

GENERAL INFORMATION

SYMBOLOGY LEGEND NOTE

THE SYMBOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOGY. THE SYMBOLOGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLOGY ON PLANS MAY VARY. PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

TRAFFIC SIGN SYMBOLOGY

SIGNS	DESCRIPTION
N	NEW SIGN
[RET]	RETAIN SIGN
S	RESETTING SIGN
[_R_]	REMOVING SIGN OR POST
[R&S]	REMOVING AND RESETTING SIGN

LANDSCAPE

POINT	DESCRIPTION	
\bigotimes	TREE REMOVAL	

D O W ADDDEVIATIONS (CODES) & SYMBOLS

R. O. W.	ABBREV	TATIONS (CODES) & SYMBOLS
POINT	CODE	DESCRIPTION
	СН	CHANNEL EASEMENT
	CONST	CONSTRUCTION EASEMENT
	CUL	CULVERT EASEMENT
	D&C	DISCONNECT & CONNECT
	DIT	DITCH EASEMENT
	DR	DRAINAGE EASEMENT
	DRIVE	DRIVEWAY EASEMENT
	EC	EROSION CONTROL
	HWY	HIGHWAY EASEMENT
	I&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
	BNDNS	BOUND SET
	BNDNS	BOUND TO BE SET
	IPNS	IRON PIN SET
(a)	IPNS	IRON PIN TO BE SET
	CALC	EXISTING ROW POINT
\bigcirc	PROW	PROPOSED ROW POINT
[LENG	TH]	LENGTH CARRIED ON NEXT SHEET

COMMON TODOCDADUIC DOINT SYMBOLS

	CODE	DESCRIPTION
<u>﴿</u> ﴿	APL	BOUND APPARENT LOCATION
•	BM	BENCHMARK
· ·	BND	BOUND
	СВ	CATCH BASIN
Þ	COMB	COMBINATION POLE
	DITHR	DROP INLET THROATED DNC
¢	EL	ELECTRIC POWER POLE
0	FPOLE	FLAGPOLE
\odot	GASFIL	GAS FILLER
\odot	GP	GUIDE POST
M	GSO	GAS SHUT OFF
⊙	GUY	GUY POLE
⊙	GUYW	GUY WIRE
×	GV	GATE VALVE
	Н	TREE HARDWOOD
\triangle	HCTRL	CONTROL HORIZONTAL
\triangle	HVCTRL	CONTROL HORIZ. & VERTICAL
\Diamond	HYD	HYDRANT
	IP	IRON PIN
⊚	IPIPE	IRON PIPE
¢	LI	LIGHT - STREET OR YARD
\$	MB	MAILBOX
0	MH	MANHOLE (MH)
⊡	MM	MILE MARKER
⊖	PM	PARKING METER
•	PMK	PROJECT MARKER
<u> </u>	POST	POST STONE/WOOD
	RRSIG	RAILROAD SIGNAL
↔	RRSL	RAILROAD SWITCH LEVER
	S	TREE SOFTWOOD
⊙	SAT	SATELLITE DISH
	SHRUB	SHRUB
$\overline{\circ}$	SIGN	SIGN
A	STUMP	STUMP
	TEL	TELEPHONE POLE
⊙	TIE	TIE
0 · 0	TSIGN	SIGN W/DOUBLE POST
\downarrow	VCTRL	CONTROL VERTICAL
0	WELL	WELL
M	WSO	WATER SHUT OFF

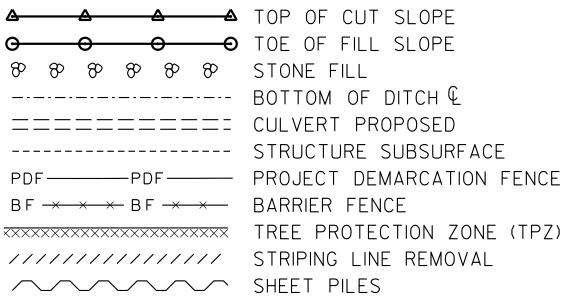
THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

THO OSED CECIMETICS CODES		
CODE	DESCRIPTION	
PC	POINT OF CURVATURE	
PI	POINT OF INTERSECTION	
CC	CENTER OF CURVE	
PT	POINT OF TANGENCY	
PCC	POINT OF COMPOUND CURVE	
PRC	POINT OF REVERSE CURVE	
POB	POINT OF BEGINNING	
POE	POINT OF ENDING	
STA	STATION PREFIX	
АН	AHEAD STATION SUFFIX	
ВК	BACK STATION SUFFIX	
D	CURVE DEGREE OF (100FT)	
R	CURVE RADIUS OF	
Τ	CURVE TANGENT LENGTH	
L	CURVE LENGTH OF	
E	CURVE EXTERNAL DISTANCE	

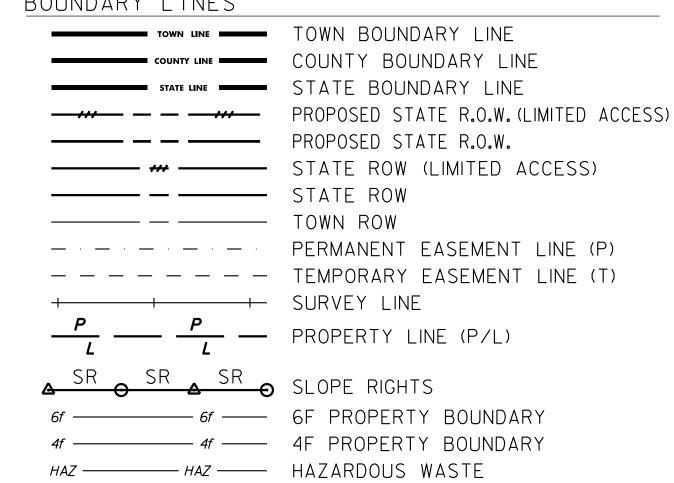
UTILITY SYMBOLOGY UNDERGROUND UTILITIES — UGU — ·· — · · - UTILITY (GENERIC-UNKNOWN) — *UT* — · · · - TELEPHONE — *UE* — · · · - ELECTRIC — *UC* — · · · - CABLE (TV) — UEC — · · - ELECTRIC+CABLE — UET — · · - - FI FCTRIC+TFI FPHONF — UCT — · · - CABLE+TELEPHONE — UECT — · · - ELECTRIC+CABLE+TELEP. — G — · · - GAS LINE — W — · · - - WATER LINE — s — · · - · SANITARY SEWER (SEPTIC) ABOVE GROUND UTILITIES (AERIAL) — AGU — · · · - UTILITY (GENERIC-UNKNOWN) — T — · · - TELEPHONE — E — · · · - ELECTRIC — C — · · · - CABLE (TV) — EC — · · - ELECTRIC+CABLE — ET — · · · - ELECTRIC+TELEPHONE - AER E&T - · · - · ELECTRIC+TELEPHONE — CT — · · - CABLE+TELEPHONE — ECT — · · - ELECTRIC+CABLE+TELEP. - · · - · · · UTILITY POLE GUY WIRE PROJECT CONSTRUCTION SYMBOLOGY PROJECT DESIGN & LAYOUT SYMBOLOGY — -- — CZ — -- — CLEAR ZONE

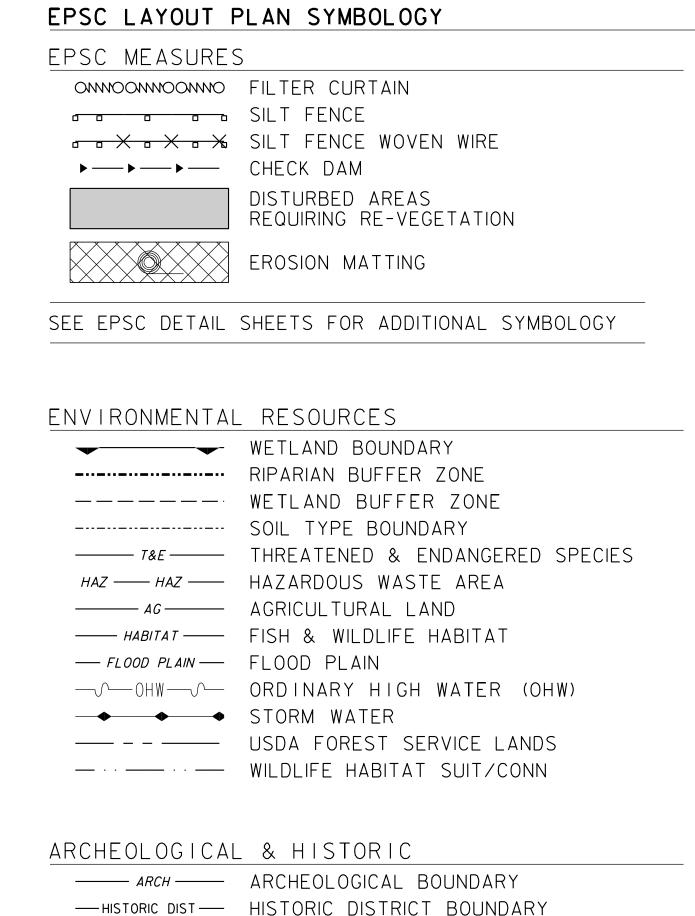
PROJECT CONSTRUCTION FEATURES



CONVENTIONAL BOUNDARY SYMBOLOGY

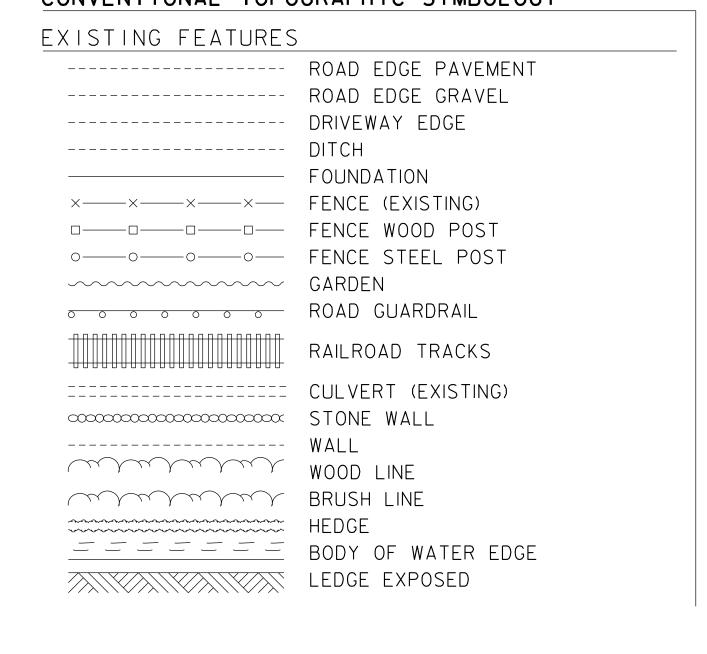
BOUNDARY LINES





ARCH	ARCHEOLOGICAL BOUNDARY
HISTORIC DIST	HISTORIC DISTRICT BOUNDARY
—— HISTORIC ——	HISTORIC AREA
\bigoplus	HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLOGY



PROJECT NAME: SOUTH BURLINGTON PROJECT NUMBER: STP MM21(1)

FILE NAME: zSTP MM2I(I)frm.dgn PROJECT LEADER: P. SHEDD DESIGNED BY: A. VOMACKA

PLOT DATE: 1/6/2022 DRAWN BY: A. VOMACKA CHECKED BY: K. HAYDEN FUSS&O'NEILL | CONVENTIONAL SYMBOLOGY LEGEND SHEET SHEET 2 OF 9



GENERAL NOTES

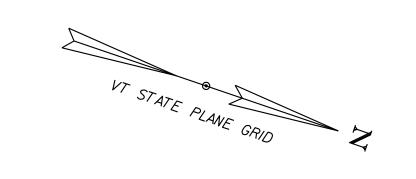
- I. ALL UTILITIES SHOWN ARE APPROXIMATE AND BASED UPON BEST AVAILABLE INFORMATION AS PROVIDED BY UTILITY PROVIDERS. CITY OF SOUTH BURLINGTON AND FIELD SURVEY. PRIOR TO CONSTRUCTION THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION. SIZE AND ELEVATIONS OF ALL UTILITIES (ABOVE AND BELOW GROUND) WITHIN THE PROJECT LIMITS. AND TO TAKE THE NECESSARY PRECAUTIONS TO PROTECT UTILITIES DURING CONSTRUCTION. CONTACT DIG-SAFE AT 1-800-DIG-SAFE (WWW.DIGSAFE.COM). PRIOR TO ANY EXCAVATION TO LOCATE UTILITIES WITHIN THE PROJECT AREA.IN THE CASE OF DAMAGE THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS AT NO ADDITIONAL COST TO THE CITY OF SOUTH BURLINGTON.
- 2. ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND THE EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING BEFORE PROCEEDING WITH WORK.
- 5. THE CONTRACTOR SHALL PROVIDE A SITE-SPECIFIC EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLAN IN ACCORDANCE WITH SECTION 653 OF THE VERMONT AGENCY OF TRANSPORTATION (VTRANS) 2018 STANDARD SPECIFICATIONS FOR CONSTRUCTION. ESTIMATED QUANTITIES FOR EPSC WORK HAVE BEEN INCLUDED IN THE CONTRACT FOR BIDDING PURPOSES. IF THE CONTRACTOR'S EPSC PLAN REQUIRES ITEMS OF WORK THAT ARE NOT INCLUDED IN THE PLANS THEY WILL BE CONSIDERED INCIDENTAL TO ITEM 653.03 MAINTENANCE OF EPSC PLAN.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SHORING. WATER DIVERSION AND DEWATERING REQUIRED FOR THE PROJECT. ALL WORK TO BE CONDUCTED IN THE DRY. THE CONTRACTOR IS RESPONSIBLE FOR DIVERTING, BYPASS PUMPING OR OTHERWISE ISOLATING THE WORK AREA FROM FLOWING WATER. THE CONTRACTOR IS TO SUBMIT A CONTROL OF WATER PLAN FOR APPROVAL BY THE ENGINEER PRIOR TO CONSTRUCTION. THERE WILL BE NO SEPARATE PAYMENT FOR TEMPORARY SHORING, WATER DIVERSION OR DEWATERING, THIS WORK SHALL BE INCIDENTAL TO ITEM 653.03 MAINTENANCE OF EPSC PLAN.
- 7. CARE SHALL BE TAKEN TO PROTECT AND PRESERVE EXISTING TREES OUTSIDE OF THE PROJECT AREA OF DISTURBANCE.
- 8. ALL STORMWATER TREATMENT PRACTICES AND PROCEDURES ARE REFERENCED FROM THE 2017 VERMONT STORMWATER MANAGEMENT MANUAL AND DESIGN GUIDANCE, BY THE VERMONT AGENCY OF NATURAL RESOURCES.
- 9. ALL WORK SHALL CONFORM TO ALL FEDERAL, STATE AND LOCAL CODES, REGULATIONS AND STANDARDS. THE MORE STRINGENT SHALL APPLY.
- IO. CARE SHALL BE TAKEN TO ENSURE THE LIVING SOUNDWALL LOCATED ADJACENT TO SYSTEM 2 IS NOT IMPACTED BY INSTALLATION OF THE SUBSURFACE INFILTRATION SYSTEM.

PROJECT NAME: SOUTH BURLINGTON PROJECT NUMBER: STP MM21(1)

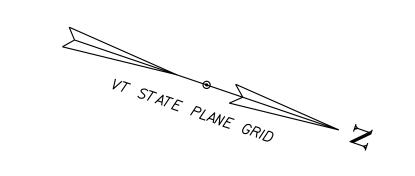


FILE NAME: zSTP MM2I(I)typ.dgn PROJECT LEADER: P. SHEDD DESIGNED BY: A. VOMACKA FUSS&O'NEILL GENERAL NOTES

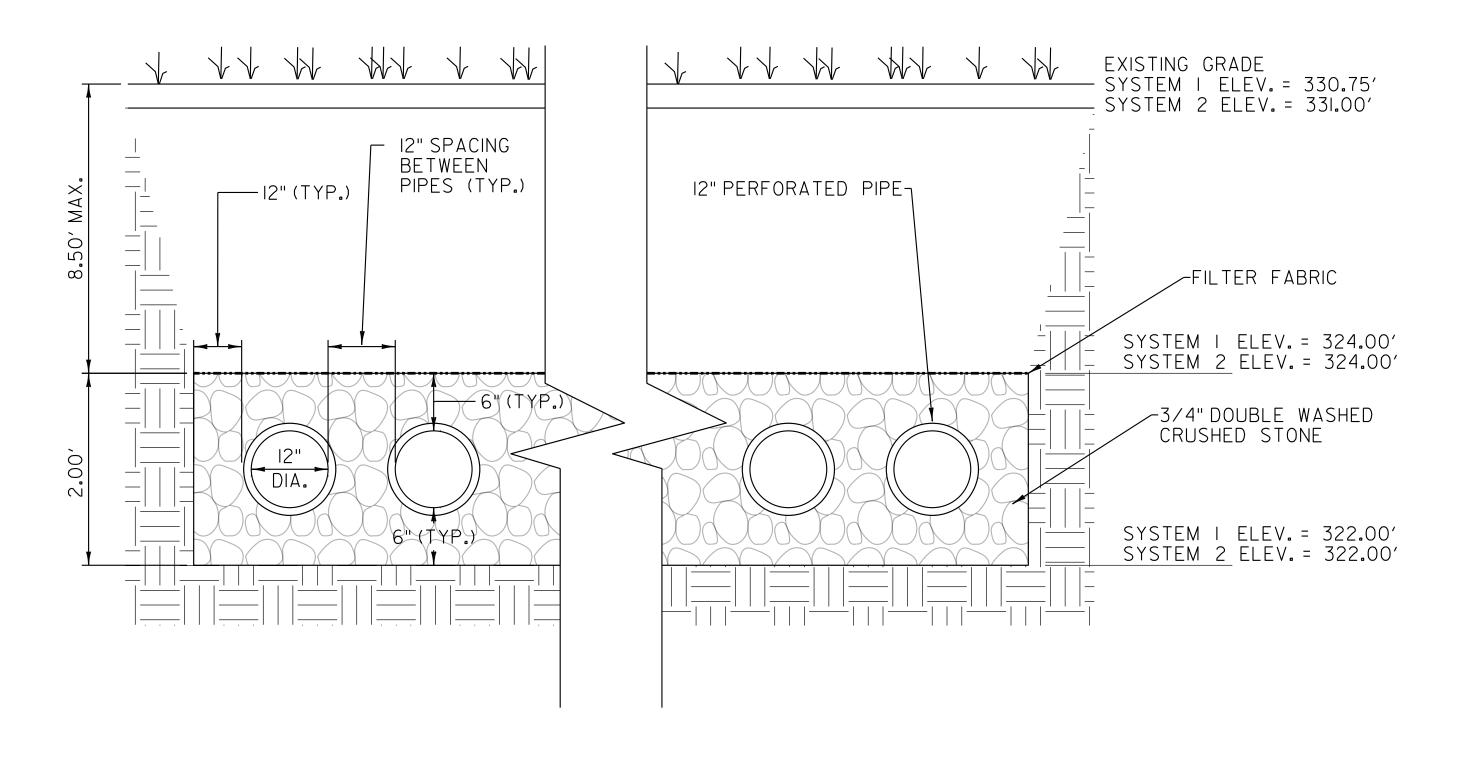
PLOT DATE: 1/6/2022 DRAWN BY: A. VOMACKA CHECKED BY: K. HAYDEN SHEET 3 OF 9









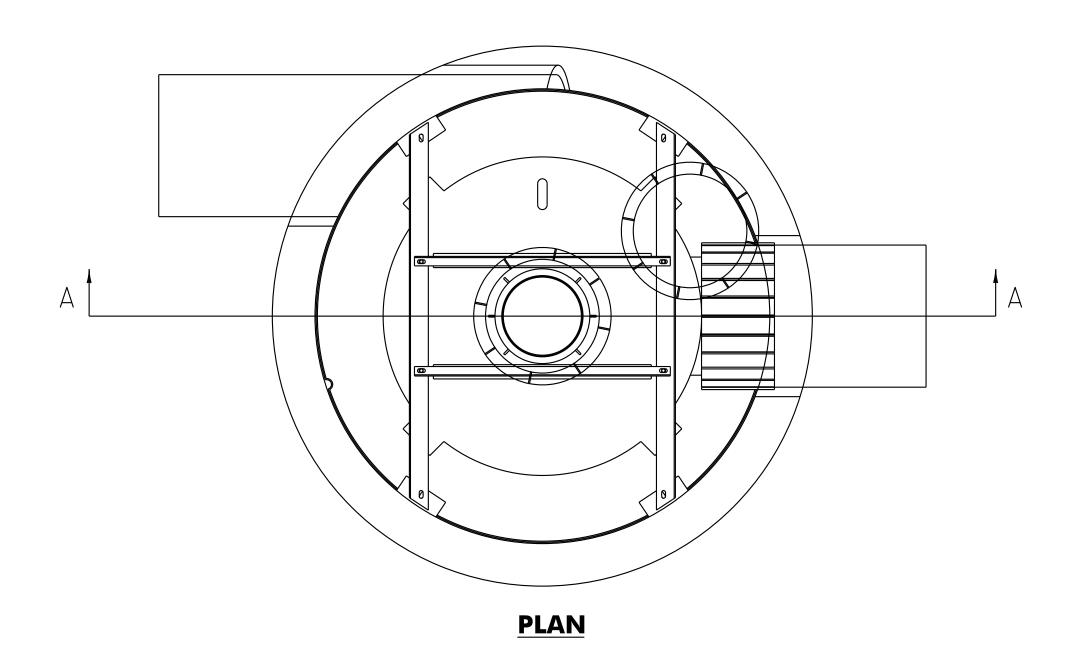


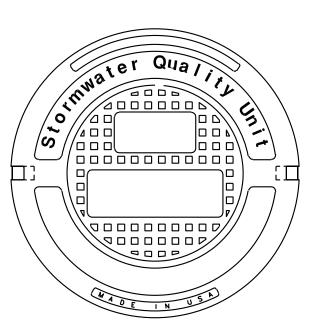
SUBSURFACE INFILTRATION TYPICAL SECTION

PROJECT NAME: SOUTH BURLINGTON PROJECT NUMBER: STP MM21(1)

FILE NAME: zSTP MM2|(|)typ.dgn PROJECT LEADER: P. SHEDD DESIGNED BY: A. VOMACKA

PLOT DATE: 1/6/2022 DRAWN BY: A. VOMACKA CHECKED BY: K. HAYDEN FUSS&O'NEILL UNDERGROUND INFILTRATION DETAIL SHEET SHEET 6 OF 9









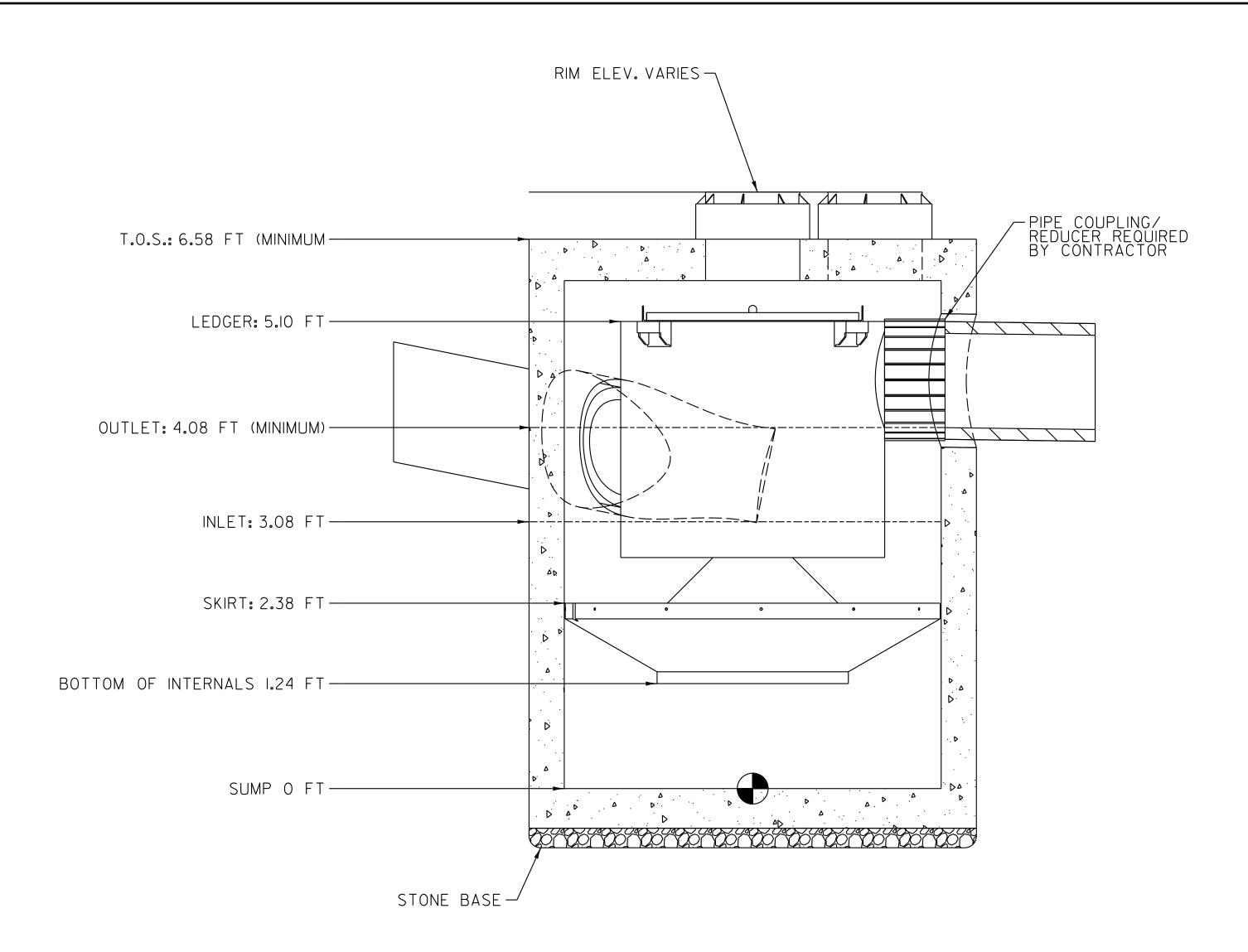
EQUIPMENT PERFORMANCE

THE STORMWATER TREATMENT UNIT SHALL PROVIDE THE REMOVAL EFFICIENCIES AND STORAGE CAPACITIES AS FOLLOWS:

- THE TREATMENT SYSTEM SHALL BE CAPABLE OF SEPARATING POLLUTANTS AND SEDIMENT FROM STORMWATER RUNOFF.
- MUST BE CAPABLE OF A:

-PEAK HYDRAULIC CAPACITY: 3.0 CFS 85 L/S) -SEDIMENT STORAGE CAPACITY: 0.70 CU. YD. (0.53 CU. M)

SEDIMENT SHALL BE STORED IN A ZONE THAT IS ISOLATED FROM THE MAIN FLOW PATH.



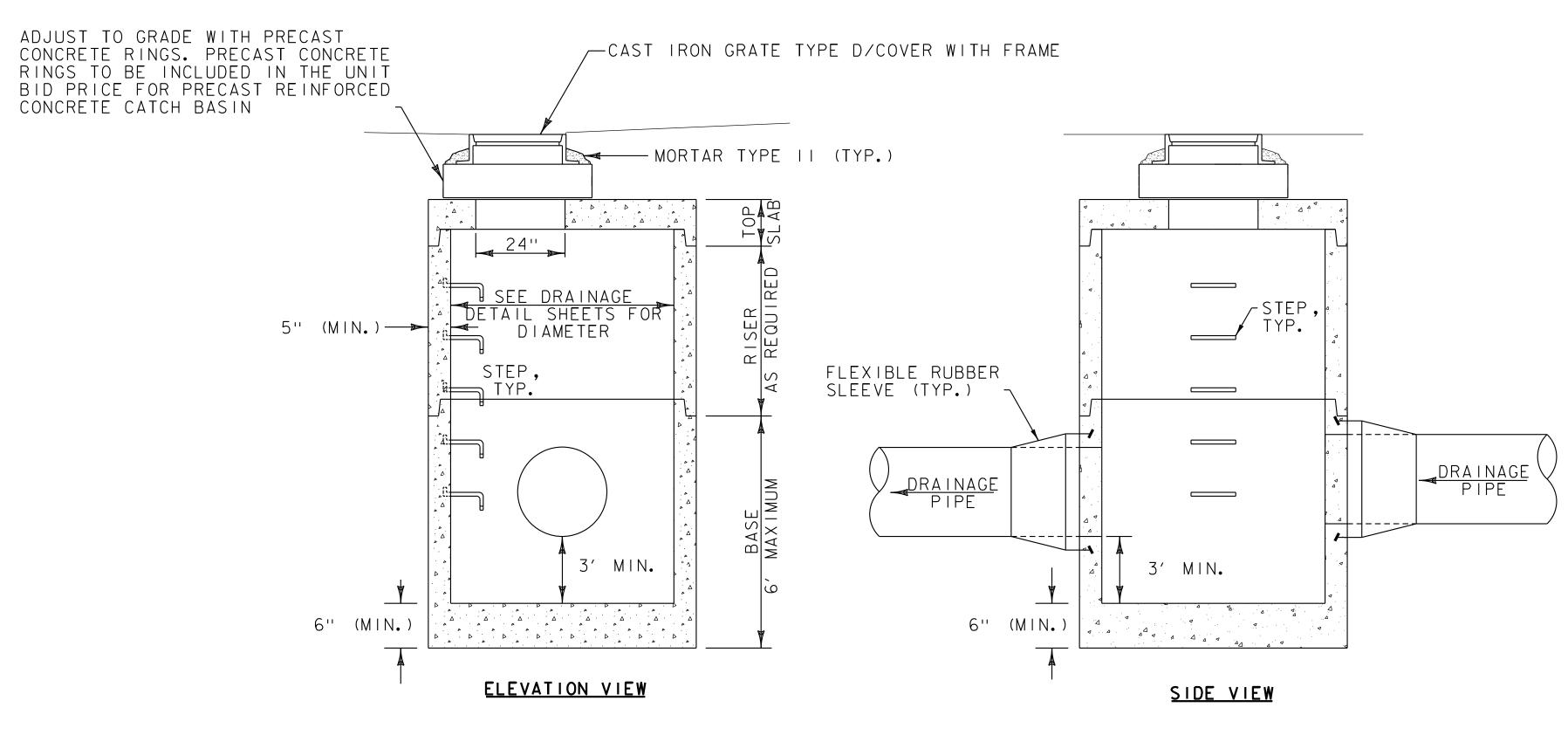
SECTION A-A

FOR PRELIMINARY PURPOSES ONLY. A DETAILED STRUCTURE WILL BE PROVIDED WITH THE FINAL PLANS SUBMISSION.

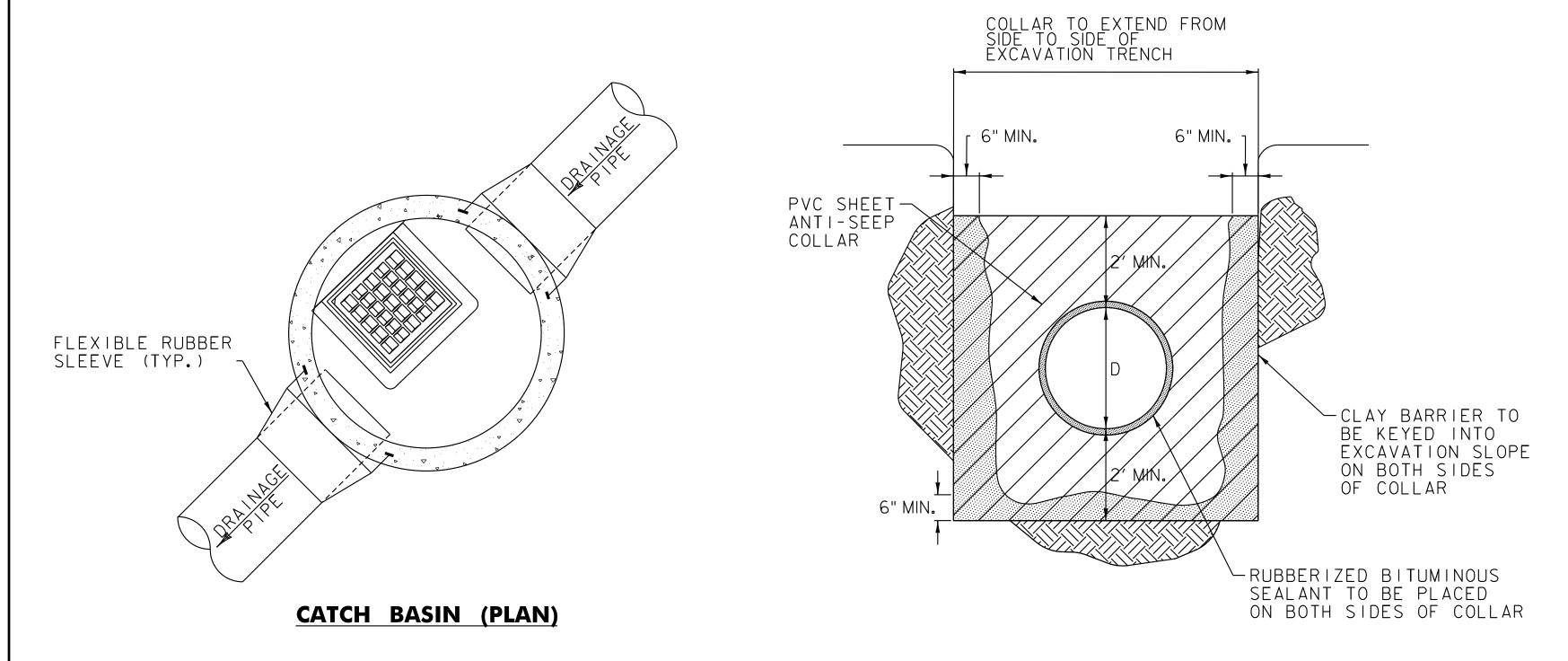
PROJECT NAME: SOUTH BURLINGTON PROJECT NUMBER: STP MM21(1)

FILE NAME: zSTP MM2I(I)typ.dgn PROJECT LEADER: P. SHEDD DESIGNED BY: A. VOMACKA FUSS&O'NEILL PRE-TREATMENT CHAMBER DETAIL SHEET SHEET 7 OF 9

PLOT DATE: 1/6/2022 DRAWN BY: A. VOMACKA CHECKED BY: K. HAYDEN



TYPICAL PRECAST CATCH BASIN OR MANHOLE



ANTI-SEEP COLLAR DETAIL

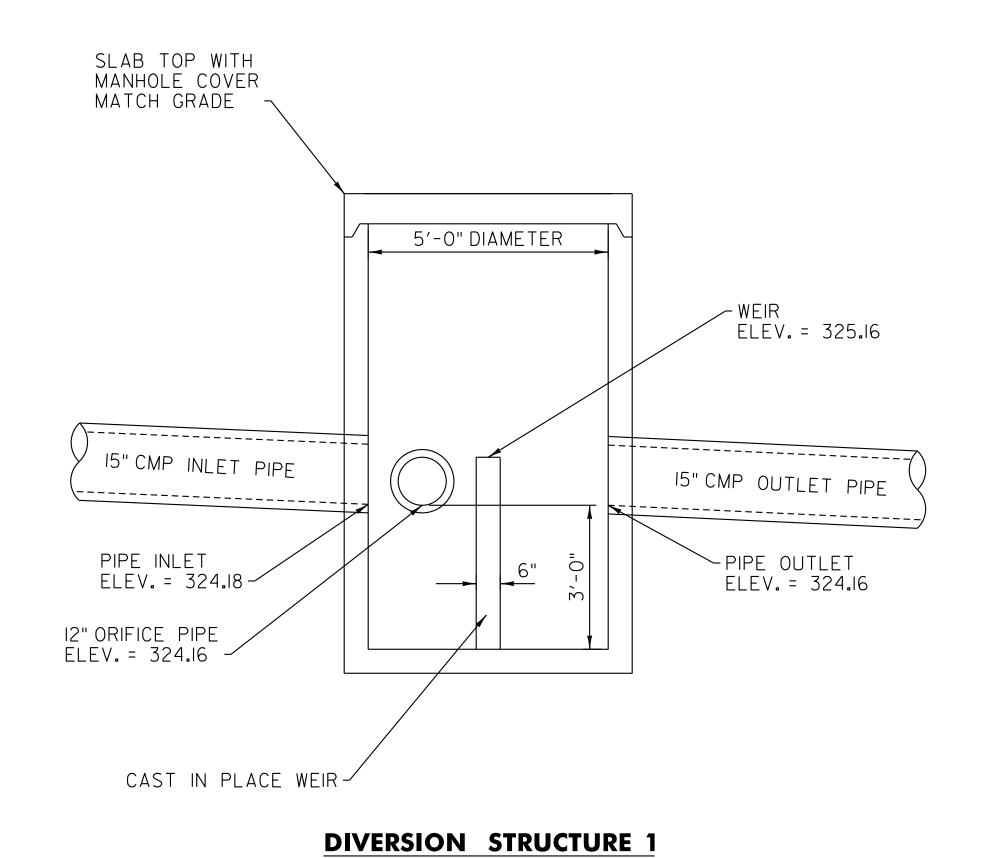
ANTI-SEEP COLLAR NOTES

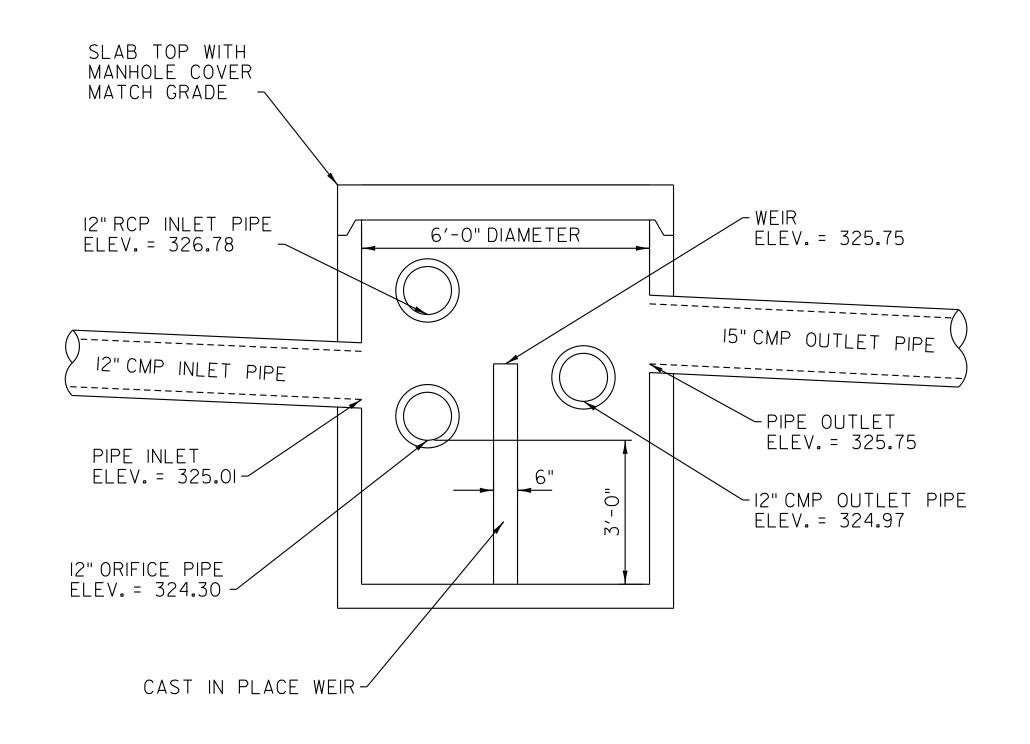
- I. OPENING IN PVC SHEET FOR PIPE TO BE CUT TO ALLOW NO MORE THAN 1/4" SPACE BETWEEN COLLAR AND PIPE.
- 2. ALL MATERIALS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
- 3. ENGINEER TO BE ONSITE DURING SINSTALLATION OF ANTI-SEEP COLLARS.

PRECAST REINFORCED CONCRETE CATCH BASIN NOTES

- I. PRECAST CONCRETE SECTIONS SHALL CONFORM TO SUBSECTION 705.04 OF THE STANDARD SPECIFICATIONS.
- 2. MINIMUM CONCRETE COMPRESSIVE STRENGTH: 5,000 PSI AT 28-DAYS.
- 3. STEEL REINFORCING SHALL CONFORM TO ASTM A185 OR A82 FOR HS-25 LOADING.
- 4. FACE OF PIPE SHALL NOT PROJECT MORE THAN TWO INCHES OR LESS THAN I INCH FROM INSIDE WALL OF STRUCTURE.
- 5. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF OUTSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS SECTION SHALL BE HOLES, AND THERE SHALL BÉ NO HOLES CLOSER THAN THREE INCHES TO JOINTS.
- 6. FITTING FRAME TO FINAL GRADE MAY BE DONE WITH PRECAST CONCRETE GRADE RINGS OF APPROPRIATE THICKNESS (THREE COURSES MAX.).
- 7. FLAT SLAB TOPS SHALL BE USED FOR ALL CATCH BASINS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- 8. THE CONTRACTOR SHALL VERIFY ALL PIPE INVERTS AND PENETRATION ANGLES PRIOR TO PRECASTING.
- 9. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT AND BE ASSEMBLED USING A BUTYL RUBBER OR APPROVED EQUAL SEALANT.
- 10. PROVIDE FLEXIBLE RUBBER SLEEVES CONFORMING TO ASTM C-923, RESILIENT, OF SIZE REQUIRED, FOR EACH PIPE CONNECTING TO STRUCTURE. SLEEVES SHALL BE CAST INTO PRECAST STUCTURE BY THE MANUFACTURER FOR ALL PIPE PENETRATIONS.
- II.PAYMENT FOR INSTALLATION OF THE CATCH BASINS SHALL BE MADE UNDER ITEM 604.20 PRECAST REINFORCED CONCRETE CATCH BASIN WITH CAST IRON GRATE.
- 12. DEPTH AS SHOWN ON THE DRAINAGE DETAIL SHEET IS DEFINED AS THE VERTICAL DISTANCE BETWEEN RIM ELEVATION AND THE BOTTOM OF SUMP.
- 13. MANHOLE STEPS SHALL BE 14" WIDE STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC AND SHALL BE CAST INTO MANHOLE SECTIONS BY THE PRECAST CONCRETE MANUFACTURER. MANHOLE STEPS IN THE RISER SHALL ALIGN WITH THE MANHOLE STEPS IN BASE OF THE STRUCTURE.

SOUTH BURLINGTON PROJECT NAME: PROJECT NUMBER: STP MM21(1)





DIVERSION STRUCTURE 2

GENERAL NOTES

- I. STEEL REINFORCING: PER SECTION 507 STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2018 STRENGTH: 5000 PSI@ 28 DAYS CONSTRUCTION JOINT: SEALED WITH I" DIAMETER BUTYL RUBBER OR EQUIVALENT
- 2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR SPECIAL PROVISION(DIVERSION STRUCTURE) TO THE ENGINEER FOR APPROVAL.
- 3. ALL HARDWARE AND STEEL APPURTENANCES FOR THE OUTLET STRUCTURES SHALL BE HOT DIP GALVANIZED.

FUSS&O'NEILL DETAIL SHEET 2

PROJECT NAME: SOUTH BURLINGTON PROJECT NUMBER: STP MM21(1)

FILE NAME:zSTP MM2K(1)typ.dgn PROJECT LEADER: P. SHEDD DESIGNED BY: A. VOMACKA

PLOT DATE: 1/6/2022 DRAWN BY: A. VOMACKA CHECKED BY: K. HAYDEN SHEET 9 OF 9