

LATITUDE: 40°21'57.91" LONGITUDE: -81°37'24.25"



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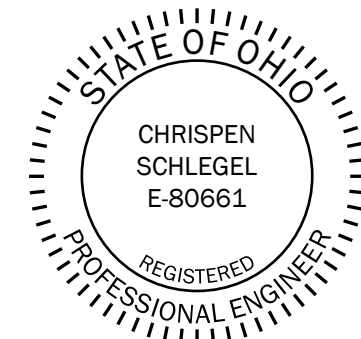
PROJECT DESCRIPTION

LIMITED ACCESS

2023 SPECIFICATIONS

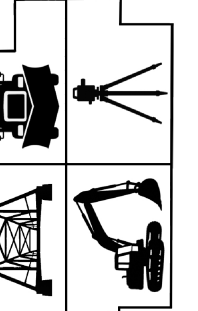
HYDRAULIC DESIGN STATEMENT

FILE SHEET
TR 459 BRIDGE 1 REPLACEMENT



APPROVED

DATE 8/28/2025 COSHOCTON COUNTY ENGINEER



SIGNER	
CJS	
REVIEWER	
CJS	08-26-25
OBJECT ID	
2025050101	
EET	TOTAL
1	5

C:\ProgramData\Bentley\OpenRoads Designer 2024.00\Configuration\WorkSpaces\OHDOTCE02_24\WorkSetCFGs\COS-TD459-0001_BridgePlacement\300-Survey\Basemaps\2025.08.26_COS-TD459-0001_Base.dgn

UTILITIES

THE CONTRACTOR SHALL NOTIFY THE OHIO UTILITIES PROTECTION SERVICE (OUPS) AT LEAST TWO (2) WORKING DAYS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH ALL OUPS REFERENCE NUMBERS FOR THIS PROJECT. ALL UTILITY RELOCATION, REMOVAL, OR NEW CONSTRUCTION SHALL BE PERFORMED BY AND AT THE EXPENSE OF THE RESPECTIVE UTILITY OWNER, UNLESS OTHERWISE NOTED IN THE PLANS. THE CONTRACTOR SHALL COORDINATE OPERATIONS WITH UTILITY OWNERS TO MINIMIZE CONFLICTS AND DELAYS. AERIAL LINES THAT REQUIRE TEMPORARY DROPPING FOR PLACEMENT OF CULVERT SECTIONS SHALL BE COORDINATED BY THE CONTRACTOR TO MINIMIZE INCONVENIENCE TO ALL PARTIES.

STANDARD DRAWINGS

REFERENCE SHOULD BE MADE TO THE MOST CURRENT ODOT STANDARD DRAWINGS SHOWN IN THE TABLE ON THE COVER SHEET.

BEST MANAGEMENT PRACTICES

BEST MANAGEMENT PRACTICES (BMP'S) FOR SOIL EROSION AND SEDIMENT CONTROL SPECIFICATIONS SET FORTH IN THE MOST CURRENT VERSION OF ODOT'S CONSTRUCTION AND MATERIAL SPECIFICATIONS (CMS), LOCATION AND DESIGN MANUAL, SUPPLEMENTAL SPECIFICATION 832, AND STANDARD DRAWINGS" SHALL BE USED TO ENSURE ADEQUATE EROSION AND SEDIMENT CONTROL, ALONG WITH ADDITIONAL PROTECTIVE MEASURES TO AVOID IMPACT TO ADJACENT PROPERTIES AND WETLANDS FROM CONSTRUCTION ACTIVITIES. EROSION/SEDIMENTATIONI IMPACTS SHALL BE KEPT TO A MINIMUM THROUGH THE USE OF BMP'S FOR SOIL EROSION AND SEDIMENTATION CONTROL. ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SPECIFIED IN THE PLAN SHALL BE IN PLACE PRIOR TO ANY EXCAVATION, GRADING OR FILLING OPERATIONS AND INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES. THEY SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE AND THE AREA STABILIZED AS ACCEPTED BY THE ENGINEER. THEY SHALL ALSO COMPLY WITH ODOT'S "HANDBOOK OF SEDIMENT AND EROSION CONTROL".

TEMPORARY EROSION CONTROL REMOVAL

ALL TEMPORARY EROSION CONTROL ITEMS SHALL BE REMOVED BEFORE THE PROJECT IS ACCEPTED. REMOVED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH THE APPROPRIATE CMS SPECIFICATIONS

RIGHT OF WAY (ROW)

ALL WORK SHALL BE PERFORMED WITHIN THE EXISTING RIGHT-OF-WAY, UNLESS OTHERWISE NOTED IN THESE PLANS.

STRUCTURE DESIGN SUBMITTAL

THE REINFORCED CONCRETE BOX CULVERT SHALL BE DESIGNED, MANUFACTURED AND INSTALLED IN ACCORDANCE WITH CMS ITEM 611 AND SUPPLEMENT 1002.

THE MANUFACTURER SHALL SUBMIT SHOP DRAWINGS, DESIGN CALCULATIONS, AND LOAD RATING (INCLUDING THE BRR DIGITAL MODEL) DOCUMENTATION SEALED BY A PROFESSIONAL ENGINEER LICENSED IN OHIO.

THE DESIGN SHALL CONFORM TO THE CURRENT AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND THE ODOT BRIDGE DESIGN MANUAL, AND SHALL ACCOMMODATE HL-93 LIVE LOADING PLUS 60 PSF FUTURE WEARING SURFACE.

CONCRETE AND REINFORCEMENT SHALL MEET THE REQUIREMENTS OF CMS ITEM 706.05.

WATERPROOFING

APPLY TYPE 2 MEMBRANE WATERPROOFING IN ACCORDANCE WITH CMS ITEM 512.08 AND 711.25. APPLY TO THE ENTIRE EXTERIOR TOP AND SIDES OF THE PRECAST BOX CULVERT. EXTEND 1 FOOT 6 INCHES PAST THE WINGWALL/CULVERT JOINT. PAYMENT UNDER ITEM 512 - TYPE 2 WATERPROOFING, PER SQUARE YARD.

ITEM 202 STRUCTURE REMOVAL, AS PER PLAN

REMOVE EXISTING STRUCTURE ACCORDING TO CMS 202.03. IF PRESENT, THE COUNTY WILL RETAIN OWNERSHIP OF ALL CUT SANDSTONE. THE CONTRACTOR SHALL COORDINATE THE HANDLING AND REMOVAL OF ANY CUT SANDSTONE WITH THE COUNTY. ALL REMAINING MATERIAL SHALL BE THE CONTRACTOR'S RESPONSIBILITY FOR DISPOSAL.

ITEM 602 MASONRY MISCELLANEOUS: PRECAST CONCRETE BLOCK, AS PER PLAN

THE WINGWALLS SHALL BE PRECAST CONCRETE BLOCKS WITH STONE TEXTURED FACE. THE BLOCKS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND SHALL BE PAID FOR UNDER THE LUMP SUM FEE FOR ITEM 602 MASONRY MISCELLANEOUS: PRECAST CONCRETE BLOCK. BLOCK GROUND REINFORCING, IF REQUIRED BY THE MANUFACTURER, SHALL BE INSTALLED AS PER THE MANUFACTURER'S REQUIREMENTS. THIS ITEM SHALL INCLUDE ALL MATERIALS AND LABOR, INCLUDING AGGREGATE LEVELING PAD, GROUND REINFORCING (IF REQUIRED), DRAIN PIPE, AND INCIDENTAL ITEMS NECESSARY TO COMPLETE THE INSTALLATION.

ITEM 614 MAINTENANCE OF TRAFFIC

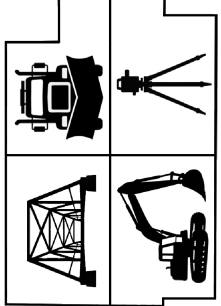
MAINTENANCE OF TRAFFIC IN ACCORDANCE WITH CMS ITEM 614 AND THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. IF A DETOUR IS REQUIRED, THE CONTRACTOR SHALL FURNISH, ERECT, MAINTAIN, AND REMOVE ALL DETOUR SIGNING, INCLUDED UNDER ITEM 614.

ITEM 659 SEEDING AND MULCHING, AS PER PLAN

ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED IN ACCORDANCE WITH CMS ITEM 659. APPLY 2 INCHES MINIMUM OF TOPSOIL PRIOR TO SEEDING UNLESS OTHERWISE DIRECTED. IN AREAS DESIGNATED TO RECEIVE EROSION CONTROL MATS (ECM), TYPE C, PREPARE, SEED, FERTILIZE, AND MULCH PRIOR TO PLACEMENT. INSTALL ECM IN ACCORDANCE WITH CMS ITEM 671 AND MANUFACTURURER'S RECOMMENDATIONS, ANCHOR AT CREST AND TOE. PAYMENT FOR SEEDING AND MULCH SHALL BE UNDER ITEM 659; PAYMENT FOR ECM SHALL BE UNDER ITEM 671.

ITEM	DESCRIPTION	UNIT	QUANTITY
201	CLEARING AND GRUBBING	LS	1
202	STRUCTURE REMOVED, AS PER PLAN	LS	1
203	EXCAVATION	CY	185
203	EMBANKMENT	CY	40
304	AGGREGATE BASE	CY	33
503	COFFERDAMS AND EXCAVATION BRACING	LS	1
503	UNCLASSIFIED EXCAVATION, INCLUDING ROCK	LS	1
509	EPOXY COATED REINFORCING STEEL	LF	610
511	CLASS QC1 CONCRETE, CUT OFF WALL	CY	12
512	TYPE 2 WATERPROOFING	SY	142
601	ROCK CHANNEL PROTECTION, TYPE C	CY	29
602	MASONRY, MISCELLANEOUS: PRECAST CONCRETE BLOCK, AS PER PLAN	LS	1
611	14' X 5' CONDUIT, TYPE A, 706.05, AS PER PLAN	FT	40
613	LOW STRENGTH MORTAR BACKFILL	CY	74
614	MAINTENANCE OF TRAFFIC	LS	1
623	CONSTRUCTION LAYOUT AND SURVEYING	LS	1
624	MOBILIZATION	LS	1
659	SEEDING AND MULCHING, CLASS 1, AS PER PLAN	LS	1
671	EROSION CONTROL MAT, TYPE C	SY	95
832	EROSION CONTROL	LS	1

*THE ESTIMATED QUANTITIES PROVIDED ABOVE ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND FIELD CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION. ANY DISCREPANCIES OR ADDITIONAL QUANTITIES REQUIRED TO COMPLETE THE WORK AS PER THE PLANS AND SPECIFICATIONS SHALL BE ADDRESSED IN ACCORDANCE WITH THE CONTRACT TERMS.

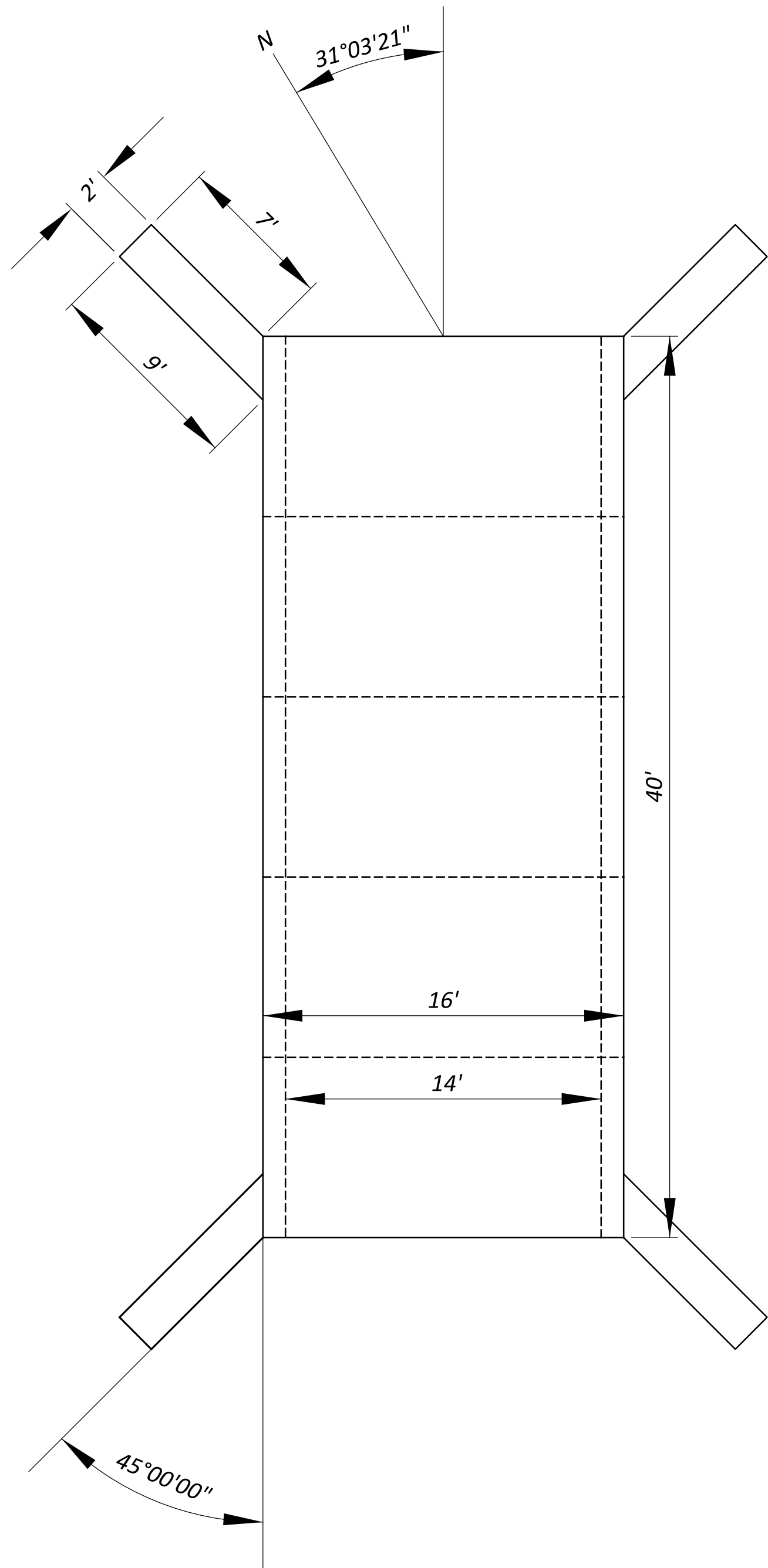
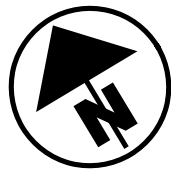


COSHOCTON COUNTY
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(740) 622-2135 FAX: (740) 623-6512

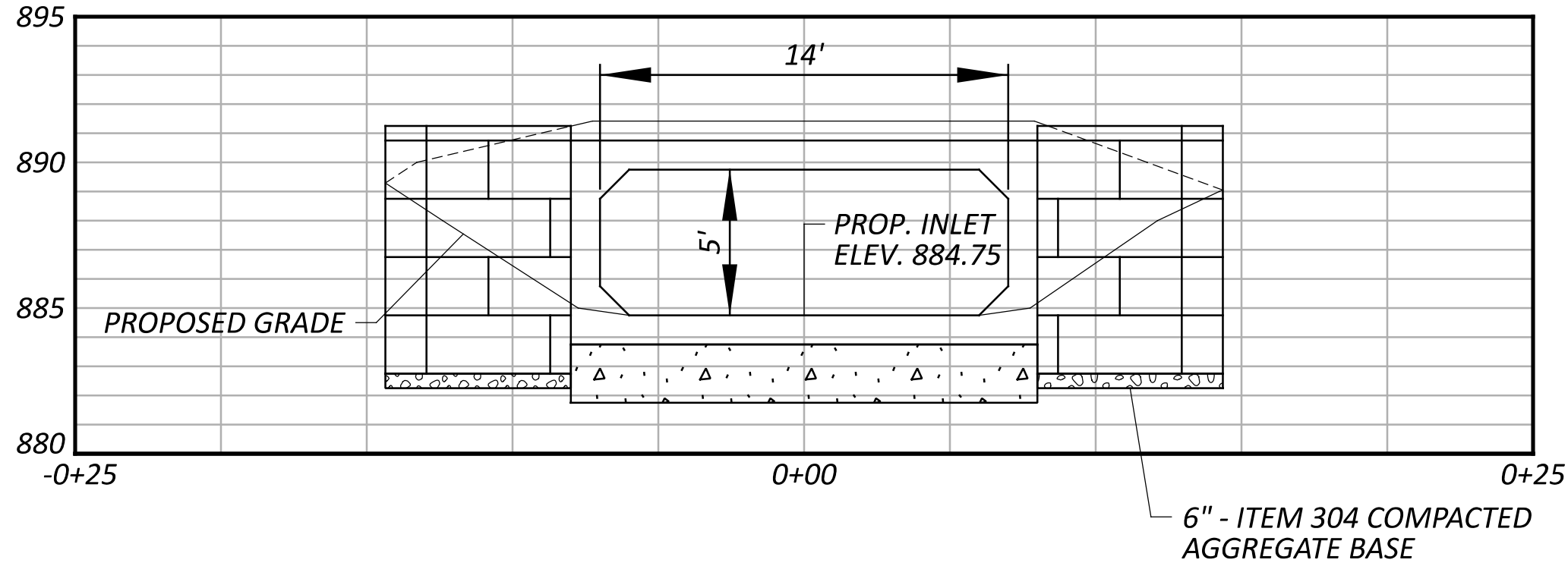
GENERAL NOTES AND SUMMARY
TR 459 BRIDGE 1 REPLACEMENT

DESIGNER	CJS
REVIEWER	CJS 08-26-25
PROJECT ID	2025050101
SHEET	TOTAL
2	5

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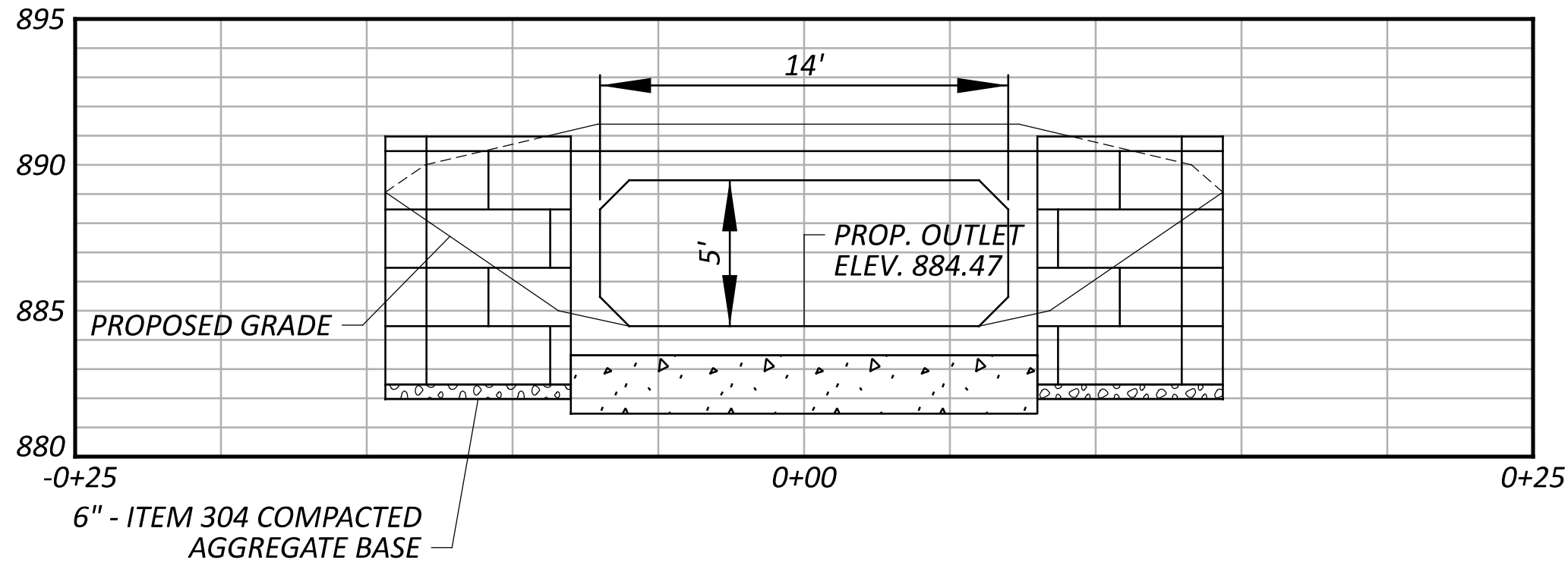


CULVERT & WINGWALL LAYOUT



INLET ELEVATION

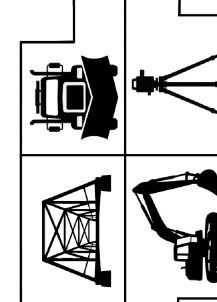
NOTE: TOP SLAB, BOTTOM SLAB, AND WALL THICKNESSES = 1 FOOT



OUTLET ELEVATION

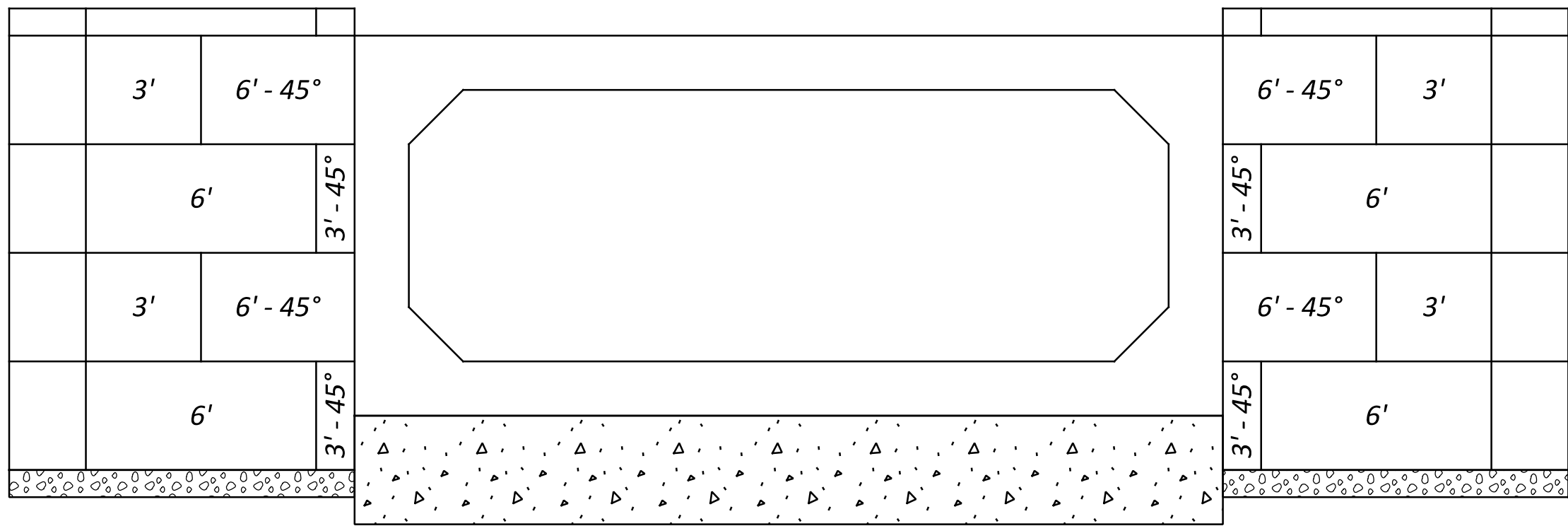
CULVERT AND FOOTER PLAN / ELEVATION DETAIL
TR 459 BRIDGE 1 REPLACEMENT

COSHOCTON COUNTY
ENGINEER'S OFFICE
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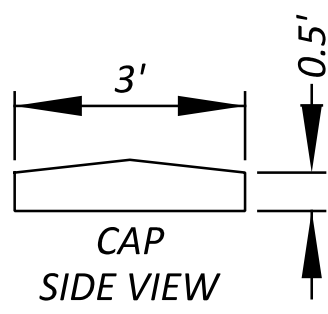
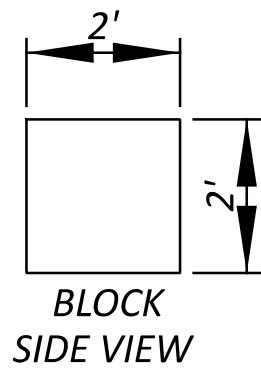
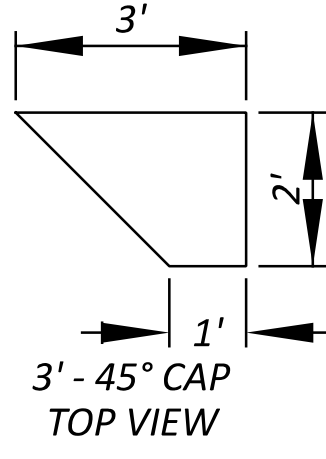
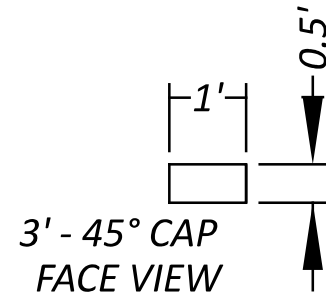
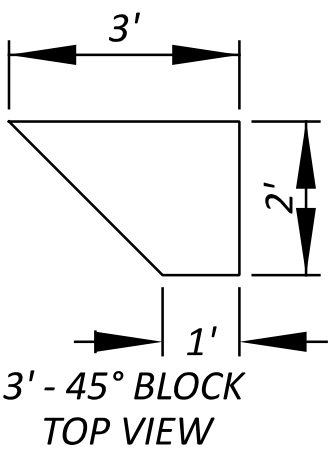
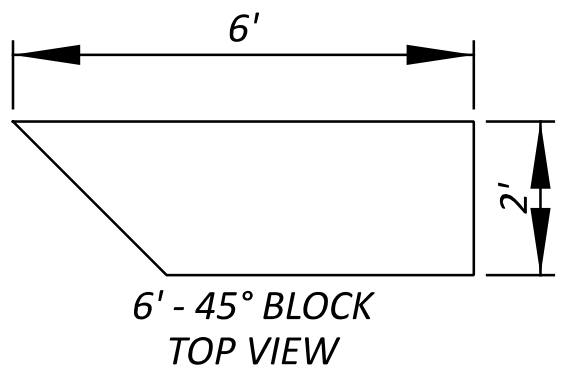
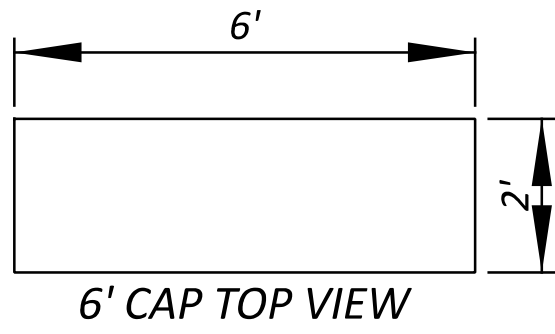
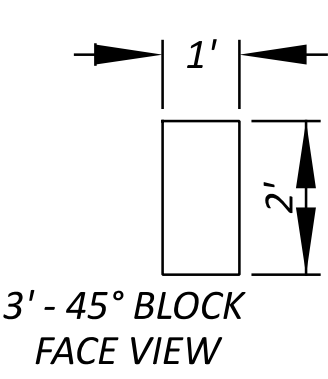
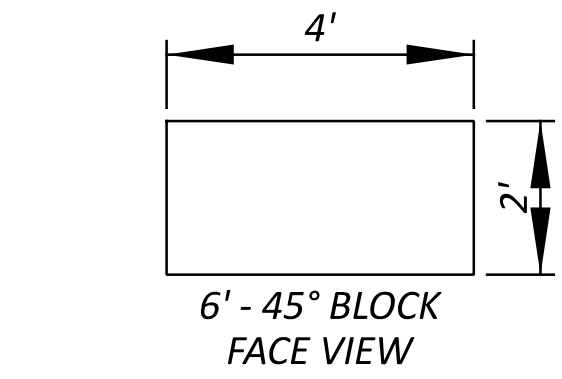
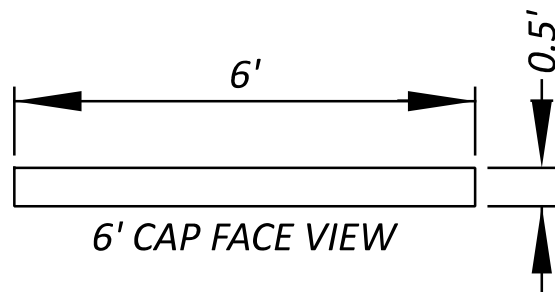
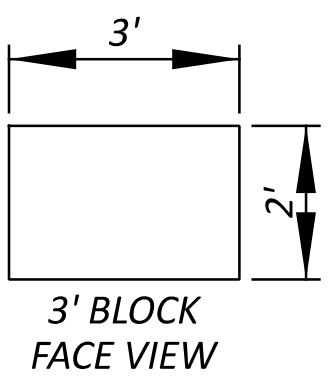
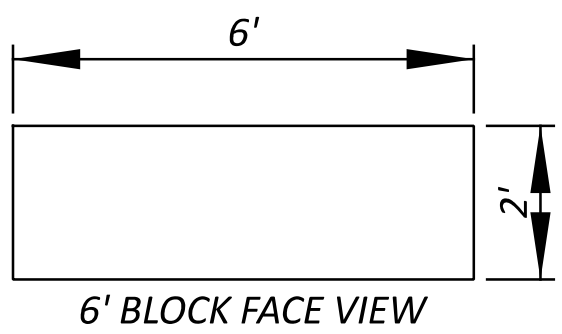


DESIGNER	CJS
REVIEWER	CJS
PROJECT ID	2025050101
SHEET	4
TOTAL	5

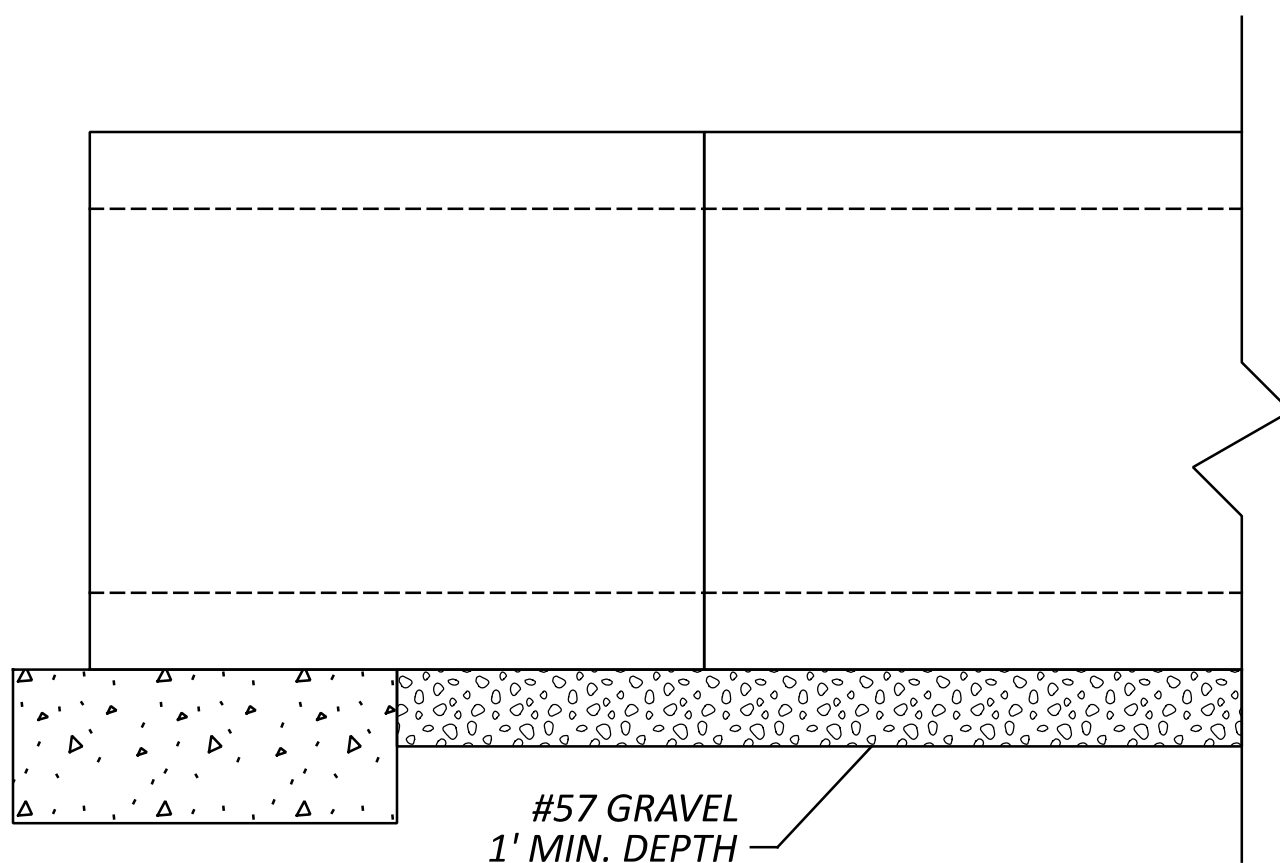
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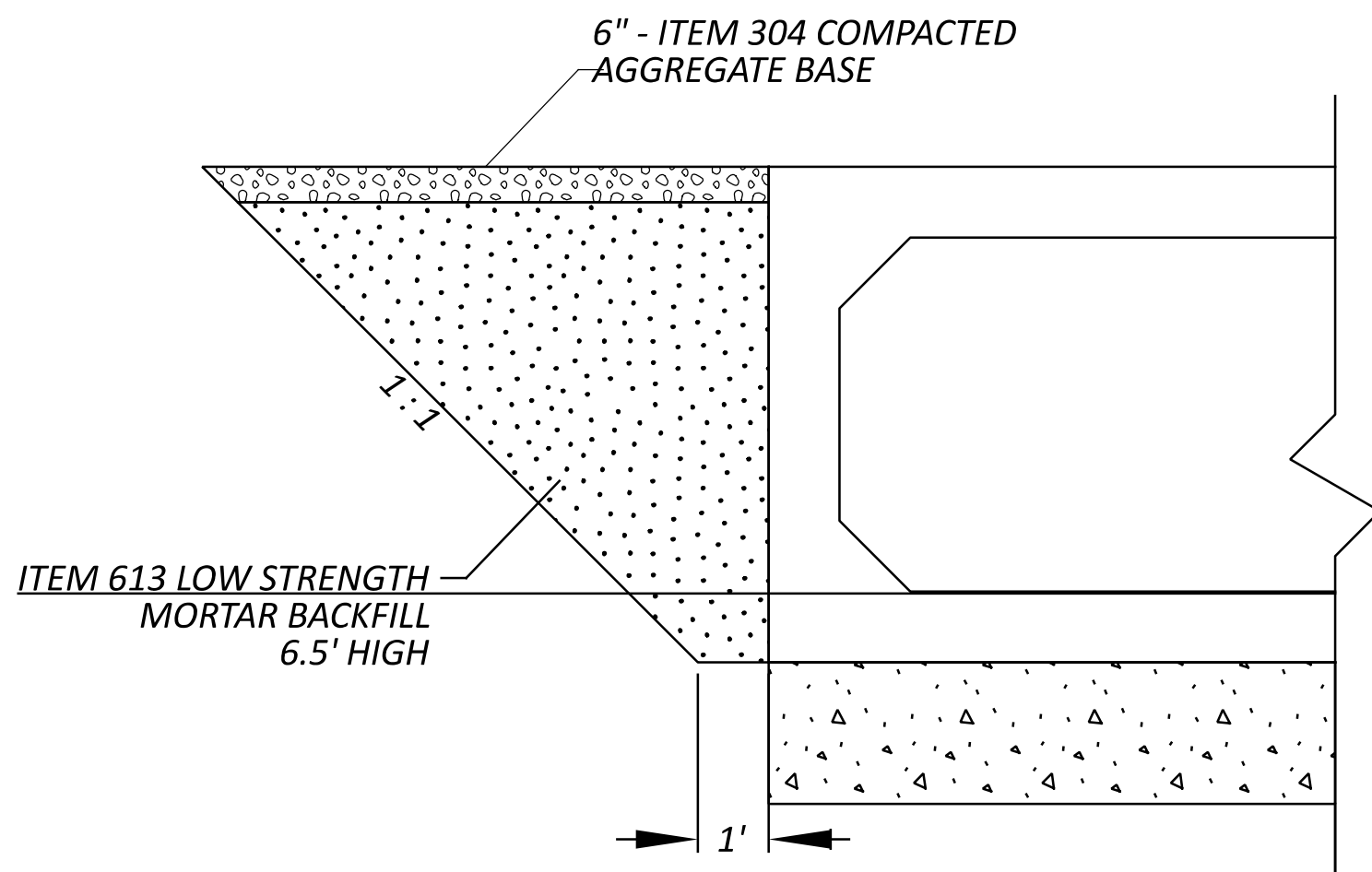
CULVERT INLET/OUTLET



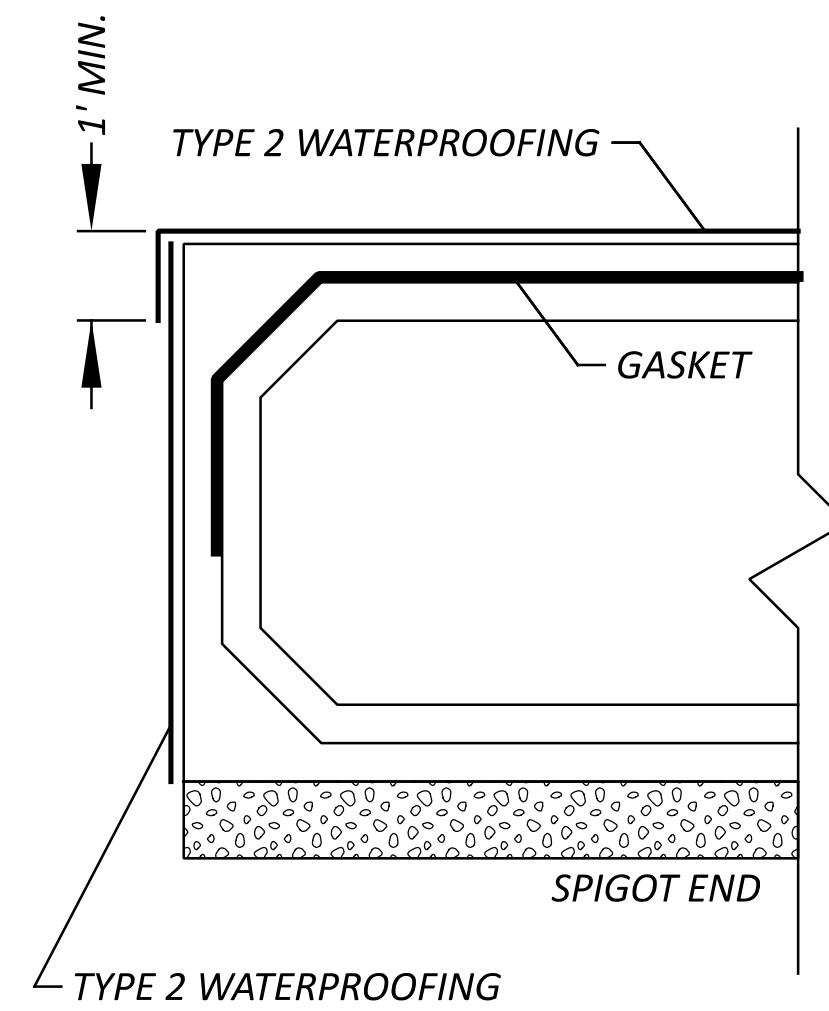
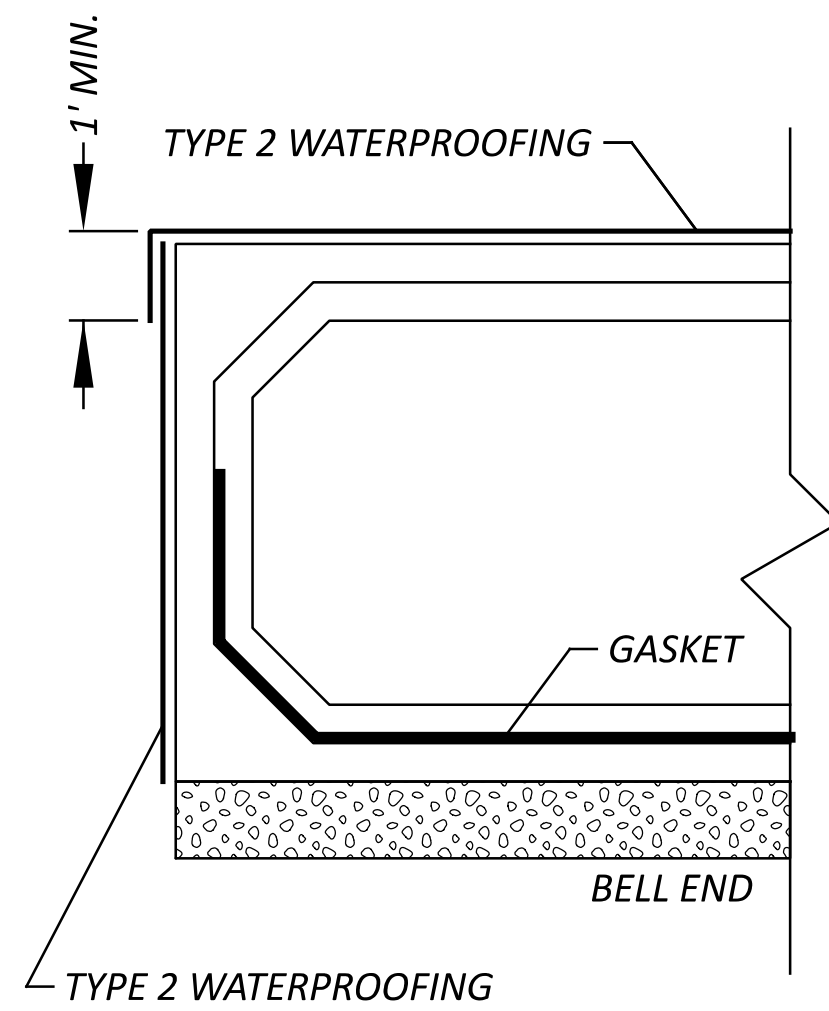
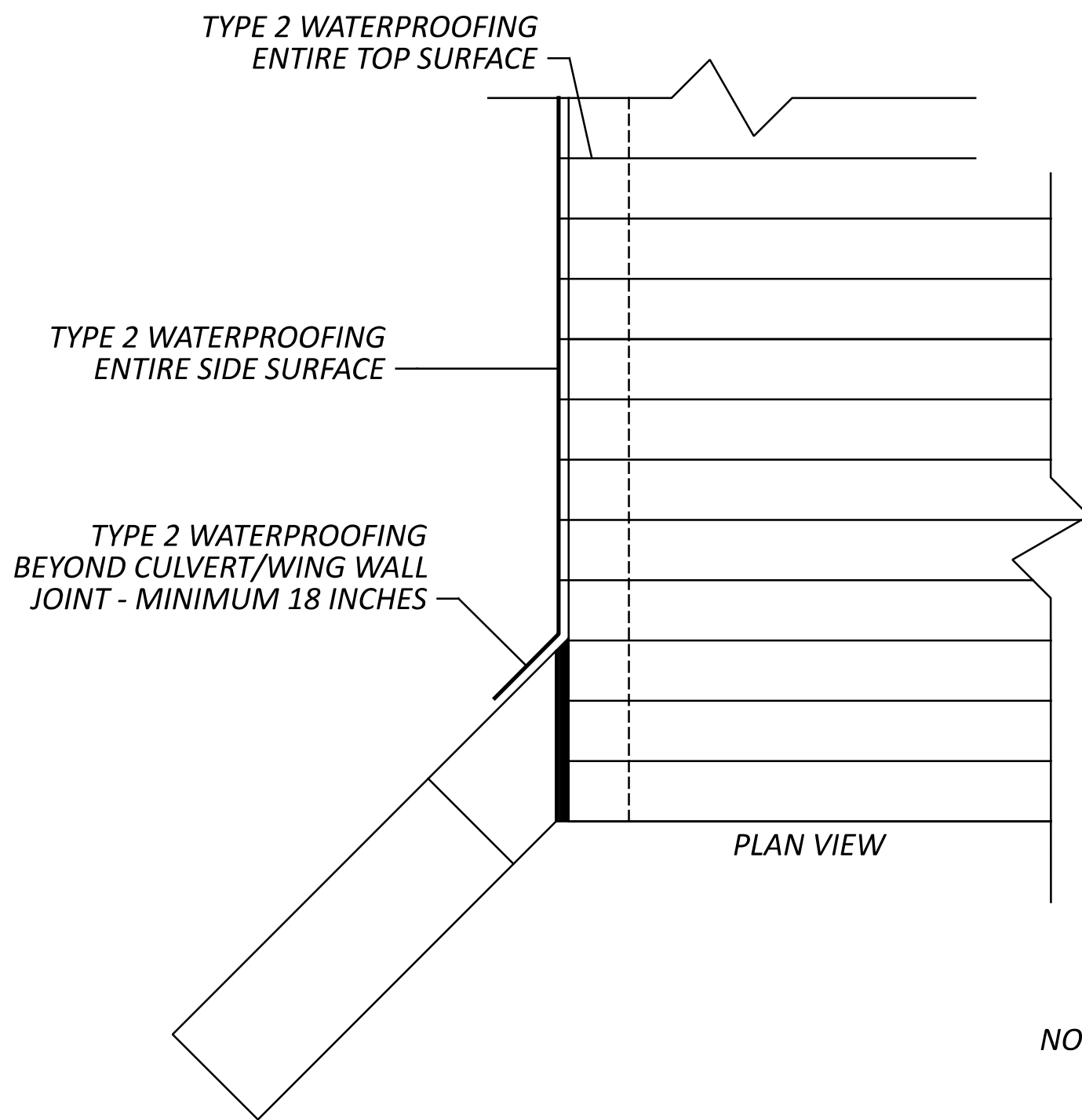
PRECAST CONCRETE BLOCK DETAILS



BOX CULVERT BEDDING DETAIL

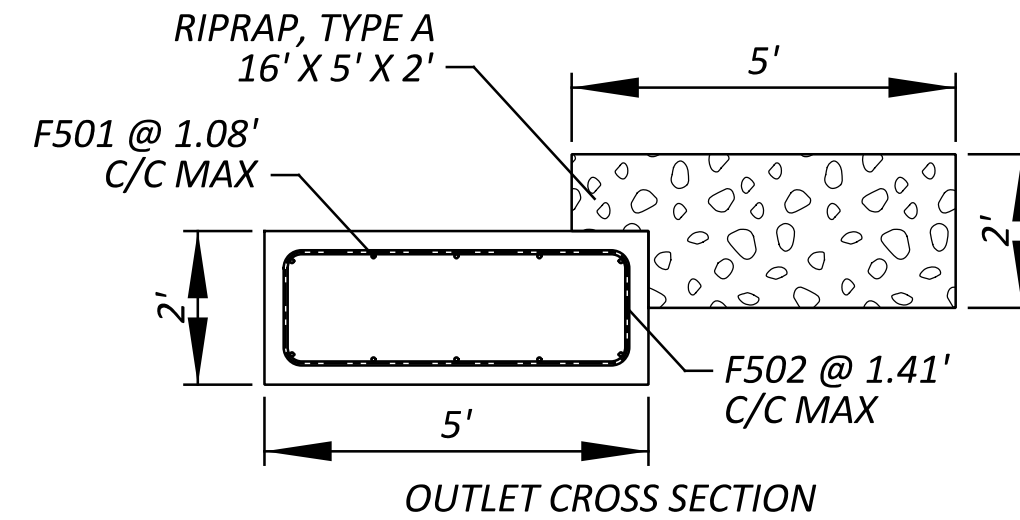
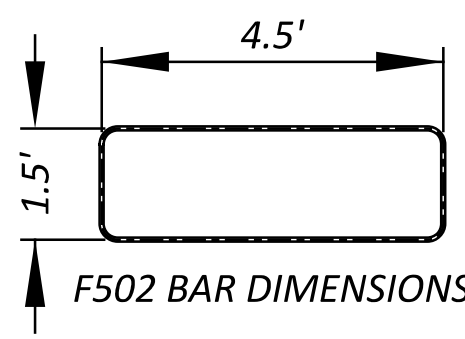
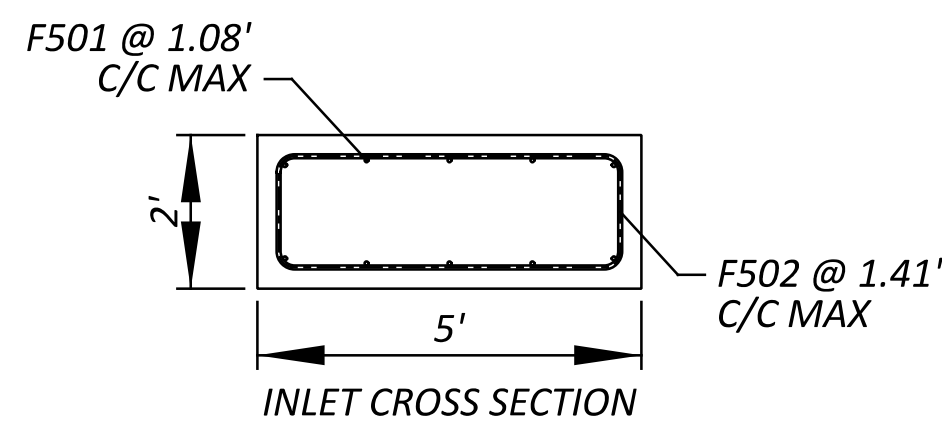
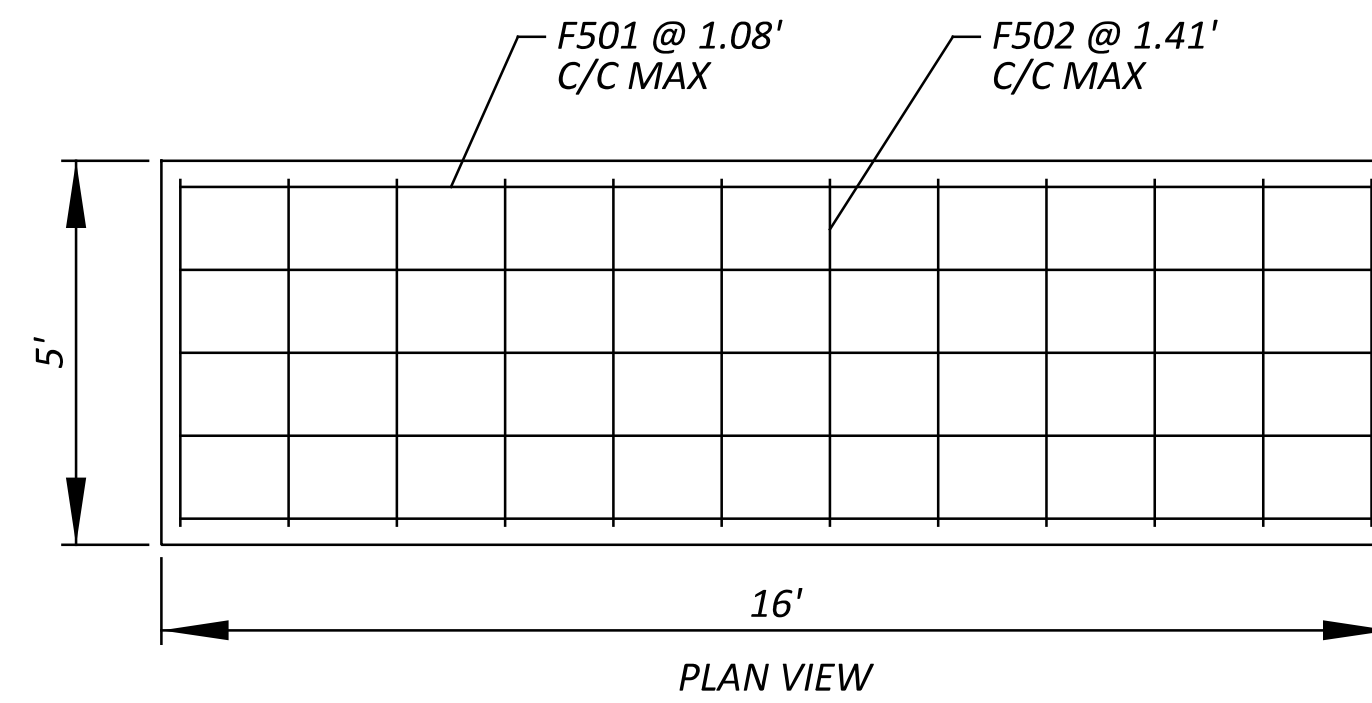


BOX CULVERT BACKFILL DETAIL



NOTE: SEE ODOT CMS 512.09 AND 711.25
AND MANUFACTURERS SPECIFICATIONS
FOR ADDITIONAL DETAILS

WATERPROOFING/SEALING DETAILS

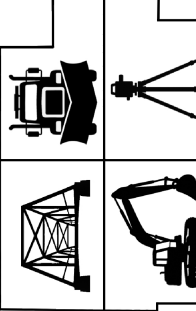


NO. 5 BARS
F501: 24 @ 15.5' EACH
F502: 24 @ 12.5' EACH

CUTOFF WALL STEEL DETAILS

BOX CULVERT DETAILS
TR 459 BRIDGE 1 REPLACEMENT

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