

CITY OF EMERSON

DEVELOPMENT REGULATIONS

STANDARD DETAILS



MARCH 2024

Table of Contents

GENERAL DESIGN DETAILS

STR-01	Typical Street Cross Section
STR-02	Cul-de-sac (Residential)
STR-03	Pavement Widening
STR-04	Landing Requirement (Street Intersections)
STR-05	Stopping Sight Distance
STR-06	Development Entrance – Sight Distance
STR-07	Residential Driveway
STR-08	Curb Detail
STR-09	Off street Parking
STR-10	Typical Pavement Repair
STR-11	Nominal Utility Locations 50' R/W
STR-12	Utility Locations
STR-13	Sidewalk Location
STR-14	Sidewalk
STR-15	Subdivision Entrance (Residential Over 200 Lots, Commercial, Industrial)
STR-16	Development Entrance (Commercial, Industrial, Residential Subdivision Less Than 200 Lots)
STR-17	Commercial / Industrial Driveway Detail
STR-18	Chain-Link Single Leaf Gate
STR-19	Chain-Link Fence with Double Gate

GENERAL SEWER DETAILS

SEW-01	Standard Manhole Frame & Cover
SEW-02	Standard Precast Manhole
SEW-03	Shallow Manhole
SEW-04	Drop Connection
SEW-05	Typical Manhole Invert Plans
SEW-06	Manhole Steps
SEW-07	Service Lateral
SEW-08	Cleanout
SEW-09	Sewer Pipe Anchor
SEW-10	Pavement Replacement
SEW-11	Sanitary Air/Vacuum Release Valve
SEW-12	Grease Interceptor
SEW-13	Manhole with Safety Platform
SEW-14	Doghouse Manhole
SEW-15	Cut In Manhole

GENERAL WATER DETAILS

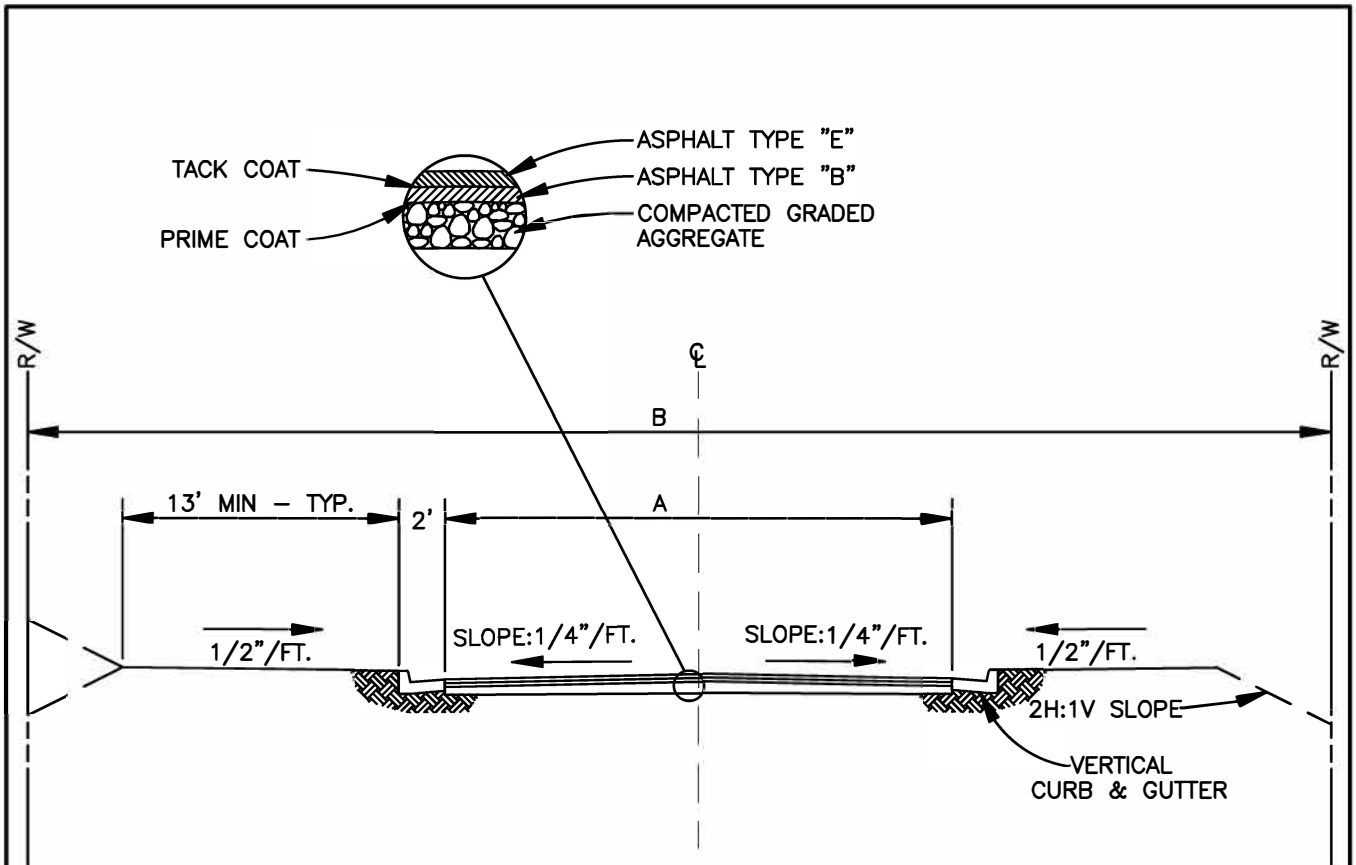
WAT-01	2" Blow Off Assembly
WAT-02	Gate Valve
WAT-03	Concrete Collar for Water Valves
WAT-04	Thrust Blocking
WAT-05	Vertical Thrust Blocking
WAT-06	Minor Creek Crossing

WAT-07	Residential Water Service
WAT-08	Fire Hydrant Assembly
WAT-09	Water Pipe Anchor
WAT-10	Air Release Valve
WAT-11	1" Valve Assembly
WAT-12	Typical Water Main at Cul-De-Sac
WAT-13	¾" Water Meter Location (For Subdivisions)
WAT-14	Industrial / Commercial ¾" Water Meter Installation
WAT-15	Industrial / Commercial 1 ½" or 2" Water Meter Installation
WAT-16	Typical Large Meter & Vault Installation
WAT-17	Concrete Valve Marker
WAT-18	Fire Line Vault
WAT-19	4" Meter Vault
WAT-20	4" or 6" Backflow Vault

GENERAL WATER & SEWER DETAILS

W&S-01	Pipe Bedding
W&S-02	Roadway Crossing
W&S-03	Pavement Replacement

GENERAL DESIGN DETAILS



NOTE:
13' OF CLEARED R/W SHALL BE DEDICATED BEHIND
ACCEL/DECEL LANES.

NOTE:
R/W SHALL BE CLEAR OF ALL LIMBS, GRADED SMOOTH
AND ESTABLISHED IN GRASS.

STREET CLASSIFICATION	MIN. PAVING WIDTH "A"	MIN. R/W WIDTH "B"	GAB	TYPE B	TYPE E-F
ARTERIAL	AS REQ'D	100'	10"	4"	2"
INDUSTRIAL	24'	60'	8"	3"	1-1/2"
MAJOR COLLECTOR	22'	80'	8"	3"	1-1/2"
MINOR COLLECTOR	22'	60'	6"	2"	1-1/2"
LOCAL	20'	50'	6"	2"	1-1/2"
ALLEY	12'	20'	6"	-	2"

TYPICAL STREET CROSS SECTION



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

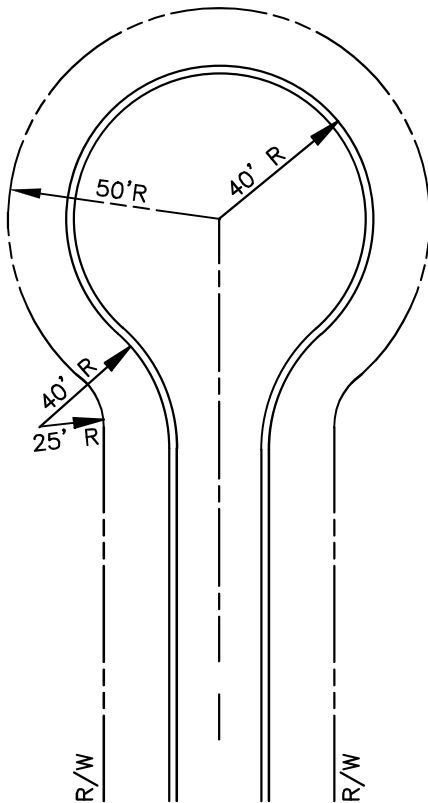
TYPICAL STREET CROSS SECTION

DRAWN BY: TGA

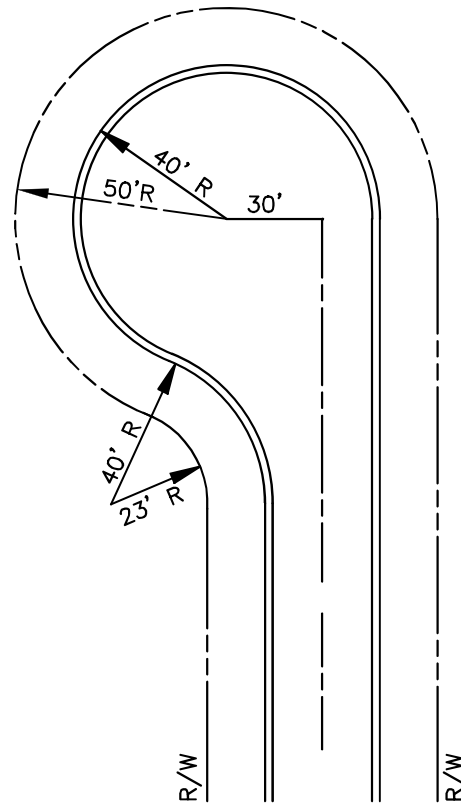
SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-01



TYPICAL



OFFSET LEFT OR RIGHT



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

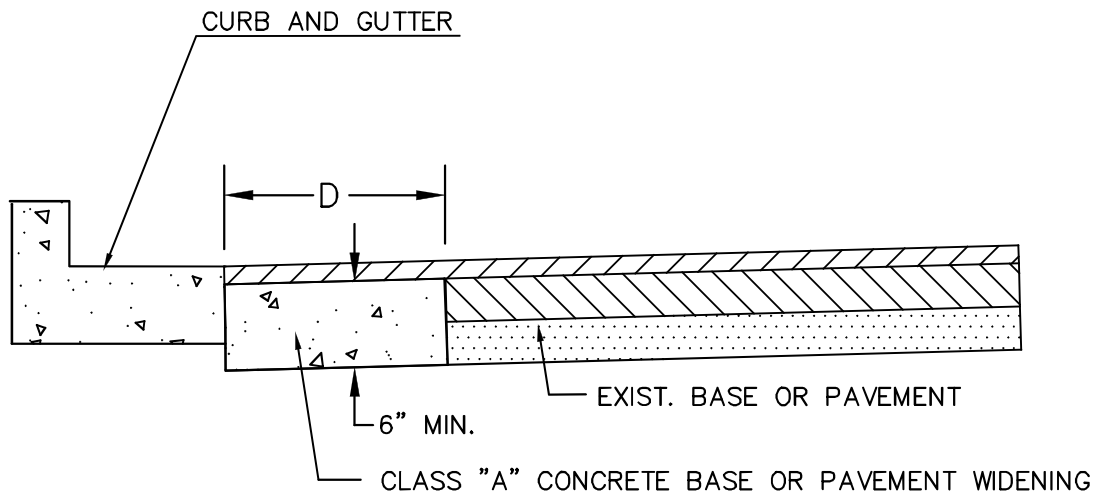
**CUL-DE-SAC
(RESIDENTIAL)**

DRAWN BY: TGA

SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-02



NOTE: IN EXCAVATED AREAS WHERE $D = 2'-0"$ OR LESS IN WIDTH BETWEEN THE EXISTING PAVING AND NEW CURB AND GUTTER, CLASS "A" CONCRETE WILL BE PLACED IN LIEU OF THE BASE AND PAVING SPECIFIED BY THE TYPICAL SECTION.

IN EXCAVATED AREAS FROM WHERE D IS FROM $2'-0"$ TO $5'-0"$ IN WIDTH THE DEVELOPER MAY PLACE CLASS "A" CONCRETE IN LIEU OF THE BASE AND PAVING

IN EXCAVATED AREAS WHERE D IS GREATER THAN $5'-0"$ IN WIDTH THE DEVELOPER SHALL PLACE BASE AND PAVING AS SPECIFIED ON THE TYPICAL SECTION.

CLASS "A" CONCRETE IS AS DEFINED BY THE GEORGIA DOT.



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

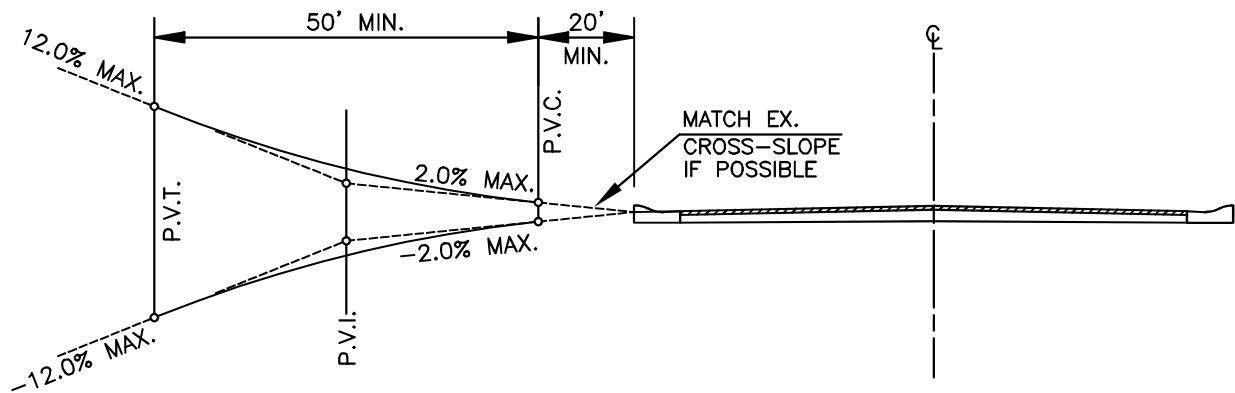
PAVEMENT WIDENING

DRAWN BY: TGA

SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-03



LANDING REQUIREMENTS



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

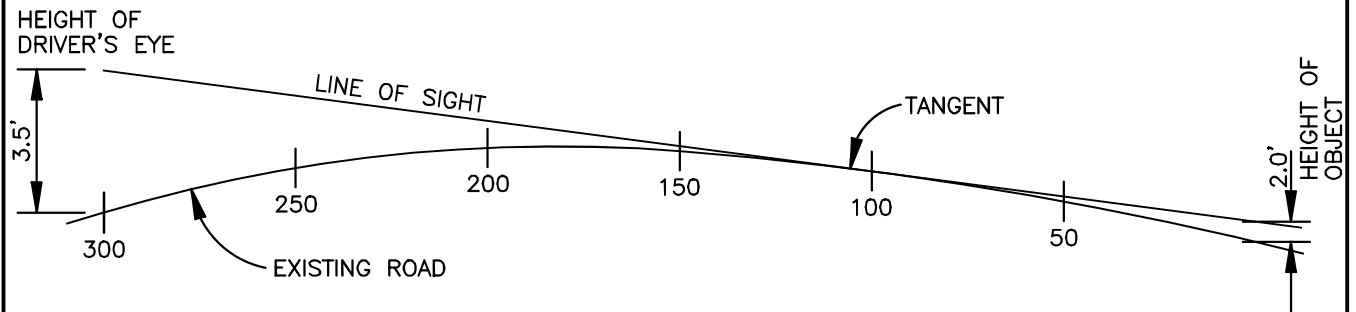
LANDING REQUIREMENT (STREET INTERSECTIONS)

DRAWN BY: TGA

SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-04



VERTICAL PROFILE

VERTICAL ALIGNMENT:

THE SIGHT DISTANCE NEAR CREST VERTICAL CURVES IS DETERMINED BY THE LINE OF SIGHT AVAILABLE FROM THE DRIVER'S EYE 3.5 FEET ABOVE THE PAVEMENT TO AN OBJECT 2.0 FEET HIGH. THE SIGHT DISTANCE IS MEASURED ALONG THE ROADWAY CENTERLINE.

<u>SPEED LIMIT (M.P.H.)</u>	<u>MINIMUM STOPPING SIGHT DISTANCE (FT.)</u>
25	155
30	200
35	250
40	305
45	360
50	425
55	495

MINIMUM SIGHT DISTANCE TAKEN FROM AASHTO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS", 2011.



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

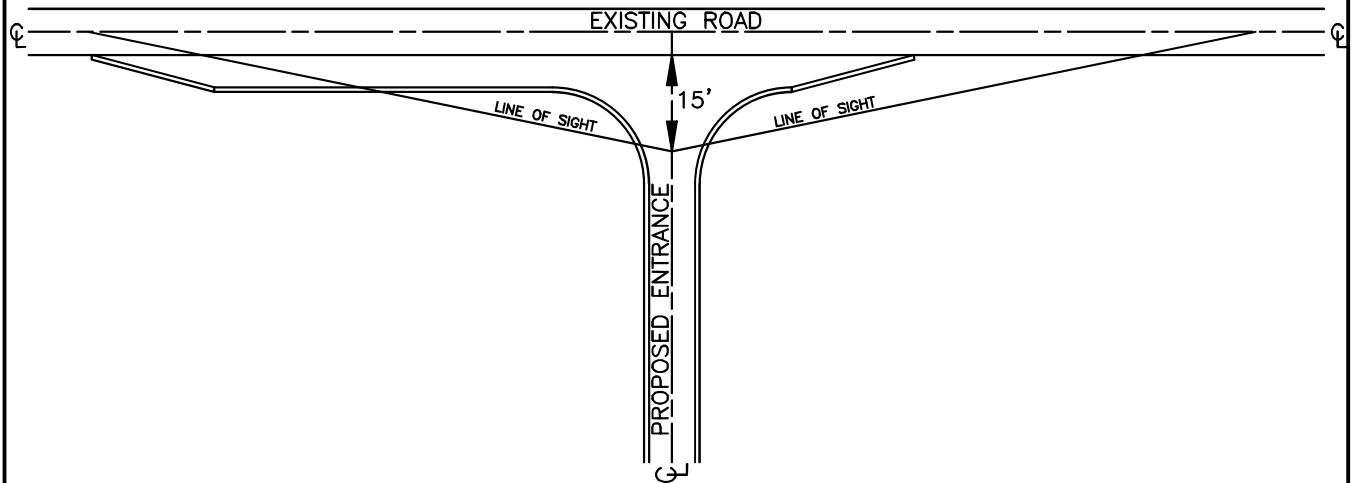
STOPPING SIGHT DISTANCE

DRAWN BY: TGA

SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-05



HORIZONTAL PLAN

HORIZONTAL SIGHT DISTANCE:

THE SIGHT DISTANCE AT DEVELOPMENT ENTRANCES IS DETERMINED BY THE LINE OF SIGHT AVAILABLE ABOVE THE GROUND SURFACE. THE SIGHT DISTANCE IS MEASURED FROM 15 FEET BEHIND THE EDGE OF TRAVEL LANE AT THE CENTERLINE OF THE PROPOSED ENTRANCE AND ENDING WHERE THE PROJECTED LINE OF SIGHT INTERSECTS THE ROADWAY CENTERLINE. EXAMPLES OF OBSTRUCTIONS ARE VEGETATION, GROUND COVER, SIGNS, EXISTING TOPOGRAPHY, ETC. THE HEIGHT OF THE DRIVERS EYE AND THE OBJECT HEIGHT ARE BOTH ASSUMED TO BE 3.5 FEET ABOVE THE ROAD SURFACE.

<u>SPEED LIMIT (M.P.H.)</u>	<u>MINIMUM INTERSECTION SIGHT DISTANCE (FT.)</u>
25	280
30	335
35	390
40	445
45	500
50	555
55	610

MINIMUM SIGHT DISTANCE TAKEN FROM AASHTO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS", 2011.



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

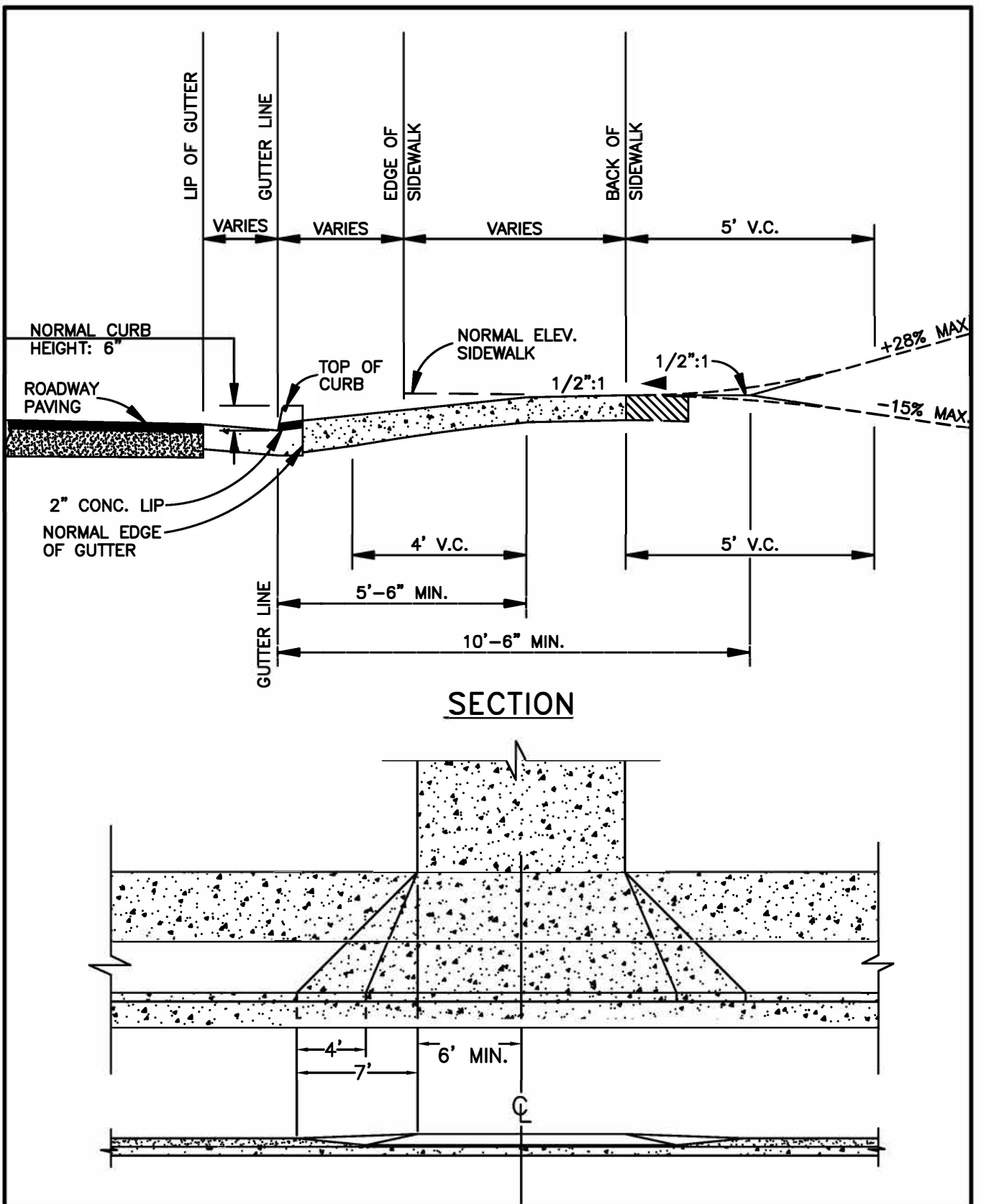
DEVELOPMENT ENTRANCE SIGHT DISTANCE

DRAWN BY: TGA

SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-06



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

RESIDENTIAL DRIVEWAY

DRAWN BY: TGA

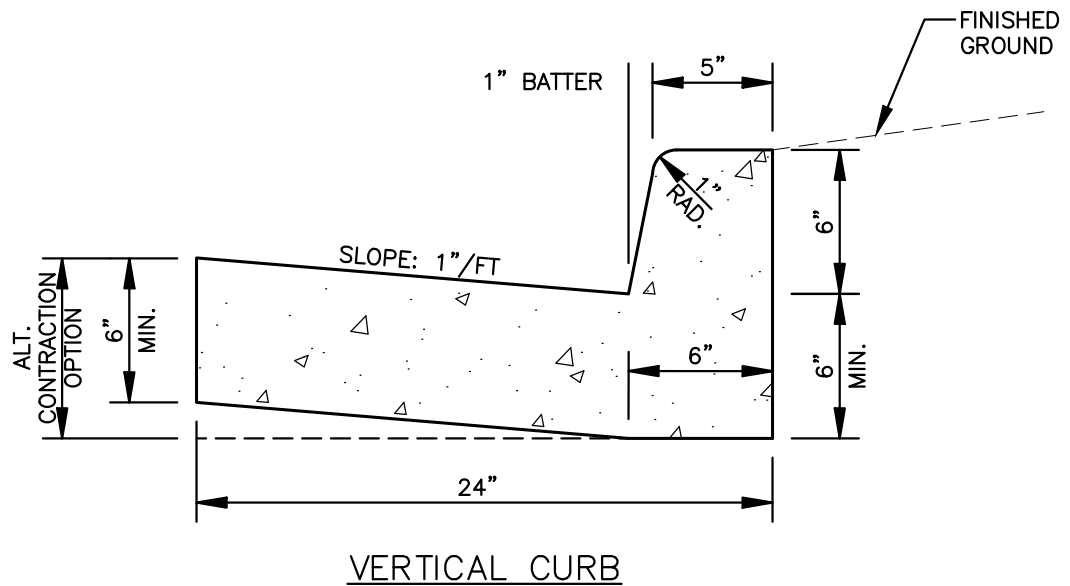
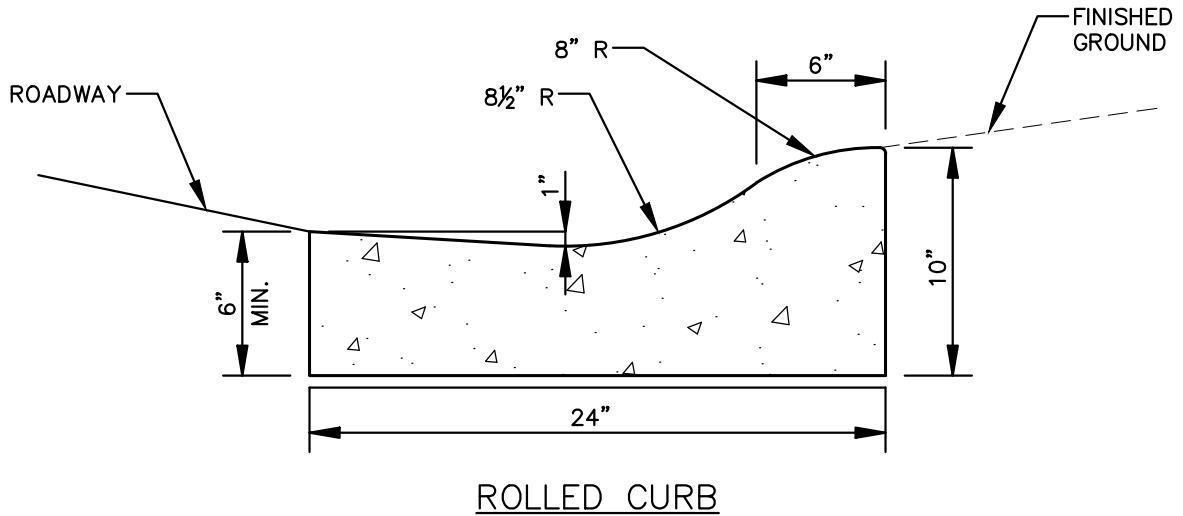
SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-07

NOTE:

1. VERTICAL CURB SHALL COMPLY WITH GEORGIA STANDARD 9032B, 6" x 24", TYPE 2.
2. 1/2" PREFORMED EXPANSION JOINTS WILL BE REQUIRED AT TANGENT POINTS OF RADIUS RETURNS, AT DRIVEWAYS, AND STREET INTERSECTIONS AND AT 40' INTERVALS ALONG THE CURB.
3. 3000 PSI CONCRETE @ 28 DAYS



NO.	DATE	BY	REVISION
1	10/14/2022	JDC	ADDED ROLLED CURB & REQUIRED CONCRETE STRENGTH



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

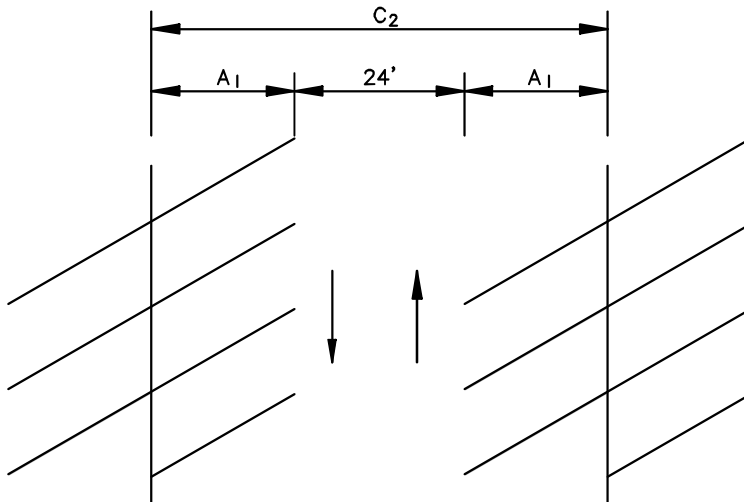
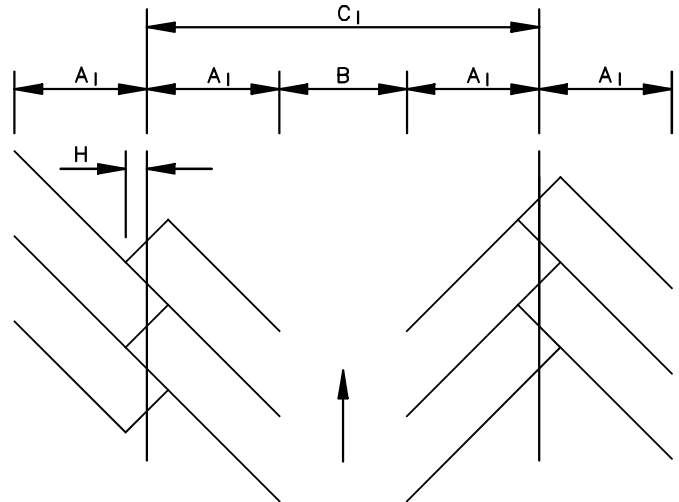
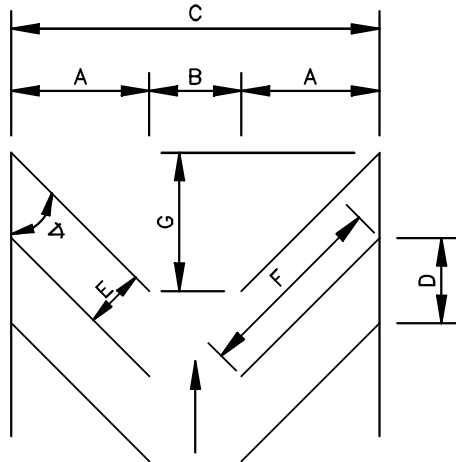
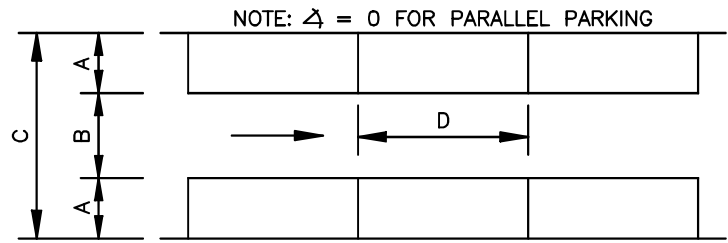
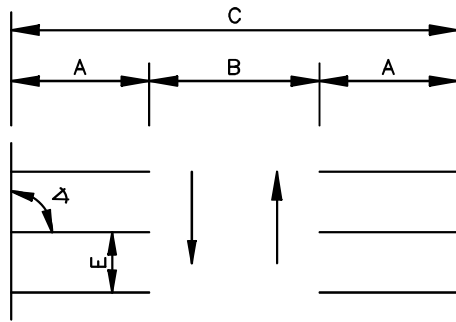
CURB DETAIL

DRAWN BY: PBH

SCALE: NTS

DATE: OCTOBER 15, 2015

DWG. NO.: STR-08



NOTE:
REFER TO ADA STANDARDS FOR
ACCESSIBLE PARKING REQUIREMENTS

Δ	A	B	A+B	C	D	E	F	G	H	A ₁	C ₁	C ₂
ANGLE OF PARKING	DEPTH OF STALL	AISLE WIDTH	---	WIDTH OF BAY	CURB LENGTH	WIDTH OF STALL	LENGTH OF STRIPE	WASTE SPACE	DEPTH OF OVERHANG	DEPTH OF STALL	WIDTH OF AREA	WIDTH OF AREA
0°	9.0	12.0	21.0	30.0	22.0	---	---	---	---	---	---	42.0
45°	19.1	13.0	32.1	51.2	12.7	9.0	27.0	19.1	3.2	15.9	44.8	55.8
60°	20.1	18.0	38.1	58.2	10.4	9.0	23.2	11.6	2.3	17.8	53.6	59.6
90°	18.0	24.0	42.0	60.0	9.0	9.0	---	---	---	---	---	60.0



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

OFFSTREET PARKING

DRAWN BY: TGA

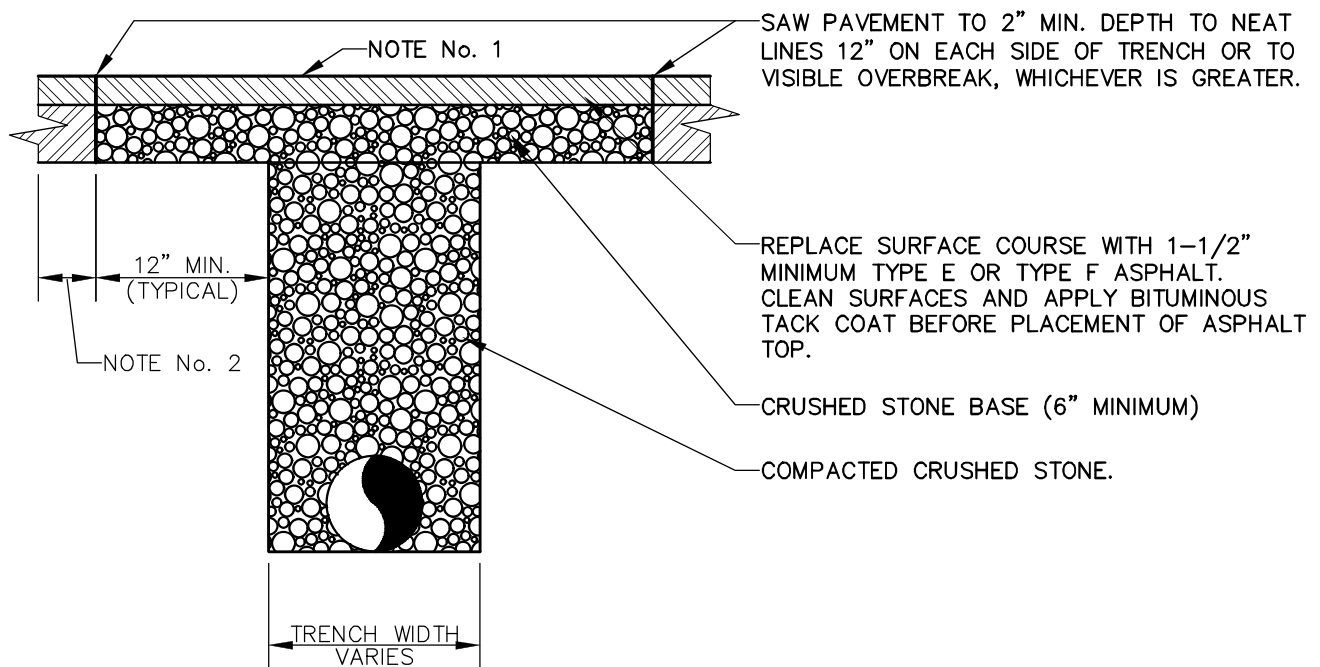
SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-09

NOTES

1. OBTAIN PERMISSION FROM CITY TO OPEN CUT ROADS. ROADS WILL GENERALLY BE BORED.
2. IN AREAS WHERE TRAFFIC MUST BE MAINTAINED, COVER PAVEMENT CUTS WITH STEEL PLATES OF SUFFICIENT THICKNESS TO SPAN CUT AND SAFELY CARRY TRAFFIC.
3. REMOVE AND REPLACE BASE AND PAVEMENT TO OUTER EDGE OF EXISTING PAVEMENT IF REMAINING PAVEMENT WIDTH IS 24" OR LESS.
4. PROVIDE BEDDING AS PER APPLICABLE UTILITY SPECIFICATION.



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

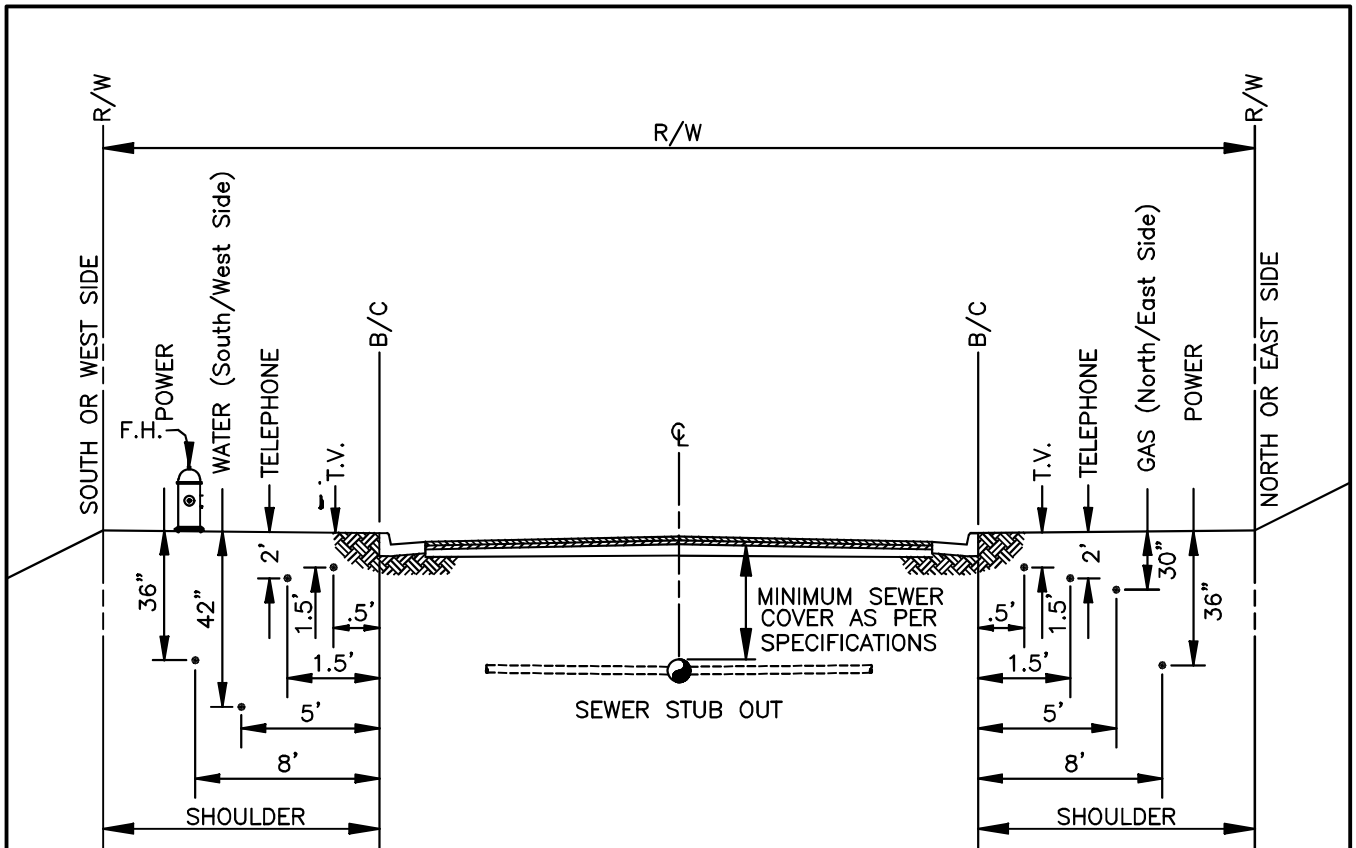
TYPICAL PAVEMENT REPAIR

DRAWN BY: TGA

SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-10



CROSS SECTION

NOTES:

1. THE REQUIRED DISTANCES FROM THE CURBS WILL APPLY TO UNDERGROUND UTILITIES.
2. THE REQUIRED LOCATION OF UTILITIES SHALL BE MEASURED FROM THE BACK OF THE CURB. CURB & GUTTER MUST BE INSTALLED AFTER SEWER BUT BEFORE ANY OTHER UTILITIES ARE INSTALLED.
3. PEDESTALS FOR TELEPHONE AND CABLE INSTALLATIONS TO BE LOCATED 6.5 FT. FROM BACK OF CURB. IF JOINT TRENCHING WITH POWER, PEDESTALS ARE TO BE LOCATED IN DESIGNATED SPACE FOR POWER.
4. FIRE HYDRANTS ARE TO BE LOCATED A MINIMUM OF 9 FT. FROM BACK OF CURB. SEE FIRE HYDRANT ASSEMBLY DETAIL.
5. ELECTRICAL TRANSFORMERS ARE TO BE LOCATED IN LINE WITH DESIGNATED SPACE FOR POWER. STREET LIGHTS ARE TO BE LOCATED 7.5' FROM BACK OF CURB.



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

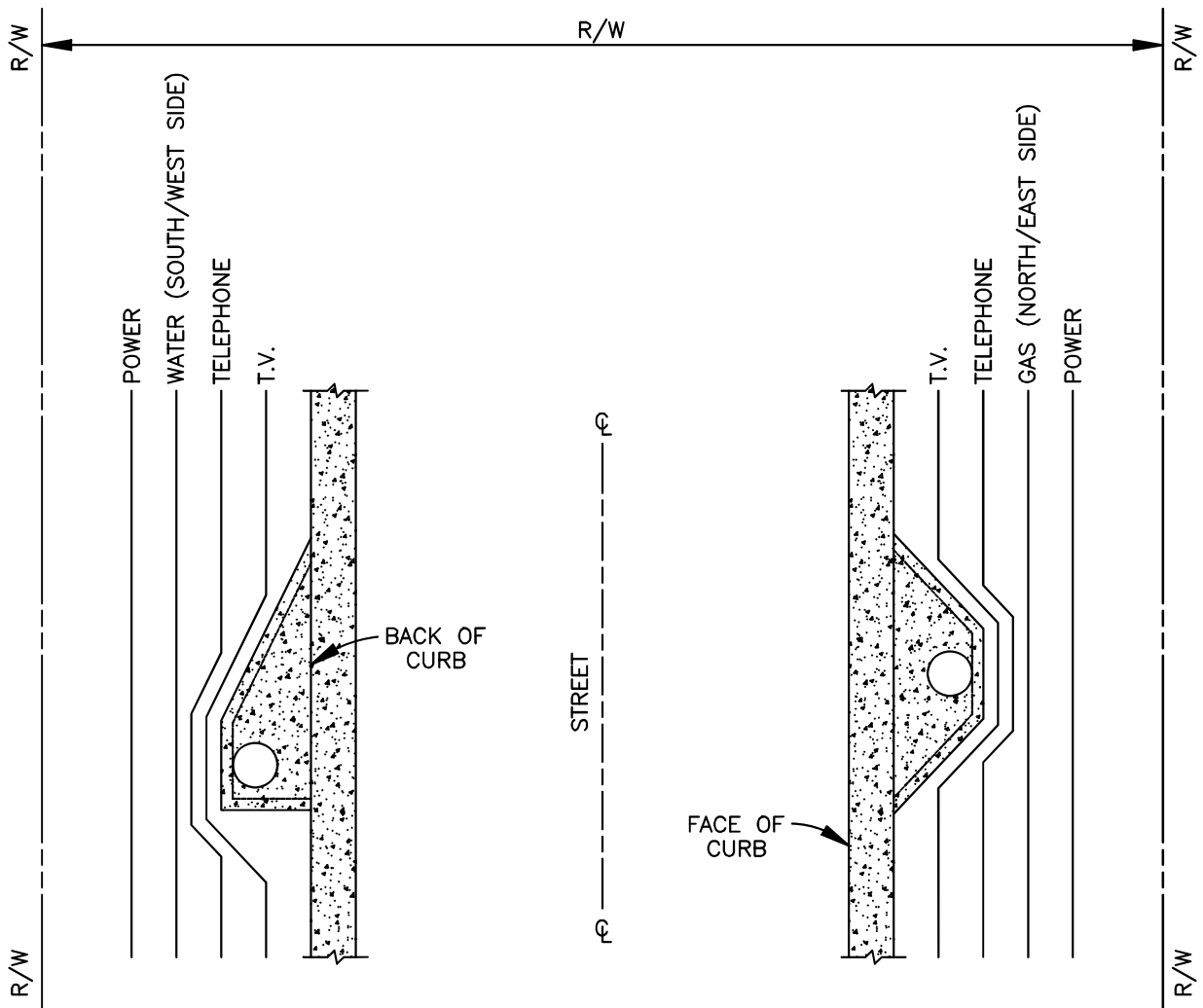
NOMINAL UTILITY LOCATIONS 50' R/W

DRAWN BY: TGA

SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-11



PLAN



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

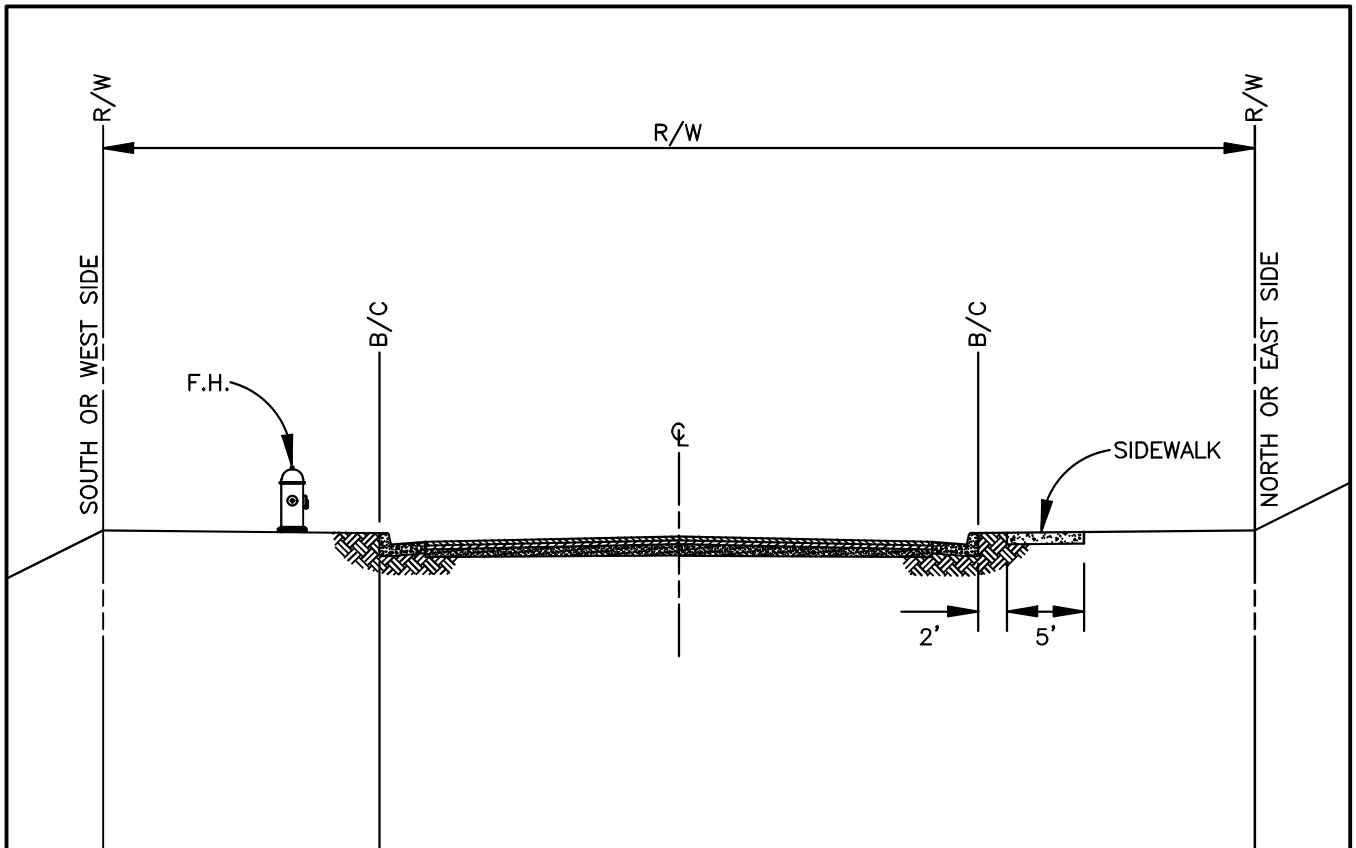
UTILITY LOCATIONS

DRAWN BY: TGA

SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-12



CROSS SECTION

NOTES:

1. SIDEWALKS NORMALLY TO BE LOCATED ON THE NORTH OR EAST SIDE OF STREET.
2. FIRE HYDRANTS MUST BE LOCATED BEHIND SIDEWALK.



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

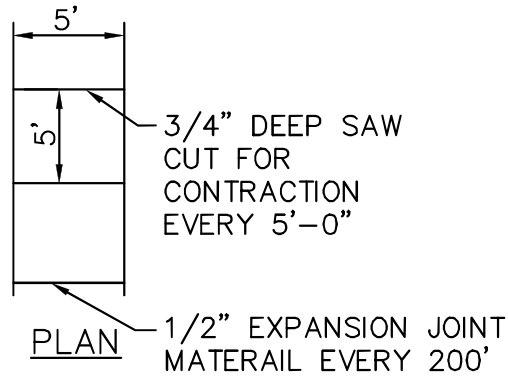
SIDEWALK LOCATION

DRAWN BY: TGA

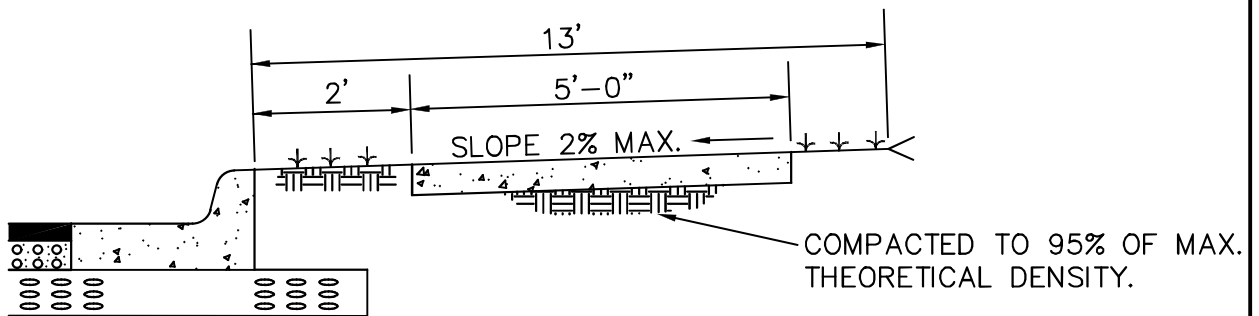
SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-13



NOTE: 1/2" PREMOULDED EXPANSION JOINT AT DRIVEWAYS, CURBS ETC.
5'-0" SIDEWALK CUT IN 5'-0" SQUARES 1 1/2" GROOVES.



TYPICAL SECTION OF 5'-0" SIDEWALK

NOTE: SIDEWALK TO BE CONSTRUCTED OF CLASS "A" CONCRETE AS DEFINED BY THE GEORGIA DOT.



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

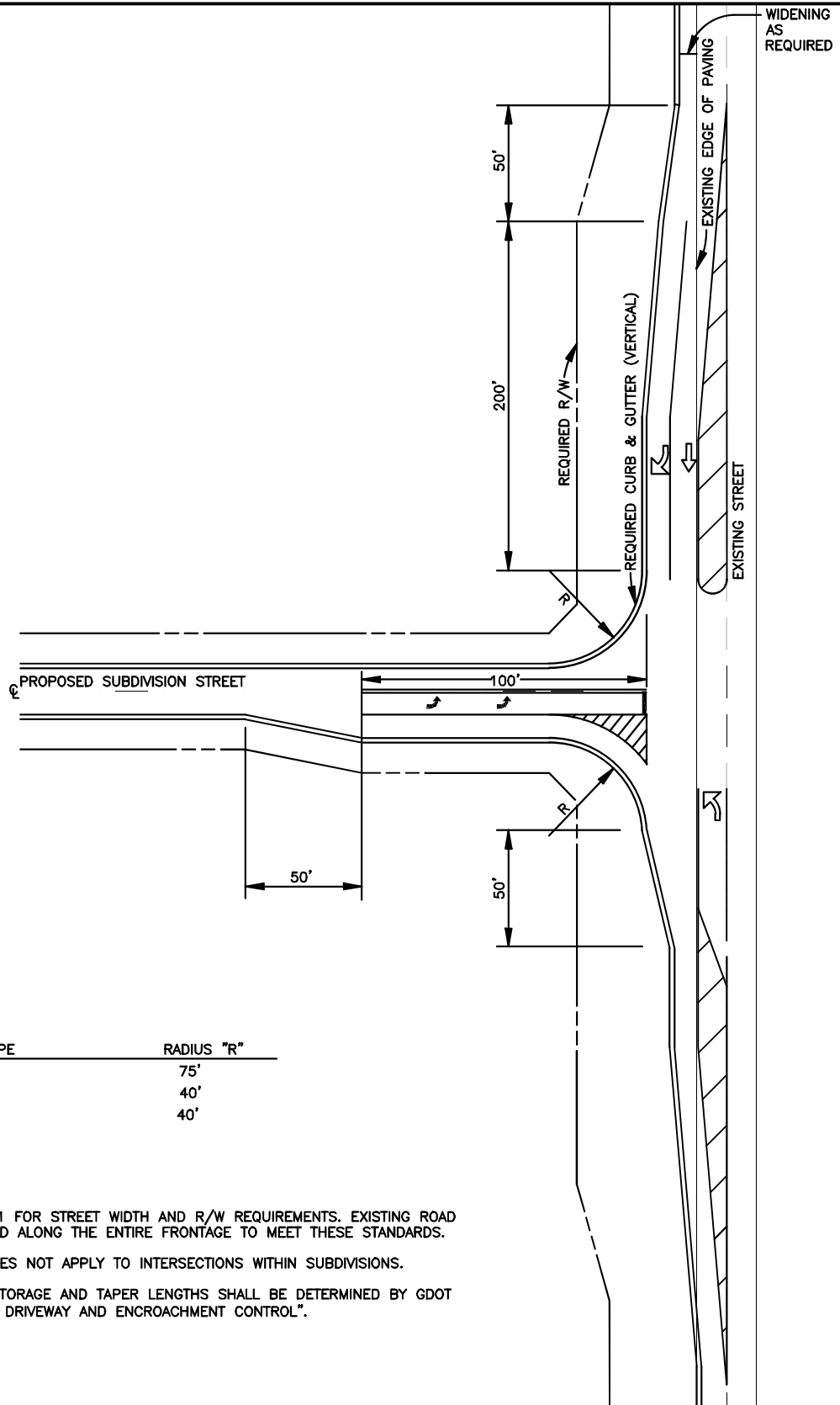
SIDEWALK

DRAWN BY: TGA

SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-14



SUBDIVISION TYPE	RADIUS "R"
INDUSTRIAL	75'
COMMERCIAL	40'
RESIDENTIAL	40'

NOTES:

1. SEE DETAIL STR-01 FOR STREET WIDTH AND R/W REQUIREMENTS. EXISTING ROAD SHALL BE IMPROVED ALONG THE ENTIRE FRONTAGE TO MEET THESE STANDARDS.
2. THIS STANDARD DOES NOT APPLY TO INTERSECTIONS WITHIN SUBDIVISIONS.
3. LEFT TURN LANE STORAGE AND TAPER LENGTHS SHALL BE DETERMINED BY GDOT "REGULATIONS FOR DRIVEWAY AND ENCROACHMENT CONTROL".



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

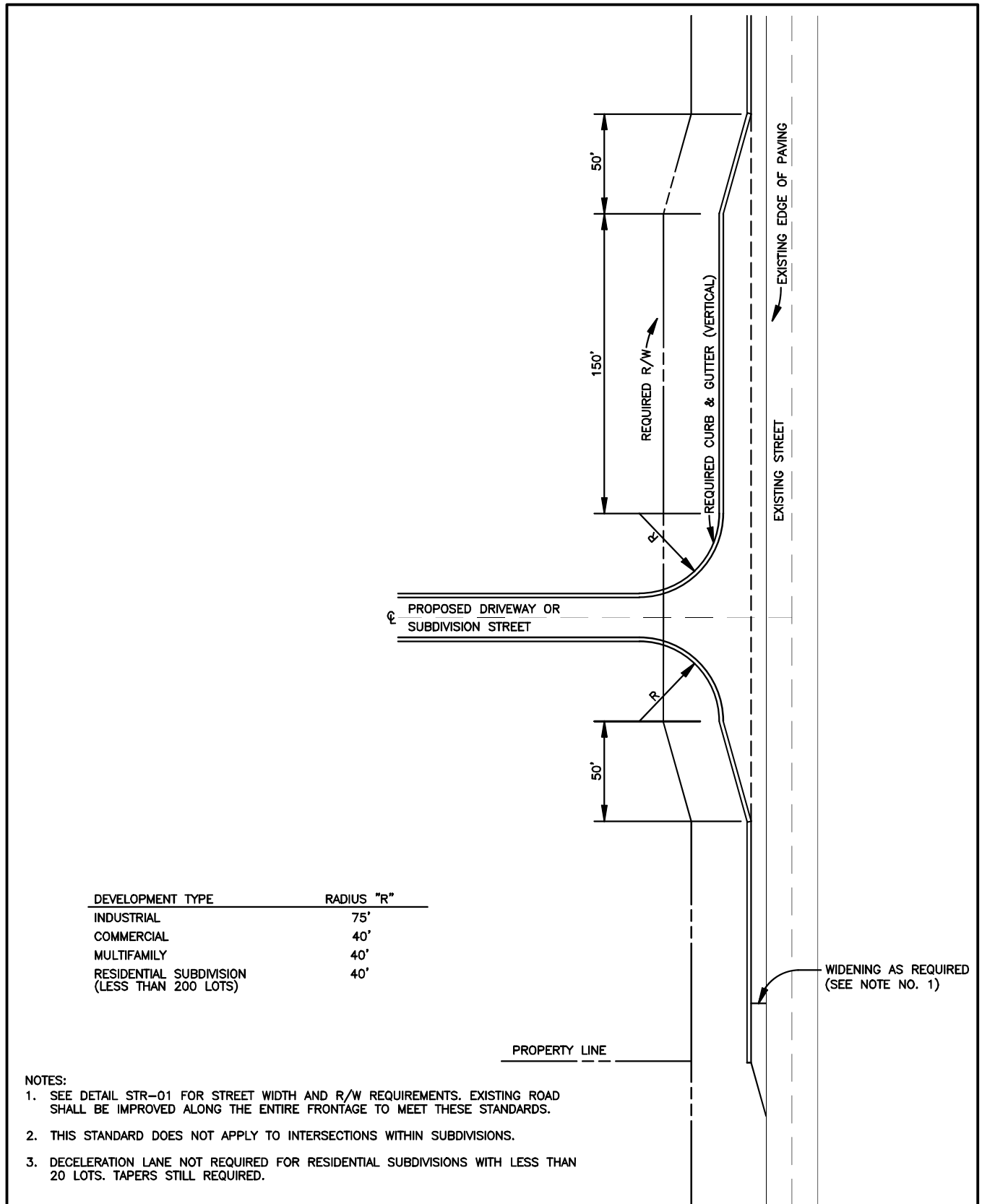
**SUBDIVISION ENTRANCE
 (RESIDENTIAL OVER 200 LOTS,
 COMMERCIAL, INDUSTRIAL)**

DRAWN BY: TGA

SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-15



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

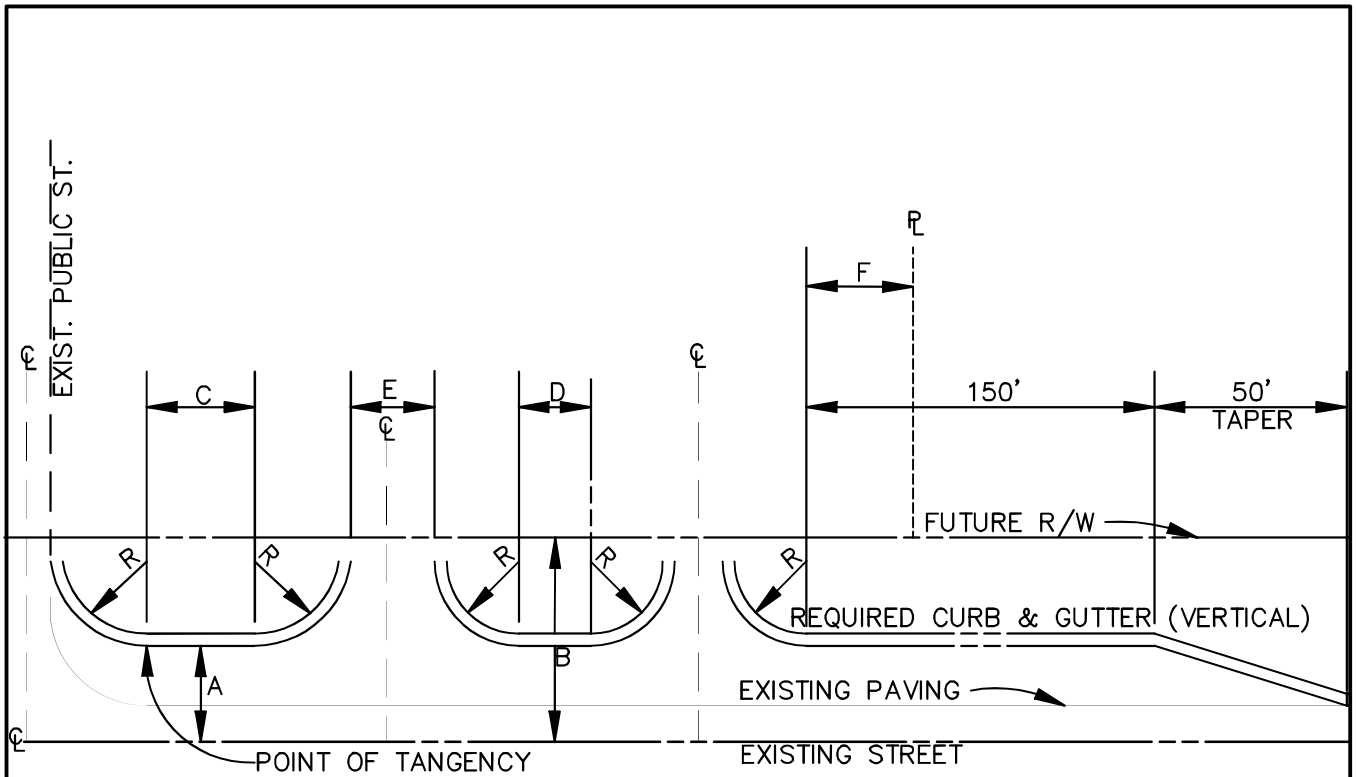
DEVELOPMENT ENTRANCE
 (COMMERCIAL, INDUSTRIAL, RESIDENTIAL
 SUBDIVISION LESS THAN 200 LOTS)

DRAWN BY: TGA

SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-16



EXISTING STREET CLASSIFICATION	RADII "R"	"A"	"B"	"C"	"D"	1-LANE "E"	2-LANE "E"	"F"
ARTERIAL	25'	24'+	50'+	50'	40'	14'-18'	24'-30'	20'+
MAJOR COLLECTOR	20'	24'	40'+	50'	40'	↓	↓	20'
MINOR COLLECTOR	15'	24'	30'+	50'	40'	↓	↓	20'
LOCAL	10'	20'	25'	40'	20'	↓	↓	15'

NOTE:

1. CURB AND GUTTER REQUIRED ON 50' TAPERS IF EXISTING STREET HAS CURB AND GUTTER

COMMERCIAL/INDUSTRIAL DRIVEWAY DETAIL



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

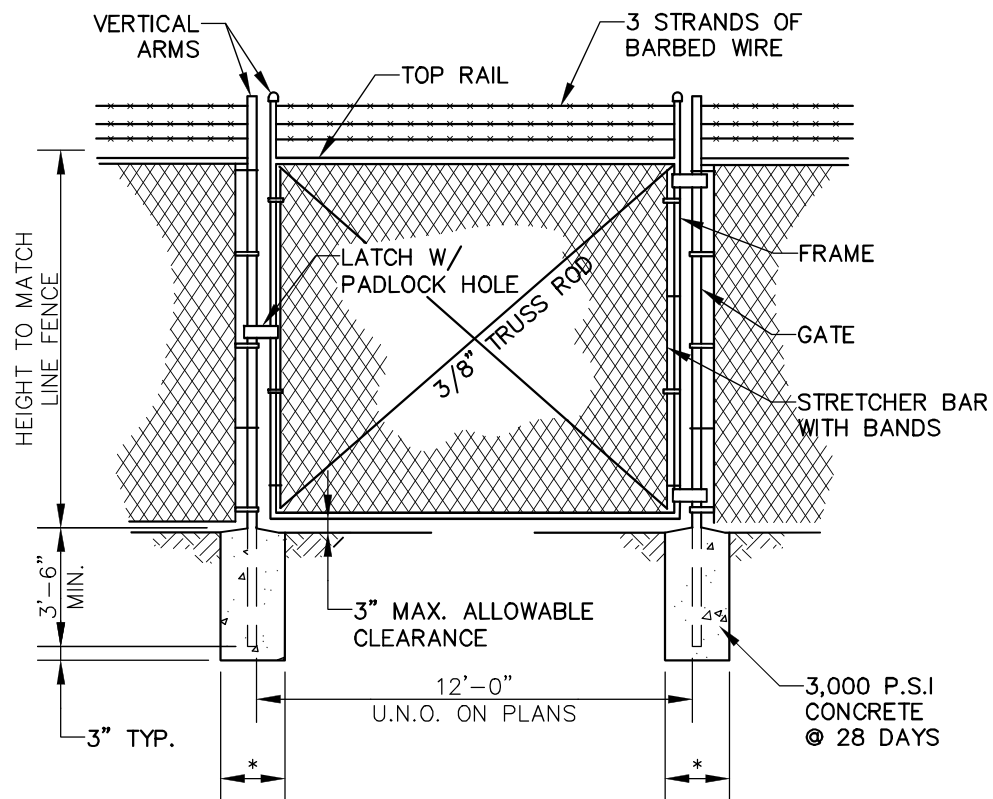
COMMERCIAL/INDUSTRIAL DRIVEWAY DETAIL

DRAWN BY: TGA

SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-17



* 4x POST O.D. 18" DIA. MINIMUM

CHAIN-LINK SINGLE LEAF GATE

NTS



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

CHAIN-LINK SINGLE LEAF GATE

DRAWN BY: TGA

SCALE: NTS

DATE: MARCH 31, 2016

DWG. NO.: STR-18

45° EXTENSION ARMS AT LINEPOST

1-5/8" O.D. TOP RAIL

2" MAX.

3 STRANDS BARBED WIRE 12 GAUGE

TOP OF FABRIC

LINE POST 2-3/8" O.D. 10' O.C.

2-7/8" O.D. CORNER, END, OR PULL POST

VERTICAL AT CORNER POSTS AND GATES

STRETCHER BAR

2 #7 GA. TENSION WIRES

HORIZONTAL BRACE RAIL

3/8" TRUSS BRACING

7 GA. TENSION WIRE

1/2" FABRIC HEIGHT

BOTTOM OF FENCE LINE

3" MAX. ALLOWABLE CLEARANCE

FINISHED GROUND LINE

3,000 P.S.I. CONCRETE @ 28 DAYS - TYP.

10'-0"

18" DIA.

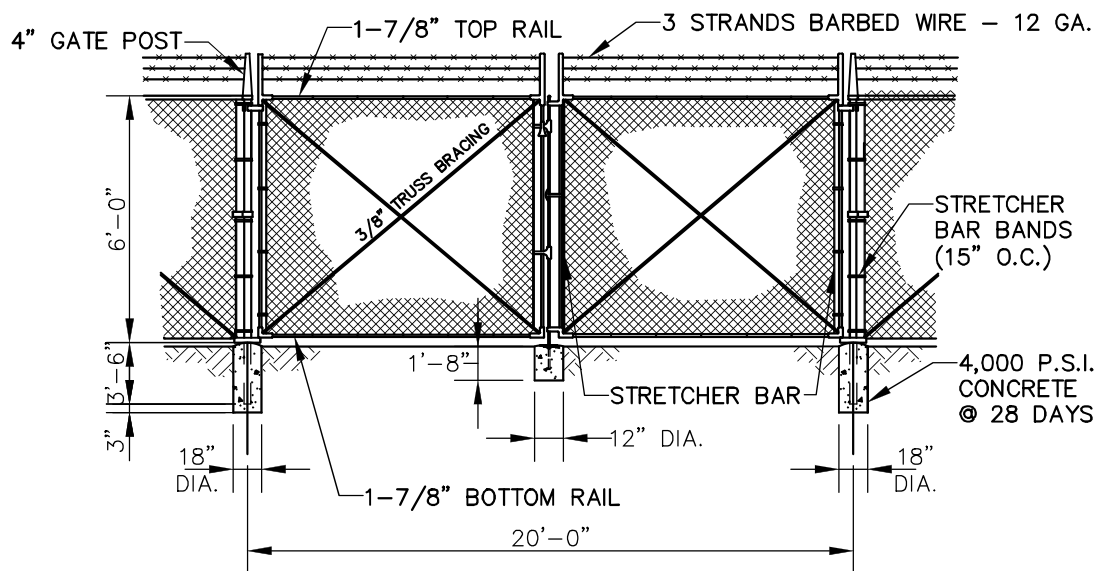
12" DIA.

3'-6" (MIN.) TYP.

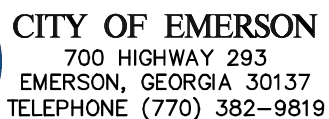
3" TYP.

CHAIN LINK FENCE

NTS



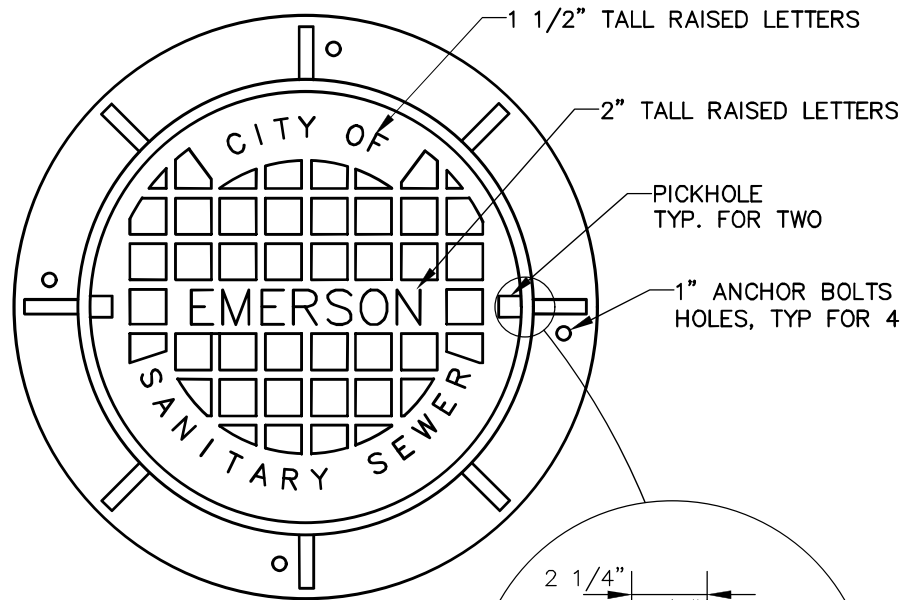
NTS



CHAIN-LINK FENCE WITH DOUBLE GATE

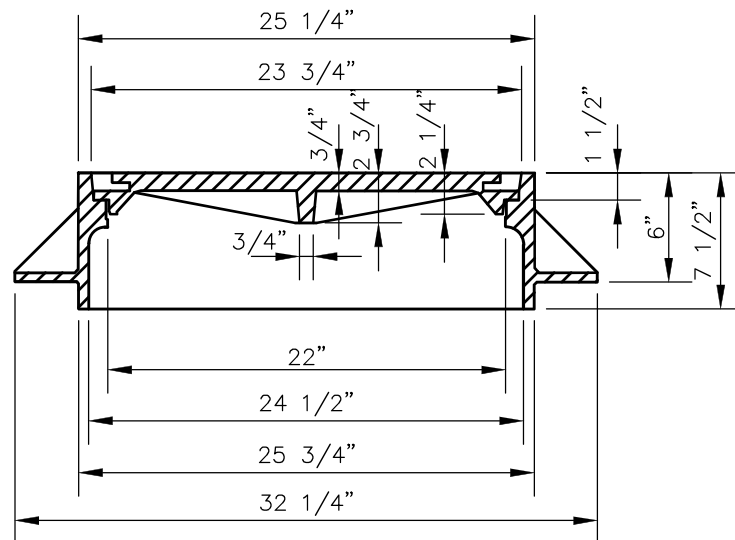
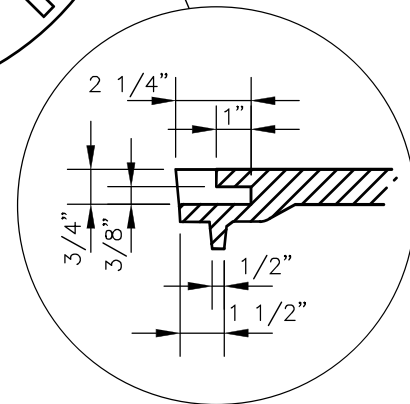
DWG. NO.: STR-19

GENERAL SEWER DETAILS



PLAN

NOTE:
WATERPROOF FRAME & COVER
DETAILS NOTE SHOWN, SEE
DRAWINGS FOR LOCATIONS



SECTIONAL VIEW



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

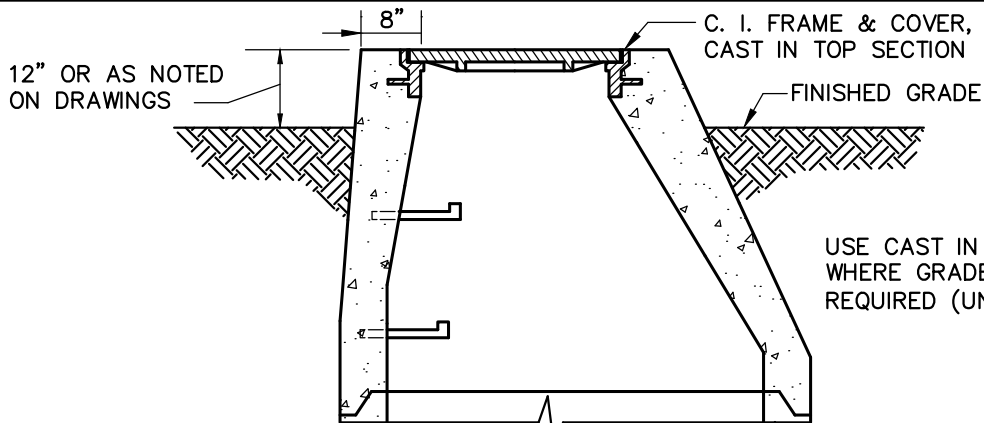
STANDARD MANHOLE FRAME & COVER

DRAWN BY: TGA

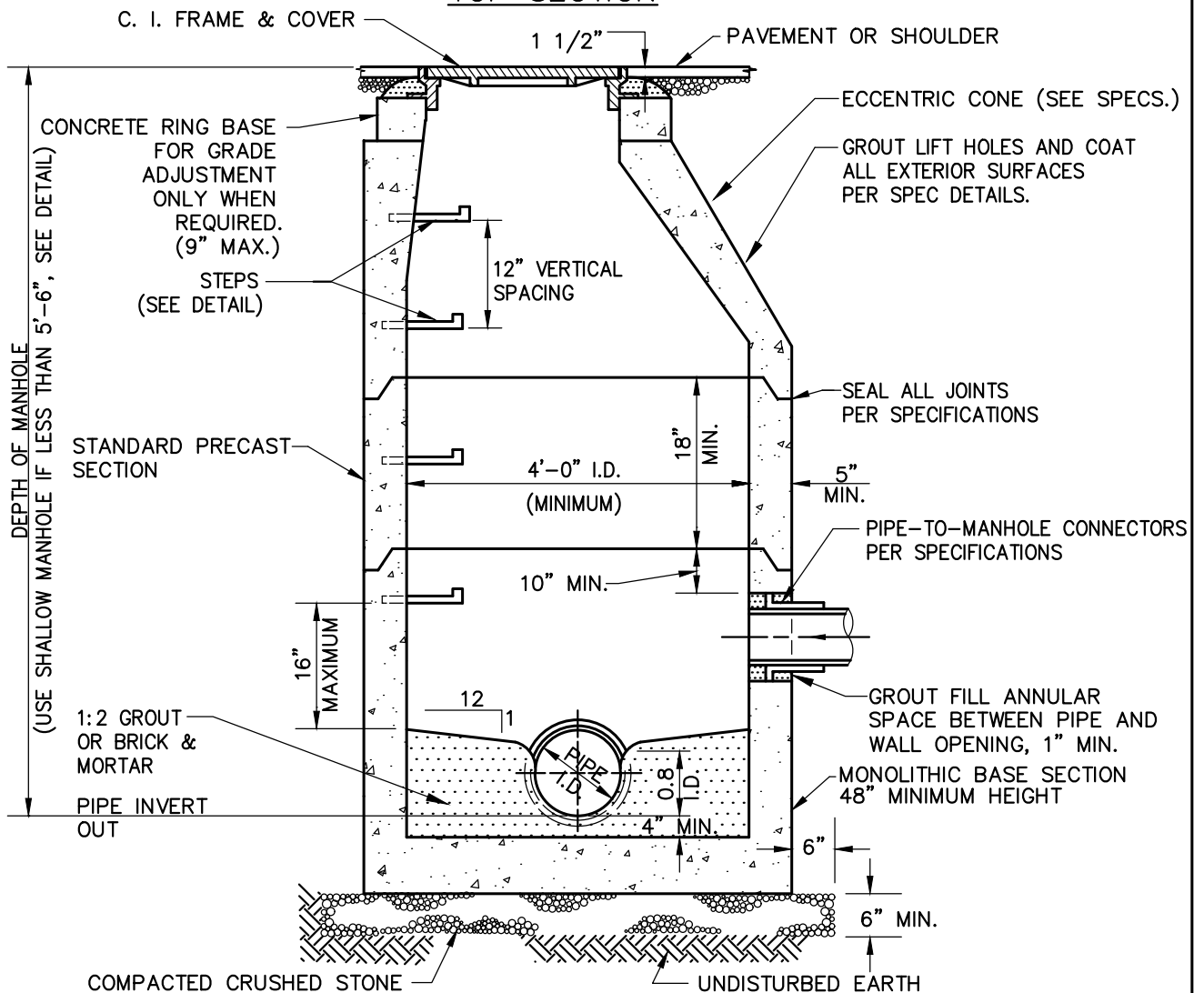
SCALE: NTS

DATE: OCTOBER 15, 2015

DWG. NO.: SEW-1



TOP SECTION



1	10/14/2022	JDC	REVISED STANDARD DIMENSIONS
NO.	DATE	BY	REVISION



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

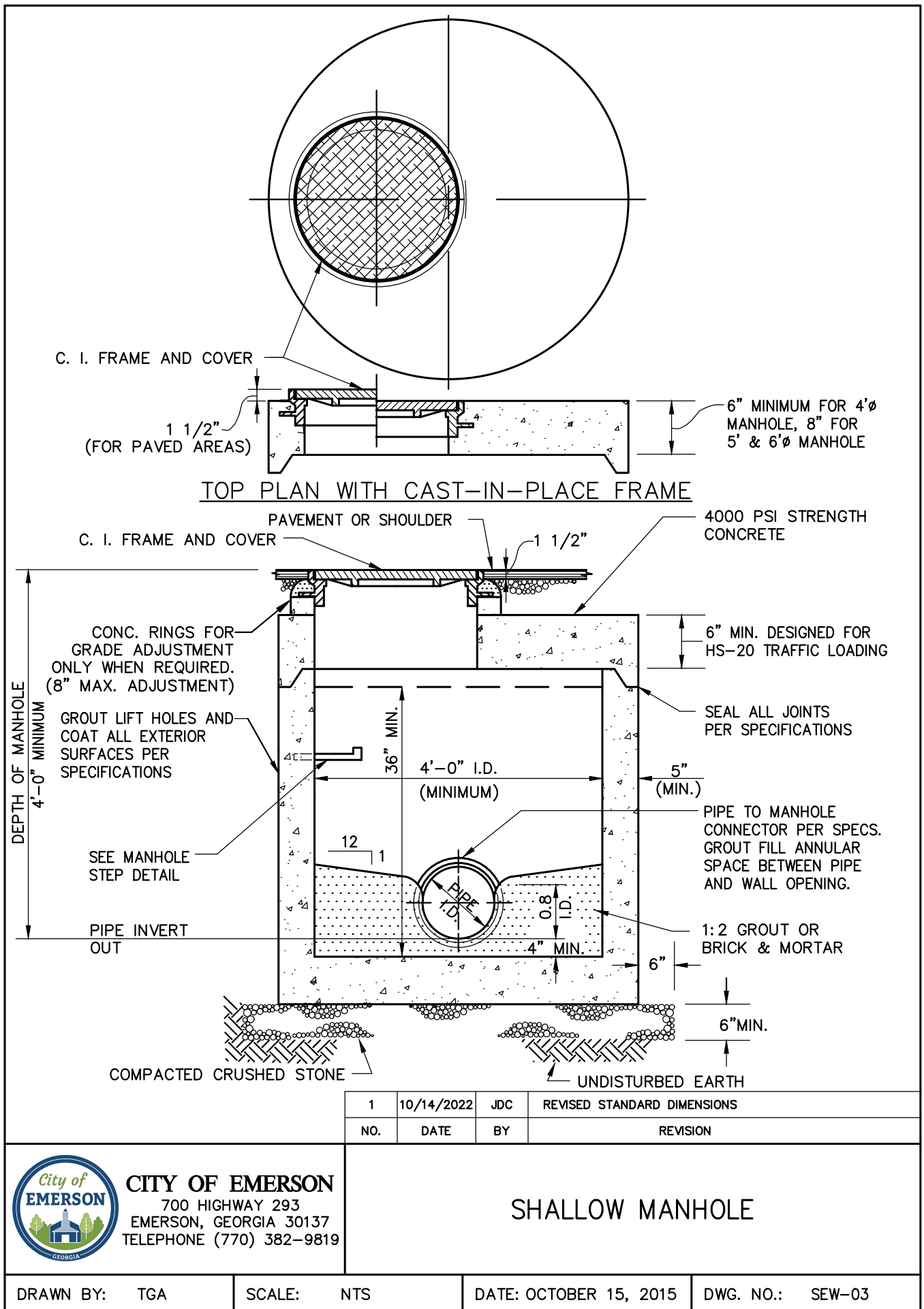
STANDARD PRECAST MANHOLE

DRAWN BY: TGA

SCALE: NTS

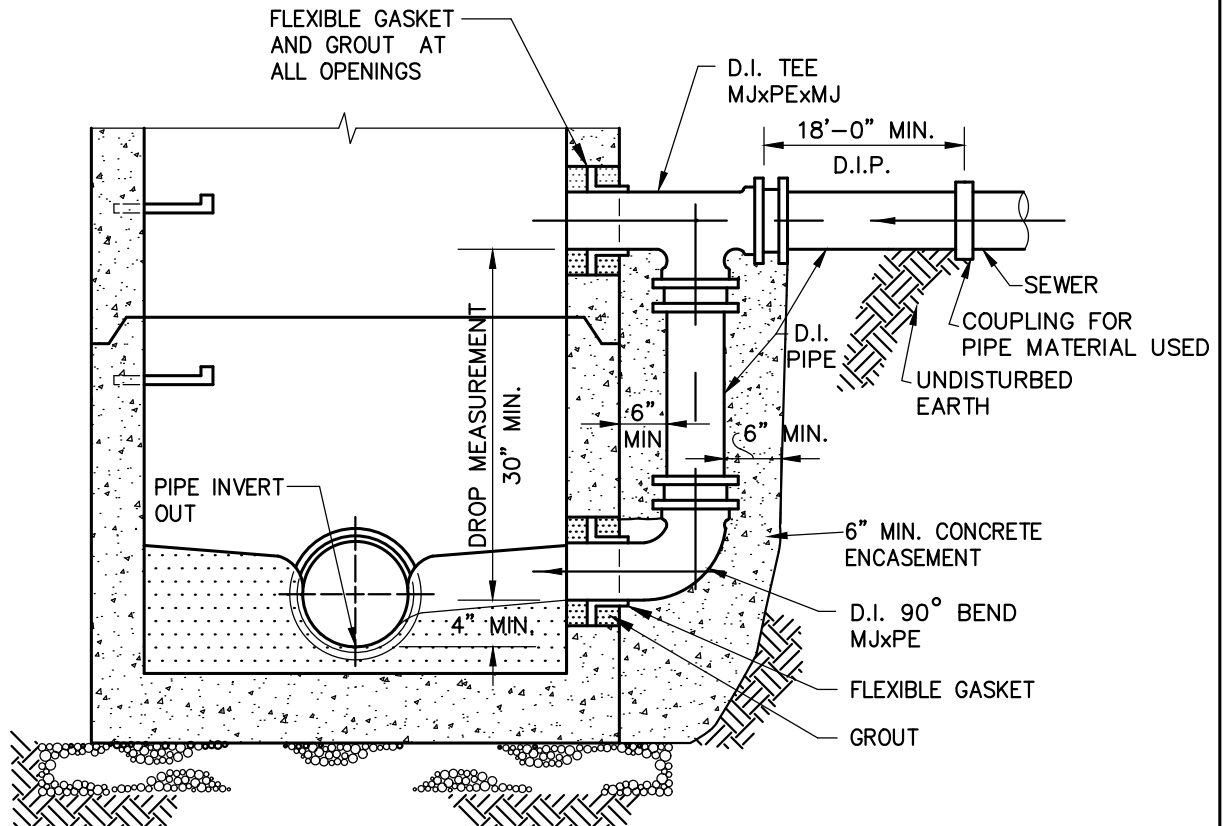
DATE: OCTOBER 15, 2015

DWG. NO.: SEW-02



NOTES

1. USE READY-MIX CONCRETE WITH 3,000 PSI STRENGTH @ 28 DAYS.
2. SEE STANDARD PRECAST MANHOLE DETAIL FOR TOP SECTION OF MANHOLE.



1	10/14/2022	JDC	REVISED STANDARD DIMENSIONS
NO.	DATE	BY	REVISION



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

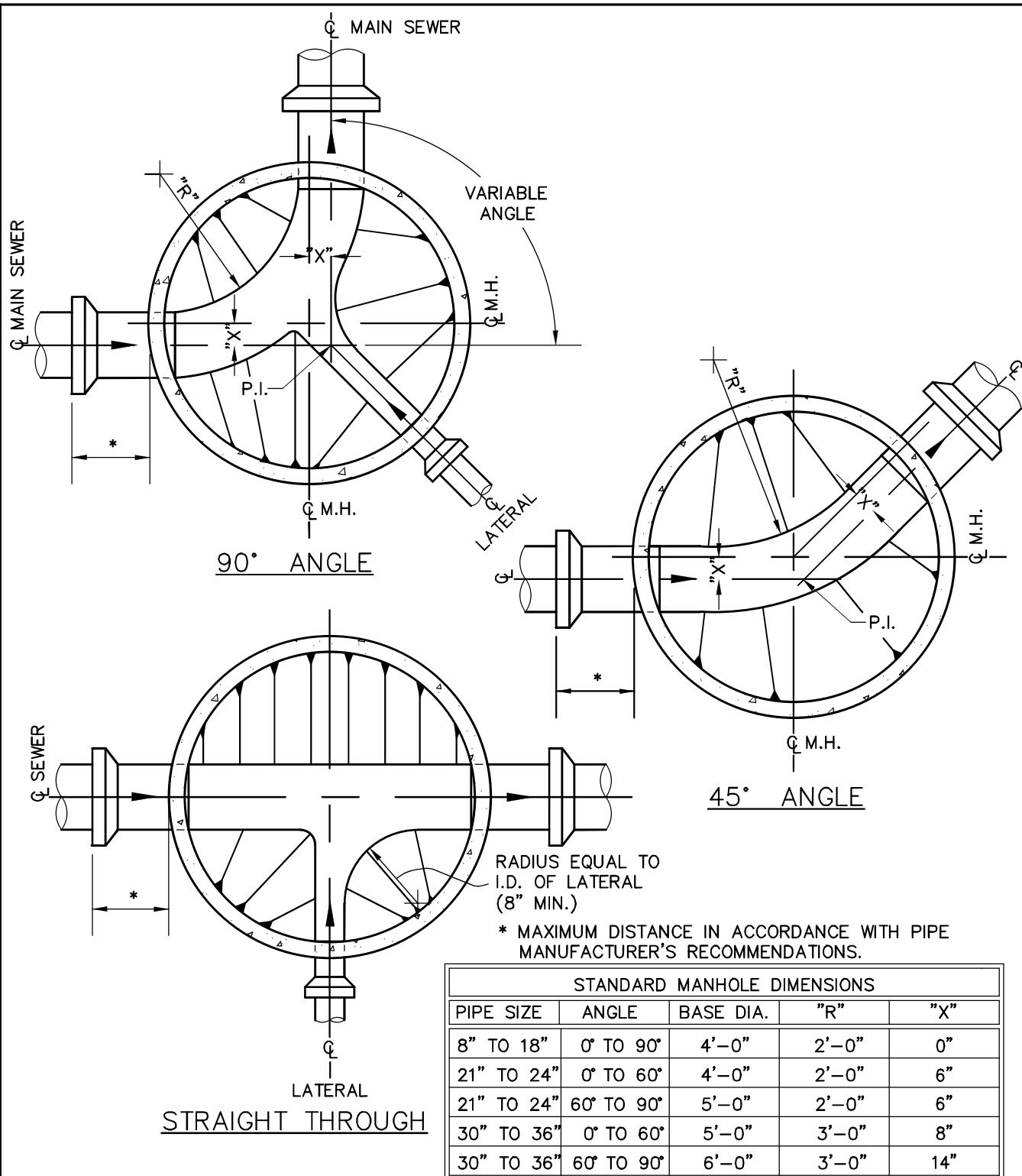
DROP CONNECTION

DRAWN BY: TGA

SCALE: NTS

DATE: OCTOBER 15, 2015

DWG. NO.: SEW-04



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

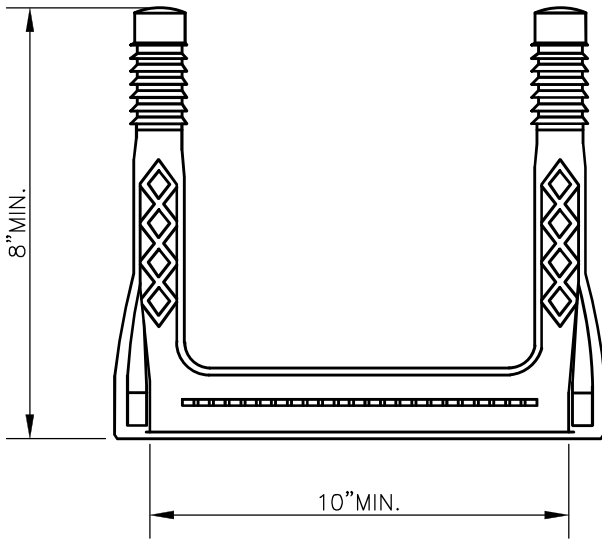
TYPICAL MANHOLE INVERT PLANS

DRAWN BY: TGA

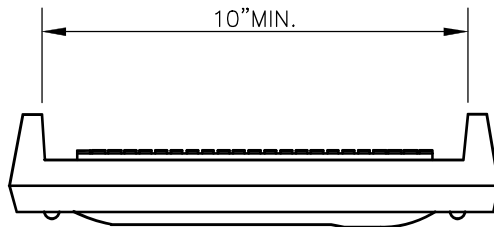
SCALE: NTS

DATE: OCTOBER 15, 2015

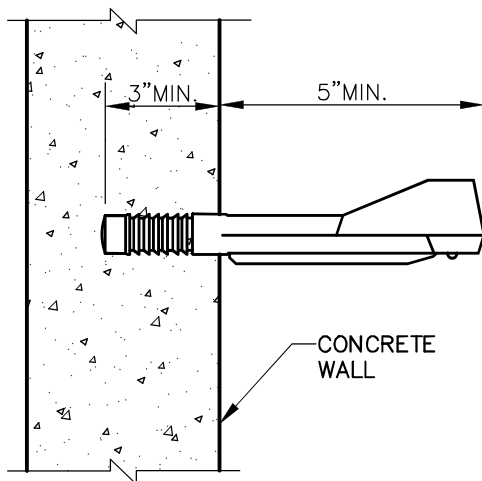
DWG. NO.: SEW-05



TOP PLAN



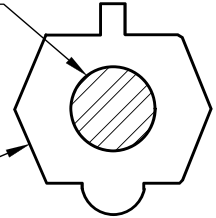
FRONT ELEVATION



SIDE ELEVATION

1/2" GRADE 60 STEEL
REINFORCING BAR
ASTM A615

POLYPROPYLENE
PLASTIC, ASTM
D4101



NOTES:

1. STEPS TO BE EQUAL TO ASTM C478.
2. STEPS MAY BE CAST IN PLACE OR DRIVEN INTO PREFORMED OR DRILLED HOLES IN CONCRETE. STEPS MUST EXCEED MINIMUM PULLOUT LOAD OF 1200 LBS.
3. STEPS SHALL BE SPACED VERTICALLY AT 12" O.C. AND ALIGNED VERTICALLY.



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

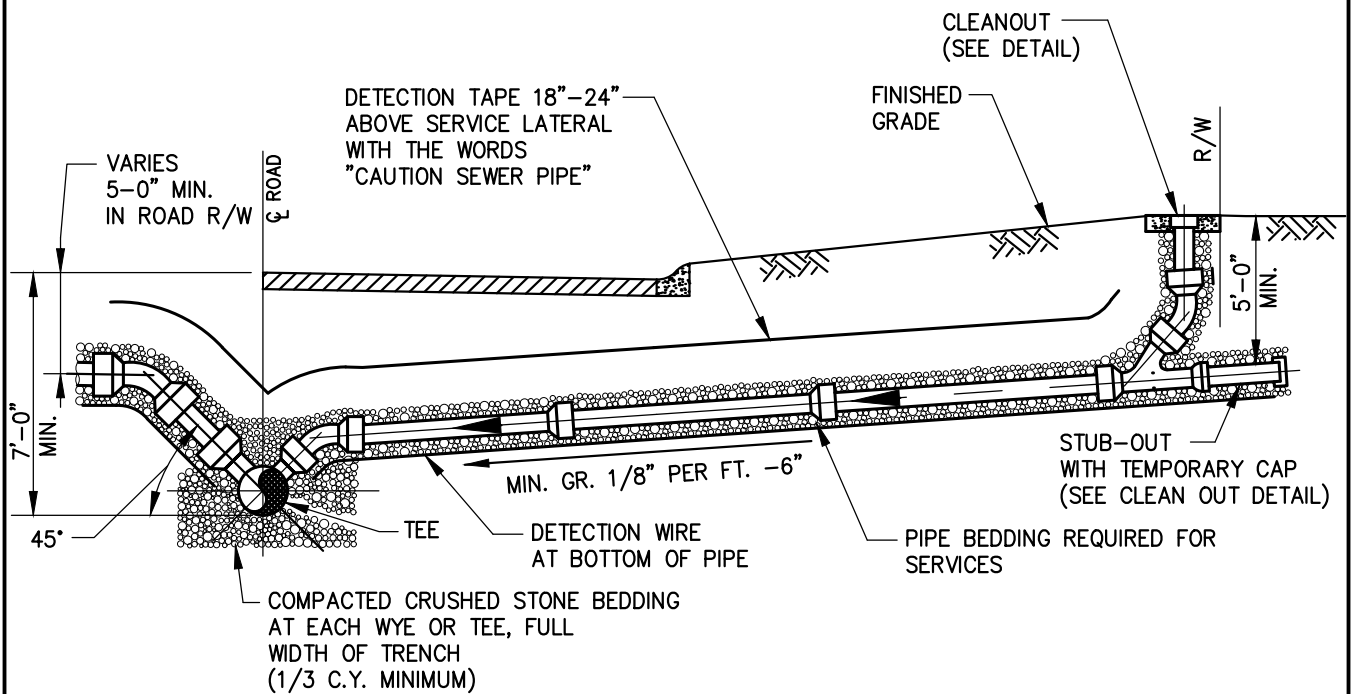
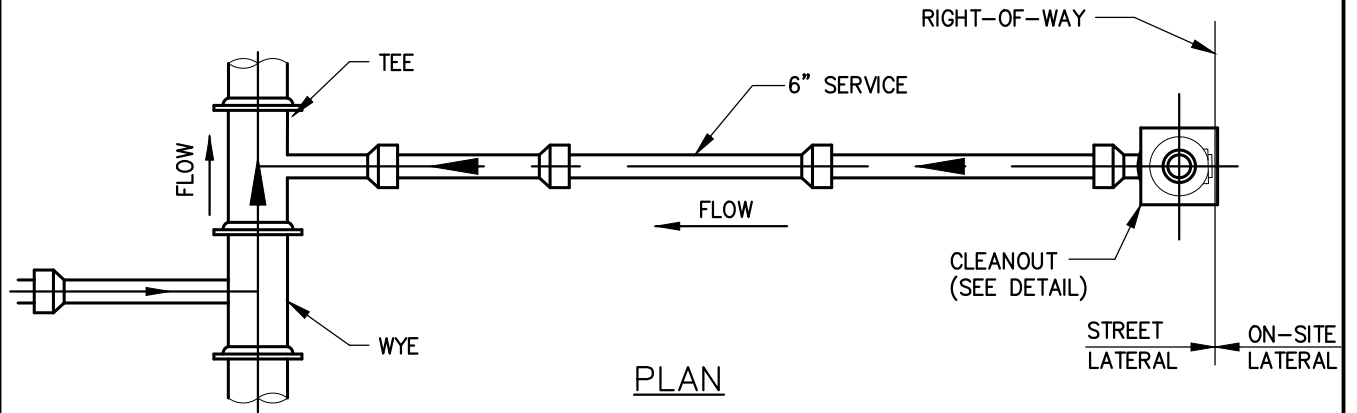
MANHOLE STEPS

DRAWN BY: TGA

SCALE: NTS

DATE: OCTOBER 15, 2015

DWG. NO.: SEW-06



NO.	DATE	BY	REVISION
1	10/14/2022	JDC	ADDED PIPE BEDDING & DELETED VERTICAL RISER



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

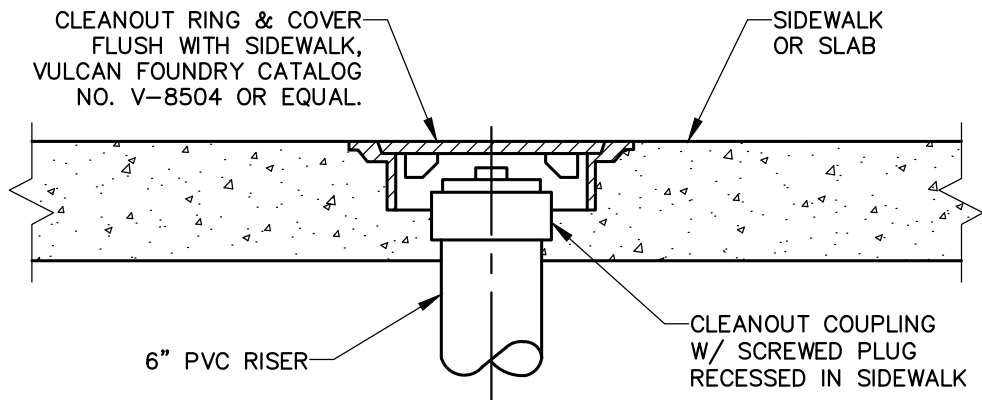
SERVICE LATERAL

DRAWN BY: TGA

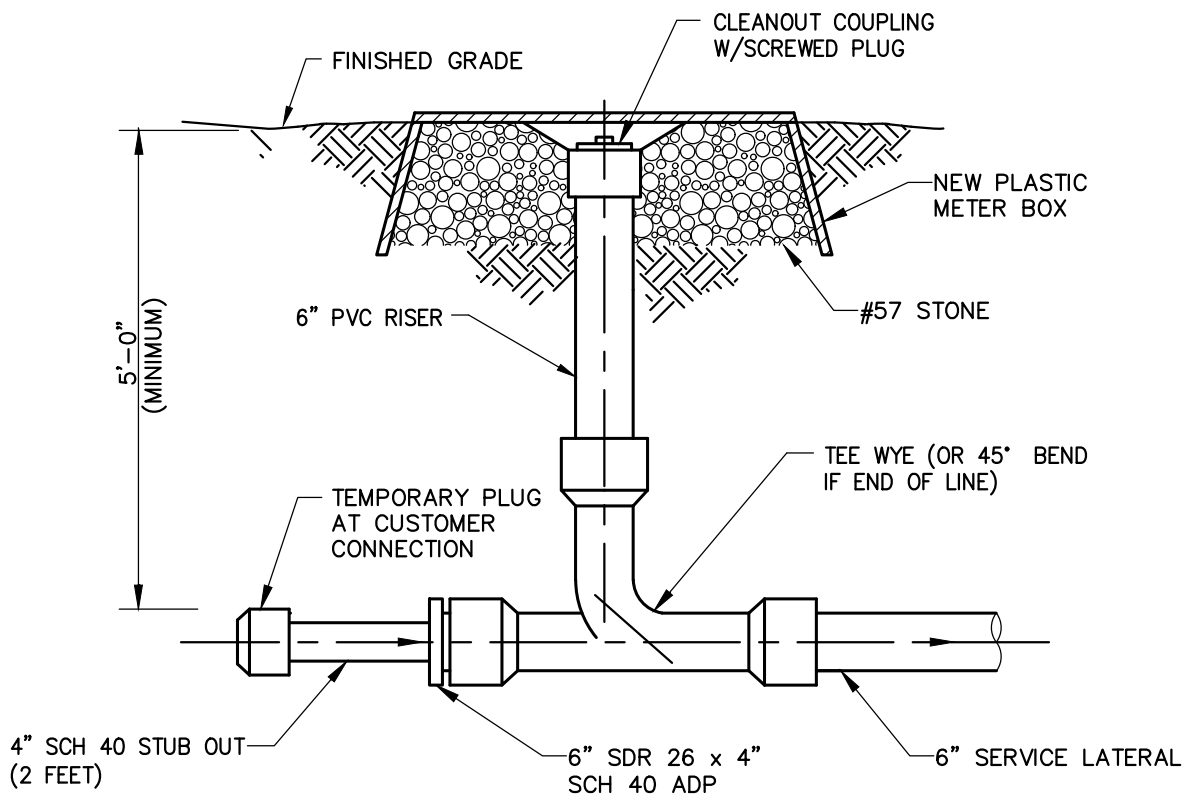
SCALE: NTS

DATE: OCTOBER 15, 2015

DWG. NO.: SEW-7



CLEANOUT IN SIDEWALK OR SLAB



CLEANOUT IN UNPAVED AREA

1	10/14/2022	JDC	INCREASED SIZE FROM 4" TO 6"
NO.	DATE	BY	REVISION



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

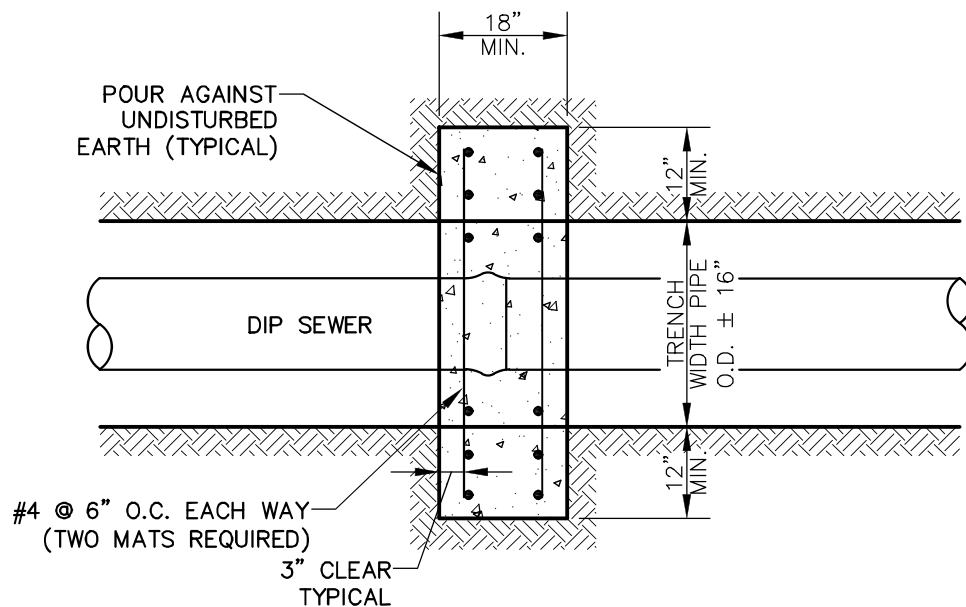
CLEANOUT

DRAWN BY: TGA

SCALE: NTS

DATE: OCTOBER 15, 2015

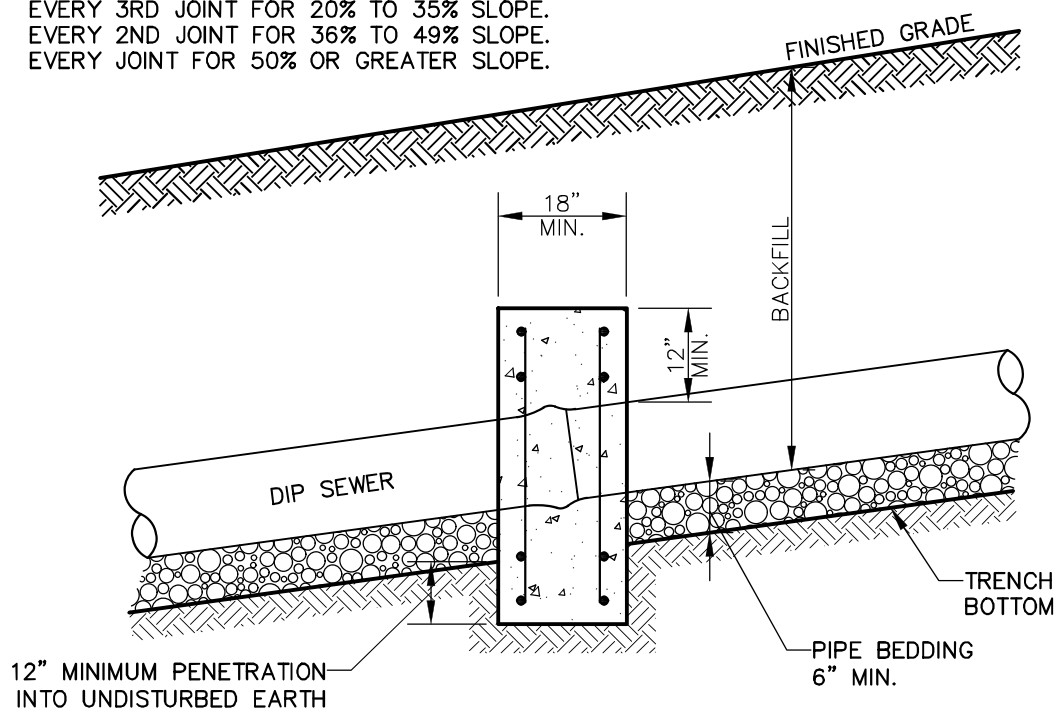
DWG. NO.: SEW-08



PLAN

NOTES:

1. FOR USE ON SEWERS WITH 20% OR GREATER SLOPES.
2. PLACE ANCHOR CENTERED ON PIPE JOINT.
3. ANCHOR SPACING:
EVERY 3RD JOINT FOR 20% TO 35% SLOPE.
EVERY 2ND JOINT FOR 36% TO 49% SLOPE.
EVERY JOINT FOR 50% OR GREATER SLOPE.



SECTION



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

SEWER PIPE ANCHOR

DRAWN BY: TGA

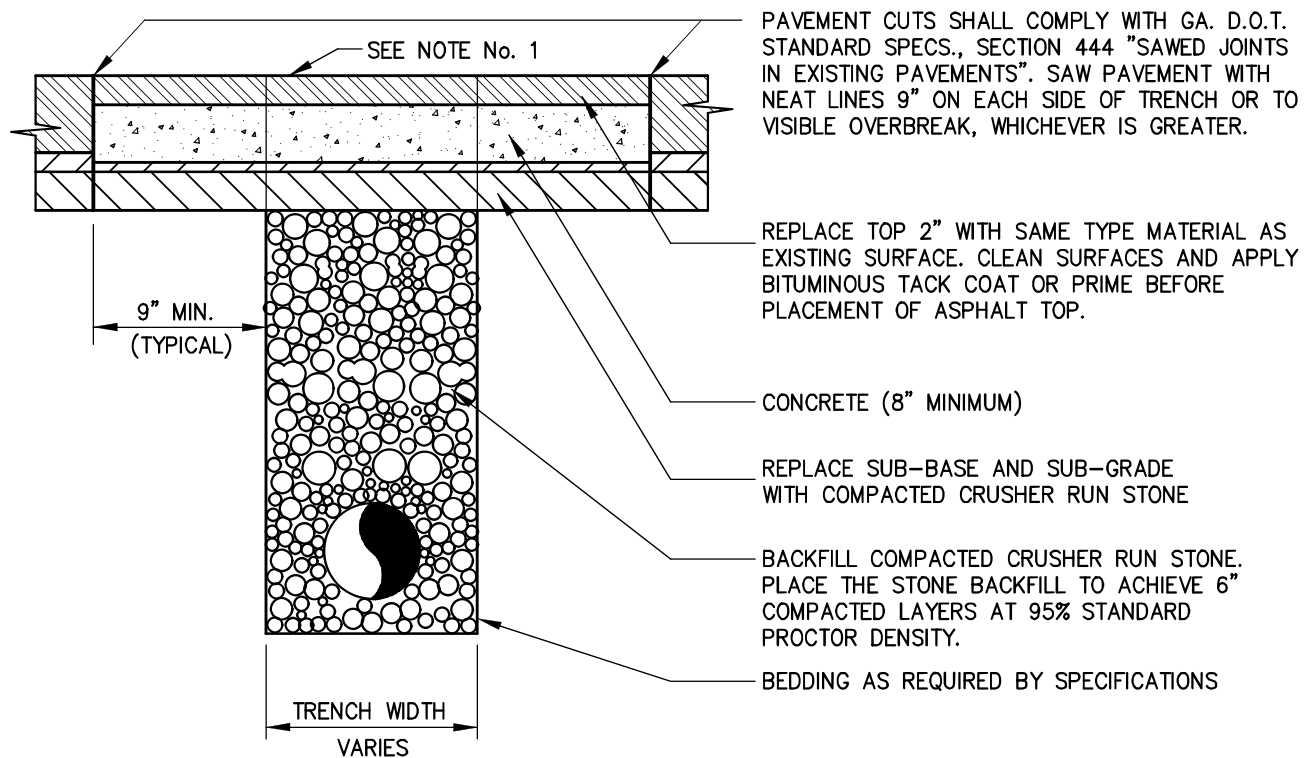
SCALE: NTS

DATE: OCTOBER 15, 2015

DWG. NO.: SEW-09

NOTES

1. COVER PAVEMENT CUTS WITH STEEL PLATES OF SUFFICIENT THICKNESS TO SPAN THE CUT AND SAFELY CARRY TRAFFIC WITHOUT NOTICEABLE DEFLECTION. PLATES SHALL REMAIN IN PLACE UNTIL THE CONCRETE BASE HAS GAINED SUFFICIENT STRENGTH TO WITHSTAND TRAFFIC LOADS (24 HOURS MINIMUM).
2. USE READY-MIX CONCRETE WITH 4,000 PSI STRENGTH @ 28 DAYS.
3. COMPLY WITH SPECIFIC REQUIREMENTS OF APPLICABLE DOT UTILITY ENCROACHMENT PERMITS.



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

PAVEMENT REPLACEMENT

DRAWN BY: TGA

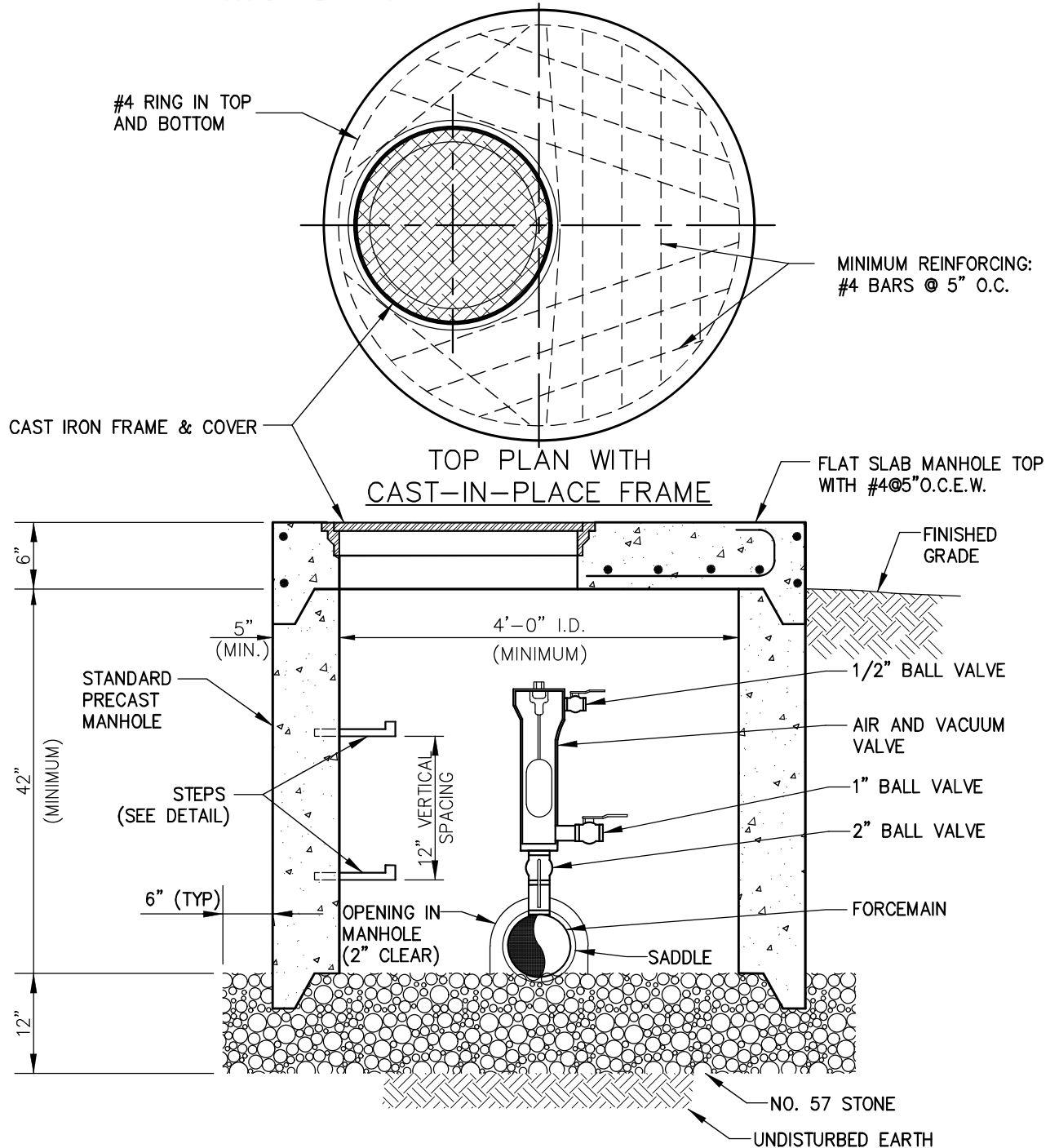
SCALE: NTS

DATE: OCTOBER 15, 2015

DWG. NO.: SEW-10

NOTES

1. USE READY-MIX CONCRETE WITH 3000 PSI STRENGTH @ 28 DAYS.
2. PROVIDE POSITIVE SLOPE AWAY FROM STRUCTURE.
3. USE VALMATIC MODEL 801BW AIR AND VACUUM VALVE OR APPROVED EQUAL.
4. POSITION VALVE IN MANHOLE TO BE EASILY ACCESSIBLE FOR MAINTENANCE. COORDINATE WITH CITY.



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

SANITARY AIR/VACUUM RELEASE VALVE

DRAWN BY: TGA

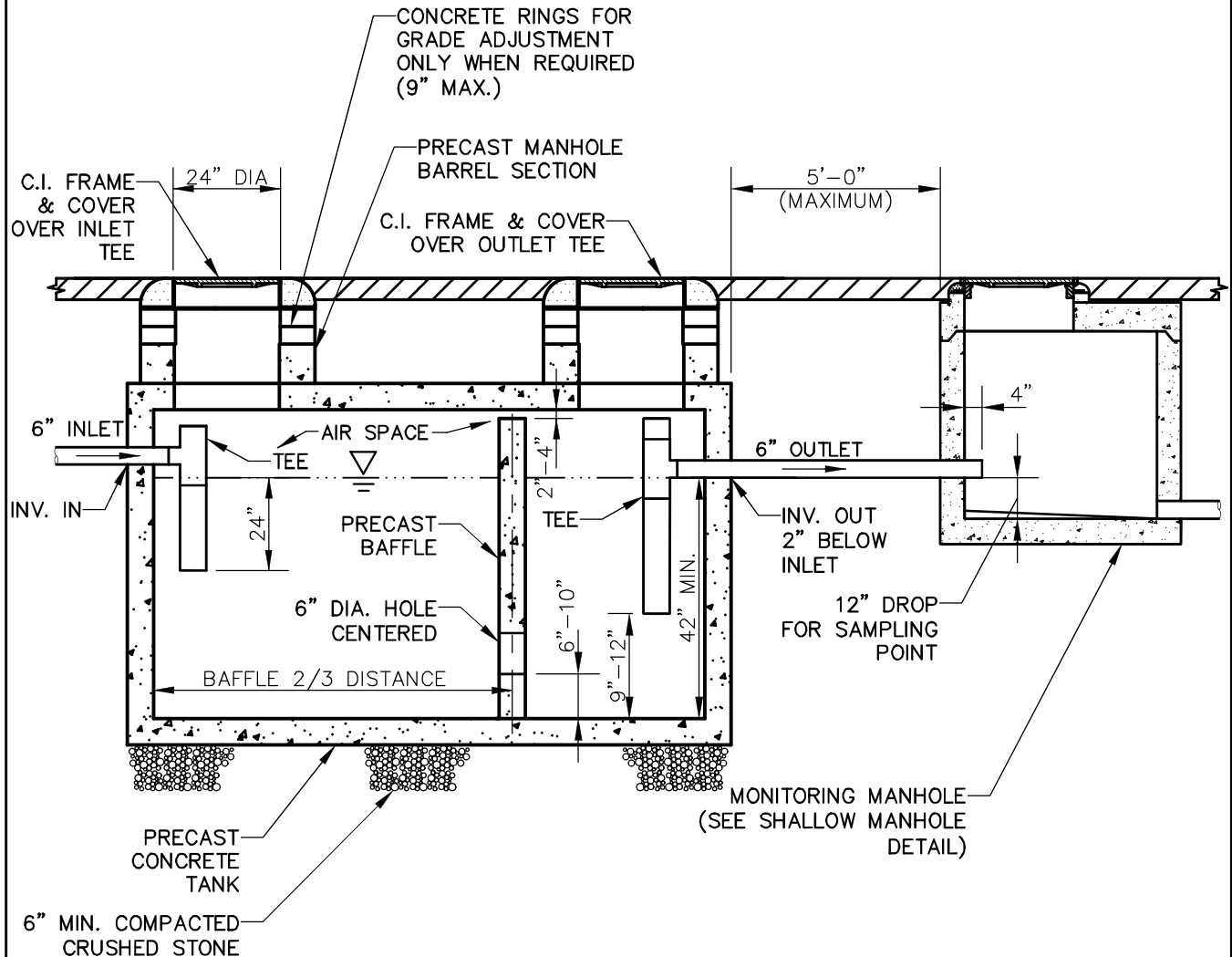
SCALE: NTS

DATE: OCTOBER 15, 2015

DWG. NO.: SEW-11

NOTES

1. GREASE TRAP TO BE SIZED BY ENGINEER. MINIMUM SIZE 750 GALLONS FOR FOOD SERVICE FACILITIES.
2. GREASE INTERCEPTOR TO BE DESIGNED IN ACCORDANCE WITH ASTM C1613.
3. PROVIDE MONITORING MANHOLE DOWNSTREAM OF INTERCEPTOR. PROVIDE 120V AC POWER SOURCE.



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

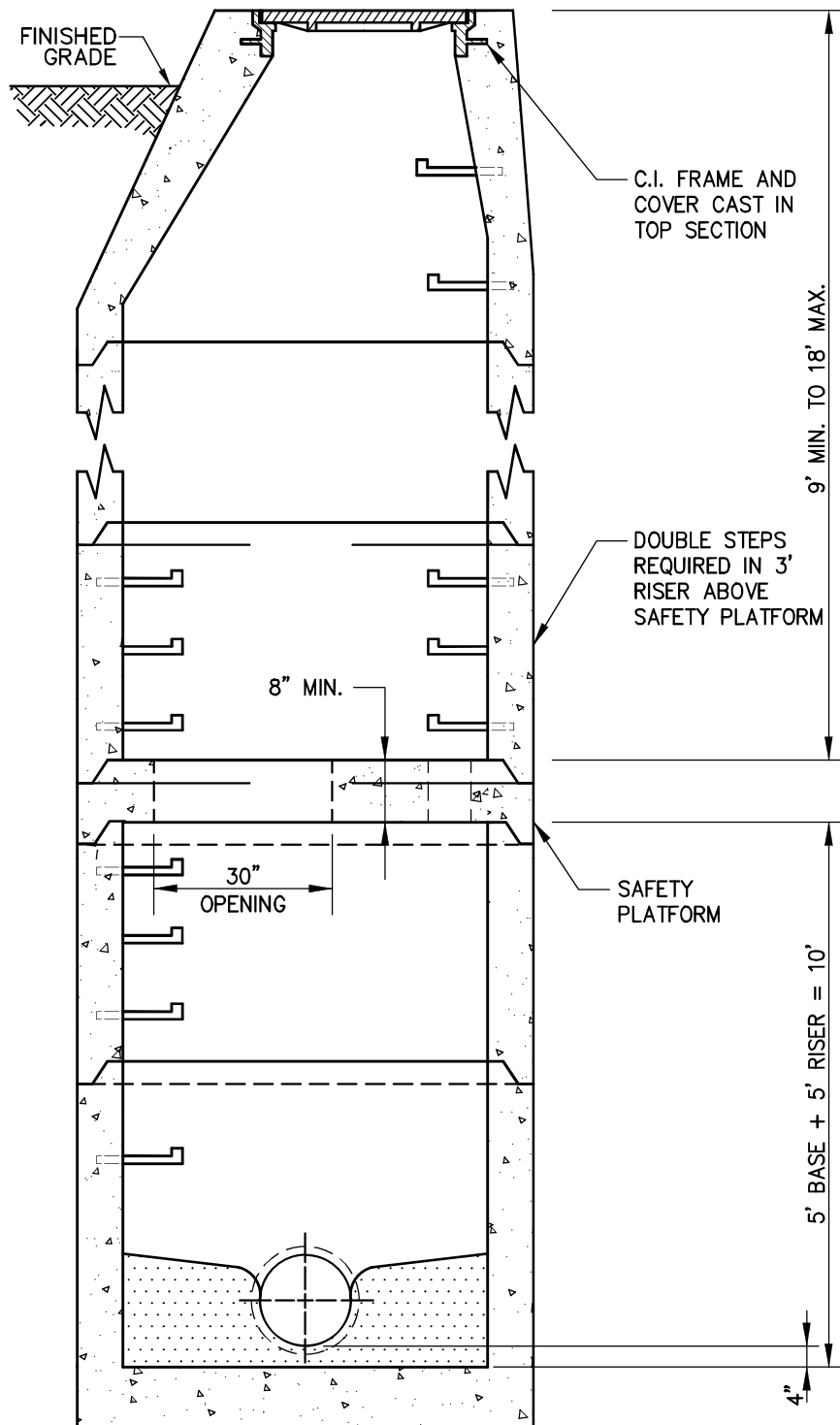
GREASE INTERCEPTOR

DRAWN BY: TGA

SCALE: NTS

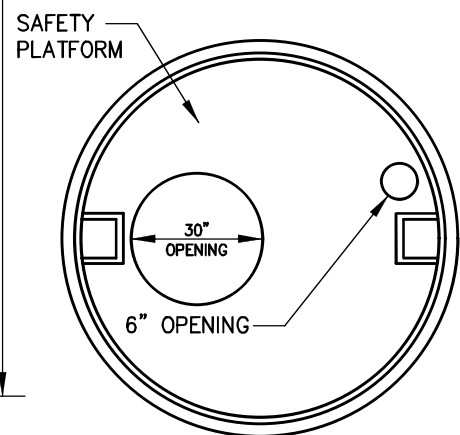
DATE: OCTOBER 15, 2015

DWG. NO.: SEW-12



NOTES

1. SEE STANDARD PRECAST MANHOLE FOR TYPICAL DETAILS.
2. FOR MANHOLES 17.33 FEET OR GREATER IN DEPTH.



NO.	DATE	BY	REVISION
-----	------	----	----------



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

MANHOLE WITH SAFETY PLATFORM

DRAWN BY: JCP

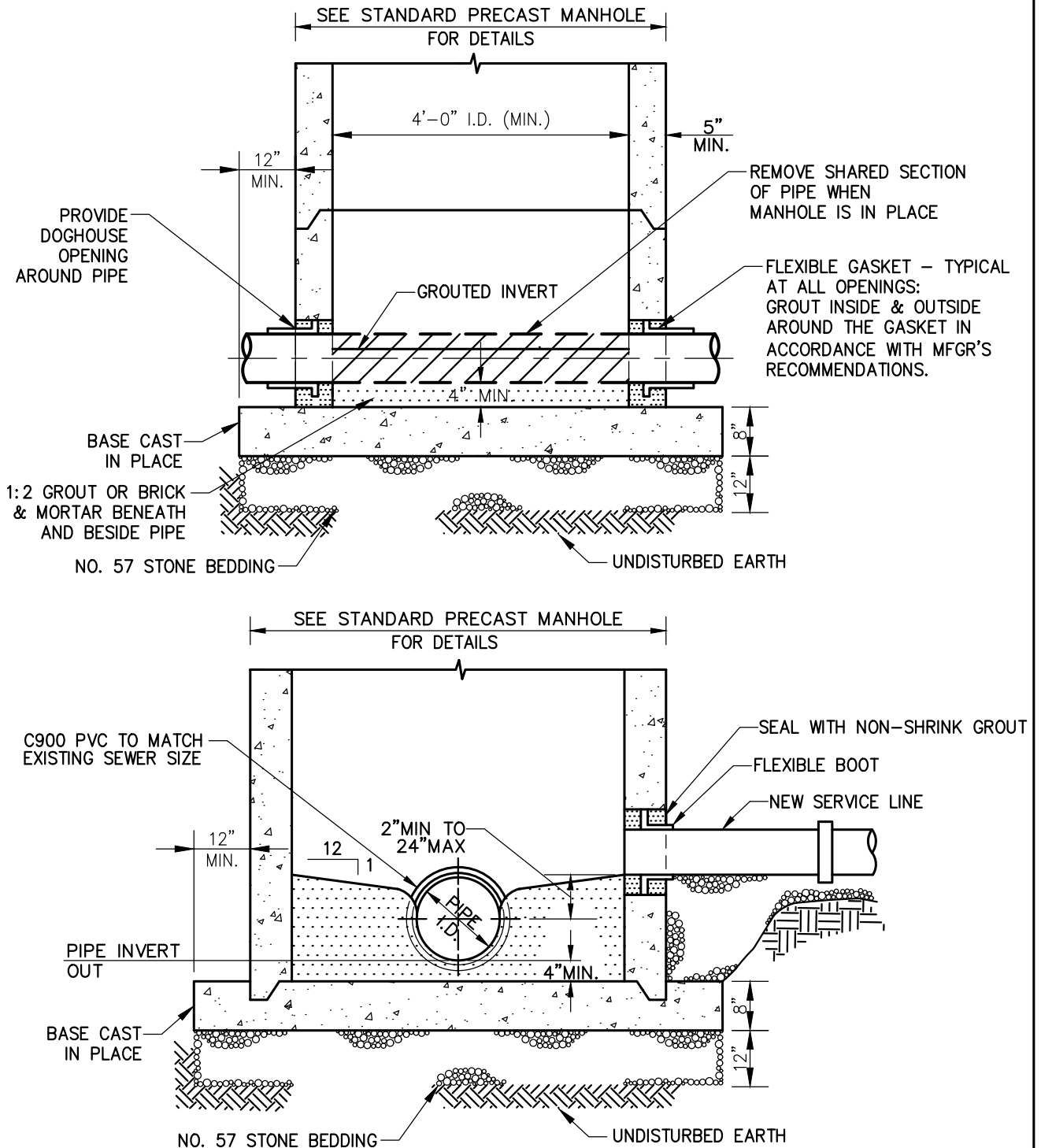
SCALE: NTS

DATE: AUG. 11, 2022

DWG. NO.: SEW-13

NOTES

1. DOGHOUSE OPENING CAREFULLY GROUTED WITH NON-SHRINK GROUT.
2. TABLES TO BE CONSTRUCTED WITH SOLID MASONRY.
3. TOP HALF OF PIPE SHALL NOT BE REMOVED UNTIL AUTHORIZED BY CITY INSPECTOR.



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

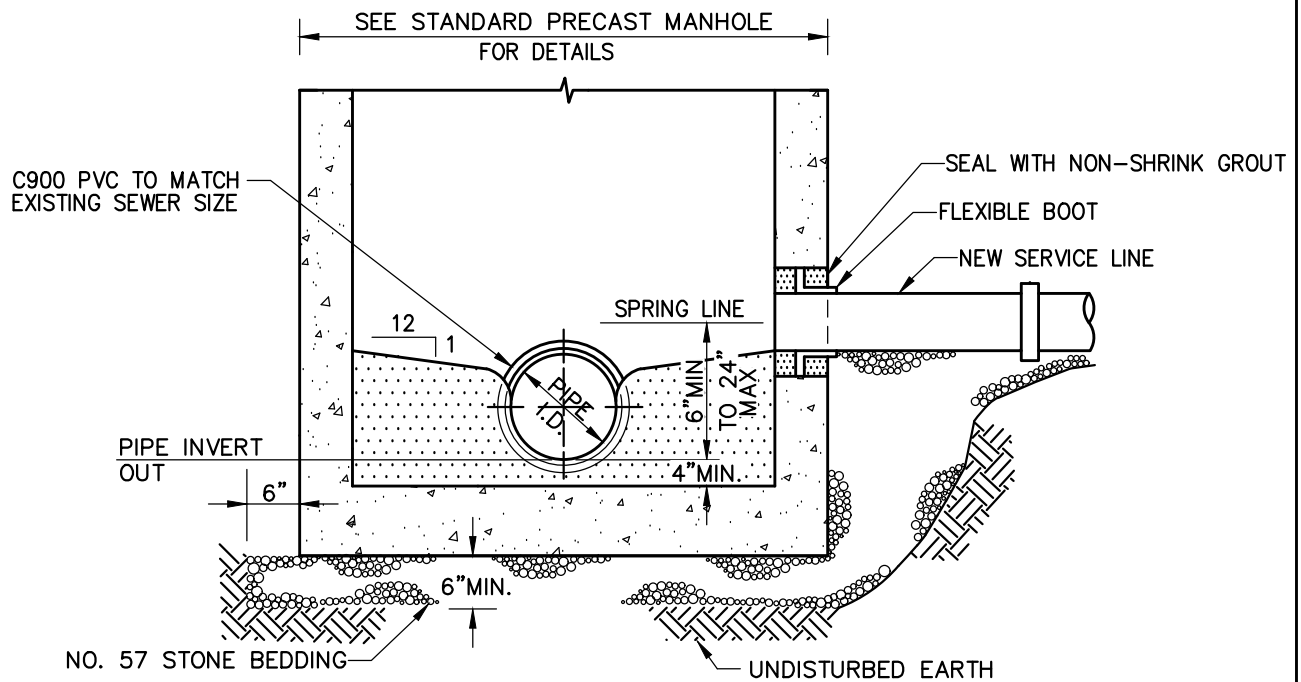
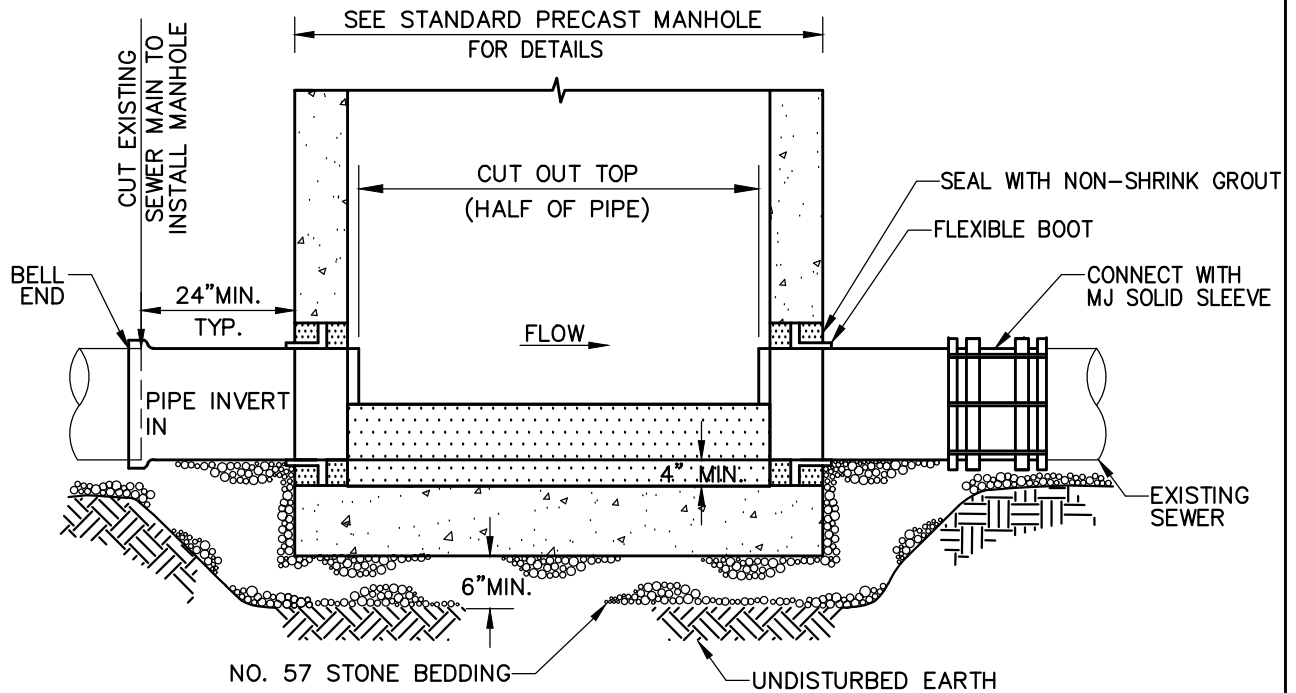
DOGHOUSE MANHOLE

DRAWN BY: YKP

SCALE: NTS

DATE: APRIL 10, 2023

DWG. NO.: SEW-14



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

CUT IN MANHOLE

DRAWN BY: YKP

SCALE: NTS

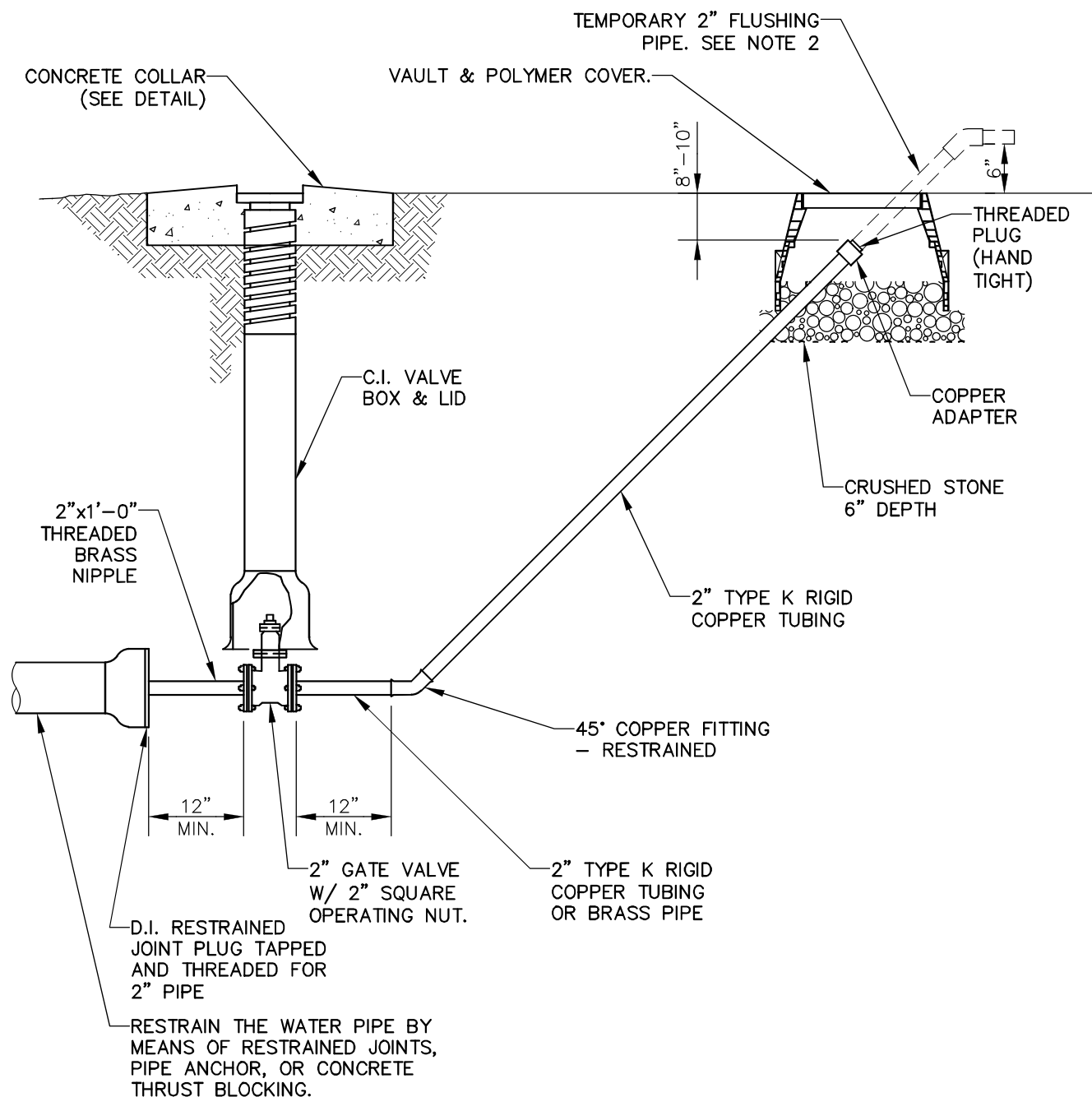
DATE: APRIL 10, 2023

DWG. NO.: SEW-15

GENERAL WATER DETAILS

NOTES

1. THREADED BRASS PIPING MAY BE SUBSTITUTED IN PLACE OF COPPER TUBING.
2. PROVIDE TEMPORARY PIPING FOR FLUSHING
ARRANGE PIPING WITH 6" MIN. AIR GAP TO PREVENT BACK SIPHONING.



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

2" BLOW OFF ASSEMBLY

DRAWN BY: TGA

SCALE: NTS

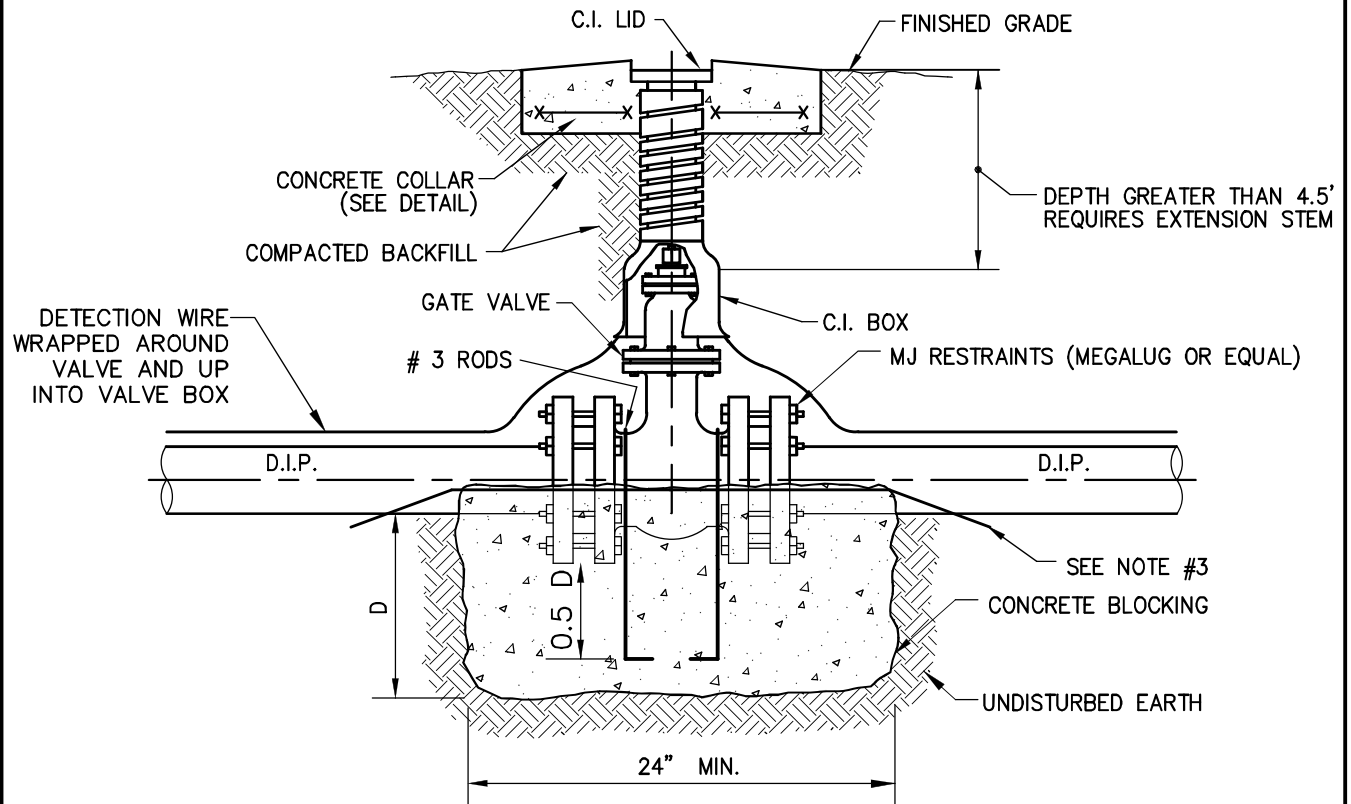
DATE: DECEMBER 9, 2015

DWG. NO.: WAT-01

NOTES

1. USE READY-MIX CONCRETE WITH 3,000 PSI STRENGTH @ 28 DAYS.
2. PLACE CONCRETE BEARING SURFACES AGAINST UNDISTURBED EARTH.
3. PROVIDE 10 MIL. PLASTIC MEMBRANE WRAP BETWEEN VALVE AND CONCRETE TO PROTECT JOINTS & JOINT ACCESSORIES.
4. USE DUCTILE IRON PIPE 5 FEET (MIN.) ON EACH SIDE OF A CUT IN VALVE ON PVC OR AC MAIN.

VALVE SIZE	DEPTH "D"	VOLUME
6"	6"	0.10 CY
8"	9"	0.18 CY
10"	12"	0.25 CY
12"	24"	0.50 CY



SECTION



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

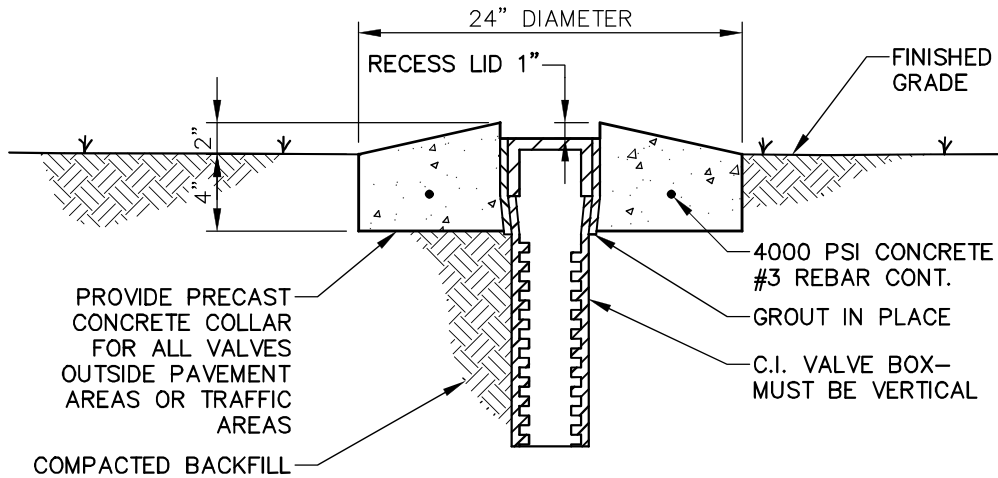
GATE VALVE

DRAWN BY: TGA

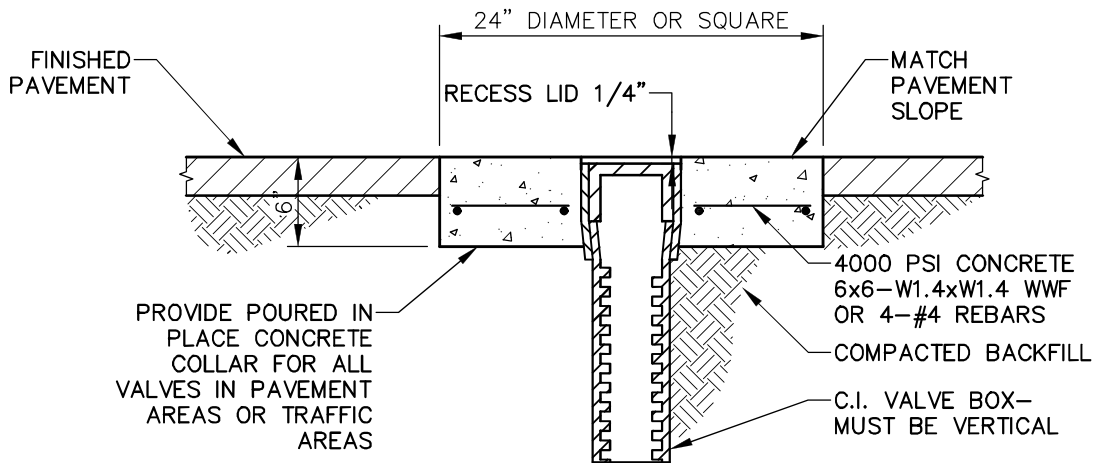
SCALE: NTS

DATE: DECEMBER 9, 2015

DWG. NO.: WAT-02



IN NON-TRAFFIC AREAS



IN TRAFFIC OR PAVEMENT AREAS



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

CONCRETE COLLAR FOR WATER VALVES

DRAWN BY: TGA

SCALE: NTS

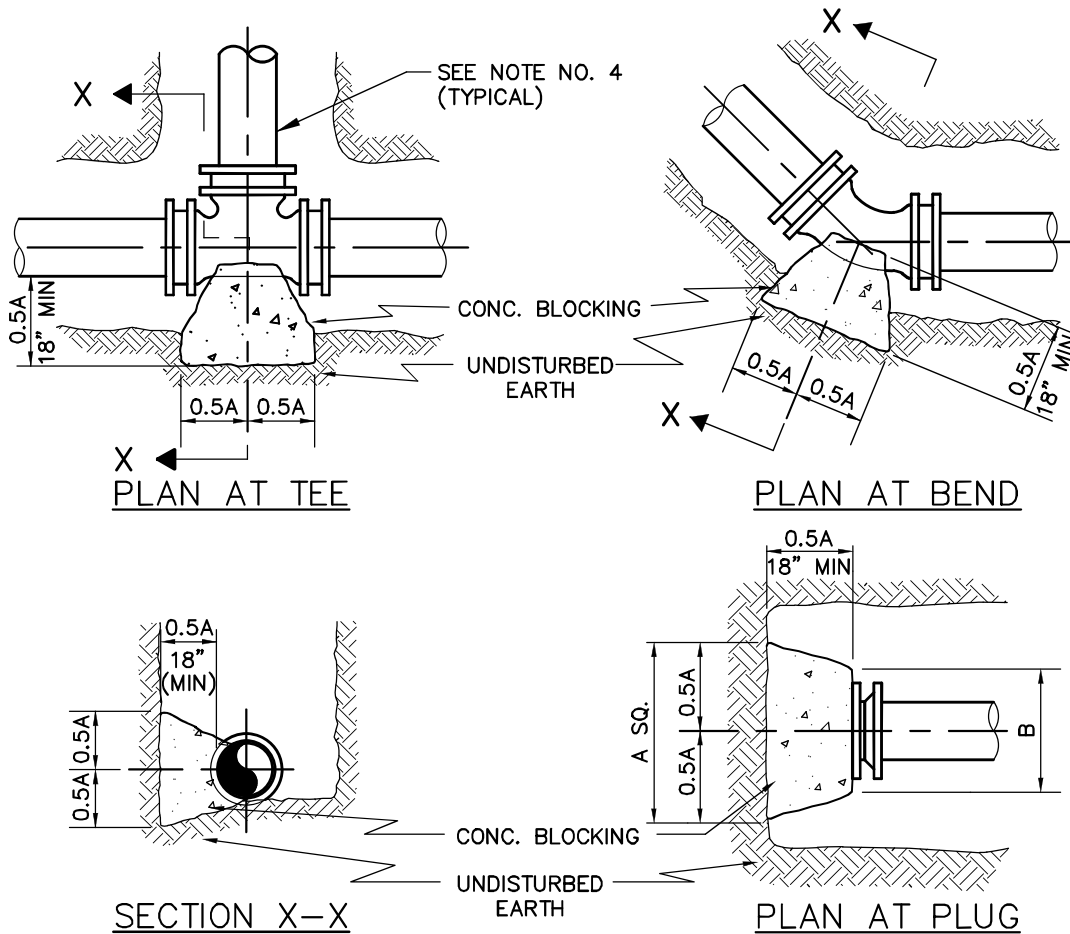
DATE: DECEMBER 9, 2015

DWG. NO.: WAT-03

NOTES

1. USE READY-MIX CONCRETE WITH 3,000 PSI STRENGTH @ 28 DAYS.
2. PLACE CONCRETE BEARING SURFACES AGAINST UNDISTURBED EARTH.
3. PLACE CONCRETE CLEAR OF JOINT AND JOINT ACCESSORIES OR PROVIDE 10 MIL. PLASTIC WRAP BETWEEN JOINT AND CONCRETE.
4. PROVIDE 5' SECTION OF DIP ON EACH SIDE OF BEND AT TIE IN TO PVC OR AC PIPE.

FITTING DIAMETER	90° BEND A	45° BEND A	22.5° BEND A	11.25° BEND A	TEES A	PLUGS A B	
4"	15"	12"	12"	12"	12"	12"	10"
6"	20"	16"	12"	12"	18"	18"	12"
8"	30"	20"	15"	12"	24"	24"	12"
12"	40"	32"	20"	16"	36"	36"	16"
16"	64"	42"	32"	20"	48"	48"	20"



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

THRUST BLOCKING

DRAWN BY: TGA

SCALE: NTS

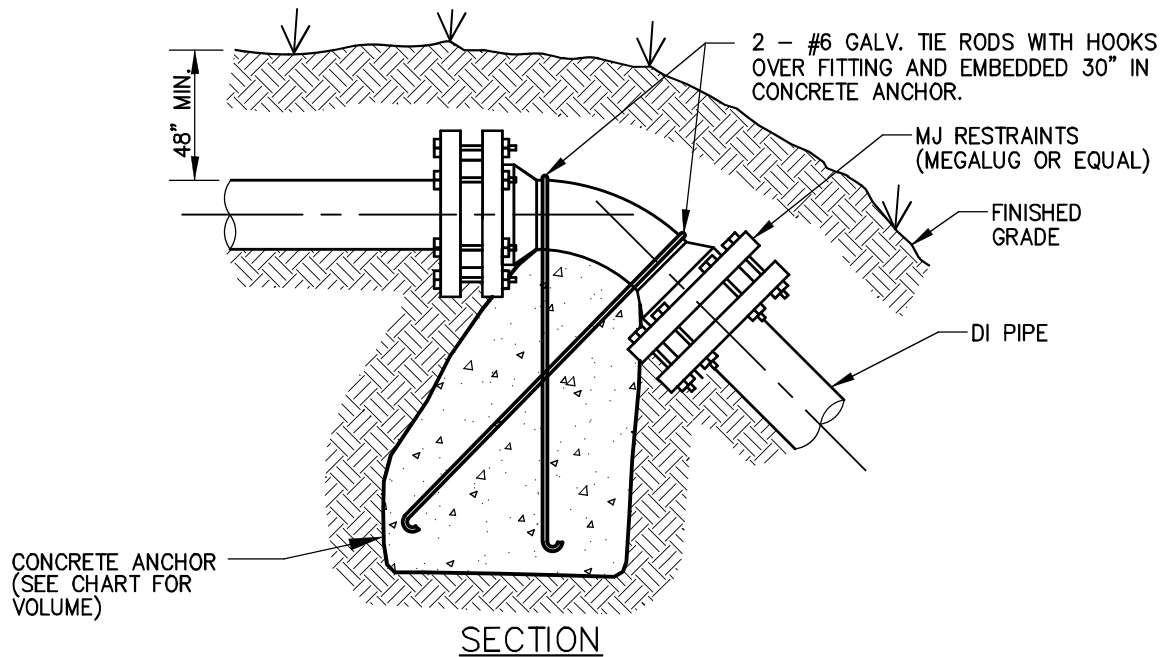
DATE: DECEMBER 9, 2015

DWG. NO.: WAT-04

NOTES

1. USE READY-MIX CONCRETE WITH 3,000 PSI STRENGTH @ 28 DAYS.
2. PLACE CONCRETE CLEAR OF JOINT & JOINT ACCESSORIES.
3. DIMENSION ARE BASED ON 200 PSI STATIC PRESSURE (FS = 1.5)
4. USE DUCTILE IRON PIPE 5 FEET (MIN.) ON EACH SIDE OF FITTING.

VOLUME OF CONCRETE ANCHOR (CUBIC YARDS)			
FITTING DIAMETER	45° BEND	22.5° BEND	11.25° BEND
4"	1.00	0.50	0.25
6"	2.25	1.00	0.50
8"	3.75	2.00	1.00
12"	5.50	3.00	1.50
16"	13.50	7.00	3.50



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

VERTICAL THRUST BLOCKING

DRAWN BY: TGA

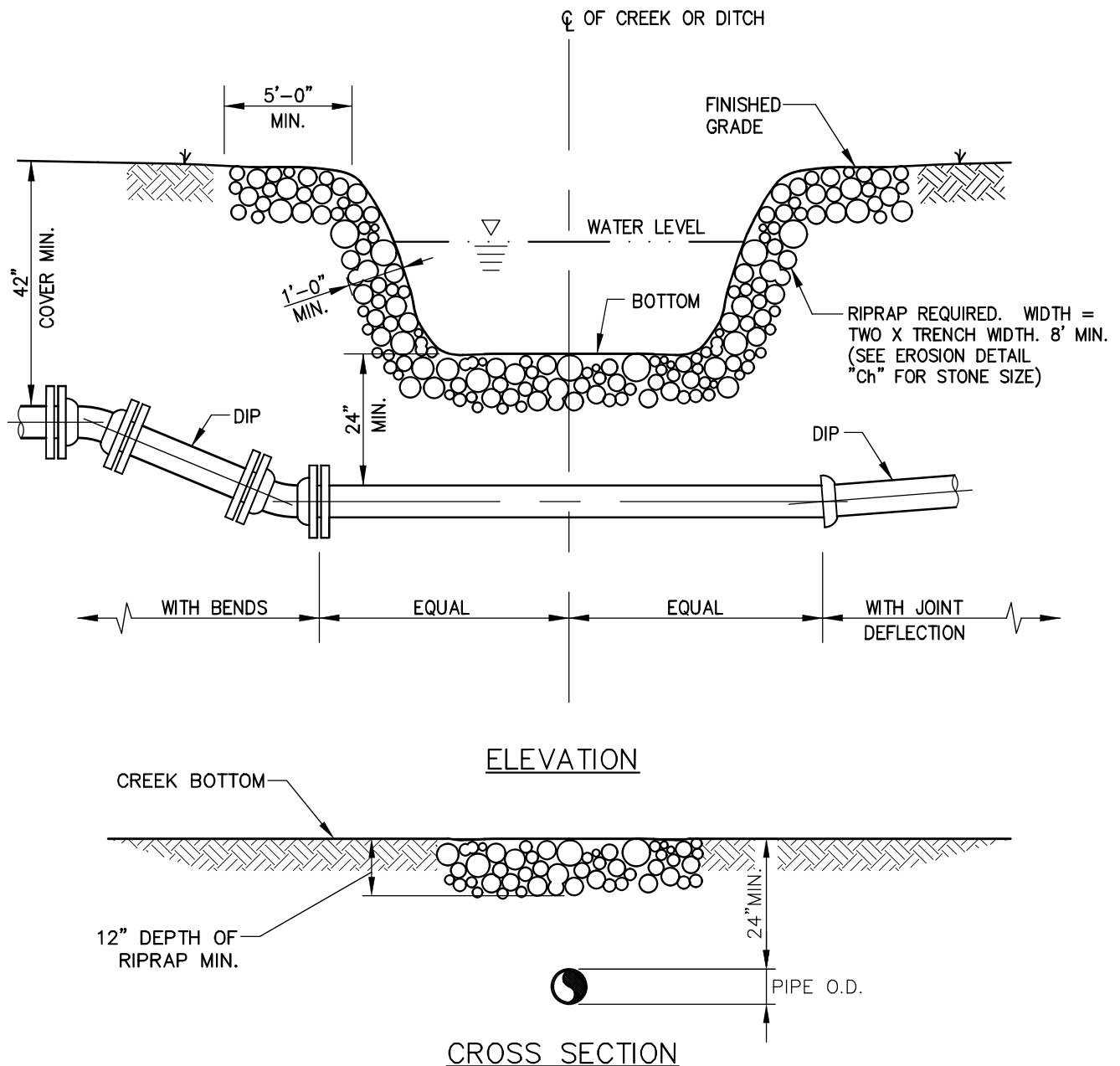
SCALE: NTS

DATE: DECEMBER 9, 2015

DWG. NO.: WAT-05

NOTES

1. THIS DETAIL IS APPLICABLE ONLY TO CREEK OR STREAM CROSSINGS LESS THAN OR EQUAL TO 15 FT IN WIDTH AT THE NORMAL WATER LEVEL.
2. USE CLASS B BEDDING FOR PIPE UNLESS OTHERWISE SPECIFIED.
3. ALL PIPE SHALL BE DUCTILE IRON.
4. FOR THE PRESSURE PIPING PROVIDE RESTRAINED JOINTS FOR ALL PIPE AND FITTINGS WITHIN THE CREEK CROSSING.



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

MINOR CREEK CROSSING

DRAWN BY: TGA

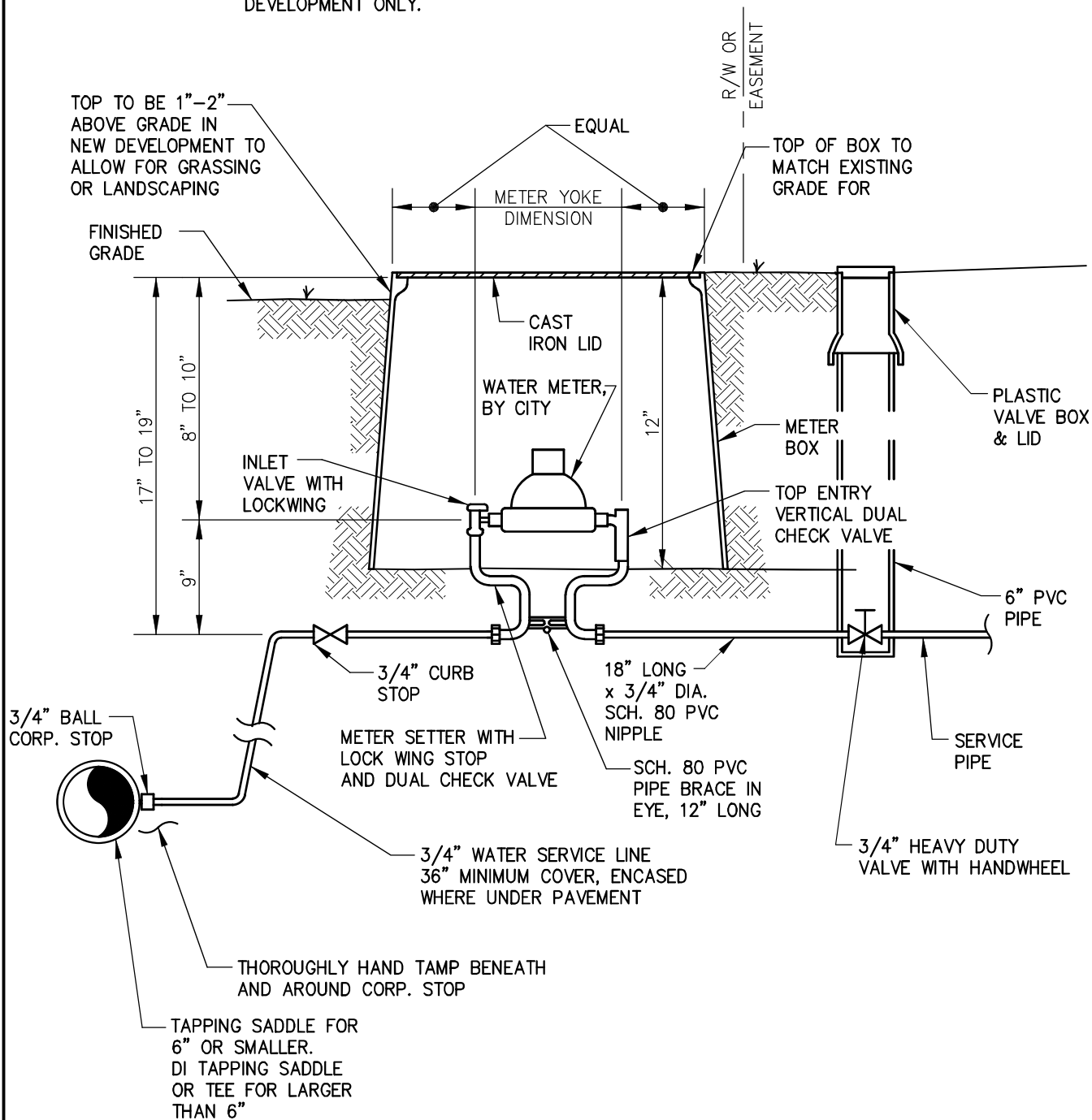
SCALE: NTS

DATE: DECEMBER 9, 2015

DWG. NO.: WAT-06

NOTES

1. SEE SPECIFICATIONS FOR WATER SERVICE CONNECTIONS.
2. 3/4" GATE VALVE AND STUB-UP FOR NEW SUBDIVISION DEVELOPMENT ONLY.



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

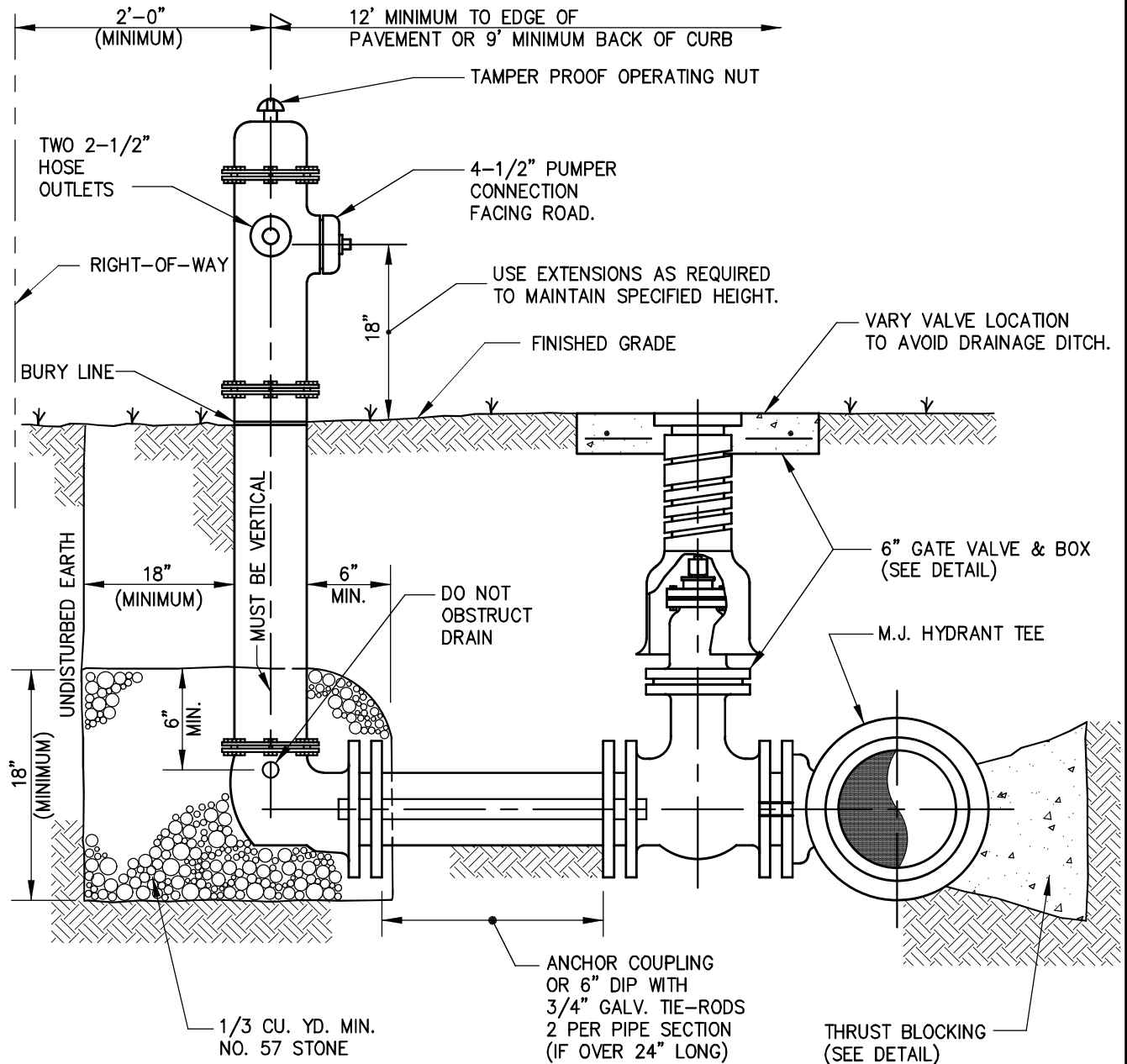
RESIDENTIAL WATER SERVICE

DRAWN BY: TGA

SCALE: NTS

DATE: DECEMBER 9, 2015

DWG. NO.: WAT-07



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

FIRE HYDRANT ASSEMBLY

DRAWN BY: TGA

SCALE: NTS

DATE: DECEMBER 9, 2015

DWG. NO.: WAT-08

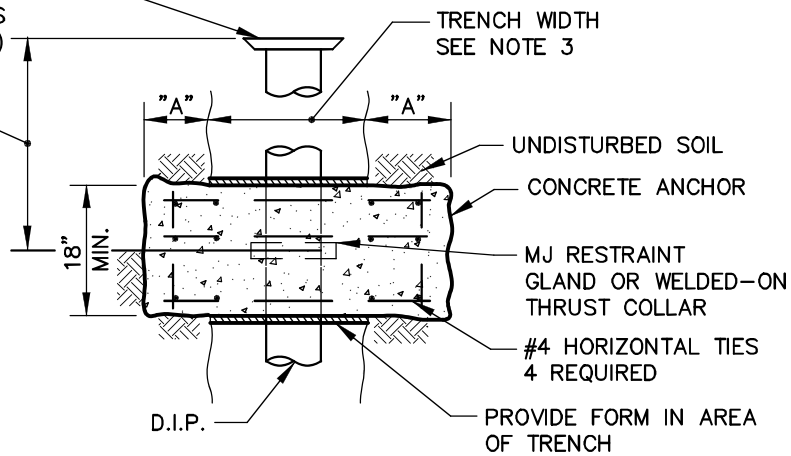
NOTES

1. DIMENSIONS BASED ON 200 PSI STATIC PRESSURE PLUS AWWA WATER HAMMER (FS = 1.5).
2. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND. ANCHOR FORM MUST EXCAVATED PRIOR TO LAYING PIPE.
3. KEEP TRENCH AS NARROW AS PRACTICAL. NEVER MORE THAN O.D. + 15"
4. DIMENSIONS ARE BASED ON 3,000 PSF SOIL BEARING. IF SOIL OF LESSER BEARING CAPACITY IS ENCOUNTERED, OBTAIN MODIFIED DIMENSIONS FROM THE ENGINEER.

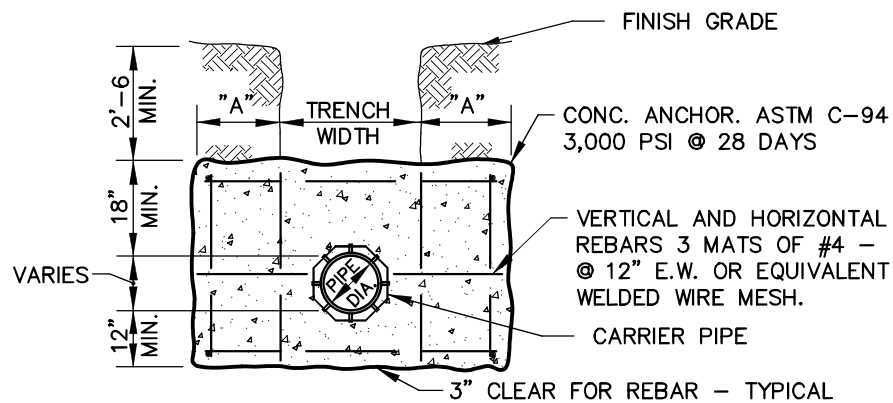
	PIPE DIAMETER			
	6"	8"	10" OR 12"	14" OR 16"
"A" (MINIMUM)	12"	18"	30"	48"

MJ PIPE WITH MJ PLUG
OR SOLID SLEEVE W/MJ
PLUG AND M.J. RESTRAINTS
(IF AT DEAD END OF MAIN)

9' FROM JT TO
C OF ANCHOR



PLAN



SECTION



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

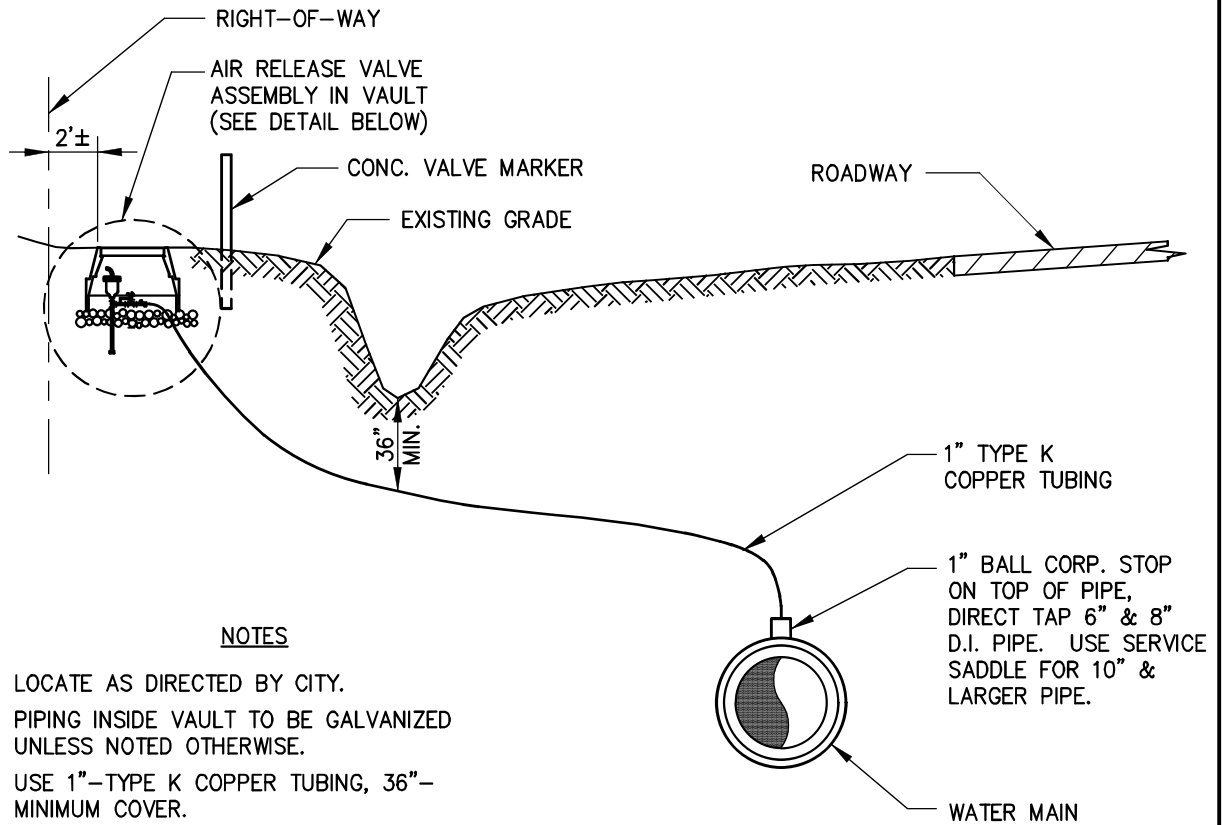
WATER PIPE ANCHOR

DRAWN BY: TGA

SCALE: NTS

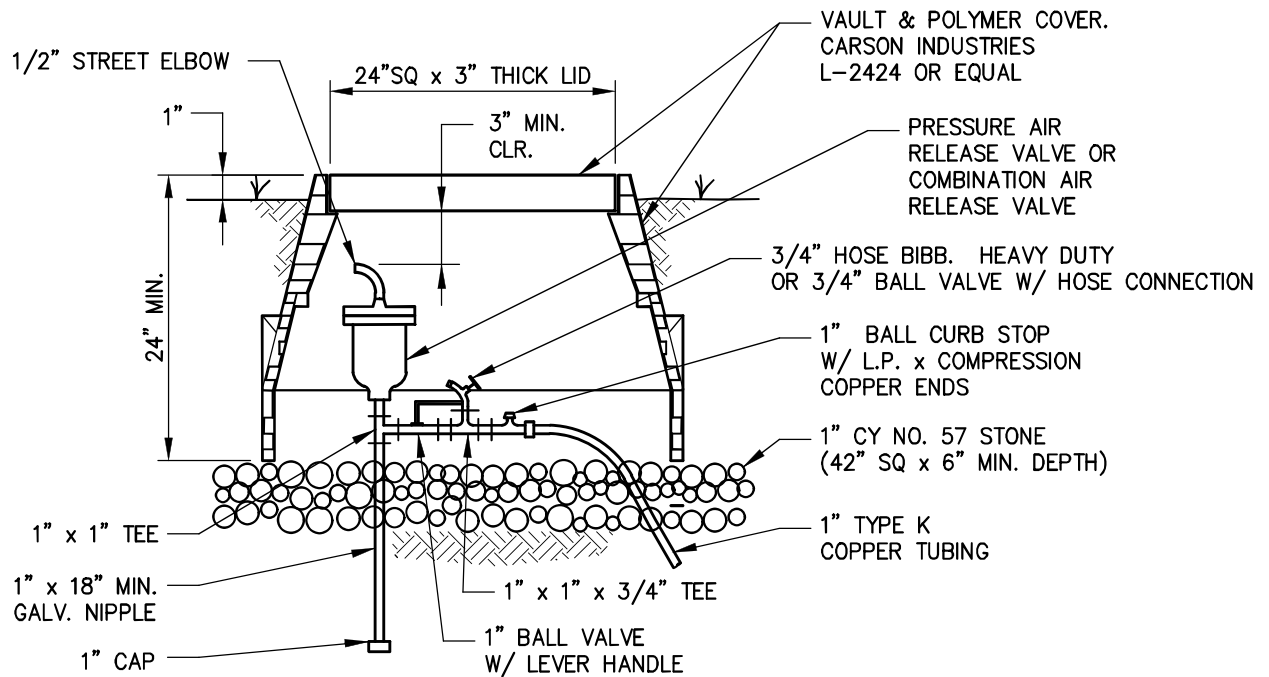
DATE: DECEMBER 9, 2015

DWG. NO.: WAT-09



NOTES

1. LOCATE AS DIRECTED BY CITY.
2. PIPING INSIDE VAULT TO BE GALVANIZED UNLESS NOTED OTHERWISE.
3. USE 1"—TYPE K COPPER TUBING, 36"—MINIMUM COVER.
4. TUBING SHALL HAVE A POSITIVE GRADE FROM WATER MAIN TO AIR RELEASE VALVE ASSEMBLY.



CITY OF EMERSON
 700 HIGHWAY 293
 EMERSON, GEORGIA 30137
 TELEPHONE (770) 382-9819

AIR RELEASE VALVE

DRAWN BY: TGA

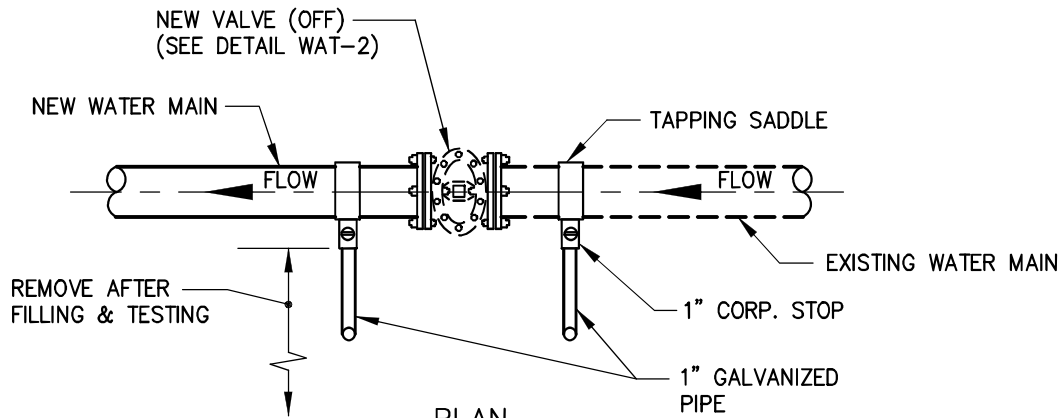
SCALE: NTS

DATE: DECEMBER 9, 2015

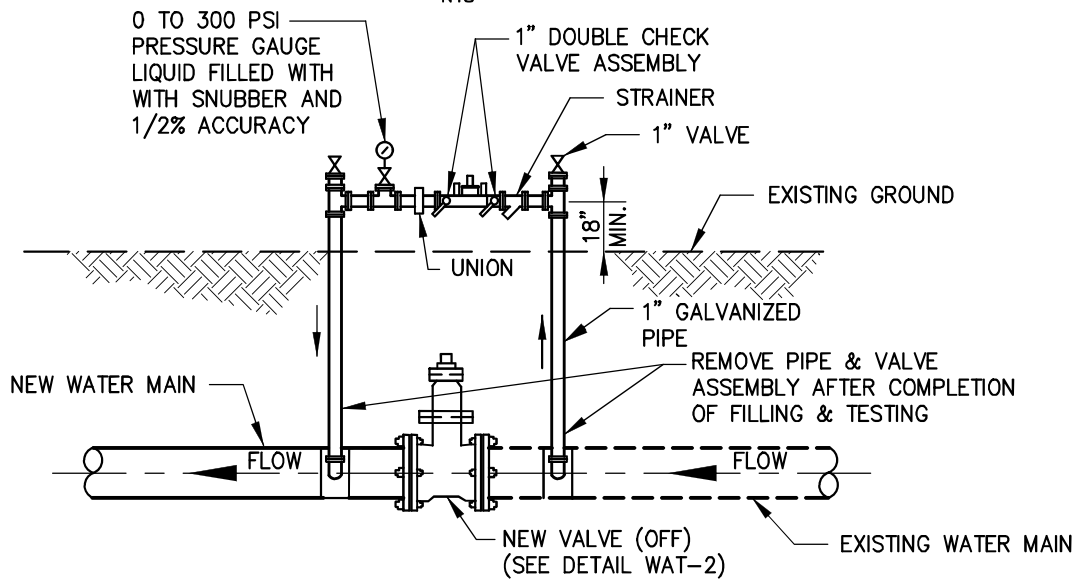
DWG. NO.: WAT-10

NOTES

1. PROTECT FROM FREEZING.
2. PROTECT FROM TRAFFIC.
3. REMOVE AND SALVAGE PIPE AND VALVE ASSEMBLY FOR OWNER AFTER FILLING AND TESTING.
4. FOR 6" AND 8" NEW WATER MAINS, 12" AND LARGER WILL REQUIRE A 2" FILL VALVE ASSEMBLY.



PLAN
NTS



SECTION



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

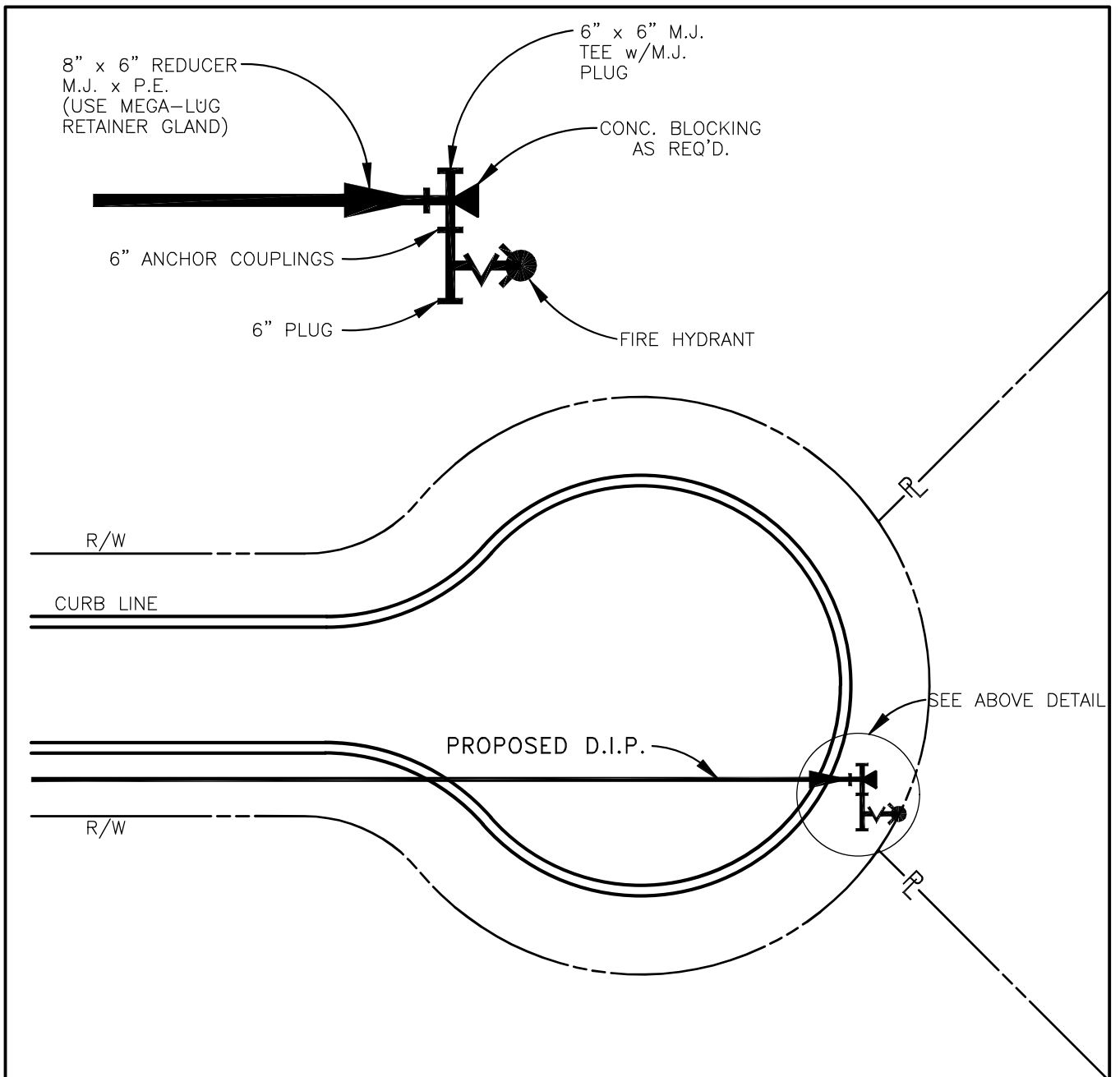
1" FILL VALVE ASSEMBLY

DRAWN BY: TGA

SCALE: NTS

DATE: DECEMBER 9, 2015

DWG. NO.: WAT-11



WATERMAIN AT CUL-DE-SAC

NOTE:

ALIGN FIRE HYDRANT WITH PROPERTY LINE.
CONSTRUCT WITH MINIMUM DISTANCE OF 9' FROM
BACK OF CURB TO BACK OF HYDRANT AND BACK OF
CURB TO BACK OF CONCRETE BLOCKING.



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

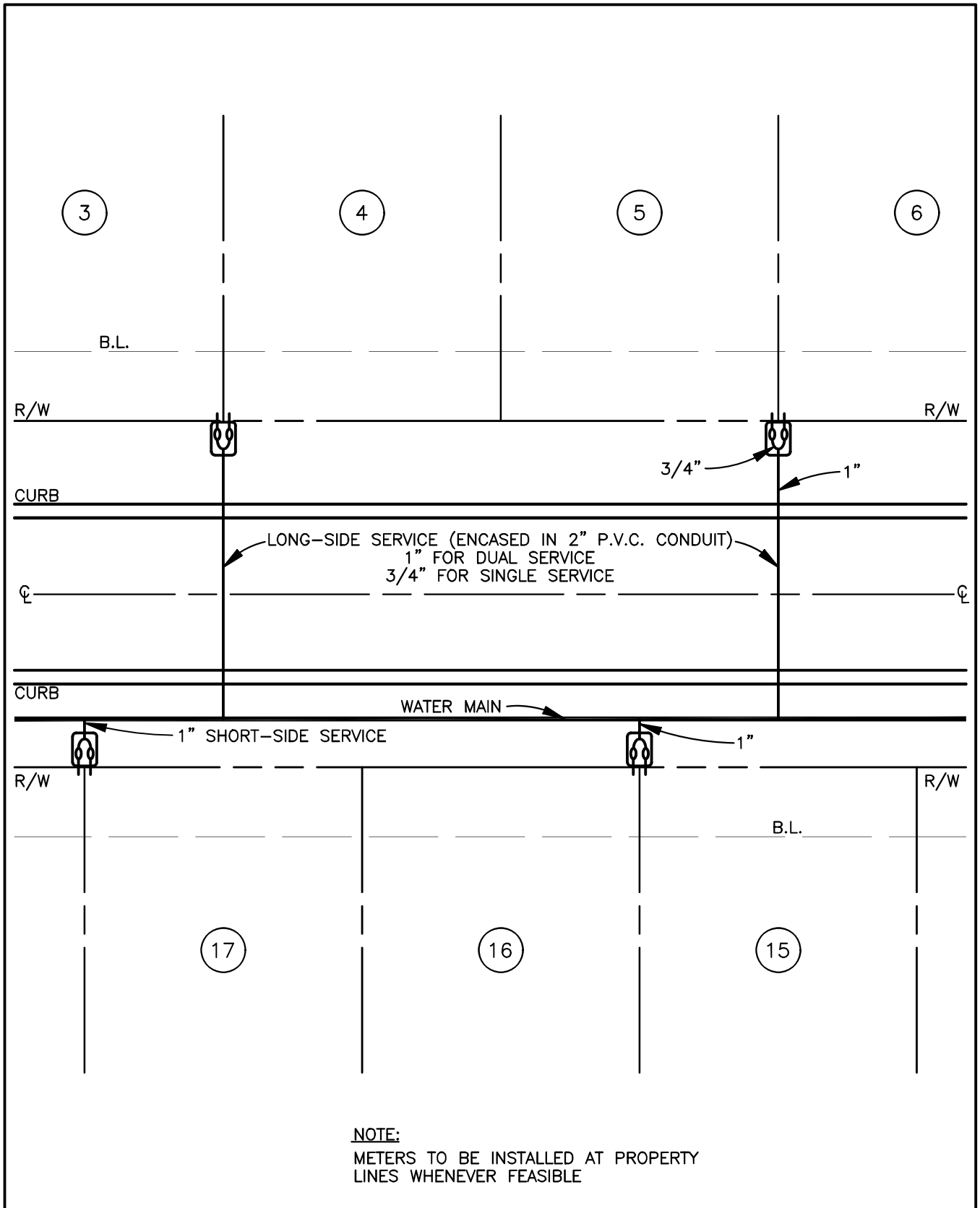
TYPICAL WATERMAIN AT CUL-DE-SAC

DRAWN BY: TGA

SCALE: NTS

DATE: DECEMBER 9, 2015

DWG. NO.: WAT-12



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

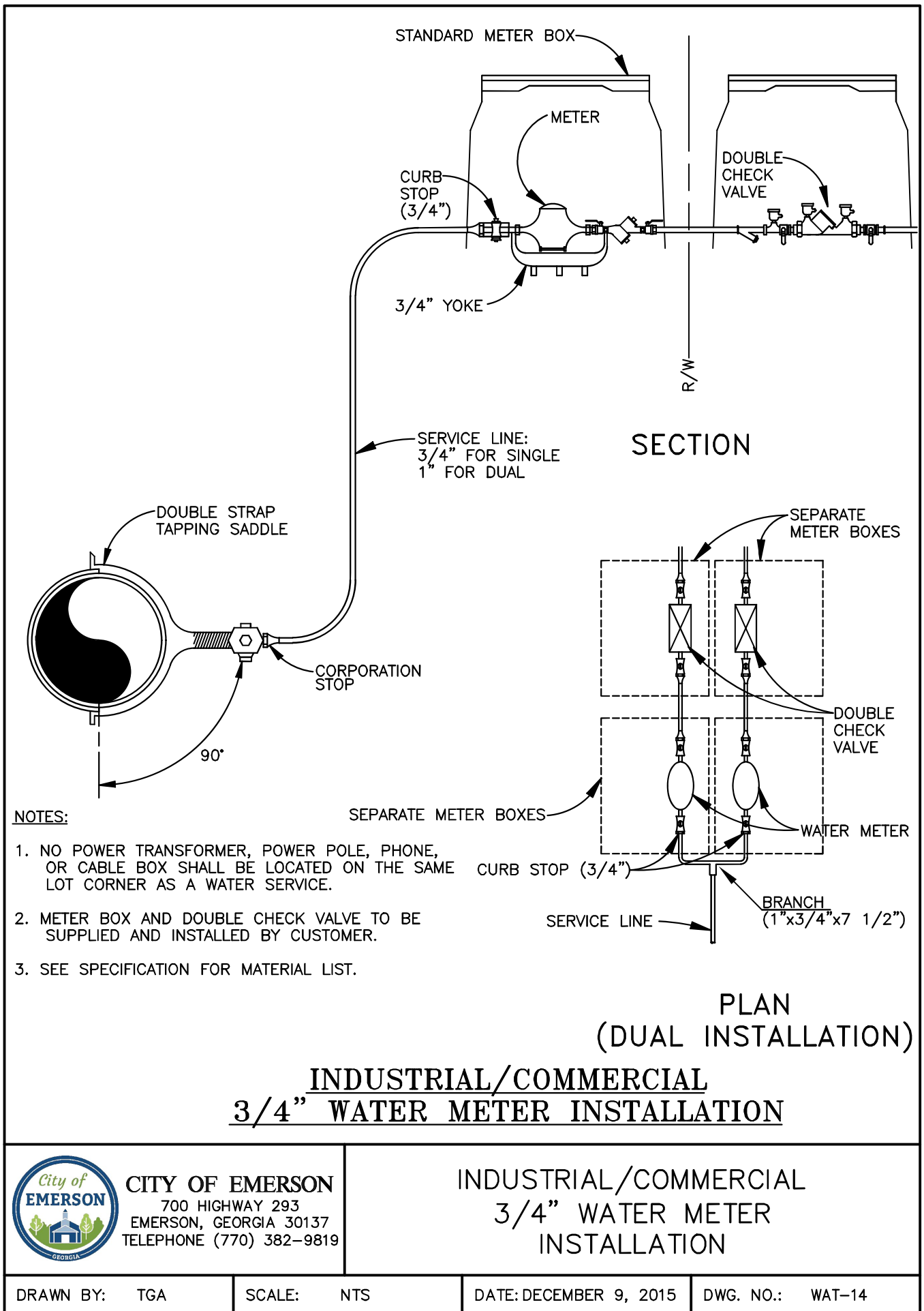
3/4" WATER METER LOCATION (FOR SUBDIVISIONS)

DRAWN BY: TGA

SCALE: NTS

DATE: DECEMBER 9, 2015

DWG. NO.: WAT-13



**PLAN
(DUAL INSTALLATION)**

**INDUSTRIAL/COMMERCIAL
3/4" WATER METER INSTALLATION**



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

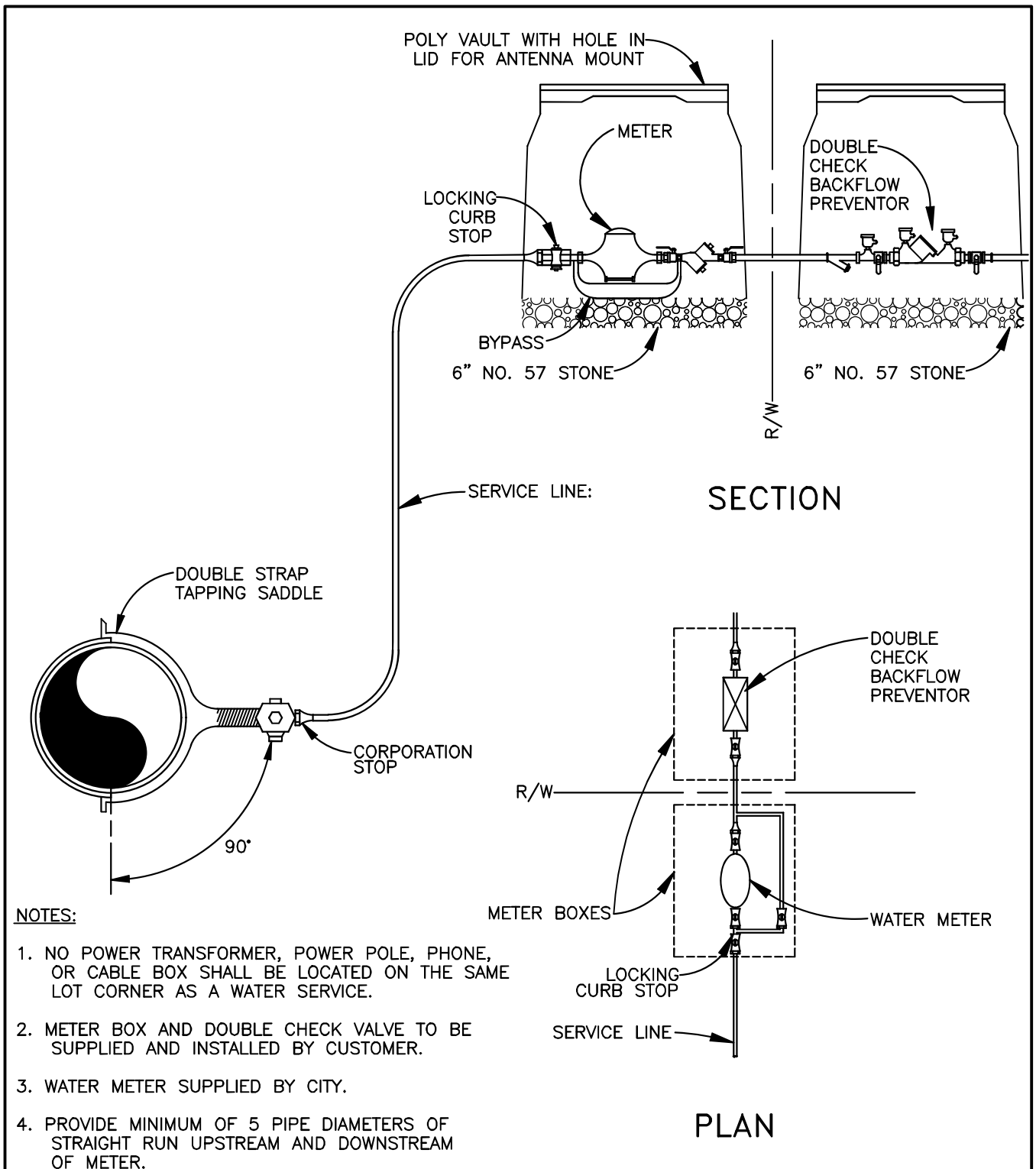
**INDUSTRIAL/COMMERCIAL
3/4" WATER METER
INSTALLATION**

DRAWN BY: TGA

SCALE: NTS

DATE: DECEMBER 9, 2015

DWG. NO.: WAT-14



INDUSTRIAL/COMMERCIAL 1 1/2" OR 2" WATER METER INSTALLATION



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

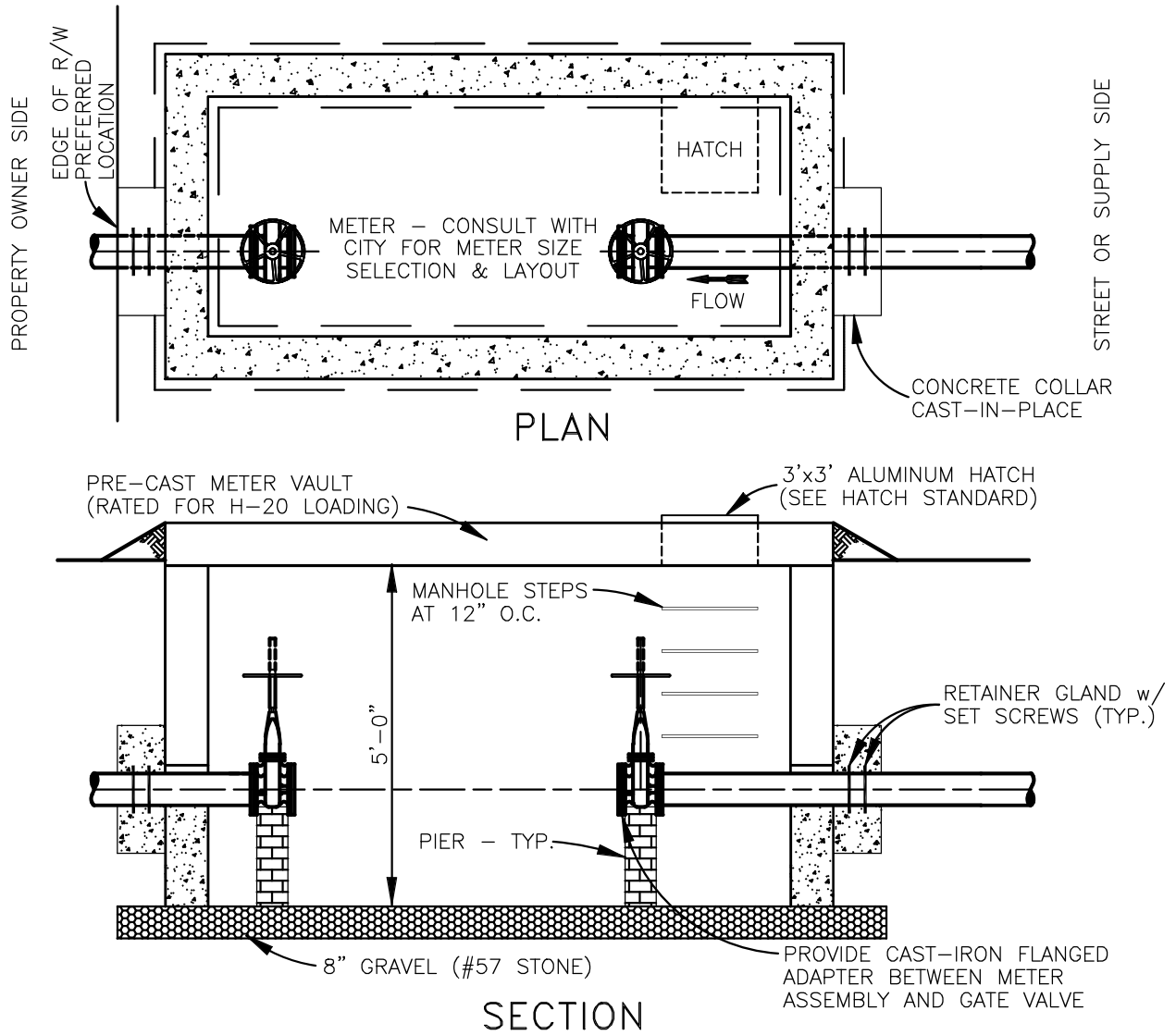
INDUSTRIAL/COMMERCIAL
1 1/2" OR 2" WATER METER
INSTALLATION

DRAWN BY: TGA

SCALE: NTS

DATE: DECEMBER 9, 2015

DWG. NO.: WAT-15



NOTES:

1. BOXES EXCEEDING 5' IN DEPTH MUST BE APPROVED BY THE CITY.
2. WHEN METER BOX CANNOT BE LOCATED ENTIRELY ON R/W, A PERMANENT EASEMENT SHALL BE OBTAINED TO PREVENT FENCES OR OTHER OBSTRUCTIONS FROM BEING ERECTED AROUND THE METER BOX.
3. COVER OPENING & STEPS TO BE PLACED NEAREST THE METER REGISTER.
4. THE METER MUST BE INSTALLED WITH AT LEAST 8 DIAMETERS OF STRAIGHT PIPE SAME SIZE AS METER ON THE INLET SIDE TO PERMIT ON-SITE MAINTENANCE AND CALIBRATION.
5. THESE BOXES ARE NOT TO BE INSTALLED IN TRAFFIC AREAS WITHOUT PRIOR PERMISSION FROM THE CITY.
6. DOUBLE CHECK BACK FLOW PREVENTION REQUIRED ON PROPERTY OWNER'S SIDE OF METER. LOCATION SHALL BE APPROVED BY THE CITY.
7. ALL VALVES AND FITTINGS INSIDE THE VAULT SHALL BE FLANGED.
8. ALL FITTINGS OUTSIDE THE VAULT SHALL BE MECHANICAL JOINT WITH RETAINER GLANDS.



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

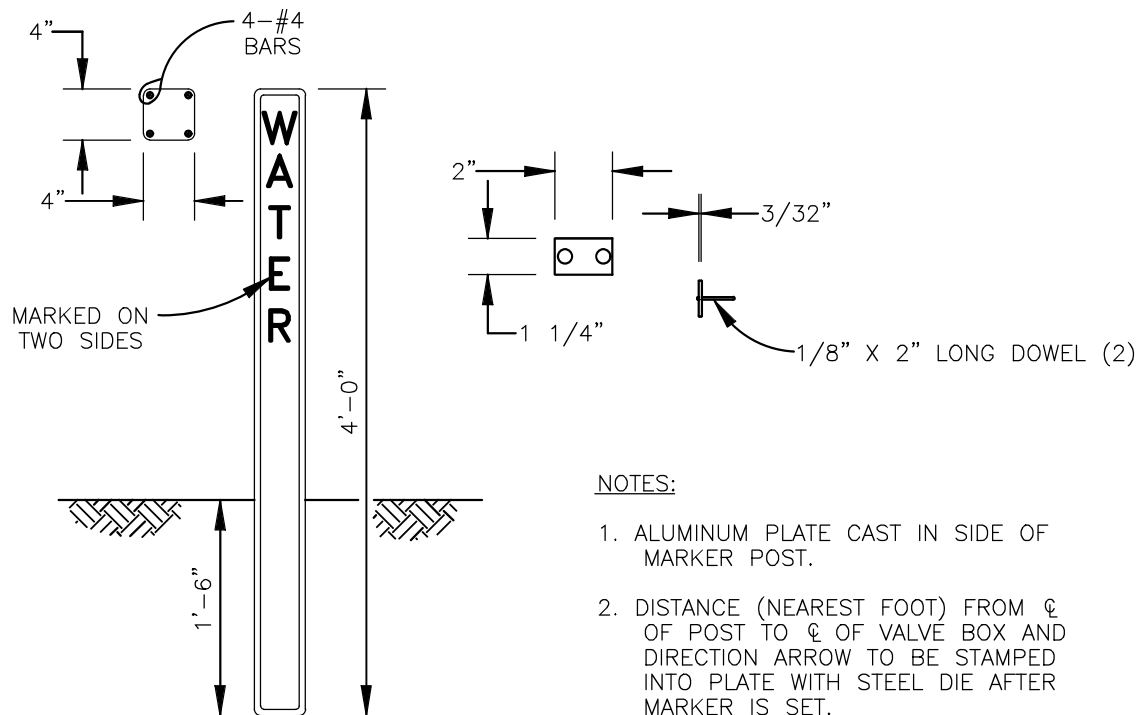
TYPICAL LARGE METER & VAULT INSTALLATION

DRAWN BY: TGA

SCALE: NTS

DATE: DECEMBER 9, 2015

DWG. NO.: WAT-16



DETAIL OF CONCRETE VALVE MARKER



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

CONCRETE VALVE MARKER

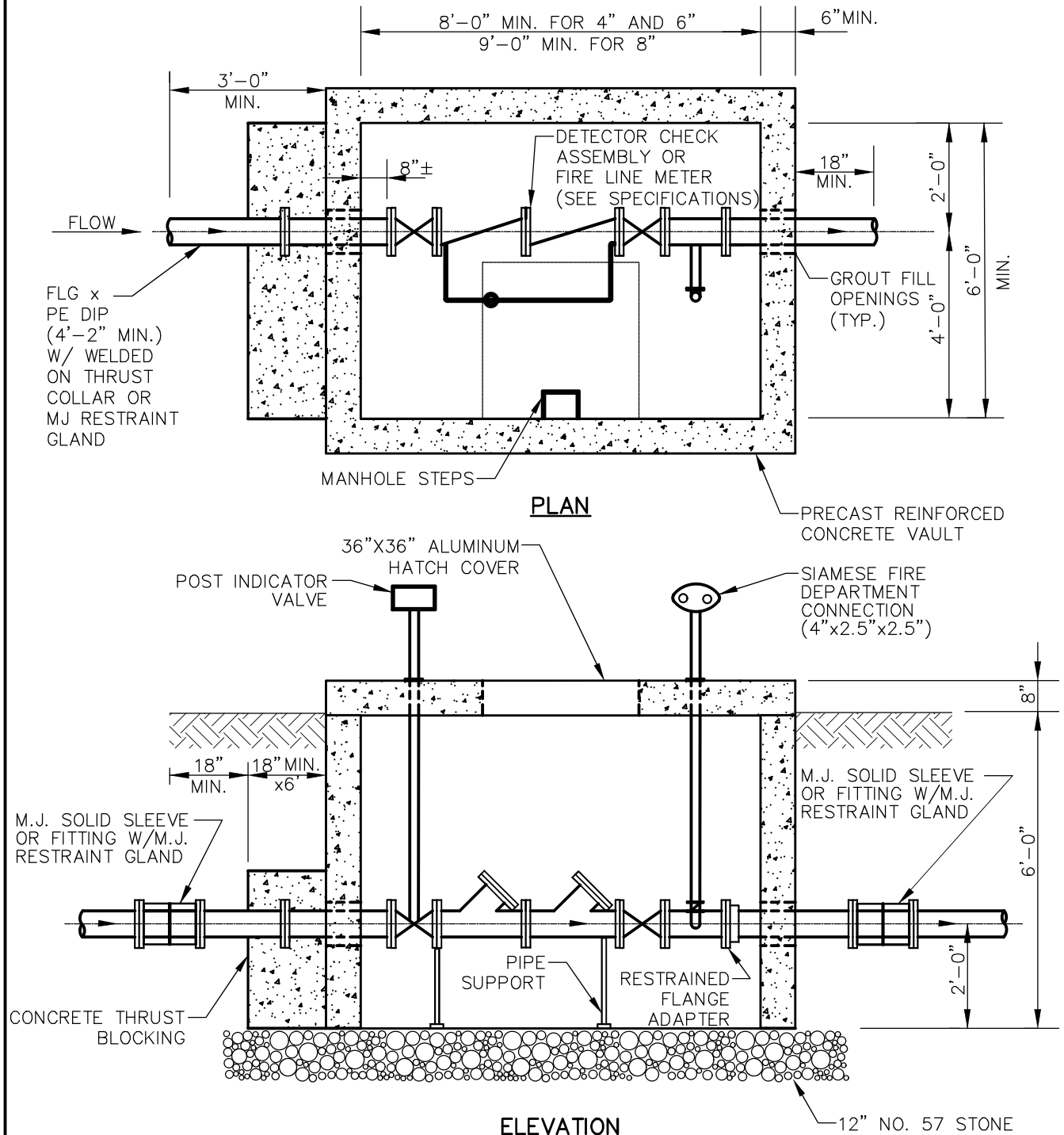
DRAWN BY: TGA

SCALE: NTS

DATE: DECEMBER 9, 2015

DWG. NO.: WAT-17

1. PROVIDE HOLE FOR ANTENNA MOUNT IN HATCH COVER NEAR THE HINGE.



FIRE LINE VAULT

DRAWN BY: TGA

SCALE: NTS

DATE: DECEMBER 9, 2015

DWG. NO.: WAT-18

(1) 4" DIP FLxPE.	(8) 0-200 PSI PRESSURE GAUGE 4" DIA WITH 1/2" TAPPING SADDLE AND 1/2" BALL VALVE.	(12) FULL FACE FL GASKET WITH S.S. BOLTS.
(2) 4" DI TEE.		(13) GROUT FILLED OPENING, TYP.
(3) 4" OSY GATE VALVE.	(9) H-20 LOADING ACCESS HATCH 36"x 36" FRAME OPENING W/SS HARDWARE AND HINGES.	(14) METER TRANSCEIVER UNIT (MXU), INSTALLED IN 2" DIA HOLE, ON HINGE SIDE OF HATCH. PROVIDE SLACK IN CABLE TO ALLOW OPENING OF HATCH.
(4) 4" SENSUS OMNI METER (PURCHASE FROM CITY).	(10) ALUM ACCESS LADDER & GRAB BARS.	(15) PIPE SUPPORT (PIPE STAND OR MASONRY)
(5) 4" DIP FLxPE, WITH MEGA FL.	(11) 4" MJ SOLID SLEEVE OR FITTING WITH MJ REST. GLAND EA END CONNECTION.	
(6) 4" DI 90° BEND.		
(7) 4" DIP FLxFL.		

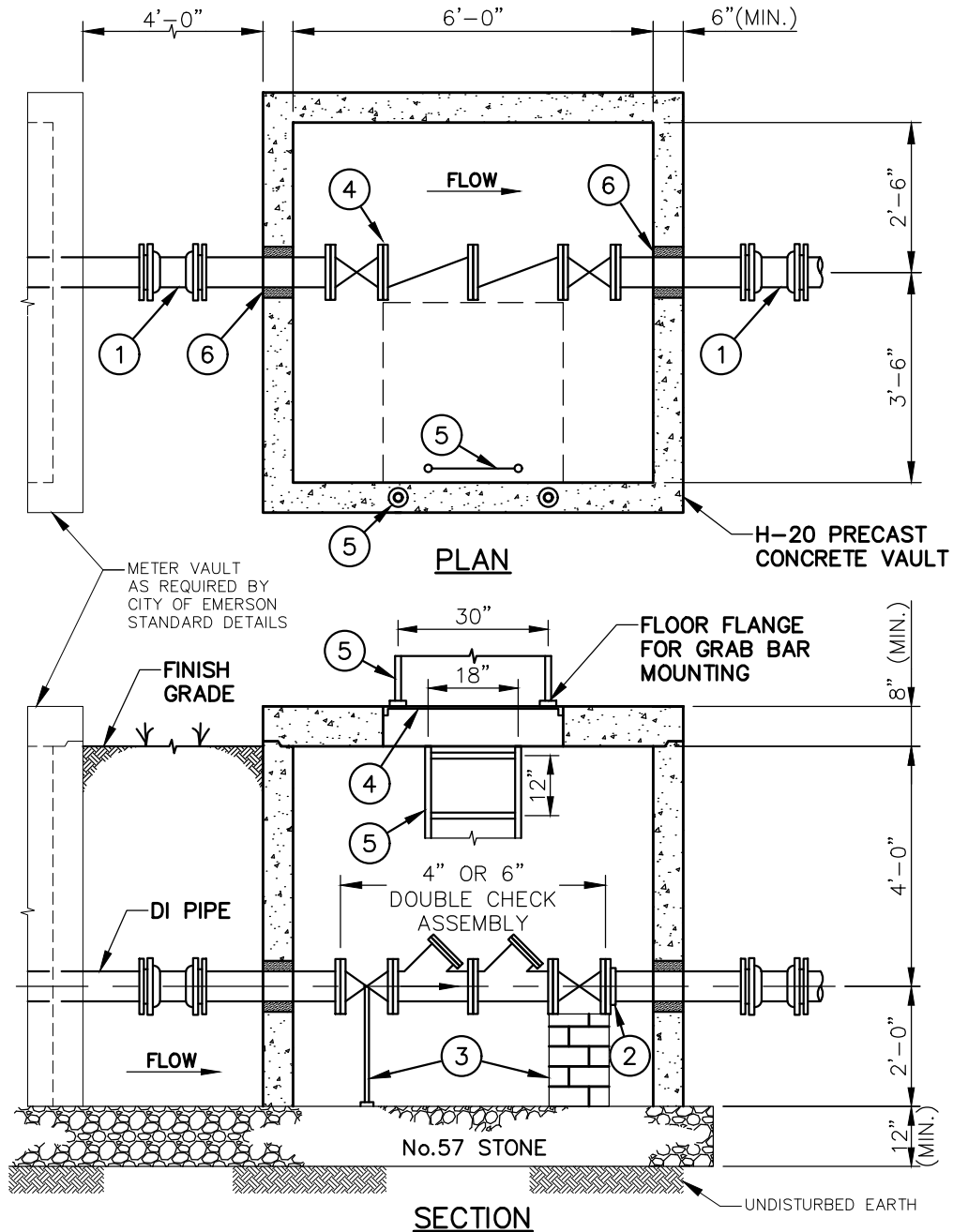


4" METER VAULT

DWG. NO.: WAT-19

PIPE LEGEND

- | | |
|--|---|
| <p>① MJ SOLID SLEEVE W/
RESTRAINED JOINT</p> <p>② MEGA FLANGE.</p> <p>③ PIPE SUPPORT
(PIPE STAND OR MASONRY)</p> | <p>④ H-20 LOADING ACCESS HATCH
36" SQ FRAME OPENING
W/SS HARDWARE + HINGES.</p> <p>⑤ ALUM ACCESS LADDER
AND GRAB BARS.</p> <p>⑥ GROUT FILL OPENINGS, TYP.</p> |
|--|---|



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

4" OR 6" BACKFLOW VAULT

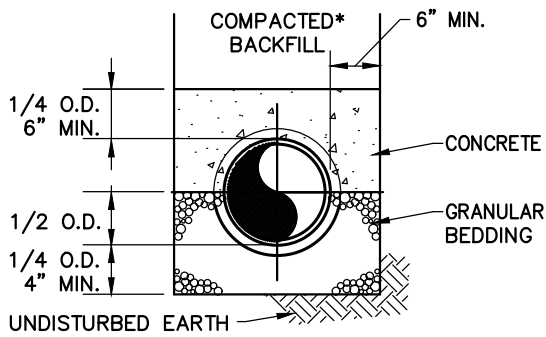
DRAWN BY: YKP

SCALE: NTS

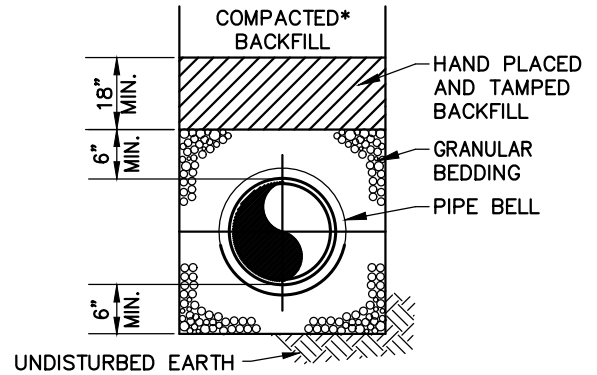
DATE: MARCH 28, 2024

DWG. NO.: WAT-20

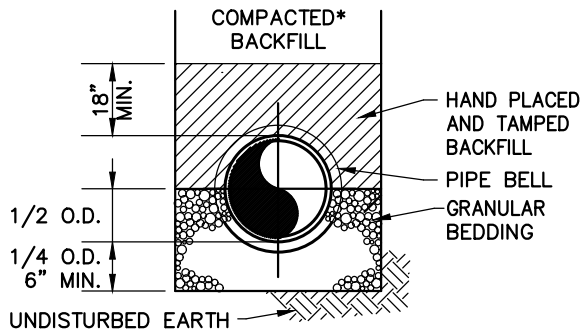
GENERAL WATER & SEWER DETAILS



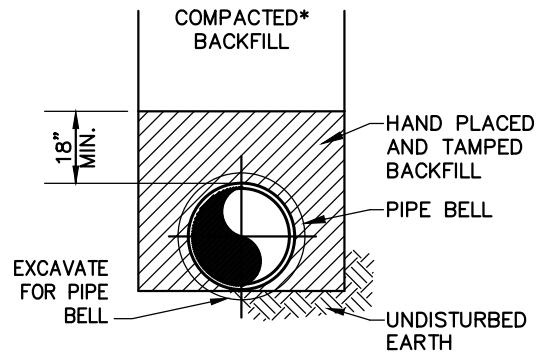
CLASS "A" TYPE 2
WITH DIP



CLASS "B MODIFIED"
WITH PVC SEWER



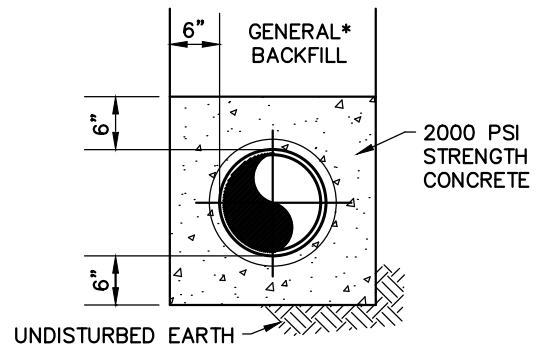
CLASS "C"
WITH DIP IN ROCK
OR WET EARTH TRENCH
OR DIP SEWER



*CLASS "D"
DRY EARTH TRENCHES ONLY
WITH DIP
(WATER ONLY)

COMPACTION REQUIREMENTS

1. PROVIDE 95% COMPACTION (STD. PROCTOR) FOR HAND PLACED BACKFILL.
2. PROVIDE 98% COMPACTION (STD. PROCTOR) IN AREAS TO BE PAVED AND ROADWAY SHOULDERS IN 6" TO 8" LAYERS. ALL OTHER AREAS TO BE COMPACTED TO 95% MIN. (STD. PROCTOR)
3. TOP 12" MIN. OF ROAD SUBGRADE TO BE COMPACTED TO 100% (STD PROCTOR)
4. IF JOB SPECS., DOT OR RAILROAD REQUIRE HIGHER COMPACTION FOLLOW REQUIRED SPECS.
5. PROVIDE WATER DEPARTMENT WITH COMPACTION TEST RESULTS.



CONCRETE
ENCASEMENT
WITH DIP

1	10/14/2022	JDC	ADDED COMPACTION REQUIREMENTS & CLASS B "MODIFIED"
NO.	DATE	BY	REVISION



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

PIPE BEDDING

DRAWN BY: TGA

SCALE: NTS

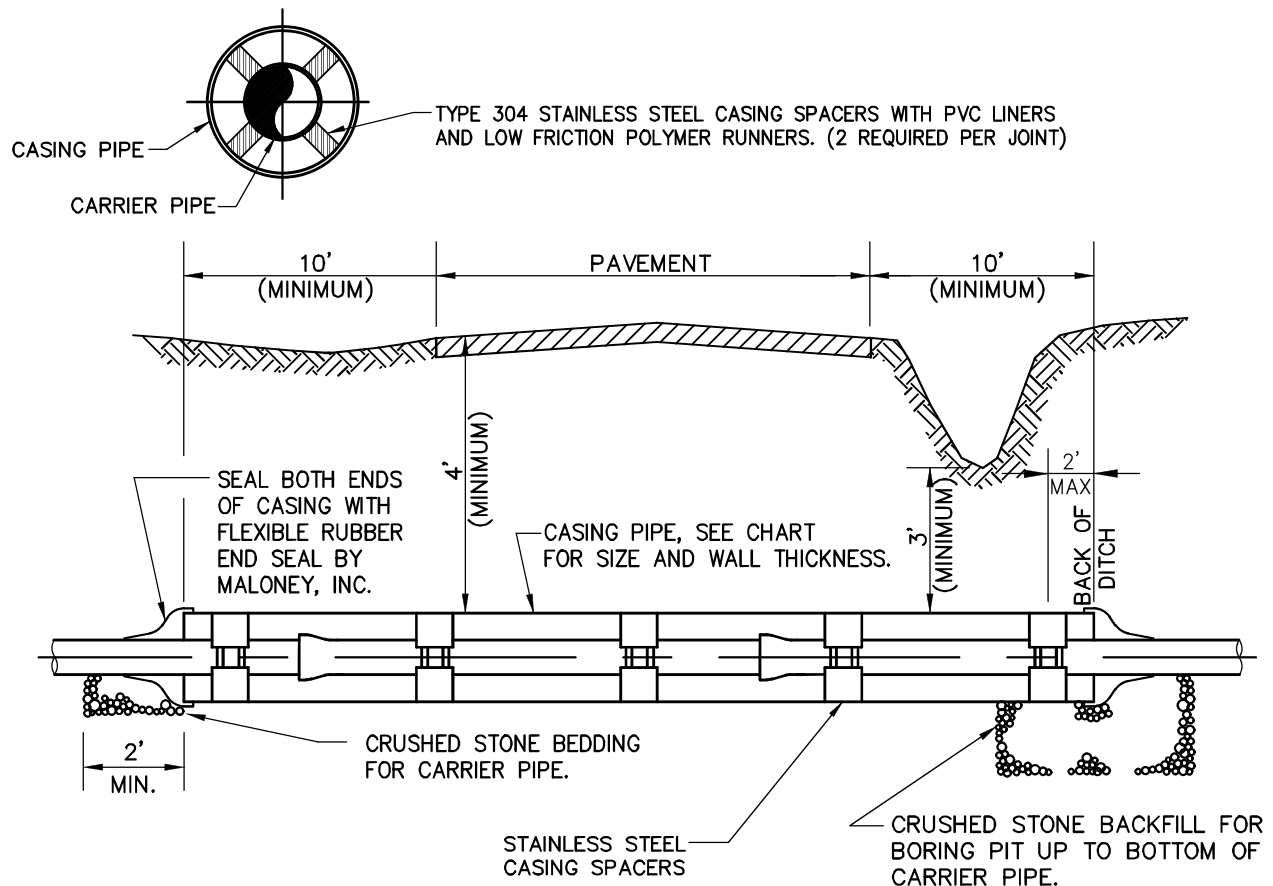
DATE: OCTOBER 15, 2015

DWG. NO.: W&S-01

NOTES

1. INSTALL CASING BY BORING AND JACKING, UNLESS OTHERWISE NOTED.
2. CROSSING ON D.O.T. RIGHT-OF-WAY SHALL COMPLY WITH ALL REQUIREMENTS OF APPLICABLE D.O.T. UTILITY ENCROACHMENT PERMIT.
2. CARRIER PIPE IN CASING SHALL BE DUCTILE IRON PIPE, PUSH-ON JOINTS WITH RESTRAINED JOINTS, U.S. PIPE FIELD LOK OR EQUAL.

DUCTILE IRON CARRIER PIPE		STEEL CASING PIPE	
INSIDE DIA.	MAX. BELL O.D.	NOMINAL DIA.	WALL THICK.
6"	9"	12"	0.250"
8"	11 1/4"	16"	0.250"
10"	13 1/2"	18"	0.375"
12"	15 1/2"	20"	0.375"
16"	20"	24"	0.375"
18"	22 1/4"	30"	0.375"
20"	24 1/4"	30"	0.375"
24"	28 1/2"	36"	0.500"



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

ROADWAY CROSSING

DRAWN BY: TGA

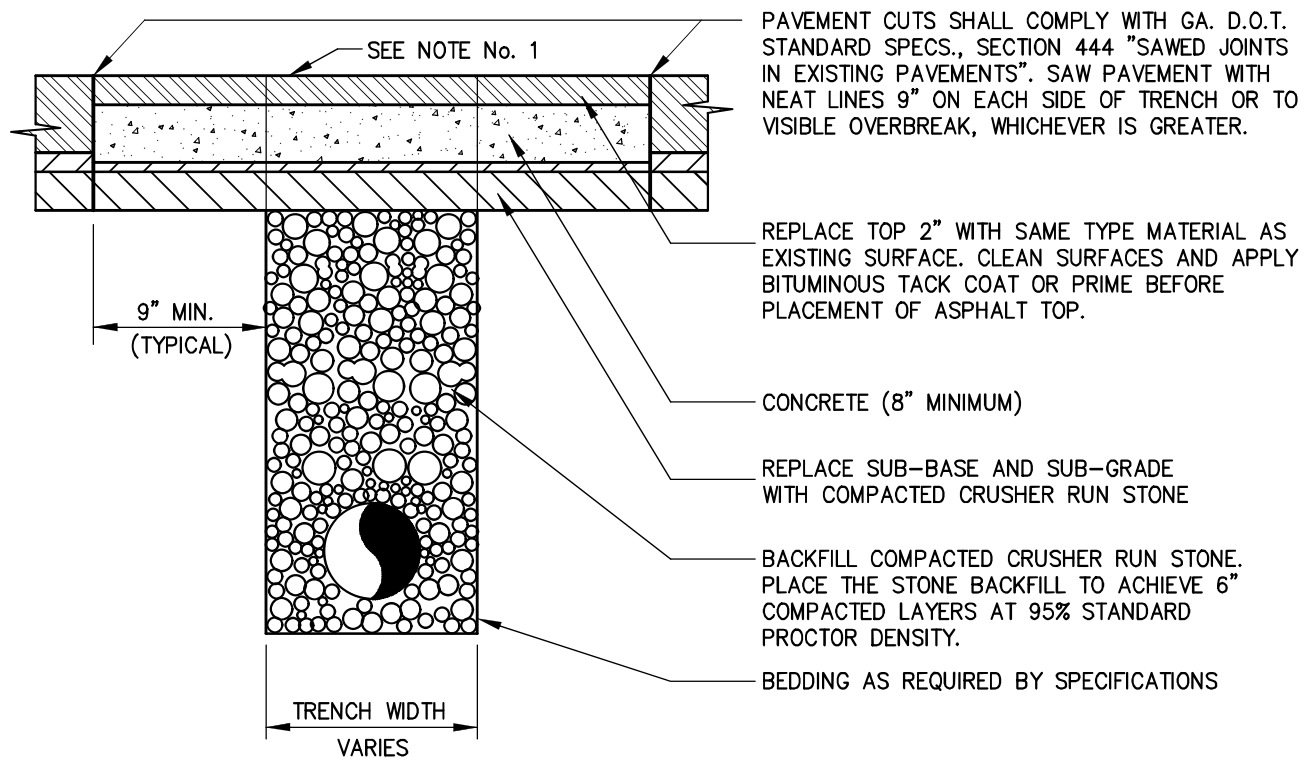
SCALE: NTS

DATE: OCTOBER 15, 2015

DWG. NO.: W&S-02

NOTES

1. COVER PAVEMENT CUTS WITH STEEL PLATES OF SUFFICIENT THICKNESS TO SPAN THE CUT AND SAFELY CARRY TRAFFIC WITHOUT NOTICEABLE DEFLECTION. PLATES SHALL REMAIN IN PLACE UNTIL THE CONCRETE BASE HAS GAINED SUFFICIENT STRENGTH TO WITHSTAND TRAFFIC LOADS (24 HOURS MINIMUM).
2. USE READY-MIX CONCRETE WITH 4,000 PSI STRENGTH @ 28 DAYS.
3. COMPLY WITH SPECIFIC REQUIREMENTS OF APPLICABLE DOT UTILITY ENCROACHMENT PERMITS.



CITY OF EMERSON
700 HIGHWAY 293
EMERSON, GEORGIA 30137
TELEPHONE (770) 382-9819

PAVEMENT REPLACEMENT

DRAWN BY: TGA

SCALE: NTS

DATE: OCTOBER 15, 2015

DWG. NO.: W&S-03