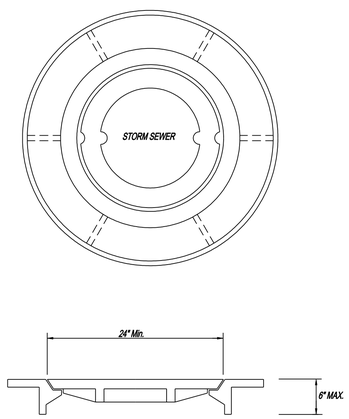
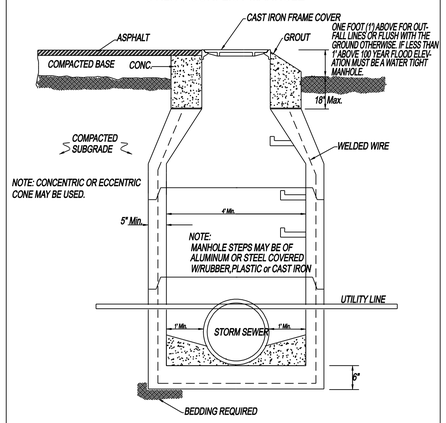
CAST IRON RING AND COVER DETAIL



CAST IRON FRAME AND COVER
NON TRAFFIC RATED

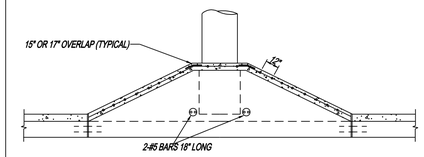
UTILITY CONFLICT MANHOLE



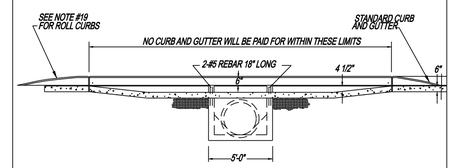
SECTIONAL ELEVATION

NOTES:
1. INSTALL JUNCTION BOX WHEN THERE IS A CONFLICT BETWEEN STORM SEWER AND OTHER UTILITY LINES.
2. IF THE CONFLICTING UTILITY LINE IS A SANITARY SEWER LINE, REPLACE THE V.C. OR PVC. PIPE WITH DUCTILE IRON PIPE.
3. IF POSSIBLE INSTALL THE CONFLICTING UTILITY IN THE UPPER 1/3 OF THE STORM SEWER.

DOUBLE WING INLET

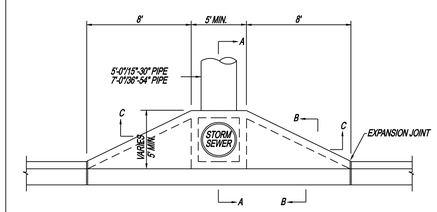


DOUBLE WING INLET SLAB SECTION

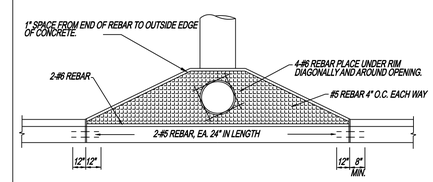


DOUBLE WING INLET ELEVATION

DOUBLE WING INLET

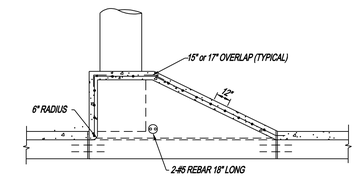


DOUBLE WING INLET PLAN

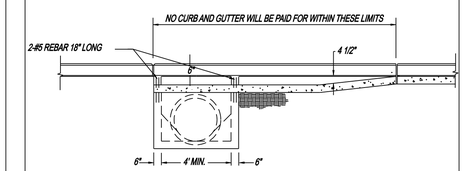


DOUBLE WING INLET TOP SECTION

SINGLE WING INLET

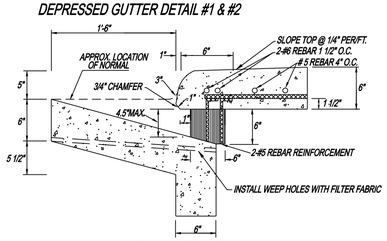


SINGLE WING INLET SLAB SECTION

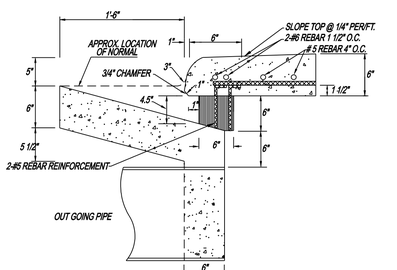


SINGLE WING INLET ELEVATION

DEPRESSED GUTTER DETAIL #1 & #2

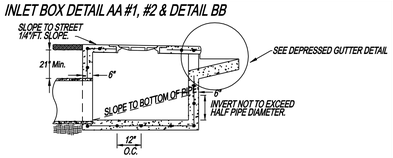


DEPRESSED GUTTER DETAIL #1

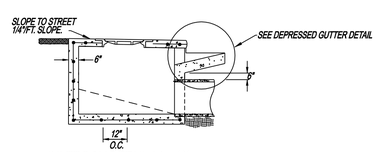


DEPRESSED GUTTER DETAIL #2

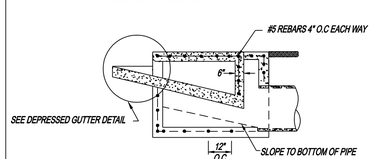
INLET BOX DETAIL AA #1, #2 & DETAIL BB



INLET BOX DETAIL AA (#1)

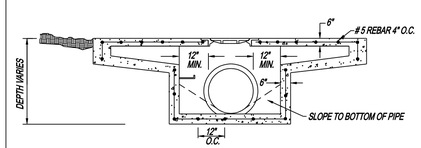


INLET BOX DETAIL AA (#2)

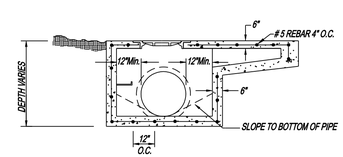


INLET BOX DETAIL BB

DOUBLE WING INLET

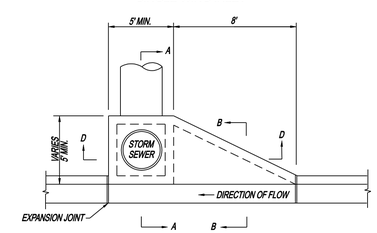


DOUBLE WING INLET DETAIL CC

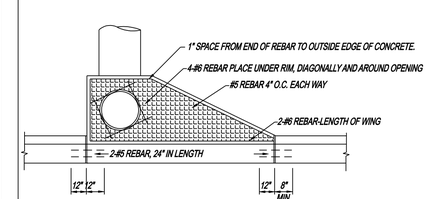


SINGLE WING INLET DETAIL DD

SINGLE WING INLET



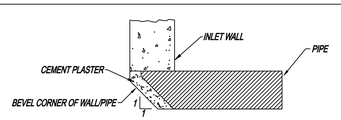
SINGLE WING INLET PLAN



SINGLE WING TOP SECTION

NOTES:

1. HEADWALL AND WINGWALLS SHALL HAVE A RUBBED SMOOTH FINISH. PIPE SHALL BE CUT FLUSH WITH THE INSIDE FACE OF THE HEADWALL.
2. JUNCTION BOX INVERTS SHALL BE SMOOTH AND APPROXIMATE THE CROSS SECTION OF THE PIPE USED. AT LEAST 0.26' OF FALL IS REQUIRED ACROSS ALL JUNCTION BOXES AND/OR INLETS. THE FLOOR SHALL BE SLOPED TO DRAIN ALL WATER TO THE INVERT. ALL PIPE SHALL BE CUT FLUSH WITH THE FACE OF THE JUNCTION BOX AND INLET JUNCTION BOX.
3. CAST IRON FRAME AND COVER SHALL WEIGH 375 POUNDS IN TRAFFIC AND 325 POUNDS OFF TRAFFIC.
4. ALL PIPES SHALL BE LAID WITH ENDS ABBUTTING AND TRUE TO LINE AND GRADE. PIPE SHALL BE PITTED AND MATCHED TO FORM A LINE WITH A SMOOTH, UNIFORM INVERT. GROUT SHALL THEN BE APPLIED SMOOTHLY TO THE OUTSIDE TOP TWO THIRDS AND THE INSIDE BOTTOM ONE HALF TO WATER PROOF ALL PIPE.
5. PRECAST MANHOLES MAY BE USED FOR PIPE UP TO 36". LARGER SIZES MUST BE APPROVED PRIOR TO USE.
6. FOR PIPE SIZES LARGER THAN 42", HEADWALLS SHALL BE AS SPECIFED BY THE CITY ENGINEER.
7. INLETS SHALL NOT BE PLACED IN A RADIUS OF INTERSECTING STREETS OR DRIVES.
8. PRECAST ITEMS MUST BE APPROVED PRIOR TO USE.
9. CHAMFER STRIPS ARE REQUIRED ON ALL HEADWALL EDGES.
10. RIPRAP IS REQUIRED AT ALL PIPE OUTLETS WITH GEOFABRIC. THE SIZE OF THE PAD SHALL BE AS DESIGNED BY THE ENGINEER BUT SHALL BE CONSTRUCTED PER THE DETAIL.
11. DISTANCE FROM RADIUS POINT TO EXISTING EXPANSION OR CONSTRUCTION JOINT SHALL BE AT LEAST 3.0'. IF LESS THAN 3.0', CURB AND GUTTER SHALL BE REPLACED TO EXISTING JOINT.
12. MINIMUM INSIDE DIMENSION OF JUNCTION BOXES AND INLETS SHALL BE 4 FEET.
13. TOP OF INLET SHALL BE THE SAME ELEVATION AS ADJOINING CURB AND GUTTER.
14. 2" MINIMUM WEEP HOLES SHALL BE CONSTRUCTED IN INLETS AS DIRECTED BY THE ENGINEER TO FACILITATE SUBGRADE DRAINAGE.
15. IF INLETS ALSO SERVES AS A JUNCTION BOX, CONTOUR BOTTOM AS PER JUNCTION BOX REQUIREMENTS.
16. MORTAR: A CONCRETE MIX EQUIVALENT TO AT LEAST A 3000 PSI STABILITY.
17. NUMBER 5 REBAR SHALL BE INSTALLED INTO ALL CURB AND GUTTER COLD JOINT TIE INS. AT ALL INLETS & JUNCTION BOXES, OR TO BE DETERMINED BY THE PROJECT ENGINEER/ PROJECT INSPECTOR.
18. INSTALL CAST IRON STEPS IN JUNCTION BOXES OR INLET EVERY 16" ON CENTER ACCESSIBLE TO MANHOLE COVER. AT LEAST ONE STEP IS REQUIRED PER BOX, MINIMUM.
19. FOUR FOOT (4') MINIMUM TRANSITIONS FROM ROLL CURB TO STANDARD CURB AND GUTTER TO ALLOW STANDARD INLET TO BE CONSTRUCTION.
20. INVERTS SHALL BE POURED CONCRETE. NO BRICK OR ROCKS SHALL BE USED AS FILLER MATERIAL.
21. #5 BARS REQUIRED IN GUTTER.
22. INVERTS SHALL NOT EXCEED HALF THE DIAMETER OF THE PIPE. NO FLAT AREAS ARE PERMITTED.
23. INLET TOPS SHALL BE SLOPED AT 1/4"/ft TOWARD THE STREET (SEE DETAIL)
24. CONCRETE USED FOR STORM STRUCTURES MUST HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 psi.
25. MODIFIED INLETS MUST HAVE SAME CARRYING CAPACITY AS STANDARD INLETS. DIMENSIONS/DETAILS MUST BE APPROVED BY CITY OF ATHENS PRIOR TO INSTALLATION.
26. HDPE CAN BE USED FROM RIGHT OF WAY OUT WITH CITY OF ATHENS APPROVAL.



BEVELLED RING

(POURED IN PLACE APPLICATION)

STANDARD DETAILS: STORM SEWER SHEET NO 1 of 2

PROJECT TITLE:

DEPARTMENT:	Public Works	REVISIONS:
SCALE:	NTS	
IMPLEMENTED:	January, 1 2006	

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