

PRELIMINARY AND FINAL SITE PLAN

535 - 537 NEW YORK AVENUE TAX LOT 10, BLOCK 23 TOWNSHIP OF SOUTH LYNDHURST BERGEN COUNTY, NEW JERSEY

200 FEET OWNERS LIST			
BLOCK	LOT	PROPERTY LOCATION	PROPERTY OWNER & ADDRESS
24	9	133 JENNESS PL	HOPPIUS, CYNTHIA A 133 JENNESS PL LYNDHURST, NJ 07071
24	10.01	465 SECOND AVE	ENGUJST (ETAL), DEAN F & MAYRA I 465 SECOND AVE LYNDHURST, NJ 07071
24	10.02	461 SECOND AVE	FERREIRO, PETER & FILOMENA 344 SPENCER PL PARAMUS, NJ 07652
24	11	457 SECOND AVE	FERREIRO, PETER & FILOMENA 457 SECOND AVE LYNDHURST, NJ 07071
24	12	453 SECOND AVE	POLIZZOTTO, SALVATORE & ANGELA 453 SECOND AVE LYNDHURST, NJ 07071
25	5	442 LAKE AVE	SMITH, WILLIAM J. & ELLEN C. 442 LAKE AVE LYNDHURST, NJ 07071
25	6.01	446 LAKE AVE	LYNDHURST, NJ 07071
25	6.02	448 LAKE AVE	450 LAKE AVE LYNDHURST, NJ 07071
25	7	450 LAKE AVE	YANG, NINA & STEPHANE 450 LAKE AVE LYNDHURST, NJ 07071
25	8	454 LAKE AVE	MC GUIRE, THOMAS M & JEANNE 454 LAKE AVE LYNDHURST, NJ 07071
25	8	458 LAKE AVE	MCZANK, THOMAS 458 LAKE AVE LYNDHURST, NJ 07071
25	9	461 THRD AVE	HICKEY, THOMAS JAMES & MARY 12 SOUTH VIEW LANE HOPEWELL, NJ, NY 12533
25	10	459 THRD AVE	PATEL, DASHRATHLAL P & BHARTIBEN D 451 GENESEE CT SUFFERN, NJ 10902
25	11	451 THRD AVE	LASZKIEWICZ, WACLAW 451 THRD AVE LYNDHURST, NJ 07071
25	12	447 THRD AVE	LYNDHURST, NJ 07071
25	13	445 THRD AVE	DYBUS, JOSHUA 445 THRD AVE LYNDHURST, NJ 07071
25	14	443 THRD AVE	PRYSZLAK, WALTER & HELEN 443 THRD AVE LYNDHURST, NJ 07071
25	15	439 THRD AVE	BULGER, DIANA 439 THRD AVE LYNDHURST, NJ 07071
79	16	530-560 NEW YORK AVE	VETERANS SQUARE 2016 LLC 1735 MARKET ST, STE A-400 PHILADELPHIA, PA 19103

UTILITIES	
TOWNSHIP OF LYNDHURST	367 VALLEY BROOK AVE LYNDHURST, NJ 07071
PASSAIC VALLEY WATER	1525 MAIN ST CLIFTON, NJ 07015
COMCAST CABLEVISION	800 RAHWAY AVE UNION, NJ 07087
PASSAIC VALLEY SEWAGE	600 WILSON AVE NEWARK, NJ 07105
PSE&G	325 COUNTY AVE SECAUCUS, NJ 07094
PASSAIC RIVER COALITION	246 MADISONVILLE RD BASKING RIDGE, NJ 07920
NEW JERSEY MEADOWLANDS COMMISSION	ONE DEKORTE PLAZA LYNDHURST, NJ 07071
NEW JERSEY TRANSIT	1 PENN PLAZA EAST NEWARK, NJ 07105
PORT AUTHORITY OF NY & NJ	225 PARK AVE SOUTH NEW YORK, NY 10003

DESIGN WAIVER SCHEDULE LOT 10, BLOCK 23 - 535-537 NEW YORK AVENUE - TOWNSHIP OF LYNDHURST		
Code Regulation	Required	Proposed
21-7 SITE PLAN APPROVAL 21-7.8 Standards for Site Plans.	a. Off-Street Parking. 3. The parking plan shall provide adequate access to and egress from each parking space and shall provide for safe and adequate circulation of pedestrians and vehicles. The width of all aisles or driveways providing direct access to four or more individual parking stalls shall be in accordance with the following requirements: Parking Angle (90 Degrees) Aisle Width 24'	21.00'
21-4 OFF-STREET PARKING AND LOADING. 21-4.10 Landscaping Requirement.	b. All parking areas of 15 parking spaces or more shall be landscaped with a tree for every 15 spaces, and a landscaped island at least three feet wide separating every 15 spaces.	Some provided

PARKING ANALYSIS			
Description	Required	Proposed	Comment
Multi-Family Dwelling			
2 spaces per dwelling unit. (18 Units)	36 Spaces	29 Spaces	Non-Conforming
Total	36 Spaces	29 Spaces	Non-Conforming



ZONING/ 200' RADIUS MAP
SCALE: ±1"=500'

SCHEDULE OF GENERAL ZONING REQUIREMENTS (ZONE R-B, RESIDENTIAL DISTRICT) BLOCK 23 - 535 - 537 NEW YORK AVENUE - TOWNSHIP OF LYNDHURST				
Regulation	General Requirements	Existing Lot 10	Proposed Lot 10	Comment
Principal Permitted Uses	One and Two Family Dwelling	One Family Dwelling	Multi Family Dwelling (V)	Variance is Required
Min. Lot Area	5,500 sf	14,131.25 sf	14,131.25 sf	Conforming
Min. Lot Width	50 ft.	125.01 ft.	125.01 ft.	Conforming
Min. Lot Depth	100 ft.	106.35 ft.	106.35 ft.	Conforming
Min. Front Yard (Avg. Front Yard = 14.44 ft.)	20 ft. *	1.92 ft. (e)	14.24 ft. (V)	Variance is Required
Min. Rear Yard (Avg. Rear Yard = 1.48 ft.)	20 ft. **	1.48 ft. (e)	16.42 ft. (V)	Variance is Required
Min. Side Yard (Each) (Interior Lot)	10 ft.***	1.84 ft. (e)	4.30 ft. (V)	Variance is Required
Min. Side Yard (Both) (Interior Lot)	20 ft. ****	3.94 ft. (e)	14.31 ft. (V)	Variance is Required
Max. Building Coverage	30% *****	34.71% (e)	52.45% (V)	Variance is Required
Max. Lot Coverage	70% *****	69.09%	88.36% (V)	Variance is Required
Max. Building Height (ft/stories)	32 ft./2.5 sty *****	32 ft./2.5 sty	37.34 ft./3 sty (V)	Variance is Required

* Average Front Yard Setback Modifications. In such cases in the R-A and R-B residential zoning districts where the existing dwellings on the adjacent lots on each side form an existing setback line, the minimum front yard setback for a new dwelling or an addition to an existing dwelling shall be modified to the average setback of the existing dwellings on the adjacent lots or the required setback of twenty (20) feet, whichever is greater, but in no case shall it be required for the setback to exceed thirty-five (35) feet.

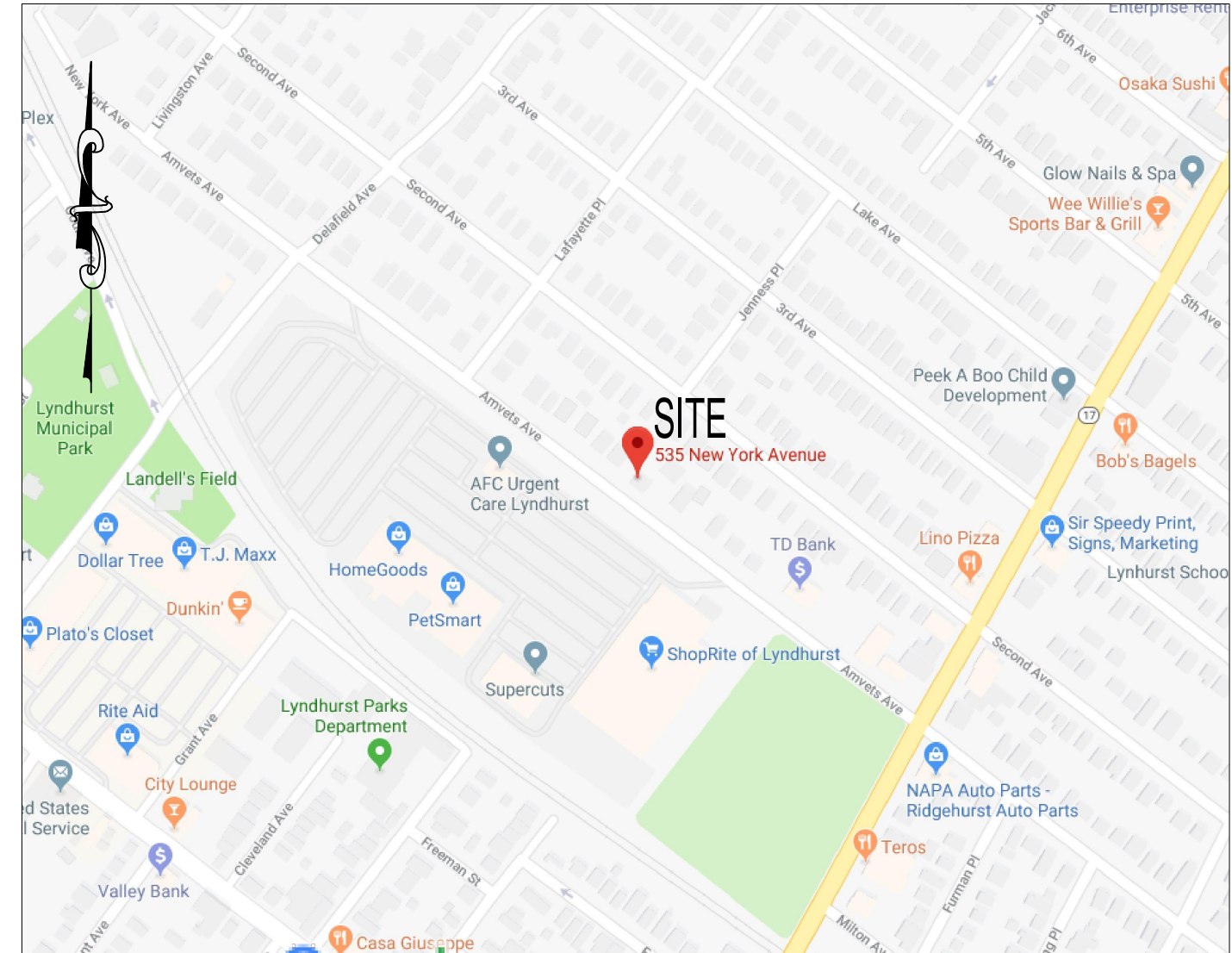
** Average Rear Yard Setback Modifications. In such cases in the R-A and R-B residential zoning districts where the existing dwellings on the adjacent lots on each side form an existing setback line, the minimum rear yard setback for a new dwelling or an addition to an existing dwelling shall be modified to the average setback of the existing dwellings on the adjacent lots or the required setback of twenty (20) feet, whichever is greater, but in no case shall it be required for the setback to exceed thirty-five (35) feet.

*** For lots which exceed 50' in width, the minimum side yard dimensions shall be as follows: (1) Lot width of 51'-7' each side, 16' both sides; (2) Lot width of 52'-8' each side, 17' both sides; (3) Lot width of 53'-9' each side, 18' both sides; (4) Lot width of 54'-9' each side, 19' both sides; (5) Lot width of 55' or greater, 10' each side, 20' both sides.

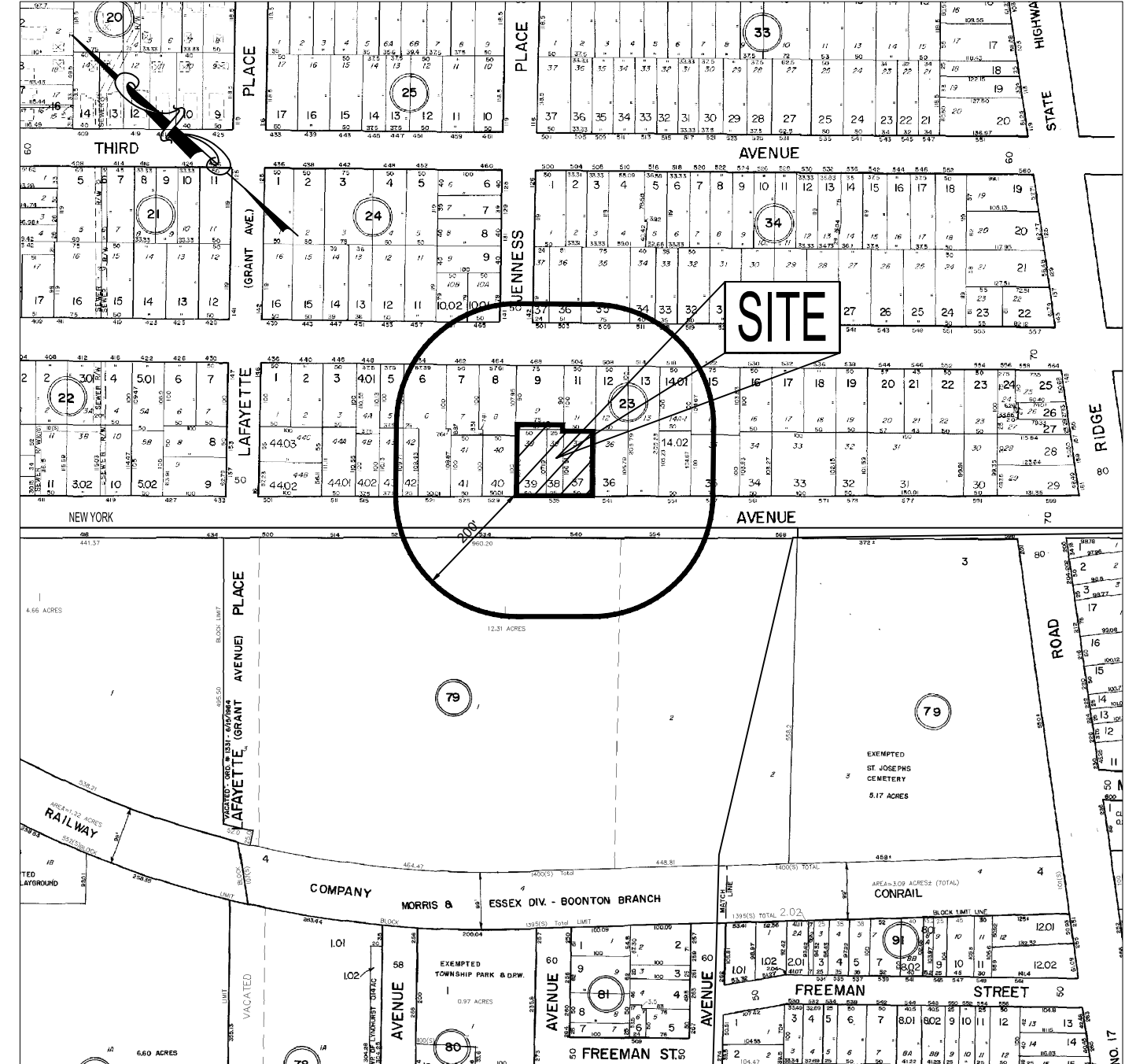
**** The total lot coverage in R-A and R-B zones shall not exceed sixty (60%) percent. The maximum total lot coverage shall increase five (5%) percent for every 500 square feet in area over 5,500 square feet, but in no event shall exceed seventy (70%) percent.

***** The maximum height for dwellings located in Zone AE on the flood maps adopted under Ordinance Section 23-3-2 shall be 35 feet.

Notes:
(e) Pre-existing Nonconformity N/A - Denotes Not Applicable
(V) Variance is Required NA - Denotes Not Available



SITE MAP
SCALE: ±1"=150'



200' TAX MAP
SCALE: 1"= ± 250'

PROPERTY OWNER/APPLICANT:

MR. JACK SEXIERO
C/O NEW YORK AVENUE, LLC
753 UNION AVENUE
LYNDHURST, NEW JERSEY 07071

PROTECT YOURSELF
A PHONE CALL
CAN BE YOUR INSURANCE POLICY

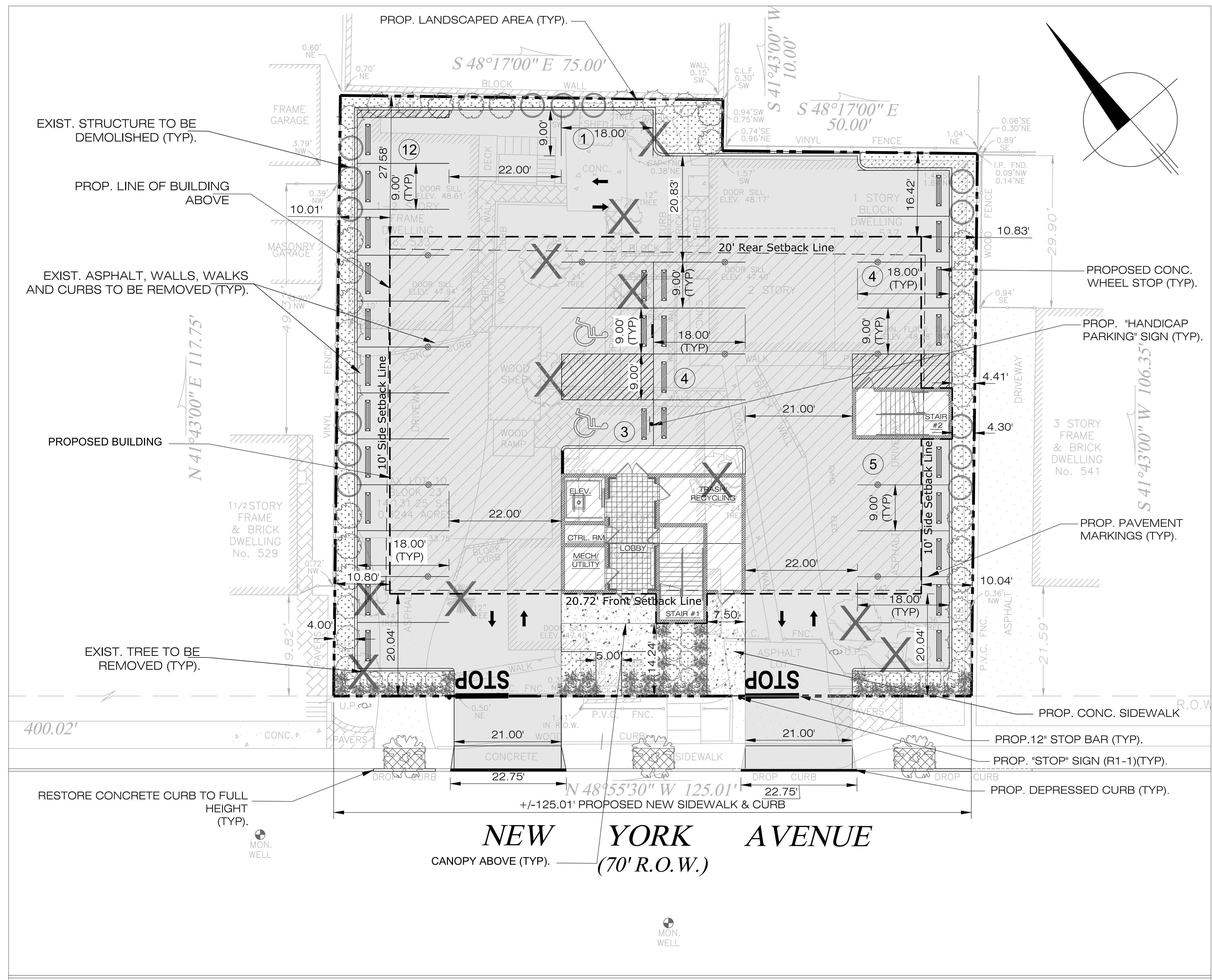


WHAT YOU DON'T KNOW CAN HURT YOU.
THE STATE OF NEW JERSEY REQUIRES NOTIFICATION OF LOCATORS,
DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S
SURFACE ANYWHERE IN THE STATE.

APPROVED BY ZONING BOARD - TOWNSHIP OF LYNDHURST	
BOARD SECRETARY:	DATE:
BOARD CHAIRMAN:	DATE:
BOARD ENGINEER:	DATE:

<p>ADNAN A. KHAN, P.E., C.M.E. PROFESSIONAL ENGINEER</p> <p>AWZ ENGINEERING, INC. ENGINEERS • SCIENTISTS • CONSULTANTS Main Office: 150 River Road, Suite B3, Montville, NJ 07045 Pennsylvania Office: Scranton, PA 18504 Tel: 973-588-7080 Fax: 973-588-7079 www.awzeng.com e-mail: info@awzeng.com New Jersey Certificate of Authorization No.: 24EA2811&400 Pennsylvania Certificate of Authority No.: 3771354</p>	<p>DATE: 02/21/19 DESIGNED BY: AK DATE: 03/22/21 APPROVED BY: AK DATE: 02/22/21</p>	<p>REVISIONS</p> <p>NO. DATE BY: APE</p>
<p>BLOCK 23 TAX LOT 10 535 - 537 NEW YORK AVENUE TOWNSHIP OF LYNDHURST BERGEN COUNTY, NEW JERSEY</p>	<p>COVER SHEET</p>	<p>JOB NUMBER: 19-0205</p> <p>SCALE: AS SHOWN</p> <p>C-01 SHEET 1 OF 6</p>

SHEET	INDEX OF DRAWINGS	ISSUED	REVISED
1	COVER SHEET	03/22/21	
2	SITE DEVELOPMENT PLAN	03/22/21	
3	GRADING AND UTILITY PLAN	03/22/21	
4	LIGHTING AND LANDSCAPE PLAN	03/22/21	
5	CONSTRUCTION DETAILS	03/22/21	
6	CONSTRUCTION DETAILS	03/22/21	
7	SOIL EROSION AND SEDIMENT CONTROL PLAN	03/22/21	
8	SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	03/22/21	

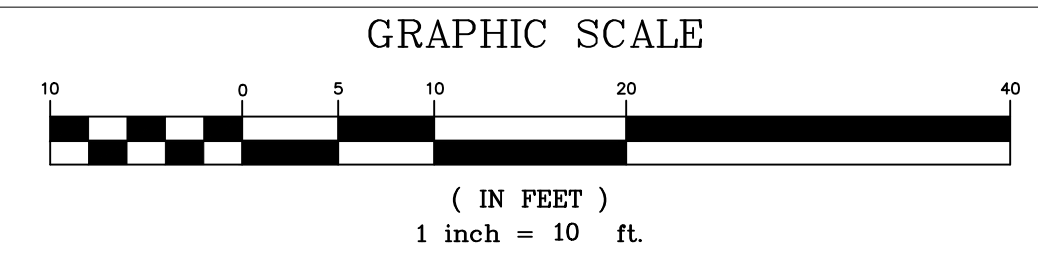


GENERAL NOTES:

- PARCEL IS KNOWN AS TAX LOT 10, IN BLOCK 23 AS SHOWN ON THE TAX MAPS OF THE TOWNSHIP OF LYNDHURST.
- AREA OF PARCEL = 14,131.25 S.F. OR 0.3244 ACRES.
- PARCEL IS LOCATED ENTIRELY IN THE R-B (RESIDENTIAL) DISTRICT AS SHOWN ON THE ZONING MAP OF THE TOWNSHIP OF LYNDHURST.
- IF THIS DOCUMENT DOES NOT CONTAIN A RAISED IMPRESSION SEAL OF THE PROFESSIONAL, IT IS NOT AN AUTHORIZED ORIGINAL, AND MAY HAVE BEEN ALTERED.
- THIS IS A SITE DEVELOPMENT PLAN AND NOT A SURVEY. DO NOT SCALE DRAWINGS FOR LOCATIONS OF ADJACENT STRUCTURES AND SURROUNDING PHYSICAL CONDITIONS. THESE ITEMS MAY BE SCHEMATIC ONLY EXCEPT WHERE DIMENSIONS ARE SHOWN THERETO.
- THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER FROM THOSE SHOWN HEREON.
- ELEVATIONS AND CONTOURS SHOWN ON THIS PLAN ARE BASED ON THE SURVEY PERFORMED AND PROVIDED BY MANNO SURVEYING INC., OF LYNDHURST N.J., DATED AUGUST 29, 2018 AND ARE BASED ON NAVD 1988 DATUM.
- PROPOSED BUILDING FOOTPRINT AS PER THE ARCHITECTURAL PLANS PREPARED AND PROVIDED BY GUZZO + GUZZO ARCHITECTS, LLC, DATED 01/21/20, RECEIVED AS DIGITAL FILE.
- UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY AND COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL UTILITY INFORMATION TO HIS SATISFACTION PRIOR TO COMMENCEMENT OF ANY WORK. THE CONTRACTOR SHALL PERFORM TEST PITS WHERE EXISTING UTILITIES ARE TO BE CROSSED. TEST PIT INFORMATION SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENTS AS MAY BE REQUIRED TO AVOID CONFLICTS.
- ALL EXISTING UTILITIES THAT ARE TO BE RELOCATED OR ALTERED IN ANY MANNER ARE TO BE DONE IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANIES STANDARDS. ALL THE EXISTING UTILITIES EXPOSED DURING CONSTRUCTION ARE TO BE SUPPORTED UNTIL BACKFILL IS IN PLACE. ANY CROSSING LESS THAN ONE FOOT CLEAR TO BE SUPPORTED WITH A SADDLE (CONCRETE OR SAND) AS NOTED.
- ALL SEWER LINES SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALLY FROM POTABLE WATER LINES AND/OR AT LEAST 18 INCHES BELOW POTABLE WATER LINES AND IN SEPARATE TRENCHES.
- ALL UTILITIES SHALL BE INSTALLED UNDERGROUND. DESIGN AND INSTALLATION OF WATER, ELECTRIC, GAS, TELEPHONE AND CABLE TO BE PROVIDED BY RESPECTIVE UTILITY COMPANIES.
- WATER AND GAS SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS SHALL BE SPECIFIED BY THE LOCAL UTILITY COMPANY. UTILITY CONNECTIONS SHALL COMPLY WITH THE COUNTY/MUNICIPAL ROAD OPENING PERMIT REQUIREMENTS.
- THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEAN OUTS SHALL BE ADJUSTED, IF REQUIRED, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS.
- PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
- LOCATION OF PROPOSED ROOF DRAINS ARE APPROXIMATE AND SHALL BE COORDINATED WITH THE PROJECT ARCHITECT PRIOR TO CONSTRUCTION. ALL PROPOSED ROOF LEADERS TO BE DISCHARGED AWAY FROM THE FOUNDATION AND ADJACENT PROPERTIES.
- NO ON-SITE SOIL TESTING AND GROUNDWATER ASSESSMENT HAS BEEN PERFORMED ON THIS PROJECT BY THE DESIGN ENGINEER. IT SHALL BE THE OWNERS AND/OR CONTRACTORS RESPONSIBILITY TO CONDUCT SOIL TESTING AND GROUNDWATER ELEVATION DETERMINATION TO CONFIRM APPLICABILITY OF PROPOSED IMPROVEMENTS. CONSTRUCT ABILITY OF THE PROPOSED FINISHED GRADES AND CONSTRUCTION TECHNIQUES WITH RESPECT TO SUBSURFACE SOIL AND GROUNDWATER CONDITIONS.
- COMPACTING IN FILL AREAS BENEATH ALL PROPOSED UTILITIES AND STRUCTURES SHOULD MEET ALL MANUFACTURERS AND MUNICIPAL REQUIREMENTS AND BE EQUAL TO THE MINIMUM 95% MODIFIED PROCTOR DENSITY.
- THIS SET OF PLANS HAS BEEN PREPARED FOR PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED AND THE DRAWINGS MARKED "ISSUED FOR CONSTRUCTION".
- ALL MATERIAL, WORKMANSHIP AND CONSTRUCTION FOR SITE IMPROVEMENTS SHOWN HEREON SHALL BE PERFORMED IN STRICT CONFORMANCE WITH:
 - NJDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", A CURRENTLY AMENDED.
 - CURRENT PREVAILING MUNICIPAL AND/OR COUNTY SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.
 - CURRENT PREVAILING UTILITY COMPANY/AUTHORITY SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.
 - "RESIDENTIAL SITE IMPROVEMENT STANDARDS", N.J. ADMINISTRATIVE CODE TITLE 5, CHAPTER 21, AS CURRENTLY AMENDED.
 - STANDARDS AND/OR CONDITIONS OF ANY OTHER GOVERNING BODIES HAVING JURISDICTION.
- CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE SAFETY CODES. APPLICABLE SAFETY CODES SHALL MEAN THE LATEST EDITION INCLUDING ANY AND ALL AMENDMENTS, REVISIONS AND ADDITIONS THERETO OF THE FEDERAL DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATIONS "OCCUPATIONAL SAFETY AND HEALTH STANDARDS" (OSHA); "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION" OF THE STATE OF NEW JERSEY, DEPARTMENT OF LABOR AND INDUSTRY, BUREAU OF ENGINEERING AND SAFETY; "CONSTRUCTION SAFETY CODE"; AND "MAINTENANCE, CONSTRUCTION AND DEMOLITION," AND "BUILDING CODE".
- CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL ALSO BE SOLELY RESPONSIBLE FOR THE MEANS, METHODS, AND SEQUENCING OF CONSTRUCTION OPERATIONS. UNDER NO CIRCUMSTANCES SHOULD THE INFORMATION PROVIDED HERE BE INTERPRETED TO MEAN THAT AWZ ENGINEERING, INC. IS ASSUMING RESPONSIBILITY FOR CONSTRUCTION SITE SAFETY OR THE CONTRACTOR'S ACTIVITIES; SUCH RESPONSIBILITY IS NOT BEING IMPLIED AND SHOULD NOT BE INFERRED.
- THE EXISTING BUILDING AND OTHER STRUCTURES TO BE RAZED AND MATERIALS SHOULD BE REMOVED FROM SITE AND PROPERLY DISPOSED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
- ALL REQUIRED SOIL EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED PRIOR TO ANY SITE DISTURBANCE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY ANY ADDITIONAL SOIL EROSION & SEDIMENT CONTROL MEASURES AS REQUESTED BY THE GOVERNING SOIL CONSERVATION DISTRICT.
- THE CONTRACTOR IS RESPONSIBLE FOR THE STABILIZATION OF THE EXISTING SEWER MAIN, STRUCTURES AND APPURTENANCES DURING CONNECTION.

LEGEND

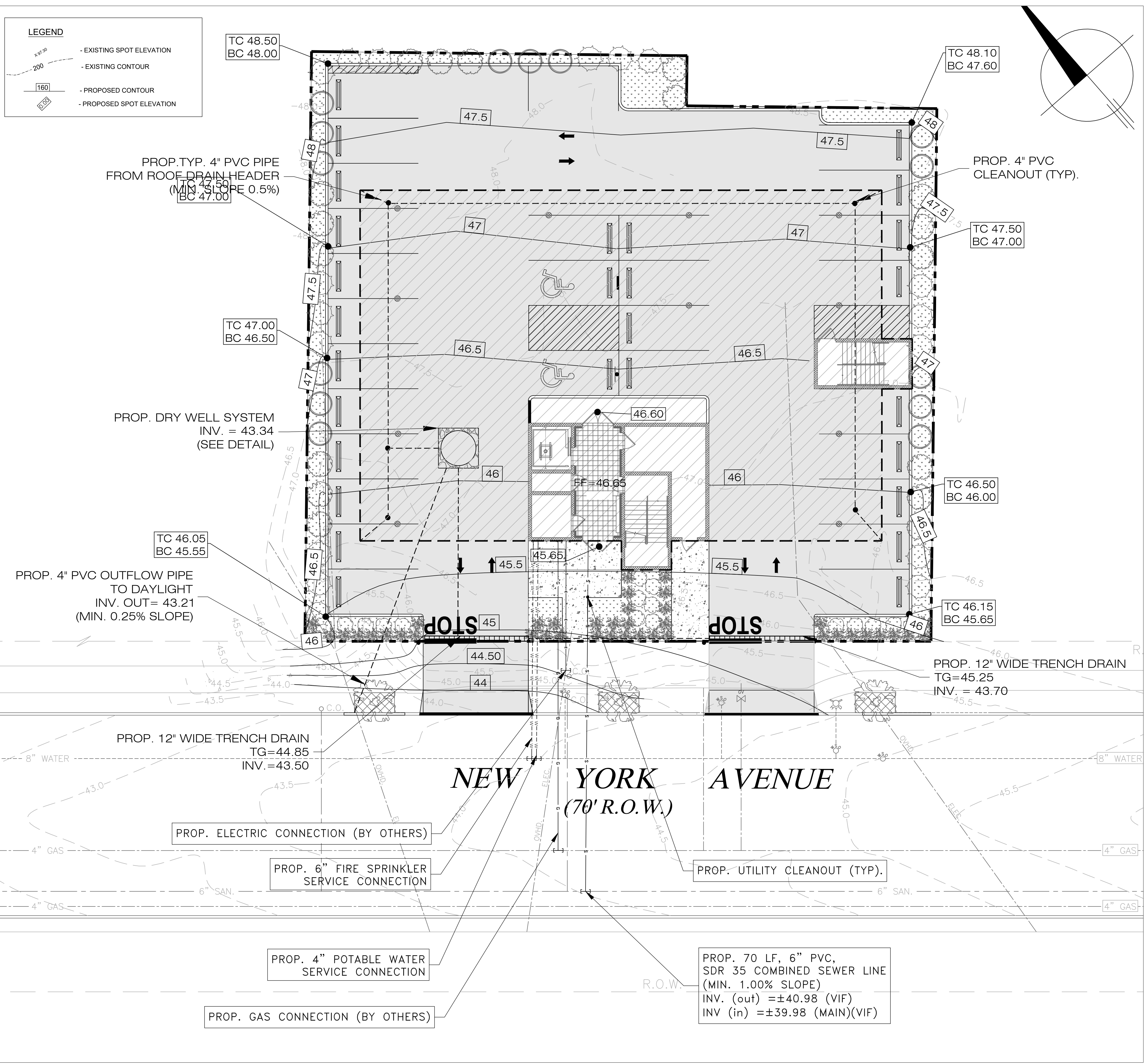
X	-TO BE REMOVED
---	----------------



<p>TAX LOT 10</p> <p>BLOCK 23</p> <p>535 - 537 NEW YORK AVENUE</p> <p>TOWNSHIP OF LYNDHURST</p> <p>BERGEN COUNTY, NEW JERSEY</p> <p>SITE DEVELOPMENT PLAN</p>	<p>AWZ ENGINEERING, INC.</p> <p>ENGINEERS • SCIENTISTS • CONSULTANTS</p> <p>Main Office: 150 River Road, Suite B3, Montville, NJ 07045</p> <p>Pennsylvania Office: Scranton, PA 18504</p> <p>Tel: 973.588.7080 Fax: 973.588.7079</p> <p>www.awzeng.com e-mail: info@awzeng.com</p> <p>New Jersey Certificate of Authorization No.: 24EA28118400</p> <p>Pennsylvania Certificate of Authority No.: 3771354</p>	<p>ADNAN A. KHAN, P.E., C.M.E.</p> <p>PROFESSIONAL ENGINEER</p> <p><i>Adnan A. Khan</i></p> <p>DATE: 03/21/19</p> <p>DESIGNED BY: AK</p> <p>DATE: 03/21/19</p> <p>APPROVED BY: AK</p> <p>DATE: 03/21/19</p>	<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>DESCRIPTION</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	BY	DESCRIPTION					<p>JOB NUMBER:</p> <p>19-0205</p> <p>SCALE: AS SHOWN</p> <p>C-02</p> <p>SHEET 2 OF 6</p>
NO.	DATE	BY	DESCRIPTION									

LEGEND

- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION



THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION, LAYOUT AND INVERTS OF THE PROPOSED STORM SYSTEM AND SEWER UTILITY CONNECTIONS PRIOR TO CONSTRUCTION.

MAINTENANCE OF UNDERGROUND STORM FACILITIES:

UNDERGROUND STORM SYSTEM - The underground drainage system, including all pipes, manholes, catch basins, inlets and appurtenances must be inspected for clogging and excessive debris and sediment accumulation at least annually as well as after every storm exceeding 2 inches of rainfall. Sediment removal should take place when all runoff has drained from the conveyance network and the systems are reasonably dry. Disposal of debris, trash, sediment, and other waste material should be done at suitable disposal/recycling sites and in compliance with all applicable local, state, and federal waste regulations.

All structural components must be inspected for cracking, subsidence, breaching, wearing, and deterioration at least annually. The condition of surrounding and above lying materials shall be inspected for evidence of potential failures or deterioration.

Two people will be needed to perform routine maintenance of the conveyance systems. The routine equipment to be utilized for the maintenance tasks include a jet vacuum vehicle, shovels, lighting equipment and a wheel barrel or truck for the hauling off of debris. No manufacturer's instructions or user manuals are available for maintenance of these components. Maintenance would only take place in the adjacent components of the system, i.e. the catch basins, pipes, and other units outside the seepage pit system. Water, mosquito control chemicals, and concrete repair materials may also be required depending on the condition of the structure.

All conveyance systems including cleanouts, manholes, concrete chambers, and pipes are expected to receive and/or accumulate debris and sediment. These systems must be inspected for clogging and excessive debris and sediment accumulation four (4) times annually as well as after every storm exceeding 1 inch of rainfall. Sediment removal should take place when all runoff has drained from conveyance network and the systems are reasonably dry. Disposal of debris, trash, sediment, and other waste material should be done at suitable disposal/recycling sites and in compliance with all applicable local, county, state, and federal waste regulations.

THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE STORMWATER MANAGEMENT SYSTEM AND APPURTENANCES OPERATIONS AND MAINTENANCE ON SITE.

DESIGNED BY	DATE	DESIGNED BY	DATE
ADNAN A. KHAN, P.E., C.M.E.	02/21/19	ADNAN A. KHAN, P.E., C.M.E.	02/21/19
PROFESSIONAL ENGINEER		PROFESSIONAL ENGINEER	
DATE	DATE	DATE	DATE
02/21/19	02/21/19	02/21/19	02/21/19
APPROVED BY	DATE	APPROVED BY	DATE
REVISIONS	NO.	REVISIONS	NO.
BY: APE	DATE: 02/21/19	BY: APE	DATE: 02/21/19

AWZ ENGINEERING, INC.
 ENGINEERS • SCIENTISTS • CONSULTANTS
 Main Office: 150 River Road, Suite B3, Montville, NJ 07045
 Pennsylvania Office: Scranton, PA 18504
 Tel: 973-588-7080 Fax: 973-588-7079
 www.awzeng.com e-mail: info@awzeng.com
 New Jersey Certificate of Authority No.: 24EA2811&400
 Pennsylvania Certificate of Authority No.: 3771354

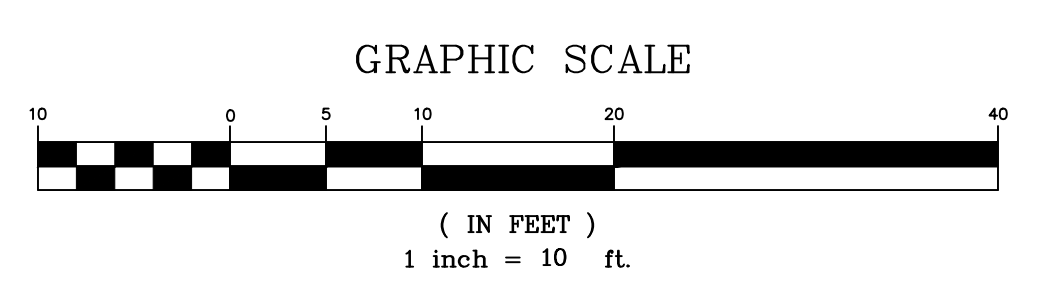
TAX LOT 10
535-537 NEW YORK AVENUE
TOWNSHIP OF LYNDHURST
BERGEN COUNTY, NEW JERSEY
GRADING AND UTILITY PLAN

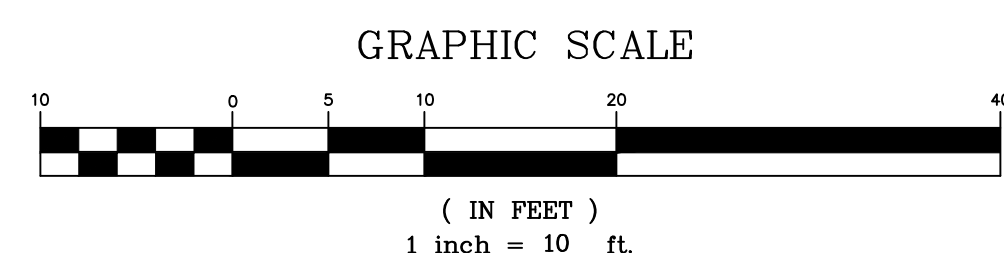
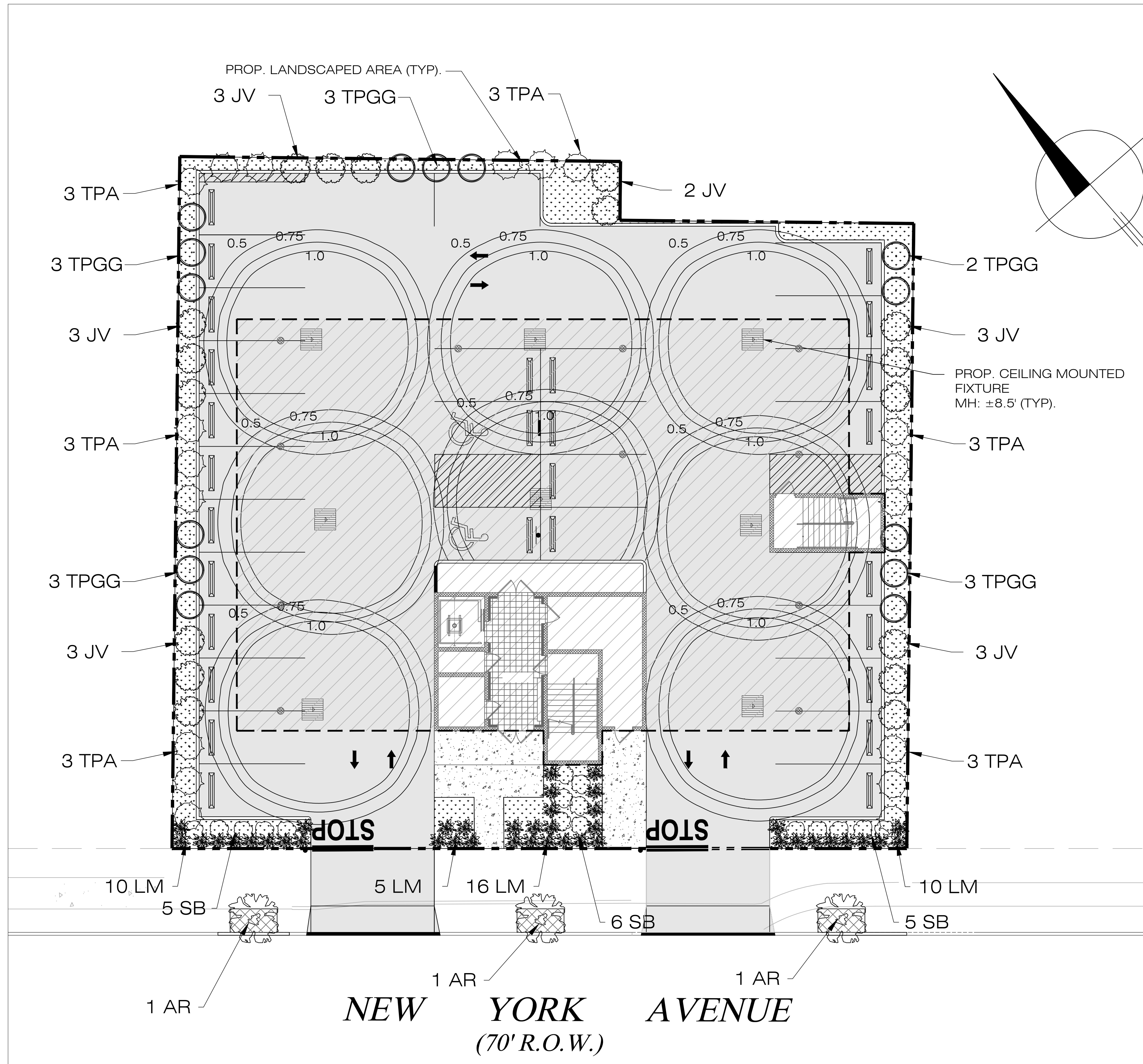
BLOCK 23

JOB NUMBER:
19-0205

SCALE: AS SHOWN

C-03
 SHEET 3 OF 6



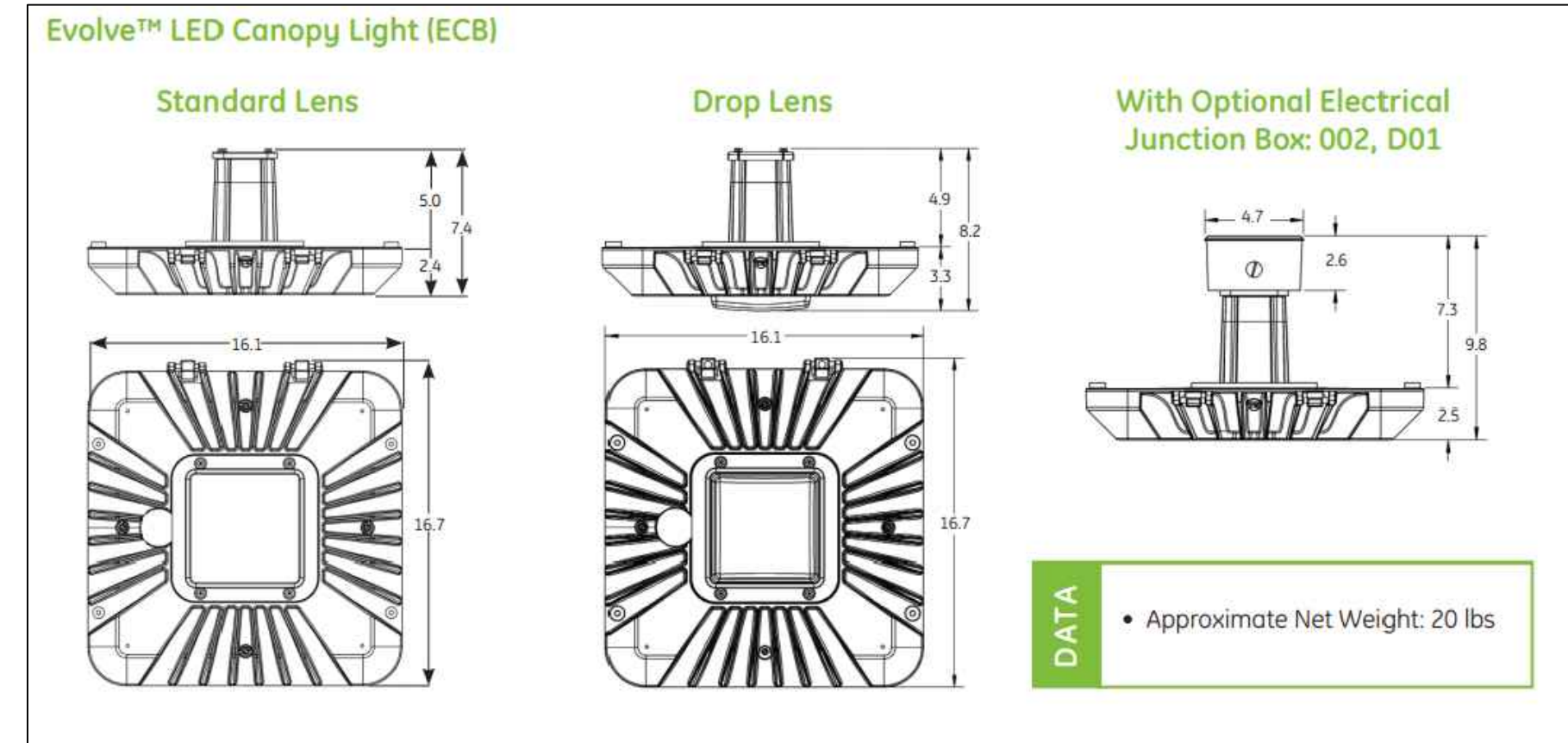


Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Lumens/Lamp	LLF	Lum. Watts	Manufacturer	Item Number
	8	EVOLVE LED CONOPY LIGHTLIGHT	SINGLE	4150	0.800	35	GE LIGHTING SOLUTIONS	ECBB_A5D540_120-277V

PROPOSED PLANTING SCHEDULE

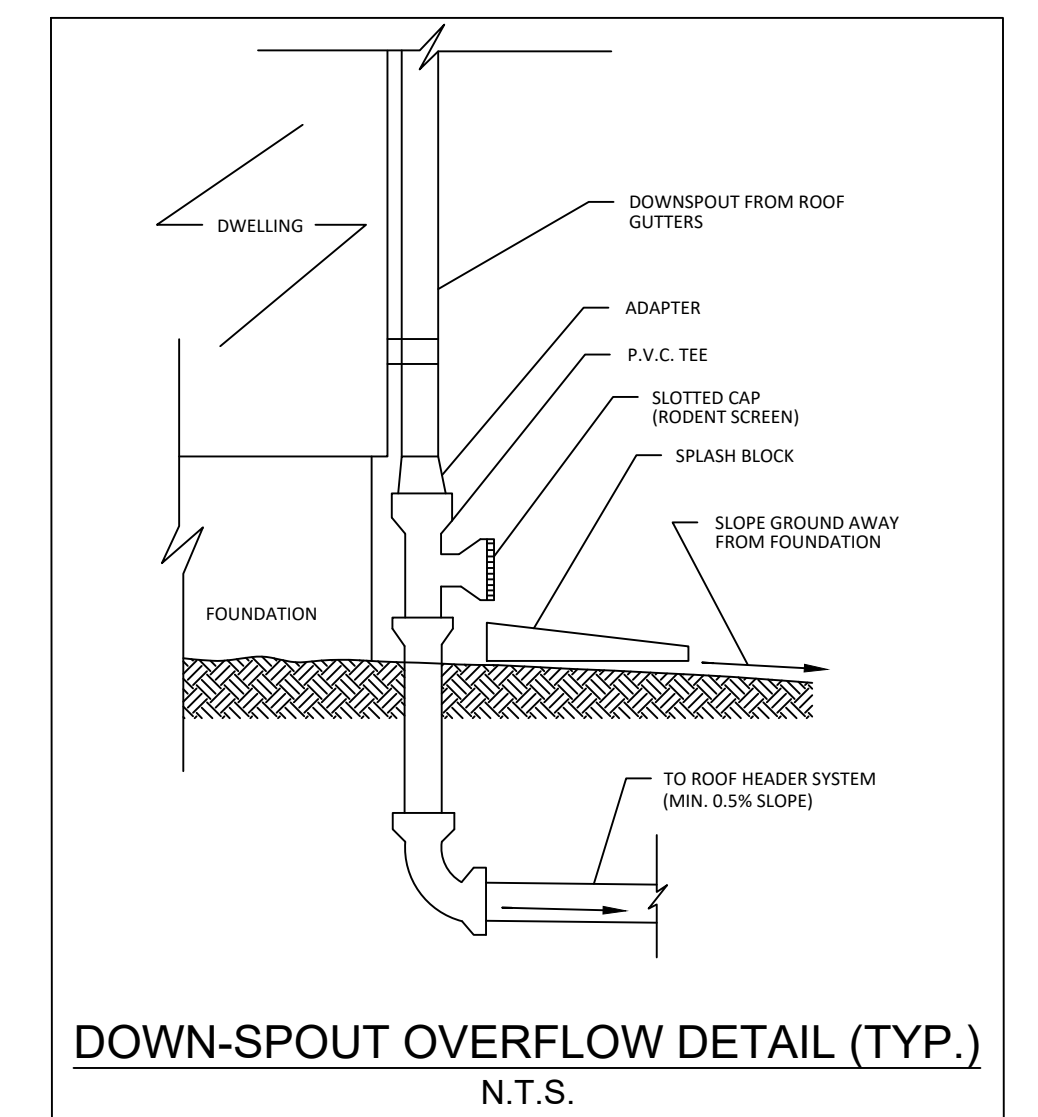
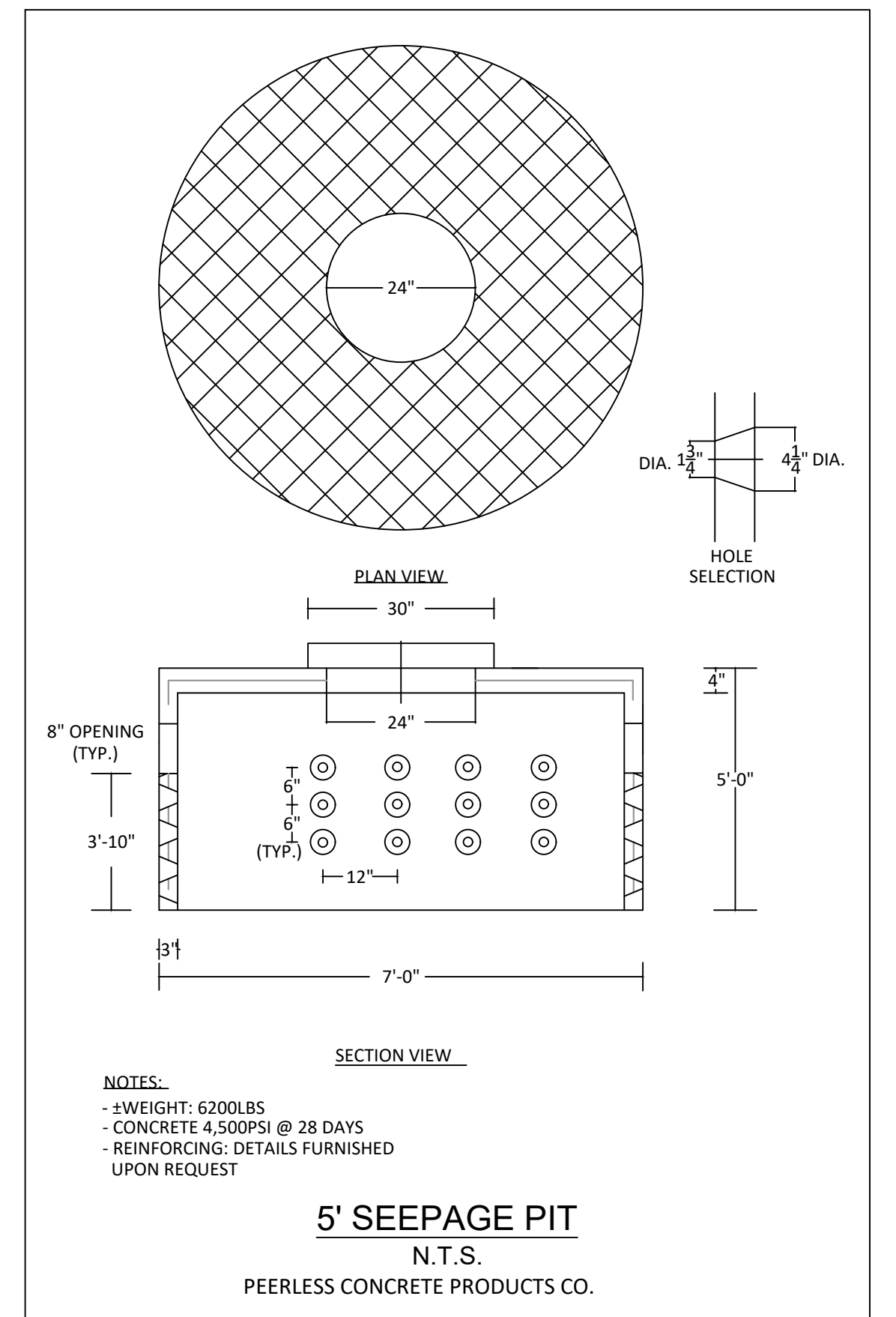
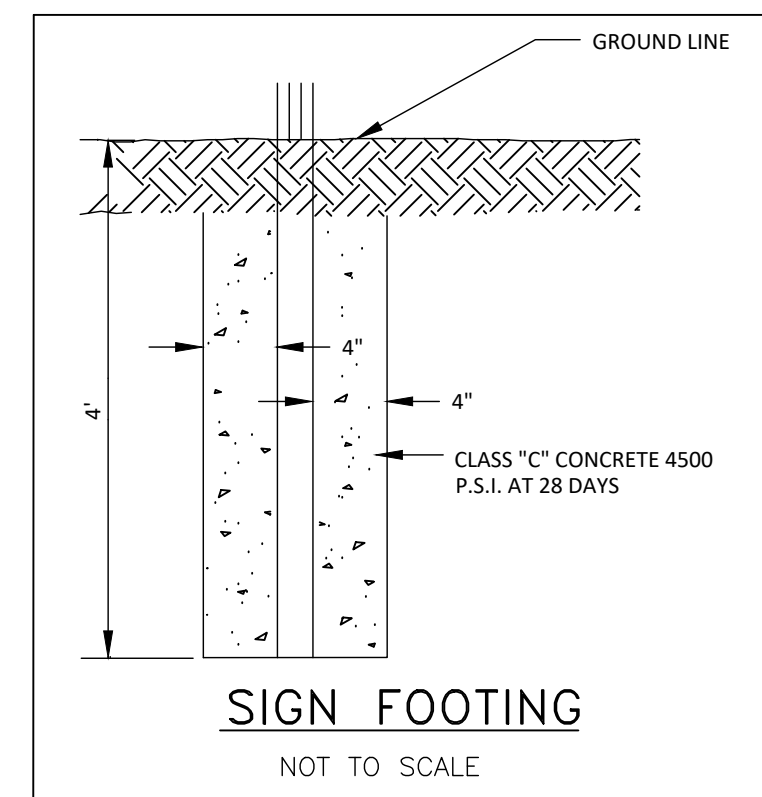
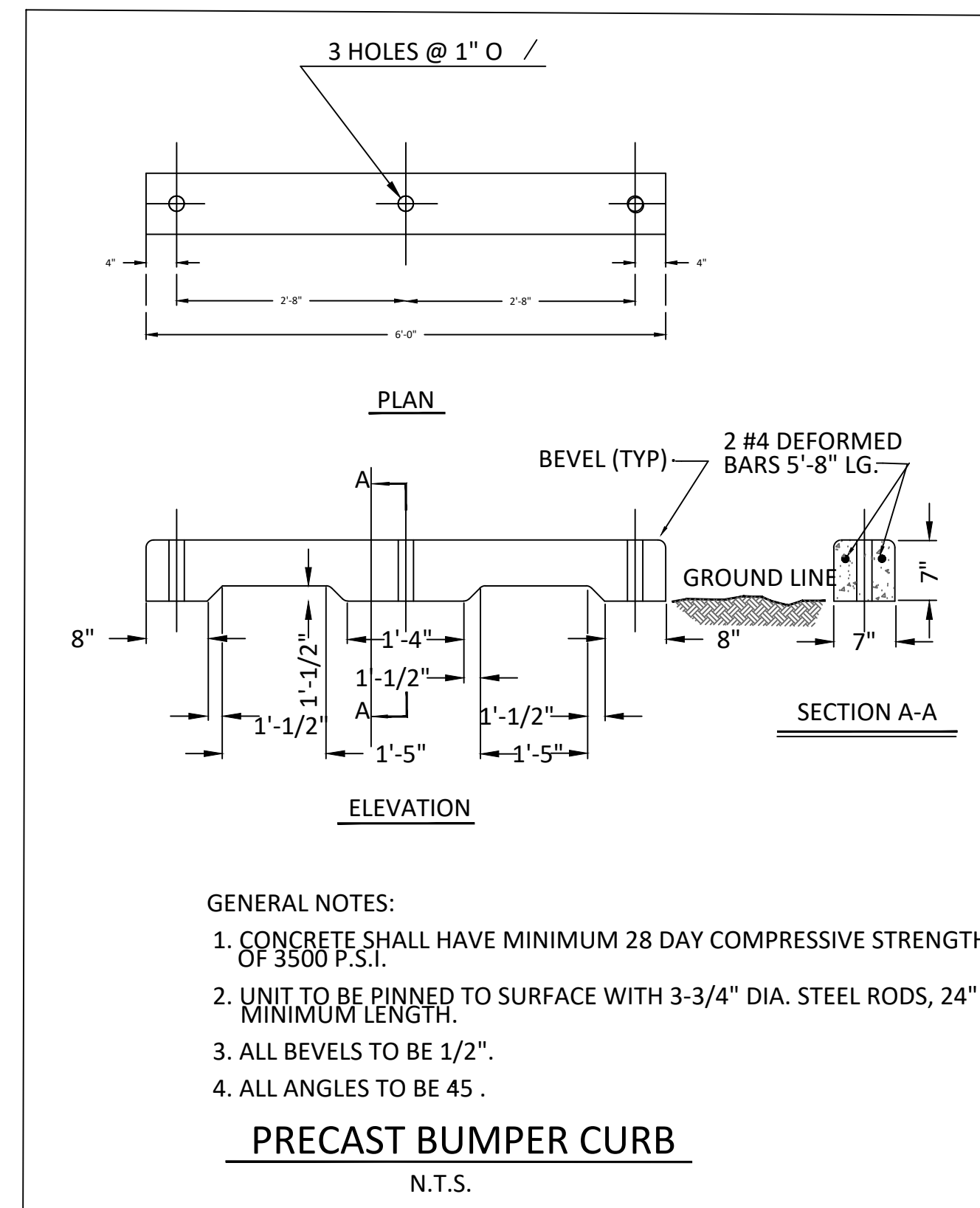
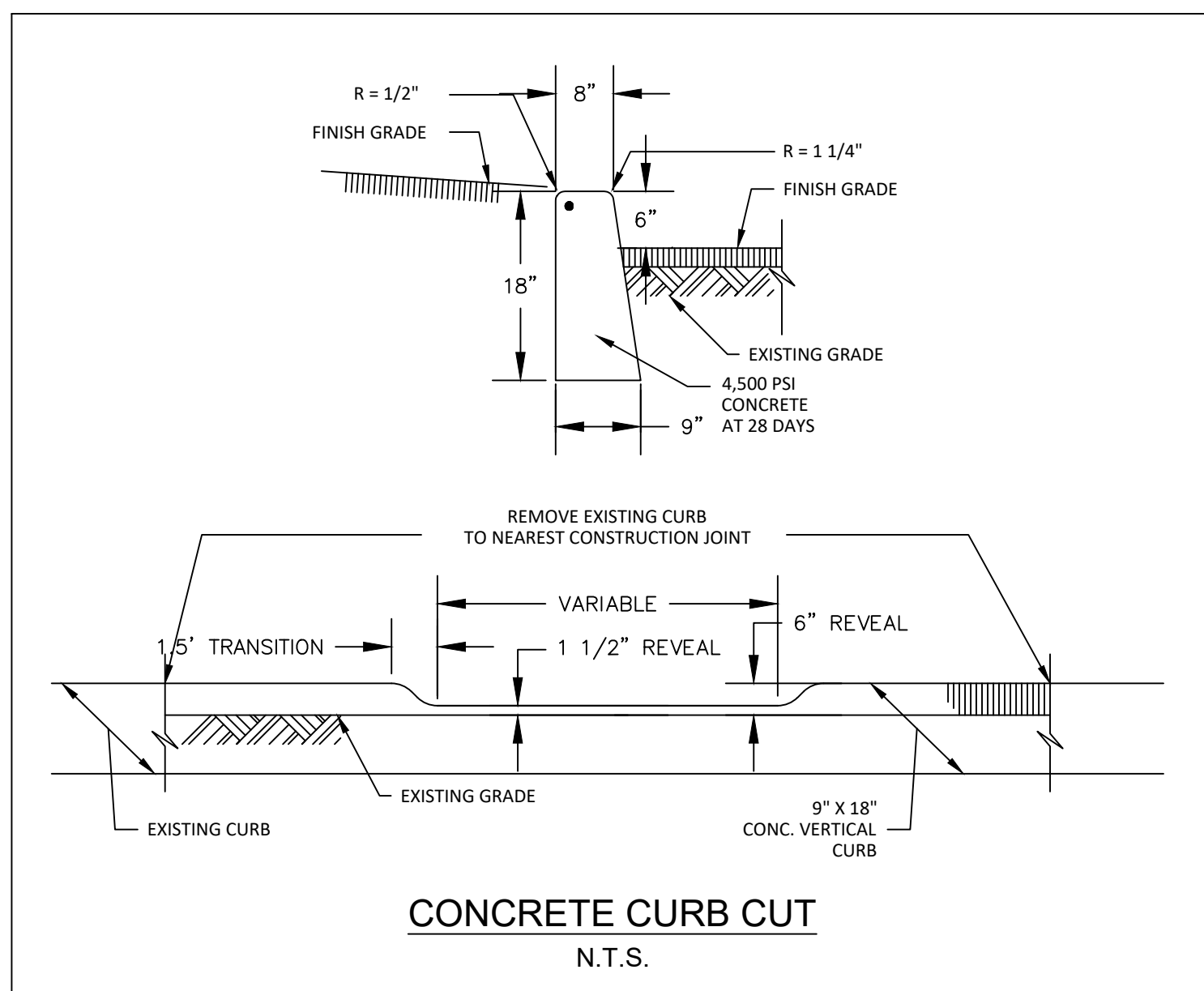
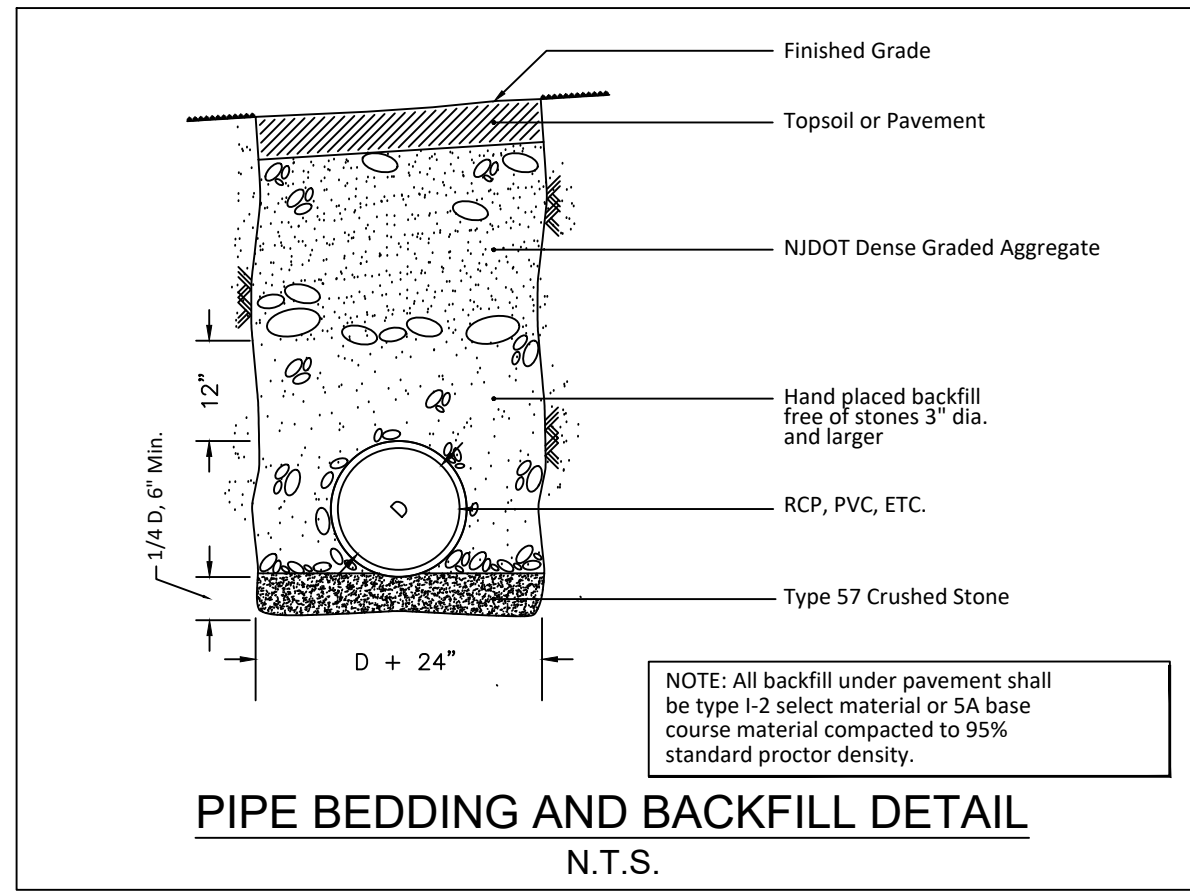
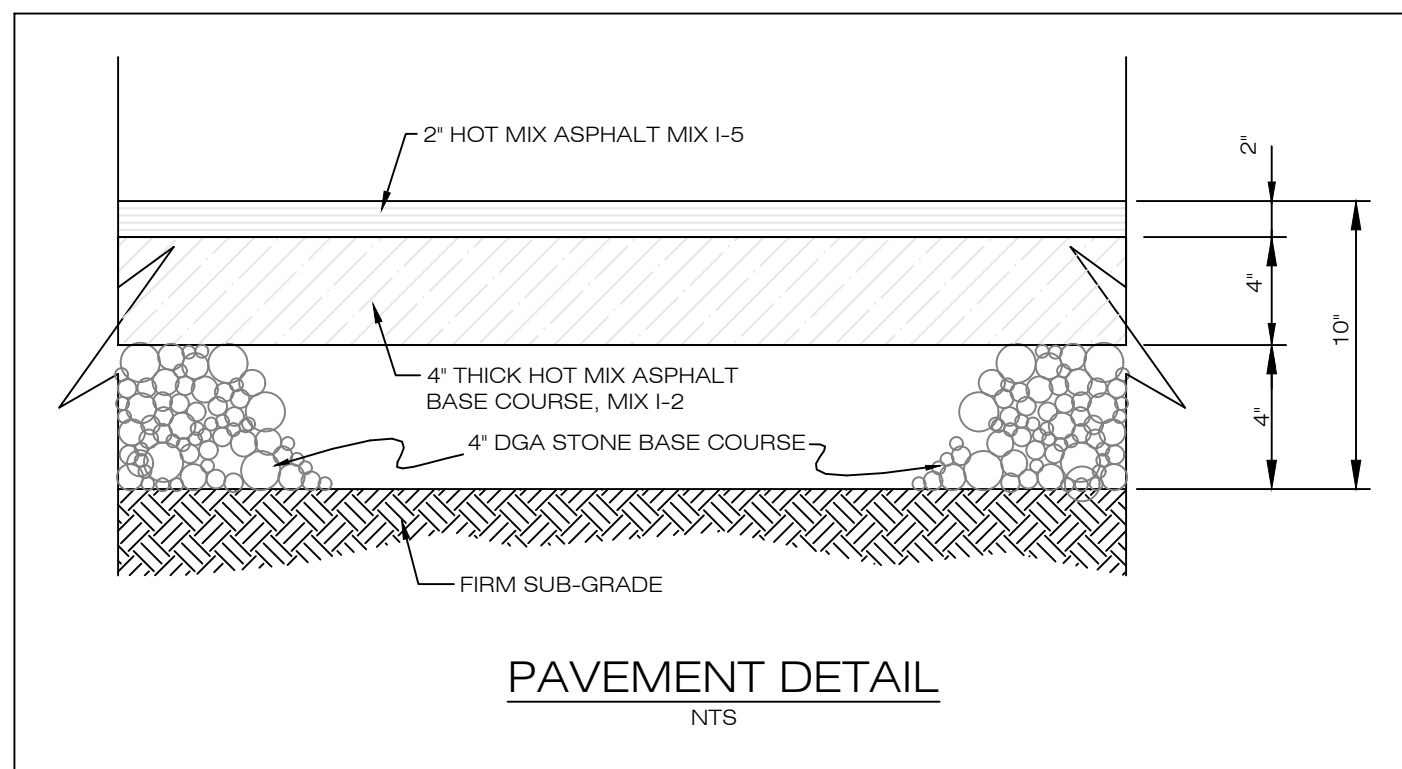
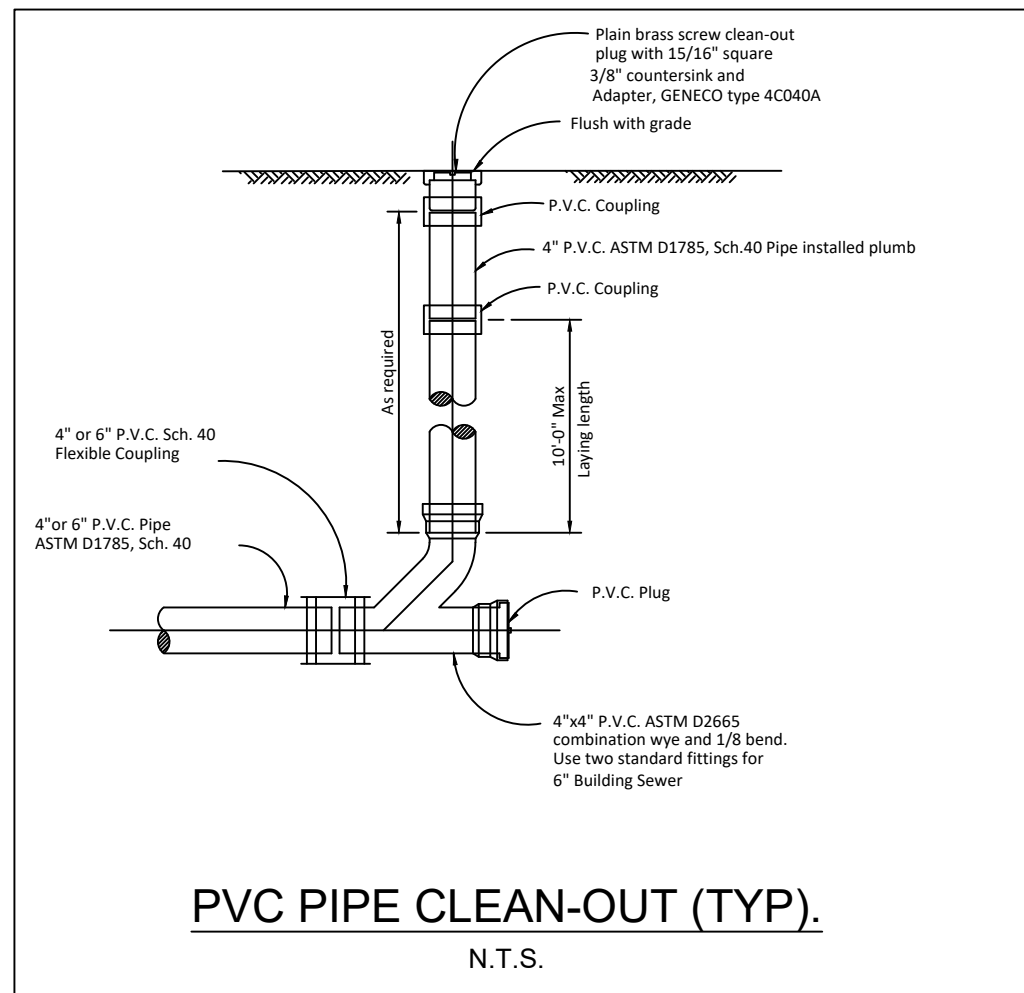
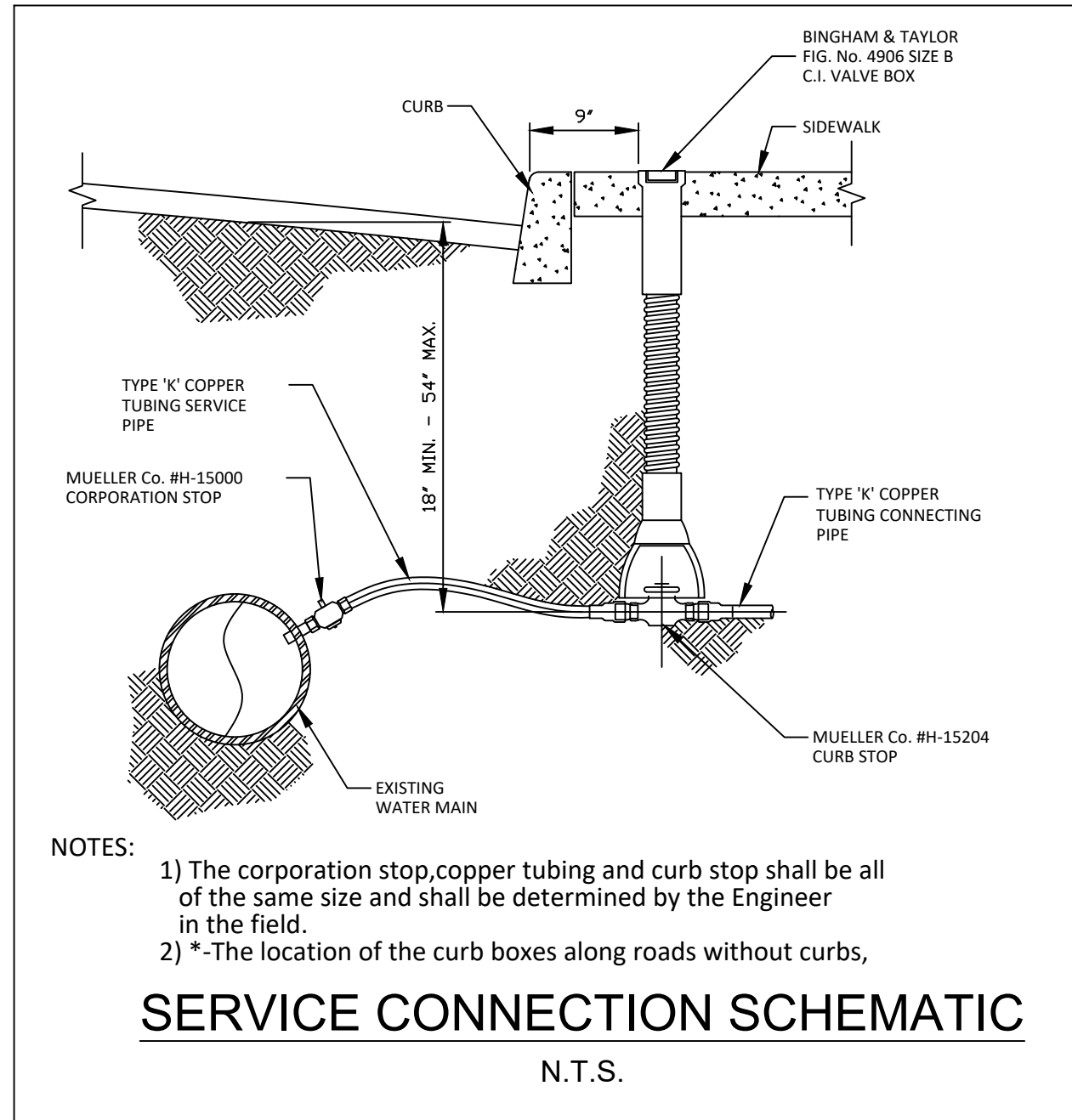
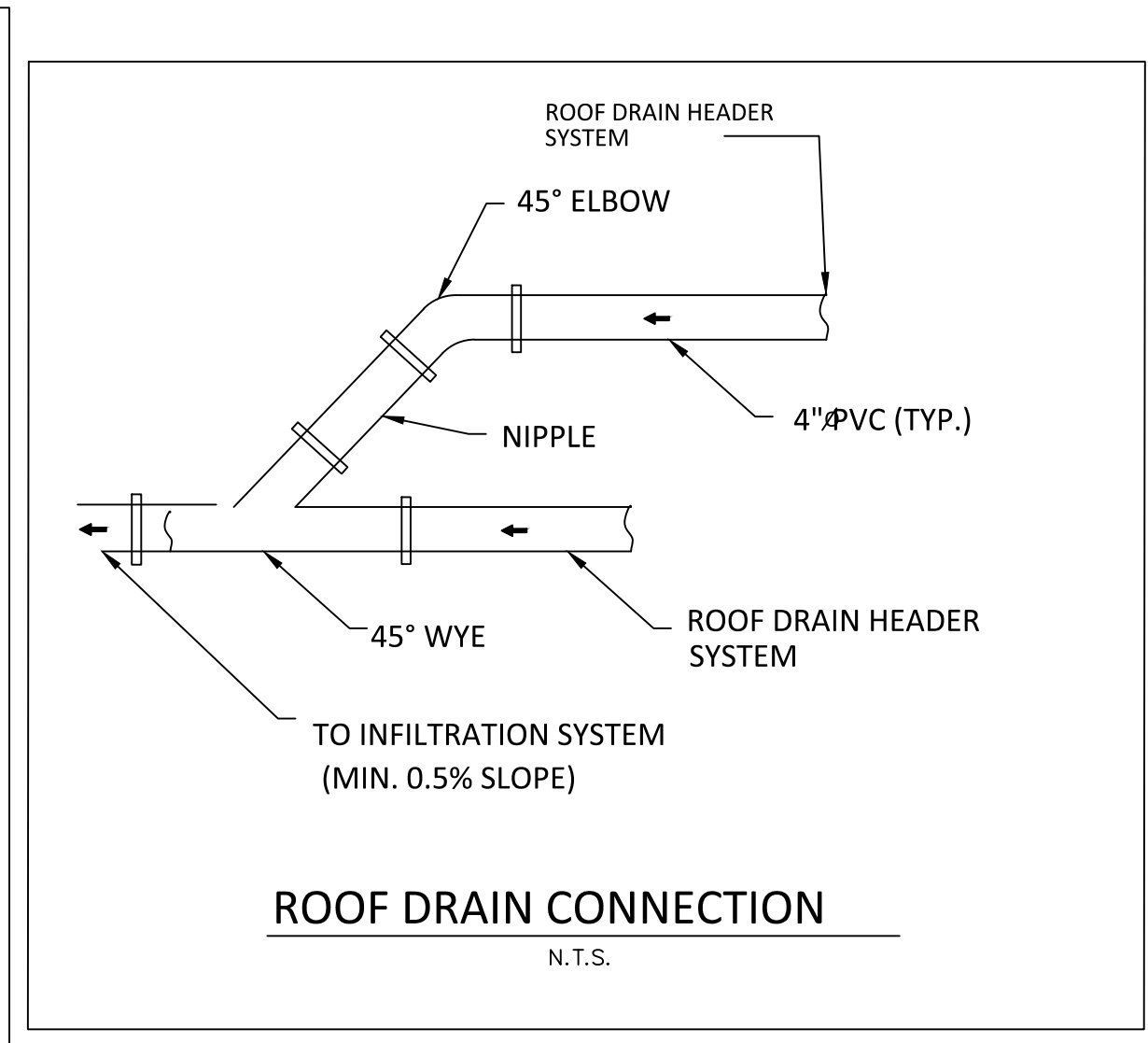
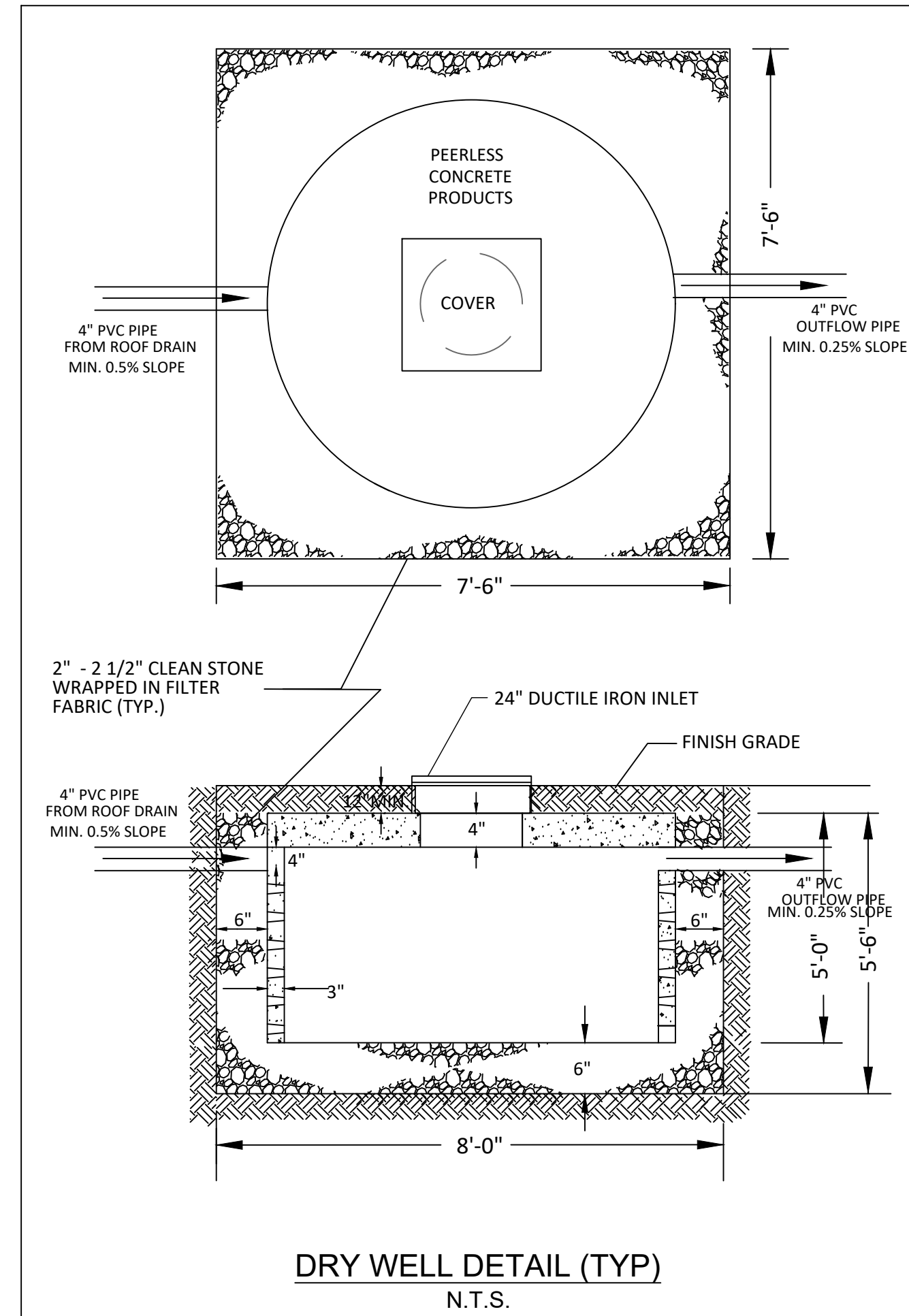
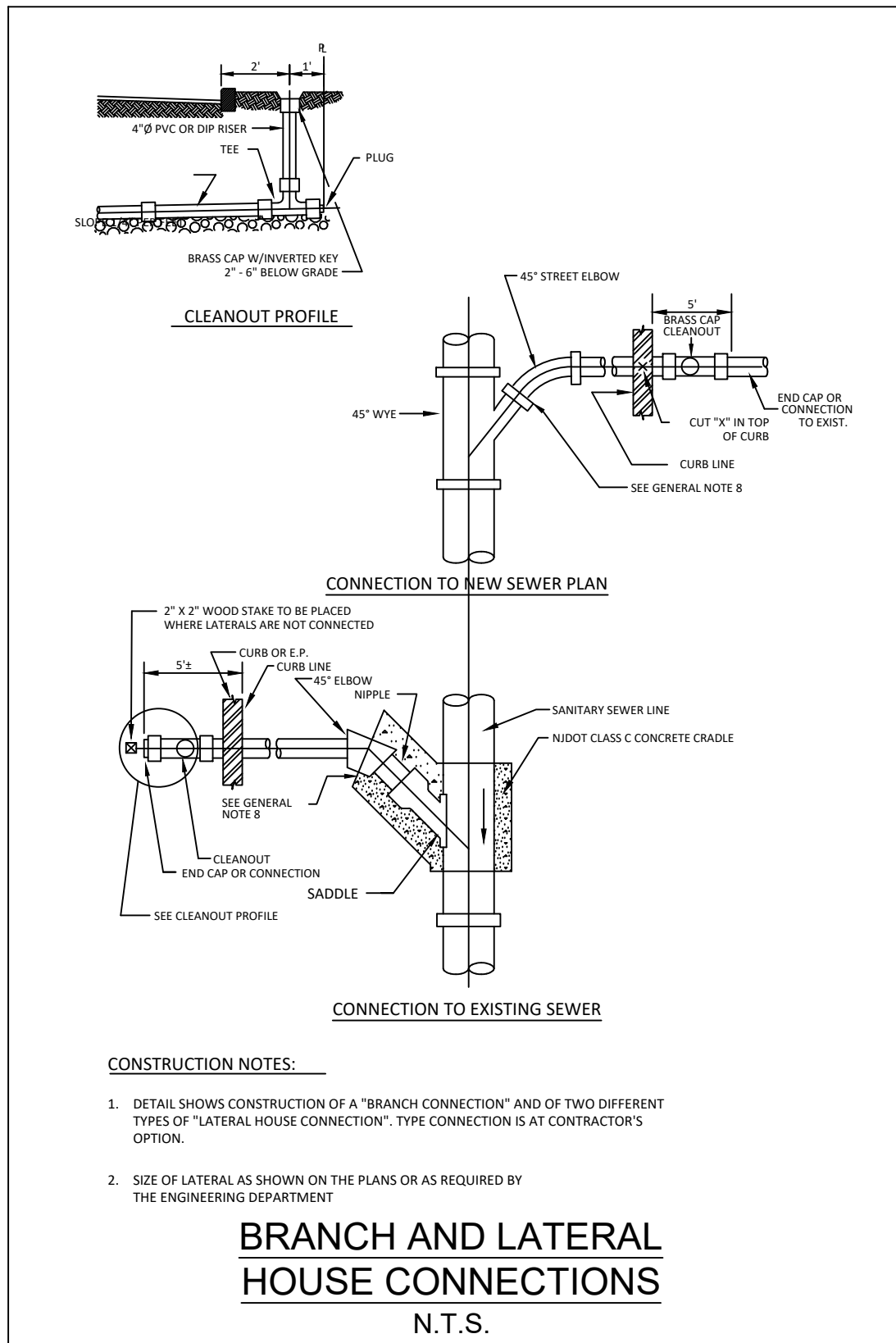
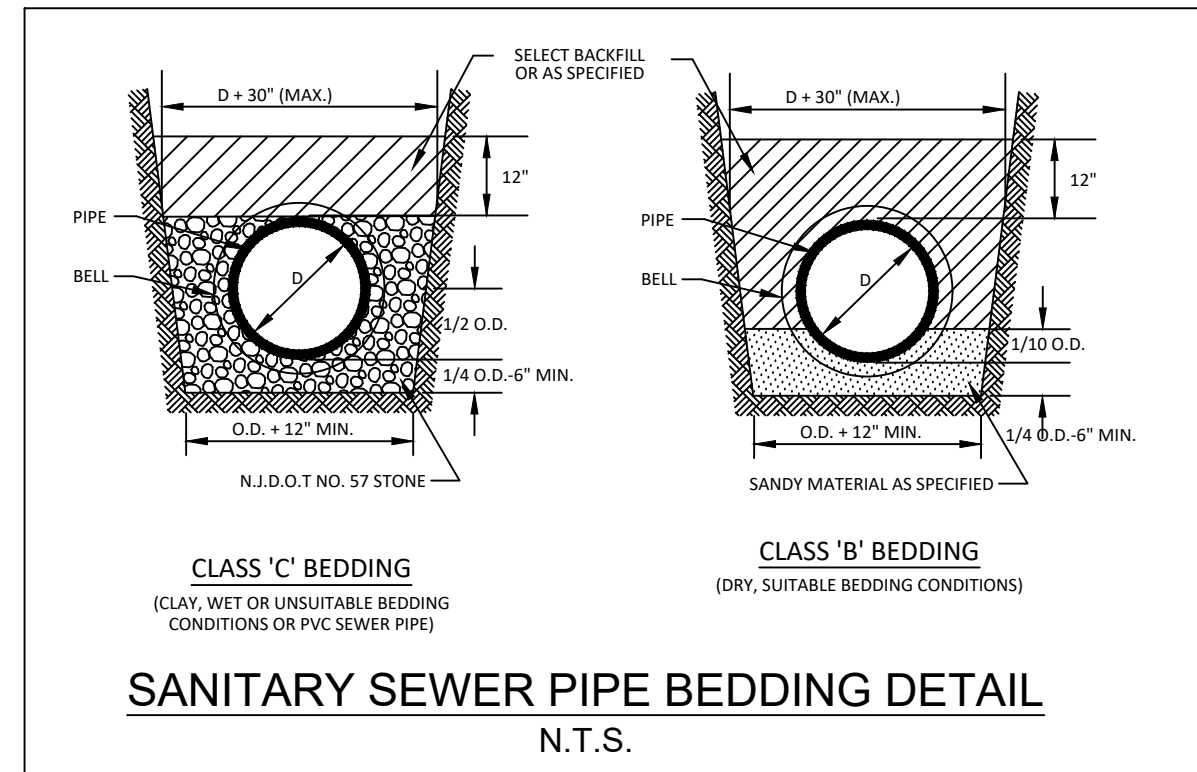
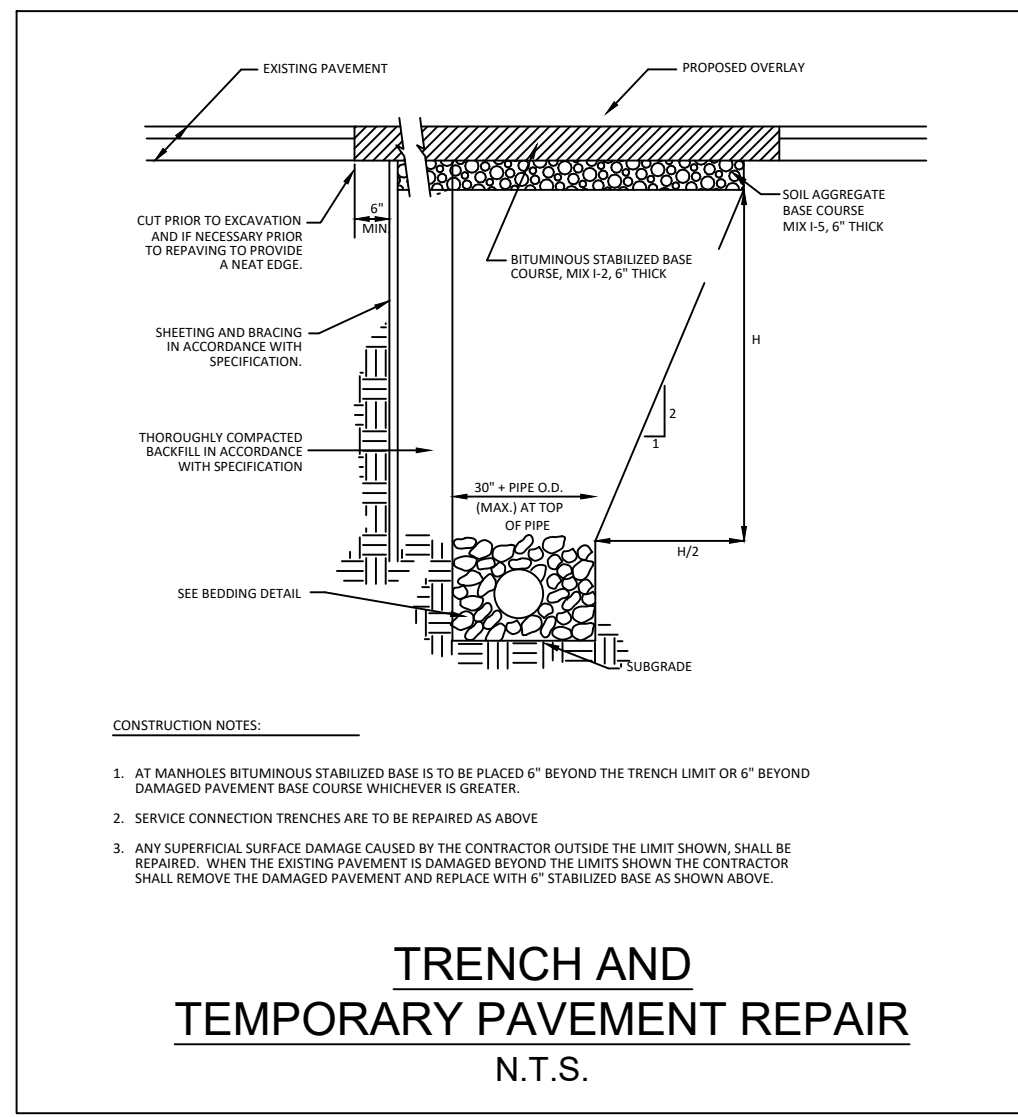
KEY	QTY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
SHADE TREE(S)						
AR	3		ACER RUBRUM	RED MAPLE	3-4" CAL.	B+B
TOTAL	3					
EVERGREEN TREE(S)						
JV	17		JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	9-10'	B+B
TPGG	14		THUJA PLICATA 'GREEN GIANT'	GREEN GIANT 'ARBORVITAE'	9-10'	B+B
TPA	18		THUJA PLICATA 'ATROVIRENS'	ATROVIRENS ARBORVITAE	9-10'	B+B
TOTAL	49					
SHRUBS						
LM	41		LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILY TURF	10-12"	1 GAL.
SB	16		SPIREA BUMALDA 'ANTHONY WATER'	DWARF RED SPIREA	18-24"	3 GAL.
TOTAL	57					

NOTE:
1. IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.



CEILING MOUNTED FIXTURE
NO TO SCALE

DRAWN BY: IC DATE: 02/11/19 DESIGNED BY: AK DATE: 02/11/19 APPROVED BY: AK DATE: 02/22/19	REVISIONS NO. DATE BY: APE 1. 02/22/19 APE Description of changes to be made, including a description of the proposed work.
ADNAN A. KHAN, P.E., C.M.E. PROFESSIONAL ENGINEER P.A. LICENSE NO. 48852 N.Y. LICENSE NO. 08645 M.D. LICENSE NO. 4183	TAX LOT 10 BLOCK 23 535 - 537 NEW YORK AVENUE TOWNSHIP OF LYNDHURST BERGEN COUNTY, NEW JERSEY PARKING AREA LIGHTING AND LANDSCAPE PLAN
AWZ ENGINEERING, INC. ENGINEERS • SCIENTISTS • CONSULTANTS Main Office: 150 River Road, Suite B3, Montville, NJ 07045 Pennsylvania Office: Scranton, PA 18504 Tel: 973-588-7080 Fax: 973-588-7079 www.awzeng.com e-mail: info@awzeng.com New Jersey Certificate of Authorization No.: 24EA28118400 Pennsylvania Certificate of Authority No.: 37171354	JOB NUMBER: 19-0205 SCALE: AS SHOWN C-04 SHEET 4 OF 6



DESIGNED BY	AK
DATE	02/21/19
DESIGNED BY	AK
DATE	02/21/19
APPROVED BY	AK
DATE	02/22/21
REVISIONS	
NO.	
DATE	
BY	

ADNAN A. KHAN, P.E., C.M.E.
PROFESSIONAL ENGINEER

DATE: 02/22/21

PA. LICENSE NO. 48982
NJ. LICENSE NO. 39812
NY. LICENSE NO. 08645
M.D. LICENSE NO. 41803

AWZ ENGINEERING, INC.
ENGINEERS • SCIENTISTS • CONSULTANTS

Main Office: 150 River Road, Suite B3, Montville, NJ 07045
Pennsylvania Office: Scranton, PA 18504

Tel: 973-588-7080 Fax: 973-588-7079
www.awzeng.com e-mail: info@awzeng.com
New Jersey Certificate of Authorization No.: 24EA28118400
Pennsylvania Certificate of Authority No.: 3771354

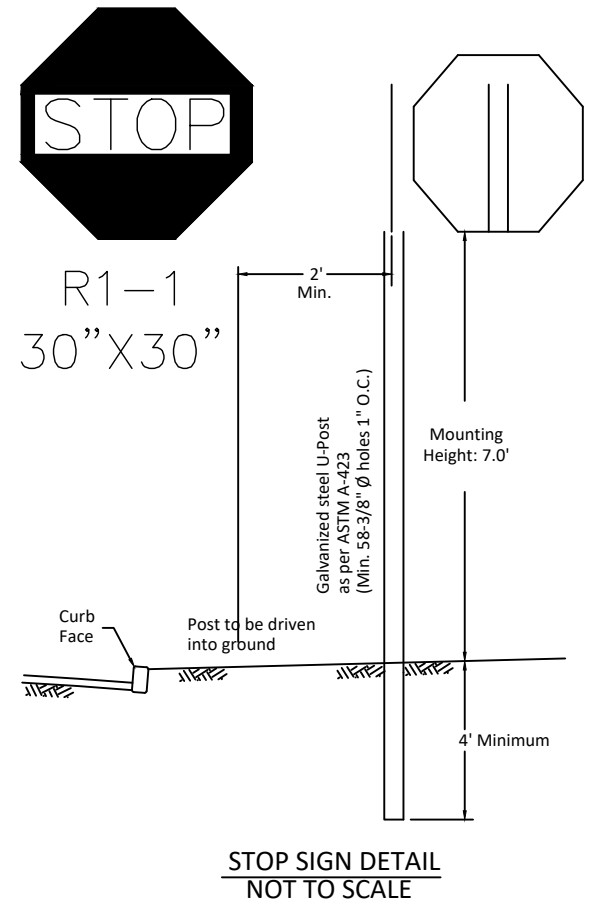
TAX LOT 10
BLOCK 23
535-537 NEW YORK AVENUE
TOWNSHIP OF LYNDHURST
BERGEN COUNTY, NEW JERSEY

CONSTRUCTION DETAILS

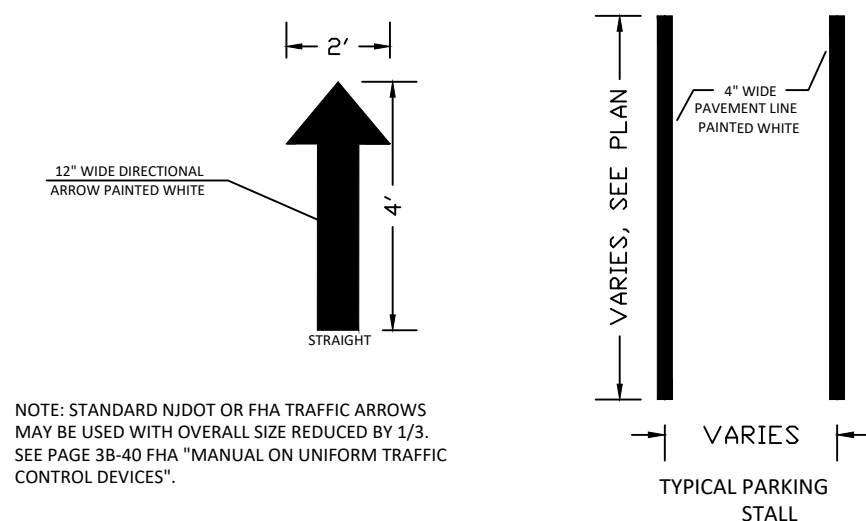
JOB NUMBER:
19-0205

SCALE: AS SHOWN

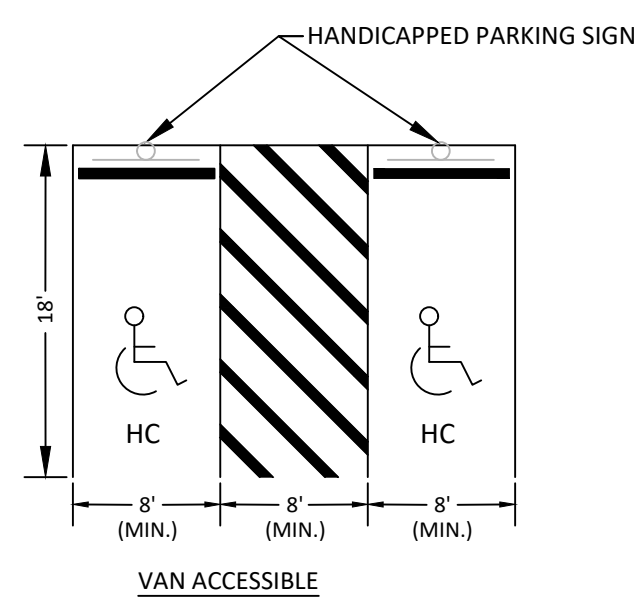
C-05
SHEET 5 OF 6



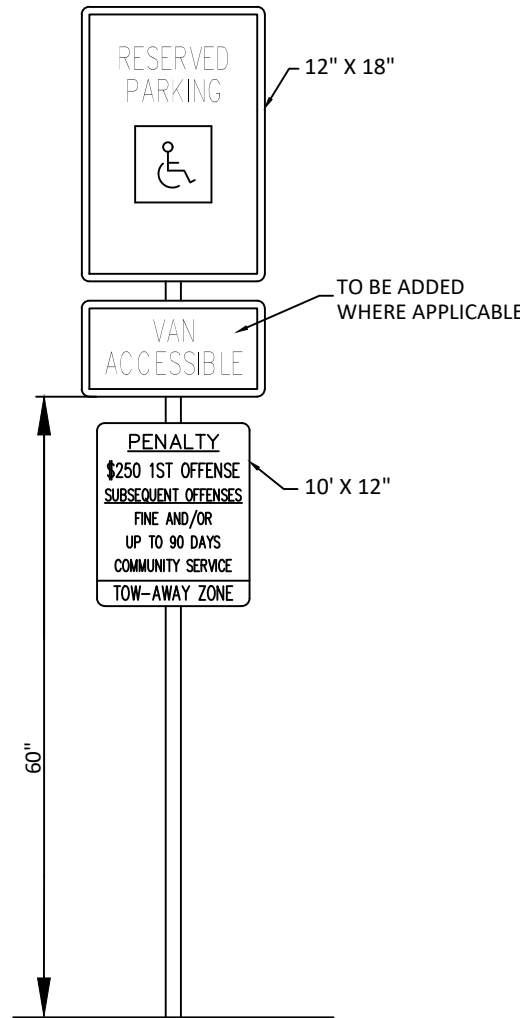
SIGN POST INSTALLATION
NOT TO SCALE



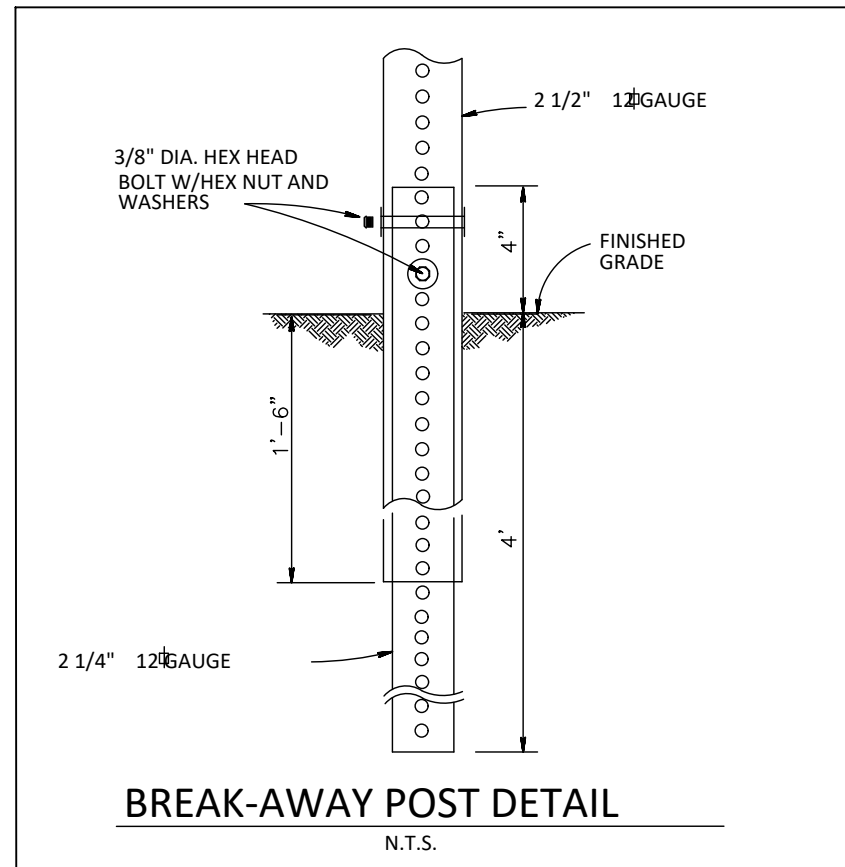
PAVEMENT MARKINGS
(N.T.S.)



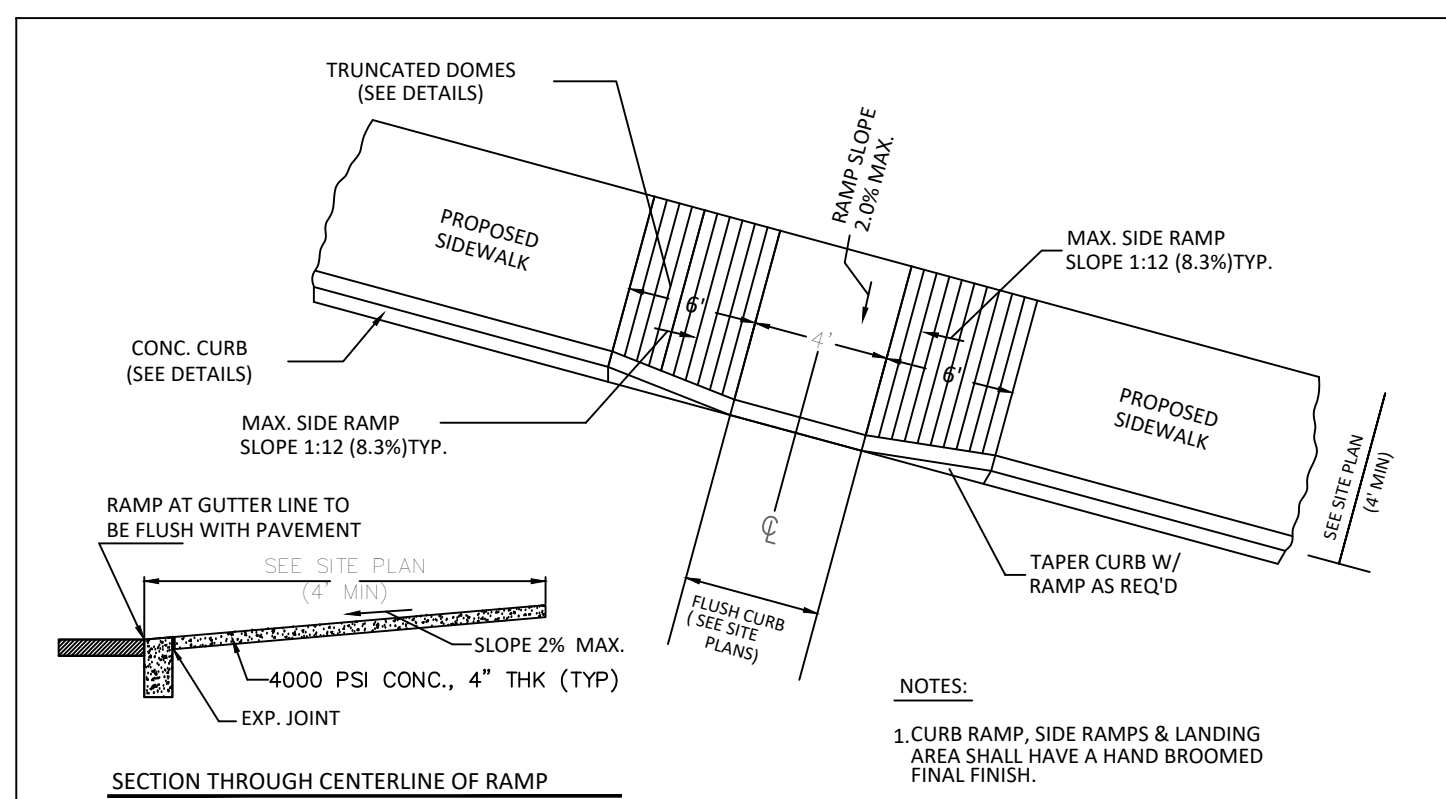
HANDICAPPED PARKING SPACE DETAIL
NOT TO SCALE



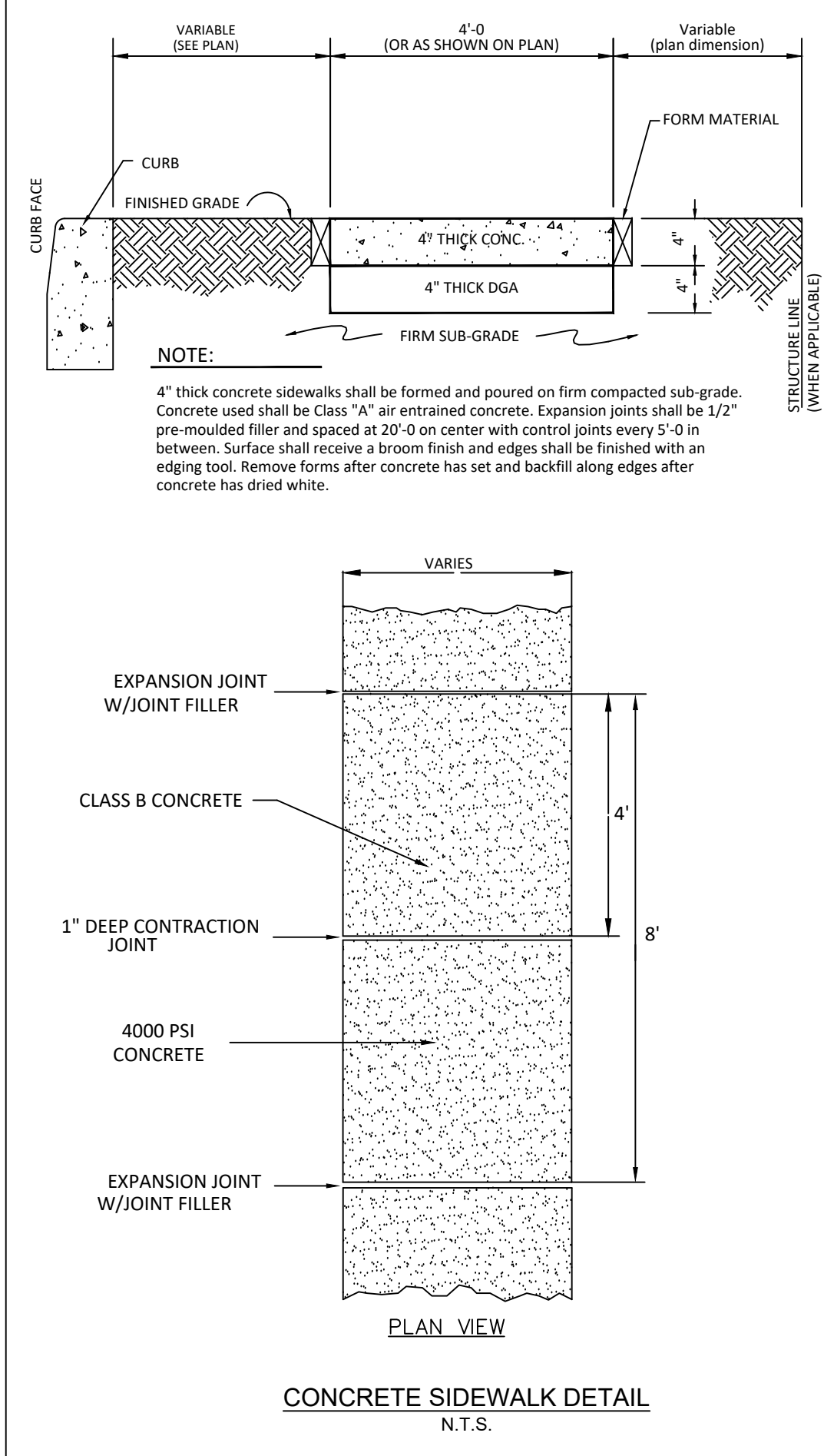
HANDICAPPED PARKING SIGN
NOT TO SCALE
ALL SIGN MATERIALS TO CONFORM WITH SECTION 916 OF THE N.J.D.O.T. STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ASTM D1535



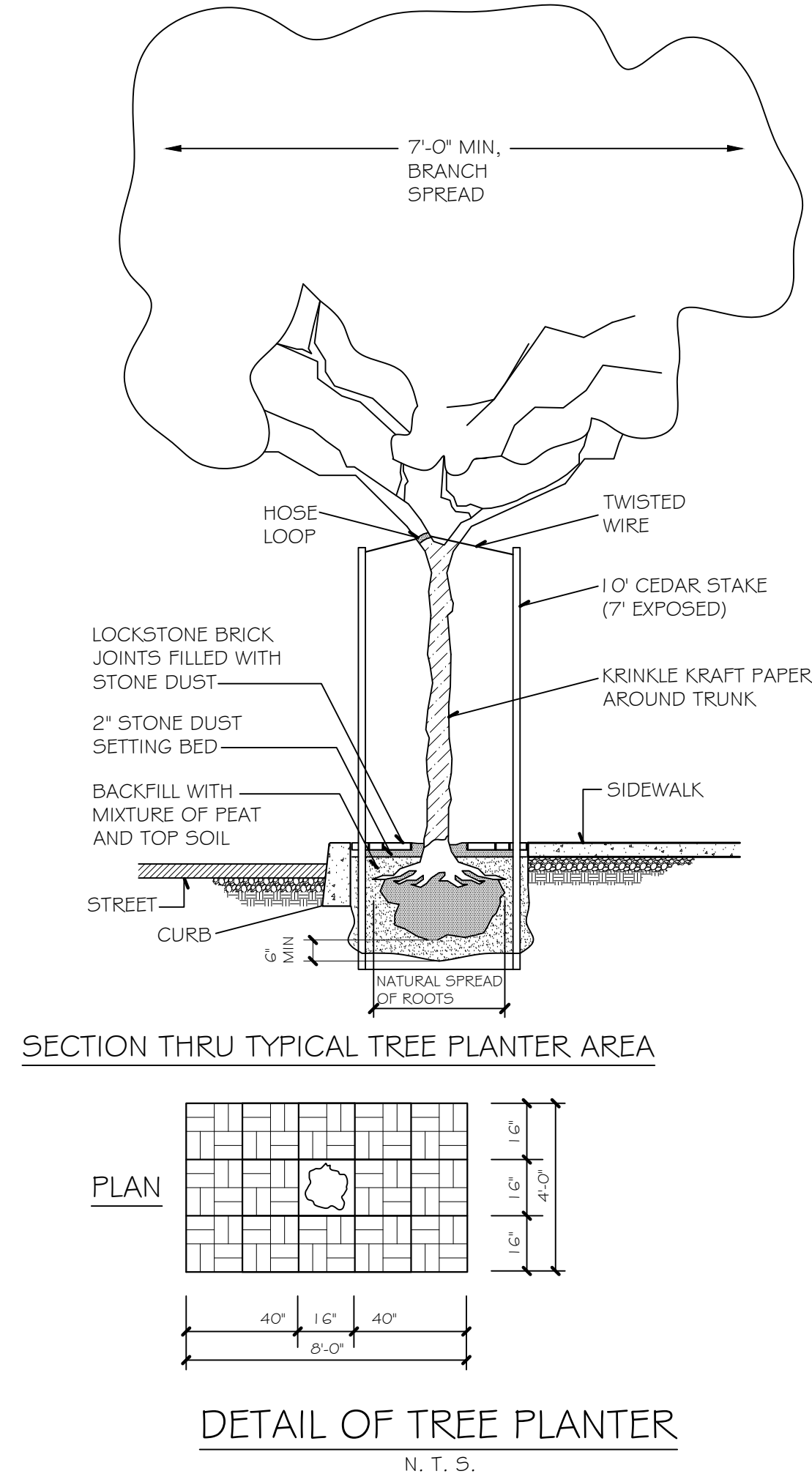
BREAK-AWAY POST DETAIL
N.T.S.



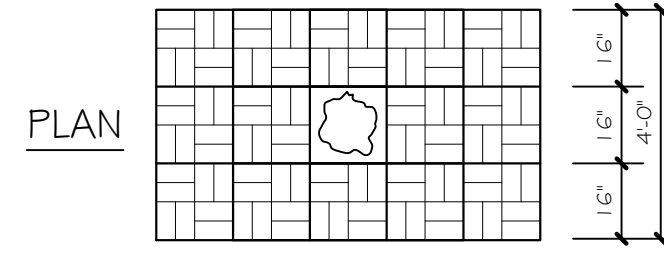
CURB RAMPS FOR THE PHYSICALLY HANDICAPPED
N.T.S.



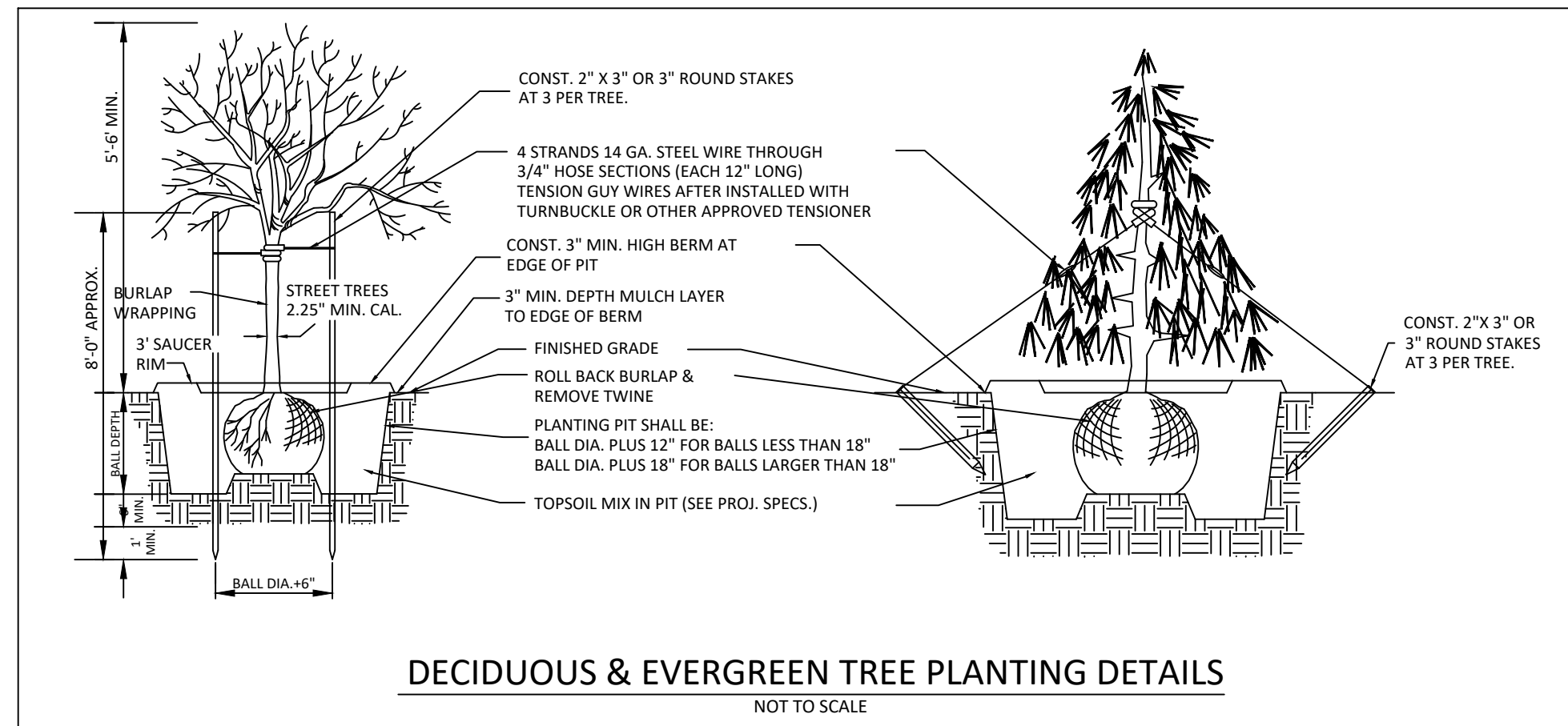
CONCRETE SIDEWALK DETAIL
N.T.S.



SECTION THRU TYPICAL TREE PLANTER AREA

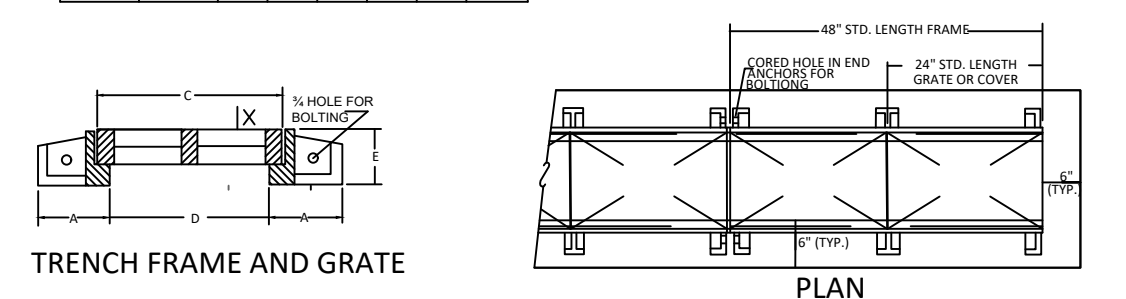


DETAIL OF TREE PLANTER
N.T.S.

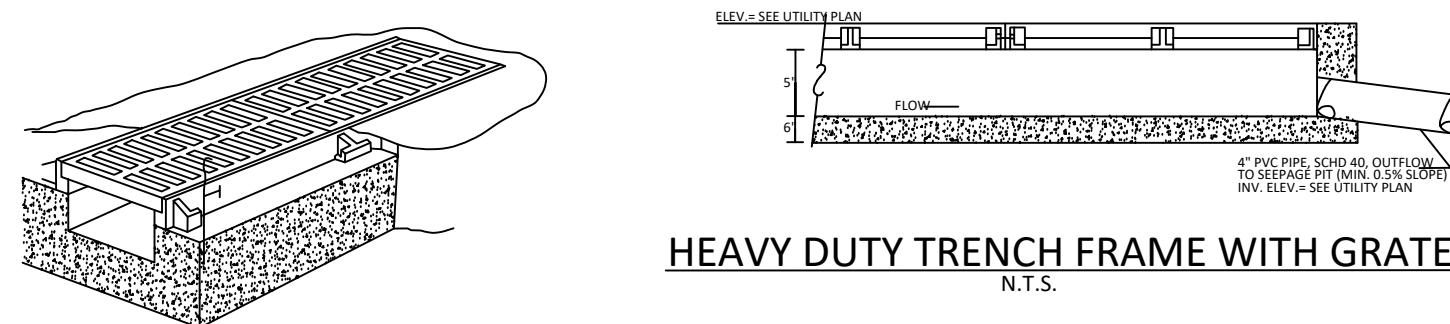


DECIDUOUS & EVERGREEN TREE PLANTING DETAILS
NOT TO SCALE

PATTERN NUMBER	GRATE	WIDTH	LENGTH	TYPE
4000A	4000A	24	48	3
4000B	4000B	24	36	3
4000C	4000C	24	24	3
4000D	4000D	36	48	3
4000E	4000E	36	36	3
4000F	4000F	36	24	3
4000G	4000G	48	48	3
4000H	4000H	48	36	3
4000I	4000I	48	24	3
4000J	4000J	60	48	3



TRENCH FRAME AND GRATE



HEAVY DUTY TRENCH FRAME WITH GRATE
N.T.S.

TAX LOT 10
535 - 537 NEW YORK AVENUE
TOWNSHIP OF LYNDHURST
BERGEN COUNTY, NEW JERSEY

ADNAN A. KHAN, P.E., C.M.E.
PROFESSIONAL ENGINEER
DATE: 02/21/19
DESIGNED BY: AK
DATE: 02/21/19
APPROVED BY: AK
DATE: 02/22/19

AWZ ENGINEERING, INC.
ENGINEERS • SCIENTISTS • CONSULTANTS
Main Office: 150 River Road, Suite B3, Montville, NJ 07045
Pennsylvania Office: Scranton, PA 18504
Tel: 973-588-7080 Fax: 973-588-7079
www.awzeng.com e-mail: info@awzeng.com
New Jersey Certificate of Authorization No.: 24EA28118400
Pennsylvania Certificate of Authority No.: 3771354

REVISIONS

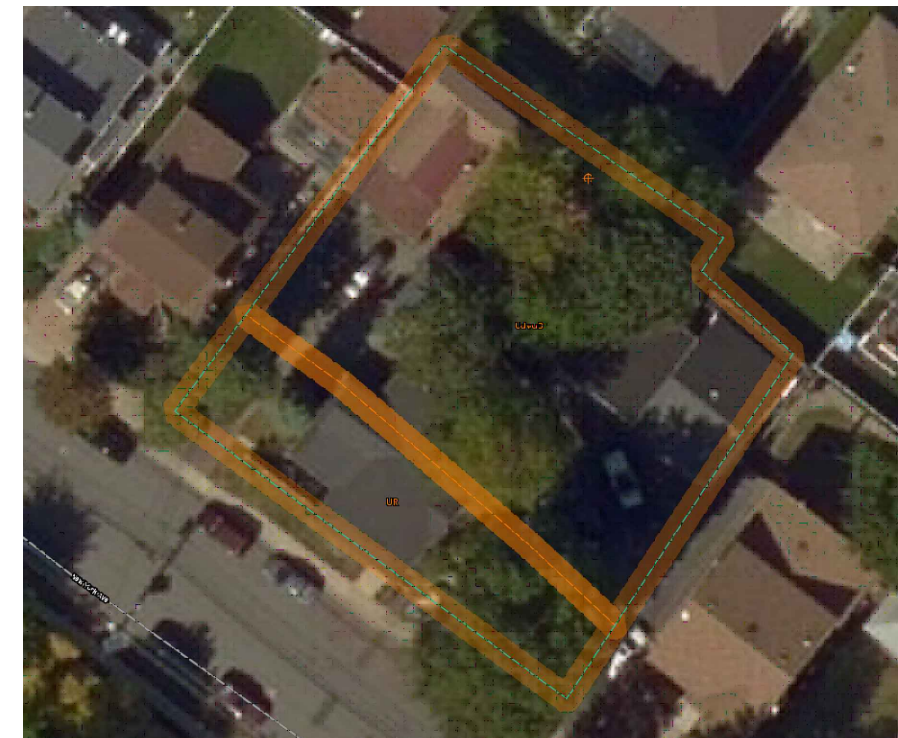
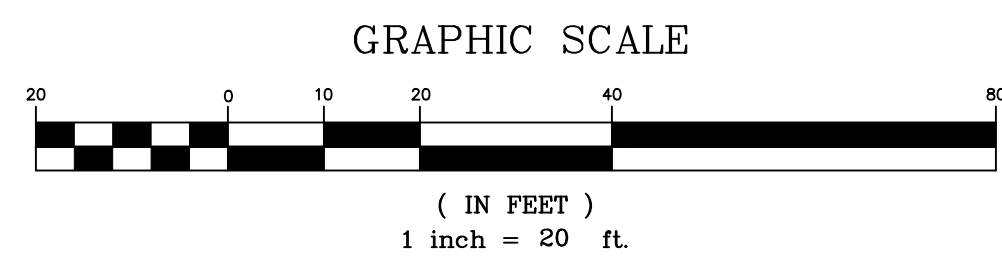
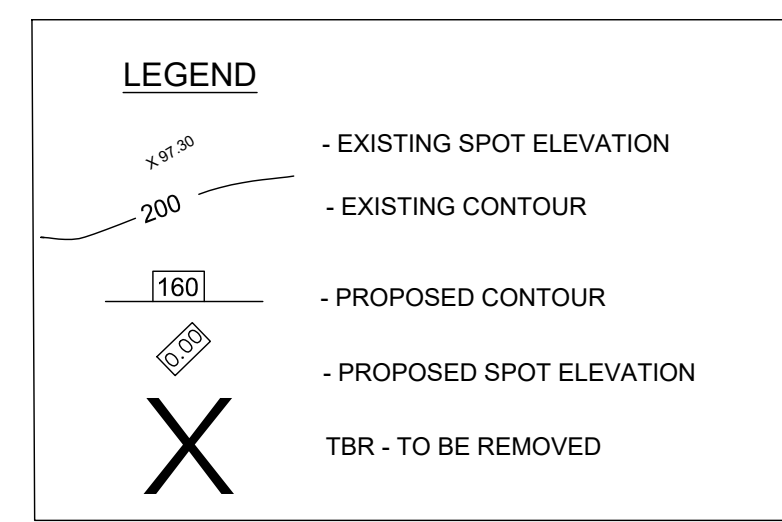
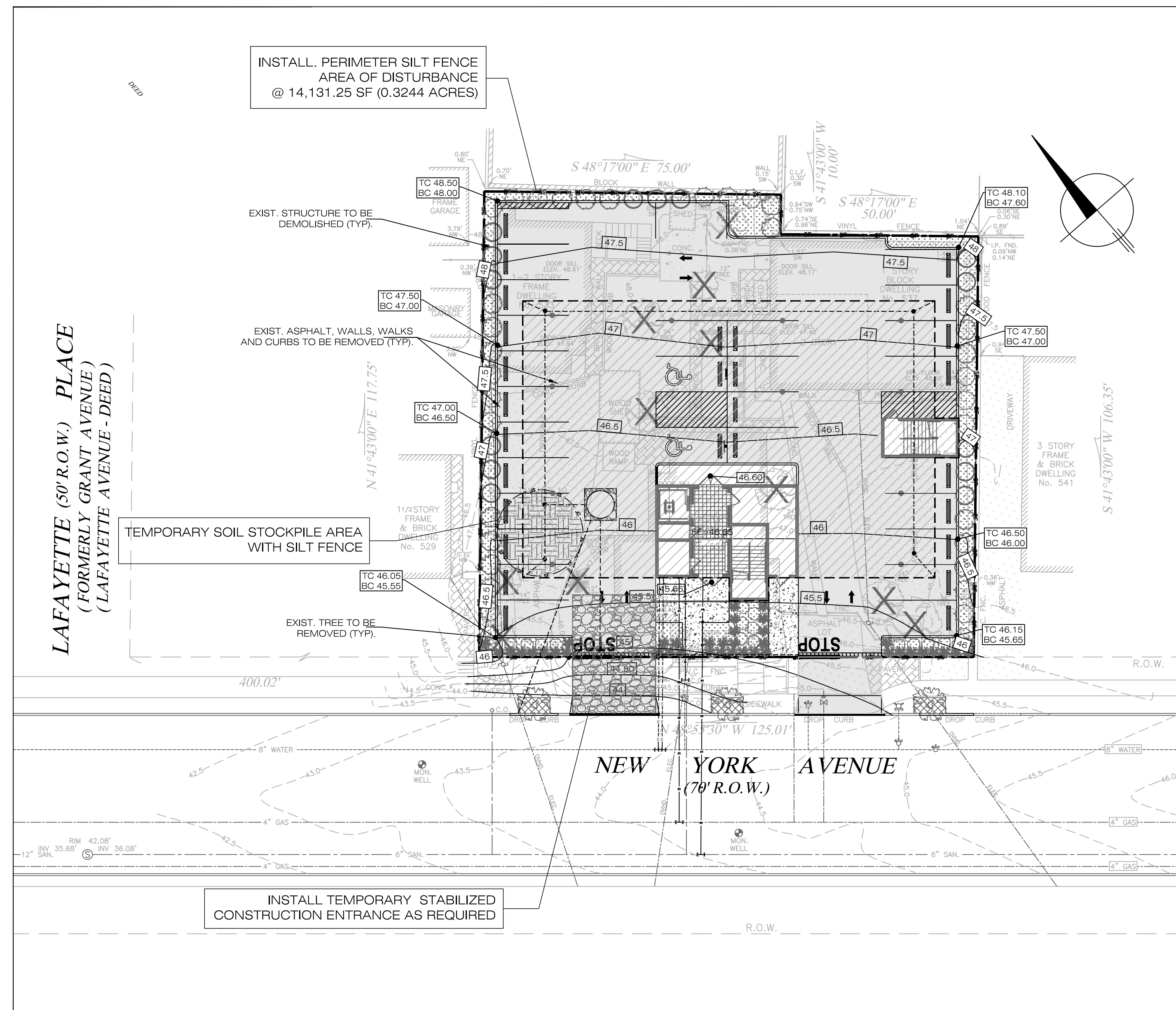
NO.	DATE	BY	REVISIONS

CONSTRUCTION DETAILS

JOB NUMBER:
19-0205

SCALE: AS SHOWN

C-06
SHEET 6 OF 6



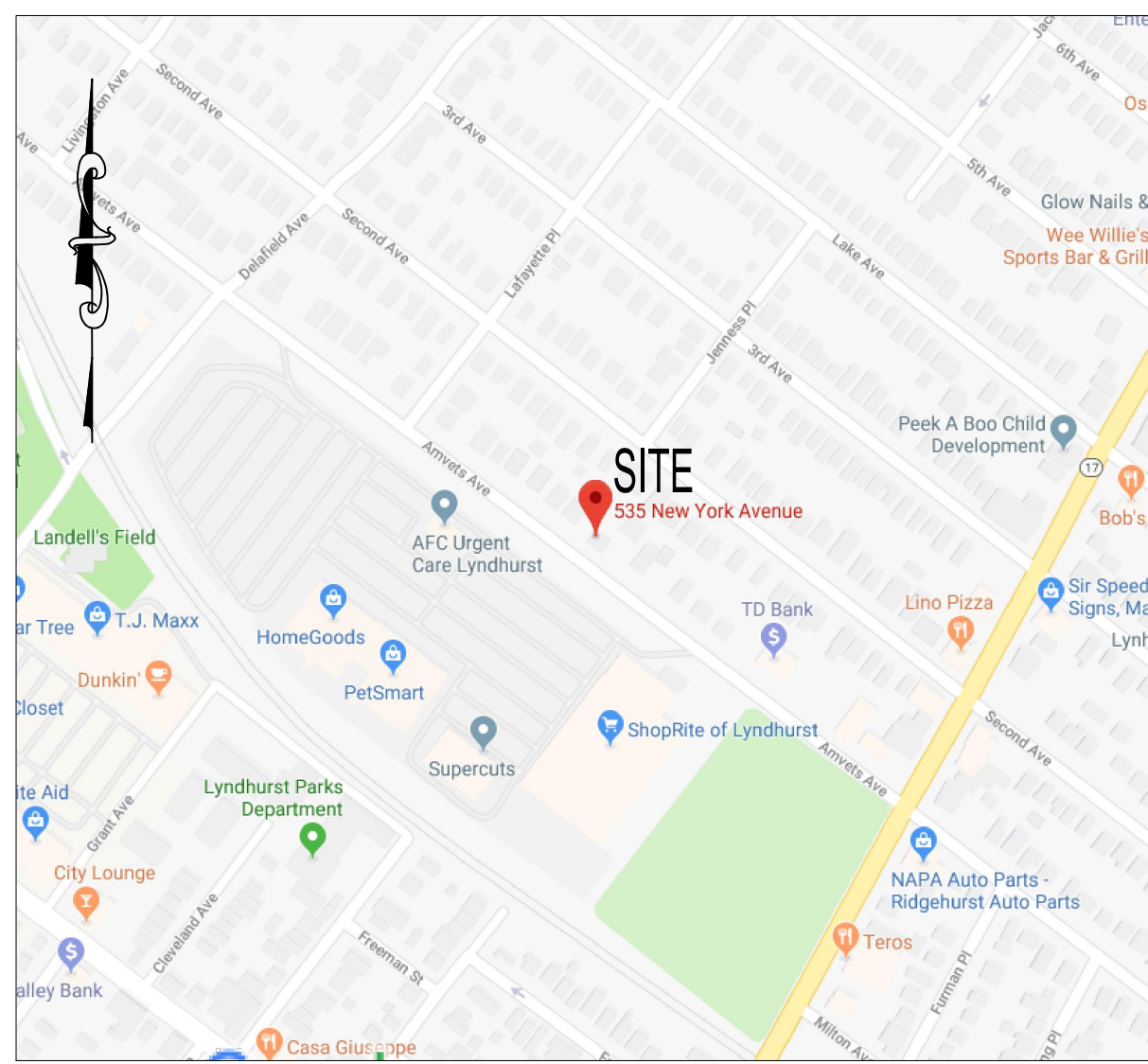
USDA WEB SOIL SURVEY MAP
N.T.S.

NOTES FOR ROAD WORK:

1. THE CONTRACTOR SHALL PREPARE A PLAN FOR THE PROPER DEWATERING OF EACH STREAM CROSSING PRIOR TO EXCAVATING THE STREAM BED. PLAN SHALL BE FORWARDED TO THE ENGINEER AND MORRIS COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL. THE DISTRICT SHALL BE NOTIFIED FOR INSPECTION PRIOR TO EACH STREAM CROSSING CONSTRUCTION.
2. ANY AREAS USED FOR CONTRACTOR'S STAGING, INCLUDING BUT NOT LIMITED TO, TEMPORARY STORAGE OF STOCKPILE MATERIALS (e.g. CRUSHED STONE, QUARRY PROCESS STONE, SELECT FILL, EXCAVATED MATERIALS, ETC.) SHALL BE ENTIRELY PROTECTED BY A SILT FENCE ALONG THE LOW ELEVATION SIDE TO CONTROL SEDIMENT RUNOFF.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE MORRIS COUNTY SOIL CONSERVATION DISTRICT OF ANY STAGING AND/OR STOCKPILE LOCATION AREAS AND FOR OBTAINING A SOIL EROSION AND SEDIMENT CONTROL CERTIFICATION FOR THESE AREAS.
4. A CRUSHED STONE, VEHICLE WHEEL-CLEANING BLANKET SHALL BE INSTALLED AT THE CONTRACTOR'S STAGING YARD AND/OR STOCKPILE AREAS TO PREVENT OFF-SITE TRACING OF SEDIMENT BY CONSTRUCTION VEHICLE ONTO PUBLIC ROADS. BLANKET SHALL BE 15 FT. x 50 FT. x 6 IN. (MINIMUM), CRUSHED STONE 2-1/2 INCHES IN DIAMETER. SAID BLANKET SHALL BE UNDERLAIN WITH A SUITABLE SYNTHETIC SEDIMENT FILTER FABRIC AND MAINTAINED IN GOOD ORDER.

SOIL MANAGEMENT NOTE:
ACCORDING TO STATE OF NEW JERSEY LAND USE CLASSIFICATION SYSTEM, THE SITE IS UNDER URBAN REDEVELOPMENT AREA, LAND USE CODE 1,110. THEREFORE, THE PROPOSED PROJECT DOES NOT REQUIRE COMPACTION REMEDIATION, AS PER EXEMPTION #6 UNDER SOIL MANAGEMENT AND PREPARATION STANDARDS FOR SOIL AND SEDIMENT CONTROL IN NEW JERSEY.

ACCORDING TO USDA WEB SOIL SURVEY, THE MAP UNIT SYMBOL FOR 75.1% OF THE SITE IS "UdwbU" (UDORTHERTS, WET SUBSTRATUM-URBAN LAND COMPLEX, AND 24.9% "UR" URBAN LAND.



SITE MAP
SCALE: ±1"=150'

DUST CONTROL NOTES

THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST. MULCHES - SEE STANDARD FOR STABILIZATION WITH MULCHES ONLY (PG. 5-1) OF STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY. NOTE: ALL PAGE REFERENCES ARE FOR ABOVE DOCUMENT DATED 7/99. VEGETATIVE COVER - SEE STANDARD FOR TEMPORARY VEGETATIVE COVER (PG. 7-1), PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION (PG. 4-1), AND PERMANENT STABILIZATION WITH SOD (PG. 6-1) SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS), KEEP TRAFFIC OFF THESE AREAS.

TABLE 16-1: DUST CONTROL MATERIALS

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1200
LATEX EMULSION	12.5:1	FINE SPRAY	235
BASIN IN WATER	4:1	FINE SPRAY	300
POLYACRYLAMIDE (PAM) - SPRAY ON		APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS.	
POLYACRYLAMIDE (PAM)-SDRY SPRAY		MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS. SEE SEDIMENT BASIN STANDARD (PG.26-1)	
ACIDULATED SOY BEAN SOAP STICK	NONE	COARSE SPRAY	1200

TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT. SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET. BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. CALCIUM CHLORIDE - SHALL BE IN THE FORM OF LOOSE, DRY GRANULATES OF FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS, OR ACCUMULATION AROUND PLANTS. STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

BERGEN COUNTY SOIL CONSERVATION DISTRICT SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY (NJ STANDARDS), AND WILL BE INSTALLED IN PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT STABILIZATION IS ESTABLISHED.
2. ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN THIRTY (30) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND MULCHING. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREA WILL BE MULCHED WITH UNROTTED STRAW AT A RATE OF 2 TONS PER ACRE ANCHORED BY APPROVED METHODS (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).
3. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF 2 TONS PER ACRE, ACCORDING TO THE NJ STANDARDS.
4. **STABILIZATION SPECIFICATIONS:**
 - A. TEMPORARY SEEDING AND MULCHING:
 - GROUND LIMESTONE- APPLIED UNIFORMLY ACCORDING TO SOIL TEST RECOMMENDATIONS.
 - FERTILIZER- APPLY 11 LBS. / 1,000 SF OF 10-20-10 OR EQUIVALENT WITH 50 % WATER INSOLUBLE NITROGEN (UNLESS A SOIL TEST INDICATES OTHERWISE) WORKED INTO THE SOIL A MINIMUM OF 4".
 - SEED- PERENNIAL RYEGRASS 100 LBS. / ACRE (2.3 LBS. / 1,000 SF) OR OTHER APPROVED SEED; PLANT BETWEEN MARCH 1 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 1.
 - MULCH- UNROTTED STRAW OR HAY AT A RATE OF 70 TO 90 LBS. / 1,000 SF APPLIED TO ACHIEVE 95% SOIL SURFACE COVERAGE. MULCH SHALL BE ANCHORED BY APPROVED METHODS (i.e. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).
 - B. PERMANENT SEEDING AND MULCHING:
 - TOPSOIL - UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 5", MINIMUM OF 4" FIRMED IN PLACE IS REQUIRED.
 - GROUND LIMESTONE- APPLIED UNIFORMLY ACCORDING TO SOIL TEST RECOMMENDATIONS.
 - FERTILIZER- APPLY 11 LBS. / 1,000 SF OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN (UNLESS A SOIL TEST INDICATES OTHERWISE)
 - SEED - TURF TYPE TALL FESCUE (BLEND OF 3 CULTIVARS), 350 LBS. / ACRE (8 LBS. / 1,000 SF) OR OTHER APPROVED SEED; PLANT BETWEEN MARCH 1 AND OCTOBER 1 (SUMMER SEEDING REQUIRES IRRIGATION)
 - MULCH- UNROTTED STRAW OR HAY AT A RATE OF 70 TO 90 LBS. / 1,000 SF APPLIED TO ACHIEVE 95 % SOIL SURFACE COVERAGE. MULCH SHALL BE ANCHORED BY APPROVED METHODS (i.e. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).
5. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
6. SOIL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS, INCLUDING AFTER EVERY STORM EVENT.
7. STOCKPILES ARE NOT TO BE LOCATED WITHIN 50' OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY. THE BASE OF ALL STOCKPILES SHALL BE CONTAINED BY A HAYBALE SEDIMENT BARRIER OR SILT FENCE.
8. A CRUSHED STONE, VEHICLE WHEEL-CLEANING BLANKET WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS ROAD INTERSECTS ANY PAVED ROADWAY. SAID BLANKET WILL BE COMPOSED OF 1" - 2 1/2" CRUSHED STONE, 6" THICK, WILL BE AT LEAST 30' X 100' AND SHOULD BE UNDERLAIN WITH A SUITABLE SYNTHETIC SEDIMENT FILTER FABRIC AND MAINTAINED.
9. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT EXCEED 3:1 UNLESS OTHERWISE APPROVED BY THE DISTRICT.
10. DRIVEWAYS MUST BE STABILIZED WITH 1" - 2 1/2" CRUSHED STONE OR SUB-BASE PRIOR TO INDIVIDUAL LOT CONSTRUCTION.
11. ALL SOIL WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAYS, WILL BE REMOVED IMMEDIATELY. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
12. CATCH BASIN INLETS WILL BE PROTECTED WITH AN INLET FILTER DESIGNED IN ACCORDANCE WITH SECTION 28-1 OF THE NJ STANDARDS.
13. STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
14. DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT CONTROL BAG OR OTHER APPROVED FILTER IN ACCORDANCE WITH SECTION 14-1 OF THE NJ STANDARDS.
15. DUST SHALL BE CONTROLLED VIA THE APPLICATION OF WATER, CALCIUM CHLORIDE OR OTHER APPROVED METHOD IN ACCORDANCE WITH SECTION 16-1 OF THE NJ STANDARDS.
16. TREES TO REMAIN AFTER CONSTRUCTION ARE TO BE PROTECTED WITH A SUITABLE FENCE INSTALLED AT THE DRIP LINE OR BEYOND IN ACCORDANCE WITH SECTION 9-1 OF THE NJ STANDARDS.
17. THE PROJECT OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFF-SITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.
18. ANY REVISION TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE SUBMITTED TO THE DISTRICT FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION IN THE FIELD.
19. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE THROUGHOUT CONSTRUCTION.
20. THE BERGEN COUNTY SOIL CONSERVATION DISTRICT MUST BE NOTIFIED, IN WRITING, AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBANCE. BERGEN COUNTY SCD, 700 KINDERKAMACK ROAD, SUITE 106, ORADELL, NJ 07649. TEL: 201-261-4407; FAX 201-261-7573.
21. THE BERGEN COUNTY SOIL CONSERVATION DISTRICT MAY REQUEST ADDITIONAL MEASURES TO MINIMIZE ON OR OFF-SITE EROSION PROBLEMS DURING CONSTRUCTION.
22. THE OWNER MUST OBTAIN A DISTRICT ISSUED REPORT OF COMPLIANCE PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY. THE DISTRICT REQUIRES AT LEAST ONE WEEK'S NOTICE TO FACILITATE THE SCHEDULING OF ALL REPORT OF COMPLIANCE INSPECTIONS. ALL SITE WORK MUST BE COMPLETED, INCLUDING TEMPORARY/PERMANENT STABILIZATION OF ALL EXPOSED AREAS, PRIOR TO THE ISSUANCE OF A REPORT OF COMPLIANCE BY THE DISTRICT.

TAX LOT 10
BLOCK 23
535 - 537 NEW YORK AVENUE
TOWNSHIP OF LYNDHURST
BERGEN COUNTY, NEW JERSEY
SOIL EROSION AND SEDIMENT CONTROL PLAN

ADNAN A. KHAN, P.E., C.M.E.
PROFESSIONAL ENGINEER
DESIGNED BY: 02/21/19
DATE: 03/22/21
APPROVED BY: [Signature]
DATE: 03/22/21

AWZ ENGINEERING, INC.
ENGINEERS • SCIENTISTS • CONSULTANTS
Main Office: 150 River Road, Suite B3, Montville, NJ 07045
Pennsylvania Office: Scranton, PA 18504
Tel: 973-588-7080 Fax: 973-588-7079
www.awzeng.com e-mail: info@awzeng.com
New Jersey Certificate of Authorization No.: 24EA28118400
Pennsylvania Certificate of Authority No.: 3713154

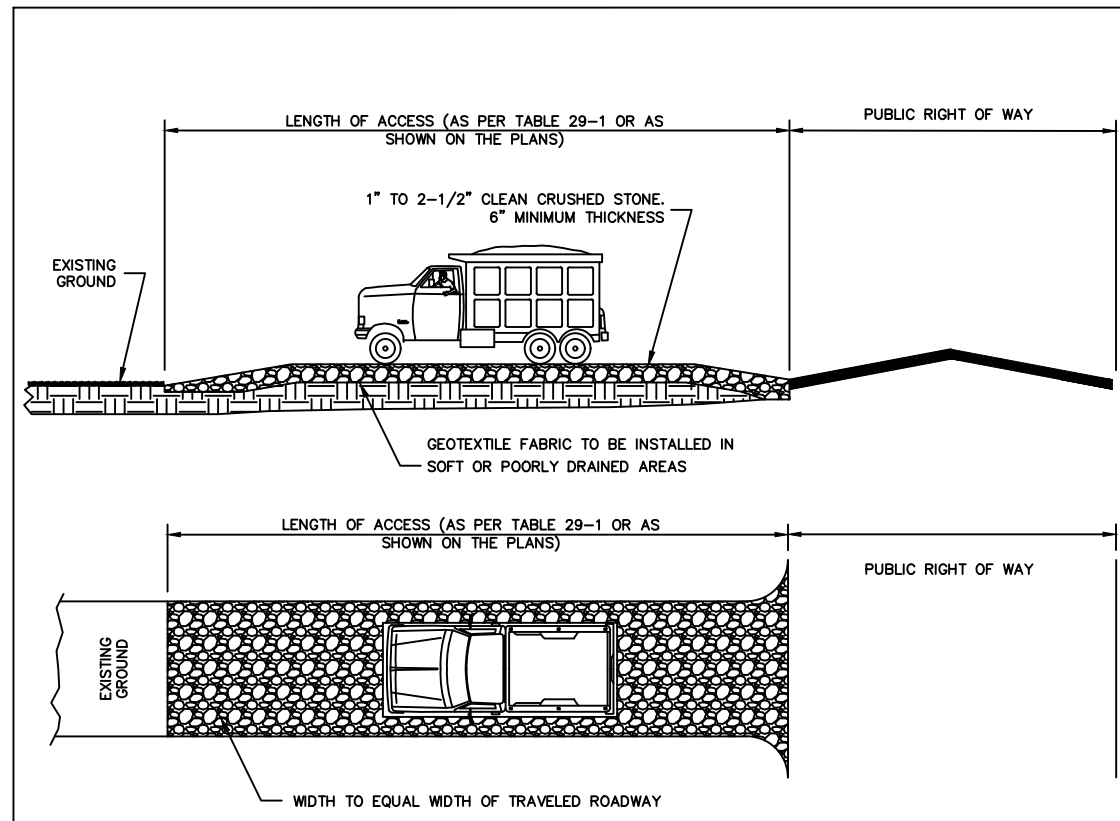
JOB NUMBER:
19-0205

SCALE: AS SHOWN

S-01
SHEET 1 OF 2

THIS PLAN IS TO BE USED FOR SOIL EROSION CONTROL PURPOSES ONLY

THIS PLAN IS TO BE USED FOR SOIL EROSION CONTROL PURPOSES ONLY



LENGTH OF STABILIZED CONSTRUCTION ACCESS (TABLE 29-1)

PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED
0 TO 2%	50 FT
2 TO 5%	100 FT
5%	200 FT

Course per governing authority requirements

- NOTES:**
- ALL INDIVIDUAL LOT INGRESS/EGRESS POINTS SHALL REQUIRE STABILIZED CONSTRUCTION ENTRANCE ACCESS.
 - PLACE STABILIZED CONSTRUCTION ENTRANCE AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
 - STONE SIZE SHALL BE ASTM C-39, SIZE NO. 2 OR 3, CRUSHED STONE.
 - THE THICKNESS OF THE STABILIZED CONSTRUCTION ENTRANCE SHALL NOT BE LESS THAN 6".
 - THE WIDTH AT THE EXISTING PAVEMENT SHALL NOT BE LESS THAN THE FULL WIDTH OF POINTS OF INGRESS AND EGRESS.
 - THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO THE ROADWAY. THIS INCLUDES PERIODIC TOP DRESSING WITH ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURE USED TO TRAP SEDIMENT.
 - ALL SEDIMENT SPILLED, DRIPPED, WASHED OR TRACKED INTO THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
 - WHERE TRACKING OF SOIL ONTO ROADWAYS IS A CONTINGUAL OCCURRENCE, ALL CONTRACTORS BOTH SITE AND SWEELING CONTRACTORS, SHALL BE REQUIRED TO BROOM SWEEP THE ROADWAY AT 2 HOUR INTERVALS MINIMUM PRIOR TO LEAVING THE CONSTRUCTION SITE AT THE END OF THE DAY.

STABILIZED CONSTRUCTION ACCESS

- PROPOSED SEQUENCE OF DEVELOPMENT**
- Installation of all sediment and erosion control devices (including silt fences and stabilized construction access) prior to any major soil disturbances or in their proper sequence and maintenance until permanent protection is established. **1 Week**
 - Site demolition, clearing, clear and remove all debris as necessary. All remaining vegetation to be properly protected and to remain in its natural state. **2 Weeks**
 - General and preliminary grading of all pavement areas and storm water management basins. **2 Week**
 - Layout and location of all proposed utilities. **1 Week**
 - Construction of all proposed improvements and drainage facilities. Installation of all erosion control measures effected by said facilities such as inlet sediment barriers. **25 Weeks**
 - Pavement subbase course to be applied immediately following preliminary grading and construction of improvements in order to stabilize pavement areas. **1 Week**
 - Installation of all pavement base material. **1 Week**
 - Fine grading of all lot areas and basins including construction of all soil erosion control as necessary. **1 Week**
 - Stabilization of all off pavement areas. **1 Week**
 - Uniformly apply topsoil to an average depth of 5", minimum of 4", firmed in place. Provide permanent vegetative stabilization of all exposed areas. **1 Week**
 - Complete all landscaping and vegetative cover. **1 Week**
 - Removal of all temporary sediment and erosion control devices. **upon completion**

STANDARD FOR TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

DEFINITION
Establishment of temporary vegetative cover on soils exposed for periods of two to six months which are not being graded, not under active construction or not scheduled for permanent seeding within 60 days.

PURPOSE
To temporarily stabilize the soil and reduce damage from wind and water erosion until permanent stabilization is accomplished.

WATER QUALITY ENHANCEMENT
Provides temporary protection against the impacts of wind and rain, slows the over land movement of stormwater runoff, increases infiltration and retains soil and nutrients on site, protecting streams or other stormwater conveyances.

WHERE APPLICABLE
On exposed soils that have the potential for causing off-site environmental damage.

METHODS AND MATERIALS

- SITE PREPARATION**
- Grade as needed and feasible to permit the use of conventional equipment for seeded preparation, seeding, mulch application, and mulch anchoring. All grading should be done in accordance with Standards for Land Grading, page 18-1.
 - Install needed erosion control practices or facilities such as diversions, grade stabilization structures, channel stabilization measures, sediment basins, and waterways. See Standards 11 through 42.
- C. Topsoil should be handled only when it is dry enough to work without damaging the soil structure. A uniform application to a depth of 5 inches (unsettled) is required on all sites. Topsoil shall be amended with organic matter, as needed, in accordance with the STANDARD FOR TOPSOILING.**
- D. Install needed erosion control practices or facilities such as diversions, grade stabilization structures, channel stabilization measures, sediment basins, and waterways. See Standards 11 through 42.**

SEEDING PREPARATION

A. Apply limestone and fertilizer according to soil test recommendations as offered by Rutgers Cooperative Extension. Soil sample materials are available from the local Rutgers Cooperative Extension offices. Fertilizer shall be applied at the rate of 500 pounds per acre of 11 lbs. per 1000 square feet of 10-20-10 or equivalent with 50% water insoluble nitrogen unless a soil test indicates otherwise. Calcium carbonate is the equivalent standard for measuring the ability of liming materials to neutralize soil acidity and supply calcium magnesium to grasses and legumes.

- Work lime and fertilizer into the soil as nearly as practical to a depth of 4 inches with a disc, springtooth harrow, or other suitable equipment. The final harrowing or disking operation should be the general contour. Continue tillage until a reasonable uniform seedbed is prepared.
- Inspect seedbed just before seeding. If traffic has left the soil compacted, the area must be retilled in accordance with the above.
- Soils high in sulfides or having a pH of 4 or less refer to Standard for Management of High Acid Producing Soils, pg. 1-1.

SEEDING

A. Select seed from recommendations in Table 7-2.

TEMPORARY VEGETATIVE STABILIZATION GRASSES, SEEDING RATES, DATES AND DEPTH.

SEED SELECTIONS	SEEDING RATE ¹ (pounds)		OPTIMUM SEEDING DATE ² Based on Plant Hardiness Zone ³			OPTIMUM SEEDING DEPTH ⁴ (inches)
	Per Acre	Per 1000 Sq. Ft.	ZONE 5b,6a	ZONE 6b	ZONE 7a,b	
COLD SEASON GRASSES						
1. Perennial ryegrass	100	1.0	3/15-6/1 8/1-9/15	3/1-5/15 8/15-10/1	2/15-5/1 8/15-10/15	0.5
2. Spring oats	86	2.0	3/15-6/1 8/1-9/15	3/1-5/15 8/15-10/1	2/15-5/1 8/15-10/15	1.0
3. Winter Barley	98	2.2	3/15-6/1 8/1-9/15	3/1-5/15 8/15-10/1	2/15-5/1 8/15-10/15	1.0
4. Annual ryegrass	110	1.0	3/15-6/1 8/1-9/15	3/1-5/15 8/1-9/15	2/15-5/1 8/15-10/15	0.5
5. Winter Cereal Rye	112	2.8	3/15-6/1 8/1-9/15	3/1-5/15 8/1-11/1	2/15-5/1 8/1-12/15	1.0
WARM SEASON GRASSES						
6. Pearl Millet	20	0.5	6/1-8/1 5/15-8/15	5/15-8/15	5/1-9/1	1.0
7. Millet (German or Hungarian)	30	0.7	6/1-8/1 5/15-8/15	5/15-8/15	5/1-9/1	0.25

- Seeding rate for warm season grass, selections 5-7 shall be adjusted to reflect the amount of Pure Live Seed (PLS) as determined by a germination test result. No adjustment is required for cool season grasses.
 - May be planted throughout summer if soil moisture is adequate or seeded area can be irrigated. Plant Hardiness Zone (see figures 7-1, pg. 7-4).
 - Twice the depth for sandy soils.
- B. Conventional Seeding.** Apply seed uniformly by hand, cyclone (centrifugal) seeder, drop seeder, drill or cultipacker seeder. Except for drilled, hydroseeded or cultipacked seedings, seed shall be incorporated into the soil to a depth of 1/4 to 1/2 inch, by raking or dragging. Depth of seed placement may be 1/4 inch deeper on coarse textured soil.
- C. Hydroseeding** is a broadcast seeding method usually involving a truck or trailer mounted tank, with an agitation system and hydraulic pump for mixing seed, water and fertilizer and spraying the mix onto the prepared seedbed. Mulch shall not be included in the tank with seed. Short fibered mulch may be applied with a hydroseeder following seeding. (also see Section VI Mulching) Hydroseeding is not a preferred seeding method because seed and fertilizer are applied to the surface and not incorporated into the soil. Poor seed to soil contact occurs reducing seed germination and growth. Hydroseeding may be used for areas too steep for conventional equipment to traverse or too obstructed with rocks, stumps, etc.
- D. After seeding, firming the soil with a corrugated roller will assure good seed-to-soil contact, restore capillary, and improve seeding emergence. This is the preferred method. When performed on the contour, sheet erosion will be minimized and water conservation on site will be maximized.**

MULCHING
Mulching is required on all seeding. Mulch will insure against erosion before grass is established and will promote faster and earlier establishment. The existence of vegetation sufficient to control soil erosion shall be deemed compliance with this mulching requirement.

Straw or Hay, Unrotted small grain straw, hay free of seeds, or salt hay to be applied at the rate of 1-1/2 to 2 tons per acre (70 to 90 pounds per 1,000 square feet), except that where a crimp is used instead of a liquid mulch-binder (tackifying or adhesive agent), the rate of application is 3 tons per acre. Mulch choppers-blowers must cut and grind the mulch. Hay mulch is not recommended for establishing fine turf or lawns due to the presence of weed seed.

Liquid Mulch-Binders. May be used to anchor salt hay, hay or straw mulch.

a. Applications should be heavier at edges where wind may catch the mulch, in valleys, and at crests of banks. The remainder of the area should be uniform in appearance.

Use one of the following:

- Organic and Vegetable Based Binders - Naturally occurring, powder based, hydrophilic materials which when water formulated a gel and when applied to mulch under satisfactory curing conditions will form membrane networks of insoluble polymers. The vegetable gel shall be physiologically harmless and not result in a phytotoxic effect or impede growth of turf-grass. Use at rates and weather conditions as recommended by the manufacturer to anchor mulch materials. Many new products are available, some of which may need further evaluation for use in this state.
- Synthetic Binders - High polymer synthetic emulsion, miscible with water when diluted and following application to mulch, drying and curing shall no longer be soluble or dispersible in water. It shall be applied at rates recommended by the manufacturer and remain tacky until germination of grass.

NOTE: All names given above are registered trade names. This does not constitute a recommendation of these products to the exclusion of other products.

Wood-fiber or paper-fiber mulch. Shall be made from wood, plant fibers or paper containing no growth or germination inhibiting materials, used at the rate of 1,500 pounds per acre (or as recommended by the product manufacturer) and may be applied by a hydroseeder. This mulch shall not be mixed in the tank with seed. Use is limited to flatter slopes and during optimum seeding periods in spring and fall.

Pelletized mulch. Compressed and extruded paper and/or wood fiber product, which may contain co-polymers, tackifiers, fertilizers and coloring agents. The dry pellets, when applied to a seeded area and watered, form a mulch mat. Pelletized mulch shall be applied in accordance with the manufacturer's recommendations. Mulch may be applied by hand or mechanical spreader at the rate of 60-75 lbs./1,000 square feet and activated with 0.2 to 0.4 inches of water. This material has been found to be beneficial for use on small lawn or renovation areas, seeded areas where weed-seed free mulch is desired or on sites where straw mulch and tackifier agent are not practical or desirable.

Applying the full 0.2 to 0.4 inches of water after spreading pelletized mulch on the seed bed is extremely important for sufficient activation and expansion of the mulch to provide soil coverage.

STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

DEFINITION
Establishment of permanent vegetative cover on exposed soils where perennial vegetation is needed for long term protection.

PURPOSE
To permanently stabilize the soil, assuring conservation of soil and water, and to enhance the environment.

WATER QUALITY ENHANCEMENT
Slows the over land movement of stormwater runoff, increases infiltration and retains soil and nutrients at site, protecting conveyances.

WHERE APPLICABLE
On exposed soils that have the potential for causing off-site environmental damage.

SITE PREPARATION

- Grade as needed and feasible to permit the use of conventional equipment for seeded preparation, seeding, mulch application, and mulch anchoring. All grading should be done in accordance with Standards for Land Grading.
- Immediately prior to seeding and topsoil application, the surface should be scarified 6" to 12" where there has been soil compaction. This scarification is permissible only where there is no danger to underground utilities (cables, irrigation systems, etc.).
- Topsoil should be handled only when it is dry enough to work without damaging the soil structure. A uniform application to a depth of 5 inches (unsettled) is required on all sites. Topsoil shall be amended with organic matter, as needed, in accordance with the STANDARD FOR TOPSOILING.
- Install needed erosion control practices or facilities such as diversions, grade stabilization structures, channel stabilization measures, sediment basins, and waterways. See Standards 11 through 42.

SEEDING PREPARATION

A. Uniformly apply ground limestone and fertilizer to topsoil which has been spread and firmed, according to soil test recommendations as offered by Rutgers Cooperative Extension. Soil sample materials are available from the local Rutgers Cooperative Extension offices. Fertilizer shall be applied at the rate of 500 pounds per acre of 11 lbs. per 1000 square feet of 10-20-10 or equivalent with 50% water insoluble nitrogen unless a soil test indicates otherwise and incorporated into the surface 4 inches. If fertilizer is not incorporated, apply one-half the rate described above during seeded preparation and repeat another one-half rate application of the same fertilizer within 3 to 5 weeks after seeding.

- Work lime and fertilizer into the soil as nearly as practical to a depth of 4 inches with a disc, springtooth harrow, or other suitable equipment. The final harrowing or disking operation should be the general contour. Continue tillage until a reasonable uniform seedbed is prepared.
- High soil producing soils. Soils having a pH of 4 or less or containing iron sulfide shall be covered with a minimum of 12 inches of soil having a pH of 5 or more before initiating seeded preparation. See Standard for Management of High Acid-Producing Soils for specific requirements.

SEEDING

A. Select a mixture from Table 4-3 or use mixture recommended by Rutgers Cooperative Extension or Natural Resources Conservation Service which is approved by the Soil Conservation District. Seed germination shall have been tested within 12 months of the planting date. No seed shall be accepted with a germination test date more than 12 months old unless retested.

- Seeding rates specified are required when a report of compliance is requested prior to actual establishment of permanent vegetation. Up to 50% reduction in rates may be used when permanent vegetation is established prior to a report of compliance inspection. These rates apply to all methods of seeding. Establishing permanent vegetation means 80% vegetative coverage with the specified seed mixture for the seeded area and mowed once.
 - Warm season mixtures are grasses and legumes which maximize growth at high temperatures, generally 85F and above. See Table 4-3, mixtures 1 to 7. Planting rates for warm season grasses shall be the amount of Pure Live Seed (PLS) as determined by germination testing results.
 - Cool Season Mixtures are grasses and legumes which maximize growth at temperatures below 85F. Many grasses become active at 65F. See Table 3, mixtures 8-20. Adjustment of planting rates to compensate for the amount of Pure Live Seed is not required for cool season grasses.
- B. Conventional Seeding** is performed by applying seed uniformly by hand, cyclone (centrifugal) seeder, drop seeder, drill or cultipacker seeder. Except for drilled, hydroseeded or cultipacked seedings, seed shall be incorporated into the soil within 24 hours of seedbed preparation to a depth of 1/4 to 1/2 inch, by raking or dragging. Depth of seed placement may be 1/4 inch deeper on coarse textured soil.
- C. After seeding, firming the soil with a corrugated roller will assure good seed-to-soil contact, restore capillary, and improve seeding emergence. This is the preferred method. When performed on the contour, sheet erosion will be minimized and water conservation on site will be maximized.**

D. Hydroseeding is a broadcast seeding method usually involving a truck or trailer mounted tank, with an agitation system and hydraulic pump for mixing seed, water and fertilizer and spraying the mix onto the prepared seedbed. Mulch shall not be included in the tank with seed. Short fibered mulch may be applied with a hydroseeder following seeding. (also see Section VI Mulching) Hydroseeding is not a preferred seeding method because seed and fertilizer are applied to the surface and not incorporated into the soil. Poor seed to soil contact occurs reducing seed germination and growth. Hydroseeding may be used for areas too steep for conventional equipment to traverse or too obstructed with rocks, stumps, etc.

MULCHING

Mulching is required on all seeding. Mulch will insure against erosion before grass is established and will promote faster and earlier establishment. The existence of vegetation sufficient to control soil erosion shall be deemed compliance with this mulching requirement.

Straw or Hay, Unrotted small grain straw, hay free of seeds, or salt hay to be applied at the rate of 1-1/2 to 2 tons per acre (70 to 90 pounds per 1,000 square feet), except that where a crimp is used instead of a liquid mulch-binder (tackifying or adhesive agent), the rate of application is 3 tons per acre. Mulch choppers-blowers must cut and grind the mulch. Hay mulch is not recommended for establishing fine turf or lawns due to the presence of weed seed.

Liquid Mulch-Binders. May be used to anchor salt hay, hay or straw mulch.

a. Applications should be heavier at edges where wind may catch the mulch, in valleys, and at crests of banks. The remainder of the area should be uniform in appearance.

Use one of the following:

- Organic and Vegetable Based Binders - Naturally occurring, powder based, hydrophilic materials which when water formulated a gel and when applied to mulch under satisfactory curing conditions will form membrane networks of insoluble polymers. The vegetable gel shall be physiologically harmless and not result in a phytotoxic effect or impede growth of turf-grass. Use at rates and weather conditions as recommended by the manufacturer to anchor mulch materials. Many new products are available, some of which may need further evaluation for use in this state.
- Synthetic Binders - High polymer synthetic emulsion, miscible with water when diluted and following application to mulch, drying and curing shall no longer be soluble or dispersible in water. It shall be applied at rates recommended by the manufacturer and remain tacky until germination of grass.

NOTE: All names given above are registered trade names. This does not constitute a recommendation of these products to the exclusion of other products.

Wood-fiber or paper-fiber mulch. Shall be made from wood, plant fibers or paper containing no growth or germination inhibiting materials, used at the rate of 1,500 pounds per acre (or as recommended by the product manufacturer) and may be applied by a hydroseeder. This mulch shall not be mixed in the tank with seed. Use is limited to flatter slopes and during optimum seeding periods in spring and fall.

Pelletized mulch. Compressed and extruded paper and/or wood fiber product, which may contain co-polymers, tackifiers, fertilizers and coloring agents. The dry pellets, when applied to a seeded area and watered, form a mulch mat. Pelletized mulch shall be applied in accordance with the manufacturer's recommendations. Mulch may be applied by hand or mechanical spreader at the rate of 60-75 lbs./1,000 square feet and activated with 0.2 to 0.4 inches of water. This material has been found to be beneficial for use on small lawn or renovation areas, seeded areas where weed-seed free mulch is desired or on sites where straw mulch and tackifier agent are not practical or desirable.

Applying the full 0.2 to 0.4 inches of water after spreading pelletized mulch on the seed bed is extremely important for sufficient activation and expansion of the mulch to provide soil coverage.

IRRIGATION (where feasible)

If soil moisture is deficient, and mulch is not used, supply new seedings with adequate water (a minimum of 1/4 inch twice a day until vegetation is well established). This is especially true when seedings are made in abnormally dry or hot weather or on droughty sites.

TOPDRESSING

Since soil organic matter content and slow fertilizer (water insoluble) are prescribed in Section 2A, Seeded Preparation in this Standard, no follow-up of topdressing is mandatory. An exception may be made where gross nitrogen deficiency exists to the extent that turf failure may develop. In that instance, topdress with 10-10-10 or equivalent at 300 pounds per acre or 7 pounds per 1,000 square feet every 3 to 5 weeks until the gross until the gross nitrogen deficiency in the turf is ameliorated.

ESTABLISHING PERMANENT VEGETATIVE STABILIZATION

The quality of permanent vegetation rests with the contractor. The timing of seeding, preparing the seedbed, applying nutrients, mulch and other management are essential. The seed application rates in Table 4-3 are required when a Report of Compliance is requested prior to actual establishment of permanent vegetation. Up to 50% reduction in application rates may be used when permanent vegetation is established prior to a report of compliance from the district. These rates apply to all methods of seeding. Establishing permanent vegetation means 80% vegetative cover (of the seeded species) and mowed once. Note this designation of mowed once does not guarantee the permanency of the turf should other maintenance factors be neglected or otherwise mismanaged.

TABLE 4-2 PERMANENT STABILIZATION MIXTURES FOR VARIOUS USES

Application	PLANTING MIXTURES BY SOIL DRAINAGE CLASS ¹ (see Table 4-3)		
	Excessively Drained	Moderately Well to Poorly Drained	Somewhat Poorly to Poorly Drained
Residential/commercial lots	10, 12, 15	6, 10, 12, 13, 14, 15	16
Pond and channel banks, dikes, berms, and dams	2, 5, 6, 10	5, 6, 7, 8, 9, 15	2, 6, 16, 17
Drainage ditches, swales, detention basins	2, 9, 11	2, 7, 9, 11, 12, 17	2, 9, 16, 17
Filter Strips	12	11, 12	11, 12
Grasses waterway, spillways	2, 3, 9, 10, 12	6, 7, 9, 10, 11, 12	2, 9, 11, 12
Recreation areas, athletic fields	5, 12, 15, 18	12, 13, 14, 15, 18	16
Seeds Problem Sites			
Slopes and banks, roadsides, borrow areas	2, 3, 6, 8	2, 3, 5, 7, 8, 9, 10, 15	2, 9, 10, 11, 12
Sand and gravel pits, Sanitary landfills	1, 2, 3, 4, 6, 21	1, 2, 3, 4, 5, 6, 8	2, 8
Dredged material, spoilbanks, borrow areas	2, 3, 6, 20	2, 3, 6, 11	2, 8
Streambanks & shorelines ²	2, 8, 20, 21a	2, 8, 19b, 20, 21a, 21b	2, 8, 19a, 21a,b,c,d
Utility rights-of-way	3, 7, 180	3, 7	8, 9, 17

TABLE 4-3 PERMANENT VEGETATIVE MIXTURES, PLANTING RATES AND PLANTING DATES¹

SEED MIXTURE ²	PLANTING RATE ³	PLANTING DATES			REMARKS
		PLANT HARDINESS ZONES (see Figure 4-1)			
		Zone 5b, 6a	Zone 6b	Zone 7a, 7b	
WARM SEASON SEED MIXTURES					
1. FINE FESCUE AND PERENNIAL RYEGRASS (SEE TABLE 4.4 PG. 4-1 OF THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY)					
2. SWITCHGRASS AND AIR COASTAL PANCOAGRASS OR FLATPEA	15 .35 20 .45				C-D
3. DEERTONGUE OR PERENNIAL RYEGRASS	15 .35 20 .45				C-D
4. SWITCHGRASS BIG BLUESTEM BLUESTEM BERMUDA PANCOAGRASS OR FLATPEA	15 .35 10 .25 20 .45 10 .25				C-D
5. BERMUDA PANCOAGRASS (SEED) ZONYSGRASS (SPRIG)	15 .35 30 .70				A-D
COOL SEASON SEED MIXTURES					
6. FINE FESCUE (BLENDED) PERENNIAL RYEGRASS CRIMPER PERENNIAL RYEGRASS PLUS WHITE CLOVER	45 .10 10 .50 5 .10				B-D
7. STRONG CREEPING RYEGRASS PERENNIAL RYEGRASS PLUS WHITE CLOVER	130 .3 50 .1 20 .5 10 .25 5 .10				B-D
8. TALL FESCUE PERENNIAL RYEGRASS OR WHITE CLOVER	30 .70 30 .70 25 .60				B-D
9. DEERTONGUE (BLENDED) SWITCHGRASS	20 .45 15 .35 25 .60				C-D
10. TALL FESCUE (BLENDED) PERENNIAL RYEGRASS OR WHITE CLOVER	265 .8 20 .50 5 .10				B-D
11. KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	45 .1 22 .5				C-D
12. TURF-TYPE BLENDED CUTTWAINS	350 .8				C-D
13. WARD FESCUE AND/OR STRONG CREEPING RYEGRASS PERENNIAL RYEGRASS	175 .4 45 .1				A-C
14. TALL FESCUE (BLENDED) PERENNIAL RYEGRASS	285 .8 20 .50				A-B
15. WARD FESCUE (BLENDED) PERENNIAL RYEGRASS	130 .3 45 .1 10 .25				C-D
16. WARD FESCUE PERENNIAL RYEGRASS	90 .20 130 .3				C-D
17. CREEPING BENTGRASS ALASKA SALTGRASS	45 .1 45 .1				B-D
18. WARD OR SHEEP PERSIC N.E. WILDER COVER MIXTURE	25 .60 12 .35				C-D
19. A. SMOOTH CORDGRASS B. SALT TOWN CORDGRASS	veg veg	Before 7/1			D
20. AMERICAN BEACHGRASS COASTAL PANCOAGRASS	veg 20 .45	Before 4/1			D
21. A. PURPLEBERBER B. DWARF WILLOW C. SALT TOWN CORDGRASS D. SILV DOGWOOD	veg veg veg veg	Before 5/10	Before 5/10	Before 5/1	D

- FOOTNOTES:**
- See Appendix B for descriptions of turf grass mixtures and cultivars. The actual amount of warm season grass mixture used in Table 3 (Seed mix 1-17) will be adjusted to reflect the amount of Pure Live Seed (PLS) as determined by germination testing results. No adjustment is required for cool season grasses (Seed mixtures 8-20).
 - Seeding mixtures and/or rates not listed above may be used if recommended by the local Soil Conservation District, Natural Resources Conservation Service, or the Rutgers Cooperative Extension. These rates may be used if approved by the Soil Conservation District. Seeding rates are based on the amount of Pure Live Seed (PLS) as determined by germination testing results. These rates apply to all methods of seeding. Establishing permanent vegetation means 80% vegetative coverage of the seeded area and mowed once. Grass seed mixture created by the State Seed Agency, the State Department of Agriculture, or other approved sources may be used. Note this designation of mowed once does not guarantee the permanency of the turf should other maintenance factors be neglected or otherwise mismanaged. Time past control and irrigation (Examples - high maintenance lawns, commercial and recreation areas, public facilities, frequent mowing, 4-7 days), occasional fertilization, lime and weed control (Examples - home lawns, parks, etc.).
 - Seeding rates specified are required when a report of compliance is requested prior to actual establishment of permanent vegetation. Up to 50% reduction in rates may be used when permanent vegetation is established prior to a report of compliance inspection. These rates apply to all methods of seeding. Establishing permanent vegetation means 80% vegetative coverage of the seeded area and mowed once. Grass seed mixture created by the State Seed Agency, the State Department of Agriculture, or other approved sources may be used. Note this designation of mowed once does not guarantee the permanency of the turf should other maintenance factors be neglected or otherwise mismanaged.

- Refer to Soil Surveys for drainage class descriptions.
- Refer to Soil Bioengineering Standard for additional seed mixtures.
- Spills only used.
- See Appendix E for description of turf grasses and cultivars.

TABLE 4-3 PERMANENT VEGETATIVE MIXTURES, PLANTING RATES AND PLANTING DATES¹

SEED MIXTURE ²	PLANTING RATE ³	PLANTING DATES			REMARKS
		PLANT HARDINESS ZONES (see Figure 4-1)			
		Zone 5b, 6a	Zone 6b	Zone 7a, 7b	
WARM SEASON SEED MIXTURES					
1. FINE FESCUE AND PERENNIAL RYEGRASS (SEE TABLE 4.4 PG. 4-1 OF THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY)					
2. SWITCHGRASS AND AIR COASTAL PANCOAGRASS OR FLATPEA	15 .35 20 .45				C-D
3. DEERTONGUE OR PERENNIAL RYEGRASS	15 .35 20 .45				C-D
4. SWITCHGRASS BIG BLUESTEM BLUESTEM BERMUDA PANCOAGRASS OR FLATPEA	15 .35 10 .25 20 .45 10 .25				C