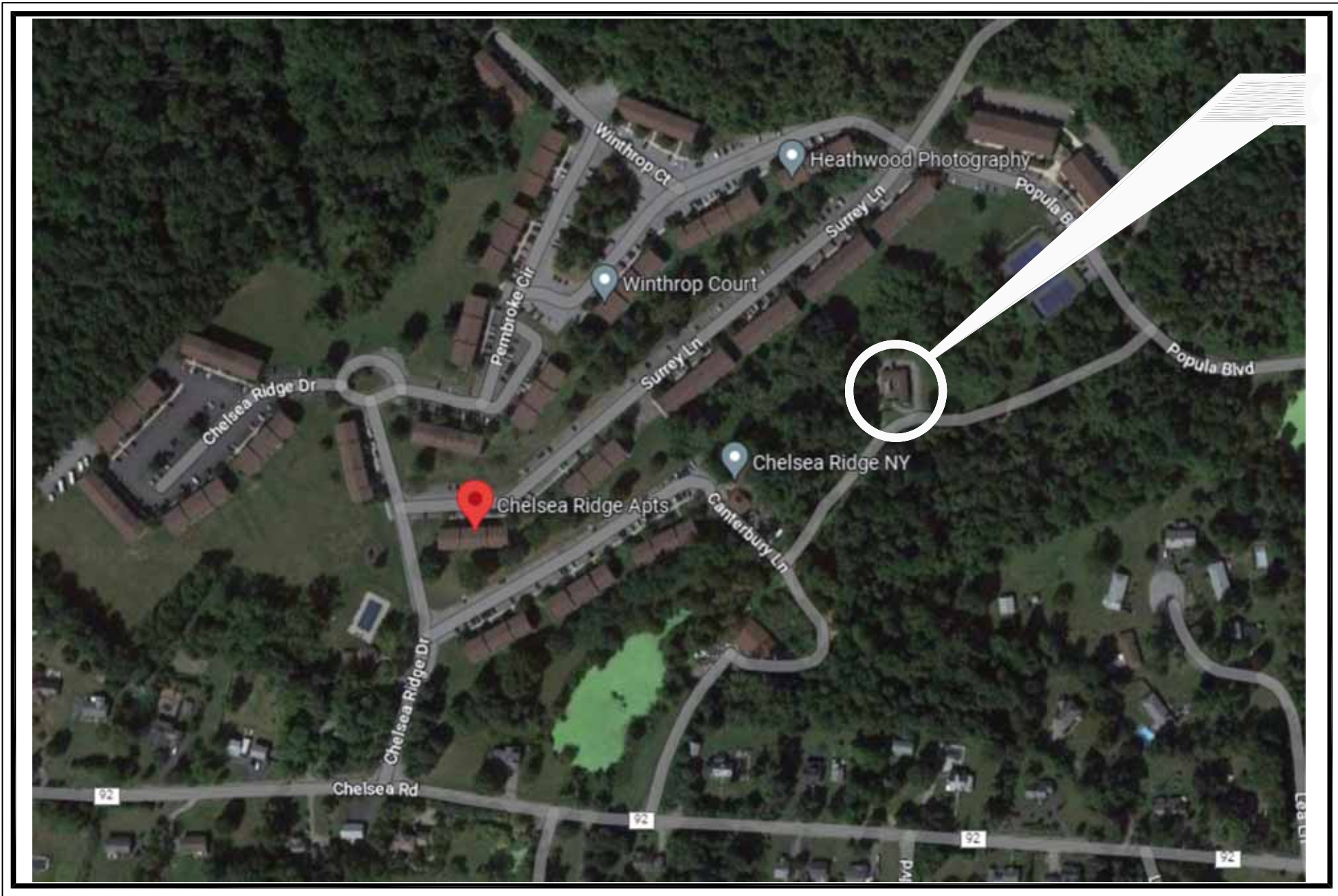


# CHELSEA RIDGE WWTP UPGRADE PROJECT

27 CANTERBURY LANE  
TOWN OF WAPPINGER, NY

MAY 2023

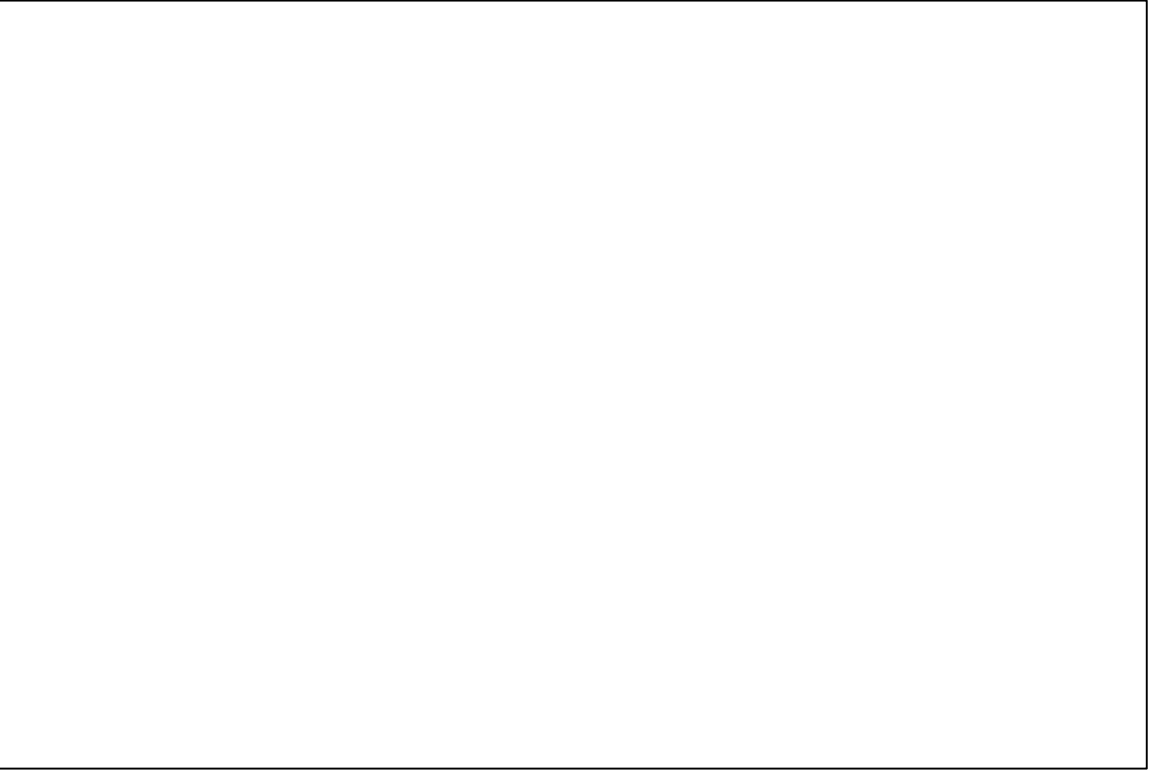
## SITE PLAN SUBMISSION



LOCATION MAP

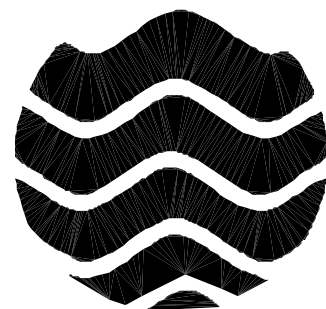
PROJECT  
LOCATION

- INDEX:
- C10 EXISTING SITE PLAN
  - C11 PROPOSED SITE PLAN
  - C12 PROPOSED YARD PIPING AND PROFILE
  - C100 TYPICAL SITE DETAILS
  - C101 TYPICAL EROSION AND SEDIMENT CONTROL DETAILS
  - C102 TYPICAL EROSION AND SEDIMENT CONTROL DETAILS
  - S100 FOUNDATION PLAN
  - S200 BUILDING ELEVATIONS
  - S300 CONCRETE DETAILS



SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_  
TOWN OF WAPPINGER PLANNING BOARD


PREPARED BY:



DELAWARE ENGINEERING, D.P.C.  
CIVIL AND ENVIRONMENTAL ENGINEERING

PREPARED FOR:  
**CHELSEA DHC, LLC**  
20 Corporate Woods Blvd  
Albany, NY 12211

DATE: 3/2023  
DRAWN BY: TJ  
SCALE: AS SHOWN  
REVIEWED BY: BDJ  
PROJECT NO.: 21-2151  
FILE: CHELSEA RIDGE UPGRADE REV1



**DELAWARE  
ENGINEERING, D.P.C.**  
CIVIL AND ENVIRONMENTAL ENGINEERING  
28 MADISON AVENUE EXTENSION, ALBANY, NY 12203 - 518.452.1290  
55 SOUTH MAIN ST., ONEONTA, NY 13820 - 607.432.8073  
16 EAST MARKET ST., RED HOOK, NY 12571 - 518.452.1280  
223 MAIN ST., GOSHEN, NY 10924 - 518.452.1277



REVISIONS		DESCRIPTION
NO.	DATE	

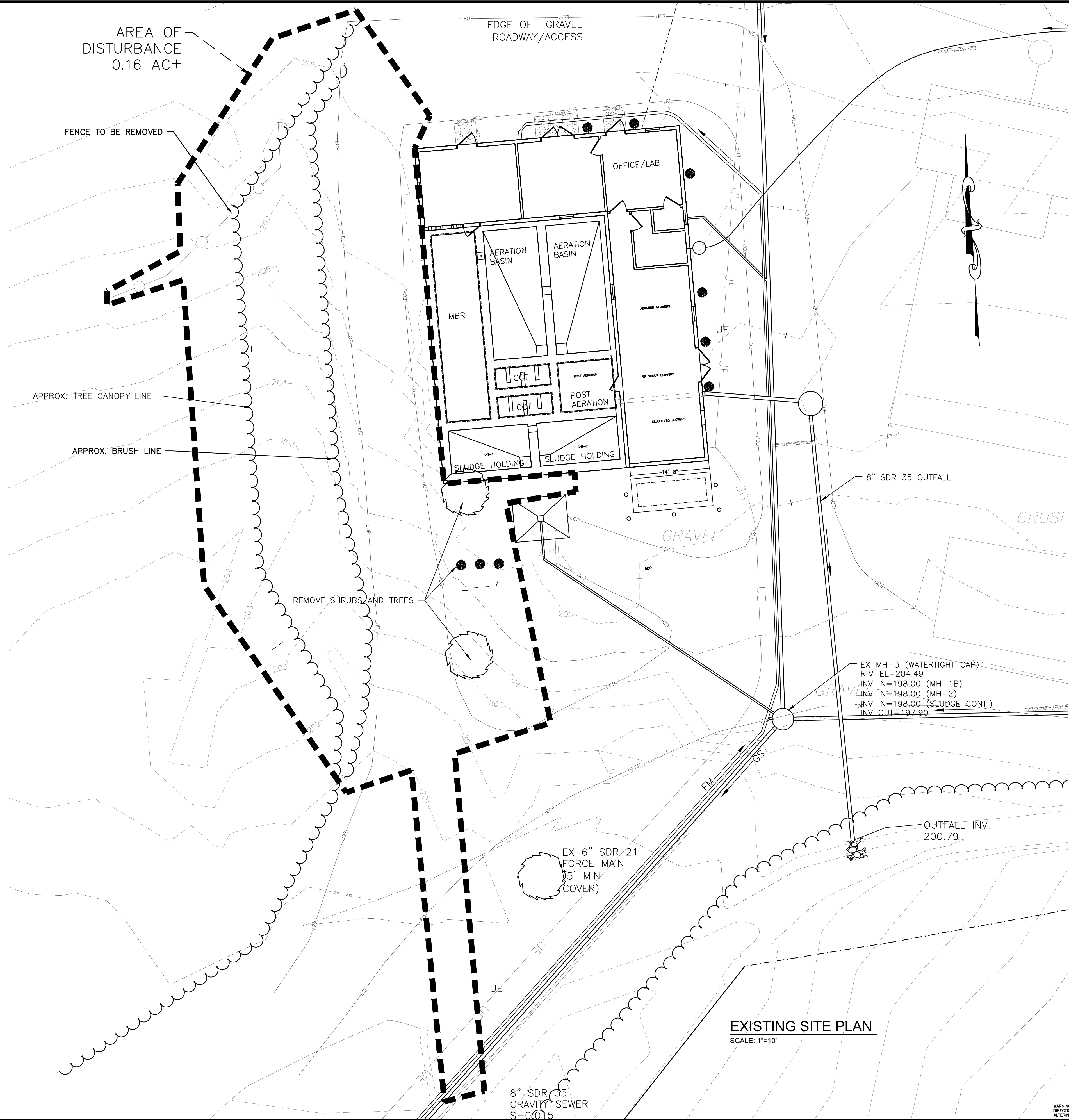
CHELSEA RIDGE WWTP  
UPGRADE PROJECT  
TOWN OF WAPPINGER  
DUTCHESS COUNTY, NY

COVER

SHEET:  
**COVER**



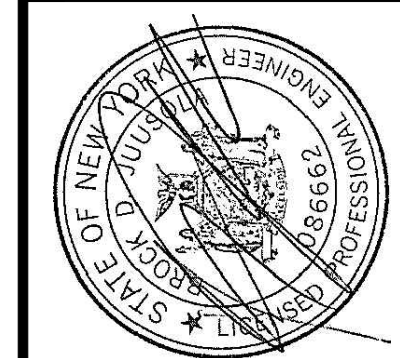
H:\DRAWINGS\CHelsea RIDGE 2021\CR SITE REV4.DWG/6/30/23



- NOTES:
1. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES.
  2. CONTRACTOR SHALL HOLD ALL UTILITIES LINES AND POLES AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER
  3. TREES SHALL NOT BE REMOVED BETWEEN NOVEMBER 1ST AND MARCH 31ST TO PROTECT INDIANA BAT HABITAT.
  4. NO TREES 12" IN DIAMETER SHALL BE CUT UNLESS APPROVED BY ENGINEER AND TOWN OF WAPPINGER.

DATE: 3/2023  
DRAWN BY: STM  
SCALE: AS SHOWN  
REVIEWED BY: BDJ  
PROJECT NO.: 21-2151  
FILE:

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CIVIL AND ENVIRONMENTAL ENGINEERING  
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1	6/1/23	PER CPL COMMENTS 5/26/23
2	6/30/23	PER CPL COMMENTS 6/29/23

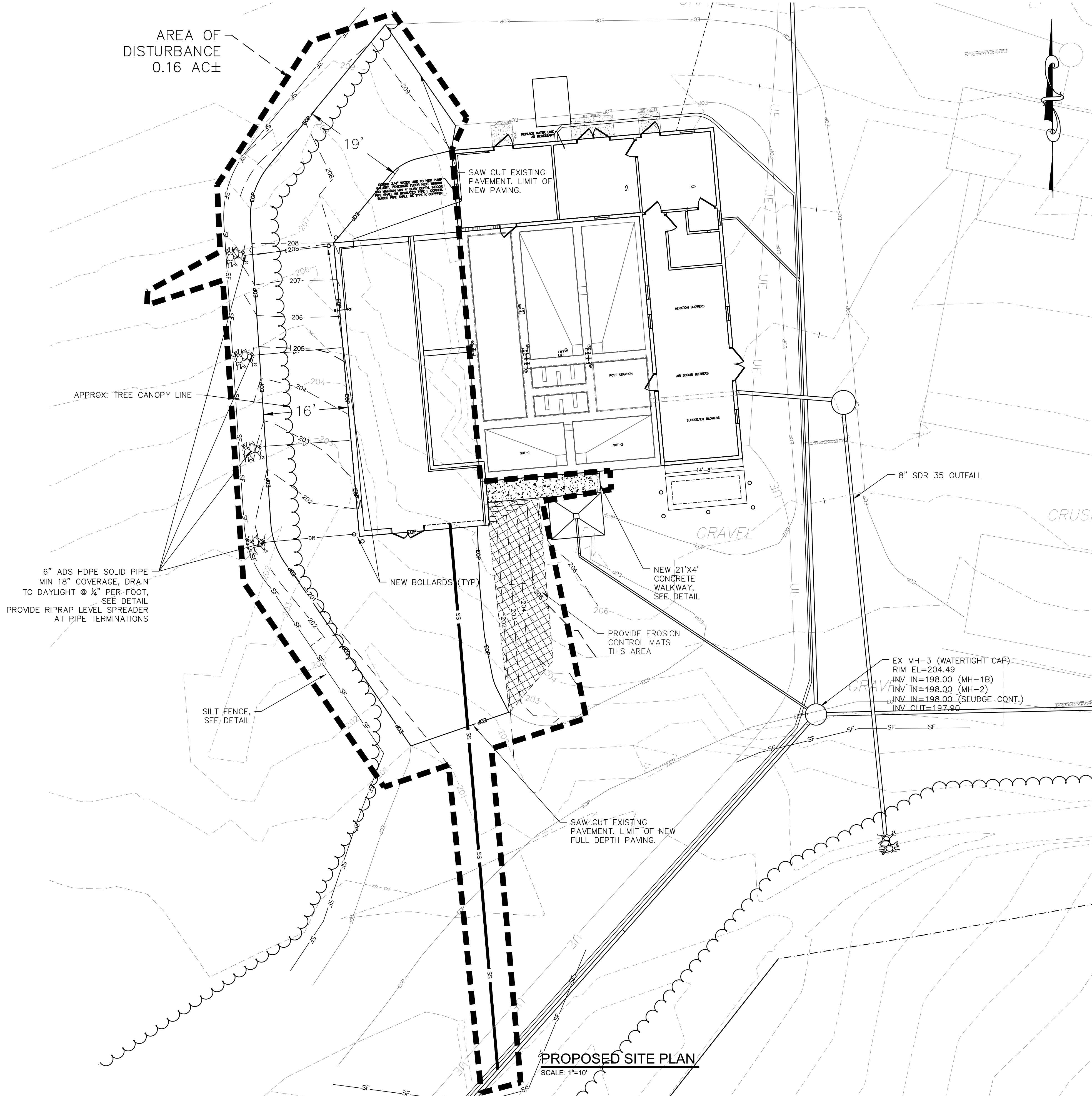
CHelsea RIDGE WWTP  
UPGRADE PROJECT  
TOWN OF WAPPINGER  
DUTCHESS COUNTY, NY

EXISTING SITE PLAN

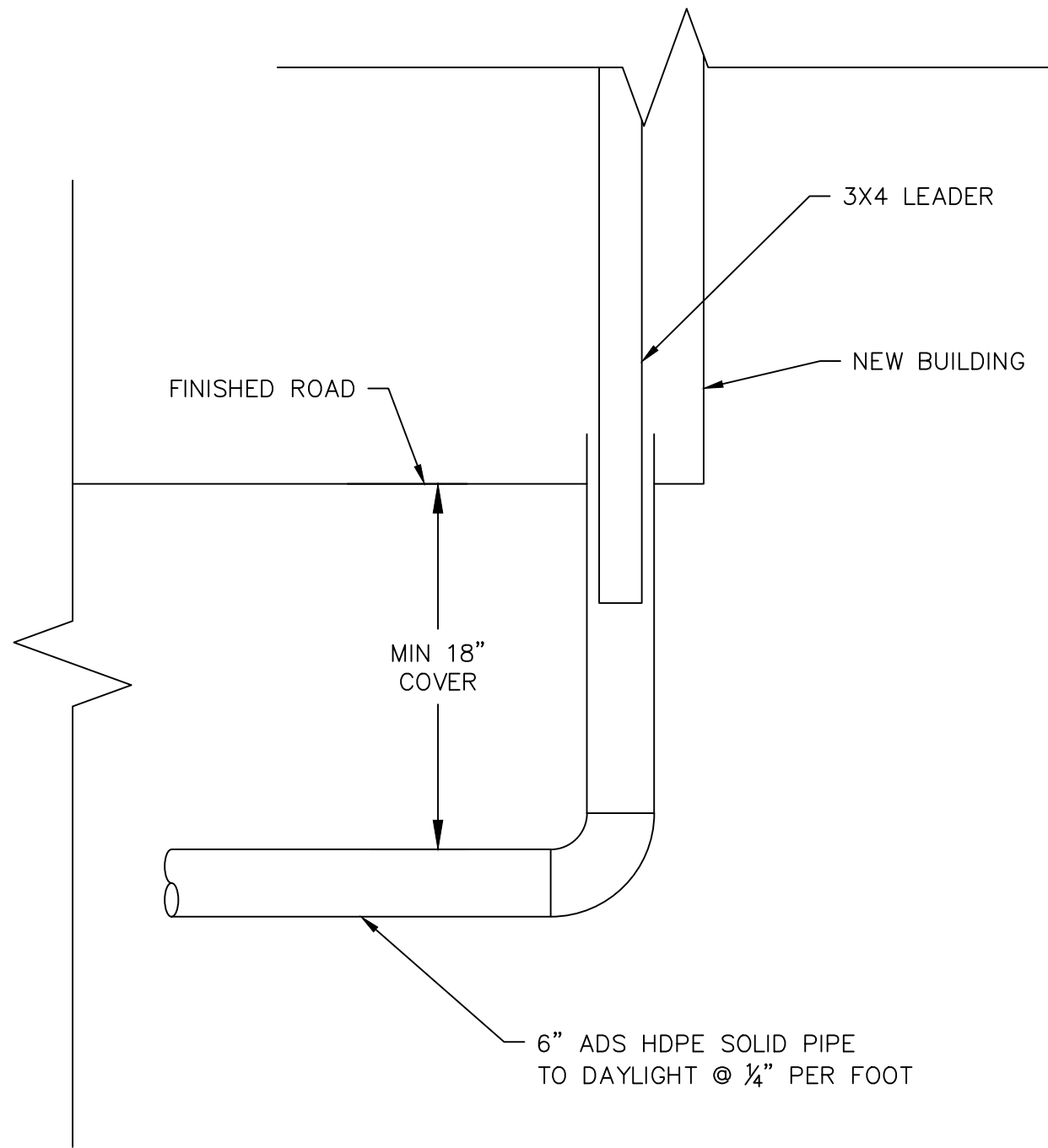
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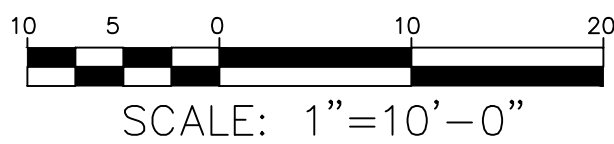
H:\DRAWINGS\CHelsea RIDGE 2021\CR SITE REV4.DWG(6/30/23)



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  4. NO TREES 12" IN DIAMETER SHALL BE CUT UNLESS APPROVED BY ENGINEER AND TOWN OF WAPPINGER.

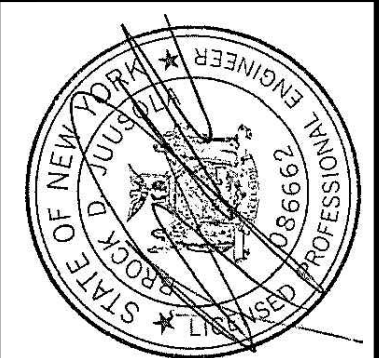


ROOF DRAIN DETAIL  
SCALE: NTS



DATE: 3/2023  
DRAWN BY: STM  
SCALE: AS SHOWN  
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PROJECT NO.: 21-2151  
FILE:

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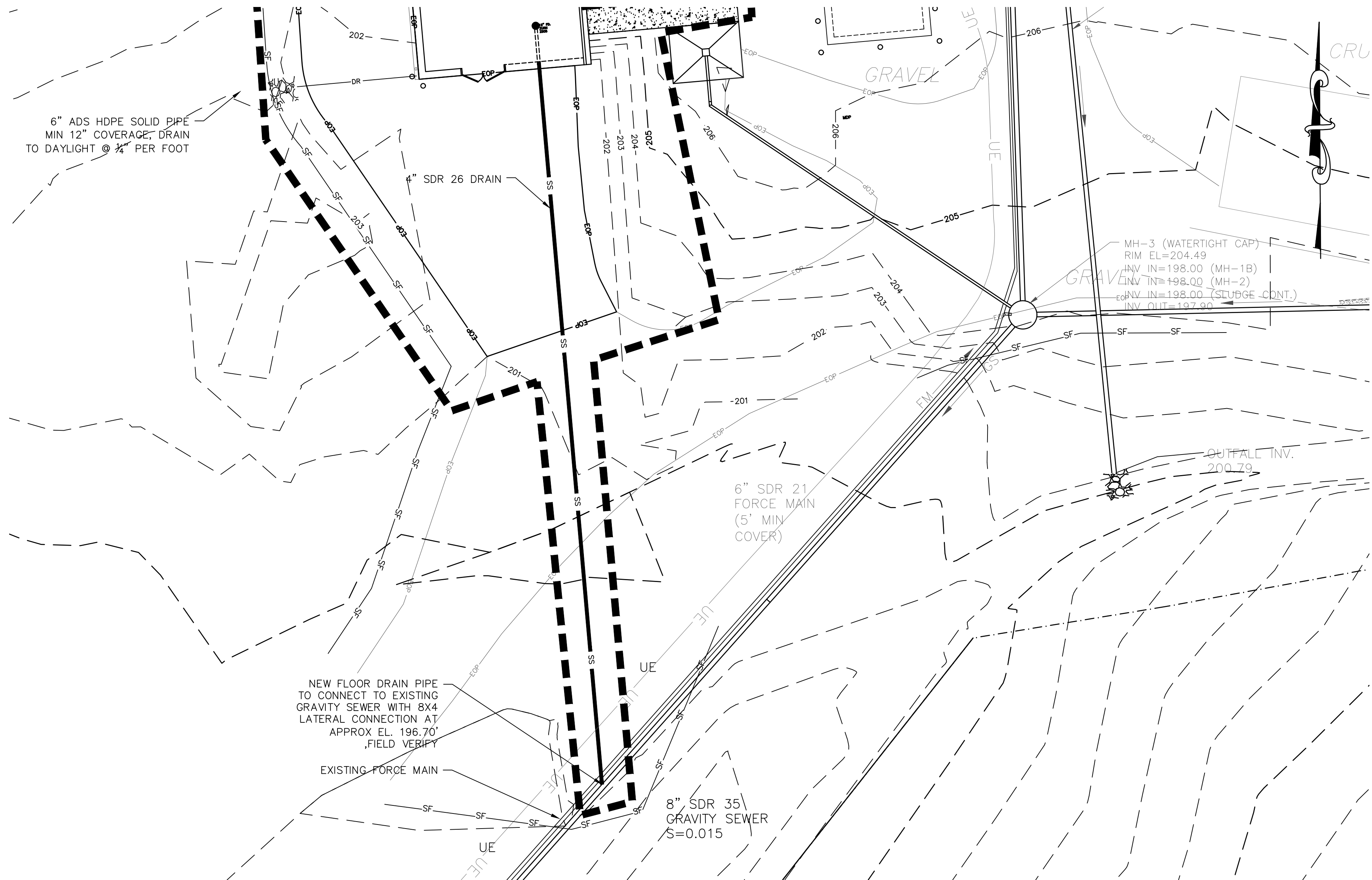
REVISIONS		DESCRIPTION
NO.	DATE	
1	6/1/23	PER CPL COMMENTS 5/26/23
2	6/30/23	PER CPL COMMENTS 6/29/23

CHelsea RIDGE WWTP  
UPGRADE PROJECT  
TOWN OF WAPPINGER  
DUTCHESS COUNTY, NY

PROPOSED SITE PLAN  
SHEET:  
**C11**

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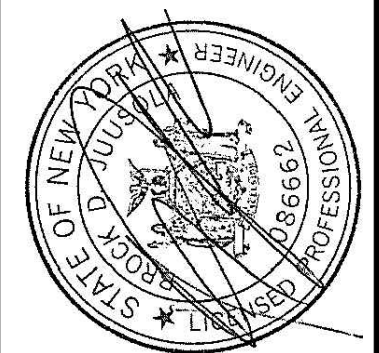




- NOTES:
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DATE: 3/2023  
DRAWN BY: STM  
SCALE: AS SHOWN  
REVIEWED BY: BDJ  
PROJECT NO.: 21-2151  
FILE:

**DELAWARE ENGINEERING, D.P.C.**  
CIVIL AND ENVIRONMENTAL ENGINEERING  
28 MADISON AVENUE EXTENSION, ALBANY, NY 12203 - 518.452.1290  
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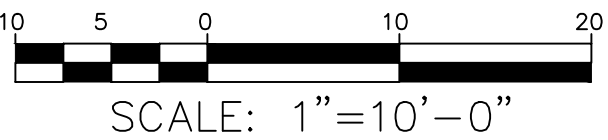
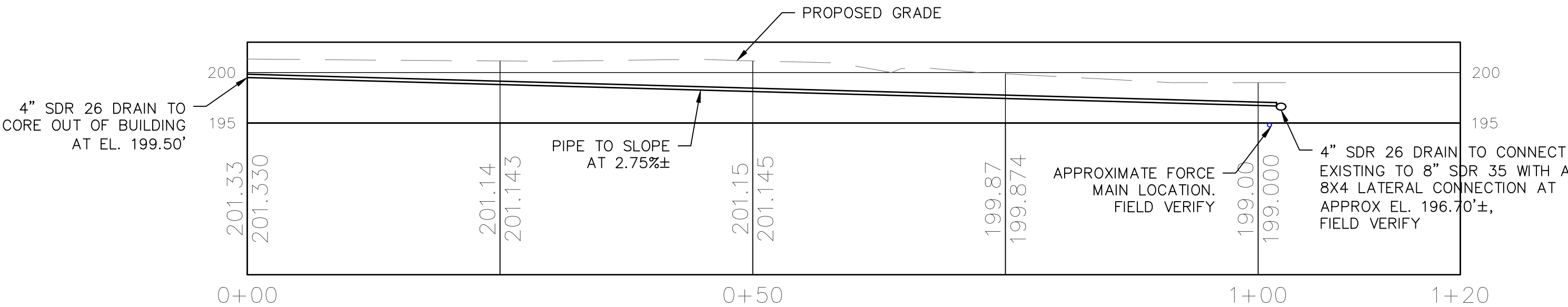
REVISIONS		DESCRIPTION
NO.	DATE	

CHELSEA RIDGE WWTP  
UPGRADE PROJECT  
TOWN OF WAPPINGER  
DUTCHESS COUNTY, NY

PROPOSED YARD PIPING  
PLAN AND PROFILE

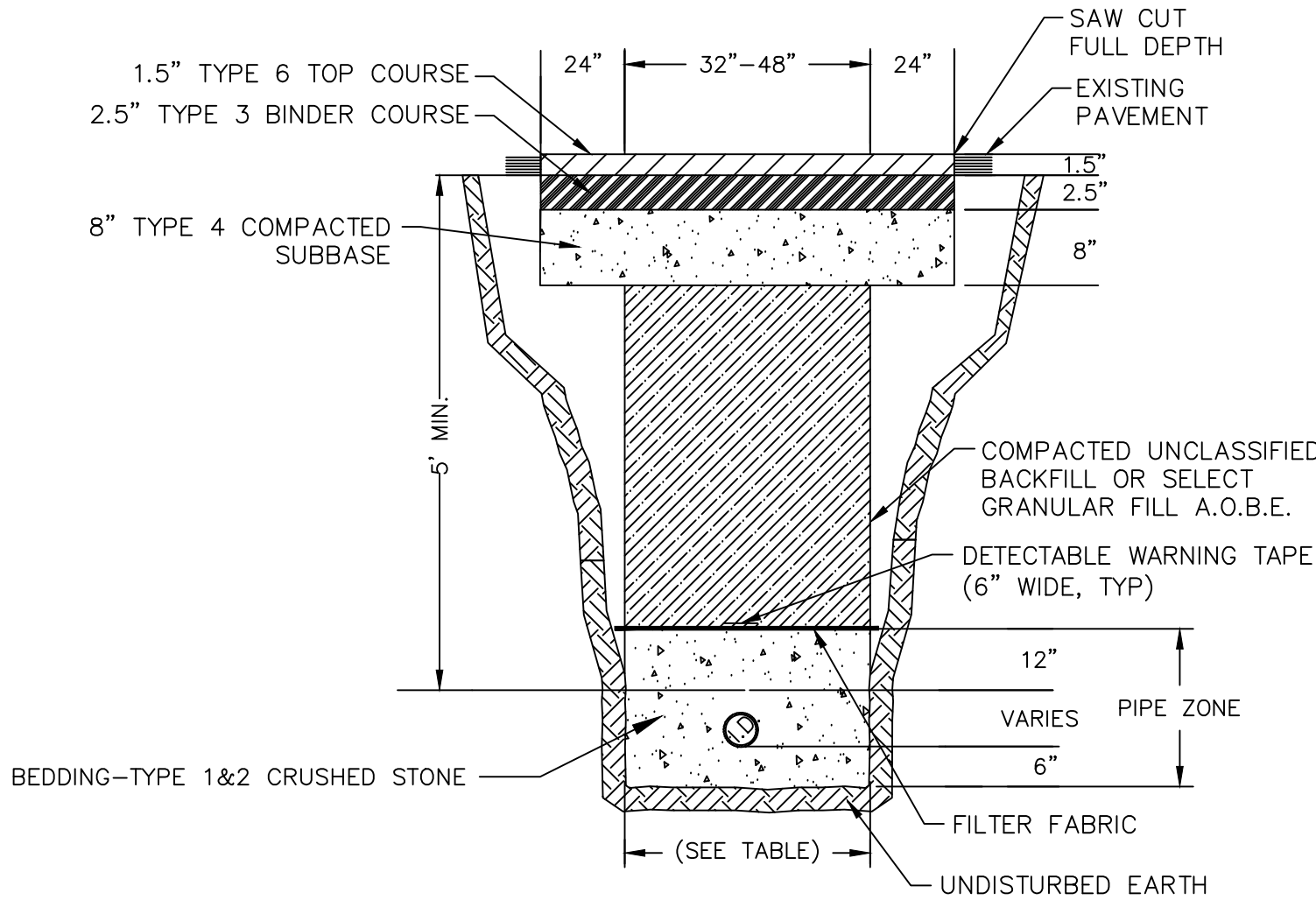
SHEET:  
**C12**

PROPOSED DRAIN PIPING PLAN  
SCALE: 1"=10'



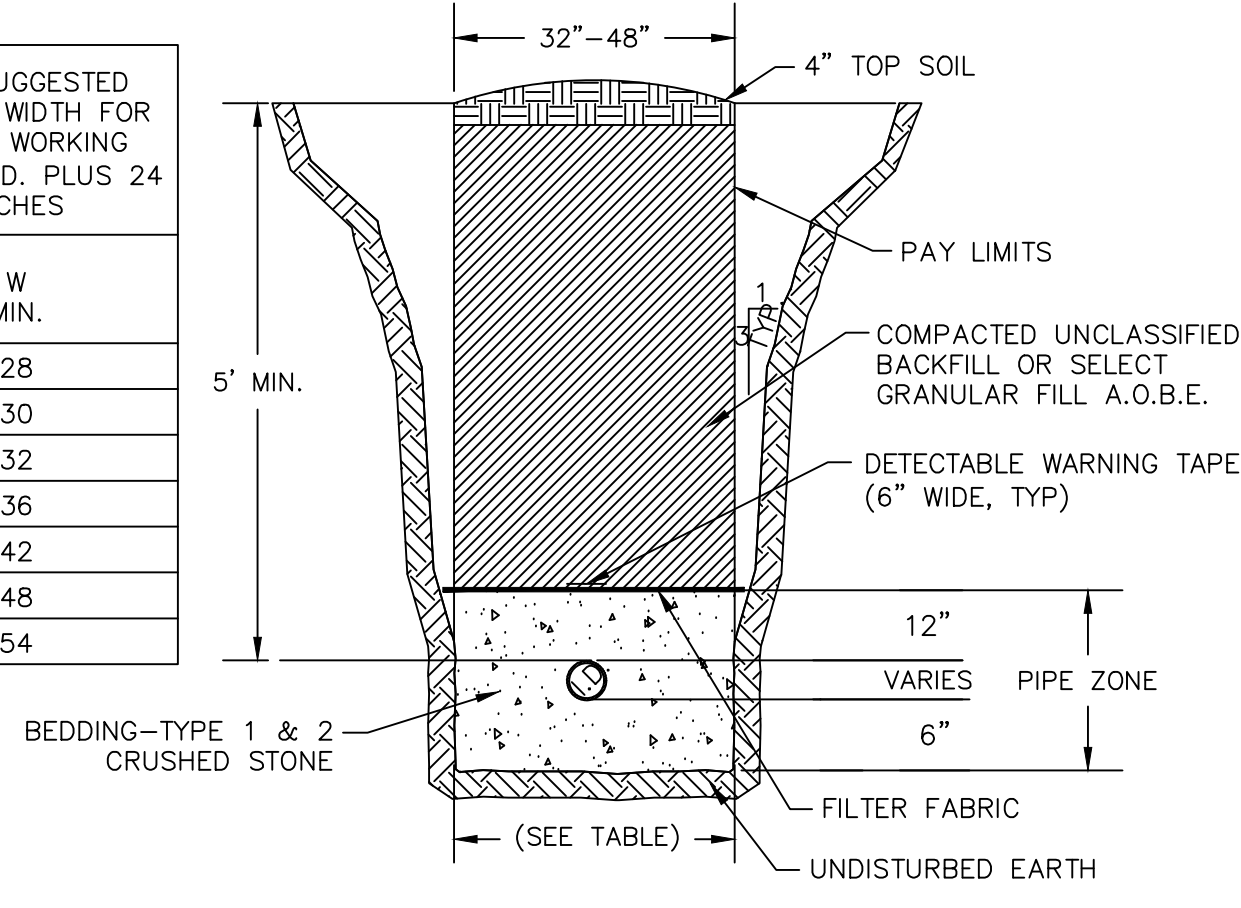
PROPOSED DRAIN PIPING PROFILE  
SCALE: H: 1"= 10', V: 1"= 10'

H:\DRAWINGS\CHelsea RIDGE 2021\CR SITE DETAILS.DWG/123

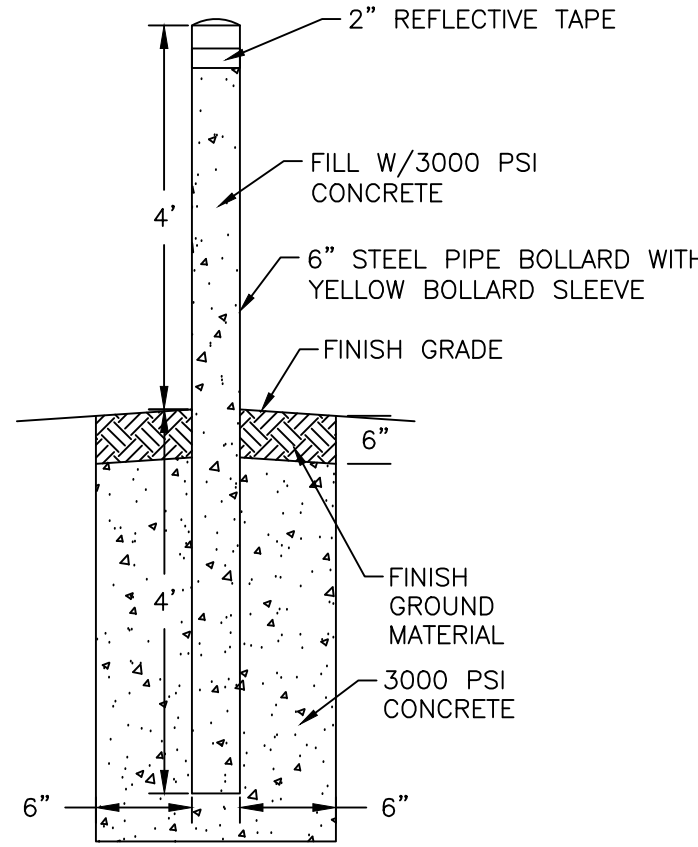


TRENCH IN ROAD DETAIL  
SCALE: NTS

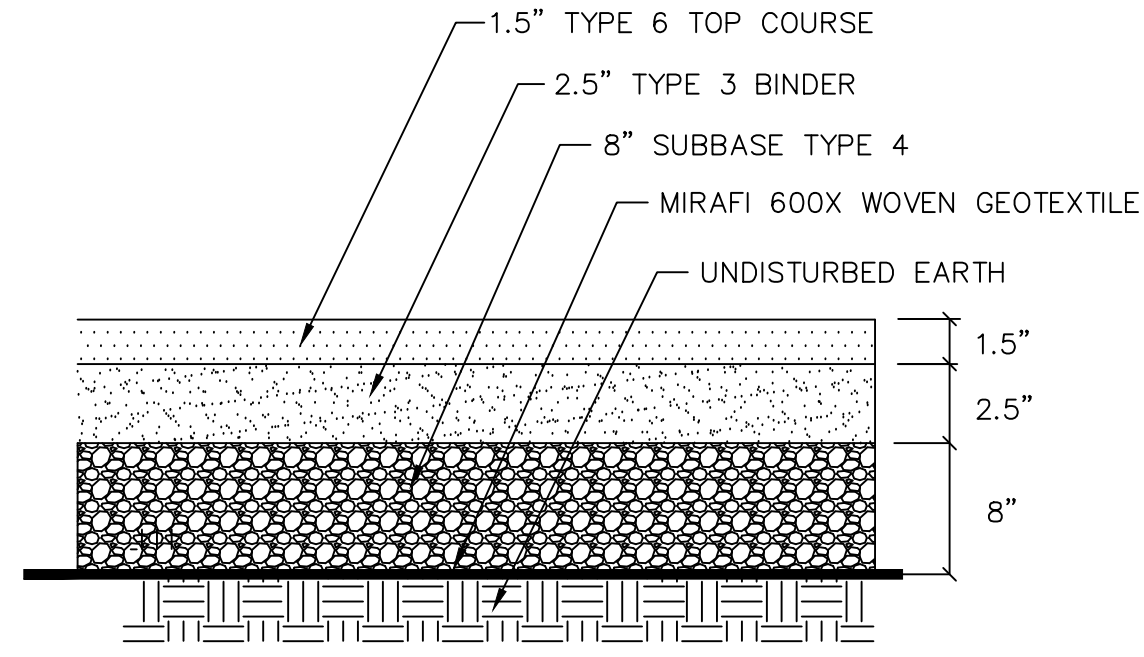
PIPE SIZE I.D. INCHES	MIN. SUGGESTED TRENCH WIDTH FOR AMPLE WORKING SPACE (I.D. PLUS 24 INCHES
I.D.	W MIN.
4	28
6	30
8	32
12	36
18	42
24	48
30	54



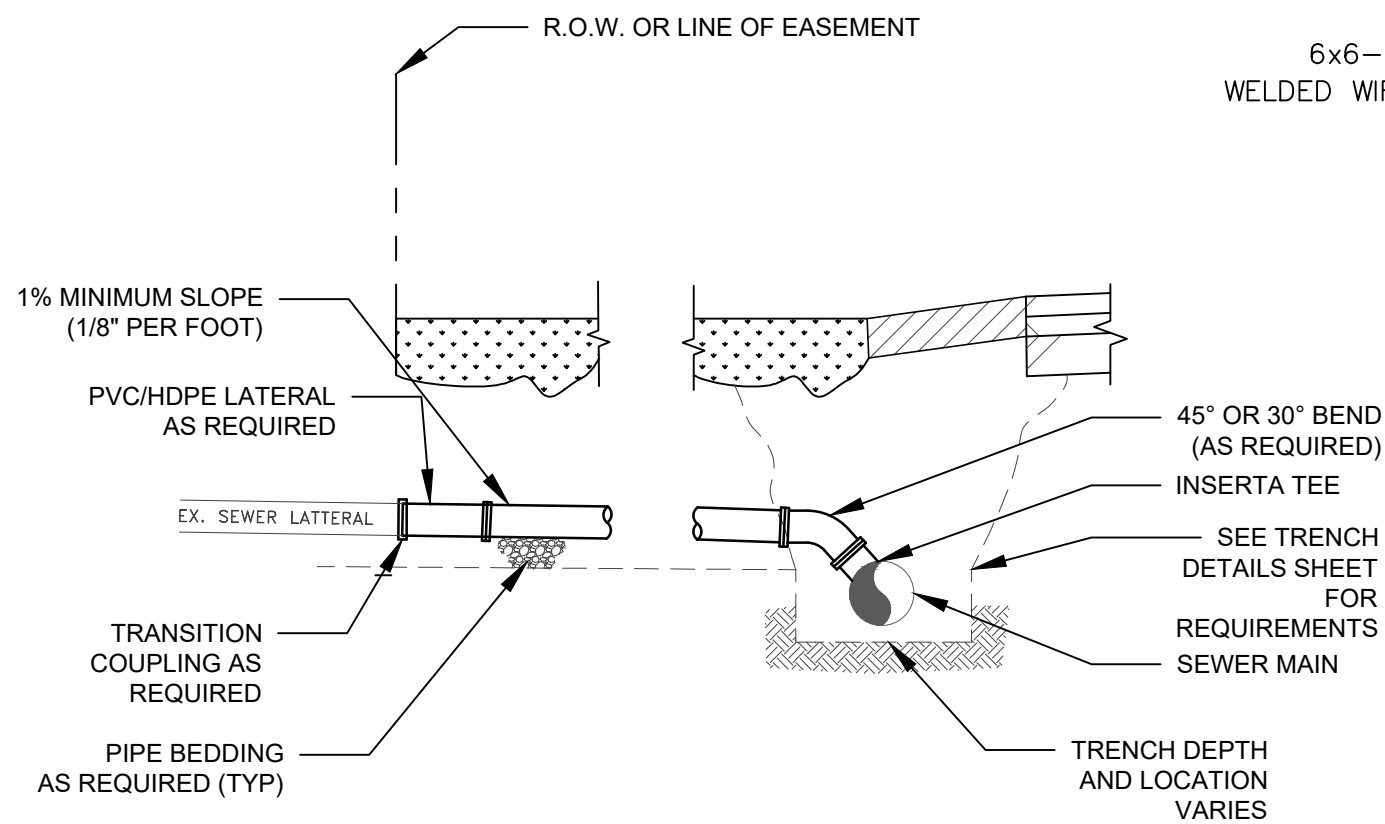
TRENCH IN EARTH DETAIL  
SCALE: NTS



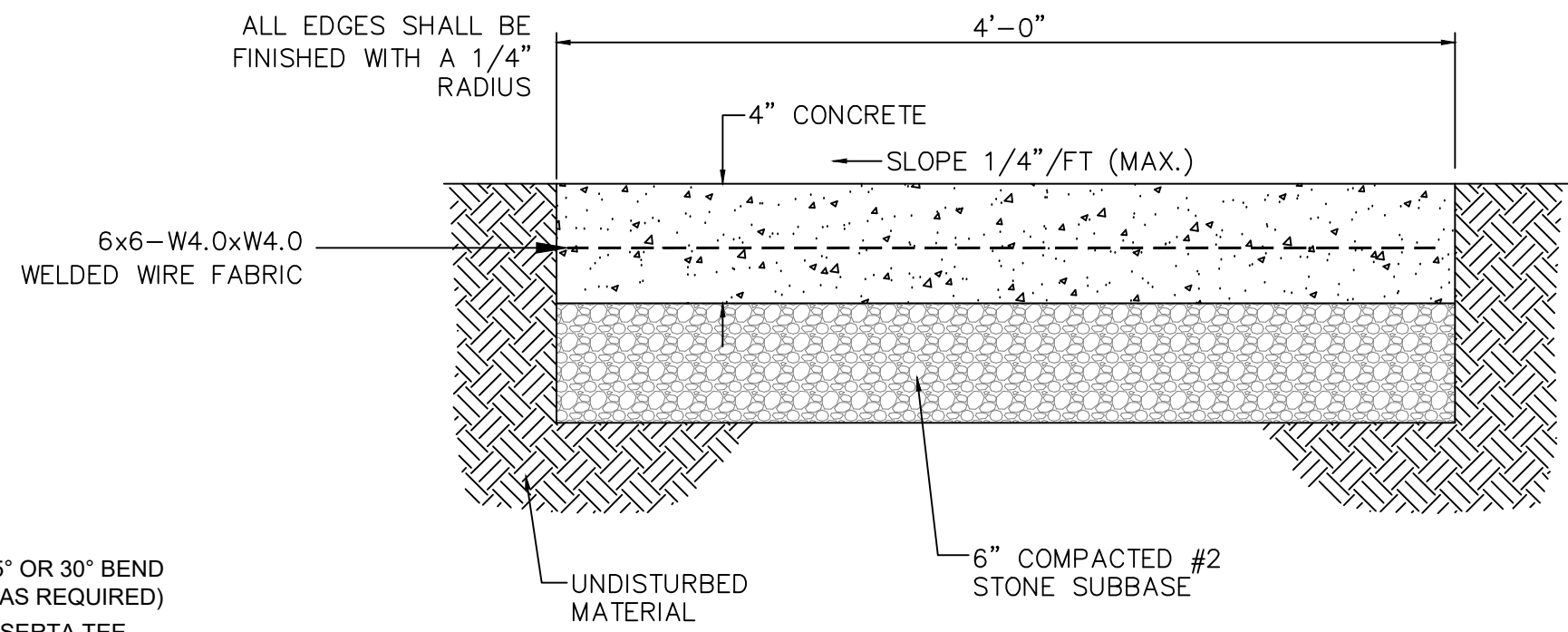
TYPICAL BOLLARD DETAIL  
SCALE: NTS



FULL DEPTH PAVING DETAIL  
SCALE: NTS



TYPICAL LATERAL CONNECTION  
SCALE: NTS



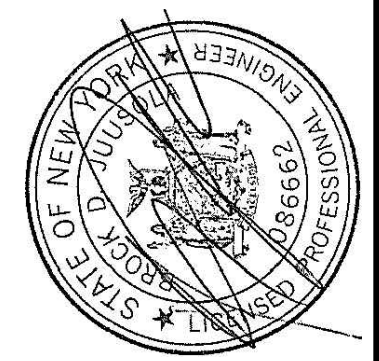
- NOTES:
1. THE CONCRETE USED SHALL BE 4000 PSI, AIR-ENTRAINED, PER SPEC.
  2. ALL NEW CONCRETE SIDEWALKS SHALL BE TRANSVERSELY SCORED TO ONE (1) INCH DEPTHS 5' INTERVALS. FULL-DEPTH CONSTRUCTION JOINTS SHALL BE PROVIDED AT ALL DRIVEWAY CROSSINGS OR AT 20' INTERVALS, MAX.
  3. PROVIDE EXPANSION JOINTS WHERE SIDEWALK ABUTS STRUCTURES.

TYPICAL CONCRETE SIDEWALK DETAIL  
SCALE: NTS

DATE: 3/2023  
DRAWN BY: STM  
SCALE: AS SHOWN  
REVIEWED BY: BDJ  
PROJECT NO.: 21-2151  
FILE:

DELAWARE  
ENGINEERING, D.P.C.

CIVIL AND ENVIRONMENTAL ENGINEERING  
28 MADISON AVENUE EXTENSION, ALBANY, NY 12203 - 518.452.1290  
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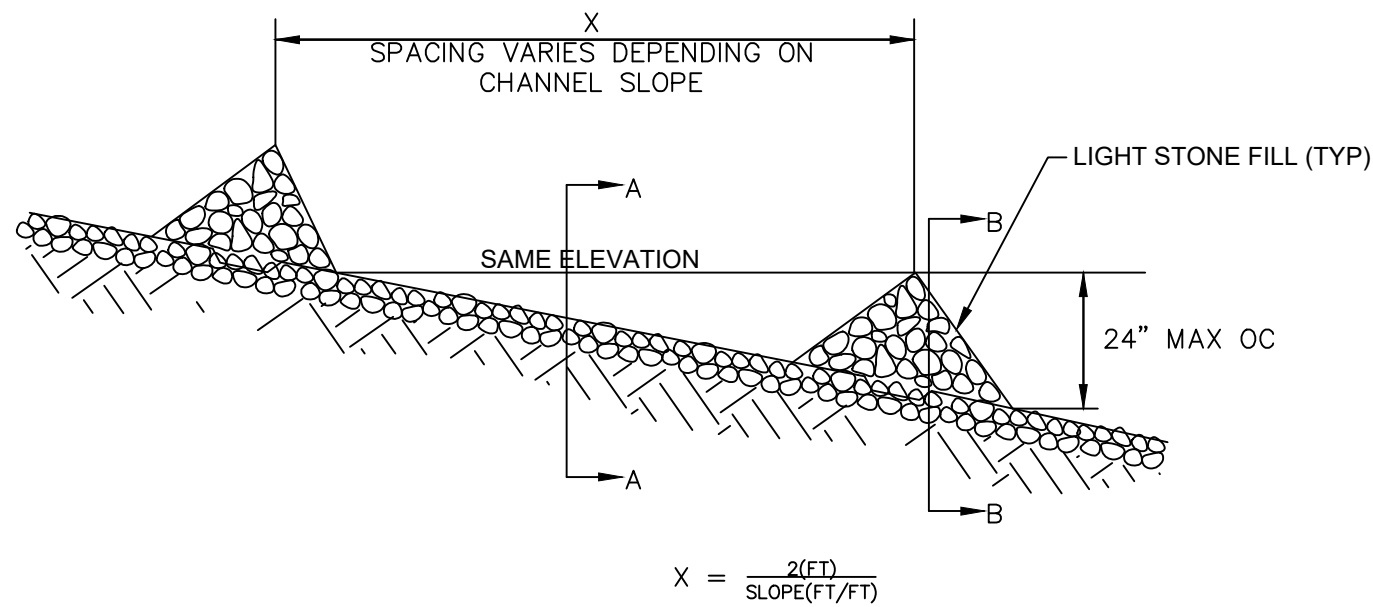
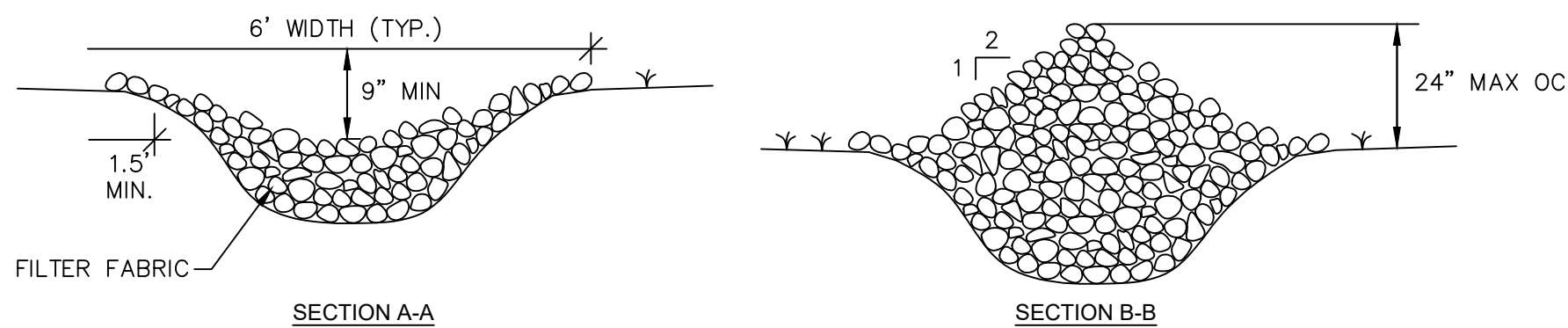
CHelsea RIDGE WWTP  
UPGRADE PROJECT  
TOWN OF WAPPINGER  
DUTCHESS COUNTY, NY

TYPICAL SITE  
DETAILS

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H:\DRAWINGS\CHelsea Ridge 2021\CR SITE DETAILS.DWG/123



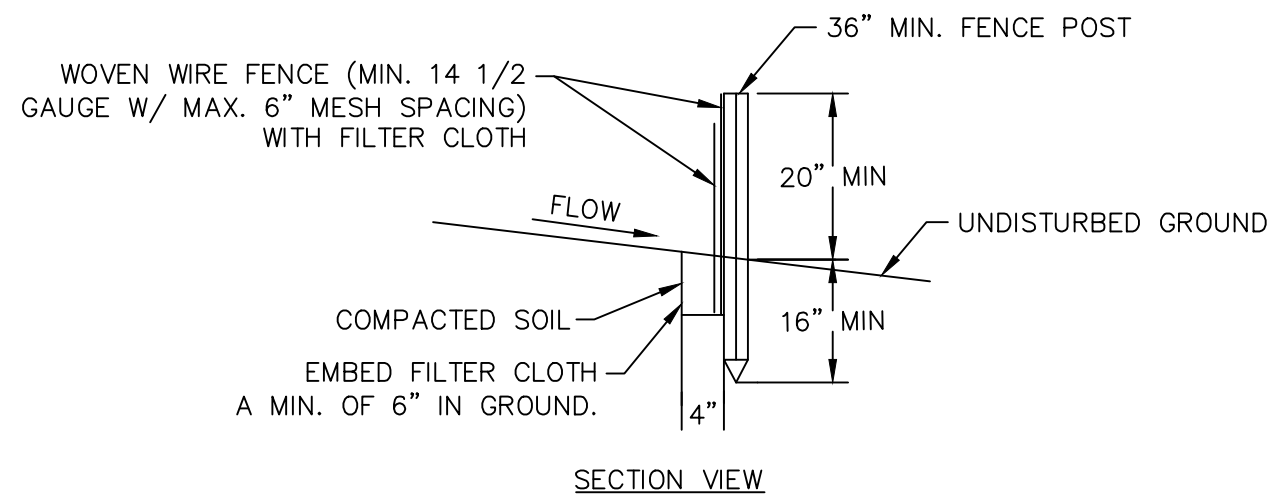
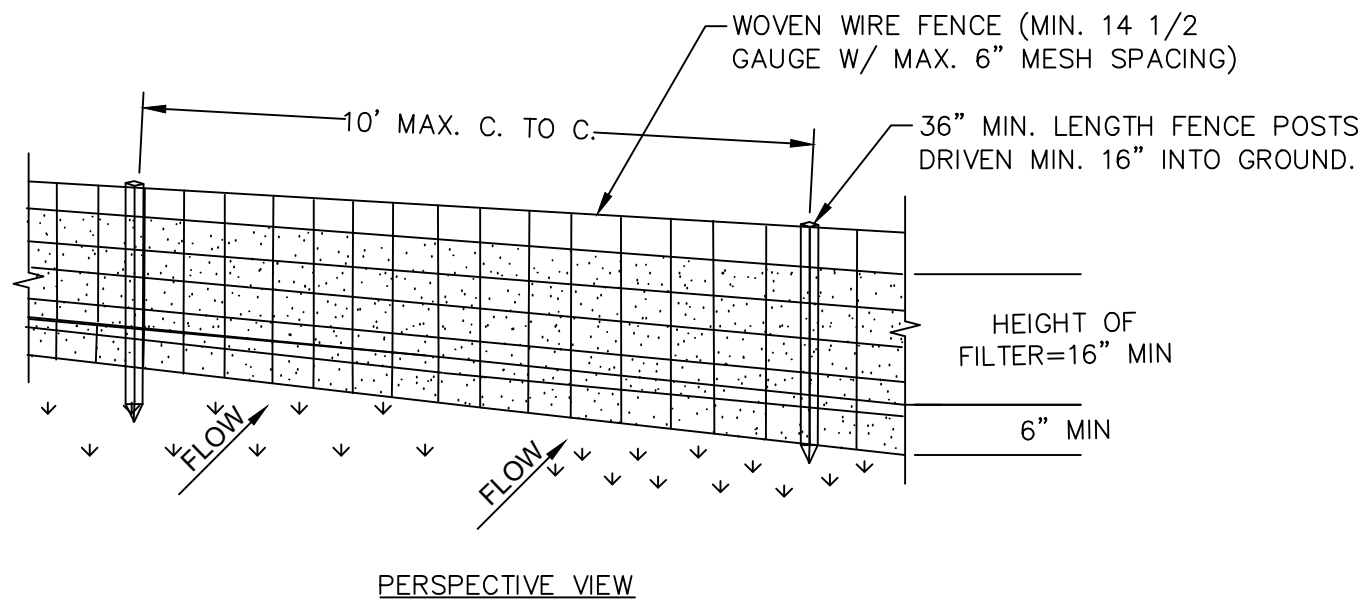
#### CONSTRUCTION SPECIFICATIONS

1. LIGHT STONE FILL PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSURE THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO BLOCKAGE FROM DISPLACED STONES.

\*MAXIMUM DRAINAGE AREA 2 ACRES\*

#### TYPICAL CHECK DAM DETAIL

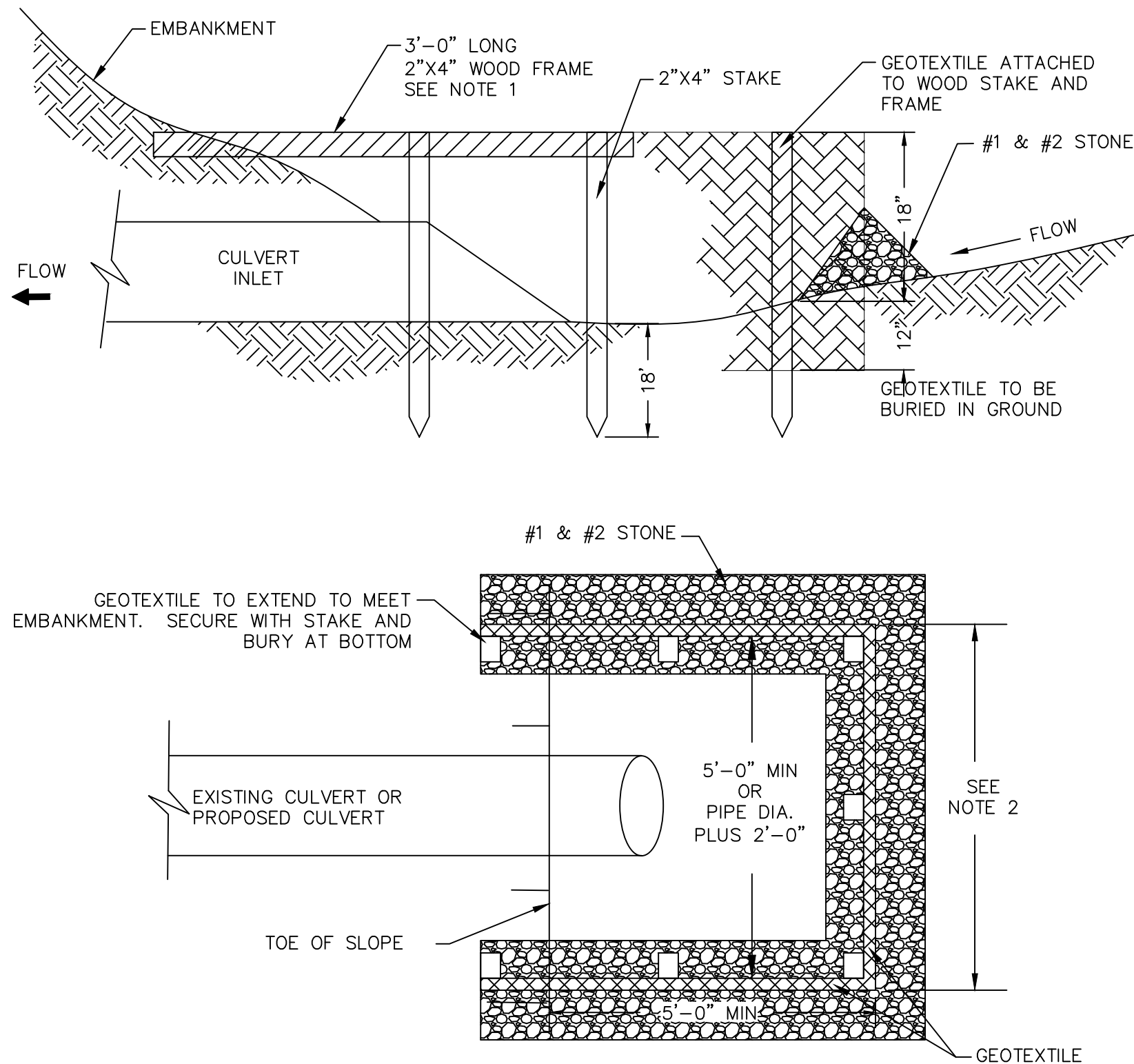
SCALE: NTS



1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

#### TYPICAL SILT FENCE DETAIL

SCALE: NTS

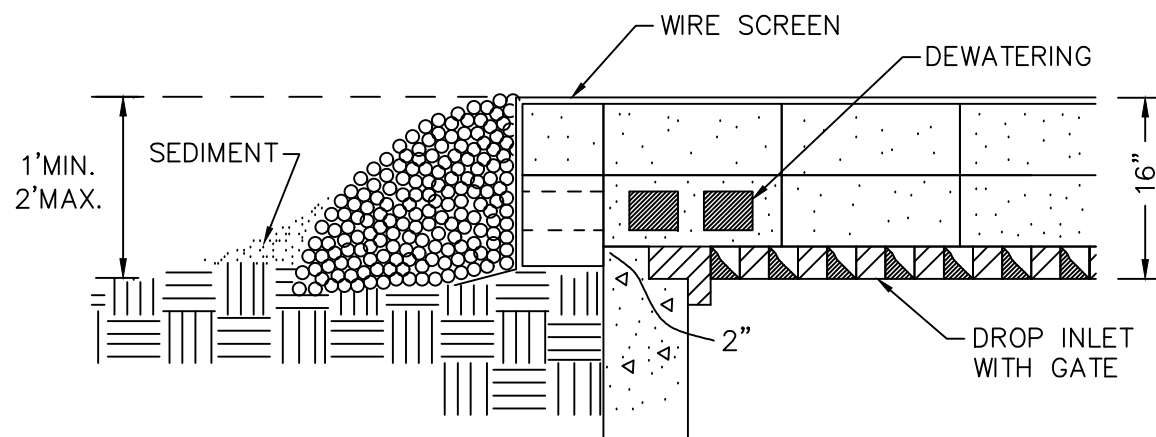
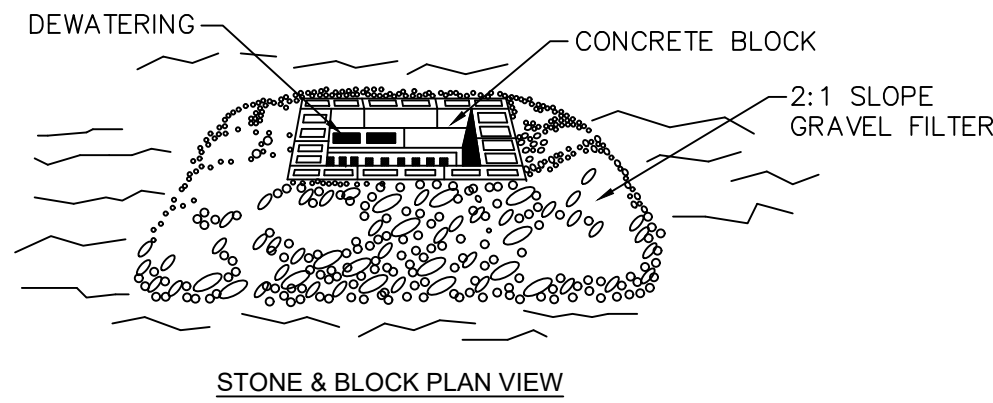


#### NOTES:

1. A 2"x4" WOOD FRAME SHALL BE COMPLETELY AROUND THE TOP OF THE STAKES OVER THE ATTACHED FABRIC FOR OVERFLOW STABILITY.
2. SPACE STAKES EVENLY AROUND INLET TO A MAXIMUM OF 3'-0" APART.

#### TYPICAL SILT FENCE/CHECK DAM CULVERT PROTECTION DETAIL

SCALE: NTS



#### STONE & BLOCK DETAIL

#### NOTES:

1. LAY ONE BLOCK ON EACH SIDE OF THE STRUCTURE ON ITS SIDE. FOUNDATION SHALL BE 2 INCHES MINIMUM BELOW REST OF INLET AND BLOCKS SHALL BE PLACED AGAINST INLET FOR SUPPORT.
2. HARDWARE CLOTH OR 1/2" WIRE MESH SHALL BE PLACED OVER BLOCK OPENINGS TO SUPPORT STONE.
3. USE CLEAN STONE OR GRAVEL 1/2-3/4 INCH IN DIAMETER PLACED 2 INCHES BELOW TOP OF THE BLOCK ON A 2:1 SLOPE OR FLATTER.
4. FOR STONE STRUCTURES ONLY, A 1 FOOT THICK LAYER OF THE FILTER STONE WILL BE PLACED AGAINST THE 3 INCH STONE AS SHOWN ON THE DRAWINGS.

\*\*MAXIMUM DRAINAGE AREA 1 ACRE

#### TYPICAL CATCH BASIN INLET PROTECTION DETAIL

SCALE: NTS

#### NOTES FOR TEMPORARY EROSION AND SEDIMENT CONTROL

1. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT THROUGHOUT THE DURATION OF THE CONTRACT IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL WATER COURSES FROM WATER BORNE SEDIMENT OR POLLUTANTS ORIGINATING FROM ANY WORK DONE ON, OR IN SUPPORT OF THIS PROJECT.
2. PROVIDE AND MAINTAIN SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES THROUGHOUT THIS PROJECT TO EFFECTIVELY CONTAIN ALL SOIL MATERIAL WITHIN THE SITE CONSTRUCTION AREA
3. THE CONTRACTOR SHALL IDENTIFY STAGING, STOCKPILE, SPOIL DISPOSAL, AND CONCRETE WASHOUT AREAS FOR THE ENGINEERS REVIEW AND APPROVAL PRIOR TO THE START OF CONSTRUCTION.
4. THE CONTRACTOR SHALL OBSERVE ALL RULES AND REGULATIONS OF THE STATE OF NEW YORK AND AGENCIES OF THE FEDERAL GOVERNMENT THAT APPLY TO THIS PROJECT.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN PLACE BEFORE COMMENCING WORK WITHIN AN AREA.
6. DISTURBED AREAS THAT ARE NOT UNDER ACTIVE EXCAVATION WILL BE MULCHED AND SEEDED WITHIN ONE DAY FOLLOWING CESSATION OF ACTIVITY IN THE AREA. ALL UTILITY LINE TRENCHES WILL BE BACKFILLED AT THE END OF EACH WORKDAY AND WILL BE MULCHED AND SEEDED. SILT FENCE WILL BE PLACED AROUND SOIL AND STONE STOCKPILES THAT WILL REMAIN IN PLACE FOR MORE THAN 7 DAYS. SOIL STOCKPILES THAT WILL REMAIN IN PLACE FOR MORE THAN 14 DAYS WILL BE MULCHED AND SEEDED.
7. CHECK DAMS WILL BE USED WITHIN DRAINAGE DITCHES TO CONTROL SEDIMENTATION IN AREAS WHERE THERE IS A POTENTIAL FOR SOIL TO BE TRANSPORTED TO THE DITCH. CHECK DAMS WILL BE USED TO CONTAIN SEDIMENT AT LOCATIONS ABOVE, WHERE EXISTING DRAINAGE PATTERNS DIRECT ROAD RUNOFF TO A WATERBODY.
8. ANY TURBID DISCHARGES FROM DEWATERING AREAS WILL BE DIRECTED TO EITHER A SETTLING TANK OR A STABLE, LEVEL, GRASSED AREA, AT LEAST 100 FEET FROM WATERCOURSES AND WETLANDS. IF THE DISCHARGE IS DIRECTED TO A STABLE, LEVEL, VEGETATED AREA, THE DISCHARGE AND ANY RELATED DEWATERING FILTER AREA WILL BE SURROUNDED BY A SILT CURTAIN SEDIMENT BARRIER. SETTLING TANKS AND DEWATERING FILTER DEVICES SHALL BE OF SUFFICIENT CAPACITY TO HANDLE THE DISCHARGE OF THE PUMPS SUCH THAT THE WATER RETURNED TO A STREAM IS CLEAR. NO DISCHARGES SHALL CAUSE A SUBSTANTIAL VISIBLE CONTRAST TO NATURAL CONDITIONS. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR WILL IDENTIFY DISCHARGE LOCATIONS AND METHODS FOR TRENCH DEWATERING OPERATIONS TO ENSURE TURBIDITY FREE DISCHARGE TO ANY RECEIVING WATER BODY.
9. IN PAVEMENT AREAS ALL UTILITY LINE TRENCHES WILL BE BACKFILLED AT THE END OF EACH WORKDAY. ALSO, THE TRENCH AREA WILL BE TEMPORARILY COVERED WITH THE REQUIRED AMOUNT OF ROAD SUBBASE PLUS THE ADDITIONAL AMOUNT NEEDED TO MEET THE EXISTING ROAD GRADE TO MINIMIZE EROSION. THE CONTRACTOR WILL BE REQUIRED TO INSTALL A MINIMUM OF 2" COLD PATCH OVER THE REQUIRED SUBBASE IN ALL DISTURBED AREAS ON A DAILY BASIS ONCE THE ASPHALT PLANTS HAVE SHUT DOWN FOR THE WINTER. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN THE SURFACE IN GOOD CONDITION TO THE SATISFACTION OF THE OWNER AND THE ENGINEER. THE COLD PATCH SHALL BE REMOVED AND REPLACED WITH THE SPECIFIED AMOUNT OF TYPE 3 BINDER ASPHALT AS SOON AS THE ASPHALT PLANTS REOPEN IN THE SPRING.
10. THE SEDIMENT AND EROSION CONTROLS WILL BE MAINTAINED DURING ALL CONSTRUCTION ACTIVITIES AND UNTIL AREAS WITH THE POTENTIAL FOR EROSION HAVE BEEN STABILIZED. DISTURBED AREAS ARE CONSIDERED PERMANENTLY STABILIZED WHEN 80 PERCENT OF THE AREA HAS ATTAINED PERENNIAL VEGETATIVE COVER.
11. TOPSOIL REQUIRED TO ESTABLISH VEGETATION SHALL BE STOCKPILED IN AMOUNT NECESSARY TO COMPLETE FINISH GRADING OF ALL EXPOSED AREAS. ANY EXCESS TOPSOIL SHALL BE STOCKPILED AT A LOCATION ON SITE DESIGNATED BY THE OWNER.
12. THE CONTRACTOR SHALL HAVE A HYDROSEEDER AND/OR A MULCHING MACHINE AVAILABLE ON THE PROJECT UNTIL THE PERMANENT SEEDING IS COMPLETED.
13. UNLESS DIRECTED BY OWNER, REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIALS NOT USED ELSEWHERE.
14. UNSUITABLE EXCAVATED MATERIAL SHALL NOT BE UTILIZED IN FILL SLOPES, STRUCTURAL FILL, OR OTHER AREAS OF BACKFILL. UNSUITABLE MATERIAL IS DEFINED AS: HIGHLY ORGANIC SOIL, TOPSOIL, HIGHLY COMPRESSIBLE SOIL, FROZEN MATERIAL, ROOTS, TRASH, AND DEBRIS.
15. STRAW BALES AND/OR HAY BALES CAN ONLY BE USED AS SUPPORT FOR SILT FENCING OR OTHER EROSION CONTROL MEASURE.
16. AT LOCATIONS WHERE THERE IS SIGNIFICANT FLOW IN ROADSIDE DRAINAGE DITCHES/SWALES, IT MAY BE NECESSARY FOR THE CONTRACTOR TO CONTAIN WATER AS NEAR AS POSSIBLE TO THE SOURCE, AND PUMP WATER AWAY FROM EXCAVATION AREAS TO PREVENT SOILS FROM BECOMING ENTRAINED IN THE WATER.
17. ALL ROADS SOILED BY THIS PROJECT TO BE CLEANED BY RESPONSIBLE CONTRACTOR.

#### NOTES FOR FUEL AND EQUIPMENT STORAGE

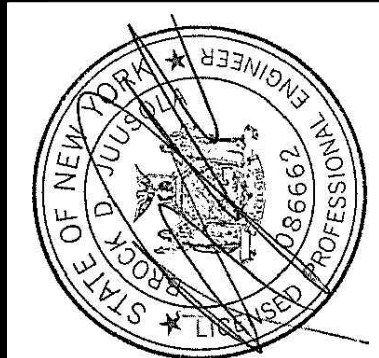
1. ALL CONSTRUCTION MATERIALS AND EQUIPMENT SHALL BE STORED IN THE DESIGNATED STAGING AREAS. SUBSTITUTE LOCATIONS MAY BE USED SUBJECT TO APPROVAL.
2. FUEL STORAGE SHALL BE CONDUCTED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
3. ON SITE VEHICLES AND EQUIPMENT FUELING SHOULD ONLY OCCUR IN THE DESIGNATED FUEL STORAGE AREAS. SUBSTITUTE LOCATIONS MAY BE USED SUBJECT TO APPROVAL.
4. VEHICLE AND EQUIPMENT FUELING (INCLUDING FUELING OF HANDHELD EQUIPMENT) SHALL BE CONDUCTED IN ACCORDANCE WITH THE FOLLOWING:
  - AWAY FROM STORM DRAIN INLETS, DRAINAGE FACILITIES, OR WATERCOURSES.
  - WITHIN A BERMED AREA TO PREVENT RUN-ON, RUN-OFF, AND TO CONTAIN SPILLS.
  - STORE PORTABLE FUEL CONTAINERS FOR HANDHELD EQUIPMENT IN A TUB OR EQUIVALENT DEVICE TO AVOID SPILLS AND LEAKS.
  - USE SECONDARY CONTAINMENT TECHNIQUES FOR FUELING OF HANDHELD OR PORTABLE EQUIPMENT, SUCH AS DRAIN PANS OR DROP CLOTHS TO CATCH SPILLS OR LEAKS
  - SIGNAGE THAT FUEL TANKS SHOULD NOT BE "TOPPED OFF." AN ADEQUATE SUPPLY OF SPILL CLEAN UP MATERIALS SHALL BE READILY ACCESSIBLE TO ALL FUELING ACTIVITIES.

#### NOTES FOR CONCRETE MANAGEMENT

1. STORE CONCRETE, GROUT, AND MORTAR UNDER COVER AND AWAY FROM DRAINAGE AREAS.
2. CONCRETE TRUCKS AND TRANSFER CHUTES SHALL BE WASHED-OUT ON-SITE IN THE DESIGNATED AREA UTILIZING A CONCRETE WASHOUT TO COLLECT ALL WASH WATER AND CONCRETE WASTE. A SUBSTITUTE LOCATION MAY BE USED SUBJECT TO APPROVAL.
3. THE WASHOUT AREA SHALL BE LOCATED AWAY FROM STORM DRAINS, OPEN DITCHES, OR WATER BODIES.
4. SIGNS SHALL BE POSTED THROUGHOUT THE JOBSITE, DIRECTING CREWS AND CONCRETE TRUCKS TO CONCRETE WASHOUTS.
5. UPON COMPLETION OF THE CONCRETE WORK, THE CONTRACTOR SHALL BREAK UP, REMOVE, AND HAUL AWAY SOLID CONCRETE THAT HAS ACCUMULATED IN THE WASHOUT.

DATE: 3/2023  
DRAWN BY: STM  
SCALE: AS SHOWN  
REVIEWED BY: BDJ  
PROJECT NO.: 21-2151  
FILE:

**DELAWARE ENGINEERING, D.P.C.**  
CIVIL AND ENVIRONMENTAL ENGINEERING



NO.	DATE	DESCRIPTION			

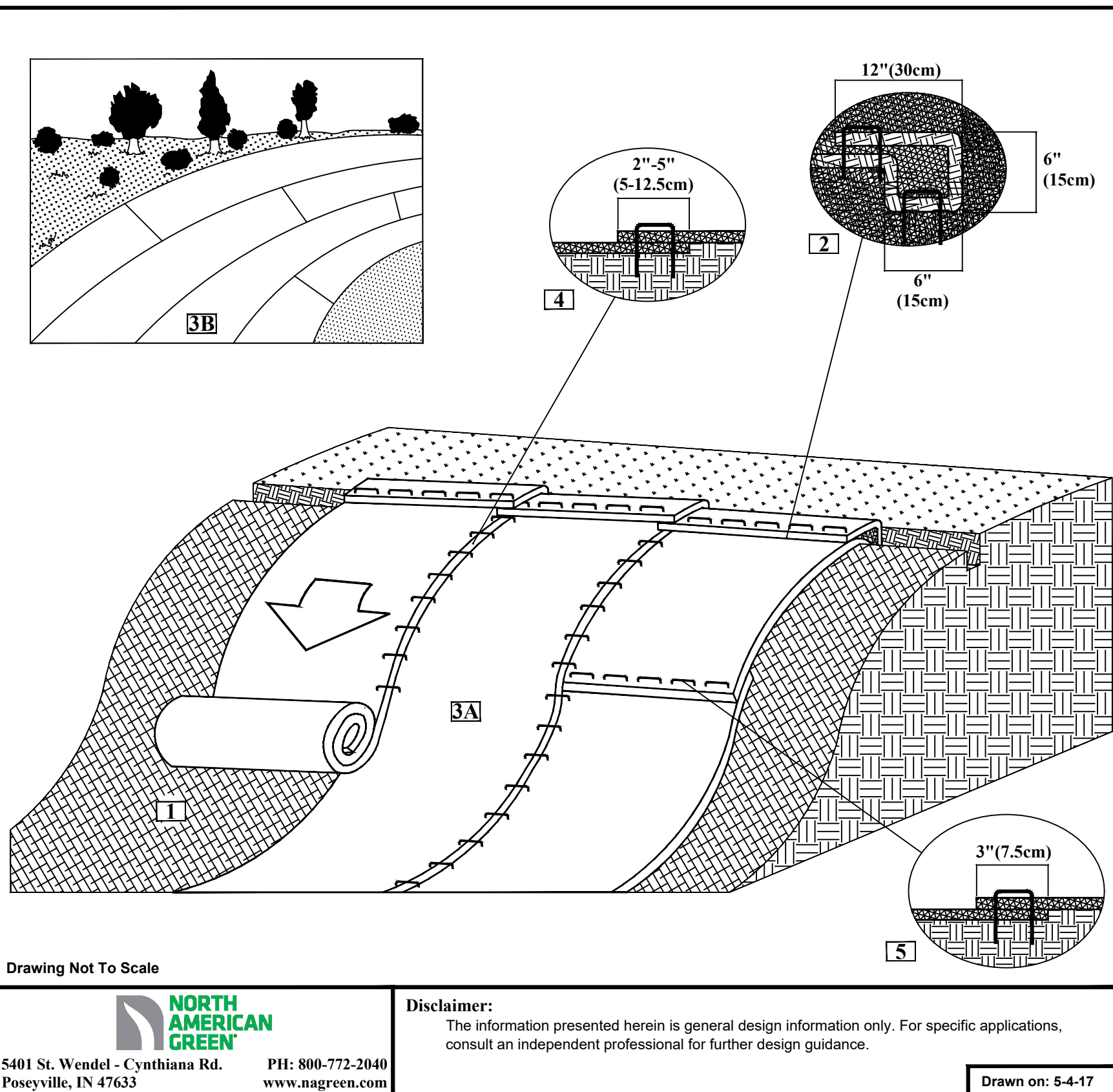
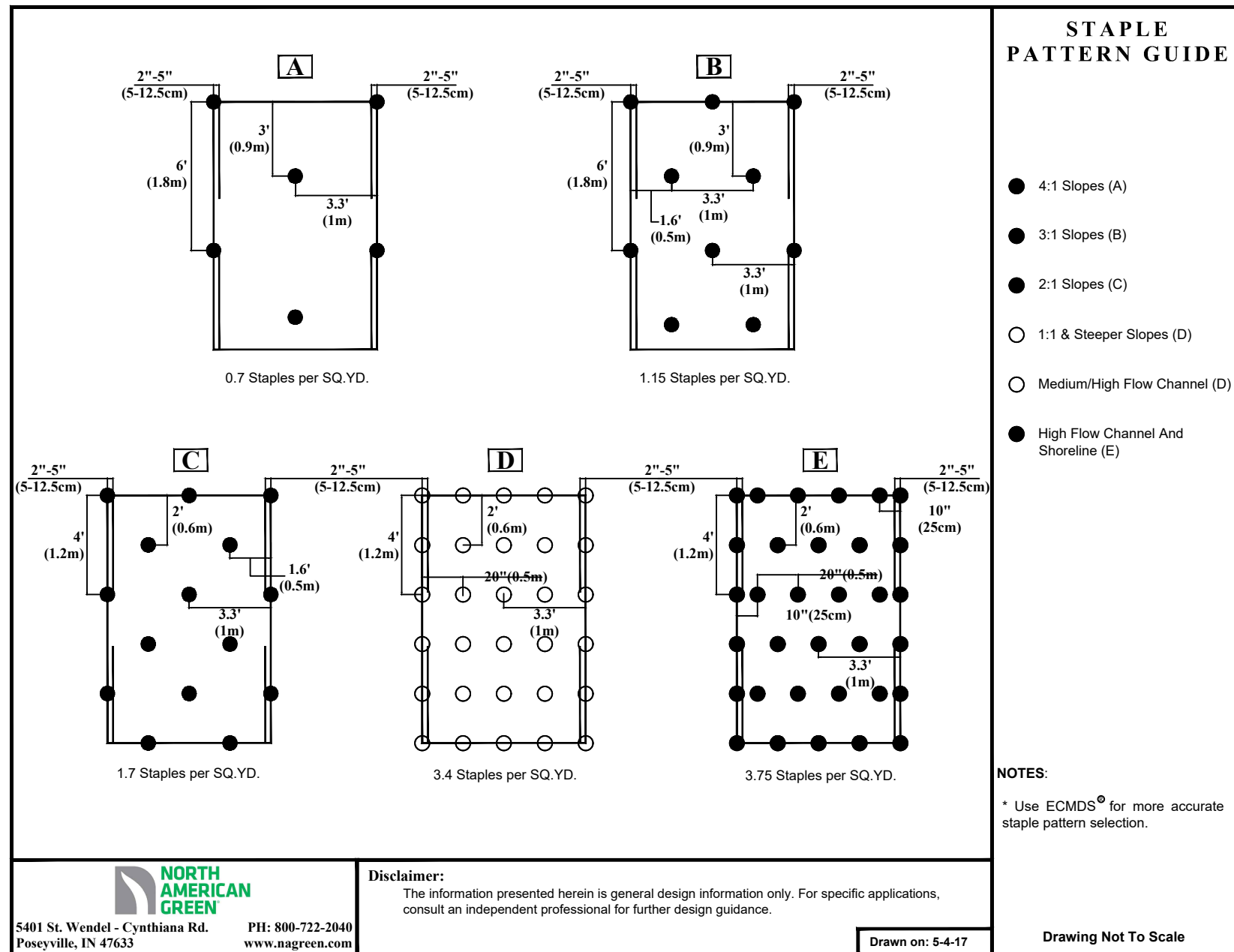
CHelsea Ridge WWTP  
UPGRADE PROJECT  
TOWN OF WAPPINGER  
DUTCHESS COUNTY, NY

TYPICAL EROSION AND  
SEDIMENTATION  
CONTROL DETAILS

SHEET:

C101

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**NOTES:**  
1. CONTRACTOR SHALL PROVIDE EROSION CONTROL MATTING FOR ALL SLOPES EXCEEDING 25%.

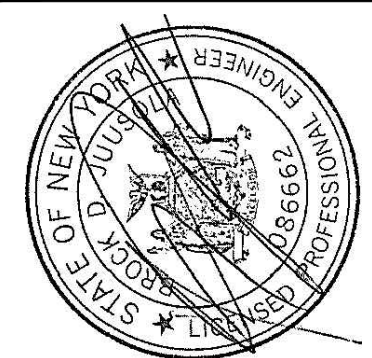
### SLOPE INSTALLATION DETAIL

1. Prepare soil before installing rolling covers to ensure control products (RECPs), including any necessary application of lime, fertilizer, and seed.
2. Begin at the top of the slope by anchoring the RECPs in by a (15'cm) deep X (61'15cm) wide trench at approximately 12' (30cm) apart. The RECPs extended beyond the up-slope portion of the trench. Anchor the RECPs with a row of staples/stakes approximately 12' (30cm) apart in the bottom of the trench. The RECPs are secured in the trench after stapling. Apply seed to the compacted soil and fold the remaining 12'(30cm) portion of RECPs back over the seed and compacted soil. Secure RECPs over compacted soil with a row of staples/stakes spaced approximately 12'(30cm) apart across the width of the RECPs.
3. Roll the RECPs (A) down or (B) up the slope. The RECPs will unroll with staple against the soil surface. All RECPs must be securely fastened to soil surface by placing staples in appropriate locations as shown in the staple pattern guide.
4. The edges of parallel RECPs must be stapled with approximately 2' (50cm) overlap depending on the RECPs type.
5. Consecutive RECPs spliced down the slope must be end over end (Shingle style) with an approximate 3'(75cm) overlap. Staple through the overlap area, approximately 12'(30cm) apart across entire RECPs width.

**NOTE:**  
In loose soil conditions, the use of staple or stake lengths greater than 6"(15cm) may be necessary to properly secure the RECP's.

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**DELAWARE  
ENGINEERING, D.P.C.**  
CIVIL AND ENVIRONMENTAL ENGINEERING

[illegible]

CHELSEA RIDGE WWTP  
UPGRADE PROJECT  
TOWN OF WAPPINGER  
DUTCHESS COUNTY, NY

## TYPICAL EROSION AND SEDIMENTATION CONTROL DETAILS

SHEET:  
**C102**



## STRUCTURAL LEGEND

- INDICATES FOUNDATION TYPE MARK. REFERENCE THE FOUNDATION SCHEDULE.
- INDICATES FLOOR/ROOF STEP.
- INDICATES TOP FOUNDATION WALL STEP.
- INDICATES NEW STRUCTURAL WALL PER PLAN NOTES, TYPICAL UNLESS NOTED OTHERWISE.
- INDICATES EXISTING STRUCTURAL WALL.
- INDICATES NEW STRUCTURAL WALL BELOW.
- INDICATES KEYED NOTE.
- INDICATES NEW WALL, REF WALL SCHEDULE.
- INDICATES NEW GRIDLINE
- INDICATES EXISTING GRIDLINE

## FOUNDATION PLAN NOTES

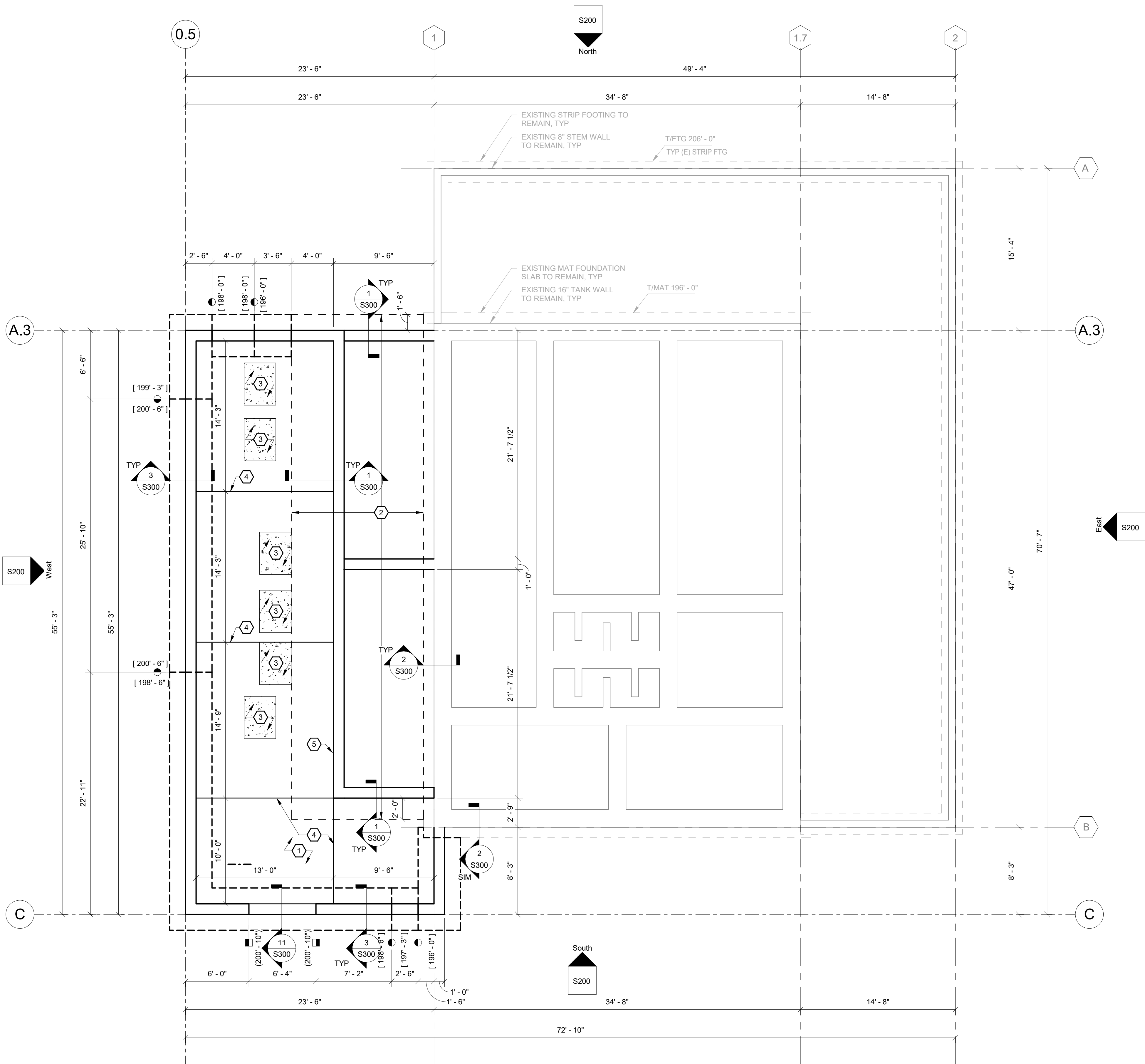
- ALL ELEVATIONS ARE REFERENCED FROM 210'-0" = EXISTING FINISH FLOOR.
- VERIFY ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS. GRIDLINES ARE LOCATED AT OUTSIDE FACE OF CONCRETE FOUNDATION WALLS.
- DETAILS ON THESE PLANS ARE INTENDED TO DEPICT THE GENERAL CONSTRUCTION METHOD FOR THIS STRUCTURE. CONNECTIONS, DETAILS AND CONDITIONS NOT SPECIFICALLY SHOWN THAT ARE SIMILAR TO THOSE THAT ARE SPECIFIED SHALL BE ASSUMED ONE AND THE SAME. IF QUESTIONS ARISE REGARDING THE APPLICATION OF DETAILS ARE ENCOUNTERED, NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD FOR CLARIFICATION IN A TIMELY MANNER PRIOR TO BID OPENING.
- REFERENCE MEP DRAWINGS FOR ALL ELEVATIONS, PIPE PENETRATIONS, ETC. REFER TO STRUCTURAL DETAILS CORRESPONDING TO SPECIFIC ITEMS SUCH AS PIPE PENETRATIONS, OPENINGS, ETC.
- VERIFY SIZE AND LOCATION OF ALL SLAB AND WALL PENETRATIONS.
- ALL NEW CONCRETE WALLS ARE TO BE 12" THICK CAST-IN-PLACE CONCRETE, REINFORCE WITH #6@12" OC, EW, EF.
- REFER TO S102 FOR TOP OF WALL ELEVATIONS.
- TOP OF MAT SLAB ELEVATION = 196' - 0" UNLESS OTHERWISE NOTED.
- TOP OF FOOTING ELEVATION IS 200' - 6" UNLESS OTHERWISE NOTED.
- ALL NEW WALL FOOTINGS ARE TO BE WF1 UNLESS OTHERWISE NOTED.
- TOP OF SLAB ELEVATION IS 201' - 6" UNLESS OTHERWISE NOTED.

## KEYNOTES

- 6" NW CONCRETE SLAB-ON-GRADE; REINFORCE W/ #5 @ 12" OC, T/SLAB = 201' - 6".
- EXTENTS OF 16" THICK MAT SLAB, T/MAT ELEVATION = 196' - 0". REINFORCE WITH #6 @ 12" OC, EW, T&B
- NW CONCRETE HOUSEKEEPING PAD PER 3/S301; REFER TO MECHANICAL DRAWINGS FOR SIZE, THICKNESS, & LOCATION.
- CONTROL/CONSTRUCTION JOINT, PER 5/S301.
- EDGE JOINT, PER 5/S301; TYPICAL AROUND ENTIRE PERIMETER OF SLAB-ON-GRADE.

## WALL FOOTING SCHEDULE

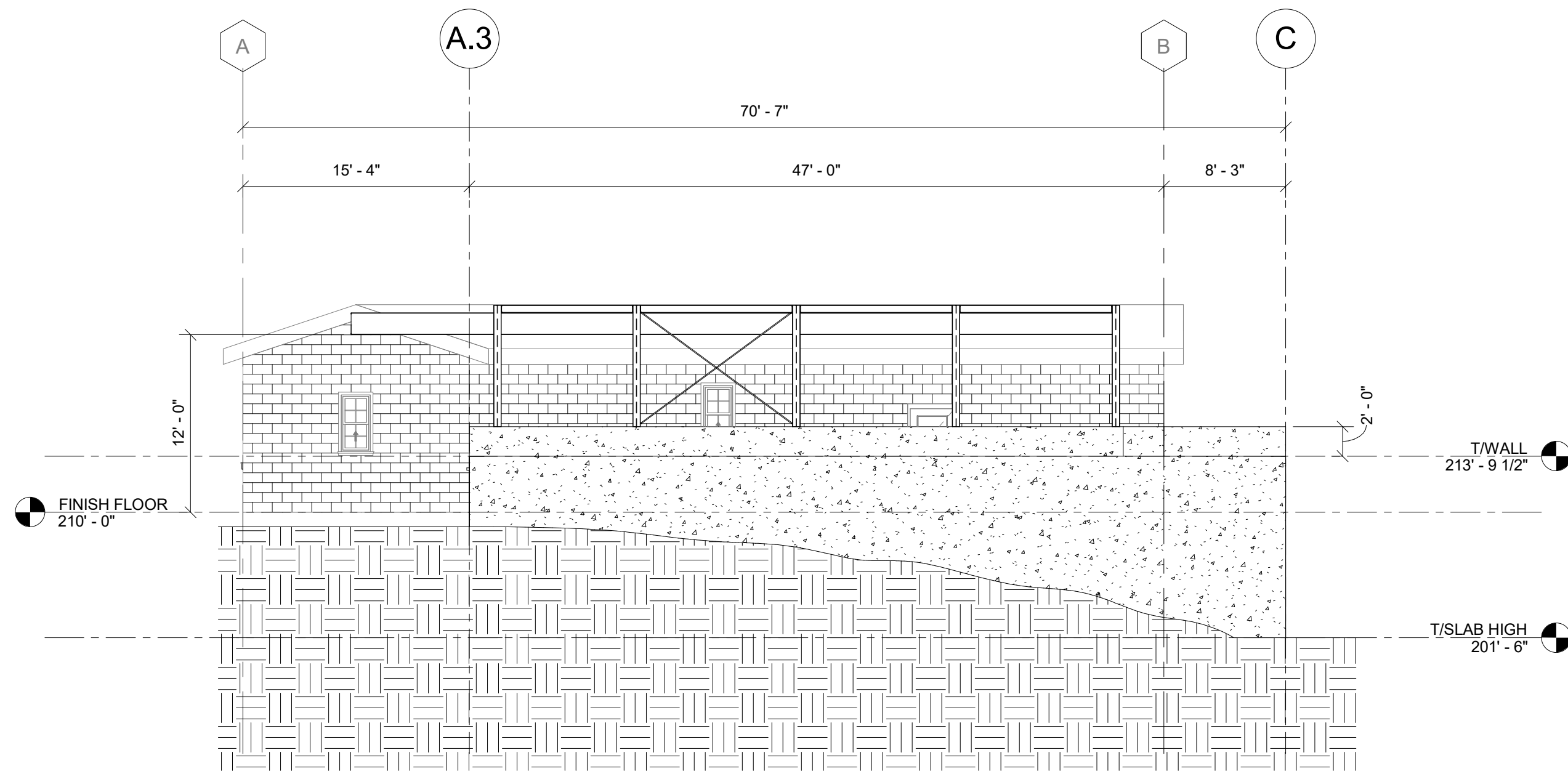
MARK	WIDTH	THICKNESS	LONG. REINF.	TRANS. REINF.
WF1	4' - 0"	1' - 0"	(4) #5	#5@12" OC, BOT



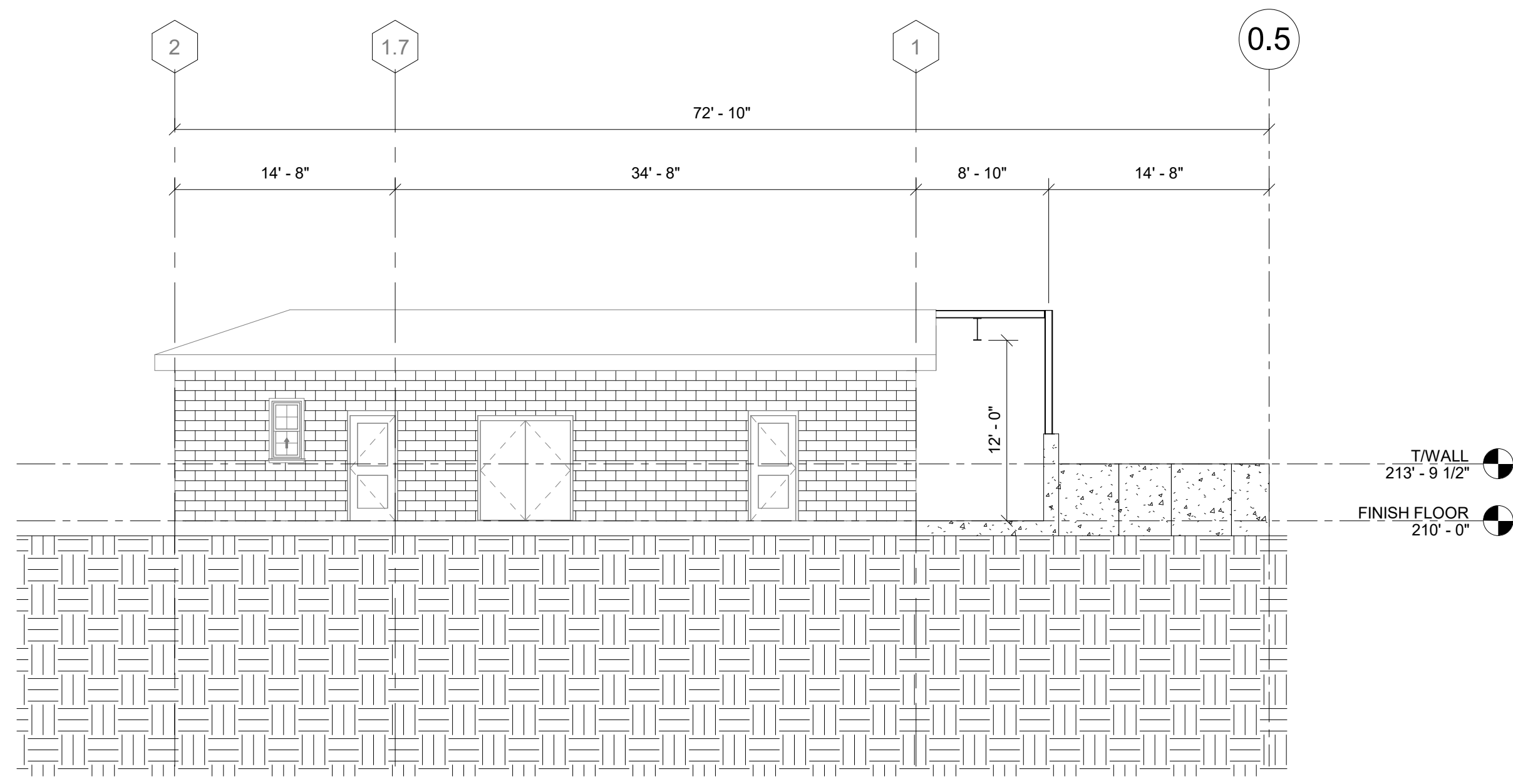


ELEVATION NOTES

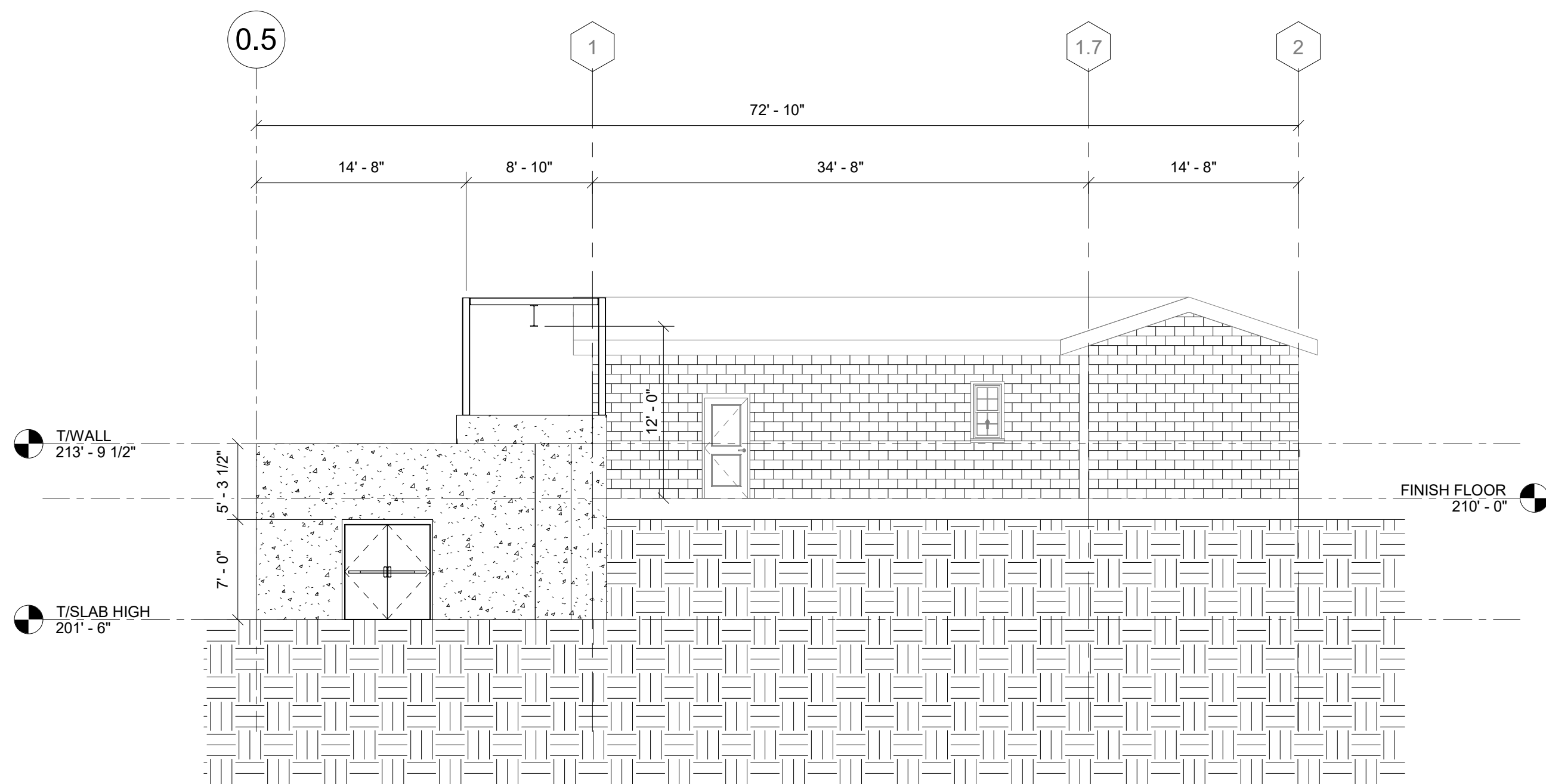
1. ELEVATIONS SHOWN FOR REFERENCE ONLY.



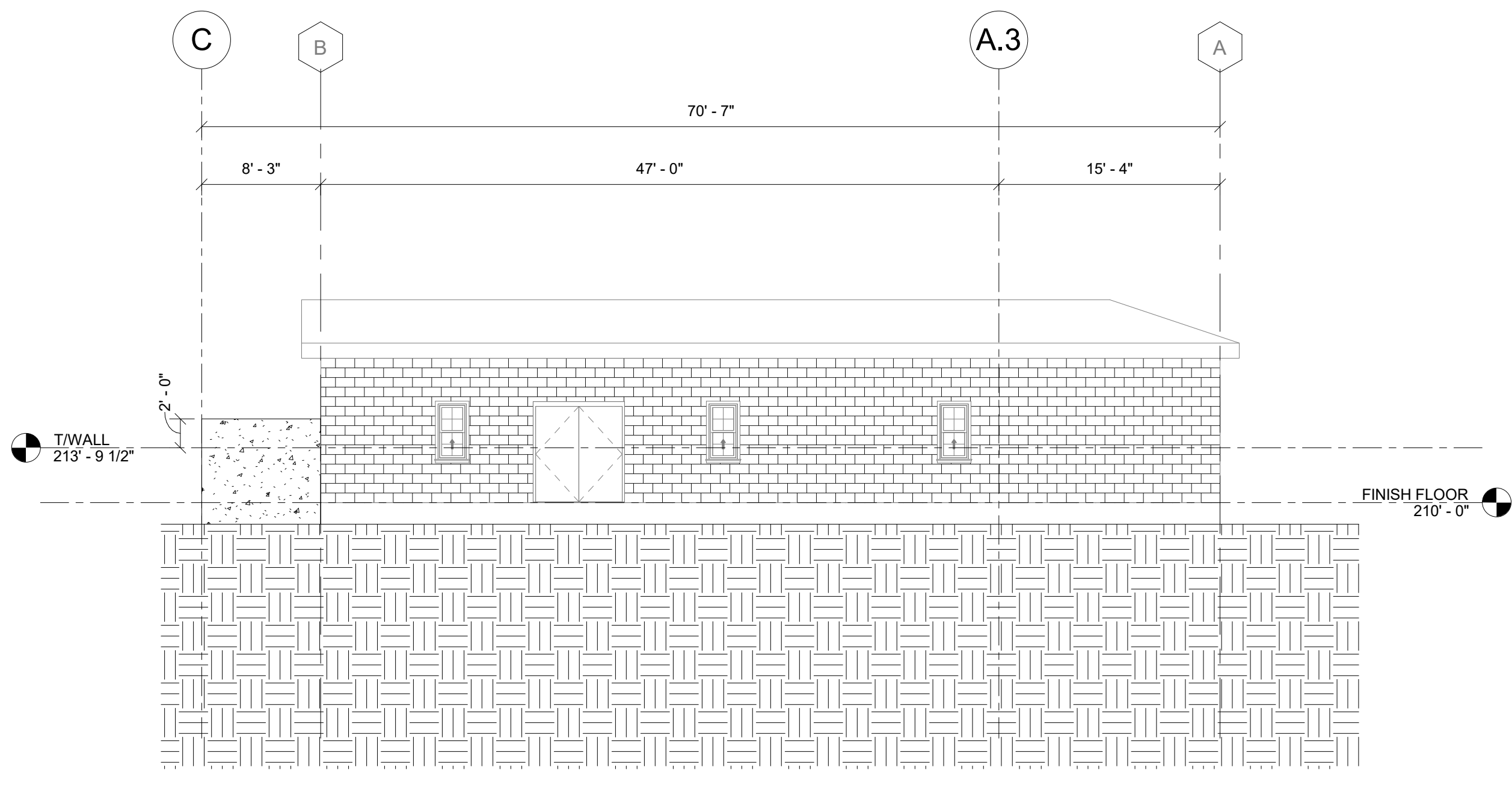
4 WEST ELEVATION  
S200 1/8" = 1'-0"



2 NORTH ELEVATION  
S200 1/8" = 1'-0"



3 SOUTH ELEVATION  
S200 1/8" = 1'-0"



1 EAST ELEVATION  
S200 1/8" = 1'-0"

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SCALE: As indicated  
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PROJECT NO.: 21-2151  
FILE:

**DELAWARE**  
**ENGINEERING, D.P.C.**  
CIVIL AND ENVIRONMENTAL ENGINEERING  
28 MADISON AVENUE EXTENSION, ALBANY, NY 12203 - 518.452.1290  
55 SOUTH MAIN STREET, ONEONTA, NY 13920 - 607.432.8073  
31 NORTH MAIN STREET, LIBERTY, NY 12754 - 845.747.9952  
6 TOWNSEND STREET, WALTON, NY 13598 - 607.885.9235  
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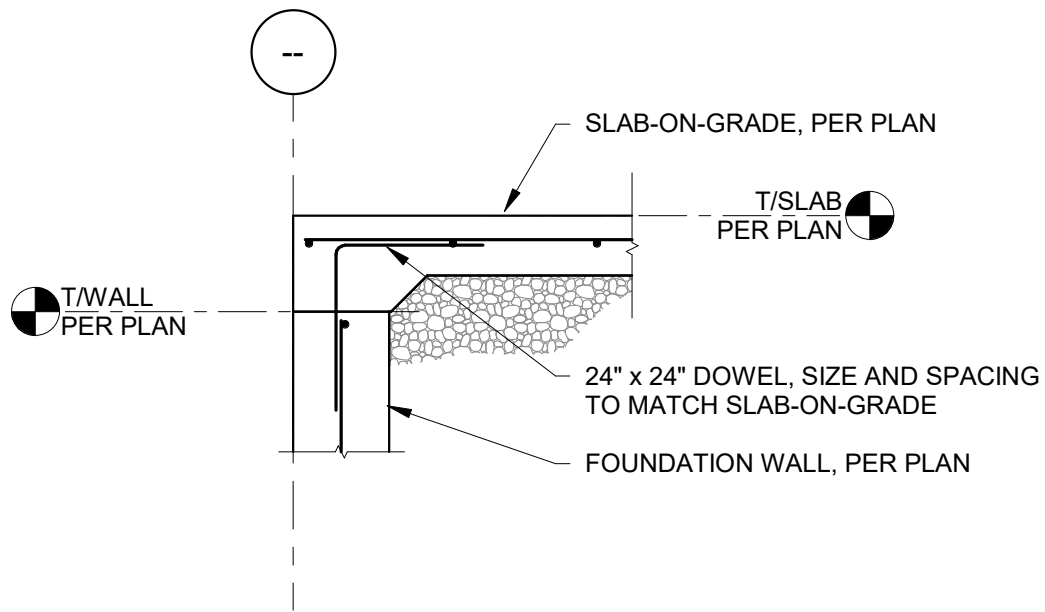
NO.	REVISIONS	
	DATE	DESCRIPTION

CHELSEA RIDGE WWTP  
UPGRADE PROJECT  
TOWN OF WAPPINGER  
DUTCHESS COUNTY, NY

ELEVATIONS

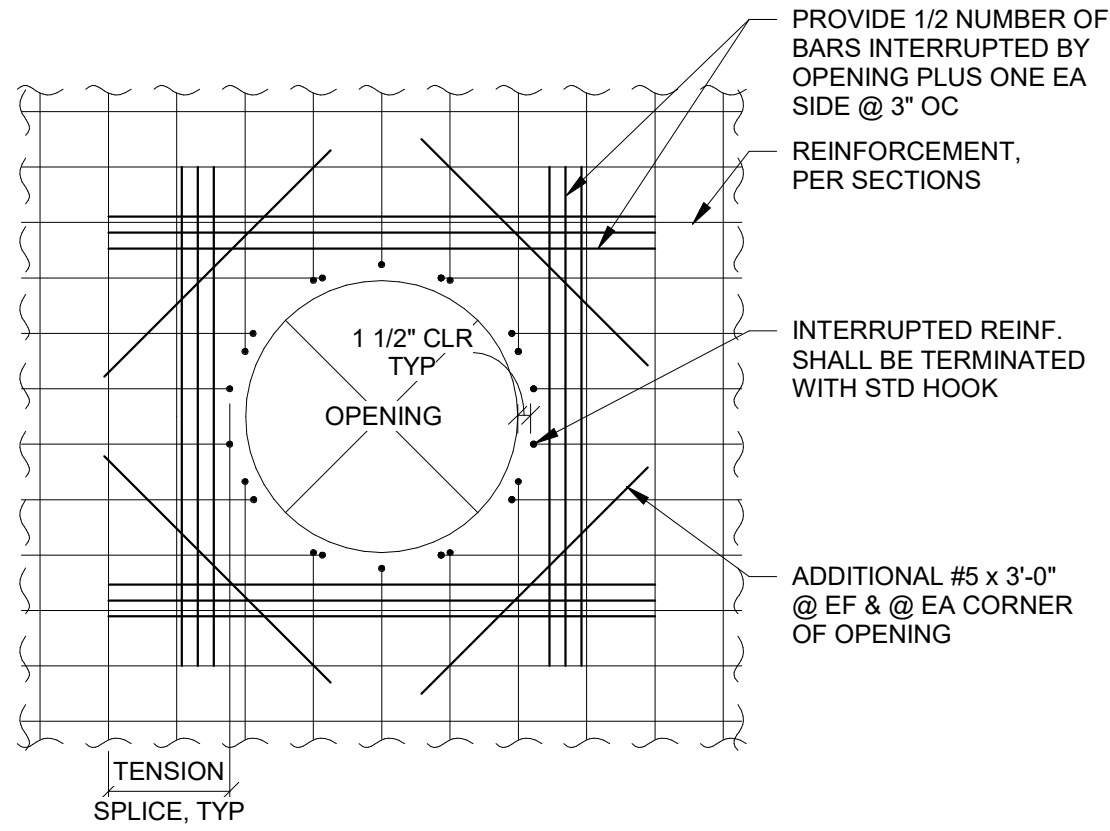
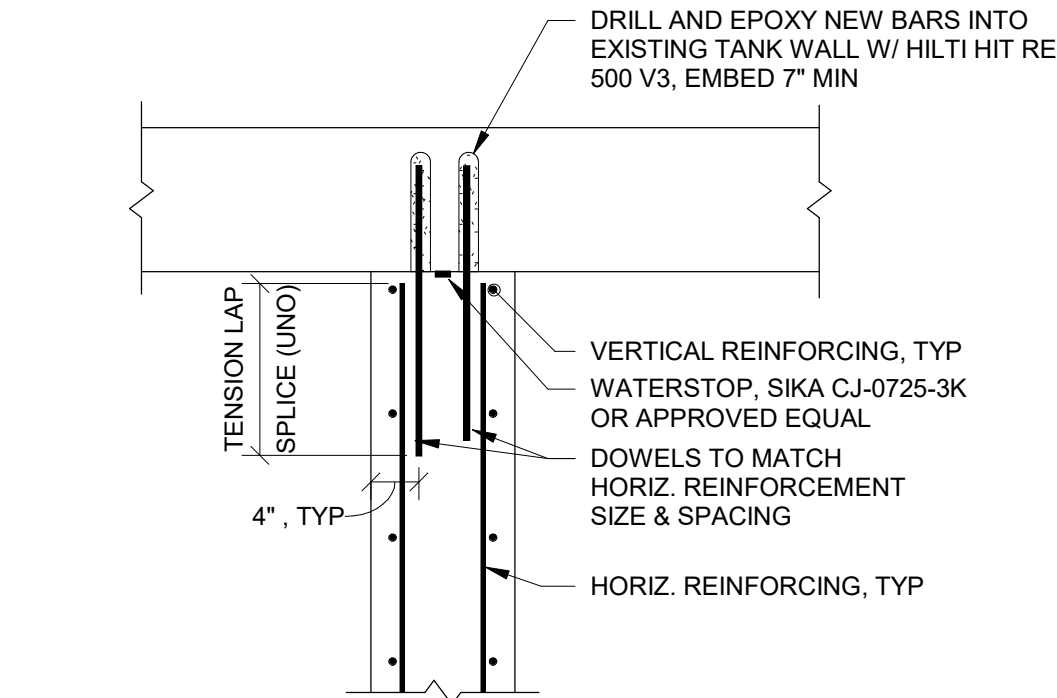
SHEET:

S200



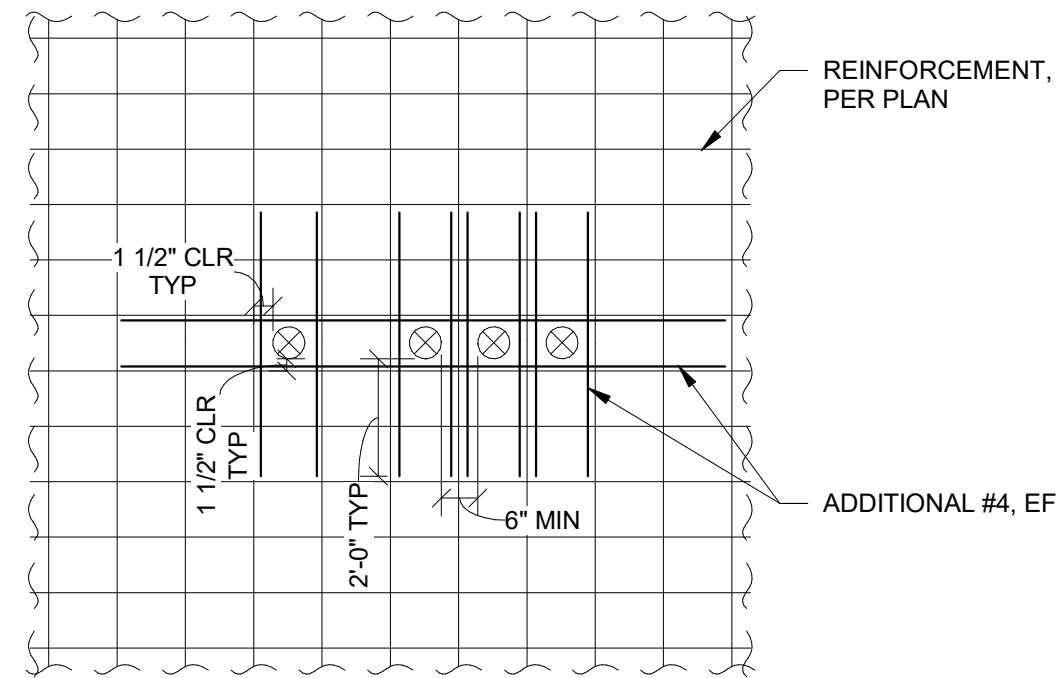
11 TYPICAL SLAB OVER POUR @ DOOR  
S300 N.T.S

12 TYPICAL CONCRETE WALL INTERSECTION DETAIL  
@ EXISTING WALL  
S300 N.T.S



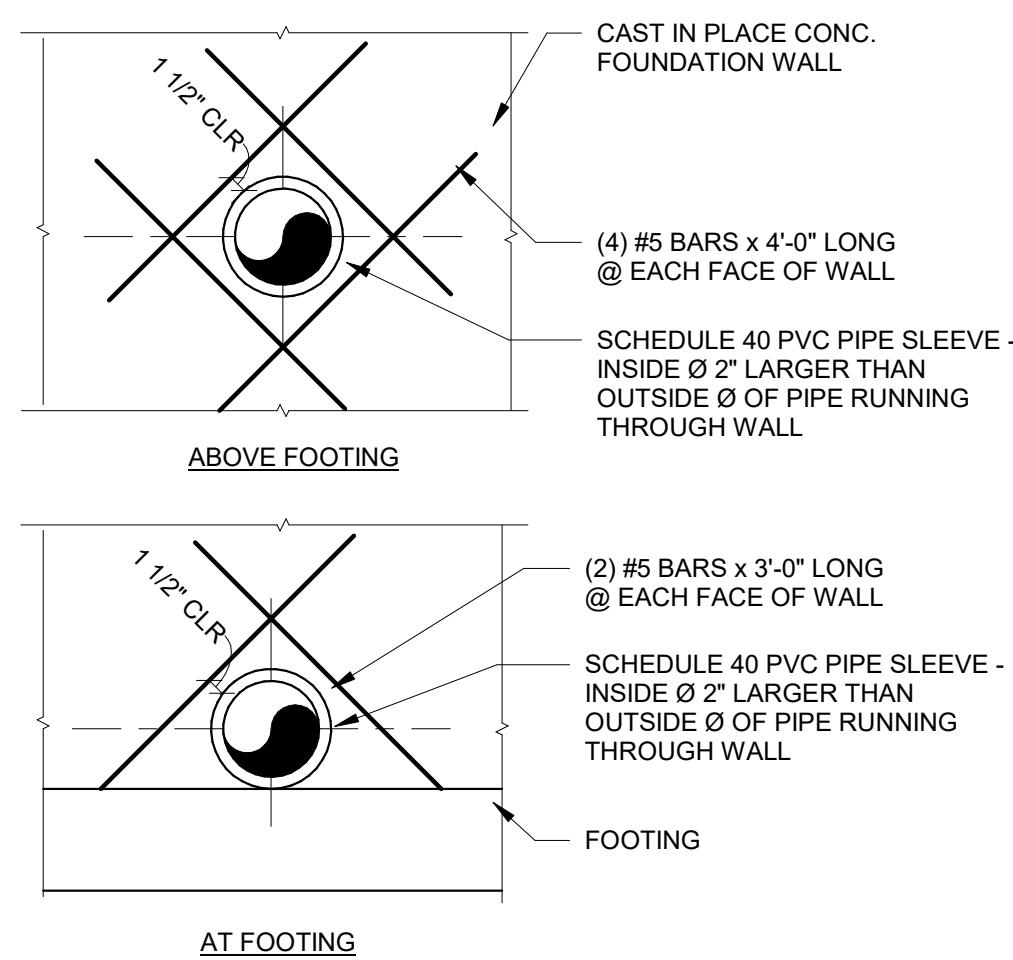
NOTES:  
1. MAX OPENING SIZE 4' - 0"

10 TYPICAL WALL SLEEVE OPENING  
S300 N.T.S



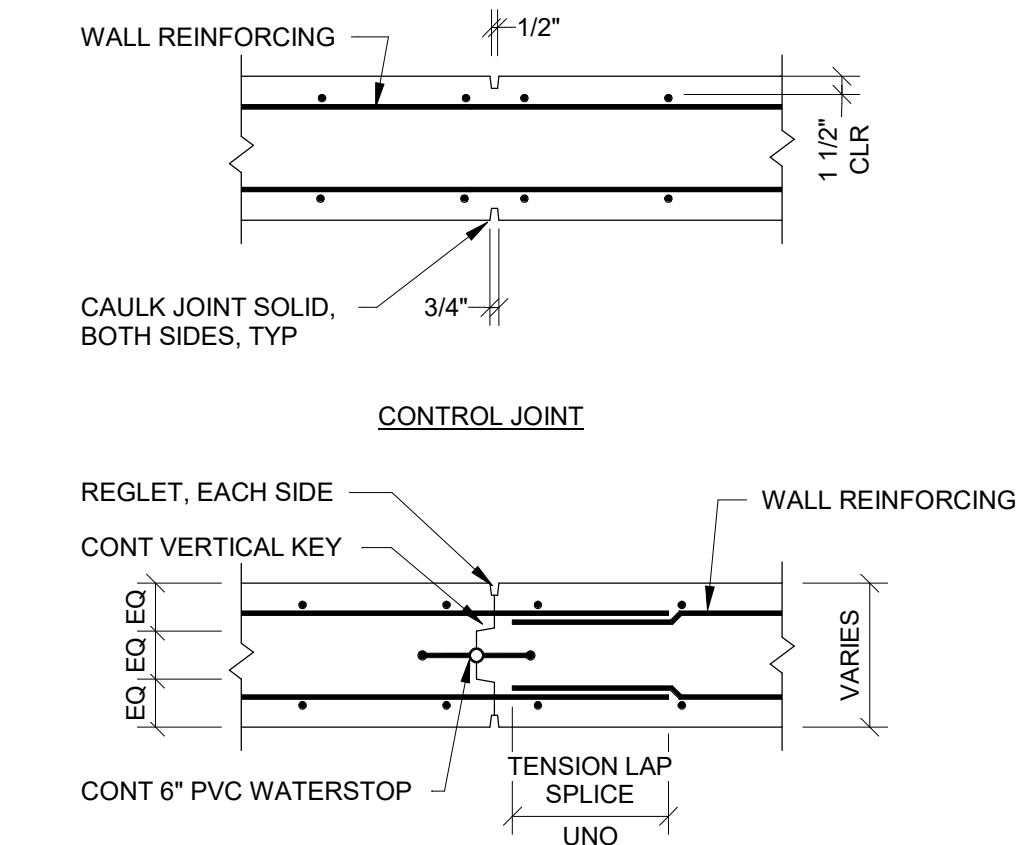
NOTES:  
1. COORDINATE THE LOCATION OF THE SLEEVES SUCH THAT THEY DO NOT INTERRUPT THE WALL REINFORCEMENT.

9 TYPICAL MULTIPLE WALL SLEEVE OPENING DETAIL  
S300 N.T.S



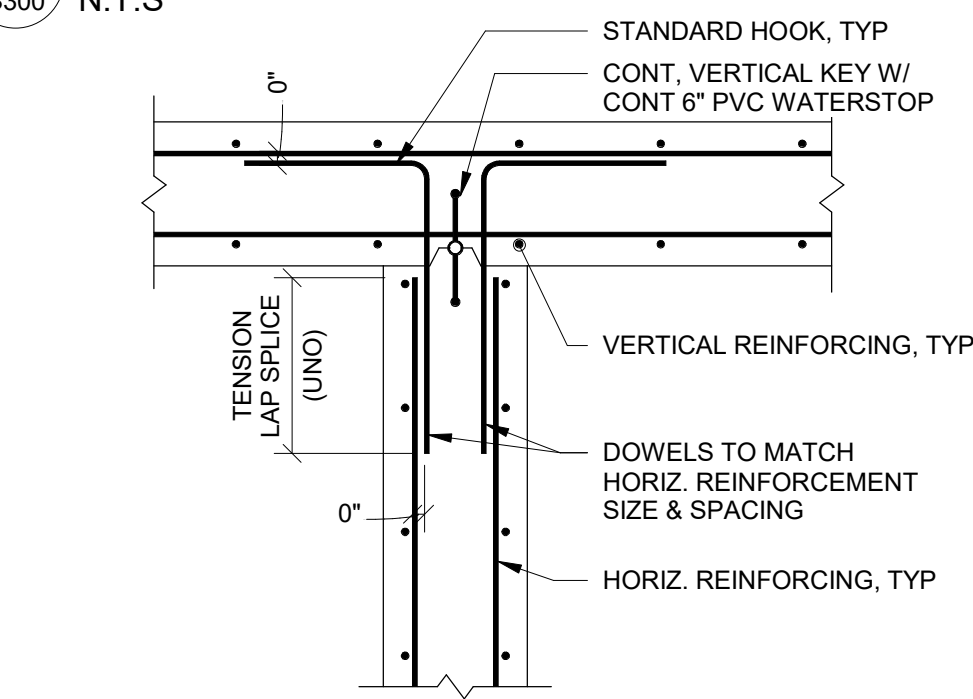
NOTES:  
1. PROVIDE 6" MINIMUM CLEAR COVER BETWEEN ADJACENT OPENINGS.

8 TYPICAL WALL REINFORCING FOR PIPE OPENING  
S300 N.T.S

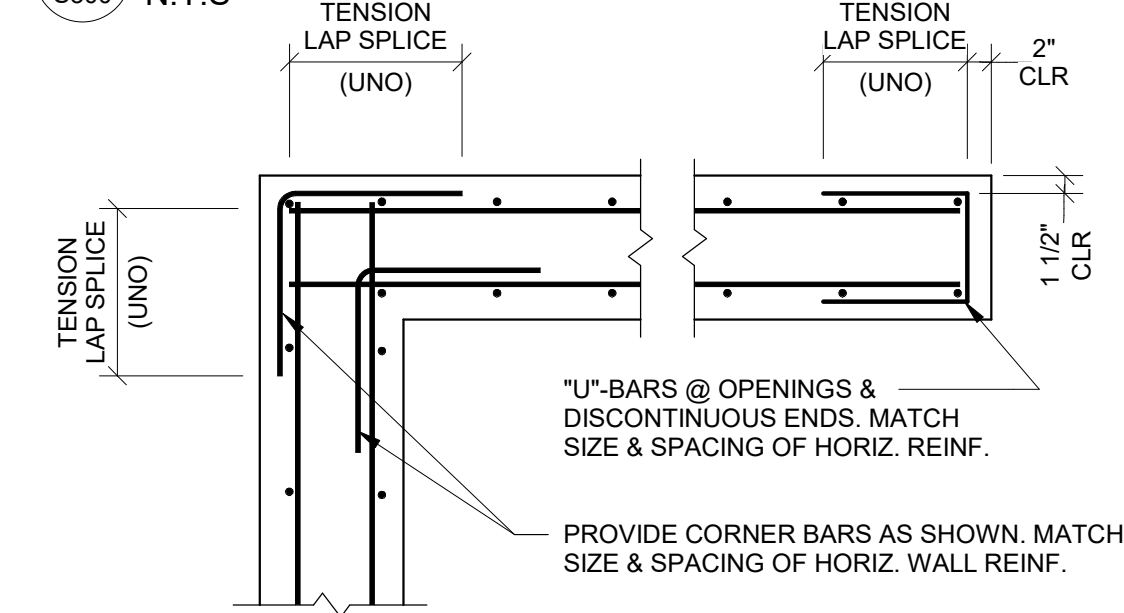


NOTES:  
1. PROVIDE CONSTRUCTION AND CONTROL JOINTS IN CONCRETE WALLS AS FOLLOWS UNLESS OTHERWISE INDICATED:  
• FOUNDATION WALLS - 25'-0" (MAX)  
2. DO NOT PLACE WITHIN 5 FEET OF A PIER, CORNER, INTERSECTIONS, AND ENDS.  
3. COORDINATE JOINT LOCATIONS WITH BRICK VENEER CONTROL JOINT LOCATIONS, SEE ARCHITECTURAL DRAWINGS.  
4. ALL CONSTRUCTION JOINTS MUST BE LOCATED ON SHOP DRAWINGS AND APPROVED BY THE ENGINEER OF RECORD. NO CONSTRUCTION JOINTS MAY BE FORMED IN THE FIELD WITHOUT THE ENGINEERS APPROVAL

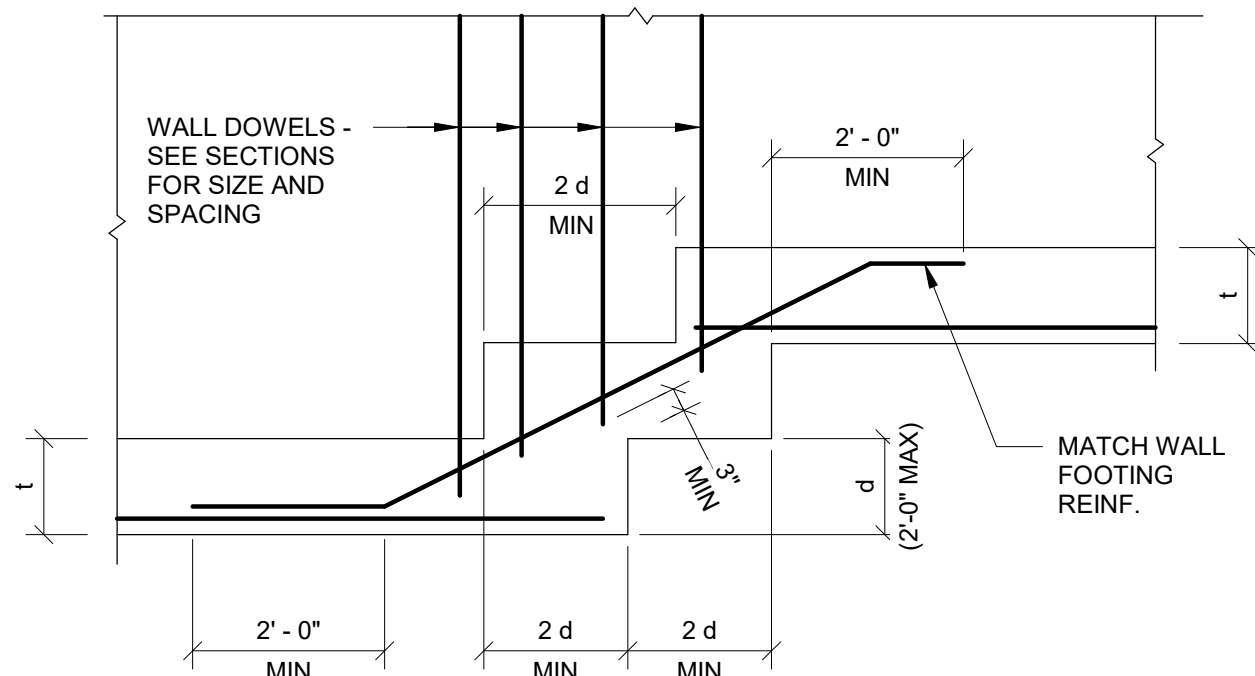
7 TYPICAL CONCRETE WALL JOINT DETAILS  
S300 N.T.S



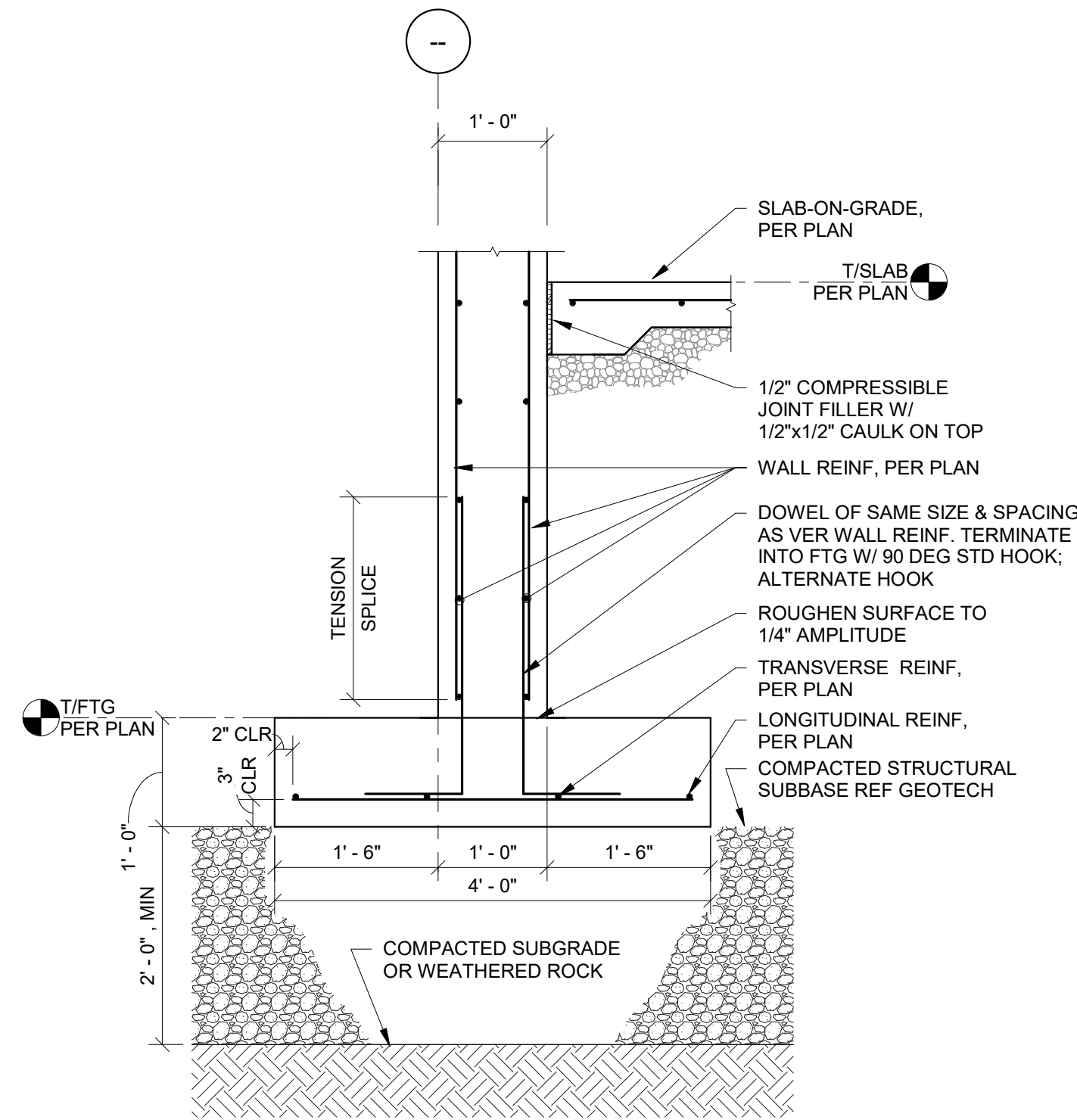
6 TYPICAL CONCRETE WALL INTERSECTION DETAIL  
S300 N.T.S



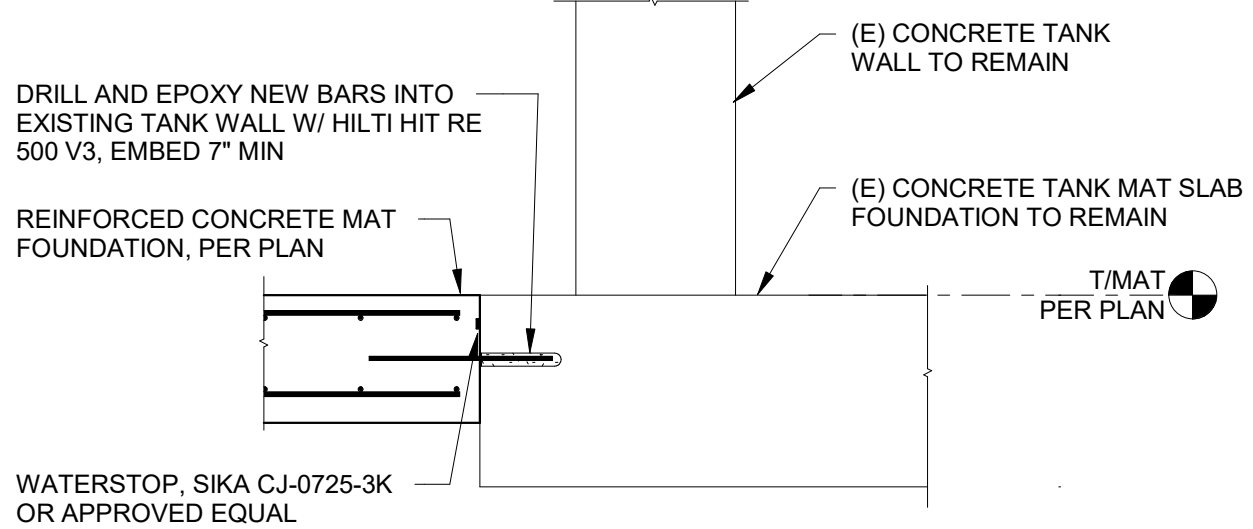
5 TYPICAL CONCRETE WALL CORNER & END DETAIL  
S300 N.T.S



4 TYPICAL STEPPED FOOTING DETAIL  
S300 1/2" = 1'-0"

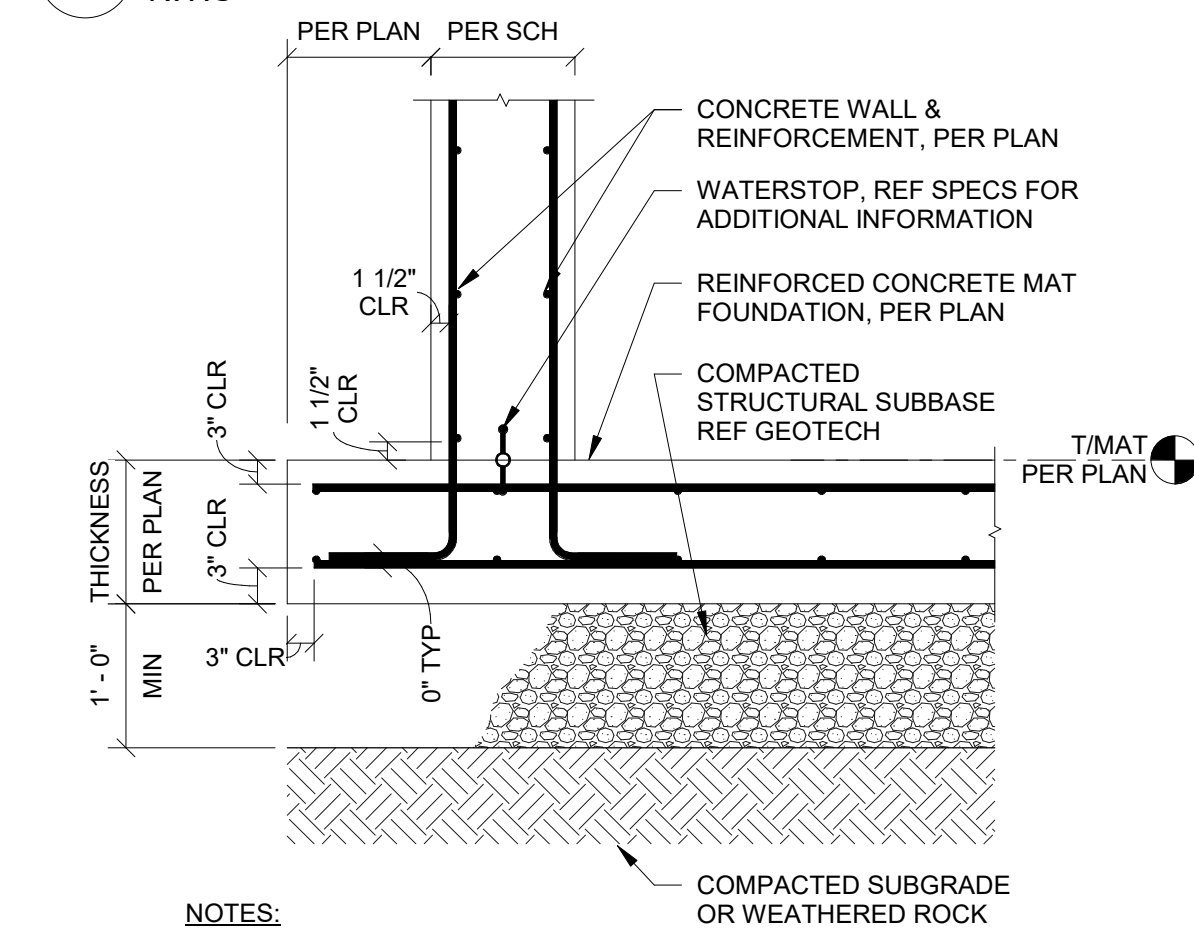


3 TYPICAL FOUNDATION WALL DETAIL  
S300 N.T.S



NOTES:  
1. ORIENTATION OF REINFORCEMENT IN MAT FOUNDATION SHOWN BELOW IS TYPICAL. ACTUAL ORIENTATION SHALL BE VERIFIED WITH SLAB PLANS AND SCHEDULING AS INDICATED.  
2. SIM CONDITION WHERE NEW CONCRETE FOOTING ADJOINS EXISTING MAT SLAB.  
3. CONCRETE MIX FOR MAT SLAB SHALL INCLUDE XYPEX C-SERIES INTEGRAL CRYSTALLINE WATERPROOFING ADDITIVE.  
4. REFER TO FOUNDATION NOTES, GEOTECHNICAL REPORT, AND 1/S300 FOR SOIL/FILL REQUIREMENTS BENEATH MAT SLAB.

2 NEW MAT SLAB AT EXISTING MAT SLAB  
S300 N.T.S



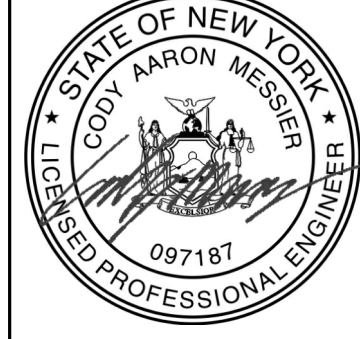
NOTES:  
1. ORIENTATION OF REINFORCEMENT IN MAT FOUNDATION SHOWN BELOW IS TYPICAL. ACTUAL ORIENTATION SHALL BE VERIFIED WITH SLAB PLANS AND SCHEDULING AS INDICATED.  
2. SIM CONDITION WHERE FNDN DOES NOT TERMINATE.  
3. CONCRETE MIX FOR MAT SLAB & WALLS SHALL INCLUDE XYPEX C-SERIES INTEGRAL CRYSTALLINE WATERPROOFING ADDITIVE.

1 TYPICAL WALL TO MAT FOUNDATION  
S300 N.T.S

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CONCRETE DETAILS

SHEET:  
**S300**