

LEGEND

	CON. HWY. MONUMENT
	PROPERTY CORNER
	POWER POLE (PP)
	LIGHT POLE
	CATCH BASIN
	FIRE HYDRANT
	WATER METER
	BOUNDARY LINE
	BUILDING SETBACK LINE
	CHAIN-LINK FENCE
	ROAD CENTERLINE
	EDGE OF ROAD
	EDGE OF ASPHALT
	EDGE OF CONCRETE
	DOMESTIC WATER LINE
	ELECTRIC LINE (OVERHEAD)
	TIA ELECTRIC LINE (OVERHEAD)
	PVC PIPE TO DRAIN FIELD
	CORRUGATED METAL PIPE (CMP)
	SMOOTH-WALL PLASTIC PIPE (HDPE)
	REINFORCED CONCRETE PIPE (RCP)
	EXISTING INTERMEDIATE CONTOUR
	EXISTING INDEX CONTOUR
	DESIGN INTERMEDIATE CONTOUR
	DESIGN INDEX CONTOUR
	PROPOSED BUILDING
	PROPOSED SITE ASPHALT
	SECTION A-A DRAINAGE CHANNEL (SEE DETAIL)

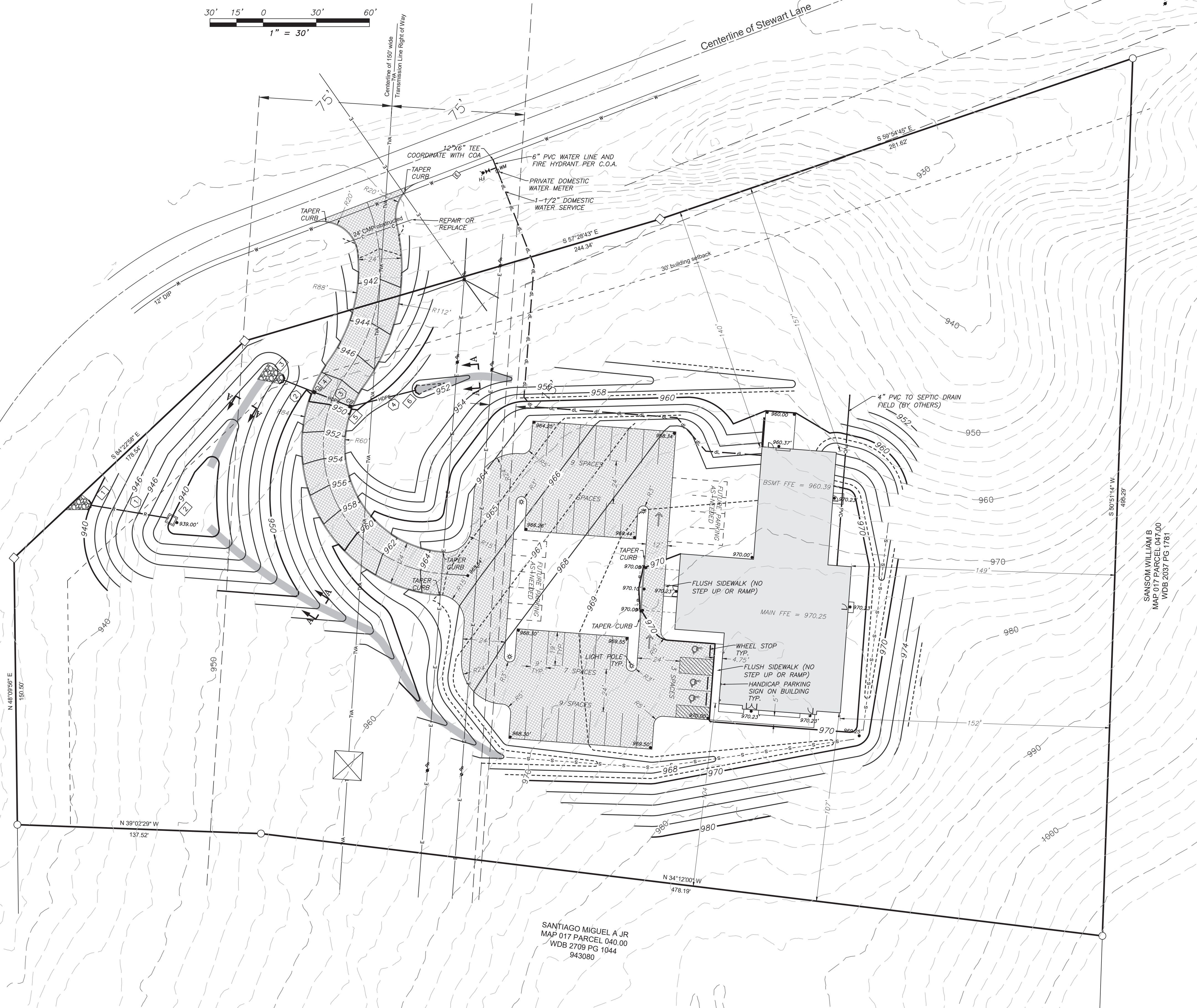
CLIENT/OWNER:
 CALVARY COMMUNITY CHURCH
 P.O. BOX 233
 LOUISVILLE, TN 37777
 701-541-1515

PROPERTY INFORMATION:
 CALVARY COMMUNITY CHURCH
 1 LOT 4.95 AC
 DISTRICT 11, BLOUNT COUNTY
 WDB 2535 PG 18
 TAX MAP 17 PARCEL 40.04
 ADDRESS: 1913 STEWART LANE

AREA INFORMATION:
 TOTAL PROPERTY AREA = 4.95 AC
 TOTAL PROPOSED IMPERVIOUS = 0.72 AC
 TOTAL PERCENT IMPERVIOUS = 14.55%
 TOTAL PERCENT GREEN SPACE = 85.45%

- SURVEYOR NOTES:**
- Boundary and existing site information shown hereon taken from survey by Michael Ogle (TN RLS #1466) dated 04/15/24.
 - There is a 5' utility and drainage easement along all interior lot lines and a 10' utility and drainage easement along all exterior lot lines.
 - Front setback 30', all other setbacks per zoning.
 - In accordance with FEMA Rate Map 470090128C, effective on 9/19/2007 this property is not in a special flood hazard area.
 - Zoning S-Suburbanizing
 - RTK GPS was used on 100% of this survey, datum is NAD 83 CORS 96 (TDOT network correction). The GPS base and receiver were Carlson BRX7s and exceed dual frequencies. All GPS measured points were reduced to ground with a grid to ground factor of 1.0000. hrms values recorded were less than 0.053' ft at each corner.
 - Contours derived from 2015 Lidar data provided by the State of Tennessee Geographic Information Council using QGIS software version 3.30.1

- GENERAL NOTES:**
- Drainage grates shall be as follows:
 Catch Basins: Neenah R-3246-AL or equal
 Catch Basins: Neenah R-3246-AL or equal
 - All headwalls shall be constructed per TDOT Standard Drawings or pre-cast equivalent.
 - Energy Dissipating Headwalls shall be Oldcastle Precast or equal.
 - The Contractor shall be responsible for obtaining all necessary permits prior to construction.
 - Erosion control measures such as straw bale barriers and silt fences shall be installed as necessary to prevent siltation onto adjoining properties and shall be maintained until permanent vegetation is established. See the site specific SWPPP for details.
 - The Contractor shall notify the Engineer immediately if discrepancies or omissions are found or if clarifications are required on the plans.
 - Rip-rap with filter fabric underlayment shall be installed at all pipe ends and as otherwise shown on the plan to a depth of 18". Swales shall be matted and protected with straw bales until permanent vegetation is established. See details for additional information and dimensions.
 - All inlets shall be protected with filter rings until completion of grading activities.
 - Topographic Survey based on aerial topography by others. 2 foot Contour interval shown.
 - Actual location of all underground utilities should be verified through Tennessee 1 Call (1-800-351-1111) or the utility provider prior to any excavation or construction.
 - All roof drains are to be directed to ditches leading to the Detention Pond.
 - Exterior lighting plan is by Lighting Trends of Knoxville. Contact Corey Brown at 865-523-8745 for purchasing.



SANSOM WILLIAM B
 MAP 017 PARCEL 047.00
 WDB 2037 PG 1781

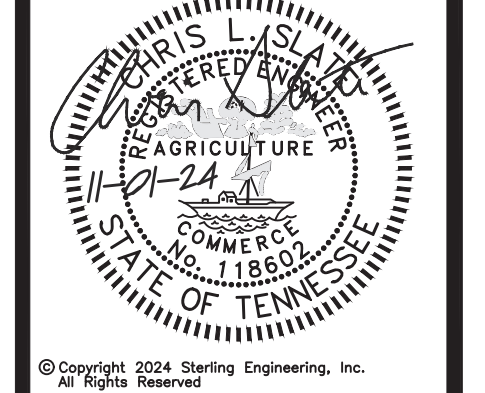
SANTIAGO MIGUEL A JR
 MAP 017 PARCEL 040.00
 WDB 2709 PG 1044
 943080

STERLING
 ENGINEERING, INC.
CIVIL ENGINEERING
CONSULTING
LAND SURVEYING
LAND PLANNING

1020 WILLIAM BLOUNT DRIVE
 MARYVILLE, TENNESSEE
 37802-8401
 P.O. BOX 4878
 MARYVILLE, TENNESSEE
 37802-4878
 PHONE: 865-984-3905
 FAX: 865-981-2815
 www.sterling.us.com

SITE PLAN FOR
CALVARY COMMUNITY
CHURCH
 CALVARY COMMUNITY CHURCH
 BLOUNT COUNTY, TN

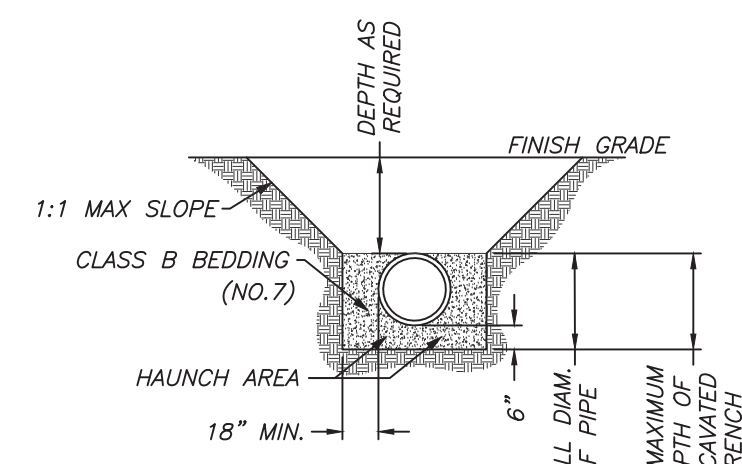
DATE	BY	REVISIONS



SHEET
CP.1.1

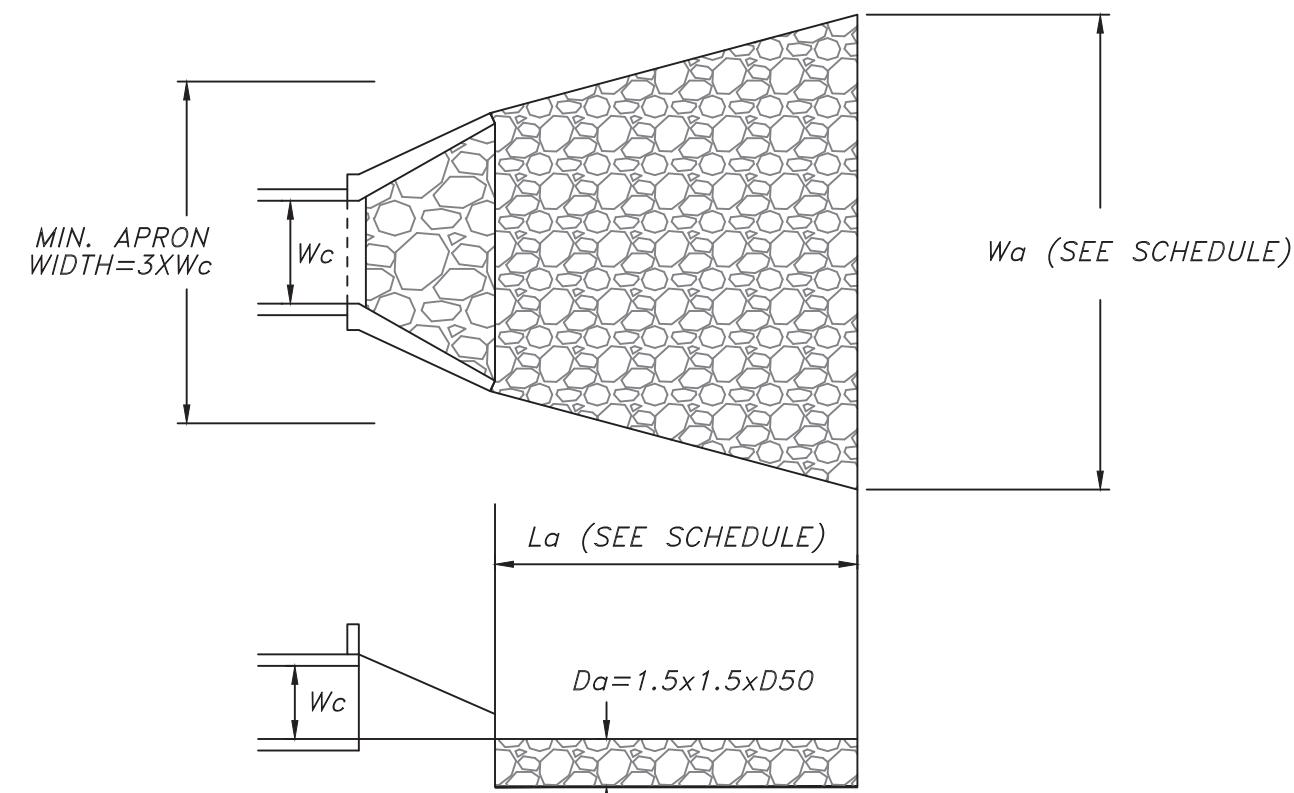
DESIGNED: **RDR**
 DRAWN: **CLS**
 CHECKED: **CLS**
 DATE: **9/30/24**
 SCALE: **1" = 30'**
 DRAWING: **6323A-CP**
 PROJECT NO: **SEI#6323A**

DETAIL "A"
HDPE/RCP CULVERT INSTALLATION
NOT TO SCALE



CULVERT INSTALLATION NOTES:
1. All pipes to be backfilled with stone up to 3/4 diameter of pipe. Pipes under roadways to be finish backfilled to subgrade level with stone. Pipes in open areas to be finish backfilled with natural soil.
2. All culvert installation shall be based on the manufacturers standards and specifications and may supersede the requirements of the detail shown.
3. For larger diameter pipes (>30"), embedment materials shall be worked under the haunches by hand and must be placed and compacted in 8 inch maximum lifts, compacted to 90% standard proctor density.

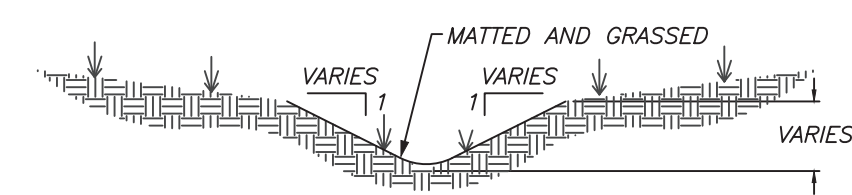
DETAIL "B"
RIPRAP OUTLET PROTECTION
NOT TO SCALE



D50=Median Rip-Rap Size Varies (Underlay Rip-Rap with Geotex 601 Nonwoven Geotextile or Approved Equal, Anchored)

STRUCTURE NUMBER	PIPE DIAMETER (IN)	FLOW (CFS)	TAILWATER CONDITION	La (FT)	Wa (FT)	D50 (IN)
1	15	2(025)	LOW	8	10	6
3	15	5(025)	LOW	8	10	6

SECTION A-A
DRAINAGE CHANNEL
NOT TO SCALE



NOTE:
Matting shall be North American Green RollMax Vmax S200 or approved equal and shall be installed at 4' wide.



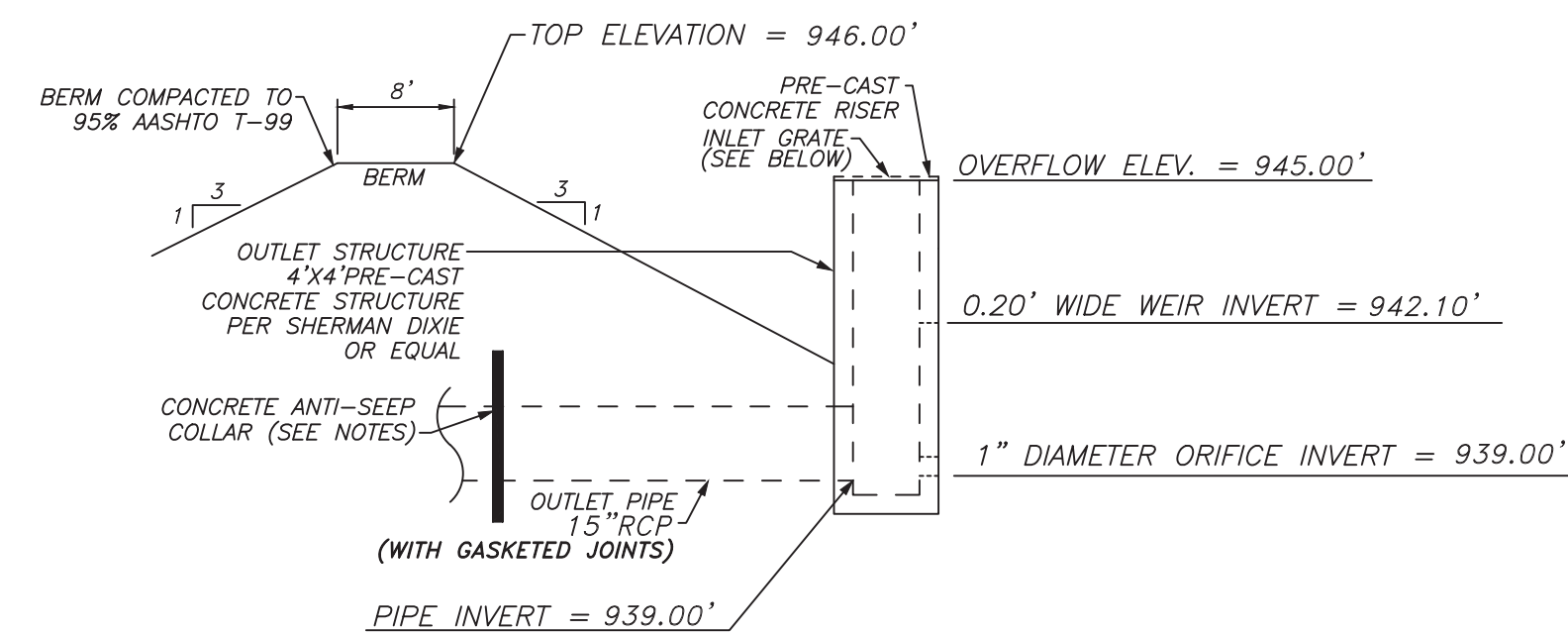
STRUCTURE NUMBER	STRUCTURE TYPE	LOCATION	TOP ELEVATION	INVERT IN	INVERT OUT	NOTE
1	EDHW	-	-	-	938.50	
2	OFS	-	-	-	-	SEE DETAIL
3	EDHW	-	-	-	944.00	
4	CB	-	949.75	945.50	945.50	
5	CB	-	949.75	945.75	945.75	
6	HW	-	-	950.50	-	

NOTES:
HW=CONCRETE HEADWALL
EDHW=ENERGY DISSIPATING HEADWALL
CB=CATCH BASIN
OFS=OVERFLOW STRUCTURE

NUMBER	LOCATION	MATERIAL	LENGTH	SIZE	SLOPE (%)	NOTE
1	1-2	RCP	44.3'	15"	1.13	
2	2-3	HDPE	18.3'	15"	8.20	
3	3-4	HDPE	22.2'	15"	1.13	
4	4-5	HDPE	37.7'	15"	12.60	

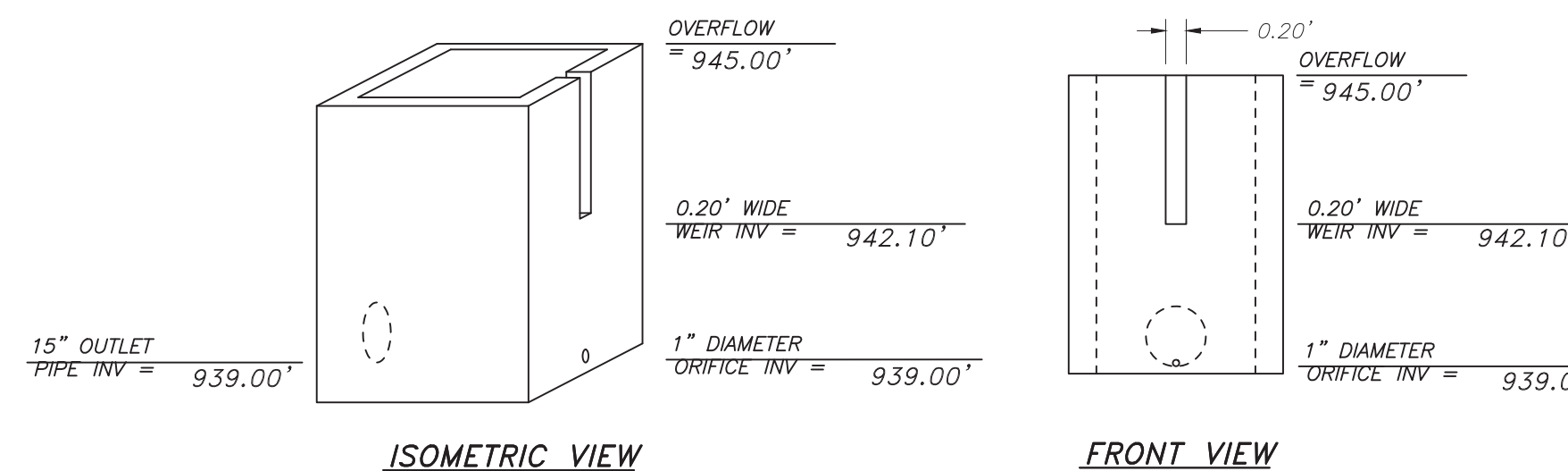
NOTES:
1. Pipe lengths shown are from center of structure.
2. Detention Pond outlet pipes shall be RCP with gaskets in the joints.

DETENTION POND
OUTLET BOX
NOT TO SCALE

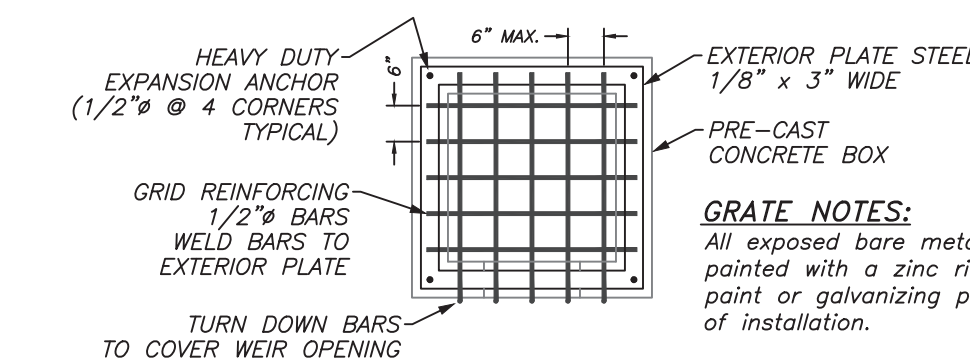


ANTI-SEEP COLLAR NOTES:
ASC (Anti-Seep Collar): The anti-seep collars shall be constructed of cast in place concrete. The collar shall be poured around the pipe and shall be a minimum of 12" larger than the outside diameter of the pipe and 12" thick. The contractor shall install the position the collar such that it does not interfere with a pipe joint.

POND OUTLET PIPE INSTALLATION:
The pond outlet pipe shall be laid and backfilled with suitable compacted soil with no gravel bedding or gravel in the trench.

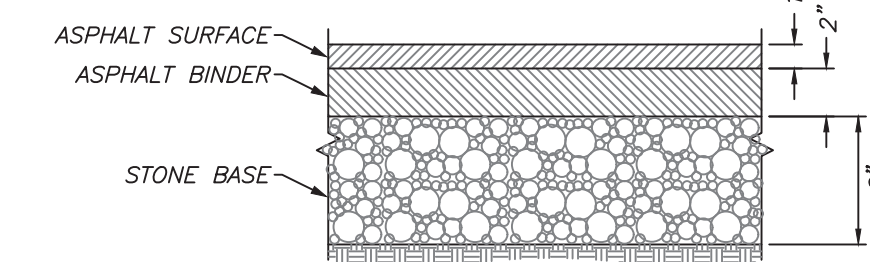


ISOMETRIC VIEW FRONT VIEW

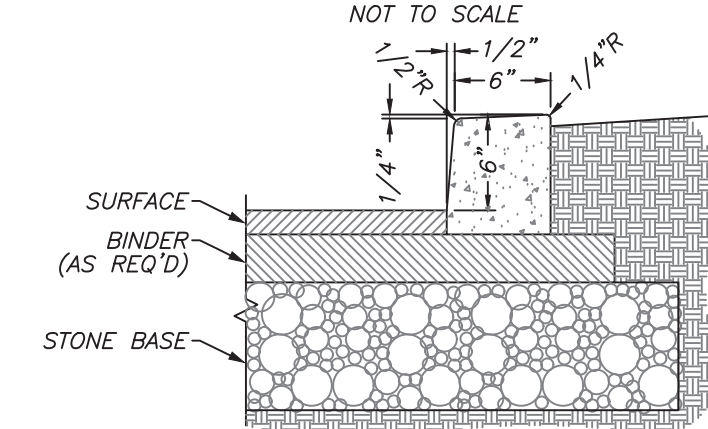


DETAIL "C"
DETENTION POND 1
REMOVABLE INLET GRATE DETAIL

DETAIL "D"
TYPICAL PAVEMENT
NOT TO SCALE

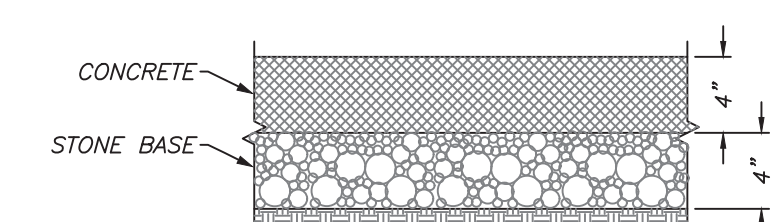


DETAIL "E"
TYPICAL CURB
NOT TO SCALE



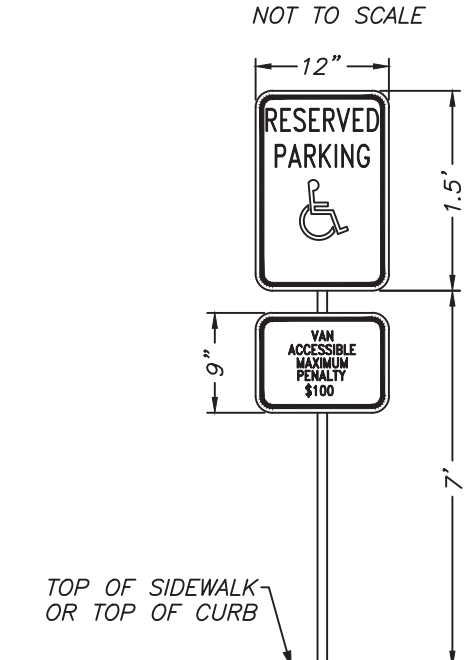
NOTE:
Concrete curb shall be minimum 3500 PSI.

DETAIL "F"
TYPICAL SIDEWALK
NOT TO SCALE



NOTES:
1. Expansion joints are to be placed 25 to 30 feet apart depending on transverse joint markings and the need to match curb expansion joint where sidewalk is built directly against curb.
2. Concrete joint material to be flush with the sidewalk surface, half inch and/or one inch preformed fiber in accordance with TDOT standard specifications.
3. One inch expansion joints are to be placed where the proposed sidewalk is in contact with circular curbs.
4. Half inch expansion joints are to be used at all other locations.
5. Transverse joint markings are to be made to form blocks as nearly to square as practical and are to be placed at 5 feet apart.
6. Concrete is to be a minimum of 4000 psi.
7. Stone base shall be grading 0.

DETAIL "G"
TYPICAL HANDICAP PARKING SIGN
NOT TO SCALE

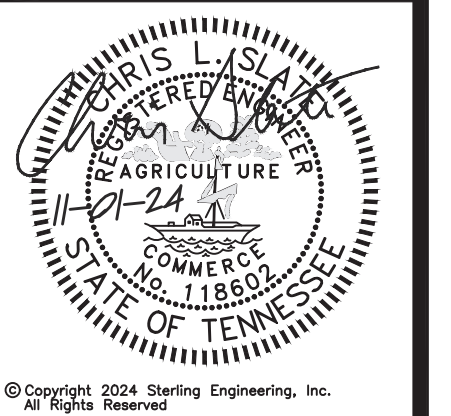


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SITE PLAN DETAILS
CALVARY COMMUNITY CHURCH
CALVARY COMMUNITY CHURCH
BLOUNT COUNTY, TN

REVISIONS	DATE	BY



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