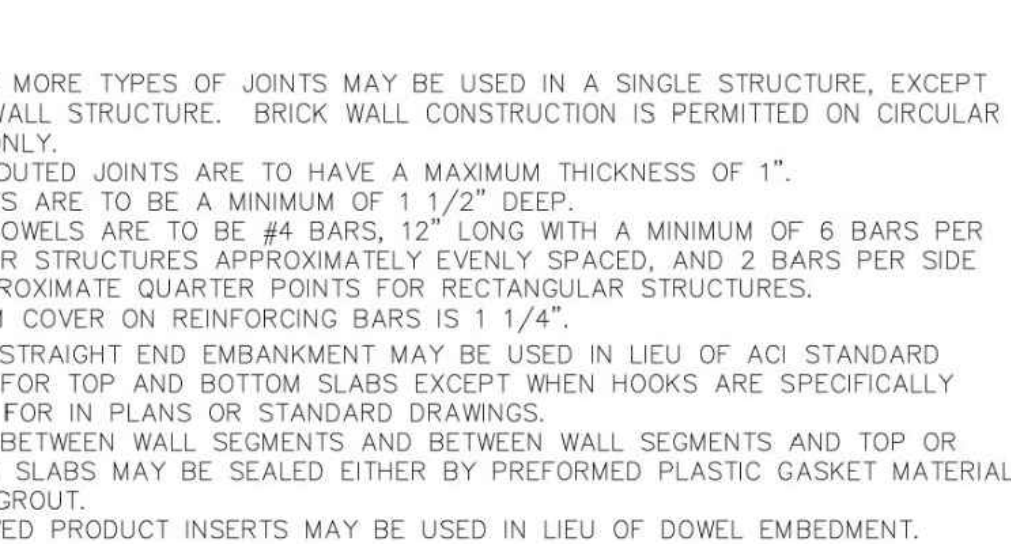




## CAST IRON FRAME FOR MANHOLES



## OPTIONAL CONSTRUCTION JOINTS



MORE TYPES OF JOINTS MAY BE USED IN A SINGLE STRUCTURE, EXCEPT WALL STRUCTURE. BRICK WALL CONSTRUCTION IS PERMITTED ON CIRCULAR ONLY.

OUTED JOINTS ARE TO HAVE A MAXIMUM THICKNESS OF 1".

SLABS ARE TO BE A MINIMUM OF 1 1/2" DEEP.

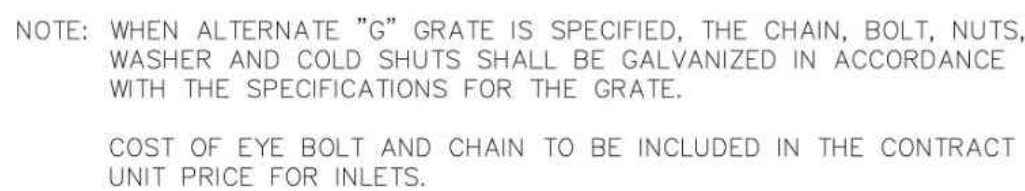
BEAMS ARE TO BE #4 BARS, 12" LONG WITH A MINIMUM OF 6 BARS PER END. JOINTS ARE TO BE APPROXIMATELY EVENLY SPACED, AND 2 BARS PER SIDE AT APPROXIMATE QUARTER POINTS FOR RECTANGULAR STRUCTURES.

COVER ON REINFORCING BARS IS 1 1/4".

STRAIGHT END EMBANKMENT MAY BE USED IN LIEU OF ACI STANDARD FOR TOP AND BOTTOM SLABS EXCEPT WHEN HOOKS ARE SPECIFICALLY REQUIRED IN PLANS OR STANDARD DRAWINGS.

JOINTS BETWEEN WALL SEGMENTS AND BETWEEN WALL SEGMENTS AND TOP OR BOTTOM SLABS MAY BE SEALED EITHER BY PREFORMED PLASTIC GASKET MATERIAL OR GROUT.

PRECAST PRODUCT INSERTS MAY BE USED IN LIEU OF DOWEL EMBEDMENT.



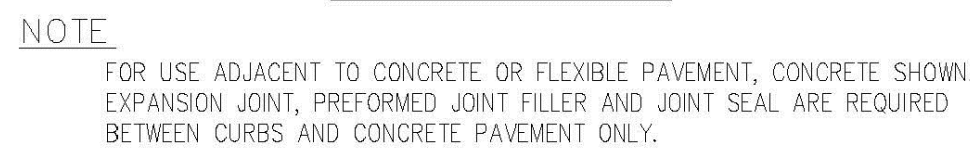
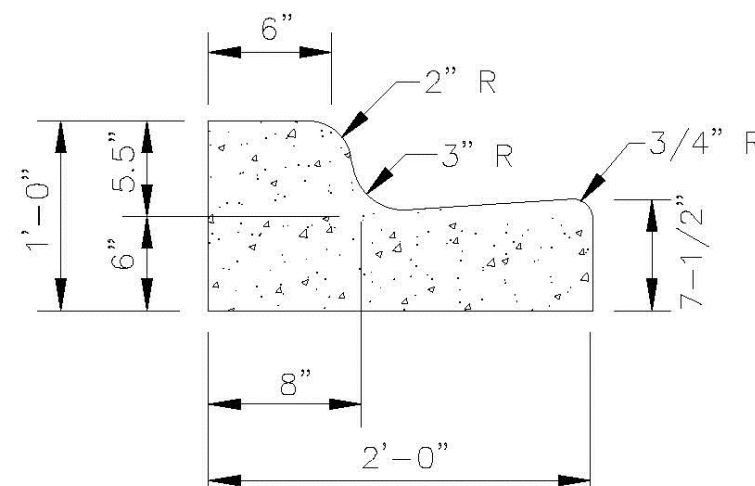
NOTE: WHEN ALTERNATE "G" GRATE IS SPECIFIED, THE CHAIN, BOLT, NUTS, WASHER AND COLD SHUTS SHALL BE GALVANIZED IN ACCORDANCE WITH THE SPECIFICATIONS FOR THE GRATE.

COST OF EYE BOLT AND CHAIN TO BE INCLUDED IN THE CONTRACT UNIT PRICE FOR INLETS.

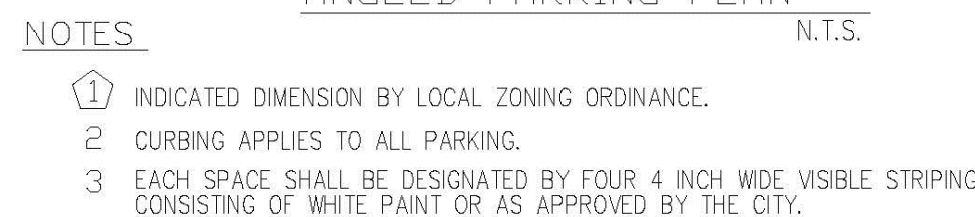


2. Chop clean 2 feet of pipe section at the insertion end of the thoroughly cleaned pipe.
3. Position the stainless steel Take-Up Stop: the center brace is in the center of the coupling.
4. Place the stainless steel Take-Up clamps in the grooves on each side of the Take-Up Stop. Inset each clamp one inch from the edge of the Take-Up Stop.
5. Position the take-up clamps 180° from each other. Using a torque wrench or torque wrench, gradually tighten both screws of each clamp to 60 lbs./inch torque. Do not over-tighten.
6. Apply a good quality concrete bonding agent to the structure opening.
7. Insert pipe into structure opening. Make sure that the Take-Up Stop is fully within the plane of the structure wall. If mortaring in place, apply and compact non-shrink grout around the Take-Up Stop. Use a 1/2" diameter rod to clean the opening, taking care to fill the voids. Make sure that the ADS Take-Up Stop does not contact the bare structure walls. Use a 1/2" diameter rod to clean the Take-Up clamps and pipe. Completely flush air around the pipe and the Take-Up Stop. Thoroughly vibrate all around the pipe and the Take-Up Stop. Use a 1/2" diameter rod to clean the Take-Up clamps and pipe. Completely flush air around the pipe and the Take-Up Stop.
8. Allow concrete or mortar to fully cure before testing or backfilling. If the system is to be tested, testing should be completed within 28 days of installation. Follow all local, state and all recommendations and requirements of the test system or contractor. Plug any vent holes in the N-12 pipe prior to testing.
9. Backfill the N-12 pipe following recommendations in ADS and Product Note 3-115, *Installing N-12 Storm, Sanitary Sewer*

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NOTE  
FOR USE ADJACENT TO CONCRETE OR FLEXIBLE PAVEMENT, CONCRETE SHOWN  
EXPANSION JOINT, PREFORMED JOINT FILLER AND JOINT SEAL ARE REQUIRED  
BETWEEN CURBS AND CONCRETE PAVEMENT ONLY.



NOTES	PROPOSED PARKING VIEW	N.T.S.
① INDICATED DIMENSION BY LOCAL ZONING ORDINANCE.		
2 CURBING APPLIES TO ALL PARKING.		
3 EACH SPACE SHALL BE DESIGNATED BY FOUR 4 INCH WIDE VISIBLE STRIPING CONSISTING OF WHITE PAINT OR AS APPROVED BY THE CITY.		