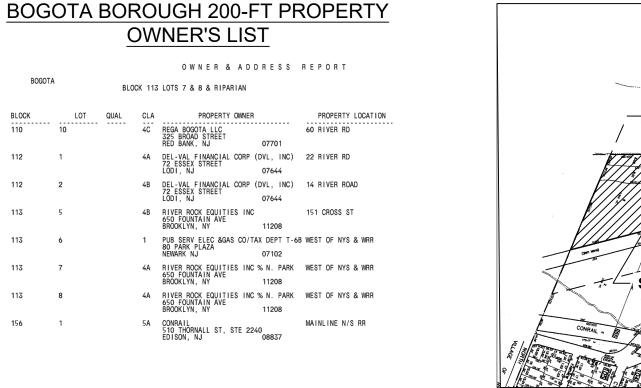
PRELIMINARY AND FINAL SITE PLAN APPLICATION **FOR** 30 CROSS STREET

BLOCK 113, LOT 7, 7.01, 7.02, 7.03 & 8, 8.01, 8.02 (BOGOTA BOROUGH) BLOCK 152.01, LOT 1, 1.01 & 2 (VILLAGE OF RIDGEFIELD PARK) BOROUGH OF BOGOTA, BERGEN COUNTY, NEW JERSEY VILLAGE OF RIDGEFIELD PARK, BERGEN COUNTY, NEW JERSEY

200-FT BOUNDARY

SHEET INDEX				
SHEET NUMBER	DRAWING NUMBER	DRAWING TITLE	LAST REVISED	
1	CS001	COVER SHEET		
2	CS002	GENERAL INFORMATION SHEET		
3	DM101	DEMOLITION PLAN		
4	CS101	SITE PLAN		
5	CG101	GRADING AND DRAINAGE PLAN		
6	CG201	DRAINAGE PROFILES		
7	CU101	UTILITY PLAN		
8	CU201	SANITARY SEWER PROFILE		
9	LL101	LIGHTING PLAN		
10	LL501	LIGHTING NOTES AND DETAILS		
11	LP101	LANDSCAPE PLAN		
12	LP501	LANDSCAPE NOTES AND DETAILS		
13	CE101	SOIL EROSION & SEDIMENT CONTROL PLAN		
14	CE501	SOIL EROSION & SEDIMENT CONTROL PLAN		
15	CS501	CONSTRUCTION DETAILS 1		
16	CS502	CONSTRUCTION DETAILS 2		
17	CS503	CONSTRUCTION DETAILS 3		
18	CS504	CONSTRUCTION DETAILS 4		
19	CS505	CONSTRUCTION DETAILS 5		



01/20/21 Page 1 of 1

2.01,2.02

ASSESSED BY STATE

RIDGEFIELD PARK 200-FT PROPERTY

OWNER'S LIST

Date

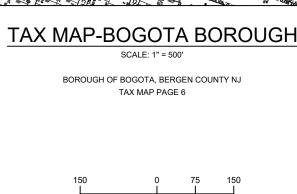
OWNER & ADDRESS REPORT

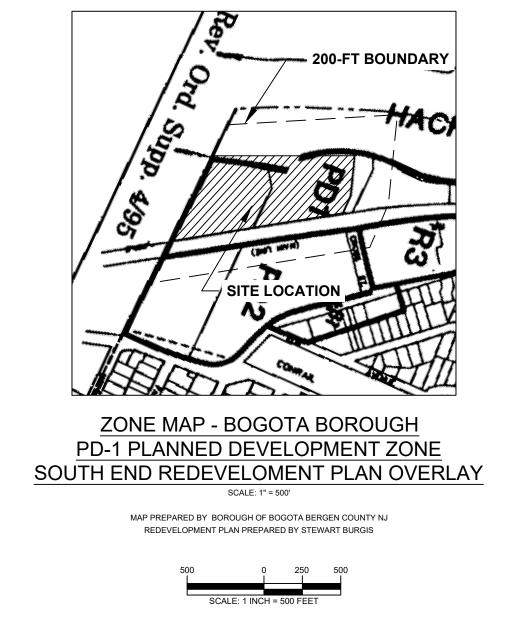
LIST OF PROPERTY OWNERS WITHIN 200' OF: BLCCK: 152.01 LOTS: 1-2 INDUSTRIAL AVE RIDGEFIELD PARK, NJ 07660

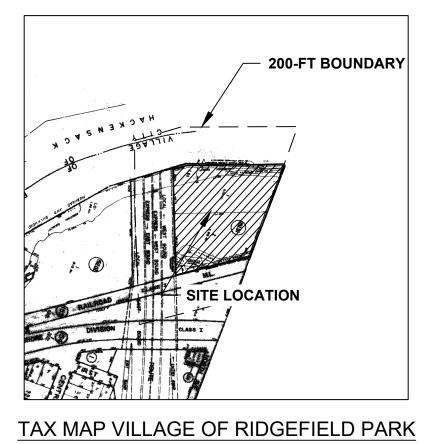
RB LEASING CORP C/O DVL INC INDUSTRIAL AVE 72 ESSEX STREET 07644

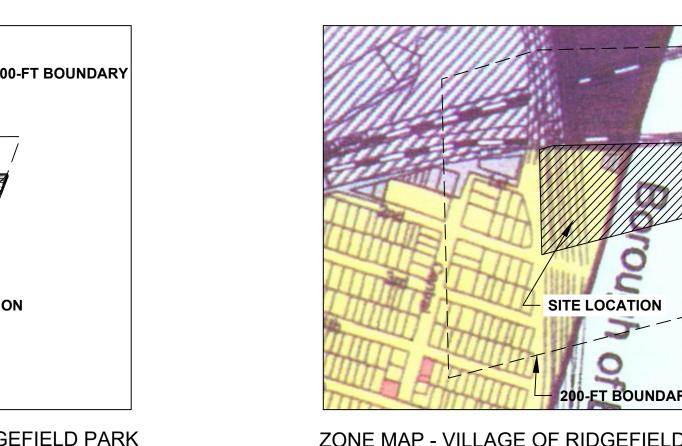
300 INDUSTRIAL AVE

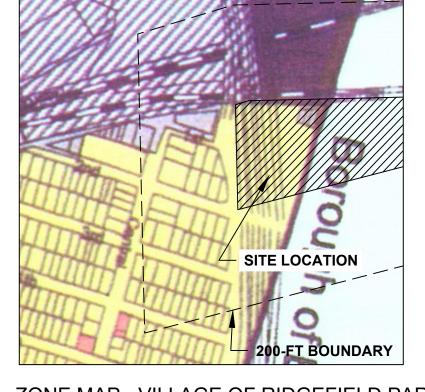
MAINLINE N/S RR

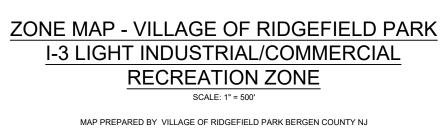


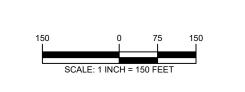






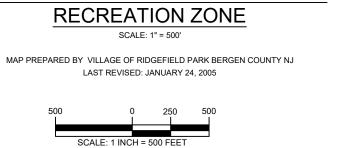


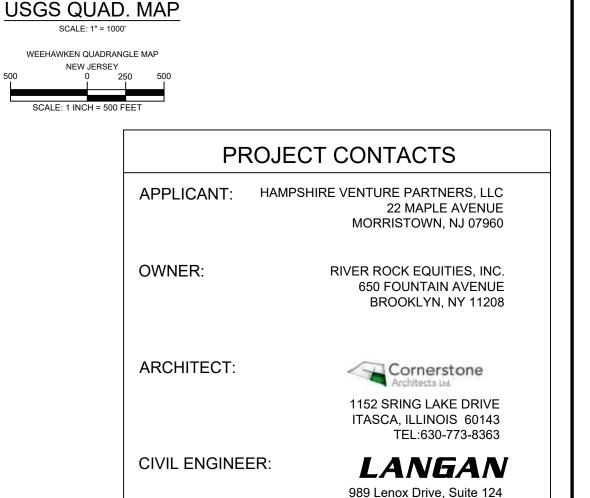




VILLAGE OF RIDGEFIELD PARK, BERGEN COUNTY NJ

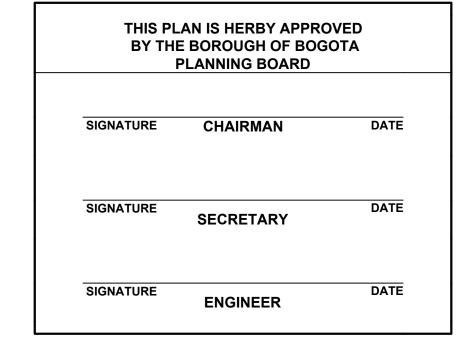
TAX MAP PAGE 5

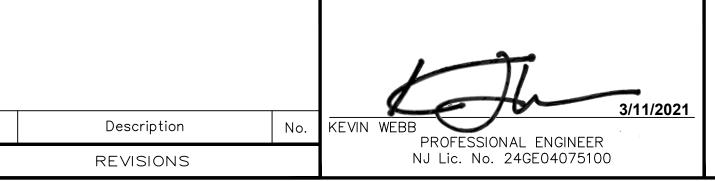




SITE LOCATION

BY THE VI	AN IS HERBY APPR LLAGE OF RIDGEFIE PLANNING BOARD	
SIGNATURE	CHAIRMAN	DATE
SIGNATURE	SECRETARY	DATE
SIGNATURE	ENGINEER	DATE





LANGAN Environmental Services, Inc.

989 Lenox Drive, Suite 124 Lawrenceville, NJ 08648 T: 609.282.8000 F: 609.282.8001 www.langan.com

NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

30 CROSS STREET BLOCK 113 / LOTS 7, 7.01, 7.02, 7.03, 8, 8.01, 8.02 (BOGOTA) BLOCK 152.01 / LOTS 1, 1.01, 2 (RIDGEFIELD PARK) BOROUGH OF BOGOTA / VILLAGE OF RIDGEFIELD PARK BERGEN COUNTY

COVER SHEET

Drawing No. 130148001 03/03/2021 rawn By

NJ Certificate of Authorization No: 24GA27996400

Lawrenceville NJ, 08648 TEL: 609-282-8000

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GENERAL NOTES AND PLAN REFERENCES:

- INFORMATION PERTAINING TO EXISTING PROPERTY BOUNDARY, TOPOGRAPHY, AND LOCATION OF EXISTING IMPROVEMENTS FOR THE SUBJECT PROPERTY IS BASED ON A PLAN TITLED, "BOUNDARY & TOPOGRAPHIC SURVEY, RIVER ROCK EQUITIES, INC." PREPARED BY CONTROL POINT ASSOCIATES, INC., DATED JULY 15, 2012, LAST REVISED FEBRUARY 1, 2021.
- 2. THE RECORD SURVEY IS REFERENCED TO THE NEW JERSEY STATE PLAN COORDINATE SYSTEM NAD 1983.
- 3. ELEVATIONS SHOWN ARE REFERENCED TO NGVD 1929. NAVD 1988 DATUM IS 1.01 FEET LOWER THAN NGVD 1929.

CONSTRUCTION NOTES:

- 1. ALL MATERIALS, METHODS OF CONSTRUCTION AND CONSTRUCTION DETAILS SHALL CONFORM TO APPLICABLE STANDARDS OF LOCAL MUNICIPALITY, COUNTY, STATE, MUNICIPAL UTILITIES AUTHORITY AND UTILITY COMPANIES. IN CASE OF CONFLICT, THE STANDARDS OF THE ADMINISTRATIVE AUTHORITY HAVING JURISDICTION THEREOF SHALL GOVERN. THE CONTRACTOR SHALL PROVIDE THE MUNICIPAL ENGINEER WITH SHOP DRAWINGS FOR ALL ITEMS UNDER HIS JURISDICTION FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- 2. THE MUNICIPAL ENGINEER'S OFFICE SHALL BE NOTIFIED AT LEAST 72 HOURS BEFORE THE START OF WORK ON ANY IMPROVEMENTS UNDER ITS JURISDICTION.
- 3. ALL DISTURBED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE STANDARDS OF THE LOCAL SOIL CONSERVATION DISTRICT.
- 4. PROPOSED GROUND SLOPES SHALL NOT EXCEED 3:1, EXCEPT WHERE NOTED ON PLAN.
- 5. EXCAVATED MATERIAL USED FOR EMBANKMENTS SHALL CONFORM TO THE STANDARDS OF SECTION 203 OF THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- 6. FILL MATERIAL SHALL BE PLACED IN SIX (6) INCH LIFTS AND THOROUGHLY COMPACTED IN ACCORDANCE WITH SECTION 204 OF THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE OWNER'S GEOTECHNICAL ENGINEER AND INDEPENDENT TESTING AGENCY DURING CONSTRUCTION. REFER TO THE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
- 7. BORROW FILL, IF REQUIRED, SHALL BE IN CONFORMANCE WITH SECTION 204 OF THE NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- 8. WHERE NEW PAVEMENT IS PROPOSED ADJACENT TO EXISTING PAVEMENT, THE EXISTING PAVEMENT SHALL BE CUT ONE (1) FOOT FROM THE EDGE TO PROVIDE A NEAT LINE AGAINST WHICH TO PAVE.
- 9. ALL OPEN EXCAVATIONS SHALL CONFORM TO ALL APPLICABLE STANDARDS. TRENCH OPENINGS SHALL NOT REMAIN OPEN OVERNIGHT.
- 10. ALL ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION AND OTHER PUBLIC UTILITY LINES SHALL BE INSTALLED UNDERGROUND IN ACCORDANCE WITH UTILITY COMPANY DETAILS. MINIMUM HORIZONTAL CLEARANCE BETWEEN PUBLIC UTILITY LINES AND WATER OR SEWER MAINS SHALL BE THREE (3) FEET.
- 11. THE LOCATIONS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR MUST VERIFY THE EXACT LOCATIONS OF ALL EXISTING UTILITY LINES, INCLUDING THOSE THAT ARE CUSTOMER OWNED. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND OTHER INTERESTED PARTIES BEFORE THE START OF WORK ON ANY IMPROVEMENTS UNDER THEIR

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PERFORMING TEST PITS AS REQUIRED BY THE DESIGN ENGINEER OR AS DEEMED NECESSARY TO ACCURATELY LOCATE, BOTH HORIZONTALLY AND VERTICALLY, ALL UTILITIES AFFECTED BY THE PROPOSED CONSTRUCTION.

- THE CONTRACTOR MUST NOTIFY THE DESIGN ENGINEER OF ANY CONDITIONS OR CONFLICTS THAT WOULD ALTER THE INTENT OF THE DESIGN AS SHOWN.
- 12. DURING CONSTRUCTION, ALL EXISTING OVERHEAD AND UNDERGROUND UTILITY LINES MUST BE PROTECTED, MAINTAINED AND KEPT OPERATIONAL BY THE CONTRACTOR IN ACCORDANCE WITH STANDARDS OF THE ADMINISTRATIVE AUTHORITY HAVING JURISDICTION THEREOF. THE CONTRACTOR SHALL SUPPORT UTILITY POLES LOCATED ADJACENT TO EXCAVATED AREAS UNTIL THE AREAS ARE BACKFILLED AND STABILIZED.
- 13. ALL CONCRETE USED SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI, UNLESS OTHERWISE NOTED.
- 14. ALL STORM SEWER PIPING SHALL BE REINFORCED CONCRETE PIPE, CLASS III WITH BELL AND SPIGOT JOINTS UNLESS OTHERWISE NOTED. CIRCULAR REINFORCED CONCRETE PIPE AND FITTINGS SHALL MEET THE REQUIREMENTS OF ASTM C76. ALL JOINTS ARE TO BE SEALED WITH EITHER RUBBER GASKETS OR BUTYL TAPE AND BE WRAPPED WITH MORTAR AND FABRIC ON THE OUTSIDE. IF RUBBER GASKETS ARE USED FOR CIRCULAR PIPE, THE JOINT DESIGN AND JOINT MATERIAL SHALL CONFORM TO ASTM C443. ALL 36-INCH AND LARGER PIPES SHALL HAVE THE INSIDE JOINTS MORTARED. MORTAR JOINTS SHALL CONFORM TO SECTIONS 601.03 AND 903.08 OF THE CURRENT NEW JERSEY DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION.

WHERE PROPOSED, CORRUGATED HIGH DENSITY POLYETHYLENE PIPE (HDPE) SHALL HAVE A SMOOTH INTERIOR AND ANNULAR EXTERIOR CORRUGATIONS IN ACCORDANCE WITH AASHTO M294-97. GASKETS FOR HDPE SHALL MEET THE REQUIREMENTS OF ASTM F477 WITH THE ADDITION THAT THE GASKETS SHALL NOT HAVE ANY VISIBLE CRACKING WHEN TESTED ACCORDING TO ASTM D1149 AFTER 72 HOURS OF EXPOSURE IN 50 PPHM OZONE AT 104 DEGREES FARENHEIT. INSTALLATION OF HDPE SHALL BE IN ACCORDANCE WITH ASTM D2321 WITH THE EXCEPTION THAT MINIMUM COVER IN TRAFFICKED AREAS SHALL BE ONE FOOT BELOW THE BOTTOM OF THE ASPHALT.

ALL INLETS IN CURBED AREAS SHALL BE TYPE "B" WITH WATER QUALITY TYPE SIX (6) INCH CURB PIECES. ALL INLETS SHALL BE PROVIDED WITH GRATES CLASSIFIED AS "BICYCLE SAFE". ALL CASTINGS SHALL BE OF AMERICAN MANUFACTURE.

15. ALL WATER MAIN PIPING SHALL BE DOUBLE CEMENT-LINED DUCTILE IRON PIPE CONFORMING TO ANSI A21.51 (AWWA C151) CLASS 52 WITH EITHER MECHANICAL OR PUSH-ON JOINTS, UNLESS OTHERWISE SPECIFIED. "MEG-A-LUG" RESTRAINT GLANDS (OR APPROVED EQUAL) MUST BE INSTALLED ON ALL FITTINGS HAVING MECHANICAL JOINTS.

MINIMUM COVER OVER WATER MAINS AND WATER SERVICE PIPING SHALL BE FOUR (4) FEET.

THRUST BLOCKS SHALL BE INSTALLED AT ALL TEES, BENDS, PLUGS, REDUCERS, HYDRANT CONNECTIONS AND ANYWHERE ELSE REQUIRED BY THE LOCAL WATER COMPANY OR AGENCY HAVING JURISDICTION THEREOF. TIE RODS MUST BE INSTALLED WITH ALL FIRE HYDRANT ASSEMBLIES.

ALL WATER MAINS AND ASSOCIATED FITTINGS MUST BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL WATER COMPANY OR AGENCY HAVING JURISDICTION THEREOF

- 16. ALL GRAVITY SANITARY SEWER MAIN AND LATERALS SHALL BE PVC PIPE, SDR-35 CONFORMING TO ASTM D3034 WITH PUSH-ON JOINTS, UNLESS OTHERWISE SPECIFIED.
- MINIMUM COVER OVER PVC SANITARY SEWER MAINS AND LATERALS SHALL BE THREE (3) FEET. MINIMUM COVER OVER DUCTILE IRON SANITARY SEWER MAINS AND LATERALS SHALL BE
- 17. SANITARY SEWER PIPING AND POTABLE WATER PIPING SHALL BE SEPARATED BY A MINIMUM OF TEN (10) FEET HORIZONTALLY AND/OR EIGHTEEN (18) INCHES VERTICALLY, PLACED IN SEPARATE TRENCHES. WHERE THESE MINIMUM SEPARATION DISTANCES CANNOT BE MET, ENCASE THE SANITARY SEWER IN CONCRETE FOR A DISTANCE OF TEN (10) FEET EACH SIDE OF THE WATER MAIN. DUCTILE IRON PIPE WITH SLIP-ON JOINTS MAY BE SUBSTITUTED FOR THE CONCRETE ENCASEMENT. IN NO CASE SHALL THE VERTICAL CLEARANCE BETWEEN POTABLE WATER AND SANITARY SEWER MAINS BE LESS THAN ONE (1) FOOT
- 18. THE MINIMUM VERTICAL CLEARANCE BETWEEN PVC SEWER MAINS AND STORM SEWER PIPE AT CROSSINGS ABOVE SHALL BE ONE (1) FOOT. PROVIDE CONCRETE ENCASEMENT WHEN THE VERTICAL CLEARANCE IS LESS THAN EIGHTEEN (18) INCHES.

THE MINIMUM VERTICAL CLEARANCE BETWEEN DUCTILE IRON SEWER OR WATER MAINS AND STORM SEWER PIPE CROSSINGS ABOVE SHALL BE SIX (6) INCHES. PROVIDE CONCRETE ENCASEMENT WHEN THE VERTICAL CLEARANCE IS LESS THAN ONE (1) FOOT.

- 19. EXISTING SANITARY SEWER PIPE, MANHOLES, ETC. TO BE ABANDONED SHALL BE REMOVED.
- 20. THE LOCATION OF ALL PROPOSED FIRE HYDRANTS SHALL BE APPROVED BY THE ADMINISTRATIVE AUTHORITY HAVING JURISDICTION THEREOF. ALL EXISTING FIRE HYDRANTS SHALL BE TESTED PRIOR TO CONSTRUCTION.
- 21. TRAFFIC STRIPES AND MARKINGS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 610 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2007 EDITION, AS PUBLISHED BY THE NEW JERSEY DEPARTMENT OF TRANSPORTATION.
- TRAFFIC CONTROL SIGNS SHALL CONFORM TO THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, AS PUBLISHED BY THE US DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY AUTHORITY
- 22. THE PROPOSED DEVELOPMENT HAS BEEN DESIGNED TO BE COMPLIANT WITH APPLICABLE ADA REGULATIONS. THE PROPOSED PEDESTRIAN CROSSWALKS ARE IN ACCORDANCE WITH ADA REGULATIONS AND SHALL NOT HAVE JOINTS THAT PROTRUDE GREATER THAN 1/2 INCH.
- 23. THE OWNER OR HIS REPRESENTATIVE IS TO DESIGNATE AN OSHA-COMPETENT INDIVIDUAL TO BE RESPONSIBLE FOR CONSTRUCTION SITE SAFETY DURING THE COURSE OF THE CONSTRUCTION OF SITE IMPROVEMENTS PURSUANT TO NJAC 5:23-2.21(e) OF THE NEW JERSEY CONSTRUCTION CODE AND CFR 1926.32(f).
- 24. ANY RETAINING WALLS 48 INCHES OR GREATER IN HEIGHT SHALL REQUIRE A BUILDING PERMIT. DESIGN CALCULATIONS FOR PROPOSED RETAINING WALLS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE BOROUGH ENGINEER AND CONSTRUCTION CODE OFFICIAL FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- 25. TO THE EXTENT PRACTICABLE, NO TOPSOIL SHALL BE REMOVED FROM THE SITE OR USED AS SPOIL. TOPSOIL STRIPPED AND STOCKPILED DURING THE COURSE OF CONSTRUCTION SHALL BE REDISTRIBUTED SO AS TO PROVIDE EQUAL COVER TO ALL AREAS OF THE SITE AND SHALL BE STABILIZED BY SEEDING OR PLANTING.
- 26. CONTRACTOR SHALL BE RESPONSIBLE FOR ARRANGING A PRECONSTRUCTION MEETING WITH EACH OF THE UTILITY COMPANIES, INCLUDING THE OWNER, ARCHITECT, AND ENGINEERS TO ENSURE ALL PROJECT SPECIFIC REQUIREMENTS ARE MET. CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES DURING CONSTRUCTION, INCLUSIVE OF ALL REQUIRED

Zone: South End Redevelopment Plan Overlay of the PD-1 Planned Development District					
Bulk Requirements	Required	Existing	Proposed (Existing Lot Line)	Complies	
Proposed Use	As listed in the Bogota South End Redevelopment Plan	Commercial Recreation	Warehouse /Distribution Light Manufacturing and Assembly	Yes	
Min. Lot Area	2 AC	6.0 AC	6.0 AC	Yes	
Min. Lot Width	200 FT	763 FT ±	763FT ±	Yes	
Min. Lot Depth	200 FT	360 FT ±	360 FT ±	Yes	
Min. Front Yard ^[1]	50 FT	22.7 FT	60.2 FT (TO EXST. LOT LINE) 10.9 FT (TO PROP. R.O.W.)	Yes	
Min. Side Yard	40 FT	198 FT	47.0 FT	Yes	
Min. Rear Yard	40 FT	77.8 FT	84 FT	Yes	
Max. Building Height ^[2]	4 Stories / 50 FT	< 40 FT	1 Sty/≤50 FT	Yes	
Max. Building Coverage	40%	17.8%	34.1%	Yes	
Max. Impervious Coverage	85%	51.5%	72.3%	Yes	
Floor Area Ratio	0.4	0.18	0.34	Yes	

According to Section 4.B.5 of the South End Redevelopment plan, compliance with bulk regulations shall be determined on lot sizes and dimensions as they exist at the time the redevelopment plan is adopted.

[2] Building height is defined as the vertical distance measured from the average elevation of the finished grade along the front of the building to the highest elevation of the roof surface.

Off-Street Parking Standards		Required	Provided	Complies
Office: 1 space / 250 SF GFA	5,500 SF	22 spaces		
Warehousing and Distribution: 1 space/ 2,500 SF GFA for Areas 60,000 GFA or greater	83,600 SF	34 spaces	1	
Total required for Warehouse/Distribution Use		56 spaces	154 spaces	Vas
Office: 1 space / 250 SF GFA	5,500 SF	22 spaces	134 spaces	Yes
Light Manufacturing and Assembly: 1 space/ 800 SF GFA	83,600 SF	105 spaces	1	
Total required for Light Manufacturing and Assembly Use		127 spaces		

Signage					
Bulk Regulations	Requirements	Proposed	Complies		
Freestanding Signs in South End Rede	evelopment Plan Overlay of the PD-1 Planned Development Dis	strict			
Max. Number of Freestanding Signs	1 / Building	1	Yes		
Max. Height	20 FT	8 FT	Yes		
Max. Size of Sign Face	50 SF / Side	≤50 SF/Side	Yes		
Min. Setback ^[1]	10 FT from the front street property line	47.1 FT	Yes		
Façade Signs in South End Redevelop	ment Plan Overlay of the PD-1 Planned Development District				
Max. Number of Façade Signs	1 sign per Building tenant on front façade of building and 1 additonal sign per building tenant for building whose entranceway faces an off-street parking area	1 sign per tenant on front façade and 1 sign per tenant on entranceway façade	Yes		
Max. Sign Area	≤10% of the area of the wall area	(2 signs ^[2] x 125 SF) / (371 FT x 41 FT) = 1.6% (East Façade) (2 signs x 125 SF) / (190 FT x 41 FT) = 3.2% (North Façade)			
Max. Sign Height	Height: 5 FT	5 FT	Yes		
Max. Sign Width	<90% Building Wall width	(2 signs x 25 FT) / 371 FT = 13.5% (East Façade) (2 signs x 25 FT) / 190 FT = 26.3% (North Façade)	Yes		

According to Section 4.B.5 of the South End Redevelopment plan, compliance with bulk regulations shall be determined on lot sizes and dimensions as they exist at the time the redevelopment plan is adopted.

[2] A second set of façade signs are proposed in the event the building contains 2 tenants.

No. PROFESSIONAL ENGINEER NJ Lic. No. 24GE04075100

Description

REVISIONS

Date

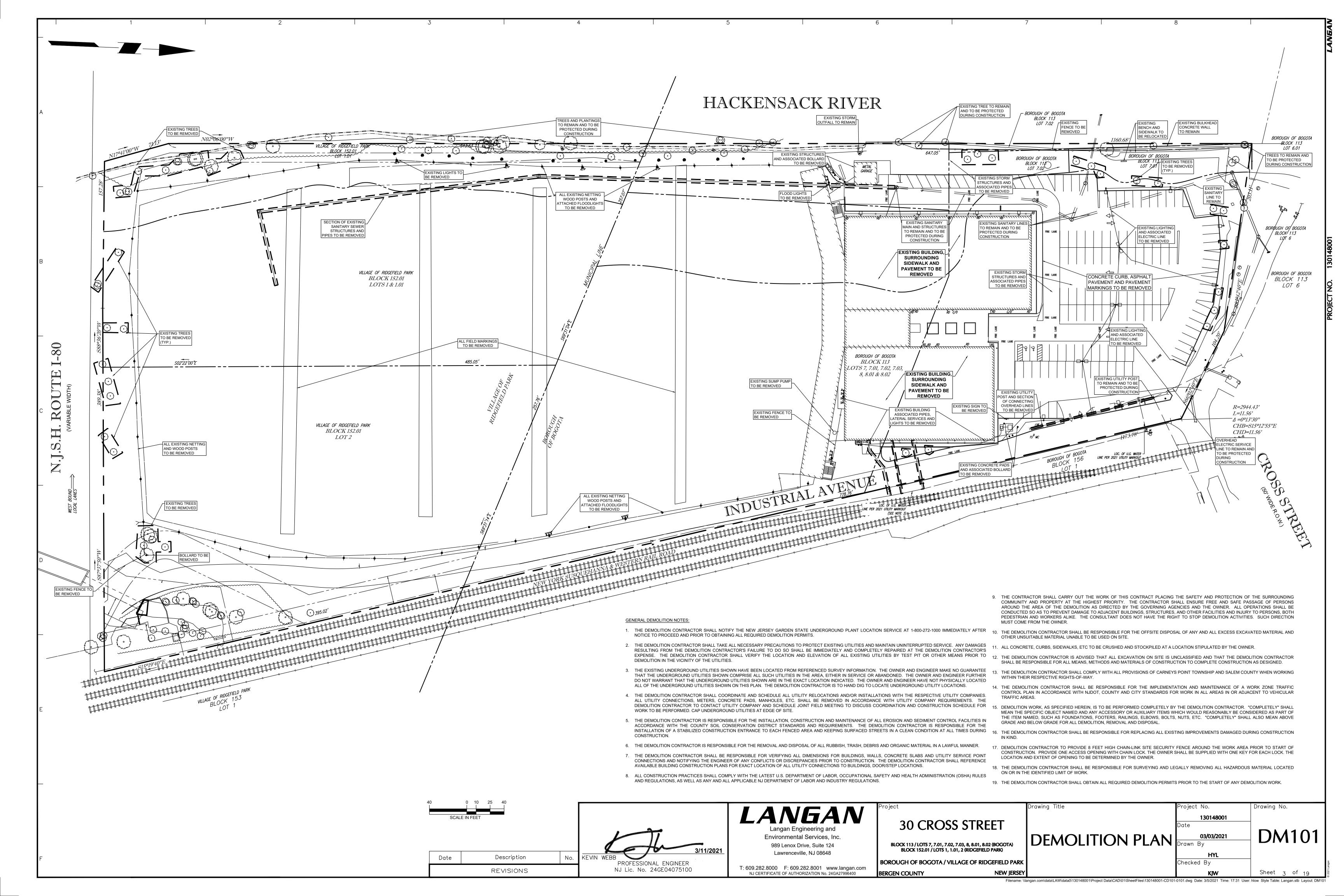
LANGAN **30 CROSS STREET** Environmental Services, Inc. BLOCK 113 / LOTS 7, 7.01, 7.02, 7.03, 8, 8.01, 8.02 (BOGOTA) 989 Lenox Drive, Suite 124

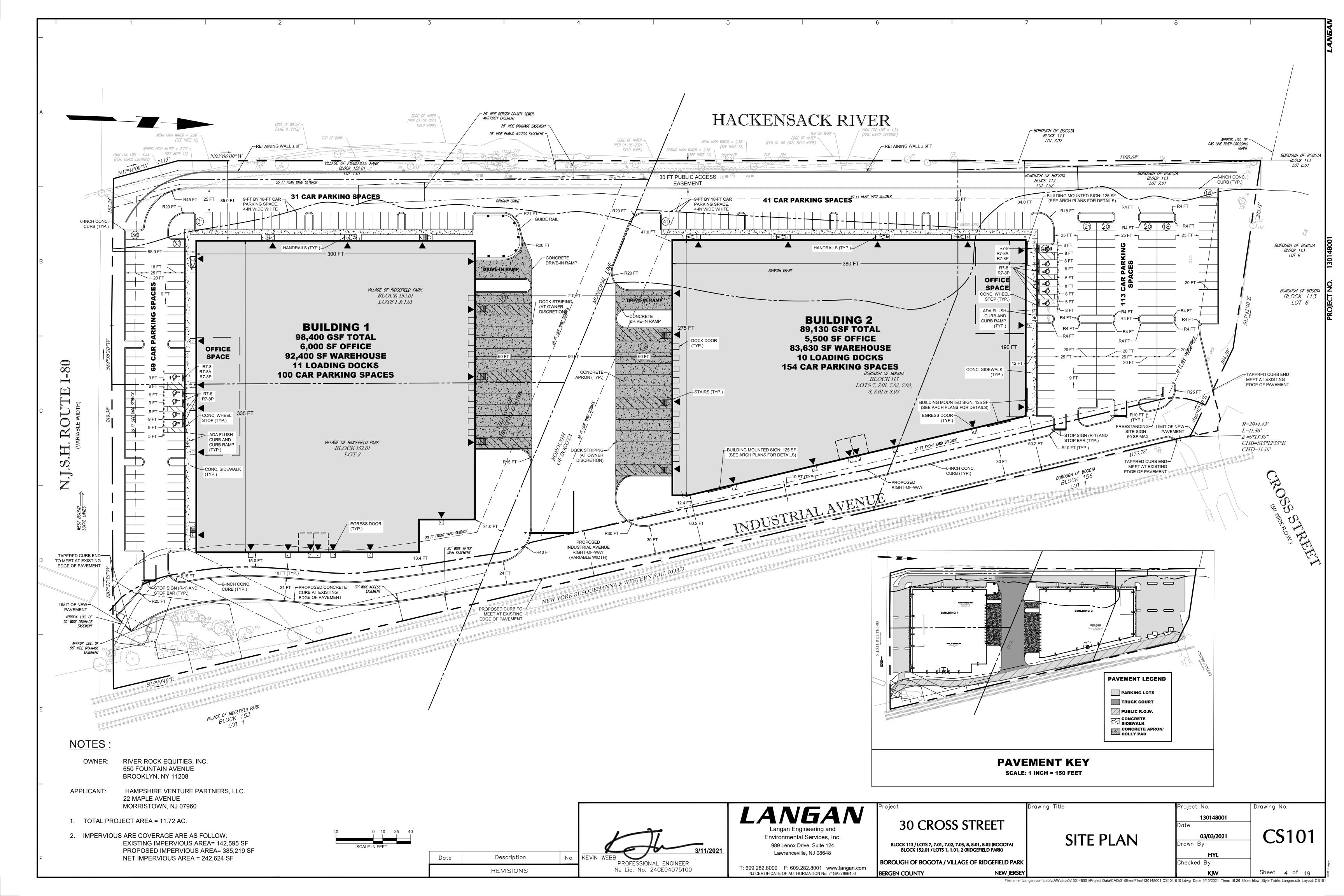
Lawrenceville, NJ 08648

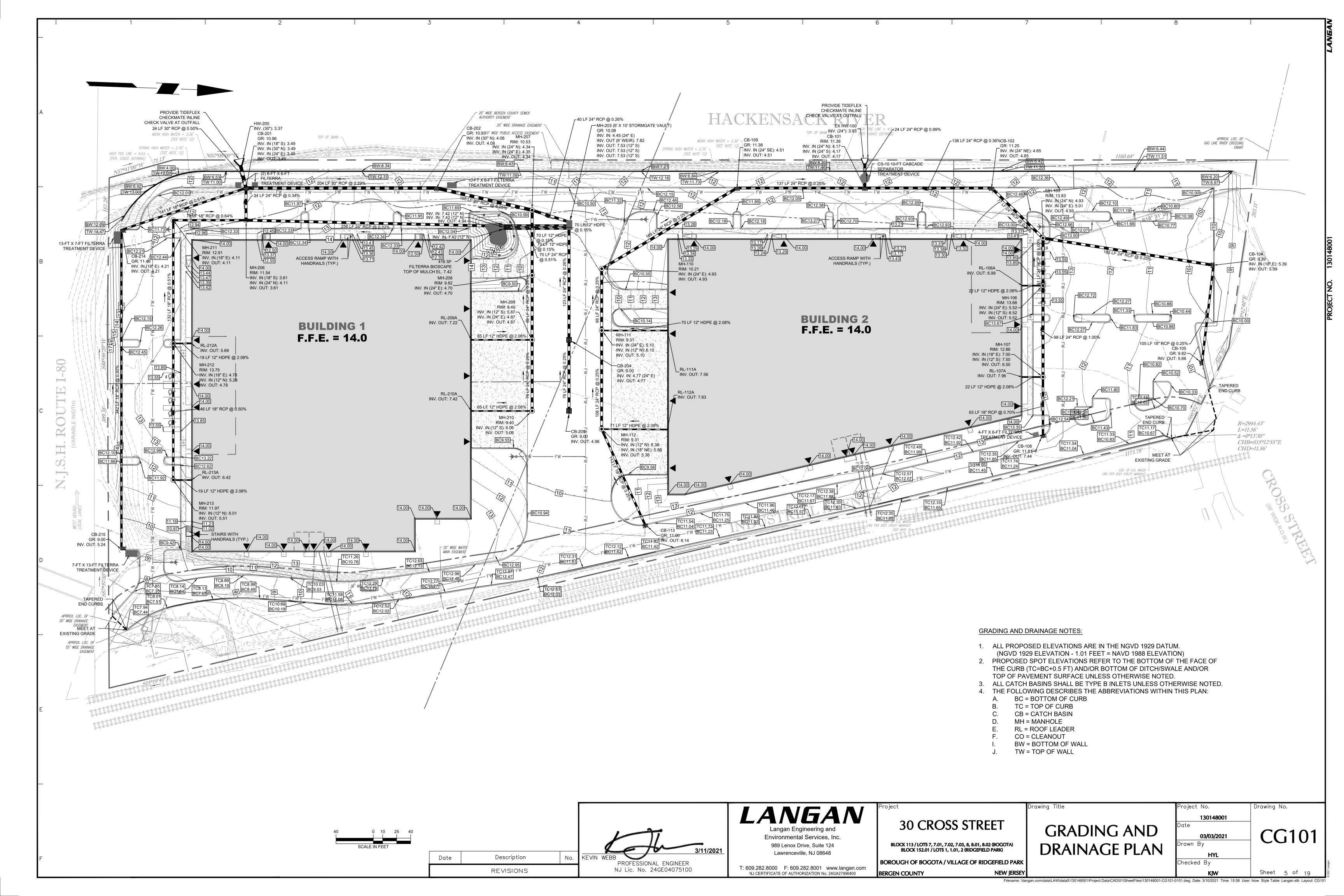
BLOCK 152.01 / LOTS 1, 1.01, 2 (RIDGEFIELD PARK) **BOROUGH OF BOGOTA / VILLAGE OF RIDGEFIELD PARK** T: 609.282.8000 F: 609.282.8001 www.langan.com NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400 BERGEN COUNTY

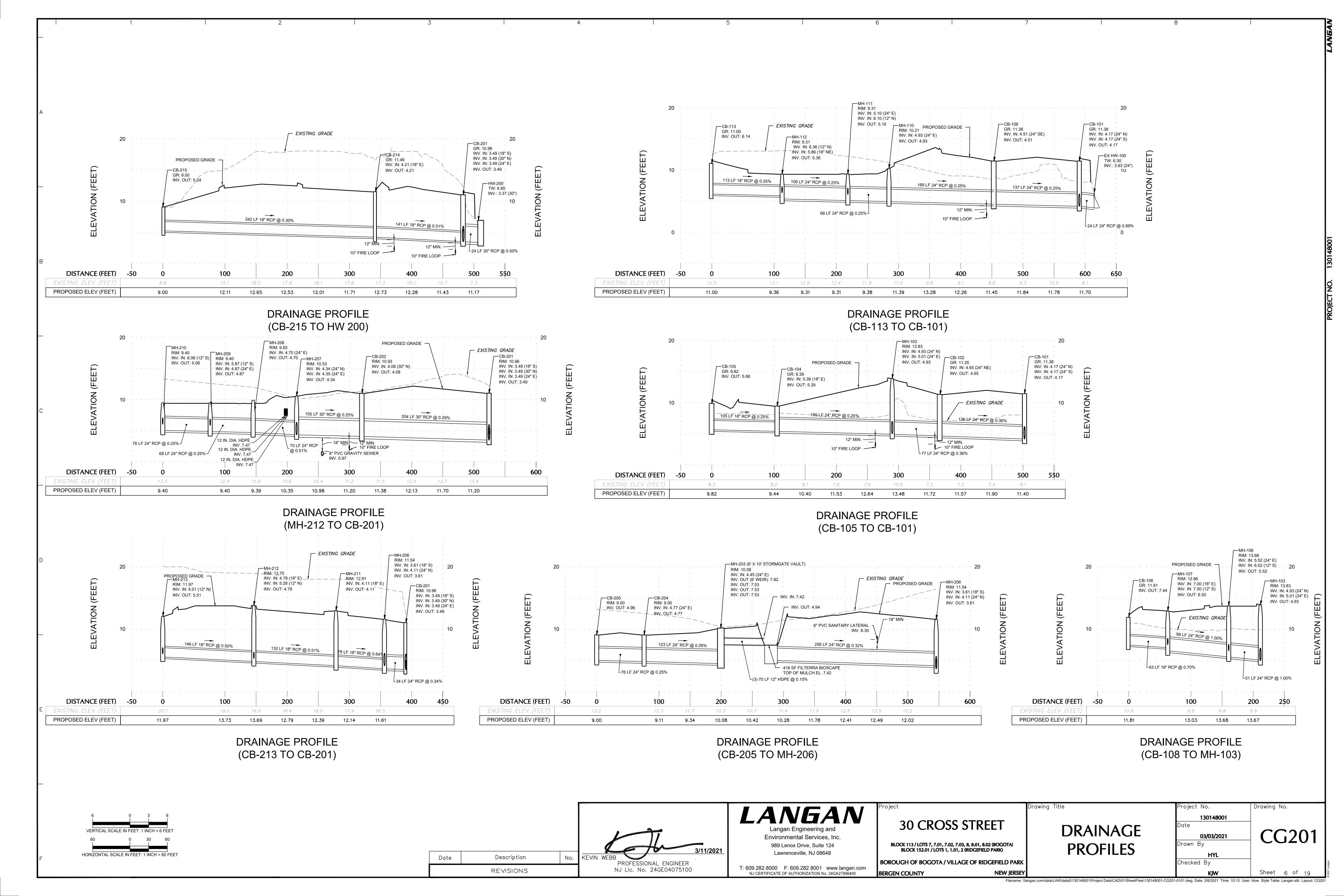
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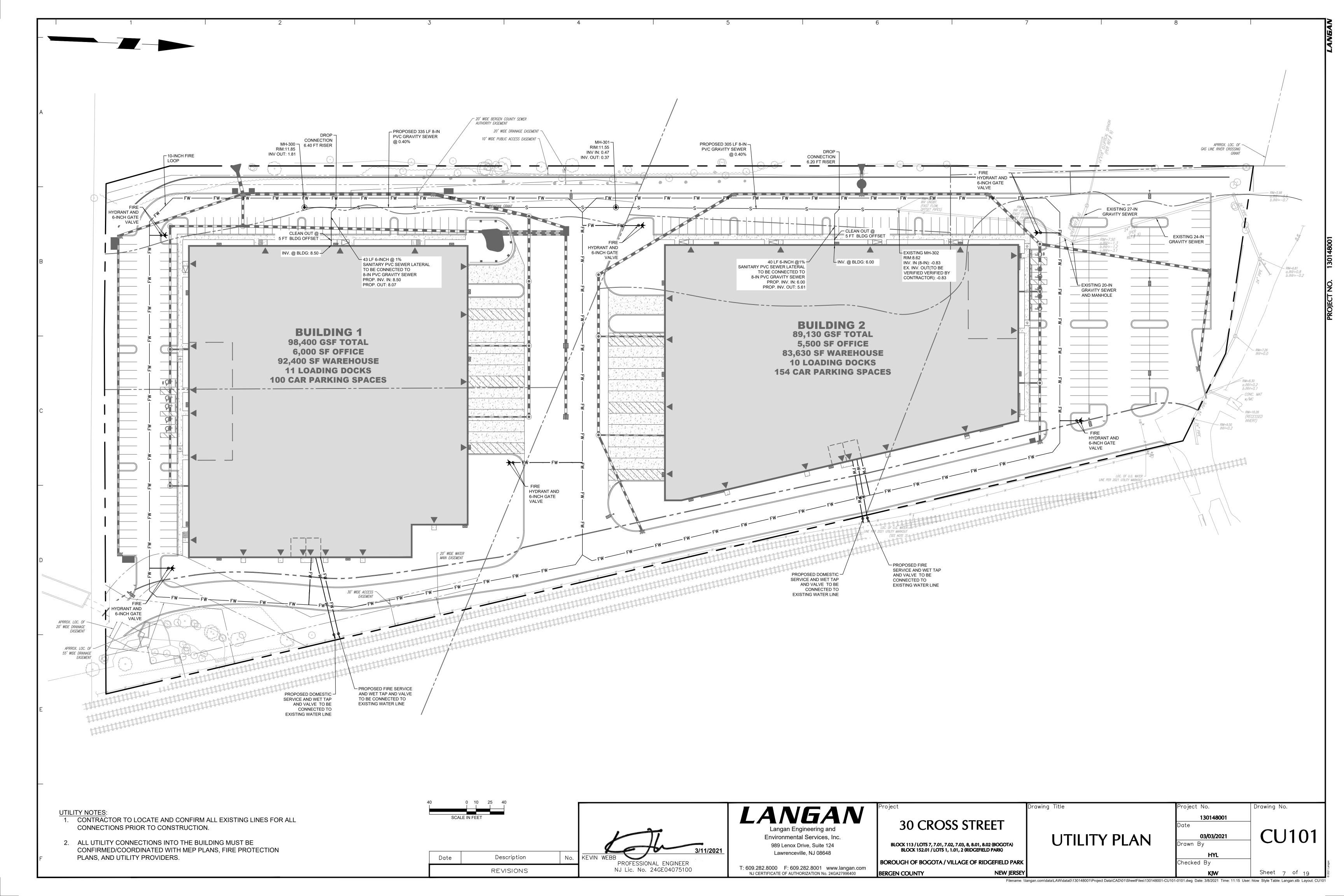
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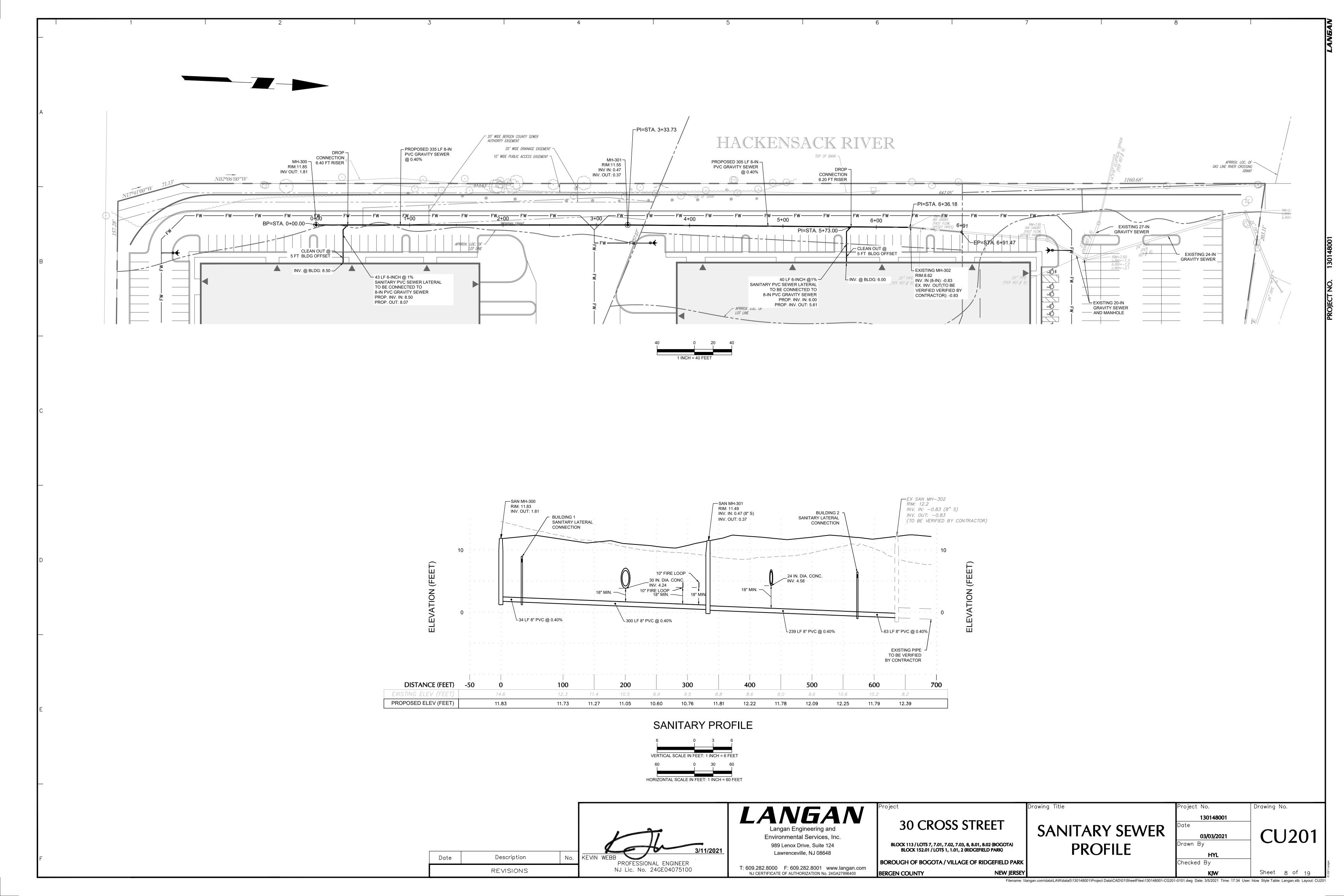


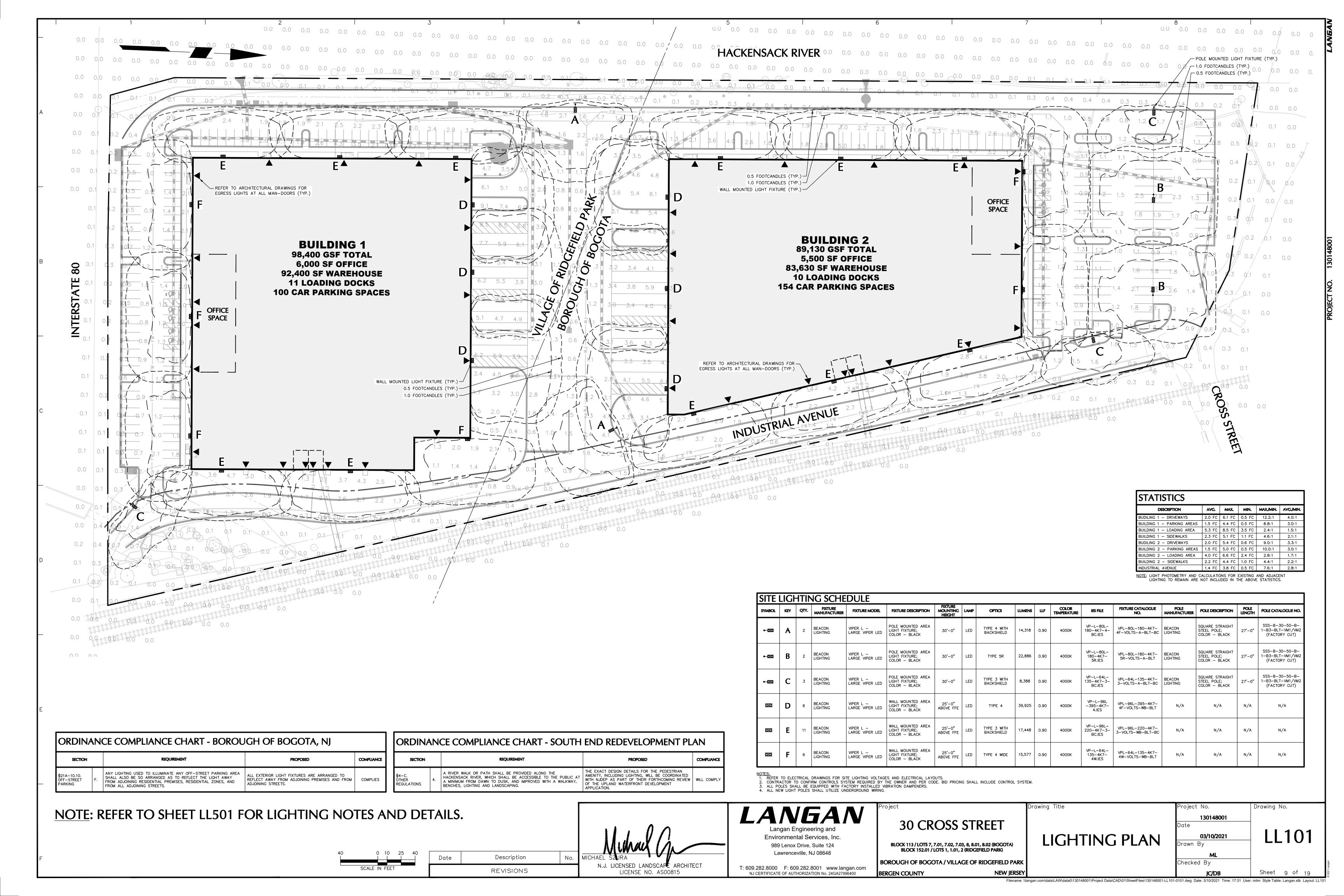












2. LIGHT LEVEL POINT SPACING IS 20 FT. LEFT TO RIGHT AND 20 FT. TOP TO BOTTOM. POINT BY POINT CALCULATIONS ARE BASED ON THE LIGHT LOSS FACTOR AS STATED IN THE LIGHTING SCHEDULE.

- 3. ALL SITE LIGHTING RELATED WORK AND MATERIALS SHALL COMPLY WITH CITY, COUNTY, AND OTHER
- 4. LIGHTING LAYOUT COMPLIES WITH THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) SAFETY STANDARDS FOR LIGHT LEVELS.

- 5. CONTRACTOR TO COORDINATE POWER SOURCE WITH LIGHT FIXTURES TO ENSURE ALL SITE LIGHTING IS OPERATING EFFECTIVELY, EFFICIENTLY AND SAFELY.
- 6. REFER TO ELECTRIFICATION PLAN FOR PROVIDING ADEQUATE POWER FOR SITE LIGHTING. 7. CONTRACTOR TO COORDINATE LOCATION OF EASEMENTS, UNDERGROUND UTILITIES AND DRAINAGE BEFORE
- 8. INSTALLATION OF ALL LIGHTING FIXTURES, POLES, FOOTINGS, AND FEEDER CABLE TO BE COORDINATED WITH ALL SITE WORK TRADES TO AVOID CONFLICT WITH FINISHED AND PROPOSED WORK.
- 9. CONTRACTOR TO COORDINATE INSTALLATION OF UNDERGROUND FEEDER CABLE FOR EXTERIOR LIGHTING WITH EXISTING AND PROPOSED UTILITIES, SITE DRAINAGE SYSTEMS, AND PAVING. CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE SHOULD ANY UTILITIES, NOT SHOWN ON THE PLANS, BE FOUND

POLES AND FOOTINGS

DRILLING POLE BASES.

- 10. PROVIDE A CONCRETE BASE FOR EACH LIGHT POLE AT THE LOCATIONS INDICATED ON THE CONSTRUCTION DRAWINGS AND/OR IN ACCORDANCE WITH PROJECT PLANS AND SPECIFICATIONS RELATING DIRECTLY TO CAST-IN-PLACE CONCRETE. THE USE OF ALTERNATE LIGHTING FOUNDATIONS, SUCH AS PRECAST, MAY ANGE THE SIZING AND REINFORCEMENT REQUIREMENTS FROM THOSE SHOWN ON THESE PLANS CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW PRIOR TO ORDERING ANY SUBSTITUTED PRODUCTS
- 11. CONTRACTOR SHALL EXAMINE AND VERIFY THAT SOIL CONDITIONS ARE SUITABLE TO SUPPORT LOADS EXERTED UPON THE FOUNDATIONS DURING EXCAVATION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY
- 12. POLE FOUNDATIONS SHALL NOT BE POURED IF FREE STANDING WATER IS PRESENT IN EXCAVATED AREA. 13. ALL POLES SHALL BE EQUIPPED WITH FACTORY INSTALLED VIBRATION DAMPENERS.

WALL MOUNTED FIXTURES

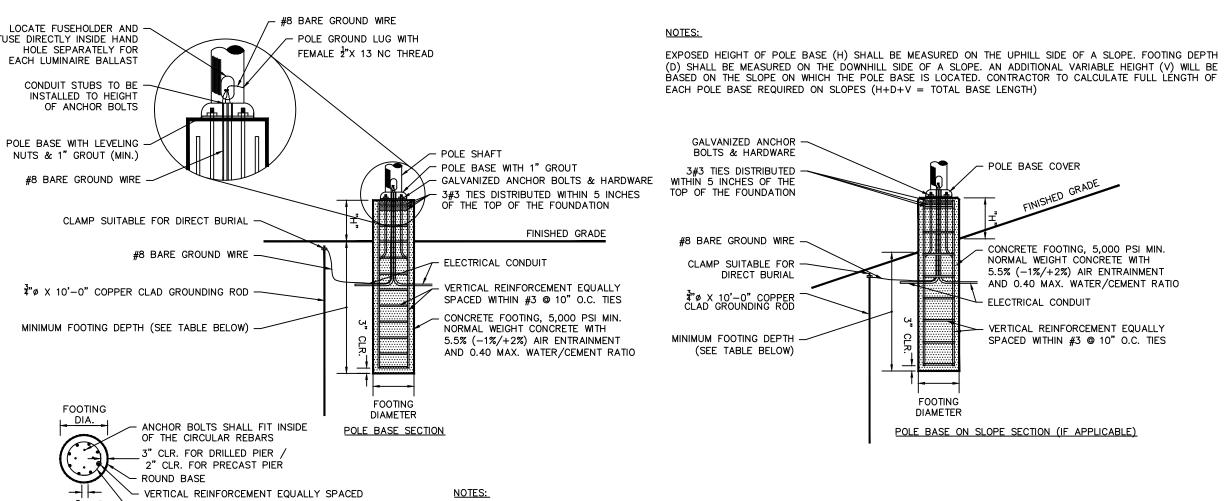
- 14. CONTRACTOR TO COORDINATE INSTALLATION OF ALL THE WALL MOUNTED FIXTURES AND ELECTRICAL CONNECTIONS TO SITE STRUCTURE(S) WITH BUILDING MEP, ARCHITECT, AND/OR OWNER.
- 15. INSTALLATION AND ELECTRICAL CONNECTIONS FOR WALL MOUNTED FIXTURES TO BE COORDINATED WITH ARCHITECTURAL, STRUCTURAL, UTILITY AND SITE PLANS AND TO BE IN ACCORDANCE WITH ALL APPLICABLE CODES.

ADJUSTMENT AND INSPECTION

- 16. CONTRACTOR TO OPERATE EACH LUMINAIRE AFTER INSTALLATION AND CONNECTION. INSPECT FOR IMPROPER CONNECTIONS AND OPERATION.
- 17. CONTRACTOR TO AIM AND ADJUST ALL LUMINAIRES TO PROVIDE ILLUMINATION LEVELS AND DISTRIBUTION AS INDICATED ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE LANDSCAPE ARCHITECT AND/OR
- 18. CONTRACTOR TO CONFIRM THAT LIGHT FIXTURES, TILT ANGLE AND AIMING MATCH SPECIFICATIONS ON THE

REQUIREMENTS FOR ALTERNATES

- 19. ALL LIGHTING SUBSTITUTIONS MUST BE MADE WITHIN 14 DAYS PRIOR TO THE BID DATE TO PROVIDE AMPLE TIME FOR REVIEW AND TO ISSUE AN ADDENDUM INCORPORATING THE SUBSTITUTION WITH THE A. ANY SUBSTITUTION TO LIGHTING FIXTURES, POLES, ETC. MUST BE APPROVED BY THE OWNER, ENGINEER AND TENANTS. ANY COST ASSOCIATED WITH REVIEW AND/OR APPROVAL OF THE SUBSTITUTIONS SHALL
- BE ENTIRELY BORNE BY THE CONTRACTOR B. COMPUTER PREPARED PHOTOMETRIC LAYOUT OF THE PROPOSED LIGHTED AREA WHICH INDICATES, BY ISOFOOTCANDLE, THE SYSTEM'S PERFORMANCE.
 C. A PHOTOMETRIC REPORT FROM A NATIONAL INDEPENDENT TESTING LABORATORY WITH REPORT NUMBER, DATE, FIXTURE CATALOG NUMBER, LUMINAIRE AND LAMP SPECIFICATIONS; IES CALCULATIONS POINT BY POINT FOOT CANDLE PLAN, STATISTIC ZONES SHOWING AVERAGE, MAXIMUM, MINIMUM AND
- UNIFORMITY RATIOS, SUMMARY, ISOLUX PLOT, AND CATALOGUE CUTS. CATALOGUE CUTS MUST IDENTIFY OPTICS, LAMP TYPE, DISTRIBUTION TYPE, REFLECTOR, LENS, BALLASTS, WATTAGE, VOLTAGE, FINISH HOUSING DESCRIPTION AND ALL OTHER PERTINENT INFORMATION. D. POLE MANUFACTURER AASHTO CALCULATIONS INDICATING THE POLE AND ANCHOR BOLTS BEING
- UBMITTED ARE CAPABLE OF SUPPORTING THE POLE AND FIXTURE SYSTEMS BEING UTILIZED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. E. THE UNDERWRITERS LABORATORY LISTING AND FILE NUMBER FOR THE SPECIFIC FIXTURE(S) TO BE
- F. A COLOR PHOTOGRAPH THAT CLEARLY SHOWS THE REPLACEMENT FIXTURE POLE MOUNTED, THE FIXTURE'S COLOR, FINISH, AND PHYSICAL CHARACTERISTICS.



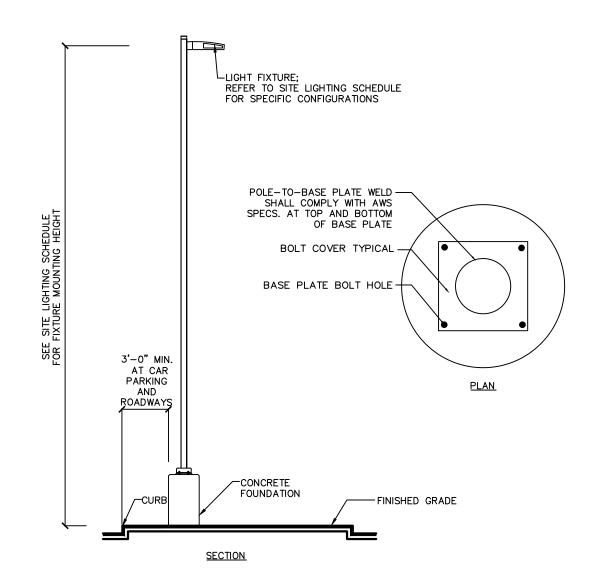
 SHAFT CAP, ARMS, BASE FLANGE, ANCHOR BOLTS, LEVELING NUTS, CONNECTION HARDWARE, BOLT COVERS, HANDHOLE COVER, AND BOLT CIRCLE TEMPLATE SHALL BE FURNISHED BY POLE MANUFACTURER. 2. EACH STANDARD TO BE PROTECTED AGAINST LIGHTNING WITH AN INTERCONNECTED GROUND ROD. THIS ROD SHALL BE BONDED PER SECTION NUMBER 250-86, N.E.C.

3. CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENT OF ACI 318. CAST-IN-PLACE SHALL HAVE UNCONFINED COMPRESSIVE STRENGTH OF AT

CONTRACTOR TO ENSURE CONCRETE POLE BASES ARE POURED / PLACED ABSOLUTELY VERTICAL & LEVEL IF POLE BASE IS CAST-IN-PLACE, POLE BASE SHALL BE ONE CONTINUOUS POUR. EXPOSED PORTION OF BASE SHALL BE HAND-RUBBED SMOOTH. CONTRACTOR TO COMPACT SUBGRADE AROUND POLE BASE PER EARTHWORK SPECIFICATIONS / GEOTECH REPORT. THE INFORMATION ILLUSTRATED IN THE LIGHT POLE FOUNDATION DETAIL HAS BEEN PROVIDED FOR GENERAL REFERENCE AND PRELIMINARY COST

LEAST 5,000 PSI AT 28-DAYS. DEFORMED REINFORCEMENT BARS SHALL CONFORM TO ASTM A615, GRADE 60.

5'**-**7" 2'-0" 3'-0" ESTIMATE PURPOSES. LIGHT POLE FOUNDATIONS SHOULD BE DESIGNED AND DETAILED BY A LICENSED STRUCTURAL ENGINEER BASED ON EXISTING SOIL CONDITIONS, LOCAL DESIGN STANDARDS AND MANUFACTURERS RECOMMENDATIONS. 8. CONTRACTOR TO CONFIRM GROUNDING DESIGN WITH MEP



NOTE: ALL LIGHT POLES SHALL BE EQUIPPED WITH FACTORY INSTALLED VIBRATION DAMPENERS.

NTS

LIGHT FIXTURE AND POLE

NTS

LIGHT POLE BASE

HEIGHT

► #3 TIES AT 10" O.C. WITH 6" LAP

| DEPTH | DIAMETER | HEIGHT "H" | REINFORCEMENT

MOUNTING FOOTING FOOTING EXPOSED VERTICAL

<u>PLAN</u>

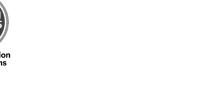
LOCATION: PROJECT: CATALOG #: LARGE VIPER LUMINAIRE **FEATURES** • Large size companion to Viper Small

• Wide choice of different LED wattage configurations Ten optical distributions • Designed to replace HID lighting up to 1000W MH or HPS • Suitable for wet locations









CONTROL TECHNOLOGY

SPECIFICATIONS

CONSTRUCTION

coat finish

 Manufactured with die cast aluminum • Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements

• IFS polyester powder-coat electrostatically applied and thermocured. IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder

• The finish meets the AAMA 2604 performance specification which includes passing a 3.000-hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists

surface impacts of up to 160 inch-pounds External hardware is corrosion resistant Cartridge is held together with internal brass

standoffs soldered to the board so that it can be field replaced as a one-piece optical One-piece silicone gasket ensures a

weatherproof seal around each individual One-piece optical cartridge system consisting of an LED engine, optics, gasket

INSTALLATION • Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included

and stainless steel bezel

ELECTRICAL Luminaire accepts 100V through 277V, 347V or 480V input 50 Hz to 60 Hz (UNV)

ELECTRICAL (CONTINUED) Power factor is ≥ .90 at full load

• Dimming drivers are standard, but CD must be selected in options to obtain external wiring leads for dimming controls

• Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher Plug disconnects are certified by UL for use

at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only Fixture electrical compartment contains all LED driver components • Optional 7-pin ANSI C136.41-2013 Twist-Lock® photo control receptacle available.

wireless control devices Ambient operating temperature -40°C to 25°C Surge protection: 20kA

· Available with an optional passive infrared

Compatible with ANSI C136.41 external

Lifeshield™ Circuit (see Electrical Data) CONTROLS

(PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the motion response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to ful wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration

 Available with <u>Energeni</u> for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night

Wattage Range 64–395 Efficacy Range (LPW) 98-135 Reported Life (Hours) L70>377,000

Lumen Range

RELATED PRODUCTS

8 Viper Small

CONTROLS (CONTINUED)

CERTIFICATIONS

IDA approved

WARRANTY

5 year warranty

· In addition, Viper can be specified with

SiteSync™ wireless control system for

while optimizing light quality 24/7

Qualified. Please refer to the DLC

Certified to UL 1598 and UL 8750

applications with MAF mounting

Separate spec available online

DLC® (DesignLights Consortium)

at <u>www.designlights.org</u>

reduction in energy and maintenance costs

website for specific product qualifications

• 3G rated for ANSI C136.31 high vibration

This product is approved by the Florida

• This product qualifies as a "designated

country construction material" per FAR

52.225-11 Buy American-Construction

Fish and Wildlife Conservation Commission.

Materials under Trade Agreements effective

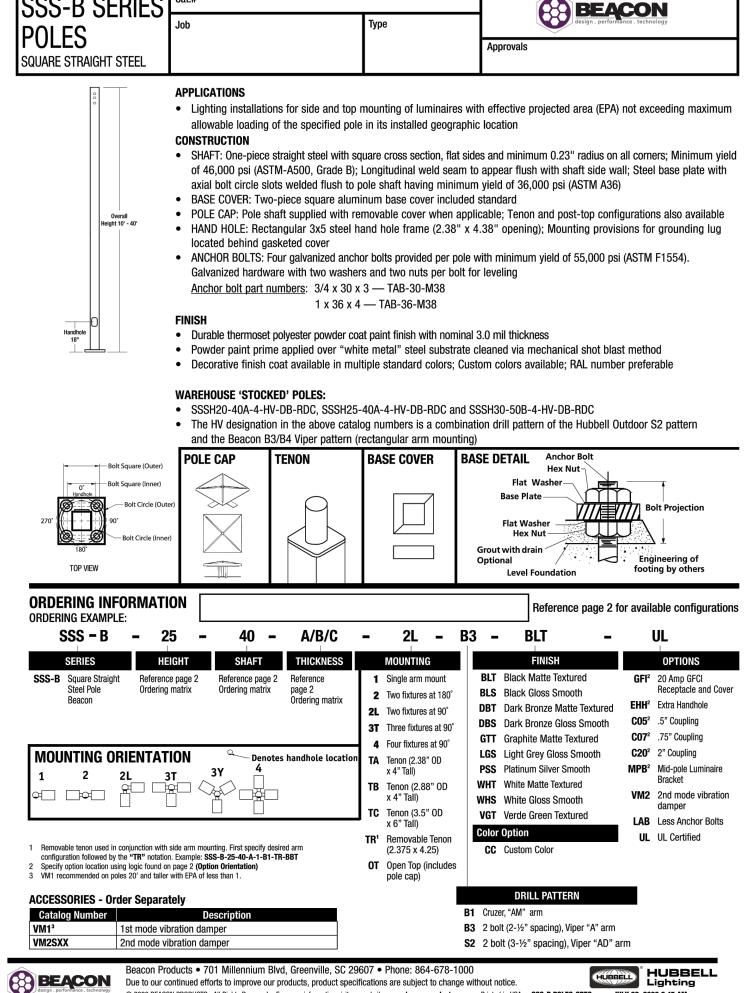
06/03/2020. See Buy American Solutions.

See HLI Commercial and Industrial Outdoor

<u>Lighting Warranty</u> for additional information

KEY DATA

Input Current Range (Amps) © 2020 Beacon Products, a division of Hubbell Lighting, Inc. Specifications subject to change without notice. HUBBELL HUBBELL 701 Millennium Boulevard • Greenville, SC 29607 / Tel 864.678,1000 / Website www.beaconproducts.com



AREA LIGHT FIXTURE

BEA-VIPER-L-SPEC

NTS LIGHT POLE © 2020 BEACON PRODUCTS, All Rights Reserved • For more information visit our website: www.beaconproducts.com • Printed in USA SSS-B POLES-SPEC JULY 28, 2020 8:45 AM

30 CROSS STREET

14,283–39,969

BLOCK 113 / LOTS 7, 7.01, 7.02, 7.03, 8, 8.01, 8.02 (BOGOTA) BLOCK 152.01 / LOTS 1, 1.01, 2 (RIDGEFIELD PARK) BOROUGH OF BOGOTA / VILLAGE OF RIDGEFIELD PARK LIGHTING NOTES AND DETAILS

Drawing No. 130148001 03/10/2021 Drawn By Checked By

NTS

Description No. Date PROFESSIONAL ENGINEER LANGAN Langan Engineering and Environmental Services, Inc.

Lawrenceville, NJ 08648 T: 609.282.8000 F: 609.282.8001 www.langan.com

Filename: \langan.com\data\LAW\data\130148001\Project Data\CAD\01\SheetFiles\130148001-LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Langan.stb Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Langan.stb Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Langan.stb Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Langan.stb Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Langan.stb Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Langan.stb Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Langan.stb Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Langan.stb Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Langan.stb Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Langan.stb Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Layout: LL501-0101.dwg Date: 3/10/2021 Time: 17:33 User: mlim Style Table: Ll501-0101.dwg Date: 3/10/2021 Time: 3/10/2021 Time: 3/10/2021 Time: 3/10/2021 Time: 3/10/2021 Time: 3/10/2021 Time: 3/10/2021 Time:

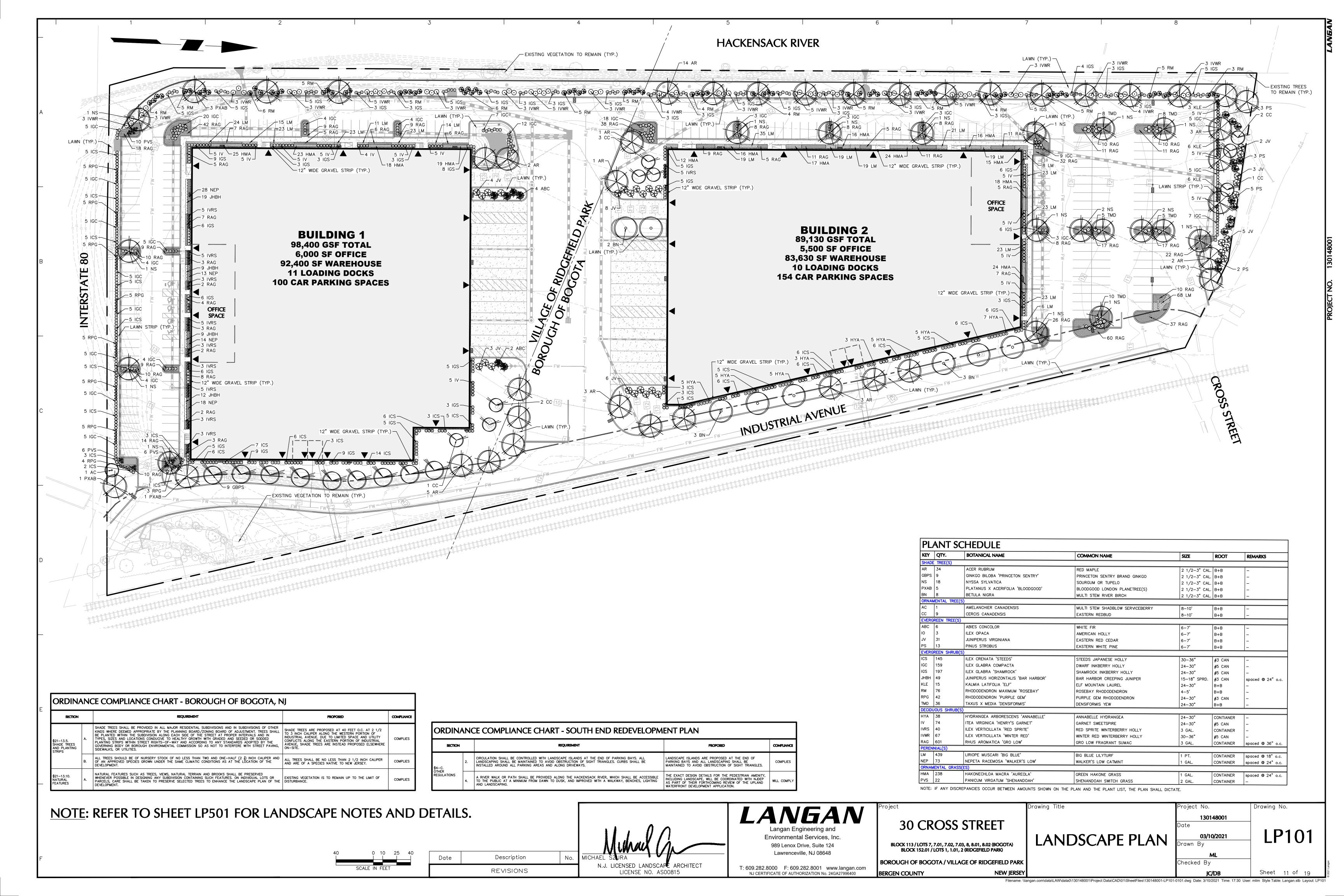
REVISIONS

989 Lenox Drive, Suite 124

BERGEN COUNTY

NJ Lic. No. 24GE04075100

NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400



FREE FROM DISEASES AND INSECT INFESTATION

LOSES THE MAIN LEADER SHALL BE REPLACED.

2. STANDARDS FOR TYPE, SPREAD, HEIGHT, ROOT BALL AND QUALITY OF NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH GUIDELINES AS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION. PLANT MATERIAL SHALL HAVE NORMAL HABIT OF GROWTH AND BE HEALTHY, VIGOROUS, AND

3. NEW PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE SET PLUMB AND SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING. PLANT MATERIAL OF THE SAME SPECIES AND SPECIFIED AS THE SAME SIZE SHOULD BE SIMILAR IN SHAPE, COLOR AND HABIT, THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT PLANT MATERIAL THAT DOES NOT CONFORM TO THE TYPICAL OR SPECIFIED HABIT OF THAT SPECIES. ALL TREES SHALL HAVE A STRAIGHT TRUNK AND FULL HEAD AND MEET ALL REQUIREMENTS SPECIFIED. ANY TREE THAT

4. THE BACKFILL MIXTURE AND SOIL MIXES TO BE INSTALLED PER THE SPECIFICATIONS. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE SITE AND SUBGRADE DRAINAGE OR

PERCOLATION CHARACTERISTICS, WHETHER THE SUBGRADE SOILS ARE EXISTING TO REMAIN OR IMPORTED AND PLACED. CONTRACTOR TO ENSURE POSITIVE VERTICAL DRAINAGE THROUGHOUT PLANTED AREAS. DISCREPANCIES SHALL BE ADDRESSED WITH THE PROJECT LANDSCAPE ARCHITECT PRIOR TO PURCHASING PLANT MATERIALS.

AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER ALL PLANT INSTALLATIONS SHALL BE COMPLETED EITHER BETWEEN APRIL 1 - JUNE 15 OR AUGUST 15 - NOVEMBER 1, UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT. SEE LAWN SEEDING DATES IN SEEDING NOTES.

6. NO PLANT SHALL BE PUT INTO THE GROUND BEFORE FINISH GRADING HAS BEEN COMPLETED

8. ALL FENCE AND GUIDE RAIL INSTALLATIONS SHALL BE COMPLETED PRIOR TO COMMENCEMENT OF ANY LANDSCAPE PLANTING, LAWN AND GRASSES, OR IRRIGATION WORK

9. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY AND SEWER LINES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF CONSTRUCTION. NOTIFY THE PROJECT ENGINEER AND OWNER IMMEDIATELY OF ANY CONFLICTS WITH PROPOSED PLANTING LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE.

10. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREA 2) TO PROTECT OF ALL UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.

11. THE CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, THE CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT AND OWNER, TOGETHER WITH A WRITTEN PROPOSAL FOR USE OF AN

12. LANDSCAPE CONTRACTOR TO STAKE OUT PLANTING LOCATIONS, FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND/OR OWNER BEFORE PLANTING WORK BEGINS. THE LANDSCAPE ARCHITECT AND/OR OWNER SHALL DIRECT THE CONTRACTOR IN THE FINAL PLACEMENT OF ALL PLANT MATERIAL AND LOCATION OF PLANTING BEDS TO ENSURE COMPLIANCE WITH DESIGN INTENT UNLESS OTHERWISE INSTRUCTED.

13. ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE. DURING, AND AFTER INSTALLATION, THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIALS AT THE SITE FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, , AND QUALITY. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO FURTHER REVIEW PLANT MATERIALS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEM, INSECTS, INJURIES, AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. THE CONTRACTOR SHALL REMOVE REJECTED PLANT MATERIALS IMMEDIATELY FROM PROJECT SITE AS DIRECTED BY THE LANDSCAPE ARCHITECT OR

14. ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, MISSING, 25% OR MORE DEAD, WHICH DO NOT DEVELOP FROM PLANTING STOCK, THAT APPEAR UNHEALTHY OR UNSIGHTLY AND/OR HAVE LOST THEIR NATURAL SHAPE DUE TO DEAD BRANCHES DEAD, OR REJECTED FOR ANY OTHER REASON (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.

15. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY AND PLANTING PER SPECIFICATIONS TO MAINTAIN HEALTHY PLANT CONDITIONS.

A. PACKAGED MATERIALS: PACKAGED MATERIALS SHALL BE DELIVERED IN CONTAINERS SHOWING WEIGHT. ANALYSIS, AND NAME OF MANUFACTURER. MATERIALS SHALL BE PROTECTED FROM DETERIORATION DURING DELIVERY, AND WHILE STORED AT SITE.

B. TREES AND SHRUBS: THE CONTRACTOR SHALL PROVIDE TREES AND SHRUBS DUG FOR THE GROWING SEASON FOR WHICH THEY WILL BE PLANTED. DO NOT PRINE PRIOR TO DELIVERY UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING TRANSIT. DO NOT DROP BALLED AND BURLAPPED STOCK DURING DELIVERY OR HANDLING.

C. ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOTBALL WRAPPING AND BINDING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED FROM THE TOP OF THE BALL AT THE TIME OF PLANTING. IF THE PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, THE WIRE BASKET SHALL BE CUT AND FOLDED DOWN 8 INCHES INTO THE PLANTING HOLE. WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE ROOT BALL SHALL BE CUT THROUGH THE

D. THE CONTRACTOR SHALL HAVE TREES AND SHRUBS DELIVERED TO SITE AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY, IF PLANTING IS DELAYED MORE THAN 6 HOURS AFTER DELIVERY, THE CONTRACTOR SHALL SET TREES AND SHRUBS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE A KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE

17. ALL LANDSCAPED AREAS TO BE CLEARED OF ROCKS, STUMPS, TRASH AND OTHER UNSIGHTLY DEBRIS. ALL FINE GRADED AREAS SHOULD BE HAND RAKED SMOOTH ELIMINATING ANY CLUMPS AND UNEVEN SURFACES PRIOR TO PLANTING OR MULCHING.

18. ALL PLANT MATERIAL SHALL BE INSTALLED AS PER DETAILS, NOTES AND CONTRACT SPECIFICATIONS. THE LANDSCAPE ARCHITECT MAY REVIEW INSTALLATION AND MAINTENANCE

19. CONTRACTOR'S GUARANTEE: ALL PLANTINGS AND PLANTING AREAS SHALL BE PERMANENTLY MAINTAINED. NEW PLANT MATERIAL SHALL BE GUARANTEED TO BE ALIVE AND IN VIGOROUS GROWING CONDITION FOR A PERIOD OF TWO YEARS FOLLOWING ACCEPTANCE BY THE OWNER THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, PRUNING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS AND LAWN FOR THE DURATION OF THE GUARANTEED PERIOD. PLANT MATERIAL FOUND TO BE UNHEALTHY, DYING OR DEAD DURING THIS PERIOD, SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.

20. THE CONTRACTOR SHALL KEEP AREA CLEAN DURING DELIVERY AND INSTALLATION OF PLANT MATERIALS. REMOVE AND DISPOSE OF OFF-SITE ANY ACCUMULATED DEBRIS OR UNUSED MATERIALS. REPAIR DAMAGE TO ADJACENT AREAS CAUSED BY LANDSCAPE INSTALLATION

21. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24- HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR AS REQUIRED BY SITE AND WEATHER CONDITIONS TO MAINTAIN VIGOROUS AND HEALTHY PLANT GROWTH.

22. AFTER PLANT IS PLACED IN TREE PIT LOCATION, ALL TWINE HOLDING ROOT BALL TOGETHER SHOULD BE COMPLETELY REMOVED AND THE BURLAP SHOULD BE PULLED DOWN SO 1/3 OF THE ROOT BALL IS EXPOSED. SYNTHETIC BURLAP SHOULD BE COMPLETELY REMOVED AFTER

23. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.

24. ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE. AND THAT ARE NOT COVERED BY LANDSCAPE PLANTING OR SEEDING AS SPECIFIED, SHALL BE COVERED BY A NATURAL MULCH FROM A LOCAL SOURCE HARVESTED IN A SUSTAINABLE MANNER THAT WILL PREVENT SOIL EROSION AND THE EMANATION OF DUST. MULCH SHALL BE A FIBROUS SHREDDED HARDWOOD MULCH, MULCH SHOULD NOT BE PILED UP AROUND TH TRUNK OF ANY PLANT MATERIAL. NO MULCH OR TOPSOIL SHOULD BE TOUCHING THE BASE OF THE TRUNK ABOVE THE ROOT COLLAR.

25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK. FOR ANY DISCREPANCIES BETWEEN THE PLANT SCHEDULE AND PLANTING PLAN THE GRAPHIC QUANTITY SHOWN SHALL GOVERN.

26. LANDSCAPE PUNCH LIST SITE VISITS TO BE PERFORMED BY THE PROJECT LANDSCAPE ARCHITECT, IF UNDER CONTRACT FOR SUCH WORK, WILL NOT BE SCHEDULED UNTIL CONFIRMATION IS RECEIVED THAT ALL PROPOSED LANDSCAPE ITEMS HAVE BEEN INSTALLED, OR DEFICIENCIES NOTED IN THE PRIOR PUNCH LIST REPORT HAVE BEEN CORRECTED. THE PUNCH LIST SITE VISIT WILL THEN BE PERFORMED WITHIN 10 BUSINESS DAYS.

27. CONTRACTOR SHALL ASSESS THE NEED FOR DEER PROTECTION ON SITE. IF DEEMED NECESSARY, SHADE AND ORNAMENTAL TREES SHALL BE PROTECTED THROUGH WINTER WITH SPIRAL WRAP TREE GUARDS. OR APPROVED EQUAL. PROTECTION LENGTH TO BE FROM BELOW HE LOWEST BRANCH AND DOWN TO WITHIN A FEW INCHES OF THE GROUND. THE GUARDS CAN BE REMOVED IN SPRING AND SAVED FOR RE-INSTALLATION DURING FOLLOWING WINTERS AS PART OF A MAINTENANCE PROGRAM.

PLANTING SOIL SPECIFICATIONS

2. PLANTING SOIL:

1. PLANTING SOIL, ALTERNATELY MAY BE REFERRED TO AS TOPSOIL, SHOULD BE FRIABLE, FERTILE, WELL DRAINED, FREE OF DEBRIS, TOXINS, TRASH AND STONES OVER 1/2" DIA., IT SHOULD HAVE A HIGH ORGANIC CONTENT SUITABLE TO SUSTAIN HEALTHY PLANT GROWTH AND SHOULD LOOK AESTHETICALLY PLEASING HAVING NO

REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOIL AND TOPSOIL CRITERIA IN THIS SPECIFICATION THROUGH TESTING. CLEAN SURFACE SOIL OF ALL ROOTS, PLANTS, SOD, AND GRAVEL OVER 1" IN DIAMETER AND DELETERIOUS MATERIALS. IF ON-SITE SOILS ARE TO BE USED FOR PROPOSED PLANTING, THE CONTRACTOR SHALL DEMONSTRATE, THROUGH SOIL TESTING, THAT ON-SITE SOILS MEET THE SAME CRITERIA AS INDICATED IN NOTES PLANS AND

SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN TOPSOIL AND PLANTING SOIL QUANTITIES ARE INSUFFICIENT. OBTAIN SOI DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4" DEEP. DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, MARSHES OR

CONTRACTOR SHALL TEST SOILS AND FURNISH SAMPLES UPON REQUEST. PACKAGED MATERIALS SHALL BE UNOPENED BAGS OR CONTAINERS, EACH BEARING A NAME, GUARANTEE, AND TRADEMARK OF THE PRODUCER, MATERIAL COMPOSITION. MANUFACTURER'S CERTIFIED ANALYSIS, AND THE WEIGHT OF THE MATERIALS. SOIL OR AMENDMENT MATERIALS SHALL BE STORED ON SITE TEMPORARILY IN STOCKPILES PRIOR TO PLACEMENT AND SHALL BE PROTECTED FROM INTRUSION OF CONTAMINANTS AND EROSION. AFTER MIXING, SOIL MATERIALS SHALL BE COVERED WITH A TARPAULIN UNTIL TIME OF ACTUAL USE.

L PLANTING SOILS SHALL BE SUBMITTED FOR TESTING TO THE STATE COOPERATIVE EXTENSION SERVICE, OR APPROVED EQUAL, PRIOR TO DELIVERY TO THE SITE.

CONTRACTOR SHALL FURNISH SOIL SAMPLES AND SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER AT A RATE OF ONE SAMPLE PER 500 CUBIC YARDS TO ENSURE CONSISTENCY ACROSS THE TOTAL VOLUME OF PLANTING SOIL REQUIRED. TEST RESULTS SHALL EVALUATE FOR ALL CRITERIA LISTED IN THIS SPECIFICATION. IF TESTING AGENCY DETERMINES THAT THE SOILS ARE DEFICIENT IN ANY MANNER AND MAY BE CORRECTED BY ADDING AMENDMENTS, THE CONTRACTOR SHALL FOLLOW STATED RECOMMENDATIONS FOR SOIL IMPROVEMENT AND FURNISH SUBMITTALS FOR

ALL AMENDMENTS PRIOR TO DELIVERY OF SOIL TO THE PROJECT SITE.

A. THE FOLLOWING TESTING SHOULD BE PERFORMED AND RESULTS GIVEN TO THE LANDSCAPE ARCHITECT FOR APPROVAL BEFORE INSTALLATION: a. PARTICLE SIZE ANALYSIS - LOAMY SAND: 70-85% SAND. 15-30% SILT AND b. FERTILITY ANALYSIS: pH (5.5-6.5). SOLUBLE SALTS (LESS THAN 2 MMHO/CM), NITRATE, PHOSPHATE, POTASSIUM, CALCIUM AND MAGNESIUM c. ORGANIC MATTER CONTENT: 2.5-5% IN NATIVE SOILS; UP TO 10% IN

A TOXIC SUBSTANCE ANALYSIS e. MATERIAL DRAINAGE RATE: 60% PASSING IN 2 MINUTES, 40% RETAINED f. NOT MORE THAN 1% OF MATERIAL SHALL BE RETAINED BY A #4 SIEVE

. <u>SOIL AMENDMENT FOR PLANT MATERIAL;</u>
IF SOIL ORGANIC CONTENT IS INADEQUATE, SOIL SHALL BE AMENDED WITH COMPOST OR ACCEPTABLE, WEED FREE, ORGANIC MATTER. ORGANIC AMENDMENT SHALL BE WELL COMPOSTED, PH RANGE OF 6-8; MOISTURE CONTENT 35-55% BY WEIGHT 100% PASSING THROUGH 1" SIEVE; SOLUBLE SALT CONTENT LESS THAN 0.5 MM HOS/CM; MEETING ALL APPLICABLE ENVIRONMENTAL CRITERIA FOR CLEAN FILL

A. ORGANIC MATTER AS A SOIL AMENDMENT: LEAF MOLD WITH 60-90% ORGANIC CONTENT BY WEIGHT. SHREDDED LEAF LITTER, COMPOSTED FOR A MINIMUM OF 1 YR. SHOULD BE FREE OF DEBRIS, STONES OVER 1/2", WOOD CHIPS OVER 1". B. SOIL IN BEDS AND PLANTING ISLANDS OTHER THAN BACKFILL MATERIAL AND TOPSOIL, SHOULD BE FRIABLE, WELL DRAINED, AND FREE OF DEBRIS, INCLUDING

C. AMENDMENTS FOR BACK FILL IN TREE AND SHRUB PITS: a. GROUND LIMESTONE (WITH A MIN. OF 88% OF CALCIUM AND MAGNESIUM CARBONATES) USED PENDING RESULTS OF SOIL ANALYSIS. - BRING pH LEVELS TO 5.5 MIN. TO 6.5 FOR NON-ERICACEOUS PLANTS BRING pH LEVELS TO 4.5 MIN. TO 5.5 FOR ERICACEOUS PLANTS b. TERRA-SORB BY 'PLANT HEALTH CARE' 800-421-9051 (SEE

MANUFACTURER RECOMMENDATIONS) USED IN PLANTER BACKFILL MIXTURE WITH TREES AND SHRUBS c. MYCOR-ROOT SAVER BY 'PLANT HEALTH CARE' 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN BACKFILL MIXTURE WITH TREES.

4. WHERE PLANTING AREAS ARE PROPOSED FOR FORMER PAVED OR GRAVEL AREAS, BEDS SHALL BE EXCAVATED TO A MINIMUM 30" DEPTH AND, AT A MINIMUM, BE BACKFILLED WITH BOTTOM LAYER OF SANDY LOAM (ORGANIC CONTENT LESS THAN 2%) OVER WHICH TOPSOIL AND PLANTING SOILS WILL BE PLACED AT DEPTHS INDICATED IN PLANS, DETAILS AND NOTES.

5. <u>CLEAN SOIL FILL IN LANDSCAPE AREAS:</u>
LANDSCAPE FILL MATERIAL, BELOW PLANTING SOILS, SHALL HAVE THE PHYSICAL PROPERTIES OF A SANDY LOAM WITH AN ORGANIC CONTENT OF LESS THAN 2% AND A PH BETWEEN 5 - 7

A. CONTRACTOR TO PROVIDE SIX INCHES (6") MINIMUM DEPTH PLANTING SOIL LAYER IN LAWN AREAS, TWELVE INCHES (12") MINIMUM DEPTH PLANTING SOIL LAYER IN GROUNDCOVER AND PERENNIAL AREAS, EIGHTEEN INCHES (18") MINIMUM DEPTH ING SOIL LAYER IN SHRUB AREAS, AND THIRTY—SIX INCHES (36") MINIMUN DEPTH PLANTING SOIL LAYER IN TREE PLANTING AREAS.

B. SCARIFY AND/OR TILL COMPACTED SUBSOILS TO A MINIMUM DEPTH OF 6 INCHES THOROLIGHI Y MIX A 6 INCH DEPTH LAYER OF PLANTING SOIL INTO THE SUBSOIL PRIOR TO PLACING PLANTING SOIL AT THE DEPTHS INDICATED ABOVE. PLANTING SOIL SHALL BE PLACED IN 12-18" LIFTS AND WATER THOROUGHLY BEFORE INSTALLING NEXT LIFT. REPEAT UNTIL DEPTHS AND FINISH GRADES HAVE BEEN ACHIEVED. NO SOILS SHALL BE PLACED IN A FROZEN OR MUDDY CONDITION.

C. PLANTING SOIL PRESENT AT THE SITE, IF ANY, MAY BE USED TO SUPPLEMENT TOTAL AMOUNT REQUIRED. CONTRACTOR TO FURNISH AN ANALYSIS OF ON-SITE PLANTING SOIL UTILIZED IN ALL PLANTING AREAS.

A. ADJUST pH AND NUTRIENT LEVELS AS REQUIRED TO ENSURE AN ACCEPTABLE GROWING MEDIUM. LOWER pH USING ELEMENTAL SULFUR ONLY, PEAT MOSS OR COPPER SULFATE MAY NOT BE USED. GROUND LIMESTONE AS A SOIL AMENDMENT MATERIAL WILL ONLY BE USED PENDING RESULTS OF SOIL ANALYSIS. PROVIDE WITH MINIMUM 88% CALCIUM AND MAGNESIUM CARBONATES AND SHALL HAVE TOTAL 100% PASSING THE 10 MESH SIEVE, MINIMUM 90% PASSING 20 MESH SIEVE, AND MINIMUM 60% PASSING 100 MESH SIEVE.

B. ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE.

C. <u>SOIL MODIFICATIONS (PENDING RESULTS OF SOIL ANALYSIS)</u>: a. THOROUGHLY TILL ORGANIC MATTER (LEAF COMPOST) INTO THE TOP 6 TO 12 IN OF MOST PLANTING SOILS TO IMPROVE THE SOIL'S ARILITY TO RETAIN WATER AND NUTRIENTS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A pH HIGHER THAN 7.0. PEAT MOSS MAY NOT BE USED AS ORGANIC MATTER AMENDMENT.

b. MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. IMPROVE DRAINAGE IN HEAVY SOILS BY PLANTING ON RAISED MOUNDS OR BEDS AND INCLUDING SUBSURFACE

c. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE

LANDSCAPE MAINTENANCE NOTES

MAINTENANCE OPERATIONS BEFORE APPROVAL:

A. PLANT CARE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS SATISFACTORILY INSTALLED AND SHALL CONTINUE THROUGHOUT THE LIFE OF THE CONTRACT UNTIL FINAL ACCEPTANCE OF THE PROJECT.

B. CARE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR OTHER MEANS, REPAIRING AND RESHAPING WATER RINGS OR SAUCERS. MAINTAINING STAKES AND GUYS AS ORIGINALLY INSTALLED, WATERING WHEN NEEDED OR DIRECTED, AND PERFORMING ANY OTHER WORK REQUIRED TO KEEP

C. CONTRACTOR SHALL REMOVE AND REPLACE ALL DEAD, DEFECTIVE AND/OR REJECTED PLANTS AS REQUIRED BEFORE FINAL ACCEPTANCE.

. MAINTENANCE DURING CONSTRUCTION: A. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING. PLANTS SHALL BE WATERED, MULCHED, WEEDED, PRUNED, SPRAYED, FERTILIZED, CULTIVATED, AND OTHERWISE MAINTAINED AND PROTECTED UNTIL PROVISIONAL ACCEPTANCE. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE AND POSITION, PLANTING SAUCER RESTORED AND DEAD MATERIAL REMOVED. STAKES AND WRES SHALL BE TIGHTENED AND REPAIRED. DEFECTIVE WORK SHALL BE CORRECTED AS SOON AS POSSIBLE AFTER IT BECOMES APPARENT AND WEATHER AND SEASON PERMIT.

LANDSCAPE MAINTENANCE NOTES (CONTD.)

IF A SUBSTANTIAL NUMBER OF PLANTS ARE SICKLY OR DEAD AT THE TIME OF INSPECTION, ACCEPTANCE SHALL NOT BE GRANTED AND THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF ALL PLANTS SHALL BE EXTENDED FROM THE TIME REPLACEMENTS ARE MADE OR EXISTING PLANTS ARE DEEMED ACCEPTABLE BY THE LANDSCAPE ARCHITECT

ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE SPECIFIED ON THE PLANT LIST OR THAT WHICH WAS TO REMAIN OR BE RELOCATED. THEY SHALL BE FURNISHED AND PLANTED AS SPECIFIED. THE COST SHALL BE BORNE BY THE CONTRACTOR. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE DUE TO OCCUPANCY OF THE PROJECT IN ANY PART, VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITIES SHALL BE APPROVED AND PAID FOR BY THE OWNER.

A. PLANTS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER INSPECTION AND PROVISIONAL ACCEPTANCE.

B. AT THE END OF THE ESTABLISHMENT PERIOD, INSPECTION SHALL BE MADE AGAIN. ANY PLANT REQUIRED UNDER THIS CONTRACT THAT IS DEAD OR UNSATISFACTORY TO THE LANDSCAPE ARCHITECT OR OWNER SHALL BE REMOVED FROM THE SITE AND REPLACED DURING THE NORMAL PLANTING SEASON.

A. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH PORTION OF LAWN IS PLANTED AND CONTINUE FOR 8 WEEKS AFTER ALL LAWN PLANTING IS COMPLETED.

B. WATER TO KEEP SURFACE SOIL MOIST, REPAIR WASHED OUT AREAS BY FILLING WITH TOPSOIL, LIMING, FERTILIZING AND RE-SEEDING: MOW TO 2 1/2 - 3 INCHES AFTER GRASS REACHES 3 1/2 INCHES IN HEIGHT. AND MOW FREQUENTLY ENOUGH TO KEEP GRASS FROM EXCEEDING 3 1/2 INCHES. WEED BY LOCAL SPOT APPLICATION OF SELECTIVE HERBICIDE ONLY AFTER GRASS IS WELL-ESTABLISHED.

LAWN SEED MIX

PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 1/2" DIAMETER.

2. PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS. 3. SEEDING RATE AT 220 POUNDS PER ACRE:

> 10% DEEPBLUE KENTUCKY BLUEGRASS 25% DAKOTA TALL FESCUE 25% BLACK MAGIC TALL FESCUE 40% FRONTIER PERENNIAL RYEGRASS

4. SEEDING DATES FOR THIS MIXTURE SHALL BE BETWEEN MARCH 15TH TO MAY 15TH OR AUGUST 15TH TO OCTOBER 30TH.

5. GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL A STAND OF COVER IS ESTABLISHED AND FOUND ACCEPTABLE TO THE OWNER. SEE LAWN WATERING SCHEDULE NOTES.

LAWN WATERING SCHEDULE (SEED)

THE FOLLOWING WATERING SCHEDULE COVERS ROUGHLY 8 WEEKS TO ESTABLISH A HEALTHY STAND OF GRASS FROM SEED. THE CONTRACTOR SHALL BE OBLIGATED TO ENSURE A HEALTHY STAND OF GRASS AT THE FND OF THE MAINTENANCE/BOND PERIOD. ANY BARE OR DEAD AREAS IN THE LAWN SHALL BE PREPARED, RESEEDED AND REESTABLISHED PRIOR THE END OF THE MAINTENANCE/BOND PERIOD AND TO THE SATISFACTION OF THE PROJECT LANDSCAPE ARCHITECT AND THE OWNER.

IMPORTANT ASPECTS TO ATTAINING AND SUSTAINING A HEALTHY STAND OF GRASS ARE THE INSTALLATION OF TOPSOIL, SEED BED PREPARATION, ATTAINING OPTIMAL pH FOR THE INTENDED PLANT SPECIES, FERTILIZING, MULCH COVERING, AND SUFFICIENT WATERING PER THESE NOTES AND/OR PROJECT SPECIFICATIONS.

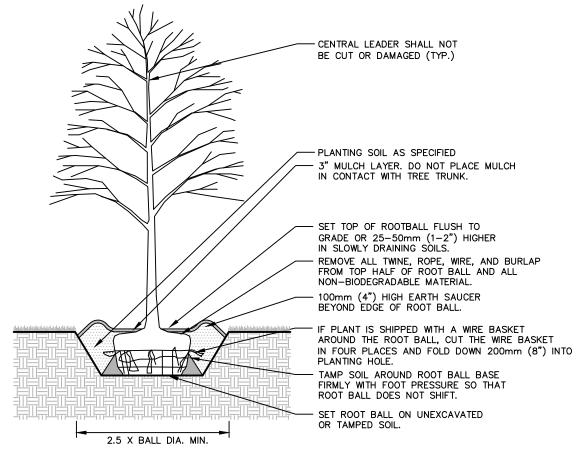
1. SEEDING SHALL BE DONE DURING THE SEASONS SPECIFIED IN THE LAWN SEED MIX NOTES AND/OR PROJECT SPECIFICATIONS. AFTER THE SEEDBED IS PREPARED, SEED IS INSTALLED, AND MULCH IS APPLIED, WATER LIGHTLY TO KEEP THE TOP 2 INCHES OF SOIL CONSISTENTLY MOIST, NOT SATURATED.

DISPLACEMENT OF SEED. DEPENDING ON SOIL TEMPERATURES, IT MAY TAKE SEVERAL WEEKS FOR GERMINATION O OCCUR. DIFFERENT SPECIES WITHIN THE MIX GERMINATE AT DIFFERENT TIMES AND THEREFORE CONTRACTOR SHOULD CONTINUE THE LIGHT WATERING, AS DESCRIBED ABOVE, UNTIL THERE IS AT LEAST 2 INCHES OF GROWTH THROUGHOUT.

AT NO TIME SHOULD WATER BE APPLIED TO THE POINT OF RUNOFF OR THE

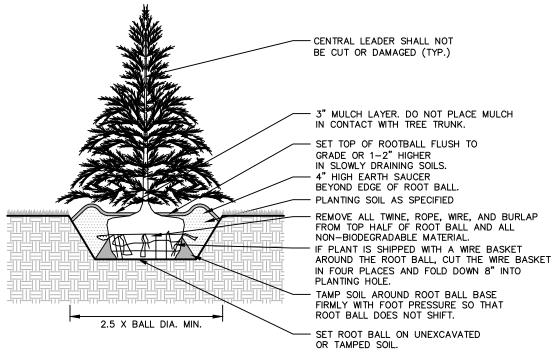
4. AT THIS POINT, WATERING FREQUENCY MAY BE REDUCED TO EVERY 3 TO 5 DAYS. WATER SHALL BE APPLIED TO WET A 6 INCH MINIMUM SOIL DEPTH TO PROMOTE

5. BEGIN MOWING ONCE PER WEEK AFTER THE GRASS HAS REACHED 3 INCHES HEIGHT. MOW TO A HEIGHT OF NO LESS THAN 2-1/2 INCHES. AFTER 2 TO 3 WEEKS OF MOWING, CONTINUE TO WATER TO A 6 INCH MINIMUM SOIL DEPTH AS NECESSARY PER WEATHER CONDITIONS, AND SOIL MOISTURE SENSORS IF APPLICABLE



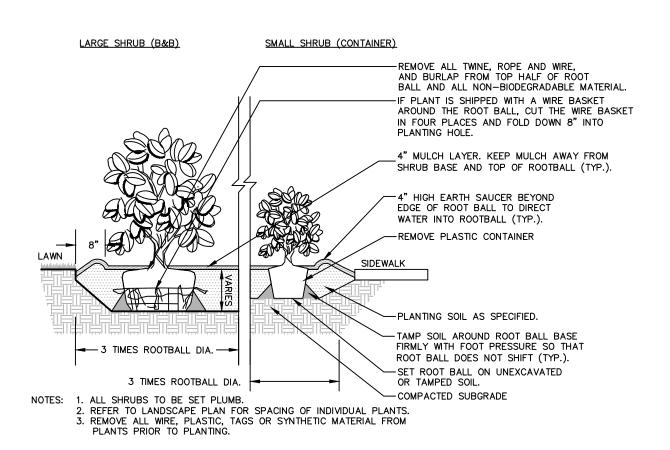
DECIDUOUS TREE PLANTING

N.T.S.



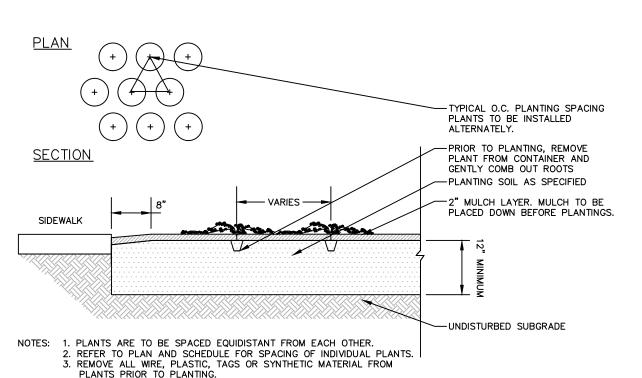
EVERGREEN TREE PLANTING

N.T.S.



SHRUB PLANTING

N.T.S.



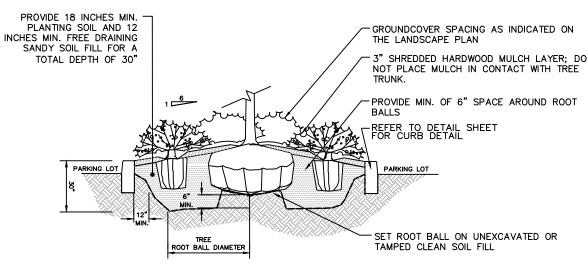
GROUNDCOVER/GRASSES PLANTING

N.T.S.

BERGEN COUNTY

 MOUND PARKING ISLAND AS SHOWN.
 REMOVE ALL WIRE, PLASTIC, TAGS OR SYNTHETIC MATERIAL FROM PLANTS PRIOR TO PLANTING. 4. SET PLANTS AT GRADE WHICH IS EVEN WITH ORIGINAL NURSERY GRADE.

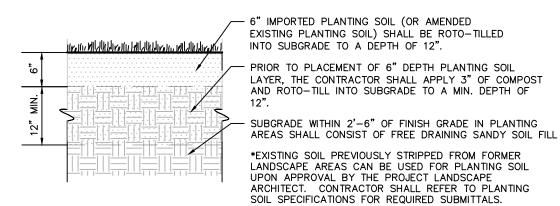
NOTES: 1. ISLAND AREAS TO BE FREE OF DEBRIS AND RUBBLE PRIOR TO PLANTING OPERATION.



PARKING ISLAND PLANTING

N.T.S.

GENERAL NOTE: DUE TO GENERAL CONSTRUCTION ACTIVITIES AND ADJACENT SITE COMPACTION REQUIREMENTS, SUBGRADE SOILS WITHIN PROPOSED PLANTING AREAS TEND TO BECOME HIGHLY COMPACTED. IN ORDER TO CREATE A HEALTHY GROWTH MEDIUM TO ALLOW PROPOSED PLANTINGS TO ESTABLISH A VIGOROUS ROOT MASS, THIS SUBGRADE SOIL MUST UNDERGO A RESTORATION PROCESS. IN ADDITION, IMPORTED OR AMMENDED EXISTING SOILS SHALL BE MIXED WITH SUBGRADE SOILS WHERE THEY MEET IN ORDER TO CREATE A TRANSITIONAL GRADIENT TO ALLOW FOR PROPER



IMPORTED OR AMENDED EXISTING PLANTING SOIL WITHIN AREAS OF RAISED GRADE

- EXISTING SOIL IN ALL PROPOSED PLANTING AREAS SHALL BE ROTO-TILLED TO A DEPTH OF 12" (EXCLUDING TREE PROTECTION AREAS) AND AMENDED IN ACCORDANCE WITH PLANTING SOIL SPECIFICATIONS. EXISTING SOIL WITHIN TREE PROTECTION AREAS SHALL BE LOOSENED AND AMENDED BY NON-MECHANICAL METHODS, PROTECTING ROOT MASS AGAINST DAMAGE.

PRIOR TO DELIVERY OF ANY FILL TO THE SITE.

AMENDED EXISTING PLANTING SOIL WITHIN AREAS OF UNCHANGED OR CUT GRADE

1. CONTRACTOR IS RESPONSIBLE TO SEND SAMPLES OF EXISTING SOILS INTENDED FOR USE IN

ENVIRONMENTAL REVIEW AGENCY STANDARDS AND MEET THE ENVIRONMENTAL REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF COMPLIANCE

PLANTING AREAS (1 PER 500 CY.) TO TESTING LABORATORY OR UNIVERSITY COOPERATIVE EXTENSION FOR TESTING. ALL TESTING COSTS ARE AT THE CONTRACTOR'S EXPENSE. 2. RECYCLED CRUSHED CONCRETE AND ASPHALT MILLINGS SHALL NOT BE PLACED WITHIN 2'-6" OF FINISH GRADE IN PROPOSED LANDSCAPE AREAS. 3. IMPORTED FILL SHALL CONTAIN NO CONTAMINATION IN EXCEEDENCE OF THE PROJECT STATE

4. CONTRACTOR TO LIGHTLY COMPACT ALL PLACED PLANTING SOILS AND RAISE GRADES ACCORDINGLY TO ALLOW FOR FUTURE SETTLEMENT OF PLANTING SOILS (TYP.) 5. NO STONES, WOOD CHIPS, OR DEBRIS LARGER THAN 1/2" SHALL BE ACCEPTABLE WITHIN

PLANTING SOIL

N.T.S.

FINISHED GRADE -WEED BARRIER FABRIC 18" STAKE INTO UNDISTURBED -GROUND EVERY 30" O.C.

BUILDING WALL, CURB, RETAINING -

WALL, OR OTHER RIGID EDGE

1-3" DIA. RIVERSTONE

3/16"X4" METAL EDGING —

GRAVEL TO BE INSTALLED WHERE SHOWN ON THE LANDSCAPE PLANS.

GRAVEL STRIP

130148001

03/10/2021

Drawing No.

N.T.S.

Description Date REVISIONS

LANGAN Langan Engineering and

Environmental Services, Inc. 989 Lenox Drive, Suite 124 Lawrenceville, NJ 08648

LANDSCAPE NOTES AND DETAILS

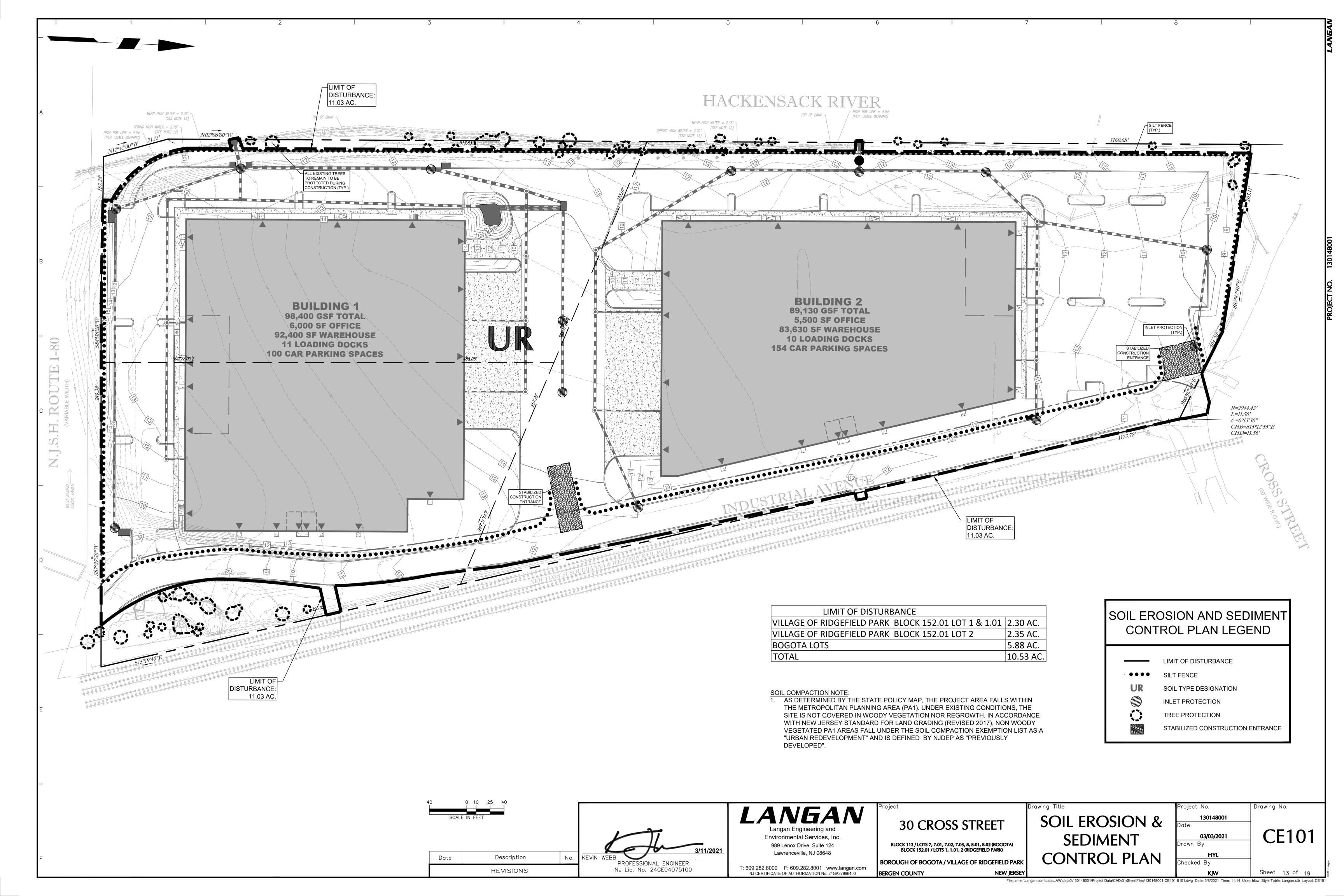
rawn By

No. N.J. LICENSED LANDSCAPE ARCHITECT T: 609.282.8000 F: 609.282.8001 www.langan.com **30 CROSS STREET**

BLOCK 152.01 / LOTS 1, 1.01, 2 (RIDGEFIELD PARK) BOROUGH OF BOGOTA / VILLAGE OF RIDGEFIELD PARK

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LICENSE NO. AS00815 NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400 BLOCK 113 / LOTS 7, 7.01, 7.02, 7.03, 8, 8.01, 8.02 (BOGOTA)



2. ANY DISTURBED AREA THAT WILL BE LEFT EXPOSED FOR MORE THAN THIRTY (30) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND MULCHING. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREA WILL BE MULCHED WITH UNROTTED STRAW AT A RATE OF 2 TONS PER ACRE ANCHORED BY APPROVED METHODS (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).

. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF 2 TONS PER ACRE, ACCORDING TO THE NJ STANDARDS.

4. STABILIZATION SPECIFICATIONS:

A. TEMPORARY SEEDING AND MULCHING:

GROUND LIMESTONE - APPLIED UNIFORMLY ACCORDING TO SOIL TEST RECOMMENDATIONS.

FERTILIZER - APPLY 11LBS. /1,000 SF OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN (UNLESS A SOIL TEST INDICATES OTHERWISE) WORKED INTO THE SOIL A MINIMUM OF 4". SEED - PERENNIAL RYEGRASS 100 LBS. /ACRE (2.3 LBS. /1,000 SF) OR OTHER APPROVEDSEED; PLANT BETWEEN MARCH 1 AND MAY 15 OR BETWEEN

AUGUST 15 AND OCTOBER 1. MULCH - UNROTTED STRAW OR HAY AT A RATE OF 70 TO 90 LBS. /1,000 SF APPLIED TO ACHIEVE 95% SOIL SURFACE COVERAGE. MULCH SHALL BE ANCHORED BY APPROVED METHODS (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).

B. PERMANENT SEEDING AND MULCHING:

PRIOR TO IMPLEMENTATION IN THE FIELD.

TOPSOIL - A UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 5", MINIMUM OF 4" FIRMED IN PLACE IS REQUIRED. GROUND LIMESTONE - APPLIED UNIFORMLY ACCORDING TO SOIL TEST RECOMMENDATIONS.

ANCHORED BY APPROVED METHODS (I.E. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDER).

FERTILIZER - APPLY 11 LBS. /1,000 SF OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN (UNLESS A SOIL TEST INDICATES OTHERWISE) WORKED INTO THE SOIL A MINIMUM OF 4".

SEED - TURF TYPE TALL FESCUE (BLEND OF 3 CULTIVARS) 350 LBS. /ACRE (8 LBS. /1,000 SF) OR OTHER APPROVED SEED; PLANT BETWEEN MARCH 1 AND OCTOBER 1 (SUMMER SEEDING REQUIRES IRRIGATION) MULCH - UNROTTED STRAW OR HAY AT A RATE OF 70 TO 90 LBS. /1.000 SF APPLIED TO ACHIEVE 95% SOIL SURFACE COVERAGE. MULCH SHALL BE

5. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.

6. SOIL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS, INCLUDING AFTER EVERY STORM

7. 7. STOCKPILES ARE NOT TO BE LOCATED WITHIN 50' OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY. THE BASE OF ALL STOCKPILES SHALL BE CONTAINED BY A HAYBALE SEDIMENT BARRIER OR SILT FENCE.

8. A CRUSHED STONE, VEHICLE WHEEL-CLEANING BLANKET WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS ROAD INTERSECTS ANY PAVED ROADWAY. SAID BLANKET WILL BE COMPOSED OF 1" - 21/2" CRUSHED STONE, 6" THICK, WILL BE AT LEAST 30' X 100' AND SHOULD BE UNDERLAIN WITH A SUITABLE SYNTHETIC SEDIMENT FILTER FABRIC AND MAINTAINED.

9. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT EXCEED 3:1 UNLESS OTHERWISE APPROVED BY THE DISTRICT.

10. DRIVEWAYS MUST BE STABILIZED WITH 1" - 21/2" CRUSHED STONE OR SUBBASE PRIOR TO INDIVIDUAL LOT CONSTRUCTION.

11.ALL SOIL WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHTOF-WAYS, WILL BE REMOVED IMMEDIATELY. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.

12. CATCH BASIN INLETS WILL BE PROTECTED WITH AN INLET FILTER DESIGNED IN ACCORDANCE WITH SECTION 28 -1 OF THE NJ STANDARDS.

13. STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL

14. DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT CONTROL BAG OR OTHER APPROVED FILTER IN ACCORDANCE WITH SECTION 14-1 OF THE NJ STANDARDS.

15. DUST SHALL BE CONTROLLED VIA THE APPLICATION OF WATER, CALCIUM CHLORIDE OR OTHER APPROVED METHOD IN ACCORDANCE WITH SECTION 16-1 OF THE NJ STANDARDS.

16. TREES TO REMAIN AFTER CONSTRUCTION ARE TO BE PROTECTED WITH A SUITABLE FENCE INSTALLED AT THE DRIP LINE OR BEYOND IN ACCORDANCE WITH SECTION 9-1 OF THE NJ STANDARDS.

17. THE PROJECT OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFF-SITE AS A RESULT OF CONSTRUCTION OF THE PROJECT. 18.ANY REVISION TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE SUBMITTED TO THE DISTRICT FOR REVIEW AND APPROVAL

19. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE THROUGHOUT CONSTRUCTION.

20.THE BERGEN COUNTY SOIL CONSERVATION DISTRICT MUST BE NOTIFIED, IN WRITING, AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBANCE: BERGEN COUNTY SCD, 700 KINDERKAMACK ROAD, SUITE 106, ORADELL, NJ 07649. TEL: 201-261-4407; FAX 201-261-7573.

21.THE BERGEN COUNTY SOIL CONSERVATION DISTRICT MAY REQUEST ADDITIONAL MEASURES TO MINIMIZE ON OR OFF-SITE EROSION PROBLEMS DURING CONSTRUCTION.

22.THE OWNER MUST OBTAIN A DISTRICT ISSUED REPORT OF COMPLIANCE PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY. THE DISTRICT REQUIRES AT LEAST ONE WEEK'S NOTICE TO FACILITATE THE SCHEDULING OF ALL REPORT OF COMPLIANCE INSPECTIONS. ALL SITE WORK MUST BE COMPLETED, INCLUDING TEMPORARY/PERMANENT STABILIZATION OF ALL EXPOSED AREAS, PRIOR TO THE ISSUANCE OF A REPORT OF COMPLIANCE BY THE DISTRICT.

SCHEDULE OF CONSTRUCTION OPERATIONS

1. NOTIFY THE BERGEN COUNTY COUNTY SOIL CONSERVATION DISTRICT AT LEAST 48 HOURS PRIOR TO ANY PROJECT PRE-CONSTRUCTION MEETING OR SITE DISTURBANCES.

1 DAY 2. INSTALL A GRAVEL BUFFER OF 2 1/2" WASHED STONE 12" DEEP AT THE CONSTRUCTION ENTRANCES IMMEDIATELY AFTER INITIAL DISTURBANCES AS PER STANDARDS ON DRAWINGS. TRAFFIC SHOULD USE ONLY THESE AREAS FOR 3. EQUIP ALL CATCH BASINS WITH FILTER FABRIC INLET PROTECTION IMMEDIATELY UPON START OF CONSTRUCTION. 1 DAY

1 WEEK 4. PLACE AND MAINTAIN THE SEDIMENT BARRIERS AS SHOWN ON THE PLAN. 1 MONTH DEMOLISH EXISTING DEVELOPMENT. 6. CONSTRUCT STORM SEWERS, SANITARY SEWERS, SEDIMENT CONTROL MEASURES AROUND INLETS. 1 MONTH

3 WEEKS 7. CONSTRUCT CURBS AND SIDEWALKS. 2 WEEKS 8. INSTALL PAVEMENT BASECOURSE. 12 MONTHS CONSTRUCT BUILDING. 10. FINAL GRADING OF SITE INCLUDING 6-IN TOPSOIL AND PERMANENT STABILIZATION, AND PAVEMENT TOPCOURSE. 2 WEEKS

PARKING AREAS ARE PAVED, AND LANDSCAPE AREAS ARE PERMANENTLY STABILIZED. 12. PLANT ALL LANDSCAPED AREAS AS INDICATED ON THE LANDSCAPING PLAN AND REMOVE ALL TEMPORARY SEDIMENT CONTROL STRUCTURES.

11. ALL SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL IMPROVEMENTS TO THE SITE ARE COMPLETE,

1 DAY 13. NOTIFY THE BERGEN COUNTY SOIL CONSERVATION DISTRICT AT THE COMPLETION OF CONSTRUCTION.

ACID SOIL MITIGATION PLAN

SEPARATE AND TEMPORARILY STOCKPILE HIGH ACID PRODUCING SOILS (WITH A PH LESS THAN 4)

SOIL EXPOSED MORE THAN 30 DAYS SHOULD BE COVERED WITH PROPERLY ANCHORED, HEAVY GRADE SHEETS OF POLYETHYLENE. IF NOT POSSIBLE, STOCKPILE SHALL BE COVERED BY 3 TO 6 INCHES OF WOOD CHIPS.

INSTALL SILT FENCE AT THE TOE OF SLOPE OF THE STOCKPILE

SOIL WITH A PH OF 4 OR LESS, OR CONTAINING IRON SULFIDE, SHALL BE BURIED WITH LIMESTONE AT A RATE OF 6 TONS PER

A MINIMUM COVER OF 12 INCHES SHALL BE MET WITH SETTLED SOIL WITH A PH OF 5 OR MORE. a. MINIMUM COVER OF 24 INCHES IN AREAS WHERE TREES AND SHRUBS ARE PLANTED. b. DISPOSAL AREAS SHALL NOT BE WITHIN 24 INCHES OF ANY SURFACE OF A SLOPE OR BANK.

EQUIPMENT USED TO MOVE HIGH ACID SOILS SHOULD BE CLEANED AT THE END OF EACH DAY

MONITOR FOR 6 TO 12 MONTHS TO ASSURE STABILIZATION.

TEMPORARY STABILIZATION NOTES

TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

DISTURBED AREAS SHALL BE MAINTAINED IN A ROUGH GRADED CONDITION AND TEMPORARILY SEEDED AND HAY MULCHED (OR HYDROSEEDED) UNTIL PROPER WEATHER EXISTS FOR THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER. THE FOLLOWING SEEDING SCHEDULE SHALL BE USED FOR TEMPORARILY SEEDING:

A. LIME - 90 lbs/1,000 sf GROUND LIMESTONE.

B. FERTILIZER - 14 lbs/1,000 sf; 10-20-10 OR EQUIVALENT, WITH 50% WATER INSOLUBLE NITROGEN, WORKED INTO SOIL TO A DEPTH

SEED - PERENNIAL RYEGRASS - 100 lbs/acre; PLANT BETWEEN MARCH 1 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 1

MULCH - SALT HAY OR SMALL GRAIN STRAW AT A RATE OF 70 TO 90 lbs/1,000 sf; TO BE APPLIED ACCORDING TO NEW JERSEY STANDARDS. MULCH SHALL BE SECURED BY APPROVED METHODS (i.e. PEG AND TWINE, MULCH NETTING, OR LIQUID MULCH BINDING).

STABILIZATION WITH MULCH ONLY

NON-GROWING STABILIZATION MEASURES SHALL BE USED WHERE THE SEASON AND OTHER CONDITIONS MAY NOT BE SUITABLE FOR GROWING AN EROSION RESISTANT COVER OR WHERE STABILIZATION IS NEEDED FOR A SHORT PERIOD UNTIL MORE SUITABLE PROTECTION CAN BE APPLIED.

SALT HAY OR SMALL GRAIN STRAW AT A RATE OF 90 TO 115 lbs/1,000 sf TO BE APPLIED ACCORDING TO THE NEW JERSEY STANDARDS. MULCH SHALL BE SECURED BY APPROVED METHODS (i.e. PEG AND TWINE, LIQUID MULCH BINDER, OR MULCH NETTING).

DUST CONTROL NOTES

THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:

MULCHES - SEE STANDARD OF STABILIZATION WITH MULCHES ONLY, PG. 5-1

<u>VEGETATIVE COVER</u> - SEE STANDARD FOR: TEMPORARY VEGETATIVE COVER, PG. 7-1, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION PG. 4-1 AND PERMANENT STABILIZATION WITH SOD, PG. 6-1

SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

DUST CONTROL MATERIALS TYPE OF NOZZLE MATERIAL WATER DILUTION APPLY GALLONS/ACRE ANIONIC ASPHALT EMULSION COARSE SPRAY LATEX EMULSION FINE SPRAY 12.5:1 235 **RESIN IN WATER** FINE SPRAY 300 ACIDULATED SOY BEAN SOAP STICK COARSE SPRAY NONE APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS POLYACRYLAMIDE (PAM) - SPRAY ON MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO POLYACRYLAMIDE (PAM) - DRY SPREAD FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS

SEE SEDIMENT BASIN STANDARD, P. 26-1

TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED

SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

CALCIUM CHLORIDE - SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS OR ACCUMULATION AROUND

STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

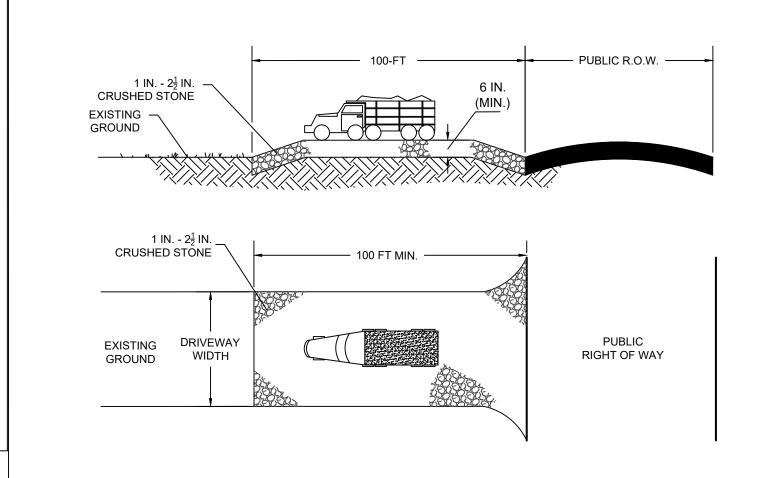
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Date

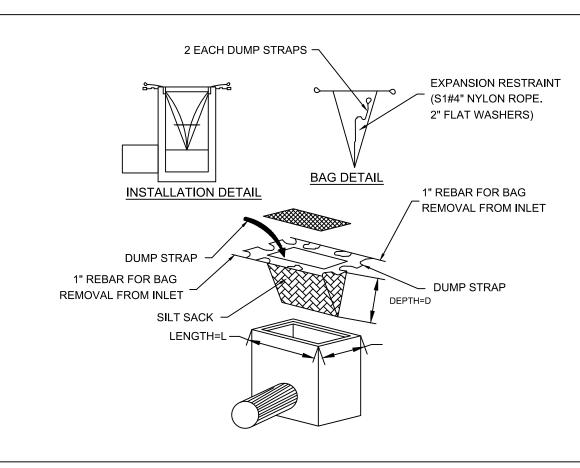
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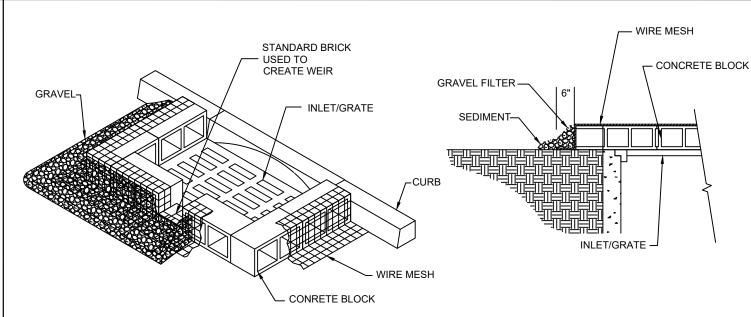


CONSTRUCTION ENTRANCE

No.



INLET PROTECTION - SILT BAG



CONSTRUCTION SPECIFICATIONS

LAY CONCRETE BLOCKS ON SIDES ALONG OUTER EDGE OF GRATE. FOR CURB INLET LAY BLOCKS ALONG 3 SIDES AND BUTT BLOCKS UP AGAINST CURB PIECE.

PLACE 1/2" WIRE MESH ALONG BLOCK OPENINGS, WRAPPED OVER TOP OF BLOCKS AND EXTEND A MINIMUM OF SIX INCHES FROM FACE OF BLOCKS, AS SHOWN, TO SUPPORT STONE.

USE CLEAN CRUSHED GRAVEL 3/2 - 1 INCH IN DIAMETER PLACED ALONG WIRE MESH/BLOCK OPENINGS AT A WIDTH OF AT LEAST 12 INCHES.

USING STANDARD BRICK CREATE WEIR ALONG FRONT FACE, AS SHOWN, TO ALLOW FLOW FROM STORM EVENTS GREATER THAN THE 1 YR-24 HR STORM TO PASS FREELY

5. CLEAN SEDIMENT DEPOSITS AFTER EVERY STORM

INLET PROTECTION

TREE PROTECTION NOTES

1. ALL EXISTING TREES WITHIN THE LIMITS OF TREE PROTECTION FENCING SHALL BE PROTECTED THROUGHOUT THE DURATION OF WORK. THE LIMIT OF TREE PROTECTION FENCE RADIUS SHALL BE 18 TIMES THE MEASURED DIAMETER-AT-BREAST-HEIGHT (DBH). UNLESS CONDITIONS WARRANT THE FENCE TO BE LOCATED CLOSER TO THE TREE. THE PROJECT LANDSCAPE ARCHITECT TO APPROVE THE LOCATION OF ALL FENCING PRIOR TO EXCAVATION

2. TREE PROTECTION PLANKING SHALL BE INSTALLED ON ALL EXISTING TREES WHERE WORK IS TO BE DONE WITHIN THE LIMIT OF TREE PROTECTION FENCING. REFER TO

3. IF TREE PROTECTION FENCING NEEDS TO BE MOVED OR BREACHED DUE TO TEMPORARY CONSTRUCTION ACTIVITY WITHIN THE TREE PROTECTION ZONE, THE FENCING WILL BE RESET TO ITS ORIGINAL LOCATION IMMEDIATELY AFTER CONSTRUCTION WITHIN THE TREE PROTECTION ZONE IS COMPLETE.

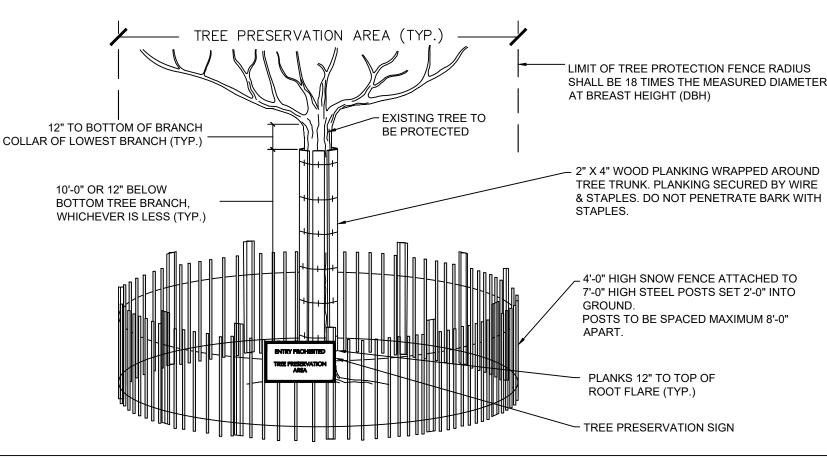
4. TREE PROTECTION FENCING SHALL BE MAINTAINED TO PROTECT TREES AT ALL TIMES. ANY DAMAGED FENCING SHALL BE IMMEDIATELY REPLACED WHEN DAMAGED.

5. DEMOLITION WORK WITHIN THE DRIP-LINE OF PROTECTED TREES SHALL BE PERFORMED BY NON-MECHANICAL METHODS. CONTRACTOR TO PROTECT ROOT MASS AGAINST DAMAGE DURING EXCAVATION, ANY TREE ROOTS THAT ARE DISTURBED, BROKEN, OR CUT SHALL BE PRUNED BACK WITH CLEAN SHARP TOOLS.

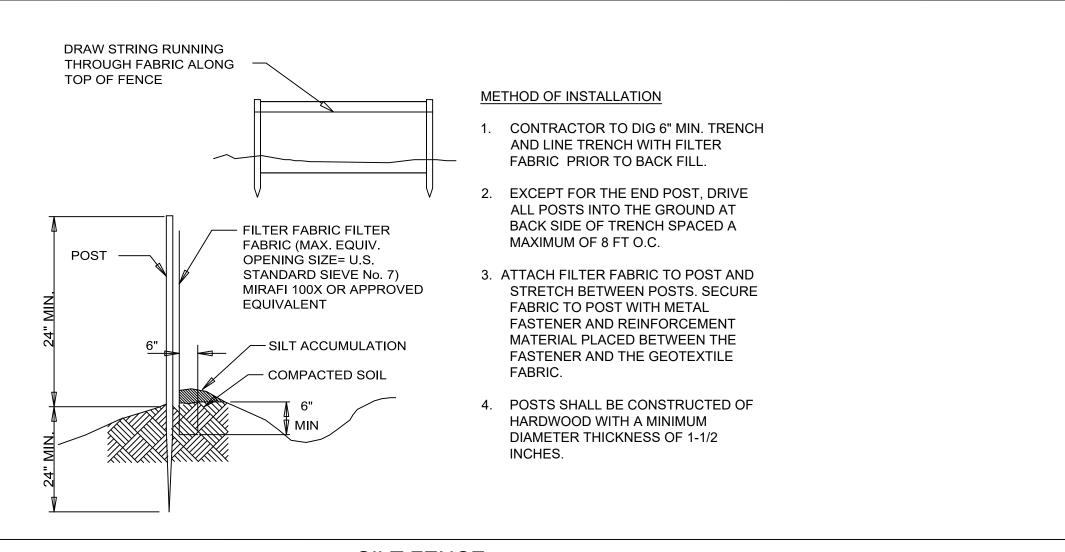
6. ALL EXPOSED TREE ROOTS SHALL BE THOROUGHLY IRRIGATED ON A DAILY BASIS AS DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT.

7. ALL WORK TO BE PERFORMED UNDER THE DIRECT SUPERVISION OF EITHER THE

OWNER'S REPRESENTATIVE OR THE PROJECT LANDSCAPE ARCHITECT.



TREE PROTECTION FENCING AND TREE PLANKING



SILT FENCE

LANGAN Environmental Services, Inc. 989 Lenox Drive, Suite 124 Lawrenceville, NJ 08648 PROFESSIONAL ENGINEER

30 CROSS STREET

BLOCK 113 / LOTS 7, 7.01, 7.02, 7.03, 8, 8.01, 8.02 (BOGOTA) BLOCK 152.01 / LOTS 1, 1.01, 2 (RIDGEFIELD PARK) **BOROUGH OF BOGOTA / VILLAGE OF RIDGEFIELD PARK** SOIL EROSION & **SEDIMENT**

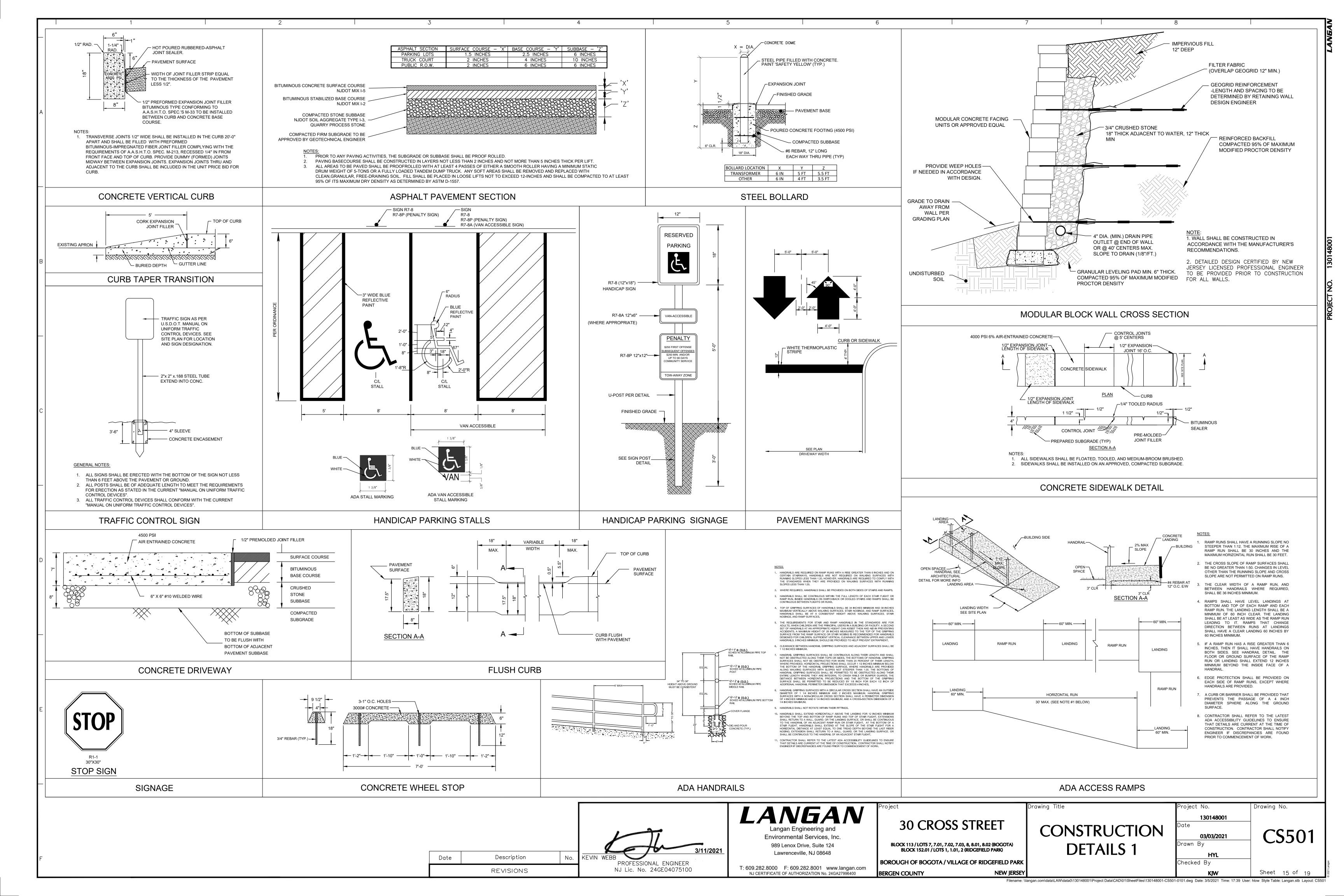
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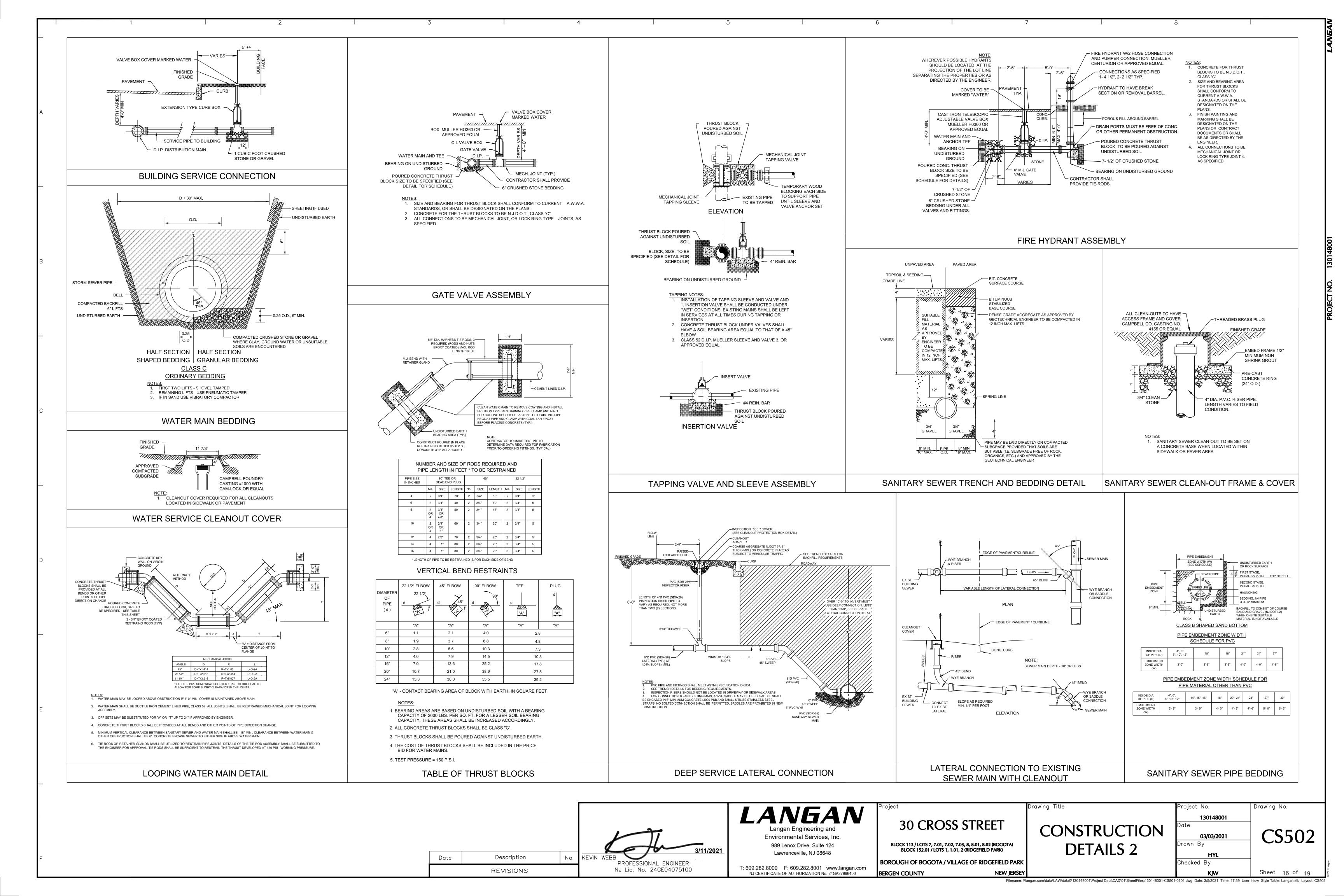
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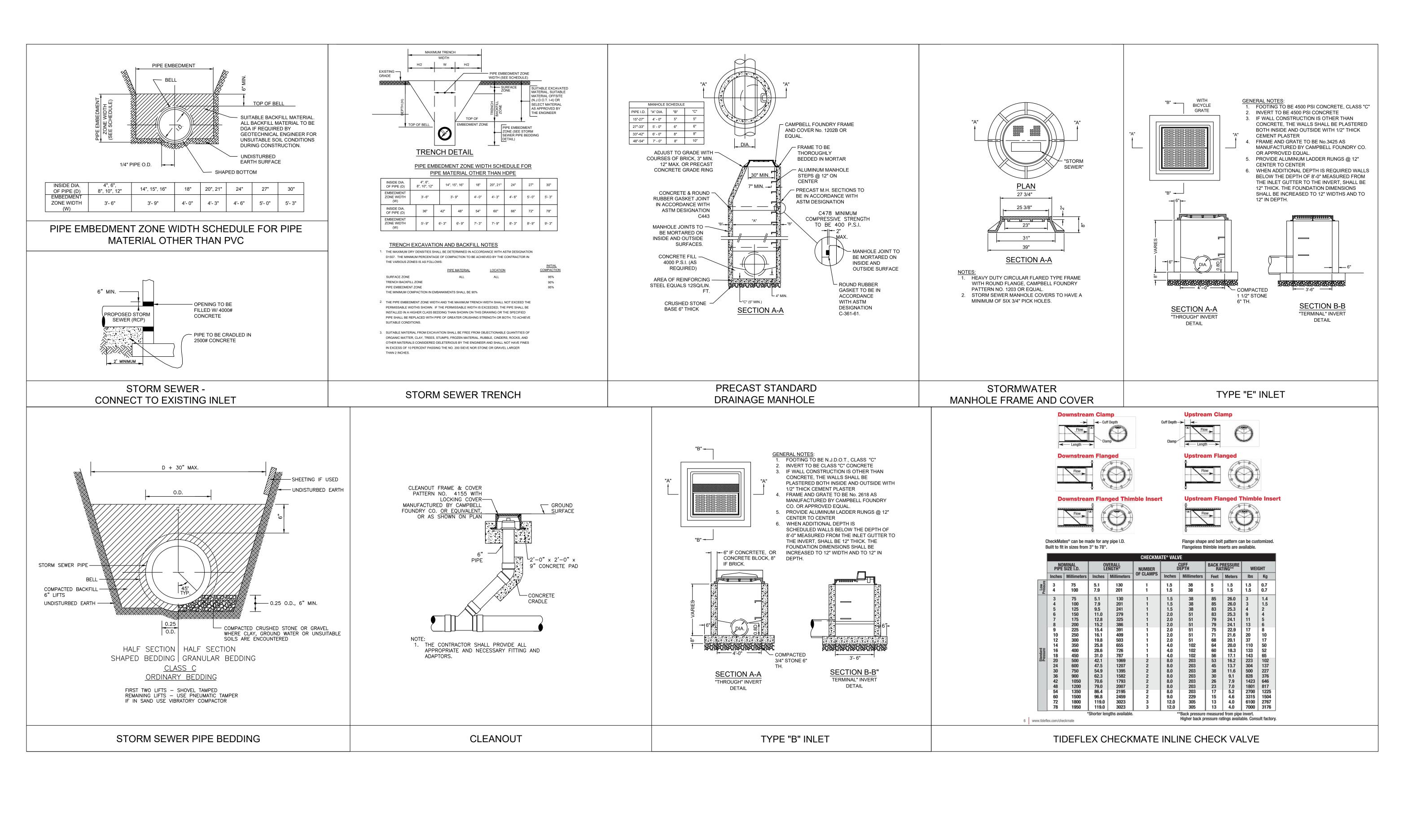
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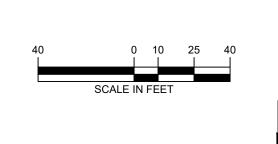
T: 609.282.8000 F: 609.282.8001 www.langan.com NJ Lic. No. 24GE04075100 NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

BERGEN COUNTY









Date Description No.

REVISIONS

No. 24GE04075100

LANGA Langan Engineering and Environmental Services, Inc. 989 Lenox Drive, Suite 124

Lawrenceville, NJ 08648

T: 609.282.8000 F: 609.282.8001 www.langan.com

NJ CERTIFICATE OF AUTHORIZATION No. 24GA27996400

30 CROSS STREET

BLOCK 113/LOTS 7, 7.01, 7.02, 7.03, 8, 8.01, 8.02 (BOGOTA)
BLOCK 152.01 / LOTS 1, 1.01, 2 (RIDGEFIELD PARK)

BOROUGH OF BOGOTA / VILLAGE OF RIDGEFIELD PARK

BERGEN COUNTY

NEW JERSEY

CONSTRUCTION
DETAILS 3

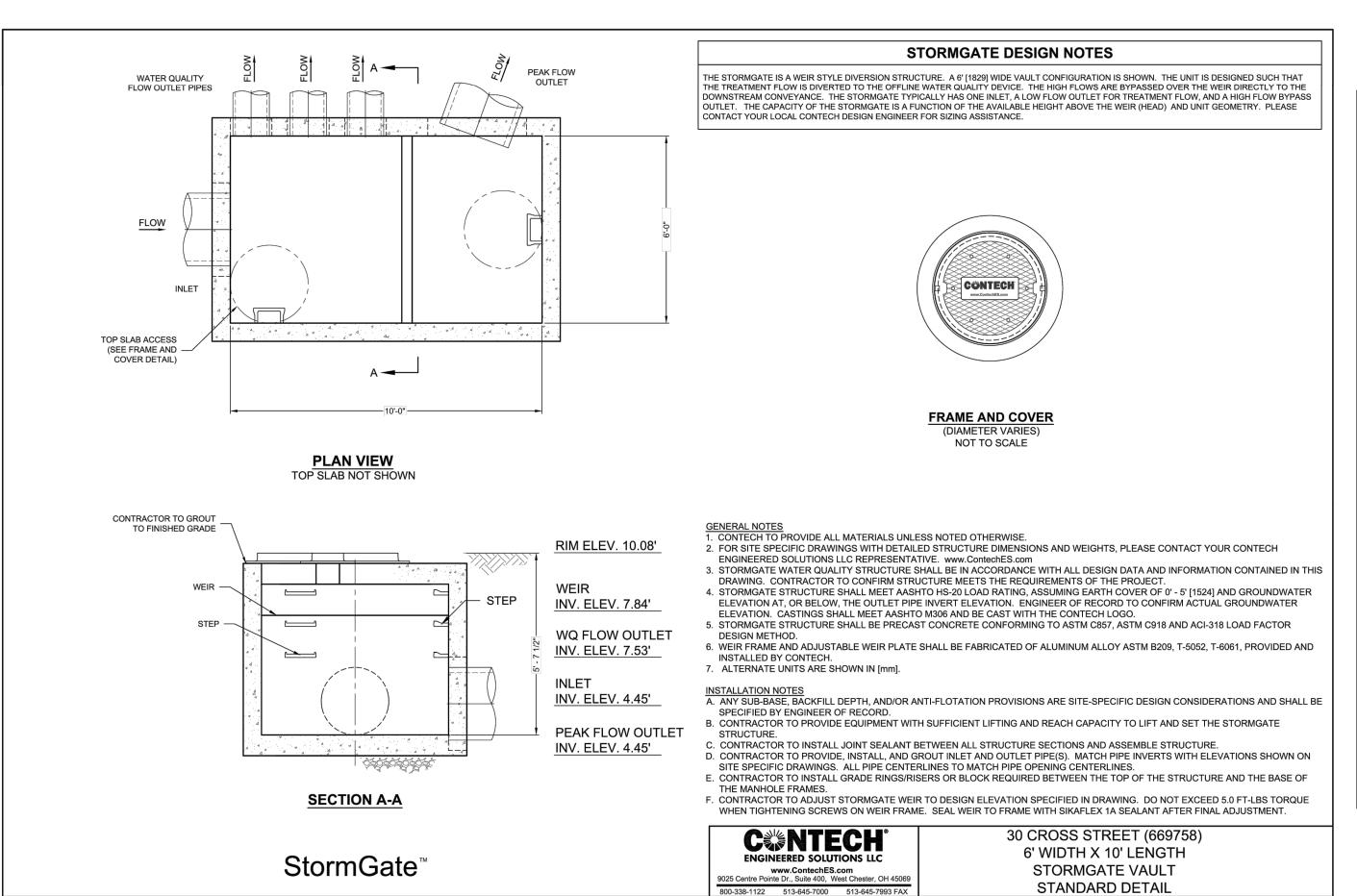
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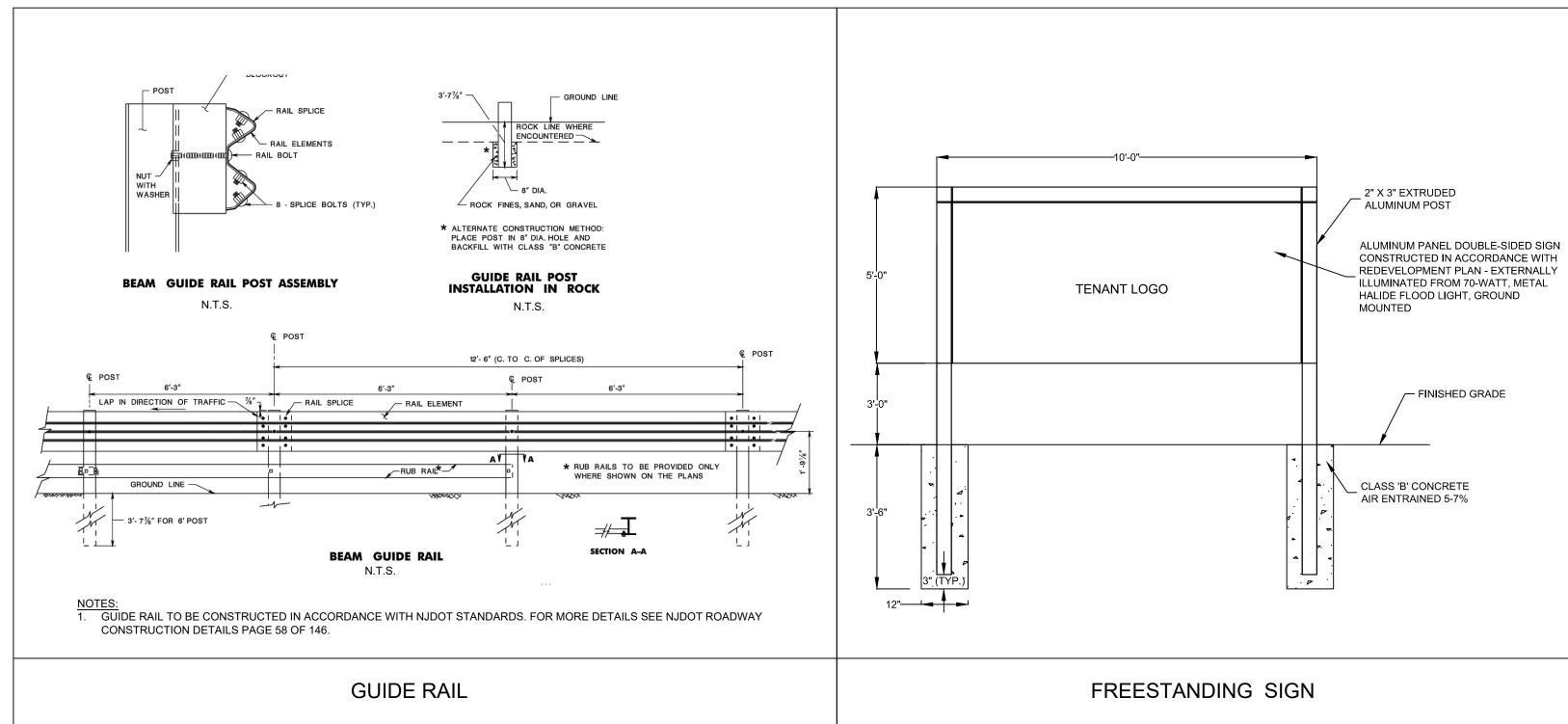
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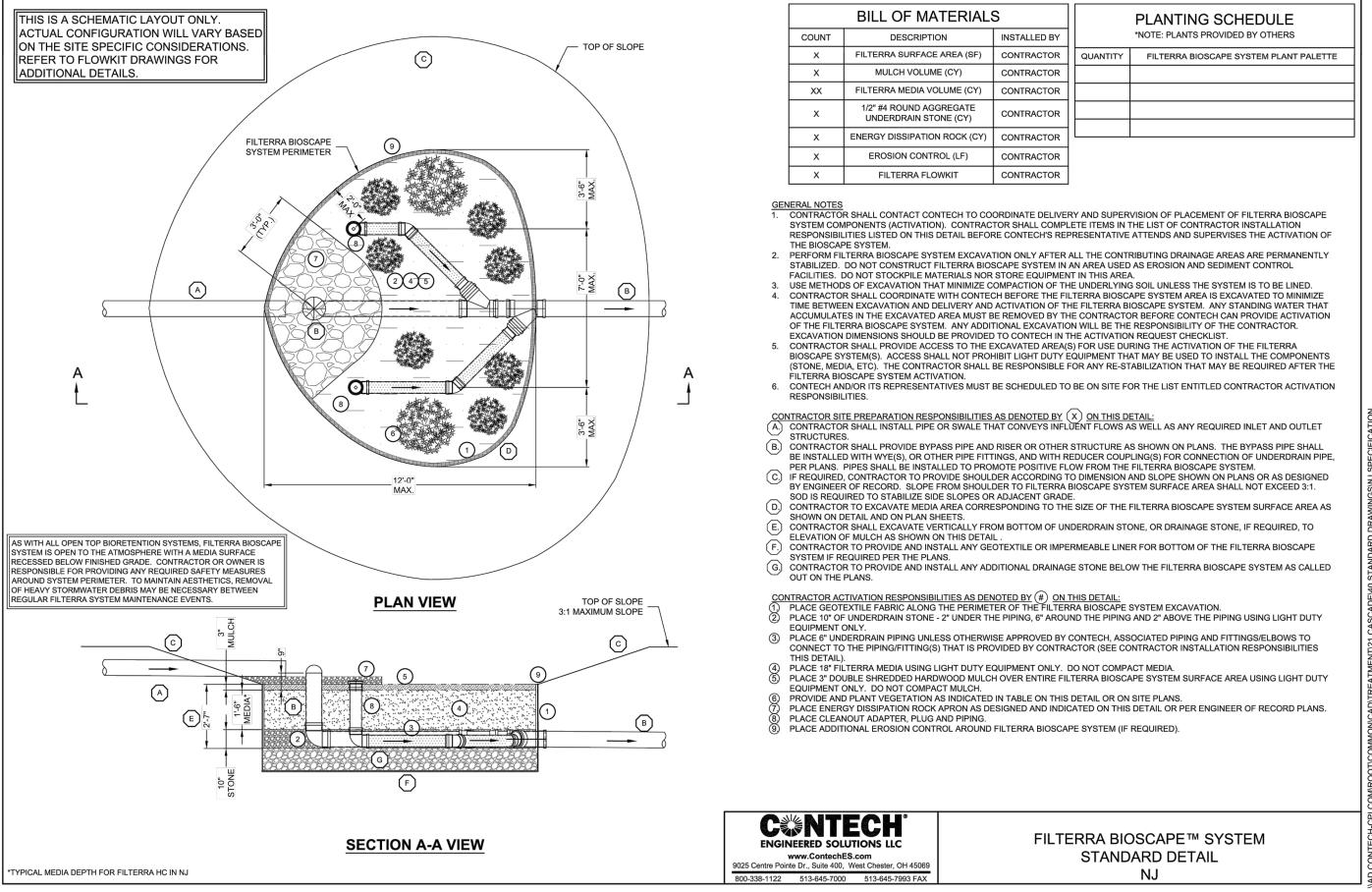
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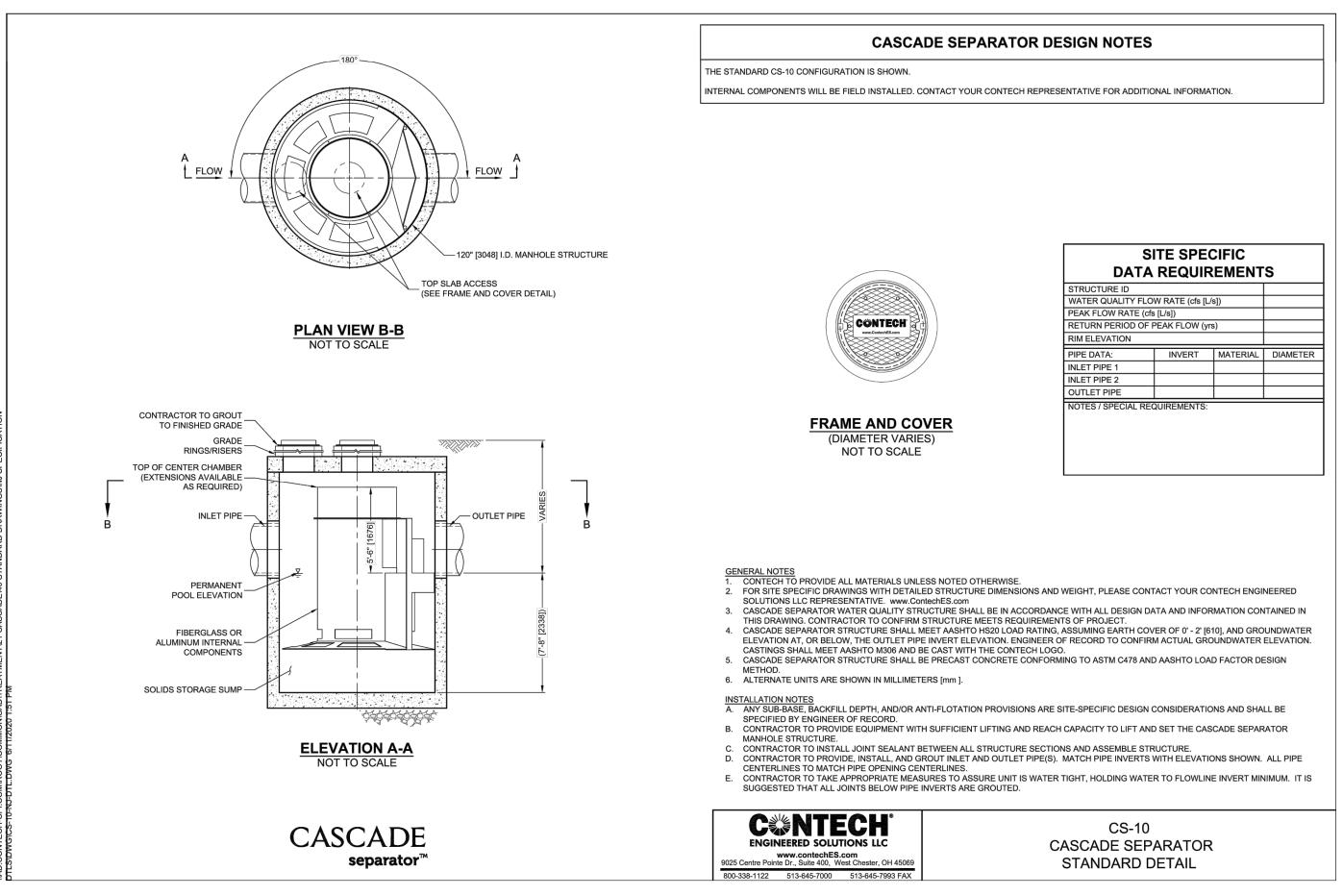
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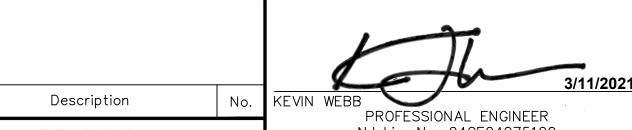
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Environmental Services, Inc.

989 Lenox Drive, Suite 124

Lawrenceville, NJ 08648

BERGEN COUNTY

CONSTRUCTION **DETAILS 4**

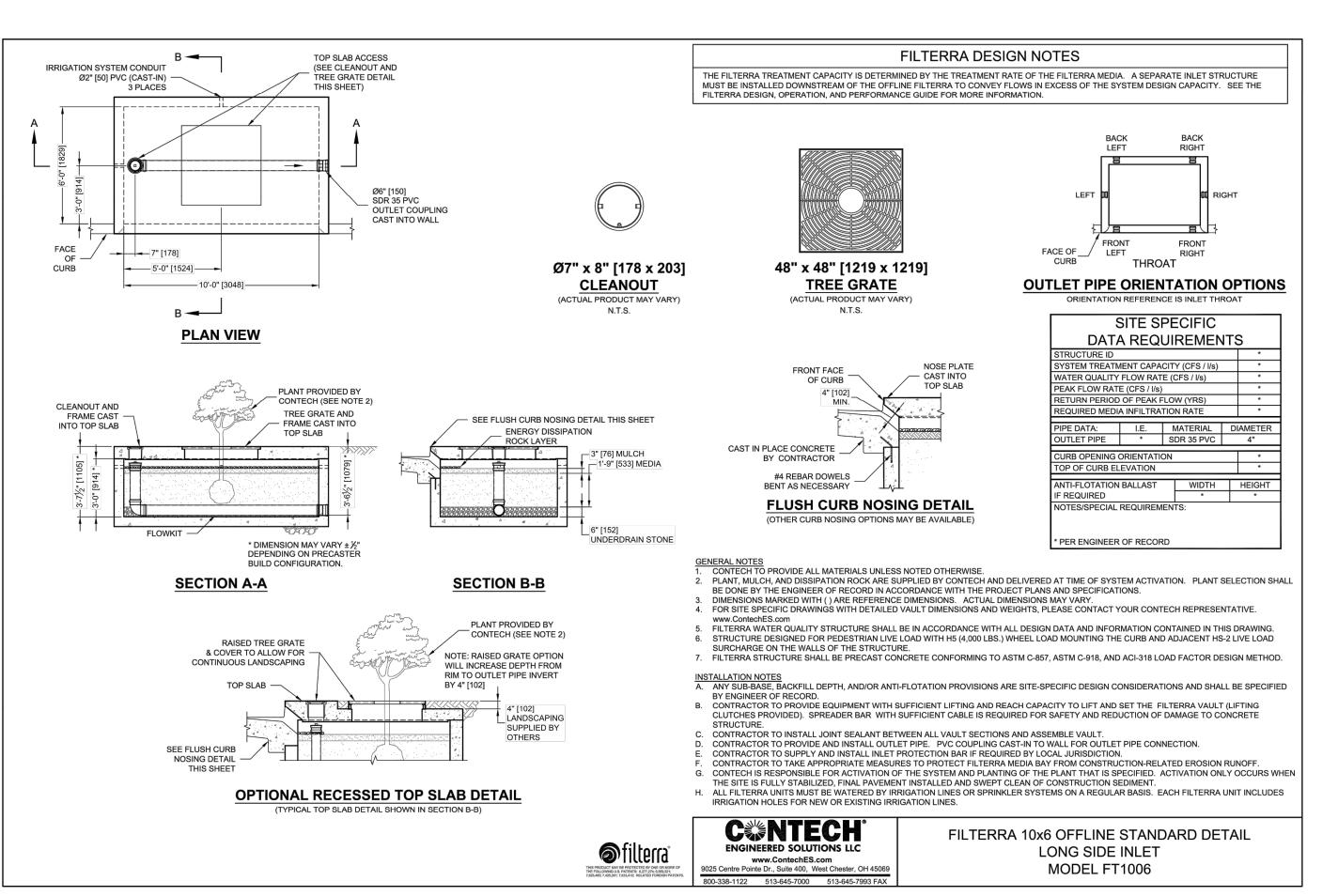
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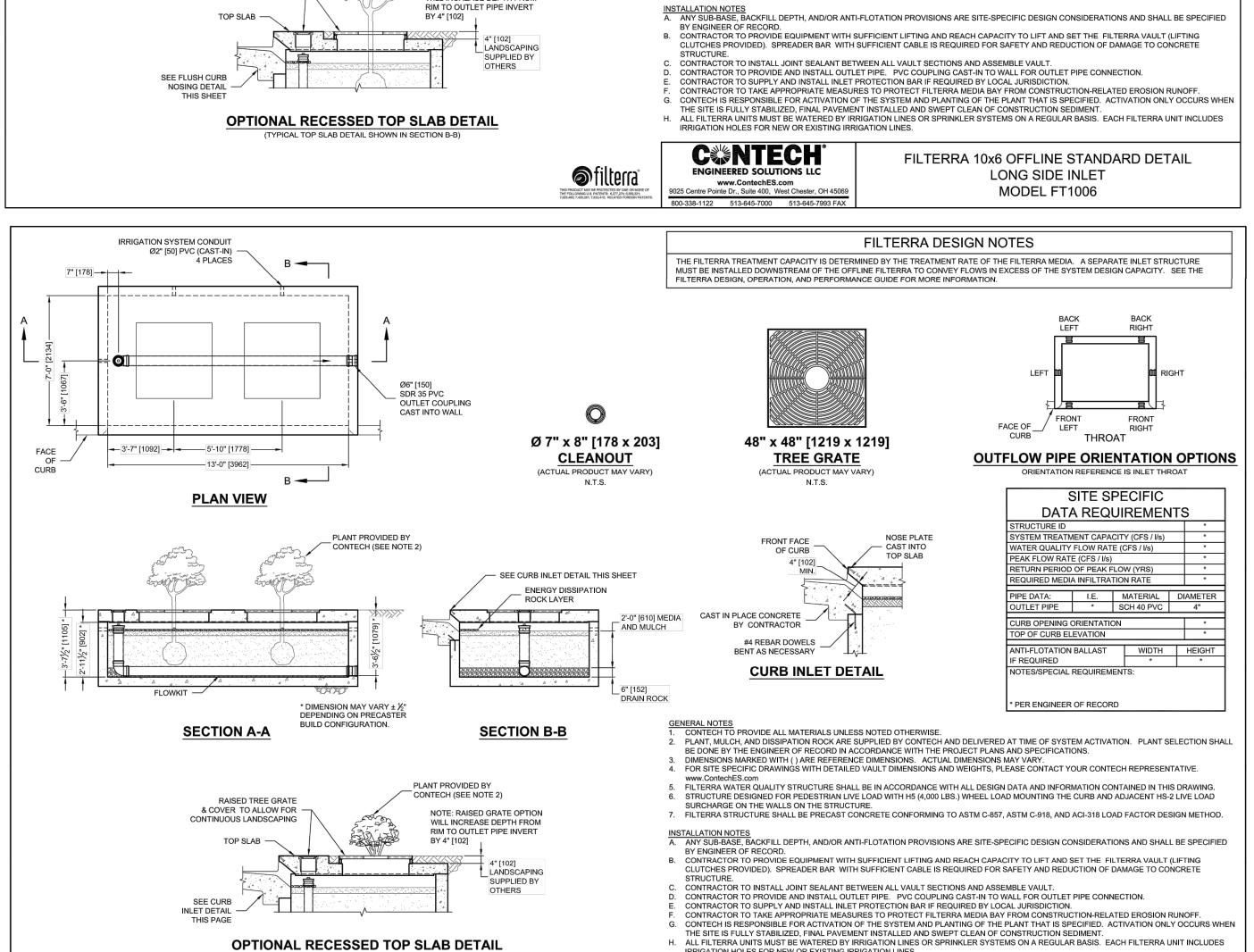
BLOCK 113 / LOTS 7, 7.01, 7.02, 7.03, 8, 8.01, 8.02 (BOGOTA) BLOCK 152.01 / LOTS 1, 1.01, 2 (RIDGEFIELD PARK) BOROUGH OF BOGOTA / VILLAGE OF RIDGEFIELD PARK

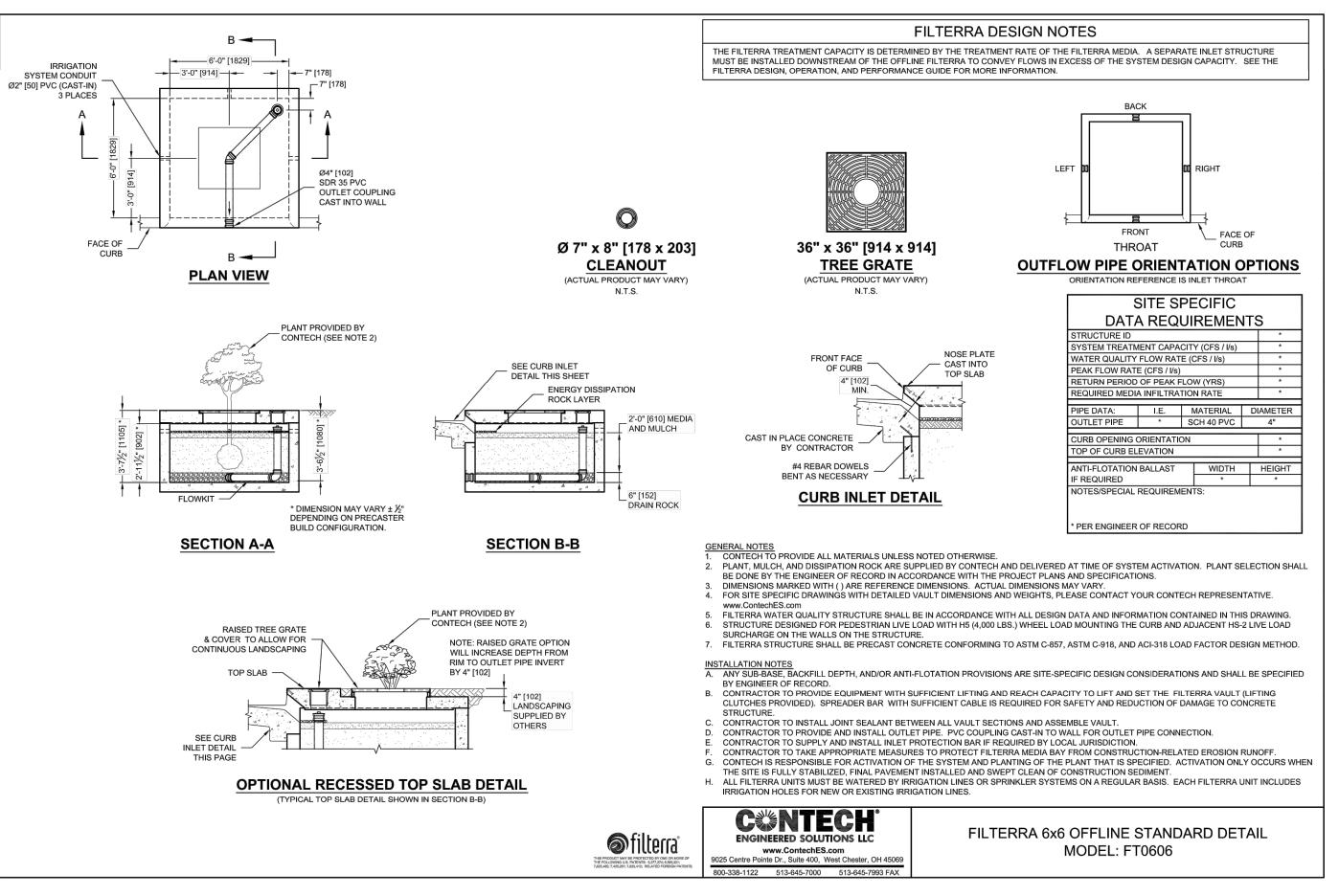
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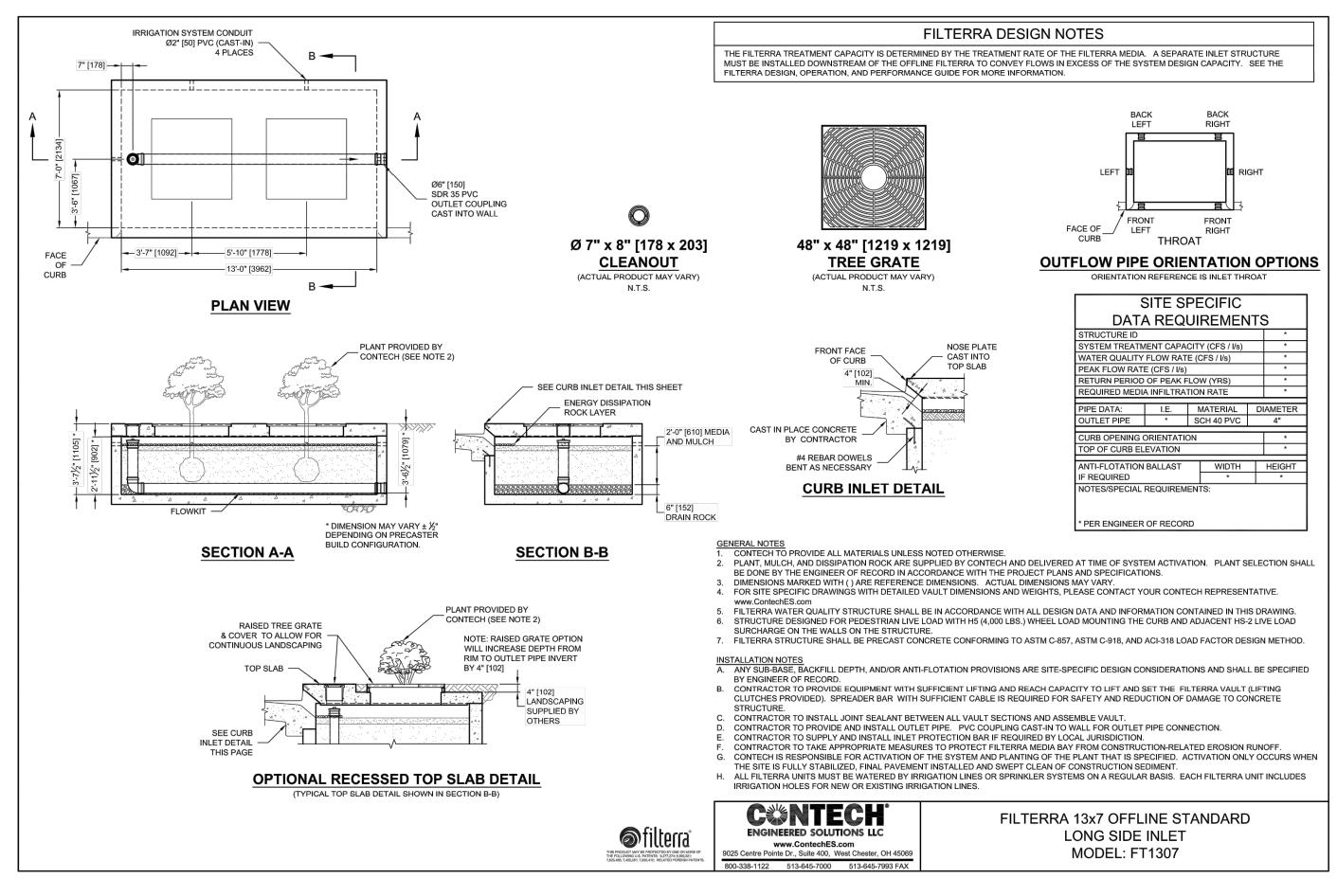
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FILTERRA 13x7 OFFLINE STANDARD

LONG SIDE INLET

MODEL: FT1307

IRRIGATION HOLES FOR NEW OR EXISTING IRRIGATION LINES.

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BLOCK 113 / LOTS 7, 7.01, 7.02, 7.03, 8, 8.01, 8.02 (BOGOTA) BLOCK 152.01 / LOTS 1, 1.01, 2 (RIDGEFIELD PARK) BOROUGH OF BOGOTA / VILLAGE OF RIDGEFIELD PARK

CONSTRUCTION **DETAILS 5**

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