

REVISIONS	BY

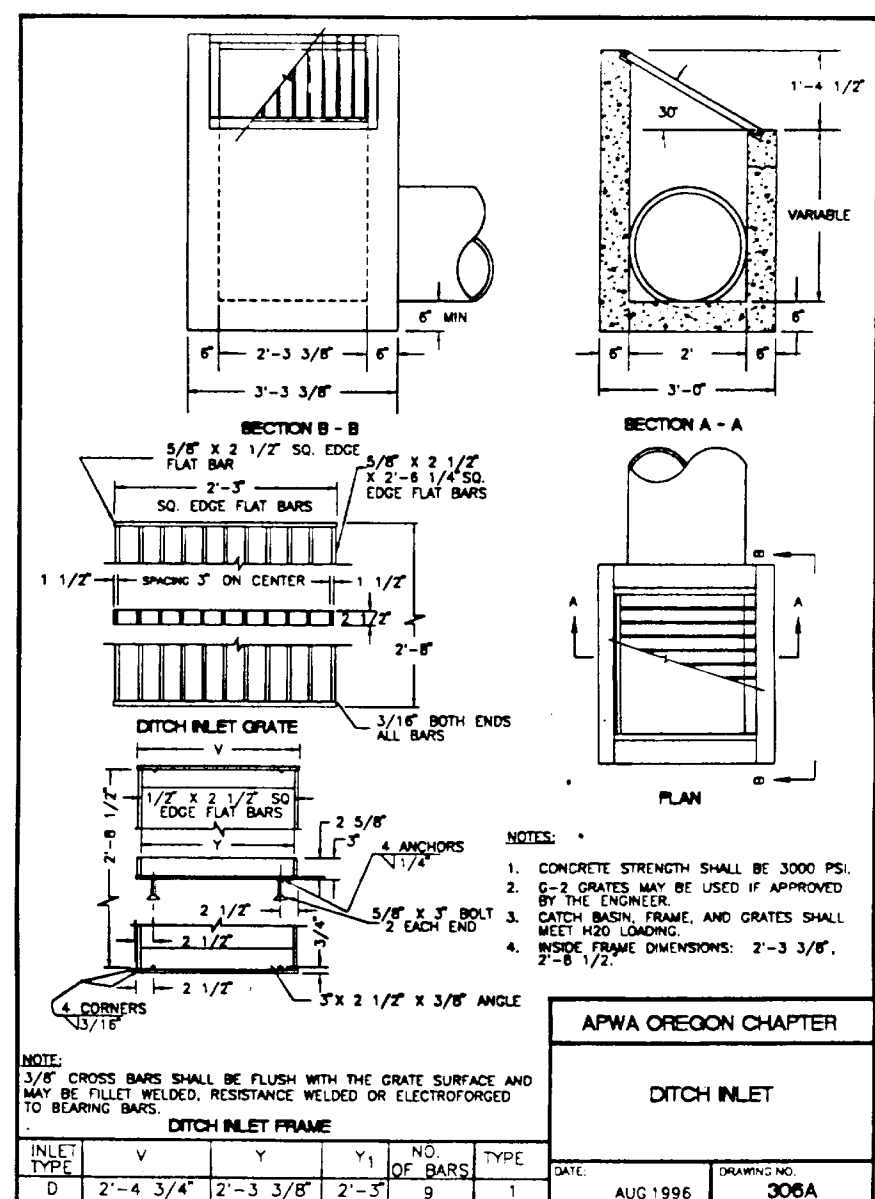
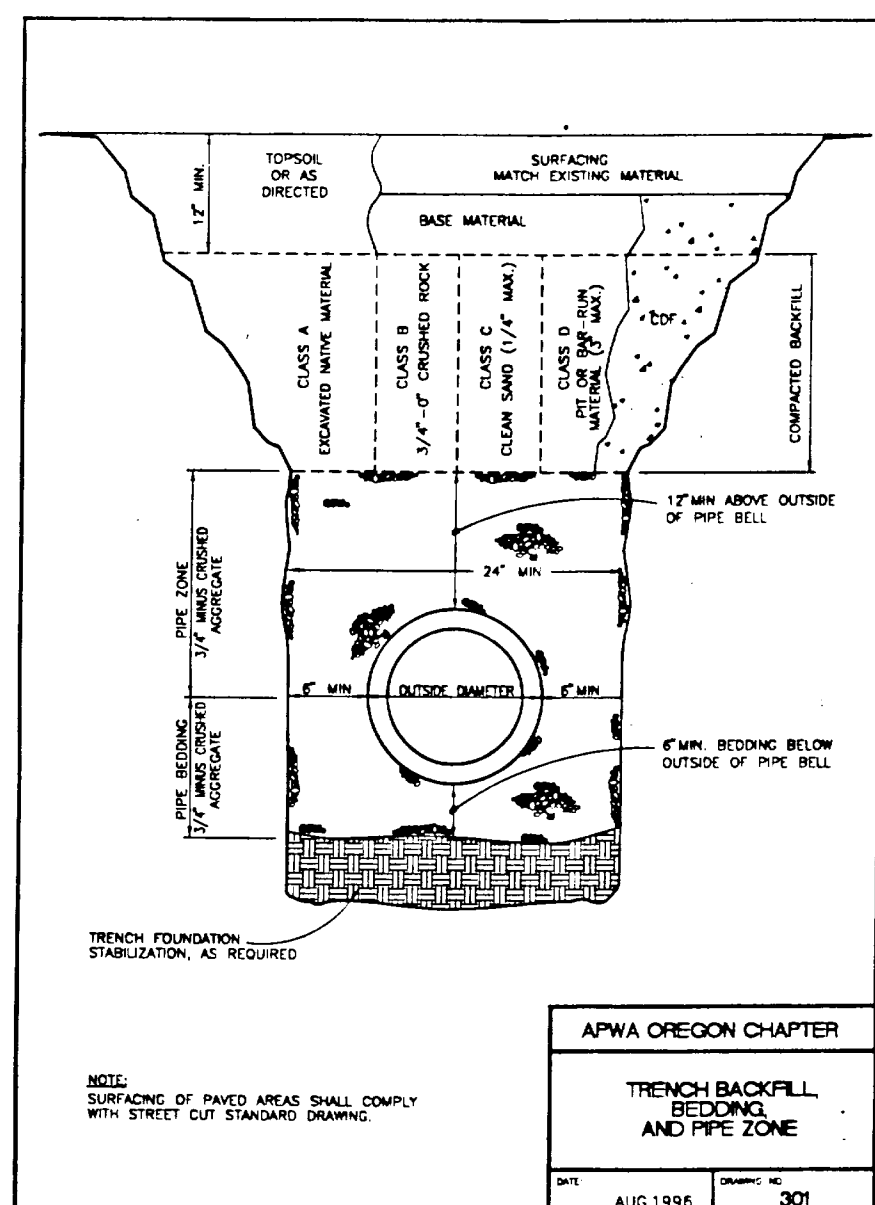
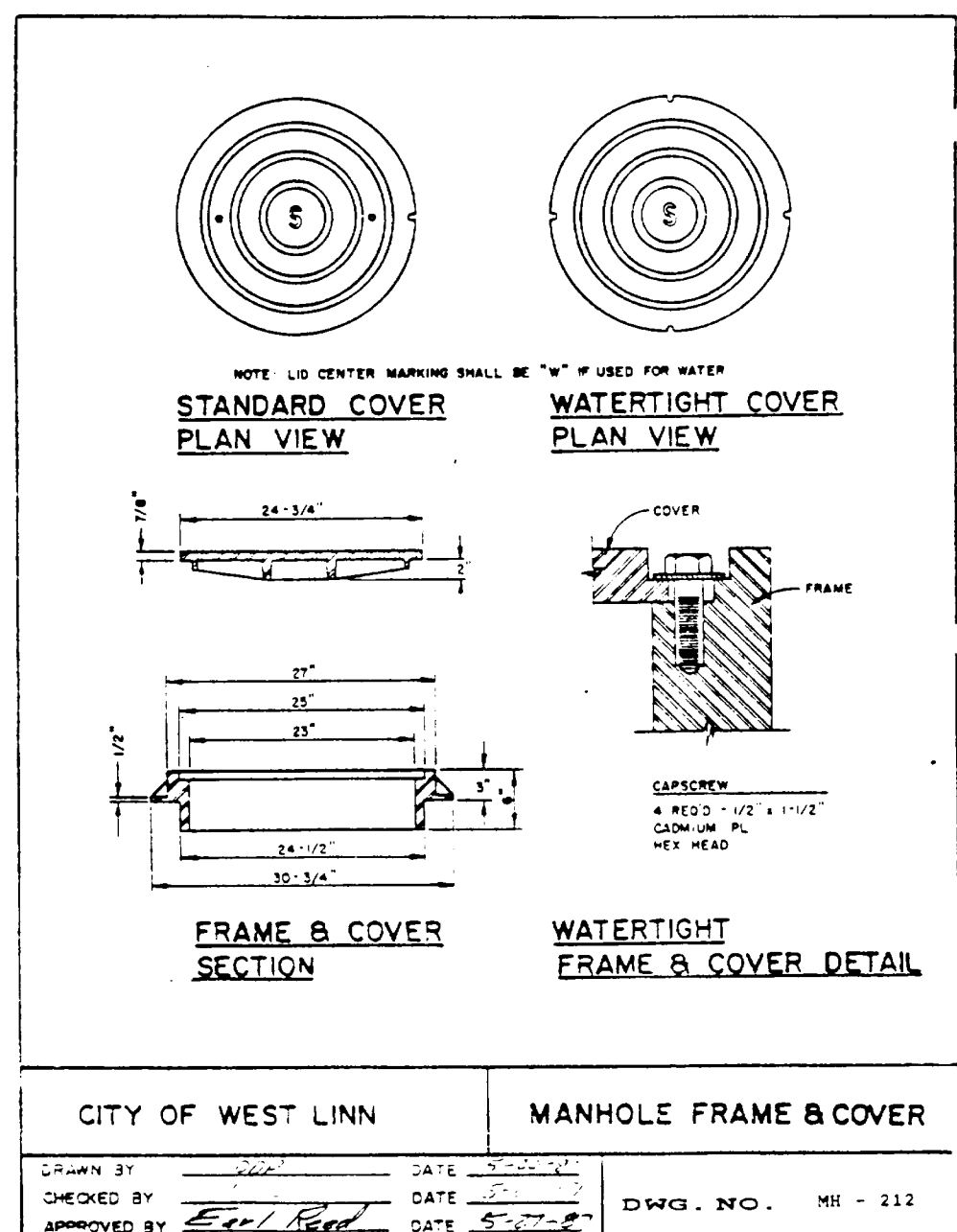
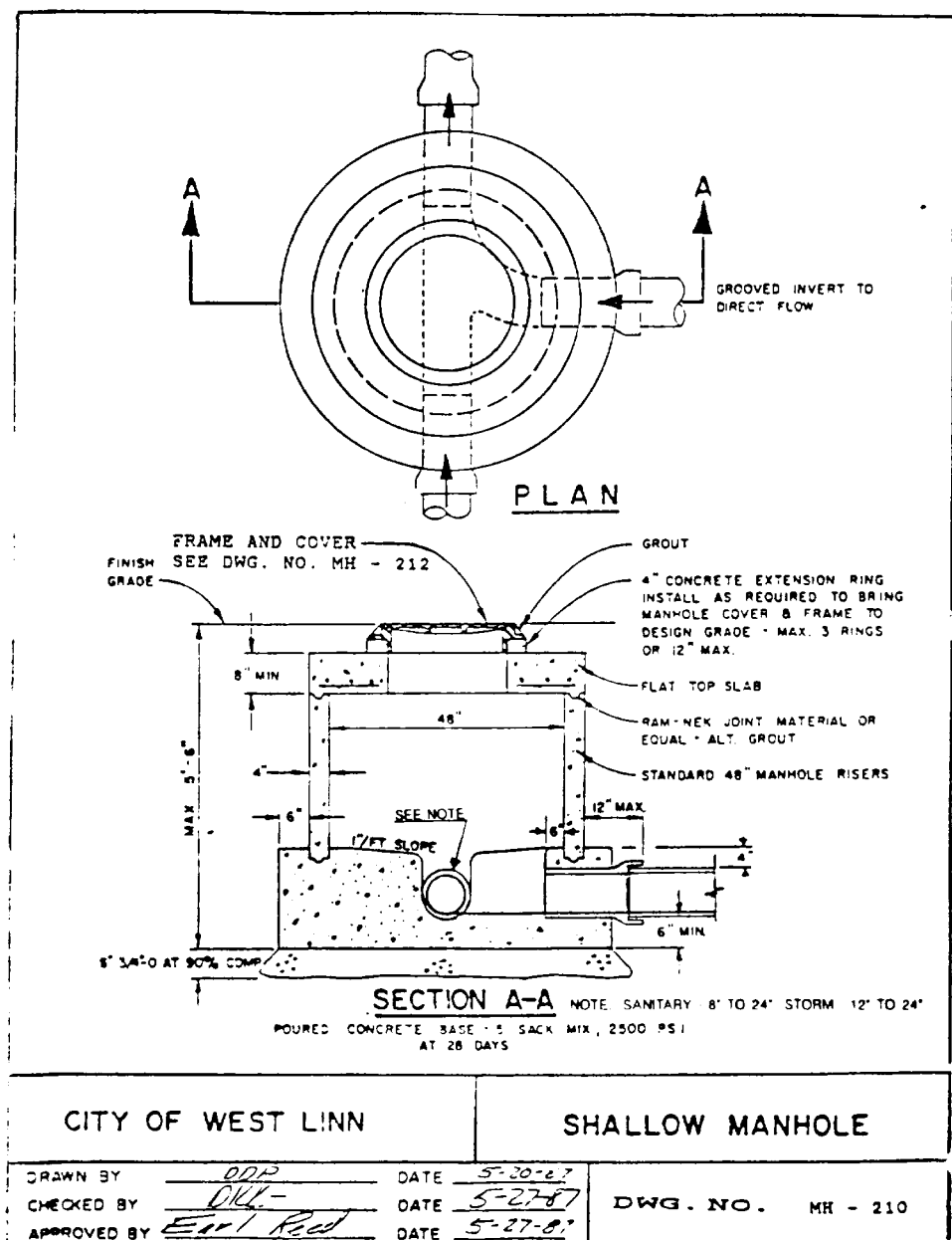
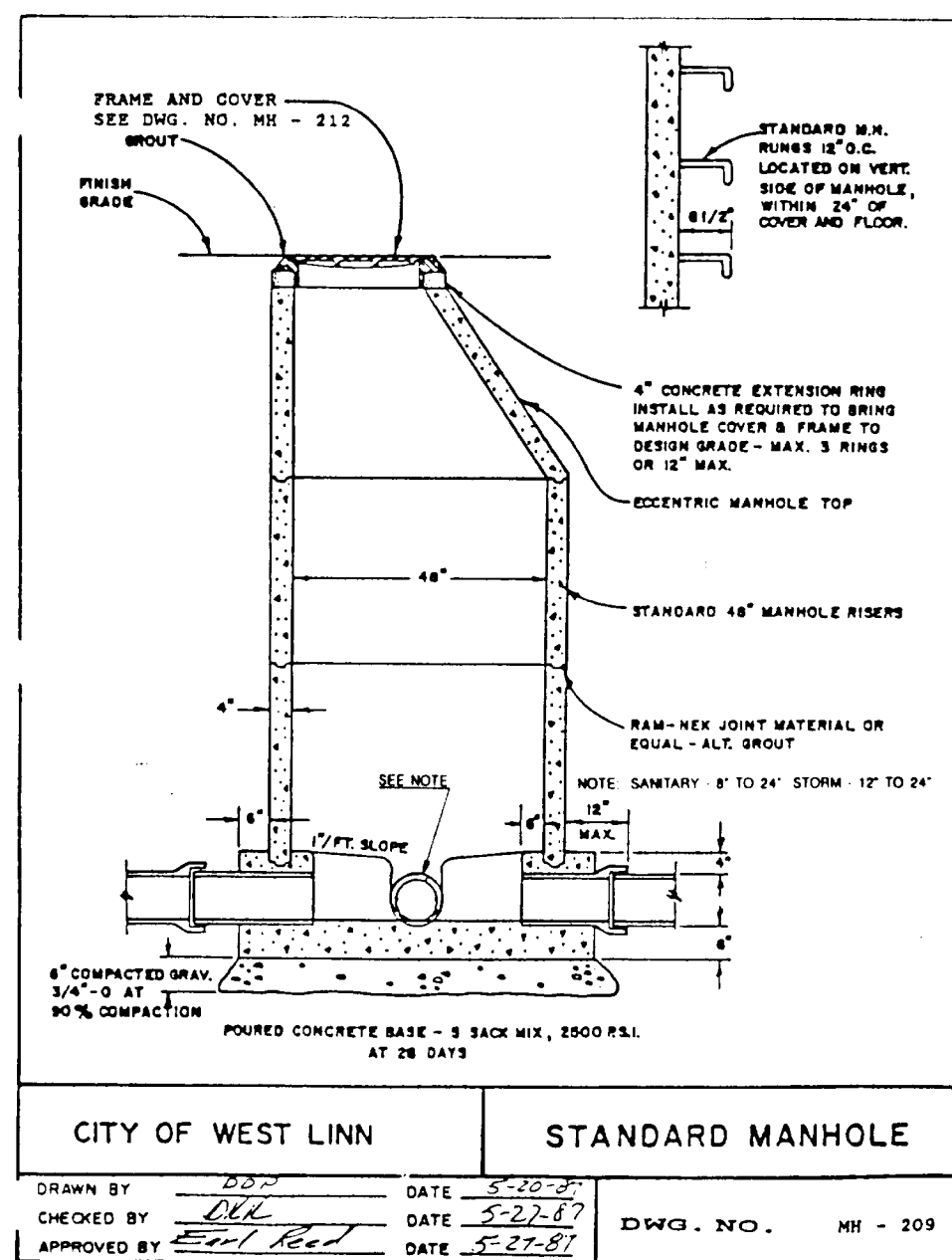
19th STREET STORM DRAIN  
CITY OF WEST LINN, OREGON

Storm Drain Plan

**SISUL ENGINEERING**  
375 PORTLAND AVENUE  
GLADSTONE, OREGON 97027  
(503) 657-0188  
9/18/97

DATE	SEPT. 1997
SCALE	H: 1" = 40' V: 1" = 4'
DRAWN	PS
JOB	97-078
SHEET	1
OF 2 SHEETS	





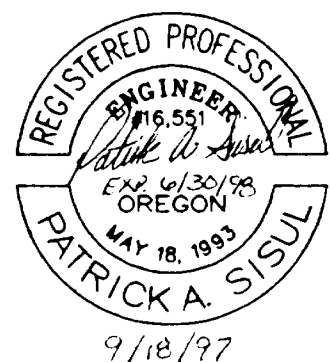
- General Notes:**
- The City will be responsible for inspection of the proposed improvements with oversight from the Design Engineer.
  - A work schedule will be required from the contractor so that the City can have an inspector onsite at the appropriate times. If the work schedule is revised the contractor is to notify the Engineer of the changes. Additionally, the contractor is to give the Engineer at least 24 hours notice of any testing requiring the presence of the Engineer and/or City staff.
  - The contractor is to receive the approval of the Engineer of any proposed changes to the plans or standard requirements.
  - A street construction encroachment permit or similar permit may be required from the City of West Linn. Construction permit fees or other similar fees will be the contractor's responsibility to obtain. A pre-construction conference with the City of West Linn will be required.

- Utilities:**
- The location and descriptions of existing utilities shown on the drawings are compiled from available records and/or field surveys. The engineer or utility companies do not guarantee the accuracy or the completeness of such records. Contractor shall field verify locations of all existing utilities prior to construction.
  - Contractor shall field verify location and depth of all existing utilities where new facilities cross. Contractor shall be responsible for exposing potential utility conflicts far enough ahead of construction to make necessary grade modifications without delaying the work. If grade modification is necessary, Contractor shall notify the Design Engineer, and the Design Engineer shall obtain approval from the City Engineer prior to construction. All utility crossings shall be potholed as necessary prior to excavating or boring to allow the Contractor to prevent grade or alignment conflicts.
  - All existing facilities shall be maintained in-place by the Contractor unless otherwise shown or directed. Contractor shall take all precautions necessary to support, maintain, or otherwise protect existing utilities and other facilities at all time during construction. Contractor to leave existing facilities in an equal or better-than-original condition and to the satisfaction of the City Engineer.
  - Utility contacts are as follows: PGE - Milo Starr, 464-7753; TCI Cable - Linda Petersen, 243-7497, U.S. West Communications - Jackie Lollar 242-8496.

- Storm Drains:**
- Ten inch and larger storm drain pipe shall be PVC pipe conforming to ASTM D-3034 or seamless PVC pipe conforming to ASTM F794.
  - Manhole base may be poured in-place concrete or precast. Manhole risers and tops shall be precast sections with a minimum compressive strength of 4000 psi. Tops shall be eccentric cones except where insufficient headroom requires flat tops.
  - All manholes located in easement areas require tamper proof lids. All manhole rims not in pavement area to be set 12 inches above proposed grade.
  - Granular backfill is to be compacted to 95% maximum dry density per AASHTO T-99 test method. CDF backfill to be used where noted on the plan.
  - Riprap where noted on the plans is to be Class 50 in accordance with Oregon State Highway Division specification 714.
  - All storm drain lines shall be TV'd and deflection tested per City of West Linn requirements prior to acceptance by the City. Submit a copy of the test results to the City of West Linn for review and approval.
  - Contractor to restore all surfaces to original condition or better.
  - All materials, installation, tests, and inspections to be made in strict accordance with City of West Linn standard specifications.

- Water Supply**
- Contractor shall field verify location and depth of existing water mains prior to beginning pipe laying operations.
  - If potential conflicts are found and cannot be eliminated by adjusting storm drain grade, waterline depth will have to be modified. Coordinate work with West Linn Public Works Department.
  - All materials, installation, tests, and chlorination to be in strict accordance with the standards and codes of the City of West Linn and the Oregon State Health Division Administrative Rules, Chapter 333.

- Construction Staking Notes:**
- The City has contracted with Engineer to provide construction staking as outlined below. The contractor is to give the Engineer/Surveyor at least a week notice of when the first construction staking will be needed. After the initial staking on the project, requests for staking should be given at least 3 working days (72 hours) in advance of when staking is desired. When called to the site for staking the Engineer's surveyor will stake each phase of the project in a manner that is most efficient for the surveyor. Additional staking requested by the contractor or restaking required due to the contractor's carelessness will be charged to the contractor. In addition, if survey control monuments (which will be plainly identified) are destroyed by the contractor, the contractor will be charged for the re-establishment of the monuments. Staking to be provided is as follows:
- Storm drain cut stakes at the following stations, 10', 25', 50', 100', and every 100' thereafter, following each manhole or catch basin.



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Details

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 17-078.DWG

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SHEET	2
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