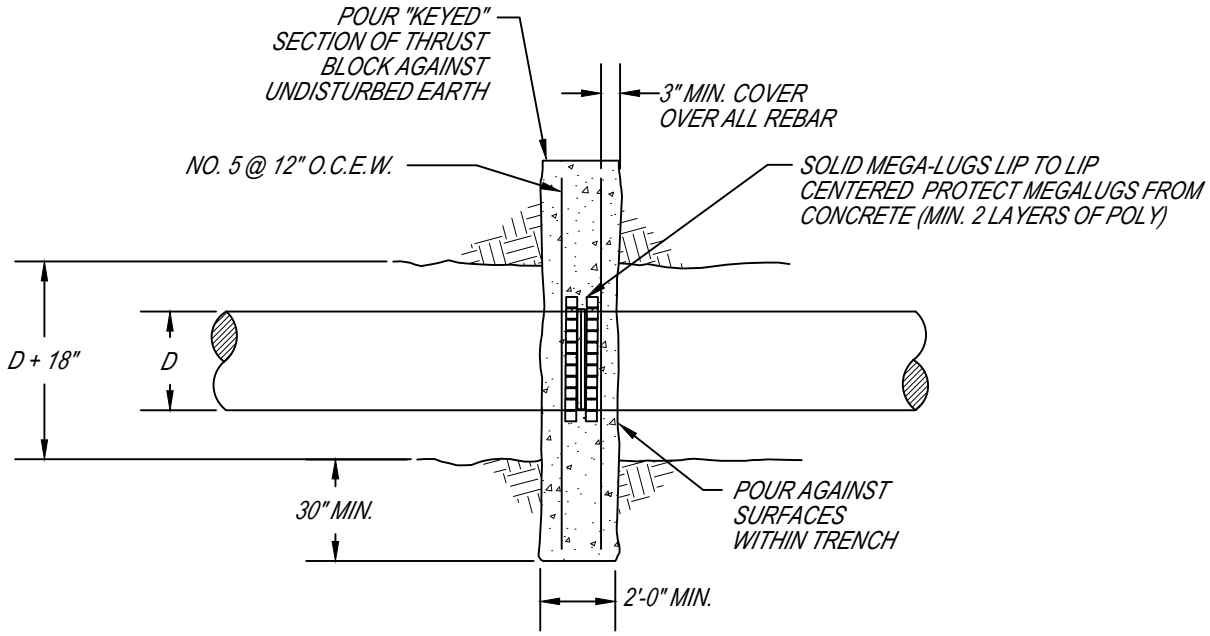
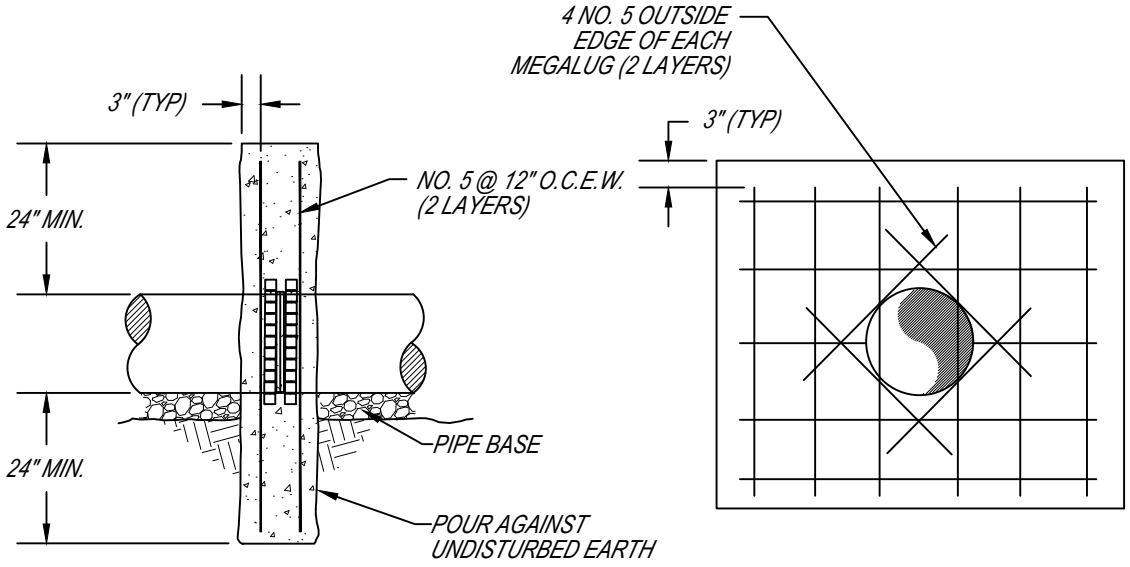
Appendix A
Standard Details

TYPICAL DEADMAN THRUST RESTRAINT



PLAN



PROFILE

FRONT

NOTES:

1. DEADMAN TO BE CENTERED ON FULL JOINT OF PIPE
2. ALL CONCRETE SHALL BE CLASS "A" (4000 PSI) IN ACCORDANCE WITH THE CITY OF AUBURN STANDARD SPECIFICATIONS
3. NO CALCIUM CHLORIDE CURING ACCELERATOR ALLOWED.
4. APPLICABLE FOR UP TO AND INCLUDING 12" DIAMETER PIPE. MAY BE USED FOR PIPES ABOVE 12" DIAMETER ON A CASE BY CASE BASIS.
5. TO BE USED ON EXISTING DUCTILE IRON OR CAST IRON PIPE IN GOOD CONDITION.

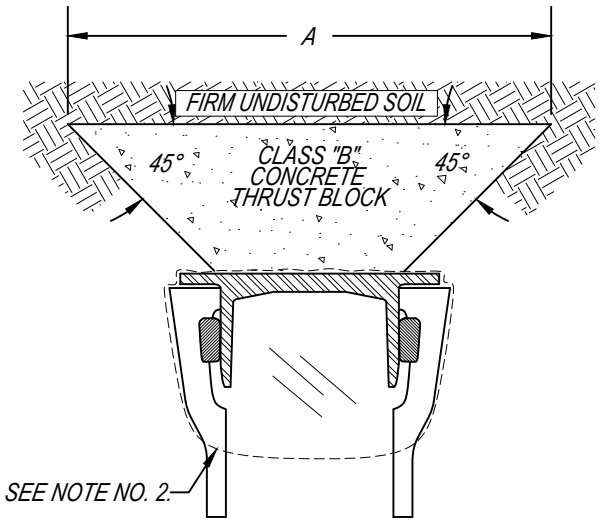
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

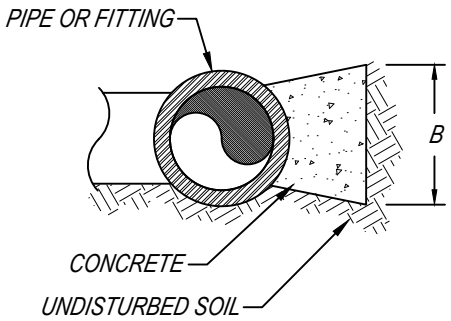
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DEPARTMENT:	WRM	REVISIONS:	DCM 2010
SCALE:	N.T.S.		
DRAWN BY:	BS		
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	12/2007		

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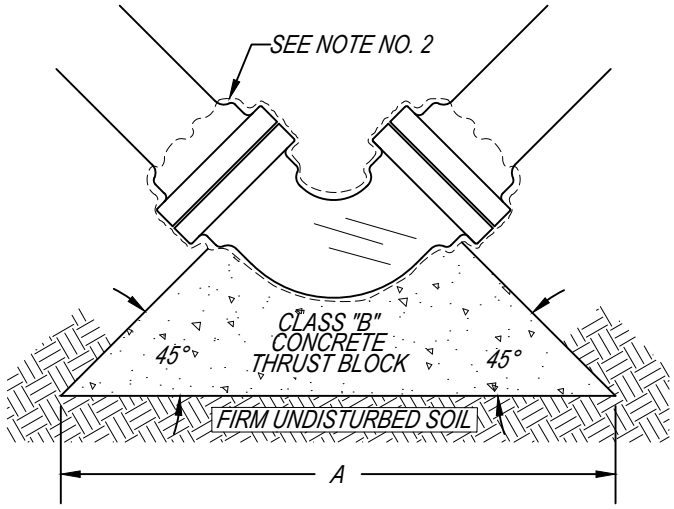
TYPICAL CONCRETE THRUST BLOCK DESIGN



BELL JOINT PLUG
UNRESTRAINED TYPE



SIDE VIEW



TYPICAL BEND THRUST BLOCK

BEARING AREA

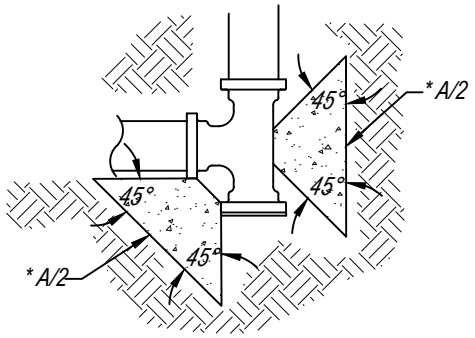
AREA (SF) AGAINST UNDISTURBED SOIL

Size	Tee, Wye, Plug or 90° Bend	45° Bend	22.5° Bend	11.5° Bend
4"	1	1	1	1
6"	3	2	1.5	1
8"	5	3	2	1.5
10"	9	5	3	2
12"	12	8	4	3
16"	22	12	5	4
BASED ON 2500 LB/ft.^{2} SOIL				
BEARING AREA (SF) = A x B 1<(A / B)<3				
≤ 100 PSI STATIC PRESSURE (600 MSL OR HIGHER)				

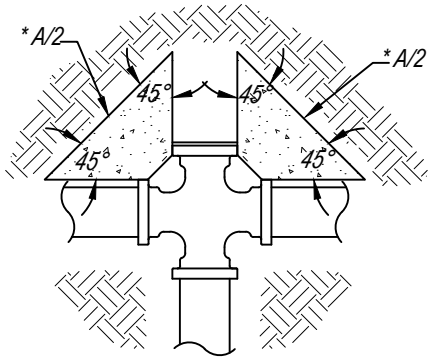
NOTES:

1. 45 DEGREE ANGLES REQUIRED FOR ALL THRUST BLOCKS.
2. NON STANDARD THRUST BLOCKING WILL REQUIRE SPECIAL DETAILING PROVIDED BY A LICENSED ENGINEER AND APPROVED BY THE CITY OF AUBURN.
3. ALL MECHANICAL JOINT FITTINGS THAT REQUIRE THRUST BLOCKS SHALL BE WRAPPED IN PLASTIC. CONCRETE SHALL NOT BE POURED OVER JOINTS.
4. CLASS "B" CONCRETE SHALL BE AS DEFINED IN THE CITY OF AUBURN STANDARD SPECIFICATIONS SECTION II.
5. THE PREFERRED METHOD OF THRUST RESTRAINT SHALL BE THROUGH THE USE OF EXTERNALLY RESTRAINED JOINT DEVICES SUCH AS MEGA -LUGS IN LIEU OF CONCRETE BLOCKING. CONCRETE BLOCKING SHALL ONLY BE PERMITTED WHERE APPROVED BY THE AWWB AND SHALL NOT BE USED IN CONJUNCTION WITH MEGA-LUG RESTRAINTS . THE APPROPRIATE LENGTH OF RESTRAINT SHALL BE CALCULATED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

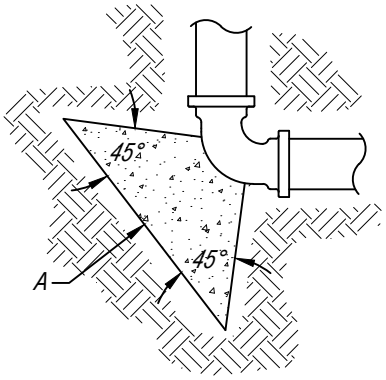
TYPICAL CONCRETE THRUST BLOCK LAYOUT



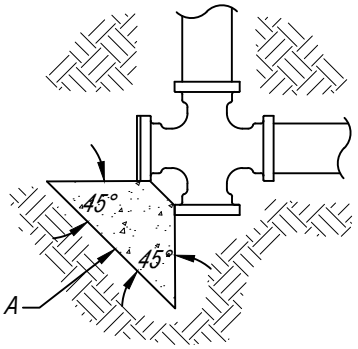
PLUGGED TEE



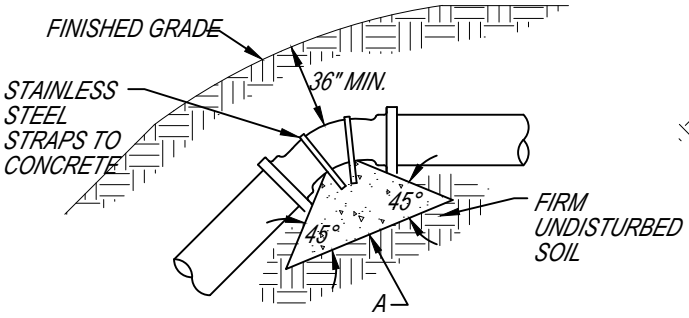
PLUGGED CROSS



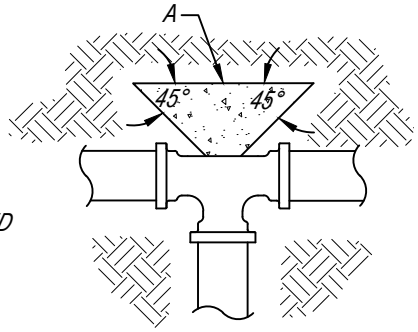
BEND



PLUGGED CROSS



VERTICAL BEND
(AGAINST DISTURBED SOIL)



TEE

NOTES:

1. 45 DEGREE ANGLES REQUIRED FOR ALL THRUST BLOCKS.
2. NON STANDARD THRUST BLOCKING WILL REQUIRE SPECIAL DETAILING PROVIDED BY A LICENSED ENGINEER AND APPROVED BY THE CITY OF AUBURN.
3. ALL MECHANICAL JOINT FITTINGS THAT REQUIRE THRUST BLOCKS SHALL BE WRAPPED IN PLASTIC. CONCRETE SHALL NOT BE POURED OVER JOINTS.
4. CLASS "B" CONCRETE SHALL BE AS DEFINED IN THE CITY OF AUBURN STANDARD SPECIFICATIONS SECTION II.
5. THE PREFERRED METHOD OF THRUST RESTRAINT SHALL BE THROUGH THE USE OF EXTERNALLY RESTRAINED JOINT DEVICES SUCH AS MEGA -LUGS IN LIEU OF CONCRETE BLOCKING. CONCRETE BLOCKING SHALL ONLY BE PERMITTED WHERE APPROVED BY THE AWWB AND SHALL NOT BE USED IN CONJUNCTION WITH MEGA-LUG RESTRAINTS . THE APPROPRIATE LENGTH OF RESTRAINT SHALL BE CALCULATED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

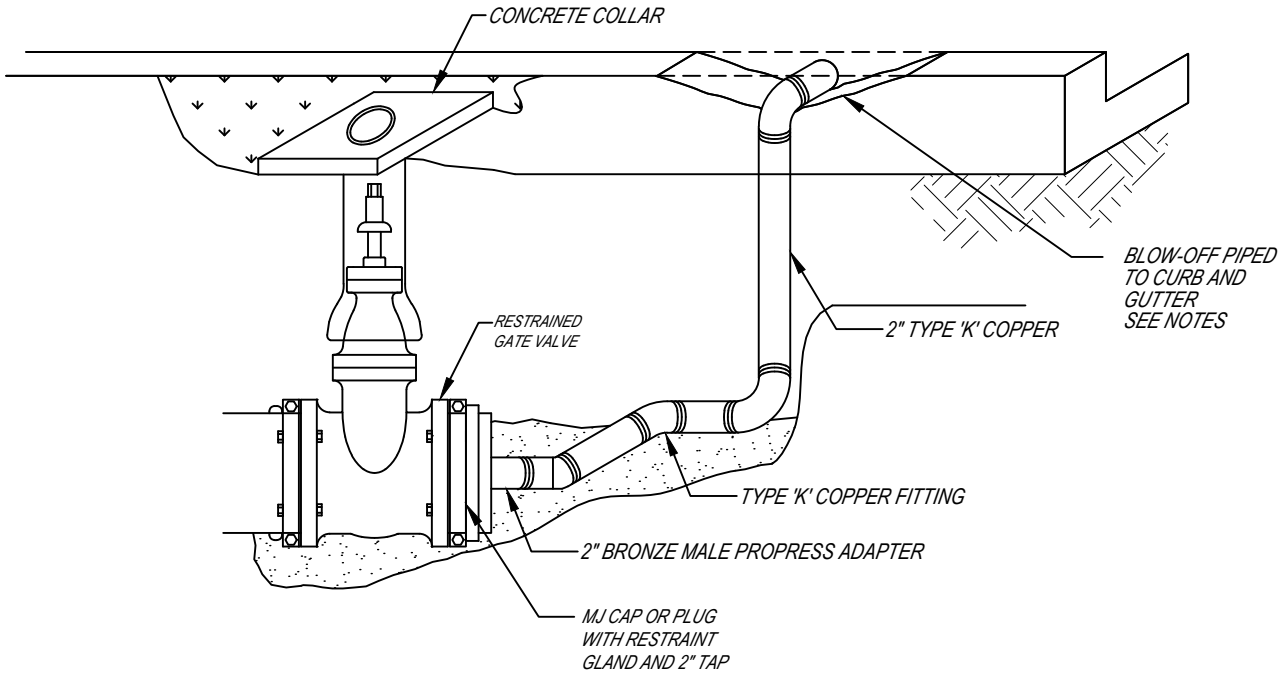
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

DRAWING TITLE:	TYPICAL CONCRETE THRUST BLOCK LAYOUT	
DEPARTMENT:	WRM	REVISIONS:
SCALE:	N.T.S.	
DRAWN BY:	CN	
REVIEWED BY:	JC	
APPROVED BY:	EC	
IMPLEMENTED:	DCM 2010	

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TYPICAL END OF MAIN BLOWOFF ASSEMBLY



NOTES:

1. THE PREFERRED METHOD OF THRUST RESTRAINT SHALL BE THROUGH THE USE OF EXTERNALLY RESTRAINED JOINT DEVICES SUCH AS MEGA -LUGS IN LIEU OF CONCRETE BLOCKING. CONCRETE BLOCKING SHALL ONLY BE PERMITTED WHERE APPROVED BY THE AWWB AND SHALL NOT BE USED IN CONJUNCTION WITH MEGA-LUG RESTRAINTS . THE APPROPRIATE LENGTH OF RESTRAINT SHALL BE CALCULATED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
2. BLOW OFF SHALL BE ANGLED TO PERFECT FLOW AWAY FROM BLOW-OFF AND VALVE , WHERE POSSIBLE
3. VALVE SHALL BE LOCATED WITHIN 24" OF THE BACK OF CURB, MAY BE PLACED IN PAVEMENT.
4. THE BLOW-OFF SHALL BE PLACED WITH AT LEAST 1" CLEARANCE BETWEEN GUTTER AND BOTTOM OF PIPE AND SHOULD BE POINTED SLIGHTLY UPWARD

THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

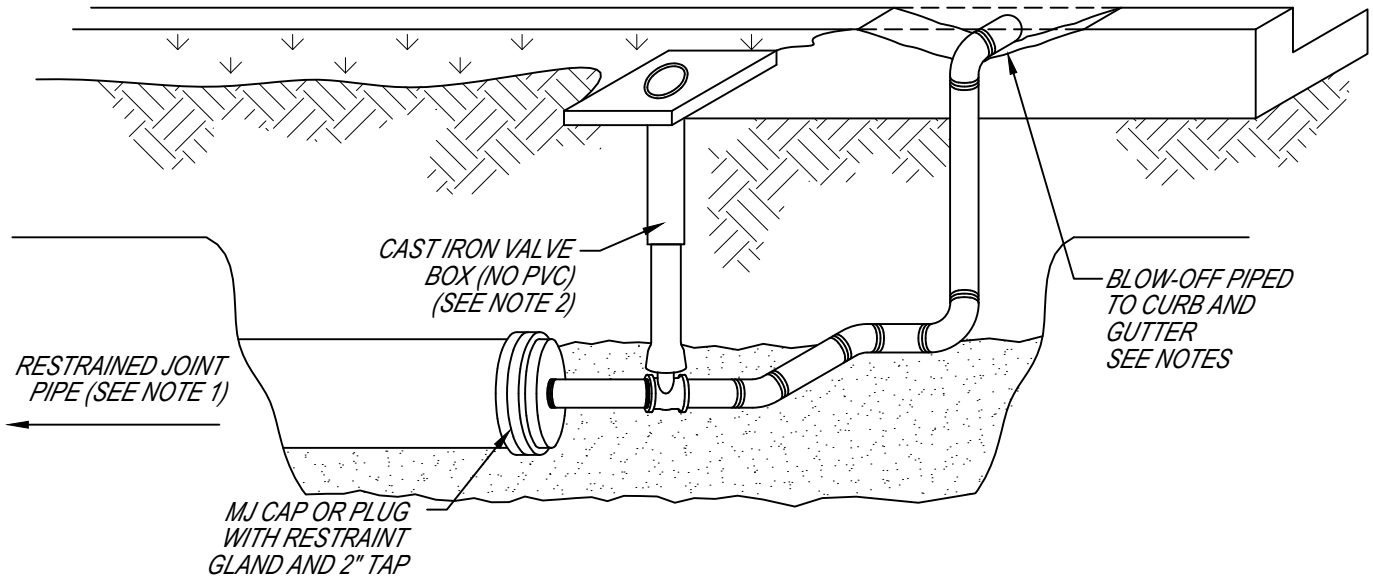
STANDARD WATER DETAILS

DRAWING TITLE: TYPICAL END OF MAIN FOR FUTURE EXTENSION

DEPARTMENT:	WRM	REVISIONS:	BS-09-13-07
SCALE:	N.T.S.		DCM 2010
DRAWN BY:	GM		MW-12-03-2020
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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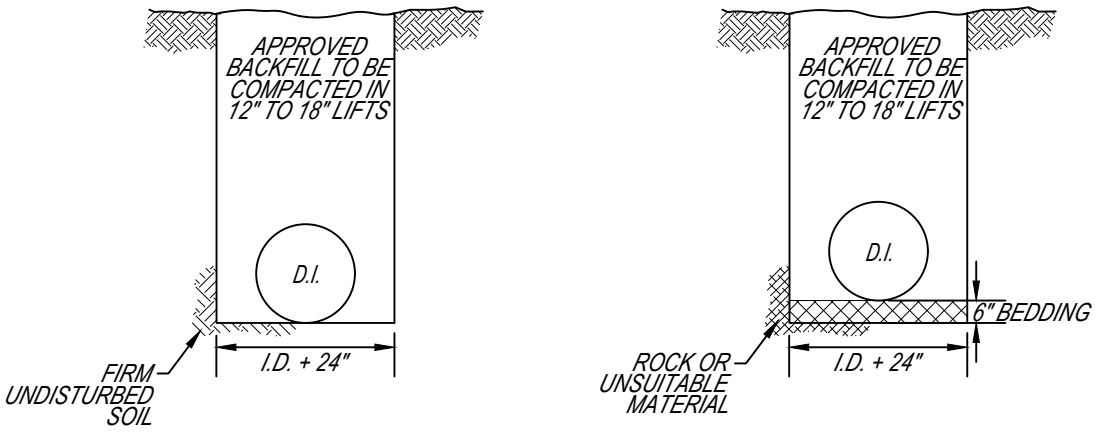
TYPICAL END OF MAIN IN CUL DE SAC



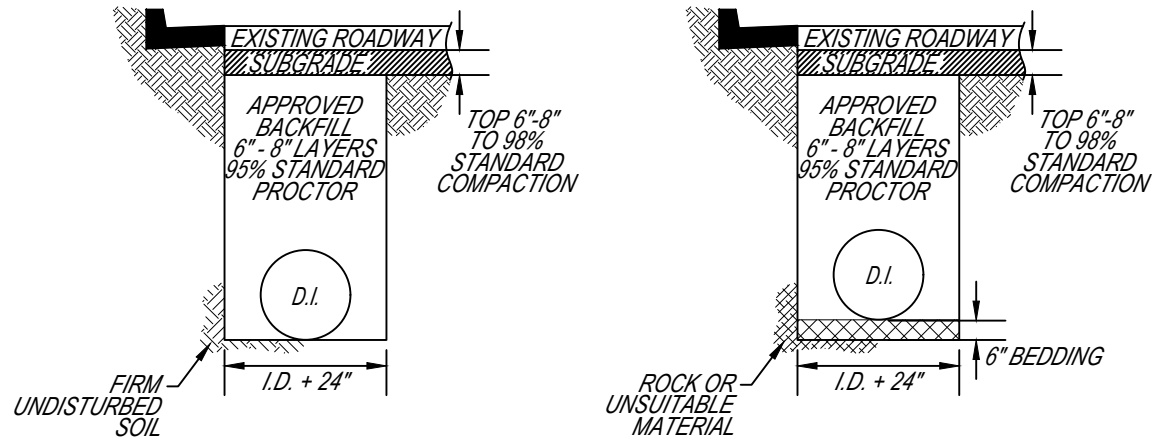
NOTES:

1. THE PREFERRED METHOD OF THRUST RESTRAINT SHALL BE THROUGH THE USE OF EXTERNALLY RESTRAINED JOINT DEVICES SUCH AS MEGA -LUGS IN LIEU OF CONCRETE BLOCKING. CONCRETE BLOCKING SHALL ONLY BE PERMITTED WHERE APPROVED BY THE AWWB AND SHALL NOT BE USED IN CONJUNCTION WITH MEGA-LUG RESTRAINTS . THE APPROPRIATE LENGTH OF RESTRAINT SHALL BE CALCULATED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
2. VALVE SHALL BE LOCATED WITHIN 24" OF THE BACK OF CURB, MAY BE PLACED IN PAVEMENT.
3. THE BLOW-OFF SHALL BE PLACED WITH AT LEAST 1" CLEARANCE BETWEEN GUTTER AND BOTTOM OF PIPE AND SHOULD BE POINTED SLIGHTLY UPWARD.
4. THE BLOW-OFF SHALL BE LOCATED WITHIN 18" OF A PROPERTY LINE AND BE ANGLED TO DIRECT FLOW AWAY FROM THE BLOW-OFF AND VALVE, AND TOWARDS A STORM DRAIN INLET.

BEDDING REQUIREMENTS FOR TRENCHES



NON-STREET TRENCH



STREET TRENCH

NOTES:

1. *BEDDING MATERIALS SHALL BE 1/4" TO 1 1/2" GRADED CRUSHED STONE SUCH AS: 56,57,6,67,68,7,OR 78, STONE PER ALDOT STANDARD SPECS.*
2. *WIDTH VARIES BASED ON WALL STABILITY. STABLE WALLS WIDTH AS NEEDED TO JOIN PIPE AND COMPACT HAUNCHING AND INITIAL BACKFILL. UNSTABLE WALLS: WIDTH TO BE A MINIMUM OF FIVE TIMES PIPE DIAMETER.*
3. *FLOWABLE FILL CAN BE USED AS BACKFILL, BUT MUST HAVE PRIOR APPROVAL AND MUST BE ALLOWED TO SET FOR 24 HOURS PRIOR TO TOPPING.*
4. *APPROVED BACKFILL MATERIAL INCLUDES 825 B, FLOWABLE FILL AND APPROVED DIRT. ALTERNATIVE MATERIAL MUST BE APPROVED BY PROJECT MANAGER PRIOR TO USE.*

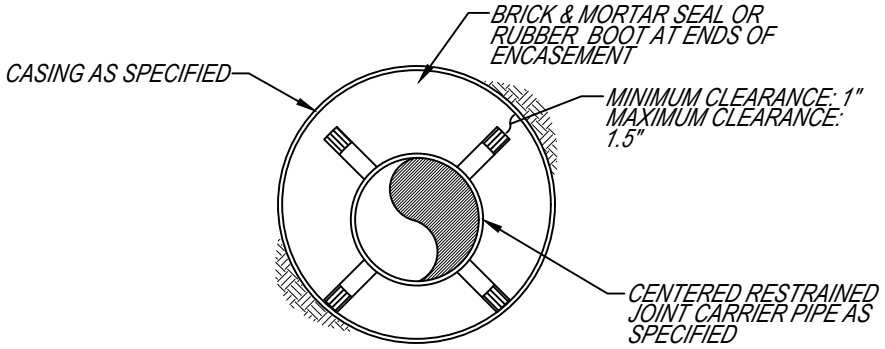
TYPICAL BORE ENCASEMENT

CARRIER PIPE		SPACER	STEEL ENCASEMENT	
NOMINAL PIPE DIAMETER	STANDARD PIPE BELL O.D.*	CASING SPACER BAND WIDTH	MINIMUM CASING THICKNESS	MINIMUM CASING DIAMETER**
4	6.40	8	0.25	14
6	8.60	8	0.25	16
8	11.16	8	0.25	18
10	13.25	8	0.25	20
12	15.22	8	0.25	22
14	17.73	12	0.25	24
16	19.86	12	0.3125	26
18	22.16	12	0.3125	30
20	24.28	12	0.3125	32
24	28.50	12	0.3125	36
30	34.95	12	0.5	42
36	41.37	12	0.5	48

ALL SIZES INDICATED ARE IN INCHES

*PIPE BELL OUTSIDE DIAMETER BASED ON PRESSURE CLASS 350 DUCTILE IRON PIPE.

**CASING DIAMETERS BASED ON BEING A MINIMUM OF 6 INCHES GREATER THAN THE OUTER DIAMETER OF THE JOINT BELL, TO THE NEAREST EVEN SIZE.

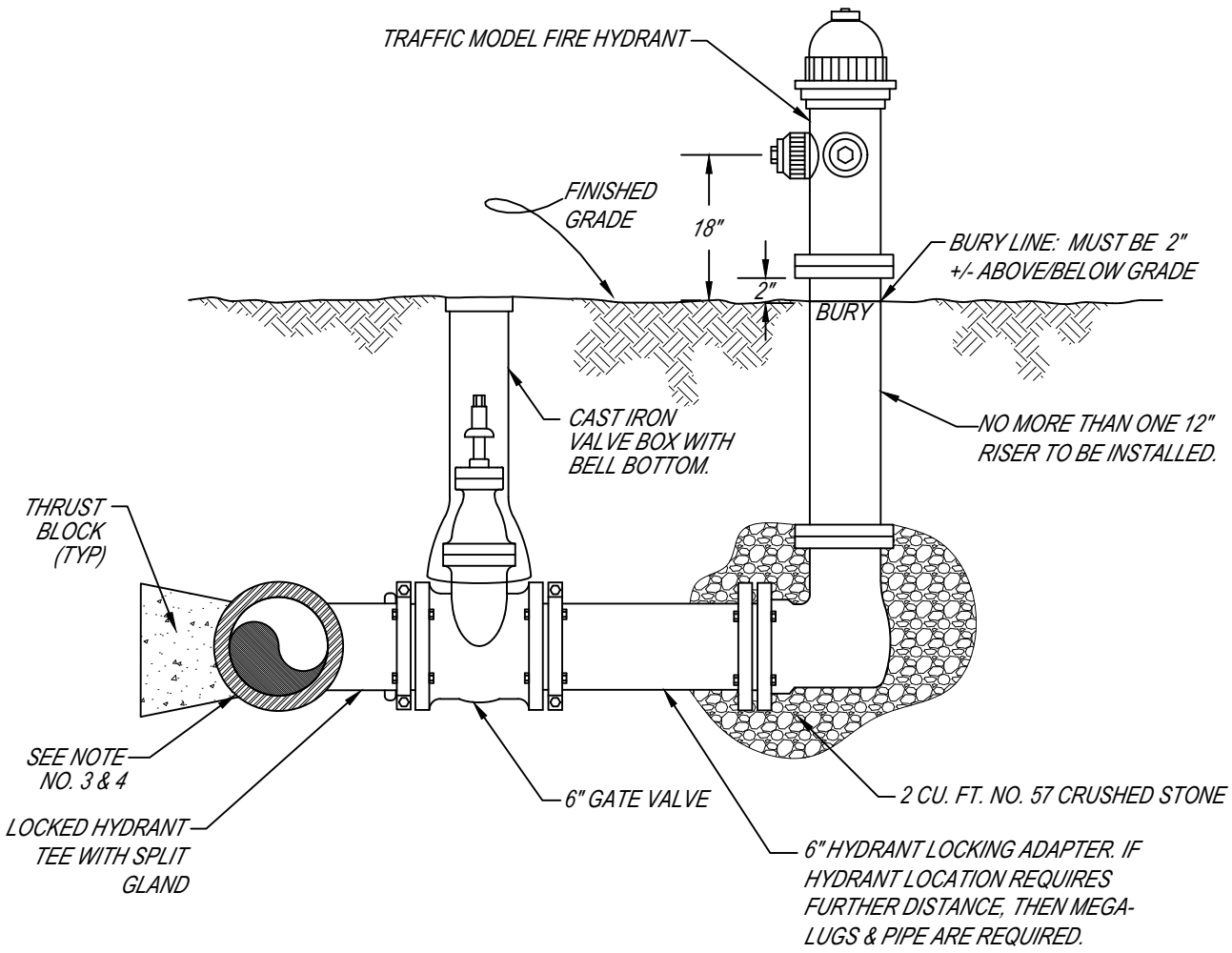


CASING SECTION

NOTES

1. ALL SPACER BANDS SHALL BE MADE FROM T-304 STAINLESS STEEL OF A MINIMUM 14 GAUGE THICKNESS.
2. ALL SPACERS SHALL HAVE A SYNTHETIC RUBBER OR PVC LINER TO INSULATE THE PIPELINE FROM THE SPACER.
3. ALL SPACERS SHALL HAVE 1.5" WIDE GLASS REINFORCED PLASTIC OR UHMW POLYMER RUNNERS TO INSULATE THE SPACER.
4. SPACERS TO BE MANUFACTURED BY CASCADE WATERWORKS MFG. CO. (PSI) PIPELINE SEAL AND INSULATOR, INC. OR EQUAL.
5. 6" THRU 12" DIAMETER PIPELINE SHALL USE 8" WIDE BANDS: GREATER THAN 12" DIAMETER PIPELINES SHALL USE 12" WIDE BANDS.
6. CENTERED RESTRAINED CASING SPACERS SHALL BE SPACED AT A MAXIMUM OF TEN FEET APART WITH A MINIMUM OF TWO SPACERS PER JOINT OF PIPE.

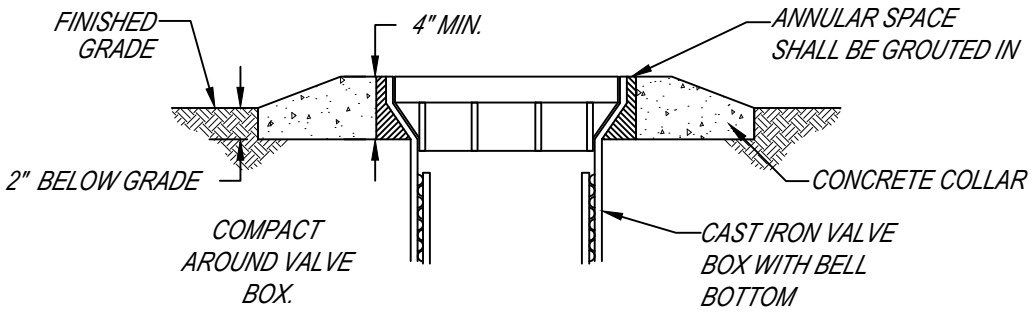
TYPICAL FIRE HYDRANT INSTALLATION

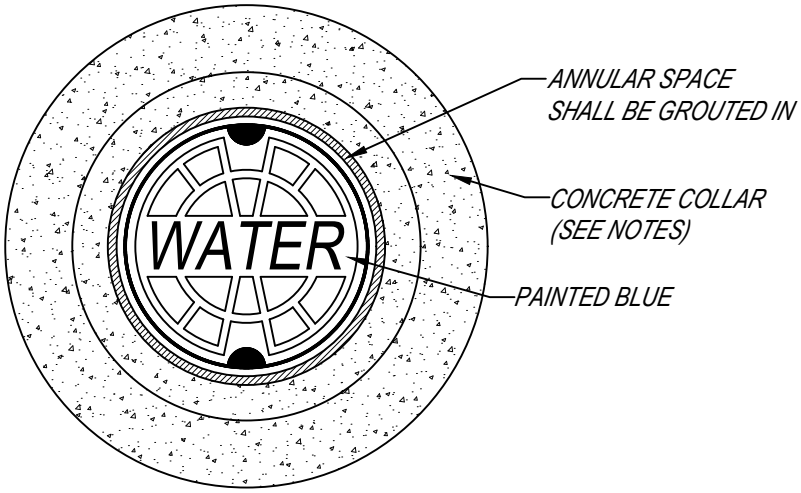


NOTES:

1. ALL FIRE HYDRANTS SHALL HAVE NATIONAL STANDARD THREADS, 4 1/2-INCH STEAMER & 2 1/2-INCH HOSE NOZZLE, AND SHALL BE MUELLER CENTURION, OR AMERICAN DARLING B-84-B, OR APPROVED EQUAL. BRONZE TO BRONZE SEATED. EPOXY COATED SHOES. WEATHER CAPS SHALL NOT BE MADE OF RUBBER.
2. ALL FIRE HYDRANTS SHALL BE LEVELED AND PLUMBED DURING INSTALLATION.
3. ALL MECHANICAL JOINT FITTINGS THAT REQUIRE THRUST BLOCKS SHALL BE WRAPPED IN PLASTIC. CONCRETE SHALL NOT BE POURED OVER JOINTS.
4. THE PREFERRED METHOD OF THRUST RESTRAINT SHALL BE THROUGH THE USE OF EXTERNALLY RESTRAINED JOINT DEVICES SUCH AS MEGA -LUGS IN LIEU OF CONCRETE BLOCKING. CONCRETE BLOCKING SHALL ONLY BE PERMITTED WHERE APPROVED BY THE AWWB AND SHALL NOT BE USED IN CONJUNCTION WITH MEGA-LUG RESTRAINTS. THE APPROPRIATE LENGTH OF RESTRAINT SHALL BE CALCULATED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
5. USE MEGA-LUGS BETWEEN HYDRANT AND GATE VALVE.
6. HYDRANT LOCKING TEE TO BE USED IN LIEU OF STANDARD M.J. TEE ON ALL FIRE HYDRANT CONNECTIONS.

TYPICAL VALVE BOX INSTALLATION





NOTE:

1. CONCRETE COLLAR MAY BE CAST-IN-PLACE OR PRECAST AND MAY BE ROUND OR SQUARE IN SHAPE.
2. CONCRETE COLLAR SHALL BE A MIN. 4" THICK.

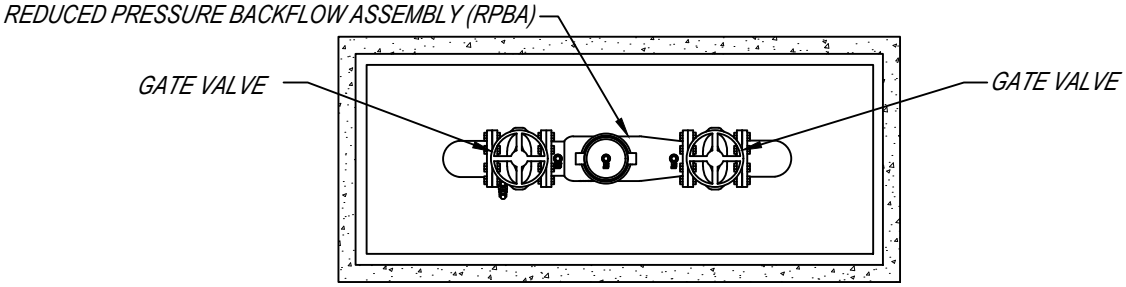
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

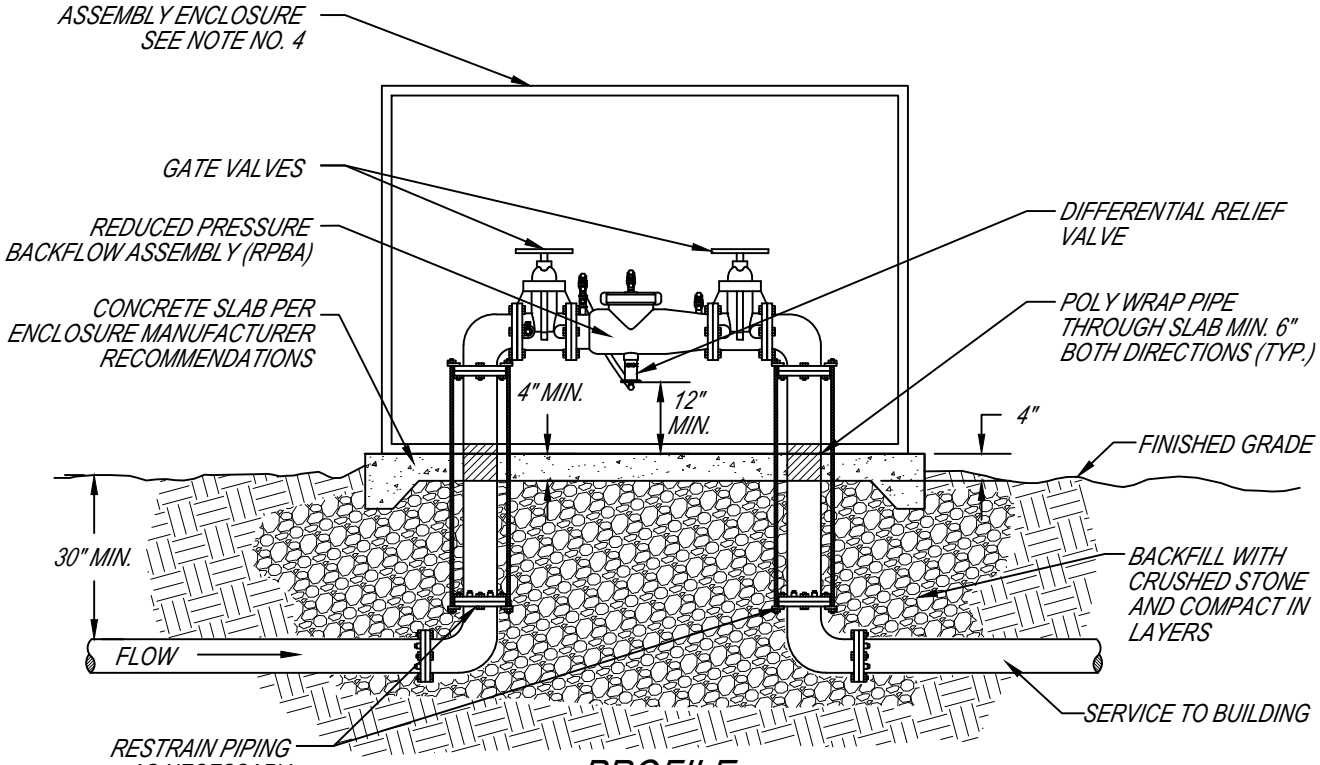
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DEPARTMENT:	WRM	REVISIONS:	DCM 2010
SCALE:	N.T.S.		
DRAWN BY:	BS		
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	12/2007		

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TYPICAL REDUCED PRESSURE BACKFLOW ASSEMBLY (RPBA)



PLAN



PROFILE

NOTES:

1. RPBA SHALL BE MANUFACTURED BY AMES, WATTS, OR AN APPROVED EQUAL.
2. RPBA TO BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.
3. RPBA's SHALL NOT BE BURIED OR INSTALLED IN BELOW GROUND VAULTS.
4. RPBA ENCLOSURES SHALL BE CONCRETE, REINFORCED ALUMINUM, OR FIBERGLASS CONSTRUCTION AND SHALL BE INSULATED AND/OR HEATED SO AS TO ENSURE AGAINST FREEZING. ENCLOSURES APPROVED FOR INSTALLATION INCLUDE: HYDROCOWL, HOT BOX, AND LOK BOX.
5. RESTRAINT SYSTEM SHALL BE DESIGNED FOR SPECIFIC INSTALLATION CONDITIONS. WHERE STATIC PRESSURES EXCEED 100 PSI, MEGA-LUG RESTRAINTS USED ON VERTICAL BENDS SHALL BE REINFORCED WITH S.S. RODS.

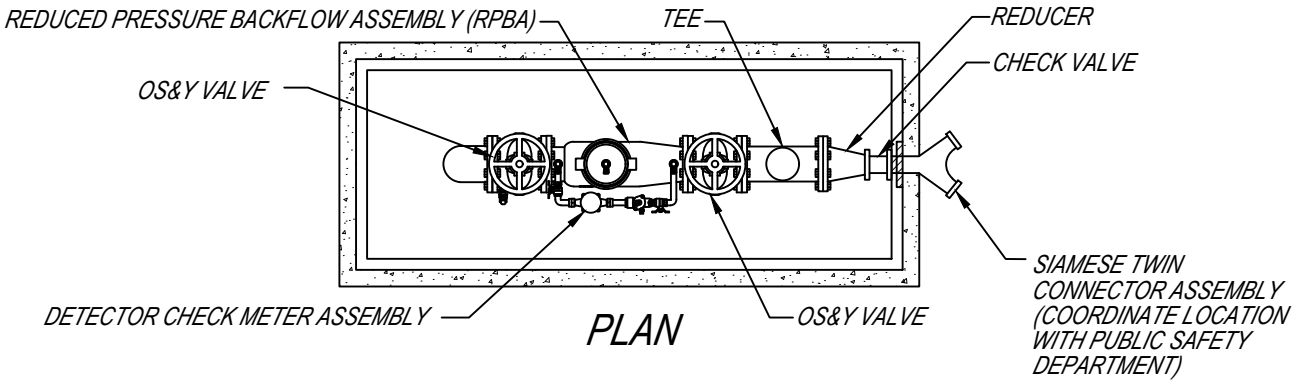
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

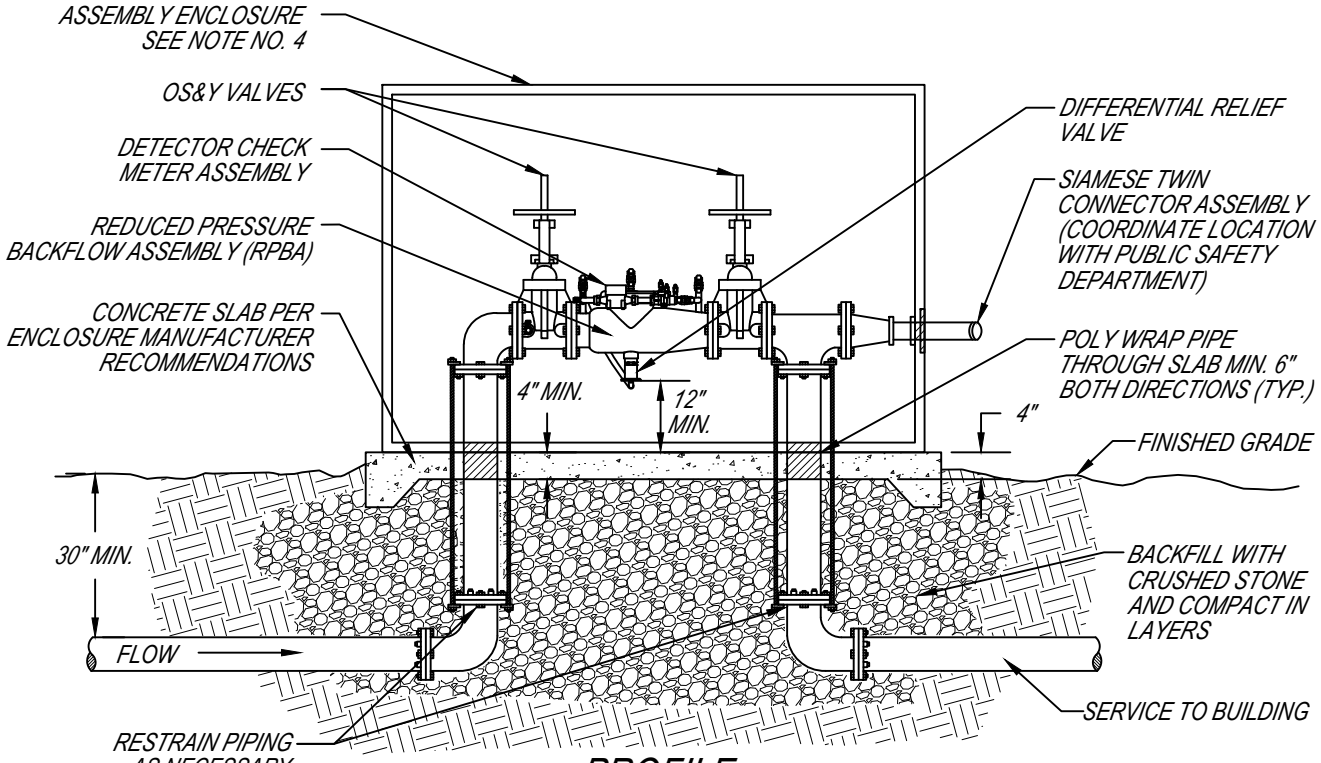
DRAWING TITLE:	TYPICAL REDUCED PRESSURE BACKFLOW ASSEMBLY (RPBA)		
DEPARTMENT:	WRM	REVISIONS:	DCM 2010
SCALE:	N.T.S.		JC-10-2011
DRAWN BY:	BS		JC-12-2012
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	12/2007		

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TYPICAL FIRE PROTECTION SYSTEM RPBA



PLAN



PROFILE

NOTES:

1. RPBA SHALL BE MANUFACTURED BY AMES, WATTS, OR AN APPROVED EQUAL.
2. RPBA TO BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.
3. RPBA's SHALL NOT BE BURIED OR INSTALLED IN BELOW GROUND VAULTS.
4. RPBA ENCLOSURES SHALL BE CONCRETE, REINFORCED ALUMINUM, OR FIBERGLASS CONSTRUCTION AND SHALL BE INSULATED AND/OR HEATED TO PROTECT AGAINST FREEZING. ENCLOSURES APPROVED FOR INSTALLATION INCLUDE: HYDROCOWL, HOT BOX, AND LOK BOX.
5. RESTRAINT SYSTEM SHALL BE DESIGNED FOR SPECIFIC INSTALLATION CONDITIONS. WHERE STATIC PRESSURES EXCEED 100 PSI, MEGA-LUG RESTRAINTS USED ON VERTICAL BENDS SHALL BE REINFORCED WITH S.S. RODS.

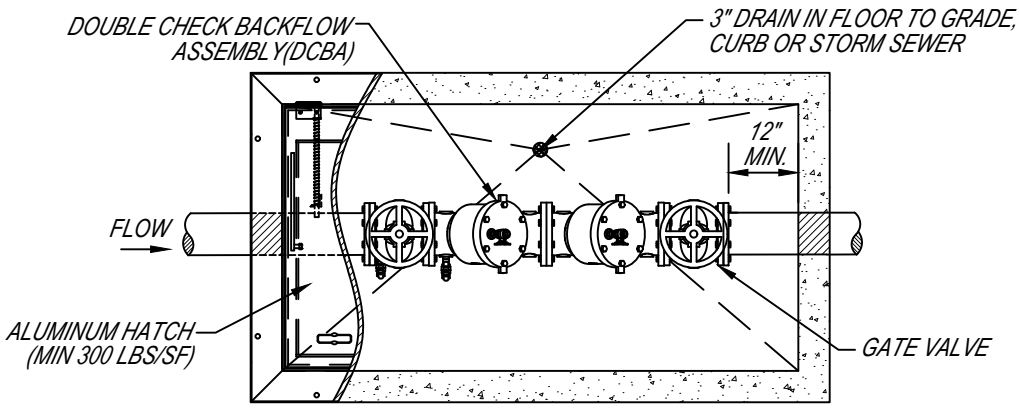
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

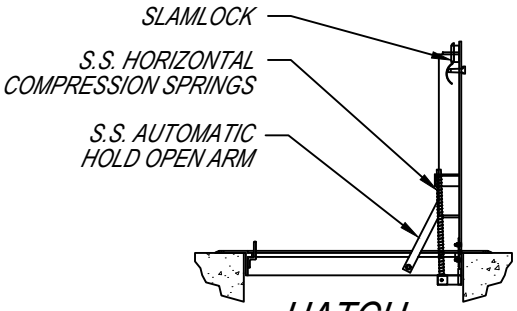
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DEPARTMENT:	WRM	REVISIONS:	DCM 2010
SCALE:	N.T.S.		JC-10-2011
DRAWN BY:	BS		JC-12-2012
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	12/2007		

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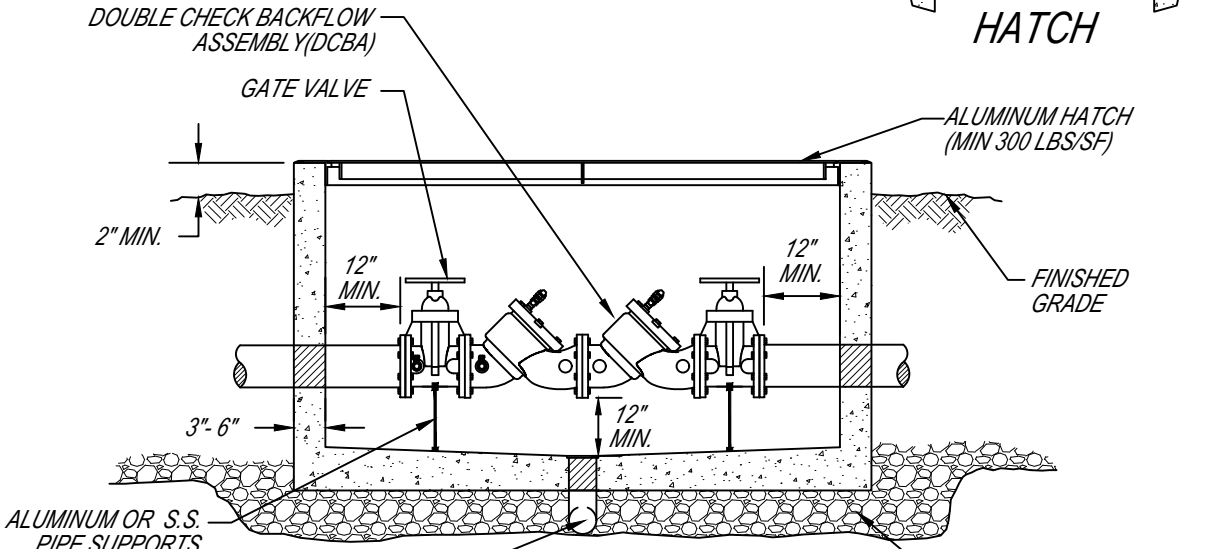
TYPICAL DOUBLE CHECK BACKFLOW ASSEMBLY (DCBA)



PLAN



HATCH



PROFILE

NOTES:

1. DOUBLE CHECK BACKFLOW ASSEMBLY SHALL BE MANUFACTURED BY AMES, WATTS, OR AN APPROVED EQUAL.
2. VAULTS SHALL BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.

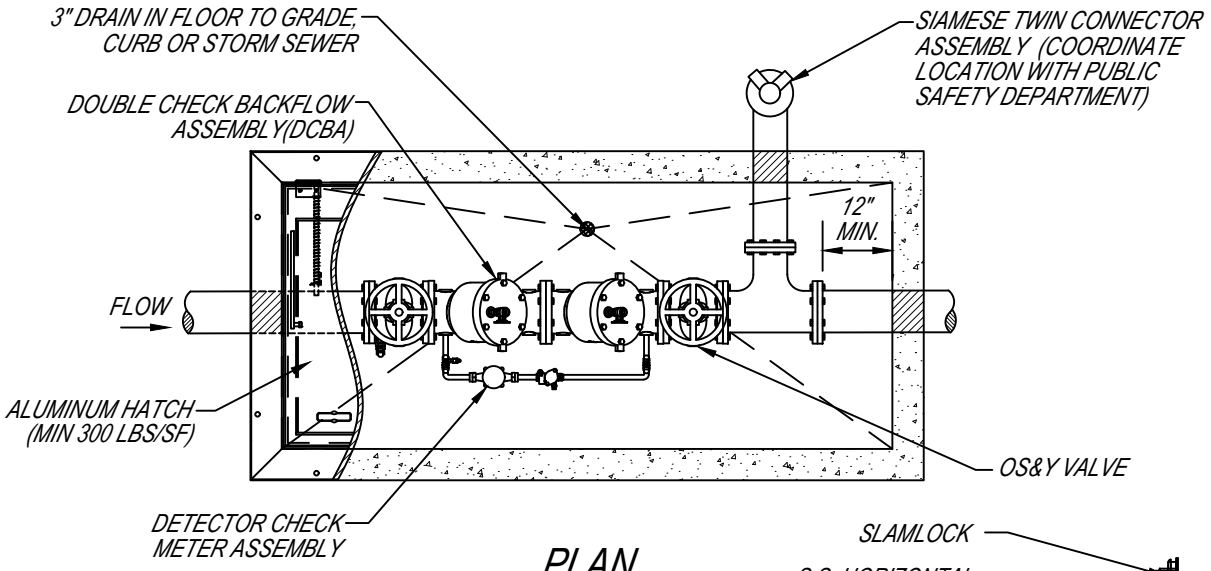
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

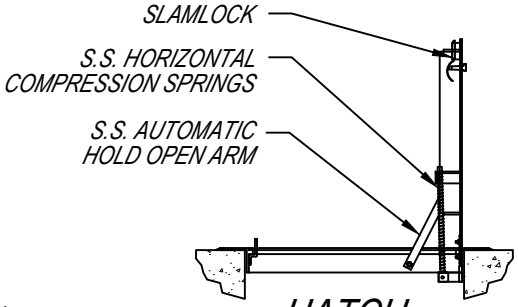
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DEPARTMENT:	WRM	REVISIONS:	DCM 2010
SCALE:	N.T.S.		JC-10-2011
DRAWN BY:	BS		
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	12/2007		

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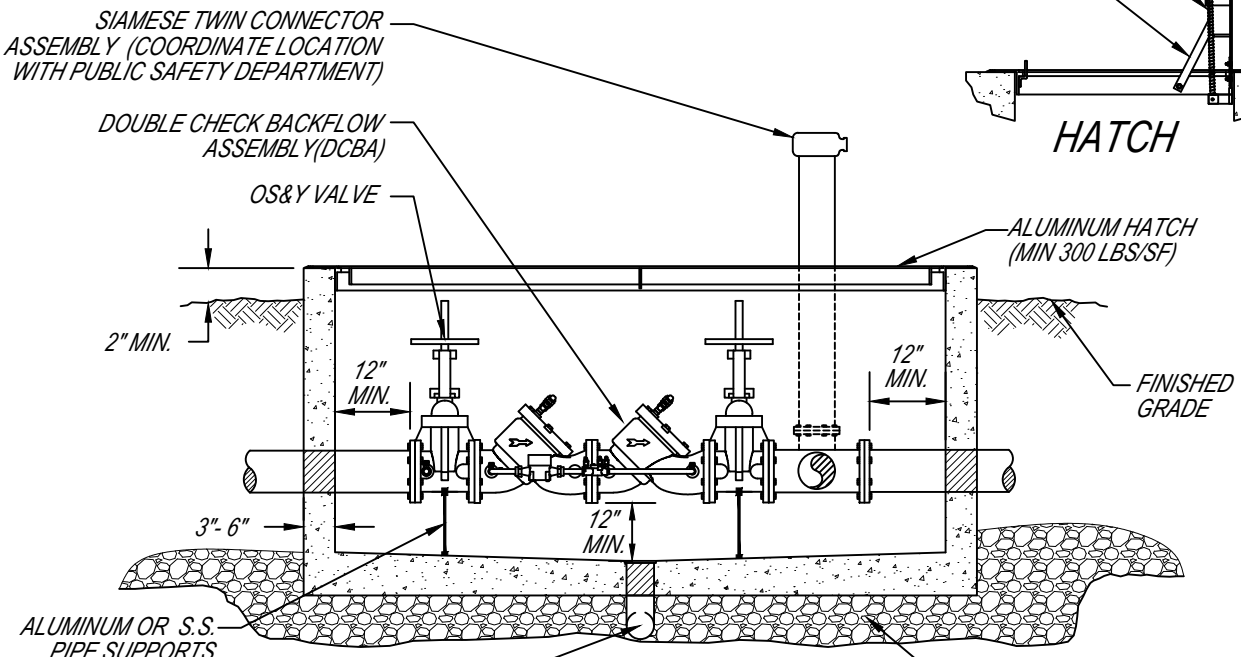
TYPICAL FIRE PROTECTION SYSTEM DCBA



PLAN



HATCH



PROFILE

NOTES:

1. DOUBLE CHECK BACKFLOW ASSEMBLY SHALL BE MANUFACTURED BY AMES, WATTS, OR AN APPROVED EQUAL.
2. VAULTS SHALL BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.

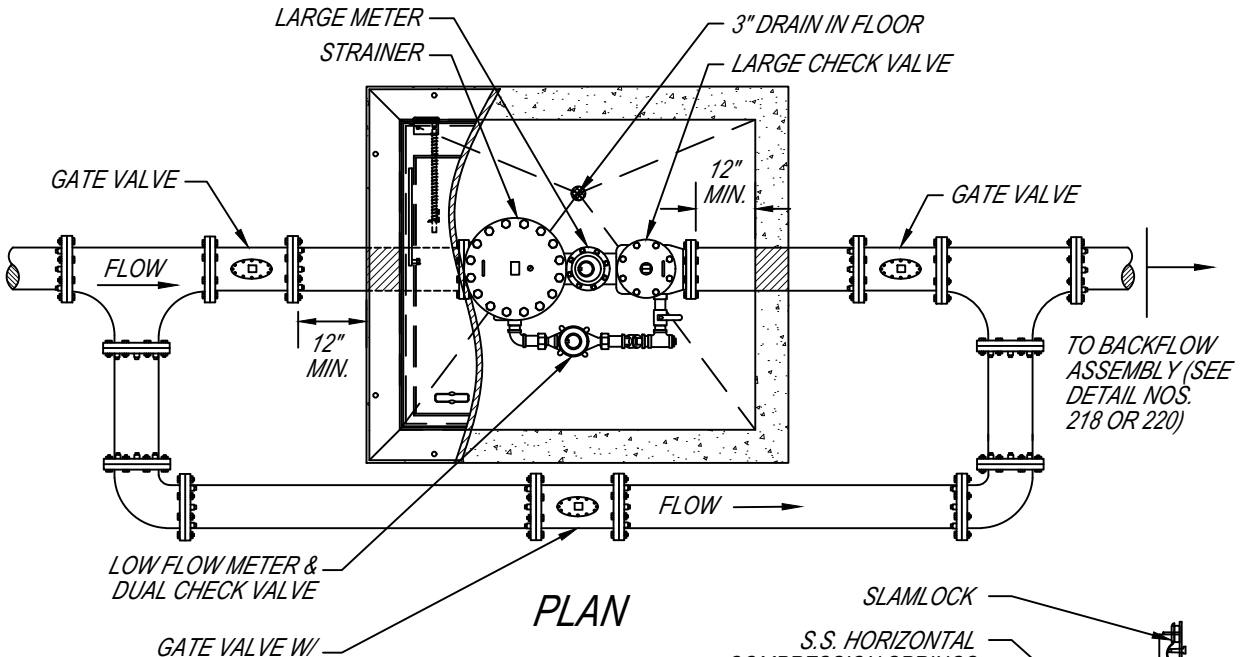
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

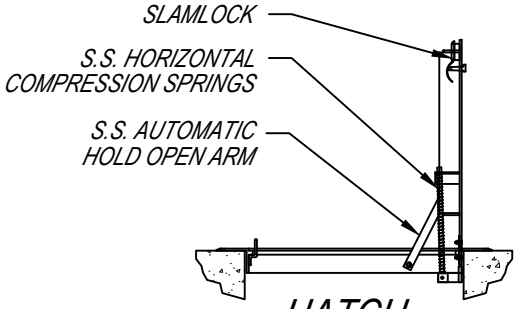
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DEPARTMENT:	WRM	REVISIONS:	DCM 2010
SCALE:	N.T.S.		JC-10-2011
DRAWN BY:	BS		
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	12/2007		

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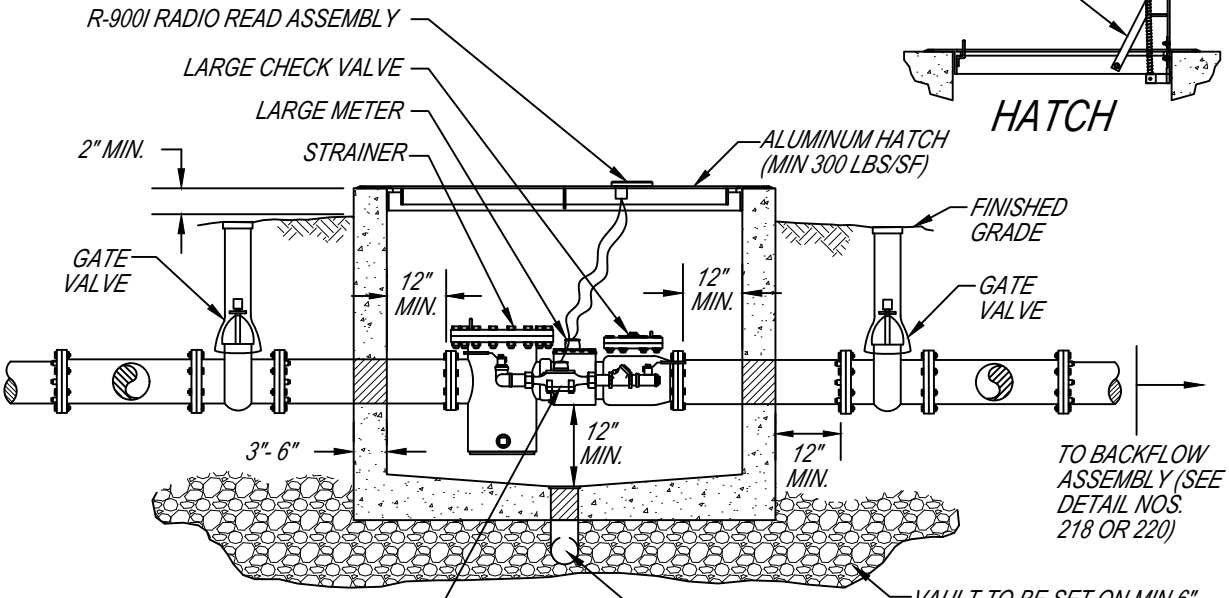
TYPICAL FIRE / DOMESTIC METER VAULT (4" AND LARGER)



PLAN



HATCH



PROFILE

NOTES:

1. COMBINATION FIRE / DOMESTIC METER SHALL BE NEPTUNE PROTECTUS III.
2. VAULTS SHALL BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.
3. THE APPROPRIATE BACKFLOW ASSEMBLY IN ACCORDANCE WITH STANDARD DETAIL NOS. 218 OR 220 SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE METER ASSEMBLY.

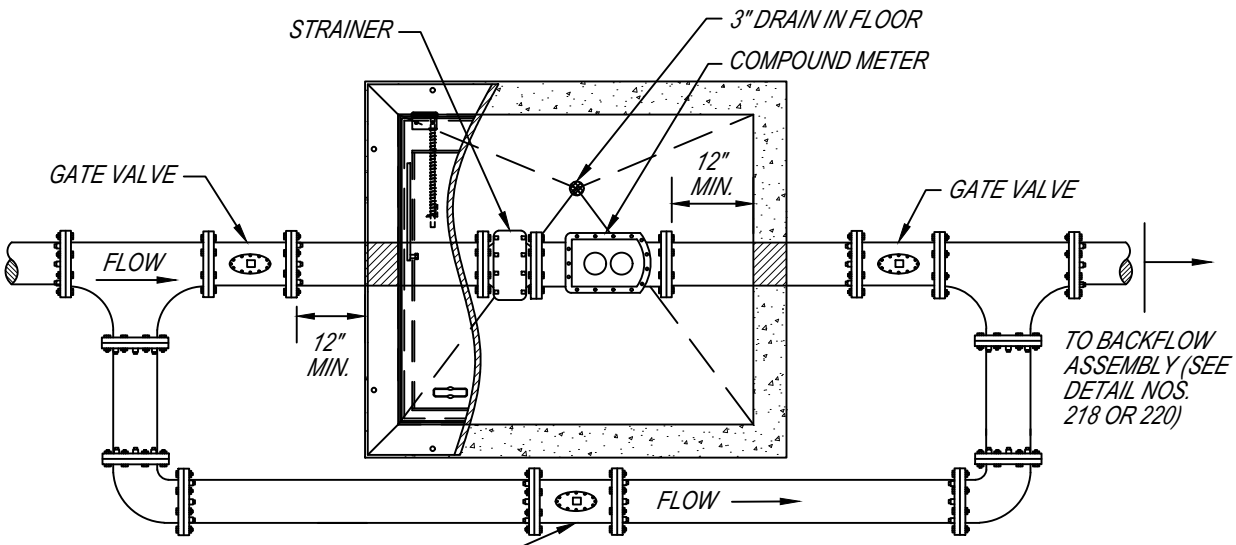
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

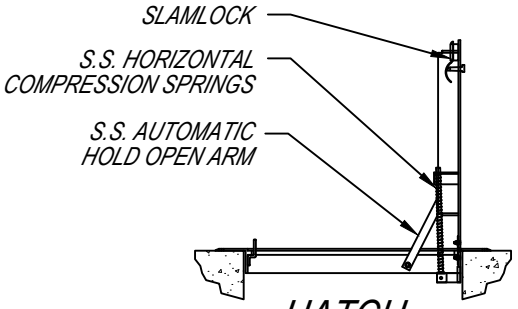
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DEPARTMENT:	WRM	REVISIONS:	DCM 2010
SCALE:	N.T.S.		JC-10-2011
DRAWN BY:	BS		
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	12/2007		

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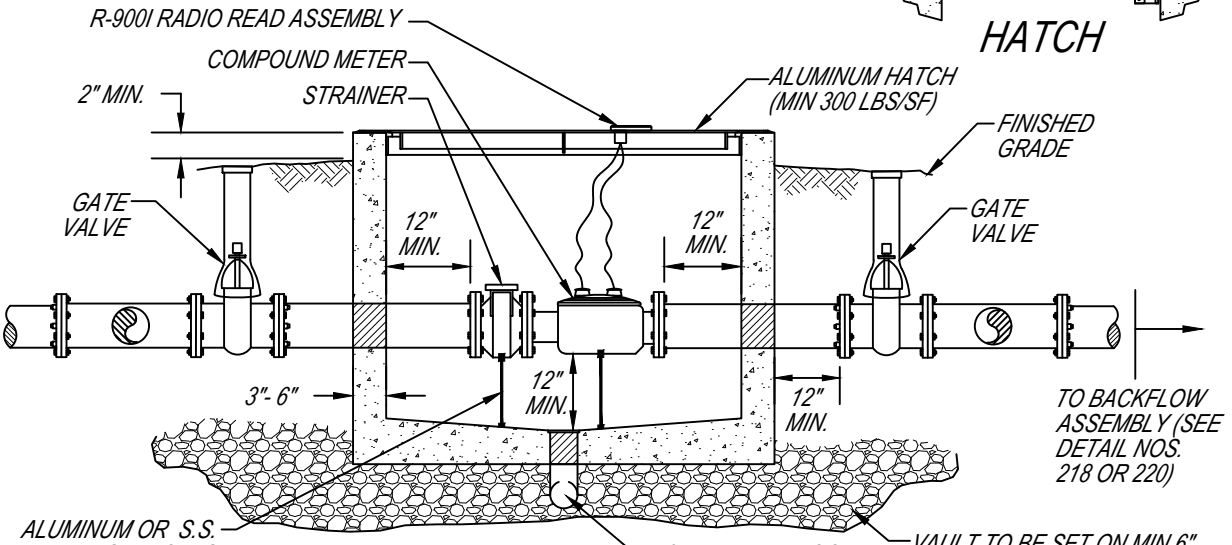
TYPICAL LARGE DOMESTIC METER VAULT (3" AND LARGER)



PLAN



HATCH



PROFILE

NOTES:

1. LARGE METER SHALL BE NEPTUNE TRU-FLOW COMPOUND METER.
2. VAULTS SHALL BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.
3. THE APPROPRIATE BACKFLOW ASSEMBLY IN ACCORDANCE WITH STANDARD DETAIL NOS. 218 OR 220 SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE METER ASSEMBLY.

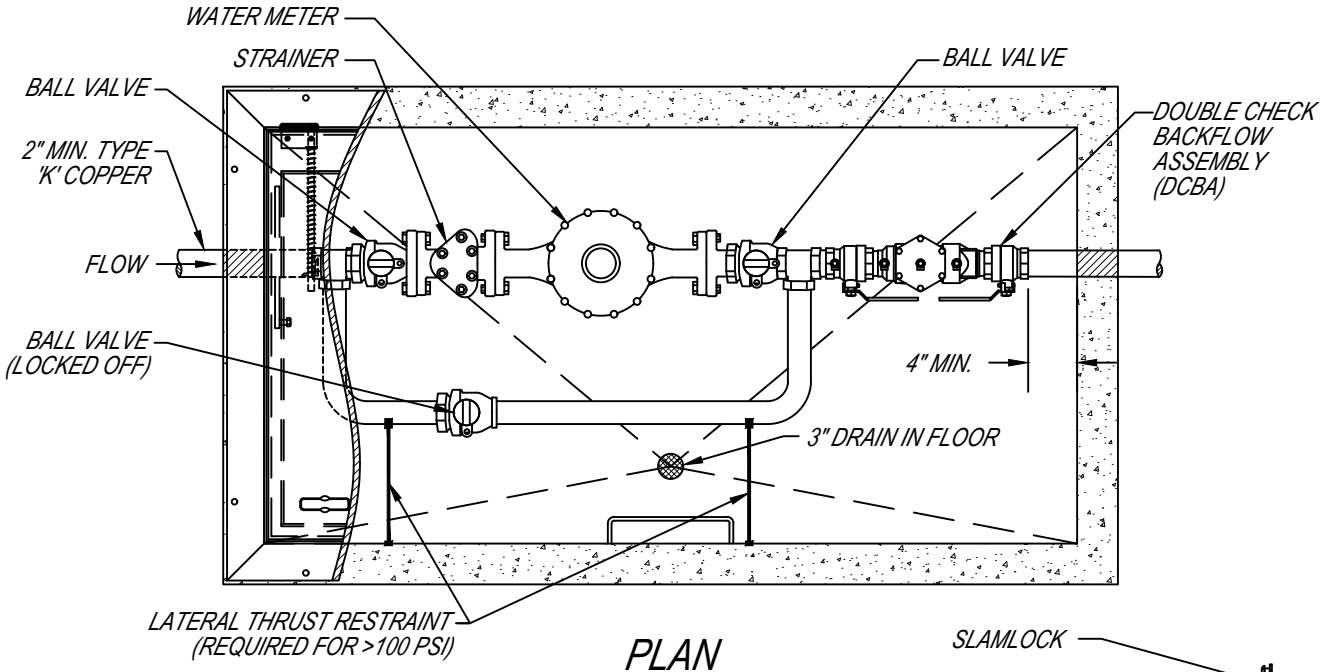
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

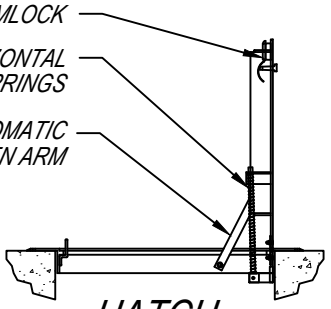
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DEPARTMENT:	WRM	REVISIONS:	DCM 2010
SCALE:	N.T.S.		JC-10-2011
DRAWN BY:	BS		
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	12/2007		

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TYPICAL 1.5" TO 2.0" METER VAULT W/ DCBA



PLAN



HATCH

PROFILE

NOTES:

1. METER SHALL BE NEPTUNE T-10 METER, UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE AWWB.
2. VAULTS SHALL BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.

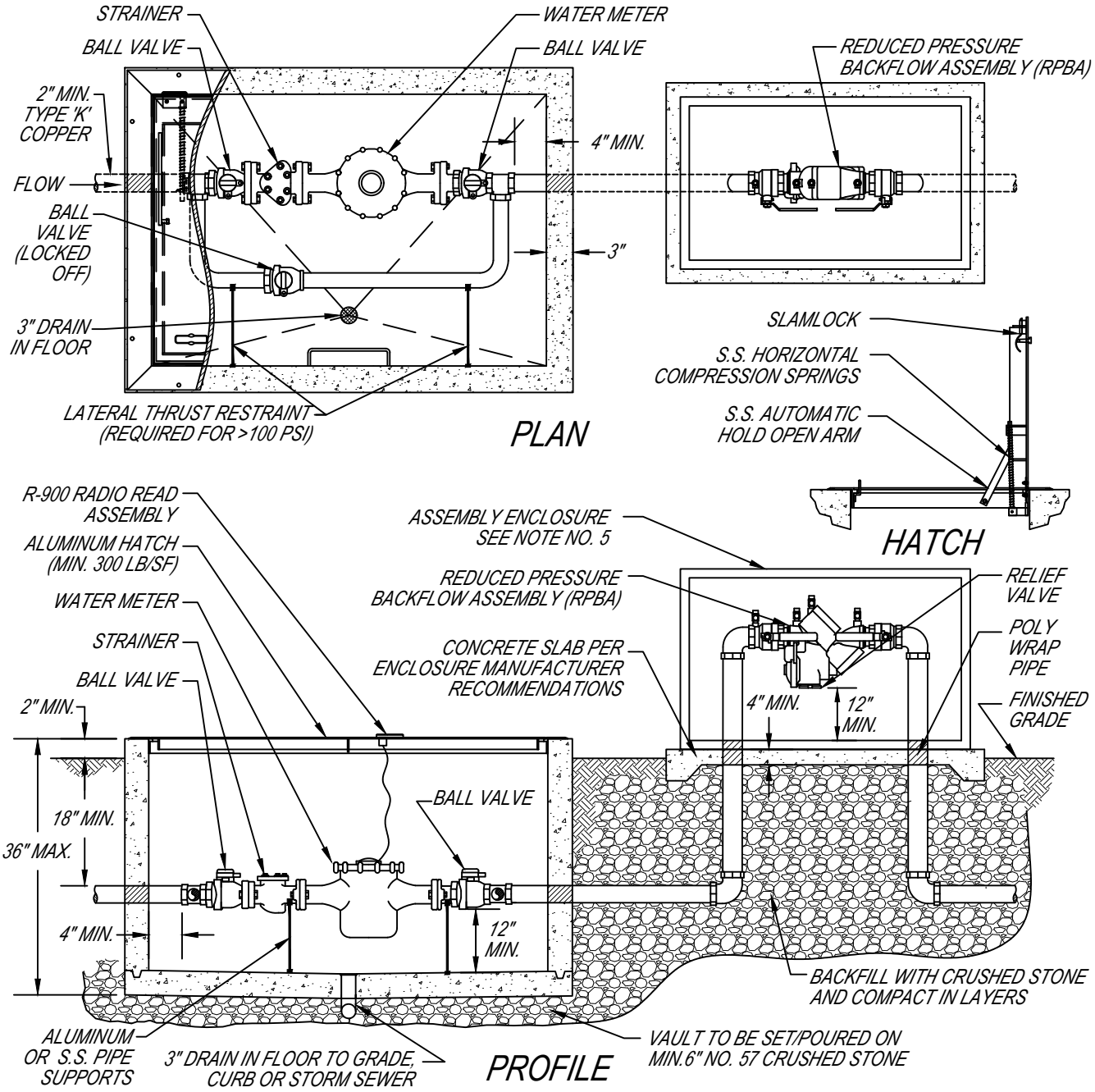
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

DRAWING TITLE:	TYPICAL 1.5" TO 2.0" METER VAULT W/ DCBA		
DEPARTMENT:	WRM	REVISIONS:	BS-09-13-07
SCALE:	N.T.S.		DCM 2010
DRAWN BY:	GM		JC-10-2011
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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TYPICAL 1.5" TO 2.0" METER VAULT W/ RPBA



NOTES:

1. METER SHALL BE NEPTUNE T-10 METER, UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE AWWB.
2. RPBA SHALL BE MANUFACTURED BY AMES, WATTS, OR AN APPROVED EQUAL.
3. VAULTS AND RPBA SHALL BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.
4. RPBA's SHALL NOT BE BURIED OR INSTALLED IN BELOW GROUND VAULTS.
5. RPBA ENCLOSURES SHALL BE CONCRETE, REINFORCED ALUMINUM, OR FIBERGLASS CONSTRUCTION AND SHALL BE INSULATED AND/OR HEATED TO PROTECT AGAINST FREEZING. ENCLOSURES APPROVED FOR INSTALLATION INCLUDE: HYDROCOWL, HOT BOX, AND LOK BOX.

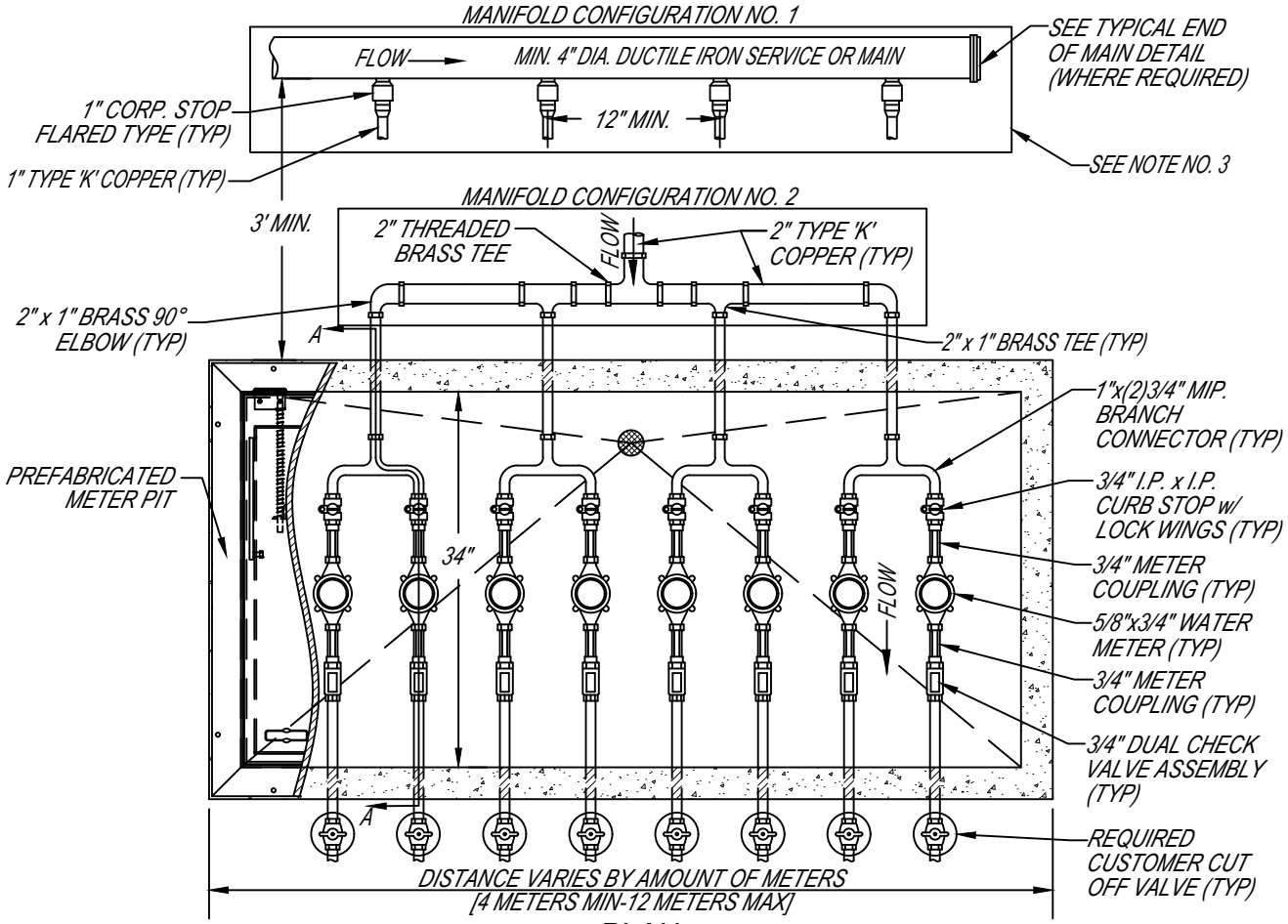
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

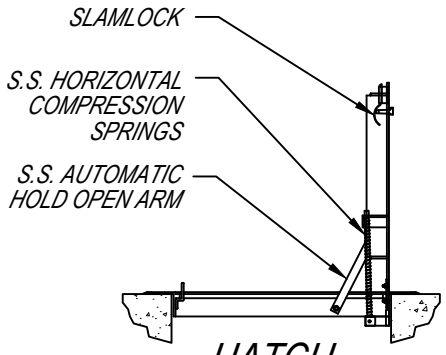
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DEPARTMENT:	WRM	REVISIONS:	BS-09-13-07
SCALE:	N.T.S.		DCM 2010
DRAWN BY:	GM		JC-10-2011
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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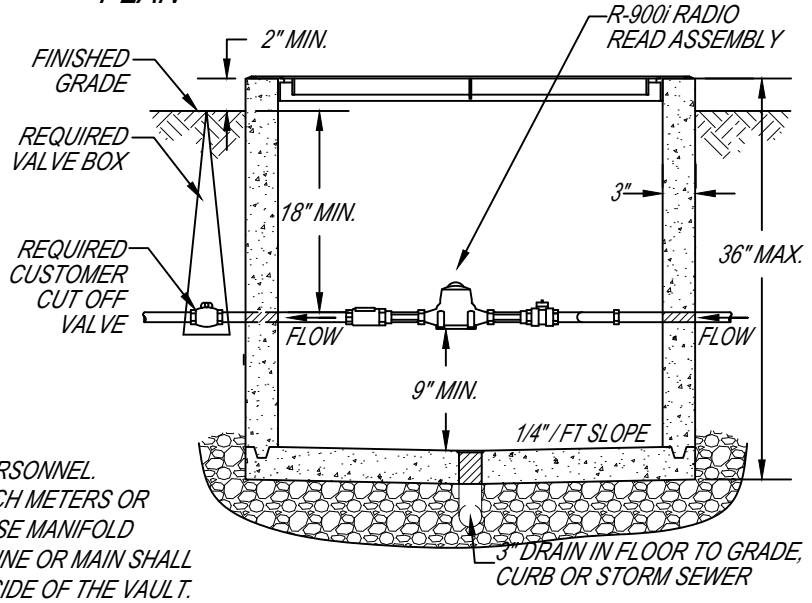
TYPICAL MULTIPLE METER VAULT



PLAN



HATCH



SECTION A - A

NOTES:

1. METER SHALL BE NEPTUNE T-10 METER.
2. VAULTS SHALL BE INSPECTED BY AWWB PERSONNEL.
3. METER PITS WITH MORE THAN EIGHT 3/4-INCH METERS OR MORE THAN FOUR 1-INCH METERS SHALL USE MANIFOLD CONFIGURATION NO. 1, AND THE SERVICE LINE OR MAIN SHALL BE INSTALLED PARALLEL TO THE SERVICE SIDE OF THE VAULT.
4. ALL LONG SIDE CONNECTIONS SHALL INSTALL A SINGLE SERVICE FROM THE MAIN TO THE MANIFOLD AT THE METER PIT.

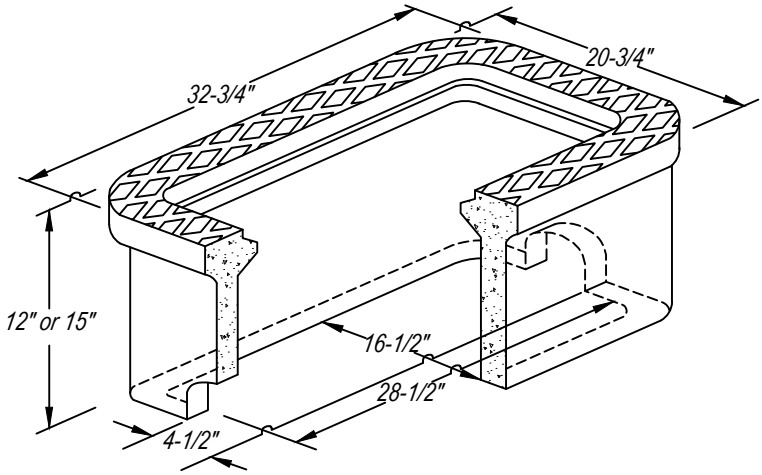
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

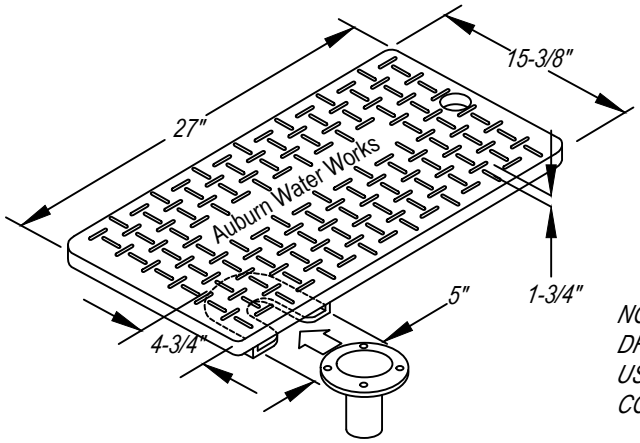
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DEPARTMENT:	WRM	REVISIONS:	DCM 2010
SCALE:	N.T.S.		JC-10-2011
DRAWN BY:	BS		
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	12/2007		

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CONCRETE SERVICE BOX

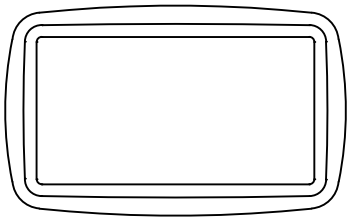


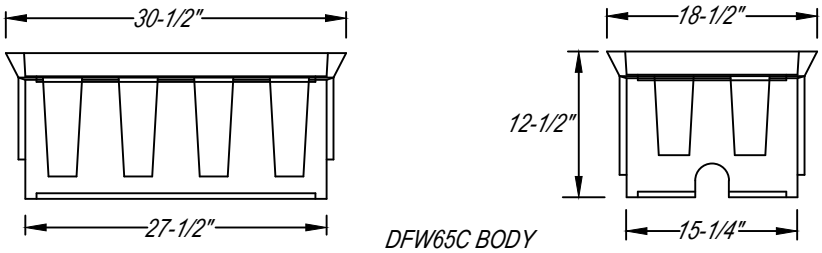
SERVICE BOX LID



NOTE:
DFW-65C LID SHALL BE USED FOR PLASTIC OR CONCRETE SERVICE BOX

REINFORCED PLASTIC SERVICE BOX





DFW65C BODY

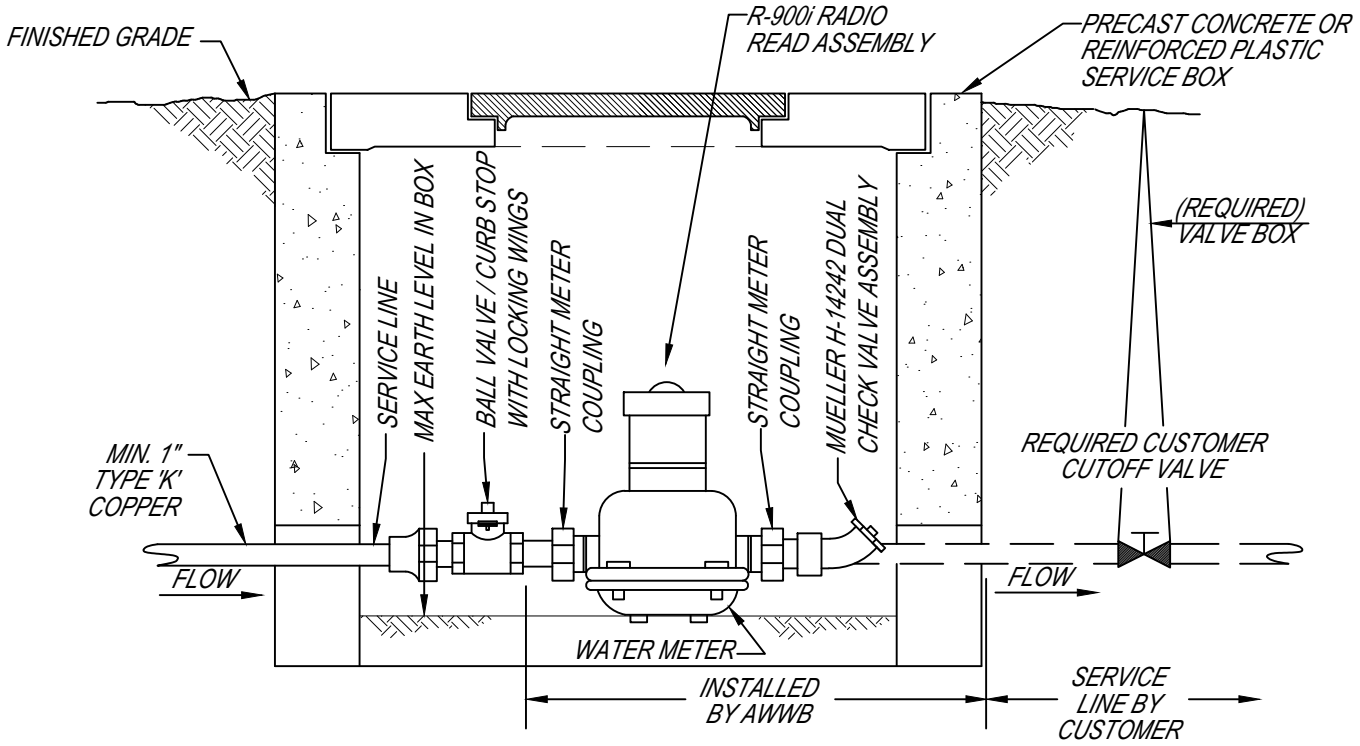
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

DRAWING TITLE:	TYPICAL SERVICE BOX AND LID		
DEPARTMENT:	WRM	REVISIONS:	BS-09-13-07
SCALE:	N.T.S.		DCM 2010
DRAWN BY:	GM		
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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TYPICAL 3/4" TO 1" METER



NOTES:

1. METER SHALL BE NEPTUNE T-10 METER.
2. CURB STOP SHALL BE LOCATED JUST INSIDE THE METER BOX TO ALLOW SUFFICIENT SPACE FOR THE WATER METER AND CHECK VALVE ASSEMBLY.

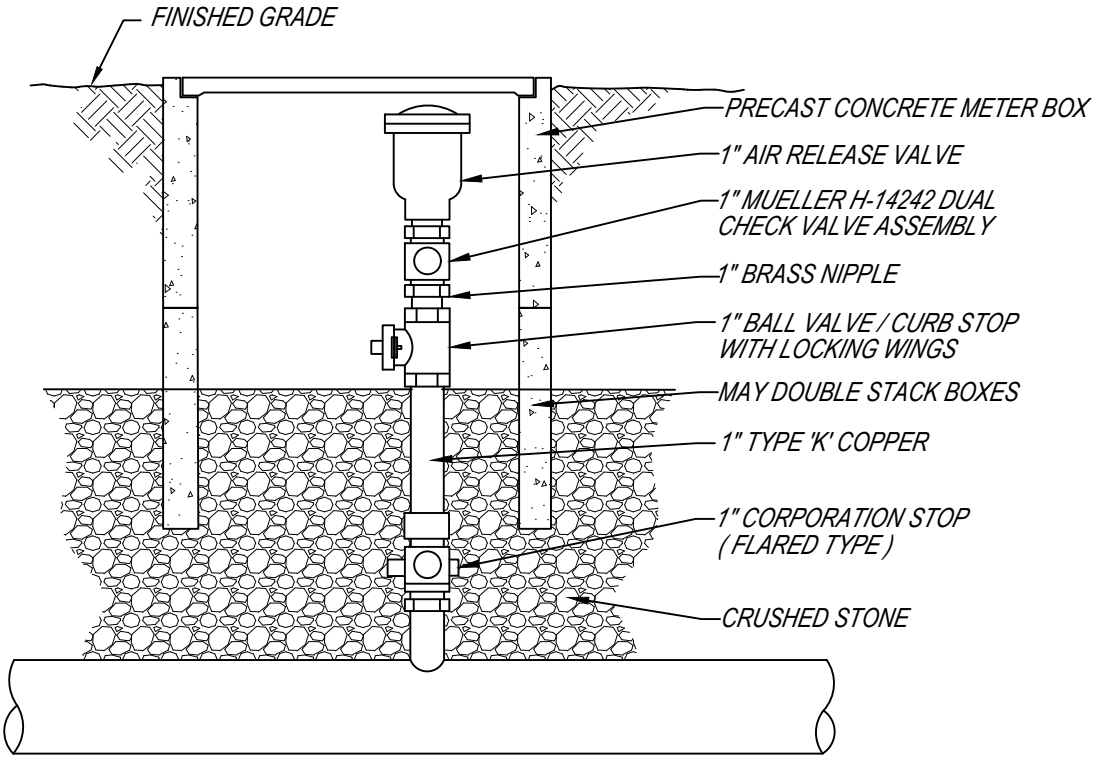
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

DRAWING TITLE:	TYPICAL 3/4" TO 1" METER		
DEPARTMENT:	WRM	REVISIONS:	12-07-2015
SCALE:	N.T.S.		DCM 2015
DRAWN BY:	GM		
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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TYPICAL AUTOMATIC AIR RELEASE VALVE



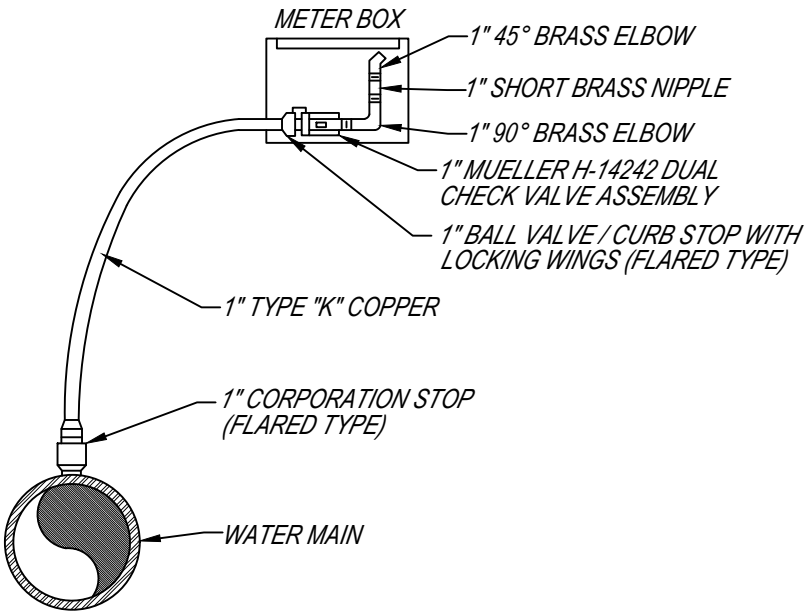
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

DRAWING TITLE:	TYPICAL AUTOMATIC AIR RELEASE VALVE		
DEPARTMENT:	WRM	REVISIONS:	BS-09-13-07
SCALE:	N.T.S.		DCM 2010
DRAWN BY:	GM		
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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TYPICAL MANUAL AIR RELEASE VALVE



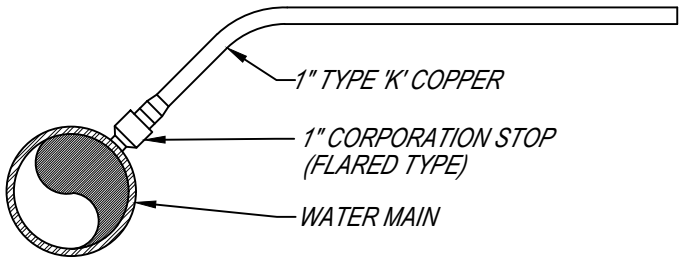
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

DRAWING TITLE:	TYPICAL MANUAL AIR RELEASE VALVE		
DEPARTMENT:	WRM	REVISIONS:	BS-09-13-07
SCALE:	N.T.S.		DCM 2010
DRAWN BY:	GM		
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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TYPICAL 1" SERVICE CONNECTION



NOTES:

1. TYPICAL 1" SERVICE CONNECTION SHALL BE USED AT A MINIMUM FOR ALL 3/4" AND 1" METER INSTALLATIONS.

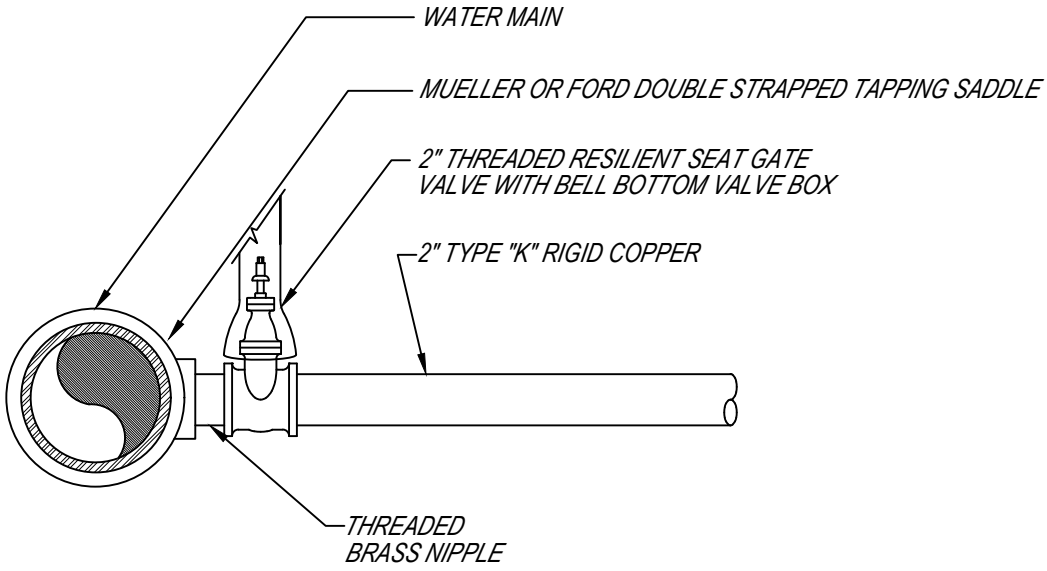
THE WATER WORKS BOARD
OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

DRAWING TITLE:	TYPICAL 1" SERVICE CONNECTION		
DEPARTMENT:	WRM	REVISIONS:	BS-09-13-07
SCALE:	N.T.S.		DCM 2010
DRAWN BY:	GM		
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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TYPICAL 2" SERVICE CONNECTION



NOTES:

1. TYPICAL 2" SERVICE CONNECTION SHALL BE USED AT A MINIMUM FOR ALL 1-1/2" AND 2" METER INSTALLATIONS.

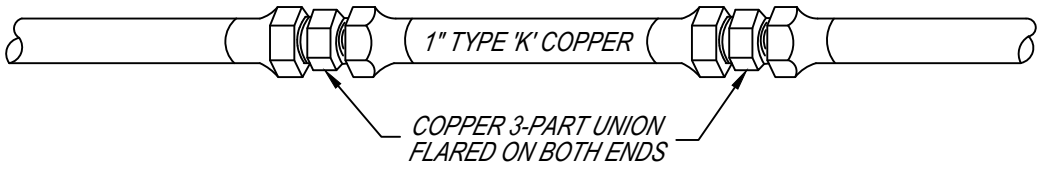
THE WATER WORKS BOARD
OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

DRAWING TITLE:	TYPICAL 2" SERVICE CONNECTION		
DEPARTMENT:	WRM	REVISIONS:	BS-09-13-07
SCALE:	N.T.S.		DCM 2010
DRAWN BY:	GM		
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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TYPICAL COPPER REPAIR (1" ONLY)



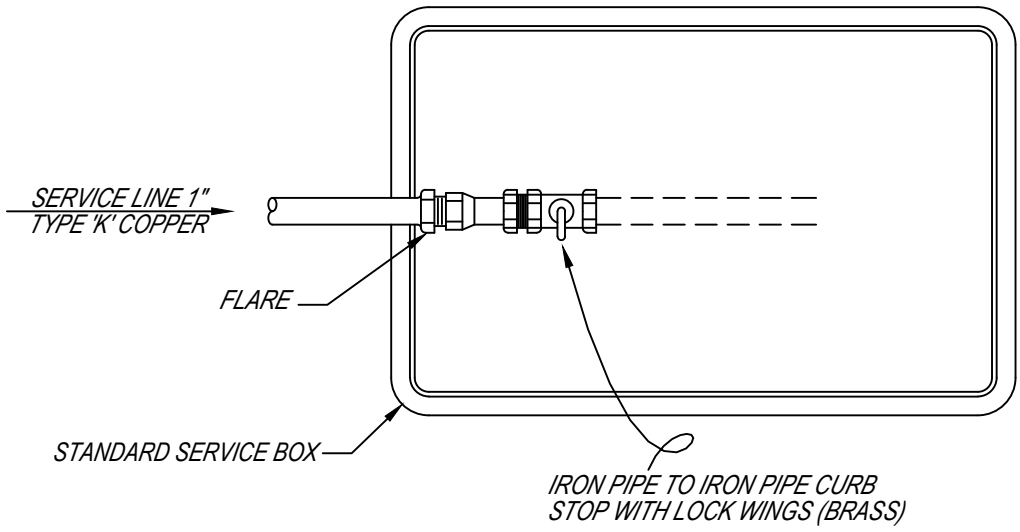
THE WATER WORKS BOARD
OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

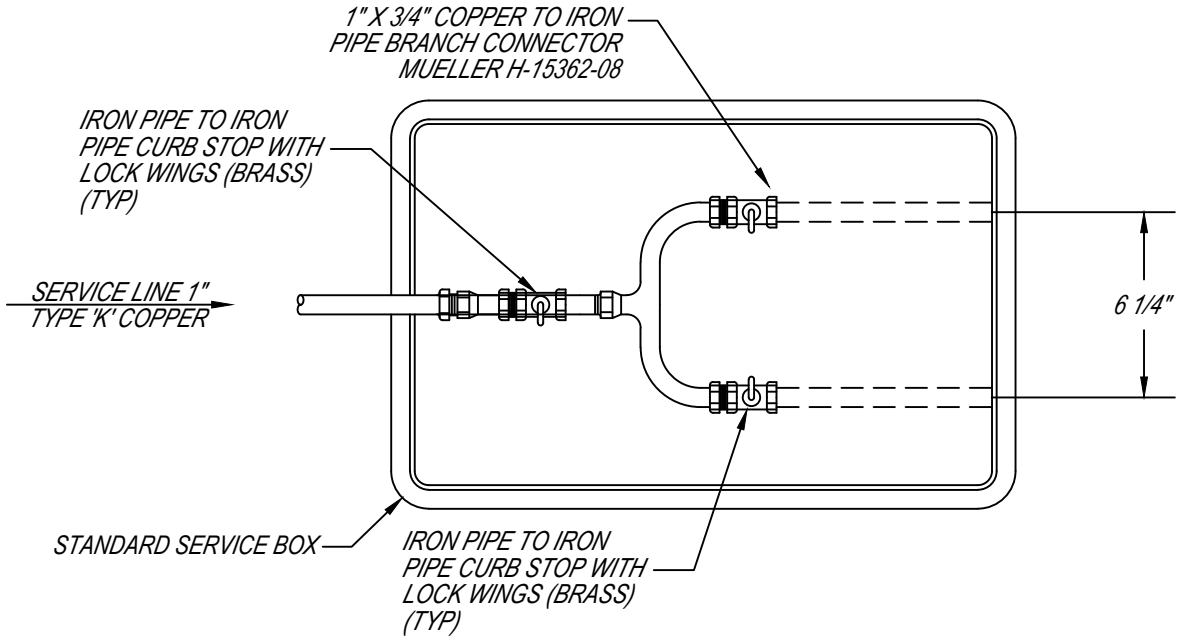
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DEPARTMENT:	WRM	REVISIONS:	BS-09-13-07
SCALE:	N.T.S.		DCM 2010
DRAWN BY:	GM		
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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TYPICAL SINGLE SERVICE CONNECTION



TYPICAL DOUBLE SERVICE CONNECTION



NOTES:

1. IN A SINGLE FAMILY DEVELOPMENT, BRANCH CONNECTORS WILL BE SET BY AWWB ONLY WHEN TWO (2) METERS HAVE BEEN REQUESTED (ONE DOMESTIC AND ONE IRRIGATION) FOR A SINGLE LOT AND ALL APPLICABLE FEES HAVE BEEN PAID
2. THE DOMESTIC METERS WILL NOT BE ALLOWED IN A SERVICE BOX.

THE WATER WORKS BOARD
OF THE CITY OF AUBURN, AL

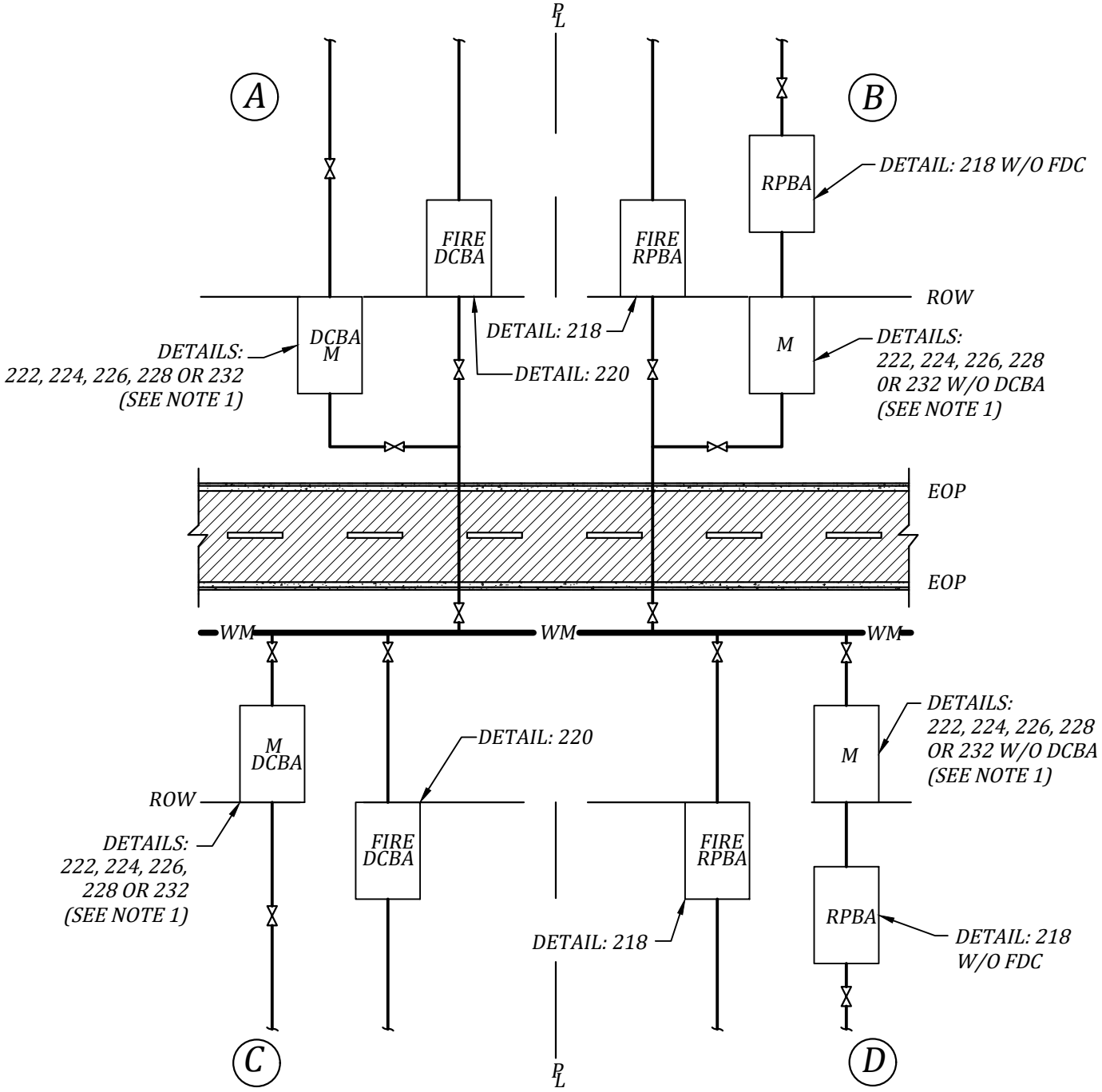
STANDARD WATER DETAILS

DRAWING TITLE:	TYPICAL SERVICE CONNECTION		
DEPARTMENT:	WRM	REVISIONS:	12-07-2015
SCALE:	N.T.S.		DCM 2010
DRAWN BY:	GM		MW-12-03-2020
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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GENERAL SERVICE CONNECTION CONFIGURATIONS

LONG SIDE TAP CONFIGURATIONS



SHORT SIDE TAP CONFIGURATIONS

NOTES:

1. *METER SHOULD BE INSTALLED BETWEEN TWO FEET (2') AND FIVE FEET (5') FROM BACK OF CURB OR BACK OF SIDEWALK (WHERE PRESENT).*

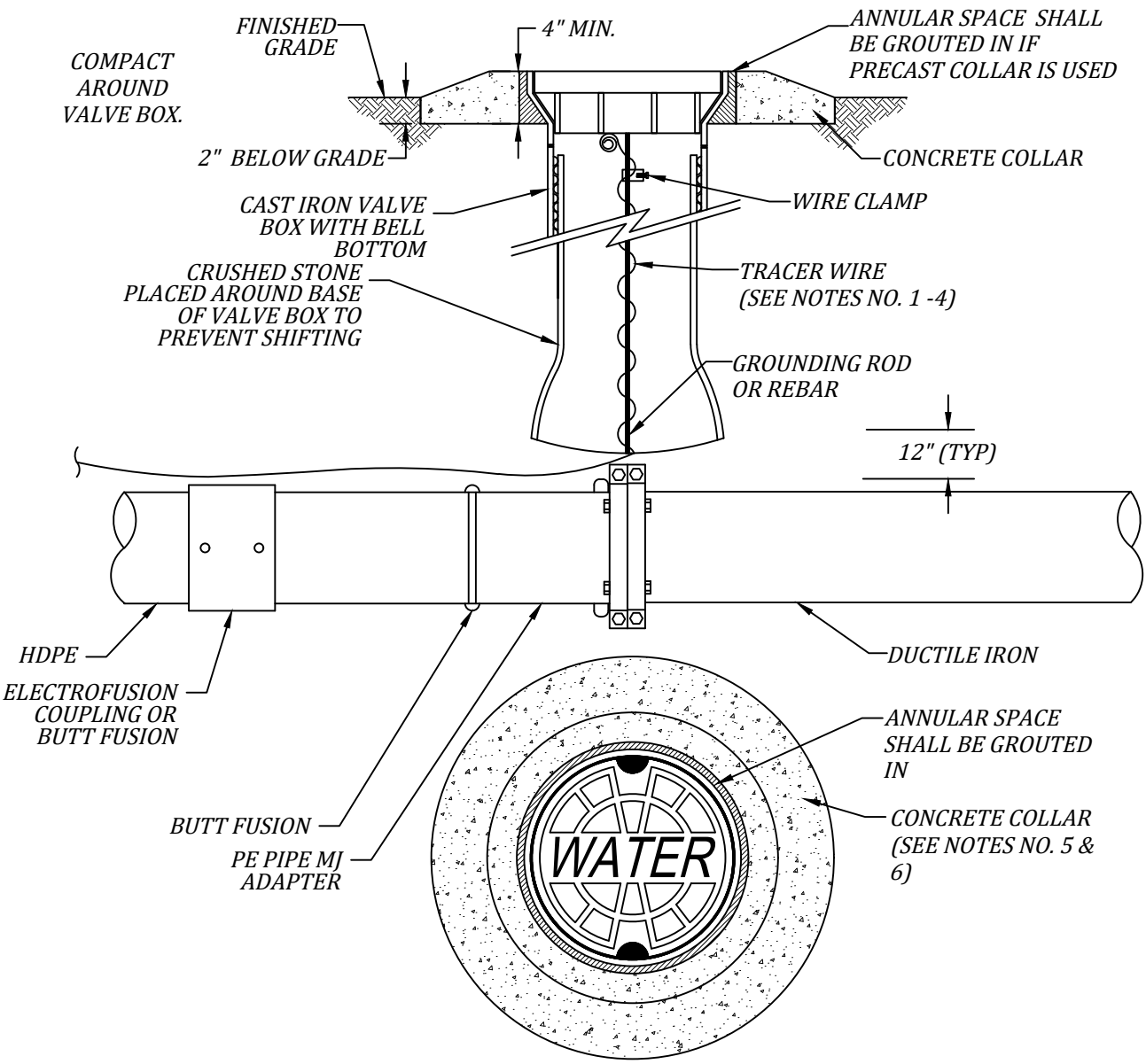
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

DRAWING TITLE: GENERAL SERVICE CONNECTION CONFIGURATIONS			
DEPARTMENT:	WRM	REVISIONS:	JP 11/2022
SCALE:	N.T.S.		
DRAWN BY:	CN		
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	DCM 2010		

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TYPICAL HDPE TO DUCTILE IRON MAIN TRANSITION



NOTES:

1. *TRACER WIRE SHALL BE BROUGHT TO GRADE AT A MINIMUM OF EVERY 500 FEET IN A VALVE BOX .*
2. *TRACER WIRE SHALL WRAP AROUND GROUNDING ROD/ REBAR INSIDE VALVE BOX.*
3. *A MINIMUM OF 12 INCHES OF EXCESS WIRE SHALL BE COILED AND LEFT IN THE VALVE BOX.*
4. *TRACER WIRE SHALL BE NO. 14 A.W.G. COPPER CLAD STEEL W/ POLYETHYLENE INSULATION.*
5. *CONCRETE COLLAR MAY BE CAST-IN-PLACE OR PRECAST AND MAY BE ROUND OR SQUARE IN SHAPE.*
6. *CONCRETE COLLAR SHALL BE A MIN. 4" THICK.*

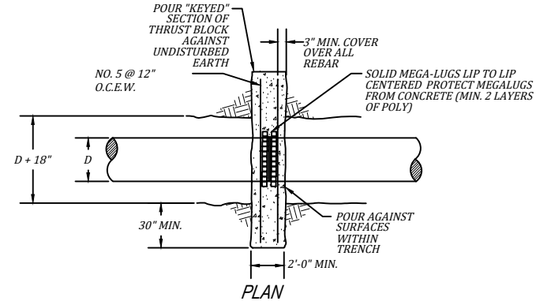
THE WATER WORKS BOARD OF THE CITY OF AUBURN, AL

STANDARD WATER DETAILS

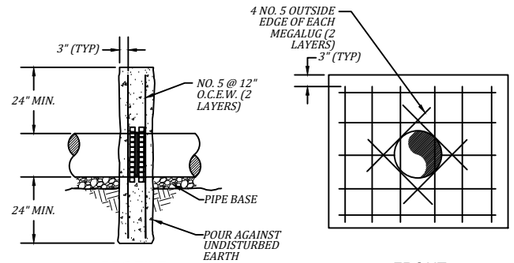
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DEPARTMENT:	WRM	REVISIONS:	
SCALE:	N.T.S.		MW-12-03-2020
DRAWN BY:	MW		MW-11-10-2021
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	DCM 2010		

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TYPICAL DEADMAN THRUST RESTRAINT



PLAN

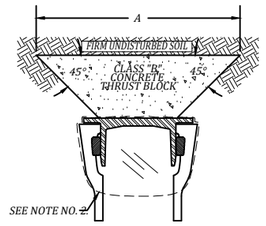


PROFILE FRONT

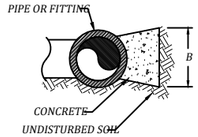
NOTES:
1. DEADMAN TO BE CENTERED ON FULL JOINT OF PIPE
2. ALL CONCRETE SHALL BE CLASS "A" (4000 PSI) IN ACCORDANCE WITH THE CITY OF AUBURN STANDARD SPECIFICATIONS
3. NO CALCIUM CHLORIDE CURING ACCELERATOR ALLOWED.
4. APPLICABLE FOR UP TO AND INCLUDING 12" DIAMETER PIPE. MAY BE USED FOR PIPES ABOVE 12" DIAMETER ON A CASE BY CASE BASIS.
5. TO BE USED ON EXISTING DUCTILE IRON OR CAST IRON PIPE IN GOOD CONDITION.

200

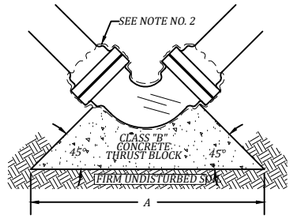
TYPICAL CONCRETE THRUST BLOCK DESIGN



BELL JOINT PLUG UNRESTRAINED TYPE



SIDE VIEW



TYPICAL BEND THRUST BLOCK

BEARING AREA

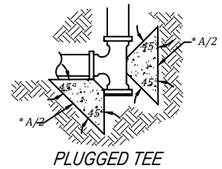
AREA (SF) AGAINST UNDISTURBED SOIL

Size	Tee, Wye/Plug or 90° Bend	45° Bend	22.5° Bend	11.5° Bend
4"	1	1	1	1
6"	3	2	1.5	1
8"	5	3	2	1.5
10"	9	5	3	2
12"	12	8	4	3
16"	22	12	5	4
BASED ON 2500 LB/ft. SOIL				
BEARING AREA (SF) = A x B 1<(A / B)<3				
<100 PSI STATIC PRESSURE (600 MSL OR HIGHER)				

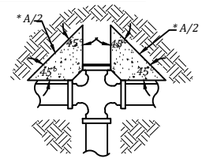
NOTES:
1. 45 DEGREE ANGLES REQUIRED FOR ALL THRUST BLOCKS.
2. NON STANDARD THRUST BLOCKING WILL REQUIRE SPECIAL DETAILING PROVIDED BY A LICENSED ENGINEER AND APPROVED BY THE CITY OF AUBURN.
3. ALL MECHANICAL JOINT FITTINGS THAT REQUIRE THRUST BLOCKS SHALL BE WRAPPED IN PLASTIC. CONCRETE SHALL NOT BE POURED OVER JOINTS.
4. CLASS "B" CONCRETE SHALL BE AS DEFINED IN THE CITY OF AUBURN STANDARD SPECIFICATIONS SECTION II.
5. THE PREFERRED METHOD OF THRUST RESTRAINT SHALL BE THROUGH THE USE OF EXTERNALLY RESTRAINED JOINT DEVICES SUCH AS MEGA -LUGS IN LIEU OF CONCRETE BLOCKING. CONCRETE BLOCKING SHALL ONLY BE PERMITTED WHERE APPROVED BY THE AWWB AND SHALL NOT BE USED IN CONJUNCTION WITH MEGA-LUG RESTRAINTS . THE APPROPRIATE LENGTH OF RESTRAINT SHALL BE CALCULATED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

202

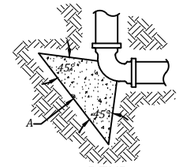
TYPICAL CONCRETE THRUST BLOCK LAYOUT



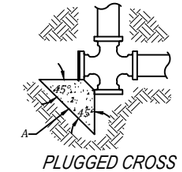
PLUGGED TEE



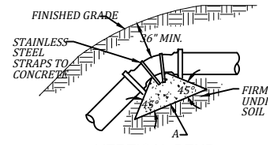
PLUGGED CROSS



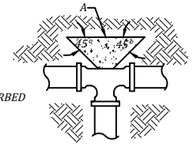
BEND



PLUGGED CROSS



VERTICAL BEND (AGAINST DISTURBED SOIL)

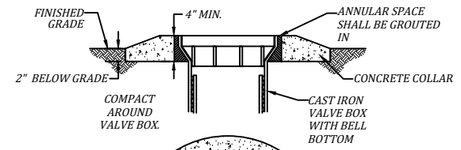


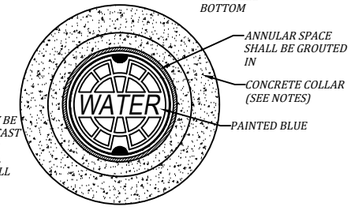
TEE

NOTES:
1. 45 DEGREE ANGLES REQUIRED FOR ALL THRUST BLOCKS.
2. NON STANDARD THRUST BLOCKING WILL REQUIRE SPECIAL DETAILING PROVIDED BY A LICENSED ENGINEER AND APPROVED BY THE CITY OF AUBURN.
3. ALL MECHANICAL JOINT FITTINGS THAT REQUIRE THRUST BLOCKS SHALL BE WRAPPED IN PLASTIC. CONCRETE SHALL NOT BE POURED OVER JOINTS.
4. CLASS "B" CONCRETE SHALL BE AS DEFINED IN THE CITY OF AUBURN STANDARD SPECIFICATIONS SECTION II.
5. THE PREFERRED METHOD OF THRUST RESTRAINT SHALL BE THROUGH THE USE OF EXTERNALLY RESTRAINED JOINT DEVICES SUCH AS MEGA -LUGS IN LIEU OF CONCRETE BLOCKING. CONCRETE BLOCKING SHALL ONLY BE PERMITTED WHERE APPROVED BY THE AWWB AND SHALL NOT BE USED IN CONJUNCTION WITH MEGA-LUG RESTRAINTS . THE APPROPRIATE LENGTH OF RESTRAINT SHALL BE CALCULATED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.

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TYPICAL VALVE BOX INSTALLATION

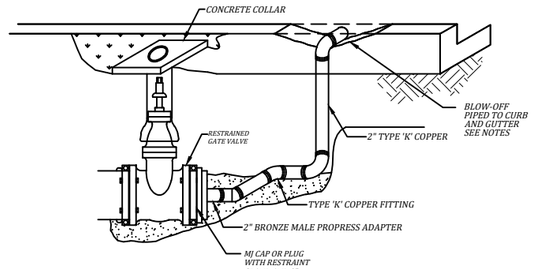




NOTE:
1. CONCRETE COLLAR MAY BE CAST-IN-PLACE OR PRECAST AND MAY BE ROUND OR SQUARE IN SHAPE.
2. CONCRETE COLLAR SHALL BE A MIN. 4" THICK.

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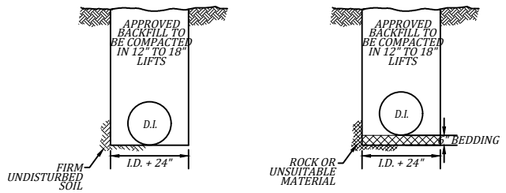
TYPICAL END OF MAIN BLOWOFF ASSEMBLY



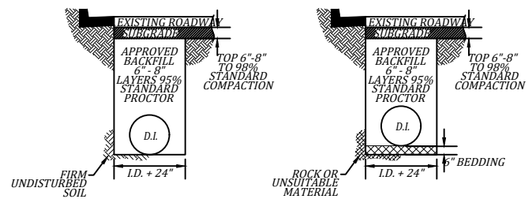
NOTES:
1. THE PREFERRED METHOD OF THRUST RESTRAINT SHALL BE THROUGH THE USE OF EXTERNALLY RESTRAINED JOINT DEVICES SUCH AS MEGA -LUGS IN LIEU OF CONCRETE BLOCKING. CONCRETE BLOCKING SHALL ONLY BE PERMITTED WHERE APPROVED BY THE AWWB AND SHALL NOT BE USED IN CONJUNCTION WITH MEGA-LUG RESTRAINTS . THE APPROPRIATE LENGTH OF RESTRAINT SHALL BE CALCULATED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
2. BLOW OFF SHALL BE ANGLED TO PERFECT FLOW AWAY FROM BLOW-OFF AND VALVE , WHERE POSSIBLE
3. VALVE SHALL BE LOCATED WITHIN 24" OF THE BACK OF CURB, MAY BE PLACED IN PAVEMENT.
4. THE BLOW-OFF SHALL BE PLACED WITH AT LEAST 1' CLEARANCE BETWEEN GUTTER AND BOTTOM OF PIPE AND SHOULD BE POINTED SLIGHTLY UPWARD

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BEDDING REQUIREMENTS FOR TRENCHES



NON-STREET TRENCH



STREET TRENCH

NOTES:
1. BEDDING MATERIALS SHALL BE 1/4" TO 1 1/2" GRADED CRUSHED STONE SUCH AS: 56,57,6,67,68,7,OR 78, STONE PER ALDOT STANDARD SPECS.
2. WIDTH VARIES BASED ON WALL STABILITY. STABLE WALLS WIDTH AS NEEDED TO JOIN PIPE AND COMPACT HAUNCHING AND INITIAL BACKFILL. UNSTABLE WALLS: WIDTH TO BE A MINIMUM OF FIVE TIMES PIPE DIAMETER.
3. FLOWABLE FILL CAN BE USED AS BACKFILL, BUT MUST HAVE PRIOR APPROVAL AND MUST BE ALLOWED TO SET FOR 24 HOURS PRIOR TO TOPPING.
4. APPROVED BACKFILL MATERIAL INCLUDES 825 B, FLOWABLE FILL AND APPROVED DIRT. ALTERNATIVE MATERIAL MUST BE APPROVED BY PROJECT MANAGER PRIOR TO USE.

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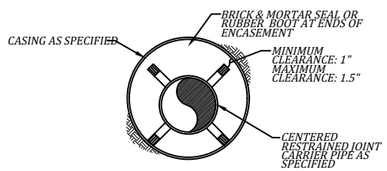
TYPICAL BORE ENCASEMENT

CARRIER PIPE		SPACER	STEEL ENCASEMENT	
NOMINAL PIPE DIAMETER	STANDARD PIPE BELL O.D.*	CASING SPACER BAND WIDTH	MINIMUM CASING THICKNESS	MINIMUM CASING DIAMETER**
4	6.40	8	0.25	14
6	8.60	8	0.25	16
8	11.16	8	0.25	18
10	13.25	8	0.25	20
12	15.22	8	0.25	22
14	17.73	12	0.25	24
16	19.86	12	0.3125	26
18	22.16	12	0.3125	30
20	24.28	12	0.3125	32
24	28.50	12	0.3125	36
30	34.95	12	0.5	42
36	41.37	12	0.5	48

ALL SIZES INDICATED ARE IN INCHES

*PIPE BELL OUTSIDE DIAMETER BASED ON PRESSURE CLASS 350 DUCTILE IRON PIPE.

**CASING DIAMETERS BASED ON BEING A MINIMUM OF 6 INCHES GREATER THAN THE OUTER DIAMETER OF THE JOINT BELL, TO THE NEAREST EVEN SIZE.

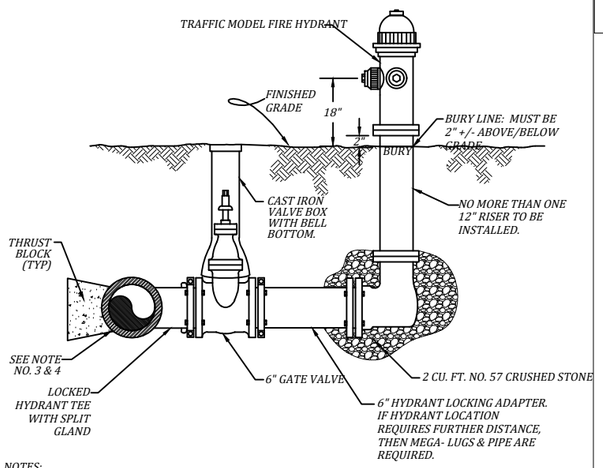


CASING SECTION

NOTES
1. ALL SPACER BANDS SHALL BE MADE FROM T-304 STAINLESS STEEL OF A MINIMUM 14 GAUGE THICKNESS.
2. ALL SPACERS SHALL HAVE A SYNTHETIC RUBBER OR PVC LINER TO INSULATE THE PIPELINE FROM THE SPACER.
3. ALL SPACERS SHALL HAVE 1.5" WIDE GLASS REINFORCED PLASTIC OR UHMW POLYMER RUNNERS TO INSULATE THE SPACER.
4. SPACERS TO BE MANUFACTURED BY CASCADE WATERWORKS MFG. CO. (PSI) PIPELINE SEAL AND INSULATOR, INC. OR EQUAL.
5. 6" THRU 12" DIAMETER PIPELINE SHALL USE 8" WIDE BANDS: GREATER THAN 12" DIAMETER PIPELINES SHALL USE 12" WIDE BANDS.
6. CENTERED RESTRAINED CASING SPACERS SHALL BE SPACED AT A MAXIMUM OF TEN FEET APART WITH A MINIMUM OF TWO SPACERS PER JOINT OF PIPE.

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TYPICAL FIRE HYDRANT INSTALLATION



NOTES:
1. ALL FIRE HYDRANTS SHALL HAVE NATIONAL STANDARD THREADS, 4 1/2-INCH STEAMER & 2 1/2-INCH HOSE NOZZLE, AND SHALL BE MUELLER CENTURION, OR AMERICAN DARLING B-84-B, OR APPROVED EQUAL. BRONZE TO BRONZE SEATED. EPOXY COATED SHOES. WEATHER CAPS SHALL NOT BE MADE OF RUBBER.
2. ALL FIRE HYDRANTS SHALL BE LEVELED AND PLUMBED DURING INSTALLATION.
3. ALL MECHANICAL JOINT FITTINGS THAT REQUIRE THRUST BLOCKS SHALL BE WRAPPED IN PLASTIC. CONCRETE SHALL NOT BE POURED OVER JOINTS.
4. THE PREFERRED METHOD OF THRUST RESTRAINT SHALL BE THROUGH THE USE OF EXTERNALLY RESTRAINED JOINT DEVICES SUCH AS MEGA -LUGS IN LIEU OF CONCRETE BLOCKING. CONCRETE BLOCKING SHALL ONLY BE PERMITTED WHERE APPROVED BY THE AWWB AND SHALL NOT BE USED IN CONJUNCTION WITH MEGA-LUG RESTRAINTS . THE APPROPRIATE LENGTH OF RESTRAINT SHALL BE CALCULATED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
5. USE MEGA-LUGS BETWEEN HYDRANT AND GATE VALVE.
6. HYDRANT LOCKING TEE TO BE USED IN LIEU OF STANDARD M.J. TEE ON ALL FIRE HYDRANT CONNECTIONS.

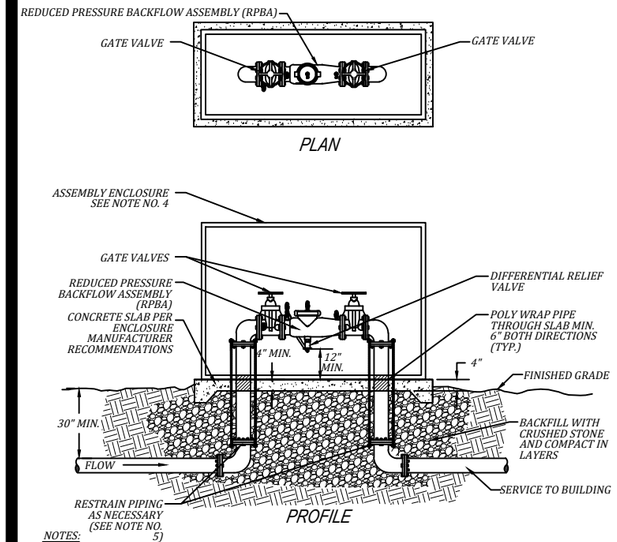
214

STANDARD DETAILS: WATER - SHEET 1 OF 4

PROJECT TITLE:

DEPARTMENT:	WRM	REVISIONS:	GM-04/30
SCALE:	N.T.S.		BS-10-25-
DRAWN BY:	GM		DCM 201
REVIEWED BY:	JC		JC-10-201
APPROVED BY:	EC		JC-12-201
IMPLEMENTED:	JANUARY 2008		MW-12-202

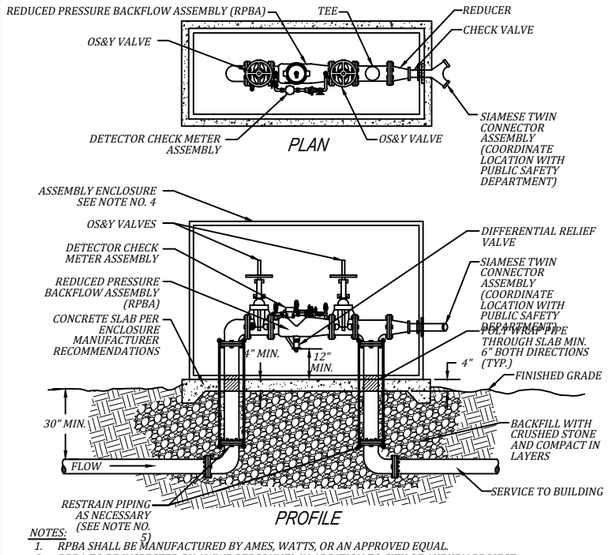
TYPICAL REDUCED PRESSURE BACKFLOW ASSEMBLY (RPBA)



NOTES:

1. RPBA SHALL BE MANUFACTURED BY AMES, WATTS, OR AN APPROVED EQUAL.
2. RPBA TO BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.
3. RPBA's SHALL NOT BE BURIED OR INSTALLED IN BELOW GROUND VAULTS.
4. RPBA ENCLOSURES SHALL BE CONCRETE, REINFORCED ALUMINUM, OR FIBERGLASS CONSTRUCTION AND SHALL BE INSULATED AND/OR HEATED SO AS TO ENSURE AGAINST FREEZING. ENCLOSURES APPROVED FOR INSTALLATION INCLUDE: HYDROCOWL, HOT BOX, AND LOK BOX.
5. RESTRAINT SYSTEM SHALL BE DESIGNED FOR SPECIFIC INSTALLATION CONDITIONS. WHERE STATIC PRESSURES EXCEED 100 PSI, MEGA-LUG RESTRAINTS USED ON VERTICAL BENDS SHALL BE REINFORCED WITH S.S. RODS.

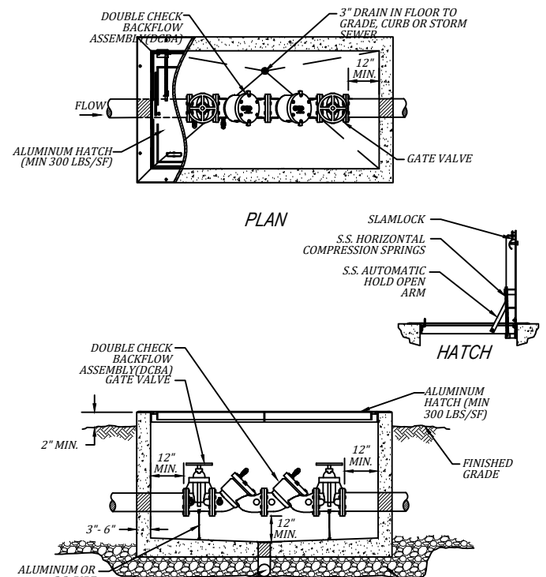
TYPICAL FIRE PROTECTION SYSTEM RPBA



NOTES:

1. RPBA SHALL BE MANUFACTURED BY AMES, WATTS, OR AN APPROVED EQUAL.
2. RPBA TO BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.
3. RPBA's SHALL NOT BE BURIED OR INSTALLED IN BELOW GROUND VAULTS.
4. RPBA ENCLOSURES SHALL BE CONCRETE, REINFORCED ALUMINUM, OR FIBERGLASS CONSTRUCTION AND SHALL BE INSULATED AND/OR HEATED TO PROTECT AGAINST FREEZING. ENCLOSURES APPROVED FOR INSTALLATION INCLUDE: HYDROCOWL, HOT BOX, AND LOK BOX.
5. RESTRAINT SYSTEM SHALL BE DESIGNED FOR SPECIFIC INSTALLATION CONDITIONS. WHERE STATIC PRESSURES EXCEED 100 PSI, MEGA-LUG RESTRAINTS USED ON VERTICAL BENDS SHALL BE REINFORCED WITH S.S. RODS.

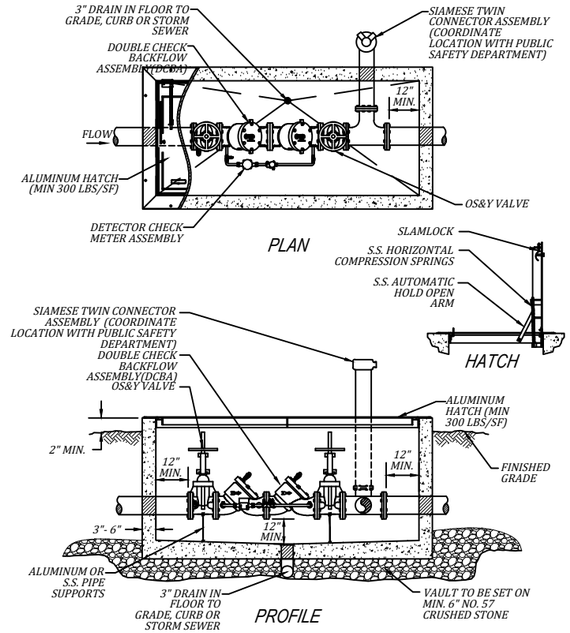
TYPICAL DOUBLE CHECK BACKFLOW ASSEMBLY (DCBA)



NOTES:

1. DOUBLE CHECK BACKFLOW ASSEMBLY SHALL BE MANUFACTURED BY AMES, WATTS, OR AN APPROVED EQUAL.
2. VAULTS SHALL BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.

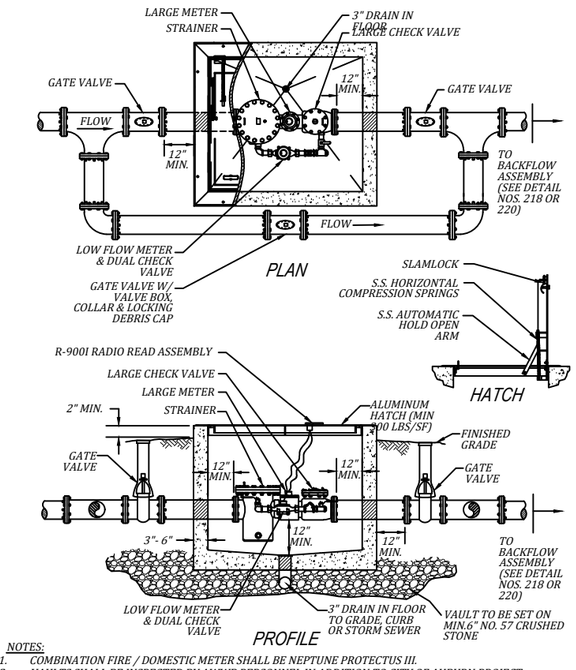
TYPICAL FIRE PROTECTION SYSTEM DCBA



NOTES:

1. DOUBLE CHECK BACKFLOW ASSEMBLY SHALL BE MANUFACTURED BY AMES, WATTS, OR AN APPROVED EQUAL.
2. VAULTS SHALL BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.

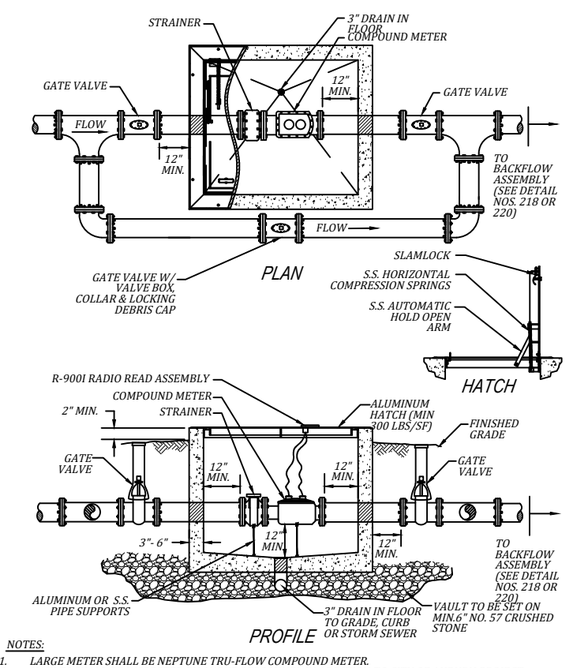
TYPICAL FIRE / DOMESTIC METER VAULT (4" AND LARGER)



NOTES:

1. COMBINATION FIRE / DOMESTIC METER SHALL BE NEPTUNE PROTECTUS III.
2. VAULTS SHALL BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.
3. THE APPROPRIATE BACKFLOW ASSEMBLY IN ACCORDANCE WITH STANDARD DETAIL NOS. 218 OR 220 SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE METER ASSEMBLY.

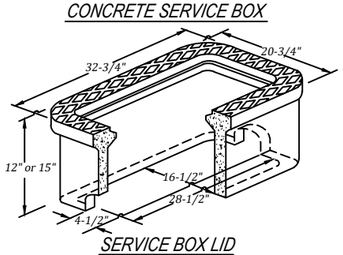
TYPICAL LARGE DOMESTIC METER VAULT (3" AND LARGER)



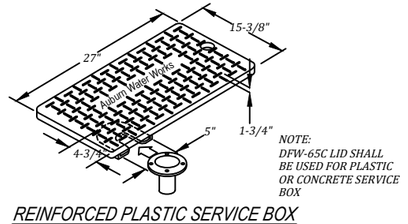
NOTES:

1. LARGE METER SHALL BE NEPTUNE TRU-FLOW COMPOUND METER.
2. VAULTS SHALL BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.
3. THE APPROPRIATE BACKFLOW ASSEMBLY IN ACCORDANCE WITH STANDARD DETAIL NOS. 218 OR 220 SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE METER ASSEMBLY.

CONCRETE SERVICE BOX

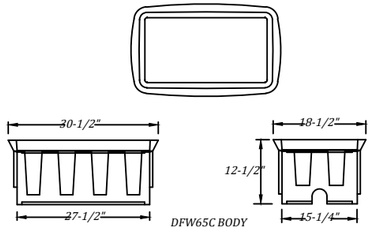


SERVICE BOX LID

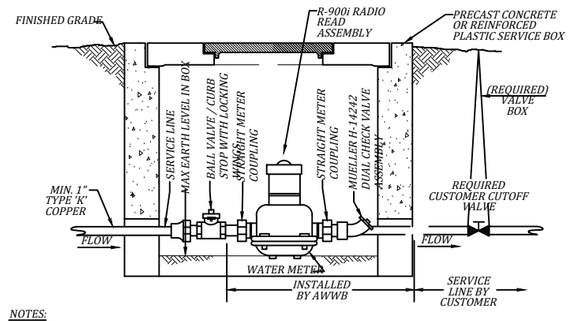


NOTE: DFW-65C LID SHALL BE USED FOR PLASTIC OR CONCRETE SERVICE BOX

REINFORCED PLASTIC SERVICE BOX



TYPICAL 3/4" TO 1" METER



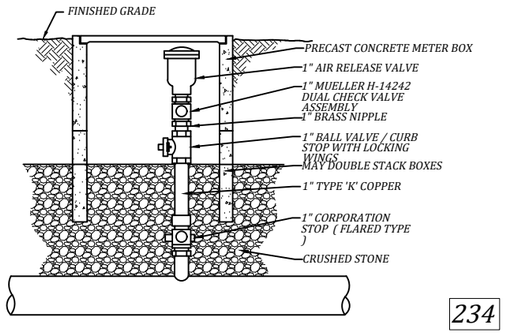
NOTES:

1. METER SHALL BE NEPTUNE T-10 METER.
2. CURB STOP SHALL BE LOCATED JUST INSIDE THE METER BOX TO ALLOW SUFFICIENT SPACE FOR THE WATER METER AND CHECK VALVE ASSEMBLY.

STANDARD DETAILS: WATER - SHEET 2 OF 4

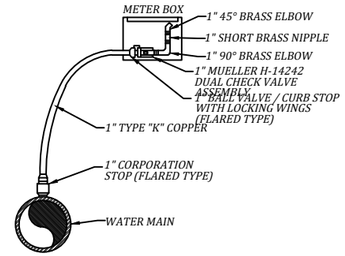
PROJECT TITLE:			
	DEPARTMENT:	WRM	REVISIONS: GM-04/30/0
	SCALE:	N.T.S.	BS-10-25-0
	DRAWN BY:	GM	DCM 2010
	REVIEWED BY:	JC	JC-10-2011
	APPROVED BY:	EC	JC-12-2012
	IMPLEMENTED:	JANUARY 2008	MW-12-203

TYPICAL AUTOMATIC AIR RELEASE VALVE



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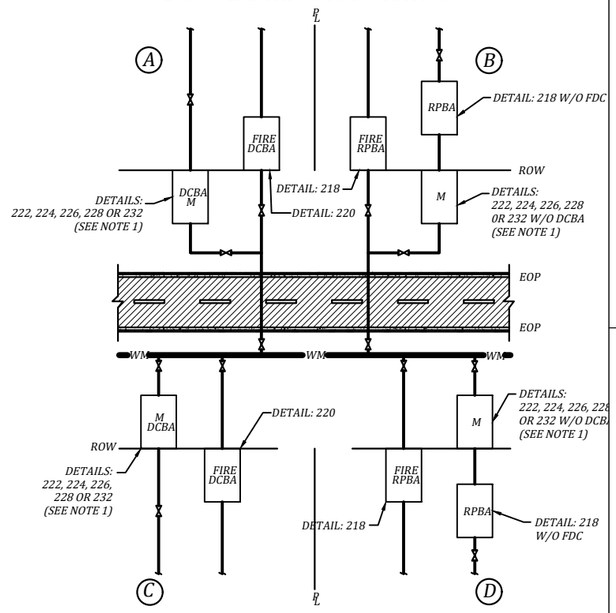
TYPICAL MANUAL AIR RELEASE VALVE



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GENERAL SERVICE CONNECTION CONFIGURATIONS

LONG SIDE TAP CONFIGURATIONS



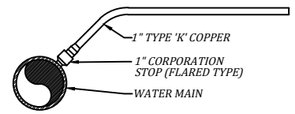
SHORT SIDE TAP CONFIGURATIONS

NOTES :

1. METER SHOULD BE INSTALLED BETWEEN TWO FEET (2') AND FIVE FEET (5') FROM BACK OF CURB OR BACK OF SIDEWALK (WHERE PRESENT).

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TYPICAL 1" SERVICE CONNECTION

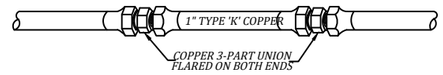


NOTES:

1. TYPICAL 1" SERVICE CONNECTION SHALL BE USED AT A MINIMUM FOR ALL3/4" AND 1" METER INSTALLATIONS.

238

TYPICAL COPPER REPAIR (1" ONLY)

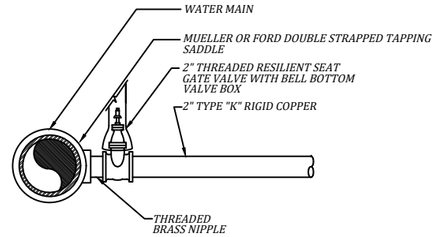


242

TYPICAL MANUAL AIR RELEASE VALVE

236

TYPICAL 2" SERVICE CONNECTION

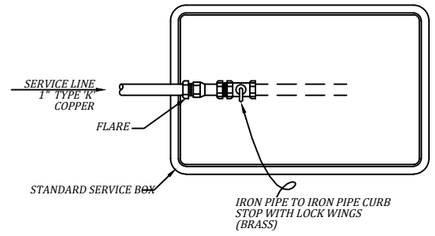


NOTES:

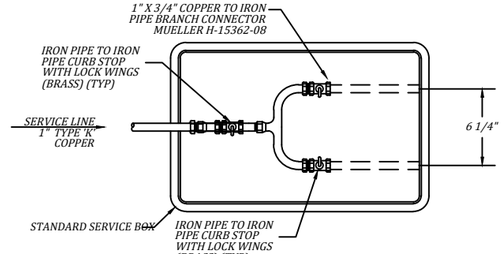
1. TYPICAL 2" SERVICE CONNECTION SHALL BE USED AT A MINIMUM FOR ALL 1-1/2" AND 2" METER INSTALLATIONS.

240

TYPICAL SINGLE SERVICE CONNECTION



TYPICAL DOUBLE SERVICE CONNECTION



NOTES:

1. IN A SINGLE FAMILY DEVELOPMENT, BRANCH CONNECTORS WILL BE SET BY AWWB ONLY WHEN TWO (2) METERS HAVE BEEN REQUESTED (ONE DOMESTIC AND ONE IRRIGATION) FOR A SINGLE LOT AND ALL APPLICABLE FEES HAVE BEEN PAID
2. THE DOMESTIC METERS WILL NOT BE ALLOWED IN A SERVICE BOX.

244

TYPICAL 1.5" TO 2.0" METER VAULT W/ DCBA

NOTES:

1. METER SHALL BE NEPTUNE T-10 METER, UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE AWWB.
2. VAULTS SHALL BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.

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TYPICAL 1.5" TO 2.0" METER VAULT W/ RPBA

NOTES:

1. METER SHALL BE NEPTUNE T-10 METER, UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE AWWB.
2. RPBA SHALL BE MANUFACTURED BY AMES, WATTS, OR AN APPROVED EQUAL.
3. VAULTS AND RPBA SHALL BE INSPECTED BY AWWB PERSONNEL IN ADDITION TO CITY OF AUBURN PROJECT INSPECTIONS.
4. RPBA's SHALL NOT BE BURIED OR INSTALLED IN BELOW GROUND VAULTS.
5. RPBA ENCLOSURES SHALL BE CONCRETE, REINFORCED ALUMINUM, OR FIBERGLASS CONSTRUCTION AND SHALL BE INSULATED AND/OR HEATED TO PROTECT AGAINST FREEZING. ENCLOSURES APPROVED FOR INSTALLATION INCLUDE: HYDROCOWL, HOT BOX, AND LOK BOX.

227

TYPICAL MULTIPLE METER VAULT

NOTES:

1. METER SHALL BE NEPTUNE T-10 METER.
2. VAULTS SHALL BE INSPECTED BY AWWB PERSONNEL.
3. METER PITS WITH MORE THAN EIGHT 3/4-INCH METERS OR MORE THAN FOUR 1-INCH METERS SHALL USE MANIFOLD CONFIGURATION NO. 1, AND THE SERVICE LINE OR MAIN SHALL BE INSTALLED PARALLEL TO THE SERVICE SIDE OF THE VAULT.
4. ALL LONG SIDE CONNECTIONS SHALL INSTALL A SINGLE SERVICE FROM THE MAIN TO THE MANIFOLD AT THE METER PIT.

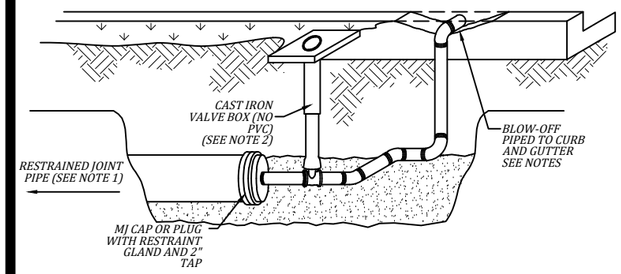
228

STANDARD DETAILS: WATER - SHEET 3 OF 4

PROJECT TITLE:

DEPARTMENT:	WRM	REVISIONS:	GM-04/30/0
SCALE:	N.T.S.		BS-10-25-0
DRAWN BY:	GM		DCM 2010
REVIEWED BY:	JC		JC-10-2011
APPROVED BY:	EC		JC-12-2012
IMPLEMENTED:	JANUARY 2008		MW-12-202

TYPICAL END OF MAIN IN CUL DE SAC

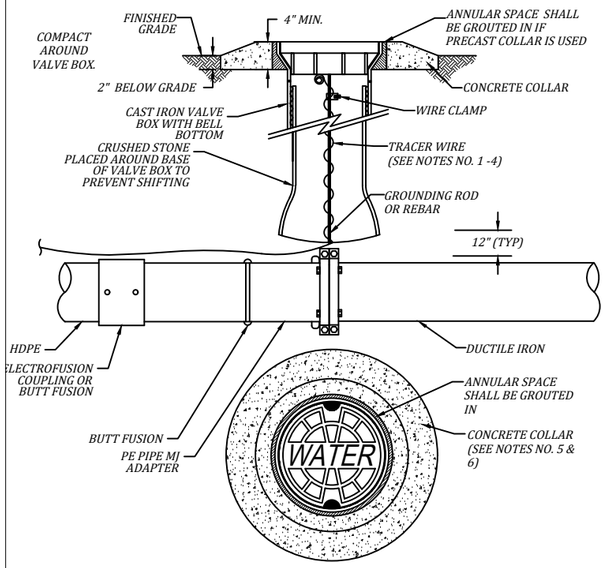


NOTES:

1. THE PREFERRED METHOD OF THRUST RESTRAINT SHALL BE THROUGH THE USE OF EXTERNALLY RESTRAINED JOINT DEVICES SUCH AS MEGA -LUGS IN LIEU OF CONCRETE BLOCKING. CONCRETE BLOCKING SHALL ONLY BE PERMITTED WHERE APPROVED BY THE AWWB AND SHALL NOT BE USED IN CONJUNCTION WITH MEGA-LUG RESTRAINTS . THE APPROPRIATE LENGTH OF RESTRAINT SHALL BE CALCULATED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
2. VALVE SHALL BE LOCATED WITHIN 24" OF THE BACK OF CURB, MAY BE PLACED IN PAVEMENT.
3. THE BLOW-OFF SHALL BE PLACED WITH AT LEAST 1" CLEARANCE BETWEEN GUTTER AND BOTTOM OF PIPE AND SHOULD BE POINTED SLIGHTLY UPWARD.
4. THE BLOW-OFF SHALL BE LOCATED WITHIN 18" OF A PROPERTY LINE AND BE ANGLED TO DIRECT FLOW AWAY FROM THE BLOW-OFF AND VALVE, AND TOWARDS A STORM DRAIN INLET.

208

TYPICAL HDPE TO DUCTILE IRON MAIN TRANSITION



NOTES:

1. TRACER WIRE SHALL BE BROUGHT TO GRADE AT A MINIMUM OF EVERY 500 FEET IN A VALVE BOX .
2. TRACER WIRE SHALL WRAP AROUND GROUNDING ROD/ REBAR INSIDE VALVE BOX.
3. A MINIMUM OF 12 INCHES OF EXCESS WIRE SHALL BE COILED AND LEFT IN THE VALVE BOX.
4. TRACER WIRE SHALL BE NO. 14 A.W.G. COPPER CLAD STEEL W/ POLYETHYLENE INSULATION.
5. CONCRETE COLLAR MAY BE CAST-IN-PLACE OR PRECAST AND MAY BE ROUND OR SQUARE IN SHAPE.
6. CONCRETE COLLAR SHALL BE A MIN. 4" THICK.

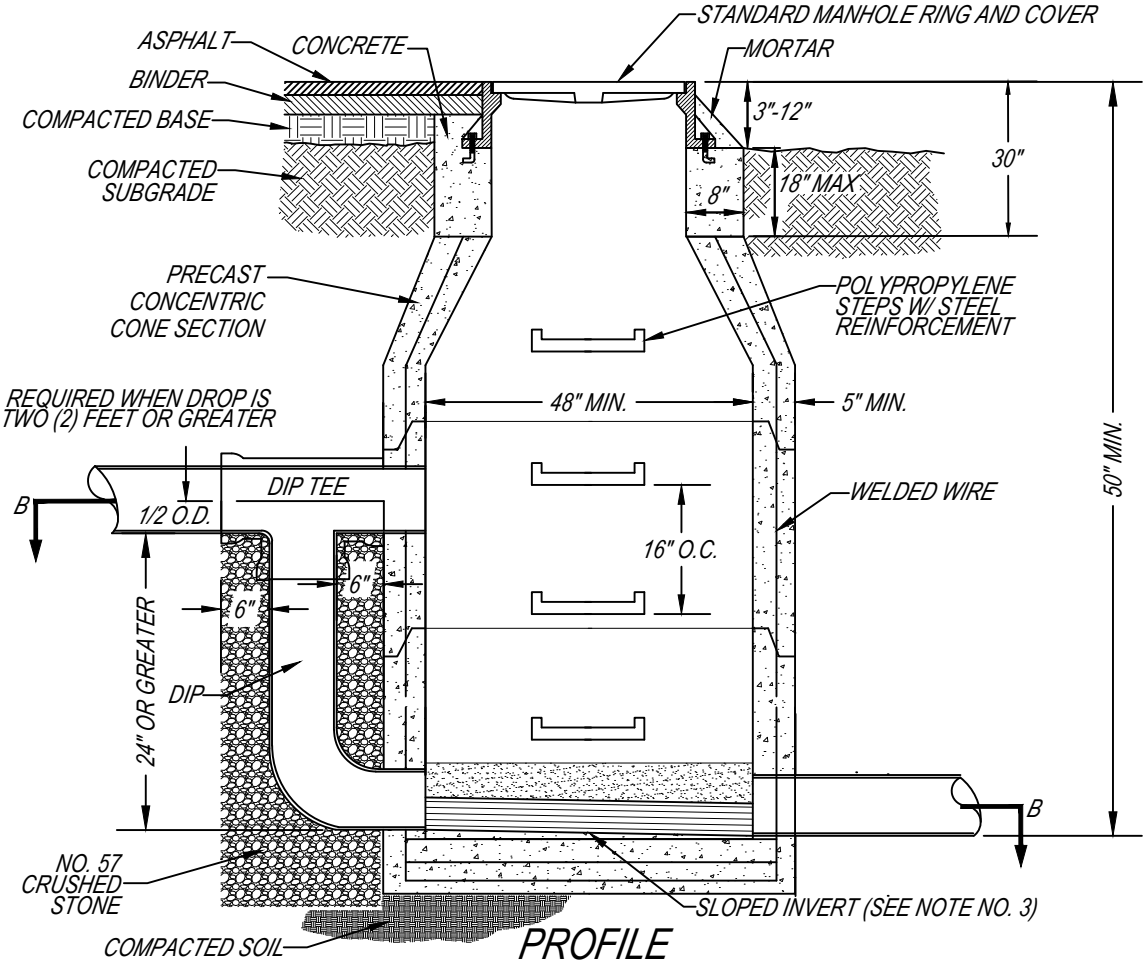
248

STANDARD DETAILS: WATER - SHEET 4 OF 4

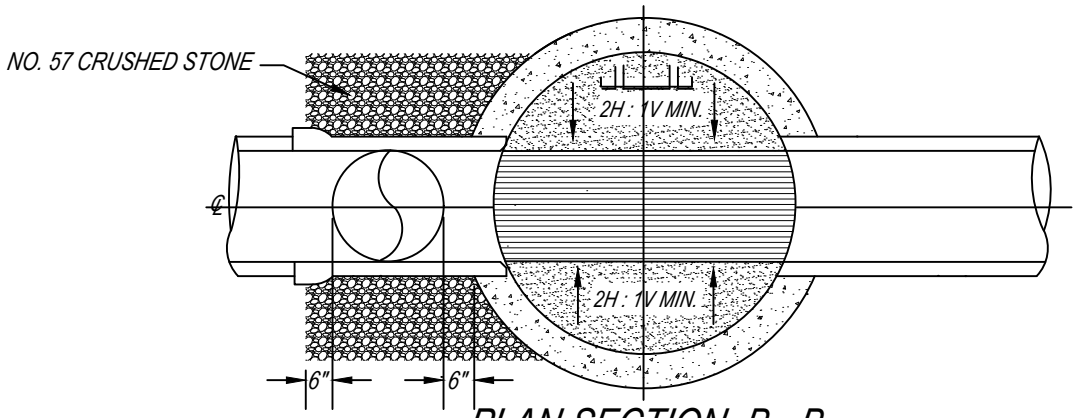
PROJECT TITLE:

DEPARTMENT:	WRM	REVISIONS:	BS-10-25-07
SCALE:	N.T.S.		DCM 2010
DRAWN BY:	MW		JC-10-2011
REVIEWED BY:	JC		JC-12-2012
APPROVED BY:	EC		MW-12-2020
IMPLEMENTED:	JANUARY 2008		MW-12-2021

TYPICAL DROP MANHOLE



PROFILE



PLAN SECTION B - B

NOTES:

1. ALL MANHOLES SHALL BE REQUIRED TO HAVE CLEAR LINE OF SIGHT FROM THE RIM TO ALL PIPE INVERTS.
2. ALL MANHOLE SECTIONS SHALL BE CYLINDRICAL SHAPED PRECAST STRUCTURAL CONCRETE.
3. ALL MANHOLES SHALL BE PROPERLY GROUTED AND WATER TIGHT.
4. INVERT SLOPE SHALL PROVIDE A 0.10' DROP ACROSS THE MANHOLE WHERE THERE IS NOT A TURN GREATER THAN 22 DEGREES AND A 0.25' DROP ACROSS THE MANHOLE WHERE THE TURN IS GREATER THAN 22 DEGREES.
5. VERTICAL PIPE SHALL BE DIP WITH RESTRAINED JOINTS.

City of Auburn

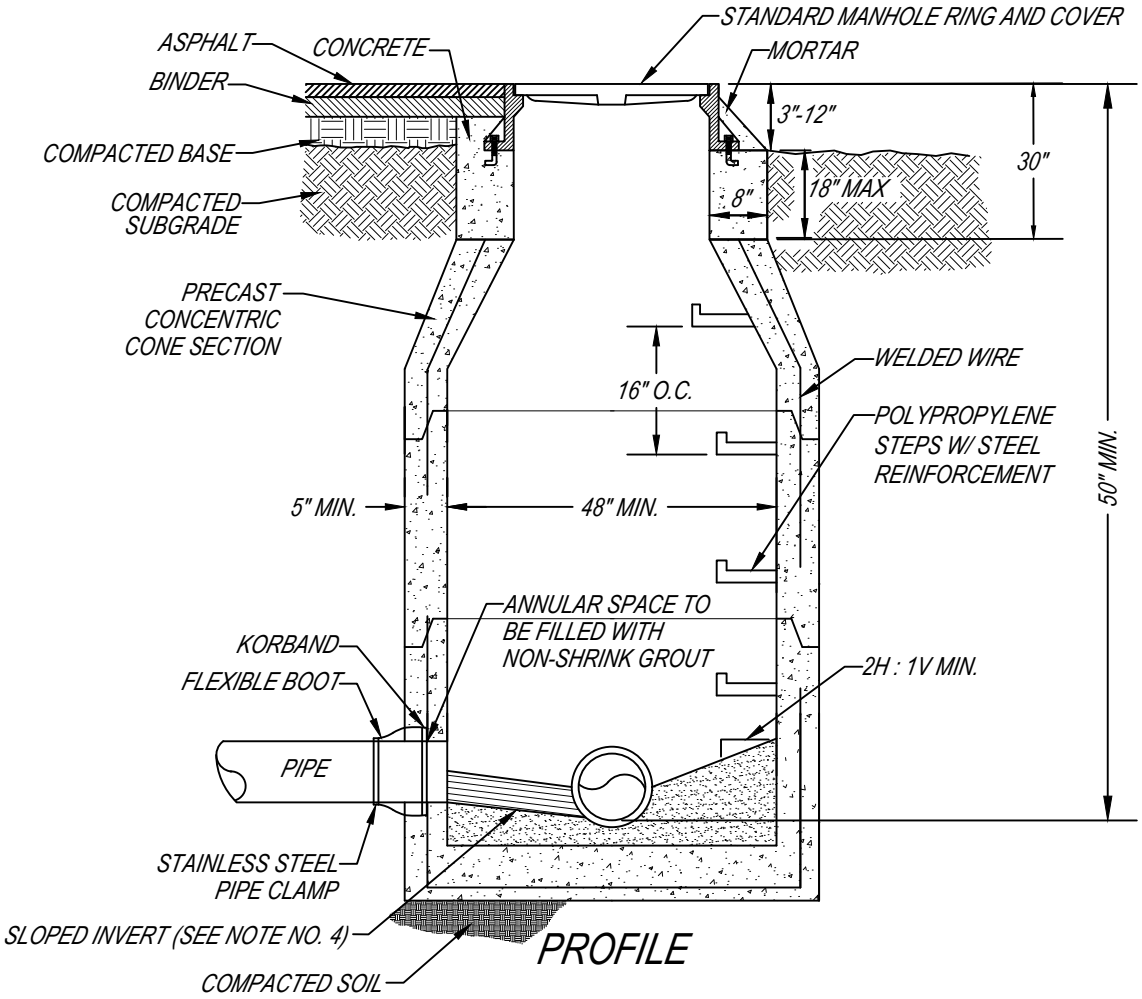
THE CITY OF AUBURN, AL

STANDARD SANITARY SEWER DETAILS

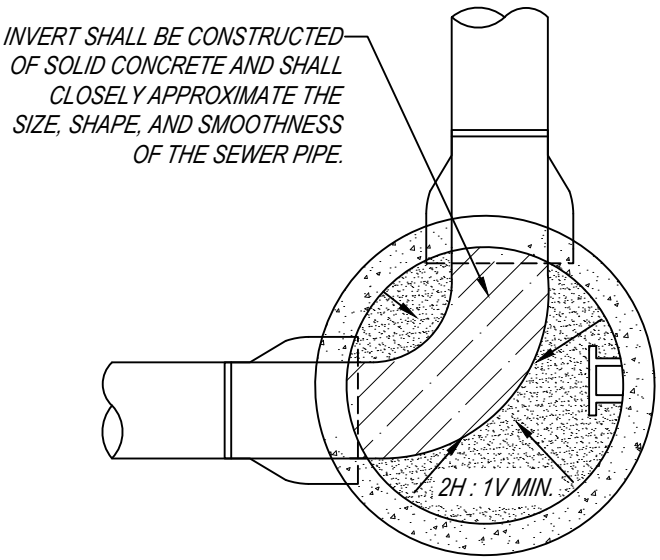
DRAWING TITLE:	TYPICAL DROP MANHOLE		
DEPARTMENT:	WRM	REVISIONS:	GM-04-30-04
SCALE:	N.T.S.		BS-10-30-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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STANDARD MANHOLE



PROFILE



PLAN

NOTES:

1. ALL MANHOLES SHALL BE REQUIRED TO HAVE CLEAR LINE OF SIGHT FROM THE RIM TO ALL PIPE INVERTS.
2. ALL MANHOLE SECTIONS SHALL BE CYLINDRICAL SHAPED PRECAST STRUCTURAL CONCRETE.
3. ALL MANHOLES SHALL BE PROPERLY GROUTED AND WATER TIGHT.
4. INVERT SLOPE SHALL PROVIDE A 0.10' DROP ACROSS THE MANHOLE WHERE THERE IS NOT A TURN GREATER THAN 22 DEGREES AND A 0.25' DROP ACROSS THE MANHOLE WHERE THE TURN IS GREATER THAN 22 DEGREES.
5. DIRECTIONAL CHANGE IN THE MAIN LINE THROUGH A MANHOLE SHALL BE NO LESS THAN 90 DEGREES BETWEEN THE INVERT IN AND INVERT OUT.

City of Auburn

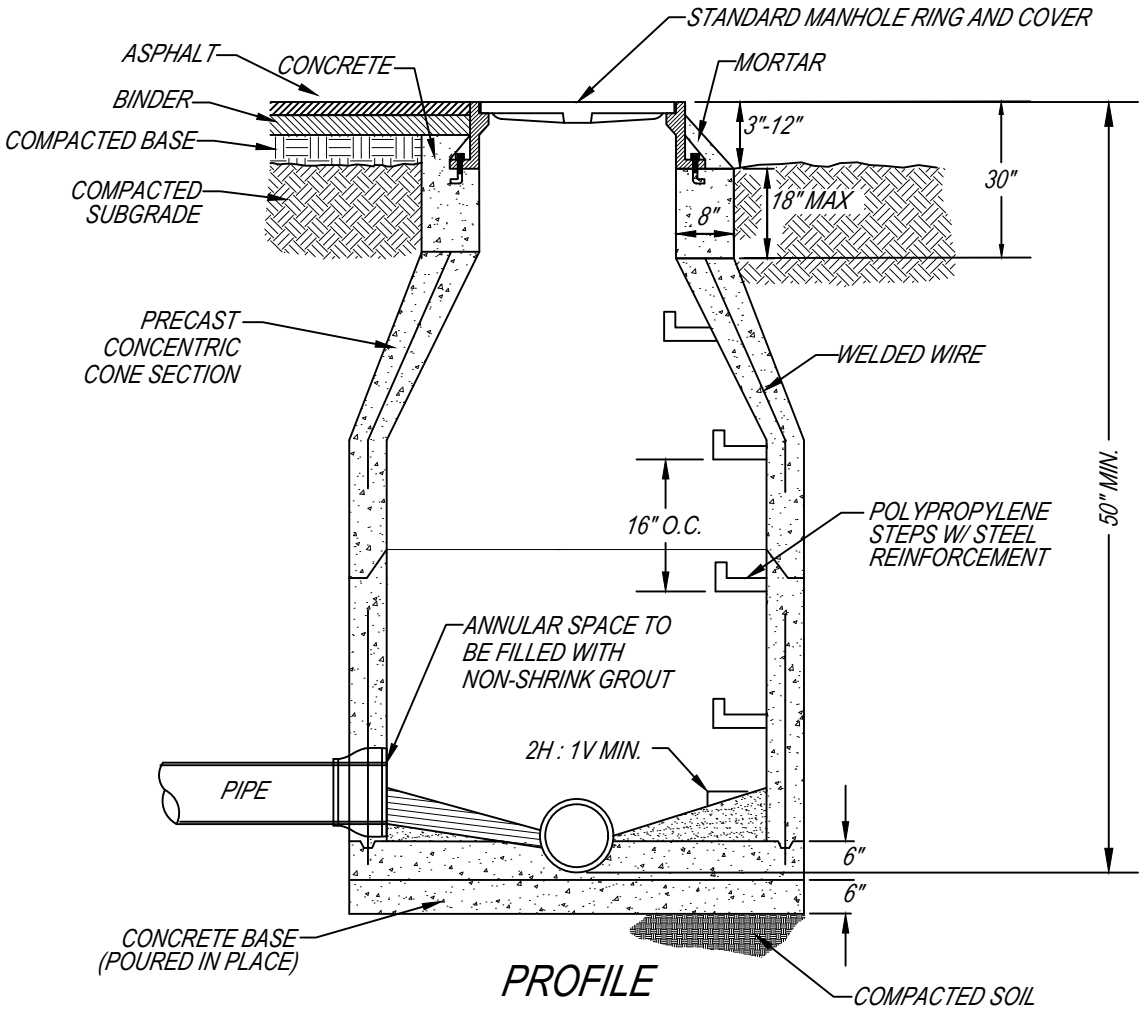
THE CITY OF AUBURN, AL

STANDARD SANITARY SEWER DETAILS

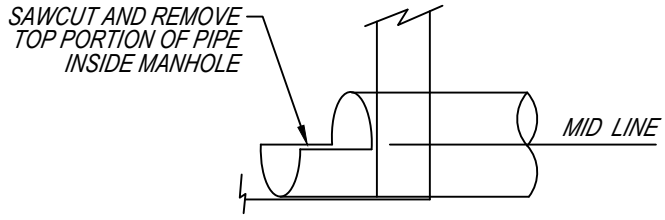
DRAWING TITLE:	STANDARD MANHOLE		
DEPARTMENT:	WRM	REVISIONS:	GM-04-30-04
SCALE:	N.T.S.		BS-10-30-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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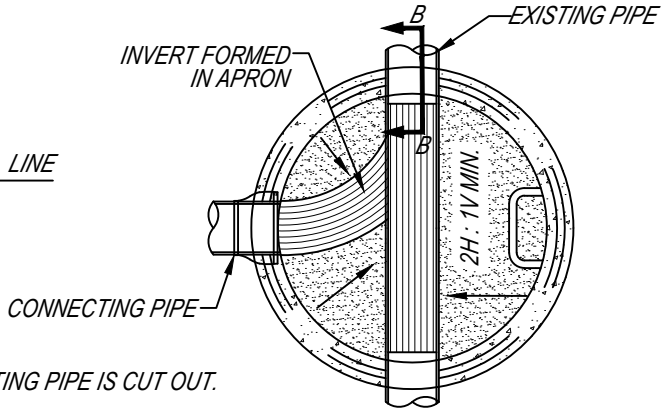
TYPICAL SADDLE MANHOLE



PROFILE



SECTION B - B



PLAN

NOTES

1. MANHOLES SHALL BE AIR TESTED BEFORE EXISTING PIPE IS CUT OUT.
2. MINIMUM 6" CONCRETE REQUIRED UNDER PIPE.
3. ALL MANHOLES SHALL BE REQUIRED TO HAVE CLEAR LINE OF SIGHT FROM THE RIM TO ALL PIPE INVERTS.
4. ALL MANHOLE SECTIONS SHALL BE CYLINDRICAL SHAPED PRECAST STRUCTURAL CONCRETE.
5. ALL MANHOLES SHALL BE PROPERLY GROUTED AND WATER TIGHT.

City of Auburn

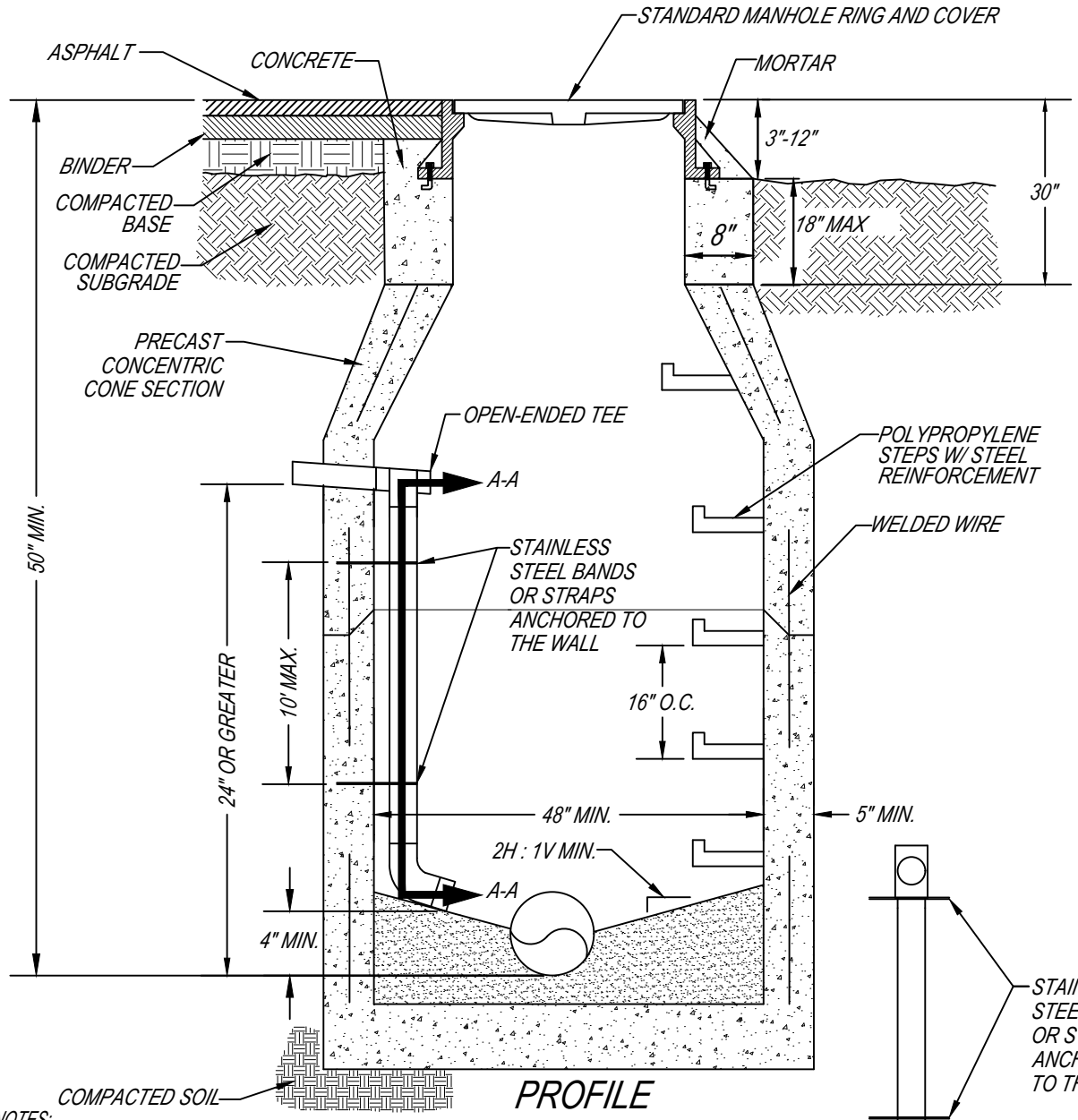
THE CITY OF AUBURN, AL

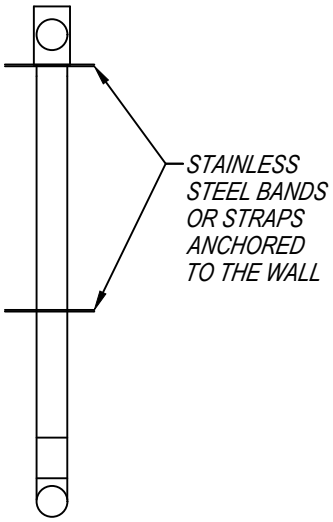
STANDARD SANITARY SEWER DETAILS

DRAWING TITLE:	TYPICAL SADDLE MANHOLE		
DEPARTMENT:	WRM	REVISIONS:	GM-04-30-04
SCALE:	N.T.S.		BS-10-30-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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TYPICAL 4" OR 6" DROP SERVICE LINE





PLAN SECTION A - A

NOTES:

1. SERVICE LINES SHALL BE A MINIMUM OF FOUR (4) INCHES ABOVE THE INVERT OF THE MANHOLE OR FLOW LINE OF OUTGOING PIPE. SERVICE LINES ANGLED AGAINST THE DIRECTION OF FLOW SHALL BE A MINIMUM SIX (6) INCHES ABOVE THE FLOW LINE. IF THE ANGLE FROM OUTLET FLOW LINE IS LESS THAN 45°, THE SERVICE LINE SHALL TIE TO THE MAIN.
2. ALL MANHOLES SHALL BE REQUIRED TO HAVE CLEAR LINE OF SIGHT FROM THE RIM TO ALL PIPE INVERTS IN THE MANHOLE.
3. ALL MANHOLE SECTIONS SHALL BE CYLINDRICAL SHAPED PRECAST STRUCTURAL CONCRETE.
4. ALL MANHOLES SHALL BE PROPERLY GROUTED AND WATER TIGHT.
5. DROP SERVICE LINES FOR SEWER MAINS GREATER THAN 6" WILL BE ALLOWED ON A CASE BY CASE BASIS WITH PRIOR APPROVAL BY WRM

City of Auburn

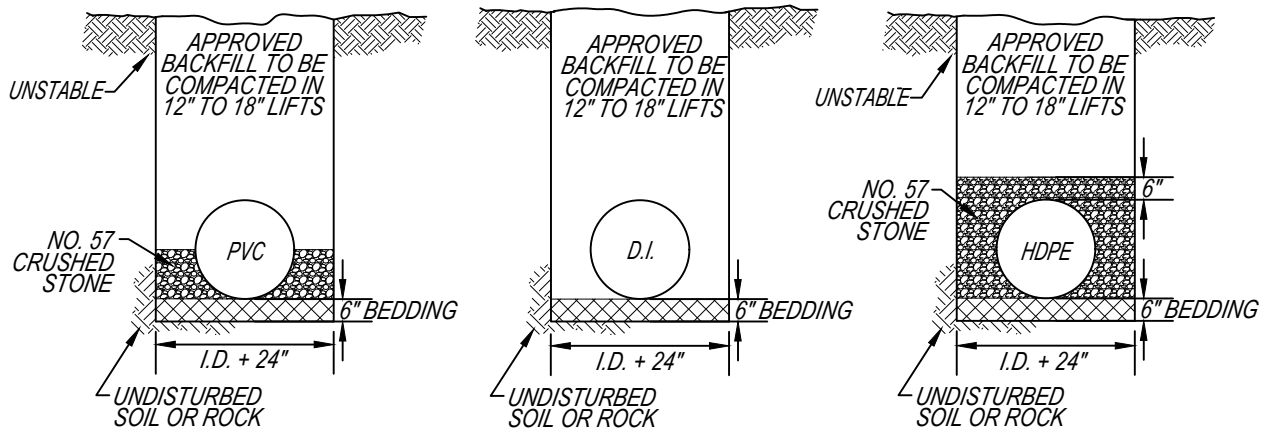
THE CITY OF AUBURN, AL

STANDARD SANITARY SEWER DETAILS

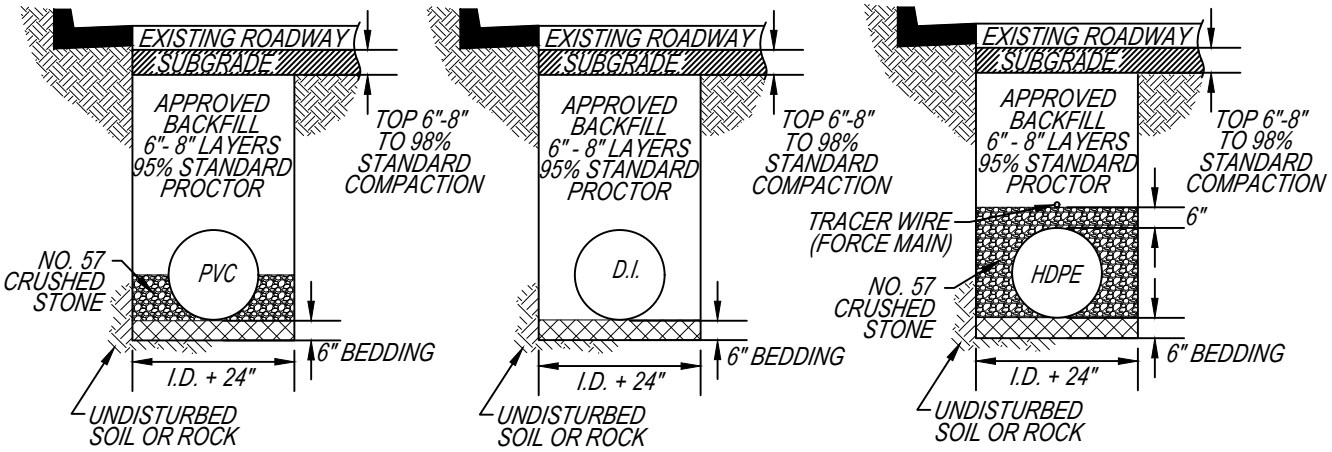
DRAWING TITLE:	TYPICAL 4" OR 6" DROP SERVICE LINE		
DEPARTMENT:	WRM	REVISIONS:	GM-04-30-04
SCALE:	N.T.S.		BS-10-30-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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BEDDING REQUIREMENTS FOR TRENCHES



NON-STREET TRENCH

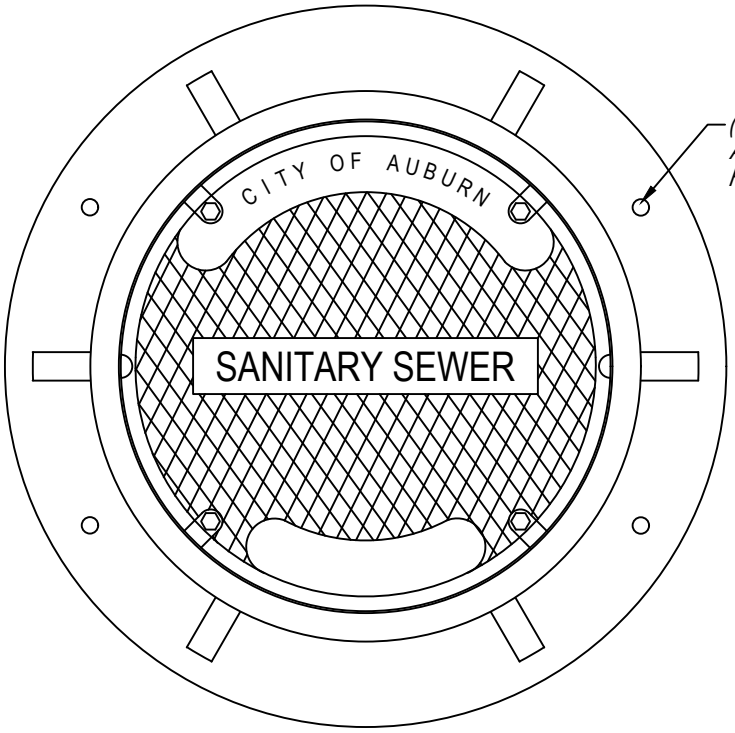


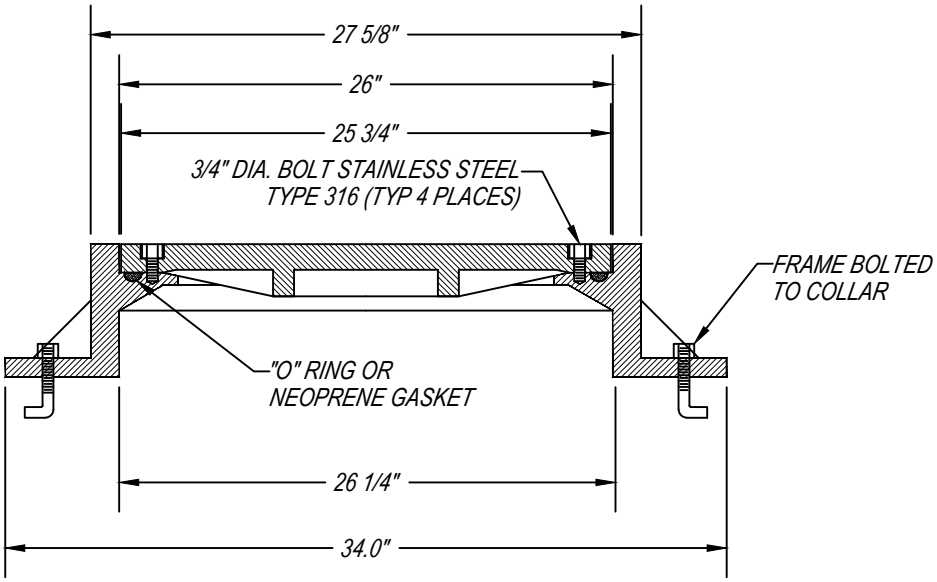
STREET TRENCH

NOTES:

1. BEDDING MATERIALS FOR PVC AND HDPE PIPE SHALL BE 1/4" TO 1 1/2" GRADED CRUSHED STONE SUCH AS: 56,57,6,67,68,7,OR 78, STONE PER ALDOT STANDARD SPECS. SAND OR GRAVEL MAY BE USED AS BEDDING MATERIAL FOR D.I. PIPE.
2. WIDTH VARIES BASED ON WALL STABILITY. STABLE WALLS WIDTH AS NEEDED TO JOIN PIPE AND COMPACT HAUNCHING AND INITIAL BACKFILL. UNSTABLE WALLS: WIDTH TO BE A MINIMUM OF FIVE TIMES PIPE DIAMETER.
3. FLOWABLE FILL CAN BE USED AS BACKFILL, BUT MUST HAVE PRIOR APPROVAL AND MUST BE ALLOWED TO SETUP FOR 24 HOURS PRIOR TO TOPPING.
4. APPROVED BACKFILL MATERIAL INCLUDES 825 B, FLOWABLE FILL AND APPROVED DIRT. ALTERNATIVE MATERIAL MUST BE APPROVED BY PROJECT MANAGER PRIOR TO USE.

TYPICAL WATERTIGHT MANHOLE COVER





NOTES:

1. REQUIRED FOR ALL MANHOLES WHERE THE RIM ELEVATION IS LESS THAN ONE (1) VERTICAL FOOT ABOVE THE 100 YEAR FLOODPLAIN ELEVATION.
2. CAST IRON FRAME AND COVER IN ROADWAY AND TRAFFIC SHALL BE INSTALLED FLUSH WITH FINISHED GRADE OF THE PAVEMENT IN FLAT OR STEEP GRADES.
3. THE FRAME AND COVER SHALL WEIGH APPROXIMATELY 370 POUNDS IN TRAFFIC AND NON TRAFFIC APPLICATIONS.
4. THE DIAMETER OF THE COVER FOR ALL SANITARY SEWER MANHOLES SHALL BE 25 3/4".
5. ALL COVERS SHALL BE MARKED "SANITARY SEWER" BY THE MANUFACTURER.
6. APPROVED DRAWINGS ARE FROM US FOUNDRY (USF-152-BV-BWT CITY OF AUBURN).

City of Auburn

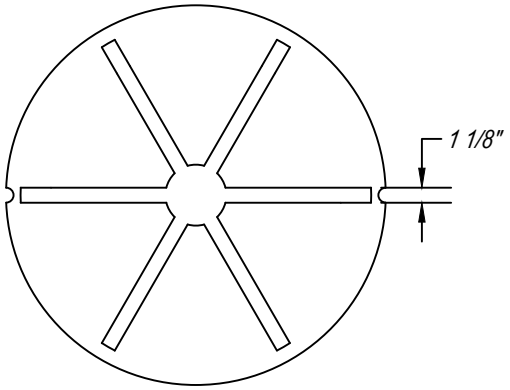
THE CITY OF AUBURN, AL

STANDARD SANITARY SEWER DETAILS

DRAWING TITLE:	TYPICAL WATERTIGHT MANHOLE COVER		
DEPARTMENT:	WRM	REVISIONS:	GM-04-30-04
SCALE:	N.T.S.		BS-10-30-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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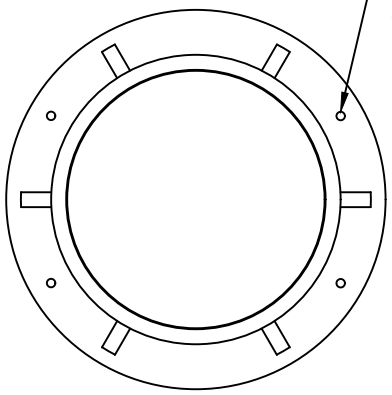
STANDARD MANHOLE RING & COVER



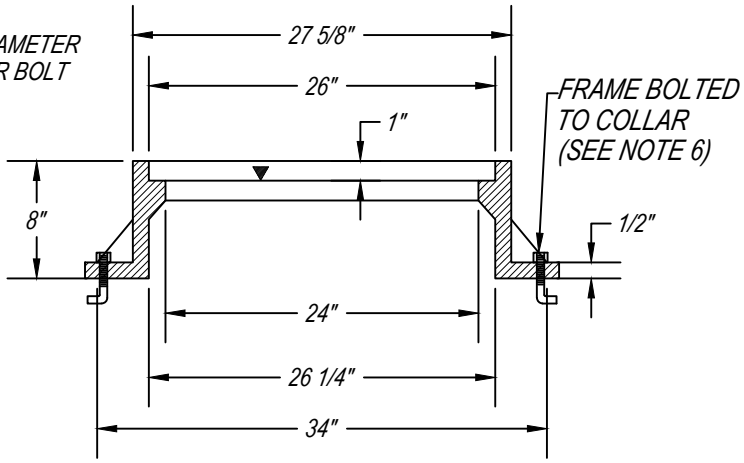
COVER BACK



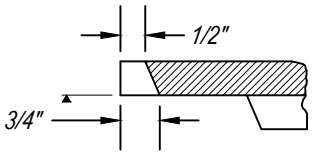
COVER FACE



FRAME PLAN

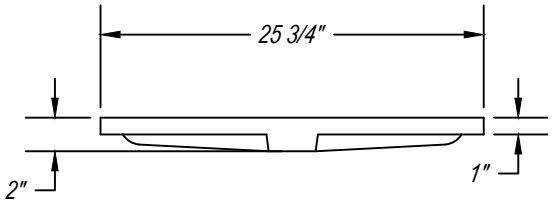


FRAME SECTION



(2) TYPE ONE PICKSLOTS

PICKSLOT DETAIL



COVER SECTION

NOTES:

1. CAST IRON FRAME AND COVER IN ROADWAY AND TRAFFIC SHALL BE INSTALLED FLUSH WITH FINISHED GRADE OF THE PAVEMENT IN FLAT OR STEEP GRADES.
2. THE FRAME AND COVER SHALL WEIGH APPROXIMATELY 370 POUNDS IN TRAFFIC AND NON TRAFFIC APPLICATIONS.
3. THE DIAMETER OF THE COVER FOR ALL SANITARY SEWER MANHOLES SHALL BE 25 3/4".
4. ALL COVERS SHALL BE MARKED "SANITARY SEWER" BY THE MANUFACTURER.
5. APPROVED DRAWINGS ARE FROM US FOUNDRY (USF-152-BV CITY OF AUBURN) OR SIGMA CORPORATION (RMH-2565).
6. OFF ROAD MANHOLES SHALL HAVE THE RING BOLTED DOWN OR PRECAST INTO THE CONCRETE.

▼ MACHINED BEARING SURFACE

City of Auburn

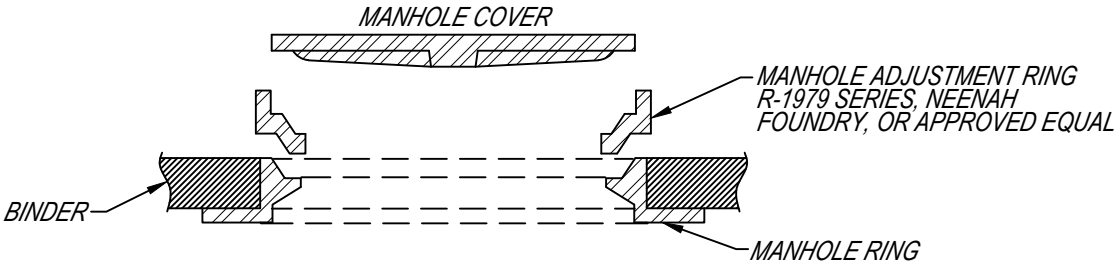
THE CITY OF AUBURN, AL

STANDARD SANITARY SEWER DETAILS

DRAWING TITLE:	STANDARD MANHOLE RING AND COVER		
DEPARTMENT:	WRM	REVISIONS:	12-07-2015
SCALE:	N.T.S.		BS-10-30-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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MANHOLE ADJUSTMENT RISER



NOTES:

1. ONE PIECE CONSTRUCTION, NO WELDS. COATED TO PREVENT RUST.
2. MULTIPLE RISERS ARE NOT ALLOWED.
3. ALL MANHOLES IN PAVEMENT MUST BE FLUSH WITH THE BINDER LAYER. THE MANHOLE ADJUSTMENT RISER SHALL BE USED UPON PLACEMENT OF WEARING SURFACE.

City of Auburn

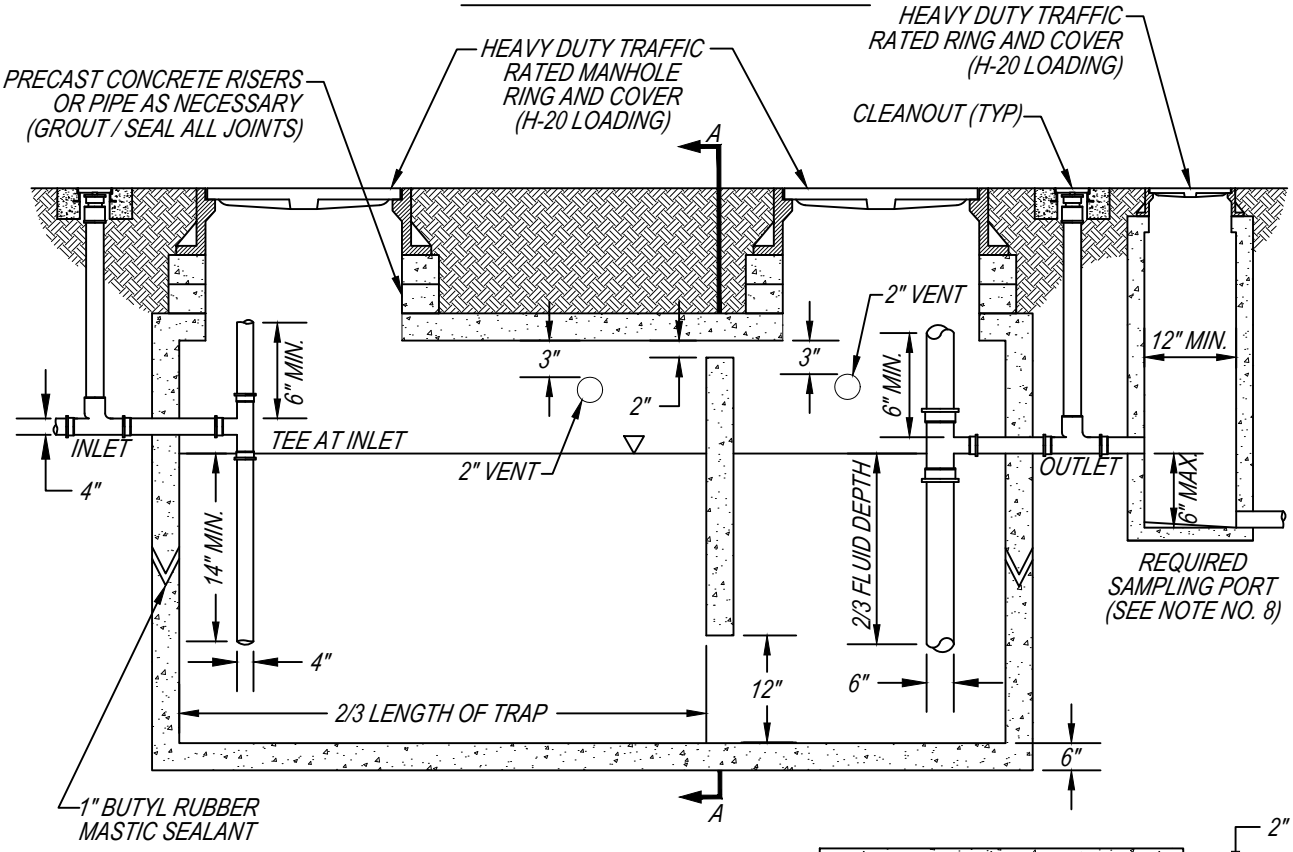
THE CITY OF AUBURN, AL

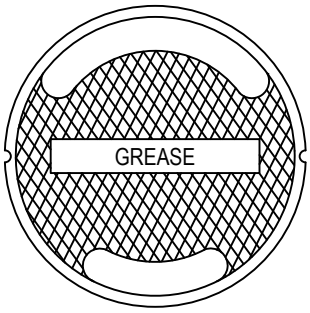
STANDARD SANITARY SEWER DETAILS

DRAWING TITLE:	MANHOLE ADJUSTMENT RISER		
DEPARTMENT:	WRM	REVISIONS:	GM-04-30-04
SCALE:	N.T.S.		BS-10-30-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

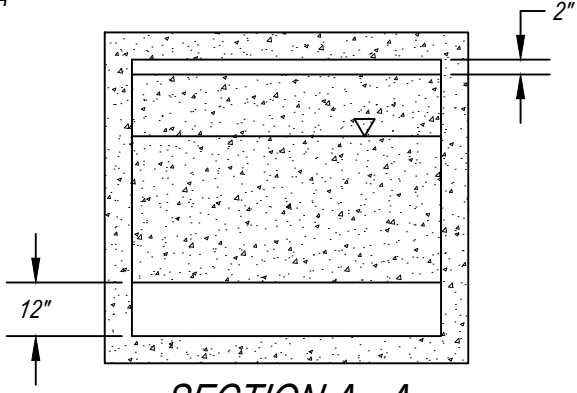
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TYPICAL GREASE TRAP





COVER FACE



SECTION A - A

NOTES:

1. MANHOLE, RING AND COVERS SHALL NOT BE COVERED, OR OBSCURED BY LANDSCAPING, PAVEMENT, ETC.
2. INLET AND OUTLET PIPES SHALL BE SCHEDULE 40 PVC, AND SHALL NOT BE COVERED OR CAPPED.
3. INLET PIPE MUST BE A MINIMUM OF 4" IN DIAMETER. VERTICAL PIPE ON OUTLET SIDE MUST BE A MINIMUM OF 6" IN DIAMETER.
4. TRAPS SHALL NOT BE LOCATED IN AN ENTRANCE, EXIT, DRIVE-THRU, OR UNDER A MENU BOARD.
5. SIZE TO BE PER STANDARD SIZING WORKSHEET (MIN. 500 GALLONS).
6. 2" DIAMETER VENTS TO BE CONNECTED TO BUILDING VENT SYSTEM (WHERE REQUIRED BY THE PLUMBING PLANS).
7. GREASE TRAPS SHALL MEET STATE OF ALABAMA HEALTH REGULATIONS SECTION 420-3-1-23: 420-3-1-24: 420-3-1-25
8. A DOWNSTREAM SAMPLING PORT OR MANHOLE WILL BE REQUIRED. NO OTHER CONNECTIONS ARE ALLOWED BETWEEN GREASE TRAP AND SAMPLING MANHOLE.
9. RESTROOM AND NON GREASE LADEN WASTE SHALL NOT PASS THROUGH THE GREASE TRAP.

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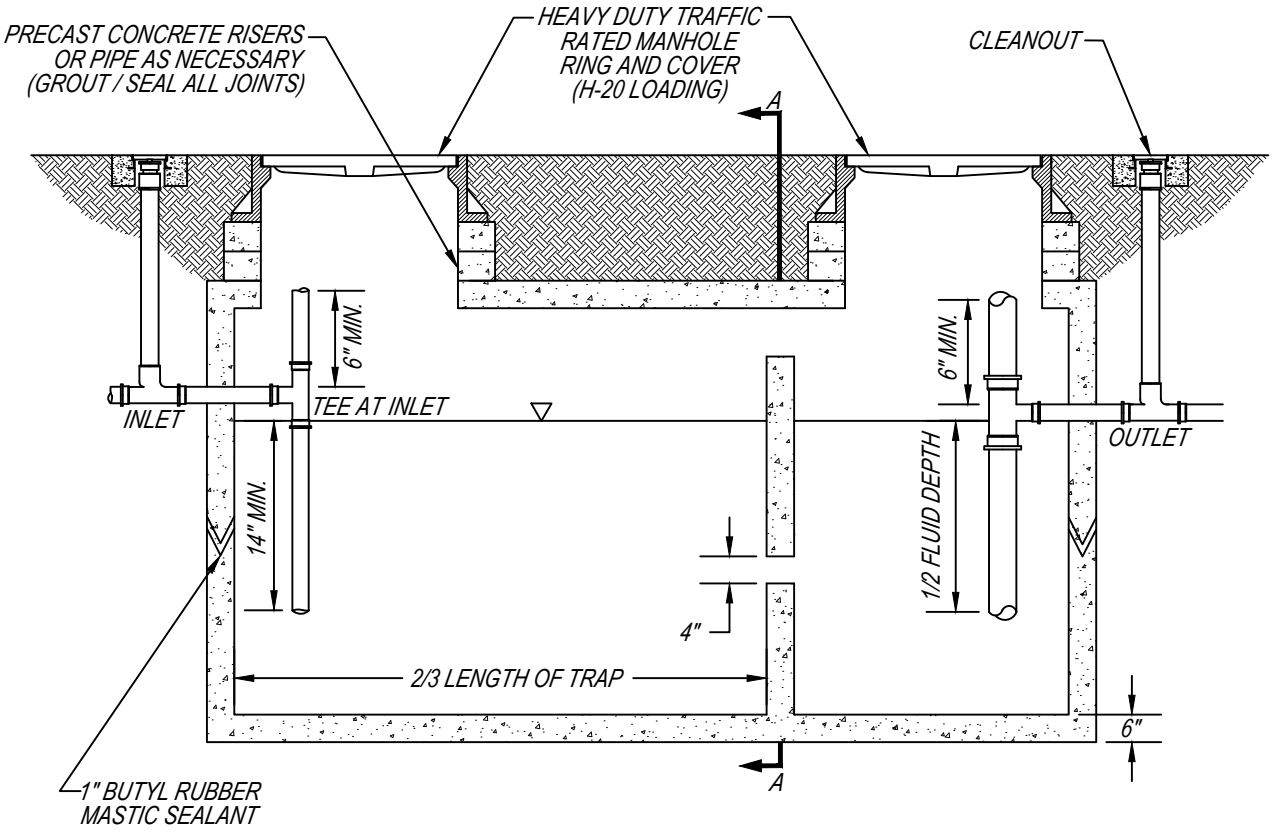
THE CITY OF AUBURN, AL

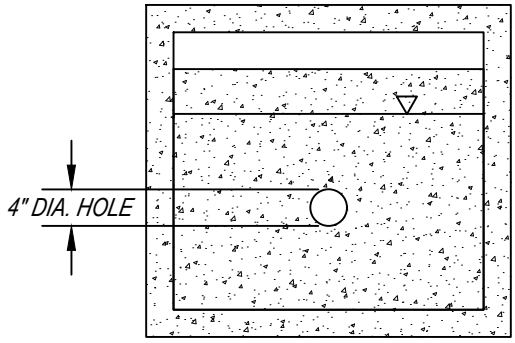
STANDARD SANITARY SEWER DETAILS

DRAWING TITLE:	TYPICAL GREASE TRAP		
DEPARTMENT:	WRM	REVISIONS:	GM-04-30-04
SCALE:	N.T.S.		BS-10-30-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	EC		JC-10-2011
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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TYPICAL OIL/GRIT SEPARATOR





SECTION A - A

NOTES:

1. MANHOLE RING AND COVERS SHALL NOT BE COVERED, OR OBSCURED BY LANDSCAPING, PAVEMENT, ETC.
2. INLET AND OUTLET PIPES SHALL BE SCHEDULE 40 PVC, AND SHALL NOT BE COVERED OR CAPPED.
3. INLET PIPE MUST BE A MINIMUM OF 4" DIAMETER. VERTICAL PIPE ON OUTLET SIDE MUST BE A MINIMUM OF 6" IN DIAMETER.
4. SEPARATOR SHALL NOT BE LOCATED IN AN ENTRANCE, EXIT, DRIVE-THRU, OR UNDER A MENU BOARD.
5. MINIMUM SIZE: 1000 GALLONS.

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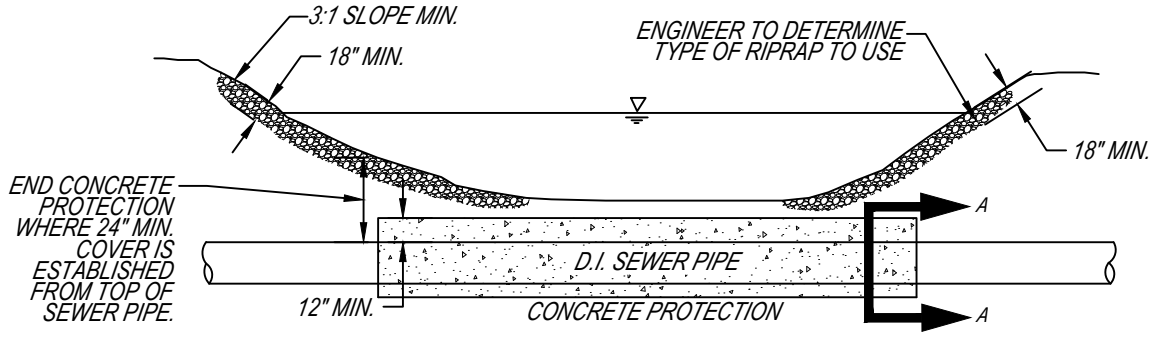
THE CITY OF AUBURN, AL

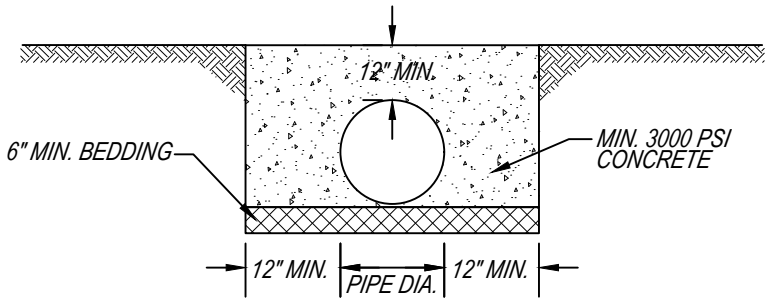
STANDARD SANITARY SEWER DETAILS

DRAWING TITLE:	TYPICAL OIL/GRIT SEPARATOR		
DEPARTMENT:	WRM	REVISIONS:	GM-04-30-04
SCALE:	N.T.S.		BS-10-30-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	EC		JC-10-2011
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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TYPICAL STREAM CROSSING





*END CONCRETE PROTECTION WHERE 24" MIN. COVER IS ESTABLISHED FROM TOP OF SEWER PIPE.

DETAIL SECTION A - A

NOTES:

1. ALL CREEK CROSSINGS SHALL BE DUCTILE IRON, PRESSURE CLASS 350 PIPE.
2. PIPE SHALL HAVE LOCKING GASKETS OR RESTRAINED JOINTS WHERE LOCATED INSIDE STREAM BANKS.
3. END CONCRETE PROTECTION WHERE 24" MINIMUM COVER IS ESTABLISHED FROM THE TOP OF THE SEWER PIPE.

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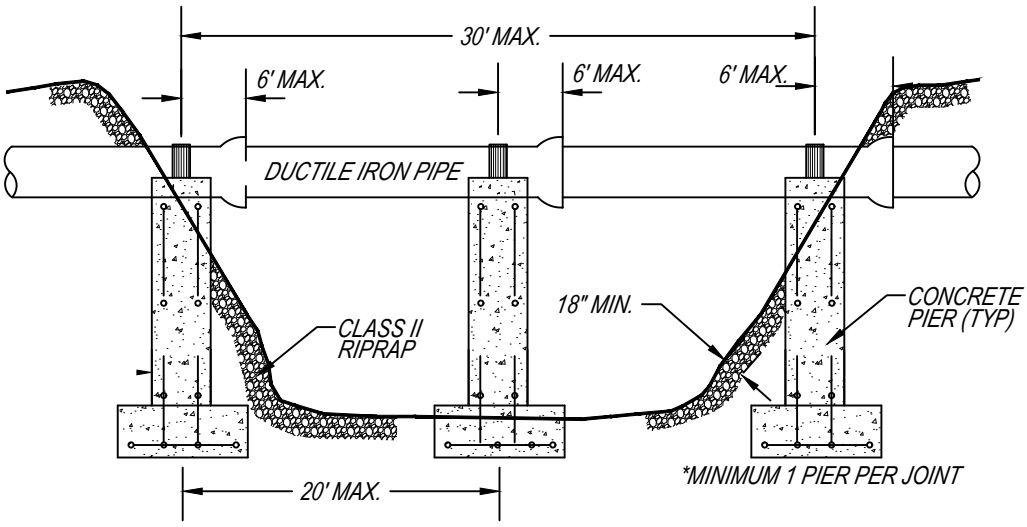
THE CITY OF AUBURN, AL

STANDARD SANITARY SEWER DETAILS

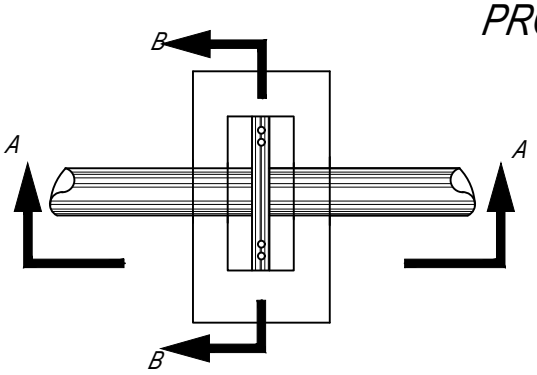
DRAWING TITLE:	TYPICAL STREAM CROSSING		
DEPARTMENT:	WRM	REVISIONS:	GM-04-30-04
SCALE:	N.T.S.		BS-10-30-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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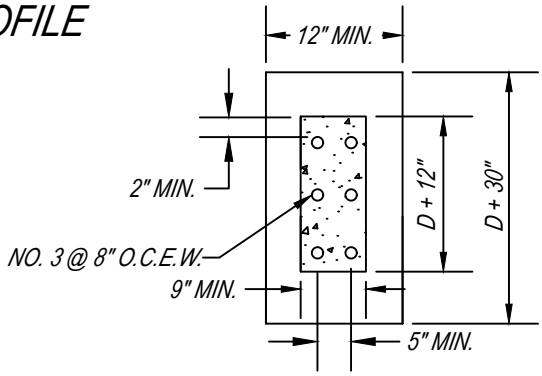
TYPICAL AERIAL STREAM CROSSING



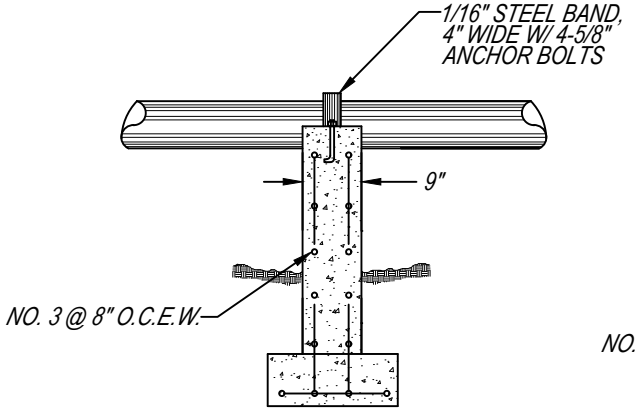
PROFILE



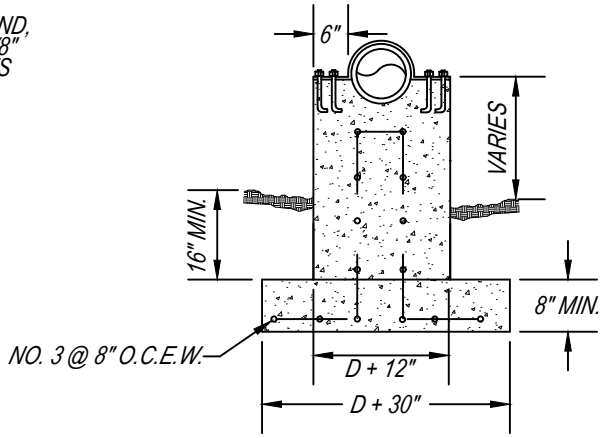
PLAN



SECTIONAL PLAN



SECTION A - A



SECTION B - B

NOTES:

1. ALL CREEK CROSSINGS SHALL BE DUCTILE IRON, PRESSURE CLASS 350 PIPE.
2. FOUNDATION AND OR FOOTINGS FOR PIERS SHALL BE PLACED A MINIMUM OF TWO (2) FEET BELOW STREAM BED OR ANCHORED TO SOLID ROCK AND SHALL BE CERTIFIED BY A GEOTECHNICAL ENGINEER.
3. PIPE SHALL HAVE LOCKING GASKETS OR RESTRAINED JOINTS.

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STANDARD SANITARY SEWER DETAILS

DRAWING TITLE:	TYPICAL AERIAL STREAM CROSSING		
DEPARTMENT:	WRM	REVISIONS:	GM-04-30-04
SCALE:	N.T.S.		BS-10-30-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

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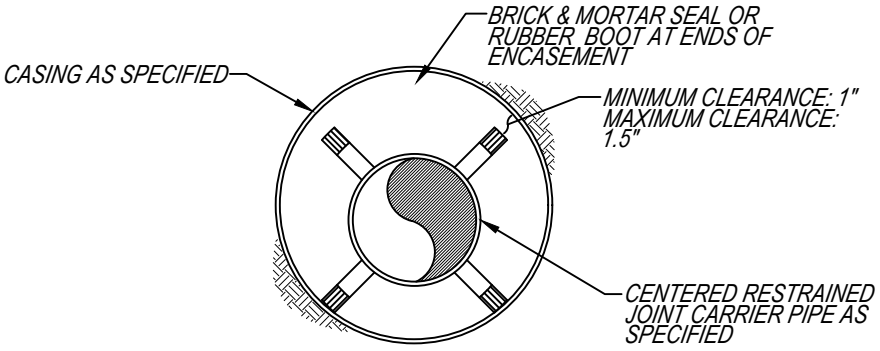
TYPICAL BORE ENCASEMENT

CARRIER PIPE		SPACER	STEEL ENCASEMENT	
NOMINAL PIPE DIAMETER	STANDARD PIPE BELL O.D.*	CASING SPACER BAND WIDTH	MINIMUM CASING THICKNESS	MINIMUM CASING DIAMETER**
4	6.40	8	0.25	14
6	8.60	8	0.25	16
8	11.16	8	0.25	18
10	13.25	8	0.25	20
12	15.22	8	0.25	22
14	17.73	12	0.25	24
16	19.86	12	0.3125	26
18	22.16	12	0.3125	30
20	24.28	12	0.3125	32
24	28.50	12	0.3125	36
30	34.95	12	0.5	42
36	41.37	12	0.5	48

ALL SIZES INDICATED ARE IN INCHES

*PIPE BELL OUTSIDE DIAMETER BASED ON PRESSURE CLASS 350 DUCTILE IRON PIPE.

**CASING DIAMETERS BASED ON BEING A MINIMUM OF 6 INCHES GREATER THAN THE OUTER DIAMETER OF THE JOINT BELL, TO THE NEAREST EVEN SIZE.

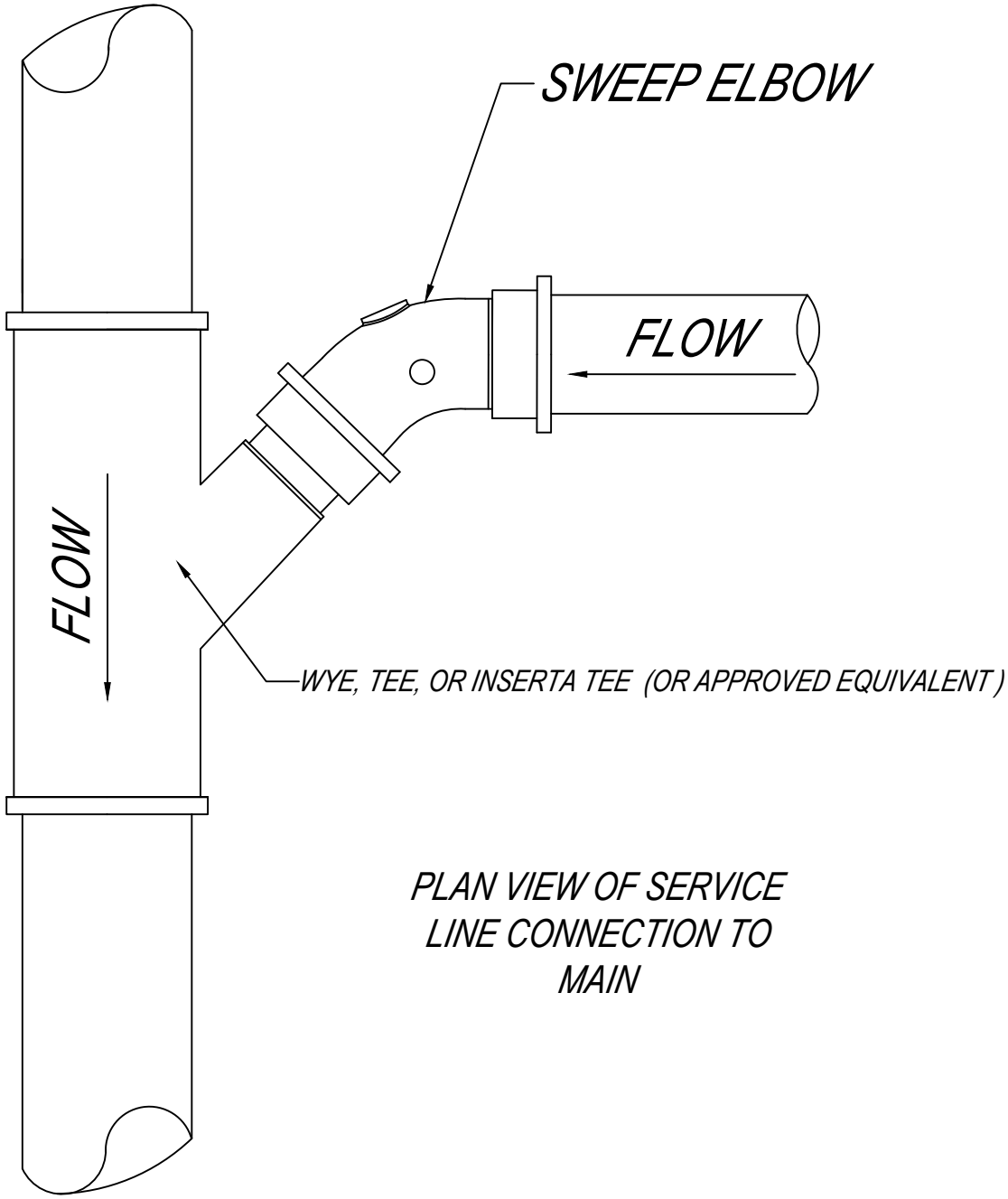


CASING SECTION

NOTES

1. ALL SPACER BANDS SHALL BE MADE FROM T-304 STAINLESS STEEL OF A MINIMUM 14 GAUGE THICKNESS.
2. ALL SPACERS SHALL HAVE A SYNTHETIC RUBBER OR PVC LINER TO INSULATE THE PIPELINE FROM THE SPACER.
3. ALL SPACERS SHALL HAVE 1.5" WIDE GLASS REINFORCED PLASTIC OR UHMW POLYMER RUNNERS TO INSULATE THE SPACER.
4. SPACERS TO BE MANUFACTURED BY CASCADE WATERWORKS MFG. CO. (PSI) PIPELINE SEAL AND INSULATOR, INC. OR EQUAL.
5. 6" THRU 12" DIAMETER PIPELINE SHALL USE 8" WIDE BANDS: GREATER THAN 12" DIAMETER PIPELINES SHALL USE 12" WIDE BANDS.
6. CENTERED RESTRAINED CASING SPACERS SHALL BE SPACED AT A MAXIMUM OF TEN FEET APART WITH A MINIMUM OF TWO SPACERS PER JOINT OF PIPE.

TYPICAL SERVICE CONNECTION



PLAN VIEW OF SERVICE LINE CONNECTION TO MAIN

NOTE:

1. SADDLE FITTING CONNECTIONS SHALL BE MADE WITH PRIOR APPROVAL BY WRM. THE SADDLE SHALL BE PLACED OVER A CAREFULLY CUT OPENING IN THE UPPER QUADRANT OF THE SEWER MAIN AND ATTACHED TO THE MAIN USING STAINLESS STEEL BANDS. UNDER NO CIRCUMSTANCES SHALL ANY LATERAL CONNECTION BE ALLOWED TO PROTRUDE INTO THE SEWER MAIN.

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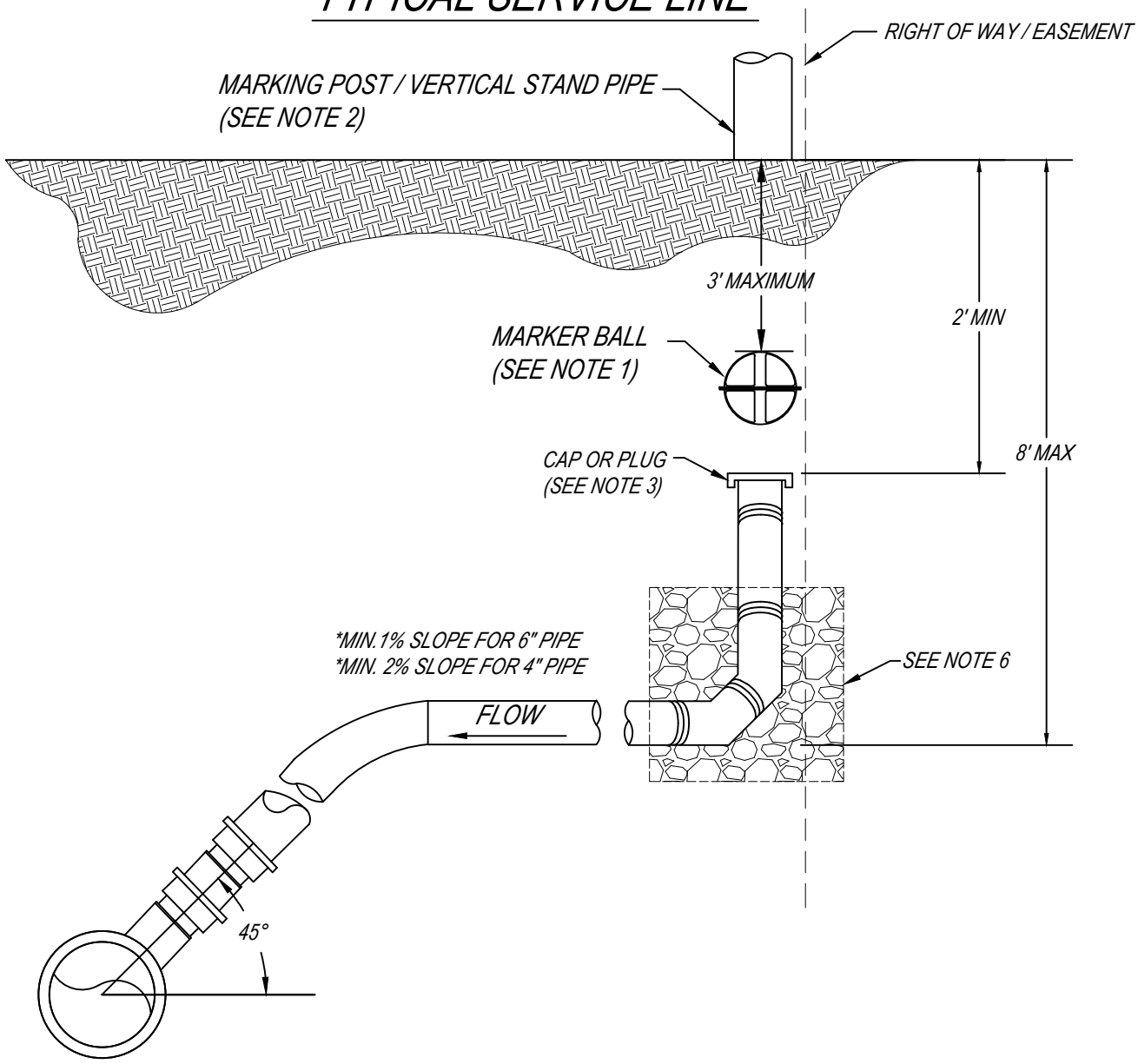
STANDARD SANITARY SEWER DETAILS

DRAWING TITLE: TYPICAL SERVICE CONNECTIONS

DEPARTMENT:	WRM	REVISIONS:	GM-04-30-04
SCALE:	N.T.S.		BS-10-30-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	EC		MW-12-03-2020
APPROVED BY:	RG		MW-10-27-2021
IMPLEMENTED:	02/2003		

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TYPICAL SERVICE LINE



NOTES:

1. PLUG LATERAL AND BURY MARKER BALL LOCATOR AT THE ROW OR EDGE OF EASEMENT. (TEMPO OMNI MARKER MODEL 162, 121.6 KHZ, OR APPROVED EQUAL). MARKER BALL SHALL NOT BE DEEPER THAN 3'.
2. SERVICE LATERAL SHOULD ALSO BE MARKED ABOVE GRADE WITH A GREEN RHINO 3-RAIL FIBERGLASS MARKING POST OR APPROVED EQUAL. VERTICAL STANDPIPE MAY SERVE AS MARKING POST IF PREFERRED, MARKER BALL IS STILL REQUIRED.
3. SERVICE LINE SHALL BE CAPPED OR PLUGGED PER COA STANDARDS.
4. SEWER LATERAL SHALL MATCH MATERIAL OF MAIN WHERE OTHERWISE APPROVED BY WRM
5. DUCTILE IRON LATERALS CAN BE USED WHEN CONNECTING TO A PVC MAIN.
6. 45° FITTING CONFIGURATION, SET IN #57 STONE, REQUIRED WHEN DEPTH IS GREATER THAN 3'. LONG SWEEP FITTING CAN BE USED WITH COA APPROVAL
7. THE 45° FITTING CONFIGURATION AND RISER MATERIAL SHOULD MATCH THE LATERAL

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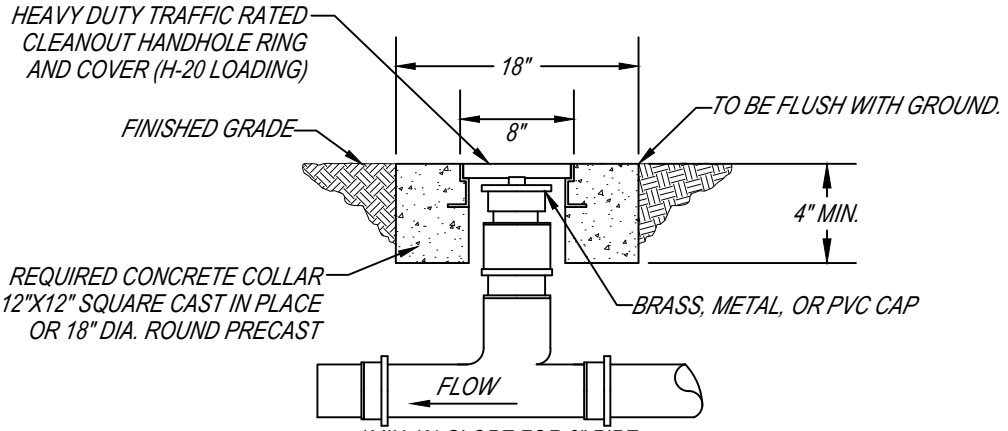
THE CITY OF AUBURN, AL

STANDARD SANITARY SEWER DETAILS

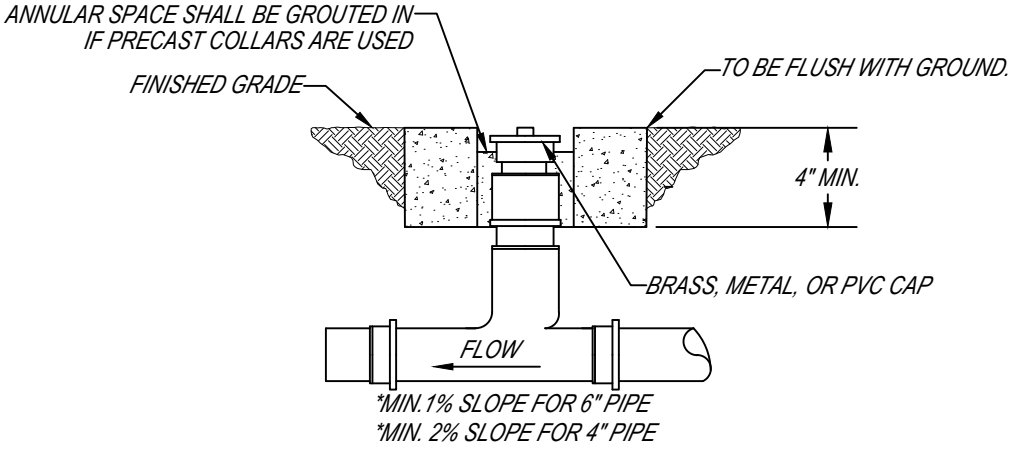
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SCALE:	N.T.S.		DCM 2015
DRAWN BY:	BS		MW-12-03-2020
REVIEWED BY:	EC		MW-10-27-2021
APPROVED BY:	RG		JP-11/2022
IMPLEMENTED:	02/2003		

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TYPICAL CLEANOUT



CLEANOUT IN PAVED AREAS



CLEANOUT IN NON-PAVED AREAS

NOTE:

1. CLEANOUTS ARE REQUIRED AT THE EDGE OF ALL EASEMENTS AND RIGHT OF WAYS, UNLESS APPROVED OTHERWISE.

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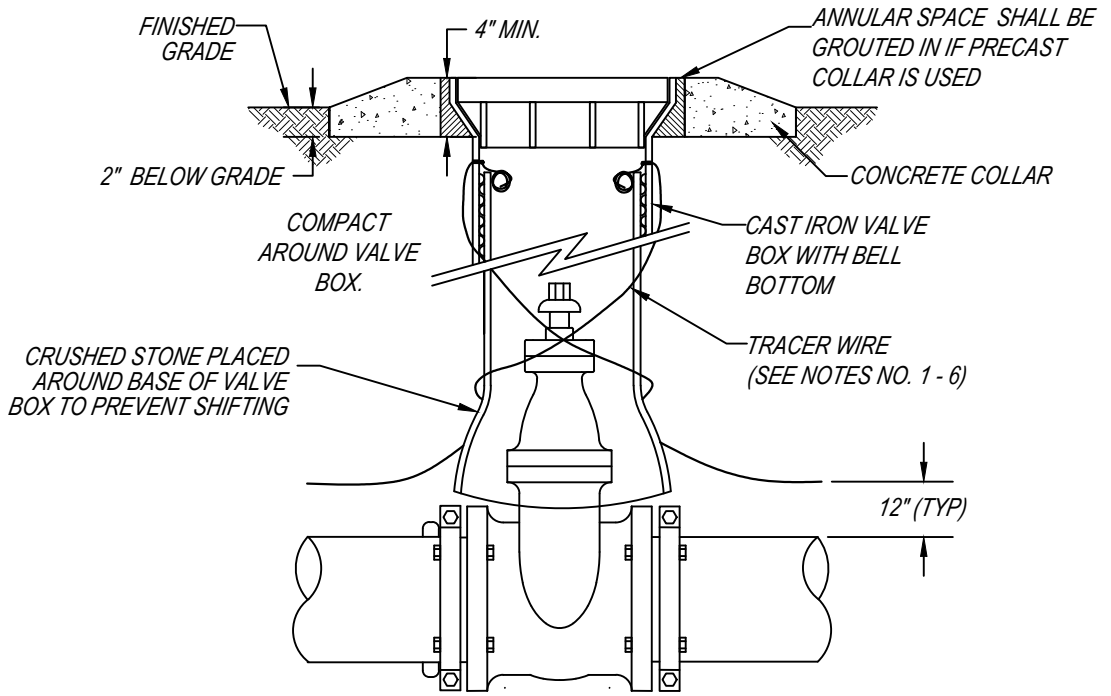
THE CITY OF AUBURN, AL

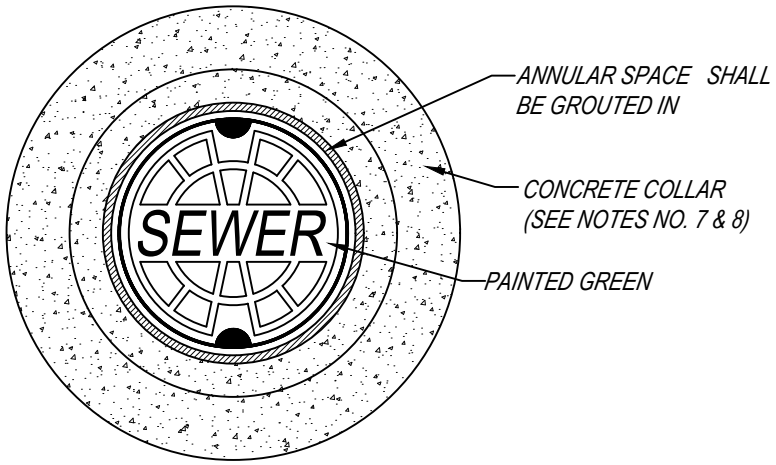
STANDARD SANITARY SEWER DETAILS

DRAWING TITLE:	TYPICAL CLEANOUT		
DEPARTMENT:	WRM	REVISIONS:	DCM 2010
SCALE:	N.T.S.		
DRAWN BY:	BS		
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	02/2003		

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TYPICAL VALVE BOX INSTALLATION





NOTES:

1. TRACER WIRE SHALL BE BROUGHT TO GRADE AT A MINIMUM OF EVERY 500 FEET IN A VALVE BOX .
2. TRACER WIRE SHALL BE WRAPPED AROUND THE VALVE BOX TO PREVENT MOVEMENT.
3. A 3/16" DIAMETER HOLE SHALL BE LOCATED IN THE VALVE BOX NO MORE THAN 6 INCHES BELOW GRADE FOR THE TRACER WIRE TO PULL THROUGH.
4. THE TRACER WIRE SHALL BE KNOTTED INSIDE THE VALVE BOX TO PREVENT SLIPPING BACK THROUGH THE HOLE.
5. A MINIMUM OF 12 INCHES OF EXCESS WIRE SHALL BE COILED AND LEFT IN THE VALVE BOX.
6. TRACER WIRE SHALL BE NO. 14 A.W.G. COPPER CLAD STEEL W/ POLYETHYLENE INSULATION.
7. CONCRETE COLLAR MAY BE CAST-IN-PLACE OR PRECAST AND MAY BE ROUND OR SQUARE IN SHAPE.
8. CONCRETE COLLAR SHALL BE A MIN. 4" THICK.

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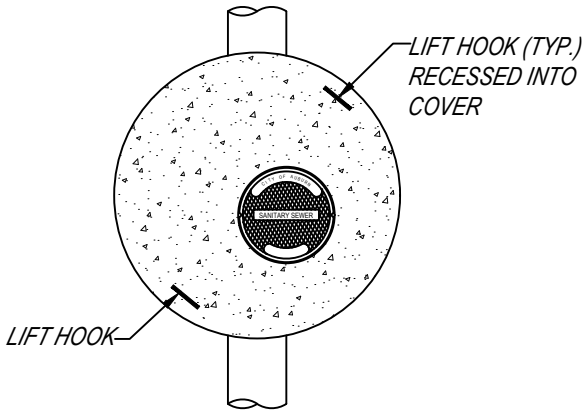
THE CITY OF AUBURN, AL

STANDARD SANITARY SEWER DETAILS

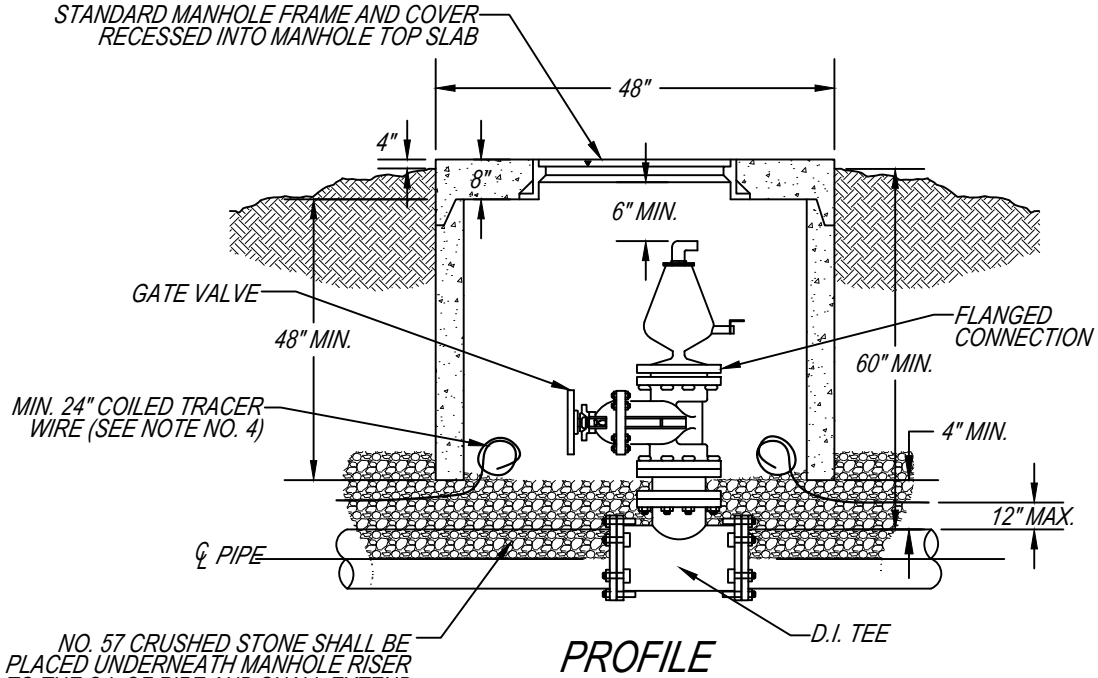
DRAWING TITLE:	TYPICAL VALVE BOX INSTALLATION		
DEPARTMENT:	WRM	REVISIONS:	DCM 2010
SCALE:	N.T.S.		
DRAWN BY:	BS		
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	02/2003		

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COMBINATION AIR RELEASE & AIR/VACUUM VALVE



PLAN



PROFILE

NOTES:

1. AIR RELEASE VALVES SHALL BE MANUFACTURED BY ARI OR APPROVED EQUAL.
2. VALVE BODY SHALL BE STAINLESS STEEL.
3. AIR RELEASE VALVES SHALL BE INSTALLED ON A LEVEL SECTION OF PIPE, EQUIDISTANT BETWEEN JOINTS.
4. TRACER WIRE SHALL BE NO. 14 A.W.G. COPPER CLAD STEEL W/ POLYETHYLENE INSULATION.

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STANDARD SANITARY SEWER DETAILS

DRAWING TITLE:	COMBINATION AIR RELEASE & AIR/VACUUM VALVE		
DEPARTMENT:	WRM	REVISIONS:	GM-04-30-04
SCALE:	N.T.S.		BS-10-30-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	EC		
APPROVED BY:	RG		
IMPLEMENTED:	02/2003		

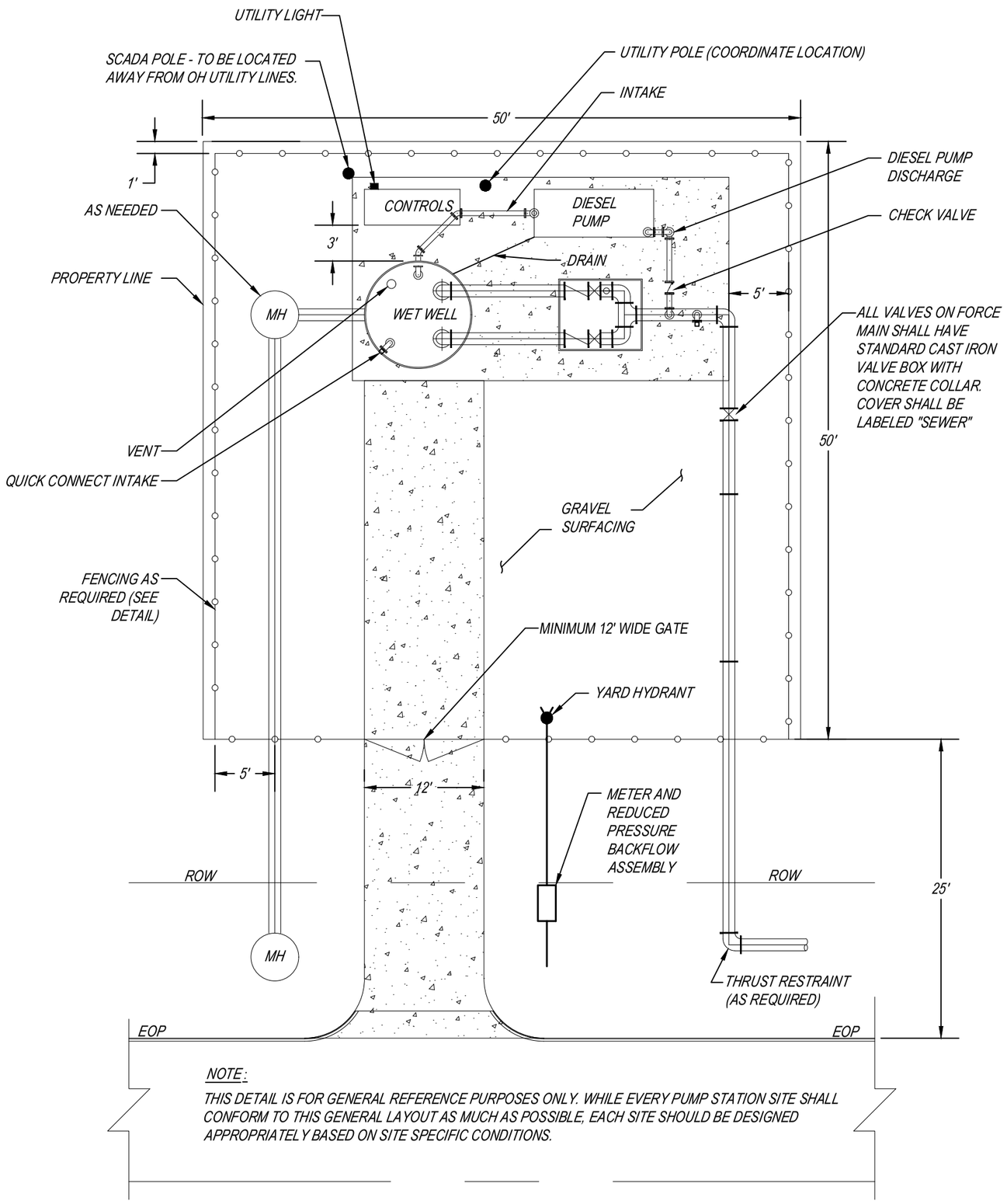
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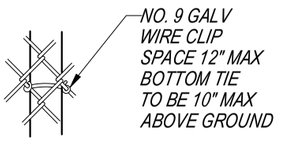
STANDARD SANITARY SEWER DETAILS

GENERAL PUMP STATION SITE PLAN

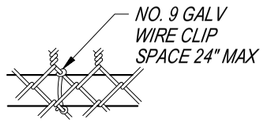


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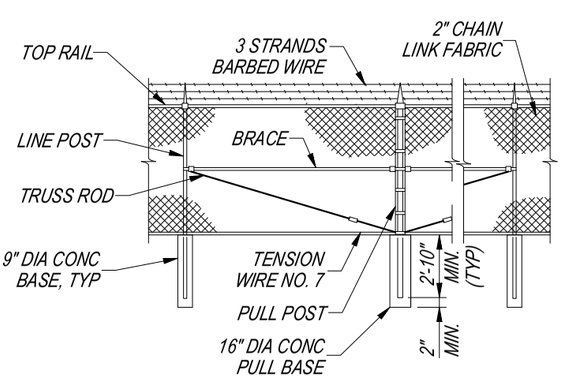
THIS DETAIL IS FOR GENERAL REFERENCE PURPOSES ONLY. WHILE EVERY PUMP STATION SITE SHALL CONFORM TO THIS GENERAL LAYOUT AS MUCH AS POSSIBLE, EACH SITE SHOULD BE DESIGNED APPROPRIATELY BASED ON SITE SPECIFIC CONDITIONS.



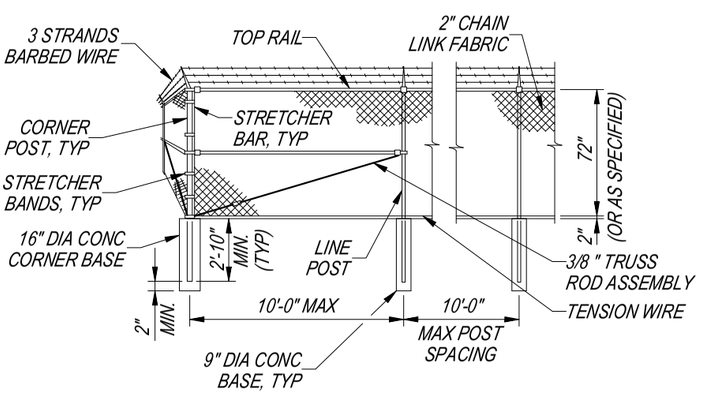
LINE POST CONNECTION



TOP RAIL CONNECTION



TYPICAL PULL POST



TYPICAL CORNER POST

FENCE NOTES:

1. BRACE AND TRUSS ROD REQUIRED AT GATES AND SIDE OF ALL CORNER POSTS.
2. FABRIC ATTACHED TO OUTSIDE OF POSTS.

DRAWING TITLE: GENERAL PUMP STATION SITE PLAN

DEPARTMENT: WWM

REVISIONS

SCALE: N.T.S.

DRAWN BY: CN

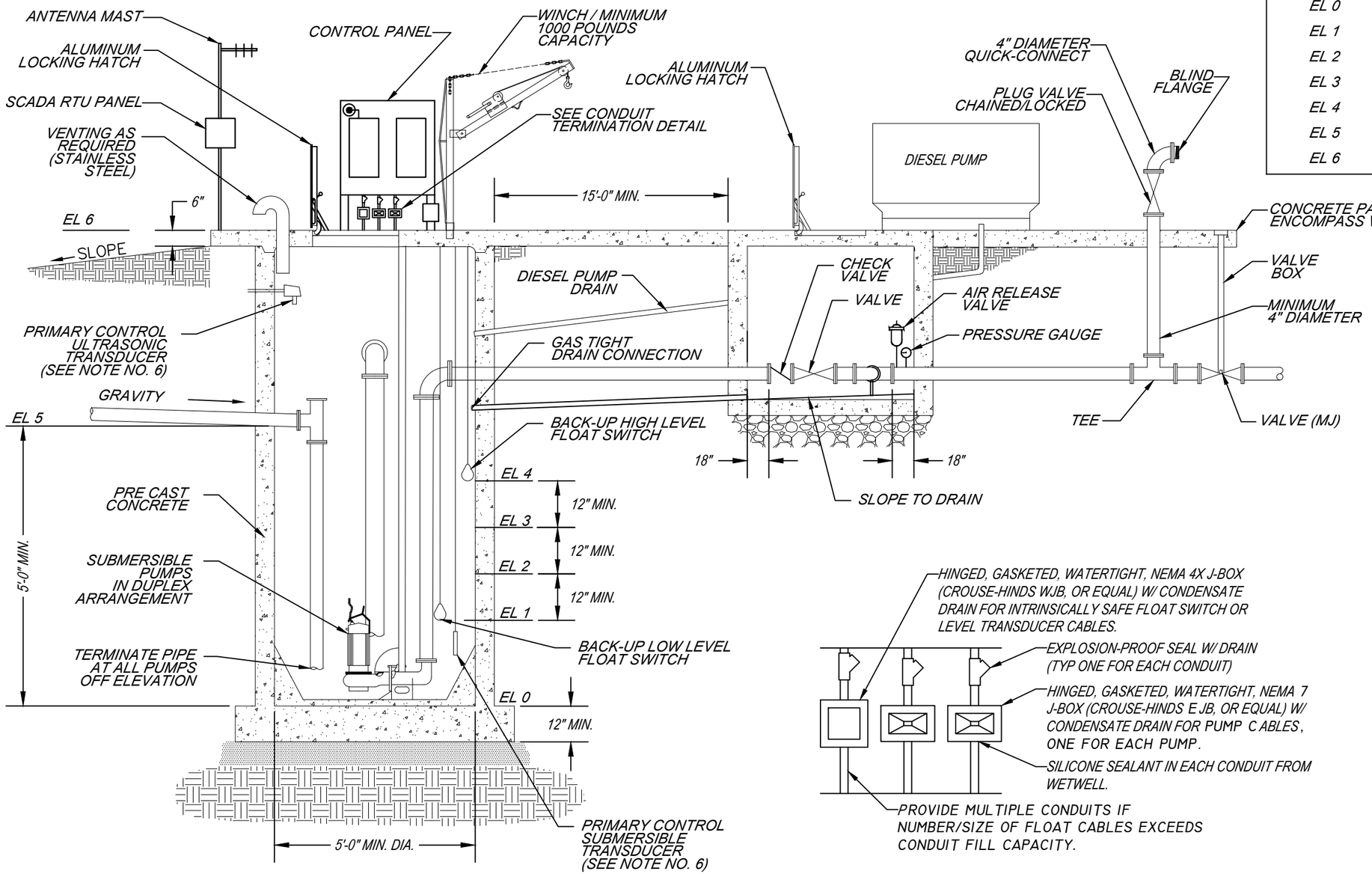
REVIEWED BY: JC

APPROVED BY: EC

IMPLEMENTED: OCM 2010

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GENERAL PUMP STATION SITE SECTION



PUMP STATION - SECTION

CONDUIT TERMINATION DETAIL

ELEVATION	DESCRIPTION	VALUE	NOTES
EL 0	WET-WELL INVERT		
EL 1	ALL PUMPS OFF		
EL 2	LEAD PUMP ON		
EL 3	LAG PUMP ON		
EL 4	HIGH LEVEL ALARM		
EL 5	GRAVITY INVERT		
EL 6	TOP OF WET-WELL		

NOTES:

1. ELEVATION OF THE TOP OF THE PUMP STATION SHALL BE A MINIMUM 2'-0" ABOVE THE 100 YEAR FLOOD ELEVATION.
2. INTERIOR OF WET WELL TO BE LINED WITH HDPE, PVC, OR APPROVED EPOXY LINING.
3. ALL PIPING ON SITE TO BE DUCTILE IRON WITH EPOXY LINING SUITABLE FOR WASTEWATER SERVICE.
4. DIESEL PUMP SHALL BE SIZED TO HANDLE THE PEAK HOURLY DISCHARGE OF THE STATION AND SHALL HAVE A MINIMUM 24 HOUR FUEL CAPACITY.
5. WET WELL SIZE TO BE BASED ON SPECIFIC DESIGN CRITERIA. MINIMUM 5'-0" DIAMETER AND 5'-0" DEPTH FROM THE LOWEST INCOMING PIPE INVERT TO THE WET WELL BOTTOM.
6. PRIMARY LEVEL CONTROL SHALL UTILIZE A 4-20mA SUBMERSIBLE OR ULTRASONIC TRANSDUCER, AS APPROVED.
7. THIS IS A GENERAL SCHEMATIC DRAWING. EACH STATION SHALL HAVE A DETAILED SITE SPECIFIC DESIGN.
8. ALL PIPING INSIDE WET-WELL SHALL BE STAINLESS STEEL

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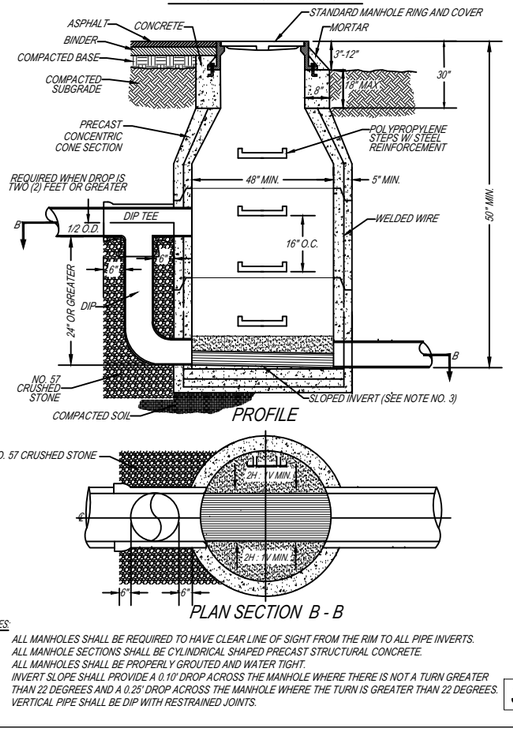
THE CITY OF AUBURN, AL

STANDARD SANITARY SEWER DETAILS

DRAWING TITLE:	GENERAL PUMP STATION SITE SECTION
DEPARTMENT:	WRM
SCALE:	N.T.S.
DRAWN BY:	CN
REVIEWED BY:	JC
APPROVED BY:	EC
IMPLEMENTED:	DCM 2010
REVISIONS:	JP 11/2022

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TYPICAL DROP MANHOLE

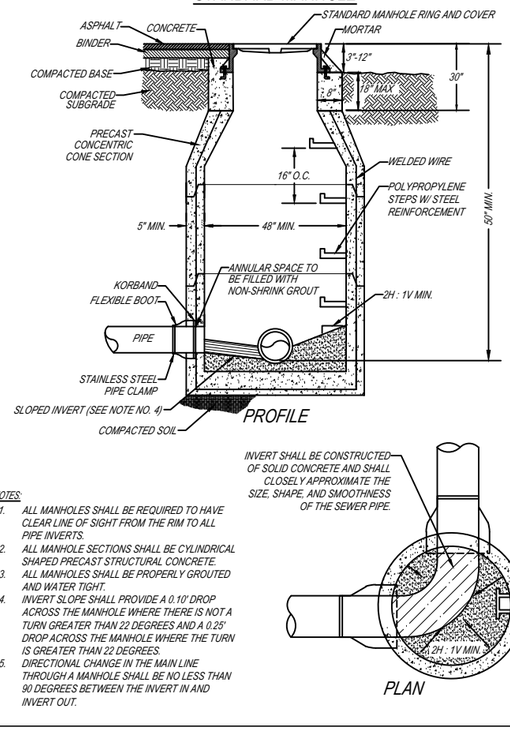


NOTES:

1. ALL MANHOLES SHALL BE REQUIRED TO HAVE CLEAR LINE OF SIGHT FROM THE RIM TO ALL PIPE INVERTS.
2. ALL MANHOLE SECTIONS SHALL BE CYLINDRICAL SHAPED PRECAST STRUCTURAL CONCRETE.
3. ALL MANHOLES SHALL BE PROPERLY GROUTED AND WATER TIGHT.
4. INVERT SLOPE SHALL PROVIDE A 0.10' DROP ACROSS THE MANHOLE WHERE THERE IS NOT A TURN GREATER THAN 22 DEGREES AND A 0.25' DROP ACROSS THE MANHOLE WHERE THE TURN IS GREATER THAN 22 DEGREES.
5. VERTICAL PIPE SHALL BE DIP WITH RESTRAINED JOINTS.

300

STANDARD MANHOLE

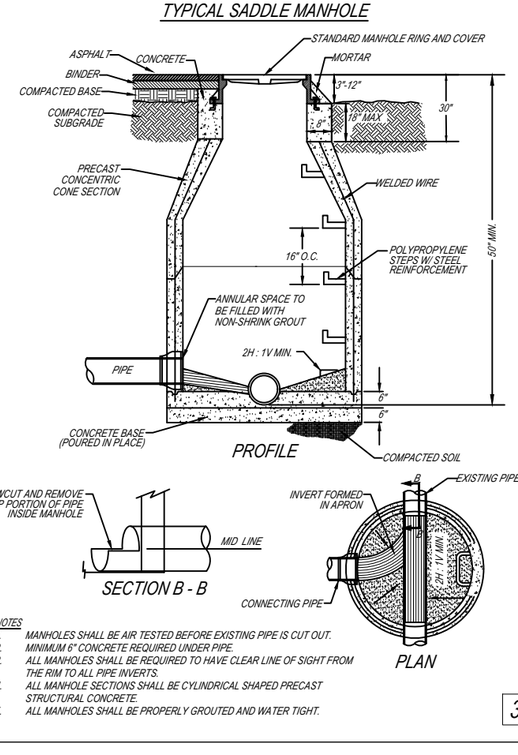


NOTES:

1. ALL MANHOLES SHALL BE REQUIRED TO HAVE CLEAR LINE OF SIGHT FROM THE RIM TO ALL PIPE INVERTS.
2. ALL MANHOLE SECTIONS SHALL BE CYLINDRICAL SHAPED PRECAST STRUCTURAL CONCRETE.
3. ALL MANHOLES SHALL BE PROPERLY GROUTED AND WATER TIGHT.
4. INVERT SLOPE SHALL PROVIDE A 0.10' DROP ACROSS THE MANHOLE WHERE THERE IS NOT A TURN GREATER THAN 22 DEGREES AND A 0.25' DROP ACROSS THE MANHOLE WHERE THE TURN IS GREATER THAN 22 DEGREES.
5. DIRECTIONAL CHANGE IN THE MAIN LINE THROUGH A MANHOLE SHALL BE NO LESS THAN 90 DEGREES BETWEEN THE INVERT IN AND INVERT OUT.

302

TYPICAL SADDLE MANHOLE

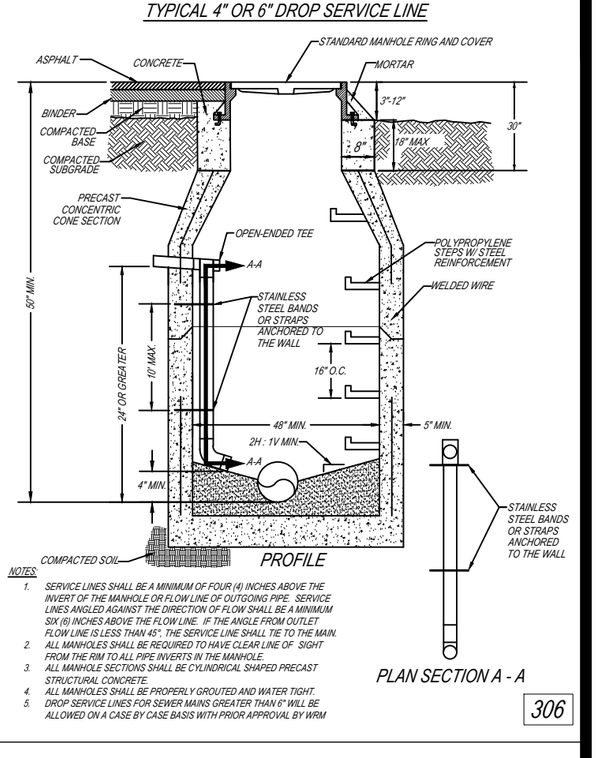


NOTES

1. MANHOLES SHALL BE AIR TESTED BEFORE EXISTING PIPE IS CUT OUT.
2. MINIMUM 6" CONCRETE REQUIRED UNDER PIPE.
3. ALL MANHOLES SHALL BE REQUIRED TO HAVE CLEAR LINE OF SIGHT FROM THE RIM TO ALL PIPE INVERTS.
4. ALL MANHOLE SECTIONS SHALL BE CYLINDRICAL SHAPED PRECAST STRUCTURAL CONCRETE.
5. ALL MANHOLES SHALL BE PROPERLY GROUTED AND WATER TIGHT.

304

TYPICAL 4" OR 6" DROP SERVICE LINE

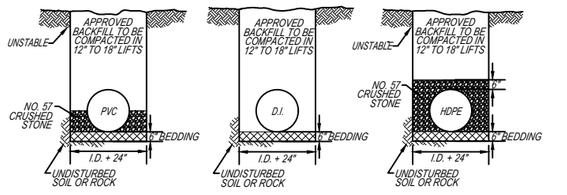


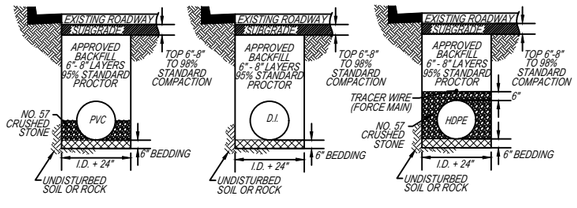
NOTES:

1. SERVICE LINES SHALL BE A MINIMUM OF FOUR (4) INCHES ABOVE THE INVERT OF THE MANHOLE OR FLOW LINE OF OUTGOING PIPE. SERVICE LINES ANGLED AGAINST THE DIRECTION OF FLOW SHALL BE A MINIMUM SIX (6) INCHES ABOVE THE FLOW LINE. IF THE ANGLE FROM OUTLET FLOW LINE IS LESS THAN 45°, THE SERVICE LINE SHALL TIE TO THE MAIN.
2. ALL MANHOLES SHALL BE REQUIRED TO HAVE CLEAR LINE OF SIGHT FROM THE RIM TO ALL PIPE INVERTS IN THE MANHOLE.
3. ALL MANHOLE SECTIONS SHALL BE CYLINDRICAL SHAPED PRECAST STRUCTURAL CONCRETE.
4. ALL MANHOLES SHALL BE PROPERLY GROUTED AND WATER TIGHT.
5. DROP SERVICE LINES FOR SEWER MAINS GREATER THAN 6" WILL BE ALLOWED ON A CASE BY CASE BASIS WITH PRIOR APPROVAL BY WRM

306

BEDDING REQUIREMENTS FOR TRENCHES



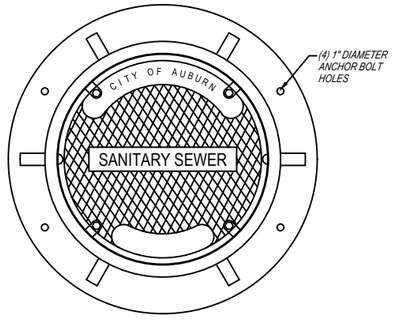


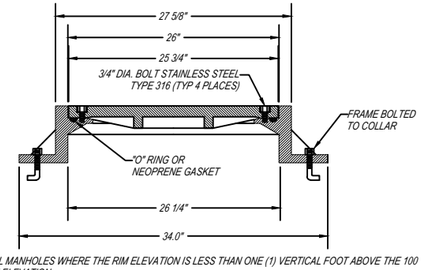
NOTES:

1. BEDDING MATERIALS FOR PVC AND HDPE PIPE SHALL BE 1/4" TO 1 1/2" GRADED CRUSHED STONE SUCH AS: 56,57,6,67,68,7, OR 78. STONE PER ALDOT STANDARD SPECS. SAND OR GRAVEL MAY BE USED AS BEDDING MATERIAL FOR D.I. PIPE.
2. WIDTH VARIES BASED ON WALL STABILITY. STABLE WALLS WIDTH AS NEEDED TO JOIN PIPE AND COMPACT HAUNCHING AND INITIAL BACKFILL. UNSTABLE WALLS: WIDTH TO BE A MINIMUM OF FIVE TIMES PIPE DIAMETER.
3. FLOWABLE FILL CAN BE USED AS BACKFILL, BUT MUST HAVE PRIOR APPROVAL AND MUST BE ALLOWED TO SETUP FOR 24 HOURS PRIOR TO TOPPING.
4. APPROVED BACKFILL MATERIAL INCLUDES 825 B, FLOWABLE FILL AND APPROVED DIRT. ALTERNATIVE MATERIAL MUST BE APPROVED BY PROJECT MANAGER PRIOR TO USE.

308

TYPICAL WATERTIGHT MANHOLE COVER



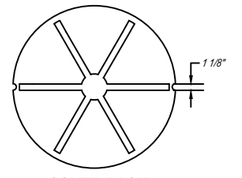


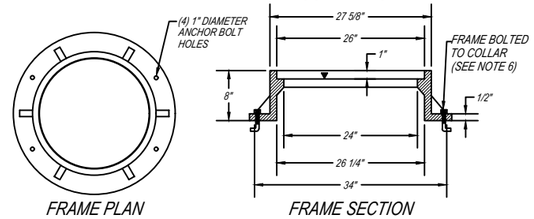
NOTES:

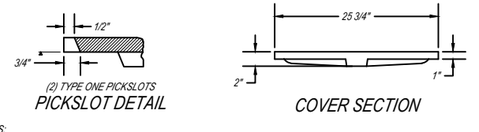
1. REQUIRED FOR ALL MANHOLES WHERE THE RIM ELEVATION IS LESS THAN ONE (1) VERTICAL FOOT ABOVE THE 100 YEAR FLOODPLAIN ELEVATION.
2. CAST IRON FRAME AND COVER IN ROADWAY AND TRAFFIC SHALL BE INSTALLED FLUSH WITH FINISHED GRADE OF THE PAVEMENT IN FLAT OR STEEP GRADES.
3. THE FRAME AND COVER SHALL WEIGH APPROXIMATELY 370 POUNDS IN TRAFFIC AND NON TRAFFIC APPLICATIONS.
4. THE DIAMETER OF THE COVER FOR ALL SANITARY SEWER MANHOLES SHALL BE 25 3/4".
5. ALL COVERS SHALL BE MARKED "SANITARY SEWER" BY THE MANUFACTURER.
6. APPROVED DRAWINGS ARE FROM US FOUNDRY (USF-152-BV-BWT CITY OF AUBURN).

310

STANDARD MANHOLE RING & COVER







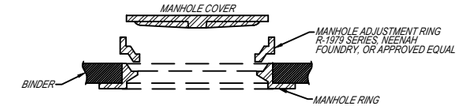
NOTES:

1. CAST IRON FRAME AND COVER IN ROADWAY AND TRAFFIC SHALL BE INSTALLED FLUSH WITH FINISHED GRADE OF THE PAVEMENT IN FLAT OR STEEP GRADES.
2. THE FRAME AND COVER SHALL WEIGH APPROXIMATELY 370 POUNDS IN TRAFFIC AND NON TRAFFIC APPLICATIONS.
3. THE DIAMETER OF THE COVER FOR ALL SANITARY SEWER MANHOLES SHALL BE 25 3/4".
4. ALL COVERS SHALL BE MARKED "SANITARY SEWER" BY THE MANUFACTURER.
5. APPROVED DRAWINGS ARE FROM US FOUNDRY (USF-152-BV CITY OF AUBURN) OR SIGMA CORPORATION (RMH-2565).
6. OFF ROAD MANHOLES SHALL HAVE THE RING BOLTED DOWN OR PRECAST INTO THE CONCRETE.

▼ MACHINED BEARING SURFACE

312

MANHOLE ADJUSTMENT RISER



NOTES:

1. ONE PIECE CONSTRUCTION, NO WELDS. COATED TO PREVENT RUST.
2. MULTIPLE RISERS ARE NOT ALLOWED.
3. ALL MANHOLES IN PAVEMENT MUST BE FLUSH WITH THE BINDER LAYER. THE MANHOLE ADJUSTMENT RISER SHALL BE USED UPON PLACEMENT OF WEARING SURFACE.

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STANDARD DETAILS: SANITARY SEWER - SHEET 1 OF 3

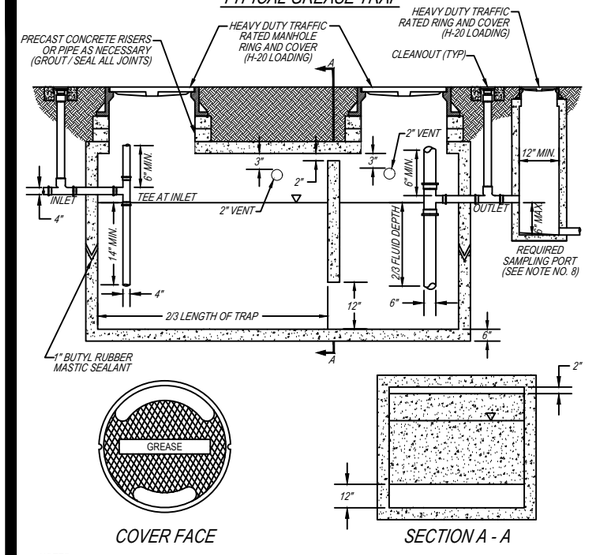
PROJECT TITLE:

City of Auburn

DEPARTMENT:	WRM
SCALE:	N.T.S.
DRAWN BY:	BS
REVIEWED BY:	JC
APPROVED BY:	EC
IMPLEMENTED:	02/2003

REVISIONS:	
	GM-04/20/04
	BS-10-25-07
	DCM 2010
	JC-10-2011
	MW-11-2021

TYPICAL GREASE TRAP

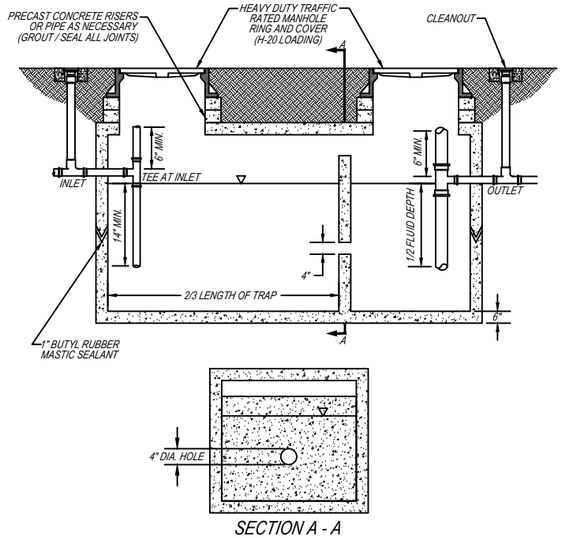


NOTES:

1. MANHOLE, RING AND COVERS SHALL NOT BE COVERED, OR OBSCURED BY LANDSCAPING, PAVEMENT, ETC.
2. INLET AND OUTLET PIPES SHALL BE SCHEDULE 40 PVC, AND SHALL NOT BE COVERED OR CAPPED.
3. INLET PIPE MUST BE A MINIMUM OF 4" IN DIAMETER. VERTICAL PIPE ON OUTLET SIDE MUST BE A MINIMUM OF 6" IN DIAMETER.
4. TRAPS SHALL NOT BE LOCATED IN AN ENTRANCE, EXIT, DRIVE-THRU, OR UNDER A MENU BOARD.
5. SIZE TO BE PER STANDARD SIZING WORKSHEET (MIN. 500 GALLONS).
6. 2" DIAMETER VENTS TO BE CONNECTED TO BUILDING VENT SYSTEM (WHERE REQUIRED BY THE PLUMBING PLANS).
7. GREASE TRAPS SHALL MEET STATE OF ALABAMA HEALTH REGULATIONS SECTION 420-3-1-23: 420-3-1-24: 420-3-1-25
8. A DOWNSTREAM SAMPLING PORT OR MANHOLE WILL BE REQUIRED. NO OTHER CONNECTIONS ARE ALLOWED BETWEEN GREASE TRAP AND SAMPLING MANHOLE.
9. RESTROOM AND NON GREASE LADEN WASTE SHALL NOT PASS THROUGH THE GREASE TRAP.

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TYPICAL OIL/GRIT SEPARATOR

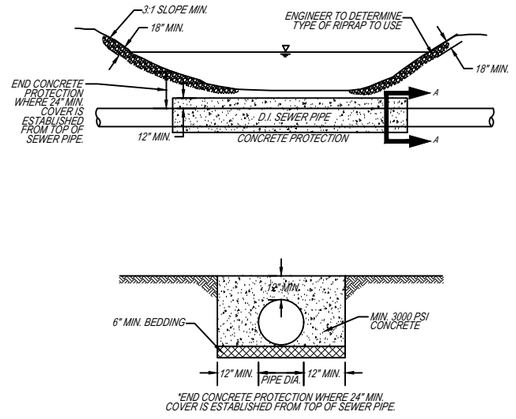


NOTES:

1. MANHOLE RING AND COVERS SHALL NOT BE COVERED, OR OBSCURED BY LANDSCAPING, PAVEMENT, ETC.
2. INLET AND OUTLET PIPES SHALL BE SCHEDULE 40 PVC, AND SHALL NOT BE COVERED OR CAPPED.
3. INLET PIPE MUST BE A MINIMUM OF 4" DIAMETER. VERTICAL PIPE ON OUTLET SIDE MUST BE A MINIMUM OF 6" IN DIAMETER.
4. SEPARATOR SHALL NOT BE LOCATED IN AN ENTRANCE, EXIT, DRIVE-THRU, OR UNDER A MENU BOARD.
5. MINIMUM SIZE: 1000 GALLONS.

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TYPICAL STREAM CROSSING

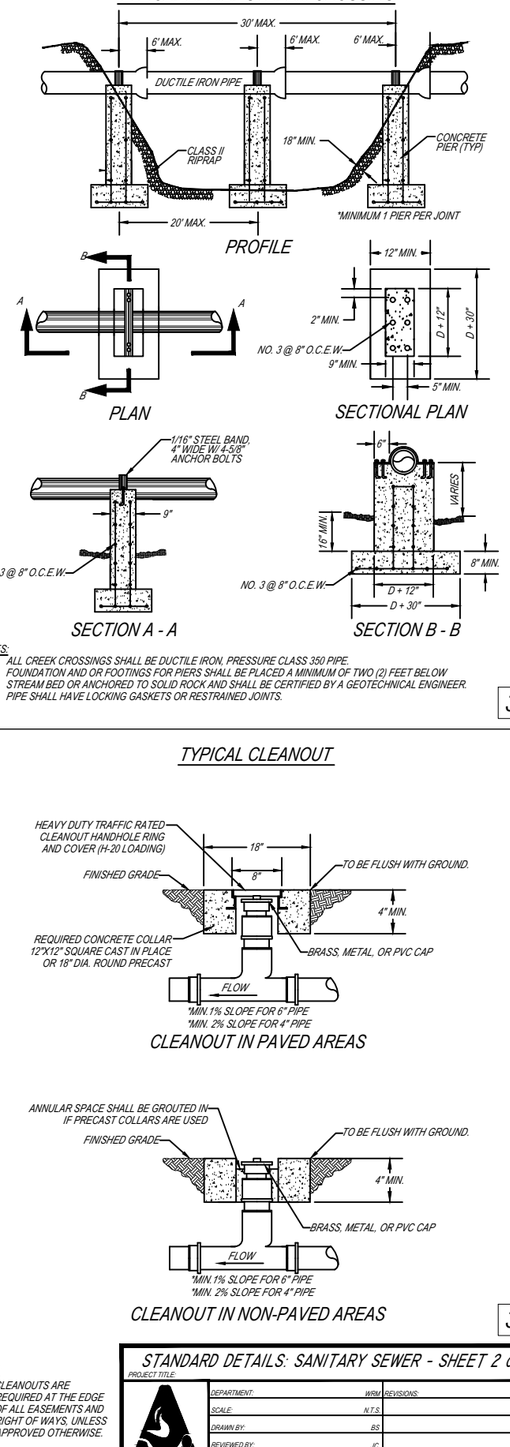


NOTES:

1. ALL CREEK CROSSINGS SHALL BE DUCTILE IRON, PRESSURE CLASS 350 PIPE.
2. PIPE SHALL HAVE LOCKING GASKETS OR RESTRAINED JOINTS WHERE LOCATED INSIDE STREAM BANKS.
3. END CONCRETE PROTECTION WHERE 24" MINIMUM COVER IS ESTABLISHED FROM THE TOP OF THE SEWER PIPE.

320

TYPICAL AERIAL STREAM CROSSING



NOTES:

1. ALL CREEK CROSSINGS SHALL BE DUCTILE IRON, PRESSURE CLASS 350 PIPE.
2. FOUNDATION AND OR FOOTINGS FOR PIERS SHALL BE PLACED A MINIMUM OF TWO (2) FEET BELOW STREAM BED OR ANCHORED TO SOLID ROCK AND SHALL BE CERTIFIED BY A GEOTECHNICAL ENGINEER.
3. PIPE SHALL HAVE LOCKING GASKETS OR RESTRAINED JOINTS.

322

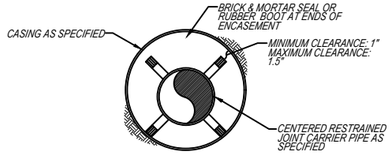
TYPICAL BORE ENCASEMENT

CARRIER PIPE		SPACER	STEEL ENCASEMENT	
NOMINAL PIPE DIAMETER	STANDARD PIPE BELL O.D.*	CASING SPACER BAND WIDTH	MINIMUM CASING THICKNESS	MINIMUM CASING DIAMETER**
4	6.40	8	0.25	14
6	8.60	8	0.25	16
8	11.16	8	0.25	18
10	13.25	8	0.25	20
12	15.22	8	0.25	22
14	17.73	12	0.25	24
16	19.86	12	0.3125	26
18	22.16	12	0.3125	30
20	24.28	12	0.3125	32
24	28.50	12	0.3125	36
30	34.95	12	0.5	42
36	41.37	12	0.5	48

ALL SIZES INDICATED ARE IN INCHES

*PIPE BELL OUTSIDE DIAMETER BASED ON PRESSURE CLASS 350 DUCTILE IRON PIPE.

**CASING DIAMETERS BASED ON BEING A MINIMUM OF 6 INCHES GREATER THAN THE OUTER DIAMETER OF THE JOINT BELL, TO THE NEAREST EVEN SIZE.

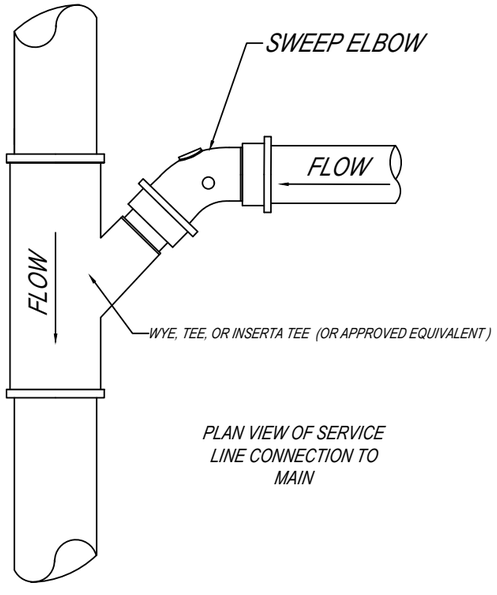


NOTES

1. ALL SPACER BANDS SHALL BE MADE FROM T-304 STAINLESS STEEL OF A MINIMUM 14 GAUGE THICKNESS.
2. ALL SPACERS SHALL HAVE A SYNTHETIC RUBBER OR PVC LINER TO INSULATE THE PIPELINE FROM THE SPACER.
3. ALL SPACERS SHALL HAVE 1.5" WIDE GLASS REINFORCED PLASTIC OR UHMW POLYMER RUNNERS TO INSULATE THE SPACER.
4. SPACERS TO BE MANUFACTURED BY CASCADE WATERWORKS MFG. CO. (PSI) PIPELINE SEAL AND INSULATOR, INC. OR EQUAL.
5. 6" THRU 12" DIAMETER PIPELINE SHALL USE 8" WIDE BANDS: GREATER THAN 12" DIAMETER PIPELINES SHALL USE 12" WIDE BANDS.
6. CENTERED RESTRAINED CASING SPACERS SHALL BE SPACED AT A MAXIMUM OF TEN FEET APART WITH A MINIMUM OF TWO SPACERS PER JOINT OF PIPE.

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TYPICAL SERVICE CONNECTION

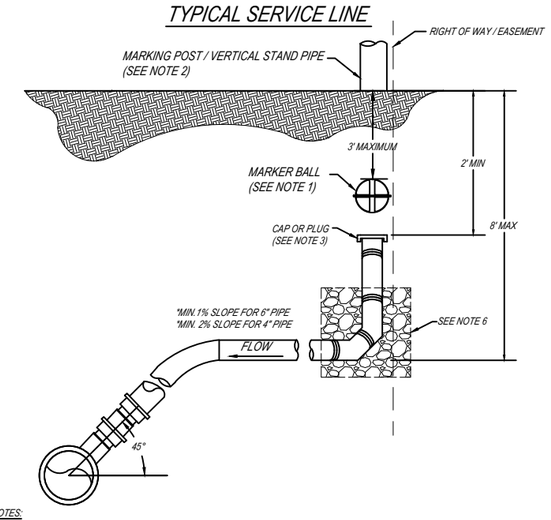


NOTE:

1. SADDLE FITTING CONNECTIONS SHALL BE MADE WITH PRIOR APPROVAL BY WRM. THE SADDLE SHALL BE PLACED OVER A CAREFULLY CUT OPENING IN THE UPPER QUADRANT OF THE SEWER MAIN AND ATTACHED TO THE MAIN USING STAINLESS STEEL BANDS. UNDER NO CIRCUMSTANCES SHALL ANY LATERAL CONNECTION BE ALLOWED TO PROTRUDE INTO THE SEWER MAIN.

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TYPICAL SERVICE LINE



NOTES:

1. PLUG LATERAL AND BURY MARKER BALL LOCATOR AT THE ROW OR EDGE OF EASEMENT. (TEMPO OMNI MARKER MODEL 162, 121.6 KHZ, OR APPROVED EQUAL). MARKER BALL SHALL NOT BE DEEPER THAN 3'.
2. SERVICE LATERAL SHOULD ALSO BE MARKED ABOVE GRADE WITH A GREEN RHINO 3-RAIL FIBERGLASS MARKING POST OR APPROVED EQUAL. VERTICAL STANDPIPE MAY SERVE AS MARKING POST IF PREFERRED, MARKER BALL IS STILL REQUIRED.
3. SERVICE LINE SHALL BE CAPPED OR PLUGGED PER COA STANDARDS.
4. SEWER LATERAL SHALL MATCH MATERIAL OF MAIN WHERE OTHERWISE APPROVED BY WRM
5. DUCTILE IRON LATERALS CAN BE USED WHEN CONNECTING TO A PVC MAIN.
6. 45° FITTING CONFIGURATION. SET IN #57 STONE. REQUIRED WHEN DEPTH IS GREATER THAN 3'. LONG SWEEP FITTING CAN BE USED WITH COA APPROVAL
7. THE 45° FITTING CONFIGURATION AND RISER MATERIAL SHOULD MATCH THE LATERAL

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TYPICAL CLEANOUT

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NOTE:

1. CLEANOUTS ARE REQUIRED AT THE EDGE OF ALL EASEMENTS AND RIGHT OF WAYS, UNLESS APPROVED OTHERWISE.

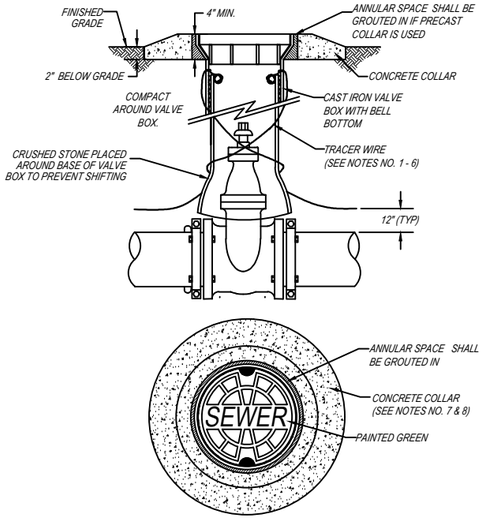
STANDARD DETAILS: SANITARY SEWER - SHEET 2 OF 3

PROJECT TITLE:

City of Auburn

DEPARTMENT:	WRM	REVISIONS:	GM-04/20/04
SCALE:	N.T.S.		BS-10-25-07
DRAWN BY:	BS		DCM 2010
REVIEWED BY:	JC		JC-10-2011
APPROVED BY:	EC		MW-11-2021
IMPLEMENTED:	02/2003		

TYPICAL VALVE BOX INSTALLATION

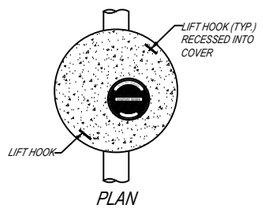


NOTES:

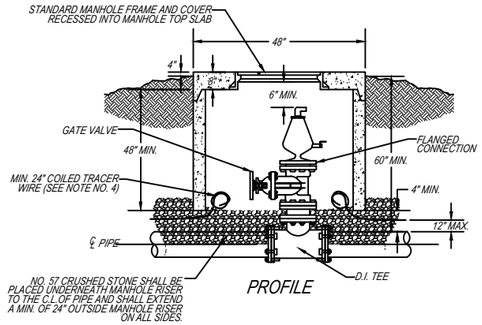
1. TRACER WIRE SHALL BE BROUGHT TO GRADE AT A MINIMUM OF EVERY 500 FEET IN A VALVE BOX.
2. TRACER WIRE SHALL BE WRAPPED AROUND THE VALVE BOX TO PREVENT MOVEMENT.
3. A 3/16" DIAMETER HOLE SHALL BE LOCATED IN THE VALVE BOX NO MORE THAN 6 INCHES BELOW GRADE FOR THE TRACER WIRE TO PULL THROUGH.
4. THE TRACER WIRE SHALL BE KNOTTED INSIDE THE VALVE BOX TO PREVENT SLIPPING BACK THROUGH THE HOLE.
5. A MINIMUM OF 12 INCHES OF EXCESS WIRE SHALL BE COILED AND LEFT IN THE VALVE BOX.
6. TRACER WIRE SHALL BE NO. 14 A.W.G. COPPER CLAD STEEL W/ POLYETHYLENE INSULATION.
7. CONCRETE COLLAR MAY BE CAST-IN-PLACE OR PRECAST AND MAY BE ROUND OR SQUARE IN SHAPE.
8. CONCRETE COLLAR SHALL BE A MIN. 4" THICK.

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COMBINATION AIR RELEASE & AIR/VACUUM VALVE



PLAN



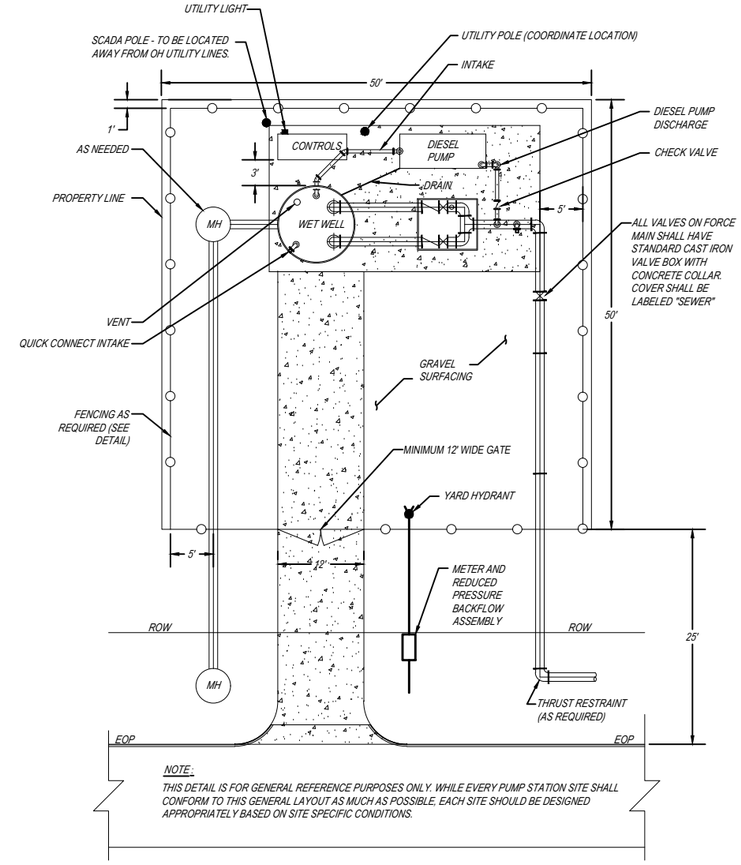
PROFILE

NOTES:

1. AIR RELEASE VALVES SHALL BE MANUFACTURED BY ARI OR APPROVED EQUAL.
2. VALVE BODY SHALL BE STAINLESS STEEL.
3. AIR RELEASE VALVES SHALL BE INSTALLED ON A LEVEL SECTION OF PIPE, EQUIDISTANT BETWEEN JOINTS.
4. TRACER WIRE SHALL BE NO. 14 A.W.G. COPPER CLAD STEEL W/ POLYETHYLENE INSULATION.

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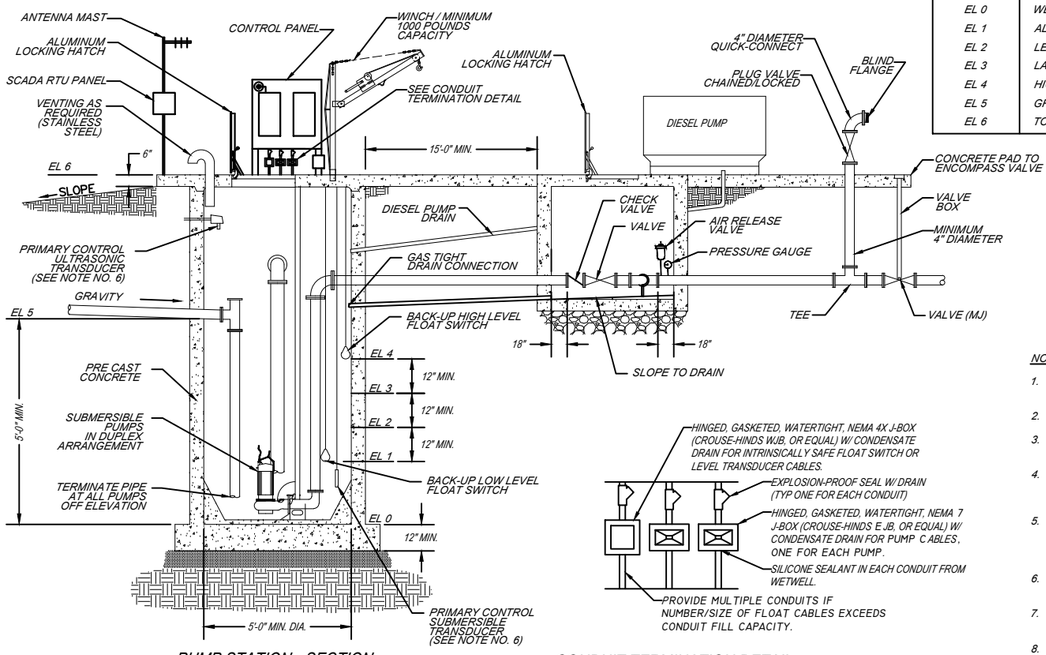
GENERAL PUMP STATION SITE PLAN



NOTE:

THIS DETAIL IS FOR GENERAL REFERENCE PURPOSES ONLY. WHILE EVERY PUMP STATION SITE SHALL CONFORM TO THIS GENERAL LAYOUT AS MUCH AS POSSIBLE, EACH SITE SHOULD BE DESIGNED APPROPRIATELY BASED ON SITE SPECIFIC CONDITIONS.

GENERAL PUMP STATION SITE SECTION



PUMP STATION - SECTION

ELEVATION	DESCRIPTION	VALUE	NOTES
EL 0	WET-WELL INVERT		
EL 1	ALL PUMPS OFF		
EL 2	LEAD PUMP ON		
EL 3	LAG PUMP ON		
EL 4	HIGH LEVEL ALARM		
EL 5	GRAVITY INVERT		
EL 6	TOP OF WET-WELL		

NOTES:

1. ELEVATION OF THE TOP OF THE PUMP STATION SHALL BE A MINIMUM 2'-0" ABOVE THE 100 YEAR FLOOD ELEVATION.
2. INTERIOR OF WET WELL TO BE LINED WITH HDPE, PVC, OR APPROVED EPOXY LINING.
3. ALL PIPING ON SITE TO BE DUCTILE IRON WITH EPOXY LINING SUITABLE FOR WASTEWATER SERVICE.
4. DIESEL PUMP SHALL BE SIZED TO HANDLE THE PEAK HOURLY DISCHARGE OF THE STATION AND SHALL HAVE A MINIMUM 24 HOUR FUEL CAPACITY.
5. WET WELL SIZE TO BE BASED ON SPECIFIC DESIGN CRITERIA, MINIMUM 5'-0" DIAMETER AND 5'-0" DEPTH FROM THE LOWEST INCOMING PIPE INVERT TO THE WET WELL BOTTOM.
6. PRIMARY LEVEL CONTROL SHALL UTILIZE A 4-20mA SUBMERSIBLE OR ULTRASONIC TRANSDUCER, AS APPROVED.
7. THIS IS A GENERAL SCHEMATIC DRAWING. EACH STATION SHALL HAVE A DETAILED SITE SPECIFIC DESIGN.
8. ALL PIPING INSIDE WET-WELL SHALL BE STAINLESS STEEL

CONDUIT TERMINATION DETAIL

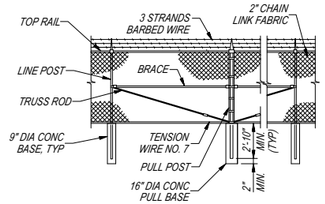
338



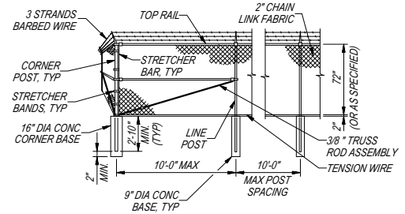
LINE POST CONNECTION



TOP RAIL CONNECTION



TYPICAL PULL POST



TYPICAL CORNER POST

FENCE NOTES:

1. BRACE AND TRUSS ROD REQUIRED AT GATES AND SIDE OF ALL CORNER POSTS.
2. FABRIC ATTACHED TO OUTSIDE OF POSTS.

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STANDARD DETAILS: SANITARY SEWER - SHEET 3 OF 3

PROJECT TITLE:

City of Auburn

DEPARTMENT:	WRM	REVISIONS:	DCM 2010
SCALE:	N.T.S.		JC-10-2011
DRAWN BY:	BS		
REVIEWED BY:	JC		
APPROVED BY:	EC		
IMPLEMENTED:	12/2007		

EROSION CONTROL NOTES:

1. A CONSTRUCTION EXIT PAD MUST BE INSTALLED AT ALL POINTS OF INGRESS/EGRESS TO THE SITE.
2. EROSION CONTROL BLANKETS AND NETTING SHOULD BE USED ON STEEP SLOPES AND IN CHANNELS IN CONJUNCTION WITH PERMANENT VEGETATION.
3. MULCH ALL BARE AREAS IMMEDIATELY FOLLOWING INITIAL GRADING PROCEDURES.
4. BMP'S SHALL BE INSPECTED AT LEAST MONTHLY AND WITHIN 24 HOURS OF RAIN EVENTS OF 0.75 INCHES OR GREATER. MAINTENANCE AND REPAIR MUST BE MADE WITHIN 3 DAYS OF INSPECTIONS, UNLESS OTHERWISE DIRECTED. COPIES OF THE QUALIFIED CREDENTIALED PROFESSIONAL (QCP) / QUALIFIED CREDENTIALED INSPECTOR (QCI) INSPECTION REPORTS SHALL BE SUBMITTED TO THE CITY OF AUBURN WATER RESOURCE MANAGEMENT DEPARTMENT, ATTN: WATERSHED DIVISION, 1501 WEST SAMFORD AVENUE, AUBURN, ALABAMA 36832.
5. TEMPORARY SEEDING OF DISTURBED AREAS SHOULD BE IMPLEMENTED WHENEVER DISTURBED SOIL AREAS WILL NOT BE BROUGHT TO FINISHED GRADE FOR A PERIOD OF 15 CALENDAR DAYS OR LONGER.
6. THESE STANDARD DETAILS SHALL BE APPLICABLE TO ALL LAND DISTURBING ACTIVITIES AND ATTACHED TO THE RELEVANT SITE PLAN AND/OR SUBDIVISION DRAWINGS.
7. ALL EROSION CONTROL MEASURES ARE TO BE IN ACCORDANCE WITH THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL, AND STORM WATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS (LATEST EDITION), AND SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
8. SILT FENCE: REMOVE ACCUMULATED SEDIMENT WHEN DEPTH REACHES 1/4" THE HEIGHT OF THE BARRIER.
9. TRACK OUT CLEAN UP SHOULD ONLY BE DONE USING "DRY" METHOD.

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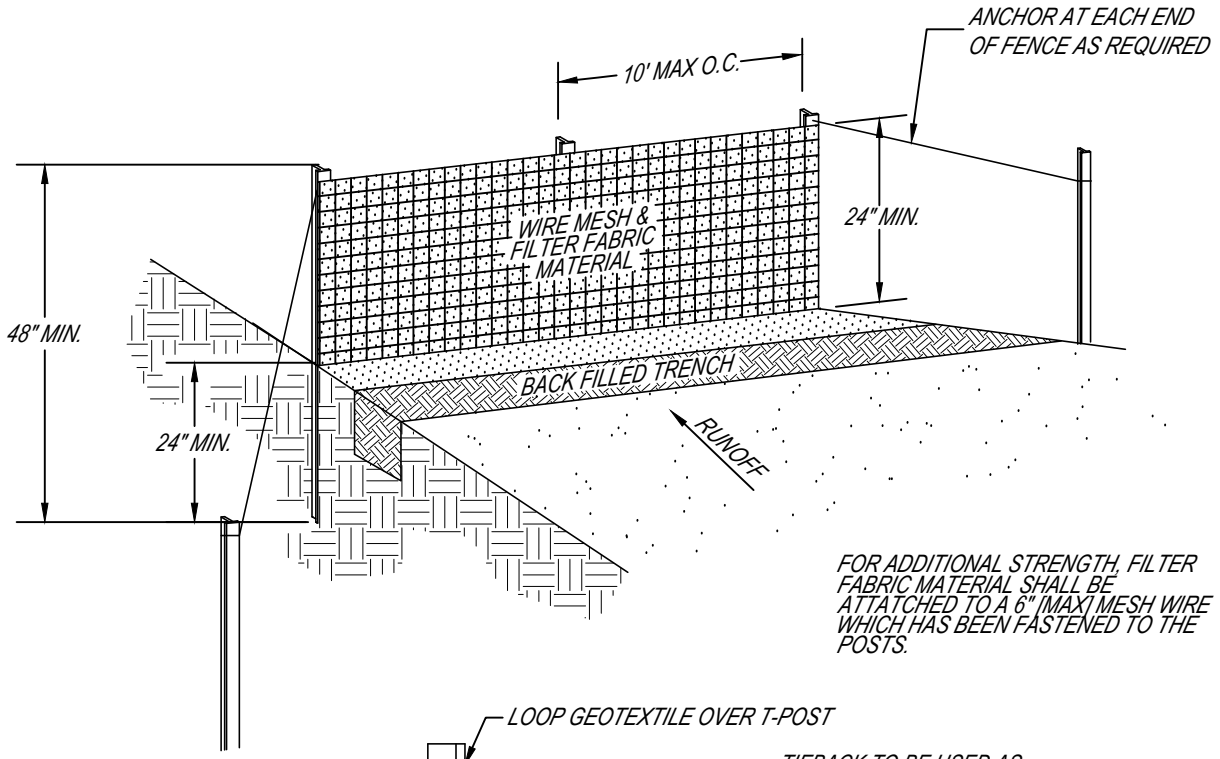
STANDARD EROSION CONTROL DETAILS

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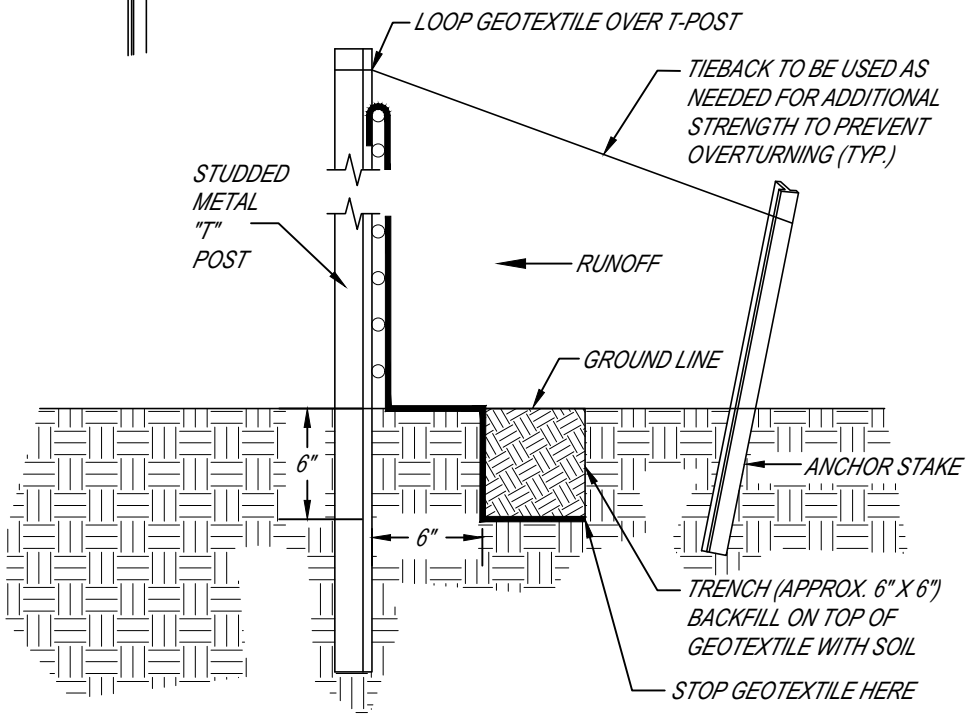
DEPARTMENT:	WRM	REVISIONS:	AF-06-13-07
SCALE:	N.T.S.		BS-10-05-07
DRAWN BY:	BS/GM		DCM 2010
REVIEWED BY:			JDP 11/22
APPROVED BY:	MD		
IMPLEMENTED:	02/2003		

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SILT FENCE W/ WIRE MESH (ALDOT TYPE A)



FOR ADDITIONAL STRENGTH, FILTER FABRIC MATERIAL SHALL BE ATTATCHED TO A 6" (MAX) MESH WIRE WHICH HAS BEEN FASTENED TO THE POSTS.



SILT FENCE W/ WIRE MESH (ALDOT TYPE A)

City of Auburn

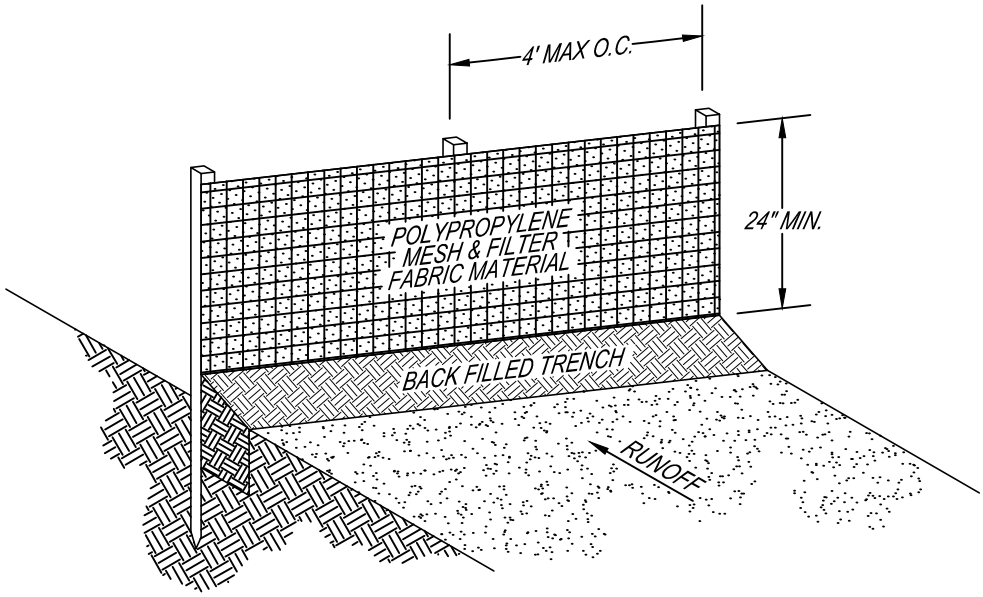
THE CITY OF AUBURN, AL

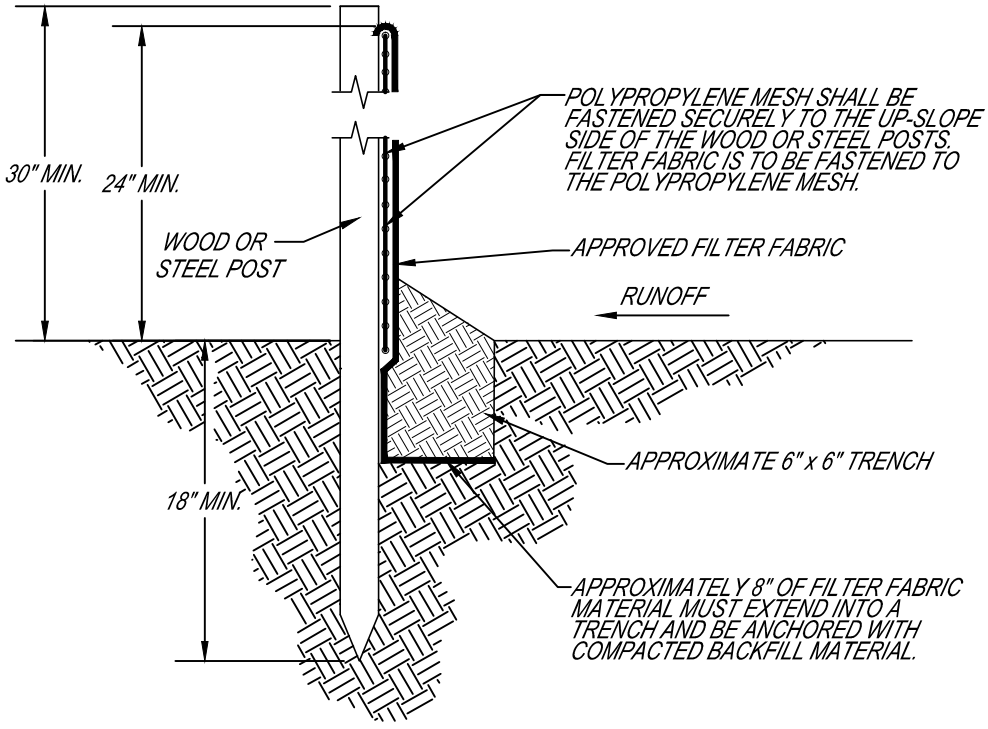
STANDARD EROSION CONTROL DETAILS

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DEPARTMENT:	WRM	REVISIONS:	AF-06-13-07
SCALE:	N.T.S.		BS-10-05-07
DRAWN BY:	BS/GM		DCM 2010
REVIEWED BY:			JC-12-2012
APPROVED BY:	MD		JDP-11/2022
IMPLEMENTED:	02/2003		

402

SILT FENCE W/ POLYPROPYLENE MESH (GDOT TYPE C)





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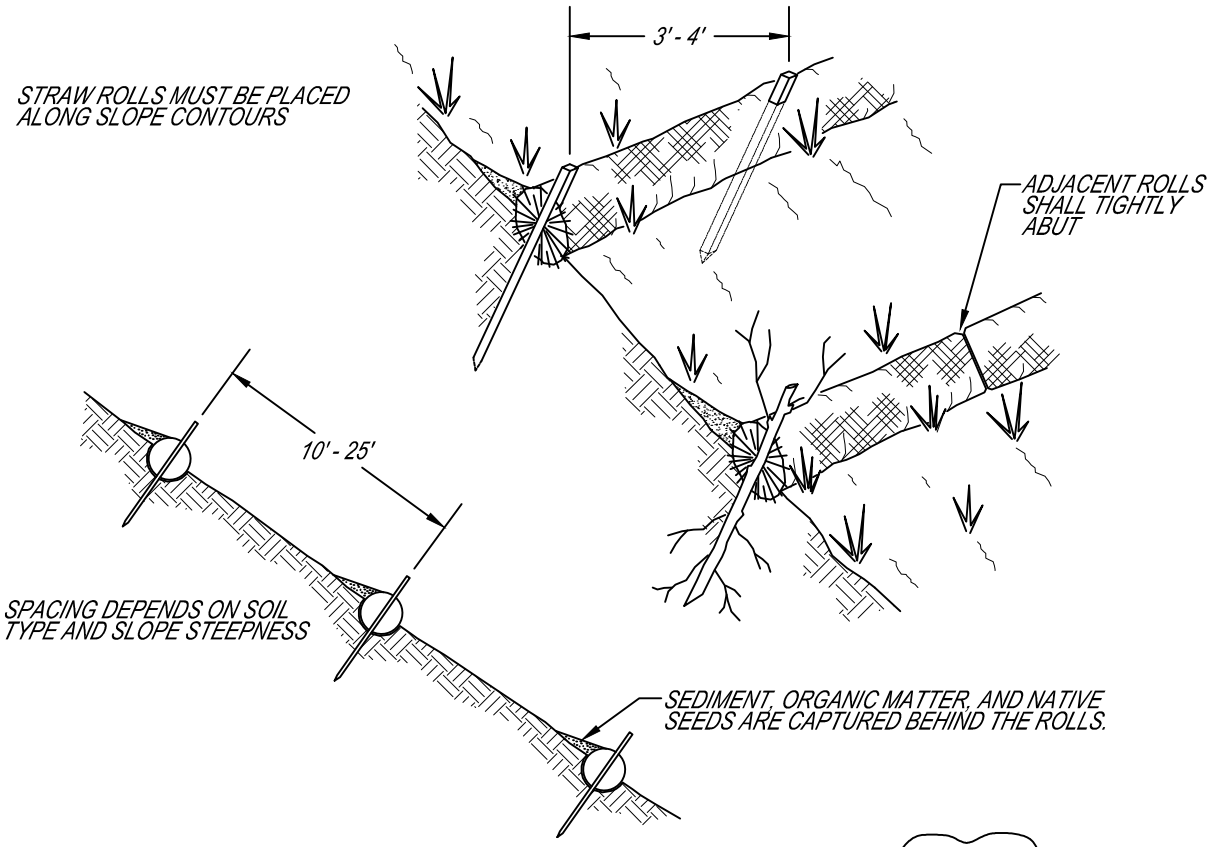
THE CITY OF AUBURN, AL

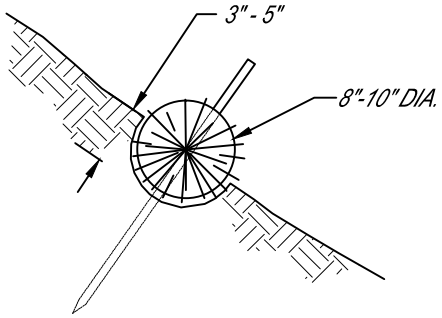
STANDARD EROSION CONTROL DETAILS

DRAWING TITLE:	SILT FENCE W/ POLYPROPYLENE MESH (GDOT TYPE C)		
DEPARTMENT:	WRM	REVISIONS:	AF-06-13-07
SCALE:	N.T.S.		BS-10-05-07
DRAWN BY:	BS/GM		DCM 2010
REVIEWED BY:			JC-12-2012
APPROVED BY:	MD		
IMPLEMENTED:	02/2003		

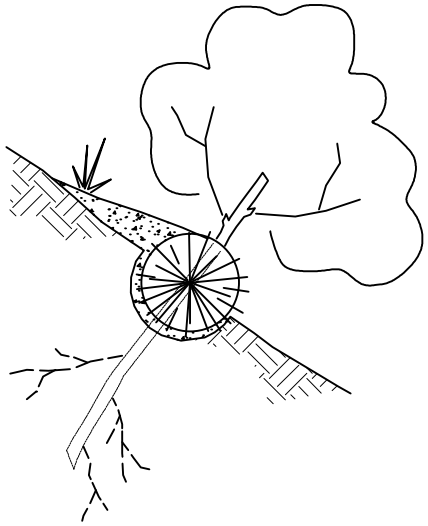
404

STRAW ROLL





1" X 1" STAKE



LIVE STAKE

NOTE:

1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"-5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.

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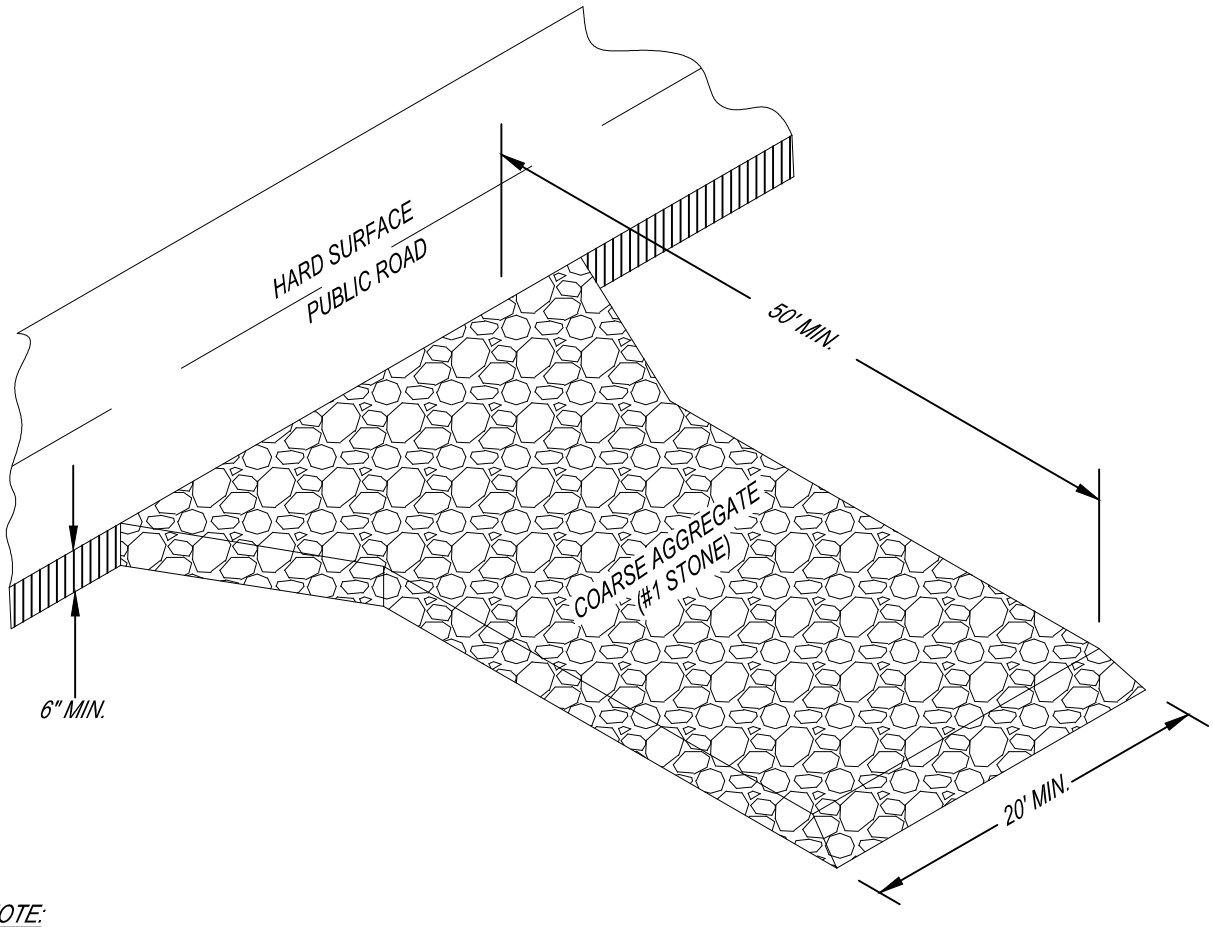
THE CITY OF AUBURN, AL

STANDARD EROSION CONTROL DETAILS

DRAWING TITLE:	STRAW ROLL		
DEPARTMENT:	WRM	REVISIONS:	AF-06-13-07
SCALE:	N.T.S.		BS-10-05-07
DRAWN BY:	BS/GM		DCM 2010
REVIEWED BY:			
APPROVED BY:	MD		
IMPLEMENTED:	02/2003		

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CONSTRUCTION EXIT PAD (CEP)



NOTE:

1. INSTALL GEOTEXTILE FABRIC UNDER THE #1 STONE TO EXTEND THE LIFE OF THE ENTRANCE.

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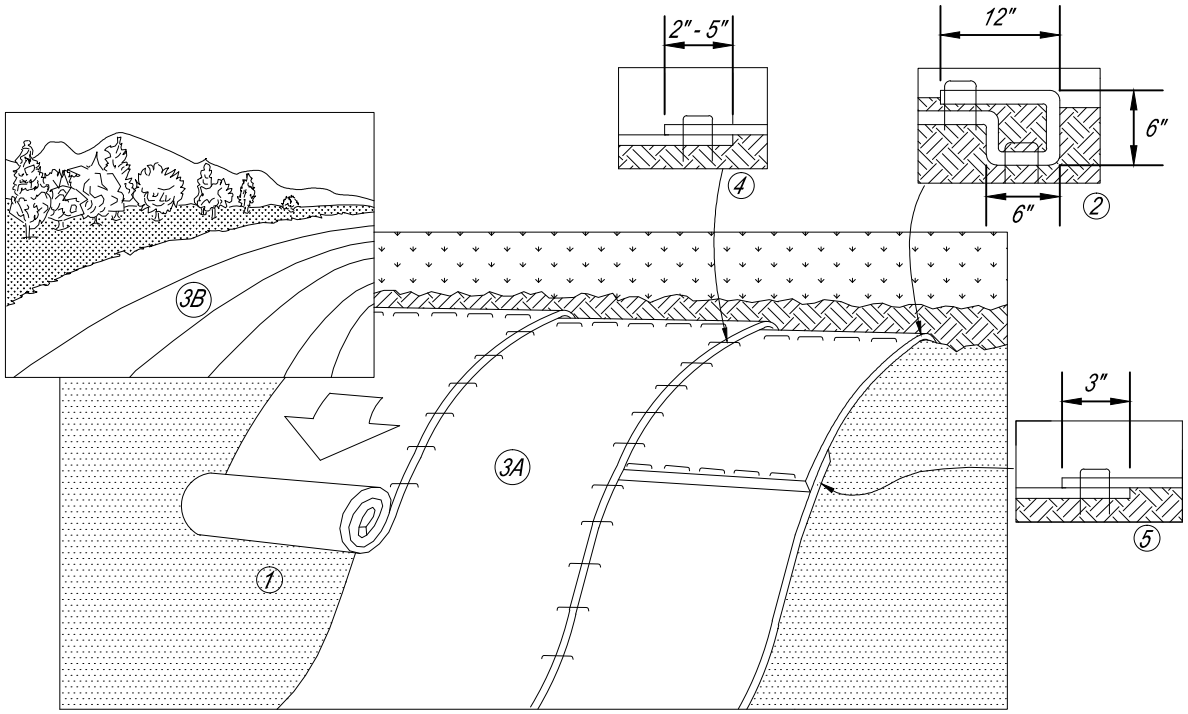
THE CITY OF AUBURN, AL

STANDARD EROSION CONTROL DETAILS

DRAWING TITLE:	CONSTRUCTION EXIT PAD (CEP)		
DEPARTMENT:	WRM	REVISIONS:	AF-06-13-07
SCALE:	N.T.S.		BS-10-05-07
DRAWN BY:	BS/GM		DCM 2010
REVIEWED BY:			
APPROVED BY:	MD		
IMPLEMENTED:	02/2003		

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SLOPE INSTALLATION



NOTES:

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP's WIDTH.
6. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.
7. RECPS SHALL BE IDENTIFIED AND DESIGNED ACCORDING TO THE CLASSIFICATION DESIGNATION GIVEN IN TABLES ECB-1, ECB-2, ECB-3, AND ECB-4 OF THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS (LATEST EDITION).

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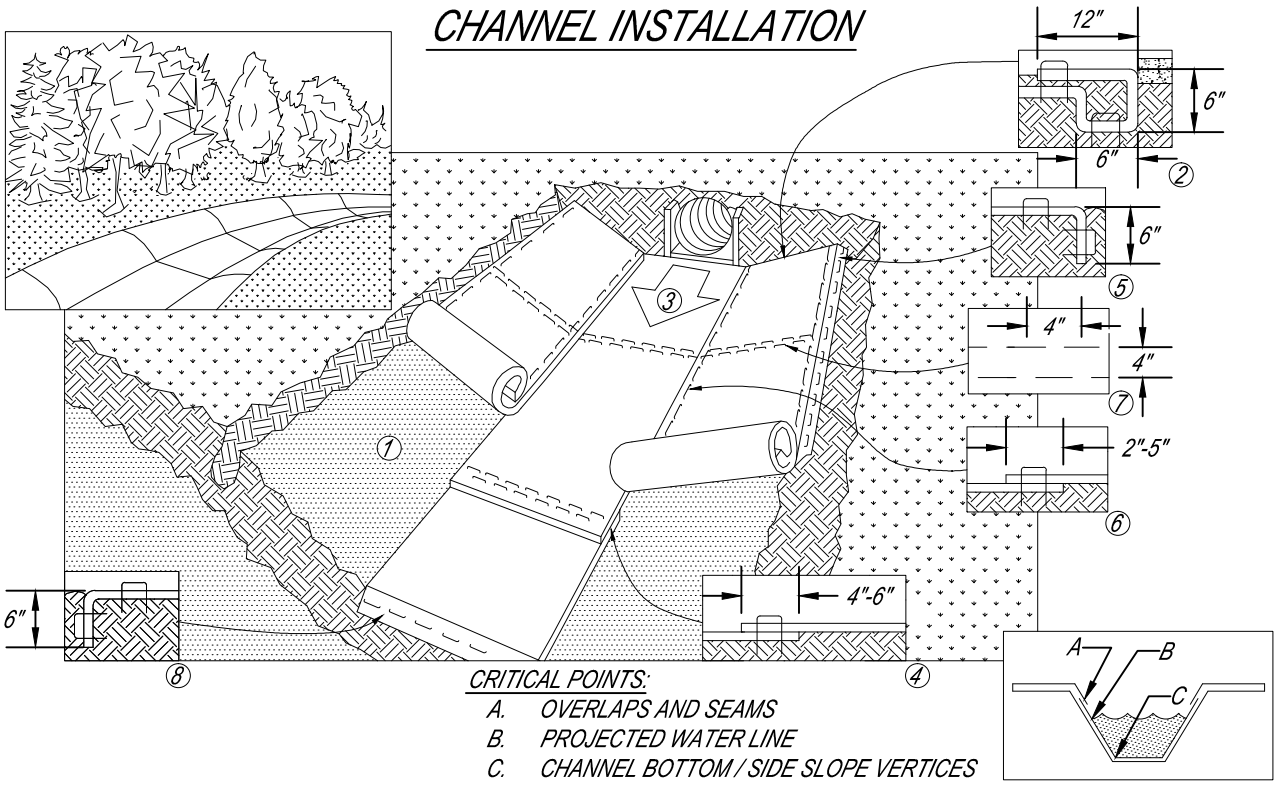
THE CITY OF AUBURN, AL

STANDARD EROSION CONTROL DETAILS

DRAWING TITLE:	SLOPE INSTALLATION		
DEPARTMENT:	WRM	REVISIONS:	AF-06-13-07
SCALE:	N.T.S.		BS-10-05-07
DRAWN BY:	BS/GM		DCM 2010
REVIEWED BY:			
APPROVED BY:	MD		
IMPLEMENTED:	02/2003		

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CHANNEL INSTALLATION



CRITICAL POINTS:

A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM / SIDE SLOPE VERTICES

NOTES:

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 4" - 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECP's.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" - 5" (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
9. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.
10. HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
11. RECPS SHALL BE IDENTIFIED AND DESIGNED ACCORDING TO THE CLASSIFICATION DESIGNATION GIVEN IN TABLES ECB-1, ECB-2, ECB-3, AND ECB-4 OF THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS (LATEST EDITION).

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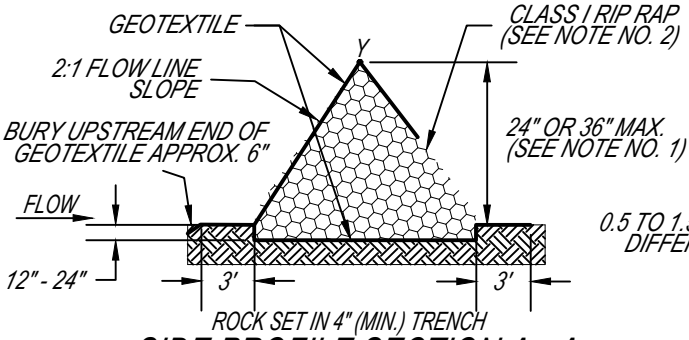
THE CITY OF AUBURN, AL

STANDARD EROSION CONTROL DETAILS

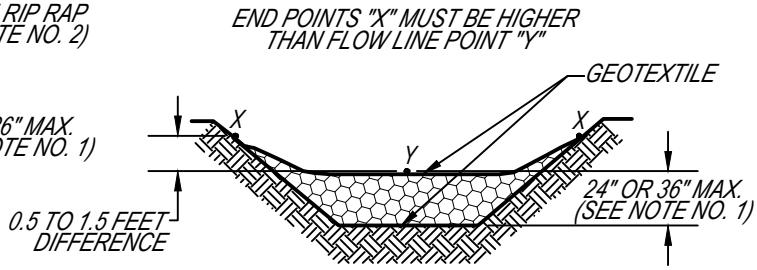
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DEPARTMENT:	WRM	REVISIONS:	AF-06-13-07
SCALE:	N.T.S.		BS-10-05-07
DRAWN BY:	BS/GM		DCM 2010
REVIEWED BY:			
APPROVED BY:	MD		
IMPLEMENTED:	02/2003		

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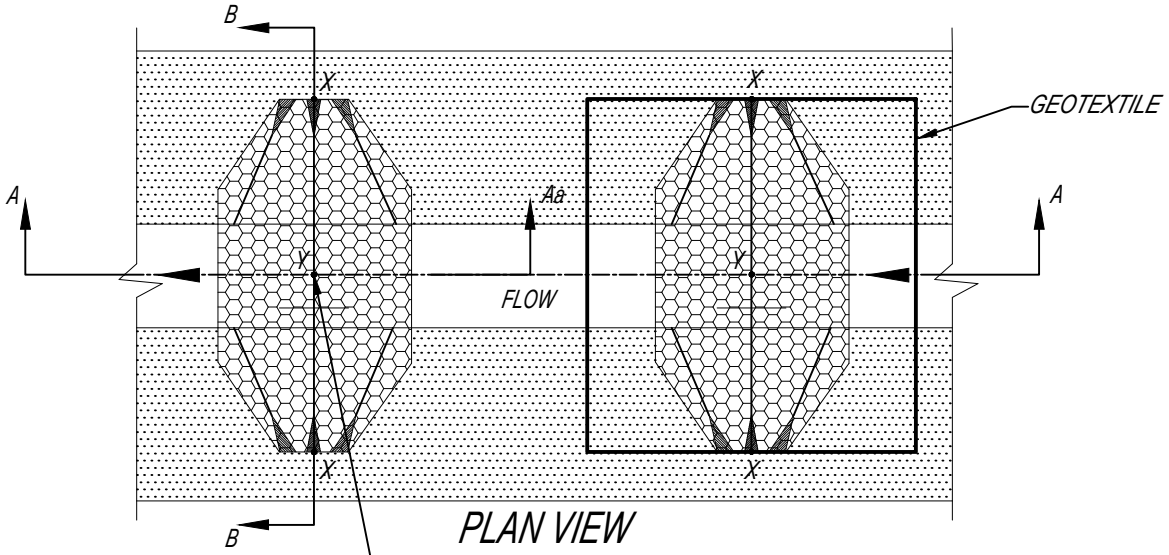
TYPICAL CHECK DAM (CD)



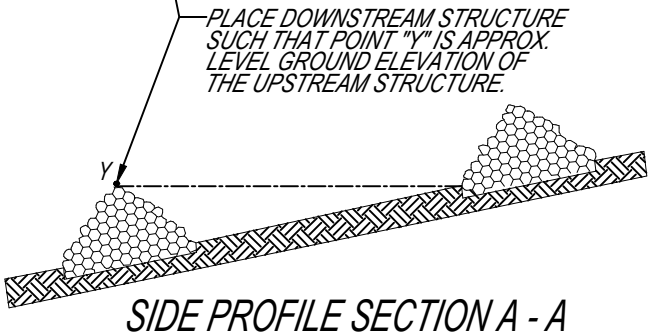
SIDE PROFILE SECTION A - Aa



FRONT PROFILE SECTION B - B



PLAN VIEW



SIDE PROFILE SECTION A - A

NOTE:

1. MAXIMUM HEIGHT SHALL BE 24 INCHES WHEN DRAINAGE AREA IS LESS THAN 5 ACRES AND 36 INCHES WHEN DRAINAGE AREA IS 5 TO 10 ACRES.
2. RIP RAP GRADATION SHALL CONFORM TO THE REQUIREMENTS OF CLASS I RIP RAP, ALABAMA HIGHWAY DEPARTMENT, STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION.
3. GEOTEXTILE FABRIC REQUIRED UNDER AND ON TOP OF CHECK DAM. FABRIC SHOULD EXTEND A MINIMUM OF 3 FEET ON UPSTREAM AND DOWNSTREAM SIDE OF DAM. UPSTREAM END OF FABRIC SHOULD BE BURIED TO A MINIMUM DEPTH OF 6 INCHES.

D-50 OF ROCK (INCHES)	DOWNSTREAM FLOWLINE SLOPE OF STRUCTURE (FT/FT) MAXIMUM WATER DEPTH OVER ROCK (INCHES)					
	0.35	0.30	0.25	0.20	0.15	0.10
3	0.6	0.7	0.8	1.0	1.3	1.9
6	1.2	1.4	1.6	2.0	2.6	3.9

RECOMMENDED ROCK SIZE AND FLOW DEPTHS

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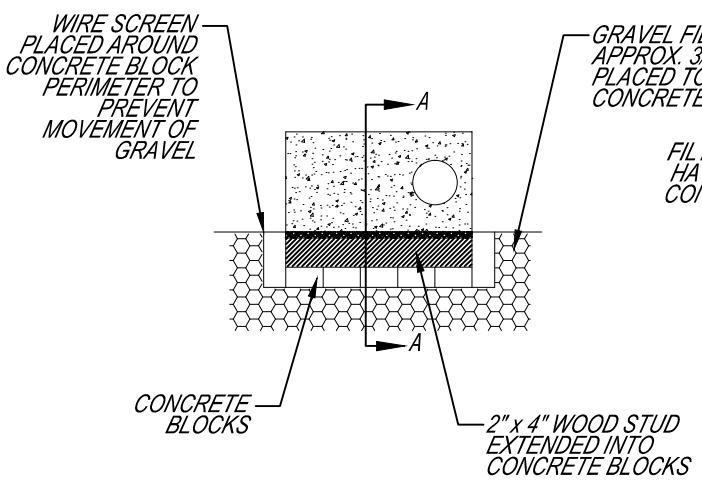
STANDARD EROSION CONTROL DETAILS

DRAWING TITLE: TYPICAL CHECK DAM (CD)

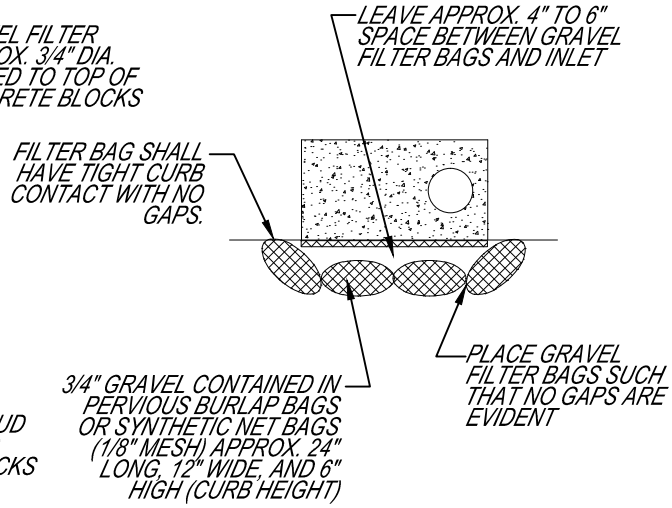
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REVIEWED BY:			JP 02-2024
APPROVED BY:	MD		
IMPLEMENTED:	02/2003		

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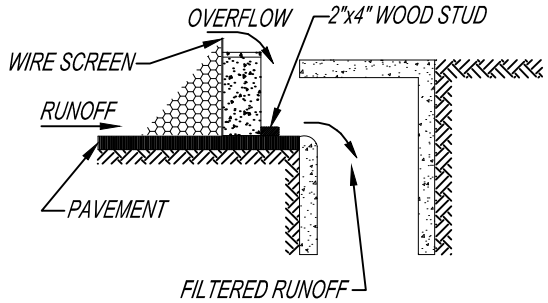
TYPICAL CURB INLET GRAVEL FILTER



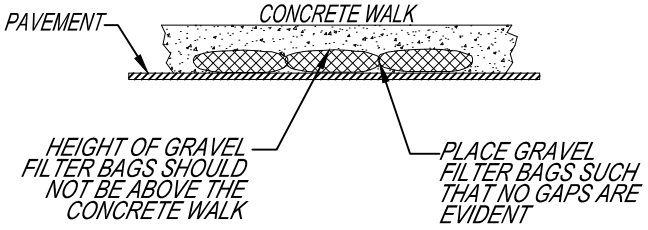
CONCRETE BLOCK FILTER PLAN VIEW



GRAVEL FILTER BAGS PLAN VIEW



CONCRETE BLOCK FILTER PROFILE SECTION A-A



GRAVEL FILTER BAGS PROFILE VIEW

NOTE:

1. GRAVEL FILTERS CAN BE USED ON PAVEMENT OR BARE GROUND.

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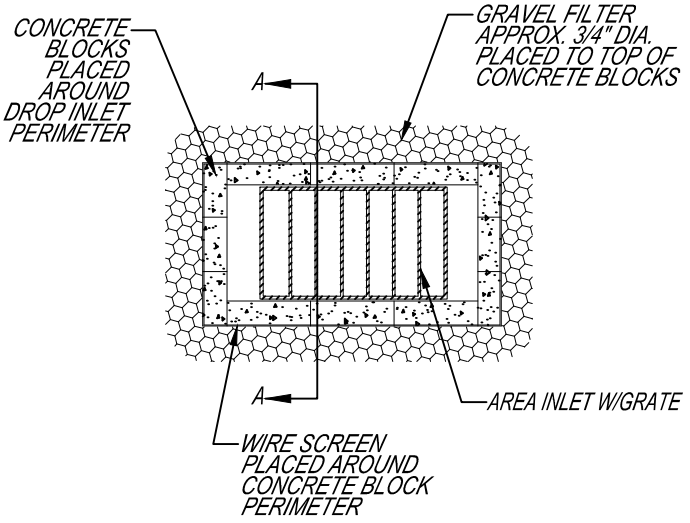
THE CITY OF AUBURN, AL

STANDARD EROSION CONTROL DETAILS

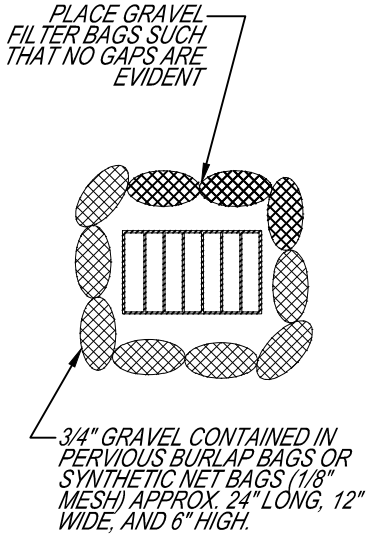
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IMPLEMENTED:	02/2003		

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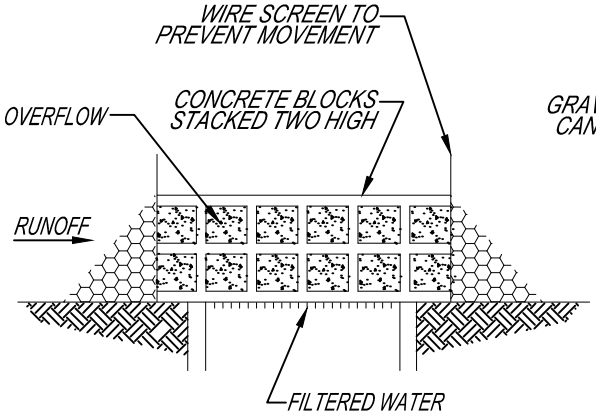
TYPICAL EXCAVATED DROP INLET PROTECTION (EIP)



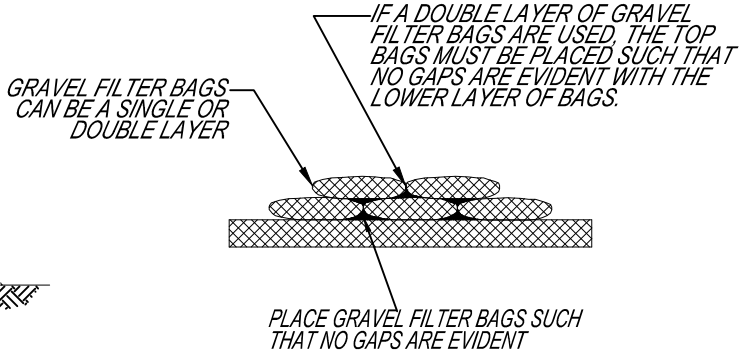
CONCRETE BLOCK FILTER PLAN VIEW



GRAVEL FILTER BAGS PLAN VIEW



CONCRETE BLOCK FILTER PROFILE SECTION A-A



GRAVEL FILTER BAGS PROFILE VIEW

NOTE:

1. GRAVEL FILTERS CAN BE USED ON PAVEMENT OR BARE GROUND.

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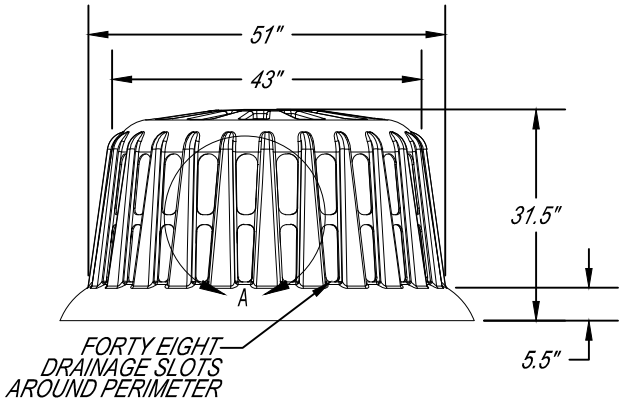
STANDARD EROSION CONTROL DETAILS

DRAWING TITLE:	TYPICAL EXCAVATED DROP INLET PROTECTION (EIP)		
DEPARTMENT:	WRM	REVISIONS:	AF-06-13-07
SCALE:	N.T.S.		BS-10-05-07
DRAWN BY:	BS/GM		DCM 2010
REVIEWED BY:			
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IMPLEMENTED:	02/2003		

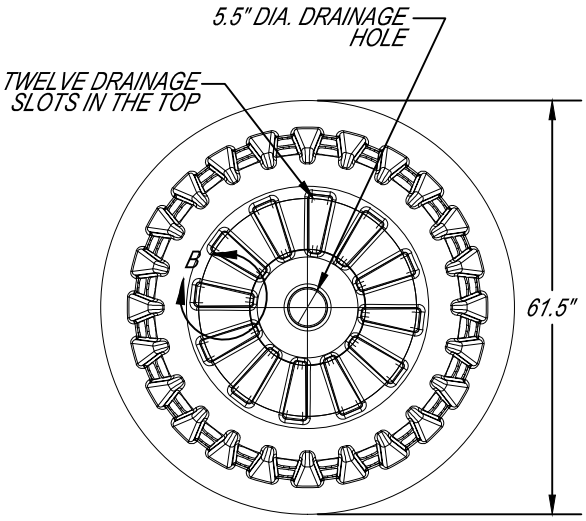
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SILT-SAVER ROUND FRAME

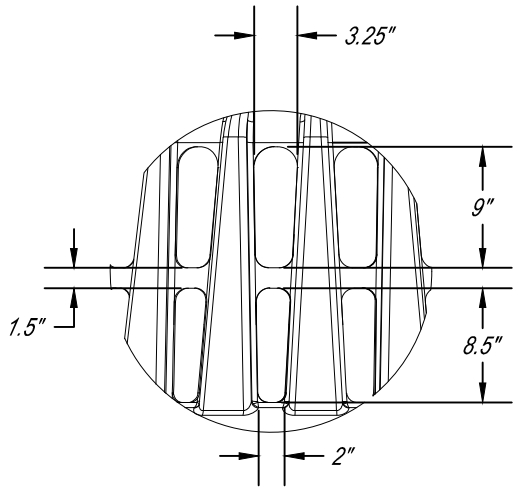
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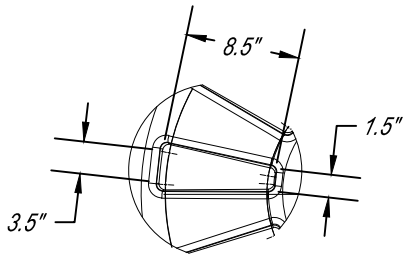
PROFILE VIEW



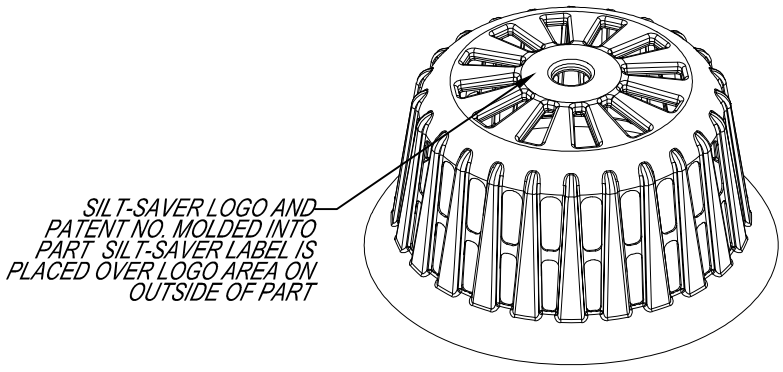
PLAN VIEW



DETAIL A



DETAIL B



ISOMETRIC VIEW

City of Auburn

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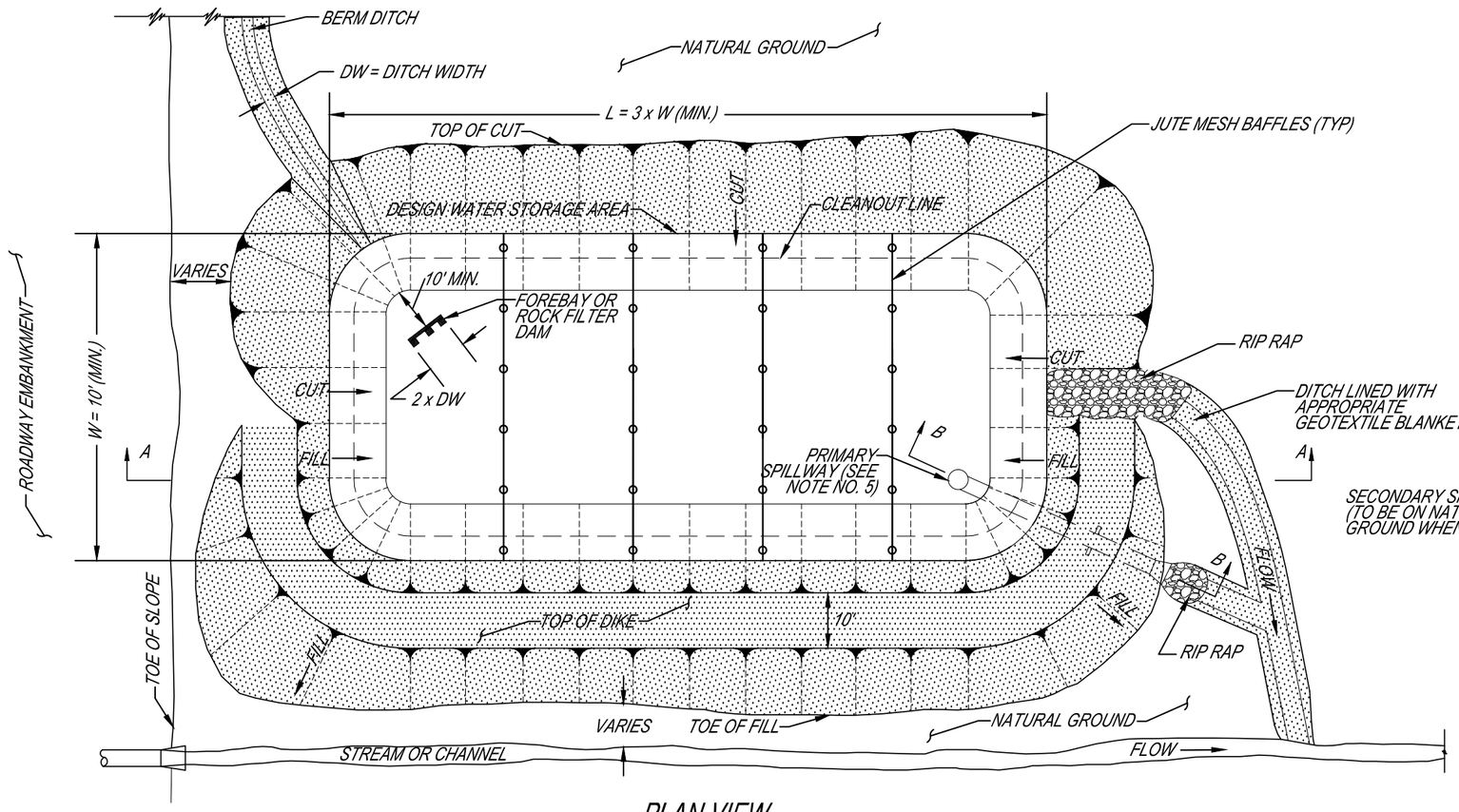
STANDARD EROSION CONTROL DETAILS

DRAWING TITLE:	SILT-SAVER ROUND FRAME		
DEPARTMENT:	WRM	REVISIONS:	AF-06-13-07
SCALE:	N.T.S.		BS-10-05-07
DRAWN BY:	BS/GM		DCM 2010
REVIEWED BY:			
APPROVED BY:	MD		
IMPLEMENTED:	02/2003		

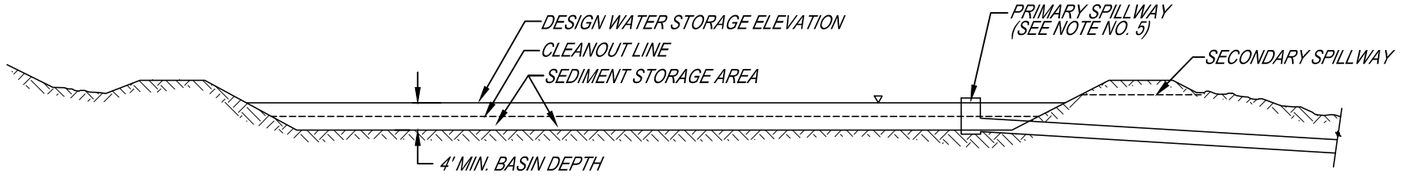
420

TYPICAL SEDIMENT BASIN

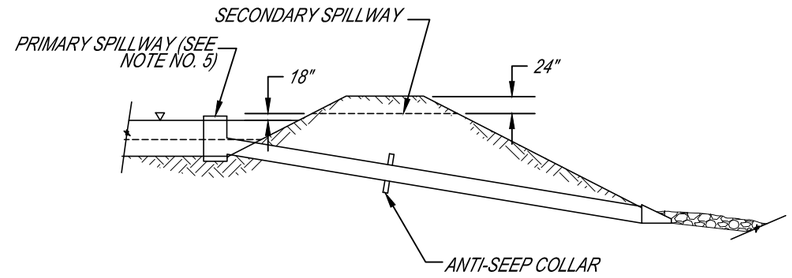
FOR USE OUTSIDE NATURAL CHANNELS



PLAN VIEW



PROFILE SECTION A-A



PROFILE SECTION B-B

LOCATION	SIDE	REQUIRED VOLUME	BASIN DEPTH	W AT DEPTH SHOWN	L AT DEPTH SHOWN	PRIMARY SPILLWAY D_S	PRIMARY SPILLWAY D_O	SECONDARY SPILLWAY WIDTH
		CU. FT.	FT.	FT.	FT.	IN.	IN.	FT.

NOTES:

1. THIS IS A BASIN THAT IS EXCAVATED OR AN AREA THAT IS DAMMED. THE BASIN WILL BE DESIGNED TO HOLD A SEDIMENT LOAD OF 3600 CUBIC FEET OF VOLUME PER ACRE OF DRAINAGE AREA.
2. ALLOWABLE SEDIMENT DEPTH SHALL NOT EXCEED 1/3 TOTAL BASIN DEPTH.
3. RUNOFF FROM UNDISTURBED, ADJACENT LAND SHOULD BE ROUTED TO BYPASS SEDIMENT BASINS.
4. BASIN DEPTH 4'-0" MINIMUM, W & L MAY VARY TO CONFORM TO SITE CONDITIONS, PROVIDED REQUIRE VOLUME IS MAINTAINED, MINIMUM L = 2W.
5. PRIMARY SPILLWAY OUTLET STRUCTURE MAY BE CONVENTIONAL RISER TYPE (AS SHOWN) OR "SKIMMER" DEVICE, AS APPROVED. SEE THE APPROPRIATE STANDARD DETAILS FOR OUTLET STRUCTURE CONSTRUCTION.

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STANDARD EROSION CONTROL DETAILS

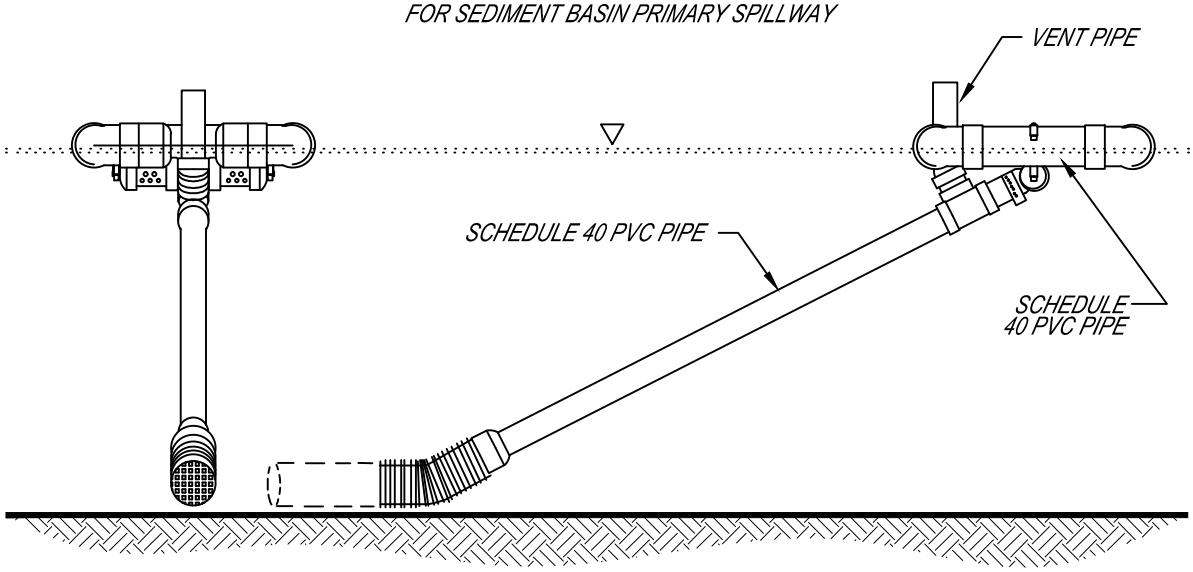
DRAWING TITLE: TYPICAL SEDIMENT BASIN

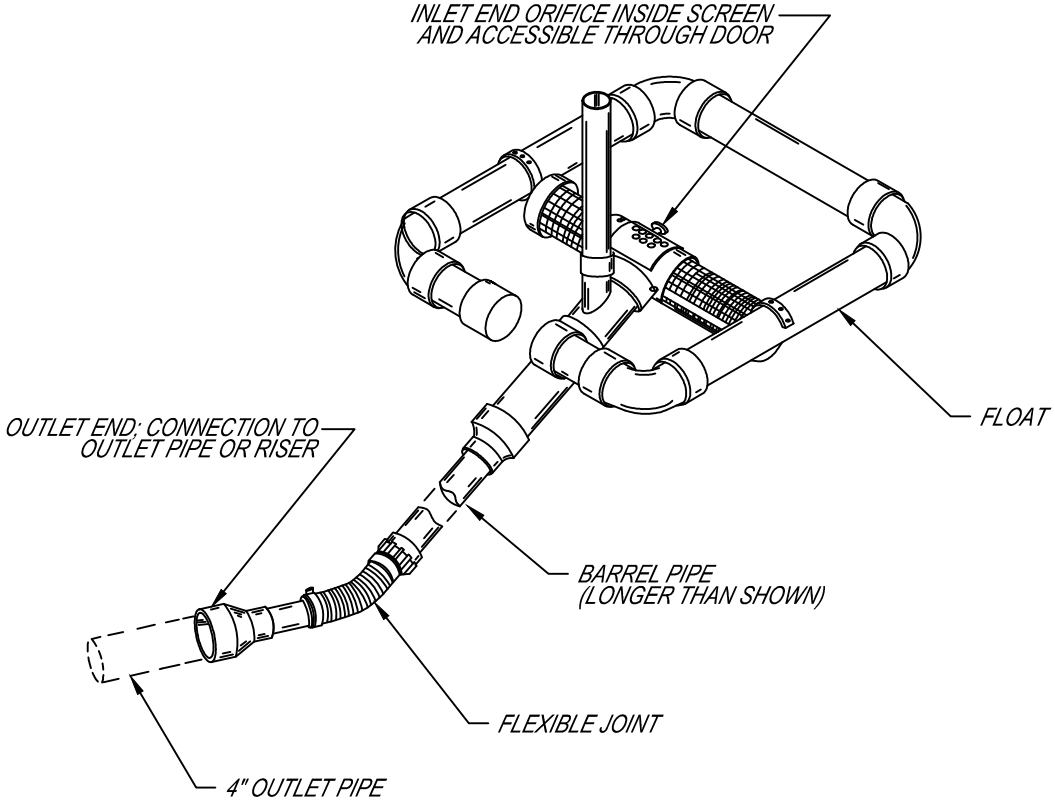
DEPARTMENT:	WRM	REVISIONS:	AF-06-13-07
SCALE:	N.T.S.		BS-10-05-07
DRAWN BY:	BS/GM		DCM 2010
REVIEWED BY:			JC-12-2012
APPROVED BY:	MD		
IMPLEMENTED:	02/2003		

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"SKIMMER" OUTLET STRUCTURE

FOR SEDIMENT BASIN PRIMARY SPILLWAY





NOTES:

1. THE MOST IMPORTANT DESIGN PARAMETER IS THE CONTROL OF ORIFICE SIZE, WHICH CAN CONTROL THE DESIRED DEWATERING TIME. THE LONGER THE DEWATERING TIME, THE BETTER THE QUALITY OF WATER DISCHARGED FROM THE SEDIMENT BASIN.
2. SKIMMER DESIGN BY: W. FAIRCLOTH, PATENT # 5,820,751
3. SKIMMER SHALL BE DESIGNED IN ACCORDANCE WITH THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS (LATEST EDITION).

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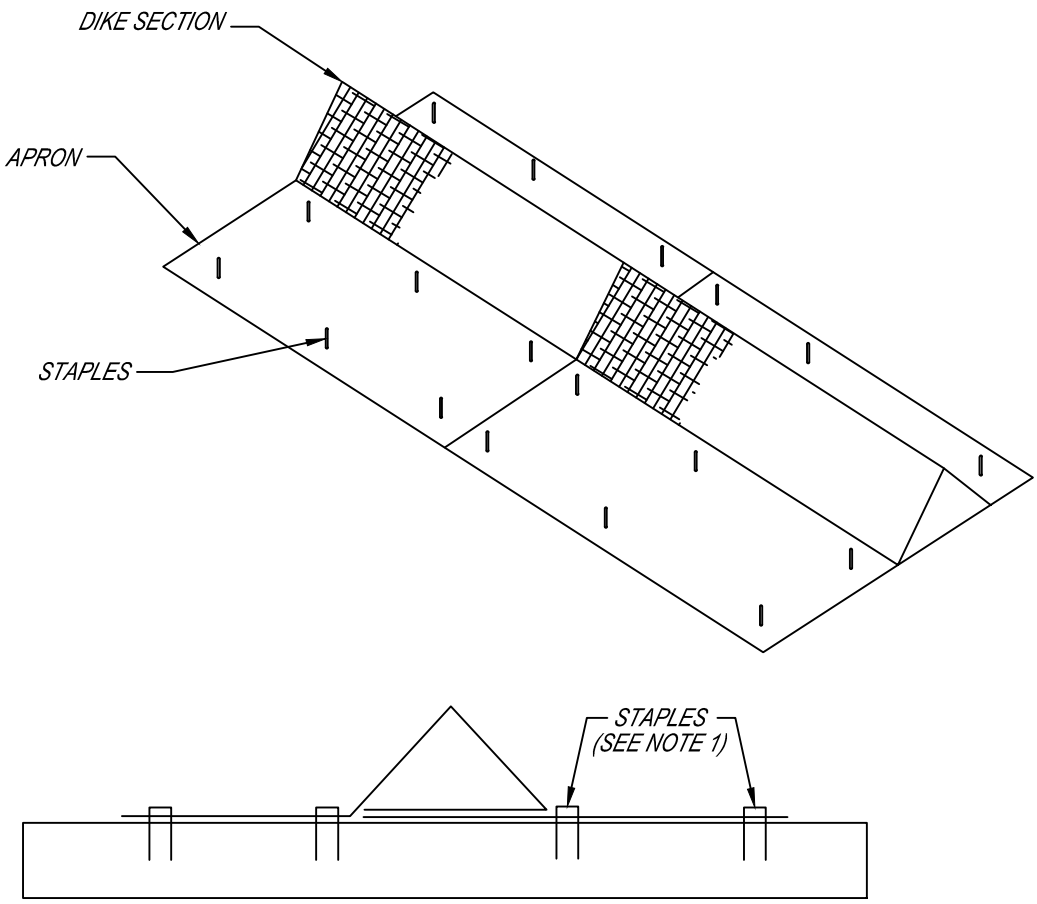
THE CITY OF AUBURN, AL

STANDARD EROSION CONTROL DETAILS

DRAWING TITLE:	"SKIMMER" OUTLET STRUCTURE	
DEPARTMENT:	WRM	REVISIONS:
SCALE:	N.T.S.	
DRAWN BY:	JC	
REVIEWED BY:		
APPROVED BY:	MD	
IMPLEMENTED:	DCM 2010	

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TRIANGULAR SILT DIKE INSTALLED ON CONCRETE OR ASPHALT



NOTES:

1. If THE SURFACE AREA IS CONCRETE , ADHESIVES SUCH AS LIQUID NAIL OR SAND BAGS SHALL BE USED. IF IT IS AN ASPHALT SURFACE, A RUBBERIZED ASPHALT EMULSION CAN BE USED. THE TACKING AGENT MUST BE APPLIED UNDER THE FULL LENGTH OF THE BARRIER SECTION AND THE APRON.
2. DIKES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING.
3. FABRIC COVER AND SKIRT SHALL BE CONTINUOUS WRAPPING OF GEOTEXTILE. THE SKIRT SHALL BE A CONTINUOUS EXTENSION OF THE UPSTREAM FABRIC.
4. FILTER MATERIAL SHALL BE LAPPED OVER ENDS 6" TO COVER DIKE-TO-DIKE JOINTS. JOINTS SHALL BE FASTENED WITH GALVANIZED SHOAT RINGS.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS REQUIRED.
6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 4" AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
7. AFTER THE DEVELOPMENT SITE IS COMPLETELY STABILIZED. THE DIKES ANY ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS INDICATED IN NOTE #6 ABOVE.

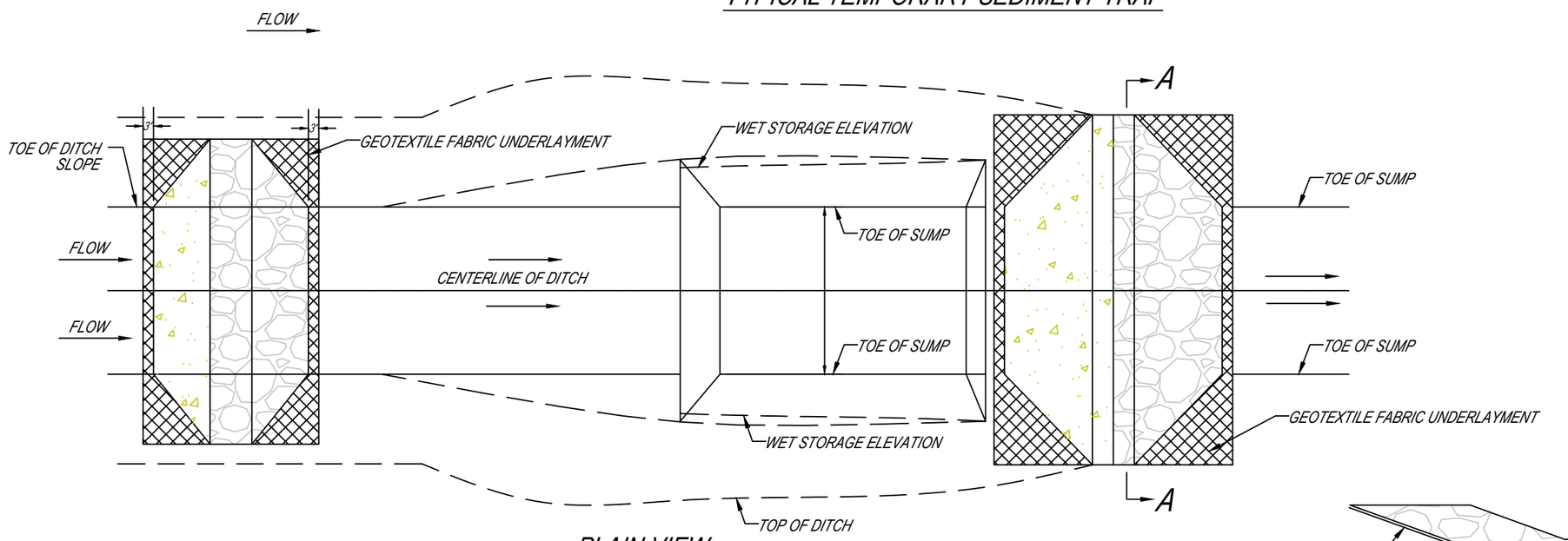
City of Auburn

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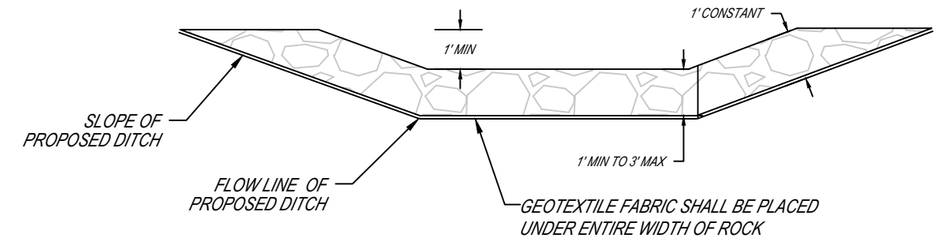
STANDARD EROSION CONTROL DETAILS

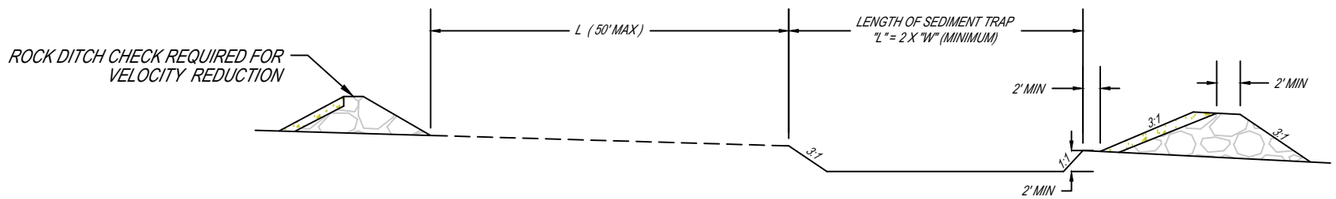
DRAWING TITLE:	TRIANGULAR SILT DIKE INSTALLED ON CONCRETE OR ASPHALT		
DEPARTMENT:	WRM	REVISIONS:	430
SCALE:	N.T.S.		
DRAWN BY:	EI		
REVIEWED BY:			
APPROVED BY:	MD		
IMPLEMENTED:	01/2019		

TYPICAL TEMPORARY SEDIMENT TRAP



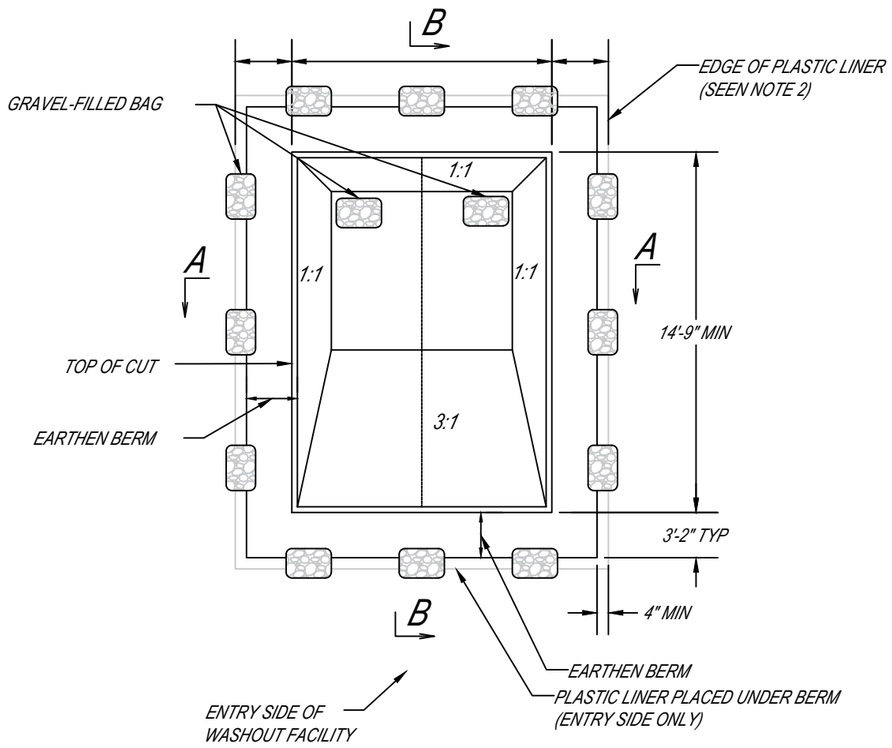
PLAIN VIEW

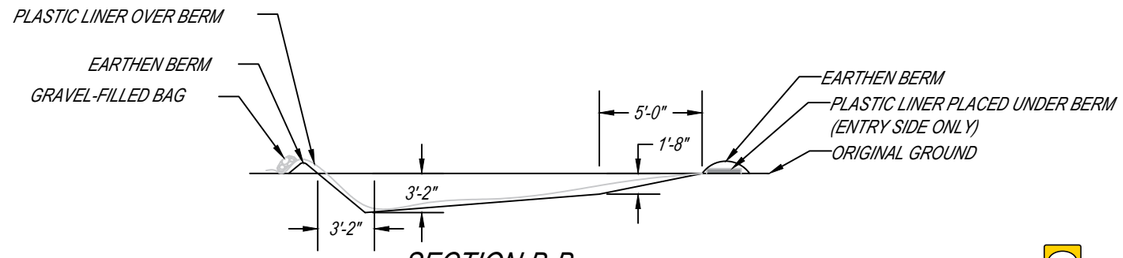




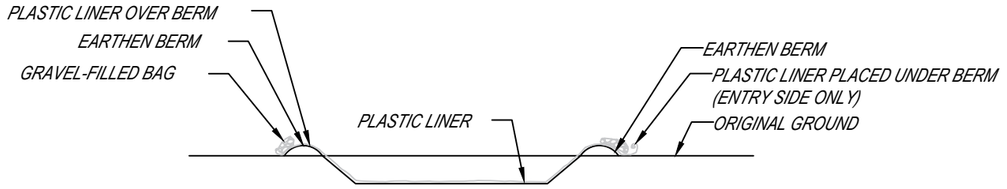
PROFILE VIEW , DITCH CENTERLINE

TYPICAL EXCAVATED PIT CONCRETE WASHOUT





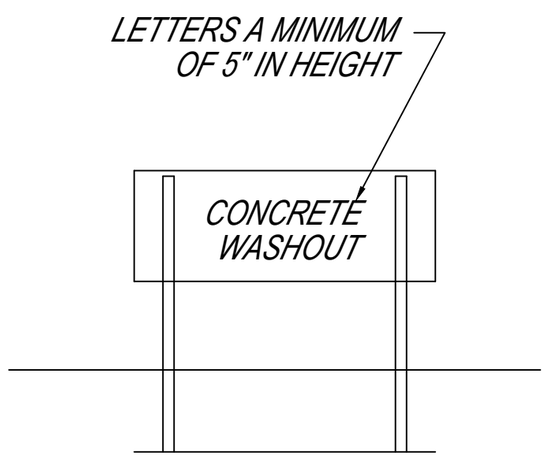
SECTION B-B
NOT TO SCALE



SECTION A-A
NOT TO SCALE

NOTES:

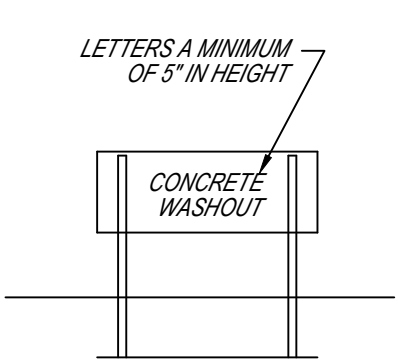
1. ACTUAL LAYOUT DETERMINED IN FIELD .
2. INSTALL CONCRETE WASHOUT SIGN (24"X24", MINIMUM) WITHIN 30' OF TEMPORARY CONCRETE WASHOUT FACILITY .
3. TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
4. CLEAN OUT CONCRETE WASHOUT AREA WHEN 50% FULL..
5. THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS , ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
6. MUST BE LINED WITH A 10-MIL OR THICKER PLASTIC LINER.



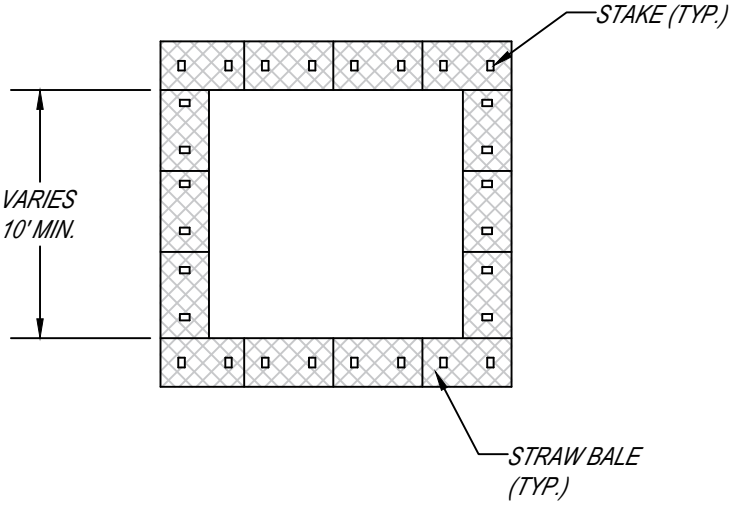
CONCRETE WASHOUT SIGN DETAIL

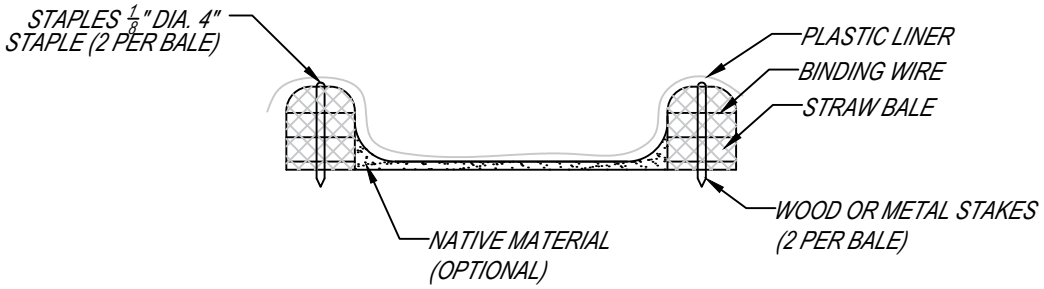
DRAWING TITLE:	TYPICAL EXCAVATED PIT CONCRETE WASHOUT		
DEPARTMENT:	WRM	REVISIONS:	434
SCALE:	NTS		
DRAWN BY:	MW		
REVIEWED BY:	KB		
APPROVED BY:	KB		
IMPLEMENTED:	1/2022		

TYPICAL STRAW BALE BARRIER CONCRETE WASHOUT



CONCRETE WASHOUT SIGN DETAIL





NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD .
2. INSTALL CONCRETE WASHOUT SIGN (24"X24", MINIMUM) WITHIN 30' OF TEMPORARY CONCRETE WASHOUT FACILITY .
3. TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
4. CLEAN OUT CONCRETE WASHOUT AREA WHEN 50% FULL..
5. THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS , ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
6. MUST BE LINED WITH A 10-MIL OR THICKER PLASTIC LINER.

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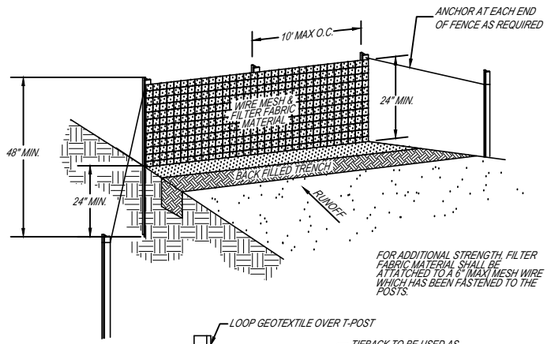
THE CITY OF AUBURN, AL

STANDARD EROSION CONTROL DETAILS

DRAWING TITLE:	TYPICAL STRAW BALE BARRIER CONCRETE WASHOUT	
DEPARTMENT:	WRM	REVISIONS:
SCALE:	N.T.S.	
DRAWN BY:	MW	
REVIEWED BY:		
APPROVED BY:	KB	
IMPLEMENTED:	01/2022	

436

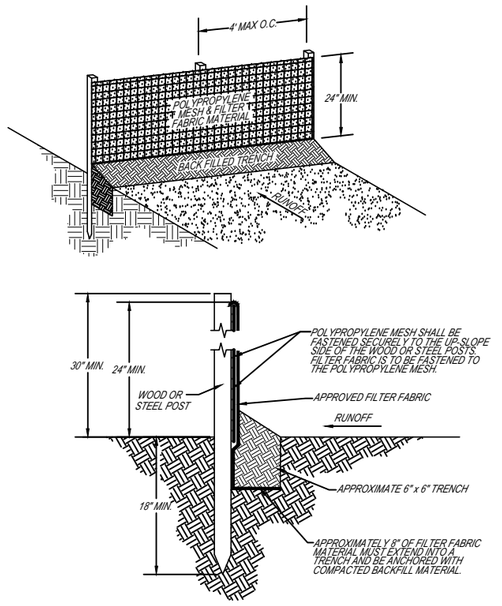
SILT FENCE W/ WIRE MESH (ALDOT TYPE A)



SILT FENCE W/ WIRE MESH (ALDOT TYPE A)

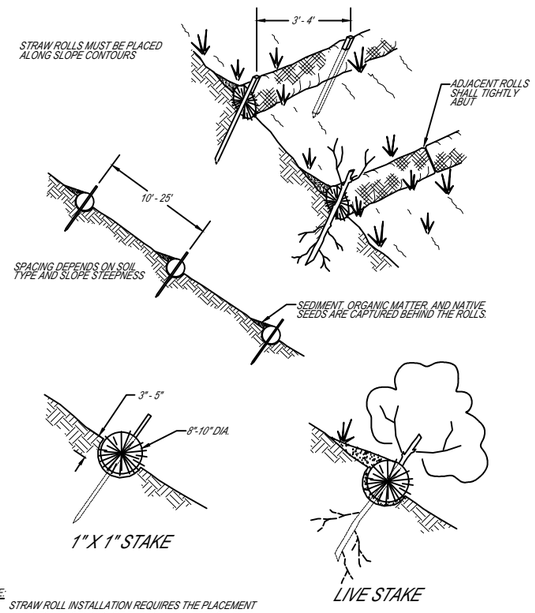
402

SILT FENCE W/ POLYPROPYLENE MESH (GDOT TYPE C)



404

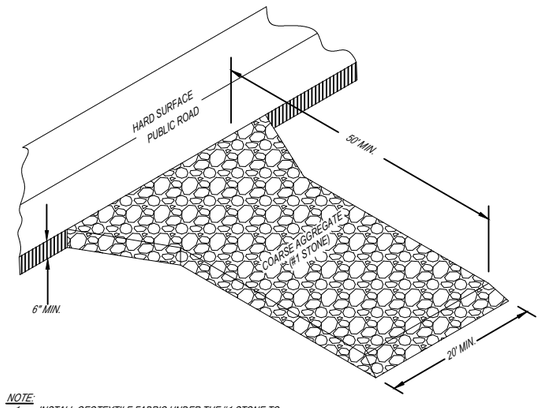
STRAW ROLL



NOTE:
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3"-5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.

406

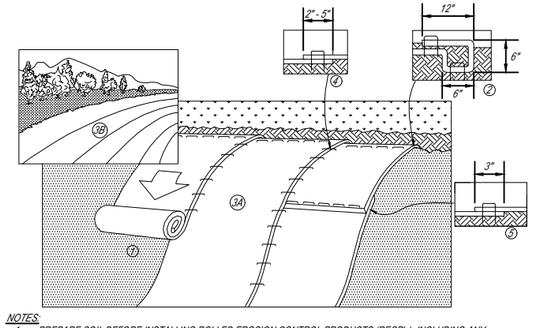
CONSTRUCTION EXIT PAD (CEP)



NOTE:
1. INSTALL GEOTEXTILE FABRIC UNDER THE #1 STONE TO EXTEND THE LIFE OF THE ENTRANCE.

408

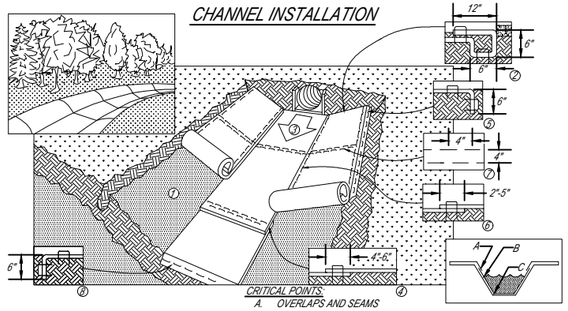
SLOPE INSTALLATION



NOTES:
1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" - 5" OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP's WIDTH.
6. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.
7. RECPS SHALL BE IDENTIFIED AND DESIGNED ACCORDING TO THE CLASSIFICATION DESIGNATION GIVEN IN TABLES ECB-1, ECB-2, ECB-3, AND ECB-4 OF THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS (LATEST EDITION).

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CHANNEL INSTALLATION

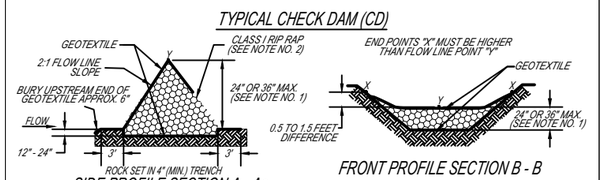


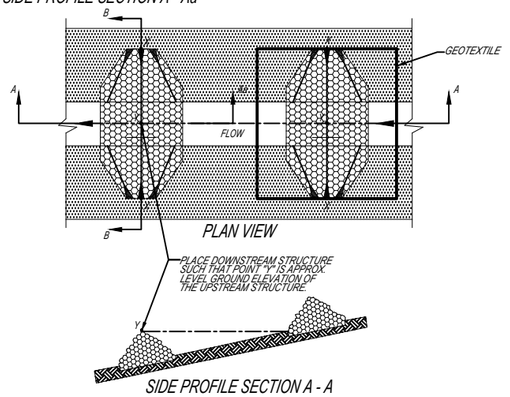
CRITICAL POINTS:
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOM / SIDE SLOPE VERTICES

NOTES:
1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL CENTER RECP's IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. PLACE CONSECUTIVE RECP's END OVER END (SHINGLE STYLE) WITH A 4" - 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE RECP's.
5. FULL LENGTH EDGE OF RECP's AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
6. ADJACENT RECP's MUST BE OVERLAPPED APPROXIMATELY 2" - 5" (DEPENDING ON RECP's TYPE) AND STAPLED.
7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
8. THE TERMINAL END OF THE RECP's MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
9. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE RECP's.
10. HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
11. RECPS SHALL BE IDENTIFIED AND DESIGNED ACCORDING TO THE CLASSIFICATION DESIGNATION IVEN IN TABLES ECB-1, ECB-2, ECB-3, AND ECB-4 OF THE ALABAMA HANDBOOK FOR ROSION CONTROL EDIMENT CONTROL AND STORM WATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS (LATEST EDITION).

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TYPICAL CHECK DAM (CD)





NOTE:
1. MAXIMUM HEIGHT SHALL BE 24 INCHES WHEN DRAINAGE AREA IS LESS THAN 5 ACRES AND 36 INCHES WHEN DRAINAGE AREA IS 5 TO 10 ACRES.
2. RIP RAP GRADATION SHALL CONFORM TO THE REQUIREMENTS OF CLASS I RIP RAP, ALABAMA HIGHWAY DEPARTMENT, STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION.
3. GEOTEXTILE FABRIC REQUIRED UNDER AND ON TOP OF CHECK DAM. FABRIC SHOULD EXTEND A MINIMUM OF 3 FEET ON UPSTREAM AND DOWNSTREAM SIDE OF DAM. UPSTREAM END OF FABRIC SHOULD BE BURIED TO A MINIMUM DEPTH OF 6 INCHES.

D-50 OF ROCK (INCHES)	DOWNSTREAM FLOWLINE SLOPE OF STRUCTURE (FT/FT)					
	0.35	0.30	0.25	0.20	0.15	0.10
	MAXIMUM WATER DEPTH OVER ROCK (INCHES)					
3	0.6	0.7	0.8	1.0	1.3	1.9
6	1.2	1.4	1.6	2.0	2.6	3.9

RECOMMENDED ROCK SIZE AND FLOW DEPTHS

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EROSION CONTROL NOTES:
1. A CONSTRUCTION EXIT PAD MUST BE INSTALLED AT ALL POINTS OF INGRESS/EGRESS TO THE SITE.
2. EROSION CONTROL BLANKETS AND NETTING SHOULD BE USED ON STEEP SLOPES AND IN CHANNELS IN CONJUNCTION WITH PERMANENT VEGETATION.
3. MULCH ALL BARE AREAS IMMEDIATELY FOLLOWING INITIAL GRADING PROCEDURES.
4. BMP'S SHALL BE INSPECTED AT LEAST MONTHLY AND WITHIN 24 HOURS OF RAIN EVENTS OF 0.75 INCHES OR GREATER. MAINTENANCE AND REPAIR MUST BE MADE WITHIN 3 DAYS OF INSPECTIONS, UNLESS OTHERWISE DIRECTED. COPIES OF THE QUALIFIED CREDENTIALED PROFESSIONAL (QCP) / QUALIFIED CREDENTIALED INSPECTOR (QCI) INSPECTION REPORTS SHALL BE SUBMITTED TO THE CITY OF AUBURN WATER RESOURCE MANAGEMENT DEPARTMENT, ATTN: WATERSHED DIVISION, 1501 WEST SAMFORD AVENUE, AUBURN, ALABAMA 36832.
5. TEMPORARY SEEDING OF DISTURBED AREAS SHOULD BE IMPLEMENTED WHENEVER DISTURBED SOIL AREAS WILL NOT BE BROUGHT TO FINISHED GRADE FOR A PERIOD OF 15 CALENDAR DAYS OR LONGER.
6. THESE STANDARD DETAILS SHALL BE APPLICABLE TO ALL LAND DISTURBING ACTIVITIES AND ATTACHED TO THE RELEVANT SITE PLAN AND/OR SUBDIVISION DRAWINGS.
7. ALL EROSION CONTROL MEASURES ARE TO BE IN ACCORDANCE WITH THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL, AND STORM WATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS (LATEST EDITION), AND SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
8. SILT FENCE: REMOVE ACCUMULATED SEDIMENT WHEN DEPTH REACHES 1/4" THE HEIGHT OF THE BARRIER.
9. TRACK OUT CLEAN UP SHOULD ONLY BE DONE USING "DRY" METHOD.

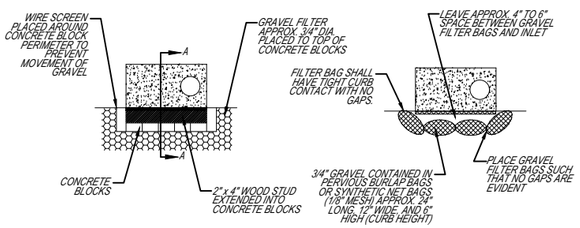
STANDARD DETAILS: EROSION CONTROL - SHEET 1 OF 3

PROJECT TITLE:

City of Auburn

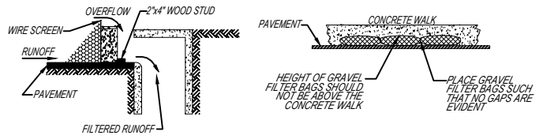
DEPARTMENT:	WRM	REVISIONS:	AF-06-13-07
SCALE:	N.T.S.		BS-10-05-07
DRAWN BY:	BS/GM		DCM 2010
REVIEWED BY:			JC-12-2012
APPROVED BY:	MD		MW-12-2021
IMPLEMENTED:	02/2003		JDP - 11/2022

TYPICAL CURB INLET GRAVEL FILTER



CONCRETE BLOCK FILTER PLAN VIEW

GRAVEL FILTER BAGS PLAN VIEW



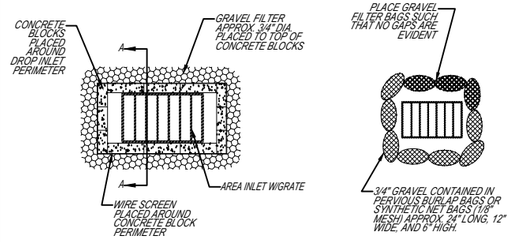
CONCRETE BLOCK FILTER PROFILE SECTION A-A

GRAVEL FILTER BAGS PROFILE VIEW

NOTE:
1. GRAVEL FILTERS CAN BE USED ON PAVEMENT OR BARE GROUND.

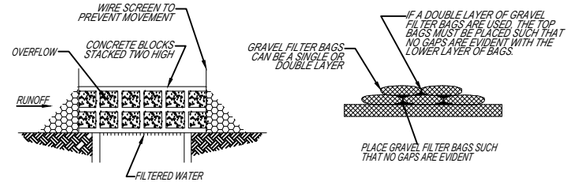
416

TYPICAL EXCAVATED DROP INLET PROTECTION (EIP)



CONCRETE BLOCK FILTER PLAN VIEW

GRAVEL FILTER BAGS PLAN VIEW



CONCRETE BLOCK FILTER PROFILE SECTION A-A

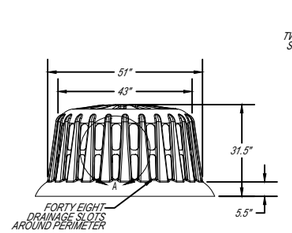
GRAVEL FILTER BAGS PROFILE VIEW

NOTE:
1. GRAVEL FILTERS CAN BE USED ON PAVEMENT OR BARE GROUND.

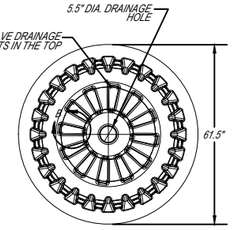
418

SILT-SAVER ROUND FRAME

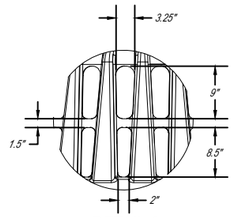
P/N SS-100



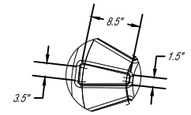
PROFILE VIEW



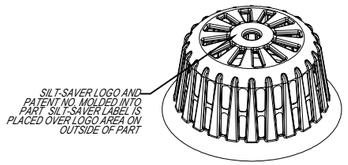
PLAN VIEW



DETAIL A



DETAIL B

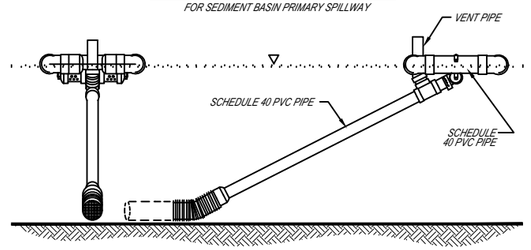


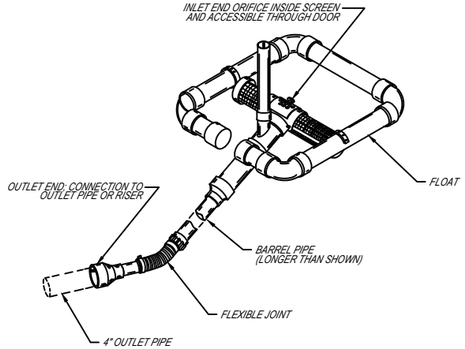
ISOMETRIC VIEW

420

"SKIMMER" OUTLET STRUCTURE

FOR SEDIMENT BASIN PRIMARY SPILLWAY



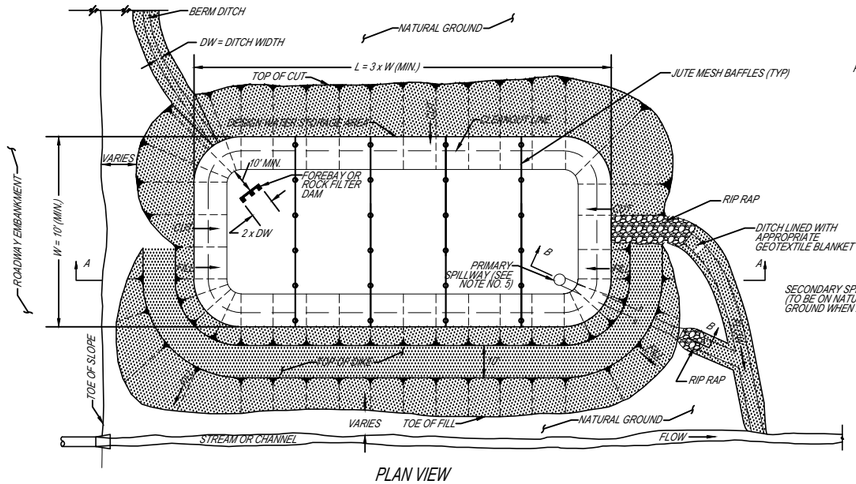


NOTES:
1. THE MOST IMPORTANT DESIGN PARAMETER IS THE CONTROL OF ORIFICE SIZE, WHICH CAN CONTROL THE DESIRED DEWATERING TIME. THE LONGER THE DEWATERING TIME, THE BETTER THE QUALITY OF WATER DISCHARGED FROM THE SEDIMENT BASIN.
2. SKIMMER DESIGN BY: W. FAIRCLOTH, PATENT # 5,820,751
3. SKIMMER SHALL BE DESIGNED IN ACCORDANCE WITH THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS (LATEST EDITION).

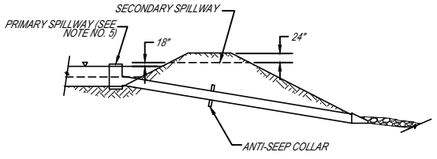
428

TYPICAL SEDIMENT BASIN

FOR USE OUTSIDE NATURAL CHANNELS



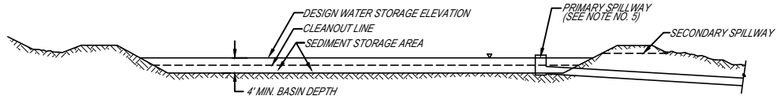
PLAN VIEW



PROFILE SECTION B-B

LOCATION	SIDE	REQUIRED VOLUME CU. FT.	BASIN DEPTH FT.	W AT DEPTH SHOWN FT.	L AT DEPTH SHOWN FT.	PRIMARY SPILLWAY "DS" IN.	PRIMARY SPILLWAY "DO" IN.	SECONDARY SPILLWAY WIDTH FT.

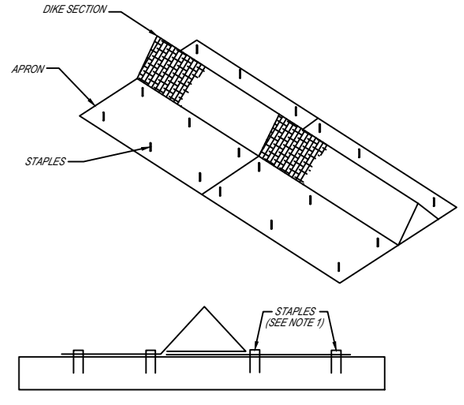
NOTES:
1. THIS IS A BASIN THAT IS EXCAVATED OR AN AREA THAT IS DAMMED. THE BASIN WILL BE DESIGNED TO HOLD A SEDIMENT LOAD OF 3600 CUBIC FEET OF VOLUME PER ACRE OF DRAINAGE AREA.
2. ALLOWABLE SEDIMENT DEPTH SHALL NOT EXCEED 1/3 TOTAL BASIN DEPTH.
3. RUNOFF FROM UNDISTURBED, ADJACENT LAND SHOULD BE ROUTED TO BYPASS SEDIMENT BASINS.
4. BASIN DEPTH 4'-0" MINIMUM. W & L MAY VARY TO CONFORM TO SITE CONDITIONS, PROVIDED REQUIRE VOLUME IS MAINTAINED. MINIMUM L = 2W.
5. PRIMARY SPILLWAY OUTLET STRUCTURE MAY BE CONVENTIONAL RISER TYPE (AS SHOWN) OR "SKIMMER" DEVICE, AS APPROVED. SEE THE APPROPRIATE STANDARD DETAILS FOR OUTLET STRUCTURE CONSTRUCTION.



PROFILE SECTION A-A

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TRIANGULAR SILT DIKE INSTALLED ON CONCRETE OR ASPHALT



NOTES:
1. IF THE SURFACE AREA IS CONCRETE , ADHESIVES SUCH AS LIQUID NAIL OR SAND BAGS SHALL BE USED. IF IT IS AN ASPHALT SURFACE, A RUBBERIZED ASPHALT EMULSION CAN BE USED. THE TACKING AGENT MUST BE APPLIED UNDER THE FULL LENGTH OF THE BARRIER SECTION AND THE APRON.
2. DIKES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING.
3. FABRIC COVER AND SKIRT SHALL BE CONTINUOUS WRAPPING OF GEOTEXTILE. THE SKIRT SHALL BE A CONTINUOUS EXTENSION OF THE UPSTREAM FABRIC.
4. FILTER MATERIAL SHALL BE LAPPED OVER ENDS 6" TO COVER DIKE-TO-DIKE JOINTS. JOINTS SHALL BE FASTENED WITH GALVANIZED SHOAT RINGS.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS REQUIRED.
6. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 4" AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
7. AFTER THE DEVELOPMENT SITE IS COMPLETELY STABILIZED, THE DIKES ANY ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS INDICATED IN NOTE #6 ABOVE.

430

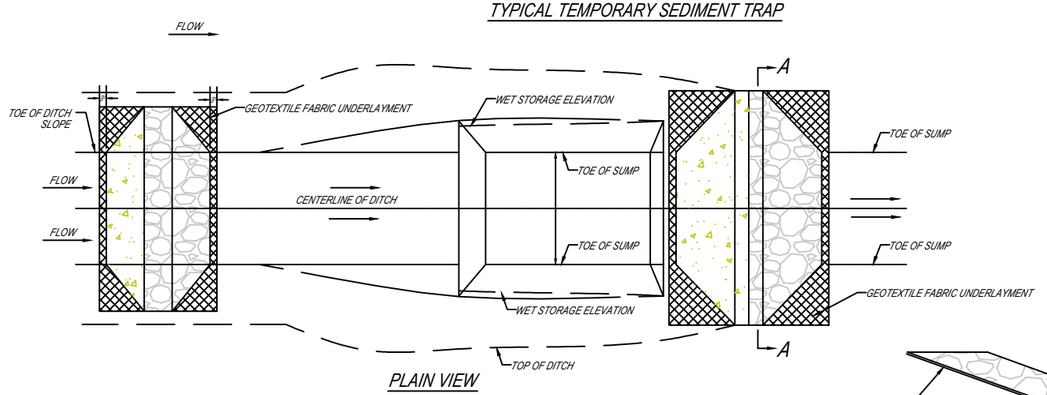
STANDARD DETAILS: EROSION CONTROL - SHEET 2 OF 3

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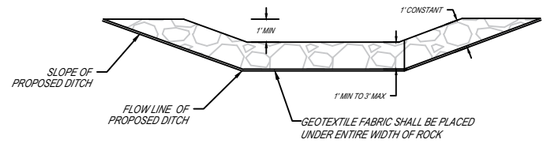
City of Auburn

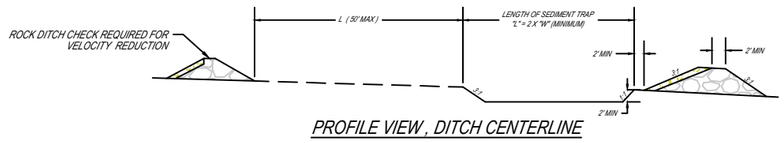
DEPARTMENT:	WRM	REVISIONS:	AF-06-13-07
SCALE:	N.T.S.		BS-10-05-07
DRAWN BY:	BS/GM		DCM 2010
REVIEWED BY:			JC-12-2012
APPROVED BY:	MD		MW-12-2021
IMPLEMENTED:	02/2003		

TYPICAL TEMPORARY SEDIMENT TRAP



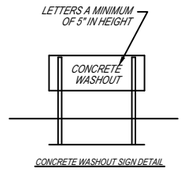
PLAIN VIEW



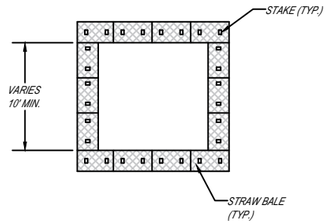


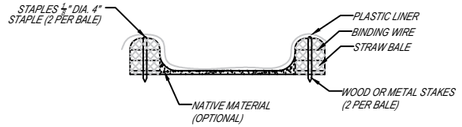
PROFILE VIEW , DITCH CENTERLINE

TYPICAL STRAW BALE BARRIER CONCRETE WASHOUT



CONCRETE WASHOUT SIGN DETAIL

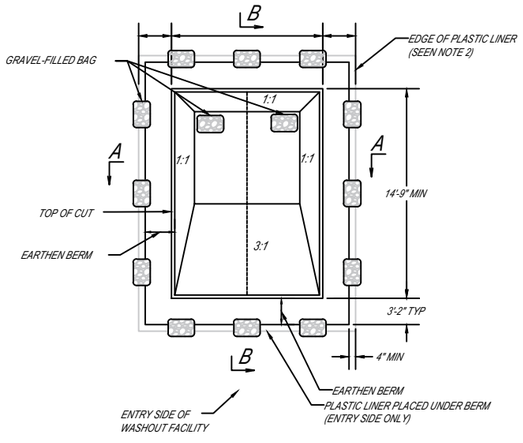


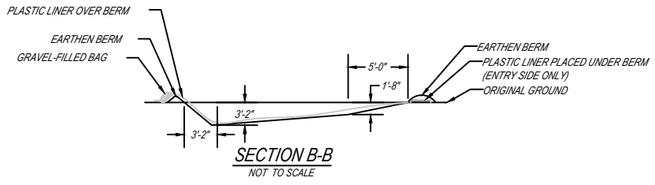


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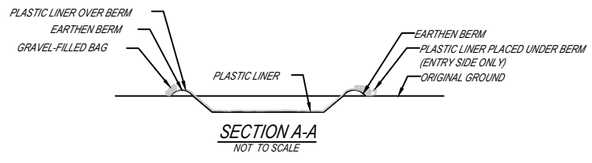
1. ACTUAL LAYOUT DETERMINED IN FIELD .
2. INSTALL CONCRETE WASHOUT SIGN (24"X24", MINIMUM) WITHIN 30' OF TEMPORARY CONCRETE WASHOUT FACILITY .
3. TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
4. CLEAN OUT CONCRETE WASHOUT AREA WHEN 50% FULL..
5. THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS , ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
6. MUST BE LINED WITH A 10-MIL OR THICKER PLASTIC LINER.

TYPICAL EXCAVATED PIT CONCRETE WASHOUT

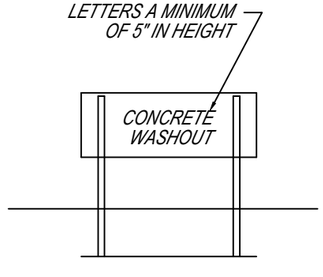




SECTION B-B
NOT TO SCALE



SECTION A-A
NOT TO SCALE



CONCRETE WASHOUT SIGN DETAIL

NOTES:

1. ACTUAL LAYOUT DETERMINED IN FIELD .
2. INSTALL CONCRETE WASHOUT SIGN (24"X24", MINIMUM) WITHIN 30' OF TEMPORARY CONCRETE WASHOUT FACILITY .
3. TEMPORARY WASHOUT AREA MUST BE AT LEAST 50' FROM STORM DRAIN, CREEK BANK OR PERIMETER CONTROL.
4. CLEAN OUT CONCRETE WASHOUT AREA WHEN 50% FULL..
5. THE KEY TO FUNCTIONAL CONCRETE WASHOUTS IS WEEKLY INSPECTIONS , ROUTINE MAINTENANCE, AND REGULAR CLEAN OUT.
6. MUST BE LINED WITH A 10-MIL OR THICKER PLASTIC LINER.

STANDARD DETAILS: EROSION CONTROL - SHEET 3 OF 3

PROJECT TITLE:

City of Auburn

DEPARTMENT:	WRM	REVISIONS:	AF-06-13-07
SCALE:	N.T.S.		BS-10-05-07
DRAWN BY:	BS/GM		DCM 2010
REVIEWED BY:			JC-12-2012
APPROVED BY:	MD		MW-12-2021
IMPLEMENTED:	02/2003		