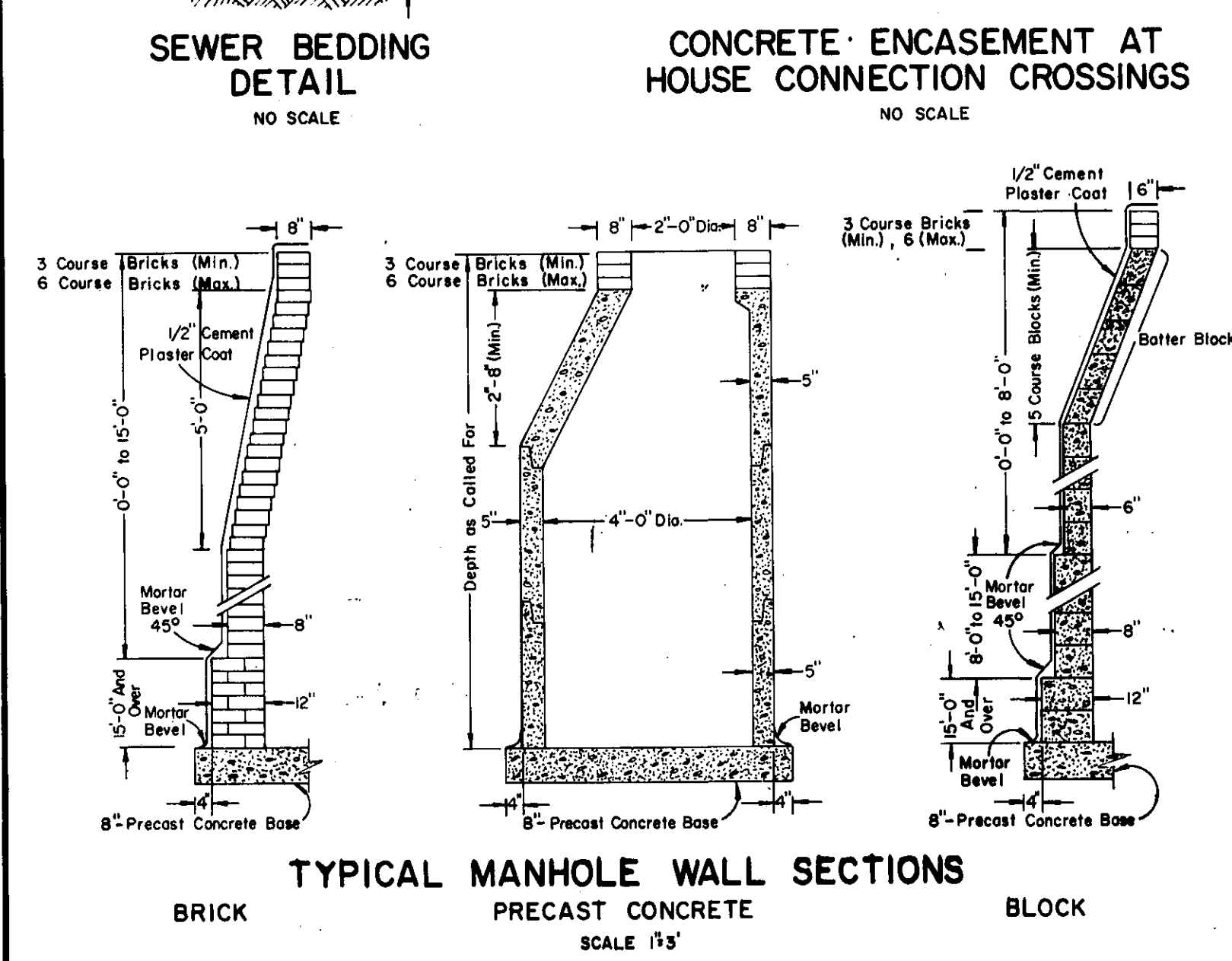
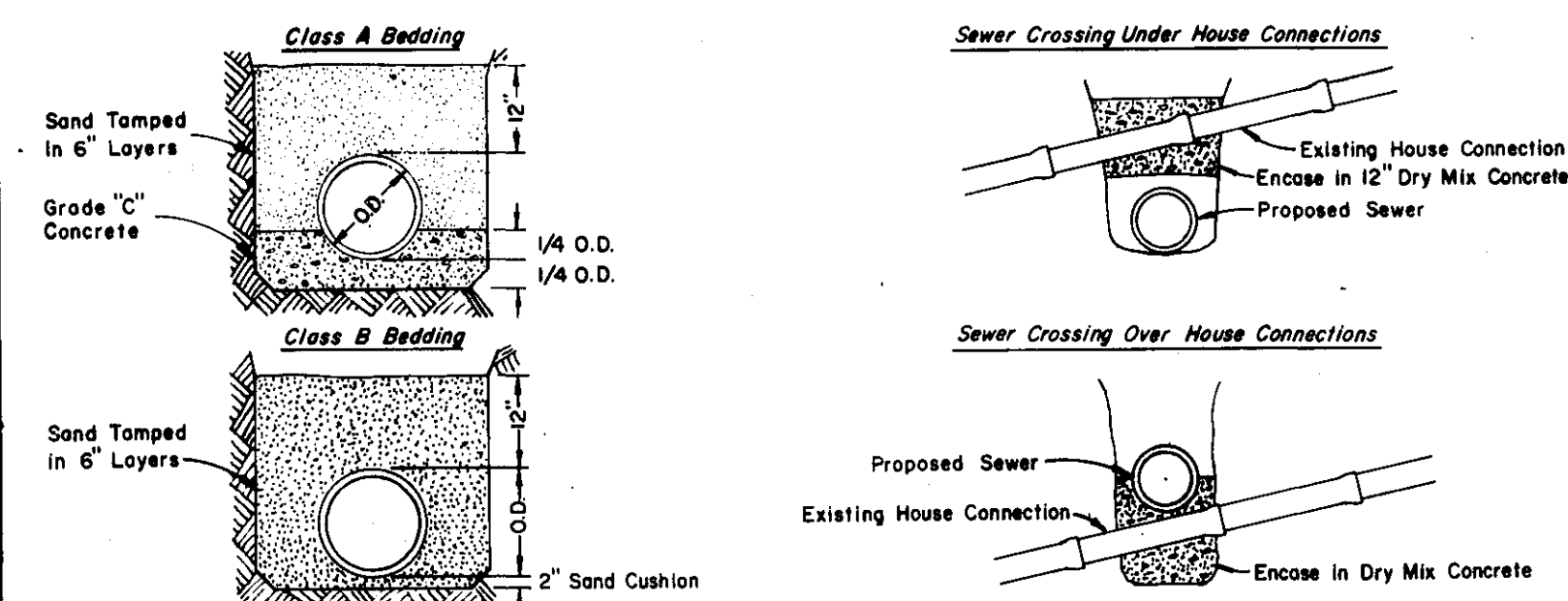


**TRENCH WIDTH REQUIREMENTS**

MAXIMUM WIDTH OF TRENCH AT 12" ABOVE TOP OF PIPE

Sewer Size	Maximum Trench Width
8" through 15"	30"
18" and Over	OD + 18"



**NOTE FOR STORM MANHOLES** 48" Reinforced Concrete A.S.T.M. C-478 Pipe May be Used at Contractor's Option For Construction of Portion of Manhole Above a Point 8" Above the Top Highest Connecting Sewer. The Dome Shall be Not Less Than 3' High With 8" Top Thickness and Positioned to Provide Not Less Than 8" of Brickwork Beneath Manhole Ring and Cover. Pipe Joints Shall be 1:3 Cement Mortar. Pre-Cast Concrete Base, Bottom Fill, Manhole Steps, Frame, Cover, etc. Shall Comply to Specifications for Standard Brick Manholes. Premium Joints are Required on All Manholes.

**NOTE FOR STORM MANHOLES, CATCH BASIN & INLETS** Solid Concrete Block May be Used at Contractor's Option. Block Shall be 3,000 P.S.I. Concrete With Butter Cone Blocks Used For the Critical Section. Such Manholes Shall Have a 3' Dome.

**GENERAL CONSTRUCTION NOTES** Top of Masonry Structures Shall be Sufficiently Low to Permit Proper Adjustment of Frame & Cover to Grade With Mortar & Brick as Directed by Engineer. Approved Granular Material Shall be Used Around All Structures. Place 4" Minimum Sand Under Pre-Cast Bottoms Prior to Placement. All Sewer Extensions or Stubs to be Backfilled With Minimum of 1 Yard of Stone 1 1/2" Diameter or Less and Remaining Backfill With Sand or Select Material.

**NOTE ON PUBLIC UTILITIES** Public Utilities Locations Are Not Guaranteed as Accurate. Contractor Shall Check With Utility Companies For Information on Their Facilities Before Starting Work Whether Shown on Plans or Not. Hand Excavated Test Holes Shall be Dug by Contractor to Locate Existing Utilities Which Cross, or Are in Close Proximity to Excavation. Adequate Support Shall be Installed by Contractor Where Necessary Under Existing Utilities.

- LEGEND**
- DESIGNATED BAG MIX WITH CLASS AND STRENGTH
- 3,500 P.S.I. 6 SACK - CLASS "A"
  - 3,000 P.S.I. 5 SACK - CLASS "B"
  - 2,500 P.S.I. 4 SACK - CLASS "C"
- STANDARD PROFILE CONVENTIONS:
- NORTH OR EAST R. & SIDEWALK
  - SOUTH OR WEST R. & SIDEWALK
  - CENTERLINE
- STANDARD PLAN CONVENTIONS
- SANITARY SEWER
  - STORM SEWER
  - WATER MAIN
  - GAS MAIN
  - UNDERGROUND CABLE
  - FIRE HYDRANT
  - GATE VALVE & WELL
  - MANHOLE
  - CATCH BASIN
  - INLET

CITY OF MADISON HEIGHTS, MICHIGAN ENGINEERING DEPARTMENT			
STORM SEWER MANHOLE & CATCH BASIN STANDARD DETAILS			
NO.	BY	CHANGE	DATE
REVISIONS			
SCALE: HORIZONTAL AS SHOWN VERTICAL AS NOTED			
DRAWN BY	J.D. Le Beau	DATE	7/25/74
DESIGNED BY	M.D. Poin	DATE	7/25/74
PRELIMINARY BOOK		PAGE	
LAYOUT BOOK		PAGE	
CONSTRUCTED BY			
APPROVED BY		DATE	
APPROVED BY		DATE	
APPROVED BY		DATE	