

SECTION 4-A MANHOLES, CLEANOUTS & CONNECTIONS

CITY OF SACHSE, TEXAS
DEPARTMENT OF ENGINEERING

STANDARD CONSTRUCTION DETAILS
SANITARY SEWER

MANHOLES, CLEANOUTS & CONNECTIONS

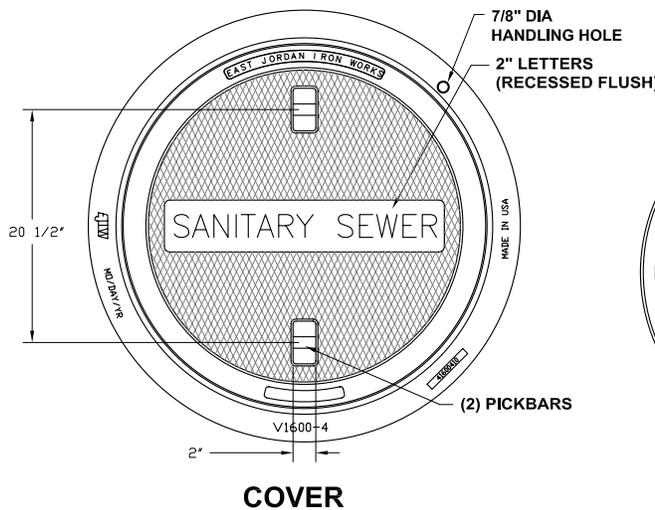
APPROVED:

DATE: SEPTEMBER 2013 | REVISED:

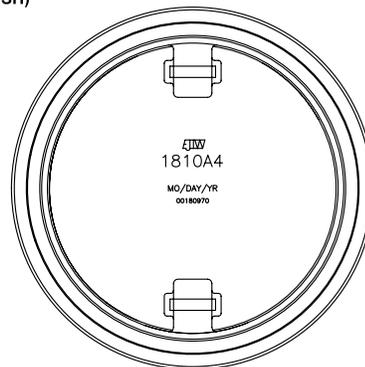
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GENERAL NOTES

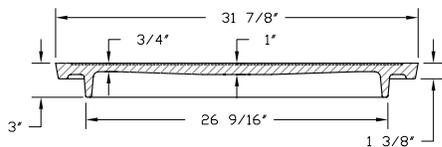
- 1 All sanitary sewer pipe shall be PVC SDR-35 for depths of 0' - 10' and SDR-26 for depths 10' - 20'. City approval required for depths exceeding 20'. Other pipes shall be subject to approval by the City Engineer. No clay pipe.
- 2 Sanitary sewer pipe joints shall conform to current ASTM designation D-3034 for PVC pipe.
- 3 All sanitary sewer laterals shall include 4" tee wye bend, pipe and stopper installed at the center line of each lot with a minimum 10' separation from water line. Each service shall serve only one unit structure, unless otherwise indicated on plans. No common taps.
- 4 Unless otherwise noted, all material and construction shall conform to the Standard Specifications of the City of Sachse, Texas.
- 5 In the event an item is not covered in the City of Sachse specifications, the City Engineer's decision shall apply.
- 6 Identify location of line.
- 7 Color to be green on PVC pipe with magnetic red color tape installed.
- 8 Sewer main to be located in center of street.
- 9 Sewer clean outs to be plugged with an expandable plug, not a cap or standard plug
- 10 For sanitary sewer lines, the manholes shall be 4' inside diameter for line size 6" thru 21" and 5' inside diameter for line size 24" thru 36".
- 11 All sanitary sewer manholes whose invert is greater than fifteen (15) feet below grade, shall be 5' diameter or larger.
- 12 All sanitary sewer lines shall be tested with low pressure air per standard test procedure.
- 13 All P.V.C. sewer lines shall be tested using TV video inspection.
- 14 All sanitary sewer lines shall conform and be tested to pass a standard mandrel test.
- 15 All manholes shall be tested for infiltration through either water, air or vacuum standard testing procedures.
- 16 All manholes shall be concrete. No fiberglass or alternate materials allowed for manhole construction.



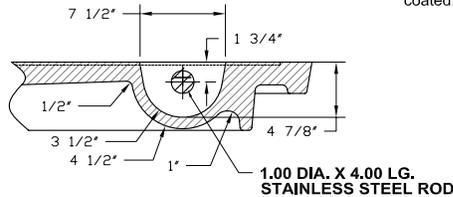
COVER



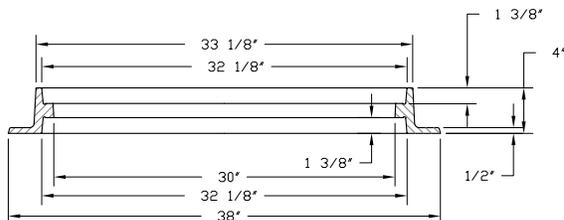
BOTTOM OF COVER



COVER SECTION



PICKBAR DETAIL



**FRAME SECTION
MANHOLE GRATE AND FRAME DETAIL**

- NOTES:
1. Manhole cover and frame shall be standard cast iron manhole cover.
 2. Covers shall be one man operable using standard tools and shall be capable of withstanding a test load of 80,000 lbs.
 3. Frames shall be circular, incorporate a seating ring and shall have a 30 inch clear opening. The frame depth shall not exceed 5 inches, and the flange shall incorporate bedding slots, bolt holes, and lifting eyes.
 4. All components shall be black coated.

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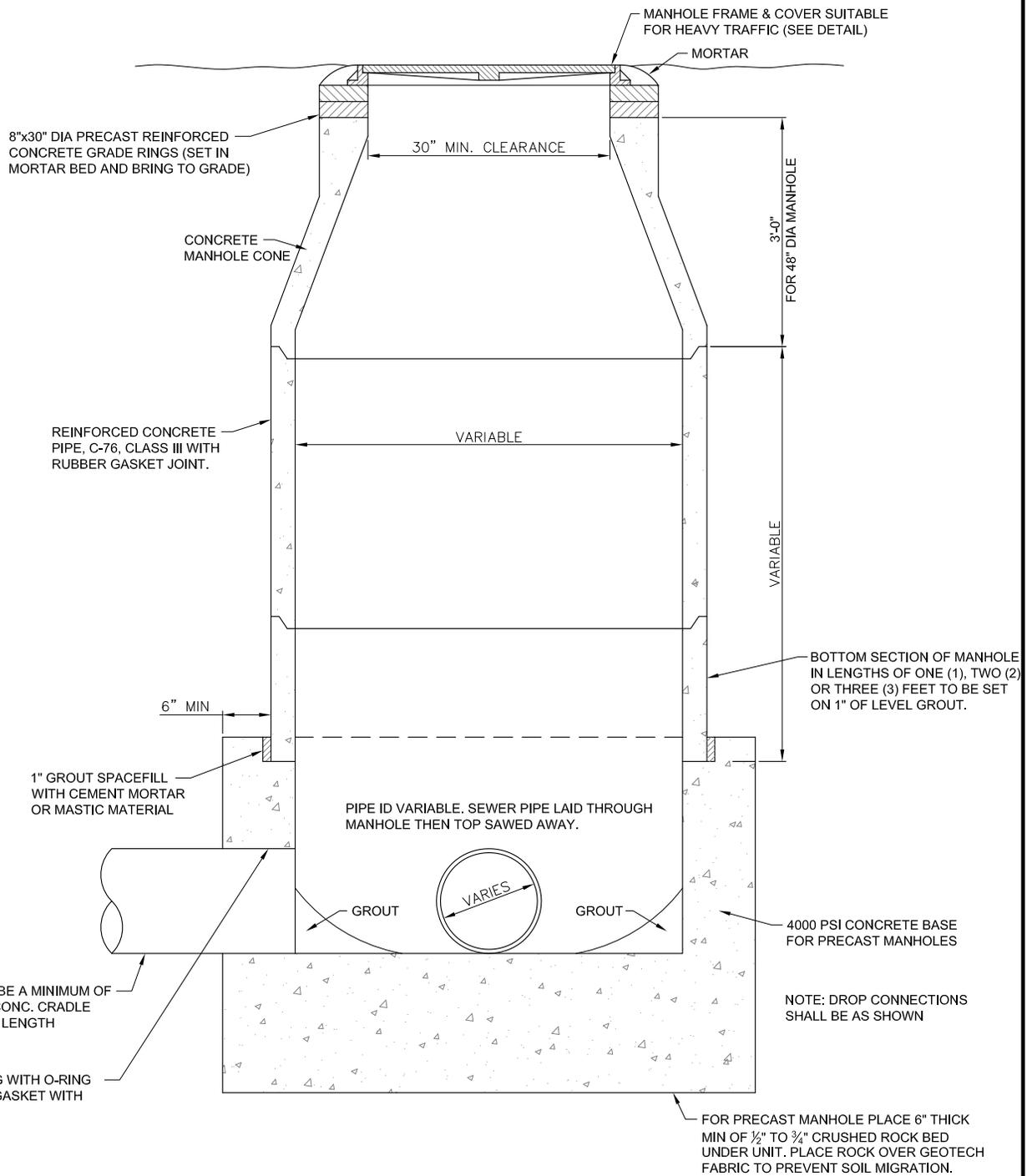
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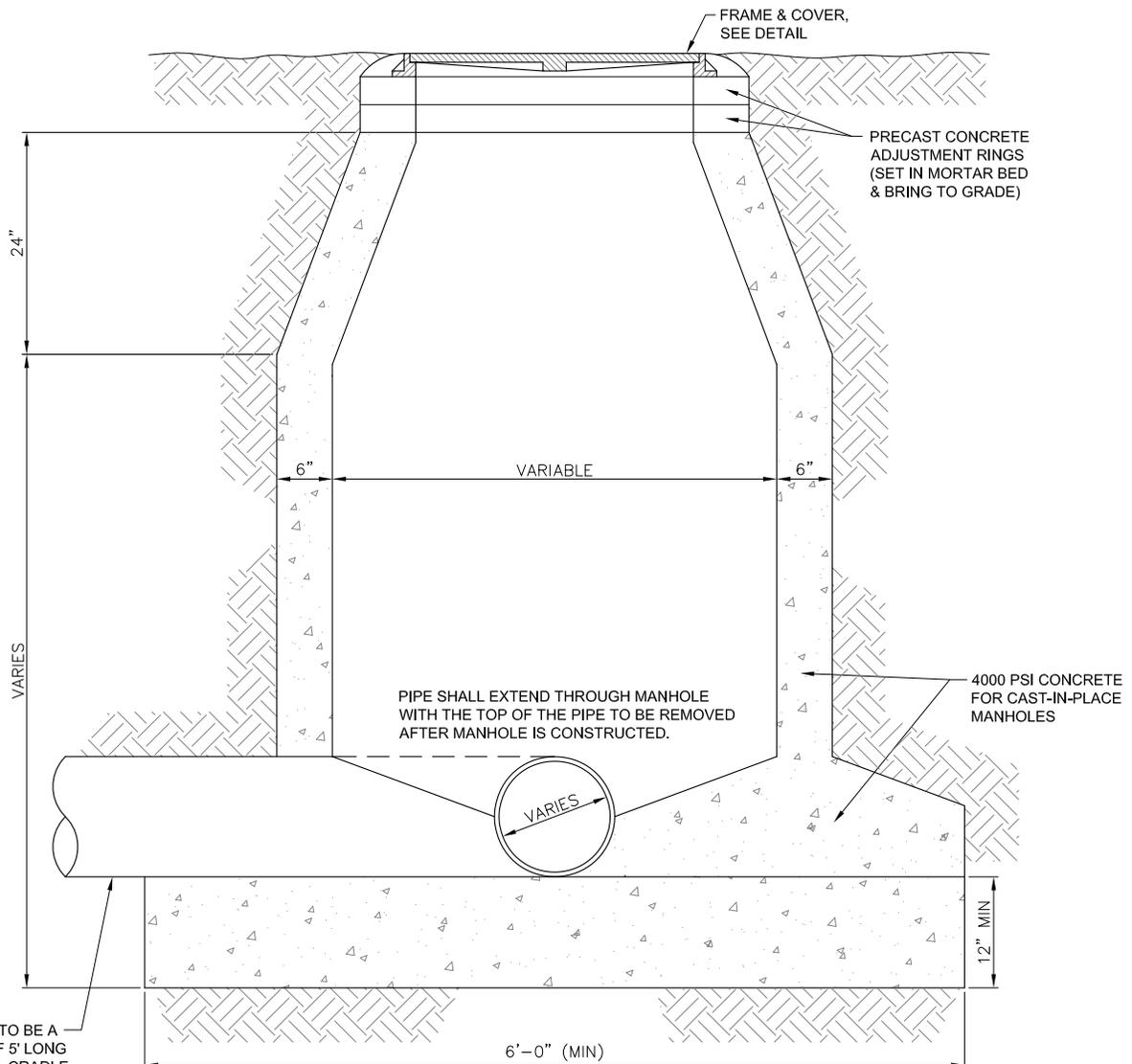


PRECAST CONCRETE PIPE MANHOLE

NOTES Pour in place, or pre-fabricated RC pipe manhole shall be used.

MANHOLE SPACING SHALL BE 550' ON CENTER OR AT ANGLE POINTS OR AS DESIGNATED UNLESS APPROVED OTHERWISE BY CITY

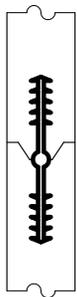
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STUBOUTS TO BE A MINIMUM OF 5' LONG WITH CONC. CRADLE UNDER ENTIRE LENGTH

STANDARD CAST IN PLACE MANHOLE

- NOTES
- 1 Keyways required for all construction joints
 - 2 PVC water stop required for all joints in lower 4'-0" of manholes
 - 3 Concrete shall be 4000 psi
 - 4 When conditions should require manhole to be placed over embedment, Place 6" thick min of 1/2" to 3/4" crushed rock bed under unit. Place rock over geotech fabric to prevent soil migration.



STANDARD 2x4 KEYWAY, ROUGHEN EDGES PRIOR TO MAKING SECOND POUR

PROVIDE 4" HEAVY DUTY PVC WATERSTOP AT ALL CONST. JOINTS

KEYWAY WITH WATERSTOP

MANHOLE SPACING SHALL BE 550' ON CENTER OR AT ANGLE POINTS OR AS DESIGNATED UNLESS APPROVED OTHERWISE BY CITY

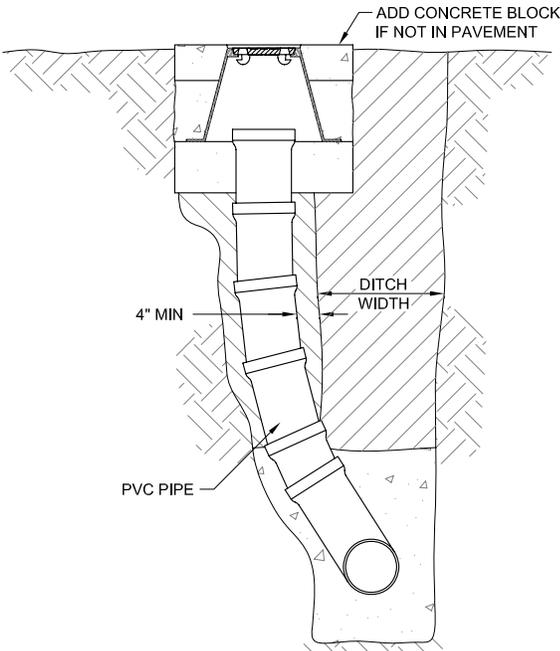
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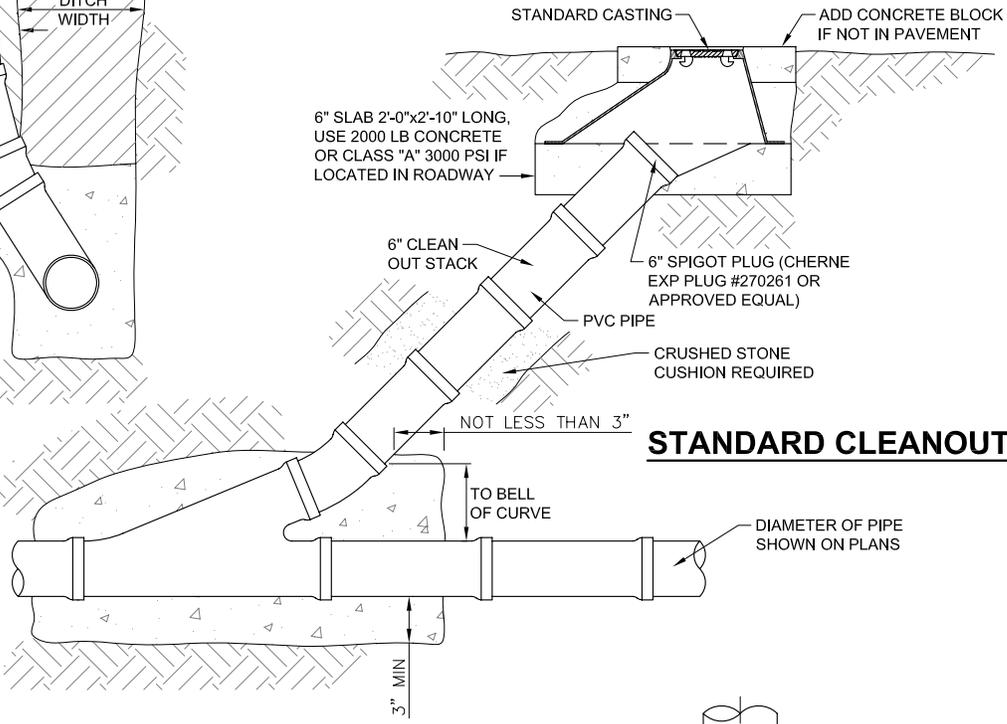
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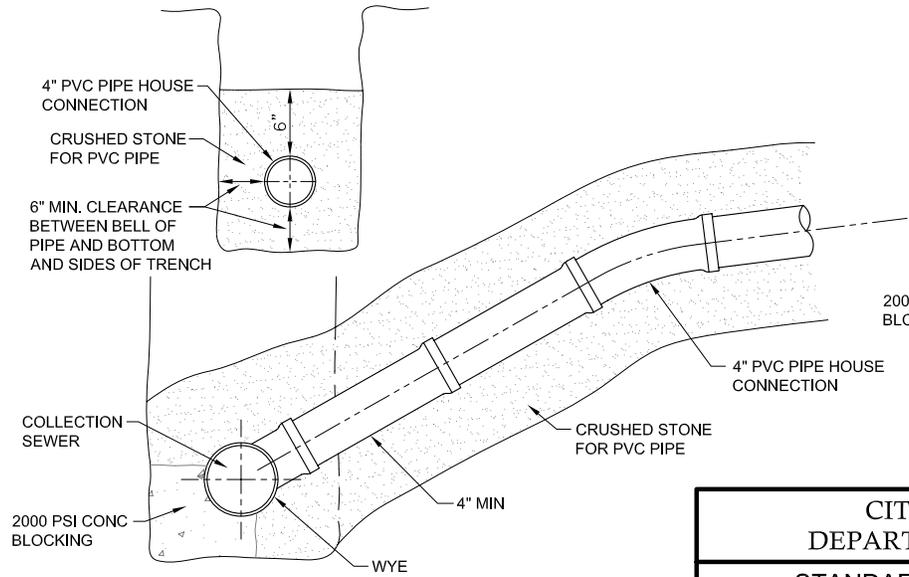
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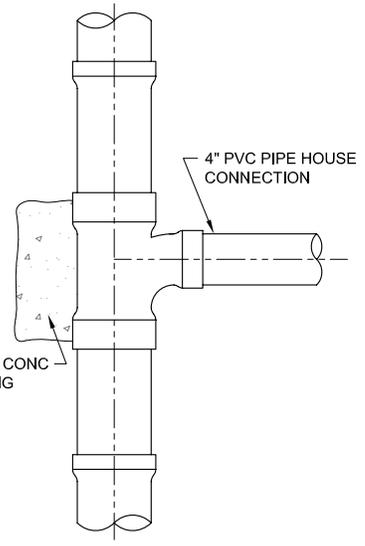
NOTE: ALL SEWER SERVICES SHALL BE INSTALLED TO A POINT 5' INSIDE OF THE PROPERTY LINE TO MINIMUM DEPTH OF 4' BELOW FUTURE FOUNDATION ELEVATION.



STANDARD CLEANOUT



TYPICAL SEWER HOUSE SERVICE CONNECTION



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