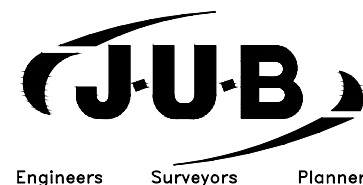
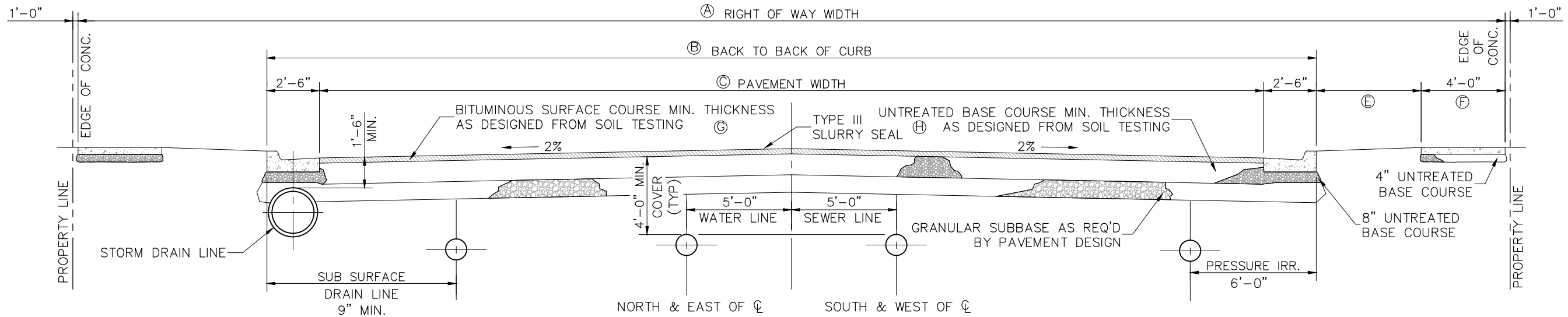


CLINTON CITY CORPORATION DEVELOPMENT STANDARDS

RELEASED FOR CONSTRUCTION
APRIL 2015

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1	COVER SHEET
2	STANDARD STREET IMPROVEMENTS
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14	CULINARY WATER TRENCH DETAILS
15	LAND DRAIN DETAILS
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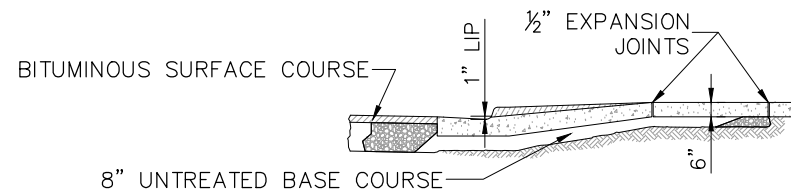


- NOTES:
1. TOP BACK OF CURB ON BOTH SIDES OF ROAD TO BE SAME ELEVATIONS.
 2. THE CITY ENGINEER SHALL VERIFY PAVEMENT DESIGN PRESCRIBED BY SOILS REPORT. (SEE SPECIFICATIONS)
 3. COMMERCIAL AND INDUSTRIAL STREET SECTIONS ARE DETERMINED BASED ON A TRAFFIC ANALYSIS FOR THE PARTICULAR USE.

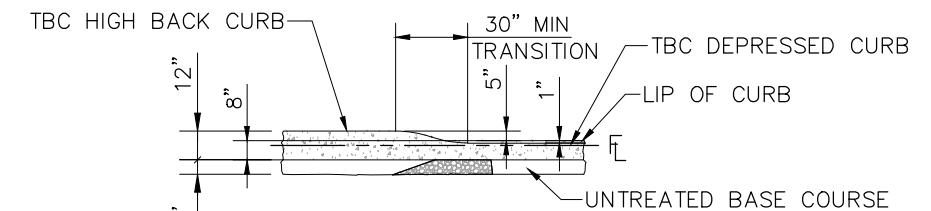
STREET DESIGNATION	A	B	C	D	E	F	G	H
ARTERIAL	UDOT	UDOT	UDOT	UDOT	4.5'	4.0'	NOTE 2	NOTE 2
SECONDARY ARTERIAL	84'	65'	60'	2.5'	4.5'	4.0'	NOTE 2	NOTE 2
COLLECTOR	66'	47'	42'	2.5'	4.5'	4.0'	NOTE 2	NOTE 2
COLLECTOR	70'	48'	43'	2.5'	6.0'	4.0'	NOTE 2	NOTE 2
LOCAL - SITE APPROVAL	60'	41'	36'	2.5'	4.5'	4.0'	3"	10"
LOCAL - SITE APPROVAL	60'	38'	33'	2.5'	6.0'	4.0'	3"	10"

STANDARD STREET SECTION

- NOTE:
- SCRIBE SIDEWALK 1/2" DEPTH AT EACH 4'-0" EXPANSION JOINT AT EACH 32'-0"
- CURB & GUTTER EXPANSION JOINT AT EACH 50'
- CURB & GUTTER CONSTRUCTION JOINT AT EACH 10'

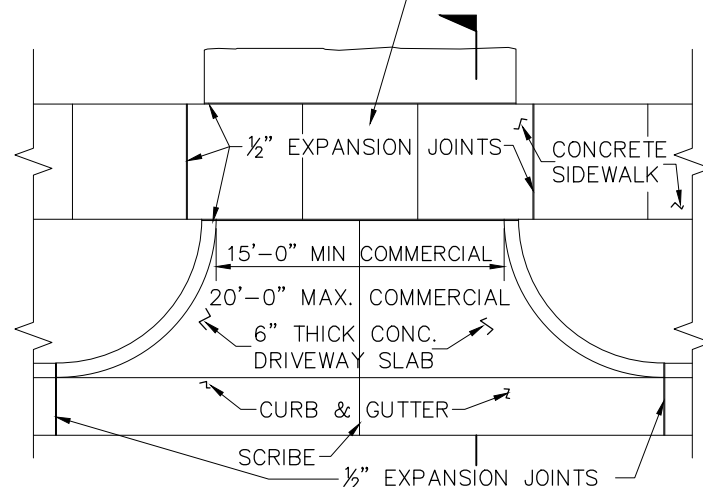


SECTION 1



SECTION 2

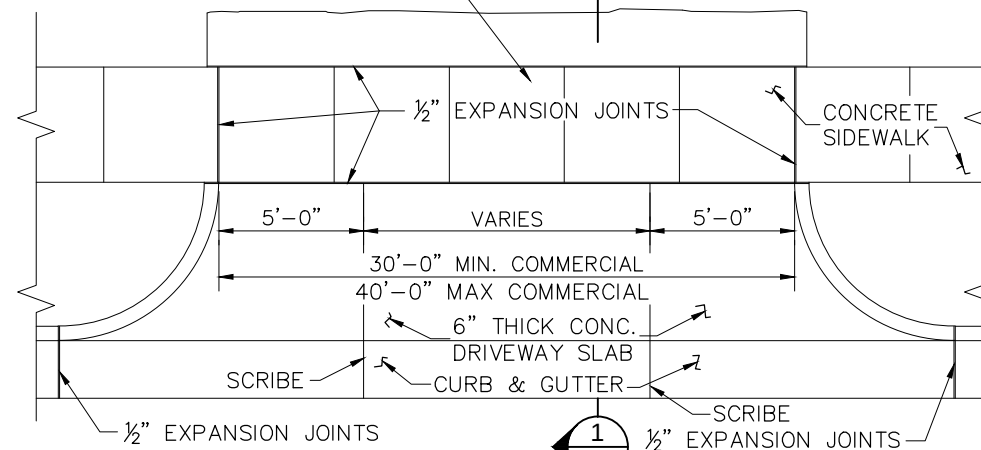
SIDEWALK THICKNESS 6" IN RESIDENTIAL AND COMMERCIAL DRIVEWAYS



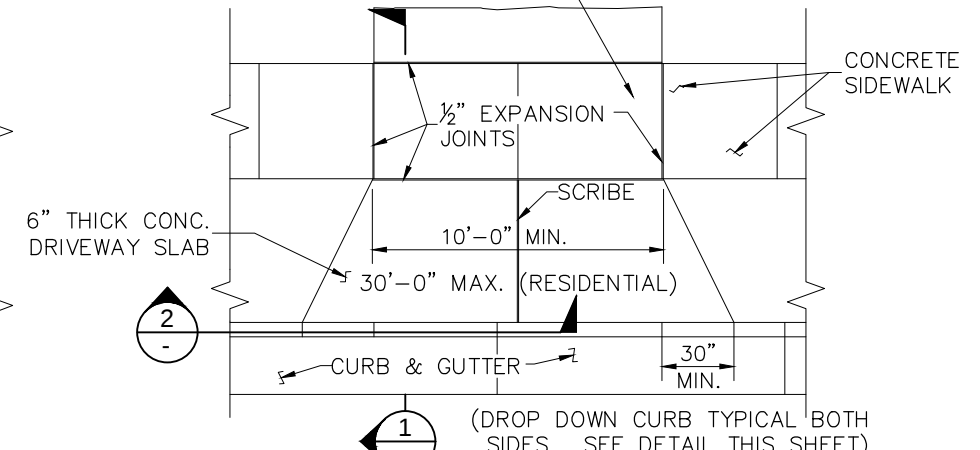
TYPE 1 DRIVEWAY APPROACH

PREFERRED STYLE FOR COMMERCIAL DEVELOPMENT

SIDEWALK THICKNESS 6" IN RESIDENTIAL AND COMMERCIAL DRIVEWAYS



SIDEWALK THICKNESS 6" IN RESIDENTIAL AND COMMERCIAL DRIVEWAYS



(DROP DOWN CURB TYPICAL BOTH SIDES. SEE DETAIL THIS SHEET)

TYPE 2 DRIVEWAY APPROACH

PREFERRED STYLE FOR RESIDENTIAL DEVELOPMENT

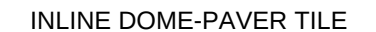
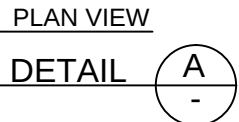
NO.	REVISION	DESCRIPTION	BY	DATE
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

DEVELOPMENT STANDARDS CLINTON CITY CORPORATION

STANDARD STREET SECTIONS AND DRIVEWAY DETAILS

FILE: 03 STREET_SEC.DRIVEWAY_DET.DWG
DRAWN BY: ELC
DESIGN BY: BKW
CHECKED BY: BKW
SCALE OF SHEET: AS SHOWN
HOR SCALE: NONE
VER SCALE: NONE
LAST UPDATED: 5/11/2015
DATE PLOTTED: 5/14/2015

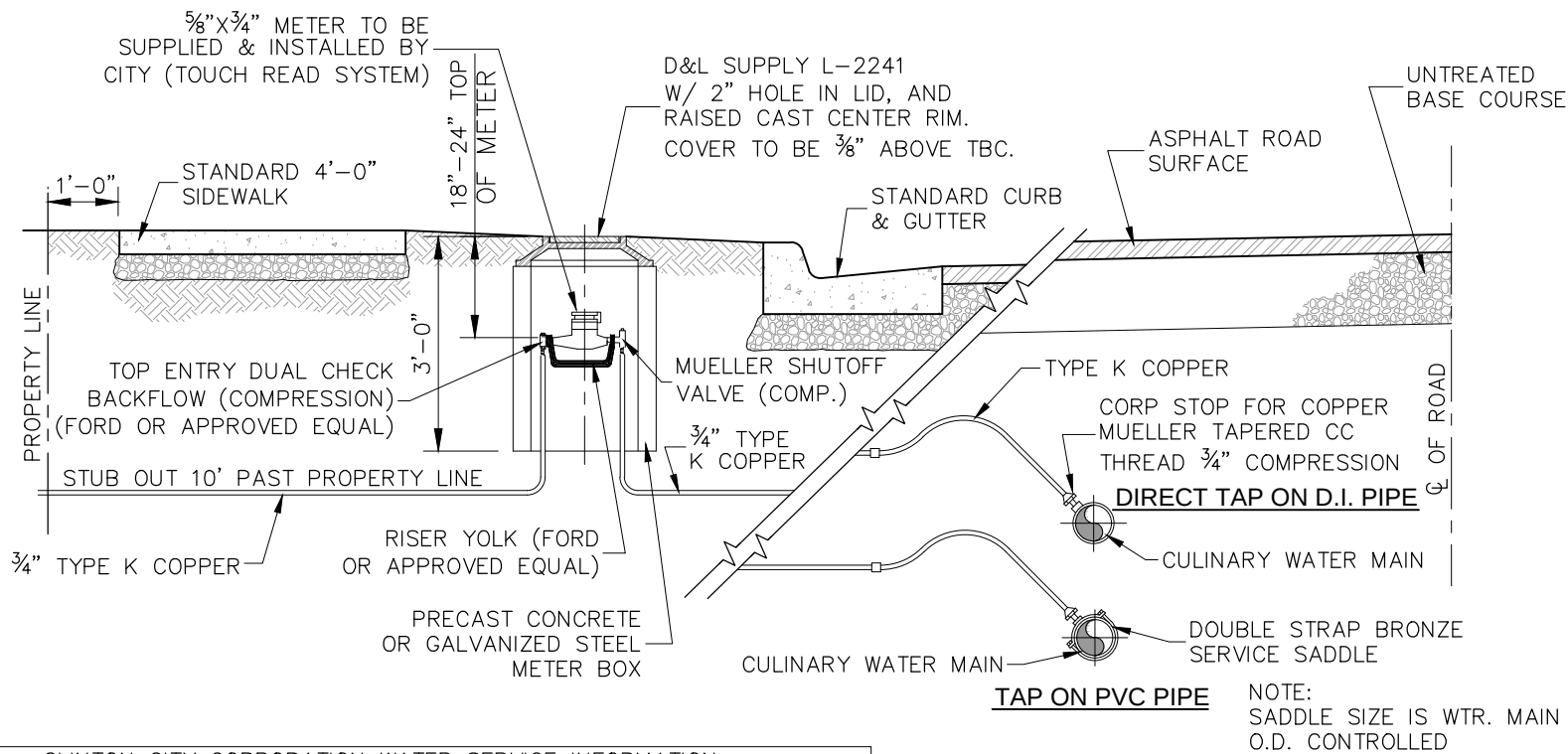
1. 400'-0" MAX. DISTANCE FROM CENTERLINE OF ADJOINING STREET TO RADIUS OF CUL-DE-SAC.
2. CUL-DE-SAC SHOULD BE USED ONLY WHERE UNUSUAL CONDITIONS EXIST.
3. MAX. GRADE IN CUL-DE-SAC AREA IS TO BE 2.5%.



1. LOCATE RAISED TRUNCATED DOMES SO THAT THE EDGE NEAREST THE CURB LINE IS WITHIN 6 TO 8 INCHES FROM THE CURB LINE. PROVIDE 2'-0" OF TRUNCATED DOME PATTERN AT THE LOWER END OF ALL CURB RAMPS EXTENDING THE FULL WIDTH OF THE CURB RAMP.
2. CHANGES IN ELEVATION GREATER THAN ¼" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 2:1
3. THE DETECTABLE WARNING SURFACE DOMES SHALL BE ORIENTED SUCH THAT THE ROWS ARE PARALLEL WITH THE DIRECTION OF PEDESTRIAN TRAVEL TO THE RAMP ON THE OPPOSITE SIDE OF THE STREET.
4. THE STANDARD COLOR FOR THE DETECTABLE WARNING SHALL BE RED BRICK. WHEN THE EXISTING SIDEWALK COLOR IS NOT STANDARD CONCRETE, THE COLOR OF THE DETECTABLE WARNING SURFACE SHALL BE DETERMINED BY CLINTON CITY.
5. WHEN A DETECTABLE WARNING SURFACE DOME IS CUT, THE REMAINING PORTION OF THE DOME SHALL BE BEVELED TO A MAXIMUM SLOPE OF 1:2.
6. INSTALLATION SHALL BE DONE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.

CURB RAMP DETAIL

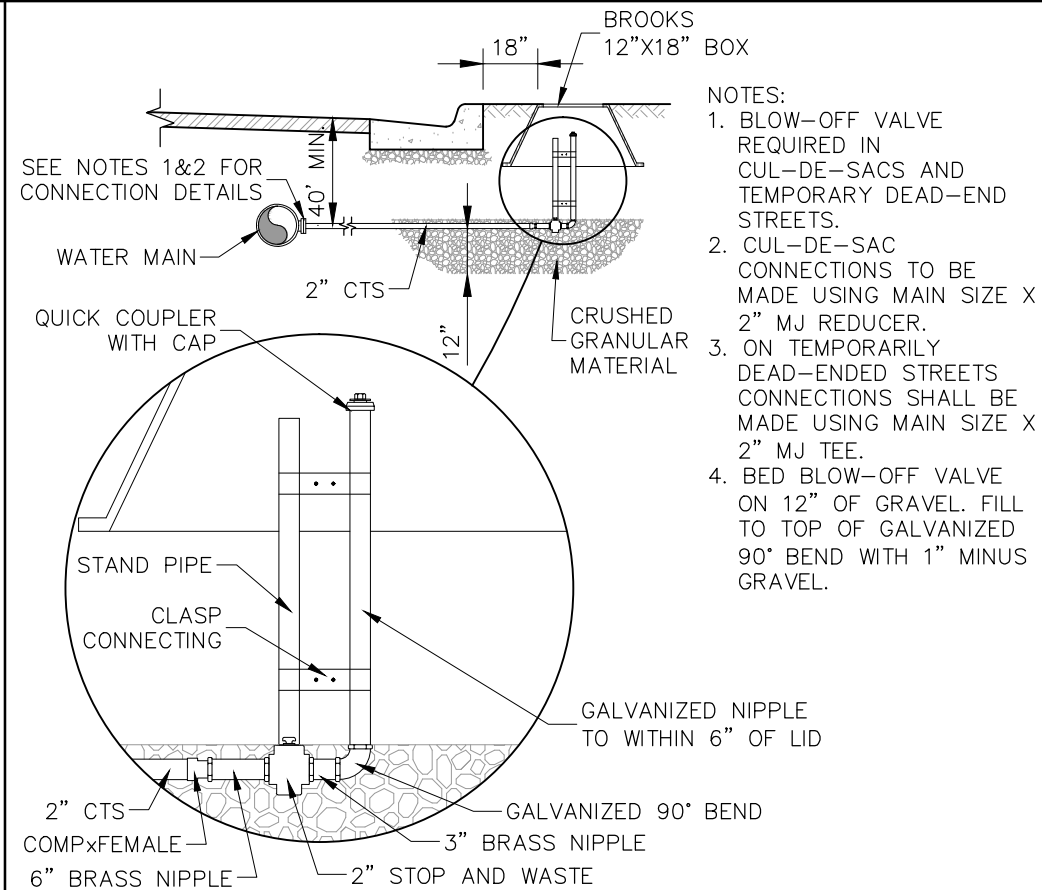
SCALE N.T.S.



CLINTON CITY CORPORATION WATER SERVICE INFORMATION					
SERVICE SIZE	METER BOX SIZE	TYPE OF MATERIAL FOR METER BOX	WATER METER	CONNECTION TYPE	BYPASS
3/4"	18" DIA.	CONCRETE, CORRUGATED, POLYETHYLENE	BY CITY	COMPRESSION	NO
1"	24" DIA.	CONCRETE, CORRUGATED, POLYETHYLENE	BY CITY	COMPRESSION	NO
1 1/2"	48" DIA.	CONCRETE	BY CITY	FLANGE	YES
2"	48" DIA.	CONCRETE	BY CITY	FLANGE	YES
3"	60" DIA.	CONCRETE	BY CITY	FLANGE	YES
4"	4'X6' BOX	CONCRETE	BY CITY	FLANGE	YES

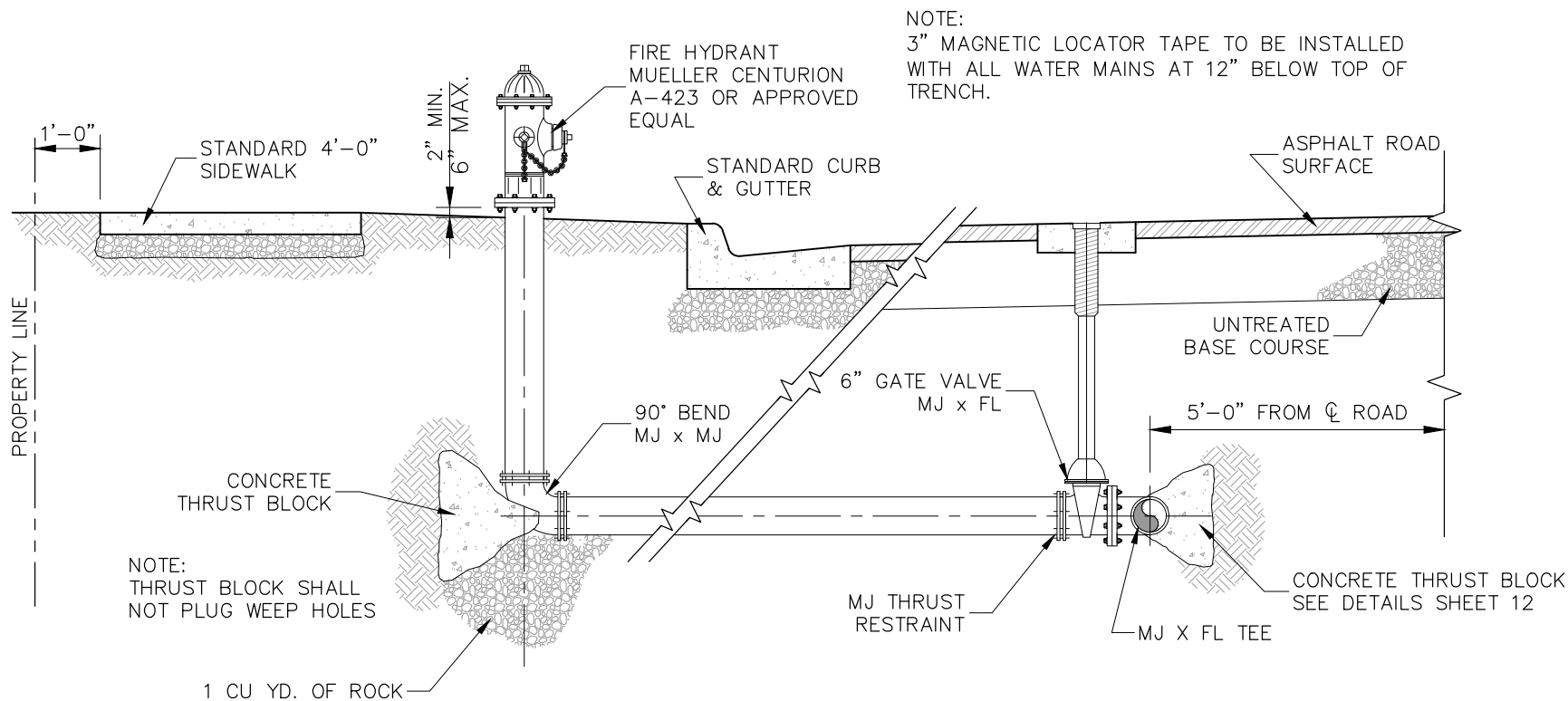
TYPICAL WATER CONNECTION

SCALE: N.T.S.



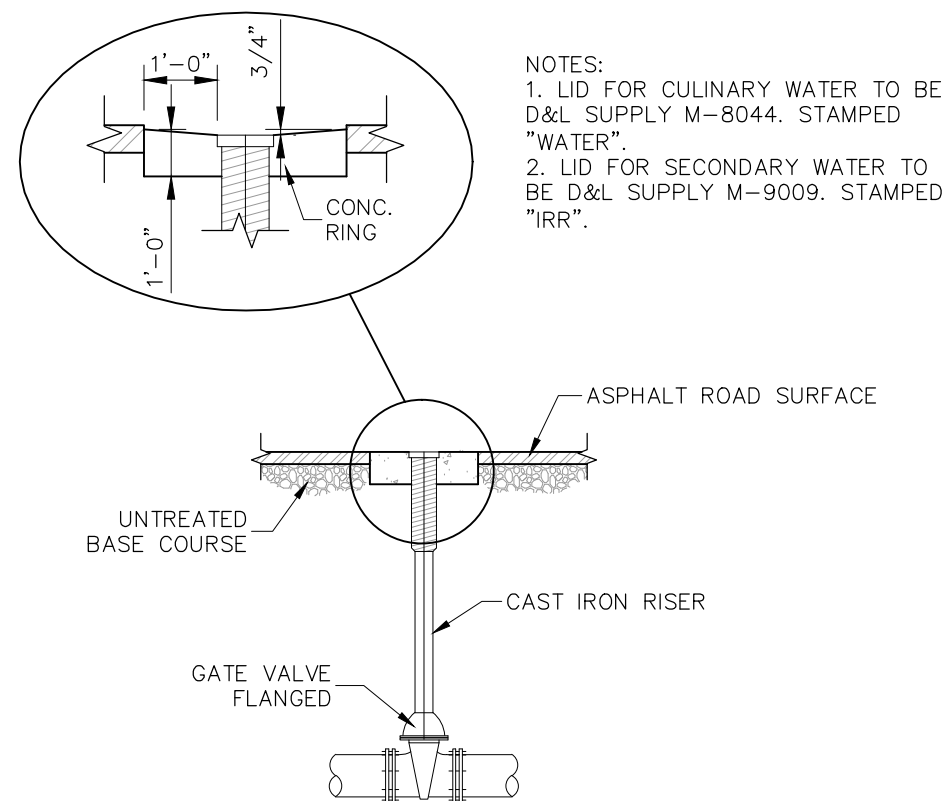
TYPICAL BLOW-OFF VALVE DETAIL

SCALE: N.T.S.



TYPICAL FIRE HYDRANT CONNECTION

SCALE: N.T.S.



TYPICAL WATER VALVE IN STREET

SCALE: N.T.S.

JUB

Engineers • Surveyors • Planners

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NO.	REVISION	DATE	BY	CHKD.
1	ISSUED FOR PERMIT	05/11/2015	BKW	ELC
2	BLOW-OFF - 2" PVC TO 2" POLY	05/11/2015	BKW	ELC
3	1 FT. - MOVED TO STREET	05/11/2015	BKW	ELC

FILE: 05-06 FIRE_HYD_WATER_CONN.DWG

DRAWN BY: ELC

DESIGN BY: BKW

CHECKED BY: BKW

SCALE OF SHEET: AS SHOWN

VER SCALE: NONE

LAST UPDATED: 5/11/2015

DATE PLOTTED: 5/14/2015

SHEET

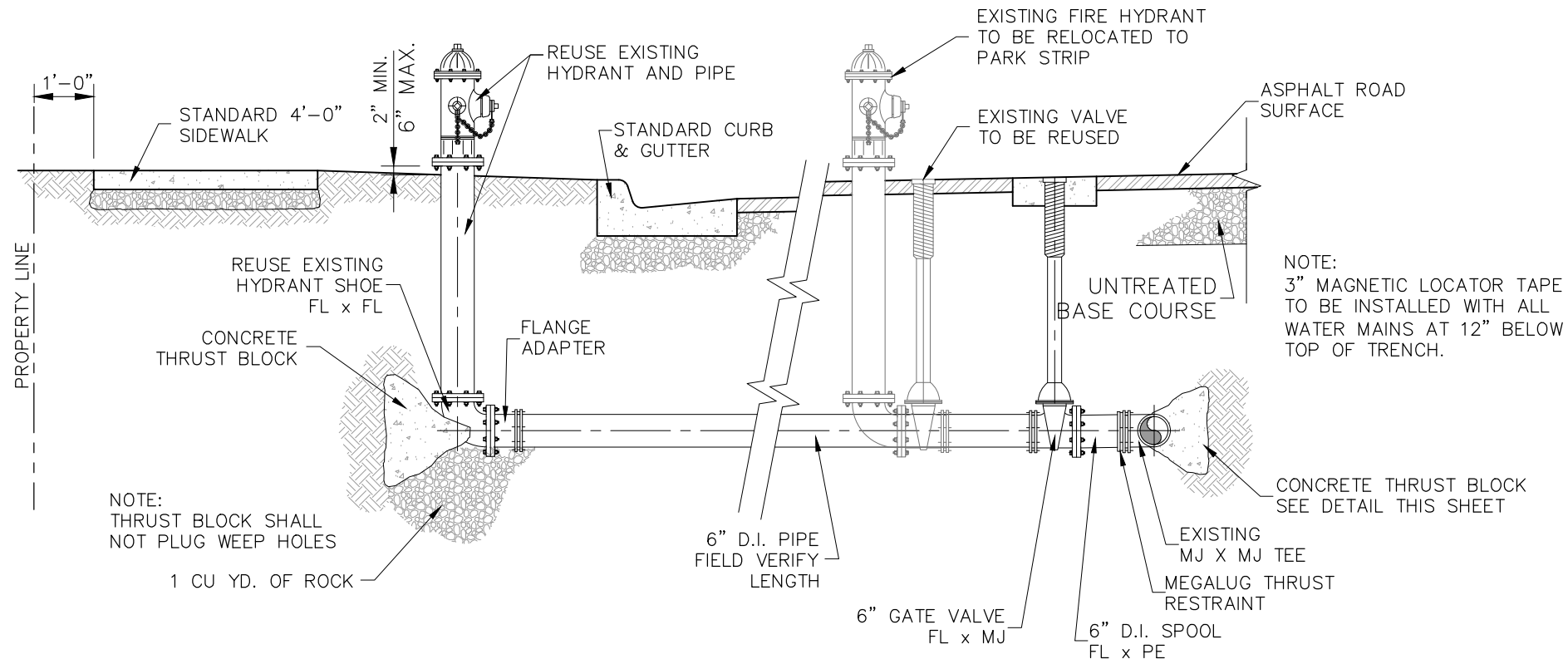
DEVELOPMENT STANDARDS
CLINTON CITY CORPORATION

TYPICAL FIRE HYDRANT AND WATER SERVICE CONNECTION DETAILS

5

OF 17

\\KAYS\PUBLIC\STANDARDS\CITY STANDARDS\UPDATED STANDARDS\CLINTON\JUB05-06 FIRE_HYD.WATER_CONN.DWG



EXISTING FIRE HYDRANT RELOCATION DETAIL

SCALE: N.T.S.



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REVISION			
NO.	DESCRIPTION	BY	DATE

DEVELOPMENT STANDARDS
CLINTON CITY CORPORATION

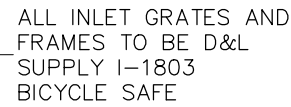
TYPICAL FIRE HYDRANT AND WATER
SERVICE CONNECTION DETAILS

FILE: 05-06 FIRE_HYD.WATER_CONN
DRAWN BY: ELC
DESIGN BY: BKW
CHECKED BY: BKW
SCALE OF SHEET
HOR SCALE: AS SHOWN
VER SCALE: NONE
LAST UPDATED: 5/11/2015
DATE PLOTTED: 5/14/2015

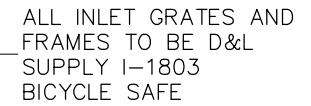
SHEET

6

OF 17

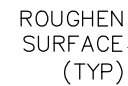


SCALE: N.T.S.

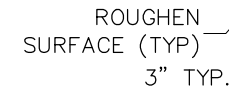


SCALE: N.T.S.

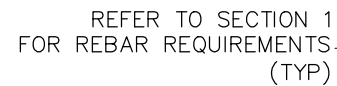
- | |
|--|
| <p>NOTES:</p> <ol style="list-style-type: none"> 1. REFER TO SHEET 8 FOR GENERAL NOTES. 2. REFER TO SHEET 8 FOR DIMENSION TABLE AND NOTES. 3. CATCH BASINS TO BE INSTALLED AT A MAXIMUM SPACING OF 500 FEET. 4. OPEN FACE CATCH BASIN LOCATIONS WILL BE DETERMINED DURING PLAN APPROVAL. |
|--|



SCALE: N.T.S.

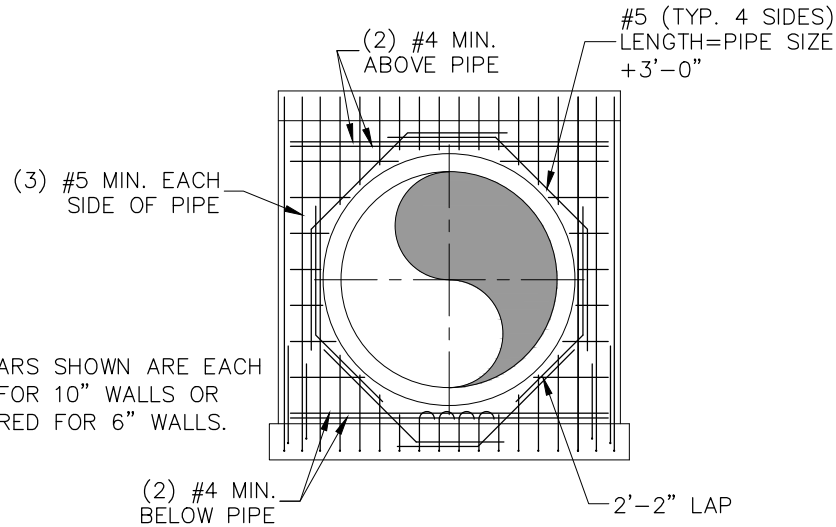


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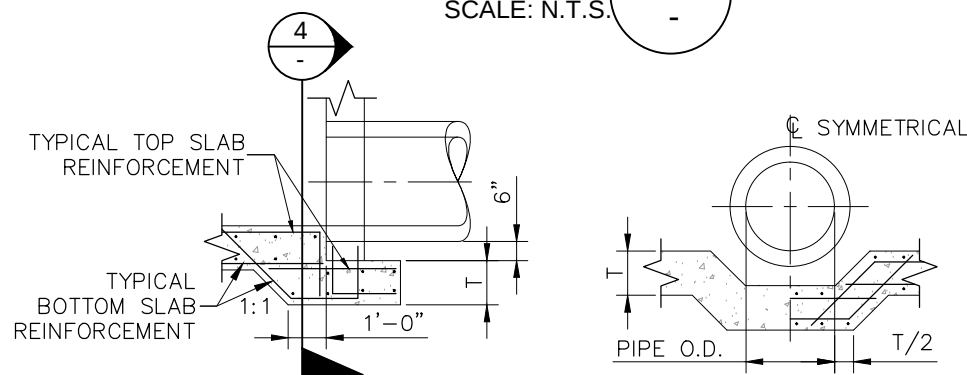
SCALE: N.T.S

\\KAYSER\PUBLIC\STANDARDS\CITY STANDARDS\UPDATED STANDARDS\CLINTON\JUB08 CATCH BASIN_2.DWG



REINFORCEMENT AT WALL PENETRATION

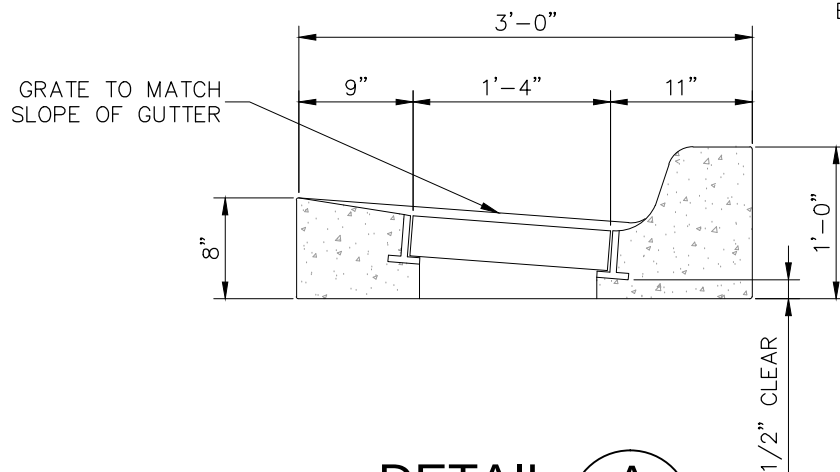
DETAIL B
SCALE: N.T.S.



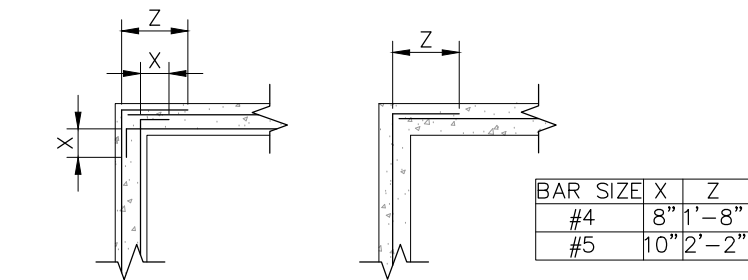
OPTIONAL FOOTING DETAIL AT WALL PIPE CONNECTION

SECTION THRU PIPE

SECTION 4
SCALE: N.T.S.

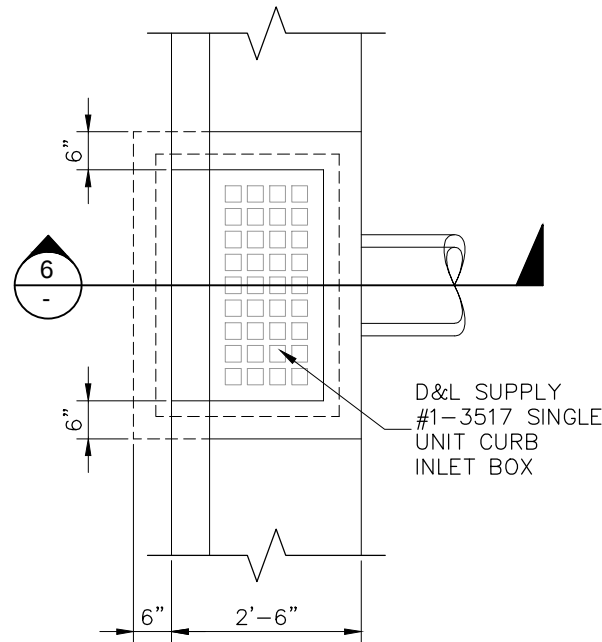


DETAIL A
SCALE: N.T.S.



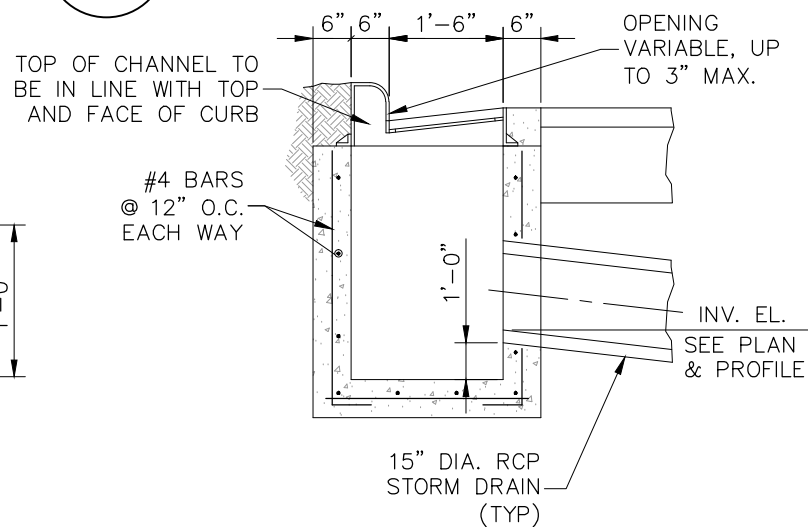
HORIZONTAL REINFORCEMENT
AT WALL INTERSECTIONS

SCALE: N.T.S.



OPEN FACE
CATCH BASIN PLAN

SCALE: N.T.S.



SECTION 6
SCALE: N.T.S.

GENERAL NOTES:

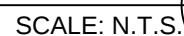
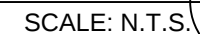
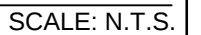
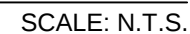
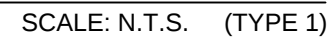
1. ALL STRUCTURAL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS.
2. REINFORCEMENT STEEL SHALL BE DEFORMED BARS CONFORMING IN QUALITY TO THE REQUIREMENTS OF ASTM DESIGNATION A-615, GRADE 60, INCLUDING SUPPLEMENTARY REQUIREMENTS (S1).
3. ALL DETAILING, FABRICATION AND PLACING OF REINFORCING BARS SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" ACI-315, LATEST EDITION.
4. TOLERANCES II PLACING REINFORCEMENT SHALL BE:
 $\pm \frac{3}{8}$ " FOR MEMBERS WITH $D < 8$ "
 $\pm \frac{1}{2}$ " FOR MEMBERS WITH $D > 8$ "
5. DOWELS, PIPES, WATER STOPS AND OTHER INSTALLED MATERIALS AND ACCESSORIES SHALL BE HELD SECURELY IN POSITION WHILE CONCRETE IS BEING PLACED.
6. UNLESS OTHERWISE SHOWN, ASIDE FROM NORMAL ACCESSORIES USED TO HOLD REINFORCING BARS FIRMLY IN POSITION, THE FOLLOWING SHALL BE ADDED:
A) IN SLABS #5 RISER BARS @ 36" O.C. MAX TO SUPPORT TOP REINFORCING BARS.
B) IN WALLS WITH 2 CURTAINS #3 U OR Z SHAPE SPACES @ 6'-0" O.C. EACH WAY.
7. METAL CLIPS OR SUPPORTS SHALL NOT BE PLACED IN CONTACT WITH THE FORMS OR THE SUBGRADE. CONCRETE BLOCKS (OR DOBBIES) SUPPORTING BARS ON SUBGRADE SHALL BE IN SUFFICIENT NUMBERS TO SUPPORT THE BARS WITHOUT SETTLEMENT, BUT IN NO CASE SHALL SUCH SUPPORT BE CONTINUOUS.
8. DOWELS SHALL BE WIRED OR OTHERWISE HELD IN POSITION. THEY SHALL NOT BE SHOWN INTO FRESHLY PLACED CONCRETE.
9. REINFORCED BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH ANY PIPE, PIPE FLANGE, OR METAL PARTS EMBEDDED IN CONCRETE. A MINIMUM OF 2" CLEARANCE SHALL BE PROVIDED AT ALL TIMES.
10. STRUCTURES SHALL BE BACKFILLED WITH GRANULAR SOIL, COMPACTED TO 96% ACCORDING TO ASTM-81557.
11. ALL CONSTRUCTION JOINTS SHALL BE ROUGHED AND CLEANED AND FREE OF LAITANCE.
12. STRUCTURES HAVE BEEN DESIGNED FOR THE FOLLOWING: IF CONDITIONS ARE EXCEEDED THE ENGINEER SHALL BE NOTIFIED.
A) AASHTO HS-20 TRUCK LOAD.
B) 1'-6" MAX. SOIL ABOVE THE ROOF OF THE STRUCTURE.
C) GROUND WATER TO TOP OF STRUCTURE.
D) "AT REST" LATERAL SOIL PRESSURE OF 60 PCF FOR DRY SOIL CONDITIONS AND 92.4 PCF WHEN GROUND WATER IS PRESENT.

DIMENSION TABLE

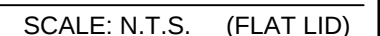
USE LARGEST PIPE SIZE FOR THESE DIMENSIONS AND REBAR EXCEPT DIMENSION "Y"										
PIPE SIZE (IN.)	"X"	"Z"	"T"	"A"	"B"	"C"	"D"	"E"	"F"	"G"
15	3'-0"	3'-3"	6"	#4 @ 12"	-----	-----	#5 @ 9"	#4 @ 12"	#4 @ 12"	#5 @ 9"
18	3'-0"	3'-3"	6"	#4 @ 12"	-----	-----	#5 @ 9"	#4 @ 12"	#4 @ 12"	#5 @ 9"
21	3'-3"	3'-6"	6"	#4 @ 12"	-----	-----	#5 @ 9"	#4 @ 12"	#4 @ 12"	#5 @ 9"
24	3'-6"	3'-9"	6"	#4 @ 12"	-----	-----	#5 @ 9"	#4 @ 12"	#4 @ 12"	#5 @ 9"
27	3'-9"	4'-0"	6"	#4 @ 12"	-----	-----	#5 @ 9"	#4 @ 12"	#4 @ 12"	#5 @ 9"
30	4'-2"	4'-5"	6"	#4 @ 12"	-----	-----	#5 @ 9"	#4 @ 12"	#4 @ 12"	#5 @ 9"
33	4'-5"	4'-8"	6"	#4 @ 12"	-----	-----	#5 @ 9"	#4 @ 12"	#4 @ 12"	#5 @ 9"
36	4'-8"	4'-11"	6"	#4 @ 12"	-----	-----	#5 @ 9"	#4 @ 12"	#4 @ 12"	#5 @ 9"
42	5'-3"	5'-6"	6"	#4 @ 12"	-----	-----	#5 @ 9"	#4 @ 12"	#4 @ 12"	#5 @ 9"
48	5'-10"	6'-1"	10"	#4 @ 12"	#5 @ 12"	#4 @ 12"	-----	-----	#4 @ 12"	#5 @ 12"
54	6'-5"	6'-8"	10"	#4 @ 12"	#5 @ 12"	#4 @ 12"	-----	-----	#4 @ 12"	#5 @ 12"
60	7'-0"	7'-3"	10"	#4 @ 12"	#5 @ 12"	#4 @ 12"	-----	-----	#4 @ 12"	#5 @ 12"
66	7'-7"	8'-10"	10"	#4 @ 12"	#5 @ 12"	#4 @ 12"	-----	-----	#4 @ 9"	#5 @ 12"
72	8'-2"	8'-5"	10"	#4 @ 12"	#5 @ 12"	#4 @ 12"	-----	-----	#4 @ 9"	#5 @ 12"

NOTES:

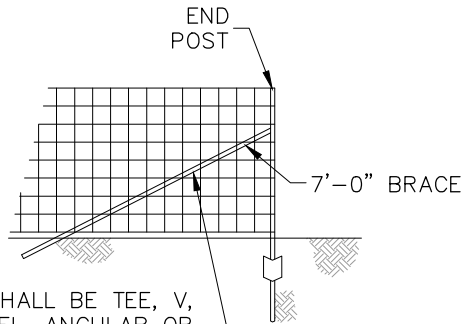
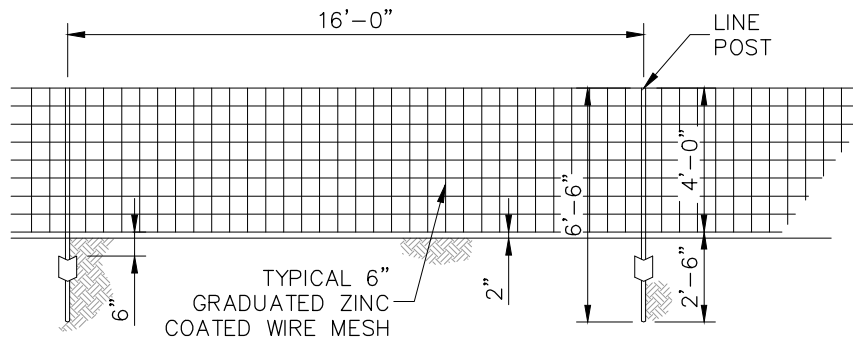
1. THE "H" REBAR IS BASED ON THE SMALLER PIPE. WHEN THE SMALLER PIPE IS 15"-36" USE #4 @ 6". WHEN THE SMALLER PIPE IS 42"-60" USE #5 @ 6". WHEN THE SMALLER PIPE IS 66" OR 72" USE #6 @ 6".
2. WALL THICKNESS IS BASED ON THE LARGEST OF THE PIPES. FOR 10" WALLS, USE 2 LAYERS OF STEEL. FOR 6" WALLS, USE A SINGLE LAYER OF STEEL.
3. WHEN "Z" IS LESS THAN 4'-0", THE VERTICAL REBAR LAP MAY BE ELIMINATED AND DOWELS EXTENDED TO THE TOP OF THE WALL.



NOTES:
1. REFER TO SHEET 7 FOR GENERAL NOTES.
2. REFER TO SHEET 7 FOR DIMENSION TABLE AND NOTES.

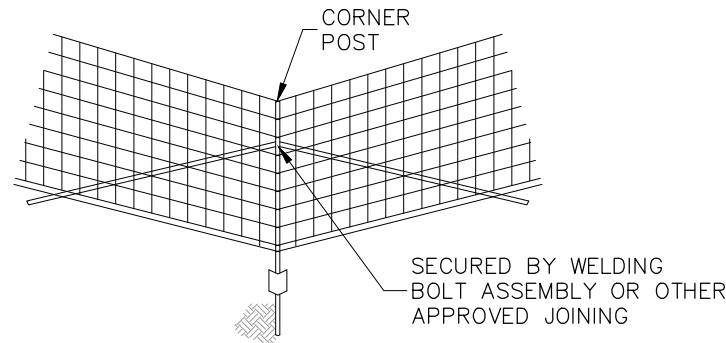


\\KAYS\PUBLIC\STANDARDS\CITY STANDARDS\UPDATED STANDARDS\CLINTON-JUB\10 FENCE.DWG



BRACE POSTS SHALL BE TEE, V, OR Y CHANNEL, ANGULAR OR OTHER APPROVED SHAPES 7'-0" LONG. ALL POST BRACING SHALL BE 12" TO 16" FROM TOP OF POST

NOTE:
BLOCK WALLS, WHEN REQUIRED, SHALL BE DESIGNED FOR THE SPECIFIC APPLICATION.

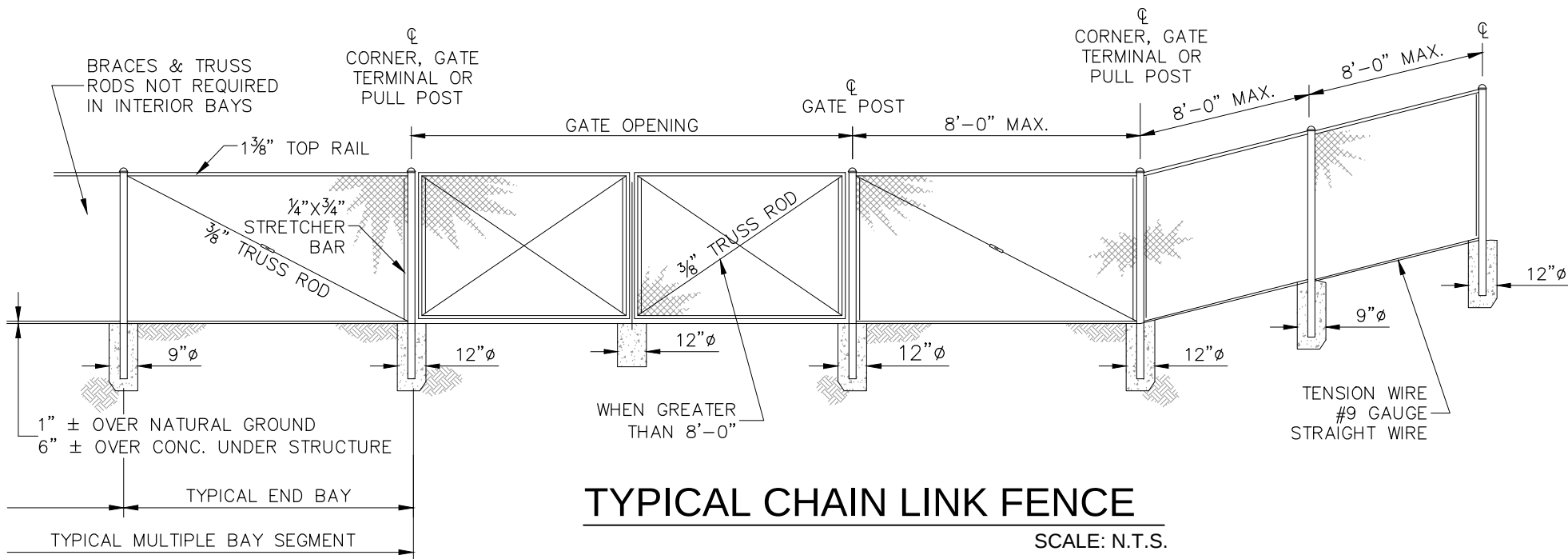


TYPE "D" CONSTRUCTION FENCE

SCALE: N.T.S.

TYPICAL CORNER POST

SCALE: N.T.S.



TYPICAL CHAIN LINK FENCE

SCALE: N.T.S.

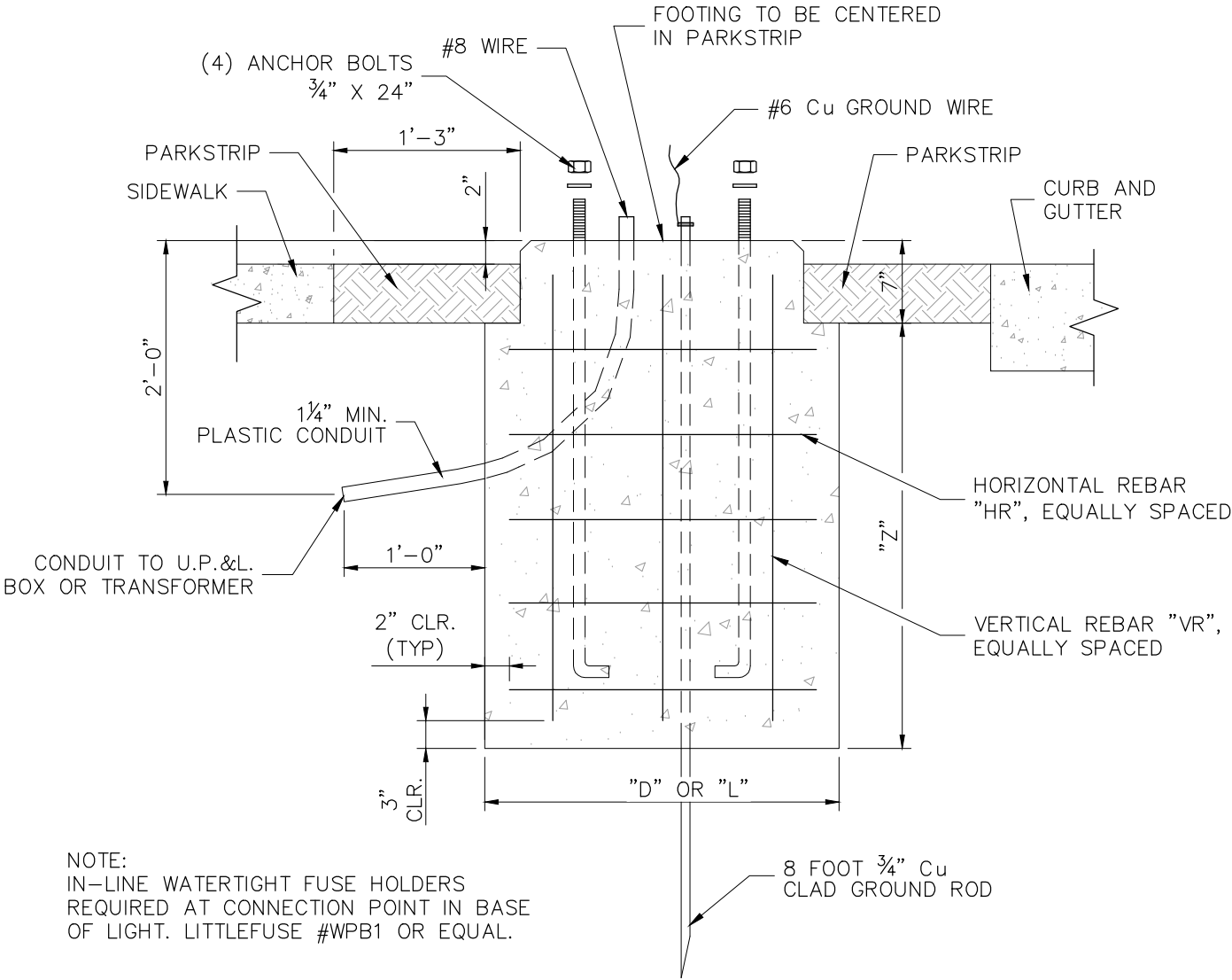
NOTES:

1. ALL FABRIC SHALL BE 6'-0" HIGH CHAIN LINK OF 2" GALVANIZED MESH OF 11 GAUGE.
2. ALL STEEL PIPE MEMBERS SHALL CONFORM TO THE REQUIREMENTS OF A.S.T.M. DESIGNATION A-120, SCHEDULE 40, HOT DIPPED ZINC COATED STEEL PIPE.
3. ALL POSTS SHALL BE SET IN CONCRETE AND SHALL BE TOPPED WITH BALL TYPED OR OTHER APPROVED ORNAMENT.
4. ALL END, CORNER, OR PULL POST SHALL BE 8'-0" IN LENGTH WITH A MINIMUM DIAMETER OF 2 3/8". ALL LINE POSTS SHALL BE 8'-0" IN LENGTH WITH A MINIMUM DIAMETER OF 1 7/8".
5. PRIVACY SLATS SHALL BE OF FLAT, TUBULAR CONSTRUCTION MANUFACTURED FROM VIRGIN POLYETHYLENE CONTAINING AN ULTRAVIOLET INHIBITOR. THE SLATS SHALL BE RETAINED BY A RETAINING CHANNEL AT THE BOTTOM OF THE FENCE FABRIC.

GATES			
GATE POSTS AND GATE FRAMES			
HEIGHT	GATE OPENING	GATE POST SCH. 40	GATE FRAME 16 GA.
6 FEET	SINGLE TO 4'-0" OR DOUBLE TO 8'-0"	2 3/8"	1 5/8"
	SINGLE OVER 4'-0" TO 12'-0" OR DOUBLE OVER 8'-0" TO 24'-0"	2 7/8"	1 5/8"
	SINGLE OVER 12'-0" TO 18'-0" OR DOUBLE OVER 24'-0" TO 36'-0"	4"	1 5/8"
	SINGLE OVER 18'-0" OR DOUBLE OVER 36'-0"	8 5/8"	1 7/8"

HEIGHT OF FABRIC	DEPTH OF POST	LENGTH OF END, CORNER OR PULL POSTS	LENGTH OF LINE POSTS	SIZE OF POSTS		
				END, CORNER AND PULL PIPE OPTION (MIN. 300'-0")	LINE POST (MIN. SIZE) PIPE OPTION	GATE POSTS
6'-0"	2'-0"+	8'-0"+	8'-0"	2 3/8" 16 GA.	1 7/8" 16 GA. 8'-0" O.C.	SEE GATE TABLE

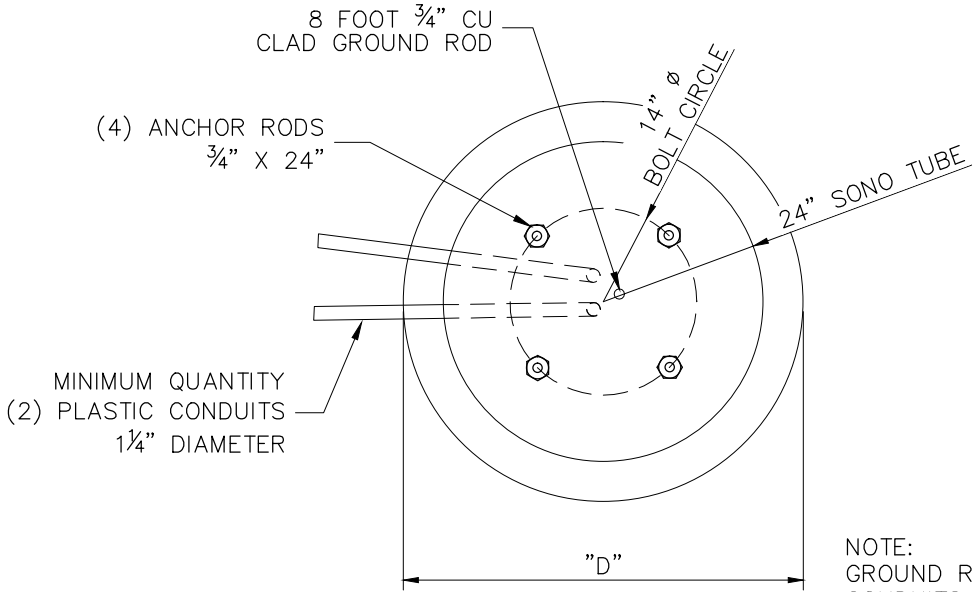
\\KAYSER\PUBLIC\STANDARDS\CITY STANDARDS\UPDATED STANDARDS\CLINTON\JUB11 LIGHT_PED.DWG



NOTE:
IN-LINE WATERTIGHT FUSE HOLDERS
REQUIRED AT CONNECTION POINT IN BASE
OF LIGHT. LITTLEFUSE #WPB1 OR EQUAL.

LIGHT PEDESTAL DETAIL

SCALE: N.T.S.

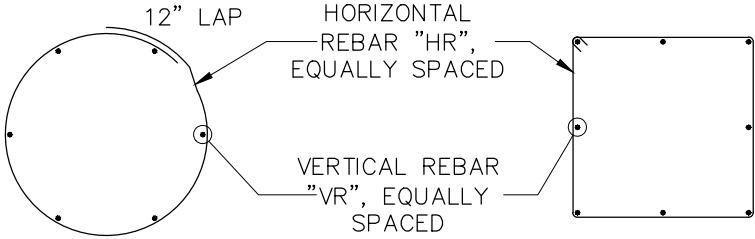


CIRCULAR FOOTING PLAN VIEW

SCALE: N.T.S.

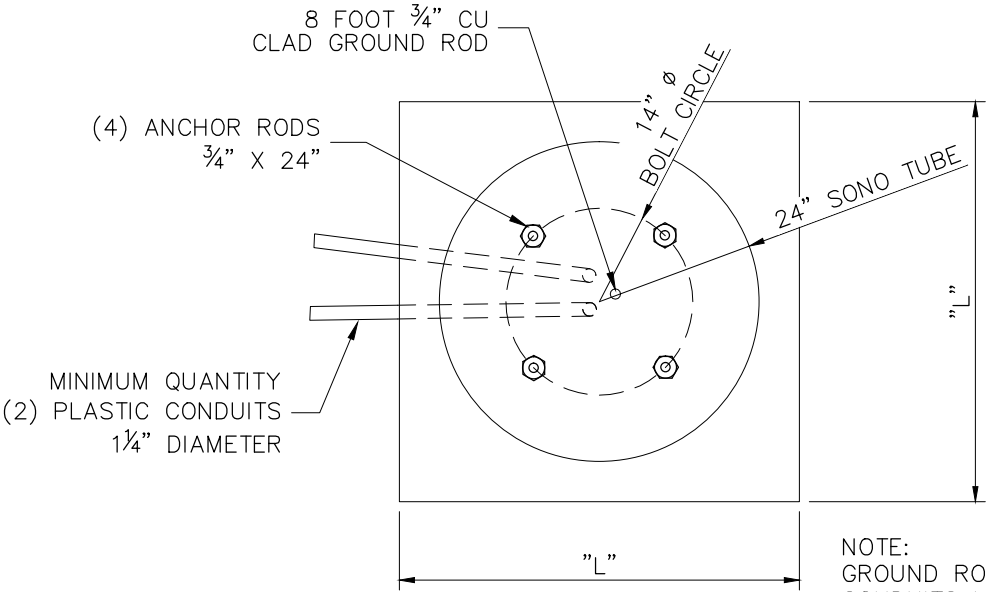
NOTE:
GROUND ROD AND PLASTIC
CONDUITS MUST BE LOCATED
WITHIN A 3" RADIUS FROM THE
CENTER OF BOLT CIRCLE.

FOOTING DIMENSION TABLE				
	CIRCULAR			SQUARE
DIAMETER ("D") OR SIDE LENGTH ("L")	24"	30"	36"	48"
DEPTH ("Z")	43"	40"	37"	30"
VERTICAL REINFORCING ("VR")	(5) #4	(7) #4	(6) #5	(16) #5 OR (12) #6
HORIZONTAL REINFORCING ("HR")	(5) #4	(5) #4	(5) #4	(5) #4



**TYPICAL CIRCULAR
FOOTING REINFORCING**

**TYPICAL SQUARE
FOOTING REINFORCING**

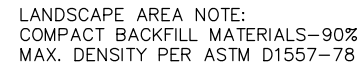


SQUARE FOOTING PLAN VIEW

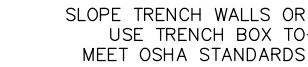
SCALE: N.T.S.

NOTE:
GROUND ROD AND PLASTIC
CONDUITS MUST BE LOCATED
WITHIN A 3" RADIUS FROM THE
CENTER OF BOLT CIRCLE.

REVISION		NO.	DESCRIPTION	BY	DATE
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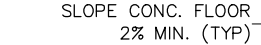


(UNIMPROVED & LANDSCAPED AREAS) SCALE: N.T.S.



(PAVED AREAS) SCALE: N.T.S.

- SEWER MANHOLE NOTES:

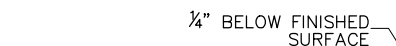


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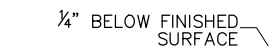
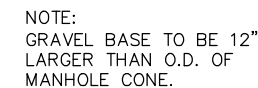
- SEWER LATERAL NOTES:



SCALE: N.T.S.



SCALE: N.T.S.



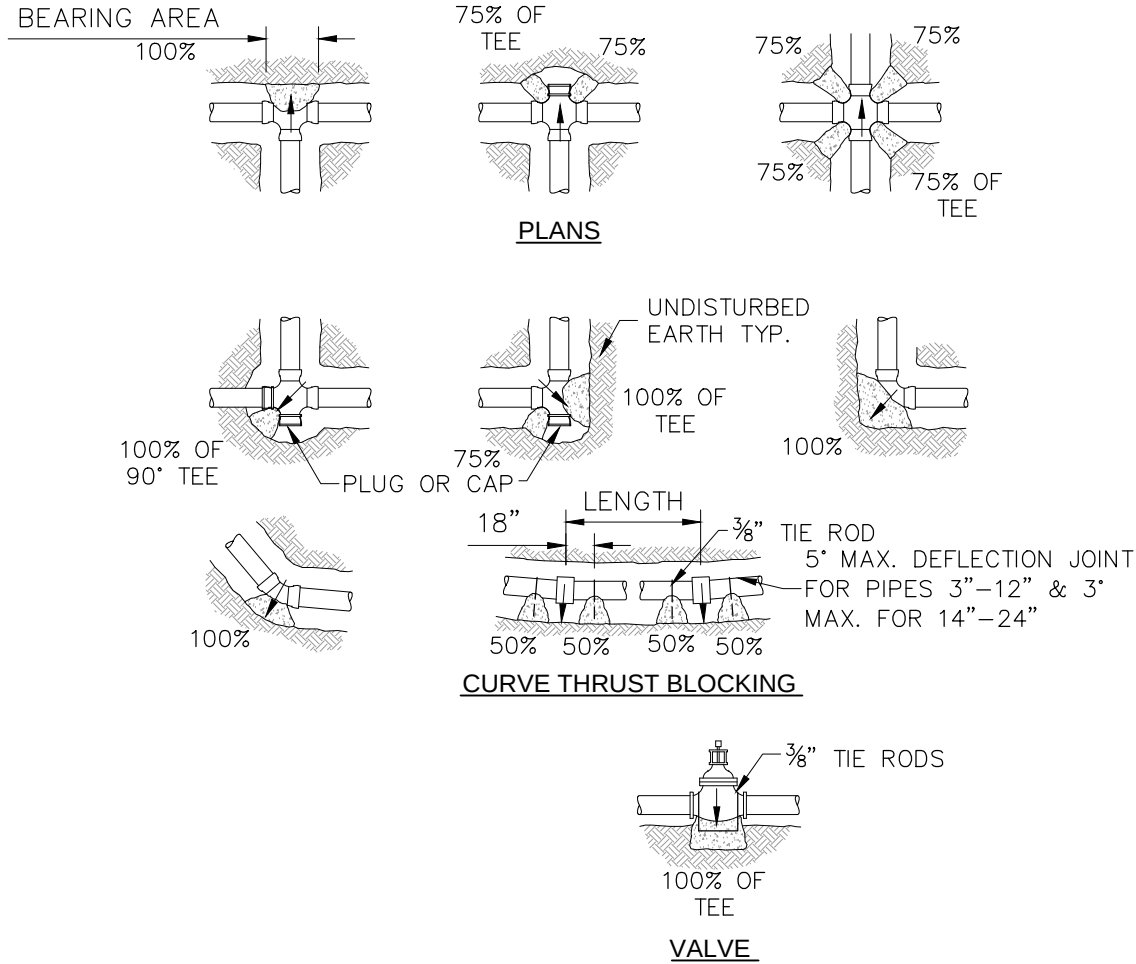
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STANDARD SEWER MANHOLE AND MISCELLANEOUS DETAILS

DATE: 12/11/2015	DATE: 12/11/2015
DESIGNED BY: ELC	DESIGNED BY: ELC
CHECKED BY: BKW	CHECKED BY: BKW
SCALE: AS SHOWN	SCALE: AS SHOWN
DATE PLOTTED: 5/14/2015	DATE PLOTTED: 5/14/2015

\\KAYSPUBLIC\STANDARDS\CITY STANDARDS\UPDATED STANDARDS\CLINTON\JUB\13 THRUST_BLK.WATER_LOOP.DWG



ALL MJ AND FLANGED FITTINGS TO BE WRAPPED WITH POLYETHYLENE WRAP PRIOR TO POURING THRUST BLOCK.

- DETAIL NOTES:
- FIGURE (100%) AT THRUST BLOCK INDICATES PERCENT OF TOTAL THRUST TO BE APPLIED FOR BEARING AREA.
 - ARROW (→) INDICATES THRUST DIRECTION.
 - CONCRETE FOR THRUST BLOCKS TO BE 2000 P.S.I.

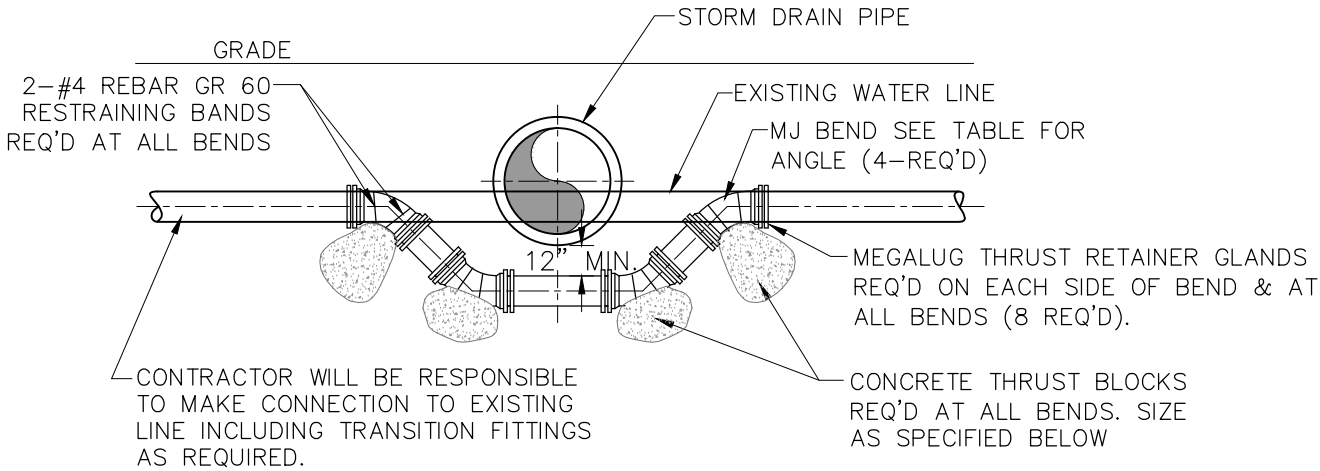
EXAMPLE:
8" 90° ELBOW, PRESSURE-200 LB. / SQ. IN.
FROM TABLE: THRUST = 94 X 200 = 18800 LB.
ASSUME BEARING STRENGTH OF SOIL = 2000 LB. / SQ. FT.
 $\frac{18000}{2000} = 9.4$ SQ. FT. = AREA OF BEARING REQUIRED FOR THRUST BLOCK.

SIDE THRUST PER 1 PSI					
PIPE SIZE	DEAD END OR TEE	90° ELBOW	45° ELBOW	22 1/2° ELBOW	
4	19	27	15	7	
6	39	55	30	15	
8	67	94	51	26	
10	109	154	84	43	
12	155	218	119	61	
14	210	296	161	82	
16	272	383	209	106	
18	351	494	269	137	
20	434	611	333	169	
24	623	878	478	244	

- TABLE NOTES:
- IN USING THE ABOVE TABLES, USE THE MAXIMUM INTERNAL PRESSURE ANTICIPATED (I.E. HYDROSTATIC TEST PRESSURE, POSSIBLE SURGE PRESSURE DUE TO PUMP SHUTOFF, ETC.)
 - SEE SOILS REPORT FOR BEARING STRENGTH OF SOIL IN THE ABSENCE OF A SOILS REPORT, AND AVERAGE SOIL (SPADABLE MEDIUM CLAY) CAN BE ASSUMED TO HAVE A BEARING STRENGTH OF 2000 P.S.F.

HORIZONTAL THRUST BLOCK DETAILS

SCALE: N.T.S.



NOTES:

BEFORE RELOCATING AN EXISTING WATERLINE THE CONTRACTOR SHALL NOTIFY ALL AFFECTED BUSINESSES AND RESIDENTS 24 HOURS BEFORE CONSTRUCTION. THE CONTRACTOR MUST DEMONSTRATE TO THE CITY THE ALL OF THE MATERIALS ARE ON HAND THAT MAY BE NEEDED BEFORE RELOCATING ANY WATERLINES. RELOCATION OF WATERLINES WILL NOT BE STARTED AFTER 10:00 A.M. THE CITY SHALL OPERATE ALL MAINLINE WATER VALVES AND THE CONTRACTOR MUST CONTACT THE CITY IF SERVICE IS REQUIRED.

NOTE:

ALL MJ AND FLANGED FITTINGS TO BE WRAPPED WITH POLYETHYLENE WRAP PRIOR TO POURING THRUST BLOCK.

VERTICAL BEND

WEIGHT OF CONCRETE
TO RESIST 100% OF
TOTAL THRUST

VERTICAL THRUST BLOCK DIMENSION TABLE

PIPE SIZE	CONDITION		
	BEND ANGLE	BEARING AREA (SF)	GRAVITY BLOCK SIZE CY
4	45	1.0	0.5
6	45	2.0	0.75
8	22.5	2.0	0.75
10	22.5	3.0	1.0
12	22.5	4.0	1.5
12	11.25	2.0	0.75

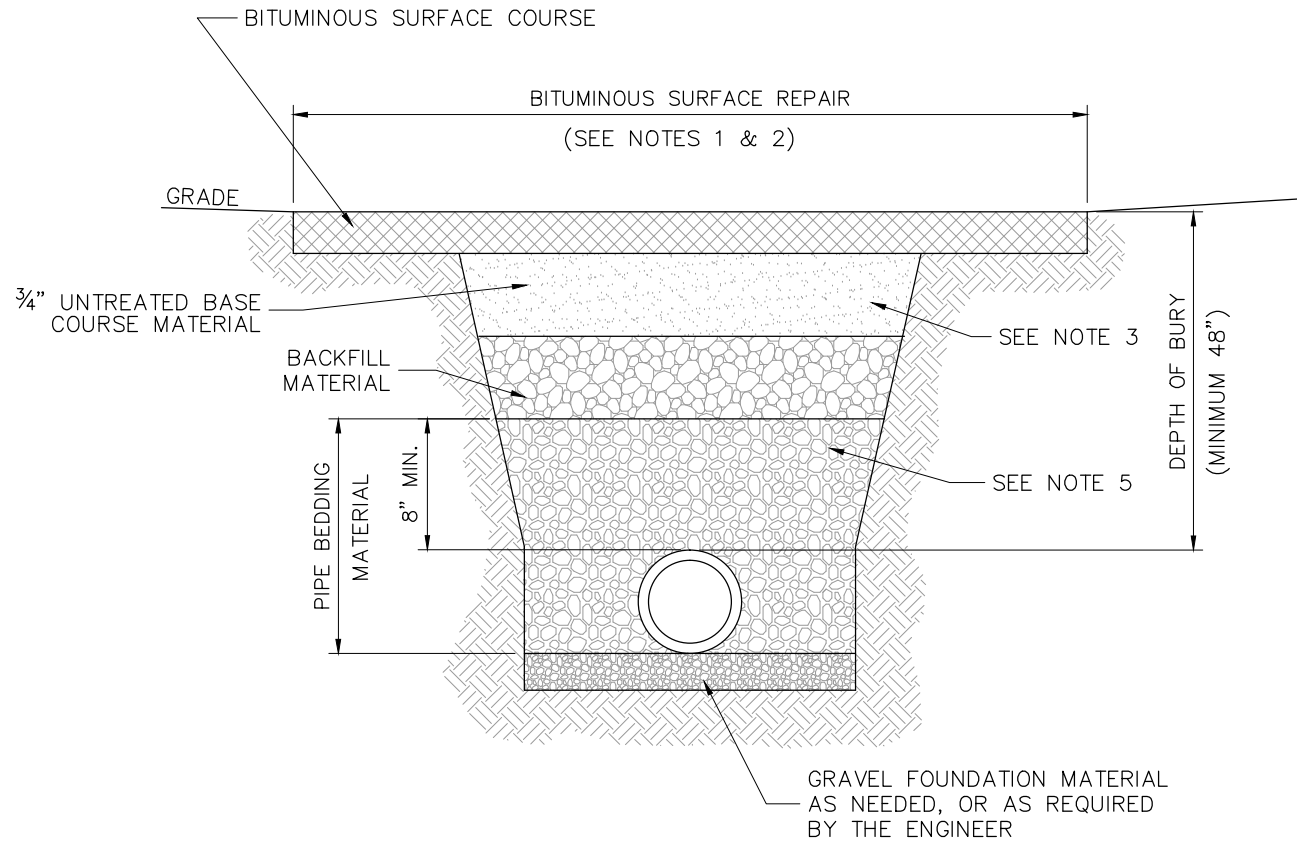
DIMENSION TABLE CONDITIONS:

LINE PRESSURE - 120 PSI
SOIL BEARING CAPACITY - 1500 PSF
CONCRETE FOR THRUST BLOCKS TO BE 2000 P.S.I.

WATERLINE LOOP DETAIL

SCALE: N.T.S.

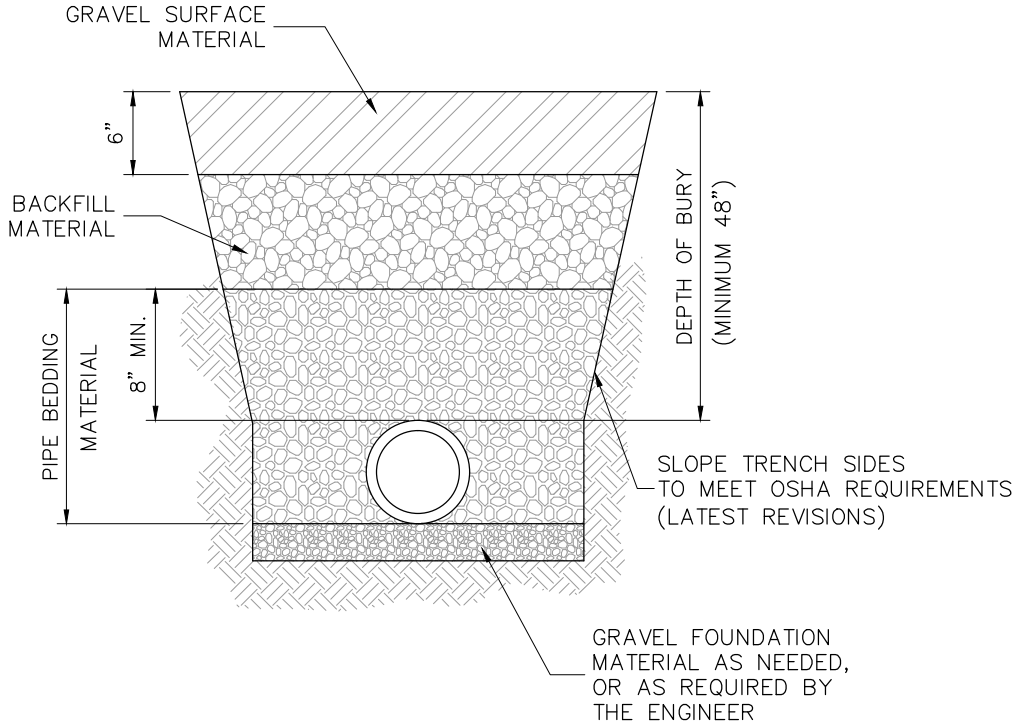
\\KAYS\PUBLIC\STANDARDS\CITY STANDARDS\UPDATED STANDARDS\CLINTON-JUB\14 TRENCH.DWG



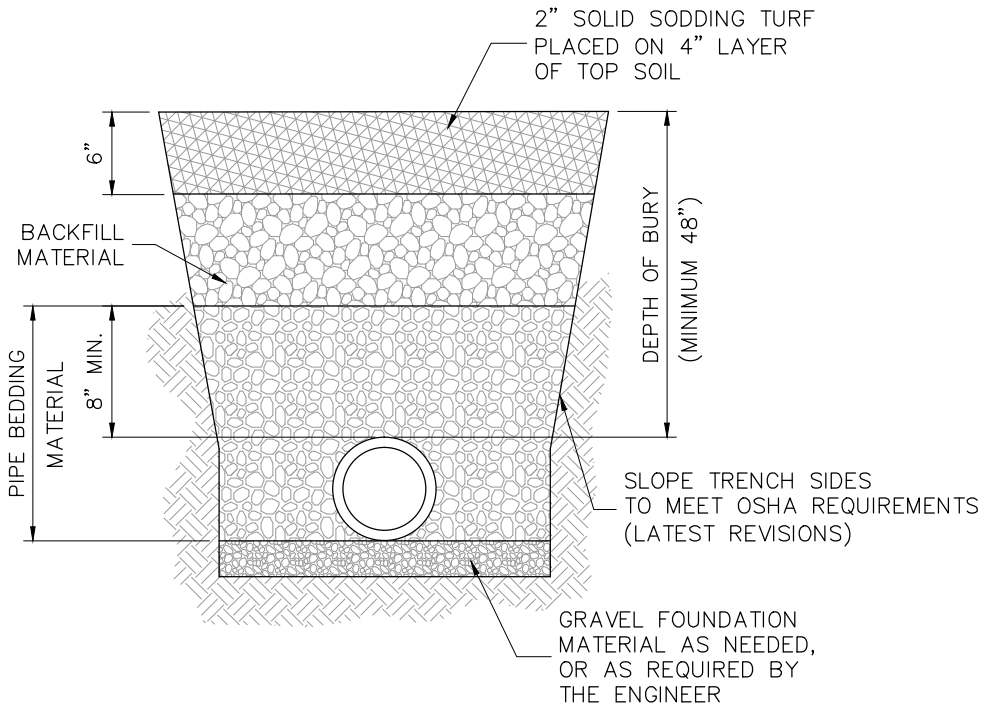
BITUMINOUS SURFACE
SCALE: N.T.S.

- NOTES:
1. SAW CUT BITUMINOUS ASPHALT SURFACE 6" WIDER THAN TRENCH ON EACH SIDE FOR FINAL TRENCH REPAIR WHERE BITUMINOUS SURFACE EXISTS.
 2. BITUMINOUS SURFACE IS TO BE 5" OR TO MATCH EXISTING THICKNESS, WHICHEVER IS GREATER FOR STATE ROADS & 3" OR MATCH EXISTING THICKNESS, WHICHEVER IS GREATER FOR OTHER ROADS.
 3. FOR TRENCH REPAIR, $\frac{3}{4}$ " UNTREATED BASE COURSE MATERIAL IS TO BE 12" OR TO MATCH EXISTING THICKNESS, WHICHEVER IS GREATER. FOR NEW ROAD CONSTRUCTION, $\frac{3}{4}$ " UNTREATED BASE COURSE MATERIAL IS TO BE 10" MIN. OR AS DIRECTED BY THE ENGINEER. BASE COURSE TO BE COMPACTED TO 96% ASTM D-1557.
 4. SLOPE TRENCH SIDES TO MEET OSHA SAFETY REGULATIONS. (LATEST REV.)
 5. BACKFILL TO BE COMPACTED TO 96% ASTM D-1557 IN ROADWAYS AND 90% IN LANDSCAPED AREAS.

CULINARY WATER TRENCH SECTIONS



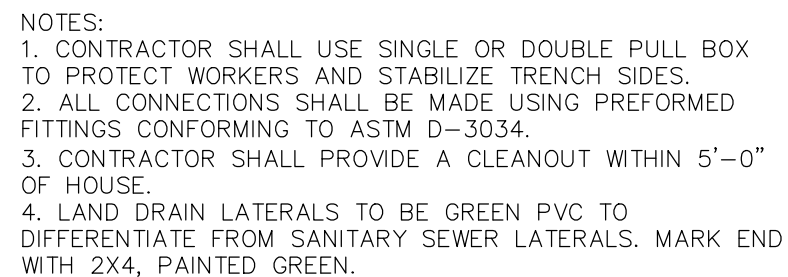
GRAVEL SURFACE
SCALE: N.T.S.



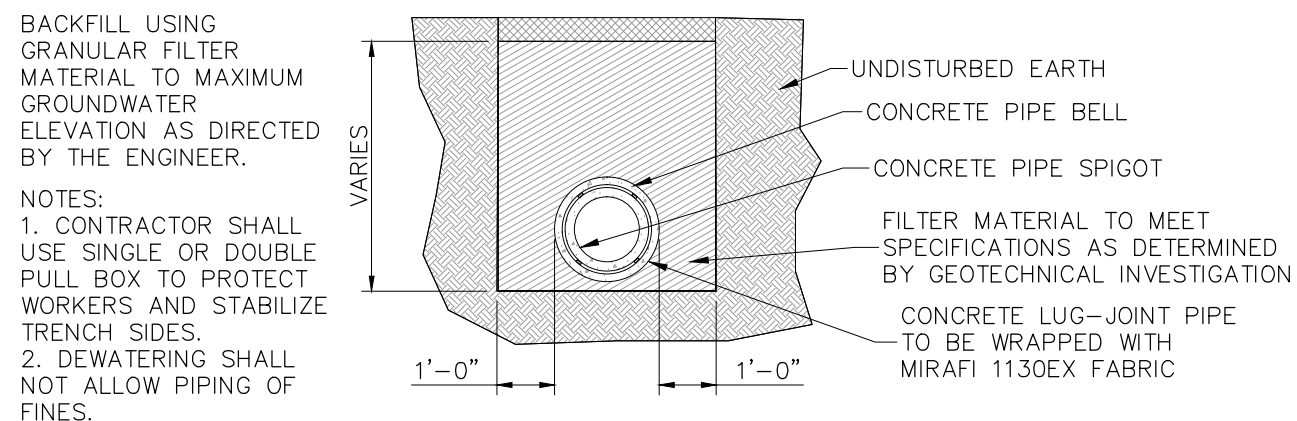
TURF SURFACE
SCALE: N.T.S.

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		BY	DATE
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DEVELOPMENT STANDARDS
CLINTON CITY CORPORATION
CULINARY WATER TRENCH DETAILS

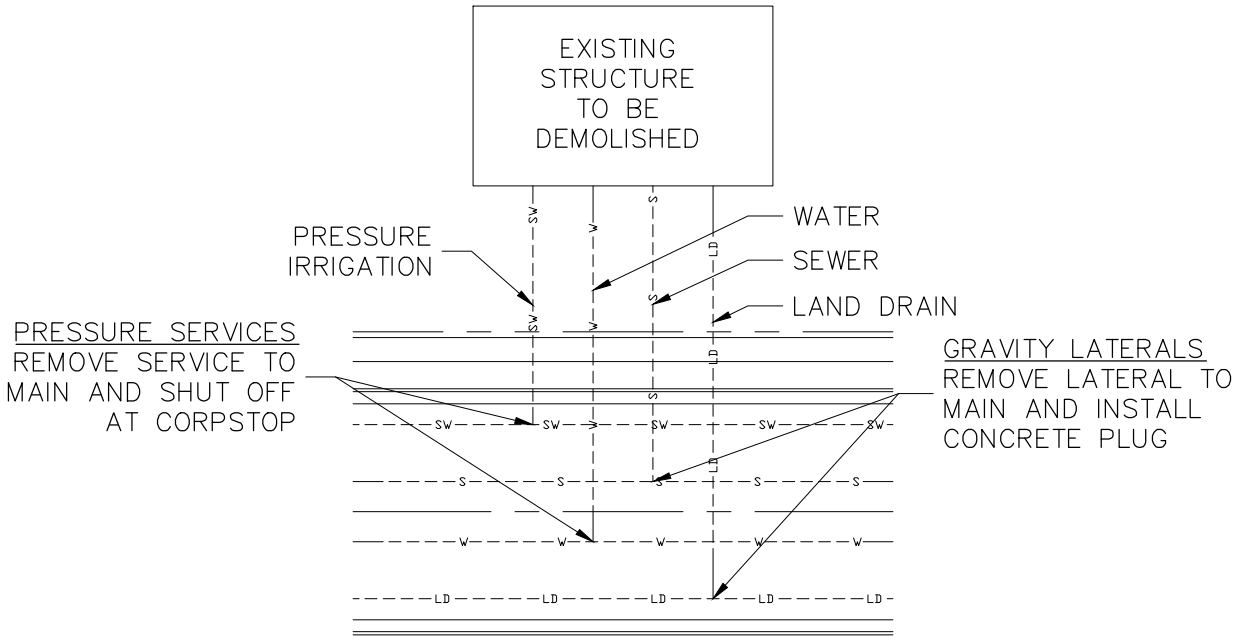


SCALE: N.T.S.



SCALE: N.T.S. ONLY WHEN APPROVED BY CLINTON CITY

\\KAYS\PUBLIC\STANDARDS\CITY STANDARDS\UPDATED STANDARDS\CLINTON\JUB\16 DEMOLITION.DWG



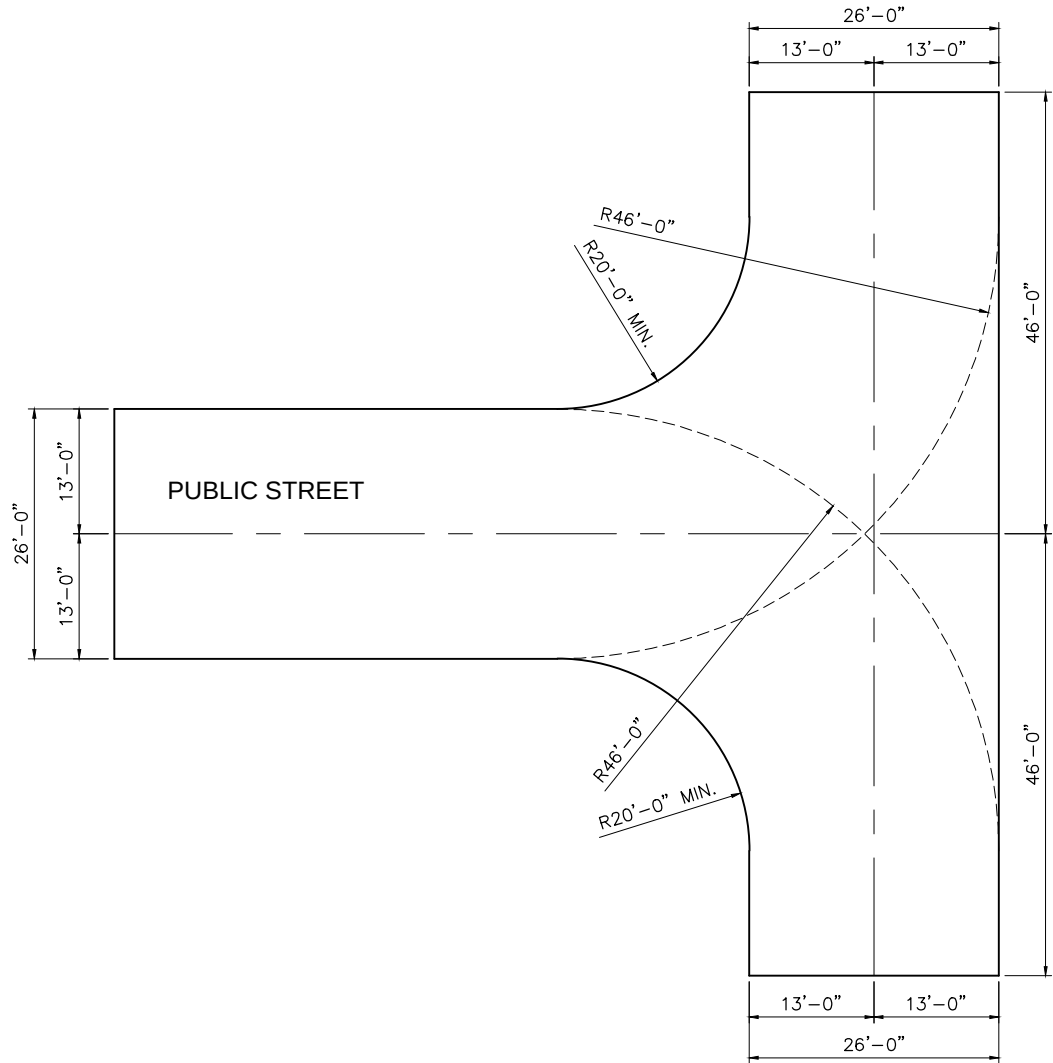
NOTE:
IF UTILITY SERVICE LATERALS ARE TO BE REUSED, THE CONDITION MUST BE DETERMINED BY THE CONTRACTOR/OWNER. IF THE CONDITION OF THE LATERALS DOES NOT MEET CURRENT STANDARDS, THE LATERALS MUST BE REPLACED TO THE MAIN LINE.

UTILITIES FOR HOME DEMOLITION
SCALE: N.T.S.

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		NO.	DESCRIPTION	BY	DATE

DEVELOPMENT STANDARDS CLINTON CITY CORPORATION	DEMOLITION DETAILS
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\\KAYS\PUBLIC\STANDARDS\CITY STANDARDS\UPDATED STANDARDS\CLINTON\JUB\17 EMERGENCY ACCESS.DWG



EMERGENCY VEHICLE TURNING RADII DETAIL
SCALE: NOT TO SCALE



Engineers • Surveyors • Planners

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Kaysville, Utah 84037
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www.jub.com

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REVISION			
NO.	DESCRIPTION	BY	DATE

DEVELOPMENT STANDARDS
CLINTON CITY CORPORATION
EMERGENCY VEHICLE ACCESS DETAILS

FILE:17 EMERGENCY ACCESS
DRAWN BY: ELC
DESIGN BY: BKW
CHECKED BY: BKW
SCALE OF SHEET
HOR SCALE: AS SHOWN
VER SCALE: NONE
LAST UPDATED: 5/11/2015
DATE PLOTTED: 5/14/2015

SHEET
17
OF 17