



**TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS**

PROJECT NAME: GAS LAND PETROLEUM, INC.
PROJECT NO.: 2019-16
PROJECT LOCATION: 5200 ROUTE 9W
SECTION 43, BLOCK 5, LOT 1
REVIEW DATE: 13 SEPTEMBER 2024
MEETING DATE: 19 SEPTEMBER 2024
PROJECT REPRESENTATIVE: LABELLA

1. The subsurface sanitary sewer disposal system has been revised according to our previous comments. Surface sanitary sewer disposal system is now located in an area without proposed filling. The system is designed to treat 356 gallons per day based on the SSDS Demand Calculations provided.
2. Approval from NYSDOT for the entrance drive is required.
3. The NYSDOT is requiring a left turn lane within NYS Route 9W. Approval of this left turn lane is required. Ken Wersted's comments regarding this should be received.
4. A watermain has been depicted on the plans which has been up-sized to 8 inches. An easement in favor of the Town of Newburgh is proposed. Any approval should address the easement for the watermain.
5. Orange County Health Department approval for watermain extension with hydrants is required.
6. The plan requires the abandonment of on-site wells. Approval resolution should address the requirement to abandon the wells in compliance with applicable codes.
7. A note appears on the plan identifying potential underground tanks, potential contaminated soil and previous piping. Status of any underground tanks should be identified and addressed on the plans.
8. A permit from the Town of Newburgh is required for any tank removals.
9. Coordination with Central Hudson Gas and Electric should be undertaken regarding proposed activities within the Central Hudson gas line easement. Several proposed utilities including stormwater, potable water as well as the site access drive improvements cross the Central Hudson high pressure gas main.

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

10. Status of NYSDOT's approval for sidewalks which are within the right-of-way and on the project, site should be addressed.
11. Architectural review of the commercial buildings will eventually be required prior to approvals.
12. Approval for stormwater connection to DOT catch basin required.
13. Since the project was previously before the Board the Town has adopted a Tree Preservation Ordinance. Compliance with the Tree Preservation Ordinance must be documented.
14. A location on the plan where the former subsurface sanitary disposal system material is to be buried should be depicted.
15. Information pertaining to the existing 2-story dwellings subsurface sanitary sewer disposal system should be provided.
16. Ken Wersted's comments on the improvements should be received.
17. Any architectural review should address signage proposed on the site. It is noted that signage on the canopy requires ZBA approval.
18. Final review of the SWPPP prepared for the site is being undertaken. The site is a stormwater hot spot. This must be addressed on the SWPPP.

Respectfully submitted,

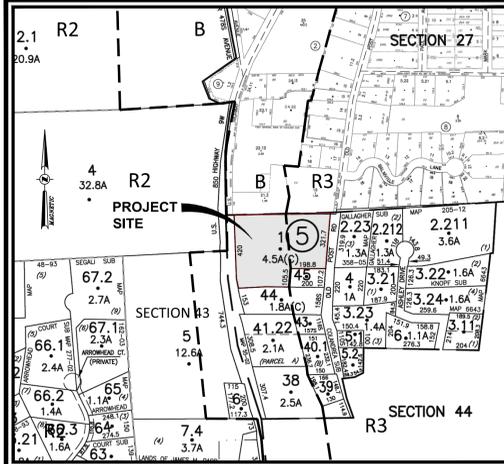
MHE Engineering, D.P.C.



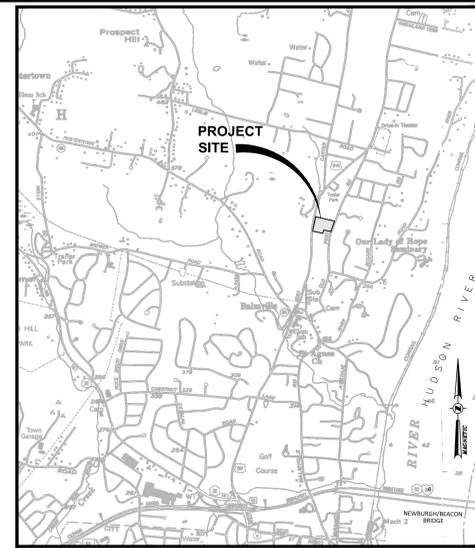
Patrick J. Hines
Principal
PJH/kmm/kbw



Michael W. Weeks, P.E.
Principal



MAP SOURCES: ORANGE COUNTY TAX MAP
TOWN OF NEWBURGH ZONING MAP (EXISTING CONDITION)
VICINITY MAP
SCALE: 1"=400'



LOCATION MAP
SCALE: 1"=2000'
MAP SOURCE: USGS MAPPING

SITE PLAN

PREPARED FOR

GAS LAND PETROLEUM, INC.

FOR A

CONVENIENCE STORE WITH A GASOLINE FILLING STATION

LOCATED AT

5200 N.Y.S. ROUTE 9W
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

JANUARY 20, 2022
LAST REVISED: MARCH 4, 2024

BULK TABLE 1 ACCESSORY BUILDING ¹		
REQUIREMENTS:	REQUIRED	PROPOSED
MINIMUM LOT AREA ⁵	0.69 ACRES	4.52± ACRES
MINIMUM LOT WIDTH	150 FT	415± FT
MINIMUM LOT DEPTH	175 FT	287.0 FT
SETBACKS:		
MINIMUM YARD FRONT ²	N/A	119.6 FT (NYS 9W) 147.0 FT (OLD POST RD)
MINIMUM YARD SIDE ³	15 FT	9.0 FT ^{6,7}
MINIMUM YARD REAR ³	5 FT	N/A
MINIMUM DISTANCE TO MAIN BUILDING	10 FT	318.1 FT
MAXIMUM PERCENTAGE IN YARD AREA ⁴	10%	12% ^{6,7}
MAXIMUM HEIGHT	15 FT	2 STORY ^{6,7}
MAXIMUM LOT COVERAGE (BUILDING)	40%	4.1% (ALL BLDGS)
MAXIMUM IMPERVIOUS SURFACE	50%	30% (ENTIRE SITE)

NOTES:
¹ EXISTING ON-SITE APARTMENTS ARE ACCESSORY BUILDINGS TO THE PRINCIPAL USE. BULK REQUIREMENTS ARE PER FOR ACCESSORY BUILDINGS IN SECTION 185-15 AND EXISTING SINGLE-FAMILY DWELLINGS WITH EITHER PUBLIC SEWER OR PUBLIC WATER ONLY.
² PER SECTION 185-15.B, NO SUCH BUILDING SHALL PROJECT CLOSER TO THE FRONTING STREET THAN THE FRONT OF THE MAIN BUILDING.
³ PER SECTION 185-15.A(2), SUCH BUILDING SHALL BE SET BACK AT LEAST FIVE FEET FROM ANY SIDE OR REAR LOT LINE.
⁴ PER SECTION 185-15.A(3), SUCH BUILDING SHALL NOT OCCUPY MORE THAN 10% OF THE REQUIRED YARD AREA IN WHICH IT IS PROPOSED TO BE SITUATED.
⁵ MINIMUM LOT AREA FOR LOT BOUNDED BY TWO OR MORE STREETS.
⁶ EXISTING NON-CONFORMANCE VARIANCE REQUIRED. TOWN HAS STATED 15 FT SIDE WARD SETBACK APPLIES TO ACCESSORY STRUCTURE.
⁷ ZONING VARIANCE GRANTED ON 10/28/21 BY TOWN OF NEWBURGH ZONING BOARD OF APPEALS.

BULK TABLE 2 ZONING DISTRICT: BUSINESS (B) ZONING DISTRICT / LHI OVERLAY "MOTOR VEHICLE SERVICE STATION AND PUBLIC GARAGE"		
ZONING REQUIREMENTS (B):	REQUIRED	PROPOSED
MINIMUM LOT AREA ³	0.690 ACRES	4.52± ACRES
MINIMUM LOT WIDTH	100 FT	415± FT
MINIMUM LOT DEPTH	150 FT	287.0 FT
SETBACKS:		
MINIMUM YARD FRONT	40 FT	259.5 FT (U.S. RTE 9W) 202.2 FT. (OLD POST RD)
MINIMUM YARD SIDE	15 FT	39.0 FT
MINIMUM YARD REAR	30 FT	N/A
PROPERTY LINE TO DRIVEWAY	10 FT	90.0 FT
PROPERTY LINE TO UNDERGROUND FUEL TANK	15 FT	154.5 FT
PROPERTY LINE TO PUMP ISLAND	15 FT	107.9 FT
PROPERTY LINE TO PARKED VEHICLES	10 FT	20.9 FT
DISTANCE TO MOTOR VEHICLE SERVE STATION ¹	1000 FT	900.0 FT ^{4,5}
MAXIMUM LOT COVERAGE (BUILDING) ²	40%	4.1% (ALL BLDGS)
MAXIMUM IMPERVIOUS SURFACE	80%	30% (ENTIRE SITE)
MAXIMUM HEIGHT	35 FT	<35 FT

NOTES:
¹ IN NO INSTANCE SHALL A NEW MOTOR VEHICLE SERVICE STATION OR ANY OTHER ESTABLISHMENT DISPENSING GASOLINE BE PERMITTED TO BE ESTABLISHED WITHIN 1,000 FEET IN ANY DIRECTION FROM A LOT ON WHICH THERE IS AN EXISTING MOTOR VEHICLE SERVICE STATION OR OTHER ESTABLISHMENT DISPENSING GASOLINE.
² MAXIMUM LOT BUILDING COVERAGE IS 40% IF NO PUBLIC WATER OR SEWER AND 50% IF PUBLIC WATER AND SEWER.
³ MINIMUM LOT AREA FOR LOT BOUNDED BY TWO OR MORE STREETS.
⁴ EXISTING NON-CONFORMANCE VARIANCE REQUIRED.
⁵ ZONING VARIANCE GRANTED ON 10/28/21 BY TOWN OF NEWBURGH ZONING BOARD OF APPEALS.

BULK TABLE 3 ZONING DISTRICT: BUSINESS (B) ZONING DISTRICT / LHI OVERLAY "CONVENIENCE STORE WITH OR WITHOUT GASOLINE FILLING STATION"		
ZONING REQUIREMENTS (B):	REQUIRED	PROPOSED
MINIMUM LOT AREA ¹	0.459 ACRES	4.52± ACRES
MINIMUM LOT WIDTH	100 FT	415± FT
MINIMUM LOT DEPTH	125 FT	287.0 FT
SETBACKS:		
MINIMUM YARD FRONT	60 FT	80.0 FT (U.S. RTE 9W) 372.9 FT (OLD POST RD)
MINIMUM YARD SIDE	15 FT	17.0 FT
MINIMUM YARD REAR	30 FT	N/A
PROPERTY LINE TO DRIVEWAY	10 FT	90.0 FT
PROPERTY LINE TO UNDERGROUND FUEL TANK	15 FT	154.5 FT
PROPERTY LINE TO PUMP ISLAND	15 FT	107.9 FT
PROPERTY LINE TO PARKED VEHICLES	10 FT	20.9 FT
DISTANCE TO MOTOR VEHICLE SERVE STATION ²	1000 FT	900.0 FT ⁴
MAXIMUM LOT COVERAGE (BUILDING) ³	40%	4.1% (ALL BLDGS)
MAXIMUM IMPERVIOUS SURFACE	80%	30% (ENTIRE SITE)
MAXIMUM HEIGHT	35 FT	1 STORY

NOTES:
¹ MINIMUM LOT AREA FOR LOT BOUNDED BY ONE STREET.
² IN NO INSTANCE SHALL A NEW MOTOR VEHICLE SERVICE STATION OR ANY OTHER ESTABLISHMENT DISPENSING GASOLINE BE PERMITTED TO BE ESTABLISHED WITHIN 1,000 FEET IN ANY DIRECTION FROM A LOT ON WHICH THERE IS AN EXISTING MOTOR VEHICLE SERVICE STATION OR OTHER ESTABLISHMENT DISPENSING GASOLINE.
³ MAXIMUM LOT BUILDING COVERAGE IS 40% IF NO PUBLIC WATER OR SEWER AND 50% IF PUBLIC WATER AND SEWER.
⁴ ZONING VARIANCE GRANTED ON 10/28/21 BY TOWN OF NEWBURGH ZONING BOARD OF APPEALS.

INDEX OF DRAWINGS					
PAGE NO.	REV	SHEET NO.	DATE	DESCRIPTION	
1	2	G001	03/04/24	TITLE SHEET	
2	1	G002	03/03/22	NOTES & LEGENDS	
3	0	SV1	10/21/19	EXISTING CONDITIONS PLAN (BY OTHERS)	
4	3	C120	03/04/24	DEMOLITION PLAN	
5	3	C130	03/04/24	SITE PLAN	
6	1	C131	03/03/22	TRUCK MANEUVERING PLAN	
7	1	C132	03/03/22	TRUCK MANEUVERING PLAN WB-67 PULL IN	
8	3	C140	03/04/24	GRADING & DRAINAGE PLAN	
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15	1	C502	03/03/22	NYS DOT NOTES	
16	1	C510	03/03/22	STORM SEWER DETAILS	
17	1	C520	03/03/22	EROSION & SEDIMENT CONTROL DETAILS AND NOTES	
18	1	C530	03/03/22	WATER DETAILS	
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20	1	C541	03/04/24	SUBSURFACE DISPOSAL SYSTEM DETAILS	
20	1	C550	03/03/22	LANDSCAPE DETAILS & NOTES	
20	1	C560	03/04/24	PUMP STATION DETAILS	

RECORD OWNER:
P&J PROPERTY WALNUT ST LLC
24 WALNUT ST
NEW WINDSOR NY 12553

DEVELOPER / APPLICANT:
GAS LAND PETROLEUM, INC.
3 S.OHIOVILLE ROAD
NEW PALTZ, NY 12561

ADDRESS:
5200 ROUTE 9W
NEWBURGH, NY 12550

TAX MAP INFORMATION:
MUNICIPALITY OF NEWBURGH
SECTION 43, BLOCK 5, LOT 1

SITE CIVIL ENGINEER:
CHAZEN ENGINEERING & LAND SURVEYING CO., P.C.
21 FOX STREET, POUGHKEEPSIE, NY 12601
PHONE: (845) 454-3980

SURVEYOR:
HERITAGE LAND SURVEYING, P.C.
DARREN J. STRIDIRON, PROFESSIONAL LAND SURVEYOR
P.O. BOX 579 PLATTEKILL, NEW YORK 12568
PHONE: (845) 562-4148

SITE AREA:
TOTAL PROJECT ACREAGE : 4.517 ACRES

ZONING:
BUSINESS DISTRICT WITH LIGHT AND HEAVY INDUSTRIAL EQUIPMENT AND RECREATIONAL VEHICLE SALES, SERVICE AND REPAIR OVERLAY DISTRICT. 150 FT-DEEP ON THE EASTERLY PORTION OF THE LOT IS IN R-3 DISTRICT, PER TABLE OF ZONING MAP AMENDMENTS.
PER SECTION 185-6.F, MULTIPLE USES SHALL BE PERMITTED ON A SINGLE LOT; THEREFORE, THE SINGLE FAMILY HOME AND ACCESSORY APARTMENT TO THE AUTO REPAIR GARAGE ARE ANTICIPATED TO COMPLY.

PARKING SPACE CALCULATIONS:

TOTAL SPACES PROVIDED ON SITE = 45 (W/INCLUDES 3 INTERIOR BAY SPACES)

CONVENIENCE STORE WITH GASOLINE FILLING STATION:
 REQUIRED = 20 SPACES
 PROVIDED* = 24 SPACES (12 SPACES + 12 SPACES AT THE PUMPS)

PER SECTION 185-13.C(1)(b): REQUIRED PARKING FOR A RETAIL STORE, SHOPPING CENTER, AND PERSONAL SERVICE STORE IS 1 PER 150 SQUARE FEET OF GROSS LEASABLE FLOOR SPACE.
 (2,940 SQUARE FEET X 1 SPACE PER 150 SQUARE FEET = 20)

*THE TOTAL SPACES PROVIDED INCLUDES THE 12 SPACES AT THE FUEL PUMPS.

AUTO REPAIR GARAGE:
 REQUIRED (MIN.) = 8 SPACES
 PROVIDED = 19 SPACES (3 INTERIOR BAYS + 16 SPACES = 19)

PER SECTION 185-13.C(1)(b): REQUIRED PARKING FOR A REPAIR GARAGE IS PARKING SPACES FOR ALL VEHICLES BEING SERVICED AT ANY 1 PERIOD OF TIME, PLUS A MINIMUM OF 5 ADDITIONAL SPACES.

RESIDENTIAL BUILDING: (ACCESSORY BUILDING)
 REQUIRED = 2 SPACES
 PROVIDED = 2 SPACES

PER SECTION 185-13.C(1)(c): FOR ONE RESIDENTIAL SINGLE FAMILY UNIT, 2 SPACES SHALL BE PROVIDED.

**OWNER ENDORSEMENT
TOWN OF NEWBURGH, NEW YORK**

THE UNDERSIGNED APPLICANT/OWNER OF THE PROPERTY HEREON STATES THAT THE OWNER IS FAMILIAR WITH THIS MAP, ITS CONTENTS, LEGENDS AND HEREBY CONSENTS TO ALL SAID TERMS, AND CONDITIONS STATED HEREON, INCLUDING APPROVAL FOR FILING.

APPLICANT: _____ DATE: _____

OWNER: _____ DATE: _____

**TOWN PLANNING BOARD
NEWBURGH, NEW YORK
SITE PLAN APPROVAL**

FILE NO: _____
PROJECT NAME: _____

PROJECT LOCATION: _____

APPLICANT: _____
OFFICIALLY APPROVED at the Planning Board meeting held the _____ day of _____, 20____.

PLANNING CHAIRMAN: _____
DESIGNEE: _____
DATE SIGNED: _____
CONDITIONS: _____

FOR PLANNING BOARD REVIEW - NOT FOR CONSTRUCTION

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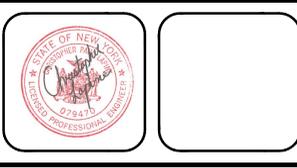
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ORIGINAL SCALE IN INCHES

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LANDSCAPE ARCHITECTURE & GEOLOGY CO., D.P.C.

THE Chazen COMPANIES

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 o White Plains, NY
 o New York City, NY

Hudson Valley Office
21 Fox Street
Poughkeepsie, New York 12601

www.chazencompanies.com
888-528-9073

rev.	date	description
3	02/09/24	REVISIONS PER SDS SUBMISSION
2	10/07/22	REVISIONS PER TOWN COMMENTS
1	03/03/22	REVISIONS PER TOWN COMMENTS

GAS LAND 5200 ROUTE 9W

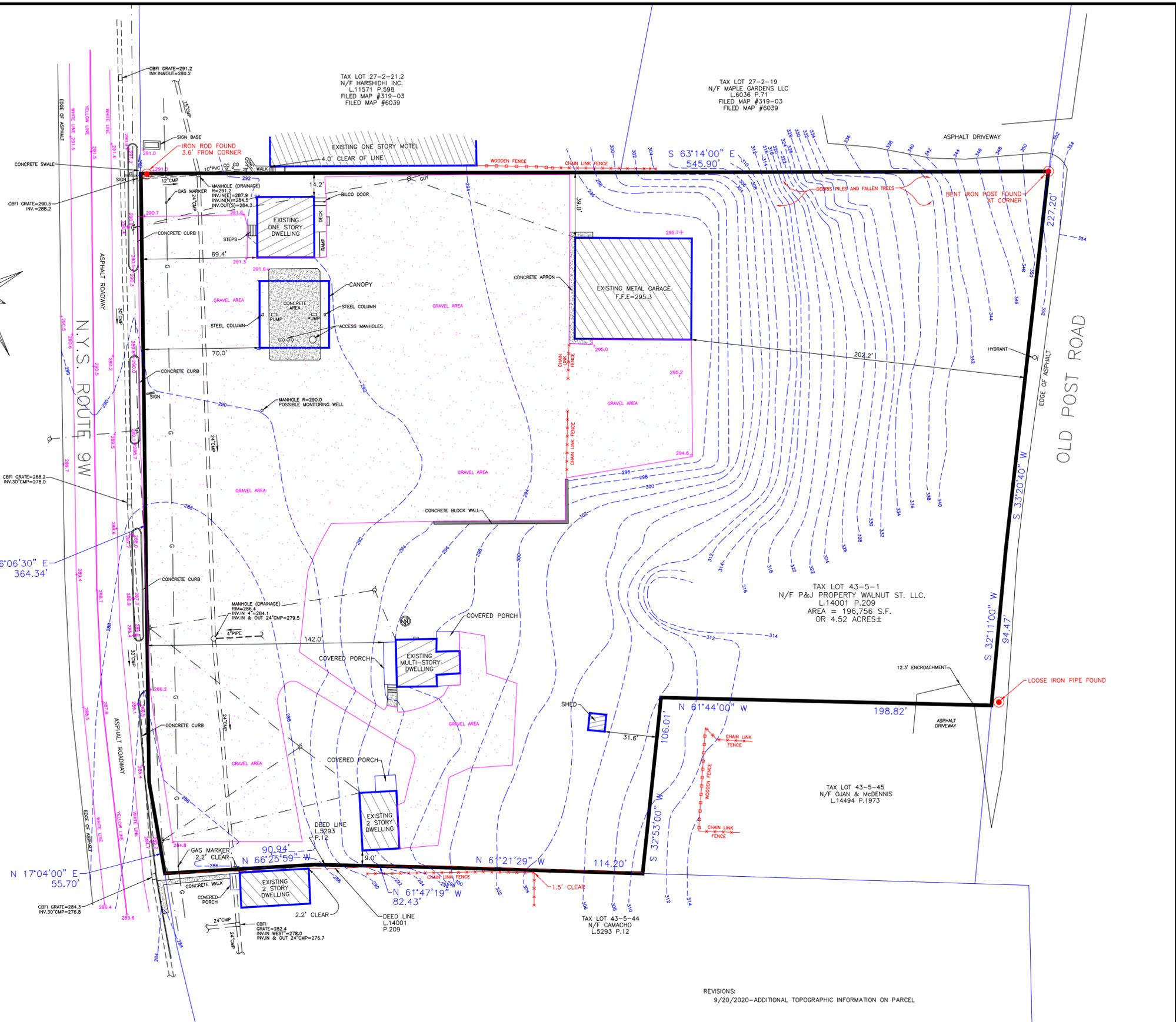
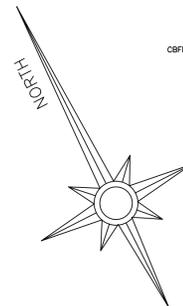
TITLE SHEET

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed SPL	checked CPL
01/20/22	JAS SHOWN
project no.	81912.00
sheet no.	G001

REFERENCES:

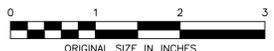
- TOWN OF NEWBURGH TAX MAP SECTION 27 & 43.
- DEEDS FILED IN THE ORANGE COUNTY CLERK'S OFFICE:
L.14001 P.209
L.14494 P.1973
L.5293 P.12
L.11571 P.598
L.6036 P.71
- MAPS FILED IN THE ORANGE COUNTY CLERK'S OFFICE:
MAP #319-03
MAP #6039



REVISIONS:
9/20/2020-ADDITIONAL TOPOGRAPHIC INFORMATION ON PARCEL

LEGEND

- 490 — DENOTES EXISTING CONTOUR LINE
- x — x — DENOTES EXISTING CHAIN LINK FENCE
- □ — □ — DENOTES EXISTING WOODEN FENCE
- ○ — ○ — DENOTES EXISTING UTILITY POLE
- ○ — DENOTES EXISTING CLEANOUT
- 490.0+ — DENOTES EXISTING SPOT GRADE
- — — DENOTES EXISTING OVERHEAD WIRES
- (W) — DENOTES EXISTING WELL



I HEREBY CERTIFY THAT:
THIS MAP OR PLAN IS BASED UPON THE FIELD NOTES OF THE SURVEY AND OTHER REFERENCES SHOWN.
ALL RECORDED EASEMENTS OR RIGHTS-OF-WAY AS SHOWN IN THE TITLE REPORT AND OTHER REFERENCES ARE SHOWN.
ALL OBSERVABLE EVIDENCE OF EASEMENTS ON THE GROUND ARE SHOWN.
ALL OBSERVABLE, ABOVE GROUND EVIDENCE OF BUILDINGS, STRUCTURES AND OTHER IMPROVEMENTS ARE SHOWN.
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PLAN PREPARED PURSUANT TO SECTION 7208m OF THE NEW YORK STATE EDUCATION LAW.
SUBJECT TO THE FINDINGS OF TITLE REPORT M-052439 PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY.

Darren Stridiron
DARREN J. STRIDIIRON, PROFESSIONAL LAND SURVEYOR
NEW YORK STATE LICENSE No. 050487

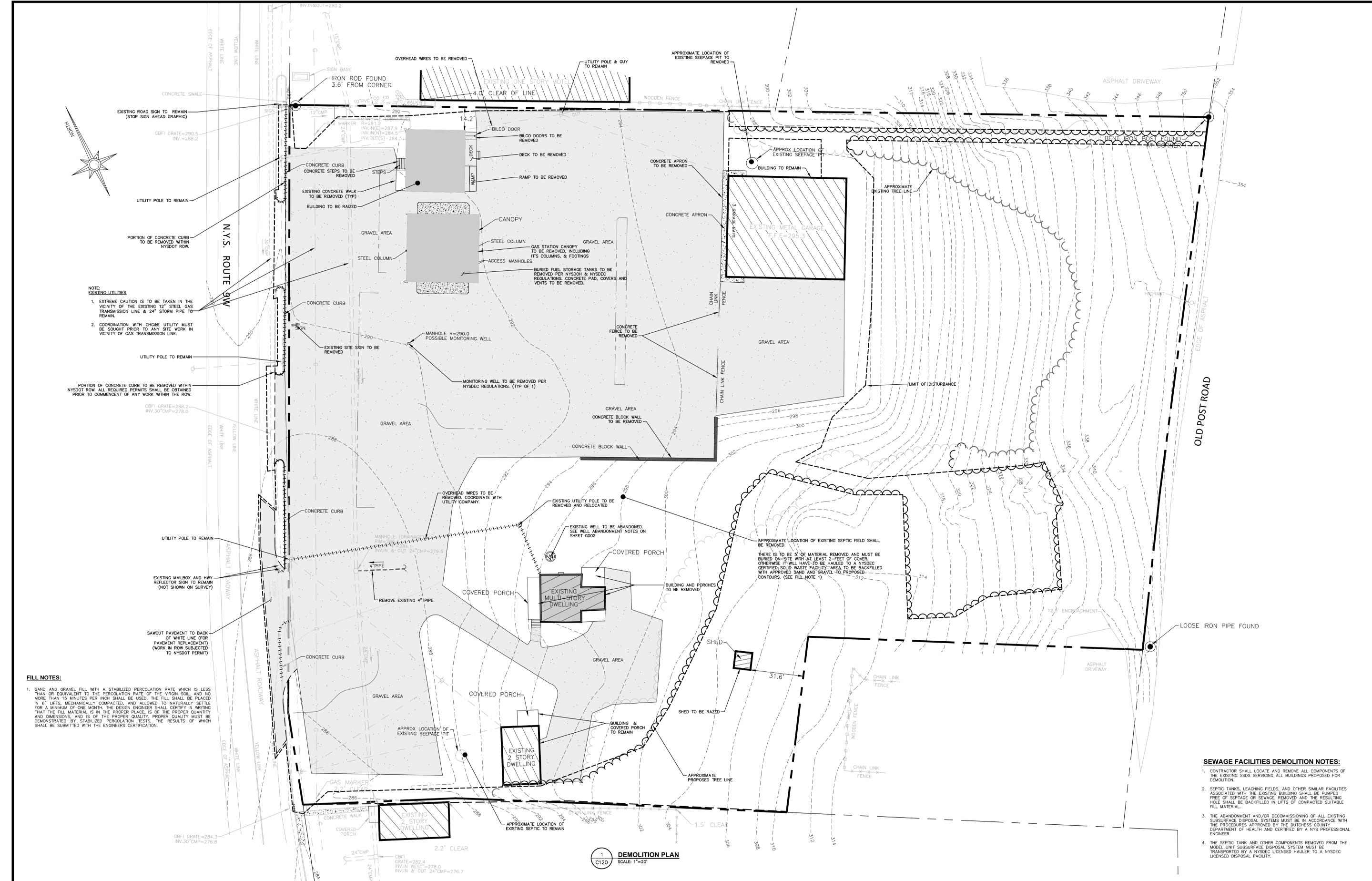
HERITAGE LAND SURVEYING, P.C.

P.O. BOX 579 PLATTEKILL, NEW YORK 12568
TEL (845)562-4148, FAX (845)562-4148, e-mail: heritagelandsurvey@hotmail.com

SURVEY OF PROPERTY

5200 ROUTE 9W
LOCATED AT
TAX LOT 43-5-1
TOWN OF NEWBURGH
COUNTY OF ORANGE, NEW YORK

Date 10/21/19	Work Order	Drawing No.	SHEET
Scale 1" = 30'	2019-053	2019-053S2	1



NOTE: EXISTING UTILITIES

1. EXTREME CAUTION IS TO BE TAKEN IN THE VICINITY OF THE EXISTING 12" STEEL GAS TRANSMISSION LINE & 24" STORM PIPE TO REMAIN.
2. COORDINATION WITH CH&E UTILITY MUST BE SOUGHT PRIOR TO ANY SITE WORK IN VICINITY OF GAS TRANSMISSION LINE.

FILL NOTES:

1. SAND AND GRAVEL FILL WITH A STABILIZED PERCOLATION RATE WHICH IS LESS THAN OR EQUIVALENT TO THE PERCOLATION RATE OF THE VIRGIN SOIL, AND NO MORE THAN 15 MINUTES PER INCH SHALL BE USED. THE FILL SHALL BE PLACED IN 6" LIFTS, MECHANICALLY COMPACTED, AND ALLOWED TO NATURALLY SETTLE FOR A MINIMUM OF ONE MONTH. THE DESIGN ENGINEER SHALL CERTIFY IN WRITING THAT THE FILL MATERIAL IS IN THE PROPER PLACE, IS OF THE PROPER QUANTITY AND DIMENSIONS, AND IS OF THE PROPER QUALITY. PROPER QUALITY MUST BE DEMONSTRATED BY STABILIZED PERCOLATION TESTS. THE RESULTS OF WHICH SHALL BE SUBMITTED WITH THE ENGINEER'S CERTIFICATION.

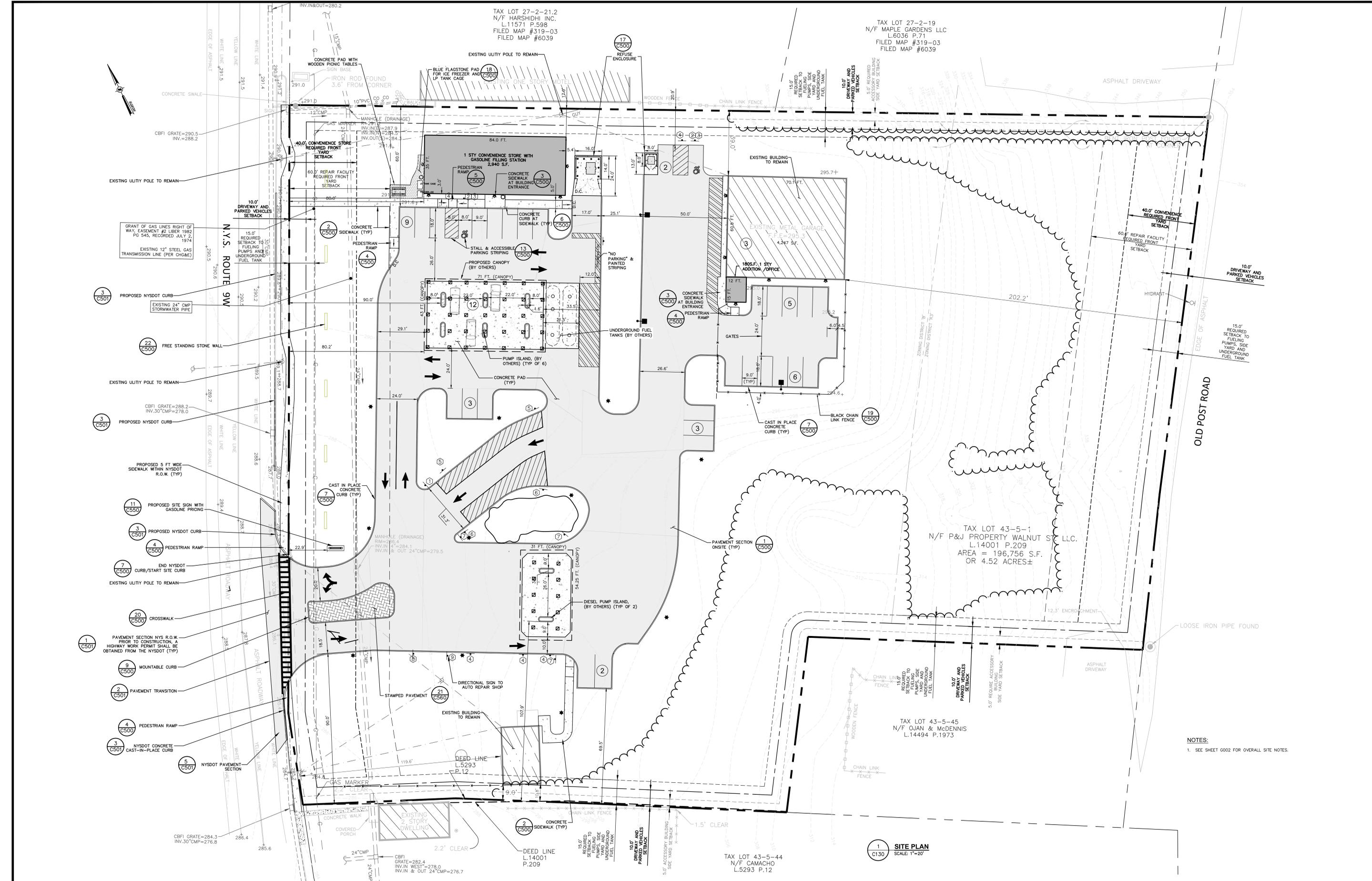
SEWAGE FACILITIES DEMOLITION NOTES:

1. CONTRACTOR SHALL LOCATE AND REMOVE ALL COMPONENTS OF THE EXISTING SDDS SERVING ALL BUILDINGS PROPOSED FOR DEMOLITION.
2. SEPTIC TANKS, LEACHING FIELDS, AND OTHER SIMILAR FACILITIES ASSOCIATED WITH THE EXISTING BUILDING SHALL BE PUMPED FREE OF SEPTAGE OR SEWAGE, REMOVED AND THE RESULTING HOLES SHALL BE BACKFILLED IN LIFTS OF COMPACTED SUITABLE FILL MATERIAL.
3. THE ABANDONMENT AND/OR DECOMMISSIONING OF ALL EXISTING SUBSURFACE DISPOSAL SYSTEMS MUST BE IN ACCORDANCE WITH THE PROCEDURES APPROVED BY THE DUTCHESS COUNTY DEPARTMENT OF HEALTH AND CERTIFIED BY A NYS PROFESSIONAL ENGINEER.
4. THE SEPTIC TANK AND OTHER COMPONENTS REMOVED FROM THE MODEL UNIT SUBSURFACE DISPOSAL SYSTEM MUST BE TRANSPORTED BY A NYSDC LICENSED HAULER TO A NYSDC LICENSED DISPOSAL FACILITY.

1 DEMOLITION PLAN
SCALE: 1"=20'

FOR PLANNING BOARD REVIEW - NOT FOR CONSTRUCTION

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1 SITE PLAN
SCALE: 1"=20'

NOTES:
1. SEE SHEET G002 FOR OVERALL SITE NOTES.

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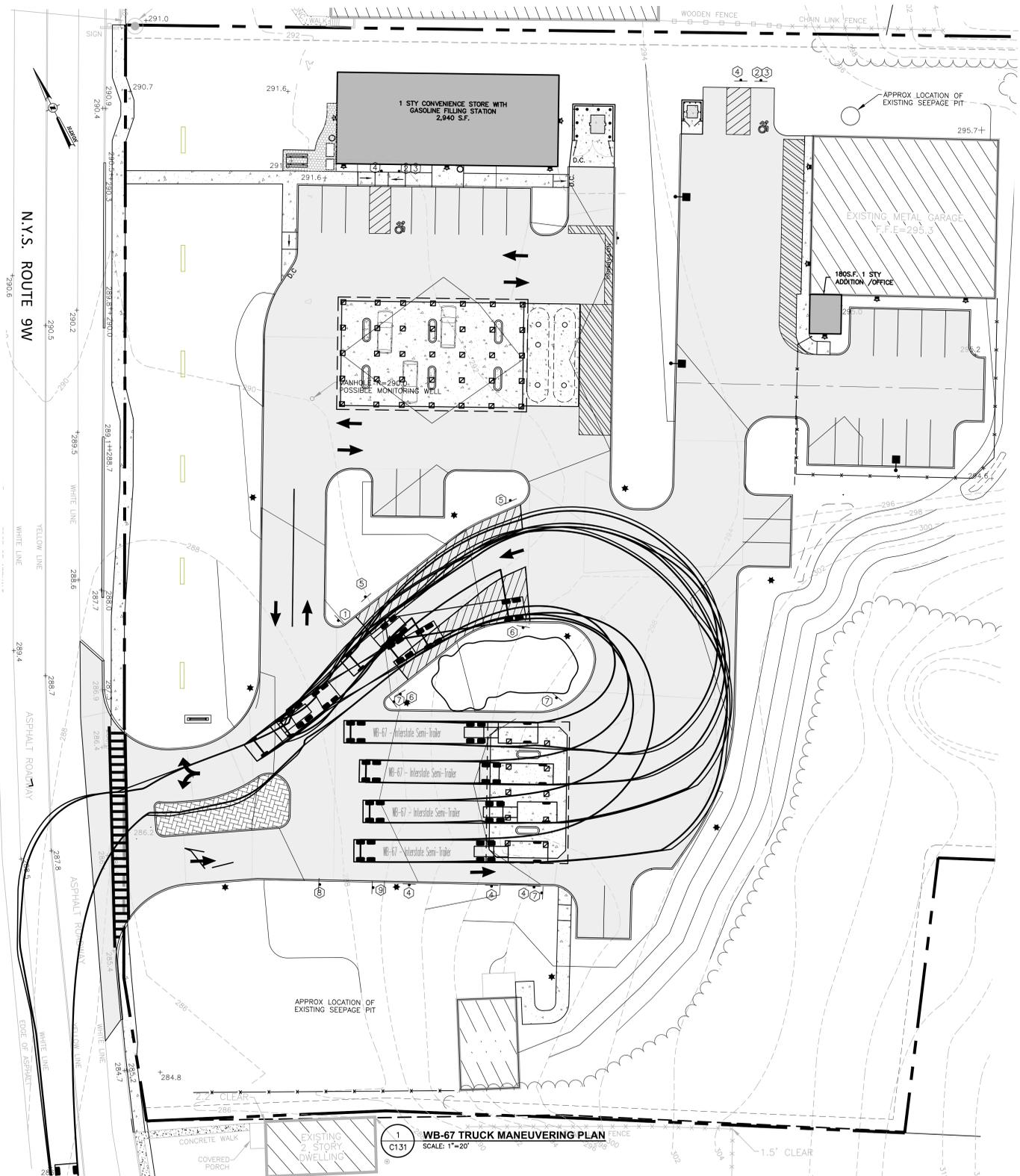
GAS LAND 5200 ROUTE 9W

SITE PLAN

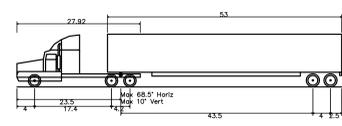
TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

rev.	date	description
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2	10/07/23	REVISED PER TOWN COMMENTS
1	03/03/22	REVISED PER TOWN COMMENTS

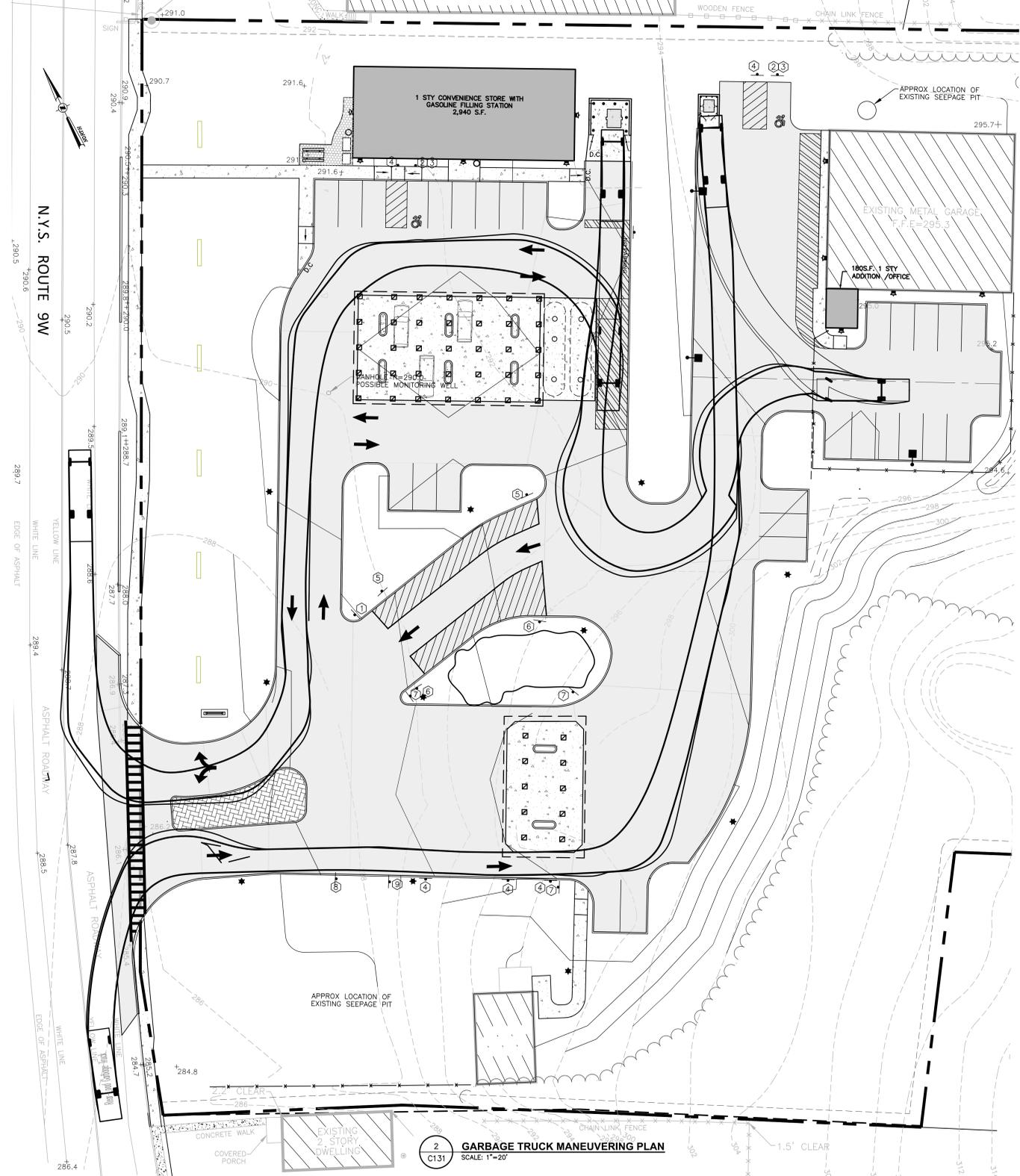
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checked CPL
date 01/20/22
scale 1"=20'
project no. 81912.00
sheet no. **C130**



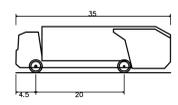
1 WB-67 TRUCK MANEUVERING PLAN
SCALE: 1"=20'



WB-67 - Interstate Semi-Trailer
 Overall Length 73.500ft
 Overall Width 8.500ft
 Overall Body Height 12.52ft
 Min Body Ground Clearance 8.500ft
 Max Track Width 8.00ft
 Lock-to-lock time 6.00s
 Max Steering Angle (Virtual) 28.40°



2 GARbage TRUCK MANEUVERING PLAN
SCALE: 1"=20'



Rear-Load Garbage Truck
 Overall Length 35.000ft
 Overall Width 8.500ft
 Overall Body Height 10.546ft
 Min Body Ground Clearance 8.300ft
 Track Width 8.300ft
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 29.300ft

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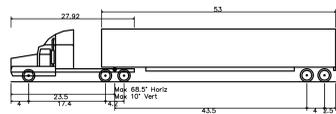
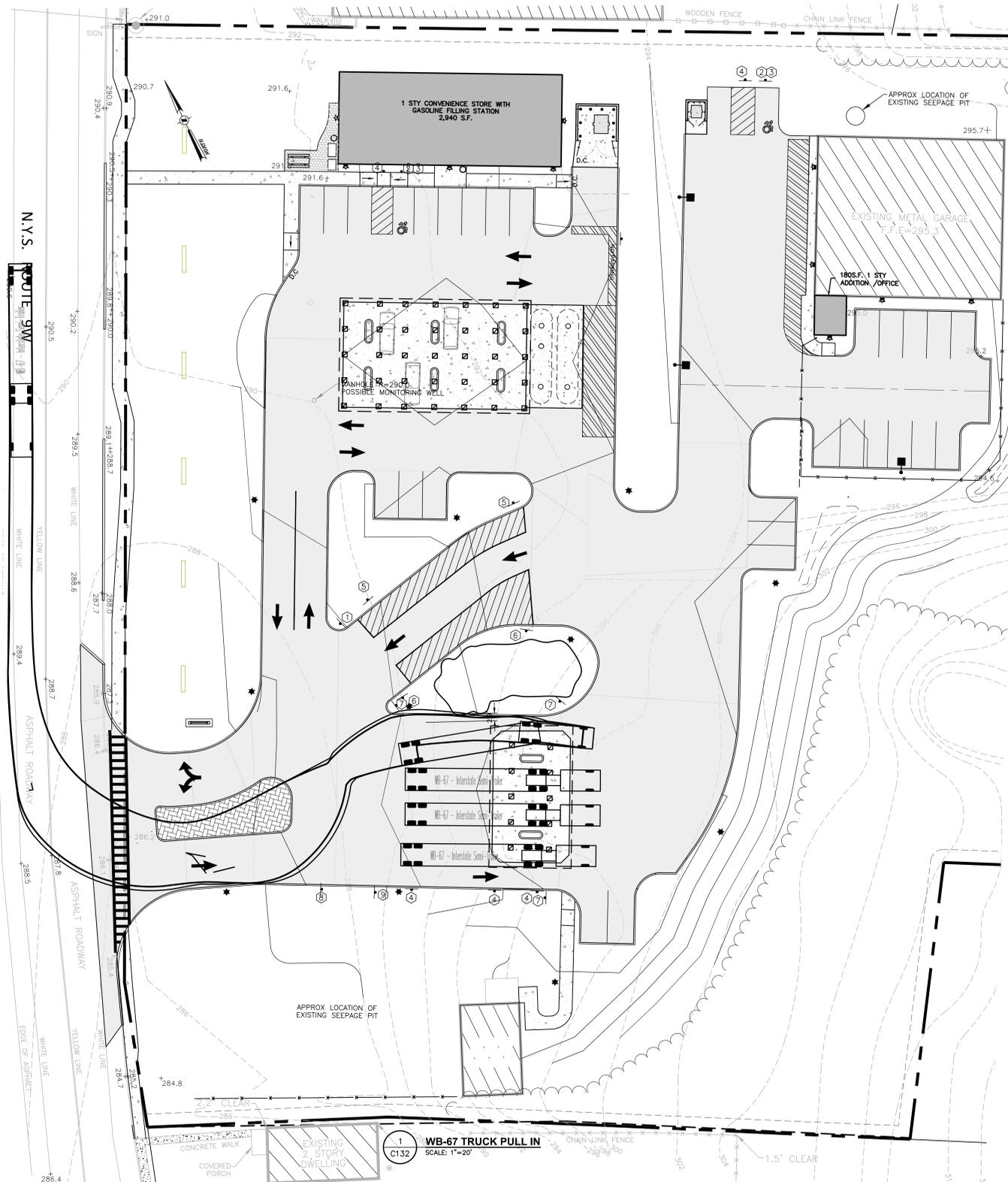


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rev.	date	description
1	03/03/22	REVISED PER TOWN COMMENTS

GAS LAND 5200 ROUTE 9W
TRUCK AND VEHICLE MANEUVERING PLAN
 TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed	checked
date	scale
01/20/22	1"=20'
project no.	81912.00
sheet no.	C131



WB-67 - Interstate Semi-Trailer
 Overall Length 73.500ft
 Overall Width 12.052ft
 Overall Body Height 13.344ft
 Min Body Ground Clearance 8.500ft
 Max Track Width 8.005ft
 Lock-to-lock time 26.40'

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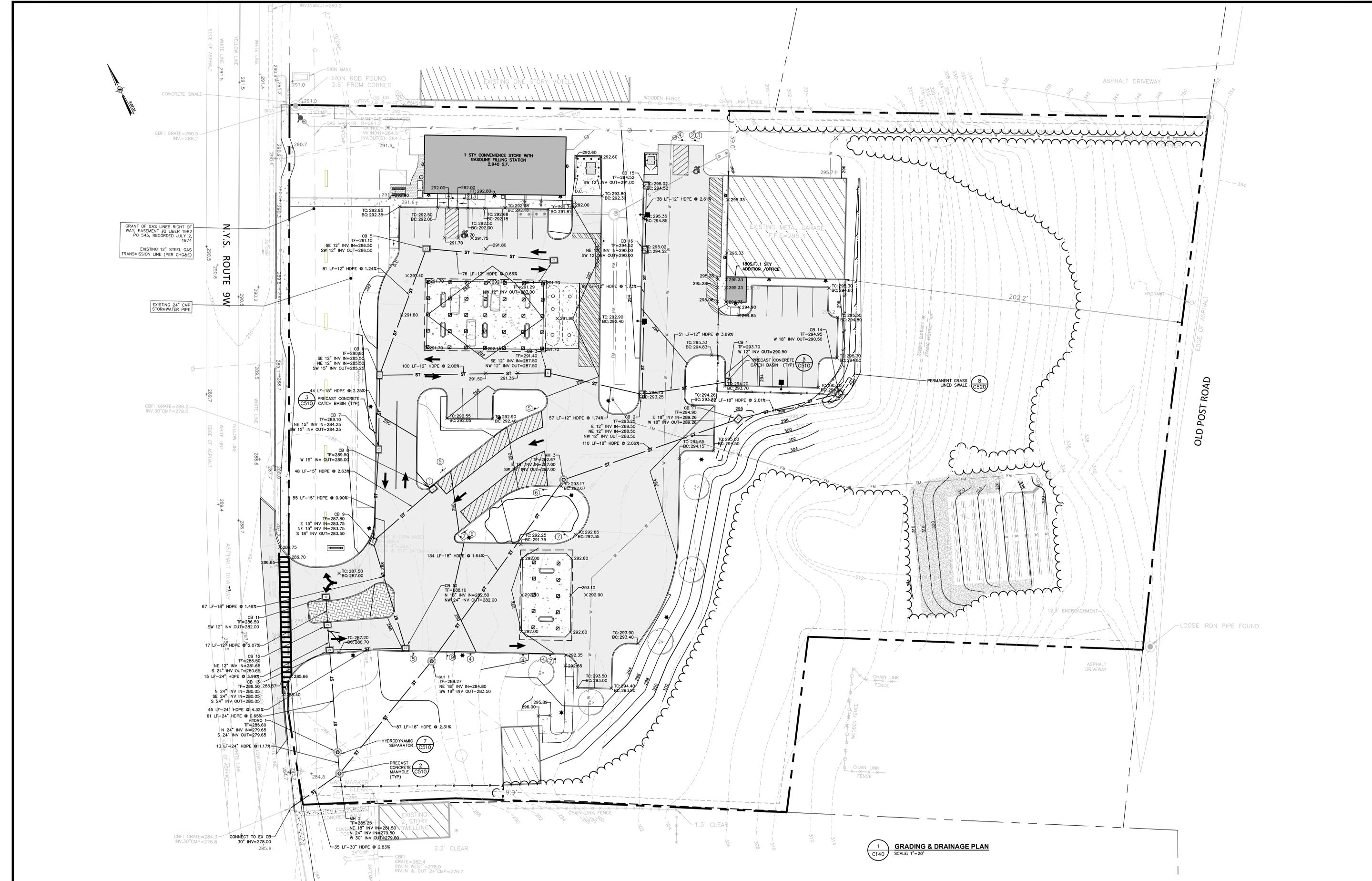


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 888-838-9073

rev.	date	description
1	03/03/22	REVISED PER TOWN COMMENTS

GAS LAND 5200 ROUTE 9W
**TRUCK MANUEVERING PLAN
 WB-67 PULL IN**
 TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed checked
 date scale
 01/23/22 1"=20'
 project no.
 81912.00
 sheet no.
C132



1 GRADING & DRAINAGE PLAN
SCALE: 1"=20'

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rev.	date	description
3	05/04/24	REVISED PER 3395 DESIGN
2	10/07/23	REVISED PER TOWN COMMENTS
1	05/03/22	REVISED PER TOWN COMMENTS

designed	checked
SPL	CPL
01/20/22	1"=20'
project no.	81912.00
sheet no.	C140

GAS LAND 5200 ROUTE 9W

GRADING & DRAINAGE PLAN

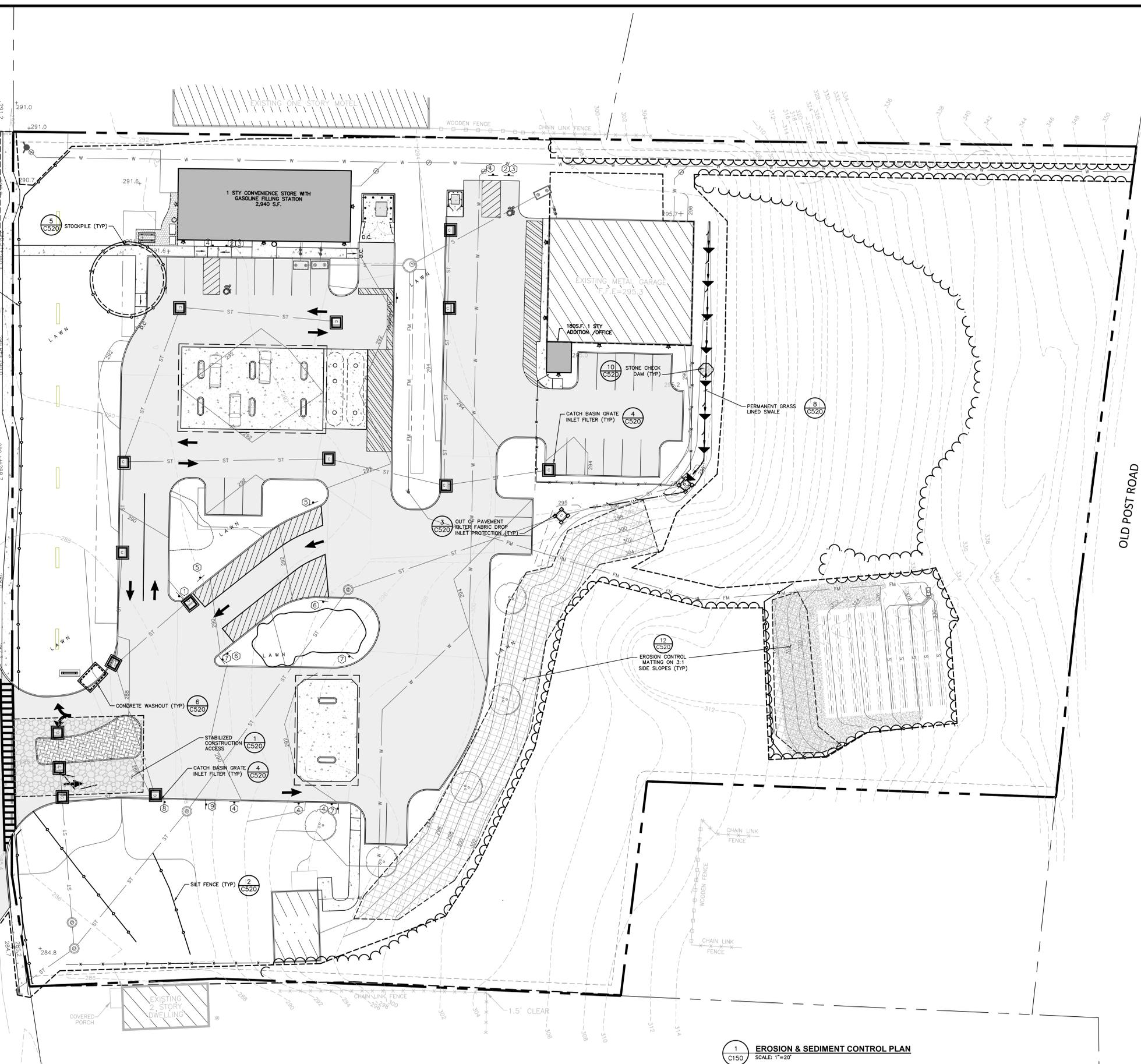
TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK



2 (C520) 13 (C520) SILT FENCE WITH WATTLE IN FRONT

N.Y.S. ROUTE 9W

WHITE LINE



OLD POST ROAD

1 EROSION & SEDIMENT CONTROL PLAN SCALE: 1"=20'

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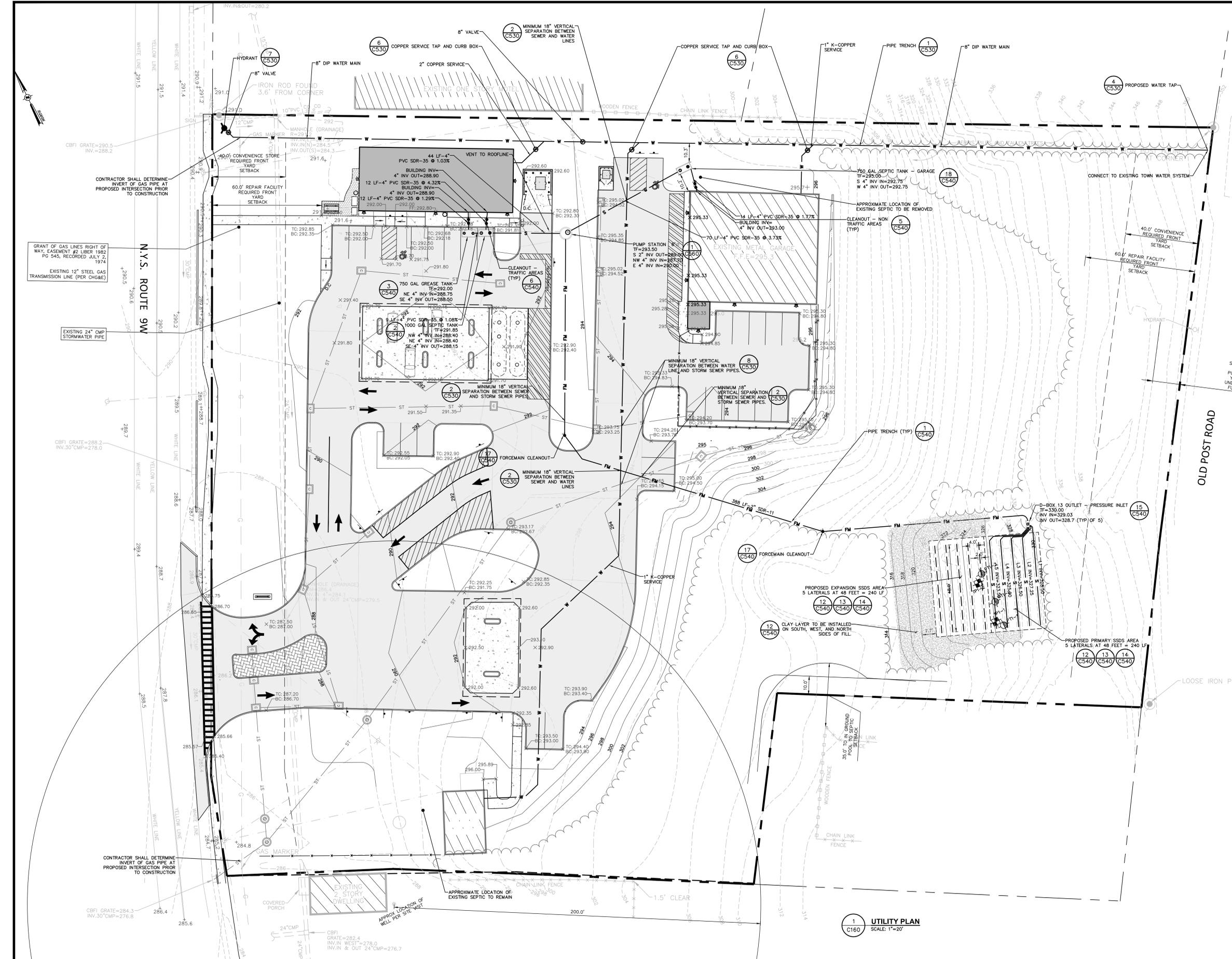


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GAS LAND 5200 ROUTE 9W
EROSION & SEDIMENT CONTROL PLAN
TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed	checked
SPL	CPL
01/23/22	1"=20'
project no.	81912.00
sheet no.	C150



- ### SEWAGE DISPOSAL SYSTEM DESIGN NOTES
1. NO COMPONENTS OF THE SEWAGE DISPOSAL SYSTEM IS TO BE BACK FILLED UNTIL INSPECTED BY THE ENGINEER PERFORMING THE CERTIFICATION AND THE TOWN ENGINEER.
 2. FINAL GRADING SHALL BE PERFORMED SO THAT NO SURFACE WATER WILL RUN ON OR COLLECT ON THE INSTALLED SEPTIC SYSTEM.
 3. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED.
 4. HEAVY EQUIPMENT SHALL BE KEPT OFF OF THE ABSORPTION FIELD AREA EXCEPT FOR ACTUAL CONSTRUCTION OF THE FIELD. THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE AREA OF THE PROPOSED FIELD, BEFORE, DURING AND AFTER CONSTRUCTION.
 5. TRENCHES SHALL NOT BE CONSTRUCTED IN WET SOIL.
 6. SIDES AND BOTTOM OF TRENCHES SHALL BE RAKED IMMEDIATELY PRIOR TO PLACING GRAVEL.
 7. THE END OF ALL DISTRIBUTION PIPES SHALL BE PLUGGED.
 8. THE LOCATION OF THE SEPTIC FIELD IS TO BE FIELD LOCATED BY A LICENSED NYS SURVEYOR PRIOR TO CONSTRUCTION. THE SEPTIC FIELD MUST BE CONSTRUCTED IN THE AREA SHOWN ON PLAN.
 9. THE ENGINEER MUST BE CONTACTED 24 HOURS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, TO SCHEDULE A REVIEW OF THE SEPTIC INSTALLATION.
 10. A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER SHALL INSPECT THE SANITARY FACILITIES (WATER SUPPLY, ANY WATER TREATMENT, AND SEWAGE DISPOSAL FACILITIES) AT THE TIME OF CONSTRUCTION. PRIOR TO OCCUPANCY, THE ENGINEER SHALL CERTIFY TO THE LOCAL CODE ENFORCEMENT OFFICER THAT THE FACILITIES ARE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS.
 11. THE OWNER AND/OR CONTRACTOR SHALL NOTIFY THE ENGINEER A MINIMUM OF FIVE (5) WORKING DAYS IN ADVANCE OF THE START OF WORK.
 12. ALL PIPES AT STRUCTURES AND CONTACT SURFACES ON GREASE TRAP, SEPTIC TANK & PUMP STATION TO HAVE AN ASPHALTIC SEAL OR ACCEPTABLE EQUAL.
 13. SANITARY FACILITIES ARE NOT TO BE RELOCATED OR REDESIGNED WITHOUT REVIEW AND APPROVAL OF THE ENGINEER AND THE AUTHORITY HAVING JURISDICTION ENGINEER.
 14. THERE WILL BE NO REGRADING OR COMPACTING IN THE AREA OF THE PROPOSED TILE FIELD.

- ### SUBSURFACE SEWAGE DISPOSAL SYSTEM
1. THE PROPOSED FACILITY SHALL NOT PROVIDE "SIT DOWN" SERVICE.
 2. FLOOR, FOOTING OR ROOF DRAINS, ETC. SHALL NOT BE ALLOWED TO ENTER THE SEWAGE DISPOSAL SYSTEM.
 3. THERE ARE NO KITCHEN SINK GARBAGE DISPOSAL SYSTEMS PLANNED OR INCLUDED IN THE DESIGN.
 4. IF AND WHEN IT BECOMES NECESSARY TO CONSTRUCT THE PROPOSED 100% RESERVE AREA, IT SHALL BE INSTALLED IN CONFORMANCE WITH THE SAME CONDITIONS AND SPECIFICATIONS SET FORTH AND APPROVED AS PART OF THIS PLAN.
 5. ONLY KITCHEN TYPE WASTEWATER FIXTURES MAY BE CONNECTED TO THE GREASE TRAP PIPING PIPING AND A PROFESSIONAL ENGINEER SHALL CERTIFY SO TO THE HEALTH DEPARTMENT.
 6. SEPTIC TANKS SHOULD BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS.
 7. DOSING CHAMBERS SHOULD BE INSPECTED PERIODICALLY BY A PROPERLY TRAINED PERSON FOR PROPER OPERATION, INCLUDING HIGH WATER ALARMS, VENTING AND ANY PHYSICAL DAMAGE.
 8. DISTRIBUTION BOXES/DROP BOXES SHOULD BE INSPECTED PERIODICALLY TO ASSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY.

- ### SSDS DEMAND CALCULATIONS:
- CONVENIENCE STORE/ DELI = 400 GPD/TOILET * 1 TOILET = 400 GPD
 - AUTO REPAIR FACILITY = 15 GPD/EMPLOYEE * 3 EMPLOYEES = 45 GPD
 - 80% REDUCTION FOR LOW FLOW = (400 GPD + 45 GPD) * 80% = 356 GPD
 - TOTAL DEMAND = 356 GPD

- ### NOTES:
1. PROPOSED SEPTIC FIELD REQUIRES A SUBMISSION OF AN AS-BUILT PLAN AND CERTIFICATION BY A LICENSED DESIGN PROFESSIONAL PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY.
 2. SEE DEEP AND PERC TEST RESULTS ON SHEET C541.

- ### INFILTRATOR SYSTEM DESIGN CALCULATIONS
- DESIGN FLOW = 356 GPD
 - PERCOLATION RATE = 21-30 MINUTES
 - APPLICATION RATE = 0.60
 - AREA REQUIRED = 356/60 = 5.93 SF
 - AREA PROVIDE = 296 LF * 0.75 (INFILTRATOR REDUCTION CONSTANT) = 222 LF
 - LINEAR FOOTAGE PROPOSED: 5 ROWS X 48 LF. = 240 LF TOTAL

1 UTILITY PLAN
SCALE: 1"=20'

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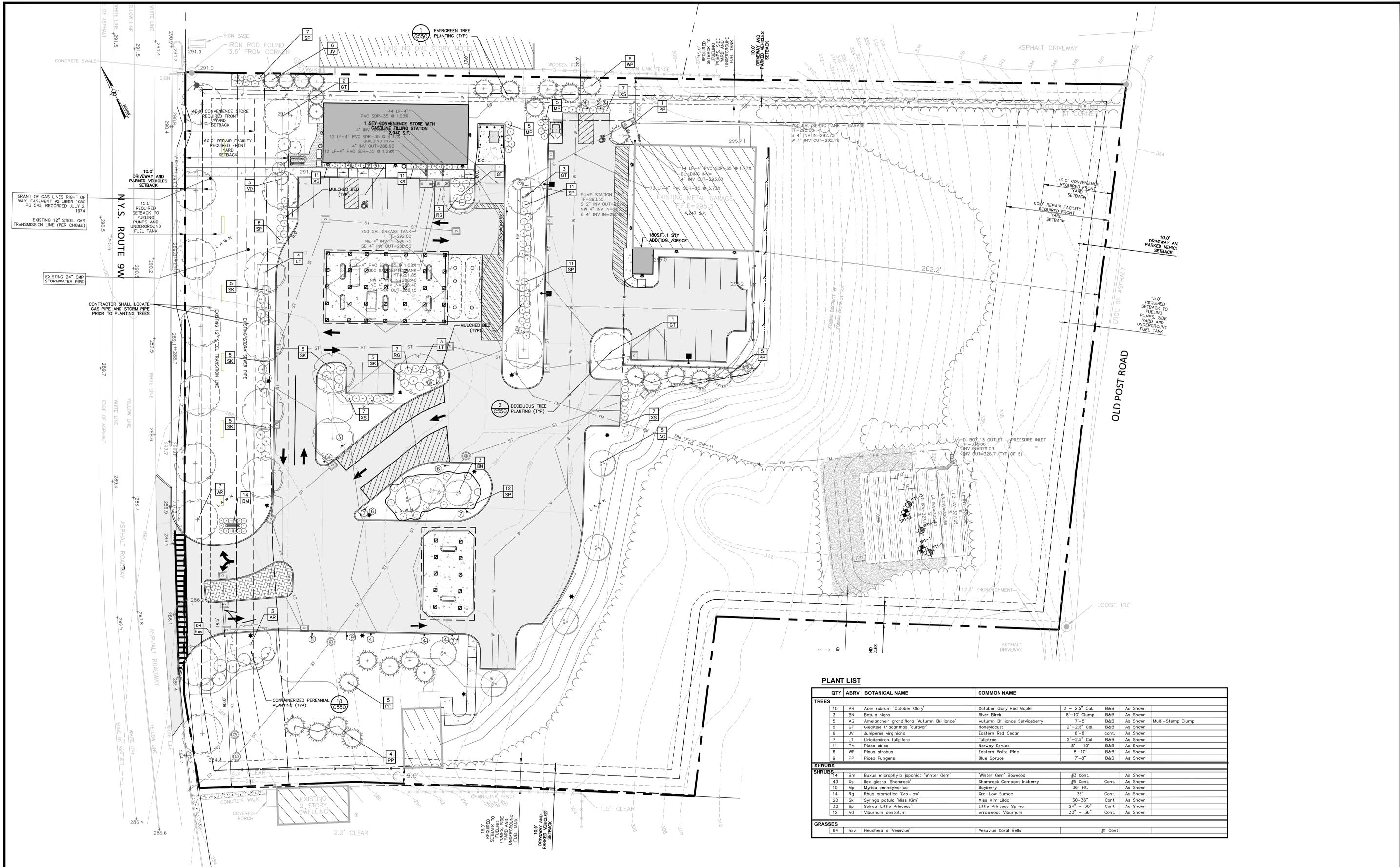
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GAS LAND 5200 ROUTE 9W

UTILITY PLAN

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed SPL	checked CPL
01/20/22	1"=20'
81912.00	
C160	



PLANT LIST

QTY	ABRV	BOTANICAL NAME	COMMON NAME				
TREES							
10	AR	Acer rubrum 'October Glory'	October Glory Red Maple	2 - 2.5" Cal.	B&B	As Shown	
3	BN	Betula nigra	River Birch	8'-10" Clump	B&B	As Shown	
5	AG	Amanchier grandiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	7'-8"	B&B	As Shown	Multi-Stem Clump
6	GT	Gleditsia triacanthos 'cultivar'	Honeylocust	2" - 2.5" Cal.	B&B	As Shown	
6	JV	Juniperus virginiana	Eastern Red Cedar	6'-8"	cont.	As Shown	
7	LT	Liriodendron tulipifera	Tulip Tree	2" - 2.5" Cal.	B&B	As Shown	
11	PA	Picea abies	Norway Spruce	8" - 10"	B&B	As Shown	
6	WP	Pinus strobus	Eastern White Pine	8"-10"	B&B	As Shown	
9	PP	Picea pungens	Blue Spruce	7'-8"	B&B	As Shown	
SHRUBS							
14	Bm	Buxus microphylla japonica 'Winter Gem'	'Winter Gem' Boxwood	#3 Cont.		As Shown	
43	Xs	Ilex glabra 'Shamrock'	Shamrock Compact Inkberry	#5 Cont.	Cont.	As Shown	
10	Mp	Myrica pennsylvanica	Bayberry	36" Ht.		As Shown	
14	Rg	Rhus aromatica 'Gra-low'	Gra-Low Sumac	36"		As Shown	
30	Sk	Syringa patula 'Miss Kim'	Miss Kim Lilac	30-36"	Cont.	As Shown	
32	Sp	Spiraea 'Little Princess'	Little Princess Spiraea	24" - 30"	Cont.	As Shown	
12	Vd	Viburnum dentatum	Arrowwood Viburnum	30" - 36"	Cont.	As Shown	
GRASSES							
64	Invx	Heuchera x 'vesuvius'	Vesuvius Coral Bells	#1 Cont.			

1 LANDSCAPE PLAN
SCALE: 1"=20'

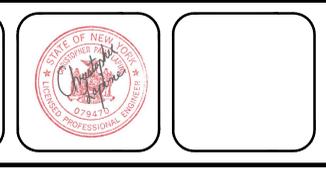
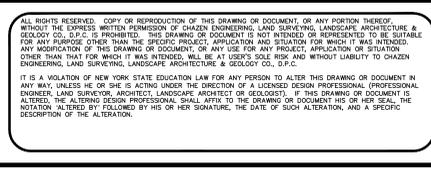
2 LANDSCAPE SCHEDULE
SCALE: NOT TO SCALE

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rev.	date	description
2	10/07/22	REVISED PER TOWN COMMENTS
1	03/03/22	REVISED PER TOWN COMMENTS

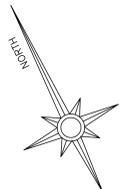
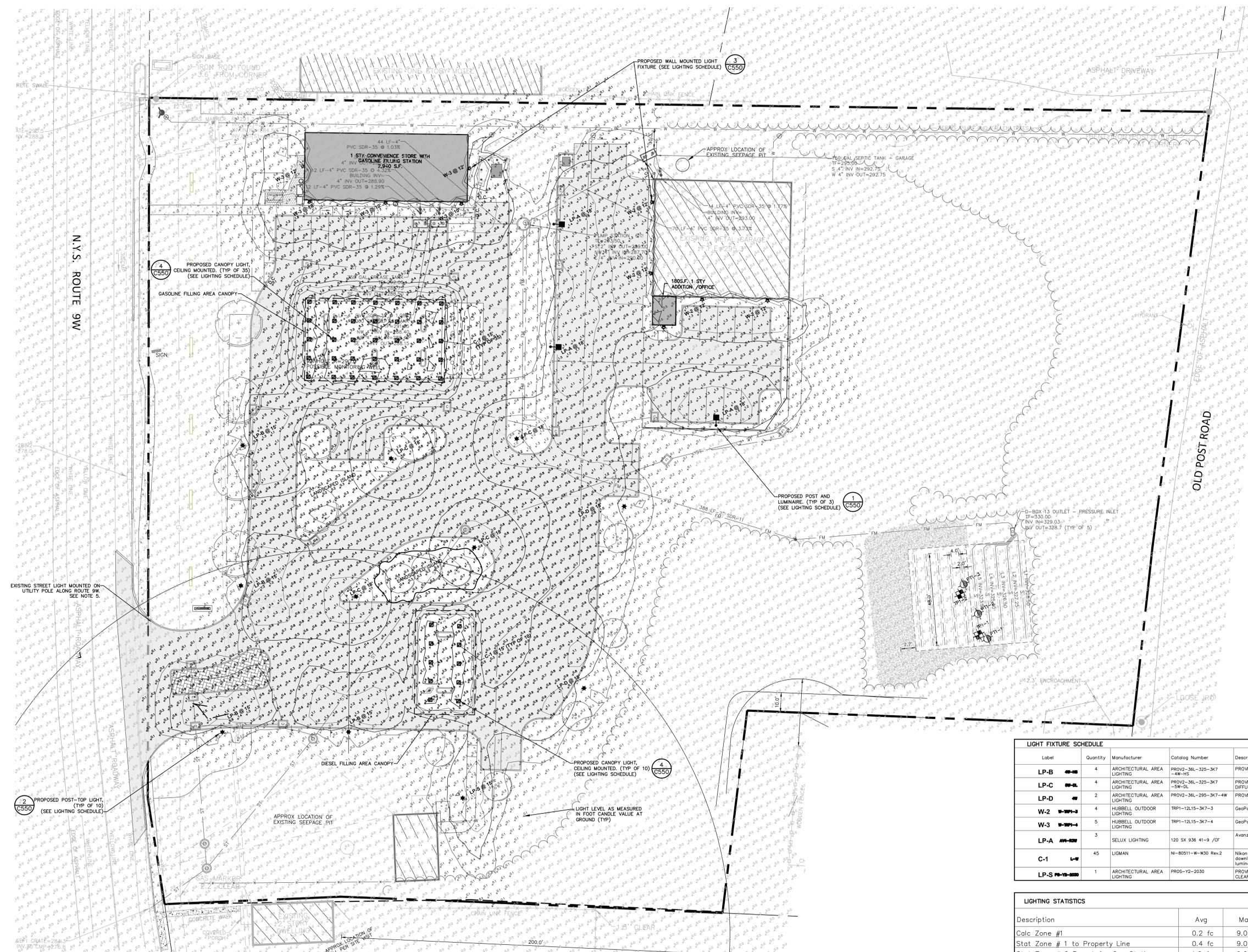
GAS LAND 5200 ROUTE 9W

LANDSCAPE PLAN

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

date	scale	checked
01/20/22	1"=20'	CPL

project no. 81912.00
sheet no. **C170**



GENERAL NOTES:

- SEE SHEET C550 FOR LIGHTING & LANDSCAPING DETAILS AND NOTES.

LIGHTING NOTES:

- PROPOSED LIGHTING IS MANUFACTURED BY ARCHITECTURAL AREA LIGHTING, SELUX LIGHTING, HUBBELL LIGHTING, AND LIGMAN LIGHTING.
- THE LIGHTING FIXTURES, SURFACE LOCATIONS ARE IDENTIFIED BY THE CHAZEN COMPANIES. DETAILED DESIGN OF THE LIGHTING SPECIFICATIONS, FOUNDATION DESIGN, LIGHTING CONDUIT, WIRING, AND CONTROL CIRCUITRY SHALL BE BY OTHERS.
- IF DISCREPANCIES EXIST BETWEEN THE LIGHTING SCHEDULE AND LIGHTING PLAN, THE PLAN SHALL DICTATE.
- GRID NUMBERS SHOWN REPRESENT FOOT-CANDLE VALUES AT GROUND PLANE.
- THE EXISTING STREET LIGHTS IN THE RIGHT-OF-WAYS HAVE NOT BEEN INCLUDED IN THIS PHOTOMETRIC ANALYSIS. THE LIGHT LEVELS SHOWN HEREON REFLECT THE PROPOSED LIGHTING ON SITE.
- ALL LIGHTING SHOWN ON THIS PLAN SHALL BE DIRECTED AND/OR SHIELDED SO AS TO PREVENT QUESTIONABLE GLARE FROM BEING OBSERVABLE FROM ADJOINING STREETS AND PROPERTIES.
- CONCRETE LIGHT BASE PER MANUFACTURER.
- EXISTING AND PROPOSED UTILITIES NOT SHOWN ON THIS SHEET FOR CLARITY. REFER TO SHEET C160 FOR UTILITY PLANS.
- ALL NON-ESSENTIAL LIGHTING SHALL BE TURNED-OFF AFTER BUSINESS HOURS, LEAVING ON ONLY THE NECESSARY LIGHTING FOR SITE SECURITY.

Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	MOUNT HEIGHT	Light Loss Factor	Wattage	Notes
LP-B	4	ARCHITECTURAL AREA LIGHTING	PROV2-36L-325-3K7-4W-HS	PROVIDENCE MEDIUM 2.0	1	2225	1	0.92	37.82	MEDIUM POST TOP, HOUSE-SIDE SHIELD
LP-C	4	ARCHITECTURAL AREA LIGHTING	PROV2-36L-325-3K7-5W-DL	PROVIDENCE MEDIUM 2.0 WITH DIFFUSED LENS	1	2466	1	0.92	37.73	MEDIUM POST TOP
LP-D	2	ARCHITECTURAL AREA LIGHTING	PROV2-36L-295-3K7-4W	PROVIDENCE MEDIUM 2.0	1	3498	1	0.92	34.1	MEDIUM POST TOP
W-2	4	HUBBELL OUTDOOR LIGHTING	TRP1-12L15-3K7-3	GeoPak Size 1	1	1478	1	0.92	13.9	WALL-MOUNTED, SMALL
W-3	5	HUBBELL OUTDOOR LIGHTING	TRP1-12L15-3K7-4	GeoPak Size 1	1	1471	1	0.92	13.9	WALL-MOUNTED, SMALL
LP-A	3	SELUX LIGHTING	120 SX 936 41-9 /CF	Avanza 450 w/ 0° Tilt	1	2755	1	0.92	38	POST & LUMINAIRE
C-1	45	LIGMAN	N-80511-W-W30 Rev.2	Nikon 2 recessed exterior spotlight square 120mm, luminaire LED	1	753	1	0.92	12.5	CANOPY LIGHTS
LP-S	1	ARCHITECTURAL AREA LIGHTING	PRO5-Y2-2030	PROVIDENCE SMALL WITH CLEAR FLAT GLASS LENS	1	1792	1	0.95	25.1	SMALL POST TOP

LIGHTING STATISTICS					
Description	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1	0.2 fc	9.0 fc	0.0 fc	N/A	N/A
Stat Zone # 1 to Property Line	0.4 fc	9.0 fc	0.0 fc	N/A	N/A
Stat Zone # 2 Pavmt for Gas Station	1.2 fc	9.0 fc	0.0 fc	N/A	N/A
Stat Zone # 3 Pavmt and Parking at Garage	0.9 fc	1.7 fc	0.2 fc	8.5:1	4.5:1
Stat Zone # 4 - 2 pkg spaces at Residence	0.4 fc	0.7 fc	0.2 fc	3.5:1	2.0:1

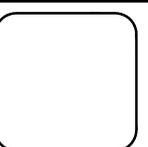
1 PHOTOMETRIC LIGHTING PLAN
SCALE: 1"=20'

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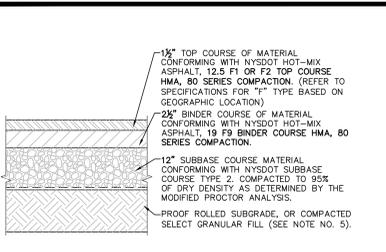
rev.	date	description
1	05/22/22	REVISED PER TOWN COMMENTS

GAS LAND 5200 ROUTE 9W

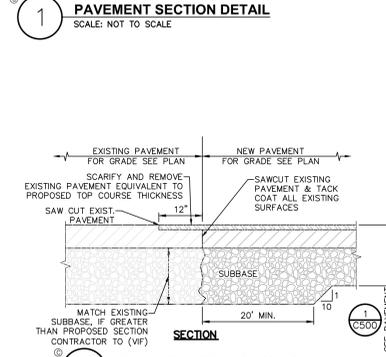
PHOTOMETRIC LIGHTING PLAN

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

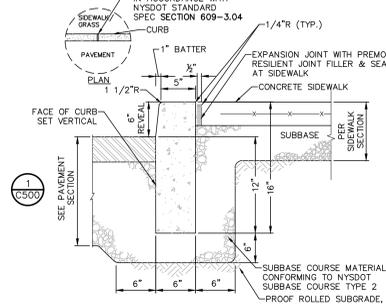
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 sheet no. **C180**



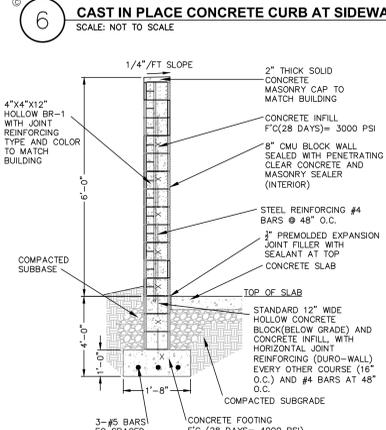
NOTES:
 1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED "CURRENT VERSION", AND ALL ADDENDA THERE TO.
 2. SUBBASE COURSE SHALL CONFORM WITH SECTION 304 - SUBBASE COURSE OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWINGS.
 3. HOT MIX ASPHALT (HMA) PAVEMENT SHALL CONFORM WITH SECTION 400-HOT MIX ASPHALT (HMA) PAVEMENTS SPECIFIED IN THESE DRAWINGS. ALTHOUGH SECTION 400 IN ITS ENTIRETY IS REFERENCED, THE HOT MIX ASPHALT (HMA) PAVEMENTS SPECIFIED IN THESE DRAWINGS SHALL BE AS SPECIFIED UNDER SECTION 402-HOT MIX ASPHALT (HMA) PAVEMENTS.
 4. TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 407-TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
 5. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.



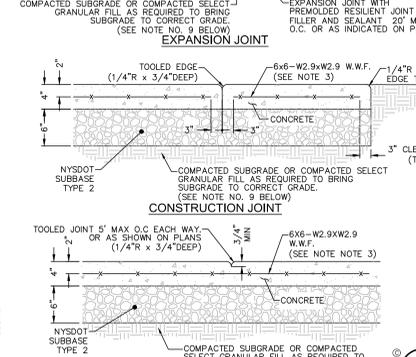
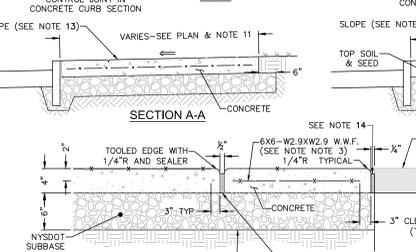
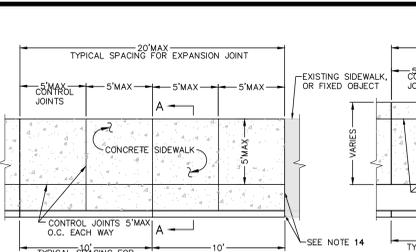
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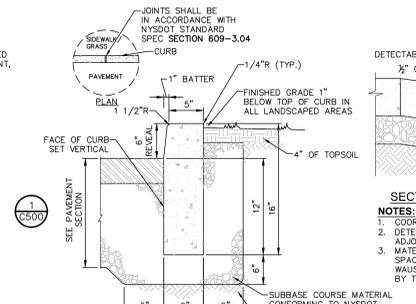
2 CONSTRUCTION JOINT
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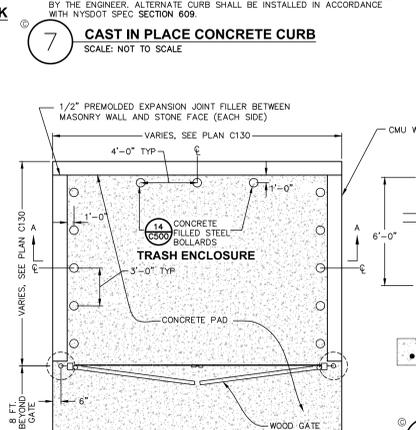
3 CAST IN PLACE CONCRETE CURB AT SIDEWALK
SCALE: NOT TO SCALE



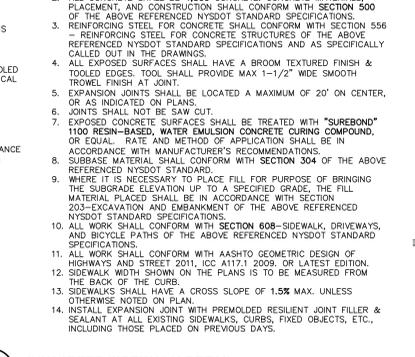
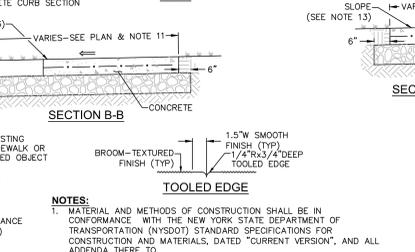
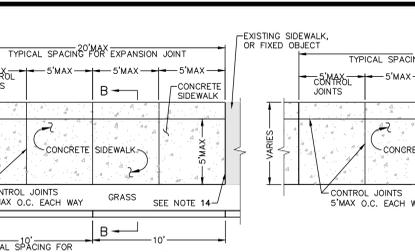
4 CONCRETE SIDEWALK DETAIL
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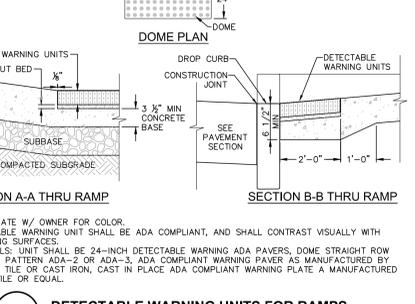
5 DETECTABLE WARNING UNITS FOR RAMPS
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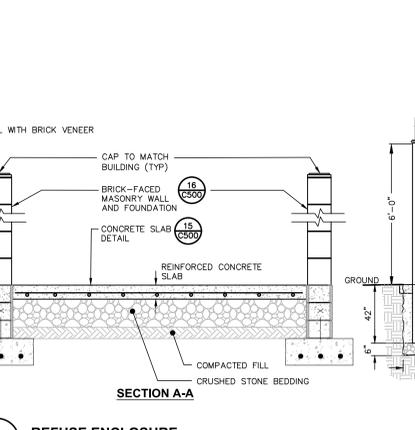
6 CAST IN PLACE CONCRETE CURB
SCALE: NOT TO SCALE



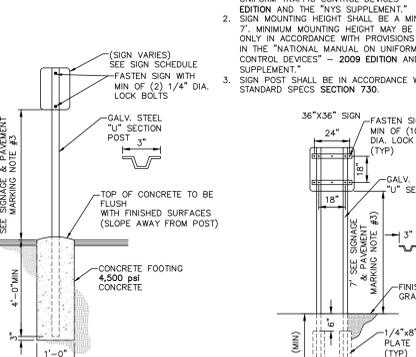
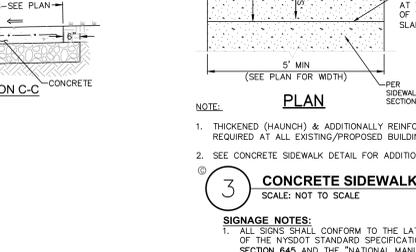
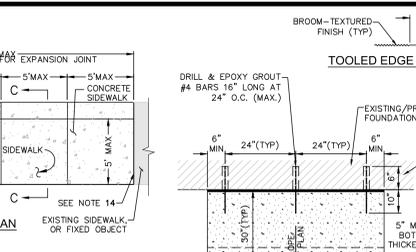
7 TOOLED EDGE
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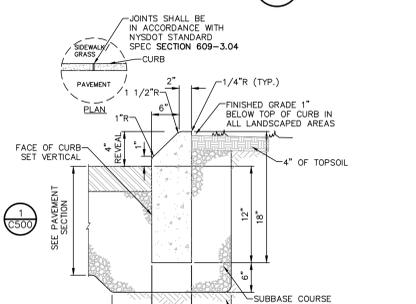
8 SECTION B-B THRU RAMP
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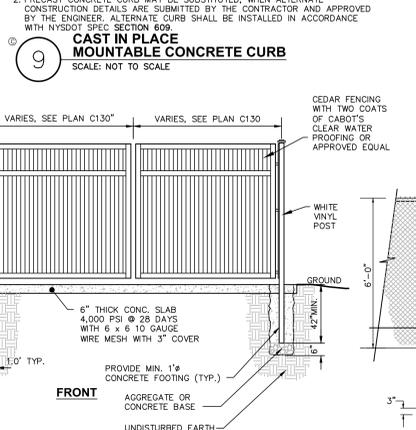
9 REFUSE ENCLOSURE
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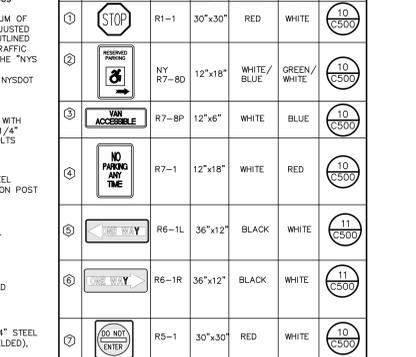
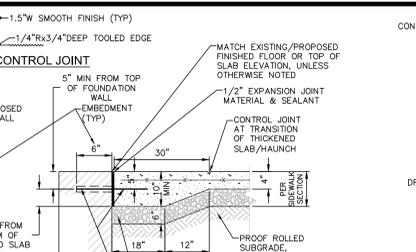
10 CONCRETE SIDEWALK AT BUILDING ENTRANCES
SCALE: NOT TO SCALE



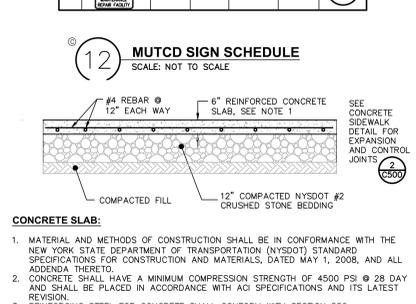
11 SINGLE POST IN CONCRETE SIGN MOUNTING DETAIL
SCALE: NOT TO SCALE



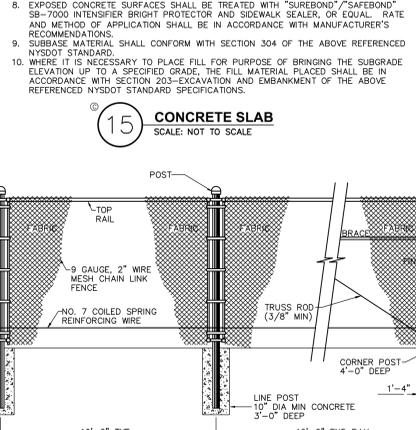
12 CONCRETE SLAB
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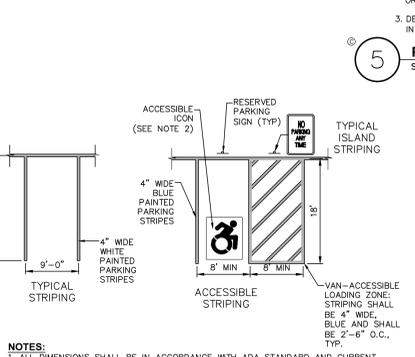
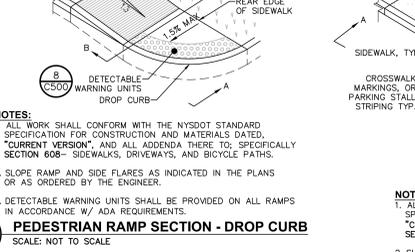
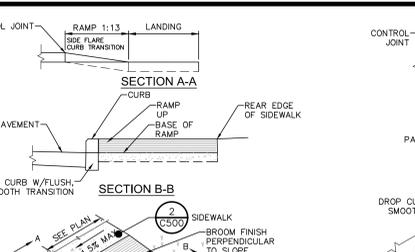
13 MUTCD SIGN SCHEDULE
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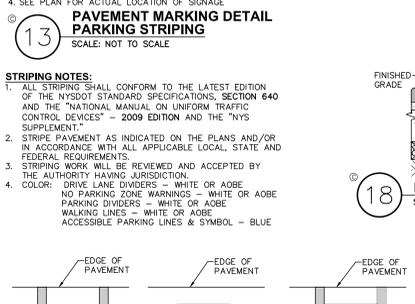
14 PAVEMENT MARKING DETAIL PARKING STRIPING
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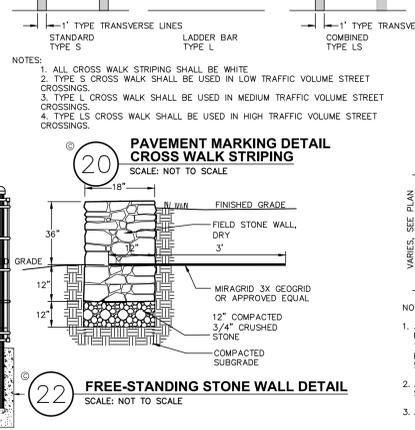
15 FREE-STANDING STONE WALL DETAIL
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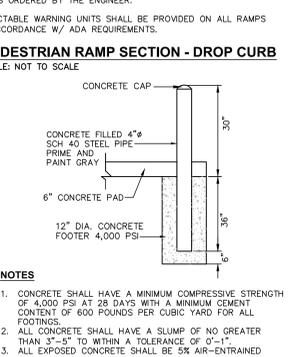
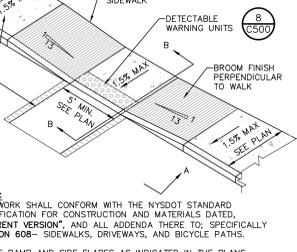
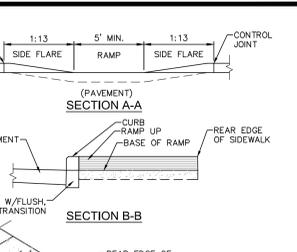
16 PEDESTRIAN RAMP SECTION - DROP CURB
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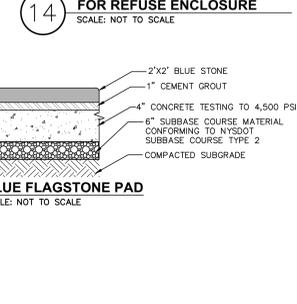
17 BLUE FLAGSTONE PAD
SCALE: NOT TO SCALE



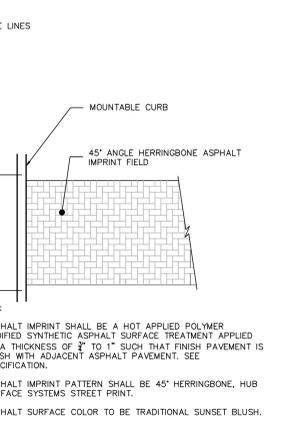
18 CHAIN LINK FABRIC FENCE
SCALE: NOT TO SCALE



19 STAMPED ASPHALT PAVEMENT
SCALE: NOT TO SCALE



20 REFUSE ENCLOSURE
SCALE: NOT TO SCALE



21 REFUSE ENCLOSURE
SCALE: NOT TO SCALE

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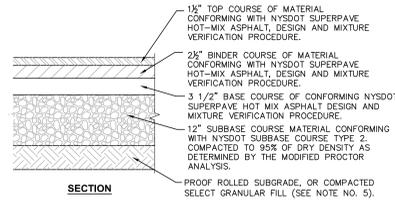
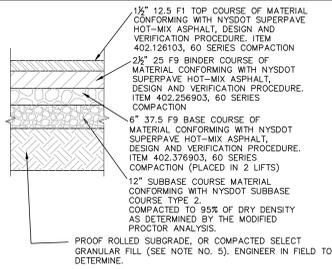
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2 10/07/22 REVISED PER TOWN COMMENTS
 1 03/03/22 REVISED PER TOWN COMMENTS
 rev. date description

GAS LAND 5200 ROUTE 9W
 SITE DETAILS
 TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed SPL checked CPL
 date 01/20/22 scale AS SHOWN
 project no. 81912.00
 sheet no. C500

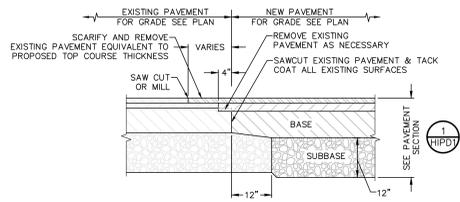


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 - TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 407-TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
 - WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
 - PAVEMENT SECTION SHOWN IS PRELIMINARY. PRIOR TO BIDDING AND COMMENCEMENT OF CONSTRUCTION, THE FINAL DESIGN OF THE PAVEMENT SECTION MUST BE PREPARED BY A NYS LICENSED PROFESSIONAL ENGINEER AND MUST BE BASED ON A CURRENT GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
 - PG BINDER 64E-22 SHALL BE IMPLEMENTED FOR ALL PAVING PROCEDURES.
 - STRAIGHT TACK COAT (ITEM 407.0103) SHALL BE APPLIED BETWEEN ALL PAVEMENT LIFTS.
 - JOINT ADHESIVE (ITEM 418.7603) SHALL BE APPLIED WHEREVER NEW PAVEMENT WILL ADJOIN EXISTING PAVEMENT.

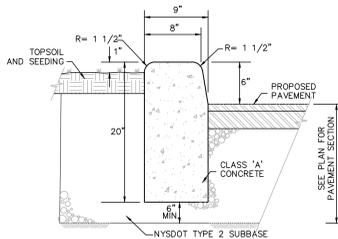
- NOTES:**
- MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008, AND ALL ADDENDA THERE TO.
 - SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 - SUBBASE COURSE OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWINGS.
 - HOT MIX ASPHALT (HMA) PAVEMENT SHALL CONFORM WITH SECTION 400-HOT MIX ASPHALT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWINGS. ALTHOUGH SECTION 400 IN ITS ENTIRETY IS REFERENCED, THE HOT MIX ASPHALT (HMA) PAVEMENT(S) SPECIFIED FOR THIS CONTRACT SHALL BE AS SPECIFIED UNDER SECTION 403-HOT MIX ASPHALT (HMA) PAVEMENTS FOR MUNICIPALITIES.
 - TACK COAT WHEN SPECIFIED OR CALLED OUT IN THESE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATIONS SHALL CONFORM WITH SECTION 407-TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
 - WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WITH SECTION 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
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1 NYSDOT TRAVEL LANE PAVEMENT DETAIL
SCALE: NOT TO SCALE

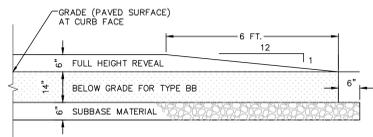
5 NYSDOT SHOULDER PAVEMENT DETAIL
SCALE: NOT TO SCALE



2 NYSDOT PAVEMENT TRANSITION
SCALE: NOT TO SCALE



3 NYSDOT CURB DETAIL
SCALE: NOT TO SCALE



4 NYSDOT CURB TERMINAL
SCALE: NOT TO SCALE



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Date Printed: Mar 04, 2024, 4:40pm

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rev.	date	description
1	03/03/22	REVISED PER TOWN COMMENTS

GAS LAND 5200 ROUTE 9W

NYSDOT DETAILS

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed	checked
SPL	CPL
date	scale
01/23/22	AS SHOWN
project no.	81912.00
sheet no.	C501

FOR PLANNING BOARD REVIEW - NOT FOR CONSTRUCTION

CONSTRUCTION PHASING NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE OWNER AND NYSDOT ENGINEER IN WRITING WHEN CONSTRUCTION WILL BEGIN, AT LEAST TWO (2) WEEKS PRIOR TO THE START OF WORK.
2. PRIOR TO LEAVING THE WORK SITE EACH DAY, THE CONTRACTOR SHALL REMOVE OR PROTECT ANY PART OF THE WORK SITE THAT MAY BE CONSIDERED HAZARDOUS TO THE TRAVELING PUBLIC.
3. WHILE PAVING WITHIN WORK ZONE, THE CONTRACTOR SHALL FOLLOW FIGURE 302-9B ON PAGE 2532 OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
4. PAVEMENT RESURFACING OPERATIONS SHALL BE SCHEDULED SO AS TO MINIMIZE THE LONGITUDINAL LENGTH OF EXPOSED PAVEMENT EDGES LEFT OVERNIGHT. REFER TO N.Y.S.D.O.T. STANDARD SPECIFICATION SECTION 402-3.09 JOINTS.

HIGHWAY WORK PERMIT NOTES:

1. NO TRAVEL LANE CLOSURE DURING THE FOLLOWING TIMES (OR ACCORDING TO PERMIT):
6:30 TO 9:30 A.M.
4:30 TO 6:30 P.M.
2. ALL LANE CLOSURE AND TRAFFIC CONTROL MUST CONFORM TO THE LATEST EDITION OF THE NYSDOT SPECIFICATIONS, SECTION 640 AND THE CODES RULES AND REGULATIONS OF THE STATE OF NEW YORK (NYCR) TITLE 17-TRANSPORTATION VOLUME B-CHAPTER V "UNIFORM TRAFFIC CONTROL DEVICES." AS PER FHWA MUTCD 2009 EDITION AND NYS SUPPLEMENTAL TO NATIONAL MUTCD 2010 EDITION.
3. THE CONTRACTOR SHALL COMPLY WITH THE WORK RESTRICTIONS FOR HOLIDAYS AND OTHER EVENTS AS PART OF THE STANDARD CONDITION AND OBLIGATION FOR HIGHWAY WORK PERMITS. LANE CLOSURES WILL NOT BE PERMITTED DURING THE FOLLOWING HOLIDAY PERIODS: EASTER WEEKEND, MEMORIAL DAY, INDEPENDENCE DAY, THANKSGIVING, CHRISTMAS, AND NEW YEARS DAY.

REFERENCE NOTES:

1. EXISTING PAVEMENT MARKINGS TO BE CLEANED UNDER ITEMS 635.0103, 635.0203, AND 635.0303, PRIOR TO THE INSTALLATION OF NEW PAVEMENT MARKINGS, A.O.B.E.
2. PAVEMENT MARKINGS ARE TO BE DIMENSIONED AS PER NYS STANDARD SHEETS 685-1, 685-1R1, 685-2R2, 685-3R2, 685-4R2, 685-5.

GENERAL NOTES:

1. EXISTING TOPOGRAPHIC INFORMATION FOR HERON WAS COMPILED FROM A SURVEY COMPLETED OCTOBER 21, 2019, BY HERITAGE LAND SURVEYING, P.C..
2. UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.
3. SURVEYED WITHOUT THE BENEFIT OF A TITLE SEARCH.
4. COPYRIGHT CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE CO., D.P.C., ALL RIGHTS RESERVED.
5. SURVEYED FROM RECORD DESCRIPTION AND AS IN POSSESSION.
6. SUBJECT TO COVENANTS, EASEMENTS, RESTRICTIONS, CONDITIONS AND AGREEMENTS OF RECORD.
7. BUILDING SHOWN HEREON SERVED BY UNDERGROUND UTILITIES.
8. THE CONTRACTOR SHALL COMPLY WITH THE NEW YORK STATE INDUSTRIAL CODE RULE 753 - 48 HOURS PRIOR TO DIGGING CALL DIGSAFEEY WORK YORK 1-800-962-7962 TO HAVE PUBLIC UTILITY LOCATIONS PAINTED.
9. TOPOGRAPHY SHOWN HEREON WAS COMPILED FROM A FIELD SURVEY COMPLETED NOVEMBER 16, 2017, BY CHAZEN ENGINEERING, LAND SURVEYING AND LANDSCAPE ARCHITECTURE CO. D.P.C. DATUM NAVD-88, 1 FOOT CONTOUR INTERVAL.
10. UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON WERE TAKEN FROM DATA OBTAINED FROM PREVIOUS MAPS AND RECORD DRAWINGS. ALL ABOVE GROUND STRUCTURES AND SURFACE FEATURES SHOWN HEREON ARE THE RESULT OF A FIELD SURVEY UNLESS OTHERWISE NOTED. THERE MAY BE OTHER UNDERGROUND UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN OR CERTIFIED BY THE UNDERSIGNED. SIZE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES MUST BE VERIFIED BY THE APPROPRIATE AUTHORITIES. THE UNDERGROUND FACILITIES PROTECTIVE ORGANIZATION MUST BE NOTIFIED PRIOR TO CONDUCTING TEST BORINGS, EXCAVATION AND CONSTRUCTION.
11. CONTRACTOR SHALL FIELD VERIFY EXISTING GRASSES, EXISTING STRUCTURE LOCATIONS AND OTHER EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE FOR FURTHER RESOLUTION.
12. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT OTHER CONTRACTORS MAY BE WORKING IN THE AREA ON OTHER CONSTRUCTION AT THE SAME TIME THAT WORK IS PERFORMED UNDER THIS CONTRACT. THE CONTRACTOR SHALL BE AWARE OF THE NATURE AND EXTENT OF THIS OTHER WORK AND SHALL SCHEDULE AND CONDUCT HIS OWN OPERATION SO THAT THERE WILL BE NO CONFLICT IN OPERATIONS.
13. SINCE THIS PROJECT INVOLVES CONSTRUCTION WITHIN AN ACTIVE ROADWAY, IT IS IMPERATIVE THAT THE CONSTRUCTION BE CARRIED FORTH IN SUCH A MANNER AS TO INSURE THAT PROPER TRAFFIC FLOW IS MAINTAINED DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE MAINTENANCE AND PROTECTION OF TRAFFIC IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND STANDARD SPECIFICATIONS.
14. THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND DIMENSIONS AND SHALL BE RESPONSIBLE FOR FIELD FIT FINISH AND QUALITY OF WORK AND MATERIALS USED IN THE CONSTRUCTION. NO ALLOWANCE SHALL BE MADE ON BEHALF OF THE CONTRACTOR FOR ANY ERROR OR NEGLECT ON HIS PART.
15. THE CONTRACTOR IS RESPONSIBLE FOR THE REPLACEMENT AND RESTORATION OF ALL NATURAL AND MANMADE FEATURES WHETHER SHOWN ON THE PLANS OR ENCOUNTERED IN THE FIELD. IT IS THE INTENTION OF THE PLANS TO SHOW ONLY MAJOR FEATURES TO BE PROTECTED, RESTORED OR REPLACED.
16. PROTECTION AND RESTORATION OF PROPERTY SHALL BE IN ACCORDANCE WITH THE NYSDOT STANDARD SPECIFICATIONS.
17. TOPSOIL SHALL BE PLACED AND AREAS SHALL BE SEEDED AS SOON AS FINAL GRADES ARE ESTABLISHED ON PERMANENT SLOPES. SLOPES SHALL ALSO BE MULCHED.
18. THE CONTRACTOR SHALL CONTACT ALL THE APPROPRIATE PARTIES WITH JURISDICTION OVER THE UTILITIES ENTERING ON OR NEAR THE PROJECT AREA PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES AND PROVIDE THOSE AGENCIES 72 HOURS NOTIFICATION.
19. THE CONTRACTOR SHALL VERIFY THE LOCATION OF AND SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL PUBLIC AND PRIVATE UTILITIES AND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION, IN SO FAR AS THEY MAY BE ENDANGERED BY HIS OPERATIONS. THIS SHALL INCLUDE TRUE WHETHER OR NOT THEY ARE SHOWN ON THE CONTRACT DRAWINGS. IF THEY ARE SHOWN ON THE DRAWINGS, THEIR LOCATIONS ARE NOT GUARANTEED EVEN THOUGH THE INFORMATION WAS OBTAINED FROM THE BEST AVAILABLE SOURCES, AND IN ANY EVENT, OTHER UTILITIES NOT SHOWN ON THESE PLANS MAY BE ENCOUNTERED IN THE FIELD. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, REPAIR OR REPLACE ANY STRUCTURES OR UTILITIES THAT HE DAMAGES, AND SHALL CONSTANTLY PROCEED WITH CAUTION TO PREVENT UNDUE INTERRUPTION TO UTILITY SERVICES.
20. IF TEMPORARY UTILITY SERVICES ARE REQUIRED, THE CONTRACTOR SHALL SEE TO IT THAT THEY ARE PROVIDED, AT NO ADDITIONAL COST TO THE OWNER, AND IT SHALL BE HIS RESPONSIBILITY TO MAINTAIN SUCH TEMPORARY FACILITIES FOR THE DURATION OF THE PROJECT AS NECESSARY.
21. ALL EPOXY PAVEMENT MARKINGS AND ALL SIGNS SHALL BE IN CONFORMANCE WITH THE NYSDOT MUTCD.
22. ALL DISTURBED AREAS WITHIN THE R.O.W. SHALL BE TOPSOILED, SEEDED AND MULCHED.
23. ALL SIGNING WILL BE IN ACCORDANCE WITH THE NATIONAL MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES WITH NYS SUPPLEMENT, MOST RECENT VERSION.
24. PRIOR TO LEAVING THE WORK SITE EACH DAY, THE CONTRACTOR SHALL REMOVE OR PROTECT ANY PART OF THE WORK SITE THAT IS CONSIDERED HAZARDOUS TO THE TRAVELING PUBLIC, BY THE NYSDOT RESIDENT ENGINEER OR PERMIT ENGINEER, TOWN ENGINEER, OR POLICE DEPARTMENT.
25. DURING ALL CONSTRUCTION OPERATIONS THE CONTRACTOR SHALL MAINTAIN ACCESS TO EACH ADJACENT SITE. IF CONDITIONS REQUIRE THAT ACCESS BE TEMPORARILY CLOSED, THE CONTRACTOR SHALL NOTIFY THE OWNER AT LEAST 24 HOURS IN ADVANCE. ALL TEMPORARY DRIVES WILL BE OPEN FOR SAFE USE AT THE END OF EACH WORK DAY.
26. PAVEMENT LETTERS AND SYMBOLS SHALL BE IN CONFORMANCE WITH NYSDOT STANDARD SHEET 685-2R2.
27. IN ADDITION TO THE ABOVE NOTES, THE CONTRACTOR SHALL FOLLOW ALL NOTES ATTACHED TO THE NYSDOT WORK PERMIT.
28. AREAS DISTURBED NOT RECEIVING PAVEMENT OR CONCRETE SHALL BE TOPSOILED, SEEDED, AND MULCHED IN ACCORDANCE WITH SPECIFICATIONS ON ATTACHED SHEETS.

SIGNAGE AND PAVEMENT MARKING NOTES:

1. ALL SIGNS AND PAVEMENT MARKINGS SHALL CONFORM TO THE MAY 1, 2008 EDITION OF THE NYSDOT STANDARD SPECIFICATIONS WITH LATEST REVISIONS, SECTION 645 AND AS NOTED IN 4, 5, AND 6 BELOW, AND THE CODES RULES AND REGULATIONS OF THE STATE OF NEW YORK (NYCR) TITLE 17-TRANSPORTATION VOLUME B-CHAPTER V "UNIFORM TRAFFIC CONTROL DEVICES, AS PER FHWA MUTCD 2009 EDITION AND NYS SUPPLEMENTAL TO NATIONAL MUTCD 2010 EDITION.
2. STRIPING WORK WILL BE REVIEWED AND ACCEPTED BY THE NYSDOT.
3. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008, AND ALL ADDENDA THERETO; THE ONLY EXCEPTION BEING THAT THE WORK OF THIS CONTRACT SHALL BE MEASURED IN ENGLISH UNITS.
4. PAVEMENT MARKINGS SHALL CONFORM WITH NYSDOT SECTION 685 - EPOXY REFLECTORIZED PAVEMENT MARKINGS
5. SURFACE PREPARATION FOR THE INSTALLATION OF PAVEMENT MARKING, SHALL CONFORM WITH SECTION 635 - CLEANING AND PREPARATION OF PAVEMENT SURFACES FOR PAVEMENT MARKINGS.
6. PERMANENT SIGNING SHALL BE INSTALLED ON TYPE A POSTS.

GENERAL CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AND UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.
2. ALL PAVEMENT RESTORATION SHALL MEET AND MATCH EXISTING GRADES.
3. ALL SAWCUT LINES SHALL BE PARALLEL AND CURVILINEAR TO EXISTING OR PROPOSED CURBING AND SHALL BE A CONSTANT DISTANCE OF 18" MIN AWAY.
4. NOTIFY ENGINEER 48 HOURS PRIOR TO INITIALIZATION OF ANY WORK ON SITE.
5. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT PRIOR REVIEW FROM THE ENGINEER.
6. CONTRACTOR IS RESPONSIBLE FOR EMPLOYING AND MAINTAINING ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING CONSTRUCTION.
7. CONTRACTOR IS RESPONSIBLE FOR PROPERLY & SAFELY MAINTAINING AREA BETWEEN ALL ADJOINING PROPERTIES.
8. NO WORK, STORAGE OR TRESPASS SHALL BE PERMITTED BEYOND THE SITE PROPERTY LINES OR PUBLIC RIGHT-OF-WAY.
9. ALL EXISTING LAWN AREA, CURBING, PAVING, SIDEWALKS, CULVERTS OR OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED BY TRENCHING OR EXCAVATION OPERATIONS SHALL BE REPLACED OR REPAIRED TO A CONDITION EQUAL TO EXISTING, AS DESCRIBED IN CONTRACT DOCUMENTS OR AS ORDERED BY ENGINEER (AOBE). MAILBOXES, SIGN POSTS, ETC SHALL BE PROTECTED OR REMOVED AND REPLACED EXACTLY AS THEY WERE BEFORE BEING DISTURBED. REMOVE AND REPLACE AFFECTED CURBING AND SIDEWALK TO NEAREST JOINT. REMOVE PAVEMENT AND REPLACE TO SAW CUT LINE. SAW CUT IN STRAIGHT LINE TO POINT NEEDED TO BLEND GRADE, REMOVE LAWN AND REPLACE TO MINIMUM LIMIT OF EXCAVATION.

LAYOUT:

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL FIELD LAYOUT. THE CONTRACTOR SHALL TAKE TIES TO ALL UTILITY CONNECTIONS AND PROVIDE MAKE-UP AS BUILT PLANS FOR ALL UTILITIES SHOWING TIES TO CONNECTIONS, BENDS, VALVES, LENGTHS OF LINES AND INVERTS. AS-BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND THE ENGINEER AND THE CONTRACTOR SHALL PROVIDE ANY CORRECTION OR ADDITIONS TO THE SATISFACTION OF THE OWNER AND THE ENGINEER BEFORE UTILITIES WILL BE ACCEPTED.
11. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION, ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AND UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.
12. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT PRIOR REVIEW BY THE ENGINEER.

PAVING:

1. NO VEHICULAR TRAFFIC OF ANY SORT SHALL BE PERMITTED ON THE SURFACE OF SUBBASE COURSE MATERIAL ONCE IT HAS BEEN FINE GRADED, COMPACTED, AND IS READY FOR PAVING. SUBBASE MATERIAL SO PREPARED FOR PAVING SHALL BE PAVED WITHIN THREE DAYS OF PREPARATION.
2. SUBBASE MATERIAL AND THE VARIOUS ASPHALT CONCRETE MATERIALS CALLED FOR IN THESE DRAWINGS SHALL CONFORM WITH THE REFERENCED SECTION OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008. CONSTRUCTION SHALL BE AS FURTHER SET FORTH IN THOSE SPECIFICATIONS AND AS OTHERWISE PROVIDED FOR IN THESE DRAWINGS.
3. PLACE ASPHALT CONCRETE MIXTURE ON PREPARED SURFACE. SPREAD AND STRIKE-OFF USING A SELF-PROPELLED PAVING MACHINE, WITH VIBRATING SOLED, PLACEMENT IN INACCESSIBLE AND SMALL AREAS MAY BE BY HAND.
4. PROVIDE JOINTS BETWEEN OLD AND NEW PAVEMENTS OR BETWEEN SUCCESSIVE DAYS' WORK.
5. TACK COAT WHEN SPECIFIED OR CALLED OUT ON THE DRAWINGS OR REQUIRED BY THE REFERENCED SPECIFICATION SHALL CONFORM WITH THE FOLLOWING:
 - a. TACK COAT SHALL MEET THE MATERIAL REQUIREMENTS OF 702-90 ASPHALT EMULSION FOR TACK COAT OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, DATED MAY 1, 2008. SHALL BE APPLIED IN ACCORDANCE WITH SECTION 407 - TACK COAT SHALL BE IN ACCORDANCE WITH THOSE SPECIFICATIONS AND AS OTHERWISE PROVIDED FOR IN THESE DRAWINGS.
 - b. REMOVE LOOSE AND FOREIGN MATERIAL FROM ASPHALT SURFACE BEFORE PAVING NEXT COURSE. USE PUMP BROOMS, BLOWERS OR HAND BROOM.
 - c. APPLY TACK COAT TO ASPHALT PAVEMENT SURFACES & SURFACES OF CURBS, GUTTERS, MANHOLES, AND OTHER STRUCTURES PROJECTING INTO OR ABUTTING PAVEMENT. DRY TO A "TACKY" CONSISTENCY BEFORE PAVING.
 - d. TACK COAT ENTIRE VERTICAL SURFACE OF ABUTTING EXISTING PAVEMENT.
6. AFTER COMPLETION OF PAVING AND SURFACING OPERATIONS, CLEAN SURFACES OF EXCESS OR SPILLED ASPHALT, GRAVEL OR STONE MATERIALS TO THE SATISFACTION OF THE ENGINEER.

STRIPING REMOVAL NOTES:

1. REMOVAL OF EXISTING PAVEMENT STRIPING SHALL BE ACCOMPLISHED BY MILLING. THE WORK SHALL BE PERFORMED IN SUCH A MANNER THAT THE FINISHED PAVEMENT IS NOT DAMAGED OR LEFT IN A PATTERN THAT WILL MISLEAD OR MISDIRECT THE MOTORISTS. WHEN THESE OPERATIONS ARE COMPLETED THE PAVEMENT SURFACE SHALL FIRST BE POWER BROOMED AND THEN BLOWN OFF WITH COMPRESSED AIR TO REMOVE RESIDUE AND DEBRIS RESULTING FROM THE WORK. ALL SUCH DEBRIS THAT REMAINS ON THE ROADWAY, INCLUDING BURNED PARTS FROM CLEANING EQUIPMENT, SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH FEDERAL AND STATE REGULATIONS.
2. THE CONTRACTOR SHALL CONDUCT THE REMOVAL AND CLEANING WORK IN SUCH A MANNER AS TO MINIMIZE AIRBORNE DUST AND SIMILAR DEBRIS, SO AS TO PREVENT A HAZARD TO MOTOR VEHICLE OPERATION OR NUISANCE TO PROPERTY OWNERS.

TRENCHING & INSTALLATION NOTES:

1. ALL AREAS DISTURBED DURING TRENCHING AND WORK OPERATIONS MUST BE STABILIZED WITHIN 14 DAYS.
2. ALL TRENCHING IN ADDITION TO PAVING SHALL BE SAW-CUT PRIOR TO TRENCHING. PAVEMENT RESTORATIONS MAY REQUIRE ADDITIONAL CUTBACKS AFTER TRENCHING OPERATIONS HAVE BEEN COMPLETED.
3. ALL PAVED AREAS MUST BE RESTORED WITH A MINIMUM OF 4" TEMPORARY PAVING AT THE CLOSE OF EACH DAY'S WORK OPERATIONS.
4. PERMANENT PAVING MUST BE COMPLETED AT AMBIENT TEMPERATURES OF 40 DEGREES AND RISING. ANY PAVING OPERATIONS COMPLETED BELOW 40 DEGREES SHALL BE CONSIDERED AS WORK.
5. ALL SIGNS REMOVED FOR CONSTRUCTION MUST BE RESET USING TYPE A POSTS.

DEMOLITION NOTES:

1. REFER TO REQUIREMENTS OUTLINED IN THE EROSION & SEDIMENTS CONTROL PLANS & NOTES PRIOR TO COMMENCEMENT OF WORK.
2. CONFORM TO APPLICABLE CODE FOR SAFETY OF ADJACENT STRUCTURES, DUST CONTROL, RUNOFF CONTROL, AND HAULING, DISPOSAL AND STORAGE OF DEBRIS.
3. PROVIDE, ERECT, AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES.
4. MAINTAIN EXISTING UTILITIES TO REMAIN IN SERVICE AND PROTECT THEM AGAINST DAMAGE DURING SELECTIVE DEMOLITION OPERATIONS. DO NOT INTERRUPT EXISTING UTILITIES SERVING OPERATING FACILITIES, EXCEPT WHEN AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
5. NOTIFY ADJACENT OWNERS OF WORK THAT MAY AFFECT THEIR PROPERTY, POTENTIAL NOISE, UTILITY OUTAGE, OR DISRUPTION. COORDINATE WITH OWNERS.
6. PREVENT MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES. PROVIDE BRACING AND SHORING.
7. LOCATE AND IDENTIFY ALL EXISTING UTILITIES WITHIN THE VICINITY OF ANY TRENCHING OR DIGGING. DISCONNECT AND SEAL OR SHUT OFF UTILITY SERVICES THAT WILL BE AFFECTED BY THIS PROJECT. NOTIFY AFFECTED UTILITY COMPANIES BEFORE STARTING WORK AND COMPLY WITH THEIR REQUIREMENTS. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED.
8. DEMOLISH AND REMOVE COMPONENTS IN AN ORDERLY AND CAREFUL MANNER.
9. PROTECT EXISTING FEATURES THAT ARE NOT TO BE DEMOLISHED.
10. CONDUCT OPERATIONS WITH MINIMUM INTERFERENCE TO PUBLIC OR PRIVATE ACCESSSES.
11. MAINTAIN EGRESS AND ACCESS AT ALL TIMES. DO NOT CLOSE OR OBSTRUCT ROADWAYS, OR SIDEWALKS WITHOUT PERMITS. COORDINATE W/ AUTHORITY HAVING JURISDICTION.
12. CEASE OPERATIONS IMMEDIATELY IF ADJACENT STRUCTURES APPEAR TO BE IN DANGER. NOTIFY AUTHORITY HAVING JURISDICTION.
13. ROUGH GRADE AND CONTACT AREAS AFFECTED BY DEMOLITION TO MAINTAIN SITE GRADES AND CONTOURS.
14. FIELD VERIFY EXISTING CONDITIONS AND CORRELATE WITH REQUIREMENTS INDICATED ON DEMOLITION PLAN TO DETERMINE EXTENT OF SELECTIVE DEMOLITION REQUIRED.
15. CONDUCT DEMOLITION OPERATIONS AND REMOVE DEBRIS TO ENSURE MINIMUM INTERFERENCE WITH SELECTIVE DEMOLITION OPERATIONS.
16. CONDUCT DEMOLITION OPERATIONS TO PREVENT INJURY TO PEOPLE AND DAMAGE TO ADJACENT BUILDINGS AND FACILITIES TO REMAIN. ENSURE SAFE PASSAGE OF PEOPLE AROUND SELECTIVE DEMOLITION AREA.
17. USE WATER MIT. TEMPORARY ENCLOSURES AND OTHER SUITABLE METHODS TO LIMIT THE SPREAD OF DUST AND DIRT, COMPLY WITH GOVERNING ENVIRONMENTAL PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE EXISTING CONSTRUCTION OR CAUSE FLOODING AND TRANSPORTING POLLUTANTS.
18. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
19. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT AND DEBRIS CAUSED BY SELECTIVE DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION EXISTING BEFORE START OF SELECTIVE DEMOLITION.
20. PROMPTLY DISPOSE OF DEMOLISHED MATERIALS. ALL DEBRIS RESULTING FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE. NO FACILITY APPROVED TO RECEIVE THE DEBRIS. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE. DO NOT BURN DEMOLISHED MATERIALS ON-SITE.

WINTER WORK:

SNOW PLOWING REQUIREMENTS:

DUE TO POSSIBLE SNOW FALL AND HENCE SNOW PLOWING OPERATIONS, ANY STEEL PLATES USED TO COVER AN EXCAVATION SHALL BE:

1. RECESSED INTO THE PAVEMENT AND PINNED.

OR

2. PINNED WITH ASPHALT RAMPS PLACED ALONG ALL EDGES. RAMPS SHALL BE SLOPED AT 1 INCH RISE PER 8 FEET RUN MAXIMUM. "RAISE FLOW" SIGNS SUPPLEMENTED WITH TYPE A FLASHING LIGHTS MUST BE ERECTED AN APPROPRIATE DISTANCE BEFORE THE EXCAVATION; SIGNS AND LIGHTS MUST MEET NYSDOT MUTCD SPECIFICATIONS.

WINTER TIME EARTHWORK REQUIREMENTS:

ALL PERMIT WORK UNDER CONSTRUCTION BETWEEN THE DATES OF NOVEMBER 1 THROUGH MAY 1 SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

1. GRANULAR OR OTHER FROST SUSCEPTIBLE MATERIAL SHALL NOT BE PLACED WHEN THE TEMPERATURE IS BELOW 32 DEGREES FAHRENHEIT.
2. FROZEN MATERIAL SHALL NOT BE INCORPORATED INTO EMBANKMENTS OR BACKFILLS.
3. MATERIAL SHALL NOT BE PLACED ON FROZEN GROUND.
4. THE MATERIAL SHALL BE COMPACTED IN ACCORDANCE WITH HIGHWAY DESIGN MANUAL CHAPTER 13 APPENDIX 13C, REQUIREMENTS FOR THE DESIGN AND CONSTRUCTION OF UNDERGROUND UTILITY INSTALLATIONS WITHIN THE STATE HIGHWAY RIGHT-OF-WAY (AKA BLUE BOOK), LATEST REVISION, AND/OR E104-015 (ENGINEERING INSTRUCTION).
5. ANY SPECIAL CONDITIONS AND RESTRICTIONS AS MAY BE IMPOSED BY THE RESIDENT ENGINEER OR THE REGIONAL GEOTECHNICAL (SOLS) ENGINEER.

PAVEMENT REPLACEMENT REQUIREMENTS:

DUE TO ASPHALT PLANTS CLOSED IN THE WINTER, TEMPORARY PAVEMENT REPLACEMENTS SHALL BE AS PER THE NYSDOT PERMIT FIELD ENGINEER (AKA INSPECTOR) AND/OR RESIDENT ENGINEER. PERMITTEE MUST MONITOR AND MAINTAIN THE TEMPORARY PAVEMENT REPLACEMENT.

TEMPORARY PAVEMENT REPLACEMENTS ARE REQUIRED TO BE REPLACED-KIND IN THE SPRING WHEN THE WEATHER ALLOWS NYSDOT STANDARD SPECIFICATIONS TO BE MET.

THERE MAY BE DIFFERENT MATERIAL REQUIREMENTS-PAVEMENT/ SUBBASE COURSES AND PAVEMENT/ SUBBASE THICKNESS FOR THE DIFFERENT PAVEMENT AREAS. ALL AREAS ARE REQUIRED TO BE REPLACED N-KIND AS PER THE NYSDOT PERMIT INSPECTOR AND/OR RESIDENT ENGINEER. TYPES OF PAVEMENT AREAS ARE AS FOLLOWS:

1. STATE HIGHWAY TRAVEL AND TURNING LANES PAVEMENT
2. STATE HIGHWAY SHOULDER PAVEMENT
3. COMMERCIAL DRIVEWAY ENTRANCES TO A STATE HIGHWAY
4. COMMERCIAL DRIVEWAY ENTRANCES FOR THE DESIGN AND CONSTRUCTION OF UNDERGROUND PAVEMENT IS USED FOR DRIVEWAY APRON/ TURNING AREA ACROSS THE SHOULDER.
5. MOST COMMERCIAL DRIVEWAY ENTRANCES HAVE THE SAME AMOUNT OF PAVEMENT AS STATE HIGHWAY TRAVEL AND TURNING LANES DUE TO VOLUME OF TRAFFIC AND TRUCK TRAFFIC USING THE ENTRANCE.
6. PUBLIC ROAD AND SUBDIVISION ENTRANCES TO A STATE HIGHWAY SEE COMMENTS FOR COMMERCIAL DRIVEWAY ENTRANCES.
7. RESIDENTIAL DRIVEWAY ENTRANCES TO A STATE HIGHWAY IF SHOULDER HAS MORE PAVEMENT THAN RESIDENTIAL DRIVEWAY ENTRANCE, SHOULDER PAVEMENT IS USED FOR SHOULDER AREA AND RESIDENTIAL DRIVEWAY PAVEMENT BEGINS AT BACK EDGE OF SHOULDER.

ALL PAVEMENT CROSS SLOPES AND DRIVEWAY PROFILES SHALL BE MAINTAINED OR CAN BE CORRECTED (DEPENDING ON EXTENT OF THE UTILITY WORK) AS ORDERED BY THE NYSDOT PERMIT FIELD ENGINEER (AKA INSPECTOR) AND/OR RESIDENT ENGINEER (AOBE).

PERMANENT PAVEMENT REPLACEMENTS FOR UNDERGROUND UTILITIES SHALL BE AS PER NYSDOT STANDARD SPECIFICATIONS, SECTION 13 APPENDIX 13C, REQUIREMENTS FOR THE DESIGN AND CONSTRUCTION OF UNDERGROUND UTILITY INSTALLATIONS WITHIN THE STATE HIGHWAY RIGHT-OF-WAY (AKA BLUE BOOK), LATEST REVISION AND/OR EDITION AND DRAWINGS:

1. DWG. 7 BACKFILL AND PAVEMENT STRUCTURE REPLACEMENT DETAILS FOR FULL DEPTH REPAIR OF UTILITY CUTS IN EXISTING PORTLAND CEMENT CONCRETE (PCC) PAVEMENT
2. DWG. 8 BACKFILL AND PAVEMENT STRUCTURE REPLACEMENT DETAILS FOR FULL DEPTH REPAIR OF UTILITY CUTS IN EXISTING HOT MIX ASPHALT (HMA) PAVEMENT
3. DWG. 9 BACKFILL AND PAVEMENT STRUCTURE REPLACEMENT DETAILS FOR UTILITY KEYHOLE AND BELLHOLE CUTOUTS
4. DWG. 10 PLACING "CONTROLLED LOW STRENGTH MATERIAL (CLSM)" BACKFILL AT EXISTING UTILITIES

PERMITTEE MUST MAKE ARRANGEMENTS WITH THE NYSDOT PERMIT FIELD ENGINEER (AKA INSPECTOR) AND/OR RESIDENT ENGINEER FOR FIELD VISIT TO ENSURE PAVEMENT REPLACEMENT IS DONE PROPERLY TO CORRECT THICKNESS.

ROCK REMOVAL NOTES:

ROCK REMOVAL BY MECHANICAL MEANS ONLY IS PERMITTED WITHIN THE NYSDOT ROW. BLASTING OF BEDROCK IS NOT PERMITTED AT THIS SITE IN ORDER TO COMPLETE THE PROPOSED DEVELOPMENT. HOWEVER, THESE NOTES ARE INCLUDED SHOULD UNFORESEEN CONDITIONS REQUIRE THE NEED FOR BLASTING TO EXCAVATE BEDROCK AND NYSDOT WOULD BE AMEND THE PERMIT TO ALLOW THE CONTRACTOR TO DO, ALL COSTS SHALL BE BOURNE BY THE CONTRACTOR.

1. ALL RECOMMENDED SAFETY REQUIREMENTS AND STANDARDS REFERENCED AND ANY LOCAL RESTRICTIONS SHALL BE APPLIED AS REQUIRED FOR SAFETY, SECURITY, AND SPECIFICALLY RELATED DETAILS FOR BLASTING PROCEDURES. AT ALL TIMES FEDERAL, STATE, AND LOCAL ORDINANCES WILL BE FOLLOWED CONCERNING THE TRANSPORTATION AND STORAGE OF EXPLOSIVES.
2. A MINIMUM OF FOUR (4) WEEKS PRIOR TO COMMENCEMENT OF THE INITIAL BLASTING OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES AS APPROPRIATE: POLICE AGENCIES, GAS AND ELECTRIC SERVICE COMPANIES, TELEPHONE AND CABLE COMPANIES, TOWN WATER AND SEWER DEPARTMENTS, NYSDOT, AND LOCAL FIRE, RESCUE, AND AMBULANCE SERVICES.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE RESULTING FROM THE USE OF EXPLOSIVES. EXPLOSIVES SHALL BE STORED IN A SECURE MANNER IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES.
4. THE CONTRACTOR SHALL NOTIFY EACH PROPERTY AND UTILITY OWNER HAVING A BUILDING, STRUCTURE, OR OTHER INSTALLATION ABOVE OR BELOW GROUND IN PROXIMITY TO THE SITE OF THE WORK OF HIS INTENTION TO USE EXPLOSIVES. NOTICE SHALL BE GIVEN SUFFICIENTLY IN ADVANCE TO ENABLE THE OWNERS TO PROTECT THEIR PROPERTY. NOTICE SHALL NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR DAMAGE RESULTING FROM HIS BLASTING OPERATIONS.
5. THE CONTRACTOR SHALL SCHEDULE AND CONDUCT PRE-BLAST SURVEYS WITH PROPERTY OWNERS LOCATED IN THE AREA POTENTIALLY AFFECTED BY AIRBLAST OVERPRESSURE AND GROUND VIBRATION OR AS REQUIRED.
6. THE CONTRACTOR SHALL IMPLEMENT ENGINEERING MEASURES IN ORDER TO MINIMIZE THE POTENTIAL IMPACTS OF DUST, NOISE AND GROUND VIBRATION. BLAST VIBRATION CONTROL WILL BE ACHIEVED BY LIMITING THE CHARGE PER DELAY SO THAT THE PEAK PARTICLE VELOCITY REMAINS BELOW THE SPECIFIED LEVELS.
7. A APPROPRIATELY QUALIFIED, LICENSED BLASTING SPECIALIST, WITH EXPERIENCE SHALL BE ONSITE AND SUPERVISE BLASTING OPERATIONS. AT ALL TIMES, THE BLASTING AREA SHALL BE RESTRICTED TO BLASTING OPERATIONS AND AUTHORIZED PERSONNEL ONLY.
8. PROTECTIVE MEASURES INCLUDING INSTALLATION OF SIGNAGE, NOTIFICATION OF NEARBY RESIDENTS, TRAFFIC CONTROL AS NECESSARY ALONG NEARBY ROADS, AUDIBLE PRE-BLAST WARNINGS, AND USE OF BLAST MATS SHALL BE IMPLEMENTED.
9. DELIVERY AND TRANSPORT OF EXPLOSIVES FROM THE POWDER MAGAZINES TO THE BLAST AREA WILL BE BY VEHICLES SPECIFICALLY DESIGNED FOR THIS USE BY THE CRITERIA OUTLINED IN THE SAFETY REQUIREMENTS. ONLY AUTHORIZED PERSONS WILL TRANSPORT AND HANDLE THE EXPLOSIVES AS DESIGNATED BY THE ISSUING AUTHORITY OF THOSE LICENSES FOR THIS PURPOSE.
10. MONITORING OF PEAK PARTICLE VELOCITY (INCHES/SECOND) AND PEAK AIRBLAST OVERPRESSURE (PSI) SHALL BE PERFORMED DURING ALL BLASTS.

GRADING NOTES:

1. PRIOR TO SITE DISTURBANCE, CONTRACTOR TO INSTALL EROSION & SEDIMENT CONTROL MEASURES.
2. IF ROCK REMOVAL BY BLASTING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY APPROVALS AND PERMITS REQUIRED BY THE AUTHORITY HAVING JURISDICTION.
3. ALL BLASTING OPERATIONS WILL ADHERE TO NEW YORK STATE AND LOCAL AUTHORITY ORDINANCES GOVERNING THE USE OF EXPLOSIVES. THE STATE REGULATIONS ARE CONTAINED IN 12 NYCRR 39 AND INDUSTRIAL CODE RULE 153.
4. STRIP ALL TOPSOIL PRIOR TO COMMENCING EARTHWORK OPERATIONS. TOPSOIL MAY BE STORED AND REUSED IN LAWN AND PLANTING AREAS ONLY. TOPSOIL AND SEED ALL AREAS DISTURBED BY CONSTRUCTION THAT ARE TO REMAIN GREEN.
5. BOX ALL TREES AND SHOW ALL SHRUBS AND HEDGES BEFORE PLACING EARTH AGAINST OR NEAR THEM. ORNAMENTAL TREES, SHRUBS AND HEDGES WHICH MUST BE REMOVED DURING CONSTRUCTION SHALL BE HEADED IN AND RE-PLANTED IN AS GOOD A CONDITION AS THEY WERE BEFORE THEIR REMOVAL. ANY DAMAGED TREES, SHRUBS, AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. ALL EARTHWORK SHALL BE SMOOTHLY AND EVENLY BLENDED INTO EXISTING CONDITIONS. NO WORK, STORAGE, OR TRESPASS SHALL BE PERMITTED BEYOND THE BOUNDARIES OF ANY EASEMENT OR PROPERTY LINE.
7. REMOVE ALL VEGETATION, TREES, STUMPS, GRASSES, ORGANIC SOILS, DEBRIS AND DELETERIOUS MATERIALS WITHIN THE AREAS ALLEED FOR CONSTRUCTION.

TRAFFIC CONTROL PLAN:

TEMPORARY LANE CLOSURES:

IT WILL BE NECESSARY TO TEMPORARILY CLOSE TRAVEL LANES IN ORDER TO PERFORM THE CONTRACT WORK. THE FOLLOWING RESTRICTIONS SHALL APPLY TO LANE CLOSURES:

1. NO LANE CLOSURES SHALL BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER-IN-CHARGE (EIC).
2. THE STATE RESERVES THE RIGHT TO ALLOW WORK WITHIN THE CONTRACT LIMITS BY OTHERS ALONG KEY CORRIDORS. IN ORDER TO MINIMIZE INCONVENIENCE TO THE TRAVELING PUBLIC, ANY LANE CLOSURES REQUIRED WITHIN CONTRACT LIMITS MUST BE APPROVED BY THE SURFACE TRANSPORTATION CONTROLLER (STC). KEY CORRIDORS ARE DEFINED AS I-84, TACONIC STATE PARKWAY (TSP), PALISADES INTERSTATE PARKWAY (PIP), SPRAIN BROOK PARKWAY (SBP), SAW MILL RIVER PARKWAY (SMRP), HUTCHINSON RIVER PARKWAY (HRP), CROSS COUNTRY PARKWAY (CCP), NYS RTE17 (FUTURE I-86), I-84 (INCLUDING THE NEWBURGH-BEACON BRIDGE), I-87 (INCLUDING THE TAPPAN ZEE BRIDGE), I-287, I-49.
3. NO LANE CLOSURES WILL BE PERMITTED DURING NON-WORKING HOURS, UNLESS SPECIFICALLY PROVIDED OTHERWISE IN THE CONTRACT.
4. ON KEY CORRIDORS AS DESCRIBED IN (8) THE REQUIRED NUMBER OF LANES BY TIME OF DAY CHART IN THE PROPOSAL SHALL BE FOLLOWED, ON ALL OTHER ROUTES THE SAME NUMBER OF TRAVEL LANES (INCLUDING TURNING LANES), AS EXIST PRIOR TO THIS CONTRACT, SHALL BE MAINTAINED IN EACH DIRECTION DURING THE HOURS OF 7:00 A.M. TO 9:00 A.M. AND 4:00 P.M. TO 6:00 P.M. - MONDAY TO FRIDAY, INCLUSIVE.
5. IN AREAS OF MAJOR SHOPPING MALLS, THE SAME NUMBER OF TRAVEL LANES (INCLUDING TURNING LANES), AS EXIST PRIOR TO THIS CONTRACT, SHALL BE MAINTAINED IN EACH DIRECTION DURING THE HOURS OF 10:00 A.M. TO 4:00 P.M. ON SATURDAYS.
6. THE ENGINEER-IN-CHARGE IS AUTHORIZED TO REDUCE THE ABOVE TIME RESTRICTIONS ON THE NON-KEY CORRIDORS TO THE CONTRACT.
7. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT THE FOLLOWING HOLIDAY WORK RESTRICTIONS ARE APPLICABLE TO THIS PROJECT. DURING THESE HOLIDAY PERIODS, THE CONTRACTOR WILL NOT BE ALLOWED TO PERFORM ANY WORK THAT WILL BE DISRUPTIVE TO TRAFFIC, INCLUDING BUT NOT LIMITED TO LANE CLOSURES. LANE CLOSURES WILL NOT BE PERMITTED DURING THE FOLLOWING STATE RECOGNIZED HOLIDAYS:
NEW YEAR'S DAY
MEMORIAL DAY
THANKSGIVING DAY
LABOR DAY
INDEPENDENCE DAY
CHRISTMAS DAY

IF THE HOLIDAY IS ON A MONDAY, NO LANE CLOSURES WILL BE PERMITTED FROM 6AM FRIDAY TO 10 A.M. TUESDAY. IF THE HOLIDAY IS ON A TUESDAY, NO LANE CLOSURES WILL BE PERMITTED FROM 6AM FRIDAY TO 10 A.M. WEDNESDAY. IF THE HOLIDAY IS ON A WEDNESDAY, NO LANE CLOSURES WILL BE PERMITTED FROM 6AM TUESDAY TO 10 A.M. THURSDAY. IF THE HOLIDAY IS ON A THURSDAY OR FRIDAY, NO LANE CLOSURES WILL BE PERMITTED FROM 6AM THE DAY BEFORE THE HOLIDAY TO 10 A.M. MONDAY. IF THE HOLIDAY IS ON A WEEKEND DAY, NO LANE CLOSURES WILL BE PERMITTED FROM 6AM FRIDAY TO 10 A.M. MONDAY.

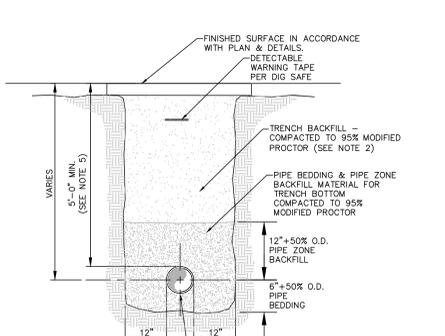
THE CONTRACTOR IS ALSO ADVISED THAT THE STATE RESERVES THE RIGHT TO PRECLUDE LANE CLOSURES DURING PERIODS OF SEVERE WEATHER OR KEY PAVEMENT REPAIRS. ACCIDENTS OR OTHER EMERGENCIES, THE STATE MAY ALTER ANY LANE CLOSURES SHOULD TRAFFIC CONDITIONS OR OTHER UNFORESEEN CIRCUMSTANCES ARISE WHICH WOULD ADVERSELY AFFECT THE TRAFFIC FLOW. THE CONTRACTOR IS ALSO ALERTED TO THE FACT THAT REQUIREMENTS FOR MANAGEMENT OF TRAFFIC CONDITIONS MUST FORCE HIS/HER CONSTRUCTION OPERATION TO STOP, EVEN DURING TIME WHERE SUCH OPERATION WOULD NORMALLY BE PERMITTED, TEN SUCH OCCURRENCES PER CALENDAR YEAR SHOULD BE TAKEN INTO CONSIDERATION AS A REASONABLE FREQUENCY OF SUCH EVENT WHEN BIDDING THIS PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM AGAINST THE STATE FOR ANY DELAYS OR EXTRA COSTS INCURRED IN COMPLYING WITH THESE RESTRICTIONS.

THE STATE MAY GRANT A WAIVER OF THESE RESTRICTIONS UPON A TIMELY RECEIPT OF A REQUEST FOR SAID WAIVER FROM THE CONTRACTOR. A MINIMUM OF FIVE WORKING DAYS FOR THE REVIEW OF THE CONTRACTOR'S REQUEST WILL BE REQUIRED.

LANDSCAPE, ADA, & ENVIRONMENTAL NOTES:

1. ALL DISTURBED AREAS WITHIN THE STATE R.O.W. ARE TO BE TOPSOILED, SEEDED AND MULCHED TO GUARANTEE AN ACCEPTABLE STATE OF GRASS.
2. NO TREES WITHIN THE STATE R.O.W. OVER 6" D.B.H. (DIAMETER BREAST HEIGHT) ARE TO BE REMOVED WITHOUT PRIOR PERMISSION FROM THE REGIONAL LANDSCAPE ARCHITECT / OFFICE. THE REGIONAL LANDSCAPE ARCHITECT/ OFFICE MAY BE CONTACTED AT (845) 431-5853.
3. ACCEPTABLE ISLAND TREATMENTS OR OTHER LANDSCAPED AREAS ARE:
 - a. MAINTAINED TURF.
 - b. ORGANIC MULCH WITH OR WITHOUT PLANTS.
 - **PLANTS AT THEIR NATURAL HEIGHT. SHALL NOT INVADE THE SIGHT DISTANCE REQUIREMENTS OF DRIVEWAYS. PLANTS MUST BE 2 FEET OR LESS IN HEIGHT ABOVE THE DRIVEWAY PAVEMENT (18" ABOVE 6" CURB).
 - c. CONCRETE PAVERS/ LANDSCAPE BRICK.
 - **FLASH CHANNELIZING ISLANDS IN LIEU OF LARGE ASPHALT DRIVEWAYS WITH PAVEMENT MARKINGS MUST BE DESIGNED AND CONSTRUCTED TO SUPPORT TRAFFIC LOAD OF LARGE VEHICLE TURN PATHS.
 - d. CONCRETE (IF FOR SIDEWALK, 5 FEET + SPACE FOR SIGNS MINIMUM BETWEEN CURBS).
 - e. COMBINATIONS OF THESE.
 - f. LANDSCAPE PLANTING DETAILS SHALL COMPLY WITH NYSDOT STANDARD SHEET M611-1 OR 611-01.
4. UNACCEPTABLE ISLAND TREATMENTS OR OTHER LANDSCAPED AREAS ARE:
 - a. ASPHALT
 - b. LOOSE STONE/ GRAVEL OF ANY SIZE.
5. APPLICANT/ PERMITTEE AGREES TO MAINTAIN LANDSCAPING ON NYSDOT ROW.
**BLOWING OF HAZARDOUS DEBRIS (DUST, DIRT, LEAVES, ETC.) WITH ANY KIND OF FORCE TOWARDS THE STATE HIGHWAY, OTHER PUBLIC ROADWAY OR DRIVEWAY ENTRANCES IS PROHIBITED. LEAF BLOWERS OR OTHER POWER TOOLS THAT CAN INTERFERE WITH TRAFFIC, DAMAGE A VEHICLE / BICYCLE / PROPERTY OF OTHER HIGHWAY USERS OR CAUSE INJURY TO PERSONS ARE NOT PERMITTED FOR MAINTENANCE OPERATIONS. MAINTENANCE SHALL INCLUDE NORMAL MANUAL LANDSCAPE TYPE LABOR.

6. ALL SIDEWALK CURB RAMPS AND DETECTABLE WARNING SURFACES SHALL BE AS PER:
 - a. NYSDOT STANDARD SHEETS
METRIC UNITS (EB 08-051, APPROVED 2006-12-07 EFFECTIVE 2007-05-03)
M608-10 SHEET 1 OF 4 SIDEWALK CURB RAMPS DIMENSIONS, DETAILS AND GEOMETRY
M608-11 SHEET 2 OF 4 SIDEWALK CURB RAMPS CONFIGURATIONS: TYPE 1 THRU 8
M608-12 SHEET 3 OF 4 SIDEWALK CURB RAMPS CONFIGURATIONS: TYPE 9 THRU 13
M608-13 SHEET 4 OF 4 SIDEWALK CURB RAMPS DETECTABLE WARNING DETAILS
US CUSTOMARY UNITS (EB 08-036, APPROVED 2008-09-19 EFFECTIVE 2009-01-08)
608-01 SHEET 1 OF 4 SIDEWALK CURB RAMP DETAILS DIMENSIONS AND GEOMETRY
608-01 SHEET 2 OF 4 SIDEWALK CURB RAMP DETAILS CONFIGURATIONS: TYPE 1 THRU 8
608-01 SHEET 3 OF 4 SIDEWALK CURB RAMP DETAILS CONFIGURATIONS: TYPE 9 THRU 13
608-01 SHEET 4 OF 4 SIDEWALK CURB RAMP DETAILS DETECTABLE WARNINGS
 - b. NYSDOT STANDARD SPECIFICATIONS MAY 1, 2008 U.S. CUSTOMARY UNITS
ITEM 608.20 SURFACE-APPLIED DETECTABLE WARNING UNITS SQUARE YARD
ITEM 608.21 EMBEDDED DETECTABLE WARNING UNITS SQUARE YARD
ITEM 608.22 STAMPED CONCRETE DETECTABLE WARNING UNITS SQUARE YARD
7. OTHER ACCESSIBLE REQUIREMENTS SHALL BE AS PER:
 - a. ENGINEERING INSTRUCTION 92-006 - ACCESSIBLE BUS STOPS
 - b. NYSDOT STANDARD SHEET.
METRIC UNITS (EB 02-039, APPROVED 2002-07-25 EFFECTIVE 2003-01-16)
M608-4R - DETAILS, ACCESSIBLE PARKING FOR PERSONS WITH DISABILITIES
U.S.CUSTOMARY UNITS (EB 08-036, APPROVED 2008-09-19 EFFECTIVE 2009-01-08)
6



NOTES:
 1. PIPE BEDDING & PIPE ZONE BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) SAND OR A MIXTURE OF CRUSHED STONE AND GRAVEL, FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. BEDDING GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:
 SIEVE DESIGNATION % PASSING
 3/4" 100%
 NO. 40 0-70%
 NO. 200 0-10%

2. TRENCH BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) OR PROCESSED GRAVEL OR EXCAVATED MATERIAL FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. TRENCH BACKFILL GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:
 SIEVE DESIGNATION % PASSING
 3/4" 100%
 NO. 40 0-70%
 NO. 200 0-10%

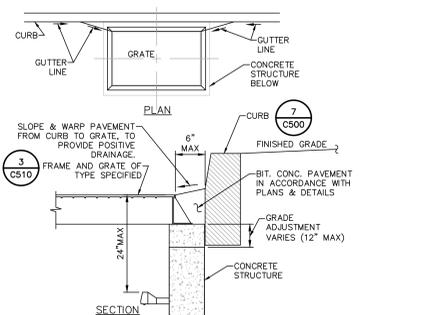
IN NON-TRAFFIC UNPAVED AREAS TRENCH BACKFILL CAN BE MATERIALS EXCAVATED FROM THE TRENCH AS APPROVED BY THE ENGINEER AND COMPACTED TO 90% MODIFIED PROCTOR.

3. INSTALL CONTINUOUS DETECTABLE MARKING TAPE DURING BACKFILLING OF TRENCH FOR UNDERGROUND PIPING. LOCATE TAPE 12" BELOW FINISHED GRADE, DIRECTLY OVER PIPING, EXCEPT 6" BELOW SUBGRADE UNDER PAVEMENTS & SLABS.

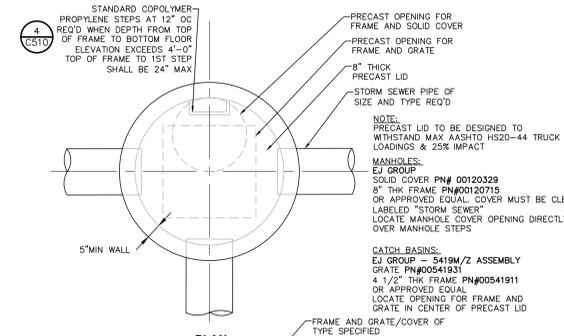
4. TRENCHING SHALL BE IMPLEMENTED IN ACCORDANCE WITH O.S.H.A. STANDARDS.

5. 5'-0" MIN COVER SHALL BE APPLIED TO WATER MAIN OR SANITARY SEWER FORCE MAINS ONLY.

1 PIPE TRENCH DETAIL (TYPICAL)
 SCALE: NOT TO SCALE



**6 30\"/>
 SCALE: NOT TO SCALE**



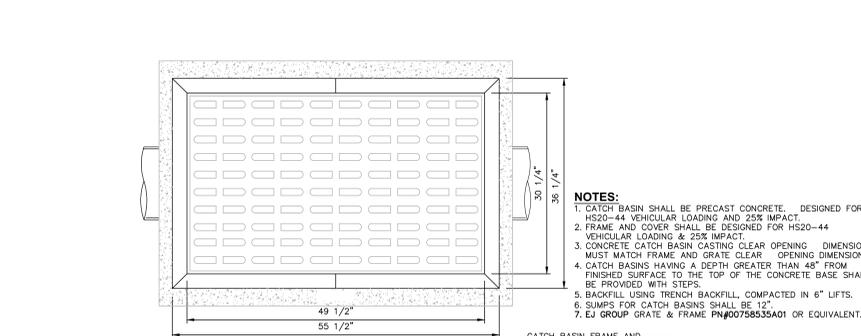
NOTES:
 1. CATCH BASIN SHALL BE PRECAST CONCRETE, DESIGNED FOR HS20-44 VEHICULAR LOADING AND 25% IMPACT.
 2. FRAME AND COVER SHALL BE DESIGNED FOR HS20-44 VEHICULAR LOADING & 25% IMPACT.
 3. CONCRETE CATCH BASIN CASTING CLEAR OPENING DIMENSION MUST MATCH FRAME AND GRATE CLEAR OPENING DIMENSION.
 4. CATCH BASINS HAVING A DEPTH GREATER THAN 48\"/>

5. BACKFILL USING TRENCH BACKFILL, COMPACTED IN 6\"/>

6. SUMPS FOR CATCH BASINS SHALL BE 12\"/>

7. ECCENTRIC CONE TOP CAN BE USED FOR MANHOLES DEPTH GREATER THAN 7 FEET.
 8. SEE CHART FOR REQUIRED MANHOLES / CATCH BASINS DIAMETERS.
 9. ALL PRECAST CONSTRUCTION IN ACCORDANCE W/ASTM C478

2 PRECAST CONCRETE CATCH BASIN/MANHOLE DETAIL
 SCALE: NOT TO SCALE



NOTES:
 1. CATCH BASIN SHALL BE PRECAST CONCRETE, DESIGNED FOR HS20-44 VEHICULAR LOADING AND 25% IMPACT.
 2. FRAME AND COVER SHALL BE DESIGNED FOR HS20-44 VEHICULAR LOADING & 25% IMPACT.
 3. CONCRETE CATCH BASIN CASTING CLEAR OPENING DIMENSION MUST MATCH FRAME AND GRATE CLEAR OPENING DIMENSION.
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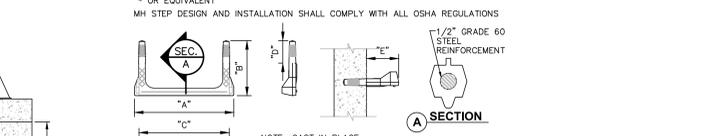
3 PRECAST CONCRETE RECTANGULAR CATCH BASIN DETAIL
 SCALE: NOT TO SCALE

STORM SEWER NOTES:
 1. ALL STORM WATER MANAGEMENT STRUCTURES (I.E. CATCH BASIN, ETC.) SHALL BE REGULARLY INSPECTED FOR SEDIMENT ACCUMULATIONS. CATCH BASINS SHALL BE CLEANED WHEN SEDIMENT DEPTH REACHES A MAXIMUM OF 1/2 THE AVAILABLE SUMP DEPTH.
 2. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL CONSTRUCT A DEWATERING PIT (A.K.A. SUMP PIT) TO TRAP AND FILTER WATER FOR PUMPING TO A SUITABLE DISCHARGE AREA. THE DEWATERING PIT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW YORK STATE GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL, LATEST EDITION.
 3. ALL EROSION CONTROL MEASURES EMPLOYED DURING THE CONSTRUCTION PROCESS SHALL BE AS OUTLINED ON THE EROSION AND SEDIMENT CONTROL PLANS, DETAILS AND NOTES.

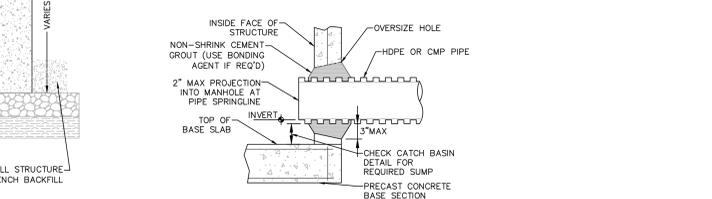
ACCEPTABLE MANHOLE STEPS

MANUFACTURER	PATTERN NUMBER	STEP WIDTH	LEG LENGTH	RUNG CLEAR	TD EMBED-MENT	TD RUNG CLEAR
M.A. INDUSTRIES INC*	PS2-PF	14 3/4	9 1/4	13 3/4	3 3/8	5 7/8
M.A. INDUSTRIES INC*	PS2-PFS	14 3/4	8 1/4	13 3/4	3 3/8	4 7/8

* OR EQUIVALENT
 MH STEP DESIGN AND INSTALLATION SHALL COMPLY WITH ALL OSHA REGULATIONS



4 COPOLYMER POLYPROPYLENE MH STEP
 SCALE: NOT TO SCALE



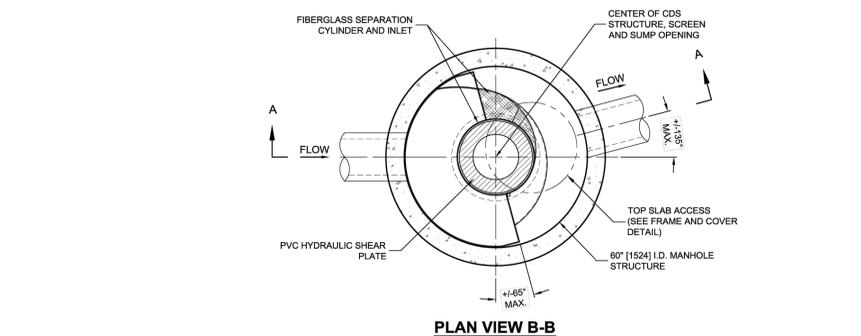
5 PIPE CONNECTION TO DRAINAGE STRUCTURE-CMP OR HDPE CEMENT GROUT SEAL JOINT
 SCALE: NOT TO SCALE

CDS2020-5-C DESIGN NOTES

THE STANDARD CDS2020-5-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION

GRATED INLET ONLY (NO INLET PIPE)	
GRATED INLET WITH INLET PIPE OR PIPES	
CURB INLET ONLY (NO INLET PIPE)	
CURB INLET WITH INLET PIPE OR PIPES	
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)	
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS	



7 CDS-5 (2020) HYDRODYNAMIC SEPARATOR DETAIL
 SCALE: NOT TO SCALE

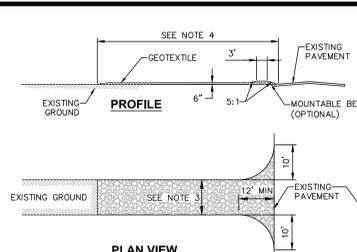
SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID		
WATER QUALITY FLOW RATE (GFS OR L/s)	*	
PEAK FLOW RATE (GFS OR L/s)	*	
RETURN PERIOD OF PEAK FLOW (YRS)	*	
SCREEN APERTURE (2400 OR 4700)	*	
PIPE DATA:		
I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*
INLET PIPE 2	*	*
OUTLET PIPE	*	*
RIM ELEVATION	*	
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*
NOTES/SPECIAL REQUIREMENTS:		
* PER ENGINEER OF RECORD		

GENERAL NOTES
 1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 2. DIMENSIONS MARKED WITH () ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
 3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
 4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
 5. STRUCTURE SHALL MEET AASHTO H20 AND CASTINGS SHALL MEET H20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
 6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
 A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
 C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
 D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
 E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

7 CDS-5 (2020) HYDRODYNAMIC SEPARATOR DETAIL
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1. STABILIZED CONSTRUCTION ACCESS DETAIL
SCALE: NOT TO SCALE

- CONSTRUCTION ENTRANCE SPECIFICATIONS:**
- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
 - THICKNESS - NOT LESS THAN SIX (6) INCHES.
 - WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY FOUR (24) FEET IF SINGLE ENTRANCE TO SITE.
 - LENGTH - NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH WOULD APPLY).
 - GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
 - 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.
 - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ON PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANUP OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
 - WASHING - 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.
 - PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.



2. SILT FENCE INSTALLATION DETAIL
SCALE: NOT TO SCALE

- NOTES:**
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL "1" OR "1 1/2" TYPE OR HARDWOOD.
 - FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAX MESH OPENING.
 - WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
 - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIALS REMOVED WHEN 'BULGES' DEVELOP IN THE SILT FENCE.
 - MAXIMUM DRAINAGE AREA FOR OVERLAND FLOW TO A SILT FENCE SHALL NOT EXCEED 1/4 ACRE PER 100 FEET OF FENCE.
 - SILT FENCE SHALL BE USED WHERE EROSION OCCUR IN THE FORM OF SHEET EROSION.
 - SILT FENCE SHALL NOT BE USED WHEN A CONCENTRATION OF WATER IS FLOWING TO THE BARRIER.
 - MAXIMUM ALLOWABLE SLOPE LENGTHS CONTRIBUTING RUN-UP TO A SILT FENCE ARE:
- | | |
|-----------------|--------------------------|
| SLOPE STEEPNESS | MAXIMUM SLOPE LENGTH(FT) |
| 2:1 | 25 |
| 3:1 | 35 |
| 4:1 | 45 |
| 5:1 | 75 |
| 6:1 | 100 |



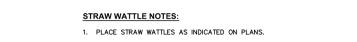
10. STONE CHECK DAM DETAIL
SCALE: NOT TO SCALE

- CONSTRUCTION SPECIFICATIONS:**
- STONE SHALL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN ON THE PLAN.
 - SET SPACING OF CHECK DAMS IN ACCORDANCE W/ THE FOLLOWING:
CHECK DAM SPACING INCREMENT 2'-6" DEEP DITCH/SWALE W/ 1'-9" HIGH CHECK DAM: (SPACING = $\frac{1000}{SLOPE \times SPACING}$)
- | SLOPE | SPACING | SLOPE | SPACING |
|-------|---------|-------|---------|
| 0.5% | 300' | 1% | 25' |
| 1% | 175' | 2% | 21' |
| 2% | 87' | 3% | 18' |
| 3% | 58' | 4% | 17' |
| 4% | 44' | 5% | 17' |
- CONTRACTOR TO ADJUST SPACING ACCORDINGLY BASED ON ACTUAL DEPTH & SLOPE OF DITCH.
- EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
 - PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
 - ENSURE THAT CHANNEL APERTURES SUCH AS CULVERT ENTRANCES BELOW CHECK DAM ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
 - MAXIMUM DRAINAGE AREA IS 2 ACRES.



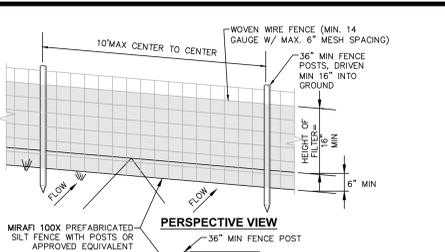
11. TEMPORARY ORANGE CONSTRUCTION FENCE DETAIL
SCALE: NOT TO SCALE

- CONSTRUCTION SPECIFICATIONS:**
- FURNISH AND INSTALL ORANGE CONSTRUCTION FENCE AND SIGNS ALONG DISTURBANCE LIMIT THAT REAR "PROTECTED AREA, DO NOT DISTURB" AT 100' O.C.
 - 4" HIGH ORANGE OVAL OR SQUARE MESH CONSTRUCTION FENCE WIRE TO FENCE.
 - 5' LIGHT DUTY FENCE POSTS DRIVEN 6"-12" INTO GROUND.
 - 10' MAX CENTER TO CENTER.
 - DO NOT DISTURB.
 - UNDISTURBED GROUND.
 - 42'-68'.
 - 6"-12" BURY.



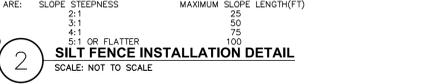
13. STRAW WATTLE DETAIL
SCALE: NOT TO SCALE

- CONSTRUCTION SPECIFICATIONS:**
- PLACE STRAW WATTLES AS INDICATED ON PLANS.
 - DIG SMALL TRENCHES ACROSS THE SLOPE ON CONTOUR TO PLACE ROLLS IN START BUILDING TRENCHES AND INSTALL ROLLS FROM THE BOTTOM OF THE SLOPE AND WORK UP. IT IS CRITICAL THAT ROLLS ARE INSTALLED PERPENDICULAR TO WATER MOVEMENT. PARALLEL TO THE SLOPE CONTOUR. LAY THE ROLL ALONG THE TRENCHES FITTING IT TIGHTLY AGAINST THE SOIL. MAKE SURE NO GAPS EXIST BETWEEN THE SOIL AND THE STRAW WATTLE.



3. TEMPORARY OUT OF PAVEMENT FILTER FABRIC DROP INLET PROTECTION DETAIL
SCALE: NOT TO SCALE

- NOTES:**
- FILTER FABRIC SHALL HAVE AN EGS OF 40-85.
 - CUT FABRIC FROM CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED, OVERLAP TO THE NEXT STAKE.
 - STAKE MATERIALS WILL BE STANDARD 2"x4" WOOD OR EQUIVALENT, WITH A MINIMUM LENGTH OF 3 FEET.
 - SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE MINIMUM 18" DEEP. SPACES GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND FABRIC FOR SUPPORT.
 - FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
 - A 2"x4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVERFLOW STABILITY.
 - MAXIMUM DRAINAGE AREA IS 1 ACRE.
 - INLET PROTECTION SHALL REMAIN IN-PLACE UNTIL SITE HAS BEEN STABILIZED.



4. SILT SACK DETAIL
SCALE: NOT TO SCALE

- NOTES:**
- CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK-FREE AND CONTAIN ALL LIQUID WASTES.
 - QUANTITY OF DEVICES MUST BE OF SUFFICIENT NUMBER OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
 - WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE AS WASHOUT IS 75% FULL OF LIQUID WASTES REPLACEMENT OF THE 10 MIL POLYETHYLENE SHEETING.
 - WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
 - ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
 - AT LEAST WEEKLY, REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.



6. CONCRETE WASHOUT AREA DETAIL
SCALE: NOT TO SCALE

- NOTES:**
- AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
 - MAXIMUM SLOPE OF STOCKPILE SHALL BE 1V:2H.
 - UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED WITH GEOTEXTILE.
 - SEE SPECIFICATIONS FOR INSTALLATION OF SILT FENCE.



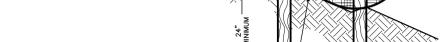
5. TEMPORARY SOIL STOCKPILE DETAIL
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- THIS PROJECT HAS NOT RECEIVED WRITTEN APPROVAL FROM THE TOWN OF NEWBURGH ALLOWING THE DISTURBANCE OF MORE THAN FIVE (5) ACRES OF LAND AT ANY ONE TIME. THEREFORE, IF THE CONTRACTOR'S CONSTRUCTION SEQUENCING REQUIRES THE DISTURBANCE OF MORE THAN FIVE ACRES AT ANY ONE TIME, WRITTEN APPROVAL MUST BE OBTAINED FROM NYSDEC PRIOR TO EXCEEDING THE 5 ACRE LIMIT.



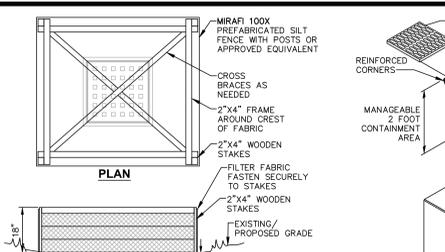
12. EROSION CONTROL BLANKET INSTALLATION DETAIL
SCALE: NTS

- CONSTRUCTION SPECIFICATIONS:**
- PREPARE THE TOPSOIL (SEEDBED) FIRST BY RAKING, SHAPING, FINE GRADING, COMPACTING, SEEDING & FERTILIZING THE SLOPES.
 - USE THE TRENCHING & ANCHORING PROCEDURES DETAILED HEREIN TO SECURE ANY EXPOSED MATERIAL ENDS. SECURE ALL PRODUCT OVERLAPS, OVERLAP IN THE DIRECTION OF WATER FLOW, PERPENDICULAR TO THE SLOPE.
 - KEEP EROSION CONTROL BLANKET IN SOLID CONTACT WITH THE TOPSOIL.
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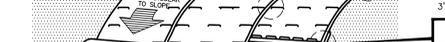
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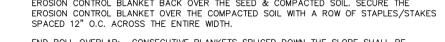
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- PREPARE THE TOPSOIL (SEEDBED) FIRST BY RAKING, SHAPING, FINE GRADING, COMPACTING, SEEDING & FERTILIZING THE SLOPES.
 - USE THE TRENCHING & ANCHORING PROCEDURES DETAILED HEREIN TO SECURE ANY EXPOSED MATERIAL ENDS. SECURE ALL PRODUCT OVERLAPS, OVERLAP IN THE DIRECTION OF WATER FLOW, PERPENDICULAR TO THE SLOPE.
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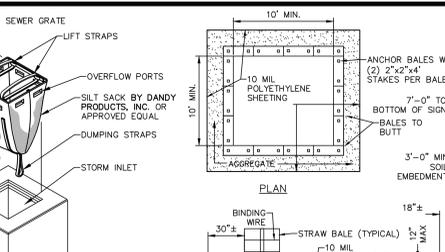
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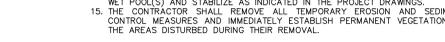
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SCALE: NOT TO SCALE

- SPDES GENERAL PERMIT GP-0-20-001 COMPLIANCE NOTES:**
- THIS PLAN SET AND THE ACCOMPANYING SWPPP ENTITLED SITE PLAN PREPARED FOR GAS LAND PETROLEUM, INC. FOR A CONVENIENCE STORE WITH A GAS FILLING STATION" HAVE BEEN SUBMITTED AS A SET. THESE ENGINEERING DRAWINGS ARE CONSIDERED AN INTEGRAL PART OF THE SWPPP. THEREFORE, THE PLAN SET IS NOT CONSIDERED COMPLETE WITHOUT THE SWPPP.
- THIS PROJECT HAS NOT RECEIVED WRITTEN APPROVAL FROM THE TOWN OF NEWBURGH ALLOWING THE DISTURBANCE OF MORE THAN FIVE (5) ACRES OF LAND AT ANY ONE TIME. THEREFORE, IF THE CONTRACTOR'S CONSTRUCTION SEQUENCING REQUIRES THE DISTURBANCE OF MORE THAN FIVE ACRES AT ANY ONE TIME, WRITTEN APPROVAL MUST BE OBTAINED FROM NYSDEC PRIOR TO EXCEEDING THE 5 ACRE LIMIT.



12. EROSION CONTROL BLANKET INSTALLATION DETAIL
SCALE: NTS

- CONSTRUCTION SPECIFICATIONS:**
- PREPARE THE TOPSOIL (SEEDBED) FIRST BY RAKING, SHAPING, FINE GRADING, COMPACTING, SEEDING & FERTILIZING THE SLOPES.
 - USE THE TRENCHING & ANCHORING PROCEDURES DETAILED HEREIN TO SECURE ANY EXPOSED MATERIAL ENDS. SECURE ALL PRODUCT OVERLAPS, OVERLAP IN THE DIRECTION OF WATER FLOW, PERPENDICULAR TO THE SLOPE.
 - KEEP EROSION CONTROL BLANKET IN SOLID CONTACT WITH THE TOPSOIL.
 - USE THE REQUIRED NUMBER OF STAPLES/STAKES TO SECURELY FASTEN THE EROSION CONTROL BLANKET TO THE SLOPE. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLES/STAKES LENGTHS GREATER THAN 6" MAY BE NECESSARY FOR PROPER SECURING. STAPLE PATTERNS & OVERLAPS ARE DEPENDENT ON SITE CONDITIONS & MANUFACTURER'S REQUIREMENTS. CONTRACTOR SHALL CONSULT WITH MANUFACTURER FOR ACTUAL SITE SPECIFIC REQUIREMENTS.
- TRENCHING & ANCHORING PROCEDURE NOTES:**
- SIDE SEAM OVERLAP:** THE EDGES OF PARALLEL BLANKETS SHALL BE STAPLED WITH A 5" OVERLAP.
- TOP OF SLOPE TRENCH:** BEGIN AT THE TOP OF SLOPE BY ANCHORING THE EROSION CONTROL BLANKET IN A 6" x 6" TRENCH WITH A 12" OVERLAP EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR WITH A ROW OF STAPLES/STAKES 12" O.C. IN THE BOTTOM OF THE TRENCH BACKFILL & COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL & FOLD THE REMAINING 12" PORTION OF THE EROSION CONTROL BLANKET BACK OVER THE SEED & COMPACTED SOIL. SECURE THE EROSION CONTROL BLANKET OVER THE COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED 12" O.C. ACROSS THE ENTIRE WIDTH.
- END ROLL OVERLAP:** CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE SHALL BE PLACED END OVER END (SHINGLE-STYLE) WITH A 3" OVERLAP. STAPLE THRU OVERLAPPED AREAS 12" APART ACROSS THE ENTIRE WIDTH.



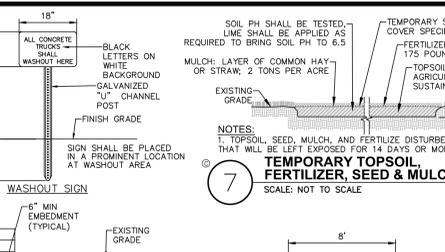
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12. EROSION CONTROL BLANKET INSTALLATION DETAIL
SCALE: NTS

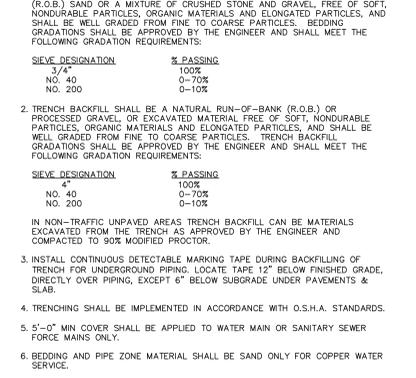
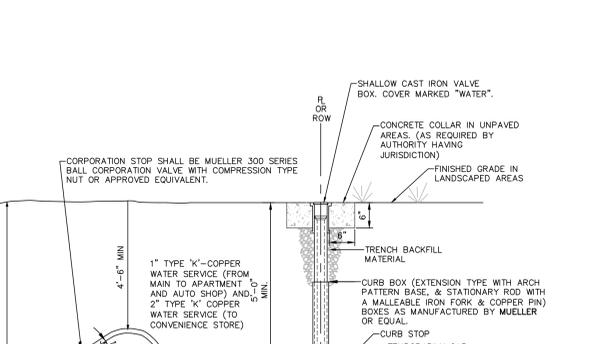
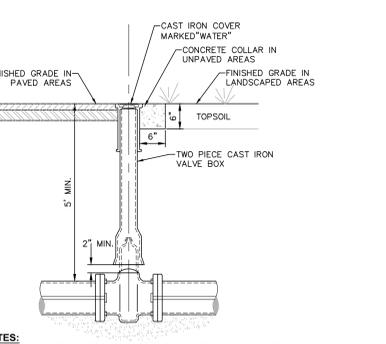
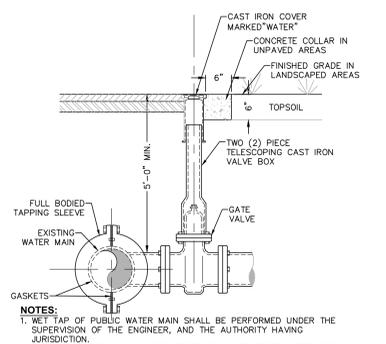
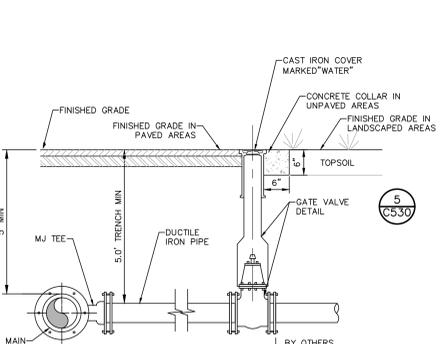
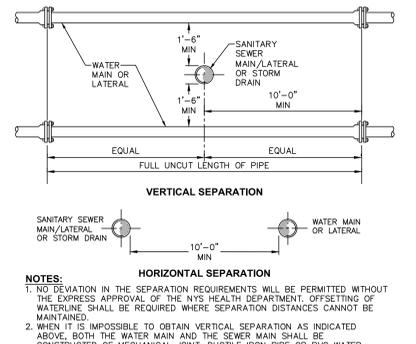
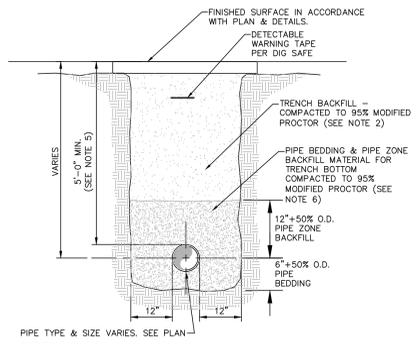
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4. SILT SACK DETAIL
SCALE: NOT TO SCALE

- NOTES:**
- CONTAINMENT MUST BE STRUCTURALLY SOUND AND LEAK-FREE AND CONTAIN ALL LIQUID WASTES.
 - QUANTITY OF DEVICES MUST BE OF SUFFICIENT NUMBER OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
 - WASHOUT MUST BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE AS WASHOUT IS 75% FULL OF LIQUID WASTES REPLACEMENT OF THE 10 MIL POLYETHYLENE SHEETING.
 - WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS.
 - ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
 - AT LEAST WEEKLY, REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.



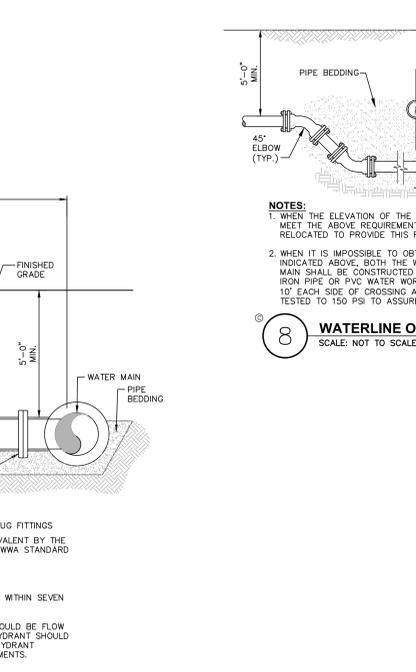
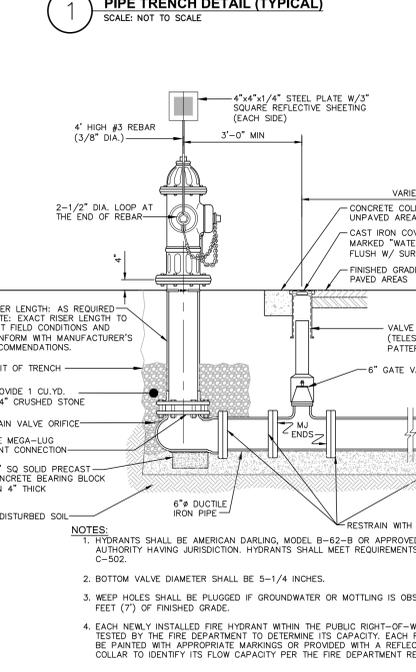


9 JOINT RESTRAINT SCHEDULE AND NOTES
SCALE: NOT TO SCALE

SCHEDULE OF JOINT RESTRAINT BARE DIP (NOT POLYWRAPPED)
(LENGTH OF PIPE EACH SIDE OF FITTING TO BE RESTRAINED IN FEET "L")

PIPE SIZE (INCHES)	FITTING TYPE						REDUCER							
	90°	45°	22 1/2°	1 1/2" TEE	VALVE	DEAD END	6"	8"	10"	12"	16"	18"	24"	
6"	43	18	8	4	29	31	31							
8"	56	23	11	5	38	41	41							
10"	68	28	14	7	48	50	50							
12"	81	34	18	8	57	59	59	43	31	17				
16"	106	44	21	10	76	78	78	66	57	46	33			
18"	119	49	24	12	85	88	88	69	59	48	18			
24"	156	65	31	15	116	116	116			86	63	50		
30"	192	80	38	19	142	144	144					91	50	

NOTES:
1. THE LENGTH OF PIPE REQUIRING RESTRAINT IS BASED UPON THE FOLLOWING ASSUMPTIONS:
A. BEDDING TYPE 2 - FLAT BOTTOM TRENCH, BACKFILL LIGHTLY CONSOLIDATED TO CENTER LINE OF PIPE.
B. SOIL TYPE CLAY 1 - CLAY OF MEDIUM TO LOW PLASTICITY, LL<50, <25% COARSE PARTICLES [CL & CL-M].
CL - INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY GRAVELY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
ML - INORGANIC SILTS, VERY FINE SAND, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS.
C. PIPE IS BARE DUCTILE IRON PIPE (NOT POLYWRAPPED)
D. DEPTH TO TOP OF PIPE 5'-0" MINIMUM
E. MAXIMUM OPERATING PRESSURE OF 150 PSI
F. FACTOR OF SAFETY OF 1.5
2. FOR END PLUGS, RESTRAIN PIPE LENGTH GIVEN FOR DEAD END FITTING.
3. THE LENGTH OF NEW PIPE TO BE RESTRAINED IS THE LENGTH FOR EACH SIDE OF THE FITTING.
4. THE ABOVE INFORMATION WAS PROVIDED USING THE THRUST RESTRAINT PROGRAM ISSUED BY THE DUCTILE IRON PIPE RESEARCH ASSOCIATION (DIPRA) AND IS BASED ON THE ASSUMPTIONS LISTED IN NOTE 1. RESTRAINED LENGTH REQUIREMENTS FOR FIELD CONDITIONS AND PIPE SIZES DIFFERING FROM THOSE LISTED ABOVE SHOULD BE EVALUATED SEPARATELY.
5. RESTRAINED JOINT PIPE AND FITTINGS SHALL BE USED ONLY AS ALLOWED BY THE PROJECT PLANS AND/OR SPECIFICATION.



WATER DISINFECTION NOTES:
1. APPROVED AND TESTED WATER MAIN SHALL BE DISINFECTED PER A.W.W.A. SECTION C651, LATEST EDITION. TABLET OR POWDERED METHOD IS NOT ALLOWED.
2. THE CONTRACTOR SHALL NOTIFY THE MUNICIPALITY AND THE PROJECT ENGINEER 48 HOURS PRIOR TO DISINFECTING THE SERVICE LINES.
3. DISINFECTED WATER MUST REMAIN IN THE WATER MAINS FOR A MINIMUM OF 24 HOURS BEFORE BEING THOROUGHLY FLUSHED OUT.
4. WATER SERVICE LINES SHALL BE DISINFECTED AS PER AWWA SECTION C651 WHERE:
A. CHLORINE CONCENTRATION IN WATER LINES SHALL BE NO LESS THAN 50 MG/L AT START OF 24-HOUR TEST.
B. CHLORINE RESIDUAL SHALL BE NO LESS THAN 10 MG/L AT END OF TEST.
5. PRIOR TO RECEIVING CERTIFICATE OF OCCUPANCY, MICROBIOLOGICAL SAMPLES SHALL BE COLLECTED FROM BOTH ENDS AND THE MIDDLE OF EACH NEW LINE. ALL LINES SHALL NOT BE USED UNTIL MICROBIOLOGICAL SAMPLES ARE ACCEPTED BY THE TOWN. RESULTS OF ALL MICROBIOLOGICAL TESTING SHALL BE SUBMITTED TO THE TOWN ALONG WITH ENGINEER'S CERTIFICATE OF COMPLETION.

WATER NOTES:
1. SHEETING AND EXCAVATION BRACING FOR THE WATERMAIN INSTALLATION SHALL BE PROVIDED IN ACCORDANCE WITH OSHA REQUIREMENTS TO SUIT EXISTING SOIL CONDITIONS. SHEETING, IF REQUIRED, SHALL BE TIGHT WOOD SHEETING AND SHALL BE LEFT IN PLACE, AND AFTER BACKFILLING SHALL BE CUT AT GROUND LEVEL OR AS ORDERED BY THE OWNER'S REPRESENTATIVE.
2. MATERIALS USED IN CONSTRUCTION THAT WILL CONTACT POTABLE WATER SHALL BE ANS/NSF 61 CERTIFIED OR EQUIVALENT.

TESTING WATER MAINS:
1. AFTER TRENCH HAS BEEN BACKFILLED, HYDROSTATIC ACCEPTANCE TESTS, CONSISTING OF A PRESSURE TEST AT ALL SECTIONS SHALL BE PERFORMED ON ALL SECTIONS OF WATER MAINS INSTALLED. LEAKAGE TEST SHALL BE CONDUCTED CONTINUOUSLY WITH PRESSURE TEST. TEST SECTION SHALL BE LIMITED TO ABOUT 2000 FT (MAX.) UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2. AFTER ALL TESTS AND INSPECTIONS HAVE BEEN PERFORMED EVIDENCE OF COMPLIANCE SHALL BE FORWARDED TO OWNER/ENGINEER AND THE MUNICIPALITY PRIOR TO ACCEPTANCE.
3. ALL WATER FOR TESTS SHALL BE FURNISHED AND DISPOSED OF BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE. SOURCE AND/OR QUALITY OF WATER WHICH THE CONTRACTOR PROPOSES TO USE IN TESTING LINES SHALL BE ACCEPTABLE TO THE ENGINEER.
4. HYDROSTATIC PRESUMPTIVE TESTS MAY BE PERFORMED WHEN SYSTEM IS PARTIALLY BACKFILLED TO SIMPLY CHECK WORK, BUT ACCEPTANCE OF SYSTEM SHALL BE BASED ON HYDROSTATIC TESTS RUN ON FINISHED SYSTEM AFTER IT HAS BEEN COMPLETELY BACKFILLED. ALL HYDROSTATIC TESTS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 4 OF AWWA STANDARD C 600 OR LATER ADDITION, AS MODIFIED HEREIN.
5. FOR THE PRESSURE TEST, SYSTEM SHALL BE PRESSURIZED AND MAINTAINED AT A MINIMUM OF 150 POUNDS PER SQUARE INCH, OR 1.5 TIMES THE WORKING PRESSURE, WHICHEVER IS GREATER, BASED ON THE ELEVATION OF THE LOWEST POINT IN THE SECTION BEING TESTED AND CORRECTED TO THE ELEVATION OF THE GAUGE. PROVISIONS SHALL BE MADE TO RELIEVE AIR TRAPPED AT HIGH POINTS IN THE SYSTEM THROUGH ADEQUATE HYDRANTS OR THROUGH TAPS AND CORROSION STOPS INSTALLED FOR THIS PURPOSE BY THE CONTRACTOR. AFTER SAID PRESSURE HAS BEEN MAINTAINED SUCCESSFULLY WITH FURTHER PUMPING AS REQUIRED, FOR A PERIOD OF AT LEAST TWO HOURS, THE SECTION UNDER TEST SHALL BE CONSIDERED TO HAVE PASSED THE PRESSURE TEST.
6. LEAKAGE TEST SHALL BE PERFORMED CONCURRENTLY WITH A MINIMUM TEST PRESSURE OF 150 LBS/SQUARE INCH, OR 1.5 TIMES THE WORKING PRESSURE, WHICHEVER IS GREATER, BASED ON THE ELEVATION OF THE LOWEST POINT IN THE SECTION UNDER TEST AND CORRECTED TO ELEVATION OF THE GAUGE. LEAKAGE TEST DURATION SHALL BE A MINIMUM OF 2 HOURS AFTER LEAKAGE RATE HAS STABILIZED.
7. MAXIMUM ALLOWABLE LEAKAGE SHALL BE AS SHOWN IN THE FOLLOWING TABLE:
ALLOWABLE LEAKAGE PER 1000 FT (305M) OF PIPELINE (GPH)

AVG. TEST PRESSURE (PSI)	8	10	12	14	16
450	0.57	0.86	1.15	1.43	1.72
400	0.54	0.81	1.08	1.35	1.62
350	0.51	0.76	1.01	1.26	1.52
300	0.47	0.70	0.94	1.17	1.40
275	0.45	0.67	0.90	1.12	1.34
250	0.43	0.65	0.85	1.07	1.28
225	0.41	0.61	0.81	1.01	1.22
200	0.38	0.57	0.76	0.96	1.15
175	0.36	0.54	0.72	0.89	1.07
150	0.33	0.50	0.66	0.83	0.99
125	0.30	0.45	0.60	0.76	0.91
100	0.27	0.41	0.54	0.68	0.81

1. IF LEAKAGE IN SYSTEM EXCEEDS THE SPECIFIED AMOUNT, THE CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER, LOCATE, REPAIR, AND/OR REPLACE DEFECT(S) AND RE-TEST PIPING.



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 o New York City, NY

Hudson Valley Office
 21 Fox Street
 Poughkeepsie, New York 12601

www.chazencompanies.com
 8880 838-9073

rev.	date	description
1	03/31/22	REVISED PER TOWN COMMENTS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
450	0.57	0.86	1.15	1.43	1.72	2.01	2.29	2.58	2.86	3.15	3.43	3.72	4.01	4.29	4.58
400	0.54	0.81	1.08	1.35	1.62	1.89	2.16	2.43	2.70	2.97	3.24	3.51	3.78	4.05	
350	0.51	0.76	1.01	1.26	1.52	1.77	2.02	2.27	2.52	2.77	3.02	3.27	3.52	3.77	
300	0.47	0.70	0.94	1.17	1.40	1.63	1.87	2.10	2.33	2.56	2.79	3.02	3.25	3.48	
275	0.45	0.67	0.90	1.12	1.34	1.57	1.79	2.01	2.23	2.45	2.67	2.89	3.11	3.33	
250	0.43	0.65	0.85	1.07	1.28	1.50	1.71	1.92	2.13	2.34	2.55	2.76	2.97	3.18	
225	0.41	0.61	0.81	1.01	1.22	1.42	1.62	1.82	2.02	2.22	2.42	2.62	2.82	3.02	
200	0.38	0.57	0.76	0.96	1.15	1.34	1.53	1.72	1.91	2.10	2.29	2.48	2.67	2.86	
175	0.36	0.54	0.72	0.89	1.07	1.25	1.43	1.61	1.79	1.97	2.15	2.33	2.51	2.69	
150	0.33	0.50	0.66	0.83	0.99	1.16	1.32	1.49	1.65	1.81	1.97	2.13	2.29	2.45	
125	0.30	0.45	0.60	0.76	0.91	1.06	1.21	1.36	1.51	1.66	1.81	1.96	2.11	2.26	
100	0.27	0.41	0.54	0.68	0.81	0.95	1.08	1.22	1.35	1.49	1.62	1.76	1.89	2.02	

FOR PLANNING BOARD REVIEW - NOT FOR CONSTRUCTION

GAS LAND 5200 ROUTE 9W

WATER DETAILS

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed	checked
SPL	CPL
date	scale
01/25/22	AS SHOWN
project no.	81912.00
sheet no.	C530

SOIL TEST RESULTS

PERCOLATION TESTS – 2023-09-05									
TEST HOLE NO.	TEST HOLE DEPTH	PRE-SOAKED	TEST RUNS					STABILIZATION TIME	
			*	1	2	3	4		5
PT-1-1	24"	Yes	9:26 AM	9:45 AM	9:58 AM	10:16 AM	10:16 AM	20 min	
			9:39 AM	9:58 AM	10:16 AM	10:36 AM	10:36 AM		
			13	13	18	20	20		
PT-1-2	24"	Yes	9:27 AM	9:44 AM	10:06 AM	10:35 AM		30 min	
			9:43 AM	10:06 AM	10:35 AM	11:05 AM			
			16	22	29	30			
PT-1-3	24"	Yes	9:27 AM	9:41 AM	9:52 AM	10:03 AM		12 min	
			9:38 AM	9:52 AM	10:03 AM	10:15 AM			
			11	11	11	12			

DEEP TESTS – 2023-10-11						
Deep Test Hole No.	Date:	Test Hole Depth	Mottling Depth	Bedrock Depth	Water Depth	Soil Profile Description
TP1-1	10/11/2023	96"	-	-	-	0"-24" Topsoil with roots 24"-96" Sandy loam with silt and small to medium cobbles
TP1-2	10/11/2023	96"	-	-	-	0"-18" Topsoil with roots 18"-96" Silty loam with sand, pockets of clay, and small to medium cobbles

**ORANGE COUNTY DEPARTMENT OF HEALTH
SEWAGE DISPOSAL SYSTEM NOTES:**

- THE DESIGN AND LOCATION OF SANITARY FACILITIES (WATER AND SEWER SYSTEMS) SHALL NOT BE CHANGED WITHOUT REVIEW AND APPROVAL OF THE ORANGE COUNTY DEPARTMENT OF HEALTH.
- ALL WELLS WITHIN 300 FT. OF THIS PROJECT HAVE BEEN LOCATED AND ARE SHOWN ON THE PLANS.
- TRENCHES SHALL NOT BE INSTALLED IN WET SOIL. THE SIDES AND BOTTOM OF TRENCHES MUST BE RAKED. THE ENDS OF THE LATERALS MUST BE CAPPED.
- THERE SHALL BE NO REGRADING, EXCEPT AS SHOWN ON THE APPROVED PLANS, IN THE AREA OF THE ABSORPTION FIELDS.
- HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREA OF THE ABSORPTION FIELDS EXCEPT DURING CONSTRUCTION.
- THE ACTUAL CONSTRUCTION, THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE ABSORPTION FIELD AREA BEFORE, DURING, OR AFTER CONSTRUCTION. EXTREME CARE MUST BE TAKEN DURING THE ACTUAL CONSTRUCTION SO AS TO AVOID ANY UNDE COMPACTION THAT COULD RESULT IN A CHANGE OF THE ABSORPTION CAPACITY OF THE SOIL ON WHICH THE DESIGN WAS BASED.
- NO SWIMMING POOLS, DRIVEWAYS, OR STRUCTURES THAT MAY COMPACT THE SOIL SHALL BE LOCATED OVER ANY PORTION OF THE ABSORPTION FIELD.
- THIS SYSTEM WAS NOT DESIGNED TO ACCOMMODATE GARAGE GRINDERS, JACUZZI TYPE SPA TUBS OVER 100 GALLONS, OR WATER CONDITIONERS, AS SUCH, THESE ITEMS SHALL NOT BE INSTALLED UNLESS THE SYSTEM IS REDESIGNED TO ACCOUNT FOR THEM AND REAPPROVED BY THE ORANGE COUNTY HEALTH DEPARTMENT.
- THERE MUST BE AN UNINTERRUPTED POSITIVE SLOPE FROM THE SEPTIC TANK (OR ANY PUMPING OR DOSING CHAMBER) TO THE BUILDING, ALLOWING SEPTIC GASES TO DISCHARGE THROUGH THE STACK VENT.
- THE OWNER/APPLICANT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS-BUILT DRAWING OF ANY EXISTING SANITARY FACILITIES.
- PROVIDE NOTES FOR ANY OF THE FOLLOWING THAT MAY APPLY:
 - SEPTIC TANKS SHOULD BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS.
 - PUMP STATIONS/DOSING CHAMBERS SHOULD BE INSPECTED PERIODICALLY BY A PROPERLY TRAINED PERSON FOR PROPER OPERATION, INCLUDING HIGH WATER ALARMS, VENTING AND ANY PHYSICAL DAMAGE.
 - DISTRIBUTION BOXES/DROP BOXES SHOULD BE INSPECTED ANNUALLY TO ASSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY.
 - INDIVIDUAL WELLS AND SEWAGE DISPOSAL SYSTEMS SHALL NO LONGER BE CONSTRUCTED OR USED WHEN PUBLIC FACILITIES BECOME AVAILABLE. CONNECTION TO THE PUBLIC SEWER SYSTEM IS REQUIRED WITHIN 1 YEAR OF AVAILABILITY.
 - ORANGE COUNTY DEPARTMENT OF HEALTH PLAN APPROVAL IS LIMITED TO 5 YEARS. TIME EXTENSIONS FOR PLAN APPROVAL MAY BE GRANTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH BASED UPON REGULATIONS IN EFFECT AT THAT TIME. A NEW PLAN SUBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.
 - THIS NOTE MUST BE ADDED TO PAGE 1 OF THE PLANS. UDDI-NY MUST BE CONTACTED PRIOR TO ANY EXCAVATION OR DEMOLITION (DIAL 811 OR WWW.UDDI.NY.GOV).
 - A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER (OR OTHER DESIGN PROFESSIONAL AS ALLOWED BY THE NYS EDUCATION DEPARTMENT) SHALL INSPECT THE SANITARY FACILITIES AT THE TIME OF CONSTRUCTION. THE ENGINEER SHALL CERTIFY TO THE ORANGE COUNTY DEPARTMENT OF HEALTH AND THE LOCAL CODE ENFORCEMENT OFFICER THAT THE FACILITIES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND THAT ANY SEPTIC TANK JOINTS HAVE BEEN SEALED AND TESTED FOR WATER TIGHTNESS.

TESTING GRAVITY SEWER SYSTEM:

- CONTRACTOR SHALL INSPECT AND TEST THE INSTALLATIONS AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION WHEN WORK IS READY FOR TESTING. AFTER ALL TESTS HAVE BEEN PERFORMED, EVIDENCE OF COMPLIANCE SHALL BE FORWARDED TO OWNER/ENGINEER AND THE AUTHORITY HAVING JURISDICTION PRIOR TO ACCEPTANCE.
- THE CONTRACTOR SHALL TEST AND INSPECT FOR ALIGNMENT OF ALL SANITARY SEWERS.
- EACH MANHOLE-TO-MANHOLE SECTION SHALL BE REJECTED OR ACCEPTED BASED ONLY ON RESULTS OF ITS OWN INDEPENDENT SECTION TEST AND NOT ON RESULTS OF ANY ONE TEST RUN SIMULTANEOUSLY OVER MORE THAN ONE CONSECUTIVE MANHOLE-TO-MANHOLE SECTION. THE ONLY EXCEPTION ALLOWED, ACCEPTING SEVERAL CONSECUTIVE MANHOLE-TO-MANHOLE SECTIONS BASED ON ONE COMBINED INFILTRATION TEST INDICATING ZERO INFILTRATION.
- LOW PRESSURE AIR TESTING SHALL BE PERFORMED UNDER DIRECTION OF ENGINEER ACCORDING TO ASTM F1417. LOW PRESSURE AIR TEST IS A COMPARISON OF THE MEASURED TIME VERSUS THE THEORETICAL TIME. THE TEST SHALL BE PERFORMED AT ALL WITH MINIMUM ALLOWABLE TIME FOR THAT PRESSURE DROP TO OCCUR DETERMINED BY METHODS INDICATED IN ASTM F1417. IF THE ONE (1) PSIG PRESSURE DROP OCCURS FASTER THAN ALLOWABLE TIME, SECTION IS UNACCEPTABLE.
- AN AIR TEST SHALL NOT BE RUN UNTIL SECTION OF LINE TO BE TESTED HAS BEEN CLEANED OF ALL FOREIGN MATERIAL BY FLUSHING AND HAS BEEN VISUALLY INSPECTED AND APPROVED BY THE ENGINEER. CERTAIN PIPE MATERIALS PRODUCE MORE CONSISTENT RESULTS WHEN INTERIOR OF PIPE IS WETTED PRIOR TO TESTING.
- WHERE FLEXIBLE PIPE IS USED, CONTRACTOR SHALL TEST ALL MAINLINE PIPE FOR MAXIMUM ALLOWABLE DEFLECTION OF 5% OF OUTSIDE DIAMETER. DEFLECTION TESTS SHALL BE PERFORMED USING A CIRCULAR STEEL BALL ON SLED 1/16-INCH IN DIAMETER SMALLER THAN ALLOWABLE INSIDE DIAMETER OF FLEXIBLE PIPE WHEN DEFLECTED A MAXIMUM OF 5% OF OUTSIDE DIAMETER. DEFLECTION TESTING OF ANY PIPE SHALL BE DONE NO SOONER THAN 30 DAYS AFTER DATE OF INSTALLATION OF PIPE SECTION UNLESS WRITTEN EXCEPTION.
- SEWERS SHALL BE LAID WITH STRAIGHT ALIGNMENT BETWEEN MANHOLES. STRAIGHT ALIGNMENT SHALL BE CHECKED EITHER USING A LASER BEAM OR LAMPING. TESTING SHALL COMPLY WITH REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
- MANHOLES, WHICH CANNOT BE PROPERLY AIR TESTED, SHOULD BE VISUALLY INSPECTED AND LEAKAGE TESTED USING INTERNAL OR EXTERNAL HYDROSTATIC PRESSURE. LEAKAGE TESTING SHALL COMPLY WITH REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
- IN AREAS WHERE CONVENTIONAL TESTING IS IMPRACTICAL (I.E. AREAS DESIGNATED BY ENGINEER WHERE EXISTING SERVICES ARE TIED INTO NEW LINE IMMEDIATELY AND ANY BLOCKAGE COULD RESULT IN HEALTH PROBLEMS) NO LINES SHALL BE BACKFILLED UNTIL EACH PIPE SECTION AND CONNECTION IS INSPECTED AND APPROVED.
- WHERE SEWERS ARE CONSTRUCTED OF PRESSURE-RATED PIPE AND INSTALLED WITH LESS THAN 18 INCHES VERTICAL SEPARATION FROM EXISTING OR PROPOSED WATER MAINS, BLOCKAGE COULD RESULT IN HEALTH PROBLEMS. NO LINES SHALL BE BACKFILLED UNTIL EACH PIPE SECTION AND CONNECTION IS INSPECTED AND APPROVED.
- IF THE ALLOWABLE RATE OF AIR LEAKAGE IS EXCEEDED, THE CONTRACTOR SHALL LOCATE POINTS OF EXCESSIVE LEAKAGE AND SHALL PROMPTLY CORRECT, REPAIR, AND BRING SYSTEM UP TO THE STANDARD. COSTS OF ALL SUCH REPAIRS AND CORRECTIVE MEASURES, INCLUDING COSTS OF REPEATED TESTS, SHALL BE BORN BY CONTRACTOR. THE SEWER LINE SECTION (INCLUDING MANHOLES AND BUILDING SERVICES) UNDER TEST SHALL NOT BE ACCEPTED UNTIL THESE TEST CRITERIA ARE MET.
- SANITARY MANHOLES SHALL BE VACUUM TESTED IN ACCORDANCE WITH ASTM C1244. A VACUUM OF 10 INCHES OF Hg SHOULD BE DRAWN ON THE MANHOLE AFTER ALL HOLES ARE PLUGGED, AND INLETS/OUTLETS ARE TEMPORARILY PLUGGED AND SECURED. THE TIME IS MEASURED FOR THE VACUUM TO DROP TO 9 INCHES Hg. THE MANHOLE IS ACCEPTED IF THE MEASURED TIME MEETS OR EXCEEDS THE VALUES PRESENTED IN TABLE 1 OF ASTM C1244. IF THE MANHOLE FAILS THE INITIAL TEST, IT SHALL BE REPAIRED BY AN APPROVED METHOD UNTIL A SATISFACTORY TEST IS OBTAINED. MANHOLES, WHICH CANNOT BE PROPERLY AIR TESTED, SHOULD BE VISUALLY INSPECTED AND LEAKAGE-TESTED USING INTERNAL OR EXTERNAL HYDROSTATIC PRESSURE. LEAKAGE TESTING SHALL COMPLY WITH REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.

SSDS NOTES:

- THE DESIGN AND LOCATION OF SANITARY FACILITIES (WATER AND SEWER SYSTEMS) SHALL NOT BE CHANGED.
- ALL WELLS WITHIN 300 FT. OF THE PROPOSED ONSITE WASTE WATER TREATMENT FACILITY HAVE BEEN LOCATED AND ARE SHOWN ON THE PLANS.
- TRENCHES SHALL NOT BE INSTALLED IN WET SOIL. THE SIDES AND BOTTOM OF TRENCHES MUST BE RAKED. THE ENDS OF THE LATERALS MUST BE CAPPED.
- THERE SHALL BE NO REGRADING, EXCEPT AS SHOWN ON THE APPROVED PLANS, IN THE AREA OF THE ABSORPTION FIELDS.
- HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREA OF THE ABSORPTION FIELDS EXCEPT DURING THE ACTUAL CONSTRUCTION. THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE ABSORPTION FIELD AREA BEFORE, DURING, OR AFTER CONSTRUCTION. EXTREME CARE MUST BE TAKEN DURING THE ACTUAL CONSTRUCTION SO AS TO AVOID ANY UNDE COMPACTION THAT COULD RESULT IN A CHANGE OF THE ABSORPTION CAPACITY OF THE SOIL ON WHICH THE DESIGN WAS BASED.
- NO SWIMMING POOLS, DRIVEWAYS, OR STRUCTURES THAT MAY COMPACT THE SOIL SHALL BE LOCATED OVER ANY PORTION OF THE ABSORPTION FIELD.
- THIS SYSTEM WAS NOT DESIGNED TO ACCOMMODATE GARAGE GRINDERS, JACUZZI TYPE SPA TUBS OVER 100 GALLONS, OR WATER CONDITIONERS, AS SUCH, THESE ITEMS SHALL NOT BE INSTALLED UNLESS THE SYSTEM IS REDESIGNED TO ACCOUNT FOR THEM AND REAPPROVED BY THE ORANGE COUNTY HEALTH DEPARTMENT.
- THERE MUST BE AN UNINTERRUPTED POSITIVE SLOPE FROM THE SEPTIC TANK (OR ANY PUMPING OR DOSING CHAMBER) TO THE BUILDING, ALLOWING SEPTIC GASES TO DISCHARGE THROUGH THE STACK VENT.
- THE OWNER/APPLICANT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS-BUILT DRAWING OF ANY EXISTING SANITARY FACILITIES.
- PROVIDE NOTES FOR ANY OF THE FOLLOWING THAT MAY APPLY:
 - SEPTIC TANKS SHOULD BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS.
 - DOSING CHAMBERS SHOULD BE INSPECTED PERIODICALLY BY A PROPERLY TRAINED PERSON FOR PROPER OPERATION, INCLUDING HIGH WATER ALARMS, VENTING AND ANY PHYSICAL DAMAGE.
 - DISTRIBUTION BOXES/DROP BOXES SHOULD BE INSPECTED PERIODICALLY TO ASSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY.
- INDIVIDUAL WELLS AND SEWAGE DISPOSAL SYSTEMS SHALL NO LONGER BE CONSTRUCTED OR USED WHEN PUBLIC FACILITIES BECOME AVAILABLE. CONNECTION TO THE PUBLIC SEWER SYSTEM IS REQUIRED WITHIN 1 YEAR OF AVAILABILITY.
- ORANGE COUNTY DEPARTMENT OF HEALTH PLAN APPROVAL IS LIMITED TO 5 YEARS. TIME EXTENSIONS FOR PLAN APPROVAL MAY BE GRANTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH BASED UPON REGULATIONS IN EFFECT AT THAT TIME. A NEW PLAN SUBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.
- A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER (OR OTHER DESIGN PROFESSIONAL AS ALLOWED BY THE NYS EDUCATION DEPARTMENT) SHALL INSPECT THE SANITARY FACILITIES AT THE TIME OF CONSTRUCTION. THE ENGINEER SHALL CERTIFY TO THE ORANGE COUNTY DEPARTMENT OF HEALTH AND THE LOCAL CODE ENFORCEMENT OFFICER THAT THE FACILITIES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND THAT ANY SEPTIC TANK JOINTS HAVE BEEN SEALED AND TESTED FOR WATER TIGHTNESS.

SEWAGE FACILITIES DEMOLITION NOTES:

- CONTRACTOR SHALL LOCATE AND REMOVE ALL COMPONENTS OF THE EXISTING SSDS SERVING ALL BUILDINGS PROPOSED FOR DEMOLITION.
- SEPTIC TANKS, LEACHING FIELDS, AND OTHER SIMILAR FACILITIES ASSOCIATED WITH THE EXISTING BUILDING SHALL BE PUMPED FREE OF SEPTAGE, FACILITIES REMOVED AND THE RESULTING HOLE SHALL BE BACKFILLED IN LIFTS OF COMPACTED SUITABLE FILL MATERIAL.
- THE ABANDONMENT AND/OR DECOMMISSIONING OF ALL EXISTING SUBSURFACE DISPOSAL SYSTEMS MUST BE IN ACCORDANCE WITH THE PROCEDURES APPROVED BY THE COUNTY DEPARTMENT OF HEALTH AND CERTIFIED BY A NYS PROFESSIONAL ENGINEER.
- TANKS SHALL BE PUMPED BY A DEC CERTIFIED SEEPAGE HAULER AND ITEMS REMOVED FROM SITE SHALL BE IN ACCORDANCE WITH DEC TRANSPORT AND DISPOSAL REQUIREMENTS.
- A PROFESSIONAL ENGINEER SHALL CERTIFY TO THE PROPER ABANDONMENT OF THE SSDS AREA TO THE TOWN.

FORCE MAIN TESTING:

- THE COMPLETE SEWAGE FORCE MAIN INCLUDING VALVES, FITTINGS CONNECTIONS TO PUMPS AND OTHER PIPELINE SYSTEMS SHALL BE TESTED FOR LEAKAGE.
- THE SYSTEM SHALL BE PRESSURIZED TO 1.5 TIMES THE PIPE WORKING PRESSURE AT THE LOWEST POINT OF THE MAIN OR 100 PSF, WHICHEVER IS GREATER. AFTER THE PRESSURE HAS BEEN MAINTAINED SUCCESSFULLY FOR ONE HOUR, THE LEAKAGE TEST SHALL BE PERFORMED FOR A PERIOD OF NO LESS THAN 2 HOURS. HYDROSTATIC TESTS SHALL BE PERFORMED AND RESULTS DERIVED IN ACCORDANCE WITH AWWA C 600-05, SECTION 5. IN NO CASE SHALL THE TEST PRESSURE EXCEED THE DESIGN PRESSURE LIMITS FOR ANY PIPE, THROTTLE VALVE, FITTINGS, VALVES OR OTHER APPURTENANCE OF THE TEST SECTION.
- IF THE LEAKAGE IN THE SYSTEM EXCEEDS THE SPECIFIED AMOUNT, MAKE ANY REPAIRS OR REPLACEMENTS NECESSARY TO REDUCE THE LEAKAGE TO THE REQUIRED LIMITS AND RETEST THE SYSTEM.

THE MAXIMUM ALLOWABLE LEAKAGE SHALL BE AS SHOWN IN THE FOLLOWING TABLE: ALLOWABLE LEAKAGE IN GALLONS PER 1000 FT OF PIPELINE (GPH).

AVG. TEST PRESSURE	NOMINAL PIPE DIAMETER-IN.
250	0.29 0.57 0.86
450	0.27 0.54 0.82
350	0.26 0.51 0.76
400	0.24 0.47 0.70
275	0.23 0.45 0.67
300	0.23 0.45 0.67
225	0.21 0.41 0.61
150	0.19 0.38 0.54
175	0.18 0.36 0.54
100	0.17 0.34 0.50
125	0.15 0.30 0.45
100	0.14 0.27 0.41

rev.	date	description
1	03/04/24	THIS SHEET ADDED.

SEPTIC TANK AND GREASE TRAP HYDROSTATIC TESTING:

- SEPTIC TANK AND GREASE TRAP SHALL BE TESTED FOR LEAKAGE AND ALL LEAKS SHALL BE REPAIRED IN A MANNER SUBJECT TO THE ENGINEER'S APPROVAL. UNLESS A SEPTIC TANK IS DELIVERED TO THE SITE, A HYDROSTATIC SHALL BE PERFORMED IN CONFORMANCE WITH THE FOLLOWING REQUIREMENTS.
- HYDROSTATIC TESTING
 - UNLESS OTHERWISE APPROVED, CONDUCT ALL TESTING IN THE PRESENCE OF THE ENGINEER.
 - NOTIFY THE ENGINEER 48 HOURS IN ADVANCE OF TESTING.
 - THE STRUCTURE SHALL BE COMPLETELY PLUGGED AND FILLED WITH WATER AND ALLOWED TO STAND FOR TWENTY FOUR (24) HOURS PRIOR TO ANY READING IN ORDER TO PERMIT ABSORPTION BY THE STRUCTURE.
 - AFTER TWENTY FOUR (24) HOURS, A READING SHALL BE TAKEN AND THE STRUCTURE ALLOWED TO STAND FOR 24 HOURS.
 - THE DROP IN WATER LEVEL AFTER 24 HOURS SHALL BE NOTED.
 - LEAKAGE IN THE STRUCTURE SHALL NOT EXCEED THE ALLOWABLE LOSS OF 1 GALLON PER VERTICAL FOOT OF MANHOLE SECTION FOR A 24-HOUR PERIOD, PER TR-16 GUIDE FOR THE DESIGN OF WASTEWATER TREATMENT WORKS.
 - STRUCTURE FAILING THE TEST SHALL BE REPAIRED AND RETESTED TO THE SATISFACTION OF THE ENGINEER.
 - THE CONTRACTOR SHALL COORDINATE AND BEAR ALL COSTS FOR PROVISION AND DISPOSAL OF WATER NECESSARY FOR THE LEAK TESTING OF THE STRUCTURE.

GREASE TRAP SIZING CALCULATIONS:

PER THE 2014 NYSED DESIGN STANDARDS FOR INTERMEDIATE SIZED WASTEWATER TREATMENT SYSTEMS, GREASE TRAPS SHALL BE SIZED BASED ON THE 30-MINUTE DETENTION TIME OF PEAK FLOW.

PER TABLE E 103.3(2), LOAD VALUES ASSIGNED TO FIXTURES, IN THE NYS PLUMBING CODE THE LOAD VALUES, IN WATER SUPPLY FIXTURES UNITS (WSFU) OF A KITCHEN SINK ASSOCIATED WITH A HOTEL/RESTAURANT WOULD BE 4 FIXTURE UNITS.

PER TABLE 709.1 DRAINAGE FIXTURE UNITS FOR FIXTURES AND GROUPS, IN THE NYS PLUMBING CODE, THE LOAD VALUES ASSOCIATED WITH FLOOR DRAINS WOULD BE 2 (REFER TO NOTE H - SEE SECTION 709.4 AND 709.4.1 OF PLUMBING CODE), FLOOR SINKS (REFER TO NOTE H - SEE SECTION 709.4 AND 709.4.1 OF PLUMBING CODE), AND HANDWASH SINKS WOULD BE 2.

- 709.4 VALUES FOR INDIRECT WASTE RECEPTOR. THE DRAINAGE FIXTURE UNIT LOAD OF AN INDIRECT WASTE RECEPTOR RECEIVING THE DISCHARGE OF INDIRECTLY CONNECTED FIXTURES SHALL BE THE SUM OF THE DRAINAGE FIXTURE UNIT VALUES OF THE FIXTURES THAT DISCHARGE INTO THE RECEPTOR, BUT NOT LESS THAN THE DRAINAGE FIXTURE UNIT VALUE GIVEN FOR THE INDIRECT WASTE RECEPTOR IN TABLE 709.1 OR 709.2.
- 709.4.1 CLEAR-WATER WASTE RECEPTORS. WHERE WASTE RECEPTORS SUCH AS FLOOR DRAINS, FLOOR SINKS AND HUB DRAINS RECEIVE ONLY CLEAR-WATER WASTE FROM DISPLAY CASES, REFRIGERATED DISPLAY CASES, ICE BINS, COOLERS AND FREEZERS, SUCH RECEPTORS SHALL HAVE A DRAINAGE FIXTURE UNIT VALUE OF ONE HALF.

TOTAL FIXTURE UNITS

1 KITCHEN SINKS AT 4 FIXTURE UNITS = 4 FIXTURE UNITS
 1 BEVERAGE FOUNTAIN AT 0.25 FIXTURE UNITS = 0.25 FIXTURE UNITS
 1 ICE MACHINE DRAIN AT 0.5 FIXTURE UNITS = 0.5 FIXTURE UNITS
 1 CONDENSATE DRAIN AT 0.5 = 0.5 FIXTURE UNITS
 2 HAND WASH SINKS AT 2 FIXTURE UNITS = 4 FIXTURE UNITS
 1 FLOOR SINKS WITH HOT/COLD AT 4 FIXTURE UNITS = 4 FIXTURE UNITS

TOTAL = 13.25 FIXTURE UNITS

PER TABLE E103.3(3) FOR ESTIMATING DEMAND IN THE NYS PLUMBING CODE THE DEMAND ASSOCIATED WITH 13.25 FIXTURE UNITS IS 17 GPM.

TO ACHIEVE A 30 MINUTE DETENTION TIME THE TANK WOULD NEED TO BE : 17 GPM X 30 MIN = 510 GALLON TANK
 A 750 GALLON GREASE TRAP IS PROPOSED.

GREASE TRAP/SEPTIC TANK/PUMP STATION HYDROSTATIC TESTING:

- IF THE GREASE TRAP/SEPTIC TANK/PUMP STATION IS DELIVERED IN TWO PIECES (NON-MONOLITHIC), THEY SHALL BE TESTED FOR LEAKAGE AND ALL LEAKS SHALL BE REPAIRED IN A MANNER SUBJECT TO THE ENGINEER'S APPROVAL. A HYDROSTATIC TEST SHALL BE PERFORMED IN CONFORMANCE WITH THE FOLLOWING REQUIREMENTS.
- HYDROSTATIC TESTING
 - UNLESS OTHERWISE APPROVED, CONDUCT ALL TESTING IN THE PRESENCE OF THE ENGINEER.
 - NOTIFY THE ENGINEER 48 HOURS IN ADVANCE OF TESTING.
 - THE STRUCTURE SHALL BE COMPLETELY PLUGGED AND FILLED WITH WATER AND ALLOWED TO STAND FOR TWO (2) HOURS PRIOR TO ANY READING IN ORDER TO PERMIT ABSORPTION BY THE WET WELL STRUCTURE.
 - AFTER TWO (2) HOURS, A READING SHALL BE TAKEN AND THE STRUCTURE ALLOWED TO STAND FOR 24 HOURS.
 - THE DROP IN WATER LEVEL AFTER 24 HOURS SHALL BE NOTED.
 - LEAKAGE IN THE GREASE TRAP/SEPTIC TANK/PUMP STATION SHALL NOT EXCEED 0.6 GALLONS/FT MANHOLE DIAMETER/FT OF MANHOLE DEPTH.
 - GREASE TRAP/SEPTIC TANK/PUMP STATION FAILING THE TEST SHALL BE REPAIRED AND RETESTED TO THE SATISFACTION OF THE ENGINEER.
 - THE CONTRACTOR SHALL COORDINATE AND BEAR ALL COSTS FOR PROVISION AND DISPOSAL OF WATER NECESSARY FOR THE LEAK TESTING OF THE STRUCTURE.

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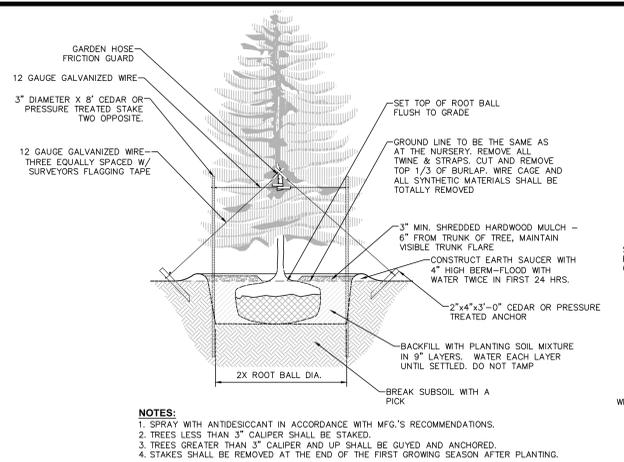
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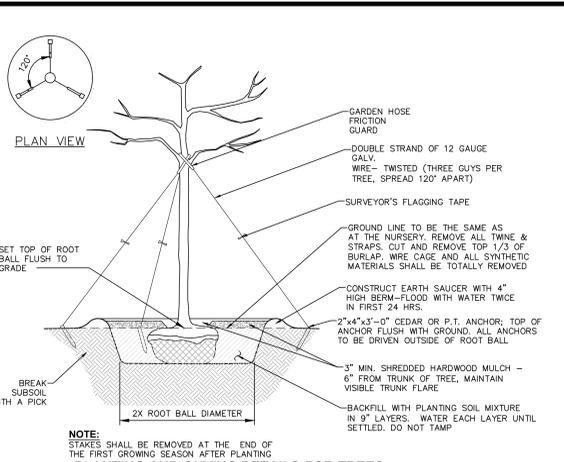
SUBSURFACE DISPOSAL SYSTEM DETAILS

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

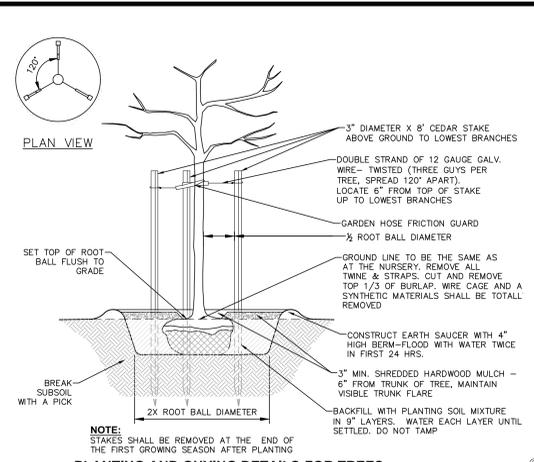
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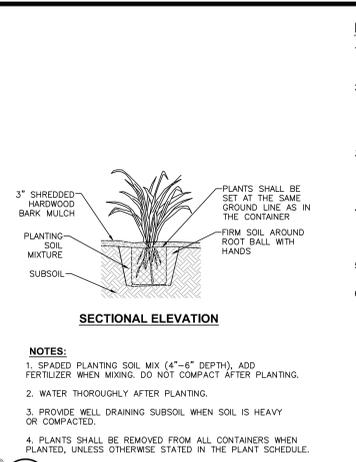
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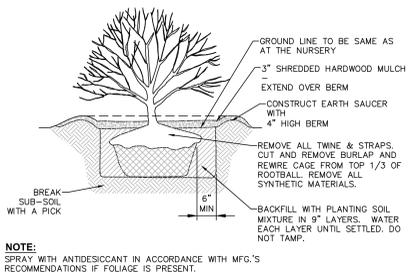
2 PLANTING AND GUYING DETAILS-FOR TREES 3\"/>



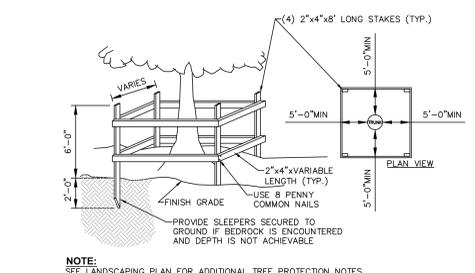
3 PLANTING AND GUYING DETAILS-FOR TREES SMALLER THAN 3\"/>



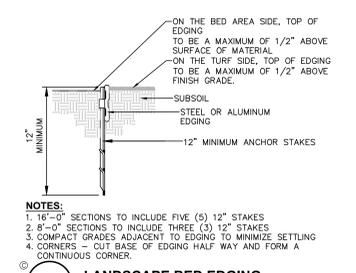
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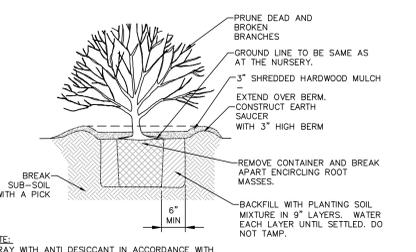
5 SHRUB PLANTING DETAIL FOR ALL SHRUBS BALLED AND BURLAPPED
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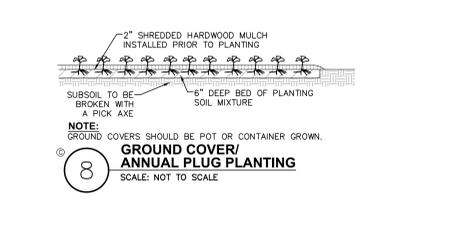
7 TEMPORARY TREE PROTECTION DETAIL
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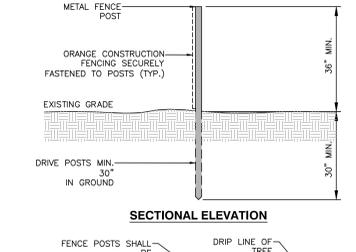
9 LANDSCAPE BED EDGING
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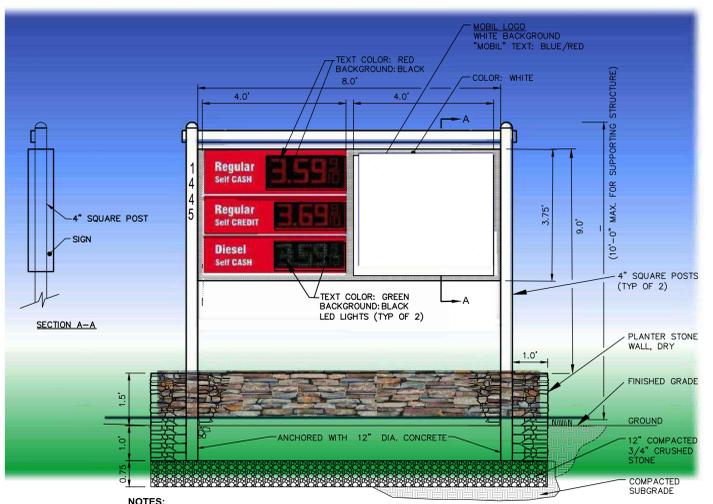
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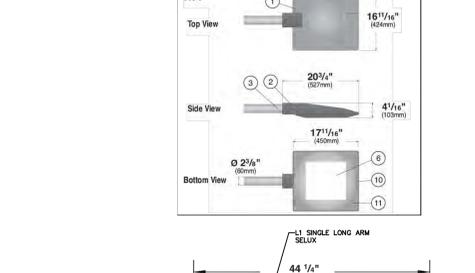
8 GROUND COVER/ANNUAL PLUS PLANTING
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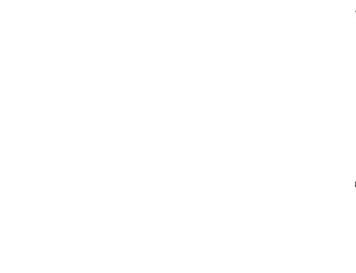
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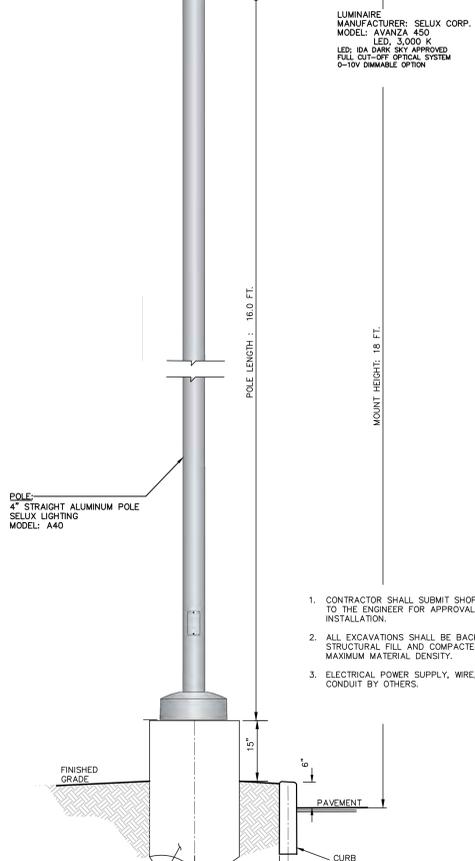
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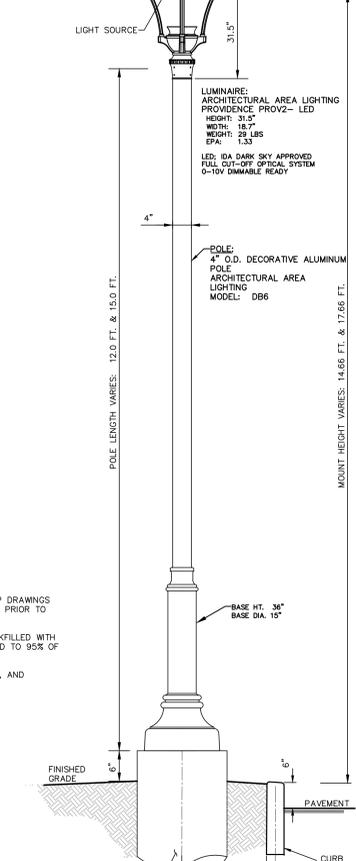
1 POST & LUMINAIRE LIGHTING DETAIL
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2 POST-TOP DECORATIVE LIGHTING DETAIL
SCALE: N.T.S.



3 WALL MOUNTED LIGHTING FIXTURE DETAIL
SCALE: 1\"/>



4 CANOPY LIGHTING FIXTURE DETAILS
SCALE: N.T.S.

LANDSCAPING NOTES:

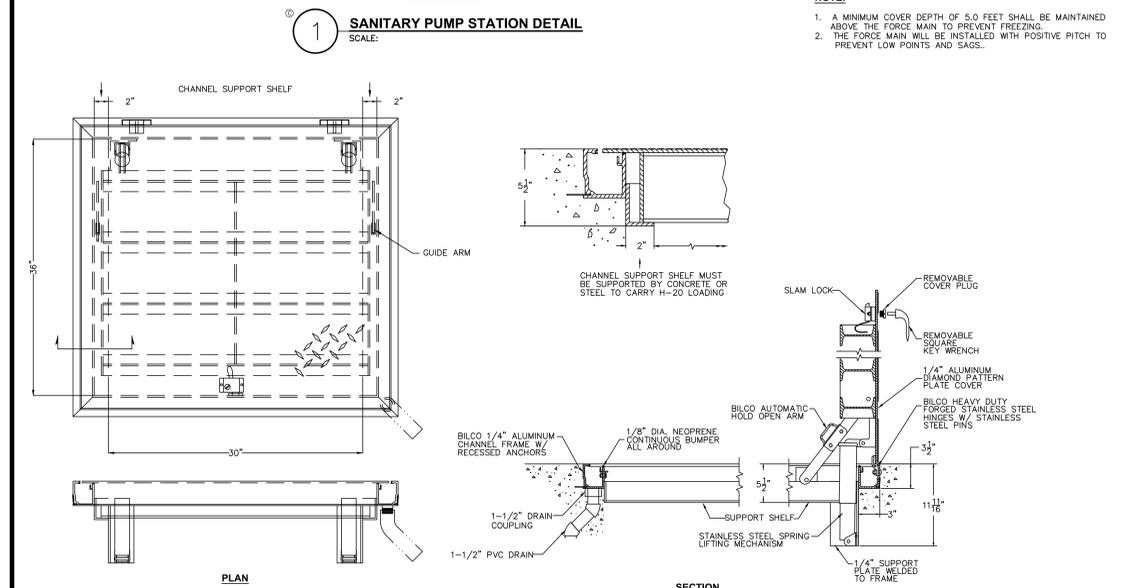
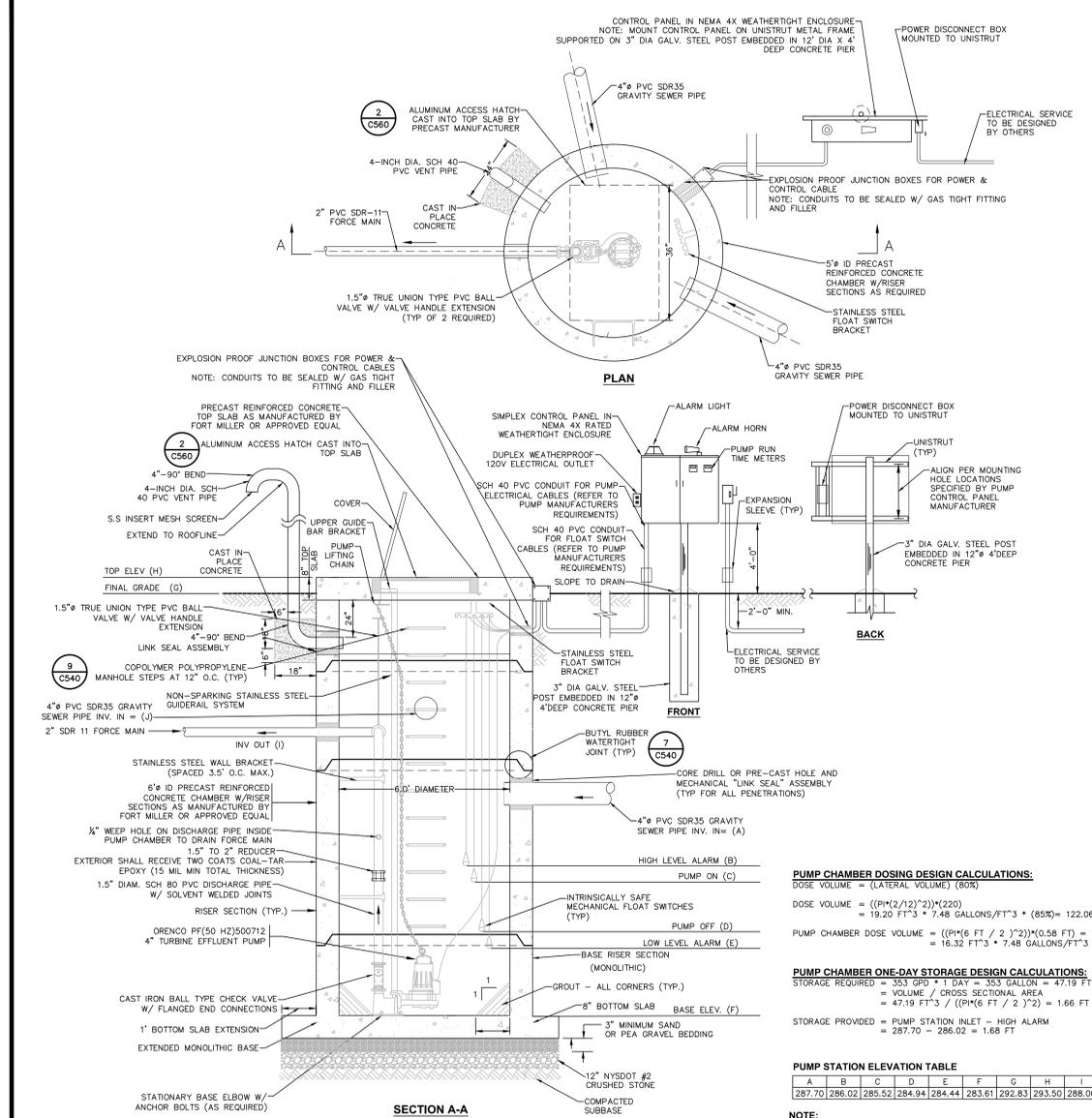
- THE LANDSCAPE CONTRACTOR SHALL CAREFULLY COORDINATE CONSTRUCTION ACTIVITIES WITH THAT OF THE EARTHWORK CONTRACTOR AND OTHER SITE DEVELOPMENT.
- THE CONTRACTOR SHALL VERIFY DRAWING DIMENSIONS WITH ACTUAL FIELD CONDITIONS AND INSPECT RELATED WORK AND ADJACENT SURFACES. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF ALL FINISH GRADES WITHIN THE WORK AREA. THE CONTRACTOR SHALL REPORT TO THE LANDSCAPE ARCHITECT/ENGINEER AND OWNER ALL CONDITIONS WHICH PREVENT PROPER EXECUTION OF THIS WORK.
- THE EXACT LOCATION OF ALL EXISTING UTILITIES, STRUCTURES AND UNDERGROUND UTILITIES, WHICH MAY NOT BE INDICATED ON THE DRAWINGS, SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL PROTECT EXISTING STRUCTURES AND UTILITY SERVICES AND IS RESPONSIBLE FOR THEIR REPLACEMENT IF DAMAGED.
- THE CONTRACTOR SHALL KEEP THE PREMISES FREE FROM RUBBISH AND ALL DEBRIS AT ALL TIMES AND SHALL ARRANGE MATERIAL STORAGE SO AS NOT TO INTERFERE WITH THE OPERATION OF THE PROJECT. ALL UNDERGROUND MATERIALS, RUBBISH AND DEBRIS SHALL BE REMOVED FROM THE SITE.
- NO TREES OR SHRUBS SHALL BE PLANTED ON EXISTING OR PROPOSED UTILITY LINES.
- QUALITY ASSURANCE:
 - NOMENCLATURE: PLANT NAMES SHALL CONFORM TO THE LATEST EDITION OF "STANDARDIZED PLANT NAMES" AS ADOPTED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE.
 - SIZE AND GRADING: PLANT SIZES AND GRADING SHALL CONFORM TO THE LATEST EDITION OF "AMERICAN STANDARD FOR NURSERY STOCK" AS SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERMEN, INC. (AAN), UNLESS OTHERWISE SPECIFIED.
 - NURSERY SOURCE: OBTAIN FRESHLY DUG, HEALTHY, WOODRUSK PLANTS NURSERY GROWN UNDER LUMINOUS CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR A MINIMUM OF 2 YEARS. PLANTS SHALL HAVE BEEN LINED OUT IN ROWS, ANNUALLY CULTIVATED, SPRAYED, PRUNED AND WETLIZED IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE. ALL PLANTS SHALL HAVE BEEN GROWN WITH PERMANENT VEGETATIVE COVER FOR AT LEAST 3 YEARS. BALLED AND BURLAPPED PLANTS MUST COME FROM SOIL WHICH WILL HOLD A FIRM ROOT BALL, HELED IN PLANTS AND PLANTS FROM CONTAINERS ARE NOT ACCEPTED.
 - SUBSTITUTIONS: DO NOT MAKE SUBSTITUTIONS OF TREES AND/OR SHRUB MATERIALS. IF REQUIRED LANDSCAPE MATERIAL IS NOT OBTAINABLE, SUBMIT PROOF OF NON-AVAILABILITY AND PROPOSAL FOR USE OF EQUIVALENT MATERIAL WHEN AUTHORIZED. ADJUSTMENTS OF CONTRACT AMOUNT (IF ANY) WILL BE MADE BY CHANGE ORDER.
- SEEDING & PLANTING SEASONS AND TIMING CONDITIONS:
 - UNLESS OTHERWISE DIRECTED IN WRITING, SEED LAWNS FROM MARCH 15 TO JUNE 15, AND FROM AUGUST 15 TO OCTOBER 15.
 - UNLESS OTHERWISE DIRECTED IN WRITING, SEED LAWNS FROM MARCH 15 TO JUNE 1, AND FROM AUGUST 15 TO OCTOBER 30.
 - AREAS UNDERGOING CLEARING OR GRADING AND ANY AREAS DISTURBED BY CONSTRUCTION ACTIVITIES WHERE LAWNS OR PLANTINGS ARE TO BE ESTABLISHED AND WORK IS COMPLETE, SHALL BE DISTURBED WITH PERMANENT VEGETATIVE COVER. PROVIDE STABILIZATION WITH TEMPORARY VEGETATIVE COVER (TOPSOIL AND TEMPORARY COVER SEED MIX) 14 DAYS AFTER WORK IS COMPLETE, FOR SEEDING OUTSIDE PERMITTED SEED PERIODS.
- PRODUCTS:
 - IMPORTED TOPSOIL: PROVIDE TOPSOIL CONFORMING TO THE FOLLOWING:
 - LOAM TOPSOIL, WELL DRAINED HOMOGENEOUS TEXTURE AND OF UNIFORM GRADE, WITHOUT THE ADDITURE OF SUBSOIL, MATERIAL AND FREE OF DENSE MATERIAL, HARDPAN, CLAY, STONES, SOD OR OTHER OBSTRUCTIONAL MATERIAL.
 - CONTAINING NOT LESS THAN 5% NOR MORE THAN 20% ORGANIC MATTER IN THAT PORTION OF SAMPLING PASSING A 1/4" SIEVE WHEN DETERMINED BY THE WET COMBUSTION METHOD ON A SAMPLE DRIED AT 105°C.
 - CONTAINING A PH VALUE WITHIN THE RANGE OF 6.5 TO 7.5 ON THAT PORTION OF THE SAMPLE WHICH PASSES A 1/4" SIEVE.
 - CONTAINING THE FOLLOWING WASHED GRADATIONS:

SIEVE DESIGNATION	% PASSING
100	100
1/4"	97-100
20-60	20-60
 - SEED MIXTURE:
 - PROVIDE FRESH, CLEAN, NEW-CROP SEED MIXED IN THE PROPORTIONS SPECIFIED FOR SPECIES AND VARIETY, AND CONFORMING TO FEDERAL AND STATE STANDARDS. PROVIDE THE FOLLOWING MIXTURES:

AMOUNT BY WEIGHT	SPECIES OR VARIETY	MINIMUM % PURITY	MINIMUM % GERMINATION
50%	KENTUCKY BLUE GRASS**	95%	90%
20%	PERENNIAL RYE	98%	90%
20%	CREeping RED FESCUE	97%	85%
100%	SHADE TOLERANT VARIETY	97%	85%
 - TEMPORARY COVER SEED MIX

AMOUNT BY WEIGHT	SPECIES OR VARIETY	MINIMUM % PURITY	MINIMUM % GERMINATION
100%	ANNUAL RYEGRASS	98%	90%

- EXECUTION:
- LANDSCAPE WORK SHALL BE UNDERTAKEN AS SOON AS SITE AREAS ARE AVAILABLE.
- TOPSOIL SHALL BE SPREAD NO LESS THAN 4" OVER SUB-GRADE MATERIAL. SOIL AMENDMENTS SHALL BE THOROUGHLY MIXED INTO THE TOP 4" OF TOPSOIL, FOLLOWING THE SPECIFICATIONS STATED BELOW.
- PERFORM FINE GRADING TO FINISHED ELEVATION ONLY IMMEDIATELY PRIOR TO PLANTING. PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN SURFACE, FREE OF DEPRESSIONS OR RIDGES WITH A UNIFORM LOOSE, FINE TEXTURE.
- FERTILIZING:
 - THE SOIL SHALL BE TESTED FOR PH AND LIME ADDED AS NECESSARY. ALL AMENDMENTS SHALL BE CHECKED AND APPROVED BY LANDSCAPE ARCHITECT BEFORE AMENDMENTS ARE MADE.
 - APPLY FERTILIZER AT RATE OF 4 LBS/1000 SF FOR LAWN AREAS.
 - TEMPORARY COVER SEED MIX: SEED AT THE RATE OF 3 TO 4 LBS PER 1000 SF.
 - TEMPORARY COVER SEED MIX: SEED AT THE RATE OF 5 TO 6 LBS PER 1000 SF.
 - TEMPORARY COVER SEED MIX: SEED AT THE RATE OF 3 TO 4 LBS PER 1000 SF.
 - TEMPORARY COVER SEED MIX: SEED AT THE RATE OF 3 TO 4 LBS PER 1000 SF.
- ALL SEEDED AREAS SHALL BE PROTECTED FROM EROSION BY ONE OF THE FOLLOWING METHODS:
 - UNIFORM BLANKET OF STRAW APPLIED AT A RATE OF 2 TONS/ACRE MIN. TO BE APPLIED ONCE SEEDING IS COMPLETE.
 - WOOD FIBER CELLULOSE APPLIED WITH SEED MIX BY A HYDROSEEDER AT A RATE OF 2,000 LBS/ACRE.
 - ALL SEEDED SLOPES 3:1 OR GREATER SHALL BE PROTECTED FROM EROSION WITH JUTE MESH OR APPROVED EQUAL.
- ALL NEWLY PLANTED AREAS SHALL BE KEPT MOIST BY WATERING UNTIL GRASSES AND GROUND COVERS ARE WELL ESTABLISHED. THE LANDSCAPE CONTRACTOR MUST WATER PLANT MATERIAL WHEN NECESSARY FOR 60 DAYS AFTER INSTALLATION.
- LAWNS ARE TO BE WARRANTED UNTIL THEY BECOME ESTABLISHED, UNTIL FINAL ACCEPTANCE, AND NOT LESS THAN 60 DAYS AFTER COMPLETION OF ALL WORK. TREES, SHRUBS, GROUND COVERS, AND PERENNIALS SHALL BE WARRANTED AGAINST DEFECTS INCLUDING POOR GROWTH AND DEATH EXCEPT WHEN RESULTING FROM OWNER NEGLECT, INCIDENTS THAT ARE BEYOND THE CONTROL OF THE LANDSCAPE INSTALLER AND DAMAGE OR ABUSE BY OTHERS, FOR AT LEAST ONE FULL YEAR AFTER PROJECT COMPLETION.
- WARRANTEE: CONTRACTOR SHALL WARRANT ALL PLANT MATERIAL TO REMAIN ALIVE AND BE IN A HEALTHY, WOODRUSK CONDITION FOR A PERIOD OF TWO YEARS AFTER FINAL ACCEPTANCE OF PLANTING WORK. EACH GROWING PERIOD, CONTRACTOR SHALL REMOVE ALL PLANTS THAT ARE MORE THAN 25% DEAD OR, AS DETERMINED BY THE LANDSCAPE ARCHITECT'S INSPECTION MEMO, ARE IN AN UNHEALTHY OR UNSIGHTLY CONDITION. CONTRACTOR SHALL BEAR THE COST OF THE COMPLETE REPLACEMENTS. REPLACEMENTS SHALL BE OF THE SAME SIZE AND SPECIES AS SPECIFIED ON THE PLANTING LIST. PLANTS TO BE INSPECTED UPON COMPLETION OF INSTALLATION ONCE A REQUEST FOR INSPECTION HAS BEEN SUBMITTED BY THE CONTRACTOR AND INSPECTED AGAIN THE FOLLOWING FOUR GROWING SEASONS.
- A PARTIAL RELEASE OF THE LANDSCAPE BOND CAN BE REQUESTED AFTER ONE YEAR, AND WILL BE RECOMMENDED FOR APPROVAL, IF MORE THAN NINETY PERCENT OF PLANTS, INCLUDING GROUND COVERS, ARE IN GOOD HEALTH AT THE TIME OF INSPECTION. A FULL RELEASE OF THE BOND AFTER TWO YEARS WILL BE RECOMMENDED FOR APPROVAL IF NINETY PERCENT OF PLANTS ARE IN GOOD HEALTH AT THE TIME OF INSPECTION. IF MORE THAN 10 PERCENT OF PLANTS ARE NOT IN GOOD HEALTH, RECOMMENDATION FOR RELEASE OF THE BOND CANNOT BE MADE. PLANTS WILL NEED TO BE REPLACED AND MUST LIVE FOR ANOTHER YEAR BEFORE THE BOND CAN BE RECOMMENDED FOR RELEASE. THE CONTRACTOR MUST INSTALL SOIL AS DEFINED ON THE DRAWINGS (AND PLANTS MUST BE APPROPRIATELY WATERED) FOR THE LANDSCAPE TO MEET REQUIREMENTS FOR RELEASE OF THE LANDSCAPE BOND TO BE RECOMMENDED.



PUMP STATION NOTES:

- ALL PRE CAST CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE A.S.T.M. STANDARDS. CONCRETE TO TEST 4000 PSI AT 28 DAYS.
- CONTRACTOR SHALL SUBMIT PRE CAST CONCRETE CHAMBER SHOP DRAWINGS INDICATING PERTINENT DIMENSIONING, REINFORCEMENT SIZES, SPACING, LOCATIONS AND QUANTITIES. CHAMBER SHALL BE DESIGNED TO WITHSTAND TRAFFIC LOADS CREATED BY AN HS20-44 TRUCK PLUS 25% IMPACT AS DEFINED IN THE LATEST EDITION OF THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) DESIGN STANDARDS.
- AN ALUMINUM WARNING PLATE SHALL BE RIVETED OR OTHERWISE PERMANENTLY ATTACHED TO THE CHAMBER. THE PLATE SHALL BE A MINIMUM OF 12" X 12" AND SHALL BE ENGRAVED WITH THE FOLLOWING LANGUAGE: "WARNING - CONFINED SPACE - ENTRY PROHIBITED WITHOUT AUTHORIZATION".
- ALL MOUNTING HARDWARE INCLUDING BOLTS, NUTS, ANGLE BRACKETS AND OTHER MISC. ITEMS LOCATED WITHIN THE PUMP STATION SHALL BE OF NON-CORROSIVE CONST. (I.E.-STAINLESS STL., ALUM., GALV.)
- ALL INSTALLATION SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION.
- PROVIDE ADDITIONAL CONDUITS FOR CONTROL WIRING AS PER MANUFACTURER'S RECOMMENDATIONS. ALL CONDUITS SHALL BE GAS TIGHT SEALED.
- MANHOLE STEPS SHALL BE ORIENTATED SUCH THAT ACCESS TO THE PUMP STATION WILL NOT BE RESTRICTED. STEPS SHALL BE COPOLYMER POLYPROPYLENE MANHOLE STEPS 12" O.C.
- PROJECT ENGINEER AND OWNER'S REPRESENTATIVE SHALL BE NOTIFIED 72-HOURS PRIOR TO START UP AND TESTING OF THE STATION.
- THE PUMP STATION SHALL BE PROVIDED WITH SUBMERSIBLE NON-CLOG SEWAGE PUMP INCLUDING CONTROL PANEL.
- THE CONTROL PANEL SHALL INCLUDE THE FOLLOWING FEATURES AND ACCESSORIES:
 - NEMA 4X AND UL RATED ENCLOSURE W/ LOCKABLE HATCH
 - INTRINSICALLY SAFE RELAYS
 - HAND-OFF-AUTO (HOA) TOGGLE SWITCH FOR EACH PUMP
 - INTRINSICALLY SAFE MECHANICAL FLOAT SWITCHES
 - TOP MOUNTED ALARM LIGHT
 - ALARM HORN WITH SILENCE SWITCH - MANUAL RESET
 - AUXILIARY DRY CONTACTS FOR ALARMS
 - CIRCUIT BREAKER PUMP DISCONNECT
 - GREEN RUN PILOT LIGHT FOR EACH PUMP
 - SEAL FAIL INDICATOR LIGHTS
 - THERMAL OVERLOAD PROTECTION
- IN ADDITION THE CONTROL PANEL SHALL INCLUDE INDIVIDUAL PUMP RUN TIME METERS AND ONE WEATHER PROOF 120V DUAL GFI RECEPTACLE OUTLET.
- ELECTRICAL SERVICE DESIGN FOR PUMP STATION BY OTHERS.
- THE FOLLOWING ALARMS SHALL BE RELATED TO AN ON-SITE CENTRAL LOCATION OR TO A 24-HOUR ON CALL SERVICE AT THE DIRECTION OF OWNER:
 - PUMP FAILURE
 - HIGH WATER/START PUMP
 - LOW WATER LEVEL
 - COMMUNICATION LINK FAILURE
- PUMP STATION PROVIDES FOR A MINIMUM TWO(2) DAY'S STORAGE CAPACITY BETWEEN THE HIGH LEVEL ALARM AND PIPE INLET.
- CONTRACTOR RESPONSIBLE FOR ALL DEWATERING DURING EXCAVATION.
- CONTRACTOR SHALL COMPACT THE BOTTOM OF EXCAVATION PRIOR TO PLACEMENT OF GEOTEXTILE.
- IF THE SUBGRADE IS SOFT, COURSE RIP-RAP MATERIAL (MAX SIZE 6 INCHES) SHALL BE ROLLED INTO SUBGRADE UNTIL IT BECOMES FIRM.
- CONTRACTOR SHALL SUBMIT PRE CAST CONCRETE CHAMBER SHOP DRAWINGS INDICATING PERTINENT DIMENSIONING, REINFORCEMENT SIZES, SPACING, LOCATIONS AND QUANTITIES.
- ALL PRE CAST CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE A.S.T.M. STANDARDS. CONCRETE TO TEST 4000 PSI AT 28 DAYS.
- VENTS SHALL EXTEND A MINIMUM OF 3' ABOVE ROOF LINE.

PUMP STATION START-UP INSTRUCTIONS:

- STARTING SYSTEM
 - THE CONTRACTOR SHALL PROVIDE THREE (3) DAYS NOTIFICATION TO THE OWNER REPRESENTATIVES, PROJECT ENGINEER, AND BUILDING INSPECTOR, PRIOR TO START-UP OF THE PUMP STATION.
 - THE CONTRACTOR SHALL ENSURE THAT EACH PIECE OF EQUIPMENT AND COMPONENT OF THE SYSTEM IS READY FOR OPERATION.
 - THE CONTRACTOR SHALL EXECUTE START-UP UNDER THE SUPERVISION OF OWNER REPRESENTATIVES, PROJECT ENGINEER, BUILDING INSPECTOR, AND MUNICIPALITY HAVING JURISDICTION.
 - THE CONTRACTOR SHALL SUBMIT A WRITTEN REPORT INDICATING THAT EACH PIECE OF EQUIPMENT AND COMPONENT OF THE SYSTEM HAS BEEN PROPERLY INSTALLED AND IS FUNCTIONING CORRECTLY.
- DEMONSTRATIONS AND INSTRUCTIONS
 - THE CONTRACTOR SHALL DEMONSTRATE OPERATION AND MAINTENANCE OF THE SYSTEM TO OWNER TWO (2) WEEKS PRIOR TO DATE OF PROJECT COMPLETION OR ISSUANCE OF CERTIFICATE OF OCCUPANCY.
 - THE CONTRACTOR SHALL DEMONSTRATE START-UP, OPERATION, CONTROL, ADJUSTMENT, TROUBLE-SHOOTING, SERVICING, MAINTENANCE, AND SHUTDOWN OF EACH ITEM OF EQUIPMENT.
- TESTING, ADJUSTING, AND BALANCING
 - THE CONTRACTOR SHALL PROVIDE ALL TESTING, ADJUSTING, AND BALANCING OF SYSTEM.
 - THE CONTRACTOR SHALL CLEAN, FLUSH, PRESSURE LEAK TEST ALL THE PIPING AND EQUIPMENT ACCORDING TO ACCEPTED STANDARDS.
- OPERATION AND MAINTENANCE DATA
 - THE CONTRACTOR SHALL SUBMIT THREE (3) SETS PRIOR TO PROJECT COMPLETION, BOUND IN 8-1/2 X 11 INCH TEXT PAGES, THREE (3) D SIDE RING BINDERS WITH DURABLE PLASTIC COVERS.
 - A BINDER COVER SHALL BE PROVIDED WITH PRINTED TITLE "OPERATION AND MAINTENANCE INSTRUCTIONS" AND TITLE OF PROJECT.
 - THE BINDER CONTENTS SHALL BE INTERNALLY SUBDIVIDED WITH PERMANENT PAGE DIVIDERS, LOGICALLY ORGANIZED, WITH TAB TITLES CLEARLY PRINTED UNDER REINFORCED LAMINATED PLASTIC TABS.
 - AS A MINIMUM THE BINDER SHALL CONTAIN THE FOLLOWING:
 - PART 1: DIRECTORY, LISTING NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF ENGINEER, CONTRACTOR, SUBCONTRACTORS, AND MAJOR EQUIPMENT SUPPLIERS.
 - PART 2: COPY OF PLANS WITH ANNOTATED CHANGES IF ANY, SPECIFICATIONS AND ENGINEERING REPORT, COPY OF ALL APPROVED SHOP DRAWINGS, INSTALLATION MANUALS, OPERATION AND MAINTENANCE MANUALS, ARRANGED BY SYSTEM'S COMPONENTS.
 - PART 3: PROJECT DOCUMENTS, MANUFACTURER'S AND SUPPLIER'S WARRANTIES AND CERTIFICATES.

PUMP STATION WET WELL TESTING:

- PUMP STATION WET WELL SHALL BE TESTED FOR LEAKAGE AND ALL LEAKS SHALL BE REPAIRED IN A MANNER SUBJECT TO THE ENGINEER'S APPROVAL. A HYDROSTATIC SHALL BE PERFORMED IN CONFORMANCE WITH THE FOLLOWING REQUIREMENTS.
- HYDROSTATIC TESTING
 - UNLESS OTHERWISE APPROVED, CONDUCT ALL TESTING IN THE PRESENCE OF THE ENGINEER.
 - NOTIFY THE ENGINEER 48 HOURS IN ADVANCE OF TESTING.
 - THE STRUCTURE SHALL BE COMPLETELY PLUGGED AND FILLED WITH WATER AND ALLOWED TO STAND FOR TWENTY FOUR (24) HOURS PRIOR TO ANY READING IN ORDER TO PERMIT ABSORPTION BY THE WET WELL STRUCTURE.
 - AFTER TWENTY FOUR (24) HOURS, A READING SHALL BE TAKEN AND THE STRUCTURE ALLOWED TO STAND FOR 24 HOURS.
 - THE DROP IN WATER LEVEL AFTER 24 HOURS SHALL BE NOTED.
 - LEAKAGE IN THE WET WELL SHALL NOT EXCEED THE ALLOWABLE LOSS OF 1 GALLON PER VERTICAL FOOT OF MANHOLE SECTION FOR A 24-HOUR PERIOD, PER TR-16 GUIDE FOR THE DESIGN OF WASTEWATER TREATMENT WORKS.
 - WET WELL FAILING THE TEST SHALL BE REPAIRED AND RETESTED TO THE SATISFACTION OF THE ENGINEER.
 - THE CONTRACTOR SHALL COORDINATE AND BEAR ALL COSTS FOR PROVISION AND DISPOSAL OF WATER NECESSARY FOR THE LEAK TESTING OF THE WET WELL.



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PUMP STATION DETAILS

TOWN OF NEWBURGH, ORANGE COUNTY, NEW YORK

designed FMK checked CPL
 date 01/23/22 AS SHOWN
 project no. 81912.00
 sheet no. C560

rev.	date	description
1	05/04/24	THIS SHEET ADDED