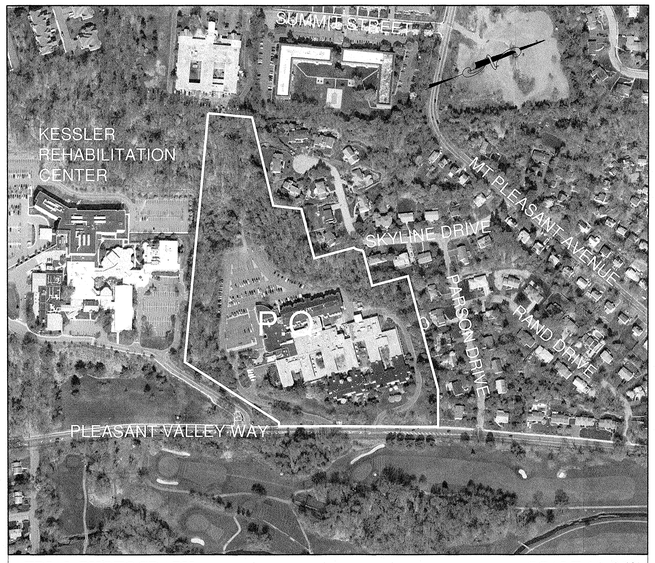
PRELIMINARY AND FINAL MAJOR SITE PLAN

PREPARED FOR

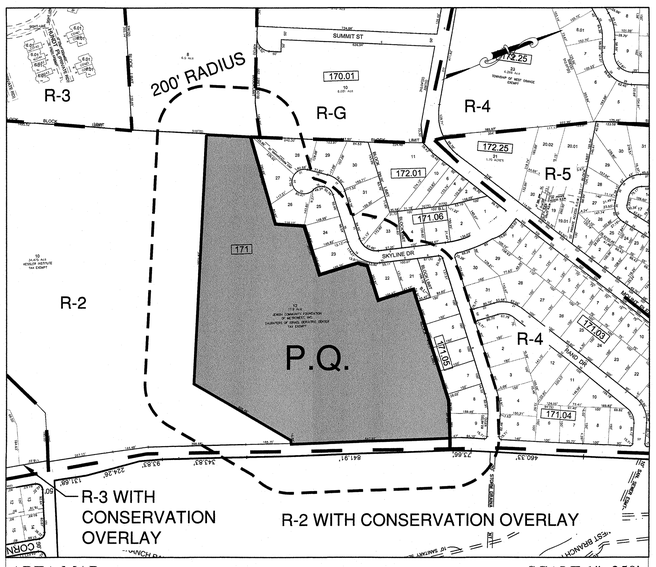
DAUGHTERS OF ISRAEL

1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY



AERIAL PHOTOGRAPH — SCALE 1"=250'

MAP REFERENCES:
TAKEN FROM NIGIN WAREHOUSE 2015



AREA MAP — SCALE 1"=250'

MAP REFERENCES:
TAKEN FROM WEST ORANGE TAX MAP AND ZONING MAP

SITE DATA CHART

OWNER & APPLICANT:	JCF 1155 PLEASANT VALLEY WAY LLC 901 ROUTE 10 WHIPPANY, NEW JERSEY 07981
PROPERTY:	BLOCK 171 LOT 12 AREA = 17.998± ACRES
ZONE: R-2	§ 25-3.1 R-2 DISTRICT (ZONING INFORMATION FROM THE TOWNSHIP OF WEST ORANGE ZONING ORDINANCE)
EXISTING USE: 303 BED NURSING HOME	PROPOSED USE: CONTINUING CARE RETIREMENT COMMUNITY*

LOT SIZE REQUIREMENTS

DESCRIPTION	CODE (R-2)	EXISTING	PROPOSED	COMPLIANCE
§25-7.1 BULK STANDARDS TABLE OF DISTRICT REGULATIONS				
MAX. HEIGHT	2 1/2 STORIES/ 35'	2 STORIES	5 STORIES/ 57.50'	NO *
MIN. LOT AREA	40,000 SF	784,099 SF	NO CHANGE	YES
MIN. LOT WIDTH	125 FT.	676.43 FT.	NO CHANGE	YES
MIN. FRONT YARD	35 FT.	100.45 FT.	117.89 FT	YES
MIN. SIDE YARD	20 + 20 FT.	80.97 + 87.07 FT.	83.62 + 100.27 FT.	YES
MIN. REAR YARD	45 FT.	131.33 FT.	132.00 FT.	YES
MAX. BUILDING COVERAGE	20%	16.47%	15.72%	YES
MAX. LOT COVERAGE	30%	38.53%	37.46%	NO *
§ 25-11.2 MIN. NON-RESIDENTIAL SIDE YARD	75 FT.	80.97 FT.	83.62 FT.	YES
§25-28.8 STEEP SLOPES CALCULATIONS				
MIN. EFFECTIVE LOT AREA	40,000 SF	435,631 SF	NO CHANGE	YES
MAX. EFFECTIVE BUILDING COVERAGE	20%	29.64%	28.18%	NO *
MAX. EFFECTIVE IMPERVIOUS COVERAGE	30%	69.35%	67.42%	NO *
RETAINING WALL REQUIREMENTS				
MAX. RETAINING WALL HEIGHT	4 FT.	4 FT.	10 FT.	NO *
PARKING AND LOADING REQUIREMENTS				
MIN. NUMBER OF TREES WITHIN PARKING AREA	1 TREE PER 12 SPACES (27 TREES)	18 TREES	27 TREES	YES
MIN. REQUIRED PARKING	479 SPACES	236 SPACES	429 (1)	NO *
STALL SIZE		9' X 18'	9' X 18'	YES
AISLE WIDTH		24 FT.	24 FT.	24 FT.	YES
MIN. NUMBER OF LOADING SPACES		13 SPACES	2 SPACES	1 SPACE	NO *
LOADING SPACE SIZE		10' X 40'	10' X 40'	12' X 40'	YES
SIGNAGE REQUIREMENTS				
SEE ARCHITECTURAL - SIGN SIGNAGE PLAN (L3.0)				

PARKING CALCULATIONS:

SKILLED NURSING:

PR. BEDS:	80	80	@ 1 SP./BED	=80 SPACES
PR. NON-RES. EMPLOYEES:	40	40	@ 1 SP./2 NON-RES	=20 SPACES
PR. RES EMPLOYEES:	0	0	@ 1 SP./1 EMP.	=1 SPACES
			SKILLED NURSING TOTAL	=**100 SPACES**

RESIDENTIAL (PER R.S.I.S.)
ASSISTED LIVING USE – 0.5 SPACE/BED:

ASSISTED LIVING BEDS 64 @ 0.5 SP/BED. =**32 SPACES**

INDEPENDENT LIVING UNITS (MID-RISE APARTMENT STANDARD):

85 1-BEDROOM APARTMENTS	@ 1.8 SP./UNIT	=153 SPACES
97 2-BEDROOM APARTMENTS	@ 2.0 SP./UNIT	=194 SPACES
	INDEPENDENT LIVING TOTAL	=**347 SPACES**

GRAND TOTAL: **479 SPACES**

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

381 SPACES x 15% = 57 ELECTRIC VEHICLE SPACES REQUIRED
(OF WHICH 5% ARE H.C. SPACES OR 3 H.C. SPACES)

58 EV SPACES PROPOSED

(1) PROPOSED PARKING CALCULATIONS:

266 SPACES AT GRADE
115 SPACES IN PARKING LEVEL
48 SPACES PER EV CREDIT

TOTAL: 429 SPACES

PARKING CALCULATIONS (ADA):

SURFACE LOT #1: 193 SPACES	=6 SPACES (1 VAN)
SURFACE LOT #2: 40 SPACES	=2 SPACES (1 VAN)
SURFACE LOT #3: 19 SPACES	=2 SPACES (1 VAN)
EMPLOYEE LOT #1: 14 SPACES	=2 SPACES (1 VAN)
GARAGE: 115 SPACES	=6 SPACES (2 VAN)
TOTAL:	**18 SPACES (6 VAN)**

PROPOSED LOADING REQUIREMENT:

GROSS FLOOR AREA = 489,300 SF

489,300 – 100,000 =	389,300	
389,300 / 40,000 =	9.7 SPACES	
UP TO 100,000 SF. =	3 SPACES	
TOTAL = 13 SPACES		

BUILDING HEIGHT CALC

FF + BUILDING HEIGHT – AVG. GRADE

427.20 + 52.86 – 422.56 = 57.50'

* INDICATES VARIANCE REQUIRED

PUBLIC UTILITY LIST

ELECTRIC & GAS

Public Service Electric & Gas Company
Manager - Corporate Properties
80 Park Plaza, T6B
Newark, NJ 07102

WATER

New Jersey American Water Company
167 John F. Kennedy Parkway
Short Hills, NJ 07078

CABLE TV

Comcast Cablevision
800 Rahway Avenue
Union, NJ 07083

TELEPHONE

Verizon
1 Verizon Way
Basking Ridge, New Jersey 07920-1025

SEWER

Township of West Orange
Municipal Building
66 Main Street
West Orange, NJ 07052

200' PROPERTY OWNERS LIST

Town	Block	Lot	Qualifier	Location	Owner	Owner Address	Owner City/State	Owner Zip
West Orange Township	157.01	11		MT. PLEASANT AVENUE	COUNTY OF ESSEX	115 CLIFTON AVENUE	NEWARK,N.J.	07114
West Orange Township	170	8		20 SUMMIT STREET	SUMMIT CARE REALTY, LLC.	457 OAK GLEN ROAD	HOWELL, NJ	07731
West Orange Township	170.01	10		6 SUMMIT STREET	PLEASANT & SUMMIT LLC, % AFFILIATED	301 S. LIVINGSTON AVE#201	LIVINGSTON, N.J.	07039
West Orange Township	171	10		1199 PLEASANT VALLEY WAY	KESSLER INSTITUTE% ALTUS GROUP US	P.O. BOX 92129	SOUTHLAKE,TX	76092
West Orange Township	171	12		1155 PLEASANT VALLEY WAY	JCF 1155 PLEASANT VALLEY WAY LLC	901 RT 10	WHIPPANY, NJ	07981
West Orange Township	171	21		8 SKYLINE DRIVE	PATEL, KRISHNAKANT H & CHANDRIKA B.	8 SKYLINE DRIVE	WEST ORANGE, NJ	07052
West Orange Township	171	22		10 SKYLINE DRIVE	CHRISANDERSON, DONNA A.	10 SKYLINE DRIVE	WEST ORANGE, N.J.	07052
West Orange Township	171	23		14 SKYLINE DRIVE	KRAVTSOV, ANDREY & EKATERINA	14 SKYLINE DRIVE	WEST ORANGE,N.J.	07052
West Orange Township	171	24		16 SKYLINE DRIVE	TO, ALBERT + EVANGELINA,C	16 SKYLINE DRIVE	WEST ORANGE,N.J.	07052
West Orange Township	171	25		18 SKYLINE DRIVE	PIERRE, YVES N. & MARGARETTE	18 SKYLINE DRIVE	WEST ORANGE, NJ	07052
West Orange Township	171	26		22 SKYLINE DRIVE	DONNELLY, JAMES P. & MARIE	22 SKYLINE DRIVE	WEST ORANGE, N.J.	07052
West Orange Township	171	27		24 SKYLINE DRIVE	FAIBIS, MIKY & RENEE	24 SKYLINE DRIVE	WEST ORANGE, N.J.	07052
West Orange Township	171	28		21 SKYLINE DRIVE	BERMACK, SCOTT W & QUINN, DARA S.	21 SKYLINE DRIVE	WEST ORANGE,N.J.	07052
West Orange Township	171	29		19 SKYLINE DRIVE	BLACK, ANDREW J. & DIANE	19 SKYLINE DR	WEST ORANGE, NJ	07052
West Orange Township	171	31		15 SKYLINE DRIVE	JOHNSON, EVERETT M & KIM D.	15 SKYLINE DR	WEST ORANGE, NJ	07052
West Orange Township	171	32		11 SKYLINE DRIVE	JONES, DAVID A & COURTNEY Y	11 SKYLINE DRIVE	WEST ORANGE, NJ	07052
West Orange Township	171	33		9 SKYLINE DRIVE	ZAKI,NOBIL + SALIVA	9 SKYLINE DRIVE	WEST ORANGE,N.J.	07052
West Orange Township	171.03	30		17 PARSON DRIVE	KUMAR, TARUN & BIBHA	17 PARSON DRIVE	WEST ORANGE, N.J.	07052
West Orange Township	171.03	31		23 RAND DRIVE	MACK,PEDRO A JR+BYNOE,BERNADETTE	23 RAND DRIVE	WEST ORANGE, NJ	07052
West Orange Township	171.05	3		6 SKYLINE DRIVE	SCHNITZER, KENNETH & JANEEN	6 SKYLINE DR	W ORANGE, N.J.	07052
West Orange Township	171.05	4		12 PARSON DRIVE	CRYSTAL, JILL	12 PARSON DR	WEST ORANGE, NJ	07052
West Orange Township	171.05	5		10 PARSON DRIVE	LOPES, MARIA D. & PATINHO, EDUARDO	10 PARSON DR	WEST ORANGE, NJ	07052
West Orange Township	171.05	6		8 PARSON DRIVE	ELLA J. SLIVKA,IRREV TRUST	8 PARSON DR.	WEST ORANGE,NJ	07052
West Orange Township	171.05	7		6 PARSON DRIVE	NNANNA, VICTORIA	6 PARSON DRIVE	WEST ORANGE, N.J.	07052
West Orange Township	171.05	8		4 PARSON DRIVE	EASY RENTALS & SALES,	4 PARSON DRIVE	WEST ORANGE, NJ	07052
West Orange Township	171.05	9		2 PARSON DRIVE	EQUITY INVSTMENTS CAPITAL CORP	2 PARSON DRIVE	WEST ORANGE, NJ	07052
West Orange Township	171.06	3		5 SKYLINE DRIVE	LERNER, JACQUELINE	5 SKYLINE DRIVE	WEST ORANGE, N.J.	07052
West Orange Township	171.06	4		7 SKYLINE DRIVE	QUINONES, OLINDA	103 OLD VIRGINIA CIRCLE	JONESBORO, GA.	30236

LIST OF DRAWINGS

SHEET NO.	NAME	PREPARED BY
1 OF 1	BOUNDARY AND TOPOGRAPHIC SURVEY	MICHAEL P. FERSCHMAN
SP-1	TITLE SHEET	PETRY ENGINEERING
SP-2	OVERALL LAYOUT SHEET	PETRY ENGINEERING
SP-3	DETAILED LAYOUT SHEET	PETRY ENGINEERING
SP-4	GRADING AND DRAINAGE PLAN	PETRY ENGINEERING
SP-5	DETAILED GRADING PLAN	PETRY ENGINEERING
SP-6	UTILITY PLAN	PETRY ENGINEERING
SP-7	STORM SEWER PROFILES	PETRY ENGINEERING
SP-8	STORM SEWER PROFILES	PETRY ENGINEERING
SP-9	STORM SEWER PROFILES	PETRY ENGINEERING
SP-10	STORM SEWER PROFILES	PETRY ENGINEERING
SP-11	STORM SEWER PROFILES	PETRY ENGINEERING
SP-12	STORM SEWER AND BASIN SECTIONS	PETRY ENGINEERING
SP-13	SANITARY SEWER PROFILES	PETRY ENGINEERING
SP-14	SANITARY SEWER PROFILES	PETRY ENGINEERING
SP-15	SOIL EROSION AND SEDIMENT CONTROL	PETRY ENGINEERING
SP-16	LIGHTING PLAN	PETRY ENGINEERING
SP-17	LIGHTING DETAILS	PETRY ENGINEERING
SP-18	CONSTRUCTION NOTES	PETRY ENGINEERING
SP-19	CONSTRUCTION DETAILS	PETRY ENGINEERING
SP-20	CONSTRUCTION DETAILS	PETRY ENGINEERING
SP-21	CONSTRUCTION DETAILS	PETRY ENGINEERING
SP-22	RETAINING WALL DETAILS	PETRY ENGINEERING
P-1	PHASING PLANS	PETRY ENGINEERING
TR-1	TREE REMOVAL PLAN	PETRY ENGINEERING
TR-2	TREE REMOVAL LIST	PETRY ENGINEERING
CS	COVER SHEET	KDA ARCHITECTS
L1.0	LANDSCAPE PLAN	KDA ARCHITECTS
L2.0	LANDSCAPE DETAILS	KDA ARCHITECTS
L3.0	SITE SIGNAGE PLAN	KDA ARCHITECTS
A1.0	LOWER LEVEL PLAN	KDA ARCHITECTS
A1.1	FIRST FLOOR PLAN	KDA ARCHITECTS
A1.2	SECOND FLOOR PLAN	KDA ARCHITECTS
A1.3	THIRD FLOOR PLAN	KDA ARCHITECTS
A1.4	FOURTH FLOOR PLAN	KDA ARCHITECTS
A2.0	EXTERIOR ELEVATIONS	KDA ARCHITECTS
A2.1	EXTERIOR ELEVATIONS	KDA ARCHITECTS
A3.0	PROJECT PHASING	KDA ARCHITECTS

APPROVALS
WEST ORANGE TOWNSHIP

APPROVED AS A SITE PLAN BY THE TOWNSHIP OF WEST ORANGE ZONING BOARD ON _____ DATE

ZONING BOARD CHAIRPERSON _____ DATE

ZONING BOARD SECRETARY _____ DATE

TOWNSHIP ENGINEER _____ DATE

COUNTY OF ESSEX

PLANNING BOARD CHAIRPERSON

PLANNING BOARD SECRETARY

LIST OF APPROVALS REQUIRED:
1. ESSEX COUNTY SITE PLAN APPROVAL
2. SOIL EROSION AND SEDIMENT CONTROL (HEPSCD)
3. NJDEP – TREATMENT WORKS APPROVAL
4. NJDEP – WATER EXTENSION PERMIT

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

REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

TITLE SHEET

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28119500
103 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL. (973) 227-7004 FAX (973) 227-7274

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 39662 DATED 10/29/2021

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: AS SHOWN
Sheet: SP-1

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)

1 inch = 50 ft.

REFERENCES:

1. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY FOR 1155 PLEASANT VALLEY WAY LOT 12 BLOCK 171, TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY" PREPARED BY MICHAEL FIRSCHMAN P.L.S. DATED 4/18/2020.

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1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR

DAUGHTERS OF ISRAEL

1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

OVERALL LAYOUT SHEET

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28139900
185 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL (973) 227-7004 FAX (973) 227-7674

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

Designer: JMP	
Draftsman: JAF	
Checked By: JMP	
Project No.: 19-265	
Scale: 1"=50'	
Sheet:	SP-2

SIGN LEGEND
1 R1-1 STOP SIGN
3 R7-8 &8B HANDICAP PARKING
EV R7-111 ELECTRIC VEHICLE PARKING
266 SURFACE LEVEL SPACES
(INCLUDES 38 EV SPACES)
NOTE:
1. ELECTRIC VEHICLE PARKING SPACES TO BE CONSTRUCTED AS NEEDED IN ACCORDANCE WITH STATUTE. MINIMUM 1/3 OF THE SPACES SHALL BE CONSTRUCTED WITH THE INITIAL PARKING FOR CONSTRUCTION. WITHIN 3 YEARS OF ISSUANCE OF C.O. AN ADDITIONAL 1/3 OF THE SPACES SHALL BE FUNCTIONAL. WITHIN 6 YEARS THE FINAL 1/3 SHALL BE CONSTRUCTED.
GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.
REFERENCES:
1. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY FOR 1155 PLEASANT VALLEY WAY LOT 12 BLOCK 171, TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY" PREPARED BY MICHAEL FIRSCHMAN P.L.S. DATED 4/18/2020.
4 STORIES OVER PARKING
(115 SPACES BELOW)
PLEASANT VALLEY WAY
CONSTRUCT RETAINING WALL "E" (SEE DETAIL)
ELECTRIC VEHICLE CHARGING STATION (DESIGNED BY OTHERS)
CONSTRUCT CONCRETE CURB (TYP.) (SEE DETAIL)
CONSTRUCT RETAINING WALL "D" (SEE DETAIL)
CONSTRUCT SCREENING FENCE (SEE DETAIL)
CONSTRUCT CONCRETE LOADING AREA (SEE DETAIL)
CONSTRUCT 5' WIDE CONCRETE SIDEWALK (TYP.) (SEE DETAIL)
CONSTRUCT FLUSH CURB (SEE DETAIL)
PORTE COCHERE
PICKUP/DROPOFF AREA
COURTYARD
LOADING AREA
CONSTRUCT OPEN LOADING DOCK (SEE ARCH PLANS FOR DETAIL)
CONSTRUCT 8-6" RISERS W/ 11" TREADS (SEE DETAIL)
BASIN #3
CONSTRUCT FENCE (TYP.) (SEE DETAIL)
CONSTRUCT RETAINING WALL "C" (SEE DETAIL)
CONSTRUCT RETAINING WALL "F" (SEE DETAIL)
BASIN #2
GATE
CONSTRUCT FENCE (TYP.) (SEE DETAIL)
ELECTRIC VEHICLE CHARGING STATION (DESIGNED BY OTHERS)
LOCATION OF PROPOSED DOORWAY (TYP.)
CONSTRUCT FLUSH CURB (SEE DETAIL)
DROP OFF AREA
TERRACE OVER PARKING LEVEL
GARAGE ENTRY/EXIT
CONSTRUCT RETAINING WALL "G" (SEE DETAIL)
CONSTRUCT GUIDE RAIL (SEE DETAIL)
CONSTRUCT RETAINING WALL "A" (SEE DETAIL)
CONSTRUCT 5' WIDE CONCRETE SIDEWALK (TYP.) (SEE DETAIL)
CONSTRUCT FENCE (TYP.) (SEE DETAIL)
CONSTRUCT RETAINING WALL "B" (SEE DETAIL)
DEPRESSED CURB (TYP.) (SEE DETAIL)
CONSTRUCT CONCRETE CURB (TYP.) (SEE DETAIL)
N82° 27' 10.65"W 150.000
S07° 32' 49.35"W 150.000
N82° 27' 10.65"W 476.570
S64° 12' 10.65"E 16.880
N54° 33' 24.35"E 456.480
L=40.017, R=61.060
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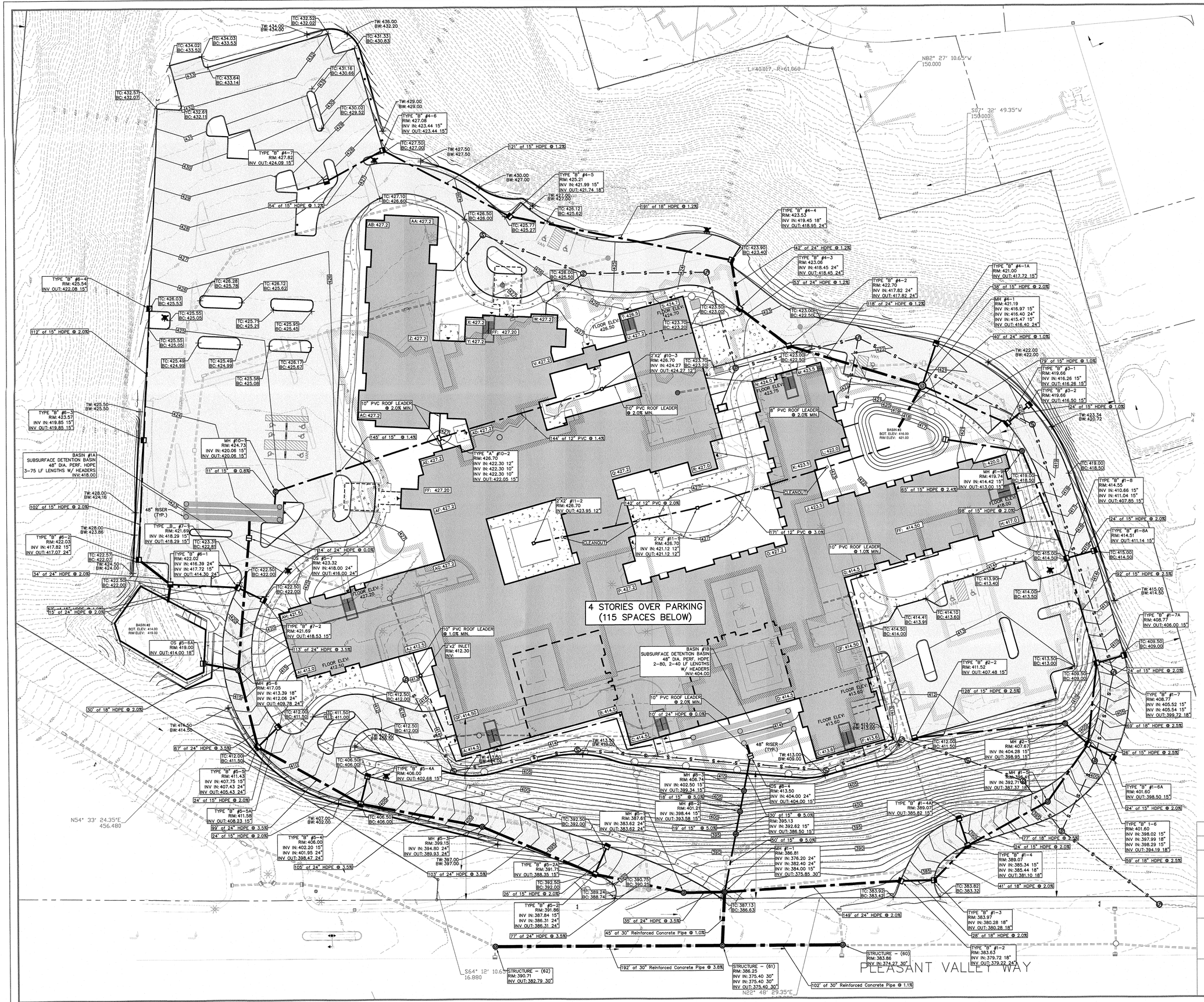
1 REVISED PER NEW BUILDING FOOTPRINT 05/20/2022 JMP
REVISION DESCRIPTION DATE BY
PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY
LAYOUT SHEET
PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28139500
100 HARRISON AVENUE, SUITE 102, HARRISON, NJ 07029
TEL. (973) 877-7564 FAX (973) 227-5214
Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: 1"=30'
Sheet: SP-3
J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021



AVERAGE GRADE CALC.

A	414.50
B	414.50
C	414.50
D	414.00
E	413.60
F	413.60
G	414.50
H	417.00
I	420.00
J	423.50
K	423.50
L	422.00
M	423.50
N	424.00
O	427.20
P	427.20
Q	427.20
R	427.00
S	424.70
T	426.50
U	427.20
V	427.20
W	427.20
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Y	427.20
Z	427.20
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AC	427.20
AD	427.20
AE	427.20
AF	427.20
AG	427.20
AH	421.50
AI	412.00
AJ	412.50
AVG.	422.56

NOTE:

1. PHASE 1 ROOF LEADERS TO TIE INTO SUBSURFACE BASIN #1A.
2. PHASE 2 ROOF LEADERS TO TIE INTO SUBSURFACE BASIN #1B.
3. PHASE 3 ROOF LEADERS TO TIE INTO SURFACE BASIN #3.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

REFERENCES:

1. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY FOR 1155 PLEASANT VALLEY WAY" LOT 12 BLOCK 171, TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY" PREPARED BY MICHAEL FIRSCHMAN P.L.S. DATED 4/18/2020.
2. SUPPLEMENTAL UTILITY INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "GPRS FINDINGS MAP OF DAUGHTERS OF ISRAEL CAMPUS 1155 PLEASANT VALLEY WAY, WEST ORANGE ,NJ" PREPARED BY SCOTT VIAPIANO AND DATED 10/06/2021.

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REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

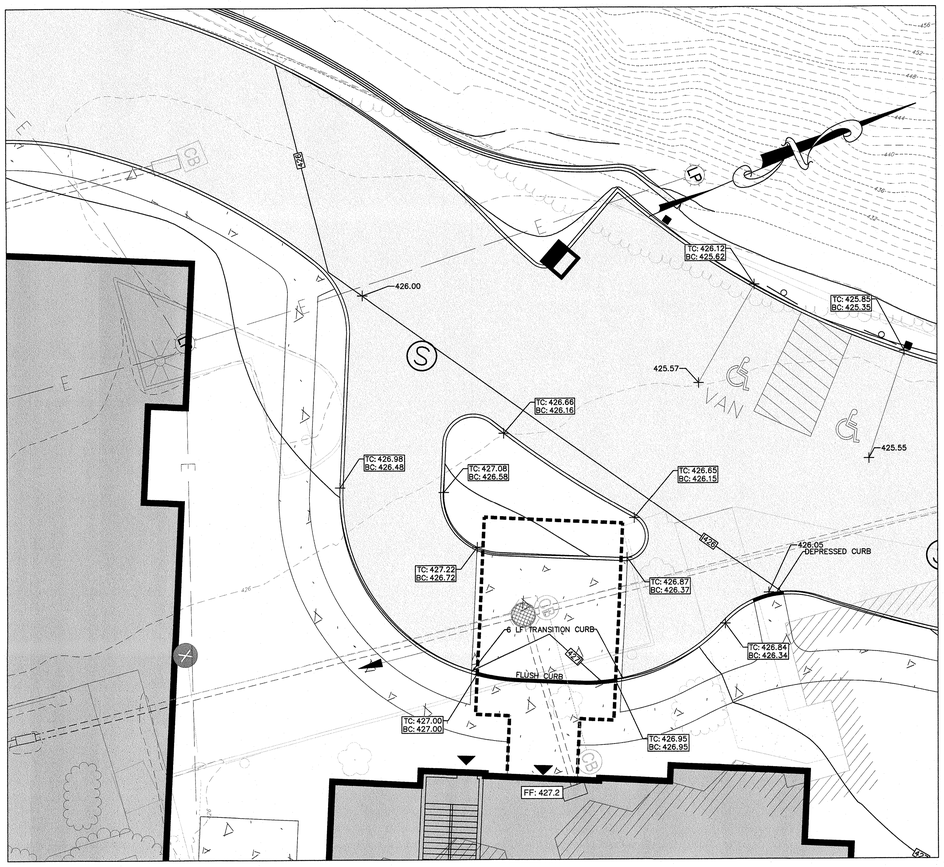
PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

GRADING AND DRAINAGE PLAN

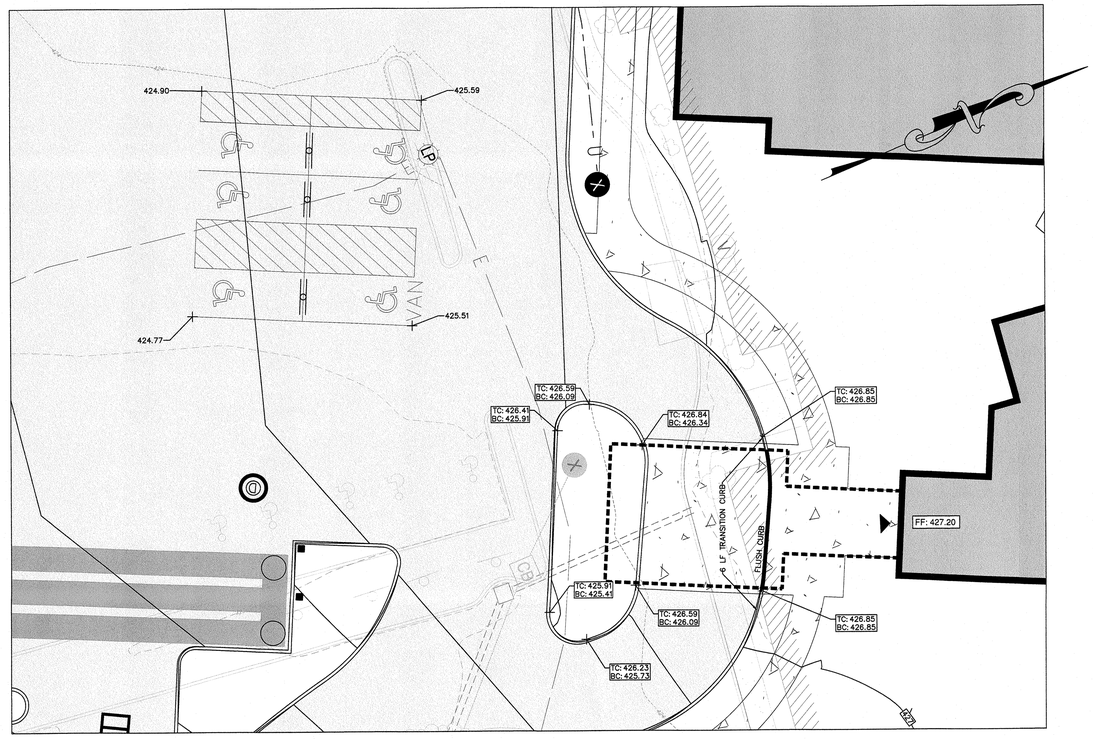
PETRY ENGINEERING, LLC
DIVISION OF CORPORATE ARTWORKS | LICENSE NUMBER 24GA28019600
150 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL. (973) 707-7004 FAX (973) 707-7074

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

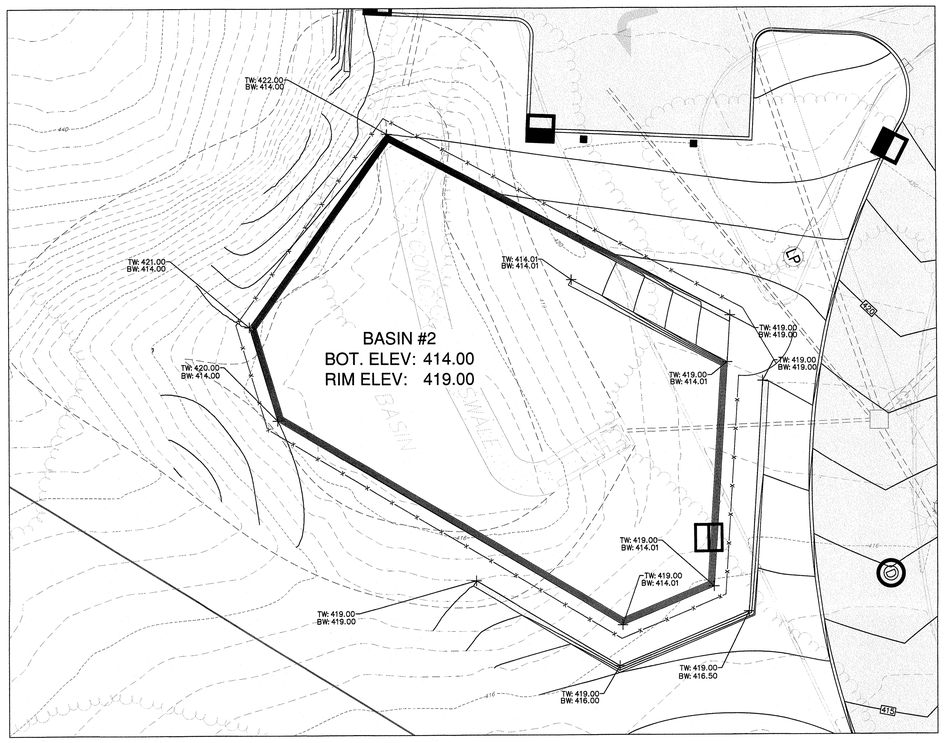
Designer: JMP	
Draftsman: JAF	
Checked By: JMP	
Project No.: 19-265	
Scale: 1"=30'	
Sheet:	SP-4



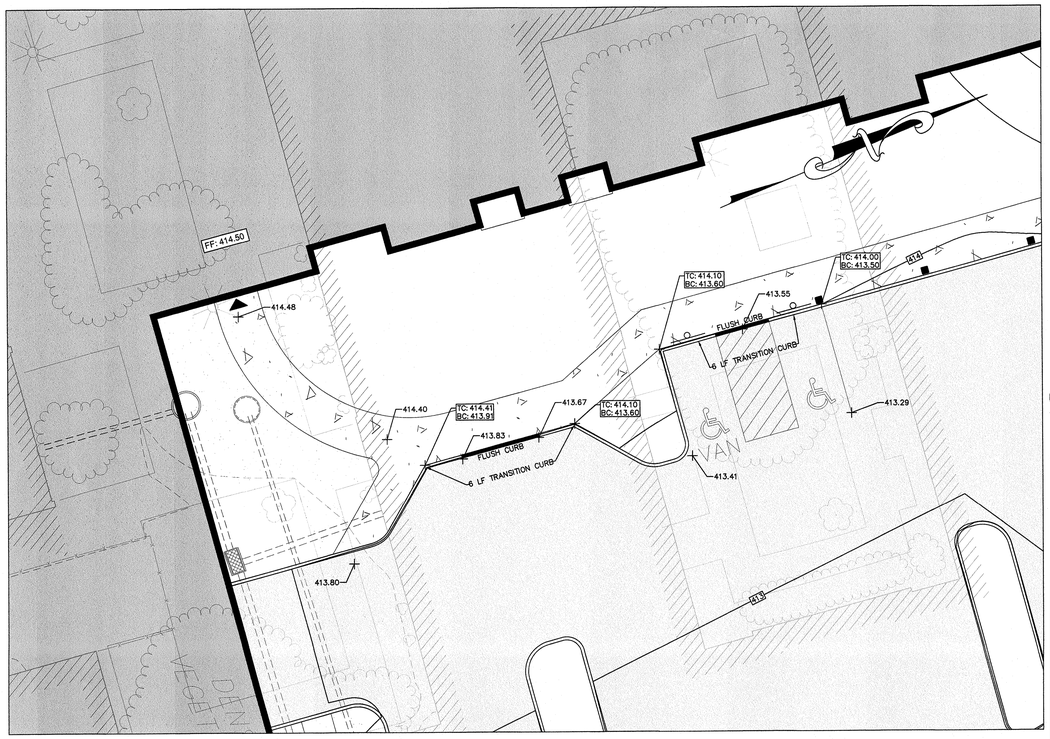
WESTERN PORTE COCHERE
SCALE: 1"=10'



SOUTHERN PORTE COCHERE
SCALE: 1"=10'



WESTERN PORTE COCHERE
SCALE: 1"=10'



NORTHERN PORTE COCHERE
SCALE: 1"=10'

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)
1 inch = 10 ft.

REFERENCES:

1. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY FOR 1155 PLEASANT VALLEY WAY LOT 12 BLOCK 171, TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY" PREPARED BY MICHAEL FIRSCHMAN P.L.S. DATED 4/18/2020.
2. SUPPLEMENTAL UTILITY INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "OPRS FINDINGS MAP OF DAUGHTERS OF ISRAEL CAMPUS 1155 PLEASANT VALLEY WAY, WEST ORANGE JN" PREPARED BY SCOTT VIAPIANO AND DATED 10/06/2021.

REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

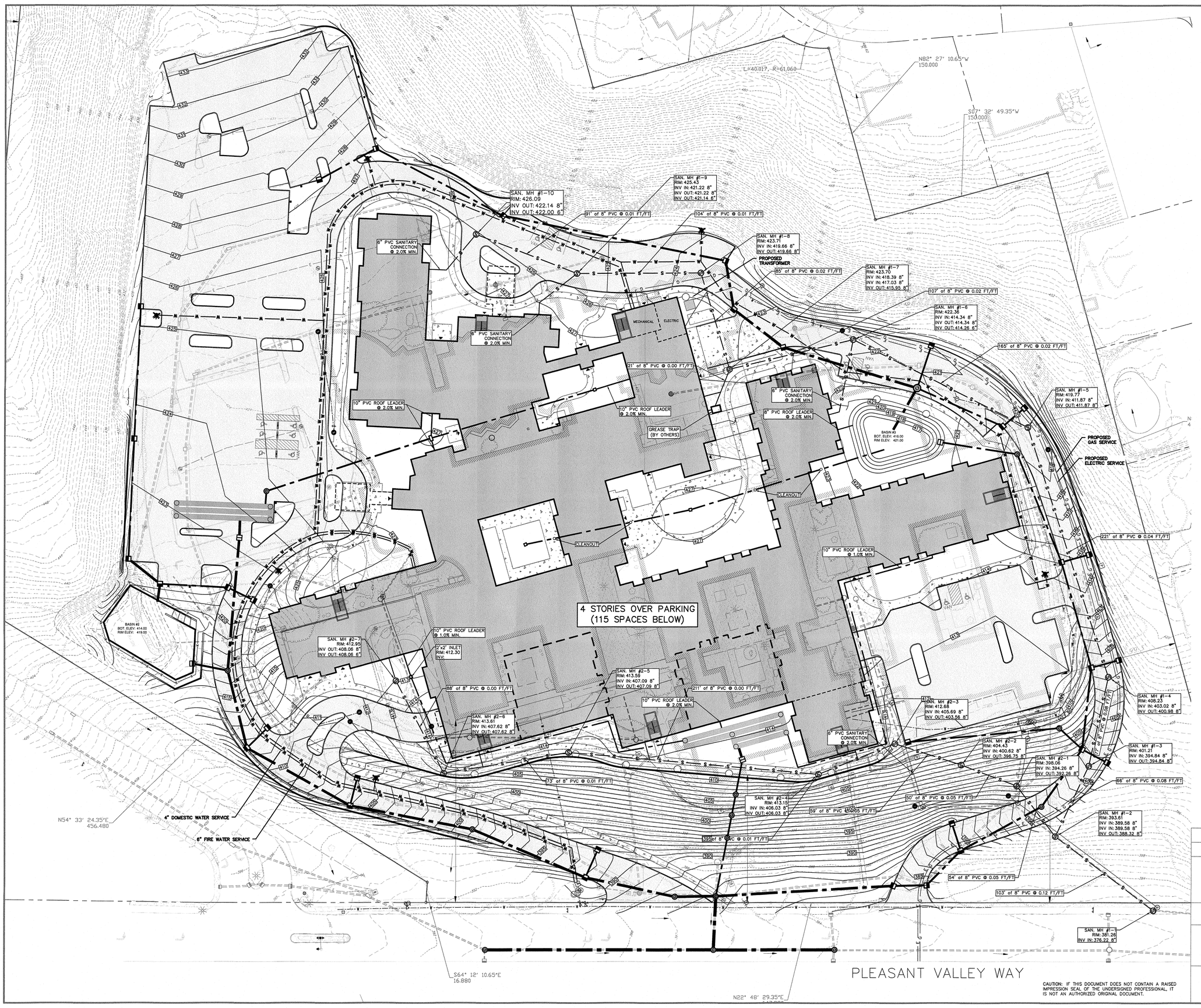
DETAILED GRADING

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28159500
185 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL: (973) 227-7604 FAX (973) 227-7674

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: AS SHOWN
Sheet: SP-5

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

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



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

REFERENCES:

1. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY FOR 1155 PLEASANT VALLEY WAY LOT 12 BLOCK 171, TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY" PREPARED BY MICHAEL FIRSCHMAN P.L.S. DATED 4/18/2020.
2. SUPPLEMENTAL UTILITY INFORMATION TAKEN FROM A CERTAIN MAP ENTITLED "GPRS FINDINGS MAP OF DAUGHTERS OF ISRAEL CAMPUS 1155 PLEASANT VALLEY WAY, WEST ORANGE JN" PREPARED BY SCOTT VIAPIANO AND DATED 10/06/2021.

REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

UTILITY PLAN

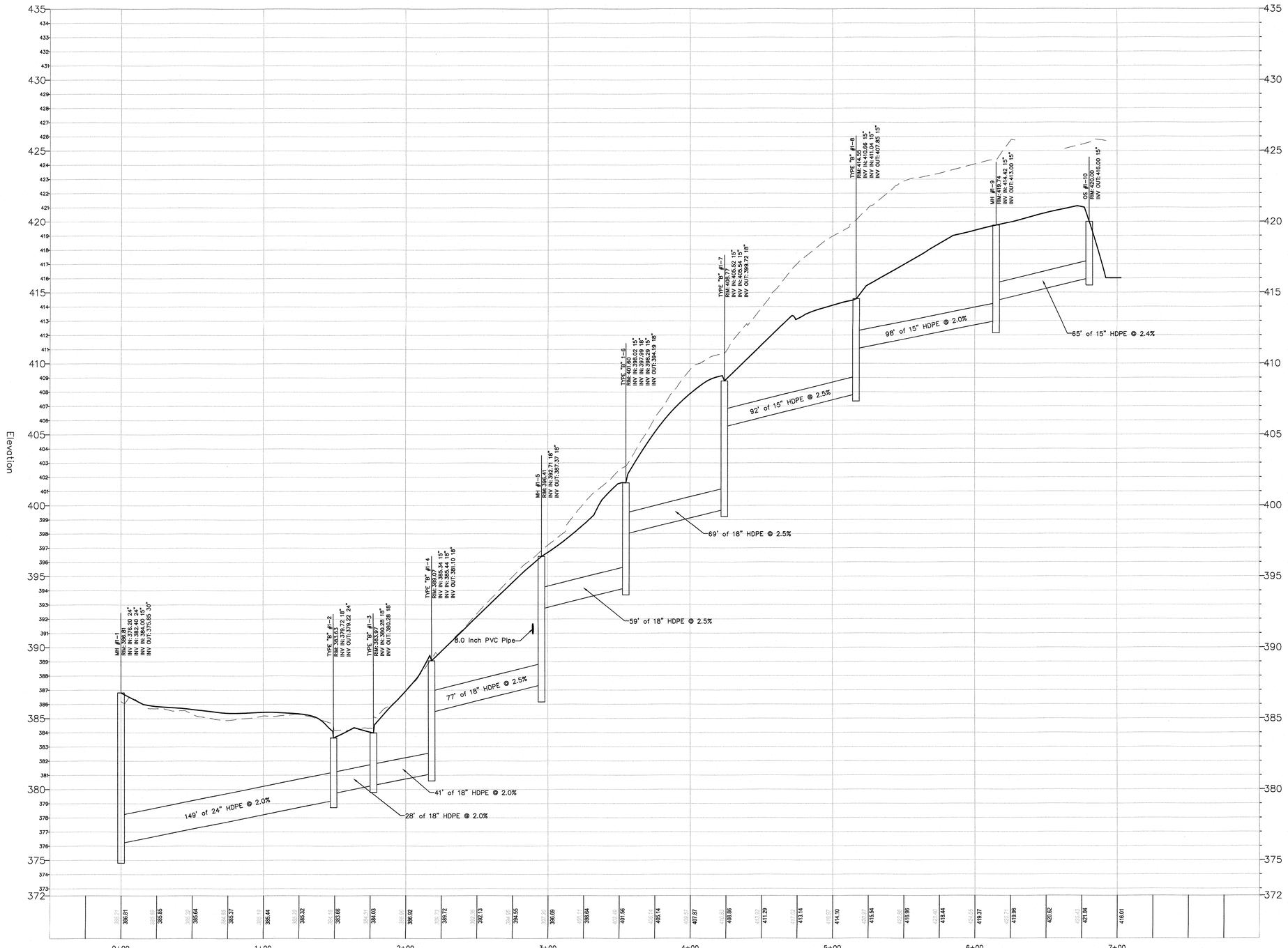
PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28135000
150 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL: (973) 227-7064 FAX (973) 227-7074

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: 1"=30'
Sheet: SP-6

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

STORM SEWER NETWORK #1 PROFILE



LEGEND

EXISTING GRADE ——— — ———

PROPOSED GRADE ———————

GRAPHIC SCALE (VERTICAL)

3 0 1.5 3 6 12

(IN FEET)
1 inch = 3 ft.

GRAPHIC SCALE (HORIZONTAL)

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

STORM SEWER PROFILES

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28133500
168 PRESTON DRIVE MORGANTON, NORTH CAROLINA • 27604
TEL. (973) 227-7604 FAX (973) 227-7674

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: HORZ.: 1" = 3'
VERT.: 1"=30'
Sheet: SP-7

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

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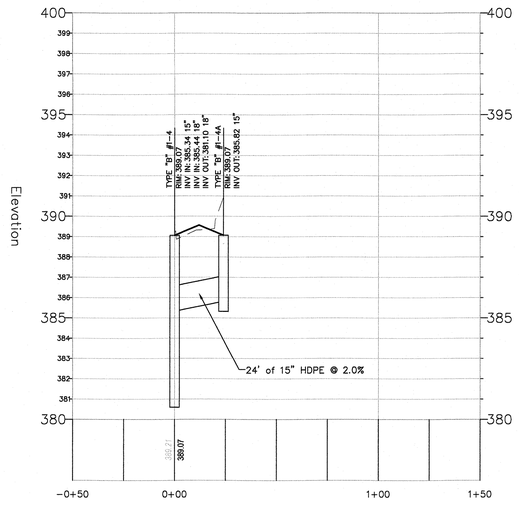
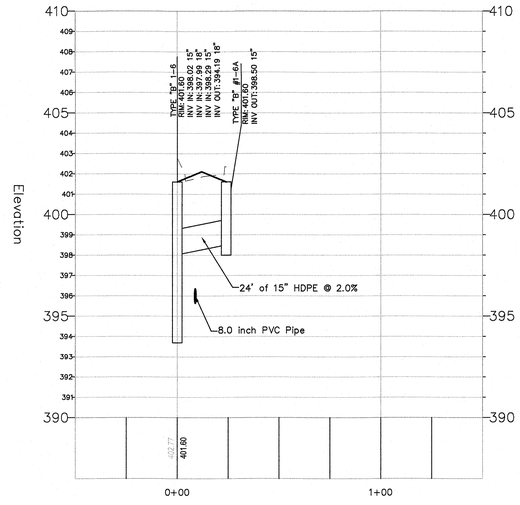
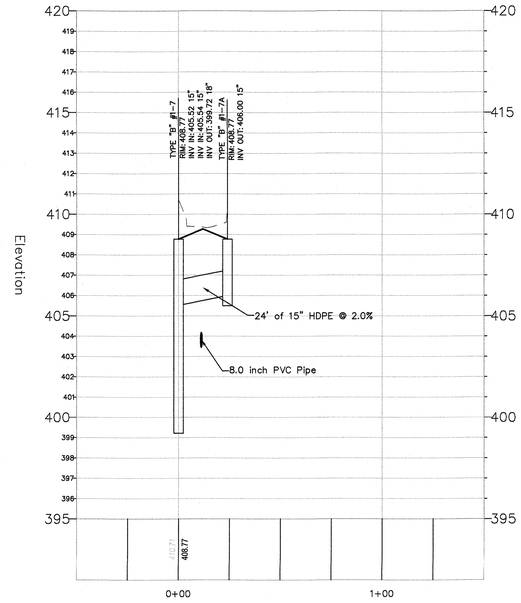
STORM SEWER NETWORK #1-4A PROFILE



STORM SEWER NETWORK #1-6A PROFILE



STORM SEWER NETWORK #1-7A PROFILE



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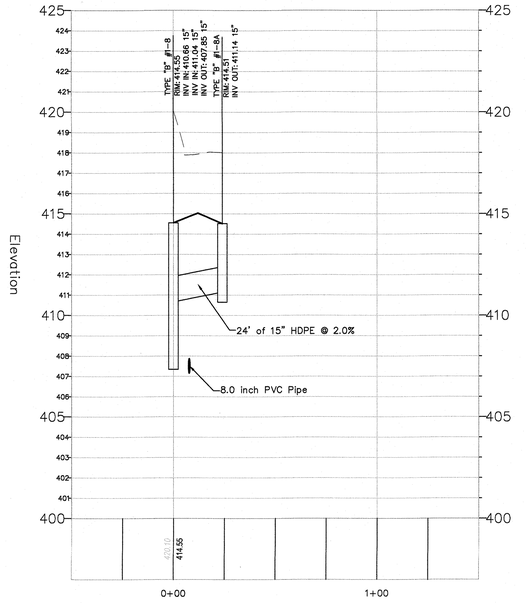

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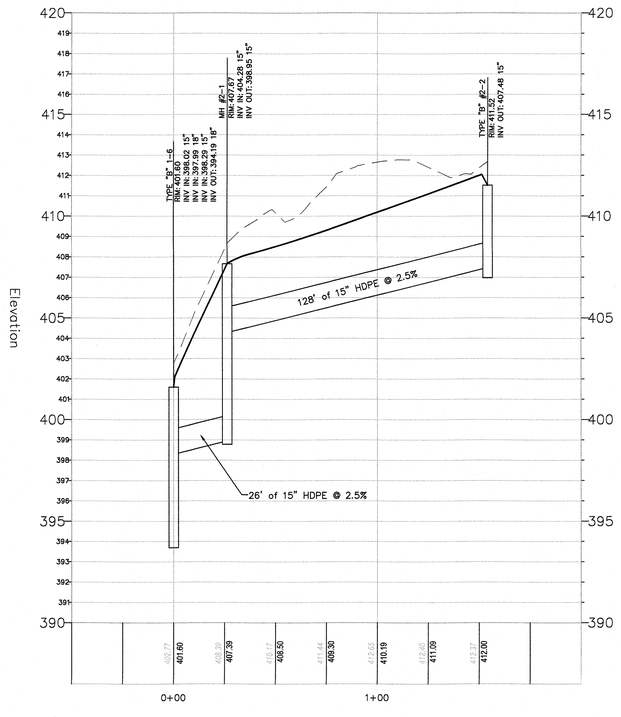

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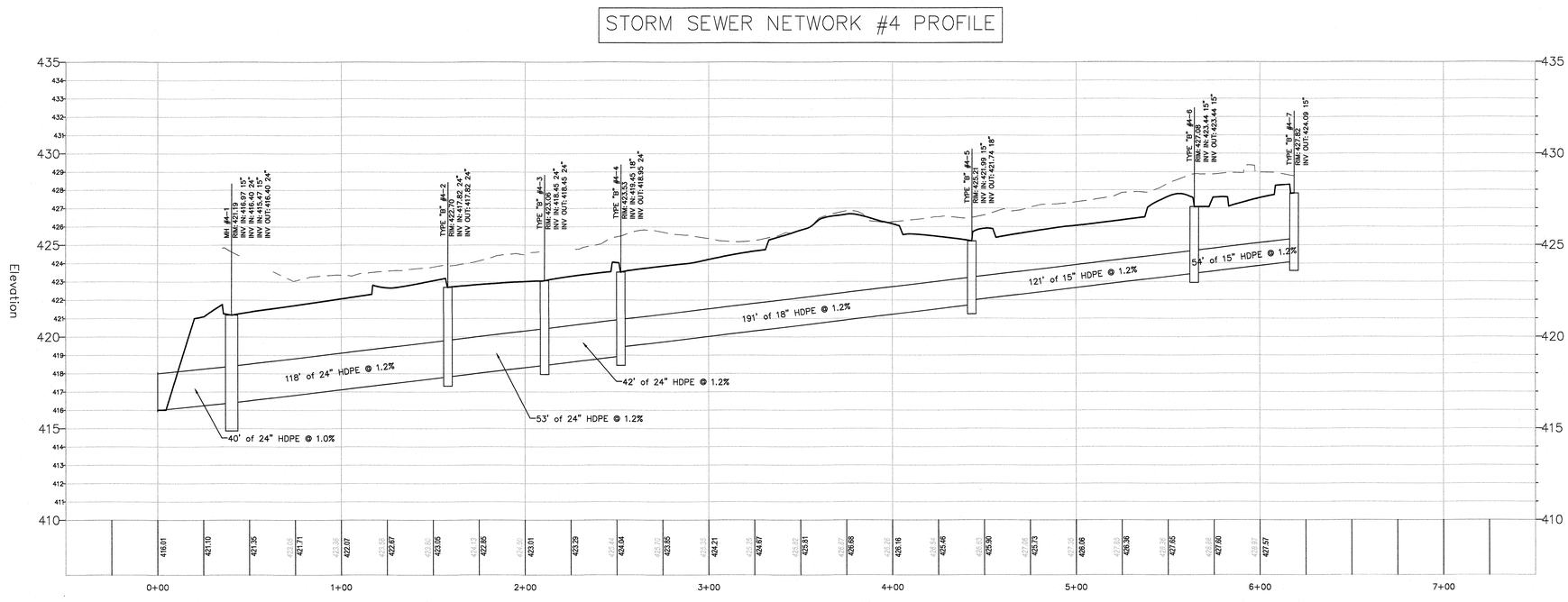


GRAPHIC SCALE (VERTICAL)

3 0 1.5 3 6 12

(IN FEET)
1 inch = 3 ft.

GRAPHIC SCALE (HORIZONTAL)

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

LEGEND

EXISTING GRADE ——— — ———

PROPOSED GRADE ———————

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

REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

STORM SEWER PROFILES

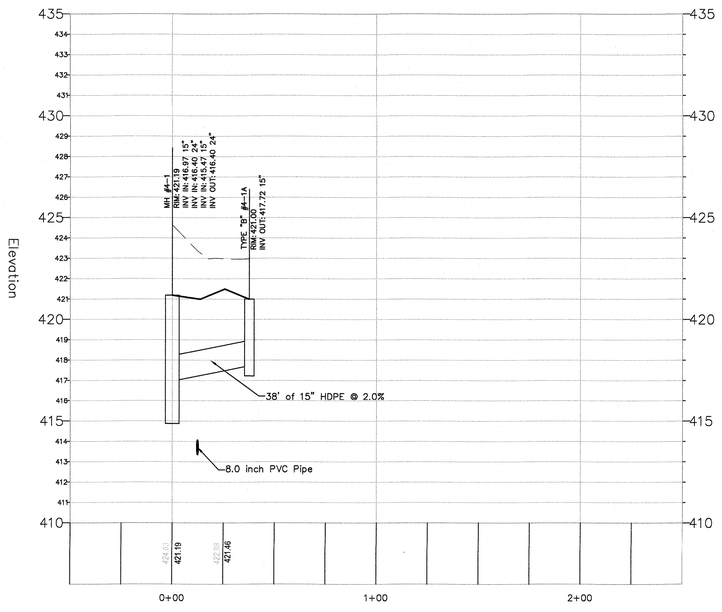
PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28133500
105 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL. (973) 227-7004 FAX (973) 227-7074

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662

DATED 10/29/2021

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: HORZ.: 1" = 3'
VERT.: 1"=30'
Sheet: SP-8

STORM SEWER NETWORK #4-1A PROFILE



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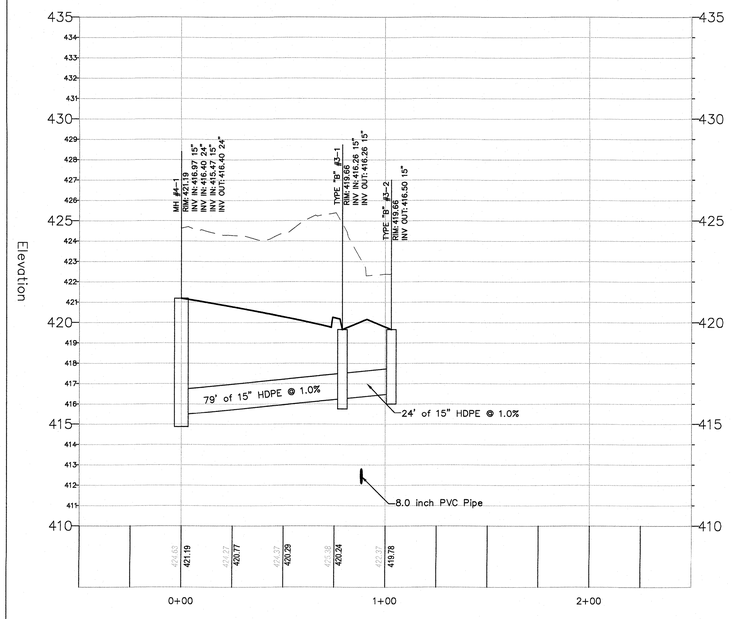

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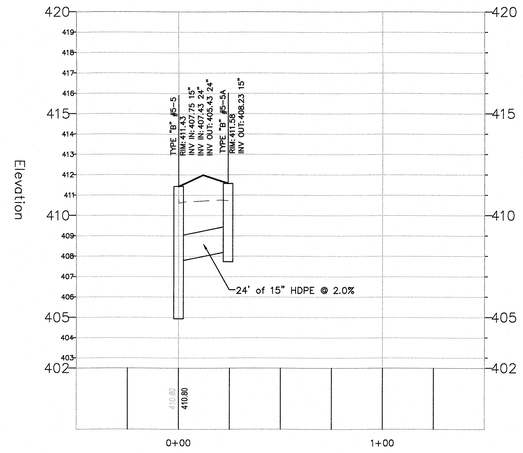
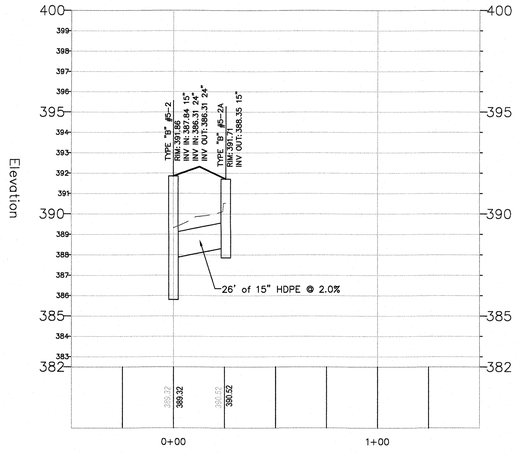
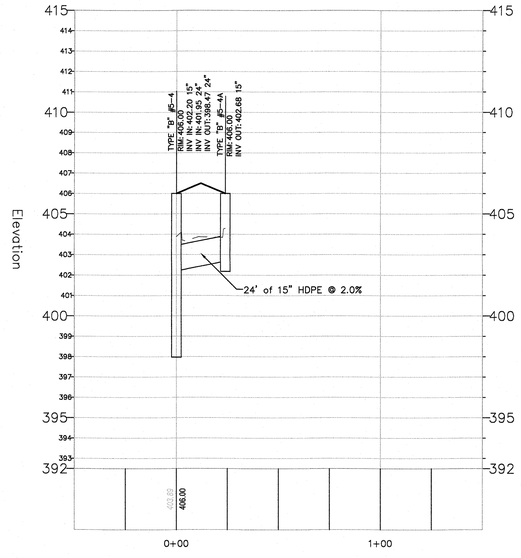


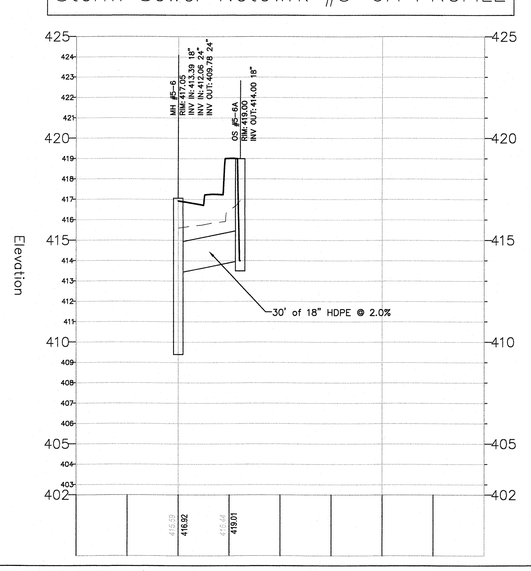
STORM SEWER NETWORK #5-2A PROFILE



STORM SEWER NETWORK #5-4A PROFILE



Storm Sewer Netowrk #5-6A PROFILE



GRAPHIC SCALE (VERTICAL)

3 0 1.5 3 6 12

(IN FEET)
1 inch = 3 ft.

GRAPHIC SCALE (HORIZONTAL)

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

LEGEND

EXISTING GRADE — — —
PROPOSED GRADE ———

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

REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

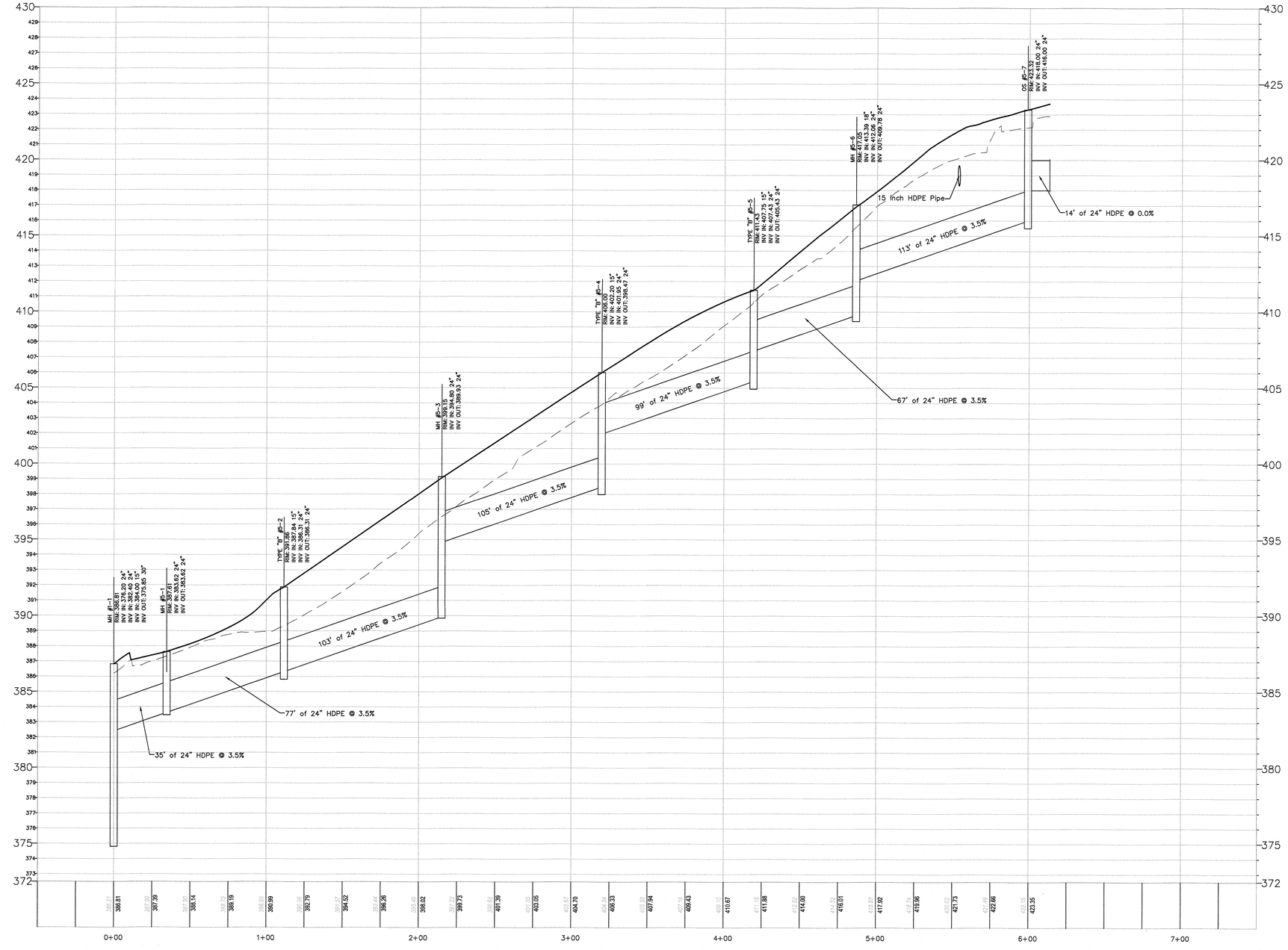
STORM SEWER PROFILES

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28151000
150 PASSAIC AVENUE • FAIRFIELD, • NEW JERSEY • 07004
TEL. (973) 227-7604 FAX (973) 227-7574

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: HORZ.- 1" = 3' VERT.- 1"=30'
Sheet: SP-9

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

STORM SEWER NETWORK #5 PROFILE



GRAPHIC SCALE (VERTICAL)

3 0 1.5 3 6 12

(IN FEET)
1 inch = 3 ft.

GRAPHIC SCALE (HORIZONTAL)

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

LEGEND

EXISTING GRADE — — —

PROPOSED GRADE ———

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REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR

DAUGHTERS OF ISRAEL

1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

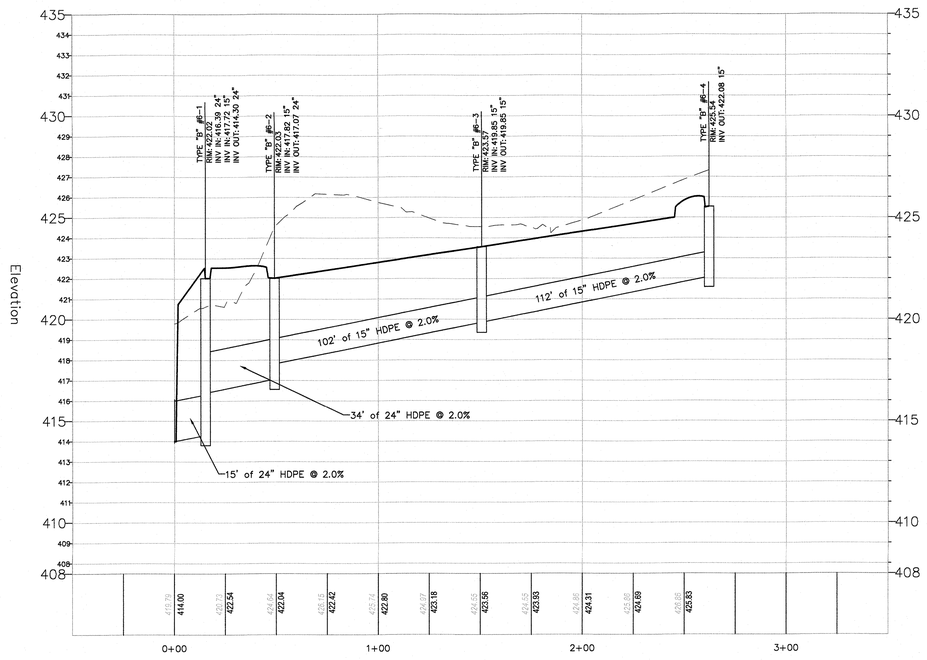
STORM SEWER PROFILES

PETRY ENGINEERING, LLC
CIVIL/SITE DEVELOPMENT ♦ LAND PLANNING ♦ WATER RESOURCES ENGINEERING
150 PASSAIC AVENUE ♦ FAIRFIELD, NEW JERSEY ♦ 07004
TEL: (973) 227-7004 FAX (973) 227-7074

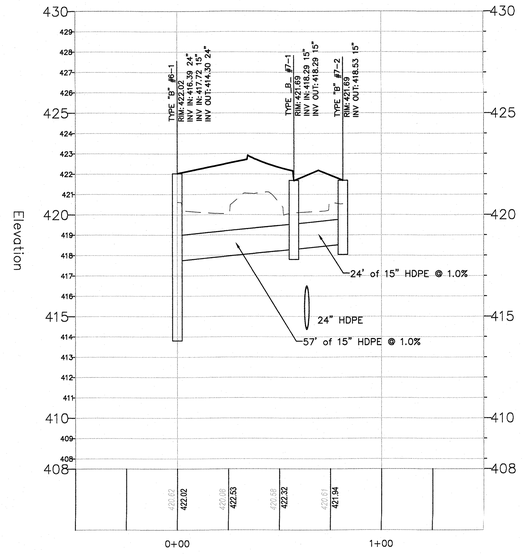
Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: HORZ.: 1" = 3' VERT.: 1"=30'
Sheet: SP-10

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

STORM SEWER NETWORK #6 PROFILE



STORM SEWER NETWORK #7 PROFILE



GRAPHIC SCALE (VERTICAL)

3 0 1.5 3 6 12

(IN FEET)
1 inch = 3 ft.

GRAPHIC SCALE (HORIZONTAL)

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

LEGEND

EXISTING GRADE — — —
PROPOSED GRADE ———

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REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

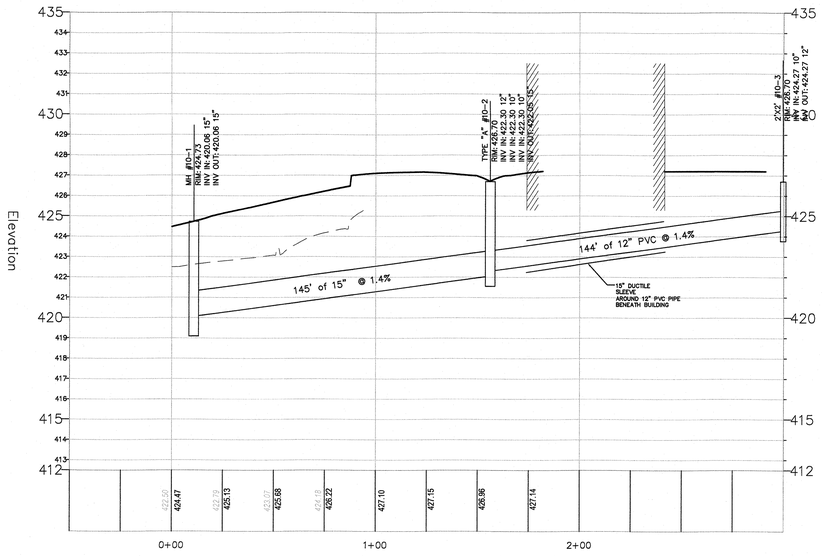
STORM SEWER PROFILES

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28100500
100 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL. (973) 357-7004 FAX (973) 357-7074

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

Designer: JMP
Drafstman: JAF
Checked By: JMP
Project No.: 19-265
Scale: HORZ.: 1" = 5'
VERT.: 1"=30'
Sheet:
SP-11

STORM SEWER NETWORK #10 PROFILE



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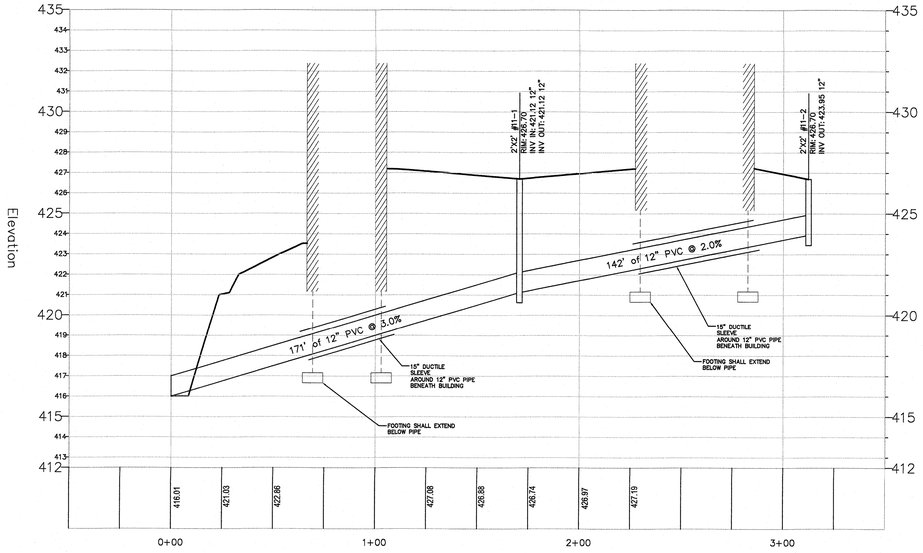
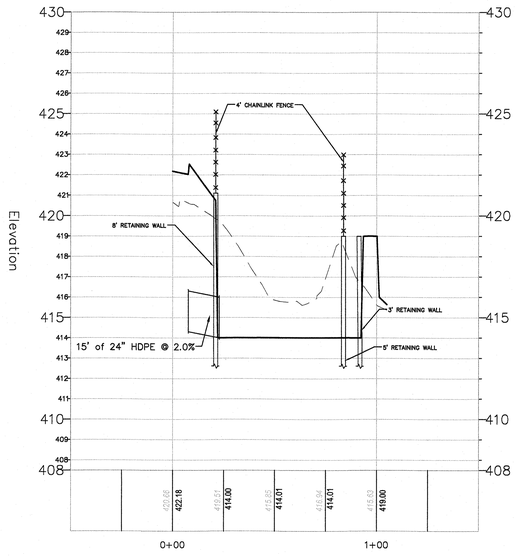


BASIN #2 PROFILE



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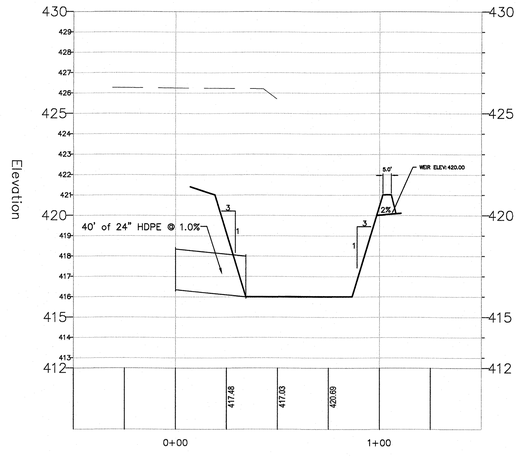


GRAPHIC SCALE (VERTICAL)

3 0 1.5 3 6 12

(IN FEET)
1 inch = 3 ft.

GRAPHIC SCALE (HORIZONTAL)

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

LEGEND

EXISTING GRADE
PROPOSED GRADE

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

REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

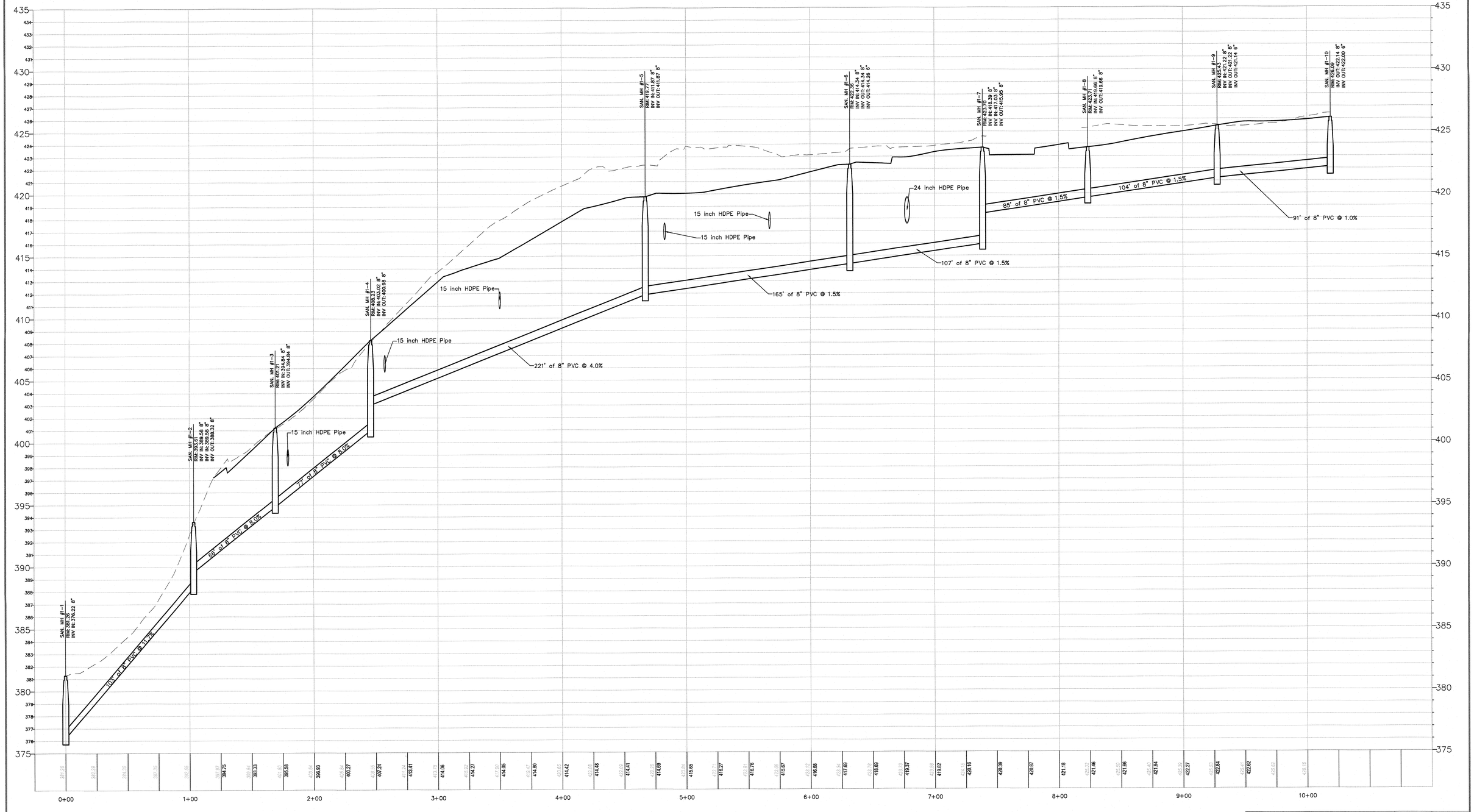
STORM SEWER AND BASIN PROFILES

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28115500
150 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL. (973) 227-7664 FAX (973) 227-7674

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: HORZ.: 1" = 3' VERT.: 1"=30'
Sheet: SP-12

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

SANITARY SEWER #1 PROFILE



GRAPHIC SCALE (VERTICAL)

3 0 1.5 3 6 12

(IN FEET)
1 inch = 3 ft.

GRAPHIC SCALE (HORIZONTAL)

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

LEGEND

EXISTING GRADE
PROPOSED GRADE

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PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

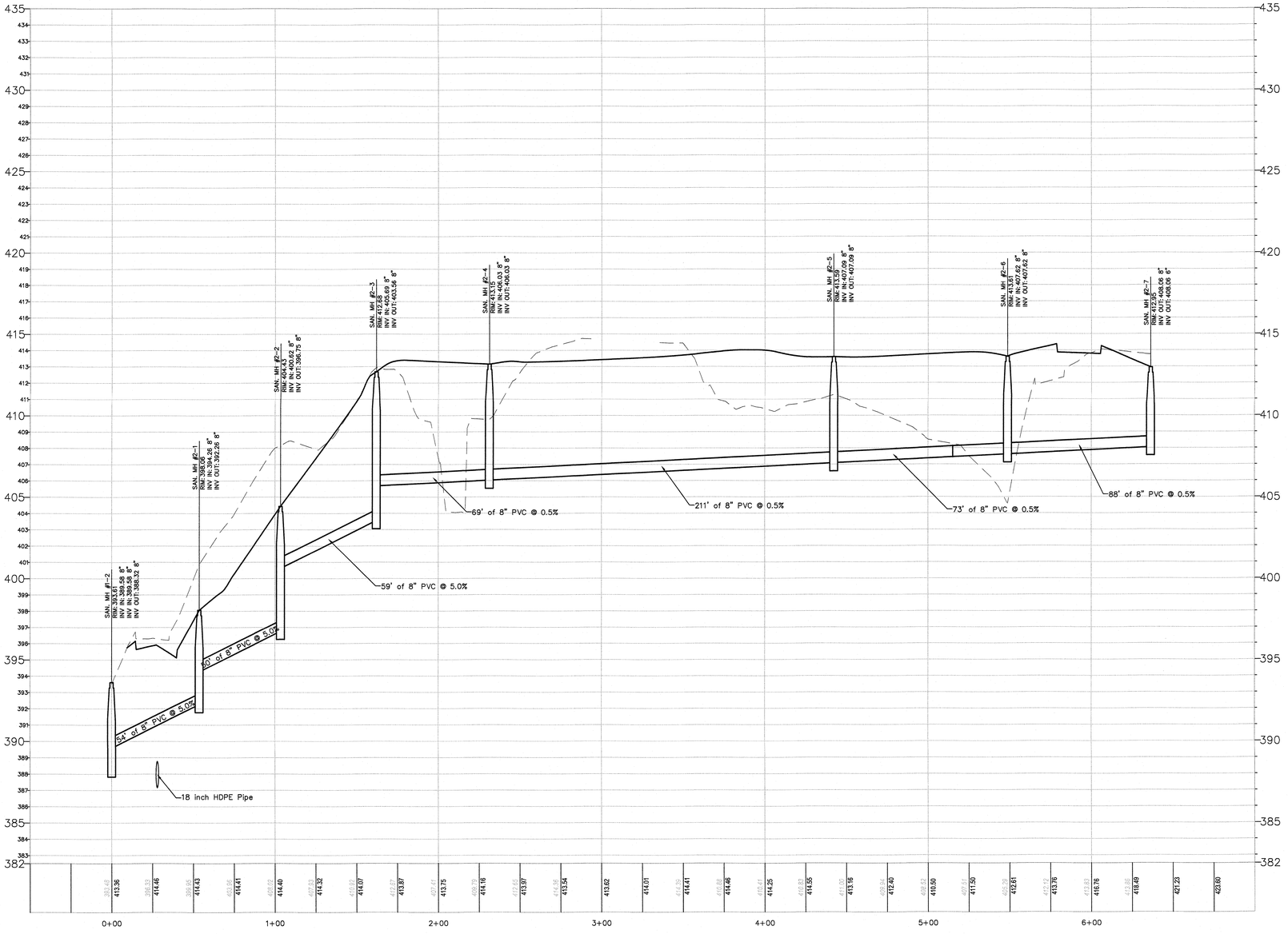
SANITARY SEWER PROFILES

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28015500
166 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL: (973) 227-7334 FAX (973) 227-7674

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: HORZ - 1" = 3'
VERT - 1"=30'
Sheet: SP-13

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662
DATED 10/20/2021

SANITARY SEWER #2 PROFILE



GRAPHIC SCALE (VERTICAL)

3 0 1.5 3 6 12

(IN FEET)
1 inch = 3 ft.

GRAPHIC SCALE (HORIZONTAL)

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

LEGEND

EXISTING GRADE — — —
PROPOSED GRADE ———

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1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

SANITARY SEWER PROFILES

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28103500
109 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL. (973) 227-7004 FAX (973) 227-7074

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36682 DATED 10/29/2021

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: HORZ: 1" = 3' VERT.: 1"=30'
Sheet: SP-14

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 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. All soil to be exposed or stockpiled for a period of greater than 14 days, and not under active construction, will be temporarily seeded and hay mulched or otherwise provided with vegetative cover. 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, last revised 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.**

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.

SEQUENCE OF CONSTRUCTION

1. INSTALL SILT FENCE, INLET FILTERS, AND ANTI-TRACKING PADS (DURATION: APPROX. 1 WEEK)
2. SAWCUT AND REMOVE PARKING LOT (DURATION: APPROX. 4 WEEKS)
3. INSTALL NEW STORM SEWERS (DURATION: APPROX. 6 WEEKS)
4. INSTALL NEW SANITARY SEWER (DURATION: APPROX. 2 WEEKS)
5. CONSTRUCT NEW BUILDINGS (DURATION: APPROX. 12 MONTHS)
6. STABILIZE AND SEED ALL DISTURBED AREAS NOT SCHEDULED FOR PAVING (DURATION: APPROX. 1 WEEK)
7. PAVE PARKING LOT (DURATION: APPROX. 2 WEEKS)
8. REMOVE ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES. (DURATION: APPROX. 1 WEEKS)

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 IS REQUIRED FOR ALL SURFACES HAVING LAWN OR LANDSCAPING AS FINAL COVER.

SOIL EROSION LEGEND

- X — FILTER FABRIC FENCING (SEE DETAIL)
- LIMIT OF DISTURBANCE
- SOIL BOUNDARY LINE
- SUPPER SILT FENCE
- INLET FILTER
- ANTI-TRACKING PAD (SEE DETAIL)

TOTAL AREA OF DISTURBANCE: 465,000 SQ.FT. OR 10.675 ± AC.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

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

REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

SOIL EROSION AND SEDIMENT CONTROL PLAN

PETRY ENGINEERING, LLC
DIVISION OF CORNERSTONE ARTHRITIS LICENSE NUMBER 35A0013500
166 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL: (973) 227-7500 FAX (973) 227-7574

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 38662 DATED 10/29/2021

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: 1" = 30'
Sheet: SP-15

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
●	40	Single	BOL	3.5 FOOT ROUND LED BOLLARD	KIM LIGHTING	PATR-NU3-12L-Q20-3K7-M16	3000k	0.900	21.76	1128	2, 3.5
●	47	Single	SL1	POST TOP LED FIXTURE, TYPE 3 DISTRIBUTION	Kim Lighting	LR20-68L-80-3K7-3-HDL-PT-M16	3000K	0.900	80	7853	12
●	4	Single	SL2	POST TOP LED FIXTURE, TYPE 5 WIDE DISTRIBUTION	Kim Lighting	LR20-68L-80-3K7-5W-HDL-PT-M16	3000K	0.900	80	8080	12
■	11	Single	SL3	VIPER SERIES AREA LIGHT, TYPE 4 WIDE DISTRIBUTION	Beacon Products	VPL-64L-135-3K7-4W-M16	3000K	0.900	135	13237	16, 25
■■	2	Back-Back	SL3	VIPER SERIES AREA LIGHT, TYPE 4 WIDE DISTRIBUTION	Beacon Products	VPL-64L-135-3K7-4W-M16	3000K	0.900	270.2	29094	25
▬	1	Single	SL6	LED WALLPACK, TYPE 4 DISTRIBUTION	KIM LIGHTING	WDW-D-48L-105-4K7-AF-M16	4000k	0.900	104	12400	16
▬	2	Single	SL7	VIPER SERIES AREA LIGHT, TYPE 5 WIDE DISTRIBUTION	Beacon Products	VPL-64L-135-3K7-5W-M16	3000K	0.900	137.6	14797	25

CALCULATION SUMMARY

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpcLr	PtSpcTb
OVERALL	Illuminance	Fc	0.73	23.6	0.0	N.A.	N.A.	20	20
PARKING AND DRIVEWAYS	Illuminance	Fc	2.39	13.3	0.3	7.97	44.33		

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

4 STORIES OVER PARKING
(115 SPACES BELOW)

BASIN #2
BOT. ELEV. 414.00
RIM ELEV. 416.00

BASIN #3
BOT. ELEV. 414.00
RIM ELEV. 416.00

PLEASANT VALLEY WAY

REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

LIGHTING PLAN

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28135900
100 PASSAIC AVENUE, SUITE 310, FAIR LAWN, NEW JERSEY • 07410
TEL. (973) 777-7544 FAX (973) 797-7015

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: 1" = 30'
Sheet: SP-16

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

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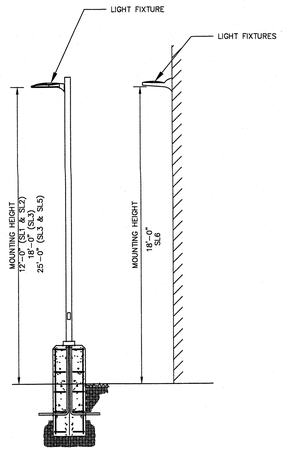
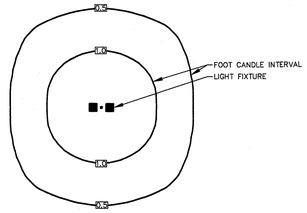
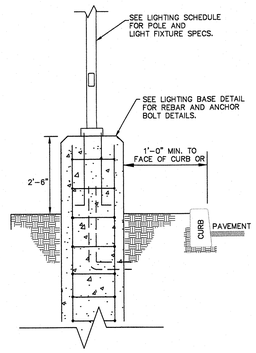


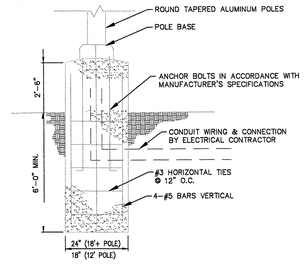
MOUNTING HEIGHT DIAGRAM
SCALE – N.T.S.



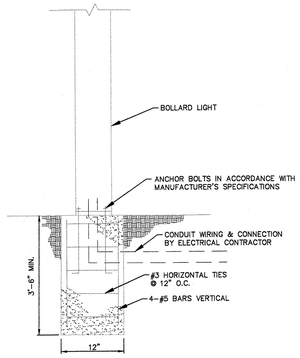
ISOLUX DIAGRAM
SCALE – N.T.S.



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



LIGHT BASE DETAIL
SCALE – N.T.S.



BOLLARD LIGHT BASE DETAIL
SCALE – N.T.S.

KIMLIGHTING®

PA7R
BOLLARD

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

Pavilion™

FEATURES

- IDA Dark Sky Compliant, No Up-light configuration
- Elegant form factor blended with Performance Optics
- Integral NEMA 3R Enclosure
- Dual receptacle power panel
- PA System capability
- Bluetooth® enabled RGBW accent

cULus LISTED · DLC 5.1 · 5K rating in 3000K and above CCTs only · IK10

CONTROL TECHNOLOGY

Bluetooth · DMX · SiteSync · phorcas

RELATED PRODUCTS

Pavilion Square · Pavilion Round: Impact Rated

SPECIFICATIONS

CONSTRUCTION

HOUSING:
- Castings are low copper aluminum alloy die-cast
- Gaskets are molded silicone to prevent harmful ingress to the lamp and driver compartments
- IP65 rated

SHAFT:
- Aluminum shaft(s) is .125" thick extruded aluminum 6061 alloy
- Concrete shaft(s) conforms to current specifications for "Portland Cement," ASTM C150, Type I or II. Aggregates shall meet current requirements of "Specifications for Concrete Aggregates," ASTM C33. Water shall be clean and free from deleterious amounts of silt, oil, acids, alkalies or organic materials. Wire for reinforcement shall conform to ASTM A185. Steel for lugs and plates shall conform to ASTM A36, or A283 grade D
- Concrete shaft(s) is medium sand-blasted with anti-graffiti sealer and material color shall be integral to the concrete mix
- Concrete shaft(s) is cured to allow for completion of the hydration process, and result in a 28 day compressive strength of not less than 4,500 psi
- Concrete shaft(s) is cast from fiberglass molds used to insure uniform parts. Mold parting lines maybe slightly visible in finished parts

OPTICS
- LEDs mount to a metal printed circuit board assembly (MCPCB)
- Optical lenses are clear injection molded PMMA acrylic
- UG configurations have an optically clear flat tempered glass lens, all other configurations have either an optically clear or high transmission diffused acrylic lens

INSTALLATION
- Aluminum shaft configurations will have four 3/8" x 10" x 2" zinc plated L-hook anchor bolts shall to be installed with an included template. Nuts and washers are provided to level and secure the mounting plate to the anchor bolts
- Aluminum shaft configurations will have a mounting plate and be able to be installed 20" in either direction during installation for aiming adjustment
- Concrete shaft configurations will have four steel mounting tabs for installation on four 1/2" x 10" x 2" zinc electroplated L-hook anchor bolts. Each anchor bolt is supplied with two nuts, two washers, and a rigid pressed board template
- Concrete shaft configurations are palletized with adequate hold-downs to prevent load movement in transit
- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury

ELECTRICAL
- Universal voltage, 120 through 277V with a ±10% tolerance. Driver is Underwriters Laboratories listed
- High voltage configurations, 208-277, 347/480. Driver is Underwriters Laboratories listed
- "Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components
- Drivers are greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments
- Luminaire is capable of operating at 100% brightness in a 40°C environment. Both driver and optical array have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C

(Specifications continued on page 3)

KEY DATA	
Lumen Range	397–2350
Wattage Range	14–22
Efficacy Range (LPW)	29–108
Reported Life (Hours)	L70/60,000

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701 Millennium Blvd • Greenville, SC 29607 / Tel 864.678.1000 / Website www.kimlighting.com

HUBBELL Lighting

KIMLIGHTING®

UR20
ARCHITECTURAL AREA/SITE

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

Ouro™

FEATURES

- 20' size in post top, pole and wall mount
- High performance optics up to 17,000 delivered lumens
- Elegant form factor
- Diffusion lens option
- SiteSync™ wireless control options
- UL/cUL listed for wet locations, IP66 and 4G/1.5G vibration rated

cULus LISTED · DLC 5.1 · 3000K std warmer CCTs only · IK10 · Buy American Specifications

CONTROL TECHNOLOGY

SiteSync · NX DISTRIBUTED INTELLIGENCE

RELATED PRODUCTS

Ouro Small Arm Mount · Ouro Large Post Top · Ouro Large Arm Mount

SPECIFICATIONS

CONSTRUCTION
- Low copper aluminum alloy die-casting is designed as one-piece.
- Molded silicone gasket throughout insures the sealing between the two compartments and provides ingress protection.
- All external fasteners are stainless steel.
- Cover is secured to Lens frame by the latch and hinge.

OPTICS
- LEDs mount to a metal printed circuit board assembly (MCPCB).
- Optical lenses are clear injection molded PMMA acrylic.
- Optional Backlight Control on each LED module to completely control unwanted backlight.
- Optional fixture finish optical surfaces will not exceed BUG ratings of the standard white finish.

LENS
- Standard lens (CLR) IK08
- Clear Polycarbonate Lens (CP) IK10

INSTALLATION
- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

ELECTRICAL
- Universal voltage, 120 through 277V with a ±10% tolerance. Driver is Underwriters Laboratories listed.
- High voltage configurations, 347/480. Driver has a 0-10V dimming interface for multi-level illumination options. Driver is Underwriters Laboratories listed.
- "Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components
- Drivers shall have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments.
- Luminaire shall be capable of operating at 100% brightness in a 40°C environment. Both driver and optical array have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C.
- Surge protection: 10,000k in parallel, 20,000k in series
- Wiring: No. 18AWM rated 105°C, wet rating.

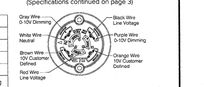
CONTROLS

7PR
- Fully gasketed and wired 7-pin receptacle option. Easy access location above the electrical compartment. 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others.

Standard customer operation modes:
- Traditional on/off photoelectric control.
- 5-pin wireless photoelectric control for added dimming feature.
- 7-pin wireless photoelectric control for for dimming and additional I/O connections for customer use.

7-Pin receptacle placement

(Specifications continued on page 3)



KEY DATA	
Lumen Range	2694 - 16874
Wattage Range	25 - 150
Efficacy Range (LPW)	95 -133
Reported Life (Hours)	L70/>60,000
Weight	35 lbs - 15.8 kg
EPA	0.608

*Clear Polycarbonate Lens (CP) IK10, Standard lens (CLR) IK08, Consult factory for details

(Specifications continued on page 3)

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HUBBELL Lighting

VIPER L
STRIKE
LARGE VIPER LUMINAIRE

Cat.#
Job
Type
Approvals

BEACON

SPECIFICATIONS

Intended Use:
The Beacon Viper luminaire is available in two sizes with a wide choice of different LED wattage configurations and optical distributions designed to replace HID lighting up to 1000W MH or HPS. Luminaires are suitable for wet locations.

Construction:
- Manufactured with die cast aluminum.
- Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements.
- External hardware is corrosion resistant.
- One-piece optical cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel base.
- Cartridge is held together with internal brass standoffs secured to the board so that it can be field replaced as a one-piece optical system.
- Two-piece silicone and microcellular polyurethane foam gasket ensures a weather-proof seal around each individual optic.

Electrical:
- Luminaire accepts 120V through 277V, 50 Hz to 60 Hz (UNV), 347V, or 480V input.
- Power factor is ≥ .90 at full load.
- Dimming drivers are standard, but must contact factory to request wiring leads for purpose of external dimming controls.
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher.
- Plug disconnects are certified by UL for use at 600 VAC, 15A or higher. 13A rating applies to primary (AC) side only.
- Fixture electrical compartment shall contain all LED driver components and shall be provided with a push-button terminal block for AC power connections.
- Optional 7-pin ANSI C136.41-2013 twist-lock photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices.
- Ambient operating temperature -40°C to 40°C
- Surge protection - 20kA.
- LifeshieldTM Circuit - protects luminaire from excessive temperature. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range. Operation shall be smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers. The device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.).

Controls/Options:
- Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the motion response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration.
- Available with Energen for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night (see www.beaconproducts.com/productsearaenergen).
- In addition, Viper can be specified with **SiteSync™** wireless control system for reduction in energy and maintenance costs while optimizing light quality 24/7. For more details, see ordering information or visit: www.hubbelllighting.com/sitesync

Installation:
- Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included.

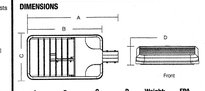
Finish:
- IFS polyester powder-coat electrostatically applied and thermocured. IFS finish consists of a five-stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish.
- The finish meets the AAMA 2604 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

Certifications/Ratings:
- Design Lights Consortium (DLC) qualified, consult DLC website for more details: http://www.designlights.org/QPL
- Certified to UL 1598, UL 8750, and CSA C22.2
- 3G rated for ANSI C136.31 high vibration applications with MAF mounting
- IDA approved
- This product is approved by the Florida Fish and Wildlife Conservation Commission. Separate spec available at: http://www.beaconproducts.com/products/viper_large

Warranty:
Five year limited warranty for more information visit: www.hubbelllighting.com/resources/warranty

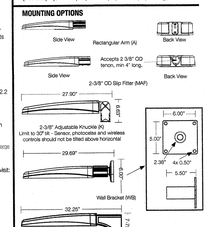
PRODUCT IMAGE(S)

DIMENSIONS



A	B	C	D	Weight:	EPA
29.9" (741 mm)	24.19" (614 mm)	14.25" (362 mm)	4.13" (105 mm)	25.0 lbs (11.3 kg)	1.2 ft²

MOUNTING OPTIONS



CERTIFICATIONS/LISTINGS

cULus · DLC 5.1 · 3000K and warmer CCTs only

Beacon Products • 2041 58th Avenue Circle East Bradenton, FL 34203 • Phone: 800-345-4928
Due to our continued efforts to improve our products, product specifications are subject to change without notice.
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HUBBELL Lighting

KIMLIGHTING®

WDM
WALL MOUNTED

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

Wall Director

FEATURES

- -5° to +10° tilt adjustment
- High performance optics deliver up to 16,000 lumens
- up or down mountable without modification
- Programmable occupancy sensor (dimming)
- NX and SiteSync wireless controls
- 130+ Lumens per watt
- UL/cUL listed for wet locations, IP66 Listed.

Wall Director Medium

cULus LISTED · DLC 5.1 · 3000K std warmer CCTs · IK07 · Buy American Specifications

RELATED PRODUCTS

Wall Director Small

CONTROL TECHNOLOGY

NX DISTRIBUTED INTELLIGENCE

SPECIFICATIONS

CONSTRUCTION
- Optical housing is a one-piece, die-cast low copper (<0.6%) aluminum alloy with integral heat sink. The housing rotates against mounting arm housing to provide -5° to 10° of adjustment with degree markers label. At 0° adjustment, lens is totally concealed from view above horizontal with fixture mounted in the downward position.
- Mounting arm housing is one-piece die-cast, low copper (<0.6%) aluminum alloy with provisions for tilt mechanism. Mounting arm fasters to the mounting plate with keyhole slots freeing both hands for securing and wiring. One stainless steel socket-head screw on the tilt mechanism frees the optical housing to rotate for aiming. Tightening the screws locks the housing and lens frame together with sealing provided by a silicone gasket. For visual aiming, adjustment may be accomplished with the fixture on.
- Lens Frame is a one-piece, die-cast low copper (<0.6%) aluminum alloy with integral cooling fins to dissipate driver thermal.
- Finish: fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat
- Brackets and hardware shall be stainless steel

OPTICS
- LEDs mount to a metal printed circuit board assembly (MCPCB).
- Optical lenses are clear injection molded PMMA acrylic.
- Secondary lens is impact resistant 1/8" tempered glass with anti-reflective coating.

INSTALLATION
- Junction box (by Others): Standard with steel, quick-mount junction box plate that mounts directly to 4" J-Box.
- Mounting plate is stainless steel and features a one-piece EPDM gasket on back side of plate to firmly seal fixture to wall surface, forbidding entry of moisture and particulates.
- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

SERVICING
- Housing should hang freely in an open service position for inspection of primary wire connections. Once in service position, the housing can be removed for service by sliding the assembly to the left (for down mounting) or to the right (for up mounting) and disconnecting the wiring plugs.
- Driver assembly shall be mounted to a prewired internal tray with quick disconnects for removal.

ELECTRICAL
- Universal voltage, 120 through 277V with a ±10% tolerance. Driver is Underwriters Laboratories listed.
- High voltage configurations, 347/480. Driver has a 0-10V dimming interface for multi-level illumination options. Driver is Underwriters Laboratories listed.
- "Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components.
- Drivers have a greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments.
- Luminaire shall be capable of operating at 100% brightness in a 40°C environment. Both driver and optical array have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C.
- Modular wiring harness in the service area provides user access to the dimming circuitry.

(Specifications continued on page 3)

KEY DATA	
Lumen Range	5,950–16,000
Wattage Range	54–131
Efficacy Range (LPW)	97–145
Reported Life (Hours)	L70/60,000
Weight	35 lbs/15.87 kg

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701 Millennium Blvd • Greenville, SC 29607 / Tel 864.678.1000 / Website www.kimlighting.com

HUBBELL Lighting

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
●	40	Single	BOL	3.5 FOOT ROUND LED BOLLARD	KIM LIGHTING	PA7R-NU3-12L-020-3K7-M16	3000k	0.900	21.76	1128	2, 3.5
●	47	Single	SL1	POST TOP LED FIXTURE, TYPE 3 DISTRIBUTION	Kim Lighting	UR20-68L-80-3K7-3-HDL-PT-M16	3000K	0.900	80	7853	12
●	4	Single	SL2	POST TOP LED FIXTURE, TYPE 5 WIDE DISTRIBUTION	Kim Lighting	UR20-68L-80-3K7-5W-HDL-PT-M16	3000K	0.900	80	8080	12
▬	11	Single	SL3	VIPER SERIES AREA LIGHT, TYPE 4 WIDE DISTRIBUTION	Beacon Products	VPL-64L-135-3K7-4W-M16	3000K	0.900	135	13237	18, 25
▬▬	2	Back-Back	SL5	VIPER SERIES AREA LIGHT, TYPE 5 WIDE DISTRIBUTION	Beacon Products	VPL-64L-135-3K7-5W-M16	3000K	0.900	275.2	29594	25
▬	1	Single	SL6	LED WALLPACK, TYPE 4 DISTRIBUTION	KIM LIGHTING	WDM-D-48L-105-4K7-4F-M16	4000k	0.900	104	12405	18
▬	2	Single	SL7	VIPER SERIES AREA LIGHT, TYPE 5 WIDE DISTRIBUTION	Beacon Products	VPL-64L-135-3K7-5W-M16	3000K	0.900	137.6	14797	25

CALCULATION SUMMARY

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpcLr	PtSpcTb
OVERALL	Illuminance	Fc	0.73	23.6	0.0	N.A.	N.A.	20	20
PARKING AND DRIVEWAYS	Illuminance	Fc	2.39	13.3	0.3	7.97	44.33		

1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP
REVISION	DESCRIPTION	DATE	BY

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

LIGHTING DETAILS

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA101115900
165 PASSAIC AVENUE, SUITE 2A, FAIRFIELD, NEW JERSEY 07004
TEL: (973) 227-7294 FAX (973) 227-7577

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: AS NOTED
Sheet: SP-17

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

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 WEST ORANGE 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 WEST ORANGE) TO PROVIDE UNIFORMED POLICE FLAGMEN AS NECESSARY FOR WORK CONDUCTED WITHIN ROADWAYS.

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

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.

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 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.

REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

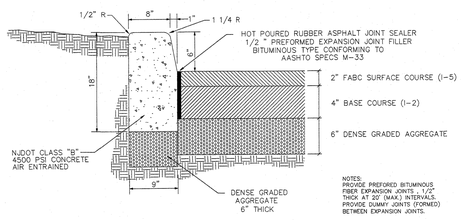
CONSTRUCTION NOTES

PETRY ENGINEERING, LLC
DIVISION OF CONSULANCE AFFAIRS | LICENSE NUMBER 24GA28123900
100 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL: (973) 227-7004 FAX (973) 227-7074

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: N.T.S.
Sheet: SP-18

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

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021



CONCRETE CURB AND FULL DEPTH PAVEMENT
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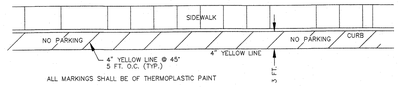

FIRE LANE PARKING
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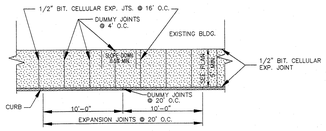

CONCRETE SIDEWALK PLAN
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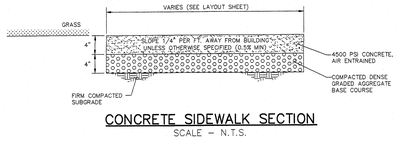

CONCRETE SIDEWALK SECTION
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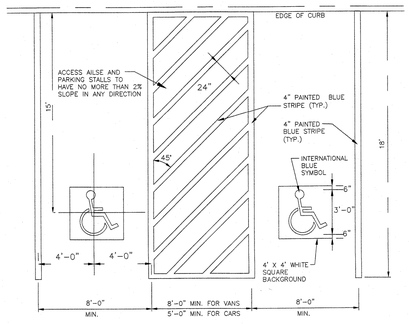
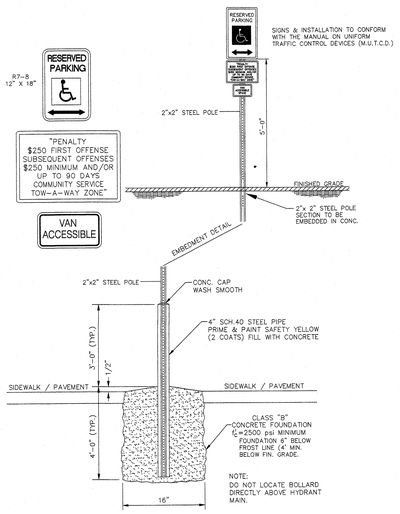
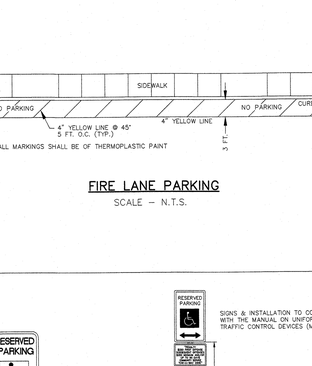


NOTE:
1. STRIPING AND CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE AND MUNICIPAL CODES AND SPECIFICATIONS.
2. ALL PAVEMENT MARKINGS AND STRIPING SHALL BE LONG LIFE THERMOPLASTIC.

HANDICAP PARKING DIMENSIONS
SCALE – N.T.S.



PIPE BOLLARD DETAIL FOR HC SIGNS
SCALE – N.T.S.



TYPICAL SIGN DETAIL
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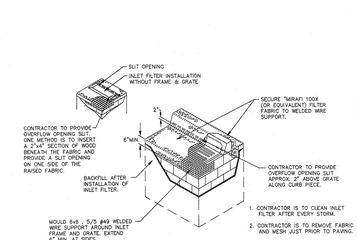

INLET FILTER DETAIL
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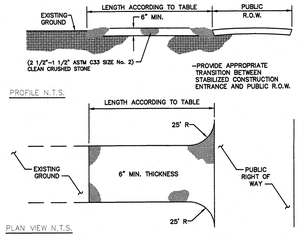
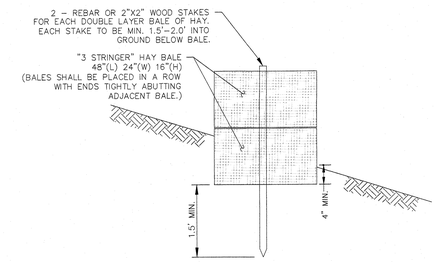


LENGTH OF CONSTRUCTION EXIT TABLE

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	

ANTI-TRACKING PAD DETAIL
SCALE N.T.S.



STRAW BALE BARRIER DETAIL
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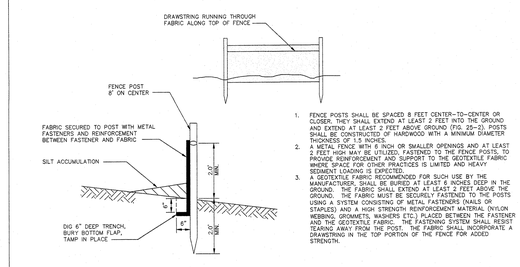
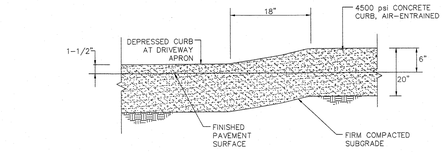
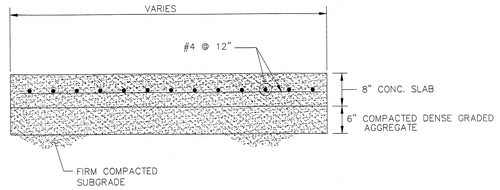


1. FENCE POSTS SHALL BE SPACED 8 FEET CENTER-TO-CENTER OR CLOSER. THEY SHALL EXTEND AT LEAST 2 FEET INTO THE GROUND AND EXTEND AT LEAST 2 FEET ABOVE GROUND (FIG. 25-2). POSTS SHALL BE CONSTRUCTED OF HARDWOOD WITH A MINIMUM DIAMETER THICKNESS OF 1.5 INCHES.
2. A METAL FENCE WITH 6 INCH OR SMALLER OPENINGS AND AT LEAST 2 FEET HIGH MAY BE UTILIZED. FASTENED TO THE FENCE POSTS, TO PROVIDE REINFORCEMENT AND SUPPORT TO THE GEOTEXTILE FABRIC IN CASES WHERE FABRIC STRENGTH 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 THIS FENCE FOR ADDED STRENGTH.

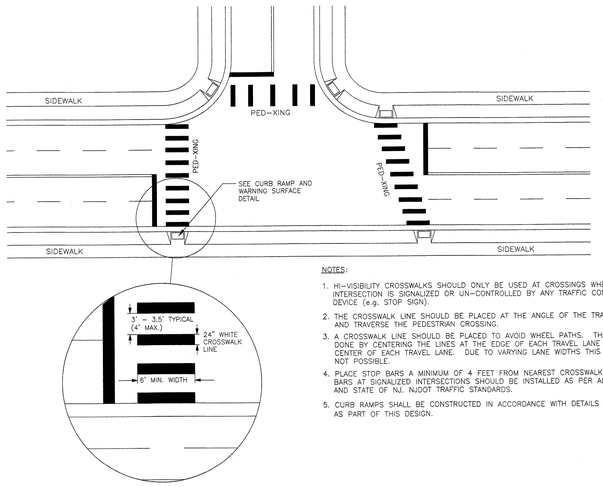
SILT FENCE DETAIL
SCALE N.T.S.



DEPRESSED CONCRETE CURB
SCALE – N.T.S.

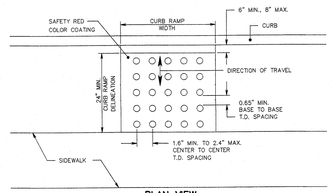


CONC. PAD FOR LOADING DETAIL
SCALE N.T.S.

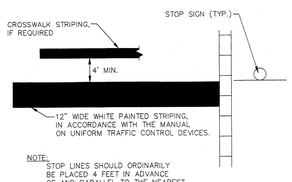


NOTES:
1. HI-VISIBILITY CROSSWALKS SHOULD ONLY BE USED AT CROSSINGS WHERE THE INTERSECTION IS SIGNALIZED OR UN-CONTROLLED BY ANY TRAFFIC CONTROL DEVICE (e.g. STOP SIGN).
2. THE CROSSWALK LINE SHOULD BE PLACED AT THE ANGLE OF THE TRAVEL LANES AND TRAVERSE THE PEDESTRIAN CROSSING.
3. A CROSSWALK LINE SHOULD BE PLACED TO AVOID WHEEL PATHS. THIS IS IDEALLY DONE BY CENTERING THE LINES AT THE EDGE OF EACH TRAVEL LANE AND IN THE CENTER OF EACH TRAVEL LANE. DUE TO VARYING LANE WIDTHS THIS IS SOMETIMES NOT POSSIBLE.
4. PLACE STOP BARS A MINIMUM OF 4 FEET FROM NEAREST CROSSWALK LINE. STOP BARS AT SIGNALIZED INTERSECTIONS SHOULD BE INSTALLED AS PER ALL FEDERAL M.U.T.C.D. AND STATE OF NJ. NJDOT TRAFFIC STANDARDS.
5. CURB RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS SHOWN/PROVIDED AS PART OF THIS DESIGN.

TYPICAL HI-VISIBILITY CROSSWALK PAVEMENT MARKINGS



DETECTABLE WARNING SURFACE
SCALE 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.

CURB RAMP TYPE 3

W FEET	H INCHES	X1 FEET	L1 FEET	Y INCHES	X2 FEET	L2 FEET
2.5	3	2.5	9	2.5	0.5	5
	4	3.3	10.6	2.5	1.5	7
	5	4.2	12.4	2.5	2.5	9
	6	5.0	14.0	2.5	3.5	11
	7	5.8	15.6	2.5	4.5	13
	8	6.7	17.4	2.5	5.5	15
	9	7.5	19.0	2.5	6.5	17
3.0	3	*	*	3.0	*	*
	4	3.3	10.6	3.0	1	6
	5	4.2	12.4	3.0	2	8
	6	5.0	14.0	3.0	3	10
	7	5.8	15.6	3.0	4	12
	8	6.7	17.4	3.0	5	14
	9	7.5	19.0	3.0	6	16
3.5	3	*	*	*	*	*
	4	3.3	10.6	3.5	0.5	5
	5	4.2	12.4	3.5	1.5	7
	6	5.0	14.0	3.5	2.5	9
	7	5.8	15.6	3.5	3.5	11
	8	6.7	17.4	3.5	4.5	13
	9	7.5	19.0	3.5	5.5	15
4.0	3	*	*	*	*	*
	4	*	*	*	*	*
	5	4.2	12.4	4.0	1	6
	6	5.0	14.0	4.0	2	8
	7	5.8	15.6	4.0	3	10
	8	6.7	17.4	4.0	4	12
	9	7.5	19.0	4.0	5	14

WARNING: DIMENSIONS SHOWN IN CURB RAMP TABLES ARE BASED ON A ZERO PERCENT GUTTER PROFILE THEREFORE, DIMENSIONS SHOWN MAY INCREASE OR DECREASE BASED ON GRADE AND PERCENT OF GUTTER PROFILE.

CURB RAMP TYPE 1

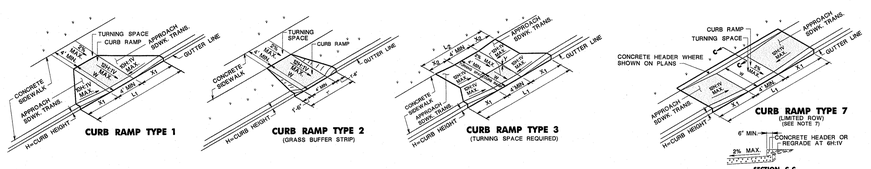
H INCHES	X1 FEET	L1 FEET	W FEET
3	2.5	9.0	5
4	3.3	10.6	4
5	4.2	12.4	5
6	5.0	14.0	6
7	5.8	15.6	7
8	6.7	17.4	8
9	7.5	19.0	9

CURB RAMP TYPE 2, 5 OR 6

H INCHES	W FEET
3	3
4	4
5	5
6	6
7	7
8	8
9	9

CURB RAMP TYPE 7

W FEET	H INCHES	X1 FEET	L1 FEET
4 MIN	3	3	10
MIN 5	4	4	12
WITH	5	5	14
HEADER	6	6	16
	7	7	18
	8	8	20
	9	9	22



ADA Ramps
SCALE N.T.S.

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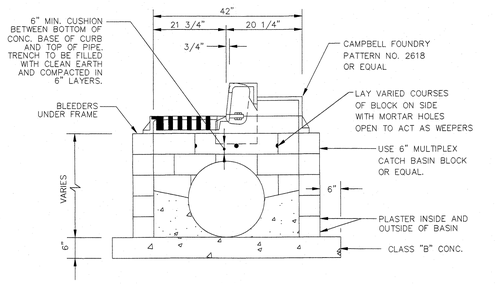
PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

CONSTRUCTION DETAILS

PETRY ENGINEERING , LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28012600
168 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL. (973) 227-7004 FAX (973) 227-7074

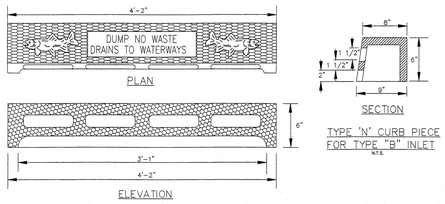
J. MICHAEL PETRY, PE, PP, RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: N.T.S.
Sheet: SP-19



TYPE 'B' INLET DETAIL

(SCALE – N.T.S.)



TYPE 'N' CURB PIECE FOR TYPE "B" INLET

N.T.S.

GENERAL NOTES

1. INLETS MAY BE CONSTRUCTED OF BRICK, CONCRETE, CONCRETE BLOCK OR PRECAST CONCRETE. WALLS SHALL BE 8 INCHES THICK IF BRICK AND 6 INCHES THICK IF CONCRETE, CONCRETE BLOCK OR PRECAST CONCRETE. INLET FOUNDATIONS AND INVERTS SHALL BE CLASS B CONCRETE.
2. CORBELLING OF INLET WALLS WILL BE PERMITTED AT THE RATE OF 1/2 INCH PER 8 INCHES OF HEIGHT; MAXIMUM CORBEL 6 INCHES PER WALL.
3. EXCEPT FOR INLETS TYPE A AND C, FOUNDATIONS AND INVERTS SHALL BE CONSTRUCTED IN TWO STAGES, AND THE BOTTOM OF THE FOOTINGS SHALL BE 8 INCHES BELOW THE OUTER WALL OF THE LOWEST PIPE IN THE INLET.
4. WHEN THE DEPTH OF AN INLET THAT IS NOT PRECAST EXCEEDS 10 FEET AS MEASURED FROM TOP OF GRATE TO INVERT, WALLS BELOW A DEPTH OF 8 FEET SHALL BE 12 INCHES THICK AND THE DEPTH OF FOUNDATION INCREASED TO 12 INCHES. WHEN ROCK IS ENCOUNTERED, THE DEPTH OF THE FOUNDATION SHALL NOT BE INCREASED.
5. INLET FOUNDATIONS WHICH ARE PRECAST SHALL BE PLACED ON A 6 INCH THICK BED OF COMPACTED COARSE AGGREGATE SIZE NO. 57. THE COARSE AGGREGATE SHALL EXTEND 6 INCHES BEYOND THE HORIZONTAL LIMITS OF THE INLET FOUNDATION.
6. CASTINGS FOR PRECAST INLETS SHALL BE ADJUSTED TO GRADE WITH COURSES OF BRICK, AS REQUIRED, 12 INCHES MAXIMUM.
7. WHEN THE DEPTH OF A PRECAST INLET EXCEEDS 10 FEET AS MEASURED FROM TOP OF GRATE TO INVERT, THE FOUNDATION SHALL BE INCREASED TO 12 INCHES. WHEN ROCK IS ENCOUNTERED, THE DEPTH OF THE FOUNDATION SHALL NOT BE INCREASED.
8. MINIMUM WALL REINFORCEMENT FOR PRECAST INLETS TYPES A, B, C, E, D–1, D–2 AND B MODIFIED:

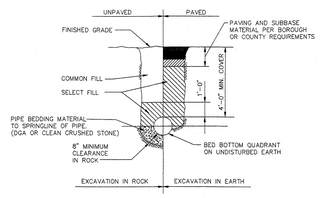
DEPTH BELOW TOP OF GRATE	HORIZONTAL REINF.	VERTICAL REINF.
0' TO 10'–0"	#13 @ 10" C.C.	#13 @ 18" C.C.
10'–1" TO 15'–0"	#13 @ 8" C.C.	#13 @ 18" C.C.
15'–1" TO 20'–0"	#13 @ 6" C.C.	#13 @ 18" C.C.

REINFORCING SHOWN FOR PRECAST INLETS IS THE MINIMUM REQUIRED. ADDITIONAL REINFORCING FOR HANDLING IS THE RESPONSIBILITY OF THE CONTRACTOR.

ALTERNATE REINFORCEMENT

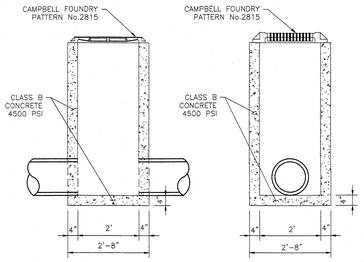
DEPTH BELOW TOP OF GRATE	
0' TO 10'–0"	WWF 3 x 6 W6 WIRES SPACED AT 3" TO RUN HORIZONTAL IN ALL CASES.
10'–1" TO 15'–0"	WWF 3 x 6 W6 ADD #10 BAR @ 18" HORIZONTAL.
15'1" TO 20'0"	WWF 3 x 6 W6 ADD #10 BAR @ 9" HORIZONTAL OR ADD #13 BAR AT 15" HORIZONTAL.

9. ALL INLETS AND MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ITS AMENDMENTS.
10. FOR CAST IRON CLASS 30B ONLY, ANY OTHER CLASS OF CAST IRON OR TYPE OF MATERIAL MUST BE ON THE BUREAU OF MATERIALS APPROVED PRODUCTS LIST OR NEW TECHNOLOGYS AND PRODUCTS APPROVED PRODUCTS LIST.



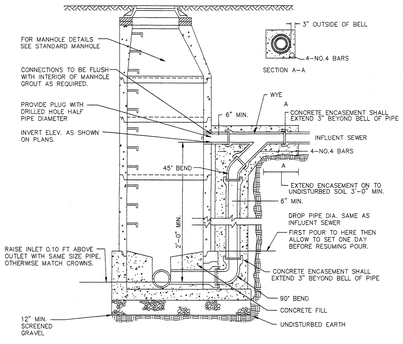
TYPICAL TRENCH DETAIL FOR UTILITIES

SCALE – N.T.S.



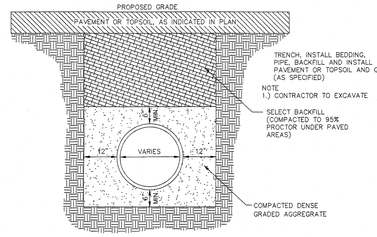
2' X 2' INLET

SCALE – N.T.S.



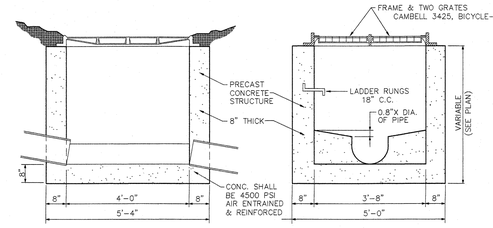
SANITARY SEWER DROP MANHOLE DETAIL

SCALE – N.T.S.



STORM SEWER PIPE TRENCH DETAIL

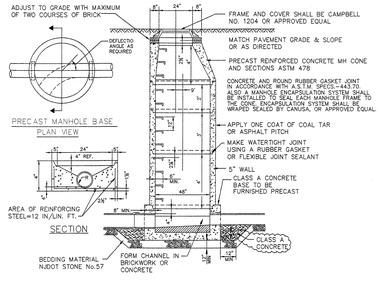
(SCALE – N.T.S.)



NOTE:
1.) THIS INLET MAY BE CONSTRUCTED OF BRICK, CONC. OR CONC. BLOCK, IF BRICK OR CONC. BLOCK IS USED THE BOTTOM SHALL BE AS SHOWN FOR CONC.
2.) DEPTH OF INVERT TO BE 0.80 THE DIAMETER OF THE MAIN SEWER THROUGH THE INLET.
3.) INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS. BOTTOMS SHALL BE DISHED AND SLOPED TOWARDS THE OUTLET PIPE AT A RATE OF 2" PER FOOT.
4.) SEE OUTLET STRUCTURE DETAILS FOR BASE STABILIZATION MATERIAL

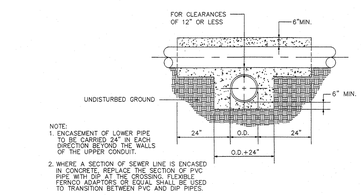
TYPE "E" INLET DETAIL

SCALE N.T.S.



48" PRECAST CONCRETE MANHOLE

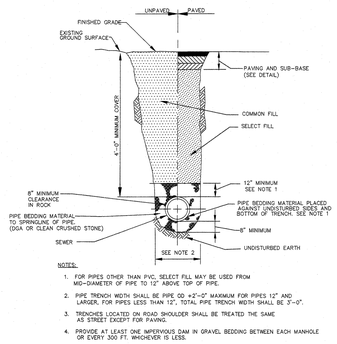
SCALE N.T.S.



NOTE:
1. ENCASEMENT OF LOWER PIPE TO BE CARRIED 24" IN EACH DIRECTION BEYOND THE WALLS OF THE UPPER CONDUIT.
2. WHERE A SECTION OF SEWER LINE IS ENCASED IN CONCRETE, REPLACE THE SECTION OF PVC PIPE WITH DIP AT THE CROSSING. FLEXIBLE FERNCO ADAPTORS OR EQUAL SHALL BE USED TO TRANSITION BETWEEN PVC AND DIP PIPES.

UTILITY CROSSING

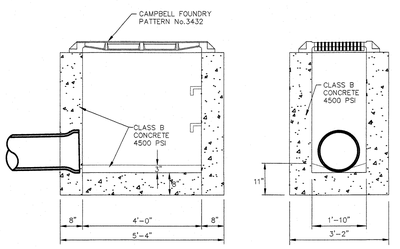
SCALE – N.T.S.



NOTES:
1. FOR PIPES OTHER THAN PVC, SELECT FILL MAY BE USED FROM MID–DIAMETER OF PIPE TO 12" ABOVE TOP OF PIPE.
2. PIPE TRENCH WIDTH SHALL BE PIPE OD +2'–0" MAXIMUM FOR PIPES 12" AND LARGER, FOR PIPES LESS THAN 12", TOTAL PIPE TRENCH WIDTH SHALL BE 3'–0".
3. TRENCHES LOCATED ON ROAD SHOULDER SHALL BE TREATED THE SAME AS STREET EXCEPT FOR PAVING.
4. PROVIDE AT LEAST ONE IMPERVIOUS DAM IN GRAVEL BEDDING BETWEEN EACH MANHOLE OR EVERY 300 FT. WHICHEVER IS LESS.

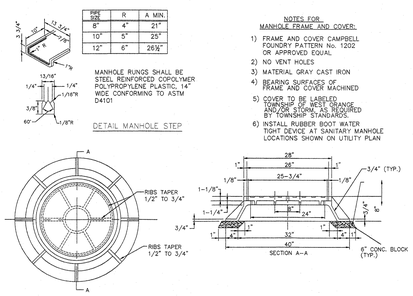
TYPICAL TRENCH DETAIL FOR PVC SDR–35 SEWER PIPE

SCALE N.T.S.



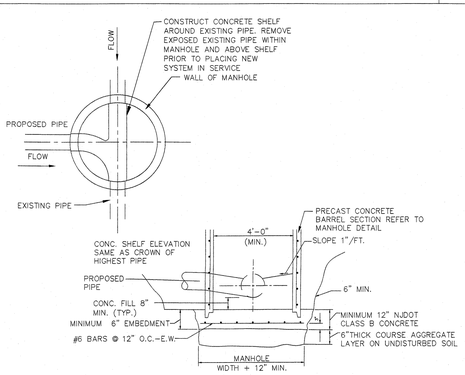
TYPE 'A' INLET DETAIL

SCALE – N.T.S.



STANDARD MANHOLE FRAME & COVER DETAIL

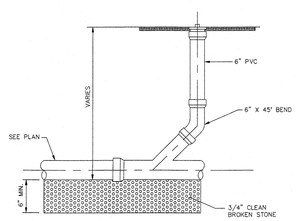
SCALE – N.T.S.



CONSTRUCTION NOTES:
1. SEE PRECAST STANDARD MANHOLE DETAIL FOR TYPICAL INSTALLATION.
2. PRECAST MANHOLE SECTION TO BE IN ACCORDANCE WITH ASTM DESIGNATION C–478

DOGHOUSE STRUCTURE

SCALE N.T.S.



CLEANOUT

SCALE – N.T.S.

REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/03/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
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BLOCK 171 LOT 12
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CONSTRUCTION DETAILS

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28113300
105 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL. (973) 227-7004 FAX (973) 227-7574

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: N.T.S.
Sheet: SP-20

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

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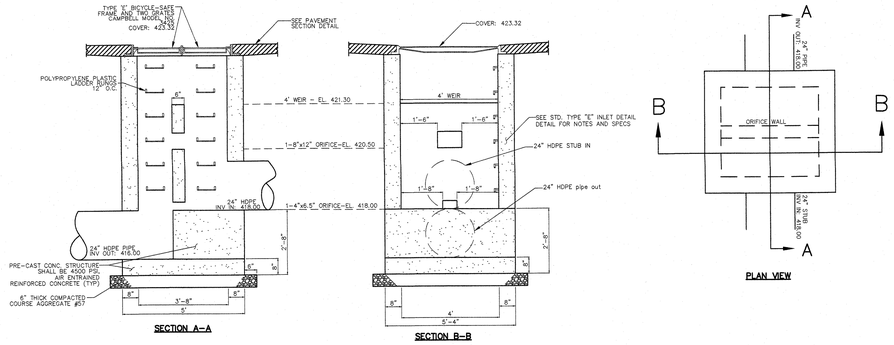
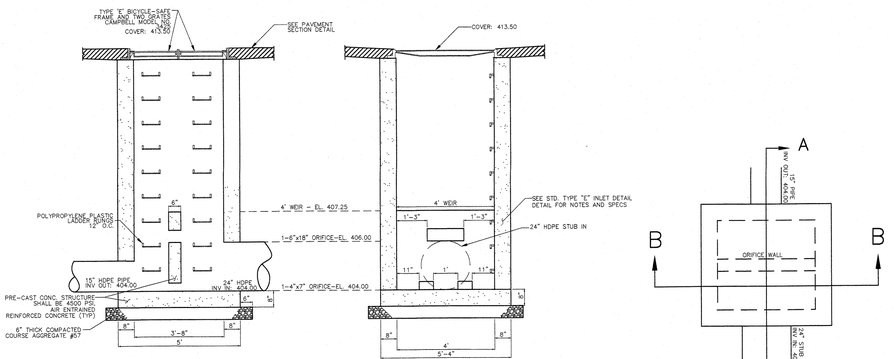


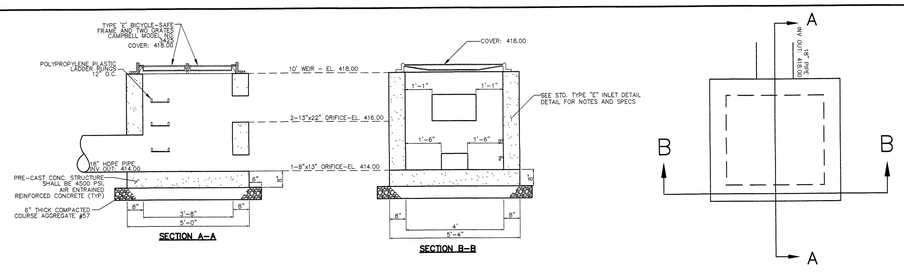
BASIN #1A - OS #5-7

SCALE N.T.S.



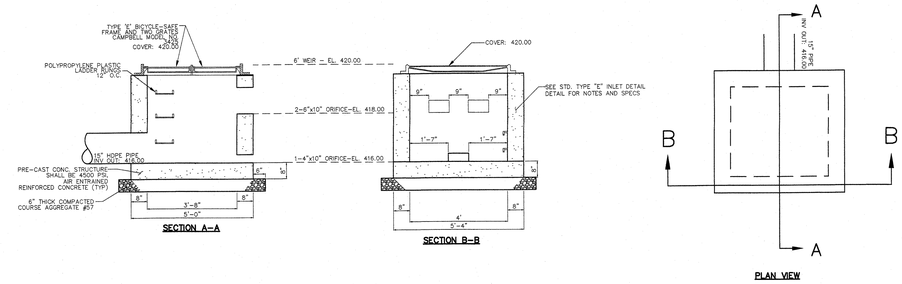
BASIN #1B - OS #8-4

SCALE N.T.S.



BASIN #2 - OS #5-6A

SCALE N.T.S.



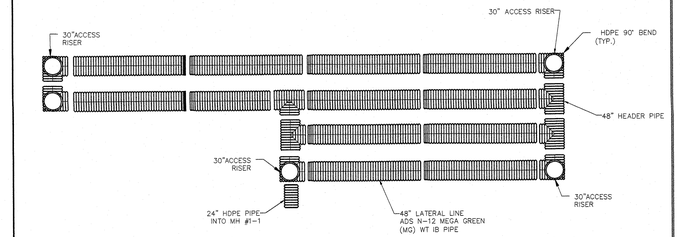
BASIN #3 - OS #1-10

SCALE N.T.S.

GENERAL DESIGN NOTE:
ALL UNDERGROUND DETENTION STRUCTURES SHALL MEET AT A MINIMUM H20S16 LOADING. THE MANUFACTURER SHALL CERTIFY THAT THE MINIMUM DESIGN CRITERIA HAS BEEN MET, AND SUBMIT SHOP DRAWINGS FOR REVIEW TO THE ENGINEER AND THE CITY OF WEST ORANGE PRIOR TO ANY INSTALLATION OF THE PROPOSED UNDERGROUND DETENTION SYSTEM STRUCTURES.

TYPICAL PLAN & ELEVATION VIEW OF SUBSURFACE DETENTION BASIN#1A

SCALE N.T.S.



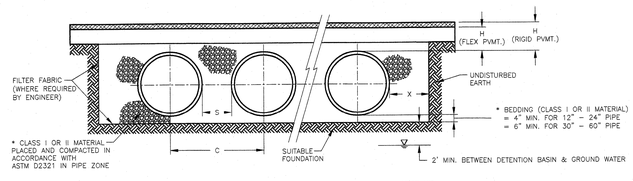
GENERAL DESIGN NOTE:
ALL UNDERGROUND DETENTION STRUCTURES SHALL MEET AT A MINIMUM H20S16 LOADING. THE MANUFACTURER SHALL CERTIFY THAT THE MINIMUM DESIGN CRITERIA HAS BEEN MET, AND SUBMIT SHOP DRAWINGS FOR REVIEW TO THE ENGINEER AND THE CITY OF WEST ORANGE PRIOR TO ANY INSTALLATION OF THE PROPOSED UNDERGROUND DETENTION SYSTEM STRUCTURES.

TYPICAL PLAN & ELEVATION VIEW OF SUBSURFACE DETENTION BASIN#1B

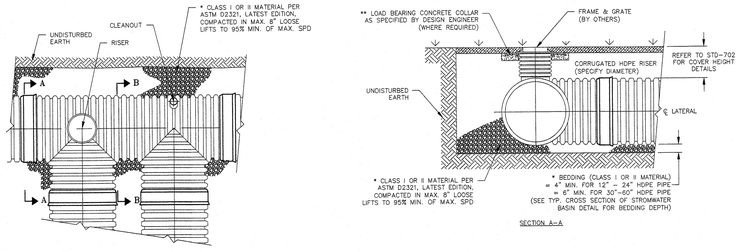
SCALE N.T.S.

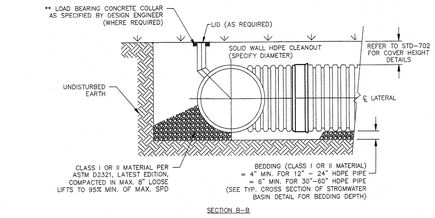
NOTES:

1. ALL REFERENCES TO CLASS I OR II MATERIAL ARE PER ASTM D2321 "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
2. ALL RETENTION AND DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, LATEST EDITION AND THE MANUFACTURER'S PUBLISHED INSTALLATION GUIDELINES.
3. MEASURES SHOULD BE TAKEN TO PREVENT THE MIGRATION OF NATIVE FINES INTO THE BACKFILL MATERIAL, WHEN REQUIRED. SEE ASTM D2321.
4. FILTER FABRIC: A GEOTEXTILE FABRIC MAY BE USED AS SPECIFIED BY THE ENGINEER TO PREVENT THE MIGRATION OF FINES FROM THE NATIVE SOIL INTO THE SELECT BACKFILL MATERIAL.
5. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, UNSTABLE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
6. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I OR II. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-1500mm).
7. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I OR II IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
8. MINIMUM COVER: MINIMUM COVER OVER ALL RETNETION/DETENTION SYSTEMS IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER IS 12" UP TO 36" DIAMETER PIPE AND 24" OF COVER FOR 42" - 60" DIAMETER PIPE,MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.
9. FOR INSTALATION RECOMMENDATIONS, SEE 702 RETENTION-DETENTION SYSTEM (CROSS SECTION) AND 703 RETENTION-DETENTION SYSTEM (RISER AND CLEANOUTS)



NOMINAL DIAMETER	NOMINAL O.D.	TYPICAL SPACING "S"	NOMINAL SPACING "C"	TYPICAL SIDE WALL "X"	H (NON-TRAFFIC)	H (TRAFFIC)
48" (1200mm)	54" (1372mm)	24.5" (622mm)	78.5" (1994mm)	18" (457mm)	24" (610mm)	24" (610mm)





* CLASS I BACKFILL REQUIRED AROUND 60" DIAMETER FITTINGS

** LOAD BEARING CONCRETE COLLAR SHALL BE CONSTRUCTED IN TRAFFIC AREAS SUCH THAT THE LIVE LOAD IS TRANSMITTED TO THE SURROUNDING SOIL AND NOT DIRECTLY TO THE RISER.

TYPICAL RISER/CLEANOUT (C.O.) DETAIL

SCALE N.T.S.

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REVISION	DESCRIPTION	DATE	BY
1	REVISED PER NEW BUILDING FOOTPRINT	05/20/2022	JMP

PREPARED FOR
DAUGHTERS OF ISRAEL
1155 PLEASANT VALLEY WAY
BLOCK 171 LOT 12
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY

CONSTRUCTION DETAILS

PETRY ENGINEERING, LLC
DIVISION OF CONSUMER AFFAIRS LICENSE NUMBER 24GA28012900
166 PASSAIC AVENUE • FAIRFIELD • NEW JERSEY • 07004
TEL: (973) 227-7004 FAX (973) 227-7074

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: N.T.S.
Sheet: SP-21

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36662 DATED 10/29/2021

NOTES

1. MODULAR BLOCK WALLS SHALL BE CONSTRUCTED WITH STANDARD WALL UNITS AS MANUFACTURED BY KEYSTONE RETAINING WALL SYSTEMS, INC OR ACCEPTED EQUAL. COORDINATE AND COLOR OF UNITS WITH OWNER.
2. INSTALLATION OF MODULAR BLOCK WALLS SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN RECOMMENDATIONS AND SPECIFICATIONS.
3. COORDINATE STYLE AND COLOR OF UNITS WITH OWNER.
4. WALLS SHALL STEP IN ELEVATION AT BOTH TOP AND BOTTOM AS REQUIRED TO CONFORM WITH PROPOSED FINISHED GRADE AT THE TOP OF THE WALL AND EXISTING GRADE AT THE BOTTOM OF THE WALL. ARRANGEMENT OF BLOCK, CAP STONE, AND CRUSHED STONE BASE AT WALL STEPS SHALL CONFORM TO MANUFACTURER'S STANDARD RECOMMENDATIONS.
5. CUT GEOGRID REINFORCING AS REQUIRED TO ACCOMMODATE GUIDERAIL FOUNDATION CONCRETE. DO NOT OMIT FABRIC ENTIRELY AT GUIDERAIL FOUNDATION LOCATIONS.

GENERAL NOTES

BUILDING CODE

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF N.J.A.C. 5:23, "UNIFORM CONSTRUCTION CODE REGULATIONS", LATEST EDITION. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THIS CODE, WITH THE SPECIFICATION, AND WITH THE REQUIREMENTS OF ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION.

GENERAL

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALLOWABLE CONSTRUCTION LOADS AND TO PROVIDE PROPER DESIGN AND CONSTRUCTION OF FALSEWORK, FORMWORK, STAGING, BRACING, SHEETING, SHORING, ETC.
2. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL STRUCTURAL ELEVATIONS AND DIMENSIONS WITH EXISTING CONDITIONS AND WITH OTHER PROJECT DRAWINGS; COORDINATE LOCATION OF SLEEVES AND OPENINGS THROUGH THE STRUCTURE, SLAB DEPRESSIONS, FLOOR DRAINS, INSERTS, AND OTHER RELATED ITEMS.
3. CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CORRECTNESS OF DIMENSIONS OR QUANTITIES AND FOR THE FITTING TO OTHER WORK; FOR WORK TO BE CONFIRMED AND CORRELATED AT THE SITE; FOR INFORMATION PERTAINING TO THE FABRICATION PROCEDURE OR TO THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES OF CONSTRUCTION; AND FOR THE COORDINATION OF STRUCTURAL WORK WITH THE WORK OF ALL OTHER TRADES. THE VERIFICATION OF THE PHYSICAL INTERRELATIONSHIPS OF ELEMENTS OF THE WORK FROM PLANS AND SPECIFICATIONS AND IN THE FIELD IS THE CONTRACTOR'S SOLE RESPONSIBILITY. REVIEW OF THE CONTRACTOR'S SUBMISSIONS DOES NOT RELIEVE THE CONTRACTOR FROM THESE RESPONSIBILITIES.
4. PROPOSED OPENINGS OR RECESSES IN THE STRUCTURE WHICH ARE NOT SHOWN IN THE STRUCTURAL DRAWINGS, EITHER DIRECTLY OR BY TYPICAL DETAIL, SHALL BE SUBMITTED FOR ACCEPTANCE.
5. IN CASE OF CONTRADICTION BETWEEN THE DRAWINGS, THE SPECIFICATIONS, AND THE CODES, OR IF ANY CHANGE IS REQUIRED, THE CONTRACTOR SHALL INFORM THE ARCHITECT/ENGINEER IMMEDIATELY. NO CHANGE SHALL BE MADE WITHOUT WRITTEN APPROVAL OF THE ARCHITECT/ENGINEER.

FOUNDATIONS:

1. FOUNDATIONS HAVE BEEN DESIGNED TO AN ALLOWABLE SOIL BEARING PRESSURE OF 4,000 PSF ON VIRGIN SOIL. SHOULD CONDITIONS VARY FROM THOSE ASSUMED, THE ARCHITECT/ENGINEER SHALL BE NOTIFIED BEFORE CONTINUATION OF WORK.
2. ALL FOOTINGS SHALL BE PLACED DIRECTLY ON VIRGIN SOIL, CERTIFIED COMPACTED FILL, OR ROCK.
3. CONCRETE FOR FOUNDATIONS:
   A. ALL CONCRETE WORK SHALL CONFORM TO REQUIREMENTS OF THE A.C.I. BUILDING CODE REQUIREMENT FOR STRUCTURAL CONCRETE (318-02 ULTIMATE STRENGTH DESIGN).
   B. ALL CONCRETE SHALL BE MIXED, TRANSPORTED, AND PLACED IN ACCORDANCE WITH ACI STANDARDS 318, 304, AND 301, LATEST EDITIONS.
   C. PROVIDE CONCRETE WITH THE FOLLOWING PROPERTIES:

f'c (PSI)	COURSE AGGREGATE	LOCATION
4000	NORMAL WEIGHT	U.O.N.

4. SEE REINFORCED CONCRETE NOTES FOR ADDITIONAL INFORMATION.
5. ALL FILL SHALL BE PLACED IN TWELVE INCH LOOSE LIFTS (MAXIMUM) COMPACTED TO PROVIDE 95% OF MAXIMUM DRY DENSITY BELOW PROPOSED FOOTINGS AND SLABS.
6. ALL EXTERIOR FOOTINGS SHALL BE PLACED A MINIMUM OF 3'-6" BELOW FINAL GRADE WHEN BEARING ON SOIL.
7. DEWATERING SHALL BE PROVIDED AS REQUIRED SO THAT EXCAVATION, CONCRETE WORK AND BACKFILLING ARE TO BE PERFORMED IN THE DRY.
8. BACKFILL AGAINST FOUNDATION WALLS OR CMU RETAINING WALLS SHALL NOT BE PERFORMED FOR A MINIMUM OF SEVEN DAYS AFTER CONSTRUCTION IS COMPLETED.
9. THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHERE BOTTOM OF FOOTING ELEVATION IS CHANGED AND OBTAIN REVISED DESIGN OF THE FOUNDATION WALLS AS REQUIRED.

REINFORCED CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO REQUIREMENTS OF THE ACI 301, 304, AND ACI 318, LATEST EDITIONS.
2. THE CONCRETE MIX SHALL CONFORM TO THE PROVISIONS FOR CONCRETE QUALITY CONTAINED IN CHAPTER 5, ACI 318. COMPRESSIVE STRENGTH, f'c, IS MEASURED AT 28 DAYS AGE.

f'c (PSI)	MINIMUM CEMENT POUNDS PER C.Y.	LOCATION
4000 NORAML WEIGHT	610	ALL

3. PROVIDE CONCRETE WITH THE FOLLOWING PROPERTIES:

f'c (PSI)	COURSE AGGREGATE	MAXIMUM SLUMP INCHES	MAXIMUM WATER CEMENT RATIO
4000	NORMAL WEIGHT	5	0.46

4. UNLESS OTHERWISE NOTED:
   A. ALL REINFORCING BARS SHALL BE DEFORMED BARS OF NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60.
   B. ALL WELDED WIRE MESH SHALL CONFORM TO ASTM A185.
5. SPLICING OF REINFORCEMENT IS PERMITTED ONLY AT LOCATIONS SHOWN IN THE CONTRACT DRAWINGS OR AS ACCEPTED BY THE ENGINEER. UNLESS OTHERWISE SHOWN OR NOTED, REINFORCING STEEL SHALL BE SPLICED TO DEVELOP ITS FULL TENSILE CAPACITY IN ACCORDANCE WITH ACI 318.
6. REINFORCING BAR DEVELOPMENT LENGTHS, AS COMPUTED IN ACCORDANCE WITH ACI 318, FORM THE BASIS FOR BAR EMBEDMENT LENGTHS AND BAR SPLICE LENGTHS SHOWN IN THE DRAWINGS. APPLY APPROPRIATE MODIFICATION FACTORS FOR TOP-STEEL, BAR SPLICING, COVER, AND THE LIKE.
7. DETAILING OF REINFORCING STEEL SHALL CONFORM TO ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 315).
8. LOCATION OF ALL CONSTRUCTION JOINTS ARE SUBJECT TO THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, CONFORMANCE WITH ACI 318, AND ACCPETANCE OF THE ENGINEER.
9. SPLICES OF WWF, AT ALL SPLICED EDGES, SHALL BE SUCH THAT THE OVERLAP MEASURED BETWEEN OUTERMOST CROSS WIRES OF EACH FABRIC SHEET IS NOT LESS THAN THE SPACING OF THE CROSS WIRE PLUS 2 INCHES, NOR LESS THAN 8 INCHES.
10. WELDING OF REINFORCING BARS IS NOT PERMITTED UNLESS SPECIFICALLY CALLED FOR IN THE DRAWINGS.
11. ALL REINFORCEMENT SHALL BE SECURELY TIED IN PLACE TO PREVENT DISPLACEMENT BY CONSTRUCTION TRAFFIC OR CONCRETE. TIE WIRE SHALL BE 16 GAGE CONFORMING TO ASTM A82.
12. REINFORCING STEEL SUPPORTED ON THE GROUND SHALL BE PLACED ON PRECAST BLOCKS PRODUCED SPECIFICALLY FOR THE INTENDED PURPOSE.
13. BAR SUPPORTS SHALL BE ALL-GALVANIZED METAL WITH PLASTIC TIPS.
14. REINFORCING STEEL SHALL BE PLACED TO PROVIDE THE FOLLOWING MINIMUM CONCRETE COVER, UNLESS OTHERWISE INDICATED:

SLABS/FOOTINGS/FOUNDATIONS	3"
WALLS	2"

15. NON-SHRINK GROUT SHALL BE PREMIXED AND BAGGED BY MANUFACTURER. ACCEPTABLE NON-SHRINK GROUT: MASTERFLOW 713 BY MASTER BUILDERS OR ACCEPTED BY THE ENGINEER.

MODULAR BLOCK

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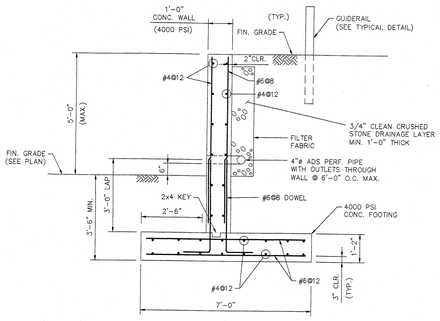
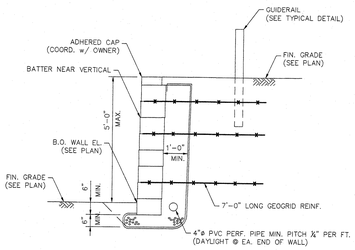
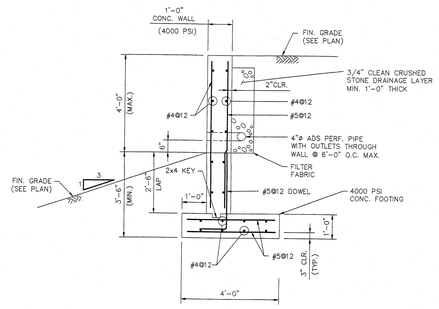


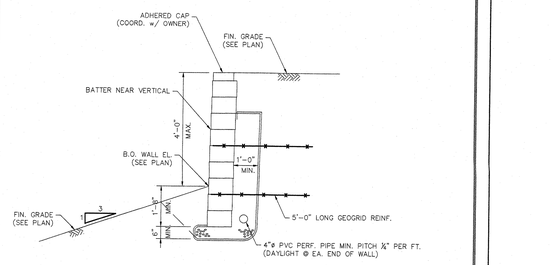
5'-0" CONCRETE RETAINING WALL "A"



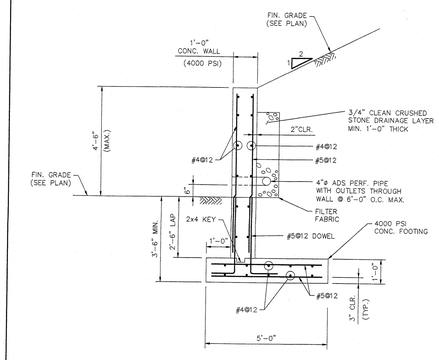
5'-0" MODULAR BLOCK RETAINING WALL "A"



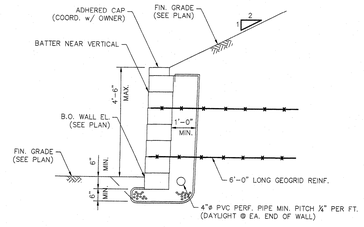
4'-0" CONCRETE RETAINING WALL "B"



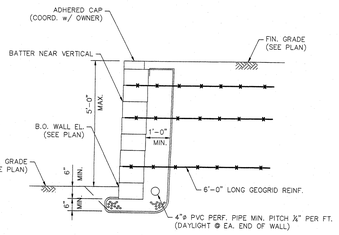
4'-0" MODULAR BLOCK RETAINING WALL "B"



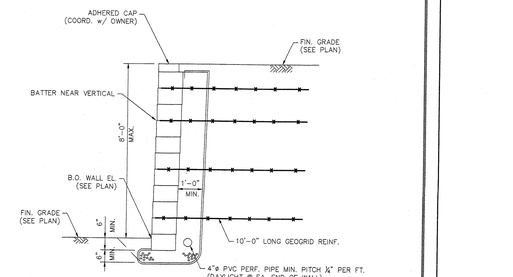
4'-6"CONCRETE RETAINING WALL "C", "D", "E", AND "F"



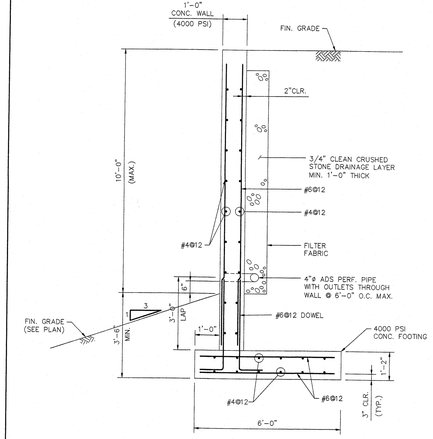
4'-6"MODULAR BLOCK RETAINING WALL "C", "D", "E", AND "F"



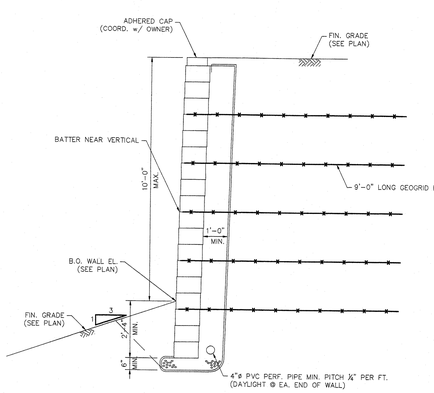
5'-0" MODULAR BLOCK RETAINING WALL "G"



8'-0"MODULAR BLOCK RETAINING WALL "G"



10'-0"CONCRETE RETAINING WALL "B"



10'-0"MODULAR BLOCK RETAINING WALL "B"

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RETAINING WALL DETAILS

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TEL. (973) 227-7424 FAX (973) 227-7674

Designer: JMP
Draftsman: JAF
Checked By: JMP
Project No.: 19-265
Scale: N.T.S.
Sheet: SP-22

J. MICHAEL PETRY-PE,PP,RA
NJ PROFESSIONAL ENGINEER LIC. No. 36562 DATED 10/29/2021