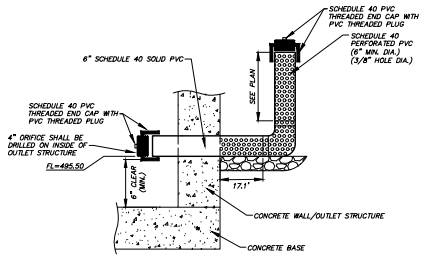
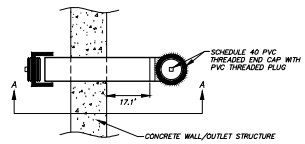


SECTION A–A

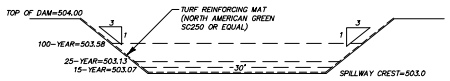


PLAN VIEW

NOTE:
1. FILL GAP BETWEEN STRUCTURE & PVC WITH MORTAR OR INSTALL A FERNCO ADAPTER.

① ORIFICE END–CAP

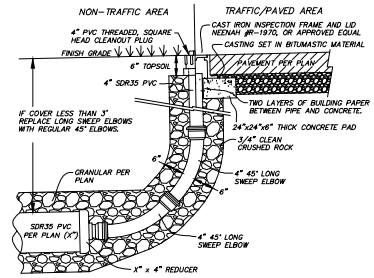
NOT TO SCALE



NOTES:
1. THE WATER LEVEL IN THE SPILLWAY REFLECTS THE ELEVATION OF THE WATER DISCHARGING WITH NO FLOW DISCHARGING THE BASIN VIA THE OUTFALL CONTROL STRUCTURE.

DAM EMERGENCY SPILLWAY CROSS SECTION (W/ PRINCIPAL SPILLWAY CLOGGED)

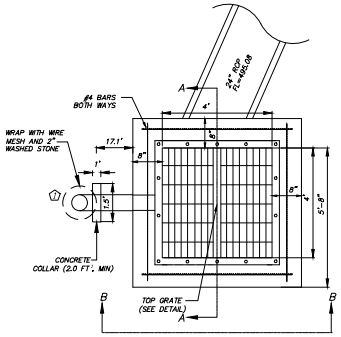
NOT TO SCALE



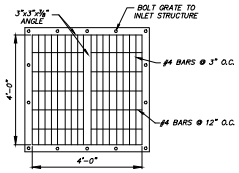
NOTES:
1. ALL PIPE & FITTINGS SHALL BE WATER TIGHT, GASKETED, SDR35 PVC.
2. INSTALL ALL PIPING PER SEPARATE DETAIL OR MANUFACTURER'S WRITTEN INSTRUCTIONS.
3. THIS DETAIL IS FOR GENERAL LAYOUT PURPOSES ONLY. ADDITIONAL COUPLERS, GASKETS, FITTINGS, ETC. MAY BE NECESSARY PER MANUFACTURER'S REQUIREMENTS
4. TOP SHALL BE SET FLUSH WITH FINISH GRADE.

PVC END–OF–LINE STORM SEWER CLEANOUT

NOT TO SCALE

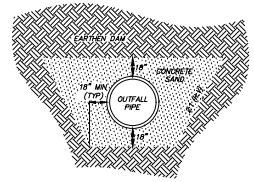


PLAN



TOP GRATE

NOTES:
1. BOLT GRATE TO STRUCTURE.
2. WELD ALL CONNECTIONS.
3. APPLY GALVANIZED COATING AFTER ASSEMBLY.



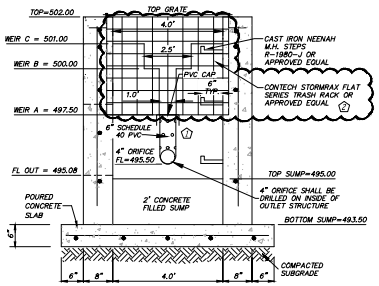
NOTES:
1. COMPACT CONCRETE SAND WITH MULTIPLE PASSES OF VIBRATORY PLATE COMPACTOR.

SAND FILTER COLLAR

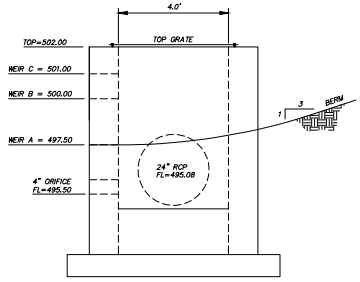
NOT TO SCALE

DETENTION BASIN DAM NOTES

1. CONTRACTOR SHALL SUBMIT SHOP DRAWING AND MATERIALS CERTIFICATIONS OF ALL MATERIALS INCORPORATED IN DETENTION BASIN BEFORE PURCHASING AND AT LEAST THREE WEEKS PRIOR TO USE. NOTIFY ENGINEERING SURVEYS & SERVICES 48 HOURS PRIOR TO STARTING DETENTION BASIN WORK.
2. THE CORE SHALL EXTEND ALONG THE ENTIRE LENGTH OF THE FILL SECTION OF THE DETENTION BASIN DAM AS SHOWN ON THE DETENTION OUTFALL PIPE PROFILE. IT SHALL CONSIST OF SILTY CLAY SOILS CLASSIFIED AS CL OR CH BY THE UNIFIED SOIL CLASSIFICATION SYSTEM WITH NO ROCKS LARGER THAN 2". COMPACT THE SOILS TO A MINIMUM OF 95% MAXIMUM DRY DENSITY WITHIN –2% TO +4% OF OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698 (STANDARD PROCTOR). THE FILL SHALL BE UNIFORMLY SPREAD AND COMPACTED IN LEVEL LIFTS PARALLEL WITH THE CENTERLINE OF THE DAM CREST. LIFT THICKNESS SHALL BE LIMITED TO 10 INCHES LOOSE. EXCAVATION SIDE SLOPES SHALL BE 2:1 MINIMUM.
3. ONLY COHESIVE SOILS WITH A DEFINITE MOISTURE DENSITY RELATIONSHIP SHALL BE USED IN THE DAM SHELL AROUND THE CORE. THEY SHALL BE COMPACTED TO A MINIMUM OF 95% MAXIMUM DRY DENSITY WITHIN –2% TO +4% OF OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698 (STANDARD PROCTOR). LIFT THICKNESS SHALL NOT EXCEED 8 INCHES LOOSE. REPRESENTATIVES OF THE GEOTECHNICAL ENGINEER SHALL OBSERVE ALL COMPACTION OPERATIONS.
4. ALONG THE SECTION OF OUTFALL PIPE EXTENDING THROUGH THE CORE, INSTALL 8" THICK CONCRETE ENCASEMENT.
5. INSTALL SAND FILTER COLLAR ON PIPE DOWNSTREAM OF CORE.



SECTION A–A

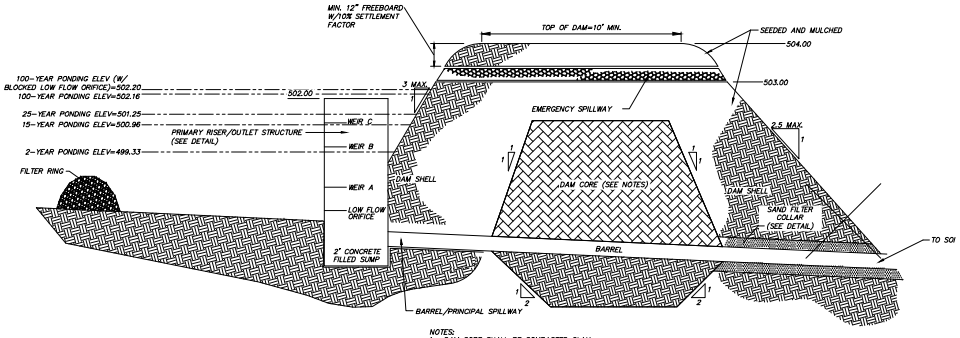


SECTION B–B

NOTES:
1. ALL CONCRETE SHALL BE 4,000 PSI 28 DAY DESIGN STRENGTH WITH 3%–6% AIR ENTRAINMENT.
2. ALL REINFORCING STEEL SHALL BE GRADE 60.
3. TOP STEP 24" BELOW TOP OF TOP SLAB, THEN AT 16" SPACING. BOTTOM STEP TO BE NO HIGHER THAN 16" FROM INVERT. STAGGER STEPS 2" EACH WAY FROM CENTERLINE.
4. ① AFTER COMPLETION, COVER PERFORATED PIPE WITH 2" WASHED STONE. MOUND STONE AROUND PIPE UNTIL COVERED, MINIMUM 4" THICK.

OUTFALL CONTROL STRUCTURE (OCS 2)

NOT TO SCALE



NOTES:
1. DAM CORE SHALL BE COMPACTED CLAY.
2. WATER PONDING ELEVATIONS REFLECT THE OUTFALL CONTROL STRUCTURE OPERATING UNDER NORMAL CONDITIONS AND THE 100–YEAR STORM WITH THE LOW FLOW ORIFICE BLOCKED IN THE OUTFALL CONTROL STRUCTURE.

DRY EXTENDED DETENTION BASIN

NOT TO SCALE

PLANNING & ZONING #20–002498 APPROVED MAY 7, 2020

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MEADOWOOD ESTATES - PHASE I

LOT 1 - MEADOWOOD ESTATES SUBDIVISION
O'FALLON, ST. CHARLES COUNTY, MISSOURI

8/3/2020
STATE OF MISSOURI
MATTHEW AARON KRIETE
NUMBER PE-2007002811
PROFESSIONAL ENGINEER

MATTHEW A. KRIETE
PROFESSIONAL ENGINEER
PE-2007002811

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
MAY 22, 2020

Revised	
1	JULY 14, 2020
	CITY COMMENTS
2	AUGUST 17, 2020
	CITY COMMENTS

Design: KAH Drawn: MJS

STORM SEWER DETAILS

Sheet
C11.03

ES&S PROJECT NO. 14480

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