LEEDS, UTAH

LEEDS
Standard Specifications
for
Design
And
Construction

Ordinance Number 05-04

Adopted JULY 27, 2005

This document identifies Standard Specifications for Design and Construction within the Town of Leeds

SECTION 7

SECTION 7

POWER SYSTEM

7.1 INTRODUCTION. This section covers the specifications for off-site improvements for power system construction and defines the materials and practices required. Polices and procedures relating to electrical construction and maintenance practices are outlined in the "City of St. George Underground Power Construction Standards and Specifications". Where conflict exists between these and said standards, said standards shall govern.

All materials and equipment shall be furnished by the Contractor and shall be installed in a workmanship like manner in compliance with the current edition of the National Electrical Code and the National Electric Safety Code. Where code conflicts occur, these specifications and local regulations will govern.

7.2 ELECTRIC SERVICES.

7.2.1 POWER CONNECTION. Only authorized employees of the Power Department will be permitted to connect, or disconnect, electrical service to, or from, their power lines.

7.2.2 ELECTRIC SERVICE AGREEMENT. Each applicant for electric service within the municipal power service area must sign a standard electric service agreement. The applicant must supply the required information relating to the amount of load, voltage required, phase required and the purpose for which the service will be used. In the absence of a signed agreement, the acceptance of electric service will be deemed as constituting acceptance of the Power Department requirements and regulations. Large industrial, and/or commercial customers shall contract with the Power Department to meet their special requirements.

7.2.3 CUSTOMER SERVICE FACILITIES. The Customer shall provide and install an approved meter socket having the proper terminal arrangement and capacity to adequately accommodate their service requirements. The Customer shall also extend the building wiring from the meter socket to the service attachment. The Customer shall provide an adequate and substantial means by which Power Department personnel can attach appropriate service line equipment to the building. All service attachments shall have a minimum clearance of ten feet above the ground level, or above other areas where people could come in contact with the power lines.

Ample space shall be provided around the meter attachment to permit an unobstructed area for meter installation and maintenance. A minimum space of three inches shall be left between each meter socket and between meter sockets and other equipment. All equipment on the load side of the building service attachment, (except the meter and metering equipment, which will be furnished by the Power Department) shall be the responsibility of the Building Owner. All building wiring shall conform to applicable wiring codes.

The Customer shall be responsible for providing adequate and proper equipment to protect their equipment against overload, over or under voltage, or phase failure. The Power Department takes reasonable precaution to prevent any abnormal condition, but does not guarantee that such conditions will not occur. Any proposed change in existing meter, or service locations, or conditions, must be approved by the Power Department or service may be discontinued.

7.3 MATERIALS AND WORKMANSHIP. All materials and workmanship shall be first quality in every respect, plumb and true, and comply with the specific requirements of the approved layout drawings. The previously referenced Power Department standards will be adhered to.

No work shall be embedded in concrete, backfilled, or otherwise covered or concealed, until it has been inspected and approved by Power Department personnel. If any portion of the completed system fails to operate satisfactorily due to defects in material or workmanship, within one year of acceptance, it shall be corrected at the Customer's expense to the satisfaction of the City's Representative.

7.4 CONTROL OF GROUND WATER. All trenches shall be kept free from water during excavation, fine grading, cable laying, and embedment operations. Where the trench bottom is mucky or otherwise unstable because of the presence of ground water, and in cases where the static ground water elevation is above the bottom of any trench excavation, such ground water shall be lowered to the extent necessary to keep the trench free from water and the trench bottom stable when the work within the trench is in progress. Surface water shall be prevented from entering the trenches.

7.5 EXCAVATION AND BACKFILL. Excavation of trenches shall be as shown on approved layout drawings. The City's Representative(s) shall have the right to direct field changes where, in his judgment, alignment or topography problems are evident. Trenches shall be straight and the bottom free from water. All blocking or shoring materials shall be removed during backfill procedures.

Where trenching is required in dedicated streets, or other public rights-of-ways, all

trenches shall be backfilled in compliance with these specifications. The developer shall assume full responsibility for street failure where trenching operations have been performed.

Where soil conditions require bedding material, sand shall be placed above and below direct buried cables, or conduits, in two backfill operations. The trench shall then be compacted to ninety (90) percent of relative maximum dry density, unless the trenches are in streets or other public rights-of-ways, where they shall be compacted to a minimum of ninety five (95) percent of relative maximum dry density for granular soils and ninety (90) percent for fine grain soils as detailed in these specifications.

Bedding material specifications shall be as follows:

> **SAND:** Sand shall be well graded, have rounded to sub-rounded particles with one hundred (100) percent of the material passing a three-eighth (3/8) inch sieve, and no more than twenty (20) percent passing a number two hundred (200) sieve. No open graded material, such as "pea gravel" will be permitted for cable bedding. The material shall be non-plastic as per ASTM D-432 and D-424, and the cable shall be embedded with a minimum depth of four (4) inches of sand below the cable and a minimum depth of eight (8) inches of sand over the cable.

7.6 CONCRETE. All concrete poured in the field shall be ready-mixed and shall meet the requirements of these specifications, unless otherwise permitted by the City's Representative.

7.7 METERS. To permit access to the metering installation and to provide working safety for personnel, a clear working and standing space shall be provided in front of all meters. This area shall be located entirely on the Customer's property. The working space shall be kept clear and unobstructed, and shall extend a minimum of three feet from the face of the meter socket or instrument transformer compartment. The working space shall be sufficiently wide to permit ready access to the complete metering installation and in no case shall it be less than three feet wide, and have a height clearance of no less than six feet.

For each meter, the Customer shall furnish and install a switch or other approved disconnecting device. The disconnecting device shall be installed on the load side of the meter and shall control all of, and only the energy registered by that meter.

All meters and enclosures for meters, metering equipment and service entrance equipment on the line side of the meter, shall be sealed only by the Power Department personnel. Seals shall not be broken except by an authorized representative from the Power Department. No person shall be permitted to tamper

with, or in any way interfere with a meter or its connections, as placed by the Power Department.

For reasons of public safety, maintenance of service, and reliability of metering; meters shall not be installed in the following areas:

1. In any location that is not readily accessible.
2. In any location which is hazardous to personnel.
3. On any surface subject to excessive vibration.
4. In any elevated or depressed area that does not have access provided by means of a ramp or clear stairway of normal tread and which conforms to building code requirements.
5. In any substation area or transformer vault.
6. In common areas with dogs.

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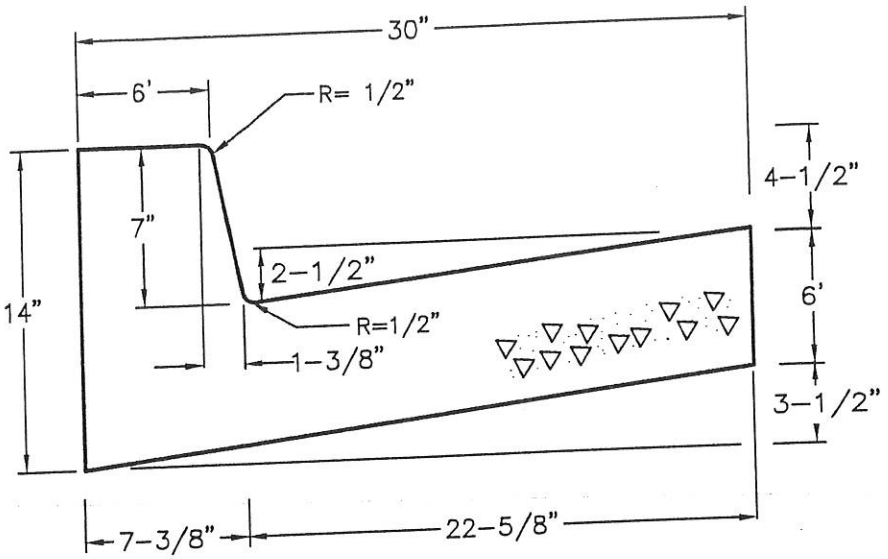
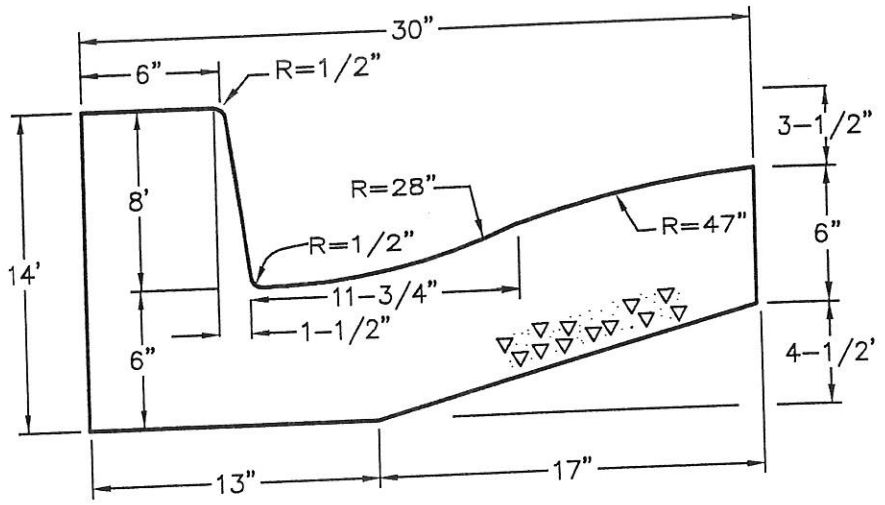
SECTION 8

City of St. George
Standard Drawing Index



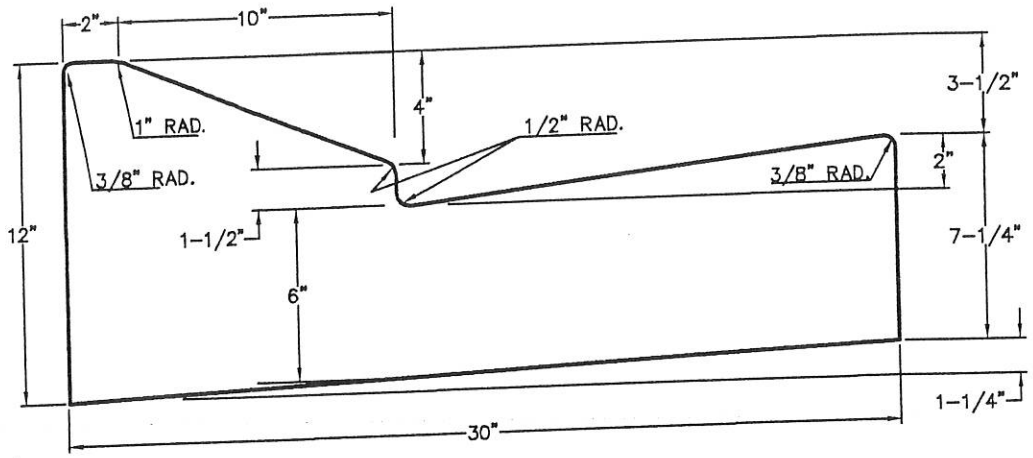
STANDARD CURB & GUTTER
(TYPE HB30-7)

NOTES:
1. ALL CONCRETE SHALL BE CLASS "A".



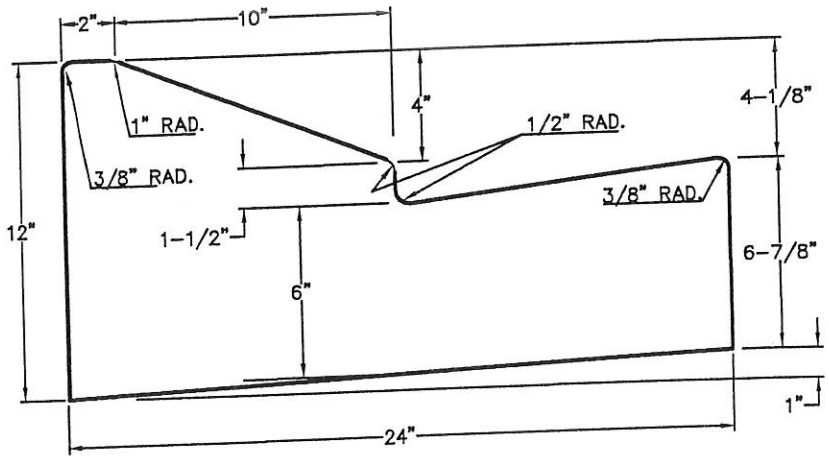
STANDARD CURB & GUTTER
(TYPE HB30-8)

REVISIONS			CITY OF ST. GEORGE ENGINEERING DEPARTMENT	STANDARD DWG. NO.	
DATE	DESCRIPTION	BY	STANDARD CURB & GUTTER DETAILS	100	1 OF 1
				APPROVED:	
				DATE:	BY: LBB



RU30

NOTES:
1- ALL CONSTRUCTION & MATERIALS SHALL CONFORM TO CITY STANDARDS.
2- RU30 FOR USE ON CERTAIN RURAL COLLECTOR ROADS ONLY & SHALL BE APPROVED BY THE CITY ENGINEER PRIOR TO ITS USE.
3- PR24 FOR USE IN PRIVATE DEVELOPMENTS ON PRIVATE ROADS ONLY.



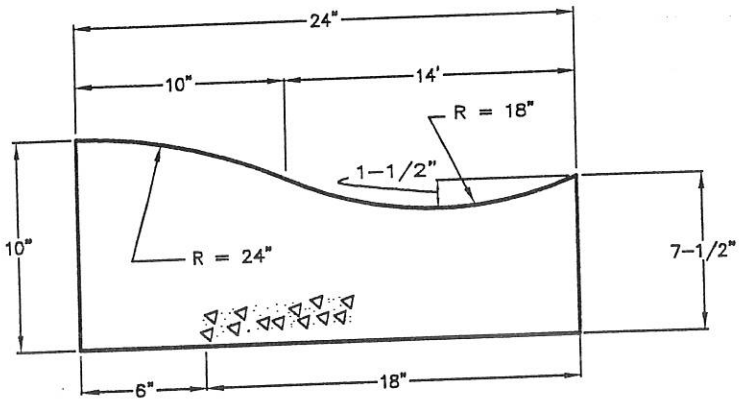
PR24
(PRIVATE DEVELOPMENTS ONLY)

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS DATE	DESCRIPTION	BY

CONCRETE CURB & GUTTER
(RU30 & PR24)

STANDARD DWG. NO. 101 | 1 OF 1
APPROVED:
DATE: 6/10/96 | BY: LBB



STANDARD ROLL CURB & GUTTER
TYPE RN24

(FOR USE IN MOBILE HOME DEVELOPMENTS ONLY)

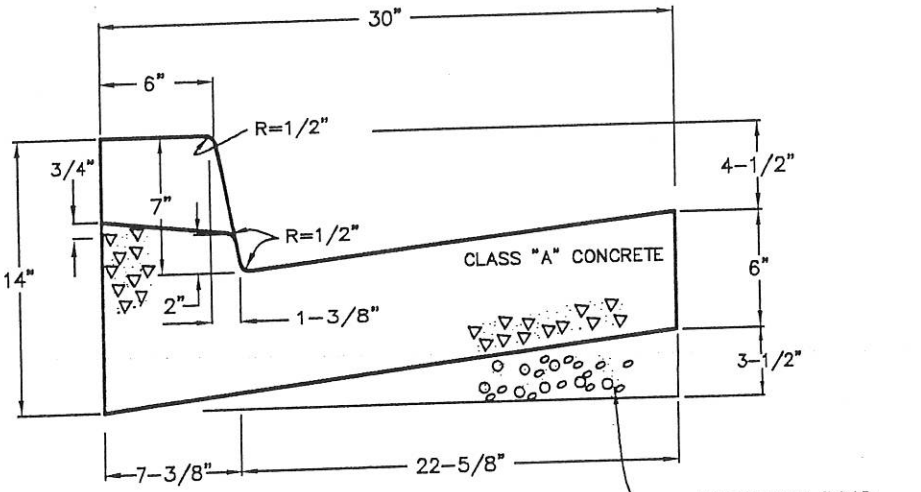
NOTES:
1– ALL CONCRETE TO BE CLASS "A" CONCRETE.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

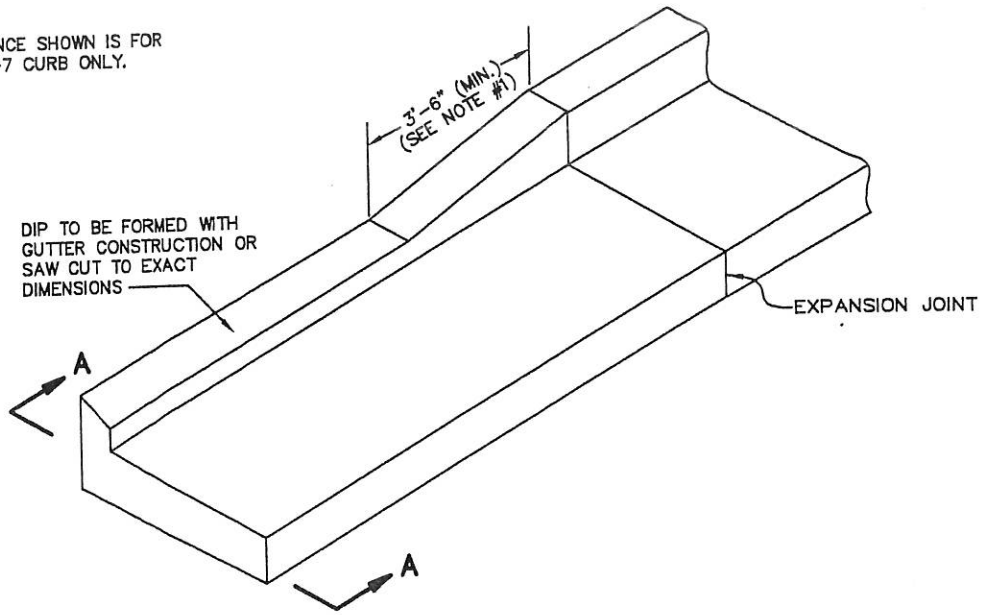
STANDARD ROLL CURB & GUTTER DETAILS

STANDARD DWG. NO.	
102	1 OF 1
APPROVED:	
DATE:	BY: LBB



A — SECTION

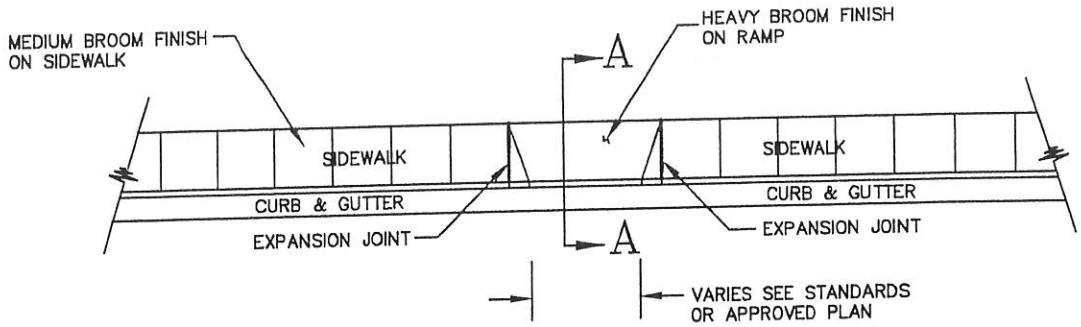
NOTES:
1- DISTANCE SHOWN IS FOR HB30-7 CURB ONLY.



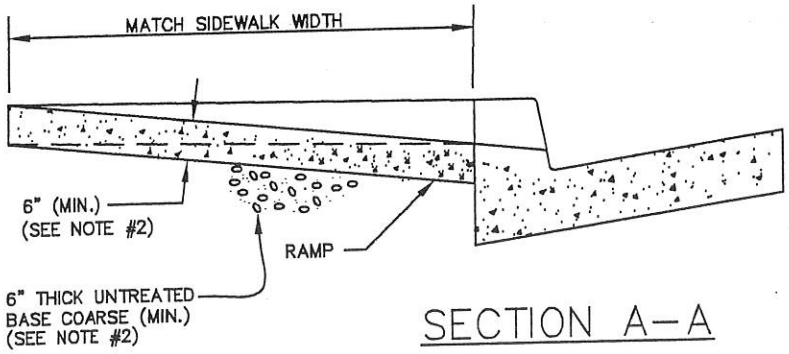
PERSPECTIVE VIEW

NO SCALE

CITY OF ST. GEORGE ENGINEERING DEPARTMENT		
REVISIONS: DATE / DESCRIPTION / BY	DRIVEWAY CURB (TYPE HB30-7) DETAILS	STANDARD DWG. NO. 110 — 1 OF 1
		APPROVED:
		DATE: — BY: LBB



PLAN

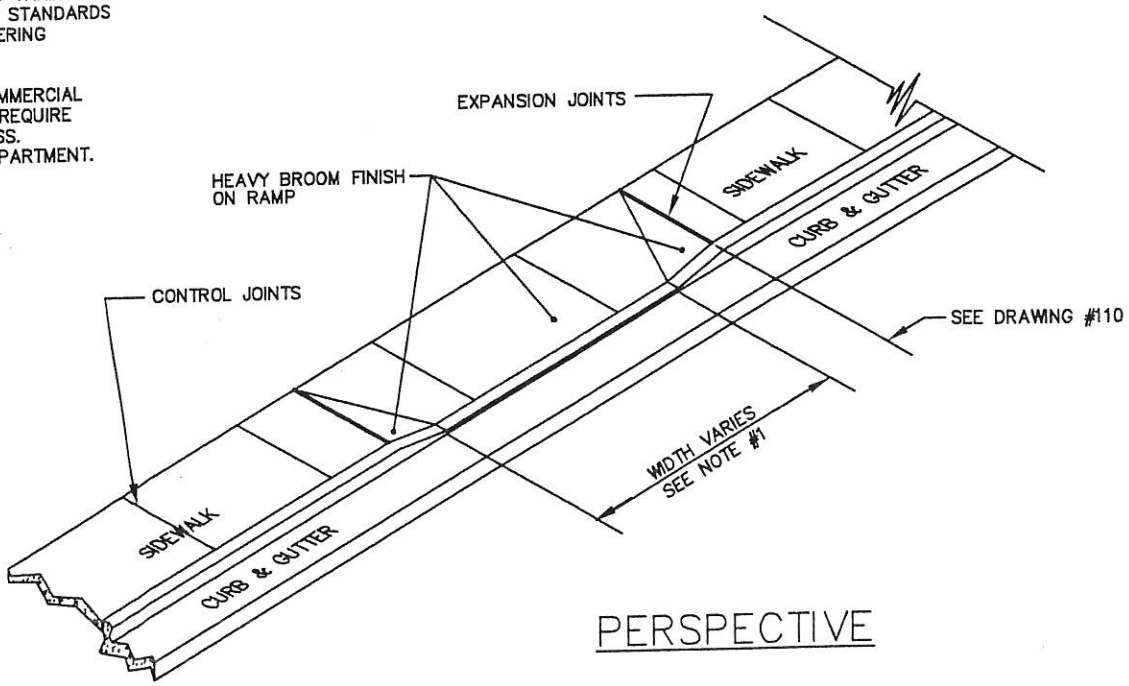


SECTION A–A

NOTES:

1– WIDTH OF DRIVEWAYS VARIES WITH USE– SEE CITY STANDARDS OR CONTACT ENGINEERING DEPARTMENT.

2– DRIVEWAYS WITH COMMERCIAL OR INDUSTRIAL USE REQUIRE ADDITIONAL THICKNESS. SEE ENGINEERING DEPARTMENT.



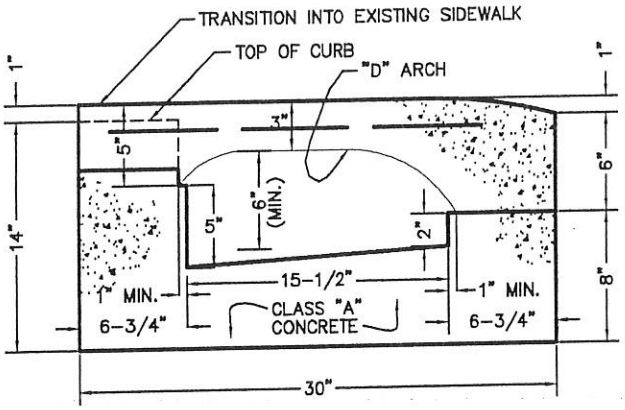
PERSPECTIVE

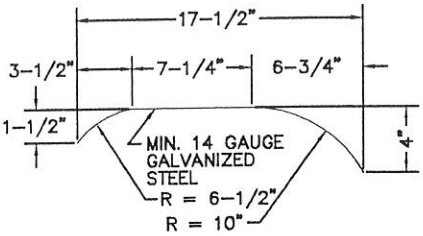
CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

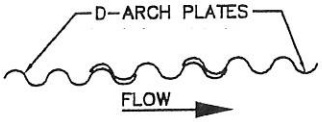
DRIVEWAY APRON DETAILS

STANDARD DWG. NO.	
111	1 OF 1
APPROVED:	
DATE:	BY: LBB





"D" ARCH DIMENSIONS
(APPROXIMATE)

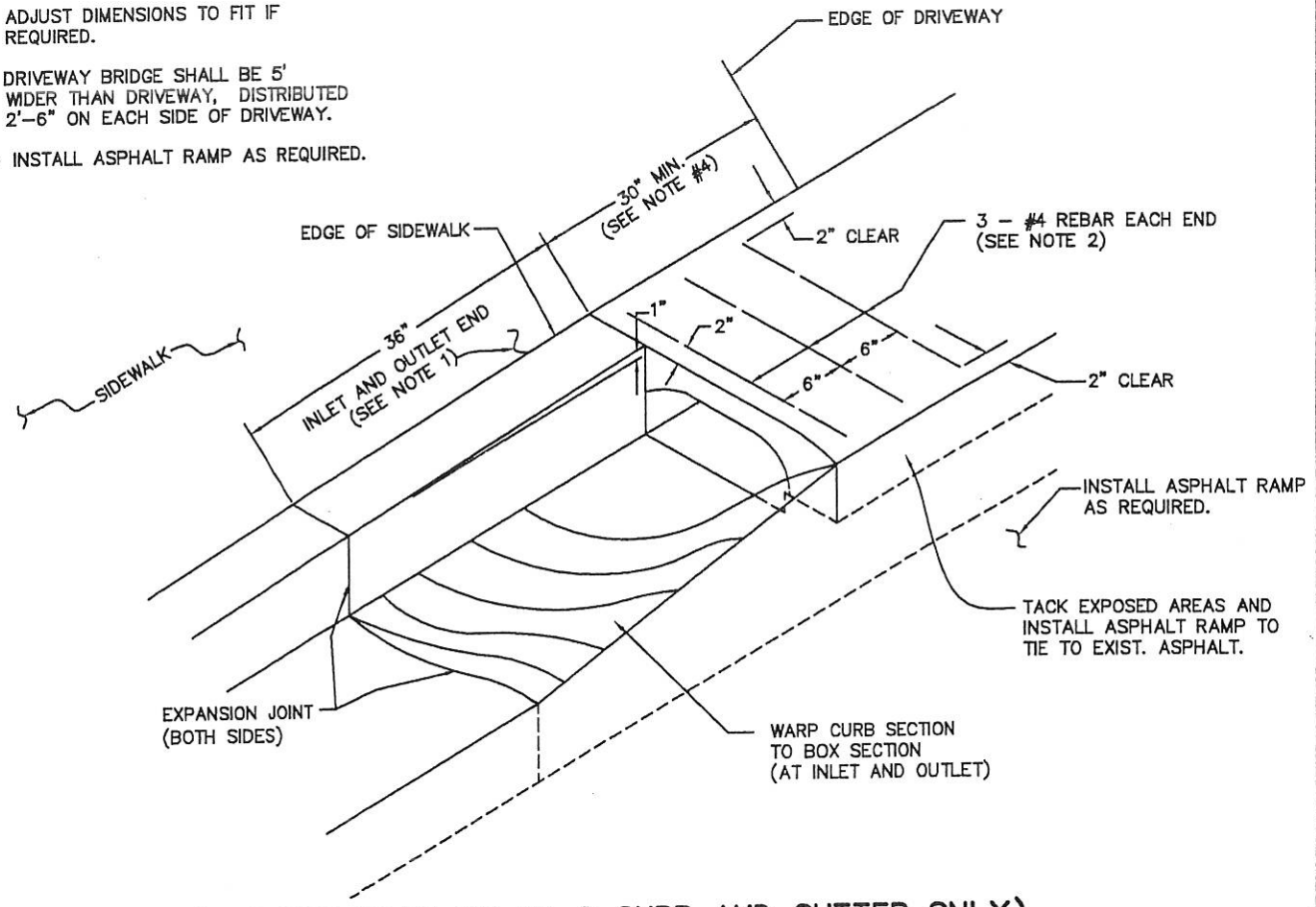


"D" ARCH OVERLAP DETAIL

NOTES:

1. MATCH SIDEWALK AT TOP OF CURB AND TOP OF BRIDGE IN 36" TRANSITION.
2. REBAR AT ENDS REQUIRED
3. ADJUST DIMENSIONS TO FIT IF REQUIRED.
4. DRIVEWAY BRIDGE SHALL BE 5' WIDER THAN DRIVEWAY, DISTRIBUTED 2'-6" ON EACH SIDE OF DRIVEWAY.

5- INSTALL ASPHALT RAMP AS REQUIRED.



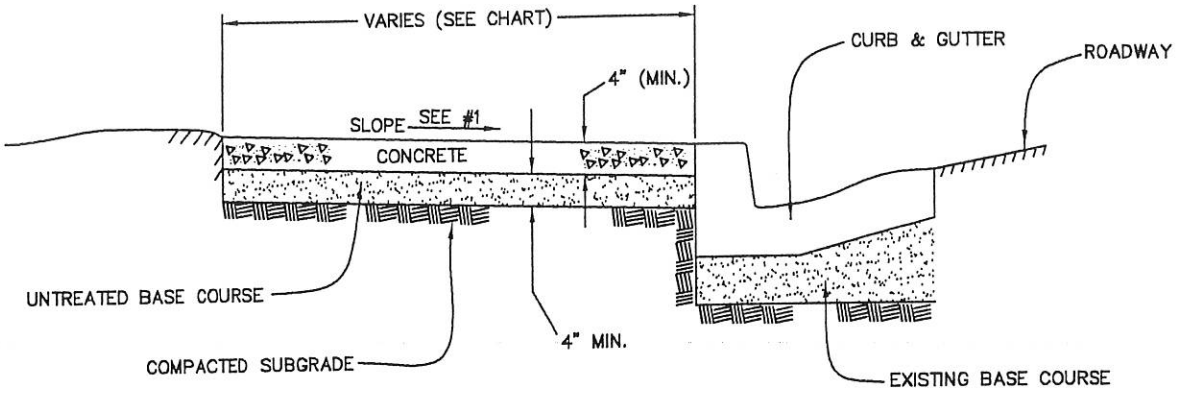
(FOR USE WITH HB 30-8 CURB AND GUTTER ONLY)

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS DATE	DESCRIPTION	BY

STANDARD DRIVEWAY BRIDGE

STANDARD DWG. NO.	
112	1 OF 1
APPROVED:	
DATE:	BY: LBB



GENERAL NOTES

1– CROSS SLOPE SHALL BE 1/4 INCH RISE PER FOOT FROM TOP OF CURB (SLOPE NOT TO EXCEED 1/2 INCH RISE PER FOOT).

2– UNTREATED BASE COURSE SHALL BE PLACED UNDER SIDEWALK AND COMPACTED TO A MIN. OF 95%. THICKNESS OF UNTREATED BASE NOT LESS THAN 4 INCHES.

3– USE CLASS "A" CONCRETE ONLY (6 BAG, TYPE V CEMENT).

4– SIDEWALK SURFACE TO HAVE A MEDIUM BROOM FINISH.

5– SIDEWALKS IN COMMMERCIAL ZONES SHALL BE A MIN. OF 7' WIDE WHERE DESIGNATED BY THE CITY.

6– WHERE SIDEWALKS CROSS DRIVEWAYS, MINIMUM THICKNESS SHALL BE AS FOLLOWS:
RESIDENTIAL: 6" FOR SIDEWALK, 6" FOR ROADBASE
COMMERCIAL/INDUSTRIAL: 8" FOR SIDEWALK, 8" FOR ROADBASE.

7– FIBER EXPANSION JOINTS SHALL BE PLACED AT BOTH ENDS OF DRIVEWAY

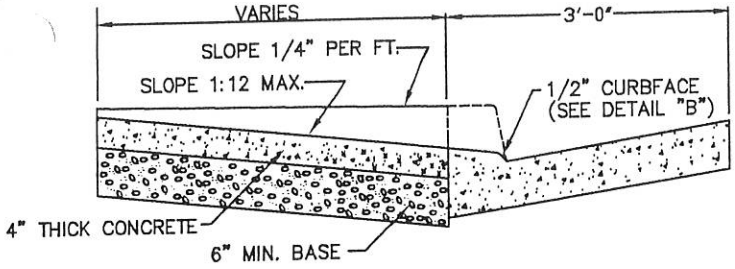
8– FIBER EXPANSION JOINTS SHALL ALSO BE PLACED BETWEEN DRIVEWAY AND BACK OF SIDEWALK.

SIDEWALK	ROAD TYPE				
	LOCAL	COLLECTOR	MAJOR COLLECTOR	ARTERIAL	MAJOR ARTERIAL
WIDTH	4'	5'	5'	5'+	6'+
SCORE JOINT SPACING	4'	5'	5'	5'+	6'+
EXPANSION JOINT SPACING	20'	20'	20'	20'	24'

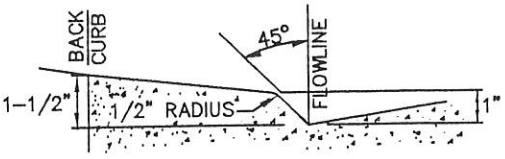
REVISIONS		
DATE	DESCRIPTION	BY

STANDARD SIDEWALK DETAILS

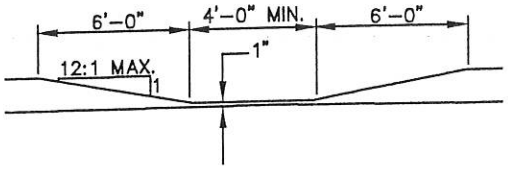
STANDARD DWG. NO.	
120	1 OF 1
APPROVED:	
DATE:	BY: LBB



SECTION A-A



CURBFACE DETAIL B



ELEVATION

NOTES:

1- POUR CURB & GUTTER SEPARATELY FROM RAMP SIDEWALK.

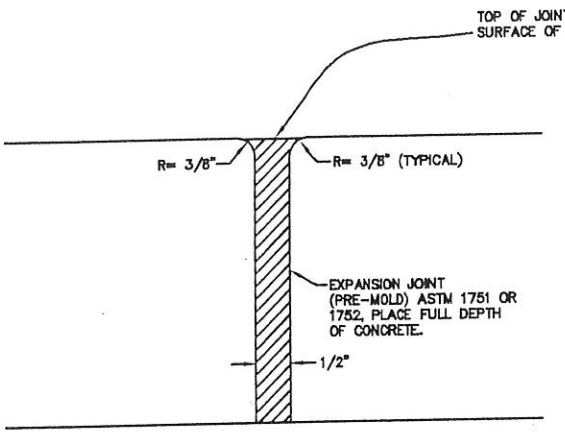
2- RAMPS SHALL BE LOCATED AT MIDPOINT OF CURB RETURN UNLESS OTHERWISE APPROVED.

3- MAXIMUM RAMP SLOPE IS 12:1.

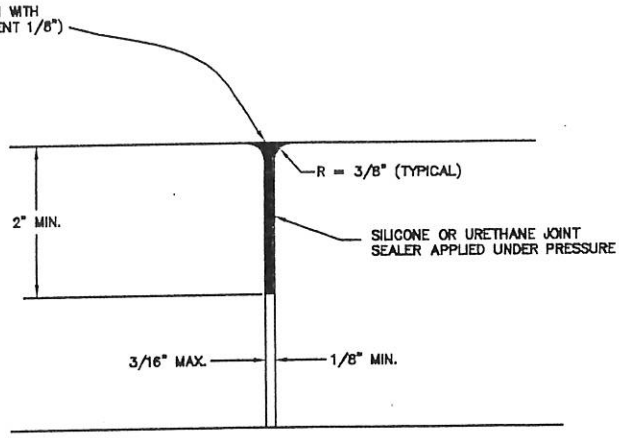
4- RAMPS SHALL HAVE A ROUGH BROOM FINISH TRANSVERSE TO SLOPE OF THE RAMP.

5- RAMP SHOWN IS FOR HB30-7 CURB & GUTTER ONLY- ADJUST OTHERS AS NECESSARY TO MEET MAXIMUM ALLOWABLE SLOPE.

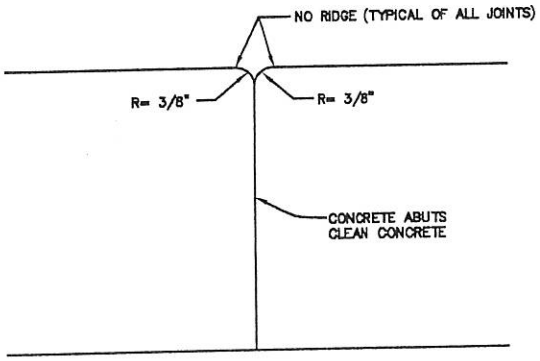
CITY OF ST. GEORGE ENGINEERING DEPARTMENT				
REVISIONS			HANDICAP RAMP DETAILS	STANDARD DWG. NO. 121 1 OF 1
DATE	DESCRIPTION	BY		APPROVED:
				DATE: BY: LBB



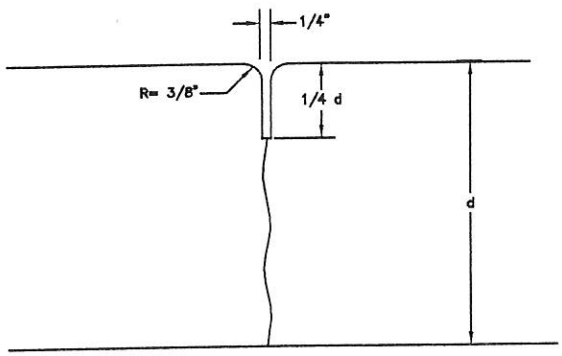
EXPANSION JOINT



FORM PLATE JOINT

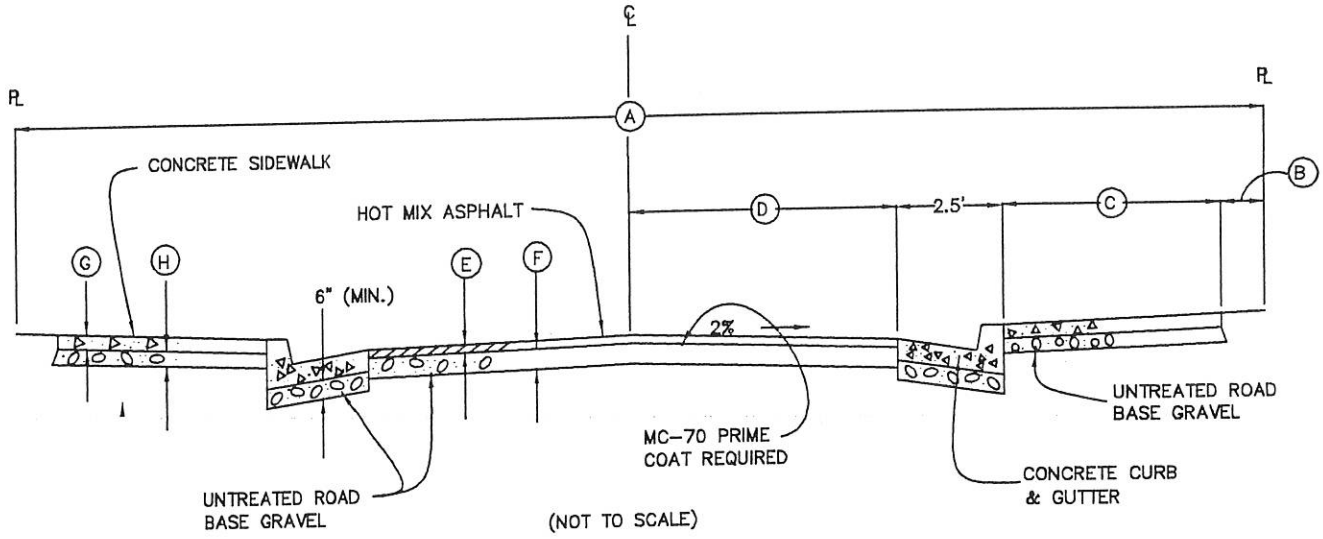


COLD JOINT



CONTROL JOINT

CITY OF ST. GEORGE ENGINEERING DEPARTMENT				
REVISIONS			STANDARD DWG. NO.	
DATE	DESCRIPTION	BY	STANDARD CONCRETE JOINT DETAILS	122 | 1 OF 1
				APPROVED:
				DATE: | BY: LBB



DIMENSIONS					
MARK	LOCAL	COLLECTOR	MAJOR COLLECTOR	ARTERIAL	MAJOR ARTERIAL
A	50'	60'	66'	80'	>80'
B	1'	0'	0.5'	0'	VARIES
C	4'	5'	5'	5'+	6'+
D	17.5'	22.5'	25'	32.5'	>32.5
E(MIN)	2.5"	3"	3"	3.5"	4"
F	SEE STANDARD SPECIFICATIONS				
G	4" FOR SIDEWALK, 6" FOR DRIVEWAY APRONS				
H	4" UNDER SIDEWALKS, 6" UNDER DRIVEWAYS				

NOTES:

1– MAXIMUM ALLOWABLE DIFFERENCE IN CURB ELEVATION SHALL BE 12 INCHES AND MUST HAVE CITY ENGINEER APPROVAL PRIOR TO ITS USE.

2– FOR ROADS IN OR SERVING INDUSTRIAL AREAS, ASPHALT AND BASE THICKNESS SHALL BE INCREASED ACCORDING TO PROVISIONS FOR HEAVY TRUCK TRAFFIC.

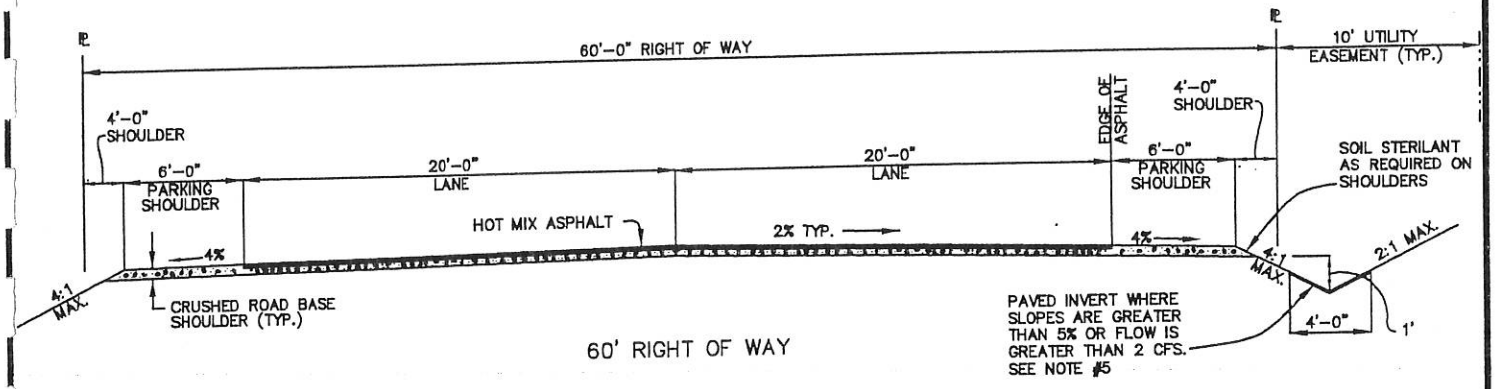
3– MINIMUM ASPHALT THICKNESS IS SHOWN. THICKNESS SHALL BE BASED UPON ACTUAL ENGINEERING ANALYSIS, BUT IN NO CASE SHALL IT BE LESS THAN THE MINIMUM.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

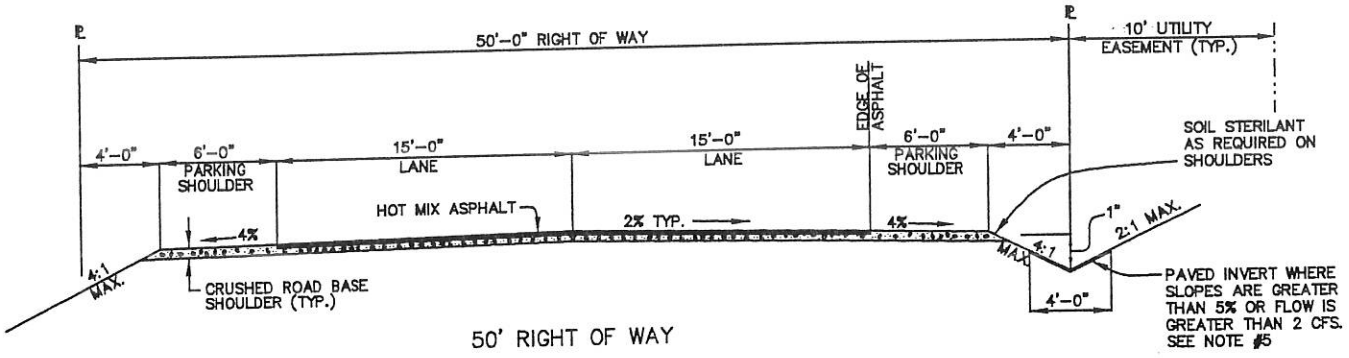
REVISIONS		
DATE	DESCRIPTION	BY

STANDARD ROAD CROSS SECTIONS

STANDARD DWG. NO.	
140	1 OF 1
APPROVED:	
DATE:	BY: LBB



60' RIGHT OF WAY



50' RIGHT OF WAY

NOTES:

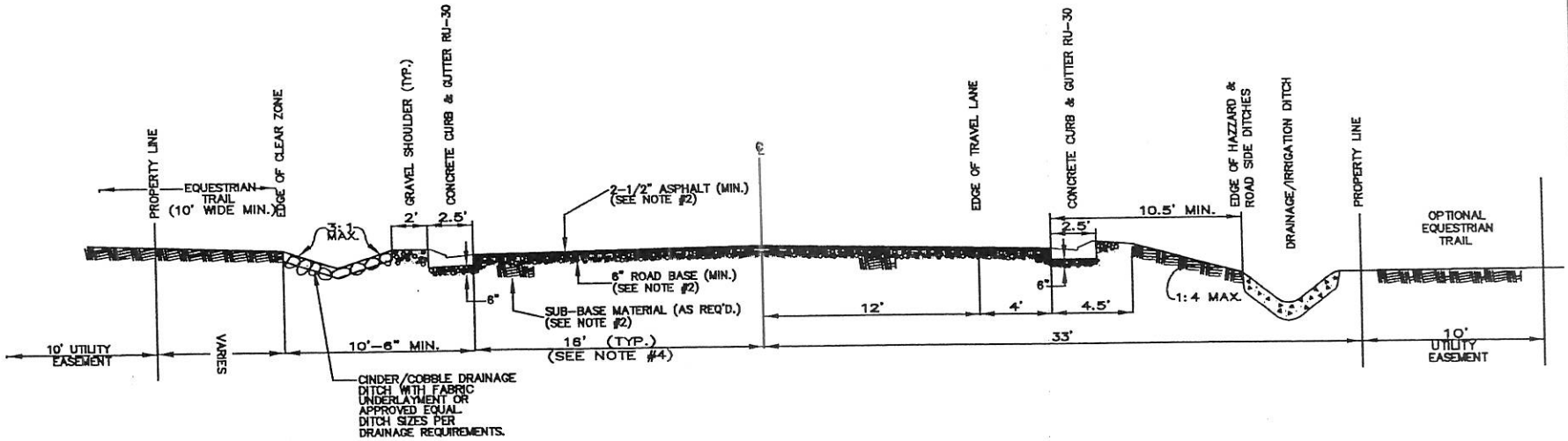
1) SHOULDER WIDTH & SLOPES WILL VARY FOR WIDER RIGHT-OF-WAY WIDTH.
2) FOR ROADWAY STRUCTURAL THICKNESS USE ROAD CROSS SECTION STANDARD IN STANDARD SPECIFICATIONS.
3) AREA BETWEEN EDGE OF ASPHALT AND PROPERTY LINE SHALL NOT BE PAVED EXCEPT AT DRIVES.
4) ALL DRAINAGE MUST SLOPE AWAY FROM PAVEMENT EDGE. DO NOT CHANNEL WATER ALONG ROADWAY EDGE.
5) OTHER EROSION CONTROL MATERIALS MAY BE USED UPON APPROVAL OF THE CITY ENGINEER.
6) ROADWAYS WITH RIGHT-OF-WAY WIDTHS GREATER THAN 66' (ie MAJOR COLLECTORS & HIGHER) SHALL COMPLY WITH THE CITY STANDARD STREET CROSS SECTIONS UNLESS OTHERWISE APPROVED.
7) THIS CROSS SECTION FOR USE IN AG ZONES ONLY. (1 ACRE LOTS & GREATER).
8) 10' MINIMUM WIDE UTILITY EASEMENT REQUIRED OUTSIDE OF RIGHT OF WAY, BOTH SIDES OF STREET.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

ROADWAY DETAILS
LARGE LOT RURAL SUBDIVISIONS

STANDARD DWG. NO.	
141	1 OF 1
APPROVED:	
DATE:	BY: LBB



RURAL X-SECTION

66' WIDE MAJOR COLLECTOR

NOTES:

1- ALL POLES, HYDRANTS, TREES, AND OTHER OBSTRUCTIONS TO BE IN UTILITY EASEMENT AREA.
2- DEPTH SHOWN IS A MIN. ACTUAL WILL BE PER ROADWAY DESIGN.
3- USE OF THIS ROAD SECTION REQUIRES PRIOR APPROVAL FROM THE CITY ENGINEER'S OFFICE.
4- ADDITIONAL ROADWAY WIDTH WILL BE REQUIRED AT INTERSECTIONS TO ACCOMODATE TURNING LANES:
LEFT ONLY-12'
LEFT AND RIGHT- 22'

REVISIONS

DATE	DESCRIPTION	BY

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

RURAL X-SECTION DETAILS

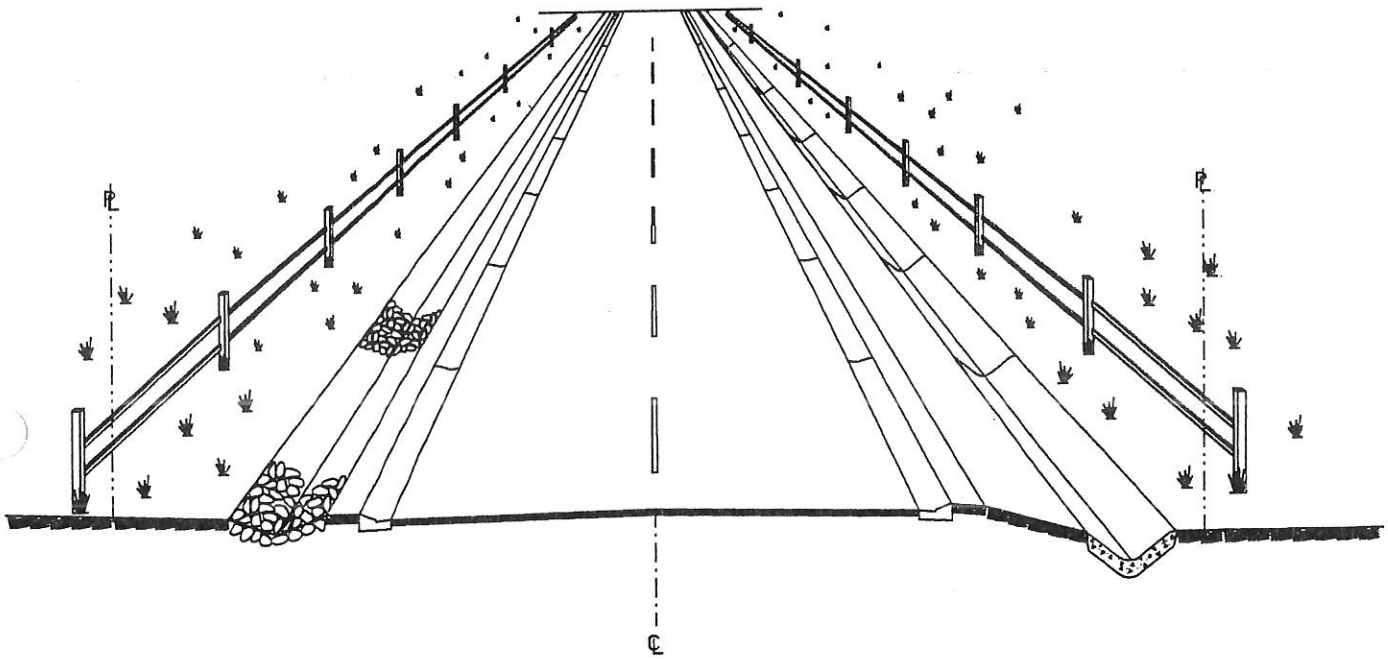
STANDARD DWG. NO. 142

1 OF 1

APPROVED:

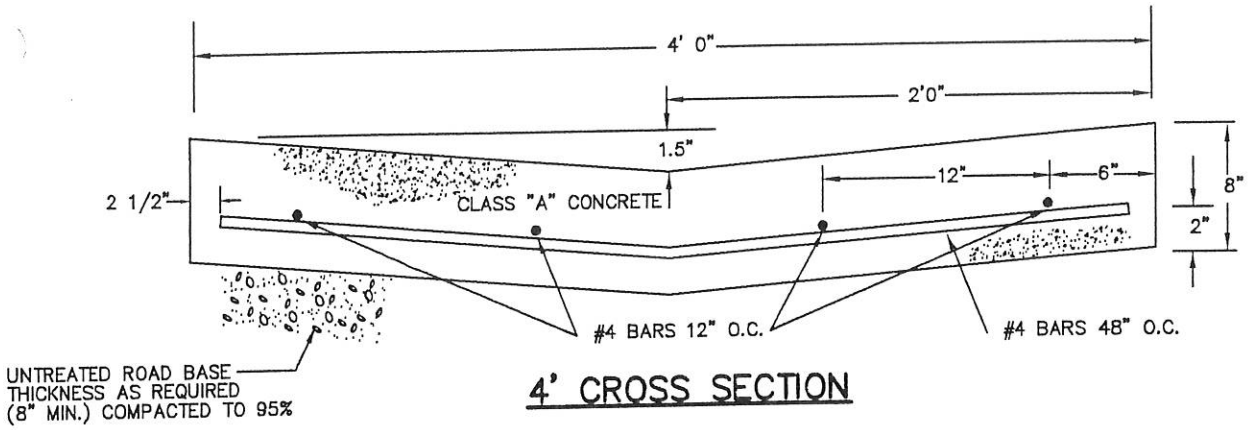
DATE:

BY: LBB

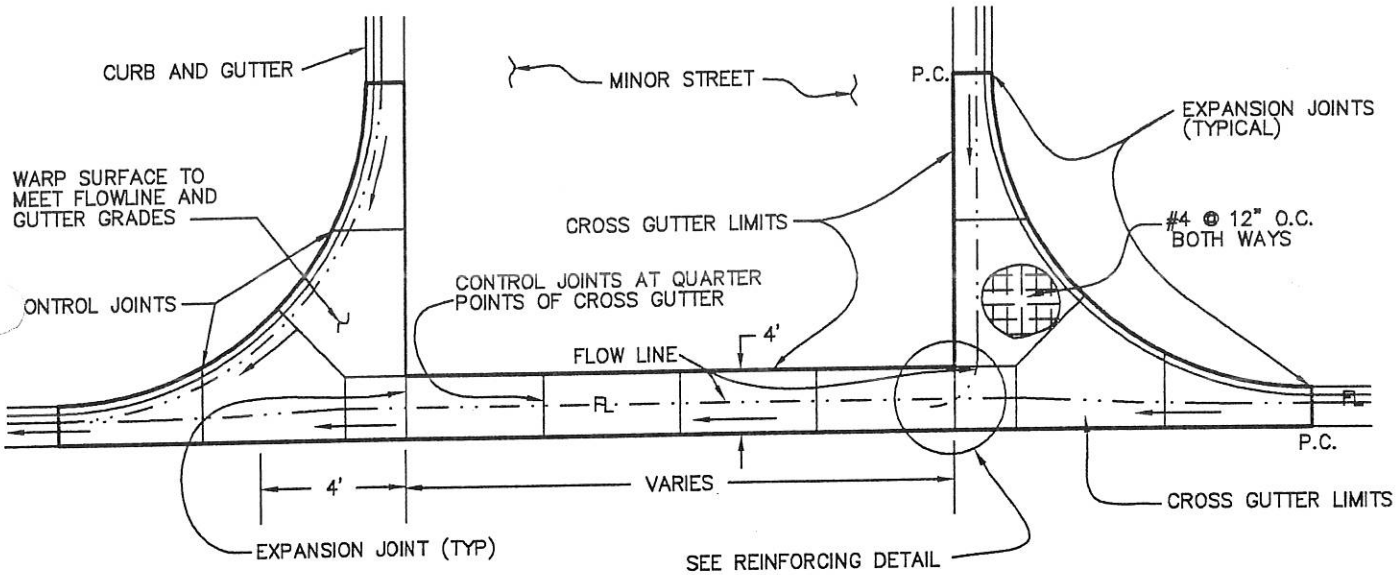


RURAL X-SECTION
PERSPECTIVE VIEW

REVISIONS			CITY OF ST. GEORGE ENGINEERING DEPARTMENT	STANDARD DWG. NO.	
DATE	DESCRIPTION	BY	RURAL X-SECTION DETAILS	143	1 OF 1
				APPROVED:	
				DATE:	BY: LBB



4' CROSS SECTION



PLAN

NOTES:

1– FOR USE ON RESIDENTIAL STREETS ONLY.

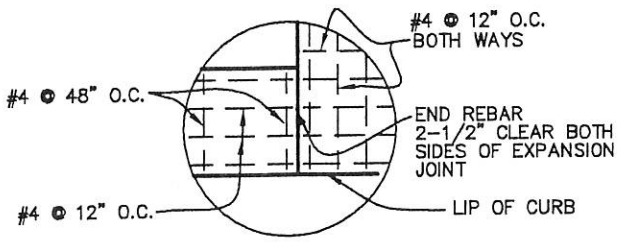
2– CROSS GUTTERS ARE USED AT INTERSECTIONS ONLY UNLESS OTHERWISE APPROVED.

3– CROSS GUTTER SHALL CROSS THE MINOR STREET.

4– ALL REINFORCING STEEL SHALL HAVE 2–INCH MINIMUM CLEAR COVER. SUPPORT CHAIRS, BLOCKS OR OTHER APPROVED EQUAL SHALL BE USED TO RAISE STEEL OFF GROUND.

5– REINFORCING TO EXTEND TO LIMITS OF CROSS GUTTER.

6– ALL REINFORCING STEEL SHALL BE GRADE 60 ASTM A 615.



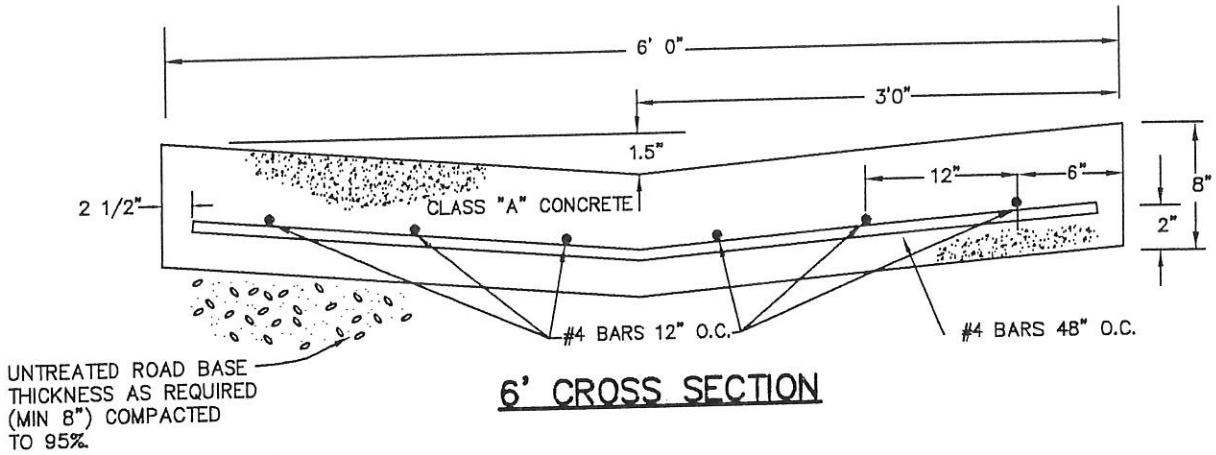
REINFORCING DETAIL

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

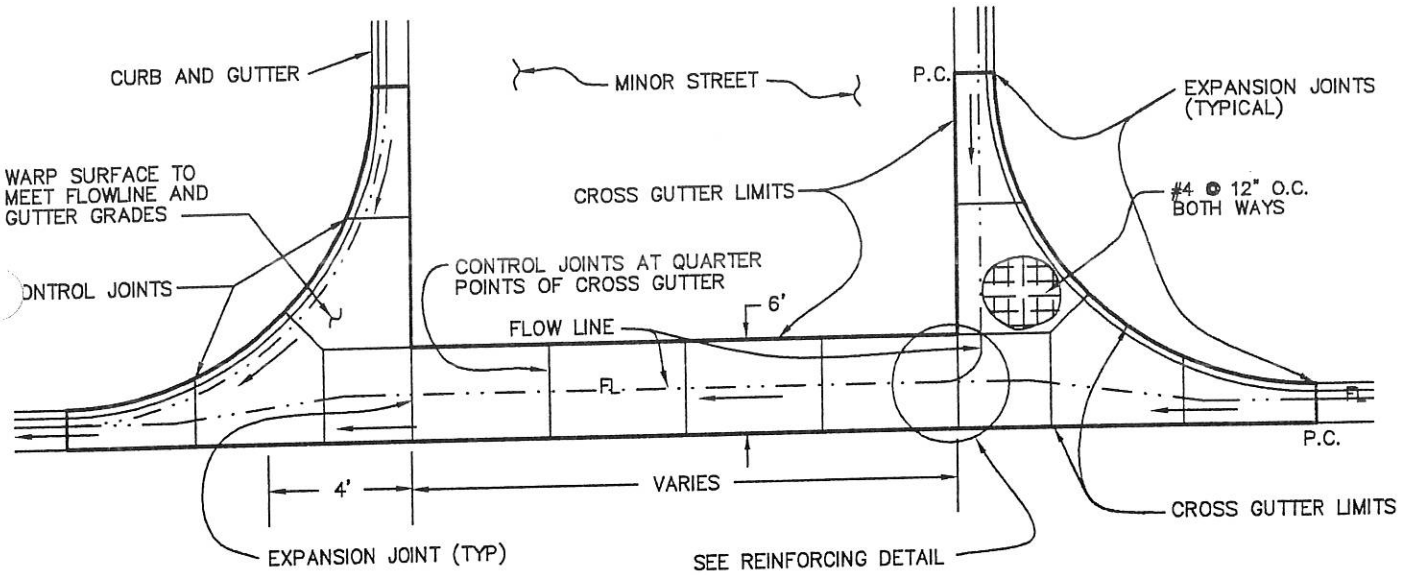
REVISIONS		
DATE	DESCRIPTION	BY

STANDARD 4' CROSS GUTTER

STANDARD DWG. NO.	
150	1 OF 1
APPROVED:	
DATE:	BY: LBB



6' CROSS SECTION



PLAN

NOTES:

1– FOR USE ON RESIDENTIAL & COMMERCIAL STREETS.

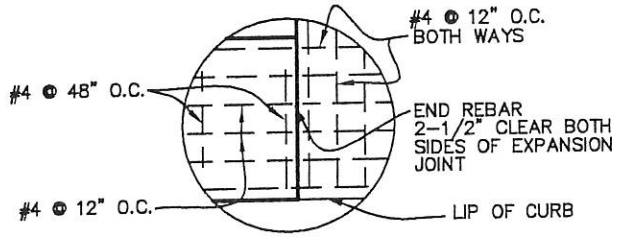
2– CROSS GUTTERS ARE USED AT INTERSECTIONS ONLY UNLESS OTHERWISE APPROVED.

3– CROSS GUTTER SHALL CROSS THE MINOR STREET.

4– ALL REINFORCING STEEL SHALL HAVE 2–INCH MINIMUM CLEAR COVER. SUPPORT CHAIRS, BLOCKS OR OTHER APPROVED EQUAL SHALL BE USED TO RAISE STEEL OFF GROUND.

5– REINFORCING TO EXTEND TO LIMITS OF CROSS GUTTER.

6– ALL REINFORCING STEEL SHALL BE GRADE 60 ASTM A 615.



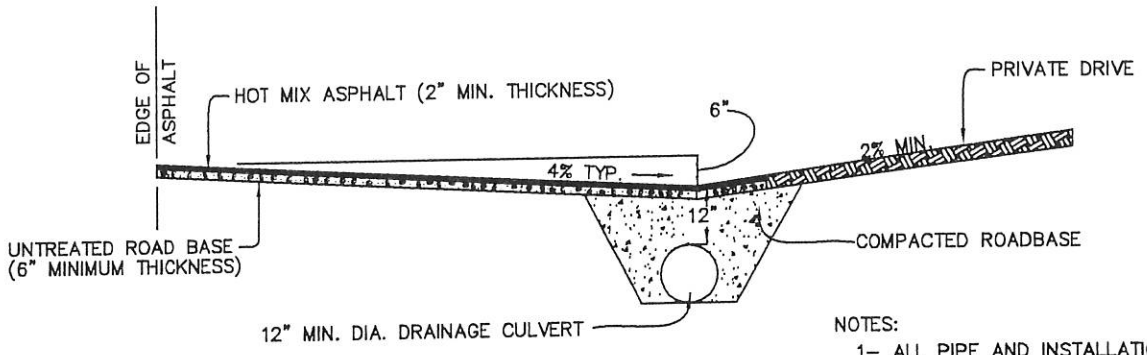
REINFORCING DETAIL

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

STANDARD 6' CROSS GUTTER

STANDARD DWG. NO.	
151	1 OF 1
APPROVED:	
DATE:	BY: LBB



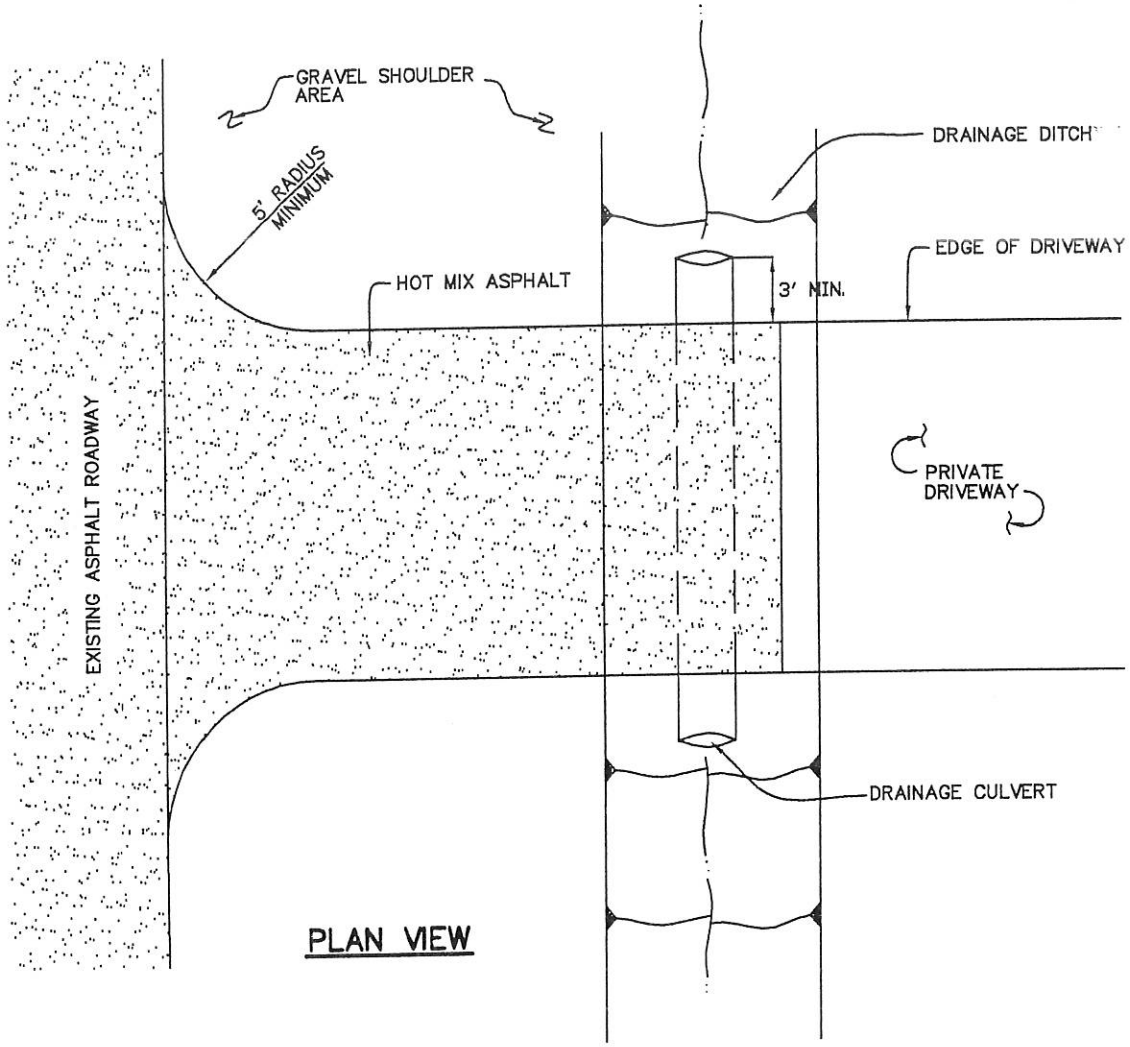
NOTES:

1– ALL PIPE AND INSTALLATION TO TO MEET CITY STANDARDS.

2– CULVERT TO HAVE A MINIMUM SLOPE OF 0.5%.

3– DO NOT PAVE BETWEEN EDGE OF ASPHALT AND DRAINAGE DITCH EXCEPT AT DRIVEWAY.

SECTION AT DRIVEWAY ℄



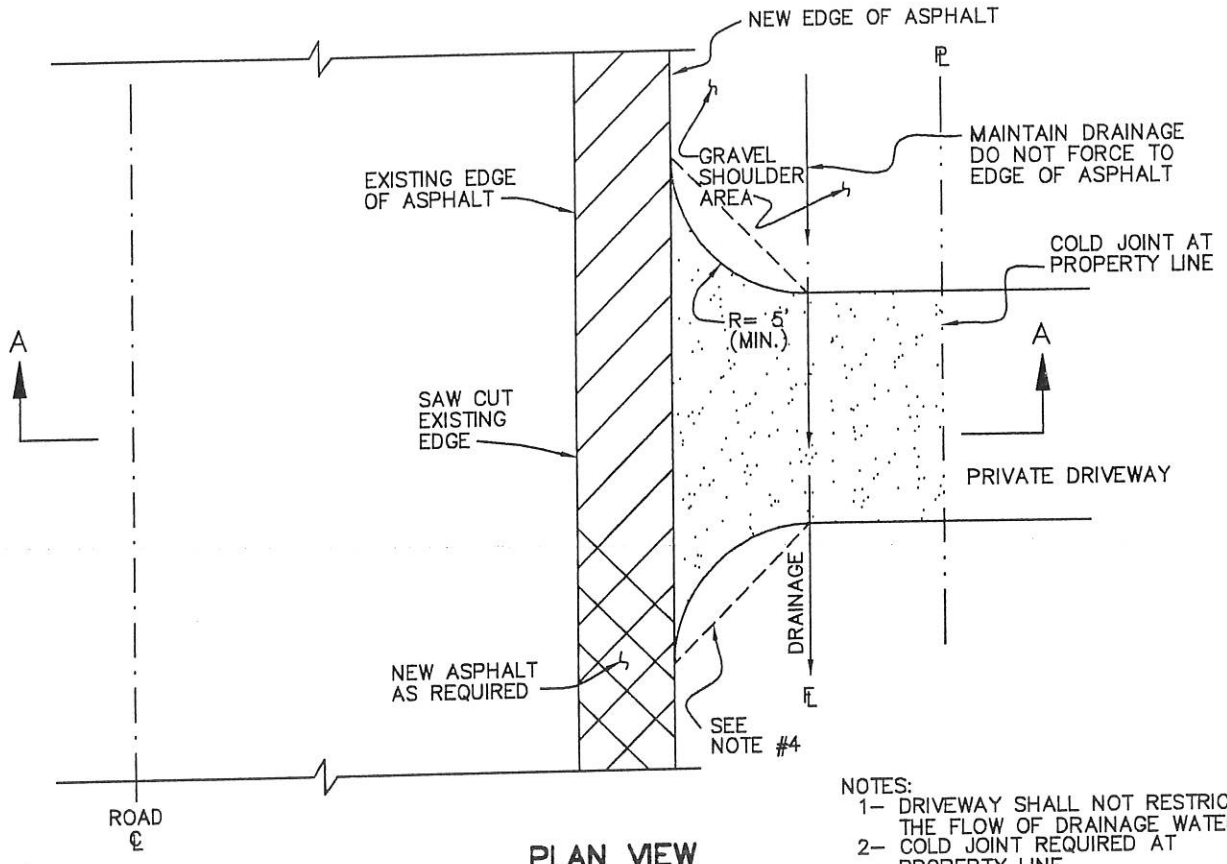
PLAN VIEW

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

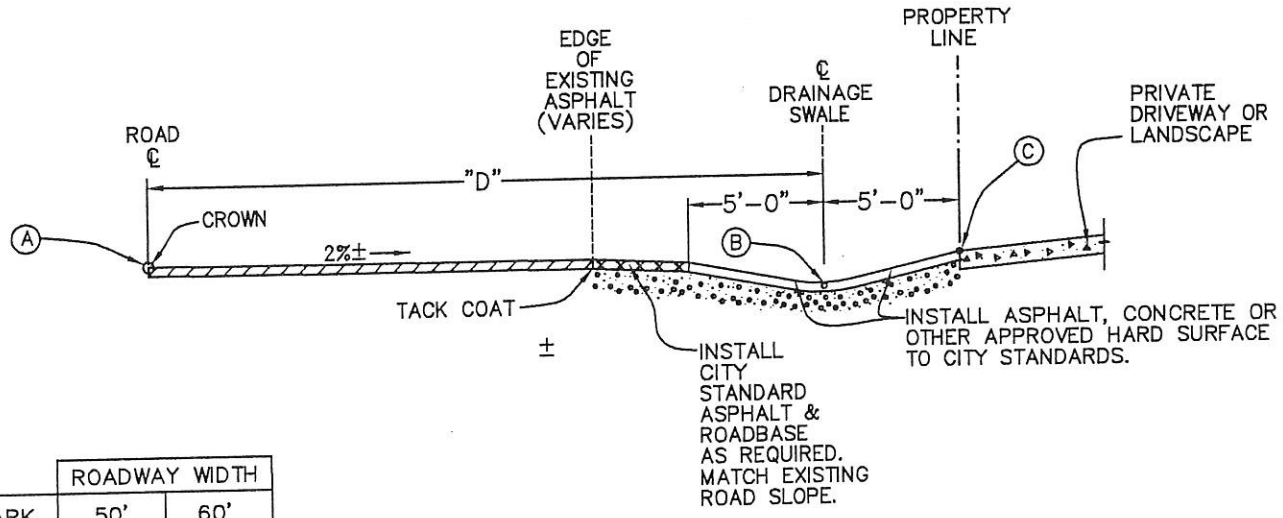
DRIVEWAY ACCESS DETAILS LARGE LOT SUBDIVISIONS

STANDARD DWG. NO.	
152	1 OF 1
APPROVED:	
DATE:	BY: LBB



PLAN VIEW

NOTES:
1– DRIVEWAY SHALL NOT RESTRICT THE FLOW OF DRAINAGE WATER
2– COLD JOINT REQUIRED AT PROPERTY LINE.
3– DO NOT PAVE BETWEEN NEW EDGE OF ASPHALT AND DRAINAGE CENTERLINE EXCEPT AT DRIVEWAY.
4– 45° ANGLE MAY REPLACE RADIUS.



SECTION–A

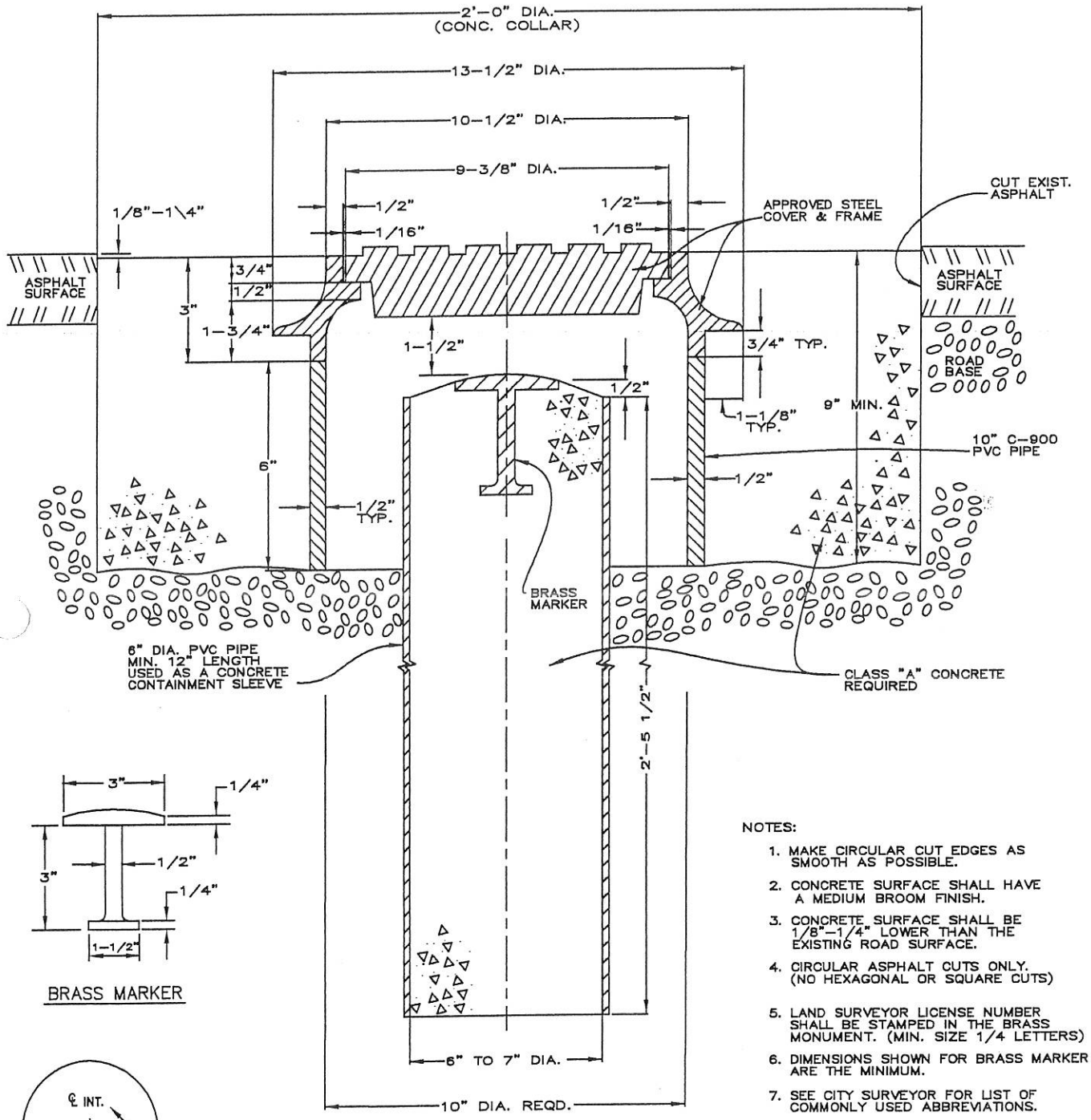
	ROADWAY WIDTH	
MARK	50'	60'
A	VARIES	VARIES
B(MIN.)	A–6"	A–7"
C	A+1"	A+1"
D	20'	25'

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

DRIVEWAY ACCESS WITHOUT CURBING (50' & 60' RIGHT OF WAY)

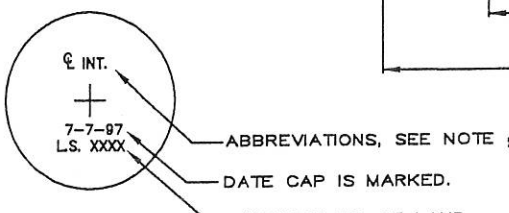
STANDARD DWG. NO.	
153	1 OF 1
APPROVED:	
DATE:	BY: LBB



BRASS MARKER

NOTES:

1. MAKE CIRCULAR CUT EDGES AS SMOOTH AS POSSIBLE.
2. CONCRETE SURFACE SHALL HAVE A MEDIUM BROOM FINISH.
3. CONCRETE SURFACE SHALL BE 1/8"-1/4" LOWER THAN THE EXISTING ROAD SURFACE.
4. CIRCULAR ASPHALT CUTS ONLY. (NO HEXAGONAL OR SQUARE CUTS)
5. LAND SURVEYOR LICENSE NUMBER SHALL BE STAMPED IN THE BRASS MONUMENT. (MIN. SIZE 1/4 LETTERS)
6. DIMENSIONS SHOWN FOR BRASS MARKER ARE THE MINIMUM.
7. SEE CITY SURVEYOR FOR LIST OF COMMONLY USED ABBREVIATIONS.



CAP PLAN

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

CLASS I STANDARD MONUMENT DETAILS

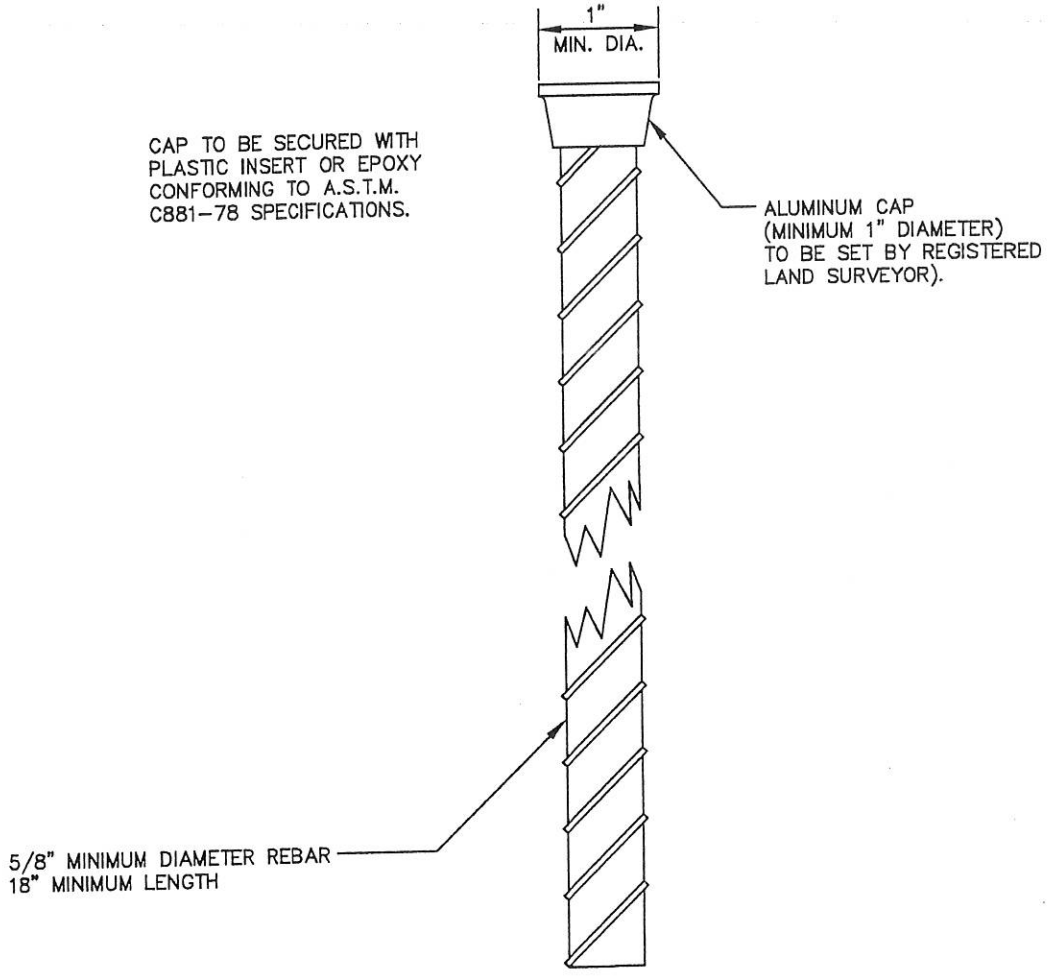
STANDARD DWG. NO.	
160	1 OF 1
APPROVED:	
DATE:	BY: LBB

NOTES:

1– TYPE II MONUMENTS TO BE SET AT ALL CENTERLINE CONTROL POINTS NOT OTHERWISE IDENTIFIED BY A TYPE I MONUMENT AND AS REQUIRED BY THE CITY SURVEYOR.

2– THE REGISTERED LAND SURVEYOR'S NUMBER, AND A PUNCH MARK ARE TO APPEAR ON THE SURFACE OF THE CAP.

3– ALUMINUM CAP SHALL BE SET FLUSH WITH SURFACE OF ROAD.



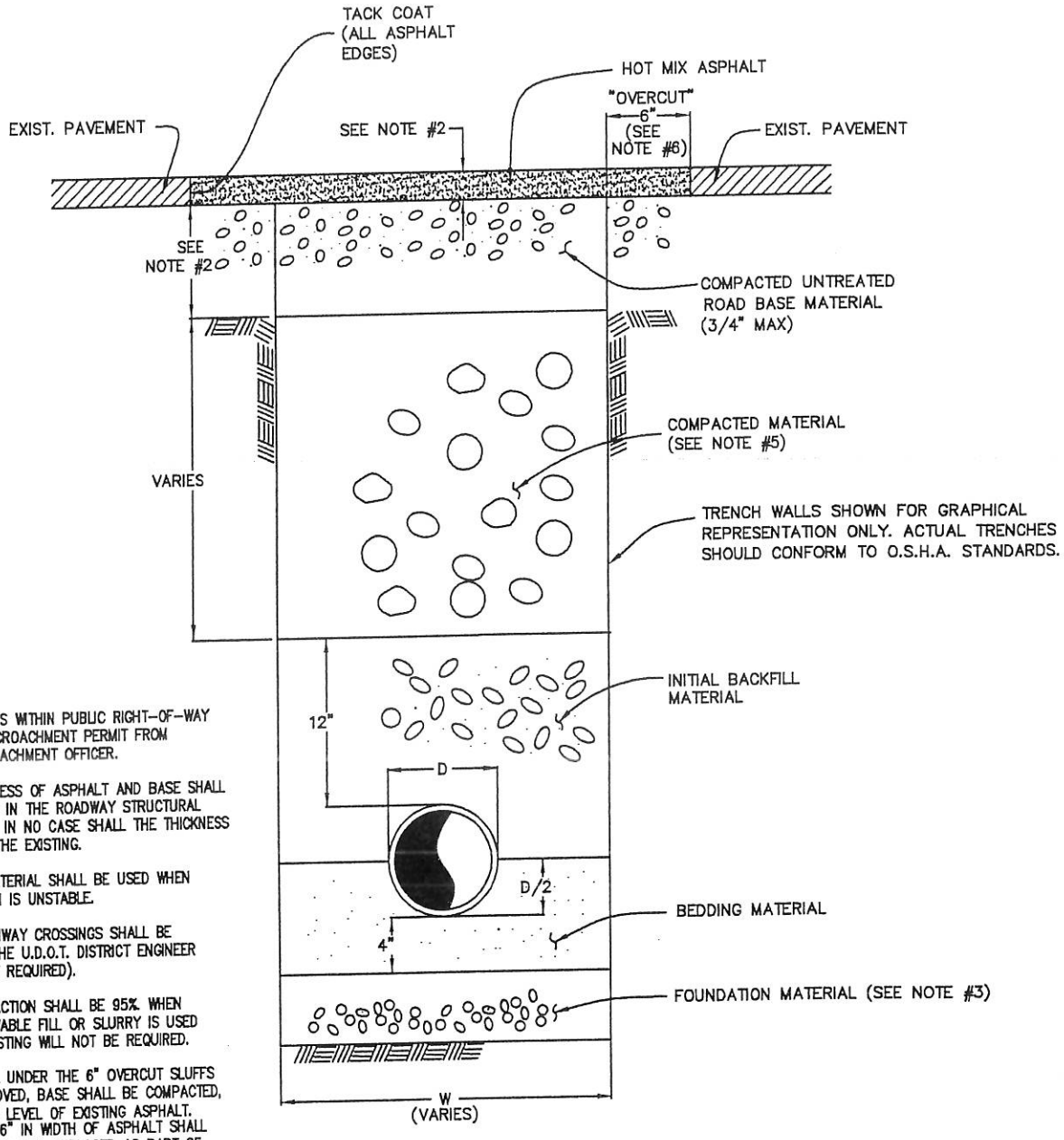
TYPE II MONUMENT

REVISIONS		
DATE	DESCRIPTION	BY

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

CLASS II MONUMENT

STANDARD DWG. NO.	
161	1 OF 1
APPROVED:	
DATE:	BY: LBB



NOTES:

1– ALL EXCAVATIONS WITHIN PUBLIC RIGHT–OF–WAY REQUIRE AN ENCROACHMENT PERMIT FROM THE CITY ENCROACHMENT OFFICER.

2– MINIMUM THICKNESS OF ASPHALT AND BASE SHALL BE AS OUTLINED IN THE ROADWAY STRUCTURAL REQUIREMENTS. IN NO CASE SHALL THE THICKNESS BE LESS THAN THE EXISTING.

3– FOUNDATION MATERIAL SHALL BE USED WHEN TRENCH BOTTOM IS UNSTABLE.

4– ALL STATE HIGHWAY CROSSINGS SHALL BE APPROVED BY THE U.D.O.T. DISTRICT ENGINEER (U.D.O.T. PERMIT REQUIRED).

5– MINIMUM COMPACTION SHALL BE 95%. WHEN APPROVED FLOWABLE FILL OR SLURRY IS USED COMPACTION TESTING WILL NOT BE REQUIRED.

6– WHEN MATERIAL UNDER THE 6" OVERCUT SLUFFS OFF OR IS REMOVED, BASE SHALL BE COMPACTED, TO THE BOTTOM LEVEL OF EXISTING ASPHALT. AN ADDITIONAL 6" IN WIDTH OF ASPHALT SHALL BE CUT, REMOVED AND REPLACED AS PART OF THE OVERALL PATCH.

7– WHERE ROAD SECTION HAS A DESIGNED GRANULAR SUB–BASE, IT SHALL BE REPLACED IN KIND OR WITH ROAD BASE GRAVEL.

8– IN GENERAL, STREET SURFACES LESS THAN 24 MONTHS OLD WILL NOT BE CUT ! IF A CUT MUST BE MADE, ADDITIONAL, STRICTER REQUIREMENTS MAY BE INVOKED. SEE ENCROACHMENT OFFICER.

9– 24 HOUR NOTICE REQUIRED ON ALL INSPECTIONS.

10– ALL TRENCH BACKFILL SHALL MEET MIN. COMPACTION REQUIREMENTS.

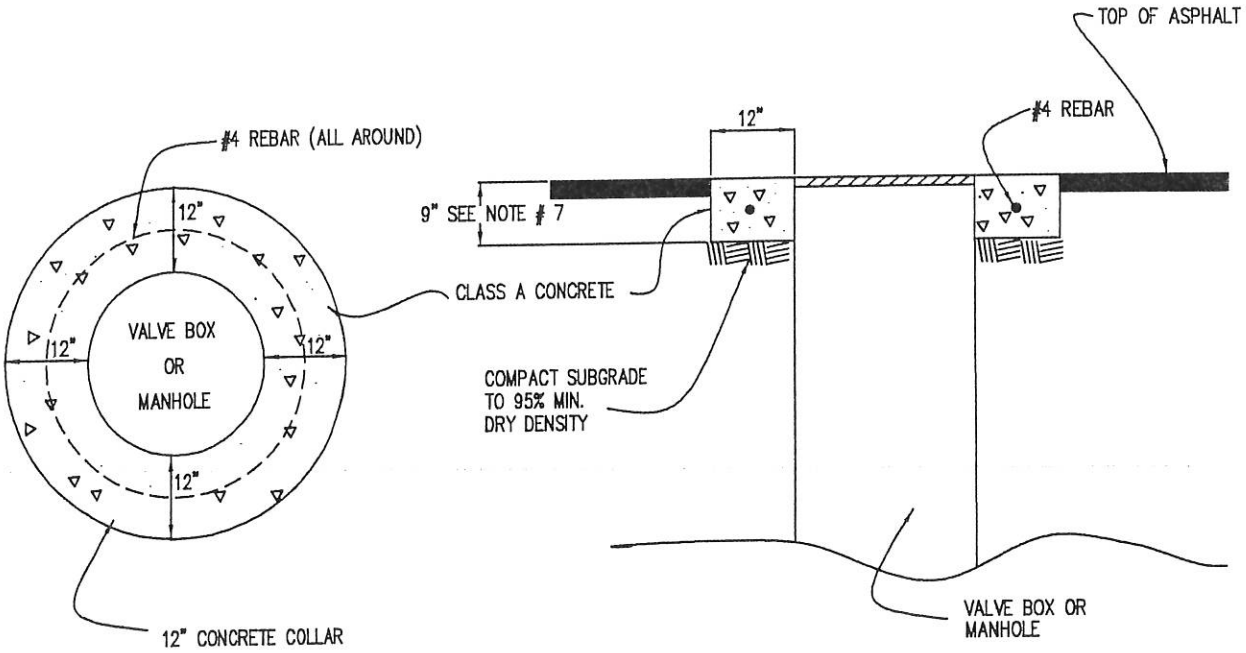
11– EXCLUDING EMERGENCY CLOSURES ALL ROAD CLOSURES AND DETOURS REQUIRE 48 HOURS PRIOR NOTICE.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

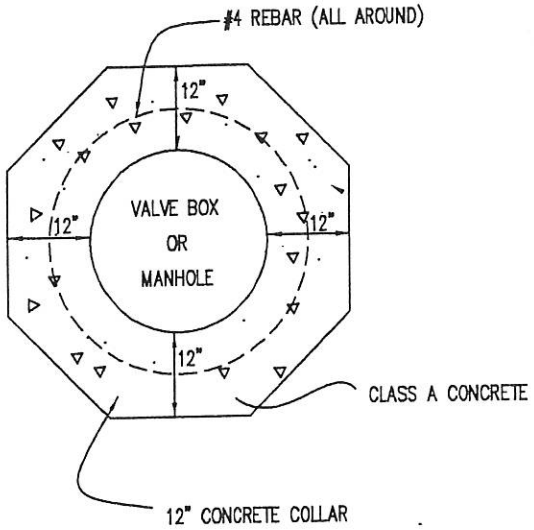
TRENCH BACKFILL AND REPAIR DETAIL

STANDARD DWG. NO.	
170	1 OF 1
APPROVED:	
DATE:	BY: LBB



PLAN

SECTION



PLAN
OPTIONAL

NOTES:

1- MANHOLES, VALVE BOXES AND OTHER SIMILAR ITEMS SHALL BE ADJUSTED TO GRADE AFTER PAVING IS COMPLETE.

2- THE SURFACE OF THE ADJUSTED RING SHALL MATCH THE GRADE OF THE CONCRETE COLLAR. CONCRETE COLLAR SHALL BE 1/8" – 1/4" LOWER THAN ASPHALT.

3- ASPHALT SHALL BE CUT IN STRAIGHT VERTICAL LINES.

4- ADJUSTMENTS TO GRADE SHALL BE MADE WITH STANDARD RINGS OR EXTENTIONS OR AS APPROVED BY THE CITY REPRESENTATIVE.

5- ALL MANHOLES, VALVE BOXES AND OTHER SIMILAR ITEMS SHALL HAVE CONCRETE COLLAR AS REQUIRED UNLESS OTHERWISE APPROVED.

6- 9" THICK COLLARS SHALL BE REINFORCED.
12 " THICK COLLARS DO NOT REQUIRE REINFORCEMENT.

7- MARK CONCRETE COLLAR ON WATER VALVE BOXES WITH ARROW INDICATING DIRECTION OF FLOW.

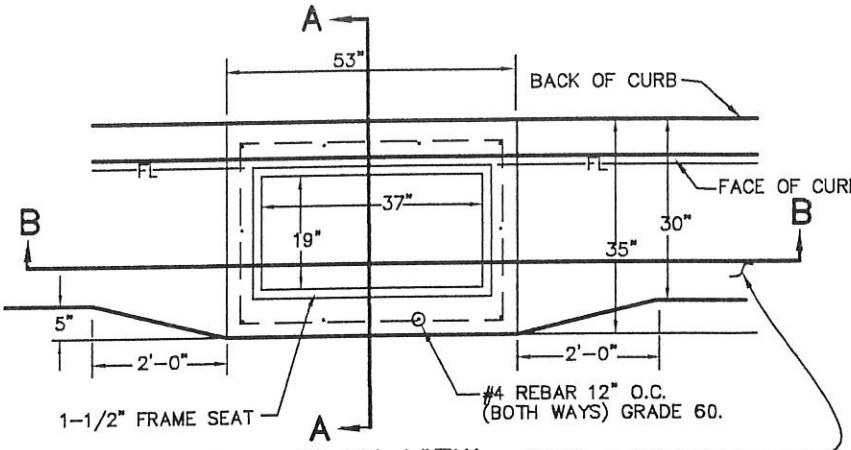
CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

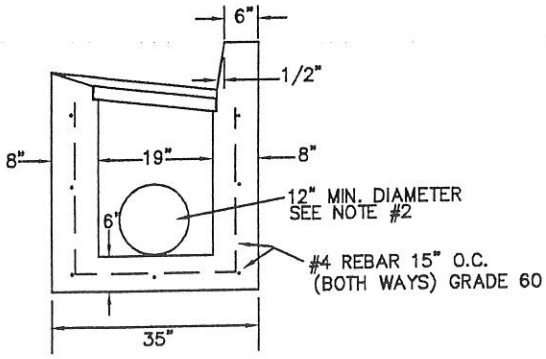
MANHOLES & VALVE BOXES
CONCRETE COLLAR

STANDARD DWG. NO.	
171	1 OF 1
APPROVED:	
DATE:	BY: LBB

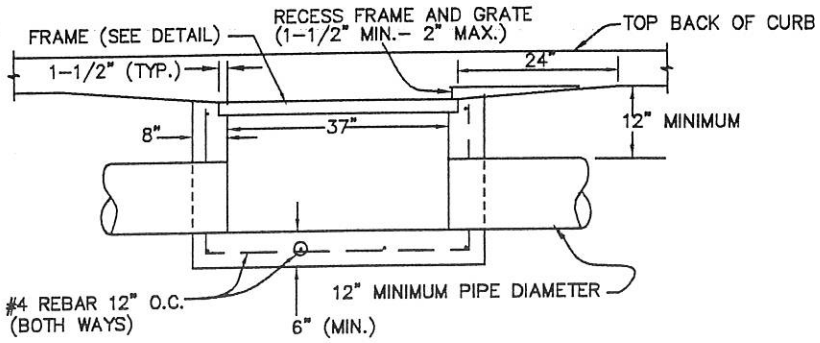
NOTES:
1- USE BICYCLE SAFE GRATE ONLY UNLESS OTHERWISE APPROVED. SEE STANDARD DRAWING.
2- BOXES WITH PIPE SIZE GREATER THAN 15" DIAMETER AND BOXES GREATER THAN 4' IN DEPTH REQUIRE ENGINEERED DESIGN.
3- GRATES & FRAMES SHALL BE PAINTED WITH ONE COAT PRIMER AND ONE COAT LIGHT GREY FINISH. COATING APPLIED PER SPECIFICATIONS.



PLAN VIEW

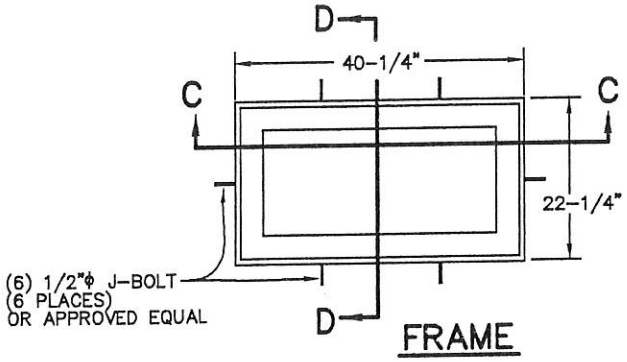


SECTION A-A

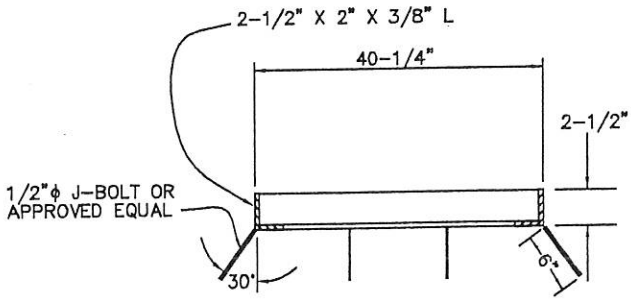


LONG DIMENSION OF BOX SHALL BE PARALLEL TO THE CURB & GUTTER.

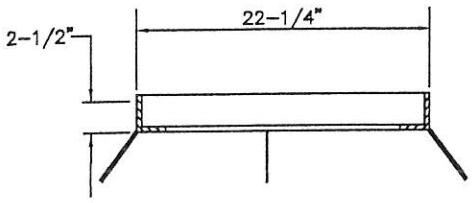
SECTION B-B



FRAME



SECTION C-C



SECTION D-D

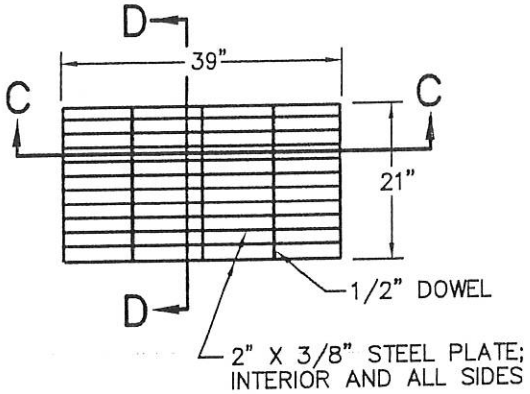
NO SCALE

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS DATE	DESCRIPTION	BY

STANDARD CATCH BASIN
BOX & FRAME

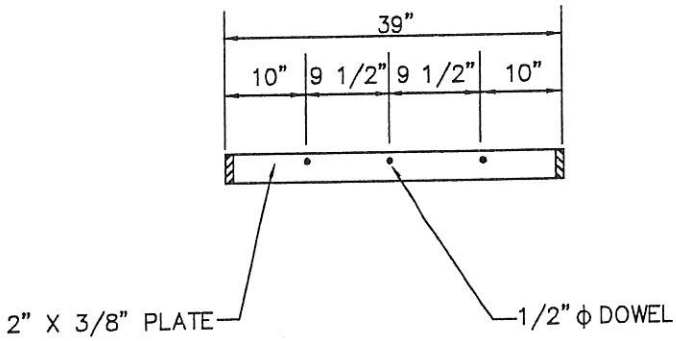
STANDARD DWG. NO.	
200	1 OF 1
APPROVED:	
DATE:	BY: LBB



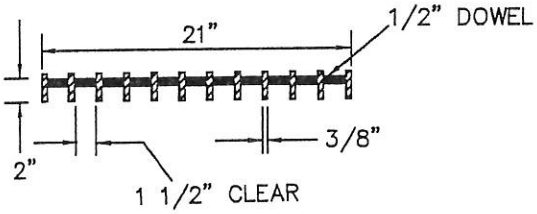
PLAN

NOTES:

1– STEEL SHALL BE COLD ROLLED FLAT STOCK.



SECTION C–C



SECTION D–D

NO SCALE

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

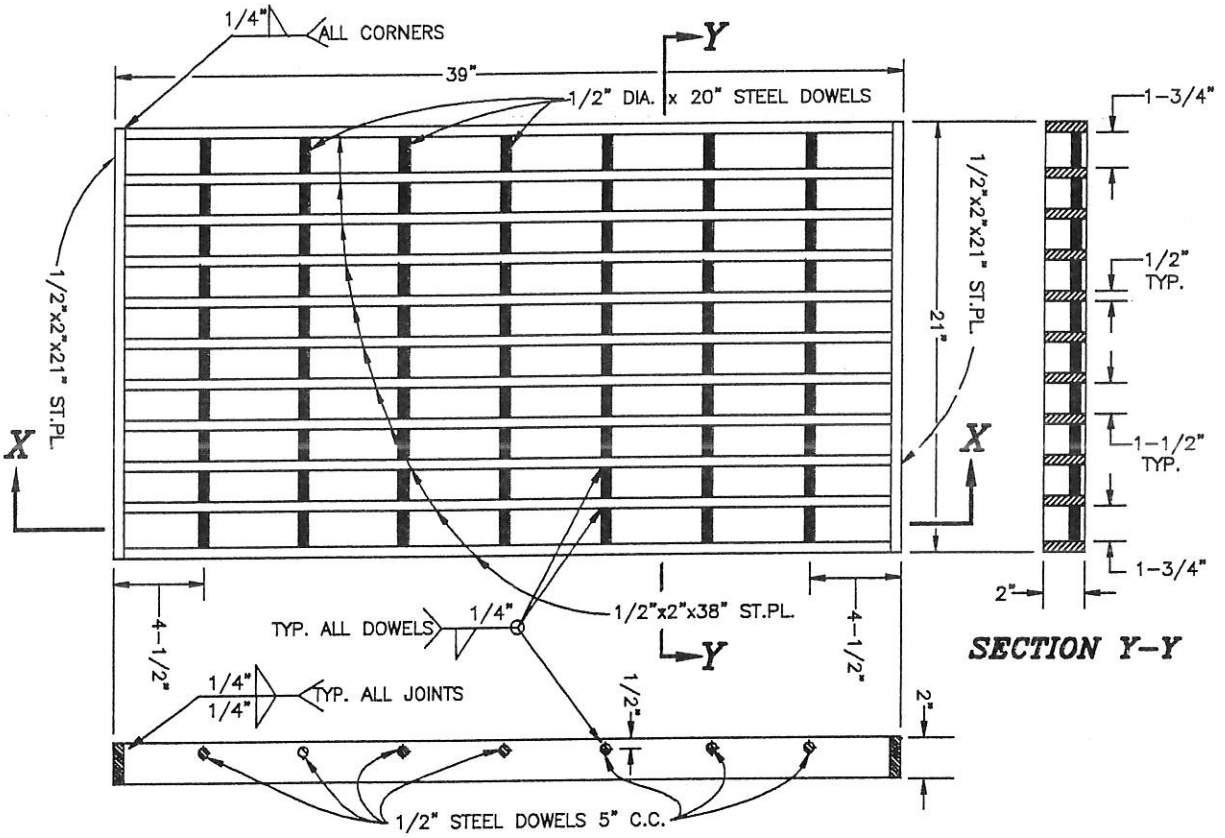
REVISIONS DATE	DESCRIPTION	BY

CATCH BASIN GRATE
(NON–BICYCLE SAFE)

STANDARD DWG. NO.	
201	1 OF 1
APPROVED:	
DATE:	BY: LBB

NOTES:

1. USE ONLY GRADE 60 STEEL
2. PAINT ALL SURFACES OF GRATE. APPLY ONE COAT OF PRIMER , AND ONE FINISH COAT, (LIGHT GREY COLOR) AS PER STANDARD CITY SPECIFICATIONS



SECTION Y-Y

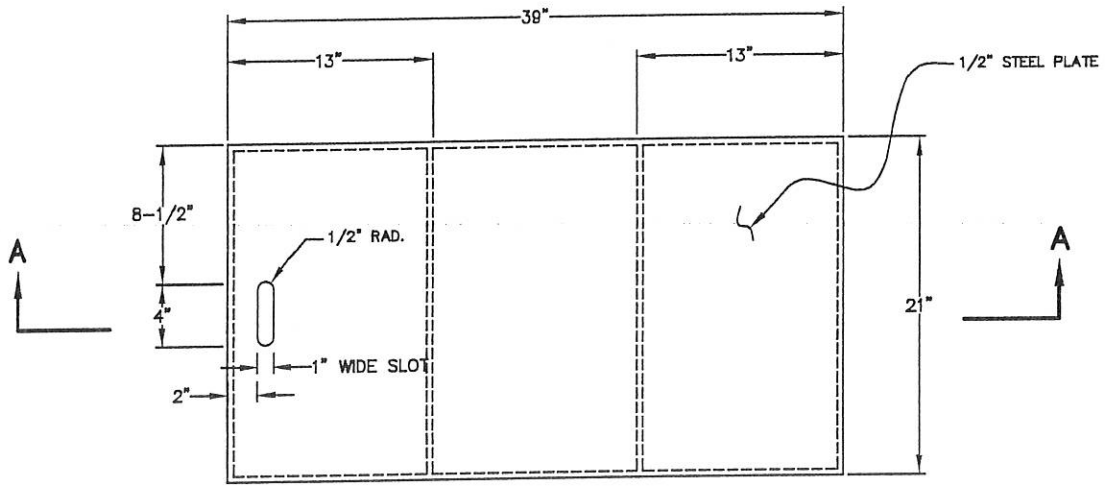
SECTION X-X

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

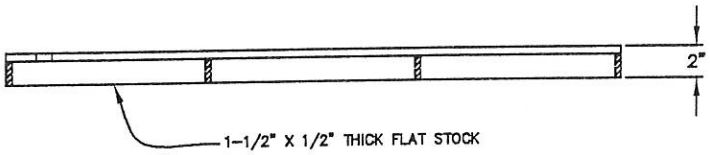
REVISIONS		
DATE	DESCRIPTION	BY

STANDARD CATCH BASIN GRATE (BICYCLE SAFE)

STANDARD DWG. NO.	
202	1 OF 1
APPROVED:	
DATE:	BY: HSP



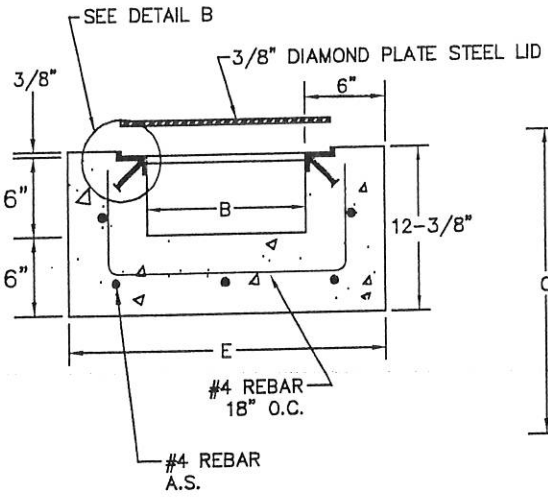
NOTES:
1- FINISH SHALL BE ONE COAT PRIMER, ONE FINISH COAT, LIGHT GRAY ENAMEL.
2- LID SHALL BE ALL WELDED CONSTRUCTION.
3- FOR USE IN NON-TRAFFIC INSTALLATIONS.
4- LID SHALL BE DIAMOND PLATE STEEL.



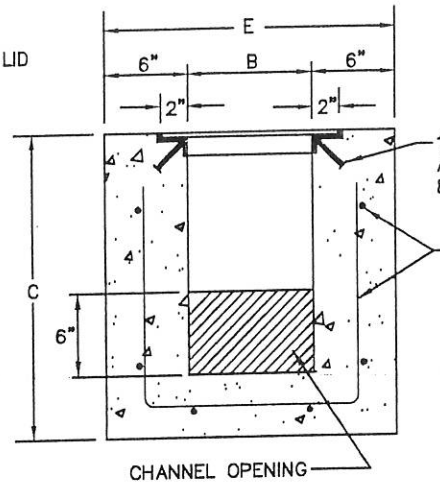
SECTION A-A

REVISIONS			CITY OF ST. GEORGE ENGINEERING DEPARTMENT		
DATE	DESCRIPTION	BY	39" SOLID LID DETAILS	STANDARD DWG. NO. 203	1 OF 2
				APPROVED:	
				DATE:	BY: LBB

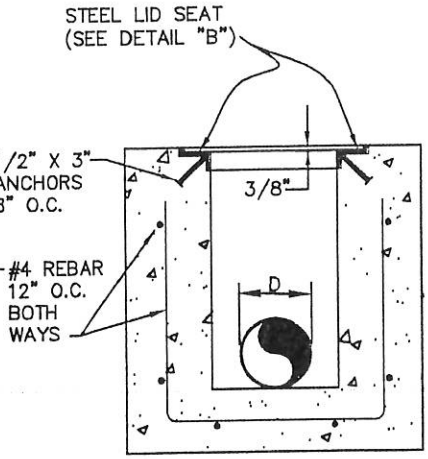
NOTE:
STEEL LID TO BE FLUSH
WITH CONCRETE SIDEWALK.



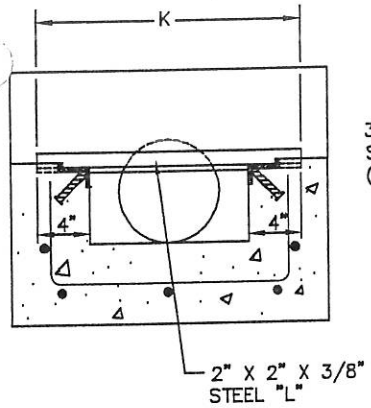
SECTION B-B



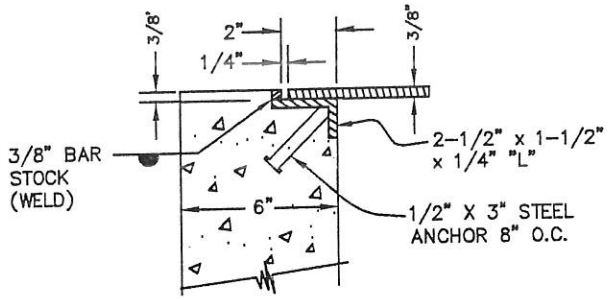
SECTION C-C



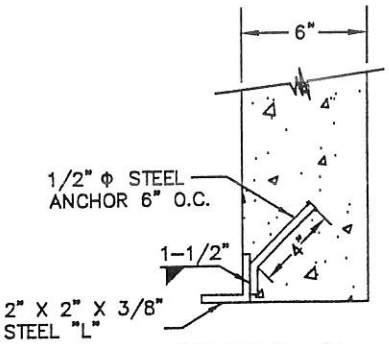
SECTION D-D



SECTION E-E



DETAIL B



DETAIL C

MARK	DIMENSION (INCHES)				COMMENTS
B	10	15	20	30*	INSIDE WIDTH
C	20	22	24	27	CLEANOUT BOX HEIGHT
D	8	10	12	15	INLET PIPE
E	22	27	32	42	BOX WIDTH
K	18	23	28	38	STEEL END SUPPORT

DIMENSION TABLE

*REQUIRES ENGINEERED DESIGN FOR LID & BOX.

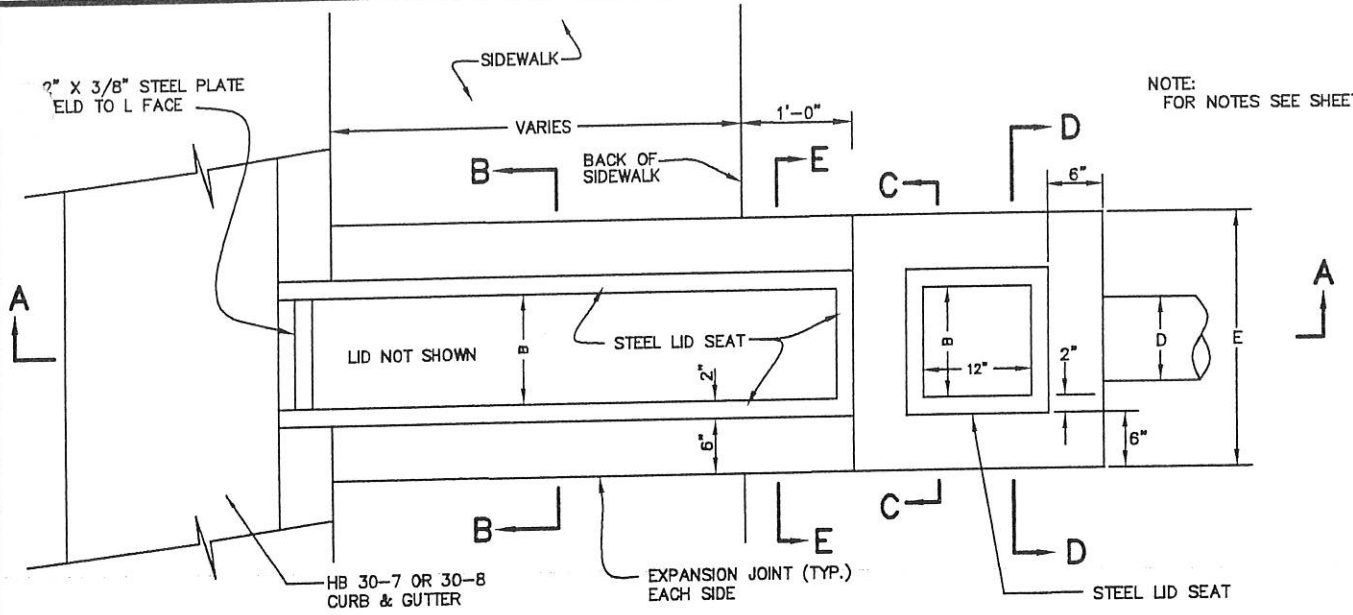
NOTES:
1- ALL REBAR SHALL HAVE 2" MIN. CLEAR.
2- STEEL LID SHALL BE FLUSH WITH CONCRETE.
3- BOX DIMENSIONS BASED UPON INLET PIPE SIZE "D".
4- ALL STEEL SHALL BE GRADE 60.
5- LID FOR CLEANOUT BOX SHALL HAVE 1-4 INCH X 1" SLOT FOR LIFTING. LID MAY BE SMOOTH OR DIAMOND PLATE STEEL.
6- SIDEWALK LID SHALL BE DIAMOND PLATE STEEL.
7- STANDARD REBAR SHALL NOT BE USED FOR STEEL ANCHORS.
8- ALL EXTERIOR EDGES OF CLEANOUT BOX TO HAVE 3/4" TO 1" CHAMFER (NOT SHOWN IN DETAILS FOR CLARITY).
9- STEEL LIDS AND SEAT TO BE PAINTED GREY IN ACCORDANCE WITH CITY STANDARDS.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

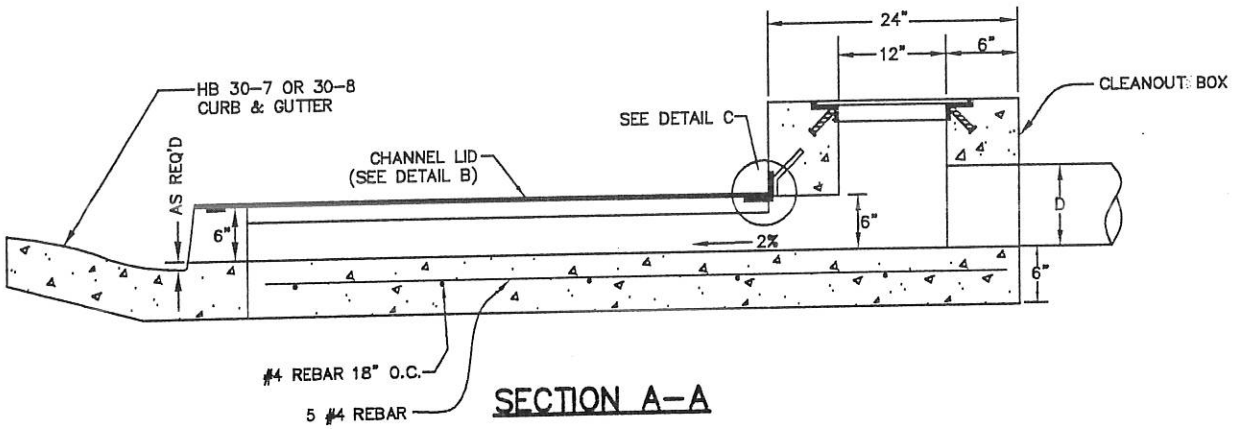
SIDEWALK DRAINAGE STRUCTURE

STANDARD DWG. NO.	
204	2 OF 2
APPROVED:	
DATE:	BY: LBB

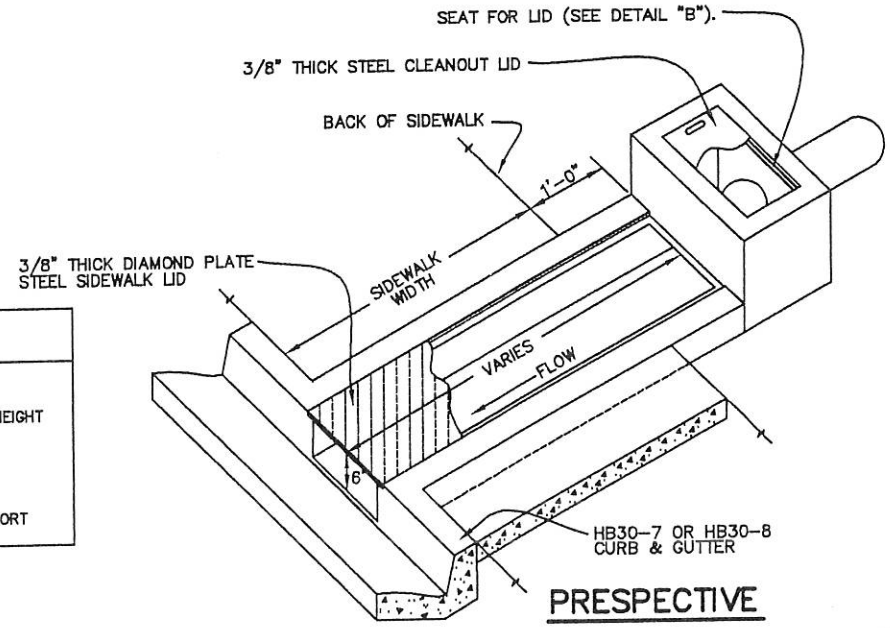


NOTE:
FOR NOTES SEE SHEET 2 OF 2

PLAN



SECTION A-A



PRESPECTIVE

MARK	DIMENSION (INCHES)				COMMENTS
B	10	15	20	30*	INSIDE WIDTH
C	20	22	24	27	CLEANOUT BOX HEIGHT
D	≤8	10	12	15	INLET PIPE
E	22	27	32	42	BOX WIDTH
K	18	23	28	38	STEEL END SUPPORT

DIMENSION TABLE

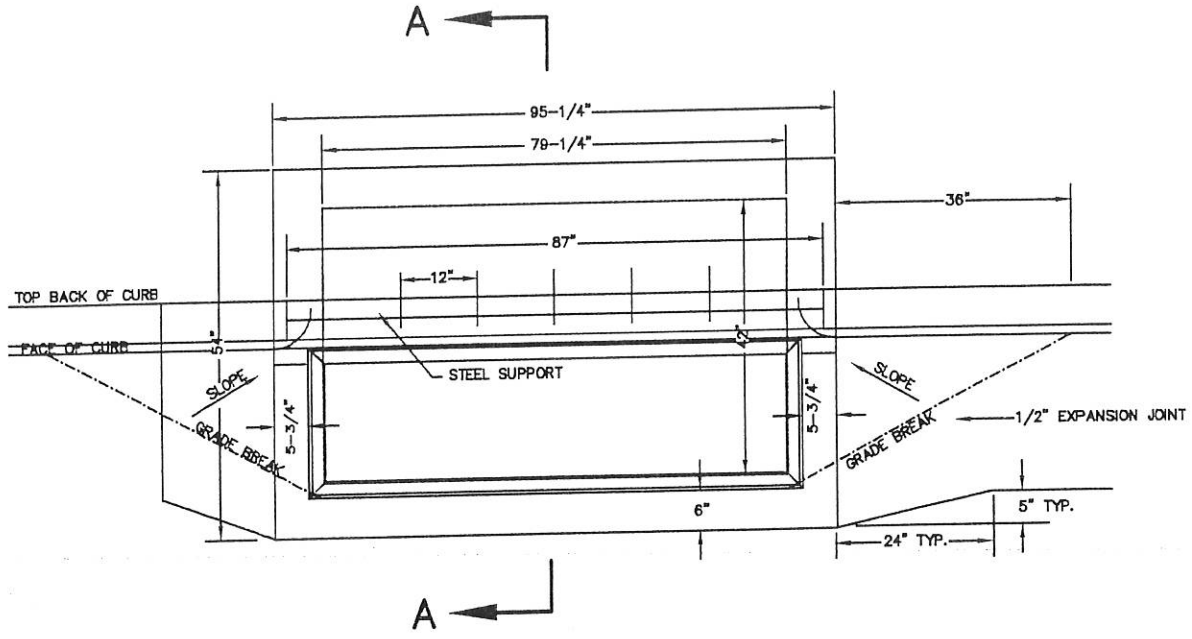
*REQUIRES ENGINEERED DESIGN FOR LID & BOX.

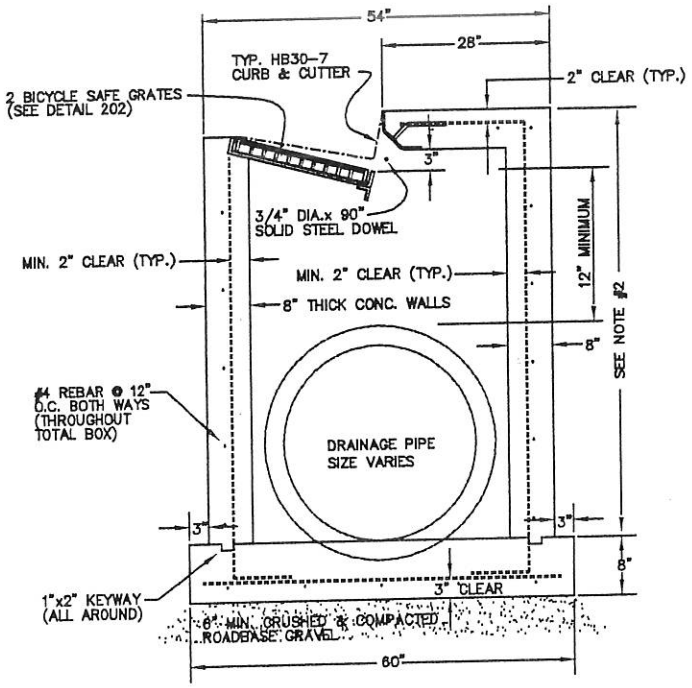
CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

SIDEWALK DRAINAGE STRUCTURE

STANDARD DWG. NO.	
204	1 OF 2
APPROVED:	
DATE:	BY: LBB





SECTION A-A

NOTES:

1- USE BICYCLE SAFE GRATES ONLY.

2- FOR PIPE SIZE GREATER THAN 42" DIAMETER AND 60" DEPTH ENGINEERED DESIGN REQUIRED.

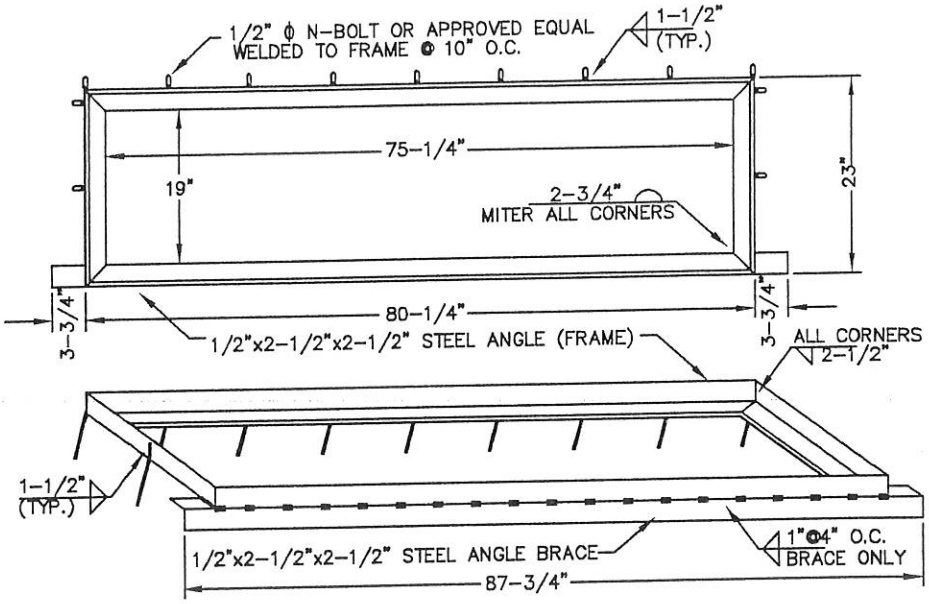
CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

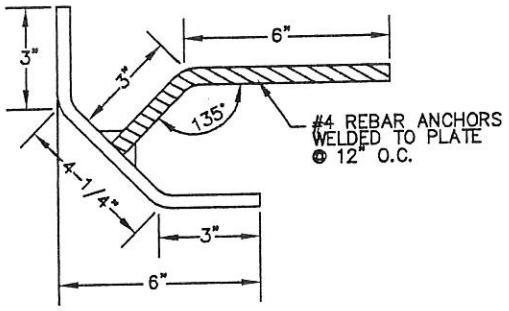
CURB INLET DOUBLE CATCH BASIN BOX

STANDARD DWG. NO.	
205	1 OF 2
APPROVED:	
DATE:	BY: LBB

PLAN VIEW



FRAME & SUPPORT BRACE



STEEL SUPPORT

NOTES:

1. FRAME SHALL BE PAINTED WITH ONE COAT PRIMER AND ONE COAT LIGHT GREY FINISH.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

CURB INLET DOUBLE CATCH BASIN FRAME

STANDARD DWG. NO.	
205	2 OF 2
APPROVED:	
DATE:	BY: LBB

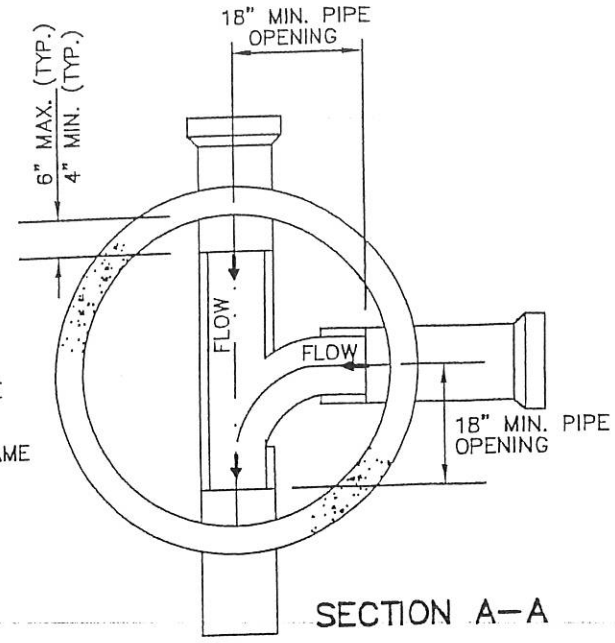
CONTACT ENGINEERING DEPARTMENT FOR DETAILS

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

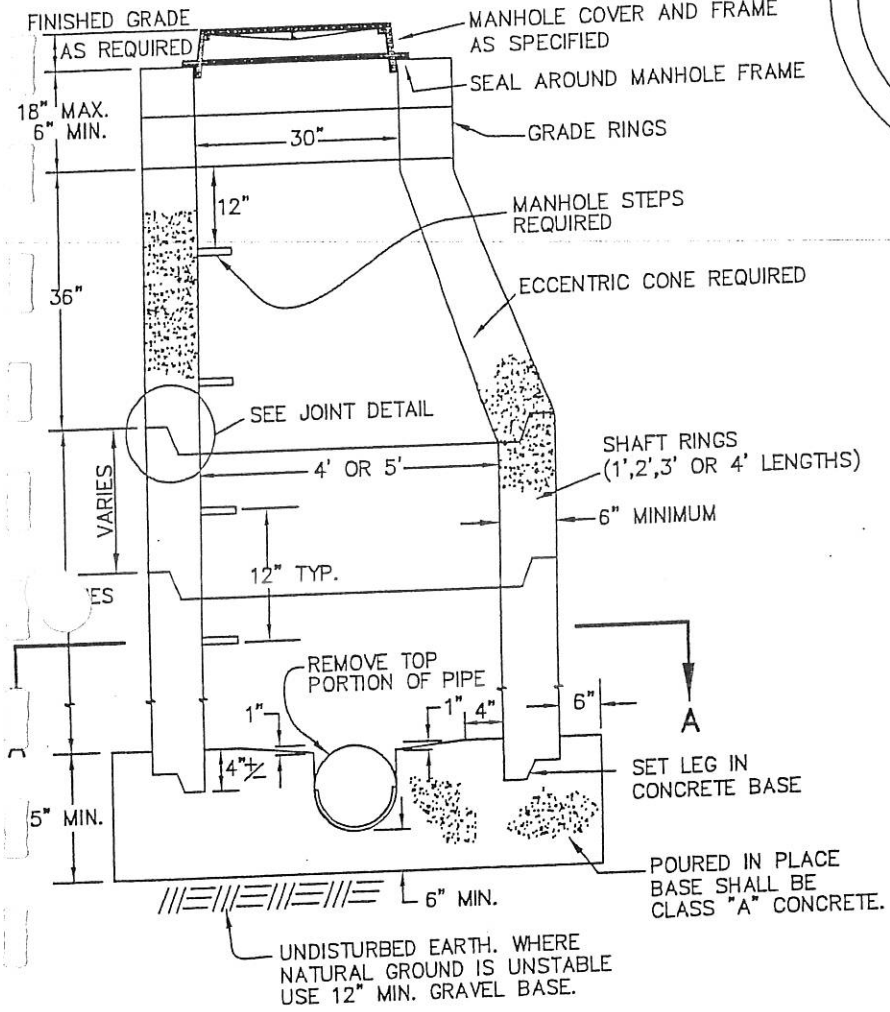
REVISIONS		
DATE	DESCRIPTION	BY

CURB INLET SINGLE CATCH BASIN BOX

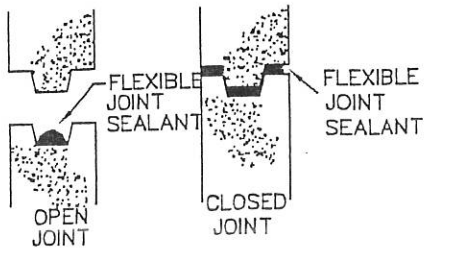
STANDARD DWG. NO.	
206	1 OF 1
APPROVED:	
DATE:	BY: LBB



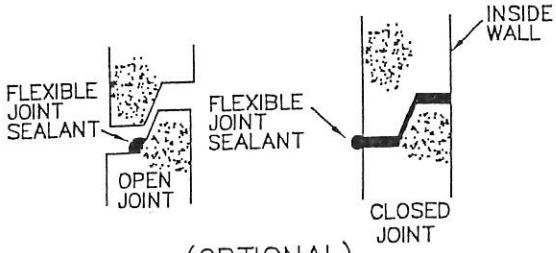
SECTION A–A



SECTION THRU CENTER



(STANDARD)



(OPTIONAL)

JOINT DETAILS

NOTES:

1– SEE DRAWING NO. 220 FOR JUNCTION AND DROP MANHOLE SIZES.
2– PRECAST BASE MAY BE USED, BUT REQUIRES ADVANCED APPROVAL.
3– IF OPTIONAL JOINT IS USED, ALL MANHOLE SECTIONS SHALL BE CLEARLY MARKED ON THE INSIDE AS TO THE MANUFACTURER AND TYPE OF JOINT BEING USED.
4– ALL MANHOLE SECTIONS SHALL BE CLEARLY MARKED ON THE INSIDE AS TO MANUFACTURER AND DATE OF MANUFACTURE.

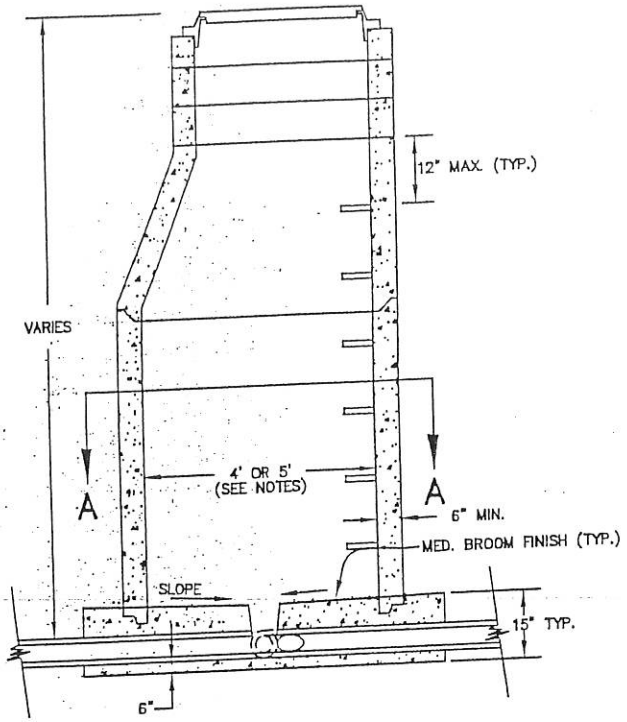
NO SCALE

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY
7-2004	ADDED NOTE 4	LBB

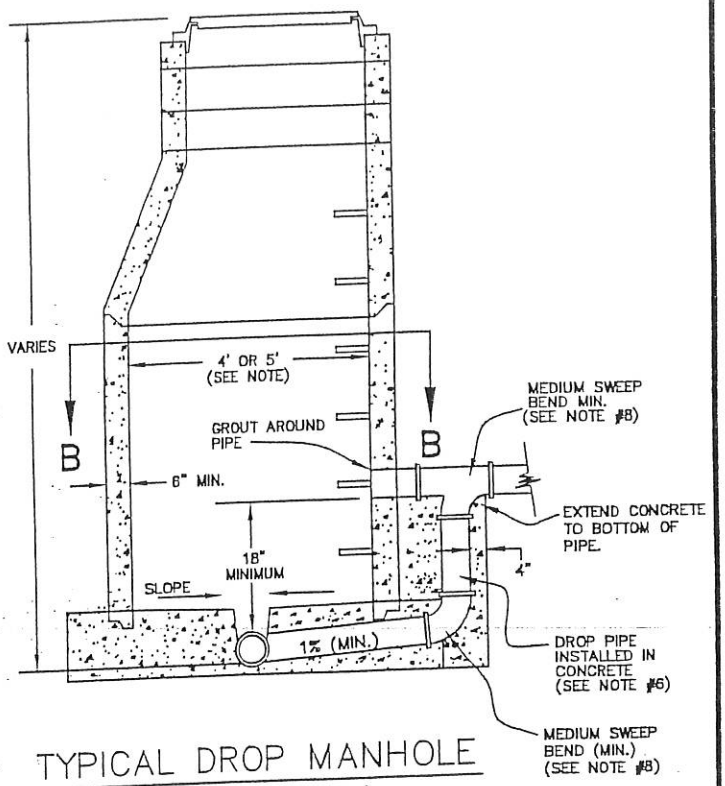
STANDARD MANHOLE DETAILS

STANDARD DWG. NO. 220 1 OF 1
APPROVED:
DATE: 9/09 BY: LBB



TYPICAL JUNCTION MANHOLE

(SECTION THRU CENTER)

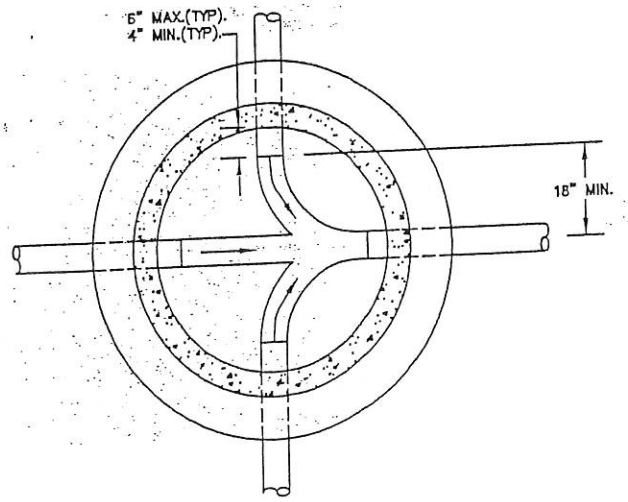


TYPICAL DROP MANHOLE

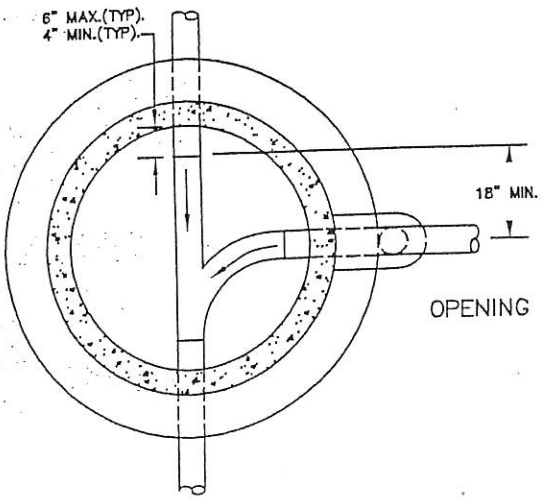
(SECTION THRU CENTER)

NOTES:

1- FOR SEWER PIPES LESS THAN 12-INCH DIAMETER USE 4-FOOT DIAMETER MANHOLE.
2- FOR SEWER PIPES WITH 12-INCH OR GREATER DIAMETER USE 5-FOOT DIAMETER MANHOLE.
3- WHEN THE SUM OF ALL PIPE SIZES CONNECTED TO THE MANHOLE TOTALS 24 INCHES OR GREATER USE A 5-FOOT DIAMTER MANHOLE.
4- WHEN SEWER DEPTH IS 12 FEET OR GREATER USE A 5-FOOT DIAMETER MANHOLE.
5- SEE DRAWING NO. _____ FOR ADDITIONAL DETAILS.
6- VERTICAL DROP PIPE AND FITTINGS SHALL BE THE SAME SIZE AS THE INCOMING SEWER PIPE.
7- NO LATERALS SHALL BE INSTALLED DIRECTLY INTO MANHOLES UNLESS PRIOR APPROVEL BY CITY REPRESENTATIVE.
8- BENDS CAN BE 45° OR 90° - (90° IS SHOWN) ALL OTHER REQUIREMENTS ARE THE SAME.



SECTION A-A



SECTION B-B

NO SCALE

REVISIONS		
DATE	DESCRIPTION	BY
8-2004	REVISED DROP/ADDED NOTES 7-8	LBB

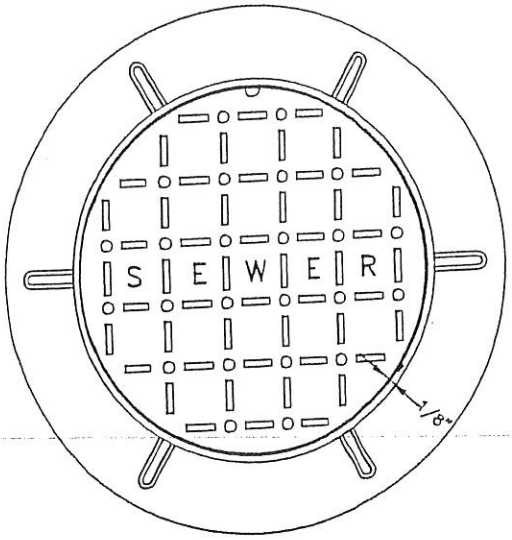
CITY OF ST. GEORGE ENGINEERING DEPARTMENT

JUNCTION & DROP MANHOLE DETAILS

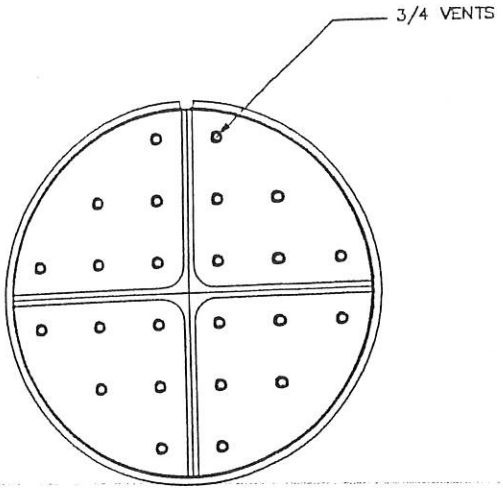
STANDARD DWG. NO. 221 | 1 OF 1

APPROVED:

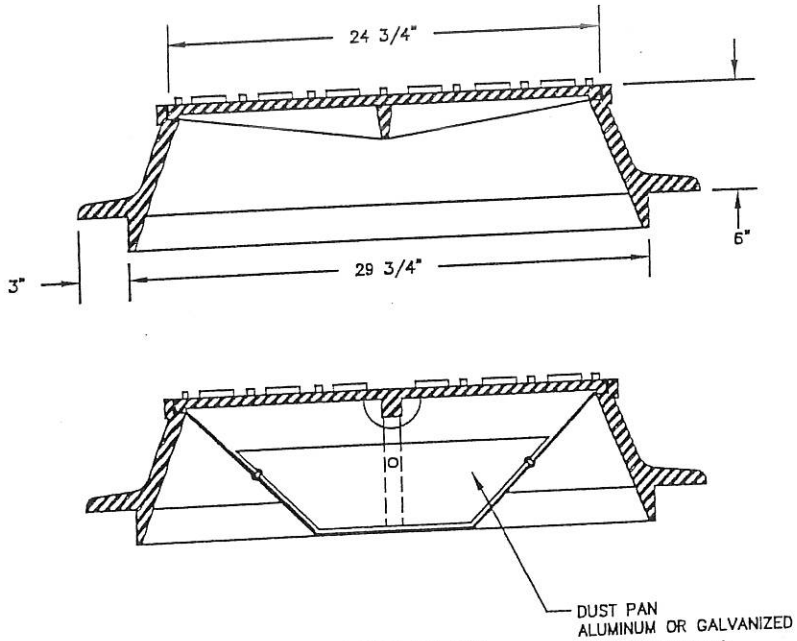
DATE: 9/09 | BY: LBB



PLAN OF COVER & RING



BOTTOM VIEW OF COVER



SECTIONS

NOTES:

1– FOR SANITARY SEWER SEE DETAIL NO. 224.

2– USE OF MANHOLE TO BE CLEARLY MARKED ON EACH LID. E.G. "STORM SEWER".

3– MUST MEET HS–20 LOADING.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

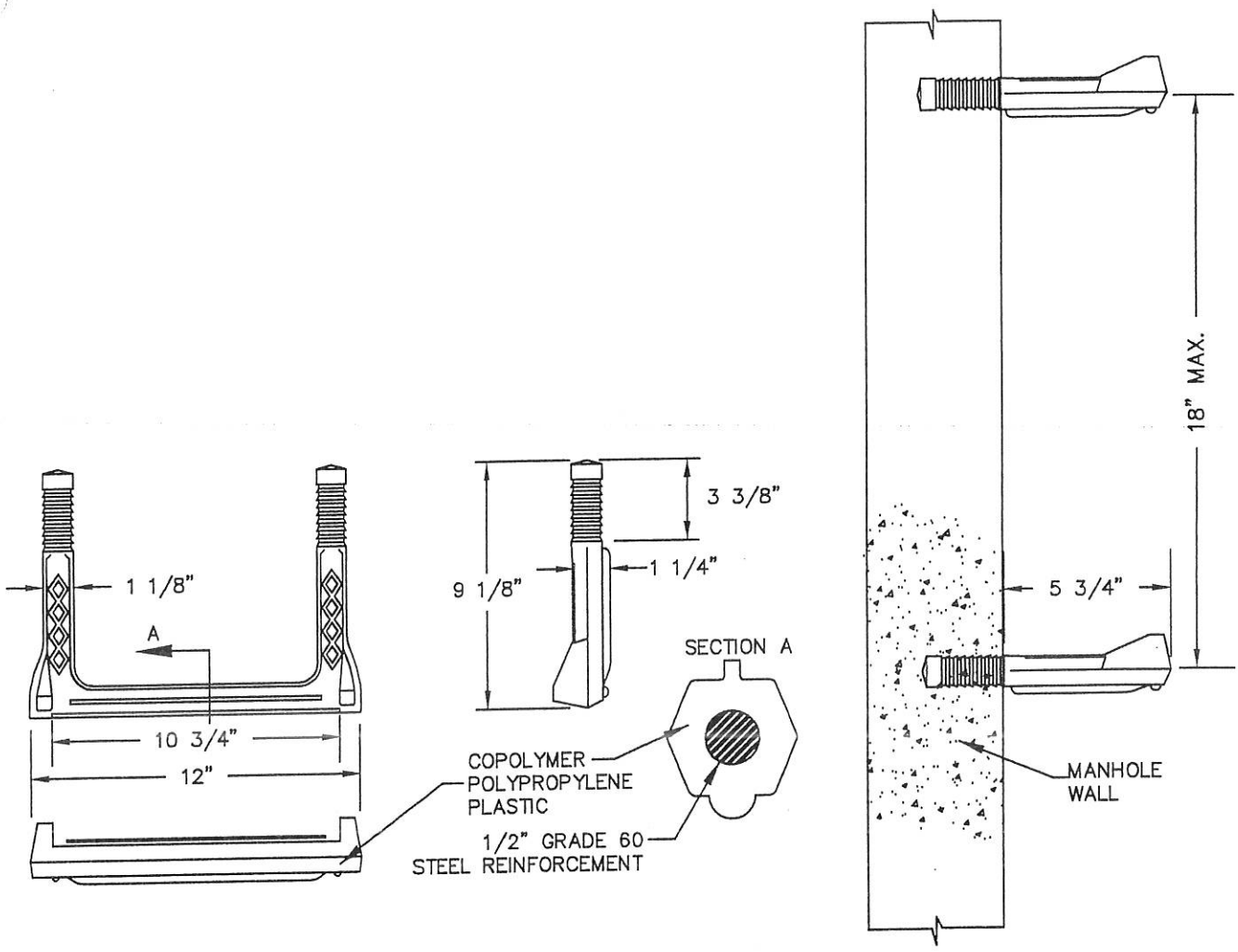
REVISIONS		
DATE	DESCRIPTION	BY
8–2004	ADDED NOTES	LBB

MANHOLE FRAME & COVER DETAILS

STANDARD DWG. NO. 222 | 1 OF 1

APPROVED:

DATE: 9/04 | BY: LBB



MANHOLE STEPS

NOTES:

1– INSTALL STEPS PER MANUFACTURERS RECOMMENDATIONS.

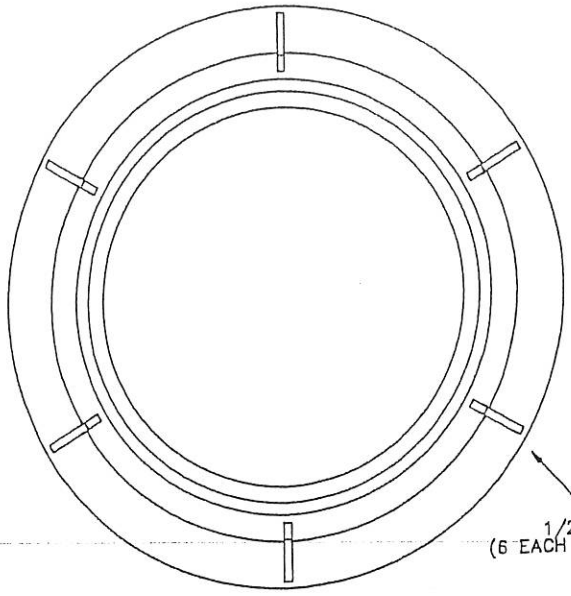
2– STEPS SHALL BE ALIGNED VERTICALLY.

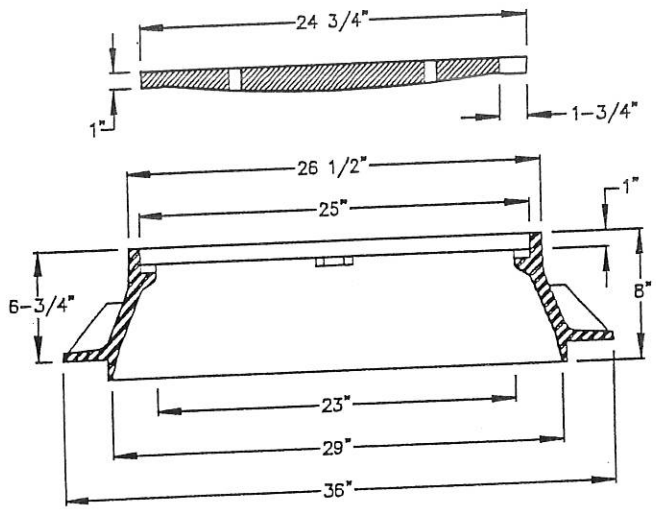
CITY OF ST. GEORGE ENGINEERING DEPARTMENT

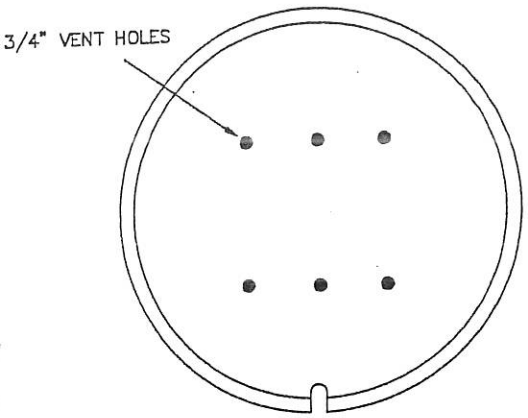
REVISIONS		
DATE	DESCRIPTION	BY

MANHOLE STEP DETAILS

STANDARD DWG. NO.	
223	1 OF 1
APPROVED:	
DATE:	BY: LBB







NOTES:

1- USE D & L MODEL NO. A-1180 OR APPROVED EQUAL.

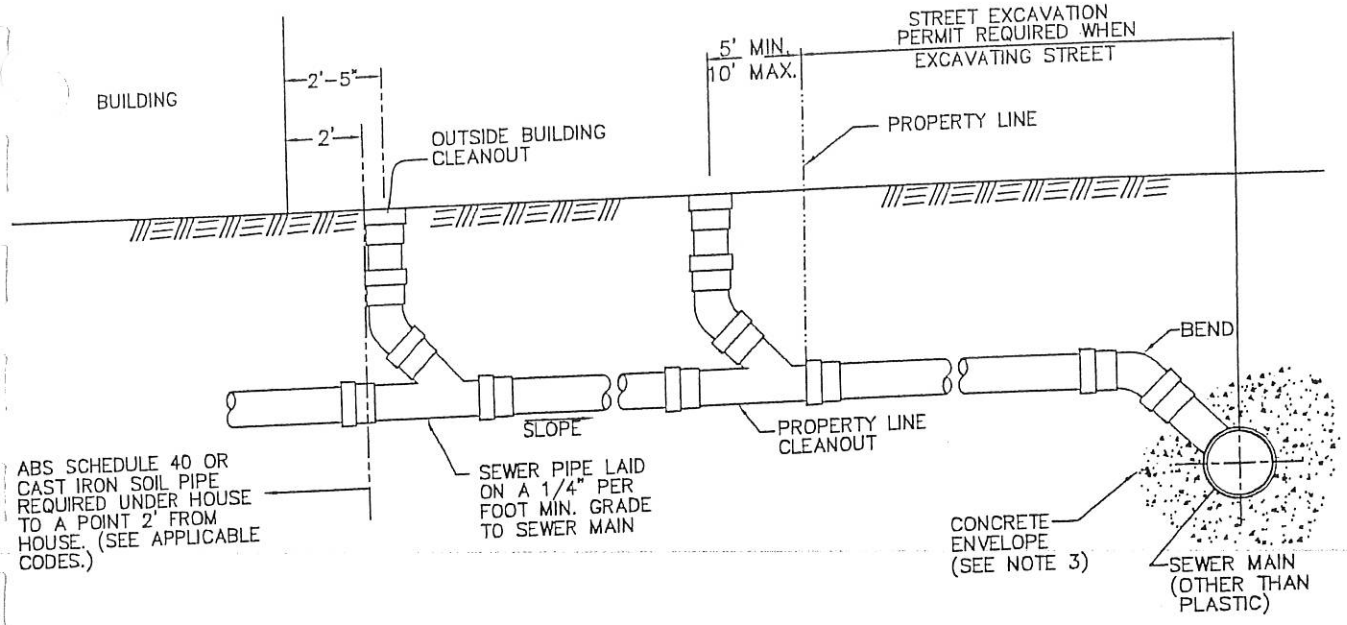
2- MUST MEET HS-20 LOADING.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

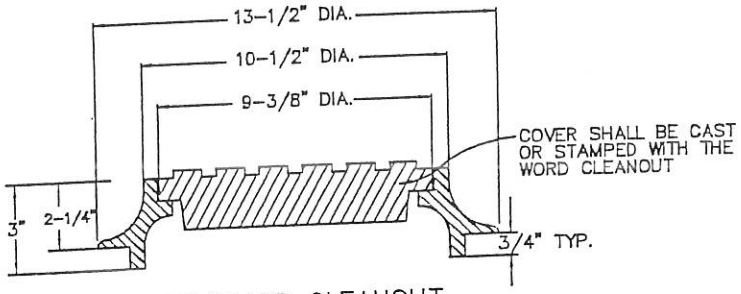
REVISIONS		
ATE	DESCRIPTION	BY

SANITARY SEWER
MANHOLE RING & COVER

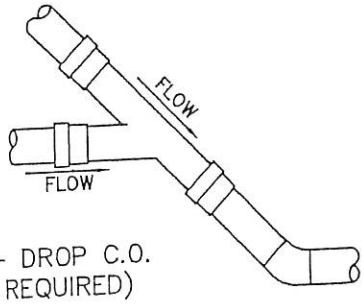
STANDARD DWG. NO.
224 1 OF 1
APPROVED:
DATE: 9/04 BY: LBB



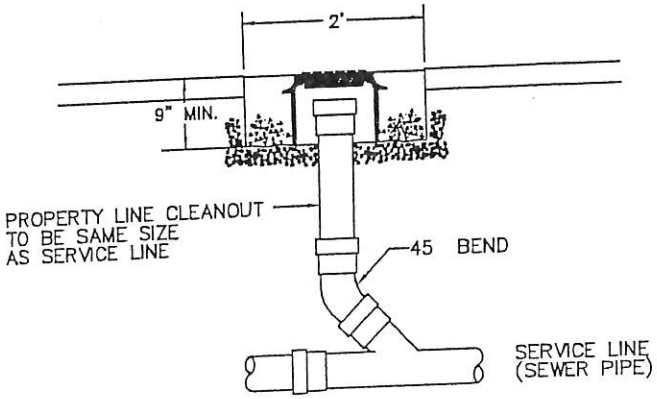
NOTES:
1- PROPERTY LINE AND OUTSIDE BUILDING CLEANOUTS ARE REQUIRED AS SHOWN.
2- CLEANOUT REQUIRED AT 100' MAX. SPACING (STRAIGHT RUNS) AND FOR EACH AGGREGATE CHANGE IN DIRECTION, WHERE TOTAL AGGREGATE CHANGE EXCEEDS 135 DEGREES.
3- ALL LATERALS CUT INTO EXISTING MAINS SHALL BE ADAPTED WITH SADDLES. WHERE SADDLES ARE NOT WATER TIGHT, A CONCRETE ENVELOPE SHALL BE REQUIRED. LATERALS SHALL NOT PROTRUDE INTO SEWER MAINS.
4- ALL CLEANOUTS LOCATED IN DRIVEWAYS, WALKWAYS OR OTHER AREAS SUBJECT TO VEHICLE OR PEDESTRIAN TRAFFIC SHALL HAVE A CAST IRON RING AND COVER OR OTHER APPROVED PROTECTIVE DEVICE WITH CONCTRETE COLLAR.
5- NO BRASS CLEAN-OUT CAPS ALLOWED OUTSIDE.



STANDARD CLEANOUT
RING & LID
(H-20 RATING)



DETAIL - DROP C.O.
(WHERE REQUIRED)



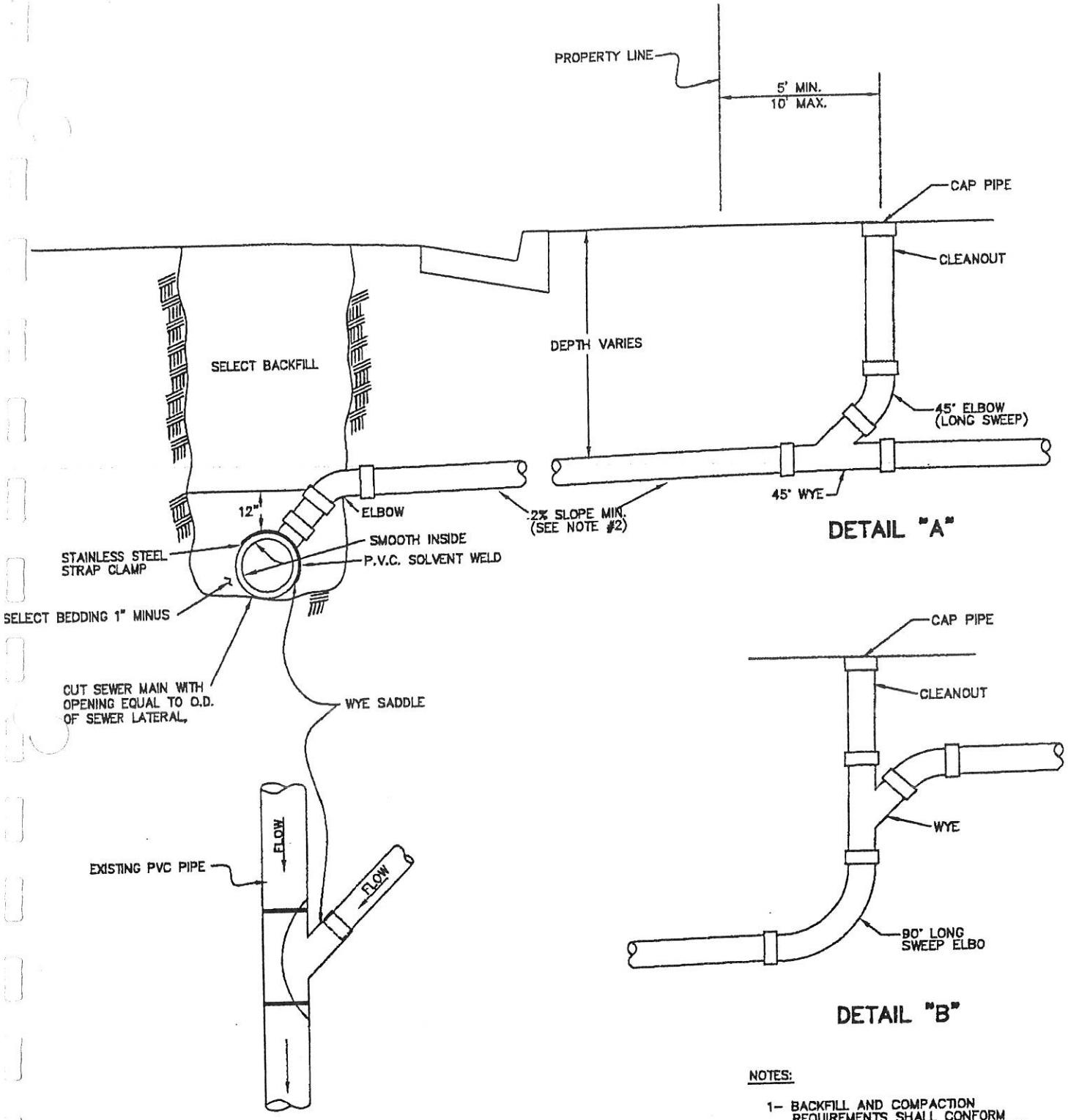
CLEANOUT DETAIL B

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY
7-2004	ADDED NOTE 6	LBB

TYPICAL SEWER CONNECTION DETAILS

STANDARD DWG. NO. 230 | 1 OF 1
APPROVED:
DATE: 9/04 | BY: LBB



DETAIL "A"

DETAIL "B"

NOTES:

1- BACKFILL AND COMPACTION REQUIREMENTS SHALL CONFORM TO CITY STANDARD SPECIFICATIONS. SPECIFICATIONS.

2- 4" DIAMETER-2% MINIMUM.
6" DIAMETER- 1% MINIMUM.

3- CLEANOUT DIAMETER TO BE SAME SIZE AS LATERAL.

4- INSTALL WYE SADDLE PER MANUFACTURER'S RECOMMENDATIONS.

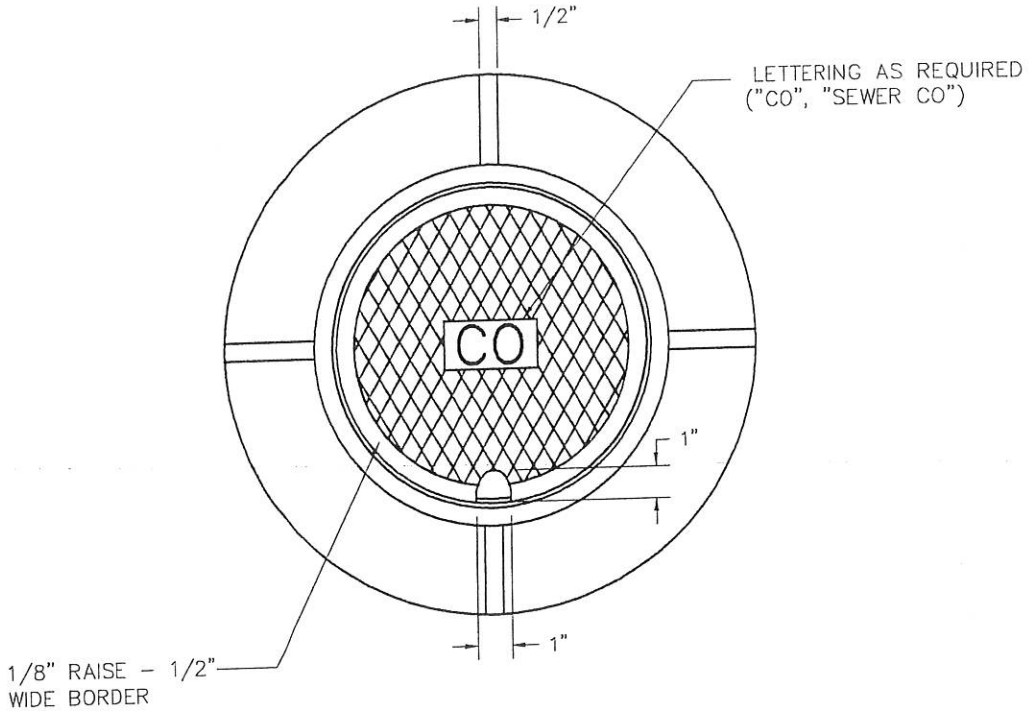
5- PIPE LAID WITH BELL OR COLLARD ENDS UP-GRADE.

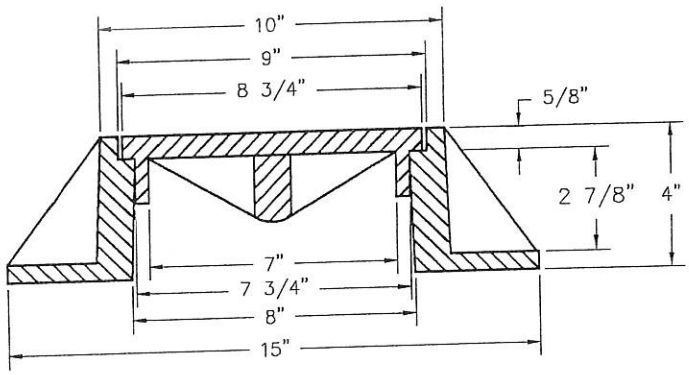
CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY
7-2004	ADDED NOTE 5/DETAIL "B"	LBB

P.V.C. SERVICE CONNECTION
EXISTING P.V.C. SEWER MAINS

STANDARD DWG. NO. 231 | 1 OF 1
APPROVED:
DATE: 9/04 | BY: LBB





NOTES:

1- MATERIAL SHALL BE CAST IRON ASTM A48, CL30
2- H-20 RATING

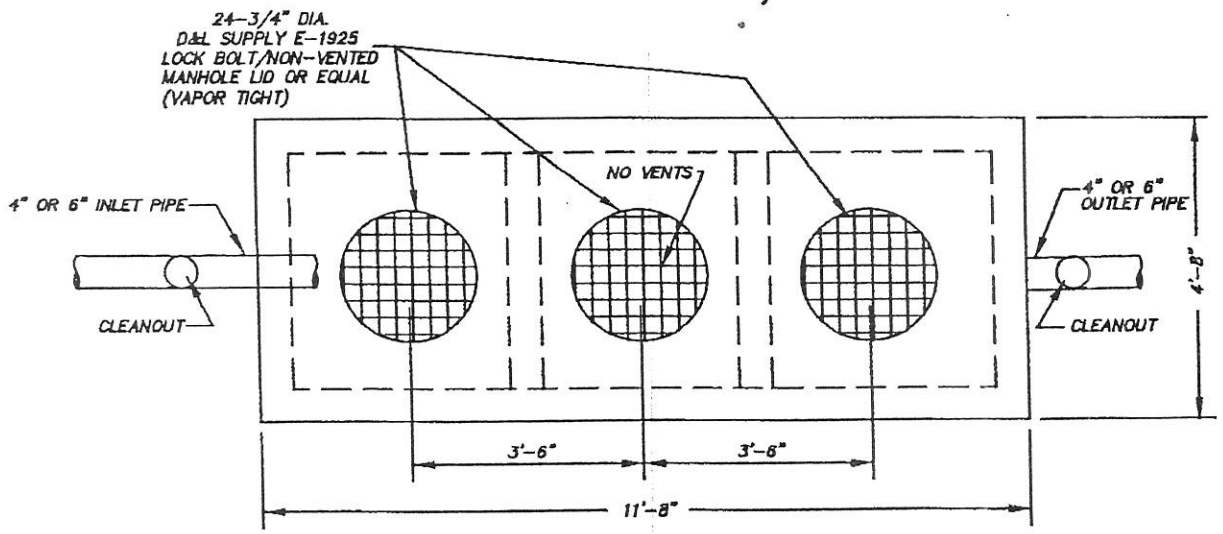
CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

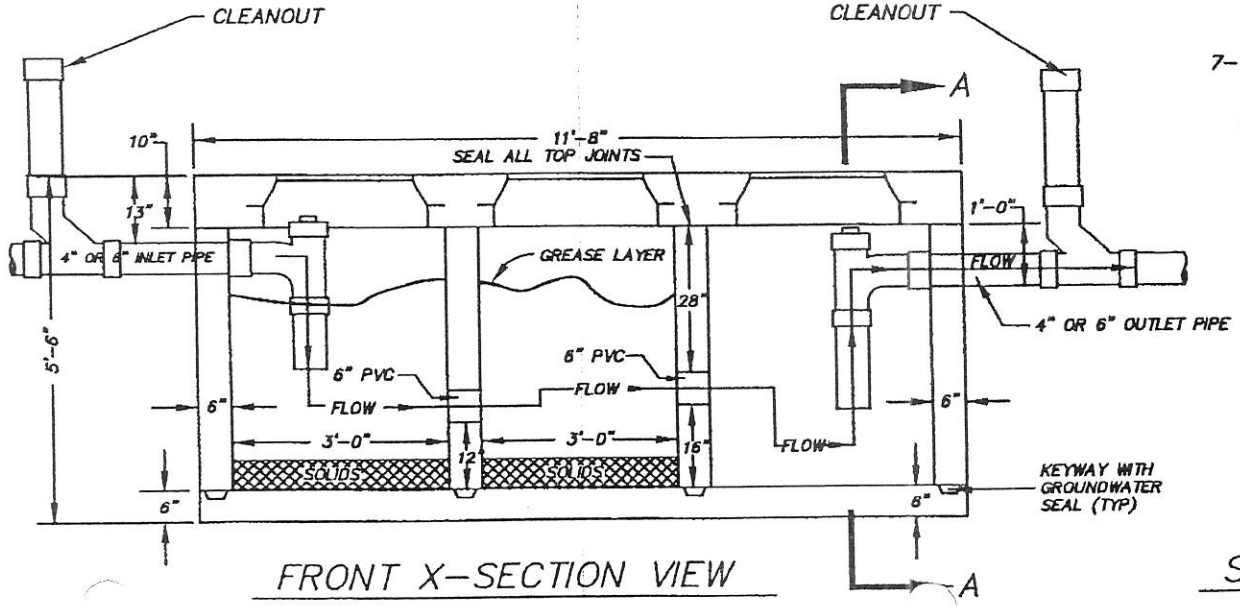
(OPTIONAL) SEWER CLEANOUT COVER DETAIL

STANDARD DWG. NO.	
233	1 OF 1
APPROVED:	
DATE:	BY: LBB

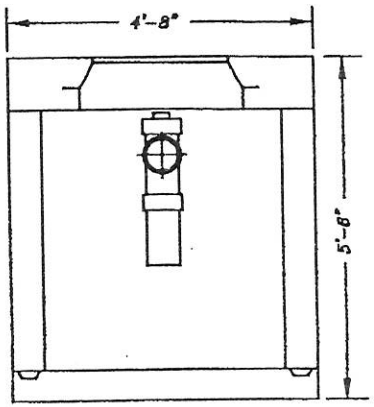
SAINT GEORGE REGION STANDARD
GREASE/SAND INTERCEPTOR



TOP VIEW



FRONT X-SECTION VIEW



SIDE X-SECTION A-A

NOTES:

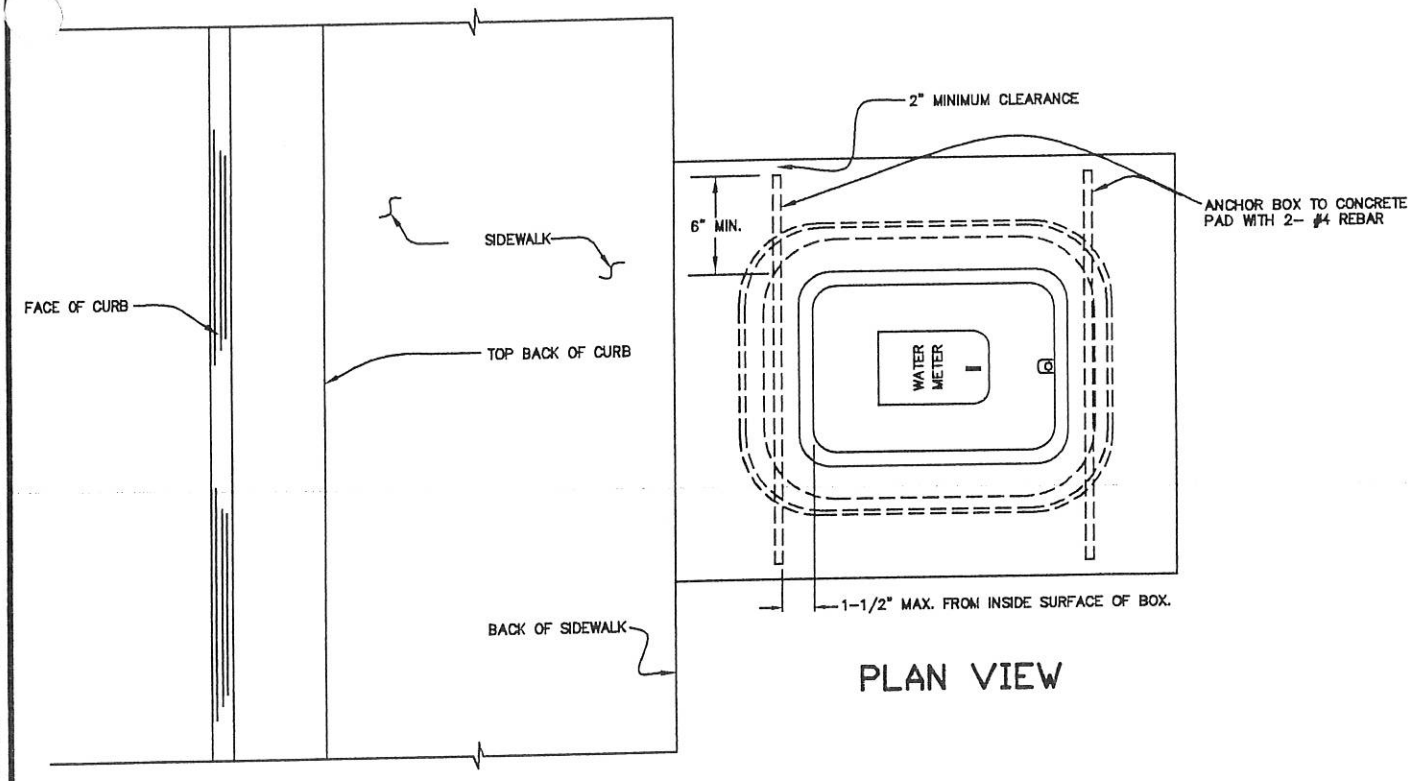
1- MATERIAL SPEC'S:
   A. CONCRETE PORTLAND CEMENT TYPE II. MINIMUM COMPRESSIVE STRENGTH=3000 PSI AT 28 DAYS.
   B. REINFORCING BAR INTERMEDIATE GRADE ASTM A615.
   C. REINFORCING WELDED WIRE MESH ASTM A185
2- UNIT COATED OUTSIDE WITH AN APPROVED PROTECTIVE COATING.
3- ALL DIMENSIONS +/- NOT TO BE USED FOR CONSTRUCTION PURPOSES UNLESS CERTIFIED.
4- PRECAST UNIT TO BE PLACED ON NATURAL SOIL OR APPROVED COMPACTED FILL.
5- STANDARD GROUND WATER SEAL- BUTYL ROPE MASTIC OR CEMENT MORTAR.
6- PRIOR TO BACKFILLING, INTERCEPTOR SHALL BE TESTED. TANK SHALL BE EXPOSED ON ALL SIDES AND FILLED WITH WATER AND SHALL HOLD WATER FOR A MINIMUM TEST PERIOD OF TWO HOURS.
7- CLEANOUT SIZE TO MATCH INLET/OUTLET SIZE.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

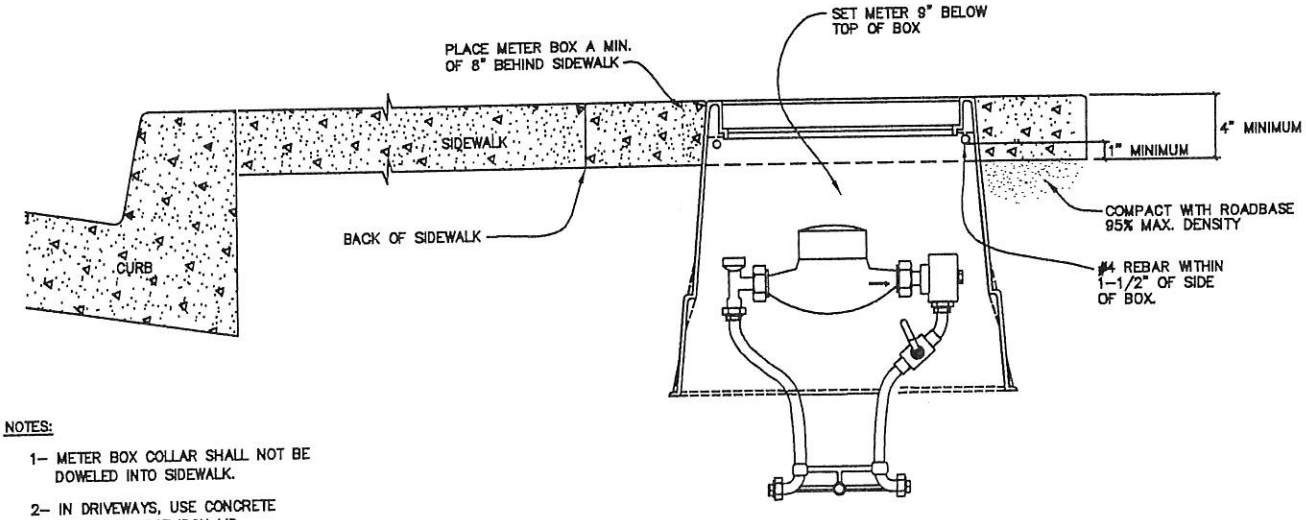
STANDARD DWG. NO. 234 | 1 OF 1
APPROVED: [signature]
DATE: 9/04 | BY: LBB

GREASE/SAND INTERCEPTOR DETAILS

REVISIONS		
DATE	DESCRIPTION	BY



PLAN VIEW



NOTES:

1- METER BOX COLLAR SHALL NOT BE DOWELED INTO SIDEWALK.

2- IN DRIVEWAYS, USE CONCRETE BOX WITH CAST IRON LID.

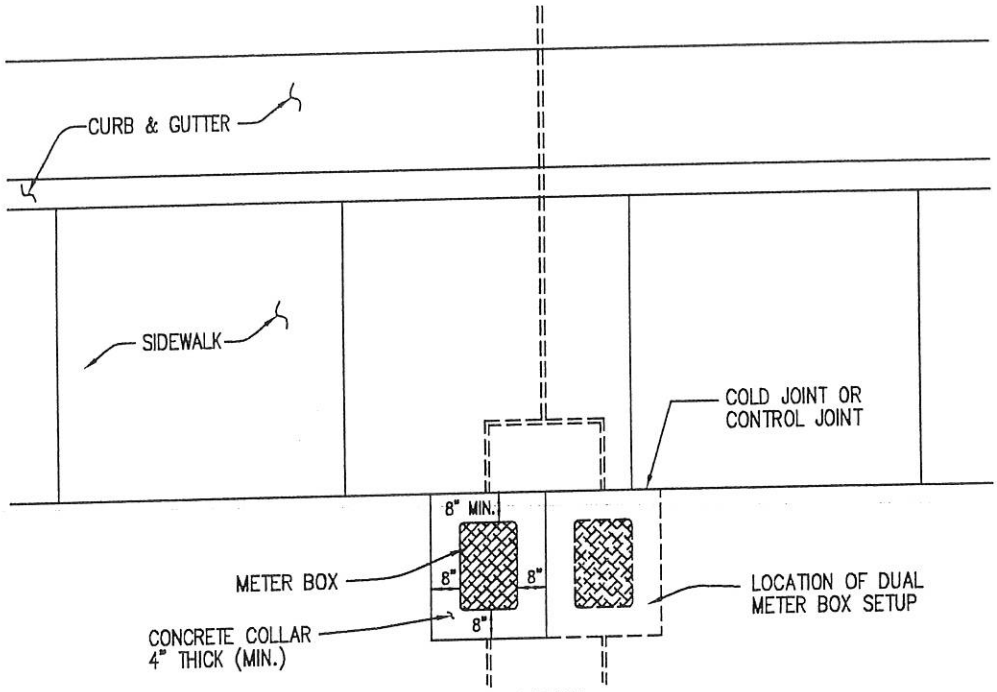
SECTION

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

WATER METER BOX DETAILS

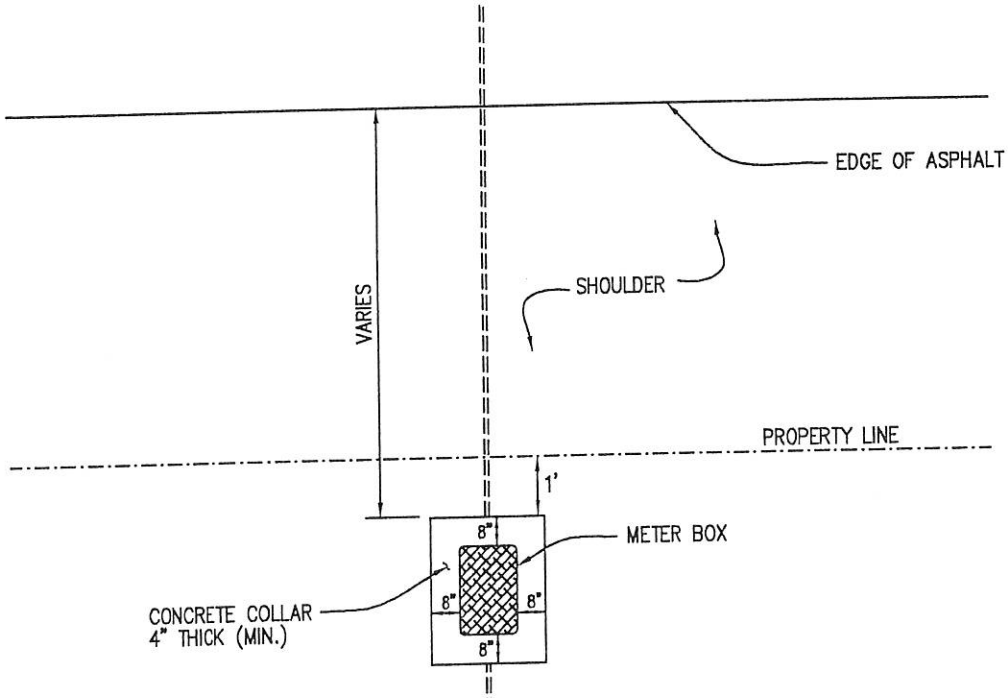
STANDARD DWG. NO.	
300	1 OF 1
APPROVED:	
DATE:	BY: LBB



PLAN VIEW
W/SIDEWALK

NOTES:

1– DO NOT DOWEL METER BOX COLLAR INTO SIDEWALK.



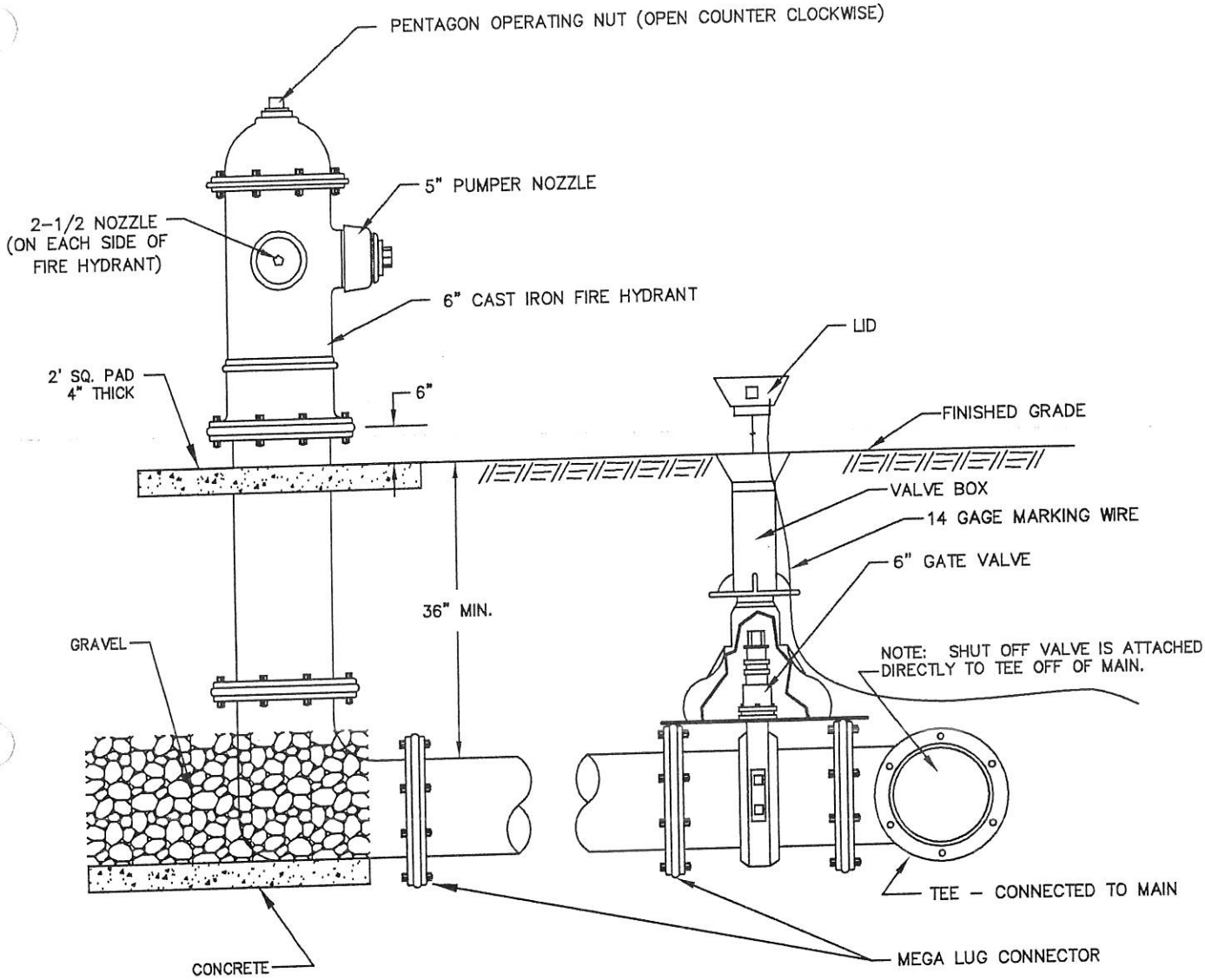
PLAN VIEW
NO SIDEWALK

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

WATER METER BOX LOCATION DETAILS

STANDARD DWG. NO.	
301	1 OF 1
APPROVED:	
DATE:	BY: LBB



NOTES:

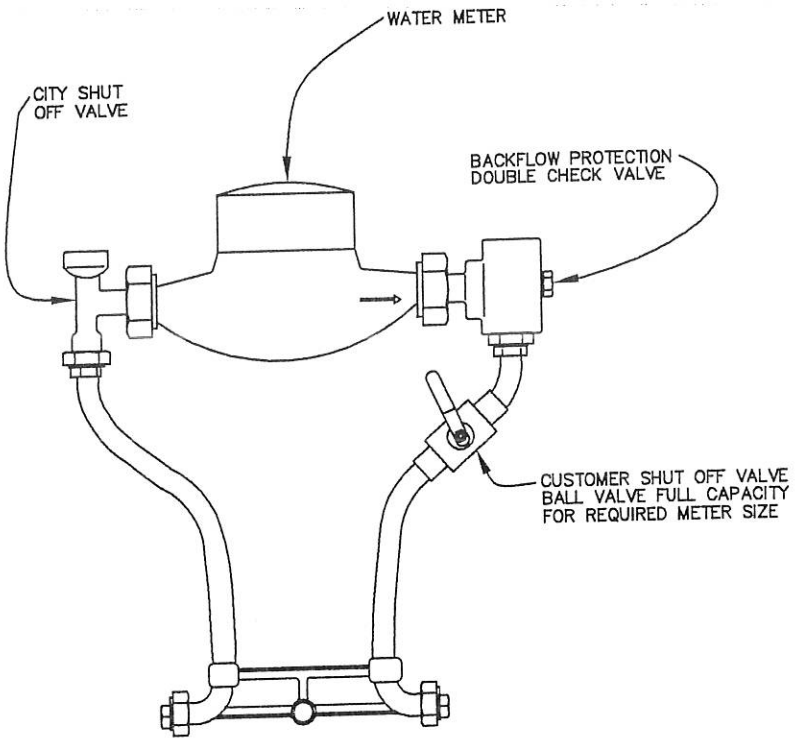
1- IN GENERAL, HYDRANTS SHALL BE PLACED A MINIMUM OF 1' BEHIND SIDEWALK. WHERE A PLANTER STRIP IS USED, HYDRANT MAY BE PLACED IN CENTER PROVIDED WIDTH OF PLANTER IS 4' OR GREATER.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

STANDARD FIRE HYDRANT DETAILS

STANDARD DWG. NO.	
302	1 OF 1
APPROVED:	
DATE:	BY: LBB

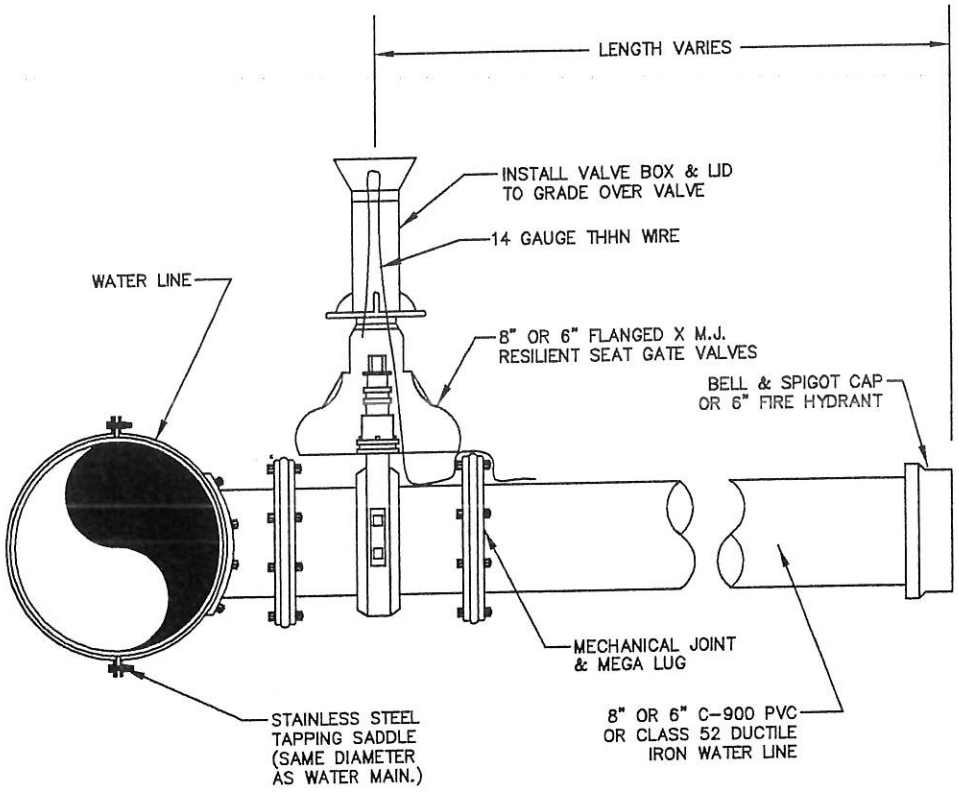


CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

WATER METER SETTER DETAILS

STANDARD DWG. NO.	
303	1 OF 1
APPROVED:	
DATE:	BY: LBB

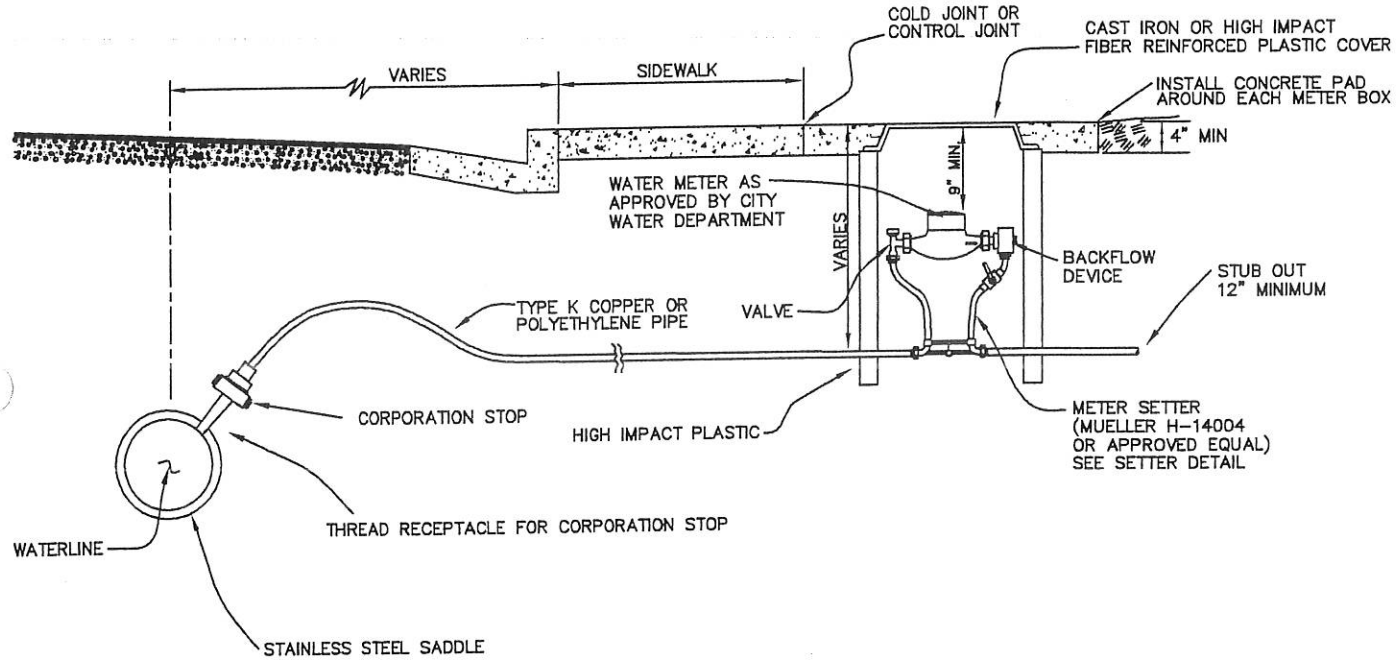


CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

8" OR 6" WATER LATERAL (CONNECTION TO EXISTING LINE)

STANDARD DWG. NO.	
304	1 OF 1
APPROVED:	
DATE:	BY: LBB



NOTES:
1- ALL TRENCH EXCAVATION AND COMPACTION SHALL BE IN ACCORDANCE WITH STANDARD SPECIFICATIONS.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

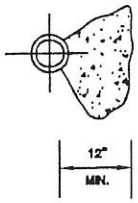
REVISIONS		
DATE	DESCRIPTION	BY

3/4" WATER SERVICE CONNECTION & METER

STANDARD DWG. NO.	
305	1 OF 1
APPROVED:	
DATE:	BY: LBB

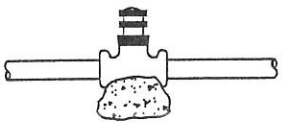
THRUST BLOCK BEARING AREA IN SQUARE FEET								
PIPE SIZE	CONDITION							
	I	II	III	IV	V	VI	VII	VII
4"	2.6	3.3	2.6	1.3	1.3	2.0	3.3	2.6
6"	4.6	6.5	3.9	2.0	2.6	3.3	6.5	4.6
8"	7.8	11.0	5.9	3.3	3.9	5.9	11.0	7.8
10"	12.4	17.5	9.8	5.2	6.5	9.1	17.5	12.4
12"	17.5	24.8	13.6	7.8	9.1	12.3	24.8	17.5
14"	24.0	33.8	18.2	9.7	12.3	16.9	33.8	24.0
16"	31.1	44.0	23.8	12.7	15.5	23.2	44.0	31.1

1. CALCULATED ON 225 LB. TEST PRESSURE & ALLOWABLE BEARING PRESSURE OF 2000 LBS. PER SQUARE FOOT.
2. IN POOR SOILS SPECIAL DESIGN IS REQUIRED.
3. CONCRETE SHALL BE CLASS "C" OR BETTER.
4. ALL THRUST BLOCK BEARING FACES SHALL BE POURED AGAINST UNDISTURBED SOIL OR APPROVED COMPACTED BACKFILL.
5. PRIOR APPROVAL FROM THE WATER DEPARTMENT REQUIRED FOR USE OF CONCRETE THRUST BLOCKS.

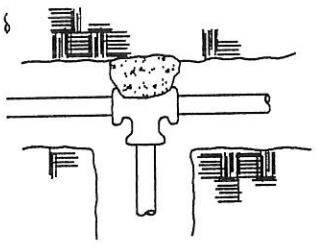


TYPICAL SECTION THRU THRUST BLOCKS

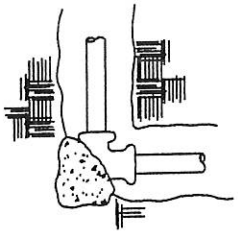
VALVE ANCHOR REQUIRED FOR VALVES 12" OR LARGER.



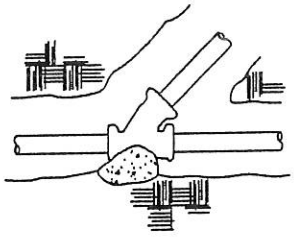
THRUST BLOCKING



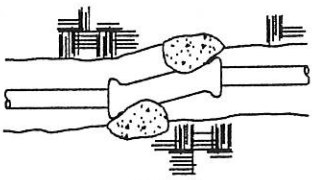
CONDITION I



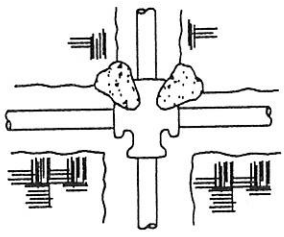
CONDITION II



CONDITION III



CONDITION IV



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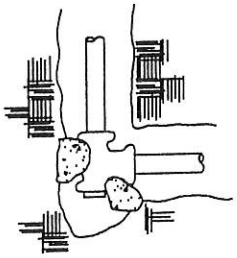
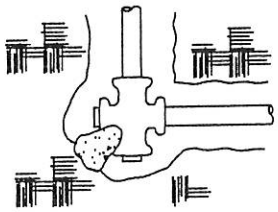
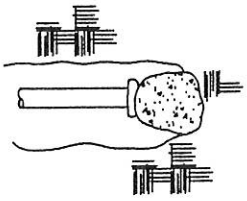


CONDITION VI



CONDITION VII



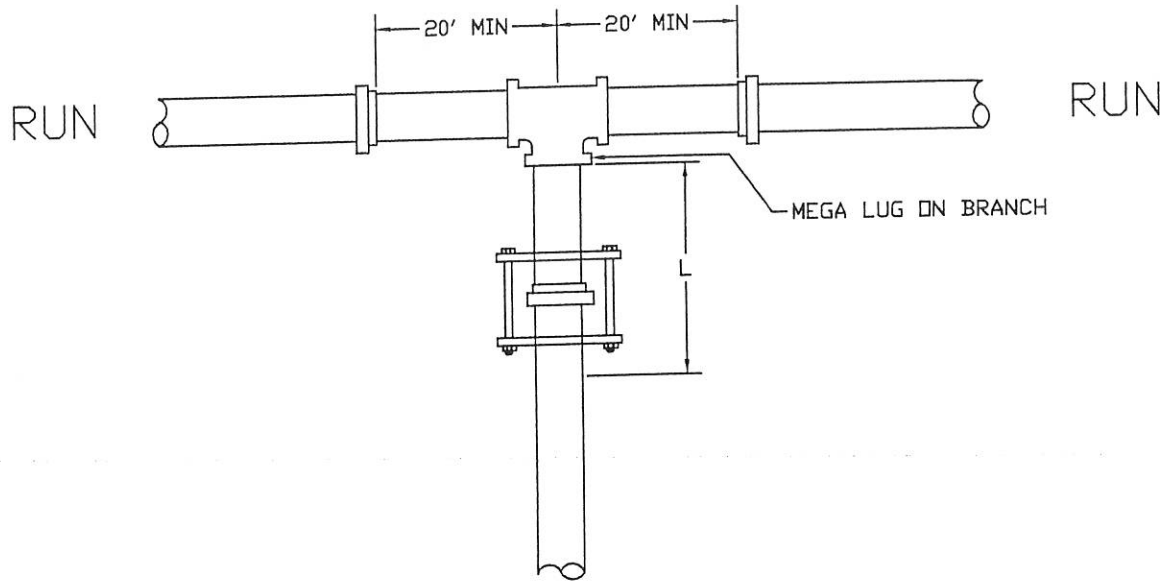
CONDITION VIII

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

WATER LINE THRUST BLOCK DETAILS

STANDARD DWG. NO.	
306	1 OF 1
APPROVED:	
DATE:	BY: LBB



BRANCH

RUN SIZE DIAMETER

BRANCH SIZE DIAMETER	4	6	8	10	12	14	16	18	20	24
4	*	*	*	*	*	*	*	*	*	*
6		*	*	*	*	*	*	*	*	*
8			*	*	*	*	*	*	*	*
10				10	*	*	*	*	*	*
12					28	12	4	*	*	*
14						45	31	17	3	*
16							62	49	37	11
18								78	67	44
20									95	74
24										127

* - FOR THIS CONDITION NEED ONLY RESTRAIN THE BRANCH OUTLET OF THE TEE.

RESTRAINED LENGTHS, "L" (IN FEET)

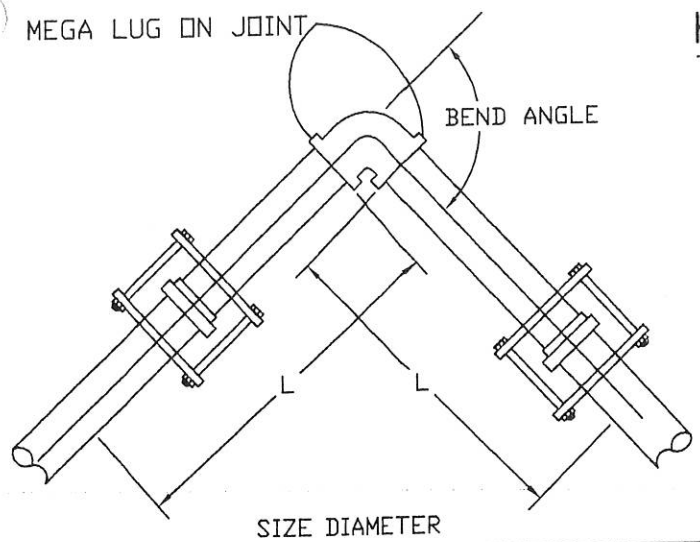
1. RESTRAIN THE TWO MECHANICAL JOINTS ON THE RUN SIDES OF THE TEE. THERE SHOULD BE A FULL 20' LENGTH OF PIPE INSTALLED ON EACH SIDE OF THE RUN.
2. ALL JOINTS WITHIN THE LENGTH "L" ON THE BRANCH MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS ON PUSH-ON PIPE PER CITY SPECIFICATION.
3. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS DATE	DESCRIPTION	BY

STANDARD TEE PVC RESTRAINING SYSTEM DETAIL

STANDARD DWG. NO.	1 OF 1
307	
APPROVED:	
DATE:	BY: LBB



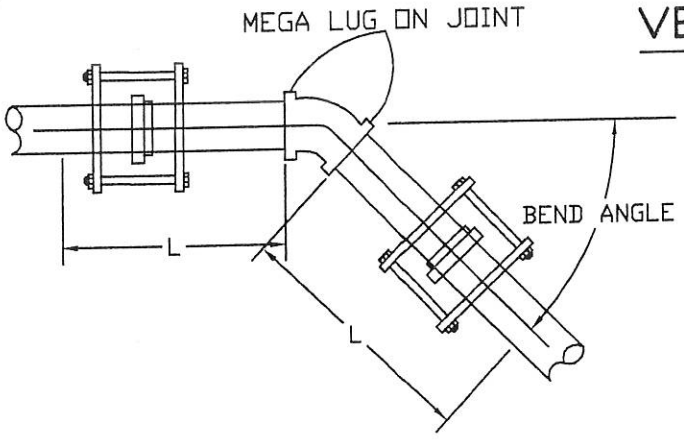
HORIZONTAL BEND

1. ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY SPECIFICATION.
2. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

SIZE DIAMETER

BEND ANGLE	4	6	8	10	12	14	16	18	20
11.25	2	3	4	4	5	6	7	7	8
22.5	4	6	7	9	10	12	13	15	16
45	8	12	15	18	21	24	28	30	33
90	20	28	37	44	52	59	67	73	81

RESTRAINED LENGTHS, "L" (IN FEET)



VERTICAL DOWN BEND

1. ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY SPECIFICATION.
2. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

SIZE DIAMETER

BEND ANGLE	4	6	8	10	12	14	16	18	20
11.25	6	8	10	12	14	15	17	20	20
22.5	11	15	19	23	27	31	35	40	40
45	23	31	40	48	56	64	72	80	80

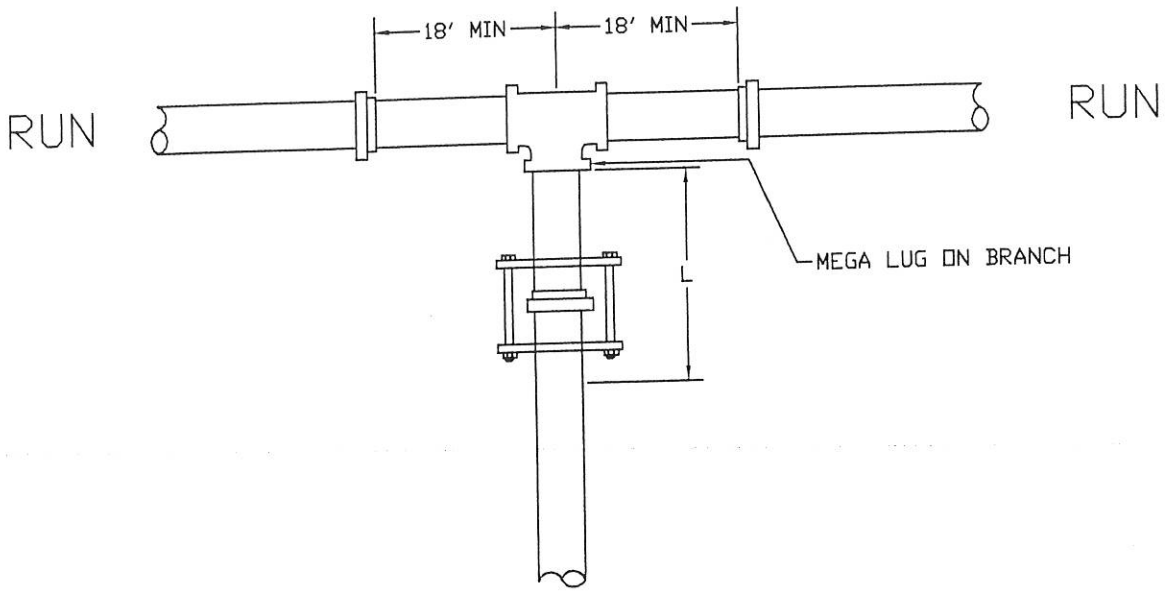
RESTRAINED LENGTHS, "L" (IN FEET)

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

STANDARD BENDS FOR PVC RESTRAINING SYSTEM DETAIL

STANDARD DWG. NO.	
308	1 OF 1
APPROVED:	
DATE:	BY: LBB



BRANCH

RUN SIZE DIAMETER

BRANCH SIZE DIAMETER	4	6	8	10	12	14	16	18	20	24
4	*	*	*	*	*	*	*	*	*	*
6		*	*	*	*	*	*	*	*	*
8			*	*	*	*	*	*	*	*
10				10	2	*	*	*	*	*
12					19	12	4	*	*	*
14						28	22	15	8	*
16							37	31	26	13
18								46	41	30
20									55	45
24										72

* - FOR THIS CONDITION NEED ONLY RESTRAIN THE BRANCH OUTLET OF THE TEE.

RESTRAINED LENGTHS, "L" (IN FEET)

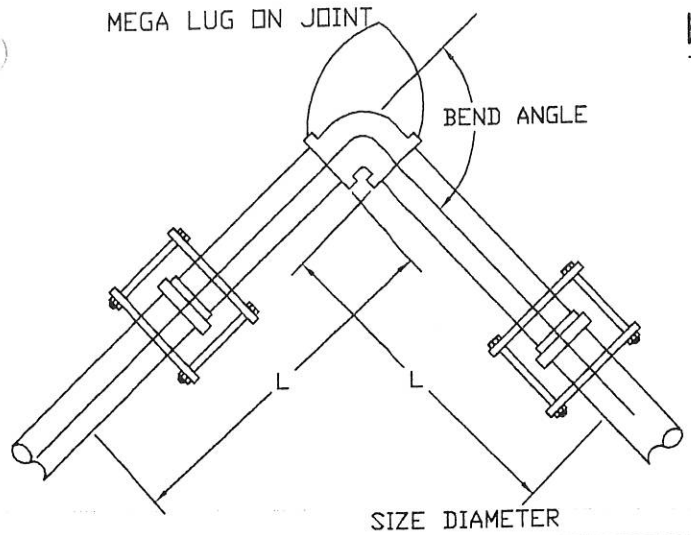
1. RESTRAIN THE TWO MECHANICAL JOINTS ON THE RUN SIDES OF THE TEE. THERE SHOULD BE A FULL 18' LENGTH OF PIPE INSTALLED ON EACH SIDE OF THE RUN.
2. ALL JOINTS WITHIN THE LENGTH "L" ON THE BRANCH MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS ON PUSH-ON PIPE PER CITY SPECIFICATION.
3. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

REVISIONS		
DATE	DESCRIPTION	BY

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

STANDARD TEE DUCTILE IRON RESTRAINING SYSTEM DETAIL

STANDARD DWG. NO.	
309	1 OF 1
APPROVED:	
DATE:	BY: LBB



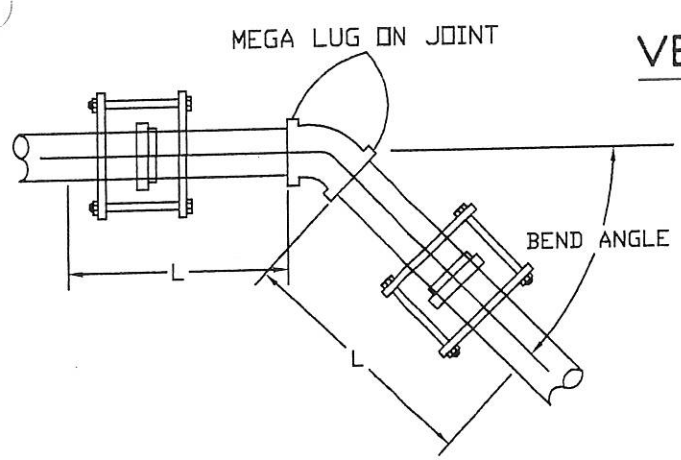
HORIZONTAL BEND

1. ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY SPECIFICATION.
2. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

SIZE DIAMETER

BEND ANGLE	4	6	8	10	12	14	16	20
11.25	3	2	3	3	4	4	5	6
22.5	3	4	7	7	8	9	10	12
45	6	9	12	14	16	19	21	26
90	15	21	28	34	40	45	51	62

RESTRAINED LENGTHS, "L" (IN FEET)



VERTICAL DOWN BEND

1. ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY SPECIFICATION.
2. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

SIZE DIAMETER

BEND ANGLE	4	6	8	10	12	14	16	20
11.25	3	5	7	8	8	10	11	13
22.5	6	10	11	14	16	18	22	25
45	14	18	24	28	33	38	43	53

RESTRAINED LENGTHS, "L" (IN FEET)

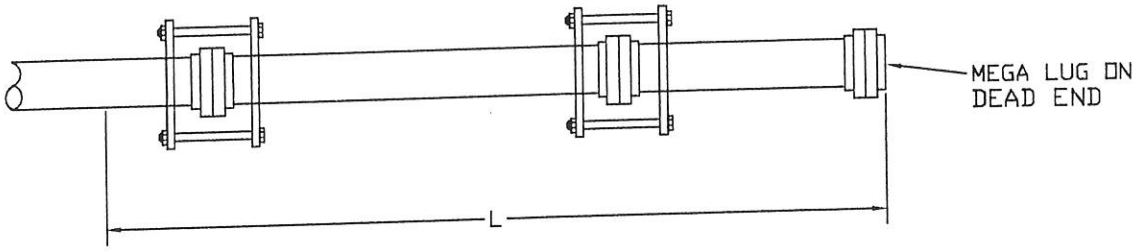
CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

STANDARD BENDS FOR DUCTILE IRON RESTRAINING SYSTEM DETAIL

STANDARD DWG. NO.	
310	1 OF 1
APPROVED:	
DATE:	BY: LBB

STANDARD DEAD END FOR DUCTILE IRON



1. ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY SPECIFICATION.
2. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

PIPE SIZE IN INCHES

4	6	8	10	12	14	16	18	20
23	33	45	52	62	71	80	89	98

RESTRAINED LENGTHS, "L" (IN FEET)

RESTRAINED JOINT LENGTHS USAGE GENERAL NOTES

RESTRAINED LENGTH CALCULATIONS ARE BASED ON THE FOLLOWING DESIGN TYPICALLY USED WITH BACKFILL IN ST. GEORGE.

1. THREE (3) FEET MINIMUM DEPTH OF COVER.
2. A SAFTEY FACTOR OF 1.5
3. SOIL TYPE SANDY CLAY
4. TYPE 5 TRENCH COMPACTION FROM FOUR (4) INCHES MINIMUM UNDER THE PIPE TO THE CENTER LINE OF THE PIPE, AND COMPACTED GRANULAR OR SELECTED MATERIAL FROM THE CENTER LINE OF THE PIPE TO THE TOP OF THE PIPE (90 PERCENT STANDARD PROCTOR DENSITY, AASHTO T-99).
5. 200 PSI TEST PRESSURES FOR FOUR (4) THROUGH SIXTEEN (16) INCH SIZE PIPES.

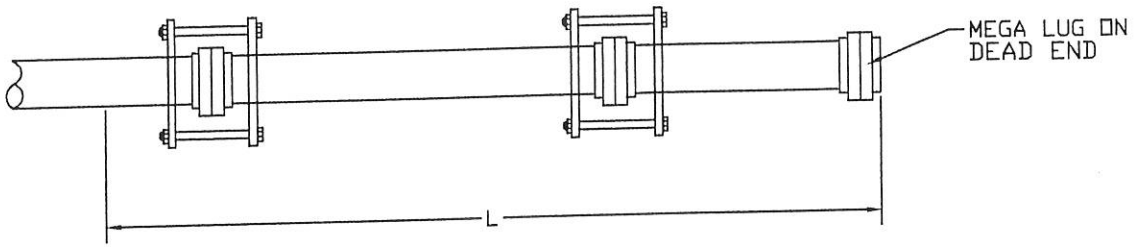
IF ACTUAL CONDITIONS DIFFER FROM THOSE LISTED ABOVE OR THE REQUIRED RESTRAINED LENGTH CANNOT BE MET, THE RESTRAINED JOINT LENGTH SHALL BE DETERMINED BY THE WATER AND POWER ENGINEER.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

STANDARD DEAD END FOR DUCTILE IRON RESTRAINING SYSTEM DETAIL

STANDARD DWG. NO.	1 OF 1
311	
APPROVED:	
DATE:	BY: LBB



1. ALL JOINTS WITHIN LENGTH "L" MUST BE RESTRAINED. USE RETAINER GLAND AT MECHANICAL JOINTS AND HARNESS WITH PUSH-ON PIPE PER CITY SPECIFICATION.
2. FOR TEST PRESSURES AND LAYING CONDITIONS SEE SECTION ON GENERAL NOTES FOR USE OF RESTRAINED JOINT LENGTHS.

PIPE SIZE IN INCHES

4	6	8	10	12	14	16	18	20
44	62	82	99	118	135	153	169	187

RESTRAINED LENGTHS, "L" (IN FEET)

RESTRAINED JOINT LENGTHS USAGE GENERAL NOTES

RESTRAINED LENGTH CALCULATIONS ARE BASED ON THE FOLLOWING DESIGN TYPICALLY USED WITH BACKFILL IN ST. GEORGE.

1. THREE (3) FEET MINIMUM DEPTH OF COVER.
2. A SAFTEY FACTOR OF 1.5
3. SOIL TYPE SANDY CLAY
4. TYPE 5 TRENCH COMPACTION FROM FOUR (4) INCHES MINIMUM UNDER THE PIPE TO THE CENTER LINE OF THE PIPE, AND COMPACTED GRANULAR OR SELECTED MATERIAL FROM THE CENTER LINE OF THE PIPE TO THE TOP OF THE PIPE (90 PERCENT STANDARD PROCTOR DENSITY, AASHTO T-99).
5. 200 PSI TEST PRESSURES FOR FOUR (4) THROUGH SIXTEEN (16) INCH SIZE PIPES.

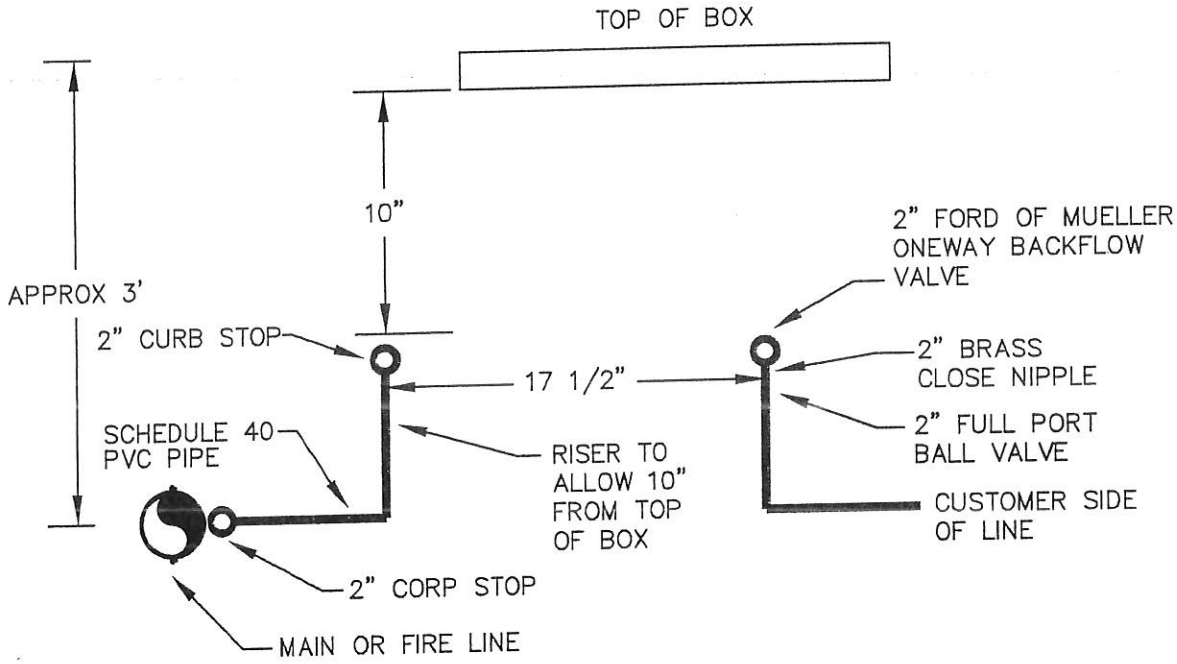
IF ACTUAL CONDITIONS DIFFER FROM THOSE LISTED ABOVE OR THE REQUIRED RESTRAINED LENGTH CANNOT BE MET, THE RESTRAINED JOINT LENGTH SHALL BE DETERMINED BY THE WATER AND POWER ENGINEER.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

IN LINE VALVE\DEAD END ON PVC PIPE DETAIL

STANDARD DWG. NO.	
312	1 OF 1
APPROVED:	
DATE:	BY: LBB



NOTES:

1– ALL FITTINGS SHALL BE SCHEDULE 80.

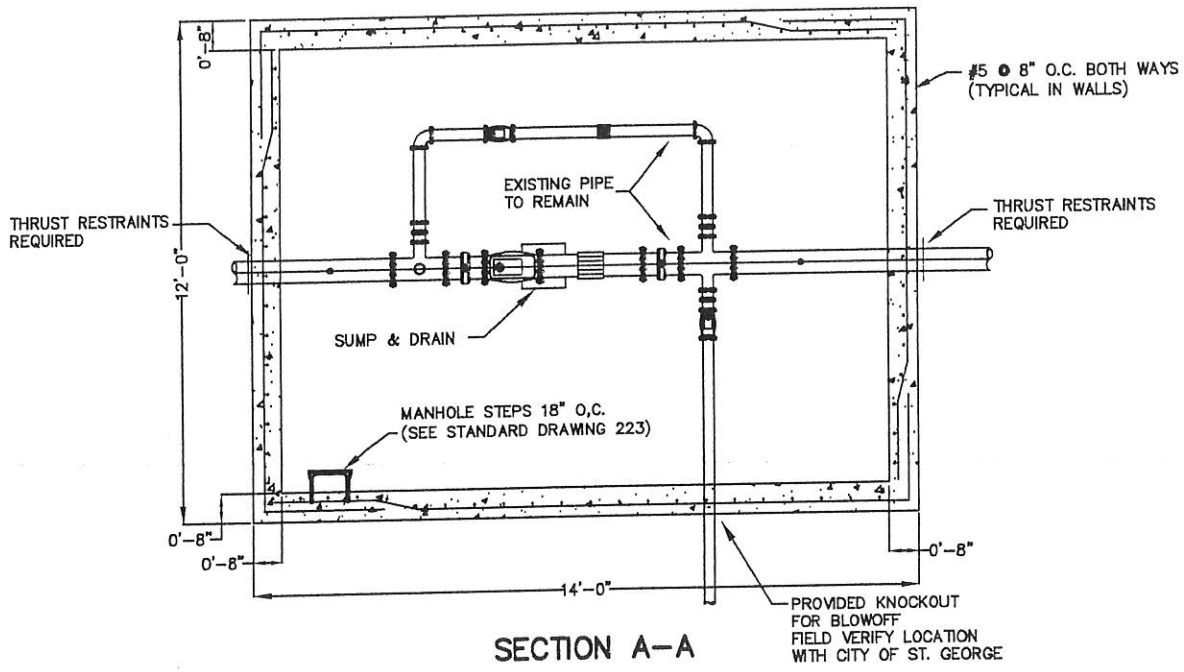
2– AS AN OPTION, A 2" SOLID SETTER WITH A 2" BRASS FULL PORT BALL VALVE MAY BE USED.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

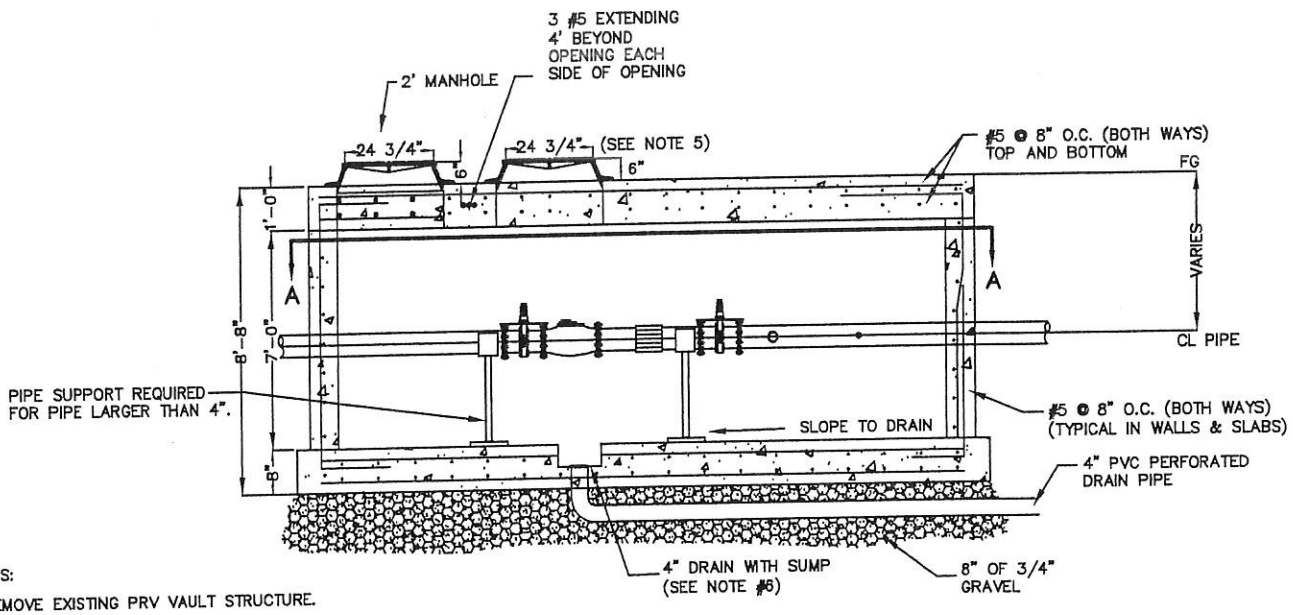
REVISIONS		
DATE	DESCRIPTION	BY

2" METER MECHANICAL PIPING DETAIL

STANDARD DWG. NO.	
313	1 OF 1
APPROVED:	
DATE:	BY: LBB



SECTION A-A



SIDE VIEW

NOTES:

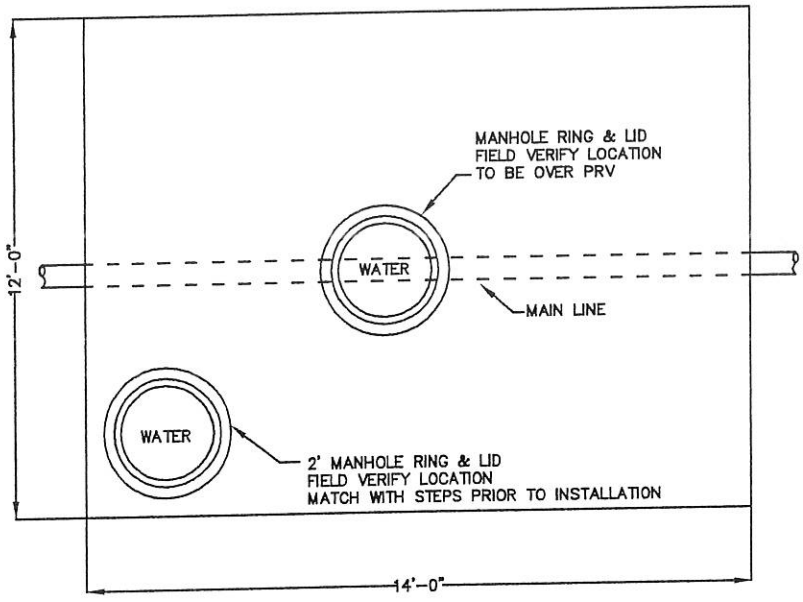
1. REMOVE EXISTING PRV VAULT STRUCTURE.
2. FIELD VERIFY EXISTING PIPING CONFIGURATION & SIZES TO DETERMINE KNOCKOUT AND MANHOLE LOCATIONS.
3. IF VAULT IS IN SIDEWALK THE FINISH GRADE OF TOP OF VAULT SHALL MATCH SLOPE OF EXISTING SIDEWALK.
4. IF VAULT IS IN ROADWAY, FINISH GRADE OF TOP OF VAULT SHALL MATCH SUBGRADE.
5. MANHOLE RING & LID WILL VARY WITH SIZE OF P.R.V. CONTACT WATER DEPARTMENT.
6. SUMP SIZE SHALL BE 12" X 12" X 4" DEEP.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

STANDARD PRESSURE REDUCING VALVE FOR EXISTING PRV & PIPING

STANDARD DWG. NO.	
314	1 OF 2
APPROVED:	
DATE:	BY: GM



TOP VIEW LID

NOTES:

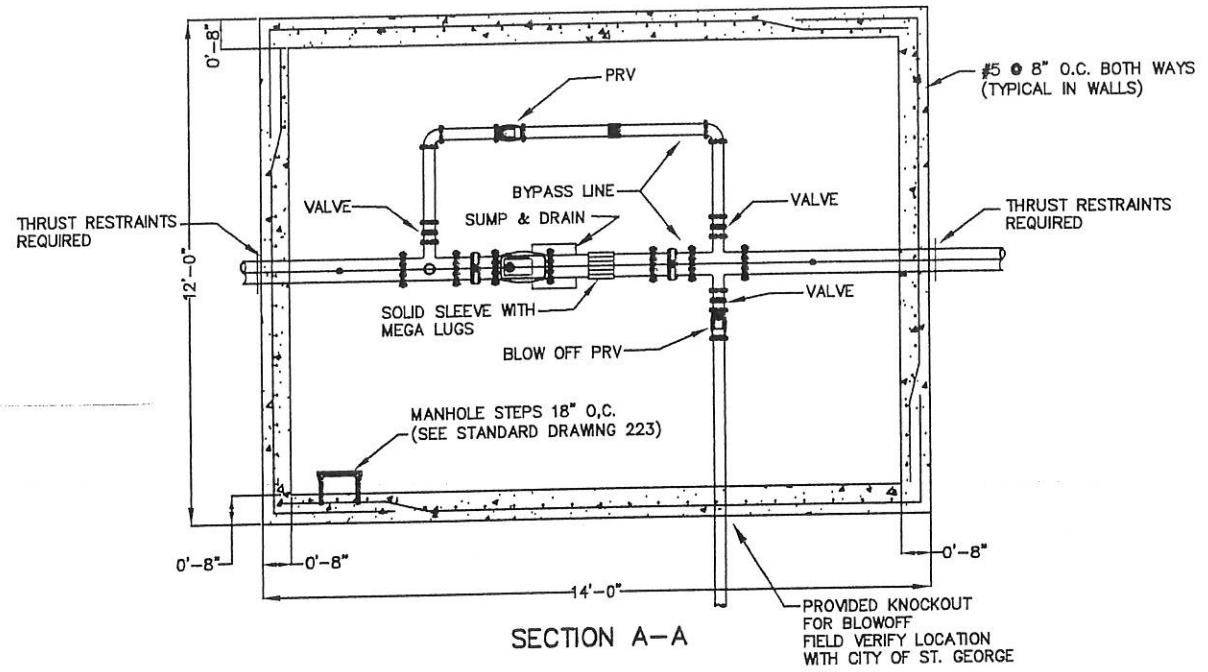
1. SIZE OF MANHOLE RING & LID WILL VARY WITH SIZE OF PRV. (CONTACT WATER DEPARTMENT).

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

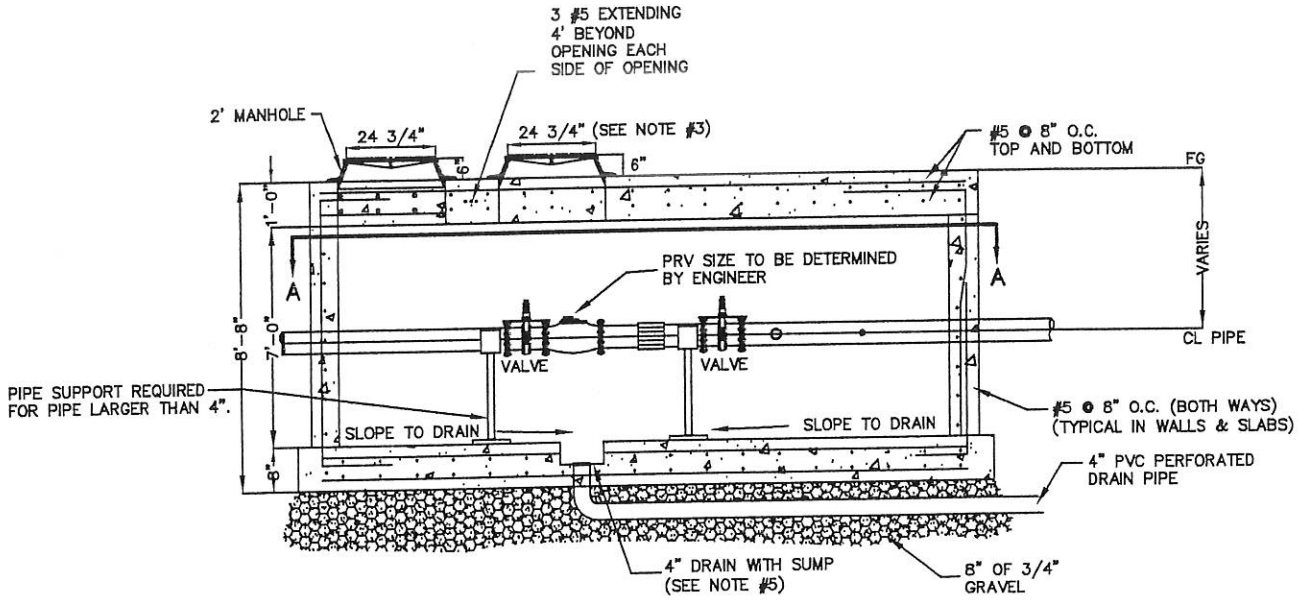
REVISIONS		
DATE	DESCRIPTION	BY

STANDARD PRESSURE REDUCING VALVE VAULT LID

STANDARD DWG. NO.	
314	2 OF 2
APPROVED:	
DATE:	BY: GM



SECTION A-A



SIDE VIEW

NOTES:

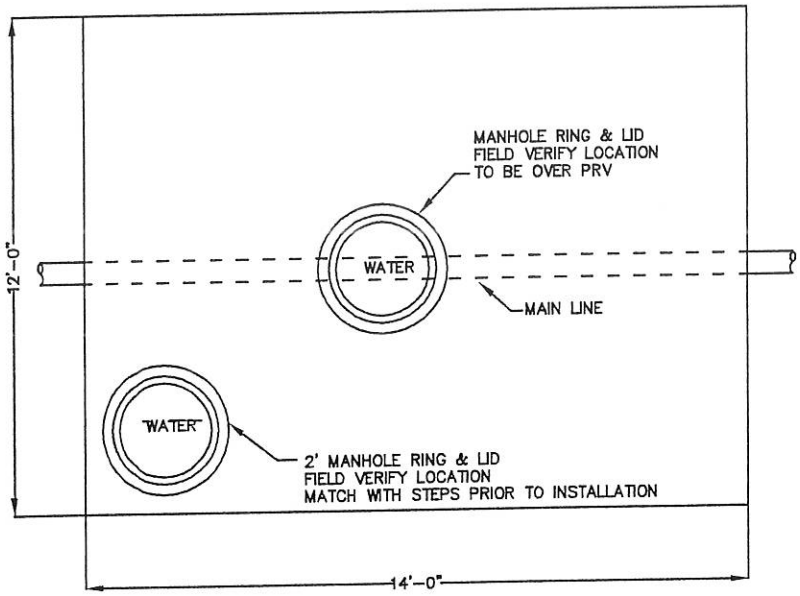
1. IF VAULT IS IN SIDEWALK THE FINISH GRADE OF TOP OF VAULT SHALL MATCH SLOPE OF EXISTING SIDEWALK.
2. ALL FITTINGS SHALL BE FLANGED AND MEGA LUGGED.
3. MANHOLE RING & LID WILL VARY WITH SIZE OF P.R.V. CONTACT WATER DEPARTMENT.
4. IF VAULT IS IN ROADWAY, FINISH GRADE OF TOP OF VAULT SHALL MATCH SUBGRADE.
5. SUMP SIZE SHALL BE 12" X 12" X 4" DEEP.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

STANDARD PRESSURE REDUCING VALVE & VALUT FOR NEW CONSTRUCTION

STANDARD DWG. NO.	
315	1 OF 2
APPROVED:	
DATE:	BY: GM



TOP VIEW LID

NOTES:

1. SIZE OF MANHOLE RING & LID WILL VARY WITH SIZE OF PRV. (CONTACT WATER DEPARTMENT).

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
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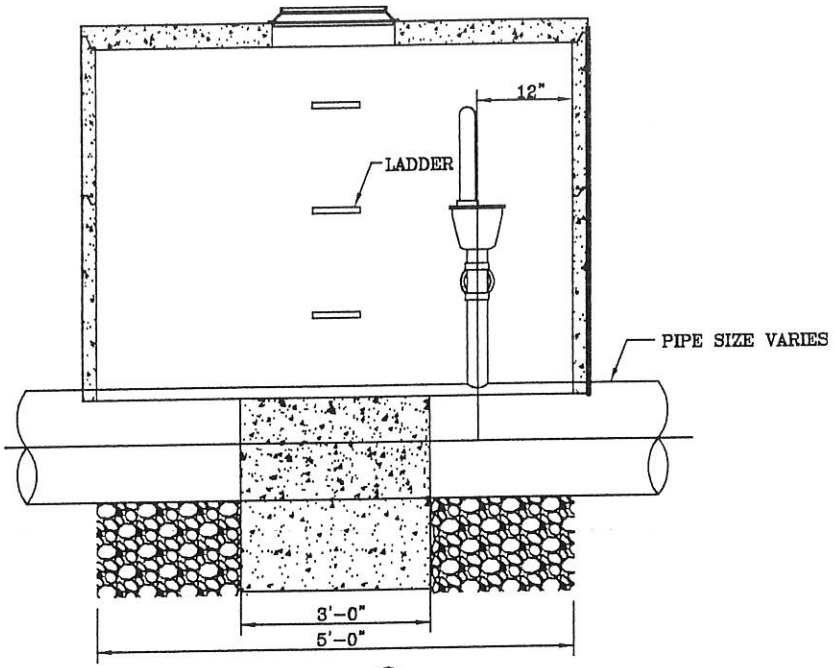
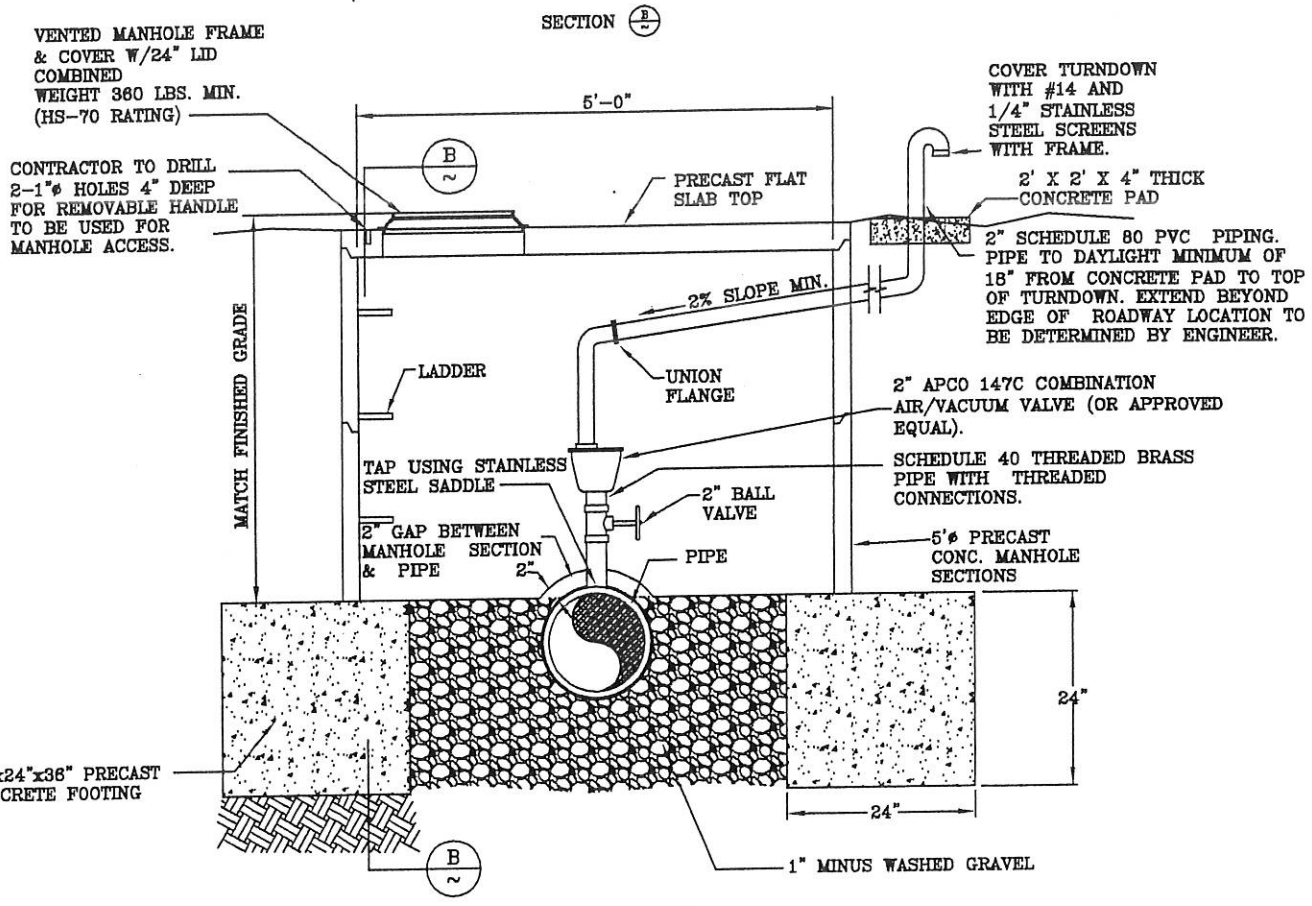
STANDARD PRESSURE REDUCING VALVE VAULT LID

STANDARD DWG. NO.	
315	2 OF 2
APPROVED:	
DATE:	BY: GM



SECTION E



NOTE: ALL AIR VALVES SHALL BE INSTALLED VERTICALLY PLUMB

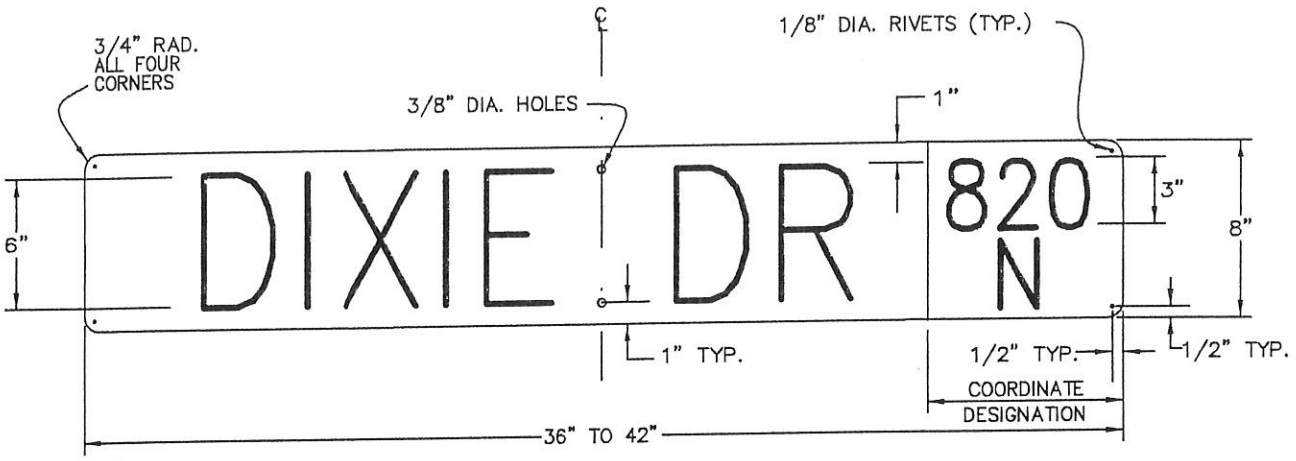
AIR VALVE SECTION
N.T.S.

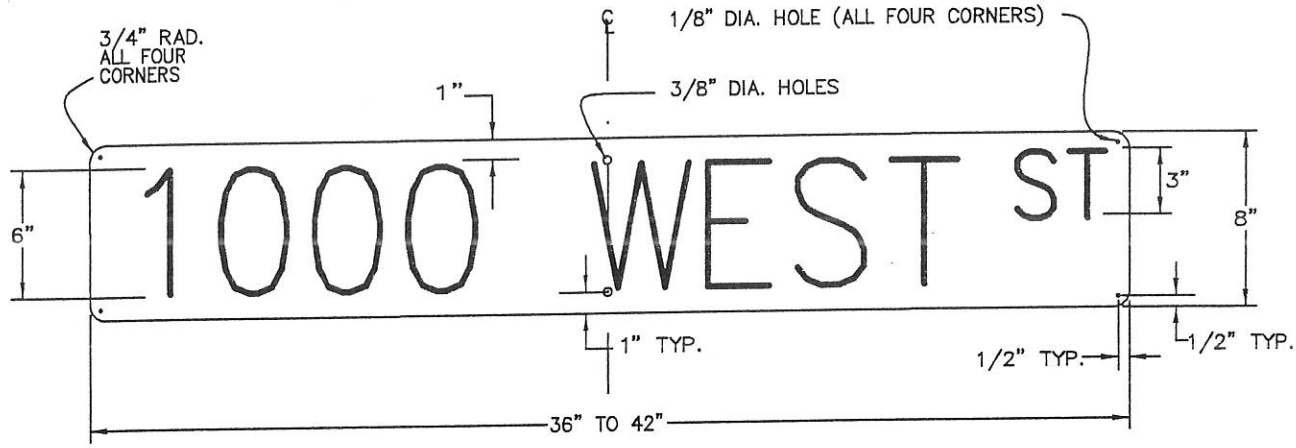
CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

STANDARD AIR VAC DETAIL

STANDARD DWG. NO.	
316	1 OF 1
APPROVED:	
DATE:	BY: GM





NOTES:

1- BACKGROUND SHALL BE GREEN, LEGEND AND LETTERS SHALL BE WHITE.
2- ALL SHEETING SHALL BE HIGH INTENSIRY REFLECTIVE SHEETING. (FP-85 TYPE III A)
3- SIGNS SHOULD BE MADE BY THE "REVERSE OUT" PROCESS. NO STICK ON LETTERS. CONTACT CITY SIGN SHOP FOR DETAILS.
4- SIGN BLANK SHALL BE 6061-T6 HEAT TREATED HIGH TENSILE DEGREASED ALUMINUM WITH ALODINE 1200 FINISH. MIN. THICKNESS SHALL BE 0.080".
5- EACH SIGN SHALL CONSIST OF TWO PLATES RIVETED TOGETHER AND MOUNTED AS REQUIRED.
6- SIGNS ON PRIVATE ROADS ARE REQUIRED AND SHOULD MEET SAME SPECIFICATIONS OF STANDARD SIGNS EXCEPT FOR BACKGROUND COLOR.
7- ALL STREETS WITH NAMES SHALL ALSO HAVE THE COORDINATE DESIGNATION ON THE SIGN IN THE APPROPRIATE LOCATION UNLESS OTHERWISE APPROVED.
8- ADDRESS COORDINATOR SHALL BE CONTACTED PRIOR TO MAKING SIGNS TO VERIFY PROPER NAMES AND COORDINATES.
9- ALL LETTERS SHALL BE UPPER CASE. LETTERS AND NUMBERS SHALL CONFORM TO THE HEIGHT, WIDTH, STROKE WIDTH, AND SPACING AS PER THE U.S. DEPT. OF TRANSPORTATION PUBLICATION "STANDARD ALPHABET FOR HIGHWAY SIGNS".

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
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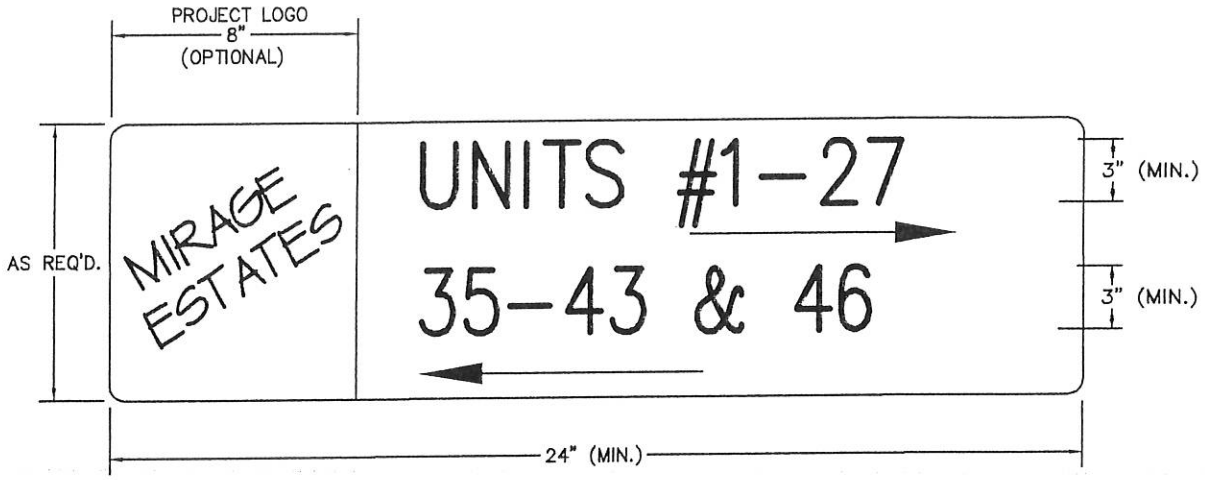
STANDARD STREET SIGN

STANDARD DWG. NO.	
400	1 OF 1
APPROVED:	
DATE:	BY: LBB



INTERIOR DIRECTIONAL SIGN

MAIN ENTRANCE STREET SIGN

NOTES:

1– SIGNS SHALL CONFORM TO CITY STREET SIGN STANDARDS AND SPECIFICATIONS.
2– STANDARD BACKGROUND IS BLUE. LETTERS AND LEGEND SHALL BE WHITE. SHEETING TYPE SHALL BE HIGH INTENSITY
3– SIGNS MOUNTED ON PUBLIC RIGHT OF WAY SHALL FOLLOW CITY INSTALLATION AND PLACEMENT STANDARDS. SAID STANDARDS ARE RECOMMENDED FOR INTERIOR SIGNS.
4– WHEN PROJECT IS ADDRESSED SIMILAR TO A SUBDIVISION WITH PUBLIC STREETS, THE ABOVE INTERIOR DIRECTIONAL SIGN IS NOT USED. SEE CITY ADDRESS COORDINATOR.
5– PROJECT LOGO, IF USED, MUST BE APPROVED BY THE CITY ADDRESS COORDINATOR PRIOR TO USE.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
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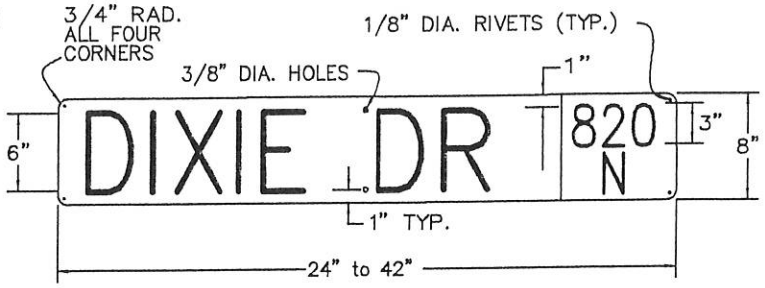
PRIVATE STREET SIGNS

STANDARD DWG. NO.	1 OF 1
401	
APPROVED:	
DATE: 6/14/96	BY: LBB

SIGN DESIGNATION FORM

PROJECT NAME

DATE BY



STANDARD ST. GEORGE CITY SIGN

THIS FORM TO BE COMPLETED BY THE CITY ADDRESS COORDINATOR PRIOR TO ORDERING OF STREET SIGNS BY DEVELOPER.

NOTES:

1- SEE DRAWING #109 FOR SIGN SPECIFICATIONS.
2- SIGNS ON PRIVATE ROADS WHEN REQUIRED BY THE CITY ENGINEER SHALL MEET ALL SPECIFICATIONS OF STANDARD SIGNS EXCEPT BACKGROUND SHALL BE BLUE.
3- ADDRESS COORDINATOR MUST BE CONTACTED PRIOR TO MAKING SIGNS TO VERIFY PROPER NAMES AND COORDINATES.
4- ALL STREETS WITH NAMES WILL ALSO HAVE COORDINATES DESIGNATED ON SIGN.

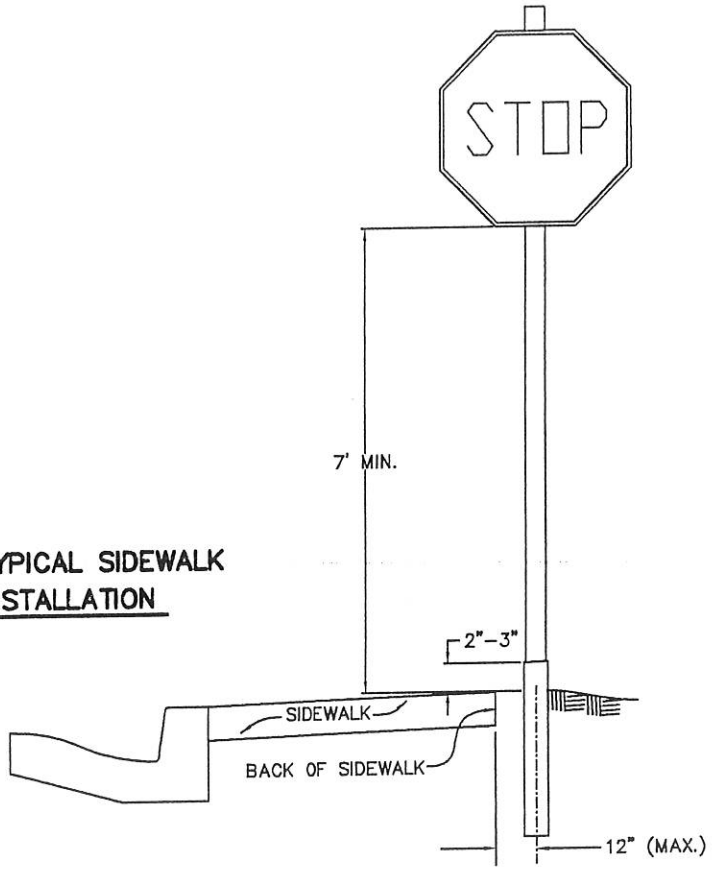
LOCATION GUIDE

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

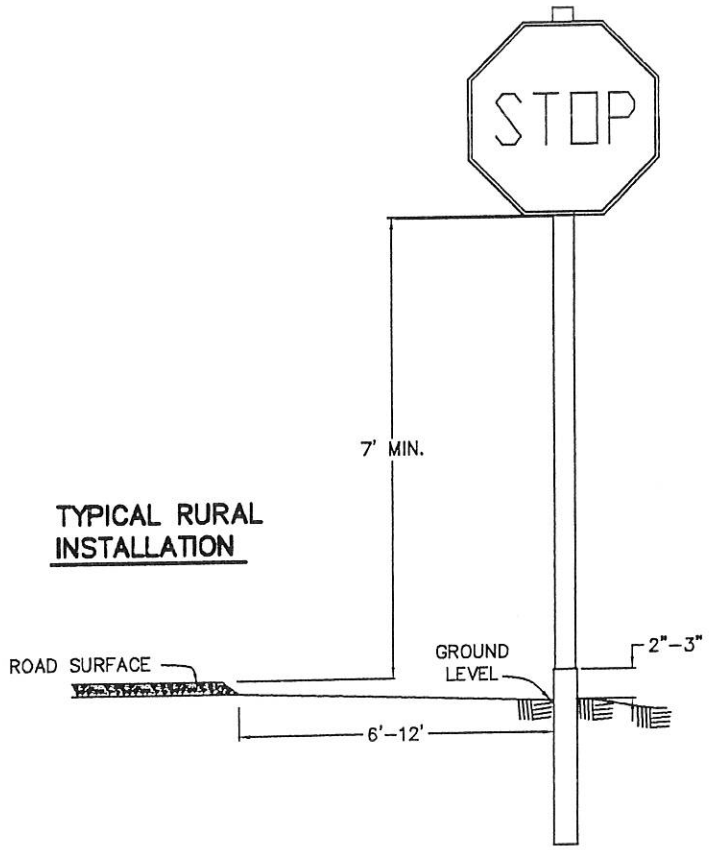
REVISIONS		
DATE	DESCRIPTION	BY

SIGN DESIGNATION FORM

STANDARD DWG. NO.	
402	1 OF 1
APPROVED:	
DATE: 6/20/96	BY: LBB



TYPICAL SIDEWALK INSTALLATION



TYPICAL RURAL INSTALLATION

NOTES:

1- SIGNS SHALL BE PLACED IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. (M.U.T.C.D.).

2- STREET NAME SIGNS SHALL BE REQUIRED ON ALL CITY STREETS.

3- ALL POST COMPONENTS SHALL BE GALVANIZED STEEL.

4- STREET NAME SIGNS PLACED ABOVE STOP SIGN SHALL BE AS SHOWN IN DRAWING 110 (2 OF 2).

5- WHERE PLANTER STRIP LIES BETWEEN SIDEWALK AND CURB, SIGNS SHALL BE INSTALLED IN PLANTER STRIP AS PER M.U.T.C.D.

6- SIGNS SHALL BE PLACED TO BE CLEARLY VISABLE. ALL OBSTRUCTIONS SUCH AS TREES, POLES, OTHER SIGNS, ETC, SHALL BE AVOIDED.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
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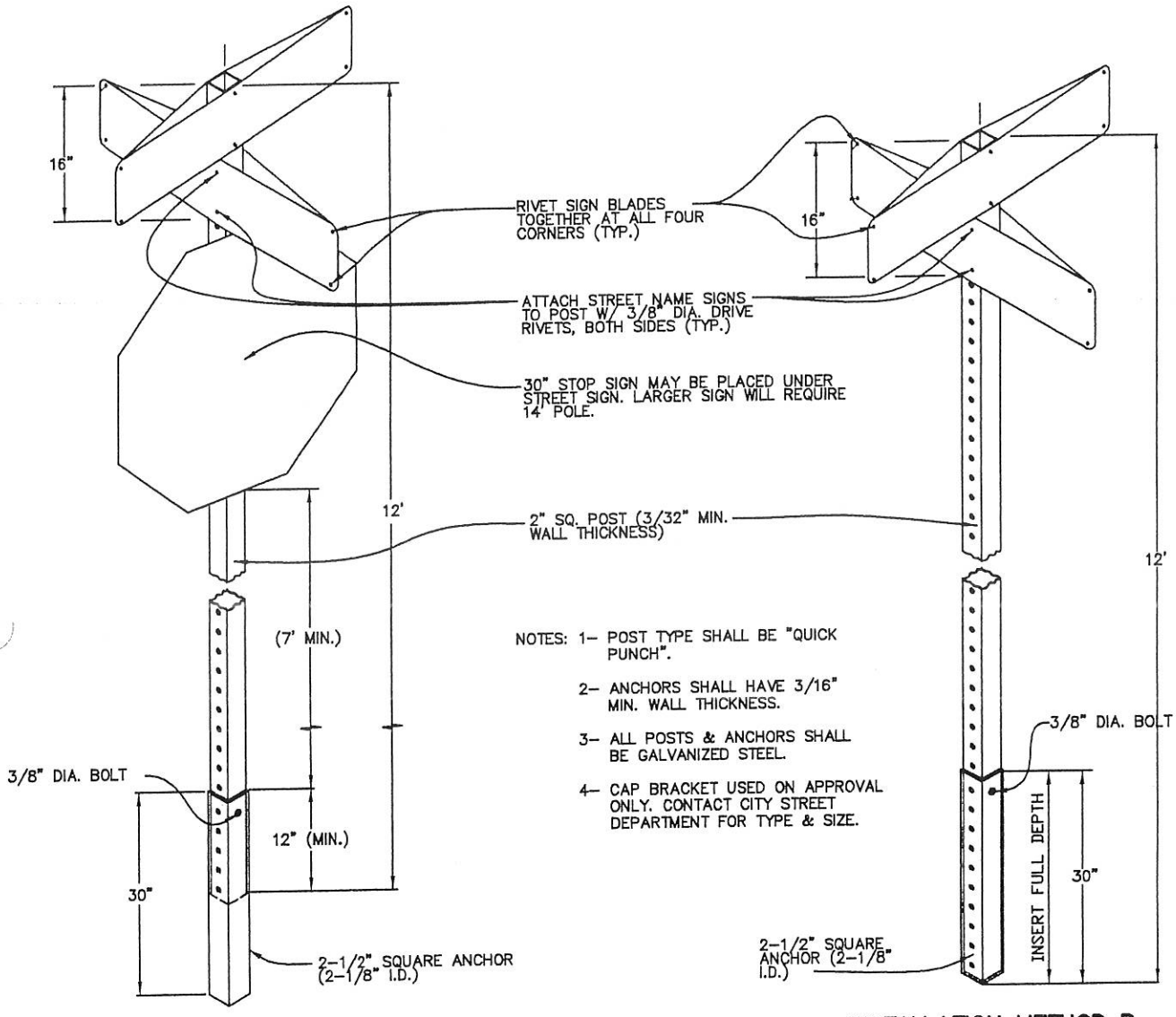
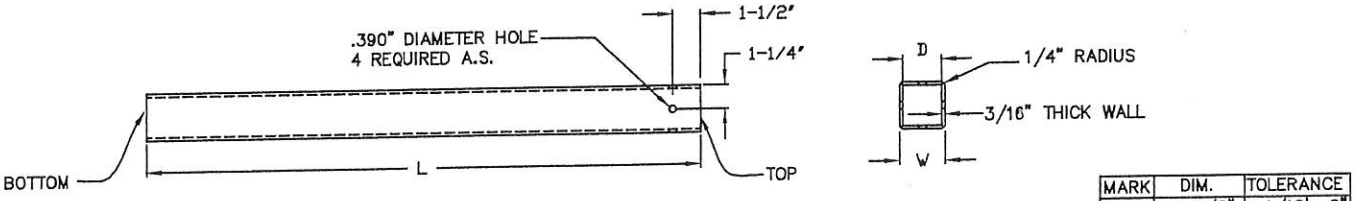
SIGN, POST AND INSTALLATION DETAILS

STANDARD DWG. NO.	
410	1 OF 1
APPROVED:	
DATE:	BY: LBB



INSTALLATION METHOD A

INSTALLATION METHOD B



MARK	DIM.	TOLERANCE
D	2-1/8"	+1/16', -0"
L	30"	±1/2"
W	2-1/2"	±1/64"

SIGN ANCHOR DETAIL

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

REVISIONS		
DATE	DESCRIPTION	BY

SIGN POST & MOUNTING DETAILS

STANDARD DWG. NO.	
411	1 OF 1
APPROVED:	
DATE:	BY: LBB