

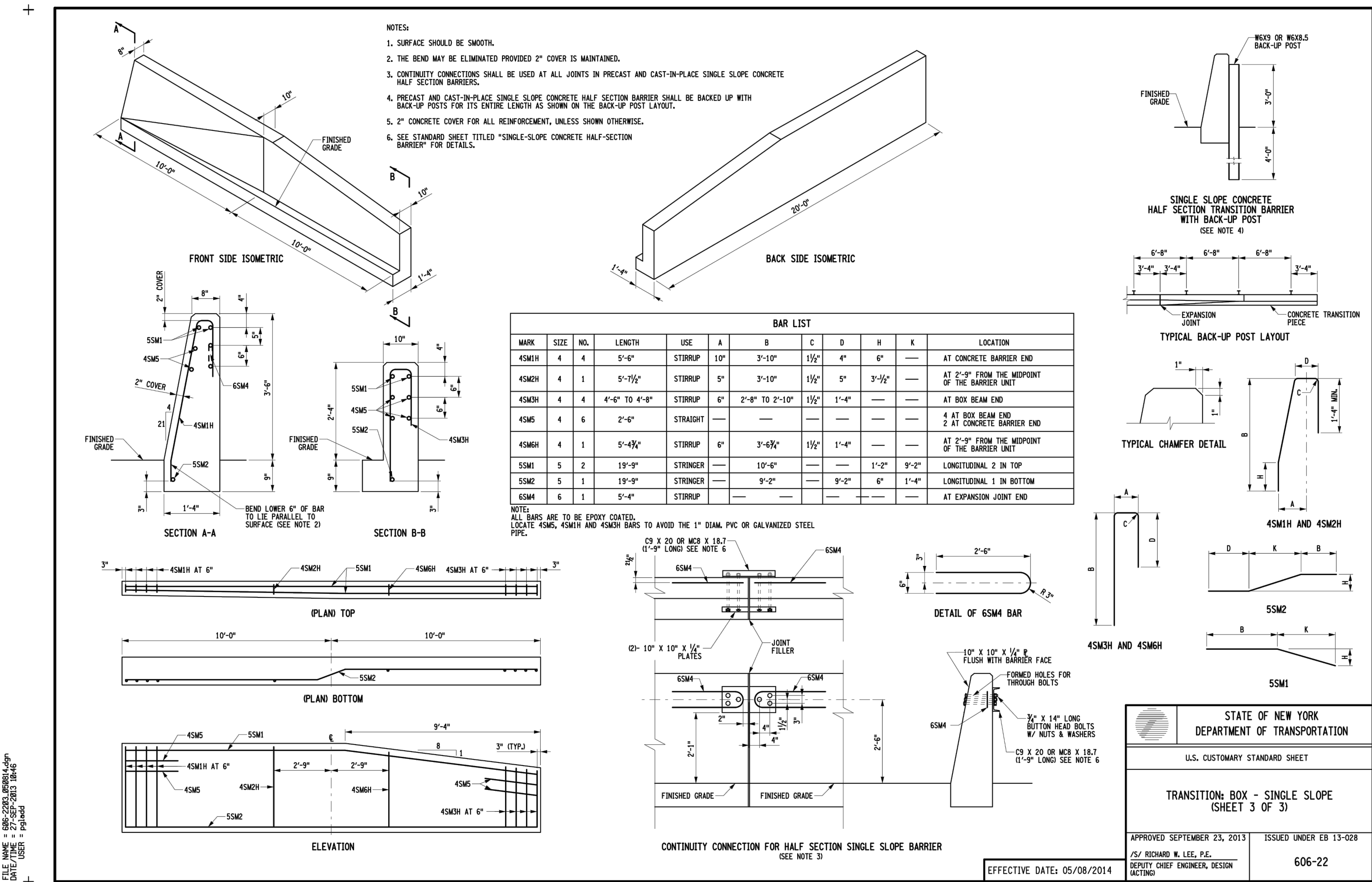
N:\VADO\9999 WALL V999.DOTXW 2023.05.16 07:20W 05/16/23 10:35:36AM mcdsies LAYOUT W-7

FILE NAME = 05-2309.05064-4.mxd  
DATE TIME = 05/16/23 10:35:36AM  
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DOWELS TYING PROP. BOX  
CULVERT TO PROP. CONCRETE  
COLLAR. (SEE ANCHOR HOOK  
CONNECTION DETAIL ON THIS  
SHEET)

△



#### CONCRETE CULVERT COLLAR NOTES

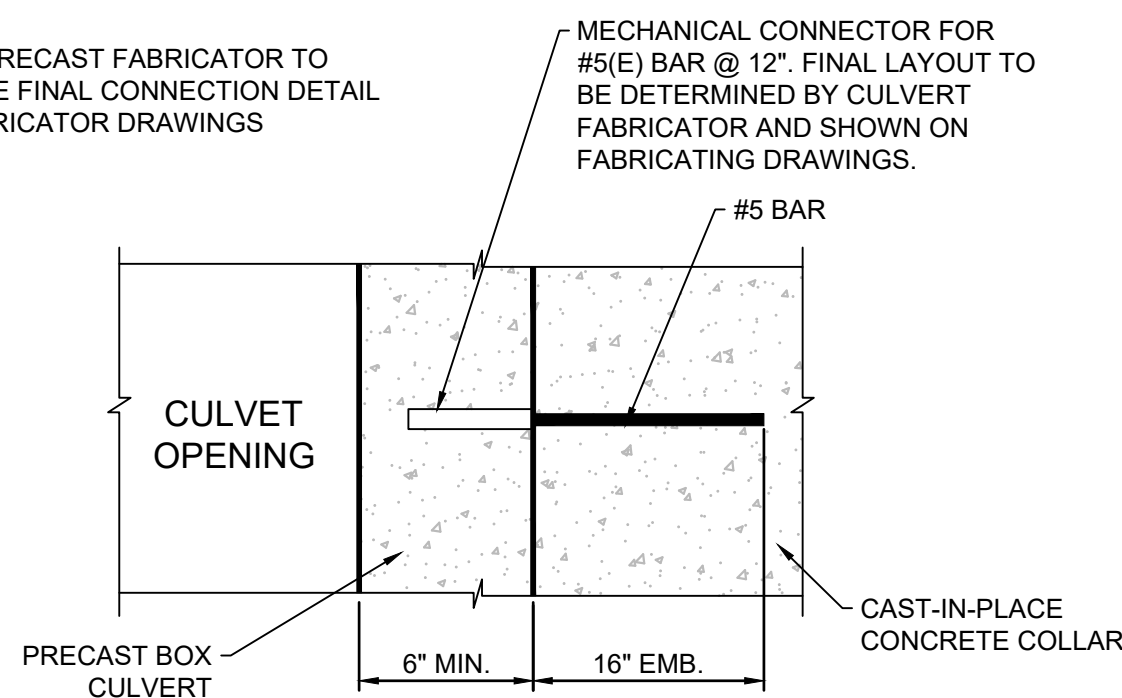
##### CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST EDITION OF THE A.C.I. "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318) AND IN CONFORMANCE WITH NYS DOT ITEM 555.0105, CLASS A CONCRETE.
2. ALL CONCRETE SHALL HAVE MINIMUM 28-DAY COMPRESSIVE STRENGTHS AS INDICATED BELOW:

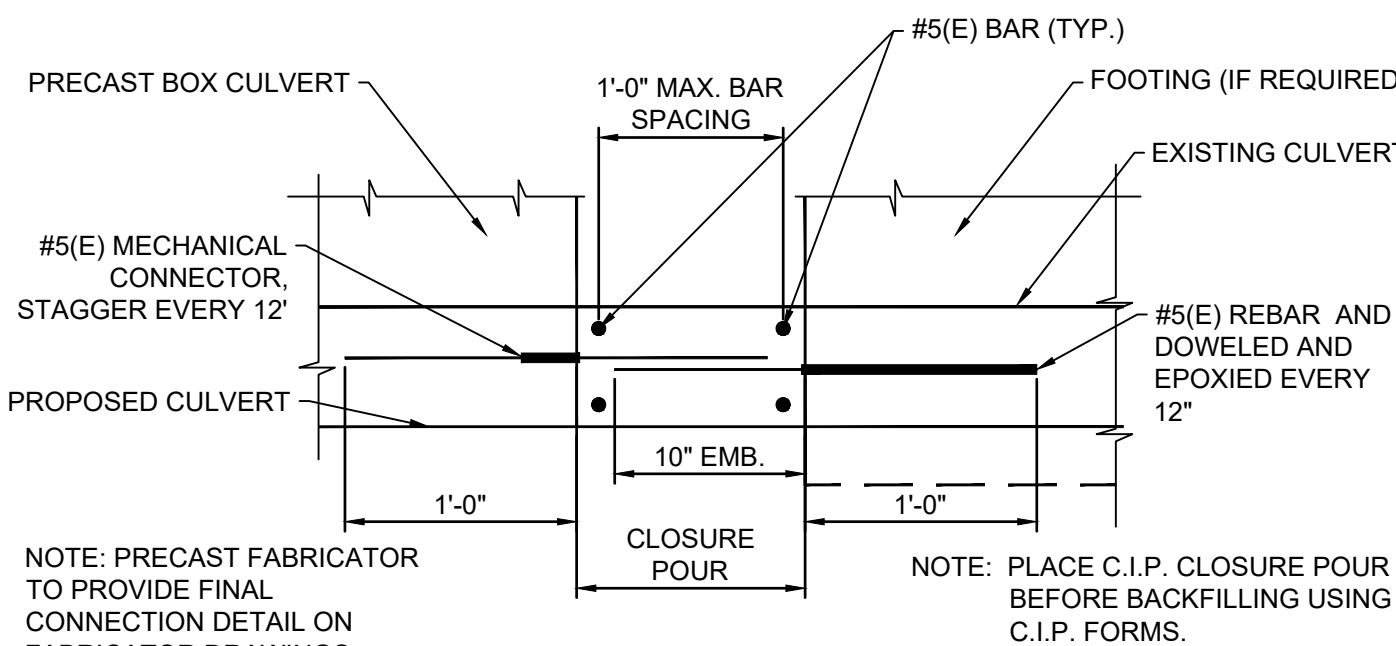
CONCRETE STRENGTH	TYPE AGGREGATE	AIR CONTENT	WHERE USED
4,500 PSI	STONE	5 TO 8%	COLLAR AND CONCRETE MASS

3. ALL CONCRETE TO BE STONE AGGREGATE 3/4" MAXIMUM HAVING A MINIMUM STRENGTH OF 4500 PSI AT 28 DAYS AND HAVE A MAXIMUM WATER-CEMENT RATIO OF 0.46.
4. PORTLAND CEMENT SHALL BE ASTM C150, TYPE II.
5. ALL AGGREGATE SHALL CONFORM TO ASTM C33 FOR NORMAL WEIGHT AGGREGATES.
6. ALL CONCRETE TO CONTAIN A WATER-REDUCING ADMIXTURE, ASTM C494, TYPE A, AND CONTAINING NOT MORE THAN .05 PERCENT CHLORIDE IONS (EUCON WR-75, EUCLID COMPANY, OR EQUAL).
7. CONCRETE IS NOT REQUIRED TO CONTAIN A HIGH RANGE WATER REDUCING ADMIXTURE (SUPERPLASTIZER) ASTM C494, TYPE F OR TYPE G AND CONTAINING NOT MORE THAN .05 PERCENT CHLORIDE IONS. (EUCON-37, EUCLID COMPANY, OR EQUAL).
8. CONCRETE MIX DESIGNS SHALL CONFORM TO ALL REQUIREMENTS OF ACI 318-19.
9. SLUMPS OVER 4 INCHES WILL NOT BE PERMITTED UNLESS THE HRW ADMIXTURE (SUPERPLASTICIZER) IS USED. MAXIMUM SLUMP IS THEN 2" TO 3" BEFORE ADDITION OF SUPERPLASTICIZER, AND 0" - 9" AFTER ADDITION OF SUPERPLASTICIZER, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. NO ADMIXTURE SHALL BE USED IN CONCRETE EXCEPT AS ALLOWED BY THE SPECIFICATIONS AND ONLY WITH LABORATORY DESIGN MIX APPROVAL. ALL ADMIXTURES SHALL CONTAIN NO MORE CHLORIDE IONS THAN ARE PRESENT IN MUNICIPAL DRINKING WATER.
10. ALL REINFORCING STEEL SHALL BE INTERMEDIATE GRADE, NEW BILLET STEEL, DEFORMED BARS, CONFORMING TO ASTM A-615, GRADE 60. ALL BARS SHALL BE SECURELY SUPPORTED AND WIRED IN PLACE PRIOR TO CONCRETE PLACEMENT.
11. UNLESS NOTED, ALL BARS MARKED CONT. SHALL BE SPLICED AT ALL LAP POINTS AND CORNERS AND DEVELOPED AT NON-CONTINUOUS ENDS AS PER TYPICAL DETAILS. SPLICE CONTINUOUS TOP BARS AT CENTER BETWEEN SUPPORTS AND SPLICE CONTINUOUS BOTTOM BARS AT SUPPORTS. WELDED WIRE FABRIC SHALL BE LAPPED 12 INCHES OR TWO SPACES, WHICHEVER IS LONGER. SHEETS SHALL BE WIRED TOGETHER.
12. CONCRETE COVER FOR REINFORCING BARS SHALL BE AS SHOWN IN DETAILS.
13. REINFORCEMENT SHALL NOT BE WELDED OR HEATED IN ANY WAY.
14. REINFORCING, INCLUDING WELDED WIRE FABRIC, SHALL BE SUPPORTED ON SOLID CONCRETE BLOCKS AT 5'-0" ON CENTER MAXIMUM EACH WAY. REINFORCING, INCLUDING WELDED WIRE FABRIC, FOR OTHER SLABS SHALL BE SUPPORTED ON CHAIRS OR BOLSTERS AT ALL SUPPORTS AND AT 5'-0" ON CENTER MAXIMUM BETWEEN SUPPORTS.
15. ALL CONSTRUCTION JOINTS SHALL BE THOROUGHLY CLEANED, AND TREATED WITH THE SPECIFIED BONDING COMPOUND JUST BEFORE PLACING NEW CONCRETE.
16. UNDER NO CIRCUMSTANCES SHALL CONCRETE BE PUMPED THROUGH ALUMINUM PIPES. CONCRETE SHALL NOT BE PLACED IN CONTACT WITH ALUMINUM, ALUMINUM MIXING DRUMS, TRUCK MIXERS, BUCKETS, CHUTES, CONVEYORS, TREMIE PIPES, AND OTHER EQUIPMENT MADE OF ALUMINUM SHALL NOT BE USED ON THIS PROJECT.
17. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR FABRICATION, BENDING AND PLACEMENT OF CONCRETE REINFORCEMENT. SHOP DRAWINGS SHALL COMPLY WITH ACI 315, MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES.
18. ALL CONCRETE REINFORCING IS SUBJECT TO INSPECTION BY THE DESIGN ENGINEER PRIOR TO CONCRETE PLACEMENT. CONTRACTOR SHALL NOTIFY ENGINEER FOR REINFORCING INSPECTION A MINIMUM OF 24 HOURS PRIOR TO CONCRETE PLACEMENT.
19. FURNISH TO ENGINEER FOR REVIEW COMPLETE SHOP DRAWINGS OF REINFORCING STEEL, CONCRETE MIX DESIGNS, AND ADMIXTURE DATA SHEETS.
20. PROVIDE ONE SET OF FIVE CYLINDERS FOR COMPRESSION TESTING AS PER ASTM C31 FOR EACH POUR. PROVIDE SLUMP TEST FOR EACH LOAD OF CONCRETE.

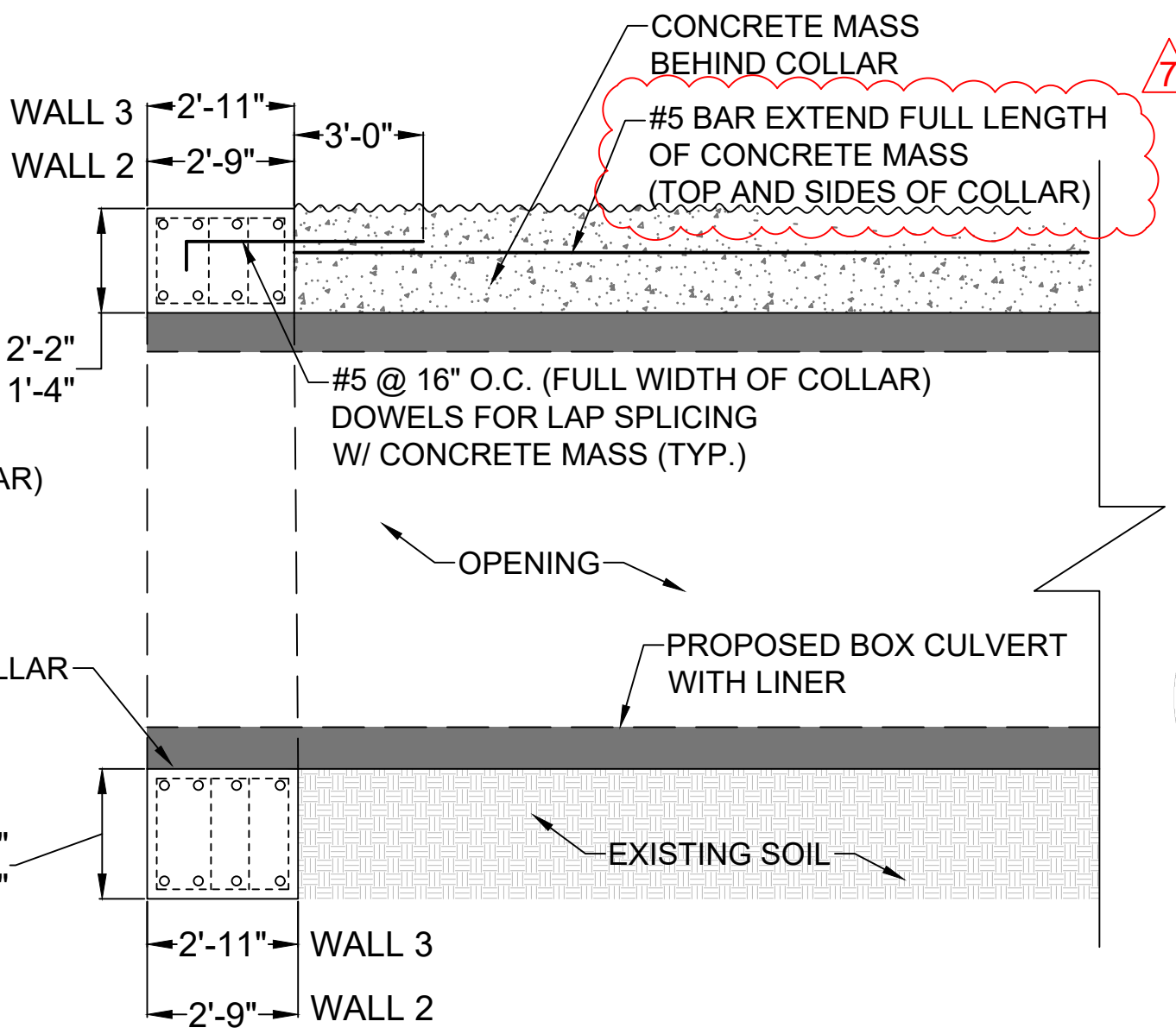
NOTE: PRECAST FABRICATOR TO PROVIDE FINAL CONNECTION DETAIL ON FABRICATOR DRAWINGS



#### BOX CULVERT MECHANICAL CONNECTION TO CONCRETE COLLAR DETAIL NTS



#### CONNECTION TO EXISTING CULVERT NTS



#### SECTION "B" FOR WALLS 2 & 3 NTS

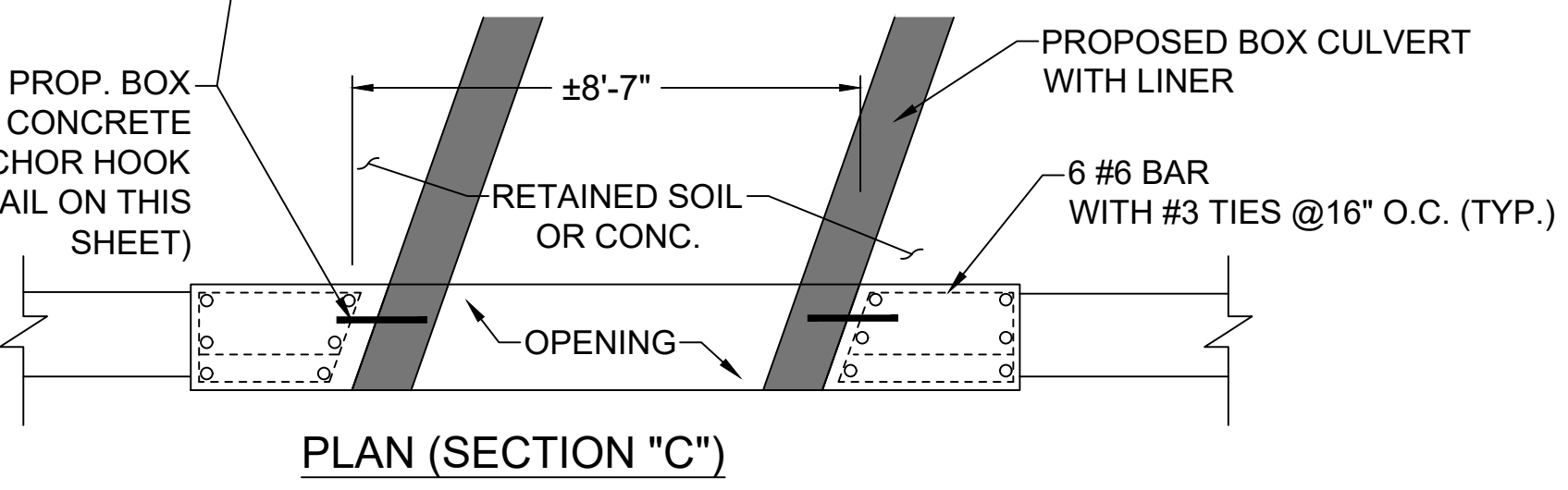
THE MINIMUM CLEAR COVER FOR REINFORCEMENT BARS SHALL BE ONE BAR DIAMETER OR THE VALUES TABULATED BELOW, WHICHEVER IS THE GREATER	
SLABS	1"
TIED PIERS (CLEAR DIMENSION TO TIES)	
SURFACE EXPOSED TO EARTH AND WEATHER	2"
OTHER SURFACES	1 1/2"
FOUNDATION ELEMENTS	
FORMED SURFACES	2"
SURFACES PLACED AGAINST EARTH	3"
WALLS	
SURFACES EXPOSED TO EARTH OR WEATHER No. 6 THROUGH No. 18 BARS	2"
SURFACES EXPOSED TO EARTH OR WEATHER No. 5 BAR AND SMALLER	1 1/2"
OTHER SURFACES	1"
COLUMNS AND BEAMS (CLEAR DIMENSION TO TIES)	1 1/2"
JOISTS	1"

#### TYPICAL CONCRETE COVER FOR REINFORCING BARS

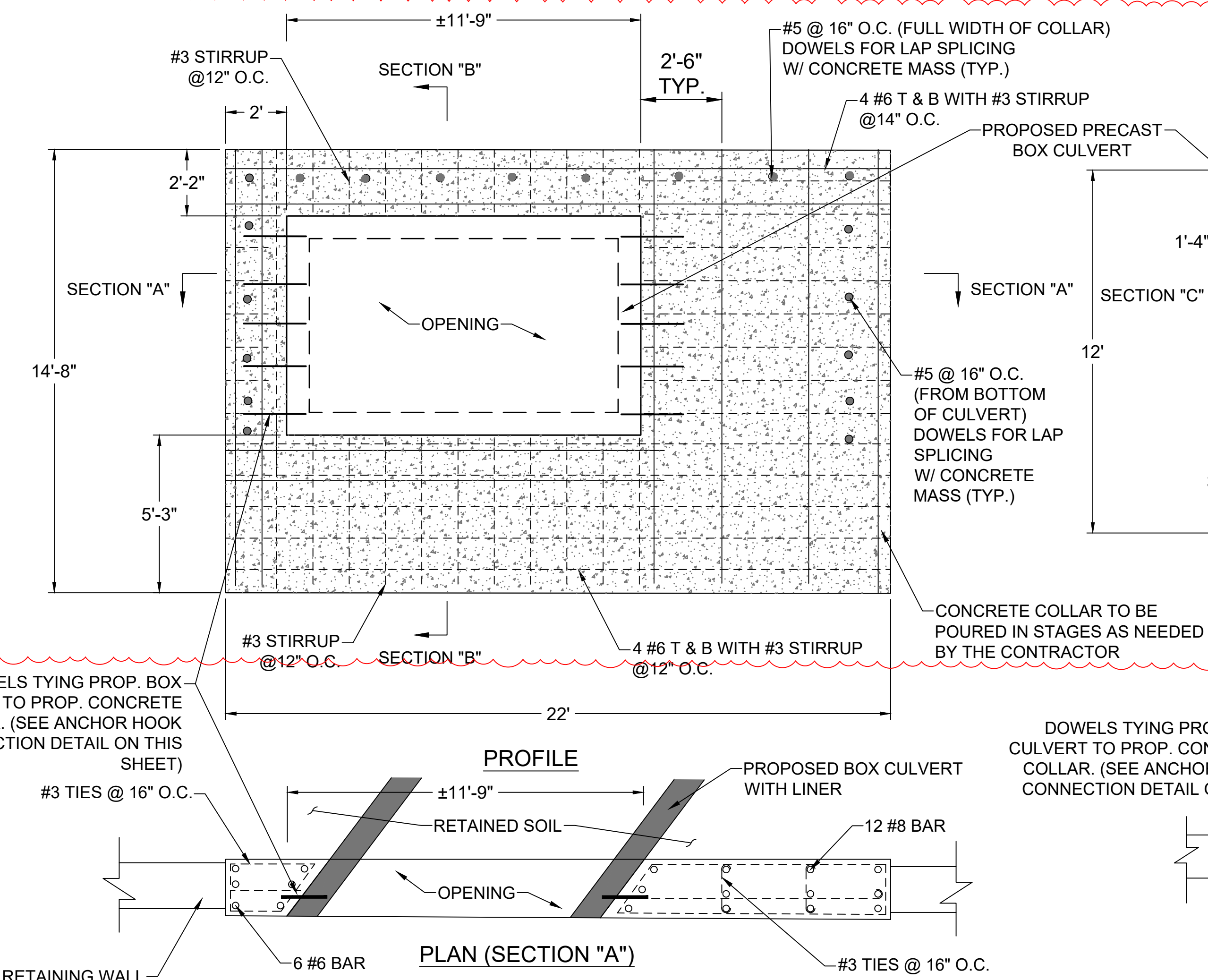
##### NOTES

1. CONCRETE CULVERT COLLAR DESIGN BY K&B STRUCTURAL ENGINEERS.
2. CONCRETE CULVERT COLLAR SHALL BE BRACED LATERALLY BY CONTRACTOR PRIOR TO POUR OF CONCRETE MASS BEHIND COLLAR.

#### CONCRETE CULVERT COLLAR REINFORCEMENT DETAIL WALL 2 NTS



#### CONCRETE CULVERT COLLAR REINFORCEMENT DETAIL WALL 3 NTS



NO.	REV.	DATE	DESCRIPTION
1	1	08/04/2021	DATE
2	1	08/04/2021	DATE
3	1	08/04/2021	DATE
4	1	08/04/2021	DATE
5	1	08/04/2021	DATE
6	1	08/04/2021	DATE
7	1	08/04/2021	DATE

dwg by: YY

chk by: AB

scale: AS NOTED

date: 08/04/2021

rev

description

by

SES CONSULTING ENGINEERS

GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL

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PROPOSED NORTHEAST INTERSTATE

LOGISTICS CENTER

NY 312 & PUGSLEY ROAD

TOWN OF SOUTHEAST, NEW YORK

RETAINING WALL DETAILS

drawing title:

job no. 9999

drawing no.

W-7

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