



**TOWN OF NEWBURGH
PLANNING BOARD**

PROJECT NAME: UNITY PLACE WAREHOUSE
PROJECT NO.: 21-29
PROJECT LOCATION: NORTHWEST CORNER OF OLD LITTLE BRITAIN RD. & UNITY WAY
SECTION 95, BLOCK 2, LOT 14.1 & 19.12
REVIEW DATE: 11 NOVEMBER 2022
MEETING DATE: 17 NOVEMBER 2022
PROJECT REPRESENTATIVE: BROOKER ENGINEERING

1. This office received a revised survey for the subject property prepared by Jay A. Greenwell, PLS, identifying that the previously identified easements bisecting the parcel have been eliminated. Dominic Cordisco's comments regarding this should be received.
2. This office has reviewed the revised Stormwater Pollution Prevention Plan (SWPPP) and plans dated 20 October 2022. The revised SWPPP addresses our previous comments regarding the stormwater management from the site.
3. City of Newburgh issued a set of comments regarding off-site stormwater impacts to the Washington Lake properties. The applicant's representative are requested to address the City of Newburgh's comments.
4. Security for stormwater management and landscaping on the project site are required.
5. ARB approval for the structure is required.
6. This office takes no exception to the Planning Board issuing a Negative Declaration for the project based on review of the Site Plans as revised, Stormwater Pollution Prevention Plan as revised, provisions for water and sewer to the site connecting to the Town's municipal systems.
7. A Public Hearing for the project could be scheduled at this time.
8. A City of Newburgh Flow Acceptance letter is required.
9. The applicant's design professionals have identified that a new 1.5 inch force main will be utilized on site to convey sanitary sewer flow to a gravity manhole located within Unity Place. The previously constructed 3 inch diameter force main is too large for the facility and will not provide adequate velocity in the pipe to meet design requirements.
10. We would request the applicant's engineer evaluate the need for force main clean-outs based on the length of the proposed force main.

NEW YORK OFFICE

33 Airport Center Drive, Suite 202, New Windsor, NY 12553
845-567-3100 | F: 845-567-3232 | mheny@mhepc.com

PENNSYLVANIA OFFICE

111 Wheatfield Drive, Suite 1, Milford, PA 18337
570-296-2765 | F: 570-296-2767 | mhepa@mhepc.com

11. The applicant's representative are requested to advise whether the sanitary sewer pump station will be connected to an emergency power generator or if 24 hours of storage is provided in the wet well.
12. The Town of Newburgh water system notes are located on Drawing #3. Sewer notes must be added to the Plan. Manhole connection detail should be provided.
13. The Town of Newburgh requires water piping to be restrained using restraint joint pipe. A restraint joint pipe chart should be added to the water details.
14. The Highway Superintendent's comments regarding the access drives are outstanding.

Respectfully submitted,

MHE Engineering, D.P.C.



Patrick J. Hines
Principal
PJH/kbw



BROOKER ENGINEERING PLLC

NY OFFICE
74 Lafayette Avenue, Suite 501 845.357.4411 Tel
Suffern, NY 10901 845.357.1896 Fax

NJ OFFICE
22 Paris Avenue, Suite 105 201.750.3527 Tel
Rockleigh, NJ 07647

November 2, 2022

MHE Engineering
33 Airport Drive, Suite 202
New Windsor, NY 12553

Attn: Patrick J. Hines, MHE Engineering

Re: **Unity Place Warehouse**

Unity Place and Old Little Britain Road, Tax Lots: 97-2-19.12 & 14.1
Town of Newburgh Planning Board Project No. 2021-29
BE # 21202

Dear Mr. Hines,

Based upon input received from MHE Engineering on their review dated October 3, 2022 we are submitting herewith:

- 1) Selected Site Plan Sheets 3 "Grading, Drainage & Utility Plan," 4 "Erosion and Sediment Control Plan," 6 "Construction Details (1 of 2)," and 7 "Construction Details (2 of 2)," Rev 4, prepared by Brooker Engineering, PLLC, dated 10/20/22.
- 2) SWPPP Report, prepared by Brooker Engineering, PLLC, last revised October 20, 2022.
- 3) MS4 Acceptance Form for execution by MHE Engineering / MS4 representative.

We respectfully request consideration of a Negative Declaration when we are scheduled for our next appearance in front of the Planning Board. Should MHE Engineering find our latest SWPPP report sufficient, we'd also request execution of the MS4 Acceptance Form at this time. Following is a response to the October 3, 2022 MHE comments with the limited revisions associated with this submission.

Patrick J. Hines, MHE Engineering, Technical Review Comments of 10/3/22

1. *COMMENT: The proposed construction sequence should be revised to include a pre-construction meeting with the Town's engineer, the Town representative, and the contractor to resolve any outstanding questions prior to the start of construction.*

Response: A pre-construction meeting was inserted as step #1 for the construction sequence as observed on Sheet 5 of the site plan and section 2.3 of the SWPPP.

2. *COMMENT: The pre-development drainage map should utilize the existing watershed area draining to the designated design point, rather than using the drainage area that will be present in the post-development condition. This will ensure that the flow is not increased at either design point.*

Response: As clarified previously with MHE Engineering, the pre-development drainage map does in fact utilize the existing watershed. Drainage Areas 2 and Offsite Drainage Area 2 both drain to the on-site large shallow depression as modeled in our report. Drainage Area 1 was delineated separately to by-pass this on-site depression.

3. *COMMENT: The existing drainage area map shows time of concentration lines moving through different drainage areas. This should be revised.*

Response: Times of concentration lines were adjusted. Time of concentration is now equal for the same watershed, although the off-site subareas are differentiated for clarification.

LAND DEVELOPMENT • MUNICIPAL • STRUCTURAL • WATER RESOURCES • LAND SURVEYING

Brian Brooker, P.E. Eve Mancuso, P.E., C.M.E. Ken DeGennaro, P.E., C.F.M. Stuart Strow, P.E., C.F.M.

Anthony Riggi, P.E. Benjamin Levitz, P.E. Cheng-Yu Ku, P.L.S. Dennis Rocks, P.E., C.F.M. Elvia Baca, P.E. Hillary Chadwick, P.E. John Bezuyen, P.L.S.
Joseph J. Moran, P.E. Joseph Nyitray, P.E. Matthew Trainor, P.E. Nestor Celiz, P.E. Shardul Patel, P.E. Vincent Kane, P.E.

4. *COMMENT: The pre- and post-development drainage maps should be revised to call out the proposed design points.*
Response: Points of interest North and South are indicated on both the existing and proposed drainage maps.
5. *COMMENT: The post-development drainage area map should show time of concentration lines for all drainage areas.*
Response: All drainage area times of concentrations are now indicated. Lines for direct pond subareas (EX DA 4, PR DA 3) were omitted and utilize the minimum 6 minute time of concentration. Offsite drainage times of concentration lines were omitted because they share the same time of concentration of the overall watershed.
6. *COMMENT: Pursuant to comment #4 in the previous comment letter dated September 2, 2022, the bioretention catch basin is only 0.5 feet above the top of the filter bed. This means that the average height of ponding is 0.25 feet, half of the depth to the catch basin rim. This should be reflected in the bioretention basin design. For further guidance, see section 8.5 in the 2015 SWMDM.*
Response: Bioretention pond was increased for a surface area of 18,379 square feet and a max ponding height of 8" (4" average ponding height).
7. *COMMENT: If proprietary practices are being utilized prior to the runoff reaching the infiltration chambers/bioretention basin, it should be ensured that they can handle the flows reaching these practices in large storm events.*
Response: Pre-treatment devices have been sized to accommodate WQv peak runoff for treatment and the 25-year storm event for by-pass flows.
8. *COMMENT: Details should be added for the proposed infiltration/detention chambers as well as the proprietary pre-treatment WQv devices being proposed.*
Response: Details for infiltration/detention chambers were originally provided on Sheet 7 and have not been altered. Pre-treatment details for the Barracuda Max have been added to Sheet 7.

Please let us know if you require any additional information.

Very truly yours,



BROOKER ENGINEERING, P.L.L.C.

Matthew Trainor, P.E.

cc: Hon. John E. Ewasutyn & Planning Board (hard copy of Site Plan – digital copy of SWPPP)
Eliot Spitzer (via email)
Akiva Bomzer (via email)
John C. Cappello, Esq. (via email)



Department of
Environmental
Conservation

NYS Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information

1. Owner/Operator Name: Unity Place Newburgh LLC

2. Contact Person: Akiva Bomzer

3. Street Address: 95 Chestnut Ridge Road

4. City/State/Zip: Montvale, NJ 07645

II. Project Site Information

5. Project/Site Name: Unity Place Warehouse

6. Street Address: 7 Unity Place

7. City/State/Zip: Newburgh, NY 12550

III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information

8. SWPPP Reviewed by:

9. Title/Position:

10. Date Final SWPPP Reviewed and Accepted:

IV. Regulated MS4 Information

11. Name of MS4:

12. MS4 SPDES Permit Identification Number: NYR20A

13. Contact Person:

14. Street Address:

15. City/State/Zip:

16. Telephone Number:

MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s).
Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

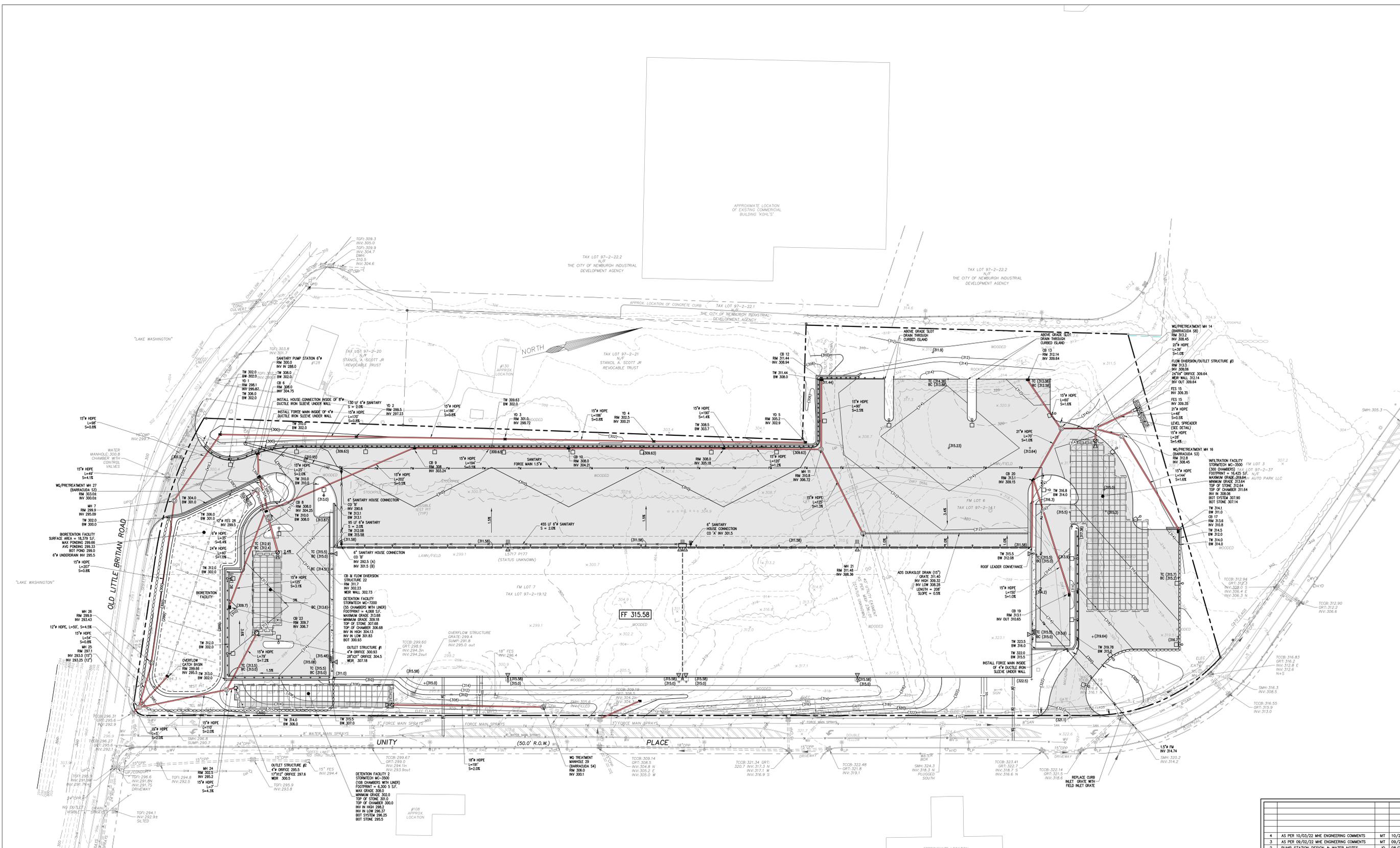
Printed Name:

Title/Position:

Signature:

Date:

VI. Additional Information

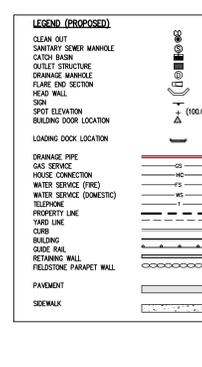


- CONSTRUCTION NOTES:**
- CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UTILITIES AND VERIFY ALL LOCATIONS, ELEVATIONS, INVERTS, ETC. PRIOR TO ANY CONSTRUCTION AND NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES ON THIS PLAN.
 - CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND HAVE ALL UTILITIES FIELD LOCATED BY RESPECTIVE UTILITY COMPANY AND SHALL ASSUME FULL RESPONSIBILITY AND SHALL BE SOLELY RESPONSIBLE FOR MAINTAINING CONTINUOUS UTILITY SERVICE AND REPAIRS TO ANY DAMAGE.
 - PROTECT SAFETY AND TRAFFIC MAINTENANCE ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
 - CONTRACTOR TO COORDINATE WITH ALL COMPANIES TO ASSURE ADEQUATE SURVEY AND SCHEDULING OF NEW SERVICE WHERE REQUIRED, TO FIT THE CONSTRUCTION SCHEDULING AND SEQUENCE TO ASSURE NO DAMAGE OR DISRUPTION TO EXISTING SERVICES. IF THE CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
 - THE CONTRACTOR IS RESPONSIBLE TO NOTIFY THE OWNER AND ENGINEER OF ANY UNANTICIPATED UTILITIES ENCOUNTERED AND MAINTAIN THE UTILITIES IN WORKING ORDER UNTIL THEIR DISPOSITION IS RESOLVED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION, PROTECTION AND/OR TEMPORARY SUPPORT OF ANY UTILITIES ENCOUNTERED WITHIN THE WORK AREA.
 - THE CONTRACTOR SHALL COORDINATE DIRECTLY WITH EACH AFFECTED UTILITY COMPANY, SHALL APPLY FOR AND OBTAIN THE NECESSARY PERMITS AND APPROVALS, AND SHALL INITIATE AND COORDINATE ALL INSPECTIONS NECESSARY FOR FINAL APPROVAL AND ACCEPTANCE BY THE SUBJECT UTILITY COMPANY.
 - CONTRACTOR IS RESPONSIBLE FOR MAINTAINING CONTINUOUS SERVICE OF ALL EXISTING UTILITIES WITHIN THE WORK AREA AT ALL TIMES. CONTRACTOR SHALL COORDINATE ANY REPAIR, RELOCATION OR REMOVAL OF EXISTING UTILITIES WITH EACH RESPECTIVE UTILITY COMPANY AND PROVISIONS MUST BE PROVIDED FOR TEMPORARY SERVICE OF ALL AFFECTED UTILITIES SERVICE AFFECTED BY THE CONSTRUCTION IN THE EVENT OF ANY DISRUPTION TO THE EXISTING UTILITY. SCHEDULING SHALL BE AT THE DISCRETION OF THE RESPECTIVE UTILITY COMPANIES AND COORDINATED WITH THE MUNICIPALITY AND THE ENGINEER FOR PUBLIC NOTICE IF NECESSARY. TEMPORARY SERVICE SHALL BE PROVIDED AND MAINTAINED AT NO ADDITIONAL COST.

- ALL STORM DRAINAGE PIPE TO BE HIGH DENSITY POLYETHYLENE PIPE (HDPE) WITH SMOOTH INTERIOR UNLESS OTHERWISE SPECIFIED.
- ALL ROOF LEADERS ARE TO BE CONNECTED TO THE ON-SITE STORMWATER SYSTEM. ROOF DOWNSPUTS AND RECEIVING UNDER SIZES SHALL BE SPECIFIED BY THE BUILDING MECHANICAL ENGINEER. FINAL LOCATIONS OF ROOF LEADERS ARE TO BE FINISHED BY CONTRACTOR. ROOF LEADER PIPES SHALL BE 300-35 PVC.
- WATER SERVICE LINE AND SEWER CONNECTION SHALL BE PLACED IN SEPARATE TRENCHES WITH A MINIMUM HORIZONTAL DISTANCE OF TEN FEET BETWEEN THEM.
- SANITARY SEWER PIPE SHALL BE SDR-35 PVC.
- WATER MAIN PIPE, VALVES, FITTINGS, THRUST RESTRAINT, TAPPING SLEEVES, HYDRANTS, ETC. SHALL CONFORM WITH TOWN OF NEWBURGH STANDARDS.
- ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- ALL DIMENSIONS ARE MEASURED TO THE ROUGH UNLESS OTHERWISE NOTED. ELEVATIONS AND DIMENSIONS SHOWN ARE FOR GENERAL REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS IN THE FIELD PRIOR TO THE USE OF SUCH INFORMATION IN BIDDING OR CONSTRUCTION. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF FINISHED WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DIMENSIONAL DISCREPANCIES.
- THE CONTRACTOR SHALL PERFORM ALL WORK WITH CARE SO THAT ANY MATERIALS WHICH ARE TO REMAIN IN PLACE WILL NOT BE DAMAGED. IF THE CONTRACTOR DAMAGES ANY MATERIALS WHICH ARE TO REMAIN IN PLACE, THE DAMAGED MATERIALS SHALL BE REPAIRED OR REPLACED IN A MANNER SATISFACTORY TO THE ENGINEER AT THE EXPENSE OF THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RELOCATION, PROTECTION AND/OR TEMPORARY SUPPORT OF ANY UTILITIES ENCOUNTERED WITHIN THE WORK AREA.
- THE CONTRACTOR SHALL COORDINATE DIRECTLY WITH EACH AFFECTED UTILITY COMPANY, SHALL APPLY FOR AND OBTAIN THE NECESSARY PERMITS AND APPROVALS, AND SHALL INITIATE AND COORDINATE ALL INSPECTIONS NECESSARY FOR FINAL APPROVAL AND ACCEPTANCE BY THE SUBJECT UTILITY COMPANY.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING CONTINUOUS SERVICE OF ALL EXISTING UTILITIES WITHIN THE WORK AREA AT ALL TIMES. CONTRACTOR SHALL COORDINATE ANY REPAIR, RELOCATION OR REMOVAL OF EXISTING UTILITIES WITH EACH RESPECTIVE UTILITY COMPANY AND PROVISIONS MUST BE PROVIDED FOR TEMPORARY SERVICE OF ALL AFFECTED UTILITIES SERVICE AFFECTED BY THE CONSTRUCTION IN THE EVENT OF ANY DISRUPTION TO THE EXISTING UTILITY. SCHEDULING SHALL BE AT THE DISCRETION OF THE RESPECTIVE UTILITY COMPANIES AND COORDINATED WITH THE MUNICIPALITY AND THE ENGINEER FOR PUBLIC NOTICE IF NECESSARY. TEMPORARY SERVICE SHALL BE PROVIDED AND MAINTAINED AT NO ADDITIONAL COST.

- TOWN OF NEWBURGH WATER SYSTEM NOTES FOR SITE PLANS**
- CONSTRUCTION OF POTABLE WATER UTILITIES AND CONNECTION TO THE TOWN OF NEWBURGH WATER SYSTEM REQUIRES A PERMIT FROM THE TOWN OF NEWBURGH WATER DEPARTMENT. ALL WORK AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE NYSDOH AND THE TOWN OF NEWBURGH.
 - ALL WATER SERVICE LINES FOUR (4) INCHES AND LARGER IN DIAMETER SHALL BE CAST IRON DUCTILE IRON PIPE CONFORMING TO ANSI/AWWA C151/A21.5 FOR DUCTILE IRON PIPE, LATEST REVISION. JOINTS SHALL BE EITHER PUSH-ON OR MECHANICAL JOINT AS REQUIRED.
 - THRUST RESTRAINT OF THE PIPE SHALL BE THROUGH THE USE OF JOINT RESTRAINT. THRUST BLOCKS ARE NOT ACCEPTABLE. JOINT RESTRAINT SHALL BE THROUGH THE USE OF MECHANICAL JOINT WITH RETAINER GLANDS. ALL FITTINGS AND VALVES SHALL ALSO BE INSTALLED WITH RETAINER GLANDS FOR JOINT RESTRAINT. RETAINER GLANDS SHALL BE EBRA IRON METAL SERIES 1100 OR APPROVED EQUAL. THE USE OF A MANUFACTURED RESTRAINTED JOINT PIPE IS ACCEPTABLE WITH PRIOR APPROVAL OF THE WATER DEPARTMENT.
 - ALL FITTINGS SHALL BE CAST IRON OR DUCTILE IRON, MECHANICAL JOINT CLASS 250 CONFORM TO ANSI/AWWA C151/A21.5 FOR DUCTILE IRON COMPACT FITTINGS, LATEST REVISION.
 - ALL VALVES 4 TO 12 INCHES SHALL BE RESIDENT BUILT GATE VALVES CONFORMING TO ANSI/AWWA C200 SUCH AS MUELLER MODEL A-2300-23 OR APPROVED EQUAL. ALL GATE VALVES SHALL OPEN LEFT (COUNTERCLOCKWISE).
 - TAPPING SLEEVES SHALL BE MECHANICAL JOINT SUCH AS MUELLER H-415 OR EQUAL. TAPPING VALVES 4 TO 12 INCHES SHALL BE RESIDENT BUILT GATE VALVES CONFORMING TO ANSI/AWWA C200 SUCH AS MUELLER MODEL A-2300-23 OR APPROVED EQUAL. ALL TAPPING SLEEVES AND VALVES SHALL BE TESTED TO 150 PSI MINIMUM. TESTING OF THE TAPPING SLEEVE AND VALVE MUST BE WITNESSED AND ACCEPTED BY THE TOWN OF NEWBURGH WATER DEPARTMENT PRIOR TO CUTTING INTO THE PIPE.

- ALL HYDRANTS SHALL BE CLASS F-2400 CONFORMING TO AWWA STANDARD C-502, LATEST REVISION. ALL HYDRANTS SHALL INCLUDE A 1/2 INCH NIP VALVE GROWING, TWO (2) 1/2 INCH DIAMETER NIP HOSE NOZZLES, ONE (1) INCH NIP STEAMER NOZZLE, A 6 INCH DIAMETER INLET CONNECTION AND A 1 1/2 INCH PENETRATION OPERATING NIP. ALL HYDRANTS SHALL OPEN LEFT (COUNTER-CLOCKWISE). HYDRANTS TO BE LOCATED TO BE DESIGNATED TO THE TOWN SHALL BE EQUIPPED WITH YELLOW HYDRANTS LOCATED ON PRIVATE PROPERTY SHALL BE RED.
- ALL WATER SERVICE LINES TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING. COPPERATION STOPS SHALL BE MUELLER H-10300 FOR 1/2 AND 1 INCH, MUELLER H-10300 OR B-25000 FOR 1 1/2 AND 2 INCH SIZES. CURB VALVES SHALL BE MUELLER H-10300 FOR 1/2 AND 1 INCH, MUELLER H-10340 FOR 1 1/2 AND 2 INCH SIZES. CURB BOXES SHALL BE MUELLER H-10340 FOR 1/2 AND 1 INCH AND MUELLER H-10300 FOR 1 1/2 AND 2 INCH SIZES.
- ALL PIPE INSTALLATION SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF NEWBURGH WATER DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL INSPECTIONS AS REQUIRED WITH THE TOWN OF NEWBURGH WATER DEPARTMENT.
- THE WATER MAIN SHALL BE TESTED, DISCONNECTED AND FLUSHED IN ACCORDANCE WITH THE TOWN OF NEWBURGH REQUIREMENTS. ALL TESTING, DISSECTION AND FLUSHING SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH WATER DEPARTMENT. PRIOR TO PUTTING THE WATER MAIN IN SERVICE SATISFACTORY SANITARY RESULTS FROM A CERTIFIED LAB MUST BE SUBMITTED TO THE TOWN OF NEWBURGH WATER DEPARTMENT. THE TEST SAMPLES MUST BE COLLECTED BY A REPRESENTATIVE OF THE TESTING LABORATORY AND WITNESSED BY THE WATER DEPARTMENT.
- THE FINAL LAYOUT OF THE PROPOSED WATER AND/OR SEWER CONNECTION, INCLUDING ALL MATERIALS, SIZE AND LOCATION OF SERVICE AND ALL APPURTENANCES, IS SUBJECT TO THE REVIEW AND APPROVAL OF THE TOWN OF NEWBURGH WATER AND/OR SEWER DEPARTMENT. PERMITS SHALL BE ISSUED FOR A WATER AND/OR SEWER CONNECTION UNTIL A FINAL LAYOUT IS APPROVED BY THE RESPECTIVE DEPARTMENT.



4	AS PER 10/03/22 M.E. ENGINEERING COMMENTS	MT	10/20/22
3	AS PER 09/02/22 M.E. ENGINEERING COMMENTS	MT	09/26/22
2	PUMP STATION DESIGN & WATER NOTES	JO	08/23/22
1	AS PER 6/16/2022 PLANNING BOARD COMMENTS	JO	07/11/2022
REV	DESCRIPTION	BY	DATE

DISCLAIMER:
UNAUTHORIZED ALTERATION OR ADDITIONS TO THESE PLANS IS A VIOLATION OF THE N.Y.S. EDUCATION LAW, ARTICLE 145, SECTION 7209, SUBSECTION 2.

BROOKER ENGINEERING, PLLC
PROFESSIONAL ENGINEERS AND LAND SURVEYORS
AND DEVELOPMENT - MUNICIPAL, STRUCTURAL, HYDROLOGICAL - SURVEYING
www.BrookerEngineering.com

74 Lafayette Avenue, Suite 501
Suffern, NY 10901
(845) 357-4411

22 Paris Avenue, Suite 105
Roseton, NY 01941
(207) 684-1221

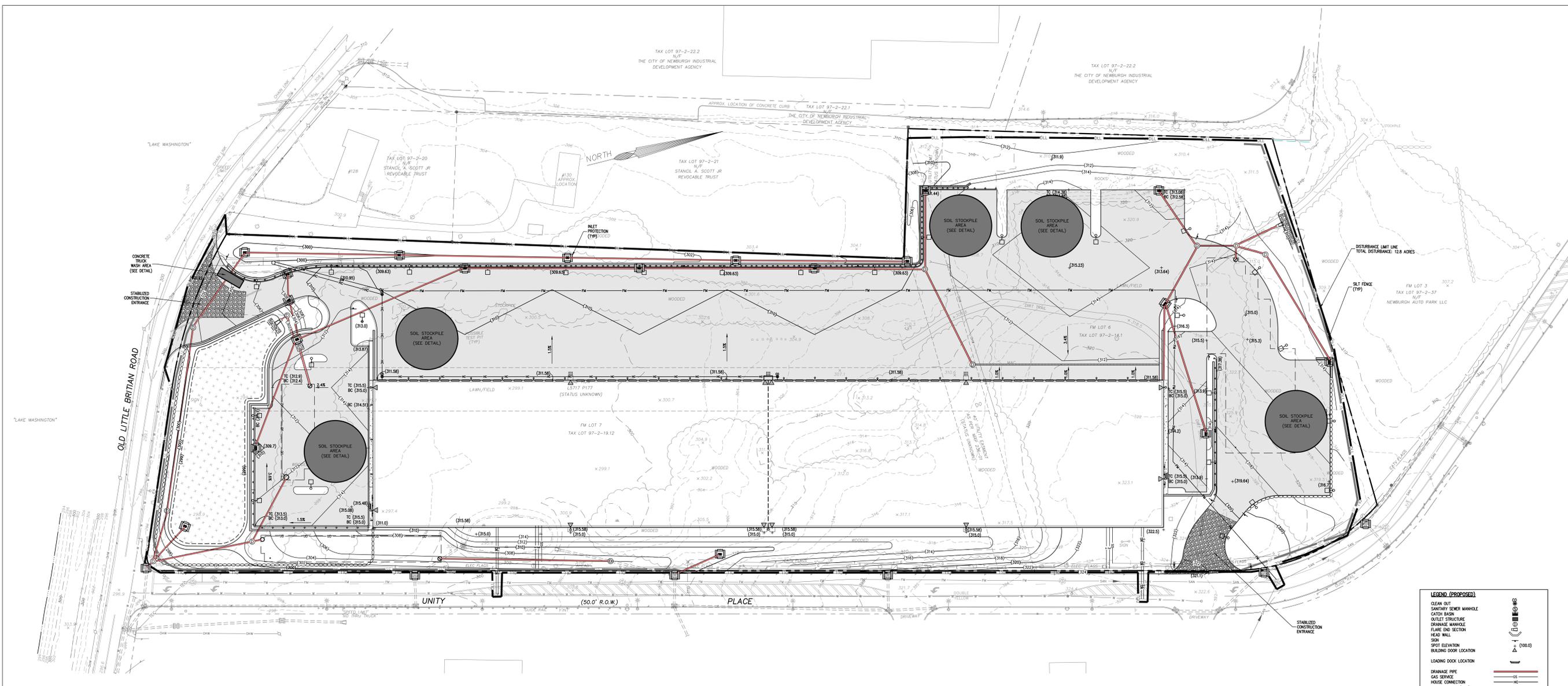
PROJECT: **UNITY PLACE WAREHOUSE**
ORANGE COUNTY
NEW YORK

TITLE: **GRADING, DRAINAGE & UTILITY PLAN**

PROJECT NO: 21202
DRAWING NO: JO
CHECKED: DR

SCALE: 1" = 40'
GRAPHIC SCALE: 0' 20' 40'

DATE: 05/27/2022
DRAWING NO: 3



STANDARD EROSION CONTROL NOTES:

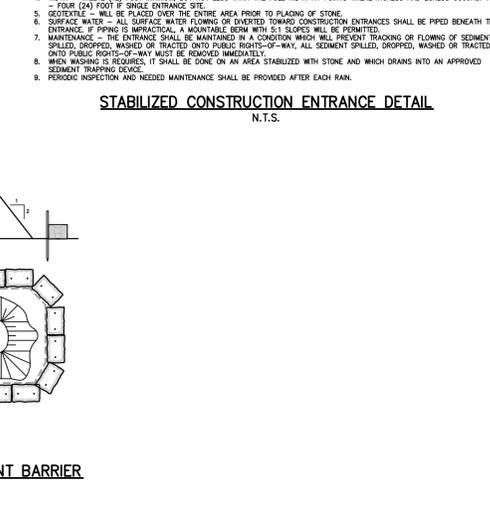
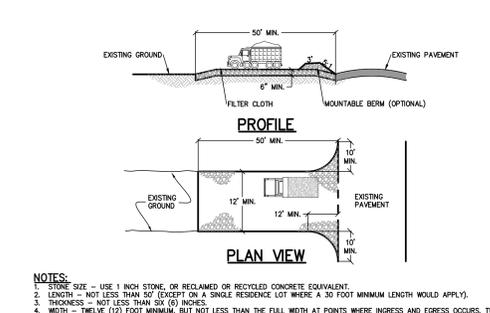
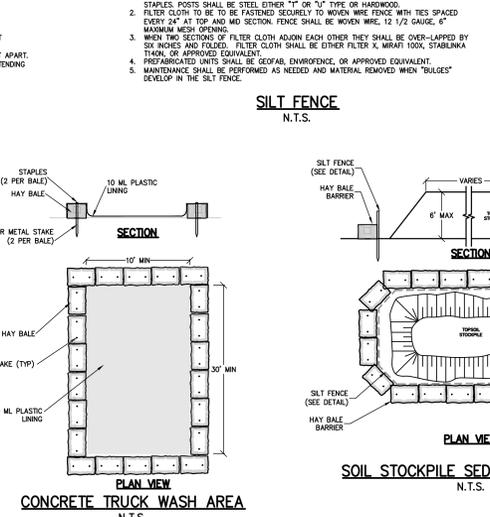
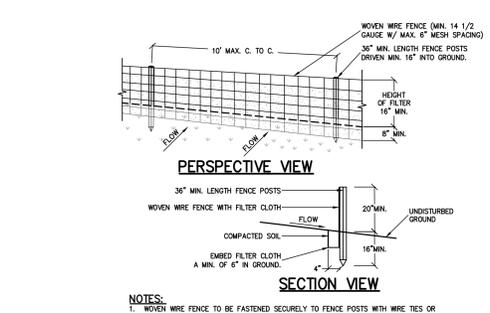
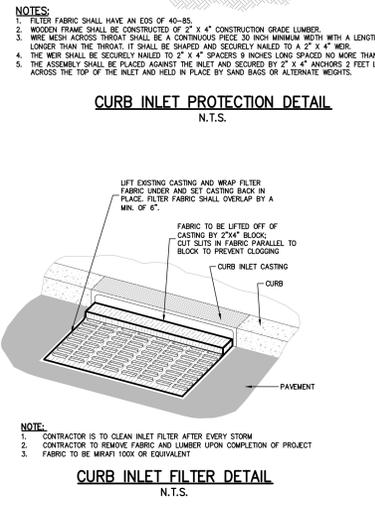
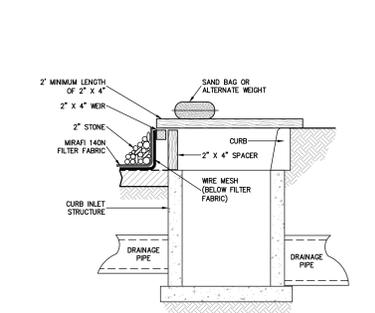
1. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, AND SHALL BE INSTALLED IN PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT STABILIZATION IS ESTABLISHED.
2. THE SITE AT ALL TIMES SHALL BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
3. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND INSPECTING ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES ON A REGULAR BASIS, INCLUDING AFTER EVERY STORM EVENT.
4. STOCKPILES ARE NOT TO BE LOCATED ON A SLOPE, ROADWAY OR DRAINAGE FACILITY. THE BASE OF ALL STOCKPILES SHALL BE CONTAINED BY A HALF BALL SEDIMENT BARRIER OR SILT FENCE.
5. A CRUSHED STONE, WHEEL-CLEANING BLANKET SHALL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS ROAD INTERSECTS ANY PAVED ROADWAY IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL. IMMEDIATELY ADJACENT ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
6. DUST SHALL BE CONTROLLED AT ALL TIMES IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
7. TEMPORARY SEDIMENT ENTRAPMENT AREAS SHALL BE PROVIDED AT KEY LOCATIONS TO INTERCEPT AND CLARIFY SILT LAUGH RUNOFF FROM THE SITE. THESE MAY BE EXCAVATED OR MAY BE CREATED UTILIZING EARTHEN BERM, RIP-RAP OR CRUSHED STONE DAM, HAY BALE, OR OTHER CHANNELIZATION SHALL BE CONSTRUCTED TO INSURE THAT ALL SILT LAUGH WATERS ARE DIRECTED INTO THE ENTRAPMENT AREAS, WHICH SHALL NOT BE PERMITTED TO FILL IN, BUT SHALL BE CLEANED PERIODICALLY DURING THE COURSE OF CONSTRUCTION. THE COLLECTION SILT SHALL BE DEPOSITED IN AREAS SAFE FROM FURTHER DISTURBANCE.
8. ALL DISTURBED AREAS, EXCEPT ROADWAYS, WHICH WILL REMAIN OPEN OR UNFINISHED FOR MORE THAN 10 DAYS SHALL BE TEMPORARILY SEEDING WITH 1/2 LB. OF THE GRASS OR MULCHED WITH 100 LBS. OF STRAW OR HAY PER 1,000 SQUARE FEET. ROADWAYS SHALL BE STABILIZED AS RAPIDLY AS PRACTICABLE BY THE INSTALLATION OF THE BASE COURSE. A TEMPORARY SEEDING AND MULCHING SHOULD BE APPLIED TO DISTURBED AREAS THAT ARE LEFT FOR 15 DAYS UNLESS CONSTRUCTION WILL BEGIN WITHIN 30 DAYS.
9. IF SILT LEAVES THE SITE, IT SHALL BE COLLECTED AND REMOVED AS DIRECTED BY APPROPRIATE MUNICIPAL AUTHORITIES.
10. AT THE COMPLETION OF THE PROJECT, ALL TEMPORARY STABILIZATION DEVICES SHALL BE REMOVED AND THE AFFECTED AREAS RE-GRASSED, PLANTED OR TILED IN ACCORDANCE WITH THE APPROVED PLAN.
11. ALL AREAS DISTURBED BY ON-SITE GRADING THAT WILL NOT BE CONSTRUCTED UPON, SHALL BE STABILIZED WITH PERMANENT VEGETATIVE COVER, USING THE FOLLOWING SEEDING SCHEDULE, OR EQUIVALENT:

KENTUCKY BLUE GRASS -	1.0 LB. PER ACRE	1.0 LB. PER 1,000 SF
CREeping RED FESCUE -	2.0	0.45
PERENNIAL RYE GRASS -	5	0.10

13. ALL SEEDING AREAS TO HAVE AN APPLICATION OF THE FOLLOWING:
 FERTILIZER - 15 LBS. PER 1,000 SF OF 10-20-10 FERTILIZER OR APPROVED EQUAL.
 IF NOT LANDSCAPED OTHERWISE, ALL NEW CONSTRUCTED STEEP PINNACLED SLOPED LESS THAN 1 (VERTICAL) : 2.5 (HORIZONTAL) TO BE SEEDING WITH THE FOLLOWING:
 FERTILIZER - 1.0 LB. PER ACRE
 FERTILIZER - 1.0 LB. PER 1,000 SF
14. SOIL CAN BE USED INSTEAD OF SEED.

CONSTRUCTION SEQUENCE:

- a. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
- b. INSTALL SEDIMENT BARRIERS AS PER NOTE 1 ABOVE.
- c. CONSTRUCT DRAINAGE SYSTEMS WITH MINIMUM NECESSARY CLEARING.
- d. CLEAR EXISTING TREES AND VEGETATION FROM AREAS TO BE EXCAVATED OR FILLED, STRIP AND STOCKPILE TOPSOIL FROM ALL AREAS TO BE DISTURBED.
- e. PERFORM NECESSARY EXCAVATION OR FILL OPERATIONS TO BRING SITE TO DESIRED SUBGRADE. INSTALL STORM DRAINAGE SYSTEM.
- f. INSTALL SEDIMENT CONTROL BARRIERS AROUND ALL OPERATIONS TO BRING SITE TO DESIRED SUBGRADE.
- g. SEED ALL DISTURBED AREAS WHICH WILL REMAIN UNDISTURBED FOR A PERIOD OR 30 DAYS AS PER NOTE 2 ABOVE.
- h. AFTER COMPLETION OF THE SITE CONSTRUCTION FINE GRADE AND SPREAD TOPSOIL ON ALL LAWN AREAS AND SEED AS PER NOTES 5 AND 6 ABOVE.
- i. REMOVE SEDIMENT BARRIERS AS PER NOTE 4 ABOVE.
- j. MAINTAIN ALL SEEDED AND PLANTED AREAS TO INSURE A MAINTAINABLE STABILIZED VEGETATIVE SPECIES.
- k. ALL CONSTRUCTION TO MEET CURRENT MUNICIPALITY SPEC.
- l. 4" OF TOP SOIL TO BE SPREAD PRIOR TO SEEDING IN ALL DISTURBED AREAS.



CONSTRUCTION SEQUENCE:

1. PRE-CONSTRUCTION MEETING SHALL BE ORGANIZED WITH THE TOWN'S ENGINEER, TOWN REPRESENTATIVE, AND THE CONTRACTOR TO RESOLVE ANY OUTSTANDING QUESTIONS PRIOR TO THE START OF CONSTRUCTION.
2. NOTIFY ALL INVOLVED AGENCIES OF PROPOSED CONSTRUCTION SCHEDULE.
3. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, OR OTHER FEATURES IDENTIFIED BY THE OWNER TO BE PROTECTED DURING CONSTRUCTION.
4. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
5. INSTALL SILT FENCE BARRIERS AT THE BASE OF ALL PROPOSED SLOPES AS DESIGNATED ON THIS PLAN.
6. CONSTRUCT TEMPORARY SEDIMENT TRAPS AT THE LOCATIONS OF CONCENTRATED STORM WATER RUNOFF, INCLUDING SWALES AND BERM AS NEEDED TO DIRECT STORM WATER RUNOFF TO THE TRAPS.
7. PRIOR TO THE START OF GRADING OPERATIONS, THE CONTRACTOR SHALL DEMONSTRATE, TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE, THAT THE AREAS DESIGNATED TO REMAIN PROTECTED OR UNDISTURBED ARE PROTECTED BY THE UNDISTURBED SYSTEM OF SILT FENCE BARRIERS, BASINS, BERMS, AND/OR SWALES.
8. CLEAR AND VEGETATION IN AREAS TO BE GRADED. THE CLEARING TO BE PERFORMED NUMBER 1, THROUGH MARCH 31 TO MINIMIZE POTENTIAL IMPACTS TO THE DISTURBED AREAS.
9. STRIP PERMITS AND STOCKPILE IN APPROVED LOCATIONS, AS DESIGNATED ON THE PLAN.
10. STOCKPILE AREAS SHALL BE PROTECTED BY SILT FENCE BARRIERS, TEMPORARY BERM, AND SWALES (ONCE THE ROAD SUB-BASE COURSE HAS BEEN INSTALLED).
11. INSTALL TEMPORARY OVERSPREAD MEASURES, DURING CONSTRUCTION, HAY BALE INLET NEAR NECESSARY GRADING FOR RETAINING WALLS, BUILDINGS, FARMING LOTS AND UTILITIES. SOIL MATERIALS SHALL BE STOCKPILED ONLY IN APPROVED AREAS AND SHALL BE PROTECTED BY SILT FENCE BARRIERS. THROUGHOUT THE CONSTRUCTION PERIOD, TEMPORARY BERM AND SWALES SHALL BE MAINTAINED, ALTERED, OR RE-LOCATED AS NECESSARY TO DIRECT RUNOFF FROM DISTURBED AREAS TO THE SEDIMENT TRAPS. ADDITIONAL SILT FENCE BARRIERS OR OTHER EROSION AND SEDIMENT CONTROL MEASURES OR SEDIMENTATION OF DOWNSTREAM AREAS.
12. INSTALL SANITARY SEWER DRAINAGE AND UTILITIES.
13. INSTALL CURBS AND BASE COURSE FOR THE ROADS.
14. ALL CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS. IF A REPAIR IS NECESSARY, IT SHALL BE IMPLEMENTED WITHIN 24 HOURS OF REPORT.
15. BUILT-UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED THE HALF THE DESIGN DEPTH OF THE BASIN. REMOVED SEDIMENT SHALL BE DEPOSITED IN A CONTAINER AREA IN A MANNER SUCH THAT IT WILL NOT DRY.
16. SILT FENCE SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE PROPERLY SET IN THE GROUND.
17. SEDIMENT SHALL BE REMOVED FROM SEDIMENT TRAPS PRIOR TO IT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE BASIN. REMOVED SEDIMENT SHALL BE DEPOSITED IN A CONTAINER AREA IN A MANNER SUCH THAT IT WILL NOT DRY.
18. AS CONSTRUCTION PROCEEDS, ALL DISTURBED AREAS SHALL BE PLANTED OR SEEDING IN A MANNER THAT WILL MAINTAIN A MAINTAINABLE STABILIZED VEGETATIVE SPECIES. TEMPORARY BERM, AND SWALES (ONCE THE ROAD SUB-BASE COURSE HAS BEEN INSTALLED), ETC. SHALL BE REMOVED.
19. PERFORM FINAL GRADING AND SOIL DE-COMPACTATION, SOIL RESTORATION AND DE-COMPACTATION SHALL BE PERFORMED FOR ALL AREAS THAT WERE DEPT RIPPING AND DE-COMPACTATION SHALL BE COMPLETED IN CONFORMANCE WITH THE NYSDC PUBLICATION DEPT RIPPING AND DE-COMPACTATION.
20. UPON COMPLETION OF THE CONSTRUCTION ACTIVITIES, REMOVE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
21. PREPARE AS-BUILT AND POST CONSTRUCTION MEASURES AND PROCEDURES IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

LEGEND (PROPOSED)

CLEAN OUT	---
SANITARY SEWER MANHOLE	---
CATCH BASIN	---
OUTLET STRUCTURE	---
DRAINAGE MANHOLE	---
FLARE END SECTION	---
HEAD WALL	---
SOIL	---
SPOT ELEVATION	---
BUILDING DOOR LOCATION	---
LOADING DOCK LOCATION	---
DRAINAGE PIPE	---
GAS SERVICE	---
HOUSE CONNECTION	---
WATER SERVICE (PUB)	---
WATER SERVICE (DOMESTIC)	---
TELEPHONE	---
YARD LINE	---
CURB	---
GLIDE RAIL	---
RETAINING WALL	---
FELDSPONE PARAPET WALL	---
PAVEMENT	---
SEWER	---
CONSTRUCTION ENTRANCE	---
SILT FENCE	---
INLET PROTECTION	---

REV	DESCRIPTION	BY	DATE
4	AS PER 10/03/22 MHE ENGINEERING COMMENTS	MT	10/26/22
3	AS PER 09/02/22 MHE ENGINEERING COMMENTS	MT	09/27/22
1	AS PER 06/16/2022 PLANNING BOARD COMMENTS	JO	07/11/2022

BROOKER ENGINEERING, PLLC
 PROFESSIONAL ENGINEERS AND LAND SURVEYORS
 LAND DEVELOPMENT - MUNICIPAL - STRUCTURAL - HYDROLOGICAL - SURVEYING
 www.BrookerEngineering.com
 74 Lafayette Avenue, Suite 501 | 22 Fort Avenue, Suite 105
 Suffern, NY 10901 | Rockledge, NJ 07866
 (845) 357-4411 | (201) 684-1221

PROJECT: UNITY PLACE WAREHOUSE
TOWN OF NEWBURGH
ORANGE COUNTY
NEW YORK

TITLE: EROSION AND SEDIMENT CONTROL PLAN

PROJECT NO:	21202	DRAWN:	JO	CHECKED:	DR
SCALE:	1" = 40'				
GRAPHIC SCALE:	0' 40' 80'				
DATE:	05/27/2022	DRAWING NO.:	4		

