

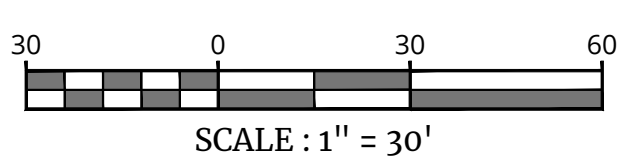
**DEMOLITION NOTES:**

- THIS PLAN REFERENCES THE FOLLOWING DOCUMENTS AND INFORMATION:
  - BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION SHOWN HEREON IS TAKEN FROM A PLAN ENTITLED "COMMERCIAL SUBDIVISION & SITE PLAN", SHEET 1 OF 1, DATED MARCH 25, 2019, PREPARED BY ATZIL, NASHER & ZIGLER P.C., P.L.S. LIC. NO. 50228 OF N.Y.S.
  - CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (29 U.S.C. 1910) AND THE NEW YORK PROTECTION OF UNDERGROUND FACILITY ACT (DIG SAFE LAW, 16 NYCRR PART 753) AS AMENDED.
  - THE DEMOLITION PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION REGARDING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR SHALL ALSO REVIEW THE OTHER SITE PLAN DRAWINGS AND INCLUDE IN DEMOLITION ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE NEW SITE IMPROVEMENTS.
  - ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS. ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS OR SPECIFICATIONS, CONCERNS REGARDING THE APPLICABLE SAFETY STANDARDS OR THE SAFETY OF THE CONTRACTOR OR THIRD PARTIES IN PERFORMING THE WORK OF THIS PROJECT SHALL BE RAISED WITH ENGINEER, IN WRITING AND RESPONDED TO BY ENGINEER, IN WRITING, PRIOR TO THE INITIATION OF ANY SITE ACTIVITY.
  - PRIOR TO STARTING ANY DEMOLITION, CONTRACTOR IS RESPONSIBLE FOR:
    - OBTAINING ALL REQUIRED PERMITS AND MAINTAINING THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND OTHER PUBLIC AGENCIES HAVING JURISDICTION.
    - NOTIFYING, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL DEPARTMENT OF PUBLIC WORKS, 72 HOURS PRIOR TO START OF WORK.
    - INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
    - IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR SHALL BE REQUIRED TO CALL THE BOARD OF PUBLIC UTILITIES ONE CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARK OUT IN ADVANCE OF ANY EXCAVATION.
    - LOCATING AND PROTECTING ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC., WITHIN AND ADJACENT TO THE LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR SHALL USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES.
    - PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.
    - ARRANGING FOR AND COORDINATING WITH THE APPLICABLE UTILITY SERVICE PROVIDERS FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE THE UTILITY ENGINEER AND OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.
  - COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES. WORK REQUIRED TO BE DONE "OFF-PEAK" SHALL BE DONE AT NO ADDITIONAL COST TO THE OWNER.
  - IN THE EVENT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY CEASE ALL WORK AND NOTIFY THE OWNER AND ENGINEER OF THE DISCOVERY OF SUCH MATERIALS.
  - THE FIRM OR ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. CONTRACTOR IS TO PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS TO ENSURE PUBLIC AND CONTRACTOR SAFETY.
  - THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION. SUCH REPAIRS SHALL BE PERFORMED AT THE CONTRACTOR'S SOLE EXPENSE.
  - THE CONTRACTOR SHALL NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS, OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE UNLESS IT IS IN STRICT ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, AND/OR UNDER THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
  - CONTRACTOR SHALL BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL SHALL BE ACCOMPLISHED WITH APPROVED BACKFILL MATERIALS AND SHALL BE SUFFICIENTLY COMPACTED TO SUPPORT NEW IMPROVEMENTS AND IN COMPLIANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. BACKFILLING SHALL OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES, AND SHALL BE DONE SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACES SHALL BE GRADED TO PROMOTE POSITIVE DRAINAGE.
  - EXPLOSIVES SHALL NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND ALL APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE AND LOCAL GOVERNMENTS SHALL BE IN PLACE PRIOR TO STARTING AN EXPLOSIVE PROGRAM. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.
  - CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FHWA "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AS WELL AS FEDERAL, STATE AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHT-OF-WAY.
  - CONTRACTOR SHALL CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.
  - DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE, WITHOUT WRITTEN PERMISSION OF THE OWNER AND ALL GOVERNMENTAL AGENCIES HAVING JURISDICTION.
  - THE CONTRACTOR SHALL USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.
  - CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.
  - CONTRACTOR IS RESPONSIBLE FOR SITE JOB SAFETY, WHICH SHALL INCLUDE BUT NOT LIMITED TO THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING AND OTHER APPROPRIATE SAFETY ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITY.
  - THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION AS TO THE MEANS AND METHODS TO BE USED TO ACCOMPLISH THAT WORK. ALL MEANS AND METHODS UTILIZED ARE TO BE IN STRICT ACCORDANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
  - DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES. THE CONTRACTOR SHALL MAINTAIN RECORDS TO DEMONSTRATE PROPER DISPOSAL ACTIVITIES, TO BE PROVIDED TO THE OWNER UPON REQUEST.
  - CONTRACTOR SHALL MAINTAIN A RECORD SET OF PLANS UPON WHICH IS INDICATED THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT SHALL BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER, AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK.
  - GENERAL CONTRACTOR IS RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS, PAVEMENT, DRAINAGE STRUCTURES, ETC. WHICH ARE TO REMAIN. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR REPAIRING DAMAGE DONE TO THE AFOREMENTIONED ITEMS. THE REPAIR SHALL RESTORE SUCH TO A CONDITION EQUIVALENT TO OR BETTER THAN THE EXISTING CONDITIONS AND IN ACCORDANCE WITH ALL APPLICABLE CODES.
  - ALL UTILITIES, INCLUDING ELECTRIC AND TELEPHONE SERVICE, SHALL BE INSTALLED UNDERGROUND.

WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, SOIL SHALL NOT BE EXPOSED MORE THAN SEVEN (7) DAYS. CONTRACTOR SHALL INITIATE STABILIZATION MEASURES IN ACCORDANCE WITH THE SOIL EROSION & SEDIMENT CONTROL PLAN.

**LEGEND**

- [Pattern] = SAWCUT ASPHALT PAVEMENT REPAIR AREA
- [Dashed Line] = ITEMS TO BE REMOVED
- [Solid Line] = ITEMS TO REMAIN
- [T.B.R.] = TO BE REMOVED



**Colliers**  
Engineering & Design  
www.colliersengineering.com

Doing Business as **MASER CONSULTING**  
811 PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE  
Know what's below. Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	08/22/23	NJ	REVISED PER PROFPANNING BOARD COMMENTS

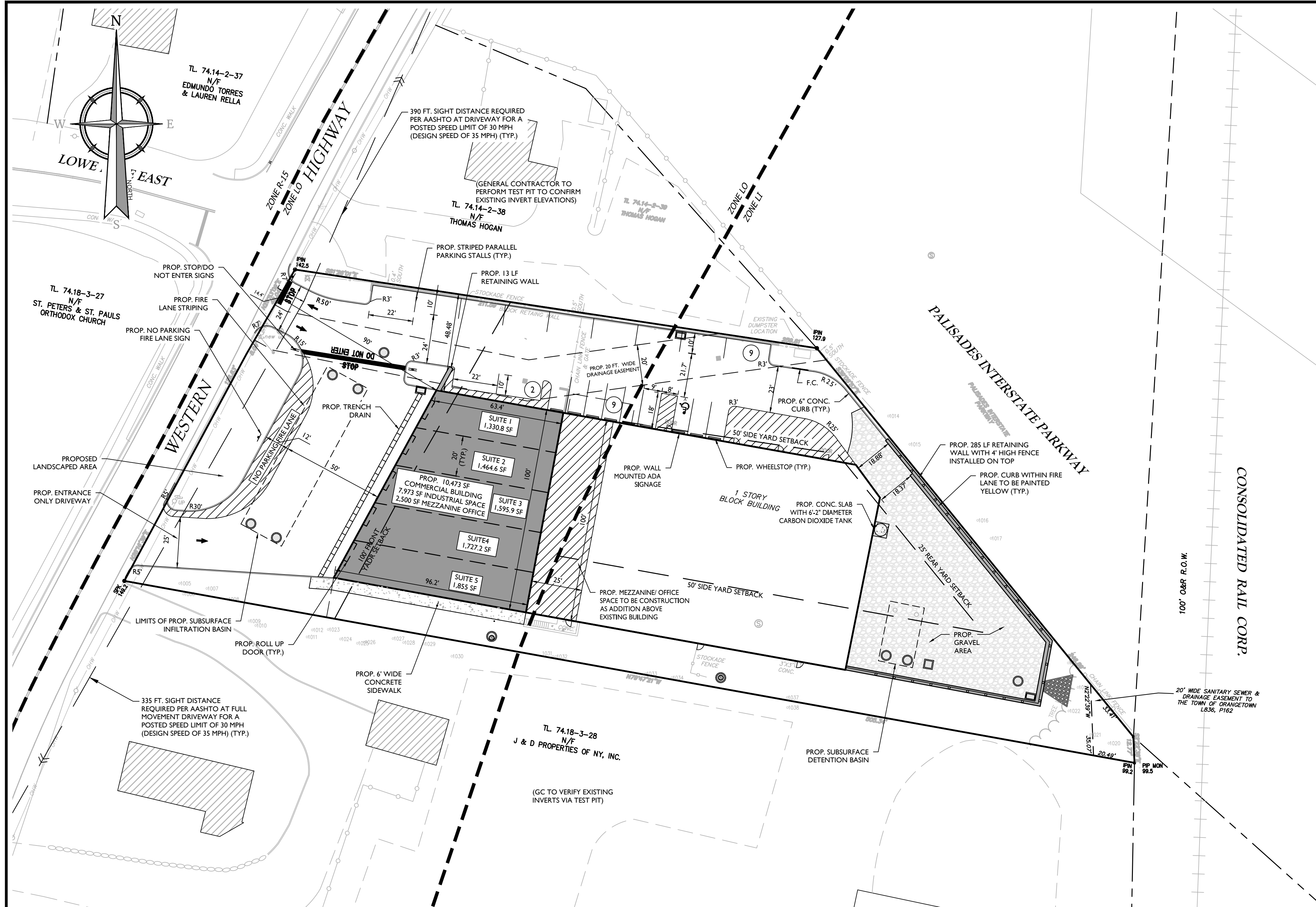
**Jesse Barrett Cokerley**  
NEW YORK LICENSED PROFESSIONAL ENGINEER  
LICENSE NUMBER: 090987-1  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
N.Y. C.O.A. #: 0017609

**PRELIMINARY SITE PLAN**  
FOR  
**WESTERN HIGHWAY ENTERPRISES LLC**  
SECTION 74.14  
BLOCK 2  
LOT 39  
HAMLET OF TAPPAN  
TOWN OF ORANGETOWN  
ROCKLAND COUNTY  
NEW YORK

**Colliers** 50 Chestnut Ridge Road, Suite 101, Montvale, NJ 07645  
Engineering & Design Phone: 845.352.0411  
COLLIERS ENGINEERING & DESIGN CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

SCALE: AS SHOWN 08/24/23 DRAWN BY: NJ CHECKED BY: JBC  
PROJECT NUMBER: 21006649A DRAWING NAME: C-DEMO  
SHEET TITLE: **DEMOLITION PLAN**  
SHEET NUMBER: 2 of 11

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



**GENERAL NOTES**

- THE SUBJECT PROPERTY IS KNOWN AS TAX LOT 74.14 BLOCK 2 LOT 39 ON THE ONLINE GIS MAP OF THE TOWN OF ORANGETOWN, ROCKLAND COUNTY.
- THE PROPERTY IS LOCATED IN THE LABORATORY OFFICE (LO) AND LIGHT INDUSTRIAL (LI) ZONING DISTRICTS AND CONTAINS A TOTAL TRACT AREA OF 66,132 SF, 1.52 ACRES.
- OWNER/APPLICANT: WESTERN HIGHWAY ENTERPRISES, LLC  
425 WESTERN HIGHWAY, SUITE #2  
TAPPAN, NY 10983  
845-398-2244
- ENGINEER: COLLIER'S ENGINEERING & DESIGN CT, P.C.  
50 CHESTNUT RIDGE ROAD  
SUITE 101  
MONTVALE, NJ 07645
- THE SUBJECT PROPERTY CURRENTLY CONTAINS TWO (2) 1 STORY BUILDINGS WITH PARKING AND TYPICAL SITE APPURTENANCES. THE APPLICANT PROPOSES TO DEMOLISH ONE BUILDING ON SITE WITHIN THE FRONT YARD OF THE SITE AND EXPAND UPON THE EXISTING BUILDING TO THE REAR OF THE PROPERTY WITH AN APPROXIMATE 7,973 SF FOOTPRINT WITH AN ADDITIONAL 2,500 SF MEZZANINE OFFICE TO BE INSTALLED ON TOP OF THE EXISTING STRUCTURE. ADDITIONAL SITE APPURTENANCES SUCH AS PARKING, LANDSCAPING, AND LIGHTING ARE ALSO PROPOSED.
- PROPOSED USE, BUSINESS AND PROFESSIONAL OFFICES ARE PERMITTED BY RIGHT WITHIN BOTH THE LI AND LO DISTRICTS WAREHOUSE ARE PERMITTED BY RIGHT WITHIN THE LI DISTRICT BUT NOT THE LO DISTRICT. (ENC)
- BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION SHOWN HEREON IS TAKEN FROM A PLAN ENTITLED "COMMERCIAL SUBDIVISION & ZIGLER PLAN", SHEET 1 OF 1, DATED MARCH 25, 2019, PREPARED BY ATZL, NASHER & SITES P.C., P.L.S. LIC. NO. 50228 OF N.Y.S. THE HORIZONTAL AND VERTICAL DATUM IS RELATIVE TO THE NEW YORK STATE PLANE COORDINATE SYSTEM EAST ZONE AND ADJUSTED TO NAD 1927.
- NO FRESHWATER WETLANDS ARE KNOWN TO EXIST ON THE SITE PER ALL AVAILABLE ONLINE MAPPING.
- NO 100 YEAR FLOOD PLAINS ARE KNOWN TO EXIST ON THE SITE PER THE FLOOD INSURANCE RATE MAP NUMBER 360686 FOR THE MUNICIPALITY OF ORANGETOWN, ROCKLAND COUNTY, NY, DATED MARCH 3, 2014 PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
- MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR THE SITE IMPROVEMENTS SHOWN HEREON MUST BE IN ACCORDANCE WITH:
  - NEW YORK STATE DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS", 2002; AS SUPPLEMENTED.
  - CURRENT PREVAILING MUNICIPAL, COUNTY, AND/OR STATE AGENCY SPECIFICATIONS, STANDARDS, CONDITIONS, AND REQUIREMENTS.
  - CURRENT PREVAILING UTILITY COMPANY/AUTHORITY SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.
  - CURRENT MANUFACTURER SPECIFICATIONS, STANDARDS, AND REQUIREMENTS.
- WATER SERVICE TO BE PROVIDED FROM THE EXISTING WATER MAIN LINE ON WESTERN

- HIGHWAY, OWNED AND OPERATED BY THE STATE WATER. PROPOSED WATER MAIN EXTENSIONS AND FIRE HYDRANT LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL, AND AMERICAN WATERWORKS ASSOCIATION STANDARDS. PIPE MATERIALS MUST BE CEMENT LINED DUCTILE IRON PIPE, CLASS 52, WITH ASPHALTIC SPOXY TYPE COATING. WATER MAINS MUST BE INSTALLED TO PROVIDE A MINIMUM 4 FEET OF COVER FROM THE TOP OF PIPE TO THE PROPOSED GRADE.
- SANITARY SEWER SERVICE MUST BE PROVIDED BY GRAVITY CONNECTION TO EXISTING SEWER MAIN RUNNING THROUGH THE SUBJECT SITE OWNED AND OPERATED BY THE ORANGETOWN SEWER DEPARTMENT. PROPOSED SEWER MAIN EXTENSIONS AND MANHOLE LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL ACCORDING TO MUNICIPAL AND ROCKLAND COUNTY HEALTH DEPARTMENT REGULATIONS. PIPE MATERIALS MUST BE PVC SDR-35, EXCEPT AS NOTED OTHERWISE ON THE PLANS. SEWER LINES, INCLUDING FORCE MAINS AND LATERALS, MUST BE INSTALLED TO PROVIDE A MINIMUM 4 FEET OF COVER FROM THE TOP OF PIPE TO PROPOSED GRADE.
- SANITARY SEWERS MUST BE SEPARATED FROM WATER MAINS BY AT LEAST 10 FEET HORIZONTALLY. IF SUCH SEPARATION IS NOT POSSIBLE, THE PIPES MUST BE IN SEPARATE TRENCHES WITH THE SANITARY SEWER AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. WHERE APPROPRIATE SEPARATION IS NOT POSSIBLE, THE SEWER MUST BE ENCASED IN CONCRETE OR CONSTRUCTED OF DUCTILE-IRON PIPE USING MECHANICAL OR SLIP ON JOINTS, FOR A DISTANCE OF 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS ARE AS FAR AWAY AS POSSIBLE FROM THE WATER LINE.
- GAS, ELECTRIC, LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE PLANS, IF REQUIRED, MUST BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND MUST BE INSTALLED PER ORDINANCE REQUIREMENTS.
- TELEPHONE, ELECTRIC, AND GAS LINES WILL BE INSTALLED UNDERGROUND. CROSSINGS OF PROPOSED PAVEMENTS WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.
- UTILITY RELOCATION SHOWN HEREON, IF ANY, ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY REPRESENT ALL REQUIRED UTILITY RELOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND/OR COORDINATING ALL REQUIRED UTILITY RELOCATIONS IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANY/AUTHORITIES.
- STORM SEWERS MUST BE CLASS III (OR HIGHER IF NOTED) REINFORCED CONCRETE PIPE (RCP) WITH "O" RING GASKETS, HIGH DENSITY POLYETHYLENE PIPE (HDPE) OR APPROVED EQUAL, AS NOTED. PROPER PIPE COVERAGE MUST BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. PIPE LENGTHS SHOWN HEREON ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- REFUSE AND RECYCLABLES MUST BE STORED WITHIN THE OUTSIDE SCREENED TRASH ENCLOSURES AS NOTED ON THE PLANS.
- TRAFFIC SIGNAGE AND STRIPING MUST CORRESPOND TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- THIS IS A SITE DEVELOPMENT PLAN AND UNLESS SPECIFICALLY NOTED ELSEWHERE HEREON, IS NOT A SURVEY.

- BUILDING FOOTPRINT DIMENSIONS SHOWN HEREON ARE APPROXIMATE. FINAL BUILDING FOOTPRINT DIMENSIONS FOR EACH DWELLING/BUILDING MUST BE FURNISHED ON THE INDIVIDUAL PLOT PLANS/ARCHITECTURAL PLANS AT THE TIME OF APPLICATION FOR A BUILDING PERMIT. ALL STRUCTURES MUST CONFORM TO THE APPROVED BULK ZONING REQUIREMENTS.
- DO NOT SCALE DRAWINGS AS THEY PERTAIN TO ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC. THEY ARE SCHEMATIC ONLY, EXCEPT WHERE DIMENSIONS ARE SHOWN THEREON.
- THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AND AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS MUST NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL APPROVALS REQUIRED HAVE BEEN OBTAINED. ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED AND THE DRAWINGS HAVE BEEN STAMPED "ISSUED FOR CONSTRUCTION". THIS MUST INCLUDE APPROVAL OF ALL CATALOG CUTS, SHOP DRAWINGS AND/OR DESIGN CALCULATIONS AS REQUIRED BY THE PROJECT OWNER AND/OR MUNICIPALITY.
- EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR MUST VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY PROPOSED CONSTRUCTIONS, TEST PITS MUST BE DUG BY THE CONTRACTOR PRIOR TO CONSTRUCTION TO ASCERTAIN EXISTING INVERTS, MATERIALS, AND SIZES. TEST PIT INFORMATION MUST BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENTS AS REQUIRED TO AVOID CONFLICTS. THE CONTRACTOR MUST NOTIFY THE UNDER SIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE REPRESENTED HEREON. SUCH CONDITIONS COULD RENDER THE DESIGNS HEREON INAPPROPRIATE OR INEFFECTIVE.
- THIS PLAN IS NOT DEPICTING ENVIRONMENTAL CONDITIONS OR A CERTIFICATION REGARDING THE PRESENCE OR ABSENCE OF ENVIRONMENTALLY IMPACTED SITE CONDITIONS. MASER CONSULTING HAS PERFORMED NO EXPLORATORY OR TESTING SERVICES, INTERPRETATIONS, CONCLUSIONS OR OTHER SITE ENVIRONMENTAL SERVICES RELATED TO THE DETERMINATION OF THE POTENTIAL FOR CHEMICAL, TOXIC, RADIOACTIVE OR OTHER TYPE OF CONTAMINANTS AFFECTING THE PROPERTY AND THE UNDERSIGNED PROFESSIONAL IS NOT QUALIFIED TO DETERMINE THE EXISTENCE OF SAME. SHOULD ENVIRONMENTAL CONTAMINATION OR WASTE BE DISCOVERED, THE OWNER AND CONTRACTOR MUST BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LAWS AND REGULATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR PROJECT SAFETY, INCLUDING PROVISION OF ALL APPROPRIATE SAFETY DEVICES AND TRAINING REQUIRED.
- THESE GENERAL NOTES MUST APPLY TO ALL SHEETS IN THIS SET.
- ALL UTILITIES, INCLUDING ELECTRIC AND TELEPHONE SERVICE, SHALL BE INSTALLED UNDERGROUND.
- THIS PLAN DOES NOT CONFLICT WITH THE COUNTY OFFICIAL MAP AND HAS BEEN APPROVED IN THE MANNER SPECIFIED BY SECTION 239.8M OF THE GENERAL MUNICIPAL LAW OF THE STATE OF NEW YORK.
- SIDEWALKS AND CURBS SHALL BE INSTALLED IN ACCORDANCE WITH THE HIGHWAY DEPARTMENT'S SPECIFICATIONS FOR SIDEWALKS AND CURBS.

**PARKING REQUIREMENTS**

- REQUIRED:
- FOR INDUSTRIAL USE:  
1 PARKING SPACE IS REQUIRED PER EACH 2 EMPLOYEES OR 300 SF OF GROSS FLOOR AREA  
EXISTING INDUSTRIAL SPACE TO REMAIN = 7,931 SF  
PROPOSED INDUSTRIAL SPACE = 7,973 SF
- TOTAL INDUSTRIAL SPACE = 15,904 SF  
ANTICIPATED EMPLOYEES = 15,904 SF @ 1/1000 = 16 EMPLOYEES  
REQUIRED PARKING: 1 SPACE PER 2 EMPLOYEES = 16/2 = 8 PARKING SPACES REQUIRED
- \* PER ITE PARKING GENERATION MANUAL, 5TH EDITION, (P.51) - WAREHOUSING PEAK PERIOD PARKING DEMAND PER 1000 SF GFA
- FOR OFFICE USE:  
1 PARKING SPACE IS REQUIRED FOR EACH 200 SF OF GROSS FLOOR AREA  
EXISTING OFFICE SPACE TO REMAIN = 7,974 SF  
PROPOSED OFFICE SPACE = 2,500 SF
- TOTAL OFFICE SPACE = 10,474 SF  
REQUIRED PARKING: 10,474 SF / 200 = 52.37 = 54 PARKING SPACES REQUIRED
- TOTAL PARKING REQUIREMENT FOR BOTH USES = 8 + 54 = 62 SPACES REQUIRED
- PROPOSED:  
20 SPACES PROVIDED (VARIANCE)
- CHAPTER 43, TABLE 31.1.1, COLUMN 7 - NO PARKING IS PERMITTED IN ANY REQUIRED YARD UNLESS PERMITTED BY ANY BOARD OR TOWN AGENCY HAVING JURISDICTION (VARIANCE)
- STALL SIZE: 9' WIDE X 18' LONG (COMPLIES)

**DISTRICTS**

- SCHOOL DISTRICT - SOUTH ORANGETOWN CENTRAL SCHOOL DISTRICT 1
- FIRE DISTRICT - TAPPAN
- WATER DISTRICT - PEARL RIVER
- SEWER DISTRICT - ORANGETOWN SEWER DISTRICT
- LIGHTING DISTRICT - TOWN OF ORANGETOWN

SIDE YARD SETBACK WITHIN LO DISTRICT ARE NOT SHOWN SINCE THEY OVERLAP. REFER ZONING TABLE FOR EXISTING AND PROPOSED SETBACK.

WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, SOIL SHALL NOT BE EXPOSED MORE THAN SEVEN (7) DAYS. CONTRACTOR SHALL INITIATE STABILIZATION MEASURES IN ACCORDANCE WITH THE SOIL EROSION & SEDIMENT CONTROL PLAN.

**ZONING TABLE**

**TABLE OF BULK REQUIREMENTS  
ZONE: LO (LABORATORY OFFICE DISTRICT)**

ITEM	REQUIRED LO (USE GROUP X)	EXISTING	PROPOSED
MIN. LOT AREA	2 ACRES	± 32,072 SF (± 0.74 ACRES)	NO CHANGE (ENC)
MAX. F.A.R.	0.40	0.05	0.35
MAX LOT COVERAGE	75%	76.30%	82.18% (V)
MIN. LOT WIDTH	300'	178'	NO CHANGE (ENC)
MIN. STREET FRONTAGE	150'	175'	NO CHANGE (ENC)
REQUIRED FRONT YARD	100'	75.54'	90' (V)
MIN. REQUIRED SIDE YARD	50"	19.79' (SOUTH) 50.07' (NORTH)	19.79' (SOUTH) (ENC) 48.48' (NORTH) (V)
MIN. REQUIRED TOTAL SIDE YARD	100"	69.86'	68.27' (V)
MIN. REQUIRED REAR YARD	100'	N/A	N/A
MAX. BUILDING HEIGHT	3' PER FOOT OF DISTANCE FROM DESIGNATED STREET LINE (22.5)	± 20'	17'

NOTES:  
(ENC) = EXISTING NON CONFORMITY  
(V) = VARIANCE REQUIRED

\* PER TOWN ZONING CODE SECTION 5.24, IF THE LOT WIDTH IS LESS THAN THE MINIMUM REQUIREMENT SET FORTH FOR GROUPS X AND CC OF THE BULK TABLE, THE REQUIRED SIDE YARD MAY BE REDUCED. THE TOTAL WIDTH OF EACH REQUIRED SIDE YARD MAY BE REDUCED ONE FOOT FOR EACH FOOT THE LOT WIDTH IS LESS THAN 300 FEET, PROVIDED THAT NO REQUIRED SIDE YARD MAY BE LESS THAN 50 FEET

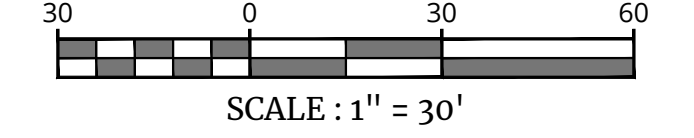
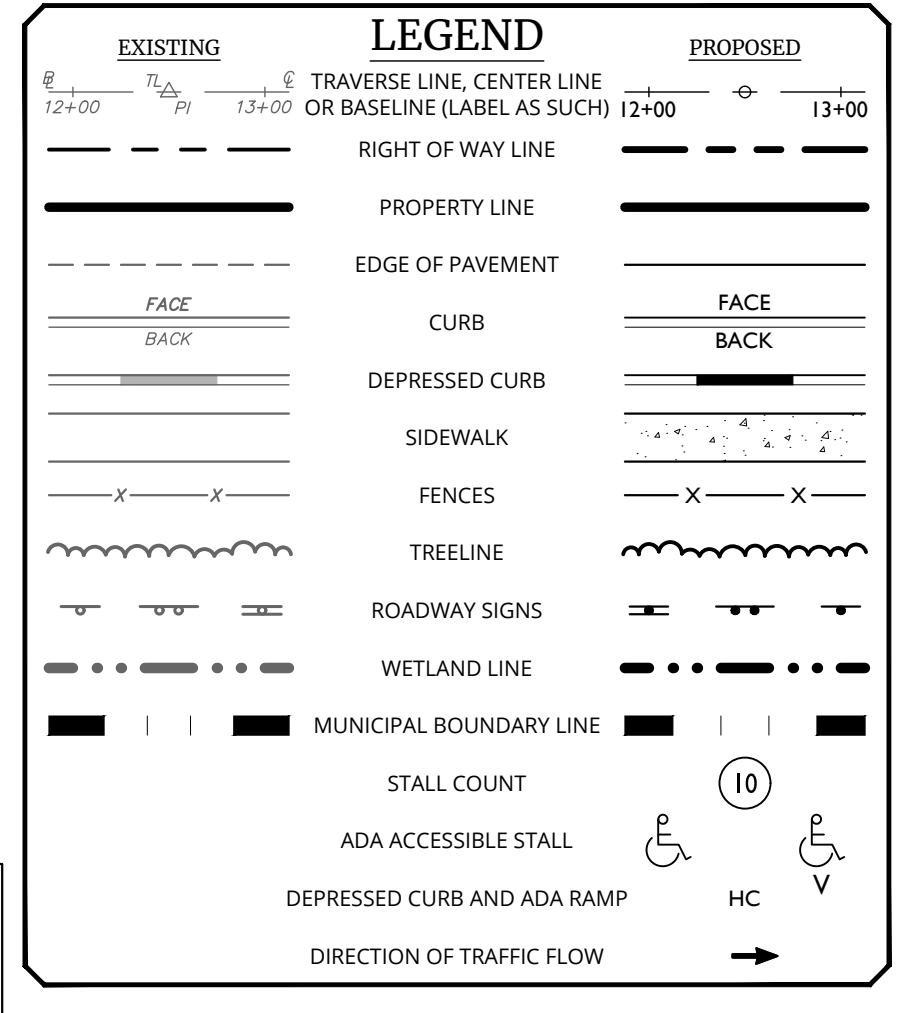
**ZONING TABLE**

**TABLE OF BULK REQUIREMENTS  
ZONE: LI (LIGHT INDUSTRIAL DISTRICT)**

ITEM	REQUIRED LI (USE GROUP QQ)	EXISTING	PROPOSED
MIN. LOT AREA	2 ACRES	± 34,060.4 (± 0.78 ACRES)	NO CHANGE (ENC)
MAX. F.A.R.	0.50	0.28	0.45
MAX LOT COVERAGE	80%	65.07%	57.56%
MIN. LOT WIDTH	150'	178'	NO CHANGE (ENC)
MIN. STREET FRONTAGE	150'	N/A	N/A
REQUIRED FRONT YARD	50'	N/A	NO CHANGE (ENC)
MIN. REQUIRED SIDE YARD	50'	19.79' (SOUTH) 51.95' (NORTH)	NO CHANGE (ENC)
MIN. REQUIRED TOTAL SIDE YARD	100'	71.74'	NO CHANGE (ENC)
MIN. REQUIRED REAR YARD	50'	21.38'	NO CHANGE (ENC)
MAX. BUILDING HEIGHT	6' PER FOOT OF DISTANCE FROM DESIGNATED STREET LINE (45)	± 20'	± 30'

NOTES:  
(ENC) = EXISTING NON CONFORMITY  
(V) = VARIANCE REQUIRED

\* WHERE A LOT LINE IN AN LO, LI OR LIO DISTRICT ABUTS A RAILROAD RIGHT-OF-WAY, THE NORMALLY REQUIRED REAR OR SIDE YARD MAY BE REDUCED TO 25', AND THE MAXIMUM BUILDING SHALL APPLY FOR THAT PORTION OF BUILDING OVER 25' IN HEIGHT



**Colliers**  
Engineering & Design

www.colliersengineering.com

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is issued. This drawing may not be copied, revised, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as **MASER CONSULTING**

**811** PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION OF EXCAVATIONS, DISBURSES, OR ANY PAVING PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

Know what's below. Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

DATE	DESCRIPTION
08/22/23	REVISED PER PROFFILING BOARD COMMENTS
1	

**Jesse Barrett Cokerley**  
NEW YORK LICENSED PROFESSIONAL ENGINEER  
LICENSE NUMBER: 090987-1  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
N.Y. C.O.A.#: 0017609

**PRELIMINARY SITE PLAN**  
FOR  
**WESTERN HIGHWAY ENTERPRISES LLC**

**SECTION 74.14  
BLOCK 2  
LOT 39**

**HAMLET OF TAPPAN  
TOWN OF ORANGETOWN  
ROCKLAND COUNTY  
NEW YORK**

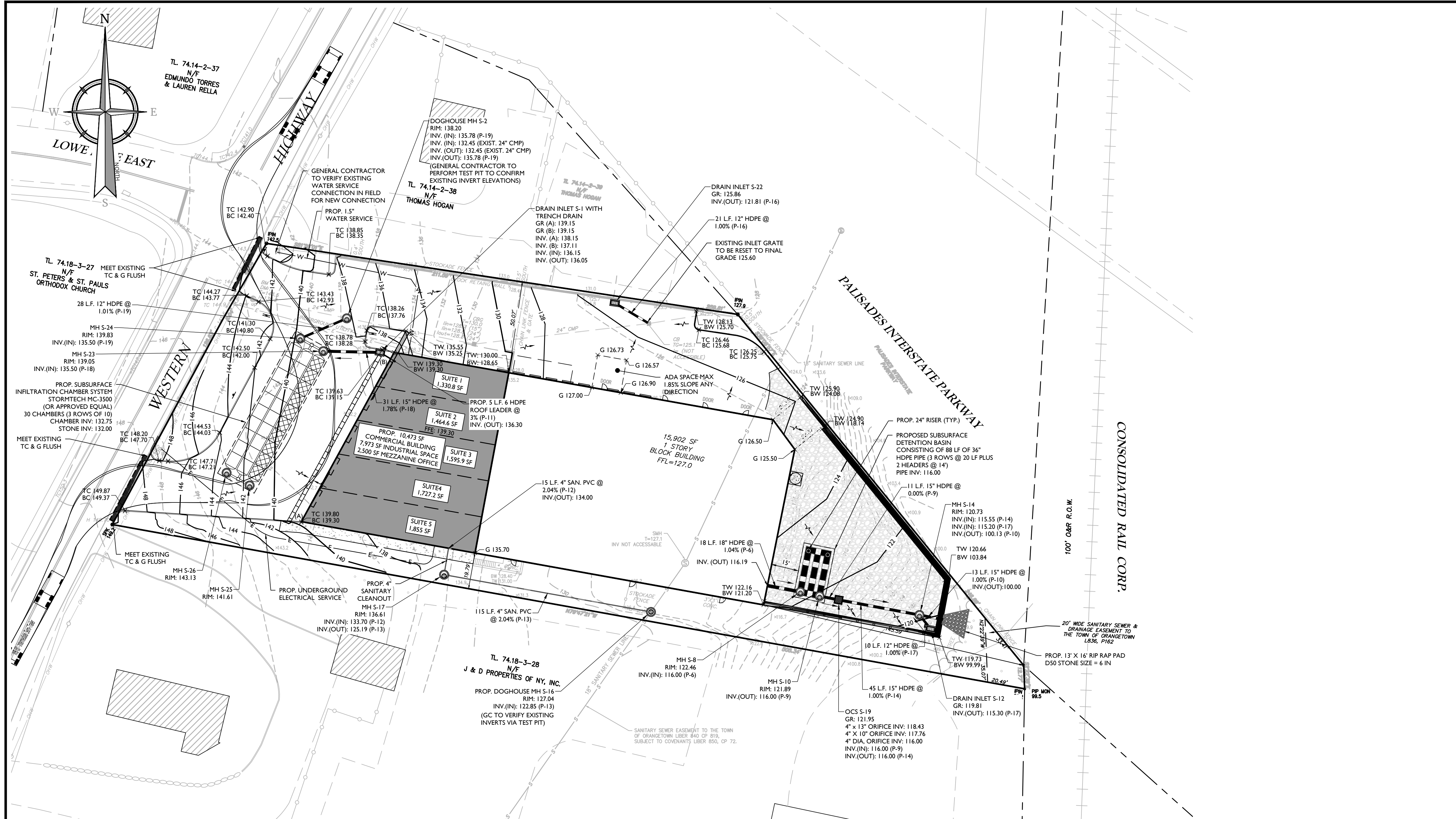
**Colliers** 50 Chestnut Ridge Road, Suite 101, Montvale, NJ 07645  
Phone: 845.352.0411  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

SCALE: AS SHOWN DATE: 08/24/23 DRAWN BY: NJ JBC CHECKED BY: JBC  
PROJECT NUMBER: 21006649A DRAWING NUMBER: CLAYT

SHEET TITLE: **LAYOUT PLAN**

SHEET NUMBER: **3 of 11**

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



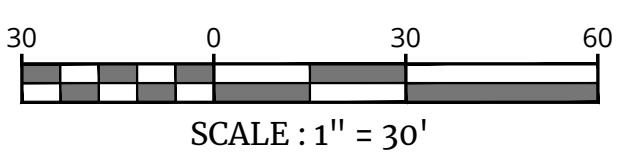
**UTILITY NOTES**

- LOCATION OF ALL EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. ALL CONNECTION POINTS SHALL BE VERIFIED IN FIELD BY GC AND ENGINEER. SHALL BE NOTIFIED IMMEDIATELY REGARDING ANY DISCREPANCIES. CONSTRUCTION SHALL COMMENCE BEGINNING AT LOWEST INVERT AND PROGRESS UP GRADIENT. PROPOSED CROSSING OF EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY AND/OR SERVICES THAT ARE TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE TO REMAIN DURING SITE CONSTRUCTION.
- THE CONTRACTOR TO INSTALL ALL STORM/SANITARY SEWERS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.
- ALL NEW UTILITIES/SERVICES TO BE INSTALLED UNDERGROUND. ALL TO BE INSTALLED IN ACCORDANCE WITH THE LOCAL UTILITY/SERVICE PROVIDER SPECIFICATIONS AND STANDARDS.
- WATER SERVICE TO BE PROVIDED FROM THE EXISTING WATER MAIN LINE. PROPOSED WATER MAIN EXTENSIONS AND FIRE HYDRANT LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL, ACCORDING TO THE NEW YORK DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATIONS, AMERICAN WATERWORKS ASSOCIATION STANDARDS. PIPE MATERIALS SHALL BE CEMENT LINED DUCTILE IRON PIPE, CLASS 52, WITH ASPHALTIC EPOXY TYPE COATING. ALL WATER SERVICE PIPES TO BE 1" DIAMETER TYPE K SEAMLESS COPPER. WATER MAINS SHALL BE INSTALLED TO PROVIDE A MINIMUM 4 FEET OF COVER FROM THE TOP OF PIPE TO THE PROPOSED GRADE.
- SANITARY SEWER SERVICE SHALL BE PROVIDED BY GRAVITY CONNECTION TO EXISTING SEWER MAIN. PROPOSED SEWER MAIN EXTENSIONS AND MANHOLE LOCATIONS ARE SUBJECT TO MUNICIPAL REVIEW AND APPROVAL, ACCORDING TO NEW YORK DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATIONS. PIPE MATERIALS SHALL BE PVC SDR-35, EXCEPT AS NOTED OTHERWISE ON THE PLANS. EXCEPT WHERE SHALLOWER DEPTHS ARE PERMITTED BY THE MUNICIPALITY OR UTILITY AUTHORITY, SEWER LINES, INCLUDING FORCE MAINS AND LATERALS, SHALL BE INSTALLED TO PROVIDE A MINIMUM 4 FEET OF COVER FROM THE TOP OF PIPE TO PROPOSED GRADE.
- ALL MATERIALS USED FOR SANITARY SEWER SYSTEMS SHALL BE MANUFACTURED IN THE UNITED STATES, WHEREVER AVAILABLE, AS GOVERNED BY P.L. 1982, c. 107, EFFECTIVE DATE OCTOBER 3, 1982.
- SANITARY SEWERS SHALL BE SEPARATED FROM WATER MAINS BY AT LEAST 18 FEET HORIZONTALLY. IF SUCH SEPARATION IS NOT POSSIBLE, THE PIPES SHALL BE IN SEPARATE TRENCHES WITH THE SANITARY SEWER AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN. ANY WATER SERVICE LOCATED IN THE SAME TRENCH AS A SEWER LINE MUST BE LOCATED ABOVE AND TO ONE SIDE OF THE SEWER LINE AT LEAST ONE FOOT AWAY FROM THE SEWER LINE. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS ARE AS FAR AWAY AS POSSIBLE FROM THE WATER LINE.
- GAS, ELECTRIC, LIGHTING, CABLE TELEVISION, AND ELECTRICAL SERVICE PLANS, IF REQUIRED, SHALL BE PREPARED BY THE RESPECTIVE UTILITY COMPANIES THAT SERVICE THE AREA PRIOR TO SITE CONSTRUCTION AND SHALL BE INSTALLED PER ORDINANCE REQUIREMENTS.
- TELEPHONE, ELECTRIC, AND GAS LINES WILL BE INSTALLED UNDERGROUND. CROSSINGS OF PROPOSED PAVEMENTS WILL BE INSTALLED PRIOR TO THE CONSTRUCTION OF PAVEMENT BASE COURSE.
- UTILITY RELOCATIONS SHOWN HEREON, IF ANY, ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT REPRESENT ALL REQUIRED UTILITY RELOCATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING AND/OR COORDINATING ALL REQUIRED UTILITY RELOCATIONS IN COOPERATION WITH THE RESPECTIVE UTILITY COMPANY/AUTHORITIES.
- STORM SEWERS SHALL BE CLASS III (OR HIGHER IF NOTED) REINFORCED CONCRETE PIPE (RCP) WITH "O" RING GASKETS OR INTERNALLY PRELUBRICATED GASKET (TYLX SUPERSEAL OR EQUIVALENT), 16 GAUGE ALUMINIZED TYPE II COATED CORRUGATED PIPE (CMP), ADS N-12 HIGH DENSITY POLYETHYLENE PIPE (HDPE), HANCOCK SURE-LOK HIGH DENSITY POLYETHYLENE PIPE (HDPE) OR APPROVED EQUAL AS NOTED. PROPER PIPE COVERAGE SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. PIPE LENGTHS SHOWN HEREON ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
- ALL UTILITIES, INCLUDING ELECTRIC AND TELEPHONE SERVICE, SHALL BE INSTALLED UNDERGROUND.

**ADA NOTES TO CONTRACTOR**

- CONTRACTORS MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (HANDICAPPED) ACCESSIBLE COMPONENTS FOR THE SITE. THESE COMPONENTS, AS CONSTRUCTED, MUST COMPLY WITH THE LATEST ADA STANDARDS FOR ACCESSIBLE DESIGN. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACE, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EGRESS, MUST COMPLY WITH THESE ADA CODE REQUIREMENTS. THESE INCLUDED, BUT ARE NOT LIMITED TO THE FOLLOWING:
  - PARKING SPACES AND PARKING AISLES - SLOPE MUST NOT EXCEED 1:48 (1/4" PER FOOT OR NORMALLY 2.0%) IN ANY DIRECTION
  - CURB RAMPS - SLOPES MUST NOT EXCEED 1:12 (8.33%) FOR A MAXIMUM OF SIX (6) FEET. CURB RAMPS MUST NOT RISE MORE THAN 6" WITHOUT A HANDICAP RAMP.
  - LANDINGS - MUST BE PROVIDED AT EACH END OF RAMPS, MUST PROVIDE POSITIVE DRAINAGE, AND MUST NOT EXCEED 1:48 (1/4" PER FOOT OR NORMALLY 2.0%) CROSS SLOPE.
  - PATH OF TRAVEL ALONG ACCESSIBLE ROUTE - MUST PROVIDE A 36 INCH OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL. (CAR OVERHANGS CANNOT EXCEED 1:48 (1/4" PER FOOT OR NORMALLY 2.0%) IN CROSS SLOPE. WHERE PATH OF TRAVEL WILL BE GREATER THAN 120 (5.0%), AN ADA RAMP WITH A MAXIMUM SLOPE OF 1:12 (8.33%), FOR A MAXIMUM DISTANCE OF 30 FEET, MUST BE PROVIDED. THE RAMP MUST HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1:48 (1/4" PER FOOT OR NORMALLY 2.0%) FOR POSITIVE DRAINAGE.
  - DOORWAYS - MUST HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE UP THE DOOR THAT IS SLOPED NO MORE THAN 1:48 (1/4" PER FOOT OR NORMALLY 2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO LESS THAN 60 INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS (SEE APPLICABLE CODE SECTIONS).
- IT IS RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE OFFICIAL PRIOR TO COMMENCING WORK.
- AT ALL CROSSWALKS, GC IS TO MAINTAIN A MAXIMUM 2% CROSS SLOPE AND MAXIMUM 5% RUNNING SLOPE. NOTIFY ENGINEER OF ANY DISCREPANCIES IN FIELD.
- CONTRACTOR MUST ENSURE A MAXIMUM OF 1/4" VERTICAL CHANGE IN LEVEL ALONG THE ACCESSIBLE PATH. WHERE A CHANGE IN LEVEL BETWEEN 1/4" AND 1/2" EXISTS, CONTRACTOR MUST ENSURE THAT THE TOP OF 1/4" CHANGE IN LEVEL IS BEVELED WITH A SLOPE NOT STEEPER THAN 1:2.
- OPENINGS (GAPS OR HORIZONTAL SEPARATION) ALONG ACCESSIBLE PATH MUST NOT ALLOW PASSAGE OF A SPHERE GREATER THAN 1/2".

EXISTING	LEGEND	PROPOSED
	TRAVERSE LINE, CENTER LINE OR BASELINE (LABEL AS SUCH)	
	RIGHT OF WAY LINE	
	PROPERTY LINE	
	EDGE OF PAVEMENT	
	FACE	
	BACK	
	DEPRESSED CURB	
	SIDEWALK	
	FENCES	
	TREELINE	
	ROADWAY SIGNS	
	WETLAND LINE	
	MUNICIPAL BOUNDARY LINE	
	B' INLET	
	E' INLET	
	STORM MANHOLE	
	SANITARY MANHOLE	
	FLARED END SECTION	
	HEADWALL	
	HYDRANT	
	POLE MOUNTED LIGHT	
	CONTOURS	
	SPOT ELEVATION	
	DIRECTION OF OVERLAND FLOW	
	TOP OF CURB ELEVATION	
	BOTTOM OF CURB ELEVATION	
	TOP OF DEPRESSED CURB ELEVATION	



**Colliers**  
Engineering & Design  
www.colliersengineering.com

Doing Business as **MASER**  
PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

**811**  
Know what's below. Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	08/22/23	NJ	REVISED PER PROPLANNING BOARD COMMENTS

**Jesse Barrett Cokerley**  
NEW YORK LICENSED PROFESSIONAL ENGINEER  
LICENSE NUMBER: 090987-1  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
N.Y. C.O.A.#: 0017609

**PRELIMINARY SITE PLAN**  
FOR  
**WESTERN HIGHWAY ENTERPRISES LLC**  
SECTION 74.14  
BLOCK 2  
LOT 39  
HAMLET OF TAPPAN  
TOWN OF ORANGETOWN  
ROCKLAND COUNTY  
NEW YORK

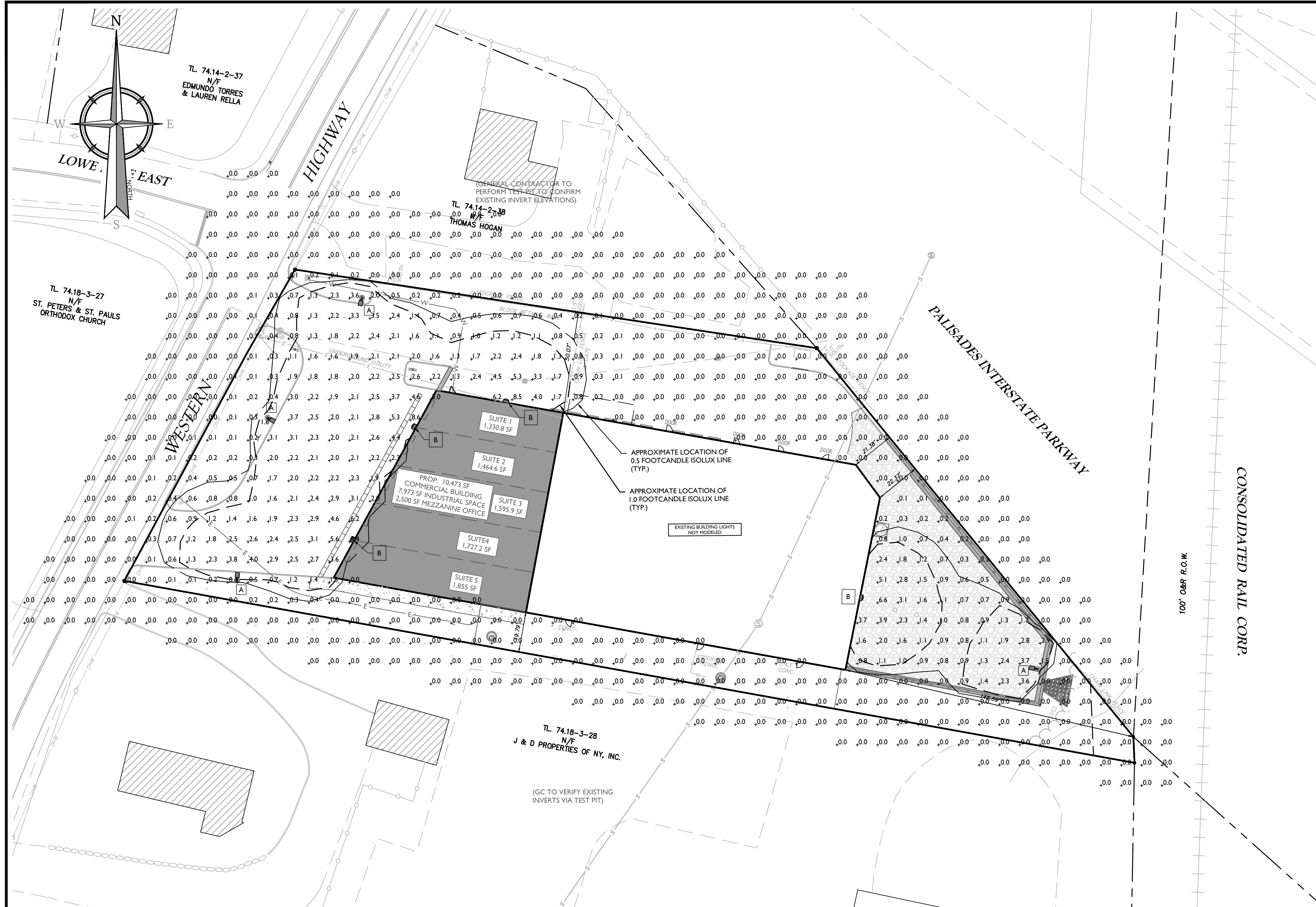
**Colliers** Engineering & Design  
50 Chestnut Ridge Road, Suite 101  
Montvale, NJ 07645  
Phone: 845.352.0411  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

SCALE: AS SHOWN  
DATE: 08/24/23  
DRAWN BY: NJ  
CHECKED BY: JBC  
PROJECT NUMBER: 21005649A  
DRAWING NAME: C-GRAD

**GRADING DRAINAGE & UTILITY PLAN**  
SHEET NUMBER:  
4 of 11

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

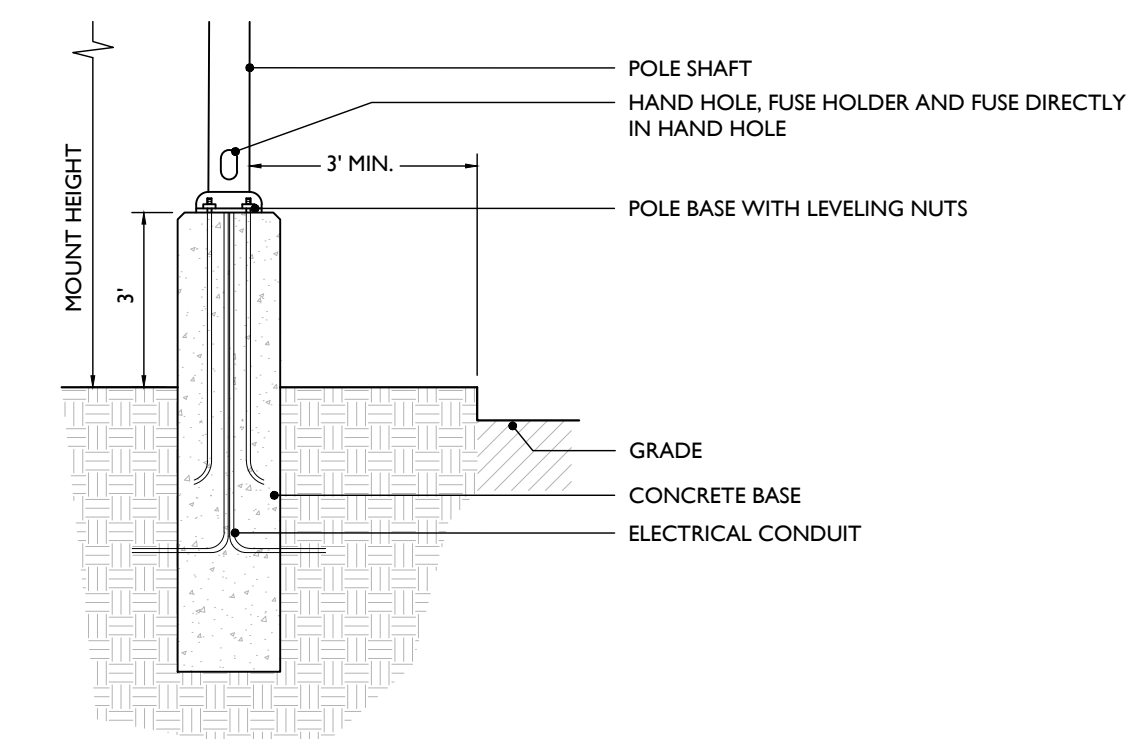




**GENERAL LIGHTING NOTES**

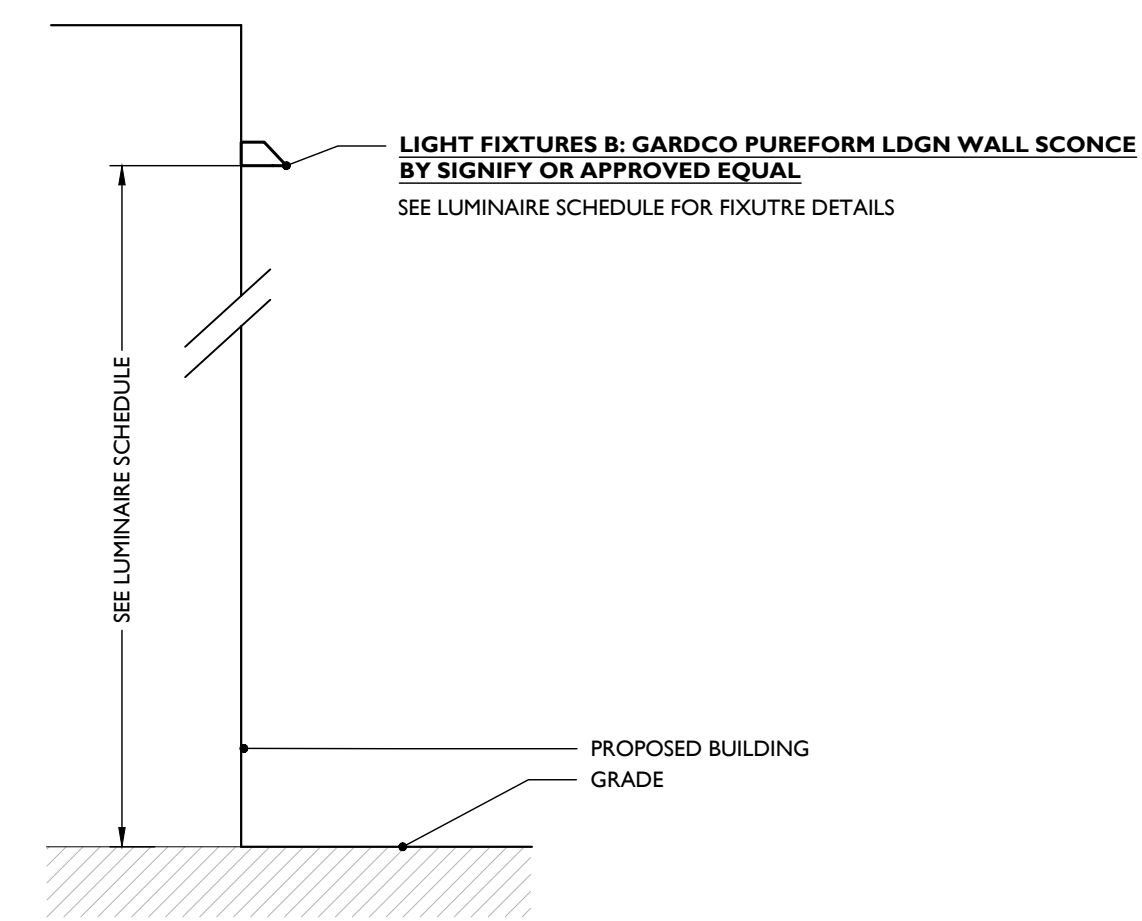
- THIS LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER. ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.
- THE LIGHT LOSS FACTORS USED IN THESE LIGHTING CALCULATIONS ARE 0.9 FOR ALL LED LUMINAIRES.
- THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ALL ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT ELEVATION ZERO (GROUND LEVEL) UNLESS OTHERWISE NOTED.
- THE LUMINAIRES, LAMPS AND LENSES SHALL BE REGULARLY INSPECTED/MAINTAINED TO INSURE THAT THEY FUNCTION PROPERLY. THIS WORK MAY INCLUDE, BUT IS NOT LIMITED TO, VISUAL INSPECTIONS, CLEANING OF LENSES, AND RELAMPING (IF NECESSARY) AT LEAST ONCE EVERY SIX (6) MONTHS.
- WHERE APPLICABLE, THE EXISTING CONDITION LIGHT LEVELS ILLUSTRATED ARE REPRESENTATIVE OF AN APPROXIMATION UTILIZING LABORATORY DATA FOR SIMILAR FIXTURES, UNLESS ACTUAL FIELD MEASUREMENTS ARE TAKEN WITH A LIGHT METER. DUE TO FACTORS SUCH AS FIXTURE MAINTENANCE, EQUIPMENT TOLERANCES, WEATHER CONDITIONS, ETC., ACTUAL LIGHT LEVELS MAY DIFFER. EXISTING LIGHT LEVELS DEPICTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE.
- THIS LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, POWER SYSTEM, CONDUITS, WIRING AND OTHER ELECTRICAL COMPONENTS ARE THE RESPONSIBILITY OF THE ARCHITECT AND/OR LIGHTING CONTRACTOR AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THESE ITEMS SHALL BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION OF LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES.
- ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
- LIGHTING CONTRACTOR TO COORDINATE WITH THE PROJECT ARCHITECT REGARDING POWER SOURCE FROM WITHIN THE BUILDING AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT.
- THE LIGHTING CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE SITE PLAN, INCLUDING BUT NOT LIMITED TO GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND GOVERNMENTAL REGULATIONS.
- THESE PLANS ARE TO BE USED FOR LIGHTING PURPOSES ONLY.
- LUMINAIRES, POLES, MOUNTS, AND WALL SCONCES ARE TO BE BLACK.
- POLE MOUNTED FIXTURES SHALL BE PLACED A MINIMUM OF THREE (3) FEET BEHIND CURBS OR IN CAR PARKING AREAS.
- POLE LOCATIONS ARE APPROXIMATE AND MAY VARY DUE TO SPECIFIC SITE CONDITIONS. THE LIGHTING CONTRACTOR SHALL FIELD VERIFY POLE LOCATIONS IN ORDER TO ACCOMMODATE UTILITIES AND PAVEMENT.
- CONTRACTOR TO PROVIDE SHOP DRAWINGS OF LIGHT FIXTURES FOR REVIEW AND APPROVAL.
- CONCRETE FOOTINGS FOR POLE MOUNTED LIGHTS TO BE DESIGNED, SIGNED AND SEALED BY A NY LICENSED ENGINEER.
- ELECTRICAL DESIGN FOR SITE LIGHTING TO BE DESIGNED BY OTHERS.
- THIS PLAN EXCLUDES EMERGENCY LIGHTING ABOVE DOORWAYS.
- THIS PLAN EXCLUDES SOFFIT LIGHTS.
- ALL UTILITIES, INCLUDING ELECTRIC AND TELEPHONE SERVICE, SHALL BE INSTALLED UNDERGROUND.

LUMINAIRE SCHEDULE						
KEY	QTY.	DESCRIPTION	ARRANGEMENT	MTG. HT.	LUMENS	CATALOG #
A	4	ECOFORM AREA LED ECF - SMALL, 32 LED'S, 4000K CCT, TYPE 4 OPTIC	SINGLE	15'	6,048	ECF-S-32L-530A-NW-G2.4-HIS
B	4	PUREFORM LDGN SCONCE (PWS), 42 LED'S, 4000K CCT, TYPE 4 OPTIC	WALL MOUNTED	12'	8,300	PWS-48L-400-NW-G2.4



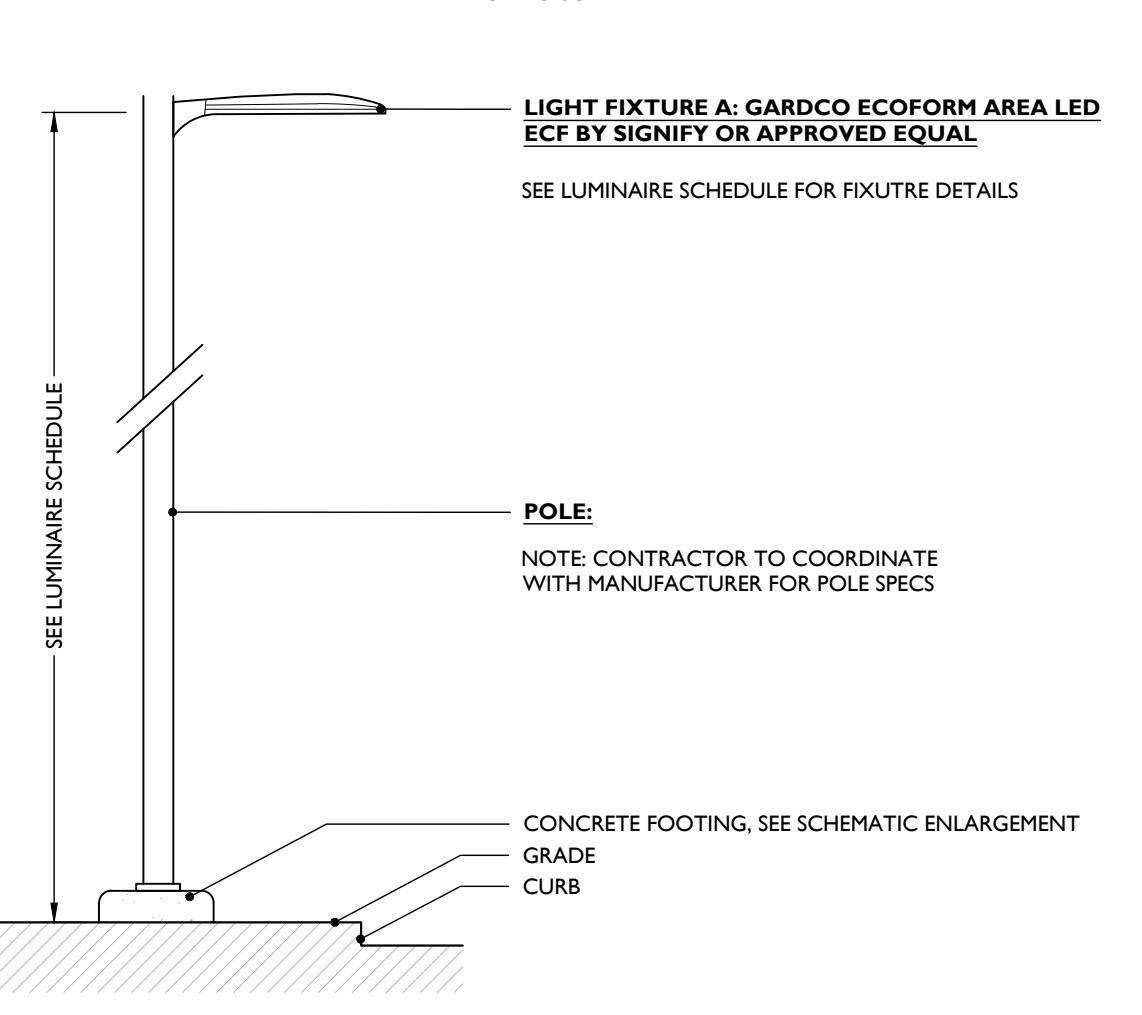
- NOTES:
- FOOTING SHOWN IS SCHEMATIC ONLY.
  - SHOP DRAWINGS AND CALCULATIONS FOR THE DESIGN AND SIZING OF THE CONCRETE FOOTING SHALL BE PREPARED BY A NY STATE LICENSED PROFESSIONAL ENGINEER, AND SHALL BE PROVIDED BY THE CONTRACTOR FOR APPROVAL PRIOR TO CONSTRUCTION.
  - SITE ELECTRICAL CONTRACTOR TO COORDINATE LOCATED OF EASEMENTS, UNDERGROUND UTILITIES, AND DRAINAGE AREAS BEFORE DRILLING POLE BASES.

**CONCRETE FOOTING SCHEMATIC DETAIL**



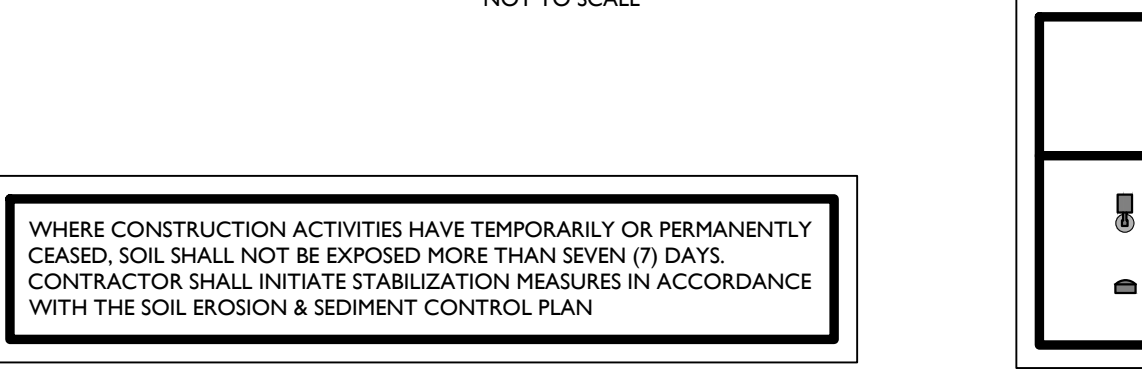
- NOTES:
- LIGHT TO BE MANUFACTURED BY LSI OR APPROVED EQUAL.
  - LIGHT FINISH TO BE WHITE.
  - MOUNTING HEIGHT TO BE MEASURED FROM FINISHED EXTERIOR GRADE TO LIGHT SOURCE.
  - MOUNTING LOCATIONS TO BE COORDINATED WITH ARCHITECTURAL PLANS.

**WALL MOUNTED LUMINAIRE DETAIL**



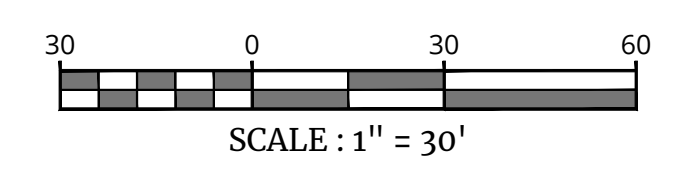
- NOTES:
- LIGHT AND POLE TO BE MANUFACTURED BY LSI OR APPROVED EQUAL.
  - LIGHT AND POLE FINISH TO BE WHITE.
  - MOUNTING HEIGHT TO BE MEASURED FROM EXTERIOR FINISHED GRADE TO LIGHT SOURCE.

**POLE MOUNTED LUMINAIRE DETAIL**



WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, SOIL SHALL NOT BE EXPOSED MORE THAN SEVEN (7) DAYS. CONTRACTOR SHALL INITIATE STABILIZATION MEASURES IN ACCORDANCE WITH THE SOIL EROSION & SEDIMENT CONTROL PLAN

THIS PLAN TO BE UTILIZED FOR LIGHTING PURPOSES ONLY.



**Colliers**  
Engineering & Design  
www.colliersengineering.com  
Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is loaned. This drawing may not be copied, revised, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as **MASER CONSULTING**  
**811** PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE.  
Know what's below. Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	08/22/23	NJ	REVISED PER PRELIMINARY BOARD COMMENTS

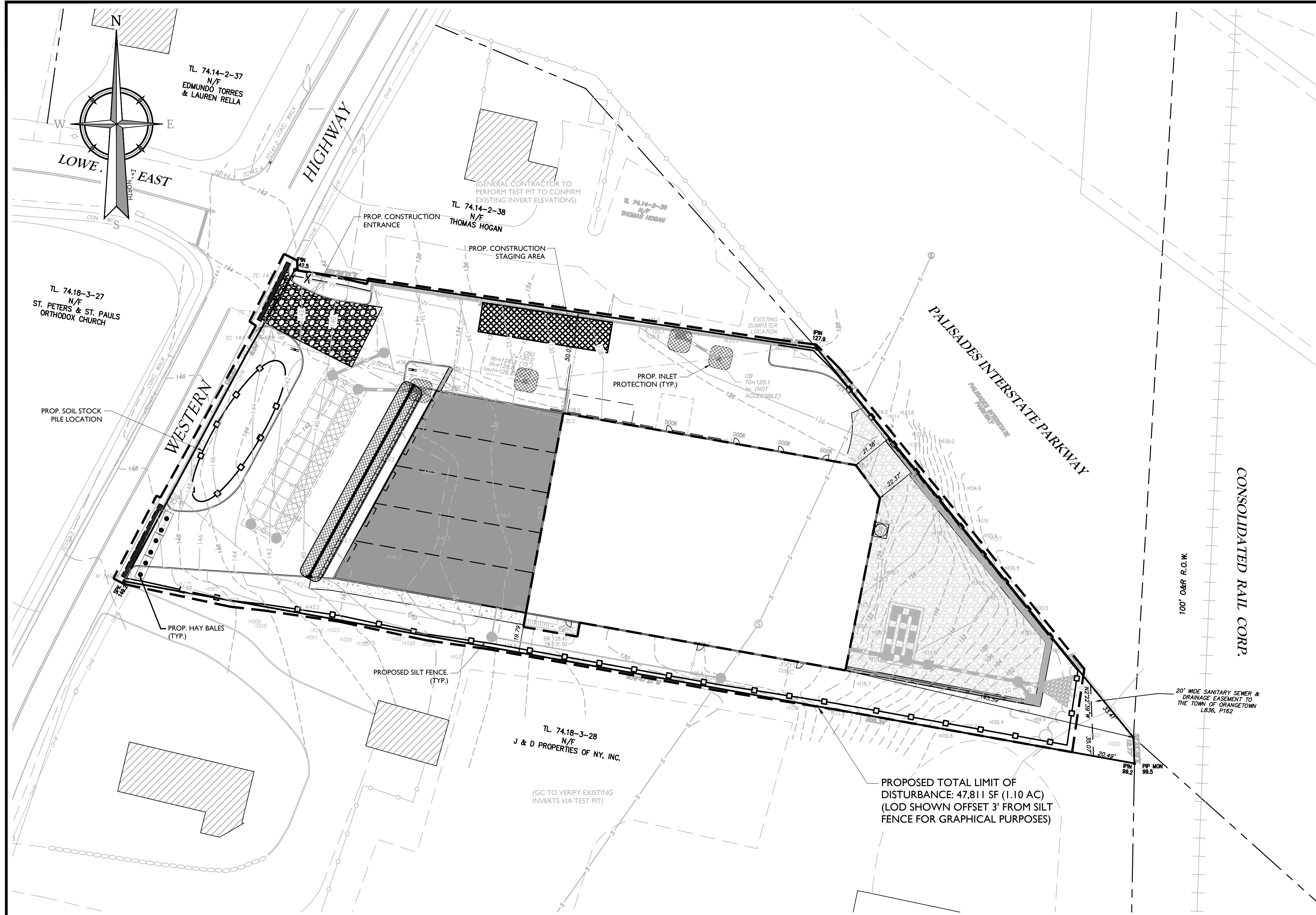
**Jesse Barrett Cokley**  
NEW YORK LICENSED PROFESSIONAL ENGINEER  
LICENSE NUMBER: 090987-1  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
N.Y. C.O.A. #: 0077609

**PRELIMINARY SITE PLAN**  
FOR  
**WESTERN HIGHWAY ENTERPRISES LLC**  
SECTION 74.14  
BLOCK 2  
LOT 39  
HAMLET OF TAPPAN  
TOWN OF ORANGETOWN  
ROCKLAND COUNTY  
NEW YORK

**Colliers** 50 Chestnut Ridge Road, Suite 101, Montvale, NJ 07645  
Engineering & Design Phone: 845.352.0411  
COLLIERS ENGINEERING & DESIGN CT, P.C. DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

SCALE: AS SHOWN DATE: 08/24/23 DRAWN BY: JAG CHECKED BY: JBC  
PROJECT NUMBER: 21005649A DRAWING NAME: CLIGHT  
SHEET TITLE: LIGHTING PLAN  
SHEET NUMBER: 6 of 11

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



**SOIL EROSION AND SEDIMENT CONTROL NOTES**

- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN FIVE (5) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
- PERMANENT VEGETATION TO BE SEED OR SODDED ON ALL EXPOSED AREAS WITHIN FIVE (5) DAYS AFTER FINAL GRADING. MULCHING IS REQUIRED ON ALL SEEDING. WHEN HYDROSEEDING, MULCH SHALL NOT BE INCLUDED IN THE TANK WITH THE SEED.
- ALL WORK TO BE DONE IN ACCORDANCE WITH THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
- A SUBBASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUBBASE SHALL BE INSTALLED WITHIN FIVE (5) DAYS OF THE PRELIMINARY GRADING.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.
- IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE COVERED WITH A MINIMUM OF TWELVE (12) INCHES OF SOIL HAVING A PH OF 5 OR MORE PRIOR TO SEEDBED PREPARATION. AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF TWENTY-FOUR (24) INCHES OF SOIL HAVING A PH OF 5 OR MORE.
- AT THE TIME THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
- UNFILTERED DEWATERING IS NOT PERMITTED. TAKE ALL NECESSARY PRECAUTIONS DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH STATE STANDARDS.
- SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED IN ACCORDANCE WITH STATE STANDARDS FOR EROSION CONTROL.
- ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAY WILL BE REMOVED IMMEDIATELY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY EROSION AND SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.
- STOCKPILE AND STAGING LOCATIONS DETERMINED IN THE FIELD, SHALL BE PLACED WITHIN THE LIMITS OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN.
- ALL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED BY THE CONTRACTOR, AND SHALL BECOME THEIR RESPONSIBILITY.
- PAVEMENT AREAS ARE TO BE KEPT CLEAN AT ALL TIMES.
- DURING CONSTRUCTION, ANY ADDITIONAL CONTROL MEASURES AS DEEMED NECESSARY TO PREVENT EROSION OR CONTROL SEDIMENT BEYOND THOSE MEASURES SHOWN ON THE APPROVED PLAN SHALL BE INSTALLED OR EMPLOYED AT THE DIRECTION OF THE MUNICIPAL ENGINEER.

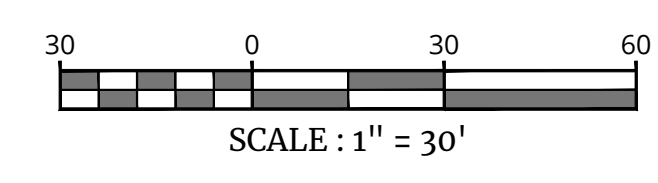
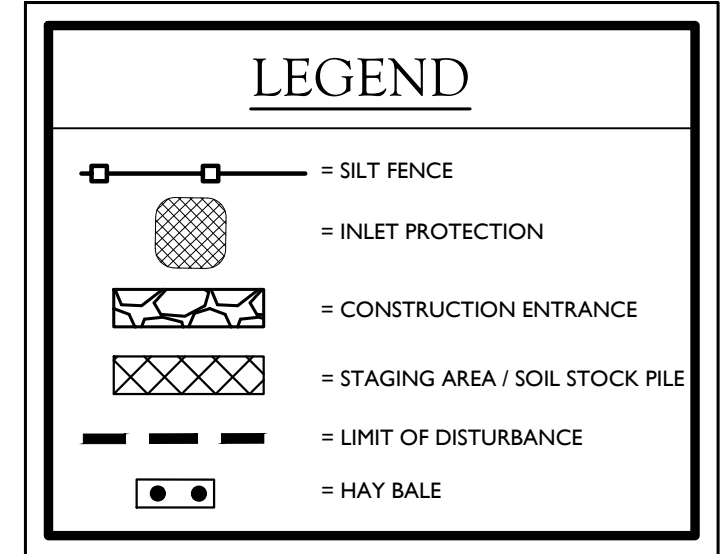
**MAINTENANCE PLAN DURING CONSTRUCTION:**  
 INSPECTION AND MAINTENANCE SHALL BE PERFORMED IN CONFORMANCE WITH GP-0-15-002. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL, BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED AND INSTALLED FOR THE PROJECT. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES ABOUT 0.5 FT DEEP AT THE FENCE. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. ALL SEEDED AREAS WILL BE FERTILIZED, RESEED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE LANDSCAPE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.

**SEQUENCE OF CONSTRUCTION FOR EROSION CONTROL**

- THE ENGINEERING INSPECTOR SHALL BE NOTIFIED IN WRITING AT LEAST 48 HOURS PRIOR TO THE START OF ANY WORK.
- PRIOR TO THE COMMENCEMENT OF ANY SITE WORK THE APPLICANT SHALL INSTALL THE SOIL EROSION AND SEDIMENT CONTROLS AS PER THE APPROVED PLANS, WHICH INCLUDES THE SILT FENCES, INLET FILTERS AND HAYBALES. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO THE LATEST VERSION OF THE NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
- CONSTRUCT AND MAINTAIN THE CONSTRUCTION ENTRANCES AS SHOWN ON THE PLANS AND DETAILS. STAGING AND STORAGE AREA SHALL BE SET UP IN THE LOCATIONS DESIGNATED ON THE PLANS.
- DEMOLISH EXISTING SITE IMPROVEMENTS (SIDEWALKS, PAVEMENT, CURBING, ETC.) AS SHOWN ON THE DEMOLITION PLAN WITH THE EXCEPTION OF THE EXISTING DWELLING AND DRIVEWAY. ALL MATERIAL TO BE CRUSHED AND STOCKPILED ON SITE.
- ROUGH GRADE THE SITE BASED ON THE GRADING PLAN TO THE APPROPRIATE BUILDING PAD ELEVATIONS.
- CONSTRUCT PROPOSED BUILDING FOUNDATIONS.
- INSTALL PROPOSED UTILITIES AND CONNECT EXISTING DWELLING TEMPORARILY. DEMOLISH EXISTING UTILITY CONNECTIONS.
- EXCAVATE FOR AND CONSTRUCT THE DRAINAGE IMPROVEMENTS PROGRESSING UPSTREAM. PROVIDE INLET PROTECTION ON EXISTING AND PROPOSED DRAINAGE STRUCTURES.
- INSTALL CURBING AND THEN PAVE (BASE COURSE) PARKING AREA AND DRIVE AISLES.
- STABILIZATION - THE OPERATOR SHALL INITIATE STABILIZATION MEASURES AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. STABILIZATION MEANS COVERING OR MAINTAINING AN EXISTING COVER OVER SOIL. COVER CAN BE VEGETATIVE (E.G. GRASS, TREES, SEED AND MULCH, SHRUBS, OR TURF) OR NON-VEGETATIVE (E.G. GEOTEXTILES, RIP RAP, OR GABIONS).
- MAINTENANCE - SEDIMENT SHALL BE REMOVED FROM SEDIMENT TRAPS WHENEVER THEIR CAPACITY HAS BEEN REDUCED BY TWENTY-FIVE (25) PERCENT FROM THE DESIGN CAPACITY. A FIXED VERTICAL SEDIMENT DEPTH MARKER SHOULD BE INSTALLED TO MONITOR THE CAPACITY.
- ONCE NEW BUILDING IS HABITABLE, DEMOLISH EXISTING DWELLING, DISCONNECT TEMPORARY UTILITIES AND FINALIZE CONSTRUCTION OF REMAINING SITE IMPROVEMENTS INCLUDING THE, SIDEWALKS, LANDSCAPE AREAS, PARKING LOT, LIGHTING AND ANY OTHER OUTSTANDING ITEMS.
- AFTER COMPLETION OF CONSTRUCTION, FINISH GRADE TO FINAL ELEVATIONS AND APPLY SEED OR SOD ON ALL LAWN AREAS.
- AFTER STABILIZATION HAS BEEN ESTABLISHED CLEAR DRAINAGE PIPES AND STRUCTURES OF ANY SEDIMENT WHICH MAY HAVE ACCUMULATED. REMOVE ALL EROSION CONTROL DEVICES.
- MAINTAIN ALL LAWN AND LANDSCAPE AREAS TO ENSURE A VIABLE STABILIZED VEGETATIVE COVER.
- ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED, AS MAY BE REQUIRED AND REQUESTED BY AUTHORITIES, TO PREVENT THE INCIDENTAL DISCHARGE OF SILT LADEN RUNOFF FROM ENTERING A WATER COURSE OR A DRAINAGE SYSTEM.
- THE GENERAL PERMIT FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES STATES THAT IT IS UNLAWFUL FOR ANY PERSON TO CAUSE OR CONTRIBUTE TO A VIOLATION OF WATER QUALITY STANDARDS.

WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, SOIL SHALL NOT BE EXPOSED MORE THAN SEVEN (7) DAYS. CONTRACTOR SHALL INITIATE STABILIZATION MEASURES IN ACCORDANCE WITH SOIL EROSION & SEDIMENT CONTROL NOTE #7 ON THIS PLAN

THIS PLAN TO BE UTILIZED FOR EROSION CONTROL PURPOSES ONLY.



**Colliers**  
 Engineering & Design  
 www.colliersengineering.com  
 Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, revised, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as **MASER CONSULTING**  
**811** PROTECT YOURSELF  
 ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE.  
 Know what's below. Call before you dig.  
 FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	08/24/23	NJ	REVISED PER PRELIMINARY BOARD COMMENTS

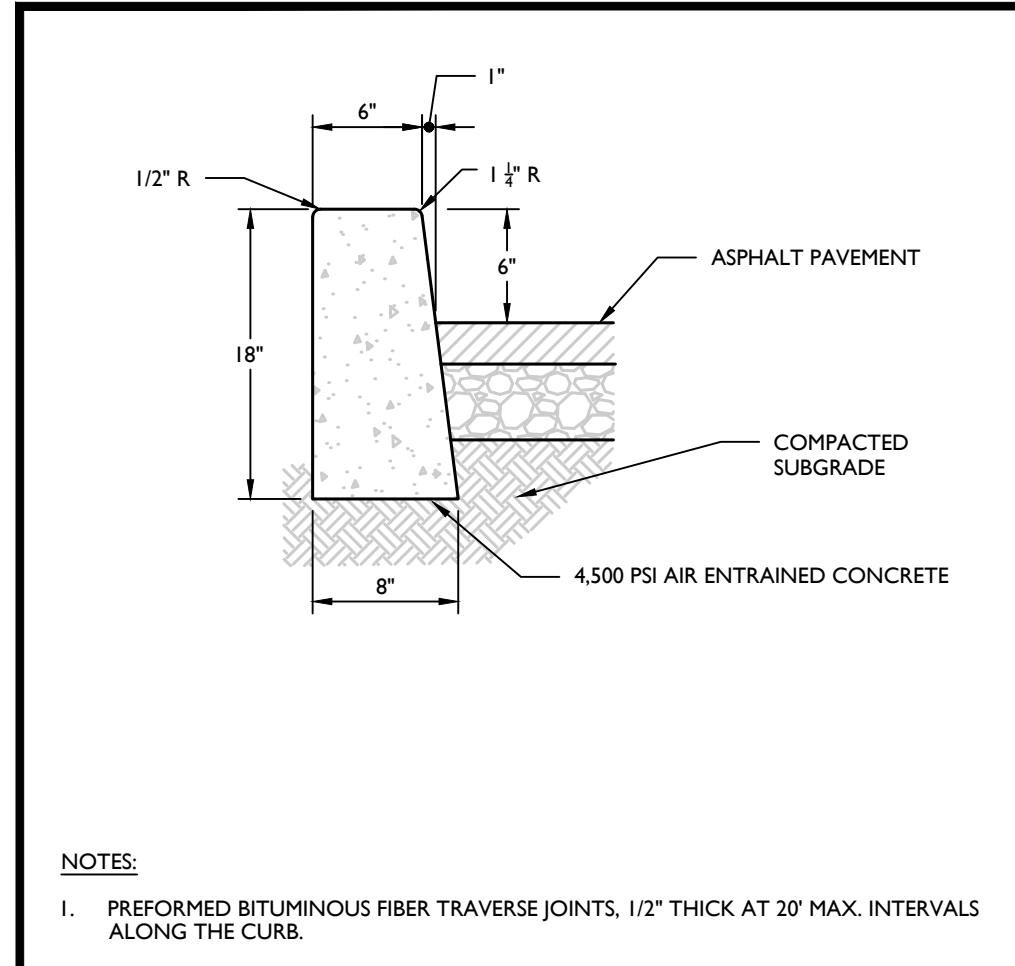
**Jesse Barrett Cokley**  
 NEW YORK LICENSED PROFESSIONAL ENGINEER  
 LICENSE NUMBER: 09087-1  
 COLLIER'S ENGINEERING & DESIGN CT, P.C.  
 N.Y. C.O.A.#: 0077609

**PRELIMINARY SITE PLAN**  
 FOR  
**WESTERN HIGHWAY ENTERPRISES LLC**  
 SECTION 74.14  
 BLOCK 2  
 LOT 39  
 HAMLET OF TAPPAN  
 TOWN OF ORANGETOWN  
 ROCKLAND COUNTY  
 NEW YORK

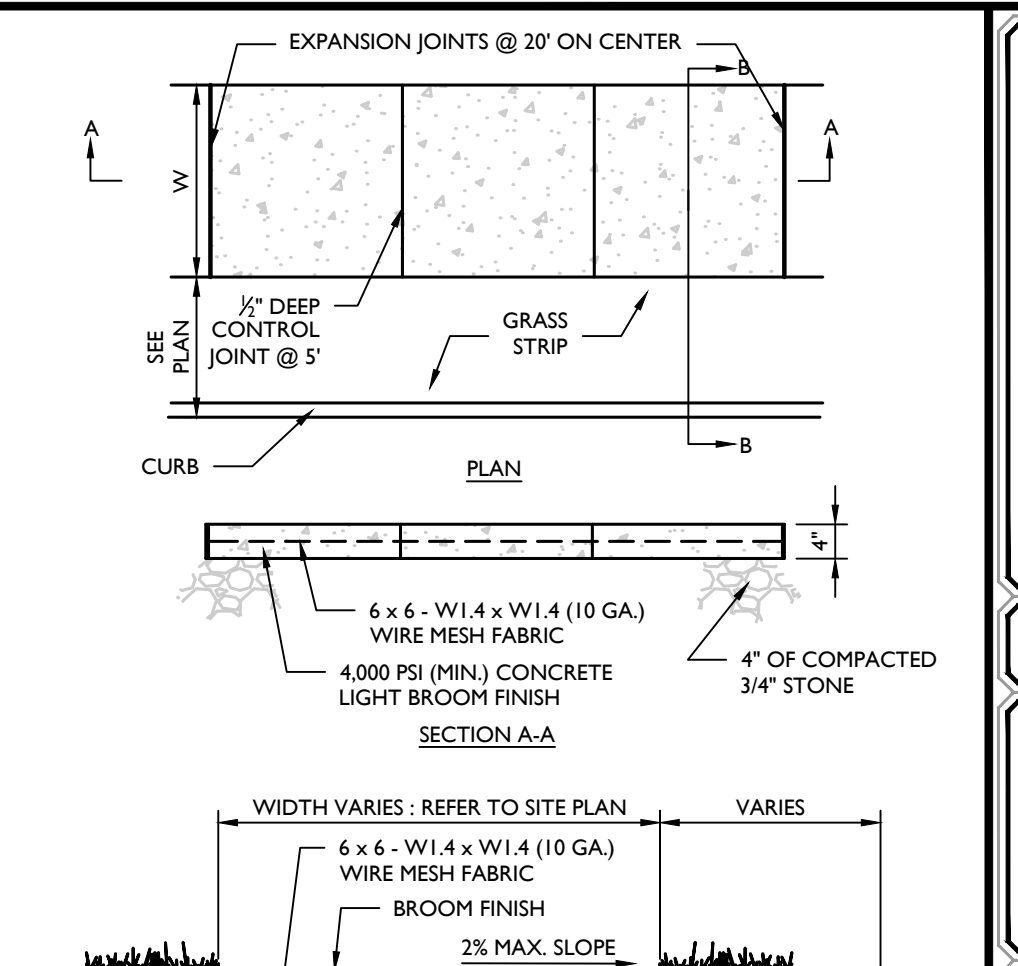
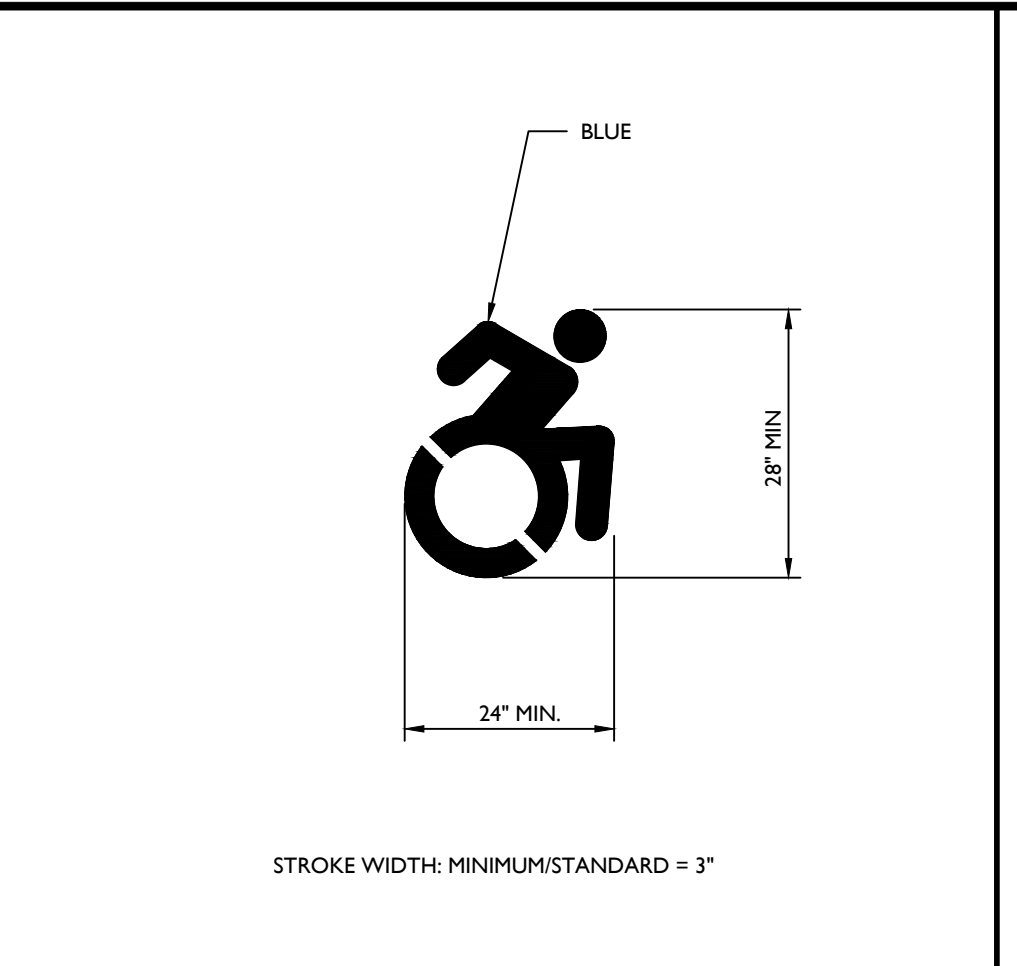
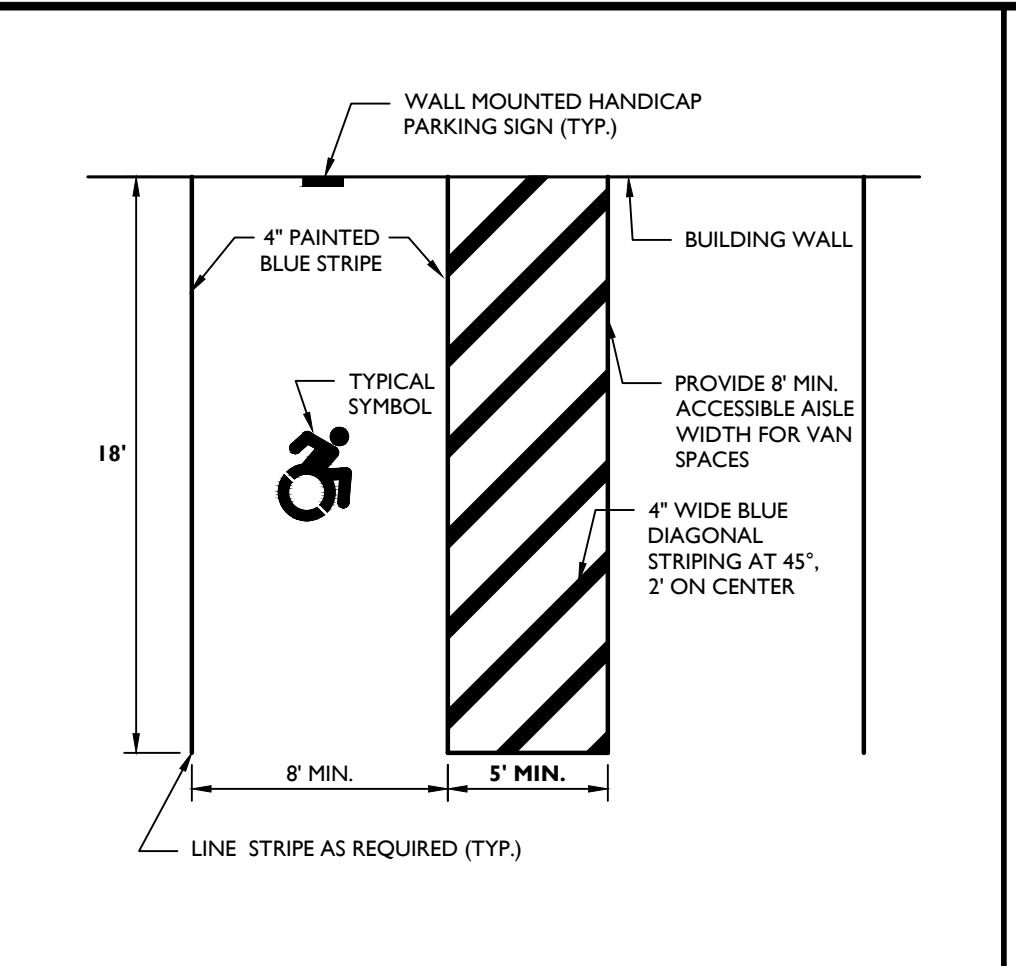
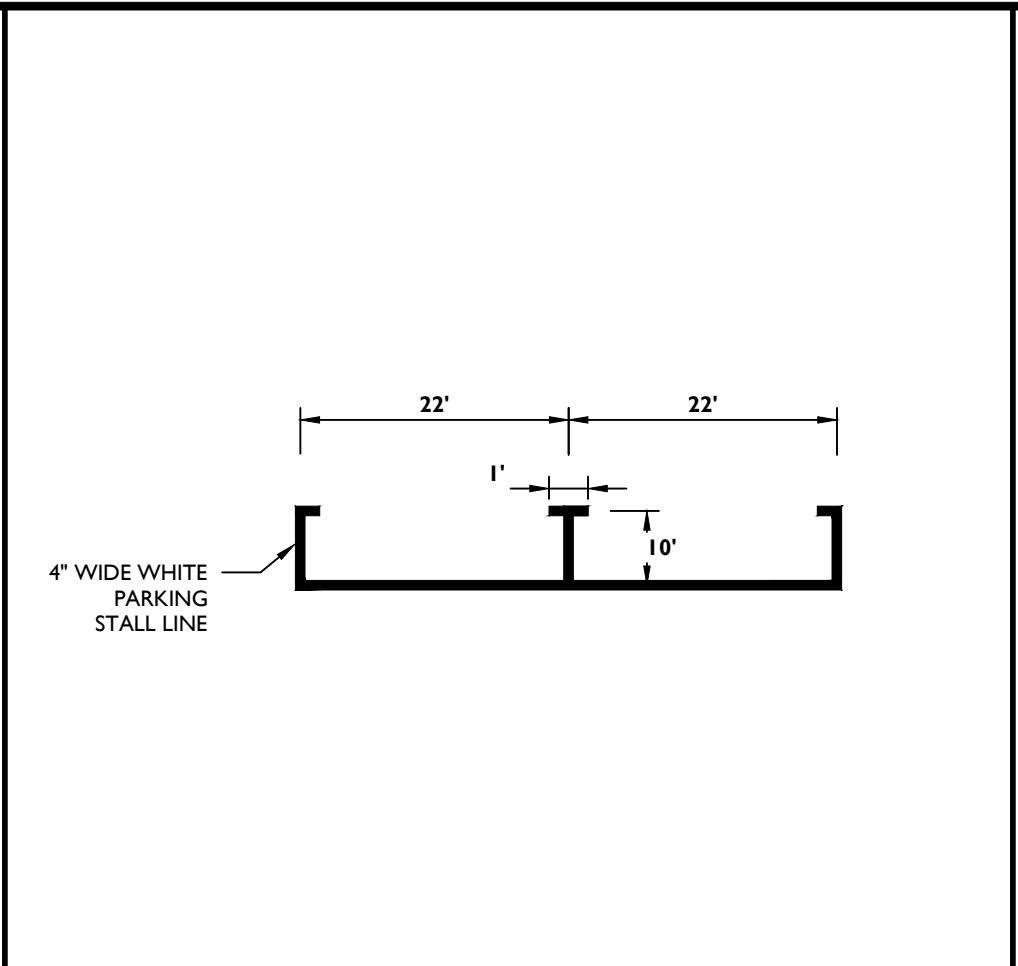
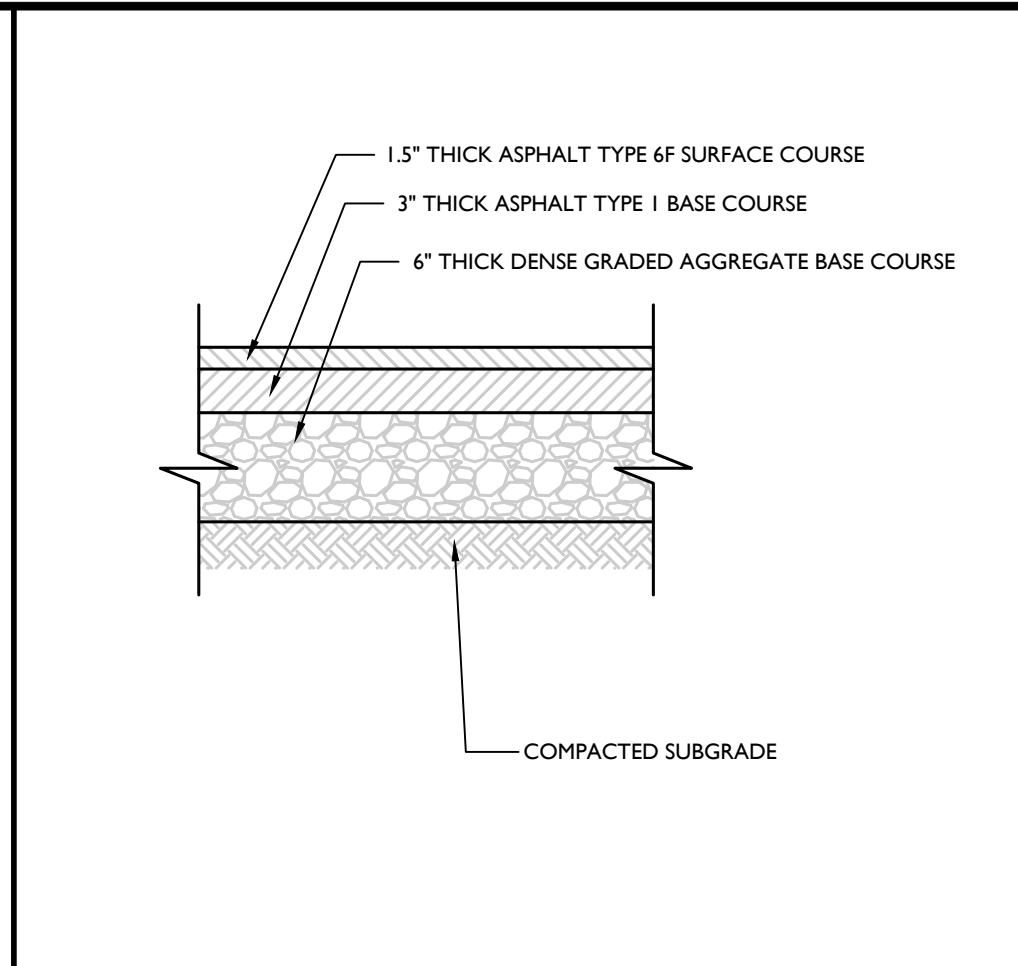
**Colliers** Engineering & Design  
 50 Chestnut Ridge Road, Suite 101  
 Montvale, NJ 07645  
 Phone: 845.352.0411  
 COLLIER'S ENGINEERING & DESIGN CT, P.C.  
 DOING BUSINESS AS MASER CONSULTING ENGINEERING & LAND SURVEYING

**SOIL EROSION & SEDIMENT CONTROL PLAN**  
 SHEET NUMBER:  
 7 of 11

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.



**NOTES:**  
1. PREFORMED BITUMINOUS FIBER TRAVERSE JOINTS, 1/2" THICK AT 20' MAX. INTERVALS ALONG THE CURB.



**NOTES:**  
1. A PREFORMED, BITUMINOUS EXPANSION JOINT 1/2" THICK, 4" WIDE AND EXTENDING THE FULL WIDTH OF THE SIDEWALK (UNBROKEN) SHALL BE INSTALLED.  
2. 1/2" DEEP CONTROL JOINTS INSTALLED AT AN INTERVAL OF EVERY 5'.  
3. JOINT FILLER SHALL CONFORM TO AASHTO M-33. SURFACE OF CONCRETE SHALL BE BROOM FINISH. ROUND EDGES USING AN EDGING TOOL WITH A 1/4" RADIUS.  
4. CONCRETE SIDEWALK SHALL BE CONSTRUCTED PER THE LATEST ADA REQUIREMENTS.

**1 CONCRETE CURB (ASPHALT PAVEMENT) DETAIL**  
NOT TO SCALE MCNY-SITE-CURB-1000 05/01/17

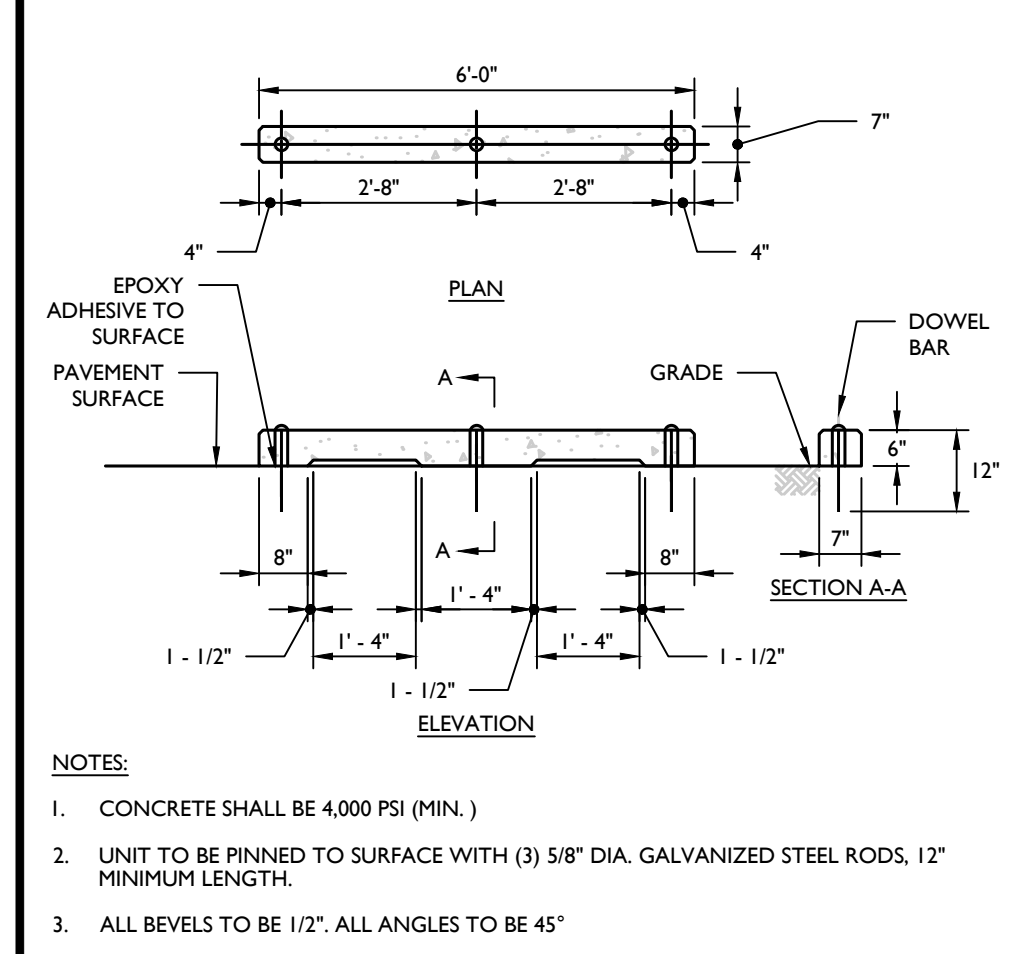
**2 STANDARD ASPHALT PAVEMENT DETAIL**  
NOT TO SCALE MCNY-SITE-PMVT-1000 07/01/17

**3 PARALLEL PARKING DETAIL**  
NOT TO SCALE MCNY-SITE-MRKG-1002 07/01/19

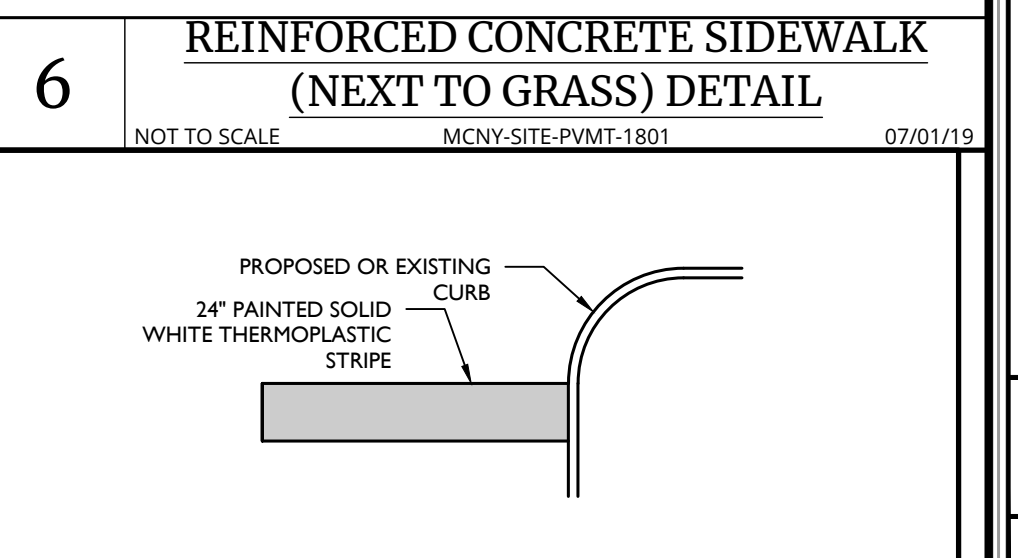
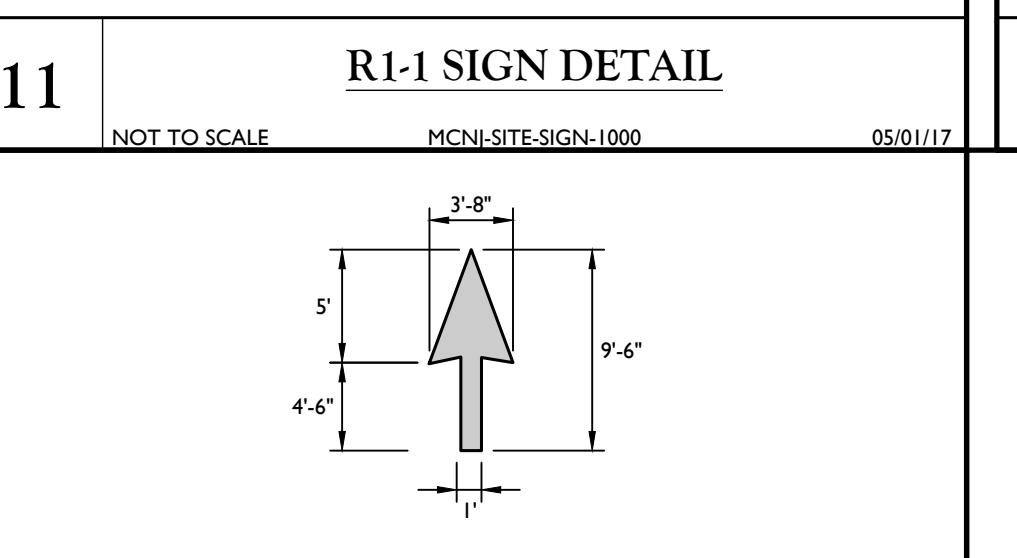
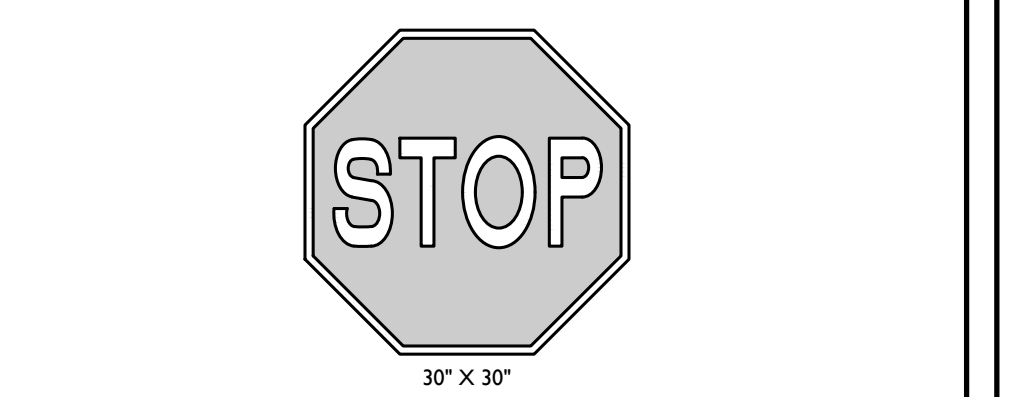
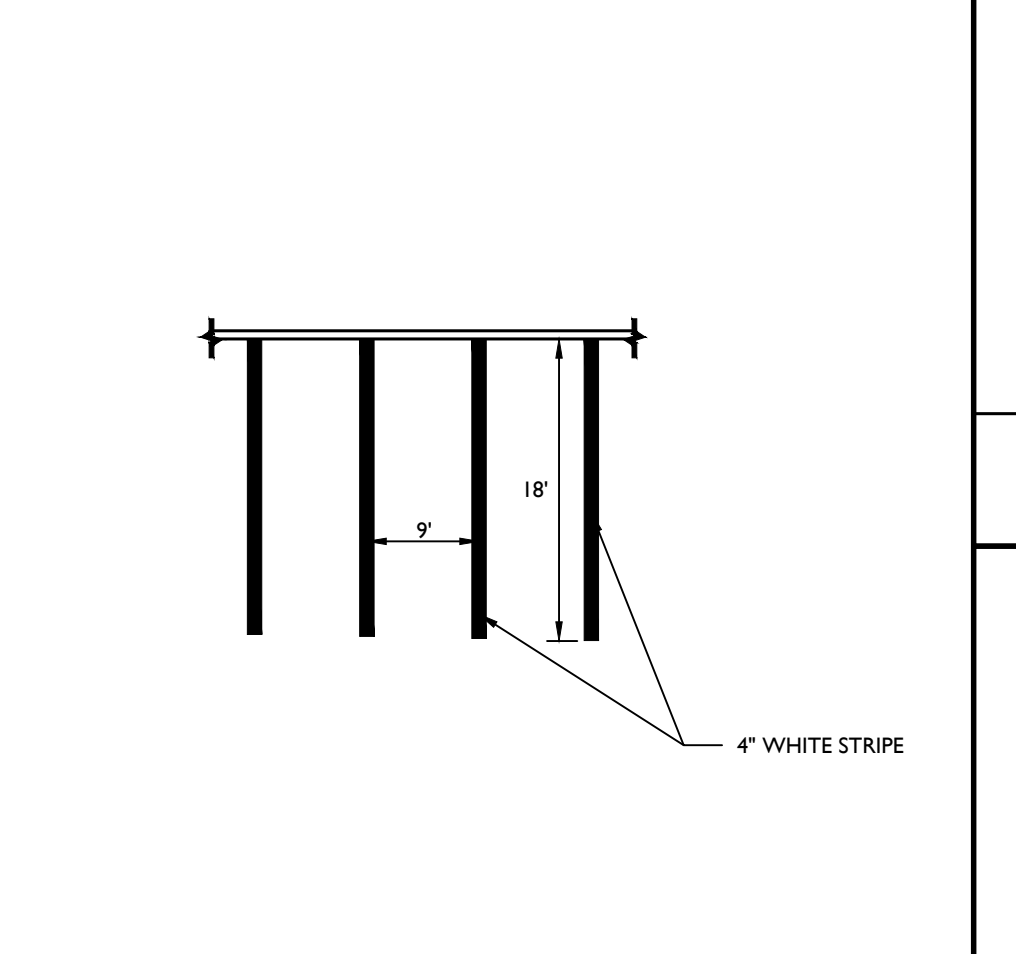
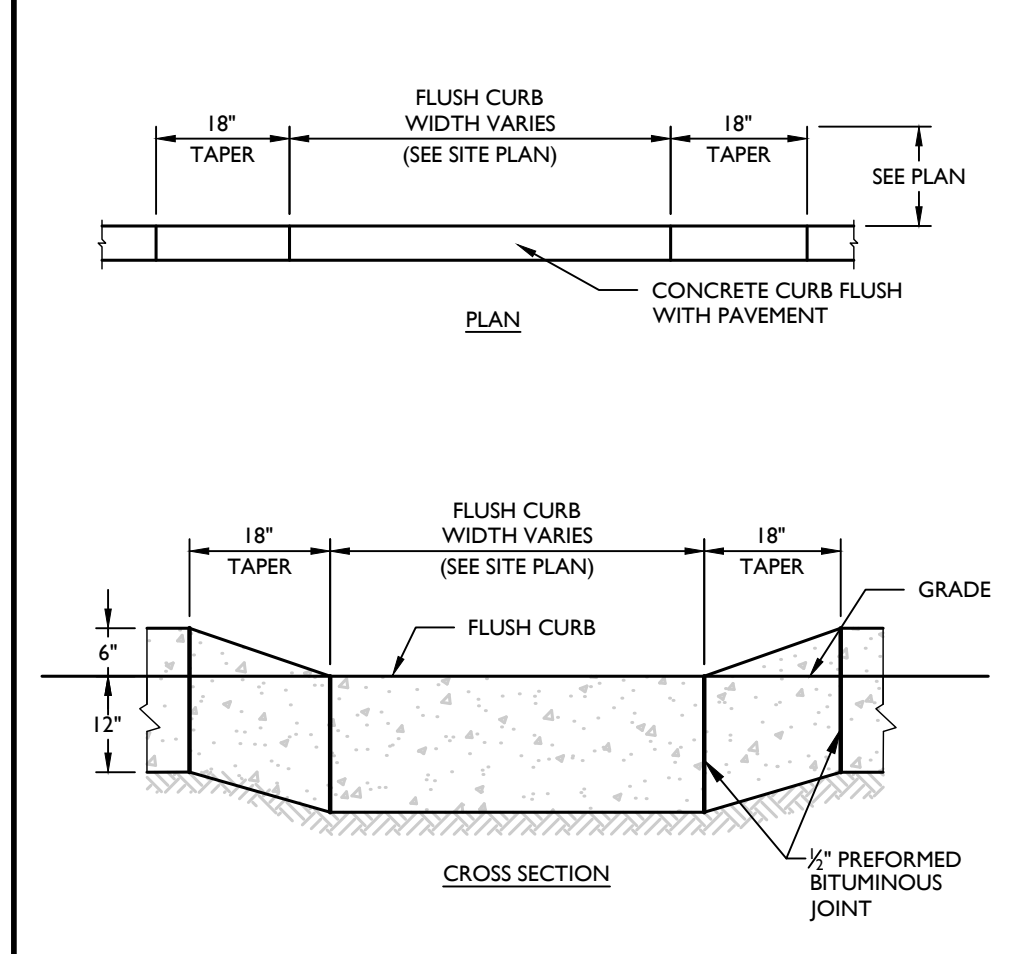
**4 ACCESSIBLE PARKING LINE STRIPE STALL DETAIL**  
NOT TO SCALE MCNY-SITE-MRKG-1801 07/01/19

**5 ACCESSIBLE SYMBOL DETAIL**  
NOT TO SCALE MCNY-SITE-MRKG-2000 07/01/19

**6 REINFORCED CONCRETE SIDEWALK (NEXT TO GRASS) DETAIL**  
NOT TO SCALE MCNY-SITE-PMVT-1801 07/01/19



**NOTES:**  
1. CONCRETE SHALL BE 4,000 PSI (MIN.)  
2. UNIT TO BE PINNED TO SURFACE WITH (3) 5/8" DIA. GALVANIZED STEEL RODS, 12" MINIMUM LENGTH.  
3. ALL BEVELS TO BE 1/2". ALL ANGLES TO BE 45°



**7 PRECAST CONCRETE BUMPER CURB WHEEL STOP (FOR CARS) DETAIL**  
NOT TO SCALE MCNY-SITE-CURB-2101 7/01/17

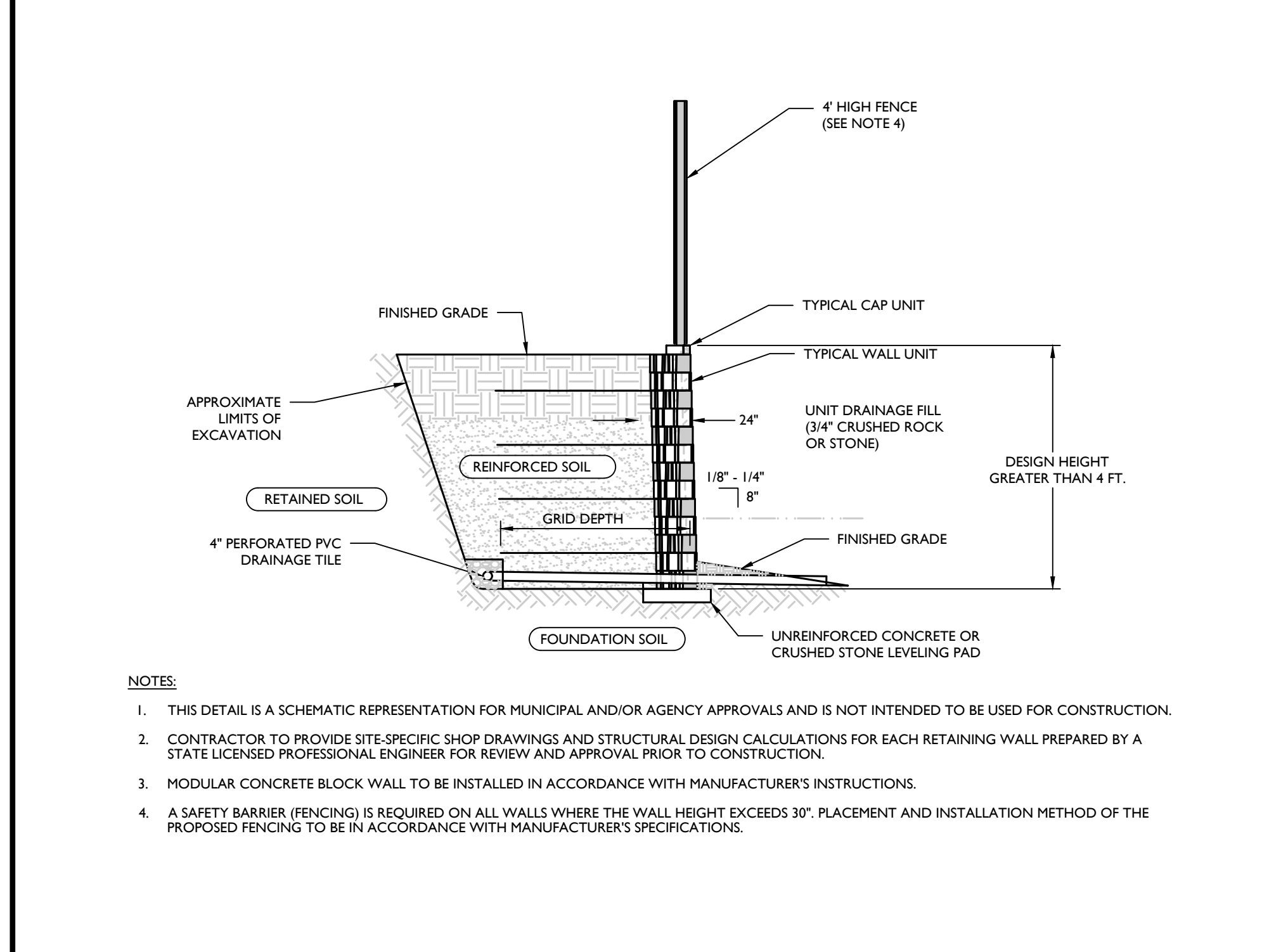
**8 CONCRETE FLUSH CURB DETAIL**  
NOT TO SCALE MCNY-SITE-MRKG-1000 05/01/17

**9 FIRE ZONE SIGN / NO PARKING SIGN**  
NOT TO SCALE MCNY-SITE-MRKG-1200 05/01/17

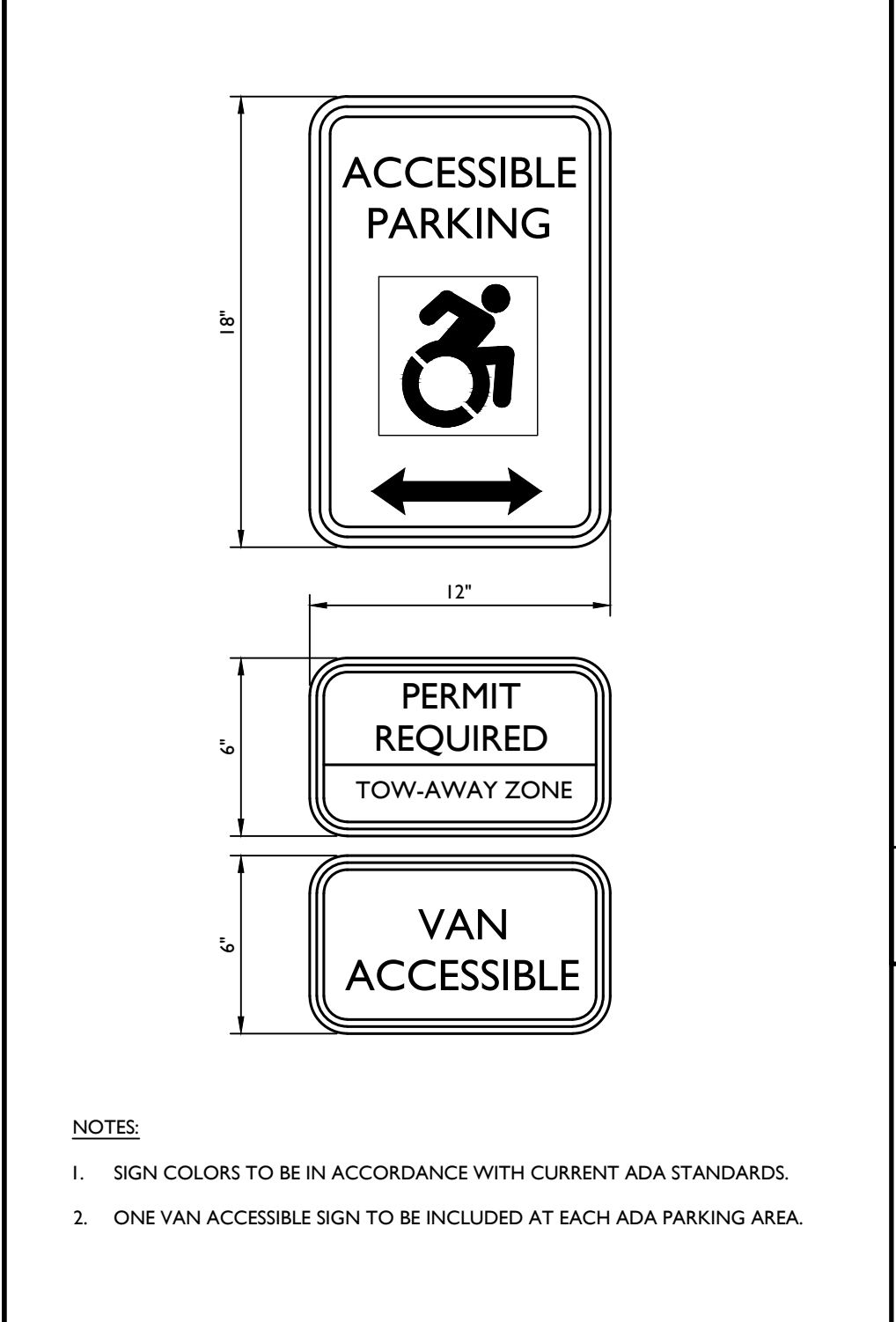
**10 TYPICAL PARKING STALL DETAIL**  
NOT TO SCALE MCNY-SITE-PMVT-2200 07/01/19

**11 R-1 SIGN DETAIL**  
NOT TO SCALE MCNY-SITE-SIGN-1000 05/01/17

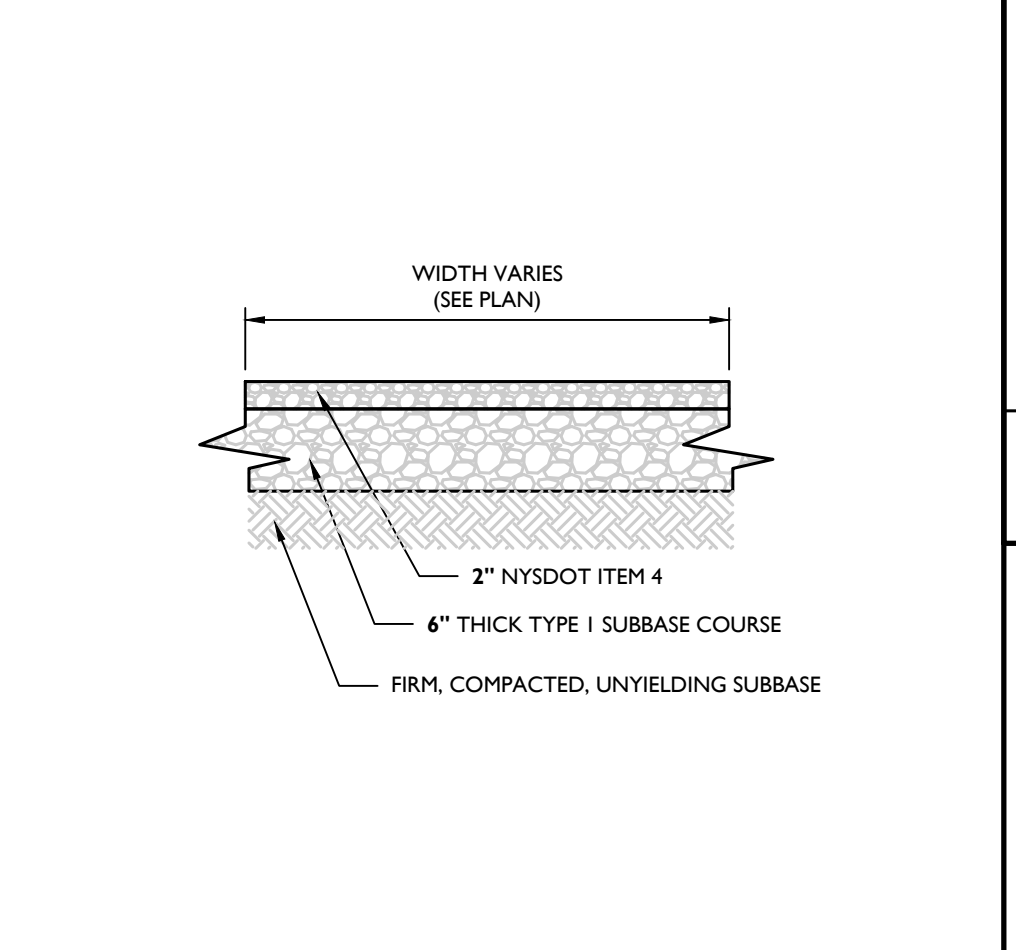
**12 STRAIGHT PAVEMENT ARROW DETAIL**  
NOT TO SCALE MCNY-SITE-MRKG-1100 05/01/17



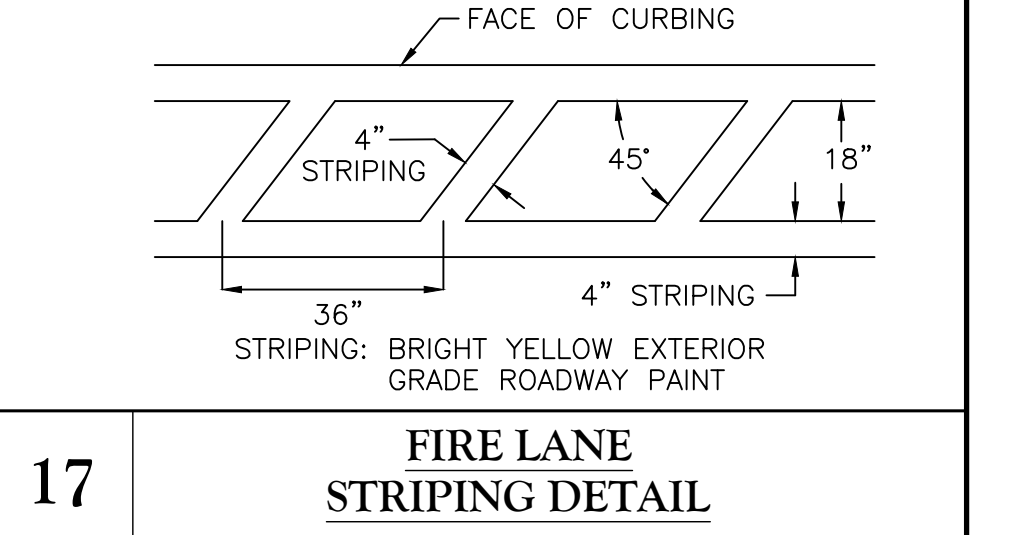
**NOTES:**  
1. THIS DETAIL IS A SCHEMATIC REPRESENTATION FOR MUNICIPAL AND/OR AGENCY APPROVALS AND IS NOT INTENDED TO BE USED FOR CONSTRUCTION.  
2. CONTRACTOR TO PROVIDE SITE-SPECIFIC SHOP DRAWINGS AND STRUCTURAL DESIGN CALCULATIONS FOR EACH RETAINING WALL PREPARED BY A STATE LICENSED PROFESSIONAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.  
3. MODULAR CONCRETE BLOCK WALL TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.  
4. A SAFETY BARRIER (FENCING) IS REQUIRED ON ALL WALLS WHERE THE WALL HEIGHT EXCEEDS 30". PLACEMENT AND INSTALLATION METHOD OF THE PROPOSED FENCING TO BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.



**NOTES:**  
1. SIGN COLORS TO BE IN ACCORDANCE WITH CURRENT ADA STANDARDS.  
2. ONE VAN ACCESSIBLE SIGN TO BE INCLUDED AT EACH ADA PARKING AREA.



**16 GRAVEL PAVEMENT DETAIL**  
NOT TO SCALE MCNY-SITE-PMVT-2200 07/01/19



**17 FIRE LANE STRIPING DETAIL**  
NOT TO SCALE MCNY-SITE-MRKG-1000 05/01/17

**14 TYPICAL REINFORCED WALL SECTION (NEAR VERTICAL SETBACK) DETAIL**  
NOT TO SCALE MCCM-SITE-WALL-1103 MOD: 08/04/22 10/01/19

**15 SIGN FOR ACCESSIBLE PARKING SPACE DETAIL**  
NOT TO SCALE MCNY-SITE-HADA-2400 07/01/19

**Colliers**  
Engineering & Design  
www.colliersengineering.com  
Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, reused, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as **MASER**  
**811** PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE  
Know what's below. Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	08/24/23	NJ	REVISED PER PROFESSIONAL BOARD COMMENTS

**Jesse Barrett Cokeley**  
NEW YORK LICENSED PROFESSIONAL ENGINEER  
LICENSE NUMBER: 090987-1  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
N.Y. C.O.A.#: 0017609

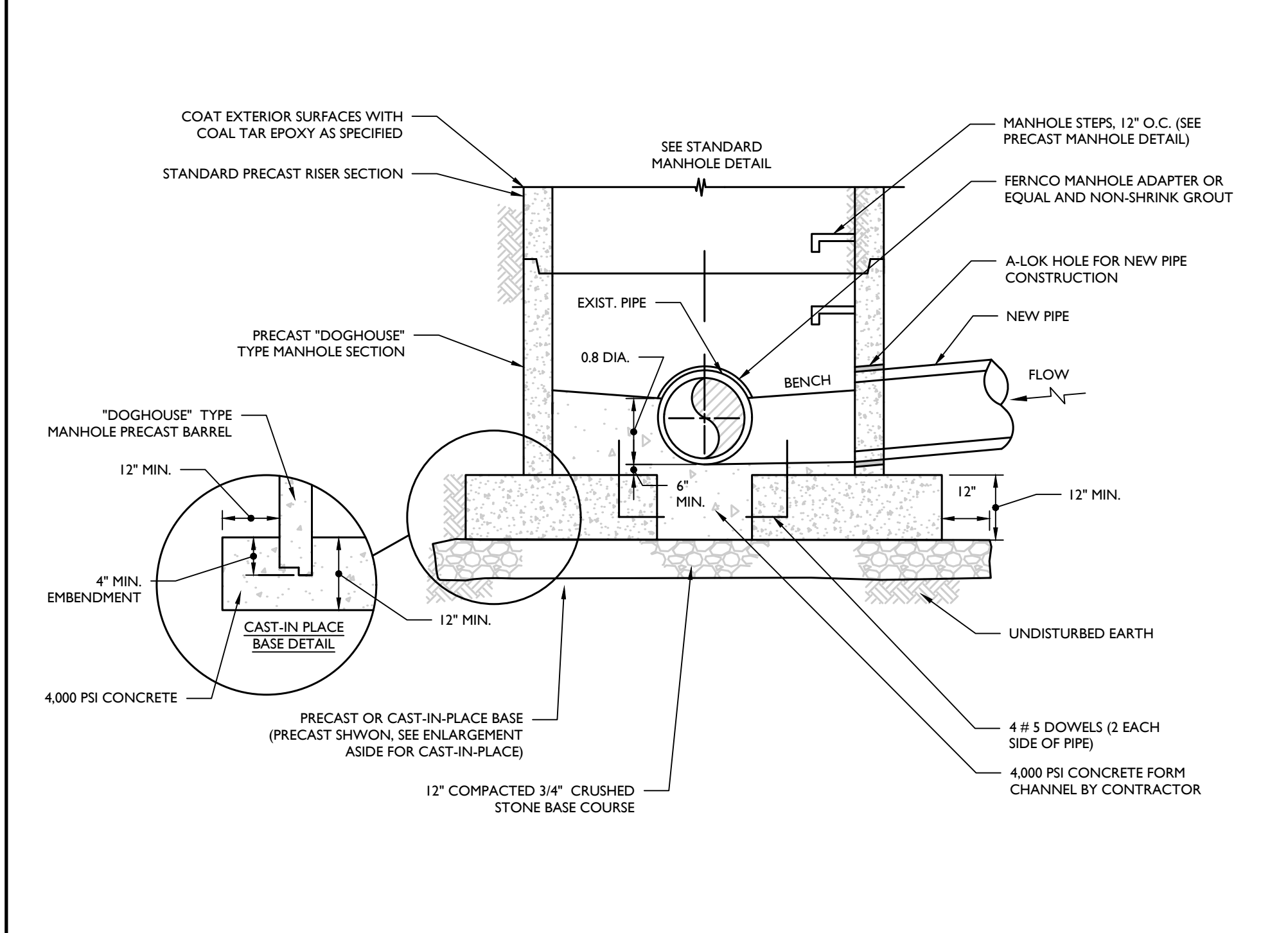
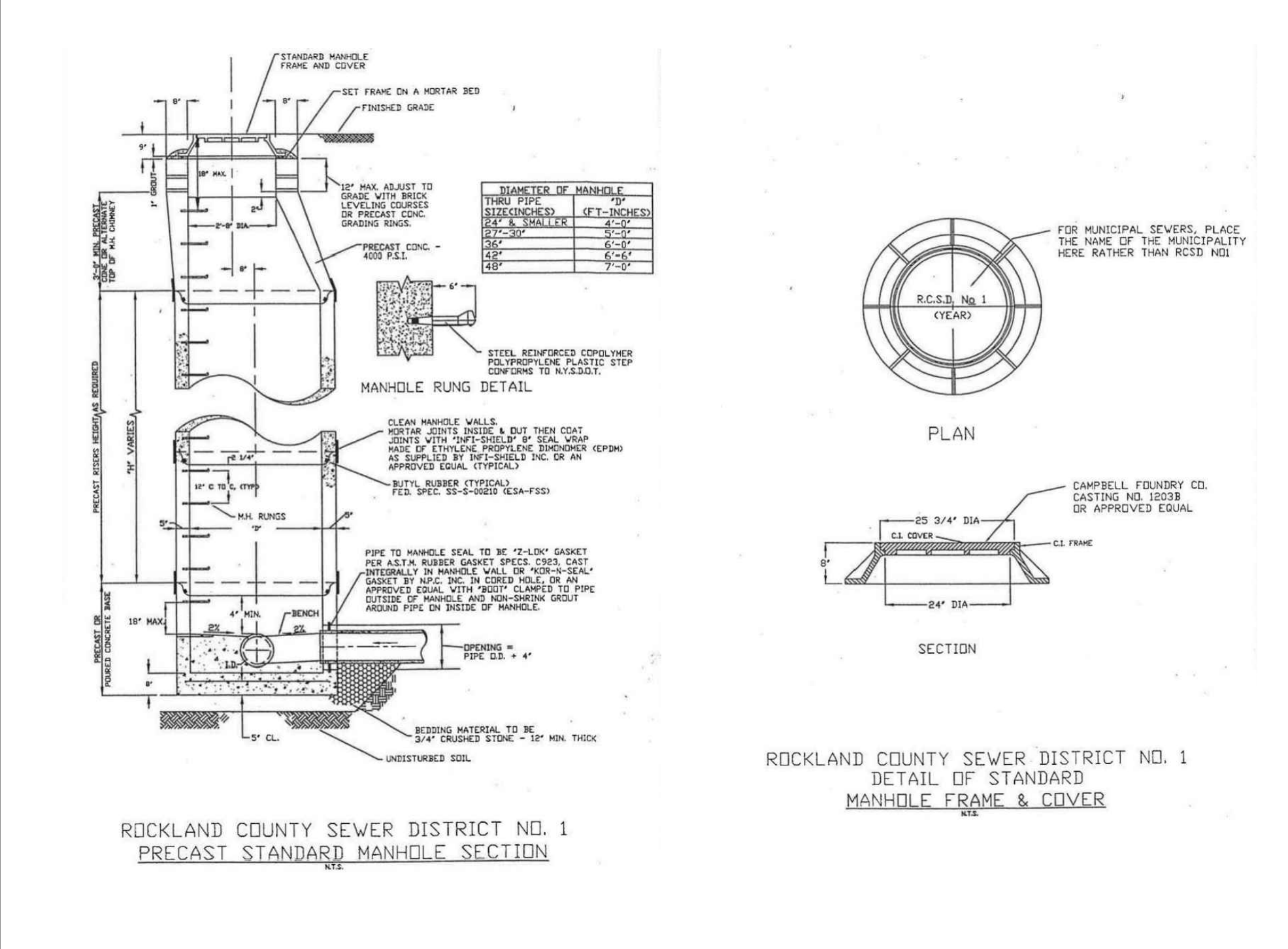
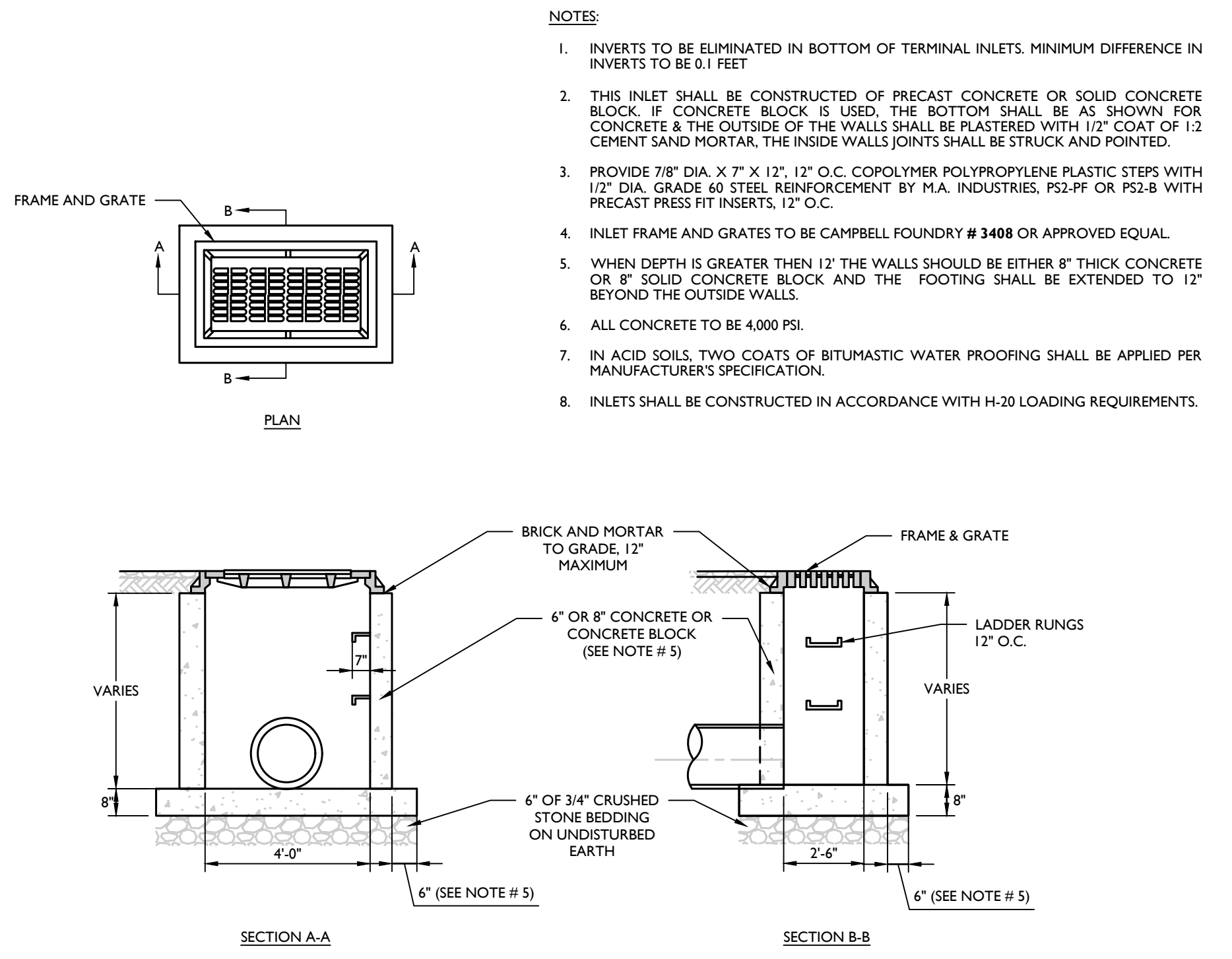
**PRELIMINARY SITE PLAN**  
FOR  
**WESTERN HIGHWAY ENTERPRISES LLC**  
SECTION 74.14  
BLOCK 2  
LOT 39  
HAMLET OF TAPPAN  
TOWN OF ORANGETOWN  
ROCKLAND COUNTY  
NEW YORK

**Colliers** MONTVALE  
50 Chestnut Ridge Road,  
Suite 101  
Montvale, NJ 07645  
Phone: 845.352.0411  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

SCALE: AS SHOWN DATE: 08/24/23 DRAWN BY: NJ CHECKED BY: JBC  
PROJECT NUMBER: 21006649A DRAWING NAME: C-DTLS  
SHEET TITLE: CONSTRUCTION DETAILS  
SHEET NUMBER: 8 of 11

2023/10/06 09:43 AM Engineering/Graphic/DTLS/MS-C-DTL5

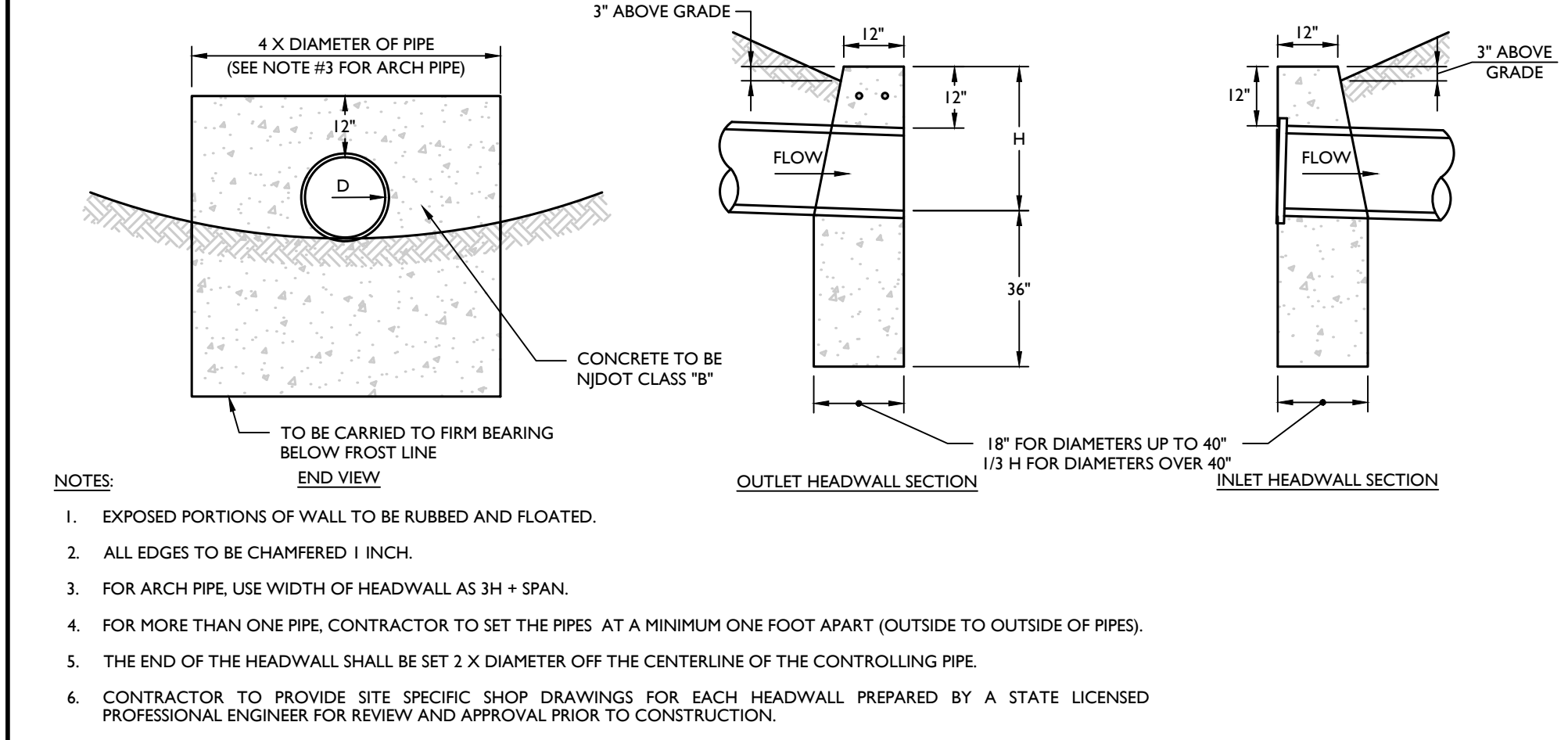
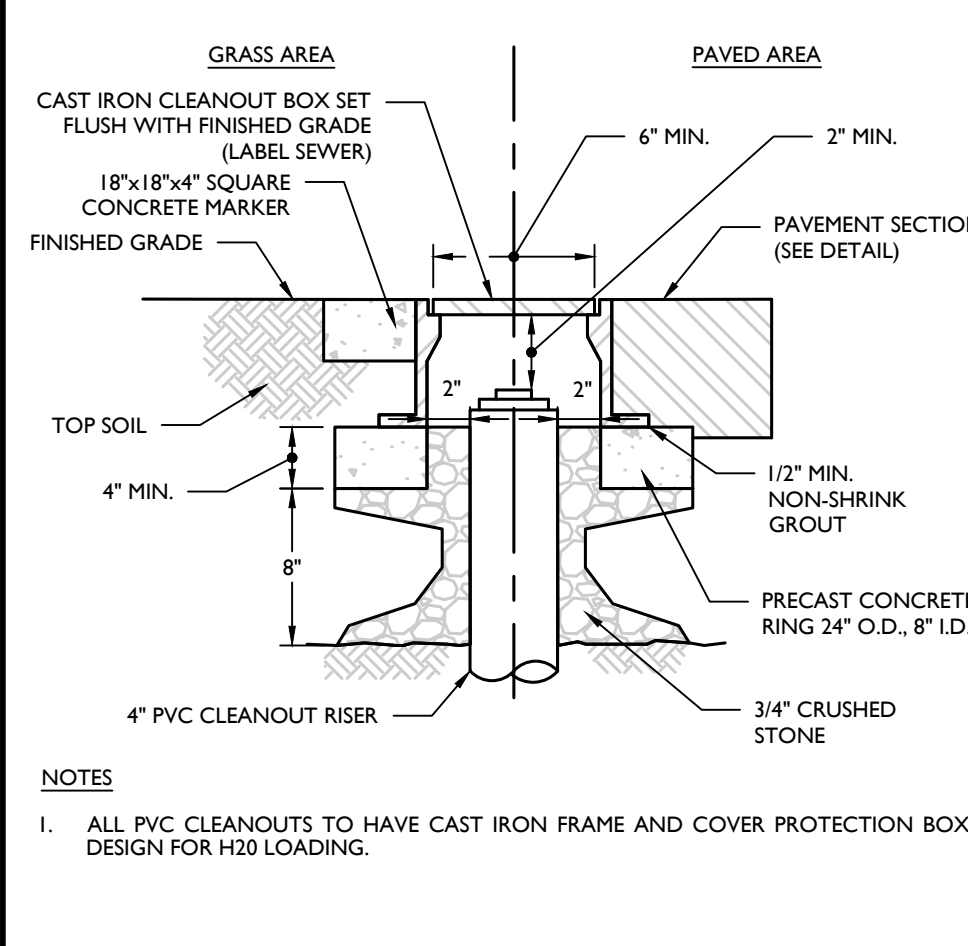
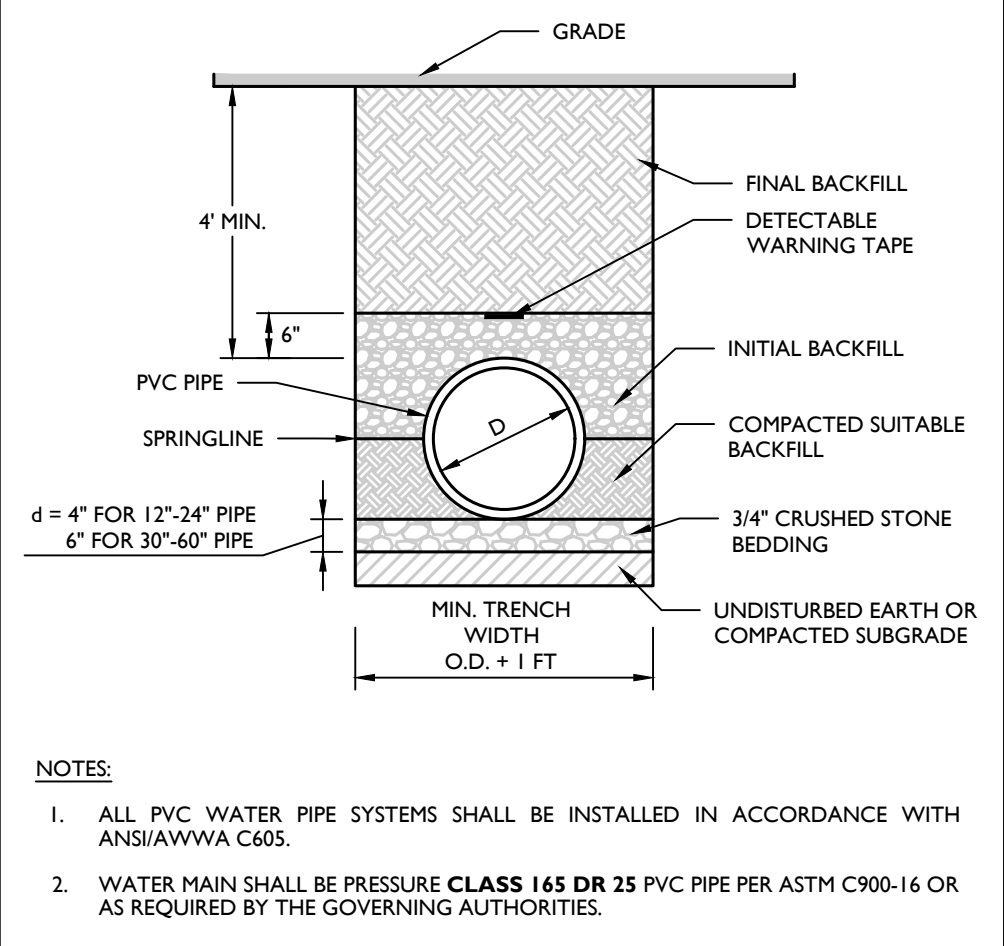
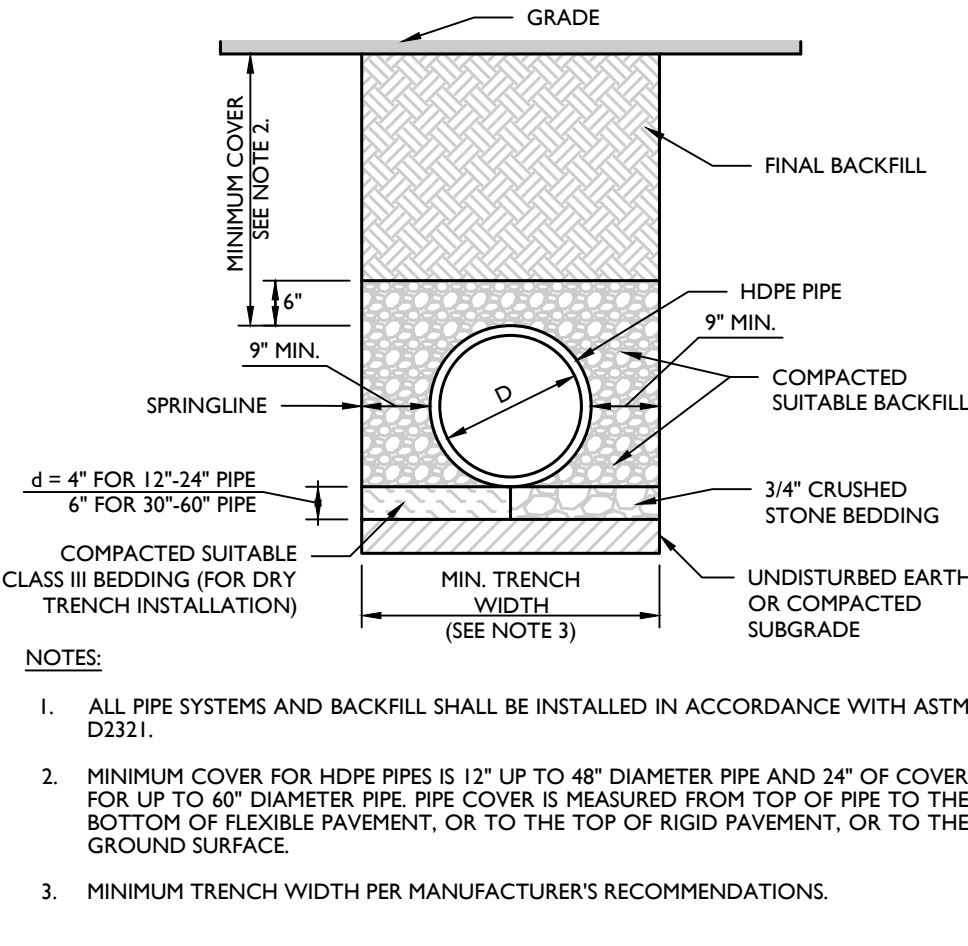
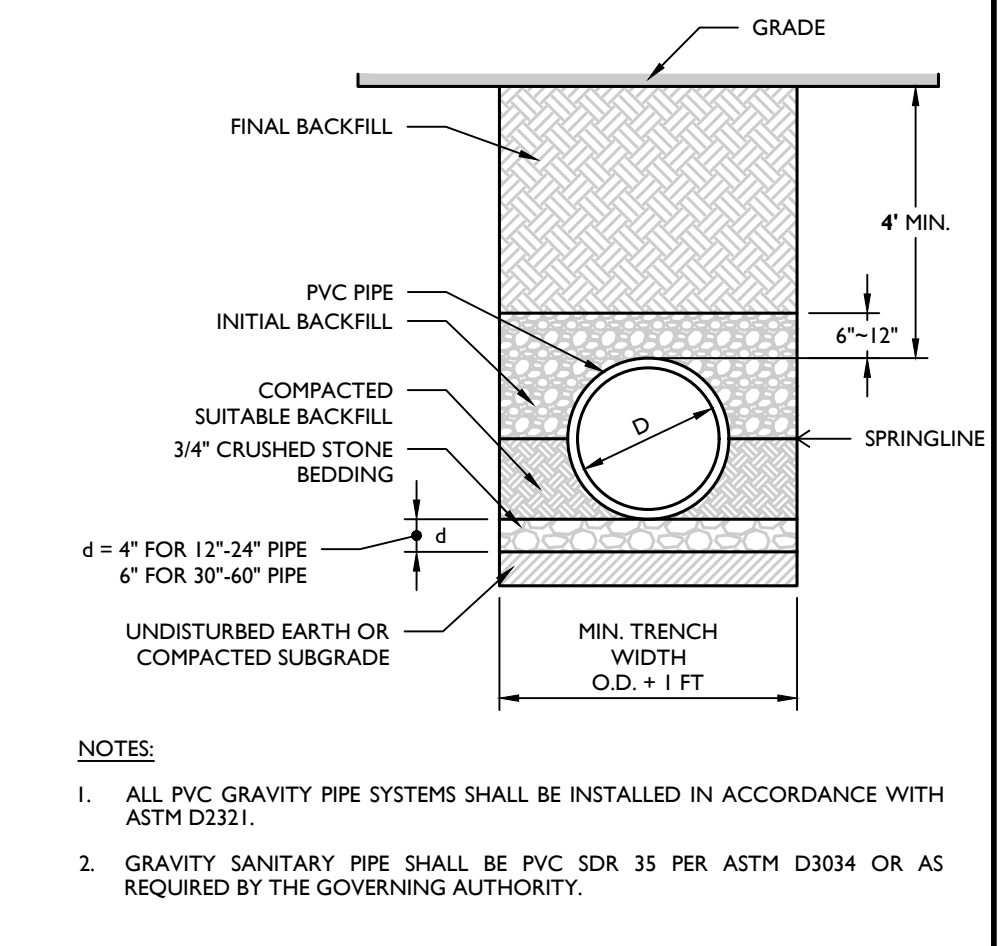




**1** SINGLE DRAIN INLET DETAIL  
NOT TO SCALE MCNY-UTIL-STRM-1000 07/01/19

**2** ROCKLAND COUNTY STANDARD MANHOLE  
NOT TO SCALE N.T.S.

**3** DOGHOUSE MANHOLE DETAIL  
NOT TO SCALE MCNY-UTIL-SSWR-1100



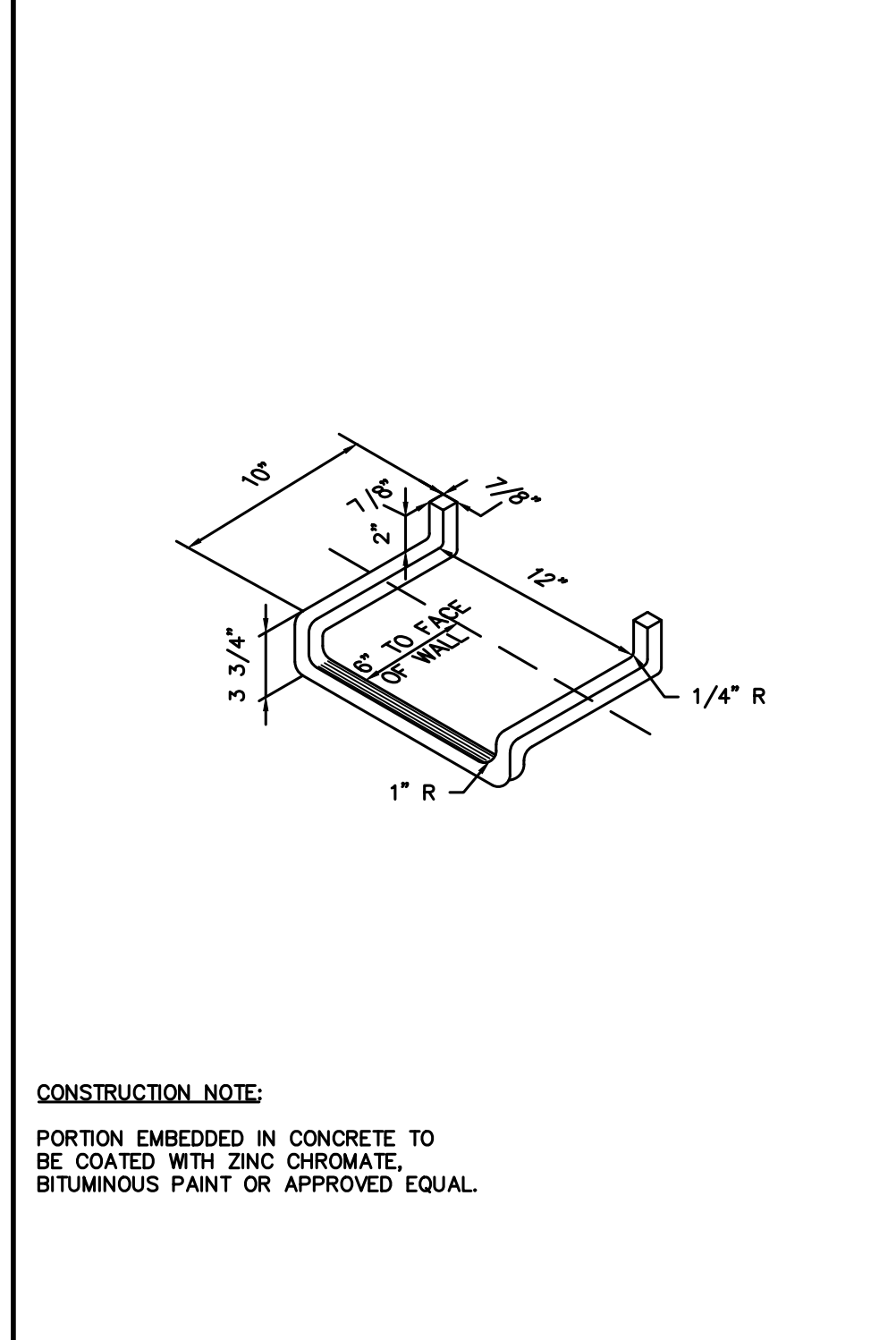
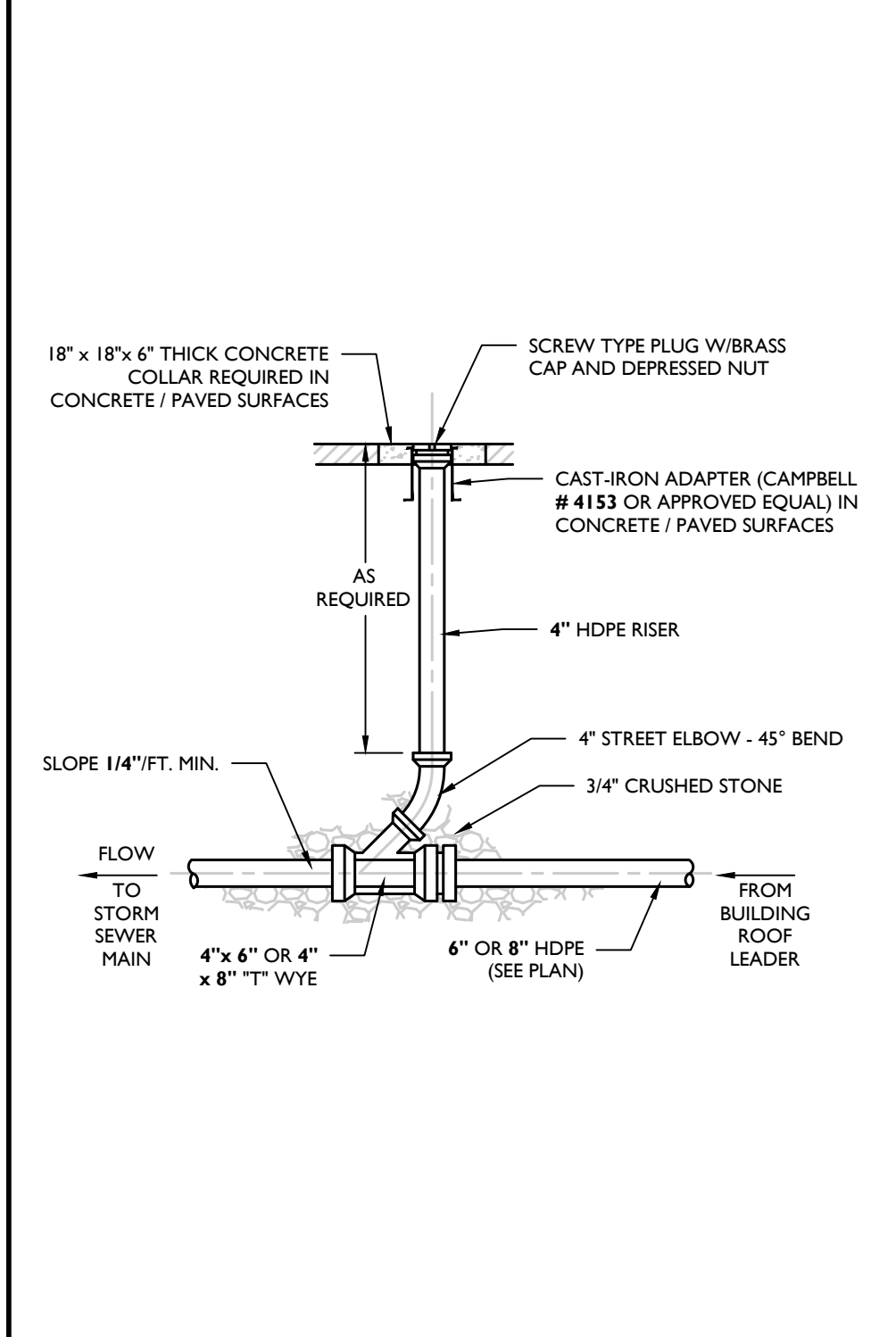
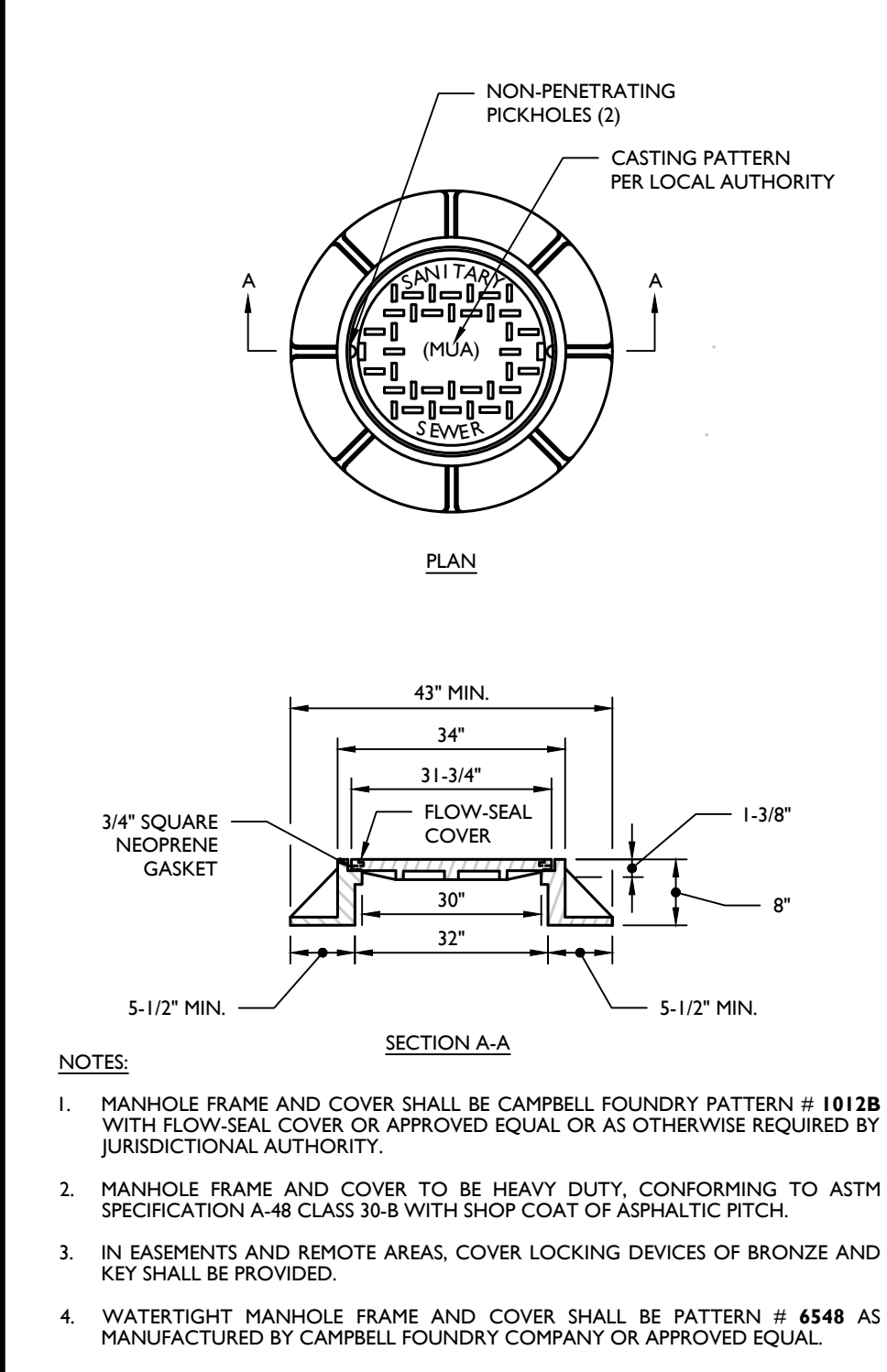
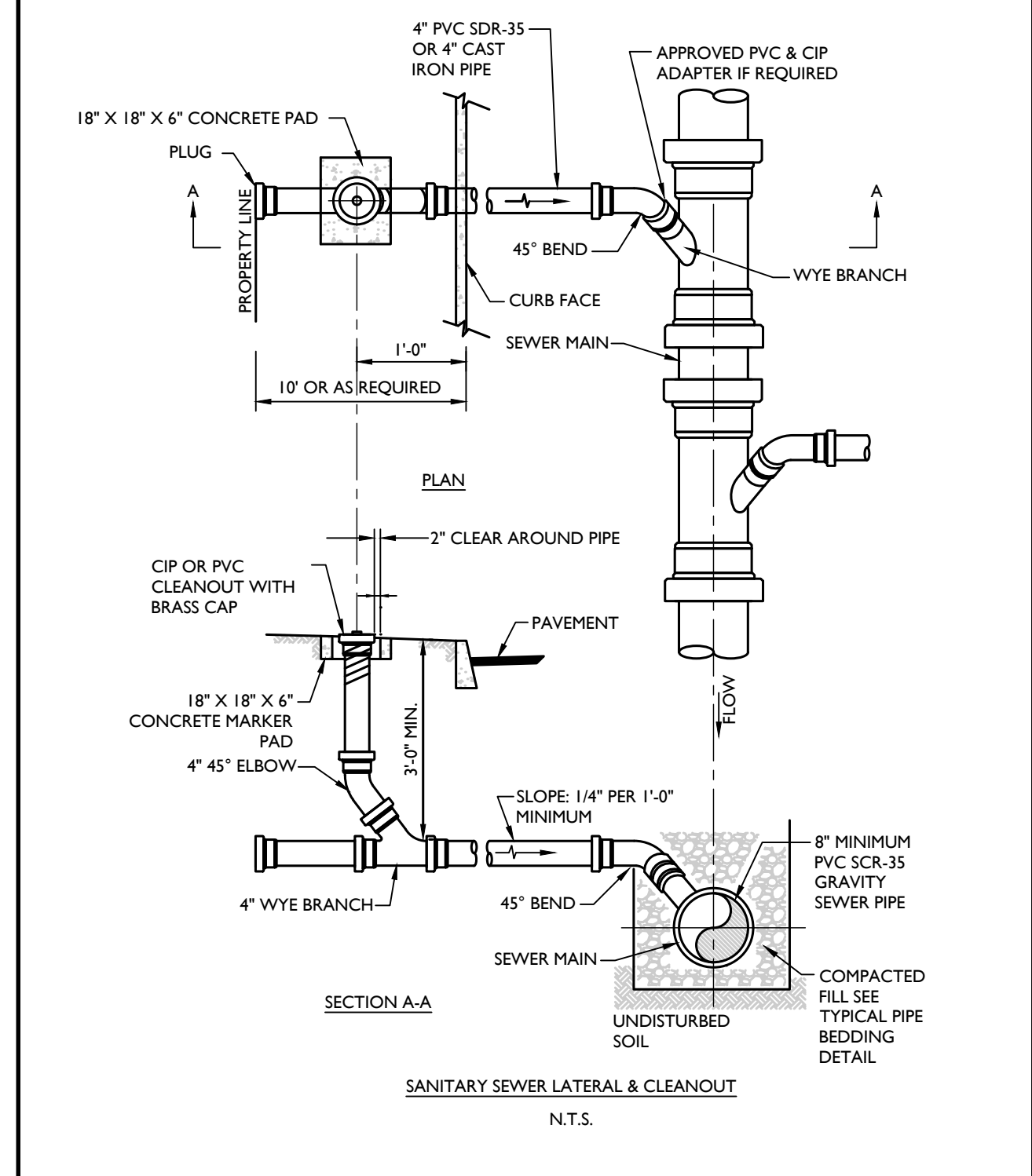
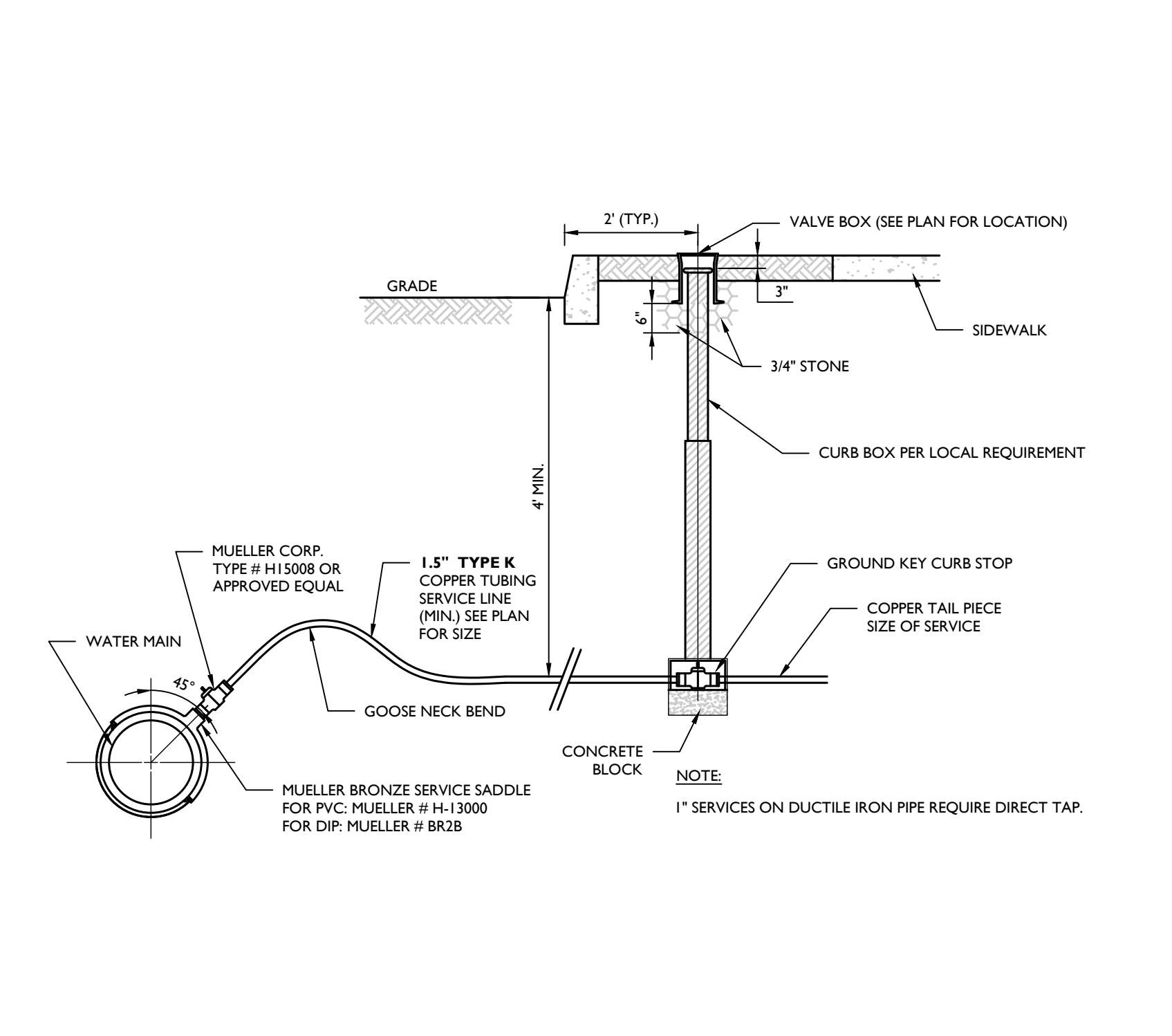
**4** PVC SANITARY PIPE BEDDING (GRAVITY) DETAIL  
NOT TO SCALE MCNY-UTIL-SSWR-2803 02/01/19

**5** HDPE STORM PIPE BEDDING DETAIL  
NOT TO SCALE MCNY-UTIL-STRM-2302 05/01/17

**6** PVC WATER PIPE BEDDING DETAIL  
NOT TO SCALE MCNY-UTIL-WATR-1910 05/01/17

**7** CLEANOUT PROTECTION BOX DETAIL  
NOT TO SCALE MCNY-UTIL-SSWR-1600 07/01/19

**8** CONCRETE HEADWALL (STRAIGHT) DETAIL  
NOT TO SCALE MCNY-UTIL-STRM-2101 07/01/19



**9** WATER SERVICE CONNECTION DETAIL  
NOT TO SCALE MCNY-UTIL-WATR-1100 MOD: 04/16/19 05/01/17

**10** SANITARY SEWER LATERAL & CLEANOUT DETAIL  
NOT TO SCALE MCNY-UTIL-SSWR-1801 05/01/17

**11** SANITARY MANHOLE FRAME AND COVER DETAIL  
NOT TO SCALE MCNY-UTIL-SSWR-1001 07/01/19

**12** ROOF LEADER CLEANOUT DETAIL  
DTL SCALE DTL NUMBER MODIFIED DTL DATE

**13** MANHOLE STEPS  
N.T.S.

**Colliers**  
Engineering & Design  
www.colliersengineering.com  
Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is loaned. This drawing may not be copied, revised, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as **MASER CONSULTANTS**

**811**  
Know what's below. Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE

REV	DATE	DRAWN BY	DESCRIPTION
1	08/22/23	NJ	REVISED PER PROFESSIONAL BOARD COMMENTS

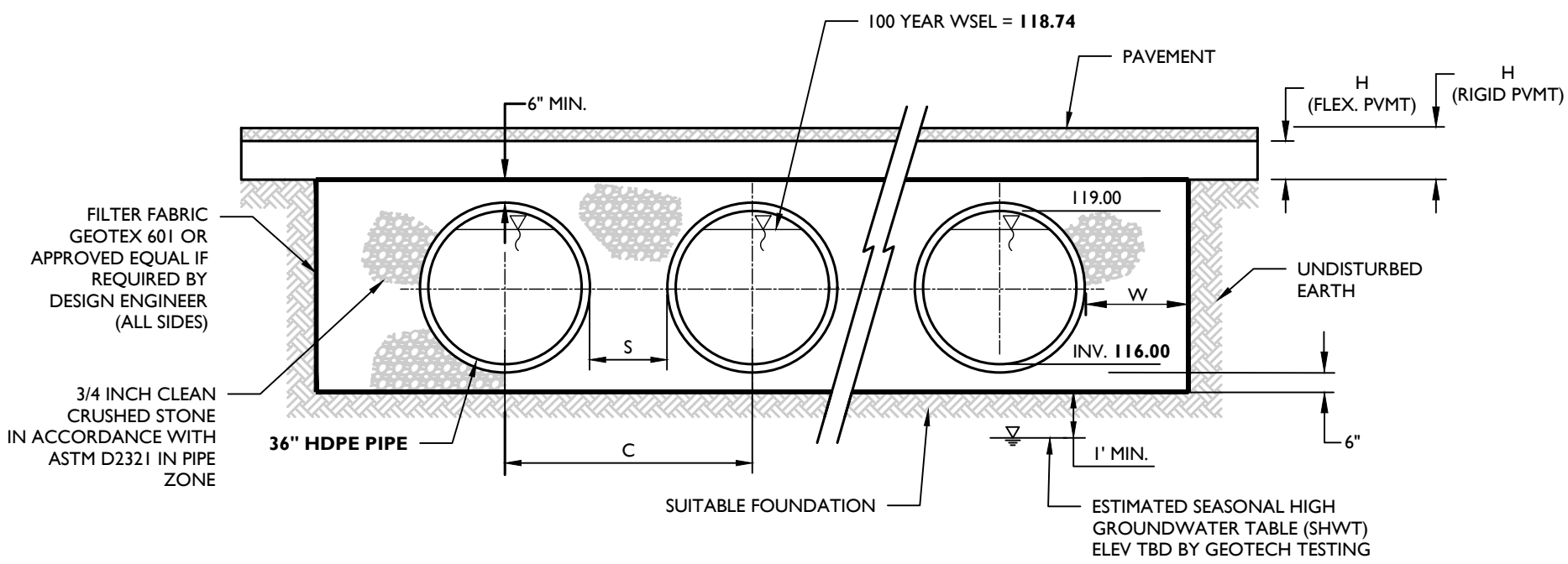
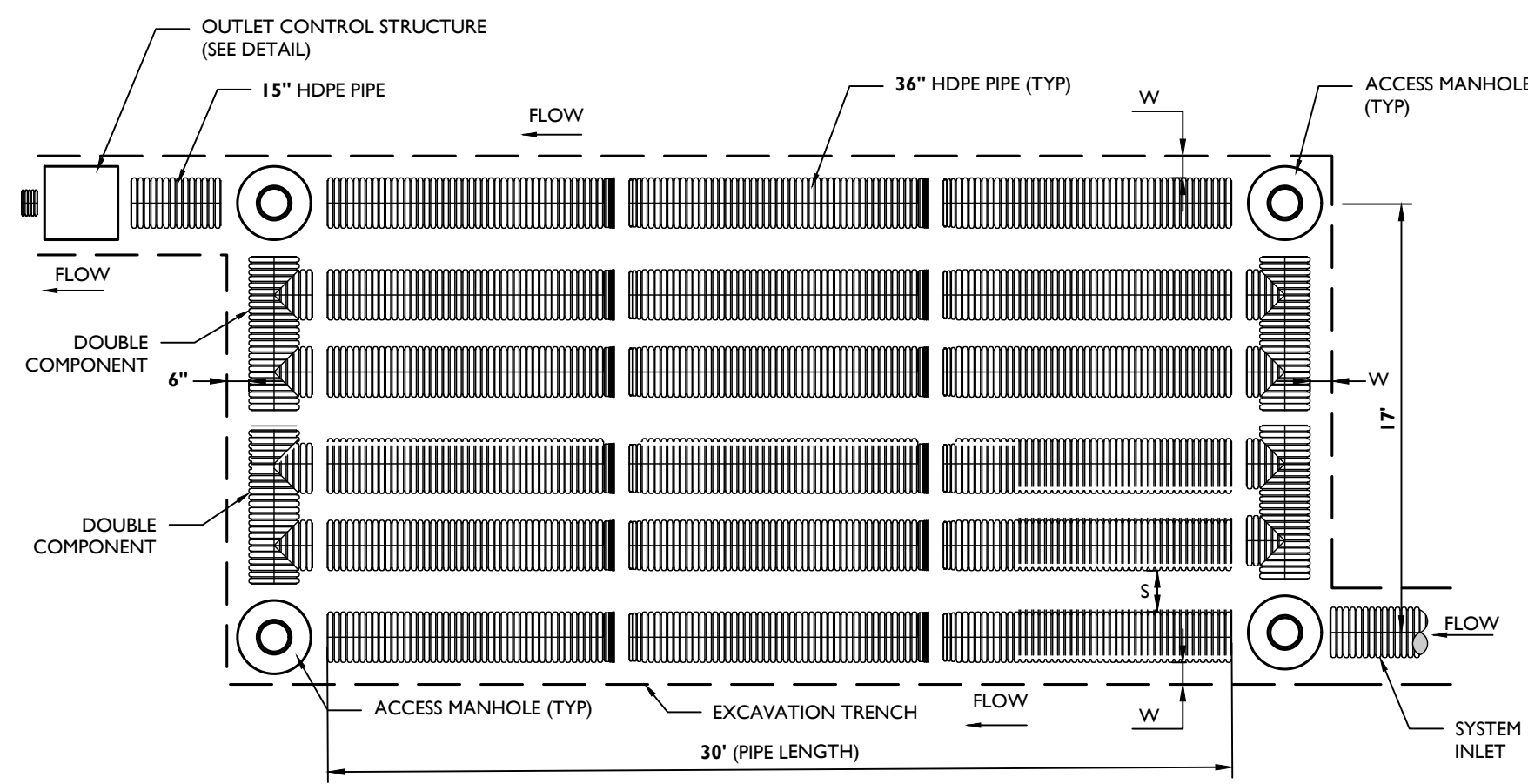
**Jesse Barrett Cokoely**  
NEW YORK LICENSED PROFESSIONAL ENGINEER  
LICENSE NUMBER: 090987-1  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
N.Y. C.O.A. #: 0017609

PRELIMINARY SITE PLAN  
FOR  
WESTERN HIGHWAY ENTERPRISES LLC  
SECTION 74.14  
BLOCK 2  
LOT 39  
HAMLET OF TAPPAN  
TOWN OF ORANGETOWN  
ROCKLAND COUNTY  
NEW YORK

**Colliers**  
Engineering & Design  
MONTVALE  
50 Chestnut Ridge Road,  
Suite 101  
Montvale, NJ 07645  
Phone: 845.352.0411  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTANTS  
ENGINEERING AND SURVEYING

SCALE: AS SHOWN DATE: 08/24/23 DRAWN BY: NJ CHECKED BY: JBC  
PROJECT NUMBER: 21006649A DRAWING NAME: C-DTL5  
SHEET TITLE: CONSTRUCTION DETAILS  
SHEET NUMBER: 9 of 11

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

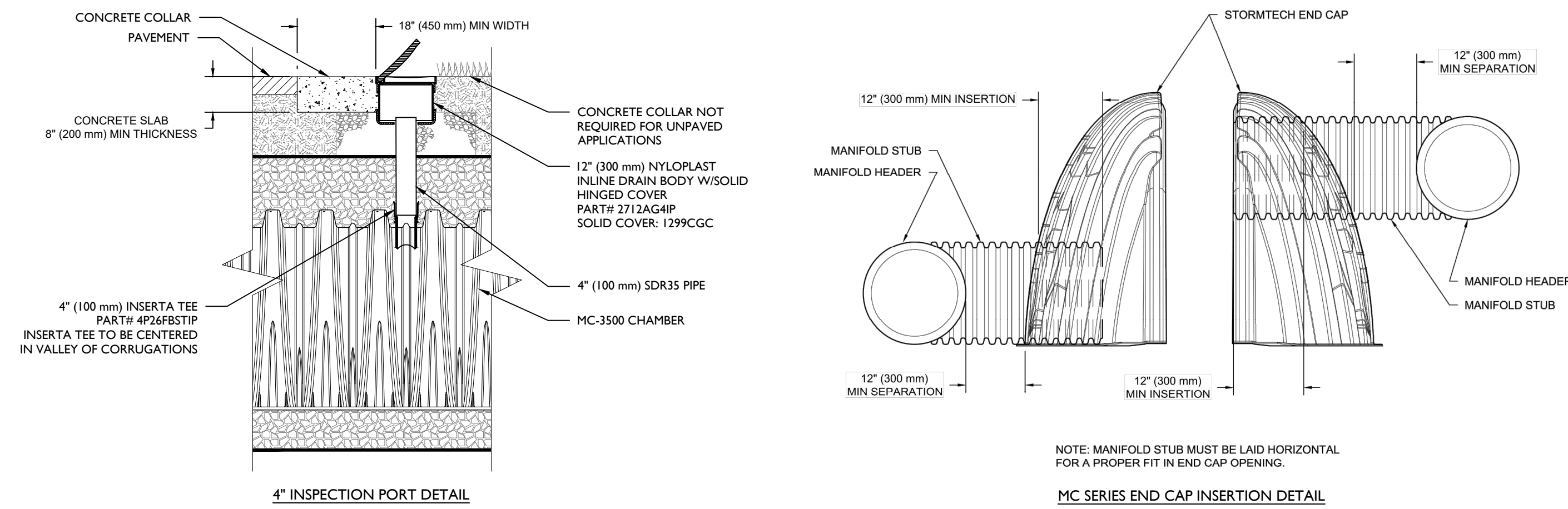


NOMINAL DIAMETER	NOMINAL O.D.	TYPICAL SPACING "S"	TYPICAL SPACING "C"	TYPICAL SIDE WALL "W"	H (MIN. PIPE COVER) (TRAFFIC)
30" (762 MM)	36" (914 MM)	18" (457 MM)	53.1" (1347 MM)	18" (457 MM)	13" (292 MM)
36" (914 MM)	42" (1067 MM)	22" (559 MM)	63" (1600 MM)	18" (457 MM)	12" (292 MM)
42" (1067 MM)	48" (1219 MM)	24" (610 MM)	71.9" (1826 MM)	18" (457 MM)	24" (610 MM)

- NOTES:
- SEE ABOVE CHART SPECIFIC TO MATERIAL/PIPE SIZES PER MANUFACTURER'S SPECIFICATIONS.
  - (H) FOR FLEXIBLE PAVEMENT MAY INCLUDE THE PAVEMENT SUBBASE THICKNESS AS MINIMUM COVER.
  - CLASS I(A) BACKFILL MATERIAL PER ASTM 2321 REQUIRED FOR PIPES 60" DIAMETER OR LARGER.

**UNDERGROUND HDPE SYSTEM NOTES**

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

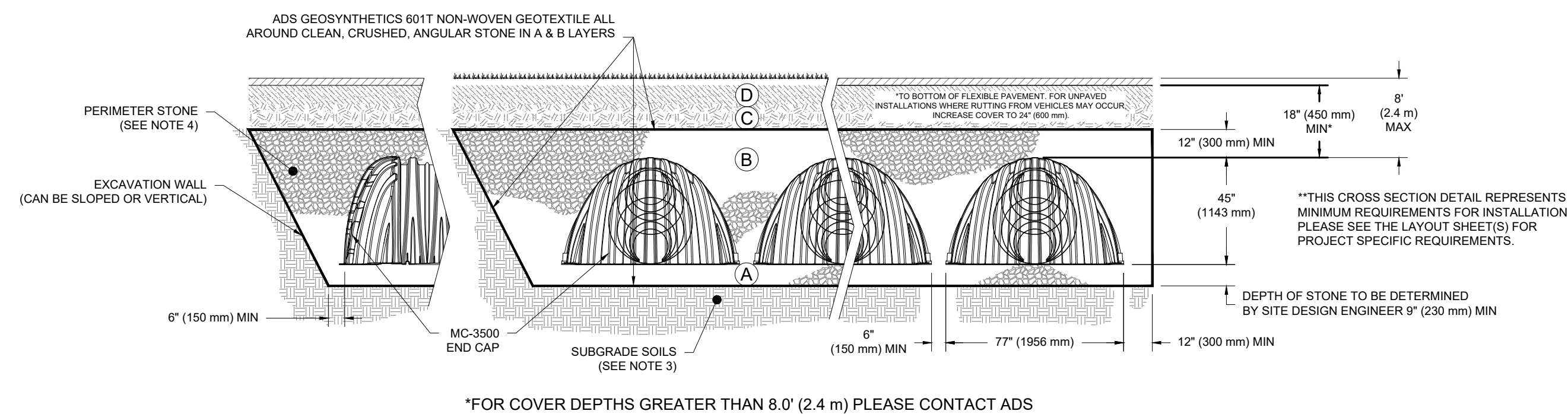


**ACCEPTABLE FILL MATERIALS: STORMTECH MC-3500 CHAMBER SYSTEMS**

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 <sup>1</sup> A-1, A-2-4, A-3 OR AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 <sup>1</sup> 3, 4	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 <sup>1</sup> 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. <sup>2,3</sup>

PLEASE NOTE:

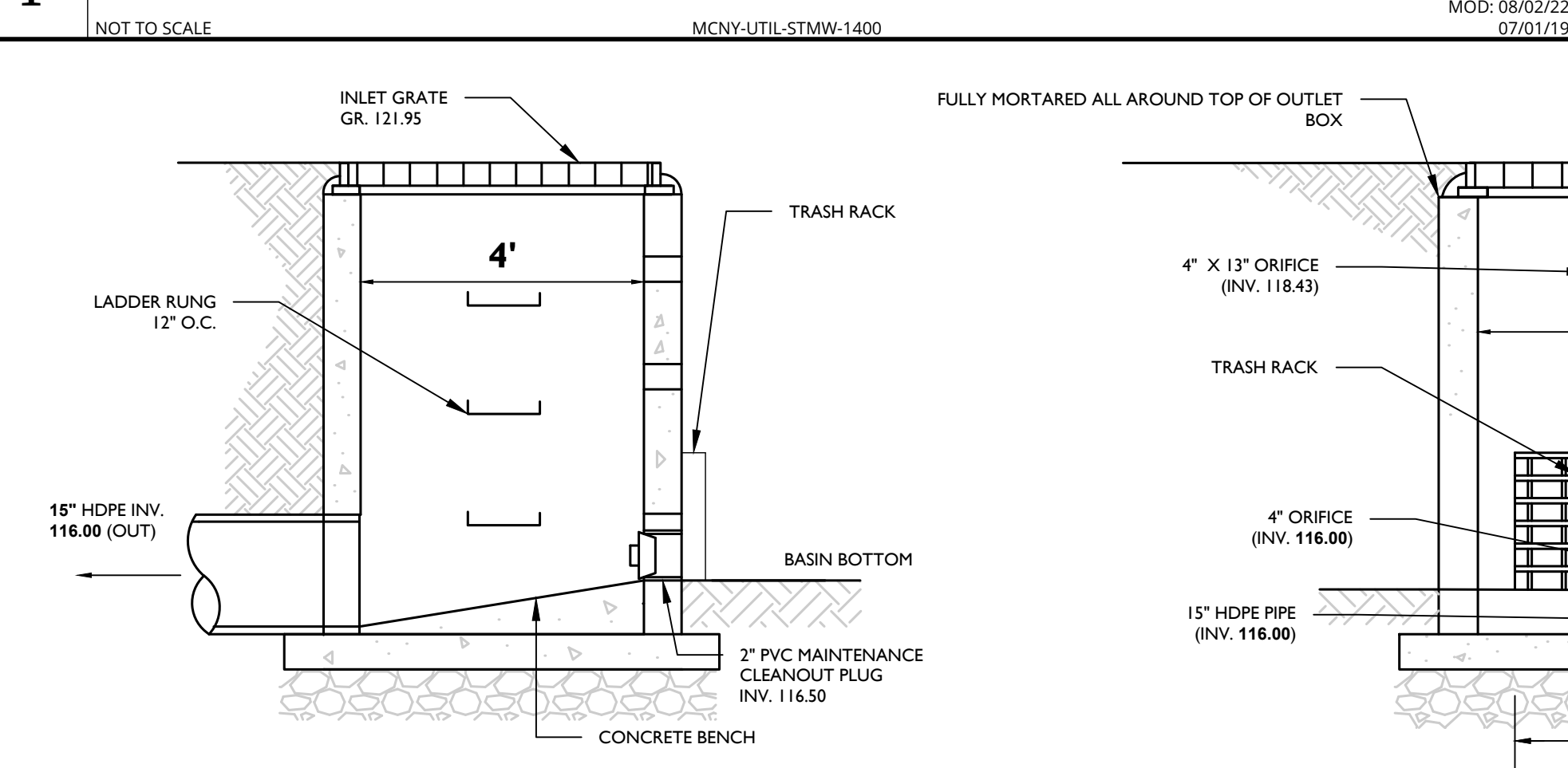
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
- STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
- WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD FINISH LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
- ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



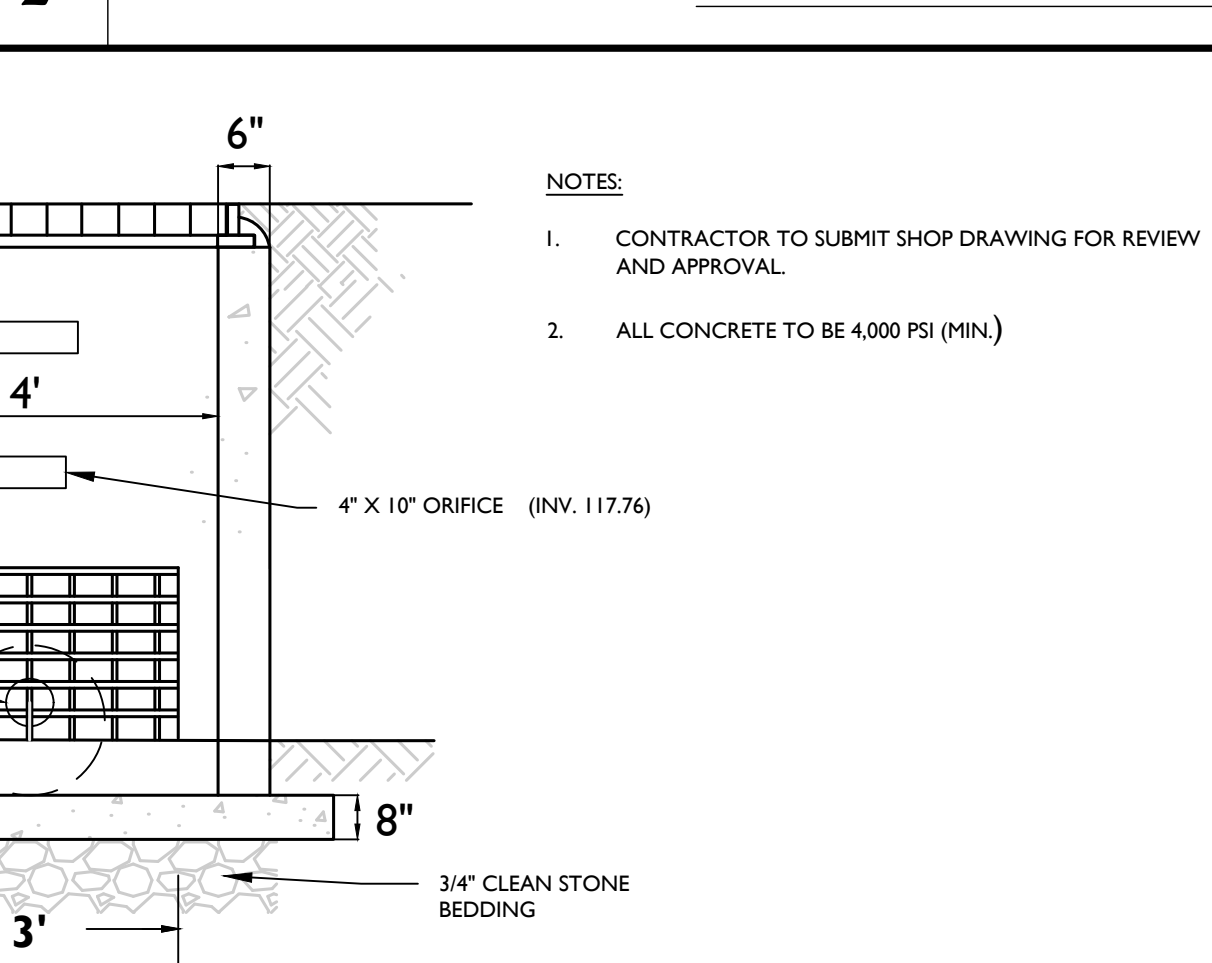
**NOTES:**

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 45x76 DESIGNATION SS.
- MC-3500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL INTERLOCKING STACKING LUGS.
  - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
  - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT<sup>2</sup>, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

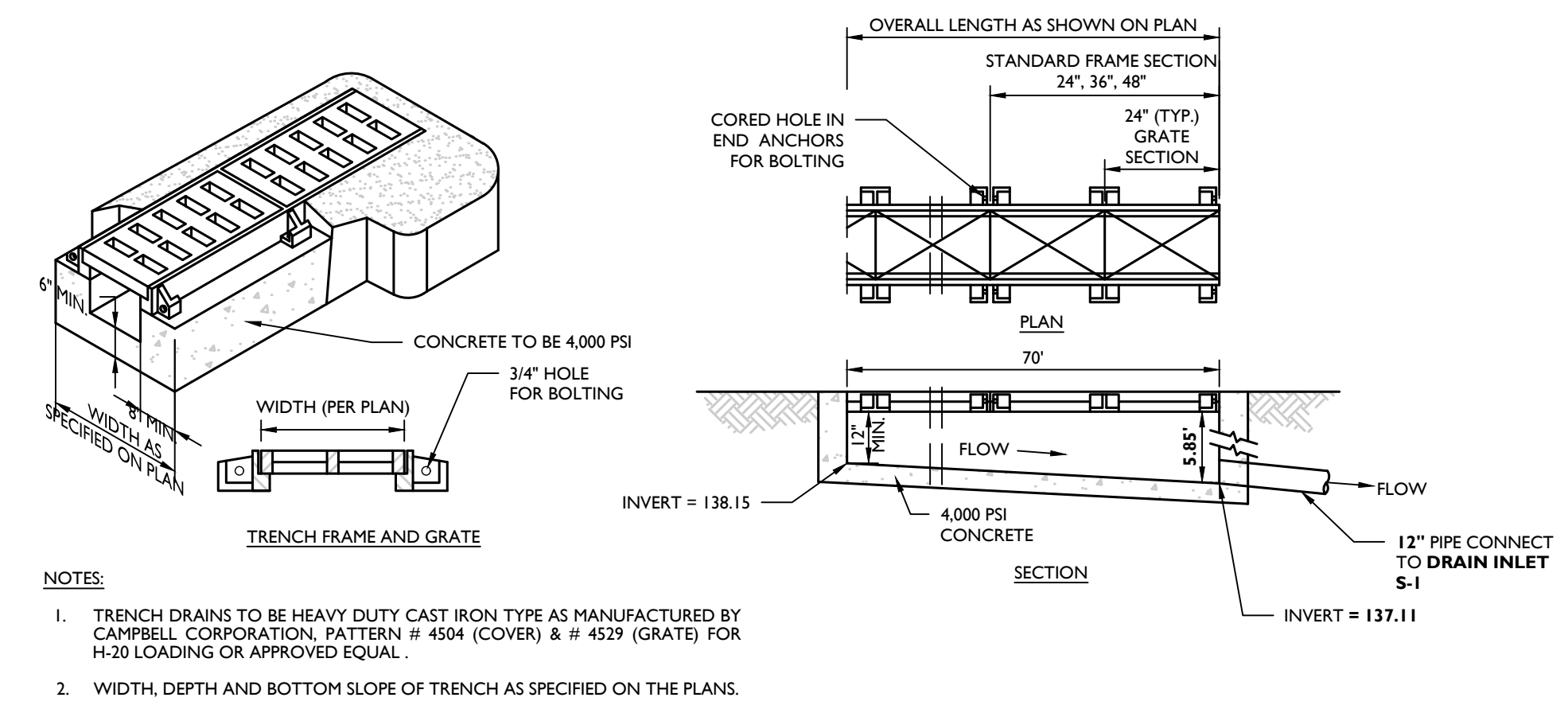
**1 UNDERGROUND DETENTION BASIN (CLOSED SYSTEM) DETAIL**



**2 STORMTECH MC-3500 UNDERGROUND INFILTRATION BASIN DETAIL**



**3 OUTLET CONTROL STRUCTURE DETAIL (SINGLE CHAMBER)**



**4 HEAVY DUTY TRENCH DRAIN DETAIL**



**Colliers**  
Engineering & Design  
www.colliersengineering.com  
Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is lent. This drawing may not be copied, reused, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as **MASER**  
CONSULTING ENGINEERS & ARCHITECTS

**811**  
Know what's below. Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DESCRIPTION
1	08/23/23	REVISED PER PROGRAMMING BOARD COMMENTS
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

**Jesse Barrett Cokeley**  
NEW YORK LICENSED PROFESSIONAL ENGINEER  
LICENSE NUMBER: 090987-1  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
N.Y. C.O.A.#: 0077609

**PRELIMINARY SITE PLAN**  
FOR  
**WESTERN HIGHWAY ENTERPRISES LLC**

SECTION 74.14  
BLOCK 2  
LOT 39

HAMLET OF TAPPAN  
TOWN OF ORANGETOWN  
ROCKLAND COUNTY  
NEW YORK

**Colliers**  
Engineering & Design

50 Chestnut Ridge Road,  
Suite 101  
Montvale, NJ 07645  
Phone: 845.352.0411  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING.

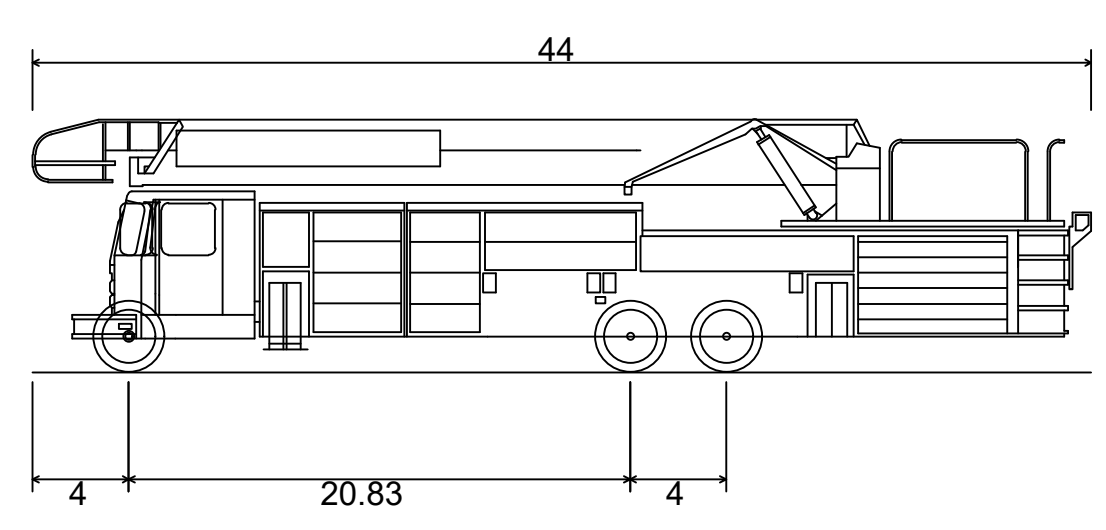
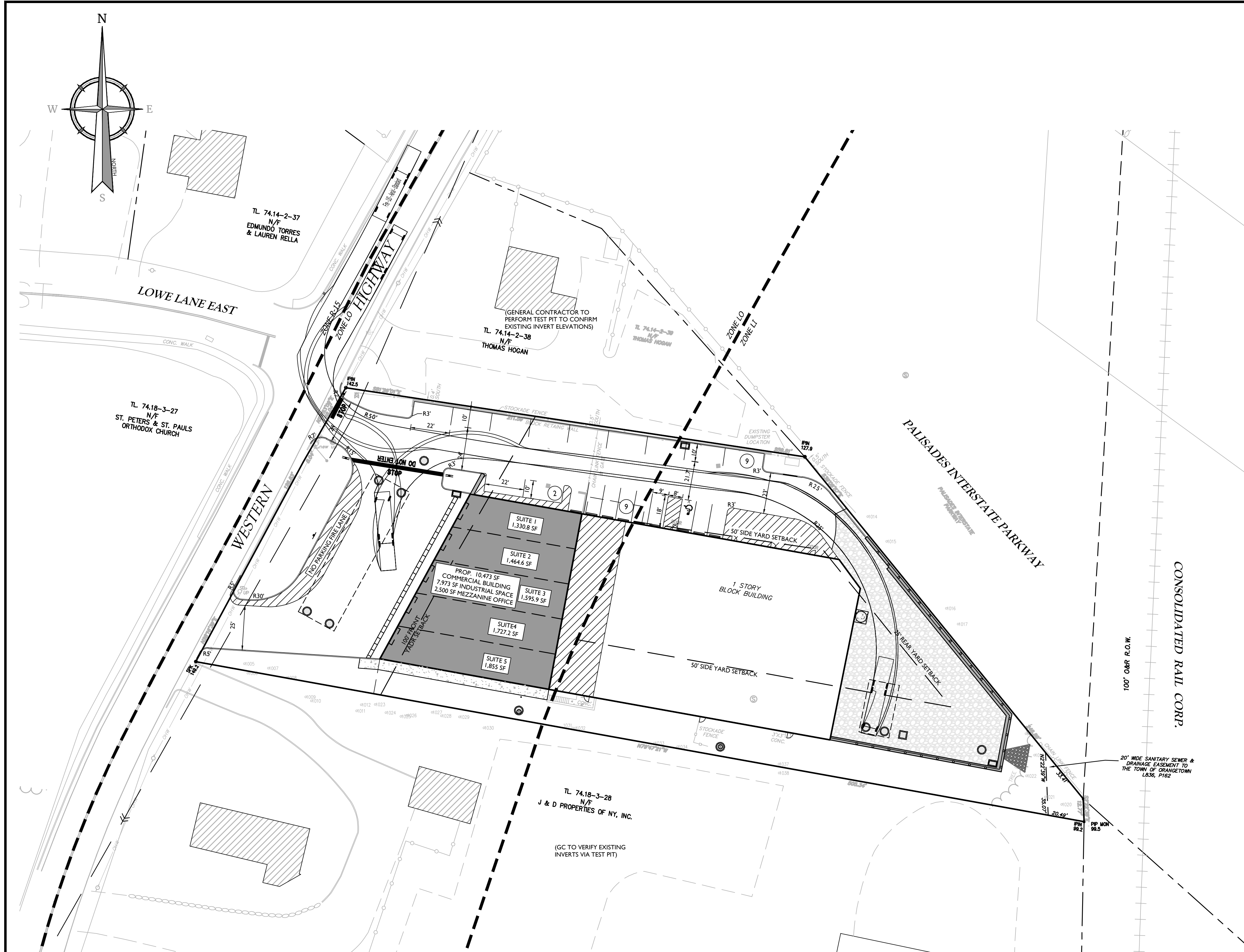
SCALE: AS SHOWN  
DATE: 08/24/23  
PROJECT NUMBER: 21006649A  
DRAWING NAME: C-DTLS

DRAWN BY: NJ  
CHECKED BY: JBC

SHEET TITLE:  
**CONSTRUCTION DETAILS**

SHEET NUMBER:  
**10 of 11**





Fire - US - Aerial - Standard  
 Overall Length 44.000ft  
 Overall Width 8.500ft  
 Overall Body Height 10.519ft  
 Min Body Ground Clearance 0.950ft  
 Track Width 8.500ft  
 Lock-to-lock time 6.00s  
 Curb to Curb Turning Radius 38.870ft

FIRE US AERIAL STANDARD TRUCK TURN DETAIL

**Colliers**  
Engineering & Design  
www.colliersengineering.com

Copyright © 2023, Colliers Engineering & Design All Rights Reserved. This drawing and all the information contained herein is authorized for use only by the party for whom the services were contracted or to whom it is certified. This drawing may not be copied, revised, disclosed, distributed or relied upon for any other purpose without the express written consent of Colliers Engineering & Design.

Doing Business as **MASER CONSULTING**

**811** PROTECT YOURSELF  
ALL STATES REQUIRE NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN ANY STATE  
Know what's below. Call before you dig.  
FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION
1	08/24/23	NJ	REVISED PER PLANNING BOARD COMMENTS

**Jesse Barrett Cokeley**  
NEW YORK LICENSED PROFESSIONAL ENGINEER  
LICENSE NUMBER: 090987-1  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
N.Y. C.O.A.#: 0017609

**PRELIMINARY SITE PLAN**  
FOR  
**WESTERN HIGHWAY ENTERPRISES LLC**

SECTION 74.14  
BLOCK 2  
LOT 39

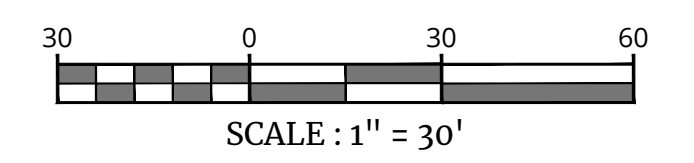
HAMLET OF TAPPAN  
TOWN OF ORANGETOWN  
ROCKLAND COUNTY  
NEW YORK

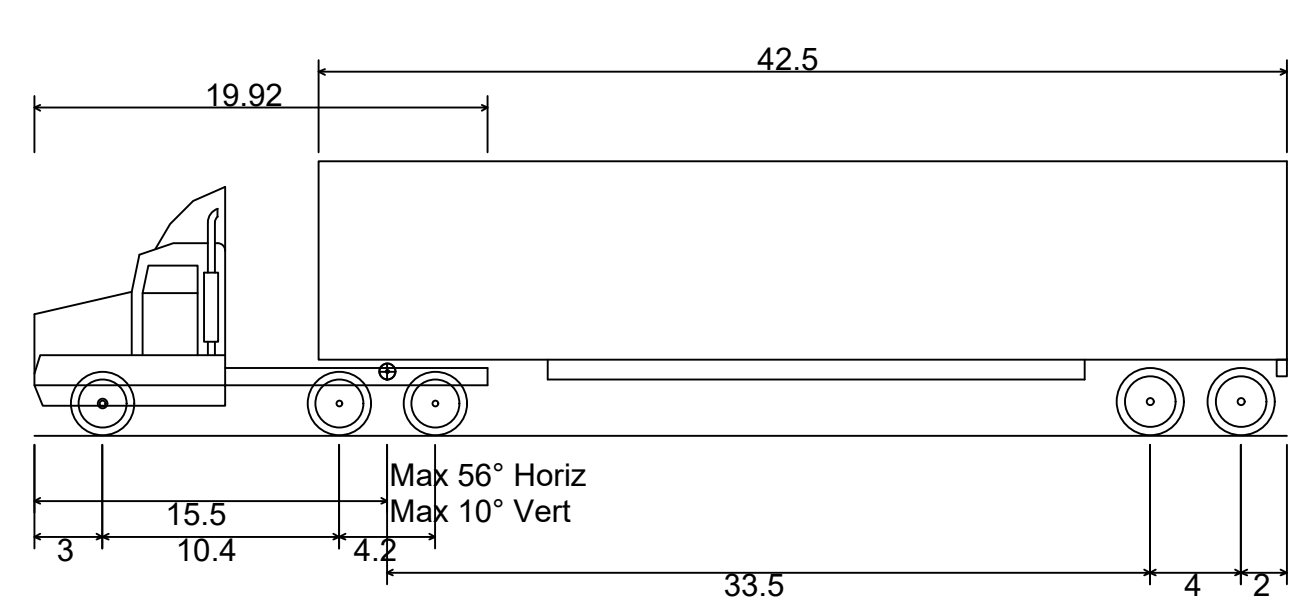
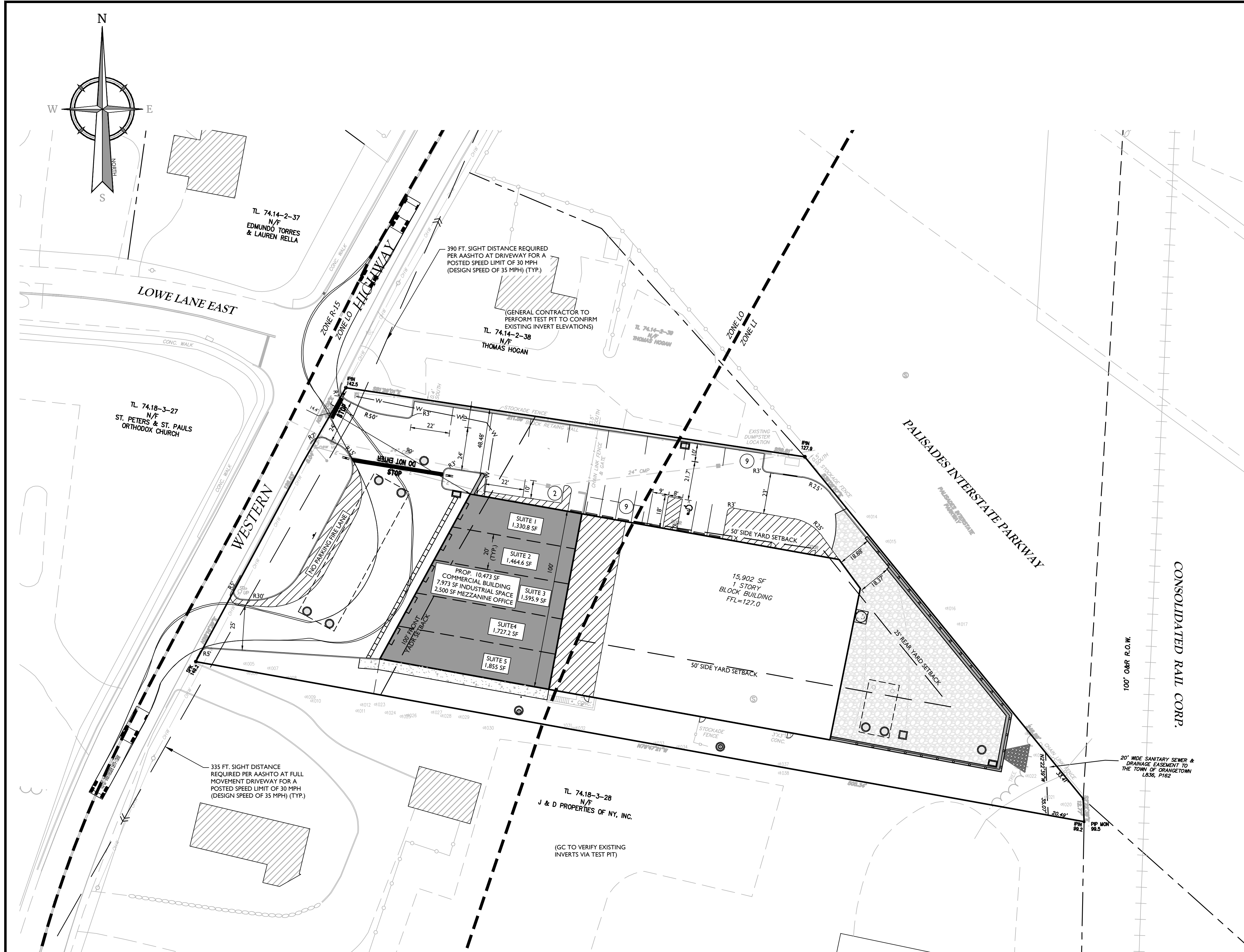
**Colliers** MONTVALE  
50 Chestnut Ridge Road,  
Suite 101  
Montvale, NJ 07645  
Phone: 845.352.0411  
COLLIERS ENGINEERING & DESIGN CT, P.C.  
DOING BUSINESS AS MASER CONSULTING  
ENGINEERING & LAND SURVEYING

SCALE: AS SHOWN	DATE: 08/24/23	DRAWN BY: NJ	CHECKED BY: JBC
PROJECT NUMBER: 21006649A	DRAWING NAME: C-LAY1		

SHEET TITLE:  
**FIRE TRUCK MOVEMENT EXHIBIT**

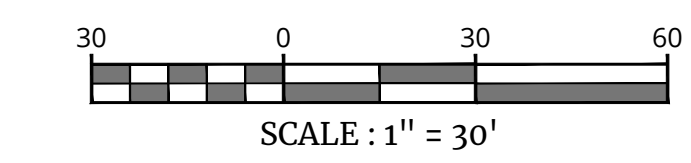
SHEET NUMBER:  
1 of 2





WB-50 - Intermediate Semi-Trailer  
 Overall Length 55.000ft  
 Overall Width 8.500ft  
 Overall Body Height 12.052ft  
 Min Body Ground Clearance 1.334ft  
 Max Track Width 8.500ft  
 Lock-to-lock time 6.00s  
 Max Steering Angle (Virtual) 17.90°

WB-67 TRUCK TURN DETAIL



REV.	DATE	DESCRIPTION	REVISION PER PLANNING BOARD COMMENTS
1	08/24/23		

**Jesse Barrett Cokeley**  
 NEW YORK LICENSED PROFESSIONAL ENGINEER  
 LICENSE NUMBER: 090987-1  
 COLLIER'S ENGINEERING & DESIGN CT, P.C.  
 N.Y. C.O.A.#: 0017609

**PRELIMINARY SITE PLAN**  
 FOR  
**WESTERN HIGHWAY ENTERPRISES LLC**

SECTION 74.14  
 BLOCK 2  
 LOT 39  
 HAMLET OF TAPPAN  
 TOWN OF ORANGETOWN  
 ROCKLAND COUNTY  
 NEW YORK

**Colliers** MONTVALE  
 50 Chestnut Ridge Road,  
 Suite 101  
 Montvale, NJ 07645  
 Phone: 845.352.0411  
 COLLIER'S ENGINEERING & DESIGN CT, P.C.  
 DOING BUSINESS AS MASER CONSULTING  
 ENGINEERING & LAND SURVEYING

SCALE: AS SHOWN	DATE: 08/24/23	DRAWN BY: NJ	CHECKED BY: JBC
PROJECT NUMBER: 21006649A	DRAWING NAME: C-LAY		

**TRUCK MOVEMENT EXHIBIT**