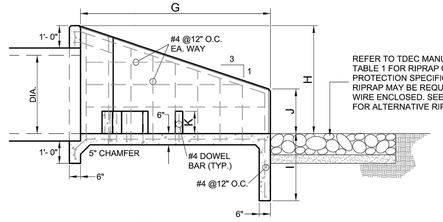
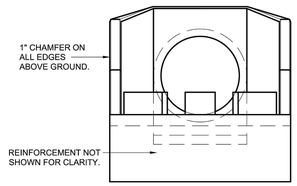
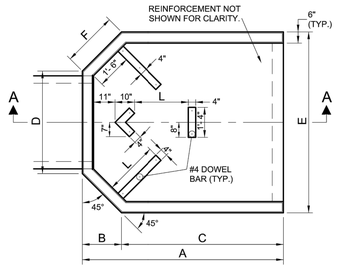


SECTION A-A

REFER TO TDEC MANUAL, BMP OP-1, TABLE 1 FOR RIPRAP OUTLET PROTECTION SPECIFICATIONS. RIPRAP MAY BE REQUIRED TO BE WIRE ENCLOSED. SEE SECTION 02370 FOR ALTERNATIVE RIPRAP OPTION.



END VIEW



PLAN

TABLE OF DIMENSIONS AND DIAMETERS

DIM	15"	18"	21"	24"	30"	36"	42"	48"	54"	60"	72"
A	5'-3"	5'-7"	5'-7"	5'-8"	5'-9"	7'-5"	9'-0"	9'-2"	10'-9"	12'-6"	15'-6"
B	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"
C	3'-1"	3'-4"	3'-10"	3'-11"	4'-0"	5'-8"	7'-3"	7'-5"	9'-0"	10'-9"	13'-9"
D	2'-0"	2'-4"	2'-7"	2'-10"	3'-5"	4'-0"	4'-7"	5'-2"	5'-9"	6'-5"	7'-9"
E	5'-5"	5'-9"	6'-0"	6'-3"	6'-11"	7'-6"	8'-1"	8'-8"	9'-3"	9'-11"	11'-3"
F	2'-4"	2'-4"	2'-4"	2'-4"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"
G	4'-9"	5'-1"	5'-1"	6'-0"	6'-3"	6'-11"	8'-6"	8'-8"	10'-3"	12'-0"	15'-0"
H	2'-5"	2-8"	2'-11"	3'-3"	3'-9"	4'-4"	4'-10"	5'-5"	5'-11"	6'-6"	7'-6"
I	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"	3'-0"
J	0'-10"	1'-0"	1'-3"	1'-6"	2'-0"	2'-0"	2'-0"	2'-6"	2'-6"	2'-6"	2'-6"
K	0'-8"	0'-8"	0'-8"	0'-8"	1'-0"	1'-0"	1'-0"	1'-0"	1'-3"	1'-3"	1'-6"
L	1'-5"	1'-6"	1'-7"	1'-9"	1'-11"	2'-2"	2'-5"	2'-6"	2'-9"	3'-0"	3'-6"

NOTE: PRECAST CONCRETE TO BE CLASS "AS", 4000 PSI, 28 DAY STRENGTH, MINIMUM.

TYPE "E" HEADWALL WITH WINGWALLS

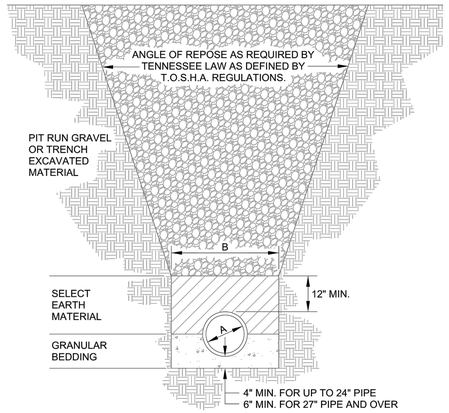
NOT TO SCALE

B1 — NTS

CITY OF LAKELAND ENGINEERING DIVISION

TYPE "E" HEADWALL

REV.	DESCRIPTION	DATE
1	ORIGINAL ISSUE	8/2008



"A" PIPE SIZE	8"	10"	12"	15"	18"	24"
"B" TRENCH WIDTH	36"	36"	36"	36"	42"	45"

CLASS C BEDDING - RIGID PIPING

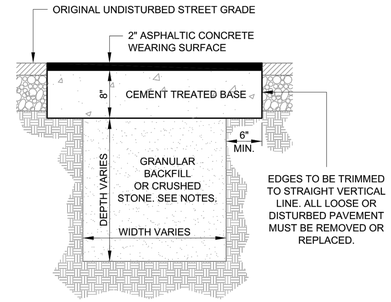
NOT TO SCALE

B3 — NTS

CITY OF LAKELAND ENGINEERING DIVISION

CLASS C BEDDING - RIGID PIPING

REV.	DESCRIPTION	DATE
1	ORIGINAL ISSUE	8/2008



NOTES:

1. SAND MAY BE USED AS BACKFILL MATERIAL IN TRENCHES 6' DEEP OR LESS.
2. ANY TRENCH GREATER THAN 6' IN DEPTH SHALL BE REQUIRED TO BE BACKFILLED WITH CR610 CRUSHED STONE OR AS DIRECTED BY THE CITY ENGINEER.
3. CEMENT TREATED BASE MUST BE PLACED AND COMPACTED WITHIN 3 HOURS OF DISPATCH.
4. GRANULAR BACKFILL MATERIAL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY.

TYPICAL PAVEMENT REPAIR DETAIL

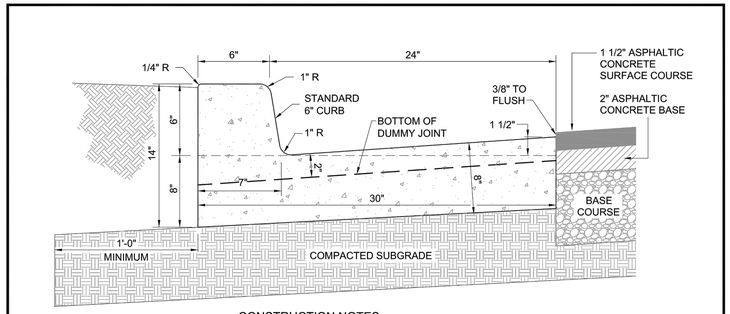
NOT TO SCALE

B4 — NTS

CITY OF LAKELAND ENGINEERING DIVISION

TYPICAL PAVEMENT REPAIR DETAIL

REV.	DESCRIPTION	DATE
1	ORIGINAL ISSUE	8/2008



CONSTRUCTION NOTES:

1. PRECUT EXPANSION JOINT MATERIAL WILL BE USED IN ALL EXPANSION JOINTS.
2. DUMMY JOINTS WILL BE INSTALLED AT 10' MAXIMUM INTERVALS.
3. EXPANSION JOINTS WILL BE INSTALLED AT 40' O.C. MAX.
4. EXPANSION JOINTS WILL BE INSTALLED AT ENDS OF RADII.
5. EXPANSION JOINTS WILL BE LOCATED ADJACENT TO INLET STRUCTURES.
6. CONCRETE WILL BE CLASS "AS" CONCRETE, 4000 PSI.
7. SEE DETAIL FOR EXPANSION JOINTS.

6-30 CURB AND GUTTER

NOT TO SCALE

C1 — NTS

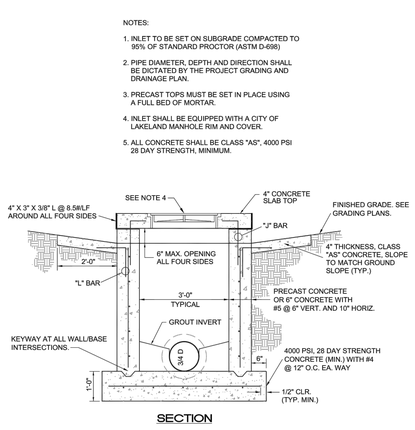
CITY OF LAKELAND ENGINEERING DIVISION

6-30 CURB AND GUTTER

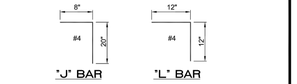
REV.	DESCRIPTION	DATE
1	ORIGINAL ISSUE	8/2008

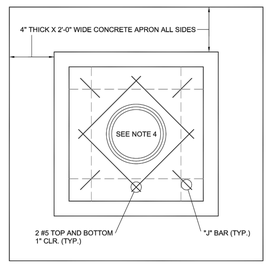
NOTES:

1. INLET TO BE SET ON SUBGRADE COMPACTED TO 95% OF STANDARD PROCTOR (ASTM D-698)
2. PIPE DIAMETER, DEPTH AND DIRECTION SHALL BE DICTATED BY THE PROJECT GRADING AND DRAINAGE PLAN.
3. PRECAST TOPS MUST BE SET IN PLACE USING A FULL BED OF MORTAR.
4. INLET SHALL BE EQUIPPED WITH A CITY OF LAKELAND MANHOLE RIM AND COVER.
5. ALL CONCRETE SHALL BE CLASS "AS", 4000 PSI 28 DAY STRENGTH, MINIMUM.



SECTION





PLAN VIEW

STANDARD 3' X 3' INLET

NOT TO SCALE

C2 — NTS

CITY OF LAKELAND ENGINEERING DIVISION

STANDARD 3' X 3' INLET

REV.	DESCRIPTION	DATE
1	ORIGINAL ISSUE	8/2008

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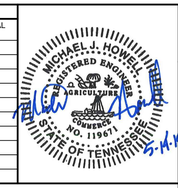
mcbeth
I:\2018\18390\2_Civil\Others\Maple Grove\18390-DETAILS.dwg
Wed, 15 May 2019 - 8:17am
PLOT SCALE: LATEST REV:

REVISION		
ITEM NO.	DESCRIPTION OF CHANGE	APPROVAL DATE



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THE GROVE AT LAKELAND
STORM DRAINAGE ADDITIONS

ENGINEER: A2H, INC.

SHEET 8 OF 8

DIVISION OF ENGINEERING

DETAILS

LOCATION:

SURVEY: MLS DATE: 03/18/19 BOOK:

DRAWN BY: A2H DATE: 05/08/19 SCALE: AS NOTED

DESIGN BY: A2H DATE: 05/08/19 PROJECT: 18390

REVIEWED BY:

CITY ENGINEER DATE