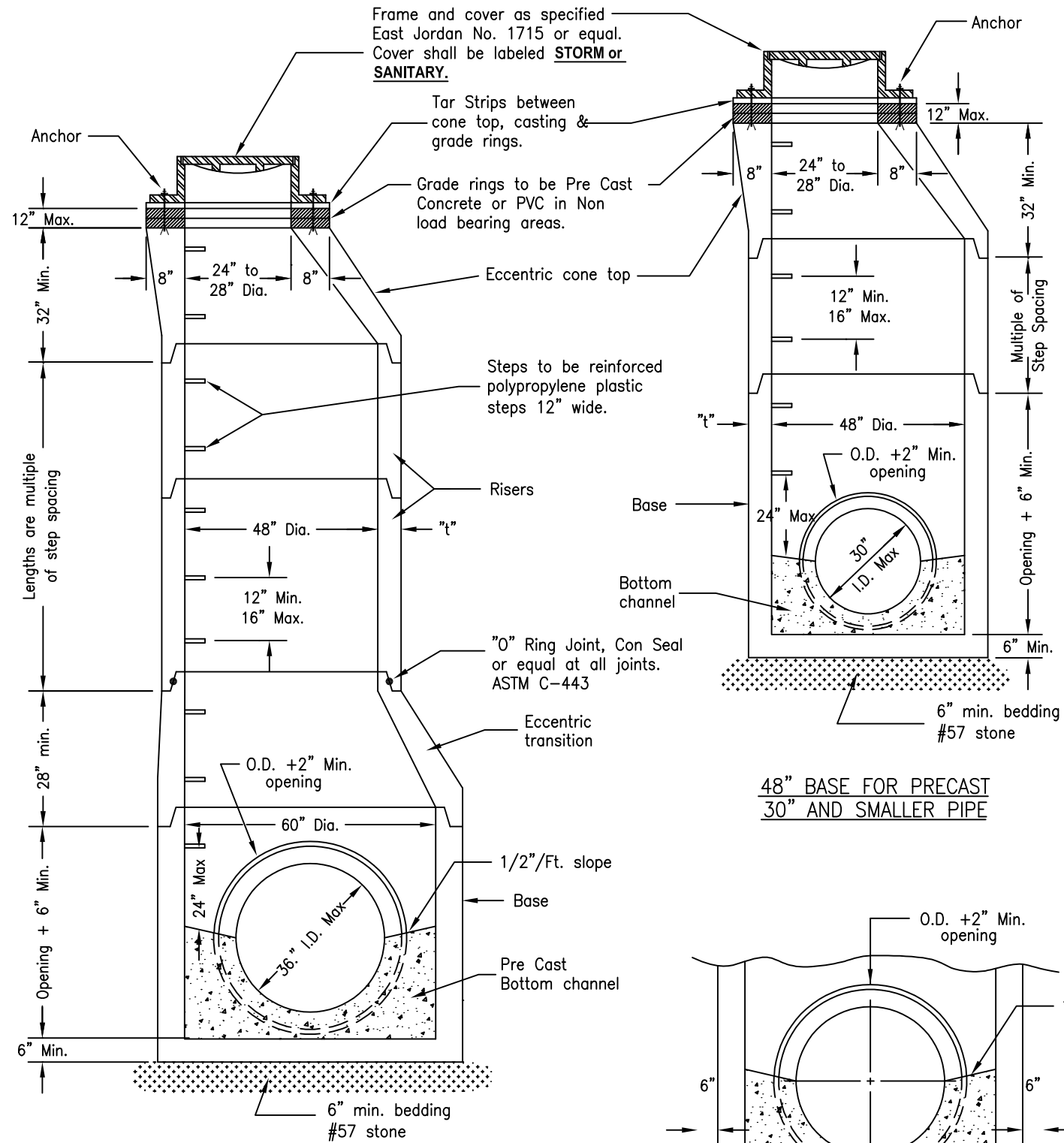
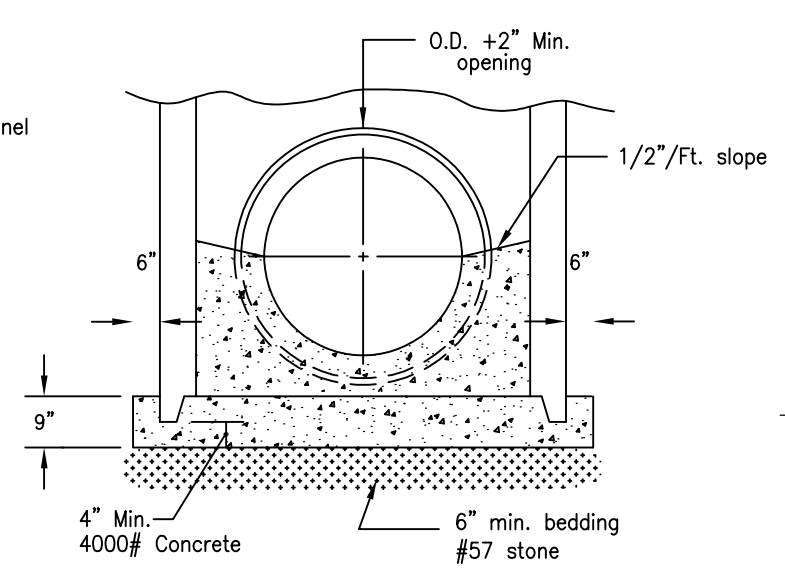


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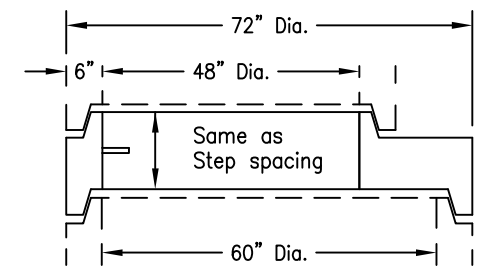
48" BASE FOR PRECAST 30" AND SMALLER PIPE



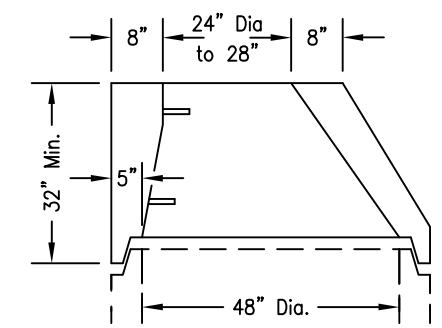
DOGHOUSE CONSTRUCTION

48" - 96" BASE FOR PRECAST

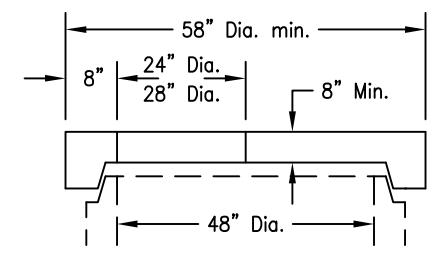
Base I.D.	Min "t"	Max. Pipe Size
48"	5"	30"
60"	5"	36"
72"	6"	48"
84"	7"	54"
90"	7-1/2"	60"
96"	8"	60"



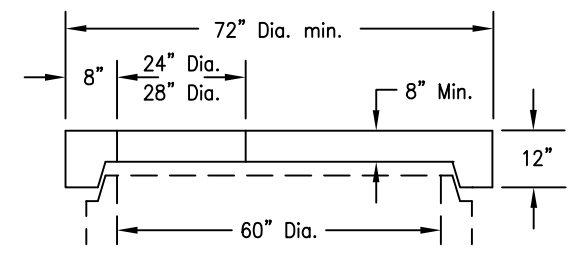
FLAT SLAB TRANSITION



ALTERNATE ECCENTRIC CONE TOP



FLAT SLAB TOP



FLAT SLAB TOP

Sanitary Manholes

Manhole shall be waterproofed with coal tar epoxy coating from invert to 4' above invert. Castings in pavement shall be solid lid and gasketed.

Manhole Testing

All sanitary manholes shall be vacuum tested per ASTM C 1244.

NOTES

Sections of the precast manhole shall be cast and assembled with either all tongue or all groove ends up. Lift holes may be provided in each section for handling.

TOP AND TRANSITION (or reducer)

Sections may be either eccentric cone, concentric cone or flat slab.

BASES for manholes are shown with monolithic floor and riser which may be cast in one or two operations.

A permissible alternate is to cast and ship the floor and barrel separately. Openings for inlet and outlet pipe shall be provided, either when the unit is cast or later, to meet project requirements. Bottom channels may be formed of concrete precast in the base or by field construction. Bases may also be poured in place. All inlets and outlets are to be identified.

OPENINGS IN RISER SECTIONS for 18" and smaller inlet pipes shall be prefabricated. Flexible connections shall be provided for sanitary and combined sewers.

JOINT SEAL between precast manhole sections on sewers shall be resilient and flexible gasket joints per ASTM C-443 or latest edition.

In addition to O-ring joint, between manhole section, a flexible butyl rubber seal, Con-Seal or equal, shall be used. This sealant shall meet a minimum temperature workability of 10°F - 130°F.

A watertight flexible sleeve "KOR-N-SEAL", "PRESS WEDGE" or equal to be provided at all connections between manholes and pipes.

MATERIALS for bases and other precast sections, including reinforcement not specified hereon, shall comply with the specifications.

LANDING PLATFORMS as shown on the Landing Details shall be installed in manholes that are over 28 feet deep to the invert with maximum vertical spacing of 20 feet. SEE DETAIL.

PRECAST MANHOLE shall conform to the requirements of ASTM C-478. Concrete shall be 4000# P.S.I.

SEAL lift holes with approved concrete plugs and bit.

ANCHORS 1/2" dia. Allthread with washers and hex nut (Min 4). Lead anchor secured into the eccentric cone top.

CASTINGS for manholes shall be cleaned and painted in field with one coat of asphalt varnish or coal tar pitch paint.

1	2/17/04	DAH	General Revisions - Re-issue
REV No.	DATE	BY	DESCRIPTION
CITY OF WESTLAKE, OHIO DEPARTMENT OF ENGINEERING			
PRECAST CONCRETE M.H.			
SCALE:	AS NOTED		1
DATE:	DRWN BY:		