway stop control warranted from the criteria set forth in either sections A, B or C? No

***Proceed to next criteria***

Step 1 Number of collisions that have occurred within a 12-month period that are susceptible to correction by a multiway stop control 0

***Multiway Stop Control is not warranted, proceed to Part 2***

Step 2

| | | |
|---|---|---|
| A minimum of | 240 | vehicles per hour required on the major street and |
| A minimum of | 160 | units per hour required on the minor street |
| A total of | **N/A** | hours meets condition D.2 |

## Multiway Stop Control is not warranted based on Section D

## Multiway Stop Control is not warranted based on Sections A - D, proceed to Part 2

**PART 2.**

*Other criteria that may be considered in an engineering study include:*

*A. The need to control left-turn conflicts;*
*B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;*
*C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonbly safely negotiate the intersection unless conflicting cross traffic is also required to stop; and*
*D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multiway stop control would improve traffic operational characteristics of the intersection.*

Question A: Is there a need to control left-turn conflicts? No

Question B: Is this intersection near an area that generates high pedestrian volumes (i.e., church, school, etc.) No

Question C.1 Is sight distance restricted for vehicles on the minor-street approach? No

***Proceed to Question D.1***

Question C.2 Have adequate improvements been implemented to improve sight distance?

Question C.3 Have these improvements worked?

Question D.1 Is this the intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics? No

***Proceed to end of worksheet***

Question D.2 Will a multiway stop control improve traffic operational characteristics of the intersection (NOTE: Capacity analyses must be performed in order to answer this question)? No

Existing Two-Way Stop Control Level of Service (minor street approaches)

| | | | | | |
|---|---|---|---|---|---|
| *East* | LOS | | Delay | | sec/veh |
| *West* | LOS | | Delay | | sec/veh |

Proposed Multi-way Stop Control Level of Service (entire intersection)

| | | | | |
|---|---|---|---|---|
| LOS | | Delay | | sec/veh |

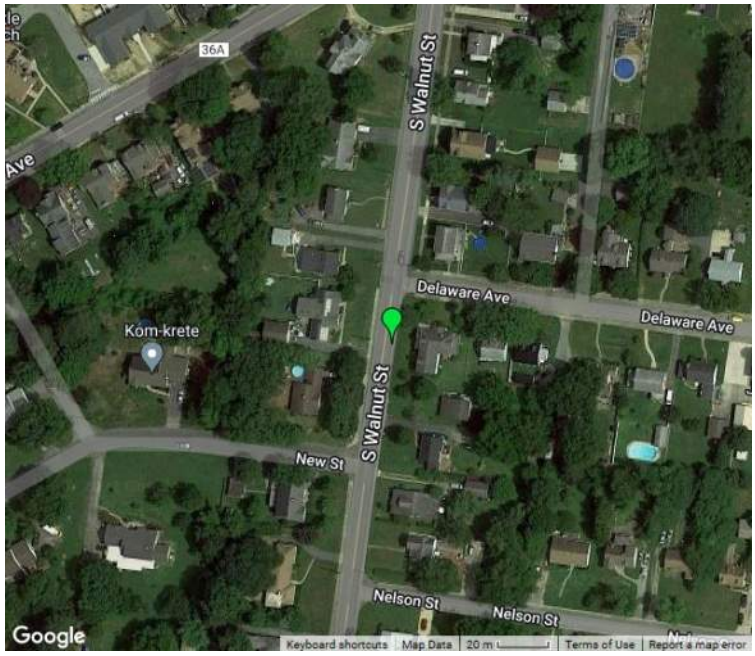
## Multiway Stop Control should not be considered at this intersection

Default Report Title
Use Preferences to Define Titles

# SPEED DATA ANALYSIS

## Location

Latitude: 38.902733
Longitude: -75.429865




## Analysis Time Period

| Start | End |
|---|---|
| 9/10/2022 12:16 PM | 9/20/2022 8:27 AM |

## Vehicles Analyzed

34,587

## Speed Limit




35

## Total Enforceable Violations

1,135

## Fastest Speed

125

## 10 MPH Pace Speed

22-31

## Average Speed

27

## 85th Percentile Speed

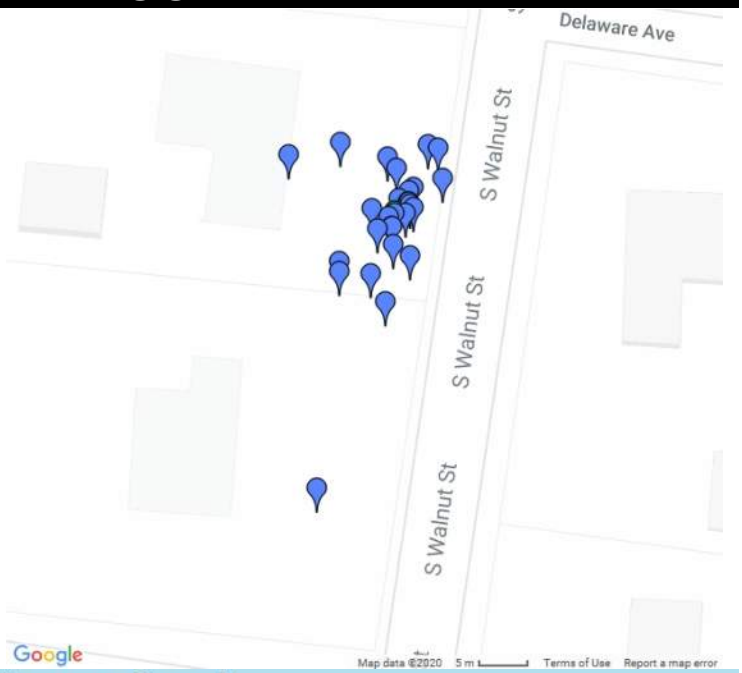
31

Century Engineering, Inc.
550 Bay Road
Dover, DE 19904

# SPEED DATA ANALYSIS

## Location

Latitude: 38.902745
Longitude: -75.430001




## Analysis Time Period

| Start | End |
|---|---|
| 1/15/2020 1:20 PM | 1/22/2020 7:31 AM |

## Vehicles Analyzed

18,363

## Average Speed

27

## 85th Percentile Speed

31

## 10 MPH Pace Speed

23-32

Site Code: 000000002165
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 38.902733
Longitude: -75.429865

# Combined Lanes 9/10/2022 to 9/20/2022

***Pace Speed - MPH***

Classes Excluded From Pace: None

| Speed | Number | Percent |
|---|---|---|
| 22 - 31 | 27,987 | 80.91769% |

***Percentile Speeds***

| Percentile | 50th | 85th |
|---|---|---|
| Speed - MPH | 26.4 | 30.6 |

***Vehicles Traveling Greater Than 50.0 MPH***

| | |
|---|---|
| Total Volume | 34,587 |
| Total Greater Than 50.0 | 44 |
| Percent Greater Than 50.0 | 0.1% |

***Mean, Median, and Mode Averages***

| | |
|---|---|
| Mean: | 26.8 |
| Median (50th %): | 26.4 |
| Mode: | 24.7 |

***Classification Statistics***

| Unclassed | Motorcycles | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 119 | 207 | 27342 | 4871 | 269 | 1465 | 93 | 3 | 163 | 53 | 2 | 0 | 0 | 0 |
| 0.3% | 0.6% | 79.1% | 14.1% | 0.8% | 4.2% | 0.3% | 0.0% | 0.5% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% |

Site Code: 000000002165
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 38.902733
Longitude: -75.429865

## North, Lane 1 9/10/2022 to 9/20/2022

***Pace Speed - MPH***

Classes Excluded From Pace: None

| Speed | Number | Percent |
|---|---|---|
| 23 - 32 | 13,341 | 79.80499% |

***Percentile Speeds***

| Percentile | 50th | 85th |
|---|---|---|
| Speed - MPH | 26.9 | 31.1 |

***Vehicles Traveling Greater Than 50.0 MPH***

| | |
|---|---|
| Total Volume | 16,717 |
| Total Greater Than 50.0 | 35 |
| Percent Greater Than 50.0 | 0.2% |

***Mean, Median, and Mode Averages***

| | |
|---|---|
| Mean: | 27.2 |
| Median (50th %): | 26.9 |
| Mode: | 26.0 |

***Classification Statistics***

| Unclassed | Motorcycles | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 67 | 94 | 13149 | 2369 | 140 | 734 | 44 | 0 | 88 | 30 | 2 | 0 | 0 | 0 |
| 0.4% | 0.6% | 78.7% | 14.2% | 0.8% | 4.4% | 0.3% | 0.0% | 0.5% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% |

Site Code: 000000002165
Station ID:
Location 1:
Location 2:
Location 3:
Location 4:

Comment 1:
Comment 2:
Comment 3:
Comment 4:
Latitude: 38.902733
Longitude: -75.429865

## South, Lane 2 9/10/2022 to 9/20/2022

***Pace Speed - MPH***

Classes Excluded From Pace: None

| Speed | Number | Percent |
|---|---|---|
| 22 - 31 | 14,662 | 82.04813% |

***Percentile Speeds***

| Percentile | 50th | 85th |
|---|---|---|
| Speed - MPH | 26 | 30.1 |

***Vehicles Traveling Greater Than 50.0 MPH***

| | |
|---|---|
| Total Volume | 17,870 |
| Total Greater Than 50.0 | 9 |
| Percent Greater Than 50.0 | 0.1% |

***Mean, Median, and Mode Averages***

| | |
|---|---|
| Mean: | 26.3 |
| Median (50th %): | 26.0 |
| Mode: | 24.7 |

***Classification Statistics***

| Unclassed | Motorcycles | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 52 | 113 | 14193 | 2502 | 129 | 731 | 49 | 3 | 75 | 23 | 0 | 0 | 0 | 0 |
| 0.3% | 0.6% | 79.4% | 14.0% | 0.7% | 4.1% | 0.3% | 0.0% | 0.4% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% |

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550 Bay Road
Dover, DE 19904

Site Code: 000000002165
Latitude: 38.902745
Longitude: -75.430001

## Combined Lanes 1/15/2020 to 1/22/2020

***Pace Speed - MPH***

Classes Excluded From Pace: None

| Speed | Number | Percent |
|---|---|---|
| 23 - 32 | 15,006 | 82% |

***Percentile Speeds***

| Percentile | 50th | 85th |
|---|---|---|
| Speed - MPH | 27.1 | 31.3 |

***Mean, Median, and Mode Averages***

| | |
|---|---|
| Mean: | 27.5 |
| Median (50th %): | 27.1 |
| Mode: | 27.1 |

***Classification Statistics***

| Motorcycles | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Unclassed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 36 | 13636 | 3322 | 220 | 888 | 42 | 3 | 64 | 36 | 0 | 0 | 0 | 0 | 121 |
| 0.2% | 74.2% | 18.1% | 1.2% | 4.8% | 0.2% | 0.0% | 0.3% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.7% |

Century Engineering, Inc.
550 Bay Road
Dover, DE 19904

Site Code: 000000002165
Latitude: 38.902745
Longitude: -75.430001

## South, Lane 1 1/15/2020 to 1/22/2020

***Pace Speed - MPH***

Classes Excluded From Pace: None

| Speed | Number | Percent |
|---|---|---|
| 24 - 33 | 7,379 | 81% |

***Percentile Speeds***

| Percentile | 50th | 85th |
|---|---|---|
| Speed - MPH | 28 | 32.2 |

***Mean, Median, and Mode Averages***

| | |
|---|---|
| Mean: | 28.3 |
| Median (50th %): | 28.0 |
| Mode: | 26.4 |

***Classification Statistics***

| Motorcycles | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Unclassed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | 6660 | 1757 | 125 | 457 | 19 | 0 | 37 | 16 | 0 | 0 | 0 | 0 | 53 |
| 0.2% | 72.9% | 19.2% | 1.4% | 5.0% | 0.2% | 0.0% | 0.4% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.6% |

Century Engineering, Inc.
550 Bay Road
Dover, DE 19904

Site Code: 000000002165
Latitude: 38.902745
Longitude: -75.430001

## North, Lane 2 1/15/2020 to 1/22/2020

***Pace Speed - MPH***

Classes Excluded From Pace: None

| Speed | Number | Percent |
|---|---|---|
| 22 - 31 | 7,736 | 84% |

***Percentile Speeds***

| Percentile | 50th | 85th |
|---|---|---|
| Speed - MPH | 26.4 | 30.2 |

***Mean, Median, and Mode Averages***

| | |
|---|---|
| Mean: | 26.7 |
| Median (50th %): | 26.4 |
| Mode: | 26.0 |

***Classification Statistics***

| Motorcycles | Cars & Trailers | 2 Axle Long | Buses | 2 Axle 6 Tire | 3 Axle Single | 4 Axle Single | <5 Axl Double | 5 Axle Double | >6 Axl Double | <6 Axl Multi | 6 Axle Multi | >6 Axl Multi | Unclassed |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | 6976 | 1565 | 95 | 431 | 23 | 3 | 27 | 20 | 0 | 0 | 0 | 0 | 68 |
| 0.2% | 75.6% | 17.0% | 1.0% | 4.7% | 0.2% | 0.0% | 0.3% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.7% |

# Milford: South Walnut Street Traffic Calming and Bike/Pedestrian Improvement Project

## Appendix B: Public Workshop Summaries

# S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project

A community workshop was organized for the South Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project on December 15, 2022. The workshop was held at Milford's City Hall from 6:00-8:00 pm. Area residents were invited to attend. The workshop was advertised through the City of Milford and the Dover/Kent MPO. Twenty-six community members attended the meeting and numerous others reviewed the information online that was posted shortly after the workshop.

Century Engineering presented numerous boards with information including study area, Project Goals, Traffic Calming Study Results, crash data, speed study evaluation, comparison of both options and two concept plan options to alleviate speeding. Feedback was gathered from attendees through conversations with Century Engineering personnel, questionnaires, and a comment box.

Workshop boards can be found at the end of this workshop summary report. After the workshop the workshop boards were posted on the City of Milford's website so that community members who did not attend the meeting could review the materials and offer feedback. This option was successful in providing additional community feedback for the project.

## Comments

Over 25 comments were received regarding the information presented.

Community members overall expressed an interest in the project and were in favor of the changes for different reasons. Different elements of the project goals were appealing to them and they were engaged to learn more about the project.

Community members were asked for feedback on which option they preferred and which elements of any of the options they liked best. Option 2 received 12 votes for preferred option. There were no votes for Option 1 and some community members did not like either option.

Positive feedback for favored items out of either option included Option 2 maintained some parking and the bump outs could be landscaped and treated as chicanes. Community members liked the added crosswalks as well as the updated intersection configurations at Seabury Avenue/W. Clarke Avenue and at the Railroad Crossing. Numerous community members commented on the preference for the grass buffer so that walking and cycling on the new shared use path would feel safer and provided some distance to the traffic.

The community expressed mixed feelings about the narrowing of the road as many residents have been victim to sideswipe accidents. There is already concern about parking on the street with the existing wider widths.

Numerous community members expressed additional requests to be added to the existing options and/or in place of the existing options. The comment provided by most was to add stop signs along this corridor. The most requested locations were at S. Walnut and McCoy as well as at Seabury and Kings Highway. Many requested these stop signs with Option 2 to complete the enhancements, while others requested that only the stop signs be added without any of the enhancements of either Option. According to the comments received, this stretch of the corridor is along a 2.9-mile corridor with no stops signs or traffic

signals. Other suggestions included landscaping the parking chicanes for beautification, enhancing our suggestion for crosswalks with raised crosswalks and raised intersections to further reduce speeds, preparing the enhancements to save trees, include improvements to reduce or remove truck traffic from the corridor, and providing historically sensitive alternatives through the historic district. Comments suggested that raised crosswalks or intersections would be welcomed at Seabury Avenue and S. Maple Streets. Suggestions also included greater police presence, speed limit signage and speed cameras to further enforce the speed limit.

Overall, the community was in favor of moving the utility poles to assist in providing room for the enhancements but requested that the project go a step further and underground the utility poles rather than moving them.

Mixed reviews were also received from the community members in reference to the shared use path. Avid bicyclists who attended the meeting mentioned that they will not use the shared use path. They will continue to use the roadway, which if narrowed makes the cycling conditions worse not better for them. Other comments praised the shared use path because it would provide a walking and cycling path for all users, especially families with young children. One comment explained that with a new middle school opening there will be a need for safer walking and cycling routes to the school.

At least three residents along the corridor expressed concerns about a new shared use path fronting their property. They do not want to encourage pedestrian or bicycle traffic in front of their property, and they do not want to lose the grass lawn between their house and the roadway. Tree removal was also a concern, but it was explained that the shared use path can be designed to avoid many if not most trees. There was also a request to reduce or completely remove any grass buffer between the path and the street so that the pedestrians would be as far from the houses as possible.

Numerous comments also requested a review of existing truck traffic, truck speeds, and an overall suspected increase in truck volumes. According to the comments, which was attributed to recent development, truck signs were removed from Wilbur Street resulting in trucks traveling from Wilbur Street across S. Walnut Street to McCoy Road. Trucks also turn right from Seabury Avenue to S. Walnut Street and have issues negotiating the corner radius. Suggestions for truck traffic included:

1. *For trucks coming from the south on #113, to turn at the Lincoln light and take Marshall ext. to McCoy and enter the South industrial area from there or continue to Wilkins to connect to Route #1.*
2. *For trucks coming from north #113, take Business Route 1 to Wilkins Rd and then turn onto Elks Rd to enter the south industrial area (Lumber 84). Or, those accessing the industrial area off Airport Rd., to use #113 only to access that road.*
3. *For trucks coming in from North or South on Route 1, turn off at the Bayhealth overpass and enter south Milford from Wilkins and Elks Road. Or, to get to #113, use Business Route 1 and cross over to #113 at 10th street, therefore, keeping trucks from our tiny downtown area.*
4. *For trucks coming from Route 36, turn onto Fitzgeralds Road and go through Lincoln and drive north on Marshall Ext. or continue to Wilkins to access Route #1.*

5. *Trucks servicing the local restaurants, while somewhat inconvenient, enter from the nearest highway and leave the same way.*

## Questionnaire Responses

Comment forms were prepared to ask specific questions about each option while also requesting feedback from the community on the overall presentation. The results are below:

## 1. Are there specific elements of either option that you like?

- Option 2: Looks nicer and keeps not only some parking but has a barrier between cars! Safety is higher
- Bike path with grass strip between roadway and bike path
- Crosswalks & fixes at Clark/Seabury/Walnut look great
- Chicanes
- Make bump outs in option 2 chicanes
- Green grassy area barrier between the street and the pedestrian bike area
- Narrowing the roadway will slow traffic
- Traffic Calming for S. Walnut
- Alignment at Jefferson
- Addition of bike path
- Chicanes

## 2. Are there specific elements of either option that concern you?

- Option 2: Cost of moving existing electrical poles
- Option 2: Demographics of the community don't match those using multi use paths on city streets
- Option 2: Lack of stop signs
- There is only a curb between proposed pedestrian/bike lane & vehicle lanes
- No serious traffic calming measures
- Only a curb between proposed pedestrian/bike lane & vehicle lanes; there should be railing or fencing
- No stop signs at pedestrian crosswalks
- Narrowing roads will cause more traffic accidents
- How will fire vehicles get through the streets?
- Consider underground power instead of electric poles
- Don't cut down trees! Replace what you cut
- Option 2: Move poles or bury lines
- Seabury and Clark intersection- too many possibilities for accidents; one of the roads should be dead end
- Loss of existing trees

- Narrowing roadway might cause more side swipe and property damage
- Don't want a sidewalk right outside my front door
- Don't remove trees
- Bury electric lines instead of moving poles
- Both options do little to improve safety; they're a very expensive fix to a simple problem; just reduce speed
- Shared use path totally out of character within historic district

## 3. Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?

- Add stop signs; they worked on Seabury
- Speed cameras, stop signs, raised crosswalks
- Stop signs and speed bumps
- Lighting could be improved
- Making pedestrian crossings raised bumps in addition to paint
- Lighting for pedestrians at night
- Chicanes for sure
- Brighter lighting
- More stop signs
- Speed camera
- Use stop signs like on Seabury
- Bury lines instead of moving electric poles
- Stop signs at McCoy and on S. Walnut & King's Highway
- Stop signs or speed cameras
- Speed limit signage, stop signs
- The intersection of Walnut/Clarke/Seabury needs to be an all way stop

## 4. Please let us know which option you prefer and why.

- Option 2 seemed to be the more popular choice
- Option 2: Looks nicer and keeps not only some parking but has a barrier between cars! Safety is higher
- Option 2: Optically pleasing, safer
- Option 2: Would require utility lines to be buried which is good
- Option 2: For beautification of the city
- Option 2: For beautification of the city; with option to put shrubbery inside chicanes
- Option 2: The narrow road will make drivers have to navigate it at slower speed
- Option 2: The barrier between shared space and traffic
- Option 2: The curves
- Neither! Option 3: 3 stop signs: 1. McCoy, 2. Seabury, 3. King's Highway

- Option 2: More pleasing
- Neither if my front yard will be eliminated with a sidewalk
- Option 2
- None: The options will take 1/3 of my front lawn and do little to reduce speed, instead, use signage and police presence
- Option 2: segregate bike path and protected parking
- Option 2: More aesthetic and beautiful
- Option 2: Keeps some parking; looks nice
- Option 2: Better for bike riding

# Workshop Boards

# Welcome to the

# S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project

## Public Workshop

## December 15, 2022

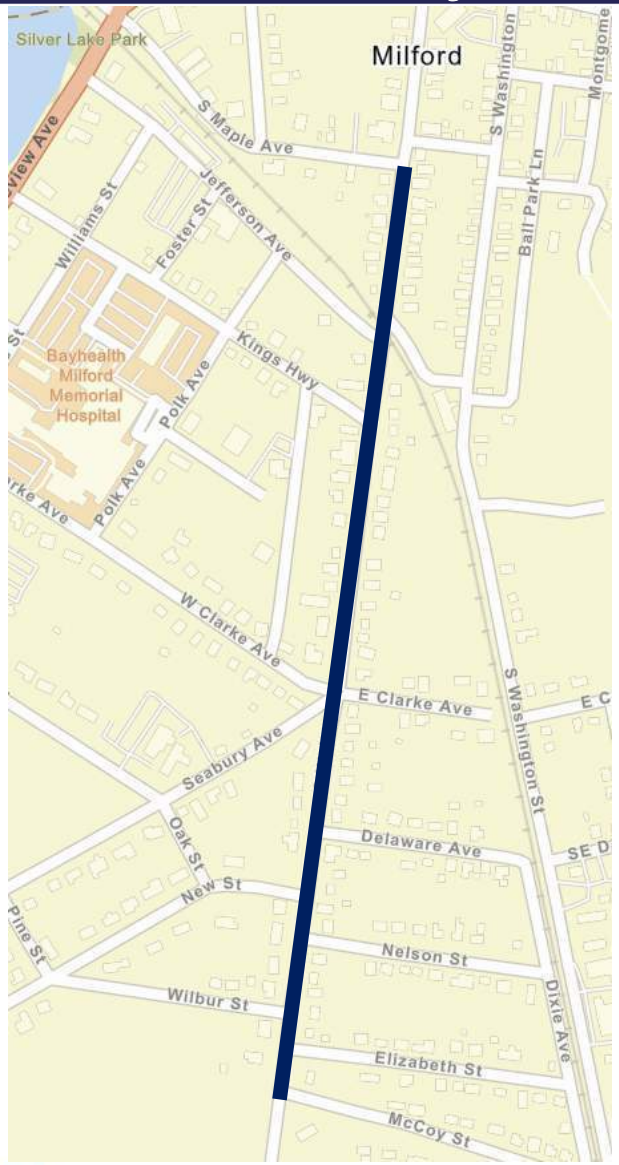
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# S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project

## Study Area

S. Walnut Street between McCoy Street and S. Maple Avenue




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# Project Goals

- Improve bicycle and pedestrian connectivity along S. Walnut St
  - New shared use path
  - Complete gaps in existing sidewalks
- Reduce traffic speeds and provide traffic calming
- Improve pedestrian crossing at Seabury Avenue and W. Clarke Ave
- Improve S. Walnut Street intersection configuration with Railroad

# Traffic Calming Study

- Current posted speed: 25 mph
- Analyzed speed data from September 11, 2022 through September 19, 2022
  - Average speed: 27 mph
  - 85$^{th}$ percentile speed: 31 mph
- 62.6% of all recorded vehicles were traveling at speeds greater than the posted speed limit
- Half of all crashes occurred at two main intersections:
  - S. Walnut Street and McCoy Street
  - S. Walnut Street and Seabury Avenue/Clarke Avenue

# S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project

## Crash Data




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# S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project

## Speed Study Evaluation

| Milford S. Walnut Street Speed and Safety Evaluation | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Type | Name | Potential Effectiveness for Speed Reduction (FHWA PSCI) | Potential for Crash Reduction (-) /Increase (+) (FHWA PSCI) | Potential Crash Reduction (-) /Increase (+) (HSM) | Considered? Why/why not? | Rank |
| Road Segment Treatment | | | | | | | |
| 1 | Vertical | Speed Humps | -6 mph | -40% to -48% (All Severities, All Crashes) | 1. Treated Road = -40% (Injury Crashes, All Crash Types) 2. Adjacent Roads = -5% (Injury Crashes, All Crash Types) | No, speed humps are not preferred due to issues with emergency vehicles etc. | 1 |
| 2 | Vertical | Speed Table | -4 mph | -36% to -64% (All Severities, All Crashes) | | No, speeds tables are not preferred due to issues with emergency vehicles etc. | 2 |
| Intersections Treatment | | | | | | | |
| 3 | Horizontal | Modern Roundabouts | -4 mph to -8 mph | | -78% (All Severities, All Crash Types) | No, due to right of way constraints | 1 |
| 4 | Horizontal | Realigned Intersections | | | | Yes, intersection improvements at S. Walnut/Seabury and S. Walnut and the R/R were recommended to assist in improving driver clarity | 2 |
| Road Segment Treatment | | | | | | | |
| 5 | Horizontal | Chicanes | -9 mph | | | No, roadway width that could be utilized for chicanes was utilized to add the shared use path | 1 |
| 6 | Horizontal | Lateral Shifts | Less than Chicanes | | | Yes, S. Walnut Street is recommended for a lateral shift between Delaware Ave and Clarke Ave | 2 |
| Road Segment Treatment: Road Width Reduction | | | | | | | |
| 7 | Width Reduction | Median Islands (Raised) | -3 mph | -39% (All Crashes) -44% (Fatal and Injury Crashes) | -39% (Injury Crashes, All Crash Types) | No, roadway width was narrowed to fit a new shared use path leaving no additional space for a median island | 1 |
| 8 | Width Reduction | Striping/Lane Markings | Reduction possible | Potential for less severe crash types | Potential for less severe crash types | Yes, lane widths were narrowed to 11' and shoulders/parking areas were reduced or eliminated | |
| Road Segment Treatment: Dynamic Signing | | | | | | | |
| 9 | Dynamic Signing | Radar Speed Signs | -2 mph to -5 mph | | -46% (All Severities, All Crashes) | Potentially, coordinating with City of Milford | 1 |

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# S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project

## Comparison of Option 1 and Option 2

| | | |
|---|---|---|
| Bicycle Infrastructure Improvements | Adds a shared use path on southbound side of S. Walnut Street | Adds a shared use path on southbound side of S. Walnut Street |
| Pedestrian Infrastructure Improvements | In addition to a shared use path on southbound side of S. Walnut Street; this project completes missing sidewalk gaps on the northbound side of S. Walnut Street | In addition to a shared use path on southbound side of S. Walnut Street; this project completes missing sidewalk gaps on the northbound side of S. Walnut Street |
| Right of Way Impacts | Minimal to none | May require temporary construction easements and permanent easements |
| Parking Impacts | Removes all existing parking along S. Walnut Street | Reduces overall number of parking spaces along S. Walnut Street |
| Utility Impacts | No | Yes |
| Added Green Space | Areas where existing sidewalk is replaced with the shared use path will have some additional green space | A 3' grass buffer has been added through the project limits |
| Grass Buffer | No | Yes |
| Traffic Calming Measures | Yes: Realigned / Reconfigured Intersections, Lateral Shift of S. Walnut Street, Lane Width Reduction, and Striping / Lane Markings | Yes: Realigned / Reconfigured Intersections, Lateral Shift of S. Walnut Street, Lane Width Reduction, and Striping / Lane Markings |

# S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project

**Thank you** for attending our workshop.
For future information please contact:


**Rob Pierce, Planning Director**
**City of Milford**
rpierce@milford-de.gov
http://cityofmilford.com

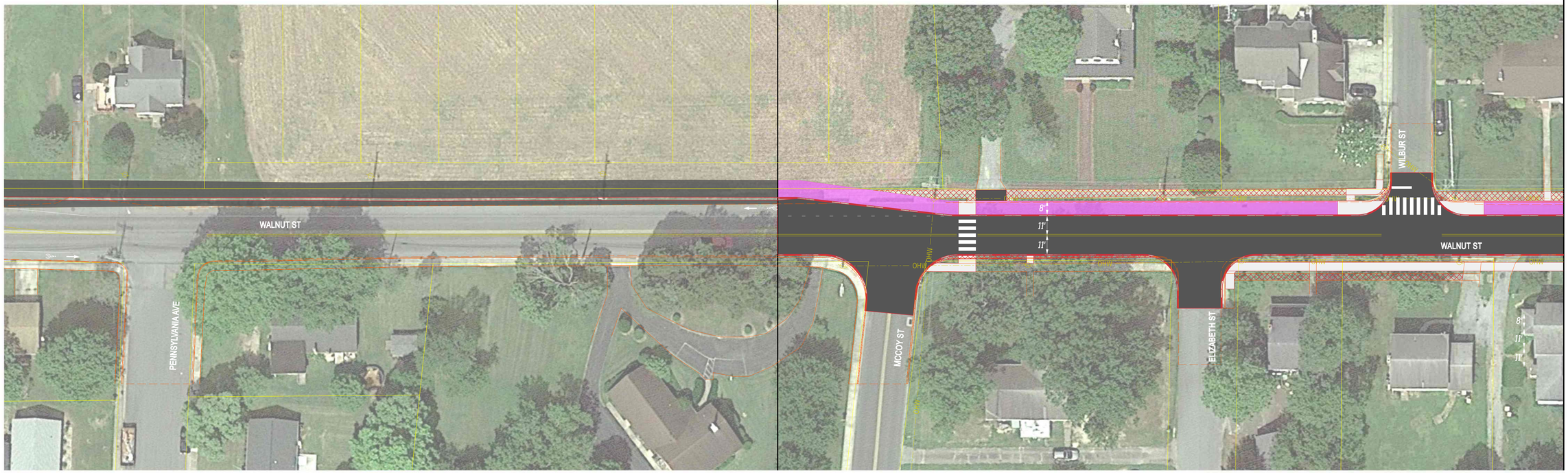
**Sonia Marichic-Goudy**
**Century Engineering**
smarichicgoudy@kleinfelder.com


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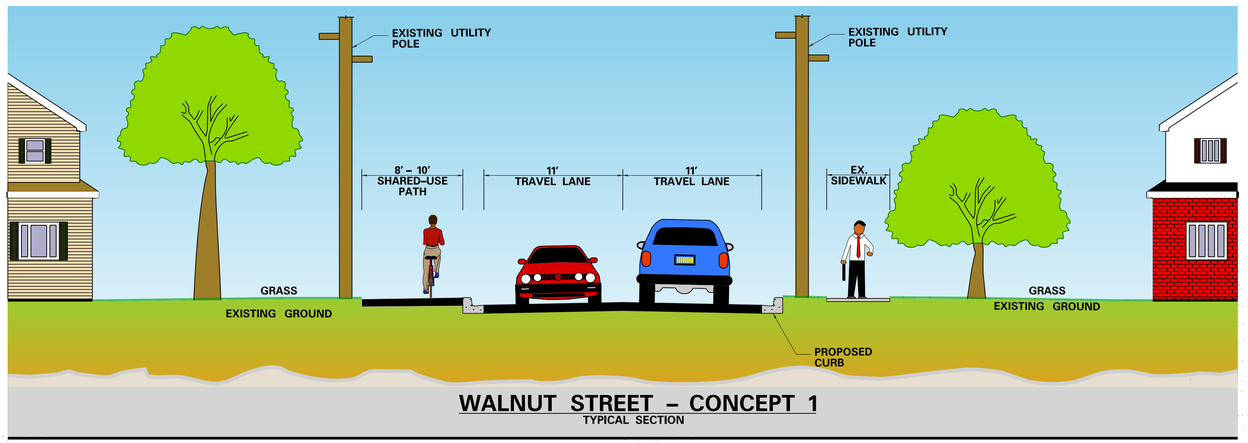
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SIMPSONS CROSSING

CONCEPT 1




MATCHLINE SHEET 2




**WALNUT STREET – CONCEPT 1**
TYPICAL SECTION

LEGEND
- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS

$DATE$
$TIME$
$FILE$

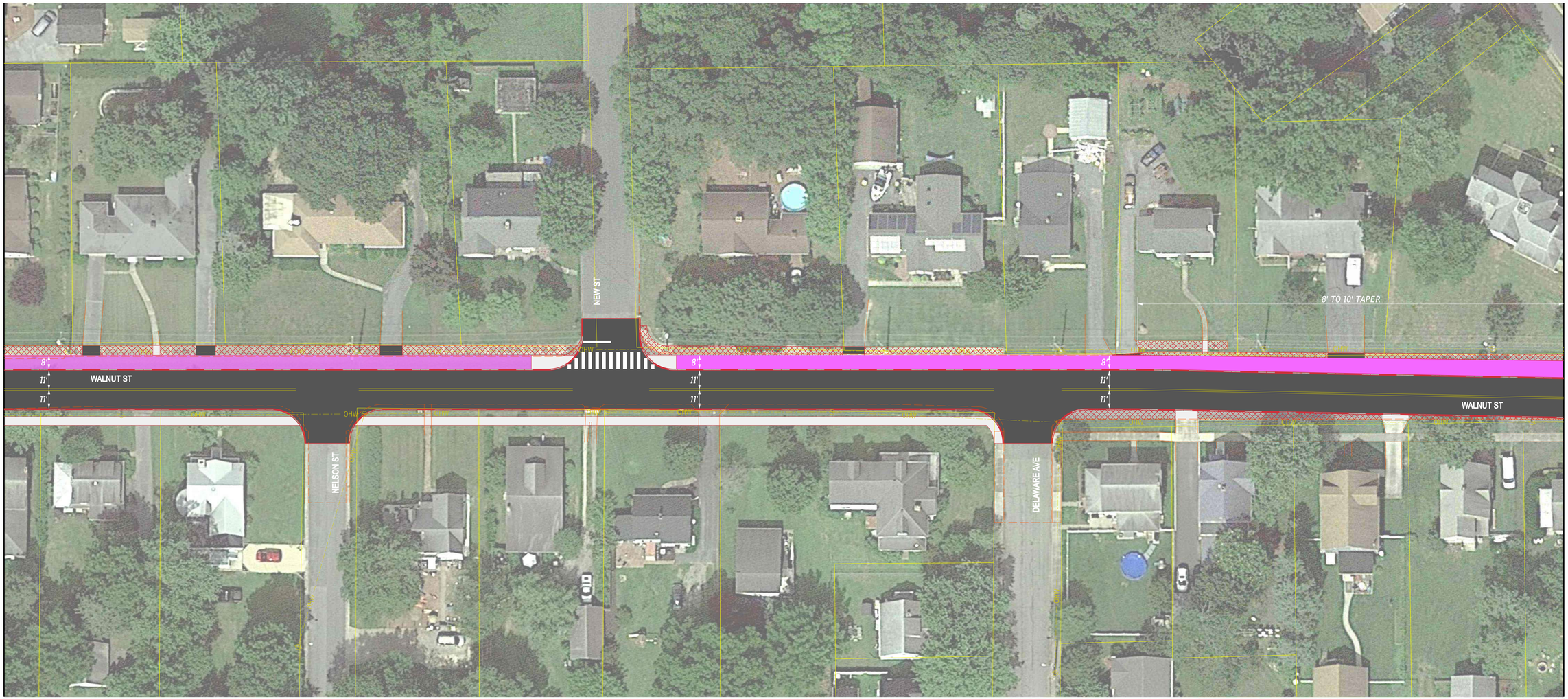
SCALE
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FEET

WALNUT STREET
MILFORD, DE
CONCEPT PLAN

# Option 1

MATCHLINE SHEET 1

MATCHLINE SHEET 3




LEGEND

- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS

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SCALE
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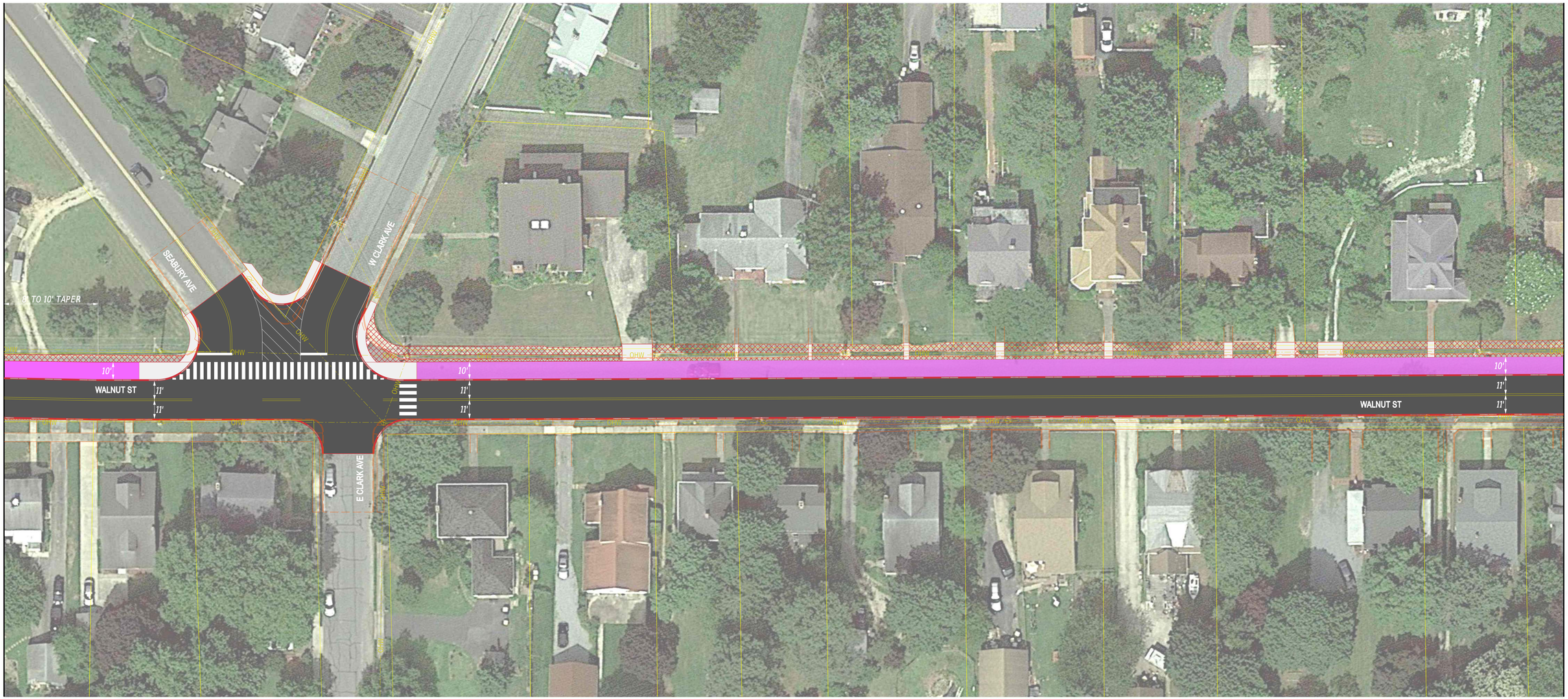
WALNUT STREET
MILFORD, DE
CONCEPT PLAN

# Option 1

N

MATCHLINE SHEET 2

MATCHLINE SHEET 4




LEGEND

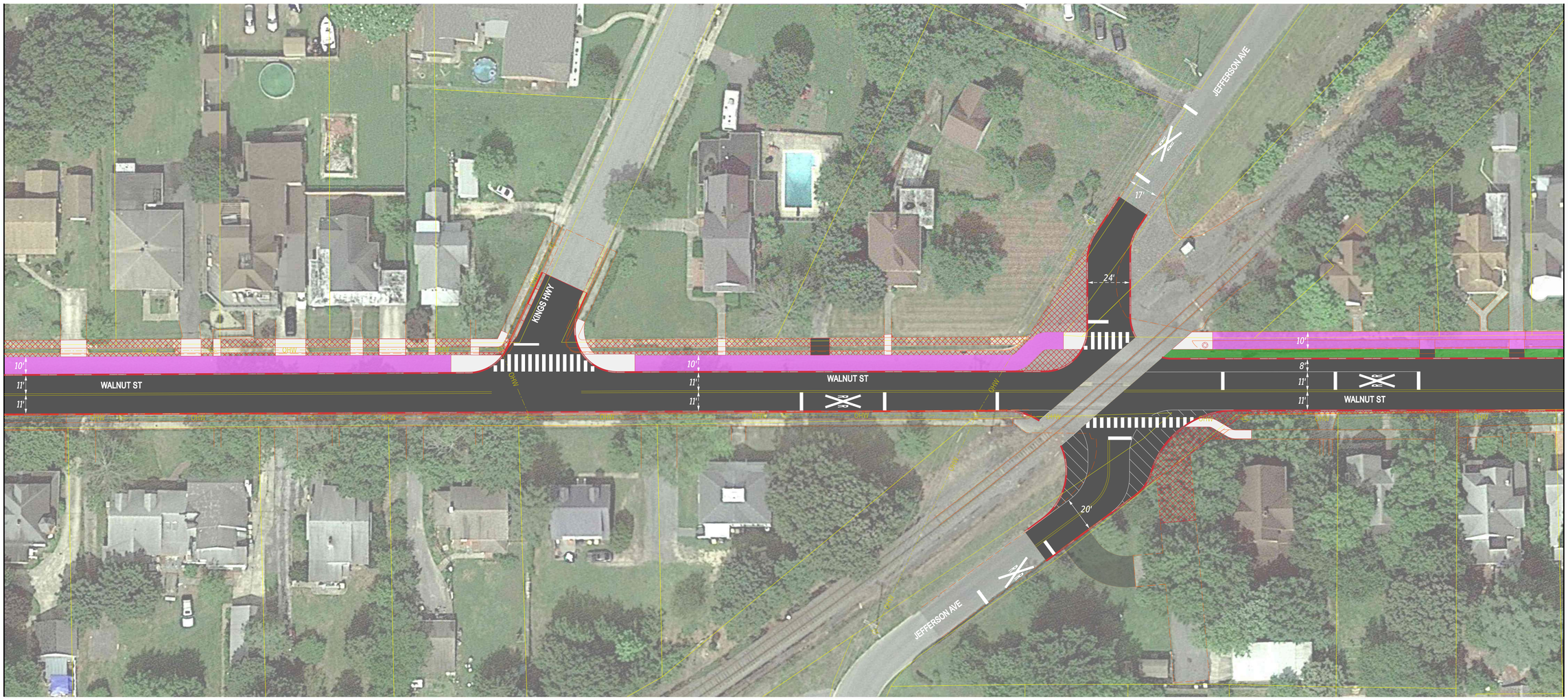
- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS

$DATE$
$TIME$
$FILE$

SCALE
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FEET

WALNUT STREET
MILFORD, DE
CONCEPT PLAN

# Option 1




LEGEND

- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS

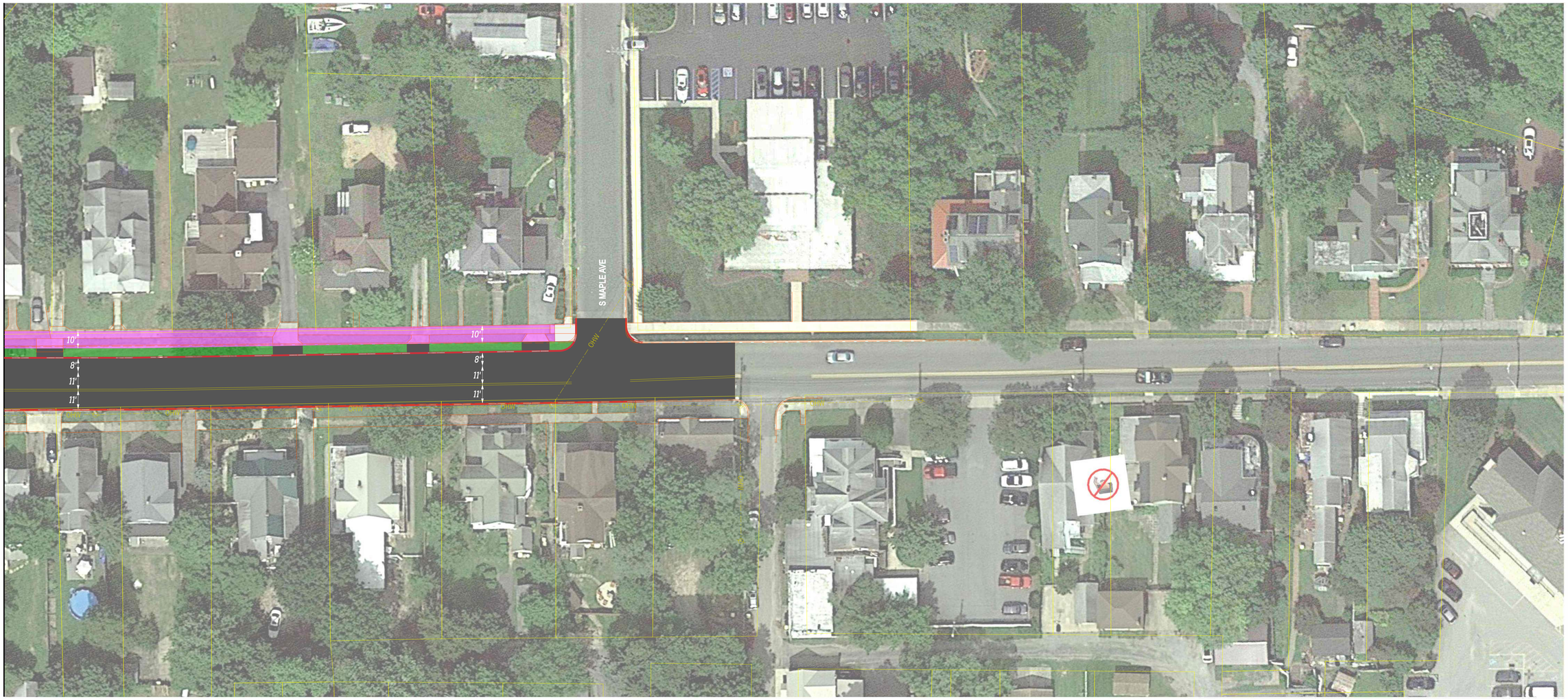
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SCALE
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**WALNUT STREET**
**MILFORD, DE**
**CONCEPT PLAN**

# Option 1

MATCHLINE SHEET 4




LEGEND

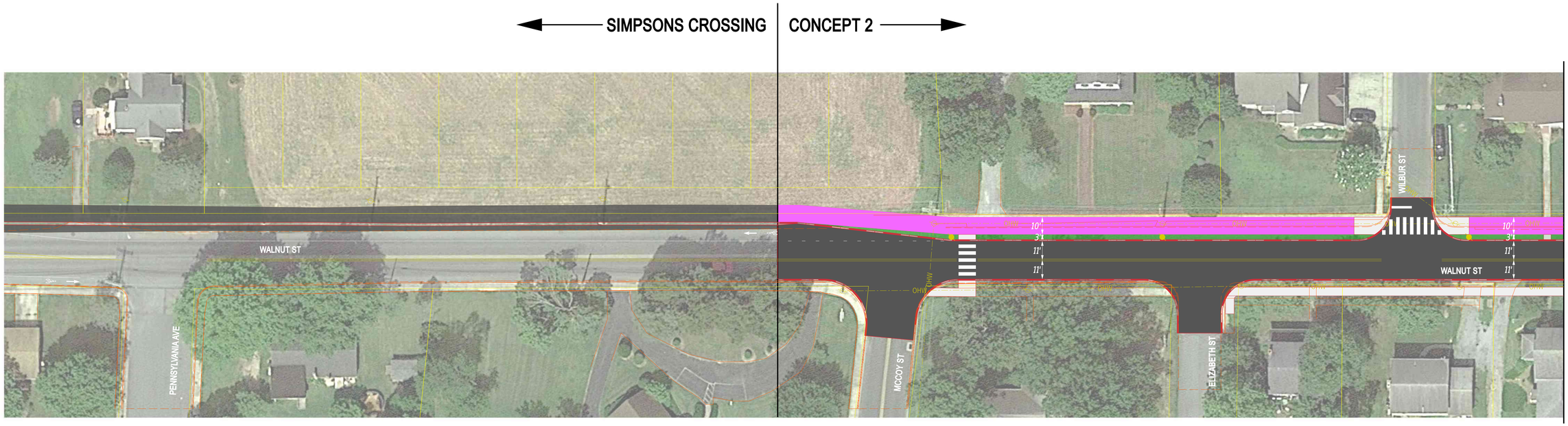
- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS

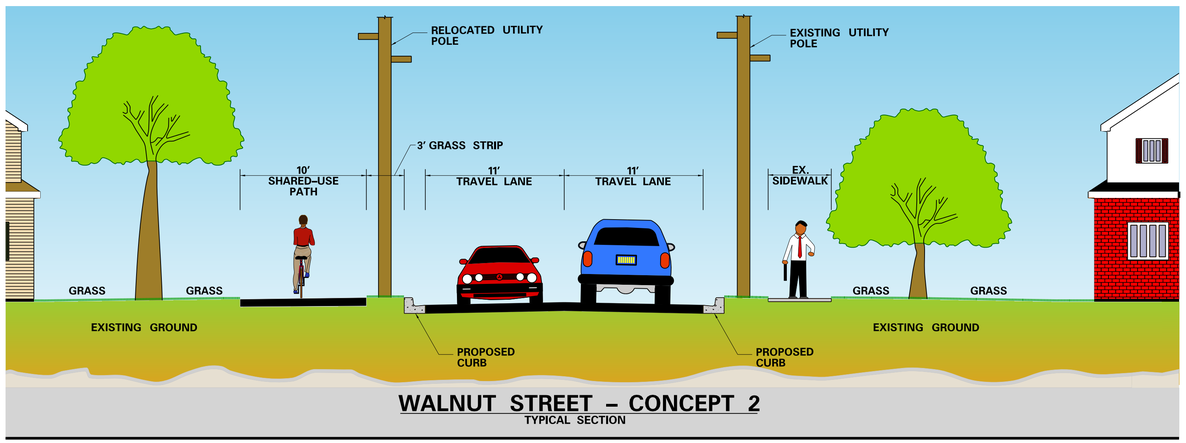
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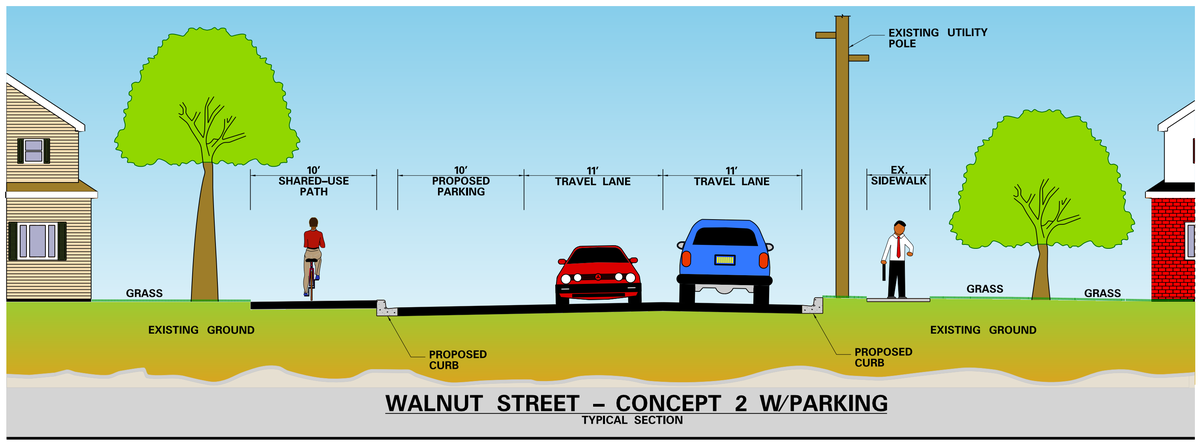
WALNUT STREET
MILFORD, DE
CONCEPT PLAN

# Option 1




**WALNUT STREET – CONCEPT 2**
TYPICAL SECTION




**WALNUT STREET – CONCEPT 2 W/PARKING**
TYPICAL SECTION

LEGEND
- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS

$DATE$
$TIME$
$FILE$

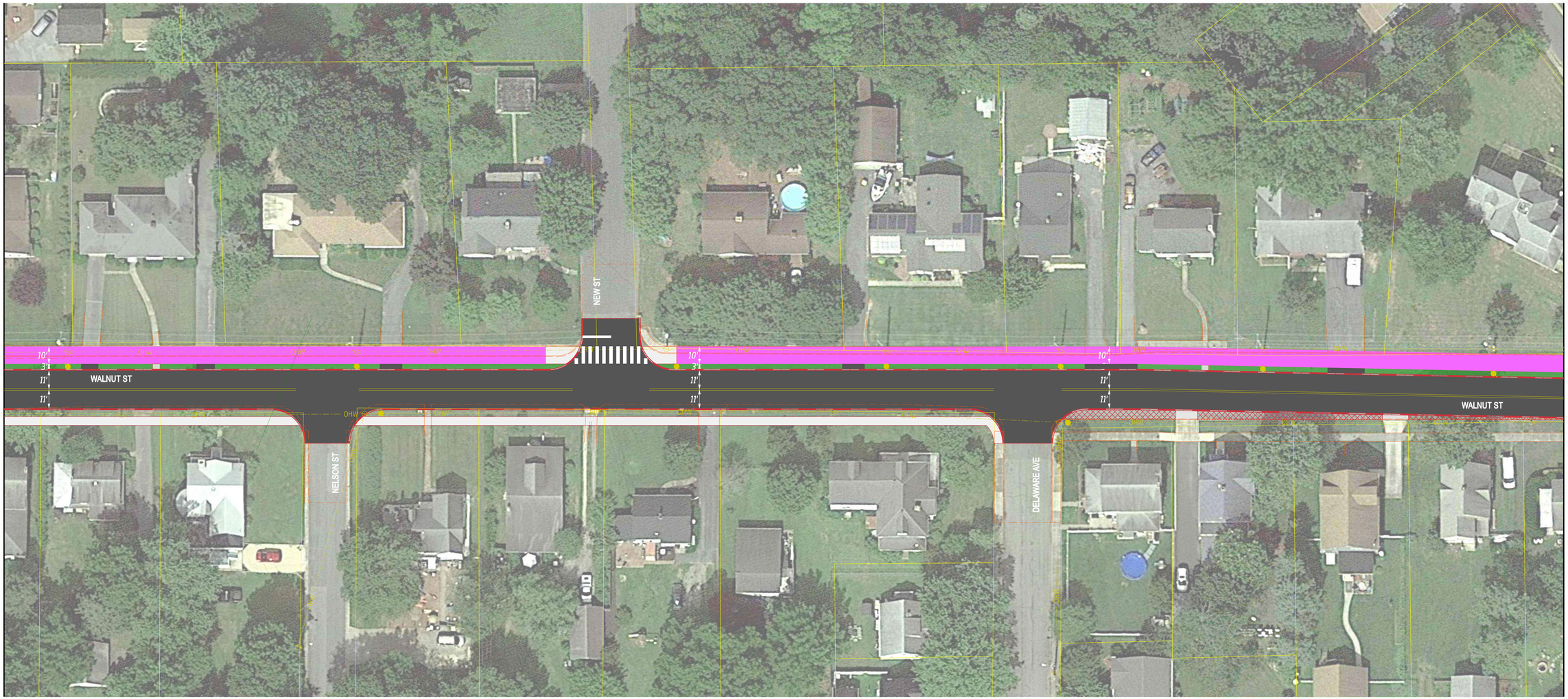
SCALE
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FEET

WALNUT STREET
MILFORD, DE
CONCEPT PLAN

# Option 2

MATCHLINE SHEET 1

MATCHLINE SHEET 3




LEGEND

- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS

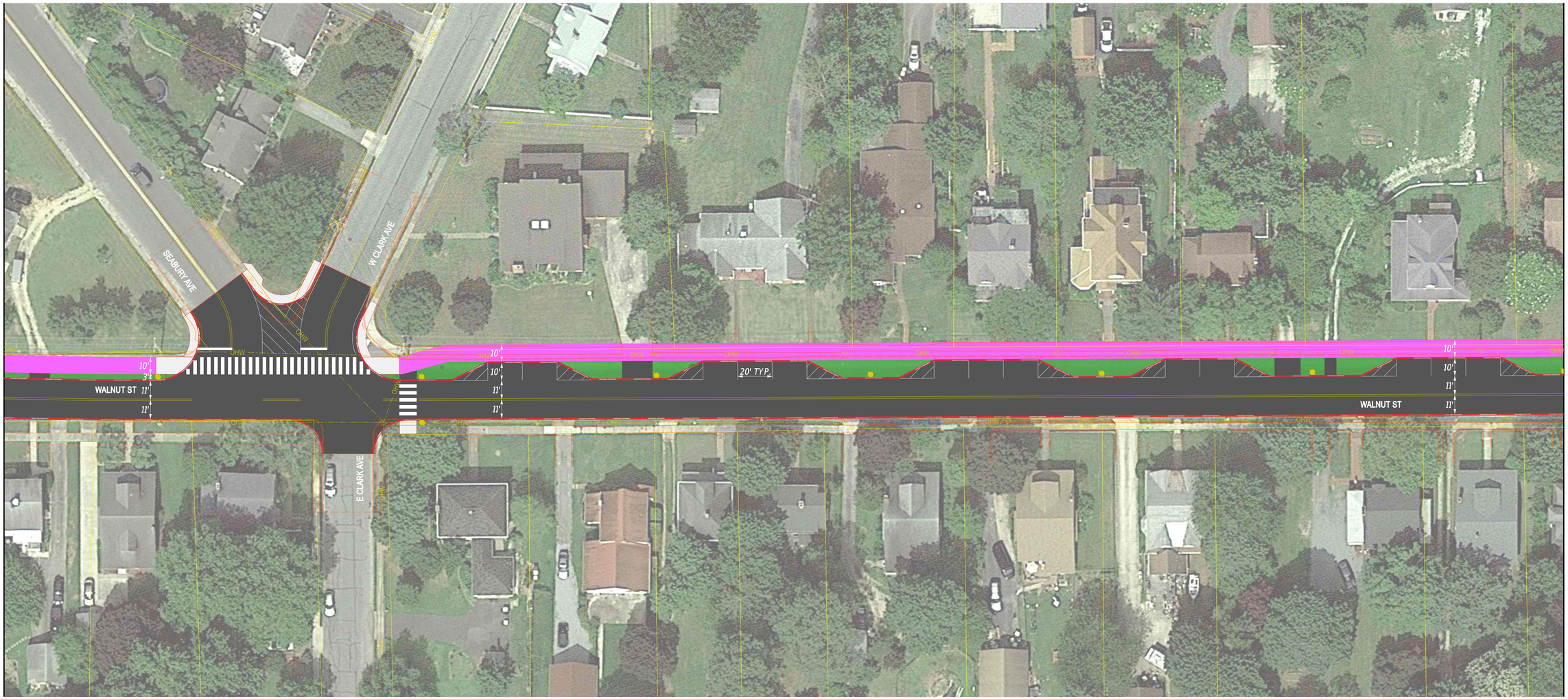
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SCALE
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WALNUT STREET
MILFORD, DE
CONCEPT PLAN

# Option 2

MATCHLINE SHEET 2




MATCHLINE SHEET 4

N

LEGEND

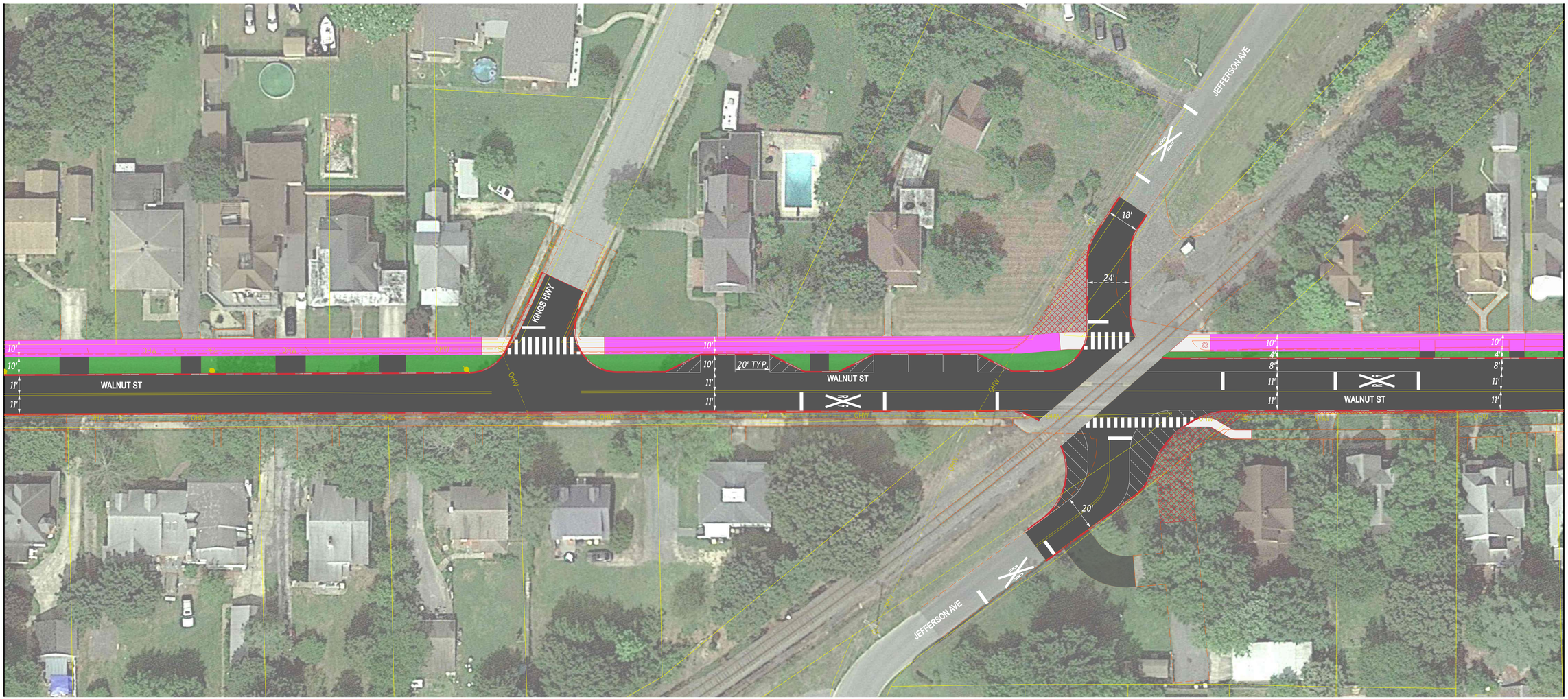
- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS

$DATE$
$TIME$
$FILE$

SCALE
0 30 60 90
FEET

**WALNUT STREET**
**MILFORD, DE**
**CONCEPT PLAN**

# Option 2




LEGEND

- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS

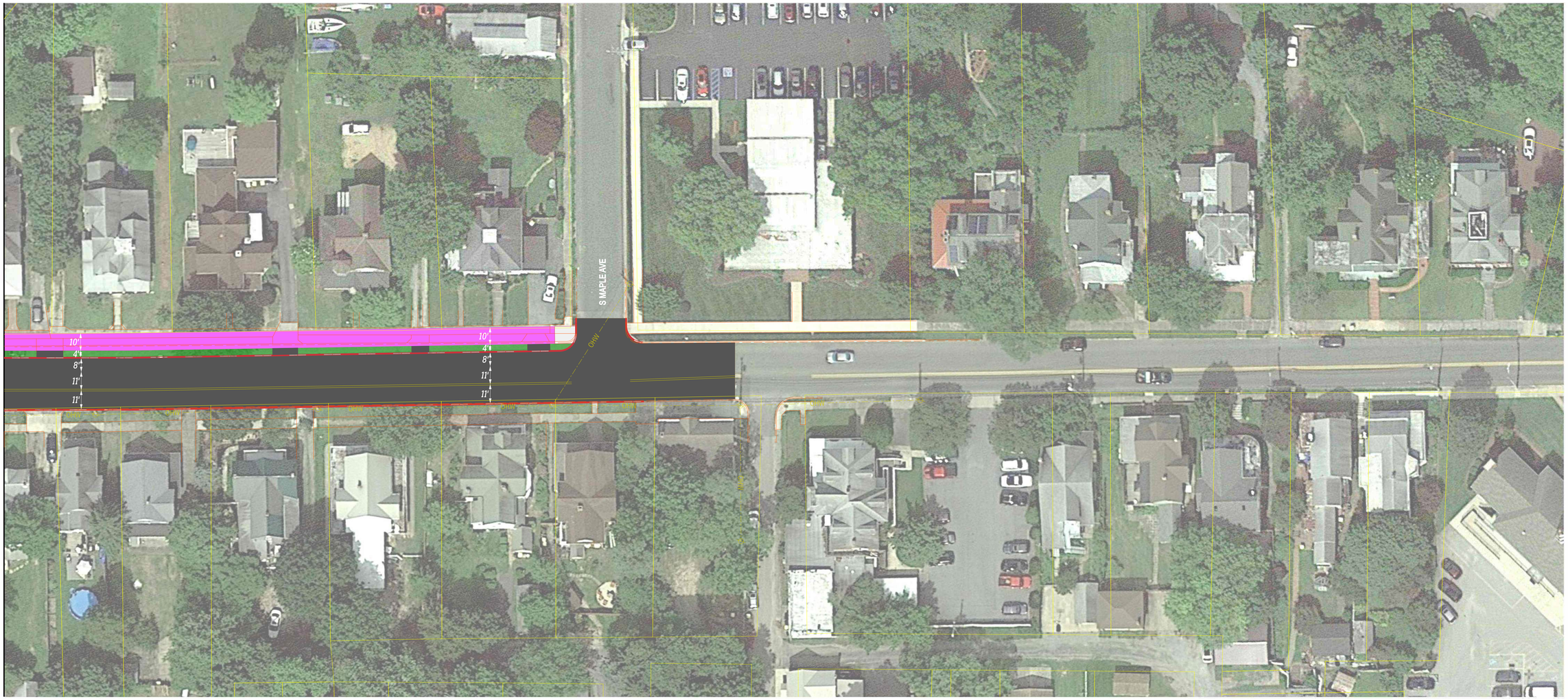
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SCALE
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FEET

**WALNUT STREET**
**MILFORD, DE**
**CONCEPT PLAN**

# Option 2

MATCHLINE SHEET 4




N

LEGEND

- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS

$DATE$
$TIME$
$FILE$

SCALE
0 30 60 90
FEET

WALNUT STREET
MILFORD, DE
CONCEPT PLAN

# Option 2

Scale: 1" = 120'

(40"x30")

December 2022

## LEGEND

- PROPERTY LINES
- EXISTING MULTI-USE PATH / PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED MULTI-USE PATH / PAVEMENT
- PROPOSED GRASS
- CONCEPT MULT-USE PATH
- CONCEPT SIDEWALK
- CONCEPT PAVEMENT

SIMPSONS CROSSING CONCEPT

MILFORD PONDS

SIMPSONS CROSSING

ISAAC LN

CROSSING AVE

WALNUT ST

WILBUR ST

THELMA LN

PENNSYLVANIA AVE

MCCOY ST

ELIZABETH ST

MISPILLION APARTMENTS

WALNUT ST

FLYING GEESE DR

WALNUT ST

# Sign in Sheets

**S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project**

**Community Workshop**

**December 15, 2022**

CENTURY ENGINEERING
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THE CITY of Milford DELAWARE

| | | | |
|---|---|---|---|
| 1 | Name: Christine Reed | Address: 607 S. Walnut St. | Phone: 302.542.2205 |
| | Organization: Resident of S. Walnut | Email Address: chrisweilis@aol.com | |
| 2 | Name: Michael Hahn | Address: 800 Bay Rd. PO Box 778 | Phone: 302-760-2131 |
| | Organization: DelDOT | Email Address: Michael C. Hahn@delaware.gov | |
| 3 | Name: Marcia DAVid | Address: & So. Walnut St. | Phone: 302-388-0246 |
| | Organization: Residents | Email Address: | |
| 4 | Name: Ann Dragon Frawers | Address: 305 S. Walnut St | Phone: 201-317-0756 |
| | Organization: Resident | Email Address: | |
| 5 | Name: Nadia Zychal | Address: 303 S. Walnut St. | Phone: (609) 314-7274 |
| | Organization: res-dent | Email Address: nadiazychal@aol.com | |
| 6 | Name: KEVIN MULLIGAN | Address: 401 S. WALNUT ST | Phone: 904.434.1493 |
| | Organization: RESIDENT | Email Address: | |
| 7 | Name: Sonya LaGrand | Address: DelDOT | Phone: 302-857-4097 |
| | Organization: | Email Address: | |

**S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project**

**Community Workshop**

**December 15, 2022**

CENTURY ENGINEERING
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THE CITY of Milford DELAWARE

| | | | |
|---|---|---|---|
| 8 | Name: Scott Nagy | Address: 2 W Clarke Ave Milford | Phone: 561 445-9880 |
| | Organization: resident | Email Address: Snagy32@comcast.net | |
| 9 | Name: JAN BROWLIK | Address: 2 CANTERBURY AVE MILFORD INFO@CANTERBURYMANSION.COM | Phone: 301-996-8910 |
| | Organization: resident | Email Address: | |
| 10 | Name: Kurt & Holly Fry | Address: 501 S. Walnut St. Milford DE | Phone: 302-745-4437 |
| | Organization: resident | Email Address: | |
| 11 | Name: Todd Colette | Address: 211 S WALNUT ST | Phone: 703-593-2673 |
| | Organization: Council | Email Address: | |
| 12 | Name: JON OHMAN | Address: 607 S. WALNUT St. | Phone: 302 430-4468 |
| | Organization: ~~RESIDENT~~ | Email Address: ohmanjon@aol.com | |
| 13 | Name: Jon Olszyk | Address: 429 S Walnut | Phone: 757 642 1387 |
| | Organization: Resident | Email Address: jon.olszyk@gmail | |
| 14 | Name: Jared Klepsmith | Address: 17137 Windward Blvd Unit 302 Milford DE | Phone: 610 295 3548 |
| | Organization: Resident | Email Address: | |

**S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project**

**Community Workshop**

**December 15, 2022**

CENTURY ENGINEERING
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| | | | |
|---|---|---|---|
| 22 | Name: Toshi Reynolds | Address: 118 N.E. 2ND St, Milford, DE 19963 | Phone: (302)423-4972 |
| | Organization: Resident | Email Address: | |
| 23 | Name: Marilyn J. Smith | Address: | Phone: |
| | Organization: Dover Kent MPO | Email Address: | |
| 24 | Name: | Address: | Phone: |
| | Organization: | Email Address: | |
| 25 | Name: | Address: | Phone: |
| | Organization: | Email Address: | |
| 26 | Name: | Address: | Phone: |
| | Organization: | Email Address: | |
| 27 | Name: | Address: | Phone: |
| | Organization: | Email Address: | |
| 28 | Name: | Address: | Phone: |
| | Organization: | Email Address: | |

**S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project**

**Community Workshop**

**December 15, 2022**

CENTURY ENGINEERING
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| | | | |
|---|---|---|---|
| 15 | Name: F.B. Clendaniel | Address: 302 S. Walnut St. | Phone: 302-270-4611 |
| | Organization: resident | Email Address: brooke@clendaniel.com | |
| 16 | Name: Dave Mills | Address: 320 S. Walnut | Phone: 302-424-7674 |
| | Organization: resident | Email Address: | |
| 17 | Name: Nina Fletcher | Address: 428 S Walnut St. | Phone: 302 357 6129 |
| | Organization: resident | Email Address: ninapletcher@gmail.com | |
| 18 | Name: Sue Linere | Address: 5582 Williamsville Rd | Phone: 302-242-0401 |
| | Organization: resident | Email Address: | |
| 19 | Name: Tim Linere | Address: " " | Phone: " |
| | Organization: resident | Email Address: | |
| 20 | Name: Steve Venett | Address: 509 S Walnut St. | Phone: 302 740 2556 |
| | Organization: resident | Email Address: | |
| 21 | Name: Pamela James + Jason | Address: 1 James Drive - Milford DE | Phone: 302-222-3078 |
| | Organization: Resident | Email Address: | |

**S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project**

**Community Workshop**

**December 15, 2022**

CENTURY ENGINEERING
A Kleinfelder Company

THE CITY of Milford DELAWARE

| | | | | |
|---|---|---|---|---|
| 64 | Name: Christine Reed | Address: 607 S. WALNUT ST | Phone: 302-542-2205 |
| | Organization: RESIDENT OF S. WALNUT | Email Address: chriswilis@aol.com | |
| 65 | Name: Michael Hahn | Address: 800 BAY ROAD P.O. BOX 778 | Phone: 302 760-2131 |
| | Organization: DelDOT | Email Address: Michael.C.Hahn@delaware.gov | |
| 66 | Name | Address | Phone |
| | Organization | Email Address | |
| 67 | Name | Address | Phone |
| | Organization | Email Address | |
| 68 | Name | Address | Phone |
| | Organization | Email Address | |
| 69 | Name | Address | Phone |
| | Organization | Email Address | |
| 70 | Name | Address | Phone |
| | Organization | Email Address | |

# Community Feedback

**Community Workshop for:**
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**December 15, 2022**

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## *Comments:*

1. **Are there specific elements of either option that you like?**
- ~~The options (age) don't meet demographics of those using bike lanes~~ (multi use)
- Like Option 2- keeps some parking, looks nice
- crosswalks & fixes at Clarke/Seabury/Walnut look great

2. **Are there specific elements of either option that concern you?**
Option 2 - cost when moving existing electrical poles
The demographics of the community don't match those using multi use paths on city streets
- Lack of stop signs

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?**
Stop signs! They worked on Seabury.

4. **Please let us know overall which Option you prefer and why.**
Option 2 - Looks nicer and keeps not only some parking but has a barrier between cars!! safety factor is higher

## *Optional:* Please provide your information to stay informed about this project and upcoming information:

Name: Jon Olszyk
Organization: Resident
Address: 429 S Walnut
Email Address: jon.olszyk@gmail.com

☒ Please add my/our name(s) to the Project Mailing List.
☐ Please delete my/our name(s) from the Project Mailing List.

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THE CITY of Milford DELAWARE

**Rob Pierce** | Planning Director
rpierce@milford-de.gov | O: 302.424.8395 | F: 302.424.3559
180 Vickers Dr. | Milford, DE 19963 | www.cityofmilford.com

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## *Comments:*

1. **Are there specific elements of either option that you like?**
Option 2 between W Clarke and the RR-Xing is my preferred choice. I like the segregated bike path and the protected parking

2. **Are there specific elements of either option that concern you?**

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?**
The intersection of WALNUT/Clarke/Seabury need to be an all way Stop

4. **Please let us know overall which Option you prefer and why.**
Option 2. It is more consistent for the length of S. Walnut I feel this would be the more aesthetic option of the two and would add to the beauty of S. Walnut

## *Optional:* Please provide your information to stay informed about this project and upcoming information:

Name: Scott M. Nagy
Organization:
Address: 2 W Clarke Ave Milford DE 19963
Email Address: Snagy32@Comcast.net

☒ Please add my/our name(s) to the Project Mailing List.
☐ Please delete my/our name(s) from the Project Mailing List.

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## *Comments:*

1. **Are there specific elements of either option that you like?**
Traffic calming in general for S. Walnut

2. **Are there specific elements of either option that concern you?**
DO NOT WANT A SIDEWALK RIGHT OUTSIDE MY FRONT DOOR!

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?**
STOP SIGNS AT MCCOY ON S. WALNUT & KINGS HWY.

4. **Please let us know overall which Option you prefer and why.**
Neither if my front yard will be eliminated with a sidewalk.

## *Optional:* Please provide your information to stay informed about this project and upcoming information:

Name: Christine Reed
Organization: Resident
Address: 607 S. WALNUT ST
Email Address: chriswilis@aol.com

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## *Comments:*

1. **Are there specific elements of either option that you like?**
   I like the alignment at Jefferson
   I like addition of Bike path
   I like idea of chicanes

2. **Are there specific elements of either option that concern you?**
   Don't lose trees
   Movement of Electric Poles. Why not bury

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?**
   How about Stops Signs or speed cameras

4. **Please let us know overall which Option you prefer and why.**
   Option 2

## *Optional:* Please provide your information to stay informed about this project and upcoming information:

Name: Ann Dragon & Francis Malinowski
Organization: _____
Address: 305 S. Walnut St.
Email Address: dragon.ann.ma@gmail.com

- ☐ Please add my/our name(s) to the Project Mailing List.
- ☐ Please delete my/our name(s) from the Project Mailing List.

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## *Comments:*

1. **Are there specific elements of either option that you like?**

2. **Are there specific elements of either option that concern you?**
BOTH OPTIONS DO LITTLE TO IMPROVE SAFETY. VERY EXPENSIVE FIX TO A SIMPLE PROBLEM. REDUCE SPEED!!!!

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?**
SPEED LIMIT SIGNAGE, STOP SIGNS

4. **Please let us know overall which Option you prefer and why.**
NONE - YOU ARE GOING TO TAKE 1/3 OF MY FRONT LAWN SO THAT PEOPLE CAN CONTINUE TO SPEED BY MY HOME DOING SIXTY IN A 25 MPH ZONE. PLACE SIGNAGE AND POLICE PRESENCE SO PEOPLE WALKING & BICYCLING DON'T HAVE TO FALL VICTIM TO SPEEDERS IN THE FIRST PLACE.

## *Optional:*

Please provide your information to stay informed about this project and upcoming information:

Name: _____

Organization: _____

Address: _____

Email Address: _____

- ☐ Please add my/our name(s) to the Project Mailing List.
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## *Comments:*

1. **Are there specific elements of either option that you like?**
narrowing the roadway will go a long way toward slowing traffic –

2. **Are there specific elements of either option that concern you?**
– however – vehicles are already side swiped on a regular basis – will narrowing cause more opportunities for side swipe/property damage?

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?** stop signs were very effective on Seabury Consider their usage here on S. Walnut

4. **Please let us know overall which Option you prefer and why.** both have merits – but would be improved with stop signs and by eliminating utility poles entirely. aesthetically option (2) is more pleasing

also – if moving utility poles – consider eliminating them and burying the lines

## *Optional:* Please provide your information to stay informed about this project and upcoming information:

Name: Nadia Zychal
Organization: / home owner
Address: 303 S. Walnut St. Milford
Email Address: nadiazychal@aol.com

☑ Please add my/our name(s) to the Project Mailing List.
☐ Please delete my/our name(s) from the Project Mailing List.

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## *Comments:*

1. **Are there specific elements of either option that you like?**

NO

2. **Are there specific elements of either option that concern you?**

POSSIBLE LOSS OF EXISTING TREES

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?**

SEE OPTIONAL SPEED CAMERA

4. **Please let us know overall which Option you prefer and why.**

NEITHER!
OPTION 3 - 3 STOP SIGNS
(1) McCoy (2) Seabury (3) King's Hwy

## *Optional:* Please provide your information to stay informed about this project and upcoming information:

Name: JAN BROULIK
Organization: CAUSEY MANSION B & B (AT ONE TIME 200 S. WALNUT)
Address: 2 Causey Ave
Email Address: INFO@CAUSEYMANSION.COM

☑ Please add my/our name(s) to the Project Mailing List.
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## *Comments:*

1. **Are there specific elements of either option that you like?**
I like the curves of Option 2

2. **Are there specific elements of either option that concern you?**
I still don't like the Seabury and Clark intersection
I feel there is too many possibilities for accidents
though I personally feel that one of those roads should be deadended

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?**

4. **Please let us know overall which Option you prefer and why.**
I like both, but will choose 2 overall

## *Optional:* Please provide your information to stay informed about this project and upcoming information:

Name: Jared Kleinsmith

Organization: _____

Address: _____

Email Address: _____

- ☐ Please add my/our name(s) to the Project Mailing List.
- ☐ Please delete my/our name(s) from the Project Mailing List.

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## *Comments:*

1. **Are there specific elements of either option that you like?**
Option 2 - barrier between shared space and traffic. Also - if poles have to be moved, we can bury the lines

2. **Are there specific elements of either option that concern you?**
Option 1 - no protection of shared space

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?**
no parking in option 2

4. **Please let us know overall which Option you prefer and why.**
Option 2 - like the protective curb for the shared space

## *Optional:* Please provide your information to stay informed about this project and upcoming information:

Name: Nina
Organization:
Address: 428 S Walnut St
Email Address: ninapletcher2@gmail.com

- ☐ Please add my/our name(s) to the Project Mailing List.
- ☐ Please delete my/our name(s) from the Project Mailing List.

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## *Comments:*

1. **Are there specific elements of either option that you like?**
I like the green grassy area / barrier between the Street and pedistrian/ Bike area

2. **Are there specific elements of either option that concern you?**
If you move or remove electric poles maybe consider underground power. -
DO NOT CUT DOWN TREES! (Replace what you cut)

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?**
Keep up the Brighter lighting / The more the better
MORE STOP Signs

4. **Please let us know overall which Option you prefer and why.**
Option 2 - five ★
I like the narrow road - It makes drivers appear they have to navigate thru at a slow speed

***Optional:*** Please provide your information to stay informed about this project and upcoming information:

Name: M. Reed
Organization: Gallery 37
Address: 8 So. Walnut St.
Email Address: mreedart@aol.com

- ☐ Please add my/our name(s) to the Project Mailing List.
- ☐ Please delete my/our name(s) from the Project Mailing List.

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## *Comments:*

1. **Are there specific elements of either option that you like?**
   Make the bump outs in option 2 as chicanes

2. **Are there specific elements of either option that concern you?**
   Narrowing of the roads will cause more traffic accidents
   How will fire vehicles get through the streets

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?**
   Chicanes for sure

4. **Please let us know overall which Option you prefer and why.**
   Option 2 - for the beautification of the city
   with the option to put shrubery inside the chicanes

## *Optional:* Please provide your information to stay informed about this project and upcoming information:

Name: Pamela James
Organization: Resident
Address: 1 James Drive Milford DE 19963
Email Address: pjames100@comcast.net

☑ Please add my/our name(s) to the Project Mailing List.
☐ Please delete my/our name(s) from the Project Mailing List.

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## *Comments:*

1. **Are there specific elements of either option that you like?**
   make the bumpouts in option 2 as chicanes

2. **Are there specific elements of either option that concern you?**

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?**
   You will definitely need lighting for those who are biking and walking at night.

4. **Please let us know overall which Option you prefer and why.**
   Option 2 - for the beautification for the city.

## *Optional:* Please provide your information to stay informed about this project and upcoming information:

Name: Toshi Reynolds
Organization: Resident
Address: 118 N.E. 2ND St., Milford, DE 19963
Email Address: tr91781@aim.com

- ☐ Please add my/our name(s) to the Project Mailing List.
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## *Comments:*

1. **~~Are there specific elements of either option that you like?~~**
Option 2 would require pole utility lines to be buried which would be good.
However No I don't see any serious traffic calming measures. Why is only McCoy to Maple being studied. What about at least Maple to Causey?

2. **Are there specific elements of either option that concern you?**
Yes, there is only a curb between proposed pedestrian/bike lane & vehicle lanes. There should be bollards, railing or fencing

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?**
Why aren't any stop signs or speed bumps proposed? Have you considered making the Pedestrian Crossings raised bumps in addition to paint? I didn't see any stop signs at these points?
Also, lighting could be improved along some portions.

4. **Please let us know overall which Option you prefer and why.**

Also, the Concept Presentations should be accessible via an easy link on the City web site.

***Optional:*** Please provide your information to stay informed about this project and upcoming information:

Name: Dave Mills

Organization: _____

Address: _____

Email Address: davidmills99@gmail.com

☒ Please add my/our name(s) to the Project Mailing List.

☐ Please delete my/our name(s) from the Project Mailing List.

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## *Comments:*

1. **Are there specific elements of either option that you like?**

(1) CHICANES (2) BIKE PATH WITH GRASS STRIP BETWEEN ROADWAY & BIKE PATH

2. **Are there specific elements of either option that concern you?**

3. **Are there any other elements, such as lighting or additional traffic calming measures, you would like considered?**

SPEED CAMERAS STOP SIGNS, RAISED CROSSWALKS

4. **Please let us know overall which Option you prefer and why.**

OPTION 2, OPTICALLY PLEASING, SAFER

## *Optional:* Please provide your information to stay informed about this project and upcoming information:

Name: DAVID PICKRELL

Organization: GALLERY 37, NORTH POLE CREAMERY

Address: 8 S WALNUT ST

Email Address: DPICKRELLMD37@GMAIL.COM

☑ Please add my/our name(s) to the Project Mailing List.

☐ Please delete my/our name(s) from the Project Mailing List.

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**CITY OF MILFORD**
**S. WALNUT STREET – CONCEPT PLAN**
**COMMENT CARD**

*We would like to hear your thoughts, comments or concerns:*

| | |
|---|---|
| NAME | Holly Fry |
| ADDRESS | 301 S. Walnut St. Milford, De. |
| PHONE # | 302-535-4687 |
| EMAIL | fryitup@comcast.net |
| COMMENTS: | Would be helpful to have more police presence in early mornings & later in evenings. |

*Thank you for your feedback! Additional comments can be emailed to Rob Pierce at rpierce@milford-de.gov.*

**CITY OF MILFORD**
**S. WALNUT STREET – CONCEPT PLAN**
**COMMENT CARD**

*We would like to hear your thoughts, comments or concerns:*

| | |
|---|---|
| NAME | Ann Dragon |
| ADDRESS | 305 S. Walnut St. |
| PHONE # | 201-317-0756 |
| EMAIL | dragon.ann.md@gmail.com |
| COMMENTS: | Raised cross walks at S. Maple & Walnut & Clarke / Seabury / Walnut |

*Thank you for your feedback! Additional comments can be emailed to Rob Pierce at rpierce@milford-de.gov.*

**CITY OF MILFORD**
**S. WALNUT STREET – CONCEPT PLAN**
**COMMENT CARD**

*We would like to hear your thoughts, comments or concerns:*

| | |
|---|---|
| NAME | Christine M Reed |
| ADDRESS | 607 S. WALNUT ST |
| PHONE # | 302 542 2205 |
| EMAIL | chrisw1is@aol.com |
| COMMENTS: | S. WALNUT STREET HAS NO STOP SIGNS OR RED LIGHTS FROM JOHNSON ST IN LINCOLN TO THE RED LIGHT AT THE MUSEUM/CITY HALL ITS A STRETCH OF 2.9 MILES, BUT WILL BE LONGER WHEN THESE ARE REMOVED. SEABURY IS .8 MILES LONG AND RECENTLY GOT 2 4 WAY STOPS |

*Thank you for your feedback! Additional comments can be emailed to Rob Pierce at rpierce@milford-de.gov.*

2 STOP SIGNS ON WALNUT AT MCCOY WOULD SOLVE THIS PROB!

**CITY OF MILFORD**
**S. WALNUT STREET – CONCEPT PLAN**
**COMMENT CARD**

*We would like to hear your thoughts, comments or concerns:*

| | |
|---|---|
| NAME | Scott M. Nagy |
| ADDRESS | 2 W Clarke Ave Milford, DE 19963 |
| PHONE # | 561-445-9880 |
| EMAIL | Snagy32@Comcast.net |
| COMMENTS: | W/E Clarke/Seabury/S walnut need to be an all-way Stop. A Stop sign needs to be added at the corner of Seabury + School pl. in front of St. Johns Church. Truck traffic needs to be restricted on Seabury. Large tractor-trailer trucks and other trucks cannot navigate the turn onto S Walnut without running over the sidewalk and grass |

*Thank you for your feedback! Additional comments can be emailed to Rob Pierce at rpierce@milford-de.gov.*

**CITY OF MILFORD**
**S. WALNUT STREET – CONCEPT PLAN**
**COMMENT CARD**

*We would like to hear your thoughts, comments or concerns:*

| | |
|---|---|
| NAME | JAN BROLLIK & JOEY PHILLIPS |
| ADDRESS | 2 CAUSEY AVE. |
| PHONE # | 301-996-8910 |
| EMAIL | INFO@CAUSEYMANSION.COM |
| COMMENTS: | 3 PUT 'N STOP' SIGNS CHEAPEST OPTION<br>① MCCOY<br>② SEABURY<br>③ KING'S HWY |

*Thank you for your feedback! Additional comments can be emailed to Rob Pierce at rpierce@milford-de.gov.*

CTF Project
NE 10th and Walnut
Rep Postles
Was funded → current status

~~John~~ Jon Lobiondo

Sonia's Comments

# S. Walnut St

1. Keep sidewalks farther from houses that are close to st already
2. Can we put in an allway stop at McCoy + Kings
3. This is part of Victorian Historic District + is forgotten
4. No truck signs on Wilbur toward S. Walnut are gone and now trucks are traveling from Wilbur crossing N. Walnut to McCoy
5. Exist. brick walkway parallel with road b/t R/K + maple - Resident says absolutely no bc historic area
6. This option makes the road bicyclists not able to use road w/ less width
7. TRUCKS turn Right from Seabury onto S Walnut

## Sonia Marichic-Goudy

**From:** Pierce, Rob <rpierce@milford-de.gov>
**Sent:** Monday, December 12, 2022 5:04 PM
**To:** Sonia Marichic-Goudy
**Subject:** FW: Comment for Dec. 15 meeting
**Attachments:** IMG_5613 (2).jpg; 121022_letter to city.docx

**External Email**

---

Sonia,

See attached and below for comments for our upcoming S. Walnut Street meeting.

Rob

---

**From:** Sara M. Bluhm <sbluhm@milford-de.gov>
**Sent:** Saturday, December 10, 2022 3:19 PM
**To:** Pierce, Rob <rpierce@milford-de.gov>
**Subject:** Fwd: Comment for Dec. 15 meeting

Sent from my iPhone

Begin forwarded message:

> **From:** Gwen <tell2gwen@aol.com>
> **Date:** December 10, 2022 at 2:24:41 PM EST
> **To:** "Hudson, Terri" <thudson@milford-de.gov>, "Culotta, Todd" <tculotta@milford-de.gov>, "Sara M. Bluhm" <sbluhm@milford-de.gov>, "Campbell, Archie" <acampbell@milford-de.gov>
> **Subject: Comment for Dec. 15 meeting**
> **Reply-To:** Gwen <tell2gwen@aol.com>
>
> CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.
>
> Hi Rob, Terri, Todd, Sarah, and Mayor Campbell,
>
> Please enter my letter and photo as public comment at the Dec. 15 meeting. I am unable to attend due to a work-related meeting at the same time/ date.
>
> If you have any questions, please email or call.
>
> Thanks for your time, and have a happy, healthy holiday season.
>
> Sincerely,
>
> Gwen Guerke
> 302-236-1084

Dec. 22, 2022

Comment for Dec. 15, 2022 meeting re South Walnut Street traffic calming

My name is Gwen Guerke, and I have lived at 709 S. Walnut St., Milford for 43 years Prior to that, my home was my grandparents' home, so I'm very familiar with the neighborhood and traffic issues.

Most recently, around 7 p.m. on July 11, 2022 while driving home, I stopped at the corner of Elizabeth and South Walnut streets waiting to turn left and then into my driveway. My car was side-swiped by a speeding, unlicensed teen driver who was fleeing another crash on Causey Avenue.(Photo of my car is attached. Police report available; other driver charged.)

I am very fortunate I was not seriously injured, but this incident and photo illustrate the hazards created by speeders and inattentive drivers. I have a city-issued sign in my front yard urging drivers to heed the speed limit. My anecdotal observations are that the sign is ineffective; people speed by all day, every day.

I walk at least three miles nearly every day – and have for years – so I can comment on hazards to pedestrians as well. I used to enjoy riding my bicycle in Milford; I no longer feel safe doing that. As an aside, I don't see many cyclists around town – except for bored youngsters taunting traffic.

I'm not a traffic engineer, so I don't have a solution for this problem, but here's what I see every day: speeding cars, trucks, school buses In both directions, vehicles ignoring stop signs at both McCoy and Wilbur streets, and when I'm walking I notice distracted drivers.

I will say that while vacationing in Oregon this past summer, I saw little traffic circles in residential neighborhoods. They definitely slow traffic!

My guess is that that the increase in traffic volume can be attributed to residential growth in southeast Milford and the location of Bayhealth's Sussex Campus. McCoy and Wilbur streets are definitely shortcuts across town, providing more direct access to US 113.

I hope that this meeting moves beyond discussion and that an action plan is developed and implemented before someone is seriously – or fatally – injured.


POLICE
302-422-8026

## Sonia Marichic-Goudy

**From:** Pierce, Rob <rpierce@milford-de.gov>
**Sent:** Tuesday, December 27, 2022 2:14 PM
**To:** Sonia Marichic-Goudy; Ted Foglietta; Drew Boyce
**Cc:** Sara M. Bluhm; Whitfield, Mark; James Puddicombe; Mike Svaby
**Subject:** S. Walnut Street Traffic Calming & Bike/Ped Open House - Public Comments
**Attachments:** 121022_letter to city.docx; IMG_5613 (2).jpg; Happy Holidays to you; Re: S WALNUT ST "IMPROVEMENT" PROJECT; Re: STOP SIGNS ; S WALNUT ST "IMPROVEMENT" PROJECT; S. Walnut St traffic calming; Scott Nagy.msg

**External Email**

Good afternoon,

See below for a summary of conversations had at the S. Walnut Street Open House. I am also attaching several emails that we received related to the study.

- Resident who lives along S. Walnut Street believes the installation of a stop sign at McCoy Street to create a three-way stop would accomplish speed reduction goal. Doesn't want sidewalk installed in front of her property due to privacy concerns and the potential loss of a tree in the front yard. Feels something needs to be done in the near now as opposed to the larger project being considered. Resident had no objection to the road narrowing.
- Resident who lives along S. Walnut Street doesn't think we need additional stop signs on Walnut, which would create an inconvenience having to stop multiple times. Resident now avoids Seabury to avoid having to deal with stop signs. Same resident doesn't think there is an issue removing the on-street parking because most people don't use S. Walnut Street due to cars being sideswiped in the past. Likes the idea of having connected sidewalks and bike paths.
- Folks generally liked the proposed solution for the Jefferson Street and railroad intersection.
- Concerns regarding the bike path through the historic district in areas where there is existing brick sidewalk.
- Resident liked the location of the proposed crosswalk at Clarke Avenue and McCoy Street.
- If we're going to move the power lines, let's bury them.
- A multi-modal path is not relevant for the age demographic, but perhaps if we build it, they will come.
- Option 2 seemed to be the more popular choice.

Can you forward me copies of the submitted written comments that attendees filled out the night of the meeting for our records?

Rob

Dec. 22, 2022

Comment for Dec. 15, 2022 meeting re South Walnut Street traffic calming

My name is Gwen Guerke, and I have lived at 709 S. Walnut St., Milford for 43 years Prior to that, my home was my grandparents' home, so I'm very familiar with the neighborhood and traffic issues.

Most recently, around 7 p.m. on July 11, 2022 while driving home, I stopped at the corner of Elizabeth and South Walnut streets waiting to turn left and then into my driveway. My car was side-swiped by a speeding, unlicensed teen driver who was fleeing another crash on Causey Avenue.(Photo of my car is attached. Police report available; other driver charged.)

I am very fortunate I was not seriously injured, but this incident and photo illustrate the hazards created by speeders and inattentive drivers. I have a city-issued sign in my front yard urging drivers to heed the speed limit. My anecdotal observations are that the sign is ineffective; people speed by all day, every day.

I walk at least three miles nearly every day – and have for years – so I can comment on hazards to pedestrians as well. I used to enjoy riding my bicycle in Milford; I no longer feel safe doing that. As an aside, I don't see many cyclists around town – except for bored youngsters taunting traffic.

I'm not a traffic engineer, so I don't have a solution for this problem, but here's what I see every day: speeding cars, trucks, school buses In both directions, vehicles ignoring stop signs at both McCoy and Wilbur streets, and when I'm walking I notice distracted drivers.

I will say that while vacationing in Oregon this past summer, I saw little traffic circles in residential neighborhoods. They definitely slow traffic!

My guess is that that the increase in traffic volume can be attributed to residential growth in southeast Milford and the location of Bayhealth's Sussex Campus. McCoy and Wilbur streets are definitely shortcuts across town, providing more direct access to US 113.

I hope that this meeting moves beyond discussion and that an action plan is developed and implemented before someone is seriously – or fatally – injured.

**Sonia Marichic-Goudy**

**From:** jack_carolyn_price@comcast.net
**Sent:** Thursday, December 22, 2022 10:18 AM
**To:** Pierce, Rob
**Cc:** Scott on Clarke; Sara M. Bluhm; Huey, Edward
**Subject:** Happy Holidays to you

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Rob,
We were unable to attend the Open House on Thursday evening to review the South Walnut traffic pattern options. However, we were able to see online the options available.

We liked Option #2 the best. It would be wonderful to be able to ride our bikes on one road safely.

We are not sure what the City plans are for reducing the speed of trucks and cars. The police show themselves occasionally, however, it doesn't seem to be consistent enough to slow traffic down. I understand that they may be understaffed and with the increase in population and traffic, have a huge workload and I totally admire and respect all that they do. The two stop signs have reduced some speeders on Seabury, however, as soon as they are beyond them, they accelerate. And most recently, a car was speeding so fast between the stop signs that it hit a telephone pole requiring the pole to be replaced. Those leaving South Walnut onto Seabury, are often on two wheels and speed all the way to the first stop sign where they have to slam on their brakes or just go through it. We know how hard you have worked and the $ spent on trying to make this town bicycle and walking friendly, however, more needs to be done for safety. This will be especially important when the new Middle School is open. We see a lot of children moving into the developments south of Milford and those kiddos will be attending that

school. And wouldn't it be wonderful to see full bike racks at the new school?

Crosswalks are wonderful only when folks abide by them. We have actually stood in a marked crosswalk with our dogs and a driver gave us the finger as he sped right by. It's pretty simple, Rob, people speed because they **can**. Do you know anyone who speeds through Magnolia or Greenwood?

Another issue that needs to be addressed is the massive truck traffic. Imagine spending $350K+ for a house on Wilbur only to be inundated with loaded construction and lumber trucks driving by their front door all day long? While turning onto Pine Street relieves us, many trucks don't want to navigate the awkward corner on Seabury and South Walnut and when they do, they take up two lanes to turn and often encroach the curbs and grass boulevards across the street to make that corner. Yesterday, a fully loaded gasoline tanker cut through residential streets which was not only annoying, but very scary. You have to admit that a loaded semi-truck driving through our downtown, while children are in line to visit Santa is a bit dangerous, as well as loaded flatbeds cruising in front the Post Office on Causey Avenue as people exit their cars. We witness these trucks speeding up side streets and residential developments like Lakelawn Estates as we walk our dogs every morning. Not only are trucks dangerous, but also traveling at higher speeds on streets that are not State, therefore, tearing up streets the tax payers of Milford need to repair and replace. This doesn't even account for the decibel levels these trucks cause within these residential streets. In Minneapolis and surrounding suburbs, they have noise ordinances in place. In Alexandria VA there are stop signs at every corner and 2 and 3 speed bumps in between.

I do have some ideas for a solution.

1. For trucks coming from the south on #113, to turn at the Lincoln light and take Marshall ext. to McCoy and enter the South industrial area from there or continue to Wilkins to connect to Route #1.
2. For trucks coming from north #113, take Business Route 1 to Wilkins Rd and then turn onto Elks Rd to enter the south industrial area (Lumber 84). Or, those accessing the industrial area off Airport Rd., to use #113 only to access that road.
3. For trucks coming in from North or South on Route 1, turn off at the Bayhealth overpass and enter south Milford from Wilkins and Elks Road. Or, to get to #113, use Business Route 1 and cross over to #113 at 10th street, therefore, keeping trucks from our tiny downtown area.
4. For trucks coming from Route 36, turn onto Fitzgeralds Road and go through Lincoln and drive north on Marshall Ext. or continue to Wilkins to access Route #1.
5. Trucks servicing the local restaurants, while somewhat inconvenient, enter from the nearest highway and leave the same way.

Somehow, Bridgeville and other communities have managed to provide a truck route(s) circumventing their town. While GPS has caused much of the problem, signage that does **not** give way to 'local traffic,' (which all trucks would claim to be), would be the only other alternative.

Yes, I know you are aware of all of this, however, it's only going to increase and if Milford doesn't work out this problem soon, we will become truck city which will completely defeat all the work you have done to make this a safe walking and bicycle community. In my opinion, addressing the problems first will help the City of Milford reach its goals.

I thank you for all the work you do for our City. And, wish you a wonderful holiday season!

Carolyn Price
611 Seabury Avenue
Milford, DE 19963

**Sonia Marichic-Goudy**

---

**From:** Brooke Clendaniel <brooke@clendaniel.com>
**Sent:** Friday, December 16, 2022 2:58 PM
**To:** Pierce, Rob
**Subject:** Re: S WALNUT ST "IMPROVEMENT" PROJECT

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Rob,

I find the shared use path totally out of character within the historic district.

And if it is to be a blacktopped mini-road, it is definitely out of place.

Are the drawings available online for further study? My wife was unable to attend and would like to see them.

Thanks,

*Brooke*

FRANK BROOKE CLENDANIEL

Home:
302 South Walnut Street
Milford, Delaware 19963-1960

Office:
CLENDANIEL & CO., LTD.
18854 Butler Avenue
Lincoln, Delaware 19960-3152

PO Box 34
Lincoln DE 19960-0034

302.270.4611

brooke@clendaniel.com

## Sonia Marichic-Goudy

**From:** Michael Schonewolf <mjswolf@icloud.com>
**Sent:** Monday, December 19, 2022 9:20 AM
**To:** Pierce, Rob
**Subject:** Re: STOP SIGNS

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

18600 Eleanor Lane
Milford De 19963

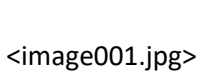
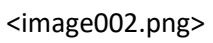
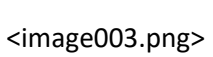
Sent from my iPhone

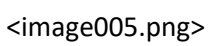
On Dec 19, 2022, at 8:59 AM, Pierce, Rob <rpierce@milford-de.gov> wrote:

Michael,

Thank you for your comments. Can you provide your address for our records?

Also, we are working on getting the materials from last Thursday posted on the City website. The study area included all of S. Walnut Street between McCoy Street and Maple Avenue and included recommendations for traffic calming, adding sidewalks where they are not currently present and replacing the sidewalk on the west side with a shared use path. We were not proposing bike lanes within the paved section of the roadway, but a separate side path similar to what you see down around the new hospital or out at Milford Plaza Shopping Center.




**Rob Pierce** | Planning Director
rpierce@milford-de.gov | O: 302.424.8395 | F: 302.424.3559

180 Vickers Dr. | Milford, DE 19963 | www.cityofmilford.com

-----Original Message-----
From: Michael Schonewolf <mjswolf@icloud.com>
Sent: Monday, December 19, 2022 7:24 AM

To: Pierce, Rob <rpierce@milford-de.gov>
Subject: STOP SIGNS

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

This what is needed not bike lanes!!!!!!!

Sent from my iPhone

**Sonia Marichic-Goudy**

**From:** Brooke Clendaniel <brooke@clendaniel.com>
**Sent:** Friday, December 16, 2022 11:26 AM
**To:** Pierce, Rob
**Subject:** S WALNUT ST "IMPROVEMENT" PROJECT
**Attachments:** NATIONAL REGISTER.pdf

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Mr. Pierce:

Attached please find the Multiple Resource Nomination for the three National Register Historic Districts in Milford.

The Victorian South Milford Historic District with the 300 block of South Walnut Street was listed on the National Register of Historic Places by the United States Department of the Interior on January 7, 1983.

The engineers last evening did not even know about the historic district. Your plans will need further review and approval due to the listing of the district on the National Register.

If you have any questions or wish to discuss the situation, please call me. I have expressed my opinion to my councilman -- I am Todd Culotta's uncle!

*Brooke*

FRANK BROOKE CLENDANIEL

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Milford, Delaware 19963-1960

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18854 Butler Avenue
Lincoln, Delaware 19960-3152

PO Box 34
Lincoln DE 19960-0034

302.270.4611

brooke@clendaniel.com

**Sonia Marichic-Goudy**

---

**From:** kathy.stetson@gmail.com
**Sent:** Tuesday, December 20, 2022 9:21 AM
**To:** Culotta, Todd; Fulton, Andrew P.; Pierce, Rob
**Subject:** S. Walnut St traffic calming

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

My address is 311 S. Walnut St. I moved here about a year ago. I was unable to attend the recent informational meeting regarding the problem of speeding on S. Walnut St. due to illness, however, I wanted to submit these comments:

1. The speeding on Walnut is a definite problem. This is a main route through to the downtown area and is used by many people to access the downtown area, City Hall and city services, both highways and the hospital and schools.
2. The street is uninterrupted by stop signs or traffic signals from Lincoln until SE 2nd Street near City Hall. This provides a miles of opportunity to build up speed by inattentive drivers.
3. The same problem was noted along Seabury and was addressed by the addition of two all-way stop signs. Since that time it seems that traffic speed has been somewhat reduced. At the least, drivers are made aware of the need to slow down.

I request that the City begin to address the speeding issue on Walnut by using the same method. Installation of all-way stops at three or four intersections: McCoy, Seabury/Clarke, Kings, and Church St. This would be a very cost-effective beginning. Monitoring these measures over time could prove to be enough traffic-calming and give the residents some relief.

The addition of bike lanes (someone mentioned this as a proposal) should ONLY be undertaken AFTER traffic has been slowed down, in my opinion. Expecting traffic to slow down BECAUSE of bike lanes seems to be a recipe for tragedy.

Thank you for your consideration.

Kathryn Stetson
311 S. Walnut St
206/851-4336 (talk or text)

## Sonia Marichic-Goudy

**From:** Scott M Nagy <snagy32@comcast.net>
**Sent:** Tuesday, December 27, 2022 11:49 AM
**To:** Pierce, Rob
**Cc:** jack_carolyn_price@comcast.net; Sara M. Bluhm; Huey, Edward
**Subject:** Re: Happy Holidays to you

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Rob,
I am included on this thread and I have a few comments myself.
I live on the corner of W Clarke and Seabury. (Yellow house/white fence) I witness southbound S Walnut street turn onto seabury and accelerate hard to way beyond the speed limit. Add to that the obnoxious exhaust systems some of these vehicles have adds to the problem, but that's a different conversation. I attended the meeting on the 15th and nobody from Century could tell me why an all way stop was not part of the speed reduction proposal for the corner in front of my house. I watch cars speed by and pass on the double yellow line in front of my house all the time. In my opinion, it is needed not just for speed control, but for safety of turning vehicles and pedestrians crossing the street.
Century stated there were four accidents on my corner, but I can attest to at least double that. Four may have been reported, but many are just minor scrapes where police services are not called and go unreported. The reason for these accidents is again, cars turning from a walnut onto seabury. Drivers on W Clarke start to pull out and clip the car making the turn. I also witness tractor trailers (and other trucks) making the hard right turn from seabury onto S Walnut and almost always running over my neighbors sidewalk and even up onto their grass. They have five children. What if a younger one got curious and ran to the corner of their property to watch the truck and got run over because he thought he was safe on his property?
I also cannot fathom why the busiest area of Seabury (St John's church) where people are crossing the street with obscured vision due to parked cars of parishioners attending services did not get a stop sign. If your intel tells you that cars are not reaching excessive speeds from my corner to the church, then your intel is wrong. I witness vehicles when I am out walking my dog pass the church in excess of 40 mph, with cars parked on both sides of the street on a daily basis. This is not hyperbole, I spent 33 years of my life as an air traffic controller and I am very good at assessing speeds. An all way stop is desperately needed at that intersection and we don't need to spend thousands of dollars on a study to confirm it. It's common sense because it's only a matter of time before someone gets hit by a car in front of the church.
I witness vehicles not even attempting to stop at the new stop signs on Seabury regularly. I believe this is people annoyed at the changes to the community because new residents are moving into the area and if it wasn't for all these "out of staters" moving in, we wouldn't need any change. I read these kind of comments on social media all the time.
I support option 2 along with the additional stop signs that I have stated above. Our police cannot be at all places at all times and traffic control measures need to be instituted on some of these roads that are exposed to a lot more traffic than they were just a few years ago.

Respectfully,

Scott Nagy
Milford, DE

Sent from my wireless device

On Dec 27, 2022, at 10:10 AM, Pierce, Rob <rpierce@milford-de.gov> wrote:

Thanks Carolyn. We will includes these comments in our summary of the open house.

Rob

---

**From:** jack_carolyn_price@comcast.net <jack_carolyn_price@comcast.net>
**Sent:** Thursday, December 22, 2022 10:18 AM
**To:** Pierce, Rob <rpierce@milford-de.gov>
**Cc:** Scott on Clarke <snagy32@comcast.net>; Sara M. Bluhm <sbluhm@milford-de.gov>; Huey, Edward <edward.huey@cj.state.de.us>
**Subject:** Happy Holidays to you

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Hello Rob,
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We liked Option #2 the best. It would be wonderful to be able to ride our bikes on one road safely.

We are not sure what the City plans are for reducing the speed of trucks and cars. The police show themselves occasionally, however, it doesn't seem to be consistent enough to slow traffic down. I understand that they may be understaffed and with the increase in population and traffic, have a huge workload and I totally admire and respect all that they do. The two stop signs have reduced some speeders on Seabury, however, as soon as they are beyond them, they accelerate. And most recently, a car was speeding so fast between the stop signs that it hit a telephone pole requiring the pole to be replaced. Those leaving South Walnut onto Seabury, are often on two wheels and speed all the way to the first stop sign where they have to slam on their brakes or just go through it. We know how hard you have worked and the $

spent on trying to make this town bicycle and walking friendly, however, more needs to be done for safety. This will be especially important when the new Middle School is open. We see a lot of children moving into the developments south of Milford and those kiddos will be attending that school. And wouldn't it be wonderful to see full bike racks at the new school?

Crosswalks are wonderful only when folks abide by them. We have actually stood in a marked crosswalk with our dogs and a driver gave us the finger as he sped right by. It's pretty simple, Rob, people speed because they **can**. Do you know anyone who speeds through Magnolia or Greenwood?

Another issue that needs to be addressed is the massive truck traffic. Imagine spending $350K+ for a house on Wilbur only to be inundated with loaded construction and lumber trucks driving by their front door all day long? While turning onto Pine Street relieves us, many trucks don't want to navigate the awkward corner on Seabury and South Walnut and when they do, they take up two lanes to turn and often encroach the curbs and grass boulevards across the street to make that corner. Yesterday, a fully loaded gasoline tanker cut through residential streets which was not only annoying, but very scary. You have to admit that a loaded semi-truck driving through our downtown, while children are in line to visit Santa is a bit dangerous, as well as loaded flatbeds cruising in front the Post Office on Causey Avenue as people exit their cars. We witness these trucks speeding up side streets and residential developments like Lakelawn Estates as we walk our dogs every morning. Not only are trucks dangerous, but also traveling at higher speeds on streets that are not State, therefore, tearing

up streets the tax payers of Milford need to repair and replace. This doesn't even account for the decibel levels these trucks cause within these residential streets. In Minneapolis and surrounding suburbs, they have noise ordinances in place. In Alexandria VA there are stop signs at every corner and 2 and 3 speed bumps in between.

I do have some ideas for a solution.

1. For trucks coming from the south on #113, to turn at the Lincoln light and take Marshall ext. to McCoy and enter the South industrial area from there or continue to Wilkins to connect to Route #1.
2. For trucks coming from north #113, take Business Route 1 to Wilkins Rd and then turn onto Elks Rd to enter the south industrial area (Lumber 84). Or, those accessing the industrial area off Airport Rd., to use #113 only to access that road.
3. For trucks coming in from North or South on Route 1, turn off at the Bayhealth overpass and enter south Milford from Wilkins and Elks Road. Or, to get to #113, use Business Route 1 and cross over to #113 at 10th street, therefore, keeping trucks from our tiny downtown area.
4. For trucks coming from Route 36, turn onto Fitzgeralds Road and go through Lincoln and drive north on Marshall Ext. or continue to Wilkins to access Route #1.
5. Trucks servicing the local restaurants, while somewhat inconvenient, enter from the nearest highway and leave the same way.

Somehow, Bridgeville and other communities have managed to provide a truck route(s) circumventing their town. While GPS has caused much of the problem, signage that does **not** give

way to 'local traffic,' (which all trucks would claim to be), would be the only other alternative.

Yes, I know you are aware of all of this, however, it's only going to increase and if Milford doesn't work out this problem soon, we will become truck city which will completely defeat all the work you have done to make this a safe walking and bicycle community. In my opinion, addressing the problems first will help the City of Milford reach its goals.

I thank you for all the work you do for our City. And, wish you a wonderful holiday season!

Carolyn Price
611 Seabury Avenue
Milford, DE 19963

## Sonia Marichic-Goudy

**From:** Chris Reed <chriswilis@aol.com>
**Sent:** Sunday, January 15, 2023 1:01 PM
**To:** Pierce, Rob
**Subject:** South Walnut Street modifications

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Mr. Pierce,

I'm writing to you so you may present this to the council and other decision makers for the installation of sidewalks/bike lanes and take my situation into consideration when making modifications to add sidewalks to properties on the South Walnut Street.

If not the closest, my home is possibly one of the closest homes to the street on South Walnut Street with a useable front porch. When I look at the plans for sidewalk installation in front of my home I see that it will require removal of a fairly large tree, my flagpole and I will have to move my mailbox. The result of the installation will be that I'll have sidewalks very close to my front porch. I spend a lot of time relaxing on my porch and currently feel it is somewhat private.

With the new sidewalks so close to the steps and porch and removal of my tree I'll lose any privacy that I currently have. I grew up in a home with a large front porch and spent a lot of time playing, socializing, talking with neighbors and even "sleeping out" on the front porch at my family home and cherish those special memories. I remember when I saw this house at 607 South Walnut I fell in love with it because it had a nice front porch that my friends, family, neighbors and I could use to spend time together.

I'm submitting this as a request for the city to consider a much smaller area between the curb and sidewalk or possibly placing the sidewalk next to the curb in front of my home. If the city would honor my request I could continue to enjoy my home and it's front porch.

Thank you for your time,
Christine M. Reed
607 S Walnut Street
Milford, DE 19963
302-542-2205

January 15, 2023

Make a loan, change a life. Kiva.org

## Sonia Marichic-Goudy

**From:** Pierce, Rob <rpierce@milford-de.gov>
**Sent:** Thursday, January 19, 2023 12:34 PM
**To:** Sonia Marichic-Goudy
**Cc:** Drew Boyce; Ted Foglietta
**Subject:** FW: Kevin Mullican - Traffic Calming Presentation

**External Email**

More comments.

Rob

**From:** KEVIN E MULLICAN <kemdesigner@att.net>
**Sent:** Thursday, January 19, 2023 9:22 AM
**To:** Pierce, Rob <rpierce@milford-de.gov>
**Cc:** JAY JOHNSON <jjohnson32277@bellsouth.net>; 'info causeymansion.com' <info@causeymansion.com>; 'Nadia Zychal' <nadiazychal@aol.com>; bdavidwalp@gmail.com; Brad@athomecabinetry.com; bdonovan31@yahoo.com; Prisgraven@comcast.net; 'Chris Reed' <chriswilis@aol.com>; 'Dave Mills' <davidmills9901@gmail.com>; 'David Pickrell' <dpickrellmd37@gmail.com>; 'Marcia Reed' <mreedinart@aol.com>; 'Todd Culotta' <todd@bayprorestore.com>; dragon.ann.m@gmail.com
**Subject:** Kevin Mullican - Traffic Calming Presentation

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning Rob,

Here are a few of my thoughts in regards to the traffic calming study for South Walnut Street presented by the State.

In option #1 the bike path moves to the east into the existing road area. The existing sidewalk (which could remain) is removed. So pedestrians and cyclists are expected to share this new path. I've personally never liked these type of paths. There seems to always be conflict between the two uses. Also, it seems a waste to remove all the sidewalks on the west side of the road if the bike path is going to be separate. Some of these sidewalks were just replaced last year. It seems it would be better to keep cyclists and pedestrians on separate paths. There would be less cost keeping the sidewalks as they would not need to be demolished and removed and replaced with new soil.

In option #2 the bike path replaces the existing sidewalk and grass shoulder on the west side of the road. This allows for a 10' wide grass shoulder on the west side of the road between Jefferson and West Clark. There is also on street parking shown within this grass area. I don't really think the on street parking is needed as people rarely park on the street in this area. Most of these homes have very large lots and driveways. Most also have rear alley access with additional garages / parking. It would be nice aesthetically if this was a continuous green area planted with street trees.

These solutions are more focused on cyclists than pedestrians. There are no pedestrian crosswalks shown at many of the side street. Also, very few are shown crossing over South Walnut. It would be nice to see pedestrian crosswalks at every intersection, such as Savannah Road in Lewes.

According to the State, the only traffic calming feature of these designs will be narrowing of the traffic lanes. In my opinion these drawings look nice, but don't really address the constant speeding issues. The traffic lanes by City hall and downtown are already narrow. There is parking on each side of the street downtown which narrows the lanes further. You can stand downtown and watch many cars speeding through.

Also, how many years will the design, funding and construction take for either of these options? The current NE Front Street reconstruction has taken many years. Also, either of these options will cost millions of dollars to implement. Both of these options are expensive and time consuming.

Jay and I would like to see an option that could be implemented in the near future for minimal cost. We are in favor of all way stops on South Walnut at Maple, Kings Hwy and West Clark / Seabury. Painted pedestrian crossings could be added at each intersection. This solution could be implemented immediately for minimal cost. The two new all way stops on Seabury have made an incredible difference in the volume and speed of traffic. These new all way stops were installed quickly and at minimal cost.

Speed cameras could also be a low cost option.

Enforcement of the existing speed limit by the Milford Police Department would also make a difference.

Please review and let me know of any questions or comments.

Thanks,

Kevin Mullican

## Sonia Marichic-Goudy

**From:** Pierce, Rob <rpierce@milford-de.gov>
**Sent:** Thursday, January 19, 2023 12:35 PM
**To:** Sonia Marichic-Goudy
**Cc:** Ted Foglietta; Drew Boyce
**Subject:** FW: Kevin Mullican - Traffic Calming Presentation

**External Email**

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More comments.

Rob

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**From:** Ann dragon <dragon.ann.m@gmail.com>
**Sent:** Thursday, January 19, 2023 12:00 PM
**To:** KEVIN E MULLICAN <kemdesigner@att.net>
**Cc:** Pierce, Rob <rpierce@milford-de.gov>; JAY JOHNSON <jjohnson32277@bellsouth.net>; info causeymansion.com <info@causeymansion.com>; Nadia Zychal <nadiazychal@aol.com>; David Walp <bdavidwalp@gmail.com>; AT HOME Cabinetry <Brad@athomecabinetry.com>; bdonovan31@yahoo.com; Prisgraven@comcast.net; Chris Reed <chriswilis@aol.com>; Dave Mills <davidmills9901@gmail.com>; David Pickrell <dpickrellmd37@gmail.com>; Marcia Reed <mreedinart@aol.com>; Todd Culotta <todd@bayprorestore.com>
**Subject:** Re: Kevin Mullican - Traffic Calming Presentation

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Thanks Kevin. Well said.

Rob,

My husband and I frequently revisit the thoughts we have after the traffic calming meeting. We wholeheartedly agree that the proposals presented were focused on the bike path and not specifically to traffic calming. We would like to see all way stop signs and cross walks for the safety of pedestrian traffic along South Walnut Street.

If we lose the battle for keeping sidewalks separate from the bike path, then it is critical that said path be astetically pleasing to the surroundings such as a colored concrete path with brick stamping and definitely NOT blacktop.

The bike path is not likely to be used by novice cyclists but more experienced cyclists looking to put in the miles to get from Milford to Georgetown and then over to Lewes. Those cyclists move at high.speeds and would be a danger to pedestrians sharing a path.

Please consider these facts and ideas before any final decisions are made

Thanks

Ann Dragon

On Thu, Jan 19, 2023, 9:22 AM KEVIN E MULLICAN <kemdesigner@att.net> wrote:

Good Morning Rob,

Here are a few of my thoughts in regards to the traffic calming study for South Walnut Street presented by the State.

In option #1 the bike path moves to the east into the existing road area. The existing sidewalk (which could remain) is removed. So pedestrians and cyclists are expected to share this new path. I've personally never liked these type of paths. There seems to always be conflict between the two uses. Also, it seems a waste to remove all the sidewalks on the west side of the road if the bike path is going to be separate. Some of these sidewalks were just replaced last year. It seems it would be better to keep cyclists and pedestrians on separate paths. There would be less cost keeping the sidewalks as they would not need to be demolished and removed and replaced with new soil.

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Jay and I would like to see an option that could be implemented in the near future for minimal cost. We are in favor of all way stops on South Walnut at Maple, Kings Hwy and West Clark / Seabury. Painted pedestrian crossings could be added at each intersection. This solution could be implemented immediately for minimal cost. The two new all way stops on Seabury have made an incredible difference in the volume and speed of traffic. These new all way stops were installed quickly and at minimal cost.

Speed cameras could also be a low cost option.

Enforcement of the existing speed limit by the Milford Police Department would also make a difference.

Please review and let me know of any questions or comments.

Thanks,

Kevin Mullican

January 8, 2023

Councilman Andrew P. Fulton, Ward 2
The City of Milford
115 E. Clark
Milford, DE 19963

Ref: The City of Milford, Council Meeting February 13, 2023

Dear Councilman Fulton:

This letter is regarding pedestrian safety and automobile speeding problem on S. Walnut Street due to increased pedestrian traffic in this residential area. The City recently added two 3-way Stop signs on Seabury Avenue at the intersecting streets of Elm and Pine. Considering that Seabury from its starting point on S. Walnut to Dupont Hwy, Rte 113, is a distance of 0.6 Miles, and having traveled Seabury many times on my way to and from Redners, I have noticed cars are now driving the speed limit of 25 mph since the 3-way stop signs installed. So Thank You.

Please note the distance from the Stop sign at Johnson and Old State Roads in Lincoln to the Stop Light at the Milford City Hall Building is approximately 4 miles. Speeds along Old State Road to McCoy range between 45 to 35 mph. Cars entering South Walnut from Old State Road are accustomed to traveling at higher speeds and many do Not reduce their speeds until coming to the Traffic light at 2nd & S.Walnut Streets —3.8 miles.

The foot traffic along this stretch of S. Walnut has significantly increased these past 2 years due to more residents walking for a healthy lifestyle, foot traffic from residents of Mispillion Apartments, new Simpson's Crossing development, the Church on McCoy and there is additional potential traffic from Milford Ponds. In summer months there is an increased presence of both adults and children on bicycles along S. Walnut Street.

If a 3-way Stop sign were to be added where Old State Road ends at McCoy and S. Walnut Streets and a second 3-way Stop sign at S. Walnut and Maple Streets (which is a distance of 0.6 Miles), there is a real potential that drivers would begin to drive at a slower rate of speed, as that is the exact same distance (0.6 Miles) where the two 3-way stop signs were placed on Seabury Avenue. In addition, if Cross Walks were added to those 3-way stop signs, pedestrians could safely cross while taking their walks. We know the addition of 3-way stop signs can increase safety. Part of living in a city drivers expect and/or anticipate frequent stops and therefore the mind set is to maintain lower speeds.

As referenced in DelDOT Traffic Calming Design Manual, "

_____

! "

! #$

My husband and I often drive S. Walnut into “downtown” Milford for various errands, visits to the Library, restaurants, etc. There are neighborhood farm stands around Milford which is part of Milford's charm that we dearly embrace. This past summer my husband and I stopped at family produce stand on S. Walnut and made our fresh produce purchase. While we were attempting to cross S. Walnut Street we were nearly run over by a truck going about 45 mph. My husband was using a cane (post hip surgery) and was not able to turn and dart out of the truck's path. I had to jump up and down and frantically wave my arms so the truck would notice us and stop. This was quite frightening for both of us (and probably the truck driver as well).

Milford City Council Members, please consider a cost-effective plan of adding two 3-way Stop Signs on S. Walnut to mitigate a potentially dangerous event or worst case – loss of life. Having our City Police present to enforce speed limits as the City knows is not cost-effective as their presence are much better utilized elsewhere for crime prevention.

Thank you for your consideration.

Sincerely,

Elaine Wilson

cc: Mark Whitfield, City Manager

Letter of complaint about Milford town plans.

Basic goals that can be achieved for Milfords continued success:
Improve traffic flow in and around the town to improve driving quality.
Increase parking, business growth, and overall town quality.

The current plans only include business park development and many new home developments, which are not connected to current traffic flow. There have been no new roads, no new parking spaces in the town, which has increase driver frustration. There is no flow of traffic thru city, most drivers get lost as was experience a few years ago, when work on 113 had traffic detoured thru town.
We have a beautiful river runing through our town, the road organization follows the river, but, does not take advantage of it. There are no north south, east west roads built for high volume traffic, except for 113 and 1 for bypassing traffic. There are road name changes, which causes confusion. Ever try to give directions to someone?

Our town needs to flow, it doesn't right now. The main reason for speeding, is the amount of traffic that has increased, which increases the amount of driver frustration. Milford used to have the traffic lights on 113 untimed, so that the traffic would have to stop, going through town. Now everyone thinks it is a highway and should be able to do 50-60 mph, when it is 40 mph. This carries over when the get off of 113.

The town has plans for huge amount of development, but lacks a compehensive concept about how these different areas are to work together. Housing developments and business parks being constructed with little to no access, no connection to each other. This causes blind spots in flow of traffic and everyone has to drive around, rather then the straightest path.

The town has not been forthcoming about proposed plans. The City is pitting developments verses the city interior. They should be treated equally. The rules need to be the same for all types of development. The town spends months of hard work on plans yet, gives the public little input.

*There is a public comment portion of every council meeting that is limited to 15 minutes with each person allotted three minutes to speak. All public comment at council meetings is also limited to agenda items only. At this time, there is no date for the proposed changes to South Walnut Street to be presented to council at a regular meeting.*

Regarding the South Walnut Plans:
There are several concerning issues, drawn from above.

Town crash study states most accidents are from the flow of traffic at McCoy and Seabury. The traffic is trying to travel west thru town, but has several turns in order to complete. This is what needs to be addressed, shrinking the space, removing parking and creating bicycle lanes does not do this. It only creates less traffic flow, decrease business due to lack of parking. A great example is Berlin. At first they had no parking, and have worked hard to develop more parking for business.

Changes that have occurred: South Walnut is an emergency evacuation route. Downtown has flooded in the past. Wouldn't it be better to build the route so that it is safer for everyone, during an emergency? Adding a bike lane would not add to the overall safty.

South Walnut used to have laws about heavy truck traffic, what happened to those traffic signs. South Walnut used to be quiet, due to the heavy truck traffic having to travel a different route.

The proposed plan will only increase drivers stress, due to lack of flow. They will be stepping on gas to make up for it – speeding, not caring about slower traffic, crossing yellow lines and generally being a disrespectful driver. Also, Police traffic speeding down south walnut. Do not have any other way to go??

Side issues:
Are property owners going to be reimbursed for the money they were forced to pay for new sidewalks, just last year? How is the sidewalk development going, is entire city in compliance?
There are no sidewalks in new developments, only intown, is there really such a great demand for bike paths over other difficulties the town is facing. The plan clarifies that a bike path is more important then traffic accidents, speeding, parking and ease of use for our citizens.

It is my hope that new plans be drawn up which incorporate traffic flow between all of the new developments with considerations given to current traffic flow. Basically connect streets so that traffic can flow around the town. If you achieve that, the whole town will benefit. Creating a bike lane in the hopes that traffic slows down is a narrow perspective.

## Sonia Marichic-Goudy

**From:** Pierce, Rob <rpierce@milford-de.gov>
**Sent:** Thursday, January 26, 2023 3:02 PM
**To:** Sonia Marichic-Goudy
**Cc:** Ted Foglietta; Drew Boyce; Whitfield, Mark
**Subject:** FW: Kevin Mullican - Milton Delaware - Streets Committee recommendations

**External Email**

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See below resident comment referencing a study performed for Milton.

Rob

---

**From:** Kristy Rogers <KRogers@ci.milton.de.us>
**Sent:** Wednesday, January 25, 2023 11:57 AM
**To:** Whitfield, Mark <mwhitfield@milford-de.gov>
**Cc:** Pierce, Rob <rpierce@milford-de.gov>
**Subject:** RE: Kevin Mullican - Milton Delaware - Streets Committee recommendations

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Hi Mark,

Milton is just going through the design and plan submission now. If/When DelDOT approves and releases a permit for the all-way stops, Milton will perform the intersection improvements and install the signs.

*Kristy*

Kristy L. Rogers, MPA, ICMA-CM
Town Manager

Town of Milton
115 Federal Street
Milton, DE 19968
P: 302-684-4110
F: 302-684-8999

NOTE: The information contained in this email message is privileged and confidential intended only for the use of this individual named above. If the reader of this message is not the intended recipient, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately.

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**From:** Whitfield, Mark [mailto:mwhitfield@milford-de.gov]
**Sent:** Wednesday, January 25, 2023 11:52 AM

**To:** Kristy Rogers <KRogers@ci.milton.de.us>
**Cc:** Pierce, Rob <rpierce@milford-de.gov>
**Subject:** FW: Kevin Mullican - Milton Delaware - Streets Committee recommendations

Kristy,

See the email below. Did DELDOT and/or Milton install the 4 Way Stops recommended by the Streets Committee?

Thanks.

Mark

Mark Whitfield | City Manager
mwhitfield@milford-de.gov | O: 302.424.8394 | F: 302.424.3558
201 S. Walnut St. | Milford, DE 19963 | www.cityofmilford.com

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**From:** Pierce, Rob <rpierce@milford-de.gov>
**Sent:** Wednesday, January 25, 2023 11:47 AM
**To:** Whitfield, Mark <mwhitfield@milford-de.gov>
**Subject:** FW: Kevin Mullican - Milton Delaware - Streets Committee recommendations

Mark,

FYI - See below email from Kevin and my response.

Rob

---

**From:** Pierce, Rob
**Sent:** Wednesday, January 25, 2023 11:35 AM
**To:** KEVIN E MULLICAN <kemdesigner@att.net>
**Subject:** RE: Kevin Mullican - Milton Delaware - Streets Committee recommendations

Thanks Kevin,

Our study should be wrapped up in a couple of months and similar to the Milton article, we will share our recommendations with DelDOT for review. I haven't been down to Milton in a while but it doesn't look like the all way stops have been installed per the committee's recommendation from last year on google street view or recent aerials. Do you know if they have?

Rob

---

**From:** KEVIN E MULLICAN <kemdesigner@att.net>
**Sent:** Wednesday, January 25, 2023 11:00 AM
**To:** Pierce, Rob <rpierce@milford-de.gov>
**Cc:** JAY JOHNSON <jjohnson32277@bellsouth.net>; dragon.ann.m@gmail.com; 'David Pickrell' <dpickrellmd37@gmail.com>; 'Dave Mills' <davidmills9901@gmail.com>; 'Chris Reed' <chriswilis@aol.com>; bdavidwalp@gmail.com; Brad@athomecabinetry.com; bdonovan31@yahoo.com; 'Nadia Zychal' <nadiazychal@aol.com>; 'Marcia Reed' <mreedinart@aol.com>; Prisgraven@comcast.net; 'Todd Culotta'

<todd@bayprorestore.com>
**Subject:** Kevin Mullican - Milton Delaware - Streets Committee recommendations

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good Morning Rob,

Please find attached an article from April of last year that was published in the Cape Gazette. This article is in reference to Milton's "Streets Committee". According to the article the streets committee main priority is curtailing speeding. It appears from this article and others that Milton is also having a problem with drivers speeding through town. I have included a link to this article below:

https://www.capegazette.com/article/milton-committee-submits-traffic-priorities/237953

After a several year study, their streets committee has reached several conclusions.

Their recommendations for reducing speeding are as follows:

The third priority is in-street pedestrian signs. There used to be one on South Walnut at Park Avenue and one on South Washington near the Library. But they both have been removed. These type of signs do seem to make a difference. It would be nice to see more of these signs at additional points in town.

The second priority is reducing the speed limit within the town of Milton from 25 mph to 20 mph for cars and 15 mph for trucks. I'm always amazed at how fast 18 wheel semi-trucks speed through town. Reducing and enforcing the speed limits would also make a difference within our town. Or maybe limit the size of trucks within downtown like other towns around us. I'm always amazed that our City allows 18 wheel trucks on basically every street downtown. During the traffic calming presentation, I overheard one of the State presenters mention that one of the reasons that the intersection at South Walnut and Jefferson was being realigned was to make it easier and quicker for large trucks to get through the intersection. Does this make it easier and safer for pedestrians at this intersection?

The first priority is multi-way stops at multiple intersections within the downtown. This should also be Milford's first priority to reduce speeding. Multiple all way stops on South Walnut Street would be an inexpensive solution that could be implemented immediately.

It seems we are trying to reinvent the wheel when this extensive study of a neighboring town with similar issues has already been completed. Maybe to save time and money, we could take their conclusions and apply them to Milford with some adjustments.

Maybe it's time for the City to start focusing on the needs of pedestrians (residents) and truly make Milford a walkable city.

Regards,

Kevin Mullican

# S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project

A second community workshop was organized for the South Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project on April 4, 2023. The workshop was held at Milford's City Hall from 6:00-8:00 pm. Area residents were invited to attend. The workshop was advertised through the City of Milford and the Dover/Kent MPO. Twenty-seven community members attended the meeting and numerous others reviewed the workshop materials that was posted online shortly after the workshop.

Century Engineering presented numerous boards with information including study area, project goals, Traffic Calming Study Results, crash data, speed study evaluation, option 2 (option with parking) revised with comments from the first public workshop, and stop sign analysis results. Feedback was gathered from attendees through conversations with Century Engineering personnel, questionnaires, and a comment box.

Workshop boards can be found at the end of this workshop summary report. After the workshop the workshop boards were posted on the City of Milford's website so that community members could review the materials and offer feedback. This option was successful in providing additional community feedback for the project.

Based on the comments and feedback received through the first community workshop, recommendations and feedback for this workshop centered around minor improvements to the preferred option which included minor revisions to the sidewalk alignment, Seabury Avenue/W. Clark Avenue intersection, adding crosswalks on the minor roads, adding the historic area boundary, and replacing proposed concrete sidewalk with proposed brick within the historic area which is north of the Railroad Tracks. In addition, the primary request from the first public workshop was for the addition of stop signs along Walnut Street at the McCoy Street, Seabury Avenue, and Kings Highway intersections. At the request of the community and the City, a stop sign analysis for the three intersections was completed. The analysis consisted of additional traffic counts to determine traffic volumes and a stop sign warrant analysis. The warrant analysis studied crashes, volumes on both the major and minor approaches, as well as, other criteria such as left-turn conflicts, high pedestrian volumes generated by a church or school, site distance, and operational criteria. The result of the study for all three intersections concluded that stop signs are not warranted. A sensitivity analysis was completed to determine when, if ever, stop signs would be warranted. It was determined that stop signs will not be warranted through the duration of our design year 2050.

## Comments

Five comments were received regarding the information presented. Community members continued to express an interest in the project and were in favor of the modifications made to the project. Those in attendance had a better understanding as to why stop signs cannot be placed on Walnut Street based on the results of the stop sign warrant analysis.

Comments received after the workshop included wondering why there is parking on the street along South Walnut between Jefferson Avenue and W. Clarke Avenue. The community member has seen minimal cars parked on the street because most properties have a rear alley with additional parking. Response: The parking on that side of the street remained because the space was already there so there

was no reason to restrict parking. The general consensus of the community members who attended the meeting were positive toward keeping the parking.

An additional request from the community was to determine whether parking could alternate which side of the street parking is located to further help slow traffic. This could be studied as part of the design process when this project moves forward with funding for design.

Additional comments include potentially updating the curb line at the intersection of Maple Avenue and Walnut Street. Trucks drive over the curb line frequently.

An additional comment is that the property shown omitted from the historic district is in the historic district but is non-conforming.

A few comments were provided regarding bicycles and pedestrians along the corridor including:

- Bicycle friendly inlet grates should be utilized when the project is in design and construction
- Add warning beacons at cross streets
- Add signage for bicycles on roads especially at Seabury Ave/W. Clark Ave.
- Add green striping to pedestrian crosswalks indicating bicycles may be present not just pedestrians
- Add a shared use path on both sides of the road so that all users can operate a bicycle on both sides of the roadway; this can be accomplished by removing all street parking with plastic bollards used to delineate the path
- Add a crosswalk across Walnut Street at Kings Highway since there is a bus stop on both sides of the roadway

## Questionnaire Responses

Comment forms were prepared to ask specific questions while also requesting feedback from the community on the overall presentation. The results are below:

## 1. Please let us know your overall thoughts on the alternative presented.

- Agree that stop signs are not warranted
- Need more police presence
- Any improvement is welcome
- Woohoo – no stop signs
- Totally agree with narrowing the street
- Like the changes! Thank you!!

## 2. Any additional thoughts on comments you would like to share?

- Stop creating more traffic – too much development on too narrow streets
- Are there any plans for dealing with traffic that will be associated with the new school
- More policing and speed cameras coupled with real fines. That'll do it!!

Sign in Sheets

**S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project**

**Community Workshop #2**

**April 4, 2023**

CENTURY ENGINEERING
A Kleinfelder Company

THE CITY OF Milford

| | | | |
|---|---|---|---|
| 1 | Name: Gwen Guerke | Address: 709 S. Walnut St Milford | Phone: 302-236-1084 |
| | Organization: | Email Address: tellagwen@aol.com | |
| 2 | Name: Bruce Long | Address: 306 B S. Walnut St. | Phone: 302 422 6816 |
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| 3 | Name: Nina Pletcher | Address: 428 S Walnut St | Phone: 302 3576129 |
| | Organization: | Email Address: nina.pletcher@gmail.com | |
| 4 | Name: Ann Dragon | Address: 305 S. Walnut St. | Phone: 201-317-0756 |
| | Organization: | Email Address: dragon.ann.m@gmail.com | |
| 5 | Name: Francis Malinowski | Address: 305 S. Walnut St. | Phone: |
| | Organization: | Email Address: | |
| 6 | Name: Jim Coulson | Address: 712 New St. | Phone: 802-535-7678 |
| | Organization: | Email Address: j.coulson1105@gmail.com | |
| 7 | Name: J Cleckaniel | Address: 302 S Walnut. | Phone: 302 270-6450 |
| | Organization: | Email Address: | |

**S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project**

**Community Workshop #2**

**April 4, 2023**

CENTURY ENGINEERING
A Kleinfelder Company

Milford

| | | | |
|---|---|---|---|
| 8 | Name: Ted Boutin | Address: 308 S. Walnut St | Phone: 302 422 9701 |
| | Organization: Retired (Virginia | Email Address: tedboutin@gmail.com | |
| 9 | Name: Holly Heverly | Address: 712 New St | Phone: 802-535-7679 |
| | Organization: | Email Address: hheverly@gmail.com | |
| 10 | Name: Mitchell Breeze | Address: 100 Wellness Way | Phone: 302 430 5030 |
| | Organization: Bayhealth | Email Address: | |
| 11 | Name: Thomas Johnson | Address: 205 Lakelawn Dr Milford, DE | Phone: 302-841-9798 |
| | Organization: | Email Address: Tom@kyoshindojo.org | |
| 12 | Name: Frank Clendaniel | Address: 302 S. Walnut St Milford DE | Phone: |
| | Organization: | Email Address: | |
| 13 | Name: Jon Ohman | Address: 607 S. Walnut St. | Phone: 302 430-4468 |
| | Organization: | Email Address: ohmanjon@aol.com | |
| 14 | Name: Michael Ward | Address: DelDOT Kent County MPO | Phone: |
| | Organization: | Email Address: | |

**S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project**

**Community Workshop #2**

**April 4, 2023**

CENTURY ENGINEERING
A Kleinfelder Company

The City of Milford

| | | | |
|---|---|---|---|
| 15 | Name: JAN BRAULIK | Address: 2 CAUSEY AVE MILFORD | Phone: 301-996-8910 |
| | Organization: CAUSEY MANSION B&B | Email Address: INFO@CAUSEYMANSION.COM | |
| 16 | Name: Kari Sinclair | Address: 429 S. Walnut St. | Phone: 757 642 1387 |
| | Organization: | Email Address: jon.olszyk@gmail.com | |
| 17 | Name: Sue Lindle | Address: | Phone: 302-422-3973 |
| | Organization: milford Bike Group | Email Address: | |
| 18 | Name: Jeralyn Kelley | Address: Lincoln, DE | Phone: |
| | Organization: Milford Bike Group | Email Address: | |
| 19 | Name: DAVE WALP + BRAD SCHLOTTERBECK | Address: 219 S. WALNUT St | Phone: 302-853-5305 |
| | Organization: | Email Address: Brad@athomecabinetry.com | |
| 20 | Name: Patrick Smith | Address: | Phone: 302-632-6998 |
| | Organization: Citizen | Email Address: Patrick.Smith1919@GMail.com | |
| 21 | Name: JOAN HUNTZINGER | Address: 36 JOHN ANDREWS DR HARRINGTON, DE | Phone: (571)296-0430 |
| | Organization: CITIZEN - WALK FOR IN DOWNTOWN | Email Address: JH66@COMCAST.NET | |

**S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project**

**Community Workshop #2**

**April 4, 2023**

CENTURY ENGINEERING
A Kleinfelder Company

THE CITY OF Milford

| | | | |
|---|---|---|---|
| 22 | Name: Charles Gray | Address: 10 Nelson St. | Phone: 302-604-5446 |
| | Organization: | Email Address: Cmgray812@aol.com | |
| 23 | Name: Sandy Culotta | Address: 6 E Clarke Ave | Phone: 302-256-5787 |
| | Organization: | Email Address: swculotta@gmail.com | |
| 24 | Name: Joseph Phillips | Address: 2 Causey | Phone: 301 994 8910 |
| | Organization: | Email Address: info@causeymarks.sh.com | |
| 25 | Name: Steve & Ashley Venett | Address: 509 S Walnut | Phone: |
| | Organization: | Email Address: hello@steve-and-ashley.com | |
| 26 | Name: Josh Collins | Address: 609 S Walnut St | Phone: 4434930741 |
| | Organization: | Email Address: joshpcollins@gmail.com | |
| 27 | Name: Bryan Shupe | Address: 30048 Stage Coach | Phone: |
| | Organization: Steel Rep | Email Address: | |
| 28 | Name: | Address: | Phone: |
| | Organization: | Email Address: | |

Comment Forms

**Community Workshop for:**
**S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project**
**April 4, 2023**

CENTURY ENGINEERING
A Kleinfelder Company

THE CITY of Milford

## *Comments:*

1. **Please let us know your overall thoughts on the alternative presented.**

Agree that stop signs not warranted.
More police presence.
Any improvement is welcome.

2. **Any additional thoughts on comments you would like to share?**

Stop creating more traffic - too much development or too narrow streets -
Are there any plans for dealing with traffic that will be associated with new school.

***Optional:*** Please provide your information to stay informed about this project and upcoming information.

Name: Gwen Guerke
Organization: Resident
Address: 709 S. Walnut St. Milford DE 19963
Email Address: tellagwen@aol.com

☑ Please add my/our name(s) to the Project Mailing List.
☐ Please delete my/our name(s) from the Project Mailing List.

*Your comments and opinions are very important. All information provided on this form will be carefully reviewed by the Project Team. Under state law, this form is public domain, and if requested, a copy of it must be provided to the media or public. Thank you for your participation and contributions to this important transportation project.*

Please hand your comment sheets in at the workshop or mail/email prior to May 5, 2023 to:

THE CITY of Milford DELAWARE

**Rob Pierce** | Planning Director
rpierce@milford-de.gov | O: 302.424.8395 | F: 302.424.3559
180 Vickers Dr. | Milford, DE 19963 | www.cityofmilford.com

**Community Workshop for:**
**S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project**
**April 4, 2023**

CENTURY ENGINEERING
A Kleinfelder Company

Milford

## *Comments:*

1. **Please let us know your overall thoughts on the alternative presented.**

100hos - no Stop Signs

totally agree & Narrowing the Street

2. **Any additional thoughts on comments you would like to share?**

More policing and speed cameras coupled to real fines. That'll do it!!!

## *Optional:* Please provide your information to stay informed about this project and upcoming information:

Name: Nina Fletcher

Organization: _____

Address: 420 S Walnut St

Email Address: nina.fletcher@gmail.com

- ☐ Please add my/our name(s) to the Project Mailing List.
- ☐ Please delete my/our name(s) from the Project Mailing List.

*Your comments and opinions are very important. All information provided on this form will be carefully reviewed by the Project Team. Under state law, this form is public domain, and if requested, a copy of it must be provided to the media or public. Thank you for your participation and contributions to this important transportation project.*

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**Community Workshop for:**
**S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project**
**April 4, 2023**

CENTURY ENGINEERING
A Kleinfelder Company

THE CITY of Milford

## *Comments:*

1. **Please let us know your overall thoughts on the alternative presented.**

Sonia & Ted are awesome. Like the changes! Thank you!

!!

2. **Any additional thoughts on comments you would like to share?**

## *Optional:* Please provide your information to stay informed about this project and upcoming information:

Name: _____

Organization: _____

Address: _____

Email Address: _____

- ☐ Please add my/our name(s) to the Project Mailing List.
- ☐ Please delete my/our name(s) from the Project Mailing List.

*Your comments and opinions are very important. All information provided on this form will be carefully reviewed by the Project Team. Under state law, this form is public domain, and if requested, a copy of it must be provided to the media or public. Thank you for your participation and contributions to this important transportation project.*

Please hand your comment sheets in at the workshop or mail/email prior to May 5, 2023 to:

THE CITY of Milford
**Rob Pierce** | Planning Director
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180 Vickers Dr. | Milford, DE 19963 | www.cityofmilford.com

## Sonia Marichic-Goudy

**From:** Pierce, Rob <rpierce@milford-de.gov>
**Sent:** Monday, April 17, 2023 10:41 AM
**To:** Sonia Marichic-Goudy
**Cc:** Drew Boyce; Ted Foglietta; Whitfield, Mark; James Puddicombe; Mike Svaby
**Subject:** RE: Kevin Mullican - bike path
**Attachments:** PW Copier_20230417_103105.pdf

**External Email**

Sonia,

I think one of the comments from the public was to put a jog in the alignment similar to what is shown on the attached drawing. We could carry the jog for a further distance and flip some of the on-street parking. I'm not opposed to this but wasn't sure what Mark, Mike and James' thoughts are. This would further deter traffic speed but we could only fit this between Clark Ave and Jefferson Street.

Rob

**From:** Sonia Marichic-Goudy <smarichicgoudy@kleinfelder.com>
**Sent:** Wednesday, April 12, 2023 9:58 PM
**To:** Pierce, Rob <rpierce@milford-de.gov>
**Cc:** Drew Boyce <dboyce@kleinfelder.com>; Ted Foglietta <tfoglietta@kleinfelder.com>
**Subject:** RE: Kevin Mullican - bike path

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Rob. Since parking was allowed in that section in the existing scenario, we tried to maintain it. Most of the comments we received from those residents who attended the workshop were positive toward keeping it.

We did get the request to see if we could alternate parking on one side of the road and then to the other so act as a further traffic calming scenario. I have not looked into this being viable yet. What are your thoughts on this?

Thanks,
Sonia

**Sonia S. Marichic-Goudy, PE**
Associate Vice President

Plaza 273, 56 West Main Street, Suite 100-A
Newark, DE 19702
0| 302-525-6022
M| 302-388-0177

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**From:** Pierce, Rob <rpierce@milford-de.gov>
**Sent:** Tuesday, April 11, 2023 2:15 PM
**To:** Sonia Marichic-Goudy <smarichicgoudy@kleinfelder.com>
**Subject:** FW: Kevin Mullican - bike path

**External Email**

---

Sonia,

See below question from a resident along S. Walnut Street. I believe we kept the on-street parking on that side because we had the room. I'm not sure if I recall someone requesting to keep parking on that side along that stretch of road.

Rob

**From:** KEVIN E MULLICAN <kemdesigner@att.net>
**Sent:** Tuesday, April 11, 2023 8:30 AM
**To:** Pierce, Rob <rpierce@milford-de.gov>
**Subject:** RE: Kevin Mullican - bike path

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hey Rob,

Thanks for the info.

I'm curious as to why the state wants on street parking on South Walnut between Jefferson and West Clark? In the four years that I've lived here I've seen minimal cars parked on the street. All of the homes in this stretch of South Walnut have large properties with ample off street parking. Most also have rear a rear alley with additional parking. What information are they using to justify this design choice?

Thanks,

Kevin

**From:** Pierce, Rob [mailto:rpierce@milford-de.gov]
**Sent:** Thursday, April 06, 2023 4:17 PM
**To:** KEVIN E MULLICAN <kemdesigner@att.net>
**Subject:** RE: Kevin Mullican - bike path

Kevin,

The poster boards have been uploaded to the website.
https://www.cityofmilford.com/563/Current-StudiesProjects

Please submit any comments within the next week or so for us to include in the final report.

Rob

**From:** KEVIN E MULLICAN <kemdesigner@att.net>
**Sent:** Wednesday, April 5, 2023 8:01 AM

**To:** Pierce, Rob <rpierce@milford-de.gov>
**Subject:** Kevin Mullican - bike path

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hey Rob,

It was great seeing you last night.

I have a quick question. Are all the presentation boards from last night online for viewing?

Thanks!

Kevin

Workshop Boards

# Welcome to the

# S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project

# Public Workshop #2

April 4, 2023

THE CITY of Milford DELAWARE

CENTURY ENGINEERING
A Kleinfelder Company

# S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project

## Study Area

S. Walnut Street between McCoy Street and S. Maple Avenue




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# Project Goals

- Improve bicycle and pedestrian connectivity along S. Walnut St
    - New shared use path
    - Complete gaps in existing sidewalks
- Reduce traffic speeds and provide traffic calming
- Improve pedestrian crossing at Seabury Avenue and W. Clarke Ave
- Improve S. Walnut Street intersection configuration with Railroad

# Traffic Calming Study

- Current posted speed: 25 mph
- Analyzed speed data from September 11, 2022 through September 19, 2022
  - Average speed: 27 mph
  - 85$^{th}$ percentile speed: 31 mph
- 62.6% of all recorded vehicles were traveling at speeds greater than the posted speed limit
- Half of all crashes occurred at two main intersections:
  - S. Walnut Street and McCoy Street
  - S. Walnut Street and Seabury Avenue/Clarke Avenue

# S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project

## Crash Data




THE CITY of Milford DELAWARE

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# S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project

## Speed Study Evaluation

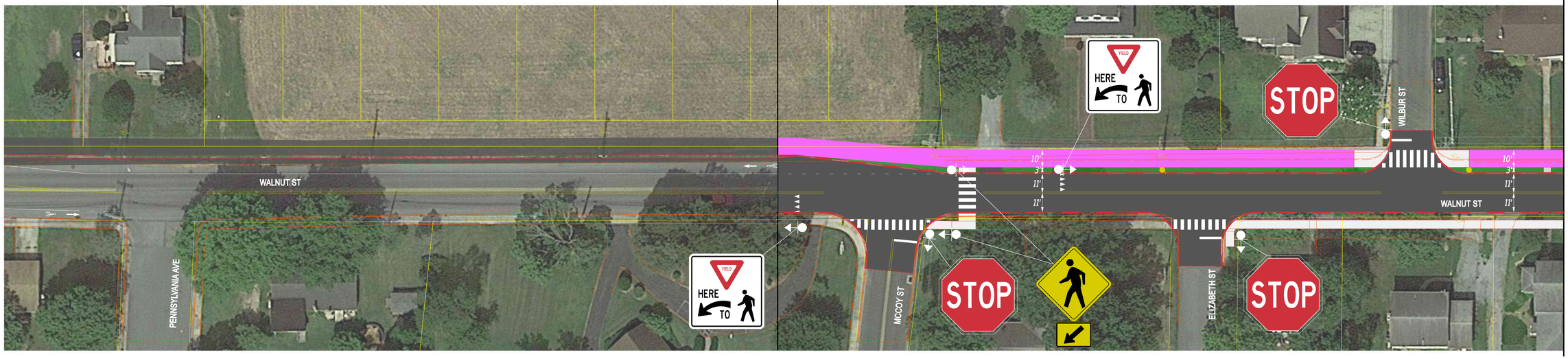
| Milford S. Walnut Street Speed and Safety Evaluation | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Type | Name | Potential Effectiveness for Speed Reduction (FHWA PSCI) | Potential for Crash Reduction (-) /Increase (+) (FHWA PSCI) | Potential Crash Reduction (-) /Increase (+) (HSM) | Considered? Why/why not? | Rank |
| Road Segment Treatment | | | | | | | |
| 1 | Vertical | Speed Humps | -6 mph | -40% to -48% (All Severities, All Crashes) | 1. Treated Road = -40% (Injury Crashes, All Crash Types) 2. Adjacent Roads = -5% (Injury Crashes, All Crash Types) | No, speed humps are not preferred due to issues with emergency vehicles etc. | 1 |
| 2 | Vertical | Speed Table | -4 mph | -36% to -64% (All Severities, All Crashes) | | No, speeds tables are not preferred due to issues with emergency vehicles etc. | 2 |
| Intersections Treatment | | | | | | | |
| 3 | Horizontal | Modern Roundabouts | -4 mph to -8 mph | | -78% (All Severities, All Crash Types) | No, due to right of way constraints | 1 |
| 4 | Horizontal | Realigned Intersections | | | | Yes, intersection improvements at S. Walnut/Seabury and S. Walnut and the R/R were recommended to assist in improving driver clarity | 2 |
| Road Segment Treatment | | | | | | | |
| 5 | Horizontal | Chicanes | -9 mph | | | No, roadway width that could be utilized for chicanes was utilized to add the shared use path | 1 |
| 6 | Horizontal | Lateral Shifts | Less than Chicanes | | | Yes, S. Walnut Street is recommended for a lateral shift between Delaware Ave and Clarke Ave | 2 |
| Road Segment Treatment: Road Width Reduction | | | | | | | |
| 7 | Width Reduction | Median Islands (Raised) | -3 mph | -39% (All Crashes) -44% (Fatal and Injury Crashes) | -39% (Injury Crashes, All Crash Types) | No, roadway width was narrowed to fit a new shared use path leaving no additional space for a median island | 1 |
| 8 | Width Reduction | Striping/Lane Markings | Reduction possible | Potential for less severe crash types | Potential for less severe crash types | Yes, lane widths were narrowed to 11' and shoulders/parking areas were reduced or eliminated | |
| Road Segment Treatment: Dynamic Signing | | | | | | | |
| 9 | Dynamic Signing | Radar Speed Signs | -2 mph to -5 mph | | -46% (All Severities, All Crashes) | Potentially, coordinating with City of Milford | 1 |

THE CITY of Milford DELAWARE

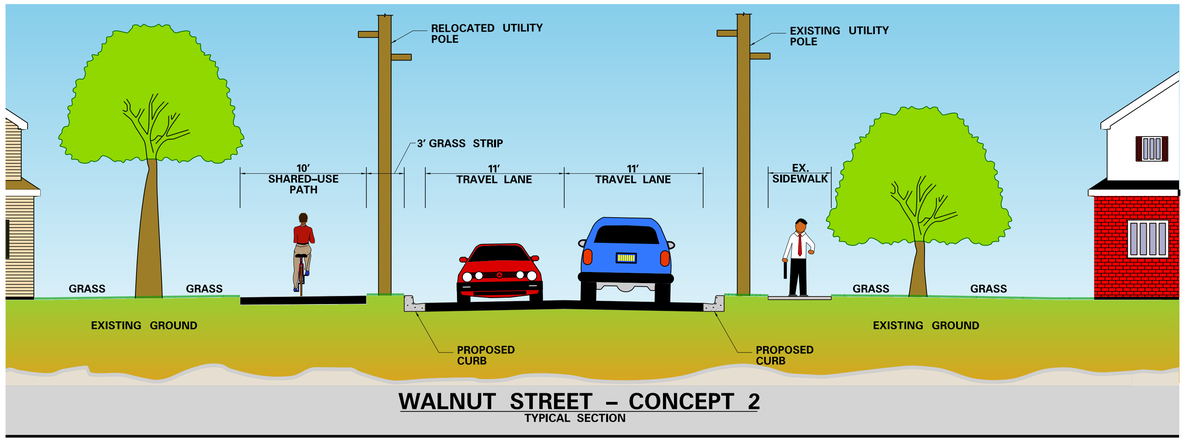
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SIMPSONS CROSSING

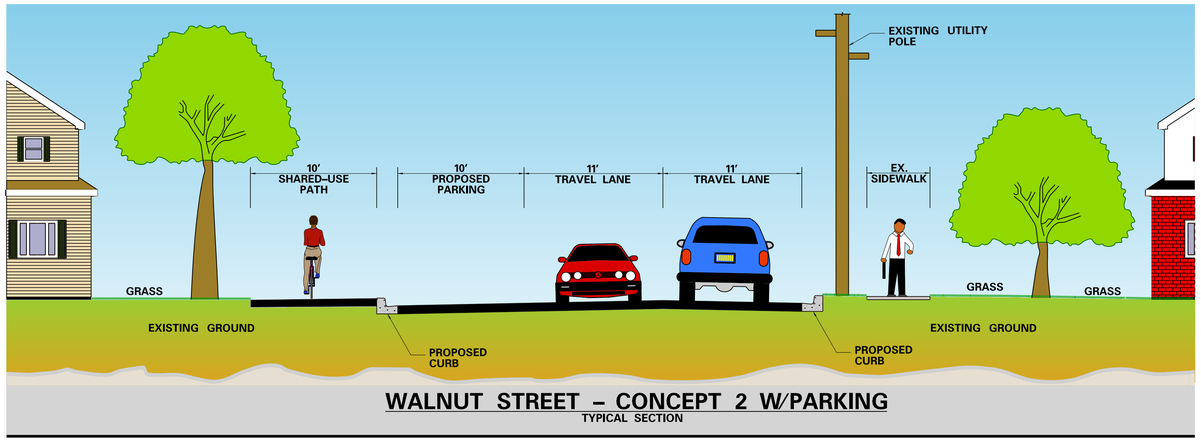
CONCEPT 2




MATCHLINE SHEET 2




## WALNUT STREET – CONCEPT 2
TYPICAL SECTION




## WALNUT STREET – CONCEPT 2 W/PARKING
TYPICAL SECTION

### LEGEND
- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED BRICK MULTI-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS
- HISTORIC DISTRICT

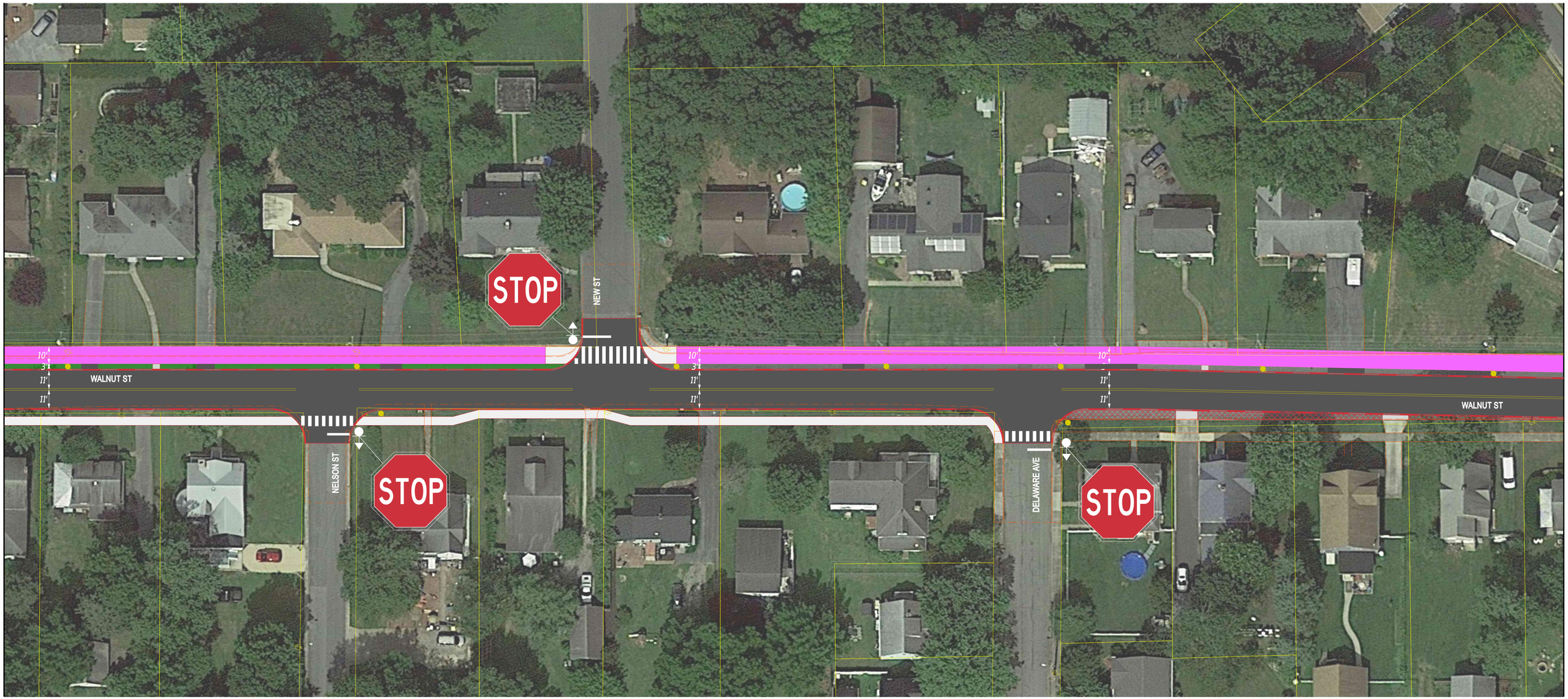
$DATE$
$TIME$
$FILE$

SCALE
0 30 60 90
FEET

# WALNUT STREET
# MILFORD, DE
# CONCEPT PLAN

| | | | |
|---|---|---|---|
| CONTRACT | BRIDGE NO. | X | SECTION |
| TXXXXXXXXX | | | CEN |
| COUNTY | DESIGNED BY: | M. PENNINGTON | SHEET NO. |
| KENT | CHECKED BY: | S. MARICHIC-GOUDY | 1 |

CONCEPT 2




## LEGEND

- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED BRICK MULTI-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS
- HISTORIC DISTRICT

$DATE$
$TIME$
$FILE$

SCALE
0 30 60 90
FEET

# WALNUT STREET
# MILFORD, DE
# CONCEPT PLAN

| | |
|---|---|
| CONTRACT | TXXXXXXXXX |
| COUNTY | KENT |
| BRIDGE NO. | X |
| DESIGNED BY: | M. PENNINGTON |
| CHECKED BY: | S. MARICHIC-GOUDY |

CONCEPT 2

| | |
|---|---|
| SECTION | CEN |
| SHEET NO. | 2 |

MATCHLINE SHEET 2

MATCHLINE SHEET 4

SEABURY AVE

W CLARK AVE

E CLARK AVE

FLUSH MOUNTABLE CONCRETE ISLAND

STOP

STOP

WALNUT ST

WALNUT ST

20' TYP.

10'

11'

YIELD HERE TO

YIELD HERE TO

## LEGEND

- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED BRICK MULTI-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS
- HISTORIC DISTRICT

$DATE$
$TIME$
$FILE$

SCALE
0 30 60 90
FEET

# WALNUT STREET MILFORD, DE CONCEPT PLAN

| CONTRACT | BRIDGE NO. | X |
|---|---|---|
| TXXXXXXXXX | DESIGNED BY: | M. PENNINGTON |
| COUNTY | CHECKED BY: | S. MARICHIC-GOUDY |
| KENT | | |

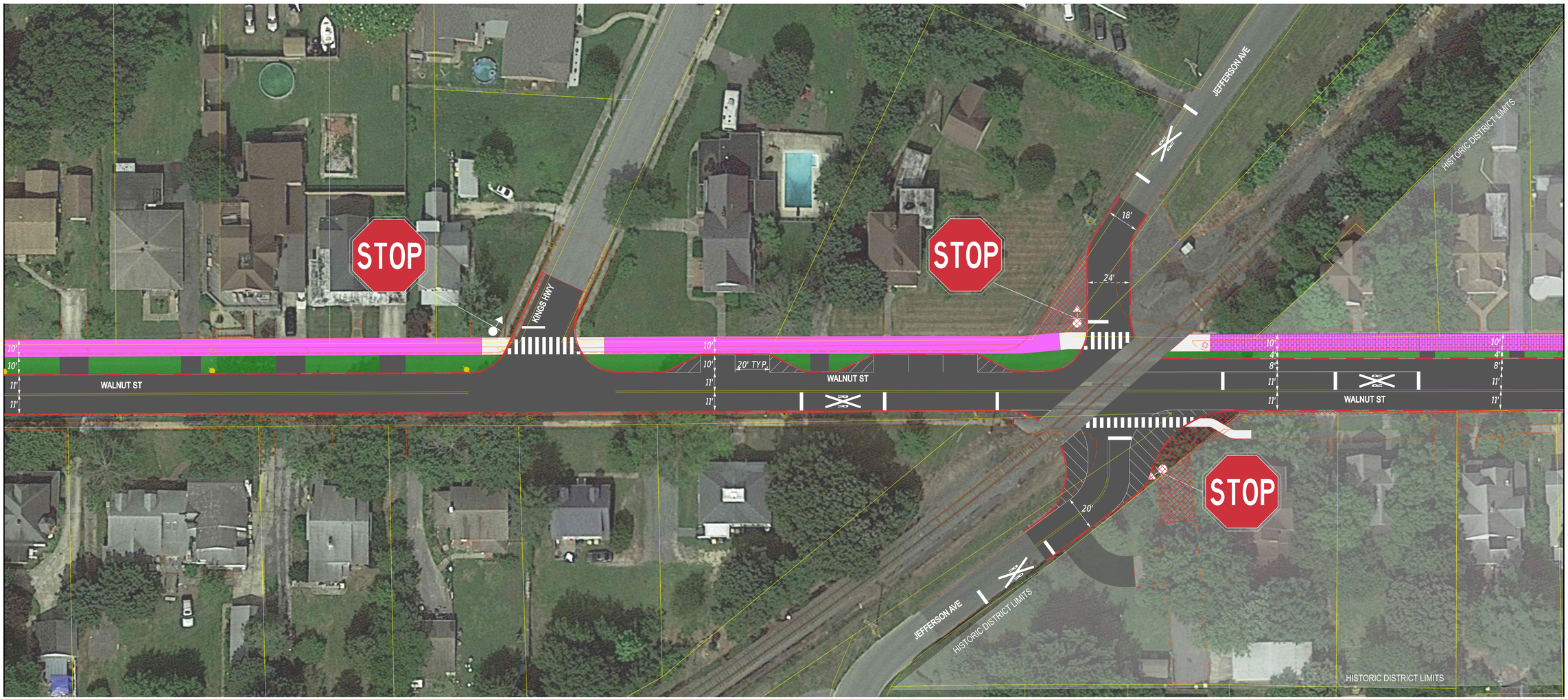
CONCEPT 2

SECTION: CEN

SHEET NO.: 3

MATCHLINE SHEET 3

MATCHLINE SHEET 5




## LEGEND

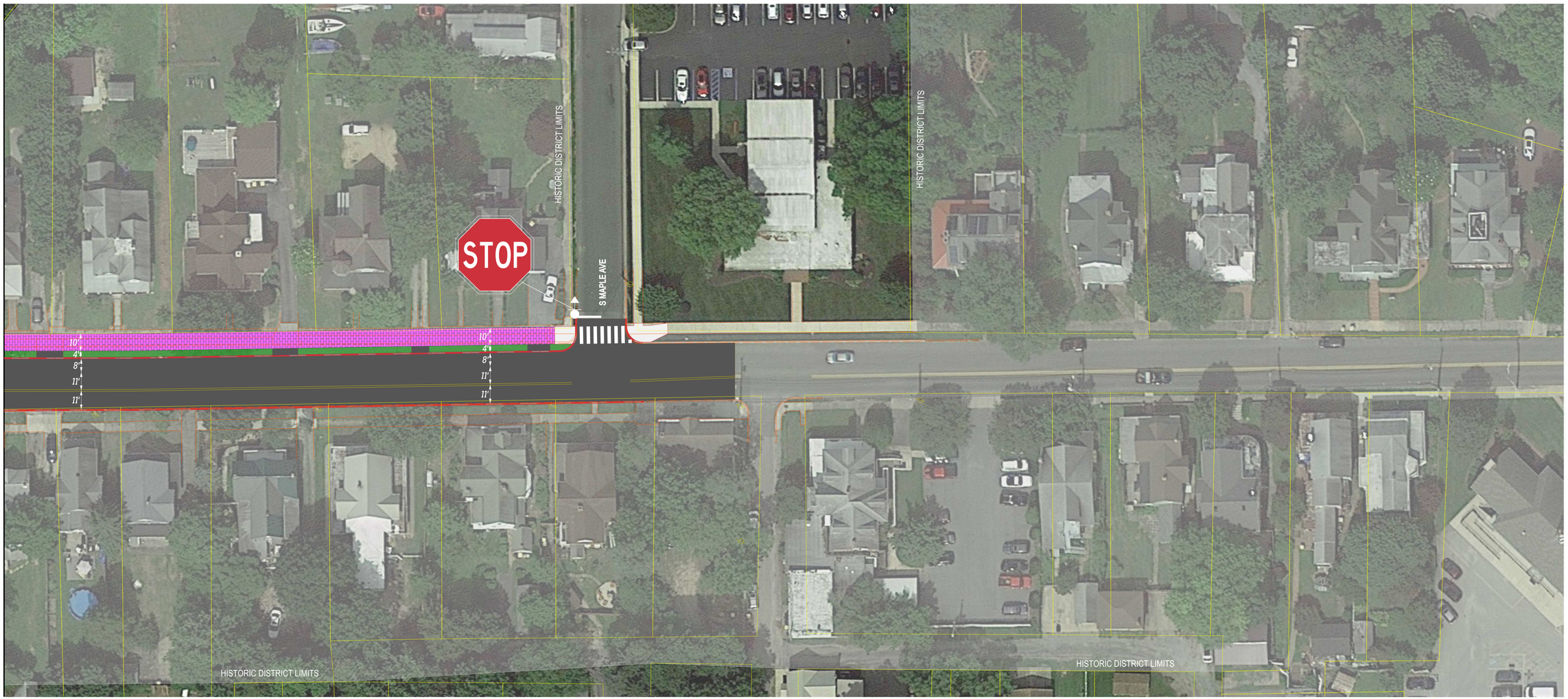
- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED BRICK MULTI-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS
- HISTORIC DISTRICT

$DATE$
$TIME$
$FILE$

SCALE
0 30 60 90
FEET

# WALNUT STREET
# MILFORD, DE
# CONCEPT PLAN

| CONTRACT | BRIDGE NO. | X | CONCEPT 2 | SECTION |
|---|---|---|---|---|
| TXXXXXXXXX | DESIGNED BY: | M. PENNINGTON | | CEN |
| COUNTY | | | | SHEET NO. |
| KENT | CHECKED BY: | S. MARICHIC-GOUDY | | 4 |




MATCHLINE SHEET 4

N

LEGEND

- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED BRICK MULTI-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS
- HISTORIC DISTRICT

$DATE$
$TIME$
$FILE$

SCALE
0 30 60 90
FEET

# WALNUT STREET
# MILFORD, DE
# CONCEPT PLAN

| | |
|---|---|
| CONTRACT | TXXXXXXXXX |
| COUNTY | KENT |
| BRIDGE NO. | X |
| DESIGNED BY: | M. PENNINGTON |
| CHECKED BY: | S. MARICHIC-GOUDY |

CONCEPT 2

| | |
|---|---|
| SECTION | CEN |
| SHEET NO. | 5 |

# Stop Sign Warrant Analysis

- ✓ Engineering analysis performed for a multiway Stop Sign installation
- ✓ Considered the following criteria
  1. Crash Analysis
     a) Were there 5 or more crashes in a 12-month period that are susceptible to correction by a multiway stop installation (right and left turn collisions as well as right angle collisions)?
  2. Volume Analysis:
     a) Major Street approach: at least 300 vehicles per hour, total for both approaches, for any 8 hours of an average day
     b) Minor Street approach: Combined vehicular, pedestrian, and bicycle volumes, total for both approaches, averages at least 200 units per hour for the same 8 hours with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour
  3. Other Criteria
     a) Is there a need to control left-turn conflicts?
     b) Is this intersection near an area that generates high pedestrian volumes (i.e., church, school, etc.)?
     c) Is this intersection a location where a road user, after stopping, cannot see conflicting traffic and is not able to reasonably safely negotiate the intersection unless conflicting cross traffic is also required to stop?
     d) Is this intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multiway stop control would improve traffic operational characteristics of the intersection?

# Stop Sign Warrant Analysis

1. Crash Analysis: Crashes in a 12-month period that are susceptible to correction by a multiway stop installation (right and left turn collisions as well as right angle collisions)

| S. Walnut Street and McCoy Road | S. Walnut Street and W. Clarke Avenue | S. Walnut Street and Kings Highway |
|---|---|---|
| 0 | 1 | 1 |
| Stop Sign Not Warranted | Stop Sign Not Warranted | Stop Sign Not Warranted |

2. Volume Analysis: Major and Minor Road Approaches

**S. Walnut Street and McCoy Road**

Major Street: S Walnut Street — Orientation: North/South
Minor Street: McCoy Street — Orientation: East/West

ENTER TRAFFIC VOLUMES IN THE TABLE BELOW

| Time | S Walnut Street | | | McCoy Street | | | | |
|---|---|---|---|---|---|---|---|---|
| | North | South | Total | East | West | Pedestrians | Bicycles | Total |
| 6 - 7 AM | 82 | 181 | 263 | 0 | 109 | 0 | 0 | 109 |
| 7 - 8 AM | 82 | 181 | 263 | 0 | 109 | 0 | 0 | 109 |
| 8 - 9 AM | 41 | 112 | 153 | 0 | 80 | 0 | 0 | 80 |
| 9 - 10 AM | 50 | 143 | 193 | 0 | 104 | 0 | 0 | 104 |
| 10 - 11 AM | 50 | 143 | 193 | 0 | 104 | 0 | 0 | 104 |
| 11 AM - 12 PM | 59 | 174 | 233 | 0 | 128 | 0 | 0 | 128 |
| 12 - 1 PM | 64 | 162 | 226 | 0 | 114 | 0 | 0 | 114 |
| 1 - 2 PM | 56 | 185 | 241 | 0 | 98 | 0 | 0 | 98 |
| 2 - 3 PM | 66 | 216 | 282 | 0 | 116 | 0 | 0 | 116 |
| 3 - 4 PM | 76 | 246 | 322 | 0 | 133 | 0 | 0 | 133 |
| 4 -5 PM | 66 | 250 | 316 | 0 | 165 | 0 | 0 | 165 |
| 5 - 6 PM | 14 | 187 | 201 | 0 | 133 | 0 | 0 | 133 |

Condition C.1 and C.2: A minimum of 300 vehicles per hour required on the major street and A minimum of 200 units per hour required on the minor street A total of 0 hours meet conditions C.1 and C.2

Stop Sign Not Warranted

**S. Walnut Street and W. Clarke Avenue**

Major Street: S Walnut Street — Orientation: North/South
Minor Street: Clarke Avenue — Orientation: East/West

ENTER TRAFFIC VOLUMES IN THE TABLE BELOW

| Time | S Walnut Street | | | Clarke Avenue | | | | |
|---|---|---|---|---|---|---|---|---|
| | North | South | Total | East | West | Pedestrians | Bicycles | Total |
| 6 - 7 AM | *173* | *120* | 293 | 35 | 25 | 0 | 0 | 60 |
| 7 - 8 AM | 173 | 120 | 293 | 35 | 25 | 0 | 0 | 60 |
| 8 - 9 AM | 157 | 135 | 292 | 28 | 14 | 0 | 0 | 42 |
| 9 - 10 AM | *146* | *142* | 288 | 28 | *17* | 0 | 0 | 45 |
| 10 - 11 AM | *146* | *142* | 288 | *28* | 17 | 0 | 0 | 45 |
| 11 AM - 12 PM | 134 | 149 | 283 | 28 | 20 | 0 | 0 | 48 |
| 12 - 1 PM | 135 | 161 | 296 | 50 | 15 | 0 | 0 | 65 |
| 1 - 2 PM | 141 | 164 | 305 | 40 | 32 | 0 | 0 | 72 |
| 2 - 3 PM | *156* | *188* | 343 | 42 | 37 | 0 | 0 | 78 |
| 3 - 4 PM | 170 | 211 | 381 | 43 | 41 | 0 | 0 | 84 |
| 4 -5 PM | 171 | 203 | 374 | 35 | 42 | 0 | 0 | 77 |
| 5 - 6 PM | *171* | *203* | 374 | 35 | 42 | 0 | 0 | 77 |

Condition C.1 and C.2: A minimum of 300 vehicles per hour required on the major street and A minimum of 200 units per hour required on the minor street A total of 0 hours meet conditions C.1 and C.2

Stop Sign Not Warranted

**S. Walnut Street and Kings Highway**

Major Street: S Walnut Street — Orientation: North/South
Minor Street: Kings Highway — Orientation: East/West

ENTER TRAFFIC VOLUMES IN THE TABLE BELOW

| Time | S Walnut Street | | | Kings Highway | | | | |
|---|---|---|---|---|---|---|---|---|
| | North | South | Total | East | West | Pedestrians | Bicycles | Total |
| 6 - 7 AM | *136* | *180* | 316 | 63 | 0 | 0 | 0 | 63 |
| 7 - 8 AM | 136 | 180 | 316 | 63 | 0 | 0 | 0 | 63 |
| 8 - 9 AM | 135 | 155 | 290 | 46 | 0 | 0 | 0 | 46 |
| 9 - 10 AM | *130* | *138* | 268 | 50 | 0 | 0 | 0 | 50 |
| 10 - 11 AM | *130* | *138* | 268 | 50 | 0 | 0 | 0 | 50 |
| 11 AM - 12 PM | 124 | 121 | 245 | 54 | 0 | 0 | 0 | 54 |
| 12 - 1 PM | 144 | 141 | 285 | 43 | 0 | 0 | 0 | 43 |
| 1 - 2 PM | 131 | 127 | 258 | 59 | 0 | 0 | 0 | 59 |
| 2 - 3 PM | *156* | *144* | *300* | *64* | 0 | 0 | 0 | 64 |
| 3 - 4 PM | 180 | 161 | 341 | 69 | 0 | 0 | 0 | 69 |
| 4 -5 PM | 181 | 168 | 349 | 68 | 0 | 0 | 0 | 68 |
| 5 - 6 PM | 173 | 176 | 349 | 61 | 0 | 0 | 0 | 61 |

Condition C.1 and C.2: A minimum of 300 vehicles per hour required on the major street and A minimum of 200 units per hour required on the minor street A total of 0 hours meet conditions C.1 and C.2

Stop Sign Not Warranted

Other Criteria

| S. Walnut Street and McCoy Road | S. Walnut Street and W. Clarke Avenue | S. Walnut Street and Kings Highway |
|---|---|---|
| *Other criteria that may be considered in an engineering study include:*<br>*A. The need to control left-turn conflicts;*<br>*B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;*<br>*C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonably safely negotiate the intersection unless conflicting cross traffic is also required to stop; and*<br>*D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multiway stop control would improve traffic operational characteristics of the intersection.* | *Other criteria that may be considered in an engineering study include:*<br>*A. The need to control left-turn conflicts;*<br>*B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;*<br>*C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonably safely negotiate the intersection unless conflicting cross traffic is also required to stop; and*<br>*D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multiway stop control would improve traffic operational characteristics of the intersection.* | *Other criteria that may be considered in an engineering study include:*<br>*A. The need to control left-turn conflicts;*<br>*B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;*<br>*C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to reasonably safely negotiate the intersection unless conflicting cross traffic is also required to stop; and*<br>*D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multiway stop control would improve traffic operational characteristics of the intersection.* |
| No to all; Stop Sign Not Warranted | No to all; Stop Sign Not Warranted | No to all; Stop Sign Not Warranted |

THE CITY of Milford DELAWARE

CENTURY ENGINEERING
A Kleinfelder Company

# Stop Sign Warrant Analysis

## What happens if a Stop Sign is installed when not warranted?

- ✓ Results in poor compliance by motorists who do not deem the stop sign necessary
- ✓ Frequent unnecessary stops result in more aggressive/abrupt motorist behaviors to recover the “lost” time from stopping
- ✓ Queues backing up at the Kings Highway approach of N. Walnut Street could extend back to railroad tracks

## What can be implemented to slow traffic if a Stop Sign is not installed?

- ✓ Traffic calming measures such as narrowing lanes and introducing roadway curves
- ✓ Speed enforcement by police officers

THE CITY of Milford DELAWARE

CENTURY ENGINEERING
A Kleinfelder Company

# S. Walnut Street Traffic Calming & Bike/Pedestrian Improvement Project

**Thank you** for attending our workshop.
For future information please contact:

**Rob Pierce, Planning Director**
**City of Milford**
rpierce@milford-de.gov
http://cityofmilford.com

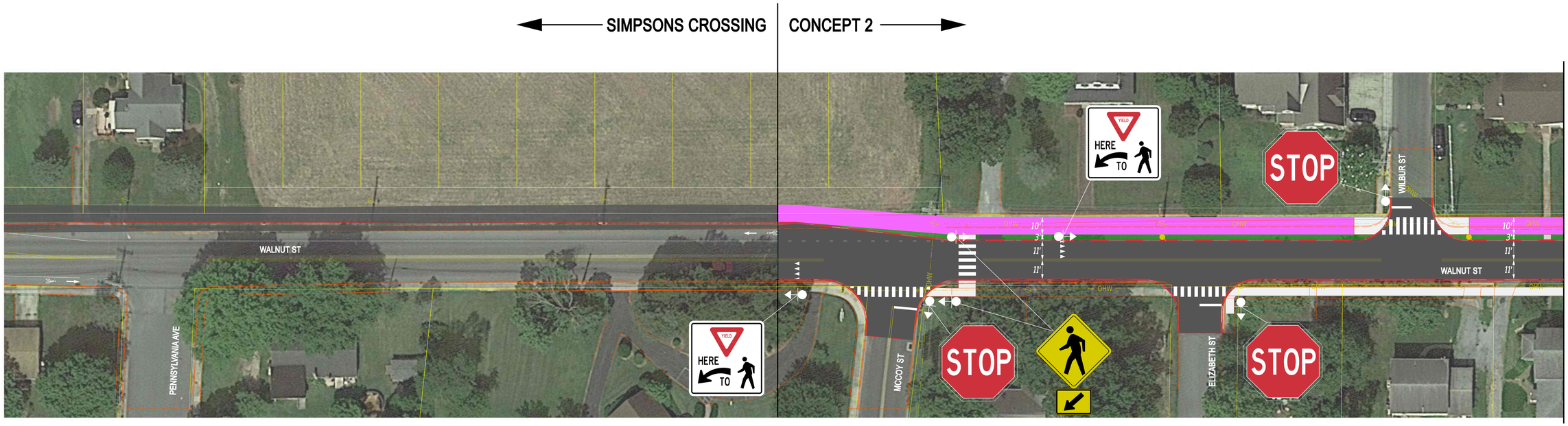
**Sonia Marichic-Goudy**
**Century Engineering**
smarichicgoudy@kleinfelder.com

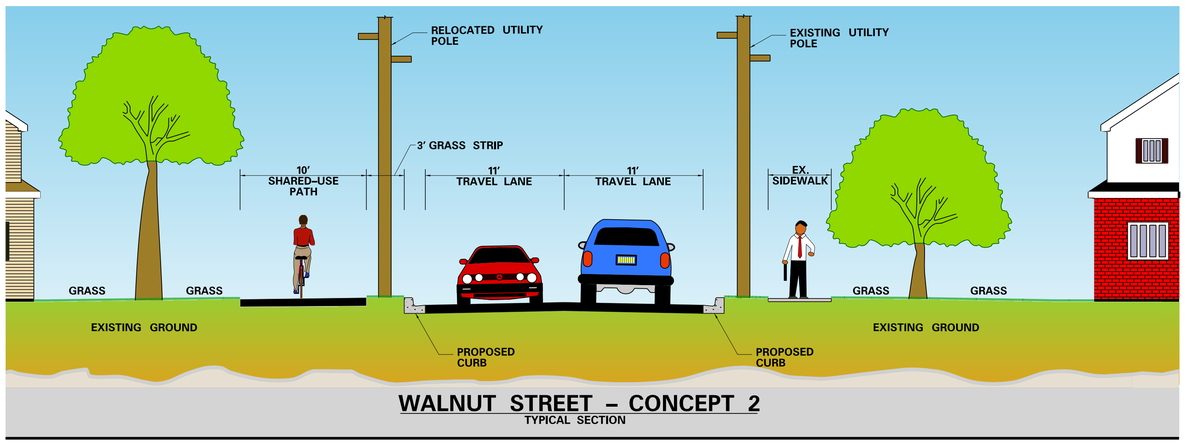
THE CITY of Milford DELAWARE

CENTURY ENGINEERING
A Kleinfelder Company

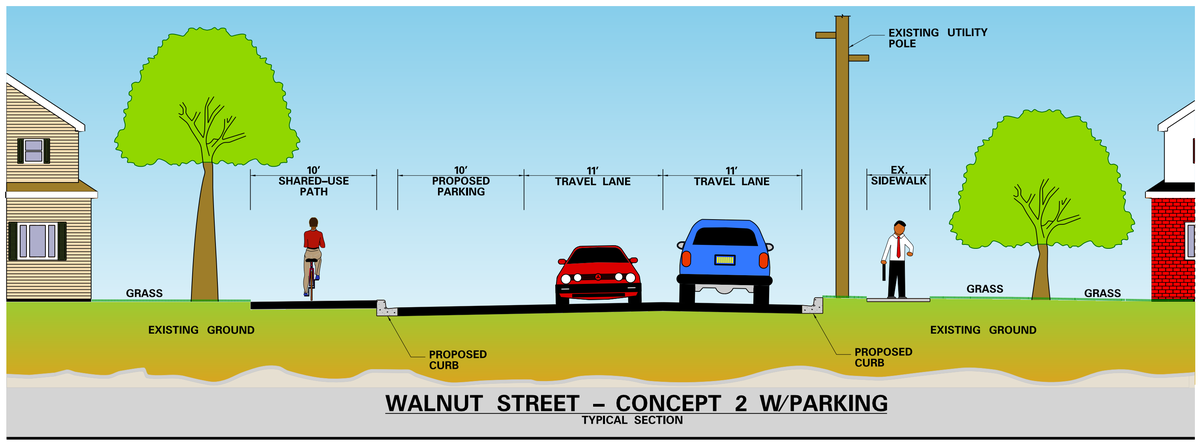
# Milford: South Walnut Street Traffic Calming and Bike/Pedestrian Improvement Project

## Appendix C: Preferred Alternative




## WALNUT STREET – CONCEPT 2
TYPICAL SECTION




## WALNUT STREET – CONCEPT 2 W/PARKING
TYPICAL SECTION

### LEGEND
- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED BRICK MULTI-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS
- HISTORIC DISTRICT

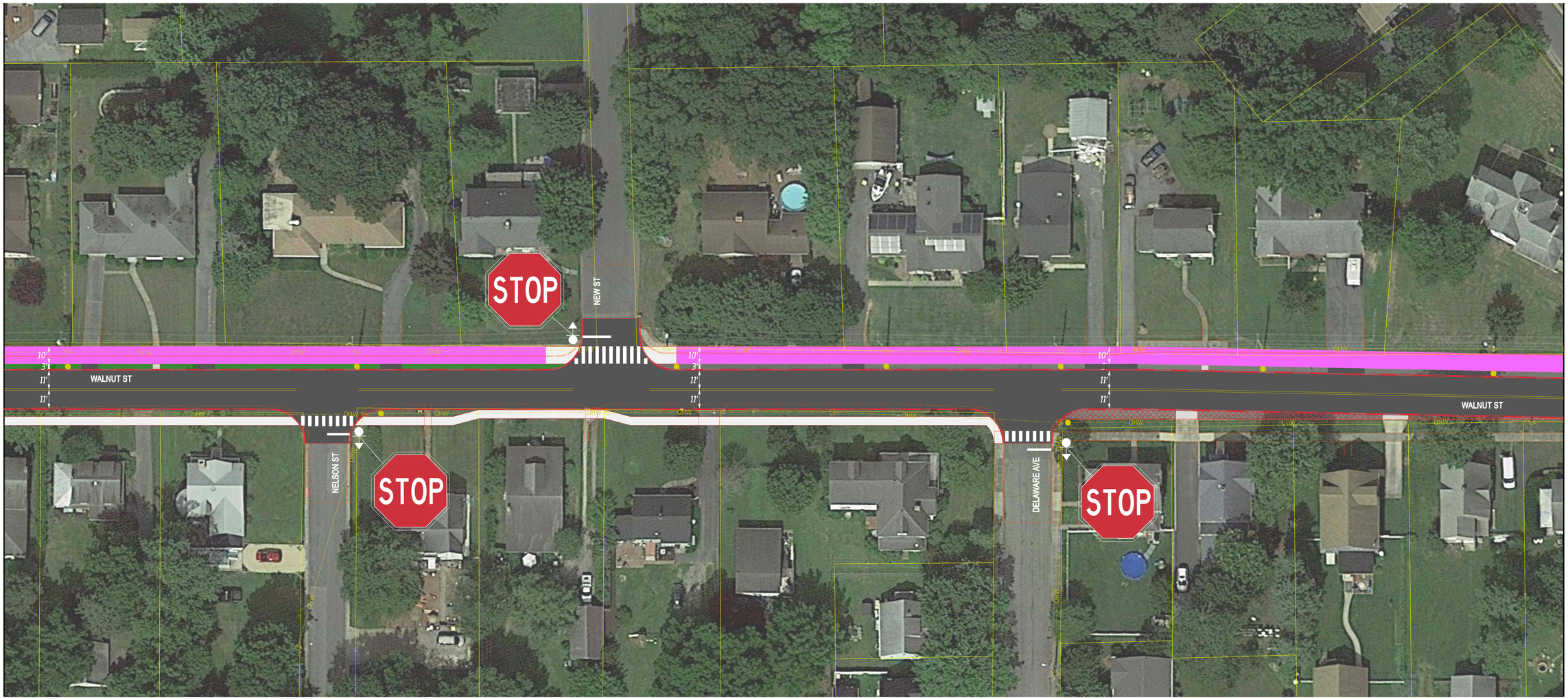
SCALE
0 30 60 90
FEET

# WALNUT STREET
# MILFORD, DE
# CONCEPT PLAN

| | | | |
|---|---|---|---|
| CONTRACT | BRIDGE NO. | X | SECTION |
| TXXXXXXXXX | | | CEN |
| COUNTY | DESIGNED BY: | M. PENNINGTON | SHEET NO. |
| KENT | CHECKED BY: | S. MARICHIC-GOUDY | 1 |

CONCEPT 2

$DATE$
$TIME$
$FILE$




LEGEND

- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED BRICK MULTI-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS
- HISTORIC DISTRICT

$DATE$
$TIME$
$FILE$

SCALE
0 30 60 90
FEET

# WALNUT STREET
# MILFORD, DE
# CONCEPT PLAN

| | |
|---|---|
| CONTRACT | TXXXXXXXXX |
| COUNTY | KENT |
| BRIDGE NO. | X |
| DESIGNED BY: | M. PENNINGTON |
| CHECKED BY: | S. MARICHIC-GOUDY |

CONCEPT 2

| | |
|---|---|
| SECTION | CEN |
| SHEET NO. | 2 |

MATCHLINE SHEET 2

MATCHLINE SHEET 4

SEABURY AVE

W CLARK AVE

E CLARK AVE

WALNUT ST

FLUSH MOUNTABLE CONCRETE ISLAND

STOP

STOP

YIELD HERE TO

YIELD HERE TO

20' TYP.

10'

11'

OHW

## LEGEND

- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED BRICK MULTI-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS
- HISTORIC DISTRICT

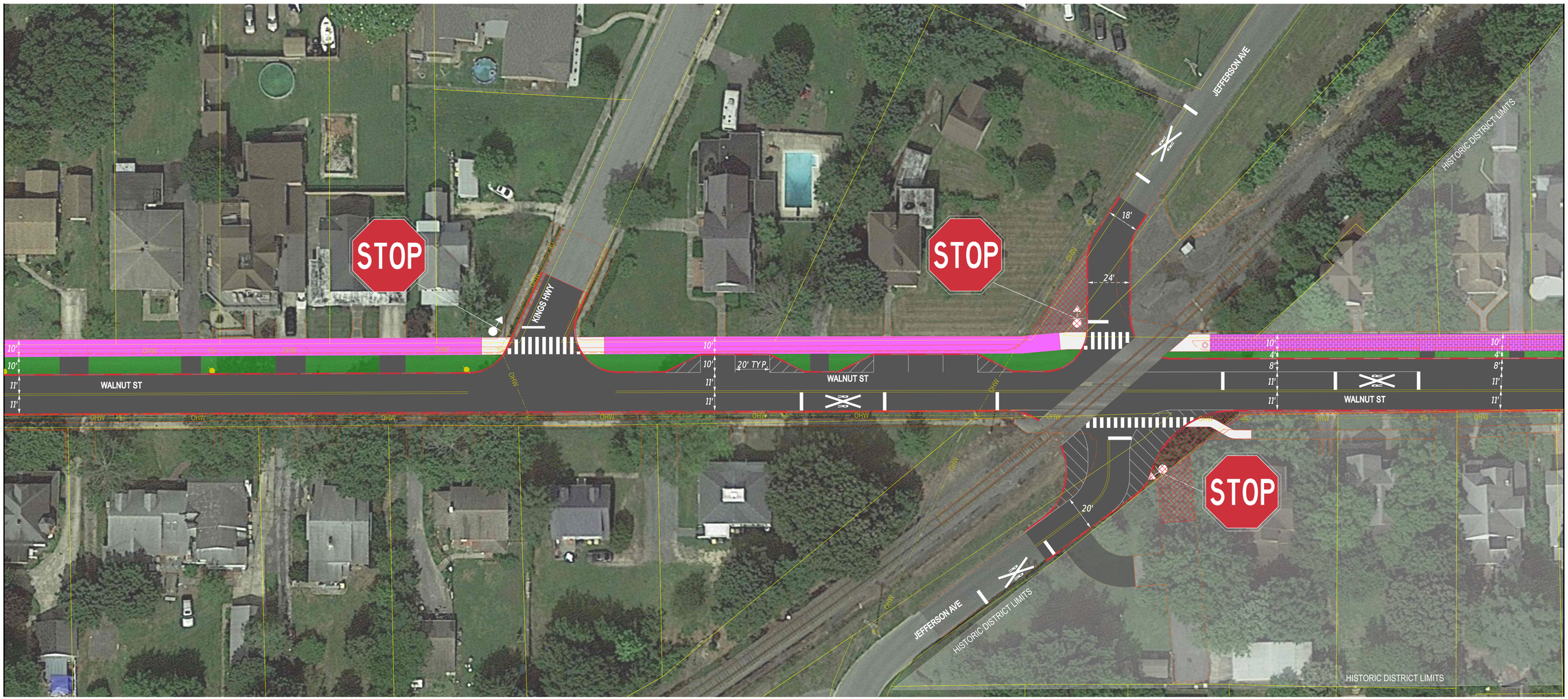
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FEET

# WALNUT STREET MILFORD, DE CONCEPT PLAN

| | | | |
|---|---|---|---|
| CONTRACT | BRIDGE NO. | X | SECTION |
| TXXXXXXXXX | DESIGNED BY: | M. PENNINGTON | CEN |
| COUNTY | CHECKED BY: | S. MARICHIC-GOUDY | SHEET NO. |
| KENT | CONCEPT 2 | | 3 |

MATCHLINE SHEET 3




MATCHLINE SHEET 5

## LEGEND

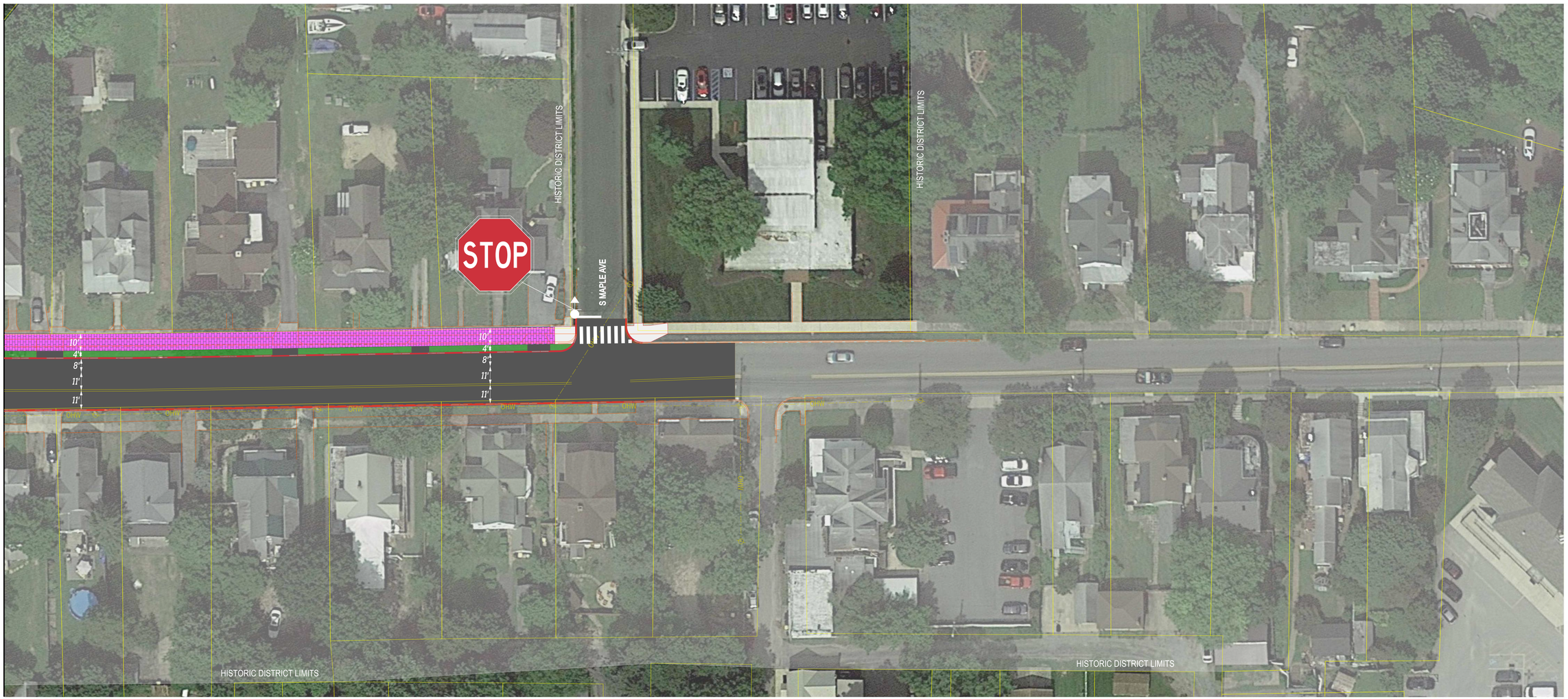
- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED BRICK MULTI-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS
- HISTORIC DISTRICT

$DATE$
$TIME$
$FILE$

SCALE
0 30 60 90
FEET

# WALNUT STREET MILFORD, DE CONCEPT PLAN

| CONTRACT | BRIDGE NO. | X | CONCEPT 2 | SECTION |
|---|---|---|---|---|
| TXXXXXXXXX | DESIGNED BY: | M. PENNINGTON | | CEN |
| COUNTY | | | | SHEET NO. |
| KENT | CHECKED BY: | S. MARICHIC-GOUDY | | 4 |




MATCHLINE SHEET 4

LEGEND

- PROPERTY LINES
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING MULT-USE PATH
- PROPOSED MULT-USE PATH
- PROPOSED BRICK MULTI-USE PATH
- PROPOSED SIDEWALK
- PROPOSED PAVEMENT
- PROPOSED GRASS
- HISTORIC DISTRICT

$DATE$
$TIME$
$FILE$

SCALE
0 30 60 90
FEET

# WALNUT STREET
# MILFORD, DE
# CONCEPT PLAN

| | |
|---|---|
| CONTRACT | TXXXXXXXXX |
| COUNTY | KENT |
| BRIDGE NO. | X |
| DESIGNED BY: | M. PENNINGTON |
| CHECKED BY: | S. MARICHIC-GOUDY |

CONCEPT 2

| | |
|---|---|
| SECTION | CEN |
| SHEET NO. | 5 |

# Milford: South Walnut Street Traffic Calming and Bike/Pedestrian Improvement Project

## Appendix D: Cost Estimates

## Cost Estimates

Conceptual cost estimates were developed for Preferred Option 2. The following provides a summary of the conceptual cost estimates:

### Preferred Option 2

| | |
|---|---|
| Preliminary Engineering | $554,885.78 |
| Right-of-Way | $75,000 |
| Construction Engineering | $416,164.33 |
| Construction | $2,774,428.89 |
| **Total Cost** | **$3,820,479.00 **Round to $4,000,000** |

Conceptual cost estimate is provided in *Appendix D* of this report.

# Walnut St, Milford

## Concept

## Preliminary 4/24/2020

| ITEM # | TITLE | UNIT | ESTIMATE COST | UNIT QUANTITY | TOTAL |
|---|---|---|---|---|---|
| 201000 | CLEARING AND GRUBBING | LS | $25,000.00 | 1.00 | $25,000.00 |
| 202000 | EXCAVATION AND EMBANKMENT | CY | $15.00 | 4277.00 | $64,155.00 |
| 202003 | UNDERCUT EXCAVATION | CY | $23.00 | 856.00 | $19,688.00 |
| 207000 | STRUCTURAL EXCAVATION | CY | $15.00 | 859.00 | $12,885.00 |
| 209001 | BORROW, TYPE A | CY | $20.00 | 500.00 | $10,000.00 |
| 209005 | FURNISHING BORROW, TYPE C FOR PIPE AND UTILITY TRENCH BACKFILL | CY | $24.00 | 702.00 | $16,848.00 |
| 209006 | BORROW, TYPE F | CY | $12.00 | 500.00 | $6,000.00 |
| 211000 | REMOVAL OF STRUCTURES AND OBSTRUCTIONS | LS | $10,000.00 | 1.00 | $10,000.00 |
| 211001 | REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT, CURB AND SIDEWALK | SY | $28.00 | 3494.00 | $97,832.00 |
| 301001 | GRADED AGGREGATE BASE COURSE, TYPE B | CY | $55.00 | 1281.00 | $70,455.00 |
| 301002 | GRADED AGGREGATE BASE COURSE, TYPE B, PATCHING | CY | $95.00 | 485.00 | $46,075.00 |
| 401014 | SUPERPAVE TYPE B, PG 64-22 | TON | $100.00 | 0.00 | $0.00 |
| 401030 | SUPERPAVE TYPE B, PG 64-22, PATCHING | TON | $140.00 | 44.00 | $6,160.00 |
| 401036 | SUPERPAVE TYPE C, PG 64-22, WEDGE | TON | $150.00 | 99.00 | $14,850.00 |
| 401044 | SUPERPAVE TYPE C, PG 64-22 (NON-CARBONATE STONE) | TON | $110.00 | 1852.00 | $203,720.00 |
| 601033 | REINFORCED CONCRETE PIPE, 18", CLASS IV | LF | $95.00 | 1470.00 | $139,650.00 |
| 602004 | DRAINAGE INLET, 48" X 30" | EACH | $4,200.00 | 7.00 | $29,400.00 |
| 602130 | ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET | EACH | $1,800.00 | 9.00 | $16,200.00 |
| 602132 | ADJUSTING AND REPAIRING EXISTING MANHOLE | EACH | $1,800.00 | 18.00 | $32,400.00 |
| 701013 | PORTLAND CEMENT CONCRETE CURB, TYPE 1-8 | LF | $30.00 | 8140.00 | $244,200.00 |
| 701014 | PORTLAND CEMENT CONCRETE CURB, TYPE 2 | LF | $25.00 | 0.00 | $0.00 |
| 701023 | INTEGRAL PORTLAND CEMENT CONCRETE CURB AND GUTTER, TYPE 3-8 | LF | $35.00 | 44.00 | $1,540.00 |
| 705001 | PORTLAND CEMENT CONCRETE SIDEWALK, 4" | SF | $12.00 | 4901.00 | $58,812.00 |
| 705002 | PORTLAND CEMENT CONCRETE SIDEWALK, 6" | SF | $14.00 | 6312.00 | $88,368.00 |
| 705005 | PORTLAND CEMENT CONCRETE SIDEWALK, 8" | SF | $16.00 | 1029.00 | $16,464.00 |
| 705007 | SIDEWALK SURFACE DETECTABLE WARNING SYSTEM | SF | $38.00 | 506.00 | $19,228.00 |
| 705008 | PEDESTRIAN CONNECTION, TYPE 1 | SF | $15.50 | 2945.00 | $45,647.50 |
| 710002 | ADJUST WATER VALVE BOXES | EACH | $450.00 | 20.00 | $9,000.00 |
| 710041 | RELOCATING FIRE HYDRANT | EACH | $7,500.00 | 0.00 | $0.00 |
| 760010 | PAVEMENT MILLING, BITUMINOUS CONCRETEPAVEMENT | SYIN | $2.50 | 26500.00 | $66,250.00 |
| 762000 | SAW CUTTING, BITUMINOUS CONCRETE | LF | $3.00 | 9482.00 | $28,446.00 |
| 762001 | SAW CUTTING, CONCRETE, FULL DEPTH | LF | $15.00 | 197.00 | $2,955.00 |
| 801000 | MAINTENANCE OF TRAFFIC | LS | $200,000.00 | 1.00 | $200,000.00 |
| 817002 | PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND, ALKYD- THERMOPLASTIC | SF | $6.00 | 3030.00 | $18,180.00 |
| 817003 | TEMPORARY MARKINGS, PAINT, 4" | LF | $0.55 | 0.00 | $0.00 |
| 817004 | TEMPORARY MARKINGS, PAINT, SYMBOL/LEGEND | SF | $4.00 | 0.00 | $0.00 |
| 817005 | PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 5" | LF | $5.00 | 0.00 | $0.00 |
| 817015 | PREFORMED RETROREFLECTIVE THERMOPLASTIC MARKINGS, BIKE SYMBOL | EACH | $400.00 | 0.00 | $0.00 |
| 817042 | PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 6" | LF | $1.50 | 7692.00 | $11,538.00 |
| 817043 | PERMANENT PAVEMENT STRIPING, ALKYD-THERMOPLASTIC, 12" | LF | $3.00 | 495.00 | $1,485.00 |
| 818001 | SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL, TYPE IV, RETROREFLECTIVE SHEETING | | $30.00 | 36.00 | $1,080.00 |
| 818003 | SUPPLY OF FLAT SHEET ALUMINUM SIGN PANEL, TYPE XI, RETROREFLECTIVE SHEETING | | $30.00 | 163.00 | $4,890.00 |
| 819011 | GALVANIZED TELESCOPING STEEL SIGN POSTS, 12' X 2", COMPLETE W/ BASEPOSTS AND HARDWARE | | $175.00 | 23.00 | $4,025.00 |
| 819018 | INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLE SIGN POST | EACH | $110.00 | 23.00 | $2,530.00 |
| 819019 | INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON MULTIPLE SIGN POSTS | SF | $22.00 | 0.00 | $0.00 |
| 905001 | SILT FENCE | LF | $4.00 | 10000.00 | $40,000.00 |
| 905004 | INLET SEDIMENT CONTROL, DRAINAGE INLET | EACH | $200.00 | 0.00 | $0.00 |
| 905005 | INLET SEDIMENT CONTROL, CURB INLET | EACH | $200.00 | 16.00 | $3,200.00 |
| 907017 | COMPOST FILTER LOGS | LF | $24.00 | 0.00 | $0.00 |
| 908004 | TOPSOIL, 6" DEPTH | SY | $4.50 | 7841.00 | $35,284.50 |
| 908017 | TEMPORARY GRASS SEEDING | SY | $0.75 | 0.00 | $0.00 |
| 908020 | EROSION CONTROL BLANKET MULCH | SY | $4.00 | 7841.00 | $31,364.00 |
| 908023 | STABILIZED CONSTRUCTION ENTRANCE | SY | $75.00 | 0.00 | $0.00 |
| | **Subtotal** | | | | **$1,755,805.00** |
| | | | | | |
| 763000 | Initial Expense (5%) | L.S. | $87,790.25 | 1 | $87,790.25 |
| 763501 | Construction Engineering (5%) | L.S. | $87,790.25 | 1 | $87,790.25 |
| | | | | | |
| | TOTAL BASE FOR PROJECT | | | | **$1,931,385.50** |
| | | | | | |
| | CONSTRUCTION CONTINGENCY | 20% | $386,277.10 | 1 | $386,277.10 |
| | TRAFFIC (FROM TRAFFIC STATEMENT) | L.S. | $0.00 | 1 | $0.00 |
| | UTILITY | L.S. | $377,559.84 | 1 | $377,559.84 |
| | QA/QC for HMA | L.S. | $698.25 | 1 | $698.25 |
| | E&S INSPECTION | L.S. | $63,000.00 | 1 | $63,000.00 |
| | Asphalt Cost Adj | L.S. | $15,508.20 | 1 | $15,508.20 |
| | | | | | |
| | **TOTAL CONSTRUCTION COST** | | | | **$2,774,428.89** |
| | | | | | |
| | CONSTRUCTION ENGINEERING - (INSPECTION, CE, ETC) | L.S. | $416,164.33 | 1 | $416,164.33 |
| | RIGHT OF WAY | L.S. | $75,000.00 | 1 | $75,000.00 |
| | PE | L.S. | $554,885.78 | 1 | $554,885.78 |
| | **TOTAL BASE CONSTRUCTION COST** | | | | **$3,820,479.00** |

Notes:
1. All MOT items included in Item 801000 for this estimate. Breakouts of individual items will be included in the semi-final cost estimate.
2. Assumes 180 Calendar Days.

PUBLIC WORKS FACILITY
180 Vickers Drive
Milford, DE 19963
www.cityofmilford.com

THE CITY of Milford DELAWARE

DIRECTOR MICHAEL J. SVABY
O 302.422.1110, EXT 1173
C 302.387.9389
msvaby@milford-de.gov

TO: Mayor and City Council

THRU: Mark Whitfield, City Manager
Lou Vitola, Director, Finance

FROM: Michael Svaby, Director, Public Works

DATE: September 21, 2023

RE: Downtown Restroom Purchase Order Award

---

**Background**: The City's approved Capital Improvement Plan (CIP) includes a provision for a downtown restroom facility (line 205, page 6 of 8 OM FY24 Working.xlsx (cityofmilford.com)).

The Public Works staff has reviewed alternatives for this purchase including multiple prefabricated units as well as a standard engineered/designed block building and found that a prefabricated unit (*Cortez, see attached quote)*, manufactured by CXT is the most economical and effective unit available.

In addition, the Finance Department has reviewed the FY24 capital budget as approved by Council to confirm the available funding. The balance of $282,500 has been loaded into General Ledger account 10197071-577020-3PR68. Finance has also reviewed lease terms offered by the vendor to determine that the outright purchase of the unit is preferred to the lease based on the imputed lease rate compared to the alternate use of the funds.

Staff recommends award of a purchase order to CXT for this manufactured restroom unit in the amount not to exceed $155,000 (see attached quote). This price falls within the budgeted amount of $282,500, allowing for site costs to connect utilities for water, sewer and electric - to be finalized in the coming months.

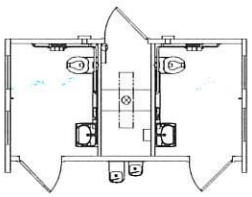
**Recommendation**: Staff recommends the approval of a purchase order to CXT in the amount of $155,000 for this prefabricated outdoor restroom unit.

Cc: Attachments

## CORTEZ — 10' 3" X 17'

Cortez with chase has two single user fully accessible flush restrooms. Standard features include simulated barnwood textured walls, simulated cedar shake textured roof, vitreous china fixtures, interior and exterior lights, off loaded, and set up at site.





CXT
800.696.5766
cxtinc.com

*Base Price $ 65,718.00

### Optional Sections

| | |
|---|---|
| Restroom* $65,718.00 Qty: = $0.00 | Shower* $79,479.00 Qty: = $0.00 |
| Family Assist Shower/Restroom Combo* $76,680.00 Qty: = $0.00 | Storage $60,840.00 Qty: = $0.00 |
| Concession* $76,194.00 Qty: = $0.00 | |

*Includes 4-gallon water heater.*

Total for Optional Sections $ 0.00

### Added Cost Options

| | | Price per unit | Click to select | |
|---|---|---|---|---|
| Final Connection to Utilities (per section) | | $ 5,000.00 | ☐ | 0.00 |
| Optional Wall Texture (per section)- *choose one* ○ Split Face Block ($5,500) ◉ Stone ($7,000) | | Reset Wall Texture | | 7,000.00 |
| Optional Roof Texture (per section) ☑ Ribbed Metal | | $ 5,500.00 | | 5,500.00 |
| Insulation and Heaters (per section) | | $ 19,500.00 | ☑ | 19,500.00 |
| Stainless Steel Water Closet (each) | Qty: 2 | $ 1,750.00 | ☑ | 3,500.00 |
| Stainless Steel Lavatory (each) | Qty: 2 | $ 1,500.00 | ☑ | 3,000.00 |
| Electric Hand Dryer (each) | Qty: 2 | $ 700.00 | ☑ | 1,400.00 |
| Electronic Flush Valve (each) | Qty: | $ 1,500.00 | ☐ | 0.00 |
| Electronic Lavatory Faucet (each) | Qty: | $ 1,500.00 | ☐ | 0.00 |
| Paper Towel Dispenser (each) | Qty: | $ 350.00 | ☐ | 0.00 |
| Toilet Seat Cover Dispenser (each) | Qty: | $ 350.00 | ☐ | 0.00 |
| Sanitary Napkin Disposal Receptacle (each) | Qty: 2 | $ 100.00 | ☑ | 200.00 |
| Baby Changing Table (each) | Qty: 2 | $ 750.00 | ☑ | 1,500.00 |
| Skylight in Restroom (each) | Qty: | $ 1,600.00 | ☐ | 0.00 |
| Marine Grade Skylight in Restroom (each) | Qty: | $ 2,450.00 | ☐ | 0.00 |
| Marine Package (excluding fiberglass doors and frames) (per section) | | $ 2,350.00 | ☐ | 0.00 |
| Exterior Mounted ADA Drinking Fountain w/Cane Skirt (each) | Qty: 1 | $ 5,600.00 | ☑ | 5,600.00 |
| 2K Anti-Graffiti Coating (per section) | | $ 4,000.00 | ☑ | 4,000.00 |
| Optional Door Closure (each) | Qty: | $ 700.00 | ☐ | 0.00 |
| Fiberglass Entry and Chase Doors and Frames (each) | Qty: | $ 3,300.00 | ☐ | 0.00 |
| Timed Electric Lock System (2 doors- does not include chase door) (each) | Qty: 2 | $ 1,350.00 | ☑ | 2,700.00 |
| Exterior Frostproof Hose Bib with Box (each) | Qty: 1 | $ 1,200.00 | ☑ | 1,200.00 |

| | |
|---|---|
| Total for Added Cost Options: | $ 55,100.00 |
| Custom Options: Brick texture only, painted to match existing buildings. Drinking ftn with bottle filler (Elkay) DE Install Surcharge 2023 | $ 11,200.00 |
| Engineering and State Fees: | $ 5,500.00 |
| Estimated One-Way Transportation Costs to Site (quote): | $ 14,800.00 |
| Estimated Tax: | $ |
| Total Cost per Unit Placed at Job Site: | $ 152,318.00 |

*Estimated monthly payment on 5 year lease* ***$3,061.59***

***Disclaimer: Please call to confirm selected sections are compatible.***

Sourcewell Awarded Contract

This price quote is good for 60 days from date below, and is accurate and complete.

Gregg Zentarsky

Digitally signed by Gregg Zentarsky
Date: 2023.07.13 09:28:06 -04'00'

CXT Sales Representative Date

I accept this quote. Please process this order.

Company Name

Company Representative Date

## OPTIONS

**Exterior Color(s)** *(For single color mark an X. For two-tone combinations use W = Walls and R = Roof.)*

| | | | |
|---|---|---|---|
| _____ Amber Rose | _____ Berry Mauve | _____ Buckskin | _____ Cappuccino Cream |
| _____ Charcoal Grey | _____ Coco Milk | _____ Evergreen | _____ Georgia Brick |
| _____ Golden Beige | _____ Granite Rock | _____ Hunter Green | _____ Java Brown |
| _____ Liberty Tan | _____ Malibu Taupe | _____ Mocha Caramel | _____ Natural Honey |
| _____ Nuss Brown | _____ Oatmeal Buff | _____ Pueblo Gold | _____ Raven Black |
| _____ Rich Earth | _____ Rosewood | _____ Sage Green | _____ Salsa Red |
| _____ Sand Beige | _____ Sun Bronze | _____ Toasted Almond | _____ Western Wheat |

Special roof color # _____

Special wall color # _____

Special trim color # _____

**Rock Color**

☐ Basalt ☐ Mountain Blend ☐ Natural Grey ☐ Romana

**Roof Texture**

☐ Cedar Shake ☑ Ribbed Metal

**Wall Texture(s)** *(For single color mark an X. For top and bottom textures use T = Top and B = Bottom.)*

| | | Can only be used as bottom texture | |
|---|---|---|---|
| _____ Barnwood | _____ Horizontal Lap | | |
| _____ Split Face Block | _____ Board & Batt | _____ Napa Valley Rock | _____ River Rock |
| _____ Stucco/Skip Trowel | X Brick | _____ Flagstone | |

(Textures not included in CXT's quote are additional cost.)

**Door Opener**

☐ Non-locking ADA Handle ☐ Privacy ADA Latch ☐ Pull Handle/Push Plate

**Deadbolt** ☐

**Accessible Signage**

☐ Men ☐ Women ☐ Unisex

**Toilet Paper Holder**

☐ 2-Roll Stainless Steel ☑ 3-Roll Stainless Steel

**Notes:**

# ORDERING INFORMATION

Sourcewell Awarded Contract
Contract # 081721-CXT

CXT® Precast Concrete Products manufactures restroom, shower and concession buildings in multiple designs, textures and colors. The roof and walls are fabricated with high strength precast concrete to meet all local building codes and textured to match local architectural details. All CXT buildings are designed to meet A.D.A. and to withstand heavy snow, high wind and category E seismic loads. All concrete construction also makes the buildings easy to maintain and withstand the rigors of vandalism. The buildings are prefabricated and delivered complete and ready-to- use, including plumbing and electrical where applicable. With thousands of satisfied customers nationwide, CXT is the leader in prefabricated concrete restrooms.

1. ORDERING ADDRESS(ES): CXT Precast Concrete Products, 606 N. Pines Road, Suite 202, Spokane Valley, WA 99206

2. ORDERING PROCEDURES: Fax 509-928-8270

3. PAYMENT ADDRESS(ES):
**Remitting by check:**
CXT, Inc., PO Box 676208, Dallas, TX 75267-6208

**Remitting by ACH or wire transfer:**
Beneficiary: CXT, Inc.
Beneficiary Bank: PNC Bank, Pittsburgh, PA
Account: 1077766885 ABA/Routing: 043000096
Email remittance details to AR@lbfoster.com

4. WARRANTY PROVISIONS: CXT provides a one (1) year warranty. The warranty is valid only when concrete is used within the specified loadings. Furthermore, said warranty includes only the related material necessary for the construction and fabrication of said concrete components. All other non-concrete components will carry a one (1) year warranty. CXT warrants that all goods sold pursuant hereto will, when delivered, conform to specifications set forth above. Goods shall be deemed accepted and meeting specifications unless notice identifying the nature of any non-conformity is provided to CXT in writing within the specified warranty. CXT, at its option, will repair or replace the goods or issue credit for the customer provided CXT is first given the opportunity to inspect such goods. It is specifically understood that CXT's obligation hereunder is for credit, repair or replacement only, F.O.B. CXT's manufacturing plants, and does not include shipping, handling, installation or other incidental or consequential costs unless otherwise agreed to in writing by CXT.

This warranty shall not apply to:

1. Any goods which have been repaired or altered without CXT's express written consent, in such a way as in the reasonable judgment of CXT, to adversely affect the stability or reliability thereof;

2. To any goods which have been subject to misuse, negligence, acts of God or accidents; or

3. To any goods which have not been installed to manufacturer's specifications and guidelines, improperly maintained, or used outside of the specifications for which such goods were designed.

5. TERMS AND CONDITIONS OF INSTALLATION (IF APPLICABLE): All prices subject to the "Conditions of Sale" listed on the CXT quotation form.

Customers are responsible for marking exact location building is to be set; providing clear and level site, free of overhead and/or underground obstructions; and providing site accessible to normal highway trucks and sufficient area for the crane to install and other equipment to perform the contract requirements. Customer shall provide notice in writing of low bridges, roadway width or grade, unimproved roads or any other possible obstacles to access. CXT reserves the right to charge the customer for additional costs incurred for special equipment required to perform delivery and installation. Customers will negotiate installation on a project-by-project basis, which shall be priced as separate line items. For more information regarding installation and truck turning radius guidelines please see our website at http://www.cxtinc.com.

In the event delivery of the building/s ordered is/are not completed within 30 days of the agreed to schedule through no fault of CXT, an invoice for the full contract value (excluding shipping and installation costs) will be submitted for payment. Delivery and installation charges will be invoiced at the time of delivery and installation.

Should the delivery and installation costs increase due to changes in the delivery period, this increase will be added to the price originally quoted, and will be subject to the contract payment terms.

In the event that the delivery is delayed more than 90 days after the agreed to schedule and through no fault of CXT, then in addition to the remedies above, a storage fee of 1-½% of contract price per month or any part of any month will be charged.

**Customer is responsible for all local permits and fees.

6. DELIVERY CHARGE: All prices F.O.B. origin prepaid and added to invoice. CXT operates three (3) manufacturing plants in the United States and will deliver from the closest location on our carriers.

7. PAYMENT TERMS: All orders are cash in advance. At CXT's discretion, credit may be given after approval of credit application. Payment to CXT by the purchaser of any approved credit amount is net 30 days after submission of invoice to purchaser. Interest at a rate equal to the lower of (i) the highest rate permitted by law; or (ii) 1.5% per month will be charged monthly on all unpaid invoices beginning with the 35th day (includes five (5) day grace period) from the date of the invoice. Under no circumstance can retention be taken. If CXT initiates legal proceeding to collect any unpaid amount, purchaser shall be liable for all of CXT's costs, expenses and attorneys' fees and costs of any appeal.

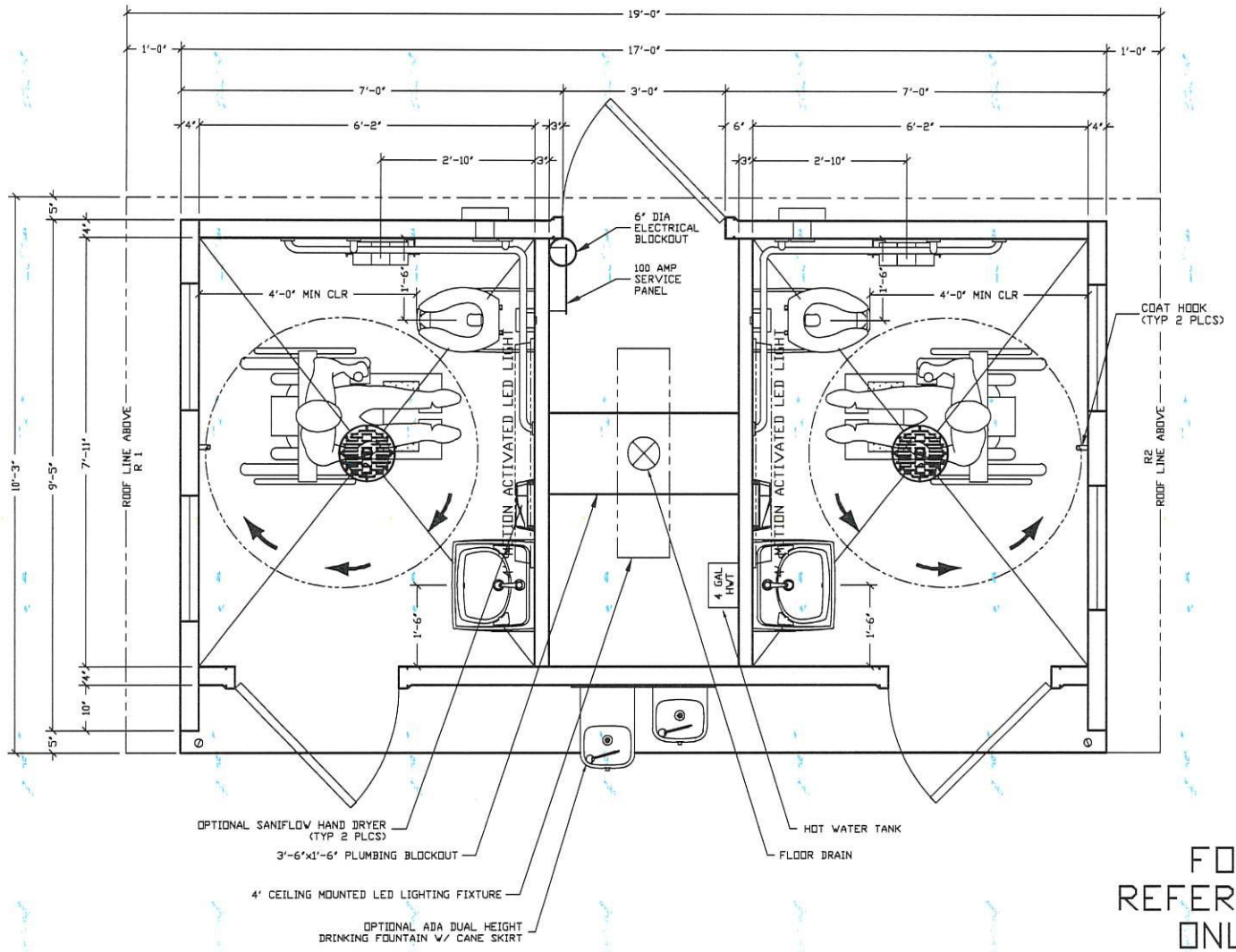
8. LIMITATION OF REMEDIES: In the event of any breach of any obligations hereunder; breach of any warranty regarding the goods, or any negligent act or omission of any party, the parties agree to submit all claims to binding arbitration. Any settlement reached shall include all reasonable costs including attorney fees. In no event shall CXT be subject to or liable for any incidental or consequential damages. Without limitation on the foregoing, in no event shall CXT be liable for damages in excess of the purchase price of the goods herein offered.

9. DELIVERY INFORMATION: All prices F.O.B. origin prepaid and added to invoice. CXT operates three (3) manufacturing plants in the United States and will deliver from the closest location on our carriers. Use the information below to determine the origin:

- F.O.B. 6701 E. Flamingo Avenue, Building 300, Nampa, ID 83687 applies to: AK, CA, HI, ID, MT, ND, NV, OR, SD, UT, WA, WY.
- F.O.B. 901 North Highway 77, Hillsboro, TX 76645 applies to AR, AZ, CO, IA, KS, LA, MN, MO, MS, NE, NM, OK, TX.
- F.O.B. 362 Waverly Road, Williamstown, WV 26183 applies to AL, CT, DE, FL, GA, IL, IN, KY, MA, MD, ME, MI, NC, NH, NJ, NY, OH, PA, PR, RI, SC, TN, VA, VT, WI, WV.
- Prices exclude all federal/state/local taxes. Tax will be charged where applicable if customer is unable to provide proof of exemption.

## CIP LINE DETAIL: FY2024-28 FINAL AS APPROVED JUNE 12, 2023

| FUND TYPE, OPS DEPT & PROJ CATEGORY | FY20-FY23 (Approved) | FY20-FY23 (Spent/DeOb) | FY23 Balance Remaining | FY24 (Plan) | FY25 (Plan) | FY26 (Plan) | FY27 (Plan) | FY28 (Plan) |
|---|---|---|---|---|---|---|---|---|
| **PARKS & REC** | | | | | | | | |
| EQUIPMENT | | | | | | | | |
| Brush cutter attachment | | - | - | 15,000 | - | - | - | - |
| Kubota Tractor w/Snow Blade (2011 PR-035 & 036) | | - | - | - | - | - | 40,000 | - |
| Kubota Zero Turn Mower (PR-8, 11, 20, 52) | 35,463 | (15,463) | 20,000 | 21,000 | 23,000 | 25,000 | 26,000 | 27,000 |
| Replacement 4x2 Gator (FY22 PR-010;PR-13 & PR-29) | 40,000 | - | 40,000 | 20,000 | - | - | - | - |
| Stand-up Mower, John Deere (PR-50 & 51) | - | - | - | - | 40,000 | - | - | - |
| Tractor, New Holland w/ Cab (PR-30) w/ mower deck (PR-33 | - | - | - | 85,000 | - | - | - | - |
| Trailer | 7,537 | (7,537) | - | - | - | - | - | - |
| Ventrac Tractor with Mulching Mower | 30,000 | - | 30,000 | - | - | - | - | - |
| VEHICLES | | | | | | | | |
| Dodge Ram 1500 Pick up (R: PR-015) | | - | - | - | - | - | - | 90,000 |
| Econoline Van (R: PR-6) | 33,457 | - | 33,457 | 16,600 | - | - | - | - |
| F350 Pickup Truck (Expansion) | | - | - | 85,000 | - | - | - | - |
| Vehicle - Parks & Rec | 56,543 | (56,543) | - | - | - | - | - | - |
| Water Truck (R: PR-41) | 50,000 | - | 50,000 | 15,000 | - | - | - | - |
| PARKS | | | | | | | | |
| Memorial Park I - Playground & Pickleball Ct | 755,781 | (316,978) | 438,803 | 60,000 | - | - | - | - |
| Riverwalk Upgrades | 525,000 | (280,315) | 244,685 | - | - | - | - | - |
| Sharp Property - Open Space Development/Greenway | 250,000 | (9,850) | 240,150 | 250,000 | 250,000 | 250,000 | 250,000 | 250,000 |
| Public Restrooms | 300,000 | (17,500) | 282,500 | - | - | 350,000 | - | - |
| Gateway signage and improvements | 20,000 | - | 20,000 | 50,000 | 20,000 | 20,000 | 20,000 | 20,000 |
| Open Space Acquisition | 320,000 | (313,895) | 6,105 | 500,000 | 500,000 | 500,000 | 500,000 | 500,000 |
| Additional Recreational Court | - | - | - | - | - | 75,000 | - | - |
| Bsktball Court Rehab | 112,443 | (72,443) | 40,000 | - | - | - | - | - |
| Construct Rec/Community Ctr@Marvel Sq | - | - | - | - | - | 2,000,000 | - | - |
| Construction of beach volleyball court | 15,000 | - | 15,000 | - | - | - | - | - |
| Construction of courts @ TSM | - | - | - | - | 200,000 | - | - | - |
| Frisbee golf course | - | - | - | - | 150,000 | - | - | - |
| Goat Island Bridge | 36,000 | (36,000) | - | - | - | - | - | - |
| Irrigation wells at TSM | 20,000 | - | 20,000 | - | - | - | - | - |
| Marshall Pond Riverbank Development | 150,000 | (24,649) | 125,351 | - | 100,000 | 100,000 | 100,000 | 100,000 |
| Marvel Sq Redevel/outdoor skating track | - | - | - | - | 100,000 | - | - | - |
| Memorial Park II - Pavilion | 75,000 | - | 75,000 | - | - | - | - | - |
| Memorial Park II - Shade/Walks/Bench | - | - | - | 30,000 | - | - | - | - |
| Redevelopment of Bicentennial Park | - | - | - | 250,000 | - | - | - | - |
| Riverwalk Ext/Bulkhead Const | - | - | - | 150,000 | 200,000 | - | - | - |
| Splash Pad | - | - | - | - | 100,000 | - | - | - |
| Tree Planting | 30,000 | (5,913) | 24,087 | 10,000 | 10,000 | 10,000 | 10,000 | - |
| Parks & Rec Consolidation | 43,563 | (43,563) | - | - | - | - | - | - |
| Riverwalk Upgrades Phase II | | - | | | | 350,000 | | |




FOR REFERENCE ONLY

3608 N. Sullivan Bldg. #7 Spokane, WA 99216

CXT

Precast Products

901 N. Highway 77 Hillsboro, TX 76645

PROJECT TITLE

CORTEZ

CXT STANDARD BUILDING

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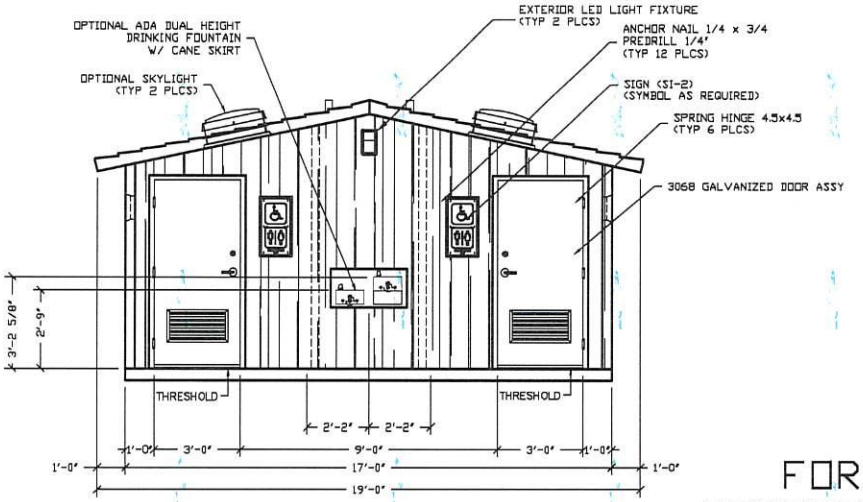
CXT Incorporated

| NO. | DESCRIPTION | APPROVAL | DATE |
|---|---|---|---|
| | | | |

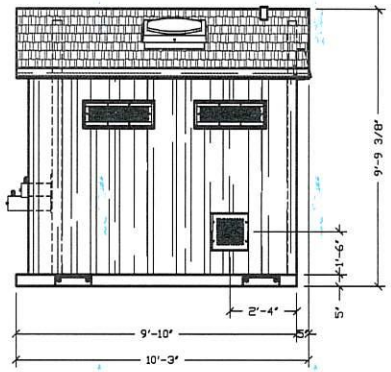
| | | | |
|---|---|---|---|
| SCALE | 1/2"=1'-0" | DATE | 04-30-18 |
| DRAWN | | FILE NO. | PD-DM03 |
| CHECKED | | PLOT | 24 |

FLOOR PLAN

| DWG NO. | SHEET | REV. |
|---|---|---|
| CR-03 | | |

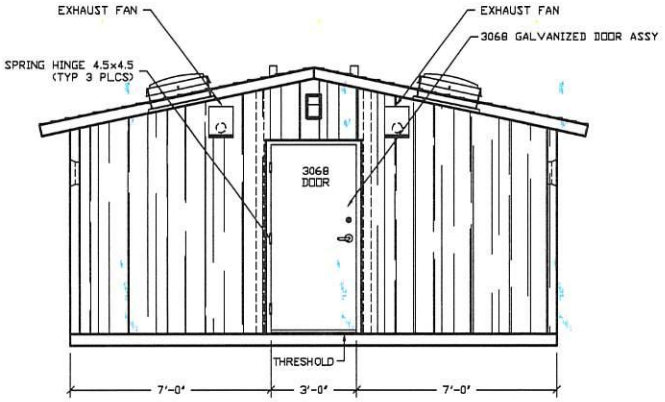



FRONT ELEVATION

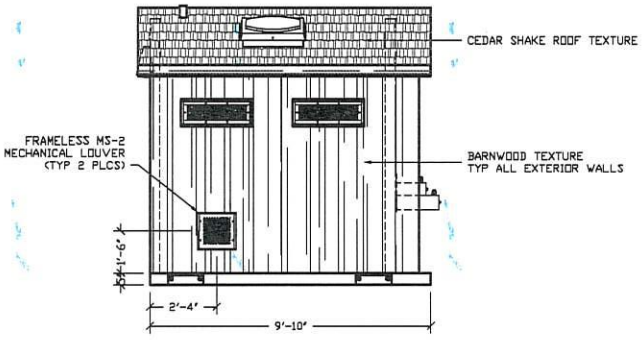



RIGHT SIDE ELEVATION

FOR REFERENCE ONLY




REAR ELEVATION




LEFT SIDE ELEVATION

| EMBEDDED MATERIALS | |
|---|---|
| ITEM | QTY |
| 3068 DOOR ASSEMBLY | 3 |
| SPRING HINGE 4.5x4.5 | 9 |
| SI-2 | 2 |
| ANCHOR NAIL 1/4x3/4 | 12 |

| CU. FT. CONC. | SQ. FT. W.W.F. |
|---|---|

APPROXIMATE WEIGHT

3606 N. Sullivan Bldg. #7 Spokane, WA 99216
CXT Precast Products
901 N. Highway 77 Hillsboro, TX 76645

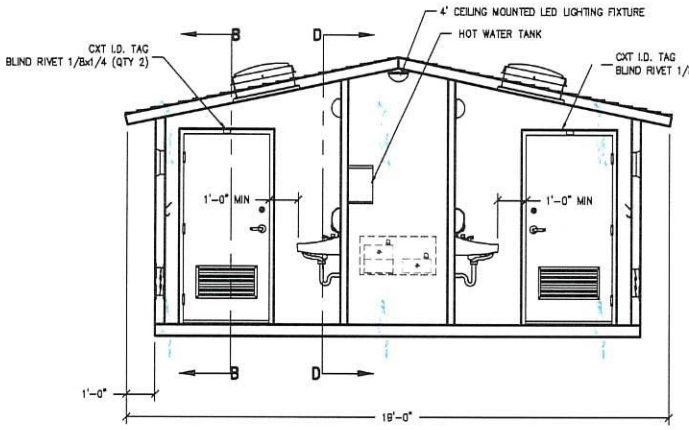
PROJECT TITLE
CORTEZ
CXT STANDARD BUILDING

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CXT Incorporated

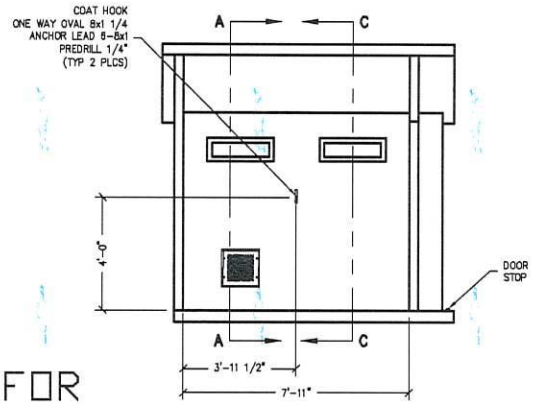
| NO. | DESCRIPTION | APPROVAL | DATE |
|---|---|---|---|
| SCALE | 1/4"=1'-0" | DATE | 04-30-18 |
| DRAWN | | FILE NO. | PS-0904 |
| CHECKED | | PLOT | 48 |

BUILDING ELEVATIONS

| DWG NO. | SHEET | REV. |
|---|---|---|
| CR-04 | | |

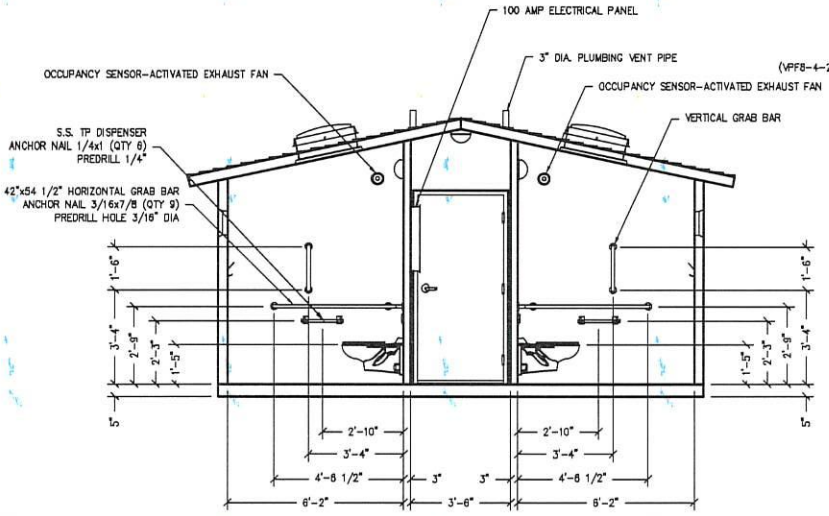



SECTION A – A

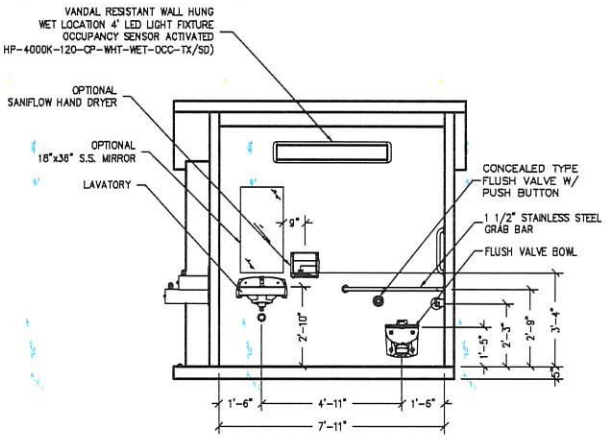



SECTION B – B

FOR REFERENCE ONLY




SECTION C – C




SECTION D – D

| EMBEDDED MATERIALS | |
|---|---|
| ITEM | QTY |
| BLIND RIVET 1/8x1/4 | 4 |
| GRAB BAR | 2 |
| TP DISPENSER | 2 |
| TOILET PAPER ROLL | 6 |
| COAT HOOK | 2 |
| DOOR STOP | 2 |
| ONE WAY OVAL 8x1 1/4 | 4 |
| ANCHOR LEAD 6-8x1 | 4 |
| CXT I.D. TAG | 2 |
| ANCHOR NAIL 1/4x1 | 12 |
| ANCHOR NAIL 1/4x3/4 | 8 |
| ANCHOR NAIL 3/16x7/8 | 30 |

| CU. FT. CONC. | SQ. FT. W.M.F. |
|---|---|

APPROXIMATE WEIGHT

3908 N. Sullivan Bldg. #7 Spokane, WA 99216
CXT
Precast Products
901 N. Highway 77 Hillsboro, TX 76645

BUILDER FOR
CORTEZ
CXT STANDARD BUILDING

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CXT Incorporated

| NO. | DESCRIPTION | COMMENTS | DATE |
|---|---|---|---|
| SCALE | 1/4"=1'-0" | DATE | 04-30-18 |
| DRAWN | | FILE NO. | PD-CR05 |
| CHECKED | | PLOT | 48 |

INTERIOR ELEVATIONS

| DWG NO. | SHEET | REV. |
|---|---|---|
| CR-05 | | |

# RESOLUTION 2023-20

Final Acceptance of Lighthouse Estates Subdivision, Phase 2
Rights of Way and Associated Infrastructure

WHEREAS, Chapter 200 provides that public roads and public utilities shall be accepted into the City of Milford's street system and public utility system by Resolution of City Council; and

WHEREAS, the Public Works Director and City Engineer have determined the water, sewer and stormwater systems included in Phase 2 of the Lighthouse Estates Subdivision have been completed in accordance with City standards and requirements; and

WHEREAS, the portion of Phase 2 to be accepted includes the utilities within the Right-of-Way ("ROW") and public utilities within associated open spaces adjacent to, but within the phase, as depicted on the phasing plan sealed and dated October 25, 2006 and recorded with the Kent County Recorder of Deeds on Book 88, Page 81; and

WHEREAS, the phase to be accepted is phase 2 which encompass lots 12 through 27 and 59 through 68; and

WHEREAS, the utilities within the following rights-of-way are to be included: Shore Lane from Lot 12 to Lot 27; and

WHEREAS, this Resolution includes acceptance of the sidewalks and public streets within these phases; and

WHEREAS, approval to operate those utilities has been obtained from the applicable State agencies; and

WHEREAS, the maintenance bond for the completed utilities is to be relinquished to the developer in an amount equivalent to that withheld for maintenance of the accepted utilities; and

WHEREAS, said developer has provided as-built drawings of the utilities to the City of Milford.

NOW, THEREFORE BE IT RESOLVED that the City Council of the City of Milford, during a lawful session duly assembled on the 25th day of September, 2023, by a favorable majority vote, accepts the water, stormwater, sewer systems and rights of way in the Lighthouse Estates Subdivision, Phase 2, that are being dedicated for public use into the City of Milford's public utility system.

BE IT FURTHER RESOLVED, that the City of Milford shall assume responsibility for the future maintenance and repair of the water, stormwater piping and sewer systems in Lighthouse Estates Subdivision, Phase 2, as noted in this Resolution.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Official Seal of the City of Milford to be affixed this 25th day of September 2023.

_____
Mayor Arthur J. Campbell

Attest: _____
City Clerk Teresa K. Hudson

# RESOLUTION 2023-21

## Halloween Trick-or-Treat

**WHEREAS**, the children of Milford are free to enjoy the fun and festivity associated with the observance of the Halloween Trick-or-Treat custom of traveling with friends and family, going door to door in their neighborhoods, displaying their costumes and gathering treats; and

**WHEREAS**, parents are urged to join in the festivities by accompanying their children throughout their journeys in celebrating Halloween Trick-or-Treat; and

**WHEREAS**, residents are requested to indicate their willingness to welcome children by keeping their porch or exterior lights on and that youngsters call only on homes so lighted.

**NOW, THEREFORE, BE IT RESOLVED** by the Mayor and City Council, that the Halloween Trick-or-Treat observance be held in an orderly manner on Tuesday, October 31, 2023 between the hours of 6:00 P.M. and 8:00 P.M. in the City of Milford.

**AND, BE IT FURTHER RESOLVED THAT**:

*Costumed celebrants will be permitted to engage in Trick-or-Treat.

*All celebrants are to refrain from committing acts of vandalism or destruction.

*Motorists are asked to be ever watchful of our youngsters making these annual rounds.

**IN WITNESS WHEREOF**, I have hereunto set my hand and caused the Official Seal of the City of Milford to be affixed this 25th day of September 2023.

Mayor Arthur J. Campbell

Attest:

City Clerk Teresa K. Hudson

**Notice of City of Milford Ordinance Review**
**Public Comments – Monday, October 9, 2023**

NOTICE IS HEREBY GIVEN the following ordinance is under review by the City Council of the City of Milford. Public comments will be taken during a regular session on Monday, October 9, 2023 that begins at 6:00 pm. Interested parties are also invited to submit written comments to thudson@milford-de.gov on the amendment up to noon on Monday, October 9, 2023.

Ordinance 2023-38
Code of the City of Milford
Part II-General Legislation
Appendix B
Electric Rules and Regulations and Electric Tariff

AN ORDINANCE OF THE CITY OF MILFORD AMENDING THE CITY OF MILFORD CODE, APPENDIX B, ELECTRIC RATES AND REGULATIONS.

WHEREAS, the Mayor and City Council desire to update the City of Milford Code Appendix B Electric Rules and Regulations in accordance with the recommendations made by Electric Staff; and

WHEREAS, updated language is being inserted and punctuation and grammar errors are being corrected; and

WHEREAS, It is recognized that the City of Milford Code has numerous references to fees and costs related to multiple matters contained in various Chapters, including Appendix B-Electric Rates and Regulations; and

WHEREAS, it is the intention of the Mayor and Council to consolidate all fees and charges in one comprehensive document to be known as the City of Milford Fee Schedule; and

WHEREAS, one Fee Schedule makes the process easier and more accessible for both City staff and customers; and

WHEREAS, City Council found that the amendments to Appendix B Electric Rules and Regulations are in the best interest of the health, safety, convenience, and general welfare of the citizens of the City.

NOW, THEREFORE, BE IT RESOLVED, the City of Milford hereby ordains:

Section 1. Purpose: The Code of the City of Milford is amended to modify the electric rules and regulations within Appendix B of the Code of the City of Milford.

Section 2. An Electric Fee Schedule will be created, to be included in the comprehensive City Fee Schedule, for the placement of all fees removed from Appendix B Electric Rates and Regulations.

Section 3. Strikethrough text denotes a deletion; underlined text denotes an addition.

Section 4. Appendix B-City of Milford Electric Rules and Regulations, including the Electric Tariff, is hereby amended to read as follows:

## APPENDIX B ELECTRIC RULES AND REGULATIONS

**City of Milford**

**—-Electric Division—-**

**Rules and Regulations**
**Including the**
**Electric Tariff**

**For**

**City of Milford**
201 South Walnut Street
Milford, Delaware 19963
Phone 302-424-3712
Fax 302-424-3558

**APPENDIX B**
**ELECTRIC RULES AND REGULATIONS**[1]

[1]Editor's note(s)—Contained herein are the City of Milford Electric Rules and Regulations adopted June 22, 2015, and effective July 2, 2015. Where further amendatory ordinances have been incorporated, citations are in

## *RULES AND REGULATIONS*

### SECTION 1 GENERAL CONDITIONS

1.1 PURPOSE

The purpose of this Tariff is to establish Rules and Regulations for the distribution and delivery of electric ~~service~~ services on the City of Milford's electric system. These Rules and Regulations are supplementary to the ordinance establishing an Electric Tariff for the City of Milford and contain the Tariff and the Service Classifications, under which electricity will be supplied to its Customers by the City of Milford. A copy of these Rules and Regulations, with the accompanying Tariff, is on file at the Customer Service Center, 119 South Walnut Street, Milford, Delaware 19963, and open to inspection during normal working hours.

1.2 REVISIONS

These Rules and Regulations and the accompanying Tariff may be revised, amended, supplemented, or otherwise changed from time to time, in accordance with rules and procedures of the City Charter and the enabling legislation.

1.3 STATEMENT BY AGENTS

No City's employee or representative has authority to modify any rule or provision of these Rules and Regulations and the accompanying Tariff, or to bind the City by any promise or statement contrary thereto, unless the same shall be incorporated in a written contract executed by the City's authorized official.

1.4 RULES AND REGULATIONS

The Rules and Regulations are a part of service and shall govern all Classes of Service unless otherwise specifically stated by a Service ~~Classification, or~~ Classification modified by a City's approved rider or a written contract.

1.5 NO PREJUDICE OF RIGHTS

The failure by the City to enforce, or the decision not to enforce, any of the provisions of these Rules and Regulations and the accompanying Tariff shall not be deemed a waiver of its right to do so.

1.6 GRATUITIES TO EMPLOYEES

The City's employees are strictly forbidden to demand or accept any personal compensation or gifts for service rendered by them while working for the City on the City's time.

1.7 DISPUTES

In the event of a dispute between the City's Electric Department and a Customer or Applicant, either party may submit the particulars of the complaint to the City's Electric Superintendent for review and further action if necessary.

1.8 USE OF "HE" OR "HIS

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brackets following the amended provisions. The system of headings, catchlines, capitalization, citation to state statutes, and expression of numbers in text remains unchanged. See Code Comparative Table for detailed history of derivation.

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The use of the pronouns "he" or "his" in these Rules and Regulations, when referring to "Customer" and "Applicant", is generic, referring to both male and female parties.

1.9 HOURS OF OPERATION

City office hours are 8:00 AM to 4:30 PM Monday through Friday, except City recognized holidays. Normal hours for Service Calls are 7:30 AM to 4:00 PM Monday through Friday, except City recognized holidays.

1.10 EXTENDED HOURS OF OPERATION

The City's Customer Service Center may be open until 8:00 PM on one designated day per week, on non-holiday weeks, to accept payments only through the drive-thru.

## SECTION 2 DEFINITIONS

2.1 APPLICANT

The word "Applicant" as used in these Rules and Regulations, means any person, firm, corporation, institution, public body, or any agency of the Federal, State, or Local government requesting electric service from the City. The term also refers to current Customers who apply for modification of existing service or facilities and developers and builders during the planning and construction stages of new facilities.

2.2 BASE RATES

Base Rate means the Service rates charged to each Customer Class, without the City's Purchased Power Cost, and any additional charge or surcharge. Base Rates are intended to recover the Operating Expenses, including its debt service, of the City's Electric Department and a reasonable margin.

2.3 CITY

City means The City of Milford, ~~Delaware~~ Delaware, or Milford Electric Department.

2.4 COMMERCIAL PROPERTY OWNER

A Customer of the City of Milford Electric Department who operates a business and owns the property associated with the Customer's electric account.

2.5 CUSTOMER

Customer shall mean any person, firm, association, partnership, corporation, institution, public body, or any agency of the Federal, State, or Local government being supplied with electric service by the City. The term also refers to developers and builders during the planning and construction stages of new facilities, and the period prior to the sale or rent of the facility.

2.6 CUSTOMER CLASS

Customer Class shall mean a group of Customers with similar end use and load characteristics.

2.7 DELIVERY SERVICE CHARGE

Delivery Service Charge shall mean a charge to Customers for recovering the City's costs for delivering power supplies to Customers.

2.8 DEVELOPER

Developer shall mean any person, firm, association, partnership, corporation, or other entity which seeks to have provided by the appropriate authority ~~authorities~~, the infrastructure (roads, sewer, electric, etc.) for new business or residential developments. As used in these Rules and Regulations, the Developer may not be the final user of the facilities requested or the entity for which electric service was provided. However, the Developer may be considered an Applicant or a Customer during the planning and construction phase of the development.

2.9 DWELLING UNIT

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A Dwelling Unit is defined as one or more rooms arranged for the use of one or more individuals as a single housekeeping unit, with cooking, living, sanitary, and sleeping facilities.

2.10 DEMAND SIDE MANAGEMENT (DSM)

DSM means managing and/or controlling loads which result in reducing the Customer's Load when ordered by the City to do so.

2.11 DSM RESOURCES

Resources used by the Customer in order to manage and/or control his loads.

2.12 EXTRA FACILITIES

Extra facilities are the facilities which are in addition to the facilities provided by the City for providing Service under a Rate Schedule incorporated in this Tariff.

2.13 FERC

Federal Energy Regulatory Commission, a federal regulatory agency which regulates all wholesale power supply generation and transmission and other related services.

2.14 OFF-PEAK HOURS

Off-Peak Hours are the hours other than On-Peak Hours.

2.15 ON-PEAK HOURS

On-peak hours are those hours of the week when, for some Service Classifications, the Utility may charge higher rates for energy and/or Demand. The rates for the Utility's Customers may be higher because the cost of purchasing power from the Utility's wholesale provider is also higher. Off-peak hours are those hours when the Utility may charge a lower rate. On-peak hours are 6:00 AM to 10:00 PM Eastern Prevailing Time Monday through Friday, excluding holidays falling on weekdays. All other hours are off-peak hours.

2.16 PJM

PJM Interconnection, LLC, is a FERC authorized regional transmission organization ("RTO") which operates transmission service, and organized electric market in a number of states, including the state of Delaware.

2.17 POINT OF ATTACHMENT

In aerial services, the Point of Attachment is the physical attachment point on the Customer's facility where the City's service drop messenger cable attaches via Customer-owned insulator and associated hardware.

2.18 POINT OF DELIVERY

That point where the Customer takes electric service from the City and terminates its wiring and facilities for connection to the supply lines of the City. The City will own and maintain all facilities up to the Point of Delivery. For a typical aerial service at secondary voltages, the Point of Delivery is defined as the connection between the Customer-owned service entrance cable and the City-owned service drop conductors and connectors. For a typical residential underground service at secondary voltages, the Point of Delivery is defined as the connection between the Customer-owned meter socket located on the Customer's home and the City-owned underground service cable. In the case of some older services when meter pedestals were furnished, it would be defined as the connection between the Customer-owned underground service entrance and the City-owned connection.

2.19 PURCHASED POWER COST

Purchased Power Cost means the costs incurred by the City to purchase power supplies for providing Service to its Customers.

2.20 RATE SCHEDULE

Rate Schedule means the rate for the Service Classification under which a Customer is taking Service from the City.

2.21 RESIDENCE[2]

A bona fide, occupied dwelling unit suitable for year-round permanent human occupation, and connected to working water and sewer systems and an active electrical supply. Such dwelling unit provides complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation. A residence may be part of a mobile home, house, duplex, town house, apartment building, or other structure.

2.22 RESIDENTIAL PROPERTY OWNER

A Customer of the City's Electric Department who owns and lives on the property associated with the Customer's electric account.

2.23 RULES AND REGULATIONS

City's rules and regulations related to Service provided by the City.

2.24 SECONDARY SERVICE

The provision of electricity at a transformed voltage which is less than the Utility's distribution voltage. Secondary Service, as used in these Rules and Regulations, typically refers to single phase or three phase circuits carrying a nominal voltage of 480 volts or less between any two conductors. See also "Service".

2.25 SERVICE

1. Any electricity which the City may supply, or any work or material ~~furnished~~ furnished, or any obligation performed by the Utility under any Rate Schedule of the Utility.

2. Overhead and underground conductors and associated materials between the last aerial structure (typically a pole) or underground terminal (typically a pad-mounted transformer) of the City's electric distribution system and the point of connection with the Customer's facility (typically a building eave or wall).

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2.26 SERVICE CALL

Work performed by the City employees at the Customer's facility upon request by a Customer. Service calls may involve investigation, troubleshooting, or repair of components of the Customer's facility outside of the normal repair and maintenance responsibilities of the City.

2.27 SERVICE CLASSIFICATION

Customers are grouped into different Classes based on their nature of Service such as residential, commercial, etc., power consumption and the voltage at which they take Service. This classification is referred to as Service Classification.

2.28 SUPPLY SERVICE CHARGES

Supply Service Charges shall mean the charges to Customers for recovering the City's costs of power supplies used for providing Service.

2.29 TARIFF

1. The monetary rates applied by the City to electric service provided and the conditions of the electric service.

[2] This definition is based on the 2006 IBC/IBR/IPMC International Building Code definition for "Dwelling Unit."

2. As used in these Rules and Regulations, "Tariff" also refers to those sheets in the "Service Classifications" section of this document.

3. The word "Tariff" also is used to refer to all of the rules and regulations governing the operation of the Electric Department and the supply of electric service. Consequently, "Tariff" is sometimes synonymous with "Rules and Regulations".

2.30 UTILITY

"Utility" shall mean City of Milford Electric Department, or any successor organization, that provides electric service to the Customers in the City's service area.

~~2.31 YEAR ONE~~

~~July 1, 2023 to June 30, 2024~~

~~2.32 YEAR TWO~~

~~July 1, 2024 to June 30, 2025~~

~~2.33 YEAR THREE~~

~~July 1, 2025 to June 30, 2026~~

[Ord. No. 2020-13, § 2, 5-11-2020; Ord. No. 2023-19, § 3, 4-24-2023]

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## SECTION 3 APPLICATION AND CONTRACT FOR SERVICE

3.1 APPLICATION FOR SERVICE FOR OWNER OCCUPIED PROPERTIES

An application for the supply of service is required from each Applicant (prospective Customer). This application, when executed by the City and the Applicant, shall be subject to the terms of the applicable Service Classification and these Rules and Regulations. The City reserves the right to require reasonable evidence of the Applicant's identity and service address, satisfactory to the City, and to make a reasonable credit investigation of such prior to rendering service. The City reserves the right to require a written application from any Applicant executed in a form satisfactory to the City. Applicants shall be eighteen years of age or older.

3.2 APPLICATION FOR SERVICE FOR NON-~~OWNER OCCUPIED~~ OWNER OCCUPIED PROPERTIES

An application for the supply of service is required from each Applicant (prospective Customer). This application, when executed by the City and the Applicant, shall be subject to the terms of the applicable Service Classification and these Rules and Regulations. The City reserves the right to require reasonable evidence of the Applicant's identity by requiring the Applicant to provide a valid identification card or driver's license issued by the State of Delaware or a valid U.S. Military Identification card and service address satisfactory to the City and to make a reasonable credit investigation of such prior to rendering service. The City reserves the right to require a written application from any Applicant executed in a form satisfactory to the City. Applicants shall be eighteen years of age or older.

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3.3 RIGHT TO REJECT APPLICATION

The City shall have the right to reject and may reject any application for Service if the Applicant does not meet all the requirements of the Rules and Regulations and Tariff. The Applicant shall be given the reason or reasons for rejection of the application for service in writing, if requested.

3.4 ONE POINT OF DELIVERY

The Service Classifications of the Tariff, unless otherwise stated, are based upon the supply of the Service to one entire premise through a single delivery and metering point. The City will supply only one metering installation for each Class of Service. The use of Service at two or more separate properties will not be combined for billing purposes. The City reserves the right to deliver Service to more than one point where

the Customer's load or service requirements necessitate such delivery. This procedure is applicable to large industrial or commercial Customers having extensive operations in a contiguous area. Where the Customer desires an extra supply circuit not necessitated by load or service requirements, he shall pay the City the full cost of this additional facility.

3.5 SERVICE AT NEW LOCATIONS

Service at new locations will be rendered only when all bills for Service to the Applicant/Customer at any other locations have been paid, or credit arrangements satisfactory to the City have been made. The Customer must also have made all deposits as may be required in Section 4 (Customer's Deposits) or Section 18 (Primary Extensions).

3.6 PERMANENT SERVICE CONTRACTS

Standard contracts shall be for terms as specified in the statement of the particular Service Classification, but where large or special investment is necessary for the supply of Service, or where Service is to be used for temporary, ~~seasonal~~ seasonal, or unusual purposes, contracts for terms other than specified in the Service Classification, or with special guarantees of revenue, or both, may be required under circumstances as defined in Section 18 (Primary Extensions).

3.7 TEMPORARY SERVICE

Temporary Service is service, ordinarily not recurrent in nature, required for construction power, one-time events (~~i.e.~~ i.e., fair or carnival), or temporary structures. Temporary Service will be rendered only when and where the City has the necessary facilities available to render the Service applied for, without detriment to the Service of other Customers.

The Customer shall pay the entire cost of the installation and removal of required facilities installed for the sole purpose of the Temporary Service. A fee will be charged to cover the labor estimated to install and remove the required facilities, and for any non-returnable material. An additional fee may be required to cover the estimated electric usage over the life of the Temporary Service and/or a meter deposit. (See Electric Fee Schedule~~, Appendix 1~~) Where facilities may be endangered by construction or proposed usage, the Customer may be required to purchase, ~~own~~ own, and maintain the transformer and other related equipment. Temporary Service is available only under Service Classifications "Residential" "SGS", "MGS", "LGS" or, "GSP", as applicable based on the size of Service, for a period of no longer than 12 months after the date of connection. If construction has been delayed, the Customer may apply for a new Temporary Service. If the Temporary Service is converted to a permanent Service (by specific exception, see Section 8.1) any additional cost resulting from the Customer's modification will be borne by the Customer. Any additional fees required by the Electric Fee Schedule ~~(Appendix 1)~~ will be paid prior to any re-connection of service. The monthly minimum bill for Temporary Service will be determined by the minimum charge provision of the appropriate Rate Schedule serving the Customer.

Temporary Service will be subject to the electrical inspection requirements as incorporated in Section 7. A schedule of the established Temporary Connection Fees is found in ~~Appendix 1~~ the Electric Fee Schedule.

3.8 RIGHT-OF-WAY

3.8.A GENERAL

The Applicant(s) requesting Service shall furnish to the City suitable Right-of-Way for the installation and maintenance of facilities on, over, under and across the premises. Right-of-Way is for the purpose of providing Service to the Applicant(s) and to premises and other users in the vicinity. Right-of-Way Agreements are set forth on forms provided by the City. These Rights-of-Way shall grant the City permission to utilize locations and facilities which are suitable (in the City's sole discretion) for the installation of City facilities. The City will not begin field layout or construction of facilities until suitable Right-of-Way agreements have been executed.

If it is necessary to acquire Right-of-Way from others such as abutting property owners, lessors, railroads, etc., in order for the City to serve the Applicant, then the Applicant shall be responsible for

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obtaining such Right-of-Way at its own cost. The City shall not in any way be subject to any claims from the Applicant/Customer deriving from delays in obtaining Right-of-Way. Where, due to the nature of the property to be served, the City finds that the exact boundaries are of critical importance, the Applicant will locate and mark such boundaries to the reasonable satisfaction of the City.

Applicant shall be responsible for clearing all trees, tree stumps and other obstructions from the construction area as designated by the City and the said clearing to be completed in reasonable time to meet Service requirements to the City's satisfaction determined by the City at its sole discretion. The Right-of-Way construction area as designated by the City shall be graded to within six (6) inches of final grade before the City will commence construction. If subsequent to construction start-up, the City is required to relocate or adjust any of its installed lines or change plans, the cost of such adjustments of relocation shall be borne by the Applicant, his successors or assigns.

The City shall construct, own, operate, and maintain distribution lines only along public streets, roads, and highways which the City has the legal right to occupy, and on public and private property across which Rights-of-Way and easements satisfactory to the City have been granted. Right-of-Way must be provided within a reasonable time and without cost to the City. ~~In some circumstances, a nominal Right-of-Way Fee, at the City's sole discretion, may be paid by the City (See Fee Schedule, Appendix 1).~~

**Commented [AJC1]:** No such fee exists in referenced appendix

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3.8.B REQUIRED PROPERTY INFORMATION

The Applicant shall furnish, at no charge to the City, property plans, utility plans, plans indicating connected electrical load, grading plans, roadway profiles, property line stakes, grade stakes and other items showing details of proposed construction. Proposed utility Rights-of-Way and/or easements shall also be delineated on plans. The City shall review these proposed easements and Rights-of- Way for adequacy and shall notify the developer of required modifications. This information is required in reasonable time to allow the City to design and construct its facilities in a safe and efficient manner to meet Service requirements and to comply with applicable laws, codes and rules and regulations.

3.8.C TREE TRIMMING

The City must attempt to maintain the integrity of its electric lines through periods of winds and ~~storm~~ storms. The Applicant, by either applying for electric service from the City or by granting a Right-of-Way, agrees to such tree trimming as is necessary to ensure the integrity of the City's electric lines, ~~transformers~~ transformers, or any facility of the City's electric distribution system in the right of way. The City may trim any portion of a tree within fifty (50) feet of electric lines. The City is the sole judge of the need to trim branches or remove trees to protect the integrity of its lines.

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3.9 NON-TRANSFERABILITY OF SERVICE

The contract for Service is not transferable, except by a Customer to his or her co-signer of the application. When the application is made jointly by co-signers, upon the death of either such Customer, such application or contract shall be deemed to be held solely by the survivor(s), subject to the Tariffs provided.

## SECTION 4 CUSTOMER ADVANCE/ USAGE, IMPACT FEES AND DEPOSITS

4.1 GENERAL

The City, at its sole discretion, may require from a Customer, prospective Customer or Applicant an advance usage fee or deposit for each account to guarantee payment of bills for Service. Where the City holds more than one advance usage fee or deposit for separate accounts for the same Customer, the City will administer each advance usage fee or deposit individually. At its sole discretion, the City reserves the right to waive Deposit from any Customer. Electric Deposit Agreement is attached to this Section.

4.2 RESIDENTIAL CUSTOMERS

4.2.A RESIDENTIAL CUSTOMERS WHO RENT PROPERTY

An advance usage fee (Deposit) will be charged to new Applicants who are residential renters. (See the Electric Fee Schedule~~, Appendix 1~~)

4.2.B RESIDENTIAL CUSTOMERS WHO OWN PROPERTY

Residential Customers who own the property associated with the electric account may not initially be charged a Deposit. However, if the Customer is delinquent in any two consecutive months after Service is initiated, a Deposit may be charged at the same rate as if the Customer is a renter. (See the Electric Fee Schedule~~, Appendix 1~~) Service may be terminated for failure to pay the Deposit when requested. If the Customer fails to pay his bill, a lien may be placed against his property and his Service may be terminated in accordance with Section 5.6 and Section 16. On presentation of facts indicating that payment of a Deposit would create a severe hardship, the City may allow payment of the required Deposit to be deferred to the first month's bill or paid in three consecutive billing periods.

4.3 COMMERCIAL CUSTOMERS

A Deposit will be charged to all new commercial Customers with an electric account. Electric service will not be connected until the deposit is paid. (See the Electric Fee Schedule~~, Appendix 1~~)

On presentation of facts indicating that payment of a Deposit would create a severe hardship, the City may allow payment of the required Deposit to be deferred to the first month's bill or paid in three consecutive billing periods.

In the case of Customers with an expected monthly load of 500 KW or an expected monthly bill above $5,000, the City may choose to waive the Deposit. In such cases, in lieu of a Deposit, the City will accept a surety bond from a bank, the proceeds of which shall equal two times the expected monthly bill.

4.4 PROVISIONS FOR ~~ALL~~ DEPOSITS

4.4.A Deposits shall be in an amount equal to two-twelfths of the estimated annual revenue or a minimum as may be reasonably required by the City. (See ~~Appendix 1~~ Electric Fee Schedule) No interest will be paid on Deposits from the Residential Customers. Accrued interest earned will be paid on the Deposits from all non-residential customer classes. Interest will be paid at the time the Deposit is returned to the Customer. No interest will be paid unless the Deposit is held longer than ninety days.

4.4.B The deposit shall cease to draw interest: On the date the deposit is returned to the Customer, or on the date service is terminated, or on the date notice is sent to the Customer's last known address that the deposit is no longer required.

4.4.C Deposits shall not be applied against the amount due on a regular bill, however they will be applied against the final bill if account is not current.

4.4.D For commercial accounts only, ~~Aat~~ At the beginning of City's each fiscal year, the City may ~~give considerations to~~ consider the return of the Deposits to Customers in good account standing. The City may return the Deposit to a Customer under the following conditions:

1. The Customer has been taking uninterrupted Service for a minimum period of three (3) years from July 1;
2. The Customer has not been sent more than three (3) disconnect notices by the City;
3. The Customer's checks have not been ~~returned for~~ returned more than three (3) times.

4.4.E At the termination of an account, the ~~customer must request a return by submitting a written request with a valid forwarding address. The Deposit Return Request Processing Fee will be deducted from the return balance. (See Appendix 1 Fee Schedule)~~ deposit will be applied to the customer's account final balance. Any remaining deposit shall be automatically refunded to customer.

4.5 ELECTRIC SYSTEM IMPACT FEES

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**Commented [AJC2]:** No fee exists in fee schedule

Prior to the issuance of a building permit by the Code Official or other duly authorized representative, all developers or owners of newly constructed structures requiring Service may be charged the Impact Fee in accordance with the Electrical ~~Impact~~ Fee Schedule ~~included in Appendix 1~~. The City reserves the right to bar occupancy of any such structure and withhold Service until such time as the aforementioned Impact Fee is paid in full. The Impact Fee shall be used for construction, ~~maintenance~~ maintenance, and expansion of the City's electric system.

Impact Fees may be reviewed annually, and ~~not~~ not ~~for~~ less than 5 years, by City Council and may be adjusted periodically as determined necessary.

4.5.A Any structure that does not receive a certificate of occupancy, in accordance with this schedule, shall be ineligible for the impact fee waiver and shall pay the required Impact Fee in full prior to the issuance of a certificate of occupancy.

## SECTION 5 PAYMENT TERMS

5.1 BILLING PERIOD

Rates for Service are stated on a monthly basis and bills are rendered monthly. Meter readings are scheduled at approximate monthly intervals from 27 to 33 days.

5.2 WHEN BILLS ARE PAYABLE

Payments must be received by the close of business on the due date to avoid penalties. Payments placed in the drop box on the due date after 4:30 PM will be considered late and subject to penalties.

The late payment charge will not be applied to balances which are under dispute (See Electric ~~Appendix 1~~ Fee Schedule).

5.3 PAYMENTS OF DELINQUENT BILLS

The Customer may avoid Service termination for non-payment of bills by making payment of the total unpaid balance to the City cashier during the Hours of Operation (See Section 1.9) ~~or Extended Hours of Operation of the City Offices~~ prior to the close of business on the day prior to the scheduled disconnection. The City may give a grace period, ~~not to exceed three (3) Business days,~~ for the payment of delinquent payments before disconnecting the Service. (See Section 5.7) Delinquent payments received at the City Offices or placed in the drop box after the close of business on the day prior to the scheduled disconnection may be subject to an administrative fee that must be paid prior to the restoration of Service. During non-hours of operation, delinquent payments may be made at the Customer Service Center at 119 South Walnut Street, Milford, DE 19963, 302-422-6616 during Extended Hours of Operation. (See Section 1.10)

5.4 ESTIMATED BILLS

When the City's Electric department is unable to read the meter for a particular Customer at any regular reading date, the City may render an estimated bill. Reasons for estimating the bill could include:

a. Discovery of inoperable or defective meters as covered in Section 10,

b. Significantly varying readings from past electric consumption, or

c. The area in which the meter is located is not accessible in a reasonably safe way.

In the case of varying readings from past readings, an investigation into the reason for such variations will be made at Customer's request as per Section 10.4.

5.5 RETURNED CHECKS

Checks given in payment for Utility Services, Customer Deposits, or reconnection charges which are returned to the City unpaid by the Customer's Bank, will result in an additional returned check charge per check, per occurrence (See ~~Appendix 1~~ Electric Fee Schedule). The return check charge shall be levied against the

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**Commented [FS3]:** The City no longer has extended hours of operation prior to disconnect. The "not to exceed 3 days" contradicts Section 16.1.C. where we are required to give notice in writing and cannot disconnect until 9 days past the due date.

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Customer's account. Upon the second occurrence of a returned check, the Customer shall be notified that they will be placed on a cash only basis for a period of one year.

5.6 AUTHORITY TO DISCONTINUE SERVICE FOR ~~NON-PAYMENT~~NON-PAYMENT.

The City reserves the right to discontinue Service in accordance with provisions of these Rules and Regulations and the accompanying Tariff and/or take any other action permitted by law with respect to any Customer who fails to make full and timely payment of all amounts due the City. (Reference: Section 16)

5.7 DELINQUENT CHARGE INSTALLMENT AGREEMENT

The City may make arrangements for installment payments for those Customers who are unable to pay their bill due to unusual or severe circumstances. However, if the Service has been disconnected, the Customer must pay the Reconnection Charges.

The installment payment agreement constitutes a contract between the Customer and the City, which guarantees payment by the Customer for the amount of the agreement over the specified period. ~~Request~~Requests for installment payment agreements are subject to City approval and must be approved by the City's billing supervisor or designee.

Failure of the Customer to meet the conditions of this installment payment agreement including prompt payment of the current bill shall constitute a breach of this agreement and entitles the City to pursue collection and Service termination procedures under the rules and regulations outlined in these Rules and Regulations and the accompanying Tariff. Such a breach will also cause the Customer to become ineligible to make an installment payment arrangement for a period of 12 months.

5.8 BUDGET BILLING

A Customer may ~~request for a~~request budget billing and the City reserves the right to establish a budget billing program. Budget billing provides a payment plan which allows Customers to levelize their monthly bills. Any Customer with good credit standing with the City may elect to be placed on budget billing once per calendar year, as long as they are not an assistance-based customer. Under this plan, the Customer will be billed for eleven months on an estimated budget amount basis with the twelfth month as the settlement month. The billing for the settlement month will consist of the actual metered billing for that month plus the difference between the actual amount due to date and the budget amount paid to date.

In no case will the under-calculation of a projected bill absolve the Budget Billing Customer from paying for the actual amount of consumed energy. If the under collection is too great, then ~~at~~with the option of the City, monthly budget billing amounts can be increased at any time during the ~~eleven month~~eleven-month budget billing period.

If the monthly budget billing is not paid, the Customer will be notified by mail that the monthly budget billing will be terminated unless payment of the balance due is received by the late date. Any Customer who is participating in budget billing will not be eligible for the Delinquent Charge Installment Agreement. If the budget billing is terminated, the ~~current finance~~ late payment charge will be applied to the unpaid balance (See ~~Appendix 1~~ Electric Fee Schedule).

5.9 POST-DATED CHECKS

Post-dated checks will not be accepted until the date of the check. Post-dated checks will not abate imposition of any late charges incurred.

## SECTION 6 ADMINISTRATION OF SERVICE CLASSIFICATION

6.1 LOAD INSPECTION

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**Commented [AC4]:** No such fee exists in fee schedule

**Commented [JE5R4]:** This line should remain. The finance charge is the late penalty the customer receives for an unpaid balance.

**Commented [AC6R4]:** OK. Then maybe we reword "finance charge" to "late payment charge" to match the fee schedule wording?

**Commented [JE7R4]:** That works. Unfortunately I see the wording vary on certain things throughout the code. I know Suzannah is aware and working with Lou on changes that include consistency.

**Commented [FS8R4]:** Use 'late payment charge'

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When the Service is supplied under Service Classifications which base the Billing Demand or Minimum Charge upon the Customer's connected load, the City's representative shall have access to the premises at reasonable times to inspect and count the connected load.

6.2 CHOICE OF SERVICE CLASSIFICATION

When two or more Service Classifications are available for the same Class of Service, the Customer may select the Service Classification to be applied to his Service.

6.3 CITY ASSISTANCE

The City, upon request, will assist the Customer in the selection of the most advantageous Service Classification, but the duty and responsibility of making the selection shall at all times rest with the Customer. In the event, the Customer fails to select the Service Classification, the City may assign the Service Classification to the Customer and the Customer shall have no recourse to any damages caused by the City's selection, however, the Customer may request a change in its Service Classification.

6.4 CHANGING SERVICE CLASSIFICATIONS

When a Customer has selected the Service Classification for his Service, its application shall remain in effect for the contract term which the Service Classification specifies. If a Customer's consumption characteristics change so that they fall within the parameters of a different Service Classification, the City reserves the right to change the Customer's Service Classification at any time.

6.5 INTERDEPARTMENTAL BILLING

The City shall bill its internal utility accounts (City Accounts) at the rate for that Customer Class for which the City Account may qualify. The Billing period will be addressed in accordance with the applicable Service Classifications. Rates are stated on a monthly basis and bills are rendered monthly following the supply of Services.

## SECTION 7 CUSTOMER'S INSTALLATION

7.1 CUSTOMER'S WIRING

~~All of~~All the Customer's wiring and appurtenances shall be furnished, ~~installed and~~ installed and maintained by the Customer. The City shall not be liable for loss or damage resulting from the Customer's wiring or equipment.

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The City may delay the construction of an extension and/or Service until the Applicant (or Applicants) has completed the wiring and installation of equipment necessary to receive and use Service. The Customer's facilities at the Point of Delivery and the Service entrance shall be in accordance with the National Electrical Code (NEC)[3], the National Electrical Safety Code (NESC)[4], and the City's standards for such facilities.

7.2 DESCRIPTION OF INSTALLATION

The Customer shall present, in writing, complete specifications of equipment, connected electric loads, location plans, electric vaults, cable runs, substations and other data required, so that the City may advise the character of the Service it will furnish, the point at which it will be connected and ~~metered~~ metered, and any other requirements associated with the special conditions of the Service.

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7.3 ELECTRICAL INSPECTION

[3] The National Electrical Code is a registered trademark of the National Fire Association.

[4] The National Electrical Safety Code is a registered trademark of the Institute of Electrical and Electronics Engineers, Inc.

All new wiring and equipment, or changes in wiring and equipment, shall conform to the standards of the National Electrical Code and of local codes in force at the time.

In no event shall the City be under any obligation to inspect the wiring or appliances of the Applicant. The City may refuse to supply Service to the Applicant if the City believes the wiring or appliances do not comply with the applicable codes and recognized requirements.

On receipt of a Temporary Cut-in Card issued by a qualified electrical inspection agency and/or a Waiver, at the sole discretion of the City, signed by the property Owner and the Electrician that holds the City harmless, the City may render Service to the Customer on a temporary basis for a period of not more than 10 working days. If a Final Cut-in Card issued by a qualified electrical inspection agency is not received within this ~~10-day~~ 10-day period, the City shall disconnect Service until such is received.

The City will further render permanent Service only after receipt of an executed Final Cut-in Card stating notice of approval issued by the duly recognized inspection agency. This card must be submitted to the City by the Customer's electrician. After the final Cut-in card has been received, the associated temporary account will be closed.

7.4 REVERSE PHASE RELAY

The Customer shall install, at his expense, a Reverse Phase relay of approved type on all motors and other equipment where a definite direction of rotation must be maintained. The Customer shall be responsible for all damages caused to the system due to its failure to install a proper Reverse Phase Relay.

7.5 PHASE PROTECTION

The Customer shall install, at his expense, suitable voltage or current type devices which will protect his equipment from damage in event of phase outages. The City shall not be responsible for any damage caused to the Customer due to the Customer's failure to install a Phase Protection system.

7.6 MOTORS

The City shall always be consulted ~~with regard to~~ regarding the requirements as to the size of motor and starting current limitations as well as ~~voltage and phase of service~~ voltage and phase of service, which will be furnished. The City reserves the right to refuse Service to any size motor where the starting currents are deemed to be excessive at City's sole discretion. Starting currents must be limited by the Customer to acceptable levels.

7.6.A MOTORS, GENERAL

It is characteristic of most electric motors, large welding machines and arc furnaces to draw large momentary starting current. This may result in objectionable variations in the voltage supply of other Customers who receive their Service from the same circuits or transformers. In the interest of all of City's Customers, it is therefore necessary for the City to limit the value of starting current which may be drawn by various classes of motors connected to City's lines.

Some latitude in the permissible starting current of motors may be permitted under certain conditions at City's sole discretion, such as when motors are started very infrequently (once or twice a day), when motors are supplied from large capacity circuits and transformers, when motors are necessarily supplied from individual transformers on the Customer's premises, etc. Limitations will be site specific.

The City must always be consulted in advance regarding motor installation above 5 horsepower single phase or above 10 ~~-~~horsepower three phase to ~~insure~~ ensure the proposed installation is acceptable to City.

7.6.B MOTORS RESIDENTIAL

Single phase, ~~120 volt~~ 120-volt motors will be permitted providing the maximum starting current does not exceed 100 amperes. (~~Typically~~ Typically, 2 HP or 12,000 BTU/hr. air conditioner.) Single phase, 240 volt or ~~208 volt~~ 208-volt motors will be permitted, however, when the maximum starting current

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exceeds 150 amperes, the City shall be contacted for approval before purchasing equipment. A/C and heating equipment exceeding 100 amperes shall be a split-unit type with two or more compressor motors, interlocked so that ~~not~~ no more than one motor can start at any one time. Three-phase, ~~208 volt~~ 208-volt service normally will not be supplied for residential service.

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7.6.C MOTORS COMMERCIAL

When commercial installations are located in areas, which are primarily residential, or rural, they normally will be treated as covered by the above Section  on "Motors Residential". The City may refuse single-phase service to motors rated 5 horsepower or more and to poly phase motors rated less than 5 horsepower or to Customers with a total three phase connected motor load less than 6 horsepower.

7.6.D MOTORS INDUSTRIAL

Due to the wide variety of equipment and methods of service, general rules for starting motors cannot be specifically outlined. Additions to existing installations can be made which will not increase the maximum starting current of the installation. In all other cases, the City must be consulted as to the maximum allowable starting currents.

7.6.E MOTOR PROTECTIVE DEVICES

All motors should be provided with devices that will protect the motor and circuit against overload or short circuit in any wire. Refer to the NEC for motor protection details. Motor equipped with reduced voltage starters that cannot be safely subjected to full voltage at starting should be provided with a device to insure that on the failure of the supply voltage, the motor will be disconnected from the line or the starter returned to the "off" position, unless the motor is equipped with automatic restarting means. To prevent unnecessary shutdowns, it is recommended that this starter be equipped with a time delay feature to prevent the starter from dropping out and to permit the motor to continue to operate during a momentary voltage change.

The direction of phase rotation and the continuity of all three phases of the alternating current supply are carefully maintained, however, the City cannot guarantee against accidental or temporary change of failure thereof. Therefore, motors or other apparatus requiring unchanged phase rotation or continuity of three-phase supply should be equipped, by the Customer, with suitable three-phase protection against the reversal or phase failure.

7.6.F WELDERS

In every case the Customer or Contractor shall consult with the City concerning the electrical supply to electric welders before any commitments for their purchase or installation are made.

7.6.G GENERATORS

No Customer shall install any generation equipment without a written approval from a City's authorized representative. The City must always be consulted concerning the installation of any electric generating equipment. In all cases of emergency standby generation (Non-Cogeneration) a single operated break before make type double throw switch shall be installed between the generator and the Cities supply, to prevent the generator from being connected to the City system at any time. Closed transition switching may be permitted after a Customer and equipment specific evaluation is made by the City. Portable generators may only be used with service conductors physically disconnected from the utility system.

7.7 RIGHT TO INSPECT

The City reserves the right, but is not obliged, to inspect any installation either before electricity is introduced or later if it believes there may be unsafe or hazardous conditions. The City also reserves the right to reject any wiring or appliances not in accordance with the City's standard requirements. Even when the City performs an inspection or otherwise, the City shall not be liable for any loss or damages resulting from defects in the installations, appliances, or wiring which may occur on the Customer's premises.

7.8 PROTECTION FOR COMPUTERS AND ELECTRONIC EQUIPMENT

The Customer shall install, own, and maintain suitable surge, outage, and harmonic protection equipment to protect computers and other sensitive electronic devices. When the Customer has important, sensitive electronic data, the Customer shall be responsible for installing uninterruptible power supply (UPS) equipment to protect the data. The City shall in no way be liable for any damage to the Customer's electronic equipment, computer hardware or software, loss of data associated with the computer hardware and associated equipment, or any other consequential damage due to voltage spikes, surges, or loss of Service.

7.9 POWER QUALITY

When an electrical disturbance affects either the City's distribution system or Service to another Customer and the disturbance is found to be due to a specific Customer's installation (such as resulting from load imbalance, the operation of motors, variable speed motor drives, power generator, or other electrical equipment), the Customer causing the disturbance shall discontinue operation of the suspect equipment until suitable corrective wiring or equipment has been implemented on the Customer's premises to eliminate the disturbance. Such corrective action to eliminate the cause of the disturbance shall be made at the Customer's expense. The City shall have the right to inspect and test the Customer's electrical equipment to determine if it has any electrical characteristics which may cause undue disturbance to the City's system or affect the Service to other Customers. The following are the City's guidelines for disturbance types:

7.9.A WAVE FORM DISTORTION

The maximum total wave form distortion caused by the Customer's equipment, including a maximum of 1% phase voltage imbalance, shall be limited to 5% measured at the Point of Delivery.

7.9.B HARMONIC DISTORTION

The total Harmonic Distortion shall not exceed 5% with any single harmonic distortion not exceeding 3% measured at the Customer-City interface.

7.9.C COMMUTATION NOTCHES

Distortion caused by the commutation of ~~solid-state~~ solid-state devices between conducting and non-conducting conditions in the form of notches on the voltage waveform shall be limited to less than a 3,400% volts-microseconds area under the notch.

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7.9.D STAGGERED STARTUPS

During start-up operations, Customer's machinery and equipment shall be started on a serial or staggered schedule with no more than 500 HP per step ~~so as to~~ to minimize the impact of such startups on the City's electric system. Such schedule shall be provided to, and approved by the City in advance, and any necessary modifications to the schedule shall be communicated to the City immediately. Between each step, the customer shall provide a time interval of a minimum of fifteen (15.0) minutes, preferably one hour. This time interval helps to reduce the power cost to the Customer and the City.

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7.10 DAMAGE TO CITY'S SYSTEM

The Customer should ensure that its installation of any facility listed in this Section does not interfere with the City's operations or cause damage to any of the City's facilities. In the event the Customer's installation causes damage to the City's operations or facilities, the Customer shall be responsible for all the costs associated with such damage.

## SECTION 8 SECONDARY SERVICES AND TRANSFORMER INSTALLATIONS

8.1 GENERAL

"Secondary Services" and "Services" as used in this Section refer to overhead and underground conductors and associated materials between the last aerial structure (typically a pole) or underground terminal (typically a pad-mounted transformer) of the City's electric distribution system and the point of connection

with the Customer's facility (typically a building eave or wall). Service as used in this Section typically refers to the provision of electricity at 480 volts or less. The City's system facility from which the Service is installed may be on public or private right-of-way. Non-refundable charges may be assessed based on the Customer request and the type of service required. (See Electric Fee Schedule~~, Appendix 1~~)

The Service connection location must be approved by the City. It will normally be located on the Customer building at a point nearest to the point at which the electric service enters the property to be served. It must be located so that the Service will be clear of obstructions and have adequate support. The Service attachment device will be approved by the City and supplied and installed by the Customer. Any modification of the Service requested by the Applicant must be agreeable to the City. Any additional cost resulting from the Applicants requested modification will be borne by the Applicant. Services will not be connected until satisfactory payment or credit arrangements are made in accordance with charges as detailed in this Tariff and referenced in the Electric Fee Schedule~~, Appendix 1~~.

All persons who work on electrical equipment or wiring that interfaces with the City's electrical distribution system must be licensed by the State and possess a City's contractor license. Homeowners may work on their own electrical systems when issued an appropriate permit from the County in which they live and have their work inspected by an approved electrical inspection Agency.

Only authorized City personnel are permitted to connect or disconnect a Customer's facility to the City's distribution system. The Customer or Customer's representative (electrician) should arrange with the City to have the meter disconnected prior to performing any modification to the Customer's electric Service. The City will reseal the meter when the modification is complete. (See Electric Fee Schedule~~, Appendix 1~~, for the appropriate charge) In the case when, in conjunction with electrical work on the Customer's facility, the meter has been disconnected without City involvement, a resealing fee will be applied (See Electric Fee Schedule, ~~Appendix 1~~).

8.2 RESIDENTIAL OVERHEAD SERVICE

The City will install, own, and maintain all overhead services. The City will install, without charge, to the Customer the first 150 feet from the existing overhead facilities. Overhead services in excess of 150 feet will be provided at a charge to the Customer as provided in the Electric Fee Schedule~~, Appendix 1~~.

8.3 COMMERCIAL OVERHEAD SERVICE

The City will install, ~~own~~ own, and maintain all overhead services. The City may install without charge the first 150 feet from the existing overhead facilities. Any Charges will be determined by the City on a ~~case by case~~ case-by-case basis.

8.4 UNDERGROUND SERVICE

All residential meters will be located on Customer Owned Facilities. The City reserves the right to waive this requirement under special circumstances. These Customer owned facilities will generally be considered ~~to be~~ their dwelling or garage. The Service entrance location must be approved by the City prior to the start of construction.

The City will install, ~~own~~ own, and maintain all residential underground service up to but not including the meter socket. Where the City's distribution lines are underground, only underground service will be provided. All Commercial Underground will be installed and maintained by the Customer.

8.5 RELOCATION OF SERVICE

Any alterations, ~~changes~~ changes, or relocations of City-owned services, which are requested by and for the convenience of the Customer, and approved by the City, shall be made by the City and the cost paid by the Customer.

If the City is required by any state or other public authority to relocate any portion of the City's distribution system, the Customer, at his expense, shall make the necessary changes in the location of his facilities for receiving Service. The City will attempt to negotiate with the state or other public authority to include the

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Customer's expenses for relocation, however, the City's failure to successfully negotiate with the state or other public authority shall not relieve the Customer's from the responsibility of the relocation expenses.

8.6 TRANSFORMER INSTALLATION

The City will make transformer installations on public rights-of-way only as permitted by the regulations of the public authorities. The type of metering or load requirements may require the Customer to provide for the installation of transformer facilities on ~~a private~~ private property right-of-way. Transformers shall be situated in such a manner that they are separated from, and do not interfere with, and are not interfered or endangered by the location of other structures or proposed structures such as concrete curbing, water supply sources, fire hydrants, parking lots, etc. The Customer shall provide the City with proposed transformer locations for the City's review and approval prior to the finalization of plans for transformer placement. (See also Section 3.8)

If the electricity supplied is metered at primary voltage, all required structures and/or vaults[5] and electrical substation equipment, including protective devices, shall be installed, ~~owned~~ owned, and maintained by the Customer.

8.7 DISCONTINUED SERVICE

When Service to a Customer is discontinued, the City may disconnect Service but leave any or ~~all of~~ all its Service connection facilities on the premises to facilitate the Service to future Customers. Customer must not remove any City's facility without the City's written approval.

8.8 SUPPLY VOLTAGES

All references to voltages are standard or nominal voltages and actual voltages supplied may vary above or below these specified voltages within the limits prescribed by accepted utility practice. The City may specify the voltage and the minimum and maximum load that it will supply at any particular voltage.

Not all types of electric service listed below are available at all locations. Subject to limitations, the types of secondary electric service available, with their nominal voltages, are:

| Phase | Volts |
|---|---|
| Single Phase 3 Wire | 120/240 Volts |
| Single Phase 3 Wire | 120/208 volts (Network) |
| Three Phase 4 Wire | 208Y/120 volts |
| Three Phase 4 Wire | 480Y/277 volts |

8.9 METERS

The City shall designate the location of meters. The meter pan location must be approved by the City prior to the start of construction. Unless otherwise approved by the City, meters will be located on the front half of homes or garages as close to the point the Service enters the property as possible. At no point will the metered service be enclosed by a fence, wall, or partition.

8.10 TREE TRIMMING

Rights-of-way granted to the City shall grant the City the Right to trim and/or clear trees and other obstructions, as it deems necessary. The City will also have the right to require the Customer at his expense to have his own contractor trim and/or clear trees or other obstructions to the satisfaction of the City when, in the City's judgment, such trees or other obstructions threaten the integrity of the City's electric lines or equipment, or other property owner'(s) property. In such cases, the Customer will be given 10 fair-

[5] The City's policy is to avoid the use of vaults in new construction. New services will be rendered in vaults as an exception and at the sole discretion of the City.

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weather[6]days to rectify the situation. However, when such overgrown trees or other obstructions create an imminent danger to the City's electric lines or equipment or other property owner'(s) property, without providing any notice to the Customer, the City reserves the right to disconnect the Customer's service (see Section 16), trim and/or clear the trees and other ~~obstructions, and~~ obstructions and reconnect the Customer. In such cases, the City will bill the Customer for these services ~~including for~~ including tree trimming. (See Chargeable Service Call and Reconnect Charges in the Electric Fee Schedule~~, Appendix 1~~).

When overgrown trees or other obstructions cause an outage of the Customer's service due to damage to the City's electric lines or equipment, the City reserves the right to clear the trees, and/or other obstructions, and to make the necessary repairs to reconnect the service. In such cases, the City will bill the Customer for the clearing of the trees or other obstructions and for the required repairs. (See Chargeable Service Call and Reconnect Charges in the Electric Fee Schedule~~, Appendix 1~~).

Pad-mounted transformer areas are to be free of trees, plantings, or other obstructions to within six feet of any edge of the concrete or fiberglass pad.

These rights-of-way shall grant the City permission to utilize locations and ~~housings~~ housing which are suitable (in the City's sole opinion) for the installation of City facilities.

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## SECTION 9 METER INSTALLATIONS

9.1 METER SOCKETS SUPPLIED BY CUSTOMER

Residential meter sockets shall be of a type approved by the City and shall be procured by and installed by the Customer. The Customer is responsible for maintaining the meter socket in a safe and workmanlike operating manner. The City reserves the right to disconnect Services within ten fair-weather[7]days of notification to an Applicant or Customer whose socket(s) are not maintained in a safe and workmanlike operating manner.

If, in the City's sole judgment, there is a clear and imminent danger to life, health, or property from a Customer's poorly maintained meter socket, the City reserves the right to make the necessary repairs and bill the Customer. All three phase and all K-base meter installation will have a disconnect of appropriate size on the load side of the metered Service which allows the meter to be read during time of discontinued Service (See Chargeable Service Call in the Electric Fee Schedule~~, Appendix 1~~)

If the Customer should desire to have multiple pan meter sockets, these sockets must be approved by the City prior to installation of meters and must be furnished, owned, and maintained by the Customer. The City does not stock multiple meter sockets and cannot be responsible for the interruption or replacement of the multiple sockets in the event of a future failure. All multiple pan meter sockets must have individual disconnects of appropriate size on the load side of the metered service.

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9.2 METERS SUPPLIED BY THE CITY

[6] In the case when inclement weather during the ~~ten day~~ ten-day period prevents a reasonable effort to rectify the situation, the Customer may apply for an extension of time. In such cases the City may grant an extension that will include at least ten "fair-weather" days. A fair-weather day is defined as a day when, in the opinion of the City of Milford, weather conditions permit sufficient opportunity for the required work to be accomplished.

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[7] In the case when inclement weather during the ~~ten day~~ ten-day period prevents a reasonable effort to rectify the situation, the Customer may apply for an extension of time. In such cases the City may grant an extension that will include at least ten "fair-weather" days. A fair-weather day is defined as a day when, in the opinion of the City, weather conditions permit sufficient opportunity for the required work to be accomplished.

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The City will furnish, install, maintain, and own one (1) set of metering equipment for measurement of the electricity supplied under each contract.

9.3 METER LOCATIONS

The City shall designate the location of meters. The meter pan location must be approved by the City prior to the start of construction. Unless otherwise approved by the City, meters will be located on the front half of homes or garages, as close to the point the Service enters the property as possible. For secondary or primary metered installations, the Customer will provide ~~a support~~ support or other facility as required and approved by the City for mounting of metering equipment.

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The Customer is responsible for keeping metering areas clean, clear of debris, and accessible by City employees or the City's Engineers. At no point will the metered service area be enclosed by a fence, wall, or partition.

In buildings where multiple meters are required, each meter position shall be clearly and visibly marked so that each meter position is identified as to the location to which Service is being supplied. Meters shall not be installed by the City until this has been accomplished.

9.4 RIGHT TO REMOVE CITY'S EQUIPMENT

All meters, instrument transformers or other service equipment supplied by the City shall remain its exclusive property. The City shall have the right to remove all its property from the premises of the Customer at any time after the termination of Service, whatever may have been the reason for such termination. Possible reasons to remove equipment would include:

1. Evidence of illegal tampering
2. Hazardous conditions endangering equipment
3. Failure to pay bills or meet other terms of payment
4. The structure has been condemned or determined unfit for human occupancy by the City.

9.5 REVERSE REGISTRATION

The City may, by ratchet or other device, control its meters ~~so as to~~ to prevent reverse registrations.

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9.6 PERIODIC TEST SCHEDULE

The City will test meters in accordance with its periodic test schedule. Meter tests performed at the request of a Customer will be made in accordance with Section 10.4.

9.7 REMOTE AUTOMATIC READING DEVICES

The City, at its discretion, may install remote automatic reading devices, including smart meters, subject to available technology. Such metering devices will be owned, ~~installed and~~ installed and maintained by the City. When requested by the Customer and approved by the City, installation will be ~~made~~ done at cost payable by the Customer. The location of such metering device shall be subject to the City approval. The City may require a verification reading.

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In cases of discrepancy between the remote automatic reading and/or smart metering device and the City's meter, the City's meter shall be used as the final determinant in measuring consumption and in all cases will take precedence over any readings on remote automatic reading and/or smart metering devices.

9.8 ELECTRIC PULSE INITIATOR

The City, at its option and upon the request of a TOU (Time of Use) Customer, will make available contact closure pulses in the KYZ format to the requesting TOU metered Customer. If an isolating relay is required, the Customer will also bear the cost of purchase and installation. The Customer must bear the cost of the pulse initiator and its installation. The City will maintain and replace the pulse initiator after the initial installation. If the pulse initiator fails, the City will not guarantee to stock a replacement but will order a

replacement as necessary. The Customer will be without pulse data during this period. If the Customer requests a standby pulse initiator to be available, he must purchase and inventory a backup pulse initiator. The City will provide~~,~~ but does not guarantee to deliver pulses to the high side of the pulse initiator fuse. The City will provide replacement fuses to re-fuse if necessary.

The Customer will be responsible for accepting the pulses on the load side of the pulse initiator fuse. The Customer will accept the pulses and utilize them in a way that does not expose the City's equipment to undue risk.

Either party may re-fuse in the event of a blown fuse.

The City reserves the right to remove the pulse initiator if its use by the Customer damages the City's equipment and electric system or continues to expose the equipment to risk.

The City will not guarantee the continuity of pulse data. The Customer will be responsible ~~to report~~ for reporting loss of pulses to the City immediately.

If the pulse initiator, contacts, fuses, or conductors that transmit data to the Customer fail, the City does not guarantee continuity and shall not be responsible for loss of pulses and no adjustment to the bill will be made. Should loss of pulses occur frequently, the City may terminate offering data pulses or the Customer may elect to install his own initiator equipment at his cost which would be under his own control and maintenance.

9.9 MOBILE METER READING DEVICES

The City reserves the right, as technology develops, to utilize mobile meter reading devices, including hand-held meter reading devices, remote meter reading or smart metering devices to replace manually written meter readings in a meter book.

9.10 CAPACITY OF METERS

The meters, instrument transformers, service connections, and equipment supplied by the City for each Customer has a definite load capacity and no additions to the equipment or connected load will be allowed except by prior written notification and consent by the City.

9.11 METER RELOCATION

Metering installations moved from the inside of the house or building to the outside of the house or building at the Customer's request, when no other modifications of electric service equipment are being made, will be relocated by the City at the Customer's expense. When requested by a Customer, metering installations moved to other exterior locations for the convenience of the Customer shall be relocated by the Customer, at the Customer's expense. In such cases the City shall be notified of the relocation prior to its occurrence. The actual transfer of the electric meter shall be made by the City. (See also Section 15)

9.12 BROKEN METER SEALS

Repeated broken meter seals are a sign of possible tampering with the meter mechanism. See Section 15.1 for conditions and remedies.

## SECTION 10 ADJUSTMENT OF CHARGES

10.1 FAST WATT-HOUR METER

Whenever a watt-hour meter in service is found, upon tests made by the City, to have a positive average error, that is~~,~~ when it over-registers or is fast, in excess of two percent (2%), the City shall credit or refund to the Customer an amount equal to the excess paid for the kilowatt-hours incorrectly metered. The refund shall be for the period that the Customer received Service through the meter, but for not more than the periods established below:

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10.1.A KNOWN DATE OF ERROR

If the date on which the error first developed or occurred can be established or estimated, the bills for Service shall be recalculated from that time.

10.1.B UNKNOWN DATE OF ERROR

If the time at which the error first developed or occurred cannot be established or estimated, it shall be assumed that the over-registration existed for a period of three (3) years or a period equal to one-half of the time since the meter was last tested, whichever is less. The credit or refund will not be issued if it is less than $5.00.

10.2 SLOW OR STOPPED METER

When a meter is found, upon test made by the City, to have a negative average error, that is, when it under registers or is slow in excess of two percent (2%), or the meter has stopped working, or in case of a poly phase meter, to be operating with an inactive element, and the error in registration or failure to operate is not attributable to the negligence of the City, but is due to some unpredictable cause, such as lightening or unauthorized overload, the City may estimate the proper charge for the normal periods or by such method as may be determined by the City or its electric consultant. Except in cases of tampering, theft, inaccessibility to meter, or unauthorized overload, such an estimate for a slow or stopped meter may cover a period of not more than three (3) years.

10.3 DEMAND METER

Whenever a demand meter, the readings, or indications of which are utilized in computing the charges for Service, is found, upon test by the City to be in error in excess of the limits indicated below, the charges to the Customer shall be adjusted in the same manner as prescribed under watt-hour meters above.

| Meter Type | Limits of Accuracy |
|---|---|
| Integrated Demand Meters | +/- 2% of ~~full scale~~ full-scale reading |

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10.4 REQUEST FOR METER TESTS

Upon request by a Customer, the City shall test the Customer's meter provided that such tests need not be made more frequently than once in twenty-four (24) months. If tests of the meter are requested more frequently than once in twenty-four (24) months, the City shall charge the Customer for testing (see Electric Fee Schedule~~, Appendix 1~~). No charge shall be made for testing meters which, upon test, are found to exceed the allowable accuracy limits as defined above. Customer, or his representative may be present when his meter is tested. A written report of the results of the test shall be made to the Customer within ten (10) business days after the completion of the test.

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10.5 ADJUSTMENTS FOR INCORRECT BILLINGS

Incorrect billings resulting from clerical error, incorrect meter installation or reading, incorrect application of the Rate Schedule, or other similar reasons, shall be corrected immediately upon discovery, and corrected bills rendered to the Customer; however, in no case additional charges due from the Customer under the application of this paragraph may be collected for more than three (3) years prior to the month of discovery. If the Customer has been overcharged, the City will refund the amount due or credit the Customer's account, at the Customer's election, to date the error was made, not to exceed three (3) years prior to discovery. In the absence of election by the Customer for refund by check, the City shall credit the account. In the event additional charges are due the City, installment payments will be offered for not more than the number of months the account was billed in error. At the City's sole discretion, a finance charge may not be applied to such installment payments. A Customer may dispute its bill(s) and such dispute must be filed in writing with the City and the City will make its best effort to resolve such disputes.

10.6 ROUTINE METER TESTING

Alternating current meters that are in Service shall be periodically tested according to the schedule below:

| Group | Rate Classification | Frequency |
|---|---|---|

| | | |
|---|---|---|
| Residential | RES | 10 years |
| Commercial - ~~Non-Demand~~ Non-Demand | SGS | 10 years |
| Commercial and Small Industrial (Customers below 300 kW) | MGS, LGS and GSP | 6 years |
| Industrial (Customers above 300 kW) | LGS, GSP and SCS | 2 years |

## SECTION 11 CONTINUITY OF SERVICE BY CITY

11.1 CITY LIABILITY

The City does not guarantee continuous uninterrupted Service and will not be liable for any loss, cost, ~~damage~~ damage, or expense to any Customer occasioned by an interruption or phase reversal if due to any cause beyond the reasonable control of the City. In no case, the City's liability shall exceed the actual tangible amount of loss to a Customer and the City's liability shall not include consequential, incidental, punitive, ~~exemplary~~ exemplary, or indirect costs and/or damages.

11.2 NOTICE OF TROUBLE

The Customer shall notify the City promptly of any defect in Service or of any trouble or irregularity to the electric supply.

11.3 PREARRANGED INTERRUPTION OF SERVICE

Whenever it is necessary to interrupt Service for work on lines or equipment, such works will be done, as far as possible, at a time that may cause the least inconvenience to the Customer. The Customer(s), to be affected by such interruptions will, if possible, be notified twenty-four (24) hours in advance. The Customer may, with justifiable cause, request the City to extend the twenty-four (24) hour notification to forty-eight (48) hours.

## SECTION 12 CUSTOMER'S USE OF SERVICE

12.1 RESALE FORBIDDEN

The Customer shall not directly or indirectly sell, sublet, ~~assign~~ assign, or otherwise dispose of the electric energy or any part therefore except as authorized by Chapter 51, Title 25 of the Delaware Code.

12.2 FLUCTUATIONS

Electric Service must not be used by the Customer in such a manner as to cause unusual fluctuations or disturbances in the City's supply system. Should such fluctuation or disturbance be caused by the Customer, the City may discontinue Service or require the Customer to modify his installation or install approved controlling devices (See also Section 7.9).

Where Service is rendered under Service Classifications "SGS", "MGS", "LGS", "GSP" or "SCS" and the use of current is intermittent or subject to large fluctuations, the City reserves the right to base the measured demand upon a five (5) minute period, or to add to the measured demand, as determined under the measured demand provision of the applicable Service Classification, an amount equal to sixty-five percent (65%) of the rated capacity in kilowatts of apparatus having fluctuating or intermittent current requirements.

12.3 UNBALANCED LOADS

Where Service is rendered under Service Classifications "SGS", "MGS", "LGS", "GSP" or "SCS", the Customer shall at all times take and use energy in such manner that the load will be balanced equally between phases. Should this not be ~~possible~~ possible, and the imbalance exceeds ten percent (10%) of the lesser phase, the City reserves the right to compute the demand for billing purposes on the assumption that the load on each

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phase is equal to that on the greatest phase. If the imbalance exceeds forty percent (40%) of the lesser phase, the City reserves the right to terminate Service.

12.4 TRANSIENT VOLTAGES

Customers are cautioned that certain types of data processing equipment are sensitive to transient voltages which typically occur in commercial power systems in routine operation. The City shall not be liable for transient voltage-related damage or loss. The Customer should purchase and install surge suppressors to protect sensitive equipment from transients, spikes, or surges.

12.5 SUPERIMPOSING ELECTRIC SIGNALS ON THE CITY'S ELECTRIC SYSTEM

When the Customer couples to or superimposes any signal on his electric system for equipment control, load management control, carrier current transmission, signal systems, communication broadcasting or any other purpose, the Customer shall be responsible for preventing any such signals from being imposed upon or entering the City's metering and electric system. The Customer shall notify and obtain the consent of the City before utilizing their equipment.

12.6 POWER FACTOR

The average Power Factor at the point where the electric service is metered should not be less than ninety-five percent (95.0%) lagging.

In any month in which the average lagging Power Factor is less than 95.0%, the measured demand shall be corrected by the ratio of the 95.0% Power Factor to the actual Power Factor as follows:

Billing Demand = Measured Demand x (95.0) /Customer's Actual Monthly Power Factor)

In case the actual Power Factor exceeds 95.0%, no correction to the Billing Demand will be made.

Where lighting, welding, motors or other electrical equipment or devices having lagging or leading Power Factor characteristics are installed, in order to avoid additional charges, the Customer may furnish, install, and maintain at his own expense, corrective apparatus which will increase the average Power Factor of the individual units or the entire installation to not less than 95.0% lagging or more than 110% leading. The City reserves the right to require removal or modification of Customer installed equipment which the City, at its sole discretion determines, is detrimental to the proper operation of the City's electric distribution system.

12.7 USE OTHER THAN STATED IN CONTRACT

The City's Service shall not be used for any purpose or in any place other than that stipulated in the Customer's contract for Service except by written consent of the City.

12.8 CHARACTERISTICS OF SERVICE

The Service specified and furnished by the City consists of sixty (60) hertz, single ~~phase~~ phase, or three-phase alternating current at one standard primary or secondary voltage. The type of Service (number of phases and voltage) available varies with location and load.

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An Applicant must contact the City to ascertain the type of Service the City will supply before making plans for receiving Service or making alterations to existing Service.

Secondary Service - Single phase or three phase circuits carrying a nominal voltage of 480 volts or less between any two conductors.

Primary Service - Single phase or three phase circuit carrying a nominal voltage of 14,400 volts to 24,900 volts between any two conductors. This Service is available to customers, with the City's approval, who have anticipated loads in excess of 750 Kw.

12.9 CHANGE OF INSTALLATION AND SERVICE OVERLOAD

The Customer shall give immediate written notice to the City of any proposed substantial increase or decrease ~~in, or~~ in or change of purpose or location of his installation. The Service connection, transformers,

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~~meters~~ meters, and equipment supplied by the City for each Customer have a definite capacity and no additions to the equipment or load connected thereto will be permitted except by written consent of the City. Failure to give notice of additions or changes in load or location shall render the Customer liable for any damage to the meters or their auxiliary apparatus or the transformers or wires of the City caused by the additional or changed installations.

12.10 LIMITATION OF USE

No other source of Service shall be introduced or permitted, directly or indirectly, for the Customer's use without written notice to the City and written consent of the ~~City~~ City, which shall not be unreasonably withheld. An installation for which permission has been granted must be made so that the supply of power from the Customer's generator or other sources cannot feed into the City's system, unless agreed to by a written contract between the City and the Customer.

## SECTION 13 DEFECTS IN CUSTOMER'S INSTALLATION

13.1 CITY'S RIGHT TO INSPECT

The City shall have the right, but shall not be obliged, to inspect any installation before electricity is introduced or at any later time, and reserves the right to reject any wiring or appliances not in accordance with the City's standard requirements.[8] However, such inspection, or failure to inspect, or to reject, shall not render the City liable or responsible for any loss or damage, resulting from defects in the installation, wiring or appliances, or from violation of City rules, or from accidents which may occur upon the premises of the Customer.

13.2 DEFECTIVE INSTALLATIONS

If at any time the wiring, fixtures or appliances of the Customer are found to be defective or dangerous by the City's representative, service may be refused or discontinued until the Customer has the condition corrected.

13.3 CUSTOMER'S RESPONSIBILITY

The City assumes no responsibility for any damages done by or resulting from any defect in the wiring, fixtures, or appliances of the Customer. In the event any loss or damage to the property of the City, or any accident or injury to persons or property is caused by or results from the negligence or wrongful act of the Customer, his agents, contractors or employees, the cost of the necessary repairs or replacement shall be paid by the Customer to the City and any liability otherwise resulting shall be assumed by the Customer.

13.4 CITY LIABILITY

The City shall not be liable for damage resulting from the presence of electric current or the City's appliances on the Customer's premises, or from the use of the Service of the City by the Customer.

## SECTION 14 ACCESS TO PREMISES

14.1 ACCESS TO PREMISES

The authorized agents or representatives of the City, having the proper City identification, shall have access at all reasonable times to the premises of the Customer for the purpose of reading its meters, ~~connecting~~ connecting, and disconnecting Service, operating, testing, inspecting, repairing, ~~removin~~ gremoving, and replacing any or ~~all of~~ all its apparatus used in connection with providing the Service. If City's meters or other

[8] The City's standard building requirements are in accordance with the 2006 IBC/IRC/IPMC International Building Code.

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equipment are located on the premises of someone other than the Customer, the Customer shall be responsible ~~to arrange~~ for arranging for access thereto by the City agents or representatives.

14.2 RIGHTS-OF-WAY, ACCESS TO CITY OWNED EQUIPMENT, AND TREE TRIMMING

Rights-of-Way must be maintained free of obstructions in order for City personnel to have free access to City distribution lines or other equipment. Fences, garages, sheds, other outbuildings, swimming pools, trellises, trees, and other large plantings are prohibited from right-of-way areas. The City will have the right to require the Customer to remove any plantings or other obstructions which prevent City personnel from accessing any item of City equipment such as poles, aerial lines, underground lines, service drops, transformers, metering pedestals, etc. Furthermore, the City will have the uninterrupted right and authority to trim trees, limbs, and undergrowth in the right-of-way which may interfere with the operation of City equipment. The City may bill the Customer for such Services. (See ~~Appendix 1~~ Electric Fee Schedule) Pad-mounted transformer areas are to be free of trees, plantings, or other obstructions to within nine feet in the front and three feet on the sides and rear of any edge of the concrete or fiberglass pad.

The City must attempt to maintain the integrity of its electric lines through periods of winds and ~~storm~~ storms. The City may trim any portion of a tree within (50) fifty feet of electric lines. The City is the sole judge of the need to trim branches or remove trees to protect the integrity of its facilities. However, the City will provide ~~an advance~~ advance notice, to the maximum extent possible, to the occupants/owners of the premises about the date and time when the City is planning to trim branches or remove trees.

14.3 PENALTY FOR NON-ACCESSIBILITY OF METER

When a Customer fails to provide the City with access to read the electric meter or perform maintenance on the City's equipment, then the Customer will be notified of the accessibility problem in writing and the Customer must take the appropriate steps to correct the problem.

The Customer will be given 30 days to rectify the problem or else Service will be terminated and a fee for inaccessibility will be charged (See ~~Appendix 1~~ Electric Fee Schedule).

## SECTION 15 TAMPERING WITH AND THEFT OF CITY PROPERTY

15.1 TAMPERING EXPRESSLY FORBIDDEN

No person except a duly authorized representative of the City shall make any connection or disconnection, either temporary or permanent between Service load of the Customer and Service wires of the City; or set, change, remove or interfere with or make any connections to the City's meter or other property or any wiring between the City's meter and the Service wires of the City. By taking Service from the City, the Customer agrees to respect the integrity of the meter seal.

15.2 THEFT OF CITY PROPERTY

No person shall commit theft of Services that are owned by or billed to the City. Theft of Services is obtaining Services owned by or billed to the City by deception, threat, coercion, stealth, tampering or use of false token or device. For purposes of this section, "tampering" includes, but is not limited to, making a connection of any wire, electronic device, conduit or device to any Service, electrical outlet, or transmission line owned by or billed to the City. No person shall be in violation of this section if the service is expressly stated to be for use by the public, or for any act that was expressly authorized by a duly authorized representative of the City.

15.3 LIABILITY FOR TAMPERING OR THEFT OF CITY PROPERTY

In the event of the City's meters or other property being tampered or interfered with, the Customer being supplied through such equipment shall pay the amount which the City may estimate is due for Service used but not registered on the City's meter, and for any repairs or replacements required, and such changes in Customer's installations as may be required by the City. Furthermore, the Customer may be subject to a utility tampering fee in accordance with the Electric Fee Schedule ~~Appendix 1~~.

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**Commented [AC9]:** No specific Fee. Would this be the Service call Fee?

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Any person found committing and act of theft of services as provided under Section 15.2 shall be subject to a penalty ~~of $25.00~~ in accordance with the Electric Fee Schedule for each violation. Furthermore, the person may be reported to the police for potential criminal charges.

When the City discovers evidence of tampering or interference, Services may be ~~terminated~~ terminated, and the police will be notified for possible criminal charges. Upon request and pending police action, the Customer may be reconnected after all applicable fees have been paid. (See Electric Fee Schedule, ~~Appendix 1~~).

[Ord. No. 2015-24, § 1, 9-28-2015]

## SECTION 16 CITY'S RIGHT TO DISCONTINUE SERVICE

16.1 RIGHT TO DISCONTINUE SERVICE

The City reserves the right to discontinue any class of Service for any of the following reasons.

16.1.A WITHOUT PRIOR NOTICE

1. Unavoidable shortage or interruptions in City's source of power supply or other cases of emergency.
2. Whenever a hazardous electrical or electrical related condition is found to exist on the Customer's premises.
3. Interference or tampering with meters or City equipment or diversion of Service.
4. The Customer's use of equipment is determined by the City to adversely affect the City's equipment or the City's Service to the other Customers.

16.1.B WITH PRIOR NOTICE

1. Failure to remedy conditions having detrimental effect on the City's electric system and/or Service of others.
2. Non-payment of any bill for Service.
3. Violation of, or non-compliance with the Rules and Regulations of the Tariff including effective Service Classification or Agreement or Contract. The City may refuse to supply any Service until the Customer has corrected the conditions constituting such violation.
4. Failure to pay a deposit or other customer charge as detailed in this Tariff.
5. Misrepresentation of identity to avoid payment of an outstanding bill for Service rendered.
6. Repeated refusal to grant access, during reasonable working hours, for maintenance, meter reading, or removal of equipment, ~~inspection~~ inspection, or replacement of equipment.

16.1.C TIMING FOR NOTICE AND SERVICE TERMINATION

The amount of time allowed for disconnection with prior notice as provided for in the preceding section, (Section 16.1.B) shall be determined by the City. The notice will state when Service will be discontinued and will inform the Customer of the steps which must be taken to avoid such disconnection of Service. The Customer may be subject to disconnection anytime on, or after, 9 days past the due date. For non-payment of any bill for electric Service, such termination will not occur between 12:00 Noon on any Friday and 10:00 AM on the succeeding Monday. Should Friday be a legal City holiday, the last preceding business day shall be substituted for Friday. Should Monday be a City holiday, the next succeeding business day shall be substituted for Monday.

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In the case of a rental Customer, the City may mail a shut-off notice to the owner of the property notifying them of a pending disconnection of service only when winter weather conditions are extreme enough to warrant notification, however, the City is not obligated to do so.

16.2 SERVICE DISCONNECTION DURING EXTREME CONDITIONS

No Dwelling Unit shall have Service disconnected if the temperature is 32 degrees Fahrenheit, or less, at 10:00 AM on the day Service is to be terminated, as verified by two (2) independent weather agencies. Service may be terminated, when in the sole judgment of the City, if an emergency situation exists which requires the immediate termination of Service.

During the heating season, no Service shall be disconnected for nonpayment of past charges without a minimum of seventy-two (72) hours' notice being given to the occupant of intention to terminate Service. Heating season is defined as the period from November 15 to March 31.

No dwelling unit shall have Service disconnected if the Heat Index is 105 degrees Fahrenheit, or more, after 12:00 PM on the day Service is to be terminated, as verified by two (2) independent weather agencies. Service may be terminated immediately, when in the sole judgment of the City, if an emergency situation exists which requires termination of Service.

No Service shall be disconnected if any occupant of a Dwelling Unit shall be so ill that termination of Service shall affect his health or recovery, which has been certified by a statement from a licensed physician and received by an authorized employee of the City empowered to collect bills. (See Section 16.4 Medical Priority Policy)

16.3 LOAD LIMITING DEVICES

In lieu of outright disconnection, the City reserves the right to install load limiting or "pay-as you-go" devices as technology permits and as circumstances warrant.

16.4 MEDICAL PRIORITY POLICY

The City has a policy relating to Customers with a medical priority status. This policy addresses the qualifications, terms and conditions of the medical priority program and the responsibilities of the City and the Customer. This policy is an administrative policy and may be amended without any prior notice.

16.5 RECONNECTION CHARGES

Service disconnected by the City for whatever reasons set forth in Section 16 will be restored only upon payment of all charges due in addition to the correction of the problem necessitating termination. Also, in cases when it has been necessary to remove Service wires to effect discontinuance of Service, Service will be restored only upon payment to the City of the costs of discontinuance and restoration (See Electric Fee Schedule~~, Appendix 1~~). Any Customer~~, who's~~ whose Service has been ~~disconnected,~~disconnected may also be required to post a deposit or advance usage fee in order to have Service restored.

16.6 AFTER HOURS RECONNECTION CHARGES

When the Customer desires Service to be reconnected after the normal hours of operation of the City Offices as shown in Section 1.9., an "after hours" Reconnection Charge will be assessed instead of the regular Reconnection Charge. (See Electric Fee Schedule~~, Appendix 1~~)

## SECTION 17 DISCONTINUANCE OF SERVICE BY CUSTOMER

17.1 NOTICE TO DISCONTINUE

The Customer must give the City at least one business day (twenty-four hours) written notice to discontinue Service unless otherwise agreed upon. The City will make every effort to disconnect the Service as soon as the Customer has requested termination and has settled the account. However, the Customer shall be liable for Service taken until the meter has been disconnected or read. Such notice to disconnect prior to the expiration of a contract term will not relieve the Customer ~~from~~ of any minimum or guaranteed payment

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under any contract or Service or Rate Classification. With a written Notice to the City, the Owner of a property may keep the Service connected after the Service to a tenant is discontinued.

17.2 COMPLETION OF TERM

If, by reason of any act, neglect or default of a Customer or his agent, the City's Service is suspended, or the City is prevented from supplying Service in accordance with the terms of any contract it may have entered into, the minimum charge for the unexpired portion of the contract term shall become due and payable immediately as liquidated damages in lieu of the anticipated returns from the said contract.

17.3 FINAL BILL

The final bill for Service is due and payable when rendered.

## SECTION 18 PRIMARY EXTENSIONS

18.1 GENERAL

Distribution line extensions or "extensions", as used in this Section, refer to overhead or underground primary voltage conductors, transformers, switchgear, and associated materials that must be constructed along public streets, ~~roads~~ roads, and highways, or on private property from the City's existing distribution system to the point of connection to the Applicant's or Customer's Service entrance (aerial or underground).

Extensions will be designed according to accepted utility practices to provide adequate Service. Modifications to the City's proposed design and/or existing system requested by the Applicant will be made when such modifications are acceptable to the City in its sole judgment.

Service entrances interface with, but are not part of these primary line extensions, a separate Service entrance connection/re-connection fee will be charged in addition to charges associated with primary line extensions. See also Section 14 for information concerning Service entrances.

18.2 DISTRIBUTION LINE EXTENSION POLICY

The City, at its discretion, will extend its distribution system under the terms and conditions incorporated below.

18.2.A RESIDENTIAL - SINGLE FAMILY DWELLINGS

The City will provide up to 150 feet of primary extension of either overhead or underground at no cost to the Customer. Beyond 150 feet, the Customer will be required to pay an additional charge per foot as stated in the Electric Fee Schedule~~, Appendix 1~~. All facilities provided by the City will remain the property of the City regardless of any Customer participation in the cost.

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18.2.B NON-RESIDENTIAL[9]

Any charges made by the City to the Customer for primary line extensions from existing overhead or underground facilities, the Customer will be required to pay up front all materials and labor cost associated with the requested extension regardless of the type of extension, in accordance with the City's Electric Fee Schedule~~, Appendix 1~~. It is also understood that the extension will be owned and maintained by the City even if the cost of such extensions have been paid by the Customer.

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In the event that the Customer is a primary metered Customer, served under the appropriate Service or Rate Schedule, then the City's responsibility and ownership will terminate at the point of Metering. Any work performed by the City beyond the point of metering under a separate agreement with the

[9] "Non-Residential" includes Commercial and Industrial customers.

Customer will remain the property of the Customer and the Customer will be responsible for the maintenance of these facilities. If the Customer desires, he may contract with the City to maintain his facilities and the City may perform the maintenance at the Customer's costs.

18.2.C RESIDENTIAL SUB-DIVISION

The City will provide primary extension of either overhead or underground for the cost of materials and labor paid up front associated with the extension by the Customer or the developer of the ~~Sub-Division~~ Subdivision.

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## SECTION 19 PURCHASE POWER COST ADJUSTMENT (PPCA)

19.1 GENERAL

Each monthly bill may also include the City's Purchased Power Cost Adjustment (PPCA) charge which will be determined monthly by the City.

## SECTION 20 GENERAL COST ADJUSTMENT

20.1 APPLICABILITY

This General Cost Adjustment (GCA) is applicable to all Service Classifications of this Tariff under the following conditions:

As deemed necessary by the City Manager, bills rendered under all Service Classifications of this Tariff may be increased to offset any new or increased special taxes, licenses, franchise fees, rentals, or assessments imposed by any governmental authority against the City in the distribution or sale of electrical energy or its electrical operations or production or sale of electrical energy or the receipts or earnings there from. The City Manager will also have the right to include the GCA in the bills rendered to Customers to reflect the changes in the City's budgeted or actual Operating Expenses. The GCA will be limited to ~~the~~ an increase in the Operating Expenses by maximum of ten percent (10.0%).

The General Cost Adjustment may be a fixed assessment, charge per kWh, or a percentage of the total bill, depending on the authorizing City's ordinance.

## SECTION 21 DELAWARE PUBLIC UTILITY TAX

21.1 STANDARD TAX

The State of Delaware requires the City of Milford to collect a tax on all non-residential accounts. The tax will be computed at the effective tax rate and is based on the total of each month's current charges including the PPCA.

21.2 WITH MANUFACTURER'S DISCOUNT

The State of Delaware periodically sends the City a list of manufacturing organizations that are not required to pay the full tax rate and may be required to pay at a lower tax rate. For such Customers the applicable tax rate will be used.

## SECTION 22 GREEN/RENEWABLE ENERGY FUND PROGRAM

The City of Milford, through the Delaware Municipal Electric Corporation, Inc. (DEMEC) and the Delaware Energy Office, provides a fund to support green/renewable energy technologies, energy efficiency technologies, or demand side management programs. The rules of practice and procedure for application and disbursement of Municipal Green Energy Fund grants for renewable energy projects in Delaware are outlined in the Municipal Utilities Green/Renewable Energy Fund Program effective January 1, 2007, as amended.

## SECTION 23 AGGREGATION OF RETAIL CUSTOMER DEMAND RESPONSE

The City of Milford or any entity that applies to be an authorized Curtailment Service or Demand Respond Service Provider and is subsequently approved by the City Manager or his designee is permitted to bid demand response and energy efficiency resources on behalf of retail customers served by the City of Milford directly into any FERC-approved independent system operator's or regional transmission organization's organized electric markets.

Retail customers served by the City of Milford wishing to bid their demand response and energy efficiency resources into a Commission-approved independent system operator's or regional transmission organization's organized electric markets may do so by participating in the program established by the City of Milford or with a Curtailment Service or Demand Response Service Provider duly approved in advance by the City of Milford.

## SECTION 24 ~~FEES,~~ SERVICE CLASSIFICATIONS AND SCHEDULES

~~The Fee Schedule is attached as Appendix 1 and supporting Worksheets are attached as Appendix 2 to this Tariff. Some of these Fees are described here.~~

~~Returned Check Fee~~

~~The City of Milford seeks to recover from each Customer the costs of bank processing fees for a returned check from that Customer with no gain or loss for the City.~~

~~Late Payment Charge~~

~~To encourage Customers to pay their electric bills on time, the City's policy is to charge the Customer a penalty on the outstanding balance of the Customer's bill after the due date. The City will set penalty rates.~~

~~Meter Inaccessibility Fee~~

~~To discourage Customers from allowing conditions to exist that prohibit City personnel from conducting their normal duties as meter reading, the City's policy is to charge the offending Customer an increasing penalty prior to service cutoff. The amounts are designed to be attention catching without being oppressive.~~

~~Right-of-Way Agreement~~

~~Generally, a Customer's provision to the City for a Right-of-Way is for the benefit of the Customer. Technically, however, the City is assuming control of the Right-of-Way (albeit for the purpose of providing electric service to the Customer).~~

~~24-1. FEE SCHEDULE~~

~~SERVICE CLASSIFICATIONS~~

24-~~2~~1. RES—RESIDENTIAL SERVICE SCHEDULE

1. AVAILABILITY

   This rate applies to residences throughout the territory served by the City. Single phase electric Service will also be rendered to the dwelling appurtenances of single private family residences for domestic requirements and also for related farm or domestic purposes when such Service is supplied through one meter.

2. TERM OF SERVICE

   Residential service is offered on a month-to-month basis until terminated unless a special contract is required as discussed in Section 3.6 of Rules and Regulations.

3. MONTHLY RATES

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See Electric Fee Schedule

| ~~Rates~~ | ~~Year 1~~ | ~~Year 2~~ | ~~Year 3~~ |
|---|---|---|---|
| ~~Monthly Facilities Charge:~~ | | | |
| ~~All Customers~~ | ~~$21.25~~ | ~~$21.50~~ | ~~$21.75~~ |
| ~~Energy Charge:~~ | | | |
| ~~Block 1 (0—2,500 kWh)~~ | ~~$0.10477~~ | ~~$0.10603~~ | ~~$0.10730~~ |
| ~~Block 2 (Excess)~~ | ~~$0.11692~~ | ~~$0.11832~~ | ~~$0.11974~~ |

4. BILLING PERIOD

   Rates are stated on a monthly basis and bills are rendered monthly following the supply of Service based on the rate stated herein.

5. PURCHASED POWER COST ADJUSTMENT (PPCA) CHARGE

   All kilowatt-hours billed under this service classification may be subject to Purchased Power Cost Adjustment (PPCA) charges. (Reference: Section 19)

6. GENERAL COST ADJUSTMENT

   The monthly charges under this Service Classification may be subject to General Cost Adjustment Charge. (Reference: Section 20)

7. GREEN/RENEWABLE ENERGY FUND RATE

   All kilowatt-hours billed under this Service Classification will be subject to Green/Renewable Energy Fund Rate. (Reference: Section 22)

8. MONTHLY FACILITIES CHARGE

   A MONTHLY CHARGE TO COVER THE FIXED COST OF SUPPLYING POWER TO A CUSTOMER.

9. MINIMUM CHARGE

   The minimum monthly charge shall be the MONTHLY FACILITIES CHARGE. MINIMUM CHARGE SHALL NOT BE PRORATED.

10. LOAD MANAGEMENT

    The City encourages its Customers to implement renewable energy and load management resources.

11. RULES AND REGULATIONS

    City's Department Rules and Regulations shall govern the supply of Service under this Service Classification.

24~~-32~~. SGS—SMALL GENERAL SERVICE SCHEDULE

1. AVAILABILITY

   This rate applies throughout the territory served by the City. Service will be rendered through a single meter for general lighting and/or power requirements of offices, institutions, professional, or commercial establishments, and other applications outside the scope of other Rate Schedules.

   When a portion of the consumption of this Service is used for residential purposes, it will be supplied under SGS rate. If the Customer desires the application of Service Schedule RES to the residential service portion of the facility, the Customer should separate and arrange his wiring so that domestic use can be separately metered. In such case the Customer is also required to complete a separate application for Residential Service.

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This rate is available to any Customer having a maximum monthly usage of less than 3,500 KWH and desiring Service at secondary voltage as defined in Section 12.8 of the Rules and Regulations. Any Customer taking Service under this Service Classification whose KWH usage for any four consecutive billing months is equal to or exceeds 3,500 KWH shall be automatically transferred to Service Classification MGS, effective with the next succeeding billing month. Any Customer so transferred shall remain on MGS for at least 12 billing months, even though the Customer's monthly usage in succeeding billing months may be less than 3,500 kWh. After 12 billing months, at the Customer's request or when the City observes that the Customer has not exceeded 3,500 KWH upon a periodic review of the Customer's records, the Customer will be transferred back to this Service Classification (SGS) provided that the Customer has not used more than 3,500 kWh for any two consecutive billing months within the most recent 12 months.

2. TERM OF SERVICE

   Subject to conditions specified, Service is offered on a month-to-month basis until terminated unless a special contract is required as discussed in Section 3 of Rules and Regulations.

3. MONTHLY RATES

   See Electric Fee Schedule

| ~~Rates~~ | ~~Year 1~~ | ~~Year 2~~ | ~~Year 3~~ |
|---|---|---|---|
| ~~Monthly Facilities Charge:~~ | | | |
| ~~All Customers~~ | ~~$30.00~~ | ~~$31.00~~ | ~~$32.00~~ |
| ~~Energy Charge:~~ | | | |
| ~~All Energy~~ | ~~$ 0.10918~~ | ~~$ 0.11017~~ | ~~$ 0.11127~~ |

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4. BILLING PERIOD

   Rates are stated on a monthly basis and bills are rendered monthly following the supply of Service based on the rate stated herein.

5. PURCHASED POWER COST ADJUSTMENT (PPCA) CHARGE

   All kilowatt-hours billed under this Service Classification may be subject to Purchased Power Cost Adjustment (PPCA) charges. (Reference: Section 19)

6. GENERAL COST ADJUSTMENT

   The monthly charge under this Service Classification may be subject to General Cost Adjustment Charge. (Reference: Section 20)

7. GREEN/RENEWABLE ENERGY FUND RATE

   All kilowatt-hours billed under this Service Classification will be subject to Green/Renewable Energy Fund Rate. (Reference: Section 22)

8. MONTHLY FACILITIES CHARGE

   A monthly charge to cover the fixed cost of supplying power to a Customer.

9. MINIMUM CHARGE

   The minimum charge shall be the MONTHLY FACILITIES CHARGE. Minimum charge shall not be prorated.

10. LOAD MANAGEMENT

    The City encourages its Customers to implement renewable energy and load management resources. ~~The City offers two rate options for this purpose. These are LCSS - Load Control Service Schedule and Net Metering Service.~~

11. AGRICULTURAL IRRIGATION USAGE

If a part of the power supplies, under this rate schedule, is used for commercial agricultural irrigation purpose, such consumption will not be used for changing the rate classification of the Customer and will be billed at all applicable kWh related rates under the SGS Rate Schedule.

12. PUBLIC UTILITIES TAX

In addition to the charges stated in this Service Classification, including Purchased Power Cost Adjustment charges, the current Delaware Public Utilities Tax will be applied to the total bill for all non-residential services, unless the Customer is exempt from such tax. Manufacturing facilities may be eligible for a reduced rate. (Reference: Section 21)

13. RULES AND REGULATIONS

The City's Rules and Regulations shall govern the supply of Service under this Service Classification.

24-43. MGS—MEDIUM GENERAL SERVICE SCHEDULE

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1. AVAILABILITY

This rate applies throughout the territory served by the City of Milford. Electric service will be rendered through a single metering installation for the general lighting and/or power requirements of offices, institutions, professional or commercial establishments, and other applications outside the scope of other rate schedules.

This rate is available to any Customer having a maximum measured demand of less than 300 kW or a minimum of 3500 kWh and desiring service at the available secondary voltage as defined in Section 12.8. Any Customer taking service under this service classification whose measured demand in any four consecutive months is equal to or exceeds 300 kW shall be automatically transferred to Service Classification LGS, effective with the next succeeding billing month. Any Customer so transferred will remain on LGS, for at least 12 billing months, even though the Customer's maximum measured demand in succeeding months may be less than 300 kW.

After 12 billing months, at the Customer's request or when the City observes, upon a periodic review of the Customer's records, that the Customer has not exceeded 300 kW, the Customer will be transferred back to this service classification (MGS) provided that the Customer's monthly demand measurement has not exceeded 300 kW during any month within the most recent 12 months.

2. TERM OF SERVICE

Subject to conditions specified, Service is offered on a month-to-month basis until terminated unless a special contract is required as discussed in Section 3.

3. MONTHLY RATES

See Electric Fee Schedule

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| Rates | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| Monthly Facilities Charge: | | | |
| All Customers | $99.50 | $101.50 | $103.50 |
| Energy Charge: | | | |
| All Energy | $0.04770 | $0. 04770 | $0.04770 |
| Demand Charge: | | | |
| All Demand | $16.20 | $16.60 | $17.00 |

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4. BILLING PERIOD

Rates are stated on a monthly basis and bills are rendered monthly following the supply of service based on the rate stated herein.

5. PURCHASED POWER COST ADJUSTMENT (PPCA) CHARGE

   All kilowatt-hours billed under this service classification may be subject to Purchased Power Cost Adjustment charges. (Reference: Section 19)

6. GENERAL COST ADJUSTMENT

   The monthly charges under this service classification may be subject to General Cost Adjustment Charges (Reference: Section 20)

7. GREEN/RENEWABLE ENERGY FUND RATE

   All kilowatt-hours billed under this Service Classification will be subject to Green/Renewable Energy Fund Rate. (Reference: Section 22)

8. MONTHLY FACILITIES CHARGE

   A monthly charge to cover the fixed cost of supplying power to a Customer.

9. MINIMUM CHARGE

   The minimum charge shall be the MONTHLY FACILITIES CHARGE. Minimum charge shall not be prorated.

10. MEASURED DEMAND

    The measured demand shall be the greatest demand established by the Customer during any fifteen (15) minute demand interval of the month as measured by demand meter, taken to the nearest whole kilowatt.

11. BILLING DEMAND

    The billing demand for each billing month shall be the maximum measured demand as created during each month.

12. LOAD MANAGEMENT

    The City encourages its Customers to implement renewable energy and load management resources. ~~The City offers two rate options for this purpose. These are LCSS - Load Control Service Schedule and Net Metering Service.~~

13. AGRICULTURAL IRRIGATION USAGE

    If a part of the power supplie~~d~~s, under this rate schedule, is used for commercial agricultural irrigation purpose, such consumption will not be used for changing the rate classification of the Customer. ~~All the increases in the Billing Demand caused by the irrigation usage will be averaged over the 12 calendar month period which may require an annual true-up of the Customer's Billing Demand and charges required by the use of the average of the monthly Billing Demands.~~

14. PUBLIC UTILITIES TAX

    In addition to the charges stated in this service classification, including power cost adjustment charges, the current Delaware Public Utilities Tax will be applied to the total bill for all non-residential services, unless the Customer is exempt from such tax. Manufacturing facilities may be eligible for a reduced rate. (Reference: Section 21).

15. RULES AND REGULATIONS

    The City's Rules and Regulations shall govern the supply of Service under this Service Classification.



**Commented [JE11]:** Two things....#13..explanation differs from #15 under Large General service. I believe they should be the same? Secondly, averaging the demand over 12 calendar months is not something our current software can do and we are not doing this manually.

**Commented [AC12R11]:** good catch! I agree it should be reworded to match #15 of LGS.

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1. AVAILABILITY

   This rate applies throughout the territory served by the City. Service will be rendered through a single metering installation for general lighting and/or power requirements of offices, institutions, and professional, commercial, or industrial establishments desiring Service under the conditions which follow.

   This rate is available to Customers having a maximum Measured Demand of 300 kW or greater who receive Service at the available secondary voltage as defined in Section 12.8. Any Customer served under this Service Classification shall remain on this Service Classification for at least 12 billing months, even though such Customer's maximum Measured Demand in succeeding months may be less than 300 kW. After 12 billing months, at the Customer's request or when the City observes, upon a periodic review of the Customer's records, that the Customer has not exceeded 300 kW, the Customer will be transferred back to Service Classification MGS provided that the Customer's monthly Measured Demand has not exceeded 300 kW during any month within the most recent 12 months.

2. TERM OF SERVICE

   Service is offered on a month-to-month basis until terminated subject to the minimum period specified above and unless a special contract is required as discussed in Section 3 of Rules and Regulations.

3. MONTHLY RATES

   See Electric Fee Schedule

| Rates | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| Monthly Facilities Charge: | | | |
| All Customers | $200.00 | $205.00 | $210.00 |
| Energy Charge: | | | |
| On Peak | $0.05906 | $0.05906 | $0.05906 |
| Off Peak | $0.04906 | $0.04906 | $0.04906 |
| Demand Charge: | | | |
| All Demand | $17.00 | $17.75 | $18.50 |

4. BILLING PERIOD

   Rates are stated on a monthly basis and bills are rendered monthly following the supply of Service based on the rate stated herein.

5. PURCHASED POWER COST ADJUSTMENT (PPCA) CHARGE

   All kilowatt-hours billed under this service classification shall be subject to Purchased Power Cost Adjustment charges. (Reference: Section 19)

6. GENERAL COST ADJUSTMENT

   The monthly charge under this Service Classification may be subject to General Cost Adjustment Charge. (Reference: Section 20)

7. GREEN/RENEWABLE ENERGY FUND RATE

   All kilowatt-hours billed under this Service Classification will be subject to Green/Renewable Energy Fund Rate. (Reference: Section 22)

8. MEASURED DEMAND

   The measured demand shall be the greatest demand established by the Customer during any fifteen (15) minute demand interval of a clock hour of the month during On-Peak hours as measured by the demand meter, taken to the nearest whole kilowatt.

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9. ON-PEAK AND OFF-PEAK HOURS

   On-peak hours are 6:00 AM to 10:00 PM Monday through Friday, excluding NERC holidays falling on weekdays. All other hours are Off-Peak hours.

10. POWER FACTOR

    The average power factor of the Customer's installation, expressed to the nearest whole percent, shall be determined by metering installed by the City ratcheted to prevent reverse registration. If the actual average Power Factor is determined to be below a Base Power Factor as defined in Section 12.6 for any given month, the billing demand will be adjusted as per Section 12.6 of the Rules and Regulations.

11. BILLING DEMAND (TIME-OF-USE)

    The Billing Demand shall be the maximum Measured Demand during On-Peak Hours in each month.

12. MONTHLY FACILITIES CHARGE

    A monthly charge to cover the fixed cost of supplying power to a Customer.

13. MINIMUM CHARGE

    The minimum monthly charge shall be the MONTHLY FACILITIES CHARGE. MINIMUM CHARGE SHALL NOT BE PRORATED.

14. LOAD MANAGEMENT

    The City encourages its Customers to implement renewable energy and load management resources. ~~The City offers two rate options for this purpose. These are LCSS – Load Control Service Schedule and Net Metering Service.~~

15. AGRICULTURAL IRRIGATION USAGE

    If a part of the power supplieds, under this rate schedule, is used for commercial agricultural irrigation purpose, such consumption will not be used for changing the rate classification of the Customer.

16. PUBLIC UTILITIES TAX

    In addition to the charges stated in this Service Classification, including Purchased Power Cost Adjustment charges, the current Delaware Public Utilities Tax will be applied to the total bill for all non-residential services, unless the Customer is exempt from such tax. Manufacturing facilities may be eligible for a reduced rate. (Reference: Section 21).

17. RULES AND REGULATIONS

    The City's Rules and Regulations shall govern the supply of Service under this Service Classification.

24~~65~~. GSP—GENERAL SERVICE-PRIMARY VOLTAGE SCHEDULE

1. AVAILABILITY

   This rate applies to existing GSP Customers throughout the territory served by the City. Service will be rendered through a single metering installation under this Rate Schedule for lighting and/or power requirements of offices, institutions, and professional, commercial, or industrial establishments at primary voltage when the Customer owns and maintains the required transforming, switching and protection equipment and expected peak loads will be greater than 500 kW.

2. TERM OF SERVICE

   Service is offered on a month-to-month basis until terminated unless a special contract is required as discussed in Section 3 of Rules and Regulations.

3. MONTHLY RATES

   See Electric Fee Schedule

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| Rates | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| Monthly Facilities Charge: | | | |
| All Customers | $420.00 | $430.00 | $440.00 |
| Energy Charge: | | | |
| On Peak | $0.05997 | $0.05997 | $0.05997 |
| Off Peak | $0.04997 | $0.04997 | $0.04997 |
| Demand Charge: | | | |
| All Demand | $15.90 | $16.55 | $17.20 |

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4. BILLING PERIOD

   Rates are stated on a monthly basis and bills are rendered monthly following the supply of Service based on the rate stated herein.

5. PURCHASED POWER COST ADJUSTMENT (PPCA) CHARGE

   All kilowatt-hours billed under this service classification may be subject to Purchased Power Cost Adjustment (PPCA) charges. (Reference: Section 19)

6. GENERAL COST ADJUSTMENT

   The monthly charge under this Service Classification may be subject to General Cost Adjustment Charge. (Reference: Section 20)

7. GREEN/RENEWABLE ENERGY FUND RATE

   All kilowatt-hours billed under this Service Classification will be subject to Green/Renewable Energy Fund Rate. (See Section 22)

8. MEASURED DEMAND

   The measured demand shall be the greatest demand established by the Customer during any fifteen (15) minute demand interval of a clock hour of the month during On-Peak hours as measured by the demand meter, taken to the nearest whole kilowatt.

9. ON-PEAK HOURS

   On-peak hours are 6:00 AM to 10:00 PM Monday through Friday, excluding NERC holidays falling on weekdays. All other hours are Off-Peak hours.

10. POWER FACTOR

    The average power factor of the Customer's installation, expressed to the nearest whole percent, shall be determined by metering installed by the City ratcheted to prevent reverse registration. If the actual average Power Factor is determined to be below a Base Power Factor as defined in Section 12.6 for any given month, the billing demand will be adjusted as per Section 12.6 of the Rules and Regulations.

11. BILLING DEMAND (TIME-OF-USE)

    The Billing Demand shall be the maximum Measured Demand during On-Peak Hours in each month.

12. MONTHLY FACILITIES CHARGE

    A monthly charge to cover the fixed cost of supplying power to a Customer.

13. MINIMUM CHARGE

    The minimum monthly charge shall be the MONTHLY FACILITIES CHARGE. MINIMUM CHARGE SHALL NOT BE PRORATED.

14. LOAD MANAGEMENT

The City encourages its Customers to implement renewable energy and load management resources. ~~The City offers two rate options for this purpose. These are LCSS - Load Control Service Schedule and Net Metering Service.~~

15. AGRICULTURAL IRRIGATION USAGE

If a part of the power supplied~~s~~, under this rate schedule, is used for commercial agricultural irrigation purpose, such consumption will not be used for changing the rate classification of the Customer.

16. PUBLIC UTILITIES TAX

In addition to the charges stated in this Service Classification, including Purchased Power Cost Adjustment charges, the current Delaware Public Utilities Tax will be applied to the total bill for all non-residential Services, unless the Customer is exempt from such tax. Manufacturing facilities may be eligible for a reduced rate. (Reference: Section 21)

17. RULES AND REGULATIONS

The City's Rules and Regulations shall govern the supply of Service under this Service Classification.

24-~~76~~. SCS—SPECIAL CONTRACT SERVICE-PRIMARY VOLTAGE SCHEDULE

1. AVAILABILITY

This rate applies to customers throughout the territory served by the City. Service will be rendered through a single metering installation under this rate schedule for lighting and/or power requirements of offices, institutions, and professional, commercial, or industrial establishments at primary voltage when the Customer has executed an Electric Service Agreement with the City for full requirements Service with a term of at least five years, and the Customer owns and maintains the required transforming, switching, and protection equipment, and expected peak loads will be greater than 500 kW.

2. TERM OF SERVICE

Service under this Service Schedule is available for the initial term and subsequent renewal terms as stated in the Electric Service Agreement. Upon expiration or cancellation of the Service Agreement, continued Service will be available under the appropriate Service Schedule then in effect.

3. MONTHLY RATES

See Electric Fee Schedule

| ~~Rates~~ | ~~Year 1~~ | ~~Year 2~~ | ~~Year 3~~ |
|---|---|---|---|
| ~~Monthly Facilities Charge:~~ | | | |
| ~~All Customers~~ | ~~$425.00~~ | ~~$435.00~~ | ~~$445.00~~ |
| ~~Energy Charge:~~ | | | |
| ~~On Peak~~ | ~~$0.06170~~ | ~~$0.06170~~ | ~~$0.06170~~ |
| ~~Off Peak~~ | ~~$0.05170~~ | ~~$0.05170~~ | ~~$0.05170~~ |
| ~~Demand Charge:~~ | | | |
| ~~All Demand~~ | ~~$15.18~~ | ~~$15.68~~ | ~~$16.18~~ |

4. BILLING PERIOD

Rates are stated on a monthly basis and bills are rendered monthly following the supply of Service based on the rate stated herein.

5. PURCHASED POWER COST ADJUSTMENT (PPCA) CHARGE

All kilowatt-hours billed under this service classification may be subject to Purchased Power Cost Adjustment (PPCA charges. (Reference: Section 19)

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6. GENERAL COST ADJUSTMENT

   The monthly charge under this Service Classification may be subject to General Cost Adjustment Charge. (Reference: Section 20)

7. MEASURED DEMAND

   The measured demand shall be the greatest demand established by the Customer during any fifteen (15) minute demand interval of a clock hour of the month during On-Peak hours as measured by the demand meter, taken to the nearest whole kilowatt.

8. GREEN/RENEWABLE ENERGY FUND RATE

   All kilowatt-hours billed under this Service Classification will be subject to Green/Renewable Energy Fund Rate. (Reference: Section 22)

9. ON-PEAK HOURS

   On-peak hours are 6:00 AM to 10:00 PM Monday through Friday, excluding NERC holidays falling on weekdays. All other hours are Off-Peak hours.

10. POWER FACTOR

    The average power factor of the Customer's installation, expressed to the nearest whole percent, shall be determined by metering installed by the City ratcheted to prevent reverse registration. If the actual average Power Factor is determined to be below or above a Base Power Factor as defined in Section 12.6 for any given month, the billing demand will be adjusted as per Section 12.6 of the Rules and Regulations.

11. BILLING DEMAND (TIME-OF-USE)

    The Billing Demand shall be the maximum Measured Demand during On-Peak Hours in each month.

12. MONTHLY FACILITIES CHARGE

    A monthly charge to cover the fixed cost of supplying power to a Customer.

13. MINIMUM CHARGE

    The minimum charge shall be the MONTHLY FACILITIES CHARGE. MINIMUM CHARGE SHALL NOT BE PRORATED.

14. LOAD MANAGEMENT

    The City encourages its Customers to implement renewable energy and load management resources. ~~The City offers two rate options for this purpose. These are LCSS - Load Control Service Schedule and Net Metering Service.~~

15. PUBLIC UTILITIES TAX

    In addition to the charges stated in this Service Classification, including Purchased Power Cost Adjustment charges, the current Delaware Public Utilities Tax will be applied to the total bill for all non-residential Services, unless the Customer is exempt from such tax. Manufacturing facilities may be eligible for a reduced rate. (Reference: Section 21)

16. RULES AND REGULATIONS

    The City's Rules and Regulations shall govern the supply of Service under this Service Classification.

24-~~8~~7PL—PRIVATE AREA LIGHTING SCHEDULE

PL—PRIVATE AREA LIGHTING SCHEDULE

1. AVAILABILITY

This rate applies throughout the territory served by the City for lighting of Customer's private property and is available to Customers presently taking Service under any other Service Classification also.

2. CHARACTER OF SERVICE

Service shall be rendered by use of LED light sources. Wattage ratings are based on nominal lamp ratings as listed by the manufacturer.

3. TERM OF SERVICE

Standard Service shall be for an initial term of one (1) year and thereafter from month to month and may be terminated by at least thirty (30) days' notice from either party. Bills will be rendered monthly in accordance with the charges shown in the Rate Table below.

4. BILLING PERIOD

Rates are stated on a monthly basis and bills are rendered monthly following the supply of Service based on the Rate Table presented below in Section 7.

5. DESCRIPTION OF EQUIPMENT TO BE SUPPLIED

The City will install, own, and maintain standard private area lighting equipment including the luminaire and bracket mounted on an existing City pole or an approved pole owned by the Customer. The City will connect to existing secondary facilities and will install one (1) additional ~~100 foot~~ 100-foot span of aerial secondary Service.

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6. TERMS AND CONDITIONS OF SERVICE

a. Private Lighting Service is available to individual Customers provided the City has in place existing secondary Service facilities.

b. When additional circuits or poles are required on the Customer's premises, such additional circuits and poles shall be paid for, ~~owned~~ owned, and maintained by Customer.

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c. Any additional secondary circuits or equipment necessary on City's poles shall be installed by City at Customer's expense but will be owned and maintained by the City. The Customer will bear the cost of any new poles or conductor over 100 feet in length.

d. Where the lighting unit is attached to a City owned pole and is located along a public right-of-way, the lighting unit furnished under this Service Classification must then extend over the Customer's property and not over the public right-of-way unless written permission is received from the government entity responsible for the right-of-way. The decision as to the location of a private lighting unit on City poles or other structures rests solely with the City.

e. The City will maintain and service only equipment which it owns.

f. Lamps shall be lighted from dusk to dawn each night, approximately 4,300 hours per year.

g. New installations shall remain in Service for a minimum of one (1) year. The City may require payment for removals or relocation of new installations in Service for less than one (1) year. A Service call fee may be charged for such Service. (See Chargeable Service Call in the Electric Fee Schedule, ~~Appendix 1~~)

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h. The City will supply electricity, revamp when necessary, and maintain the equipment and optics which it owns. All other maintenance such as repairs/replacement of Customer owned pole will be at Customer's expense.

i. It is the Customer's responsibility to notify the City of any outage or problem with the operation of the Customer's private area light. No prorated credit on the Customer's bill will be allowed by the City for lack of Service when the City has not been notified of a problem.

j. Lamp renewals and/or maintenance will be performed during normal working hours within a reasonable period following notification of a problem by the Customer to the City.

k. All Private Area Lighting installations must be accessible to the City's maintenance trucks and personnel for revamping and repairs.

l. The City reserves the right to discontinue Service where cost of Service is excessive because of vandalism or other reasons.

7. Rate Schedules by equipment installation

See Electric Fee Schedule

~~Enclosed Asymmetric Luminaire with 2 1/2, 4 or 8 ft.~~

| ~~Rates~~ | ~~Year 1~~ | ~~Year 2~~ | ~~Year 3~~ |
|---|---|---|---|
| ~~Monthly Facilities Charge:~~ | | | |
| ~~LED (100W)~~ | ~~$8.05~~ | ~~$8.05~~ | ~~$8.05~~ |
| ~~LED (400W)~~ | ~~$11.07~~ | ~~$11.07~~ | ~~$11.07~~ |
| ~~HPS (9500 Lumens)~~ | ~~$8.05~~ | ~~$8.05~~ | ~~$8.05~~ |
| ~~HPS (16000 Lumens)~~ | ~~$11.07~~ | ~~$11.07~~ | ~~$11.07~~ |
| ~~Mercury (22500 Lumens)~~ | ~~$23.14~~ | ~~$23.14~~ | ~~$23.14~~ |
| ~~HPS (50000 Lumens)~~ | ~~$24.76~~ | ~~$24.76~~ | ~~$24.76~~ |
| ~~Mercury (8600 Lumens)~~ | ~~$11.57~~ | ~~$11.57~~ | ~~$11.57~~ |
| ~~250 Watt~~ | ~~$12.61~~ | ~~$12.61~~ | ~~$12.61~~ |
| ~~MH (110000 Lumens)~~ | ~~$54.34~~ | ~~$54.34~~ | ~~$54.34~~ |
| ~~MH (40000 Lumens)~~ | ~~$24.76~~ | ~~$24.76~~ | ~~$24.76~~ |

The City does not offer Mercury, HPS, or Metal Halide lighting to any new Customer at this time.

8. GENERAL COST ADJUSTMENT

The monthly charges under this Service Classification may be subject to General Cost Adjustment Charge. (Reference: Section 20).

9. GREEN ENERGY FUND RATE

All kilowatt-hours billed under this Service Classification may be subject to Green/Renewable Energy Fund Rate. (Reference: Section 23).

10. RULES AND REGULATIONS

The City's Rules and Regulations shall govern the supply of Service under this Service Classification.

11. PUBLIC UTILITIES TAX

In addition to the charges stated in this Service Classification, the current Delaware Public Utilities Tax will be applied to the total bill for all non-residential services, unless the Customer is exempt from such tax. Manufacturing facilities may be eligible for a reduced rate (Reference: Section 21).

24~~98~~. AGR—AGRICULTURAL SERVICE SCHEDULE

1. AVAILABILITY

This rate applies throughout the territory served by the City of Milford. Electric service will be rendered through a single metering installation for the general lighting and/or power requirements of active farms where the primary purpose of energy delivered is for the preparation of livestock.

This rate is available to any Customer having a maximum measured demand of less than 300 kW or a minimum of 3500 kWh and desiring service at the available secondary voltage as defined in Section

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12.8. Any Customer taking service under this service classification whose measured demand in any four consecutive months is equal to or exceeds 300 kW shall be automatically transferred to Service Classification LGS, effective with the next succeeding billing month. Any Customer so transferred will remain on LGS, for at least 12 billing months, even though the Customer's maximum measured demand in succeeding months may be less than 300 kW.

After 12 billing months, at the Customer's request or when the City observes, upon a periodic review of the Customer's records, that the Customer has not exceeded 300 kW, the Customer will be transferred back to this service classification (AGR) provided that the Customer's monthly demand measurement has not exceeded 300 kW during any month within the most recent 12 months.

2. TERM OF SERVICE

Subject to conditions specified, Service is offered on a month-to-month basis until terminated unless a special contract is required as discussed in Section 3.

3. MONTHLY RATES

See Electric Fee Schedule

| ~~Rates~~ | ~~Year 1~~ | ~~Year 2~~ | ~~Year 3~~ |
|---|---|---|---|
| ~~Monthly Facilities Charge:~~ | | | |
| ~~All Customers~~ | ~~$102.50~~ | ~~$107.50~~ | ~~$112.50~~ |
| ~~Energy Charge:~~ | | | |
| ~~All Energy~~ | ~~$0.04577~~ | ~~$0.04577~~ | ~~$0.04577~~ |
| ~~Demand Charge:~~ | | | |
| ~~All Demand~~ | ~~$16.05~~ | ~~$16.30~~ | ~~$16.55~~ |

4. BILLING PERIOD

Rates are stated on a monthly basis and bills are rendered monthly following the supply of service based on the rate stated herein.

5. PURCHASED POWER COST ADJUSTMENT CHARGE (PPCA) CHARGE

All kilowatt-hours billed under this service classification may be subject to Purchased Power Cost Adjustment charges. (Reference: Section 19)

6. GENERAL COST ADJUSTMENT

The monthly charges under this service classification may be subject to General Cost Adjustment Charges (Reference: Section 20)

7. GREEN/RENEWABLE ENERGY FUND RATE

All kilowatt-hours billed under this Service Classification will be subject to Green/Renewable Energy Fund Rate. (Reference: Section 22)

8. MONTHLY FACILITIES CHARGE

A monthly charge to cover the fixed cost of supplying power to a Customer.

9. MINIMUM CHARGE

The minimum charge shall be the MONTHLY FACILITIES CHARGE. Minimum charge shall not be prorated.

10. MEASURED DEMAND

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The measured demand shall be the greatest demand established by the Customer during any fifteen (15) minute demand interval of the month as measured by demand meter, taken to the nearest whole kilowatt.

11. BILLING DEMAND

The billing demand for each billing month shall be the maximum measured demand as created during each month.

12. LOAD MANAGEMENT

The City encourages its Customers to implement renewable energy and load management resources.

13. PUBLIC UTILITIES TAX

In addition to the charges stated in this service classification, including power cost adjustment charges, the current Delaware Public Utilities Tax will be applied to the total bill for all non-residential services, unless the Customer is exempt from such tax. Manufacturing facilities may be eligible for a reduced rate. (Reference: Section 21).

14. RULES AND REGULATIONS

The City's Rules and Regulations shall govern the supply of Service under this Service Classification.

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24 ~~109~~. EDR—ECONOMIC DEVELOPMENT RATE SCHEDULE

1. PURPOSE

The purpose of this Economic Development Rate (EDR) is to provide a discount from the City's regular tariffs rates for Service to certain new and existing commercial and industrial Customers of the City if they make substantial new capital investments or create new employment opportunities and, in doing so, add or retain load in the City's Service territory.

2. AVAILABILITY

Customers to whom EDR is available are: (1) Customers eligible for or taking Service from the City under Service Classifications "MGS", "LGS", or "GSP"; (2) Whose operations at a facility in the City's Service territory, for which a discount under this Rate Schedule is sought, fall primarily under Standard Industrial Code classifications 20 through 38, and 60 through 67 except 65; (3) Who apply to the City in writing, for a discount under this Rate; and (4) Who satisfy all other EDR criteria described below.

Discounts under this Rate are available for New Load associated with either initial permanent Service (a "New Customer") or an expansion of existing Service (an "Expansion Customer") at a single integrated facility. The New Load of a New Expansion Customer must be at least 50 kW with a minimum of 60% load factor and the new Customer must have added at least 25 Investment Units as of the Operational Date. Discounts under this Rate may be available to the existing Customers, with a minimum load of 2,000 kW and a monthly load factor of 60% for enabling them to retain their loads.

The City shall have sole discretion in determining eligibility for discounts under this Rate, and the availability of such discounts may be limited or discontinued from time to time, as the City determines it is appropriate to do so. Examples of situations where discounts under this Rate are not available include when: (1) the identity of a Customer to whom the City currently provides, or has provided, Service has changed solely due to a name change, purchase, merger, consolidation, or reorganization; (2) A Customer has substituted one Service address in the City's Service territory for another; (3) Strikes, equipment failures, temporary plant shutdowns; or other similar circumstances are what allow the Customer to claim eligibility for discounts under this Rate; or (4) The economic development purpose of this Rate is not being served.

3. DEFINITIONS

3.1 New Load - For a New Customer, New Load is the total Metered Demand and Energy attributable to initial permanent Service. For an Expansion Customer, New Load is the net demand and energy attributable to the expansion, as determined by the City.

3.2 Investment Unit - An investment Unit is equal to 1 non-seasonal, full-time job or $100,000 in capital investment.

3.3 Operational Date - The Operational Date for a New or Expansion Customer shall be the first day of full operation of the new or expanded facility. In no event, however, shall the Operational Date be later than 2 years after the New Customer or Expansion Customer applies for the discount available under this Rate.

4. DETERMINATION OF THE DISCOUNT

After the receipt of the Customer's application, the City and the Customer will negotiate the Discount to be given to the Customer for his New Load. The period for which the Discount will be applied will also be negotiated.

5. APPLICATION OF DISCOUNT

The Discount will be applied to the total bill, before the application of the Delaware Utility Tax, for Service of the New Load of the New Customer or Expansion Customer during the periods specified below as long as the New Customer or Expansion Customer remains eligible for the Discount under this Rate.

6. SERVICE AGREEMENT

A New Customer or Expansion Customer shall execute a Service Agreement with the City providing that, for the period during which Discount is provided under this Rate, a minimum of 5 years, the New Customer or Expansion Customer shall purchase its total electric requirements from the City. At the City's sole discretion, a New Customer or Expansion Customer may be able to increase the Discount available under this Rate by executing a Service Agreement providing that the New Customer or Expansion Customer shall purchase its total electric requirements for a longer period commensurate with the amount of the Discount sought.

7. GENERAL PROVISIONS

A New Customer or Expansion Customer must submit a written application to the City for the Discount under this Rate and such application must be approved by the City before the Operational Date. The application must include a description of the amount and source of the New Load and the basis on which the New Customer or Expansion Customer believes itself to be eligible for Discount under this Rate.

For an Expansion Customer, the City may install metering equipment necessary to measure the Expansion Customer's New Load separately from loads already served by the City. The City reserves the right to determine how such New Load will be metered. If the City determines that separate metering is impractical, unduly expensive, or otherwise unnecessary, the City will administratively determine the New Load eligible for Discount under this Rate and the City's determination will be controlling.

New Customers or Expansion Customers will give the City access to information reasonably required by the City to determine continuing eligibility. Unless expressly altered by this Rate, the ~~terms~~ terms, and conditions of Service to a New Customer or an Expansion Customer will be governed by the Tariff and Service Agreement under which the City provides Service to the New Customer or Expansion Customer.

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Incremental transmission and distribution investment costs associated with specifically serving a Customer who otherwise qualifies for this rate will be separately recovered from the Customer.

8. LOSS OR REDUCTION OF NEW LOAD

If during the initial term of its Service Agreement with the City, the New Customer or Expansion Customer ceases or substantially reduces its operations at the facility where Discount has been provided for New Load under this Rate, a New Customer or Expansion Customer will refund to the City Discounts provided under this Rate. A substantial reduction in operations shall be deemed to have occurred where the New Load of the New Customer or Expansion Customer falls below 50 kW for a period of 3 or more months. A substantial reduction in operations also shall be deemed to have occurred where the energy usage of the New Customer or the Expansion Customer in 6 consecutive months is 25% or more below the energy usage in the same billing months of the prior year.

Such refunds shall be equal to the Discounts ~~actually received~~ received by the Customer on that portion of load that is lost or reduced, as determined by comparing bills for Service with and without the Discount provided under this Rate. Refunds shall be due and payable in full within 30 days after the City renders a bill for such refunds.

9. OTHER TERMS AND CONDITIONS

All other terms and conditions of the City's tariff and the applicable Rate Schedule shall be applicable to Rate Schedule EDR.

24 ~~11~~10.EXTRA FACILITIES SCHEDULE

Extra Facilities: At the request of the Customer, The City will furnish, install, ~~own~~ own, and maintain facilities which are in addition to those necessary for delivery of service at one point, through one meter, at one voltage, in accordance with the applicable rate schedule, such additional facilities to be furnished under this "Extra Facilities Schedule" added to and made a part of The City standard form of contract and containing the following provisions:

Service shall be used solely by the contracting Customer in a single enterprise located entirely on single, contiguous premises, and there shall be no exemption from any of the provisions of the Rules and Regulations related to this Schedule.

"Extra Facilities" shall include but not be limited to such of the following as may be required: voltage regulators, circuit breakers, duplicate service, transformers, substations, connecting lines, or other equipment installed for the exclusive use of the contracting Customer, in addition to the facilities which the City furnishes to the Customer without cost under its other Rate or Service Schedules.

The Extra Facilities to be supplied shall be the City's standard overhead transmission or distribution, or transmission and distribution, equipment to be installed only on The City side of the point of delivery.

A monthly "Extra Facilities Charge" equal to 1.7% of the installed cost of the facilities, but not less than $25, shall be billed to the Customer, for the life of the Extra Facilities service, in addition to the billing, in accordance with the applicable Rate Schedule.

Extra Facilities shall include the installed cost of extra meters and associated equipment necessary to record demand and energy at the voltage delivered to the Customer. The "installed cost of Extra Facilities" shall be the original cost of material used, including spare equipment, if any, plus applicable labor, transportation, stores, tax, ~~engineering~~ engineering, and general expenses, estimated if not known. The original cost of materials used is the current market price of the equipment at the time the equipment is installed, whether said equipment is new or out of inventory.

When Extra Facilities furnished include a transformer or voltage regulator, metering equipment shall be installed on the City side of the transformer or regulator, or if this is not feasible, the meter shall be compensated ~~so as to~~ to include registration of the equipment losses. Upon mutual agreement between the Customer and the City, demand and energy may be metered at primary voltage, without compensation for transformer loss, and without inclusion of any part of the metering cost as an Extra Facility.

When the Extra Facilities requested by the Customer consist of those required to furnish service at either more than one delivery point on the premises or at more than one voltage, or both, the installed cost of the Extra Facilities to be used in the computation of the Extra Facilities Charge shall be the difference between the installed

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cost of the facilities made necessary by the Customer's request, and the installed cost of the facilities which the City may furnish without cost to the Customer under its other Rate or Service Schedules.

The City shall have the option of refusing requests for Extra Facilities if, on its own determination, the requested facilities are not feasible, or may adversely affect the City service to other Customers.

Contracts containing the Extra Facilities Schedule shall have a minimum original term of 5 years to continue from year to year thereafter, but the City may require the payment of removal costs in contracts with original terms of 10 years or ~~less, and~~ less and may require advance payment of the Extra Facilities Charge for a period equal to one-half the original term of the contract.

~~In the event that~~If an existing Extra Facility must be modified or replaced, ~~whether or not~~ whether such modification or replacement is requested by the affected Extra Facility Customer, then the installed cost of Extra Facilities on which the monthly Extra Facilities Charge is based shall be the installed cost of existing equipment, plus the installed cost of new additions, less the installed cost of equipment removed. The installed cost of existing equipment shall be the same installed cost used for the said equipment immediately prior to the modification or replacement. The installed cost of new additions shall be the current market price of the said new additions at the time the new additions are installed. The installed cost of equipment removed shall be the same installed cost used for the said equipment immediately prior to removal.

24-~~12~~11.VGRE—VOLUNTARY GREEN/RENEWABLE ENERGY SCHEDULE

1. AVAILABILITY

   Available to all retail Customer Classes for the purchase of all or a portion of a Customer's energy requirements. The Customer must apply for this Service by submission of the CUSTOMER APPLICATION FOR VOLUNTARY SUBSCRIPTION TO PURCHASE RENEWABLE ENERGY attached to this Tariff as Appendix ~~3~~1.

2. CHARACTER OF SERVICE

   Service will be provided to those Customers who volunteer to receive their energy from Green/Renewable Energy Resources. Customers can take service in Blocks consisting of 100 kWh per Block. "Green/Renewable/ Energy" means electrical energy generated by means of a low- or zero-emissions generation technology that has substantial long-term production potential and may include, without limitation, solar, wind, hydropower, ocean energy, geothermal, landfill gas, anaerobically-digested waste biomass or fuel cells that are not fossil fueled, and any other generation technology approved by the State of Delaware. Green/Renewable Energy does not include any fossil fuel or nuclear energy.

   The amount of power subscribed to by the Customer shall be set out in an Application for the VGRE Rate, which is attached hereto as Appendix ~~3~~1.

3. TERM OF SERVICE

   Standard Service shall be for an initial term of one (1) year and thereafter may be renewed on an annual term.

4. MONTHLY RATES

   The Rates and Terms as set out for all other Customer Rates Classes shall apply. Additionally, the Renewable Energy Premium shall apply for kWh elected by the Customer to be served by Renewable Energy Resources as stated in the Application for VGRE Rate. The Renewable Energy Premium (REP) for all classes is established by the State of Delaware and the current REP is $0.18/Block or $0.0018/Kwh. Each Block consists of 100 kWh.

5. MONTHLY MINIMUM

   Customers may elect to take VGRE Rate Service in increments of 100 kWh, however, the monthly minimum charge will be based on one Block of 100kWh.

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6. OTHER TERMS AND CONDITIONS

Service will be offered to Customers on first-come-first-[served] basis as it is available for sale by the City. If applications exceed available supply, the remaining applicants will be placed on a waiting list. All other Tariff Rules and Regulations except PPCA provision applicable to the Customer Class to which a Customer belongs shall apply to Service under this Rate Schedule.

7. PUBLIC UTILITY TAX

Billings under this Rate Schedule may be increased by an amount equal to the sum of taxes payable under the Gross Receipts Tax and all other taxes, fees or charges (exclusive of ad valorem, state and federal income taxes) payable by the City and levied or assessed by any government authority on the Service rendered by the City, or on the right or privilege of rendering the Service, or on any object or event incidental to the rendition of the Service. (Reference: Section 21)

RETAIL CUSTOMERS DEMAND RESPONSE AGGREGATION

1. The City or any entity that applies to be an authorized Curtailment Service Provider and is subsequently approved by the City Manager or his designee is permitted to bid demand response on behalf of the Customers served by the City directly into PJM.
2. The Customers served by the City wishing to bid their demand response into PJM may do so by participating in the program established by the City or with a Curtailment Service Provider duly approved in advance by the City.

ANCILLARY SERVICES PROVIDED BY DEMAND RESPONSE RESOURCES

1. The City or any entity that applies to be an authorized Curtailment or Demand Response Service Provider and is subsequently approved by the City Manager or his designee is permitted to bid demand response on behalf of the Customers served by the City directly into PJM for energy imbalance, spinning reserves, supplemental reserves, reactive power and voltage control, or regulation and frequency response Ancillary Services or their functional equivalent as defined in the PJM's Open Access Transmission Tariff.
2. Customers served by the City wishing to bid their demand response into PJM for energy imbalance, spinning reserves, supplemental reserves, reactive power and voltage control, or regulation and frequency response ancillary services or its functional equivalent may do so by participating in the program established by the City or with a Curtailment or Demand Service Provider duly approved in advance by the City.

8. TECHNICAL CONSIDERATIONS COVERING PARALLEL OPERATIONS OF CUSTOMER OWNED GENERATION OF LESS THAN ONE (1) MEGAWATT AND INTERCONNECTED WITH THE CITY's ELECTRIC SYSTEM

1. PREREQUISITE

The Customer must be first in compliance with the Rules and Regulations and the applicable Service Classification and Rule Schedules. The terms and conditions contained herein are in addition to, but do not modify nor negate, the applicable terms of the Tariff.

2. PURPOSE

The purpose of these Technical Considerations relating to interconnection of on-site distributed generation ("Distributed Generation") and parallel generation requirements is to clearly state the terms and conditions that govern the interconnection and parallel operation of on-site Distributed Generation, in order to:

A. Establish technical requirements which will promote the safe and reliable parallel operation of Distributed Generation resources;

B. Enhance the reliability of electric service;

C. Facilitate the implementation and use of distributed resources technologies;

D. Enhance economic efficiency in the production and consumption of electricity and other energy resources; and

E. Promote the use of distributed resources in order to provide electric system benefits during periods of capacity constraint.

3. APPLICABILITY

Unless otherwise provided, these guidelines apply to all Customer owned generation operating below 1 Megawatt which is interconnected at 25kV or below and operated in parallel with the City's power delivery System. The technical requirements of Section 15 (below) and subsequent sections of this document do not apply to NMS Rider Tariff generators using inverter technology, as requirements for these installations are already covered in the applicable codes, IEEE Standard 929, Recommended Practice for Utility Interface of Photovoltaic (PV) Systems, and UL 1741, Underwriters Laboratories Subject 1741-1999, Standards for Static Inverters and Charge Controllers for use in Photovoltaic Power Systems.

4. DEFINITIONS

Account—An account is one metered or un-metered Rate or Service classification which normally has one electric delivery point of service. Each account shall have only one electric service supplier providing full electric supply requirements for that account. A premises may have more than one account.

Customer—Any adult person, partnership, association, corporation, or other entity: (i) in whose name a service account is listed, (ii) who occupies or is the ratepayer for a premises, building, structure, etc., and (iii) who is primarily responsible for payment of bills. A Customer includes anyone taking Delivery Service or combined Electric Supply and Delivery Service from the City under one Service classification for one account, ~~premises~~ premises, or site. Multiple premises or sites under the same name are considered multiple Customers.

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Distributed Generation or On-Site Distributed Generation—An electrical generating unit of less than 1 MW, which may be connected in parallel operation to the City's system. The on-site generation capacity shall be no greater than the capacity of the installed electric service.

Generator Owner—The owner of the generating system that is interconnected to the City.

Grid—The interconnected arrangement of lines and transformers that make up the City's electric power system.

IEEE Standard 929—IEEE Standard entitled Recommended Practice for Utility Interface of Photovoltaic (PV) Systems, P929 Draft 11, dated July, 1999, or subsequent approved revision thereof.

Interconnection—The physical connection of Distributed Generation to the City's system in accordance with these guidelines so that parallel operation can occur.

Interconnection Application—The standard form of application which must be submitted by the Generation Owner to the City for permission to interconnect with the City system. The approved Interconnection Application sets forth the contractual conditions under which the City and Generator Owner agree that one or more generating units whose aggregate generation at the Point of Common Coupling is less than 1 MW may be interconnected at 25 kV or less with the City's system.

Inverter—A static power converter with control, protection and filtering functions that converts Direct Current input to Alternating Current output. Inverters must be of the non-islanding type.

Island—A portion of the City system which contains both load and Distributed Generation and is isolated from the remainder of the City system.

Parallel Operation—Any electrical connection between the Company's system and the Generator Owner's generating source.

Point of Common Coupling—The point where the electrical conductors of the City system are connected to the Customer's conductors and where any transfer of electric power between the Generator Owner and the City System takes place (such as switchgear near the meter).

Pre-Approved Equipment—Specific generating and protective equipment system or systems that have been approved by the City as meeting the applicable parts of this document.

Pre-Interconnection Study—A study or studies which may be undertaken by the City in response to its receipt of a completed application for parallel operation with the City's system submitted on the Interconnected Application form prescribed by these guidelines. Pre-Interconnection Studies may include, but are not limited to service studies, coordination studies and facilities impact studies.

Qualifying Facility (QF)—An electric generation facility which is a qualifying facility under Subpart B, Section 201 of the Federal Energy Regulatory Commission's regulations per the Public Utility Regulatory Policies Act of 1978.

Stabilized—The City's system following a disturbance which returns to the normal range of voltage and frequency for at least 5 minutes or longer as coordinated with the City. The City may require a longer period upon a reasonable showing that the reconnection after 5 minutes will adversely affect the safety and reliability of the City's System.

Unit—A Distributed Generation facility which operates at the Generator Owner's service voltage and phasing.

Utility System or Electric Distribution Facility—City's distribution system operating at 25 kilovolts or below to which the generation equipment is interconnected.

5. INTERCONNECTION APPLICATION

A Generator Owner shall make a formal application to the City for the interconnection of a generator to the City system. The application will be made on an Application Form provided by the City. Two Application Forms are available at the City's Office. Generators 25kw or less will use the shorter Application Form as less technical data is needed for units within this size range. Larger size Generators shall use the other Application Form.

6. DESIGNATION OF COMPANY CONTACT PERSONS FOR MATTERS RELATING TO DISTRIBUTED GENERATION INTERCONNECTION

The City's Electric Department will be the designated point of contact for all matters related to interconnected generation. The City will maintain records concerning applications received for interconnection and parallel operation of Distributed Generation. Such records will include the date of receipt of each such application, documents generated in the course of processing such applications, correspondence regarding such applications and the final disposition of such application.

7. PRE-INTERCONNECTION STUDIES

A. In many instances the City will wish to conduct a service study, coordination study, or facilities impact study prior to interconnection of a Distributed Generation unit. In instances where such studies are deemed necessary, the scope of such studies shall be

based on the characteristics of the particular Distributed Generation unit to be interconnected and the proposed point of interconnection.

B. A Generator Owner who qualifies under the special NMS Rider Tariff and all generators less than 25kW are exempt from the pre-interconnection study requirement.

C. Completion of Pre-interconnection Study - Upon completion of the interconnection study, the City will notify the Generator Owner that his application has been approved or indicate insufficient detail why the application cannot be approved. The conducting of such pre-interconnection studies shall not unduly delay the interconnection of the Distributed Generation. In no event will such studies take longer to complete than 4 weeks after receipt of signed Customer application and Customer submittal of all required data.

D. Pre-interconnection Study Fee - The City will perform a pre-interconnection study without charge up to the typical and customary cost that the City would expend for the study work of similar type of Customer interconnection. If the cost to the City is expected to exceed this typical and customary amount, or if multiple submittals by the Generator Owner are necessary, the City will advise the Generator Owner of the expected cost of such study work by the City before such work begins. The Generator Owner will be responsible for payment of all costs above the typical and customary amount.

8. NETWORK INTERCONNECTION OF DISTRIBUTED GENERATION

Where generation is to be connected to a network system and capable of exporting power to the Grid, the interconnection study may result in more stringent interconnection requirements.

9. PRE-APPROVAL OF GENERATION UNITS, DEVICES AND SYSTEMS

Upon approval by the City that certain generating unit's protective devices and/or system(s) meet the standards set out in these guidelines, such approval shall be made available to the appropriate manufacturer upon written request. For subsequent applications using some or ~~all of~~ all the identical generating unit's protective devices and/or systems, the manufacturer may submit a copy of the approval with the application as proof that its equipment has already been approved for use on the City's system. Use of pre-approved equipment will not eliminate any applicable requirement for a pre-interconnection study to determine the suitability of the equipment for each application, given the unique arrangements and characteristics of both the Generator Owner and the City systems at the point of the interconnection.

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10. CONNECTION APPROVAL

The Generator Owner can connect their generation to the City System only after the Interconnection Application has been approved and the Generation Owner has received a written approval notification. The City will provide notification within four weeks after the receipt of the Interconnection Application and all required data.

11. INTERCONNECTED GENERATION SITE WARNING LABEL

The Generator Owner shall install a warning label in a conspicuous place on their electric meter or meter box to notify the City personnel that there is a generator source installed on the load side of the meter. The warning label shall not be placed in a location that would interfere with the ability of the City personnel to read the electric meter. The City will provide the warning label to the Generator Owner. The warning label must be placed before the generation can be interconnected.

12. DISCONNECTION AND RECONNECTION

The City may disconnect a Distributed Generation unit under the following conditions:

A. Application Termination - Upon termination of the approved Interconnection Application.

B. ~~Non-Compliance~~ Non-Compliance - For non-compliance with the technical guidelines specified in this document or other requirement contained in the applicable Tariff, provided that the City has given notice to the Generator Owner and provided the Generator Owner reasonable time (consistent with the condition) to correct such non-compliance. The City will reconnect the unit only upon receipt of certification from the Generator Owner and verification by the City that the unit ~~is in compliance~~ complies. The City will provide verification within a reasonable time period.

C. In Case of a system emergency outage of the City's primary Electrical Sources - The Generator Owner's generation equipment must be installed and configured so that parallel operation must automatically cease immediately and automatically during outages or loss of the City's electric source in accordance with these guidelines. The Generation Owner must also cease parallel operation upon notification by the City of a system emergency, abnormal condition or in cases where such operation is determined to be unsafe, interferes with the supply of service to other Customers or interferes with the City's system maintenance or operation. In addition, the City may disconnect the generator from the system for system emergencies without notice. However, the City will use reasonable efforts to notify the Generation Owner prior to disconnecting.

D. For Routine Maintenance and Repairs - The City may disconnect a Customer/Generation Owner for routine maintenance and repairs on the City's system consistent with applicable tariffs and agreements. The City will make reasonable efforts to provide advance notice to the Customer/Generation Owner of service interruptions resulting from routine maintenance.

E. The City will reconnect the Customer/Generation Owner as quickly as possible following any such service interruption.

13. TERMINATION

The Generation Owner may terminate the approved Interconnection Application at any time upon thirty (30) days of providing a written notice to the City. The City may terminate the Interconnection Application for a cause after 60 days written notice to the Generator Owner of a material violation of the terms of the approved Interconnection Application and after the Generator Owner has had a reasonable opportunity to remedy the violation. The Generator Owner must give the City notice that it intends to permanently shut down ~~his~~ its generation.

14. PRIVILEGED COMMUNICATIONS CONCERNING PROPOSED DISTRIBUTED GENERATION PROJECTS

In the course of processing applications for parallel operation and in the conduct of pre-interconnection studies, the Generation Owner shall provide the City with detailed information concerning the proposed Distributed Generation project. The City shall not use such knowledge of proposed Distributed Generator projects submitted to it for review to prepare competing proposals to the Generator Owner whereby the City, or its affiliate, offers either discounted rates in return for not installing the Distributed Generation, or offers competing Distributed Generation projects.

15. TECHNICAL GUIDELINES FOR PARALLEL OPERATION OF ON-SITE DISTRIBUTED GENERATION UNITS

This subsection describes minimum requirements and procedures for safe and effective connection and operation of Distributed Generation. A Generator Owner may operate 60 Hertz, three phase or ~~single phase~~ single-phase generating equipment, whether a QF or non-QF, in parallel with the City's system pursuant to an approved Interconnection Application provided that the equipment and Generator Owner meet or exceed the requirements of these guidelines or the NSM Rider Tariff requirements and that the City has approved the Generator Owner's application to interconnect. This subsection describes typical interconnection requirements. Certain specific interconnection locations and conditions may require the ~~installations~~

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installation of additional protective settings or hardware, especially when exporting power to the system. If the City concludes that an application for parallel operation requires additional protective settings or hardware, the City shall make those requirements known to the Generator Owner within 14 days after all pertinent studies are completed.

16. APPROVAL FOR INTERCONNECTION

Approval to connect to the City system indicates only that the minimum requirements for a safe proper interconnection have been satisfied. Such approval does not imply that the Generator Owner's facility meets all federal, ~~state~~ state, and local standards or regulations.

A. GENERAL INTERCONNECTION AND PROTECTION REQUIREMENTS

1. The Generator Owner's generation and interconnection installation must meet all applicable national, state, and local construction and safety codes.

   a. The Generator Owner's generator shall be equipped with protective hardware and software designed to prevent the generator from energizing one of the City's de-energized circuits. The Generator Owner's generator must automatically disconnect from the City's system if the Grid source is lost, ~~irrespectively~~ irrespective of connect loads or other generators.

   b. The generator shall be equipped with the necessary protective hardware and software designed to prevent sustained parallel operation of the generating equipment with the City's system unless the system service voltage and frequency are within acceptable magnitudes as defined in Section 15.

   c. Pre-approved equipment shall be accepted as part of an interconnection proposal without the need to re-review the equipment itself. However, the application, design and setting of pre-approved units and/or equipment must be reviewed and coordinated according to the unique needs of the specific location of the proposed installation. Where a complete unit or system has been pre-approved, only location-specific issues will typically need to be reviewed.

   d. The Generator Owner shall be responsible for protecting its own generating and interconnection equipment in such a manner so that City system outages, short circuits, single phasing conditions or other disturbances including zero sequence currents and Ferro resonant over-voltages do not damage the Generator Owner's generating equipment. The protective equipment shall also prevent excessive or unnecessary tripping that would adversely affect the City's service reliability to other Generator Owners and Customers.

   e. The generator and interface protection schemes shall be continuously monitored and ~~functioning~~ functioning, and the generator shall immediately disconnect from the City's system for any condition that would make the protection scheme inoperable.

   f. The operating power required for the protection and control schemes for the generator and the control power used to disconnect the generator from the City must not be dependent on the City grid power.

   g. Where multiple generators are connected to the system through a single point of common coupling, the sum of the ratings of the generators will be used to determine the applicability of these guidelines. Protection

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scheme performance with one or more units ~~off-line~~ offline will have to be considered.

h. Applicable circuit breakers or other interrupting devices at the Generator Owner's facility must be capable of interrupting the maximum available fault current at the site, including any contribution from the Owner's generator(s).

i. The Generator Owner will furnish and install a manual disconnect device which, when opened, will have the effect of isolating the generator from the City's system. The disconnect device shall have a visual break (a disconnect switch, a draw-out breaker, fuse block, etc. as appropriate to the voltage level), will, at times, be accessible to the City's personnel, and shall be capable of being locked in the open position via a City padlock. The City shall use reasonable efforts to utilize padlocks of a size consistent with typical manufacturer's specifications. The Generator Owner shall follow the City's switching, clearance and tagging procedures which the City shall provide and attach the Warning Label noted in Section 11.

(1) On generation installations of 25kW or less, the Generator Owner may elect not to install a manual disconnect switch provided that the meter can be safely "pulled" by the City to isolate the generation equipment from the City's System. If the Generator Owner elects not to install a manual disconnect device, the Generator Owner assumes all risks and consequences when a meter must be "pulled" to disconnect the generator thereby also interrupting electric service to the Customer.

j. The design, procurement, installation, and maintenance of the equipment at the Generator Owner's site is the responsibility of the Generator Owner and at the Generator Owner's expense.

k. Any necessary enhancements or improvements needed within the City's system and/or at the Customer sites to accommodate the parallel interconnection of the Generator Owner's generation will be at the Generator Owner's expense.

l. The Generator Owner has full responsibility and liability for the safe and proper operation of their equipment and the power originating from their generator. The Generator Owner is also responsible for synchronizing their generator(s) with the City's system and maintaining ~~a synchronous~~ synchronous operation.

m. The Generator Owner must immediately cease parallel operation upon notification by the City if such operation is determined to be unsafe, interferes with the supply of service to other Customers, or interferes with the City's system maintenance or operation.

n. The City reserves the right to specify the type of transformer connection ~~(e.g. e.g.,~~ delta-delta, wye-delta, wye-wye) that will be employed for all multiphase interface transformers consistent, where reasonable, with the Generator Owner's power system.

B. PREVENTION OF GENERATOR OWNER GENERATION INTERFERENCE WITH CITY SYSTEM.

To eliminate undesirable interface caused by operation of the Generator Owner's generating equipment, the Generator Owner's generator shall meet the following criteria:

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1. Voltage - The generating equipment will be operated in such a manner that the voltage levels on the City's system are in the same range as if the generating equipment were not connected to the City's system. The Generator Owner shall provide an automatic method of initiating a disconnect sequence of his generating equipment from the City system with set points noted in the table below.

| Generating Systems with Inverters Up to 25kw | Generating Systems with Inverters Greater than 25kw | Non-Inverter or Rotating Machine Generating Systems |
|---|---|---|
| ·Trip in 0.1 second for <50%<br>·Trip in 2 second for 50%≤V<88%<br>·Trip in 2 seconds for 06%<V<137%<br>·Trip in 0.03 second for 137%≤V<br>(Above times and voltages taken directly from IEEE 929) | ·Trip in 0.1 second for V <50%<br>·Trip within 0.1 to 30 seconds for 50%≤V<88%<br>·Trip within 0.1 to 30 seconds for 106%<V<137%<br>·Trip in 0.03 second for 137%≤V<br>(Specific voltage and time delay set points will be determined for each installation.) | ·Trip in 0.1 second for V≥115%<br>·Trip within 0.1 to 30 seconds for V>110% or V<90%<br>(Specific voltage and time delay set points will be determined for each installation.) |

Note: Trip time refers to the time between when the abnormal voltage condition ~~occurs~~ occurs, and the generator being disconnected from the utility Company.

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2. On three phase generator installations, full three phase voltage sensing should be employed. Voltages must be sensed on the high side of any interface transformer if the transformer high voltage winding is ungrounded.

3. The Generator Owner may reconnect to the grid when the system voltage returns to normal range and is stabilized as defined in Section III, Definitions.

4. Flicker - The Generator Owner shall not cause excessive voltage flicker on the company's system. This flicker shall not exceed the "Borderline of Irritation" curve, Fig. 10.3, as ~~define~~ defined in IEEE Std 519-1992, Recommended Practices and Requirements for Harmonic Control in Electric Power Systems. Lower levels of flicker may be required in areas where equipment such as computers and instrumentation are impacted.

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5. Frequency - The operating frequency of the generating equipment shall not deviate more than the values noted in the table below.

| Generating Systems with Inverters Up to 25kw | Generating Systems with Inverters Greater than 25kw | Non-Inverter or Rotating Machine Generating Systems |
|---|---|---|
| · Trip in 0.1 second for F<59.3 Hz<br>· Trip in 0.1 second for F>60.5 Hz<br>· (Set points taken from IEEE 929) | · Trip in 0.1 second for F<59.3 Hz<br>· Trip in 0.1 second for F>60.5 Hz<br>(Other frequency and time delay set points may be necessary for a specific installation.) | · Trip in 0.1 second for <59.3 Hz<br>· Trip in 0.1 second for F>60.5 Hz<br>(Other frequency and time delay set points may be necessary for a specific installation.) |

Note: Trip time refers to the time between when the abnormal frequency condition ~~occurs~~ occurs, and the generator being disconnected from the City.

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6. The Generator Owner may reconnect when the system frequency returns to normal range and is stabilized as defined in Section III, Definitions.

7. Harmonics - Non-linear circuit elements such as inverters can produce harmonics. Per IEEE Std 519, Recommended Practices and Requirements for Harmonic Control in Electric Power Systems, Table 11.1, the total harmonic distortion (THD) voltage shall not exceed 5% of the fundamental 60 Hz frequency nor 3% of the fundamental for any individual harmonic as measured at the location where the Customer interfaces with the City's system (Point of Common Coupling). In addition, the level of harmonic current that the Customer is allowed to inject into the City's system shall not exceed that specified in Table 10.3 in IEEE Std 519. Furthermore, any commutation notch should be limited as defined by Table 10.2 in IEEE Std 519. The preceding requirements apply to all types of generation systems.

8. The Generator Owner is responsible for the installation of any necessary controls or hardware to limit the voltage and current harmonics generated by his equipment to defined levels.

9. Power Factor - The generator must not adversely impact the power factor of the Generator Owner site. Most inverters are designed to operate close to unity power factor. The operating power factor of the generator shall be contained within the limits defined in the table below.

| Generating Systems with Inverters Up to 25kw | Generating Systems with Inverters Greater than 25kw | Non-Inverter or Rotating Machine Generating Systems |
|---|---|---|
| 0.85 Lagging or Leading when output exceeds 10% of inverter rating. (From IEEE 929-1999) | 0.85 Lagging or Leading When output exceeds 10%of inverter rating. Rating | 0.85 Lagging or Leading |

10. To the extent that a Generator Owner's power factor at the Point of Common Coupling falls below 0.9 lagging as a direct result of the installation of the generating unit(s), the Generator Owner must obtain, ~~instal~~ linstall, and maintain, at his expense, corrective apparatus that compensates for the drop in power factor caused by the installation of the generator.

11. Current - In some cases, directional over-current protection may be required to limit fault current flowing onto the Grid in the event of a line fault. DC inverters that are incapable of producing fault current do not require directional over-current protection.

12. Inverter systems should not inject DC current greater than 0.5% of rated inverter output in the AC interface point under either normal or abnormal conditions.

13. Fault and Line Clearing - The Generator Owner shall automatically disconnect from the City's system during electrical faults ~~on~~ to the City's electrical system and upon loss of the City's electric source. The Generator Owner may reconnect when the system voltage and frequency return to normal range and is stabilized as defined in Section III, Definitions. Detection of the loss of the City's primary electric system, where the Generator Owner is operating ~~in~~ on an island with other Customer load, becomes increasingly difficult as the level of dispersed generation on a feeder approaches the connected load. For generating units 25kw and below, the over/under voltage and over/under frequency

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settings described previously along with the anti-~~islandizing~~ islanding provisions of IEEE 929/UL 1746 inverters, should be sufficient to satisfy this provision. For units greater than 25kw the voltage and frequency set-points are to be adjustable, with the actual setting determined by the City based on the electrical characteristics of the generator and the City's electrical system. In addition, additional protection such as power directional or directional overcurrent functions may be required. For units 500kw or larger, a direct tripping scheme to trip the generator upon loss of the City's feeder may be required by the City. This decision will be based on the saturation of Distributed Generation on a particular feeder circuit and in those cases where under voltage or under frequency sensing may not adequately detect loss of the City source.

14. Automatic Reclosing - The Generator Owner is responsible for protecting his equipment from the effects of switching or automatic reclosing of the City's feeder circuit. The Generator Owner may request the City to delay high speed reclosing on the City's feeder to allow the interconnected generator sufficient time to remove itself from an ~~islandized~~ islanding or de-energized feeder prior to automatic reclose. Since delaying the automatic reclose time degrades the level of service provided to other Customers on the circuit, the City will limit the automatic reclose time delays to a few seconds or less. The Generator Owner may also request that a direct transfer trip scheme be added to remove the interconnected Generator from service prior to automatic reclosing by using communications equipment between the generator site and the City. ~~Similarly~~ Similarly, the Generation Owner may request that a synchronizing check, or reclose blocking scheme be installed on the City's feeder to prevent out of phase reclosing. The Generation Owner is responsible for all costs associated with the installation and maintenance of these requested modifications.

C. CONTROL, PROTECTION AND SAFETY EQUIPMENT REQUIREMENTS SPECIFIC TO GENERATORS OF 25 KW OR LESS.

1. All Generators 10 kW or less can be single phase. Customer owned generators greater than 10 kW must be evaluated by the City to determine if it can be single phase. The following table describes necessary control, ~~protection~~ protection, and safety equipment specific to generator of 25 kW or less connected to Secondary or Primary Voltage Systems:

a. Control, Protection and Safety Equipment for Generators of 25 kW[1] or Less Connected to Secondary or Primary System.

| **Generator Size 25kW or less** | |
|---|---|
| Generator Disconnect Device[2] | X |
| Over-Current Trip | X |
| Over-Voltage Trip | X |
| Under Voltage Trip | X |
| Over/Under Frequency Trip | X |
| Synchronizing Check[3] | Manual or Automatic |

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1) Exporting to the City system ~~many~~ may require additional operational/protection devices.

2) Generator Owner may elect to have the meter act as the disconnect device.

(See XIV.A.10)

3) For synchronous and other ~~type~~ types of generators with stand-alone capability.

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D. CONTROL, PROTECTION AND SAFETY REQUIREMENT SPECIFIC TO THREE PHASE SYNCHRONOUS GENERATORS, INDUCTION GENERATORS, AND INVERTER SYSTEMS.

1. Generators greater than 25 kW must be three phase machines connected to three phase circuits.

a. Three Phase Synchronous Generators. Generator circuit breakers shall be three phase devices with electronic or electromechanical control. The Generation Owner is solely responsible for properly synchronizing his generator with the City's system. For a synchronous generator, the excitation system response ratio shall not be less than 0.5 (five-tenth). The generator's excitation system(s) shall confirm, as near as reasonably achievable, to the field voltage vs. time criteria specified in American National Standards Institute Standard C50.13-1989 in order to permit adequate field forcing during transient conditions.

b. Three Phase Induction Generators and Inverter Systems. Induction generation may be connected and brought up to synchronous speed (as an induction motor) if it can be demonstrated that the initial voltage drop measured on the City's side at the point of common coupling is within the visible flicker limits stated in Section XIV.B.2. Otherwise, the Generator Owner may be required to install hardware to other techniques to bring voltage fluctuations to acceptable levels. Line-commutated inverters do not require synchronizing equipment. Self-commutated inverters whether of the utility-interactive type or stand-alone type shall be used in parallel with the City system only with synchronizing equipment.

Control, Protection and Safety Equipment[1]

| Less than 1 MW Three Phase Connected to Primary System | |
|---|---|
| Generator Disconnect Device[2] | X |
| Over-Voltage Trip | X |
| Under Voltage Trip | X |
| Over-Current Trip | X |
| Over/Under Frequency Trip | X |
| Ground Over-Voltage Trip[3] | |
| OR | X |
| Ground Over-Current Trip[3] | |
| Synchronizing Check[4] | Manual or Automatic |
| Power Direction[5] | X |
| Transfer Trip/Reclose Blocking[6] | X |

Notes:

1) Exporting to the City's system may require additional operating/protection devices and will require coordination of operations with the City.

2) For installations of 25kW or less, the Generation Owner may elect to have the meter act as the disconnect device. (See XIV.A.10)

3) Selection depends on grounding system, if required, by the City.

4) For synchronous and other types of generators with stand-alone capability.

5) To be determined on a ~~site specific~~ site-specific basis. The relay will operate if the power flow from the generator into the Grid exceeds a predetermined level. A time delay will have to be incorporated into this relay to prevent it from operating during synchronous swings.

6) May be required as part of any necessary transfer tripping/reclose blocking protection scheme.

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E. REQUIREMENTS SPECIFIC TO GENERATORS PARALLELING FOR 0.1 SECOND OR LESS (CLOSED TRANSITION SWITCHING)

1. The table below shows the protective functions required by this requirement for generators less than 1 MW which parallel with the City's system for 0.1 second or less such as during source or load transfers.

Control, Protection and Safety Equipment
Generators Connected to Secondary or Primary System Voltage
For 0.1 Second or Less
(Closed Transition Switching)

| Generator Size Up to 1 MW | |
|---|---|
| Over-Voltage Trip | X |
| Under Voltage Trip | X |
| Synchronizing Check[1] | |
| Manual or Automatic | |
| Excessive Closed Time Trip[2] | X |

Notes:

1) For synchronous and other types of generators with stand-alone capability.

2) Scheme will trip generator if closed transition parallel mode remains in effect longer than 0.1 second. Reverse power relay and current transformer may be required by the City.

F. INVERTER TYPE

DC Generation installations using inverters for interconnection with the City must use non-islanding type inverters as defined in IEEE 929, IEEE Recommended Practices for Utility Interface of Photovoltaic (PV) Systems (including Annex B, D, E, and G) and UL Subject 1741, May 1999, Standard for Static Inverters and Charge Controllers for use in Photovoltaic Power Systems.

G. INSPECTION AND START-UP TESTING

The Generator Owner shall provide the City with reasonable prior notice at least 2 weeks before the initial energizing and start-up testing of the Generator Owner's generating equipment and the City, at its discretion, shall witness the testing of any equipment and protective systems associated with the interconnection. The Generator Owner shall revise and re-submit the application information for any proposed modification that may affect the safe and reliable operation of the City's system. The generator may be reconnected to the City system only after the modified application has been reviewed, testing has been confirmed and the City has given approval to reconnect.

H. SITE TESTING AND COMMISSIONING

Testing of protection systems shall include procedures to functionally test all protective elements of the installation up to and including tripping of the generator and interconnection point. Testing and testing intervals should be in accordance with ~~manufacturers'~~ manufacturers and industry recommendations. Testing will verify all protective set points and relay/breaker trip timing. The City may witness the testing of installed switchgear, protection systems, and generator. The Generator Owner is responsible for all maintenance of the generator, ~~control~~ control, and protective equipment. The Generator Owner will maintain records of such maintenance activities which the City may review at reasonable times. For generation systems greater than 500 kW, a log of generator operations may be required in order to determine its output and run times for system planning purposes.

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I. METERING

Metering requirements will be reviewed on each specific installation.

J. DEDICATED TRANSFORMER

A dedicated transformer will be required where the Generator Owner is served from the same transformer secondary as another City's Customer and inverter-based technology not meeting IEEE 929-1999 and IEEE 519-1992 specifications is used. In addition, a dedicated transformer or other current-limiting device is needed for any type of generator installation where the increase in available short circuit current could adversely impact other City's Customers on the same secondary circuit.

K. SUGGESTED REFERENCES

The following references can supply technical support and insight into the safe, reliable interconnection of Distributed Generation with the City's systems. These references should be reviewed by those individuals or firms contemplating parallel operation of generation with the City.

IEEE C37.95 (1989) - IEEE Guide for Protective Relaying of Utility-Consumer Interconnections

IEEE Std 1001 (1988) - IEEE Guide for Interfacing Dispersed Storage and Generation Facilities with Electric Utility Systems

IEEE Std 929 - IEEE Recommended Practices for Utility Interface of Photovoltaic (PV) Systems

IEEE Std 1021 (1988) - IEEE Recommended Practices for Utility Interconnection of Small Wind Energy Conversion Systems

IEEE Std 519 - 1992 - IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems



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1. AVAILABILITY

This Net Metering Service (NMS) Rider is available to all Customers, including all Farm Customers, who own their renewable power generation resource(s) (Customer Generator). The primary intent of this installation is to offset part or all the Customer's own electricity requirements. Capacity under the NMS Rider cannot be more than 25 kilowatts for Residential Customers, 100 kilowatts for Farm Customers or usage for farming activities and 500 kilowatts for all other non-Residential Customers. The primary source of fuel must be solar, wind, hydro, fuel cell, gas from anaerobic digestion of organic material or another approved source of renewable energy which must be located at the Customer's premises for which the Customer is using the NMS Rider. The NMS Rider is applicable to a Customer-Generator interconnected and operated in parallel with the City's transmission and/or distribution facilities. Application for the installation of a Customer Generator system in excess of the ~~above specified~~ above-specified limitations, but not to exceed 2 megawatts, may be considered at the City's sole discretion and shall be made under a special contract.

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Any Customer who elects the NMS Rider must apply by filling out the Generation Interconnection Application at least 60 days in advance of the proposed activation date. Approval of the application by the City must be granted prior to activation of the electric generation facility.

The City may elect not to provide the NMS to any additional Customer-Generators should the total generating capacity exceed the threshold outlined in Title 26 of the Delaware State Code.

2. APPLICATION FOR THE NMS RIDER

Any Customer who elects the NMS Rider must apply by filling out the Generation Interconnection Application at least 60 days in advance of the proposed activation date. The Application must include the generator size, type, manufacturer, and manufacturer specifications of all components of the electric generation facility. Approval of the application by the City must be granted prior to activation of the Customer Generator.

3. CONNECTION TO THE CITY'S SYSTEM

A. The Customer Generator cannot be connected to the City's system unless it meets all applicable safety and performance standards set forth by the following: The Technical Considerations Covering Parallel Operations of Customer Owned Generation dated January 1, 2007, National Electric Safety Code, Underwriters Laboratories, Institute of Electrical and Electronic Engineers, North America Electric Reliability Council ("NERC") and the City's Electric Service Handbook. Special Attention should be given to the National Electric Code Sections 690 and 705. The Customer must, at his expense, obtain any and all necessary permits, inspections, and approvals required by any local public authorities and any other governing regulations in effect at that time. All the interconnection with the City's System shall be either done by the City or approved by the City.

B. The Customer Generator must be installed and configured so that parallel operation must cease immediately and automatically during system outages or loss of the City's primary power supply. The Customer must also cease parallel operation upon notification by the City of a system emergency, abnormal condition, or in cases where such operation is determined to be unsafe, interferes with the City's supply of service to other Customers, or with the operation or maintenance of the City's system. Customer Generator system and equipment that comply with the above listed codes and standards shall be deemed to have generally complied with these requirements.

1. If it is necessary for the City to extend or modify portions of its systems to accommodate the delivery of electricity from the Customer Generator, such extension or modification shall be performed by the City at the Customer's expense. For new Customers, such expense shall be determined by the difference between the total cost and the investment the City would make to install a normal service without the Customer Generator.

C. In the event that a net-metering customer abandons the property where the energy generating equipment is located, the equipment may remain connected to the electric distribution system, unless the equipment presents a risk to the safety and reliability of the electric distribution system.

4. DELIVERED VOLTAGE

The delivered voltage and delivery point of the Customer Generator shall be at the same delivered voltage and delivery point that would be supplied by the City if the Customer purchased all its electricity from the City.

5. CONTRACT TERM

The contract term shall be the same as the Customer's applicable Rate Schedule or Service Classification.

6. RATE

A. The monthly billing shall be as stated in the Rate Schedule applicable to the Customer. Under the NMS Rider, only the per kWh charge component billed for electricity delivered by the Customer is affected. The Customer will pay for all kWh delivered by the City to the Customer. If the Customer has delivered electricity to the City system, the City will provide for Customers to be credited in kilowatt hours valued at an amount per kilowatt hour equal to the sum of Delivery Service charges and Supply Service charges for Residential Customers, and the sum of the volumetric energy (kWh) components of the Delivery Service charges and Supply Service charges for non-Residential Customers for any excess energy production of their generating facility that exceeds the Customer's on-site consumption of kWh in a billing period. Excess kWh credits shall be credited to subsequent billing periods to offset a Customer's consumption in those billing periods. Disposition of excess kWh Credits at the end of the annualized billing period shall be in accordance with Delaware State Code

7. METERING

An electric meter service will be installed at the Customer's location to measure the energy consumed and the energy delivered to the City system. The City will furnish, install, maintain, and own all metering equipment. Cost will be determined under the Additional Costs and Responsibilities clause below.

8. ADDITIONAL COSTS AND RESPONSIBILITIES

The Customer will be required to pay for any additional transmission and distribution costs, the cost of metering, transformation, system protection, and any related safety/protective equipment in excess of what would normally be paid for by the City. Protective equipment will be installed by the Customer to provide safety for personnel, provide adequate protection for the City's electric utility system and to the Customer's property, and to prevent any interference with the City's supply of energy to the City's Customers. This equipment will be owned, installed, and maintained by the Customer at its own expense.

9. FAILURE TO COMPLY

The City may disconnect the Customer's Service from the City's electric system if the Customer fails to comply with any of the provisions of the NMS Rider. The City also retains the right to disconnect the Customer Generator if it interferes with the City's Service or poses a safety or reliability risk to the City's electric system. The Customer shall also be responsible for all the penalties and costs caused by Customer's failure to comply with this Section.

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10. RULES AND REGULATIONS

All the City's applicable Rules and Regulations shall apply to the Service rendered under this NMS Rider. All minimum billings, charges for kWh, kW, Purchased Power Cost Adjustment, General Cost

Adjustment, Public Utility Tax, Renewal Energy Charge, etc. will be covered under the applicable Rate Schedule.

[Ord. No. 2017-12, §§ 2—8, 5-8-2017; Ord. No. 2018-27, § 1, 10-9-2018; Ord. No. 2020-13, §§ 3—5 , 5-11-2020; Ord. No. 2022-43, § 2, 11-28-2022; Ord. No. 2023-19, § 4, 4-24-2023]

Editor's note(s)—Ord. No. 2017-12, §§ 2—8, adopted May 8, 2017, amended § 24 in its entirety to read as herein set out. Former § 24 pertained to fee schedule.

~~APPENDIX 1 – FEE SCHEDULE~~

~~Connection Charges~~ [10]

~~New Service/Account - Residential and Non-Residential$50.00~~

~~Account Transfer (Administrative Fee) - Residential and Non-Residential$50.00~~

~~(Reference Section 8.2 and 8.3) includes Temporary Service~~

~~Re-connection charges for non-payment~~ [11]

~~During hours of operation for non-payment$50.00~~

~~Outside hours of operation for non-payment$100.00~~

~~Re-connection charges for other than non-payment~~ [2]

~~During hours of operation (Sec 16.5)$50.00~~

~~Outside hours of operation (Sec 16.6)$100.00~~

~~Temporary Service Charges (Sec 3.7)~~

~~Flat charge for Standard Facilities (includes installation and removal)~~

~~1. Single phase underground or aerial service$150.00~~

~~2. Single phase aerial service with two spans of wire$350.00~~

~~3. Single phase aerial transformer, ground, and primary connection$600.00~~

~~4. Three phase aerial transformer bank, ground, and connection$1,500.00~~

~~Charges for other facilities will be based on a case-by-case basis. (Final determination by Finance Dept.)~~

~~Deposit Charges~~

~~Residential Renter~~

~~The greater of two-twelfths of the average annual estimated bill or minimum$250.00~~

~~-or-~~

~~Property owner guarantees, in writing, 100% payment in the case of delinquency$0~~

~~(Sec 4. 2. A)~~

~~Residential Property Owner~~ [12] ~~$0~~

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~~[10] Connection charges are NOT refundable.~~

~~[11] Business hours and hours of operation are listed in Section 1.9.~~

~~[12] A residential property owner may be required to pay an advance usage fee if his or her account becomes delinquent. See Section 4. 2. B.~~

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~~(Sec 4. 2. B)~~

~~Commercial.[13]~~

~~The greater of two-twelfths of the average annual estimated bill or minimum$500.00~~

~~(Sec 4.3)~~

~~Interest Rate on Deposits To be determined by Finance Dept.~~

~~Service Entrances and Drops~~

~~Residential Services Aerial Service Over 150 feet$5.10 per foot~~

~~(Sec 8.2)~~

~~First 150 feet of Residential Underground Service up to 200 Amp Single Phase$500.00~~

~~(Sec 8.4)~~

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~~Underground Service in excess of 150 feet$4.70 per foot~~

~~Commercial Service~~

~~Customer shall install and maintain underground service from serving transformer. (Sec 8.4)~~

~~Primary Line Extensions~~

~~Residential (single phase only)~~

~~The first 150 feet will be provided either underground or overhead at no charge to the customer. The type of extension will be determined by the City and the existing facilities. (Sec 18.2.A)~~

~~Overhead Extensions in excess of 150 feet$7.50 per foot~~

~~Reference: Section 8.3~~

~~Underground Extensions in excess of 150 feet$7.40 per foot~~

~~(Sec 8.4)~~

~~Non-Residential (includes Commercial, Industrial and multi-unit Residential)~~

~~Customer shall pay all cost of materials and labor. (Sec 18.2.B)~~

~~Residential Subdivision (single phase)~~

~~Customer shall pay all cost of materials and labor. (Sec 18.2.C)~~

~~Meter Test Fees~~

~~Any Type Meter$55.00~~

~~Meter Resealing Fee$30.00~~

~~Analyzer Test Fee$30.00~~

~~Meter Verification Fee$70.00~~

~~(Sec 10.4)~~

~~Utility Tampering Fee$500.00~~

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~~[13] Large Commercial Customers may provide for a surety bond in lieu of a deposit. (Sec 4.3)~~

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~~(Sec 15.2)~~

~~Delaware Public Utility Tax Applicable Rate~~

~~(Sec 21)~~

~~With Manufactures Discount Applicable Rate~~

~~(Sec 21)~~

~~Green/Renewable Energy Fund Rate Applicable Rate~~

~~(Sec 23)~~

~~Returned Check Fee$50.00~~

~~(Sec 5.5)~~

~~Late Payment Charge1.5% per month on Balance Due~~

~~(Sec 5.2)~~

~~Facility Inaccessibility Fee$50.00~~

~~(Sec 14.3) (Plus actual cost to City to mitigate inaccessibility)~~

~~Service Call Fee Metering$65.00/Call~~

~~(Sec 9.1)~~

~~Service Call Fee Electric Crew$150.00/Hour/Call~~

~~(Sec 9.1)~~

~~Electrical Impact Fees (Sec 4.5)~~

~~Residential Single Phase Service (120/240 Volt Service)~~

~~(.012 X Service Size) = ESU X $250.00 = IMPACT FEE~~

~~Commercial Three Phase Service (120/208 Volt Service)~~

~~(.024 X Service Size) = ESU X $250.00 = IMPACT FEE~~

~~Commercial Three Phase Service (277/480 Volt Service)~~

~~(.055 X Service Size) = ESU X $250.00 = IMPACT FEE~~

~~Industrial Three Phase Service (120/208 Volt Service)~~

~~(.03 X Service Size) = ESU X $250.00 = IMPACT FEE~~

~~Industrial Three Phase Service (277/480 Volt Service)~~

~~(.069 X Service Size) = ESU X $250.00 = IMPACT FEE~~

~~One ESU is equal to six (6) kW of residential on-peak demand.~~

~~(Ord. No. 2015-14, § 1, 8-10-2015)~~

## ~~APPENDIX 2 – WORKSHEETS~~

~~Connection/Reconnection Charge (during normal hours of operation. Sec 1.9)~~

~~New Service Residential and Non-Residential Reconnection Charges~~

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Administrative includes receipt and processing of application, entering new customer name into billing system and communication with field crew. Administrative $10.00

Field Crew includes verification of physical condition of service entrance, removal/replacement of meter or taking of initial meter reading, and communication with Administrative Staff
Field Crew $20.00

Vehicle includes use of City vehicle for field crew to make sure customer is properly connected Vehicle $20.00.
Total = $50.00

Reconnection Charges (outside of hours of operation. Sec 1.9)

New Service Residential and Non-Residential Reconnection Charges

Administrative includes receipt and processing of application, entering new customer name into billing system, and communication with field crew Administrative $30.00

Field Crew includes verification of physical condition of service entrance, removal/replacement of meter or taking of initial meter reading, and communication with the Administrative staff
Field Crew $20.00

Overtime includes overtime pay for field crew and extra recordkeeping Overtime $30.00

Vehicle includes use of City vehicle for field crew to make sure that the customer is properly connected Vehicle $20.00 Total = $100.00

Returned Check Fee (Sec 5.5)

Administrative includes receipt and processing of application, entering new customer name into billing system and communication with field crew Administrative $10.00

Field Crew includes verification of physical condition of service entrance, removal/replacement of meter or taking of initial meter reading, and communication with Administrative Staff
Field Crew $20.00

Vehicle includes use of City vehicle for field crew to make sure customer is properly connected Vehicle $20.00
Total = $50.00

Service Entrance and Drops

For Residential Customers

Aerial Line Extensions over 150 feet

| Item | Quantity | Description | Rate | Cost |
|---|---|---|---|---|
| 1 | 150 feet | 1/0 Triplex | $0.77 | $115.50 |
| 2 | 1 each | Pole, Class 2, 40 ft. | $391.00 | $391.00 |
| 3 | 1 each | Materials and Hardware | $7.68 | $7.68 |
| 4 | 2 hrs. | Truck use, Labor | $150.00 | $250.00 |
| | | | Total = $764.18 | |

The total amount of $764.18 divided by 150 ft. = $5.09 per foot.

For Rules and Regulations: use $5.09 rounded to $5.10 per foot beyond 150 feet. (Sec 8.2)

Underground Service over 150 feet

| Item | Quantity | Description | Rate | Cost |
|---|---|---|---|---|

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|---|---|---|---|---|
| 1 | 150 ft. | Underground Cable (4/0 URD) | $1.58 | $237.00 |
| 2 | 1 each | Materials and Hardware | $55.43 | $55.43 |
| 3 | 2 hrs. | Truck, Trencher, Labor | $205.00 | $410.00 |
| | | | Total = $702.43 | |

The total amount of $702.43 divided by 150 ft. = $4.68 per ft.

For Rules and Regulations: use $4.68 rounded to $4.70 per foot beyond 150 feet. (Sec 8.4)

Primary Service Line Extension

Aerial line extension over 150 feet for Residential Customers

| Item | Quantity | Description | Rate | Cost |
|---|---|---|---|---|
| 1 | 150 ft. | #2 ACSR | $0.17 | $25.50 |
| 2 | 1 each | Pole, Class 2, 45 ft. | $465.00 | $465.00 |
| 3 | 1 each | Materials and Hardware | $179.00 | $179.00 |
| 4 | 3 hrs. | Truck use, Labor | $150.00 | $450.00 |
| | | | Total = $1,119.50 | |

The total amount of $1,119.50 divided by 150 ft. = $7.46 per foot.

For Rules and Regulations: use $7.46 rounded to $7.50 per foot beyond 150 feet. (Sec 18.2 A)

For Non-Residential and Residential Sub-Divisions (Sec 18.2.B and 18.2.C)

Primary Service Line Extensions

Underground Service over 150 feet (Single Phase)

| Item | Quantity | Description | Rate | Cost |
|---|---|---|---|---|
| 1 | 150 ft. | Underground Cable 1/0 Okinite | $2.15 | $322.50 |
| 2 | 1 | Materials Hardware | $374.47 | $374.47 |
| 3 | 2 hrs. | Truck, Trencher, Labor | $205.00 | $410.00 |
| | | | Total = $1,106.97 | |

The total amount of $1,106.97 divided by 150 feet= $7.37 per ft.

Rules and Regulations: use $7.37 rounded to $7.40 per foot beyond 150 feet. (Sec 18.2 A)

For Non-Residential and Residential Sub-Divisions (Sec 18.2.B and 18.2.C)

Meter Test Fee

| Item | Quantity | Description | Rate | Cost |
|---|---|---|---|---|
| 1 | 0.4 | Supervisor's Total Billing | $25.00 | $10.00 |
| 2 | 1 | Meter Technician #1 | 20.00 | $20.00 |
| 3 | 0.5 | Truck Use/Hr. | 20.00 | $10.00 |
| 4 | 1 | Test Board Fee | 15.00 | $15.00 |
| | | | Total = $55.00 | |

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~~Meter Resealing Fee~~

| ~~Item~~ | ~~Quantity~~ | ~~Description~~ | ~~Rate~~ | ~~Cost~~ |
|---|---|---|---|---|
| ~~1~~ | ~~0.4~~ | ~~Supervisor's Total Billing~~ | ~~25.00~~ | ~~$10.00~~ |
| ~~2~~ | ~~0.5~~ | ~~Meter Technician # 1~~ | ~~20.00~~ | ~~$10.00~~ |
| ~~3~~ | ~~0.5~~ | ~~Truck use/Hr.~~ | ~~20.00~~ | ~~$10.00~~ |
| | | | ~~Total = $30.00~~ | |

~~Meter Verification Fee~~

| ~~Item~~ | ~~Quantity~~ | ~~Description~~ | ~~Rate~~ | ~~Cost~~ |
|---|---|---|---|---|
| ~~1~~ | ~~0.5~~ | ~~Administrative Fee~~ | ~~20.00~~ | ~~$10.00~~ |
| ~~2~~ | ~~2.0~~ | ~~Meter Technician(s)~~ | ~~20.00~~ | ~~$40.00~~ |
| ~~3~~ | ~~1.0~~ | ~~Truck use/Hr.~~ | ~~20.00~~ | ~~$20.00~~ |
| | | | ~~Total = $70.00~~ | |

## *APPENDIX ~~31~~ 31—APPLICATION FOR VOLUNTARY RENEWABLE/GREEN ENERGY (VGRE) SERVICE*

City of Milford offers the Customer the choice of contributing to the development of renewable energy. The Customer can sign up by completing the following application. Each ~~100 kWh~~ 100-kWh block of renewable energy will result in an additional monthly charge specified in the VGRE Service Classification. This selection will appear on your Electric bill as a separate item. The renewable energy charge is an additional fee to the Customer's regular monthly electric bill. Participation in this program is for a one-year period. The Customer's subscription will automatically renew on an annual basis, absent 30-day prior written notification of cancellation.

**Contact Information**

Customer's Name:
(As it appears on your electric bill)

Customer's Account Number:
(Found on your electric bill)

Service Address:
(Customer's street address)

*IMPORTANT:* Day-time telephone number where we can reach you with any questions regarding your application:

(  ) _____ - _____

Enter the number of 100 kWh blocks of renewable energy desired, then multiply number of blocks by the rate per kWh specified in the VGRE Service Classification Rate to obtain the additional total monthly cost for the renewable energy subscription:

_____Blocks X VGRE Rate, $/Block = $_____

(This Cost will be an addition to the Customer's regular monthly electric bill.)

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PART II - GENERAL LEGISLATION
APPENDIX B - ELECTRIC RULES AND REGULATIONS
APPENDIX ~~3~~1—APPLICATION FOR VOLUNTARY RENEWABLE/GREEN ENERGY (VGRE) SERVICE

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I have reviewed and understand the terms and conditions of City's Voluntary Renewable Energy Tariff. I hereby request service under the Voluntary Renewable Energy Subscription Tariff and agree to be bound by the terms and conditions of that tariff.

_____ _____

Signature of Customer Date

Mail To Customer Service Center at:

City of Milford
119 S Walnut Street
Milford, DE 19963

Section 5. Dates.
Introduction: 09/25/2023
Projected Adoption: 10/09/2023

Section 6.
Effective Date is Ten Days Following Adoption by City Council.

PUBLIC WORKS DEPARTMENT
180 Vickers Drive
Milford, DE 19963

THE CITY of Milford DELAWARE

PHONE 302.422.1110
FAX 302.422.1117
www.cityofmilford.com

To: Mayor and Council

Thru: Mark Whitfield, City Manger
Michael Svaby, Director, Public Works
Anthony Chipola, Director, Electric

From: Rhiannon Slater, Operations Supervisor

Subject: E-116 Electric Department Expansion Vehicle

Date: September 20, 2023

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Staff requests City Council consider a recommendation to purchase a 2024 Freightliner M2 106 Plus Cummins Diesel, 300 HP Bucket Truck with chipper body to be utilized by the Parks & Recreations Department, specifically the Arborist and Arborist Ground Helper positions. The purchase of the unit was identified in the 2024 Capital Improvement Plan, line 21 page 1 (see attached).

This vehicle is absolutely necessary to both the Parks & Recreation and Electric Departments in that it will be used for tree/vegetation control as well as Electric Utility functions in and around right of way areas.

The purchase of this vehicle will be made through the Sourcewell Contract. Specifications for the bucket truck are attached. The Electric Department budgeted $300,000 for the purchase of this unit; the final cost of $213,411 will result in savings that will be retained in electric reserves. The Finance team has reviewed the purchase and confirmed that the funding was approved in the FY24 budget through electric fund reserves[1].

**RECOMMENDATION:** Staff recommends Council authorize a purchase order in the amount of $213,411 to acquire this vehicle through Custom Truck-One Source, pursuant to the Sourcewell Contract.

[1] Purchasing & Finance Team: Munis G/L 35507070-577042

# CIP LINE DETAIL: FY2024-28 FINAL AS APPROVED JUNE 12, 2023

| | FUND TYPE, OPS DEPT & PROJ CATEGORY | FY20-FY23 (Approved) | FY20-FY23 (Spent/DeOb) | FY23 Balance Remaining | FY24 (Plan) | FY25 (Plan) | FY26 (Plan) | FY27 (Plan) | FY28 (Plan) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | **ENTERPRISE** | | | | | | | | |
| 2 | **ELECTRIC** | | | | | | | | |
| 3 | EQUIPMENT | | | | | | | | |
| 4 | Bobcat | $ - | $ - | $ - | $ - | $ - | $ - | $ 40,000 | $ - |
| 5 | Equipment - Hetra Lifts | - | - | - | - | - | - | - | - |
| 6 | NOAA Reference Station | 15,000 | (1,834) | 13,166 | - | - | - | - | - |
| 7 | Portable Light Towers (2) | - | - | - | 35,000 | - | - | - | - |
| 8 | Snow Blowers | - | - | - | - | 4,000 | - | - | - |
| 9 | Trailer (R: 1994 Saub E-119) | - | - | - | 15,000 | - | - | - | - |
| 10 | Trailer (R: 1996 Butler E-123) | - | - | - | 12,000 | - | - | - | - |
| 11 | Trailer (R: 1999 Homemade E-127) | - | - | - | - | 12,000 | - | - | - |
| 12 | Trailer, Cable Reel (R: 2007 Butler E-129) | - | - | - | - | - | 15,000 | - | - |
| 13 | Utility Trailer (R: 1992 Krueger E-121) | - | - | - | - | 25,000 | - | - | - |
| 14 | Utility Trailer (R: 2005 Butler E-132) | - | - | - | - | - | 10,000 | - | - |
| 15 | Utility Trailer (R: 2005 Towmaster E-131) | - | - | - | - | - | 18,000 | - | - |
| 16 | Utiltiy Trailer (R:2002 Towmaster E-126) | - | - | - | - | 25,000 | - | - | - |
| 17 | VEHICLES | | | | | | | | |
| 18 | Internation Digger Derrick Truck (R: 2015 E-107) | - | - | - | - | - | 260,000 | - | - |
| 19 | Pick up Truck | 55,000 | - | 55,000 | 10,000 | - | - | - | - |
| 20 | Ram QuadCab Pick-up (R: 2017 E-101) | 35,000 | - | 35,000 | 2,000 | - | - | - | - |
| 21 | Trex Bucket with chipper body (Arborist) E-116 | - | - | - | 300,000 | - | - | - | - |
| 22 | INFRASTRUCTURE | | | | | | | | |
| 23 | Advanced Relocation | 100,000 | - | 100,000 | - | 100,000 | 100,000 | 100,000 | 100,000 |
| 24 | Arborist Office - P&R Facility | 20,000 | - | 20,000 | - | - | - | - | - |
| 25 | DelDOT Traffic Signals | 350,000 | (83,822) | 266,178 | 151,000 | - | - | - | - |
| 26 | Delivery #1 Circuit Addition | - | - | - | - | - | - | 100,000 | 850,000 |
| 27 | Delivery #2 Circuit Additions | - | - | - | - | 100,000 | 850,000 | - | 100,000 |
| 28 | Delivery 1 Electrical Testing | - | - | - | - | - | - | - | 65,000 |
| 29 | Delivery 2 Electrical Testing | - | - | - | 65,000 | - | - | - | - |
| 30 | EV Charging Stations Downtown | 182,428 | (125,914) | 56,514 | 20,000 | - | - | - | - |
| 31 | Feeder extention and tie - Hospital Loop (110 & 150) | - | - | - | - | - | - | 250,000 | - |
| 32 | Fiber Network Mapping | - | - | - | - | 25,000 | - | - | - |
| 33 | Fiber Optic Backup to PW | 20,000 | (20,000) | - | 40,000 | 100,000 | - | - | - |
| 34 | GIS/Mapping - Smart Metering | 300,000 | (150,000) | 150,000 | - | - | - | - | - |
| 35 | Horseshoe Dr Distribution | - | - | - | - | - | - | 200,000 | - |
| 36 | LED Streetlight Replacements | 150,000 | (150,000) | - | 20,000 | - | - | - | - |
| 37 | Milford Corporate Center | 120,000 | - | 120,000 | 200,000 | 200,000 | 200,000 | 200,000 | - |
| 38 | Physical Security | - | - | - | 125,000 | 125,000 | 75,000 | - | - |
| 39 | Pole Inspection | 25,000 | - | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 | 25,000 |
| 40 | Power Flow Analysis Software | - | - | - | 110,000 | - | - | - | - |
| 41 | Parks & Rec Consolidation | 150,000 | (150,000) | - | - | - | - | - | - |

CUSTOM TRUCK ONE SOURCE™
12660 East Lynchburg Salem Turnpike, Forest, VA 24551
Phone: 434-525-2929 – Fax: 434-525-0917

Date: 08-21-2023

Sales Quote: JDean(0701)70F Milford DE-SW
QR-044609
Q-30776

Quote Valid: 30 Days or Availability

Sales Rep: John Dean (jdean@customtruck.com)
(434) 401-1999

**Sourcewell User:**
**City of Milford**
**Milford, Delaware**
**Account # 31321**

E-116 NEW

Sourcewell Contract: 110421-TER
Quote Number: QU17237
Terms: NET 20 Days
Delivery: 17-21 WEEKS

| | |
|---|---|
| **Company:** | **City of Milford DE** |
| **Contact:** | **VINCE WAYDELIS** |
| **Address:** | **201 S Walnut St** |
| **City, State:** | **Milford, DE 19963** |
| **Phone:** | **(302)422 1110** |
| **E-Mail:** | **vwaydelis@milford-de.gov** |

| | |
|---|---|
| **List Price:** | **$199,963.00** |
| **FCA, Milford, DE:** | **Delivery NOT Included** |
| **Base Line Price:** | **$199,963.00** |
| **CARB 2022 COMPLIANCE:** | **NOT INCLUDED** |
| **Open Market Items:** | **$13,448.00** |
| **Grand Total:** | **$213,411.00** |

## FREIGHTLINER XT PRO 70 INLINE FORESTRY ELEVATOR

2024 Freightliner M2 106 Plus (Painted White)
Cummins L9 Diesel, 300 HP
Block Heater
141" CA
Allison 3500 Series Automatic Transmission
Air Brakes with Heated Air Dryer
Driver Controlled Exhaust Brake
13,300 lb. Front Axle, 21,000 lb. Rear Axle
Factory De-Rated to 33,000 lb. GVWR
Aluminum Cab & Fuel Tank (Reduced Weight)
RH & LH Grab Handles
Dust/Bug Screen Mounted Behind Grill
Cruise Control
Air Conditioning
High Back Non-Suspension Driver's Seat
2-Man Toolbox Mid-Back Non-Suspension Passenger Seat
Adjustable Tilt and Telescoping Steering Wheel
Weather Band AM/FM/AUX/USB/Bluetooth Radio
In Cab Positive Load Disconnect
Dash Mounted PTO Hour Meter
Pre-Trip Lamp Inspection Switch
Backup Camera Installed, Reverse Gear Activated, Screen Mounting Location TBD
Mud Flaps

expansion for Arborist helper

Terex Hi-Ranger XT PRO 60/70 Lift (Painted White)
10' In-Line Elevator (Painted White)
75' Working Height
12V Axillary Power Below Rotation
24 x 36 x 42 Platform & Liner with Scuff Pad
"3D" One Hand Control
40-gallon Hydraulic Reservoir with Shut-Off Valve (Painted White)
Upper Boom Rest Tie Down
Mechanical Platform Leveling
Manual Platform Tilt
Full Pressure, Open Center Hydraulic System
Self-Locking Hydraulic Rotational Gear Box
Continuous Unrestricted Rotation
Dual Hydraulic Tool Outlets at Platform
(1) Set Hydraulic Outriggers (Painted White) Outrigger Feet Painted Red
(1) Set Outrigger Pads with Holders (Painted Black)
(2) Sets Outrigger Controls/ Electric over Hydraulic with Motion Alarm
Outrigger & Parking Brake Interlock
Full Hydraulic Pressure at 1100 RPM Engine Speed
10 Year Maintenance Free Leveling Chain
One Piece Molded Control Covers

11' L x 96" W x 60" T Chip Body, 15" W Curb-Side Ladder/Pole Box & Hoist Assembly with Holding Valve (Painted White)
Bottom RH & LH Sides of Chip Box to Have Red/White Reflective Conspicuous Tape
44" L x 50" T x 25" D, 2-Door Cabinet Box with Rope Hooks, with 3-Point Locking System and T-Handle Security, Installed Curb-Side (Painted White)
Toolbox Plumbed with Air, Shut-Off Valve, Quick Connect Fitting, 25' of Air Line, and Blower Nozzle
36" L x 13" T x 25" D thru/Pole Box with Drop Door with T-Handle Security and Locking Rod, Installed Curbside, (Painted White)
72" L x 50" T x 22" D, 3-Door Cabinet thru Box with 3-Point Locking System and T-Handle Security, Installed Street-Side (Painted White)
(2) Keyed Padlocks Included, Installed
Spring Loaded Cab Guard with Access Steps & Grab Handles, (Painted Black)
(1) LED Fixed Mounted Go-Light Mounted Top RH Front Corner of Cab Guard with Protective Cover, Wired Hot, Driver Controlled Master Power and Wireless Remote
(2) Wheel Chocks with Underbody Storage (painted black)
Electric Trailer Brake Controller
6-Prong & 7-Way RV Trailer Socket
HOT Shift PTO with Electric Dash Switch Installed in Cab
Rear Bumper (Painted Black) with PH30 Pintle Hook
Rear Hitch Security Plate, (1) Keyed Padlock Included
Heavy Duty Front Construction Bumper (Painted Black)

Front Bumper Mounted Cone Holder, (1) Keyed Padlock Included

All Lights on Body Package to be LED
Lighting Kit to Meet FMVSS #108 Standards
(2) Amber Beacon Strobes Mounted Top RH & LH Rear Corners of Chip Body with Protective Cover, (1) Amber Beacon Strobe Mounted Top Front LH Corner of Cab Guard with Protective Cover, Wired Hot, Driver Controlled Master Power Operated Independently from 8-Point Strobes

4-Point Amber LED Strobe Package
2.5 lb. ABC Fire Extinguisher
Triangle Reflector Kit
Full Body Harness with Attached Lanyard
(1) Replacement Hydraulic Filter
DOT Inspection, Road Tested, Safety Inspected, and Dialectic Tested

THE CITY of Milford DELAWARE

The governing body has recessed to Executive Session. The regular meeting will resume shortly.

CITY COUNCIL MEETING

# Executive Session has concluded. Council has returned to *Open Session*