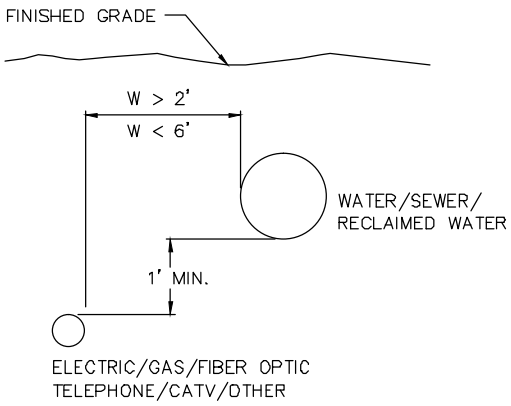
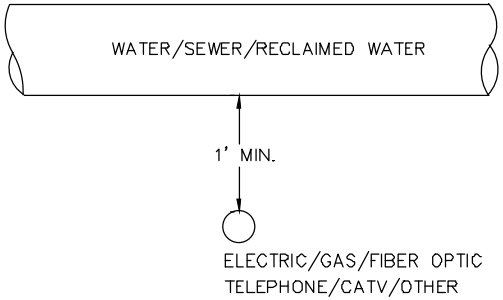
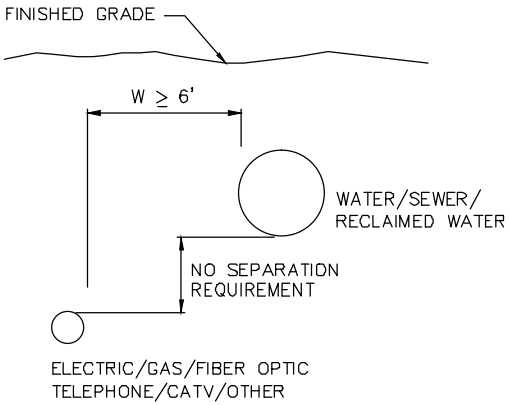


2' TO 6' SEPARATION



CROSSING



6'+ SEPARATION

NOTES

1. ELECTRIC SEPARATION REQUIREMENTS ARE FOR PRIMARY ELECTRIC CONDUCTORS. SEPARATION FOR SERVICE CONDUCTORS SHALL BE PROVIDED BY THE ENGINEER ON THE CONSTRUCTION PLANS.

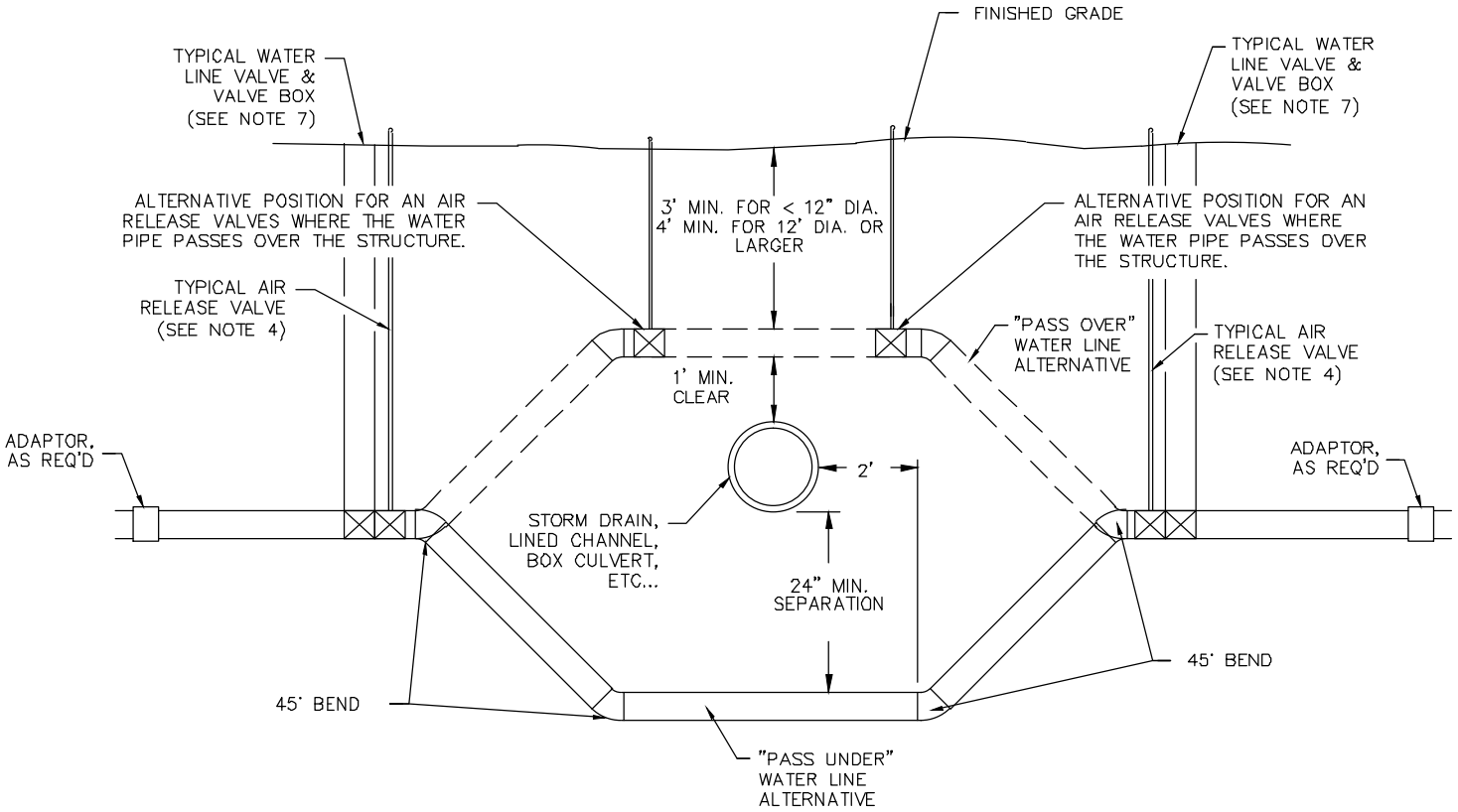
2. PRIMARY ELECTRIC, GAS, TELEPHONE, CABLE TV OR FIBER OPTIC LINES SHALL NOT CROSS ABOVE A WATER LINE WITHOUT WRITTEN APPROVAL FROM THE CITY'S WATER RESOURCES DEPARTMENT.

3. IF APPROVED, A UTILITY LOCATOR STRIP SHALL BE INSTALLED AND CLSM PER MAG SECTION 604 & 728 SHALL BE USED AS BACKFILL.

4. MINIMUM 2' HORIZONTAL SEPARATION. NO VERTICAL SEPARATION REQUIRED IF HORIZONTAL SEPARATION IS GREATER THAN 6'.

   W = HORIZONTAL SEPARATION

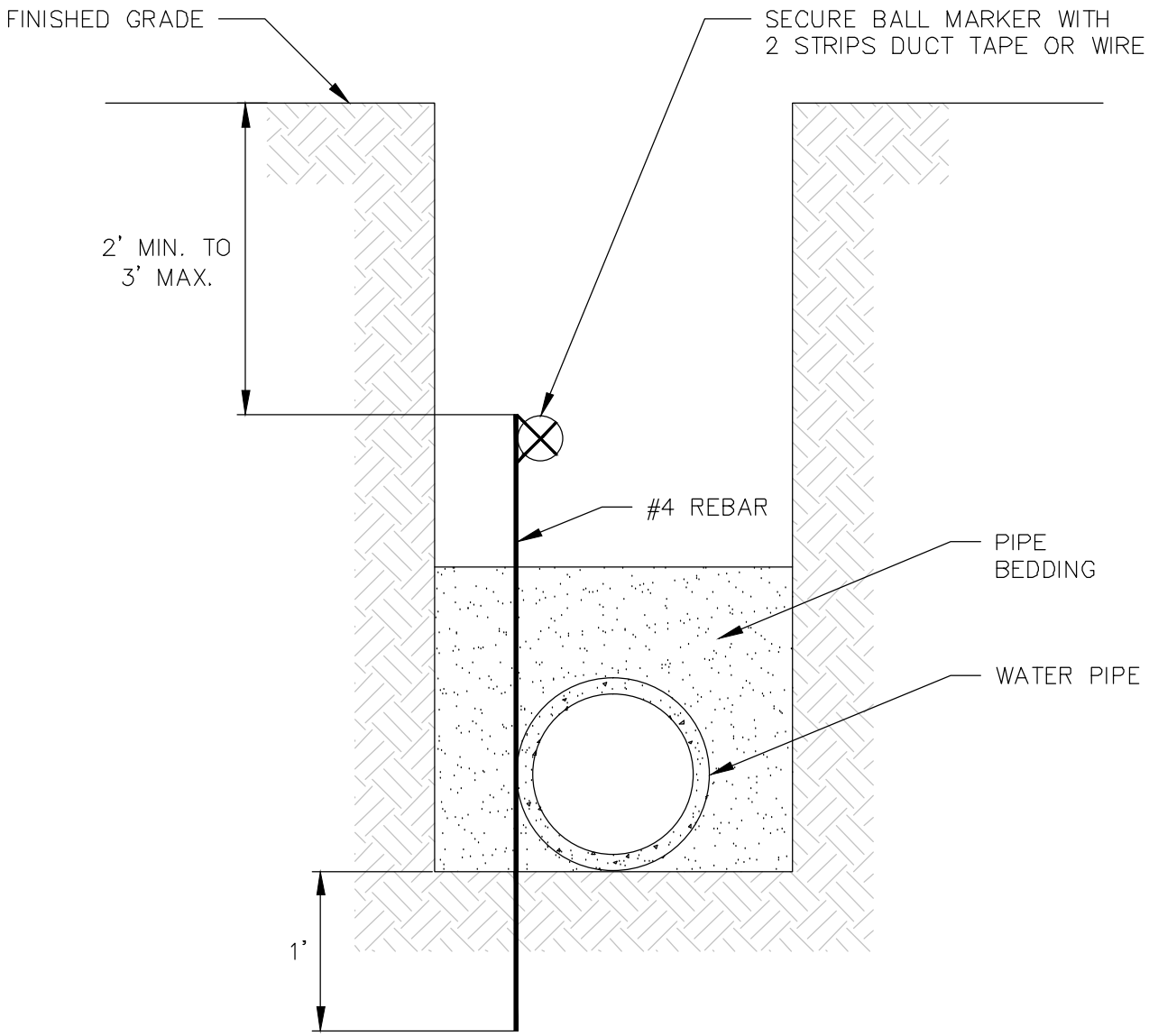
DETAIL NO. G-3300	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:12/12	DRY UTILITY TO WET UTILITY MINIMUM SEPARATION REQUIREMENTS	DETAIL NO. G-3300



NOTES:

1. THIS DETAIL PROVIDES SEPARATION & COVER REQUIREMENTS ONLY.
2. RESTRAINED JOINTS SHALL BE INSTALLED PER MAG STANDARDS 302 & 303.
3. ALL PIPE SHALL BE DUCTILE IRON PIPE.
4. UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER, AIR RELEASE VALVES SHALL BE INSTALLED AT LOCATIONS ALONG WATER AND RECLAIMED WATER LINES.
5. ELECTRONIC BALL MARKERS SHALL BE LOCATED AT ALL BENDS.
6. VALVES AND FITTINGS ARE NOT ALLOWED WITHIN A VERTICAL REALIGNMENT SECTION.
7. SEE CHAPTER 5.0 & 5.2 OF THE EDS&PM FOR INFORMATION REGARDING THE INSTALLATION OF VALVES ON A VERTICAL REALIGNMENT SECTION.

DETAIL NO. G-3301	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	VERTICAL REALIGNMENT OF WATER & RECLAIMED WATER MAINS	DETAIL NO. G-3301



NOTES:

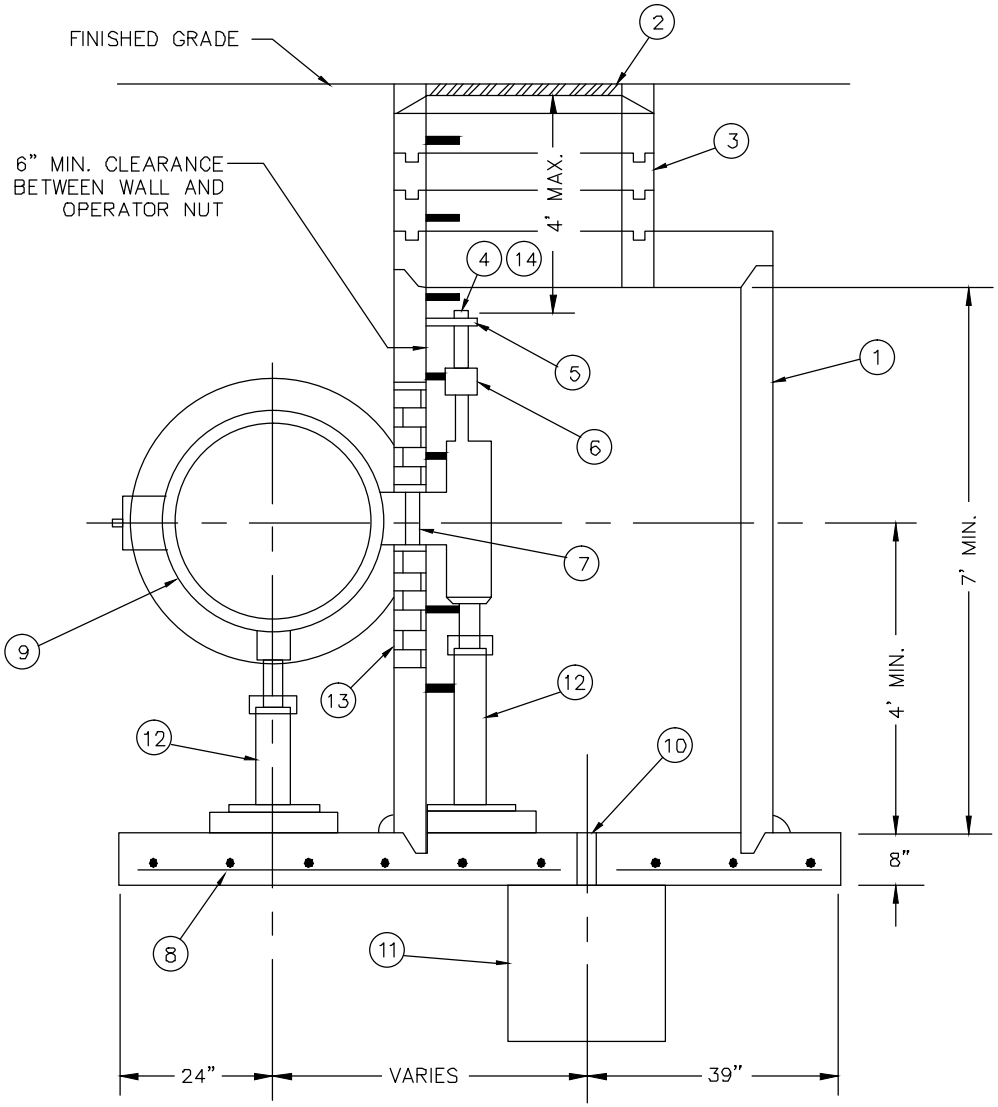
1. CONTRACTOR IS TO INSTALL, ACTIVATE, AND PROGRAM BALL MARKER WITH SIZE OF MAIN, MATERIAL OF MAIN, AND THE TYPE OF FITTING.

2. BALL MARKERS ARE REQUIRED AT CHANGES IN DIRECTION, BENDS, FITTINGS, AND STUBS FOR ALL WATER LINES 6" AND GREATER.

3. FOR WATER LINE DIAMETERS 16" AND GREATER, BALL MARKERS SHALL BE LOCATED AT ALL FITTINGS AND AT A MAXIMUM SPACING OF 440', IF VALVES ARE NOT PROVIDED AT A CLOSER SPACING.

4. SEE THE CITY POTABLE WATER APPROVED MATERIALS LIST FOR ACCEPTABLE BALL MARKER MANUFACTURERS.

DETAIL NO. G-3305	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:12/12	ELECTRONIC BALL MARKER PLACEMENT	DETAIL NO. G-3305

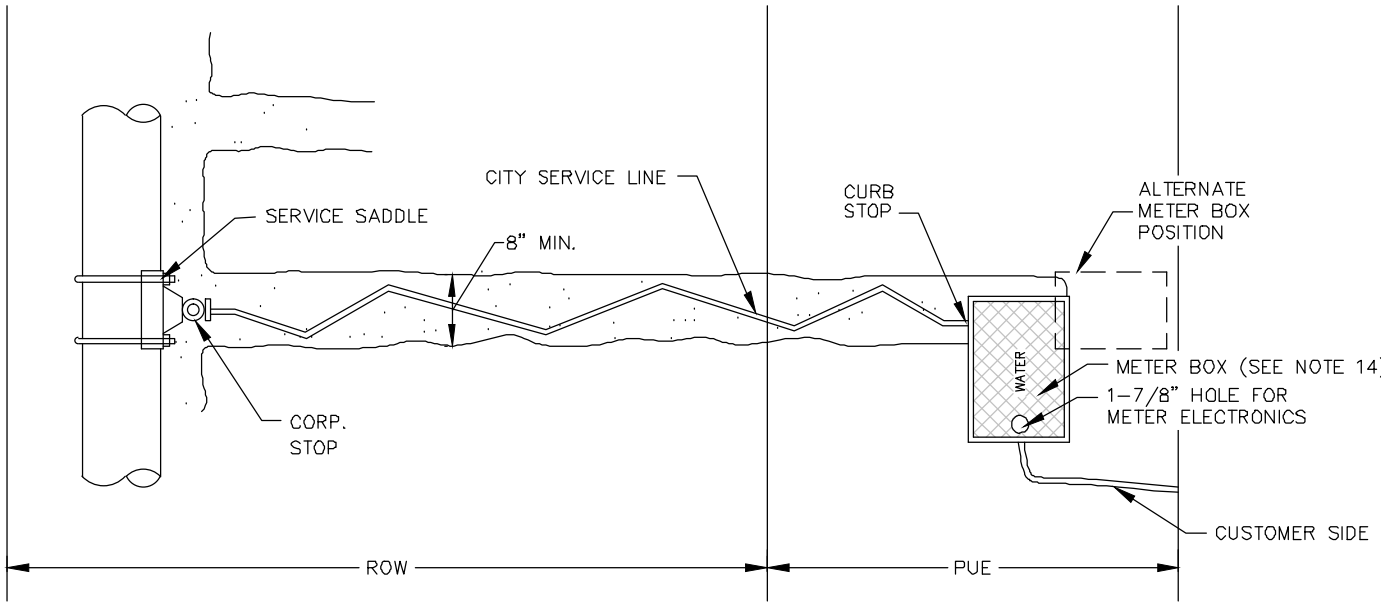


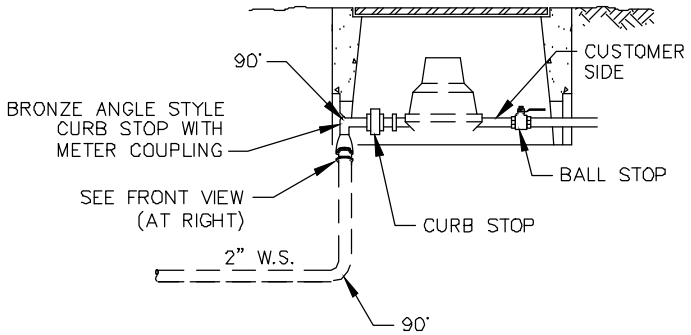
SECTION

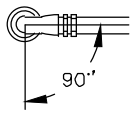
NOTES:

1. 48" I.D. MANHOLE SHAFT PER MAG STD. DETAIL 420-2, TYPE "B" TOP.
2. 30" MANHOLE FRAME & COVER PER MAG STD. DETAIL.
3. GROUTED ADJUSTMENT RINGS.
4. OPERATOR NUT.
5. WALL BRACKET.
6. PACKING GLAND.
7. SUGGESTED 6" EXTENSION.
8. #4 REBAR, 12" ON CENTER EACH WAY (2" CLEAR TYPICAL).
9. BUTTERFLY VALVE, LARGER THAN 16 INCHES.
10. 3" DIAMETER DRAIN.
11. 8 CU. FT. GRAVEL SUMP.
12. ADJUSTABLE PIPE SADDLE SUPPORT.
13. RECTANGULAR CUTOUT IN MANHOLE SHAFT FILL SPACE BETWEEN SHAFT AND PIPE WITH 1" SHEET FOAM, BRICK, AND MORTAR.
14. OPERATOR NUT MUST BE ACCESSIBLE FROM MANHOLE AT ALL TIMES.

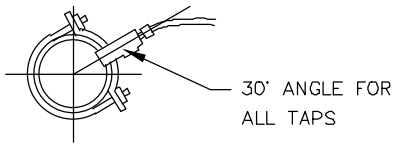
DETAIL NO. G-3307	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:11/07	BUTTERFLY VALVE OPERATOR MANHOLE	DETAIL NO. G-3307







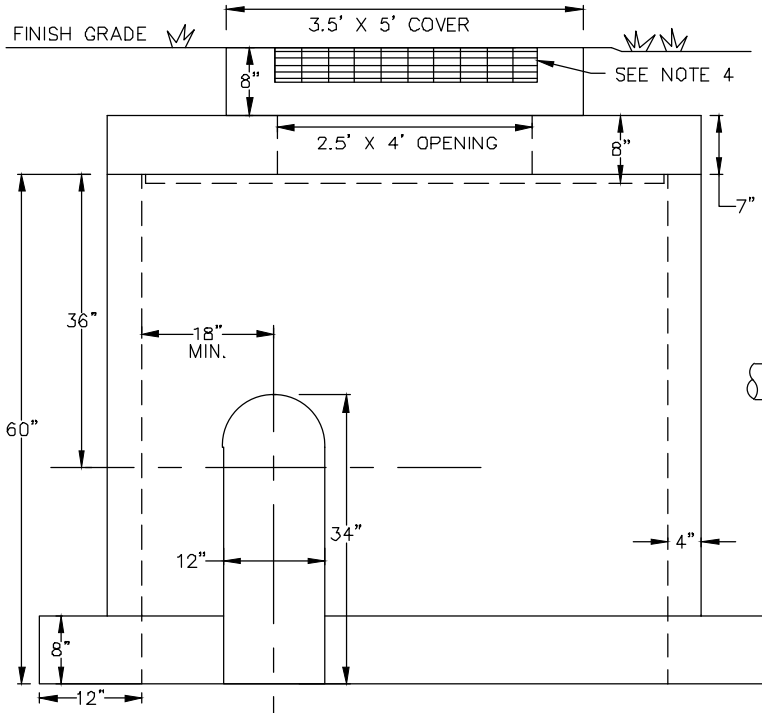
FRONT VIEW

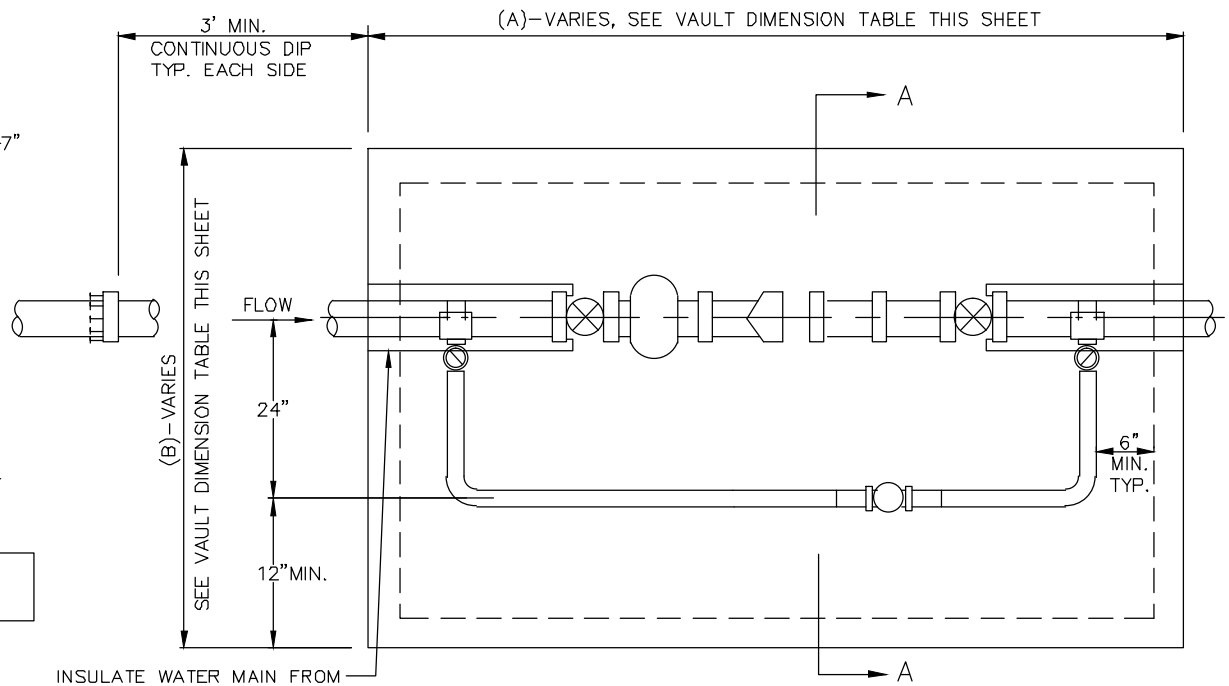


NOTES:

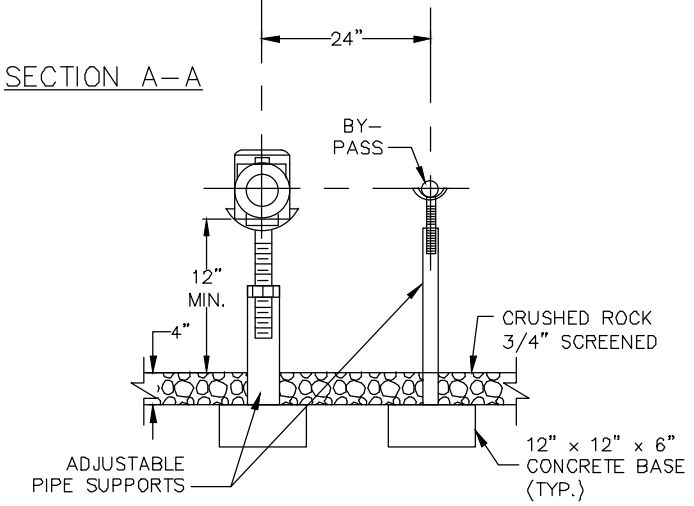
1. AT A MINIMUM, WATER SERVICES SHALL INCLUDE A CORP. STOP, SERVICE PIPE, TAPPING SADDLE, CURB STOP, AND CONCRETE METER BOX.
2. NEW WATER SERVICE TAPS SHALL BE INSTALLED USING A BRONZE DOUBLE-STRAP TAPPING SADDLE.
3. SERVICE LINES SHALL BE 1" OR 2" IN SIZE UNLESS OTHERWISE APPROVED BY THE CITY ENGINEERING AND PUBLIC WORKS DEPARTMENTS. ALL SERVICE LINES SHALL BE SOFT TYPE K SEAMLESS ANNEALED COPPER PIPE.
4. 36" MINIMUM COVER IS REQUIRED OVER SERVICE LINES.
5. ALL WATER METERS SHALL BE PROVIDED BY THE CITY AFTER PAYMENT OF ALL PREVAILING FEES.
6. ONLY AUTHORIZED PERSONNEL OF THE CITY PUBLIC WORKS DEPT. SHALL INSTALL WATER METERS OF SIZES 3/4" to 2" IN ACCORDANCE WITH THE METER INSTALLATION POLICY.
7. FOR WATER METER LOCATION, SEE THE CITY OF GOODYEAR ENGINEERING DESIGN STANDARDS AND POLICY MANUAL CHAPTER 5.
8. CONCRETE WATER METER BOXES SHALL BE PROVIDED BY THE DEVELOPER PER MAG STANDARD DETAIL 320.
9. THE MINIMUM CONCRETE BOX SIZE SHALL BE #2 FOR 3/4" AND 1" METERS, AND #4 BOX FOR 1-1/2" AND 2" METERS.
10. METER BOX LIDS SHALL BE PER MAG STANDARDS AND COME WITH A 1-7/8" PRE-DRILLED HOLE FOR THE INSTALLATION OF ELECTRONIC METER READING DEVICES.
11. SEE THE CITY "POTABLE WATER SYSTEM APPROVED MATERIALS LIST" FOR INFORMATION REGARDING SPECIFIC BRANDS AND MODELS PERMITTED TO BE INSTALLED WITHIN THE CITY LIMITS.
12. COPPER SERVICE LINES IN THE 1" AND 2" SIZES THAT CROSS STREETS WILL BE ONE CONTINUOUS PIECE FROM THE METER TO THE MAIN LINE. NO SOLDERED JOINTS WILL BE PERMITTED.
13. 2" COPPER SERVICE LINES SHALL NOT BE BENT INTO ANGLE STOP. 90° FITTINGS SHALL BE USED. REFERENCE THE APPROVED MATERIALS LIST FOR SPECIFIC PART NUMBERS.
14. WATER METERS SHALL BE LOCATED OUTSIDE OF STREET IMPROVEMENTS BUT WITHIN THE RIGHT-OF-WAY OR ADJACENT PUE.

DETAIL NO. G-3310	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	WATER SERVICE CONNECTIONS	DETAIL NO. G-3310





PLAN VIEW

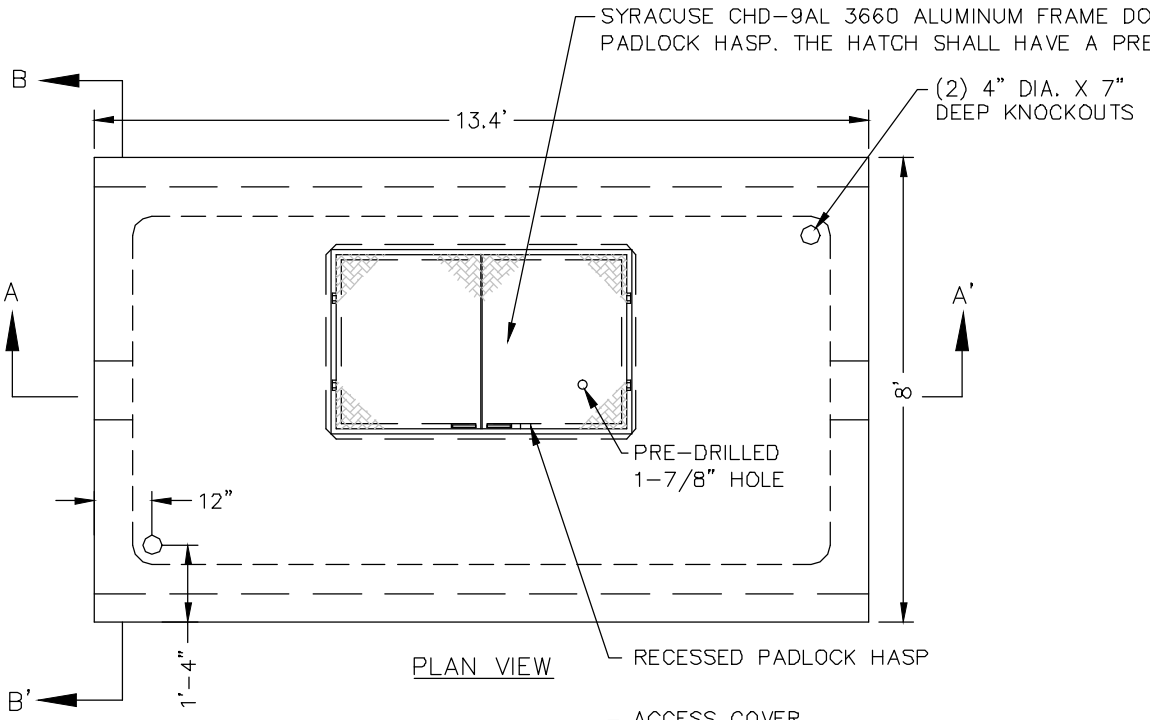


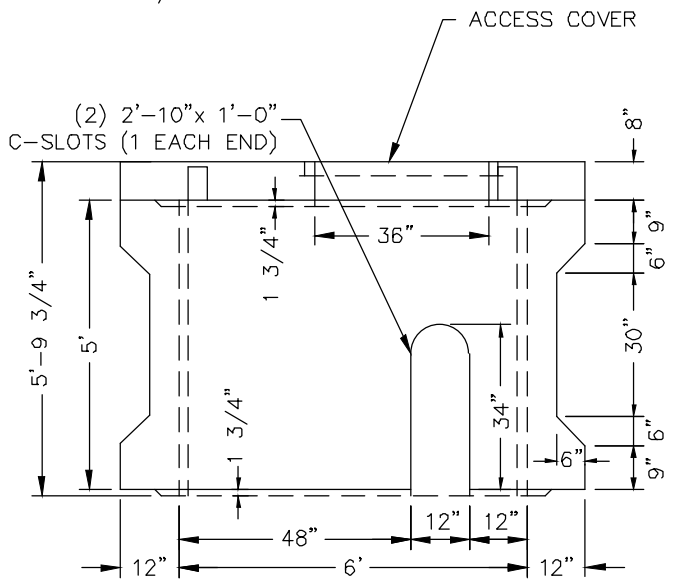
VAULT DIMENSIONS TABLE		
MAIN SIZE	4"	6"
(A)	11'-2"	13'-0"
(B)	5'-8"	7'-0"

NOTES:

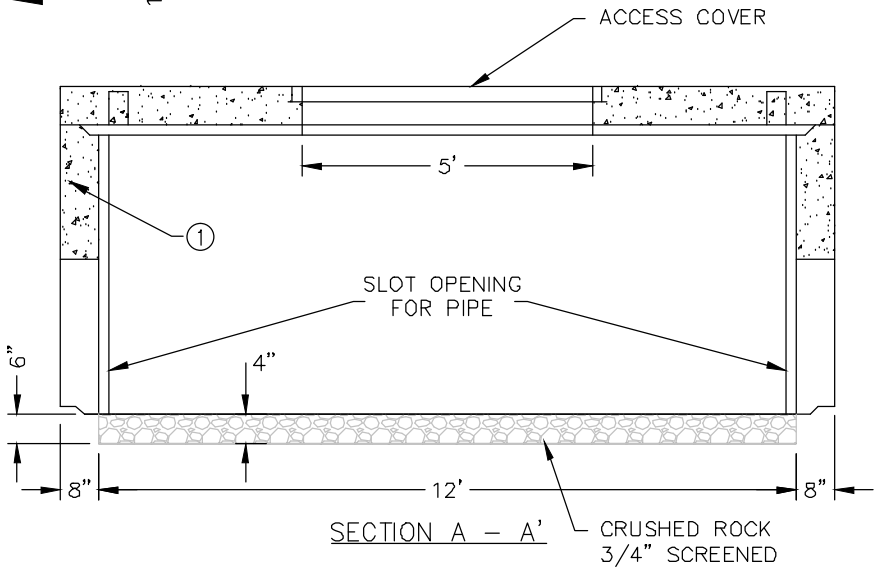
1. CONCRETE SHALL BE MAG CLASS A.
2. METER VAULTS MAY BE EITHER CAST-IN-PLACE OR PRE-CAST CONCRETE.
3. ALL FITTINGS SHALL BE FLANGED EXCEPT FOR 2" COPPER BYPASS. UNIFLANGE IS NOT ACCEPTABLE UNLESS APPROVED BY THE CITY ENGINEERING AND PUBLIC WORKS DEPARTMENTS. 2" COPPER BYPASS WILL BE JOINED WITH SILVER SOLDER EXCEPT AT 2" CORP. STOPS.
4. COVERS SHALL HAVE A SYRACUSE CHD-9AL 3660 ALUMINUM FRAME DOUBLE LEAF HATCH WITH RECESSED PADLOCK HASP. THE HATCH SHALL HAVE A PRE-DRILLED 1-7/8" METER READER HOLE.
5. ALL JOINTS SHALL BE SEALED USING CONSEAL CS-101 BUTYL RUBBER ROPE.

DETAIL NO. G-3313-1	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	4" & 6" WATER METER VAULTS	DETAIL NO. G-3313-1





SECTION B – B'



SECTION A – A'

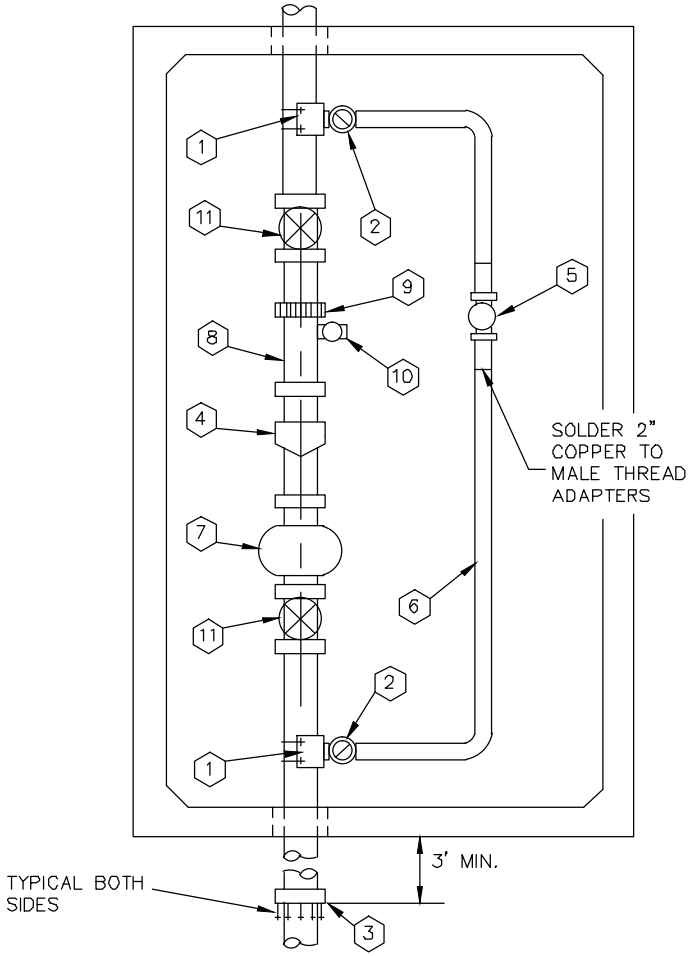
STRUCTURAL NOTES:

1. CONCRETE SHALL BE MAG CLASS A.
2. REBAR: ASTM A-615 GRADE 60.
3. MESH: ASTM A-185 GRADE 65.
4. DESIGN: ACI-318-99 BUILDING CODE ASTM C-857 "MINIMUM STRUCTURAL DESIGN LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES".

GENERAL NOTES:

1) ALL JOINTS SHALL BE SEALED USING CONSEAL CS-101 BUTYL RUBBER ROPE.

DETAIL NO. G-3313-2	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:12/12	8" WATER METER VAULT	DETAIL NO. G-3313-2



COMPOUND/TURBOMETER

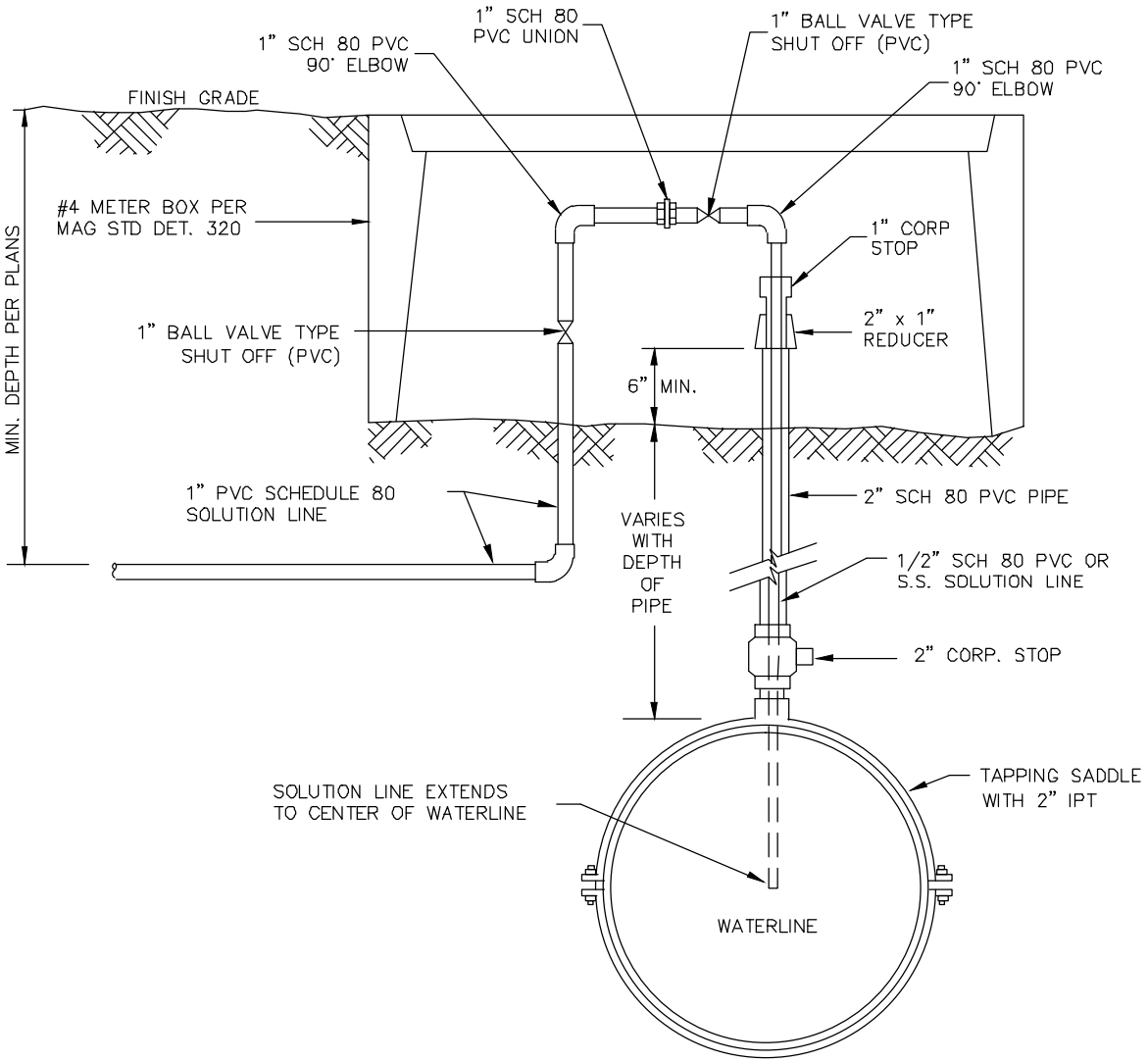
KEY NOTES

1. DOUBLE STRAP ALL BRONZE SERVICE SADDLES, OR FLANGED X FLANGED TEE WITH FLANGED X FLANGED VALVE FOR SIZES 4" OR LARGER.
2. CORP. STOP.
3. ADAPTER, FLANGED TO MECH. JOINT FOR A.C.P.
4. TURBOMETER OR COMPOUND METER.
5. BRONZE CHECK VALVE FOR 2" LINE, CAST IRON WITH COUNTERWEIGHT FOR 4" LINES AND LARGER. (SAME SIZE AS BY-PASS LINE).
6. 2" RIDGED TYPE "K" COPPER BY-PASS LINE, 4" OR LARGER TO BE DUCTILE IRON. NOT LESS THAN ONE PIPE SIZE SMALLER THAN METER IN NOTE 4.
7. STRAINER, SUPPLIED WITH METER.
8. FLANGED SPOOL (3 PIPE DIAMETERS IN LENGTH, MIN.).
9. PROVIDE RESTRAINED FLEX COUPLING ADAPTERS (RFCA) FOR ALL LINES 4" OR LARGER.
10. 2" THREADED OUTLET AND BALL VALVE NOT NEEDED IF VERTICAL TEST VALVE IS PROVIDED ON METER.
11. RESILIENT WEDGE GATE VALVE, FLANGED, WITH HAND WHEEL, OPEN LEFT, WITH NON-RISING STEM.

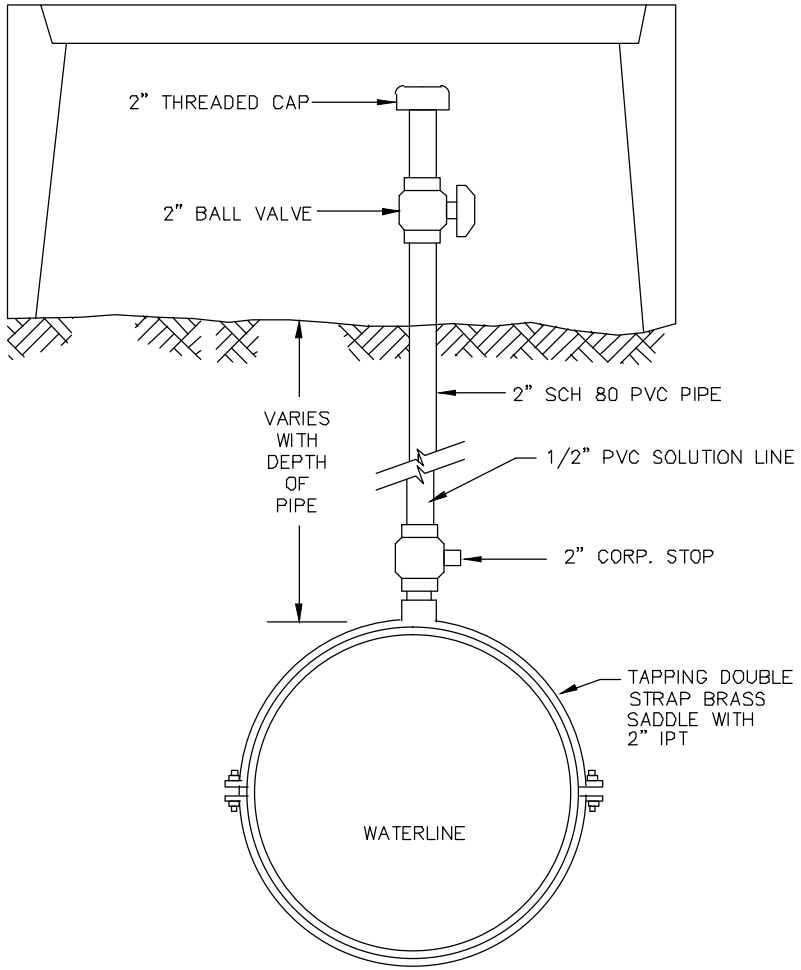
NOTES:

1. THE DESIGN OF 4" METERS OR METERS LARGER THAN 8" MAY REQUIRE ADDITIONAL INFORMATION FROM THE CITY. CONTACT THE CITY PUBLIC WORKS DEPARTMENT PRIOR TO BEGINNING DESIGN WORK.
2. INSTALLATION OF A REMOTE READING DEVICE TO BE REQUIRED AS DIRECTED BY THE PUBLIC WORKS DEPARTMENT.
3. AN APPROVED BACKFLOW PREVENTION ASSEMBLY SHALL BE REQUIRED DOWNSTREAM OF THE WATER METER. CONTACT PUBLIC WORKS, BACKFLOW PREVENTION FOR SPECIFIC INFORMATION.

DETAIL NO. G-3313-3	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	4", 6", & 8" WATER METERS	DETAIL NO. G-3313-3



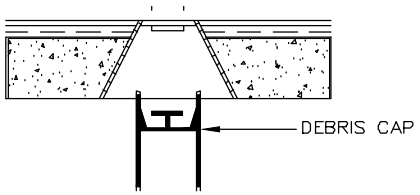
CHLORINE INJECTION ASSEMBLY



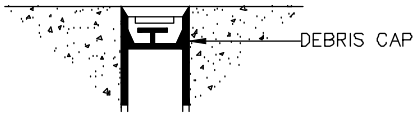
TAP FOR FUTURE CHLORINE INJECTION ASSEMBLY

NOTE:
SPECIFICATIONS ON ALL FITTINGS SHALL EXCEED THE MAXIMUM PRESSURES OF THE SYSTEM.

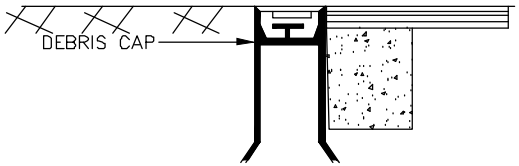
DETAIL NO. G-3316	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	CHLORINE INJECTIONS ASSEMBLY FOR UNDERGROUND WATERLINES	DETAIL NO. G-3316



TYPE "A"



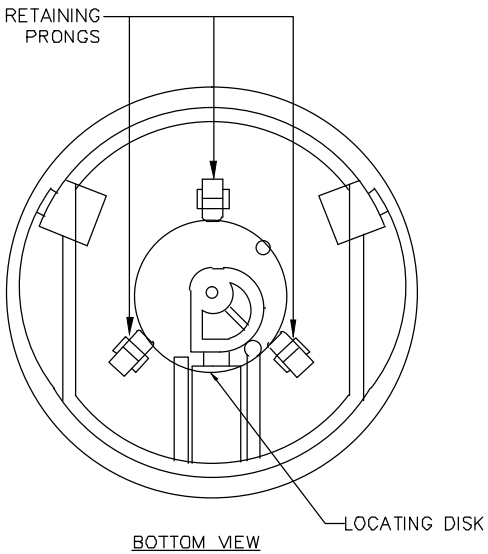
TYPE "B"



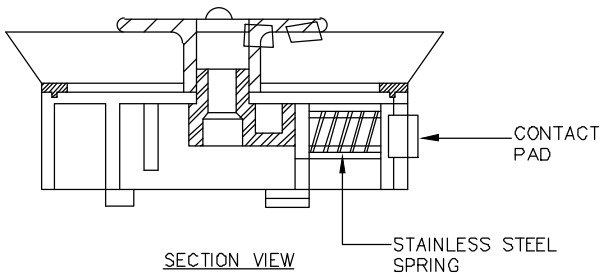
TYPE "C"

NOTES

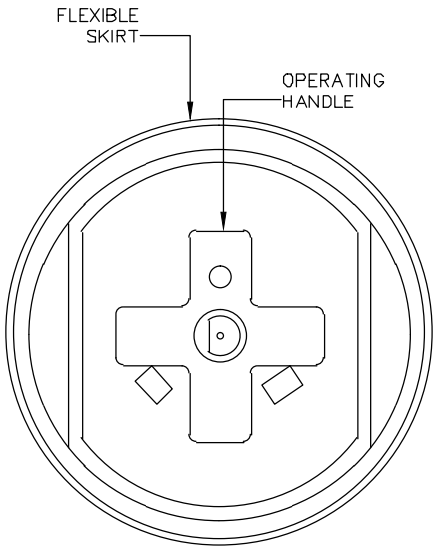
1. DEBRIS CAP SHALL BE INSTALLED AS CLOSE UNDER THE CAST IRON COVER WITHOUT INTERFERING WITH COVER OPERATION.
2. THE DEBRIS CAPS SHALL BE PROVIDED AS IDENTIFIED IN THE APPROVED MATERIALS LIST.
3. THE DEBRIS CAP SHALL BE COMPRISED OF A HOLLOW MEMBER HAVING A CYLINDRICAL OUTER SURFACE, A CLOSURE FOR ONE END, AND THREE-POINT RESILIENT CONTACT PADS PROJECTING FROM THE OUTER SURFACE. THE CAP SHALL HAVE A FLEXIBLE SKIRT PROVIDING AN OUTWARD SEAL PREVENTING DEBRIS FROM GETTING PAST THE CAP. THE CAP MUST WITHSTAND, WITHOUT SLIPPAGE, A MINIMUM VERTICAL FORCE OF 50 POUNDS, AT A LOADING RATE OF 1.0 INCHES/MINUTE. THE CAP SHALL HAVE RETAINING PRONGS TO RETAIN A STANDARD LOCATING COIL.
4. THE CAP SHALL BE MOLDED PER THE APPROVED MATERIALS LIST.



BOTTOM VIEW

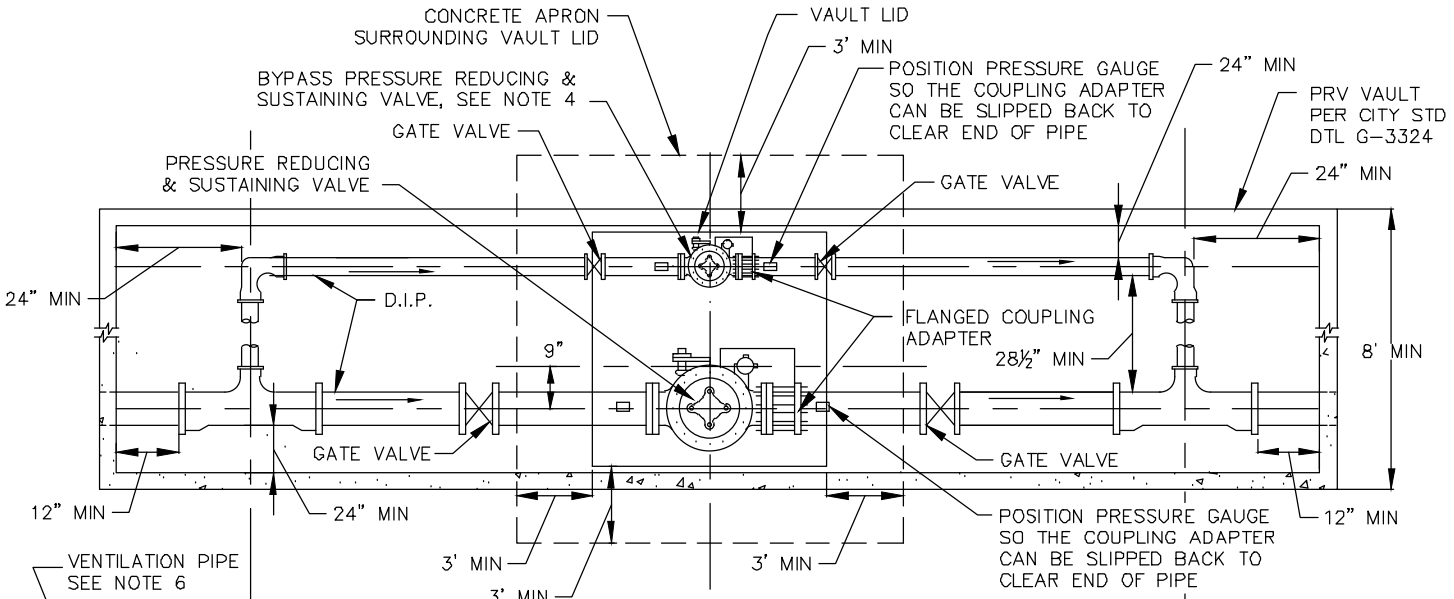


SECTION VIEW

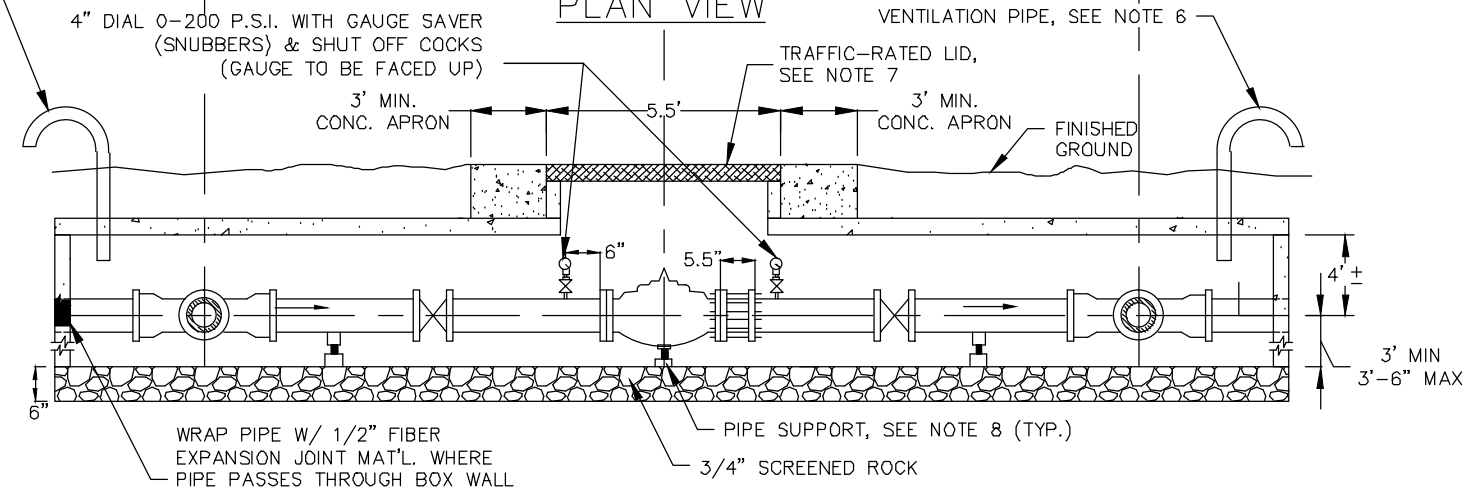


TOP VIEW

DETAIL NO. G-3321	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	DEBRIS CAP INSTALLATION	DETAIL NO. G-3321



PLAN VIEW

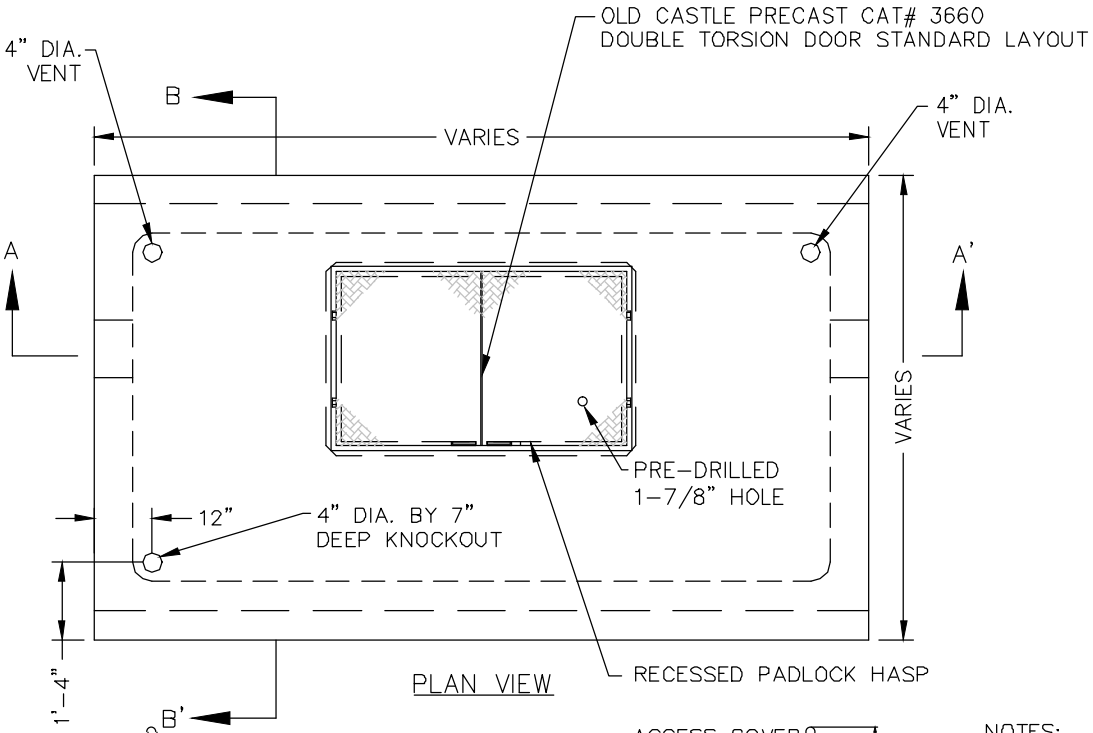


SECTION

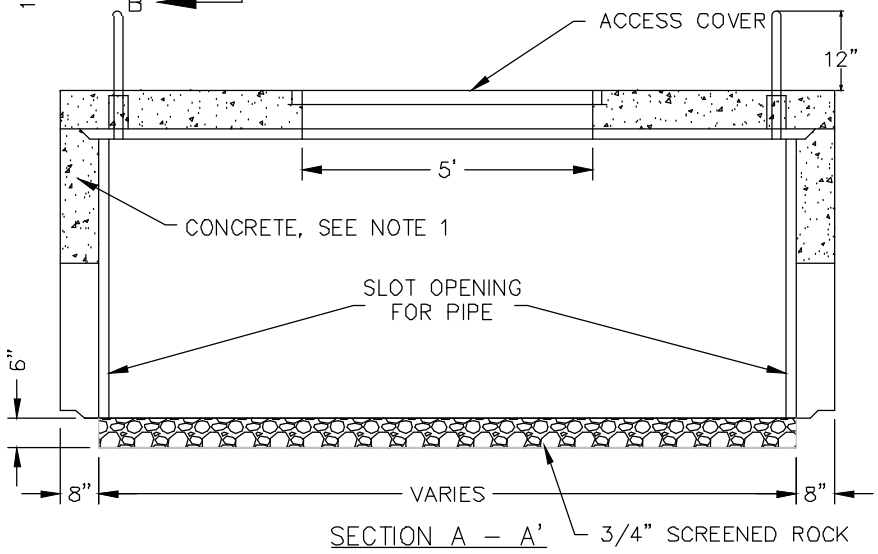
NOTES:

1. VALVE SHALL BE IRON BODY, EPOXY-COATED IN AND OUT, CLASS 150, FLANGED ENDS, HYDRAULICALLY OPERATED, PILOT CONTROLLED, DIAPHRAGM TYPE, GLOVE PATTERNED VALVE. IT SHALL BE TREATED AT 175 P.S.I. MINIMUM PRESSURE.
2. MANUFACTURER'S NAME, YEAR OF MANUFACTURE, SIZE OF VALVE, AND GUARANTEED WORKING PRESSURE SHALL BE ENGRAVED ON THE VALVE OR A NAME PLATE ATTACHED TO THE VALVE.
3. VALVE SHALL BE OPERATED BY A CONTROL SYSTEM WHICH INCLUDES PILOT CONTROLS FOR PRESSURE REDUCING AND SUSTAINING. BOTH PILOT CONTROLS SHALL BE FIELD ADJUSTABLE FOR ANY PRESSURE IN THE RANGE OF 50 TO 150 P.S.I.
4. A REDUCED SIZE VALVE AND BYPASS LINE TO BE INSTALLED FOR THE PURPOSE OF MAINTAINING FLOW AROUND THE MAIN VALVE DURING MAINTENANCE. VALVE AND LINE TO BE SIZED AS SPECIFIED BY THE PUBLIC WORKS AND ENGINEERING DEPARTMENTS.
5. ALL LINES SHALL BE D.I.P. AND CONNECTIONS SHALL EITHER BE FLANGED OR MECHANICALLY RESTRAINED JOINTS.
6. VENTILATION PIPE – SEE DETAIL G-3324 FOR ADDITIONAL INFORMATION.
7. TRAFFIC-RATED LID – SEE DETAIL G-3324 FOR ADDITIONAL INFORMATION.
8. PIPE SUPPORTS SHALL REST ON A 1' X 1' X 6" THICK CONCRETE BASE.
9. LARGE PRV MUST BE CENTERED UNDER ACCESS LID SO THAT PRV CAN BE LIFTED THROUGH HATCH WITH NO DEFLECTION.
10. VAULT MUST BE INSTALLED IN RIGHT OF WAY AND NOT IN ANY ROADWAY.

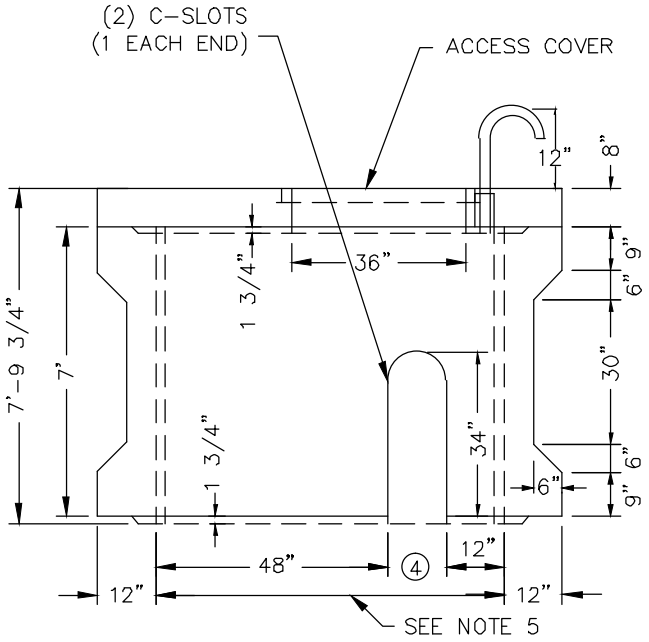
DETAIL NO. G-3323	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	PRESSURE REDUCING VALVE	DETAIL NO. G-3323



PLAN VIEW



SECTION A – A'

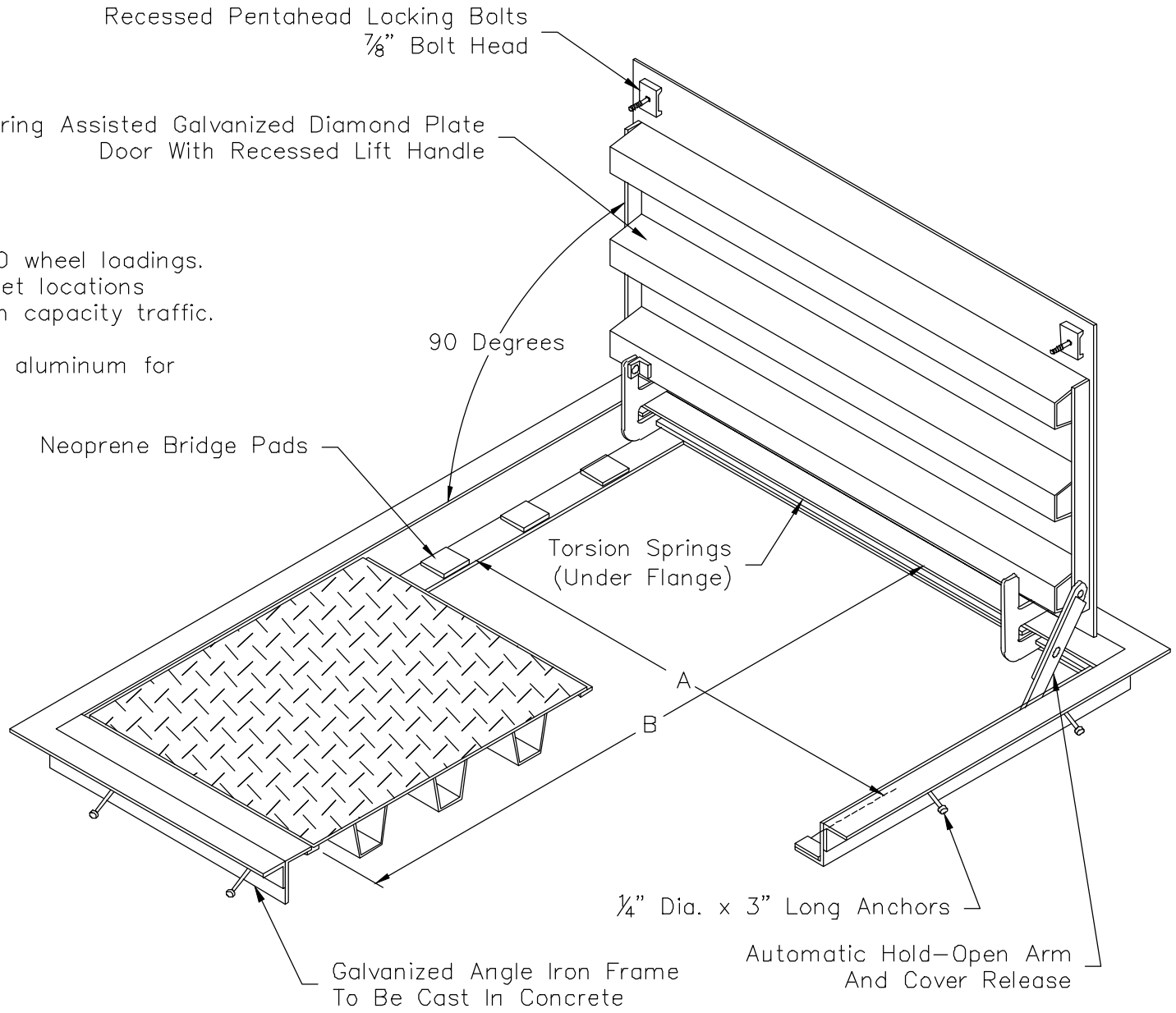


SECTION B – B'

NOTES:

1. CONCRETE: CLASS A PER MAG STANDARDS.
2. REBAR: ASTM A-615 GRADE 60.
3. MESH: ASTM A-185 GRADE 65.
4. WIDTH SHALL BE 12 INCHES MINIMUM. WIDTH FOR PIPE DIAMETERS GREATER THAN 6 INCHES SHALL EQUAL THE PIPE DIAMETER PLUS 6 INCHES.
5. WIDTH SHALL BE 8 FEET MINIMUM. WIDTH MAY INCREASE AS REQUIRED BY THE CITY ENGINEERING AND PUBLIC WORKS DEPARTMENTS.
6. ALL VAULTS SHALL BE LOCATED OFF THE ROADWAY. 2-4 INCH GALVANIZED VENTS WITH WIRE MESH ON EACH END SHALL BE INSTALLED.
7. DESIGN: ACI-318-99 BUILDING CODE ASTM C-857 "MINIMUM STRUCTURAL DESIGN LOADING FOR UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURES".
8. ALL JOINTS SHALL BE SEALED USING CONSEAL CS-101 BUTYL RUBBER ROPE.

DETAIL NO. G-3324-1	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	PRESSURE REDUCING VALVE VAULT	DETAIL NO. G-3324-1

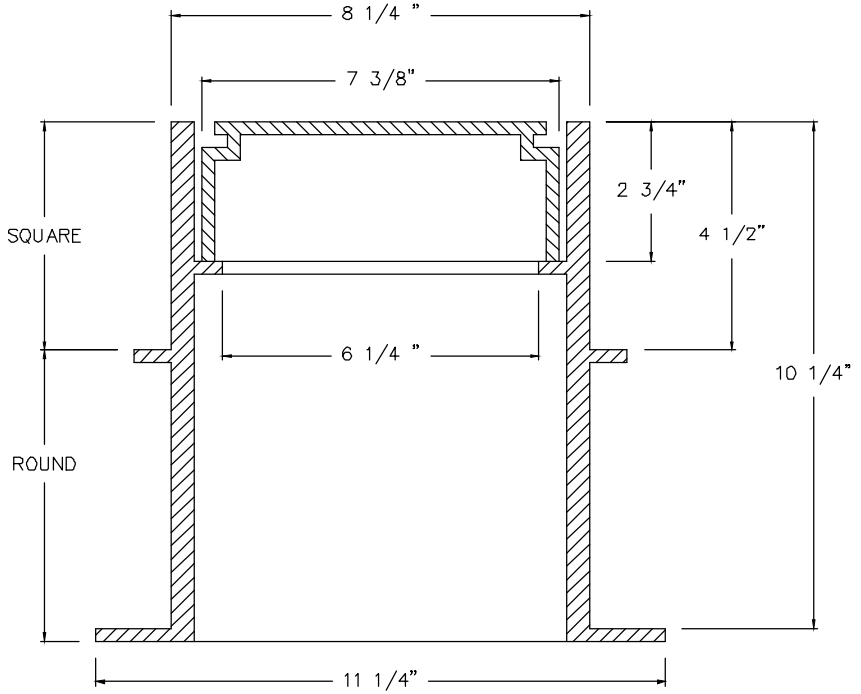


NOTE:
Designed to withstand H-20 wheel loadings.
Suitable for use in off-street locations
where not subjected to high capacity traffic.

* These sized are available in aluminum for pedestrian traffic only.

DIMENSIONS	
A	B
36"	60"

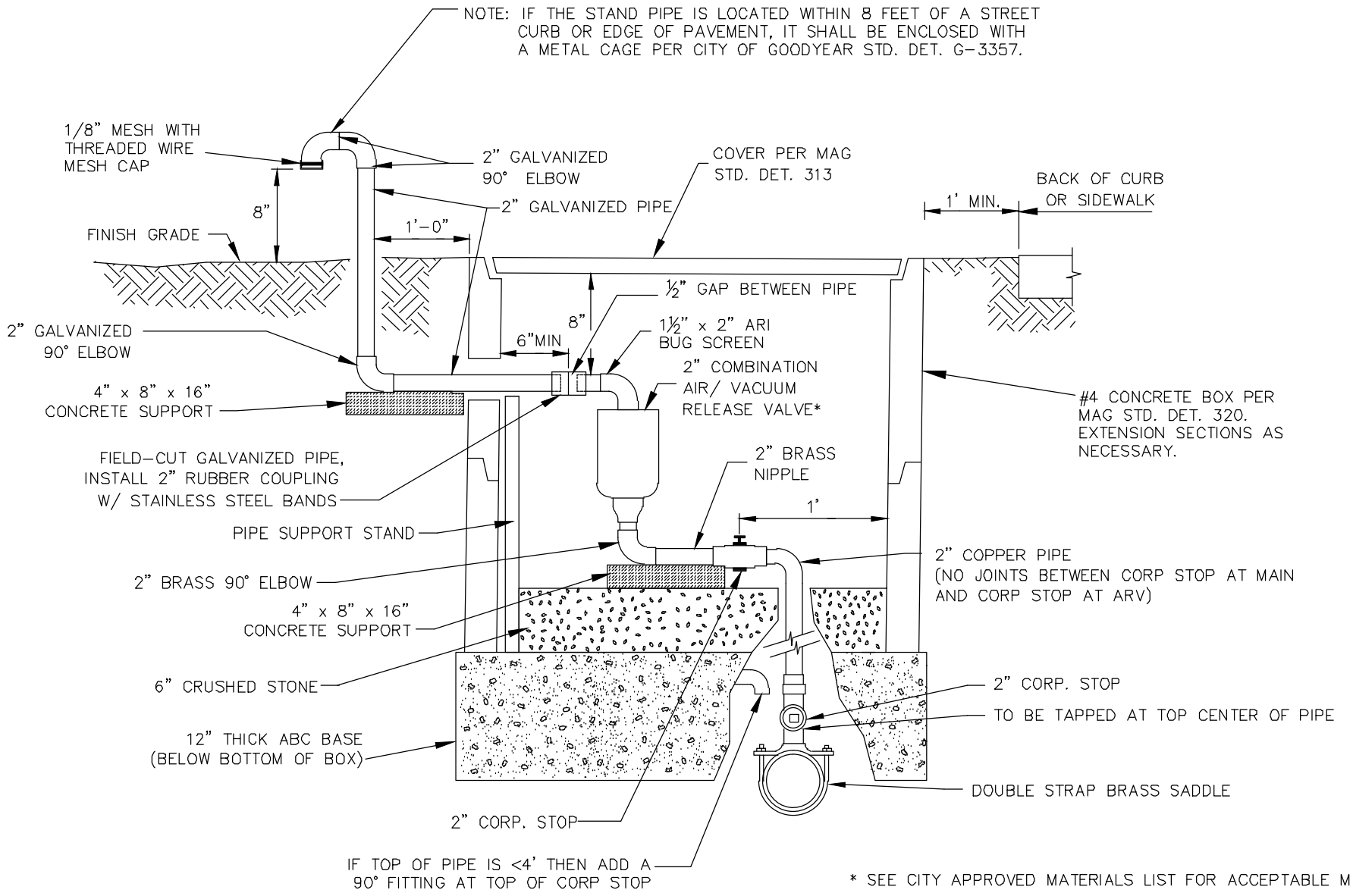
DETAIL NO. G-3324-2	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	PROPOSED PRV VAULT LID DETAIL	DETAIL NO. G-3324-2



NOTES

1. THIS VALVE BOX IS DESIGNED TO FIT OVER 6" DIAMETER PIPE OR ATOP 8" DIAMETER PIPE.
2. EACH LID IS CAST WITH TWO PICK POCKETS SET 180 DEGREES APART.
3. A MAG CLASS "AA" CONCRETE APRON SHALL BE USED SURROUNDING THE LID.
4. ALL RECLAIMED WATER VALVE BOXES AND VALVE BOX LIDS SHALL BE PAINTED PURPLE IN COLOR.

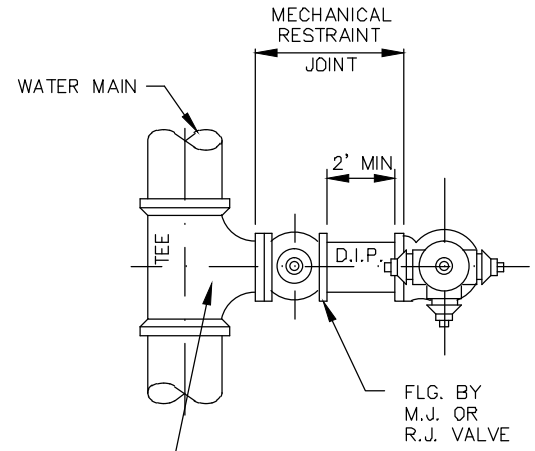
DETAIL NO. G-3325	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:12/12	RECLAIMED WATER VALVE BOX AND LID	DETAIL NO. G-3325

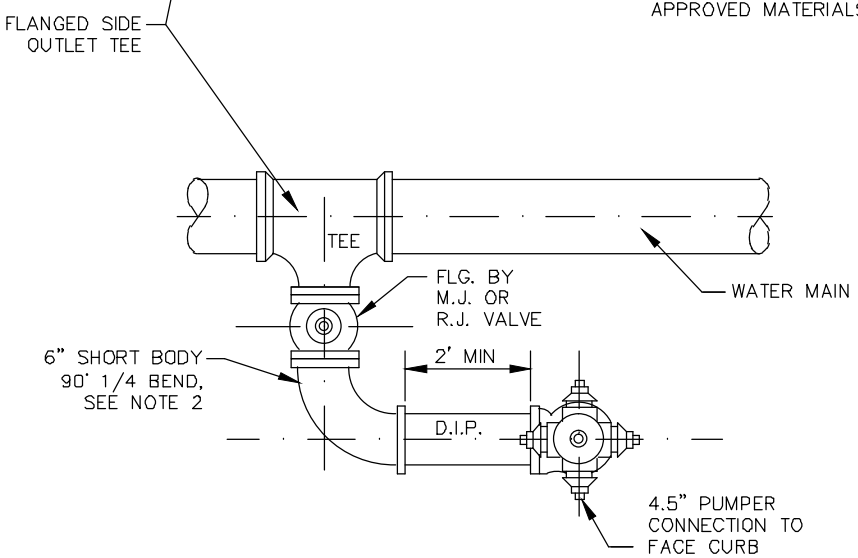


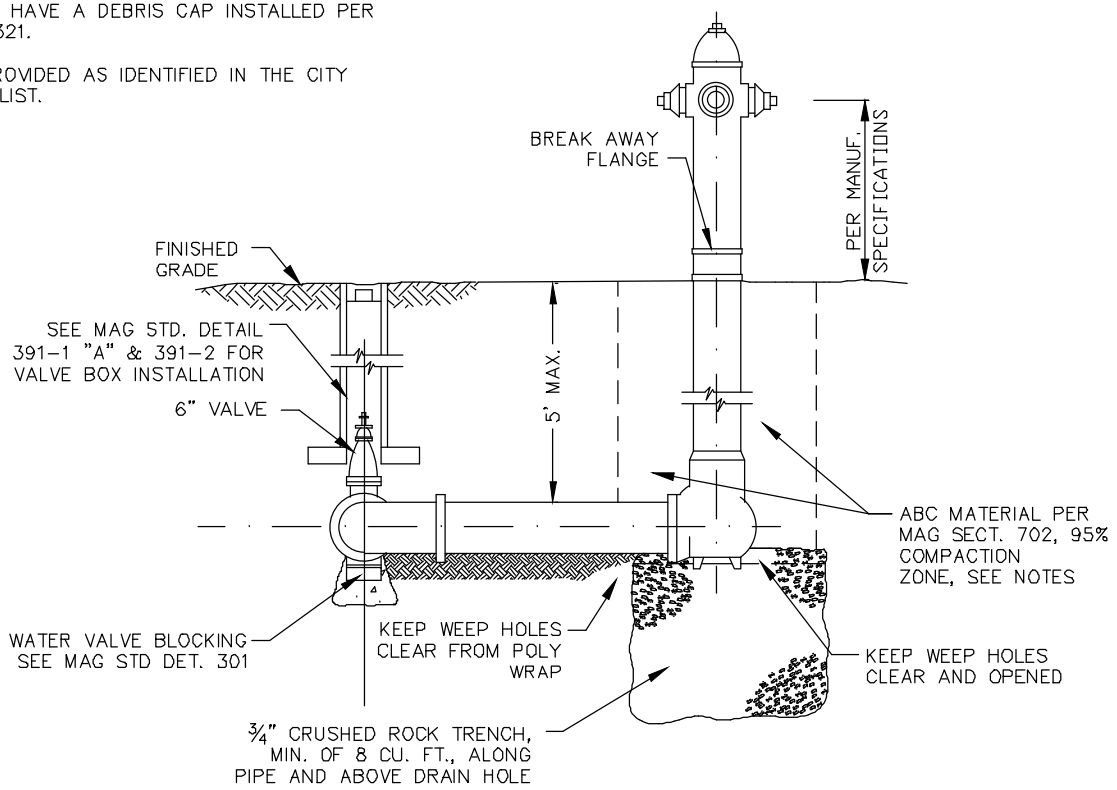
DETAIL NO. G-3328	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	2" AIR/VACUUM RELEASE VALVE	DETAIL NO. G-3328

NOTES:

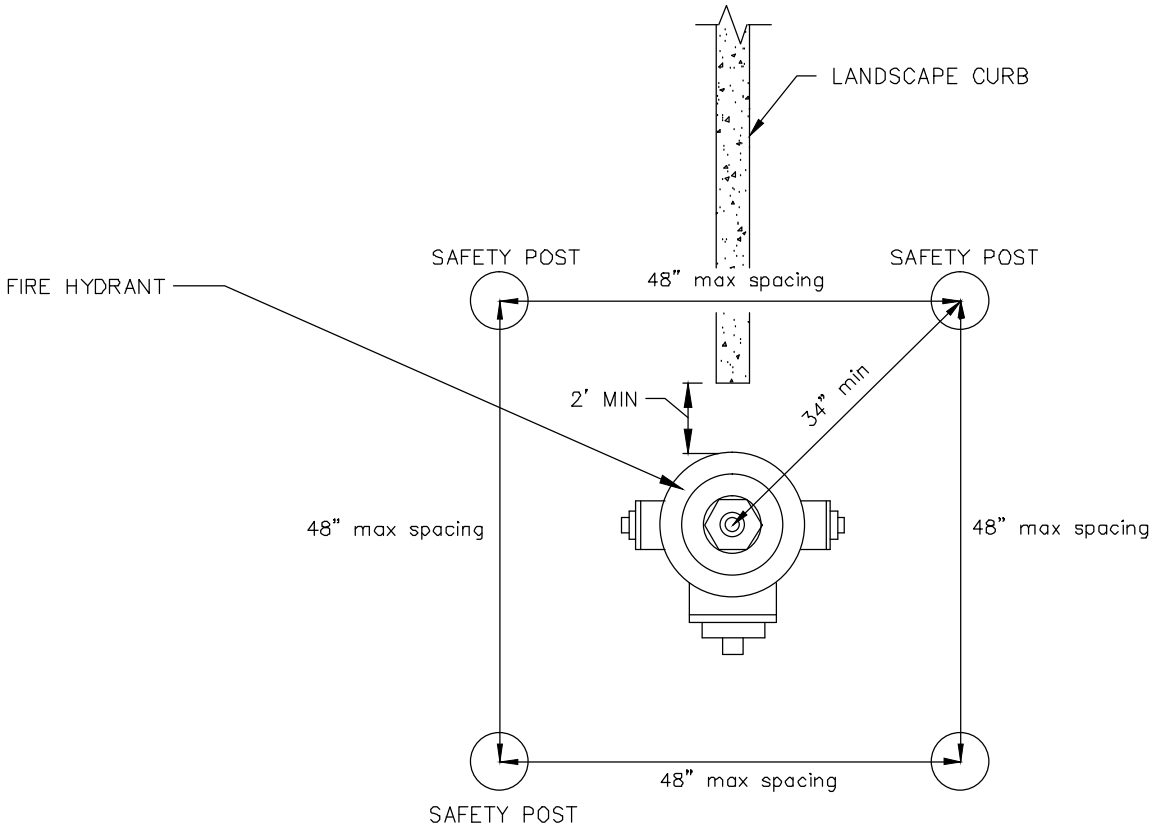
1. ALL JOINTS BETWEEN THE VALVE AND THE MAIN SHALL BE FLANGED TYPE. JOINTS BETWEEN THE VALVE AND HYDRANT SHALL BE RESTRAINT TYPE.
2. 90° BEND NOT REQUIRED IF SUFFICIENT ROOM FOR PERPENDICULAR INSTALLATION.
3. MAG STD. DETAIL 362 SHALL BE USED FOR LOCATING HYDRANTS WITH THE FOLLOWING MODIFICATIONS:
   A. THE 6' MINIMUM DISTANCE FROM THE P.T. OR P.C. OF THE CURB RETURN TO THE STANDARD LOCATION SHALL BE INCREASED TO 10'.
   B. HYDRANTS SHALL NOT BE LOCATED WITHIN THE CURB RETURN (ALTERNATIVE LOCATION) AT ARTERIAL TO ARTERIAL OR ARTERIAL TO COLLECTOR ROAD INTERSECTIONS.
   C. A MINIMUM DISTANCE OF 2' SHALL BE MAINTAINED FROM THE BACK OF CURB TO THE CENTER OF HYDRANT AND FROM THE NEAR EDGE OF SIDEWALK TO THE CENTER OF HYDRANT.
4. ABC MATERIAL MEETING THE REQUIREMENTS OF MAG SECTION 702 SHALL BE USED FOR PIPE BEDDING FROM THE TEE TO THE HYDRANT ASSEMBLY AND AS BACKFILL AROUND THE HYDRANT.
5. ABC MATERIALS PLACED IN AND AROUND HYDRANTS SHALL BE COMPACTED TO A MINIMUM 95% OF THE MAXIMUM DENSITY AS DETERMINED BY A STANDARD PROCTOR. A MINIMUM OF 2 DENSITY TESTS SHALL BE RECORDED AROUND EACH HYDRANT.
6. THE VALVE BOX SHALL HAVE A DEBRIS CAP INSTALLED PER CITY STD. DETAIL G-3321.
7. HYDRANT SHALL BE PROVIDED AS IDENTIFIED IN THE CITY APPROVED MATERIALS LIST.







DETAIL NO. G-3330	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	FIRE HYDRANT INSTALLATION	DETAIL NO. G-3330

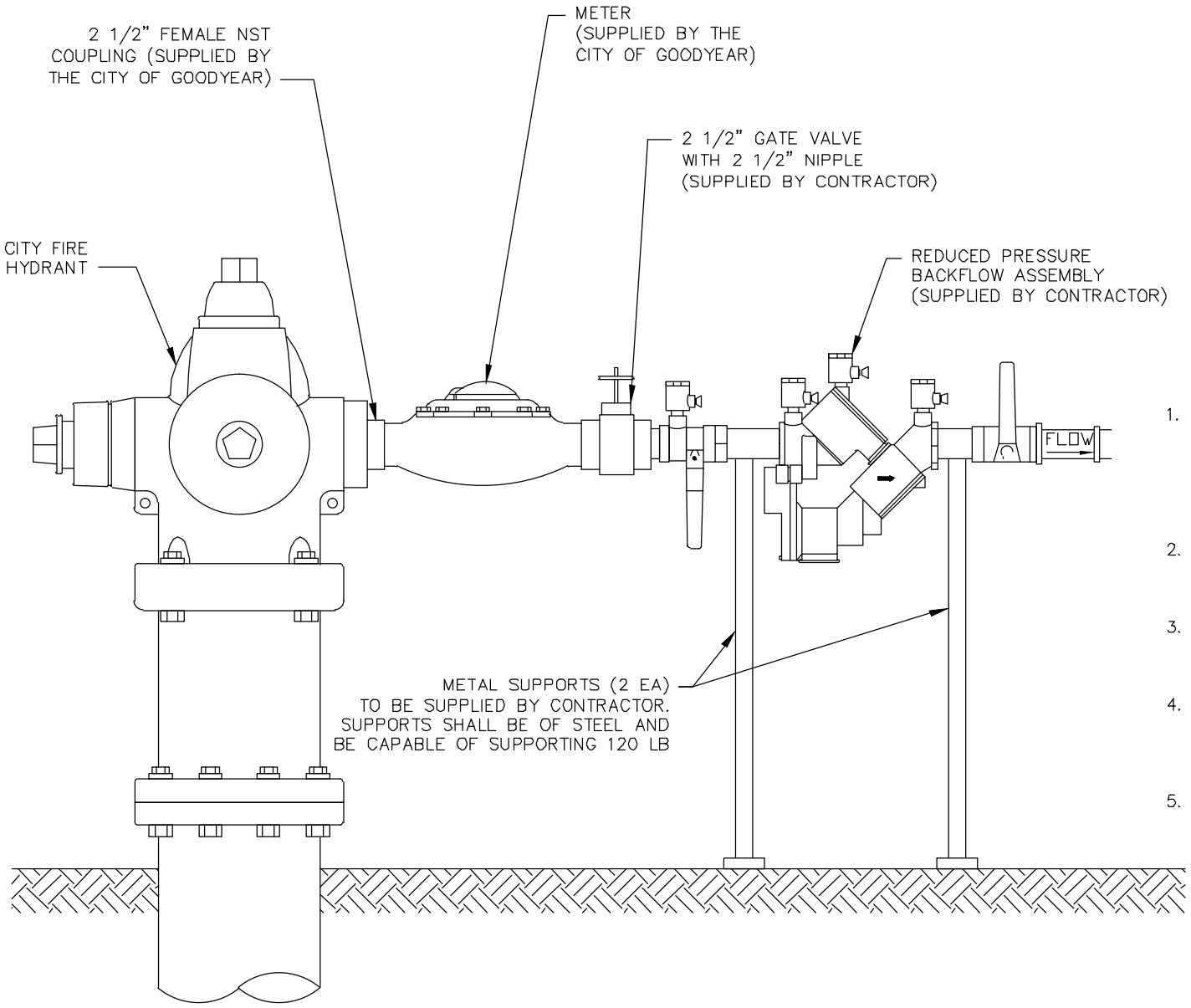


SAFETY POSTS PER
MAG STD. DET. 140
Modified PER IFC SEC
312.2

NOTE:

1. SAFETY POSTS ARE NOT REQUIRED IN ALL SITUATIONS.
2. SAFETY POSTS ARE REQUIRED WHEN NO CURB IS PRESENT OR AS DIRECTED BY THE PUBLIC WORKS AND ENGINEERING DEPARTMENTS. SAFETY POSTS WILL NOT BE INSTALLED IN CITY RIGHT-OF-WAY.
3. CONSTRUCTION SHALL COMPLY WITH IFC SECTION 312.2

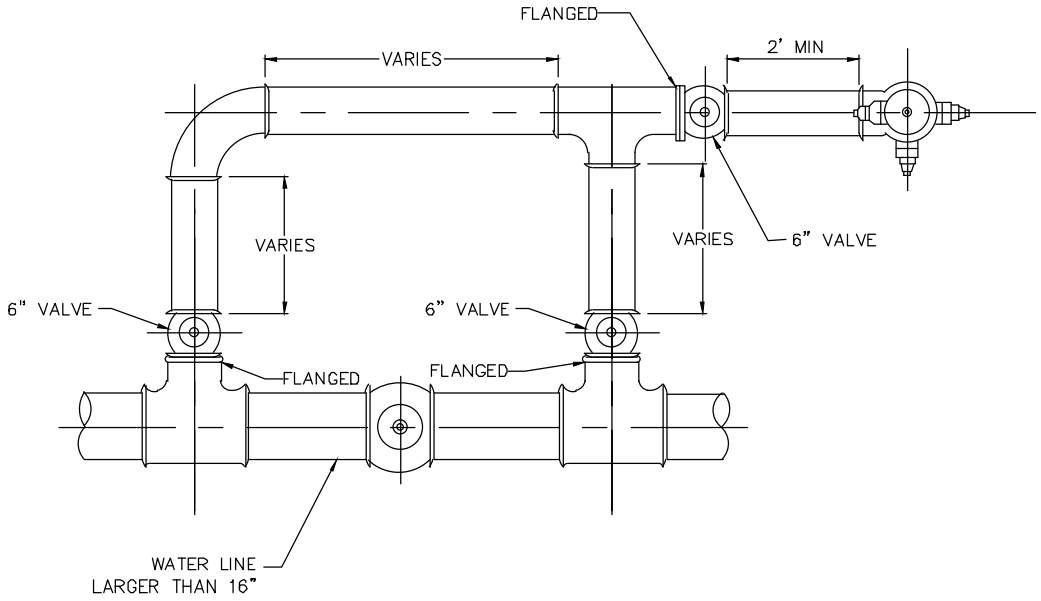
DETAIL NO. G-3332	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	HYDRANT SAFETY POSTS	DETAIL NO. G-3332



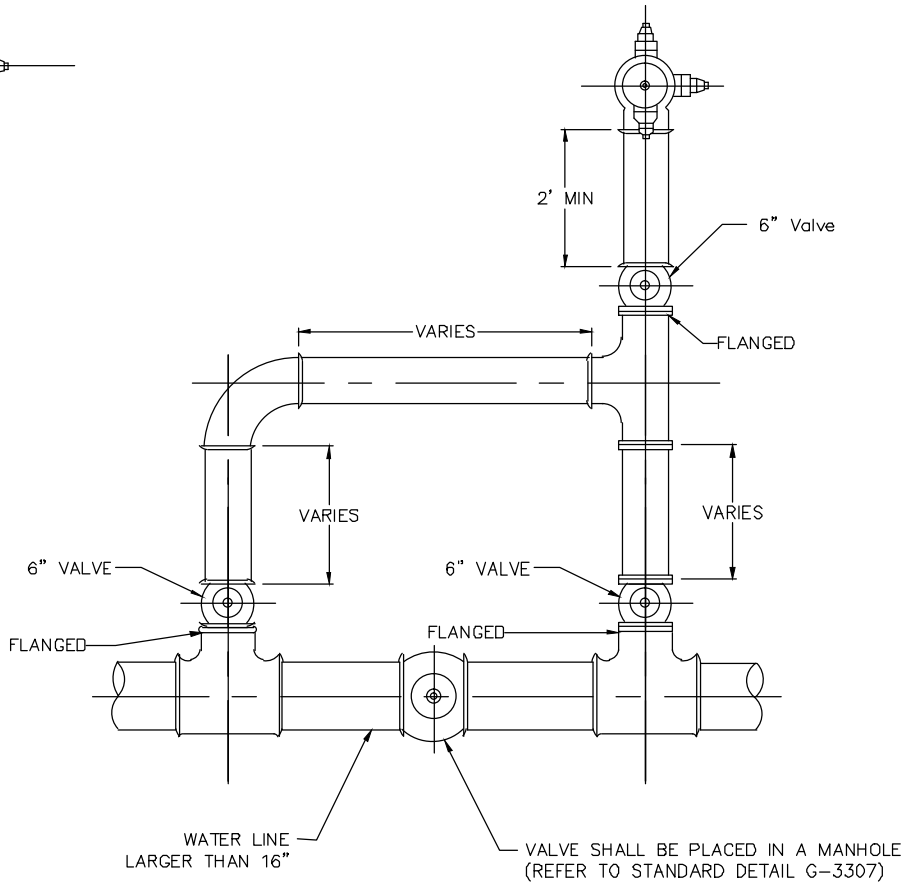
GENERAL NOTES

1. BACKFLOW ASSEMBLY SHALL BE TESTED BY A CERTIFIED BACKFLOW ASSEMBLY TESTER AND TESTING INFORMATION SUBMITTED TO THE CITY PRIOR TO USE AND ALSO EACH TIME THE METER IS MOVED.
2. USER SHALL REMOVE THE BACKFLOW ASSEMBLY WHEN THE HYDRANT METER IS REMOVED OR RELOCATED.
3. USER IS LIABLE FOR ANY DAMAGE TO THE HYDRANT AND ALL ATTACHMENTS TO THE HYDRANT.
4. USER SHALL USE THE BACKFLOW ASSEMBLY GATE VALVE TO CONTROL FLOW OF WATER, NOT THE HYDRANT VALVE ASSEMBLY.
5. REQUIRED ON ALL INSTALLATIONS TO POTABLE SYSTEM.

DETAIL NO. G-3334	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	TEMPORARY WATER SUPPLY HYDRANT METER ASSEMBLY	DETAIL NO. G-3334



FIRE HYDRANT PARALLEL TO MAIN LINE



FIRE HYDRANT PERPENDICULAR TO MAIN LINE

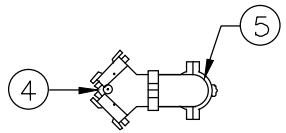
NOTES:

1. THIS DETAIL APPLIES TO WATER LINES WITH DIAMETERS GREATER THAN 16 INCHES OR AS REQUIRED BY THE CITY WATER RESOURCES AND ENGINEERING DEPARTMENTS.
2. ALL JOINTS IN HYDRANT RUN-OUT SHALL BE MECHANICAL RESTRAINT JOINTS.
3. SEE MAG STD. DETAIL 391-1 "A" & 391-2 FOR VALVE BOX INSTALLATION.
4. FOR WATER VALVE BLOCKING SEE MAG STD. DETAIL 301.
5. FOR ADDITIONAL INFORMATION SEE CITY STD. DETAIL G-3330.
6. THE VALVE BOX SHALL HAVE A DEBRIS CAP INSTALLED PER CITY STD. DETAIL G-3321.

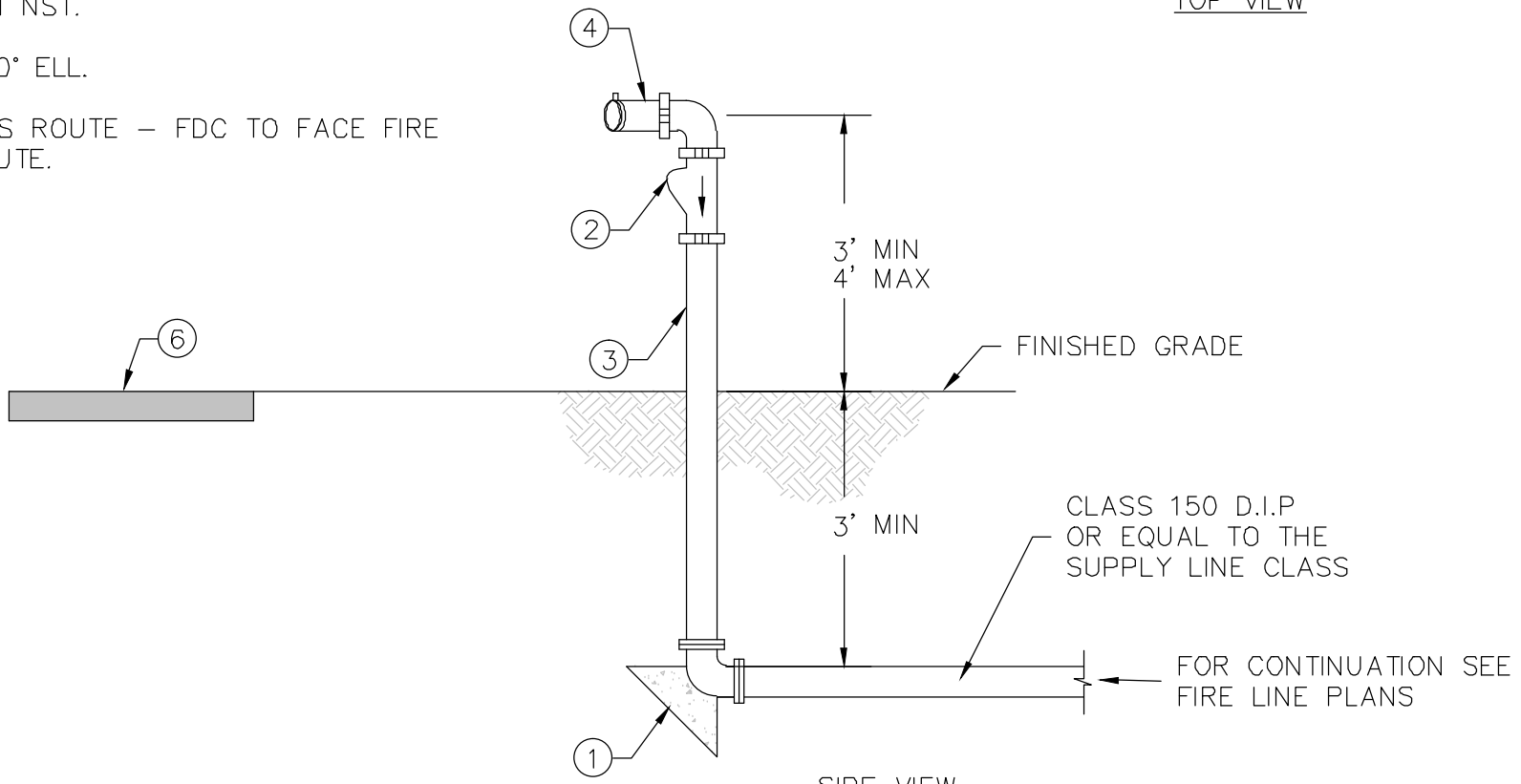
DETAIL NO. G-3336	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	FIRE HYDRANT BYPASS ASSEMBLY (FOR LINES > 16")	DETAIL NO. G-3336

NOTES:

1. THRUST BLOCKING PER MAG STD. DETAIL 380.
2. APPROVED CHECK VALVE.
3. 4" WRAPPED STEEL PIPE PER FIRE CODE OR EQUAL TO THE SUPPLY LINE CLASS.
4. 2-1/2" x 2-1/2" x 4" FIRE DEPARTMENT CONNECTION NST.
5. GROOVED 90° ELL.
6. FIRE ACCESS ROUTE – FDC TO FACE FIRE ACCESS ROUTE.



TOP VIEW

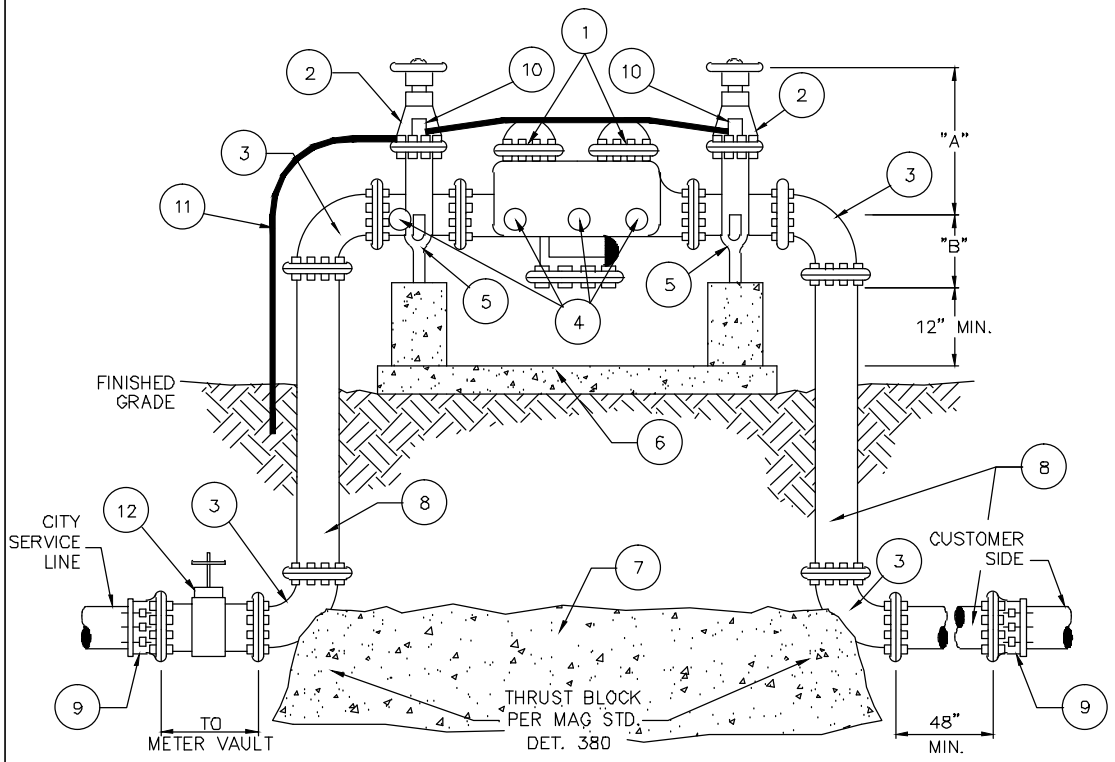


SIDE VIEW

DETAIL NO. G-3338	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:12/12	FIRE DEPARTMENT CONNECTION	DETAIL NO. G-3338

"A"	
ASSEMBLY SIZE	APPROX. DIMENSION
3"	14"
4"	16"–(22" OS&Y)
6"	20"–(30" OS&Y)
8"	25"–(40" OS&Y)
10"	29"–(48" OS&Y)
12"	32"–(56" OS&Y)

"B"	
ASSEMBLY SIZE	APPROX. DIMENSION
3"	10"
4"	11"
6"	12"
8"	22"
10"	23"
12"	24"



REDUCED PRESSURE PRINCIPLE DEVICE

OS&Y = OUTSIDE SCREW & YOKE

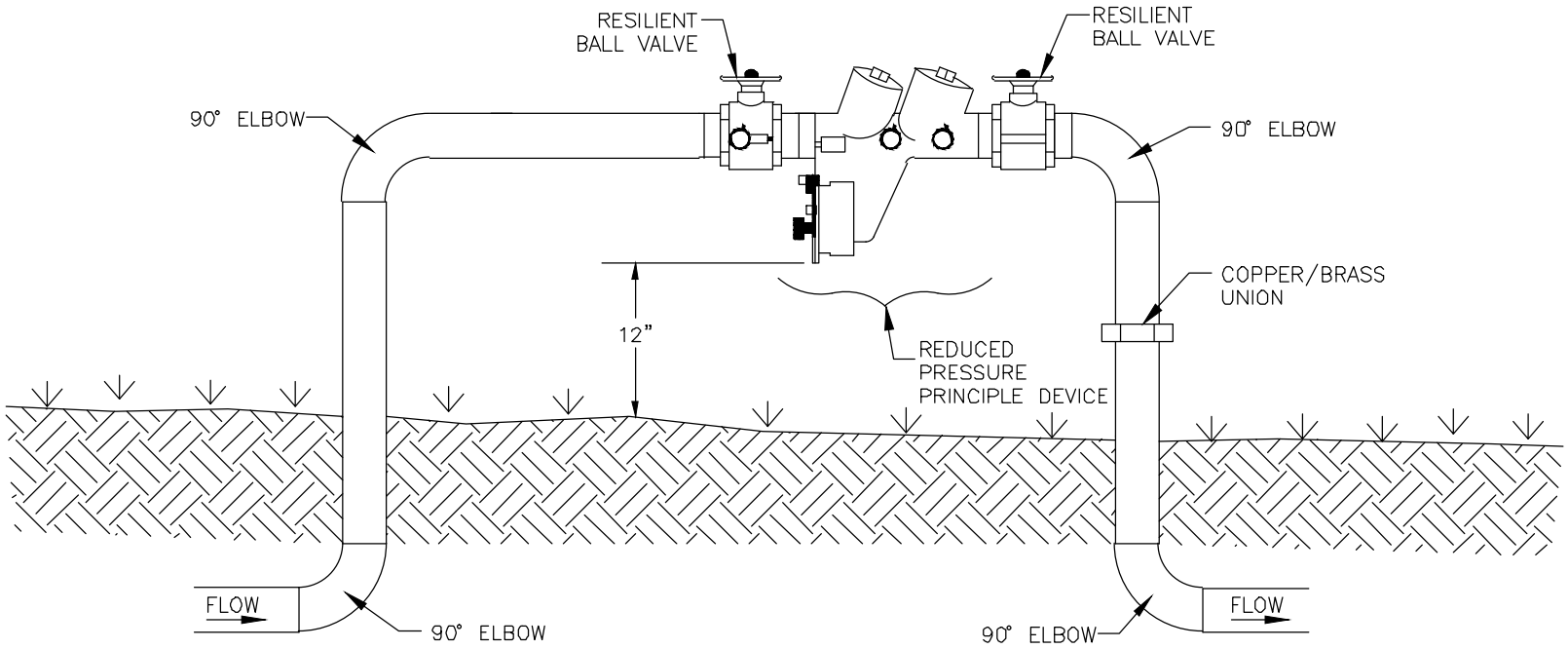
NOTES

1. ASSEMBLY SHALL BE APPROVED BY USC FOUNDATION FOR CROSS–CONNECTION AND HYDRAULIC RESEARCH.
2. SEE THE CITY'S "POTABLE WATER SYSTEM APPROVED MATERIALS LIST" FOR APPROVED MANUFACTURERS AND MODEL INFORMATION.
3. FOUR TEST COCKS TO BE INSTALLED PER USC.
4. COPPER FITTINGS SHALL BE CONNECTED WITH LEAD–FREE SOLDER JOINTS.
5. FINISHED GRADE BELOW BACKFLOW PREVENTER SHALL BE 95% COMPACTION.
6. THE ASSEMBLY SHALL BE PAINTED TO BLEND WITH LANDSCAPE SURFACE TREATMENT OR ONSITE STRUCTURES. THE ASSEMBLY MAY ALSO BE SCREENED WITH SHRUBBERY. VEGETATION SHALL BE A MINIMUM OF 24" FROM THE OUTSIDE FACE OF ANY PORTION OF THE BACKFLOW PREVENTION DEVICE.
7. ADEQUATE DRAINAGE FOR SURFACE WATER IS REQUIRED.
8. ASSEMBLY MAY BE REQUIRED TO BE PROTECTED BY GUARD POSTS. GUARD POSTS SHALL BE CONSTRUCTED PER CITY STD. DET. G–3358.

LIST OF MATERIALS

1	APPROVED REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE.
2	GATE VALVE, RESILIENT SEATED (NON–RISING STEM) (O.S.&Y. REQUIRED ON FIRE LINES).
3	90° ELL (FLANGED D.I.P. 3" THROUGH 12").
4	TEST COCK, RESILIENT SEATED (4 REQUIRED) FIT WITH BRASS PLUG.
5	ADJUSTABLE PIPE SUPPORT PERMANENTLY ATTACHED TO BASE (4" AND LARGER ASSEMBLY ONLY).
6	CONCRETE SUPPORT PAD 4" THICK BY 18" WIDE MINIMUM BENEATH 4" AND LARGER ASSEMBLIES. (CLASS "A" CONCRETE)
7	EXTEND CONCRETE BETWEEN THRUST BLOCKS.
8	PIPE SPOOL (FLANGED D.I.P. 3" THRU 12").
9	FLANGED ADAPTER (WHEN REQUIRED).
10	TAMPER SWITCH (ON FIRE LINE ONLY, OPTIONAL).
11	ELECTRICAL CONDUIT FOR TAMPER SWITCH.
12	GATE VALVE (FLANGE X FLANGE). MATCH LINE SIZE.

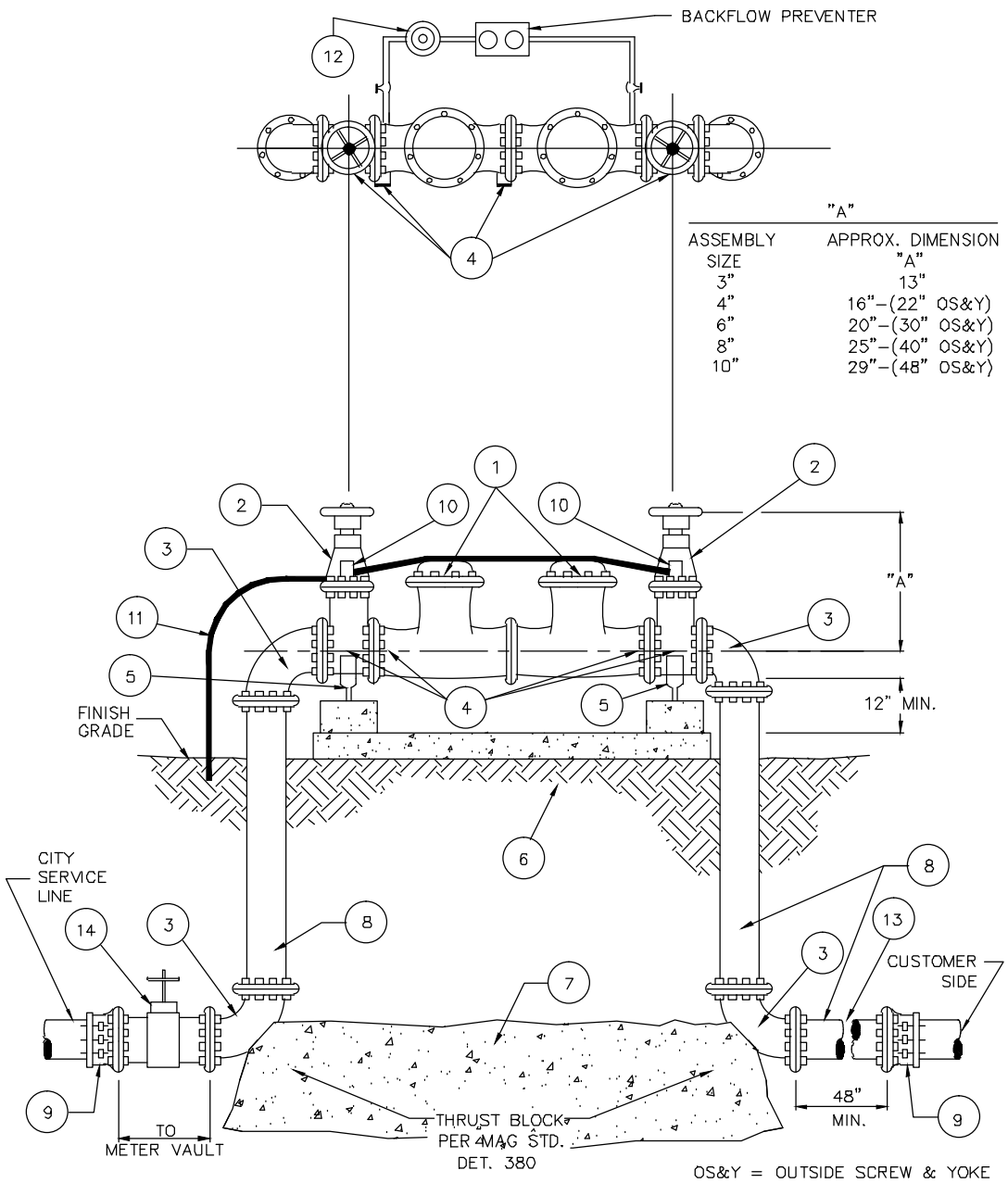
DETAIL NO. G-3350	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY INSTALLATION - 3" AND LARGER	DETAIL NO. G-3350



NOTES:

1. ALL PIPE/FITTINGS TO BE TYPE "K" COPPER.
2. REFER TO THE CITY OF GOODYEAR "POTABLE WATER SYSTEM APPROVED MATERIALS LIST" FOR APPROVED BACKFLOW PREVENTION ASSEMBLIES.
3. BACKFLOW PREVENTION ASSEMBLY MUST BE LEVEL AND INSTALLED A MINIMUM AND A MAXIMUM OF 12 INCHES FROM ASSEMBLY BODY TO FINAL GRADE.
4. ALL TEST COCKS SHALL BE FITTED WITH BRASS PLUGS INSTALLED WITH TEFLON TAPE.
5. SHUTOFF VALVES TO BE RESILIENT BALL TYPE WITH REMOVABLE HANDLES.
6. INSTALL BACKFLOW PREVENTION ASSEMBLY WITH RELIEF PORT FACING TOWARD THE GROUND.
7. COMPRESSION TYPE FITTINGS ARE NOT ALLOWED.
8. INSTALL THE BACKFLOW PREVENTION ASSEMBLY IMMEDIATELY DOWNSTREAM OF THE CITY WATER METER.
9. A COPPER/BRASS UNION MUST BE INSTALLED IN THE MIDDLE OF THE DOWNSTREAM RISER.
10. ASSEMBLY SHALL BE APPROVED BY USC FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH.
11. COPPER FITTINGS SHALL BE CONNECTED WITH LEAD-FREE SOLDER JOINTS.
12. PAVER CONCRETE BLOCK UNDER RELIEF PORT, SET AT FINAL GRADE.
13. ASSEMBLIES SHALL HAVE A SECURITY ENCLOSURE AS SHOWN ON CITY STD. DET. G-3357, OR APPROVED EQUAL.

DETAIL NO. G-3351	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:12/12	REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY INSTALLATION - 2.5" AND UNDER	DETAIL NO. G-3351



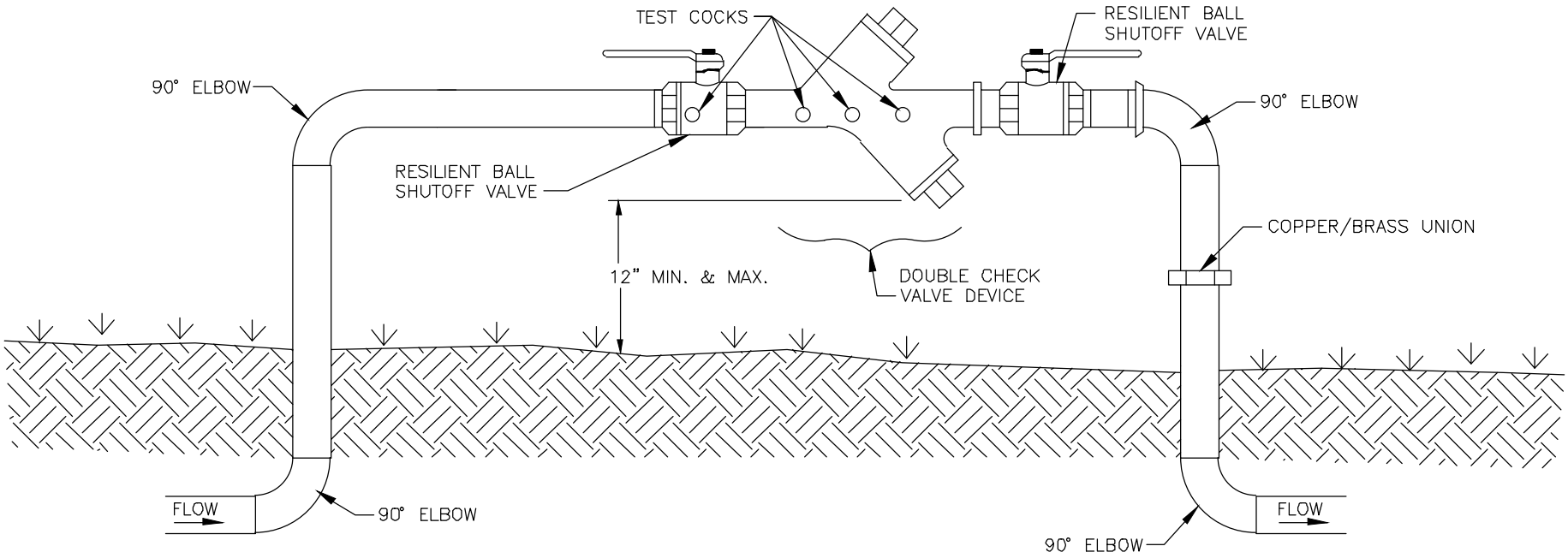
NOTES

1. ASSEMBLY SHALL BE APPROVED BY USC FOUNDATION FOR CROSS CONNECTION AND HYDRAULIC RESEARCH.
2. CONTACT THE CITY OF GOODYEAR WATER RESOURCES DEPARTMENT FOR A LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES.
3. FOUR TEST COCKS TO BE INSTALLED PER USC
4. COPPER FITTINGS SHALL BE CONNECTED WITH LEAD–FREE SOLDER JOINTS.
5. FINISHED GRADE BELOW BACKFLOW PREVENTER SHALL BE 95% COMPACTION.
6. THE ASSEMBLY SHALL BE PAINTED TO BLEND WITH LANDSCAPE SURFACE TREATMENT OR ONSITE STRUCTURES. THE ASSEMBLY MAY ALSO BE SCREENED WITH SHRUBBERY. VEGETATION SHALL BE A MINIMUM OF 24" FROM THE OUTSIDE FACE OF ANY PORTION OF THE BACKFLOW PREVENTION DEVICE.
7. ADEQUATE DRAINAGE FOR SURFACE WATER IS REQUIRED.
8. ASSEMBLY MAY BE REQUIRED TO BE PROTECTED BY GUARD POSTS. GUARD POSTS SHALL BE CONSTRUCTED PER CITY STD. DET. G–3358.

LIST OF MATERIALS

1. APPROVED DOUBLE CHECK VALVE ASSEMBLY.
2. GATE VALVE, RESILIENT SEATED (NON–RISING STEM) (D.S.&Y. REQUIRED ON FIRE LINES).
3. 90° ELL (FLANGED D.I.P. 3" THROUGH 10").
4. TEST COCK, RESILIENT SEATED (4 REQUIRED) FIT WITH BRASS PLUG.
5. ADJUSTABLE PIPE SUPPORT PERMANENTLY ATTACHED TO BASE (4" AND LARGER ASSEMBLY ONLY).
6. CONCRETE SUPPORT PAD 4" THICK BY 18" WIDE MINIMUM BENEATH 4" AND LARGER ASSEMBLIES. (CLASS "A" CONCRETE)
7. EXTEND CONCRETE BETWEEN THRUST BLOCKS.
8. PIPE SPOOL (FLANGED D.I.P. 3" THRU 10").
9. FLANGED ADAPTER (WHEN REQUIRED).
10. TAMPER SWITCH (ON FIRE LINE ONLY, OPTIONAL).
11. ELECTRICAL CONDUIT FOR TAMPER SWITCH.
12. 3/4" WATER METER.
13. PIPE REDUCER/ INCREASER, IF REQUIRED, SHALL HAVE FLANGED ENDS AND SHALL BE INSTALLED PRIOR TO THE THRUST BLOCK.
14. GATE VALVE (FLANGE X FLANGE). MATCH LINE SIZE.

DETAIL NO. G-3352	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY INSTALLATION - 3" TO 10"	DETAIL NO. G-3352



NOTES:

1. ALL PIPE/FITTINGS TO BE TYPE "K" COPPER.
2. REFER TO THE CITY OF GOODYEAR "POTABLE WATER SYSTEM APPROVED MATERIALS LIST" FOR APPROVED BACKFLOW PREVENTION ASSEMBLIES.
3. BACKFLOW PREVENTION ASSEMBLY MUST BE LEVEL AND INSTALLED A MINIMUM AND A MAXIMUM OF 12 INCHES FROM ASSEMBLY BODY TO FINAL GRADE.
4. ALL TEST COCKS SHALL BE FITTED WITH BRASS PLUGS INSTALLED WITH TEFLON TAPE.
5. SHUTOFF VALVES TO BE RESILIENT BALL TYPE WITH REMOVABLE HANDLES.
6. COMPRESSION TYPE FITTINGS ARE NOT ALLOWED.
7. INSTALL THE BACKFLOW PREVENTION ASSEMBLY IMMEDIATELY DOWNSTREAM OF THE CITY WATER METER.
8. A COPPER/BRASS UNION MUST BE INSTALLED IN THE MIDDLE OF THE DOWNSTREAM RISER.
9. ASSEMBLY SHALL BE APPROVED BY USC FOUNDATION FOR CROSS CONNECTION AND HYDRAULIC RESEARCH. CONTACT THE CITY OF GOODYEAR WATER RESOURCES DEPARTMENT FOR A LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES.
10. COPPER FITTINGS SHALL BE CONNECTED WITH LEAD–FREE SOLDER JOINTS.
11. ASSEMBLIES SHALL HAVE A SECURITY ENCLOSURE AS SHOWN ON CITY STD. DET. G–3357, OR APPROVED EQUAL.

DETAIL NO. G-3353	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY INSTALLATION - 2.5" AND UNDER	DETAIL NO. G-3353

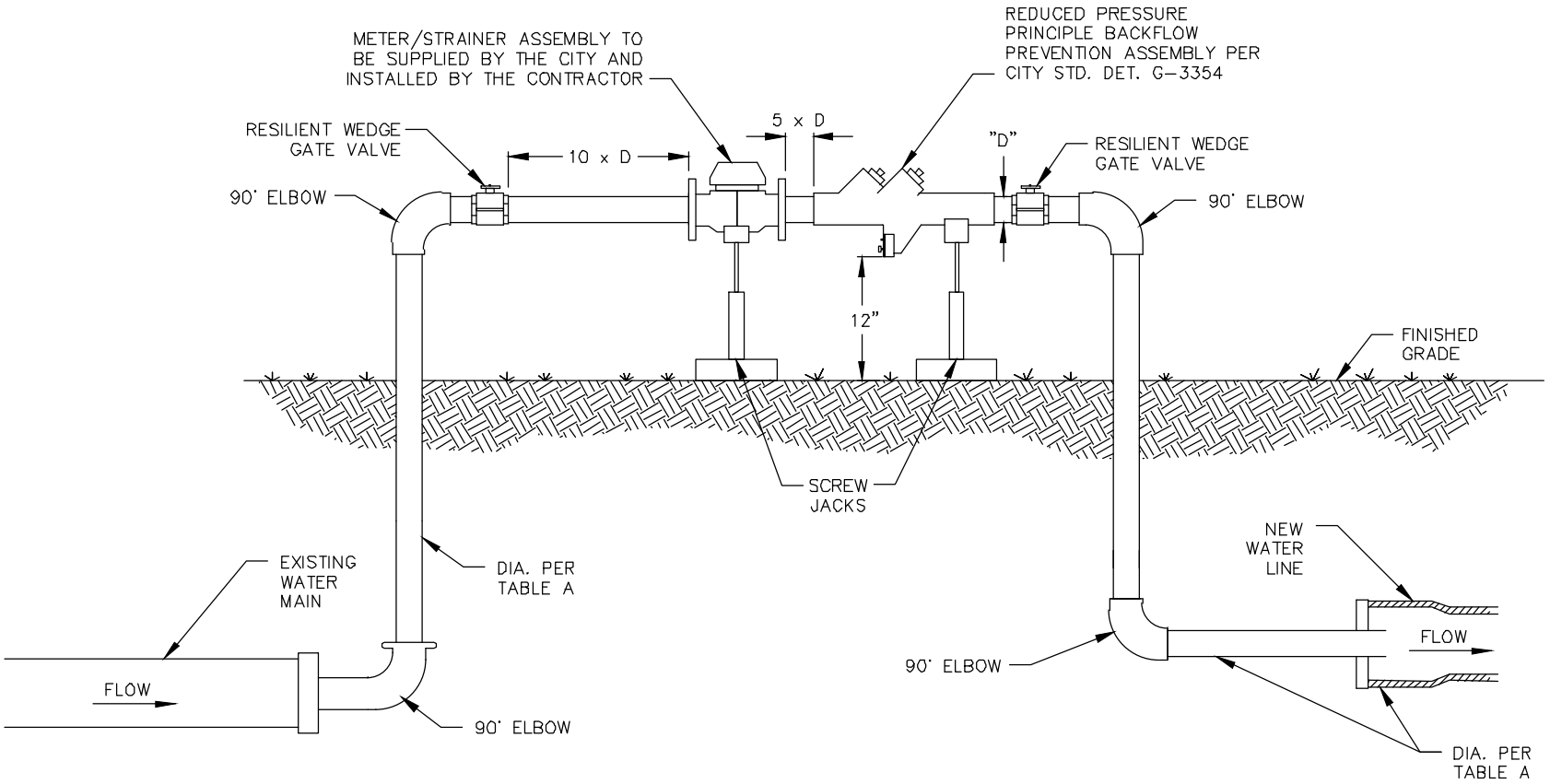


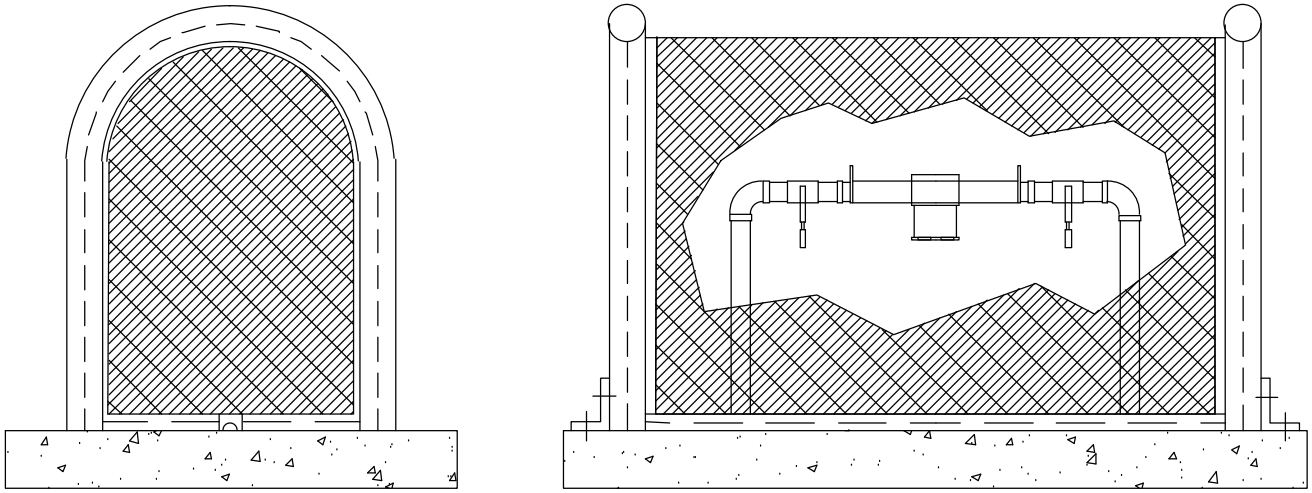
TABLE A

NEW WATER LINE PIPE DIAMETER (inches)	FLOW VELOCITY (gpm)	SIZE OF CONNECTION (inches)	LENGTH OF PIPE BERFORE METER (inches)	LENGTH OF PIPE AFTER METER (inches)	MINIMUM NUMBER OF 2.5" NOZZLES FLOWING
6	200	4	40	20	1
8	400	4	40	20	1
10	600	4	40	20	1
12	900	4	40	20	2
16	1600	6	60	30	2
20	1800	6	60	30	2
24	2000	6	60	30	2

NOTES:

1. DO NOT INSTALL ELBOWS, BENDS, NONCONCENTRIC REDUCERS, CHECK VALVES, BACK FLOW PREVENTERS AND/OR PRESSURE REDUCING DEVICES WITHIN 10 PIPE DIAMETERS UPSTREAM OR 5 PIPE DIAMETERS DOWNSTREAM OF THE METER.
2. ALL JOINTS AND FITTINGS BELOW GROUND SHALL BE FLANGED, MECHANICAL, OR RESTRAINED.
3. ALL JOINTS ABOVE GROUND SHALL BE FLANGED.

DETAIL NO. G-3356	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	TEMPORARY JUMPER CONNECTION	DETAIL NO. G-3356



NOTES

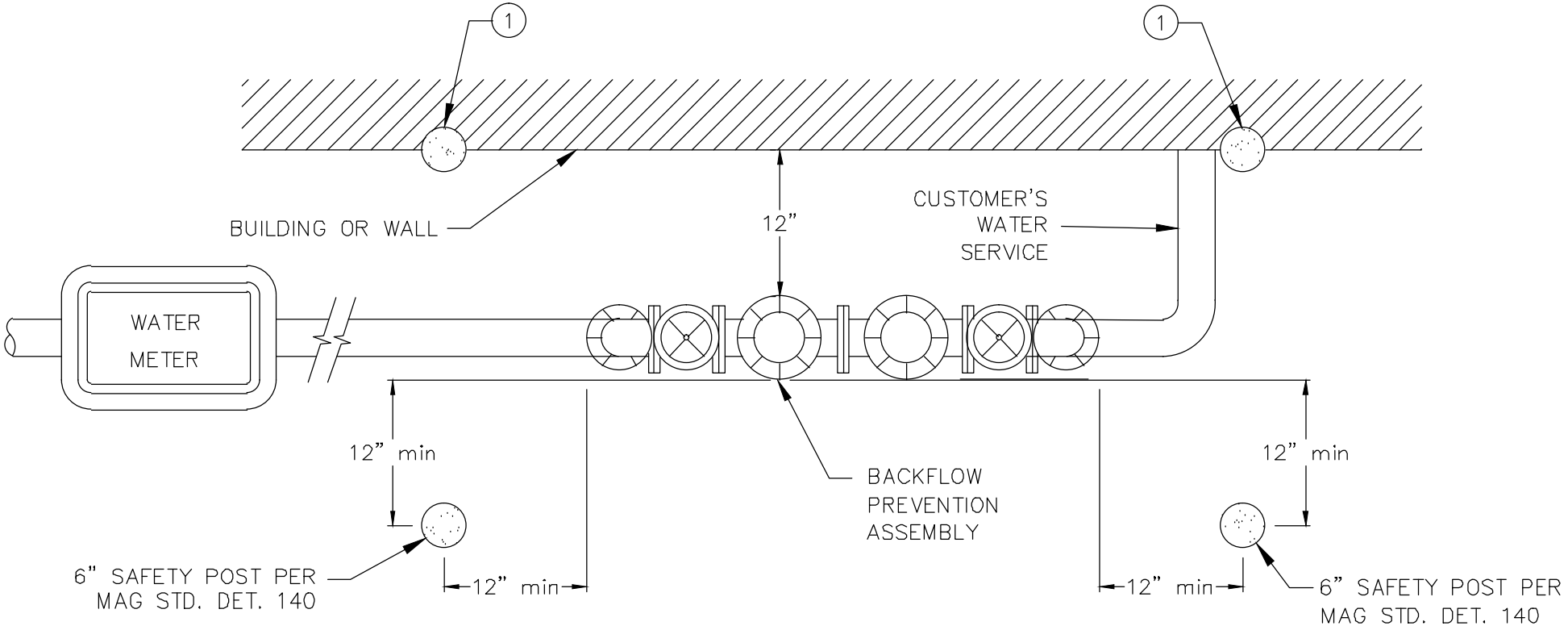
1. SET EYEBOLT WITH BOTTOM OF CIRCLE FLUSH WITH CONCRETE BASE, SUCH THAT EYEBOLT CANNOT BE TURNED IN PLACE.

2. BOLT BRACKETS TO ENCLOSE ON ENDS OR BOTH SIDES. USE 1/4" X 1-1/4" TAMPER-PROOF BOLTS WITH HEX NUTS AND WASHERS.

3. SUGGESTED PAD DIMENSIONS - 32"L x 18"W x 3-3/4" THICK.

4. COLOR OF ENCLOSURE SHALL MATCH COLOR OF NEAREST STRUCTURE, WALL OR LANDSCAPING.

DETAIL NO. G-3357	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:12/12	METAL ENCLOSURE FOR ABOVE GROUND UTILITIES	DETAIL NO. G-3357

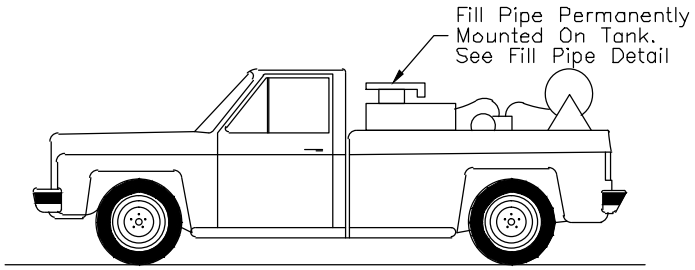


PLAN VIEW

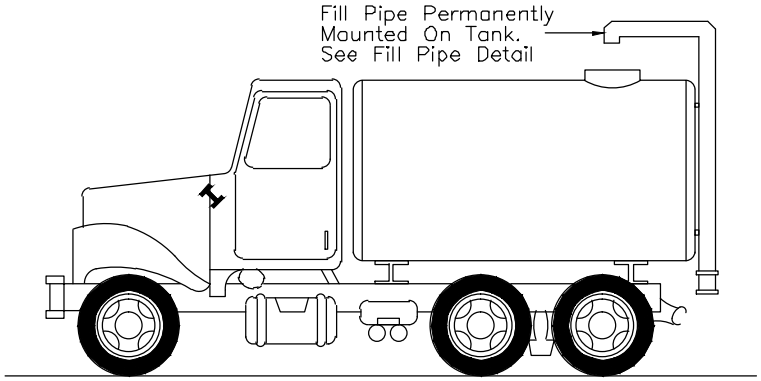
NOTE:

(1) ADDITIONAL SAFETY POSTS, PER MAG STD. DET. 140, ARE REQUIRED IF THE BACKFLOW PREVENTION ASSEMBLY IS LOCATED GREATER THAN 7' FROM THE NEAREST STRUCTURE (WALL, BUILDING, OR OTHER SIGNIFICANT STRUCTURE).

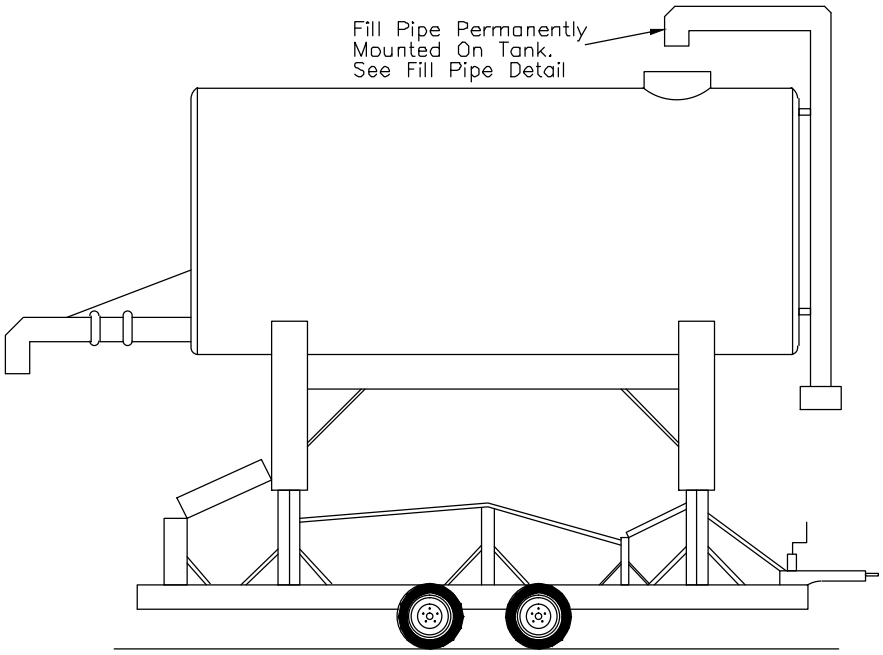
DETAIL NO. G-3358	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:12/12	SAFETY POST LOCATION FOR BACKFLOW PREVENTION ASSEMBLIES	DETAIL NO. G-3358



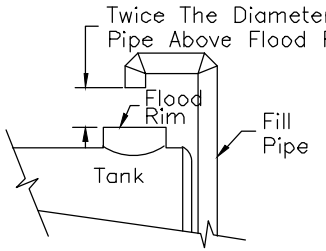
PESTICIDE APPLICATOR TRUCK



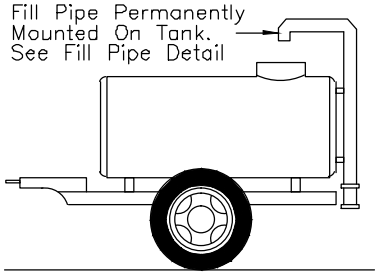
WATER TRUCK



ELEVATED TANK

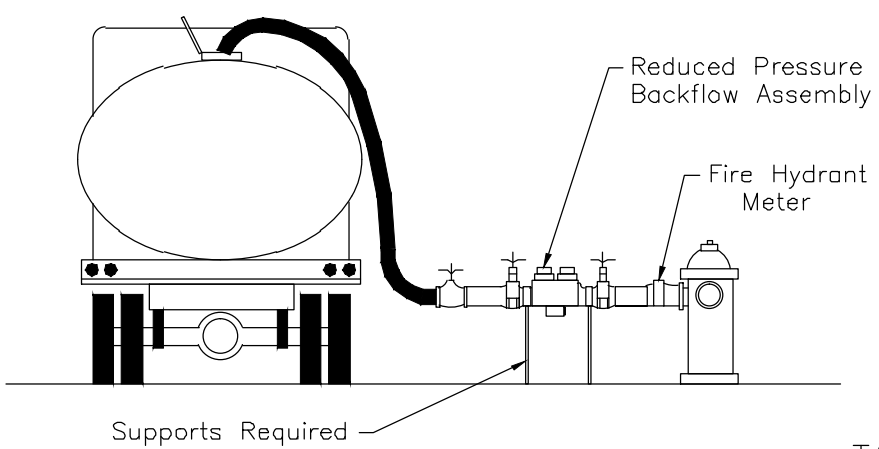


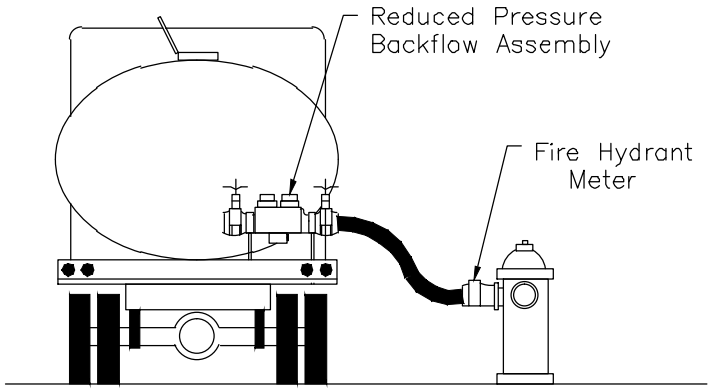
FILL PIPE DETAIL



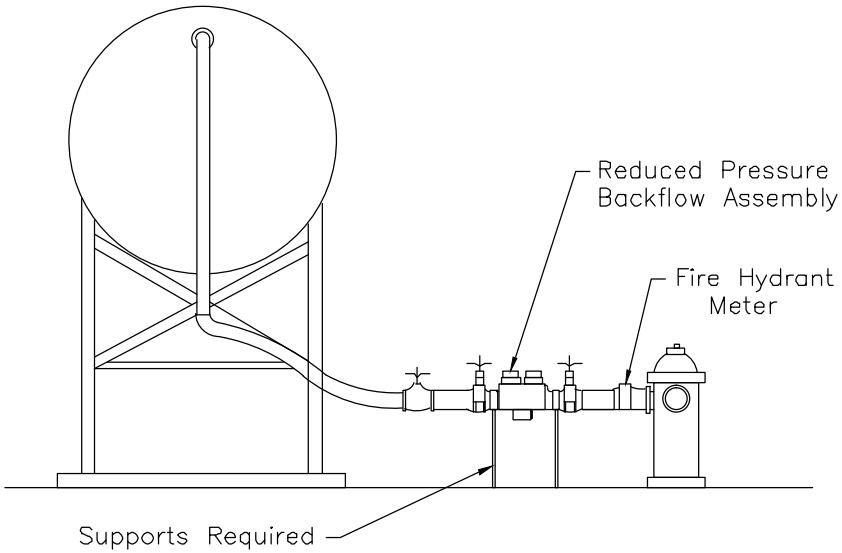
WATER WAGON

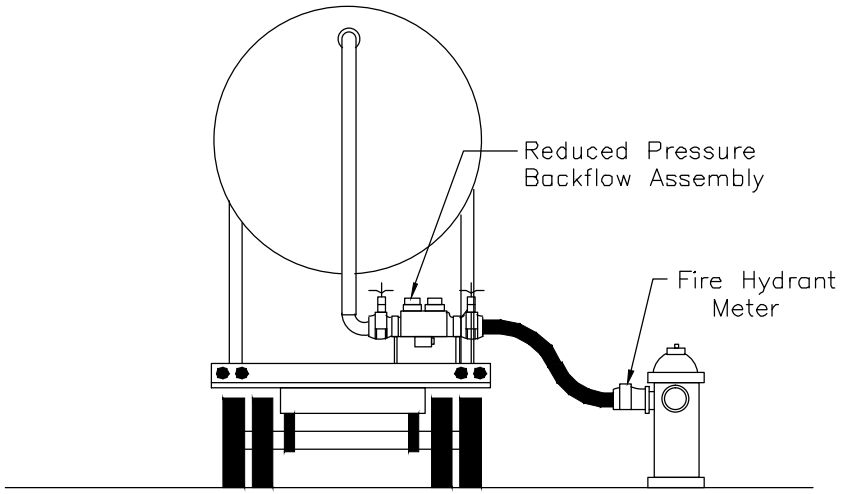
DETAIL NO. G-3360	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:11/07	FILL PIPE DETAILS FOR PORTABLE TANKS WITH AIR GAP SEPARATION	DETAIL NO. G-3360





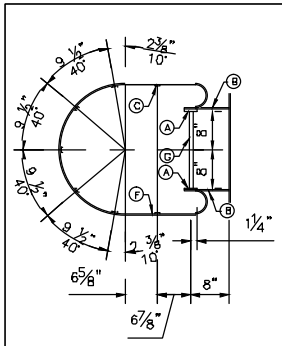
TANK TRUCKS



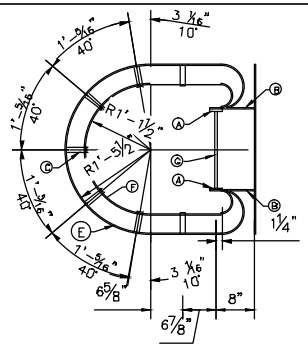


ELEVATED TANKS

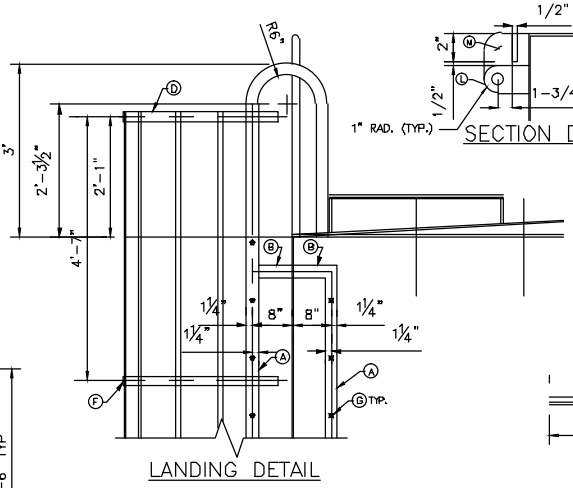
DETAIL NO. G-3361	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:11/07	BACKFLOW PREVENTION METHOD FOR PORTABLE TANKS WITH NO AIR GAP SEPARATION	DETAIL NO. G-3361



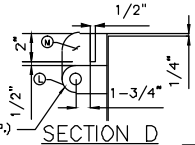
SECTION A



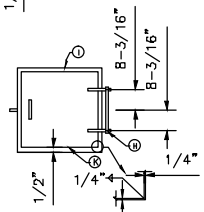
SECTION B



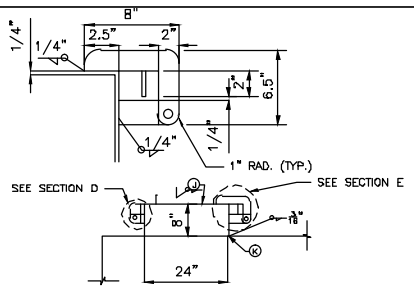
LANDING DETAIL

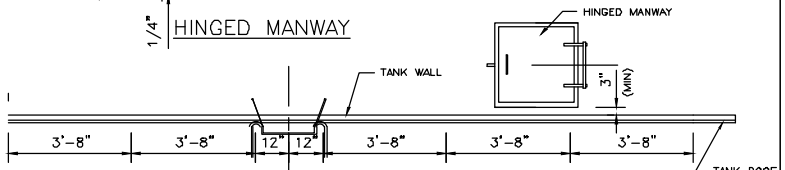


SECTION D

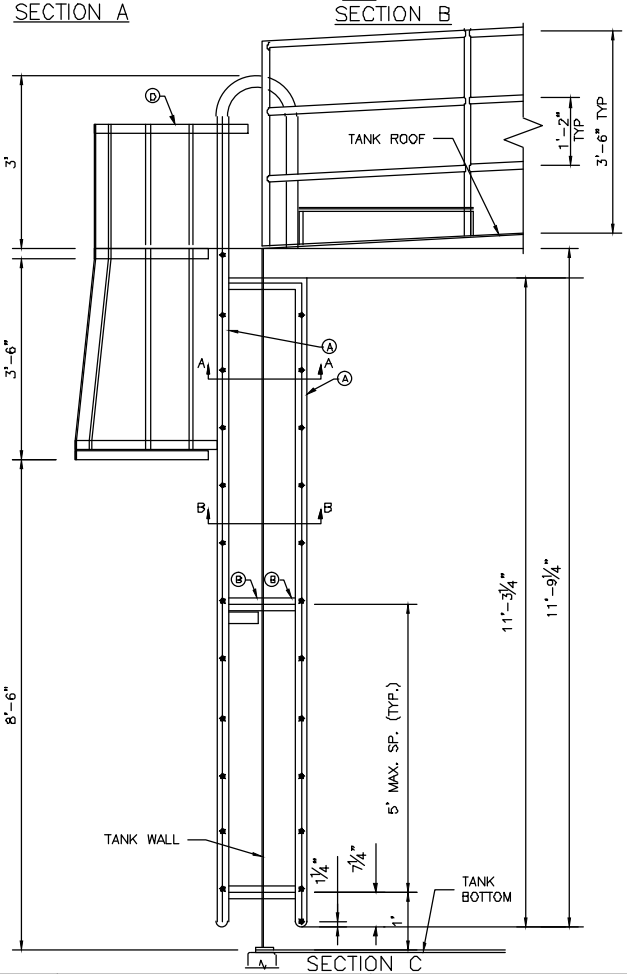


HINGED MANWAY

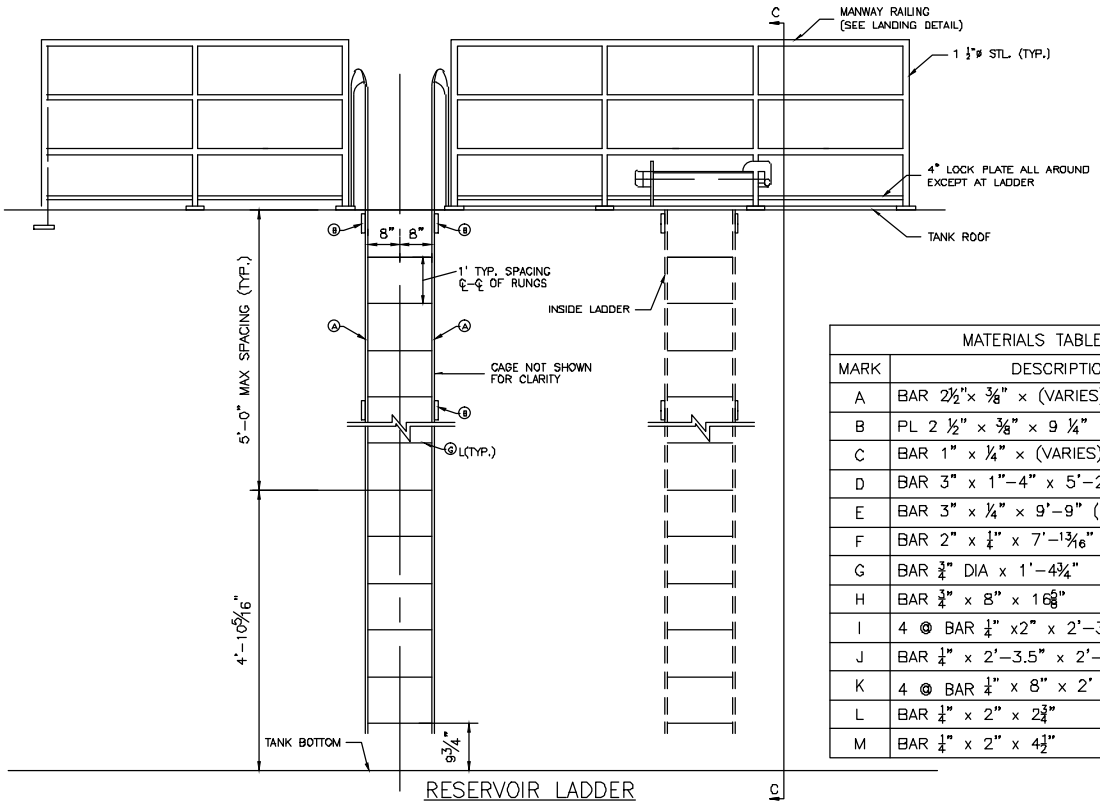




ROOF MANWAY RAILING DETAIL



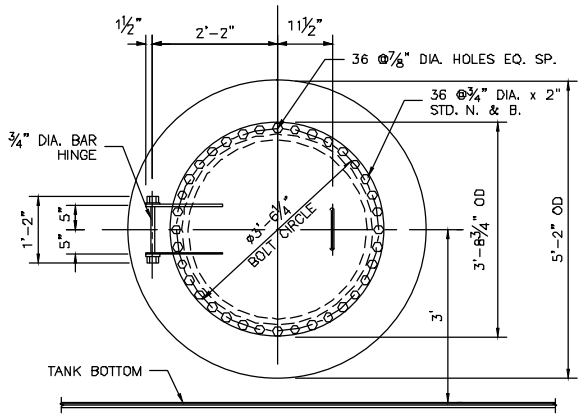
SECTION C



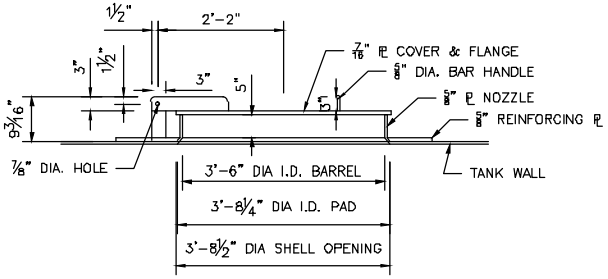
RESERVOIR LADDER

MATERIALS TABLE	
MARK	DESCRIPTION
A	BAR $2\frac{1}{2}$"x $\frac{3}{8}$" x (VARIES)
B	PL 2 $\frac{1}{2}$" x $\frac{3}{8}$" x 9 $\frac{1}{4}$"
C	BAR 1" x $\frac{1}{4}$" x (VARIES)
D	BAR 3" x 1"–4" x 5'–$2\frac{3}{4}$" (BEND)
E	BAR 3" x $\frac{1}{4}$" x 9'–9" (BEND)
F	BAR 2" x $\frac{1}{4}$" x 7'–$1\frac{3}{16}$" (BEND)
G	BAR $\frac{3}{4}$" DIA x 1'–$4\frac{1}{4}$"
H	BAR $\frac{3}{4}$" x 8" x $16\frac{5}{8}$"
I	4 @ BAR $\frac{1}{4}$" x2" x 2'–3.5"
J	BAR $\frac{1}{4}$" x 2'–3.5" x 2'–3.5"
K	4 @ BAR $\frac{1}{4}$" x 8" x 2'
L	BAR $\frac{1}{4}$" x 2" x $2\frac{3}{4}$"
M	BAR $\frac{1}{4}$" x 2" x $4\frac{1}{2}$"

DETAIL NO. G-3362	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	PROPOSED TANK LADDER AND HATCH POSITION DETAIL	DETAIL NO. G-3362

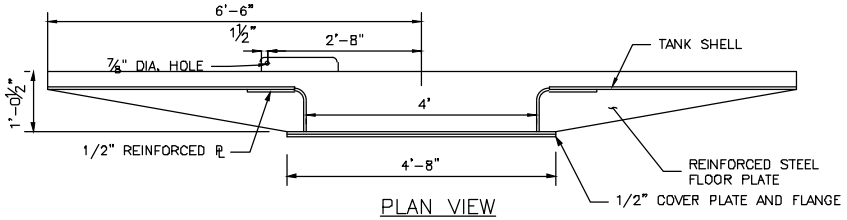


PLAN VIEW

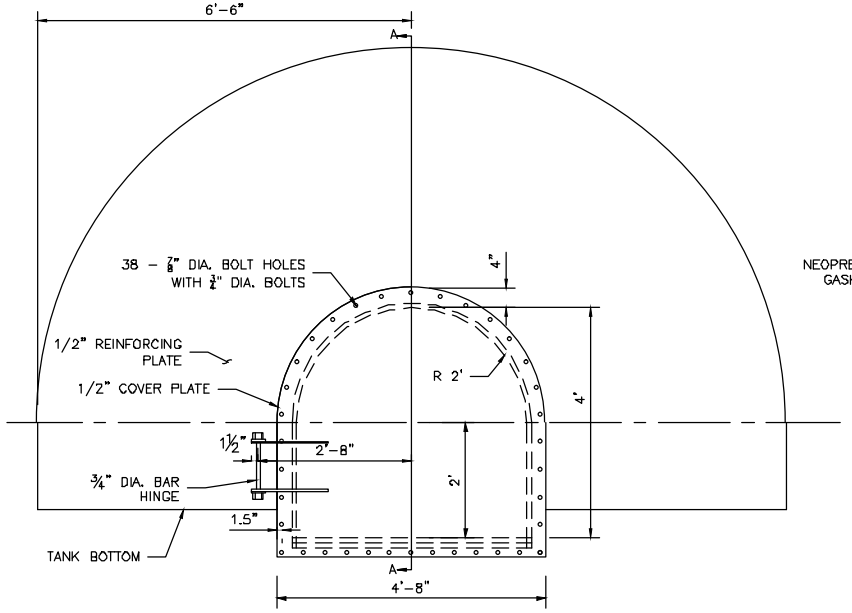


SECTION VIEW

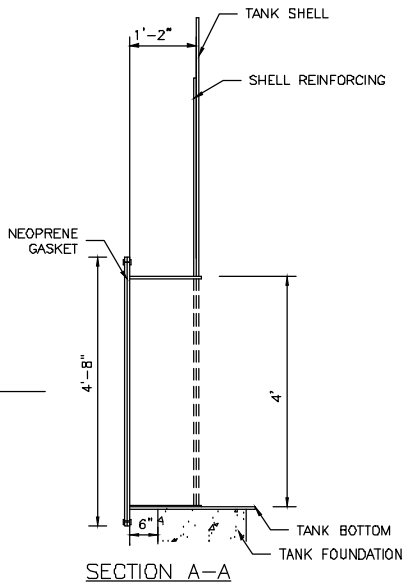
3'-6" DIA. HINGED TANK SHELL MANWAY SECTION



PLAN VIEW

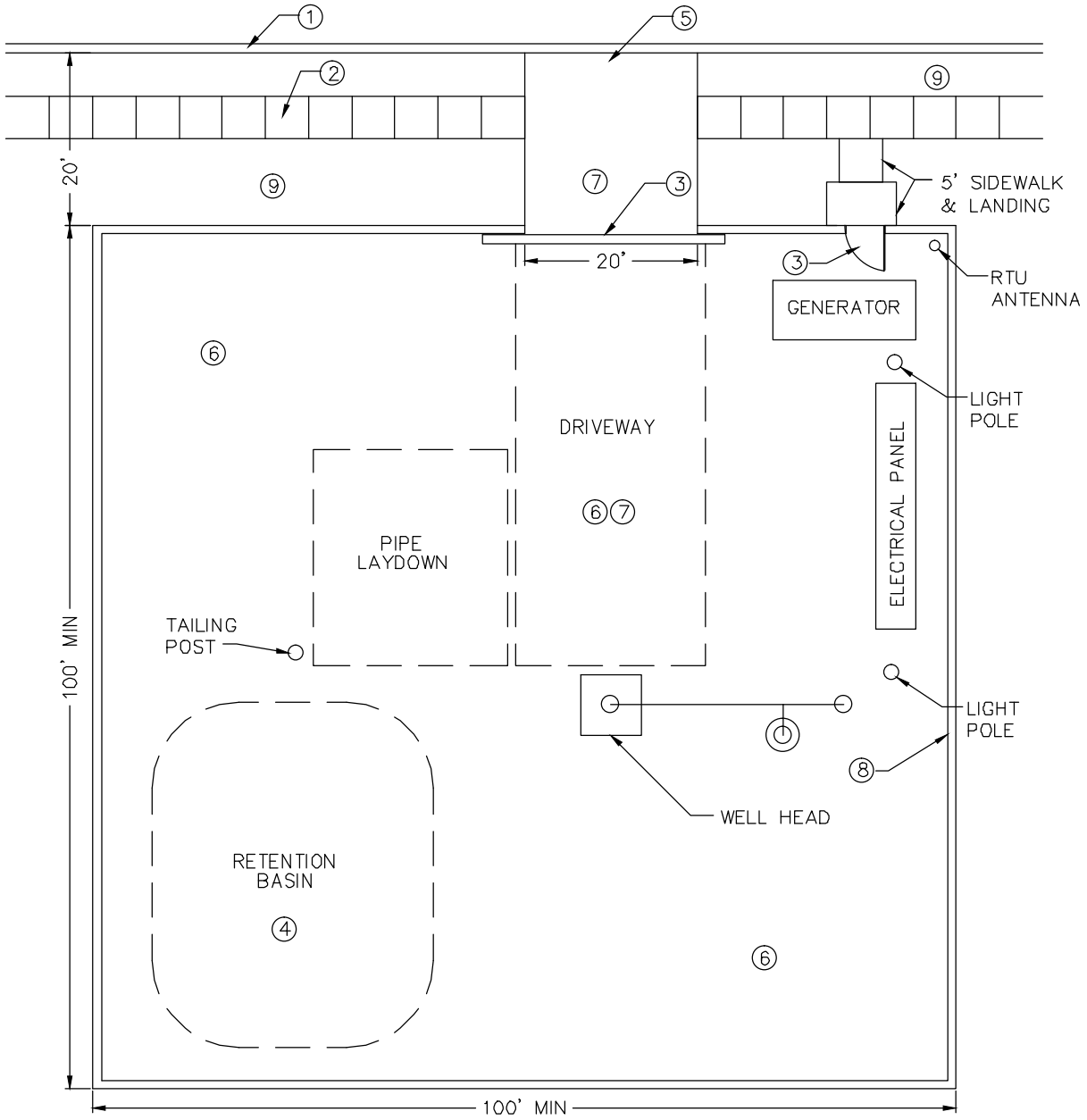


ACCESS HATCH AND FLANGE DETAIL



SECTION A–A

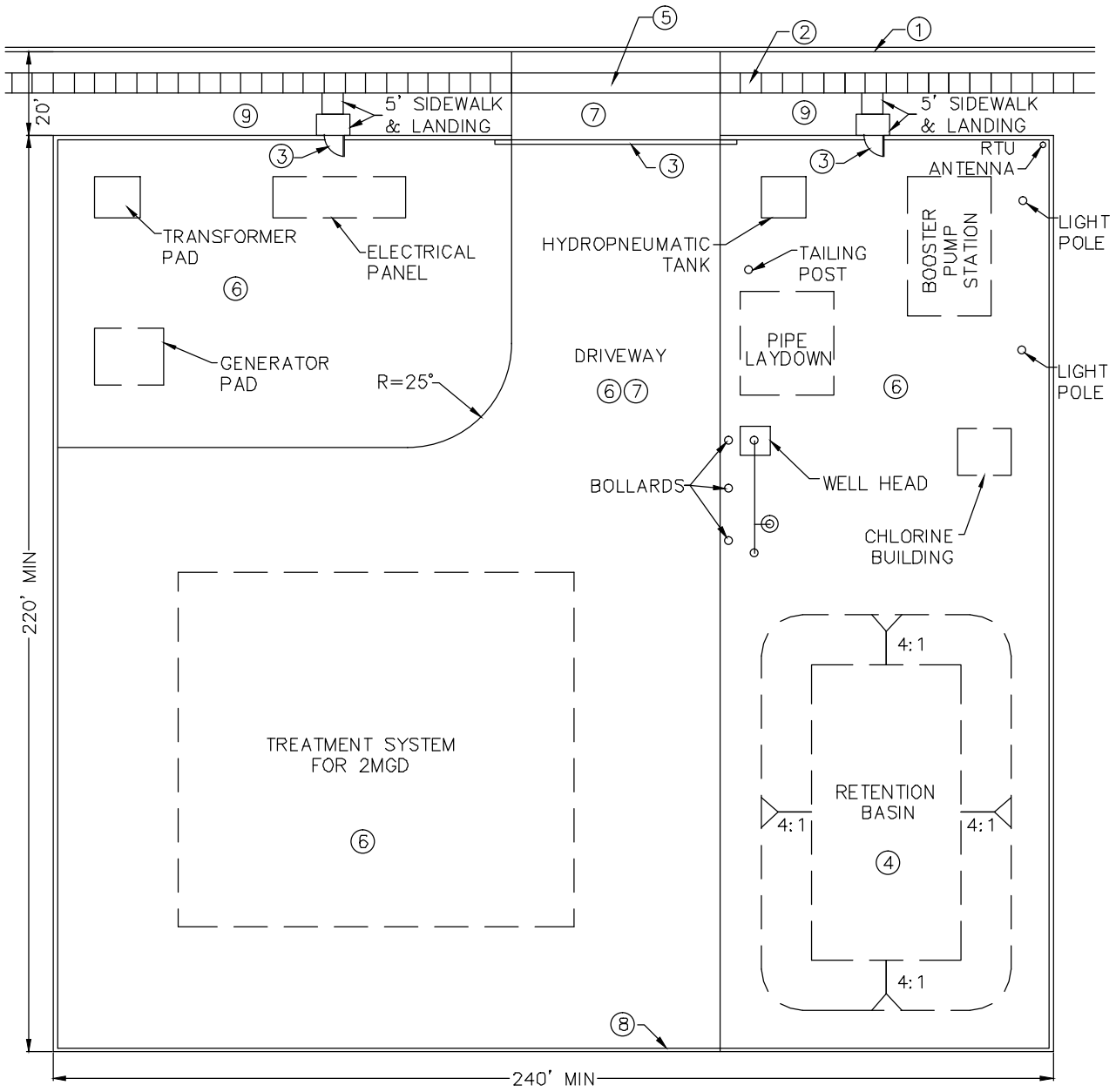
DETAIL NO. G-3363	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	PROPOSED TANK HATCH DETAIL	DETAIL NO. G-3363



NOTES:

1. CURB & GUTTER PER MAG STD. DET. 220-1 TYPE A COLLECTOR OR ARTERIAL STREETS; TYPE A OR C FOR LOCAL STREETS.
2. 8' SIDEWALK FOR ARTERIAL AND COLLECTOR STREETS; 5' SIDEWALK FOR LOCAL STREETS.
3. AUTOMATED ROLL GATE AND ACCESS DOOR TO BE PROVIDED PER CITY STD. DET. G-3390-1 & 2.
4. RETENTION BASINS SHALL HAVE A MAXIMUM 4:1 SIDE SLOPES AND A MAXIMUM 3' HIGH WATER DEPTH DURING THE 100 YEAR 6 HOUR STORM EVENT AND ENOUGH CAPACITY TO PUMP THE WELL TO WASTE OR DRY WELL FOR A MINIMUM OF 3 HRS AT FULL FLOW.
5. ARTERIAL AND COLLECTOR STREET DRIVEWAYS SHALL BE PER CITY STD. DET. G-3236 & MAG STD. DET. 251; LOCAL STREET DRIVEWAYS SHALL BE PER CITY STD. DET. G-3236 AND MAG STD. DET. 250.
6. A MAXIMUM 1% GRADE SHALL BE MAINTAINED ACROSS THE SITE.
7. DRIVEWAYS AND AREAS ACCESSED BY VEHICLES ON-SITE WILL BE REQUIRED TO BE PAVED PER THE STRUCTURAL SECTION RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
8. A MINIMUM 8' HIGH CMU BLOCK WALL WILL BE REQUIRED AROUND THE SITE WITH 2' PICKETS, (REFER TO DETAIL G-3366). WHERE TREATMENT FACILITIES WILL BE HIGHER THAN 8', WALL HEIGHTS OR SPECIAL PAINTING REQUIREMENTS MAY BE REQUIRED AS DIRECTED BY THE CITY WATER RESOURCES AND PLANNING DEPARTMENTS.
9. AREA TO BE LANDSCAPED PER CITY LANDSCAPING STANDARDS.
10. THIS DETAIL WAS DEVELOPED TO SERVE AS A PRELIMINARY GUIDE FOR ALLOCATING LAND AREA FOR A TYPICAL WELL SITE WITH ONSITE RETENTION. THE DETAIL MAY NOT SHOW ALL INFRASTRUCTURE OR THEIR EXACT LOCATIONS. LAND AREA SHOWN MAY BE SUBJECT TO CHANGE CONTINGENT UPON SUPPLY AND DISCHARGE FLOWS, STORAGE, TREATMENT, AND SITE LOCATION AS REQUIRED BY THE CITY.

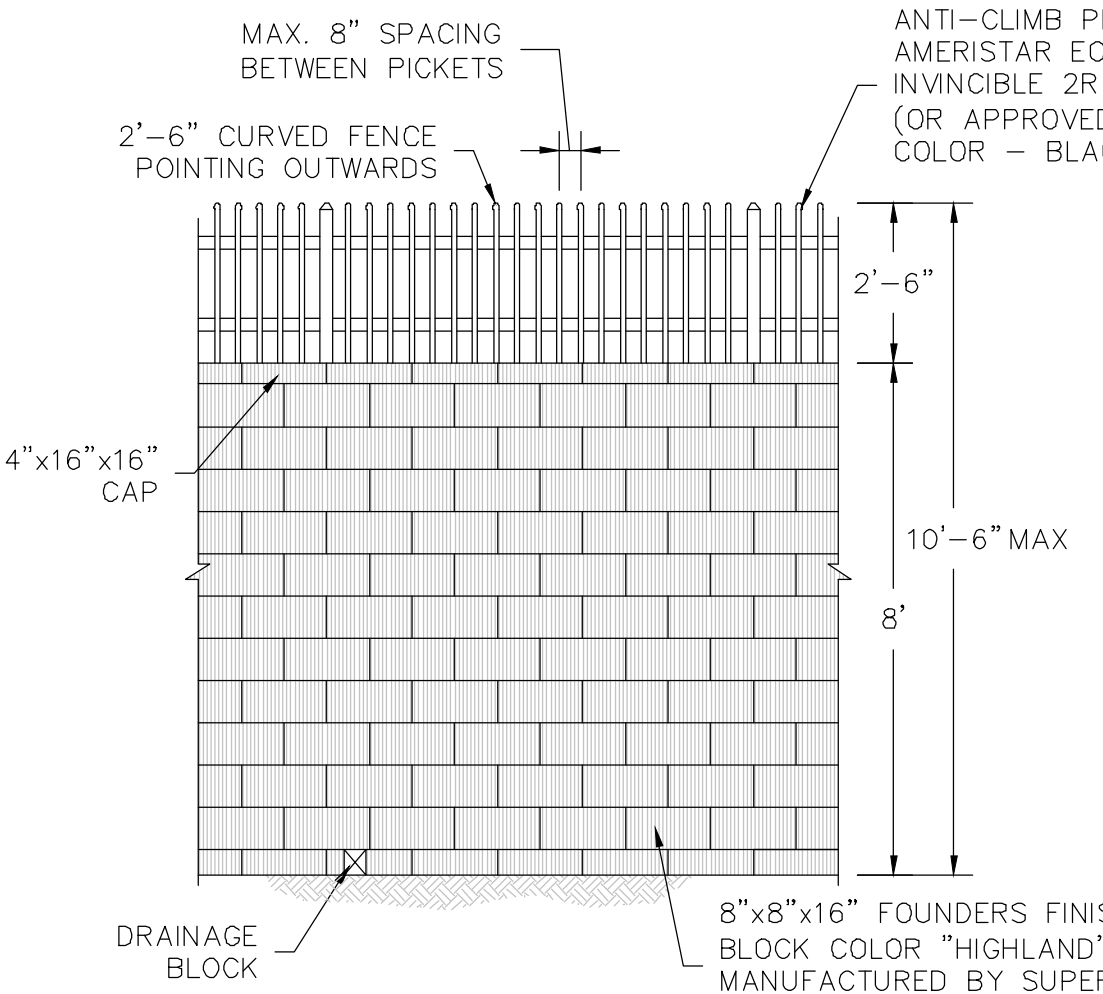
DETAIL NO. G-3364	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	TYPICAL WELL SITE	DETAIL NO. G-3364



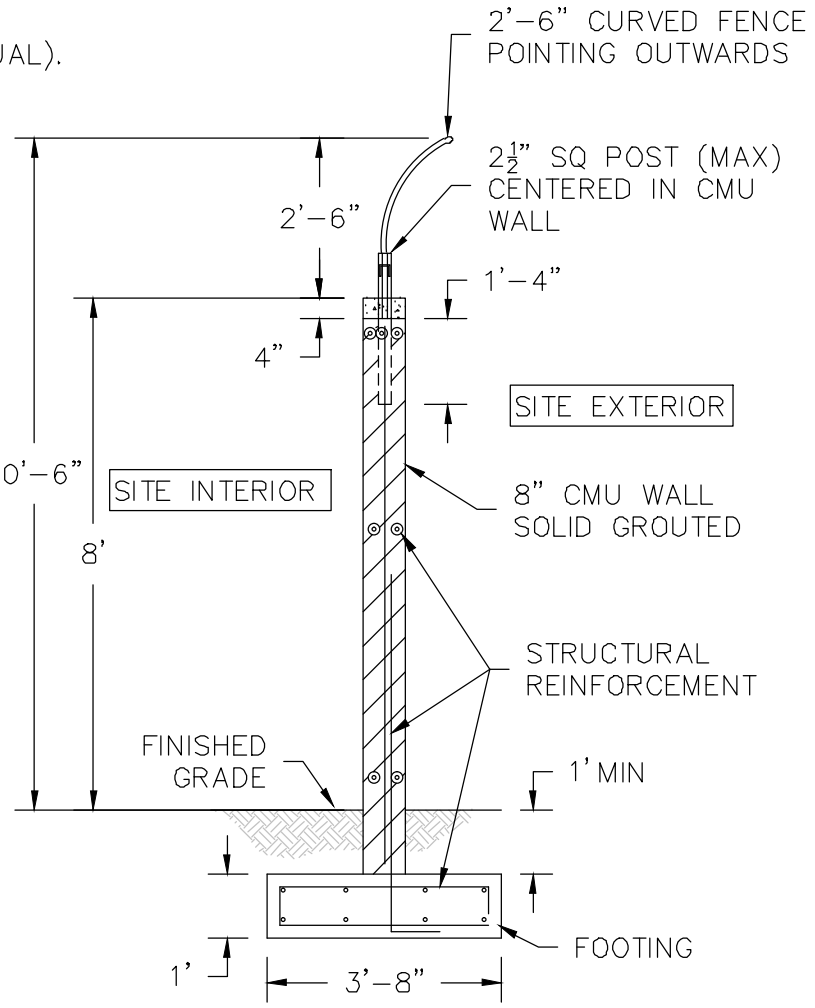
NOTES;

1. CURB & GUTTER PER MAG STD. DET. 220–1 TYPE A COLLECTOR OR ARTERIAL STREETS; TYPE A OR C FOR LOCAL STREETS.
2. 8' SIDEWALK FOR ARTERIAL AND COLLECTOR STREETS; 5' SIDEWALK FOR LOCAL STREETS.
3. AUTOMATED ROLL GATE AND ACCESS DOOR TO BE PROVIDED PER CITY STD. DET. G–3390–1 & 2.
4. RETENTION BASINS SHALL HAVE A MAXIMUM 4:1 SIDE SLOPES AND A MAXIMUM 3' HIGH WATER DEPTH DURING THE 100 YEAR 6 HOUR STORM EVENT AND ENOUGH CAPACITY TO PUMP WELL TO WASTE OR DRY WELL FOR A MINIMUM OF 3 HRS AT FULL FLOW.
5. ARTERIAL AND COLLECTOR STREET DRIVEWAYS SHALL BE PER CITY STD. DET. G–3236 & MAG STD. DET. 251; LOCAL STREET DRIVEWAYS SHALL BE PER CITY STD. DET. G–3236 AND MAG STD. DET. 250.
6. A MAXIMUM 1% GRADE SHALL BE MAINTAINED ACROSS THE SITE.
7. DRIVEWAYS AND AREAS ACCESSED BY VEHICLES ON–SITE WILL BE REQUIRED TO BE PAVED PER THE STRUCTURAL SECTION RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
8. A MINIMUM 8' HIGH CMU BLOCK WALL WILL BE REQUIRED AROUND THE SITE WITH 2' PICKETS, (REFER TO DETAIL G–3366). WHERE TREATMENT FACILITIES WILL BE HIGHER THAN 8', WALL HEIGHTS OR SPECIAL PAINTING REQUIREMENTS MAY BE REQUIRED AS DIRECTED BY THE CITY WATER RESOURCES AND PLANNING DEPARTMENTS.
9. AREA TO BE LANDSCAPED PER CITY LANDSCAPING STANDARDS.
10. THIS DETAIL WAS DEVELOPED TO SERVE AS A PRELIMINARY GUIDE FOR ALLOCATING LAND AREA FOR A TYPICAL WELL SITE WITH ONSITE RETENTION AND ONSITE WATER TREATMENT. THE DETAIL MAY NOT SHOW ALL INFRASTRUCTURE OR THEIR EXACT LOCATIONS. LAND AREA SHOWN MAY BE SUBJECT TO CHANGE CONTINGENT UPON SUPPLY AND DISCHARGE FLOWS, STORAGE, TREATMENT, AND SITE LOCATION AS REQUIRED BY THE CITY.

DETAIL NO. G-3365	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	TYPICAL WELL SITE WITH ONSITE TREATMENT	DETAIL NO. G-3365



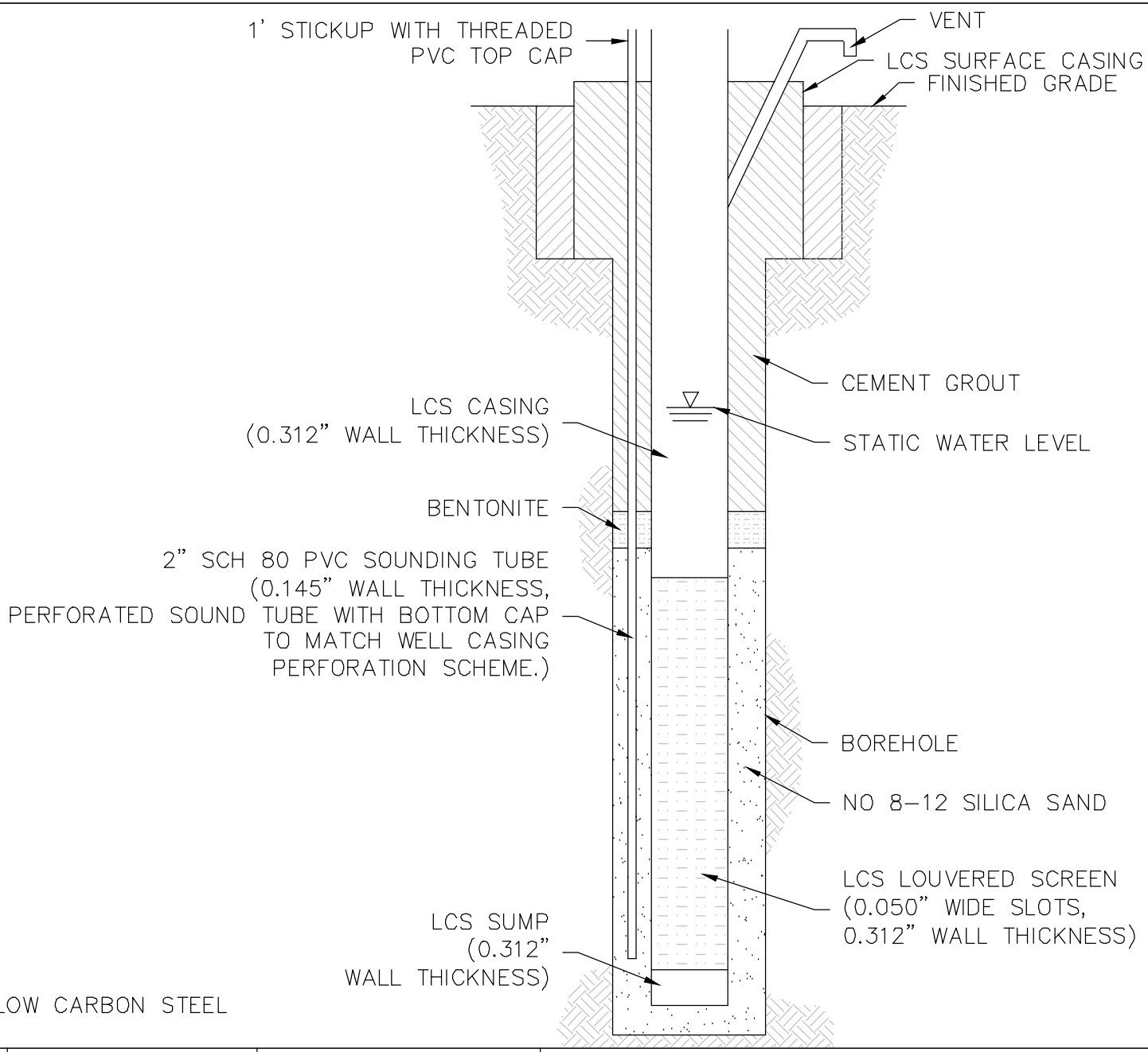
TYPICAL CMU WALL ELEVATION



TYPICAL CMU WALL REINFORCING

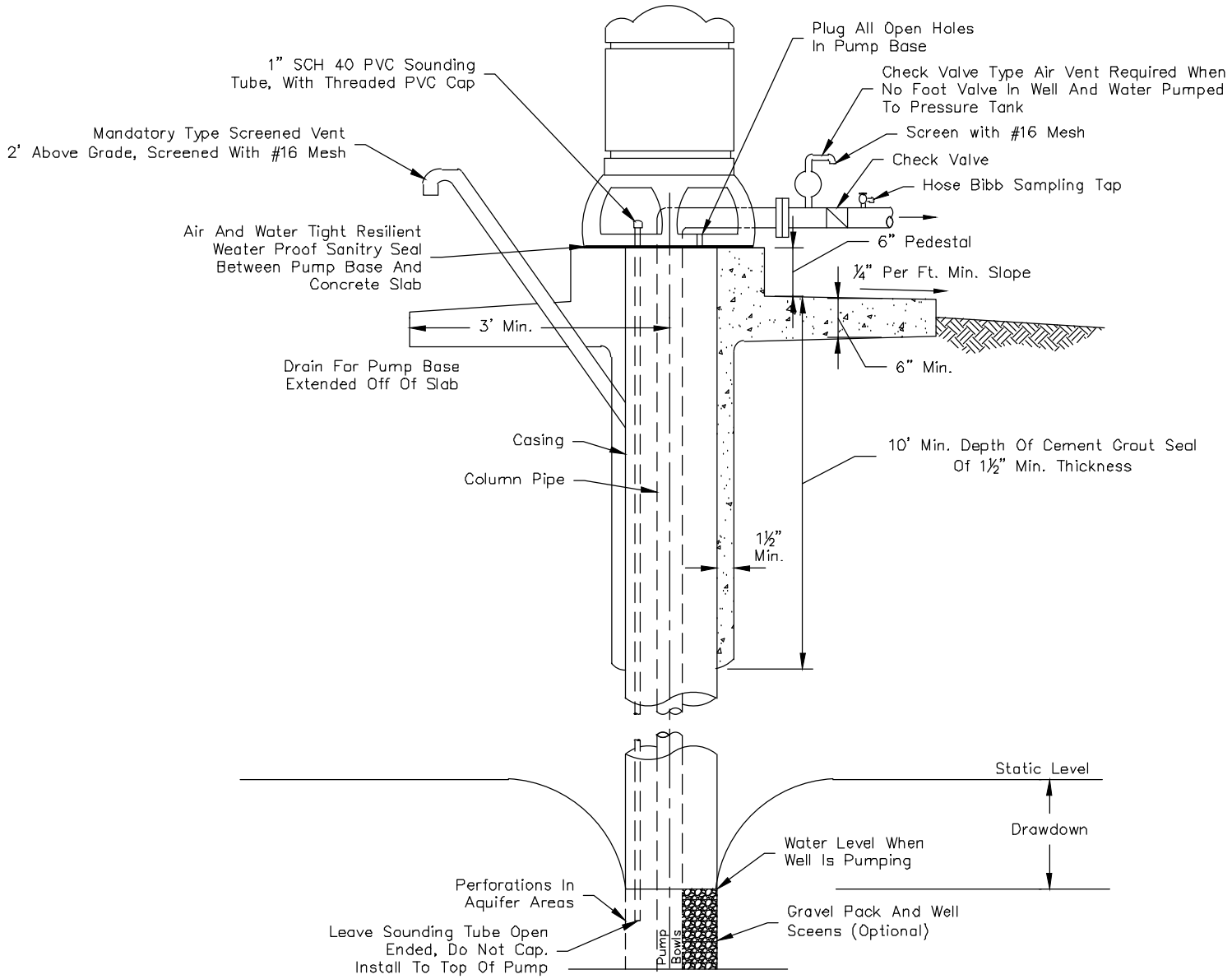
NOTE:
1. WALL PERMIT REQUIRED TO BE OBTAINED FROM BUILDING SAFETY DEPARTMENT.

DETAIL NO. G-3366	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	WALL ELEVATION FOR WELL SITE OR PUMP STATION	DETAIL NO. G-3366

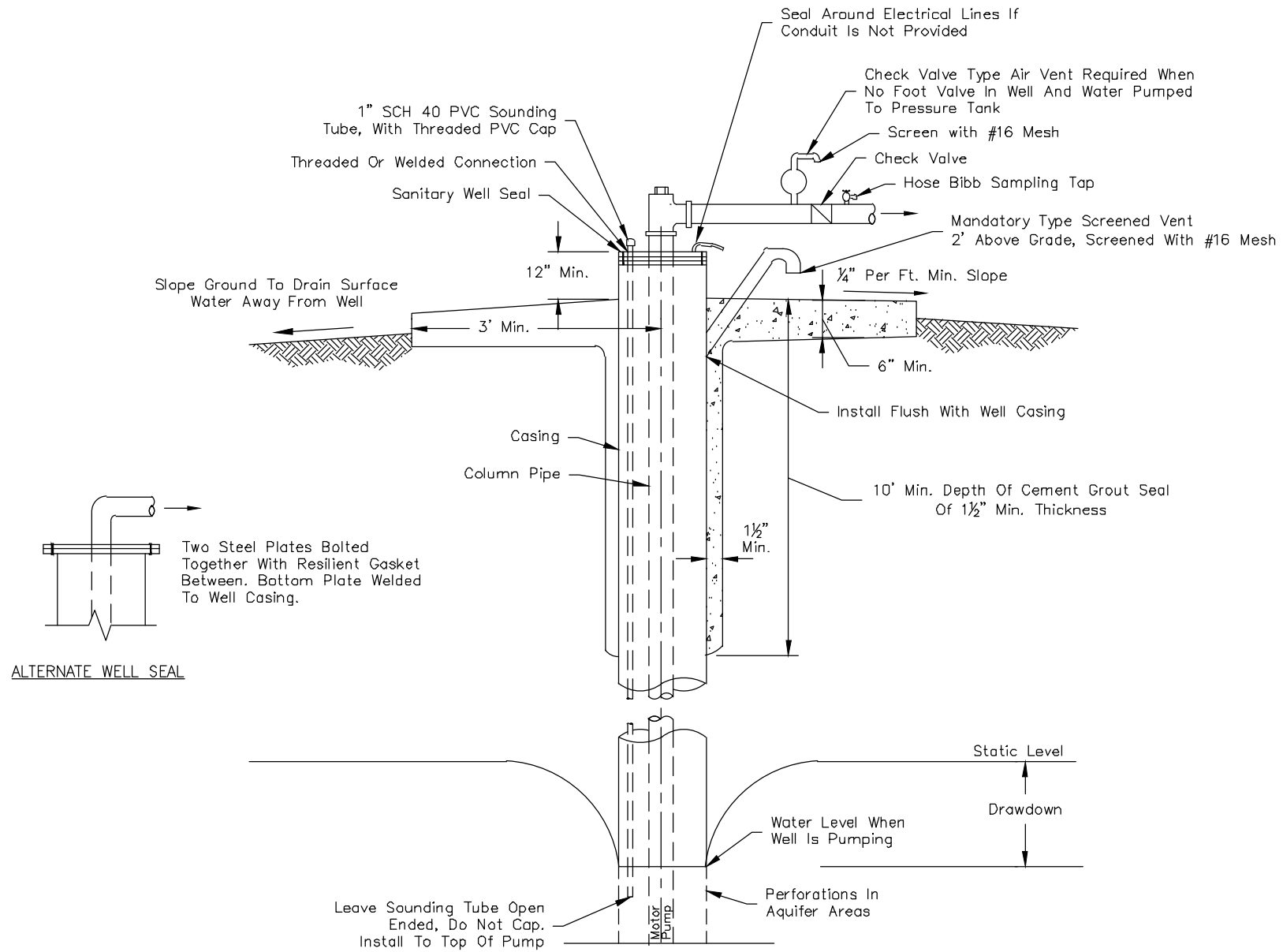


LCS= LOW CARBON STEEL

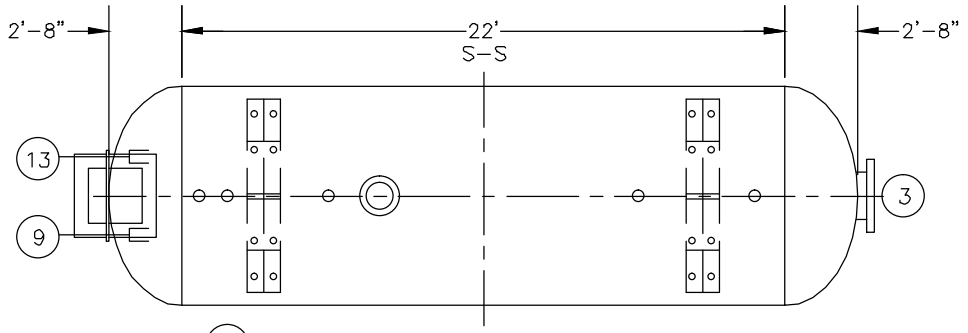
DETAIL NO. G-3367-1	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	TYPICAL WELL CASING	DETAIL NO. G-3367-1

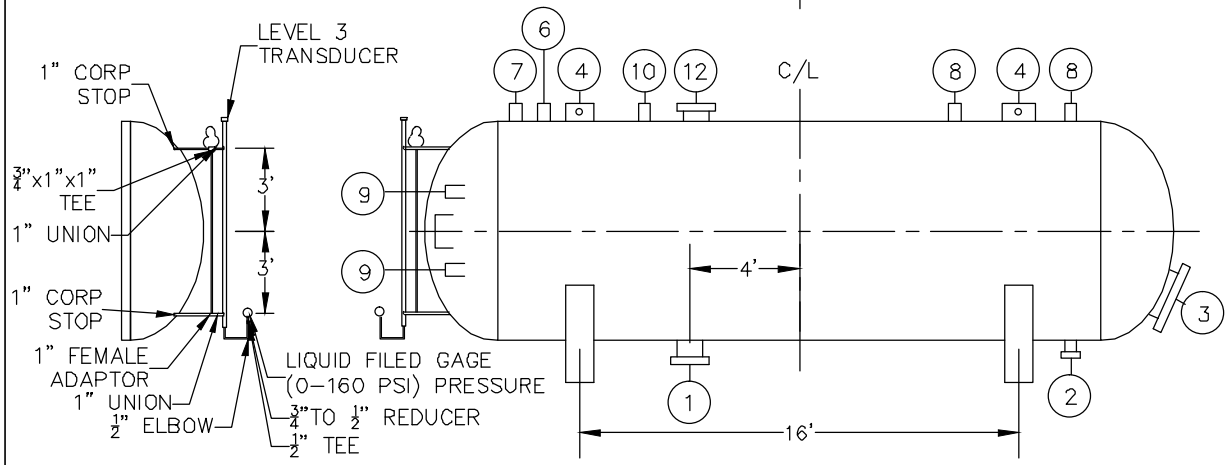


DETAIL NO. G-3367-2	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	TURBINE PUMP INSTALLATION DETAIL	DETAIL NO. G-3367-2

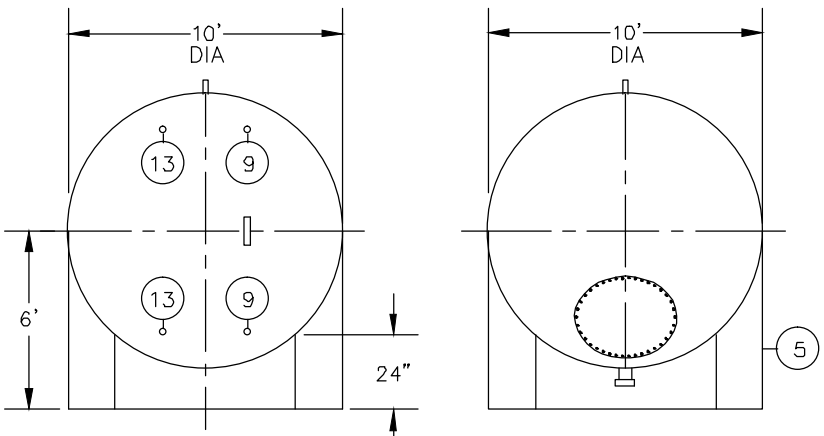


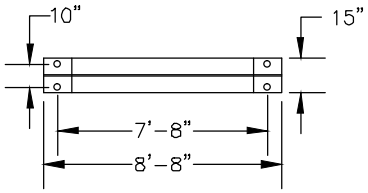
DETAIL NO. G-3367-3	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	SUBMERSIBLE PUMP INSTALLATION DETAIL	DETAIL NO. G-3367-3





WATER SIGHT GAUGE





BASEPLATE

1-1/2" DIA HOLES
TYP 4 PLCS

NOZZLE SCHEDULE

1. INLET – 12" 150# FFSO.
2. DRAIN – 4" 150# FFSO.
3. MANWAY – 30" HINGED ACCESS DOOR.
4. LIFT LUGS – 1" THK.
5. SADDLES – 3/4" THK, 1-1/4" THK BASE.
6. COUPLING – 2-1/2" 3000# NPT (VAC BRKR).
7. COUPLING – 2" 3000# NPT (SAFETY VALVE).
8. COUPLING – 2" 3000# NPT (AIRLINE).
9. COUPLING – 2" 3000# NPT (PROBE WELL).
10. COUPLING – 2" 3000# NPT (PRESS CONTROL).
11. FLANGE – 10" 150# FFSO (SPARE).
12. FLANGE – 8" 150# FFSO (SPARE).
13. COUPLING – 2" 3000# NPT (SPARE).

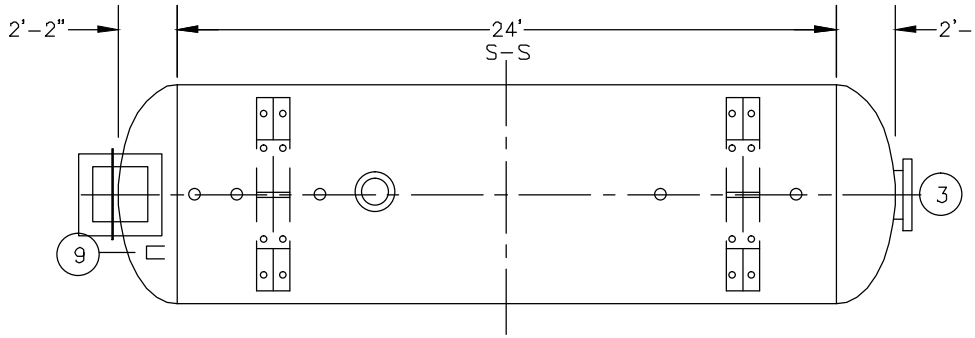
NOTE: ACCESS TO MANWAY SHOULD NOT REQUIRE A LADDER OR SCAFFOLDING.

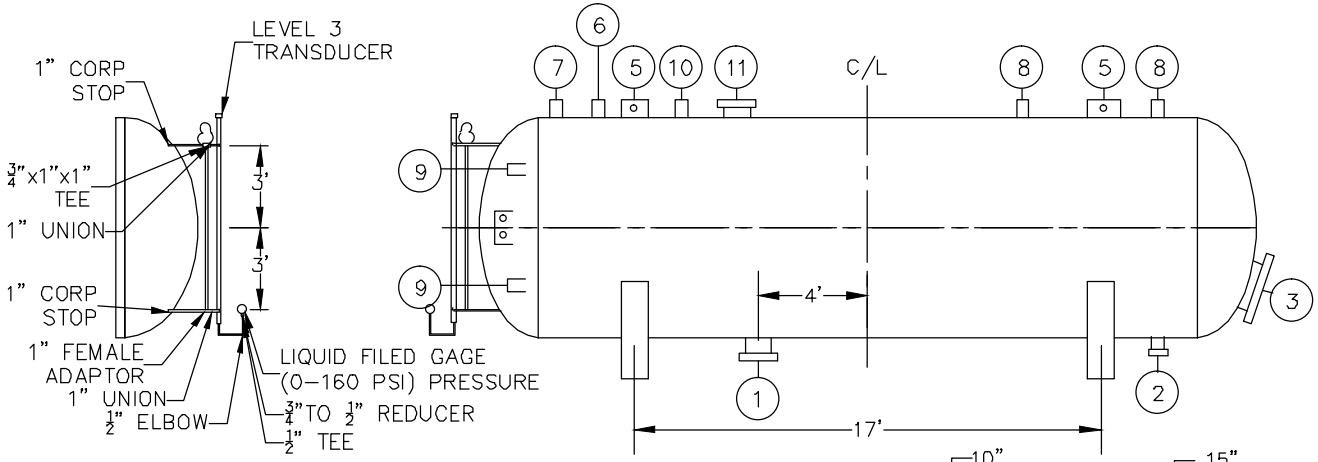
VESSEL DESIGN:	ASME SEC VIII DIV 1
DESIGN PRESSURE:	250 PSIG
INTERNAL COATING:	DEVO OR DUDICK NSF APPROVED, 10-12 MILS
EXTERNAL COATING:	DEVO OR DUDICK NSF APPROVED, 4-6 MILS
SHIPPING WEIGHT:	38,000 POUNDS
FLOODED WEIGHT:	160,000 POUNDS

HYDROTANK SET POINTS

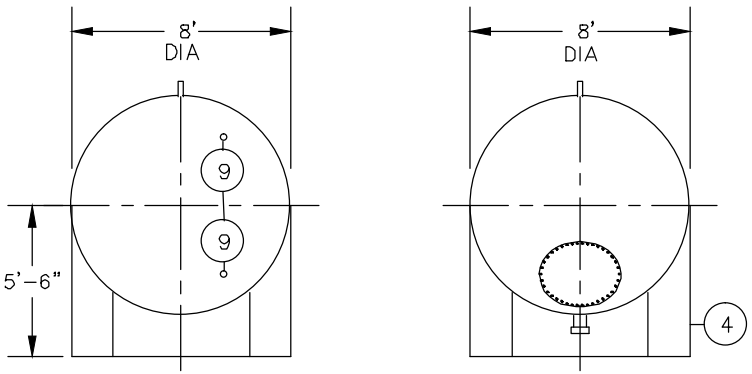
NEUTRAL TARGET LEVEL @ 50% FROM TOP
LSHH @ 65% OR 62.4" (33.6" FROM TOP / 35%) VS. 19%
LSH @ 60% OR 57.6" (38.4" FROM TOP / 40%) VS. 31%
LSL @ 40% OR 38.4" (57.6" FROM TOP / 60%) VS. 69%
LSLL @ 35% OR 33.6" (62.4" FROM TOP / 65%) VS. 81%

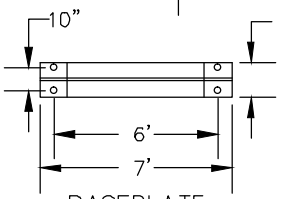
DETAIL NO.				DETAIL NO.
G-3368	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	120" OD AIR CHAMBER	G-3368





WATER SIGHT GAUGE





BASEPLATE

1-1/4" DIA HOLES
TYP 4 PLCS

NOZZLE SCHEDULE

1	INLET – 12" 150# FFSO.
2	DRAIN – 4" 150# FFSO.
3	MANWAY – 30" HINGED ACCESS DOOR.
4	SADDLES – 3/4" THK, 1-1/4" THK BASE.
5	LIFT LUGS – 1" THK.
6	COUPLING – 2" 3000# NPT (VAC BRKR).
7	COUPLING – 2" 3000# NPT (PSV).
8	COUPLING – 2" 3000# NPT (AIRLINE).
9	COUPLING – 2" 3000# NPT (PROBE WELL).
10	COUPLING – 2" 3000# NPT (PRESS CONTROL).
11	FLANGE – 8" 150# FFSO (SPARE).

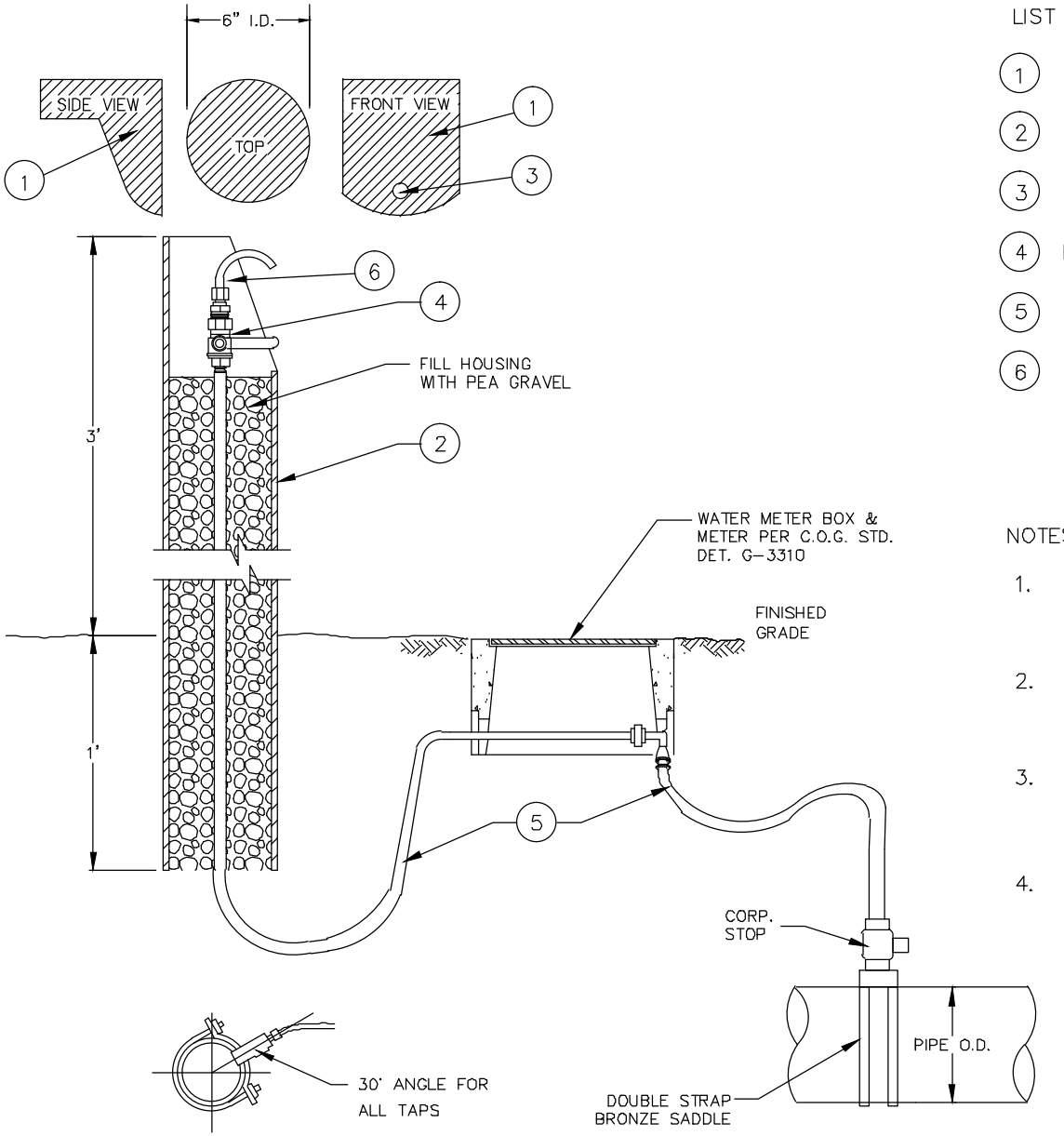
NOTE: ACCESS TO MANWAY SHOULD NOT REQUIRE A LADDER OR SCAFFOLDING.

VESSEL DESIGN:	ASME SEC VIII DIV 1
DESIGN PRESSURE:	250 PSIG
INTERNAL COATING:	DEVO OR DUDICK NSF APPROVED, 10-12 MILS
EXTERNAL COATING:	DEVO OR DUDICK NSF APPROVED, 4-6 MILS
SHIPPING WEIGHT:	38,000 POUNDS
FLOODED WEIGHT:	160,000 POUNDS

HYDROTANK SET POINTS

NEUTRAL TARGET LEVEL @ 50% FROM TOP
LSHH @ 65% OR 62.4" (33.6" FROM TOP / 35%) VS. 19%
LSH @ 60% OR 57.6" (38.4" FROM TOP / 40%) VS. 31%
LSL @ 40% OR 38.4" (57.6" FROM TOP / 60%) VS. 69%
LSLL @ 35% OR 33.6" (62.4" FROM TOP / 65%) VS. 81%

DETAIL NO.				DETAIL NO.
G-3369	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	96" OD AIR CHAMBER	G-3369



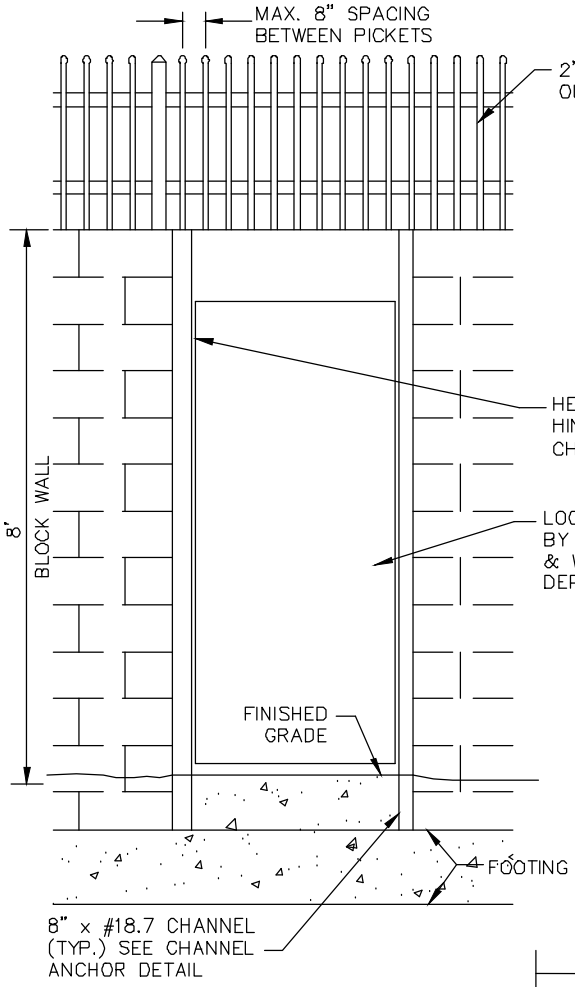
LIST OF MATERIALS:

1. ALUMINUM LID
2. ALUMINUM HOUSING – 6" x 48"
3. FLUSH MOUNTED LOCK
4. BALL VALVE, 1/2" x 3/8", 400 P.S.I.
5. COPPER SERVICE LINE (1" MIN.)
6. 1/2" SAMPLING SPIGOT

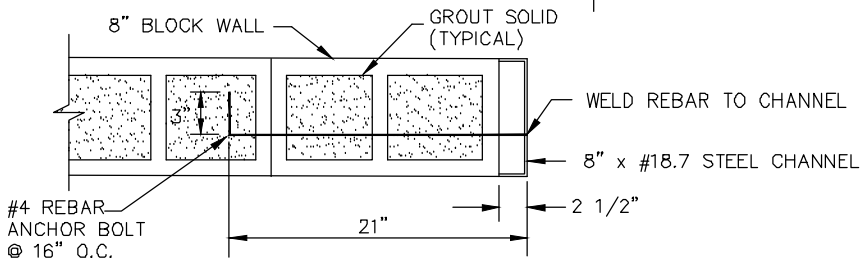
NOTES:

1. CARE SHOULD BE GIVEN TO LOCATE WATER SAMPLING STATIONS ADJACENT TO OPEN SPACES WHENEVER POSSIBLE.
2. IF A WATER SAMPLING STATION IS TO BE LOCATED IN FRONT OF A RESIDENCE, IT SHALL BE LOCATED ON A LOT LINE.
3. ONE SAMPLING STATION TO BE INSTALLED PER EVERY 100 RESIDENTIAL (SINGLE OR MULTIFAMILY) POTABLE SERVICE TAPS.
4. REFER TO THE CITY "APPROVED MATERIALS LIST" FOR ACCEPTABLE MODELS.

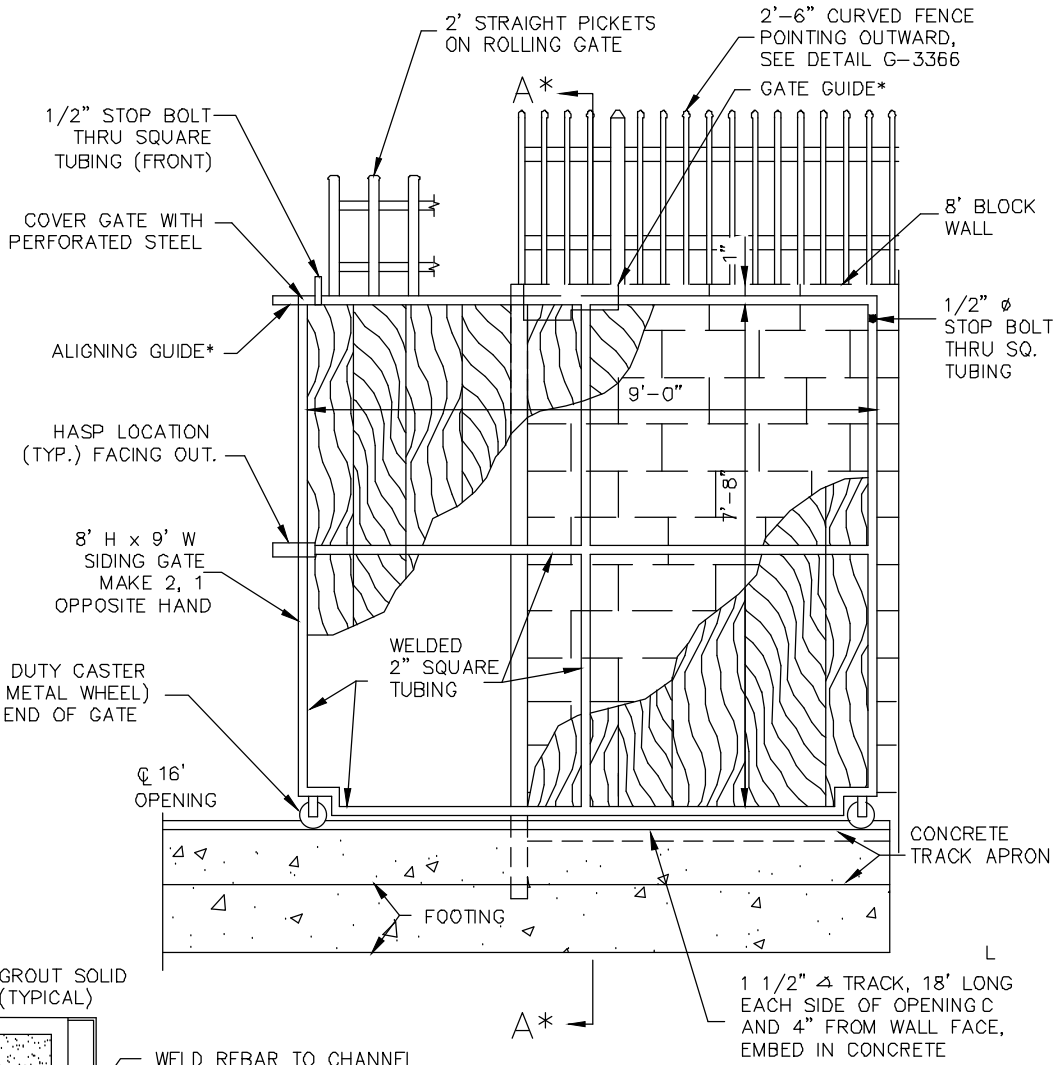
DETAIL NO. G-3370	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	WATER QUALITY SAMPLING STATION	DETAIL NO. G-3370



HINGED DOOR

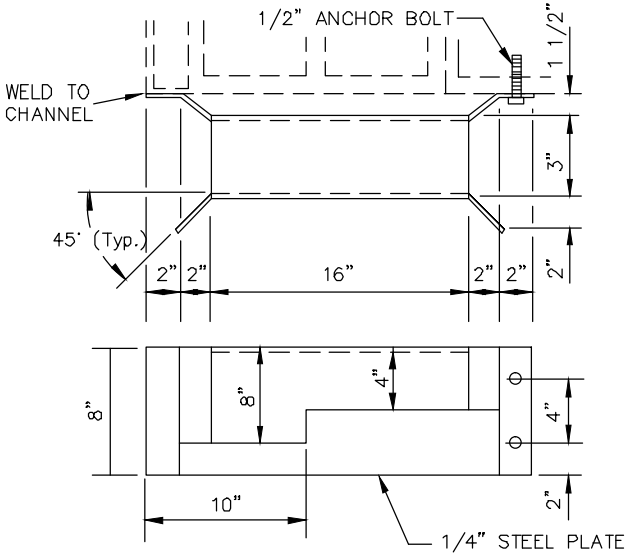


CHANNEL ANCHOR DETAIL



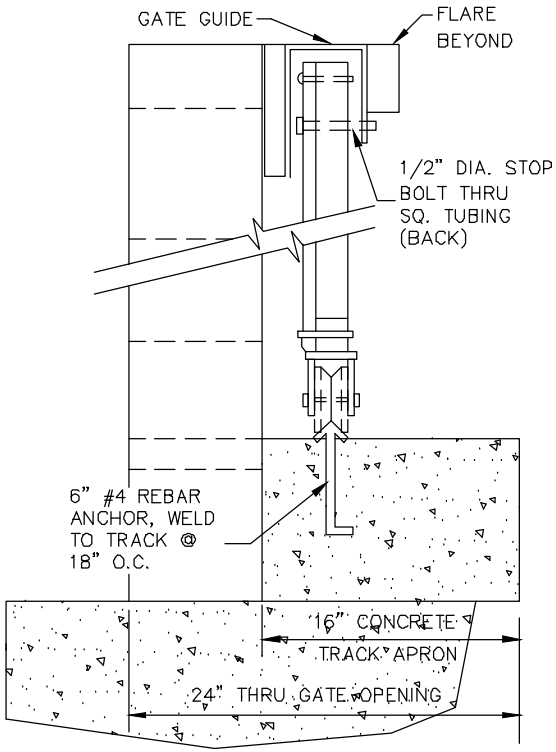
ELEVATION

DETAIL NO. G-3390-1	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	16' SLIDING GATE & HINGED DOOR	DETAIL NO. G-3390-1

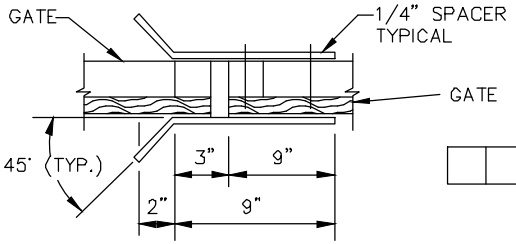


GATE GUIDE DETAIL

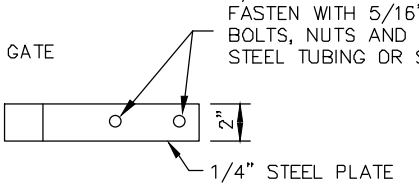
(MAKE 2, 1 OPPOSITE HAND)



SECTION A–A



PLAN



ELEVATION

ALIGNING GUIDE DETAIL

(2 REQUIRED)

NOTES:

1. CONTRACTOR SHALL PRIME AND PAINT ALL METAL SURFACES, AND SHALL SEAL ALL WOOD SURFACES. BEFORE APPLICATION, THE COLOR AND MANUFACTURE OF THE PAINT AND SEALER SHALL BE APPROVED BY THE CITY PUBLIC WORKS & WATER RESOURCES DEPARTMENT.
2. PRIOR TO PAINTING, ALL SURFACES SHALL BE CLEANED FREE OF CONCRETE, MORTAR, RUST, DIRT, AND ANY OTHER OBJECTIONAL MATERIALS.
3. APPLY ONE (1) PRIMER COAT AND TWO (2) EXTERIOR ALKYD GLOSS ENAMEL COATS TO METAL.

DETAIL NO. G-3390-2	CITY OF GOODYEAR STANDARD DETAIL	APPROVED:08/17	16' SLIDING GATE	DETAIL NO. G-3390-2