

**PROPOSED APARTMENT BUILDING**  
**408-412 EAST FRONT STREET**  
 BLOCK 324, LOT 14  
 CITY OF PLAINFIELD  
 UNION COUNTY, NEW JERSEY

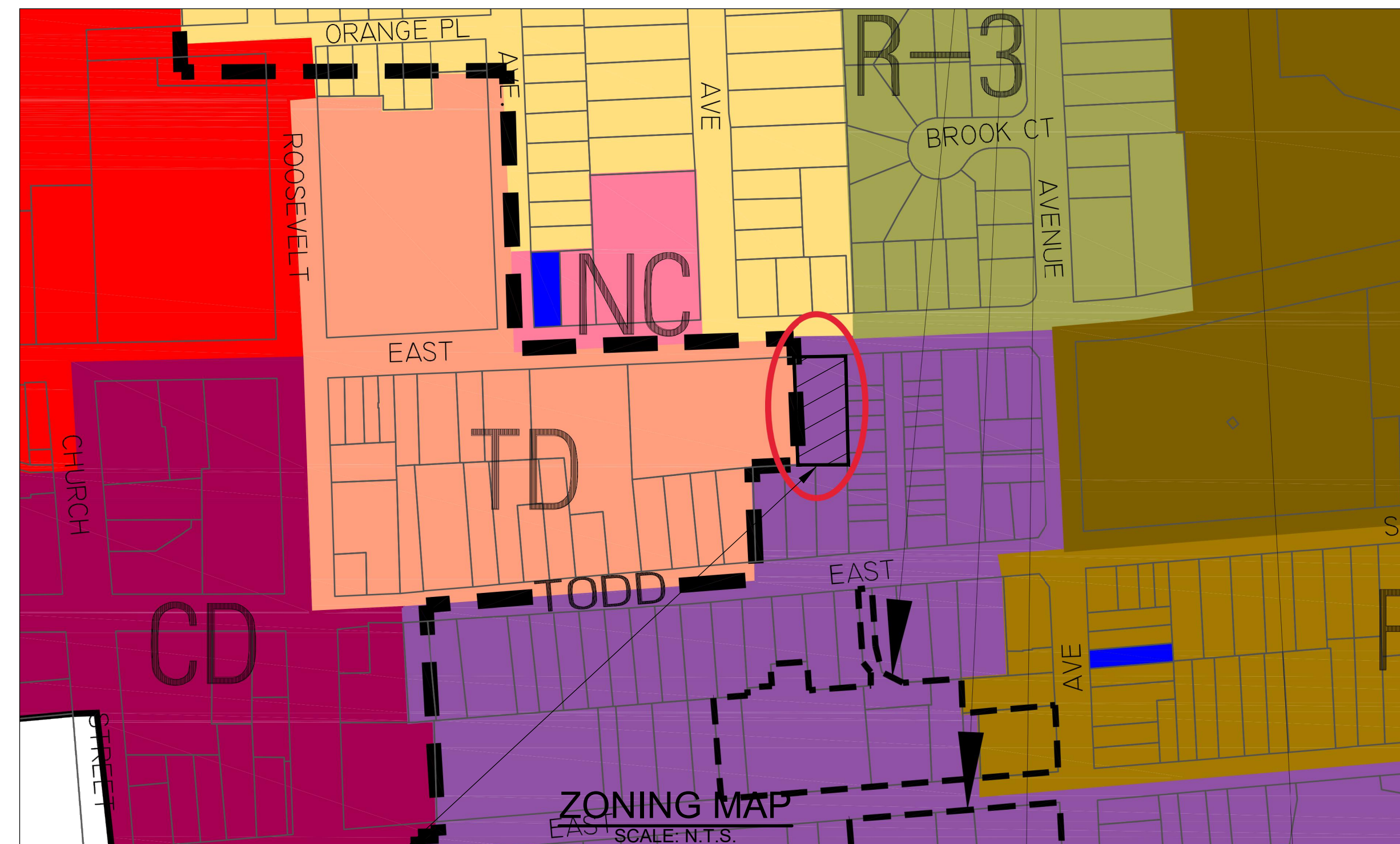
FRED HANIKEN  
345 TRENSCH DRIVE  
NEW MILFORD, NEW JERSEY 07648

FRANK H. LEHR ASSOCIATES  
101 SOUTH HARRISON STREET  
EAST ORANGE, NEW JERSEY 07018  
TEL: (973) 673-2520  
FAX: (973) 673-6623  
EMAIL: INFO@FHLEHR.COM










## INDEX OF SHEETS

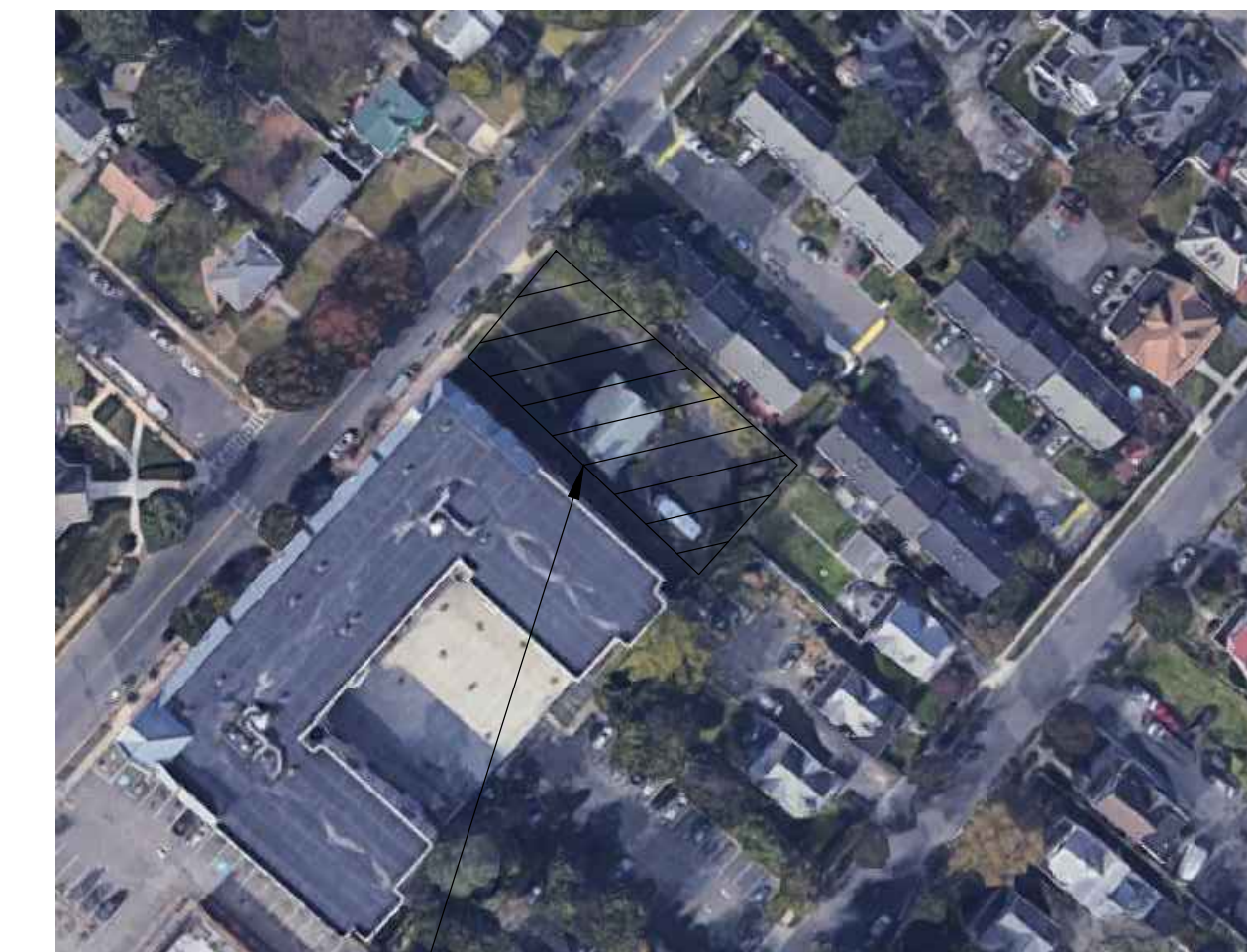
SHEET NO	DESCRIPTION
C-1	COVER SHEET
	SURVEY
C-2	DEMOLITION PLAN
C-3	SITE PLAN
C-4	GRADING, DRAINAGE AND UTILITIES PLAN
C-5	LANDSCAPING PLAN
C-6	LIGHTING PLAN
C-7	DETAILS
C-8	DETAILS
C-9	SOIL EROSION AND SEDIMENT CONTROL PLAN

## 200' NOTIFICATION LIST



## ZONING LEGEND

MU		MIXED USE
NC		NEIGHBORHOOD COMMERCIAL
R-3		LOW/MODERATE DENSITY RESIDENTIAL
R-4		MODERATE DENSITY RESIDENTIAL
R-5		MEDIUM DENSITY RESIDENTIAL
R-6		MEDIUM/HIGH DENSITY RESIDENTIAL
R-7		HIGH DENSITY RESIDENTIAL
CBD		CENTRAL BUSINESS DISTRICT
CD		COLLEGE DISTRICT



AREA MAP  
Scale: N.T.S.

## ZONING TABLE

CITY OF PLAINFIELD		Block 324, Lot 14					
PARCEL:	Office						
ZONE DISTRICT:	(MU) Mixed Use						
EXISTING USE:	Apartment Building						
PROPOSED USE:	Apartment Building						
REGULATION	EXISTING	PROPOSED	REQUIRED	VARIANCE	REQUIRED	VARIANCE	
USE:	Office	Apartments	MU Mixed Use Apartment	NO	MU Mixed Use Mixed Use		NO
LOT							
Area (Min.)	14,000 SF 0.32 Acres	N.C.	22,800 SF 0.51 Acres	YES	5,000 SF 0.11 Acres		NO
Width (Min.)	80 FT	N.C.	150 FT	YES	50 FT		NO
Frontage (Min.)	80 FT	N.C.	150 FT	YES	50 FT		NO
Depth (Min.)	175 FT	N.C.	100 FT	YES	100 FT		NO
YARD							
Front	69.3 FT	10 FT	30 FT	YES	10 FT		NO
Side	8.67 FT	5 FT	25 FT	YES	5 FT		NO
Combined Side	8.67 FT, 30.89 FT 39.56 FT	5 FT, 26.4 FT 31.4 FT	50 FT	YES	10 FT		NO
Rear	72.0 FT	67.7 FT	30 FT	NO	15 FT		NO
BUILDING							
Building Height (Max.)	30	28 FT	40 FT	NO	35 FT		NO
Stories (Max.)	2.5 Stories	2 Stories	3 Stories	NO	3 Stories		NO
Density (d.u. per acre Max)	N/A	8 Units/0.32 Acres 25 Units/1 Acre	12 Units/Acre	YES	25 Units/Acre		NO
Floor Area Ratio (Max)	2,632 SF / 14,000 SF 0.19	9,360 SF / 14,000 SF 0.67	N/A	NO	25,200 SF / 14,000 SF 1.8		NO
IMPERVIOUS COVERAGE							
Building Cover (Max.)	9.4% 1,316 SF	33.4% 4,680 SF	30% 4,200 SF	YES	60% 8,400 SF		NO
Lot Cover (Max.)	50.4% 7,045 SF	86.9% 12,164 SF	40% 5,600 SF	YES	70% 9,800 SF		YES
IMPROVABLE AREA							
Improvable Area (Min.)	3,448 SF	N.C.	5,300 SF	YES	2,100 SF		NO
Diameter of Circle (Min.)	30 FT	N.C.	51 FT	YES	51 FT		NO

N.C. = NO CHANGE

PARKING REQUIREMENTS			
Residential <sup>1</sup>	Units	Spc/Unit	Require
Two - Bedroom	8	2.0	16
TOTAL Parking Required		16 Spaces	
TOTAL Parking Provided		13 Spaces	

1) Per the Land Use Ordinance of the City of Plainfield 17:9-42 "Parking, driveways and loading"

## VARIANCES/WAIVERS

- |                                     |                              |
|-------------------------------------|------------------------------|
| CHAPTER 17 ATTACHMENT 2 SCHEDULE B: | • COMBINED SIDE YARD SETBACK |
| • LOT AREA                          | • DENSITY                    |
| • LOT WIDTH                         | • BUILDING COVERAGE          |
| • LOT FRONTAGE                      | • TOTAL LOT COVERAGE         |
| • LOT DEPTH                         | • IMPROVABLE AREA            |
| • FRONT YARD SETBACK                | • M.I.A. DIAMETER OF CIRCLE  |
| • SIDE YARD SETBACK                 |                              |

17:11 - 12. LIGHTING. F. AVERAGE ILLUMINATION LEVELS

17:11 - 15. PARKING. B. AISLE WIDTH \*

\* IN ACCORDANCE WITH RSIS N.J.A.C. 5:21-4.5, A RURAL LANE CAN HAVE A WIDTH OF 18'. TABLE 4.1 EACH LOW-RISE APARTMENT UNIT GENERATE 7.2 TRIPS. 8 UNITS \* 7.2 TRIPS = 57.6 TRIPS

17:9 - 43. PARKING LOT LANDSCAPING.

17:9 - 42. J. 2. PARKING, DRIVEWAYS AND LOADING. RESIDENTIAL OFF-STREET PARKING REQUIREMENTS.

**PROJECT DESCRIPTION**  
PROPOSED CONSTRUCTION OF A 2-STORY BUILDING W/ 8 RESIDENTIAL UNITS.  
REFUSE ROLLOUT CONTAINERS WILL BE LOCATED ON A CONCRETE PAD IN THE PARKING LOT.

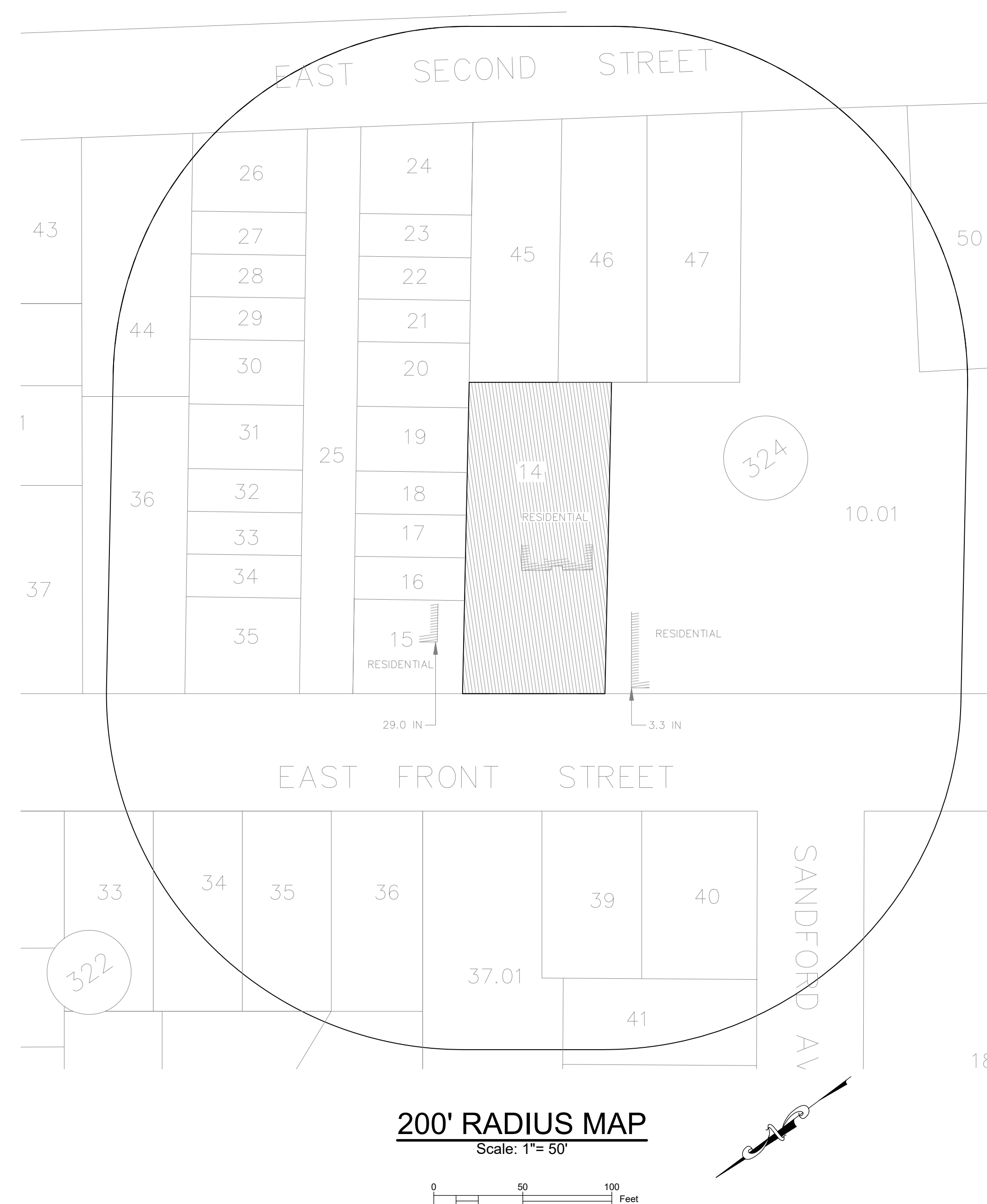
APPROVED BY THE PLANNING BOARD OF THE CITY OF PLAINFIELD AT A  
MEETING HELD ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_

\_\_\_\_\_  
CITY ENGINEER

\_\_\_\_\_  
BOARD SECRETARY

BOARD CHAIRMAN

RESOLUTION NUMBER	DATE
-------------------	------



**200' RADIUS MAP**  
Scale: 1"= 50'



**FRANK H. LEHR ASSOCIATES**  
*CONSULTING CIVIL ENGINEERS*  
 101 South Harrison Street  
 East Orange, New Jersey 07018  
 Tel: 973 673 2520  
 Fax: 973 673 6623  
[WWW.FHLEHR.COM](http://WWW.FHLEHR.COM)

Certificate of Authorization No. 246247650400

©Copyright 2020 Frank H. Lehr Associates, Inc. All Rights Reserved

Richard J. Adelsohn  
Professional Engineer  
NJ License No. GE035233

408-412 East Front Street  
Block 324, Lot 14  
City of Plainfield  
Union County, New Jersey

COVER SHEET

[illegible]

DESIGNED/DRAWN BY	LTB
CHECKED BY	RJA
DATE	OCTOBER 7, 2021
SCALE	AS NOTED

PROJECT NO.

9449

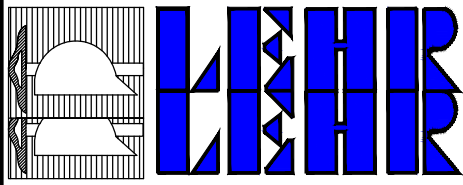
SHEET NO.

C-1



DEMOLITION NOTES

- 1) ALL DEMOLITION ACTIVITIES ARE TO CONFORM TO ALL FEDERAL, STATE, AND LOCAL REGULATIONS.
- 2) CONTRACTOR SHALL NOTIFY ADJACENT PROPERTY OWNERS PRIOR TO THE START OF DEMOLITION AND CONSTRUCTION WORK.
- 3) CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL APPROPRIATE PERMITS ASSOCIATED WITH THE DEMOLITION AND CONSTRUCTION OPERATIONS.
- 4) EXISTING UTILITIES SHALL BE MARKED OUT PRIOR TO THE START OF DISTURBANCE. CONTACT NEW JERSEY ONE CALL CENTER--(800) 272-1000--FOR UTILITY MARK OUT SERVICE. MARKOUTS SHALL BE MAINTAINED THROUGHOUT THE DEMOLITION AND CONSTRUCTION PHASE.
- 5) PRIOR TO THE START OF ANY DEMOLITION OPERATIONS, A QUALIFIED SANITATION INSPECTOR SHALL CONDUCT A SURVEY FOR EVIDENCE OF CURRENT RODENT/PEST ACTIVITY AND SHALL INITIATE A CONTROL PROGRAM BY A CERTIFIED PEST CONTROL OPERATOR IF NECESSARY.
- 6) PRIOR TO THE REMOVAL OF ANY BUILDING (OR PART OF), DISCONNECT AND TERMINATE ALL ASSOCIATED WATER, SEWER, GAS, ELECTRIC, TELEPHONE, CABLE, AND MISCELLANEOUS UTILITIES/SERVICES CONNECTED TO THE STRUCTURE.
- 7) UNLESS OTHERWISE INDICATED, SERVICE LINES SHALL BE CAPPED OR TERMINATED AT THE RIGHT-OF-WAY LINE OR AS DEEDED BY THE APPROPRIATE UTILITY. CAPPING SHALL PROVIDE SUFFICIENT CLOSURE TO WITHSTAND HYDROSTATIC OR EARTH PRESSURE. IN THE EVENT THAT AN UNHARTED UTILITY/SERVICE LINE IS ENCOUNTERED, CONTACT APPROPRIATE UTILITY/SERVICE OWNER FOR DIRECTIONS. COOPERATE WITH OWNER AND UTILITY COMPANY IN KEEPING RESPECTIVE SERVICES AND FACILITIES IN OPERATION. REPAIR DAMAGED UTILITIES TO SATISFACTION OF UTILITY/SERVICE OWNER.
- 8) ALL DEMOLITION OPERATIONS ARE TO BE CONDUCTED SAFELY TO PREVENT DAMAGE OR PERSONAL INJURY TO STRUCTURES, ADJACENT PROPERTIES, UTILITIES, AND ALL PERSONS. PROVIDE SHORING AND BRACING TO ADJACENT STRUCTURES TO PREVENT MOVEMENT, SETTLEMENT, OR DAMAGE TO ADJACENT STRUCTURES, ROADS, AND UTILITIES.
- 9) CONTRACTOR SHALL KEEP A SAFE WORKING ENVIRONMENT AT ALL TIMES. BARRICADES, FENCING, WARNING LIGHTS, SIGNS, ETC. SHALL BE FURNISHED, ERECTED, AND MAINTAINED AT LOCATIONS WHERE THE PROTECTIVE DEVICES ARE WARRANTED OR AS DIRECTED BY THE MUNICIPALITY.
- 10) WATERING TECHNIQUES, TEMPORARY ENCLOSURES, AND OTHER SUITABLE METHODS SHALL BE UTILIZED TO CONTROL DUST AND DIRT RISING IN THE AIR.
- 11) REMOVE AND DISPOSE ALL FOUNDATION WALLS, FOOTINGS, SLABS, AND BASEMENT SLABS IN A LEGAL MANNER.
- 12) IN THE EVENT THAT AN UNKNOWN EXISTING OIL TANK IS ENCOUNTERED, CONTACT ENGINEER PRIOR TO REMOVAL.
- 13) GROUND SURFACE SHALL BE GRADED, IF NECESSARY, TO ELIMINATE WATER POCKETS. ALL EXCAVATIONS SHALL BE FREE OF WATER AT ALL TIMES.
- 14) BACKFILL SHALL BE PLACED IN ACCORDANCE WITH SPECIFICATIONS.
- 15) ROUTINELY REMOVE, IN AN ORDERLY AND EFFICIENT MANNER (CART AWAY AND DISPOSE OF, BY LEGAL MEANS OFF THE SITE AND PREMISES), ALL DEBRIS RELATED TO WORK OF THIS SECTION; WORKSITE AND STAGING AREAS SHALL BE KEPT CLEAR OF ALL DEBRIS ON A DAILY BASIS; PERMIT NO DEBRIS ACCUMULATION WHICH POSES THREAT TO LIFE SAFETY OR PROPERTY. DO NOT BURY DEBRIS.
- 16) CONTRACTOR SHALL RETURN ALL ADJACENT AREAS TO THE CONDITIONS EXISTING PRIOR TO THE START OF WORK. CLEAN ADJACENT STRUCTURES AND PROPERTIES OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS.
- 17) COORDINATE LIMIT OF REMOVALS WITH OTHER CONSTRUCTION DOCUMENTS.
- 18) SEE SPECIFICATIONS FOR REQUIRED PROJECT PHASING.



FRANK H. LEHR ASSOCIATES  
CONSULTING CIVIL ENGINEERS  
101 South Harrison Street  
East Orange, New Jersey 07018  
Tel: 973 673 2520  
Fax: 973 673 6623  
WWW.FHLEHR.COM

Certificate of Authorization No. 245427950400

©Copyright 2021 Frank H. Lehr Associates. All Rights Reserved.

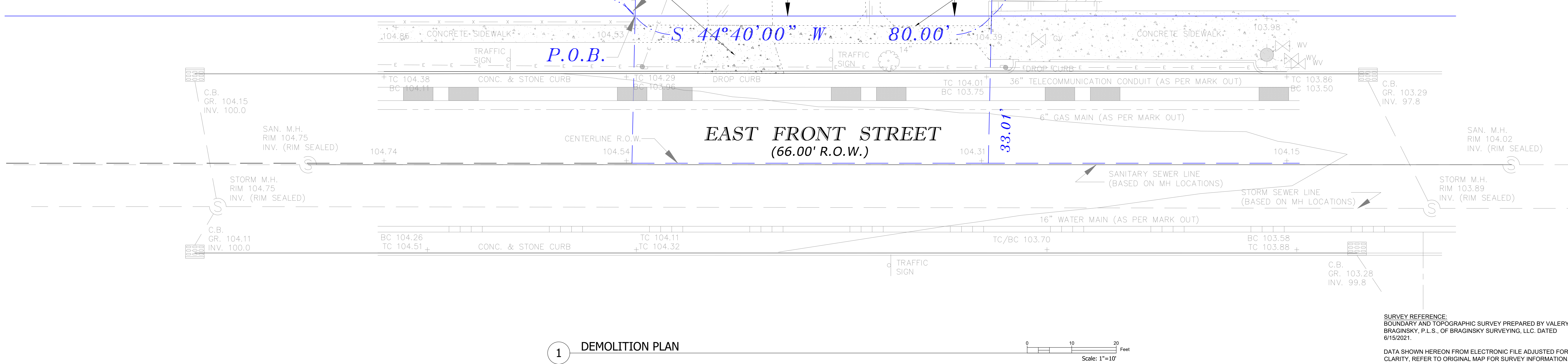
10/28/21

Richard J. Adelsohn  
Professional Engineer  
NJ License No. GE035233

408-412 East Front Street  
Block 324, Lot 14  
City of Plainfield  
Union County, New Jersey

DEMOLITION PLAN

284.04'



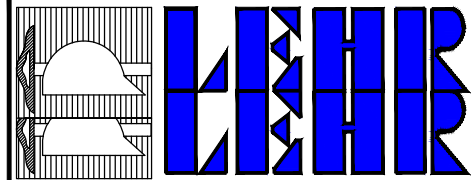


GENERAL NOTES

1. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH EXISTING FIELD CONDITIONS AND SHALL VERIFY CONDITIONS AND DIMENSIONS SHOWN ON THE DESIGN DRAWINGS. THE CONTRACTOR IS CAUTIONED THAT THE UNDERGROUND UTILITIES INFORMATION SHOWN MAY NOT BE COMPLETE OR EXACT. THE CONTRACTOR SHALL CHECK WITH THE OWNER, THE UTILITY COMPANIES, AND THE BOROUGH ENGINEERING DEPARTMENT FOR LOCATION OF ALL UTILITIES KNOWN. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES SHOWN ON DRAWINGS OR INDICATED BY OTHERS PRIOR TO START OF CONSTRUCTION. THERE MAY BE OTHER UTILITIES NOT KNOWN OR SHOWN AND THE CONTRACTOR IS CAUTIONED TO PROCEED WITH CARE. DO NOT DISTURB ANY UTILITY WITHOUT APPROVAL OF THE OWNER. ACTIVE UTILITIES DISTURBED DURING CONSTRUCTION SHALL BE RETURNED TO THEIR PRIOR CONDITION.
2. SAFETY AND PROTECTION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF, AND SHALL PROVIDE THE NECESSARY PROTECTION TO PREVENT DAMAGE, INJURY OR LOSS TO, ALL PERSONS ON THE WORK SITE, OR WHO MAY BE AFFECTED BY THE WORK; ALL MATERIALS AND EQUIPMENT; AND OTHER PROPERTY AT OR ADJACENT TO THE SITE, INCLUDING TREES, SHRUBS, LAWNS, WALKS, PAVEMENTS, ROADWAYS, STRUCTURES, UTILITIES, AND UNDERGROUND FACILITIES NOT DESIGNATED FOR REMOVAL, RELOCATION OR REPLACEMENT DURING THE COURSE OF WORK. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS AND REGULATIONS OF ANY PUBLIC BODY HAVING JURISDICTION FOR SAFETY OF PERSONS OR PROPERTY OR TO PROTECT THEM FROM DAMAGE, INJURY, OR LOSS, AND SHALL ERECT AND MAINTAIN ALL NECESSARY SAFEGUARDS FOR SUCH SAFETY AND PROTECTION.
3. CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES AND REGULATIONS.
4. CONTRACTOR SHALL NOTIFY AND MAINTAIN VALID UTILITY MARK-OUTS PRIOR TO PERFORMING EXCAVATION. CONTRACTOR SHALL CONTACT THE ONE-CALL CENTER 72 HOURS PRIOR TO THE START OR RESTART OF EXCAVATION.
5. THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL DEBRIS AND RUBBLE, SUCH AS BROKEN OUT PAVING AND CONCRETE FOOTINGS AND DISPOSE OF SAME AT AN APPROVED DISPOSAL SITE.
6. ALL REQUIRED UNDERGROUND PIPING, CONDUIT, ETC., SHALL BE IN PLACE PRIOR TO FINISHED PAVING OPERATIONS.
7. ALL PAVEMENT SHALL BE REMOVED FROM WITHIN PLANTING BEDS. PLANT BEDS SHALL CONTAIN A MINIMUM OF 4" OF TOPSOIL.
8. SITE WORK: WORKMANSHIP, EQUIPMENT AND MATERIALS, FURNISHED AND PLACED, SHALL MEET THE MINIMUM REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," DEPARTMENT OF TRANSPORTATION, STATE OF NEW JERSEY, 2019 EDITION. GRADING AND PAVING OPERATIONS SHALL BE DONE SO AS NOT TO DISTURB EXISTING UTILITIES AND BUILDINGS.
9. IN AREAS RECEIVING NEW PAVEMENT, THE SUBGRADE SHALL BE THOROUGHLY COMPACTED. THE AREA SHALL BE PROPOURED PRIOR TO THE PLACEMENT OF THE BASE COURSE. PROPOURING SHALL BE ACCOMPLISHED BY SUCCESSIVE PASSES OF A FULLY LOADED TANDEM DUMP TRUCK. EACH PASS SHALL OVERLAP THE PRECEDING PASS TO ASSURE FULL COVERAGE OF THE AREA. PROPOURING SHALL BE DONE IN THE PRESENCE OF THE SOIL ENGINEER OR BOROUGH ENGINEER.
10. MARKINGS: ALL PARKING SPACES SHALL BE MARKED BY DURABLE PAINTED 4" WHITE LINES EXTENDING THE LENGTH OF THE SPACE. PARKING SPACES SHALL BE SEPARATED BY HAIRPIN STRIPES IN ACCORDANCE WITH THE STRIPING DETAIL.
11. FILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 12" IN THICKNESS, AND SHALL BE COMPACTED TO 95% MAXIMUM MODIFIED PROCTOR DENSITY, OR IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
12. ABANDONED UTILITIES -- CLOSE ENDS OF ABANDONED UNDERGROUND UTILITIES WHICH ARE INDICATED TO REMAIN IN PLACE WITH SUFFICIENTLY STRONG CLOSURES TO WITHSTAND HYDROSTATIC OR EARTH PRESSURE WHICH MAY RESULT AFTER THE ENDS OF ABANDONED UTILITIES HAVE BEEN CLOSED. CLOSE ENDS OF CONCRETE OR MASONRY UTILITIES WITH NOT LESS THAN 8" THICK CONCRETE BRICK MASONRY BULKHEADS. CLOSE OPEN ENDS OF OPEN PIPING WITH THREADED METAL CAPS, PLASTIC PLUGS, OR OTHER ACCEPTABLE METHODS SUITABLE FOR SIZE AND TYPE OF MATERIAL BEING CLOSED. WOOD PLUGS ARE NOT ACCEPTABLE.
13. DISTURBED AREAS, WHETHER OR NOT SPECIFICALLY INDICATED, SHALL BE RESTORED.
14. SEE SITE ELECTRICAL DRAWINGS FOR ROUTES OF SITE ELECTRICAL CONDUIT.

IMPERVIOUS COVERAGE

Driveway	6,505 SF
Building	4,680 SF
Concrete	979 SF
<b>Total Impervious Area</b>	<b>12,164 SF</b>
<b>Lot Size</b>	<b>14,000 SF</b>
<b>Percentage of Lot Impervious</b>	<b>86.90%</b>



FRANK H. LEHR ASSOCIATES  
CONSULTING CIVIL ENGINEERS  
101 South Harrison Street  
East Orange, New Jersey 07018  
Tel: 973 673 2320  
Fax: 973 673 6623  
WWW.FHLEHR.COM

Certificate of Authorization No. 245427950400

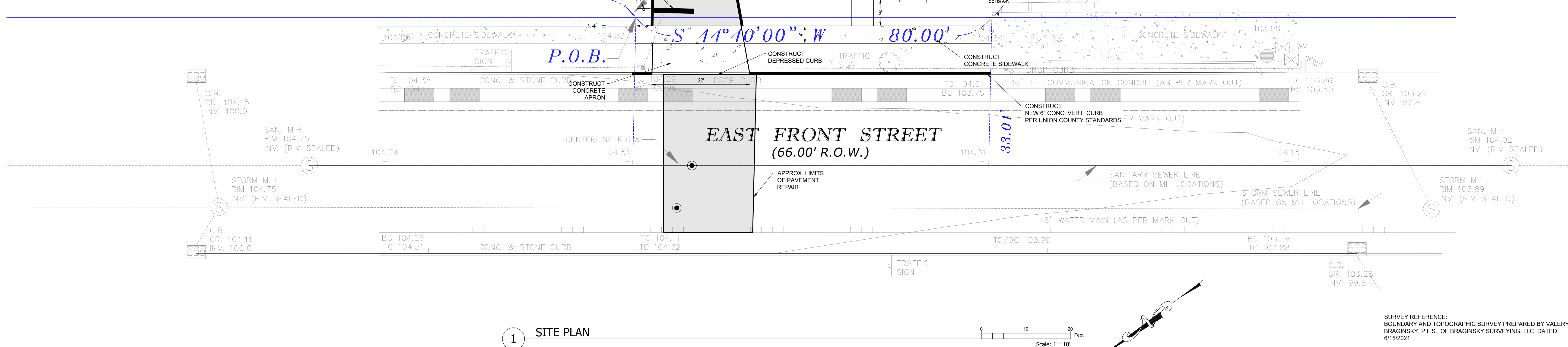
©Copyright 2021 Frank H. Lehr Associates. All Rights Reserved.

10/28/21  
Richard J. Adelsohn  
Professional Engineer  
NJ License No. GE035233

408-412 East Front Street  
Block 324, Lot 14  
City of Plainfield  
Union County, New Jersey

SITE PLAN

284.04'



NOTE:  
THE SITE DOES NOT LIE IN A FLOOD HAZARD AREA AS  
ESTABLISHED BY FEMA PRELIMINARY MAP 34039C0039G  
DATED APRIL 18, 2016.

SURVEY REFERENCE:  
BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY VALERY  
BRAGINSKY, P.L.S., OF BRAGINSKY SURVEYING, LLC. DATED  
6/15/2021.

DATA SHOWN HEREON FROM ELECTRONIC FILE ADJUSTED FOR  
CLARITY, REFER TO ORIGINAL MAP FOR SURVEY INFORMATION.

NO. DATE REVISION/ISSUE

DESIGNED/DRAWN BY

LTB

CHECKED BY

RJA

DATE

OCTOBER 7, 2021

SCALE

AS NOTED

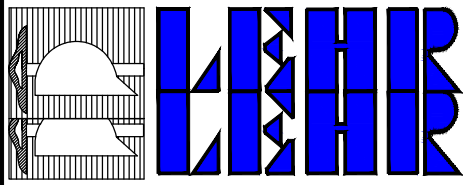
PROJECT NO.

9449

SHEET NO.

C-3





FRANK H. LEHR ASSOCIATES  
CONSULTING CIVIL ENGINEERS  
101 South Harrison Street  
East Orange, New Jersey 07018  
Tel: 973.673.2520  
Fax: 973.673.6623  
WWW.FHLEHR.COM  
Certificate of Authorization No. 245427950400  
©Copyright 2021 Frank H. Lehr Associates. All Rights Reserved.

Richard J. Adelsohn  
Professional Engineer  
NJ License No. GE035233

408-412 East Front Street  
Block 324, Lot 14  
City of Plainfield  
Union County, New Jersey

GRADING, DRAINAGE &  
UTILITIES PLAN

NO. DATE REVISION/ISSUE

DESIGNED/DRAWN BY  
LTB

CHECKED BY  
RJA

DATE  
OCTOBER 7, 2021

SCALE  
AS NOTED

PROJECT NO.  
9449

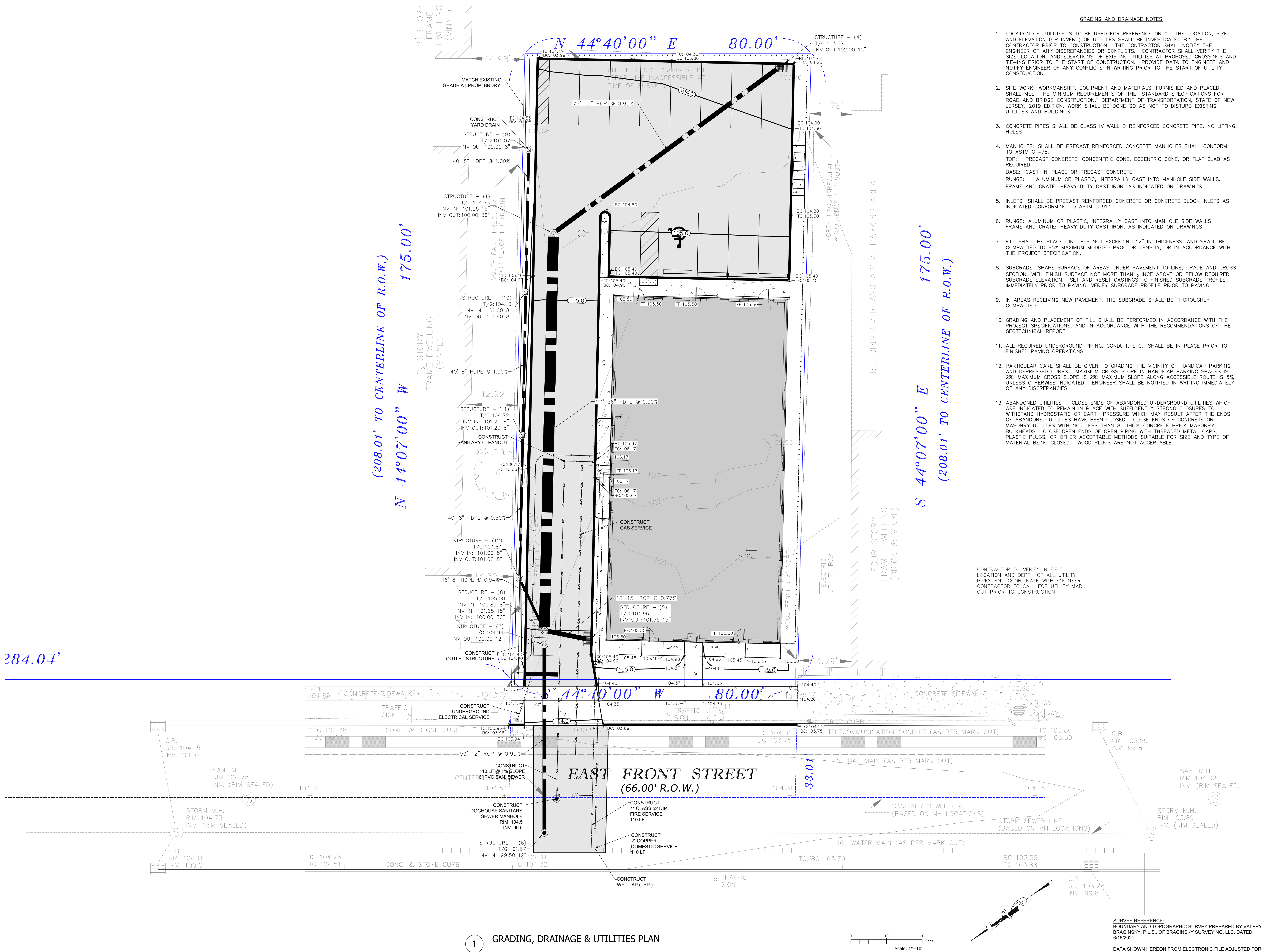
SHEET NO.  
C-4

GRADING AND DRAINAGE NOTES

1. LOCATION OF UTILITIES IS TO BE USED FOR REFERENCE ONLY. THE LOCATION, SIZE AND ELEVATION (OR INVERT) OF UTILITIES SHALL BE INVESTIGATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS. CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, AND ELEVATIONS OF EXISTING UTILITIES AT PROPOSED CROSSINGS AND TIE-INS PRIOR TO THE START OF CONSTRUCTION. PROVIDE DATA TO ENGINEER AND NOTIFY ENGINEER OF ANY CONFLICTS IN WRITING PRIOR TO THE START OF UTILITY CONSTRUCTION.
2. SITE WORK: WORKMANSHIP, EQUIPMENT AND MATERIALS, FURNISHED AND PLACED, SHALL MEET THE MINIMUM REQUIREMENTS OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION," DEPARTMENT OF TRANSPORTATION, STATE OF NEW JERSEY, 2019 EDITION. WORK SHALL BE DONE SO AS NOT TO DISTURB EXISTING UTILITIES AND BUILDINGS.
3. CONCRETE PIPES SHALL BE CLASS IV WALL B REINFORCED CONCRETE PIPE, NO LIFTING HOLES.
4. MANHOLES: SHALL BE PRECAST REINFORCED CONCRETE MANHOLES SHALL CONFORM TO ASTM C 478.  
TOP: PRECAST CONCRETE, CONCENTRIC CONE, ECCENTRIC CONE, OR FLAT SLAB AS REQUIRED.  
BASE: CAST-IN-PLACE OR PRECAST CONCRETE.  
RUNGS: ALUMINUM OR PLASTIC, INTEGRALLY CAST INTO MANHOLE SIDE WALLS.  
FRAME AND GRATE: HEAVY DUTY CAST IRON, AS INDICATED ON DRAWINGS.
5. INLETS: SHALL BE PRECAST REINFORCED CONCRETE OR CONCRETE BLOCK INLETS AS INDICATED CONFORMING TO ASTM C 913.
6. RUNGS: ALUMINUM OR PLASTIC, INTEGRALLY CAST INTO MANHOLE SIDE WALLS.  
FRAME AND GRATE: HEAVY DUTY CAST IRON, AS INDICATED ON DRAWINGS.
7. FILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 12" IN THICKNESS, AND SHALL BE COMPACTED TO 95% MAXIMUM MODIFIED PROCTOR DENSITY, OR IN ACCORDANCE WITH THE PROJECT SPECIFICATION.
8. SUBGRADE: SHAPE SURFACE OF AREAS UNDER PAVEMENT TO LINE, GRADE AND CROSS SECTION, WITH FINISH SURFACE NOT MORE THAN 3/4" INCH ABOVE OR BELOW REQUIRED SUBGRADE ELEVATION. SET AND RESET CASTINGS TO FINISHED SUBGRADE PROFILE IMMEDIATELY PRIOR TO PAVING. VERIFY SUBGRADE PROFILE PRIOR TO PAVING.
9. IN AREAS RECEIVING NEW PAVEMENT, THE SUBGRADE SHALL BE THOROUGHLY COMPACTED.
10. GRADING AND PLACEMENT OF FILL SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, AND IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
11. ALL REQUIRED UNDERGROUND PIPING, CONDUIT, ETC., SHALL BE IN PLACE PRIOR TO FINISHED PAVING OPERATIONS.
12. PARTICULAR CARE SHALL BE GIVEN TO GRADING THE VICINITY OF HANDICAP PARKING AND DEPRESSED CURBS. MAXIMUM CROSS SLOPE IN HANDICAP PARKING SPACES IS 2%; MAXIMUM CROSS SLOPE IS 2%; MAXIMUM SLOPE ALONG ACCESSIBLE ROUTE IS 5%, UNLESS OTHERWISE INDICATED. ENGINEER SHALL BE NOTIFIED IN WRITING IMMEDIATELY OF ANY DISCREPANCIES.
13. ABANDONED UTILITIES - CLOSE ENDS OF ABANDONED UNDERGROUND UTILITIES WHICH ARE INDICATED TO REMAIN IN PLACE WITH SUFFICIENTLY STRONG CLOSURES TO WITHSTAND HYDROSTATIC OR EARTH PRESSURE WHICH MAY RESULT AFTER THE ENDS OF ABANDONED UTILITIES HAVE BEEN CLOSED. CLOSE ENDS OF CONCRETE OR MASONRY UTILITIES WITH NOT LESS THAN 8" THICK CONCRETE BRICK MASONRY BULKHEADS. CLOSE OPEN ENDS OF OPEN PIPING WITH THREADED METAL CAPS, PLASTIC PLUGS, OR OTHER ACCEPTABLE METHODS SUITABLE FOR SIZE AND TYPE OF MATERIAL BEING CLOSED. WOOD PLUGS ARE NOT ACCEPTABLE.

CONTRACTOR TO VERIFY IN FIELD  
LOCATION AND DEPTH OF ALL UTILITY  
PIPES AND COORDINATE WITH ENGINEER.  
CONTRACTOR TO CALL FOR UTILITY MARK  
OUT PRIOR TO CONSTRUCTION.

284.04'



1 GRADING, DRAINAGE & UTILITIES PLAN

0 10 20  
Feet  
Scale: 1"=10'

SURVEY REFERENCE:  
BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY VALERY  
BRAGINSKY, P.L.S., OF BRAGINSKY SURVEYING, LLC. DATED  
6/15/2021.




DATA SHOWN HEREON FROM ELECTRONIC FILE ADJUSTED FOR  
CLARITY. REFER TO ORIGINAL MAP FOR SURVEY INFORMATION.



OF \_\_\_\_\_





Product	Label	Image	Quantity	Manufacturer	Catalog Number	Description	Normal Lenses	Lenses Price List	Light Lens Type	History
	A		7	COOPER DOTTING ILLUMINATED HOUSE FOUNTAIN LIGHTS	240-640-146 US-6 240-640-146	ENVI-LED LAMINATE 1" TC-08-400K LUMINOUS 1" TC-08-400K LUMINOUS 1" TC-08-400K ELEMENTARY OPTICS WITH HOUSE GDS	10	29	10	13
	B		1	SONMY CANAL LTD	P150-A02-703-145	Position Area Steel 17" Square, 10 LEDs, 800K CCT, 1700m T80 OPTC.	1	5066	1	26.6
	C		1	SONMY CANAL LTD	P150-A02-703-155	Position Area Steel 17" Square, 10 LEDs, 800K CCT, 1700m T80 OPTC.	1	4544	1	26.6

**NOTE:**

- THE SITE DOES NOT LIE IN A FLOOD HAZARD AREA AS ESTABLISHED BY FEMA PRELIMINARY MAP 34039C0039C DATED APRIL 18, 2016.



**FRANK H. LEHR ASSOCIATES**  
*CONSULTING CIVIL ENGINEERS*  
10 South Harrison Street  
East Orange, New Jersey 07018  
Tel: 973 673 2520  
Fax: 973 673 6623  
[WWW.FHLEHR.COM](http://WWW.FHLEHR.COM)

Certificate of Authorization No. 24GA27959400

Richard J. Adelsohn  
Professional Engineer  
NJ License No. GE035233

408-412 East Front Street  
Block 324, Lot 14  
City of Plainfield  
Union County, New Jersey

## LIGHTING PLAN

[illegible]

DESIGNED/DRAWN BY  
LTB

CHECKED BY  
RJA

DATE OCTOBER 7, 2021

SCALE

AS NOTED

PROJECT NO.

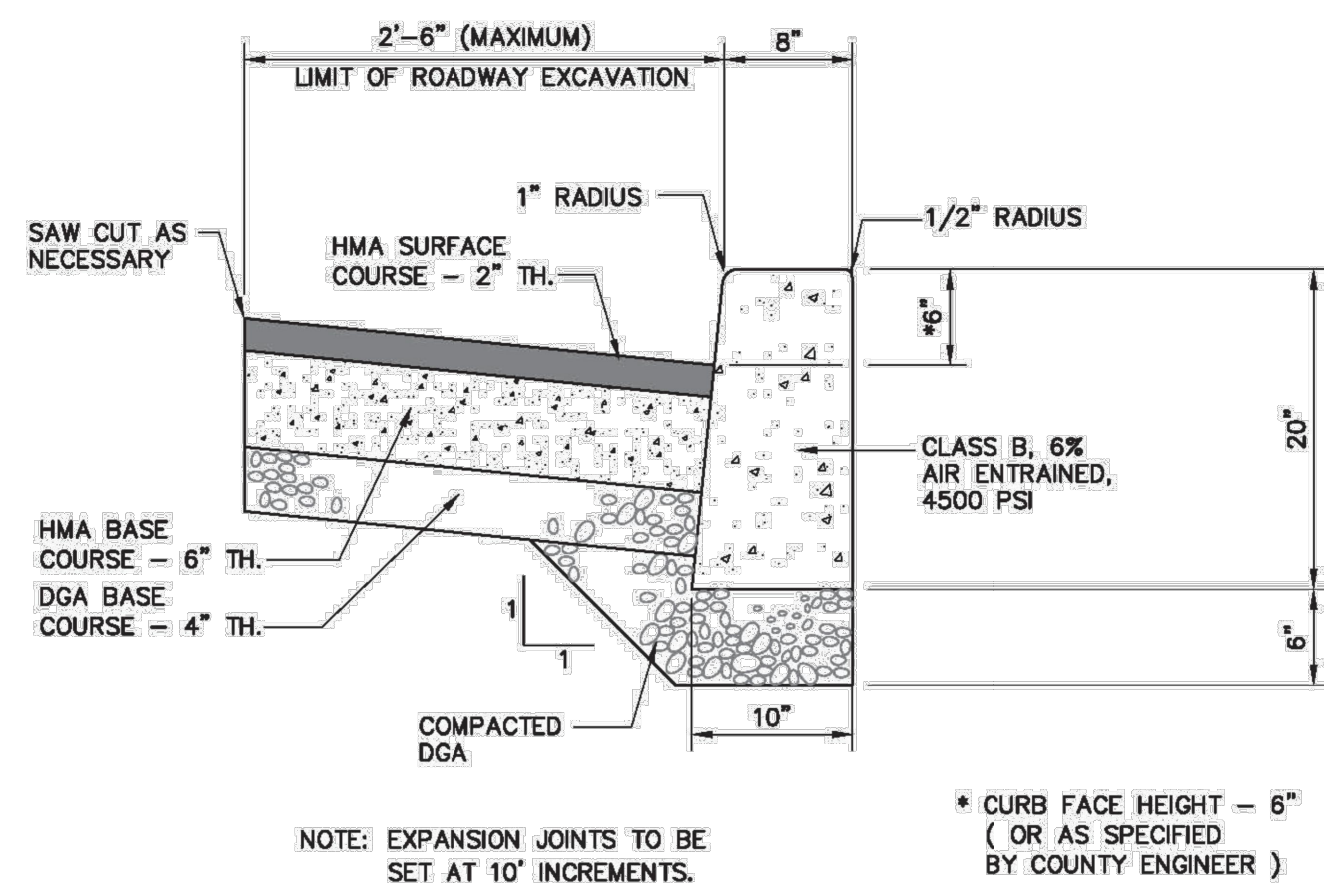
9449

SHEET NO

C-6

OF





**TYPICAL ROADWAY EXCAVATION & RESTORATION AT CURBS**

SCALE IN FEET

HMA SURFACE COURSE - NJDOT SUPERPAVE HOT MIX ASPHALT SURFACE COURSE, (AS PER ENGINEER'S SPECIFICATIONS).

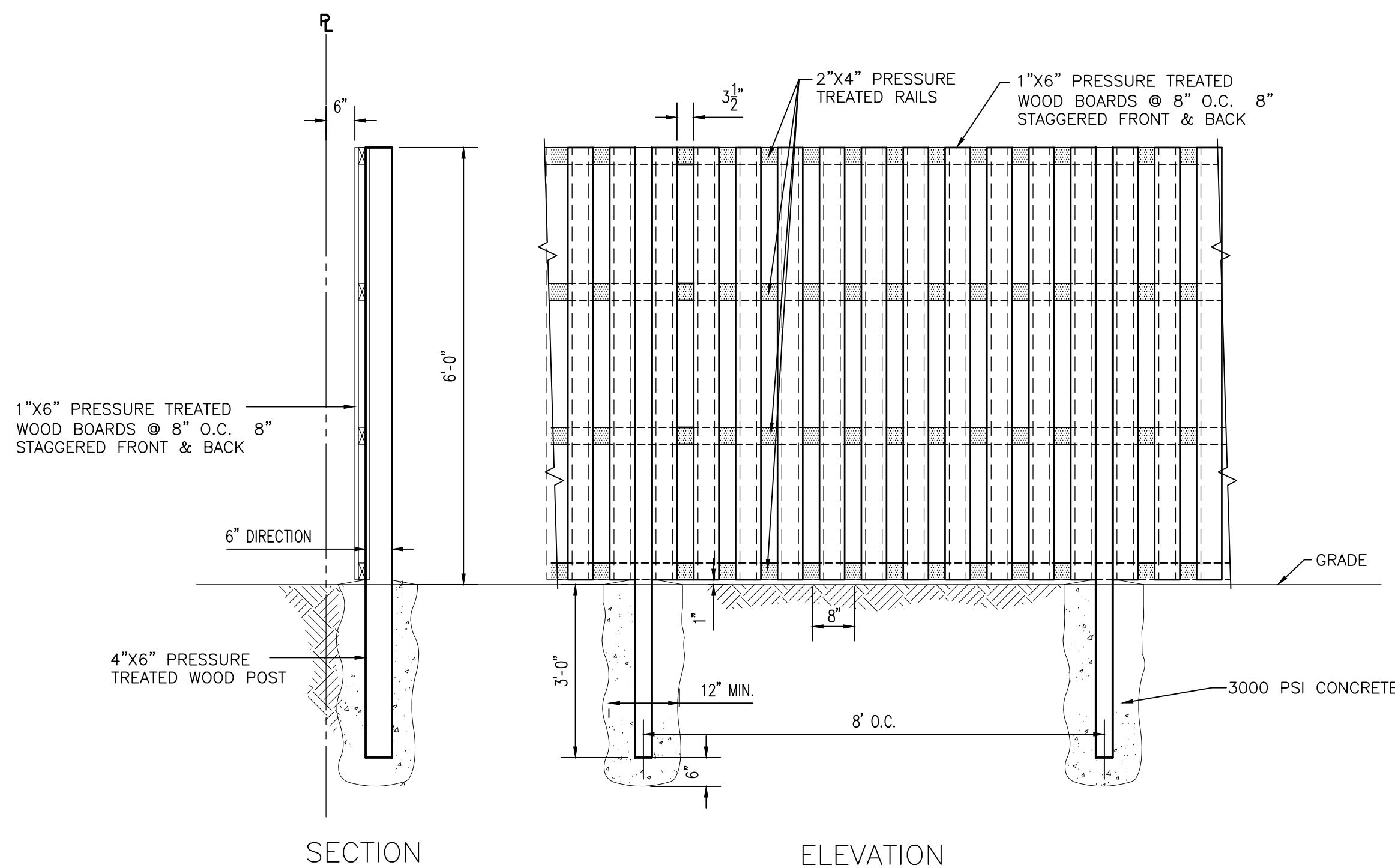
HMA BASE COURSE - NJDOT SUPERPAVE HOT MIX ASPHALT 19.5 M64 BASE COURSE.

NOTE: CONSTRUCT IN LAYERS NOT MORE THAN 3" COMPACTED THICKNESS.

DGA BASE COURSE - NJDOT DENSE GRADED AGGREGATE BASE COURSE 4" THICK (FORMERLY NJDOT QUARRY PROCESSED STONE)

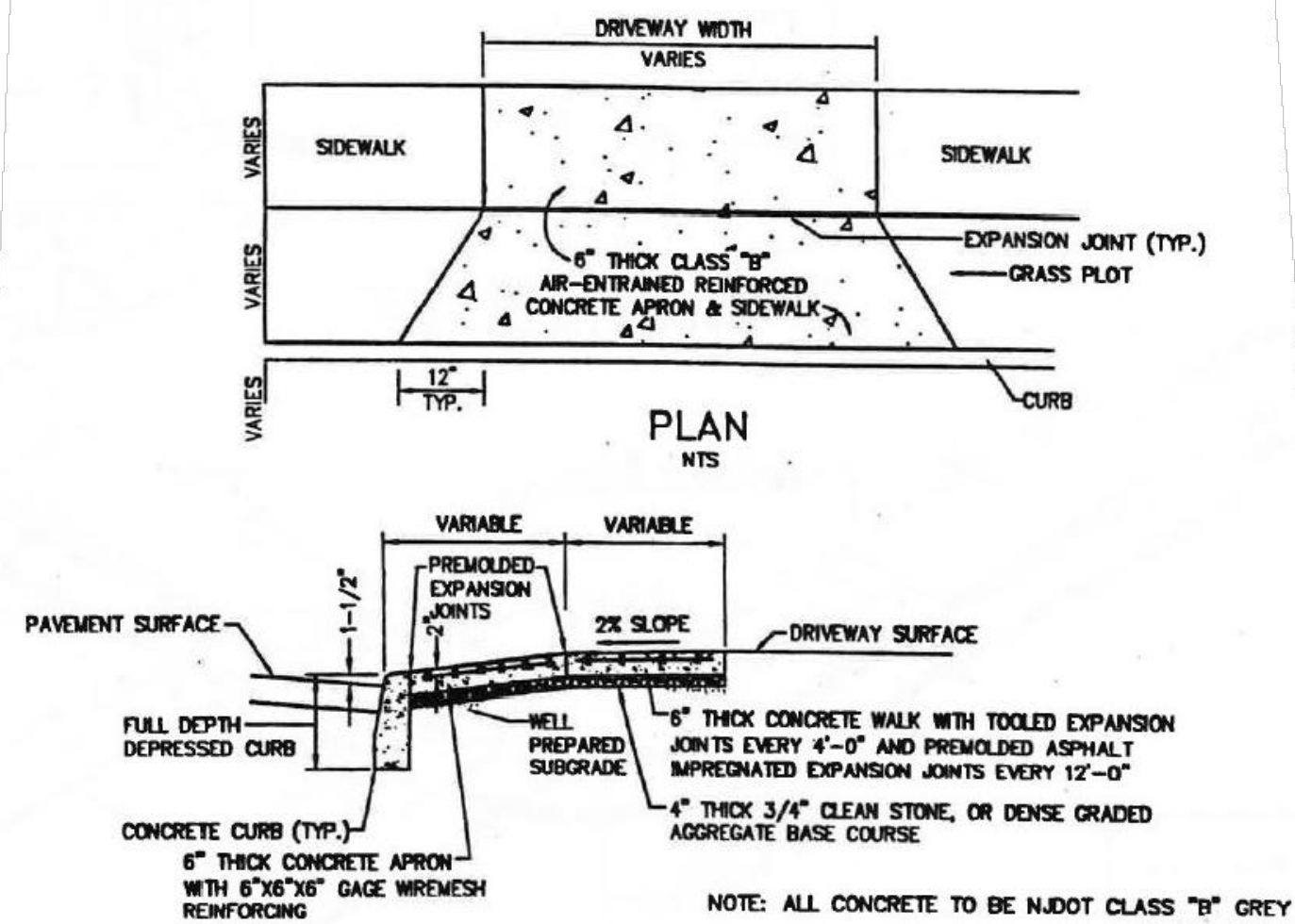
**UNION COUNTY ROADWAY EXCAVATION & RESTORATION AT CURBS DETAIL**

N.T.S.



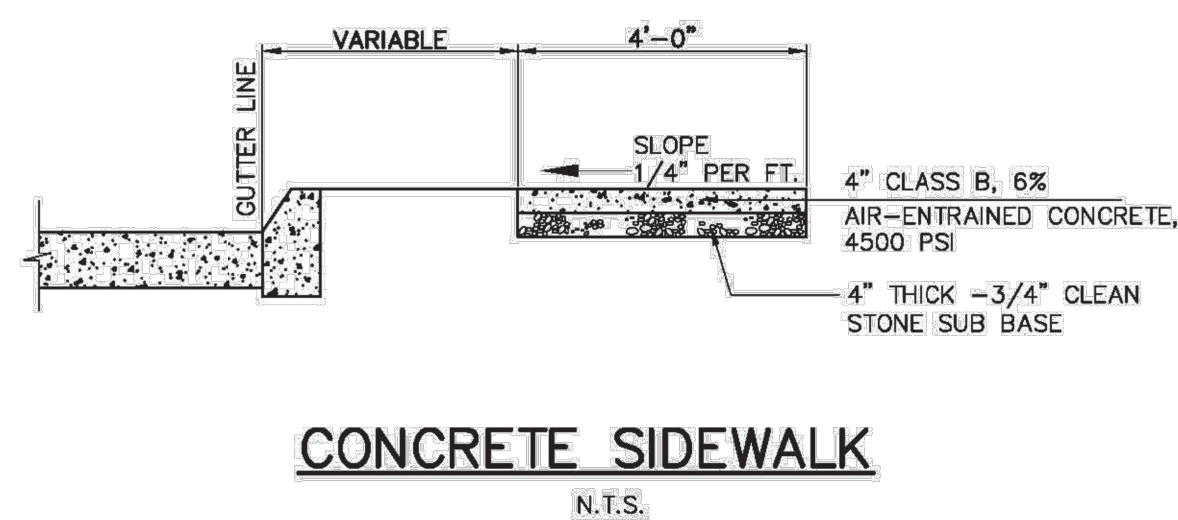
**BOARD ON BOARD FENCE**

Scale: N.T.S.



**DEPRESSED CURB & DRIVEWAY ENTRANCE APRON**

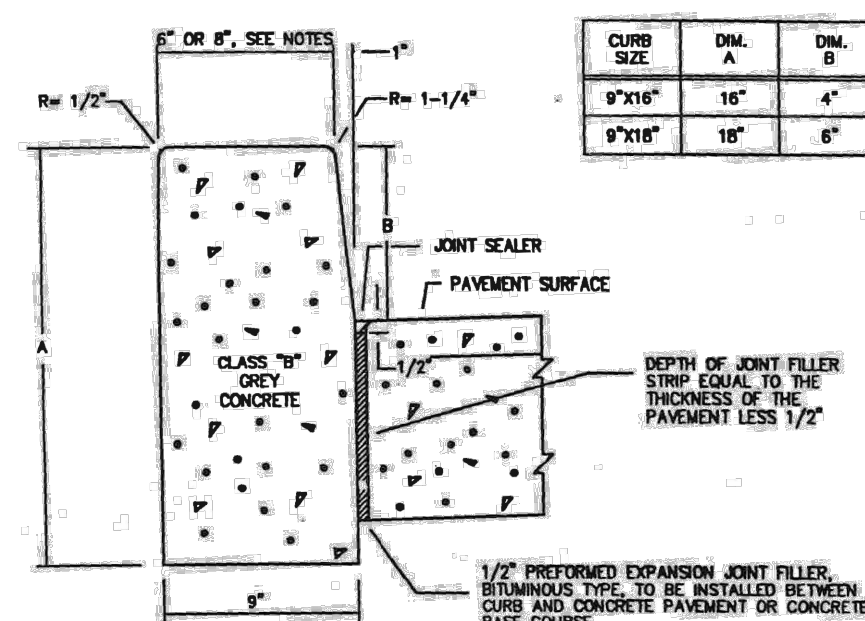
N.T.S. CITY OF PLAINFIELD



N.T.S.

**UNION COUNTY SIDEWALK DETAIL**

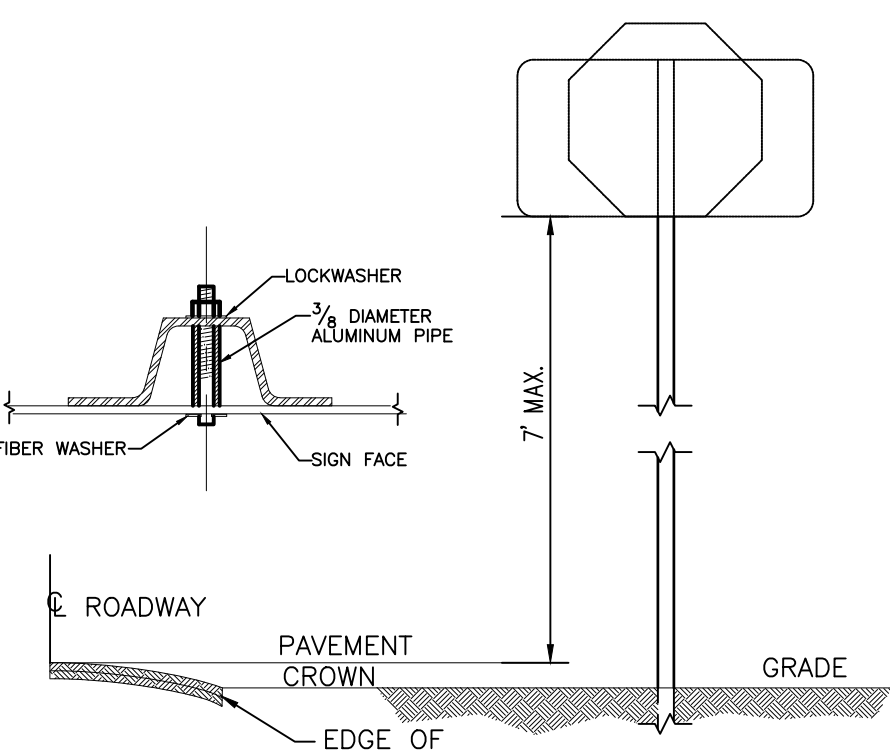
N.T.S.



N.T.S.

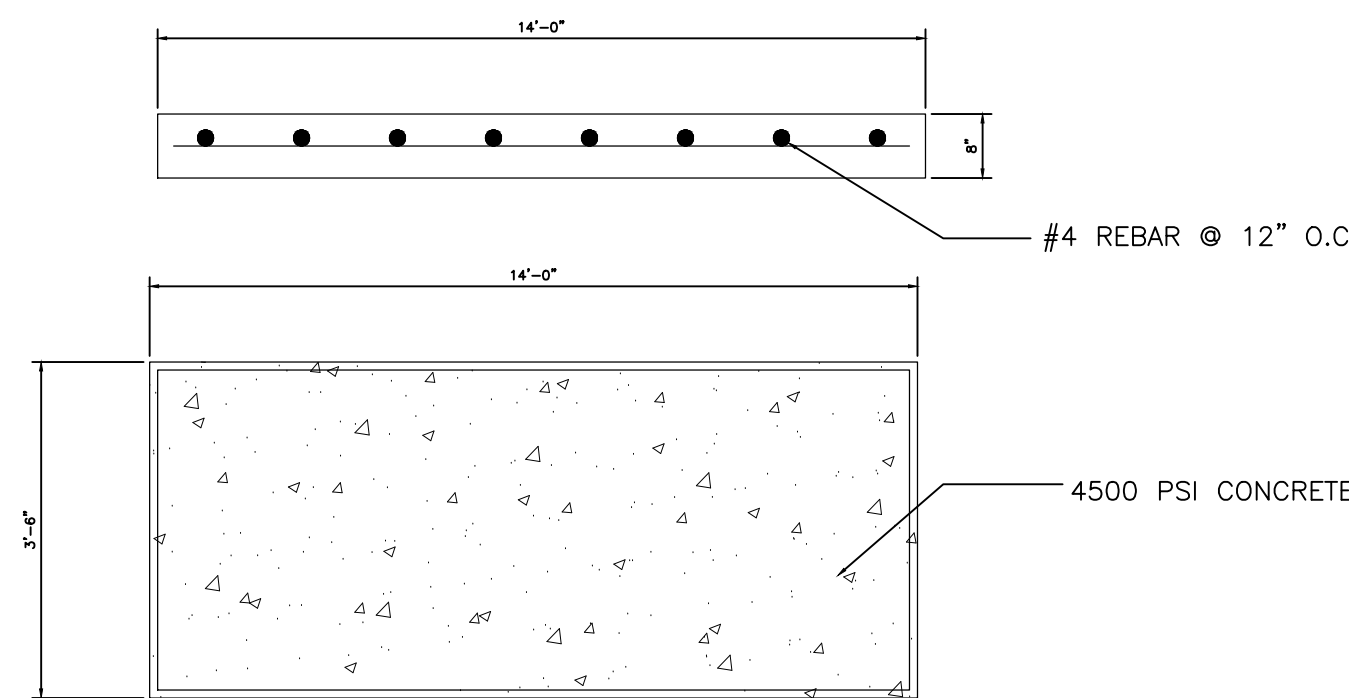
**ON-SITE CONCRETE VERTICAL CURB DETAIL**

N.T.S. CITY OF PLAINFIELD



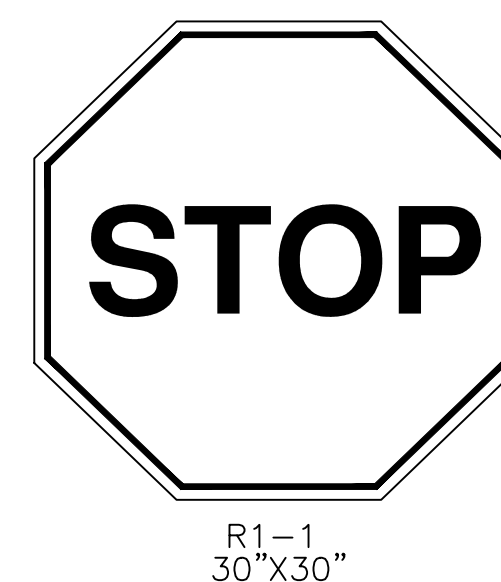
N.T.S.

1. ALL POSTS SHALL BE OF ADEQUATE LENGTH TO MEET THE REQUIREMENTS FOR ERECTION AS STATED IN THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. TWO PIECE STEEL POST SHALL BE EMBEDDED 3'-0" MIN. ONE PIECE STEEL POST SHALL BE EMBEDDED 3'-6" MAX.
3. ALL STEEL POSTS AND BRACKETS SHALL BE CUT, BENT AND HOLES PUNCHED AND DRILLED BEFORE GALVANIZING. GALVANIZING SHALL BE IN CONFORMANCE WITH CURRENT A.S.T.M. SPECIFICATIONS A 123.
4. POSTS MAY BE STEEL OR 3 PIECE STEEL U-POST IN CONFORMANCE WITH THE NOTES BELOW.
5. SIGN PANEL SIZES SHALL DETERMINE POST TYPE AND NUMBER AS SHOWN ON THIS DETAIL.
6. BOLTS SHALL NOT PROTRUDE MORE THAN 3/4" BEYOND THE NUT WHEN TIGHT BUT SHALL ENGAGE ALL THE THREADS IN THE NUT.
7. THE MINIMUM VERTICAL CLEARANCE REQUIREMENTS FOR SIGNS ARE: EDGE OF PAVEMENT TO BOTTOM OF SIGN AS PER SECTION 16-2.3 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. GROUNDLINE TO BOTTOM OF SIGN SHALL BE 7 FEET MINIMUM. FOR SINGLE POST INSTALLATIONS, THE MINIMUM DISTANCE FROM GROUNDLINE TO THE TOP OF SIGN MUST BE 9 FEET.
8. PERMANENT SIGN SUPPORTS SHALL BE INSTALLED ON SLOPES GREATER THAN 1:1, UNLESS BEING A TRAFFIC BARRIER, AND THE SLOPE SHALL EXTEND A MINIMUM OF 2'-0" BEYOND THE OUTSIDE EDGE OF SIGN (SEE GRADING DETAIL FOR SLOPE TREATMENT).
9. EXTRUDED ALUMINUM SIGN PANELS ARE NOT PERMITTED FOR USE WITH U-POST SIGN SUPPORTS.
10. U-POST SIGN SUPPORTS SHALL NOT BE PLACED IN FRONT OF CURB RAIL AND THE POSTS MUST NOT STRADDLE CURB RAIL.
11. TO EXTEND THE HEIGHT OF A SIGN POST, A MAXIMUM OF ONE SPICE MAY BE MADE AND MUST BE A MINIMUM OF 9 FEET FROM THE GROUNDLINE TO CENTER LINE OF SPICE.



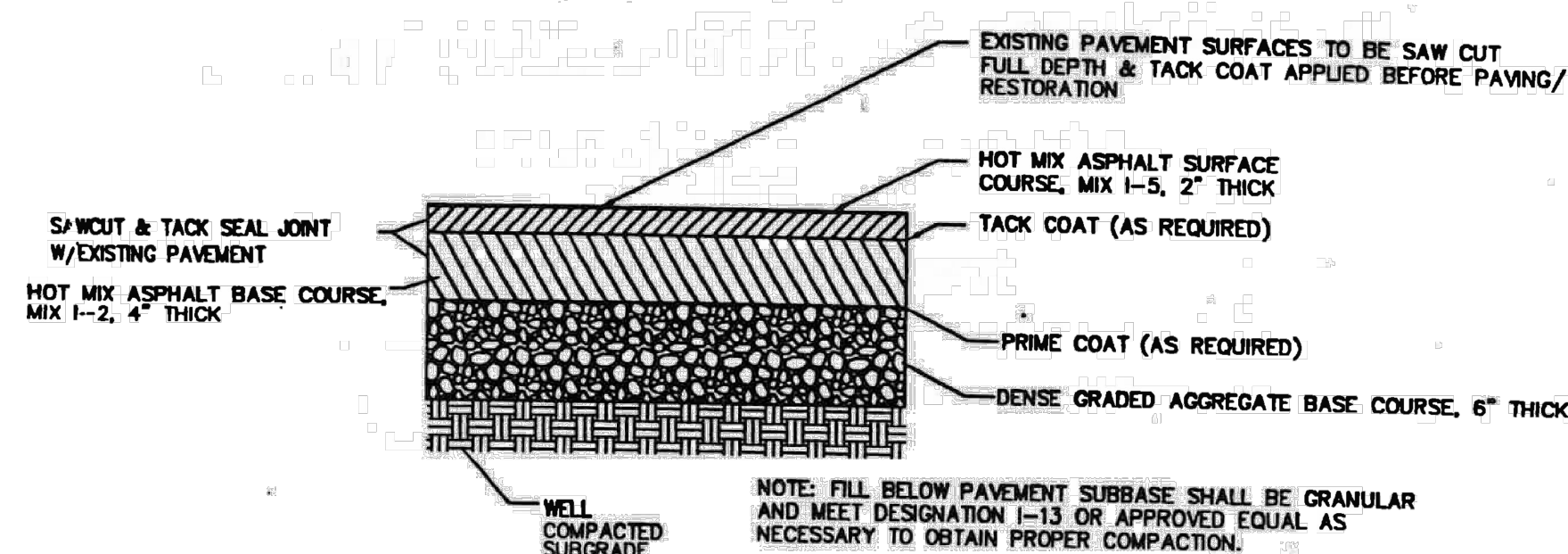
**DUMPSTER PAD**

Scale: N.T.S.



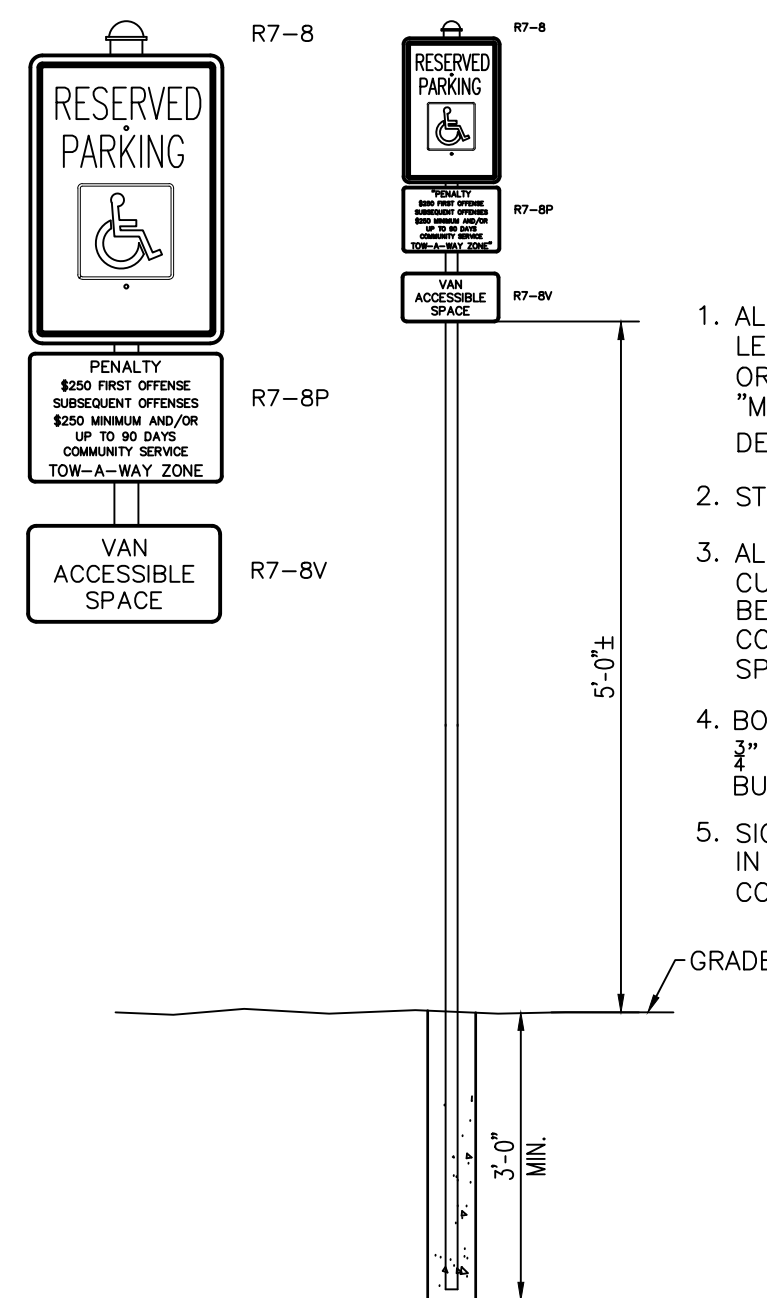
**STOP SIGN**

Scale: N.T.S.



**PAVEMENT RESTORATION DETAIL**

N.T.S. CITY OF PLAINFIELD



**HANDICAP DETAIL**

Scale: N.T.S.

1. ALL POSTS SHALL BE OF ADEQUATE LENGTH TO MEET THE REQUIREMENTS OR ERECTION AS STATED IN THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS.
2. STEEL POST SHALL BE EMBEDDED 3'-0" MIN.
3. ALL STEEL POSTS AND BRACKETS SHALL BE CUT, BENT AND HOLES PUNCHED AND DRILLED BEFORE GALVANIZING. GALVANIZING SHALL BE IN CONFORMANCE WITH CURRENT A.S.T.M. SPECIFICATIONS A 123.
4. BOLTS SHALL NOT PROTRUDE MORE THAN 3/4" BEYOND THE NUT WHEN TIGHT BUT SHALL ENGAGE ALL THREADS IN THE NUT.
5. SIGNS SHALL BE R7-B & R7-BP AS DEPICTED IN THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES

FABC SURFACE COURSE (NJDOT 9.5M64)

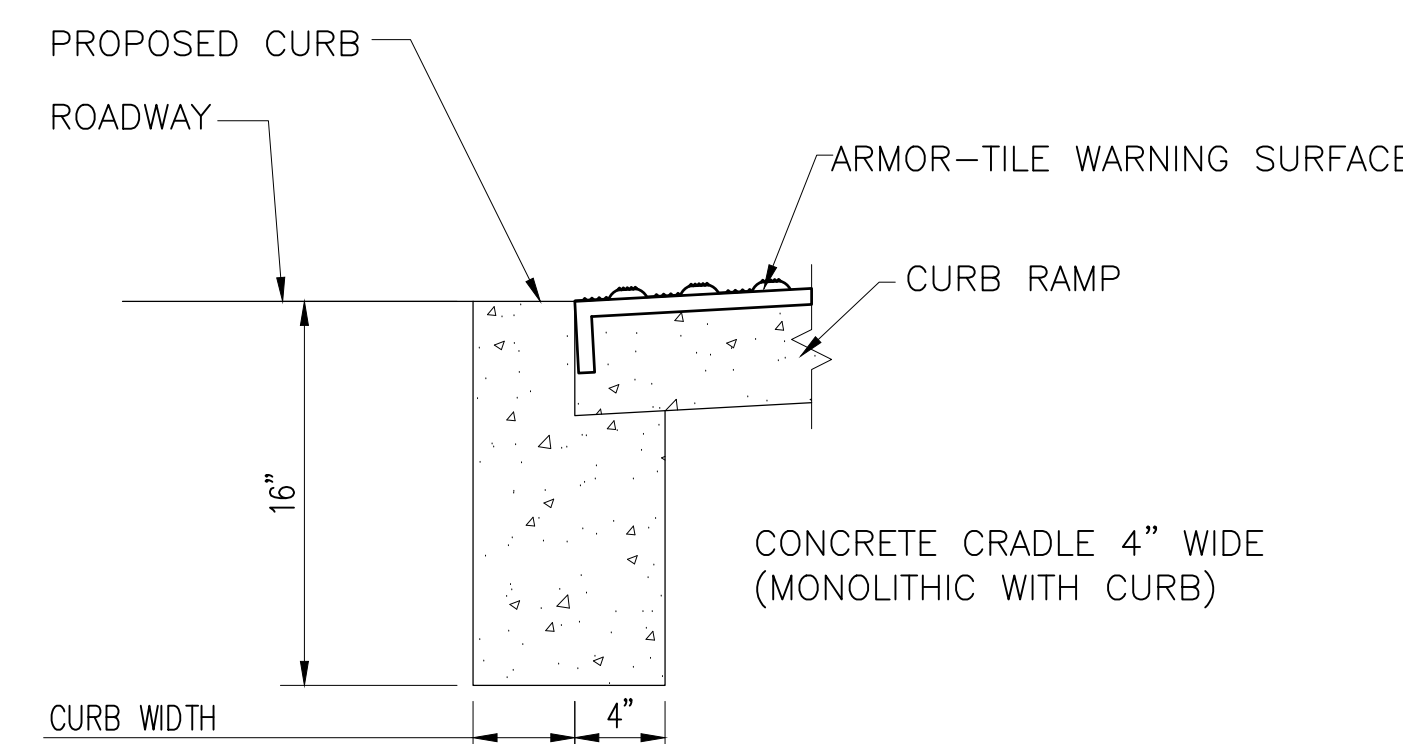
BITUMINOUS STABILIZED BASE COURSE (NJDOT 19M64)

DENSE GRADED AGGREGATE (NJDOT DGA)

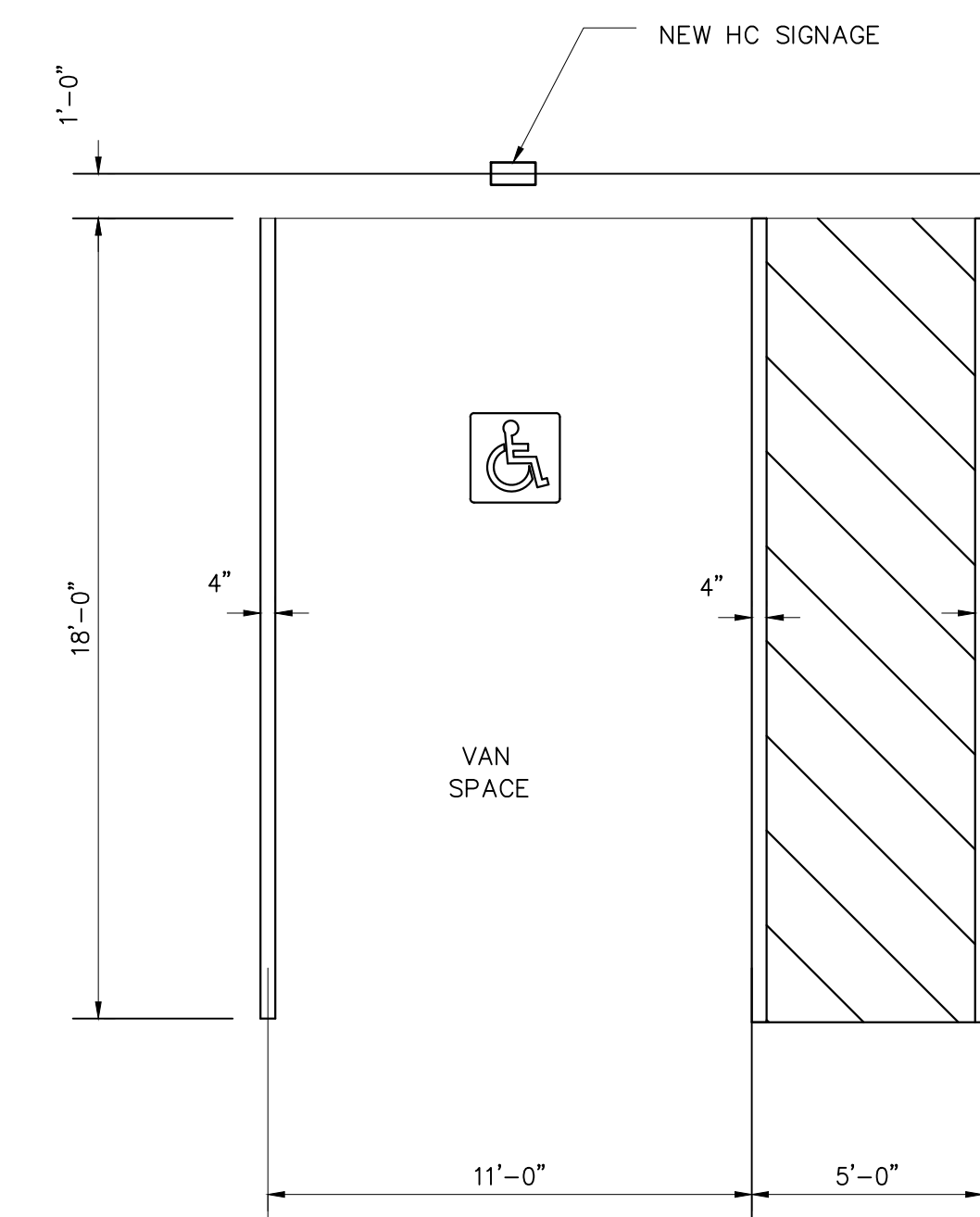
THOROUGHLY COMPACTED SUBGRADE

**ONSITE PAVEMENT DETAIL**

Scale: N.T.S.

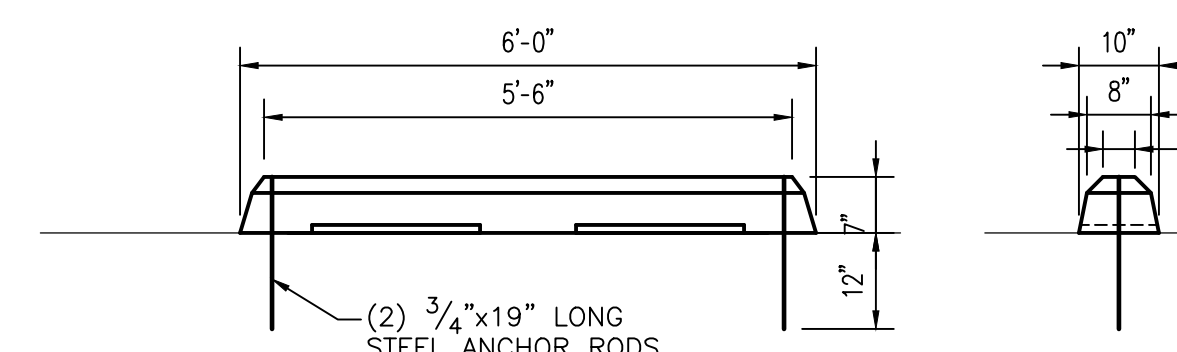


Scale: N.T.S.



**HANDICAP ACCESSIBLE PARKING SPACES**

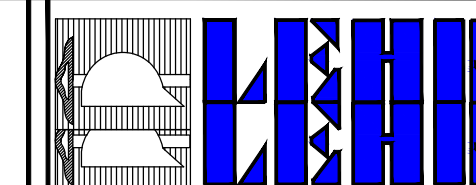
N.T.S.



3000 PSI CONC. WITH DEFORMED BAR REINFORCEMENT AS MANUFACTURED BY CASTEX CORP.

**WHEEL STOP DETAIL**

Scale: N.T.S.



FRANK H. LEHR ASSOCIATES  
CONSULTING CIVIL ENGINEERS  
101 South Harrison Street  
East Orange, New Jersey 07018  
Tel: 973 673 2520  
Fax: 973 673 6623  
WWW.FHLEHR.COM

Certificate of Authorization No. 24542795000

©Copyright 2007 Frank H. Lehr Associates. All Rights Reserved.



Richard J. Adelson  
Professional Engineer  
NJ License No. GE035233

408-412 East Front Street  
Block 324, Lot 14  
City of Plainfield  
Union County, New Jersey

SITE DETAILS

NO. DATE REVISION/ISSUE

DESIGNED/DRAWN BY

LTB

CHECKED BY

RJA

DATE

OCTOBER 7, 2021

SCALE

AS NOTED

PROJECT NO.

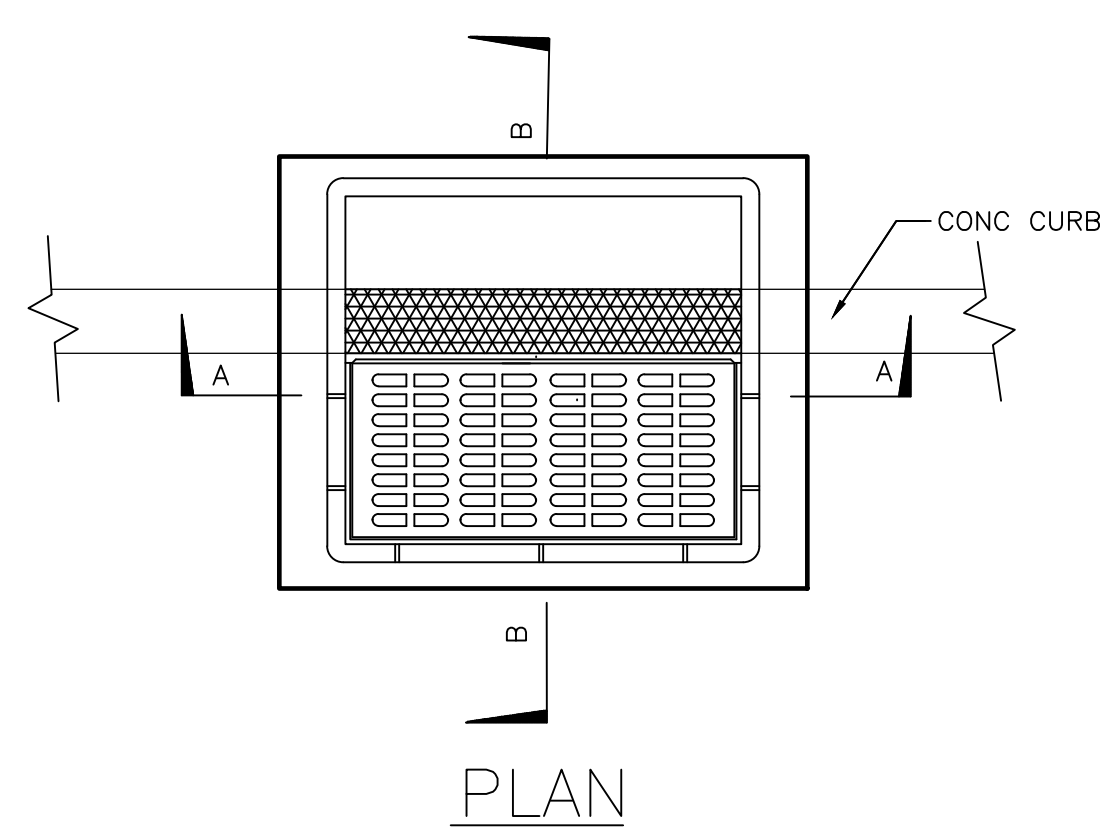
9449

SHEET NO.

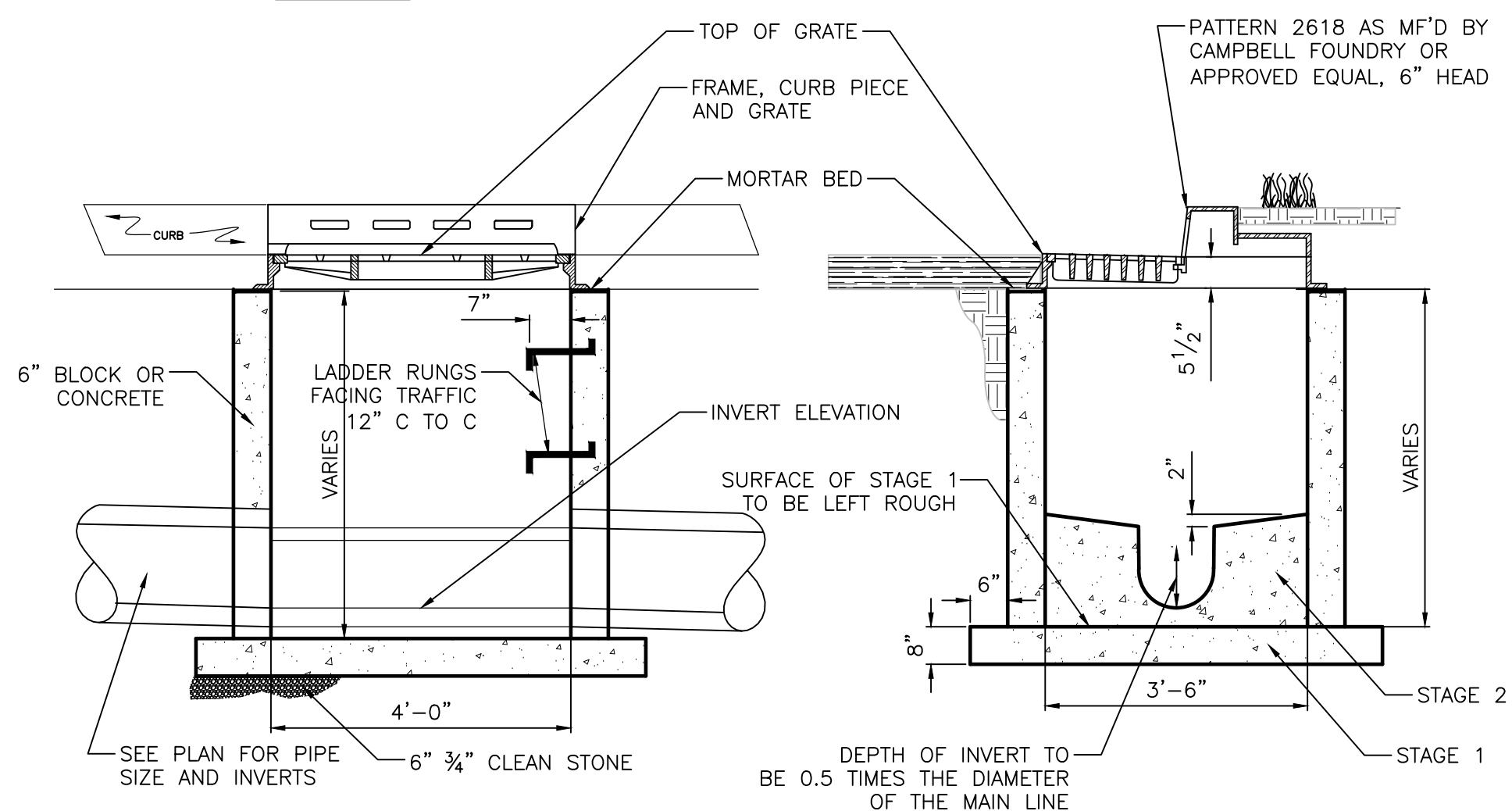
C-7

OF





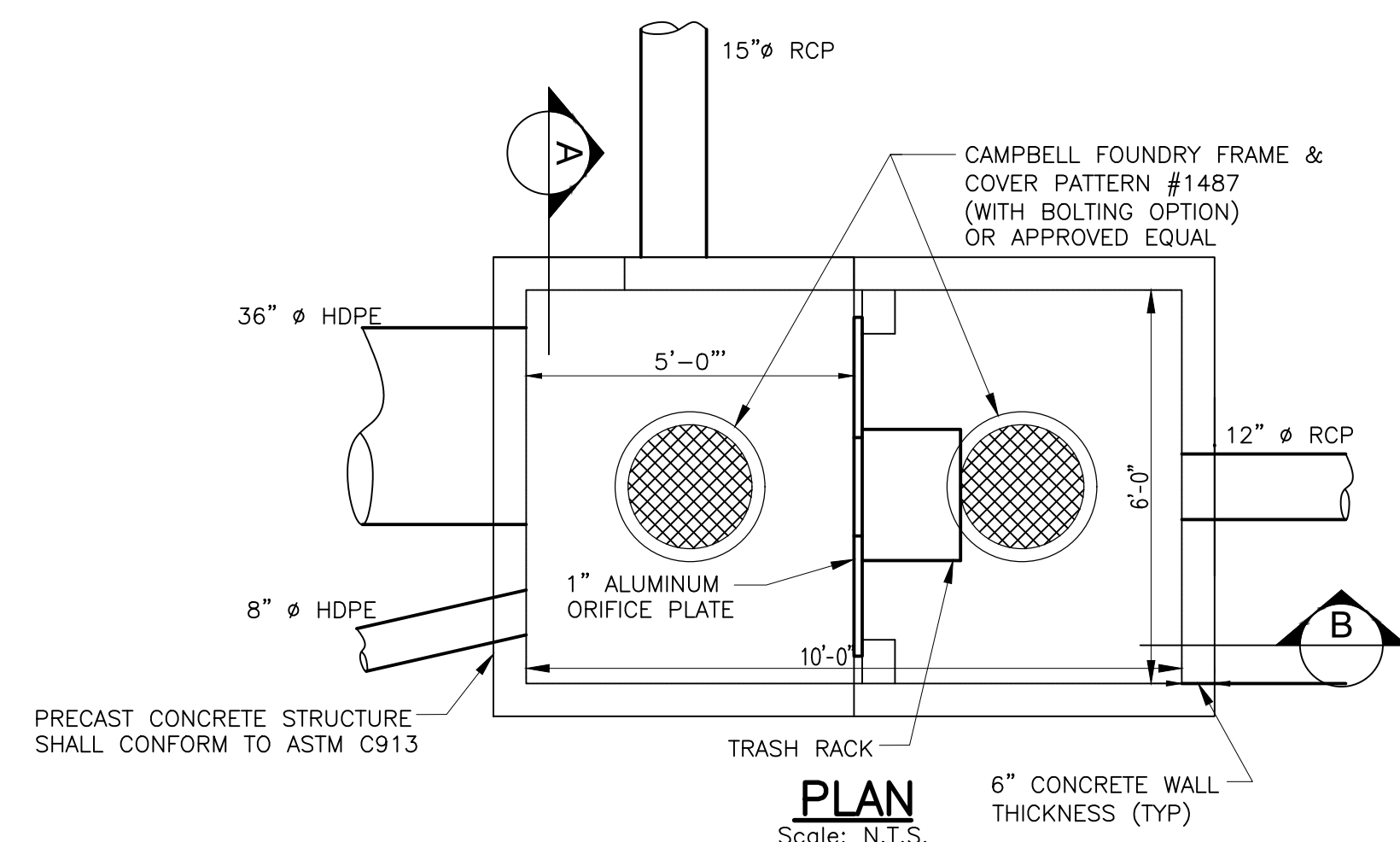
- NOTES:**
1. INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS. BOTTOMS SHALL BE DISHED AND SLOPED TOWARDS THE OUTLET PIPE AT THE RATE OF GRADE OF 2 INCHES PER FOOT.
  2. THIS INLET MAY BE CONSTRUCTED OF CONCRETE OR CONCRETE BLOCK. IF CONCRETE BLOCK IS USED, THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE & THE OUTSIDE OF THE WALLS SHALL BE PLASTERED WITH 1/2" COAT OF 1:2 CEMENT MORTAR. THE INSIDE WALLS SHALL BE STRUCK & POINTED.
  3. PROVIDE 7/8" DIA. X 7" X 12" ALUMINUM LADDER RUNGS.
  4. INLET FRAME AND GRATES TO BE CAMPBELL FOUNDRY PATTERN NO. 2618 OR APPROVED EQUAL.
  5. WHEN DEPTH IS GREATER THEN 12' THE WALLS SHOULD BE EITHER 8" CONCRETE OR 8" BLOCK AND THE FOOTING SHALL BE EXTENDED TO 12" BEYOND THE OUTSIDE WALLS.
  6. PRECAST INLET SECTIONS SHALL CONFORM TO ASTM C 478. INSIDE WALLS JOINTS SHALL BE STRUCK & POINTED.
  7. TRIM PIPE FLUSH WITH INSIDE WALL. PROVIDE SEAL AROUND PIPE TO PREVENT LEAKAGE.



SECTION A-A

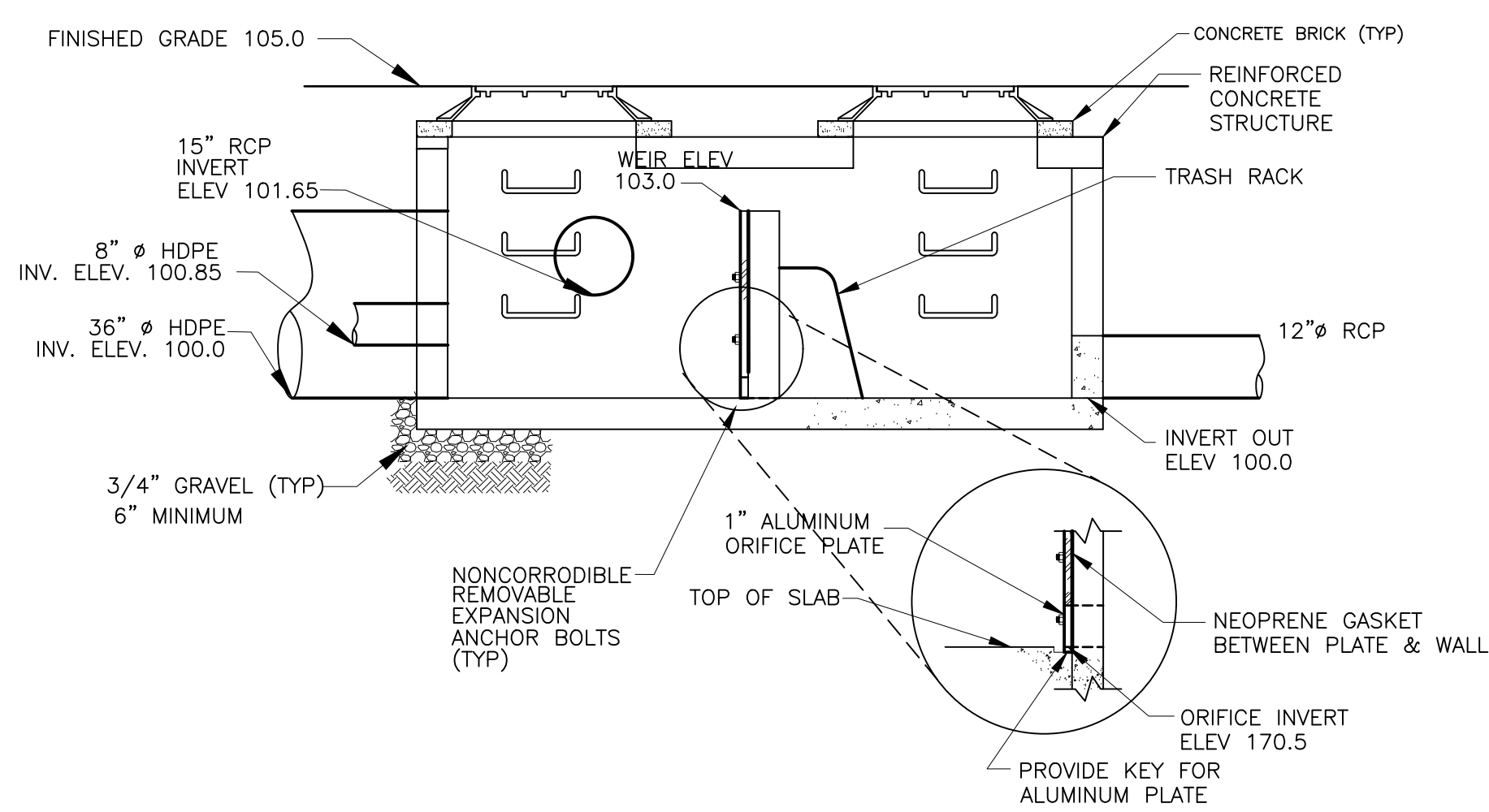
SECTION B-B

TYPE "B" INLET  
NTS



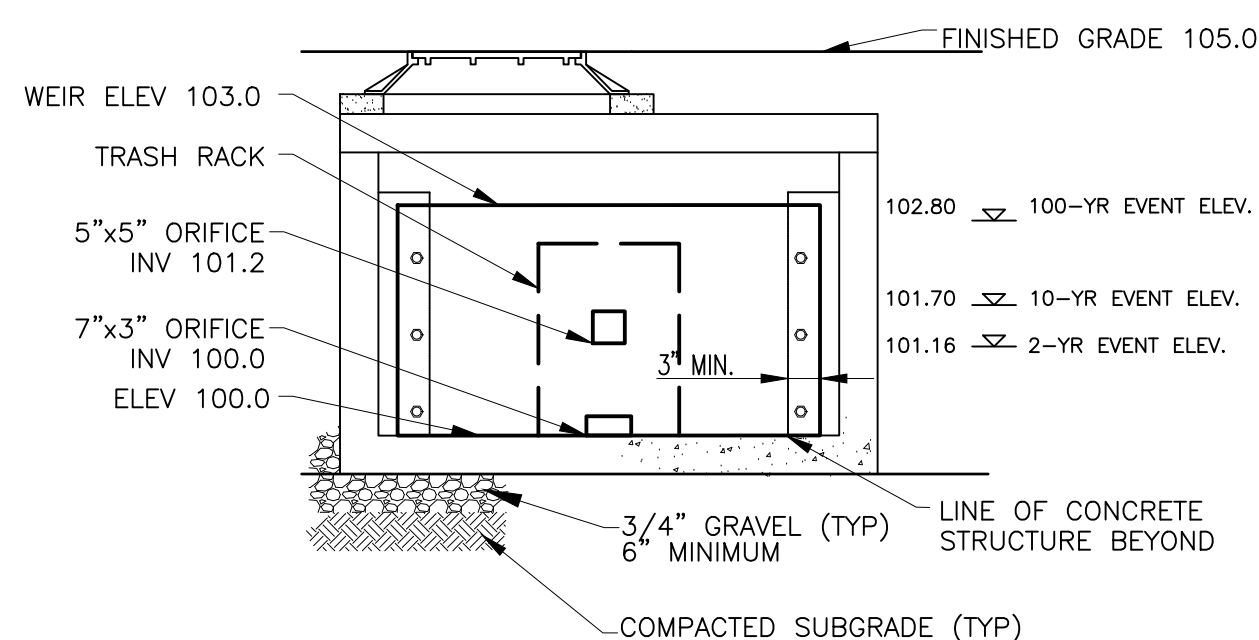
PLAN

Scale: N.T.S.

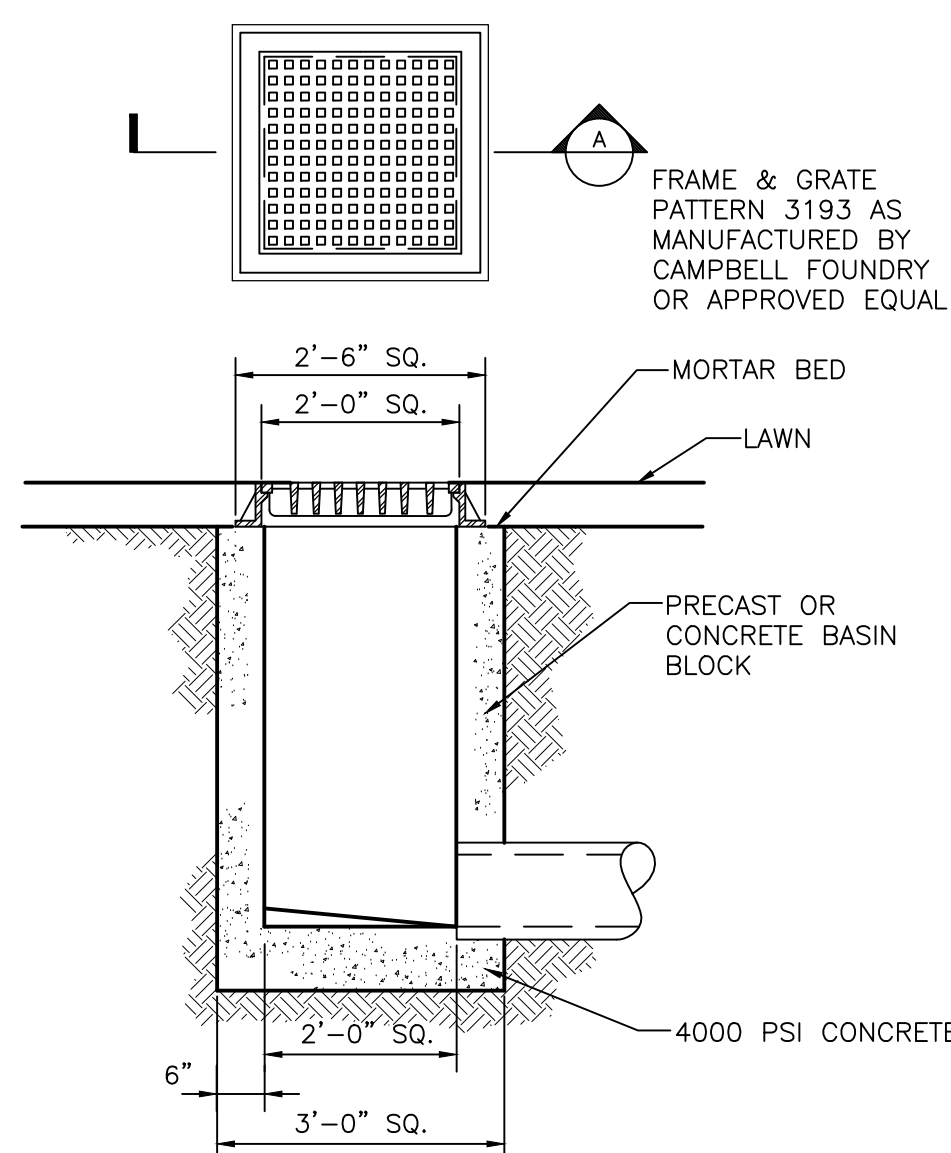


SECTION B-B  
Scale: N.T.S.

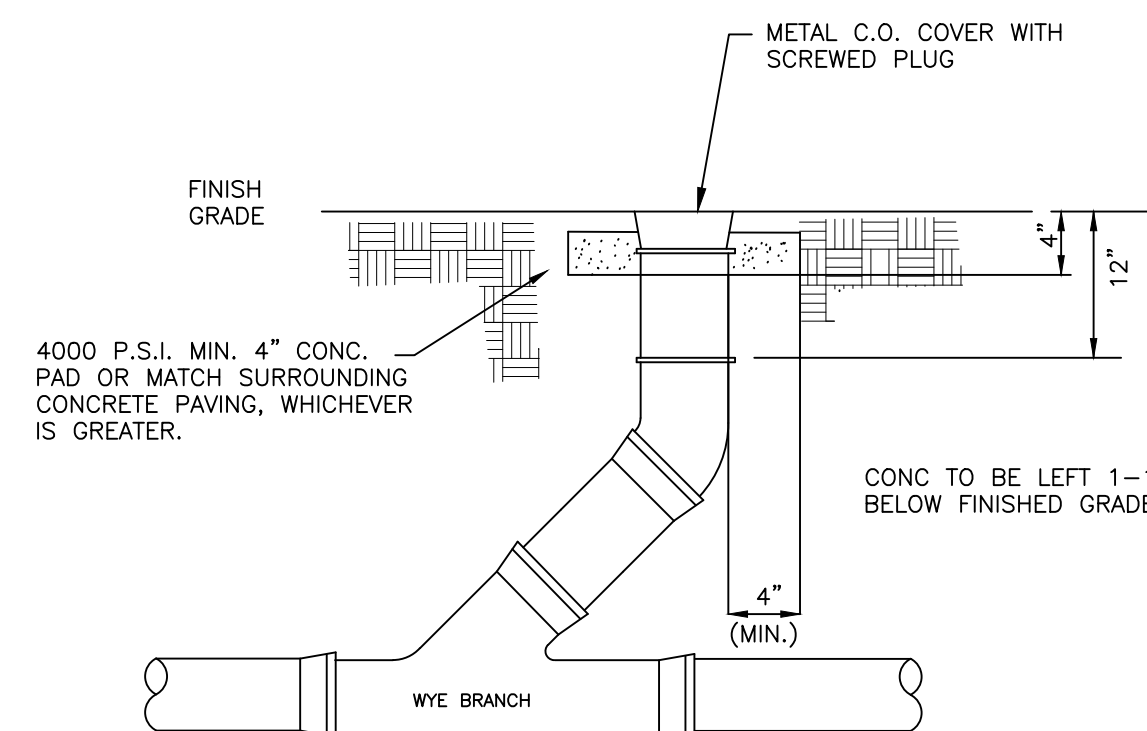
OUTLET STRUCTURE  
Scale: N.T.S.



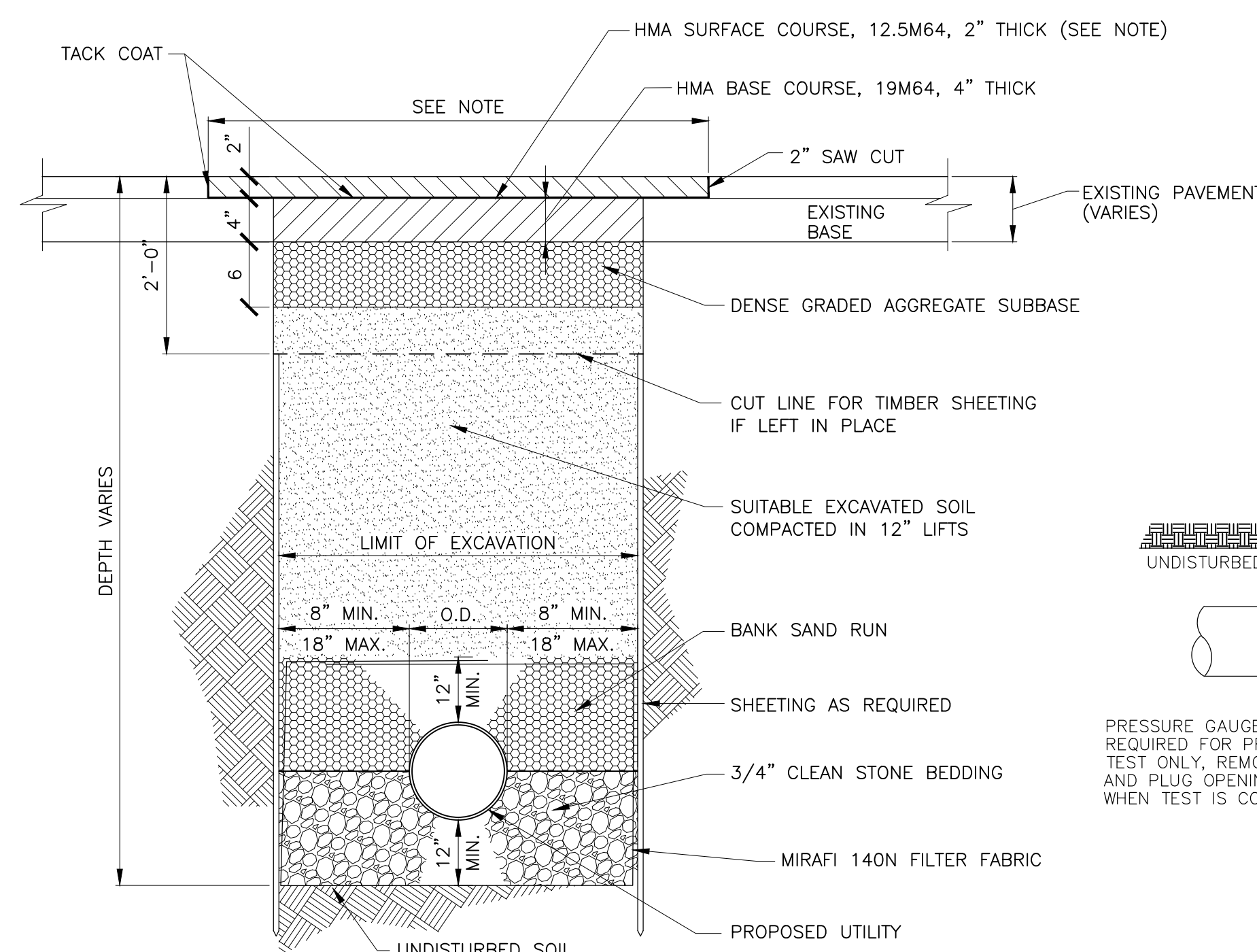
SECTION A-A  
Scale: N.T.S.



YARD DRAIN DETAIL  
Scale: N.T.S.

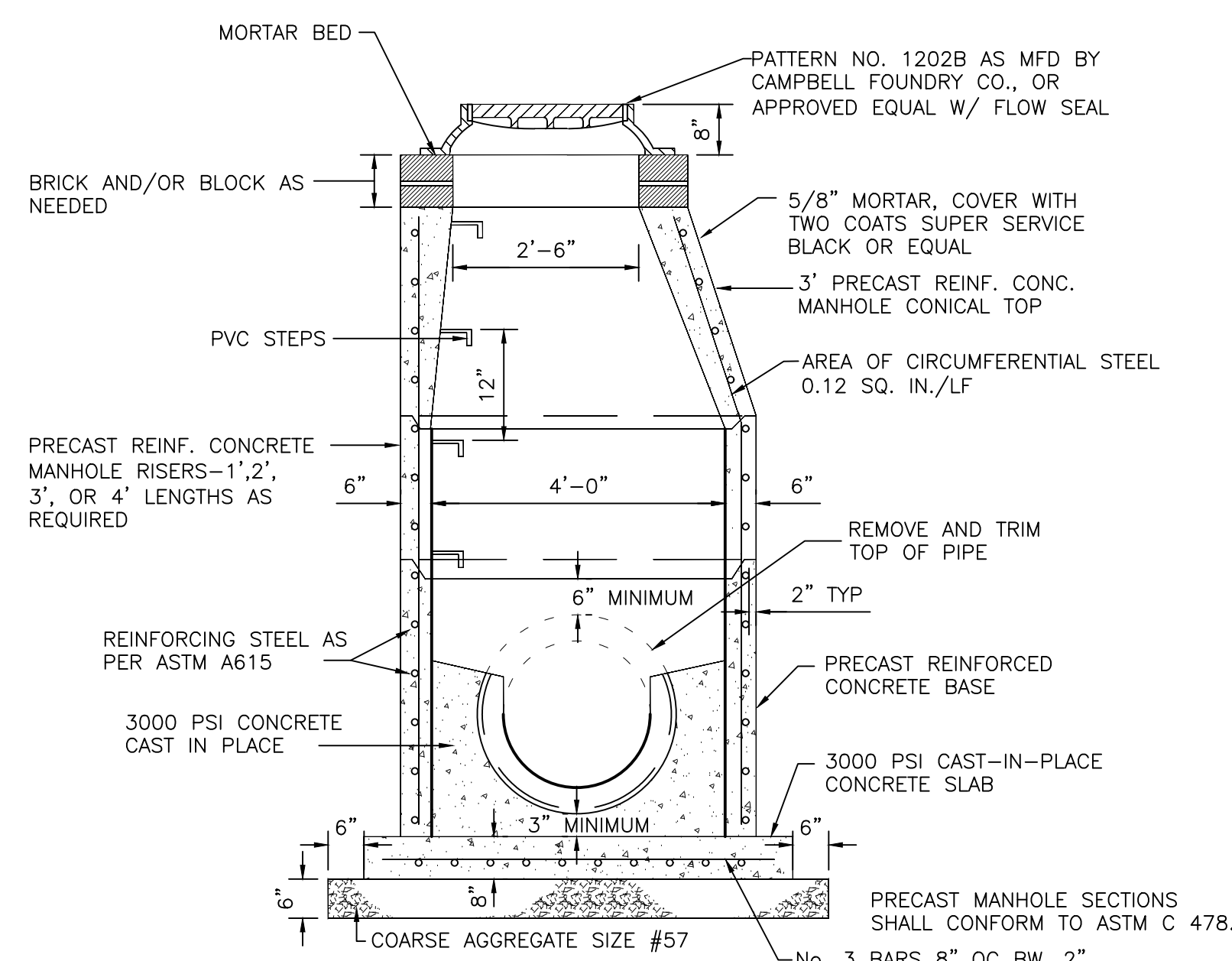


SANITARY SEWER CLEANOUT DETAIL  
Scale: N.T.S.

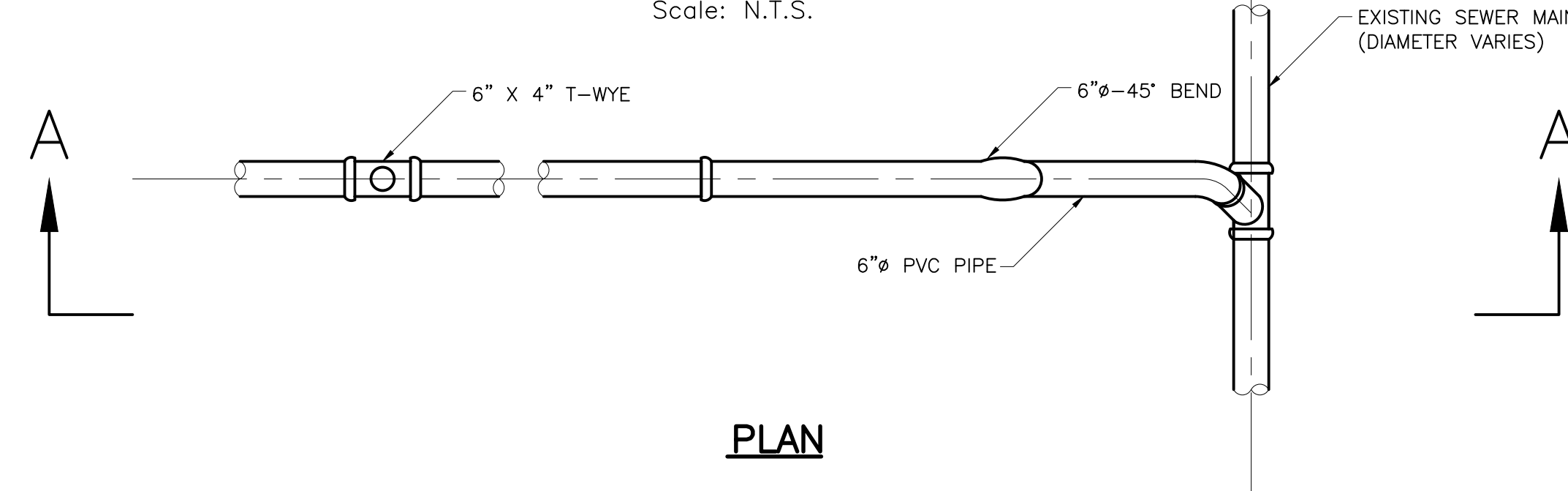


NOTE: REPAIR WIDTH & LENGTH (MILLING & PAVING) TO BE A MINIMUM OF 5' PAST TRENCH OPENING OR AS DETERMINED BY THE ENGINEER OR AS SHOWN ON THE PLANS.

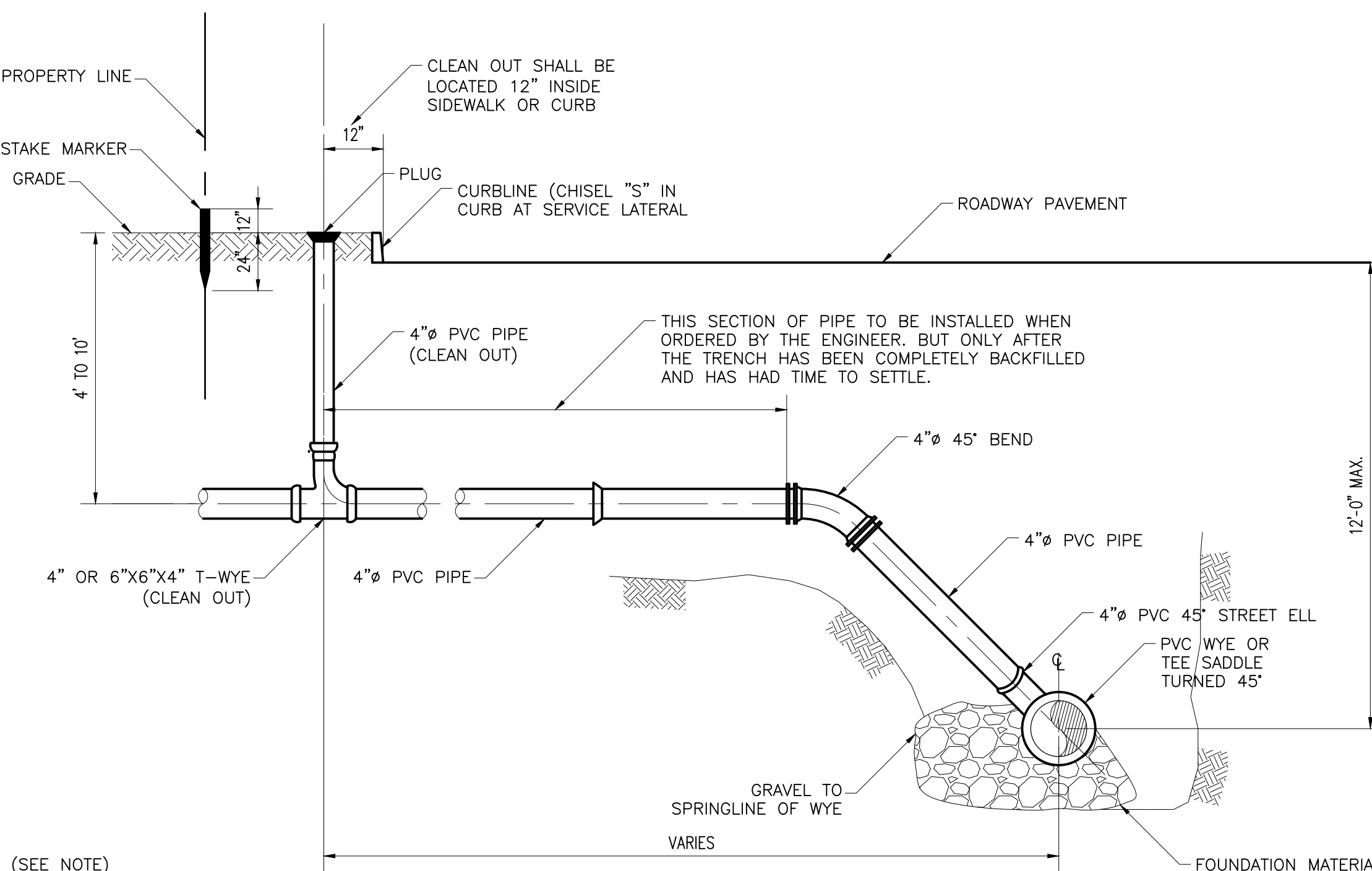
TRENCH BEDDING DETAIL  
Scale: N.T.S.



DOG HOUSE  
SANITARY SEWER MANHOLE  
Scale: N.T.S.

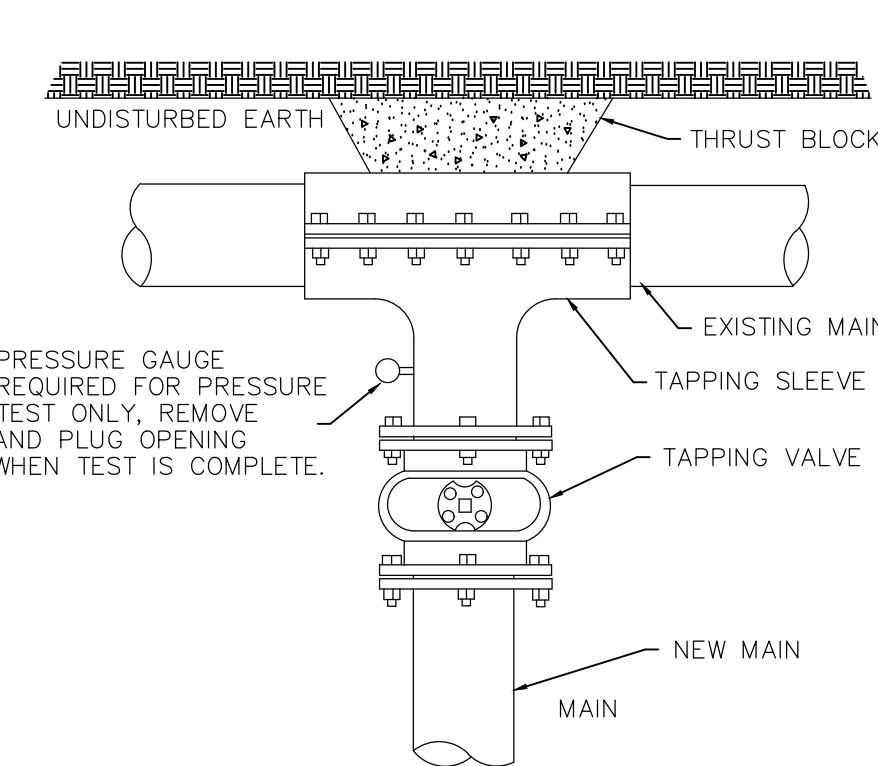


PLAN

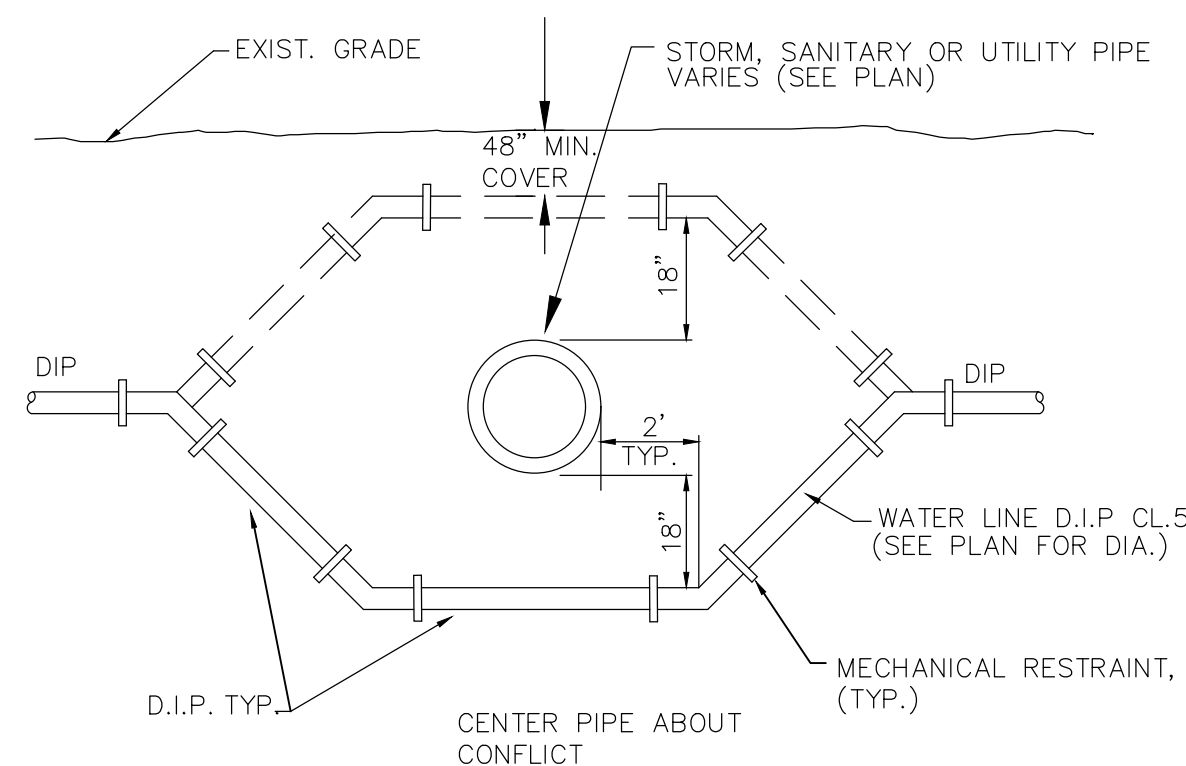


PROFILE

SEWER SERVICE DETAIL  
Scale: N.T.S.



WET TAP  
Scale: N.T.S.



UTILITY CONFLICT  
Scale: N.T.S.

NO.	DATE	REVISION/ISSUE
DESIGNED/DRAWN BY	LTB	
CHECKED BY	RJA	
DATE	OCTOBER 7, 2021	
SCALE	AS NOTED	
PROJECT NO.	9449	
SHEET NO.	C-8	



