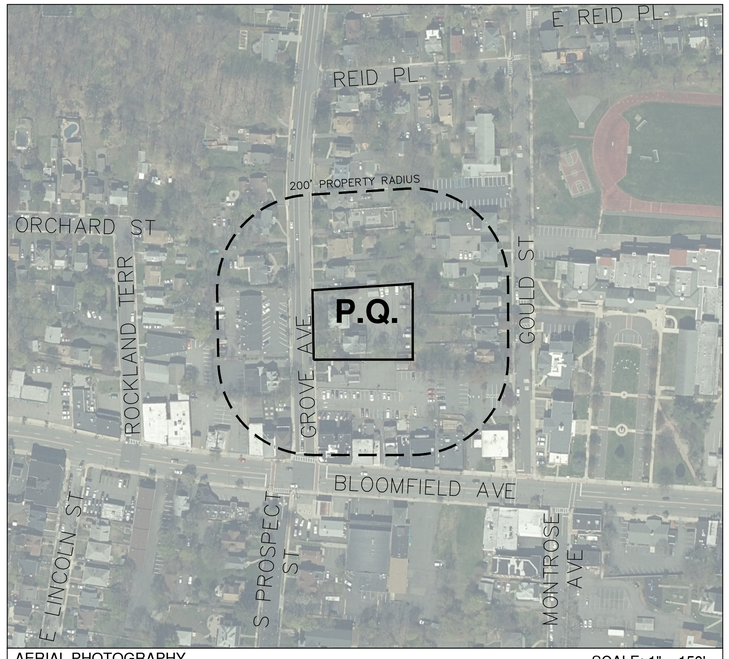
PRELIMINARY AND FINAL SITE PLAN

PREPARED FOR

MOHAMMAD ABBASI

21 & 25 GROVE AVENUE
BLOCK 1702 LOT 22
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY



AERIAL PHOTOGRAPHY — SCALE: 1" = 150'

AERIAL MAP OBTAINED FROM NJGIN IMAGERY WAREHOUSE, 2020.

SITE DATA CHART

LOT 22 BLOCK 1702 ZONE: C-2 (PROFESSIONAL OFFICE & BUSINESS) AREA: 31,210 SF (0.7165 ACRES)	OWNER: 21 AND 25 GROVE ASSOCIATES LLC 21 AND 25 GROVE ASSOCIATES TWO LLC 21 GROVE AVENUE VERONA, NJ 07044	APPLICANT: MOHAMMAD ABBASI 6716 NEWKIRK AVENUE NORTH BERGEN, NJ 07047

EXISTING USE: COMMERCIAL
PROPOSED USE: TOWNHOUSE APARTMENTS (11 UNITS)

BULK STANDARDS (§150 ZONING)

DESCRIPTION	CODE	EXISTING	PROPOSED	COMPLIANCE
LOT REQUIREMENTS				
MIN. LOT SIZE	15,000 SF	31,210 SF	NO CHANGE	YES
MIN. LOT WIDTH	100 FT	145.5 FT	NO CHANGE	YES
MAX. BUILDING COVERAGE	30%	10.6%	31.9%	NO*
MAX. IMPROVED LOT COVERAGE	65%	69.4%	61.8%	YES
PRINCIPAL BUILDING REQUIREMENTS				
MIN. FRONT YARD	20 FT	29.8 FT	20.0 FT	YES
MIN. SIDE YARD - ONE	15 FT	10.9 FT	11.6 FT	NO*
MIN. SIDE YARD - BOTH	35 FT	60.4 FT	VARIES (SEE SHEET SP-3)	NO*
MIN. REAR YARD	50 FT	103.2 FT	38.6 FT	NO*
MAX. HEIGHT	30 FT 2 ½ STORIES	2 ½ STORIES	(SEE SHEET SP-4.3)	NO*
MAX. FLOOR AREA RATIO	0.50 (15,585 SF)	-	0.57 (GROSS 29,854 SF)[1]	NO*
PARKING AND LOADING REQUIREMENTS (§150-12)				
PARKING SPACES	27 SPACES	-	35 SPACES	YES
PARKING STALL SIZE	9 FT x 20 FT[2]	-	9 FT x 18 FT[3]	NO*
MIN. PARKING AISLE WIDTH	24 FT	-	20 FT	NO*
MIN. DRIVE AISLE WIDTH	20 FT	-	20 FT	YES
MIN. FOOT CANDLES IN PARKING AREAS	1.0 f'c	-	1.0 f'c	YES
MISC. REQUIREMENTS				
MAX. RETAINING WALL HEIGHT (SIDE/REAR YARDS)	6 FT	-	4 FT	YES

* VARIANCE REQUIRED

(1) TAKEN FROM ARCHITECTURAL PLANS PREPARED BY BODNAR ARCHITECTRUAL STUDIO AND DATED 9-29-2025.

(2) OR 9 FT x 18 FT WITH A 2 FT OVERHANG

(3) PER RSIS:
a. A ONE-CAR GARAGE AND DRIVEWAY COMBINATION SHALL COUNT AS 2.0 OFF-STREET PARKING SPACES, PROVIDED THE DRIVEWAY MEASURES A MINIMUM OF 18 FEET IN LENGTH BETWEEN THE FACE OF THE GARAGE DOOR AND THE RIGHT-OF-WAY.
b. A TWO-CAR GARAGE AND DRIVEWAY COMBINATION SHALL COUNT AS 3.5 OFF-STREET PARKING SPACES, PROVIDED A MINIMUM PARKING WIDTH OF 20 FEET IS PROVIDED FOR A MINIMUM LENGTH OF 18 FEET AS SPECIFIED FOR A ONE-CAR GARAGE AND DRIVEWAY COMBINATION.

REQUIRED PARKING CALCULATIONS (RSIS §5:21-4.14):

2.4 PER 3 BEDROOM UNIT

11-3 BEDROOM UNITS PROPOSED
(2.4 x 11) = 26.4 SPACES -> 27 SPACES REQUIRED

ELECTRIC VEHICLE PARKING CALCULATIONS (PER N.J.A.C. 40:55D-66.20):

27 SPACES x 15% = 4.05 --> 4 EV SPACES REQUIRED

4 EV SPACES PROPOSED

PROPOSED PARKING CALCULATIONS (PER RSIS §5:21-4.14)

TWO-CAR GARAGE AND DRIVEWAY COMBINATION: 3.5 SPACES PER RSIS
ONE-CAR GARAGE AND DRIVEWAY COMBINATION: 2.0 SPACES PER RSIS

GARAGE AND DRIVEWAY COMBINATIONS: (3.5 x 4) + (2.0 x 2) = 18 SPACES
5 TWO CAR GARAGES WITH NO DRIVEWAY PARKING = (2.0 x 5) = 10 SPACES
OUTDOOR LOT = 4 SPACES
EV CREDIT (COUNTS AS DOUBLE UP TO 10% OF REQUIREMENT) = 3 SPACES

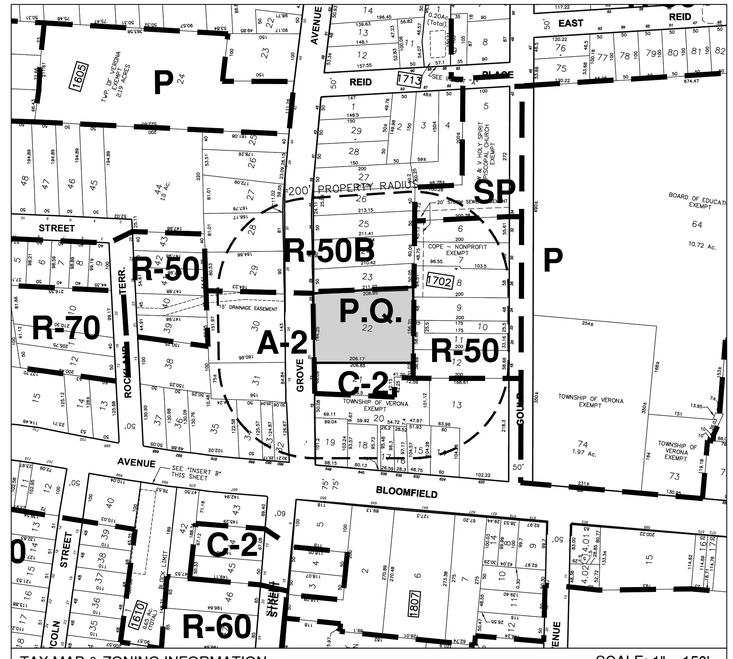
TOTAL = 35 SPACES

BUILDING COVERAGE CALCULATIONS

DESCRIPTION	EXISTING	PROPOSED
HOUSE/TOWNHOUSE	2,901 SF	9,944 SF
GARAGE	420 SF	0 SF
TOTAL:	3,321 SF	9,944 SF
CALCULATION:	3,321 SF / 31,210 SF	9,944 SF / 31,210 SF
PERCENTAGE:	10.6%	31.9%

LOT COVERAGE CALCULATIONS

DESCRIPTION	EXISTING	PROPOSED
HOUSE/TOWNHOUSE	2,901 SF	9,944 SF
GARAGE	420 SF	0 SF
DRIVEWAY	16,054 SF	7,834 SF
WALKWAYS	2,251 SF	616 SF
DECKS	0 SF	1,100 SF
WALLS	0 SF	249 SF
EQUIPMENT PADS	25 SF	0 SF
TOTAL:	21,651 SF	19,293 SF
CALCULATION:	21,651 SF / 31,210 SF	19,293 SF / 31,210 SF
PERCENTAGE:	69.4%	61.8%



TAX MAP & ZONING INFORMATION — SCALE: 1" = 150'

TAX MAP INFORMATION FROM: TOWNSHIP OF VERONA TAX MAP SHEETS 16, 17, 18

ZONING INFORMATION FROM:

LIST OF DRAWINGS

SHEET NO.	NAME	PREPARED BY
SP-1	TITLE SHEET	PETRY ENGINEERING
SP-2	EXISTING CONDITIONS AND DEMO PLAN	PETRY ENGINEERING
SP-3	LAYOUT PLAN	PETRY ENGINEERING
SP-4.1	GRADING & DRAINAGE PLAN	PETRY ENGINEERING
SP-4.2	DETAILED GRADING PLAN	PETRY ENGINEERING
SP-4.3	AVERAGE GRADE KEY MAP	PETRY ENGINEERING
SP-4.4	UTILITY PLAN	PETRY ENGINEERING
SP-4.5	STORM AND SANITARY SEWER PROFILES	PETRY ENGINEERING
SP-5	LANDSCAPE PLAN	PETRY ENGINEERING
SP-6.1	LIGHTING PLAN	PETRY ENGINEERING
SP-6.2	LIGHTING DETAILS	PETRY ENGINEERING
SP-7.1	SOIL EROSION AND SEDIMENT CONTROL PLAN	PETRY ENGINEERING
SP-7.2	SESC NOTES AND DETAILS	PETRY ENGINEERING
SP-8.1	GENERAL NOTES	PETRY ENGINEERING
SP-8.2	CONSTRUCTION DETAILS	PETRY ENGINEERING
SP-8.3	CONSTRUCTION DETAILS	PETRY ENGINEERING
TM-1	TURNING MOVEMENTS	PETRY ENGINEERING
1 OF 1	BOUNDARY AND TOPOGRAPHIC SURVEY	AZZOLINA AND FEURY ENGINEERING INC.
ZN1	ARCHITECTURAL SITE PLAN ZONING DATA	BODNAR ARCHITECTURAL STUDIO
ZN2	UNIT PLANS ELEVATION	BODNAR ARCHITECTURAL STUDIO
ZN3	GROVE AVENUE ELEVATION & DETAILS	BODNAR ARCHITECTURAL STUDIO
ZN4	REAR ELEVATION	BODNAR ARCHITECTURAL STUDIO
ZN5	6 UNIT SIDE ELEVATION	BODNAR ARCHITECTURAL STUDIO
ZN6	7 UNIT SIDE ELEVATION	BODNAR ARCHITECTURAL STUDIO
ZN7	UNIT ELEVATIONS	BODNAR ARCHITECTURAL STUDIO
ZN8	UNIT ELEVATIONS	BODNAR ARCHITECTURAL STUDIO

GENERAL NOTES:

1. A PERMIT IS REQUIRED FROM THE OFFICE OF THE COUNTY ENGINEER PRIOR TO BEGINNING ANY WORK ALONG GROVE AVENUE.
2. ALL WORK WITHIN THE COUNTY ROAD RIGHT-OF-WAY SHALL BE ACCORDING TO ESSEX COUNTY STANDARDS.

LIST OF APPROVALS REQUIRED:

1. TOWNSHIP OF VERONA ZONING BOARD
2. ESSEX COUNTY PLANNING BOARD SITE PLAN
3. HEPSCD SOIL EROSION AND SEDIMENT CONTROL

APPROVALS
TOWNSHIP OF VERONA ZONING BOARD

APPROVED AS A SITE PLAN BY THE TOWNSHIP OF VERONA ZONING BOARD ON

DATE

ZONING BOARD CHAIRPERSON DATE

ZONING BOARD SECRETARY DATE

BOARD ENGINEER DATE

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28115500
155 PASSAIC AVENUE ♦ FAIRFIELD, NEW JERSEY ♦ 07004
TEL: (973) 227-7004 ♦ FAX: (973) 227-7075
PETRYENGINEERING.COM

REV	DESCRIPTION	DATE

0 75 150 300

1 INCH = 150 FT.

CHECKED BY: SPD

DRAFTED BY: JAF

PETRY ENGINEERING, LLC

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662
DATE: 09/19/2025

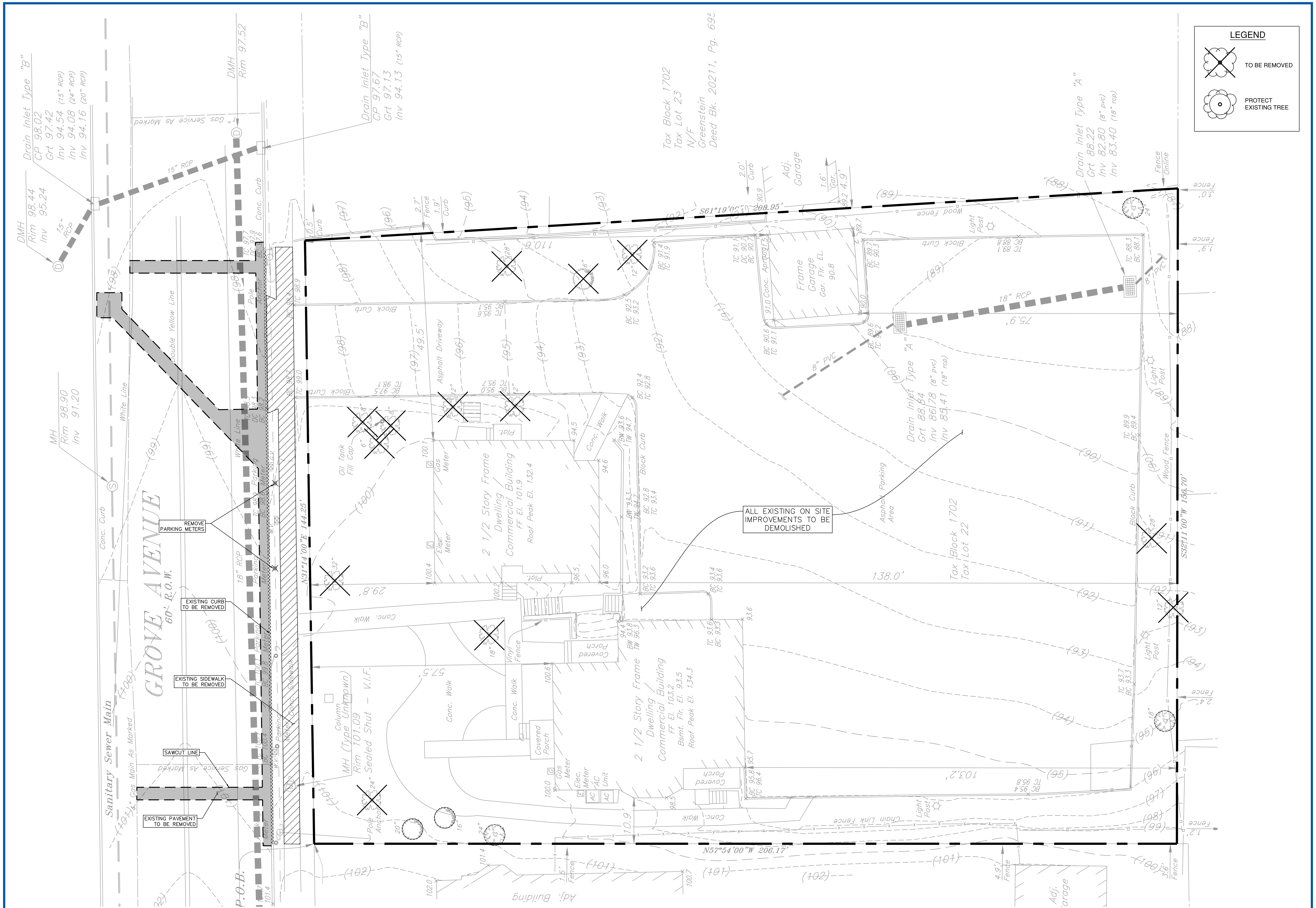
CAUTION: *IF THIS DOCUMENT DOES NOT CONTAIN A RAISED IMPRESSION SEAL OR AN ELECTRONIC SEAL OF THE UNDERSIGNED PROFESSIONAL, IT IS NOT AN AUTHORIZED ORIGINAL DOCUMENT.*

PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
TITLE SHEET

PROJECT #: 25-250

SHEET: SP-1



REV | DESCRIPTION | DATE

CHECKED BY: SPD

DRAFTED BY: JAF

PETRY ENGINEERING, LLC

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662
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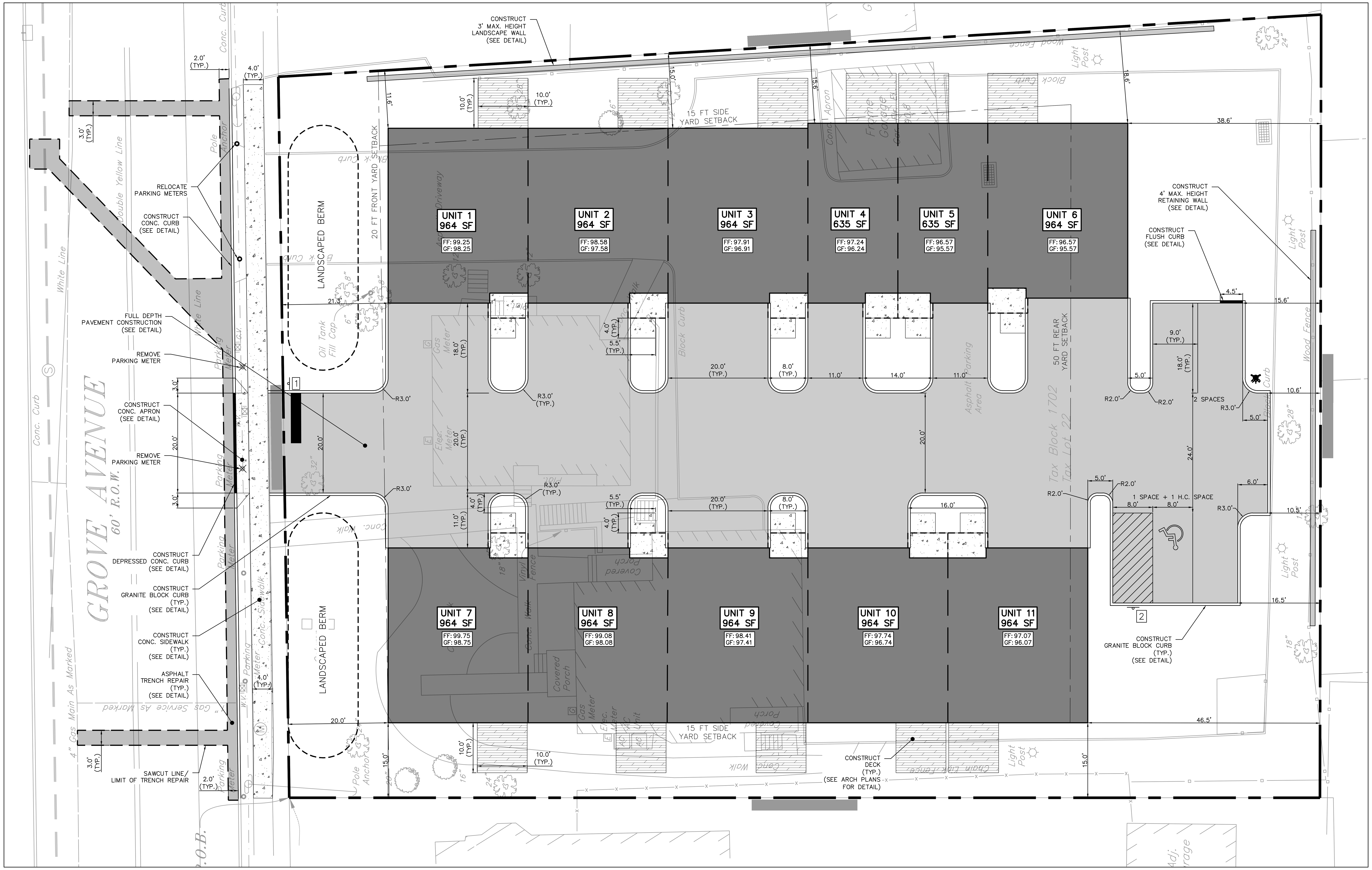
PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
EXISTING CONDITIONS AND DEMO PLAN

PROJECT #: 25-250

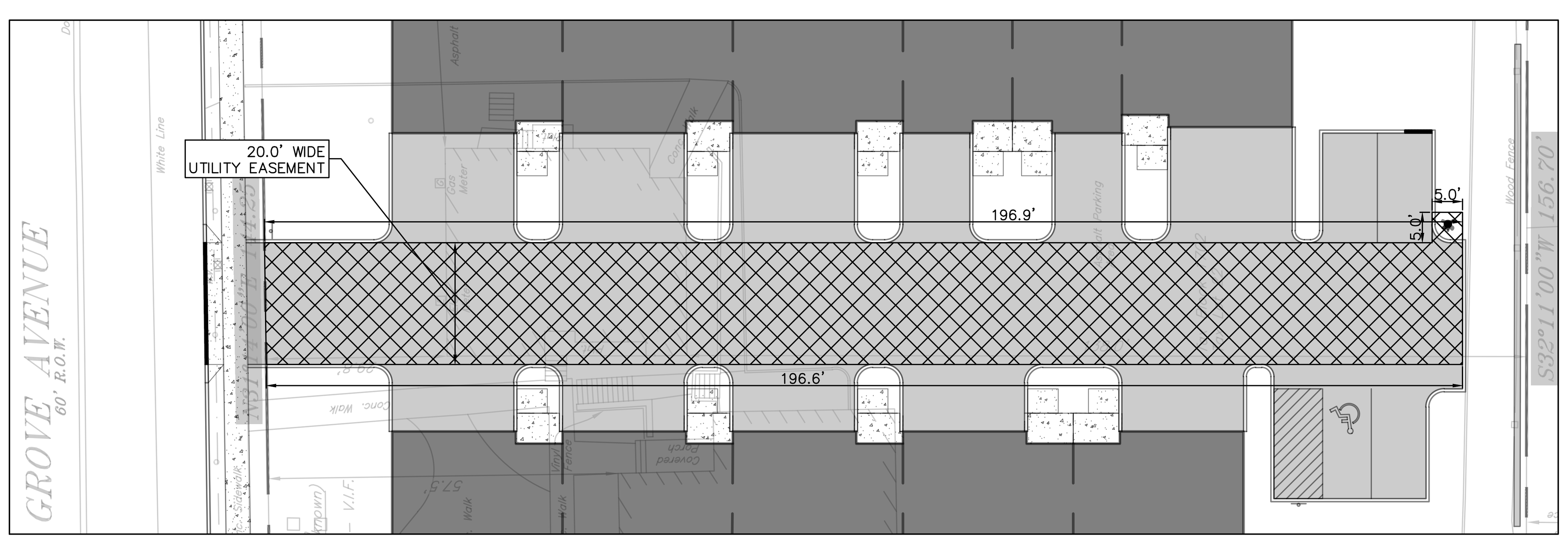
SHEET: SP-2

REFERENCES:
1. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY MAP FOR 21-25 GROVE AVENUE, BLOCK 1702 LOT 22, TOWNSHIP OF VERONA, ESSEX COUNTY, NEW JERSEY" PREPARED BY AZZOLINA & FEURY ENGINEERING INC. AND SIGNED BY JOHN A. LOCH, P.L.S. DATED 08/05/2025.



LAYOUT PLAN

SCALE: 1" = 10'



EASEMENT KEY MAP

SCALE: 1" = 20'

SIGN LEGEND

1	R1-1	STOP SIGN
2	R7-8 &8B	HANDICAP PARKING

REFERENCES:
1. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY MAP FOR 21-25 GROVE AVENUE, BLOCK 1702 LOT 22, TOWNSHIP OF VERONA, ESSEX COUNTY, NEW JERSEY" PREPARED BY AZZOLINA & FEURY ENGINEERING INC. AND SIGNED BY JOHN A. LOCH, P.L.S. DATED 08/05/2025.

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28155000
155 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL (973) 227-7004 FAX (973) 227-7074
PETRYENGINEERING.COM

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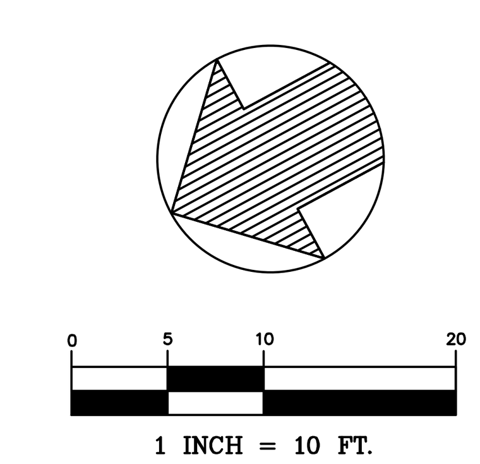

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DATE: 10/06/2025

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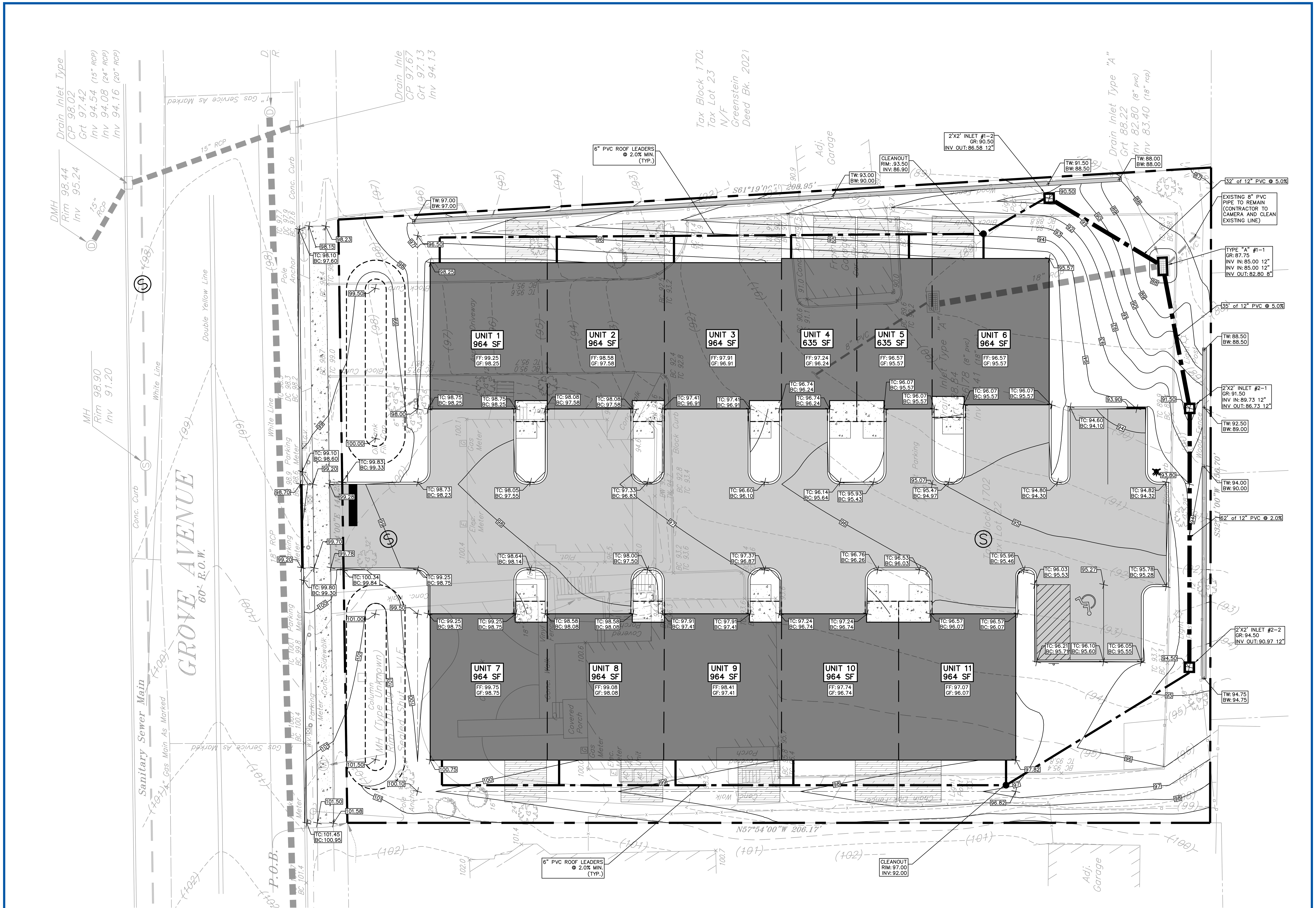
PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
LAYOUT PLAN

PROJECT #: 25-250

SHEET: SP-3



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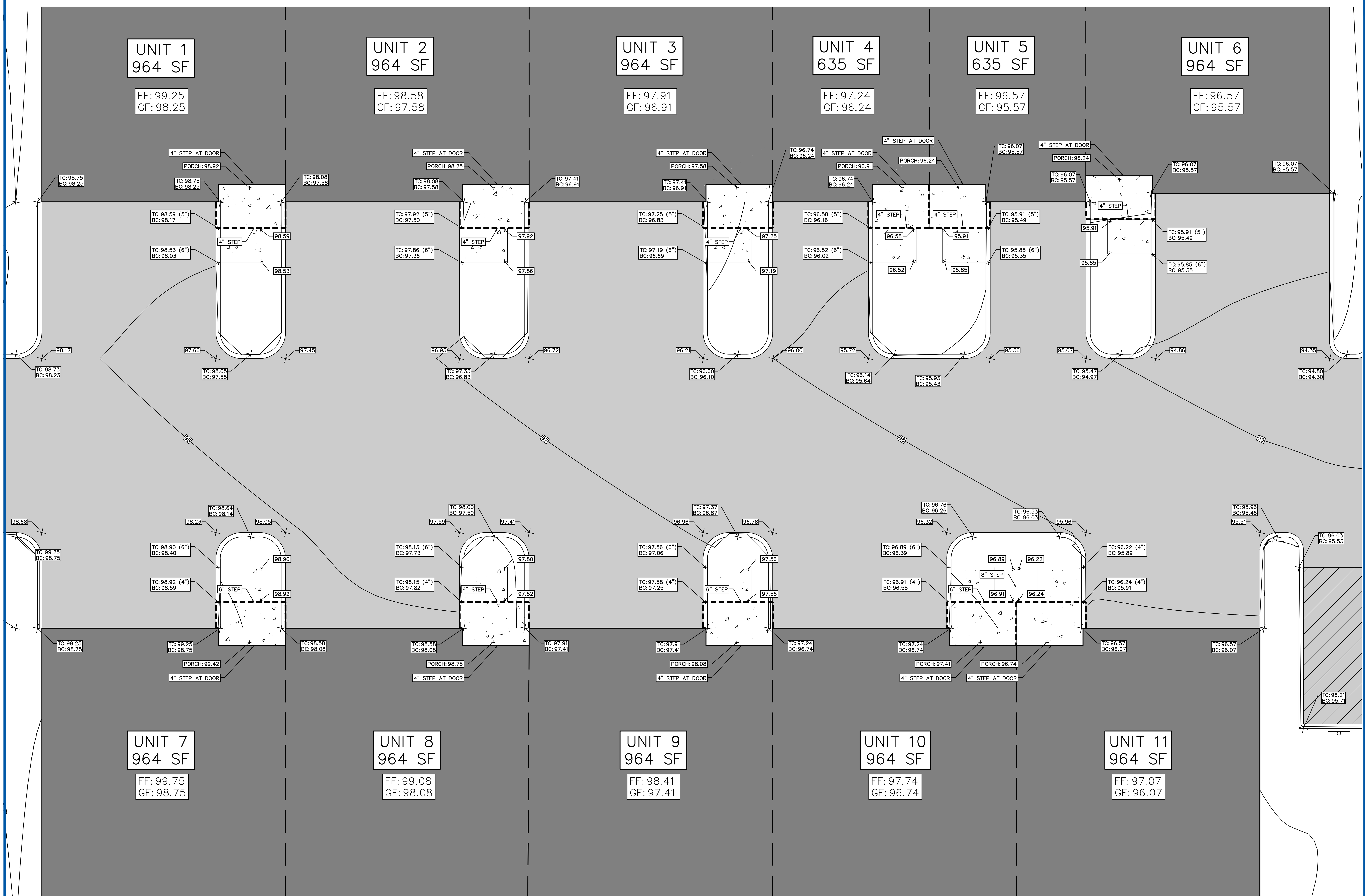
PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
GRADING AND DRAINAGE PLAN

PROJECT #: 25-250

SHEET: SP-4.1



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PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
DETAILED GRADING PLAN

PROJECT #: 25-250

SHEET: SP-4.2

Unit 1			
Point	Ex. Elev.	Pr. Elev.	Lowest
A	97.07	98.25	97.07
B	96.27	98.25	96.27
C	95.62	98.25	95.62
D	95.20	98.25	95.20
E	94.75	99.25	94.75
F	94.81	99.25	94.81
G	95.44	99.25	95.44
H	97.47	99.25	97.47
I	99.67	98.58	98.58
J	99.55	98.25	98.25
K	99.65	98.25	98.25
L	98.06	98.25	98.06
M	97.38	98.25	97.38
N	97.28	98.25	97.28
Average:	**97.02**	**98.56**	**96.75**
First Floor Elevation:		99.25	
First Floor to Ridge:		34.67*	
Building Height =		37.18	
FF to Stair Bulk Head:		37.83*	
Building Height to SBH =		40.34	

Unit 2			
Point	Ex. Elev.	Pr. Elev.	Lowest
A	95.20	98.25	95.20
B	94.43	98.01	94.43
C	93.64	97.77	93.64
D	92.96	97.58	92.96
E	92.52	98.58	92.52
F	92.43	98.58	92.43
G	92.65	98.58	92.65
H	93.29	98.58	93.29
I	93.99	97.91	93.99
J	95.88	97.58	95.88
K	97.47	99.25	97.47
L	95.44	99.25	95.44
M	94.81	99.25	94.81
N	94.75	99.25	94.75
Average:	**94.25**	**98.46**	**94.25**
First Floor Elevation:		99.25	
First Floor to Ridge:		34.67*	
Building Height =		39.67	
FF to Stair Bulk Head:		37.83*	
Building Height to SBH =		42.83	

Unit 3			
Point	Ex. Elev.	Pr. Elev.	Lowest
A	92.96	97.58	92.96
B	91.49	97.34	91.49
C	90.94	97.10	90.94
D	90.70	96.91	90.70
E	90.69	97.91	90.69
F	91.06	97.91	91.06
G	91.48	97.91	91.48
H	91.65	97.91	91.65
I	92.07	97.24	92.07
J	92.45	96.91	92.45
K	93.29	98.58	93.29
L	92.65	98.58	92.65
M	92.43	98.58	92.43
N	92.52	98.58	92.52
Average:	**91.88**	**97.79**	**91.88**
First Floor Elevation:		99.25	
First Floor to Ridge:		34.67*	
Building Height =		42.04	
FF to Stair Bulk Head:		37.83*	
Building Height to SBH =		45.20	

Unit 4			
Point	Ex. Elev.	Pr. Elev.	Lowest
A	90.70	96.91	90.70
B	90.80	96.71	90.80
C	90.80	96.53	90.80
D	90.80	97.24	90.80
E	90.57	97.24	90.57
F	90.80	97.24	90.80
G	91.07	97.24	91.07
H	.91.43	96.24	96.24
I	91.65	97.91	91.65
J	91.48	97.91	91.48
K	91.06	97.91	91.06
L	90.69	97.91	90.69
Average:	**90.95**	**97.25**	**91.39**
First Floor Elevation:		99.25	
First Floor to Ridge:		34.67*	
Building Height =		42.53	
FF to Stair Bulk Head:		37.83*	
Building Height to SBH =		45.69	

Unit 5			
Point	Ex. Elev.	Pr. Elev.	Lowest
A	90.80	96.53	90.80
B	90.28	96.34	90.28
C	89.19	96.15	89.19
D	88.97	96.57	88.97
E	89.37	96.57	89.37
F	90.23	96.57	90.23
G	90.53	96.57	90.53
H	90.91	95.57	90.91
I	91.07	97.24	91.07
J	90.80	97.24	90.80
K	90.57	97.24	90.57
L	90.80	97.24	90.80
Average:	**90.29**	**96.65**	**90.29**
First Floor Elevation:		99.25	
First Floor to Ridge:		34.67*	
Building Height =		43.63	
FF to Stair Bulk Head:		37.83*	
Building Height to SBH =		46.79	

Unit 6			
Point	Ex. Elev.	Pr. Elev.	Lowest
A	89.19	96.15	89.19
B	88.92	95.94	88.92
C	88.68	95.74	88.68
D	88.50	95.57	88.50
E	88.69	95.57	88.69
F	88.97	95.57	88.97
G	89.57	95.57	89.57
H	90.01	95.57	90.01
I	90.17	95.57	90.17
J	90.32	95.90	90.32
K	90.53	96.57	90.53
L	90.23	96.57	90.23
M	89.37	96.57	89.37
N	88.97	96.57	88.97
Average:	**89.44**	**95.96**	**89.44**
First Floor Elevation:		99.25	
First Floor to Ridge:		34.67*	
Building Height =		44.48	
FF to Stair Bulk Head:		37.83*	
Building Height to SBH =		47.64	

Unit 7			
Point	Ex. Elev.	Pr. Elev.	Lowest
A	100.15	98.75	98.75
B	100.22	98.75	98.75
C	100.62	99.08	99.08
D	100.43	99.75	99.75
E	100.63	99.75	99.75
F	100.87	99.75	99.75
G	100.73	99.75	99.75
H	100.52	100.16	100.16
I	100.63	100.33	100.33
J	100.67	100.54	100.54
K	100.52	100.75	100.52
L	100.42	100.52	100.42
M	100.36	100.22	100.22
N	100.36	99.91	99.91
Average:	**100.51**	**99.86**	**99.83**
First Floor Elevation:		99.25	
First Floor to Ridge:		34.67*	
Building Height =		34.09	
FF to Stair Bulk Head:		37.83*	
Building Height to SBH =		37.25	

Unit 8			
Point	Ex. Elev.	Pr. Elev.	Lowest
A	100.43	99.75	99.75
B	100.51	98.08	98.08
C	95.68	98.41	95.68
D	103.20	99.08	99.08
E	103.20	99.08	99.08
F	103.20	99.08	99.08
G	103.20	99.08	99.08
H	103.20	99.58	99.58
I	103.20	99.75	99.75
J	103.20	99.95	99.95
K	100.52	100.16	100.16
L	100.73	99.75	99.75
M	100.87	99.75	99.75
N	100.63	99.75	99.75
Average:	**101.56**	**99.38**	**99.18**
First Floor Elevation:		99.25	
First Floor to Ridge:		34.67*	
Building Height =		34.74	
FF to Stair Bulk Head:		37.83*	
Building Height to SBH =		37.90	

Unit 9			
Point	Ex. Elev.	Pr. Elev.	Lowest
A	103.20	99.08	99.08
B	103.20	97.41	97.41
C	103.20	97.74	97.74
D	93.97	98.41	93.97
E	94.40	98.41	94.40
F	94.93	98.41	94.93
G	95.38	98.41	95.38
H	95.67	98.99	95.67
I	103.20	99.16	99.16
J	103.20	99.37	99.37
K	103.20	99.58	99.58
L	103.20	99.08	99.08
M	103.20	99.08	99.08
N	103.20	99.08	99.08
Average:	**100.23**	**98.73**	**97.42**
First Floor Elevation:		99.25	
First Floor to Ridge:		34.67*	
Building Height =		36.50	
FF to Stair Bulk Head:		37.83*	
Building Height to SBH =		39.66	

Unit 10			
Point	Ex. Elev.	Pr. Elev.	Lowest
A	93.97	98.41	93.97
B	93.64	96.74	93.64
C	93.56	97.07	93.56
D	93.58	97.74	93.58
E	93.94	97.74	93.94
F	94.72	97.74	94.72
G	95.23	97.74	95.23
H	95.55	98.41	95.55
I	95.57	98.57	95.57
J	95.62	98.78	95.62
K	95.67	98.99	95.67
L	95.38	98.41	95.38
M	94.93	98.41	94.93
N	94.40	98.41	94.40
Average:	**94.70**	**98.08**	**94.70**
First Floor Elevation:		99.25	
First Floor to Ridge:		34.67*	
Building Height =		39.22	
FF to Stair Bulk Head:		37.83*	
Building Height to SBH =		42.38	

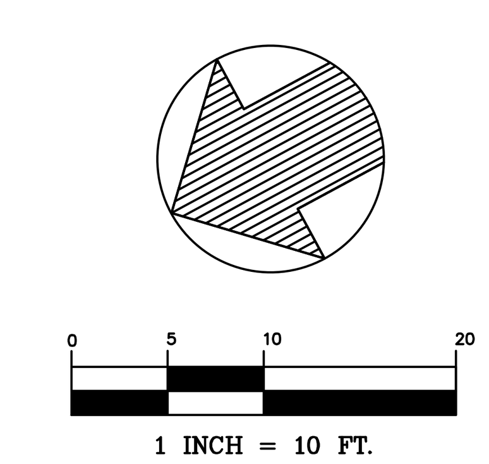
Unit 11			
Point	Ex. Elev.	Pr. Elev.	Lowest
A	93.58	97.74	93.58
B	93.33	96.40	93.33
C	93.13	96.07	93.13
D	93.01	96.07	93.01
E	93.50	96.44	93.50
F	94.17	96.94	94.17
G	94.87	97.44	94.87
H	95.38	97.82	95.38
I	95.44	98.03	95.44
J	95.51	98.24	95.51
K	95.55	98.41	95.55
L	95.23	97.74	95.23
M	94.72	97.74	94.72
N	93.94	97.74	93.94
Average:	**94.38**	**97.34**	**94.38**
First Floor Elevation:		99.25	
First Floor to Ridge:		34.67*	
Building Height =		39.54	
FF to Stair Bulk Head:		37.83*	
Building Height to SBH =		42.70	

*TAKEN FROM ARCHITECTURAL PLANS PREPARED BY BODNAR ARCHITECTRUAL STUDIO AND DATED 9–29–2025.

REFERENCES:
1. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY MAP FOR 21–25 GROVE AVENUE, BLOCK 1702 LOT 22, TOWNSHIP OF VERONA, ESSEX COUNTY, NEW JERSEY" PREPARED BY AZZOLINA & FEURY ENGINEERING INC. AND SIGNED BY JOHN A. LOCH, P.L.S. DATED 08/05/2025.

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28155900
155 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL. (973) 227-7004 FAX (973) 227-7074
PETRYENGINEERING.COM

REV	DESCRIPTION	DATE



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PETRY ENGINEERING, LLC

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662
DATE: 10/06/2025

CAUTION: *IF THIS DOCUMENT DOES NOT CONTAIN A RAISED IMPRESSION SEAL OR AN ELECTRONIC SEAL OF THE UNDERSIGNED PROFESSIONAL, IT IS NOT AN AUTHORIZED ORIGINAL DOCUMENT.*

PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
AVERAGE GRADE KEY MAP

PROJECT #: 25-250

SHEET: SP-4.3

SEWER DEMAND CALCULATION:

TOWNHOUSE: 11–3 BEDROOM UNITS
11 X 300 GPD = 3,300 GPD

* TWA APPLICATION IS NOT REQUIRED SINCE GPD IS LESS THAN 8,000 GPD.

WATER DEMAND CALCULATION:

TOWNHOUSES: 11–3 BEDROOM UNITS
11 X 215 GPD = 2,365 GPD

* WATER MAIN EXTENSION APPLICATION IS NOT REQUIRED SINCE THERE ARE LESS THAN 30 REALTY IMPROVEMENTS AND LESS THAN 3,000 FEET IN LENGTH.

REFERENCES:

1. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY MAP FOR 21–25 GROVE AVENUE, BLOCK 1702 LOT 22, TOWNSHIP OF VERONA, ESSEX COUNTY, NEW JERSEY" PREPARED BY AZZOLINA & FEURY ENGINEERING INC. AND SIGNED BY JOHN A. LOCH, P.L.S. DATED 08/05/2025.

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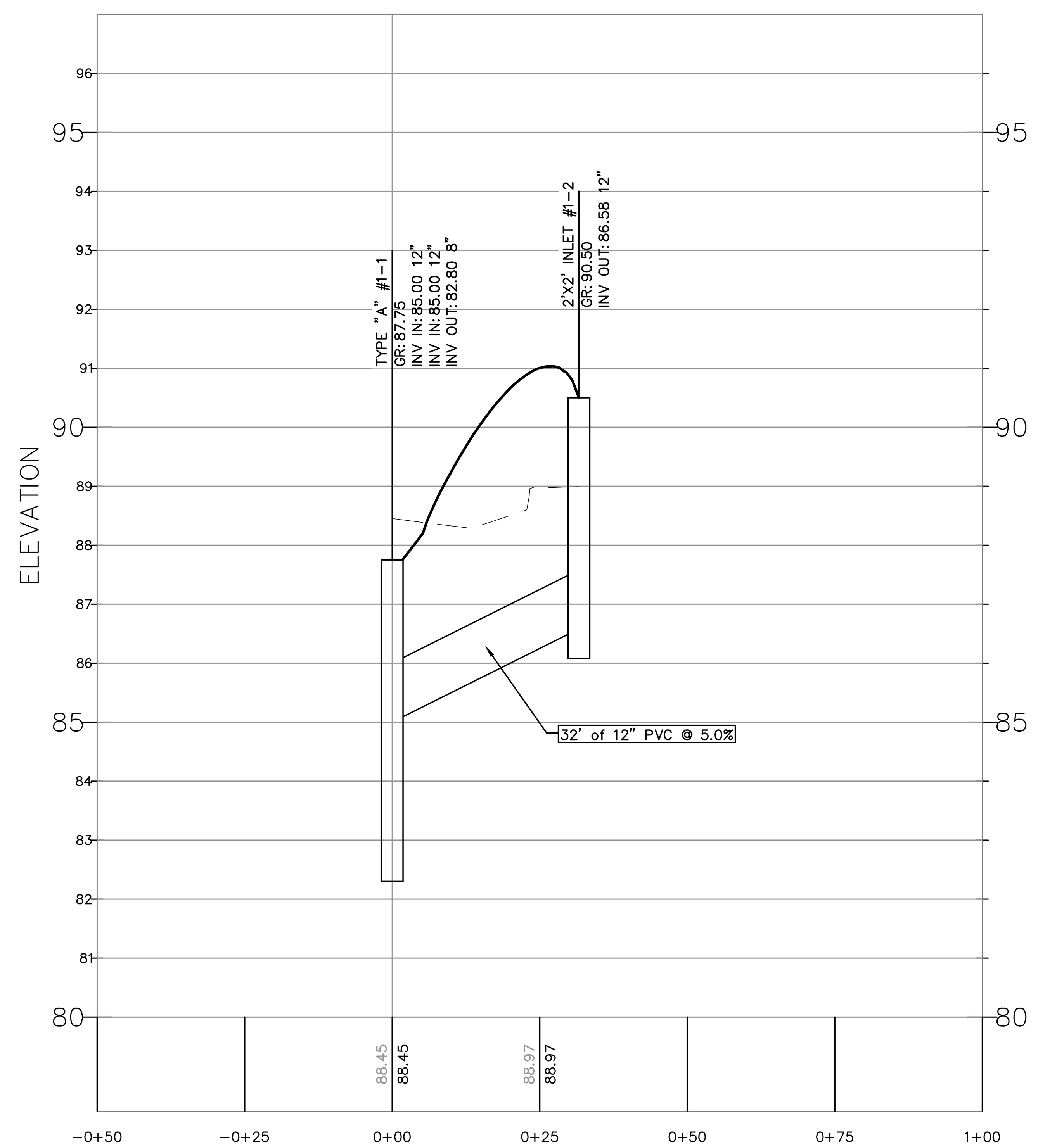
PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
UTILITY PLAN

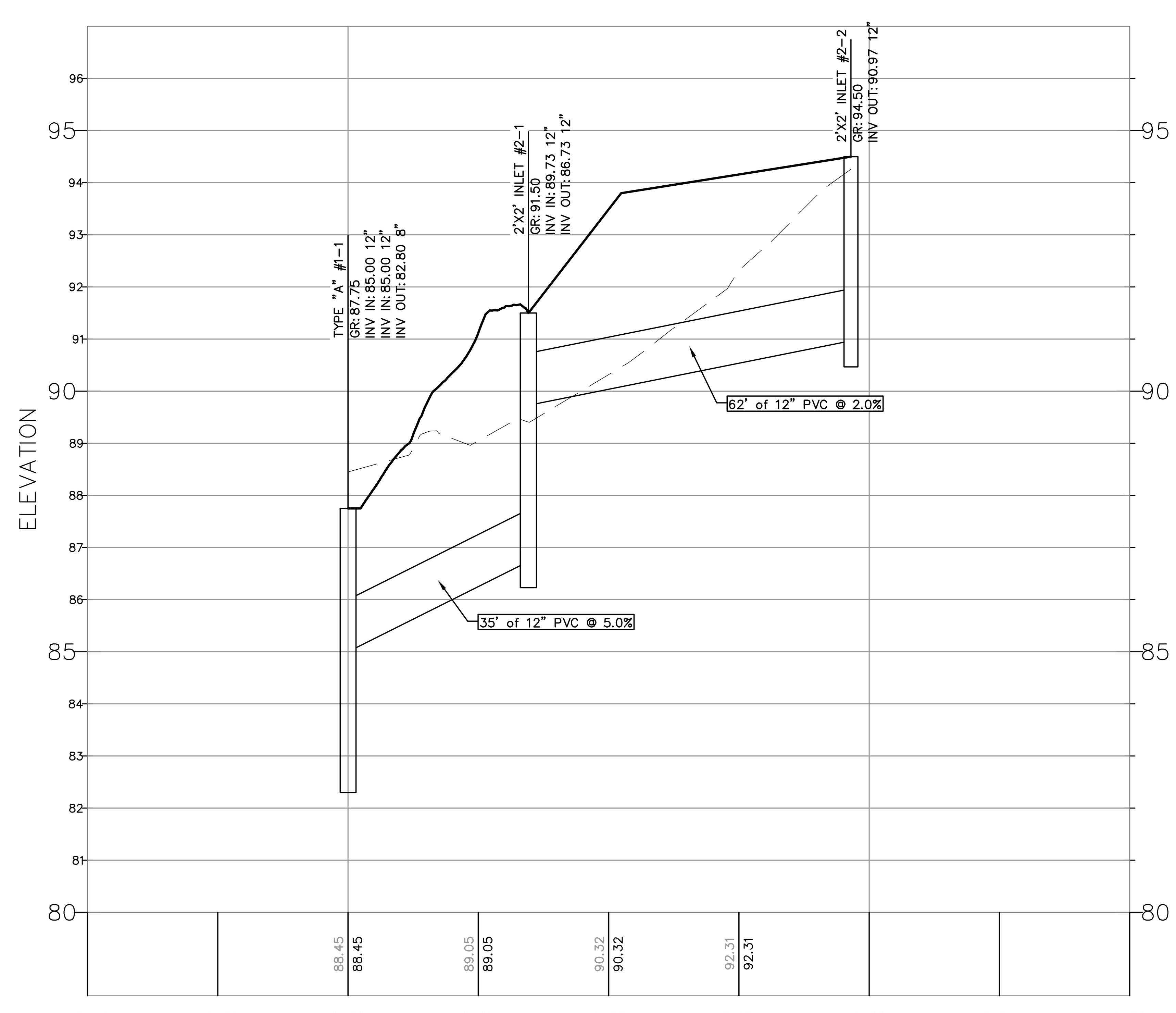
PROJECT #: 25-250

SHEET: SP-4.4

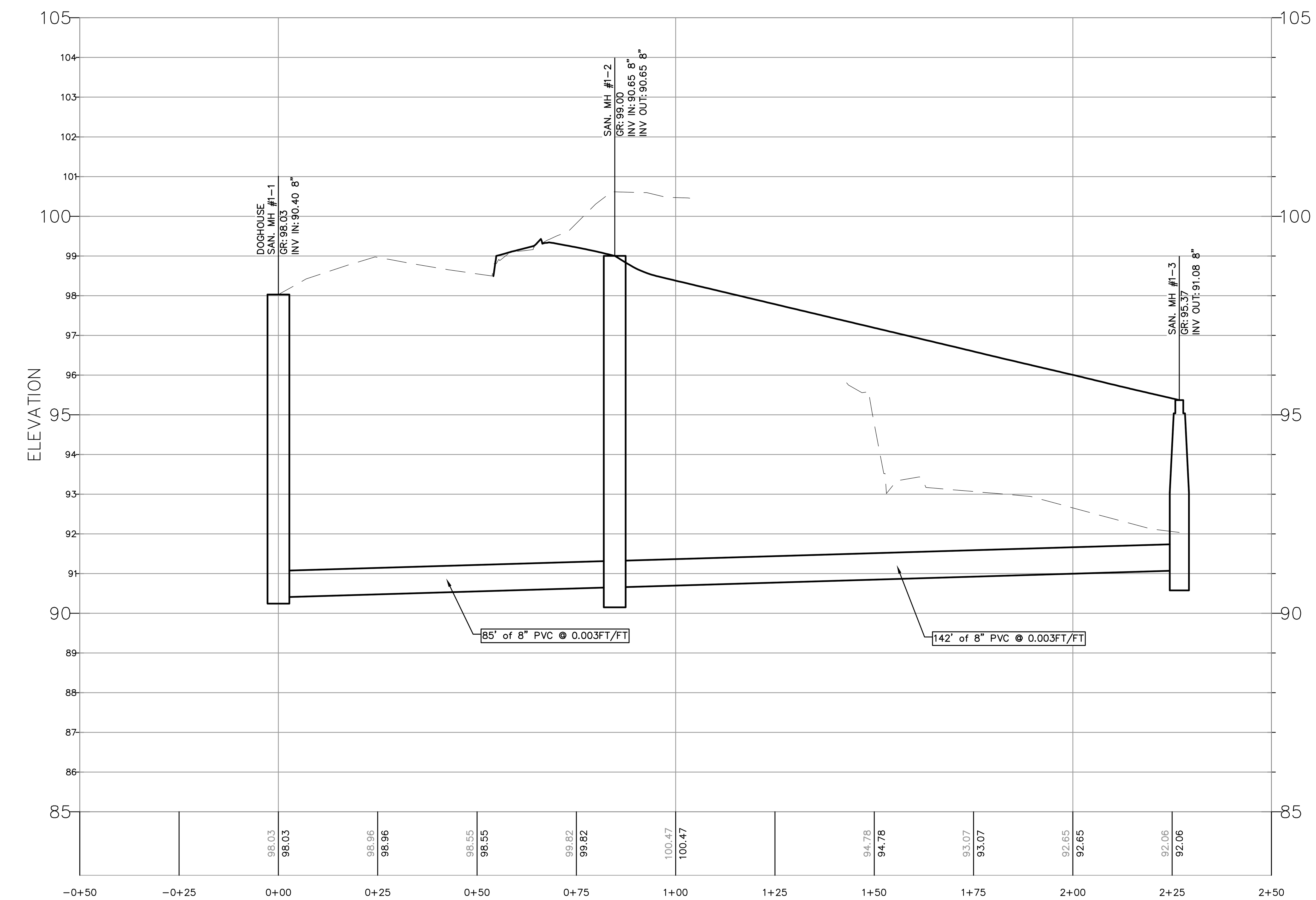
STORM SEWER NETWORK #1 PROFILE



STORM SEWER NETWORK #2 PROFILE



SANITARY SEWER NETWORK #1 PROFILE



PETRY ENGINEERING, LLC

REV	DESCRIPTION	DATE

VERTICAL SCALE: 1"=2'

HORIZONTAL SCALE: 1"=20'

CHECKED BY: SPD

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PETRY ENGINEERING, LLC

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NJ PROFESSIONAL ENGINEER LIC. No. 36662
DATE: 10/06/2025

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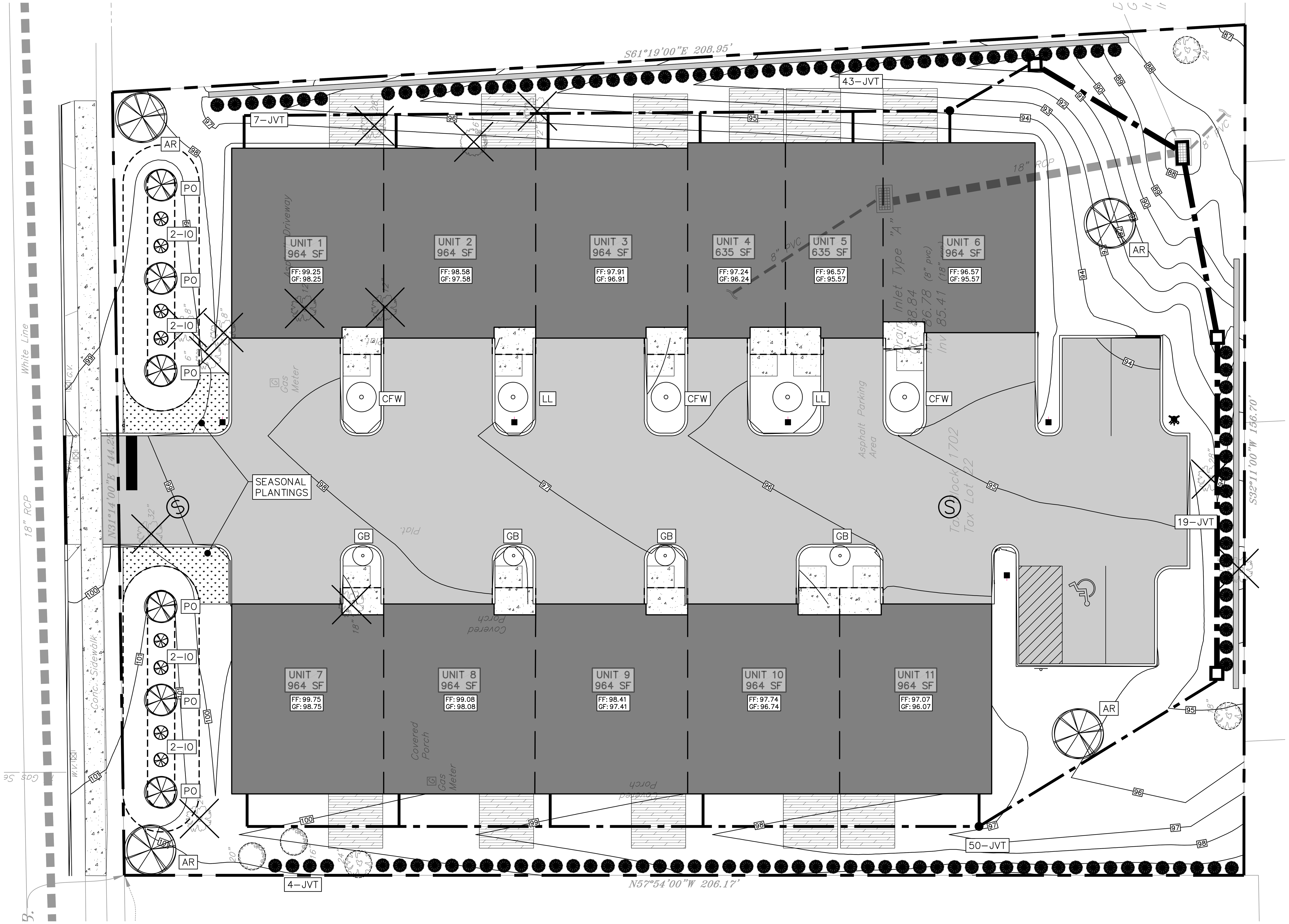
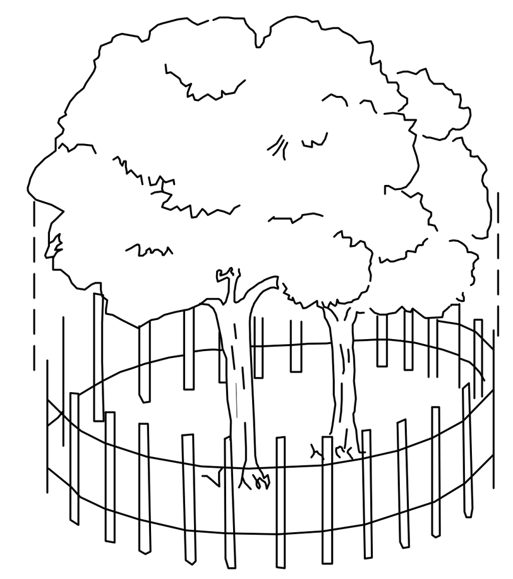
PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
STORM AND SANITARY SEWER PROFILES

PROJECT #: 25-250

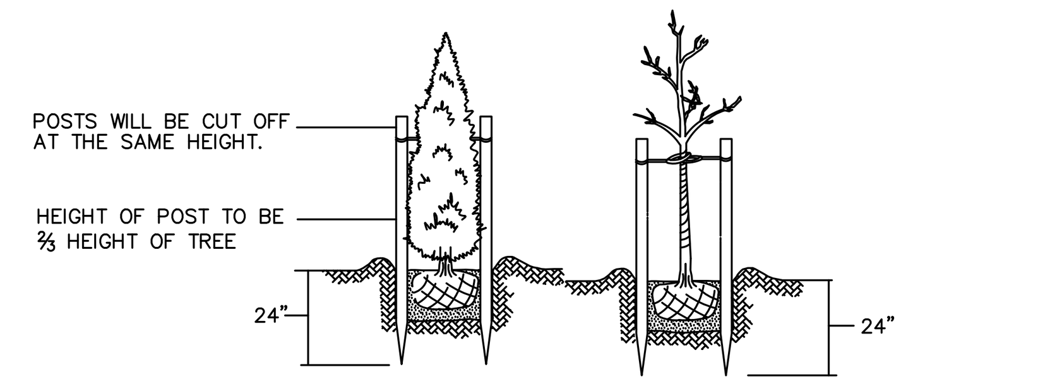
SHEET: SP-4.5





FENCING FOR TREE PROTECTION DETAIL

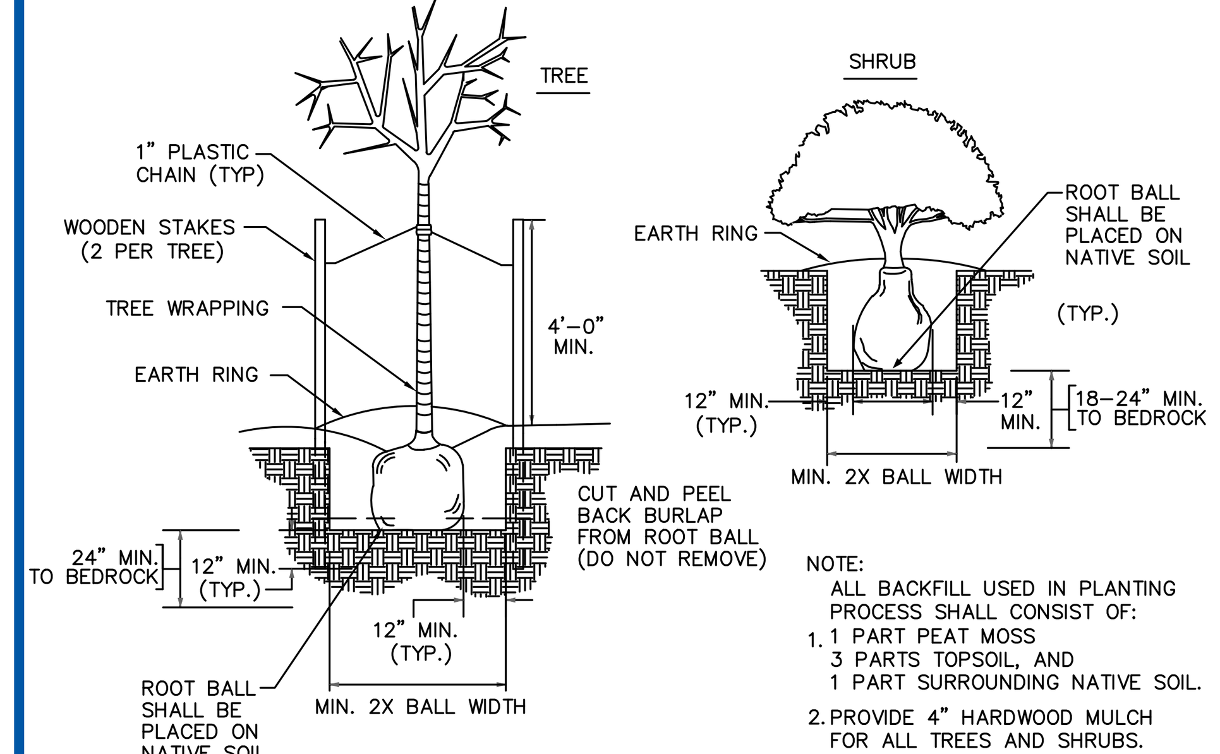
SCALE – N.T.S.



TREES REQUIRING TWO STAKES
DECIDIOUS TREES OVER 1" TO 1½" CALIPER, INCLUSIVE.
ALL SALIX, REGARDLESS OF HEIGHT, CALIPER, BARE ROOT OR BALLED AND BURLAPPED. CONE TYPE (PYRAMIDAL) TREES 5' TO 7' HIGH AND COLUMNAR EVERGREEN TREES 7' TO 9' HIGH, INCLUSIVE.

HEDGE PLANTING DETAIL

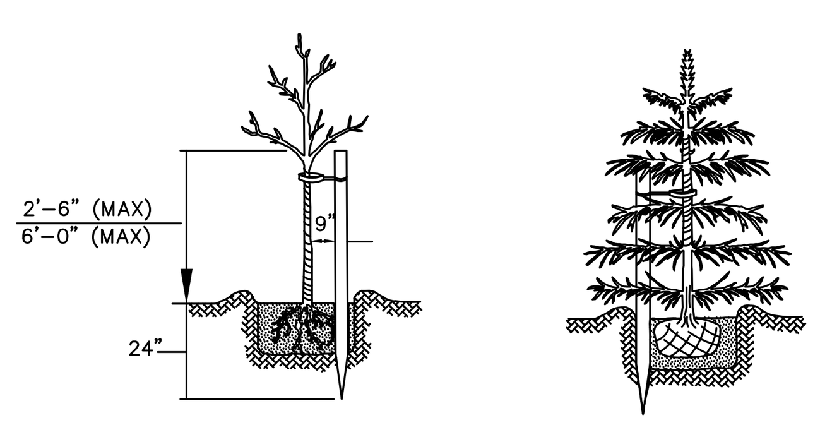
SCALE – N.T.S.



NOTE:
ALL BACKFILL USED IN PLANTING PROCESS SHALL CONSIST OF:
1. 1 PART PEAT MOSS
3 PARTS TOPSOIL, AND
1 PART SURROUNDING NATIVE SOIL.
2. PROVIDE 4" HARDWOOD MULCH FOR ALL TREES AND SHRUBS.

PLANTING DETAIL

SCALE – N.T.S.



TREES REQUIRING ONE STAKE
DECIDIOUS TREES (EXCEPT SALIX) 1" TO 1½" CALIPER, INCLUSIVE. CONE TYPE (PYRAMIDAL) TREES 3' TO 5' HIGH AND COLUMNAR EVERGREEN TREES 4' TO 7' HIGH, INCLUSIVE.

STAKING DETAIL

SCALE – N.T.S.

PLANTING NOTES:

ALL PLANTS TO BE NURSERY GROWN AND SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM PLANTING.

ALL PLANTS AND ENTIRE SHRUB BEDS TO RECIEVE 3" LAYER OF SHREDDED HARDWOOD

SEE SOIL EROSION AND SEDIMENT CONTROL PLAN FOR TEMPORARY AND PERMANENT SEEDING FOR SITE STABILIZATION.

TOPSOIL AND SEED ALL AREAS DISTURBED AS A RESULT OF ANY AND ALL ACTIVITIES RELATED TO CONSTRUCTION, TO INCLUDE ANY IMPACTED AREAS NOT SHOWN ON PLANS. CONTRACTOR TO FIELD VERIFY AREAS OF SEED.

TOPSOIL SHALL BE SANDY LOAM; FREE FROM SUBSOIL, STONES LARGER THAN 1", OR ANY UNDESIRABLE MATERIAL; 4% ORGANIC MATTER; pH 5.0 TO 6.5.

PLANTS SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AS THEY BORE TO THE EXISTING GRADE. CUT AND REMOVE BURLAP FROM TOP 1/3 OF BALL.

LOCATE GUY WIRES SO THAT THEY WILL NOT PULL CROTCH APART.

AREAS NOT DIRECTLY RELATED TO DEVELOPMENT WILL BE RETAINED IN THEIR NATURAL STATE.

ALL DECIDUOUS TREES SHALL HAVE A MINIMUM CALIPER OF 3.0 INCHES MEASURED AT A HEIGHT OF 4.5 FT. ABOVE THE TOP OF THE ROOT BALL AT THE TIME OF PLANTING.

ALL CONIFEROUS TREES SHALL HAVE A MINIMUM HEIGHT OF 8.0 FEET MEASURED ABOVE THE TOP OF THE ROOT BALL AT THE TIME OF PLANTING.

NEW PLANTING ARE TO BE ADJUSTED AS REQUIRED TO AVOID CONFLICTS WITH EXISTING TREES, NEW OR EXISTING UTILITIES, HARDSCAPE, OR OTHER INFRASTRUCTURE.

TREES LOCATED CLOSER THAN 3' TO THE CURBS SHALL BE LOCATED ON PARKING LOT STRIPING.

NOTES:

1. REASONABLE MEASURES SHALL BE TAKEN TO PROTECT MATURE TREES SLATED TO REMAIN ALONG ALL LIMITS OF DISTURBANCE THROUGHOUT CONSTRUCTION.
2. ALL LANDSCAPING SHOWN ON THE LANDSCAPING PLAN SHALL BE MAINTAINED AND ANY DEAD OR DYING TREES SHALL BE REPLACED.
3. THE LANDSCAPE PLAN SHALL INCORPORATE CHANGES OR CLARIFICATIONS, IF ANY, AS RECOMMENDED BY A CERTIFIED LANDSCAPE ARCHITECT.
4. ALL TREES EXCEPT THOSE THAT ARE SHOWN TO BE REMOVED SHALL BE MAINTAINED AND PROTECTED THROUGHOUT CONSTRUCTION. ANY TREES WHICH ARE SLATED TO REMAIN WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED.

TREE PLANTING SCHEDULE

SYM	BOTANICAL NAME	COMMON NAME	SIZE/TYPE	SPACING	QUANTITY
AR	ACER RUBRUM	RED MAPLE	2.5"–3" CAL. B&B	30' C.C.	4
GB	GINKGO BILOBA	AUTUMN GOLD	2.5"–3" CAL. B&B	4' C.C.	4
LL	TAXODIUM DISTICHUM	LINDEN LITTLEAF	2.5"–3" CAL. B&B	20' C.C.	2
IO	ILEX OPACA	AMERICAN HOLLY	2.5"–3" CAL. B&B	5' C.C.	8
CFW	CORNUS FLORIDA WHITE	FLOWERING DOGWOOD	2.5"–3" CAL. B&B	20' C.C.	3
JVT	JUNIPERUS VIRGINIANA TAYLOR	EASTERN RED CEDAR	2.5"–3" CAL. B&B	3.5' C.C.	123
PO	PICEA ORIENTALIS	SKYLANDS	2.5"–3" CAL. B&B	17' C.C.	6

REFERENCES:
1. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY MAP FOR 21–25 GROVE AVENUE, BLOCK 1702 LOT 22, TOWNSHIP OF VERONA, ESSEX COUNTY, NEW JERSEY" PREPARED BY AZZOLINA & FEURY ENGINEERING INC. AND SIGNED BY JOHN A. LOCH, P.L.S. DATED 08/05/2025.

PETRY ENGINEERING, LLC

REV	DESCRIPTION	DATE

1 INCH = 10 FT.

CHECKED BY: SPD
DRAFTED BY: JAF

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662
DATE: 10/06/2025

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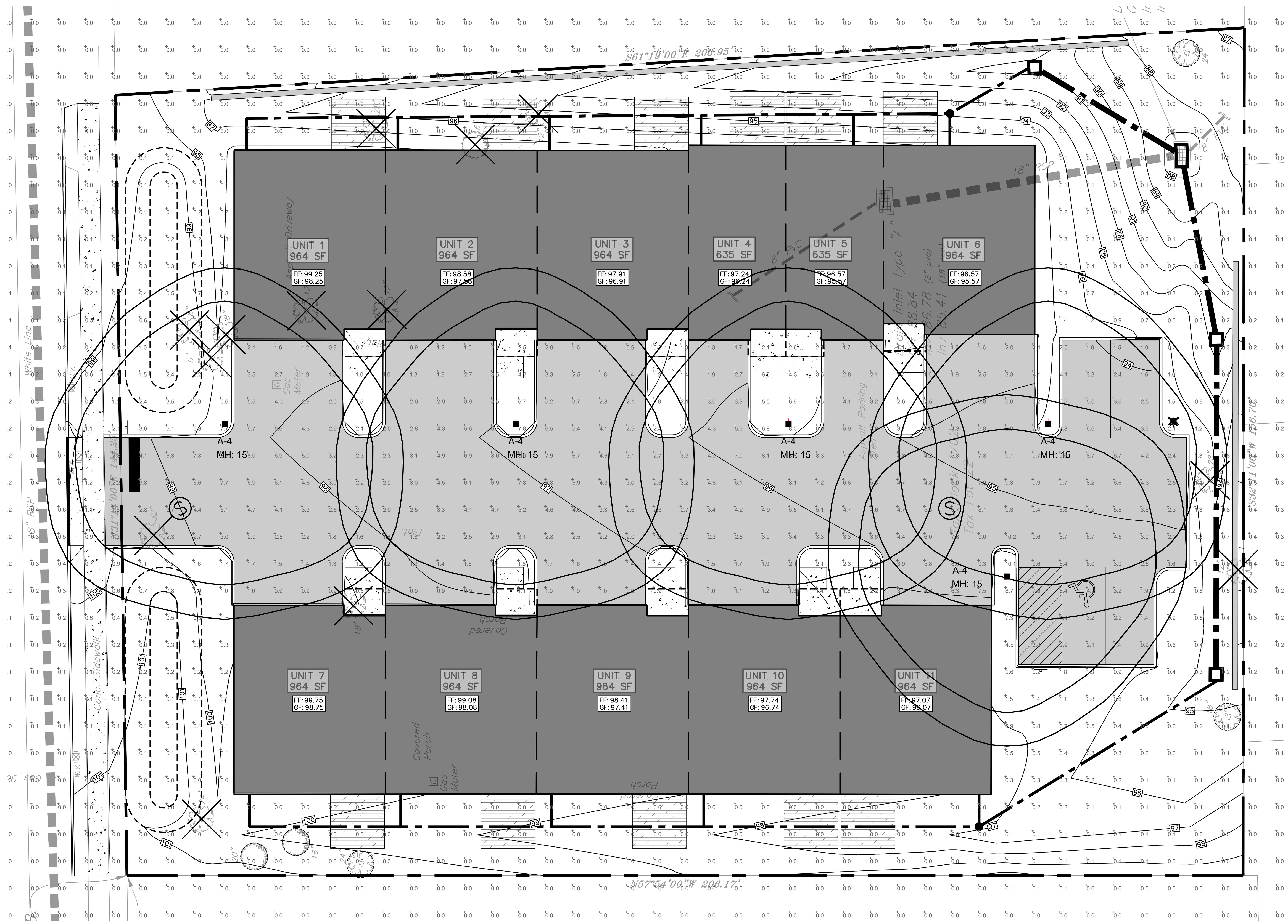
PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
LANDSCAPE PLAN

PROJECT #: 25-250
SHEET: SP-5



LUMINAIRE SCHEDULE **REFER TO LIGHTING FIXTURE CUTSHEETS FOR COMPLETE CATALOG NUMBERS**												
Symbol	Qty	Arrangement	Fixture Type	Description	Manufacturer	Catalog Number	CCT	LLF	Total Watts	Delivered Lumens	Mounting Height	Filename
■	5	Single	A-4	17.9IN WIDE POST TOP, TYPE 4 DISTRIBUTION, MDL005 OUTPUT, LLF ADJUSTED FOR 3000K CCT FROM A BASE OF .9	STERNBERG	PT-(OVERALL DROP LENGTH)-US660-(FITTER)-84L-30-T4-MDL005-SV1	3000K	0.828	97.8	11254	15	US660-84L-40-T4-MDL005-SV1.IES

CALCULATION SUMMARY									
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpcLr	PtSpcTb
SITE_Ground	Illuminance	Fc	0.2	10.2	0.0	N.A.	N.A.	5	5
PARKING AND DRIVE LANES_StatArea	Illuminance	Fc	4.0	10.2	0.9	4.5	11.3		

LIGHTING NOTES:

1. THE PROPOSED LIGHTING SHALL BE SET ON A DUSK TO DAWN TIMER.
2. ALL PROPOSED FIXTURES AND THEIR RESPECTIVE POLES SHALL BE BLACK.
3. ANY DEVIATION FROM THE SPECIFIED LIGHTING FIXTURES SHALL BE SUBMITTED IN WRITING TO PETRY ENGINEERING, LLC ALONG WITH THE ACCOMPANYING POINT BY POINT ANALYSIS AND MAY ALSO BE SUBJECT TO REVIEW AND APPROVAL BY WEST ORANGE PLANNING BOARD OR THEIR DESIGNEE.

REFERENCES:
1. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY MAP FOR 21–25 GROVE AVENUE, BLOCK 1702 LOT 22, TOWNSHIP OF VERONA, ESSEX COUNTY, NEW JERSEY" PREPARED BY AZZOLINA & FEURY ENGINEERING INC. AND SIGNED BY JOHN A. LOCH, P.L.S. DATED 08/05/2025.

PETRY ENGINEERING, LLC

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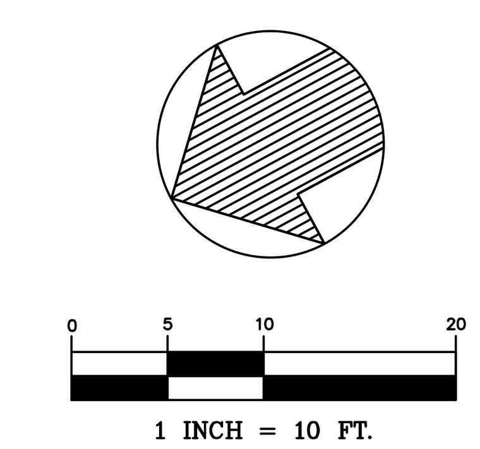


CHECKED BY: SPD

DRAFTED BY: JAF

PETRY ENGINEERING, LLC

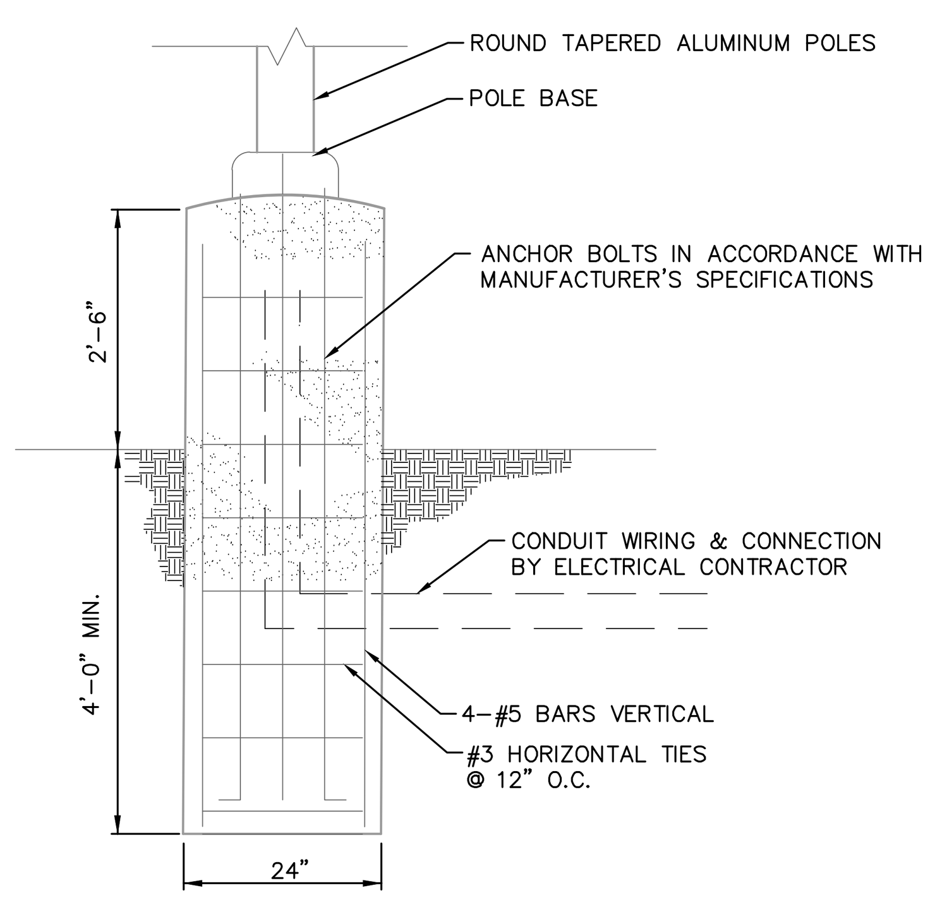
J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662
DATE: 10/06/2025

PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

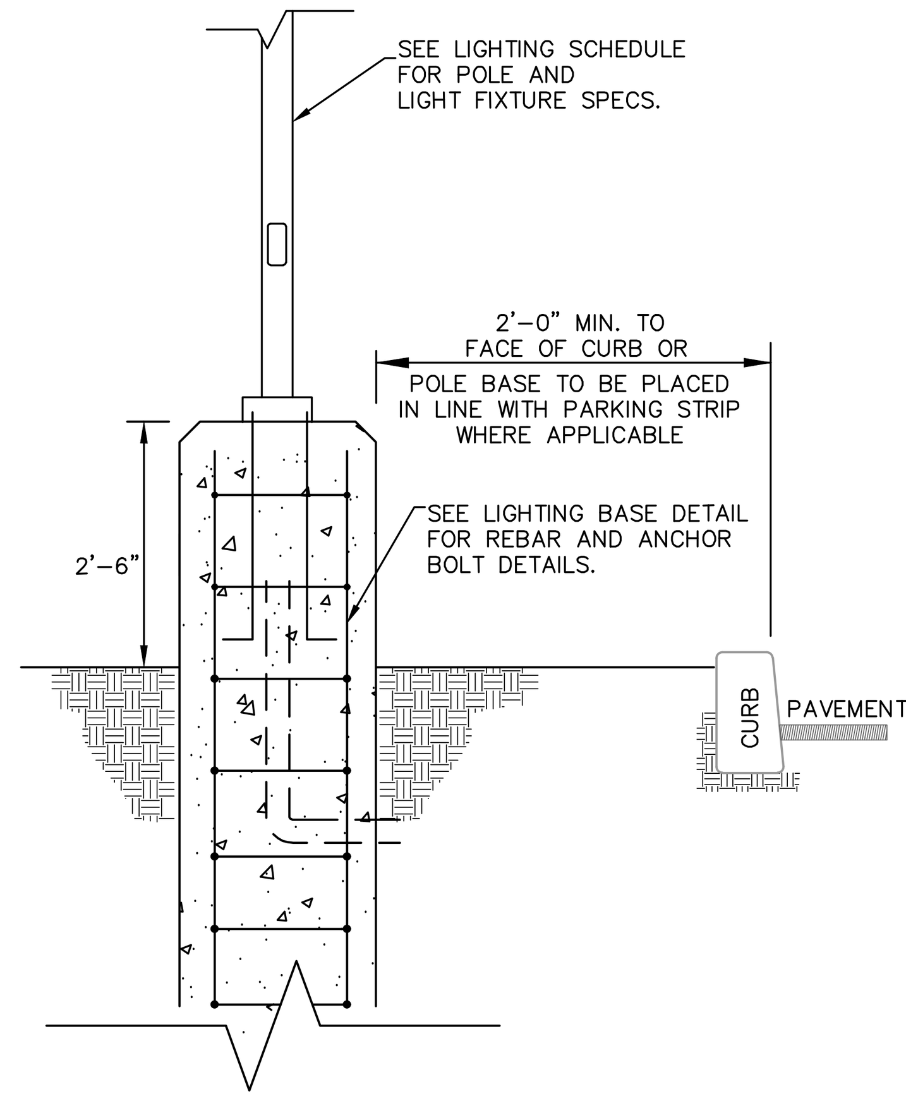
TITLE:
LIGHTING PLAN

PROJECT #: 25-250

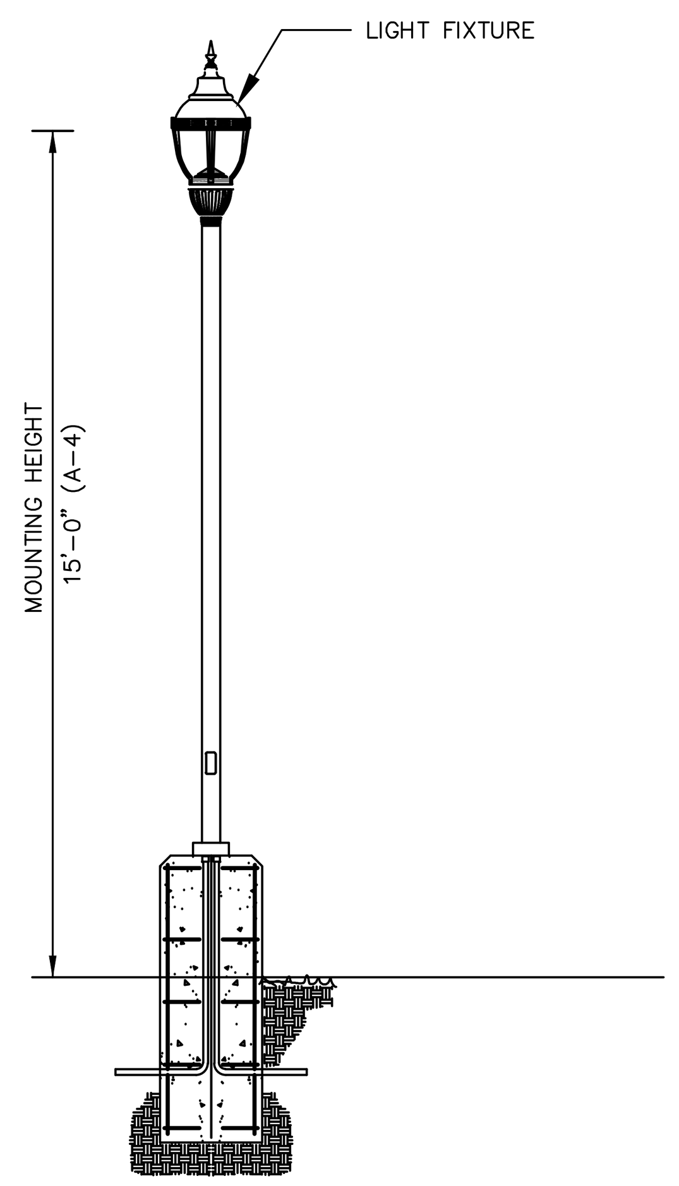
SHEET: SP-6.1



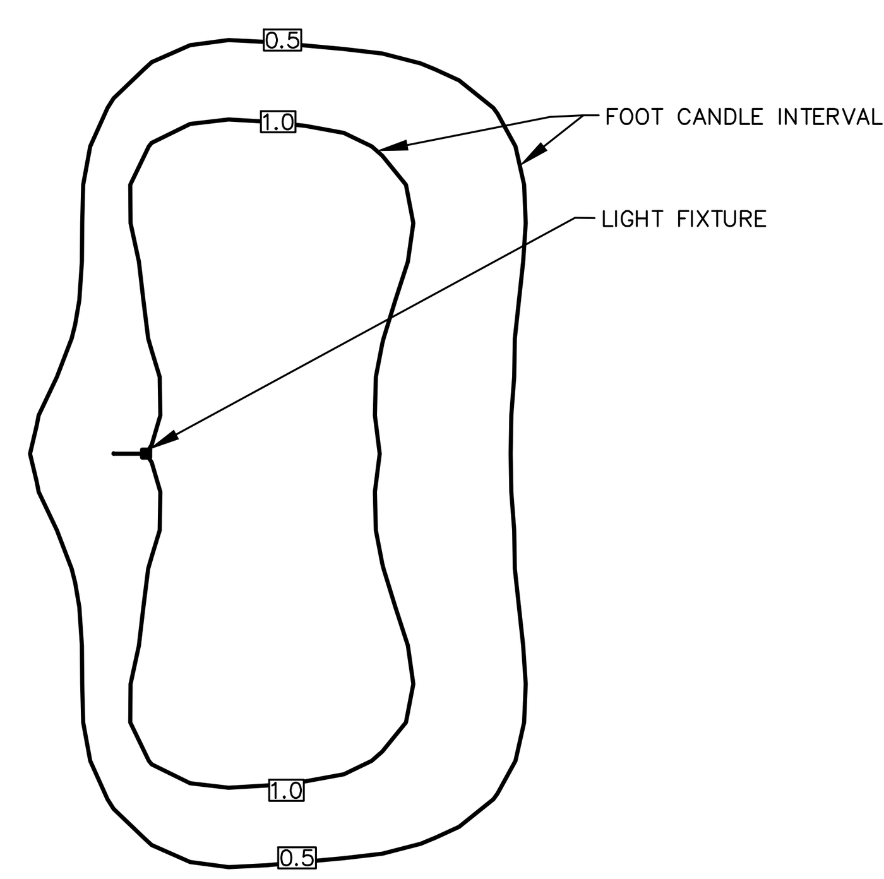
LIGHT BASE DETAIL
SCALE – N.T.S.



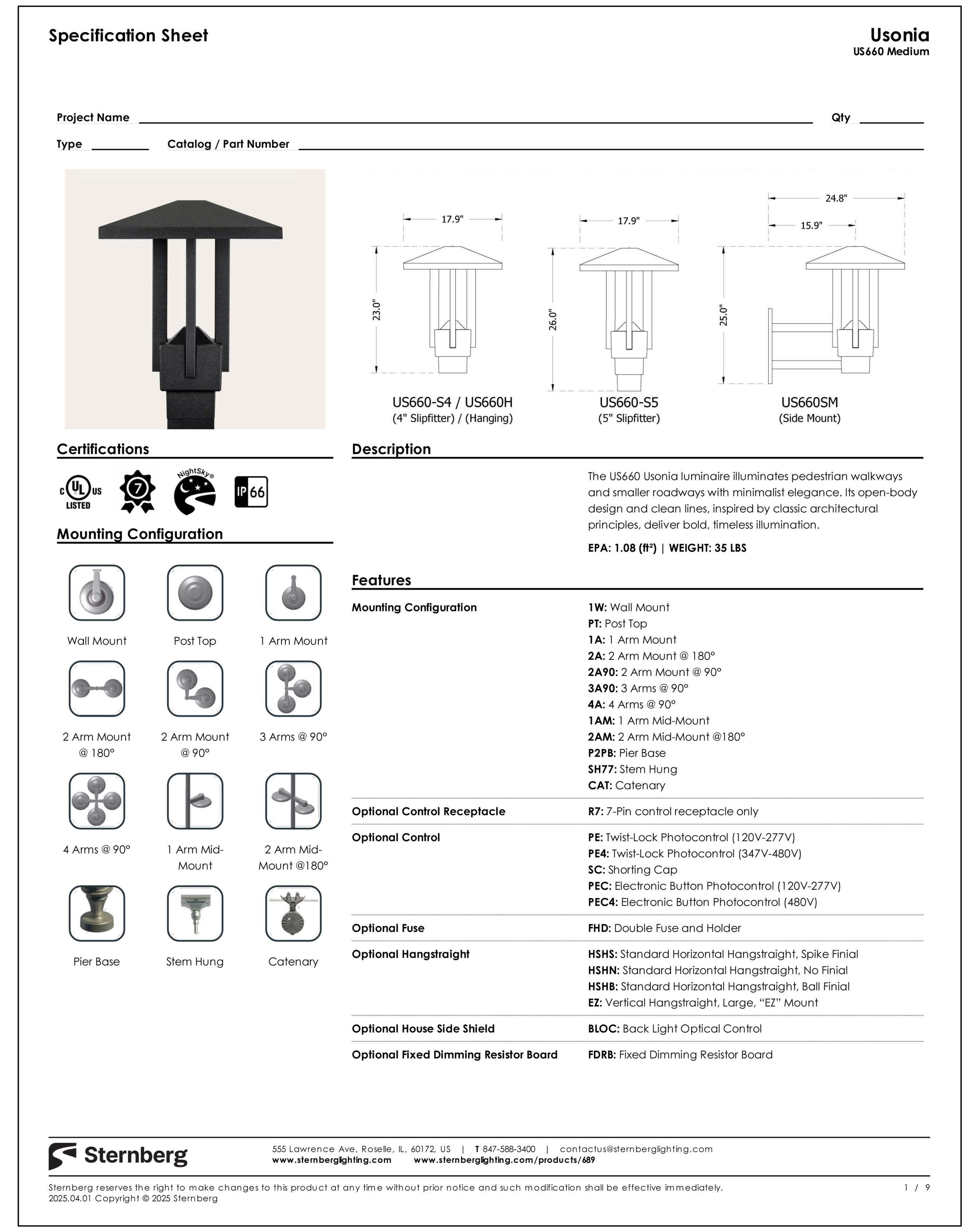
LIGHT BASE & CURB INTERACTION DETAIL
N.T.S.



MOUNTING HEIGHT DIAGRAM
SCALE – N.T.S.



ISOLUX DIAGRAM
SCALE – N.T.S.



Specification Sheet — **Usonia**
US660 Medium

Project Name ______ Qty ______
Type ______ Catalog / Part Number ______

US660-S4 / US660H (4" Slipfitter) / (Hanging) — 17.9", 23.0"
US660-S5 (5" Slipfitter) — 17.9", 26.0"
US660SM (Side Mount) — 24.8", 15.9", 25.0"

Certifications

cUL US LISTED · NightSky · IP66

Mounting Configuration

Wall Mount · Post Top · 1 Arm Mount · 2 Arm Mount @ 180° · 2 Arm Mount @ 90° · 3 Arms @ 90° · 4 Arms @ 90° · 1 Arm Mid-Mount · 2 Arm Mid-Mount @180° · Pier Base · Stem Hung · Catenary

Description

The US660 Usonia luminaire illuminates pedestrian walkways and smaller roadways with minimalist elegance. Its open-body design and clean lines, inspired by classic architectural principles, deliver bold, timeless illumination.

EPA: 1.08 (ft²) | WEIGHT: 35 LBS

Features

Mounting Configuration	**1W:** Wall Mount **PT:** Post Top **1A:** 1 Arm Mount **2A:** 2 Arm Mount @ 180° **2A90:** 2 Arm Mount @ 90° **3A90:** 3 Arms @ 90° **4A:** 4 Arms @ 90° **1AM:** 1 Arm Mid-Mount **2AM:** 2 Arm Mid-Mount @180° **P2PB:** Pier Base **SH77:** Stem Hung **CAT:** Catenary
Optional Control Receptacle	**R7:** 7-Pin control receptacle only
Optional Control	**PE:** Twist-Lock Photocontrol (120V-277V) **PE4:** Twist-Lock Photocontrol (347V-480V) **SC:** Shorting Cap **PEC:** Electronic Button Photocontrol (120V-277V) **PEC4:** Electronic Button Photocontrol (480V)
Optional Fuse	**FHD:** Double Fuse and Holder
Optional Hangstraight	**HSHS:** Standard Horizontal Hangstraight, Spike Finial **HSHN:** Standard Horizontal Hangstraight, No Finial **HSHB:** Standard Horizontal Hangstraight, Ball Finial **EZ:** Vertical Hangstraight, Large, "EZ" Mount
Optional House Side Shield	**BLOC:** Back Light Optical Control
Optional Fixed Dimming Resistor Board	**FDRB:** Fixed Dimming Resistor Board

Sternberg 555 Lawrence Ave, Roselle, IL, 60172, US | T 847-588-3400 | contactus@sternberglighting.com
www.sternberglighting.com www.sternberglighting.com/products/689

 1 / 9

FIXTURE "A-4"
SCALE – N.T.S.

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28155900
155 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL. (973) 227-7004 FAX (973) 227-7074
PETRYENGINEERING.COM

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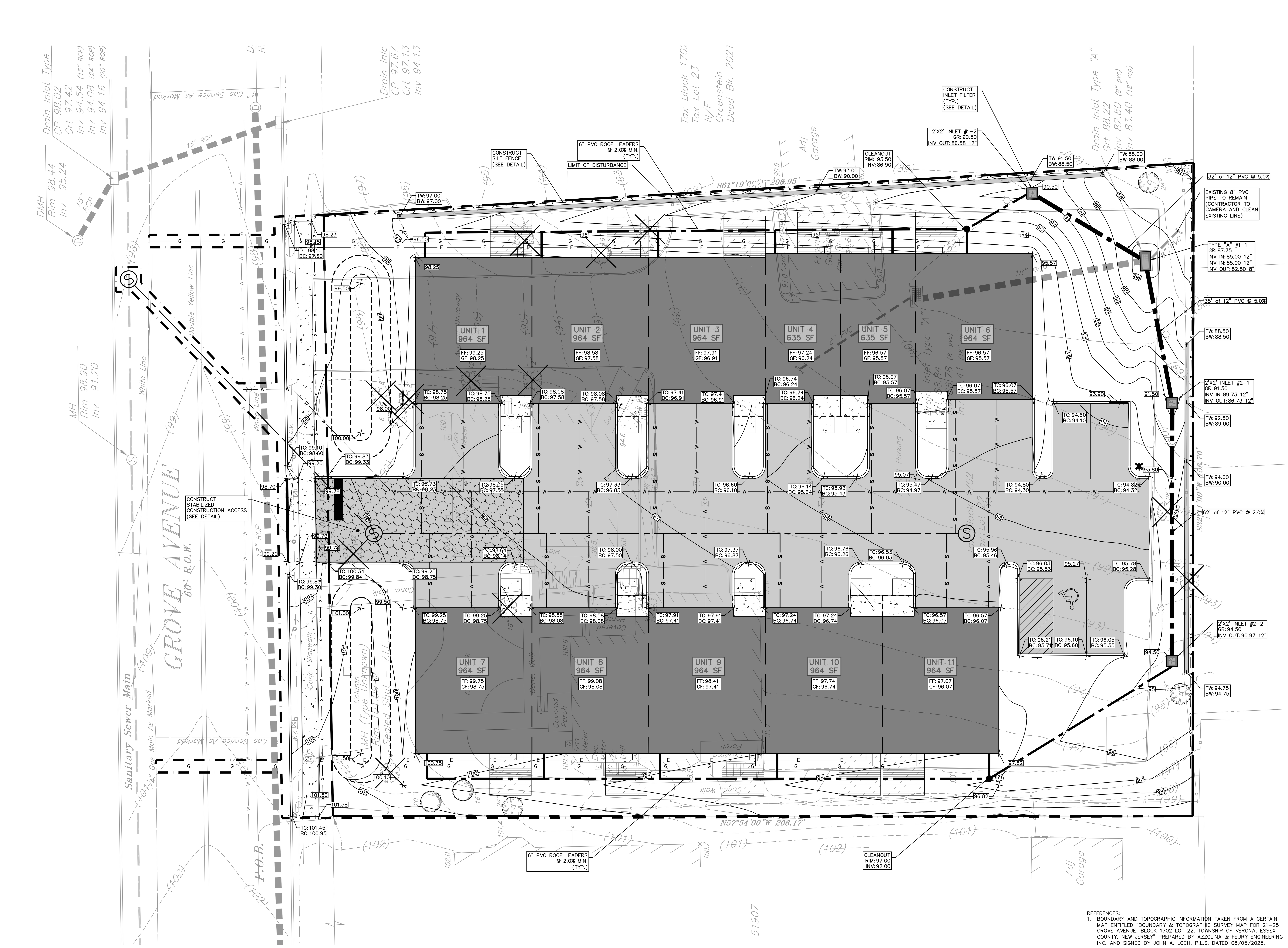
PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
LIGHTING DETAILS

PROJECT #: 25-250
SHEET: SP-6.2



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TEL (973) 227-7004 FAX (973) 227-7074
PETRYENGINEERING.COM

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J. MICHAEL PETRY-PE,PP,RA
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DATE: 10/06/2025

PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
SOIL EROSION AND SEDIMENT CONTROL PLAN

PROJECT #: 25-250

SHEET: SP-7.1

TEMPORARY STABILIZATION

SOILS EXPOSED OR STOCKPILED FOR A PERIOD OF GREATER THAN 14 DAYS, AND NOT UNDER ACTIVE CONSTRUCTION, SHALL BE SEEDED & HAY MULCHED AND STABILIZED WITH TEMPORARY VEGETATIVE COVER OR OTHER APPROVED.

1. STREETS, DRIVEWAYS AND PARKING AREAS NOT SCHEDULED FOR PAVING WITHIN THE ALLOTTED TIME FRAME SHALL BE STABILIZED USING PAVEMENT SUBBASE COURSE. THIS SUBBASE COURSE SHALL BE INSTALLED WITHIN 15 DAYS OF PRELIMINARY GRADING.
2. ALL AREAS NOT SCHEDULED FOR PAVING SHALL RECEIVE A TEMPORARY SEEDING IMMEDIATELY FOLLOWING FOLLOWING ROUGH GRADING.
3. APPLY FERTILIZER AT A RATE OF 500 LBS./ACRE OR 11 LBS./1,000 SF. OF 10-20-10 EQUIVALENT. APPLY LIMESTONE AT A RATE OF 2 TONS/ACRES.
4. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF 4 INCHES UNTIL UNIFORM.
5. TEMPORARY SEEDING WILL BE A MIX OF ANNUAL RYEGRASS OR PERENNIAL RYEGRASS AT A RATE OF 100 LBS./ACRE OR 1 LB./1,000 SF.
6. UN-ROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, TO BE APPLIED AT A RATE OF 1-1/2 TO 2 TONS/ACRE (70 TO 90 LBS./1,000 SF.

PERMANENT STABILIZATION

1. ALL AREAS NOT SCHEDULED FOR CONSTRUCTION OR LANDSCAPING TO BE STABILIZED USING SEED MIXTURE NO. 13 CONSISTING OF HARD FESCUE AND/OR CHEWING FESCUE AT A RATE OF 175 LBS/ACRE (4 LBS/1,000 SF), STRONG CREEPING RED FESCUE PERENNIAL RYEGRASS & KENTUCKY BLUEGRASS (BLEND), BOTH AT A RATE OF 45 LBS/ACRE (1LB/1000 SF)
2. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO SPREAD TOPSOIL AT A RATE OF 500 LBS./ACRE OR 11 LBS./1,000 SF OF 10-10-10 EQUIVALENT.
3. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF 4 INCHES UNTIL UNIFORM.
4. REMOVE ALL SURFACE DEBRIS AND STONES 2 INCHES OR LARGER.
5. UN-ROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, TO BE APPLIED AT A RATE OF 1-1/2 TO 2 TONS/ACRE (70 TO 90 LBS/1,000 SF.
6. INSPECT SEEDBED JUST BEFORE SEEDING IF TRAFFIC HAS LEFT THE SOIL COMPACTED. THE AREA MUST BE RE-TILLED AND FIRMED AS ABOVE.
7. A DEPTH OF 5 INCHES OF TOPSOIL (FIRMED IN PLACE) IS REQUIRED FOR ALL SURFACES HAVING LAWN OR LANDSCAPING AS FINAL COVER.

DUST CONTROL NOTES:

THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST

1. MULCHES - SEE STANDARD FOR STABILIZATION WITH MULCHES ONLY (PG. 5-1).
2. 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).
3. SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.
4. TILLAGE - TO 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 IF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, AND SPRING TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
5. SPRINKLING - SITE IS SPRINKLED UNTIL SURFACE IS WET.
6. BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIALS CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.
7. 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 THE 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.

MATERIAL	WATER DILUTION	TYPE OF NOZZEL	APPLY GALLONS/ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SORAY	1200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
POLYACRYLAMIDE (PAM) SPRAY ON/DRY SPRAY	APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. 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

SOIL EROSION AND SEDIMENT CONTROL NOTES

(To be included on the signed erosion control plan sheet)

1. All soil erosion and sediment control practices on this plan will be constructed in accordance with the **"New Jersey Standards for Soil Erosion and Sediment Control"** 7th Edition **last revised July 2017, effective December 2017.** These measures will be installed prior to any major soil disturbance or in their proper sequence and maintained until permanent protection is established.

2. Soil to be exposed or stockpiled for a period of greater than 14 days, and not under active construction, may be required to be temporarily mulched, and seeded or otherwise provided with vegetative cover as per Appendix A3. This temporary cover shall be maintained until such time whereby permanent restabilization is established.

3. *Seeding Dates:* The following seeding dates are recommended to best establish permanent vegetative cover within most locations in the HEPSCD: Spring - 3/1-5/15 and Fall – 8/15 – 10/1

4. Sediment fences are to be properly trenched and maintained until permanent vegetative cover is established

5. All storm drainage inlets shall be protected by one of the practices accepted in the Standards, and protection shall remain until permanent stabilization has been established. Storm drainage outlet points shall be protected as required before they become functional.

6. Mulch materials shall be un-rotted small grain straw applied at the rate of 70 to 90 pounds per 1,000 square feet and anchored with a mulch anchoring tool, liquid mulch binders, or netting tie down. Other suitable materials may be used if approved by the Soil Conservation District.

7. All erosion control devices shall be periodically inspected, maintained and corrected by the contractor. Any damage incurred by erosion shall be rectified immediately.

8. The Hudson-Essex-Passaic Soil Conservation District will be notified in writing at least 48 hours prior to any soil disturbing activities. Fax - (862) 333-4507 OR email – INFORMATION@HEPSCD.ORG

9. **The applicant must obtain a District issued Report-of-Compliance prior to applying for the Certificate of Occupancy or Temporary Certificate of Occupancy from the respective municipality, NJ - DCA or any other controlling agency.** Contact the District at 862-333-4505 to request a Final Inspection, giving advanced notice upon completion of the restabilization measures. A performance deposit may be posted with the District when winter weather or snow cover prohibits the proper application of seed, mulch, fertilizer or hydro-seed.

10. Paved roadways must be kept clean at all times. Do not utilize a fire or garden hose to clean roads unless the runoff is directed to a properly designed and functioning sediment basin. Water pumped out of the excavated areas contains sediments that must be removed prior to discharging to receiving bodies of water using removable pumping stations, sump pits, portable sedimentation tanks and/or silt control bags.

11. All surfaces having lawn or landscaping as final cover are to be provided topsoil prior to re-seeding, sodding or planting. A depth of 5.0 inches, firmed in place, is **required**, as per the Standards for Topsoiling and Land Grading, effective December 2017.

12. All plan revisions must be submitted to the District for proper review and approval.

13. A crushed stone wheel cleaning tracking-pad is to be installed at all site exits using 2 ½ -1" crushed angular stone (ASTM 2 or 3) to a minimum length of 50 feet and minimum depth of 6". All driveways must be provided with crushed stone until paving is complete.

14. Steep slopes incurring disturbance may require additional stabilization measures. These "special" measures shall be designed by the applicant's engineer and be approved by the Soil Conservation District.

15. **The Hudson-Essex-Passaic Soil Conservation District shall be notified, in writing, for the sale of any portion of the project or for the sale of individual lots. New owners' information shall be provided. Additional measures deemed necessary by District officials shall be implemented as conditions warrant.**

http://hepsoilnj.org
HEPSCD251SESCNOTES_7THEDREV2017.DOC

SOIL COMPACTION EXEMPTION NOTE

AS DETERMINED BY THE STATE POLICY MAP, THE PROJECT AREA FALLS WITHIN THE METROPOLITAN PLANNING AREA (PA1). UNDER EXISTING CONDITIONS, THE SITE IS NOT COVERED IN WOODY VEGETATION NOR REGROWTH. IN ACCORDANCE WITH NEW JERSEY STANDARD FOR LAND GRADING (REVISED 2017), NON WOODY VEGETATED PA1 AREAS FALL UNDER THE SOIL COMPACTION EXEMPTION LIST AS A "URBAN REDEVELOPMENT" AND IS DEFINED BY NJDEP AS "PREVIOUSLY DEVELOPED".

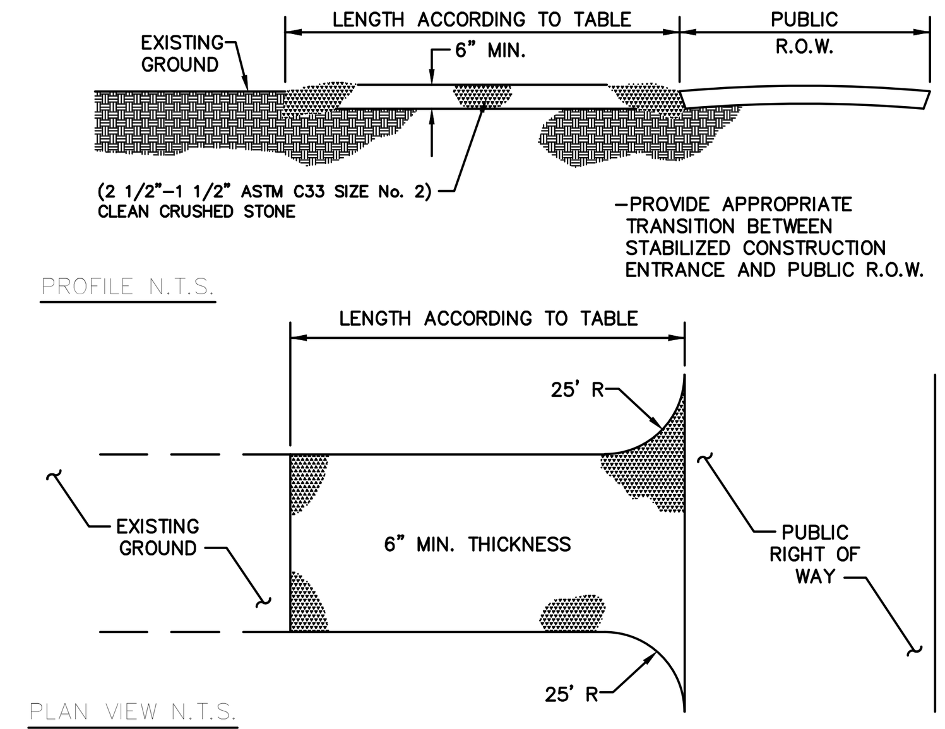
SEQUENCE OF CONSTRUCTION

1. INSTALL TEMPORARY EROSION CONTROL MEASURES (DURATION: APPROX. 2 DAYS)
2. COMPLETE ALL DEMOLITION (DURATION: APPROX. 2 MONTHS)
3. CONSTRUCTION IN ACCORDANCE WITH ARCHITECTURAL AND CIVIL DESIGN PLANS (DURATION: APPROX. 1 YEAR)
4. REMOVE AND REINSTALL FILTER FABRIC AS NEEDED TO ACCOMMODATE CONSTRUCTION SEQUENCING. (DURATION: APPROX. 1 DAY)
5. FINAL GRADING AND STABILIZATION (DURATION: APPROX. 2 DAYS)
6. UPON STABILIZATION OF ALL AREAS, REMOVE ALL SOIL EROSION DEVICES AND CLEAN ENTIRE DRAINAGE SYSTEM. (DURATION: APPROX. 1 DAY)

SOIL EROSION LEGEND

Symbol	Meaning
—— X ——	FILTER FABRIC FENCING (SEE DETAIL)
— · — ·	LIMIT OF DISTURBANCE
—— — —	SOIL BOUNDARY LINE
■	INLET FILTER
(hatched box)	STABILIZED CONSTRUCTION ACCESS (SEE DETAIL)

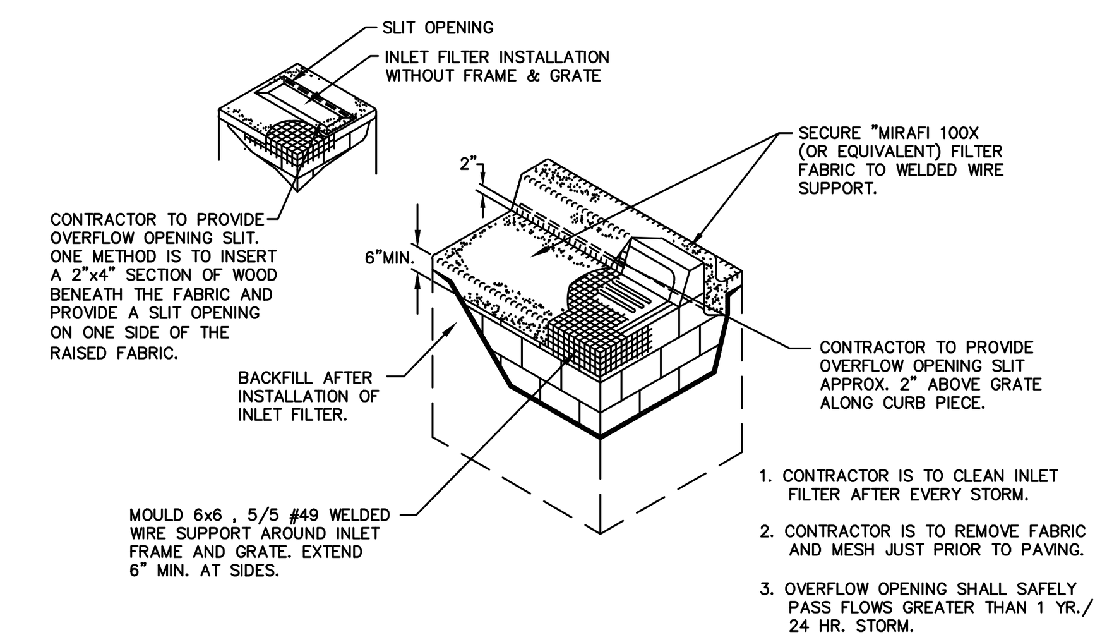
TOTAL AREA OF DISTURBANCE:
34,000 SQ.FT. OR 0.781± AC.



LENGTH OF CONSTRUCTION EXIT TABLE

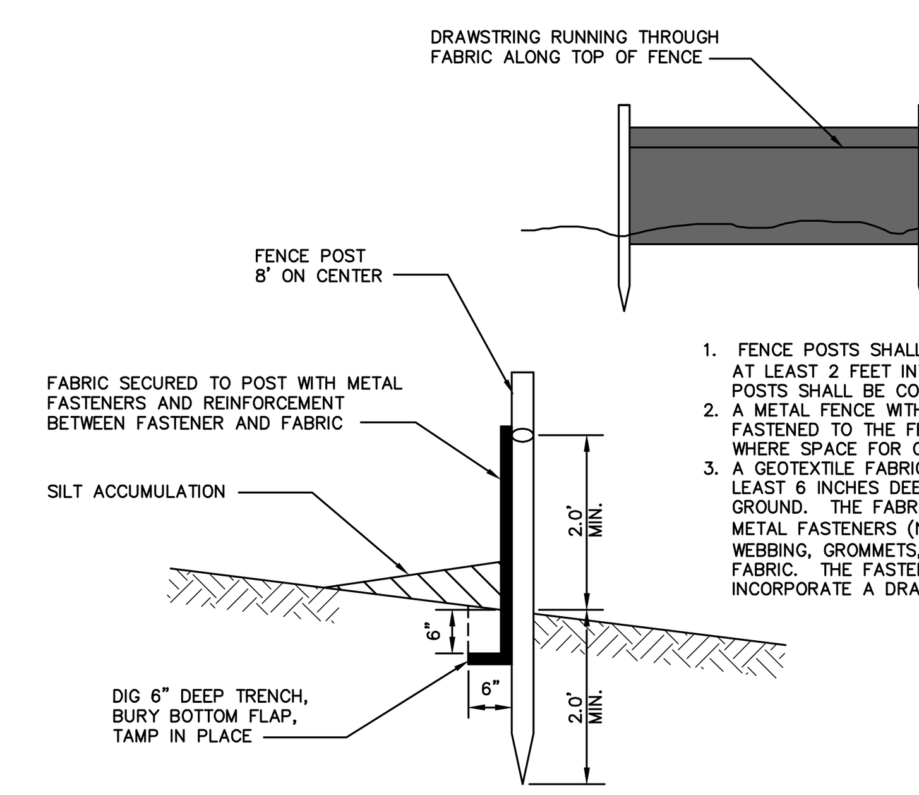
PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COURSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT.	100 FT.
2 TO 5%	100 FT.	200 FT.
> 5%	ENTIRE SURFACE STABILIZED WITH FABC BASE COURSE	

STABILIZED CONSTRUCTION ACCESS DETAIL
SCALE N.T.S.



1. CONTRACTOR IS TO CLEAN INLET FILTER AFTER EVERY STORM.
2. CONTRACTOR IS TO REMOVE FABRIC AND MESH JUST PRIOR TO PAVING.
3. OVERFLOW OPENING SHALL SAFELY PASS FLOWS GREATER THAN 1 YR./ 24 HR. STORM.

INLET FILTER DETAIL
SCALE N.T.S.



1. FENCE POSTS SHALL BE SPACED 8 FEET CENTER-TO-CENTER OR CLOSER. THEY SHALL EXTEND AT LEAST 2 FEET INTO THE GROUND AND EXTEND AT LEAST 2 FEET ABOVE GROUND (FIG. 25-2). POSTS SHALL BE CONSTRUCTED OF HARDWOOD WITH A MINIMUM DIAMETER THICKNESS OF 1.5 INCHES.
2. A METAL FENCE WITH 6 INCH OR SMALLER OPENINGS AND AT LEAST 2 FEET HIGH MAY BE UTILIZED, FASTENED TO THE FENCE POSTS, TO PROVIDE REINFORCEMENT AND SUPPORT TO THE GEOTEXTILE FABRIC WHERE SPACE FOR OTHER PRACTICES IS LIMITED AND HEAVY SEDIMENT LOADING IS EXPECTED.
3. A GEOTEXTILE FABRIC RECOMMENDED FOR SUCH USE BY THE MANUFACTURER, SHALL BE BURIED AT LEAST 6 INCHES DEEP IN THE GROUND. THE FABRIC SHALL EXTEND AT LEAST 2 FEET ABOVE THE GROUND. THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OR STAPLES) AND A HIGH STRENGTH REINFORCEMENT MATERIAL (NYLON WEBBING, GROMMETS, WASHERS ETC.) PLACED BETWEEN THE FASTENER AND THE GEOTEXTILE FABRIC. THE FASTENING SYSTEM SHALL RESIST TEARING AWAY FROM THE POST. THE FABRIC SHALL INCORPORATE A DRAWSTRING IN THE TOP PORTION OF THE FENCE FOR ADDED STRENGTH.

SILT FENCE DETAIL
SCALE N.T.S.

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28155900
155 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL. (973) 227-7004 FAX (973) 227-7074
PETRYENGINEERING.COM

REV	DESCRIPTION	DATE

CHECKED BY: SPD
DRAFTED BY: JAF

PETRY ENGINEERING, LLC

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662
DATE: 10/06/2025

CAUTION: IF THIS DOCUMENT DOES NOT CONTAIN A RAISED IMPRESSION SEAL OR AN ELECTRONIC SEAL OF THE UNDERSIGNED PROFESSIONAL, IT IS NOT AN AUTHORIZED ORIGINAL DOCUMENT.

PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
SESC NOTES AND DETAILS

PROJECT #: 25-250
SHEET: SP-7.2

GENERAL NOTES:

1. ALL SITE IMPROVEMENTS TO BE PERFORMED IN ACCORDANCE WITH NJDOT SPECIFICATIONS (LATEST EDITION) UNLESS OTHER WISE NOTED.

2. THESE PLANS REPRESENT THE OVERALL SITE WORK IMPROVEMENTS REQUIRED FOR THE PROJECT CONSTRUCTION. THE CONTRACTOR SHALL FURNISH, INSTALL, TEST, AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION. AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITE WORK CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS, AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS NECESSARY FOR CONSTRUCTION IN ACCORDANCE WITH EXISTING LOCAL, COUNTY OR STATE REGULATIONS, OR ANY OTHER AGENCIES HAVING JURISDICTION IN THESE MATTERS.

4. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE THE LOCATION OF THE UTILITIES WITH THE UTILITY DEPARTMENTS PRIOR TO CONSTRUCTION.

5. THE DRAWINGS SHOW THE EXISTING CONDITIONS WHICH ARE LIKELY TO AFFECT THE PROSECUTION OF THE WORK INSOFAR AS THEY HAVE BEEN DETERMINED. THESE DRAWINGS SHOULD NOT BE USED FOR SCALING OF DIMENSIONS OR FOR DETERMINING RIGHT-OF-WAY AND PROPERTY LIMITS.

6. THE LOCATION OF EXISTING SUBSTRUCTURES AND UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS OF SURFACE EVIDENCE AND CERTAIN INFORMATION CONTAINED IN THE PUBLIC RECORD AND RECORD DATA PROVIDED BY THE OWNER. THIS PLAN IN NO WAY REPRESENTS A GUARANTEE, EXPRESS OR IMPLIED, TO THE ACCURACY OF THESE PLOTTED LOCATIONS. ADDITIONALLY, THESE PLANS MAKE NO GUARANTEE THAT UTILITIES AND OTHER SUBSURFACE STRUCTURES ARE THE ONLY SUBSURFACE STRUCTURES.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER BRACING OF EXISTING UTILITIES AS MAY BE REQUIRED TO PREVENT DAMAGE DUE TO CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL ARRANGE FOR PROPER BRACING OF ALL EXISTING UTILITIES, UTILITY POLES, AND OTHER STRUCTURES WITHIN THE VICINITY OF THE WORK WHICH MAY BE AFFECTED BY HIS OPERATIONS. ALL COST ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE VARIOUS UNIT PRICES BID FOR THE CONTRACT WORK.

8. THE COORDINATION OF THE LOCATION OR RELOCATION, WHERE REQUIRED, OF TELEPHONE, ELECTRIC, GAS, WATER,AND ETC. IS THE RESPONSIBILITY OF THE CONTRACTOR, AND THE SAME SHALL BE COORDINATED TO ENSURE COMPLETION WITHIN THE TIME PERMITTED.

9. THE CONTRACTOR SHOULD NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON AND OR IF SUCH CONDITIONS IN THE CONTRACTOR'S OPINION WOULD OR COULD RENDER THE DESIGNS SHOWN HEREON INAPPROPRIATE OR INEFFECTIVE.

10. EXCESS EXCAVATED MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR SHALL MAKE ARRANGEMENTS TO DISPOSE OF THE MATERIAL AT A SUITABLE LOCATION. DISPOSAL OF ALL MATERIAL, GRADING AND RESTORING THE DISPOSAL SITES, AND OBTAINING ANY PERMITS SHALL BE PERFORMED AT THE SOLE COST OF THE CONTRACTOR.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXCAVATING IN ADVANCE OF PIPEWORK TO DETERMINE THE EXACT LOCATION, SIZE, TYPE, AND DEPTH OF EXISTING UTILITY NOTED ON THE DRAWINGS PRIOR TO CONSTRUCTION. EXCEPT FOR THE EXCAVATION OF TEST PITS AS NOTED ON THE DRAWINGS OR WHEN DIRECTED BY THE ENGINEER, NO ADDITIONAL PAYMENT SHALL BE MADE FOR THIS WORK BUT SHALL BE INCLUDED IN THE VARIOUS UNIT PRICES BID FOR THE CONTRACT WORK.

12. THE CONTRACTOR SHALL SUPPLY AND ERECT NECESSARY WARNING SIGNS AND PROPER TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" PUBLISHED BY THE U.S. DEPARTMENT OF TRANSPORTATION, AND IN COMPLIANCE WITH THE REQUIREMENTS OF THE (TOWNSHIP) POLICE DEPARTMENT. THE CONTRACTOR SHALL FURNISH FLAGMEN AS MAY BE REQUIRED TO MAINTAIN TRAFFIC. THE CONTRACTOR SHALL CONTACT THE POLICE DEPARTMENT PRIOR TO STARTING ANY WORK AND NOTIFY THEM OF HIS PROPOSED OPERATIONS.

13. THE CONTRACTOR SHALL BACKFILL AND PAVE ANY OPEN TRENCH AT THE END OF EACH DAY AND SHALL TAKE ANY NECESSARY PRECAUTION TO PROVIDE A SAFE AND ACCESSIBLE WORK AREA FOR VEHICULAR AND PEDESTRIAN TRAFFIC.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING VEHICLE ACCESS TO ALL DRIVEWAYS, BUILDING ENTRANCES, AND SIDE STREETS ALONG THE CONSTRUCTION ROUTE TO THE MAXIMUM EXTENT PRACTICABLE.

15. ACCESSIBLE ROUTES, PARKING SPACES, RAMPS, SIDEWALKS, AND WALKWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH FEDERAL AMERICANS WITH DISABILITIES ACT AND WITH STATE AND LOCAL LAWS AND REGULATIONS (WHICHEVER IS MORE STRINGENT.)

16. THE CONTRACTOR SHALL BRACE AND SUPPORT ALL EXISTING CURB IN THE IMMEDIATE VICINITY OF THE CONSTRUCTION WORK. PLANKS SHALL BE PLACED OVER CURBS TO PREVENT DAMAGE BY THE CONTRACTOR'S EQUIPMENT. ANY CURB WHICH IS DAMAGED, DISTURBED, OR REMOVED IN AREAS OTHER THAN WHERE THE PIPELINE CROSSES EXISTING CURBING, AS SHOWN ON THE DRAWINGS, SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE. CURB SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS ON THE DRAWINGS.

17. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STATE OF NJ WORKERS HEALTH AND SAFETY ACT (N.J.A.C. 12:110 ET. SEQ.) AS AMENDED AND THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) (29 CFR 1910), AS AMENDED WITH REGARD TO WORKER AND JOB SITE SAFETY.

18. THE CONTRACTOR SHALL CONTRACT WITH THE (TOWNSHIP OF VERONA) TO PROVIDE UNIFORMED POLICE FLAGMEN AS NECESSARY FOR WORK CONDUCTED WITHIN ROADWAYS.

19. SELECT FILL SHALL BE EITHER CLASS I OR II SOIL.

UTILITY NOTES:

1. EXCESS EXCAVATED MATERIAL WILL BE DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR WILL MAKE ARRANGEMENTS TO DISPOSE OF THE MATERIAL AT A SUITABLE LOCATION. DISPOSAL OF ALL MATERIAL, GRADING AND RESTORING THE DISPOSAL SITES, AND OBTAINING ANY PERMIT WILL BE PERFORMED AT THE SOLE COST OF THE CONTRACTOR.

2. THE MAXIMUM ALLOWABLE JOINT DEFLECTION FOR DUCTILE IRON PIPE SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURER'S RECOMMENDATIONS AND AWWA STANDARDS.

3. PROVIDE A MINIMUM VERTICAL CLEARANCE OF 18 INCHES AND A HORIZONTAL CLEARANCE OF 10 FEET BETWEEN WATER LINES AND UTILITIES OR OBSTRUCTIONS, UNLESS OTHERWISE SHOWN.

4. ALL FITTINGS ARE TO BE MECHANICAL JOINT WITH RETAINER GLANDS. HOWEVER, SOME FITTINGS SHALL REQUIRE THE INSTALLATION OF THRUST BLOCKS AS SHOWN IN THE DRAWINGS. PROVIDE CONCRETE THRUST BLOCKS IN ACCORDANCE WITH DETAILS OR AS NOTED THE DRAWINGS, OR AS REQUIRED BY SPECIFIC SOIL CONDITIONS ENCOUNTERED. TYPICAL THRUST BLOCK REACTION DETAILS SHOWN ON THE DRAWINGS ARE MINIMUM REQUIREMENTS. WHERE GALVANIZED RODS ARE TO BE USED FOR ANCHORINGS FITTINGS OR VALVES, THE COST OF SUCH MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR DUCTILE IRON FITTINGS AND GATE VALVES.

5. NOTIFY THE ENGINEER, WATER, AND FIRE DEPARTMENTS 48 HOURS PRIOR TO MAKING CONNECTIONS TO EXISTING WATER MAINS.

6. THE CONTRACTOR SHALL INSTALL TEMPORARY AIR RELEASE TAPS, AND SAMPLING TAPS WITH COPPER SAMPLING PIPE FOR TESTING AND DISINFECTION AS NEEDED OR AS REQUIRED BY THE ENGINEER. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE THE SAMPLING PIPE AND CLOSE OFF THE TAP AT THE MAIN AFTER COMPLETION OF ALL TESTING AND WHEN APPROVED BY THE ENGINEER. THE FURNISHING, INSTALLATION, AND REMOVAL OF TAPS AND PIPE SHALL BE INCLUDED IN UNIT PRICE BID FOR TESTING AND DISINFECTION.

7. THE GENERAL LOCATION OF FIRE HYDRANTS AND CURB BOXES ARE SHOWN ON THE DRAWINGS. HYDRANTS AND CURB BOXES SHALL BE LOCATED IN THE FIELD BY THE WATER DEPARTMENT PRIOR TO CONSTRUCTING THE WATER MAIN, DUE TO FUTURE ROAD RECONSTRUCTION WHICH SHALL RESULT IN THE RELOCATION OF EXISTING CURB AND CHANGES IN THE GRADE. THE WATER DEPARTMENT SHALL PROVIDE THE FINISHED GRADE ELEVATION FOR SETTING THE HYDRANT AND VALVE BOX.

8. ANY EXISTING FIRE HYDRANTS TO BE REMOVED SHALL BE DELIVERED TO THE WATER DEPARTMENT YARD.

9. THE APPROXIMATE LOCATION OF WATER SERVICE CONNECTIONS IS SHOWN IN THE DRAWINGS; THE EXACT LOCATION SHALL BE DETERMINED IN THE FIELD BY OWNER.

10. CONSTRUCTION AND TRANSFER OF SERVICES SHALL ONLY BE PERFORMED AFTER THE MAIN HAS BEEN TESTED AND DISINFECTED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. THIS INCLUDES THE INSTALLATION OF SERVICE CORPORATIONS.

11. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL AND/OR MEP DRAWINGS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES, INCLUDING BUT NOT LIMITED TO DOMESTIC WATER SERVICE, FIRE WATER SERVICE, GAS, SANITARY, ELECTRIC, AND ETC.

12. THE MINIMUM EARTH COVER OVER ALL NEW WATER MAINS SHALL BE 4 FEET UNLESS OTHERWISE INDICATED ON DRAWINGS. THE PIPE SHALL BE DUCTILE IRON, CEMENT LINED WITH RESTRAINED PUSH-ON JOINTS UNLESS OTHERWISE INDICATED. PIPE CLASSIFICATION FOR THE WATER MAINS SHALL BE CLASS 52. ALL FITTINGS SHALL BE DUCTILE IRON CEMENTS-LINED WITH MECHANICAL JOINTS, WITH RETAINER GLANDS CLASS 350 UNLESS OTHERWISE INDICATED ON DRAWINGS OR REQUIRED BY THE ENGINEER. ALL PIPE AND FITTINGS SHALL BE POLYETHYLENE ENCLOSED.

13. THE MINIMUM EARTH COVER OVER ALL OTHER UTILITIES IS TO BE 2' FEET UNLESS OTHERWISE INDICATED ON DRAWINGS.

14. WHERE EXISTING MAINS ARE TO BE ABANDONED IN PLACE, ALL OPENINGS FROM CUT PORTIONS SHALL BE COMPLETELY SEALED WITH NON-SHRINK QUICK-SETTING CEMENT, AS APPROVED BY THE ENGINEER. DO NOT BACKFILL UNTIL THE CEMENT IS CURED.

15. INSTALLATION OF NEW COPPER SERVICES SHALL BE PERFORMED BY OPEN TRENCH EXCAVATION IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS. THE EMPLOYMENT OF ALTERNATIVE METHODS SHALL NOT BE PERMITTED.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROPER BRACING OF EXISTING UTILITIES AS MAY BE REQUIRED TO PREVENT DAMAGE DUE TO CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL ARRANGE FOR PROPER BRACING OF ALL EXISTING UTILITIES, UTILITY POLES, AND OTHER STRUCTURES WITHIN THE VICINITY OF THE WORK WHICH MAY BE AFFECTED BY THEIR OPERATIONS. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE VARIOUS UNIT PRICES BID FOR THE CONTRACT WORK.

17. WORK PERFORMED ON COUNTY ROADS SHALL BE LIMITED TO THE HOURS OF 9:00 A.M. TO 4:00 P.M. UNLESS OTHERWISE PERMITTED BY THE COUNTY.

18. ALL UTILITIES TO BE ABANDONED SHALL BE ABANDONED IN THE STREET ACCORDING TO ALL APPLICABLE CODES.

DEMO NOTES:

1. DISCONNECTION OF EXISTING UTILITY SERVICES SHALL BE COORDINATED WITH THE OWNER AND IN ACCORDANCE WITH THE REGULATIONS OF THE UTILITY AUTHORITY CONCERNED. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH WRITTEN CONFIRMATION FROM UTILITY COMPANIES THAT ALL SERVICE TO THE SITE HAS BEEN TERMINATED PRIOR TO CAPPING, ABANDONMENT, OR REMOVAL OF ANY SUCH UTILITIES.

2. EXISTING BUILDINGS, STRUCTURES, CURBS, UTILITIES, SIGNS, LANDSCAPING, AND ANY OTHER IMPROVEMENTS NOT DESIGNATED FOR DEMOLITION SHALL BE PROTECTED FROM DAMAGE. SHOULD DAMAGES OCCUR, THE OWNER SHALL BE NOTIFIED IMMEDIATELY, AND REPAIRS SHALL BE MADE TO MATCH EXISTING CONDITIONS AT THE CONTRACTOR'S EXPENSE.

3. ALL CONCRETE, CMU, PAVER, AND BRICK MATERIAL DESIGNATED FOR DEMOLITION SHALL BE COMPLETELY REMOVED FROM THE SITE. INCLUDING, BUT NOT LIMITED TO, SLABS, FLOORS, BARRIERS, CURBS, AND SIDEWALKS.

4. WALLS, BEAMS, COLUMNS, FLOOR, SLABS, PAVEMENTS, RAMPS, FOOTINGS, AND ALL OTHER BUILDING COMPONENTS OR APPURTENANCES DESIGNATED FOR REMOVAL SHALL BE COMPLETELY REMOVED FROM THE SITE. THE RESULTING DEPRESSIONS SHALL BE FILLED AND COMPACTED AS DIRECTED, USING ONLY SUITABLE MATERIAL FROM ON-SITE MATERIAL OR APPROVED MATERIAL FROM OFF-SITE. NO DEBRIS FROM DEMOLITION OR OTHER UNSUITABLE MATERIAL SHALL BE USED. IN SPECIAL CASES, DEEP-SEATED CONCRETE OR MASONRY STRUCTURES WHICH SHALL NOT INTERFERE WITH SUBSEQUENT CONSTRUCTION MAY REMAIN IN PLACE IF SO APPROVED BY THE OWNER'S ENGINEER.

5. FOLLOWING THE DEMOLITION AND REMOVAL OF ALL IMPROVEMENTS SO DESIGNATED, THE DISTURBED AREA SHALL BE GRADED, AS DIRECTED BY THE OWNER'S ENGINEER, SO THAT THE RESULTING LANDFORM SHALL NOT ALLOW FOR PONDING OR THE FORMATION OF GULLIES RESULTING FROM STORMWATER RUN-OFF.

6. CONTRACTOR SHALL SECURE ALL PERMITS REQUIRED FOR WORK. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL MATERIAL.

7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REMOVAL OF ANY EXISTING SITE LIGHTING WITH THE APPROPRIATE UTILITY COMPANY. LIGHT POLES SHALL BE REMOVED AND DISPOSED OF AS REQUIRED.

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28135500
155 PASSAIC AVENUE • FAIRFIELD, NEW JERSEY • 07004
TEL: (973) 227-7004 / FAX (973) 227-7674
PETRYENGINEERING.COM

REV	DESCRIPTION	DATE

CHECKED BY: SPD

DRAFTED BY: JAF

PETRY ENGINEERING, LLC

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662
DATE: 10/06/2025

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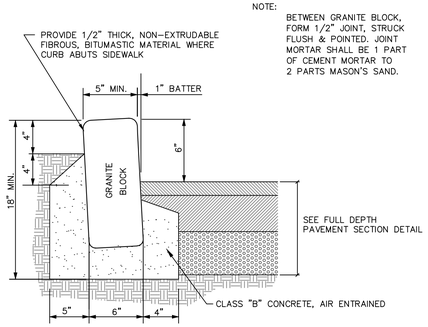
PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:

GENERAL NOTES

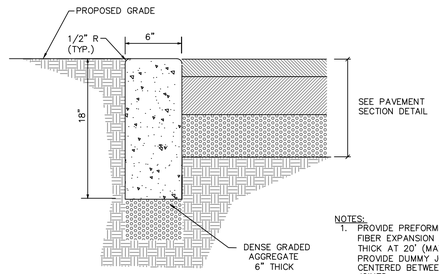
PROJECT #: 25-250

SHEET: SP-8.1



GRANITE BLOCK AND FULL DEPTH PAVEMENT

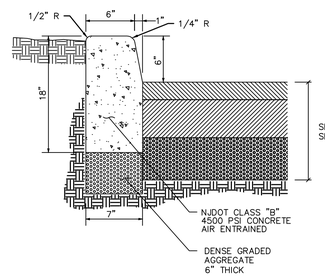
SCALE – N.T.S.



NOTES:
1. PROVIDE PREFORMED BITUMINOUS FIBER EXPANSION JOINTS , 1/2" THICK AT 20' (MAX.) INTERVALS. PROVIDE DUMMY JOINTS (FORMED) CENTERED BETWEEN EXPANSION JOINTS.

FLUSH CONCRETE CURB

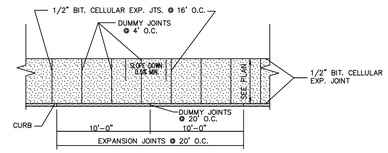
SCALE – N.T.S.



NOTES:
1. PROVIDE PREFORMED BITUMINOUS FIBER EXPANSION JOINTS , 1/2" THICK AT 20' (MAX.) INTERVALS. PROVIDE DUMMY JOINTS (FORMED) CENTERED BETWEEN EXPANSION JOINTS.

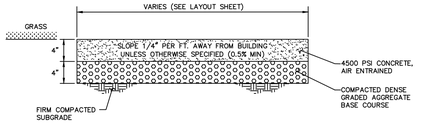
CONCRETE CURB DETAIL – ESSEX COUNTY R.O.W.

SCALE – N.T.S.



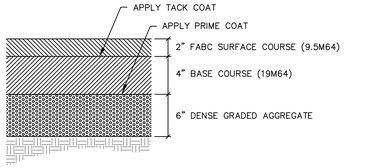
CONCRETE SIDEWALK PLAN

SCALE – N.T.S.



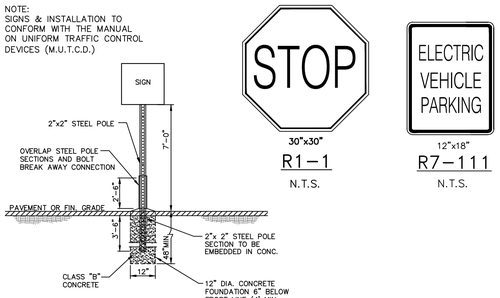
CONCRETE SIDEWALK SECTION

SCALE – N.T.S.



STANDARD – FULL DEPTH PAVEMENT DETAIL

SCALE – N.T.S.



STANDARD SIGN

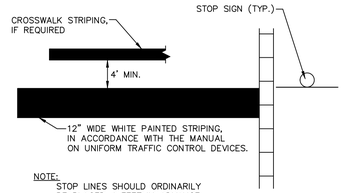
SCALE – N.T.S.

R1–1

N.T.S.

R7–111

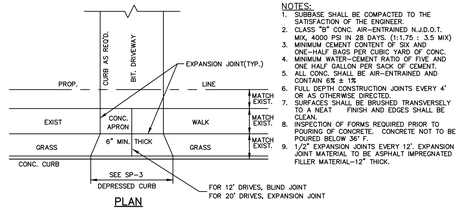
N.T.S.



NOTE:
STOP LINES SHOULD ORDINARILY BE PLACED 4 FEET IN ADVANCE OF AND PARALLEL TO THE NEAREST CROSSWALK LINE. IN THE ABSENCE OF A MARKED CROSSWALK, THE "STOP" LINE SHOULD BE PLACED AT THE DESIRED STOPPING POINT, IN NO CASE MORE THAN 300 FEET OR LESS THAN 4 FEET FROM THE NEAREST EDGE OF THE INTERSECTING ROADWAY

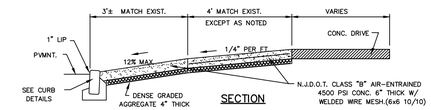
"STOP BAR" DETAIL

SCALE N.T.S.



PLAN

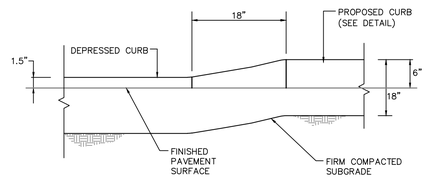
NOTES:
1. SUBBASE SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER.
2. CLASS "B" CONC. AIR-ENTRAINED N.J.D.O.T. MIX, 4000 PSI IN 28 DAYS. (1:1.75 : 3.5 MIX)
3. MINIMUM CEMENT CONTENT OF SIX AND ONE-HALF BAGS PER CUBIC YARD OF CONC.
4. MINIMUM WATER-CEMENT RATIO OF FIVE AND ONE HALF GALLON PER SACK OF CEMENT.
5. ALL CONC. SHALL BE AIR-ENTRAINED AND CONTAIN 6% ± 1%
6. FULL DEPTH CONSTRUCTION JOINTS EVERY 4' OR AS OTHERWISE DIRECTED.
7. SURFACES SHALL BE BRUSHED TRANSVERSELY TO A NEAT FINISH AND EDGES SHALL BE CLEAN.
8. INSPECTION OF FORMS REQUIRED PRIOR TO POURING OF CONCRETE. CONCRETE NOT TO BE POURED BELOW 36° F.
9. 1/2" EXPANSION JOINTS EVERY 12'. EXPANSION JOINT MATERIAL TO BE ASPHALT IMPREGNATED FILLER MATERIAL–12" THICK.



SECTION

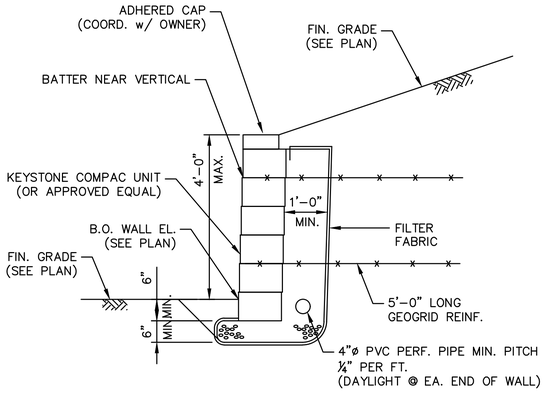
CONCRETE APRON

SCALE – N.T.S.



DEPRESSED CURB DETAIL

SCALE – N.T.S.



4' MAX. MODULAR BLOCK RETAINING WALL

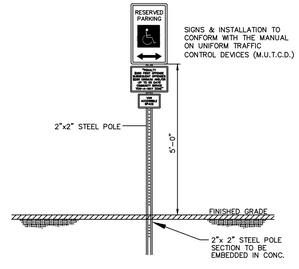
SCALE – N.T.S.

R7–8

N.T.S.

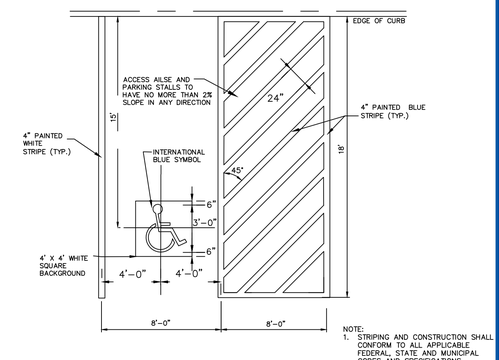
"PENALTY
$250 FIRST OFFENSE
SUBSEQUENT OFFENSES
$250 MINIMUM AND/OR
UP TO 90 DAYS
COMMUNITY SERVICE
TOW-A-WAY ZONE"

VAN ACCESSIBLE



HANDICAP PARKING SIGN DETAIL

SCALE – N.T.S.



NOTE:
1. STRIPING AND CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL CODES AND SPECIFICATIONS.
2. ALL PAVEMENT MARKINGS AND STRIPING SHALL BE LONG LIFE THERMOPLASTIC.

HANDICAP PARKING DIMENSIONS

SCALE – N.T.S.

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28135500
155 PASSAIC AVENUE • FAIRFIELD, NEW JERSEY • 07004
TEL: (973) 227-7004 • FAX: (973) 227-7041
PETRYENGINEERING.COM

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DRAFTED BY: JAF

PETRY ENGINEERING, LLC

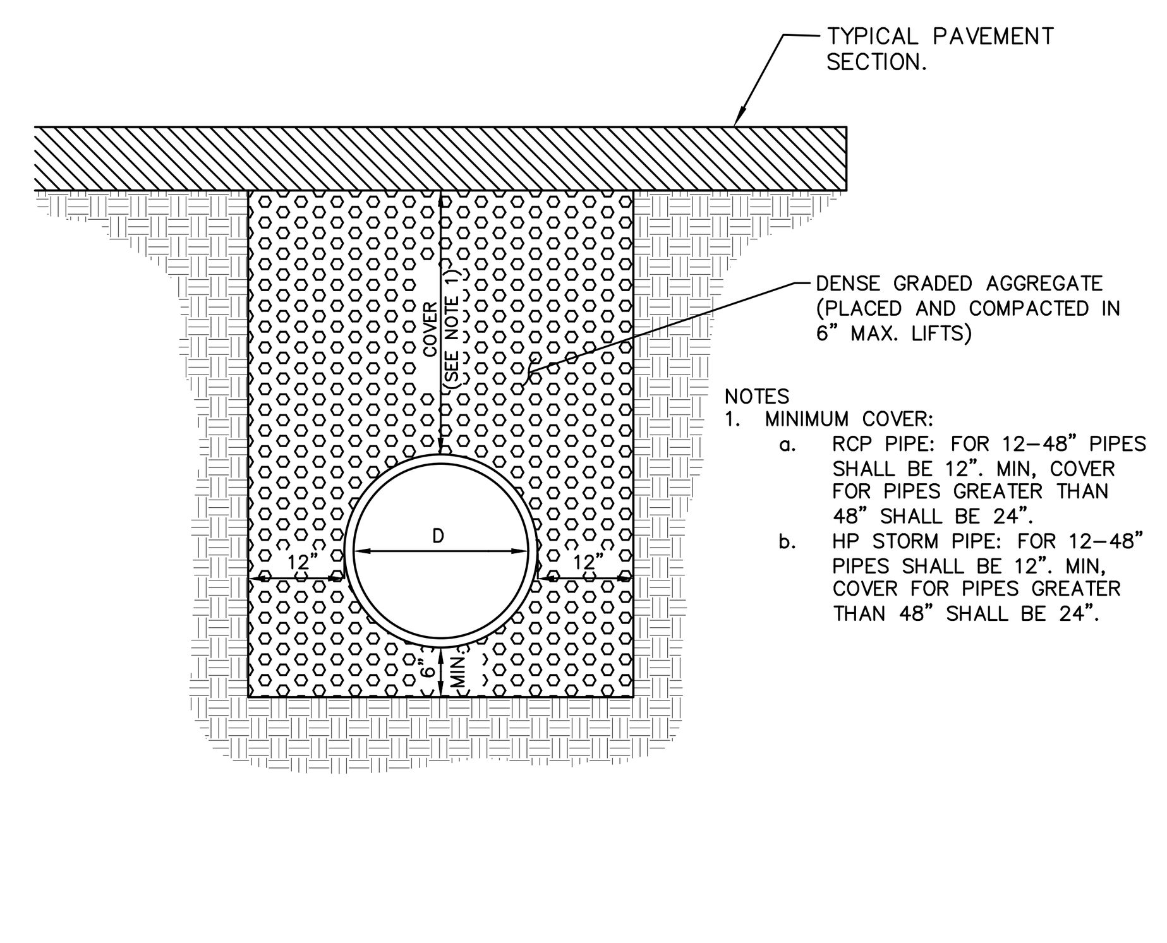
J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662
DATE: 10/06/2025

PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
CONSTRUCTION DETAILS

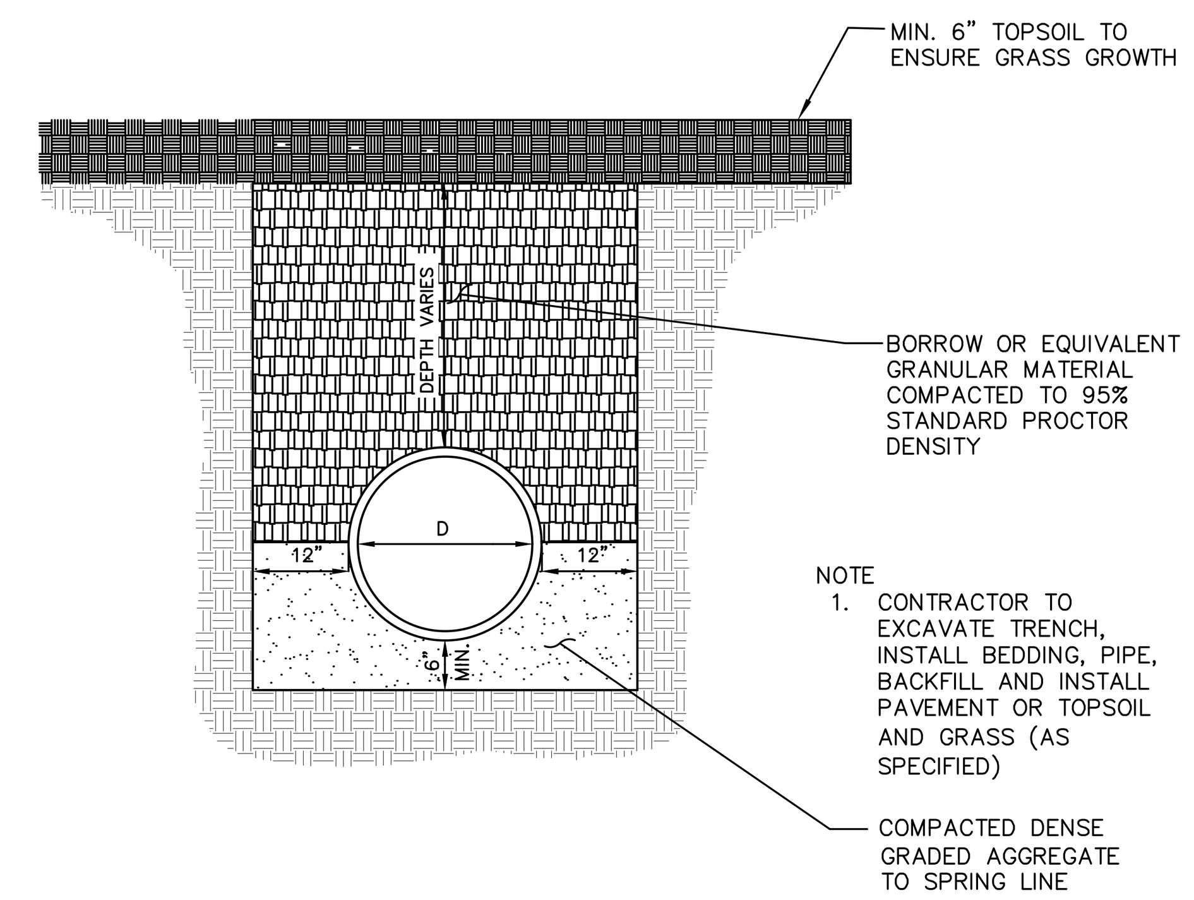
PROJECT #: 25-250

SHEET: SP-8.2



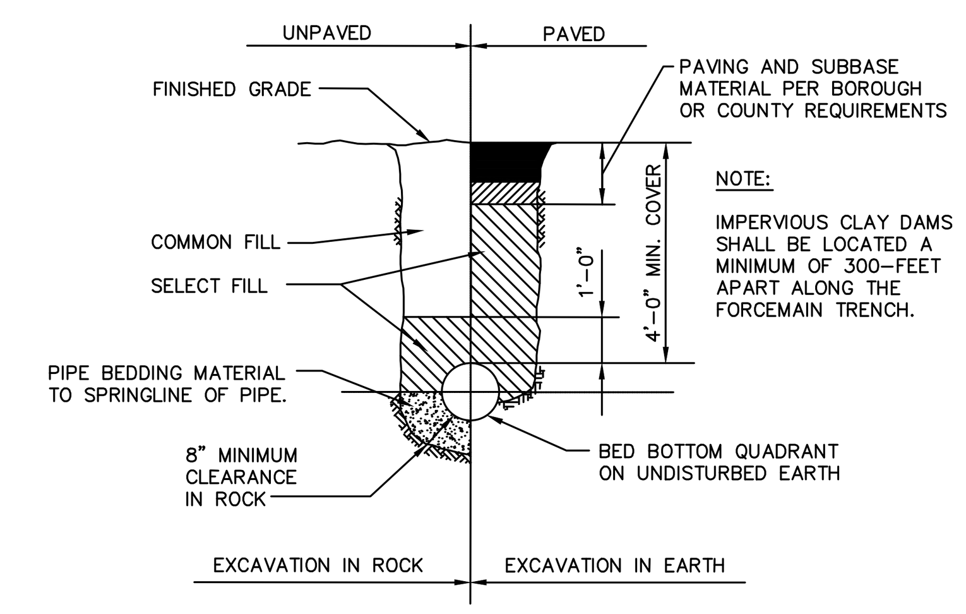
STORM SEWER TRENCH DETAIL(PAVED AREAS)

SCALE – N.T.S.



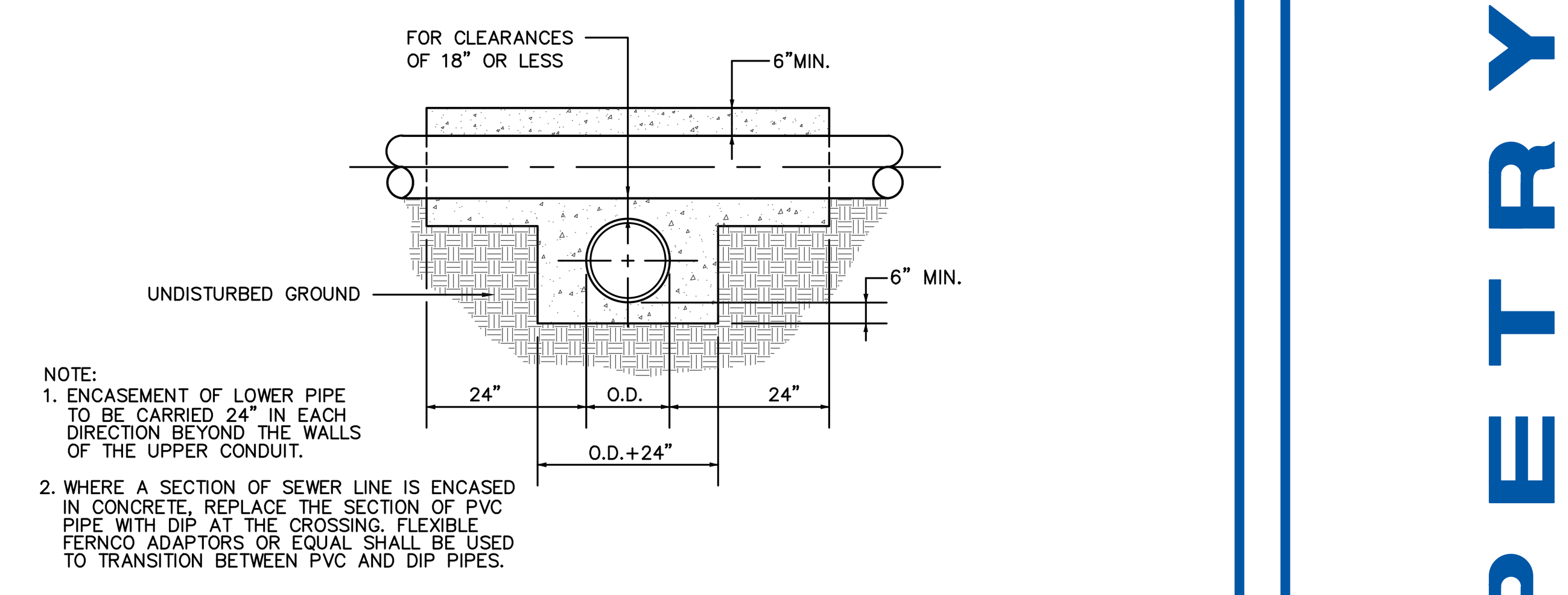
STORM SEWER TRENCH DETAIL(NON–PAVED AREAS)

SCALE – N.T.S.



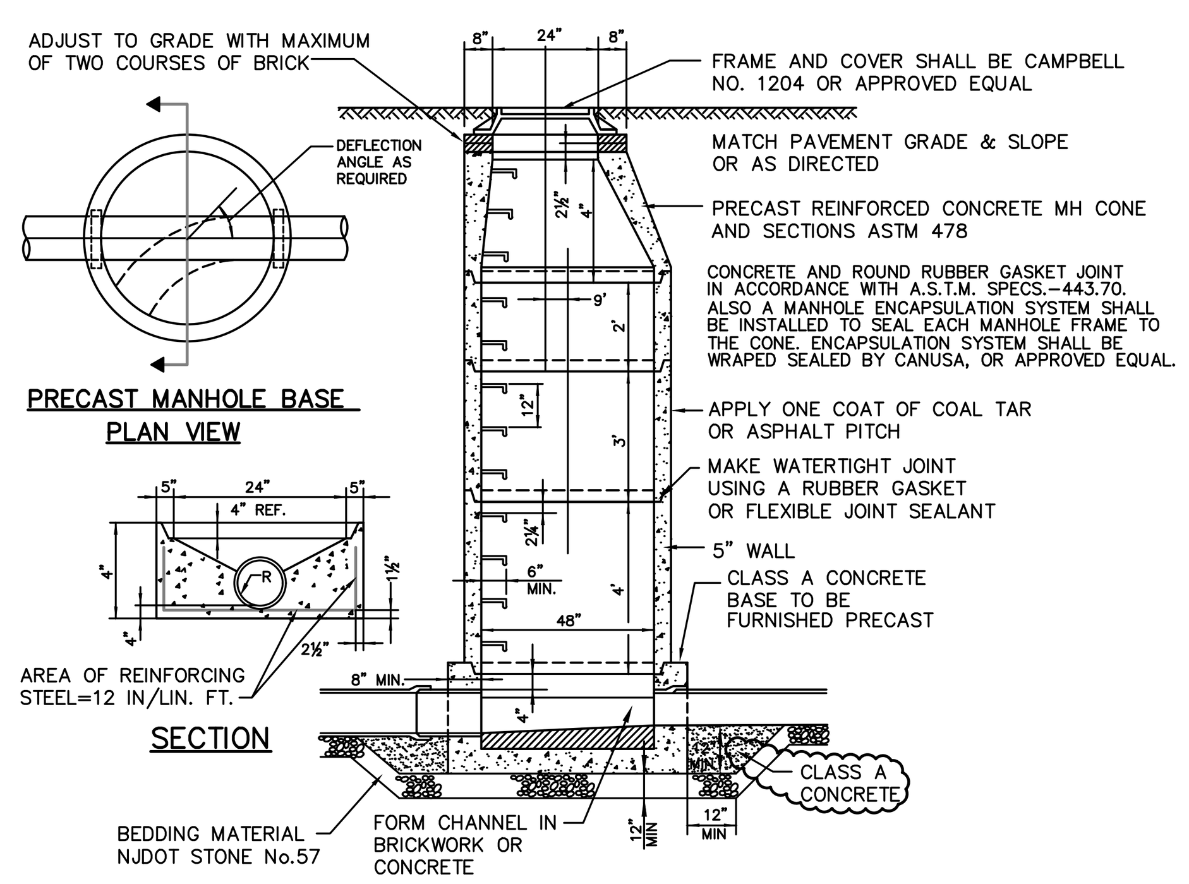
TYPICAL TRENCH DETAIL FOR UTILITIES

SCALE – N.T.S.



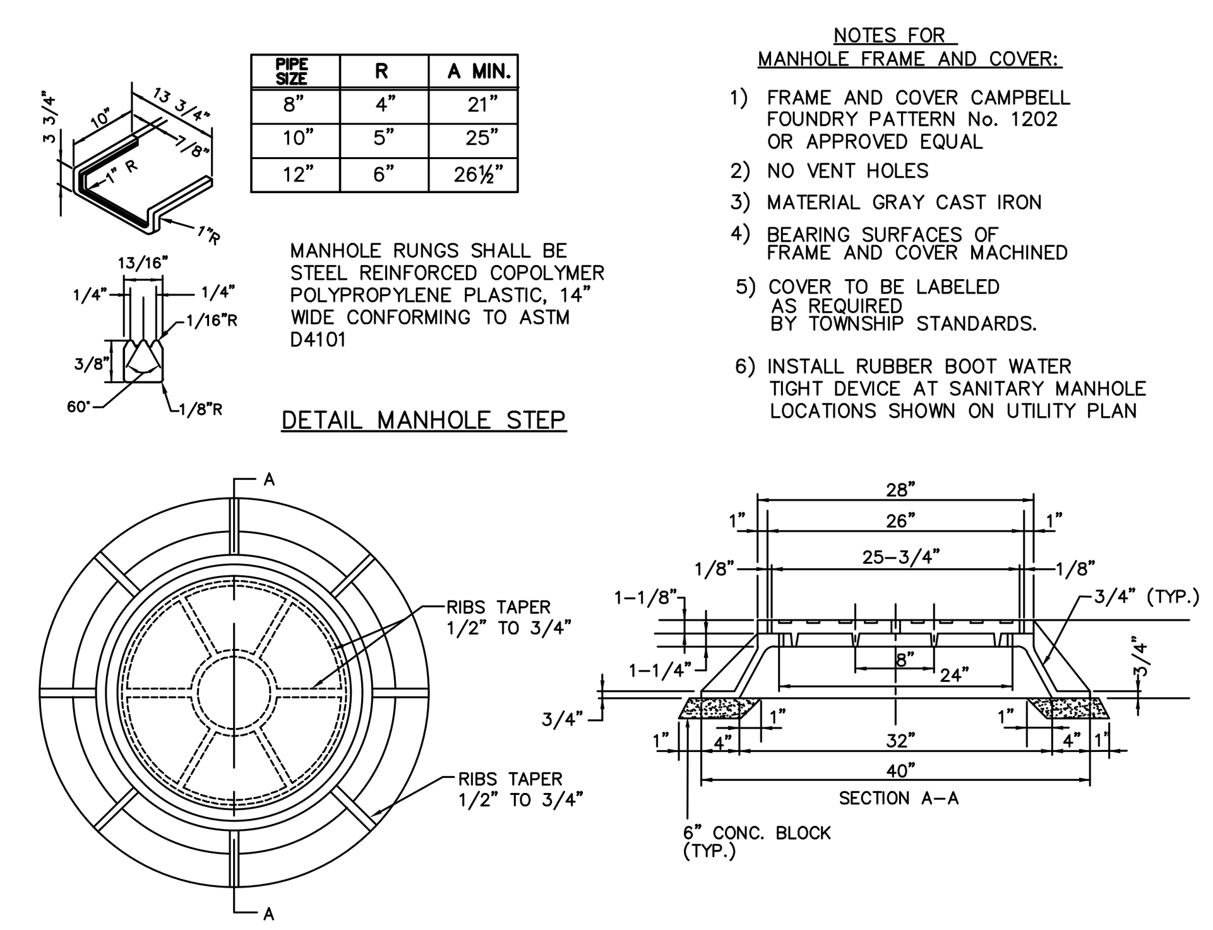
UTILITY CROSSING

SCALE – N.T.S.



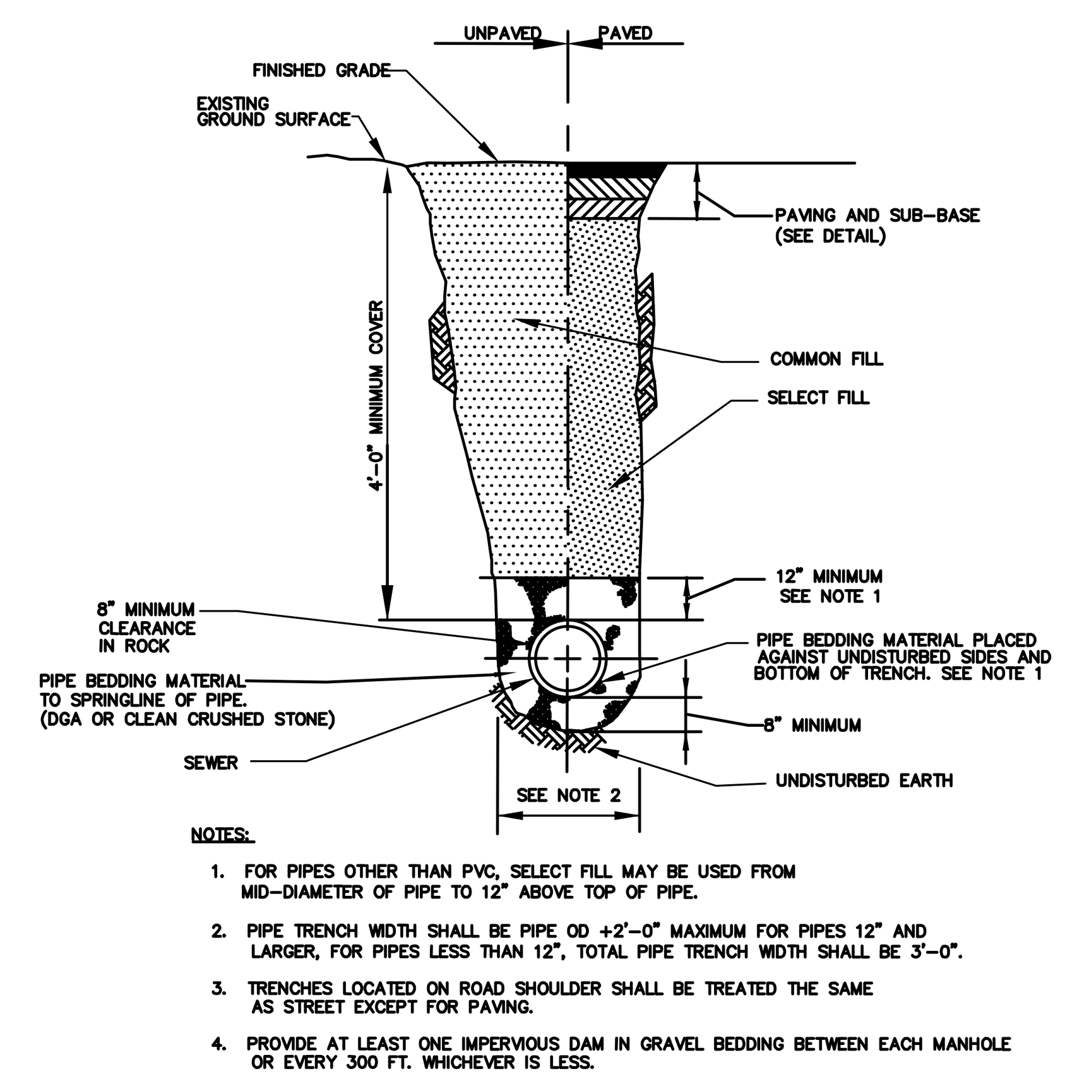
48" PRECAST CONCRETE MANHOLE

SCALE – N.T.S.



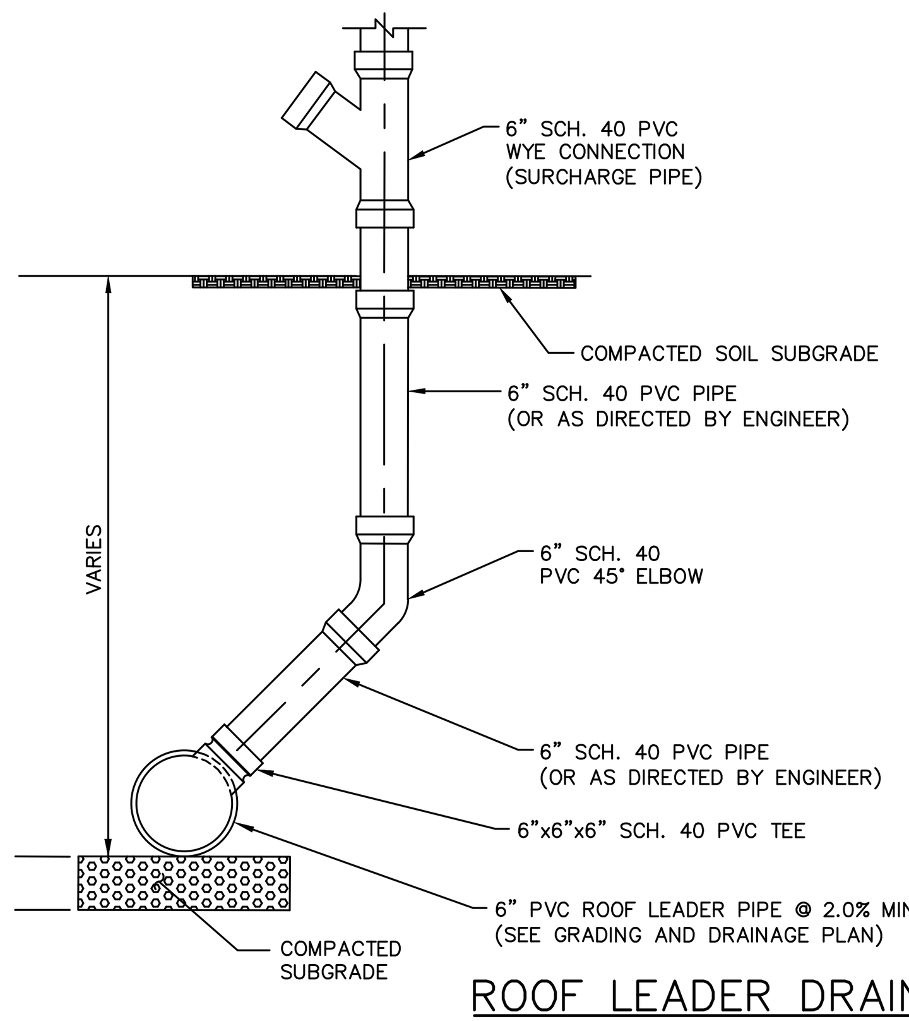
STANDARD MANHOLE FRAME & COVER DETAIL

SCALE – N.T.S.



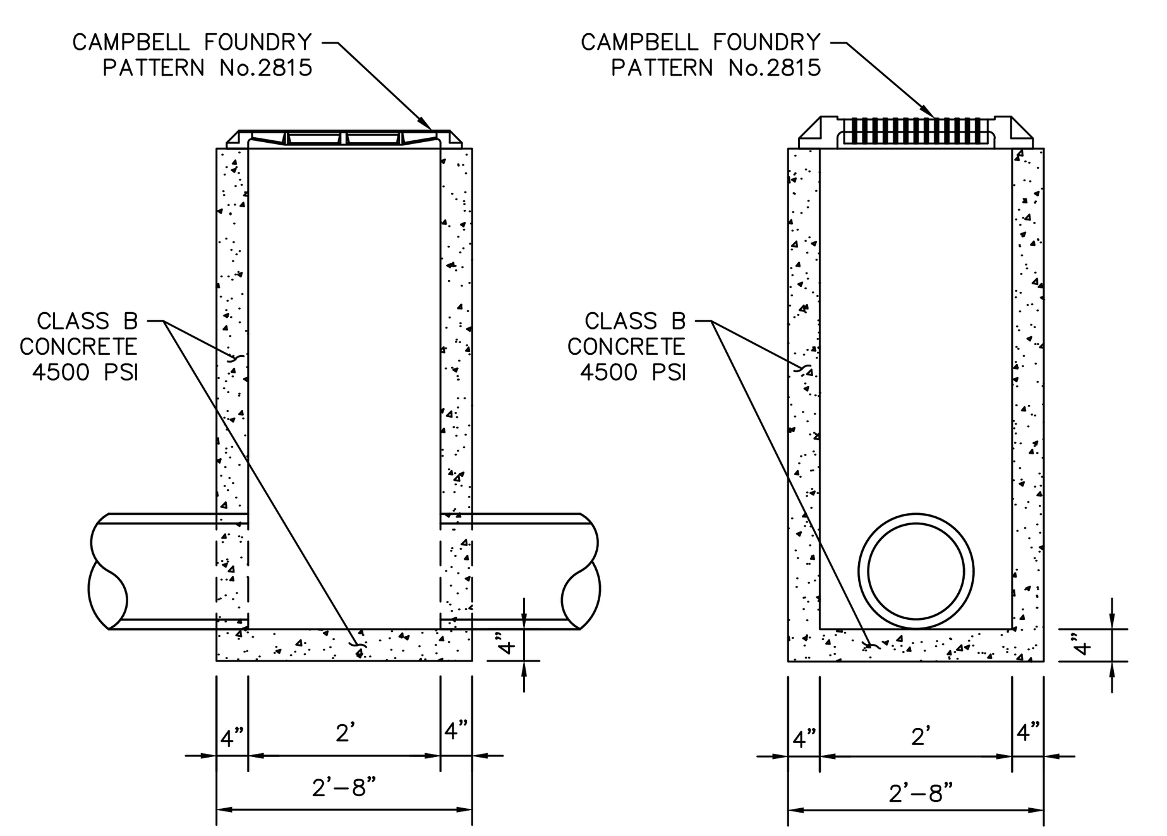
TYPICAL TRENCH DETAIL FOR PVC SDR–35 SEWER PIPE

SCALE N.T.S.



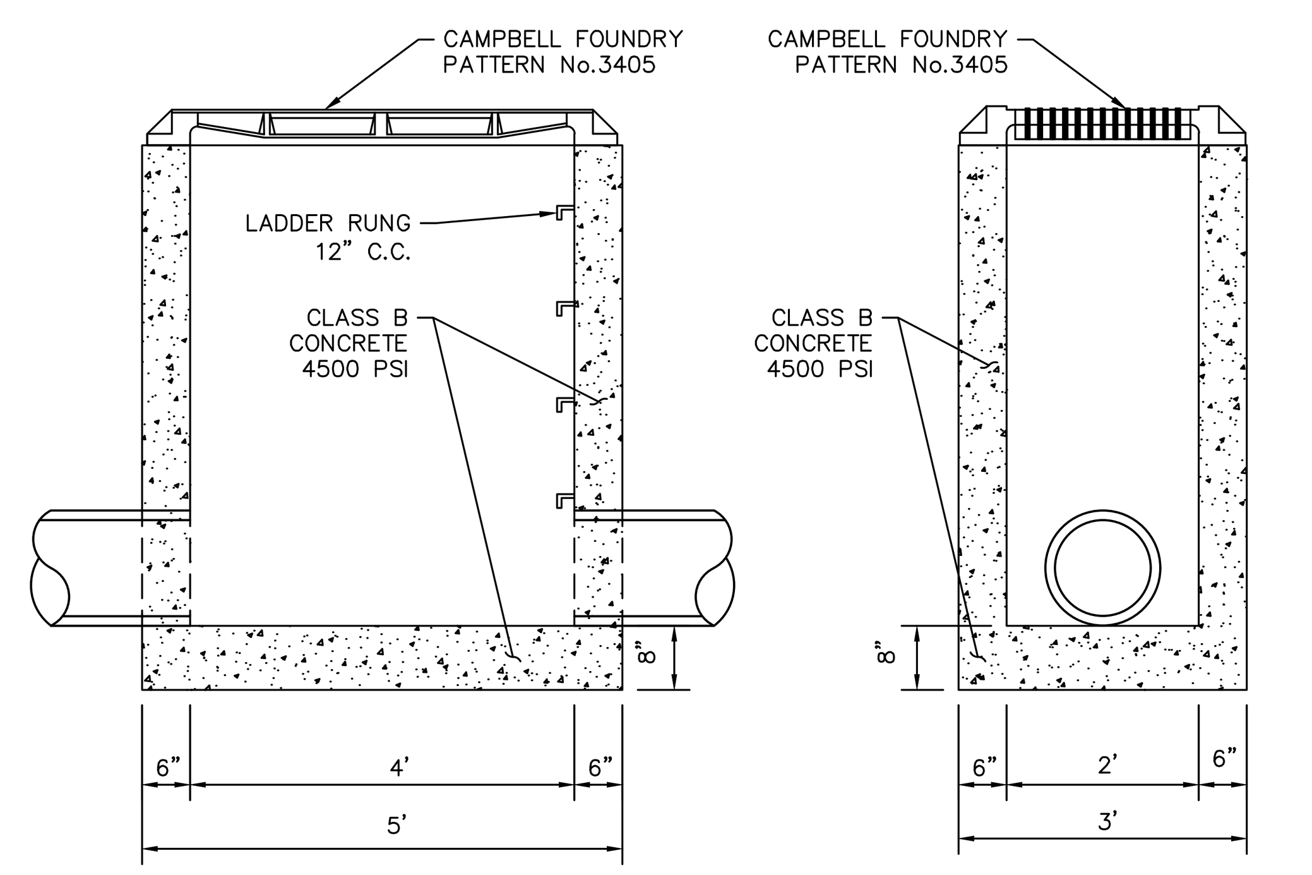
ROOF LEADER DRAIN

SCALE – N.T.S.



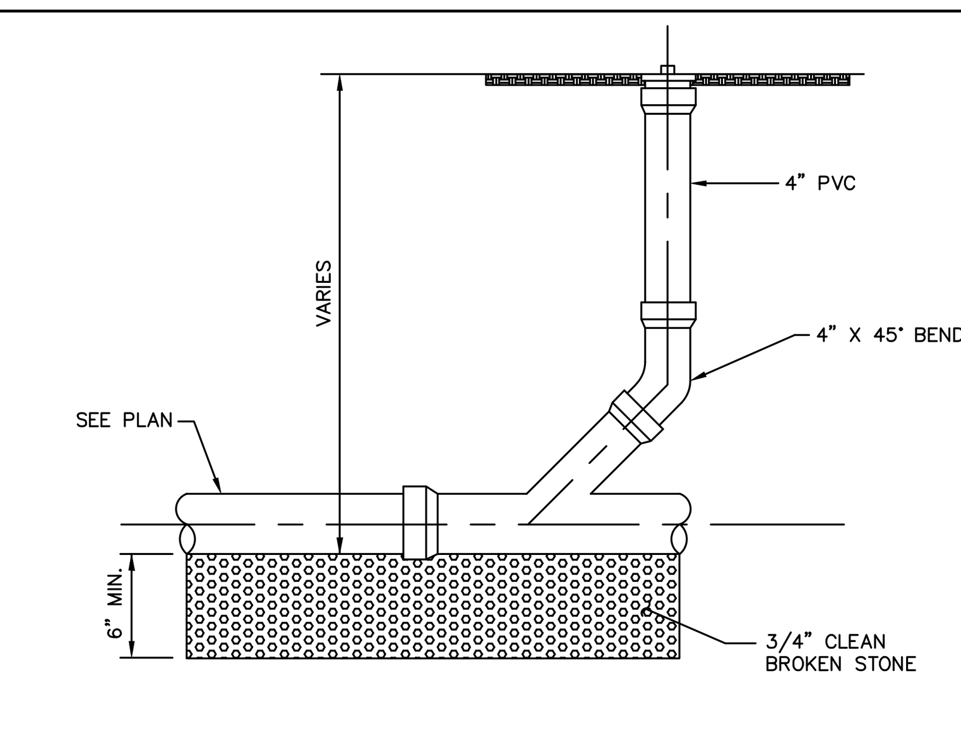
2' X 2' INLET

SCALE – N.T.S.



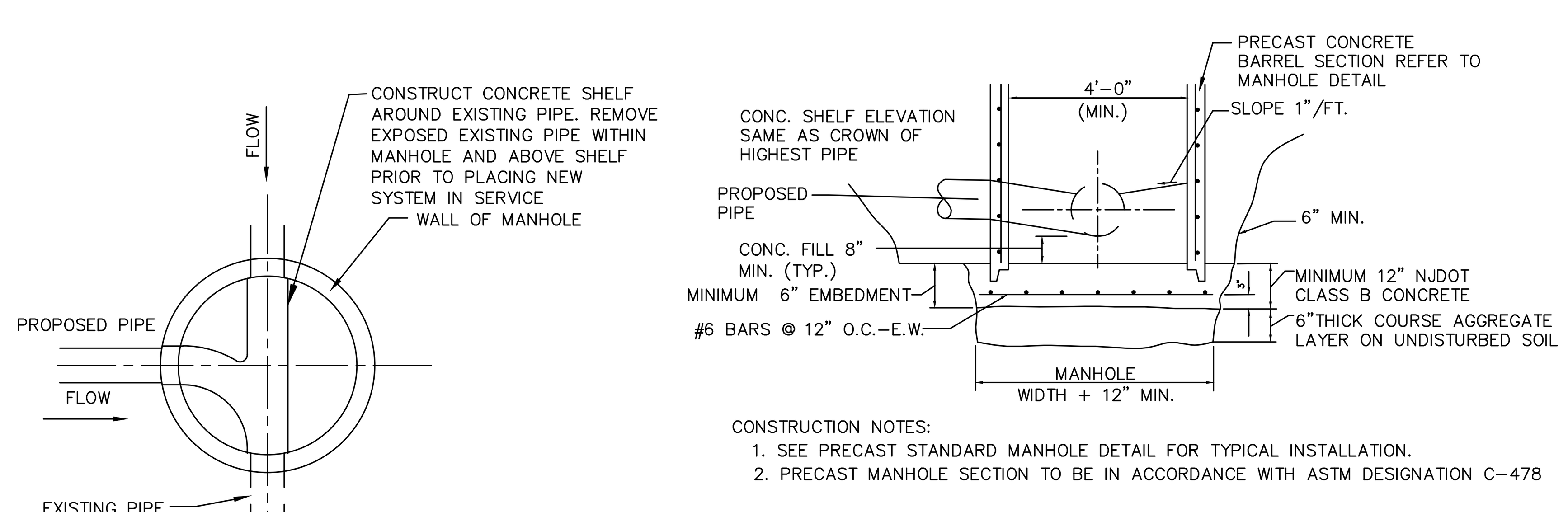
TYPE "A" INLET

SCALE – N.T.S.



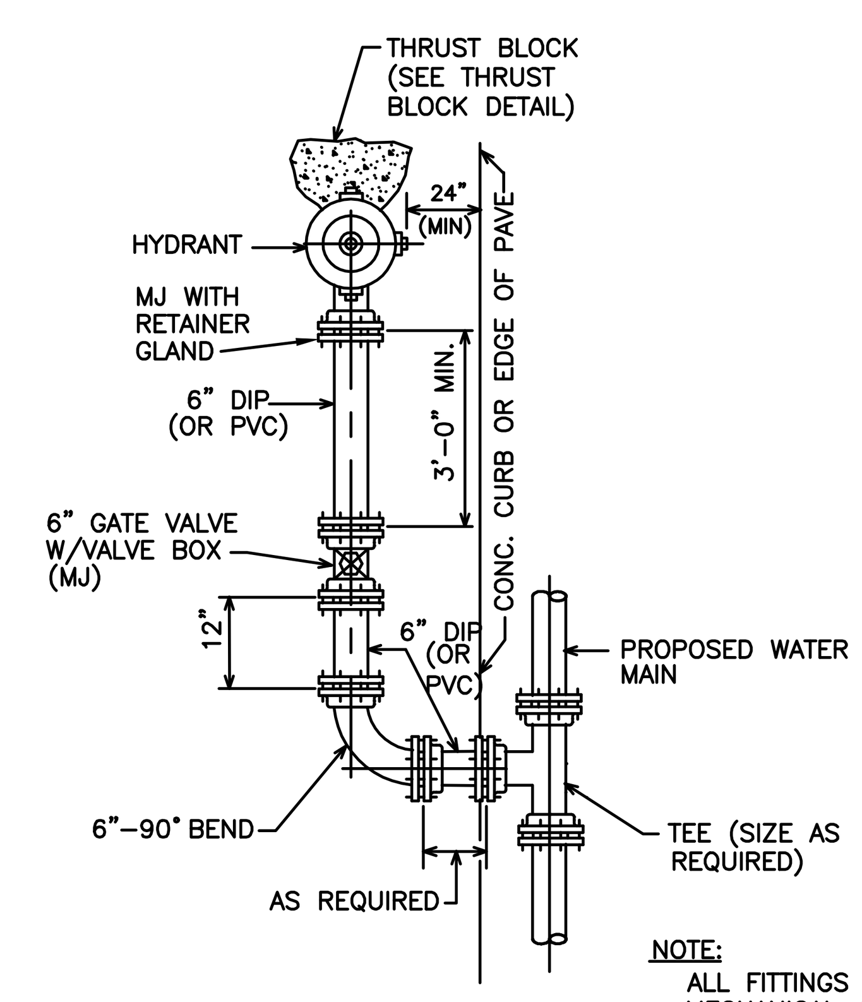
CLEANOUT

SCALE – N.T.S.

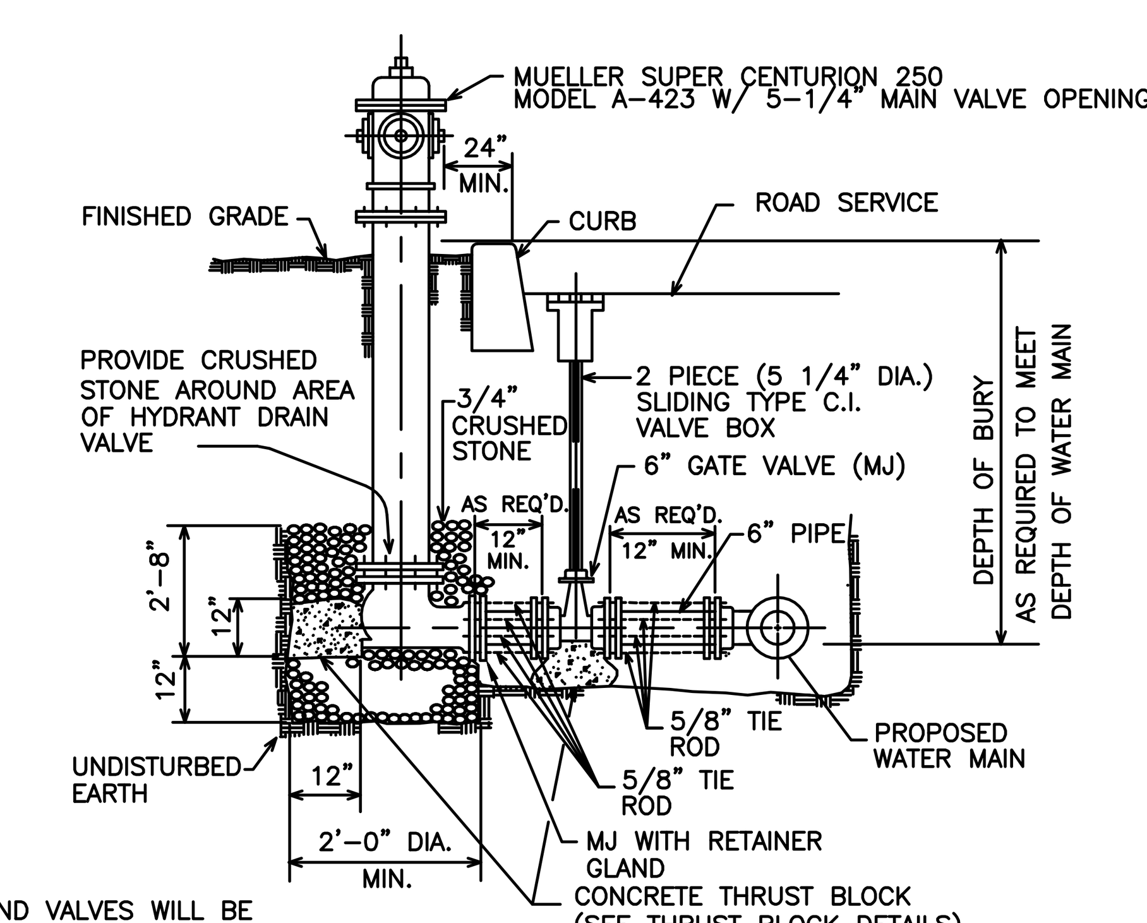


DOGHOUSE STRUCTURE (IF REQUIRED)

SCALE – N.T.S.



OFFSET INSTALLATION



STRAIGHT INSTALLATION

NOTE:
ALL FITTINGS AND VALVES WILL BE MECHANICAL JOINT, AND WILL BE INSTALLED WITH RETAINER GLANDS.

TYPICAL HYDRANT DETAILS

N.T.S.

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28155000
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TEL (973) 227-7004 FAX (973) 227-7074
PETRYENGINEERING.COM

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PETRY ENGINEERING, LLC

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662
DATE: 10/06/2025

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PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
CONSTRUCTION DETAILS

PROJECT #: 25-250

SHEET: SP-8.3

REFERENCES:
1. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY MAP FOR 21–25 GROVE AVENUE, BLOCK 1702 LOT 22, TOWNSHIP OF VERONA, ESSEX COUNTY, NEW JERSEY" PREPARED BY AZZOLINA & FEURY ENGINEERING INC. AND SIGNED BY JOHN A. LOCH, P.L.S. DATED 08/05/2025.

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28155900
155 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL. (973) 227-7004 FAX (973) 227-7074
PETRYENGINEERING.COM

REV	DESCRIPTION	DATE

0 5 10 20
1 INCH = 10 FT.

CHECKED BY: SPD

DRAFTED BY: JAF

PETRY ENGINEERING, LLC

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662
DATE: 10/06/2025

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PREPARED FOR
MOHAMMAD ABBASI
BLOCK 1702, LOT 22
21-25 GROVE AVENUE
TOWNSHIP OF VERONA
ESSEX COUNTY, NEW JERSEY

TITLE:
TURNING MOVEMENTS

PROJECT #:	SHEET:
25-250	TM-1