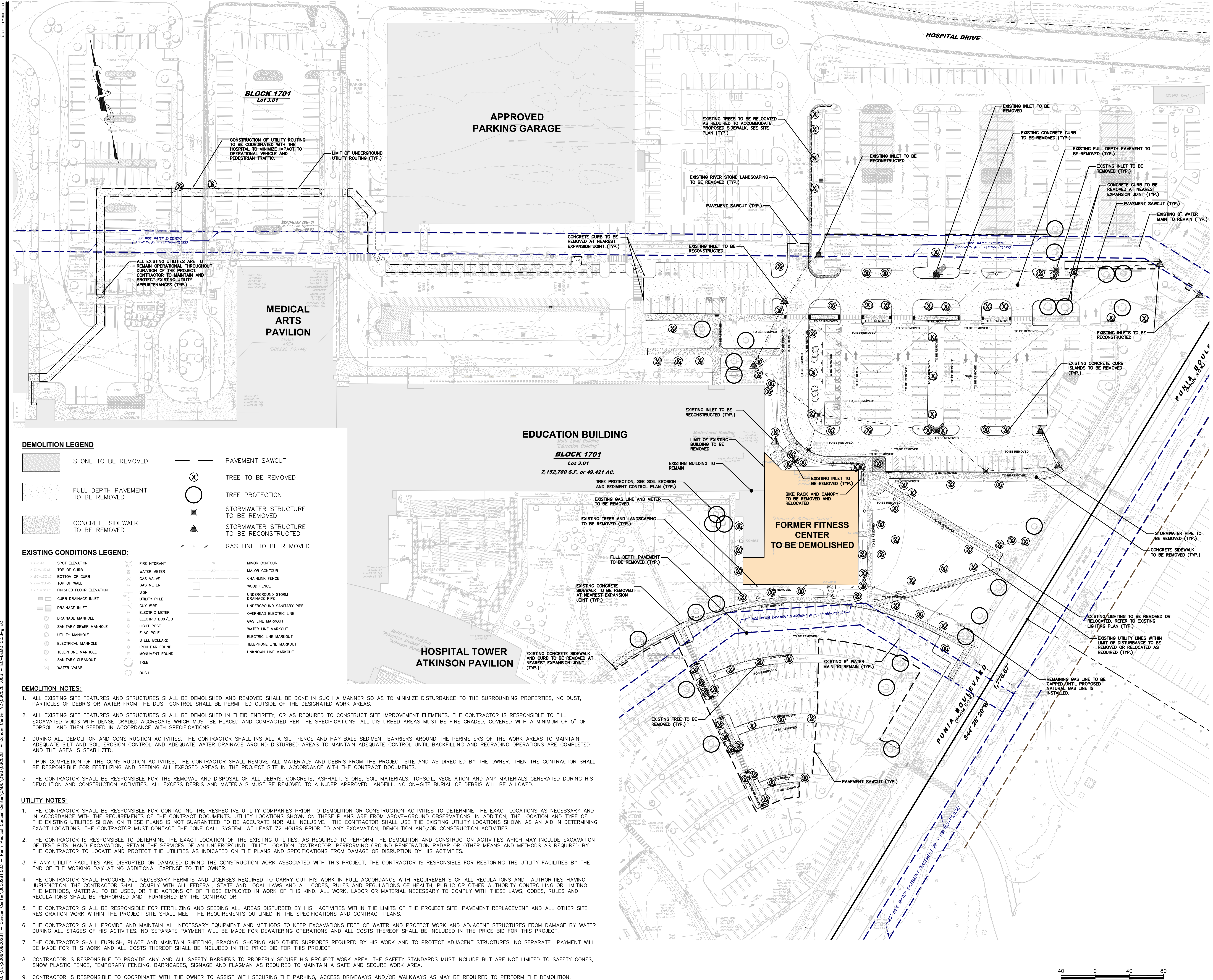


**TOWNSHIP OF PLAINSBORO  
MIDDLESEX COUNTY, NEW JERSEY**

07/31/2024	PACKAGE 0
08/02/2024	PACKAGE 1

PENN MEDICINE PRINCETON HEALTH CANCER CENTER  
0\_V-EV-2009-08020281 - Cancer Center V2-08020281-003 - EC-DEMO-CC-4W-EC  
C:\V-EV-2009-08020281 - Cancer Center V2-08020281-003 - EC-DEMO-CC-4W-EC



1 Plainsboro Road  
Plainsboro, NJ 08536

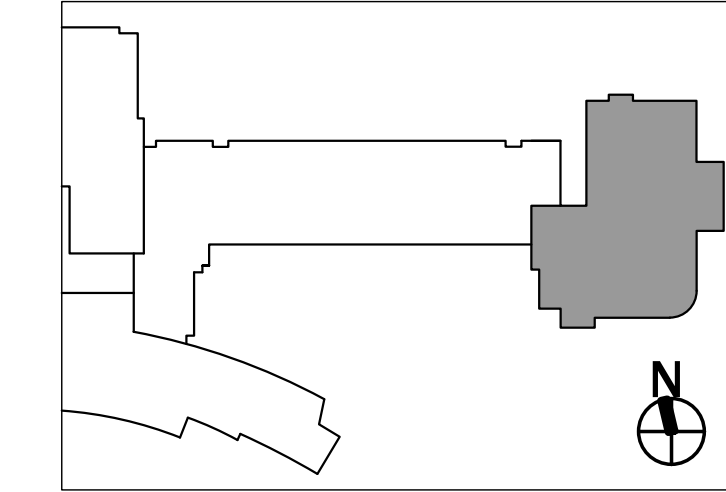
**SHEPLEY BULFINCH**

99 Chauncy Street 4th Floor  
Boston, MA 02111  
T: 617.423.1700 | F: 800.934.9691  
shepleybulfinc.com



**ANDREW L. FRENCH, P.E.**  
PROFESSIONAL ENGINEER, N.J. LIC. NO. 42894

NO.	DATE	DESCRIPTION
1.	10/18/2024	REVISED PER DRC COMMENTS



**PENN MEDICINE PRINCETON HEALTH CCIC**

1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5267.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

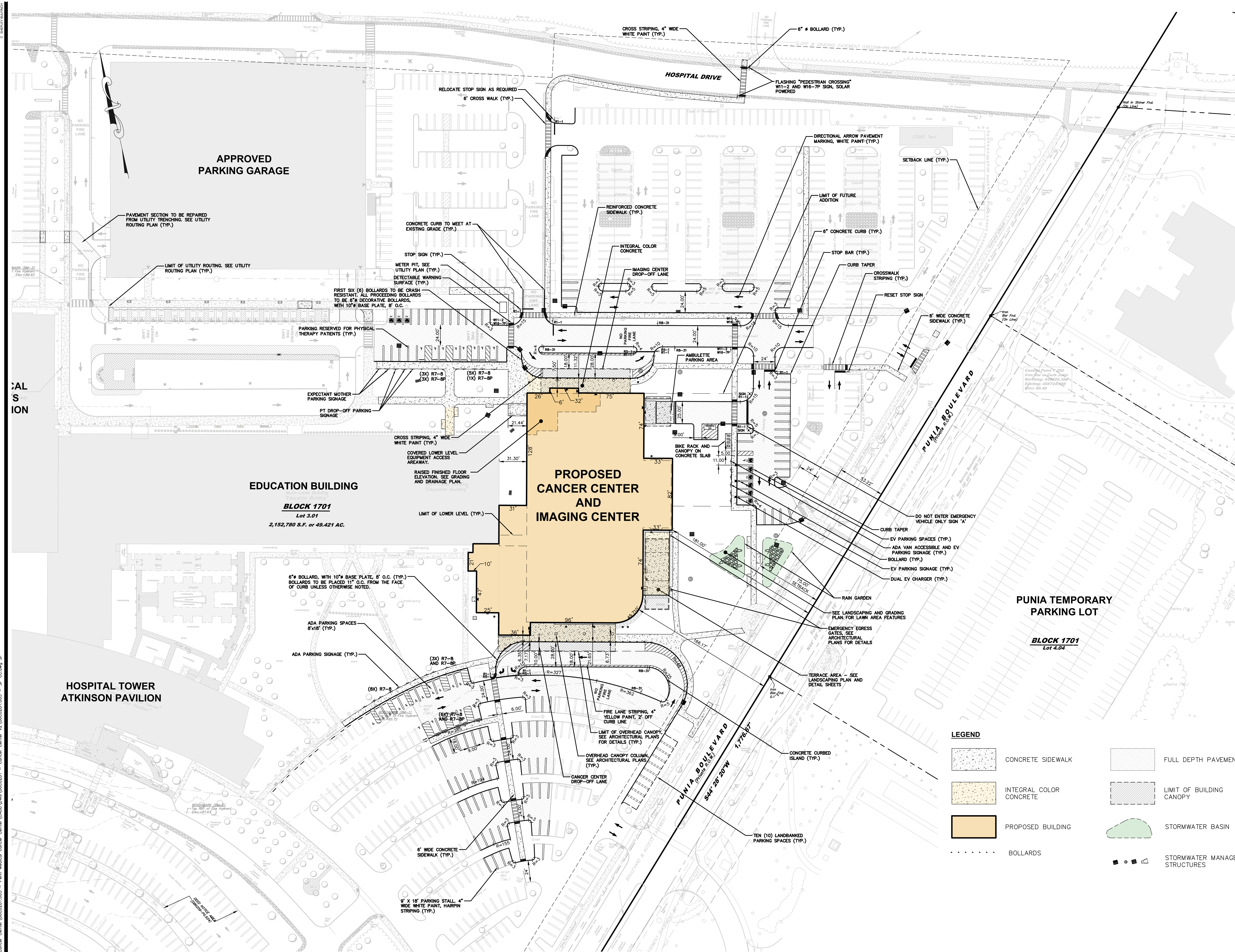
**EXISTING CONDITIONS AND DEMOLITION PLAN**

**C202**

07/31/2024  
08/02/2024

PACKAGE 0  
PACKAGE 1

PENN MEDICINE PRINCETON HEALTH CENTER  
C:\V\2020\0602281 - Cancer Center\0602281 - Cancer Center\0602281.dwg - SP - CC.dwg SP  
THE ORIGINAL OF THIS DRAWING IS 36" X 48". IF THIS COPY IS ANY OTHER SIZE, IT HAS EITHER BEEN REDUCED OR ENLARGED. TAKE APPROPRIATE PRECAUTIONS ACCORDINGLY.



1 Plainsboro Road  
Plainsboro, NJ 08536

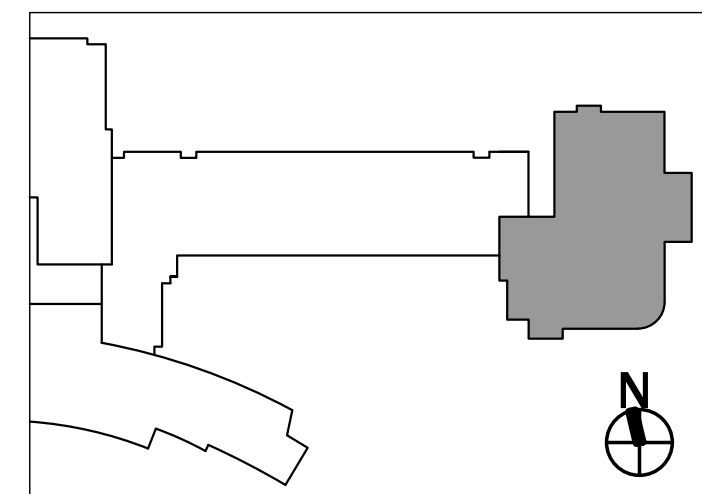
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**PENN MEDICINE  
PRINCETON  
HEALTH CCIC**

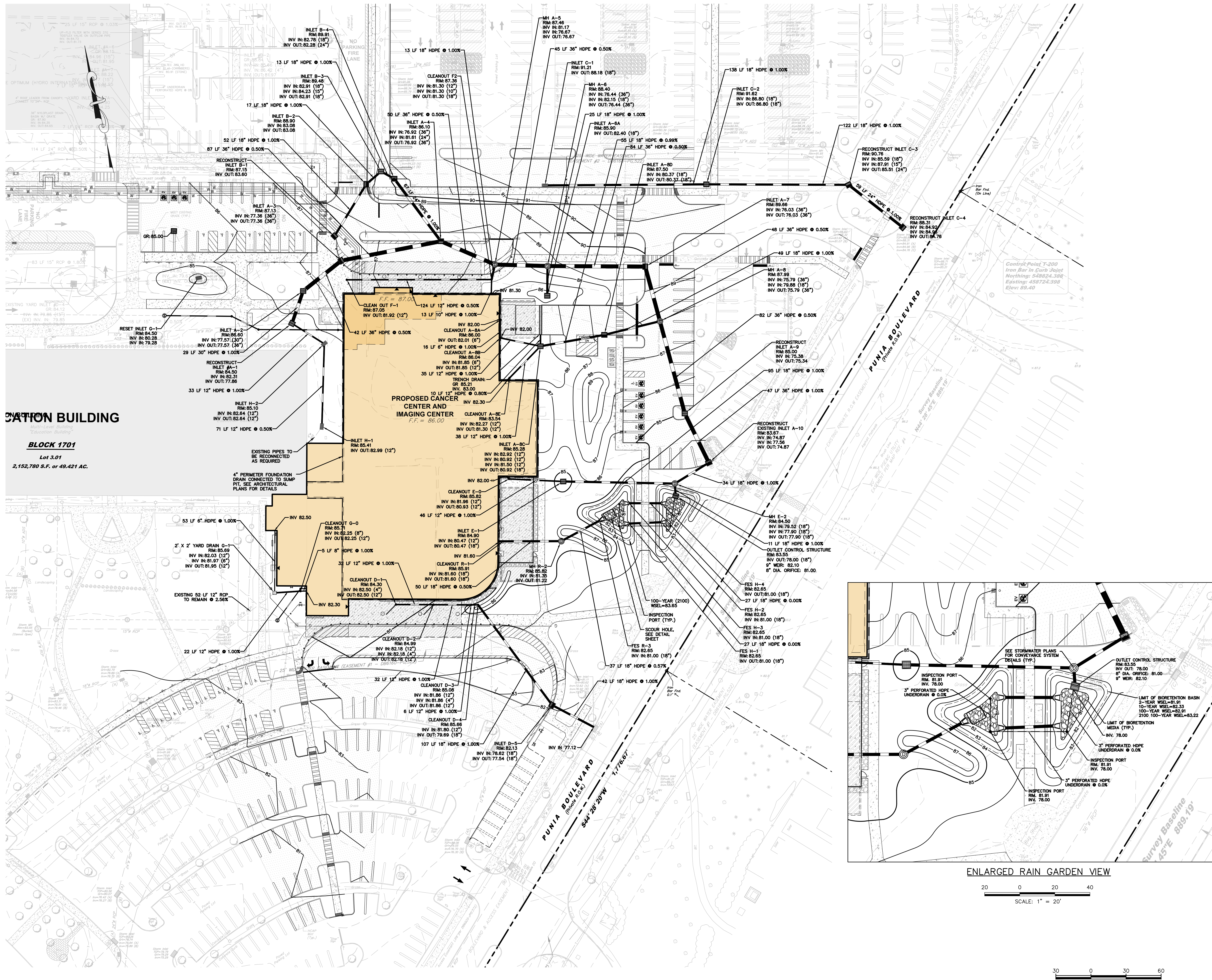
1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 2207.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

**SITE AND LAYOUT PLAN**

**C203**

07/31/2024  
08/02/2024

PACKAGE 0  
PACKAGE 1



1 Plainsboro Road  
Plainsboro, NJ 08536

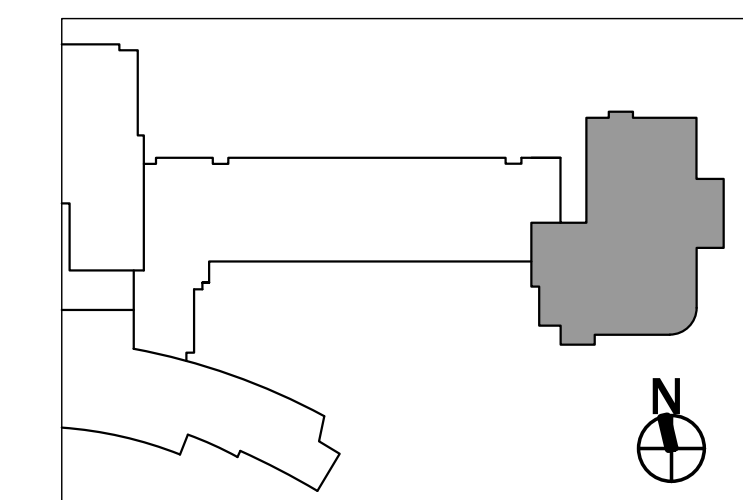
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PROFESSIONAL ENGINEER, N.J. LIC. No. 42894

NO.	DATE	DESCRIPTION
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**PENN MEDICINE  
PRINCETON  
HEALTH CCIC**

1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5257.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

**GRADING AND  
DRAINAGE PLAN**

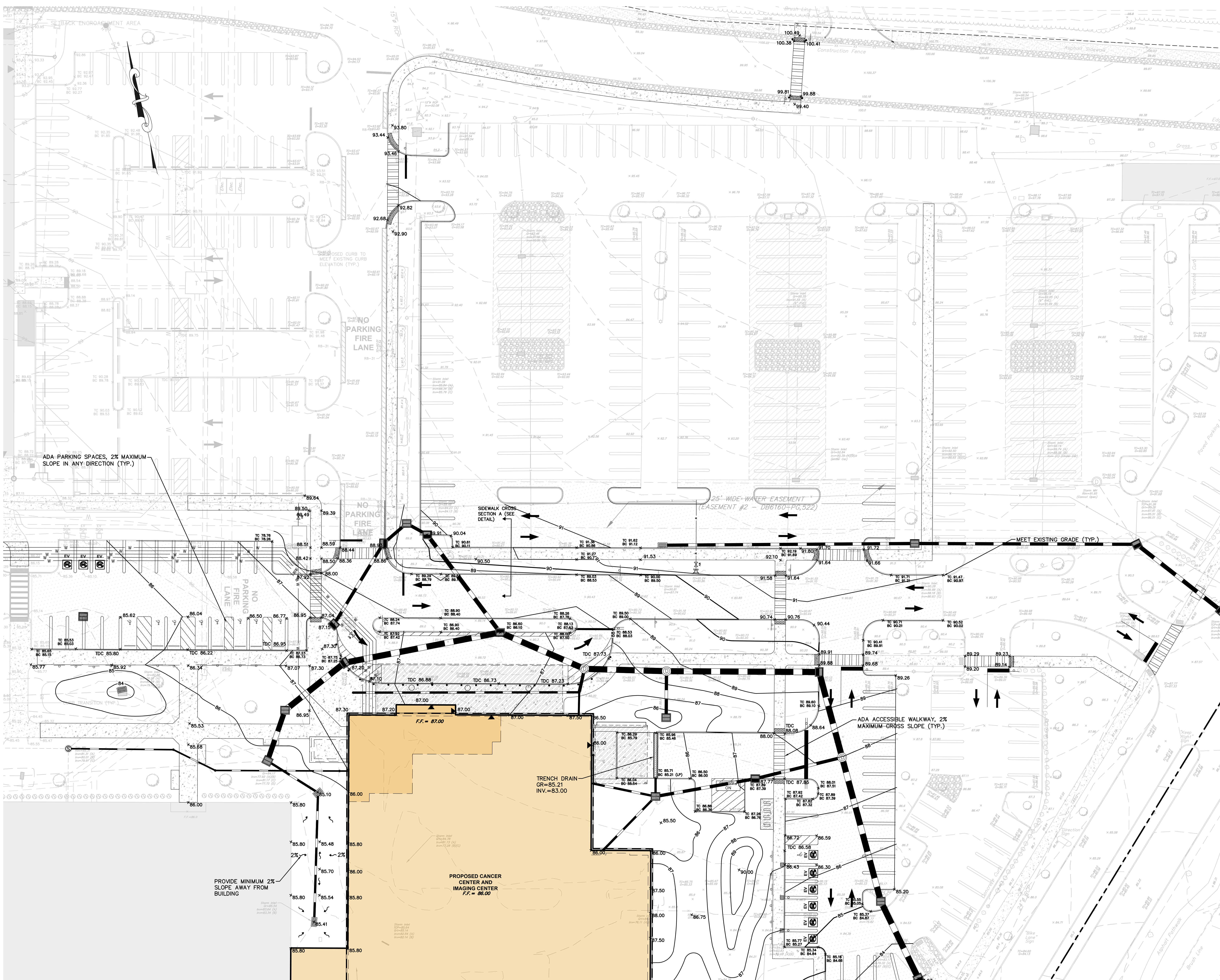
**C204**

07/31/2024  
08/02/2024

PACKAGE 0  
PACKAGE 1

SCALE: 1" = 30'

PENN MEDICINE PRINCETON HEALTH CCIC  
C:\V\2024\060228T - Cancer Center\060228T - Cancer Center\DWG\060228T - GR CC.dwg XMLK  
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1 Plainsboro Road  
Plainsboro, NJ 08536

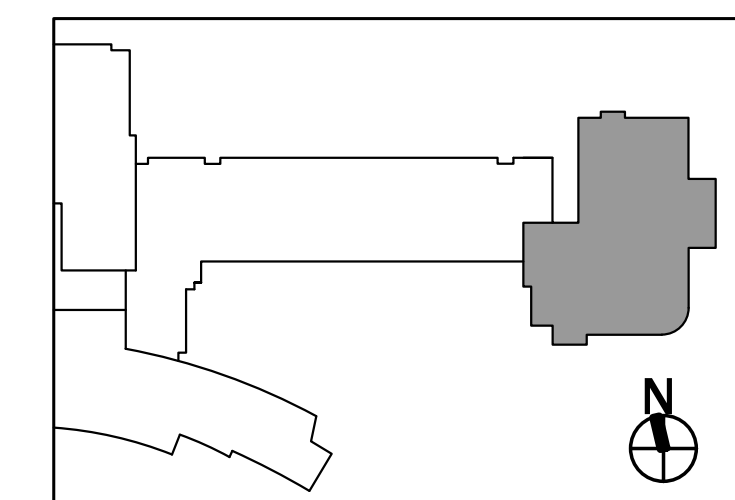
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**ANDREW L. FRENCH, P.E.**  
PROFESSIONAL ENGINEER, N.J. LIC. No. 42894

NO.	DATE	DESCRIPTION
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**PENN MEDICINE  
PRINCETON  
HEALTH CCIC**

1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5257.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

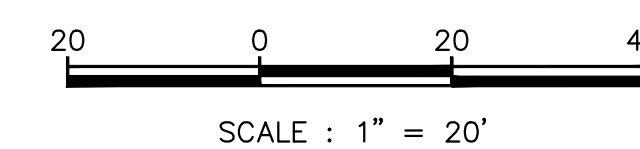
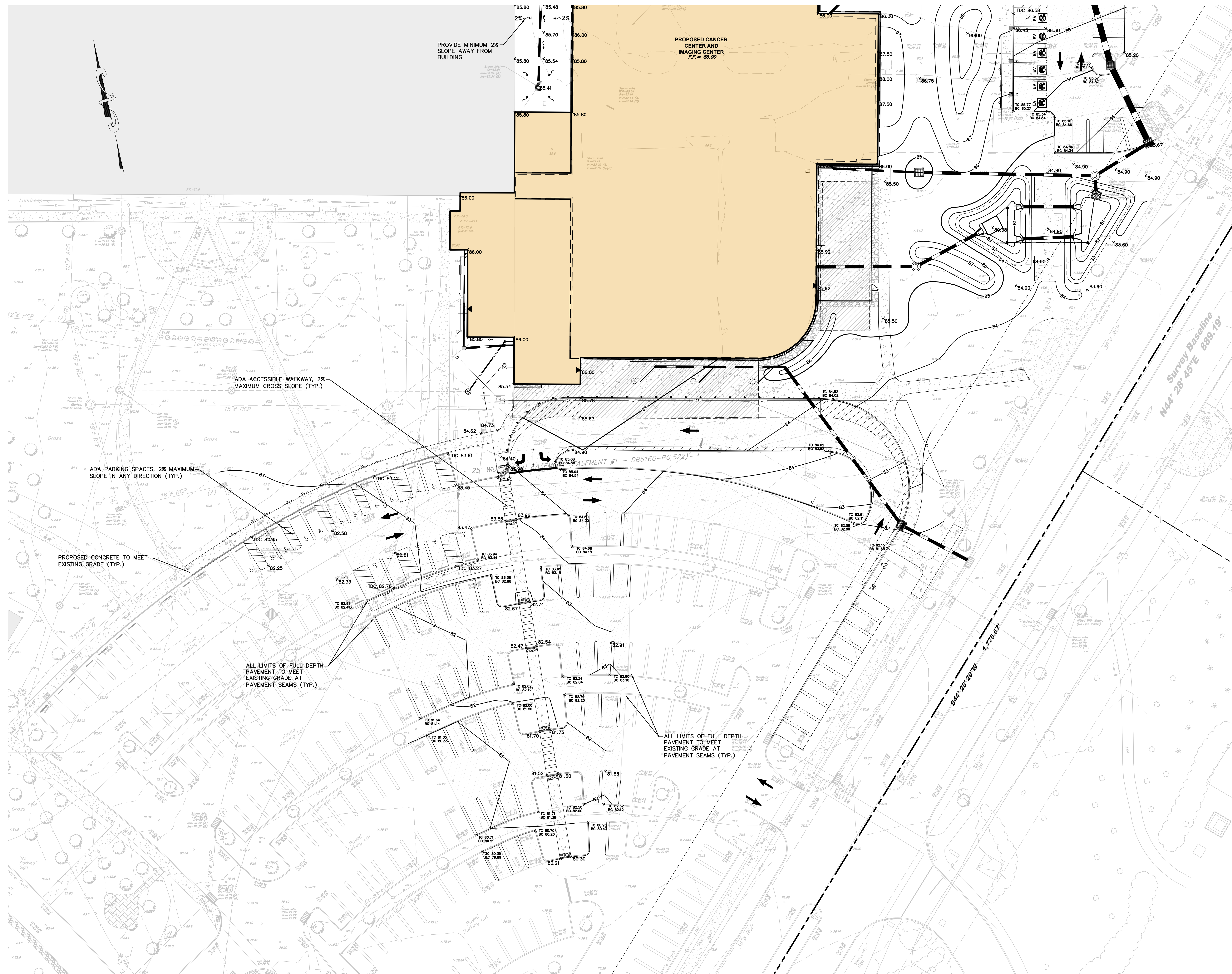
**ENLARGED GRADING  
PLAN**

**C205**

07/31/2024  
08/02/2024

PACKAGE 0  
PACKAGE 1

20 0 20 40  
SCALE : 1" = 20'



1 Plainsboro Road  
Plainsboro, NJ 08536

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BULFINCH**

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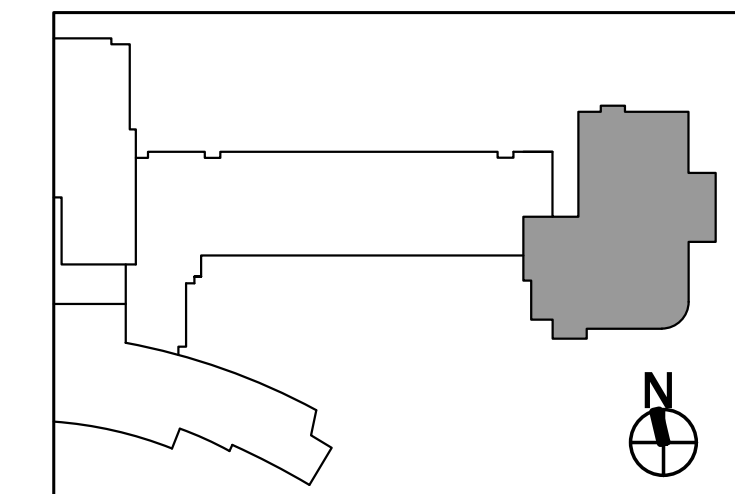
**FPA**  
**FRENCH & PARRELO**  
**ASSOCIATES**

*Corporate Office*  
1800 Rt 34, Suite 10  
Wall, New Jersey 07711  
732.312.9900

FPAEngineers.com

New Jersey ▲ New York ▲ Pennsylvania ▲ Georgia

**ANDREW L. FRENCH, P.E.**  
PROFESSIONAL ENGINEER, N.J. LIC. No. 42894

[illegible]

**PENN MEDICINE  
PRINCETON  
HEALTH CCIC**

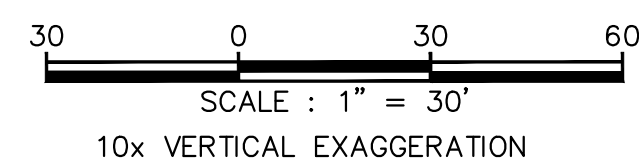
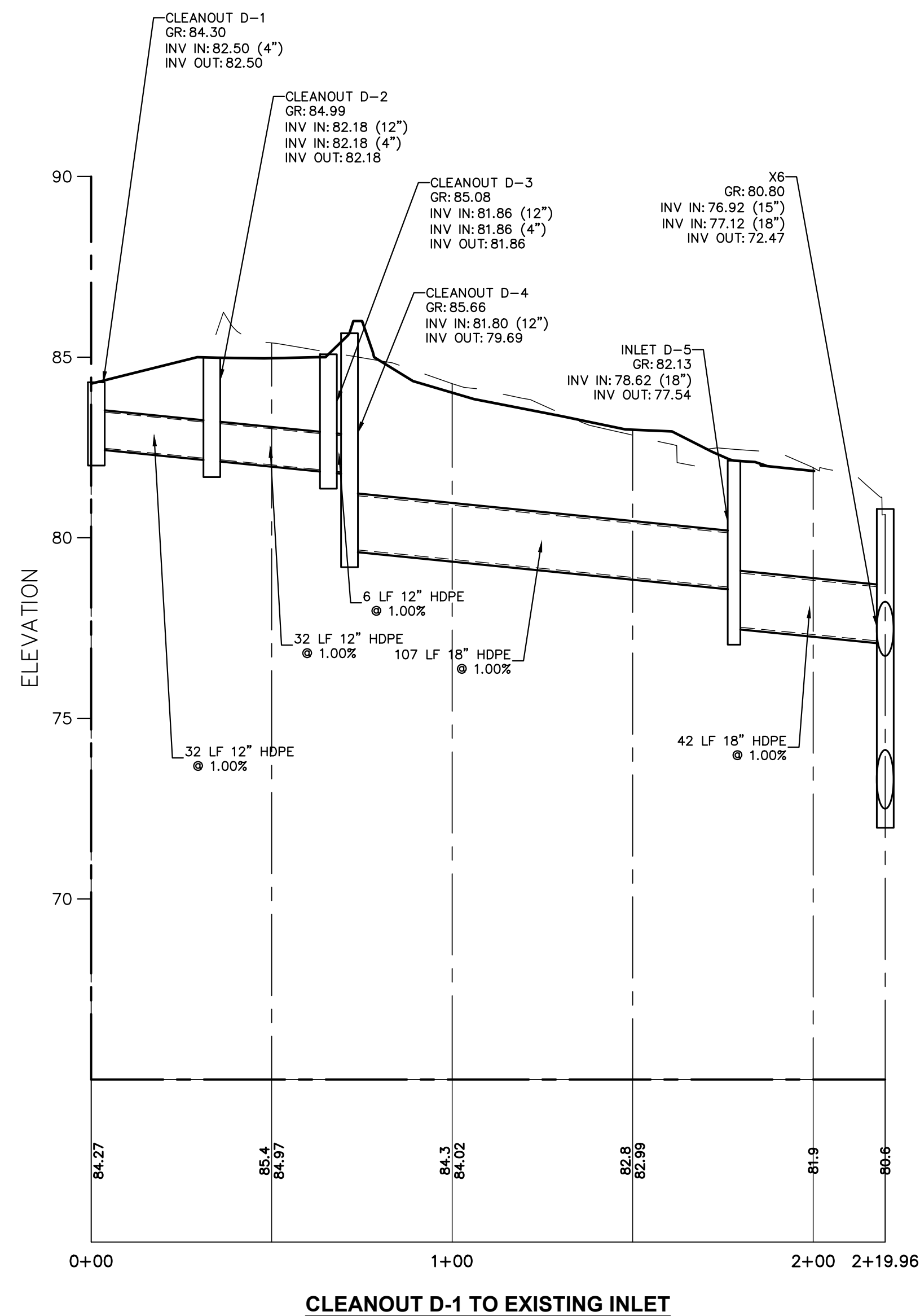
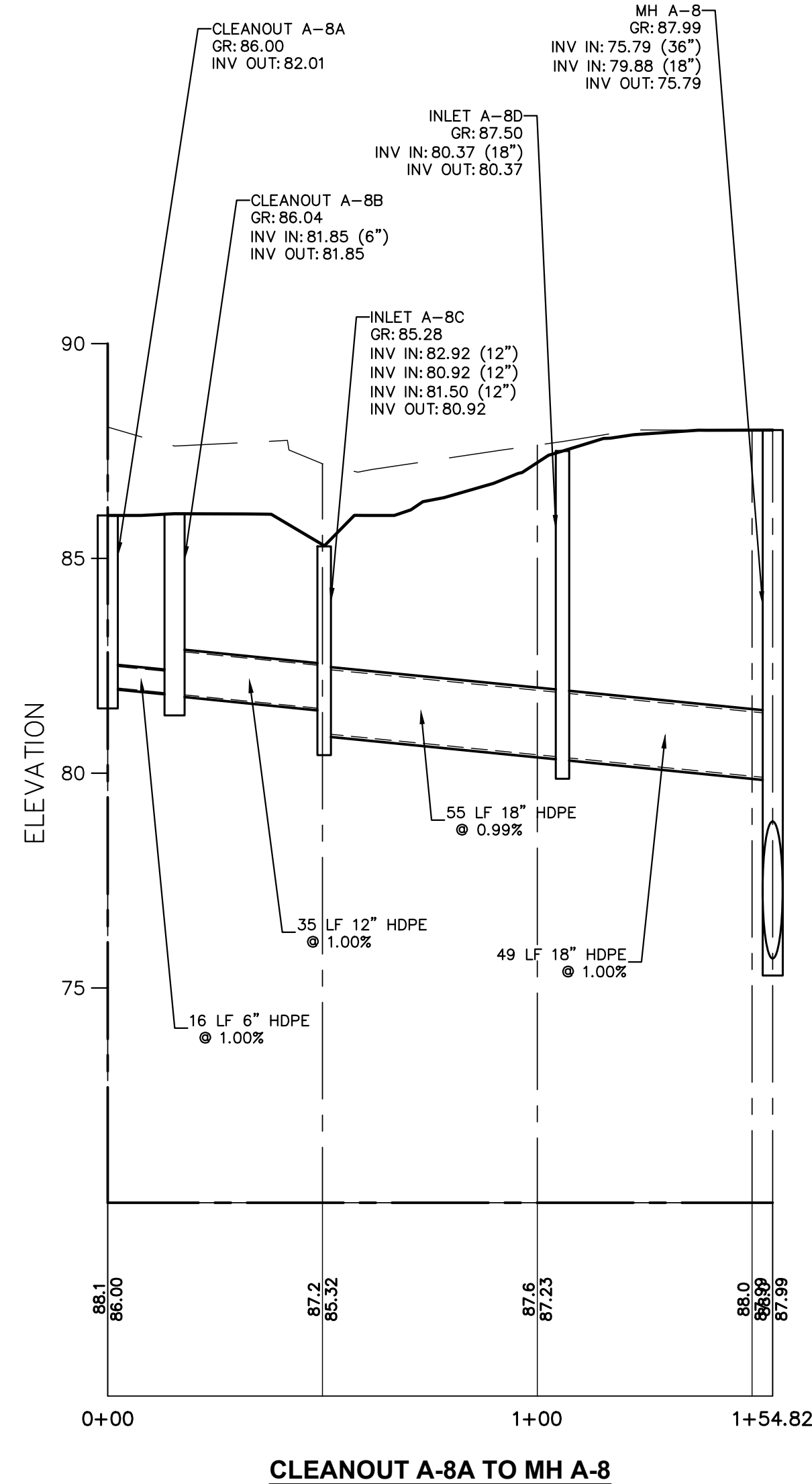
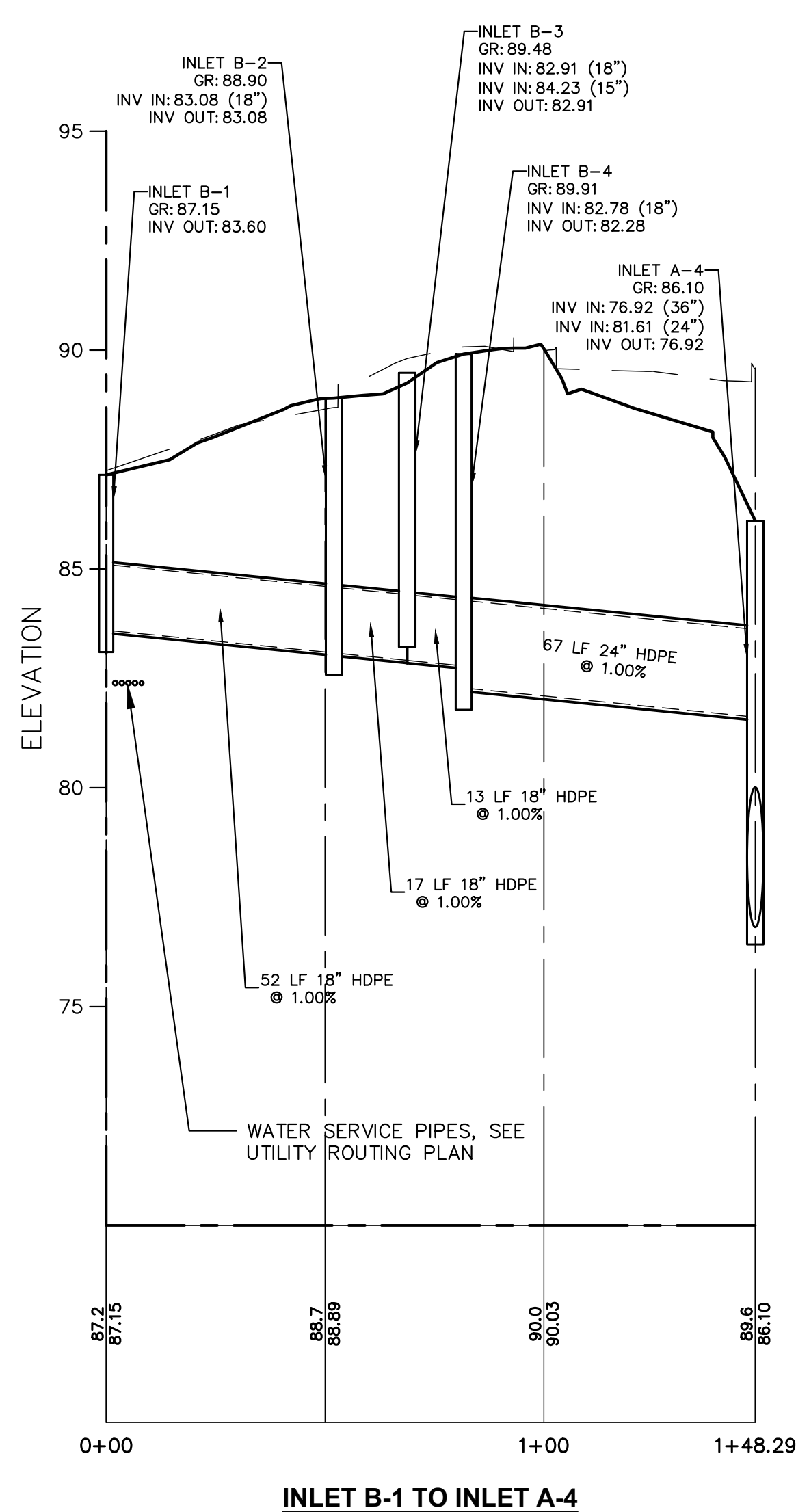
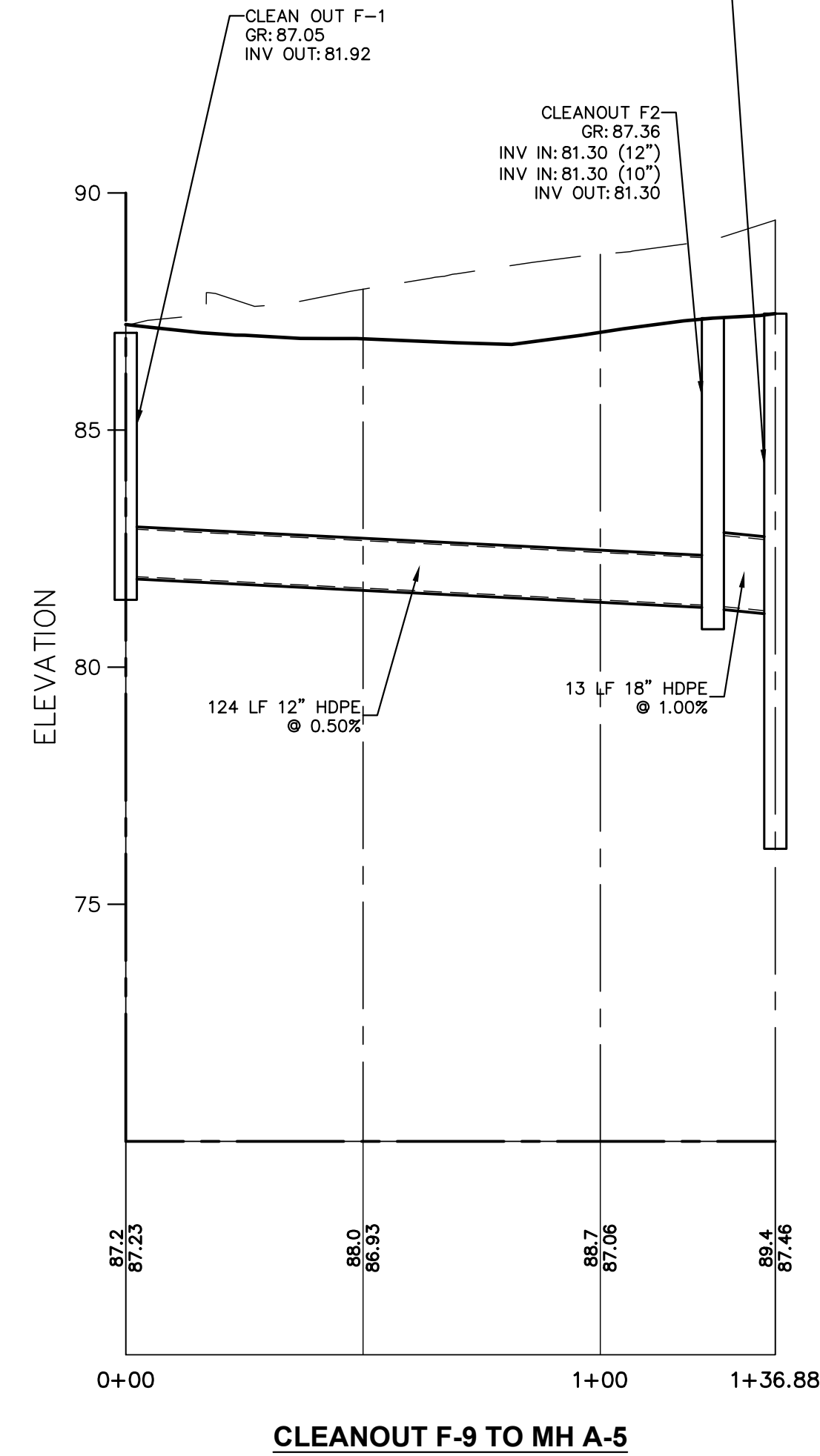
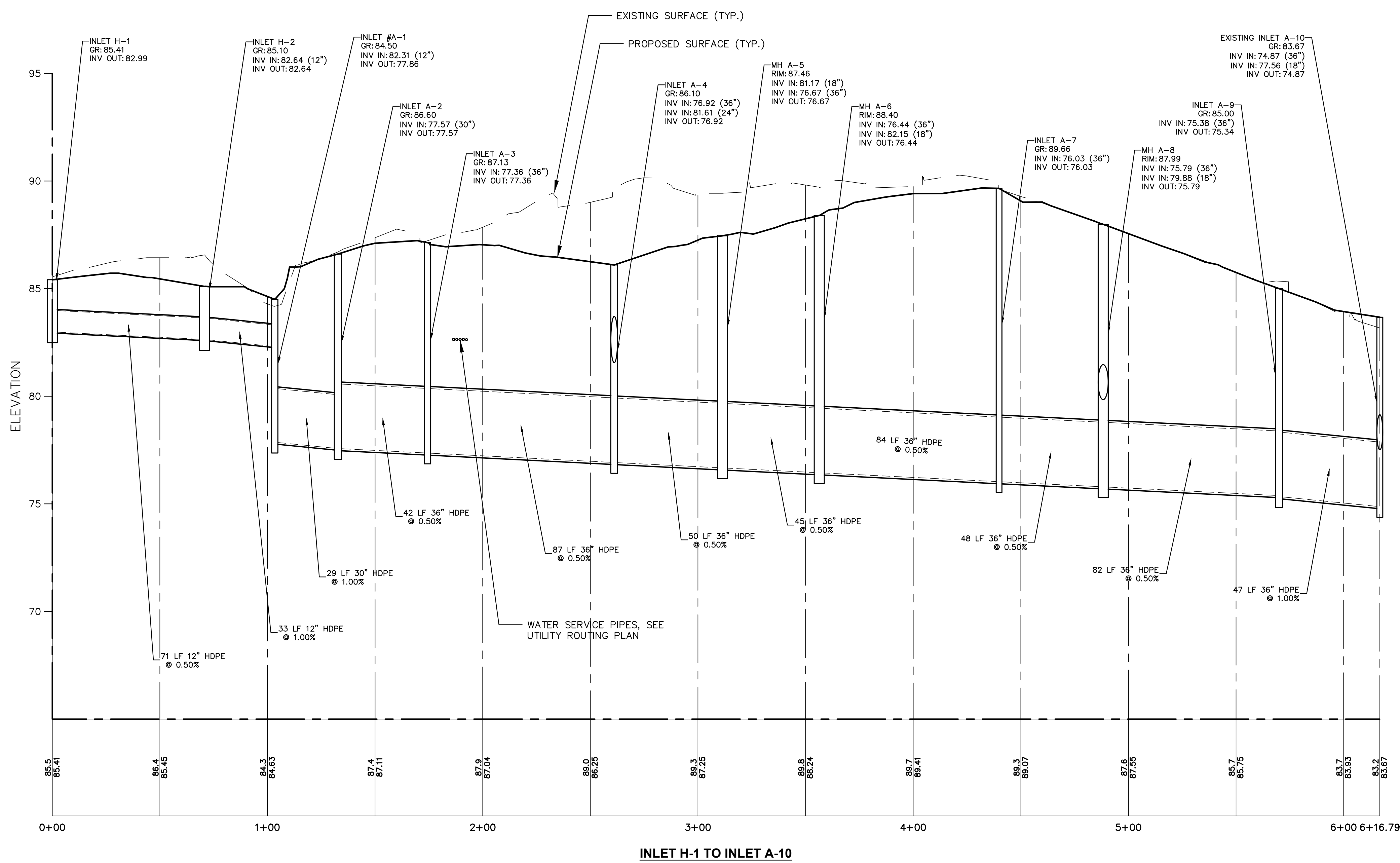
1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5267.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

**ENLARGED GRADING  
PLAN 2**

# C206

07/31/2024	PACKAGE 0
08/02/2024	PACKAGE 1

PACKAGE 0  
PACKAGE 1



1 Plainsboro Road  
Plainsboro, NJ 08536

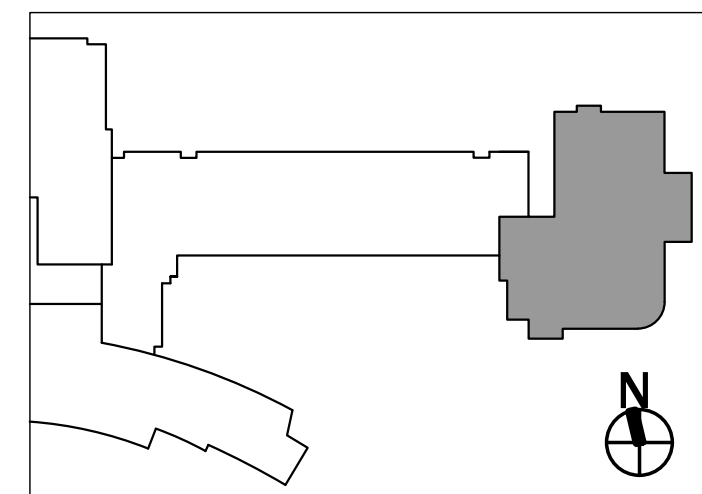
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BULFINCH**

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Boston, MA 02111  
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**ANDREW L. FRENCH, P.E.**  
PROFESSIONAL ENGINEER, N.J. LIC. No. 42894

NO.	DATE	REVISIONS
1.	10/18/2024	REVISED PER DRC COMMENTS



**PENN MEDICINE  
PRINCETON  
HEALTH CCIC**

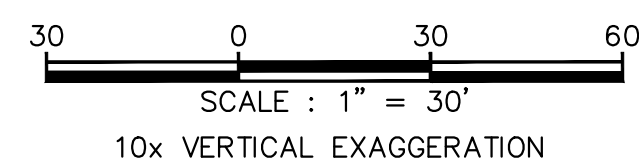
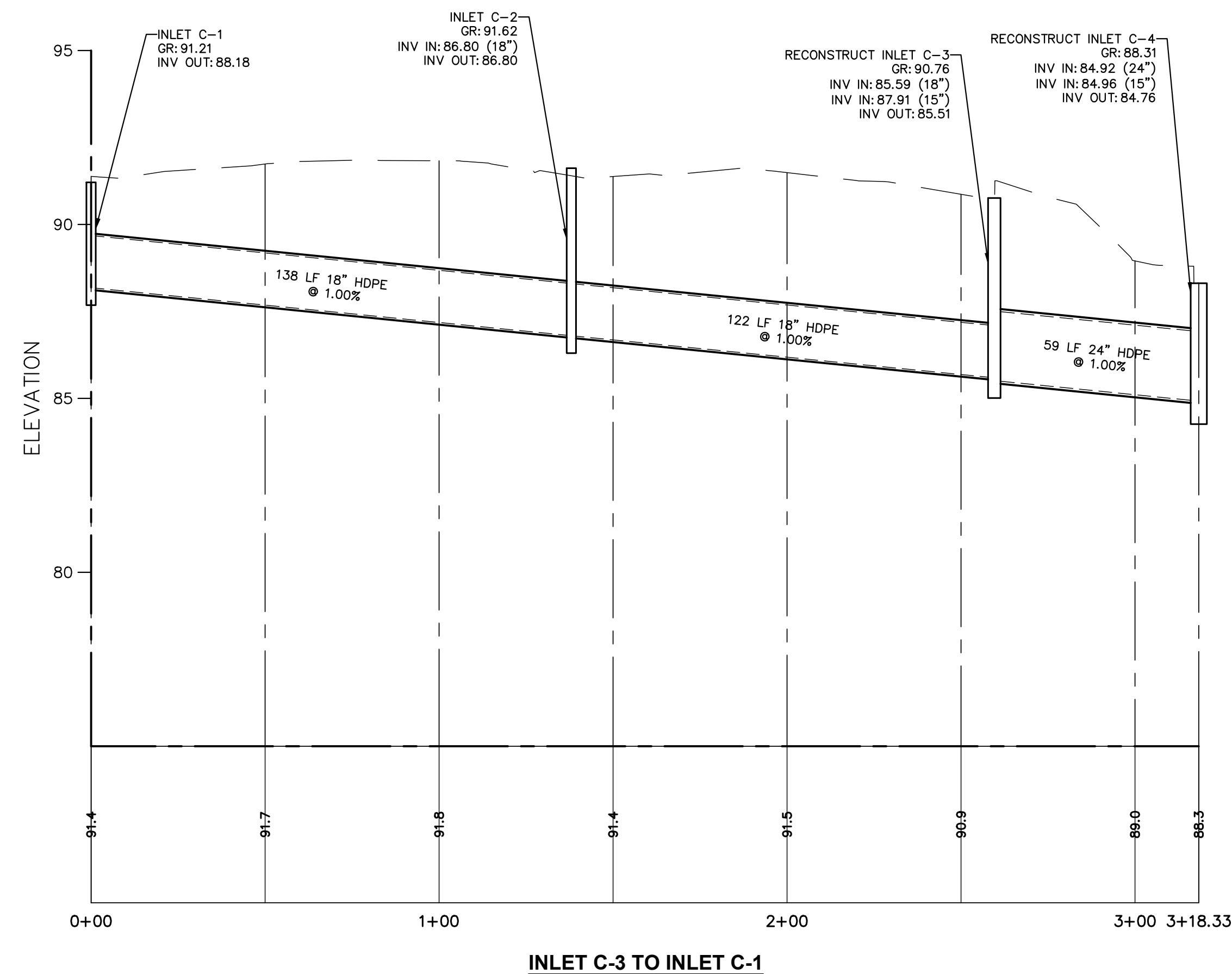
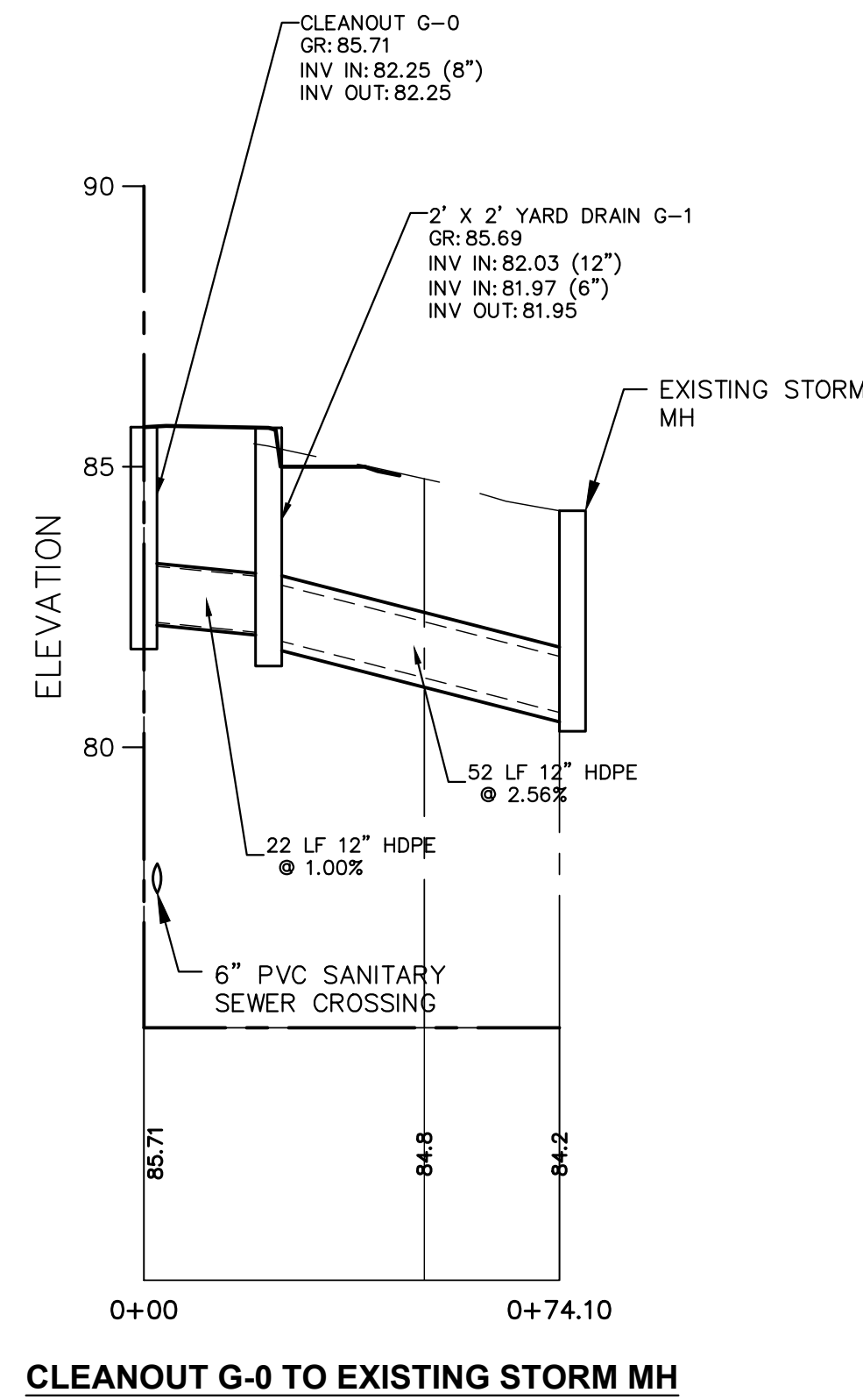
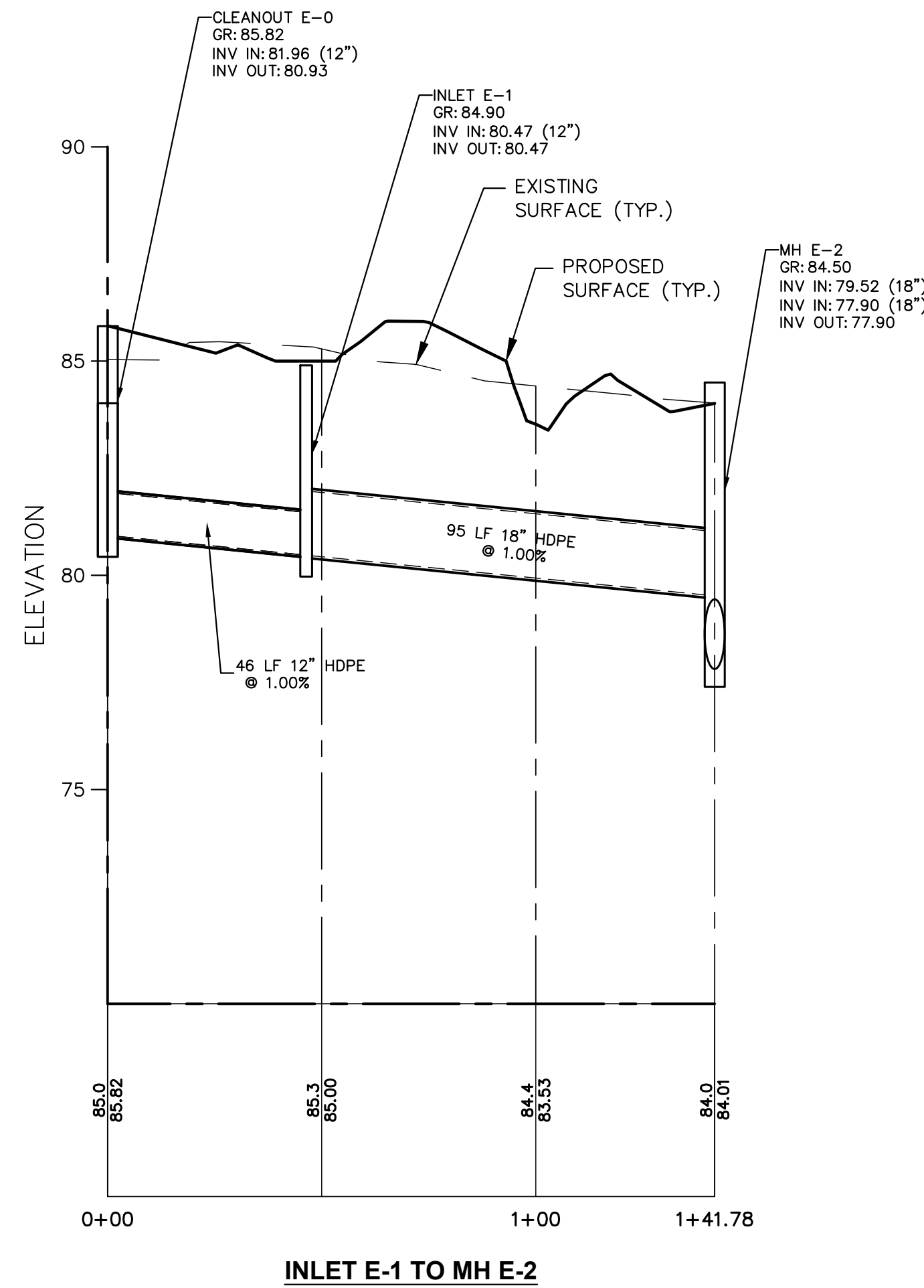
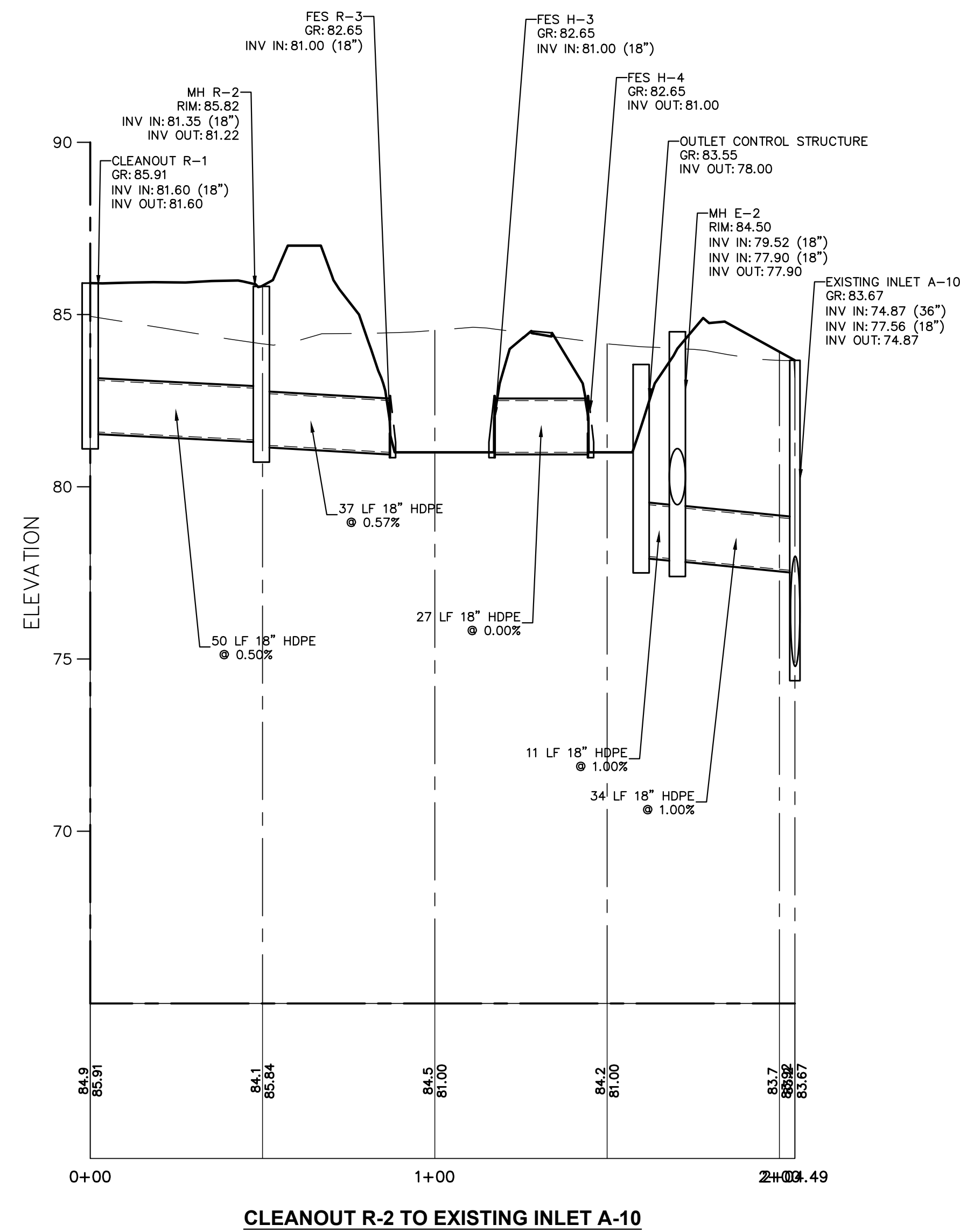
1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5257.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

**STORMWATER  
MANAGEMENT PROFILES**

**C207**

07/31/2024  
08/02/2024

PACKAGE 0  
PACKAGE 1



1 Plainsboro Road  
Plainsboro, NJ 08536

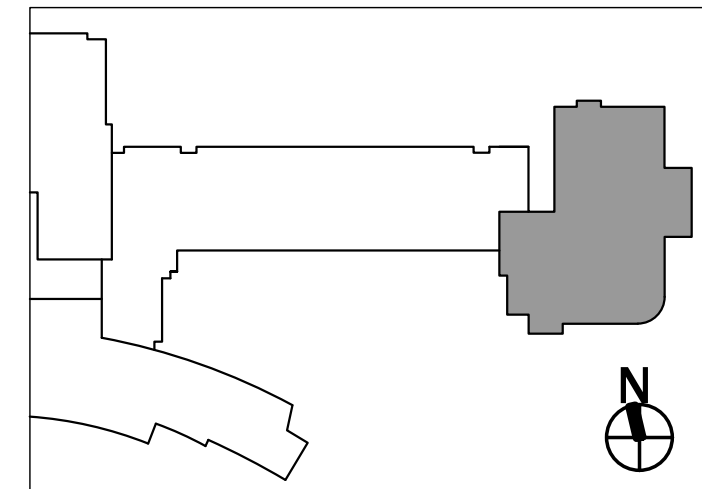
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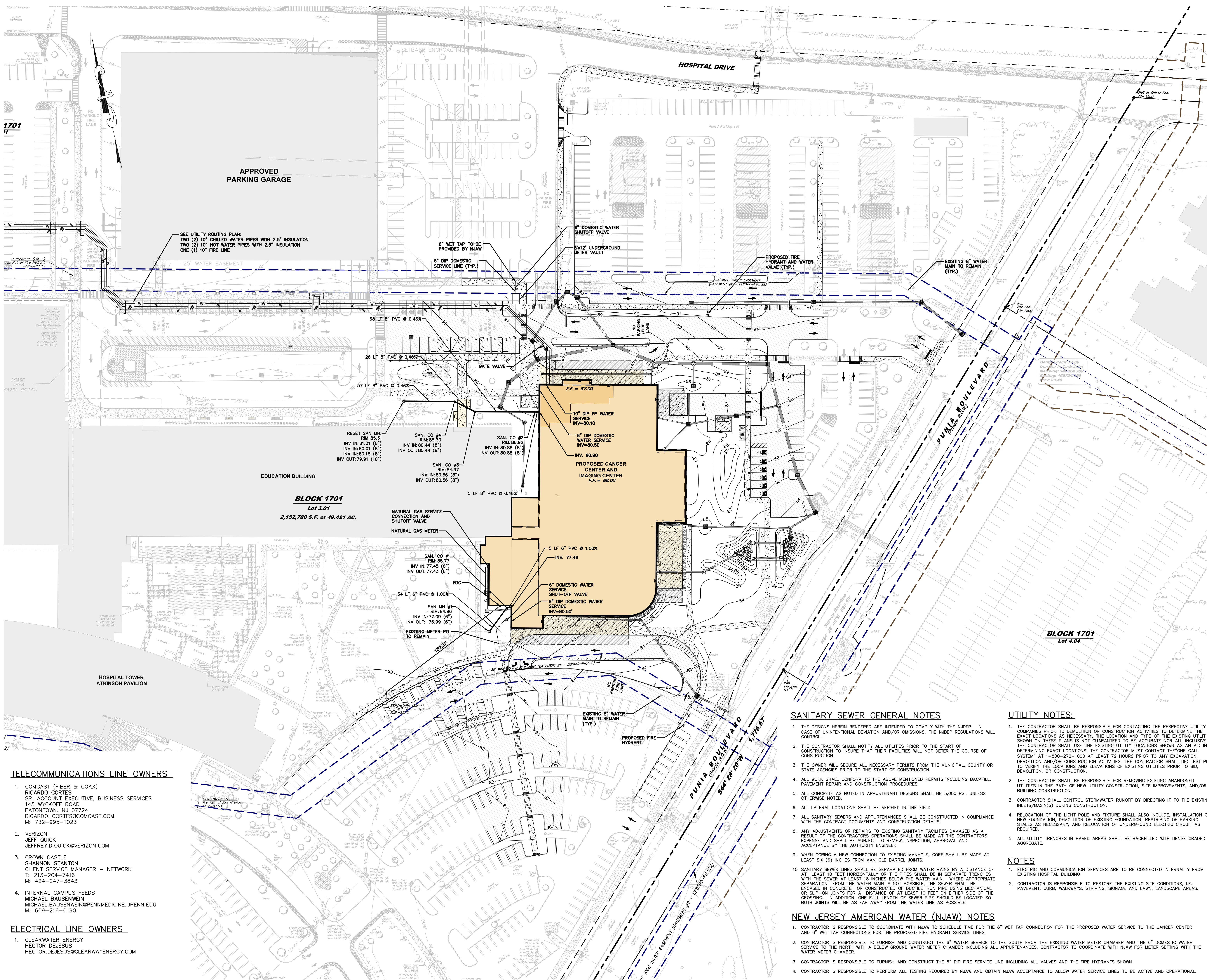
**PENN MEDICINE  
PRINCETON  
HEALTH CCIC**

1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5257.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

**STORMWATER  
MANAGEMENT PROFILES  
2  
C208**

07/31/2024  
08/02/2024

PACKAGE 0  
PACKAGE 1



TELECOMMUNICATIONS LINE OWNERS

- COMCAST (FIBER & COAX)  
RICARDO CORTES  
SR. ACCOUNT EXECUTIVE, BUSINESS SERVICES  
145 WYCKOFF ROAD  
EATONTOWN, NJ 07724  
RICARDO.CORTES@COMCAST.COM  
M: 732-995-1023
- VERIZON  
JEFFREY D. QUICK@VERIZON.COM
- CROWN CASTLE  
SHANNON STANTON  
CLIENT SERVICE MANAGER - NETWORK  
T: 213-204-7416  
M: 424-247-3843
- INTERNAL CAMPUS FEEDS  
MICHAEL BAUSENWEIN  
MICHAEL.BAUSENWEIN@PENNMEDICINE.UPENN.EDU  
M: 609-216-0190

ELECTRICAL LINE OWNERS

- CLEARWATER ENERGY  
HECTOR DEJESUS  
HECTOR.DEJESUS@CLEARWAYENERGY.COM

SANITARY SEWER GENERAL NOTES

- THE DESIGNS HEREIN RENDERED ARE INTENDED TO COMPLY WITH THE NJDEP. IN CASE OF UNINTENTIONAL DEVIATION AND/OR OMISSIONS, THE NJDEP REGULATIONS WILL CONTROL.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION TO INSURE THAT THEIR FACILITIES WILL NOT DETER THE COURSE OF CONSTRUCTION.
- THE OWNER WILL SECURE ALL NECESSARY PERMITS FROM THE MUNICIPAL, COUNTY OR STATE AGENCIES PRIOR TO THE START OF CONSTRUCTION.
- ALL WORK SHALL CONFORM TO THE ABOVE MENTIONED PERMITS INCLUDING BACKFILL, PAVEMENT REPAIR AND CONSTRUCTION PROCEDURES.
- ALL CONCRETE AS NOTED IN APPURTENANT DESIGNS SHALL BE 3,000 PSI, UNLESS OTHERWISE NOTED.
- ALL LATERAL LOCATIONS SHALL BE VERIFIED IN THE FIELD.
- ALL SANITARY SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED IN COMPLIANCE WITH THE CONTRACT DOCUMENTS AND CONSTRUCTION DETAILS.
- ANY ADJUSTMENTS OR REPAIRS TO EXISTING SANITARY FACILITIES DAMAGED AS A RESULT OF THE CONTRACTORS OPERATIONS SHALL BE MADE AT THE CONTRACTORS EXPENSE AND SHALL BE SUBJECT TO REVIEW, INSPECTION, APPROVAL AND ACCEPTANCE BY THE AUTHORITY ENGINEER.
- WHEN CORING A NEW CONNECTION TO EXISTING MANHOLE, CORE SHALL BE MADE AT LEAST SIX (6) INCHES FROM MANHOLE BARREL JOINTS.
- SANITARY SEWER LINES SHALL BE SEPARATED FROM WATER MAINS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY OR THE PIPES SHALL BE IN SEPARATE TRENCHES WITH THE SEWER AT LEAST 18 INCHES BELOW THE WATER MAIN. WHERE APPROPRIATE SEPARATION FROM THE WATER MAIN IS NOT POSSIBLE, THE SEWER SHALL BE ENCASED IN CONCRETE OR CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR SLIP-ON JOINTS FOR A DISTANCE OF AT LEAST 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS WILL BE AS FAR AWAY FROM THE WATER LINE AS POSSIBLE.

NEW JERSEY AMERICAN WATER (NJAW) NOTES

- CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH NJAW TO SCHEDULE TIME FOR THE 6\"/>

UTILITY NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE RESPECTIVE UTILITY COMPANIES PRIOR TO DEMOLITION OR CONSTRUCTION ACTIVITIES TO DETERMINE THE EXACT LOCATIONS AS NECESSARY. THE LOCATION AND TYPE OF THE EXISTING UTILITIES SHOWN ON THESE PLANS IS NOT GUARANTEED TO BE ACCURATE NOR ALL INCLUSIVE. THE CONTRACTOR SHALL USE THE EXISTING UTILITY LOCATIONS SHOWN AS AN AID IN DETERMINING EXACT LOCATIONS. THE CONTRACTOR MUST CONTACT THE "ONE CALL SYSTEM" AT 1-800-272-1000 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION, DEMOLITION AND/OR CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL DIG TEST PITS TO VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO BID, DEMOLITION, OR CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING EXISTING ABANDONED UTILITIES IN THE PATH OF NEW UTILITY CONSTRUCTION, SITE IMPROVEMENTS, AND/OR BUILDING CONSTRUCTION.
- CONTRACTOR SHALL CONTROL STORMWATER RUNOFF BY DIRECTING IT TO THE EXISTING INLETS/BAINS/DURING CONSTRUCTION.
- RELOCATION OF THE LIGHT POLE AND FIXTURE SHALL ALSO INCLUDE, INSTALLATION OF NEW FOUNDATION, DEMOLITION OF EXISTING FOUNDATION, RESTRICTION OF PARKING SPACES AS NECESSARY, AND RELOCATION OF UNDERGROUND ELECTRIC CIRCUIT AS REQUIRED.
- ALL UTILITY TRENCHES IN PAVED AREAS SHALL BE BACKFILLED WITH DENSE GRADED AGGREGATE.

NOTES

- ELECTRIC AND COMMUNICATION SERVICES ARE TO BE CONNECTED INTERNALLY FROM EXISTING HOSPITAL BUILDING
- CONTRACTOR IS RESPONSIBLE TO RESTORE THE EXISTING SITE CONDITIONS, I.E. PAVEMENT, CURB, WALKWAYS, STRIPING, SIGNAGE AND LAWN, LANDSCAPE AREAS.

40 0 40 80  
SCALE : 1" = 40'



1 Plainsboro Road  
Plainsboro, NJ 08536

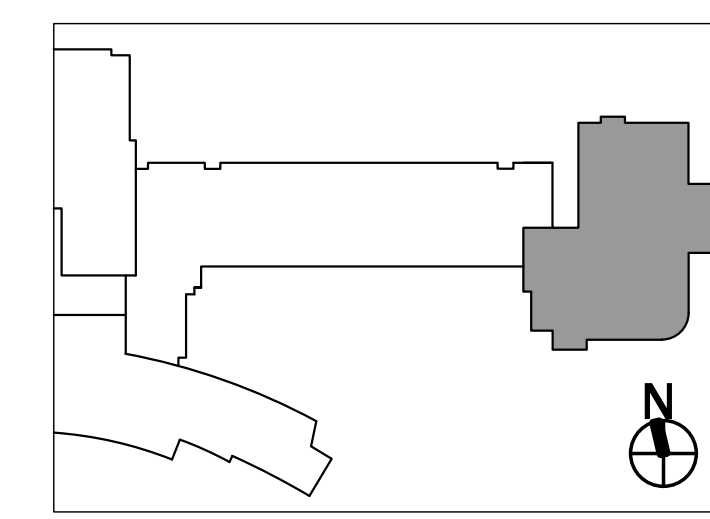
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PROFESSIONAL ENGINEER, N.J. LIC. No. 42894

NO.	DATE	REVISION	DESCRIPTION
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**PENN MEDICINE  
PRINCETON  
HEALTH CCIC**

1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5257.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

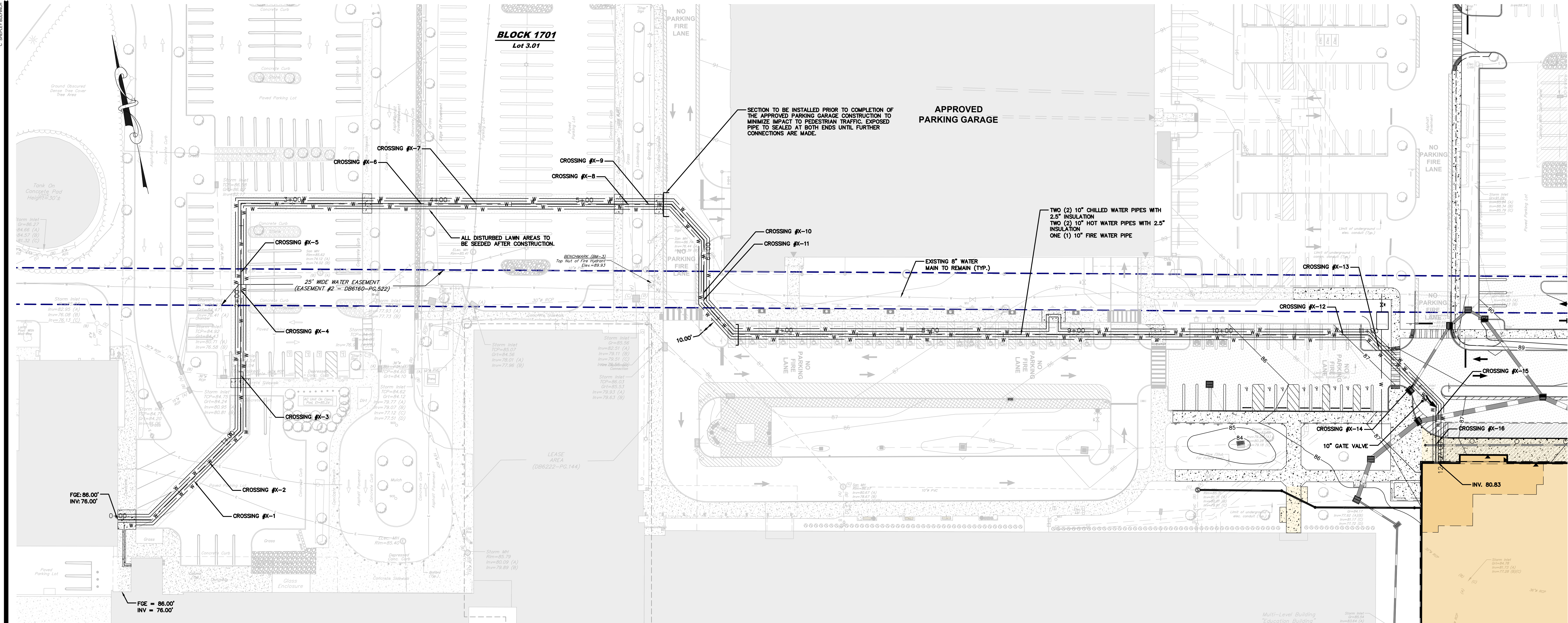
UTILITY PLAN

**C209**

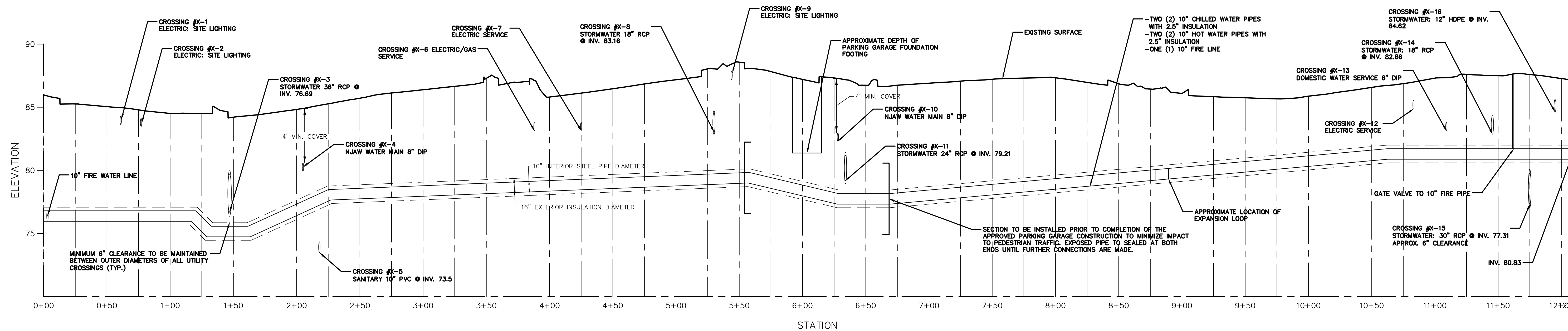
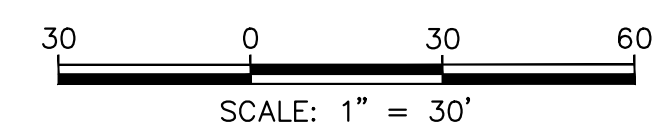
07/31/2024  
08/02/2024

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PACKAGE 1

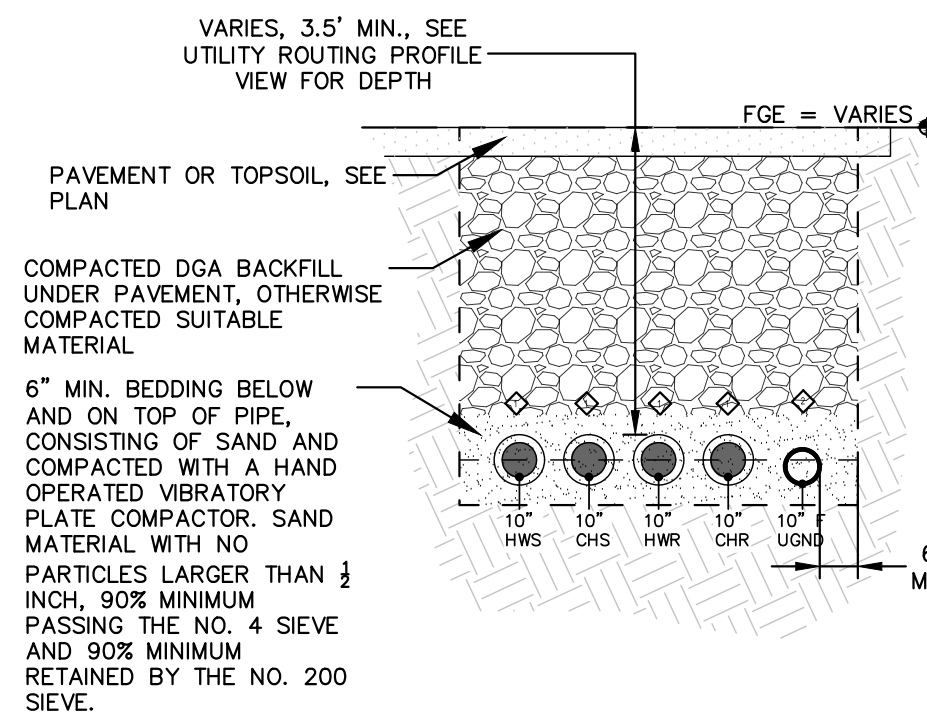
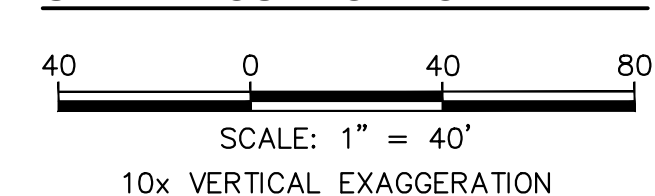
PENN MEDICINE PRINCETON HEALTH CANCER CENTER  
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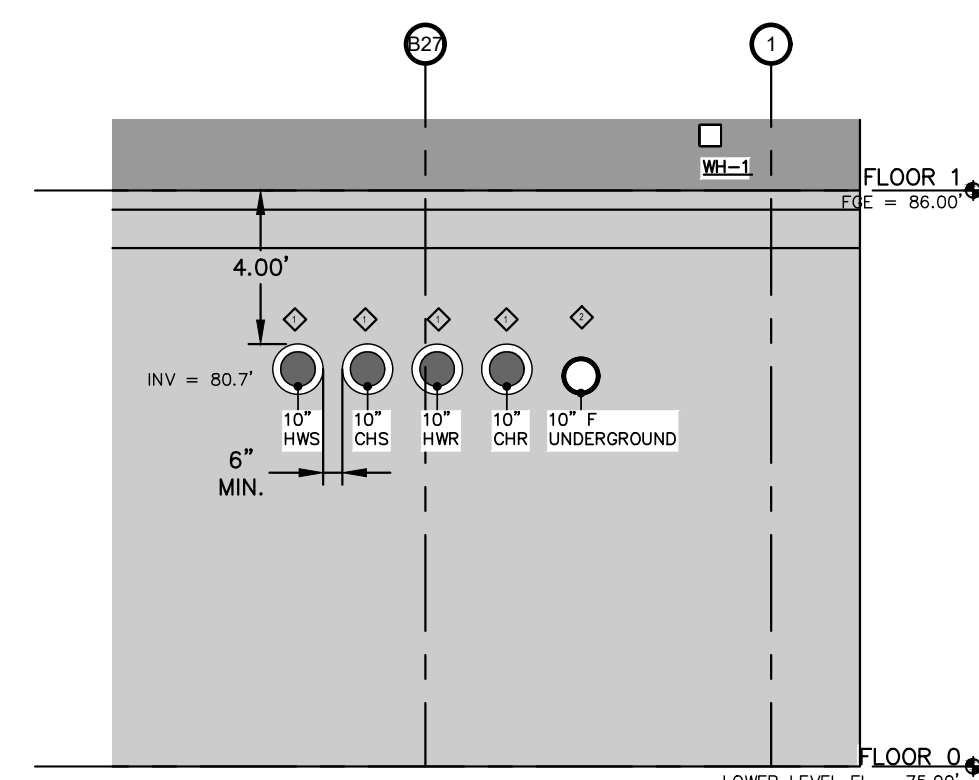
UTILITY ROUTING PLAN VIEW



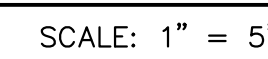
UTILITY ROUTING PROFILE VIEW



TYP. CROSS SECTION



UTILITY ROUTING CROSS SECTION DETAIL



NOTES:

1. CHILLED AND HOT WATER SUPPLY AND RETURN PIPES SHALL BE STANDARD WEIGHT CARBON STEEL A-53 OR A-106 SEAMLESS PIPE. ALL JOINTS SHALL BE BUTT-WELDED. PIPE INSULATION SHALL BE SPRAY APPLIED NOMINAL 2 POUND PER CUBIC FOOT DENSITY POLYURETHANE FOAM FOR ALL FITTINGS. INSULATION SHALL BE APPLIED TO A MINIMUM THICKNESS OF 2-1/2". PIPING SYSTEM SHALL INCLUDE A PROTECTIVE JACKET THAT IS A FILAMENT WOUND POLYESTER RESIN/FIBERGLASS REINFORCEMENT COMPOSITE APPLIED DIRECTLY TO THE INSULATING FOAM OF A MINIMUM THICKNESS OF 0.085 INCHES OR HIGH DENSITY POLYETHYLENE OF A MINIMUM THICKNESS OF 125 MILS. THE PIPING SYSTEM SHALL BE IN STRICT CONFORMANCE TO LATEST EDITION OF ANSI B31.1.
2. UNDERGROUND FIRE PROTECTION SERVICE PIPING SHALL BE DUCTILE-IRON CLASS 50 OR CLASS 52, ANSI A21-51 WITH CEMENT-MORTAR LINING PER ANSI A21.4. FITTINGS SHALL BE DUCTILE-IRON 250 PSI RATING PER ANSI A21-51 WITH CEMENT-MORTAR LINING PER ANSI A21.4. PIPE JOINTS SHALL BE AWWA C506 GROOVED END WITH VICTALOID STYLE 31 COUPLINGS OR PUSH-ON ANSI A21-11 WITH RETAINER GLANDS AND THRUST BLOCKS AS REQUIRED. ALL MATERIALS AND INSTALLATION SHALL CONFORM TO NFPA 24 AS A MINIMUM.



1 Plainsboro Road  
Plainsboro, NJ 08536

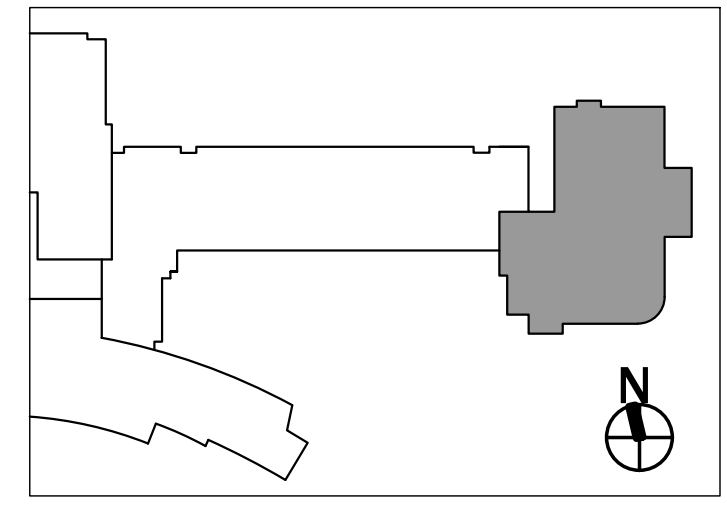
**SHEPLEY BULFINCH**

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PROFESSIONAL ENGINEER, N.J. LIC. NO. 42894

NO.	DATE	REVISION	DESCRIPTION
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**PENN MEDICINE PRINCETON HEALTH CCIC**

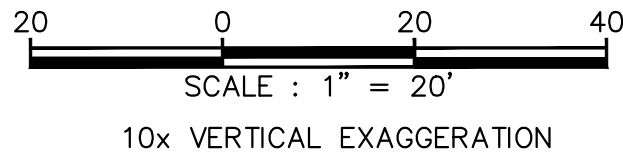
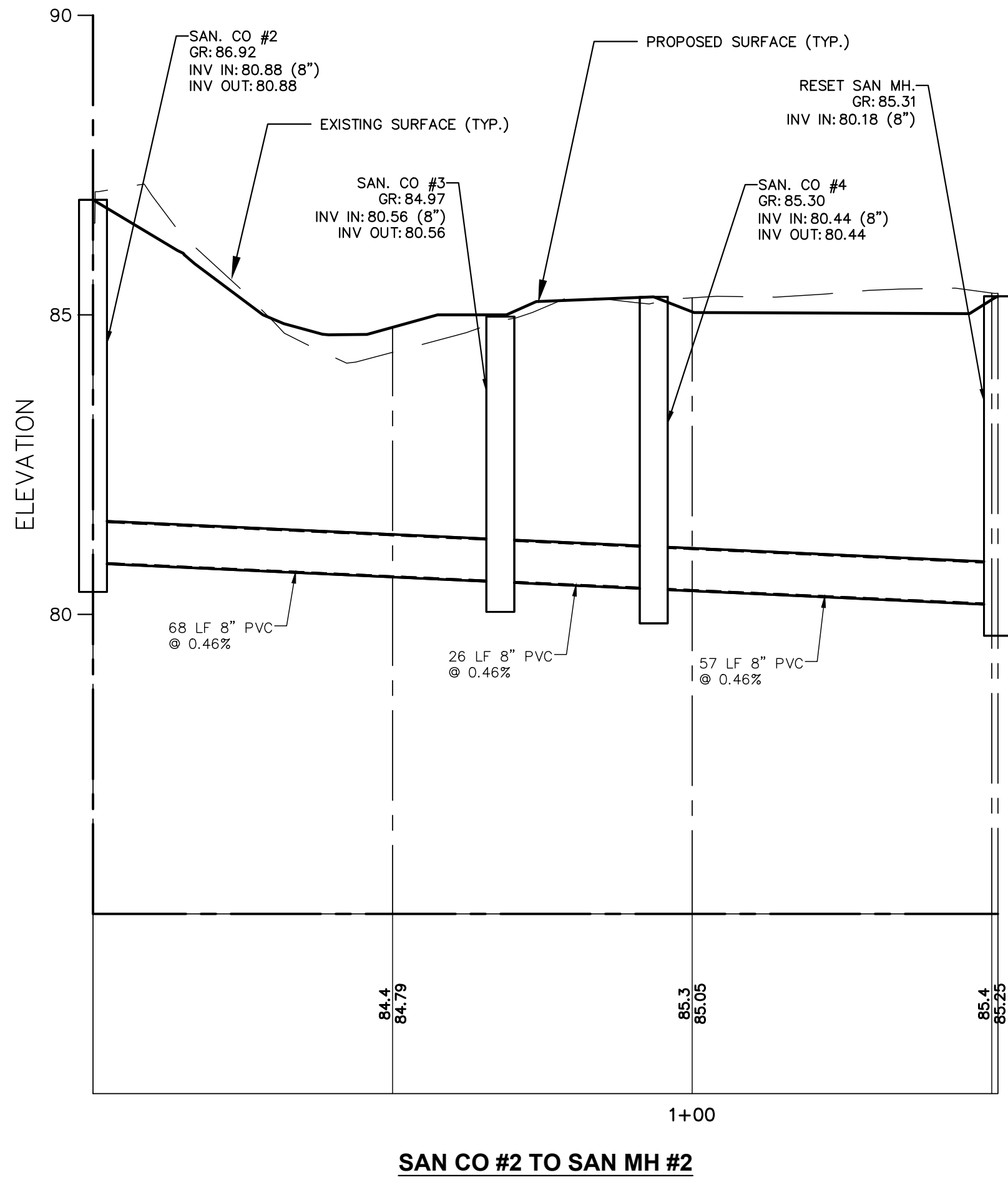
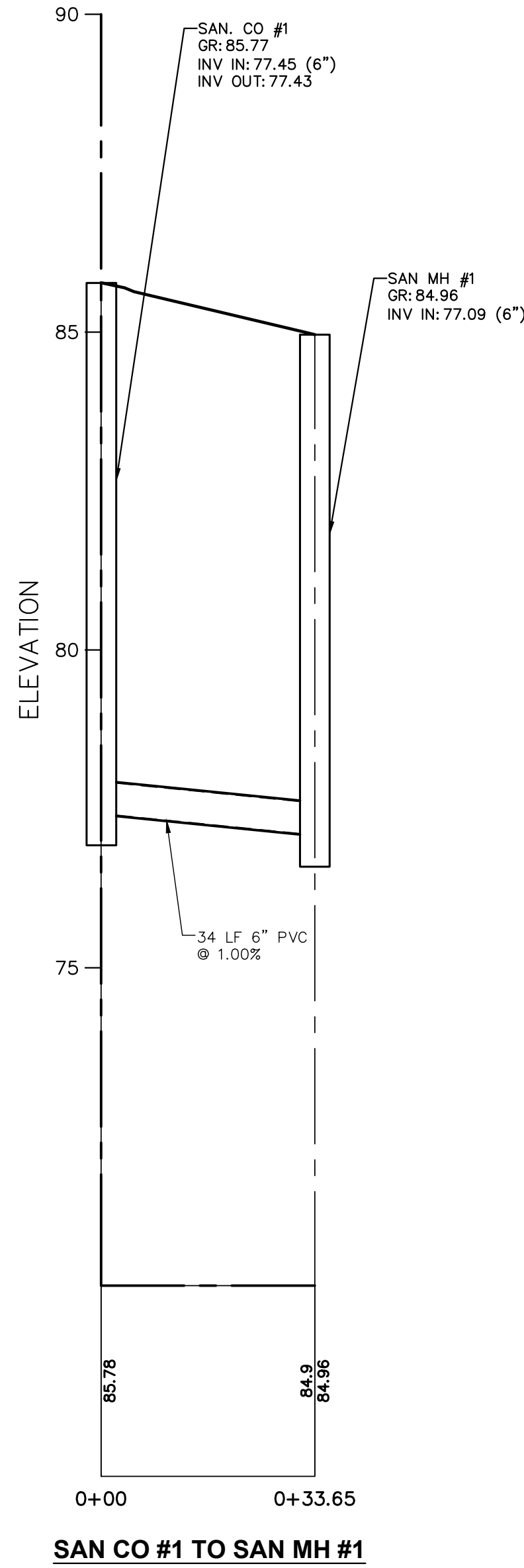
1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5287.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

**UTILITY ROUTING PLAN**

**C210**

07/31/2024  
08/02/2024

PACKAGE 0  
PACKAGE 1



1 Plainsboro Road  
Plainsboro, NJ 08536

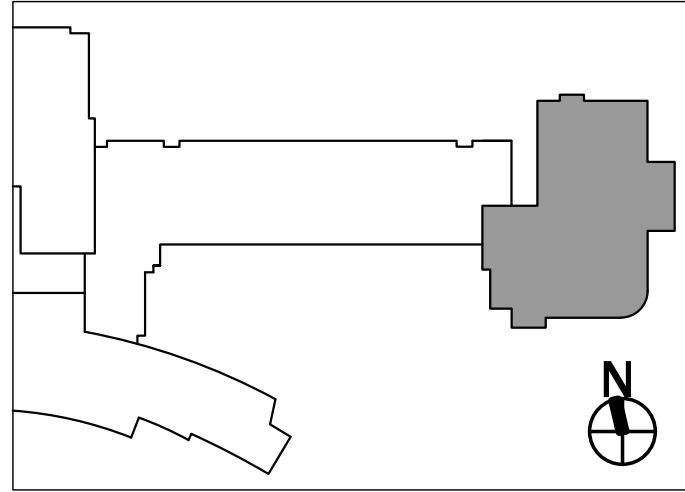
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99 Chauncy Street 4th Floor  
Boston, MA 02111  
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**ANDREW L. FRENCH, P.E.**  
PROFESSIONAL ENGINEER, N.J. LIC. No. 42894

NO.	DATE	DESCRIPTION
1.	10/18/2024	REVISED PER DRC COMMENTS



**PENN MEDICINE  
PRINCETON  
HEALTH CCIC**

1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5257.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

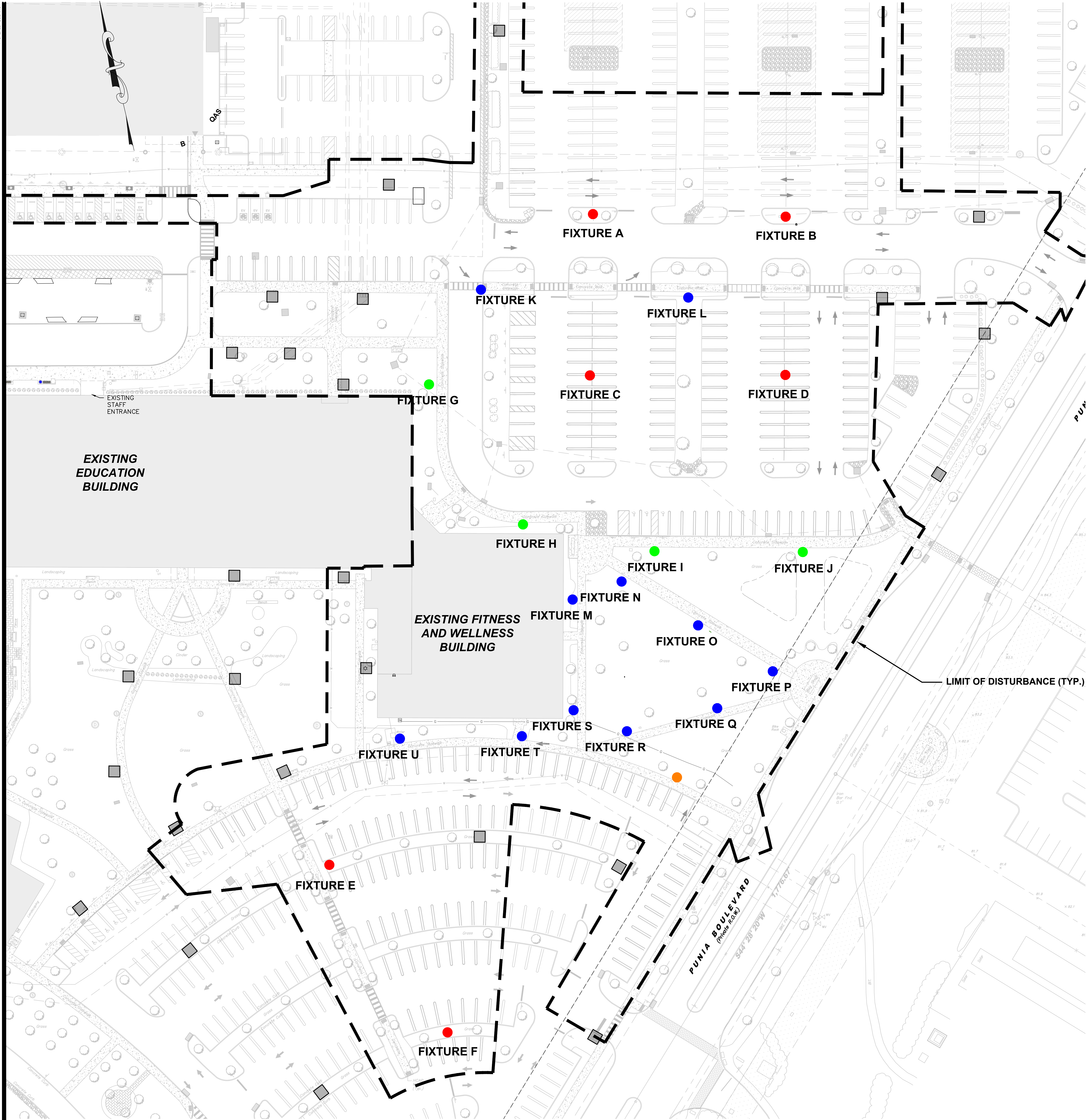
**UTILITY PROFILES**

**C211**

07/31/2024  
08/02/2024

PACKAGE 0  
PACKAGE 1

PENN MEDICINE PRINCETON HEALTH CANCER CENTER  
03\_V2\_0000\_060228T - Cancer Center V2\_0000\_060228T - Cancer Center V2\_0000\_060228T - U CC-ang U-EX  
C. 060228T



- LEGEND:**
- EXISTING LIGHT FIXTURE AND POLE TO REMAIN
  - EXISTING LIGHT FIXTURE AND POLE TO BE STORED FOR FUTURE USE
  - REUSE/RELOCATE LIGHT FIXTURE AND 25' POLE (FIXTURES A THROUGH F)
  - REUSE/RELOCATE 25' POLE, STORE LIGHT FIXTURE (FIXTURES G THROUGH J)
  - REUSE/RELOCATE LIGHT FIXTURE AND 14' POLE (FIXTURES K THROUGH U)
- LIGHTING NOTES:**
- THIS PLAN SHALL BE USED FOR THE LOCATIONS OF THE EXISTING EXTERIOR LIGHTING WITHIN THE PROPOSED CANCER CENTER LIMIT OF DISTURBANCE ONLY.
  - THE CONTRACTOR SHALL REMOVE ALL EXISTING LIGHT FIXTURES AS SHOWN FOR RE-USE AND/OR STORAGE. THE CONTRACTOR SHALL CONSULT WITH THE LIGHTING MANUFACTURER FOR DIRECTIONS FOR PROPER STORAGE OF THE EXISTING LIGHTS. THE STORAGE LOCATION SHALL BE DETERMINED BY THE OWNER.
  - ANY LIGHTS THAT ARE TO REMAIN SHALL BE PROPERLY PROTECTED FROM CONSTRUCTION ACTIVITIES. ANY DAMAGE THAT OCCURS TO THESE LIGHTS SHALL BE REMEDIED BY THE CONTRACTOR AT NO COST TO THE OWNER.
  - ANY DAMAGE THAT OCCURS TO IMPROPER STORAGE OF THE LIGHTS DURING CONSTRUCTION SHALL BE REMEDIED BY THE CONTRACTOR AT NO COST TO THE OWNER.
  - THE CONTRACTOR IS RESPONSIBLE TO DISCONNECT THE POWER SUPPLY AND REMOVAL OF EXISTING CONDUIT AND WIRING AS APPLICABLE. PLEASE REFER TO THE ELECTRICAL PLANS FOR SCOPE OF WORK AND SPECIFICATIONS FOR REMOVAL, RELOCATION AND POWER SUPPLY FOR NEW LIGHTING FIXTURES.
  - THE CONTRACTOR IS RESPONSIBLE TO EXCAVATE, REMOVE AND DISPOSE OF CONCRETE FOUNDATIONS AND FOR PROPERLY BACKFILLING ALL EXCAVATIONS.



1 Plainsboro Road  
Plainsboro, NJ 08536

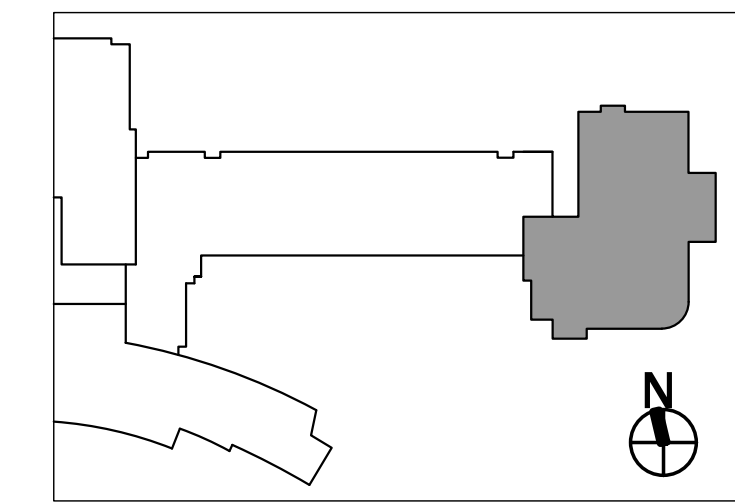
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**PENN MEDICINE  
PRINCETON  
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JOB NO: 5267.003  
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Middlesex County, New Jersey 08536

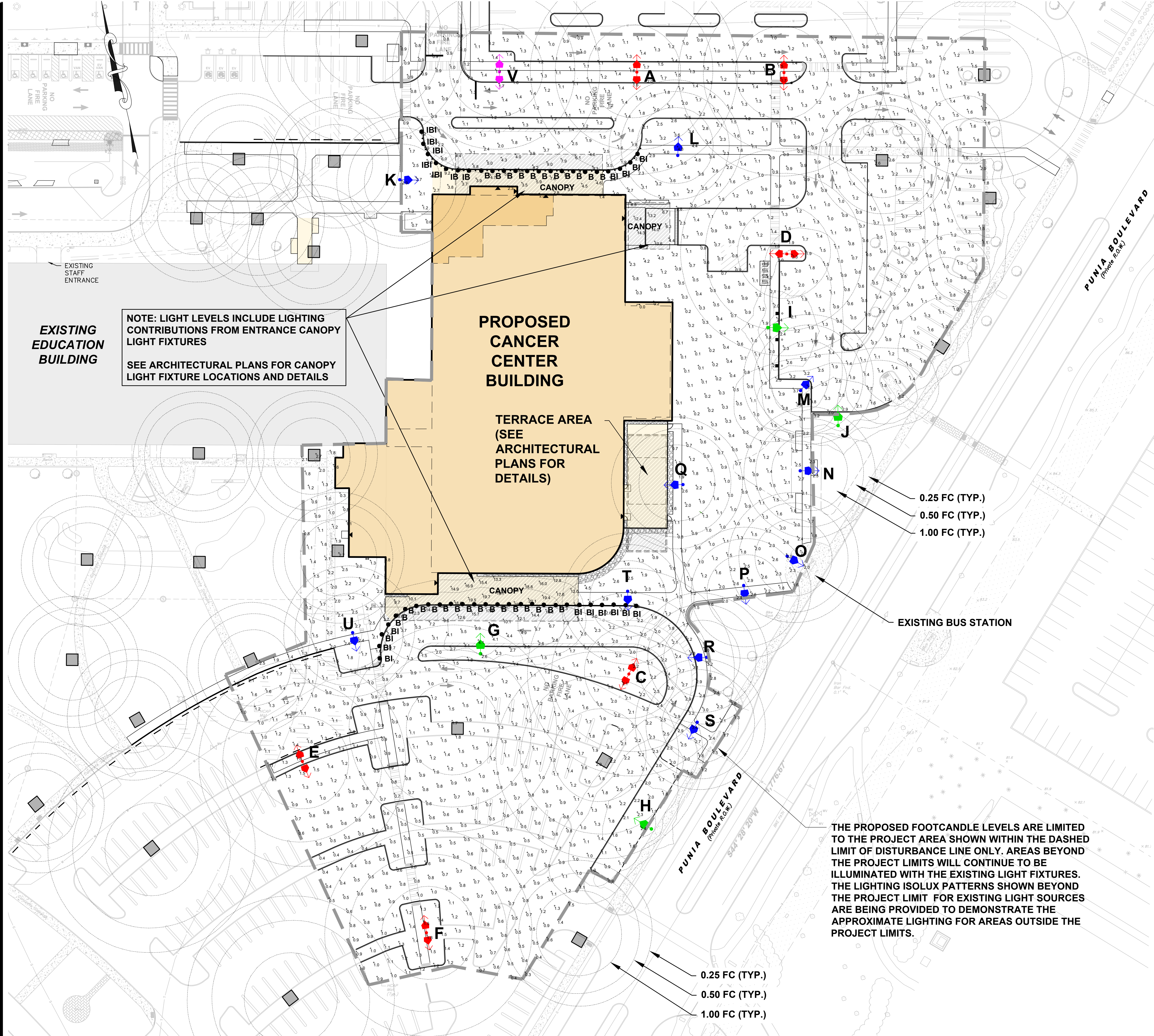
**EXISTING LIGHTING  
PLAN**

**C212**

07/31/2024  
08/02/2024

PACKAGE 0  
PACKAGE 1

PENN MEDICINE PRINCETON HEALTH CANCER CENTER  
0\_V\_E\_2020\_060228T - Cancer Center V2020060228T - Cancer Center V2020060228T - U CC-avg U  
THE ORIGINAL OF THIS DRAWING IS 36" X 48". IF THIS COPY IS ANY OTHER SIZE, IT HAS EITHER BEEN REDUCED OR ENLARGED. TAKE APPROPRIATE PRECAUTIONS ACCORDINGLY.

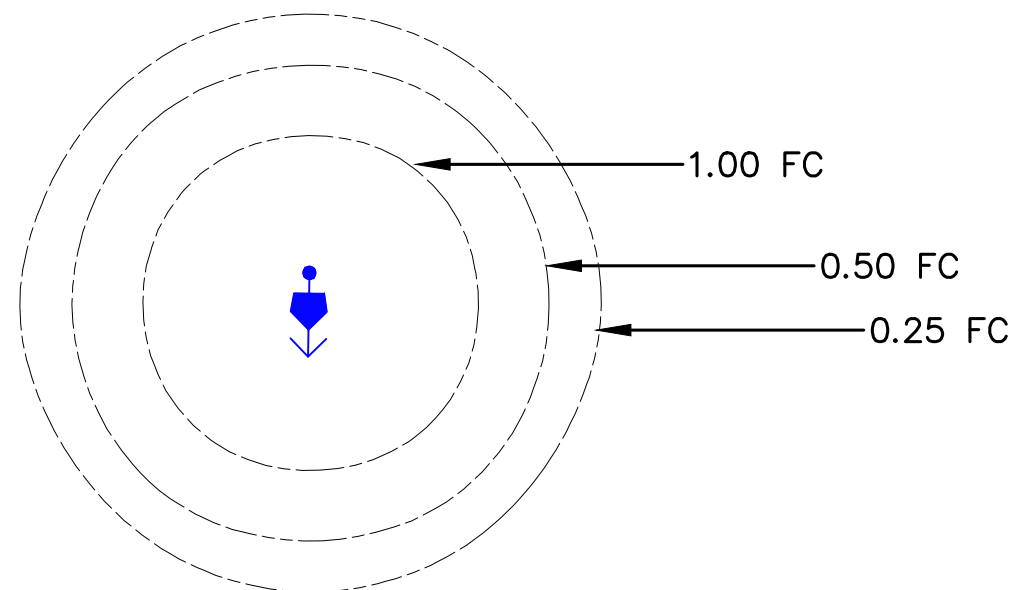


**LIGHTING NOTES:**

- DO NOT INSTALL PROPOSED LIGHTS DIRECTLY ON TOP OF ANY PROPOSED OR EXISTING UNDERGROUND UTILITIES. THE CONTRACTOR SHALL FIELD VERIFY LOCATION OF UTILITIES AND ADJUST LIGHTS AS NEEDED AS DIRECTED BY THE PROJECT PROFESSIONAL TO ACCOMMODATE ANY POTENTIAL CONFLICTS.
- ALL BOLLARDS AND POLE MOUNTED LIGHTS SHALL BE PLACED AS FOLLOWS:
  - FACE OF BOLLARD SHALL BE PLACED INSIDE OF THE CURBLINE IN DROP OFF AREA. FACE OF BOLLARD SHALL BE PLACED 1.5 FROM EDGE OF SIDEWALKS. ON CENTER SPACING SHALL BE 8 FEET.
  - POLE MOUNTED PARKING AREA LIGHTS SHALL BE INSTALLED AS APPLICABLE AS FOLLOWS:
    - IN THE CENTER OF ISLANDS;
    - AS INDICATED ON THE PLAN;
    - A MINIMUM OF 3.5' FROM THE BACK OF THE CURB TO THE FACE OF THE POLE;
    - FLUSH (FOOTING) WITH EDGE OF SIDEWALKS
- IN THE EVENT THAT THERE ARE DISCREPANCIES BETWEEN THE QUANTITIES SHOWN IN THE LIGHTING SCHEDULE AND THE PLAN, THE LIGHTING PLAN SHALL GOVERN.
- THE HOSPITAL SHALL BE OPEN 24 HOURS PER DAY, 7 DAYS A WEEK. ALL EXTERIOR LIGHTS WILL REMAIN ON, HOWEVER, ALL DOUBLE FIXTURE LIGHTS SHALL BE DIMMED BY 50% BETWEEN THE HOURS OF MIDNIGHT AND 5 AM.
- THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT SHOP DRAWINGS OF ALL LIGHT FIXTURES AND POLES FOR REVIEW AND APPROVAL BY THE APPROPRIATE ENTITIES.
- THE APPLICANT WILL ENSURE THAT THE POLE/FIXTURE FINISH AND COLOR AND THE LIGHT SOURCE COLOR RENDITION OF ALL PROPOSED LIGHT FIXTURES AND POLES SHALL MATCH THE EXISTING POLES AND FIXTURES USED THROUGHOUT THE PENN MEDICINE CAMPUS. FINAL DETAILS AND COLORS SHALL BE SUBJECT TO REVIEW AND APPROVAL BY PLAINSBORO TOWNSHIP.

**LEGEND:**

- EXISTING LIGHT FIXTURE AND POLE TO REMAIN
- PROPOSED BOLLARD
  - B = STANDARD BOLLARD - NON ILLUMINATED
  - BI = STANDARD BOLLARD - ILLUMINATED
  - IB = SECURITY (IMPACT) BOLLARD - NON ILLUMINATED
  - IBI = SECURITY (IMPACT) BOLLARD - ILLUMINATED
- REUSE/RELOCATED LIGHT FIXTURE AND 25' POLE (FIXTURES A THROUGH F) DOUBLE MOUNTED LIGHT
- REUSE/RELOCATE LIGHT FIXTURE AND 25' POLE (FIXTURES G THROUGH J) SINGLE MOUNTED LIGHT
- REUSE/RELOCATE LIGHT FIXTURE AND 14' POLE (FIXTURES K THROUGH U) SINGLE MOUNTED LIGHT
- NEW FIXTURE AND 25' POLE (FIXTURE V) DOUBLE MOUNTED LIGHT



**TYPICAL PHOTOMETRIC CONTOUR DETAIL**  
NOT TO SCALE

THE PROPOSED FOOTCANDLE LEVELS ARE LIMITED TO THE PROJECT AREA SHOWN WITHIN THE DASHED LIMIT OF DISTURBANCE LINE ONLY. AREAS BEYOND THE PROJECT LIMITS WILL CONTINUE TO BE ILLUMINATED WITH THE EXISTING LIGHT FIXTURES. THE LIGHTING ISOLUX PATTERNS SHOWN BEYOND THE PROJECT LIMIT FOR EXISTING LIGHT SOURCES ARE BEING PROVIDED TO DEMONSTRATE THE APPROXIMATE LIGHTING FOR AREAS OUTSIDE THE PROJECT LIMITS.

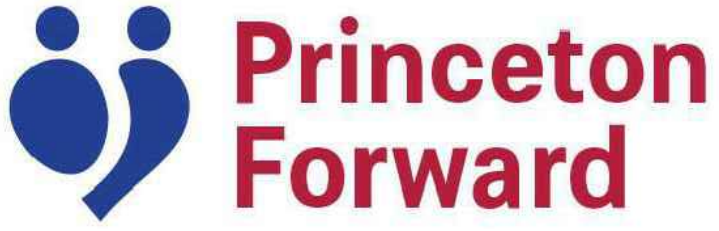
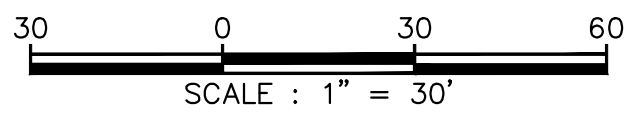
0.25 FC (TYP.)  
0.50 FC (TYP.)  
1.00 FC (TYP.)

Diversified NJ Luminaire Schedule									
Symbol	Qty **	Description	Manufacturer	AFG (FT)	Light Fixture	CCT	Lum. Lumens	LLF	Lum. Watts
●	4	SINGLE TYPE 3	ARCHITECTURAL AREA LIGHTING	25	M22-P-36L-615-3K7-3-CL-COLOR-CONFIRM EXISTING POLE DIA-VOLTS R56 - 25'	3000K	7630	0.880	71.13
● BI **	14	BOLLARD	FORMS+SURFACES	3.5	LBC8500/SECTOR180/VOLTS/COLOR/R56	3000K	539	0.880	21.1
● BI **	5	BOLLARD	FORMS+SURFACES	3.5	LBC8500/SECTOR180/VOLTS/COLOR/S10-P1/R56	3000K	539	0.880	21.1
●	6	TWIN TYPE 5	ARCHITECTURAL AREA LIGHTING	25	M22-2P-36L-615-3K7-5W-CL-COLOR-X- ODMNT VOLTS R56 - EXISTING POLE - 25'	3000K	7787	0.880	71.13
●	11	SINGLE TYPE 5	ARCHITECTURAL AREA LIGHTING	14	M22-P-36L-615-3K7-5W-CL-COLOR-X- ODMNT VOLTS R56 - EXISTING POLE - 25'	3000K	7787	0.880	71.13
●	1	TWIN TYPE 5	ARCHITECTURAL AREA LIGHTING	25	M22-2P-36L-615-3K7-5W-CL-PSS-X- ODMNT VOLTS R56	3000K	7787	0.880	71.13

**NOTES:**  
\*\* ALL ILLUMINATED BOLLARDS ARE FOR ROADWAY LIGHTING PURPOSES  
\*\* QUANTITIES SHOWN IN THE SCHEDULE ARE FOR INFORMATIONAL PURPOSES ONLY. SHOULD ANY DISCREPANCIES EXIST BETWEEN THE SCHEDULE AND LIGHTING PLAN, THE LIGHTING PLAN QUANTITIES SHALL GOVERN

**Project Contact Information:**  
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Mobile: 908.907.8462

DIV GRP CALCULATOR									
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min		
SITE	Illuminance	Fc	1.1	20.1	0.0	N.A.	N.A.		
DRIVE LANE	Illuminance	Fc	1.3	2.5	0.5	2.5	5.0		
PARKING LOT NORTH	Illuminance	Fc	1.3	3.3	0.4	3.3	8.3		
PARKING LOT SOUTH	Illuminance	Fc	1.1	2.9	0.4	2.8	7.3		
WALKING PATH	Illuminance	Fc	1.8	2.6	0.7	2.5	3.7		



1 Plainsboro Road  
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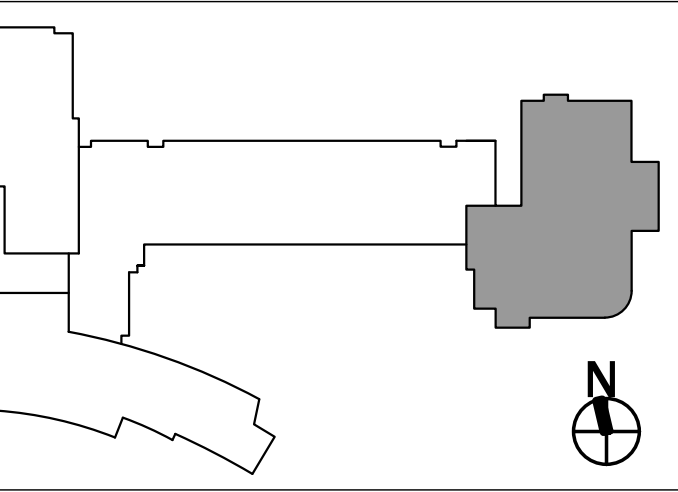
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**PENN MEDICINE PRINCETON HEALTH CCIC**

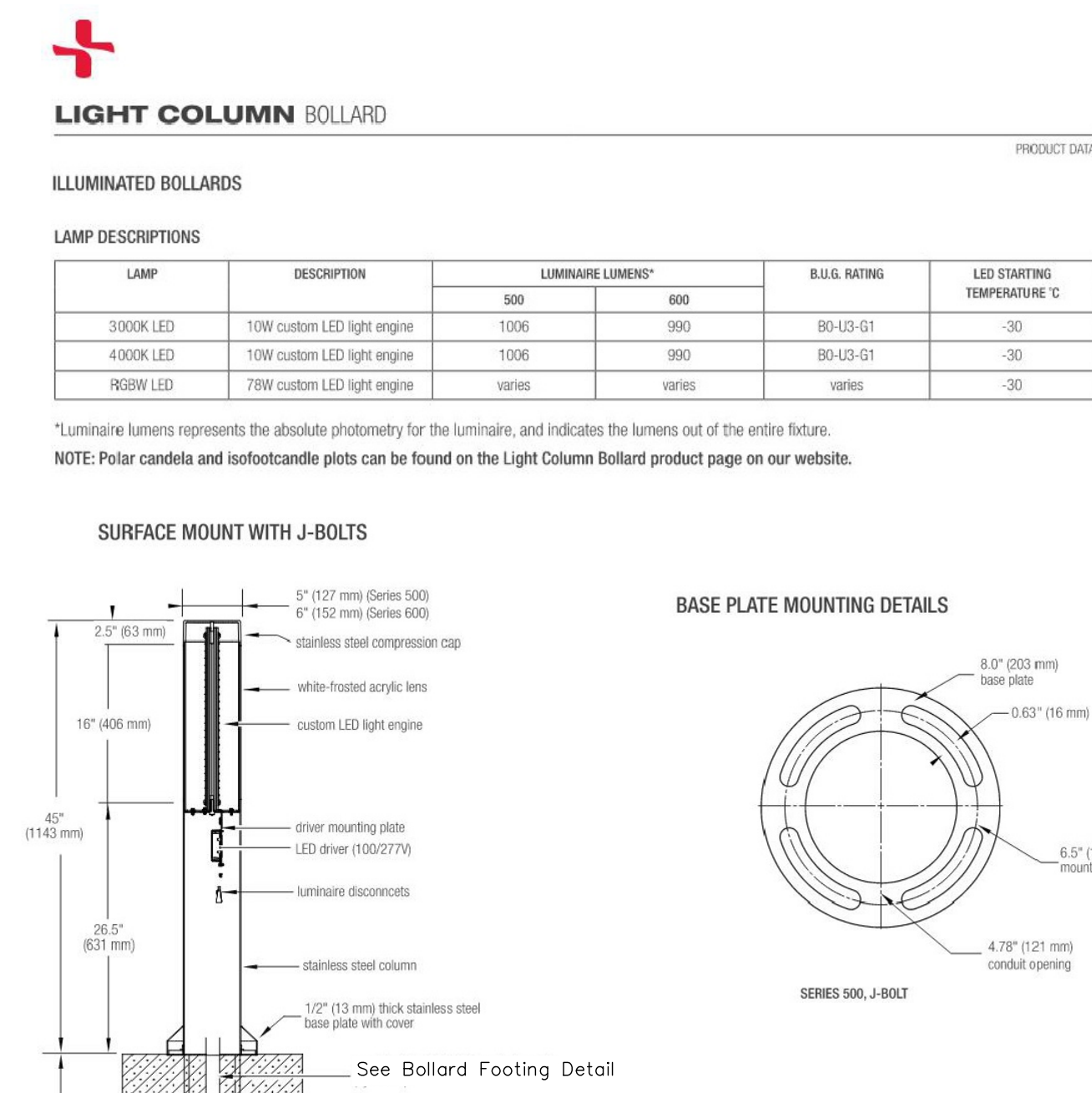
1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5287.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

**PROPOSED LIGHTING PLAN**

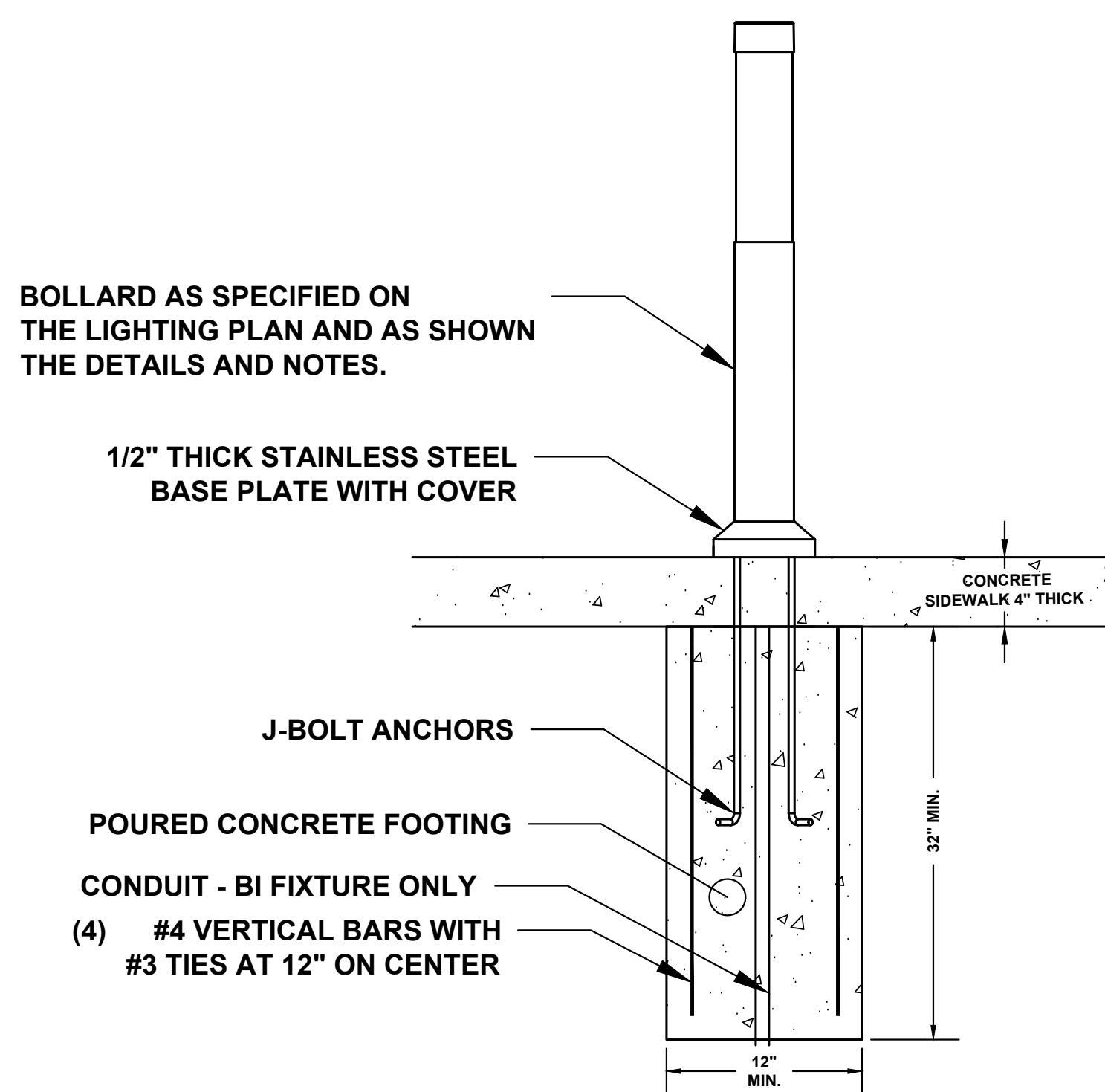
**C213**

07/31/2024  
08/02/2024

PACKAGE 0  
PACKAGE 1



**LIGHTED BOLLARD DETAIL**  
NOT TO SCALE



**NOTE: THE CONTRACTOR IS RESPONSIBLE TO CONFIRM AND COORDINATE THE ANCHOR BOLT PATTERN, SIZE, AND NUMBER PER THE BOLLARD MANUFACTURER'S SPECIFICATIONS.**

**BOLLARD FOOTING DETAIL -**  
**STANDARD (BOLLARD B AND BI)**

NOT TO SCALE

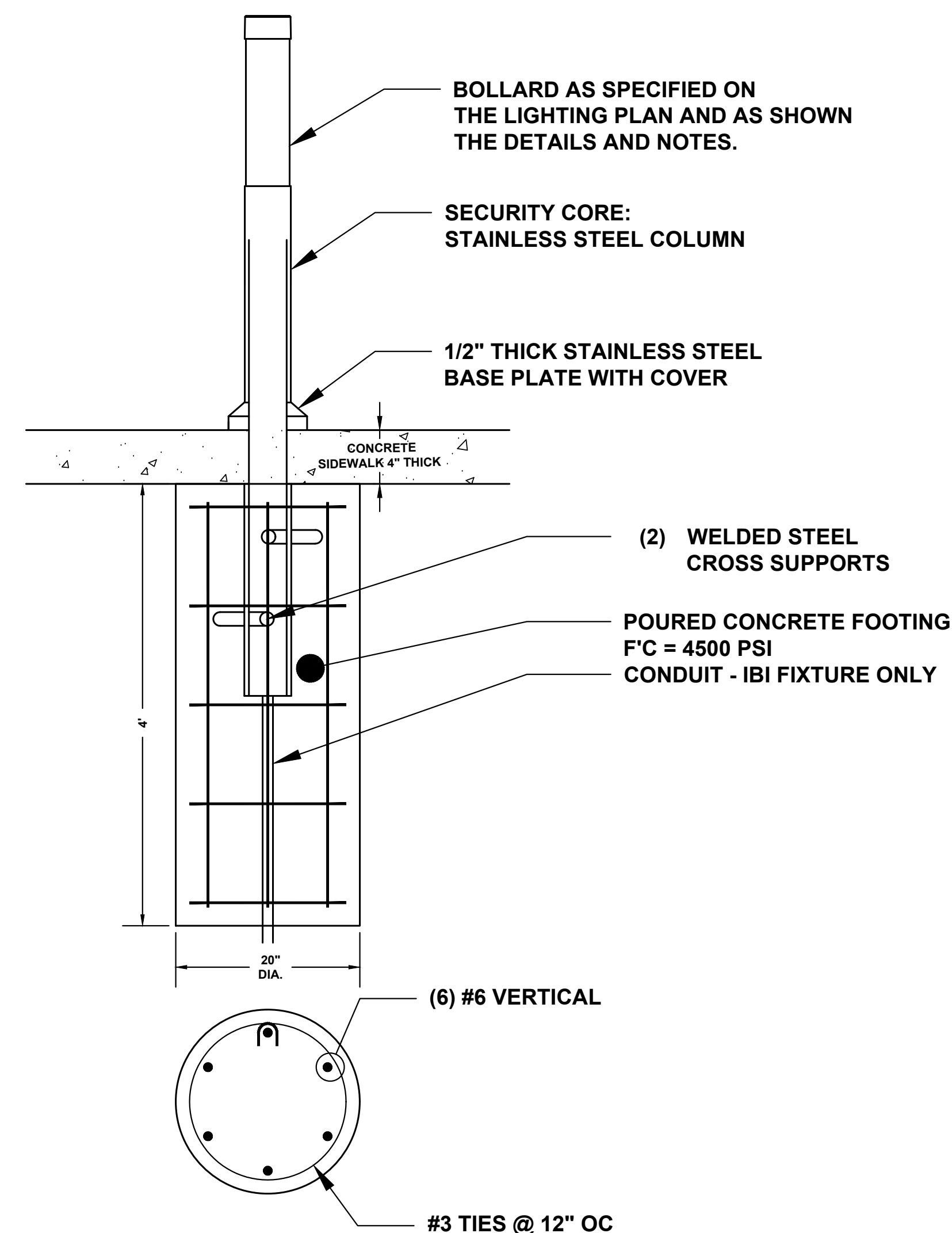


**6" DIAMETER BOLLARD IN FINISH AND TEXTURE  
TO MATCH EXISTING CAMPUS BOLLARDS**

**PROVIDE SECTOR SHIELD WHERE BOLLARD FACES THE ROAD**

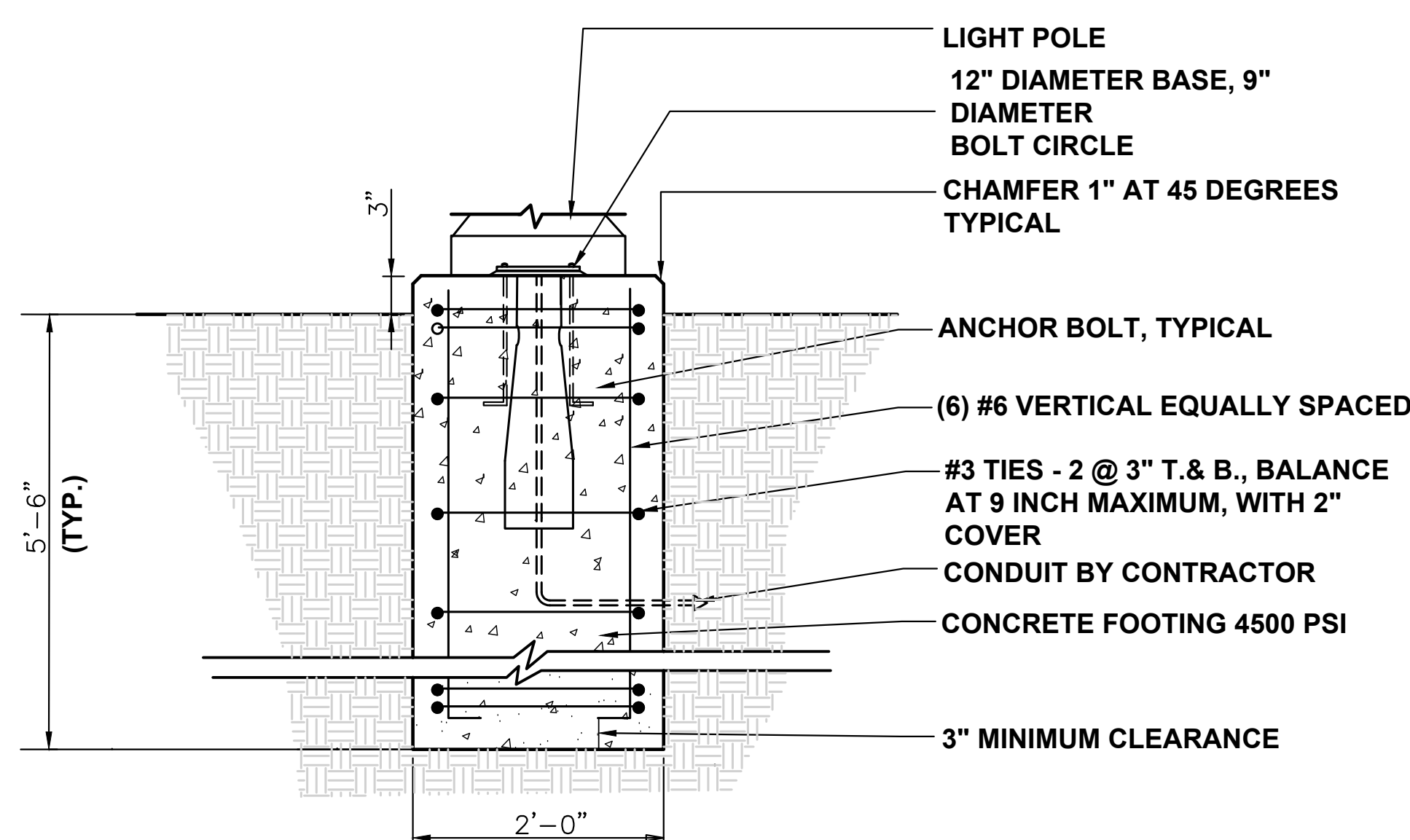
NOTES:

1. **BOLLARD SHALL BE MODEL "LIGHT COLUMN" ILLUMINATED BOLLARD WITH LED LIGHT SOURCE BY FORMS AND SURFACES OR APPROVED EQUAL.**
2. **THE PORTION OF THE BOLLARD FACING THE ROAD OR GRASS AREA SHALL HAVE THE "SECTOR SHIELD" OPTION, THE PORTION FACING THE BUILDING OR SIDEWALK SHALL NOT HAVE A SHIELD AS SHOWN IN THE PHOTO ABOVE.**
3. **THE FINISH OF THE BOLLARD HOUSING AND COLOR RENDITION OF LIGHT SOURCE SHALL MATCH THE EXISTING CAMPUS BOLLARDS, CONTRACTOR TO SUBMIT SHOP DRAWINGS.**
4. **AT DROP OFF AREAS, BOLLARDS SHALL BE PLACED 8' ON CENTER AND BASE PLATES SHALL BE FLUSH TO THE CURB JOINT. ALL OTHER SIDEWALK BOLLARDS SHALL BE PLACED 0.5 FT FROM THE EDGE OF THE SIDEWALK TO THE FACE OF THE BOLLARD.**



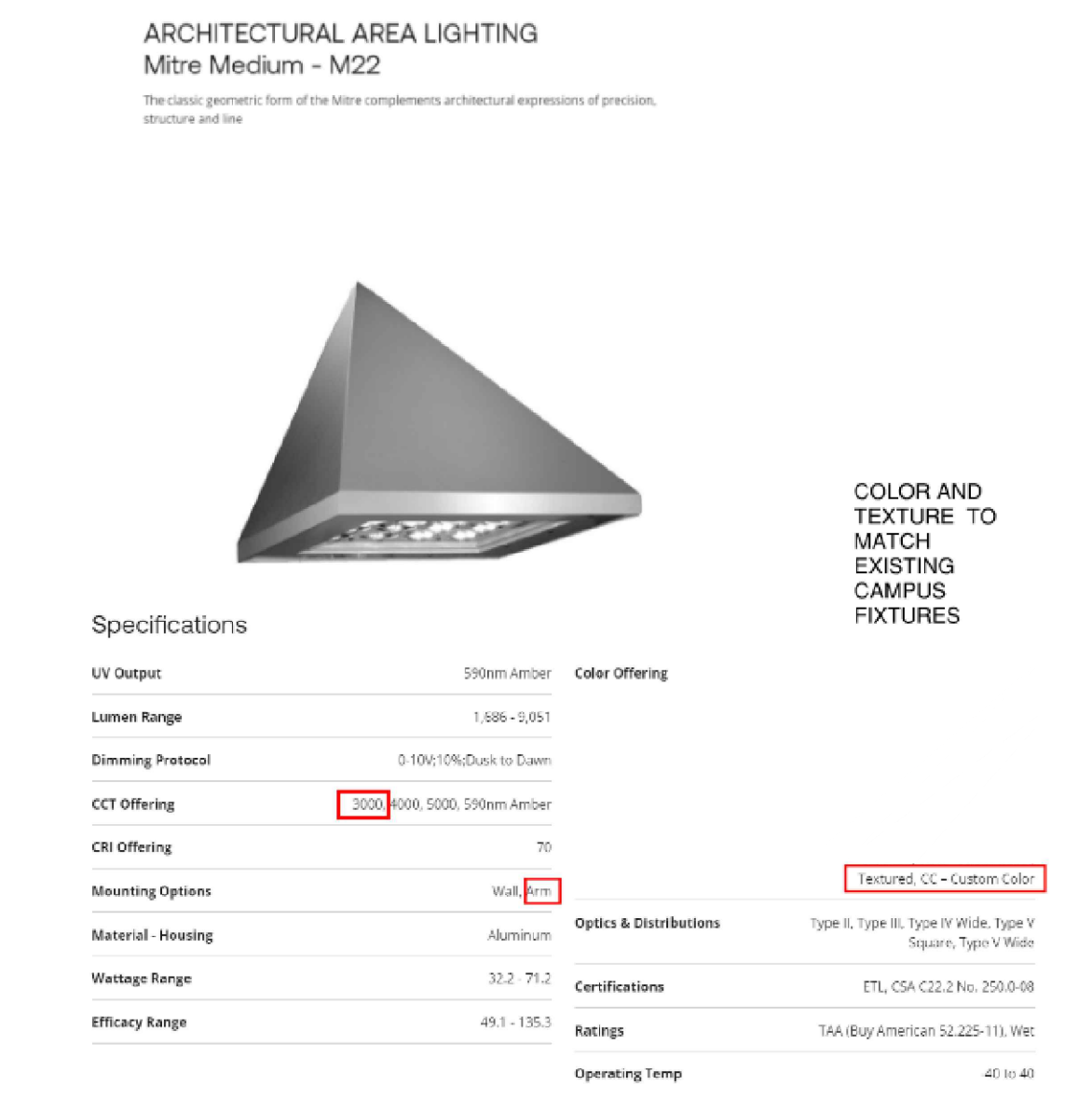
**BOLLARD FOOTING DETAIL -**  
**SECURITY (BOLLARD IB AND IBI)**

NOT TO SCALE



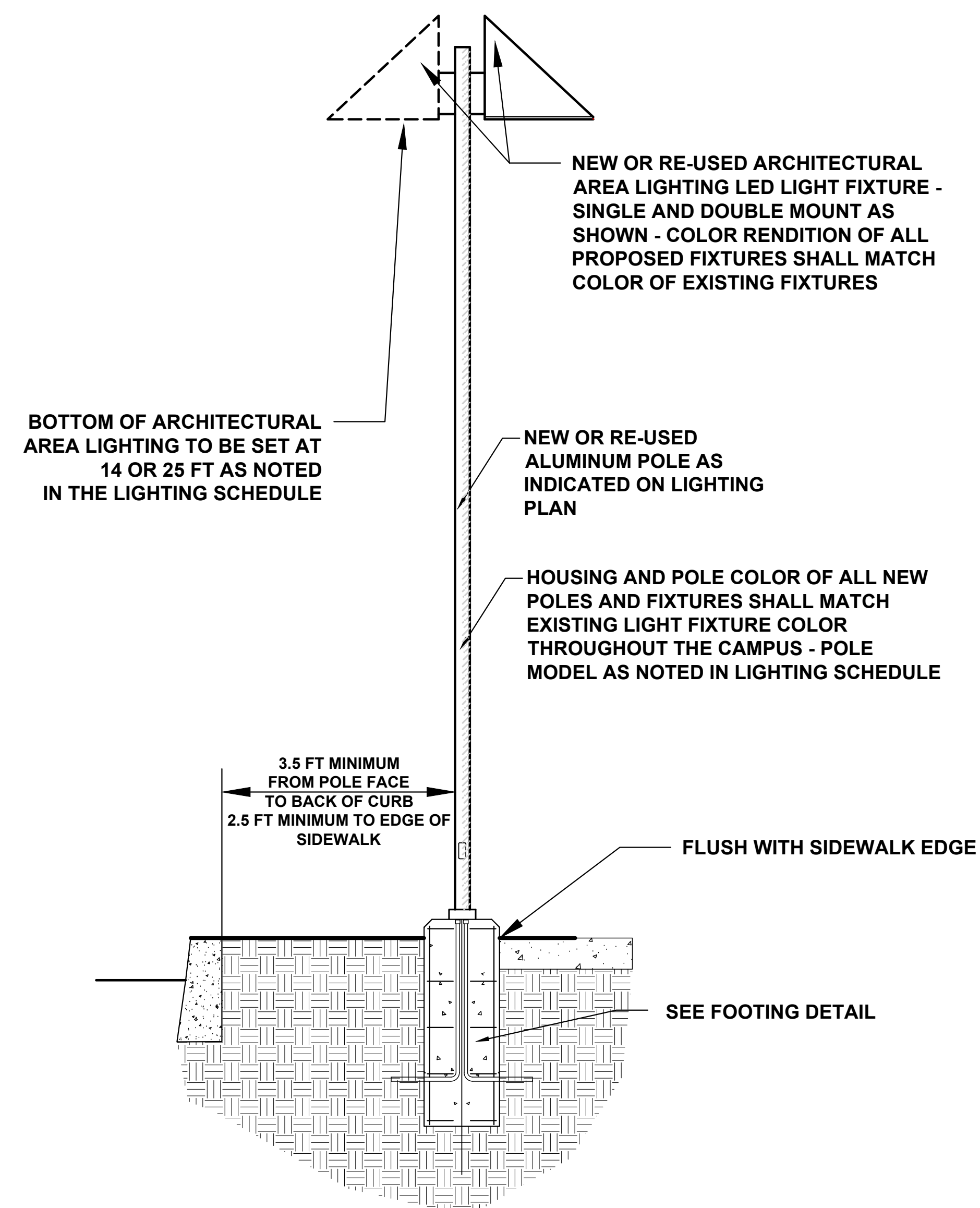
### TYPICAL 14' HIGH POLE FOOTING DETAIL

NOT TO SCALE



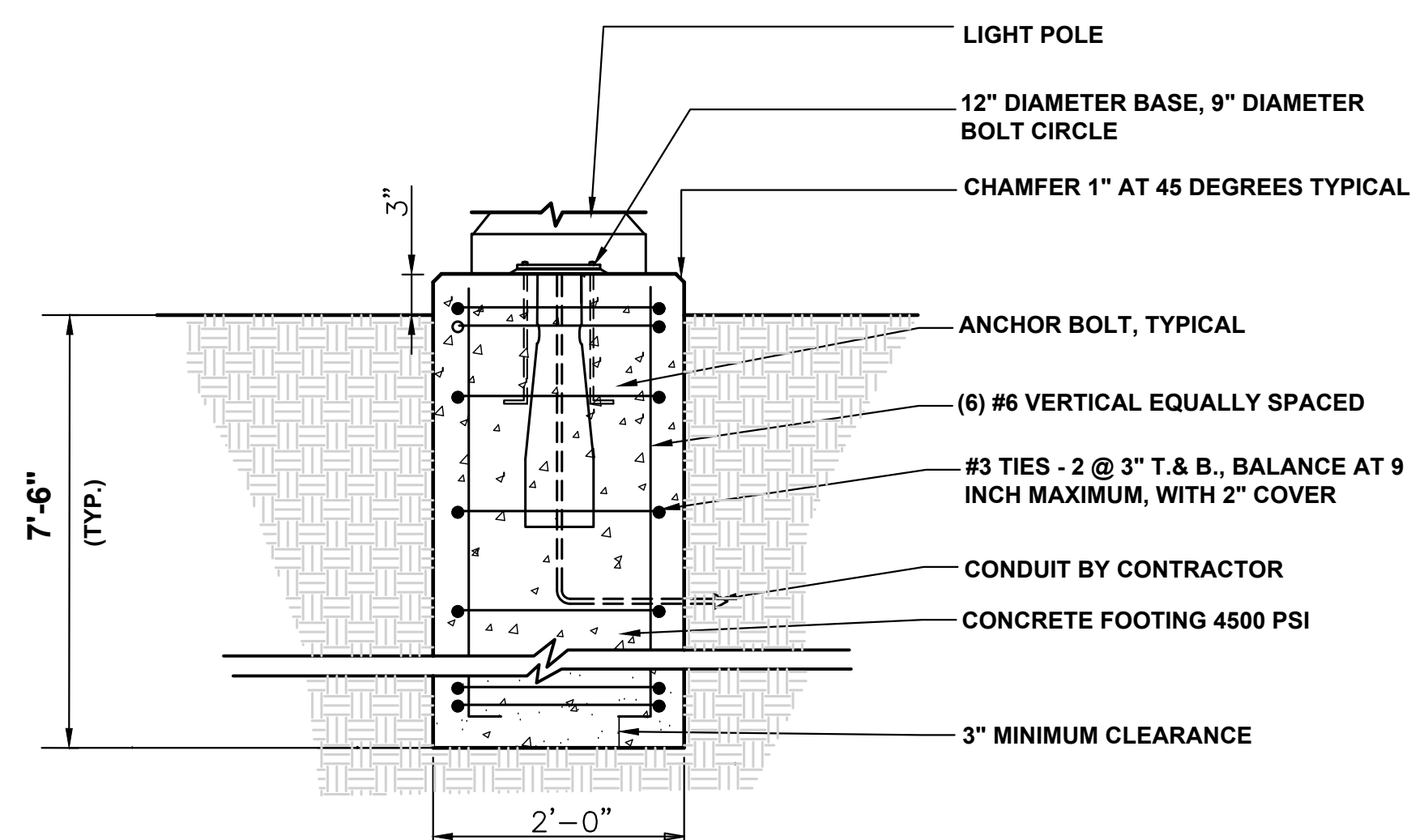
### PROPOSED LIGHT FIXTURE DETAIL

NOT TO SCALE



## PARKING LOT AND SIDEWALK LIGHT FIXTURE AND POLE DETAIL

NOT TO SCALE



### TYPICAL 25' HIGH POLE FOOTING DETAIL

NOT TO SCALE



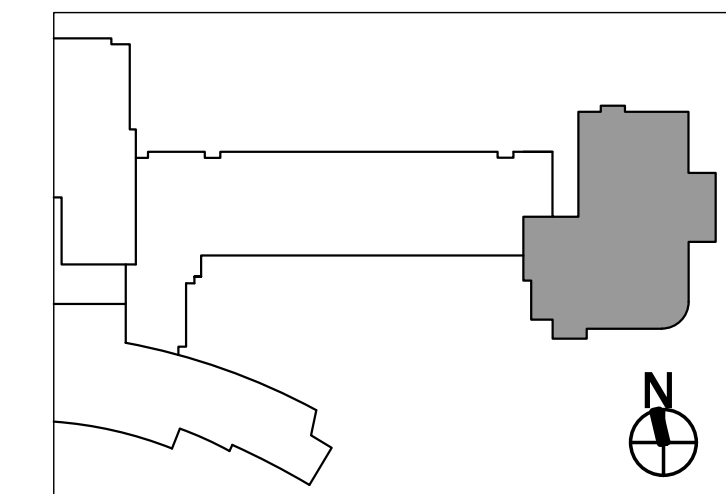
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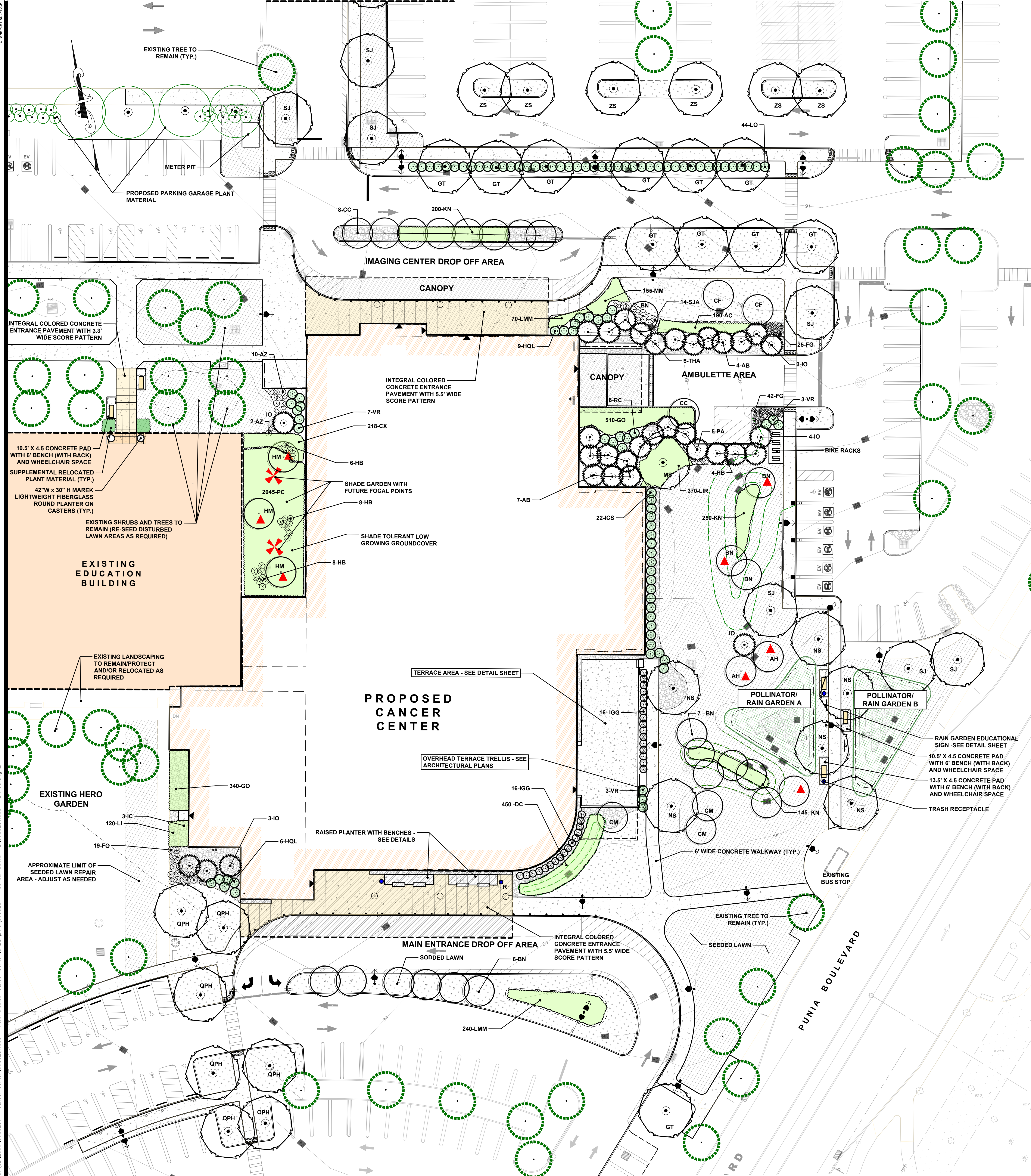
## LIGHTING PLAN NOTES AND DETAILS

# C214

07/31/2024	PACKAGE 0
08/02/2024	PACKAGE 1

PACKAGE 0  
PACKAGE 1

PENN MEDICINE PRINCETON HEALTH CANCER CENTER  
0\_V-E-0000\_060228T - Cancer Center V2\_060228T - Cancer Center V2\_060228T - LA CC.dwg LA  
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### SAMPLE PLANT LIST

DECIDUOUS SHADE AND ORNAMENTAL TREES						
SYM	QTY	BOTANICAL NAME	COMMON NAME	INSTALLED SIZE	MATURE SIZE	REMARKS
D N AH	2	OSTRYA VIRGINIANA	HOPHORNBEAM	2.5" CALIPER	20'-35' HEIGHT, 25'-35' SPREAD	B & B. ORANGE/RED/YELLOW FALL COLOR, SMOOTH TRUNK, MULTI TRUNK
NP BN	16	BETULA NIGRA 'HERITAGE'	HERITAGE RIVER BIRCH	2.5" CALIPER	50'-70' HEIGHT, 25'-35' SPREAD	B & B. YELLOW FALL COLOR, MULTI TRUNK ONLY
NP MS	1	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	8'-10' HEIGHT	40'-50' HEIGHT, 30'-40' SPREAD	B & B. SPECIMEN TREE
N CC	9	CERCIS CANADENSIS 'FOREST PANSY'	FOREST PANSY REDBUD	8' HEIGHT	20'-30' HEIGHT AND SPREAD	B & B. MULTI-TRUNK, PINK FLOWERS, APRIL
N CF	2	CORNUS FLORIDA WHITE	WHITE FLOWERING DOGWOOD	8' HEIGHT	20'-30' HEIGHT AND SPREAD	B & B. MULTI-TRUNK, WHITE FLOWERS, APRIL/MAY
CM	3	LAGERSTROEMIA INDICA 'CATAWBA'	CATAWBA CRAPE MYRTLE	6'-7' HEIGHT	10'-12' HEIGHT AND SPREAD	B & B. SMALL MULTI-TRUNK TREE, PURPLE FLOWERS, SUMMER, MATCHED SPECIMENS
D N HS	11	GLEDITSIA TRIACANTHOS NERIS	THORNLESS HONEYLOCUST	2.5" CALIPER	50'-70' HEIGHT, 25'-35' SPREAD	B & B. YELLOW FALL COLOR, SINGLE TRUNK
D N HS	3	HAMAMELIS VIRGINIANA 'ARNOLD'S PROMISE'	ARNOLD'S PROMISE WITCHAZEL	8' HEIGHT	15'-20' HEIGHT AND SPREAD	B & B. MULTI-TRUNK, DECIDUOUS TREE WITH YELLOW FLOWERS, FEBRUARY
N NS	6	NYSSA SYLVATICA	BLACK GLIM	2.5" CALIPER	30'-40' HEIGHT, 20'-30' SPREAD	B & B. BRIGHT RED FALL COLOR, SINGLE TRUNK
D NS	7	QUERCUS PHellos	WILLOW OAK	2.5" CALIPER	40'-50' HEIGHT AND SPREAD	B & B. DECIDUOUS TREE, SINGLE STEM, YELLOW FALL COLOR
D SJ	7	STYPHNOLOBIUM JAPONICUM	CHINESE SCHOLARTREE	2.5" CALIPER	40'-50' HEIGHT AND SPREAD	B & B. DECIDUOUS TREE, SINGLE STEM, YELLOW FALL COLOR
D SJ	25	ZELKOVA SERRATA	JAPANESE ZELKOVA	2.5" CALIPER	50'-70' HEIGHT, 25'-35' SPREAD	B & B. LIGHT GREY BARK, SINGLE TRUNK, SPECIMEN

### EVERGREEN TREES

SYM	QTY	BOTANICAL NAME	COMMON NAME	INSTALLED SIZE	MATURE SIZE	REMARKS
D N AB	11	ABIES CONCOLOR	WHITE FIR	8' HEIGHT	50'-70' HEIGHT, 25'-35' SPREAD	B & B. BLUE GREY FOLIAGE
D NAB	10	ILEX OPACA FEMALE	BERRIED AMERICAN HOLLY	8' HEIGHT	50'-70' HEIGHT, 25'-35' SPREAD	B & B. RED BERRIES IN THE WINTER
D PA	5	PICEA ABIES	NORWAY SPRUCE	8' HEIGHT	50'-70' HEIGHT, 25'-35' SPREAD	B & B
PA	5	THUJA PLICATA 'GREEN GIANT'	GREEN GIANT ARBORVITAE	8' HEIGHT	30'-40' HEIGHT, 10'-12' SPREAD	B & B

### SHRUBS

SYM	QTY	BOTANICAL NAME	COMMON NAME	INSTALLED SIZE	MATURE SIZE	REMARKS
N AZ	12	AZALEA 'DELAWARE WHITE'	DELAWARE VALLEY WHITE AZALEA	2' HEIGHT	3'-4' HEIGHT AND SPREAD	B & B. WHITE FLOWERS, MAY, EVERGREEN
N HQL	15	HYDRANGEA QUERCIFOLIA	OAKLEAF HYDRANGEA	3' HEIGHT	6'-8' HEIGHT AND SPREAD	B & B. WHITE FLOWERS, SUMMER, OAK LEAF SHAPED FOLIAGE
D & ICS	22	ILEX 'NELLIE R. STEVENS'	NELLIE R. STEVENS HOLLY	3' HEIGHT	15'-25' HEIGHT, 8'-12' SPREAD	B & B. EVERGREEN SHRUB, MATCHED SPECIMENS ONLY
NH & IOG	32	ILEX GLABRA GEM BOX	GEMBOX INKERRY HOLLY	2' HEIGHT	3' HEIGHT AND SPREAD	B & B. EVERGREEN SHRUB, MATCHED SPECIMENS ONLY
N LO	44	LIGUSTRUM OVALIFOLIUM	CALIFORNIA PRIVET	4' HEIGHT	6'-8' HEIGHT AND SPREAD	B & B. SEMI-EVERGREEN, MATCHED SPECIMENS ONLY
N RC	6	RHODOCODENDRON CATAPMBENSE 'BOURSAULT'	BOURSAULT CATAPMBENSE RHODOCODENDRON	3' HEIGHT	6'-10' HEIGHT AND SPREAD	B & B. RED BERRIES, MAY, EVERGREEN
D SJ	14	SPIRAEA JAPONICA 'GOLDMOUND'	GOLDMOUND JAPANESE SPIRAEA	1' HEIGHT	2'-3' HEIGHT AND SPREAD	B & B. LILAC FLOWERS, MAY, CRANESBILL
N VR	13	VIBURNUM RHYTHIDOPHYLLUM	LEATHERLEAF VIBURNUM	4' HEIGHT	10'-15' HEIGHT AND SPREAD	B & B. WHITE FLOWERS IN SPRING

### GROUNDCOVERS, PERENNIALS AND ORNAMENTAL GRASSES

SYM	QTY	BOTANICAL NAME	COMMON NAME	INSTALLED SIZE	MATURE SIZE	REMARKS
N AC	190	ASARUM CANADENSE	WILD GINGER	6" HEIGHT	6"-12" HEIGHT, 12"-18" SPREAD	1 GAL. CONT. PERENNIAL, SPRING BLOOM, 1" ON CENTER
N CX	250	CAREX MARROW 'ICE DANCE'	ICE DANCE SEDGE	2 GALLON CONTAINERS	9"-12" HEIGHT, 12"-24" SPREAD	1" ON CENTER
D & DC	450	DELOSPERMA WHEELS OF WONDER - FIRE WAGON	FIRE WAGON WHEELS OF WONDER ICE PLANT	2" HEIGHT	4"-6" HEIGHT, 1'-2' SPREAD	1 GAL. CONT. DROUGHT TOLERANT PERENNIAL WITH RED FLOWERS, SUMMER TO FALL, INSTALL AT 1" ON CENTER
D & FG	86	FESTUCA GLAUCA 'ELIJAH BLUE'	ELIJAH BLUE FESCUE	6" HEIGHT	12" HEIGHT AND SPREAD	1 GAL. CONT. LIGHT BLUE DWARF ORNAMENTAL GRASS, INSTALL AT 2" ON CENTER
N GO	850	GALUM ODORATUM	SWEET WOODRUFF	2 GALLON CONTAINERS	6"-12" HEIGHT, 9"-18" SPREAD	PERENNIAL, WHITE FLOWERS, SPRING BLOOM, 1" ON CENTER
N HB	26	HELLEBORUS ORIENTALIS 'ROYAL HERITAGE STRAIN'	ROYAL HERITAGE STRAIN HELLEBORUS	6" HEIGHT	18-24" HEIGHT AND SPREAD	3 GAL. CONT. PERENNIAL, MULTI-COLOR FLOWERS, EARLY SPRING
D N NS	595	GERANIUM MACULATUM	CRANESBILL GERANIUM	6" HEIGHT	12" HEIGHT AND SPREAD	1 GAL. CONT. PERENNIAL, PURPLE FLOWERS MAY TO AUGUST, INSTALL AT 1" ON CENTER
D LMM	310	LAURENCEA ANGUSTIFOLIA 'MUNSTEAD'	MUNSTEAD ENGLISH LAVENDER	1 GALLON CONTAINERS	12"-18" HEIGHT AND SPREAD	FRAGRANT PURPLE FLOWERS LATE SPRING TO EARLY SUMMER, PERENNIAL, INSTALL AT 1.5" ON CENTER
D N & LI	120	LIATRIS SPICATA 'KOBOLD'	KOBOLD BLAZING STAR LIATRIS	2 GALLON CONTAINERS	24"-30" HEIGHT, 12" SPREAD	PERENNIAL, PURPLE FLOWERS, JULY-AUGUST, INSTALL AT 1" ON CENTER
N LIR	370	LIRIOPE MUSCARI 'BIG BLUE'	BIG BLUE LILYTURF	6" HEIGHT	12" HEIGHT AND SPREAD	1 GALLON CONT. GRASS, BLUE FLOWERS, AUGUST, INSTALL AT 1" ON CENTER
N MM	155	CALTHA PALUSTRIS	MARSH MARIGOLD	6" HEIGHT	1'-2' HEIGHT AND SPREAD	1 GALLON CONT. YELLOW FLOWERS MAY, INSTALL AT 1" ON CENTER
D PC	2045	PACHYSANDRA TERMINALIS GREEN CARPET	GREEN CARPET PACHYSANDRA	1 GALLON CONTAINERS	12" HEIGHT, 12"-18" SPREAD	EVERGREEN GROUND COVER, DRY SHADE TOLERANT, INSTALL AT 1" ON CENTER

### KEY:

N = NATIVE PLANT OF NORTH AMERICA  
S = SALT SPRAY TOLERANT  
D = DROUGHT TOLERANT AS PER THE FOLLOWING SOURCES:  
1. NEW YORK CITY DEPARTMENT OF PARKS AND RECREATION (WWW.NYCGOV.PARKS.ORG)  
2. LANDSCAPING FOR WATER CONSERVATION BY RUTGERS COOPERATIVE EXTENSION (PUBLICATION E80)  
3. RUTGERS MASTER GARDENERS OF MERCER COUNTY, NEW JERSEY (mgm.org)  
4. HEAT AND DROUGHT TOLERANT PLANT LIST - PENN STATE EXTENSION (EXTENSION.PSU.EDU)

### LEGEND:

- EXISTING TREE TO REMAIN - PROTECTIVE FENCING/DEMARCATION TO BE INSTALLED PRIOR TO THE START OF CONSTRUCTION AT THE DRIPLINE /CANOPY OF TREES
- APPROXIMATE CANOPY SIZE
- PROPOSED BENCH WITH BACK
- PROPOSED TRASH RECEPTACLE
- PROPOSED RECYCLING TRASH RECEPTACLE
- PROPOSED BIRD FEEDER
- PROPOSED FUTURE FOCAL POINT
- APPROXIMATE CANOPY SIZE AT 20-30 YEAR GROWTH
- PROPOSED PLANTS
- APPROXIMATE CANOPY SIZE AT 20-30 YEAR GROWTH
- PROPOSED LIGHT FIXTURES
- 4" THICK 2"-3" DIAMETER DELAWARE RIVER ROCK BED - COLOR TO MATCH EXISTING CAMPUS MATERIAL
- SODDED LAWN
- SODDED LAWN - NOTE: LIMITS OF SEEDING AREAS WHERE THE PROPOSED LAWN MEETS EXISTING ARE APPROXIMATE AND SHALL BE ADJUSTED AS NEEDED BASED UPON ACTUAL DISTURBANCE LIMITS

### INSET A

SCALE: 1" = 20'

### LANDSCAPE PLAN GENERAL NOTES:

- EXISTING TREES AND SHRUBS TO REMAIN ALONG THE PERIPHERY OF THE CONSTRUCTION SHALL BE SELECTIVELY PRUNED AND THINNED AS REQUIRED BY A LICENSED LANDSCAPE PROFESSIONAL IN ORDER TO REMOVE ALL DISEASED AND DEAD LIMBS. BED LINES SHALL BE CREATED AS SHOWN AND MULCHED WITH 4" THICK WOOD MULCH.
- DO NOT INSTALL PROPOSED PLANT MATERIAL DIRECTLY ON TOP OF ANY PROPOSED OR EXISTING UNDERGROUND UTILITIES. FIELD ADJUST MATERIAL AS NEEDED FOR BOTH ABOVE AND BELOW GRADE FEATURES AS DIRECTED BY THE PROJECT PROFESSIONAL TO ACCOMMODATE ANY POTENTIAL CONFLICTS.
- A DRIP LINE IRRIGATION SYSTEM WILL BE PROVIDED WITHIN THE PROPOSED PROJECT AREA.
- SEE LANDSCAPE DETAIL SHEET FOR ADDITIONAL PLANTING NOTES AND PLANT LISTS

0 20 40  
SCALE: 1" = 20'



1 Plainsboro Road  
Plainsboro, NJ 08536

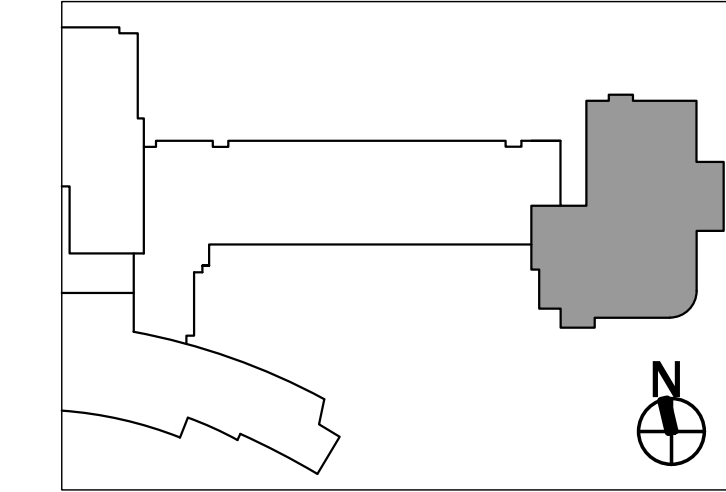


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SARAH REBAR BISABA, L.L.A., P.P.  
LICENSED LANDSCAPE ARCHITECT, N.J. LIC. No. AS000639

NO.	DATE	REVISION	DESCRIPTION
1.	10/18/2024	REVISED PER DRC COMMENTS	



1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 2207.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

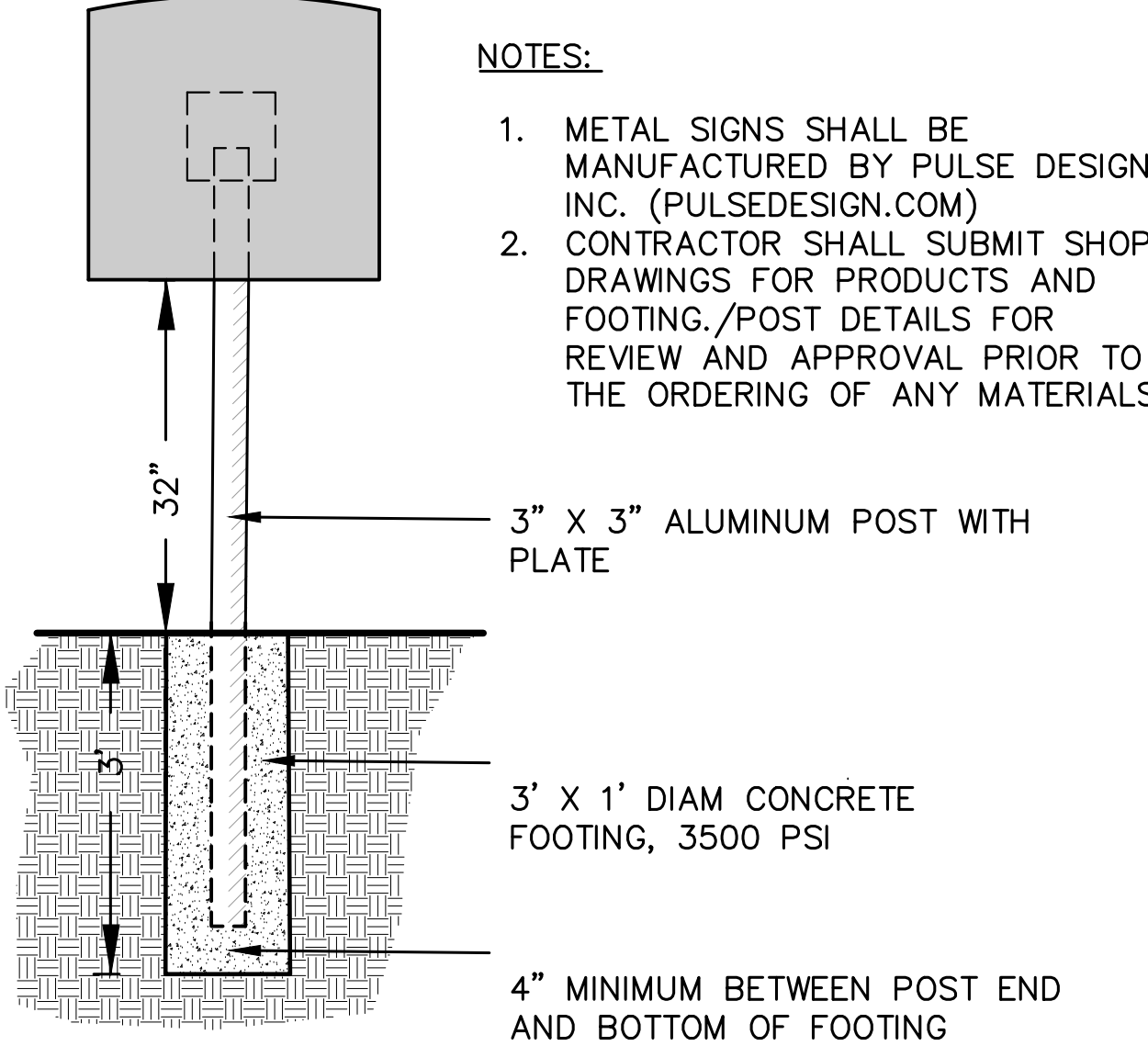
## LANDSCAPING PLAN

# C215

07/31/2024 PACKAGE 0  
08/02/2024 PACKAGE 1

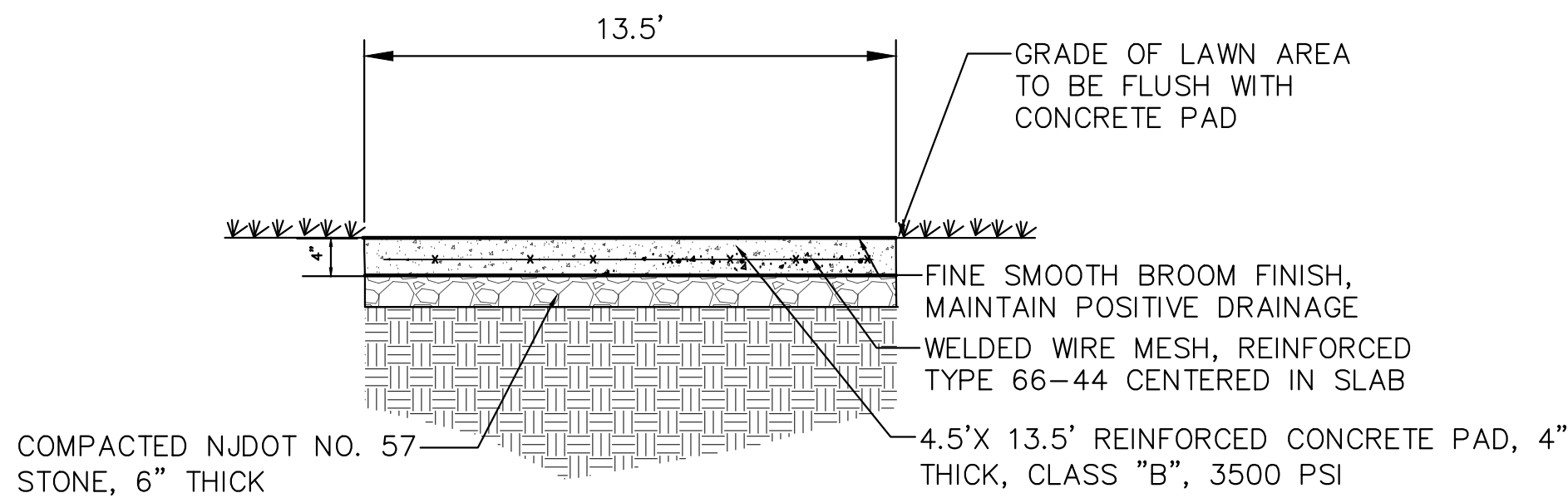
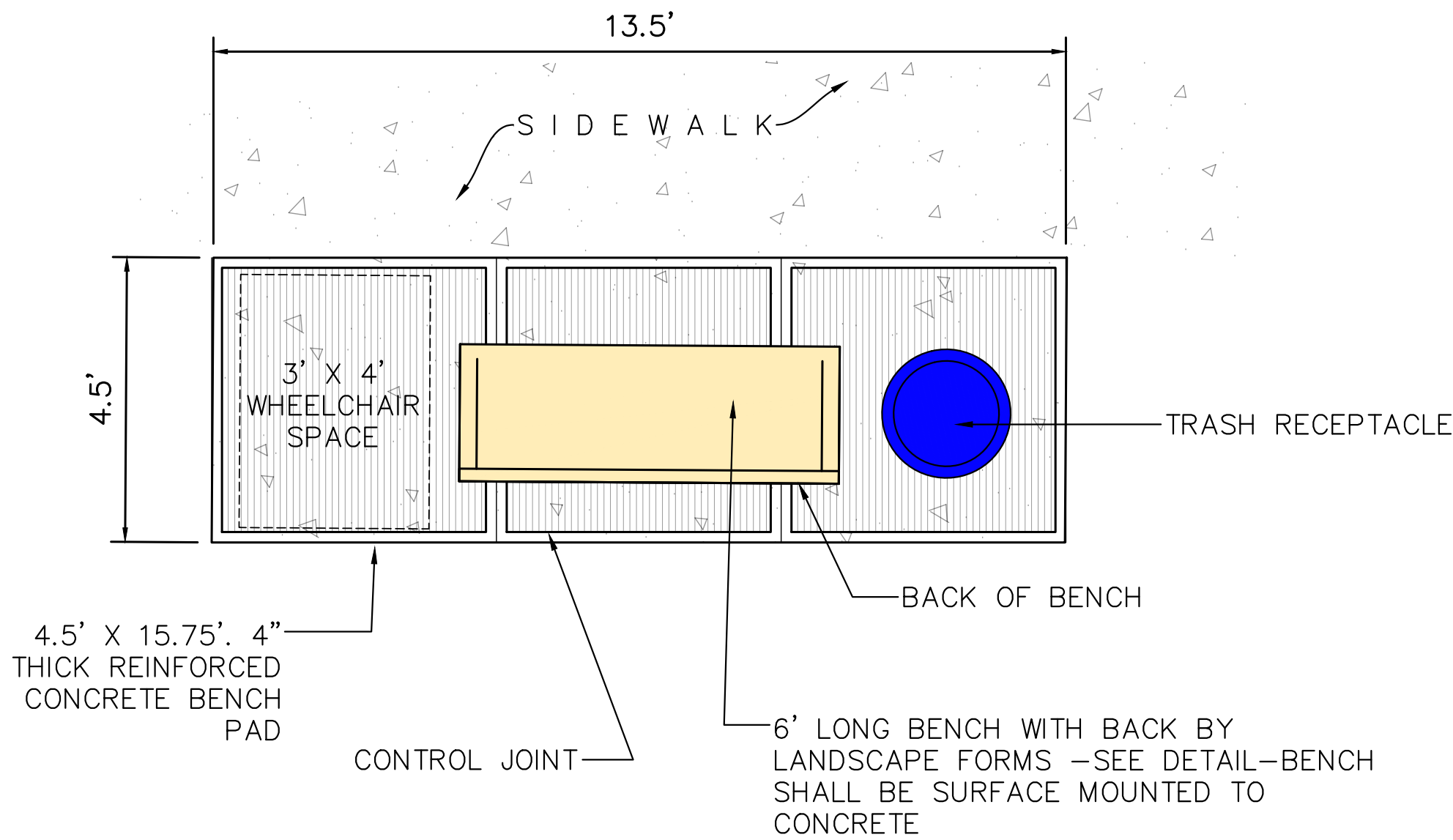
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PENN MEDICINE PRINCETON HEALTH CANCER CENTER  
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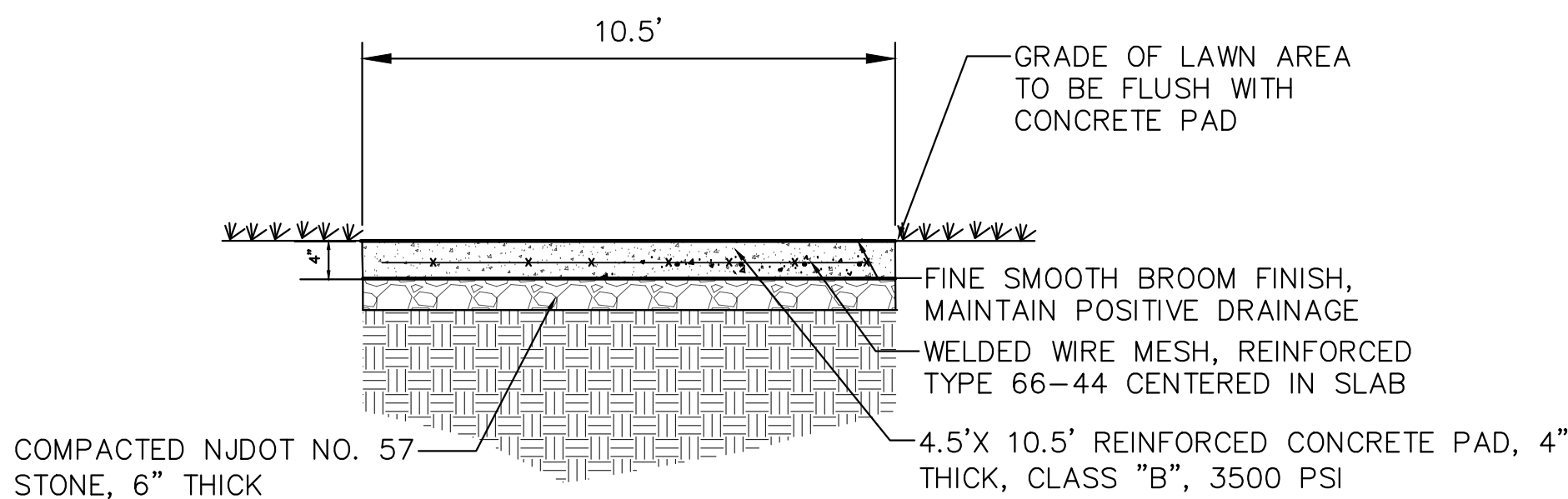
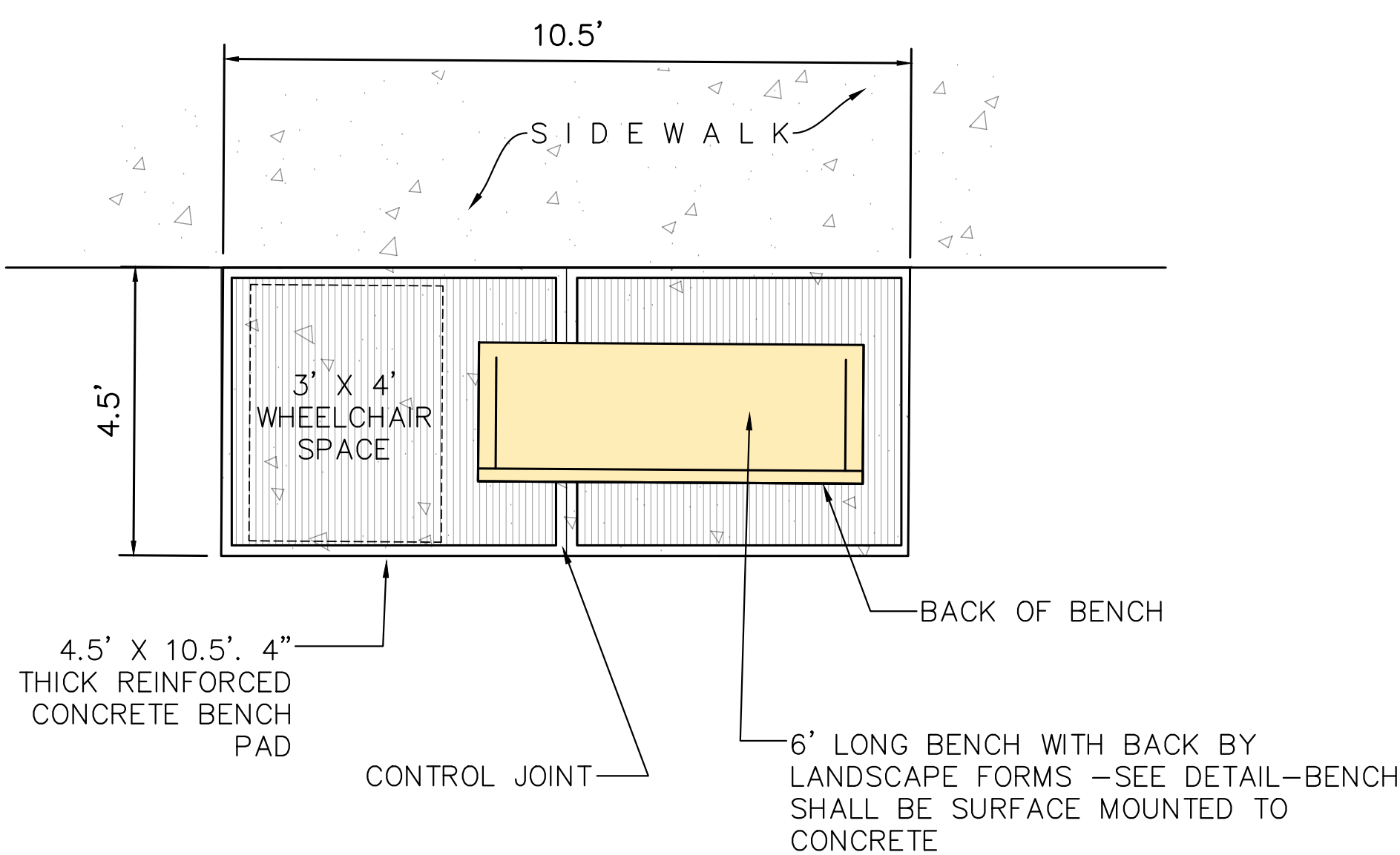
### RAIN AND POLLINATOR GARDEN SIGNS

NOT TO SCALE



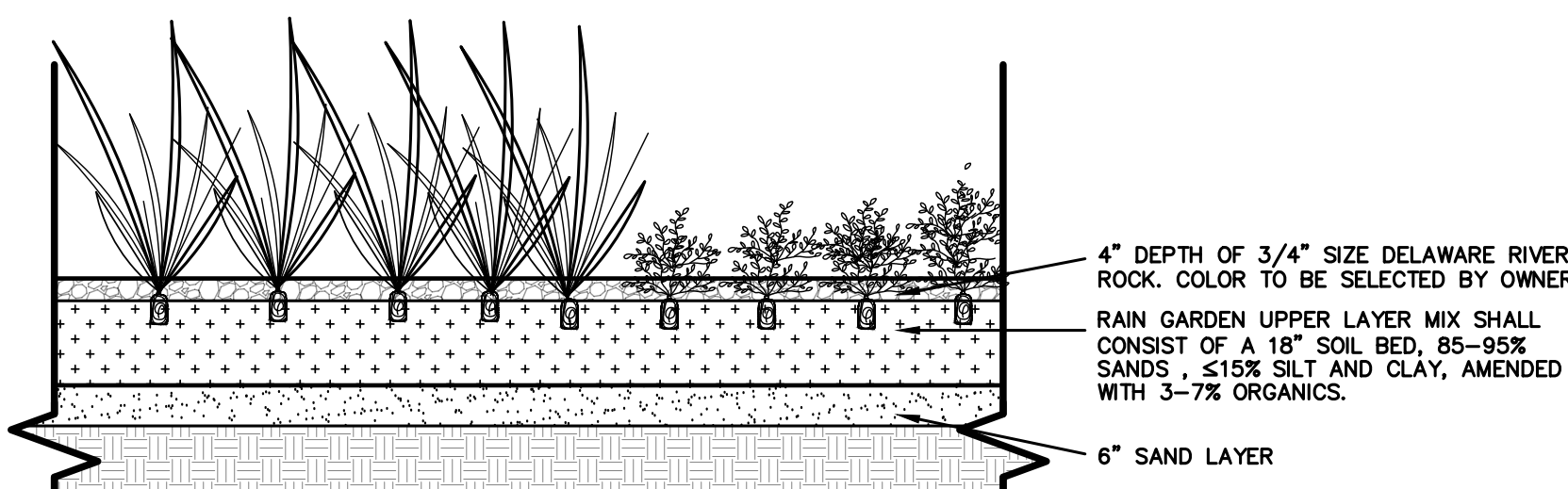
### 4.5' X 13.5' CONCRETE BENCH PAD DETAIL

NOT TO SCALE



### 4.5' X 10.5' CONCRETE BENCH PAD DETAIL

NOT TO SCALE



### RAIN GARDEN BASIN TYPICAL CROSS SECTION

NOT TO SCALE

Notes:  
6" SAND LAYER SHALL CONSIST OF CLEAN, MEDIUM-AGGREGATE CONCRETE SAND, AASHTO M-6/ASTMC-33

3" GRAVEL LAYERS SHALL CONSIST OF 0.5 TO 1.5 INCH CLEAN, BROKEN STONE OR PEA GRAVEL (AASHTO M-432)



### RAIN GARDEN SIGN A

25" X 25" METAL INTERPRETIVE RAIN GARDEN SIGN MODEL #092-2020-01B-10216



### POLLINATOR GARDEN SIGN B

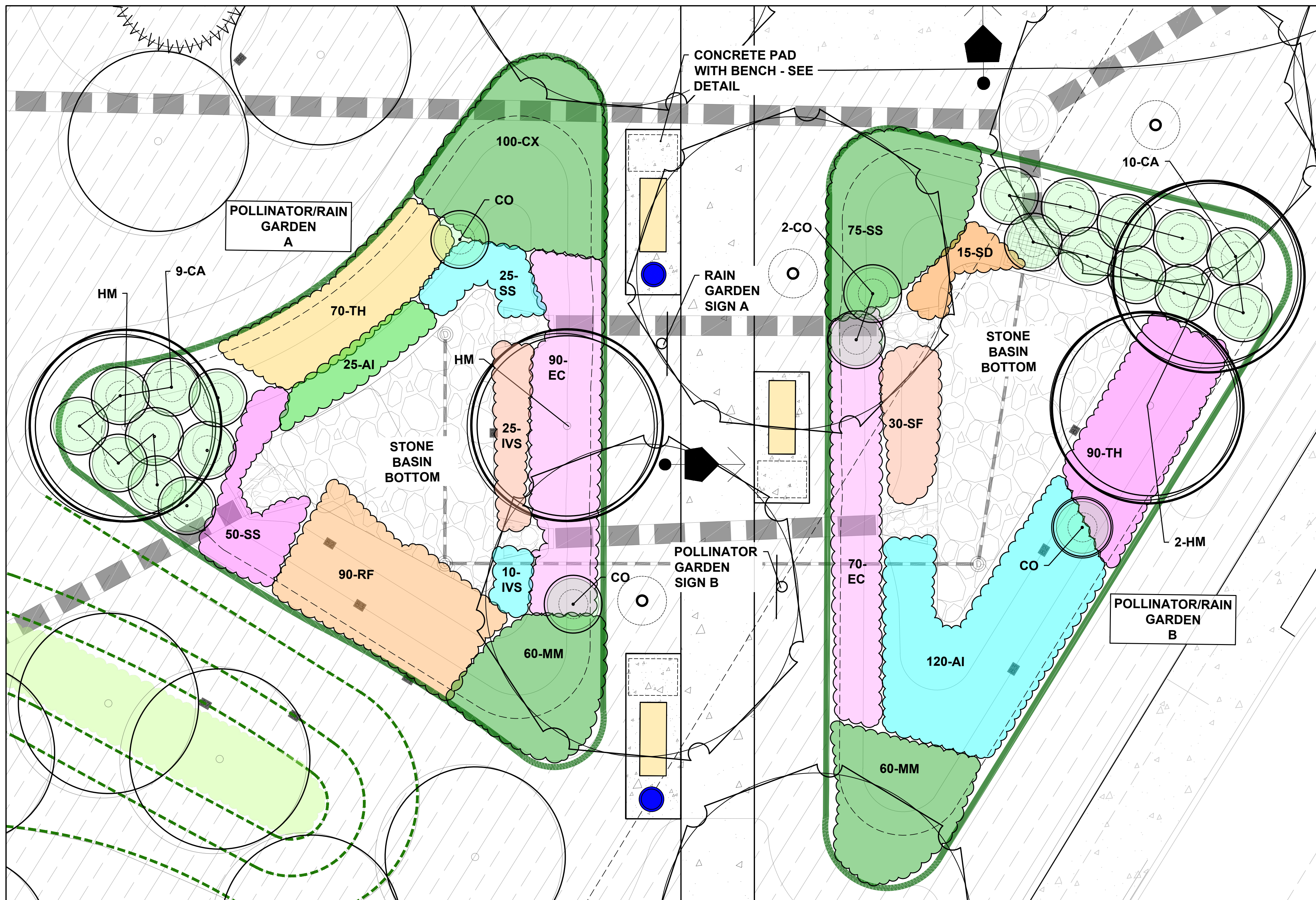
25" X 25" METAL INTERPRETIVE POLLINATOR GARDEN SIGN MODEL #092-2525-28A-34921

### TEMPORARY IRRIGATION NOTES:

1. THE CONTRACTOR SHALL PROVIDE A TEMPORARY AUTOMATIC (TIMER WITH DAY, TIME AND DURATION) IRRIGATION SYSTEM TO ENSURE THE RAIN GARDEN PLANT ESTABLISHMENT. ALL NEW PLANT MATERIAL SHALL BE WATERED DAILY FOR A PERIOD OF 3 MONTHS FOLLOWING INSTALLATION UNLESS THERE IS SIGNIFICANT RAINFALL.
2. WATERING SHALL BE DONE IN THE EARLY MORNING. CONTRACTOR WILL CONTROL LENGTH OF WATERING TIME VIA TIMERS AS DIRECTED BY THE HOSPITAL IN ORDER TO ENSURE THE WATERING DOES NOT INTERFERE WITH DAILY OPERATIONS OR VISITORS/CIENTIS.
3. DAILY WATERING PERIOD MAY BE EXTENDED IF EXTREME DRY CONDITIONS EXIST AT THE DIRECTION OF THE PROJECT LANDSCAPE ARCHITECT.
4. PLANT MATERIAL SHALL BE WATERED THROUGH DRIP, SOAKER HOSE OR MICRO SPRAY IRRIGATION METHODS ONLY.
5. THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT SHOP DRAWINGS OF THE PROPOSED EQUIPMENT AND A SKETCH SHOWING THE PROPOSED LAYOUT OF THE SYSTEM.
6. THE CONTRACTOR MUST ENSURE THE LAYOUT OF THE PROPOSED TEMPORARY IRRIGATION LINES DO NOT CREATE TRIPPING HAZARDS.

### RAIN GARDEN NOTES:

1. GARDEN DESIGN AS PER THE RECOMMENDATIONS OF THE NATIVE PLANT SOCIETY OF NEW JERSEY RAIN GARDEN MANUAL.
2. GARDEN AREA SHALL RECEIVE A SOIL MIX CONSISTING THE PROFILE NOTED IN THE RAIN GARDEN SECTION DETAIL.
3. ANY PLANT SUBSTITUTIONS SHALL BE SUBJECT TO REVIEW AND APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT AND OWNER.
4. REFER TO LANDSCAPE NOTES AND DETAILS FOR ADDITIONAL PLANTING REQUIREMENTS AND INFORMATION.
5. ALL GARDEN PLANTING SHALL BE INSTALLED BY HAND. CAUTION SHALL BE TAKEN WHEREVER PLANTS ARE TO BE INSTALLED NEAR UNDERGROUND UTILITY LINES.



### POLLINATOR/RAIN GARDEN PLANTING DETAIL

SCALE: 1" = 5'

NOTE: THIS DETAIL SHALL BE USED FOR THE PLANTING OF THE RAIN /POLLINATOR GARDEN AREAS ONLY. REFER TO THE OVERALL LANDSCAPE PLAN FOR OTHER SITE PLANTING AREAS.

5 0 5 10  
SCALE: 1" = 5'

POLLINATOR/RAIN GARDEN PLANT LIST							
ORNAMENTAL TREES AND SHRUBS							
SYM	QTY	BOTANICAL NAME	COMMON NAME	INSTALLED SIZE	MATURE SIZE	BLOOM TIME/FLOWER COLOR	REMARKS
N CO	5	CEPHALANTHUS OCCIDENTALIS	BUTTONBUSH	3' HEIGHT	5'-12' HEIGHT, 4'-8' SPREAD	JUNE/WHITE	B & B, DECIDUOUS SHRUB
P N CA	19	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	3' HEIGHT	3'-8' HEIGHT, 4'-8' SPREAD	JULY-AUGUST/WHITE	B & B, DECIDUOUS SHRUB
N # HM	4	HAMAMELIS VIRGINIANA 'ARNOLD'S PROMISE'	ARNOLD'S PROMISE WITCHAZEL	8' HEIGHT	15'-30' HEIGHT AND SPREAD	OCTOBER-DECEMBER/YELLOW	B & B, MULTI TRUNK, DECIDUOUS ORNAMENTAL TREE
GROUNDCOVERS, PERENNIALS AND ORNAMENTAL GRASSES							
P N AI	145	ASCLEPIAS INCARNATA	SWAMP MILKWEED	6"-8" HEIGHT	3'-4' HEIGHT, 2'-3' SPREAD	JUNE-OCTOBER/PINK	1 GAL CONT. PERENNIAL, INSTALL AT 18" ON CENTER
P # CX	100	CAREX BUCHANANII FOX RED	FOX RED CURLY SEDGE	6" HEIGHT	2'-3' HEIGHT AND SPREAD	RED BRONZE FOLIAGE	1 GAL. CONT. GRASS, INSTALL AT 18" ON CENTER
P N EC	160	ECHINACEA PURPUREA	PURPLE CONEFLOWER	6" HEIGHT	2'-4' HEIGHT, 1.5'-2' SPREAD	JUNE-AUGUST/PURPLE	1 GAL. CONT. PERENNIAL, INSTALL AT 18" ON CENTER
N # VS	35	IRIS VIRGINICA SHREVEI	BLUE FLAG IRIS	6"-8" HEIGHT	1.5'-2' HEIGHT AND SPREAD	JUNE/BLUE	1 GAL. CONT. PERENNIAL, INSTALL AT 18" ON CENTER
N # MM	120	CALTHA PALUSTRIS	MARSH MARIGOLD	6" HEIGHT	1'-2' HEIGHT AND SPREAD	APRIL-JUNE/YELLOW	1 GAL. CONT. PERENNIAL, ATTRACTS HUMMINGBIRDS, INSTALL AT 18" ON CENTER
N # RF	90	RUBUS ILLINOENSIS	BLACK EYED SUSAN	6" HEIGHT	2'-3' HEIGHT, 2'-3' SPREAD	JULY-OCTOBER/YELLOW-ORANGE	1 GAL. CONT. PERENNIAL, INSTALL AT 18" ON CENTER
P N SD	15	SPOROBOLUS HETEROLEPIS	RAIRIE DROPSIDE	6" HEIGHT	2'-3' HEIGHT AND SPREAD	AUGUST-OCTOBER/GREEN-TAN	1 GAL. CONTAINERS, PERENNIAL GRASS, INSTALL AT 18" ON CENTER
N # SS	150	LEUCANTHEMUM X SUPERBUM	SHASTA DAISY	6" HEIGHT	2'-3' HEIGHT, 1.5'-2' SPREAD	JULY-SEPTEMBER/WHITE	1 GAL. CONTAINERS, PERENNIAL GRASS, INSTALL AT 18" ON CENTER
P & # SF	30	SOLIDAGO FLEXICAULIS	ZIGZAG GOLDENROD	6" HEIGHT	1'-3' HEIGHT AND SPREAD	JULY-SEPTEMBER/YELLOW	1 GAL. CONT. PERENNIAL, TURTLEHEAD SHAPED FLOWERS, INSTALL AT 18" ON CENTER
TH	160	CHELONE OBLIQUA	TURTLEHEAD	6"-8" HEIGHT	2'-3' HEIGHT, 1'-2' SPREAD	JULY-SEPTEMBER/PURPLE	1 GAL. CONT. PERENNIAL, TURTLEHEAD SHAPED FLOWERS, INSTALL AT 18" ON CENTER

#### KEY:

N = NATIVE PLANT OF NORTH AMERICA  
& = SALT SPRAY TOLERANT  
# = SELDOM OR RARELY DAMAGED BY DEER AS PER RUTGERS AG AGENCY (HTTP://NJAES.RUTGERS.EDU)  
P = POLLINATOR PLANT AS PER RUTGERS GARDENS WEBSITE (RUTGERSGARDENS.RUTGERS.EDU)



1 Plainsboro Road  
Plainsboro, NJ 08536

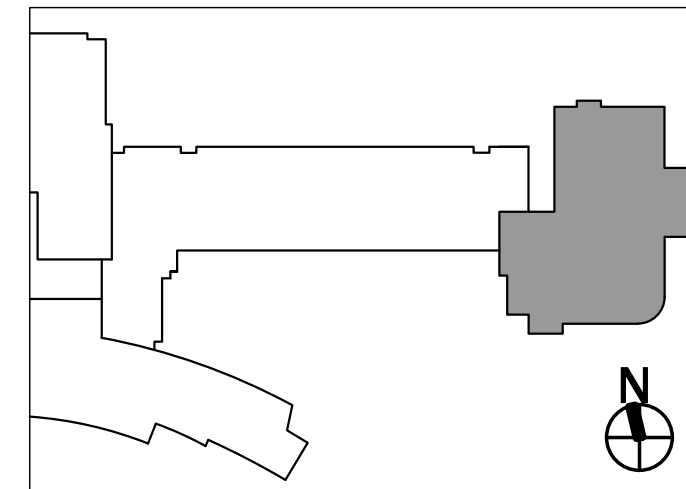
## SHEPLEY BULFINCH

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SARAH REBAR BISAHA, L.L.A., P.P.  
LICENSED LANDSCAPE ARCHITECT, N.J. LIC. No. AS000639

NO.	DATE	REVISION	DESCRIPTION
1.	10/18/2024	REVISED PER DRC COMMENTS	



## PENN MEDICINE PRINCETON HEALTH CCIC

1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5267.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

## LANDSCAPING NOTES AND DETAILS

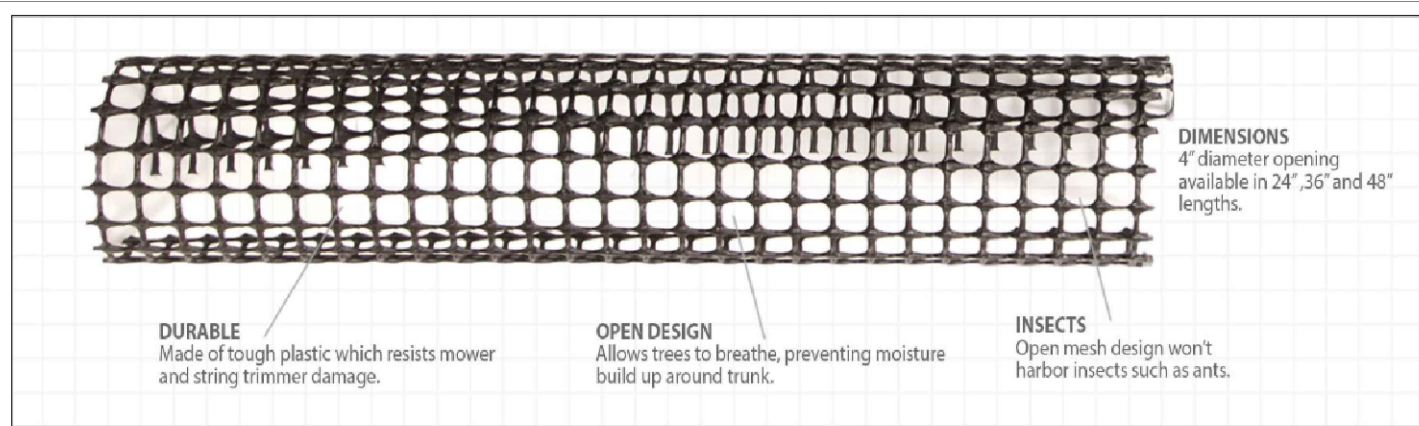
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07/31/2024  
08/02/2024

PACKAGE 0  
PACKAGE 1

PLANTING NOTES

1. THE LANDSCAPE PLANS SHALL BE USED FOR LANDSCAPING PURPOSES ONLY. THE CONTRACTOR SHOULD EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR EXACT LOCATIONS OF UTILITIES, DRAINS, ETC., AND NOTIFY THE OWNER ABOUT ANY DISCREPANCIES BEFORE STARTING WORK.
2. ALL PLANTING SHALL BE IN CONFORMANCE WITH THE AMERICAN NURSERYMEN'S ASSOCIATION STANDARDS, CURRENT EDITION. ALL PLANT MATERIALS USED SHALL BE TRUE TO NAME AND SIZE IN CONFORMITY WITH THE CURRENT EDITION OF THE AMERICAN STANDARD OF NURSERY STOCK AND SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY. ALL PLANTS SHALL HAVE NORMAL, WELL-DEVELOPED BRANCHES AND VIGOROUS ROOT SYSTEMS. THEY SHALL BE SOUND, HEALTHY, VIGOROUS, FREE FROM DEFECTS, DISFIGURING KNOTS, ABRASIONS OF THE BARK, SUN SCALD INJURIES, PLANT DISEASES, INSECT EGGS, BORERS, AND ALL OTHER FORMS OF INFECTION. ALL PLANTS SHALL BE NURSERY GROWN. ALL PLANT MATERIAL SHALL BE TAGGED AT THE NURSERY SOURCE AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT PRIOR TO PLANTING.
3. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY ANY PERSON, VEHICLE, EQUIPMENT, OR TOOLS RELATED TO THE EXECUTION OF THIS CONTRACT.
4. EXCAVATION NEAR EXISTING UTILITIES TO BE CAREFULLY PERFORMED BY HAND.
5. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT BORE TO EXISTING GRADE AT THE NURSERY. ALL PLANT MATERIAL SHALL BE PLANTED SO THAT THE TOP OF THE ROOTBALL IS NO HIGHER OR LOWER THAN THE EXISTING/FINISHED GRADE DEPENDENT UPON SOIL CONDITIONS.
6. IN THE EVENT THAT PLANTING DISCREPANCIES OR MATERIAL OMISSIONS OCCUR IN THE PLANT MATERIALS LIST, THE LANDSCAPING PLAN SHALL GOVERN. THE USE AND PLANTING OF BARE ROOT MATERIAL SHALL BE PROHIBITED.
7. ANY SUBSTITUTIONS OF PLANT MATERIAL WITH REGARDS TO SIZE, SPECIES, VARIETY, ETC., SHALL BE SUBJECT TO APPROVAL BY PLAINSBORO TOWNSHIP.
8. PLANTS SHALL ONLY BE INSTALLED WHEN THE SOIL IS FROST FREE.
9. UNDER NO CIRCUMSTANCES SHOULD THE MAIN LEADER OF A DECIDUOUS OR EVERGREEN TREE BE TOPPED. DECIDUOUS TREES SHALL BE PRUNED BY REMOVAL OF 1/3 OF THE INTERIOR BRANCHING STRUCTURE WITHOUT ALTERING THE ORIGINAL BRANCHING FORM OF THE TREE.
10. ALL DISTURBED AREAS, NOT BEING PLANTED, SHALL BE TOPSOILED 4" THICK, FERTILIZED, SEEDED, AND MULCHED WITH APPROVED MULCH. TOPSOIL SHALL BE NATURAL FRAGILE, FERTILE SOIL CHARACTERISTIC OF PRODUCTIVE SOIL IN THE VICINITY. IT SHALL BE FREE OF LUMPS OF CLAY, STONES, ROOTS, AND OTHER FOREIGN MATTER.
11. CUT AND LOOSEN SISAL HEMP CHOKE TIE AROUND TREE TRUNK. ALL PLASTIC MATERIAL SHALL NOT BE PERMITTED. ALL WIRE BASKETS AND PLASTIC LINERS OF CONTAINER GROWN TREES AND SHRUBS MUST BE COMPLETELY REMOVED. NO CONTAINER GROWN MATERIAL WILL BE ACCEPTED IF IT IS ROOT BOUND AND NOT ROOT PRUNED. THE USE OF NYLON TWINE ON ROOT BALLS IS PROHIBITED.
12. THE DEPTH OF PLANT PITS SHALL BE INCREASED BY 12" THROUGH THE ADDITION OF LOOSE AGGREGATE (3/4" TO 1 1/2" DIAMETER) WHEREVER POOR DRAINAGE OCCURS OR WHERE DIRECTED BY THE TOWNSHIP.
13. GUY WIRES SHALL BE LOCATED SO THAT THEY WILL NOT PULL CROTCH APART. GUY WIRES TO SECOND BRANCH (MINIMUM ONE-THIRD HEIGHT OF TREE). USE THREE GUYS PER TREE UNLESS OTHERWISE INDICATED. ALL TREE STAKES, GUY WIRES, TREE WRAPPING AND SAUCERS SHALL BE REMOVED AFTER ONE GROWING SEASON.
14. PLANTS PLANTED IN ROWS SHALL BE MATCHED SPECIMENS AND BE UNIFORM IN SIZE AND FORM.
15. IN THE EVENT THAT EXISTING VEGETATION IS REMOVED BEYOND THE CLEARING LIMITS SHOWN ON THE PLANS, ADDITIONAL PLANTING MUST BE PROVIDED AS APPROVED BY THE TOWNSHIP AND AT NO COST TO THE OWNER.
16. PLANTING BACKFILL MIXTURE SHALL CONSIST OF ONE PART TOPSOIL, ONE PART NATIVE SOIL AND ONE PART PEAT MOSS. NOTE THAT PLANTING MIXTURE MAY CHANGE BASED UPON SOIL CONDITIONS.
17. MULCH, 4" IN DEPTH, SHALL BE TREATED SHREDDED HARDWOOD BARK NOT EXCEEDING 2" IN GREATEST DIMENSION. MULCH SHALL BE INSTALLED WITH A MAXIMUM OF ONE (1) INCH WITHIN ONE (1) FOOT ON THE TREE'S ROOT FLARE. A NON-PLASTIC WEED RETARDANT BARRIER SHALL BE USED IN ALL NON GRASSSED AREAS. MULCH SHALL BE FINE GRADED FOR A PLEASING APPEARANCE. THE USE OF MARBLE OR PINE BARK CHIPS IS PROHIBITED. MULCH VOLCANOES ARE NOT PERMITTED.
18. ALL PLANT MATERIAL SHALL BE GIVEN A MINIMUM OF 5 GALLONS OF WATER AT THE TIME OF INSTALLATION AND SHALL BE WATERED AT INTERVALS DURING ESTABLISHMENT TO ENSURE ADAPTATION TO THE SITE. PRIOR TO THE INSTALLATION OF THE PLANT MATERIAL, THE CONTRACTOR SHALL FILL EACH PLANTING PIT WITH WATER AND ALLOW IT TO FULLY PERCOLATE INTO THE GROUND PRIOR TO PLACEMENT OF THE PLANT. THE CONTRACTOR SHALL NOTIFY EITHER THE TOWNSHIP OR PROJECT LANDSCAPE ARCHITECT OF ANY PERCOLATION PROBLEMS PRIOR TO INSTALLATION.
19. PREFERRED PLANTING TIME PERIODS ARE FROM SEPTEMBER 1 TO NOVEMBER 30 OR MARCH 20 TO MAY 31. NO PLANTING SHALL BE EXECUTED DURING ABNORMALLY HOT WEATHER NOR WHEN THE GROUND IS FROZEN.
20. THE CONTRACTOR SHALL REMOVE ALL DAMAGED BRANCHES AND NURSERY TAGS AT THE TIME OF INSTALLATION.
21. ALL TURF SHALL RECEIVE FERTILIZER CONSISTING OF 10-6-4 (50% ORGANIC) COMPOSITION, APPLIED AT 3 LB. PER 100 SQ. FT. SLOW RELEASE FERTILIZER TABLETS OR PACKETS OF 20-10-5 COMPOSITION SHALL BE ADDED TO ALL PLANTING PITS AT THE FOLLOWING RATIOS: 1 PER SHRUB, 2 PER DECIDUOUS OR EVERGREEN TREES UP TO 2" IN CALIPER AND 3 FOR DECIDUOUS AND EVERGREEN TREES ABOVE 2" IN CALIPER.
22. EACH TREE THAT IS PLANTED MUST BE TAGGED WITH A DURABLE LABEL BEARING THE GENUS, SPECIES, VARIETY, PLANT PATENT NUMBER (IF APPLICABLE) AND CULTURAL REQUIREMENTS AND MUST BE INSPECTED PRIOR TO REMOVAL.
23. ALL GROUPED SHRUBS SHALL BE MULCHED TOGETHER TO FORM ONE CONTINUOUS PLANTING BED.
24. CONTRACTOR TO BE RESPONSIBLE FOR SEEDING AREAS BEING DISTURBED BY CONSTRUCTION. SEED MIXTURE TO BE IN ACCORDANCE WITH SOIL CONSERVATION DISTRICT'S STANDARDS.
25. ALL TREES FOUR (4) FEET OR GREATER IN HEIGHT SHALL BE STAKED.
26. ALL SHRUBS SHALL BE INSTALLED A MINIMUM OF THREE (3) FEET BEHIND THE CURB.
27. ANY PLANT RELOCATIONS SHALL BE SUBMITTED TO PLAINSBORO TOWNSHIP FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
28. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR PERIOD OF TWO YEARS FROM THE TIME OF PLANTING.



Specs	Product Features
Material: HDPE	Durable high-density polyethylene construction
Diameter: inches 4	Hi trees up to 4 inches in diameter
Length (inches): varies	UV treated
Bundle count: 5	

TREE TRUNK PROTECTION DETAIL

NOT TO SCALE

NOTE:  
4" LONG, 4" DIAMETER TREE TRUNK PROTECTION MESH SHALL BE MANUFACTURED BY A.M. LEONARD (<https://www.amleo.com/leonard-rigid-plastic-mesh-tree-guards-4-inch-diameter/p/VF-BG/1>) OR APPROVED EQUAL.

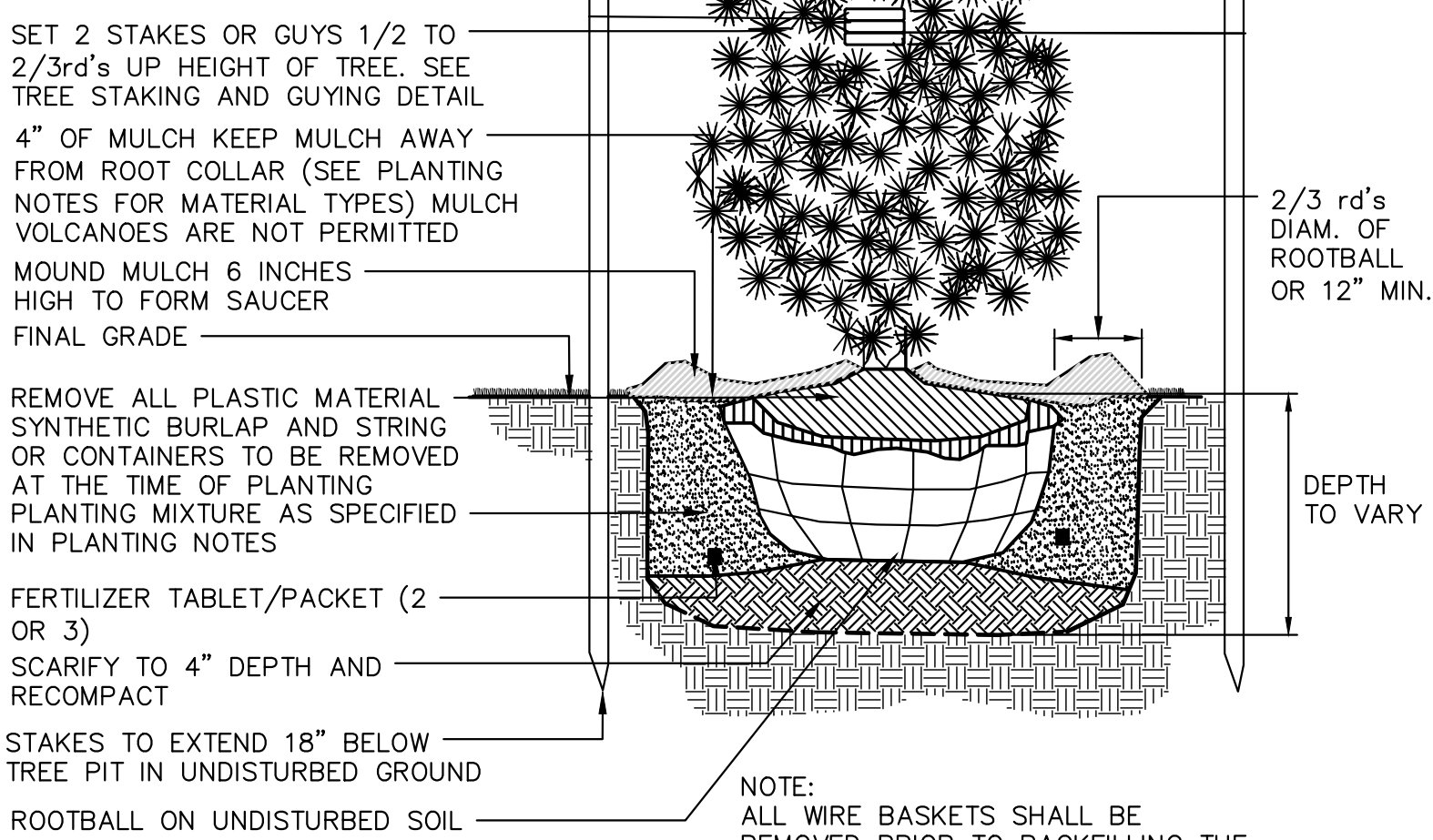
1. REMOVE SUCKER SHOOTS AT BASE OF TREE.
  2. MAKE CLEAN CUTS ON OLD STUBS, IF PRESENT.
  3. REMOVE ENTIRE SUPPLY OF TWIGS AND BUDS ON TRUNK.
  4. REMOVE LOWER BRANCH WHERE AN OVERHANGING BRANCH OCCUPIES ABOUT THE SAME AREA.
  5. SHAPE TREE BY REMOVING INJURED AN MISSHAPEN BRANCHES.
  6. REMOVE CROSS BRANCHES AND THOSE DEVELOPING INTO SECONDARY LEADERS.
- NOTES:
1. BRANCHES IN DASHED LINES INDICATE THOSE TO BE REMOVED.
  2. CENTRAL LEADER SHALL NOT BE CUT OR DAMAGED.

TREE PRUNING DETAIL

NOT TO SCALE

NOTES:

1. ALL EVERGREEN TREES TO BE STAKED AND/OR GUYED AS SPECIFIED IN THE DETAIL AND THE PLANTING NOTES
2. TREE SHALL BEAR SAME RELATION TO FINISHED GRADE AS IT BORE TO PREVIOUS GRADE.
3. NEVER CUT LEADERS.
4. PRUNE ONLY TO REMOVE DAMAGED OR BROKEN BRANCHES. SEE TREE PRUNING DETAIL.
5. STAKES SHALL BE WHITE OR RED CEDAR, OAK, OR LOCUST TREATED WITH ACCEPTABLE WOOD PRESERVATIVE



EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE

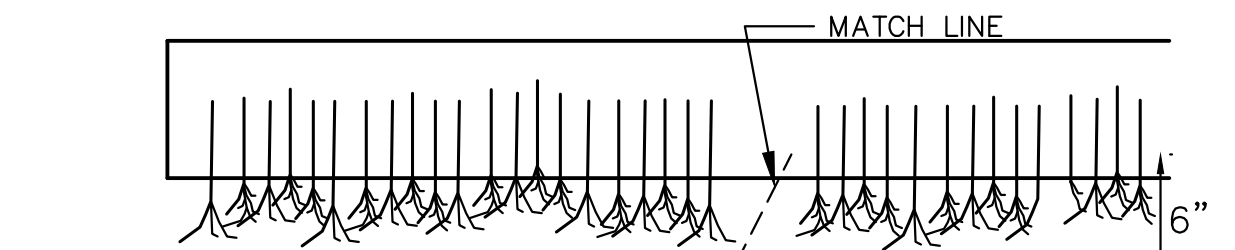
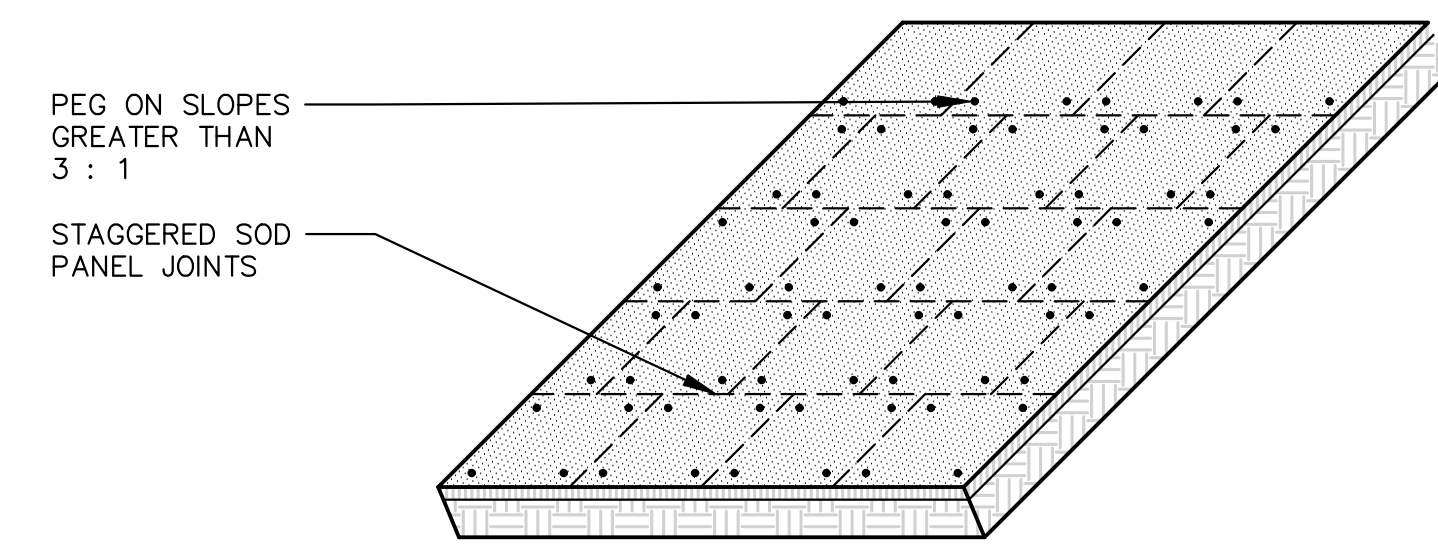
NOTES:

1. ALL TREES UNDER 3" IN CALIPER SHALL BE STAKED ALL TREES 3" IN CALIPER AND GREATER SHALL BE GUYED
2. TREE SHALL BEAR SAME RELATION TO FINISHED GRADE AS IT BORE TO PREVIOUS GRADE
3. SET STAKES VERTICAL AND AT SAME HEIGHT
4. REMOVE ALL WIRE BASKETS PRIOR TO BACKFILLING THE PLANTING PIT.
5. ALL WIRE BASKETS SHALL BE REMOVED PRIOR TO BACKFILLING THE PLANTING PIT.

- STAKES TO BE SET 2/3RDS UP TREE OR JUST AT FIRST BRANCHES SEE TREE STAKING AND GUYING DETAIL
- 4" SHREDDED HARDWOOD MULCH- KEEP MULCH AWAY FROM ROOT COLLAR AS DESCRIBED IN PLANTING NOTES. MULCH VOLCANOES ARE NOT PERMITTED
- 6" SOIL MOUND FOR WATER RETENTION
- REMOVE ALL PLASTIC MATERIAL, BURLAP, SYNTHETIC BURLAP, STRING OR CONTAINERS FROM TOP 1/3 RD. OF ROOTBALL AT THE TIME OF PLANTING
- BACKFILL AUGMENTED WITH TOPSOIL
- STAKES TO EXTEND 18" BELOW TREE PIT IN UNDISTURBED GROUND

DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE



NOTES:

1. CULTIVATED SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS.
2. APPLY FERTILIZER AT THE RATE OF 500 POUNDS PER ACRE USING 10-20-10 RATIO OR AS DETERMINED BY SOIL TESTING.
3. SUPPLY PULVERIZED DOLOMITIC LIMESTONE AT THE RATE OF 2 TONS PER ACRE OR AS DETERMINED BY SOIL TESTING.
4. APPLY 300 POUNDS 38-0-0 PER ACRE IN LIEU OF TOP DRESSING OR AS DETERMINED BY SOIL TESTING.
5. PLACE SOD STRIPS ON THE CONTOUR STARTING AT THE BOTTOM.
6. PLACE SOD WITH SNUG EVEN JOINTS THAT ARE STAGGERED.
7. ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT.
8. ON SLOPES GREATER THAN 3 TO 1 SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES, OR SPLIT SHINGLES (8 TO 10 INCHES LONG BY 3/4 OF AN INCH).
9. ANCHOR SOD IN WATER CARRYING CHANNELS WITH HEAVY JUTE OR PLASTIC NETTING.
10. SOD SHOULD BE WATERED UNTIL MOISTURE PENETRATES THE SOIL LAYER BENEATH THE SOD TO A DEPTH OF 4 INCHES. MAINTAIN OPTIMUM MOISTURE FOR AT LEAST TWO WEEKS.

SOD INSTALLATION DETAIL

NOT TO SCALE

SEEDING/SOD NOTES:

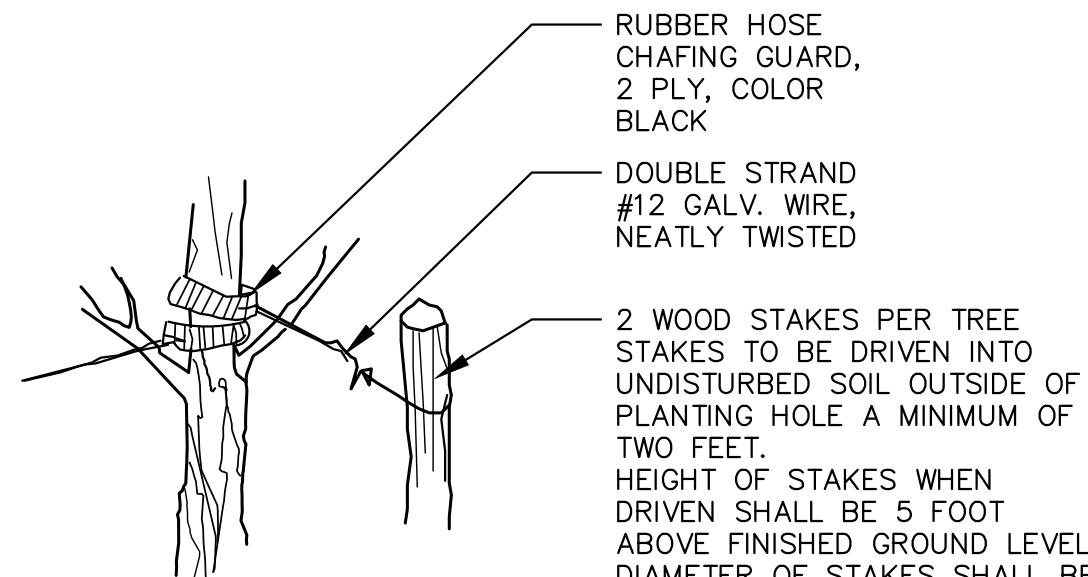
- 1.) SEED AND SOD NOTES - GENERAL LAWN AREAS:

GENERAL LAWN AREAS - SHALL BE SEEDED/SODDED AS SHOWN WITH "ATHLETIC FIELD MIX - ERNMX- 106" BY ERNST CONSERVATION SEEDS, INC. SEED MIX SHALL INCLUDE:

- 30% BLACK CAT II PERENNIAL RYEGRASS
- 30% RAPTOR II TALL FESCUE
- 15% CLEARWATER KENTUCKY BLUEGRASS
- 15% VOLT KENTUCKY BLUEGRASS
- 10% ANNUAL RYEGRASS

PREFERRED DATES FOR SEED/SOD INSTALLATION SHALL BE DURING THE PERIODS OF EITHER APRIL 1ST TO MAY 31ST OR AUGUST 15TH TO OCTOBER 15TH.

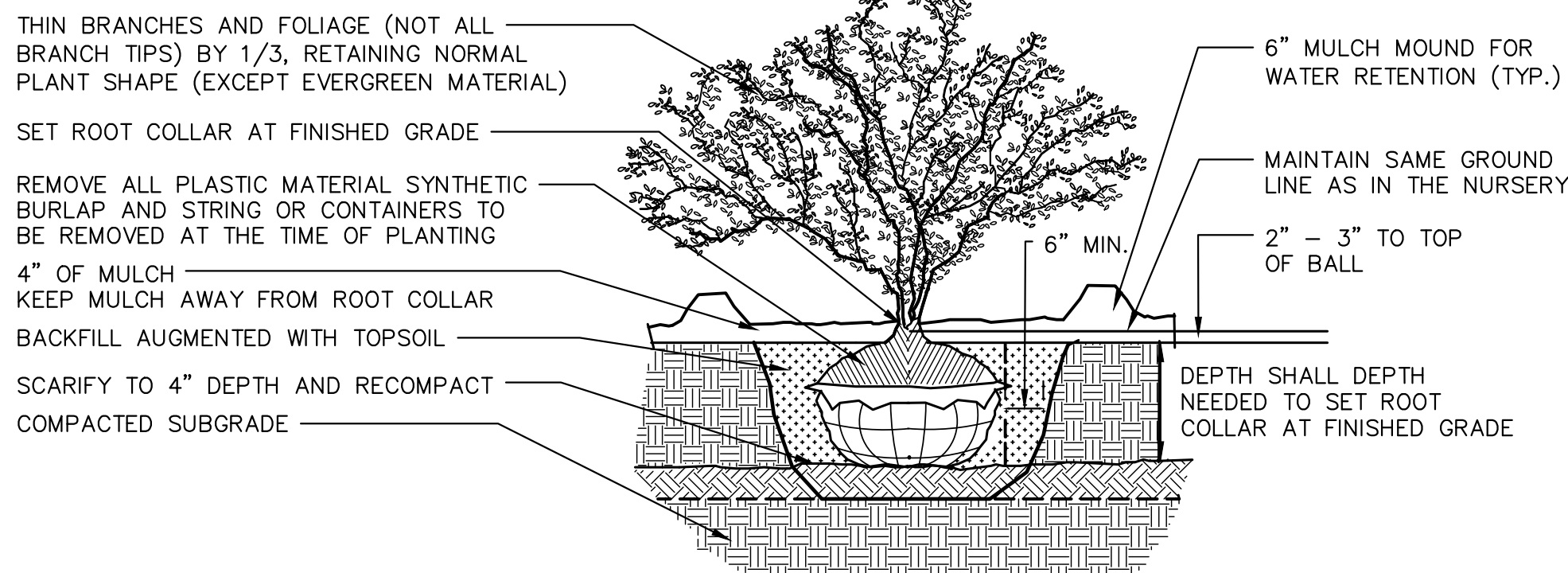
- 2.) THE CONTRACTOR WILL BE RESPONSIBLE FOR RE-ESTABLISHING ALL AREAS DISTURBED BY CONSTRUCTION. THE SEEDING/SODDING WILL BE IN ACCORDANCE WITH FREEHOLD SOIL CONSERVATION DISTRICT STANDARDS.
- 3.) SLOPED AREAS 3:1 AND GREATER SHALL RECEIVE IN COMBINATION WITH THE ABOVE SPECIFIED GRASS MIXTURE A BIODEGRADABLE EROSION CONTROL BLANKET BY NORTH AMERICAN GREEN ROLL MAX MODEL #BIONETS75BN 5K OR APPROVED EQUAL



STAKING DETAIL

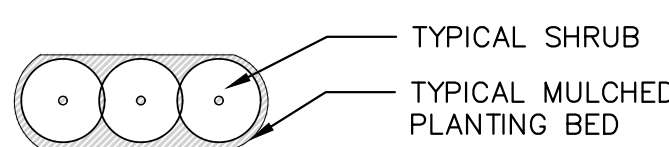
TREE STAKING DETAIL

NOT TO SCALE



NOTES:

1. CONTRACTOR TO PROVIDE A MULCHED PLANTING BED FOR SHRUBS GROUPED TOGETHER. MULCHED BEDS MAY VARY IN SHAPE AND SIZE TO CONFORM WITH SHRUB LAYOUT.
2. DO NOT PRUNE EVERGREEN SHRUBS EXCEPT TO REMOVE DEAD AND BROKEN BRANCHES



TYPICAL PLANTING BED PLAN VIEW



1 Plainsboro Road  
Plainsboro, NJ 08536

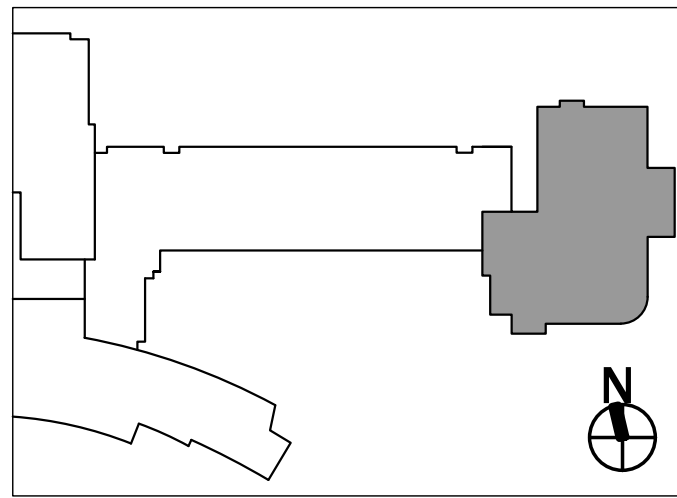
SHEPLEY  
BULFINCH

99 Chauncy Street 4th Floor  
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T: 617.423.1700 | F: 800.934.9691  
shepleybulfinch.com



SARAH REBAR BISAH, L.L.A., P.P.  
LICENSED LANDSCAPE ARCHITECT, N.J. LIC. No. AS0006039

NO.	DATE	REVISION
1.	10/18/2024	REVISED PER DRC COMMENTS



PENN MEDICINE  
PRINCETON  
HEALTH CCIC

1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5287.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

LANDSCAPING NOTES  
AND DETAILS 2

C217

07/31/2024  
08/02/2024

PACKAGE 0  
PACKAGE 1

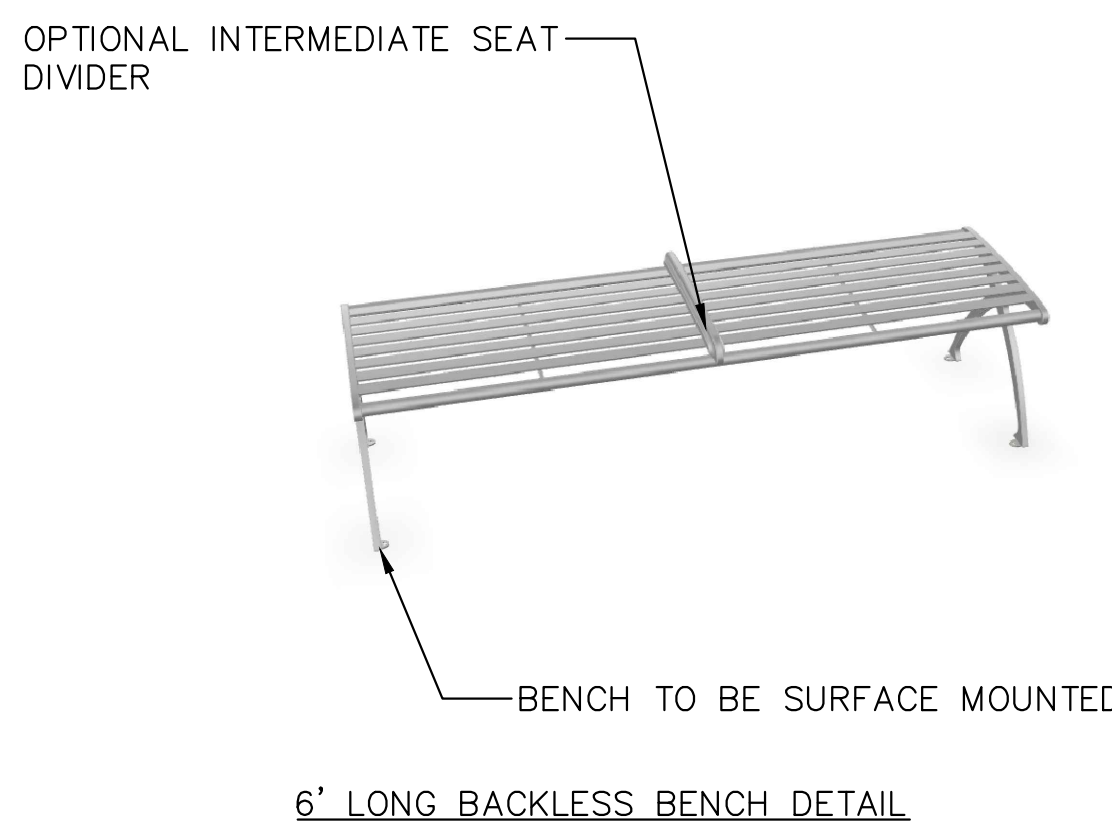


### METAL BENCH AND TRASH RECEPTACLE DETAILS

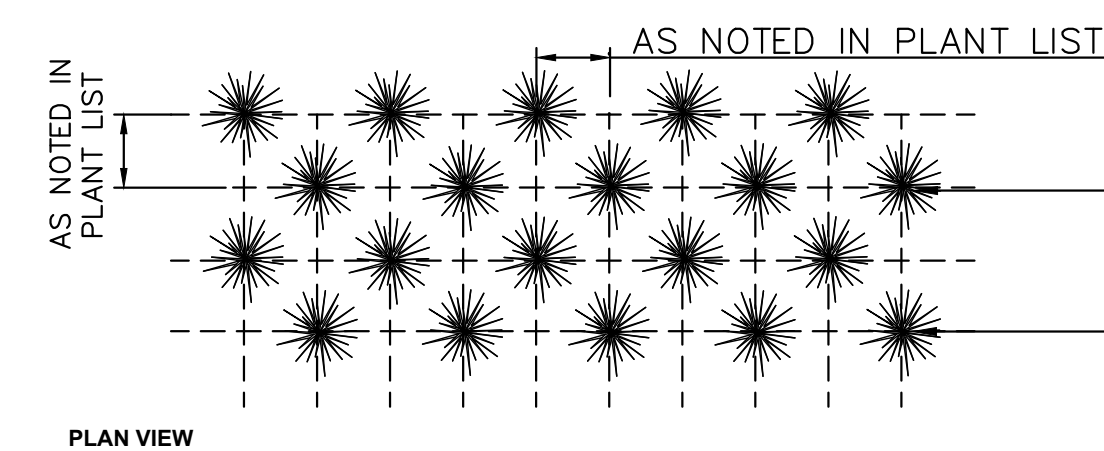
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#### NOTES:

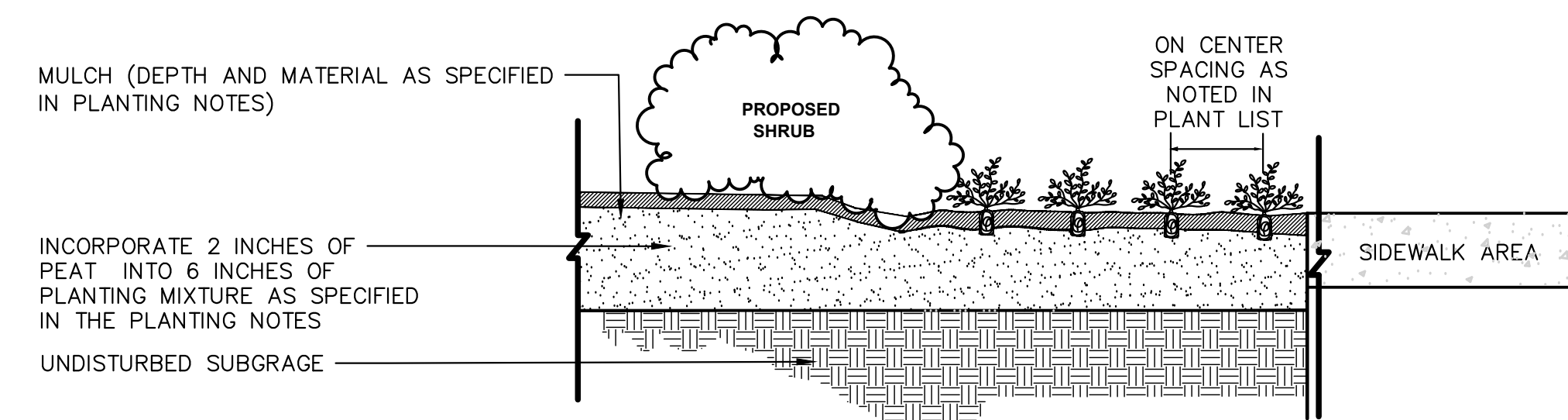
- STEEL BENCH AND TRASH RECEPTACLE SHALL BE MANUFACTURED BY LANDSCAPE FORMS OR APPROVED EQUAL, LOCAL REPRESENTATIVE MICHELLE HERTLER (MICHELLE@A-METRO.COM.)
- BENCH STYLE SHALL BE AS FOLLOWS:
  - CAMPUS OPEN SPACE AREAS - 6' LONG PARK VUE, BACKED WITH ARMS, 26D" X 72L" X 36H" WITH SURFACE MOUNTING OPTION.
  - ENTRANCE PLANTERS- PARK VUE, BACKLESS WITH INTERMEDIATE SEAT DIVIDER, 22D" X 72L" X 36H" WITH SURFACE MOUNTING OPTION.
- TRASH RECEPTACLE STYLE SHALL BE SCARBOROUGH, 25" DIAM X 33"H X 30 GALLON WITH SIDE OPENING AND SURFACE MOUNTED OPTIONS.
- COLOR AND FINISH OF BENCHES AND TRASH RECEPTACLES TO MATCH EXISTING CAMPUS FURNITURE. CONTRACTOR TO SUBMIT SHOP DRAWINGS AND COLOR SAMPLES FOR REVIEW AND APPROVAL.



6' LONG BACKLESS BENCH DETAIL

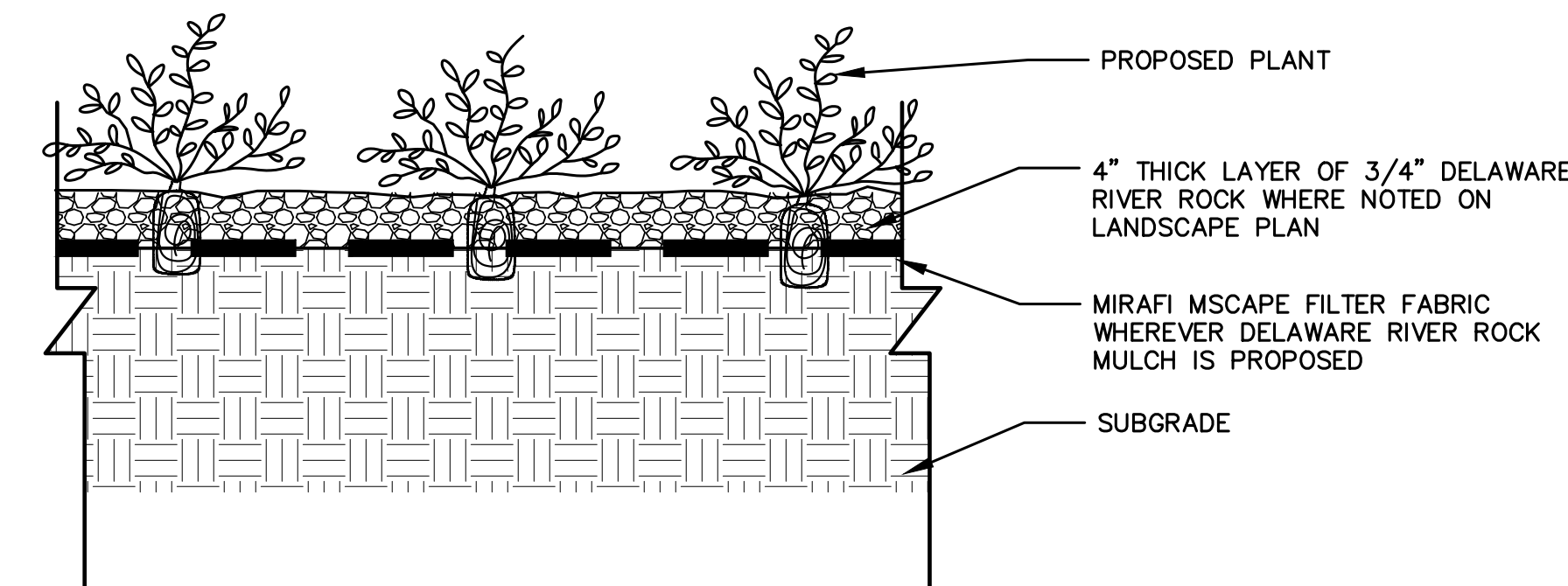


NOTE: GROUNDCOVER PLANTS SHALL BE PLACED AS SHOWN IN DOUBLE STAGGERED ROWS  
GROUNDCOVER PLANT (TYP.)



### GROUNDCOVER PLANTING DETAIL

NOT TO SCALE



### 4" THICK DELAWARE RIVER ROCK IN PLANTING BED DETAIL

NOT TO SCALE

NOTE: CONTRACTOR TO REVIEW LANDSCAPE PLANS FOR DELAWARE RIVER ROCK LOCATIONS TO DETERMINE QUANTITIES

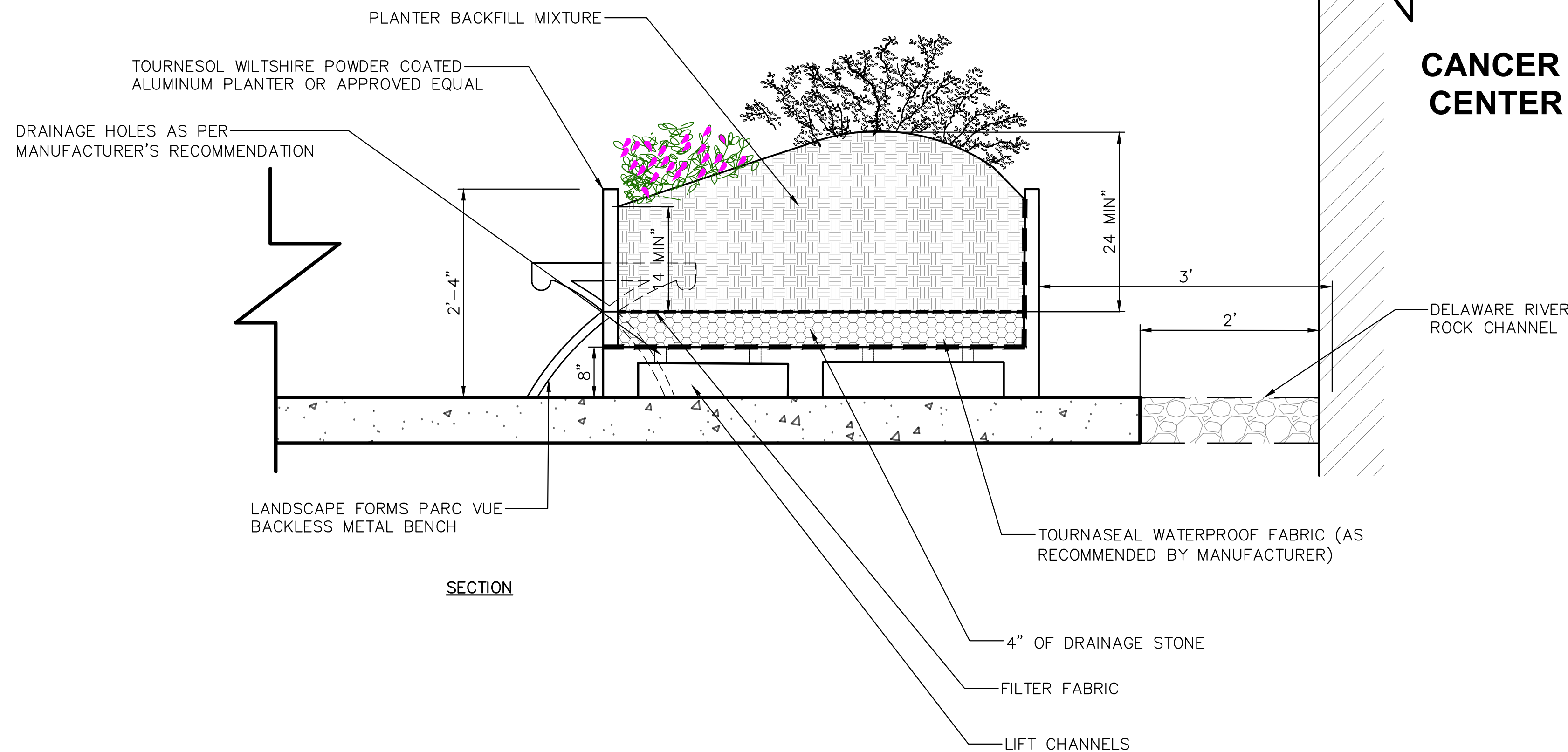


#### NOTES:

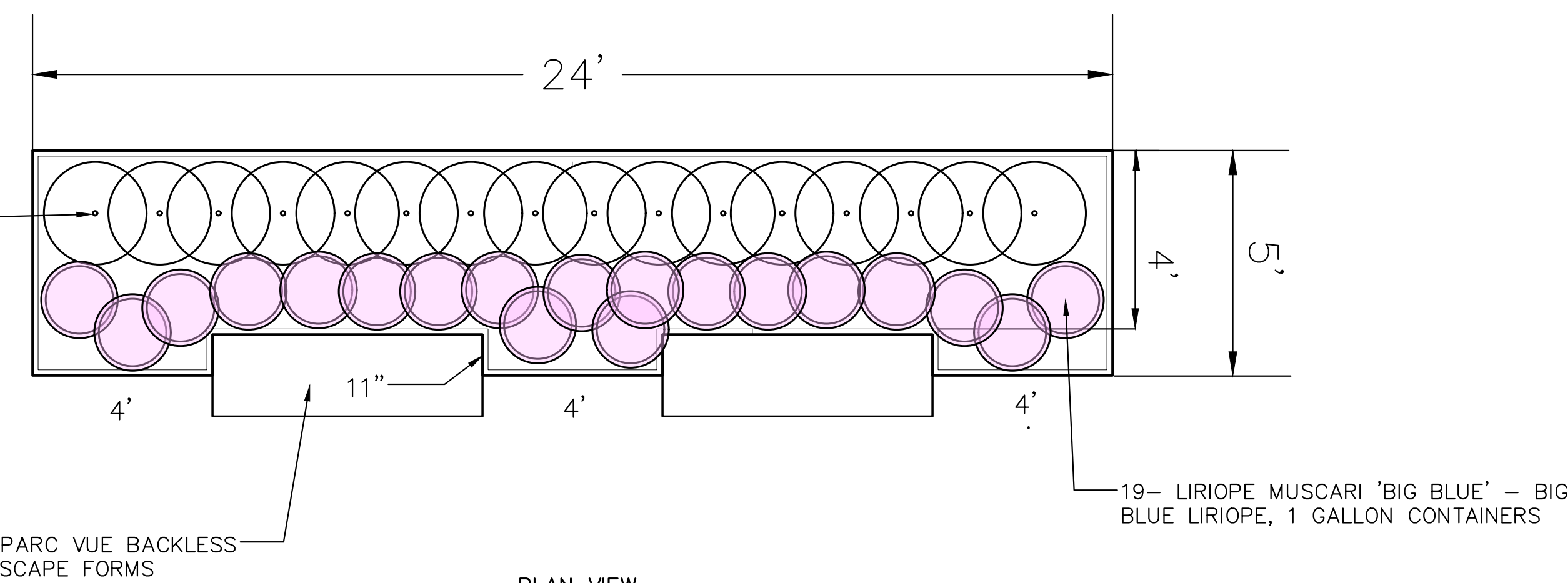
- METAL BIRD FEEDERS SHALL BE MANUFACTURED BY COURONNECO, MANOR, TEXAS (WWW.COURONNECO.COM) OR APPROVED EQUAL.
- MODEL SHALL BE M439-200-O (ORANGE COLOR.)
- FEEDER LOCATIONS AND QUANTITIES SHOWN ON THE LANDSCAPE PLAN ARE APPROXIMATE AND SHALL BE VERIFIED WITH OWNER PRIOR TO THE ORDERING OF ANY MATERIAL.

### BIRD FEEDER DETAIL

NOT TO SCALE



#### SECTION



#### PLAN VIEW

#### NOTES:

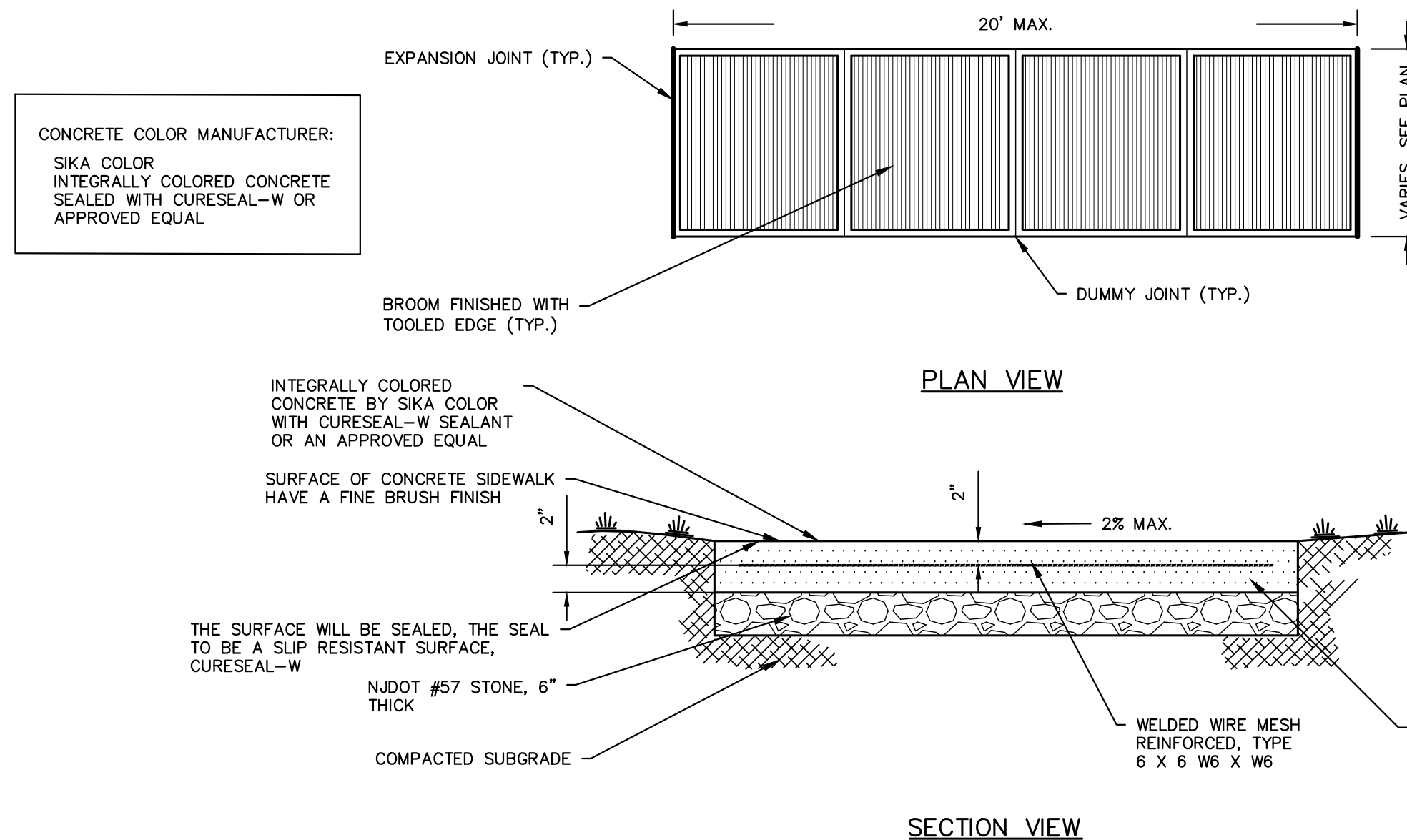
- CUSTOM PLANTERS TO MANUFACTURED BY TOURNESOL, UNION CITY CALIFORNIA (TOURNESOL.COM) MODEL WILTSHIRE RECTANGULAR IN POWDER COATED ALUMINUM. COLOR TO SELECTED FROM STANDARD AVAILABLE COLORS BY OWNER.
- THE DETAIL PROVIDED ON THIS DRAWING IS FOR SCHEMATIC AND INFORMATIONAL PURPOSES ONLY. THE CONTRACTOR SHALL BE REQUIRED TO CONTACT THE PLANTER MANUFACTURER FOR SPECIFIC DESIGN DETAILS AND APPLICABLE OPTIONS, SHOP DRAWINGS TO BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

### SCHEMATIC RAISED PLANTER WITH BENCHES DETAIL

NOT TO SCALE

#### NOTES:

- PROVIDE 1/2" X 18" STAINLESS STEEL DOWEL PINS AT 2'-0" O.C. AT ALL EXPANSION JOINTS.
- CONTROL JOINTS- CONVENTIONAL SAW-CUT JOINTS  
A.) DEPTH OF JOINT AT LEAST 1/4 OF SLAB DEPTH OR 1" MIN WHICHEVER IS GREATER  
B.) JOINTS ARE TO BE CUT AFTER THE SLAB HAS BEEN FINISHED- WITHIN 4 HOURS IN HOT WEATHER AND 12 HOURS IN COLD WEATHER  
C.) CUT 1/2 OF THE REINFORCING STEEL AT THE JOINT
- REFORMED BITUMINOUS CELLULAR JOINT FILLERS 1/2" THICK SHALL BE PLACED AT INTERVALS NOT EXCEEDING TWENTY (20) FEET ON CENTER. DUMMY (FORMED) JOINTS SHALL BE CUT INTO THE CONCRETE SIDEWALK BETWEEN THE EXPANSION JOINTS AT EQUAL INTERVALS OF 5' AND/OR AS SHOWN OR NOT EXCEEDING THE WIDTH OF THE SIDEWALK
- ALL CONCRETE TO HAVE BROOM FINISH WITH TOOLED EDGE.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, INCLUDING THE MANUFACTURER'S SPECIFICATIONS AND COLOR CHART FOR SELECTION AND APPROVAL BY THE OWNER PRIOR TO ORDERING ANY CONSTRUCTION MATERIALS.
- THE CONTRACTOR SHALL SUBMIT 12" X 12" COLOR SAMPLES FOR COLOR MIXTURE APPROVAL PRIOR TO ORDERING MIXTURE. THE SAMPLES SHALL INCLUDE A SEALANT OPTION.
- THE CONTRACTOR SHALL CONTACT THE SUPPLIER TO MAKE SURE MIXTURES WILL BE AVAILABLE. IF THERE ARE ANY DIFFICULTIES IN ACQUIRING THE MATERIAL CONTACT THE PROJECT ARCHITECT IMMEDIATELY.
- THE SIDEWALK SUBGRADE SHALL BE NUDOT #57, 6" THICK OR MATERIAL APPROVED BY THE ENGINEER, AND COMPACTED PRIOR TO THE PLACEMENT OF ANY SIDEWALK. COMPACTION SHALL BE A MINIMUM OF 95% AND SHALL COMPLY WITH ASTM TEST METHOD D-15-57, THE MODIFIED PROCTOR.



### INTEGRALLY MIXED COLOR CONCRETE SIDEWALK, 4" THICK

NOT TO SCALE



1 Plainsboro Road  
Plainsboro, NJ 08536

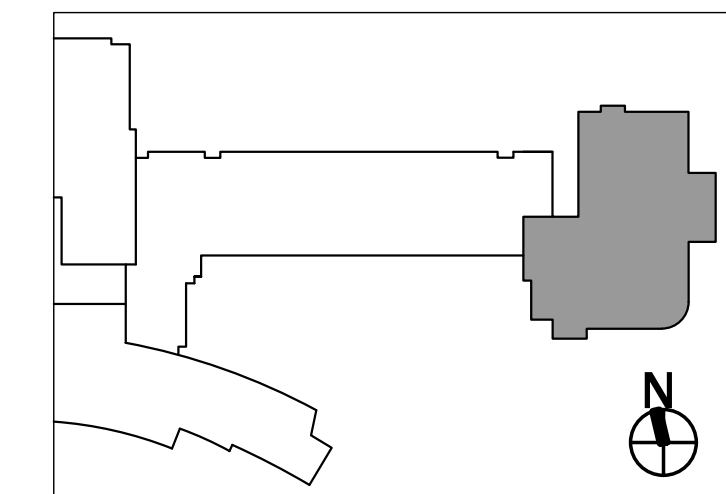
## SHEPLEY BULFINCH

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shepleybulfinch.com



SARAH REBAR BISAH, L.L.A., P.P.  
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NO.	DATE	REVISIONS
1.	10/18/2024	REVISED PER DRC COMMENTS



## PENN MEDICINE PRINCETON HEALTH CCIC

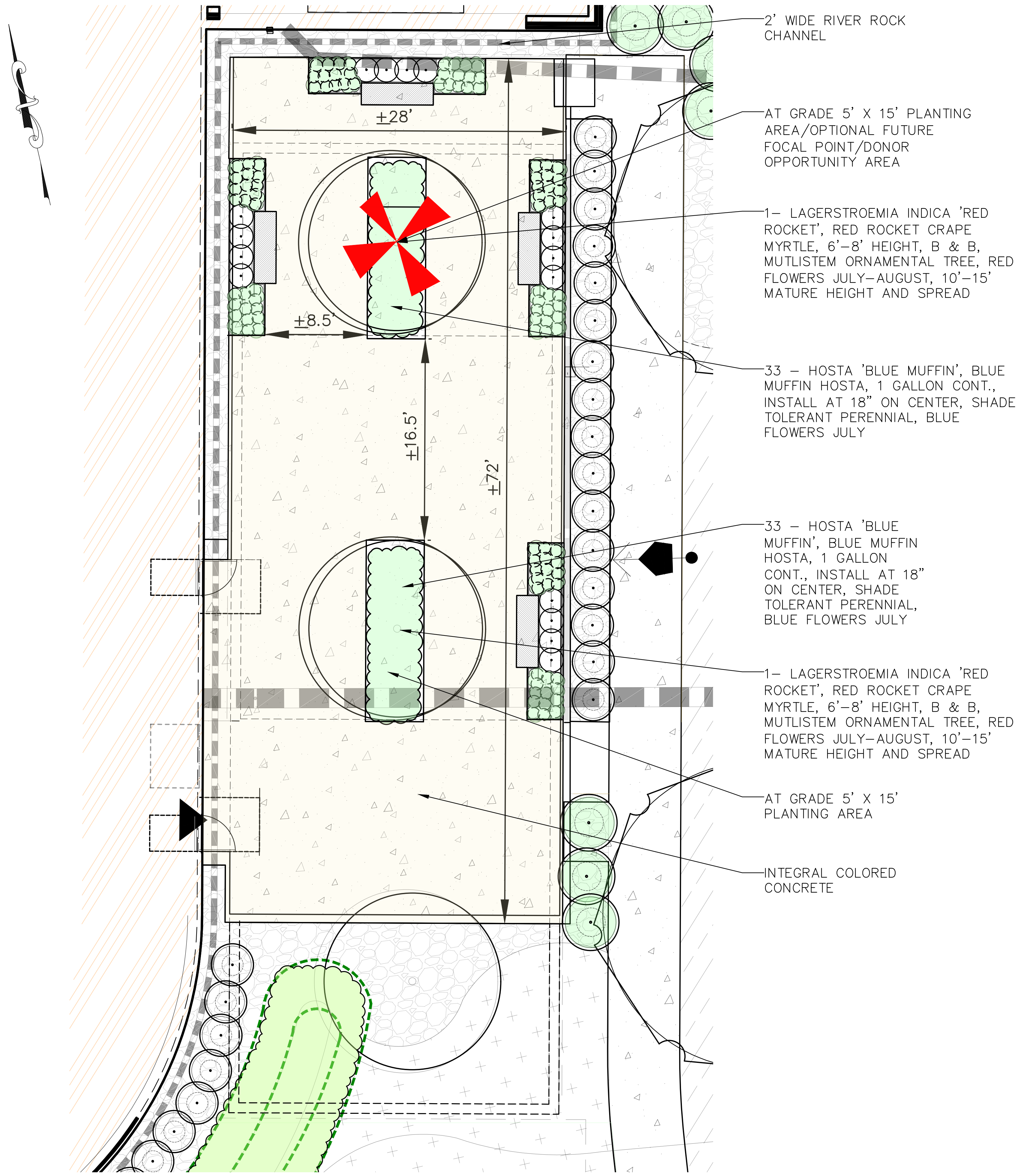
1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5257.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

## LANDSCAPING NOTES AND DETAILS 3

# C218

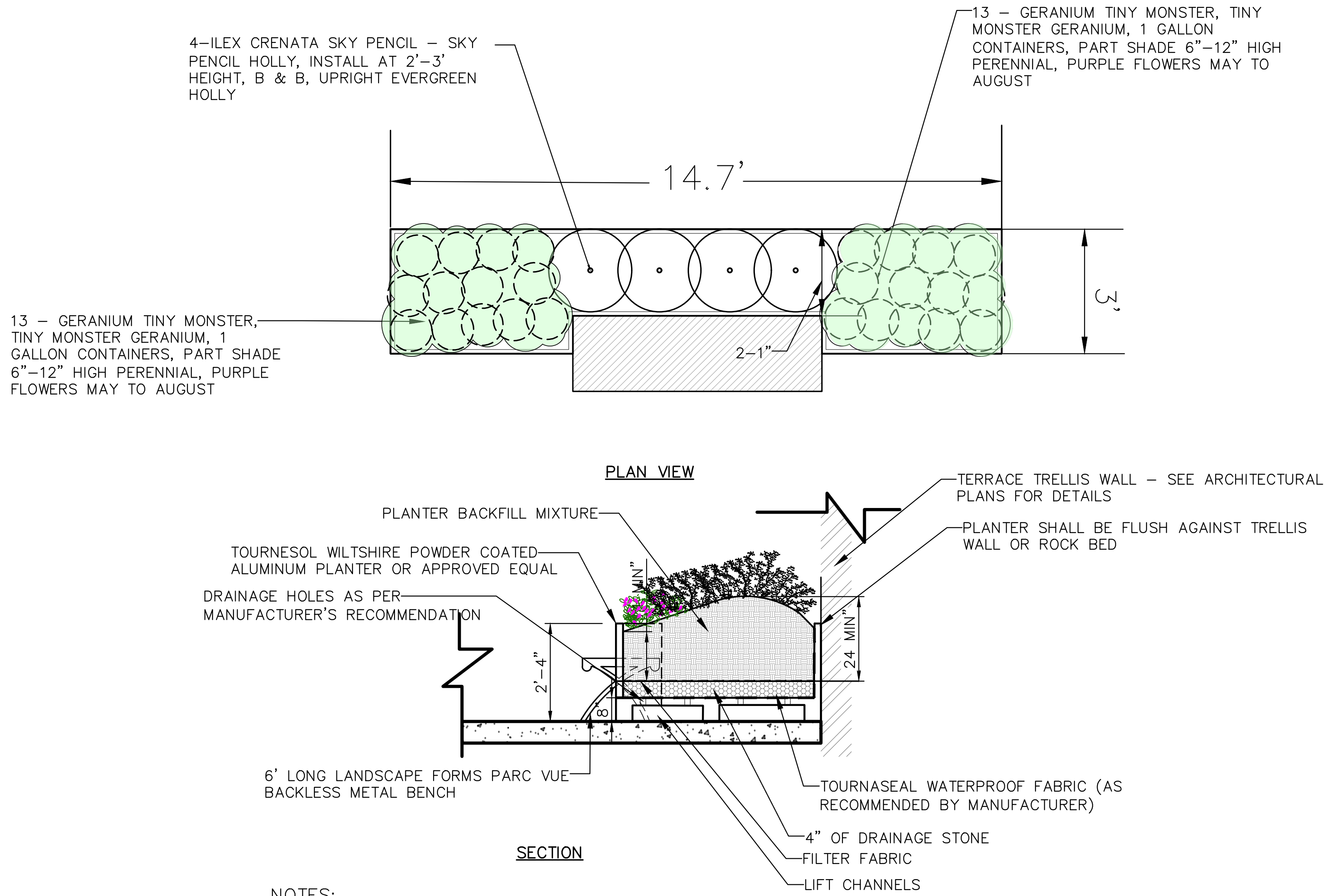
07/31/2024  
08/02/2024

PACKAGE 0  
PACKAGE 1



TERRACE AREA DETAIL

SCALE: 1" = 5'

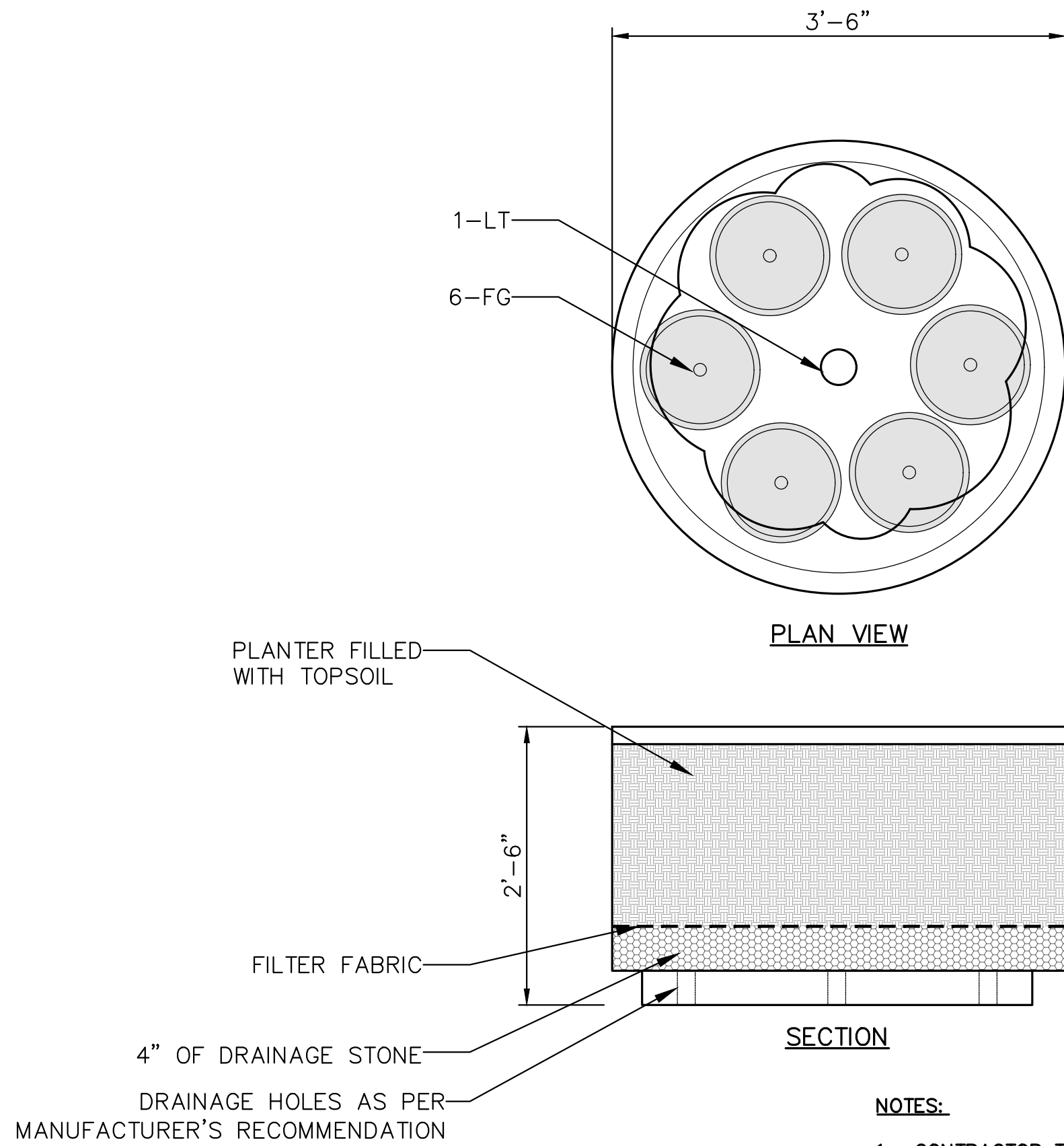


NOTES:

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SCHEMATIC TERRACE PLANTER LAYOUT

NOT TO SCALE



NOTES:

1. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR OWNER'S APPROVAL PRIOR TO ORDERING ANY MATERIAL.
- PRODUCT: MAREK FIBERGLASS ROUND PLANTER 42\"W x 30\"H ON CASTERS OR APPROVED EQUAL
- COLOR/FINISH TO BE AVAILABLE STANDARD COLOR AS APPROVED BY OWNER
- MANUFACTURER: PLANTERS UNLIMITED, CARLSBAD, CA  
WWW.PLANTERSUNLIMITED.COM OR APPROVED EQUAL  
PHONE: 1-888-320-0626

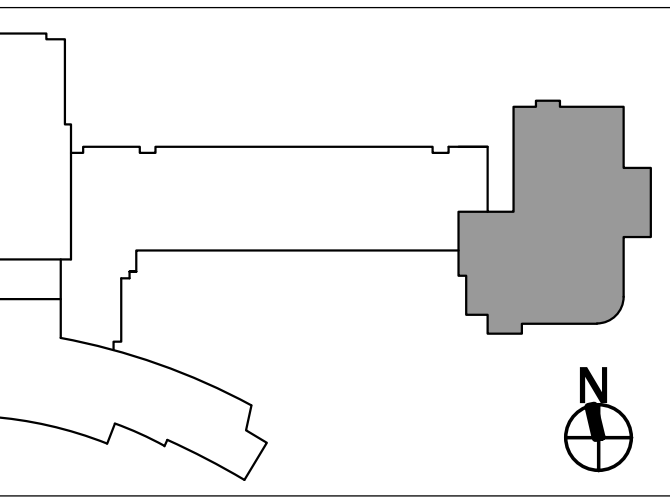
PHYSICAL THERAPY ENTRANCE PLANTER DETAIL

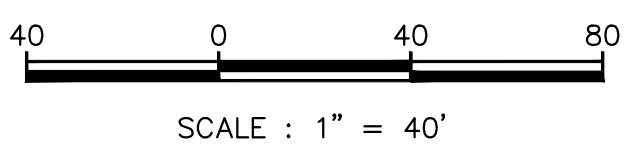
NOT TO SCALE



PLANTER PLANT LIST (PER PLANTER)						
ORNAMENTAL AND EVERGREEN TREES						
SYM	QTY	BOTANICAL NAME	COMMON NAME	INSTALLED SIZE	MATURE SIZE	REMARKS
LT	1	LAGERSTROEMIA 'TOTO'	TOTO GRAPE MYRTLE	2.5'-3' HEIGHT	8' HEIGHT, 6' SPREAD	B & B, MULTI TRUNK, DECIDUOUS DWARF ORNAMENTAL TREE
FG	6	FESTUCA GLAUCA 'ELIJAH BLUE'	ELIJAH BLUE FESCUE	2 GAL.	6\"-12\" HEIGHT AND SPREAD	ORNAMENTAL GRASS

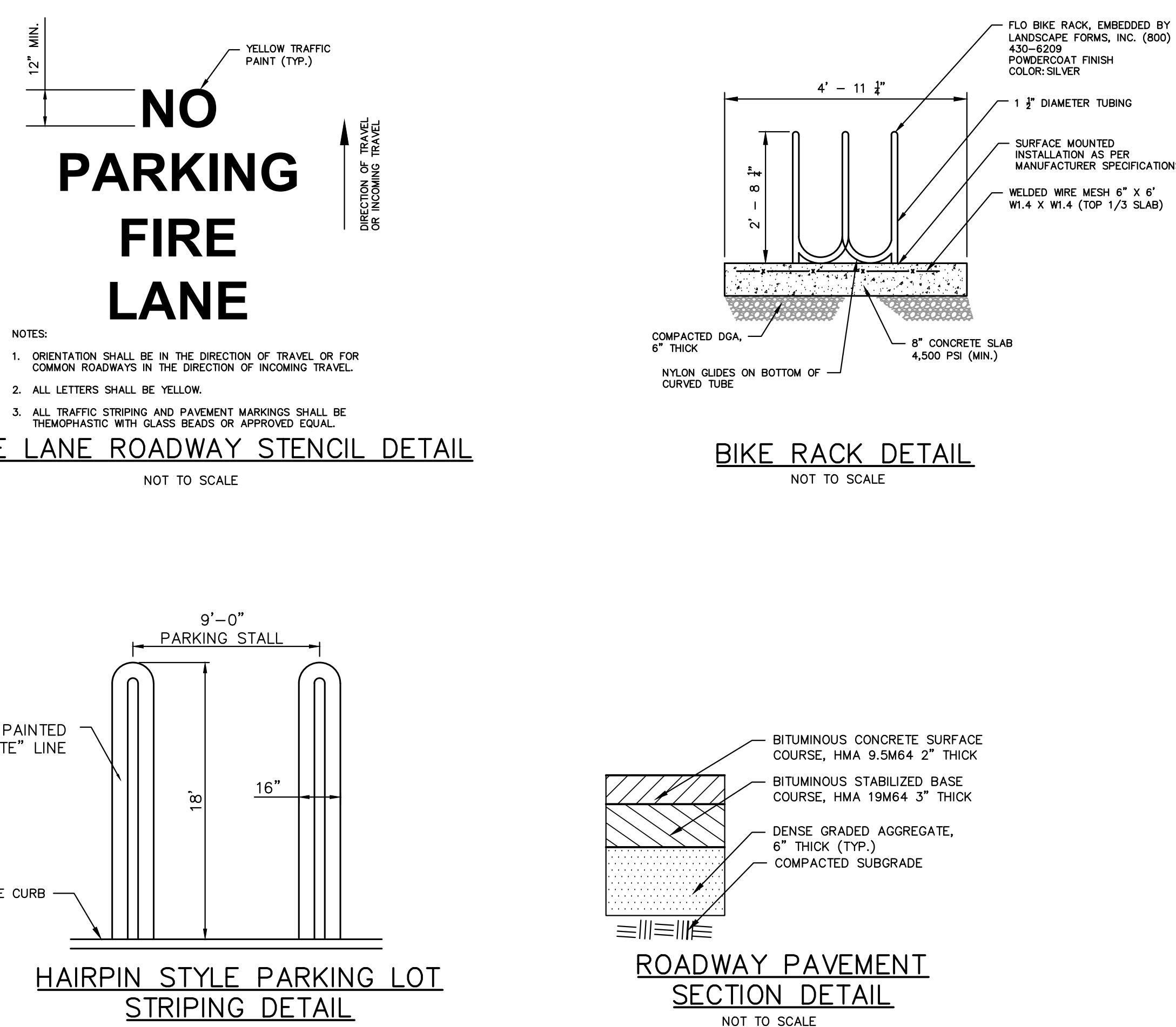
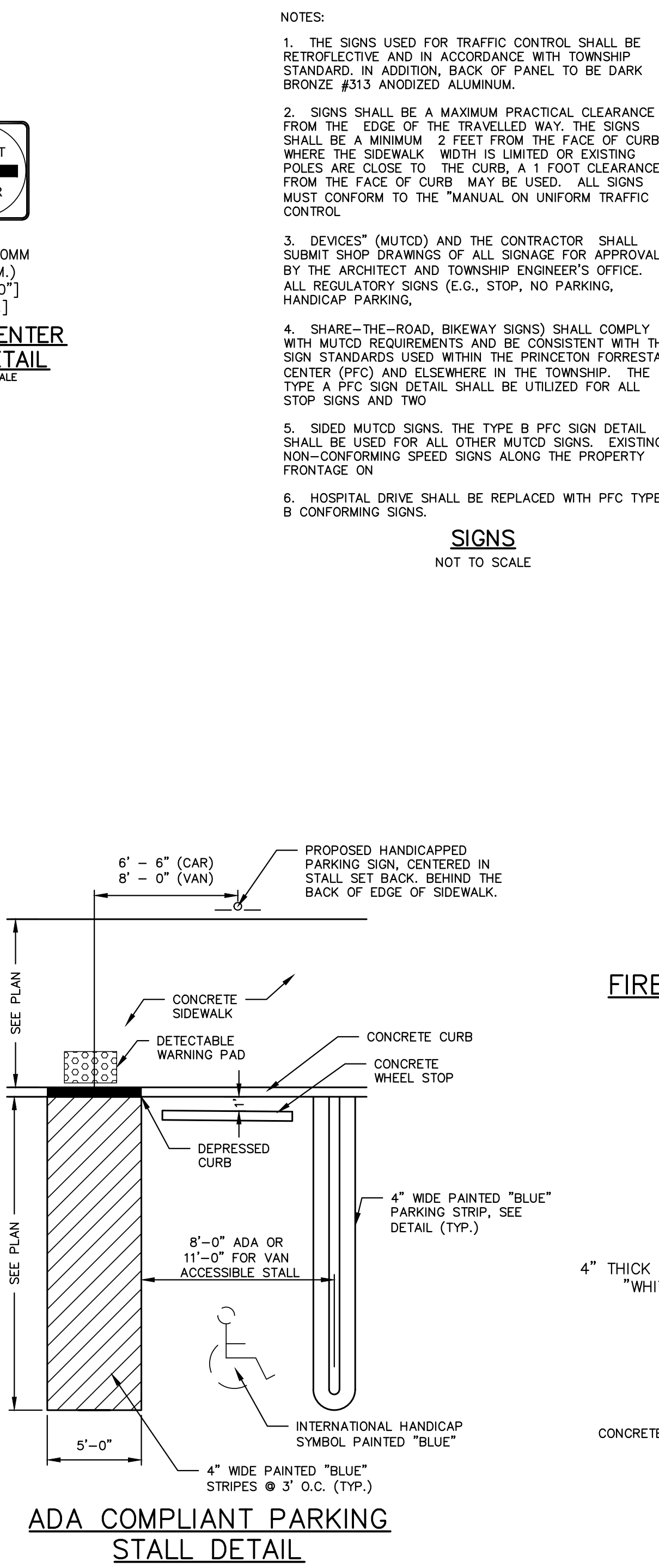
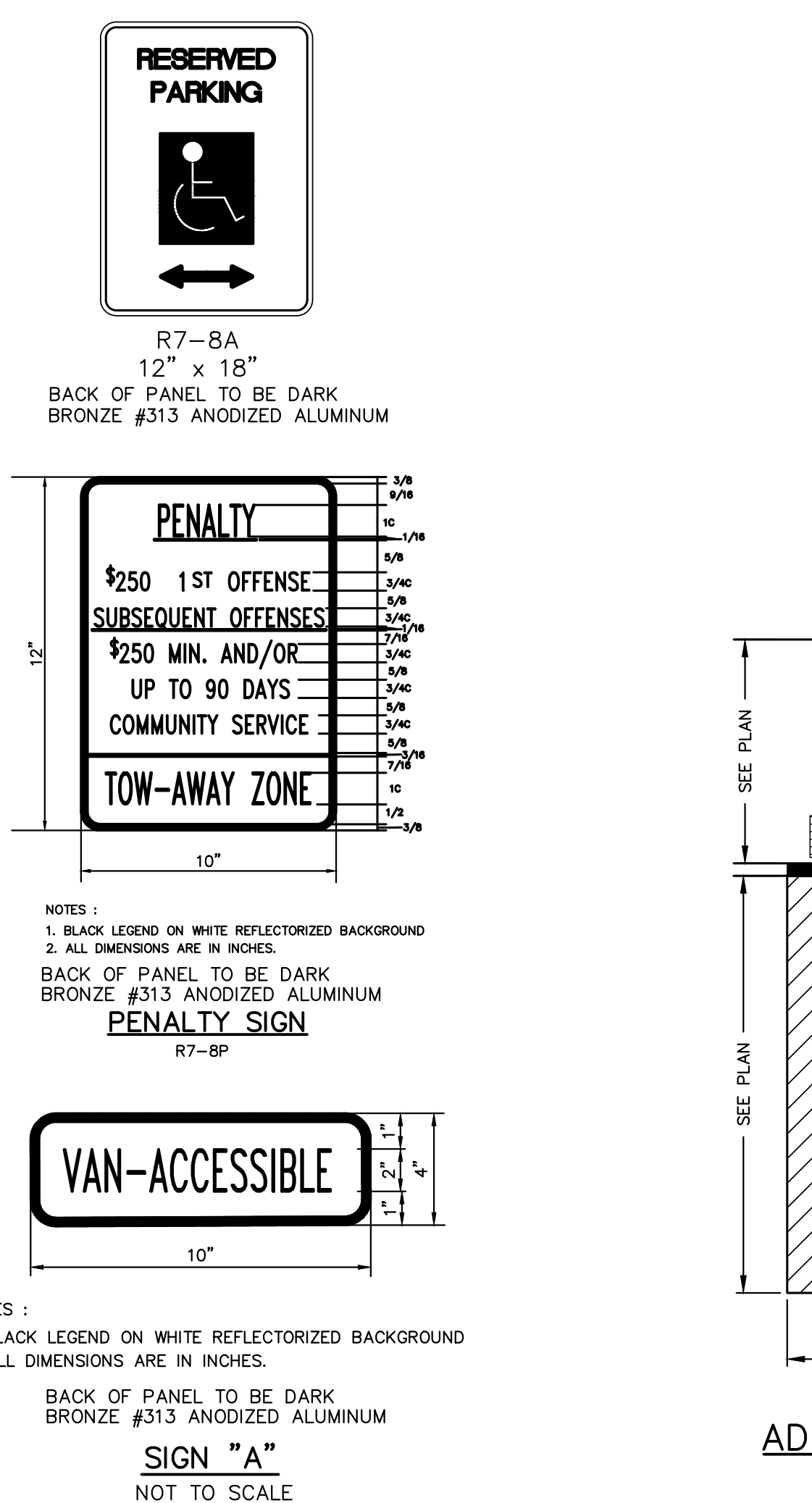
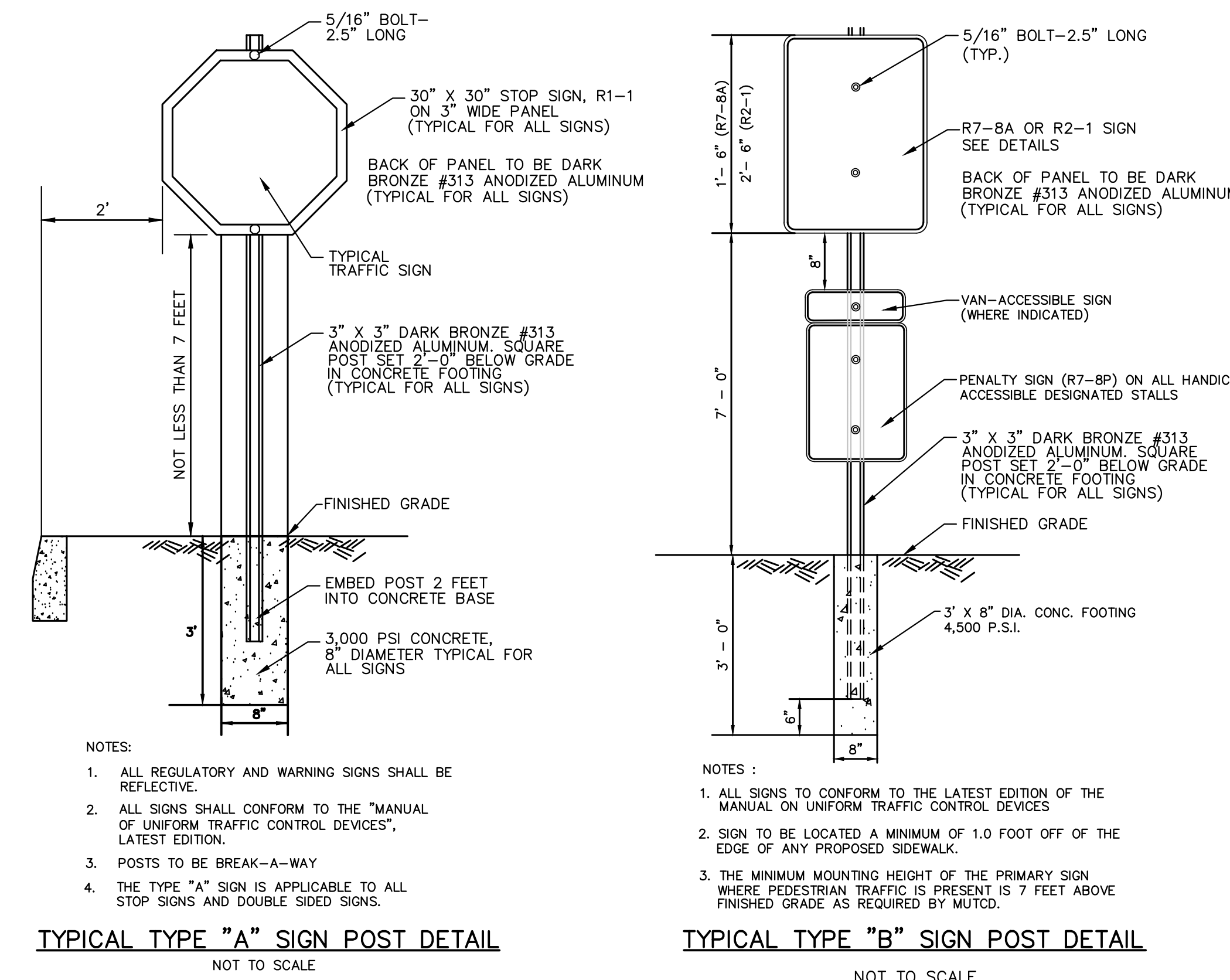
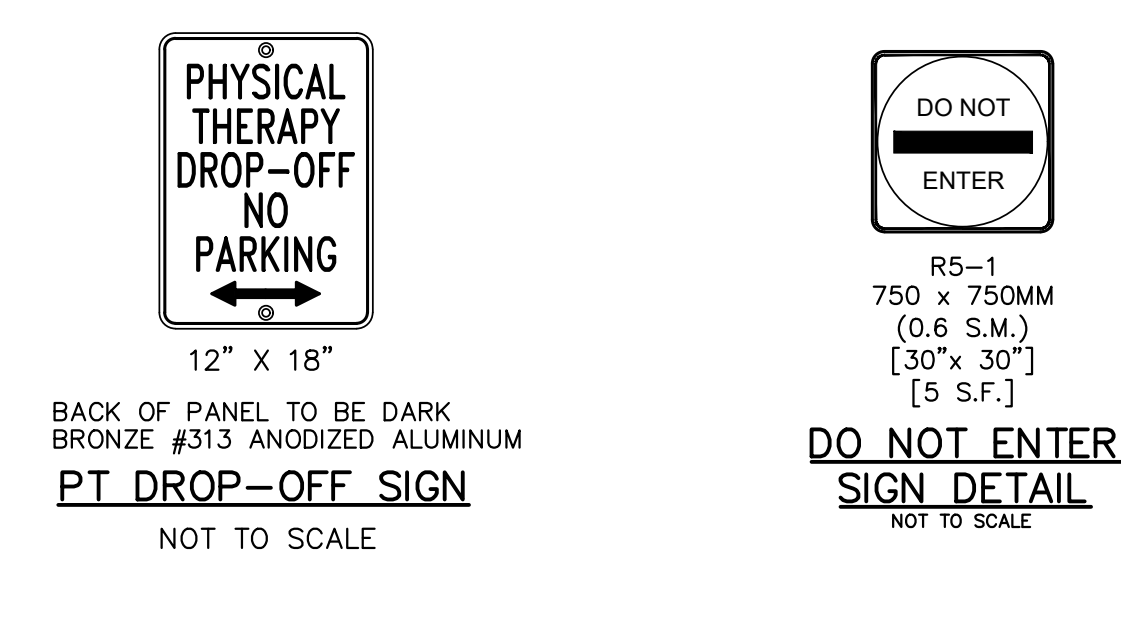
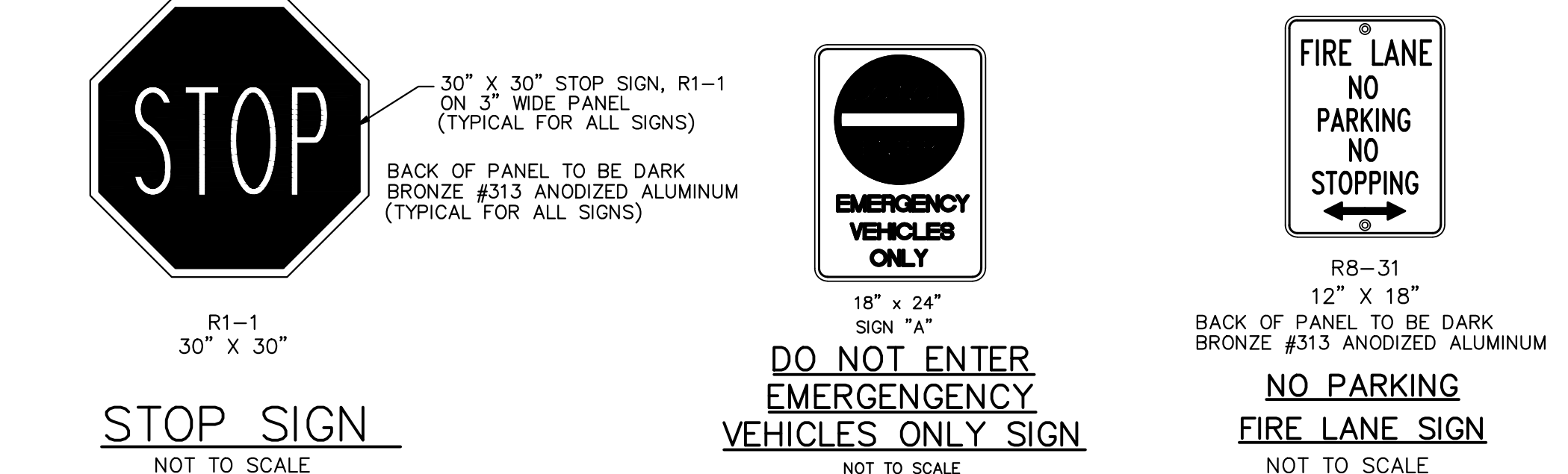
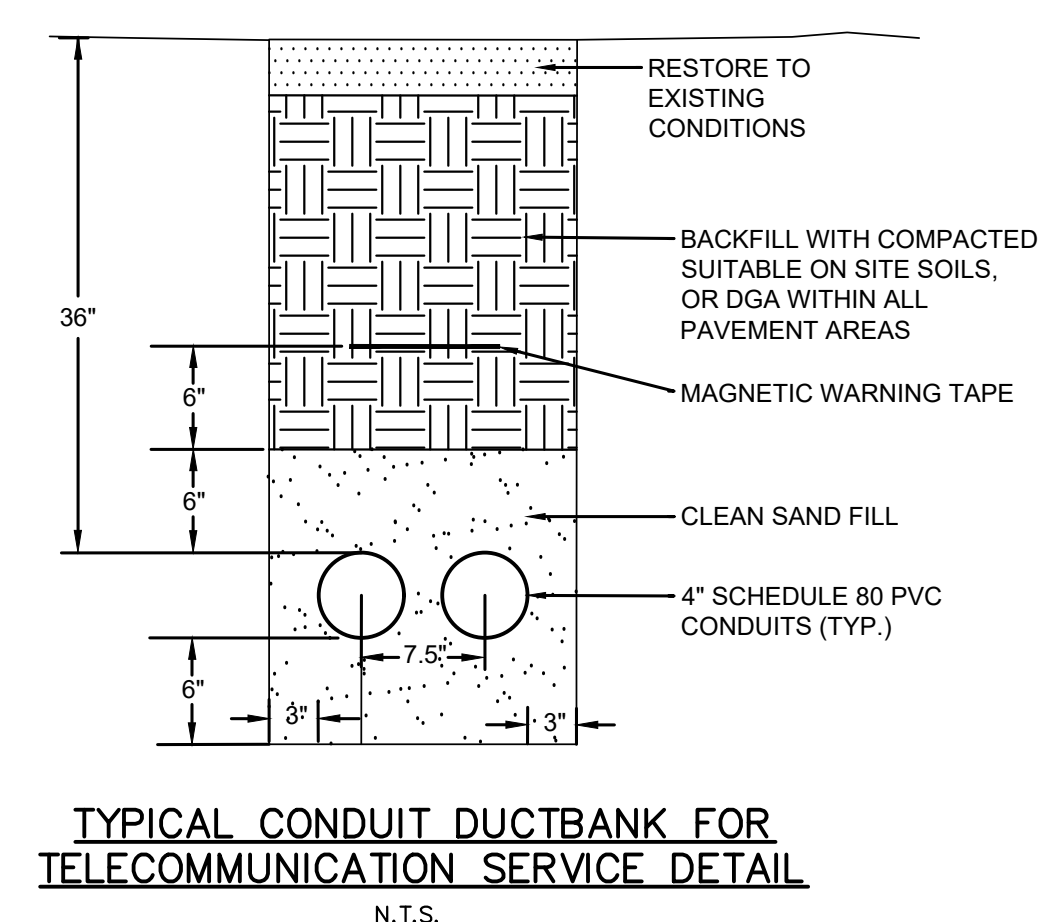
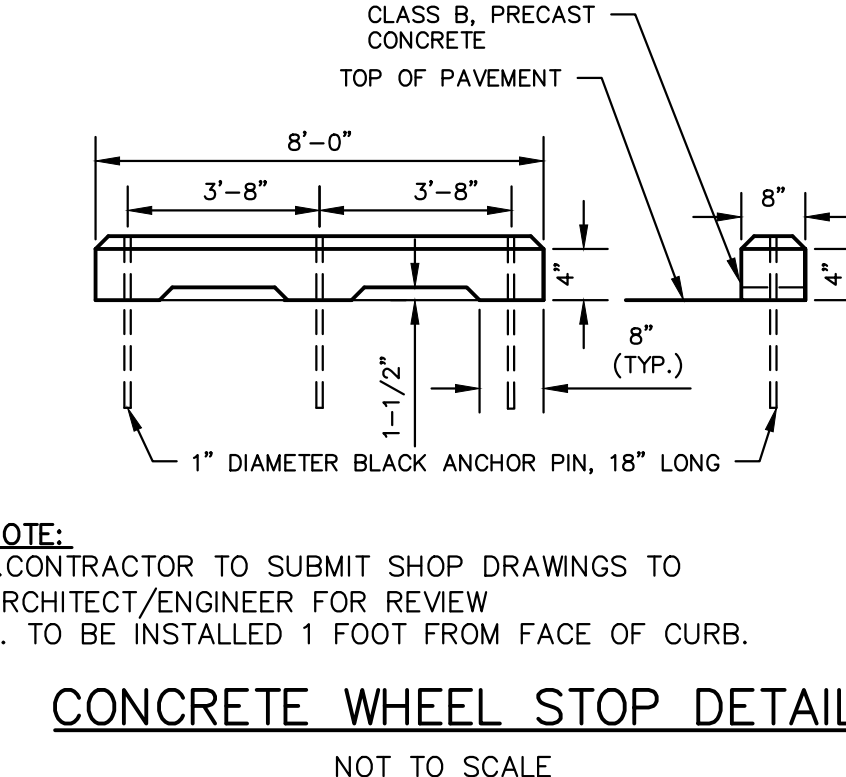
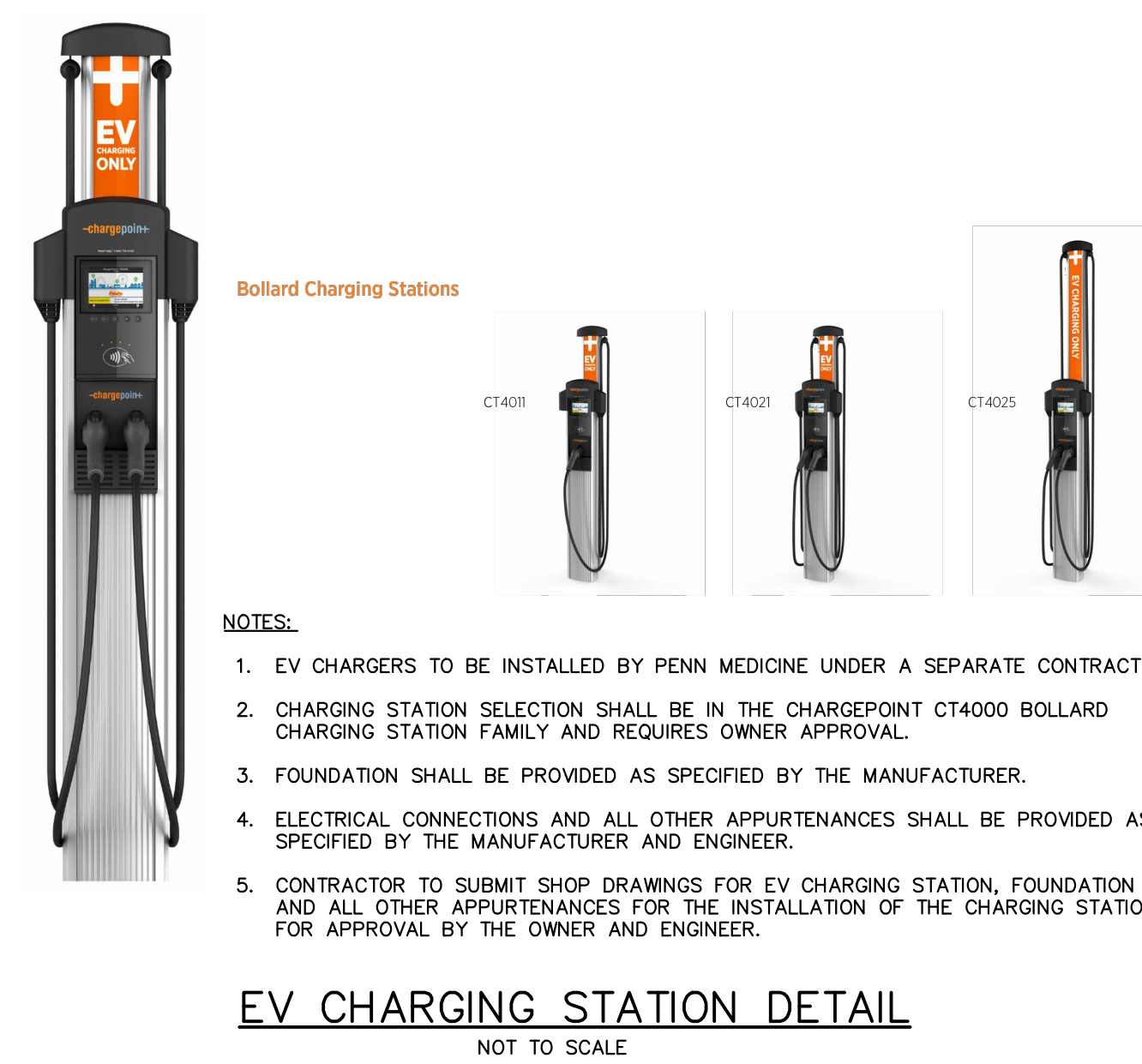
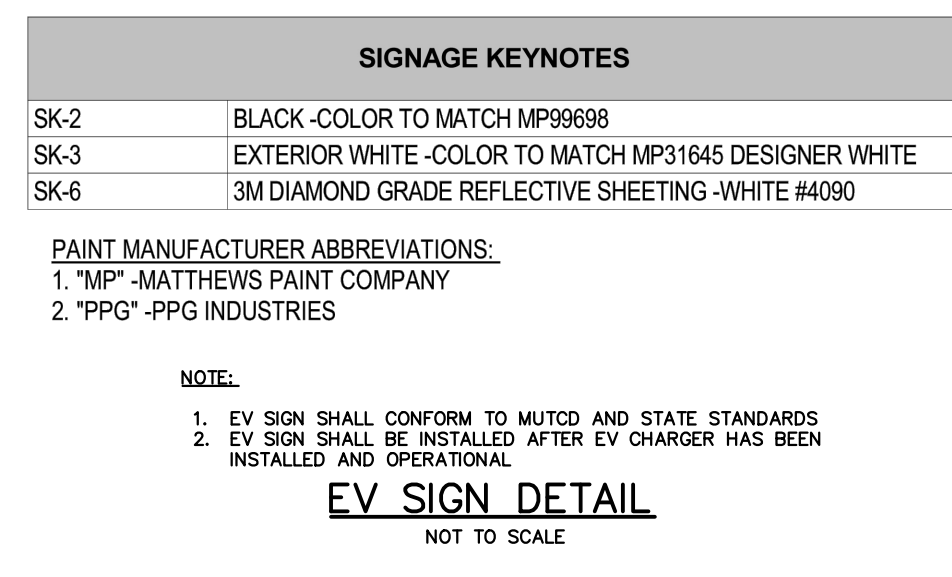
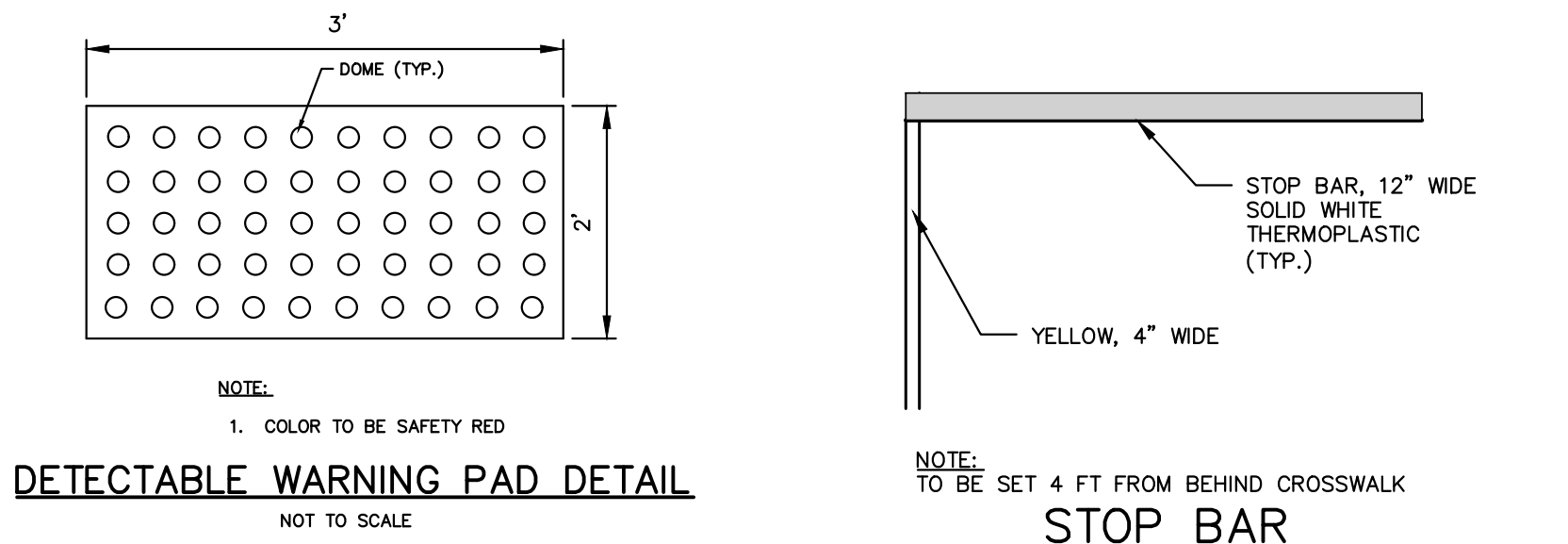
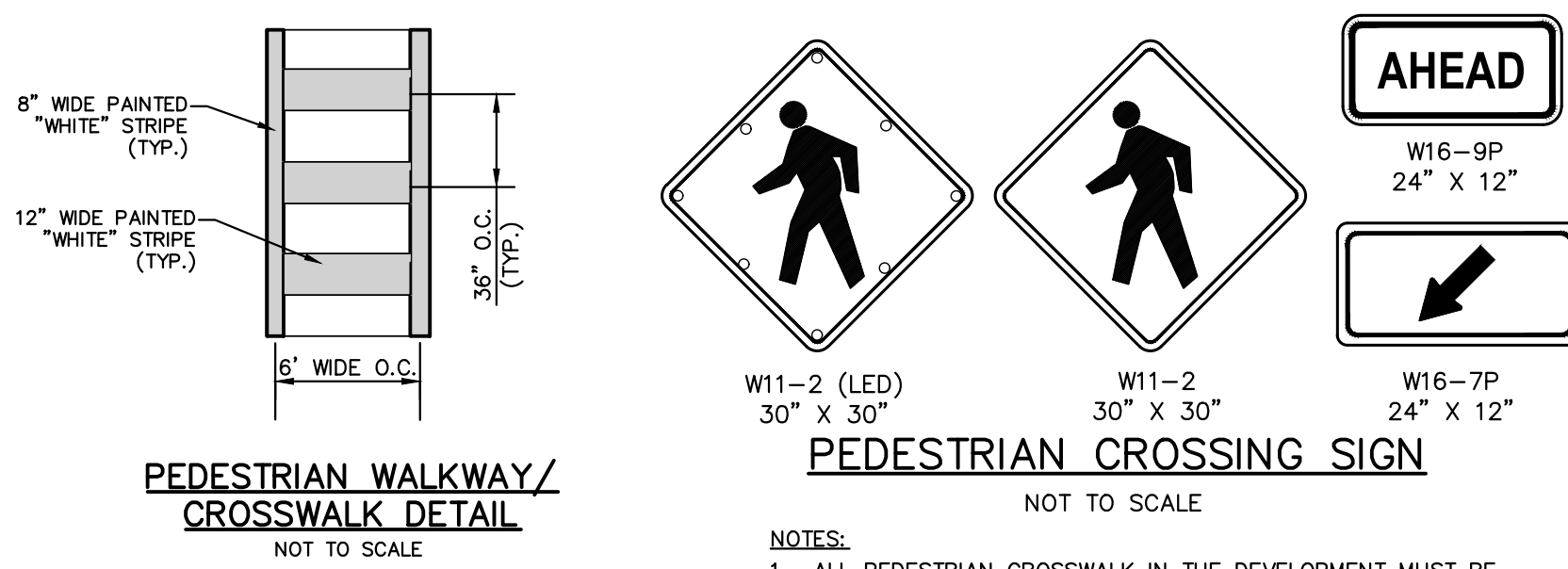
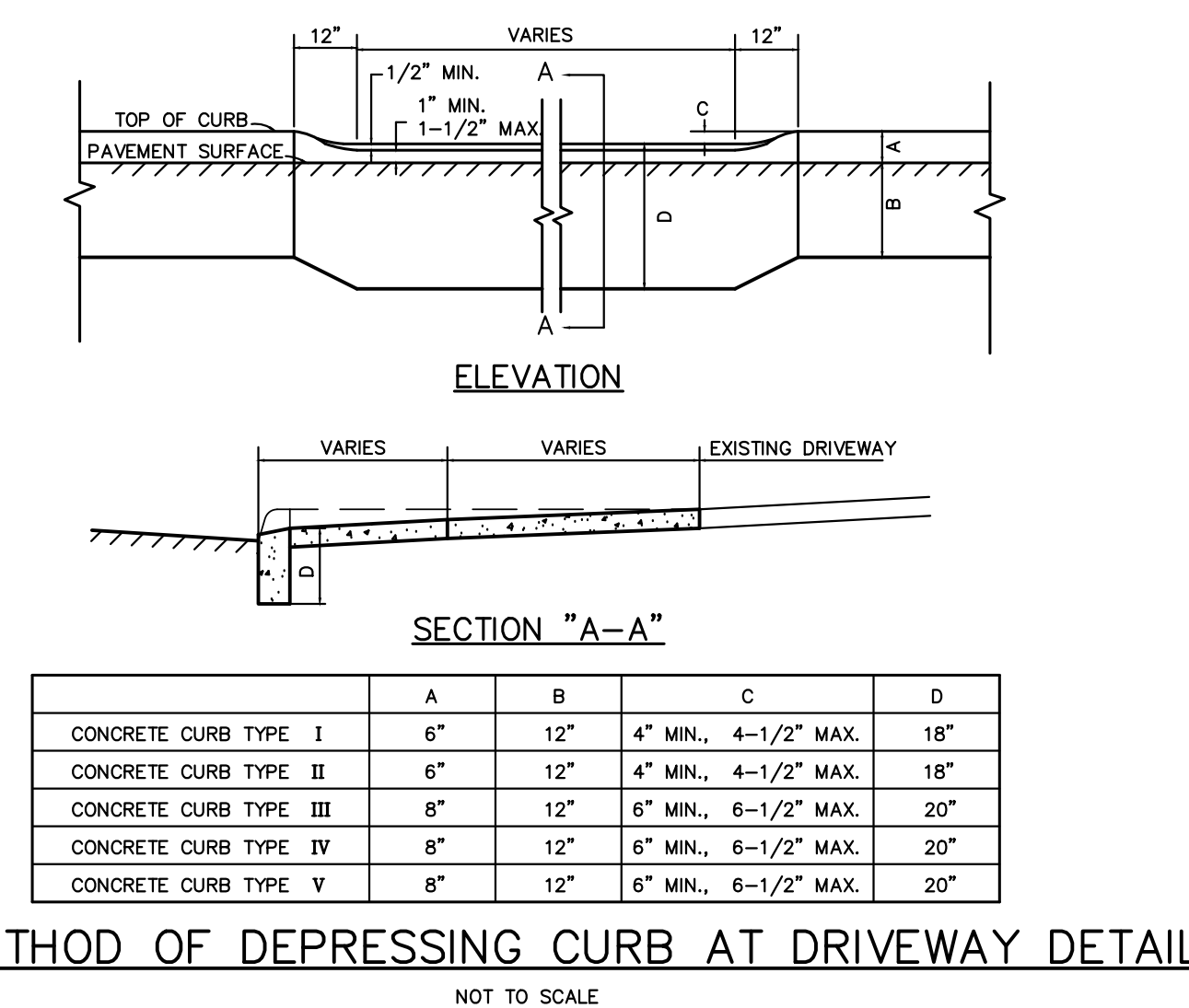
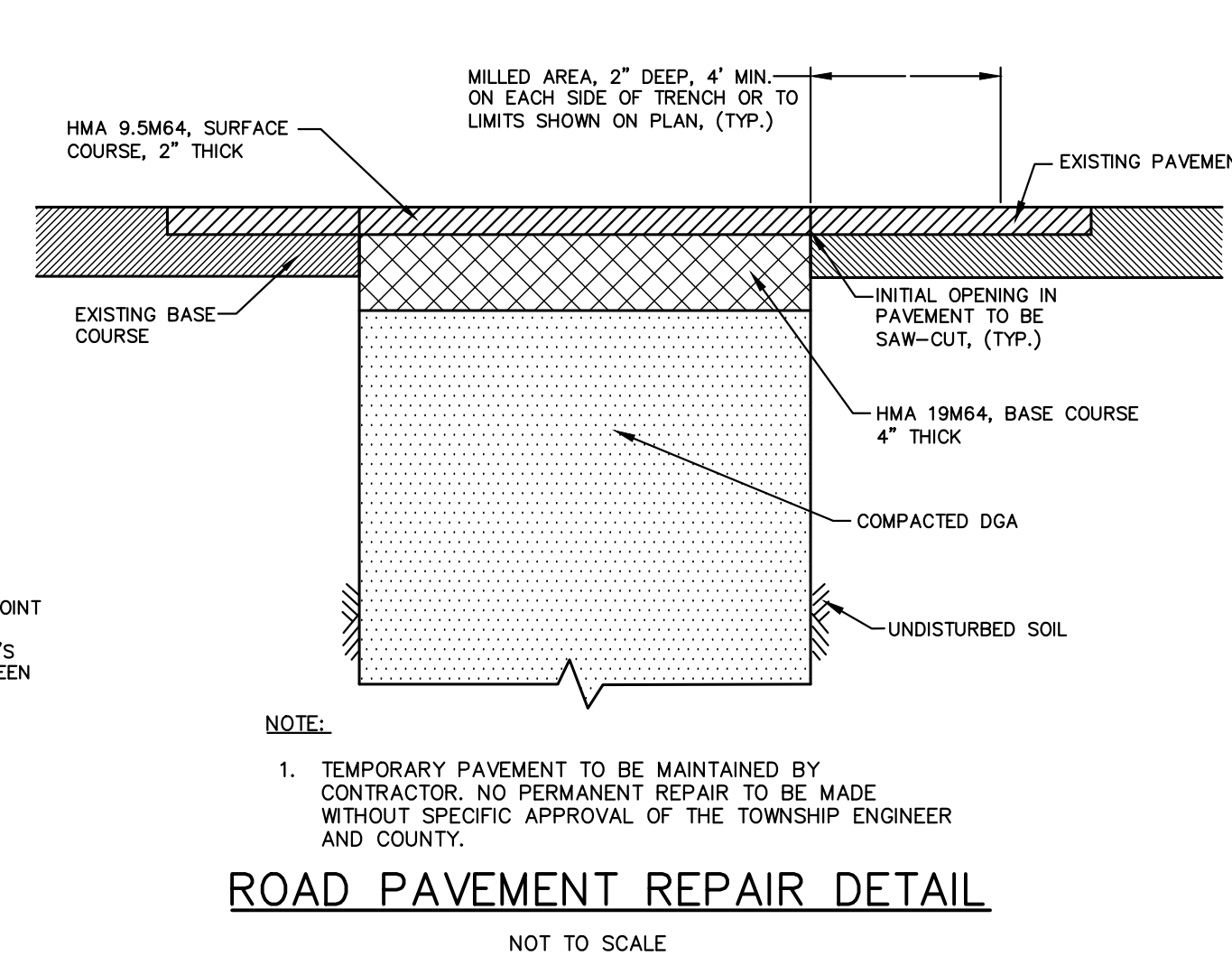
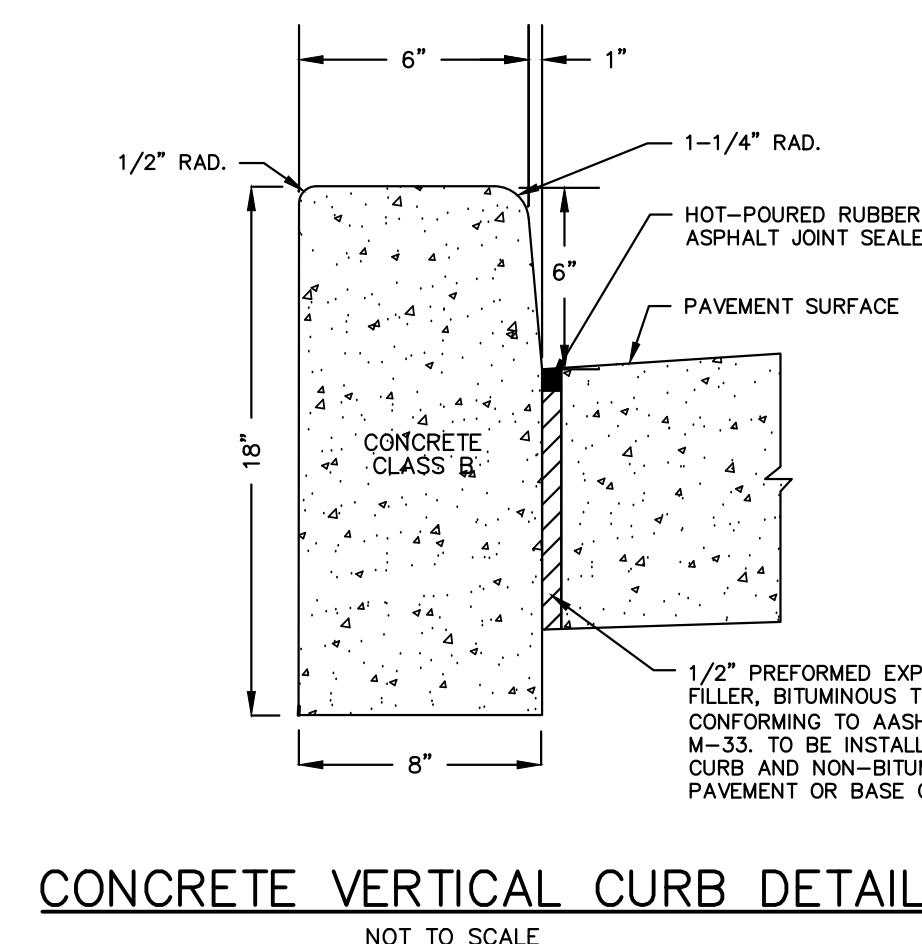
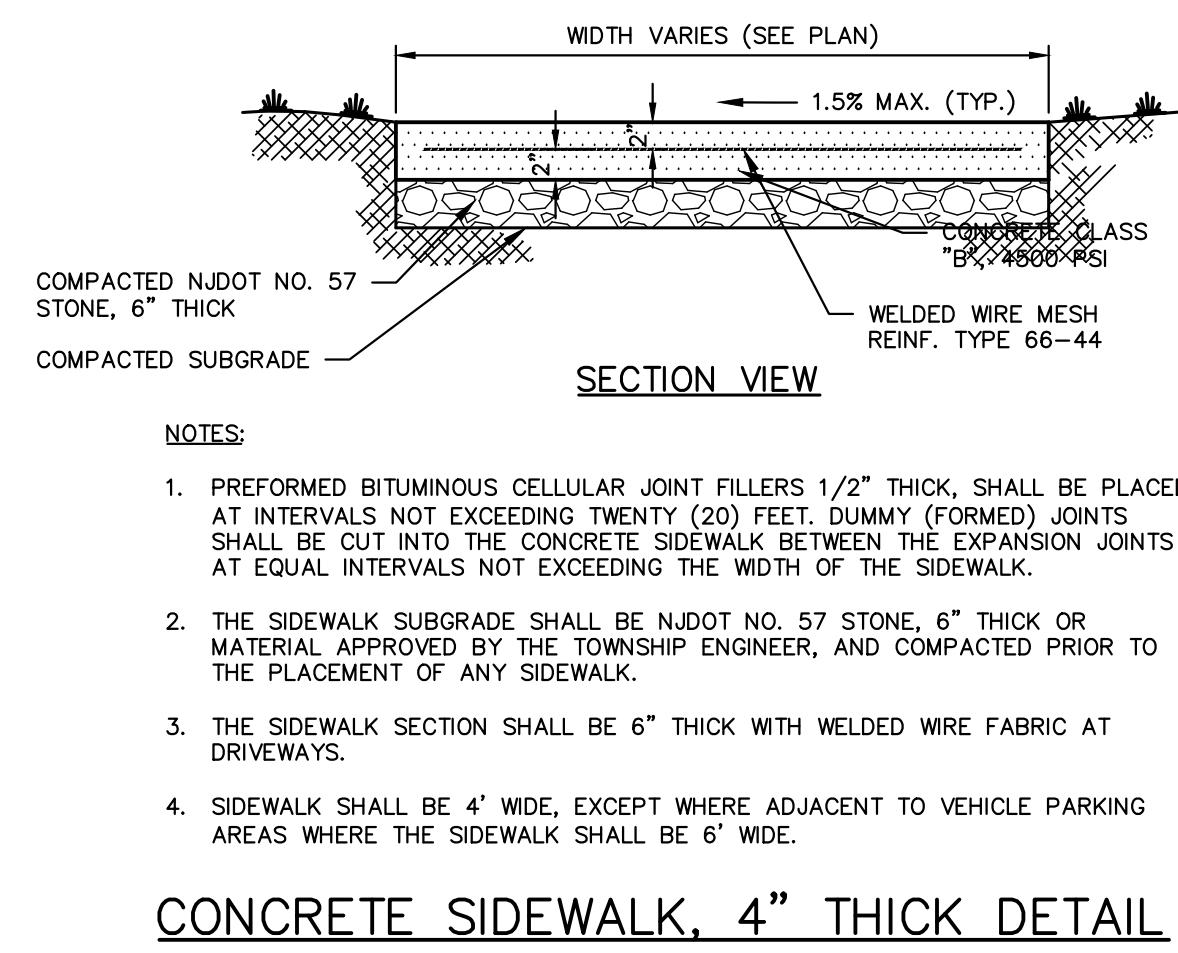
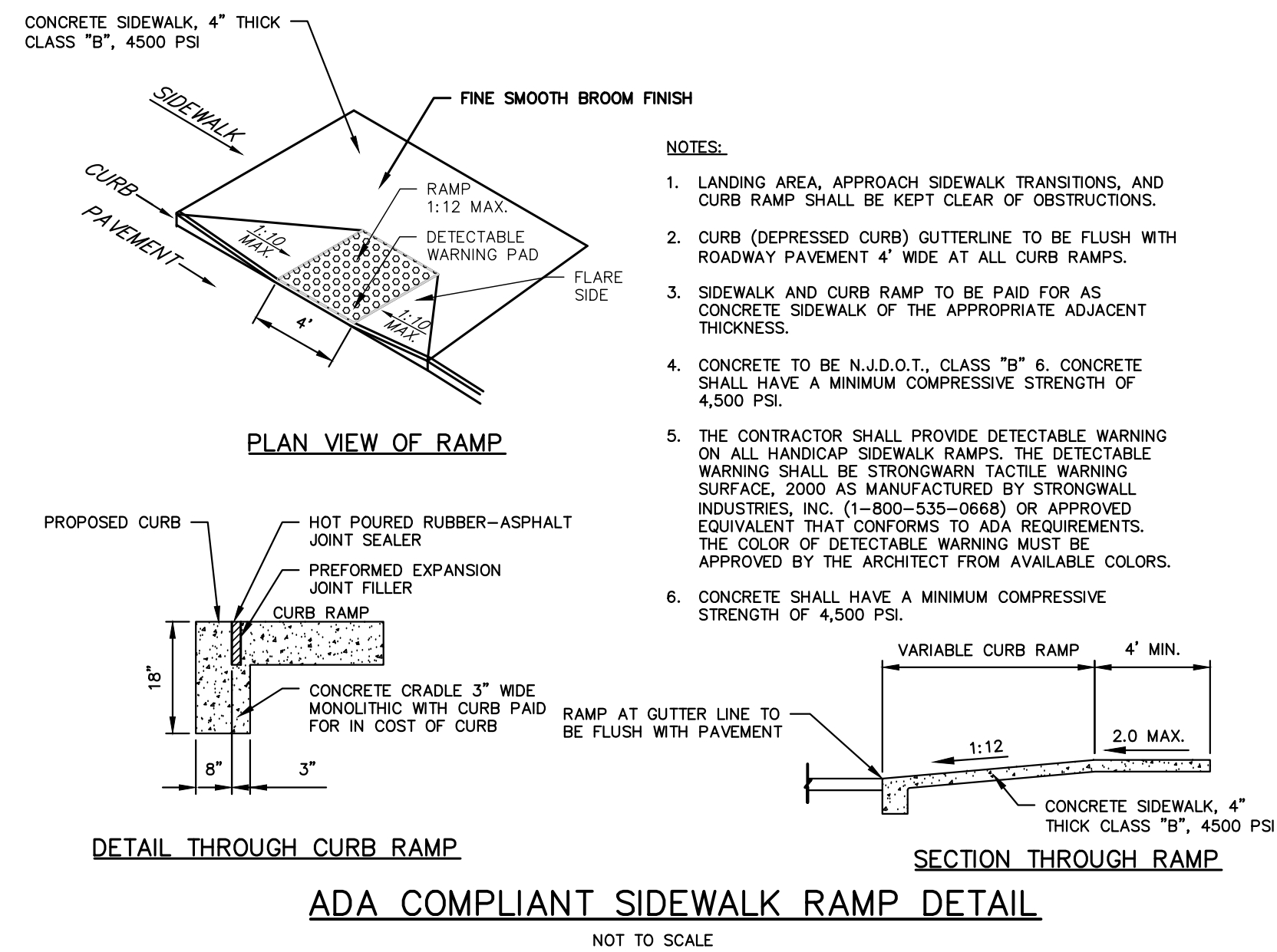
NO.	DATE	REVISIONS
1.	10/18/2024	REVISED PER DRC COMMENTS





1

07/31/2024	PACKAGE 0
08/02/2024	PACKAGE 1



1 Plainsboro Road  
Plainsboro, NJ 08536

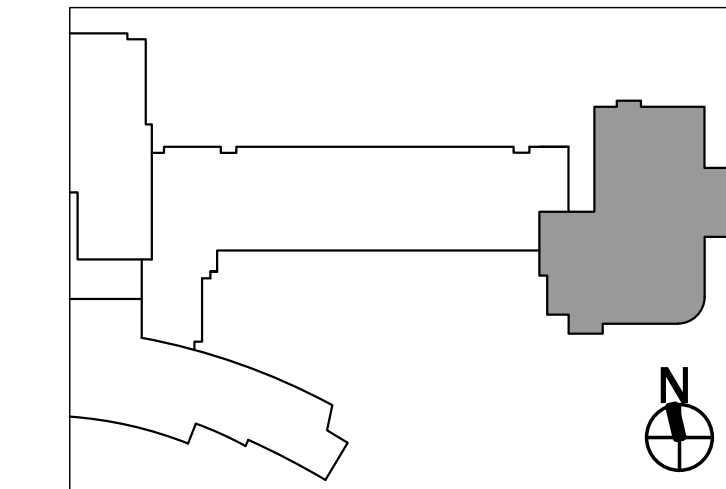
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ANDREW L. FRENCH, P.E.  
PROFESSIONAL ENGINEER, N.J. LIC. NO. 42894

NO.	DATE	REVISION	DESCRIPTION
1.	10/18/2024	REVISED PER DRC COMMENTS	



PENN MEDICINE PRINCETON HEALTH CCIC

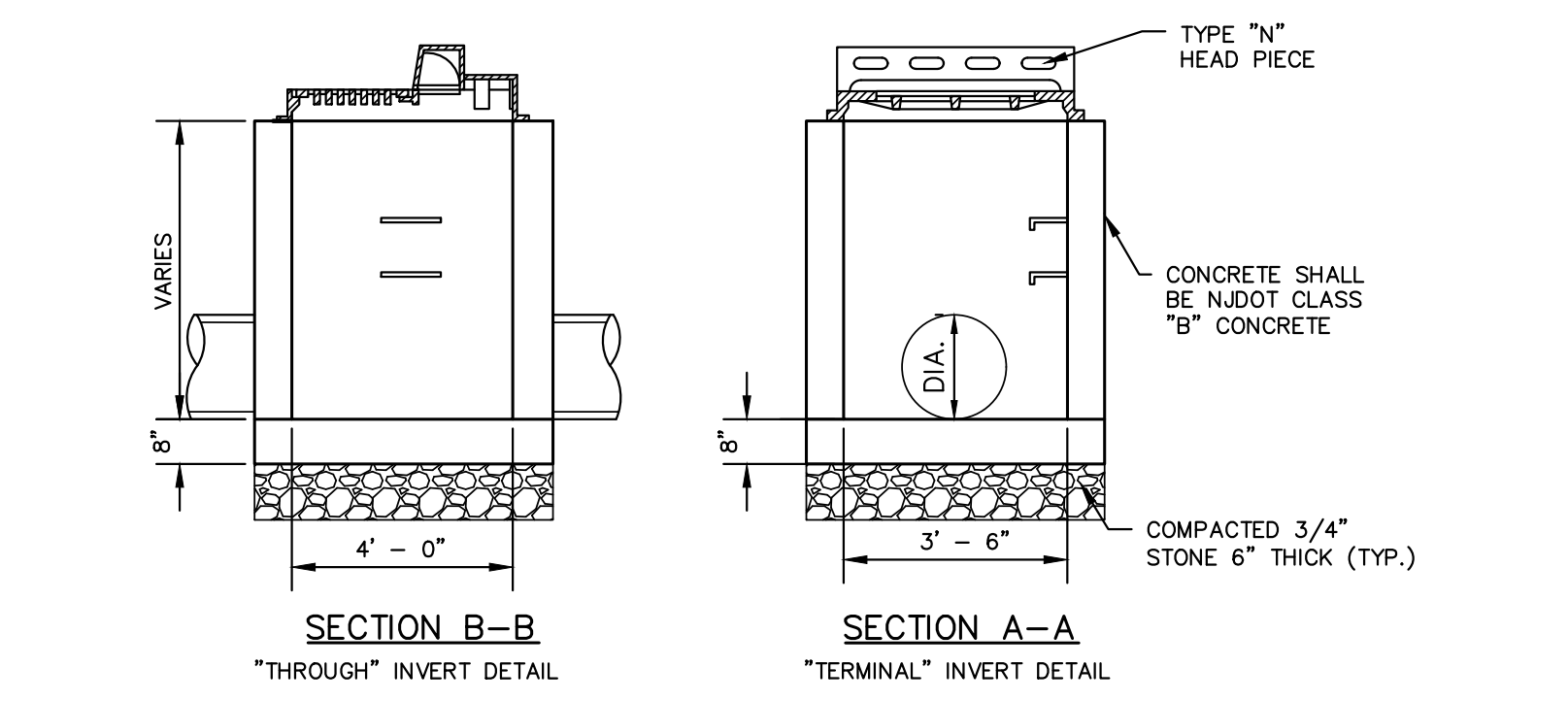
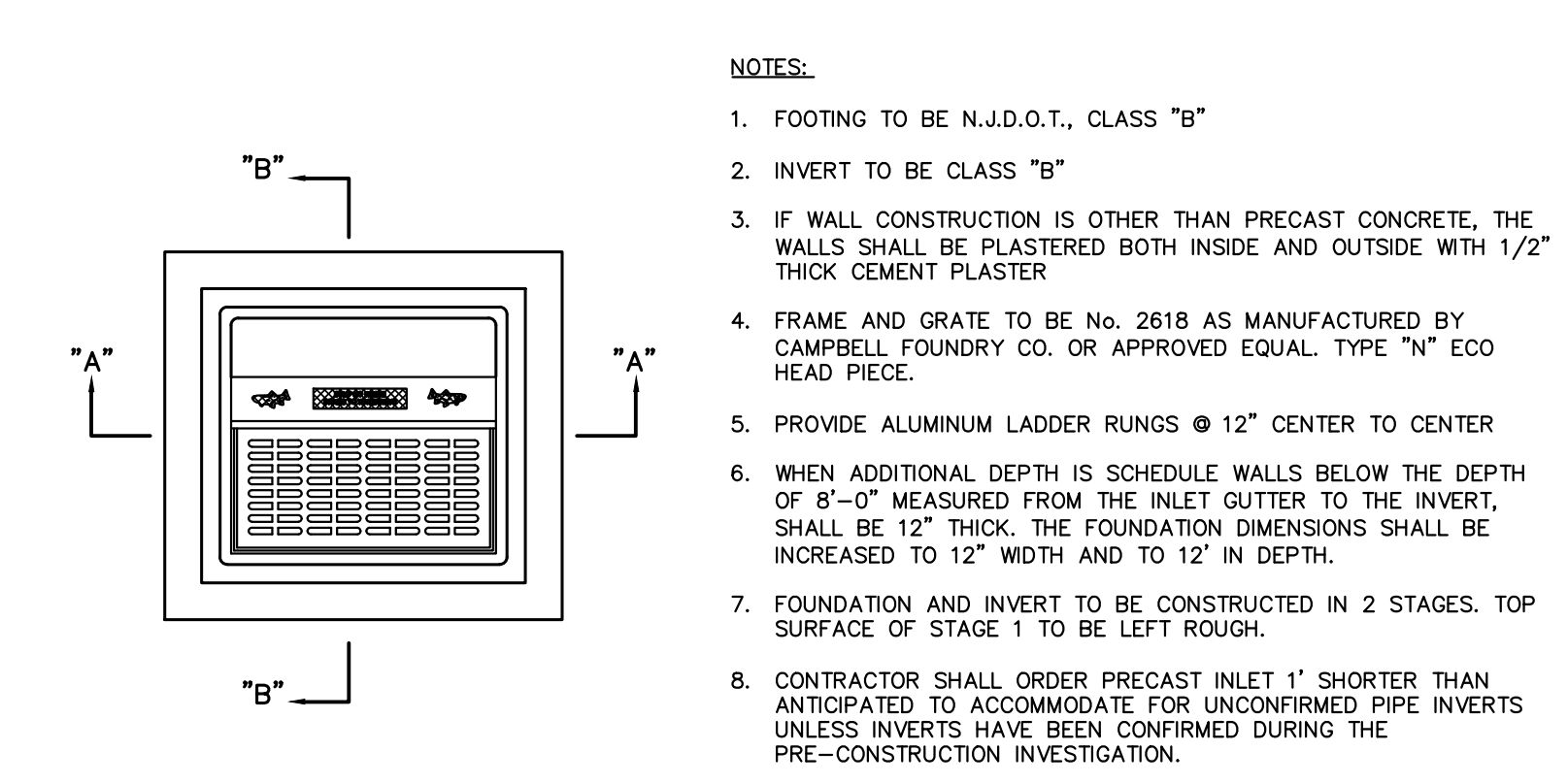
1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5287.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

CONSTRUCTION DETAILS - GENERAL CONSTRUCTION

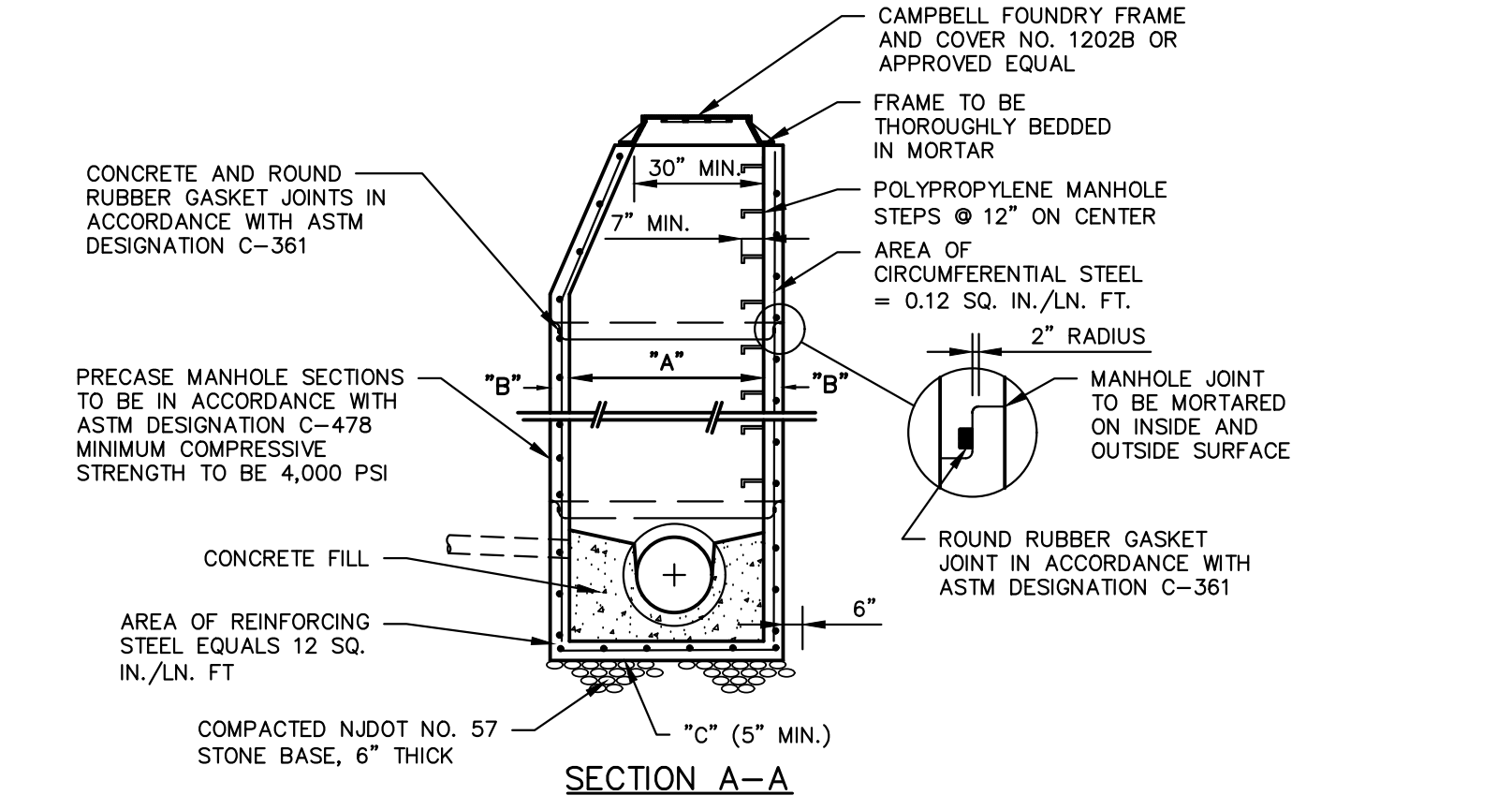
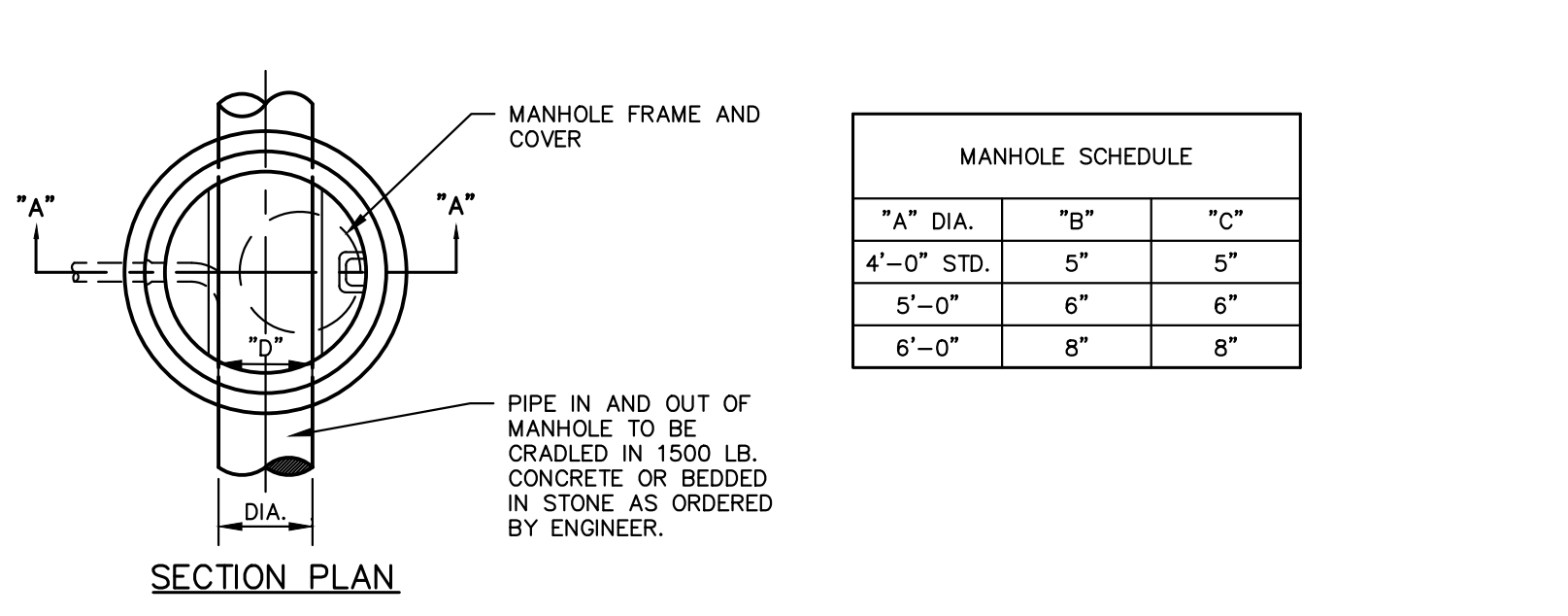
C223

07/31/2024  
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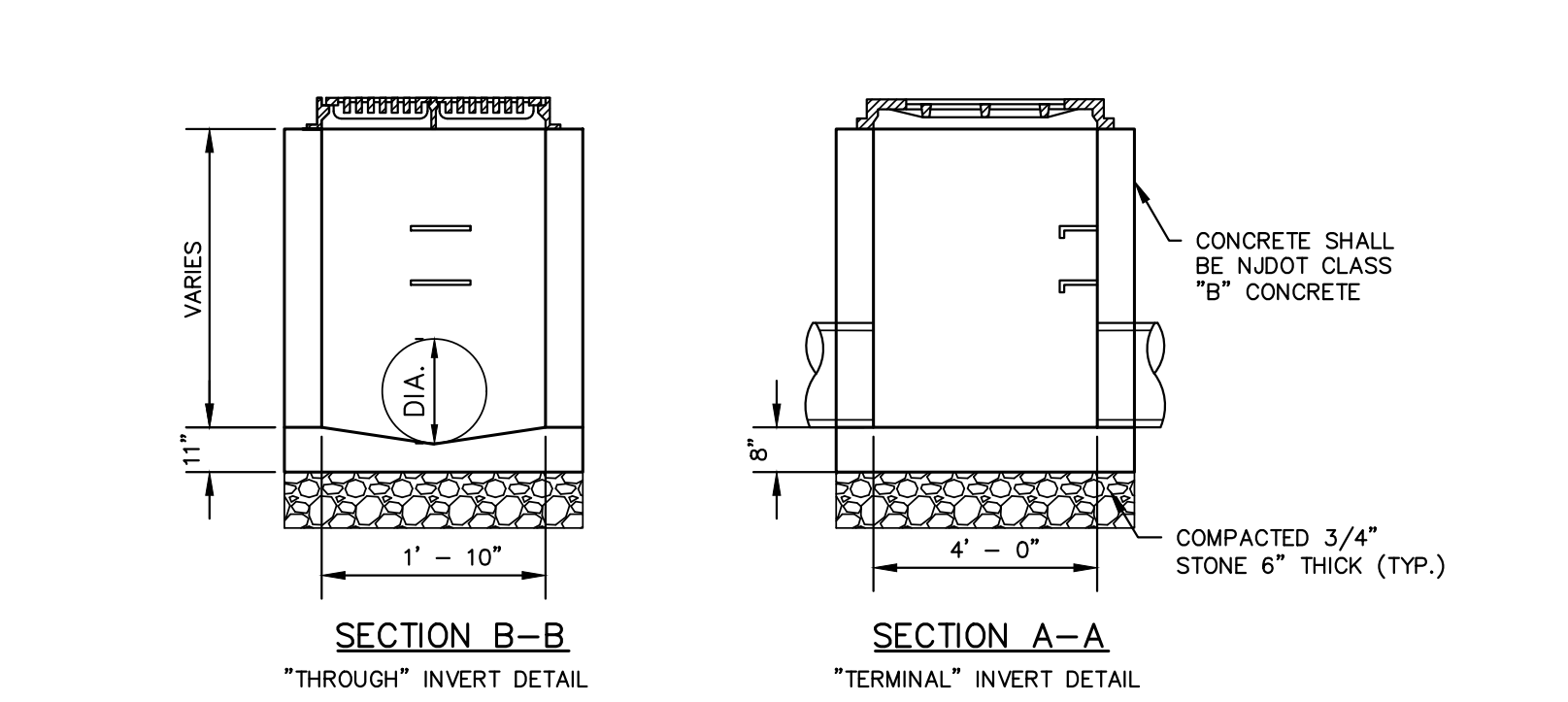
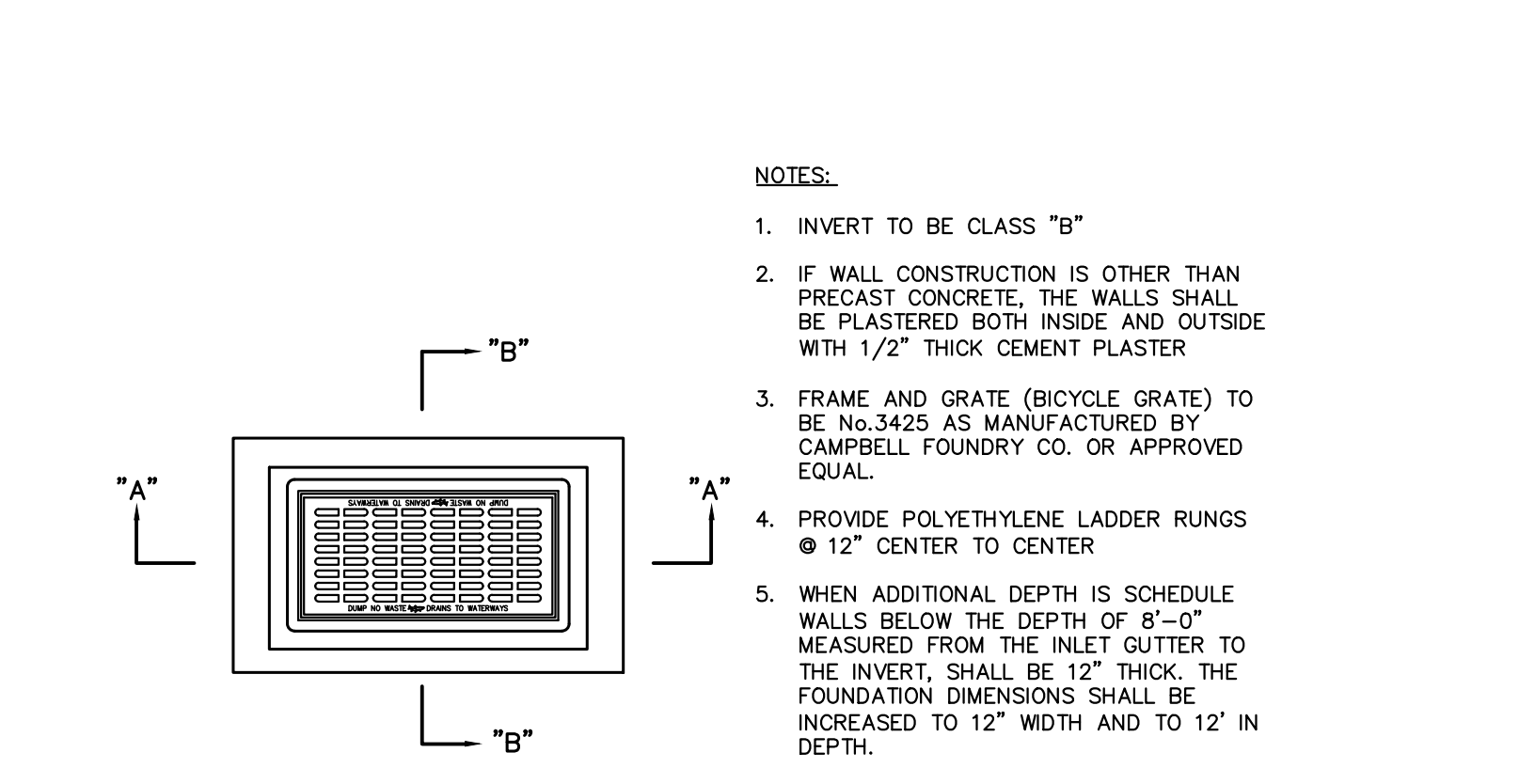
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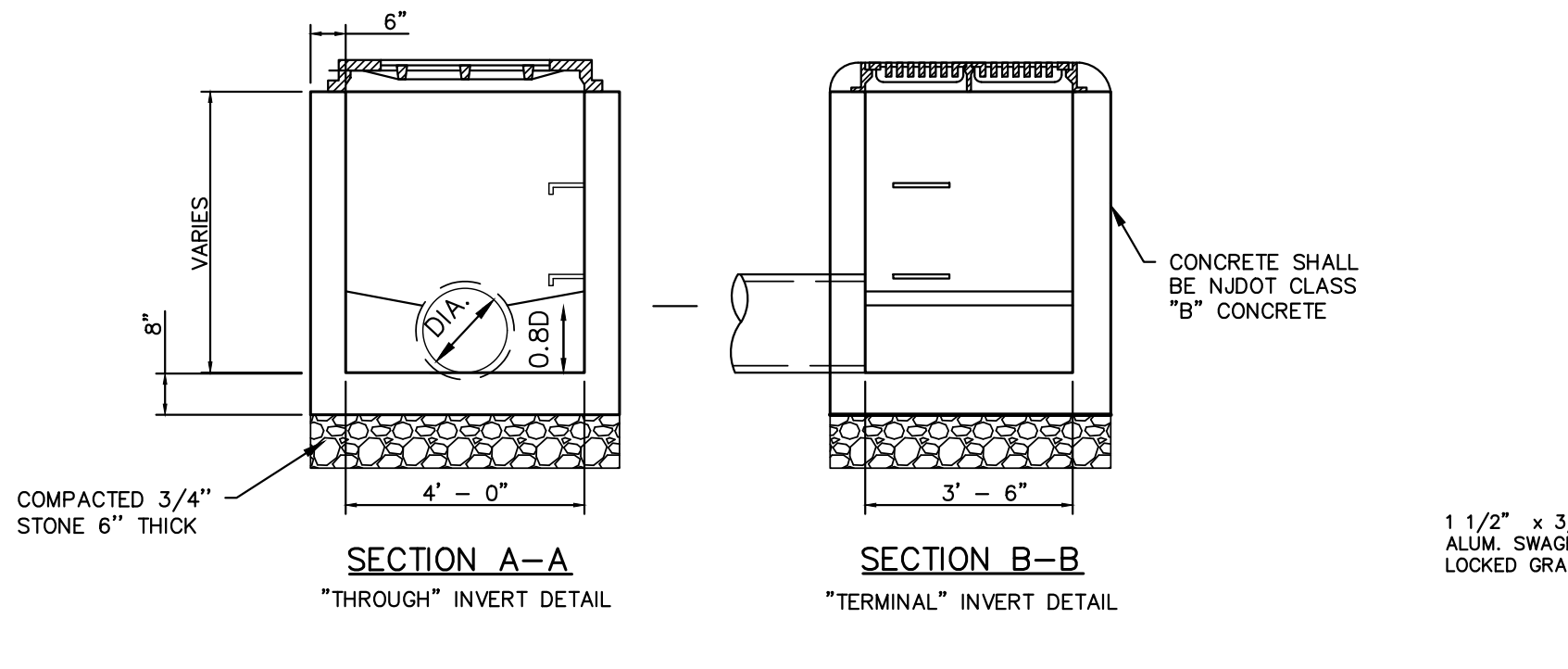
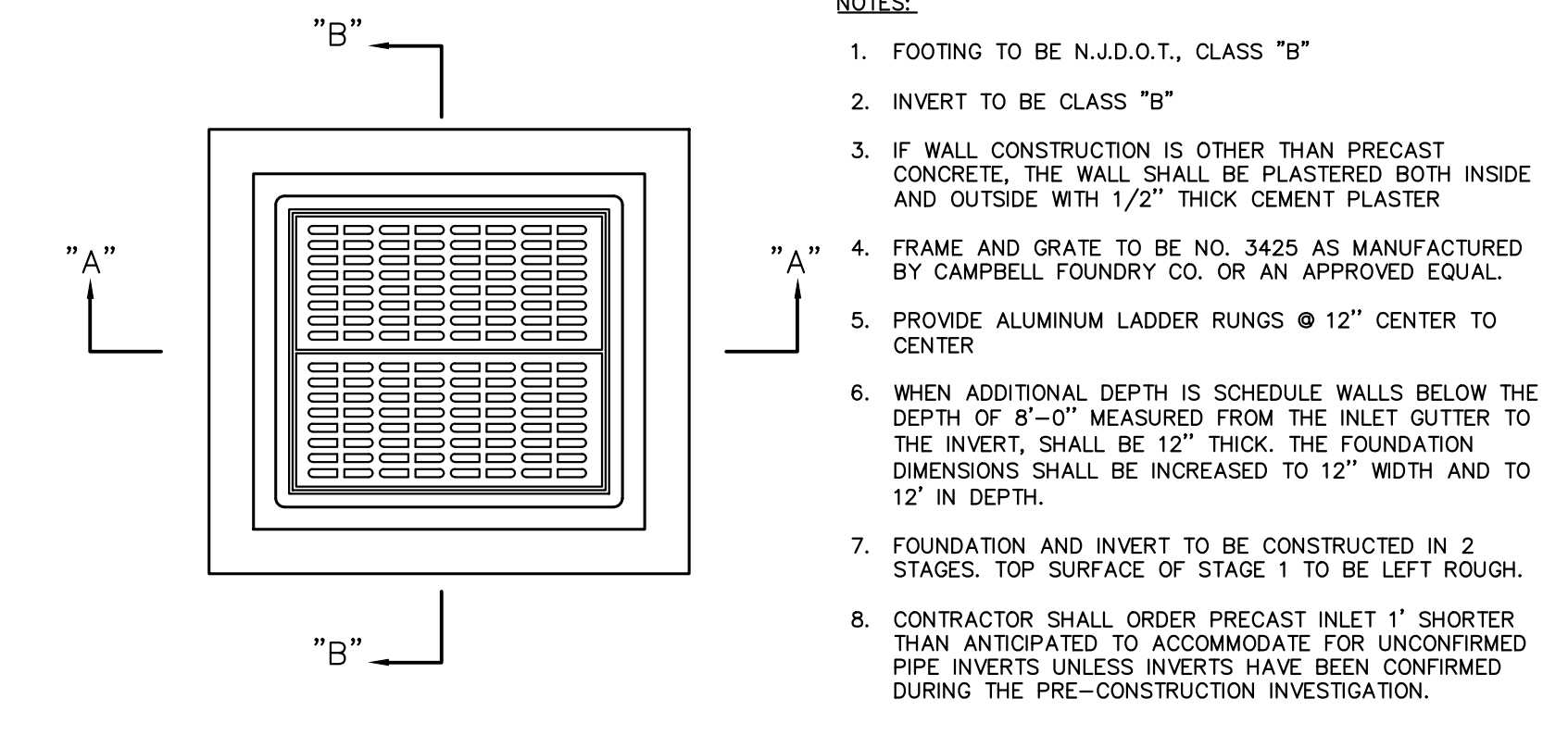
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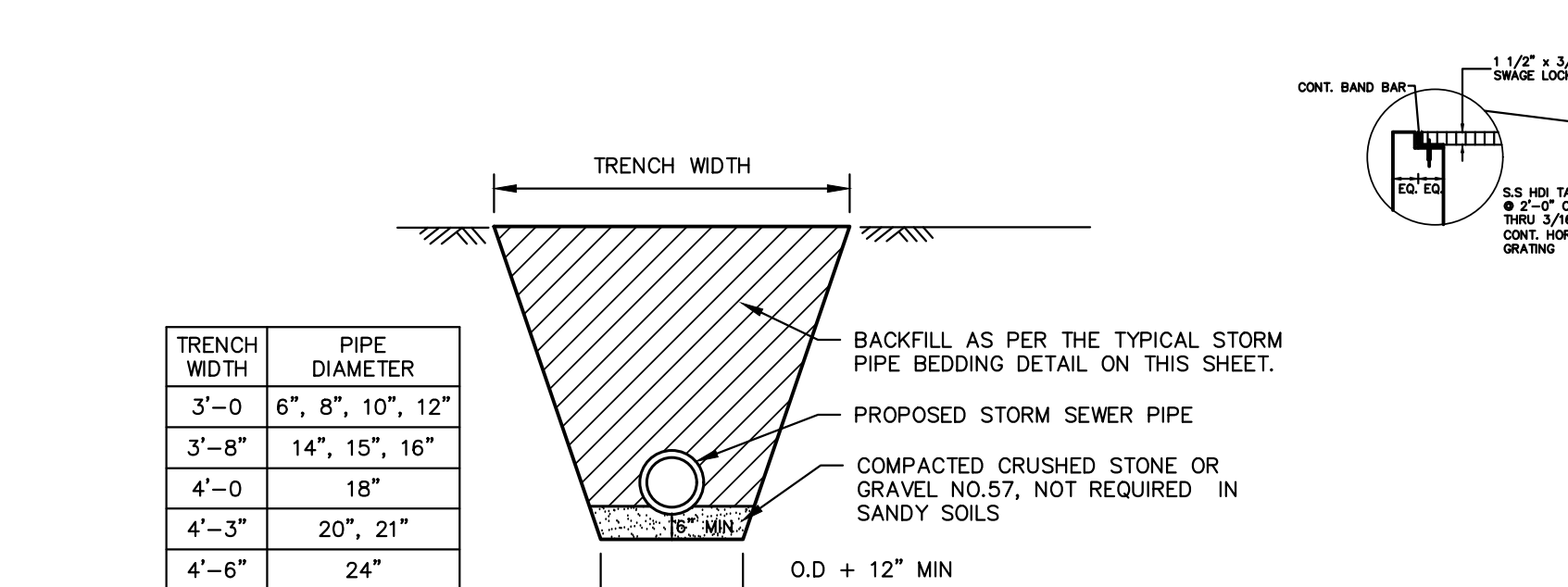
PRECAST STANDARD STORM MANHOLE  
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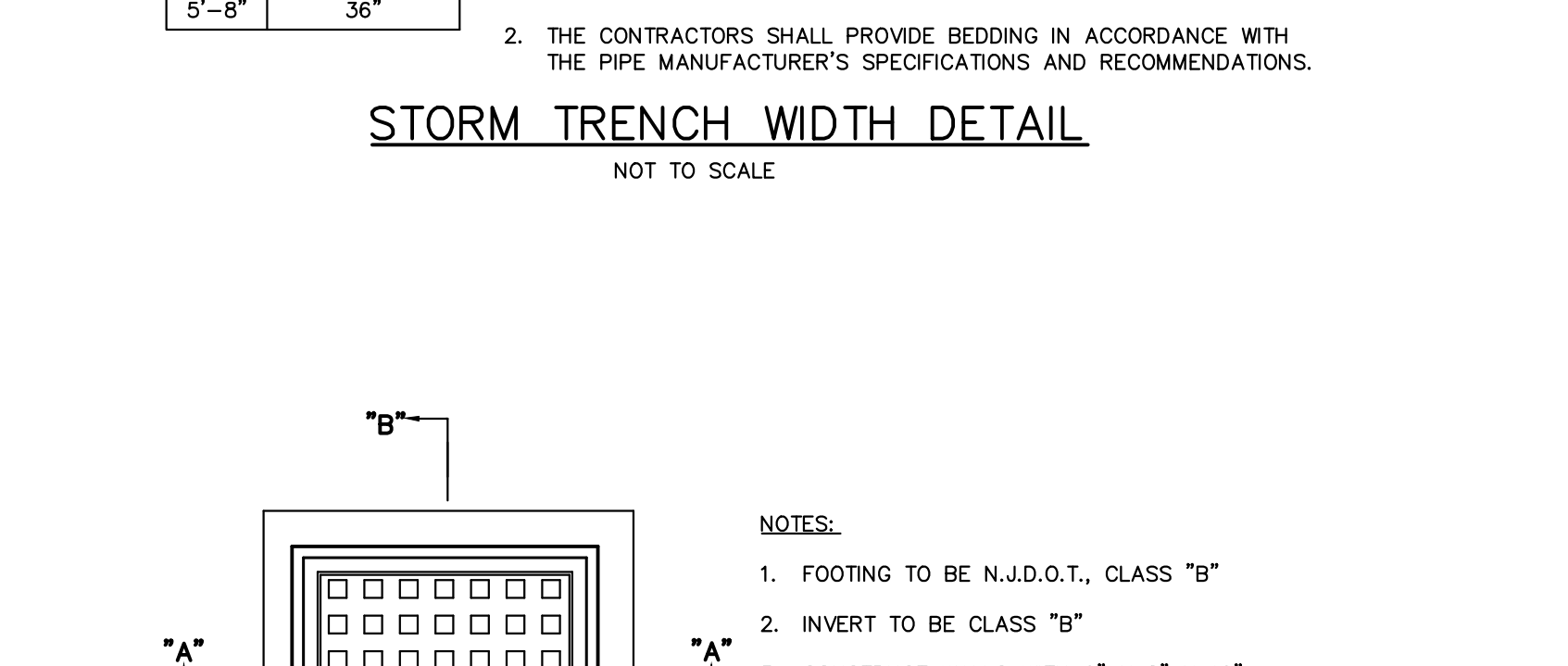
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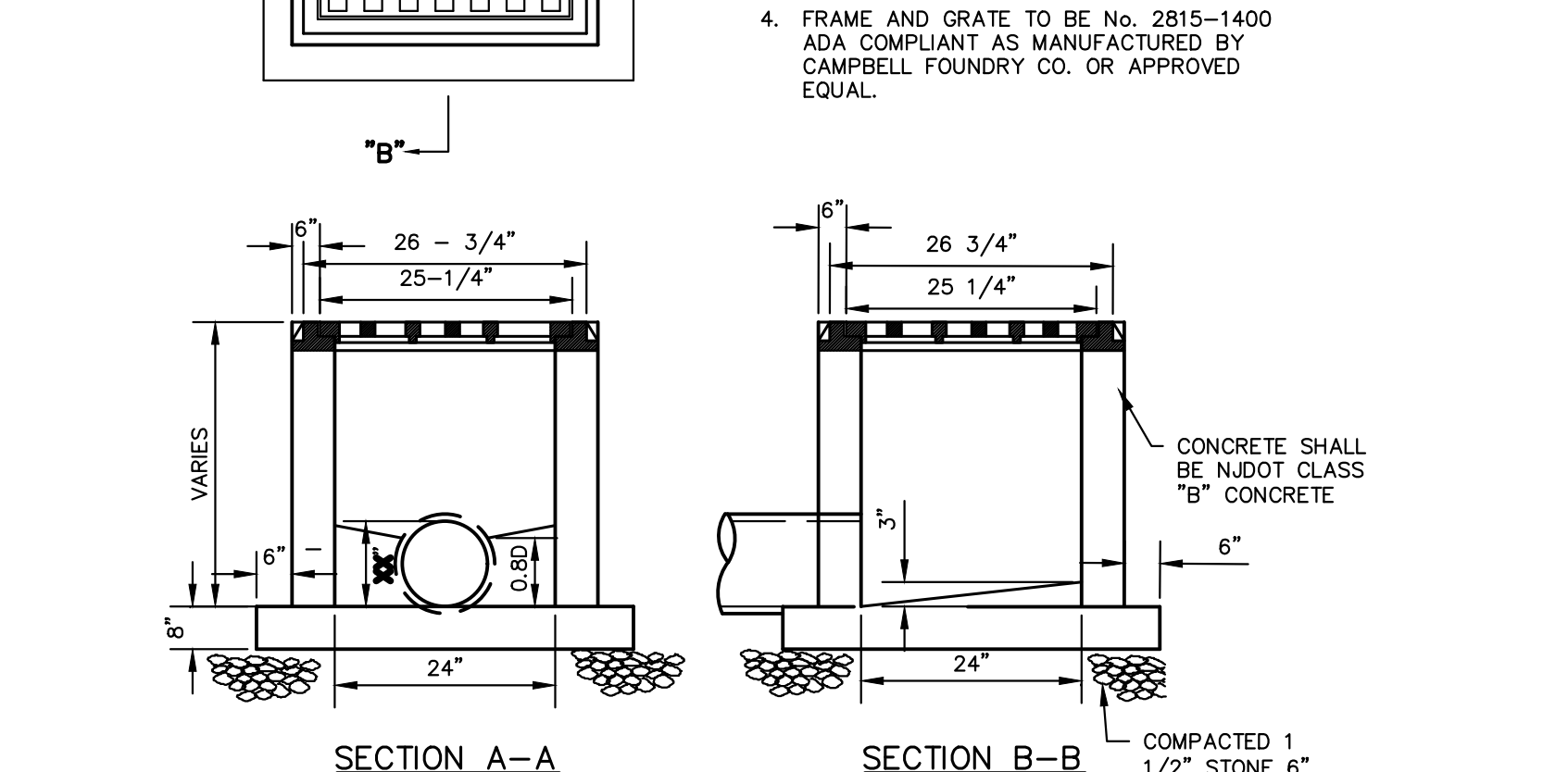
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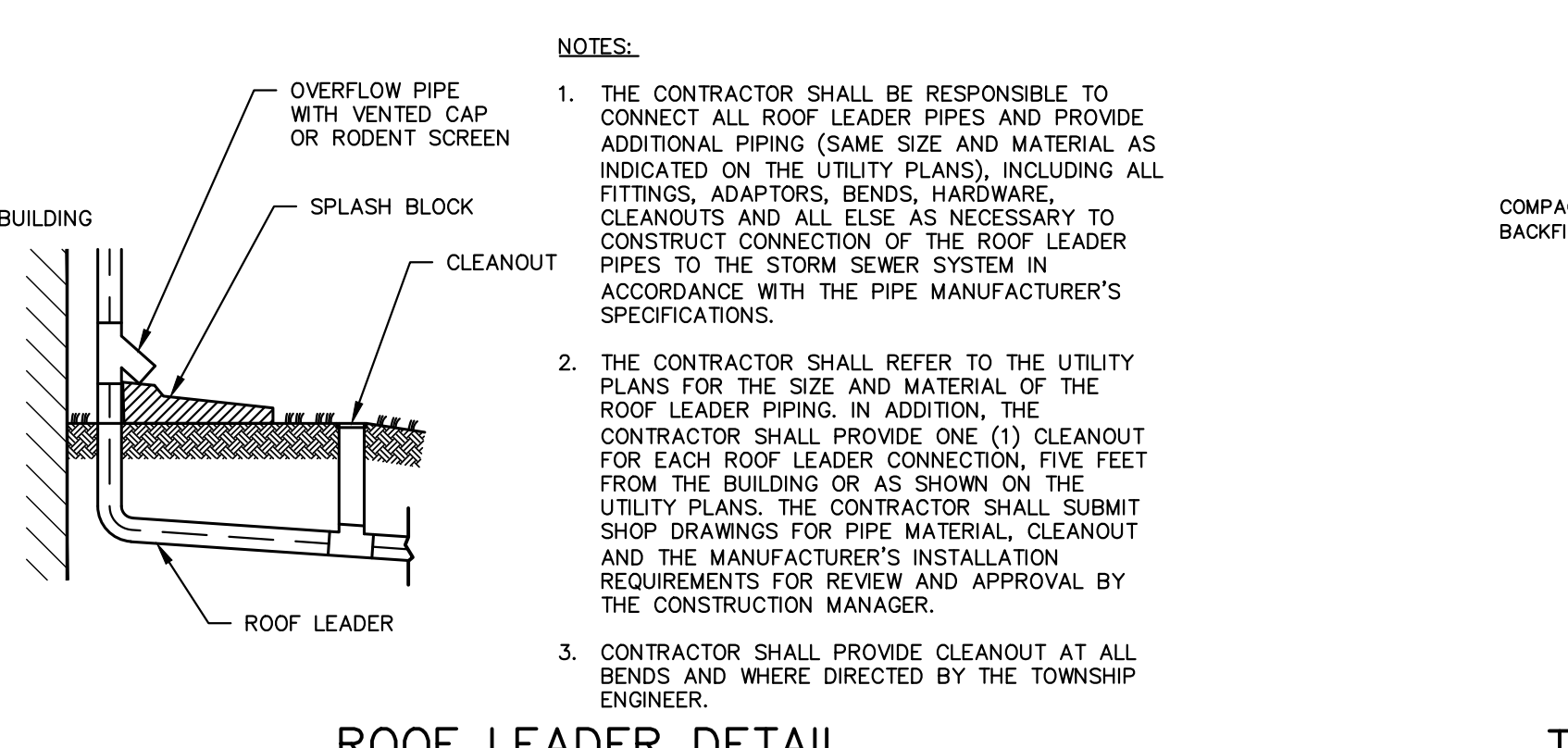
STORM TRENCH WIDTH DETAIL  
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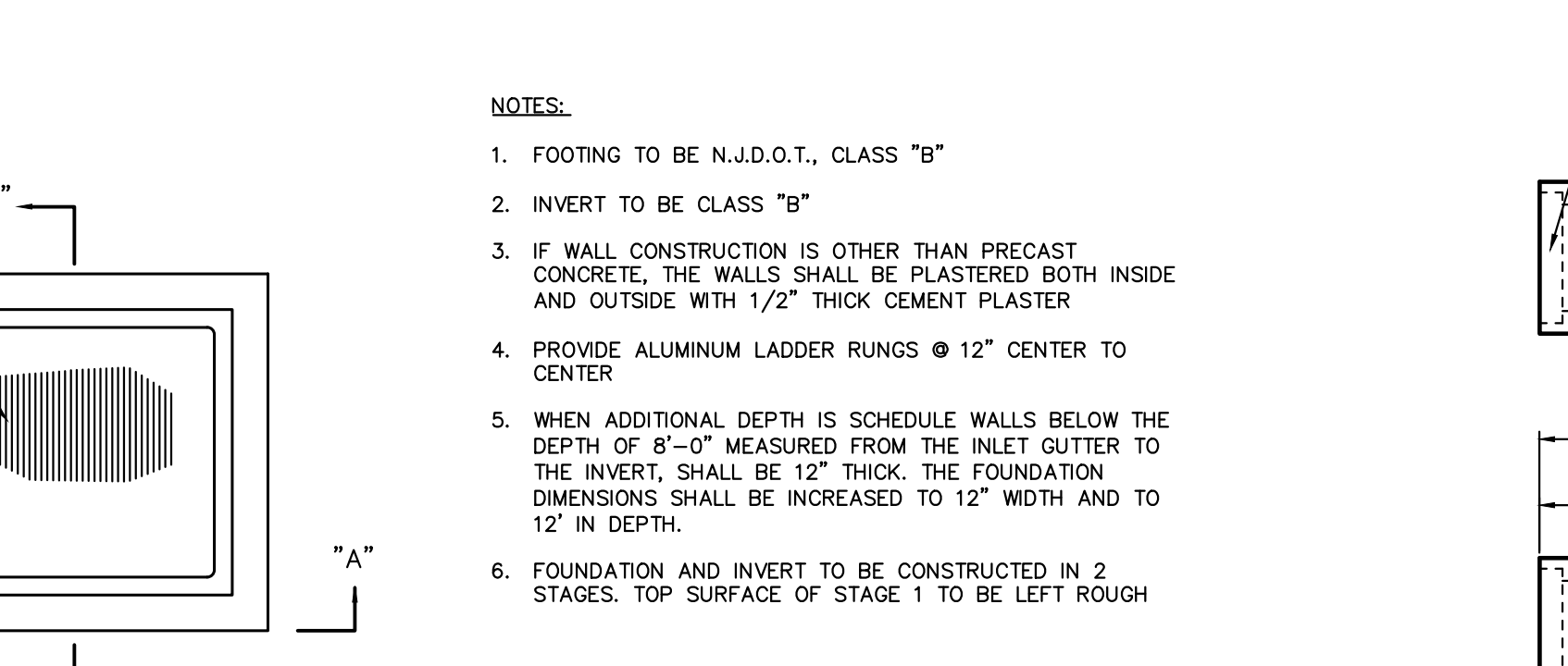
RAIN GARDEN - TYPICAL SECTION DETAIL  
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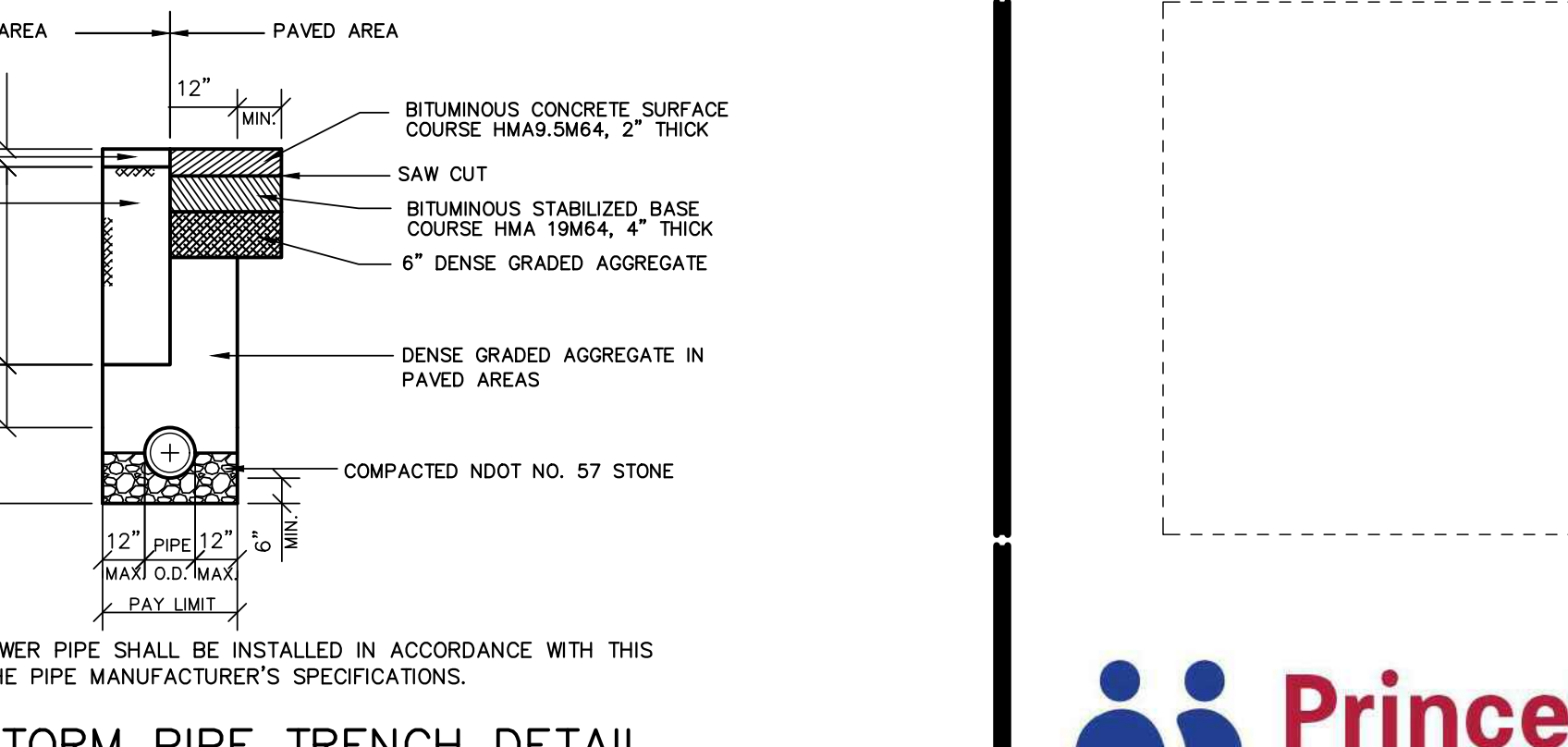
RAIN GARDEN - UNDERDRAIN LAYOUT DETAIL  
SCALE: 1"=10'



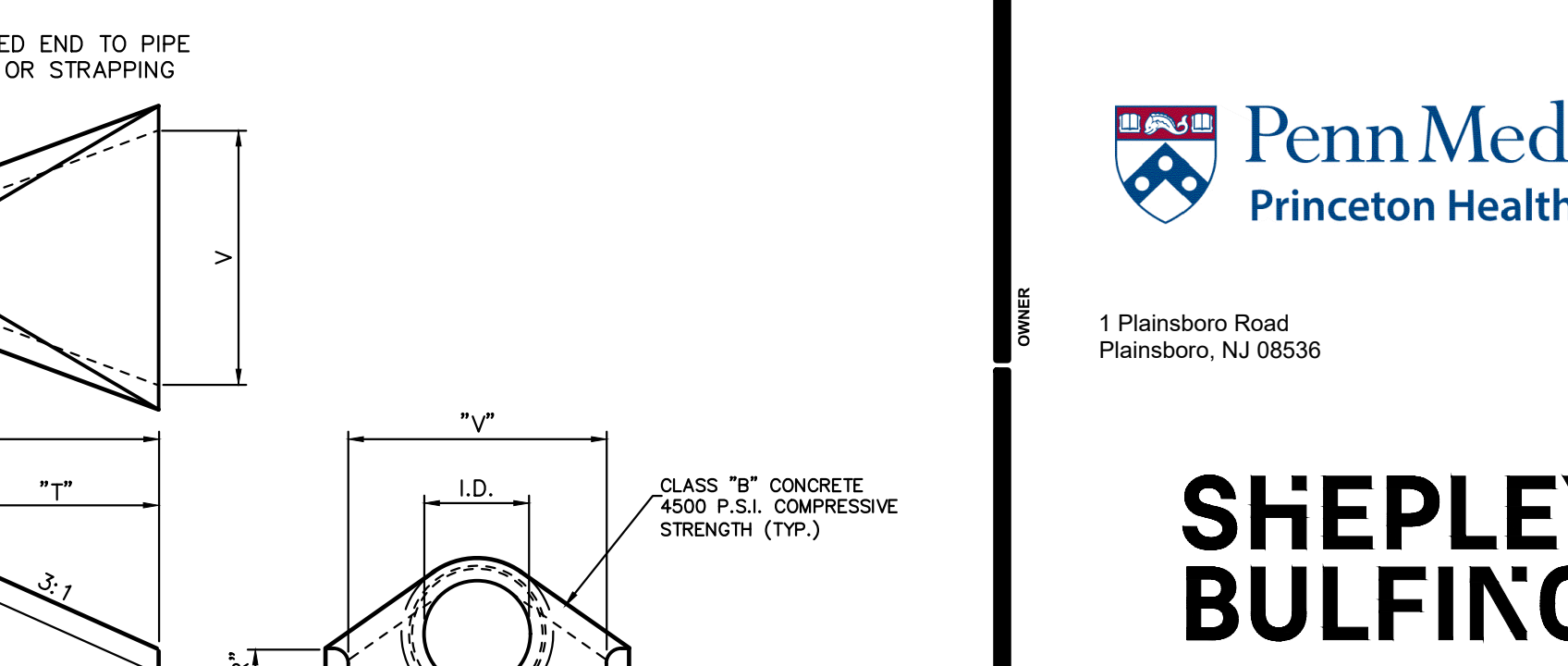
ROOF LEADER DETAIL  
NOT TO SCALE



OUTLET CONTROL STRUCTURE  
NOT TO SCALE



TYPICAL STORM PIPE TRENCH DETAIL  
NOT TO SCALE



FLARED END SECTION  
NOT TO SCALE

DOWN, ALSO AVAILABLE WITH SPIGOT END

PIPE SIZE												
I.D.	12"	15"	18"	21"	24"	27"	30"	36"	42"	48"	54"	60"
"A"	2"	2.25"	2.5"	2.75"	3"	3.25"	3.5"	4"	4.5"	5"	5.5"	6"
"R"	5"	7.5"	9"	10"	14"	21"	24"	27"	31"			
"S"					24"	26"	36"	36"	36"			
"T"					30"	36"	60"	66"	60"			
"U"					4"	4'-8"	6'-2"	8"				
"V"	24"	28"	34"	40"	48"	54"	60"	72"	78"	84"	90"	96"
WT/FT	360	480	640	860	920	1200	1540	2100	5500	6500	8200	9300

18 Wall

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FLARED END SECTION  
NOT TO SCALE



1 Plainsboro Road  
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Boston, MA 02111  
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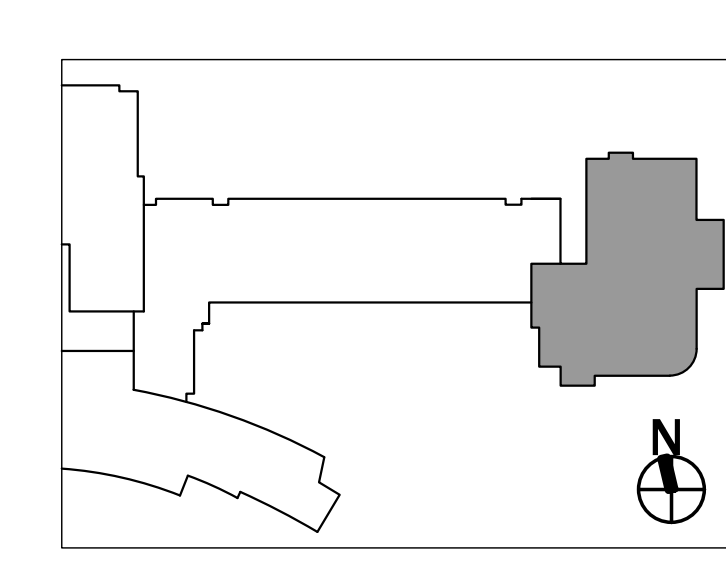


Corporate Office:  
1800 RI 34, Suite 101  
Wall, New Jersey 07719  
732.312.8800  
FPAengineers.com

ANDREW L. FRENCH, P.E.  
PROFESSIONAL ENGINEER, N.J. LIC. NO. 42894

NO.	DATE	REVISION	DESCRIPTION
1.	10/18/2024	REVISED PER DRC COMMENTS	

NO.	DATE	REVISION	DESCRIPTION
1.	10/18/2024	REVISED PER DRC COMMENTS	



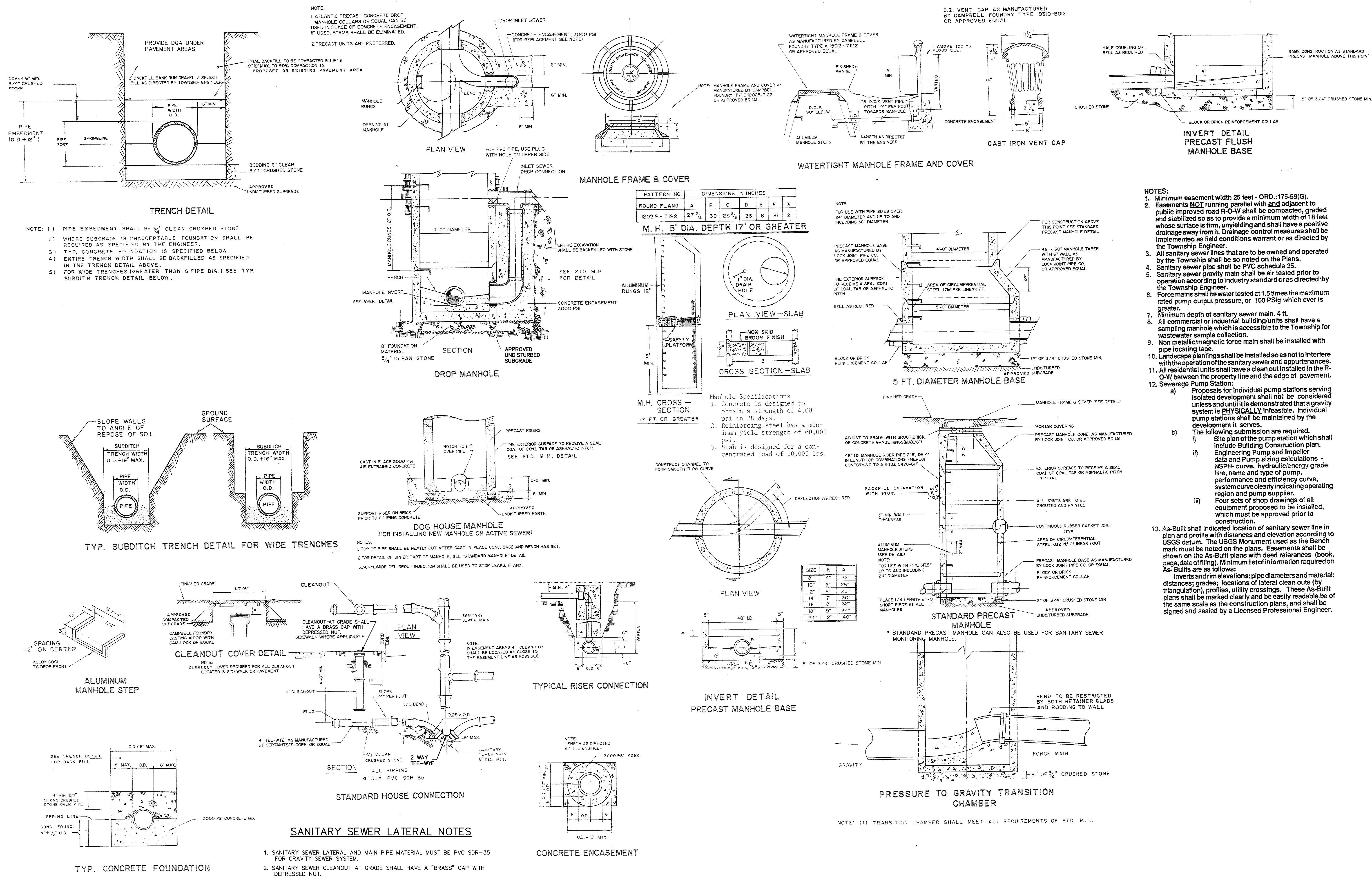
**PENN MEDICINE PRINCETON HEALTH CCIC**

1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5257.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

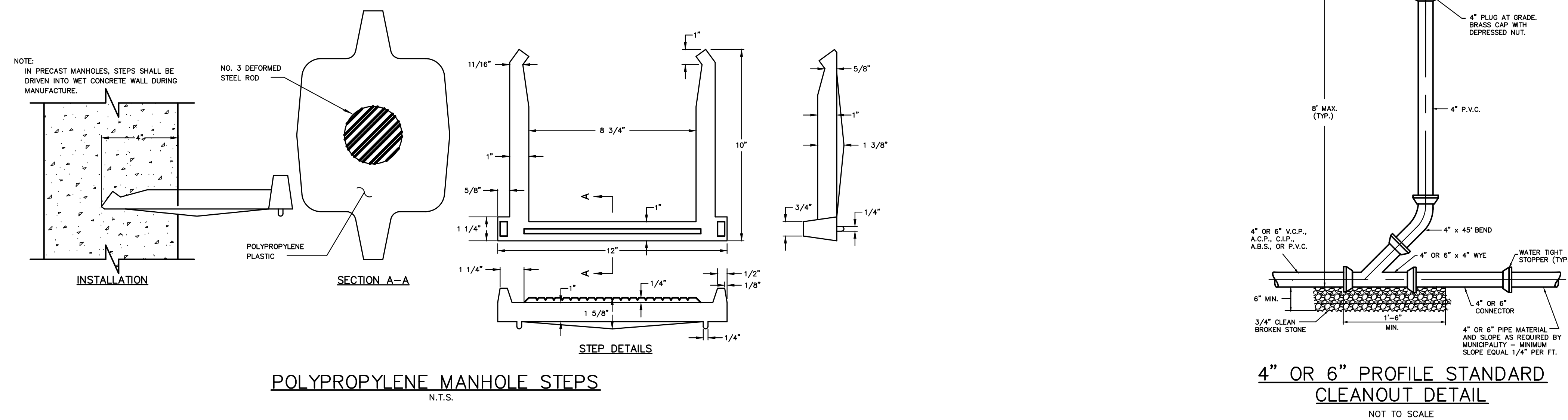
**CONSTRUCTION DETAILS - STORMWATER MANAGEMENT**

**C224**

07/31/2024 PACKAGE 0  
08/02/2024 PACKAGE 1



## SOUTH BRUNSWICK SEWER DEPARTMENT STANDARD DETAILS



1 Plainsboro Road  
Plainsboro, NJ 08536

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BULFINCH**

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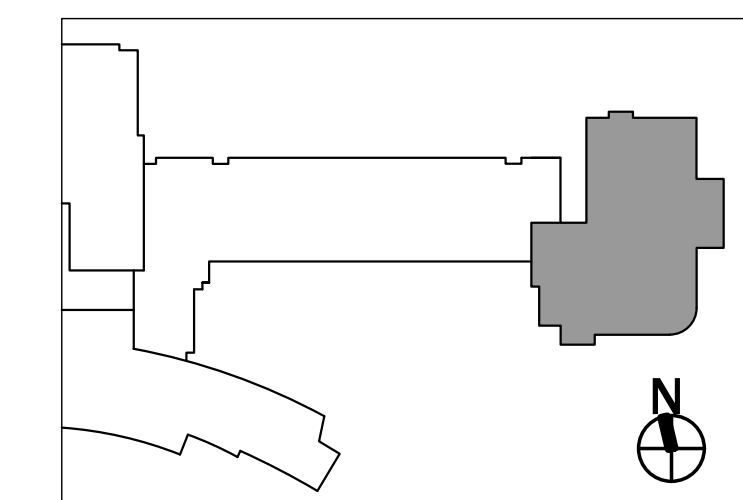
**FPA**  
**FRENCH & PARRELO**  
**ASSOCIATES**

Corporate Office  
1800 RT 34, Suite 10  
Wall, New Jersey 07711  
732.312.9908

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**ANDREW L. FRENCH, P.E.**  
PROFESSIONAL ENGINEER, N.J. LIC. No. 42894

[illegible]

**PENN MEDICINE  
PRINCETON  
HEALTH CCIC**

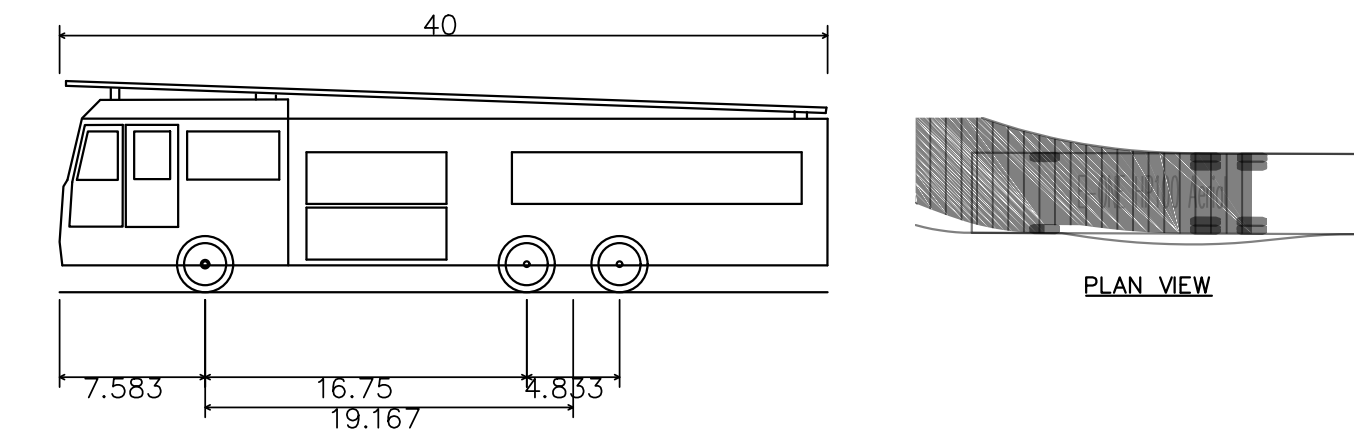
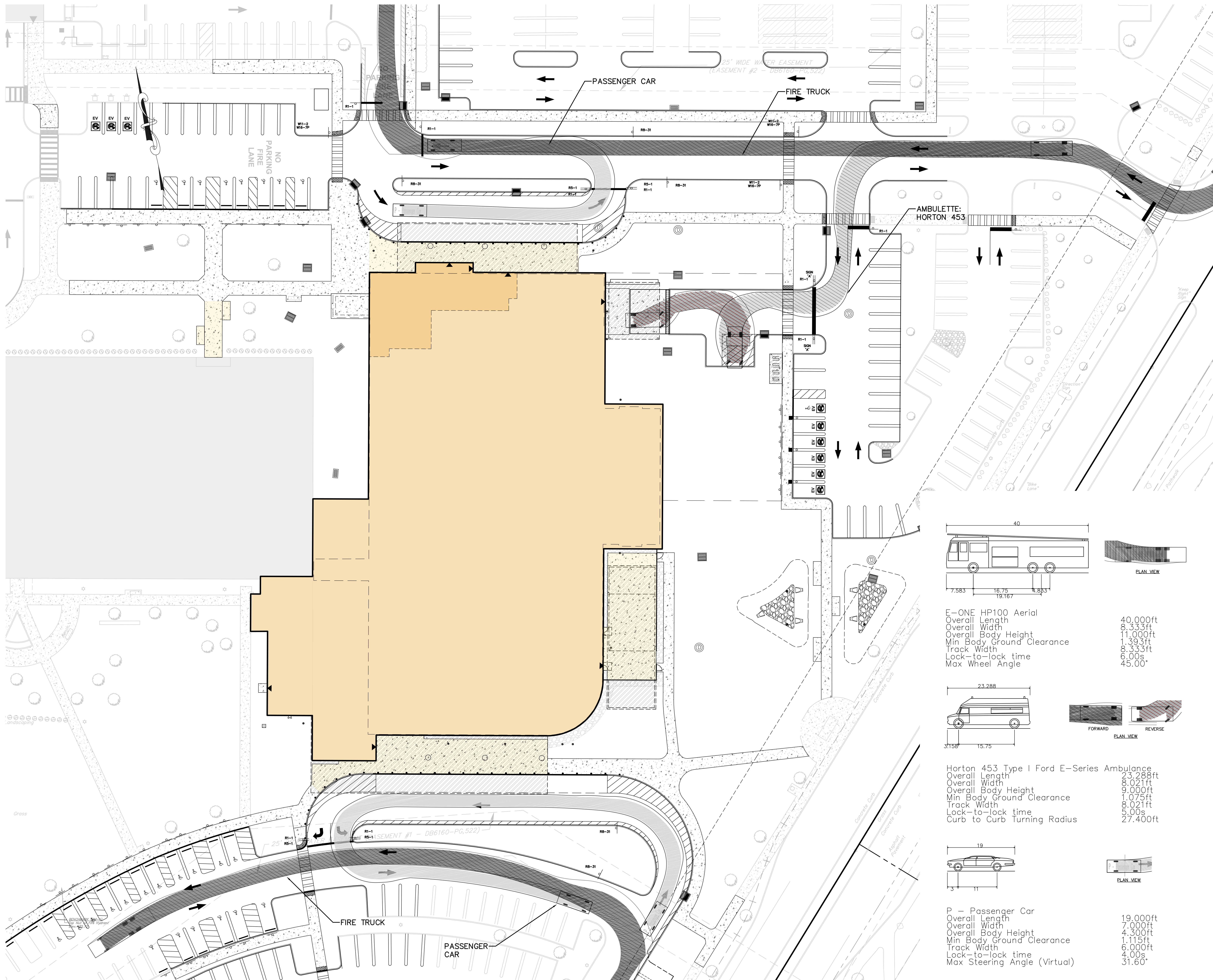
1 Plainsboro Road  
Plainsboro, NJ 08536  
JOB NO: 5267.003  
Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

## CONSTRUCTION DETAILS - SANITARY SEWER

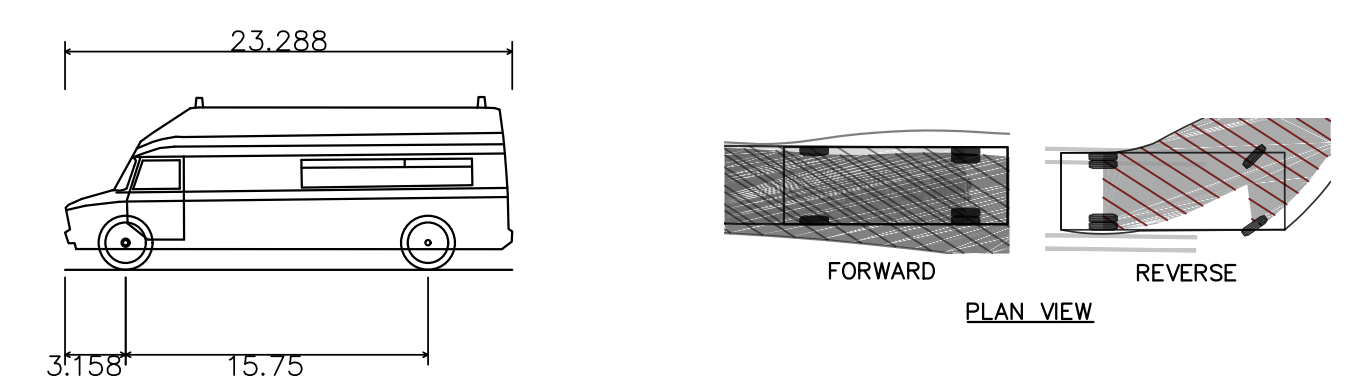
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07/31/2024	PACKAGE 0
08/02/2024	PACKAGE 1





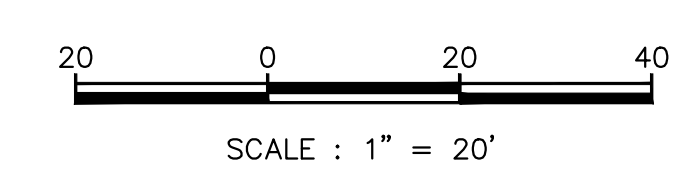
E-ONE HP100 Aerial  
Overall Length 40.000ft  
Overall Width 8.333ft  
Overall Body Height 11.000ft  
Min. Body Ground Clearance 1.393ft  
Track Width 8.333ft  
Lock-to-lock time 6.00s  
Max Wheel Angle 45.00°



Horton 453 Type I Ford E-Series Ambulance  
Overall Length 23.288ft  
Overall Width 8.021ft  
Overall Body Height 9.000ft  
Min. Body Ground Clearance 1.075ft  
Track Width 8.021ft  
Lock-to-lock time 5.00s  
Curb to Curb Turning Radius 27.400ft



P - Passenger Car  
Overall Length 19.000ft  
Overall Width 7.000ft  
Overall Body Height 4.300ft  
Min. Body Ground Clearance 1.115ft  
Track Width 6.000ft  
Lock-to-lock time 4.00s  
Max Steering Angle (Virtual) 31.60°



1 Plainsboro Road  
Plainsboro, NJ 08536

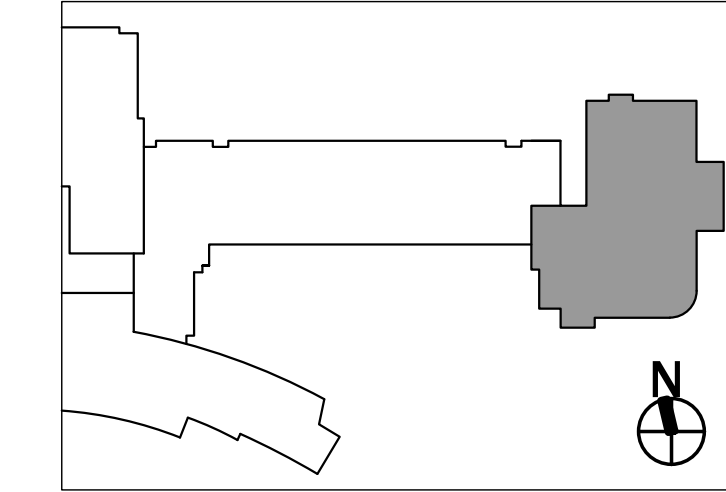
## SHEPLEY BULFINCH

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ANDREW L. FRENCH, P.E.  
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## PENN MEDICINE PRINCETON HEALTH CCIC

1 Plainsboro Road  
Plainsboro, NJ 08536  
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Block 1701 Lot 3.01  
Township of Plainsboro  
Middlesex County, New Jersey 08536

## CIRCULATION PLAN AND DETAILS

# C227

07/31/2024 PACKAGE 0  
08/02/2024 PACKAGE 1