

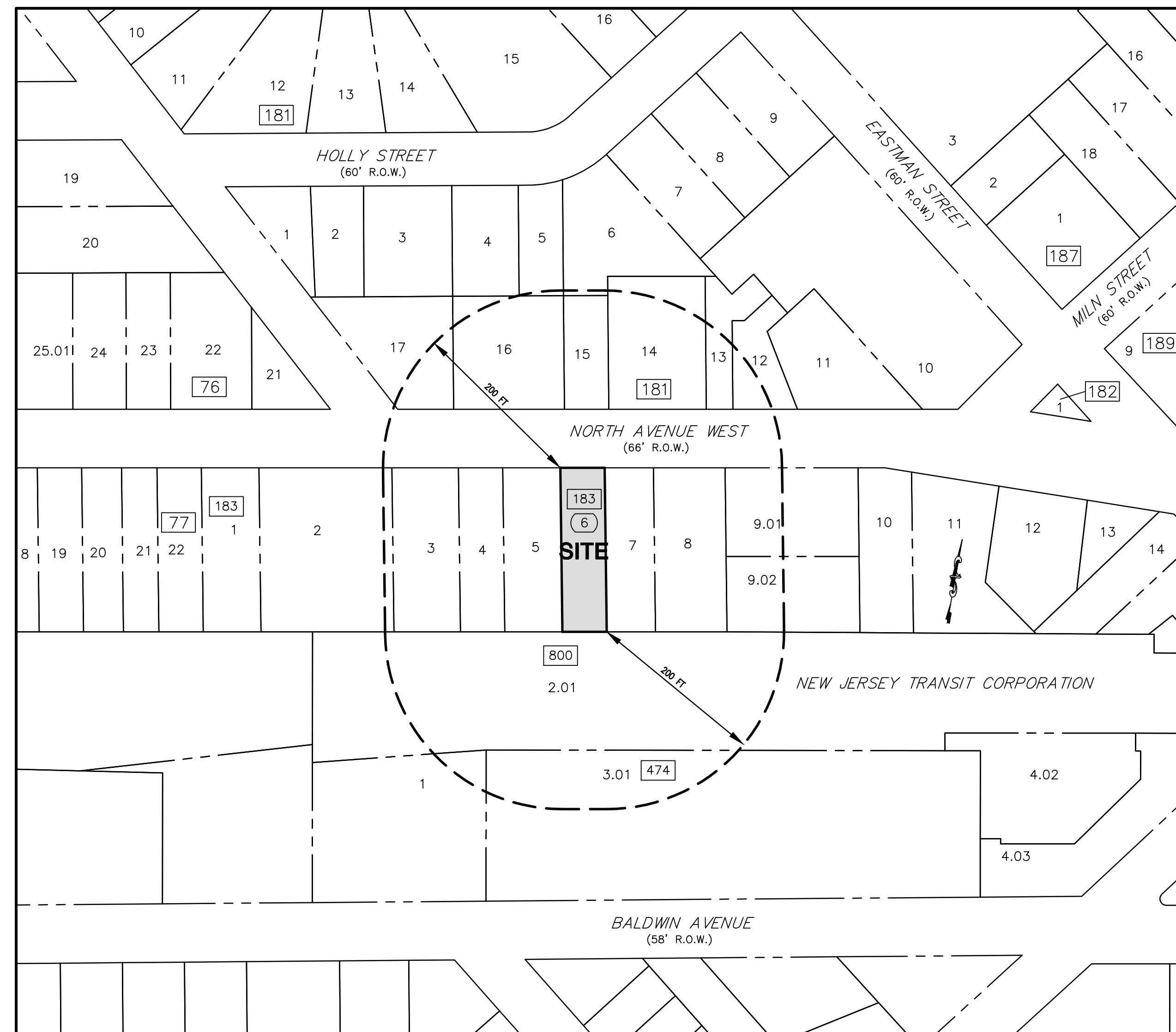
PRELIMINARY & FINAL SITE PLAN

**No. 113 NORTH AVENUE WEST
LOT 6, BLOCK 183
TAX MAP SHEET No. 31**

TOWNSHIP OF CRANFORD UNION COUNTY NEW JERSEY

LIST PROPERTY OWNERS & UTILITIES 200 FEET

BLOCK & LOT	PROPERTY LOCATION	OWNER/MAIL ADDRESS
181 4	18 HOLLY ST	BURD, DOROTHY 18 HOLLY ST Cranford, NJ 07016
181 5	20 HOLLY ST	JOHNSON, DORIS ESTATE OF 20 HOLLY ST Cranford, NJ 07016
181 6	22 HOLLY ST	FERRERA, ROSA 22 HOLLY ST Cranford, NJ 07016
181 12	110 NORTH AVE W	CRANFORD NORTH LLC 213 SOUTH AVE EAST Cranford, NJ 07016
181 13	112 NORTH AVE W	CRANFORD NORTH LLC 213 SOUTH AVE EAST Cranford, NJ 07016
181 14	114 NORTH AVE W	114 NORTH AVENUE LLC 69 MARSH DR Watchung, NJ 07069
181 15	116 NORTH AVE W	REKEMEIER, JOHN 116 NORTH AVE W Cranford, NJ 07016
181 16	118 NORTH AVE W	118 NAW LLC 118 NORTH AVE W Cranford, NJ 07016
181 17	120 NORTH AVE W	120 NORTH AVE CORP 120 NORTH AVE W Cranford, NJ 07016
183 2	201 NORTH AVE W	UNION COUNTY SAVINGS BANK 320 N BROAD ST Elizabeth, NJ 07208
183 3	119 NORTH AVE W	SALES MANAGEMENT REALTY LLC 119 NORTH AVE W Cranford, NJ 07016
183 4	117 NORTH AVE W	SALES MANAGEMENT REALTY LLC 119 NORTH AVE W Cranford, NJ 07016
183 5	115 NORTH AVE W	SPENCER, MARK S & BRUNETTE, RALPH V 101 FOREST AVE Cranford, NJ 07016
183 7	11 NORTH AVE W	SEW CENTERS OF N J INC 20 SCOTCH RD West Trenton, NJ 08628
183 8	109 NORTH AVE W	RUSTIC MILL DINER REALTY LLC 783 SPRINGFIELD AVE Summit, NJ 07901
183 9.01	105 NORTH AVE W	MY WAY DEVELOPMENT LLC, ACCT. DEPT. 101 JFK PKWY Short Hills, NJ 07078
183 9.02	109 NORTH AVE W	109 NORTH AVENUE LLC 1 CEDAR ST Cranford, NJ 07027
474 1	24 SOUTH AVE W	CRANFORD HARRISON DEVELOPERS LLC 253 MAIN ST Matawan, NJ 07747
474 3.01	6 SOUTH AVE W	CRANFORD SQUARE LLC 219 SOUTH ST S108 New Providence, NJ 07974



PROJECT AREA
1"=100'

PREPARED MAY 2022

FOR

CARWEN MANAGEMENT, LLC

113 NORTH AVENUE WEST
CRANFORD, NJ 07016

CERTIFICATION OF APPROVAL

APPROVED BY THE PLANNING BOARD
OF THE TOWNSHIP OF CRANFORD

CHAIRMAN _____ DATE _____
SECRETARY _____ DATE _____
ENGINEER _____ DATE _____

APPLICANT/OWNER
CARWEN MANAGEMENT, LLC
113 NORTH AVENUE WEST
CRANFORD, NJ 07016

MUNICIPAL & UTILITIES CONTACT LIST

COMCAST CABLEVISION
C/O- CORPORATION TRUST CO.
802 BEAR TOWN ROAD
WEST TRENTON, NJ 08628

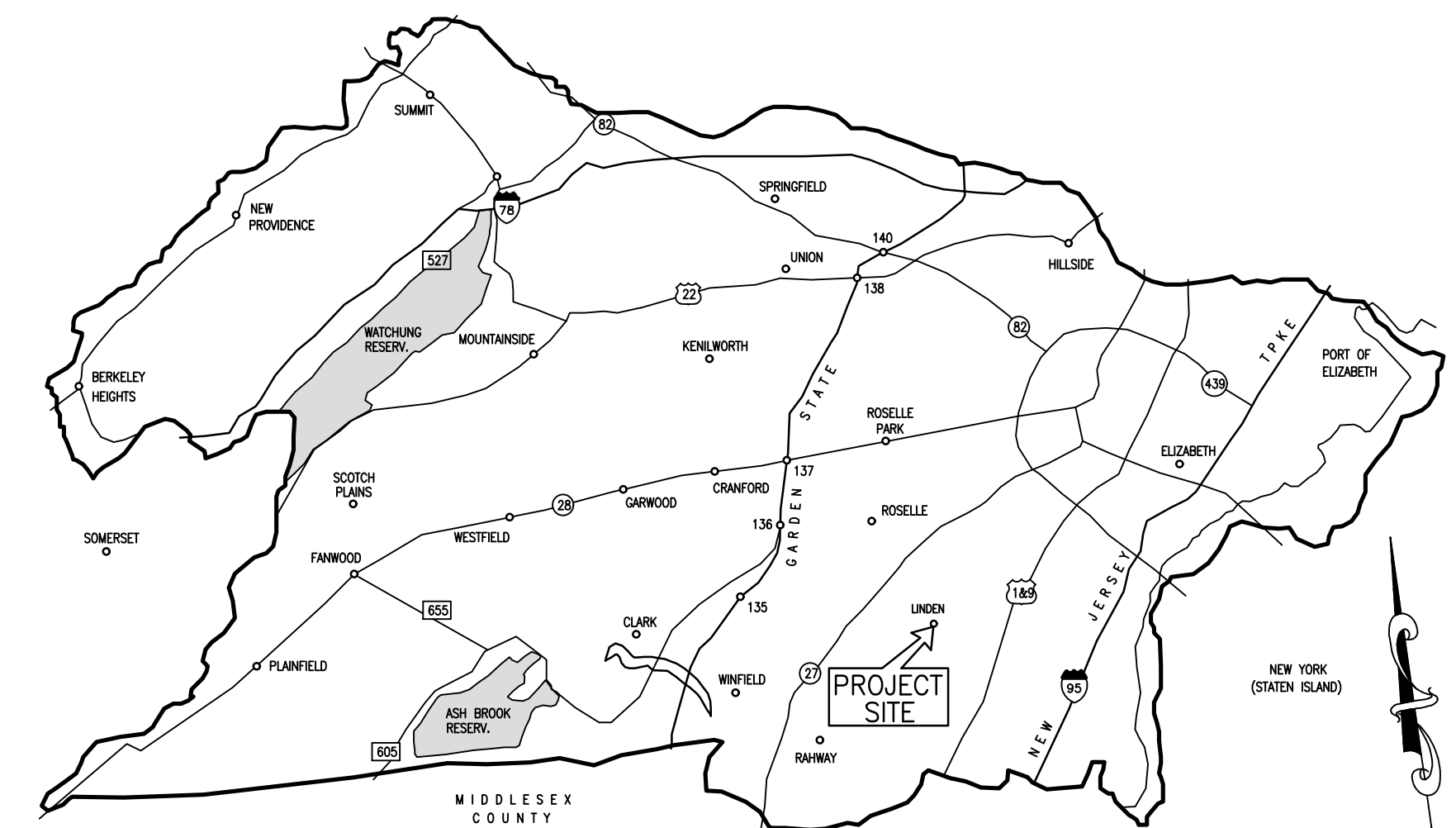
PUBLIC SERVICE ELECTRIC & GAS COMPANY
MANAGER, CORPORATE PROPERTIES
60 PARK PLAZA, 108
NEWARK, NJ 07101

NEW JERSEY AMERICAN WATER, Inc
ATTN: GIS SUPERVISOR
1025 LAUREL OAK ROAD
VOORHEES, NJ 08043

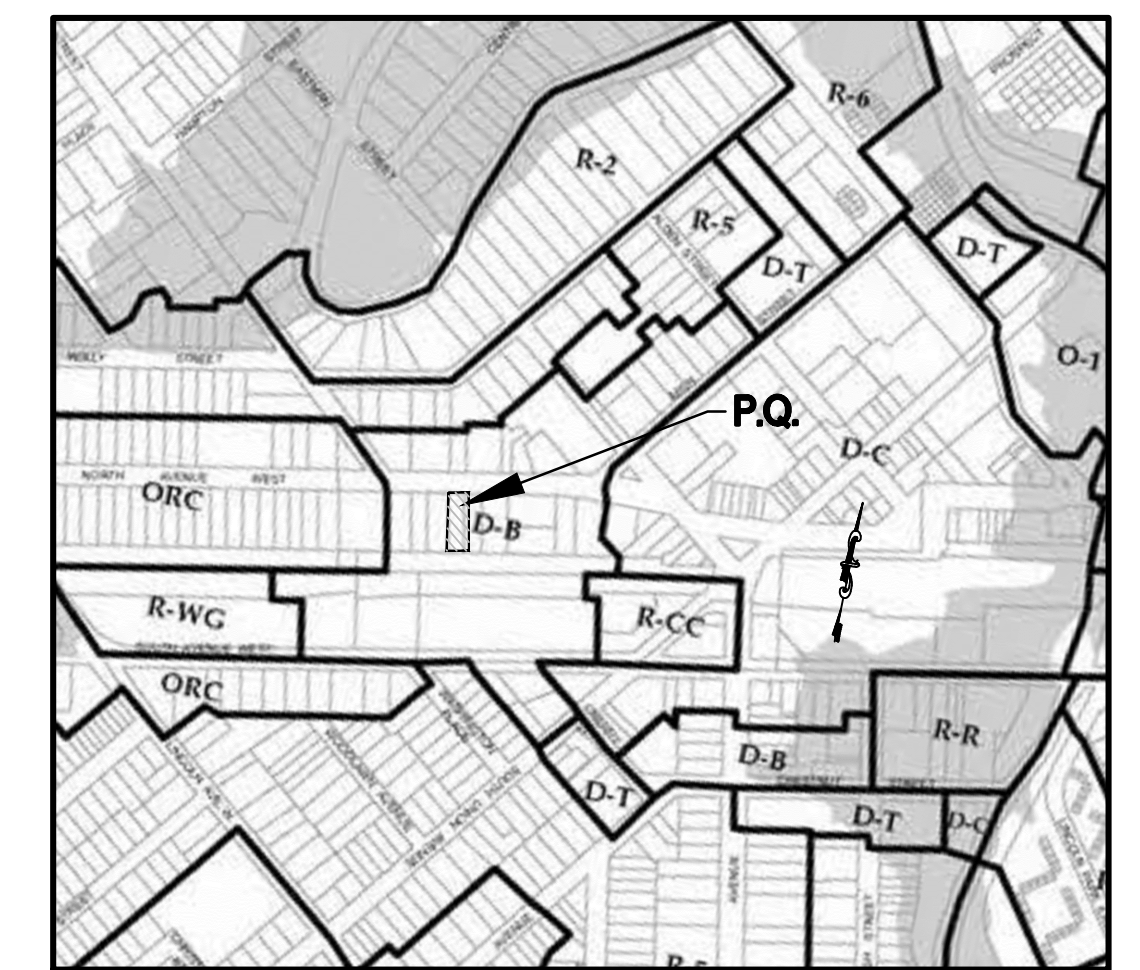
ELIZABETHTOWN GAS COMPANY
ENGINEERING DEPARTMENT
520 GREEN LANE
UNION, NJ 07053

VERIZON
EXECUTIVE OFFICES
1 VERIZON WAY
ATTN: CORPORATE SECRETARY,
BRICKNOR RIDGE, NJ 07902

RAHWAY VALLEY SEWERAGE AUTHORITY
ATTN: CHIEF ENGINEER
1050 EAST HAZELWOOD AVENUE
RAHWAY, NJ 07065



UNION COUNTY KEY MAP
N.T.S.



TOWNSHIP OF CRANFORD ZONING MAP
1"=600'

SHEET INDEX			
SHEET No.	DESCRIPTION	PREPARED	LAST REVISED
1	COVER SHEET	05/10/2022	07/27/2023
2	EXISTING CONDITIONS, DEMOLITION, LAYOUT & DIMENSIONING PLAN	05/10/2022	07/27/2023
3	GRADING & UTILITY / LIGHTING & LANDSCAPING PLAN	05/10/2022	07/27/2023
4	SOIL EROSION & SEDIMENT CONTROL PLAN	05/10/2022	07/27/2023
5	CONSTRUCTION DETAILS	05/10/2022	07/27/2023

ARCHITECTURAL PLANS PREPARED BY: WAGA ENTERPRISES ARCHITECTS, LLC
2109 ST. GEORGES AVENUE
RAHWAY, NJ 07065
PHONE: 732-382-2000

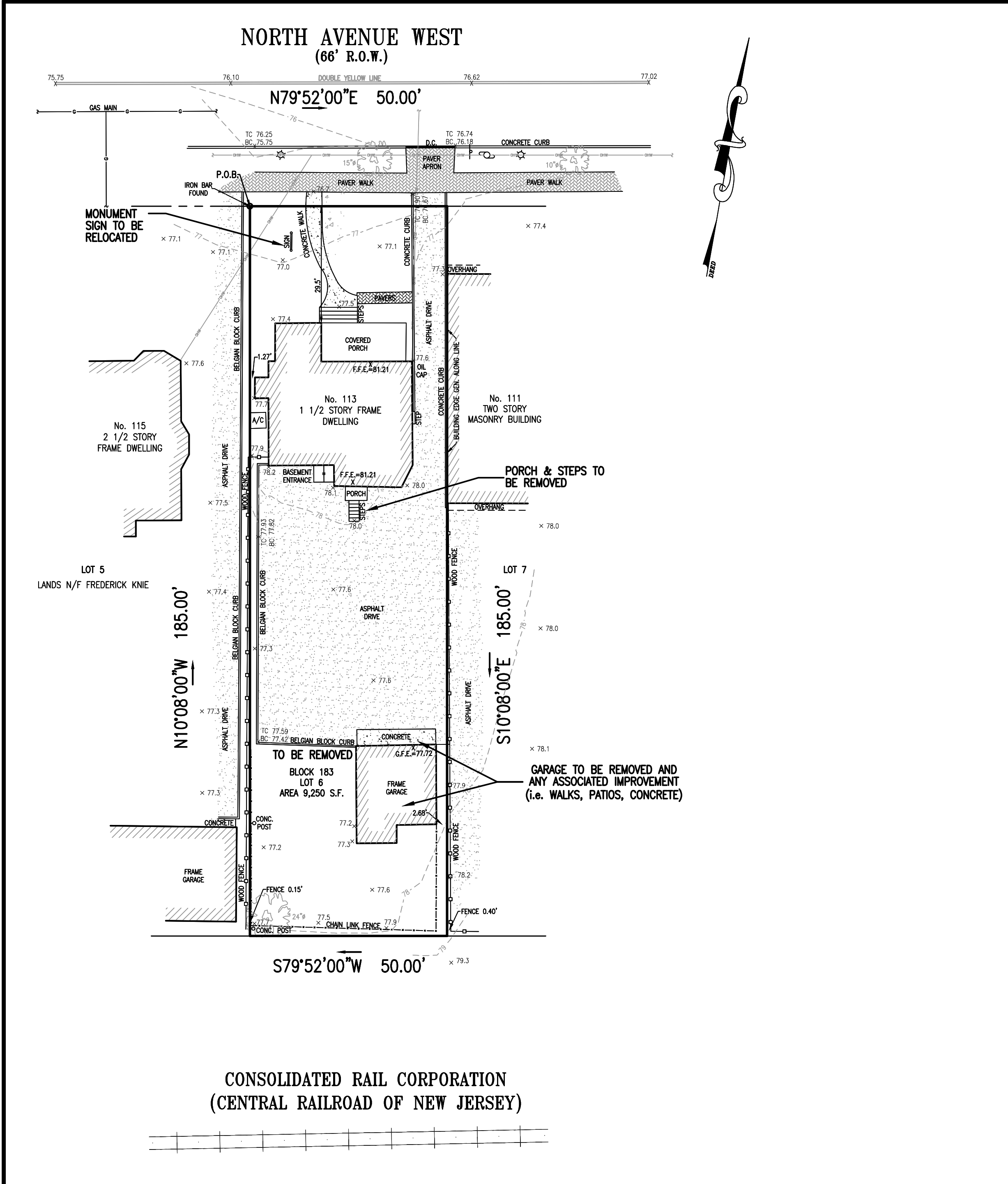
REV.	DATE	DESCRIPTION	CHK'D.	APP'VD.
4	07/27/2023	REVISED AS PER BOARD COMMENTS	A.M.	
3	05/24/2023	REVISED AS PER DRC MEETING	A.M.	
2	11/07/2022	REVISED AS PER TOWNSHIP OF CRANFORD COMMENTS	A.M.	
1	08/25/2022	REVISED AS PER TOWNSHIP OF CRANFORD COMMENTS	S.P.	



Harbor Consultants Inc.
Engineers & Surveyors
320 NORTH AVENUE EAST
CRANFORD, N.J. 07016
Phone (908) 276-2715 Fax (908) 709-1738
Email: info@hcieg.net

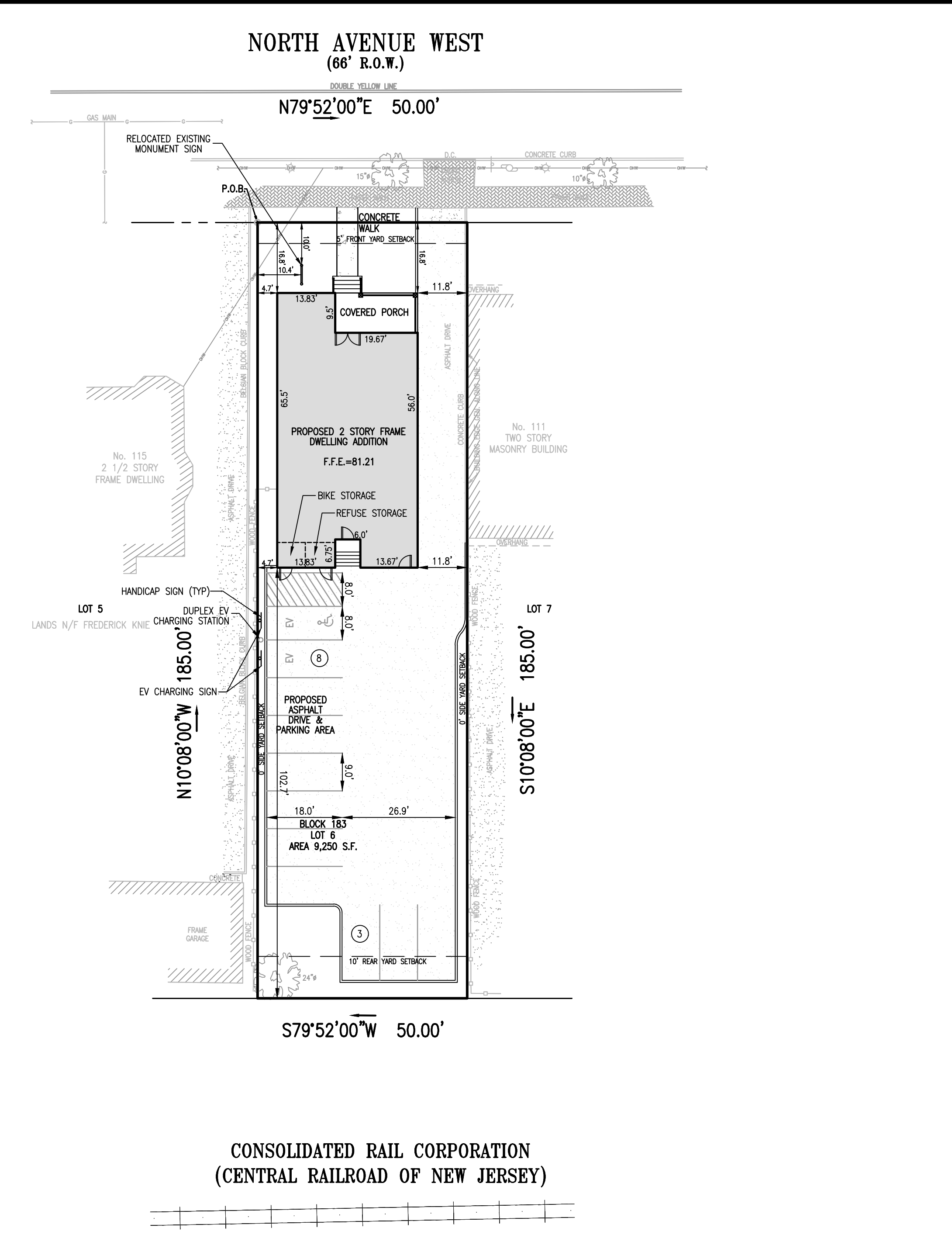
VICTOR E. VINEGRA
PROFESSIONAL ENGINEER & LAND SURVEYOR
NEW JERSEY LICENSE No. 34460

PRELIMINARY & FINAL SITE PLAN COVER SHEET						
No. 113 NORTH AVENUE WEST LOT 6, BLOCK 183 TOWNSHIP OF CRANFORD UNION COUNTY NEW JERSEY						
SCALE:	DATE:	DESIGNED BY:	DRAWN BY:	WORK FILE:	CERTIFICATE OF AUTHORIZATION No.:	PROJECT No.:
AS-SHOWN	05/10/2022	V.E.V.	S.P.	2021038_COVER	24GA27962100	2021038



CONSOLIDATED RAIL CORPORATION
(CENTRAL RAILROAD OF NEW JERSEY)

EXISTING CONDITIONS & DEMOLITION PLAN
SCALE: 1"=20'



CONSOLIDATED RAIL CORPORATION
(CENTRAL RAILROAD OF NEW JERSEY)

LAYOUT & DIMENSIONING PLAN
SCALE: 1"=20'

OFF-STREET PARKING SCHEDULE
255-44-B-CRANFORD PARKING SCHEDULE II (PARKING REQUIREMENTS FOR RESIDENTIAL LAND USE)

USE	NUMBER OF UNITS	PARKING CRITERIA	REQUIRED	PROPOSED	COMPLY
OFFICE, OTHER USE	1,967 S.F.±	1 PER 325 S.F. OF NET FLOOR AREA	6.0 SPACES		
2-BEDROOM GARDEN APARTMENT	4-UNITS	2.0 SPACES PER UNIT	8.0 SPACES		
EV CHARGING STATION		15% OF PROPOSED PARKING (2.0 SPACES)	14.0 SPACES		
EV CHARGING STATION CREDIT		1:1 UP TO 10% OF REQUIRED PARKING	-2.0 SPACES	2.0 SPACES	
		TOTAL WITH CREDIT	12.0 SPACES	11.0 SPACES	NO (1)

NOTE:
(1) - VARIANCE REQUESTED

- GENERAL NOTES:**
- SITE AREA LOT 6, BLOCK 183 = 9,250 S.F. (0.212 Ac.).
 - BEING KNOWN AS 113 NORTH AVENUE WEST, TOWNSHIP OF CRANFORD, NEW JERSEY
 - LOT IS SITUATED IN ZONE D-B (DOWNTOWN BUSIN DETACHED RESIDENTIAL) AS SHOWN ON TOWNSHIP OF CRANFORD ZONING MAP.
 - BOUNDARY INFORMATION PREPARED BY BRAGINSKY SURVEYING, INC., DATED FEBRUARY 12, 2021.
 - PUBLIC SEWER, WATER, GAS, ELECTRIC, CATV, AND TELEPHONE SERVICES ARE PRESENTLY SERVING THE PROPERTY.
 - DISTURBANCE IS WITHIN EXISTING FOOTPRINT THEREFORE SOIL EROSION CERTIFICATION APPROVAL IS NOT REQUIRED.

TOWNSHIP OF CRANFORD, UNION COUNTY, NEW JERSEY
SCHEDULE OF ZONE DISTRICT AREA, YARD & BUILDING REQUIREMENTS
ZONE D-B (DOWNTOWN BUSINESS DISTRICT)

ITEM	REQUIRED	EXISTING	COMPLY	PROPOSED	COMPLY
PRINCIPAL STRUCTURE PERMITTED USE	SINGLE FAMILY	OFFICE	YES	OFFICE/MULTI-FAMILY	NO (2)
MINIMUM LOT DIMENSION	N/A	9,250 S.F. 50.00 FEET	YES	9,250 S.F. 50.00 FEET	YES
MINIMUM YARDS (PRINCIPAL)					
FRONT YARD	5 FEET	29.50 FEET	YES	16.8 FEET	YES
REAR YARD	10 FEET	113.80 FEET	YES	102.7 FEET	YES
SIDE YARD (ONE SIDE)	0 FEET	1.27 FEET	YES	4.7 FEET	YES
SIDE YARD (BOTH SIDES)	0 FEET	10.02 FEET	YES	13.07 FEET	YES
MAXIMUM BULK STANDARDS					
MAXIMUM FLOOR AREA RATIO	2.5 (80%)	N/A	YES	0.7	YES
MAXIMUM LOT IMPERVIOUS COVERAGE	N/A	5,977 S.F. (64.6%)	YES	7,624 S.F. (82.4%)	NO (1)
MAXIMUM BUILDING COVERAGE	N/A	1,403 S.F. (15.2%)	YES	2,194.25 S.F. (23.7%)	YES
MAXIMUM BUILDING HEIGHT	3 STORES/ 45.0 FEET	1 1/2 STORES	YES	3 STORES	YES
MINIMUM DISTANCE FROM BUILDING TO 1 OR 2 FAMILY RESIDENCE ZONE	20 FEET	>200 FEET	YES	>200 FEET	YES
GROSS DENSITY (MAXIMUM DWELLING UNITS PER ACRE)	10 UNITS/AC (3) (2 UNITS)	N/A	N/A	18 UNITS/AC (4 UNITS)	NO (3)
SIGNS - 255-38(4)(g)					
SIGN AREA	12 S.F.	11.5 S.F.	YES	11.5 S.F.	YES
SIGN HEIGHT	4 FEET	3.5 FEET	YES	3.5 FEET	YES
SIGN SETBACK	10 FEET	6.7 FEET	NO	10.0 FEET	YES
BUILDING FRONT YARD SETBACK	15 FEET	29.5 FEET	YES	16.8 FEET	YES

NOTE:
(1) VARIANCE REQUESTED
(2) CONDITIONAL USE VARIANCES REQUESTED - SEE BELOW.
(3) SECTION 255-39(22)(c) ALLOWS A GROSS DENSITY NOT TO EXCEED 10 UNITS/ACRE, WHICH ALLOWS 2 UNITS ON THE LOT.

- VARIANCES REQUESTED:**
- "D" VARIANCES:**
- D.3 CONDITIONAL USE VARIANCE, SEE BELOW.
 - D.5 DENSITY VARIANCE FOR 18 UNITS/ACRE, WHERE 10 UNITS/ACRE IS ALLOWED.
- "C" VARIANCES:**
- LOT IMPERVIOUS COVERAGE OF 82.4%, WHERE 80% IS ALLOWED.
 - 11 PARKING SPACES PROVIDED, WHERE 15 SPACES REQUIRED.
- DESIGN WAIVERS:**
- PARKING SPACE DIMENSIONS OF 9' X 18', WHERE 10' X 18' IS REQUIRED.
 - NO LOADING SPACE, WHERE 1 (ONE) SPACE IS REQUIRED.

- CONDITIONAL USE VARIANCES:**
- § 255-39.B(18) - OFFICES, PROFESSIONAL, BUSINESS AND ADMINISTRATIVE USES
(a) - PROPOSED 1,967 S.F. FIRST FLOOR OFFICE (ONE TENANT), WHERE MAXIMUM 1,000 S.F. ALLOWED PER TENANT.
- § 255-39.B(22) - RESIDENTIAL USES
(g) - GROSS DENSITY OF 18 UNITS/AC, MAXIMUM 10 UNITS/AC ALLOWED.

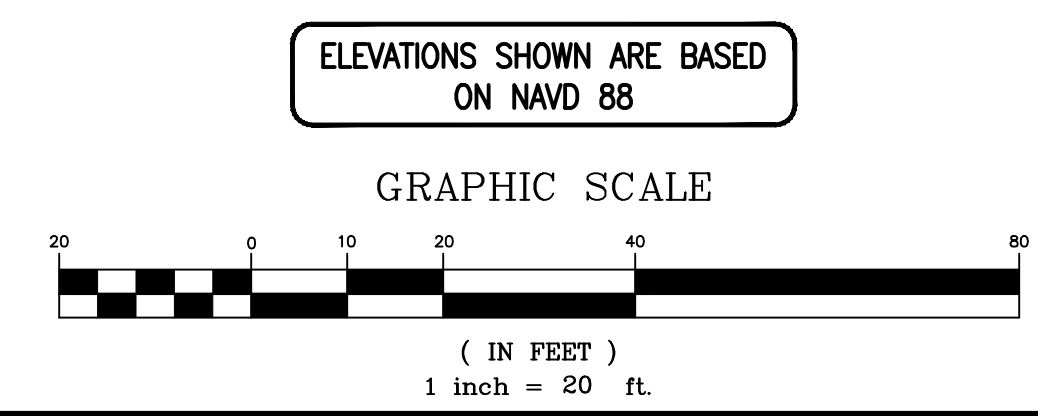
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PRELIMINARY & FINAL SITE PLAN
EXIST. CONDITIONS & DEMO/LAYOUT & DIMENSIONING PLAN
No. 113 NORTH AVENUE WEST
LOT 6, BLOCK 183
TOWNSHIP OF CRANFORD UNION COUNTY NEW JERSEY

2

VICTOR E. VINEGRA
PROFESSIONAL ENGINEER & LAND SURVEYOR
NEW JERSEY LICENSE No. 34460



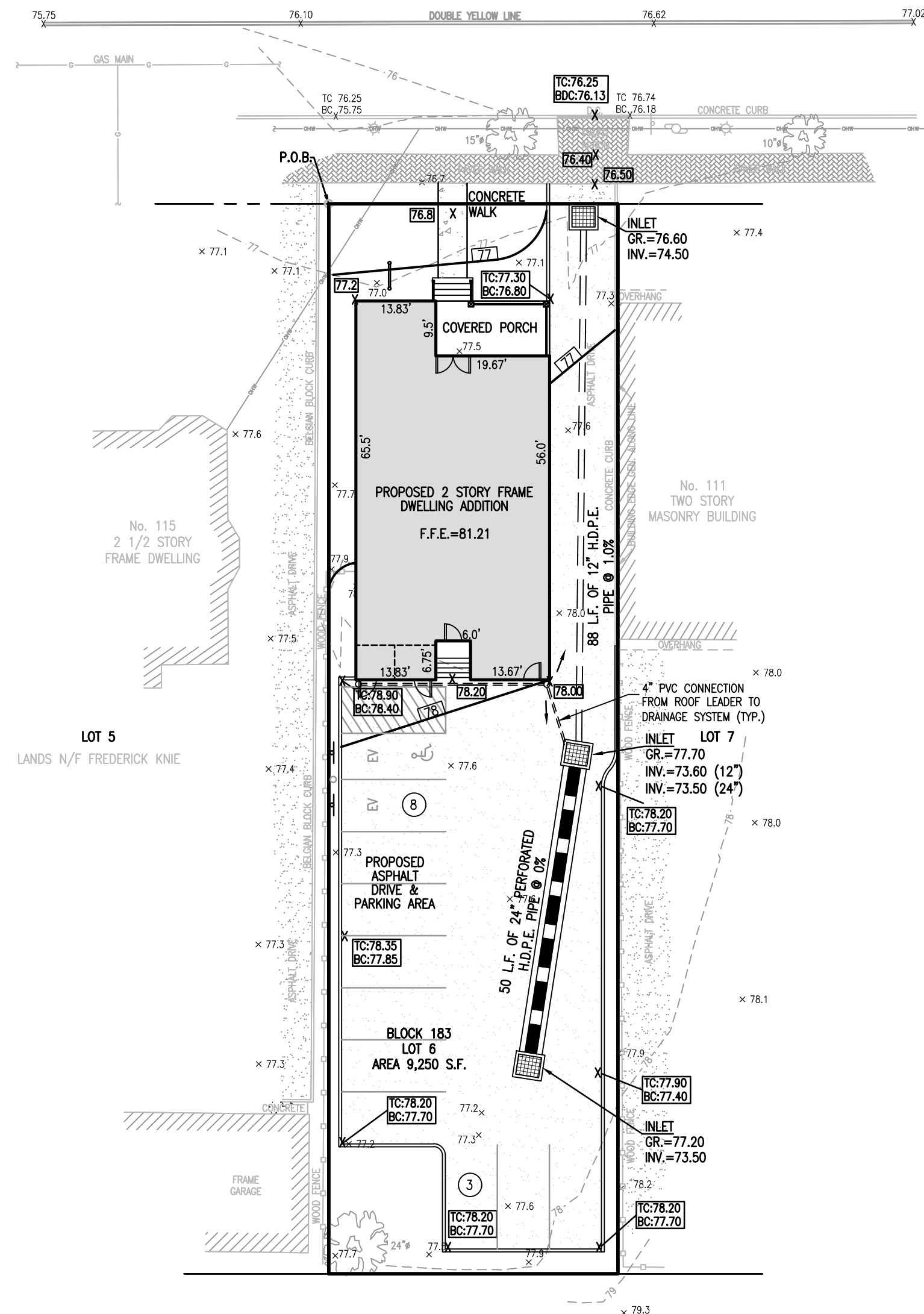
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LEGEND

— T —	STREET SIGN	○	IRON BAR FOUND
●	CLEANOUT	□	MAILBOX
⊙	SANITARY MANHOLE	⊙	STREET TREE
⊙	DRAINAGE MANHOLE	x 0.00	EXIST. SPOT ELEVATION
■	CATCH BASIN	- - - 10 - - -	EXISTING CONTOUR LINE
■	CATCH BASIN	- - - 0 - - -	GAS LINE
⊙	SOIL BORING	— W —	WATER LINE
⊙	GUY WIRE	⊙	GAS VALVE
⊙	UTILITY POLE	⊙	WATER VALVE
⊙	P.K. NAIL FOUND	⊙	FIRE HYDRANT
□	CONC. MONUMENT FOUND	☆	LIGHT POST

SCALE: 1"=20' DATE: 05/10/2022 DESIGNED BY: V.E.V. DRAWN BY: S.P. WORK FILE: 2021038_Exist&Demo&L&D CERTIFICATE OF AUTHORIZATION No. 24GA27962100 PROJECT No. 2021038

**NORTH AVENUE WEST
(66' R.O.W.)**

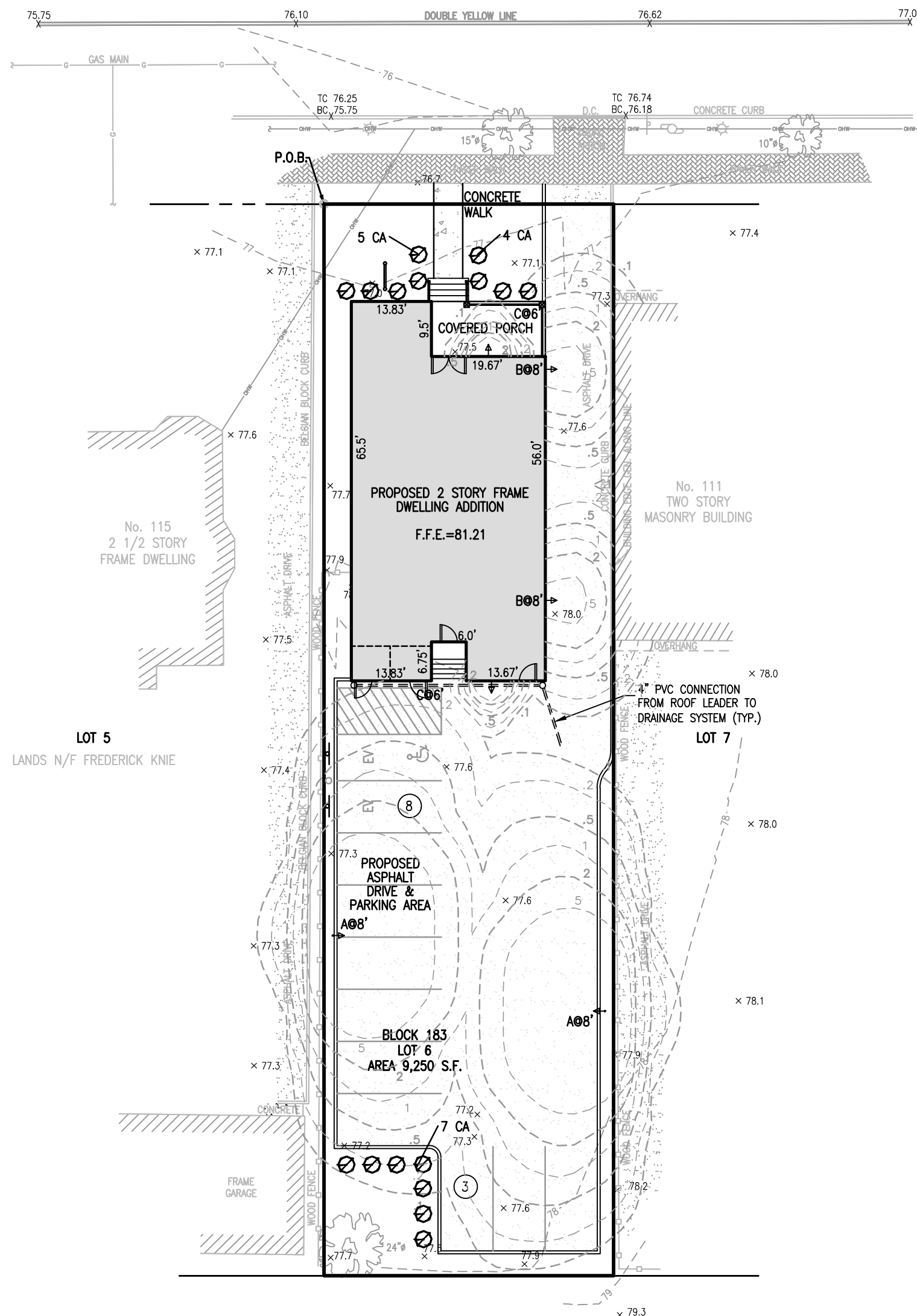


**CONSOLIDATED RAIL CORPORATION
(CENTRAL RAILROAD OF NEW JERSEY)**

GRADING & UTILITY PLAN

SCALE: 1"=20'

**NORTH AVENUE WEST
(66' R.O.W.)**



**CONSOLIDATED RAIL CORPORATION
(CENTRAL RAILROAD OF NEW JERSEY)**

LIGHTING & LANDSCAPING PLAN

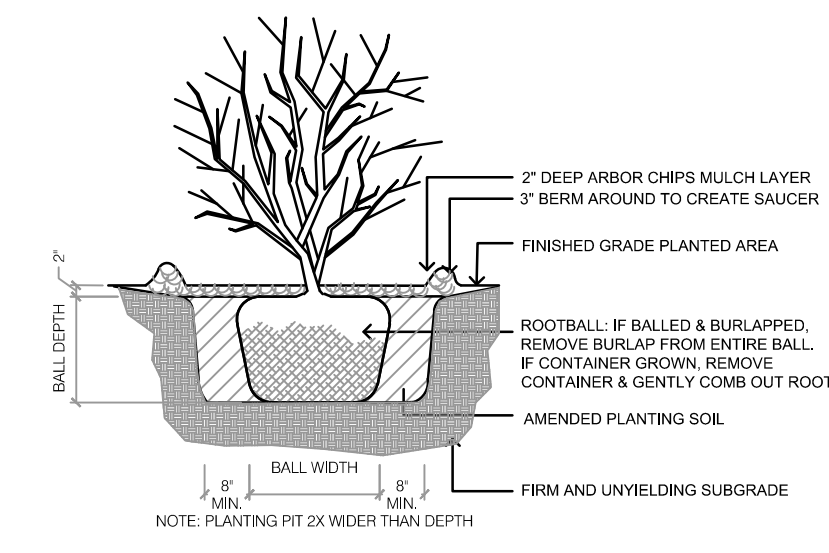
SCALE: 1"=20'

NOTES:

- ELEVATIONS SHOWN ARE BASED ON NAVD88 DATUM.
- UNDERGROUND UTILITIES WERE MARKED OUT AT TIME OF SURVEY.
- THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON IS APPROXIMATE AND BASED UPON FIELD OBSERVATION AND THE TOWNSHIP OF CRANFORD UTILITY KEY MAPS.
- PUBLIC SEWER, WATER, GAS, ELECTRIC, CATV, AND TELEPHONE SERVICES ARE PRESENTLY SERVING THE PROPERTY, AND WILL SERVE THE PROPOSED ADDITION.
- THE LOCATION OF ALL UNDERGROUND UTILITIES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE TO BE FIELD VERIFIED PRIOR TO ANY CONSTRUCTION ACTIVITIES. ANY DISCREPANCIES BETWEEN PLAN AND FIELD INFORMATION ARE TO BE REPORTED IMMEDIATELY TO HARBOR CONSULTANTS.
- THE DISRUPTION OF EXISTING UTILITY SERVICES SHALL BE AVOIDED TO THE GREATEST EXTENT POSSIBLE. ANY REQUIRED DISRUPTION OF SERVICES SHALL BE COORDINATED IN ADVANCE WITH THE RESPECTIVE AUTHORITY AND AFFECTED USERS SHALL BE ADEQUATELY NOTIFIED.
- THIS SITE PLAN MAKES NO CERTIFICATION OR REPRESENTATION AS TO THE LOCATION OF ANY UNDERGROUND, ELECTRICAL, PHONE OR CABLE CONDUITS AND/ OR WIRES WHICH MAY BE PRESENT ON THE SITE.
- ALL PROPOSED CONSTRUCTION TO BE IN CONFORMANCE WITH TOWNSHIP OF CRANFORD STANDARD DETAILS.
- ALL ROOF LEADERS/DOWN SPOUTS WILL BE CONNECTED TO THE DRAINAGE SYSTEM.
- PROPERTY IS SITUATED IN FLOOD AREA OF MINIMAL FLOOD HAZARD WHICH IS ZONE X (BASE FLOOD ELEVATIONS DETERMINED) PER A PLAN ENTITLED "FIRM" FLOOD INSURANCE RATE MAP, FOR THE TOWNSHIP OF CRANFORD COMMUNITY/PANEL No. 345291 0032F, No. 34039C0032F EFFECTIVE DATE SEPTEMBER 20TH, 2006
- WATER, GAS AND SANITARY SEWER SERVICE LINES SHOULD BE PROVIDED INVERTS DURING CONSTRUCTION
- THE APPLICANT SHALL CONTACT THE ENGINEERING OFFICE 48 HOURS IN ADVANCE FOR INSPECTION OF SEEPAGE PIT INSTALLATION AND RIGHT-OF-WAY IMPROVEMENTS.
- TELEPHONE, CABLE AND ELECTRICITY CONNECTIONS WILL BE INSTALLED AS DIRECTED BY EACH UTILITY COMPANY.

PLANTING NOTES

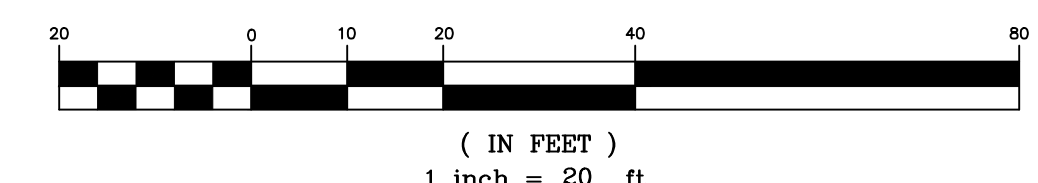
- CONTRACTOR SHALL INSPECT SITE PRIOR TO BEGINNING PLANTING OPERATIONS AND NOTIFY THE ENGINEER OF ANY CONDITIONS THAT ARE NOT SUITABLE TO PERFORMING PLANTING OPERATIONS. CONTRACTOR SHALL NOTIFY OWNER'S REP. OR LANDSCAPE ARCHITECT OF ANY CONDITIONS THAT WOULD PREVENT HEALTHY GROWTH OF PLANT MATERIAL.
- NO HEAVY EQUIPMENT, MACHINERY OR STOCK PILING OF MATERIAL IS EXISTING TREES THROUGHOUT THE COURSE OF THE CONTRACT.
- EXISTING TREES SHALL BE PROTECTED WITH TEMPORARY WOODEN TREE GUARDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING TREES INCLUDING BUT NOT LIMITED TO INSTALLING TREE GUARDS AND WOOD CHIPS.
- THE CONTRACTOR SHALL TAKE EXTREME CARE TO PROTECT THE ROOT SYSTEMS OF EXISTING TREES. HAND/PNEUMATIC EXCAVATE WITHIN THE DRP LINES OF EXISTING TREES.
- PLANT GROUPINGS & LOCATIONS ARE DIAGRAMMATIC. THE LOCATION OF PLANTS SHALL BE APPROVED IN THE FIELD BY THE LANDSCAPE ARCHITECT.
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- ALL PLANT MATERIAL SHALL CONFORM TO THE MOST CURRENT ISSUE OF "ANSI Z601-2014 NURSERY STOCK STANDARDS" OR LATEST EDITION. ALL PLANTS TO BE NURSERY-GROWN UNDER SIMILAR CLIMATIC CONDITIONS AS JOB SITE FOR AT LEAST 2 YEARS. PLANTS SHALL BE DISEASE FREE, VIGOROUS, WITH WELL DEVELOPED ROOT SYSTEMS. TREES SHALL HAVE STRAIGHT TRUNKS, LEADER INTACT, UNDAUNTED & UNOUT.
- THERE WILL BE NO SUBSTITUTIONS OF PLANT MATERIAL WITHOUT PRIOR WRITTEN APPROVAL BY THE LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL CONTACT AGENCIES FOR UTILITY MARK-OUT PRIOR TO PLANTING.
- ALL PLANTS TO BE APPROVED BY THE LANDSCAPE ARCHITECT.
- PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE. SPRING PLANTING SEASON SHALL BE MARCH 15 THROUGH MAY 15; FALL PLANTING SEASON SHALL BE OCT. 15 THROUGH DEC. 15. PLANTING IS ACCEPTABLE DURING OTHER TIMES IF WEATHER PERMITS, THE GROUND IS NOT FROZEN AND SUPPLEMENTAL WATERING IS PROVIDED (IN SUMMER MONTHS). NO PLANT, OTHER THAN GROUNDCOVER, MAY BE PLANTED CLOSER THAN TWO FEET TO EXISTING STRUCTURES OR SIDEWALKS.
- THE FOLLOWING "FALL PLANTING HAZARD" TREE SPECIES SHALL BE PLANTED IN THE SPRING SEASON ONLY:
ACER RUBRUM
LIQUIDAMBAR
QUERCUS (EXCEPT Q. pedunculata)
- THE CONTRACTOR SHALL LAYOUT ALL TREES, TREE PITS, SHRUBS, AND SHRUB BEDS PRIOR TO INSTALLATION FOR APPROVAL. FINAL LOCATION OF ALL PLANTS TO BE DETERMINED IN THE FIELD BY THE LANDSCAPE ARCHITECT.
- SOIL TEST SHALL BE PERFORMED AND ADJUSTMENTS TO pH AND AMENDMENTS MADE IN ACCORDANCE WITH RECOMMENDATIONS FROM TESTING LAB (I.E. RUTIGERS SOIL TESTING LAB), AT A MINIMUM.
TREES PITS & SHRUB BEDS SHALL HAVE COMPOST ADDED TO THE TOPSOIL MIX AT THE RATIO OF 2 PARTS COMPOST TO 7 PARTS TOPSOIL.
- TREES AND SHRUBS SHALL BE PLANTED SO THAT THE ROOT FLARE IS LEVEL OR SLIGHTLY ABOVE FINISHED GRADE AFTER ALLOWING FOR WATERING & SETTLING. REMOVE EXCESS SOIL FROM TOP OF BALL AS REQUIRED TO EXPOSE ROOT FLARE.
- PLANTS MUST BE WATERED AS THEY ARE PLANTED. TREES TO BE WATERED WITH 10 GALLONS OF POTABLE WATER WHEN BACKFILLED TO ONE HALF FINISHED HEIGHT. AN ADDITIONAL 10 GALLONS AFTER COMPLETELY BACKFILLED AND MULCHED.
- TOPSOIL FOR PLANTING PITS AND BEDS SHALL BE SANDY LOAM: FREE FROM SUBSOIL, STONES LARGER THAN 1", OR ANY UNDESIRABLE MATERIAL: CONTAIN SR ORGANIC MATTER, pH 5.0 TO 7.0 INCLUSIVE. DO NOT PLACE ANY SOIL ON TOP OF ROOT BALL.
- CUT AND REMOVE ALL BURLAP & STRING FROM ROOT BALL. REMOVE ENTIRE WIRE BASKET & DISPOSE OF LEGALLY OFF SITE.
- LOCATE TREE SUPPORT SYSTEM SO THAT IT WILL NOT PULL CROTCH APART. USE ARBOR-TIE, 3/4" FLAT WOVEN POLYPROPYLENE STRAPS. TIE TO STAKES IN A MANNER THAT PERMITS SOME TREE MOVEMENT AND SUPPORTS TREE.
- UPON COMPLETION OF THE TWO (2) YEAR PLANT WARRANTY PERIOD, THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING OR REMOVING ALL STAKES, AS WELL AS STAKING MATERIAL. WARRANTY BEGINS AT DATE OF ACCEPTANCE.
- ALL PLANTS AND ENTIRE SHRUB BEDS TO RECEIVE 3" MAX. LAYER OF MULCH. MULCH SHALL NOT COME IN DIRECT CONTACT WITH TREE TRUNKS.
- IF THERE IS A DISCREPANCY BETWEEN THE PLANT COUNT SHOWN IN THE PLANT LIST AND THE PLANTING GRAPHIC, THE GRAPHIC SHALL TAKE PRECEDENCE.
- IF THE CONTRACTOR DETERMINES THE SUB-GRADE SOIL CONDITIONS ARE DELETERIOUS TO PLANT GROWTH OR WILL INHIBIT DRAINAGE, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY AND PRIOR TO INSTALLATION OF PLANT MATERIAL.
- MAINTAIN TREES AND GROUNDCOVER UPON COMPLETION OF PLANTING OPERATIONS AND UNTIL ISSUANCE OF FINAL ACCEPTANCE.
- PLANTED AREAS SHALL BE WATERED BY THE CONTRACTOR WHEN RAINFALL IS LESS THAN 1" PER WEEK. SHRUBS SHALL RECEIVE 3-5 GALLONS PER PLANT AND TREES 7-10 GALLONS PER INCH OF CALIPER PER WEEK, OR AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL PROVIDE A MINIMUM OF 6" TOPSOIL IN ALL LAWN AREAS. PLANT PERENNIALS AND GROUNDCOVER IN 8" DEEP TOPSOIL BED CONSISTING OF 2/3 TOPSOIL AND 1/3 HUMUS. PLANT BULBS IN NATURALIZED DRIFTS. PLANT SHRUBS AND TREES AS PER PLANT DETAILS.
- TOPSOIL AND SEED ALL AREAS DISTURBED AS A RESULT OF ANY AND ALL DISTURBANCES, CONSTRUCTION, OR STORAGE OF EQUIPMENT WHETHER SUCH AREAS ARE SHOWN ON THE PLANS OR NOT.



SHRUB PLANTING
N.T.S.

ELEVATIONS SHOWN ARE BASED ON NAVD 88

GRAPHIC SCALE



Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
A	A	2	Lithonia Lighting	ESX1 LED P2 40K R3 MVOLT UPA BLS DDBXD M2	ESX1 LED, P2 Package, 4000K, Type 3, House Side Shield	LED	1	13,917	0.97	98
B	B	2	Lithonia Lighting	WDC1 LED P1 27K BDR1 VW	WDC1 LED, P1 Package, 2700K, Visual comfort wide	LED	1	1122	0.97	10
C	C	2	Lithonia Lighting	QLLWD LED P1 40K MVOLT	QLLWD LED, P1 Package, 4000K	LED	1	938	0.97	14

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPC	COMMENTS
CA	16	Ceanothus americanus	NJ Tea	18"-24"	# 3 Can	24" O.C.	Well established, heavy, symmetrical

LEGEND

- STREET SIGN
- CLEANOUT
- SANITARY MANHOLE
- DRAINAGE MANHOLE
- CATCH BASIN
- CATCH BASIN
- SOIL BORING
- GUY WIRE
- UTILITY POLE
- P.K. NAIL FOUND
- CONC. MONUMENT FOUND
- IRON BAR FOUND
- MAILBOX
- STREET TREE
- EXIST. SPOT ELEVATION
- EXISTING CONTOUR LINE
- GAS LINE
- WATER LINE
- GAS VALVE
- WATER VALVE
- FIRE HYDRANT
- LIGHT POST

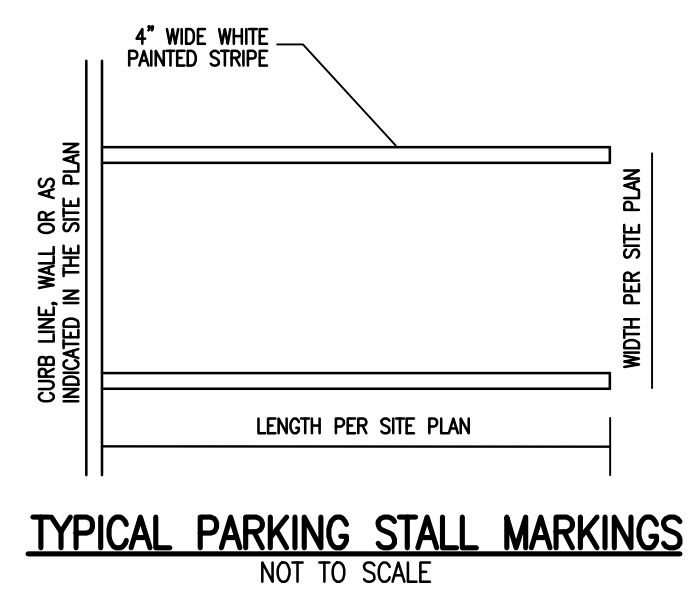
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REV.	DATE	DESCRIPTION	CHK'D.	APP'VD
4	07/27/2023	REVISED AS PER BOARD COMMENTS		A.M.
3	05/24/2023	REVISED AS DRC MEETING		A.M.
2	11/07/2022	REVISED AS PER TOWNSHIP OF CRANFORD COMMENTS		A.M.
1	08/25/2022	REVISED AS PER TOWNSHIP OF CRANFORD COMMENTS		S.P.

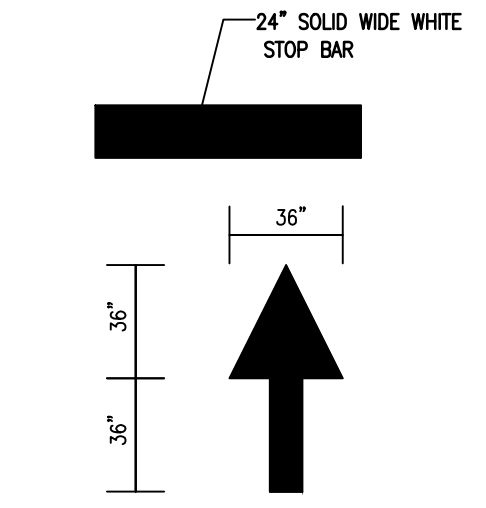
Harbor Consultants Inc.
Engineers & Surveyors
320 NORTH AVENUE EAST
CRANFORD, N.J. 07016
Phone (908) 276-2715 Fax (908) 709-1738
Email: info@hcicg.net

PRELIMINARY & FINAL SITE PLAN
GRADING & UTILITY / LIGHTING & LANDSCAPING PLAN
No. 113 NORTH AVENUE WEST
LOT 6, BLOCK 183
TOWNSHIP OF CRANFORD UNION COUNTY NEW JERSEY

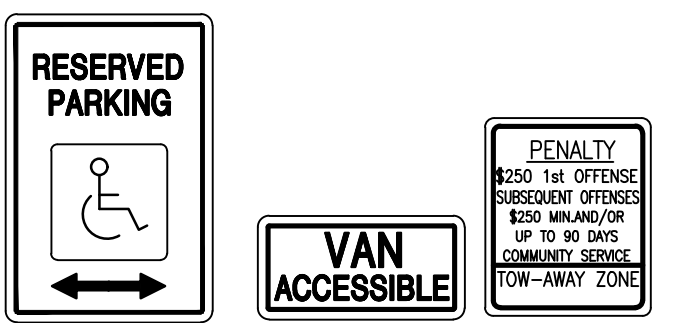
3
VICTOR E. VINEGRA
PROFESSIONAL ENGINEER & LAND SURVEYOR
NEW JERSEY LICENSE NO. 34460
SCALE: 1"=20'
DATE: 05/10/2022
DESIGNED BY: V.E.V.
DRAWN BY: S.P.
WORK FILE: 2021038_C&U
PROJECT NO.: 24GA27962100
CERTIFICATE OF AUTHORIZATION NO.: 2021038



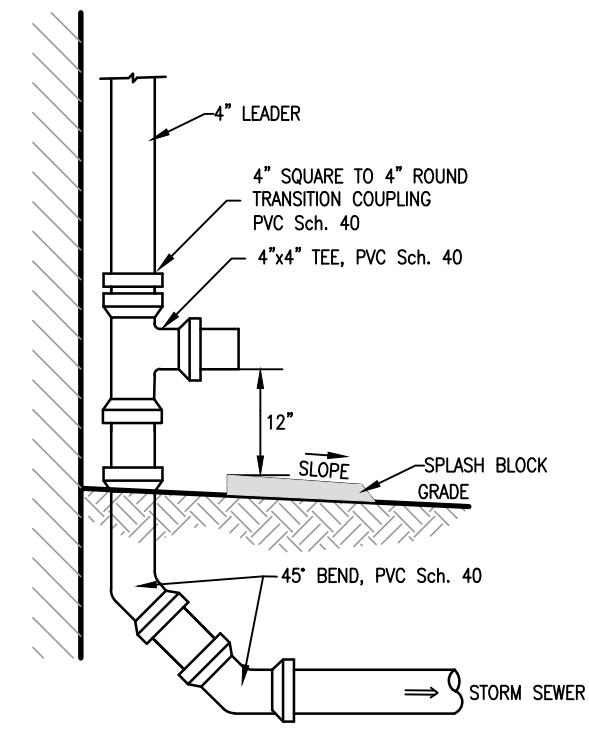
TYPICAL PARKING STALL MARKINGS
NOT TO SCALE



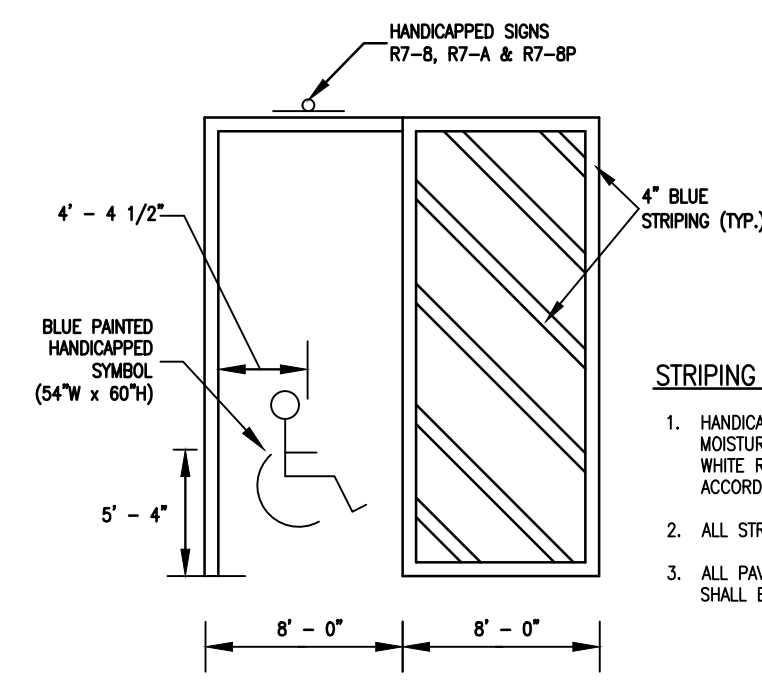
PAINTED MARKING DETAILS
NOT TO SCALE



PROPOSED SIGNAGE DETAILS
N.T.S.

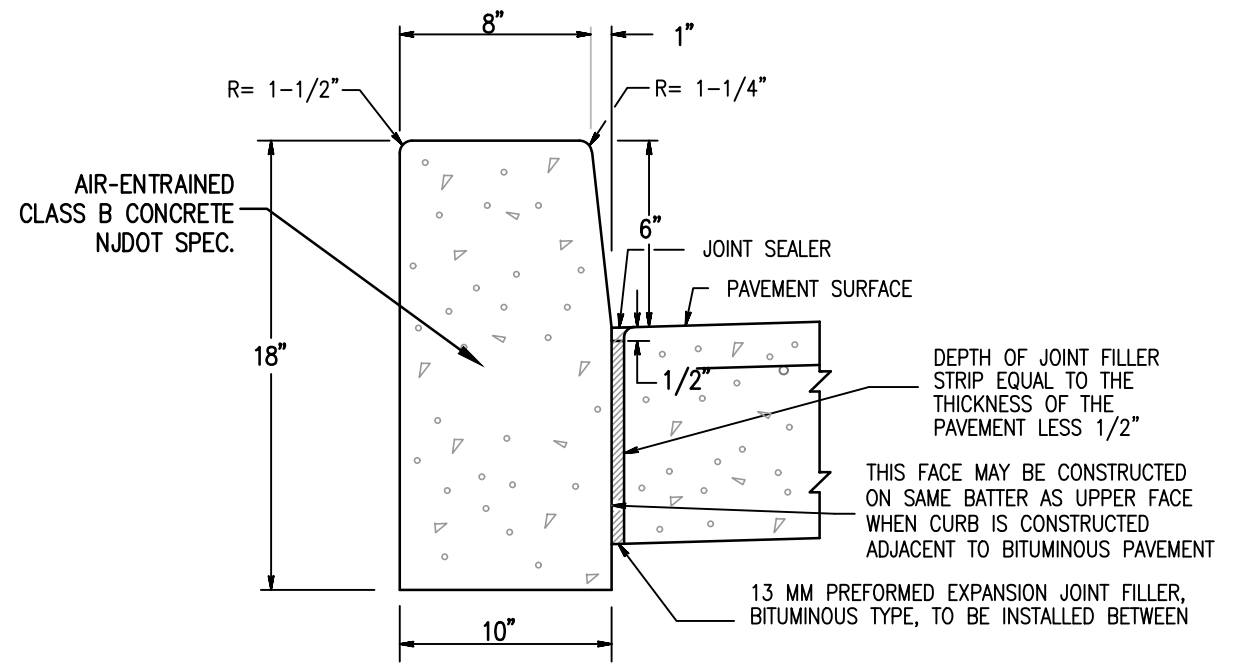


ROOF LEADER SPILL-OFF
N.T.S.



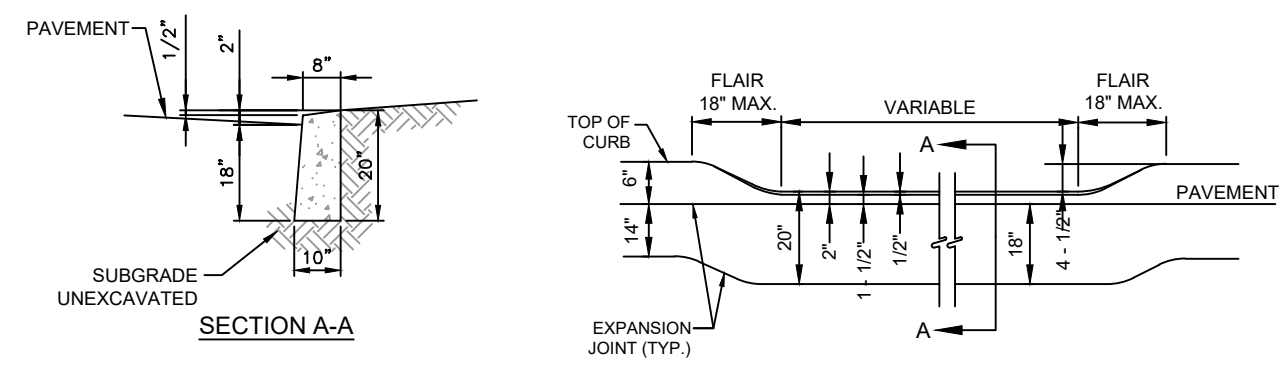
- STRIPING AND PAVEMENT MARKING NOTES:**
- HANDICAPPED RAMP SHALL BE DELINEATED WITH A "SAFETY RED" MOISTURE-CURED POLYURETHANE COATING WITH SELF-CONTAINED WHITE RUBBER GRT OR A PREFORMED PLASTIC MARKING TAPE IN ACCORDANCE WITH NJDOT STANDARDS.
 - ALL STRIPING SHALL BE EPOXY-BASED PAINT.
 - ALL PAVEMENT MARKINGS - L.A., ARROWS, STOP BARS, ETC. - SHALL BE EXTRUDED THERMOPLASTIC.

HANDICAPPED PARKING MARKINGS
N.T.S.



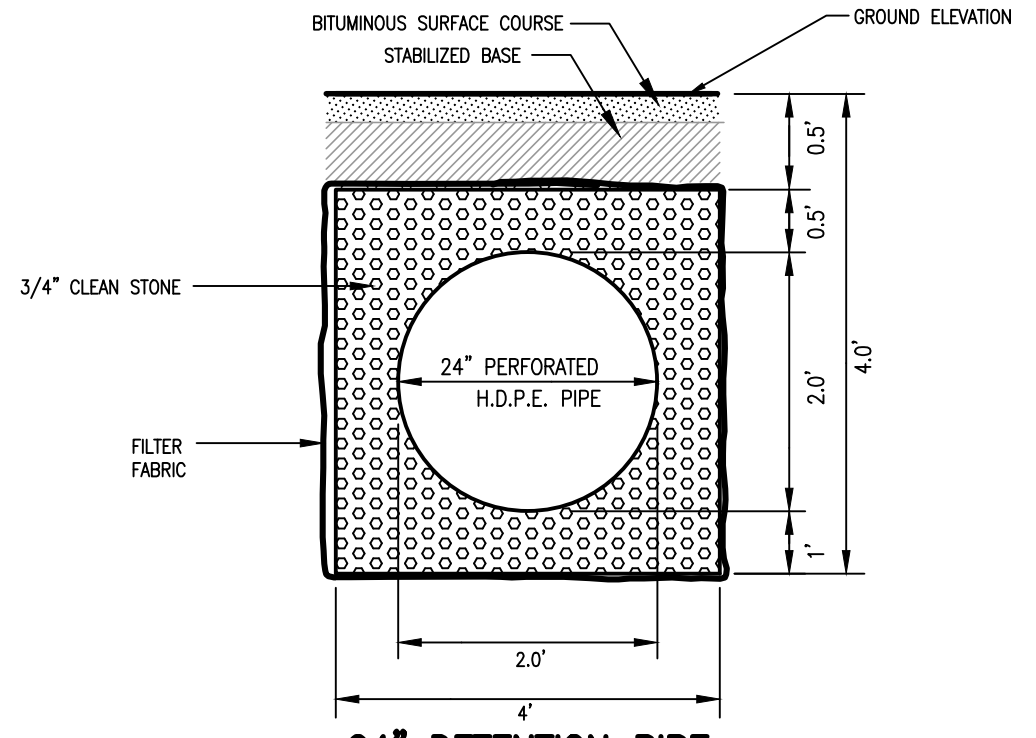
- NOTES:**
- TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 10' APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS-IMPREGATED FIBER JOINT FILLER, COMPLYING WITH THE REQUIREMENTS OF AASHTO SPEC. M-213 RECESSED 1/4" IN FROM FRONT FACE AND TOP OF CURB.
 - EXPANSION JOINTS THRU AND ADJACENT TO THE CURB SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CURB.
 - CONCRETE TO NJDOT CLASS "B" (4000 PSI, 28 DAY STRENGTH)

CONCRETE CURB DETAIL (ON SITE)
N.T.S.

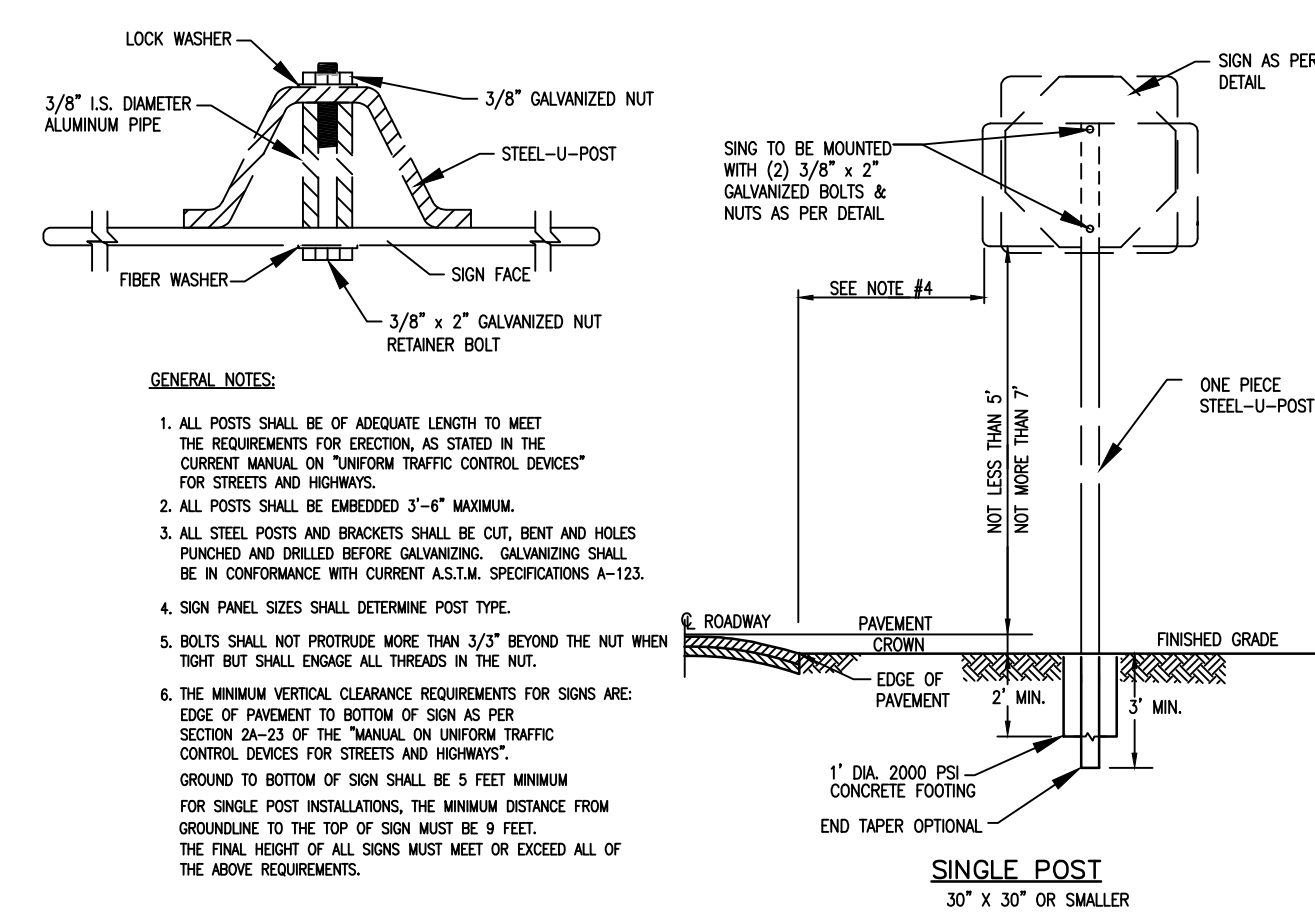


- NOTES:**
- ANY EXCAVATION BELOW DESIRED GRADE DUE TO OVER EXCAVATION OR WET SOIL CONDITIONS SHALL BE BACKFILLED WITH 3/4" CLEAN CRUSHED STONE. ALL SUBGRADES SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO POURING.
 - EXPANSION JOINTS SHALL BE PROVIDED AT EQUAL DISTANCES OF NOT MORE THAN 10' AND AT ALL STORM SEWER INLETS. JOINTS SHALL BE FILLED WITH PREFORMED EXPANSION JOINT FILLER, 3/2" THICK, CONFORMING TO NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE JOINT SHALL BE RECESSED 1/4" FROM THE TOP AND FRONT OF THE CONCRETE CURB.
 - TRANSVERSE JOINTS 3/2" WIDE SHALL BE INSTALLED IN THE CURB 10' APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS-IMPREGATED FIBER JOINT FILLER, COMPLYING WITH THE REQUIREMENTS OF AASHTO M-213, RECESSED 3/4" FROM THE FRONT FACE AND TOP OF THE CURB.
 - DUMMY JOINTS (FORMED) SHALL BE INSTALLED MIDWAY BETWEEN EXPANSION JOINTS.
 - WIDTH OF JOINT FILLER STRIP EQUAL TO THE THICKNESS OF THE PAVEMENT LESS 3/8".
 - A 3/2" PREFORMED EXPANSION JOINT FILLER, BITUMINOUS TYPE, CONFORMING TO AASHTO SPEC'S M-33, TO BE INSTALLED BETWEEN CURB AND NON-BITUMINOUS PAVEMENT OR BASE COURSE.
 - CONCRETE TO BE CURED PER NJDOT SPECIFICATIONS.

METHOD OF DEPRESSING CURB AT DRIVEWAYS
N.T.S.
(AT NORTH AVENUE WEST, STATE ROAD 59, DETAIL 1.07)

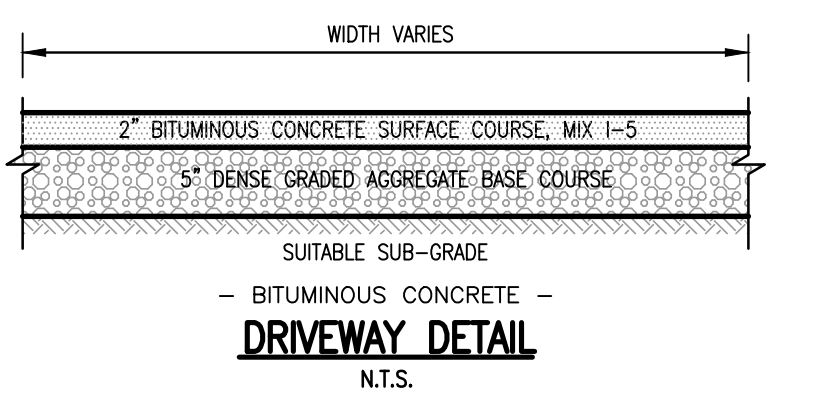


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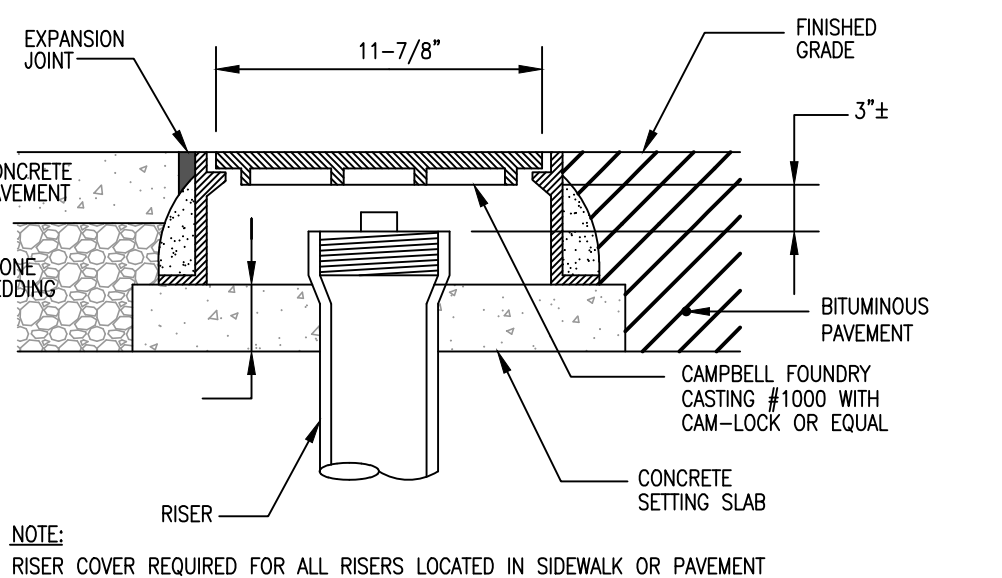


- GENERAL NOTES:**
- ALL POSTS SHALL BE OF ADEQUATE LENGTH TO MEET THE REQUIREMENTS FOR ERECTION, AS STATED IN THE CURRENT MANUAL ON "UNIFORM TRAFFIC CONTROL DEVICES" FOR STREETS AND HIGHWAYS.
 - ALL POSTS SHALL BE EMBEDDED 3'-4" MINIMUM.
 - ALL STEEL POSTS AND BRACKETS SHALL BE CUT, BENT AND HOLES PUNCHED AND DRILLED BEFORE GALVANIZING. GALVANIZING SHALL BE IN CONFORMANCE WITH CURRENT A.S.T.M. SPECIFICATIONS A-153.
 - SIGN PANEL SIZES SHALL DETERMINE POST TYPE.
 - BOLTS SHALL NOT PROTRUDE MORE THAN 3/8" BEYOND THE NUT WHEN TIGHT BUT SHALL ENGAGE ALL THREADS IN THE NUT.
 - THE MINIMUM MINOR CLEARANCE REQUIREMENTS FOR SIGNS ARE: EDGE OF PAVEMENT TO BOTTOM OF SIGN AS PER SECTION 2A-33 OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS". GROUND TO BOTTOM OF SIGN SHALL BE 5 FEET MINIMUM FOR SINGLE POST INSTALLATIONS. THE MINIMUM DISTANCE FROM GROUND TO THE TOP OF SIGN MUST BE 9 FEET. THE FINAL HEIGHT OF ALL SIGNS MUST MEET OR EXCEED ALL OF THE ABOVE REQUIREMENTS.

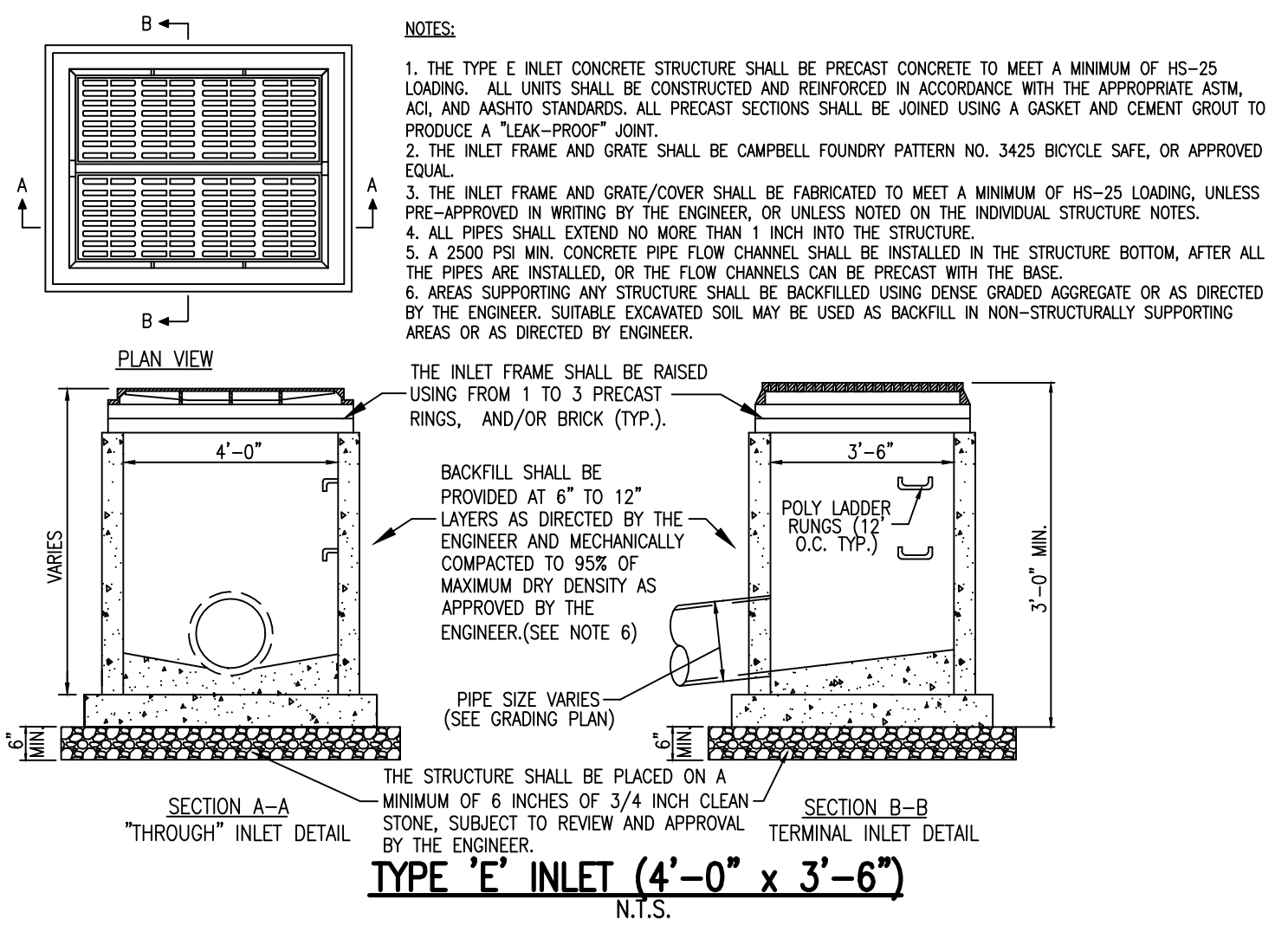
TYPICAL SIGN & MOUNTING DETAIL
N.T.S.



DRIVEWAY DETAIL
N.T.S.

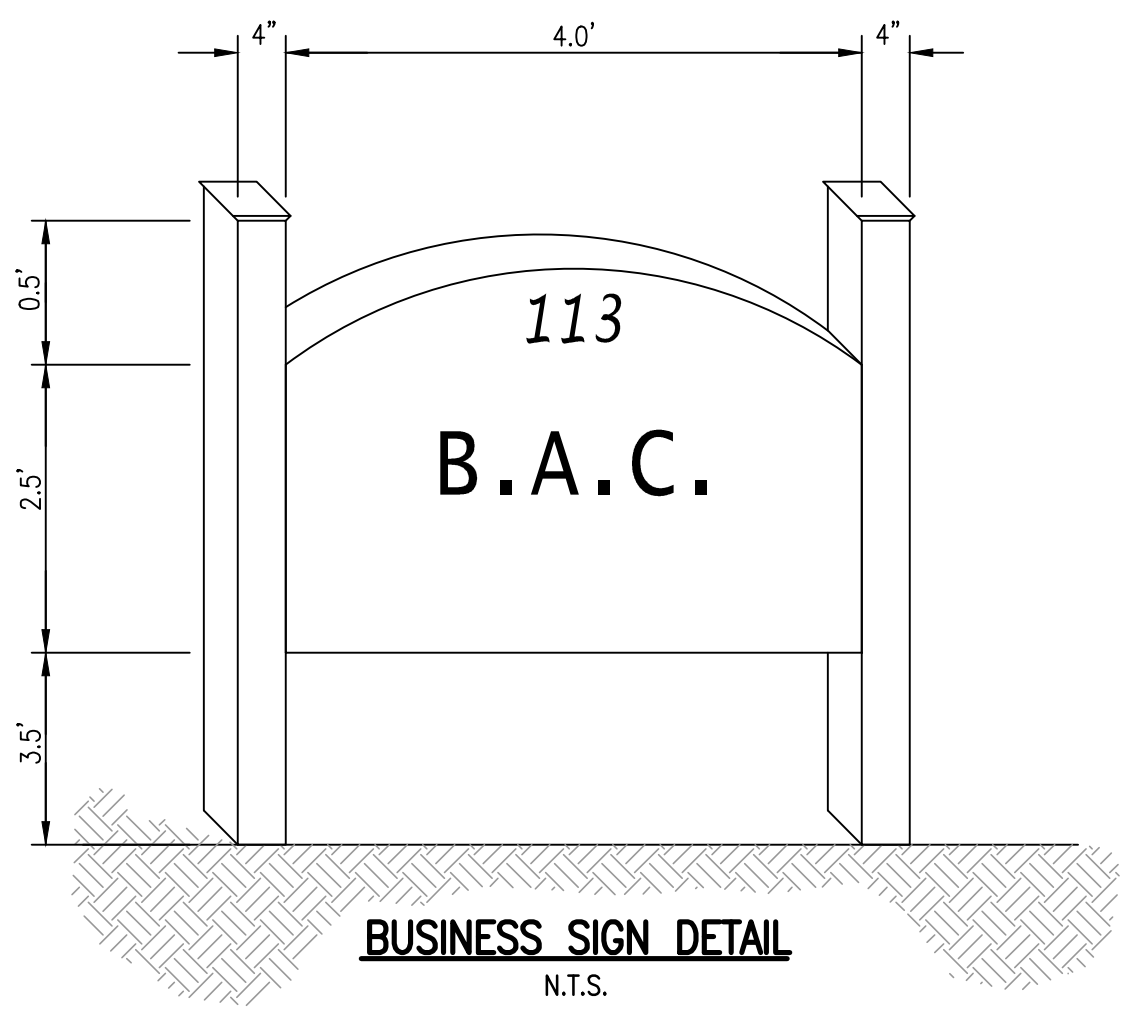


CLEANOUT RISER COVER DETAIL
N.T.S.



- NOTES:**
- THE TYPE 'E' INLET CONCRETE STRUCTURE SHALL BE PRECAST CONCRETE TO MEET A MINIMUM OF HS-25 LOADING. ALL UNITS SHALL BE CONSTRUCTED AND REINFORCED IN ACCORDANCE WITH THE APPROPRIATE ASTM, ACI, AND AASHTO STANDARDS. ALL PRECAST SECTIONS SHALL BE JOINED USING A GASKET AND CEMENT GROUT TO PRODUCE A LEAK-PROOF JOINT.
 - THE INLET FRAME AND GRATE SHALL BE CAMPBELL FOUNDRY PATTERN NO. 3425 BICYCLE SAFE, OR APPROVED EQUAL.
 - THE INLET FRAME AND GRATE/COVER SHALL BE FABRICATED TO MEET A MINIMUM OF HS-25 LOADING, UNLESS PRE-APPROVED IN WRITING BY THE ENGINEER, OR UNLESS NOTED ON THE INDIVIDUAL STRUCTURE NOTES.
 - ALL PIPES SHALL EXTEND NO MORE THAN 1 INCH INTO THE STRUCTURE.
 - A 2000 PSI MIN. CONCRETE PIPE FLOW CHANNEL SHALL BE INSTALLED IN THE STRUCTURE BOTTOM, AFTER ALL THE PIPES ARE INSTALLED, OR THE FLOW CHANNELS CAN BE PRECAST WITH THE BASE.
 - AREAS SUPPORTING ANY STRUCTURE SHALL BE BACKFILLED USING DENSE GRADED AGGREGATE OR AS DIRECTED BY THE ENGINEER. SUITABLE EXCAVATED SOIL MAY BE USED AS BACKFILL IN NON-STRUCTURALLY SUPPORTING AREAS OR AS DIRECTED BY ENGINEER.

- THE INLET FRAME SHALL BE RAISED USING FROM 1 TO 3 PRECAST RINGS, AND/OR BRICK (TYP.).
- BACKFILL SHALL BE PROVIDED AT 6" TO 12" LAYERS AS DIRECTED BY THE ENGINEER AND MECHANICALLY COMPACTED TO SIDE OF MAXIMUM DRY DENSITY AS APPROVED BY THE ENGINEER.(SEE NOTE 6)
- PIPE SIZE VARIES (SEE GRADING PLAN)
- THE STRUCTURE SHALL BE PLACED ON A MINIMUM OF 6 INCHES OF 3/4 INCH CLEAN STONE, SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER.
- TYPE 'E' INLET (4'-0" x 3'-6")**
N.T.S.



BUSINESS SIGN DETAIL
N.T.S.

DIG SAFELY - NEW JERSEY

CALL BEFORE YOU DIG
1-800-272-1000
IT'S THE LAW

NEW JERSEY ONE CALL
CONTRACTORS SHALL CALL 1-800-272-1000
MINIMUM THREE DAYS, MAXIMUM 10 DAYS NOTICE PRIOR TO BEGINNING EXCAVATION

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PRELIMINARY & FINAL SITE PLAN
CONSTRUCTION DETAILS
No. 113 NORTH AVENUE WEST
LOT 6, BLOCK 183
TOWNSHIP OF CRANFORD UNION COUNTY NEW JERSEY

5

VICTOR E. VINEGRA
PROFESSIONAL ENGINEER & LAND SURVEYOR
NEW JERSEY LICENSE No. 34460

SCALE:	DATE:	DESIGNED BY:	DRAWN BY:	WORK FILE:	CERTIFICATE OF AUTHORIZATION No.:	PROJECT No.:
N.T.S.	05/10/2022	V.E.V.	S.P.	2021038_Det01	24GA27962100	2021038

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