STD.	SHEET TITLE	SPECIAL REQUIREMENTS AND NOTES
300.01	METHOD OF PIPE INSTALLATION	
310.02	PARALLEL PIPE END SECTION–PRECAST CONCRETE FOR 15" TO 24" PIPE	
310.03	CROSS PIPE END SECTION–PRECAST CONCRETE FOR 18" TO 30" PIPE	
310.10	DRIVEWAY PIPE CONSTRUCTION USING NO SPECIAL END SECTIONS	ONLY AT LOCATIONS APPROVED BY CITY ENGINEERING STAFF
815.03	PIPE UNDERDRAIN AND BLIND DRAIN	
816.03	GEOCOMPOSITE SHOULDER DRAIN	
838.01	CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS	NOTE 1
	15" THRU 48" PIPE 90' SKEW	NOTE 1
838.02	CONCRETE ENDWALL AND SLUICE GATE 15" THRU 36" PIPE–90' SKEW	NOTE 1
838.04	CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS	NOTE 1
	17"X13"THRU 71"X47" PIPE ARCH 90' SKEW	NOTE 1
838.05	CONCRETE "L" ENDWALL FOR SINGLE PIPE CULVERTS 15" THRU 48" PIPE	NOTE 1
838.06	CONCRETE "L" ENDWALL FOR SINGLE PIPE CULVERTS 17"X13" THRU 71"X47"	NOTE 1
	71"X47" ARCH PIPE	NOTE 1
838.07	CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS	NOTE 1
	40"X31" THRU 66"X51" PIPE ARCH 90'SKEW	NOTE 1
838.08	CONCRETE "L" ENDWALL FOR SINGLE PIPE CULVERTS 40"X32"	NOTE 1
	THRU 66"X51" PIPE ARCH	NOTE 1
838.10	CONCRETE ENDWALL FOR OUTFALL 4'–6" OR 8" PIPE	NOTE 1
838.11	BRICK ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS	NOTE 1
	15" THRU 48" 90' SKEW	NOTE 1
838.14	BRICK ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS 17"X31"	NOTE 1
	THRU 71"X47" 90' SKEW	NOTE 1
838.15	BRICK "L" ENDWALL FOR SINGLE PIPE CULVERTS 15" THRU 48" PIPE	NOTE 1
838.16	BRICK "L" ENDWALL FOR SINGLE PIPE CULVERTS 17"X13" THRU	NOTE 1
	71"X47" PIPE ARCH	NOTE 1
838.17	BRICK ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS 40"X31"	NOTE 1
	THRU 66"X51" PIPE ARCH 90'SKEW	NOTE 1
838.18	BRICK ENDWALL FOR SINGLE PIPE CULVERTS 40"X31" THRU	NOTE 1
	66"X51" PIPE ARCH 90' SKEW	NOTE 1
838.20	BRICK ENDWALL FOR OUTFALL 4", 6" AND 8" PIPE	NOTE 1
838.21	REINFORCED CONCRETE ENDWALL FOR SINGLE 54" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.22	REINFORCED CONCRETE ENDWALL FOR DOUBLE & TRIPLE 54" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.27	REINFORCED CONCRETE ENDWALL FOR SINGLE 60" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.28	REINFORCED CONCRETE ENDWALL FOR DOUBLE & TRIPLE 60" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.33	REINFORCED CONCRETE ENDWALL FOR SINGLE 66" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.34	REINFORCED CONCRETE ENDWALL FOR DOUBLE & TRIPLE 66" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.39	REINFORCED CONCRETE ENDWALL FOR SINGLE 72" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.40	REINFORCED CONCRETE ENDWALL FOR DOUBLE & TRIPLE 72" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD

NOTE 1: FOR ALL STRUCTURES – NCDOT REQUIRES CLASS B CONCRETE (2500PSI). THE CITY REQUIRES 3500 PSI CONCRETE STRENGTH @ 28 DAYS. 3500 PSI CONCRETE SHALL BE USED IN ALL CITY PROJECTS.

NOT TO SCALE

STD.	SHEET TITLE	SPECIAL REQUIREMENTS AND NOTES
838.45	NOTES FOR REINFORCED CONCRETE ENDWALL STANDARD DRAWINGS	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
	838.21 THRU 838.40	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.51	REINFORCED BRICK ENDWALL FOR SINGLE 54" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.52	REINFORCED BRICK ENDWALL FOR DOUBLE & TRIPLE 54" PIPE 90'SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.57	REINFORCED BRICK ENDWALL FOR SINGLE 60" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.58	REINFORCED BRICK ENDWALL FOR DOUBLE & TRIPLE 60" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.63	REINFORCED BRICK ENDWALL FOR SINGLE 66" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.64	REINFORCED BRICK ENDWALL FOR DOUBLE & TRIPLE 66" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.69	REINFORCED BRICK ENDWALL FOR SINGLE 72" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.70	REINFORCED BRICK ENDWALL FOR DOUBLE & TRIPLE 72" PIPE 90' SKEW	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.75	NOTES FOR REINFORCED BRICK ENDWALL STANDARD DRAWINGS 838.51 THRU 838.70	NOTE 1 SEE LIDS 3018 FOR SPLASH PAD
838.80	PRECAST CONCRETE ENDWALL FOR SINGLE 12" THRU 72" PIPE 90' SKEW	
840.00	CONCRETE BASE PAD FOR DRAINAGE STRUCTURES	
840.01	BRICK CATCH BASIN 15" THRU 54" PIPE	
840.02	CONCRETE CATCH BASIN 12" THRU 54" PIPE	
840.03	FRAME, GRATE BASIN 12" THRU 54" PIPE	
840.04	CONCRETE OPEN THROAT CATCH BASIN 12" THRU 48" PIPE	NOTE 1; OPENINGS PERMITTED IN 4 SIDES OUTSIDE OF STREET R/W MANHOLE RING AND COVER REQUIRED IN TOP SLAB SEE LIDS 3016
840.05	BRICK OPEN THROAT CATCH BASIN 15" THRU 48" PIPE	NOTE 1; OPENINGS PERMITTED IN 4 SIDES OUTSIDE OF STREET R/W MANHOLE RING AND COVER REQUIRED IN TOP SLAB SEE LIDS 3016
840.14	CONCRETE DROP INLET 12" THRU 30" PIPE	NOTE 1
840.15	BRICK DROP INLET 12" THRU 30' PIPE	NOTE 1
840.16	DROP INLET FRAME AND GRATE FOR USE WITH DWGS. 840.14 & 840.15	NOTE 1
840.17	CONCRETE GRATED DROP INLET TYPE "A" 12" THRU 72" PIPE	NOTE 1
840.18	CONCRETE GRATED DROP INLET TYPE "B" 12" THRU 36" PIPE	NOTE 1
840.19	CONCRETE GRATED DROP INLET TYPE "D" 12" THRU 36" PIPE	NOTE 1
840.20	FRAMES AND WIDE SLOT FLAT GRATES	NOT FOR USE IN PEDESTRIAN AREAS
840.22	FRAMES AND WIDE SLOT SAG GRATES	NOT FOR USE IN PEDESTRIAN AREAS
840.24	FRAMES AND NARROW SLOT SAG GRATES	
840.25	ANCHORAGE FOR FRAMES BRICK OR CONCRETE	
840.26	BRICK GRATED DROP INLET TYPE "A" 12" THRU 72" PIPE	
840.27	BRICK GRATED DROP INLET TYPE "B" 12" THRU 36" PIPE	
840.28	BRICK GRATED DROP INLET TYPE "D" 12" THRU 36" PIPE	
840.29	FRAMES AND NARROW SLOT FLAT GRATES	
840.30	DRIVEWAY DROP INLET	

NOTE 1: FOR ALL STRUCTURES – NCDOT REQUIRES CLASS B CONCRETE (2500PSI). THE CITY REQUIRES 3500 PSI CONCRETE STRENGTH @ 28 DAYS. 3500 PSI CONCRETE SHALL BE USED IN ALL CITY PROJECTS.

NOT TO SCALE

REV.	STD. NO.
1	3000B

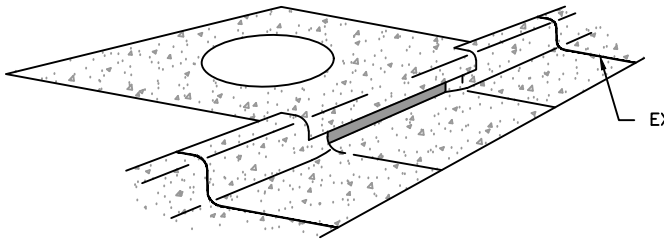
NCDOT STORM DRAINAGE STANDARDS APPROVED FOR USE IN THE CITY OF LEXINGTON

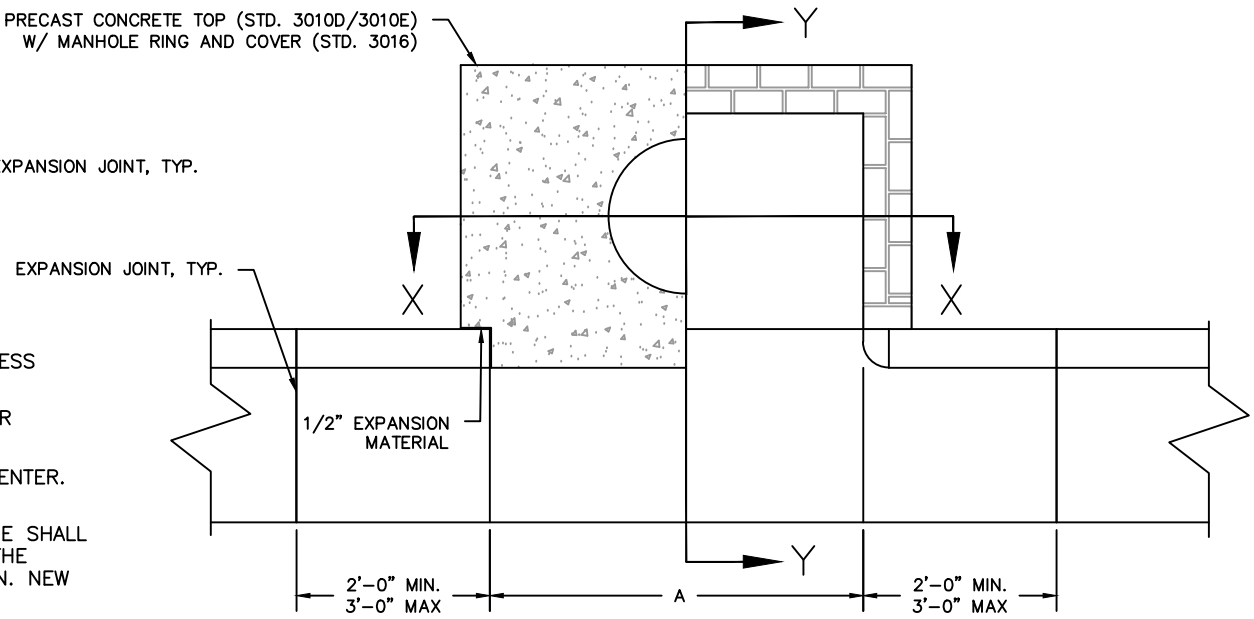
CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

STD.	SHEET TITLE	SPECIAL REQUIREMENTS AND NOTES
840.31	CONCRETE JUNCTION BOX (WITH OPTIONAL MANHOLE) 12" THRU 66" PIPE	NOTE 1; OPTIONAL MANHOLE IS REQUIRED
840.32	BRICK JUNCTION BOX 12" THRU 66" PIPE	NOTE 1; OPTIONAL MANHOLE IS REQUIRED
840.34	TRAFFIC BEARING JUNCTION BOX FOR USE WITH PIPES 42" AND UNDER	NOTE 1; OPTIONAL MANHOLE IS REQUIRED; AS MEASURED FROM BOTTOM OF TOP SLAB -- FOR JUNCTION BOX HEIGHT 0'-4'8" USE 8" THICK WALL, FROM 4'8" HEIGHT TO 10' HEIGHT, USE 12" THICK WALL. IF PROPOSED STRUCTURE EXCEEDS 12'-0" HEIGHT A SPECIAL DESIGN WILL BE REQUIRED
840.35	TRAFFIC BEARING DROP INLET FOR CAST IRON DOUBLE FRAME AND GRATES	
840.36	TRAFFIC BEARING DROP INLET FOR STEEL (840.37) DOUBLE FRAME AND GRATES	NOT FOR USE IN PEDESTRIAN AREAS
840.37	STEEL GRATE AND FRAME	NOT FOR USE IN PEDESTRIAN AREAS
840.41	SPRING BOX CONCRETE OR BRICK	
840.45	PRECAST DRAINAGE STRUCTURE (SOLID AND WAFFLE WALL)	WAFFLE WALL IS NOT PERMITTED IN CITY RIGHT-OF-WAY. ALL OPENINGS SHALL BE PRECAST
840.46	TRAFFIC BEARING PRECAST DRAINAGE STRUCTURE	
840.51	BRICK MANHOLE 12" 36" PIPE	
840.52	PRECAST MANHOLE 4', 5' AND 6' DIAMETER 12" THRU 48" PIPE	IF USED AS A CATCH BASIN SUPPORTING NCDOT 840.03 FRAME, GRATE, AND HOOD - THE FLAT TOP SLAB ONLY ACCEPTABLE WHEN A 12" VERTICAL RISER CAN BE ACCOMMODATED ON TOP OF THE STRUCTURE (BETWEEN THE TOP OF FLAT TOP SLAB AND BOTTOM OF FRAME/GRATE)
840.53	PRECAST MANHOLE WITH MASONRY BASE 12" THRU 42" PIPE	IF USED AS A CATCH BASIN SUPPORTING NCDOT 840.03 FRAME, GRATE, AND HOOD - THE FLAT TOP SLAB ONLY ACCEPTABLE WHEN A 12" VERTICAL RISER CAN BE ACCOMMODATED ON TOP OF THE STRUCTURE (BETWEEN THE TOP OF FLAT TOP SLAB AND BOTTOM OF FRAME/GRATE)
840.54	MANHOLE FRAME AND COVER	ALL COVERS SHALL BE SUPPLIED WITH A MINIMUM OF TWO AND A MAXIMUM OF SIX 1-INCH DIAMETER VENT HOLES.
840.66	DRAINAGE STRUCTURE STEPS	
840.71	CONCRETE PAVED DITCHES	
840.72	PIPE COLLAR	
850.01	CONCRETE PAVED DITCHES	
852.04	METHODS FOR PLACEMENT OF DROP INLETS IN GRASSED MEDIAN (USING 1'-6" CURB AND GUTTER)	
852.05	MEDIAN CURB FOR CATCH BASIN (FOR USE WITH 1'-6" CURB AND GUTTER)	
852.06	METHOD OF PLACEMENT OF DROP INLETS IN CONCRETE ISLANDS	
876.01	RIP RAP IN CHANNELS	
876.03	DRAINAGE DITCHES WITH CLASS "A" RIP RAP	
876.04	DRAINAGE DITCHES WITH CLASS "B" RIP RAP	
310.01	1998 DRAWINGS CONCRETE FLARED END SECTION	

NOTE 1: FOR ALL STRUCTURES - NCDOT REQUIRES CLASS B CONCRETE (2500PSI). THE CITY REQUIRES 3500 PSI CONCRETE STRENGTH @ 28 DAYS. 3500 PSI CONCRETE SHALL BE USED IN ALL CITY PROJECTS.

NOT TO SCALE



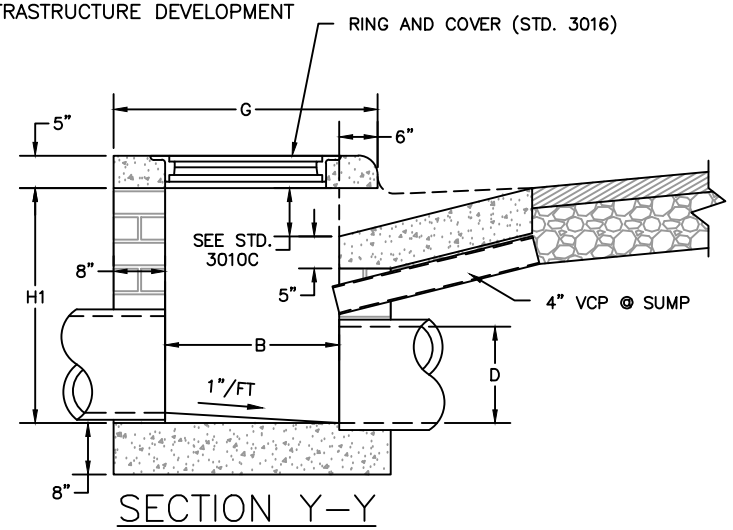


PLAN

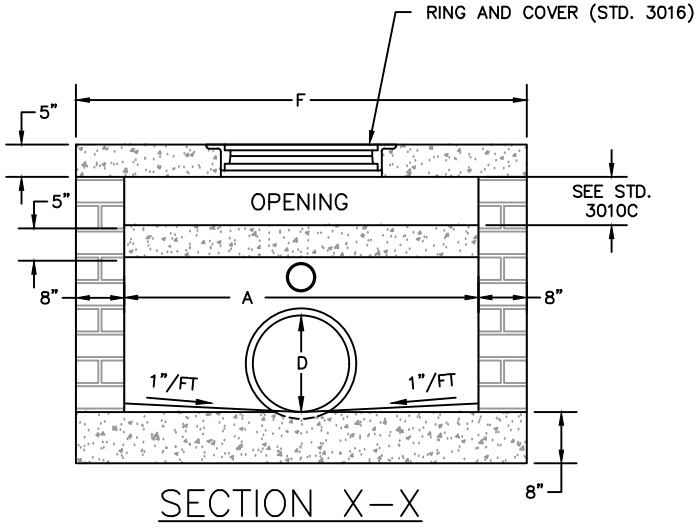
NOTES:

1. ALL MORTAR JOINTS SHALL BE BETWEEN 3/8" AND 5/8".
2. ALL CONCRETE SHALL BE 3500 PSI COMPRESSIVE STRENGTH UNLESS OTHERWISE SPECIFIED.
3. BRICK MASONRY CAN BE STANDARD CLAY BRICK, JUMBO BRICK OR CONCRETE BRICK.
4. FOR DEPTHS OVER 3'-6", STEPS SHALL BE INSTALLED 16" ON CENTER. STEPS SHALL BE IN ACCORDANCE WITH NCDOT 840.66.
5. WHEN INSTALLING A STRUCTURE OVER AN EXISTING PIPE, THE PIPE SHALL BE SAW CUT AND LENGTH EQUAL TO THE INSIDE DIMENSION OF THE STRUCTURE SHALL BE REMOVED. POUR A NEW BOTTOM AS SHOWN. NEW STRUCTURES SHALL NOT BE INSTALL ON TOP OF EXISTING PIPE.
6. THIS DETAIL ALSO APPLIES TO PRECAST CONCRETE STRUCTURES. THE USE OF PRECAST CONCRETE STRUCTURES IS SUBJECT TO THE POLICY OUTLINED IN THE LATEST VERSION OF THE LEXINGTON INFRASTRUCTURE DEVELOPMENT STANDARDS CHAPTER 3.

DIMENSIONS OF BOX AND PIPE				TOP/BOTTOM SLAB DIMENSION	
PIPE	SPAN	WIDTH	HEIGHT		
D	A	B	H1(MIN.)	F	G
15"	4'-6"	2'-3"	3'-1"	5'-10"	3'-6"
18"	4'-6"	2'-3"	3'-5"	5'-10"	3'-6"
24"	4'-6"	2'-3"	3'-11"	5'-10"	3'-6"
30"	4'-6"	2'-3"	4'-5"	5'-10"	3'-6"
36"	4'-6"	2'-3"	5'-0"	5'-10"	3'-6"
42"	4'-6"	2'-3"	5'-5"	5'-10"	3'-6"
48"	4'-6"	2'-3"	5'-11"	5'-10"	3'-6"
54"	6'-0"	2'-3"	6'-6"	7'-4"	3'-6"
60"	6'-0"	2'-3"	7'-1"	7'-4"	3'-6"
72"	6'-0"	2'-3"	8'-5"	7'-4"	3'-6"



SECTION Y-Y



SECTION X-X

NOT TO SCALE

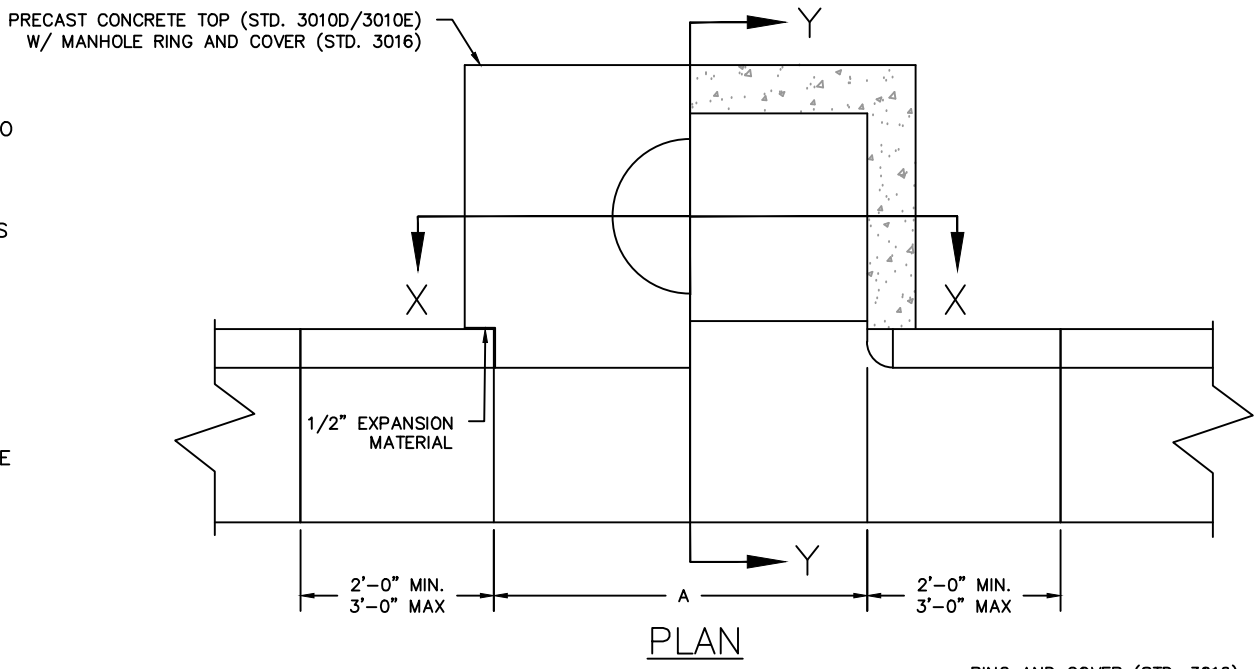
OPEN THROAT CURB INLET
BRICK MASONRY

REV.	STD. NO.
1	3010A

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

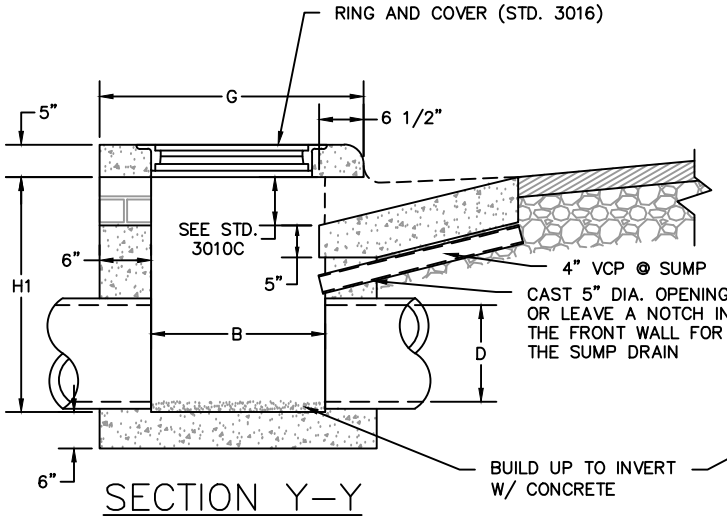
NOTES:

1. THE USE OF PRECAST CONCRETE STRUCTURES IS SUBJECT TO THE POLICY OUTLINED IN THE LATEST VERSION OF THE LEXINGTON INFRASTRUCTURE DEVELOPMENT STANDARDS CHAPTER 3.
2. CONSTRUCTION AND USE OF PRECAST CONCRETE STRUCTURES SHALL ADHERE TO ALL PERTINENT REQUIREMENTS OF STD. 3010A–E.
3. STEEL DESIGN IS NOT SHOWN ON THIS DRAWING. STEEL DESIGN IS THE RESPONSIBILITY OF THE MANUFACTURERS' ENGINEER AND SHALL BE SHOWN ON THE SEALED SHOP DRAWINGS SUBMITTED FOR APPROVAL FOR USE IN THE CITY OF LEXINGTON DRAINAGE INFRASTRUCTURE
4. FOR PRECAST CONCRETE MODELS OF THIS STRUCTURE, THE MANUFACTURER SHALL STAMP OR STENCIL ITS LOGO OR NAME ON THE INSIDE AND OUTSIDE OF THE STRUCTURE.
5. PRECAST STRUCTURES SHOULD BE SET APPROX. 2FT LOW AND BROUGHT UP TO FINAL GRADE USING BRICK MASONRY.
6. WHEN INSTALLING THE BOX, THE INSIDE FACE OF THE FRONT WALL SHALL BE LINED UP WITH THE BACK OF THE CURB.

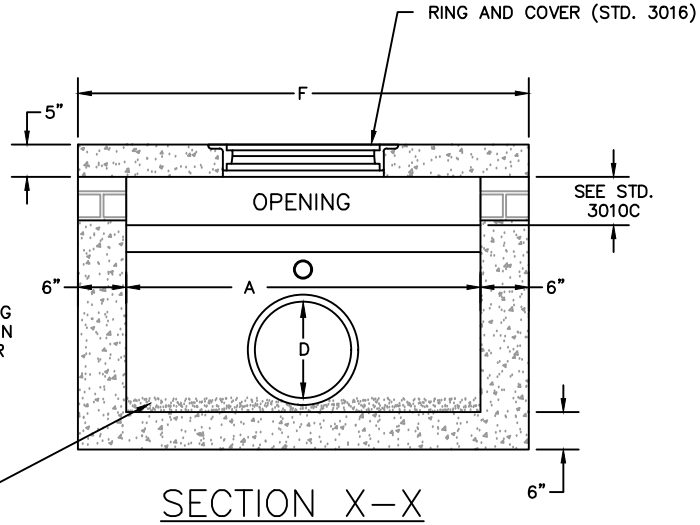


PLAN

DIMENSIONS OF BOX AND PIPE				TOP SLAB DIMENSION	
PIPE	SPAN	WIDTH	HEIGHT		
D	A	B	H1(MIN.)	F	G
15"	4'–10"	2'–5"	3'–1"	5'–10"	3'–6"
18"	4'–10"	2'–5"	3'–5"	5'–10"	3'–6"
24"	4'–10"	2'–5"	3'–11"	5'–10"	3'–6"
30"	4'–10"	2'–5"	4'–5"	5'–10"	3'–6"
36"	4'–10"	2'–5"	5'–0"	5'–10"	3'–6"
42"	4'–10"	2'–5"	5'–5"	5'–10"	3'–6"
48"	4'–10"	2'–5"	5'–11"	5'–10"	3'–6"
54"	6'–4"	2'–5"	6'–6"	7'–4"	3'–6"
60"	6'–4"	2'–5"	7'–1"	7'–4"	3'–6"
72"	6'–4"	2'–5"	8'–5"	7'–4"	3'–6"



SECTION Y–Y



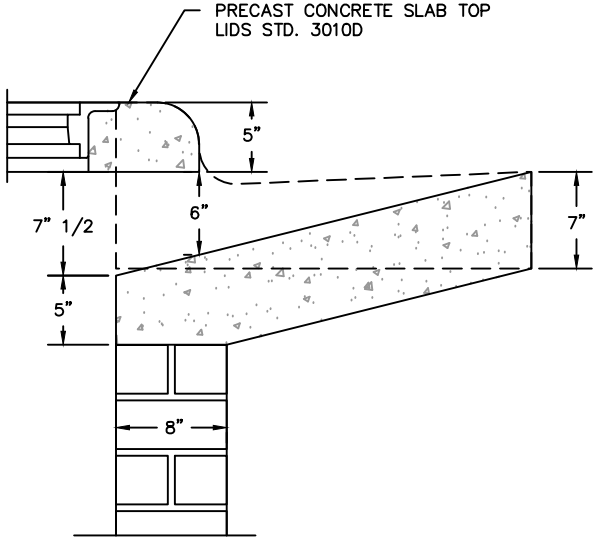
SECTION X–X

NOT TO SCALE

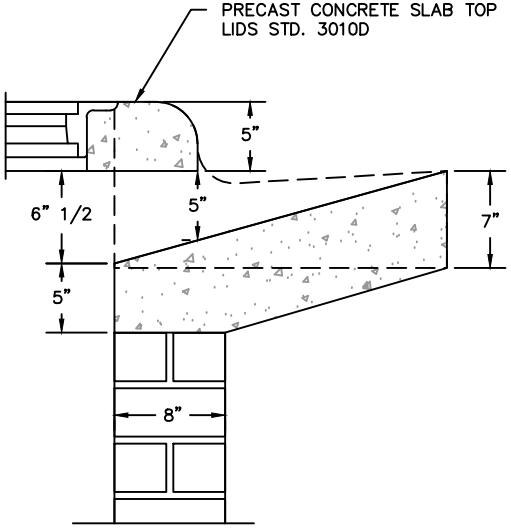
OPEN THROAT CURB INLET
PRECAST CONCRETE

REV.	STD. NO.
1	3010B

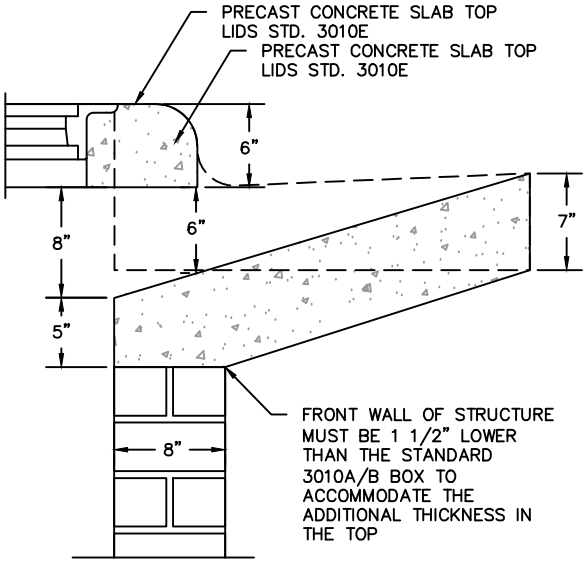
CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS



STANDARD CURB INLET THROAT
FOR 2'–6" C&G

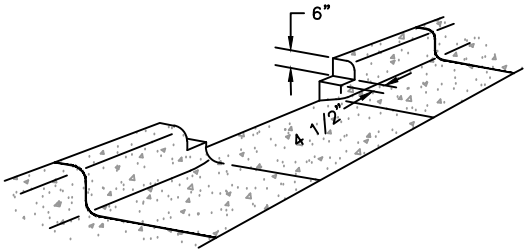


STANDARD CURB INLET THROAT
FOR 2'–0" C&G



MODIFIED CURB INLET THROAT
FOR STD. 3010E W/ 2'–6" C&G

FOR USE AT COMMERCIAL AND INDUSTRIAL INTERSECTIONS WHERE THERE IS POTENTIAL FOR HEAVY TRUCK TRAFFIC

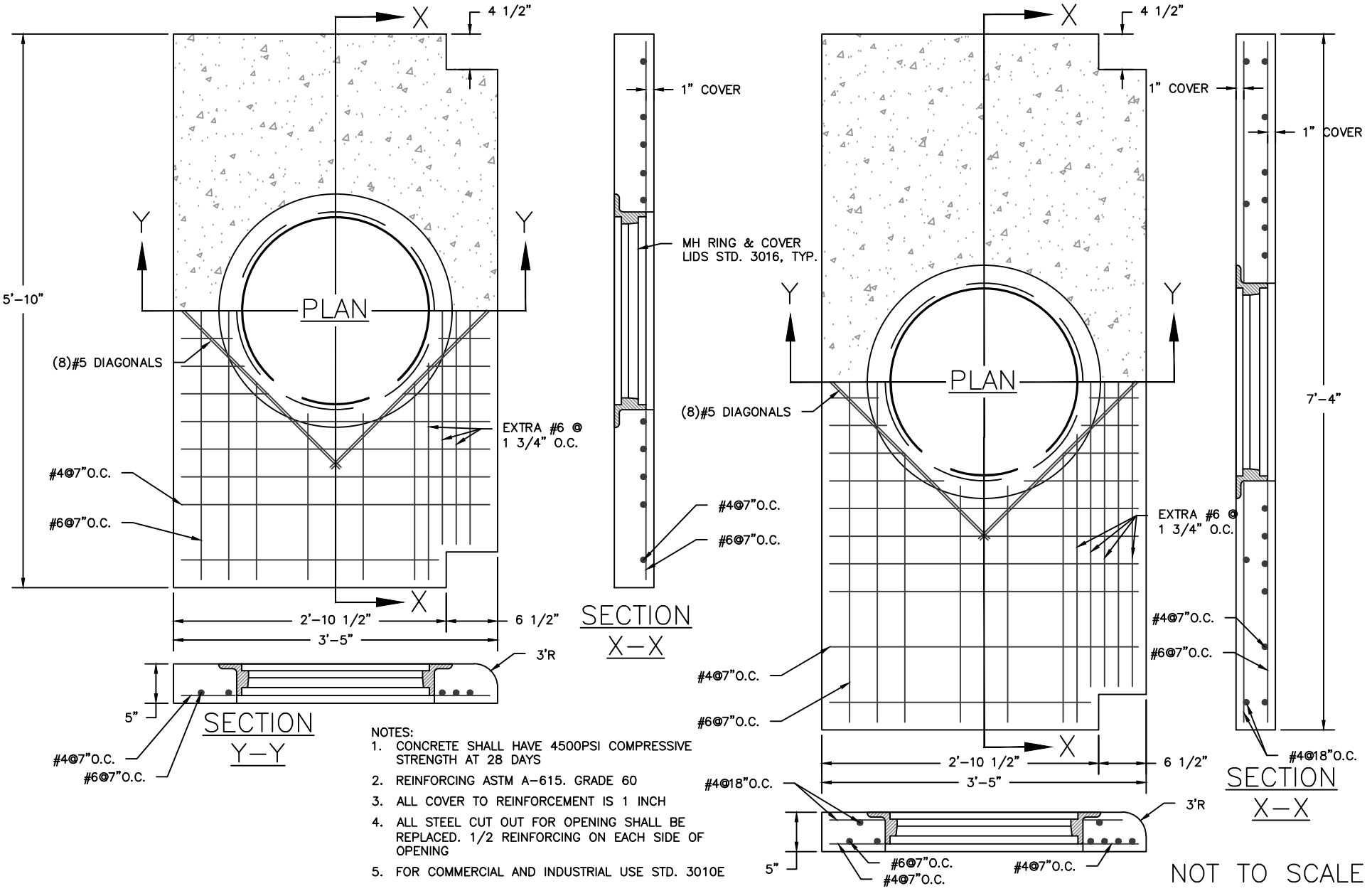


NOT TO SCALE

OPEN THROAT CURB INLET
CURB THROAT VARIATIONS

REV.	STD. NO.
1	3010C

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS



OPEN THROAT CURB INLET

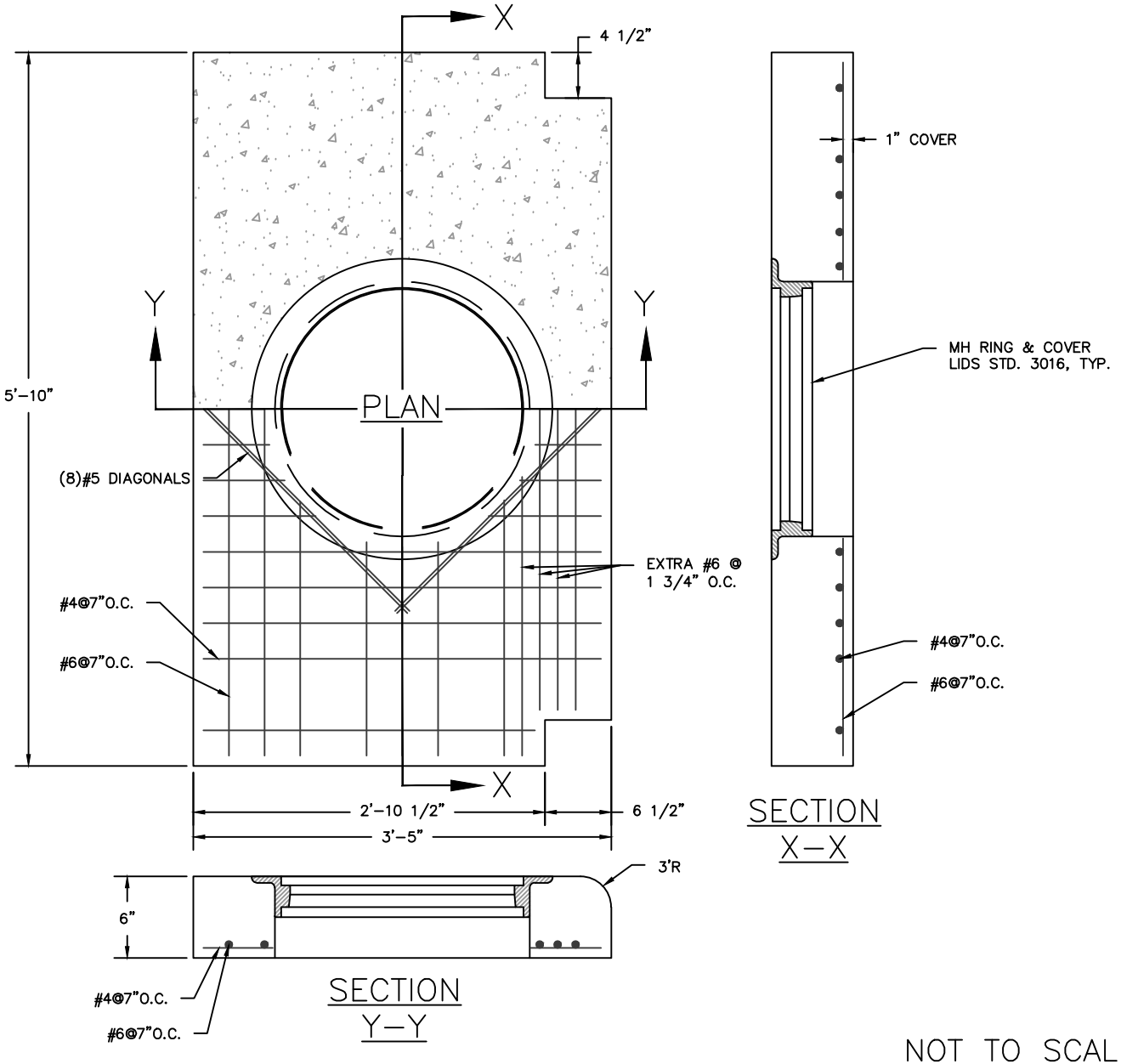
PRECAST SLAB TOP (4'-6" & 6'-0" THROAT)

REV.	STD. NO.
1	3010D

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

NOTES:

1. CONCRETE SHALL HAVE 4500PSI COMPRESSIVE STRENGTH AT 28 DAYS
2. REINFORCING ASTM A–615. GRADE 60
3. ALL COVER TO REINFORCEMENT IS 1 INCH
4. ALL STEEL CUT OUT FOR OPENING SHALL BE REPLACED. 1/2 REINFORCING ON EACH SIDE OF OPENING
5. THIS STANDARD IS FOR USE IN COMMERCIAL AND INDUSTRIAL INTERSECTIONS WHERE THERE IS A POTENTIAL FOR TRUCK TRAFFIC.
6. IN SOME CASES, THE INLETS WILL BE MOVED AWAY FROM THE RADIUS POINT OF CURVATURE TO AVOID TRUCK TRAFFIC. LOCATION WILL BE NOTED ON THE CONSTRUCTION DOCUMENTS.

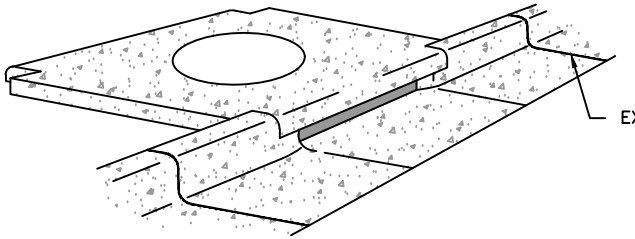


NOT TO SCALE

OPEN THROAT CURB INLET
PRECAST SLAB TOP - HEAVY DUTY

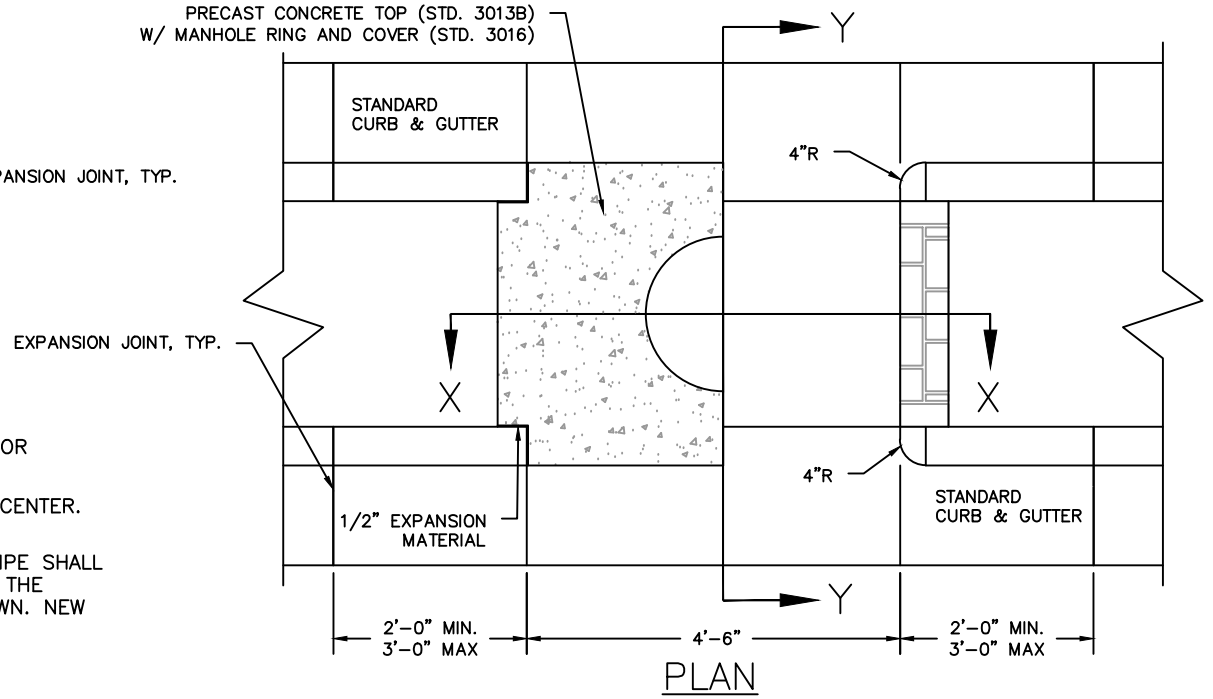
REV.	STD. NO.
1	3010E

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS



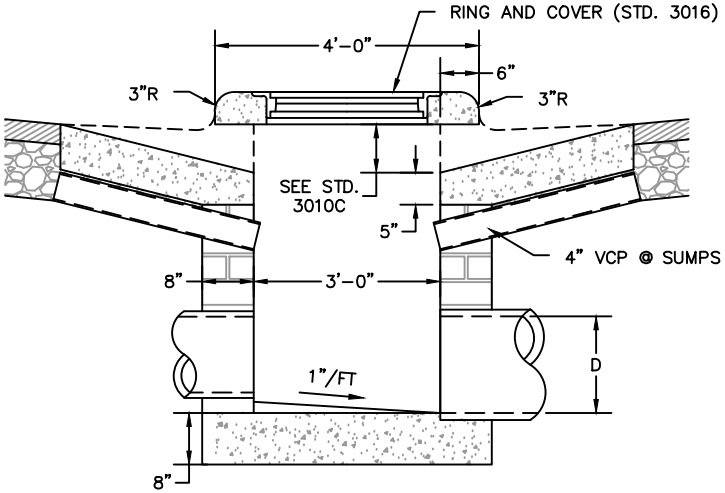
NOTES:

1. ALL MORTAR JOINTS SHALL BE BETWEEN 3/8" AND 5/8".
2. ALL CONCRETE SHALL BE 3000 PSI COMPRESSIVE STRENGTH.
3. BRICK MASONRY CAN BE STANDARD CLAY BRICK, JUMBO BRICK OR CONCRETE BRICK.
4. FOR DEPTHS OVER 3'–6", STEPS SHALL BE INSTALLED 16" ON CENTER. STEPS SHALL BE IN ACCORDANCE WITH NCDOT 840.66.
5. WHEN INSTALLING A STRUCTURE OVER AN EXISTING PIPE, THE PIPE SHALL BE SAW CUT AND LENGTH EQUAL TO THE INSIDE DIMENSION OF THE STRUCTURE SHALL BE REMOVED. POUR A NEW BOTTOM AS SHOWN. NEW STRUCTURES SHALL NOT BE INSTALL ON TOP OF EXISTING PIPE.

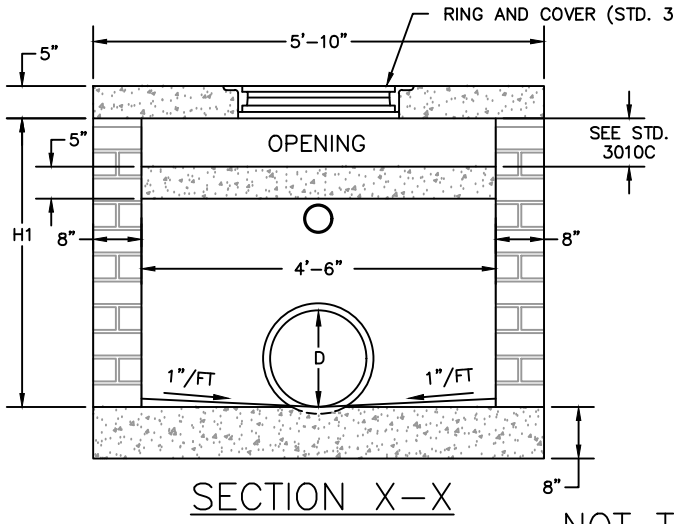


PLAN

DIMENSIONS OF BOX AND PIPE	
PIPE	HEIGHT
D	H1(MIN.)
15"	3'–1"
18"	3'–5"
24"	3'–11"
30"	4'–5"
36"	5'–0"
42"	5'–5"
48"	5'–11"
54"	6'–6"
60"	7'–1"
72"	8'–5"



SECTION Y–Y



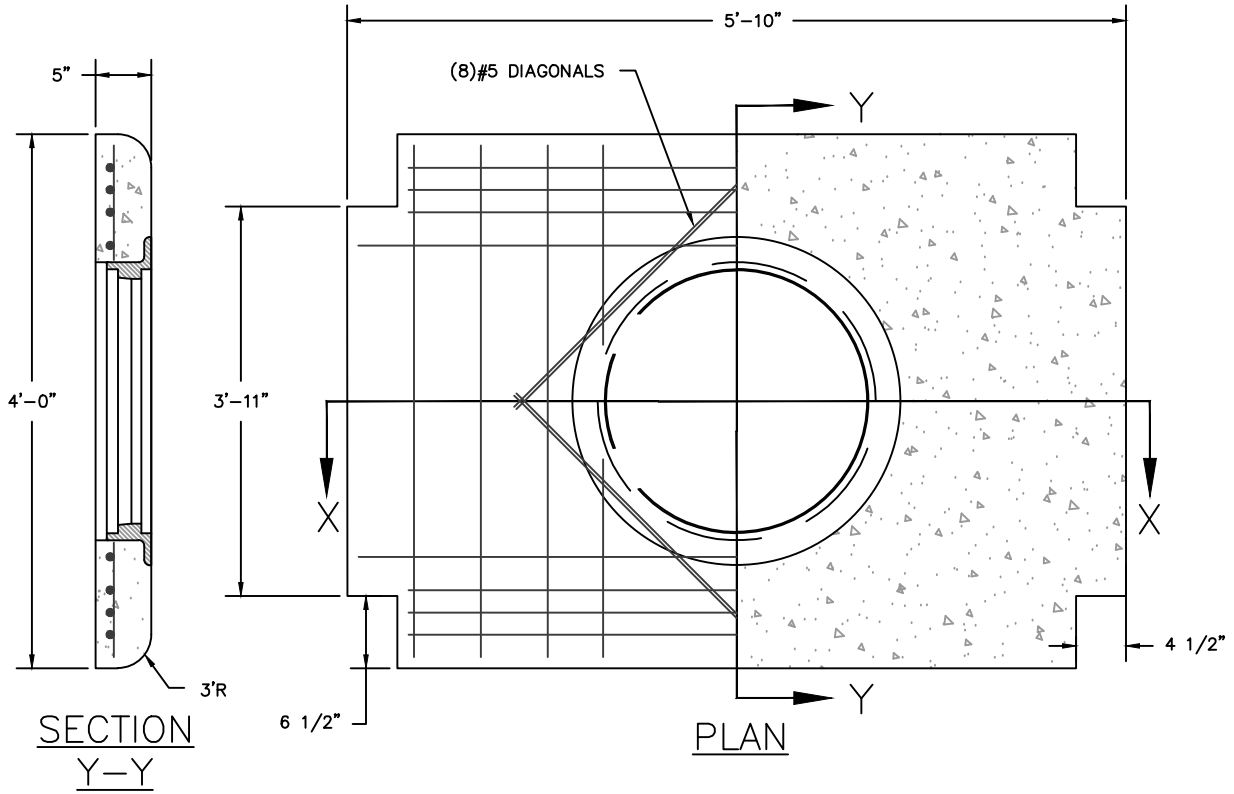
SECTION X–X

NOT TO SCALE

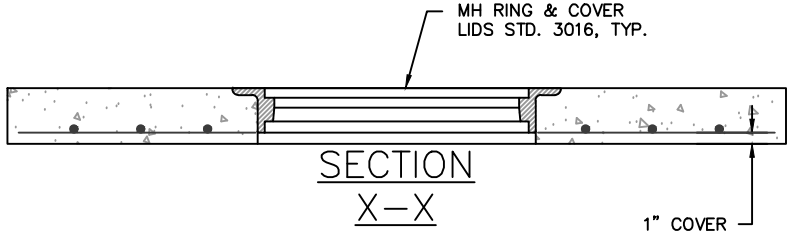
OPEN THROAT MEDIAN CURB INLET
BRICK MASONRY

REV.	STD. NO.
1	3011A

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS



NOTES:
1. CONCRETE SHALL HAVE 4500PSI COMPRESSIVE STRENGTH AT 28 DAYS
2. REINFORCING ASTM A-615. GRADE 60
3. THE INLET TOP SHALL HAVE #4 BAR REINFORCEMENT STEEL IN LONGITUDINAL AND TRANSVERSE DIRECTIONS
4. ALL COVER TO REINFORCEMENT IS 1 INCH
5. ALL STEEL CUT OUT FOR OPENING SHALL BE REPLACED. 1/2 REINFORCING ON EACH SIDE OF OPENING

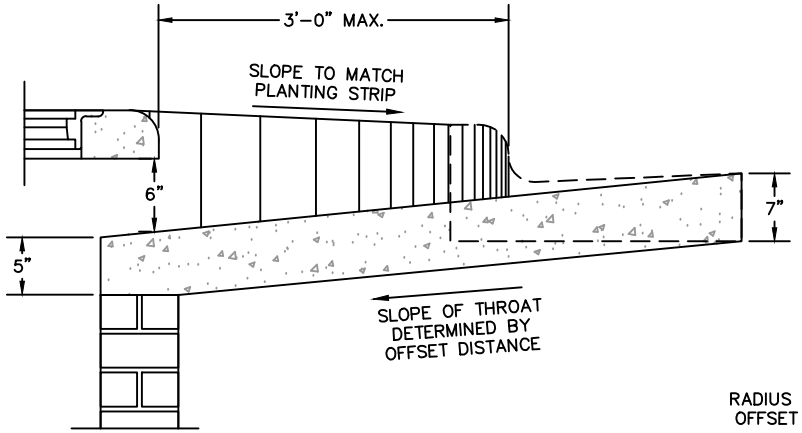


NOT TO SCALE

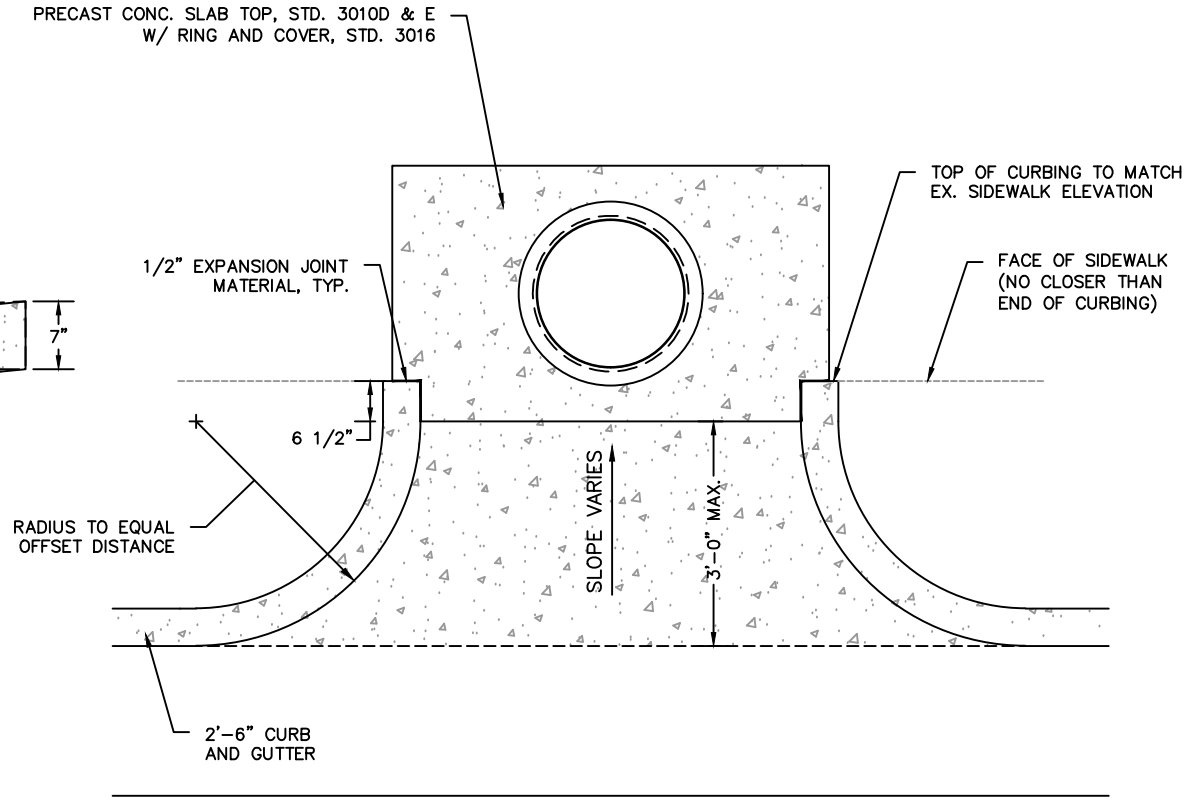
OPEN THROAT MEDIAN CURB INLET
PRECAST SLAB TOP

REV.	STD. NO.
1	3011B

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS



TYPICAL CROSS SECTION



PLAN

NOTES:

1. THIS STANDARD SHALL ONLY BE USED WHEN THERE ARE UNDERGROUND UTILITIES THAT PROHIBIT THE USE OF A STANDARD OPEN THROAT CURB INLET.
2. PRIOR APPROVAL BY THE CITY OF LEXINGTON STORMWATER ADMINISTRATOR OR CITY ENGINEER IS REQUIRED FOR THE USE OF THIS STANDARD.

NOT TO SCALE

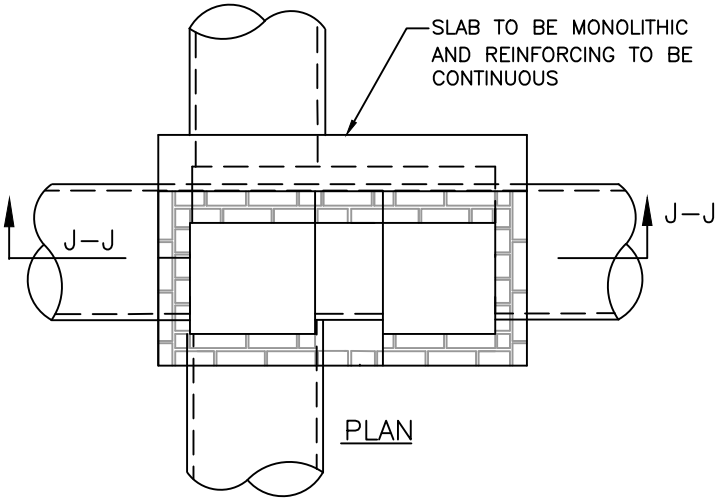
REV.	STD. NO.
1	3012

OFFSET OPEN THROAT CURB INLET

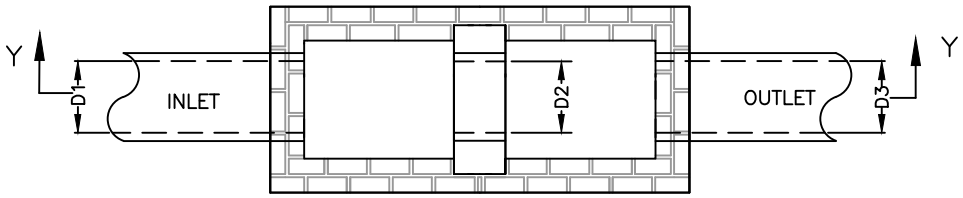
CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

GENERAL NOTES:

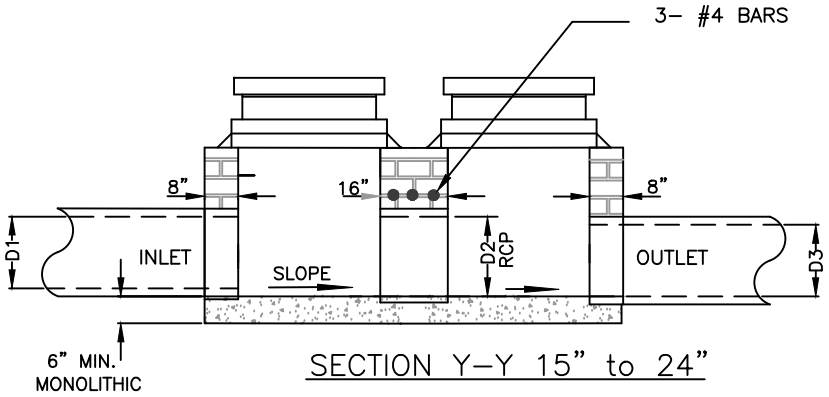
1. NOT FOR USE ON NCDOT–MAINTAINED ROADWAYS.
2. SEE NCDOT STANDARD 840.01 FOR DETAILS BASED ON PIPE SIZE PER CROSS SECTION.
3. CONSTRUCT TWO SINGLE BASINS PER NCDOT STANDARD WITH DOUBLE INTERIOR WALL.
4. ALL CONCRETE TO BE 3500 P.S.I COMPRESSIVE STRENGTH.
5. BASE SLAB SHALL BE MONOLITHIC.
6. SEE LIDS #1019 AND #1020 FOR PLACEMENT OF CATCH BASIN.
7. PIPE SECTION D2 CONNECTING CATCH BASINS SHALL HAVE THE SAME DIAMETER OR LARGER THAN THAT OF OUTLET PIPE D3.
8. ALL REINFORCING STEEL SHOWN ON NCDOT STANDARDS IS TO BE PROVIDED AS CONTINUOUS MEMBERS. (NO LAPS, USED AS A SINGLE CONTINUOUS BAR IN THE SLAB)
9. WEEP HOLES SHALL BE PLACED IN BACK WALL WITH FILTER FABRIC OR STONE ON BACK SIDE



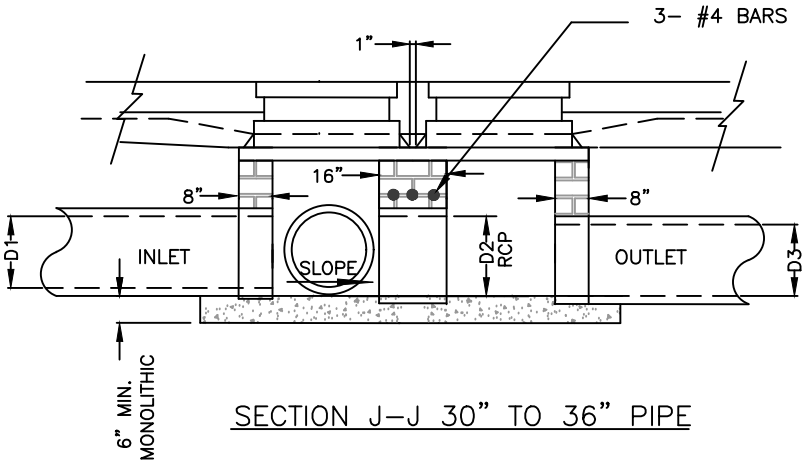
PLAN



PLAN



SECTION Y–Y 15" to 24"



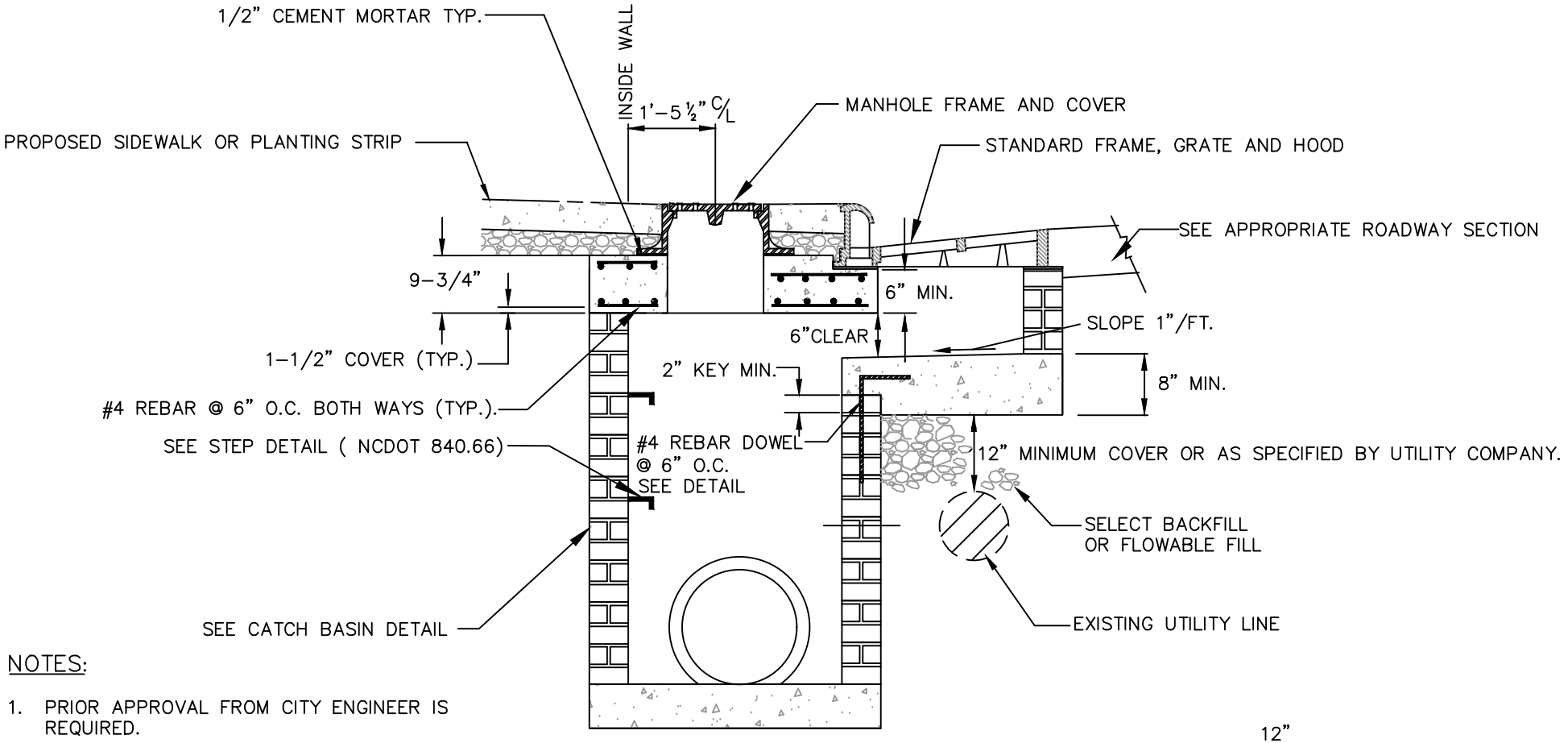
SECTION J–J 30" TO 36" PIPE

NOT TO SCALE

DOUBLE COMBINATION CURB INLET
BRICK MASONRY

REV.	STD. NO.
1	3013

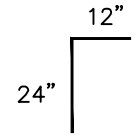
CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS



NOTES:

1. PRIOR APPROVAL FROM CITY ENGINEER IS REQUIRED.
2. THIS STRUCTURE IS TO ONLY BE USED ON CITY MAINTAINED STREETS AND NOT ON NCDOT STREETS WITHOUT THEIR PERMISSION.
3. SEE NCDOT DETAIL 840.01 FOR MAXIMUM PIPE SIZE ALLOWABLE

OFFSET CATCH BASIN EXISTING UTILITY CONFLICT



DOWEL DETAIL

NOT TO SCALE

OFFSET COMBINATION INLET

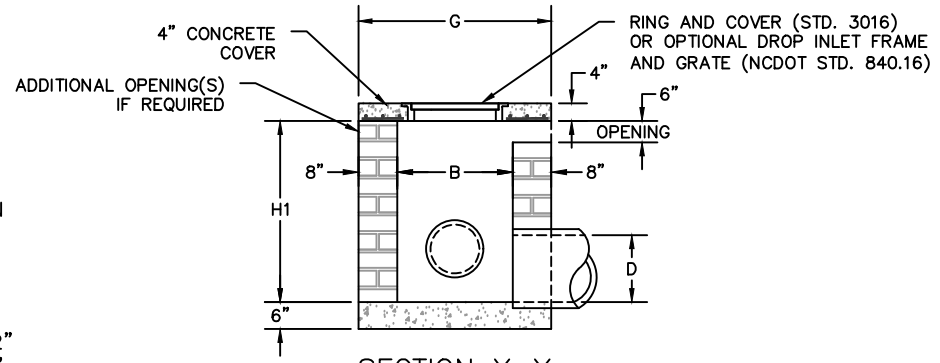
REV.	STD. NO.
1	3014

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

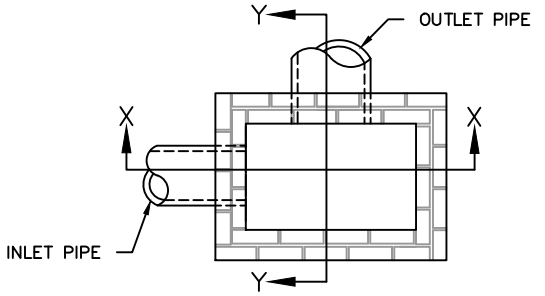
GENERAL NOTES:

1. MORTAR JOINTS SHOULD BE BETWEEN 3/8" AND 5/8" THICK.
2. ALL CONCRETE TO BE 3500 P.S.I COMPRESSIVE STRENGTH.
3. THE 6" OPENING SHOWN MAY BE INCREASED TO 8" MAX. IF DEEMED TO BE NECESSARY BY THE ENGINEER.
4. ALL INLETS OVER 3'–6" IN DEPTH SHALL BE PROVIDED WITH STEPS 1'–2" ON CENTERS. STEPS SHALL BE IN ACCORDANCE WITH NCDOT 840.66.
5. CONCRETE BRICK MAY BE USED IN LIEU OF HARD COMMON CLAY BRICK.
6. JUMBO BRICK WILL BE PERMITTED.
7. FOR 8'–0" IN HEIGHT OR LESS USE 8" WALL. OVER 8'–0" IN HEIGHT USE 12" WALL TO 6'–0" FROM TOP OF WALL, AND 8" WALL FOR THE REMAINING 6'–0".
8. ALL EXPOSED JOINTS WILL BE CONCAVE TOOLED.
9. ALL PIPE IN STORM DRAIN STRUCTURE SHALL BE STRUCK EVEN WITH THE INSIDE WALL, GROUTED AND BRUSHED SMOOTH.
10. WEEP HOLES SHALL BE PLACED IN BACK WALL WITH FILTER FABRIC OR STONE ON BACK SIDE.
11. THIS DETAIL SHALL NOT BE USED WITHIN STREET RIGHT OF WAY UNLESS OTHERWISE APPROVED BY CITY ENGINEER.
12. BOX SHALL BE SIZED ACCORDING TO THE OUTLET PIPE DIAMETER

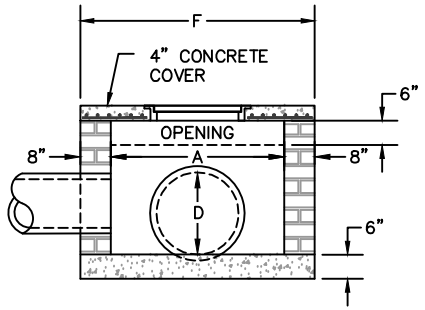
DIMENSIONS OF BOX AND PIPE				REINFORCING					TOP/BOTTOM SLAB DIMENSION	
PIPE	SPAN	WIDTH	HEIGHT	BARS – X		BARS – Y		TOTAL		
D	A	B	H1(MIN.)	NO.	LENGTH	NO.	LENGTH	LBS.	F	G
15"	3'–6"	2'–3"	2'–7"	2	3'–4"	7	4'–7"	26	4'–10"	3'–7"
18"	4'–0"	2'–8"	2'–11"	2	3'–9"	8	5'–1"	33	5'–4"	4'–0"
24"	4'–0"	2'–8"	3'–5"	2	3'–9"	8	5'–1"	33	5'–4"	4'–0"
30"	4'–0"	3'–6"	3'–11"	2	4'–7"	9	5'–1"	37	5'–4"	4'–10"
36"	4'–0"	3'–6"	4'–6"	2	4'–7"	9	5'–1"	37	5'–4"	4'–10"
42"	4'–0"	3'–6"	4'–11"	2	4'–7"	9	5'–1"	37	5'–4"	4'–10"
48"	4'–6"	4'–0"	5'–5"	2	5'–1"	10	5'–7"	45	5'–10"	5'–4"



SECTION Y–Y



PLAN



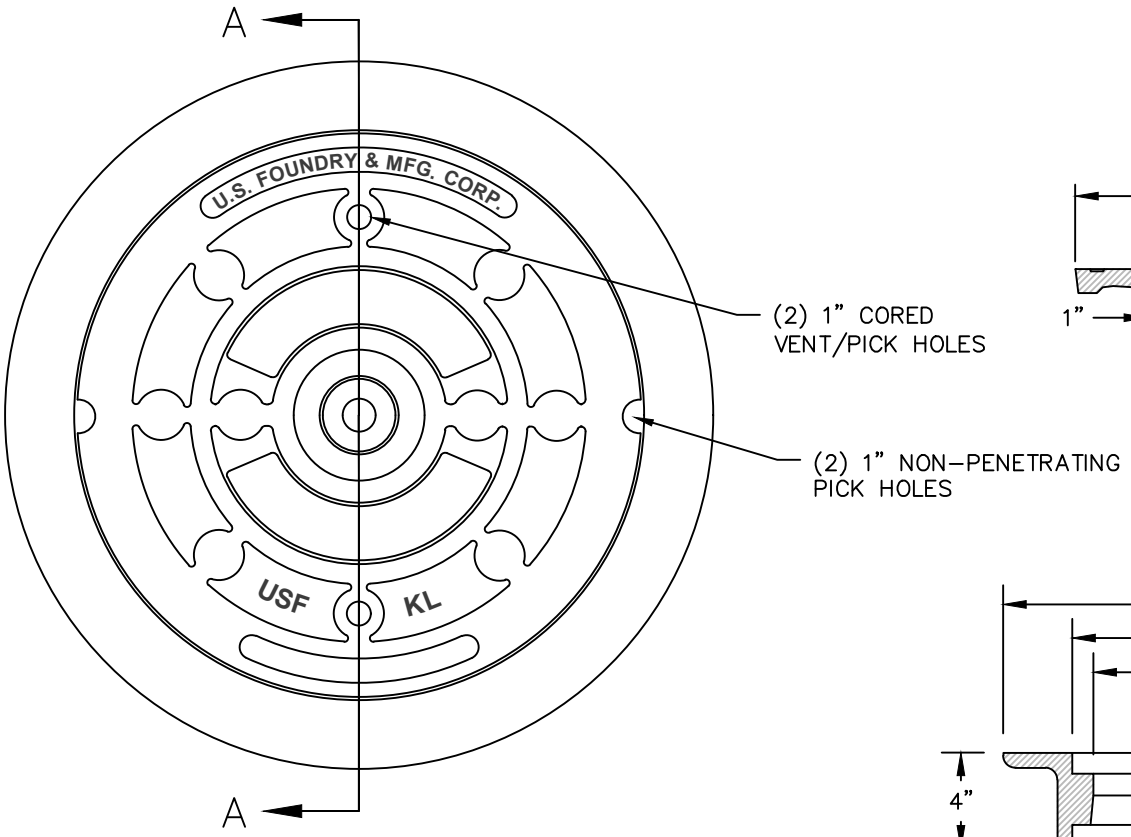
SECTION X–X

NOT TO SCALE

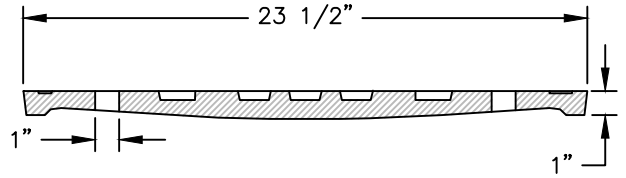
SLAB-TOP YARD INLET 15"-48"

REV.	STD. NO.
1	3015

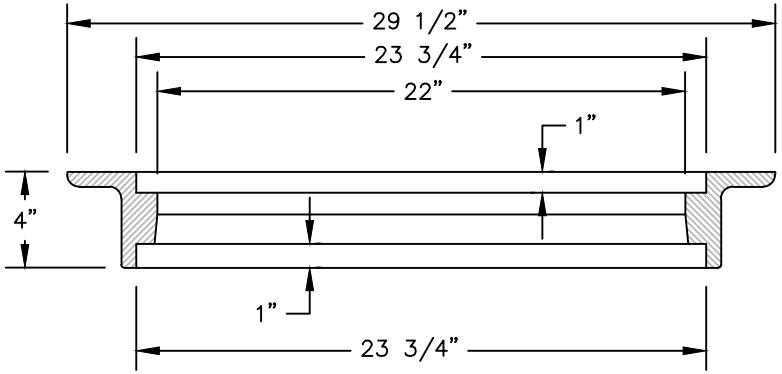
CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS



PLAN



SECTION A–A (COVER)



SECTION A–A (RING)

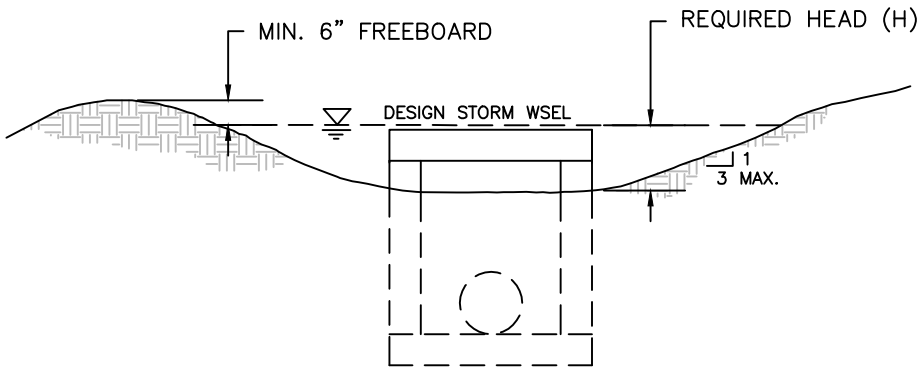
US FOUNDRY 1261 RING & KL COVER OR APPROVED EQUAL

NOT TO SCALE

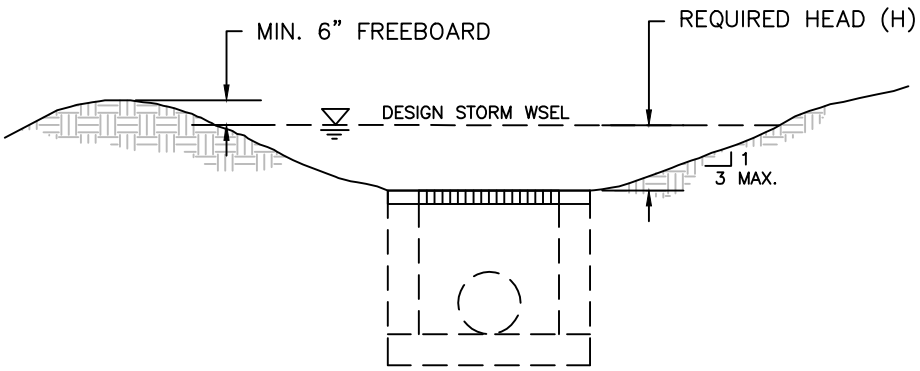
REV.	STD. NO.
1	3016

RING AND COVER FOR SLAB-TOP INLETS

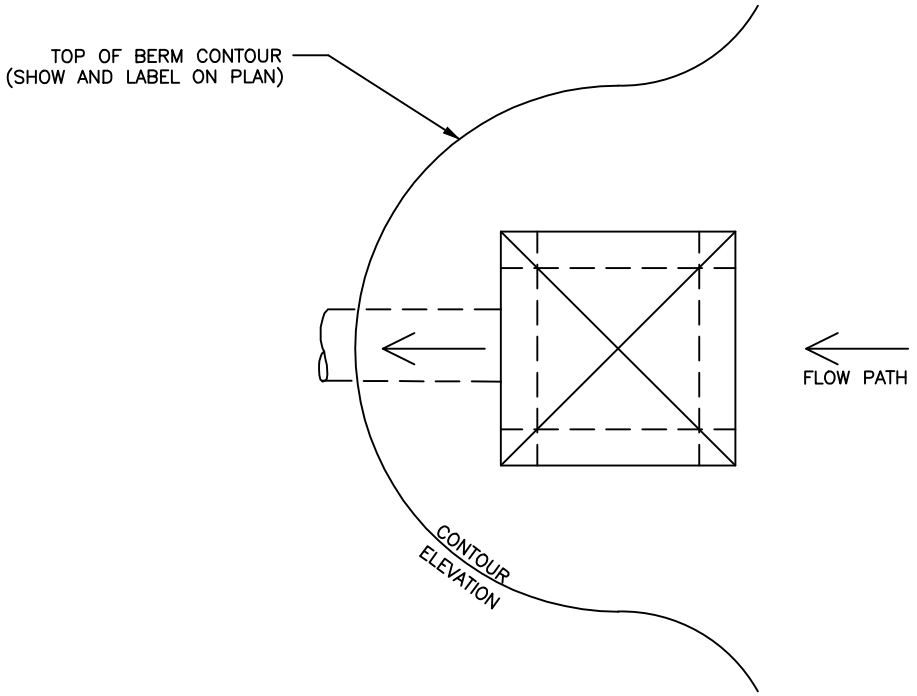
CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS



SLAB–TOP YARD INLET SECTION



GRATE DROP INLET SECTION



INLET SUMMARY CHART				
INLET #	AREA (AC.)	CFS	HEAD H (FT.)	COMMENT

NOTE OPEN SIDE(S) IN THE COMMENTS FOR YARD INLET (E.G. "N/W/E SIDES OPEN")

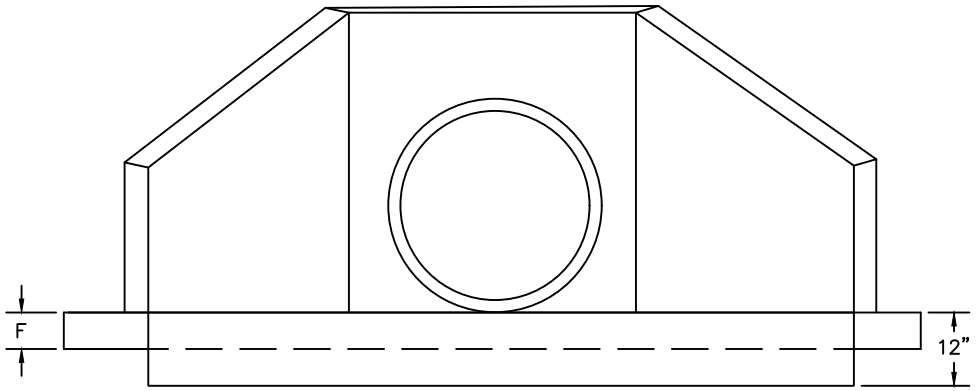
NOT TO SCALE

GRADING AT YARD/DROP INLET

REV.	STD. NO.
1	3017

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

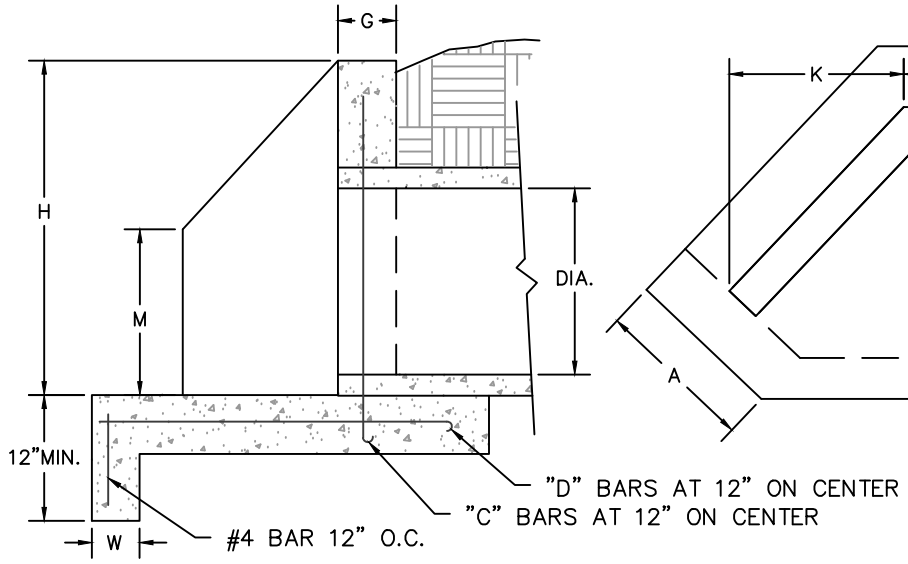
CONCRETE PIPE			DIMENSIONS									
WALL THK.	OUT DIA.	IN DIA.	H	A	B	C	E	F	G	W	K	M
2 1/4"	19 1/2"	15"	27 1/2"	20"	24"	8"	7 1/2"	4"	4"	8"	17"	10"
2 1/2"	23"	18"	31"	20"	24"	8"	9"	4"	4"	8"	17"	12"
3"	30"	24"	38"	20"	30"	8"	12"	4"	4"	8"	21"	15"
3 1/2"	37"	30"	45"	20"	44"	12"	15"	6"	8"	8"	31"	18"
4"	44"	36"	52"	32"	44"	12"	18"	6"	8"	8"	31"	22"
4 1/2"	51"	42"	59"	32"	48"	12"	21"	6"	8"	8"	34"	26"
5"	58"	48"	66"	32"	48"	12"	24"	6"	8"	8"	34"	29"
5 1/2"	65"	54"	73"	32"	54"	12"	27"	6"	8"	8"	38"	33"
6"	72"	60"	80"	36"	66"	12"	30"	8"	12"	12"	46"	36"
6 1/2"	79"	66"	87"	36"	72"	12"	33"	8"	12"	12"	51"	40"
7"	86"	72"	94"	36"	78"	12"	36"	8"	12"	12"	56"	43"



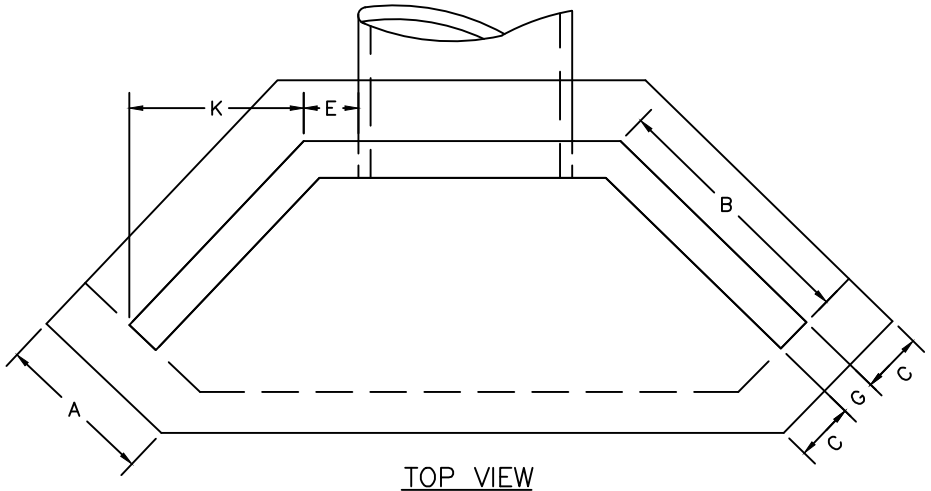
FRONT VIEW

REINFORCING

DIA.	"C" BAR		"D" BAR	
	NO.	LGT.	NO.	LGT.
15"	4	2'-0"	4	1'-11"
18"	4	2'-3"	4	2'-2"
24"	4	2'-9"	4	2'-8"
30"	4	3'-3"	4	3'-2"
36"	4	3'-9"	4	3'-8"
42"	4	4'-3"	4	4'-2"
48"	4	4'-9"	4	4'-8"
54"	4	5'-3"	4	5'-2"
60"	4	5'-9"	4	5'-8"
66"	4	6'-3"	4	6'-2"
72"	4	6'-9"	4	6'-8"



SIDE VIEW



TOP VIEW

NOT TO SCALE

CONCRETE WINGWALL WITH SPLASH PAD

REV.	STD. NO.
1	3018A

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

GENERAL NOTES:

1. ALL CORNERS TO BE CHAMFERED 1" IF CONCRETE.
2. THE CONTRACTOR WILL BE REQUIRED TO PLACE 2–#6 BARS "Y" IN THE TOP OF ALL ENDWALL FOR PIPE CULVERTS 42" AND OVER WITH A MINIMUM 3" COVER AND A LENGTH OF 6" LESS THAN ENDWALL.
3. FORMS ARE TO BE USED FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
4. WALL THICKNESS (T) SHOWN IS NOT TO BE INTERPRETED TO MEAN THE THICKNESS ACCEPTABLE, BUT IS USED ONLY IN COMPUTING ENDWALL QUANTITIES.
5. IF CONTRACTOR ELECTS TO USE CONSTRUCTION JOINT AT BOTTOM OF PIPE, AND POURS BASE SEPARATELY, THE TOP OF BASE SHALL BE LEFT ROUGH.
6. ALL CONCRETE TO BE 3500 P.S.I COMPRESSIVE STRENGTH.

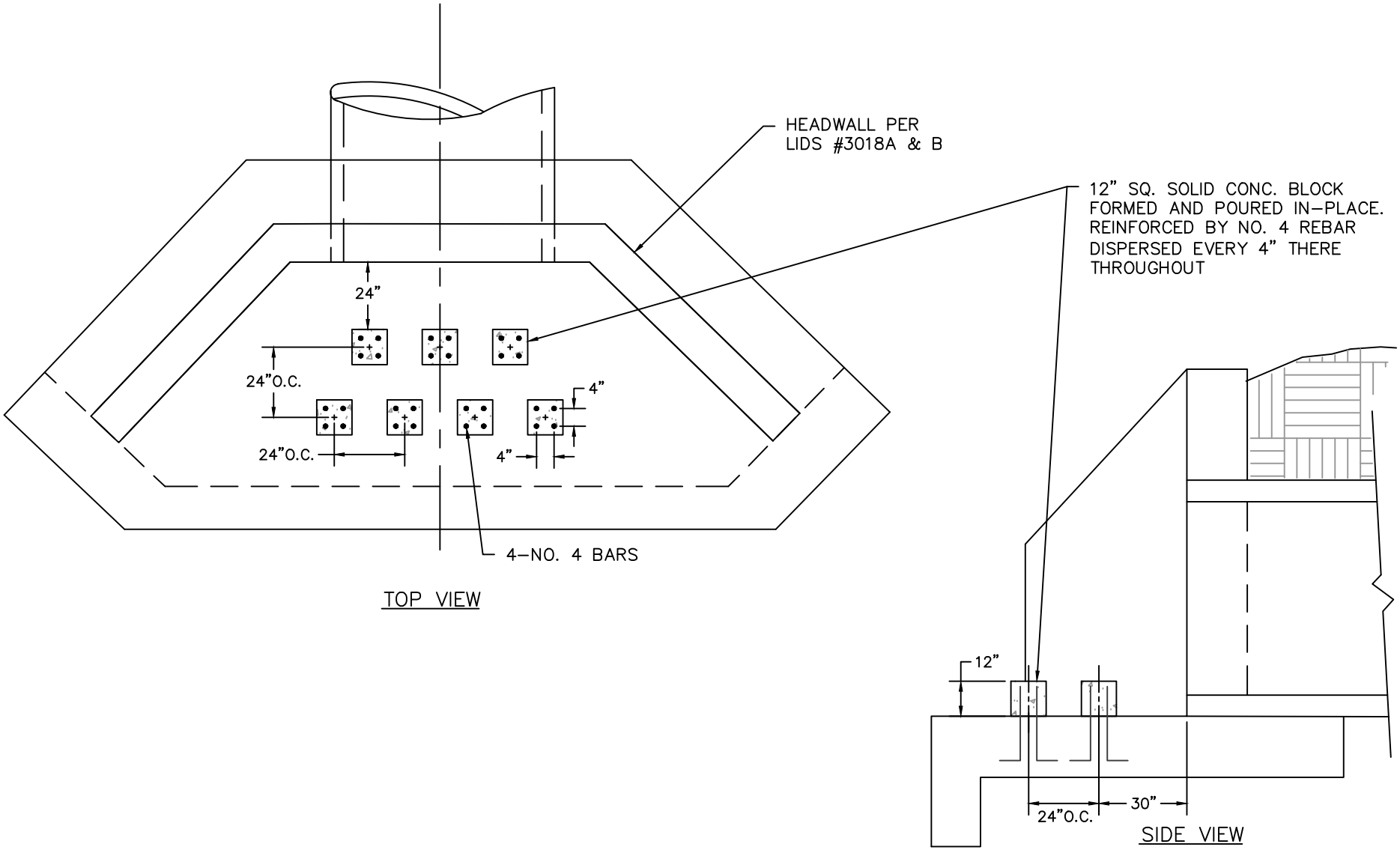
NOT TO SCALE

REV.	STD. NO.
1	3018B

CONCRETE WINGWALL WITH SPLASH PAD

(NOTES)

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

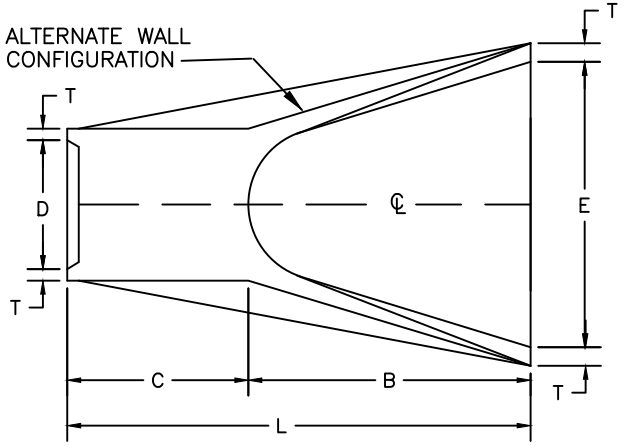


NOT TO SCALE

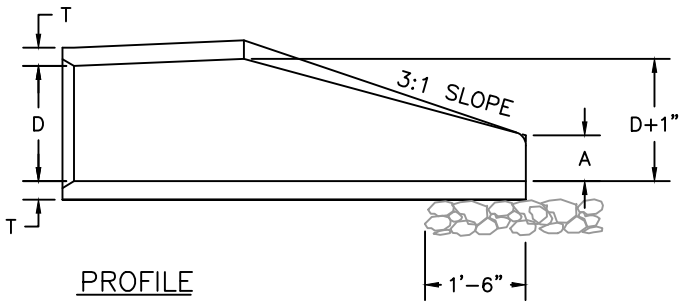
ENERGY DISSIPATERS FOR HEADWALLS

REV.	STD. NO.
1	3019

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

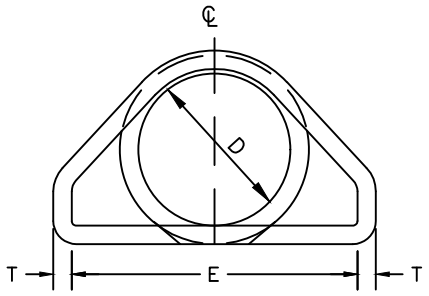


PLAN



PROFILE

SEE STD. 3021 AND 3022
FOR OUTLET PROTECTION



END SECTION

GENERAL NOTES:

1. SEE FORMER NCDOT STANDARD 310.01 FOR DETAILS.
2. REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONCRETE PIPE OF LIKE DIAMETER PER AASHTO M170, TABLE 2, WALL B.
3. ALL CONCRETE TO BE MINIMUM 3500 P.S.I COMPRESSIVE STRENGTH.
4. PROVIDE GROOVE OR BELL JOINT AT OUTLET END SECTION.
5. PROVIDE TONGUE OR SPIGOT JOINT AT INLET END SECTION.
6. THE DIMENSIONS FOR END SECTIONS SHALL SUBSTANTIALLY AGREE WITH THE TABLE. MINOR VARIATIONS WILL BE PERMITTED BASED ON THE MANUFACTURER'S STANDARD FORMS AND TEMPLATES.
7. NOT TO BE USED IN NCDOT MAINTAINED RIGHT OF WAY.

TABLE OF DIMENSIONS							
D	T	A	B	C	E	L	WT.
12"	2-1/4"	4"	2'-0"	4'-1"	2'-0"	6'-1"	730
15"	2-1/4"	6"	2'-3"	3'-10"	2'-0"	6'-1"	730
18"	2-1/2"	9"	2'-3"	3'-10"	3'-0"	6'-1"	1190
24"	3"	10"	3'-8"	2'-6"	4'-0"	6'-2"	1770
30"	3-1/2"	1'-0"	4'-6"	1'-8"	5'-0"	6'-2"	2380
36"	4"	1'-3"	5'-3"	2'-11"	6'-0"	8'-2"	5320
42"	4-1/2"	1'-9"	5'-3"	2'-11"	6'-6"	8'-2"	5920
48"	5"	2'-0"	6'-0"	2'-2"	7'-0"	8'-2"	7470
54"	5-1/2"	2'-3"	5'-6"	2'-10"	7'-6"	8'-4"	8810
60"	6"	2'-6"	5'-0"	3'-3"	8'-0"	8'-3"	11180
66"	6-1/2"	3'-0"	6'-0"	2'-3"	8'-6"	8'-3"	12530
72"	7"	3'-0"	6'-6"	1'-9"	9'-0"	8'-3"	13980

NOT TO SCALE

FLARED END SECTION
12" THRU 72" PIPE

REV.	STD. NO.
1	3020

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

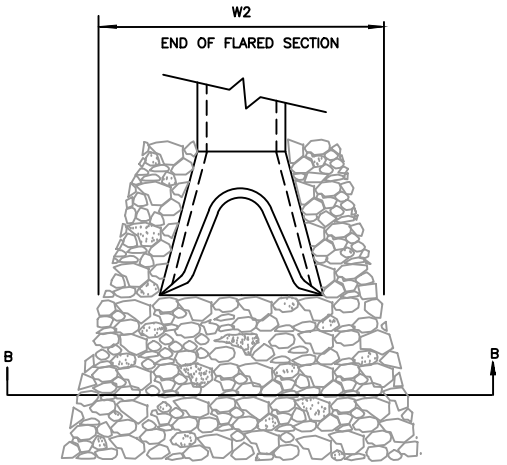
NOTES:

1. CLASS OR MEDIAN SIZE OF RIPRAP AND LENGTH, WIDTH AND DEPTH OF APRON TO BE DESIGNED BY THE ENGINEER.
2. REFER TO THE NCDEQ EROSION CONTROL DESIGN MANUAL MANUAL FOR RIPRAP APRON DESIGN STANDARDS.
3. RIPRAP SHOULD EXTEND UP BOTH SIDES OF THE APRON AND AROUND THE END OF THE PIPE OR CULVERT AT THE DISCHARGE OUTLET AT A MAXIMUM SLOPE OF 2:1 AND A HEIGHT NOT LESS THAN TWO THIRDS THE PIPE DIAMETER OR CULVERT HEIGHT.
4. THERE SHALL BE NO OVERFLOW FROM THE END OF THE APRON TO THE SURFACE OF THE RECEIVING CHANNEL. THE AREA TO BE PAVED OR RIPRAPPED SHALL BE UNDERCUT SO THAT THE INVERT OF THE APRON SHALL BE AT THE SAME GRADE (FLUSH) WITH THE SURFACE OF THE RECEIVING CHANNEL. THE APRON SHALL HAVE A CUTOFF OR TOE WALL AT THE DOWNSTREAM END.
5. THE WIDTH OF THE END OF THE APRON SHALL BE EQUAL TO THE BOTTOM WIDTH OF THE RECEIVING CHANNEL. MAXIMUM TAPER TO RECEIVING CHANNEL 5:1
6. ALL SUBGRADE FOR STRUCTURE TO BE COMPACTED TO 95% SPD OR GREATER.
7. THE PLACING OF FILL, EITHER LOOSE OR COMPACTED IN THE RECEIVING CHANNEL SHALL NOT BE ALLOWED.
8. NO BENDS OR CURVES IN THE HORIZONTAL ALIGNMENT OF THE APRON WILL BE PERMITTED.
9. FILTER FABRIC SHALL BE INSTALLED ON COMPACTED SUBGRADE PRIOR TO PLACEMENT OF RIP RAP.
10. ANY DISTURBED AREA FROM END OF APRON TO RECIEVING CHANNEL MUST BE STABILIZED.
11. RIP RAP MUST BE KEYED FLUSH WITH THE GROUND.

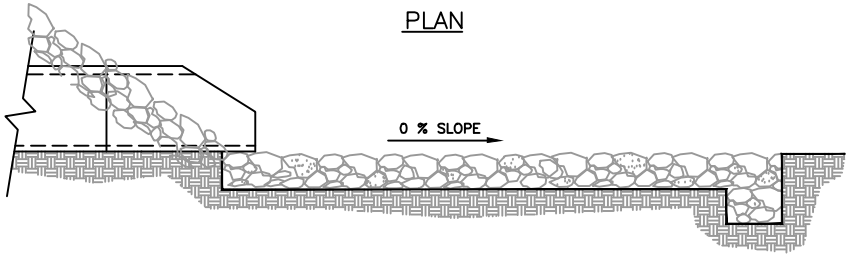
USE USDA NOMOGRAPH FROM NC SEDIMENT AND EROSION CONTROL MANUAL FOR DESIGN DATA

OUTLET	La	W1	W2	*T	H

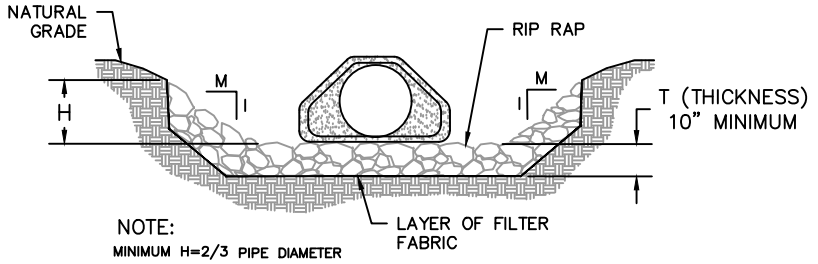
* d50 (see fig 8.06 a&b "NC SEDIMENT AND EROSION CONTROL MANUAL"
dmax = 1.5 x d50
T = 1.5 X dmax.
T(min.)=10"



PLAN



PROFILE



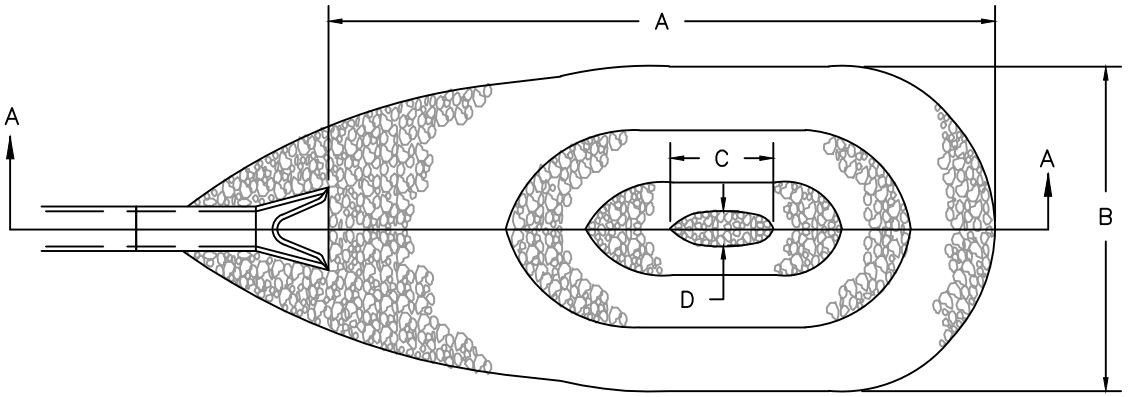
SECTION B–B

NOT TO SCALE

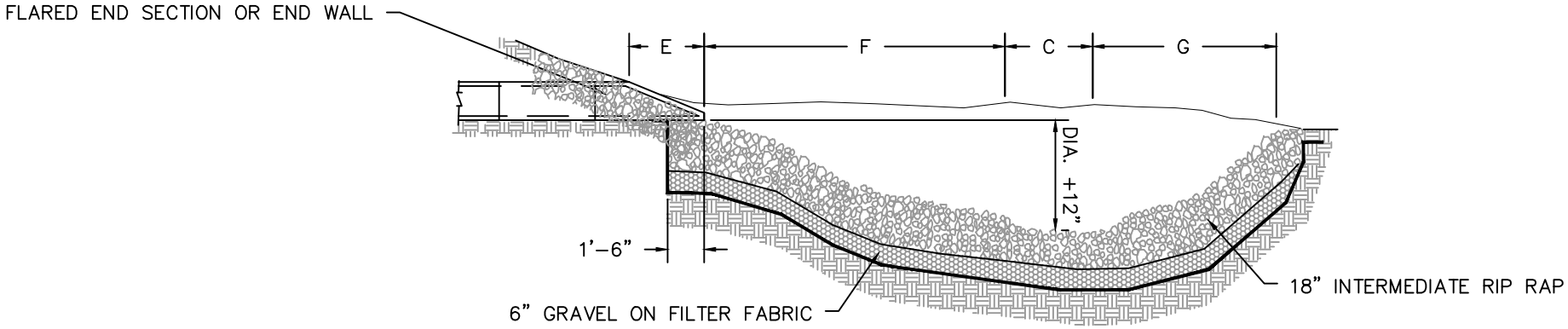
RIP RAP APRON AT PIPE OUTFALLS

REV.	STD. NO.
1	3021

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS



PLAN



SECTION A–A

NOTE

1. THIS DETAIL IS TO ONLY BE USED WHEN OUTFALL HAS A CONTINUOUS FLOW OF WATER AND WITH PRIOR APPROVAL OF THE CITY ENGINEER.
2. RIP RAP MUST BE KEYED FLUSH WITH THE GROUND

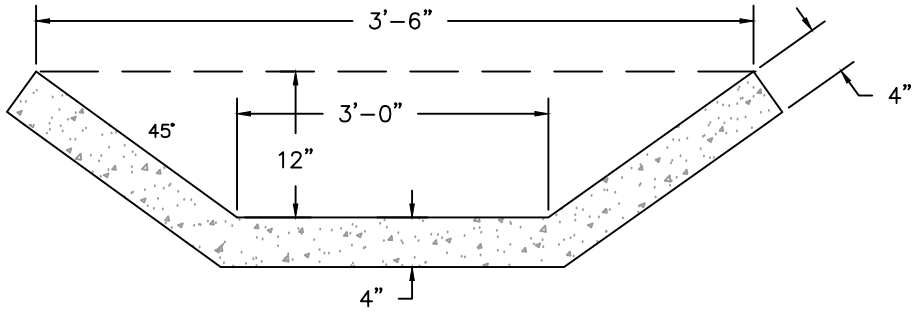
PIPE SIZE	A	B	C	D	E	F	G	WT. RIP RAP IN TONS
15"	10'	7'	1 1/2'	1'	1'	4 1/2'	3'	6
18"	12'	8'	2'	1'	1'	5'	4'	8
21"	15'	9'	2 1/2'	1 1/2'	1'	7'	4 1/2'	12
24"	17'	10'	2 1/2'	1 1/2'	1'	8'	5 1/2'	15
30"	20'	13'	3'	2'	2'	9'	6'	22
36"	24'	16'	3 1/2'	2'	2'	9 1/2'	7'	33

NOT TO SCALE

RIP RAP PLUNGE POOL

REV.	STD. NO.
1	3022

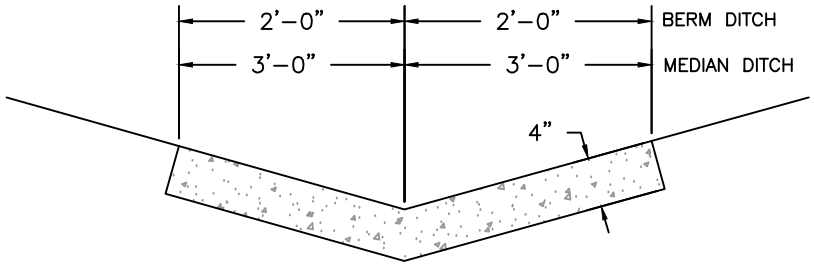
CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS



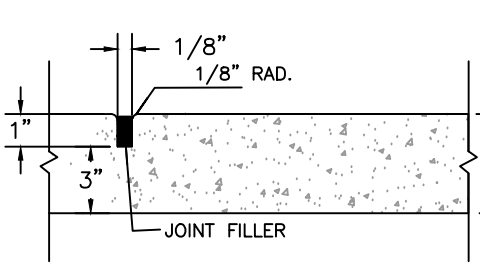
SLOPE DRAIN, BASE DITCH OR BERM DRAINAGE OUTLET DITCH

GENERAL NOTES:

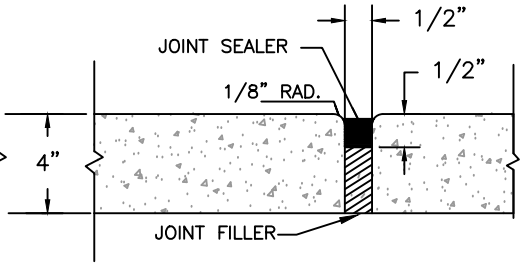
1. IN THE 4" CONCRETE PAVED DITCHES PLACE 1/2" EXPANSION JOINT AT 30 FT INTERVALS AND AT ALL OTHER POINTS WHERE PROPOSED DITCHES ABUT RIGID OBJECTS. PLACE GROOVED JOINTS 1" DEEP AT 10' INTERVALS BETWEEN EXPANSION JOINTS.
2. WIDTH AND SHAPE OF PROPOSED 4" CONCRETE PAVED DITCHES SHALL BE AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. ALL CONCRETE TO BE 3500 P.S.I. COMPRESSIVE STRENGTH.



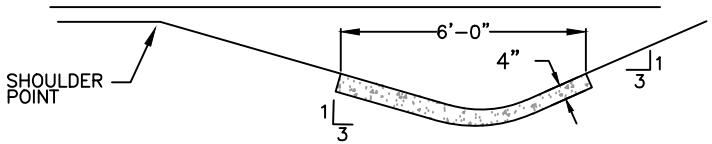
MEDIAN OR BERM DITCH



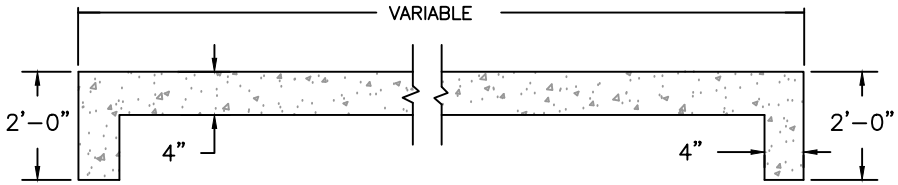
SHOWING GROOVED JOINT



SHOWING EXPANSION JOINT



SIDE DITCH



LONGITUDINAL SECTION OF PAVED DITCH

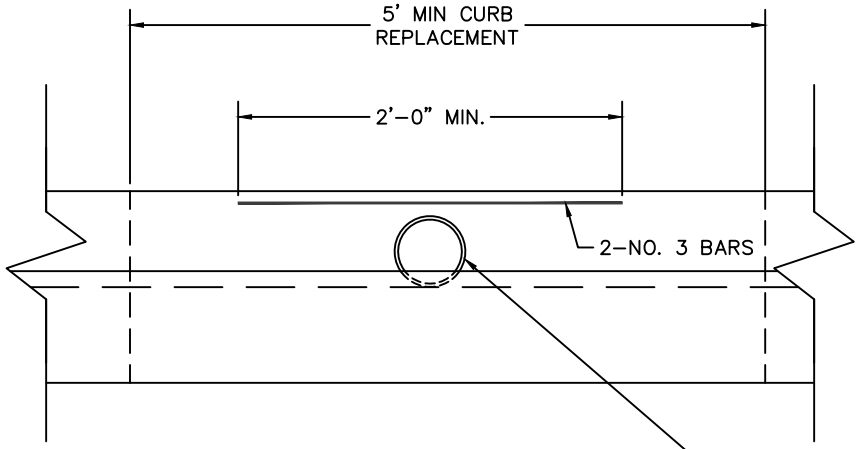
SHOWING 2'–0" CURTAIN WALL REQUIRED AT EACH END

NOT TO SCALE

CONCRETE PAVED DITCHES

REV.	STD. NO.
1	3023

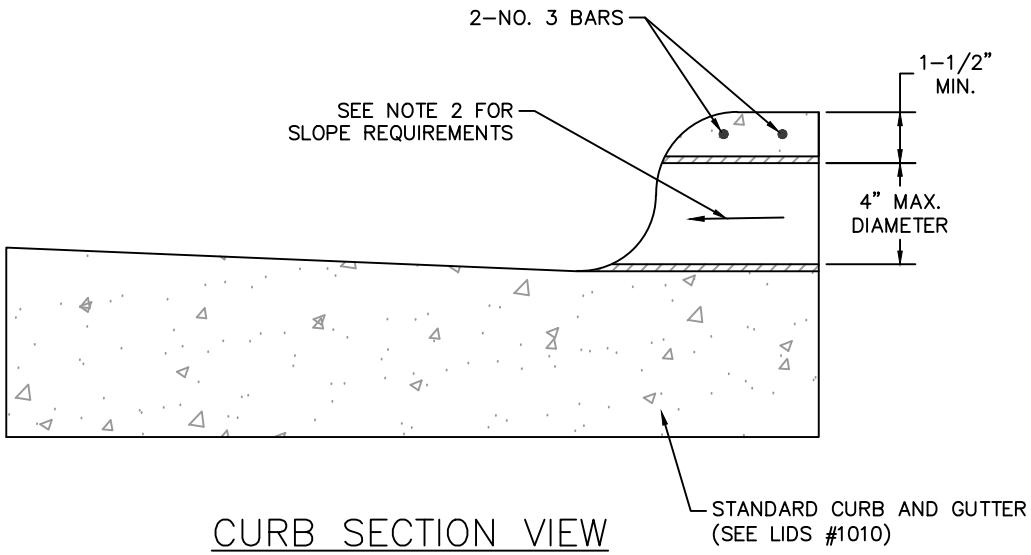
CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS



CURB PROFILE VIEW

NOTES:

1. CURB DRAINS SHALL NOT BE CONSTRUCTED WITHIN 18" OF A CONTRACTION OR EXPANSION JOINT.
2. OPENING GRADE MAY VARY BETWEEN A MAXIMUM SLOPE OF 1/2" PER FOOT AND A MINIMUM OF 1/4" PER FOOT.
3. MORE THAN ONE HOLE MAY BE INSTALLED PROVIDED THE HOLES HAVE A MINIMUM SEPARATION OF 18".
4. STEEL COVERED CHANNEL IS USED WHEN SIDEWALK IS PRESENT.
5. CURB DRAINS MAY ONLY BE INSTALLED WITH PRIOR APPROVAL FROM THE CITY ENGINEER.



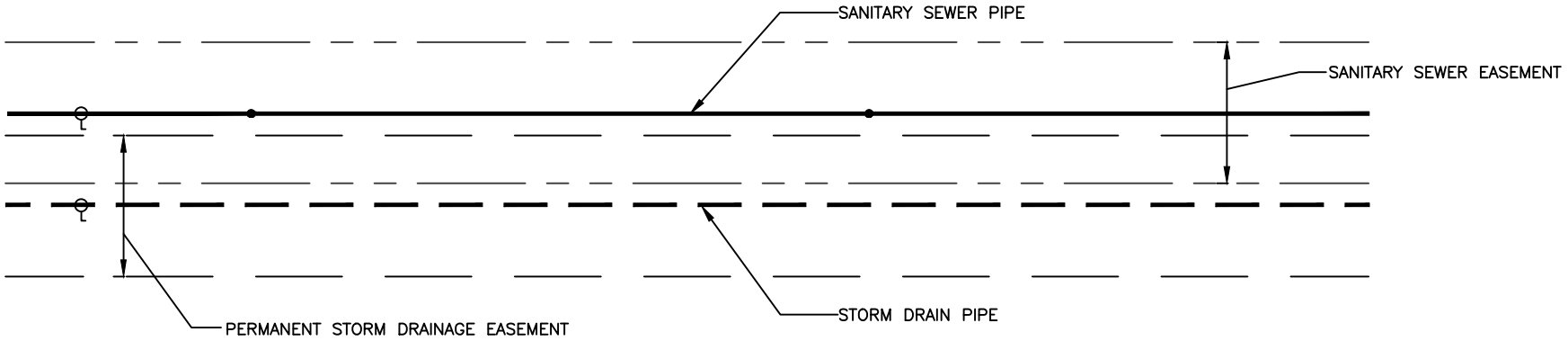
CURB SECTION VIEW

NOT TO SCALE

CURB DRAIN

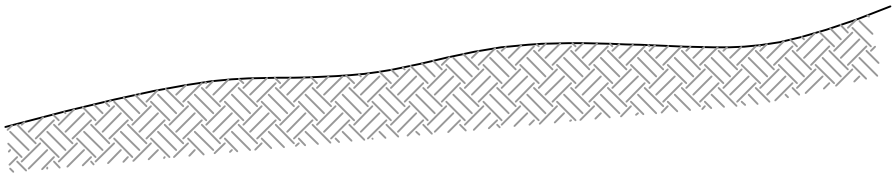
REV.	STD. NO.
1	3024

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

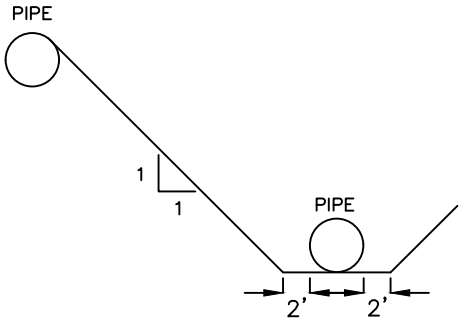


THE SANITARY SEWER AND STORM DRAINAGE EASEMENTS MAY OVERLAP; HOWEVER THE PIPE AND ASSOCIATED STRUCTURES MUST NOT BE IN THE OTHER UTILITY'S EASEMENT. FOR SANITARY SEWER EASEMENT WIDTHS REFER TO THE SANITARY SEWER AND WATER DESIGN MANUAL. THIS DETAIL DOES NOT APPLY TO STORM DRAINAGE UTILIZING OPEN CHANNEL FLOW.

PLAN VIEW



THE VERTICAL SEPARATION GUIDELINE WILL BE USED UP TO THE POINT WHERE THE TWO EASEMENTS ADJOIN EACH OTHER.



THE SANITARY SEWER AND STORM DRAINAGE PIPES MUST BE NO CLOSER TOGETHER HORIZONTALLY THAN THE VERTICAL DISTANCE BETWEEN THE TOP OF THE HIGHER PIPE AND THE BOTTOM OF THE LOWER PIPE. A MAINTENANCE CREW MUST BE ABLE TO DIG DOWN TO THE LOWER PIPE SLOPING THE DITCH ON A 1:1 SLOPE UP FROM THE REQUIRED TRENCH BOTTOM WIDTH AND NOT EXPOSE THE HIGHER PIPE.

SECTION VIEW

NOT TO SCALE

REV.	STD. NO.
1	3025

OVERLAPPING STORM DRAINAGE/SANITARY SEWER EASEMENTS

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

GENERAL NOTES:

1. FOR STREAMS CARRYING 500 ACRES OR MORE OF SURFACE RUNOFF, THE EASEMENT REQUIREMENT IS TO BE THE WIDTH OF THE STREAM FROM TOP OF BANK TO TOP OF BANK, PLUS (+) 10' ON EACH SIDE OF STREAM. (40' MINIMUM WIDTH)

2. FOR OPEN CHANNELS THE MINIMUM EASEMENT MUST CONTAIN THE WIDTH OF THE STREAM FROM TOP OF BANK TO TOP BANK.

3. EASEMENT WIDTHS SHALL INCREASE BY TEN FEET IN OVERALL WIDTH FROM WHAT IS SHOWN IN THE TABLE FOR EVERY ADDITIONAL TEN FEET IN DEPTH BEYOND THE INITIAL TEN FEET.

4. PIPE SYSTEMS AND OPEN CHANNELS ON PRIVATE PROPERTY SHALL BE PLACED IN A PERMANENT DRAINAGE EASEMENT (PDE).

EASEMENT REQUIREMENTS FOR
OPEN STORM DRAINAGE CHANNELS

AREA TO CHANNEL (AC)	MINIMUM EASEMENT WIDTH
<45	20'
45–120	30'
120–500	40'
>500	SEE NOTE 1

EASEMENT REQUIREMENTS FOR STORM DRAINAGE PIPES

PIPE SIZE	MINIMUM EASEMENT WIDTH
≤15"	15'
18"	15'
24"	15'
30"	20'
36"	20'
42"	25'
48"	25'
≥54"	30'MIN (VARIES)

NOT TO SCALE

REV.	STD. NO.
1	3026

MINIMUM EASEMENT REQUIREMENTS FOR STORM PIPES AND OPEN CHANNELS

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

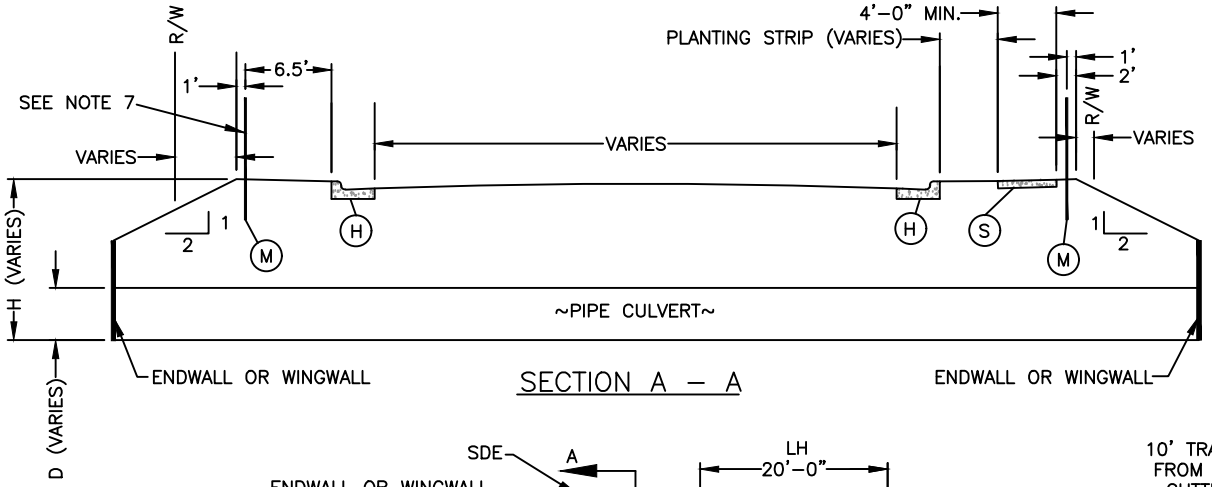
(H) 2'–6" OR 2'–0" STANDARD CURB AND GUTTER, STD. PER 1010

(M) SAFETY RAIL, STD. 5001A & B

(S) 4'–0" (MIN.) SIDEWALK, STD. 1016

(H1) 2'–0" VALLEY GUTTER. STD. 1011

(H2) CURB TRANSITION STANDARD CURB AND GUTTER TO 2'–0" VALLEY GUTTER, STD. 1014

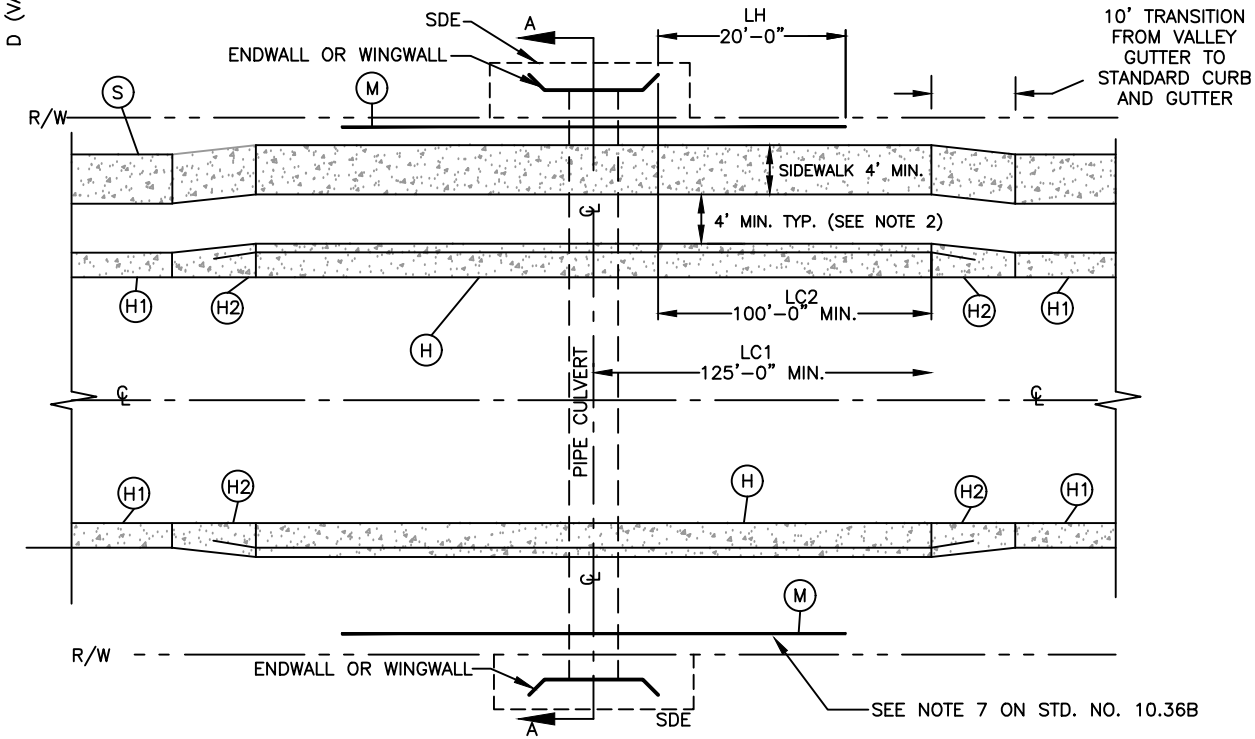


SECTION A – A

LH = DISTANCE FROM END OF WINGWALL TO END OF SAFETY RAIL.

LC1 = DISTANCE FROM ℄ OF CULVERT TO END OF 2'–6" CURB AND GUTTER GUTTER.

LC2 = DISTANCE FROM END OF WINGWALL TO END OF 2'–6" CURB AND GUTTER.



NOT TO SCALE

NOTES:

1. SEE STD. NO. 3027B FOR GENERAL NOTES AND CLEAR ZONE DISTANCES.
2. AN ALTERNATIVE FOR STREETS WITH WIDER PLANTING STRIPS AND SIDEWALKS: IN LIEU OF A PLANTING STRIP ALONG THE CULVERT CROSSING, PROVIDE A MINIMUM 8–FOOT WIDE SIDEWALK LOCATED AT THE BACK OF CURB, FOR LENGTH "LC1" ON EITHER SIDE OF THE CULVERT CENTERLINE.

CULVERT CROSSINGS ON RESIDENTIAL AND COMMERCIAL STREETS

REV.	STD. NO.
1	3027A

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

GENERAL NOTES:

1. UNLESS OTHERWISE DETERMINED BY THE CITY ENGINEER, THE MEASURES ILLUSTRATED SHALL BE USED WHEN CULVERT DIAMETER, D, IS GREATER THAN OR EQUAL TO 24 INCHES AND WHEN THE DIFFERENCE IN ELEVATION BETWEEN THE CULVERT INVERT AND THE TOP OF SLOPE, H, IS GREATER THAN OR EQUAL TO 5 FEET.
2. INSTALLATION OF 2'–6" CURB AND GUTTER MAY NOT BE REQUIRED WHEN AN ADEQUATE CLEAR ZONE IS PROVIDED FOR VEHICLES WITH A MAXIMUM OF 6:1 SLOPE (SEE TABLE 1).
3. INSTALLATION OF SAFETY RAIL MAY NOT BE REQUIRED WHEN A 10–FOOT PEDESTRIAN CLEAR ZONE IS PROVIDED BEHIND THE SIDEWALK WITH A MAXIMUM OF 6:1 SLOPE. WHERE NO SIDEWALK IS REQUIRED, INSTALLATION OF SAFETY RAIL MAY NOT BE REQUIRED WHEN A 15–FOOT PEDESTRIAN CLEAR ZONE IS PROVIDED BEHIND THE CURB WITH A MAXIMUM OF 6:1 SLOPE.
4. FOR CULVERT CROSSINGS WITHOUT ENDWALLS, LH AND LC2 SHALL BE MEASURED FROM THE OUTSIDE OF THE NEAREST WALL OF THE CULVERT BARREL.
5. FOR MULITIPLE BARREL CULVERT CROSSINGS, LC1 SHALL BE MEASURED FROM THE CENTERLINES OF THE OUTBOARD CULVERT BARRELS.
6. WHEN NECESSARY, AS DETERMINED BY THE CITY ENGINEER, ADDITIONAL MEASURES MAY BE REQUIRED.
7. INSTALLATION OF SAFETY RAIL IS REQUIRED ON BOTH SIDES OF STREET IF SIDEWALK IS REQUIRED ON BOTH SIDES.
8. INSTALLATION OF SAFETY RAIL IS REQUIRED ON BOTH SIDES OF STREET IF NO SIDEWALK IS REQUIRED EXCEPT WHEN A 15–FOOT PEDESTRIAN CLEAR ZONE IS PROVIDED BEHIND THE CURB WITH A MAXIMUM OF 6:1 SLOPE.
9. INSTALLATION OF SAFETY RAIL IS REQUIRED ON THE SIDEWALK SIDE OF STREET IF SIDEWALK IS ONLY REQUIRED ON ONE SIDE OF STREET. INSTALL EITHER SAFTEY RAIL OR 15–FT CLEAR ZONE ON SIDE WITHOUT SIDEWALK.
10. DESIGN ADT IS CALCULATED ASSUMING A TRIP GENERATION OF 10 DAILY TRIPS PER SINGLE FAMILY DWELLING UNIT.

TABLE 1.
CLEAR ZONE DISTANCES
LOCAL, COLLECTOR, AND COMMERCIAL STREETS

DESIGN ADT	CLEAR ZONE FROM EDGE OF PAVEMENT	
	TANGENT SECTION	CURVE (WITHIN 125' OF CULVERT)
UNDER 750	10'	15'
750 – 1500	12'	18'
1501 – 6000	14'	21'
OVER 6000	16'	24'

SEE STD. NO. 3027A FOR PLAN AND CROSS SECTIONAL SCHEMATICS.

NOT TO SCALE

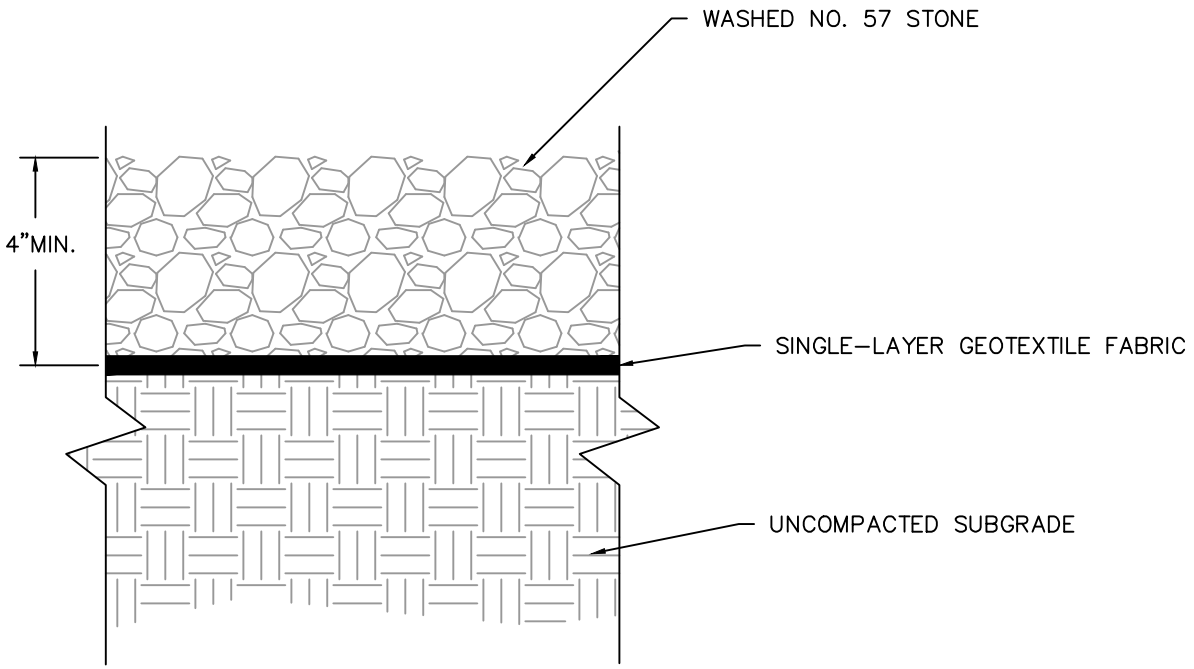
CULVERT CROSSINGS ON RESIDENTIAL AND COMMERCIAL STREETS

REV.	STD. NO.
1	3027B

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS

NOTES:

1. THE USE OF THIS DETAIL IS NOT PERMITTED WITHOUT PRIOR APPROVAL FROM THE STORMWATER ADMINISTRATOR.
2. THIS DETAIL MAY ONLY BE APPROVED FOR AREAS THAT EXPERIENCE VEHICULAR TRAFFIC 2 TIMES OR LESS PER MONTH.
3. THE STONE LAYER SHALL NOT BE LESS THAN 4–INCHES.
4. THE SUBGRADE SHALL NOT BE MECHANICALLY COMPACTED OR MATERIAL THAT IS IMPERVIOUS BY NATURE (CONCRETE, ASPHALT, CRUSHER RUN, ETC.).
5. THE USE OF UNDER–DRAINS IN CONJUNCTION WITH THIS DETAIL IS NOT PERMITTED.
6. THE STORM WATER ADMINISTRATOR SHALL BE CONTACTED NO LESS THAN 48–HOURS PRIOR TO INSTALLATION (336) 248–3980.



NOT TO SCALE

PERMEABLE GRAVEL

REV.	STD. NO.
1	3028

CITY OF LEXINGTON
INFRASTRUCTURE
DEVELOPMENT STANDARDS