SPECIFICATIONS

General: Unless otherwise shown on the approved drawings, work and materials shall conform with applicable requirements of Chapter 2, Design of Sewers. See "Criteria Used In Review Of Wastewater Treatment Facilities + Colorado Department of Health".

Materials: Sewer Pipe and Fittings
Extra strength concrete pipe (ASTM Designation C-14), Gaskets (ASTM Designation C-443).
Extra strength Vitrified Clay pipe (ASTM Designation C200), Gaskets by pipe manufacturer, (ASTM Designation C425)
Asbestos cement pipe (Federal Specification SS-P-331b), gaskets and fittings to be furnished by the pipe manufacturer. Class 1500 acceptable except under road-ways where Class 2400 required.
Polyvinyl Chloride (PVC) pipe (ASTM Designation D3033 or D3034), gaskets and fittings to be furnished by the pipe manufacturer. Wyes may be field welded saddle type. SDR 51 acceptable if trench width at pipe depth does not exceed 24 inches or 3 pipe diameters, and if specified Proctor Densities (85% Modified or better if required by the County Road Department) are maintained.

Manholes and Covers
Precast manhole sections (ASTM Designation C478). Frames and covers to be 250 lb. Cast iron or cast aluminum as approved for use by the City of Grand Junction. If PVC pipe is used, rubber water stop gaskets shall be installed where pipe passes through concrete walls.
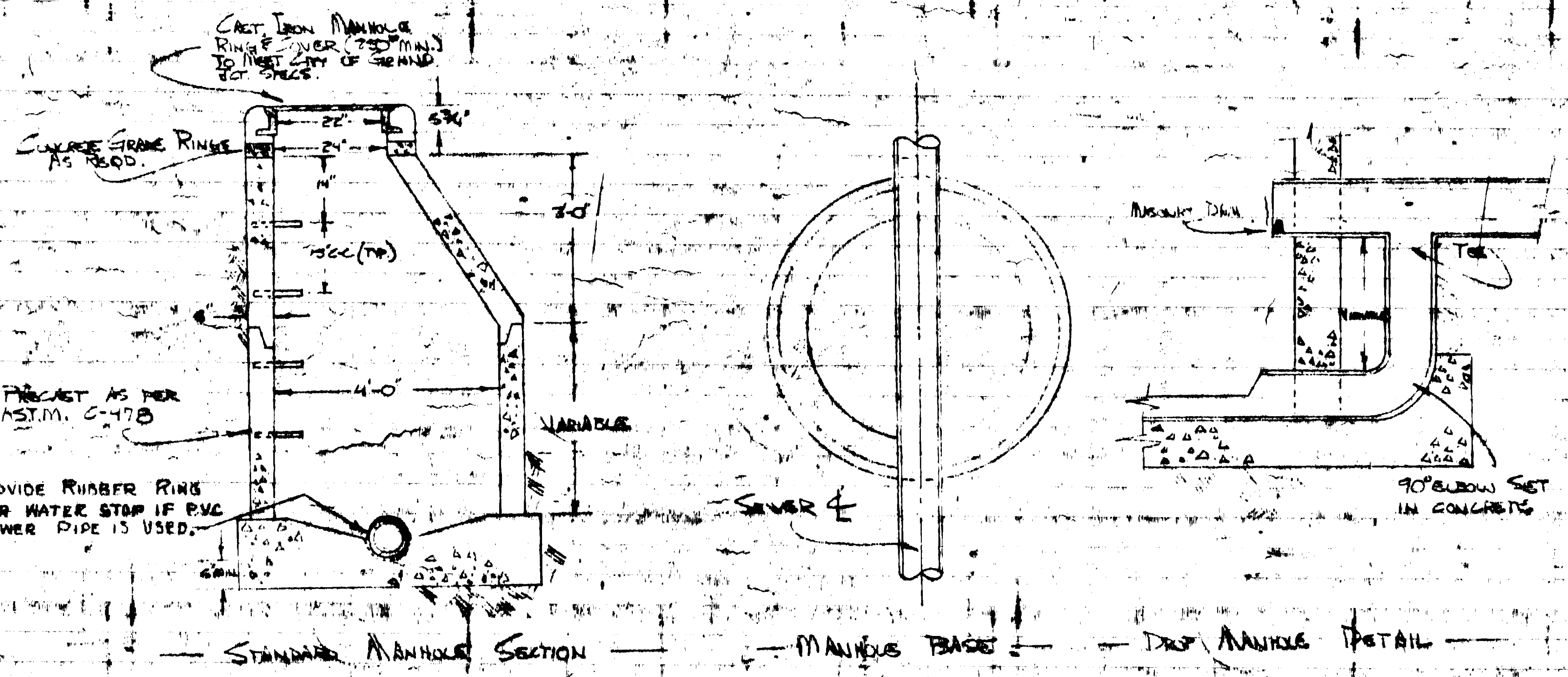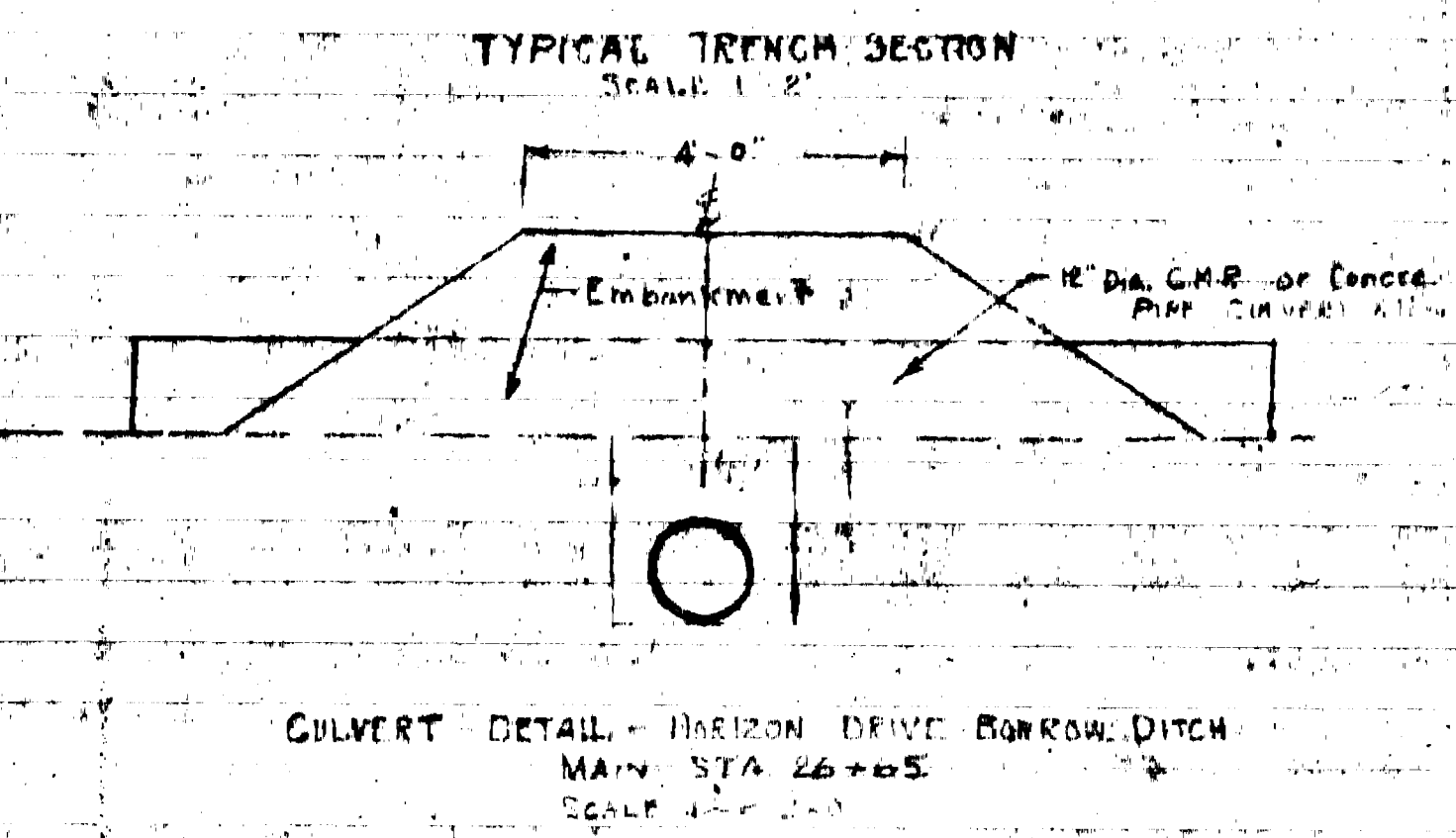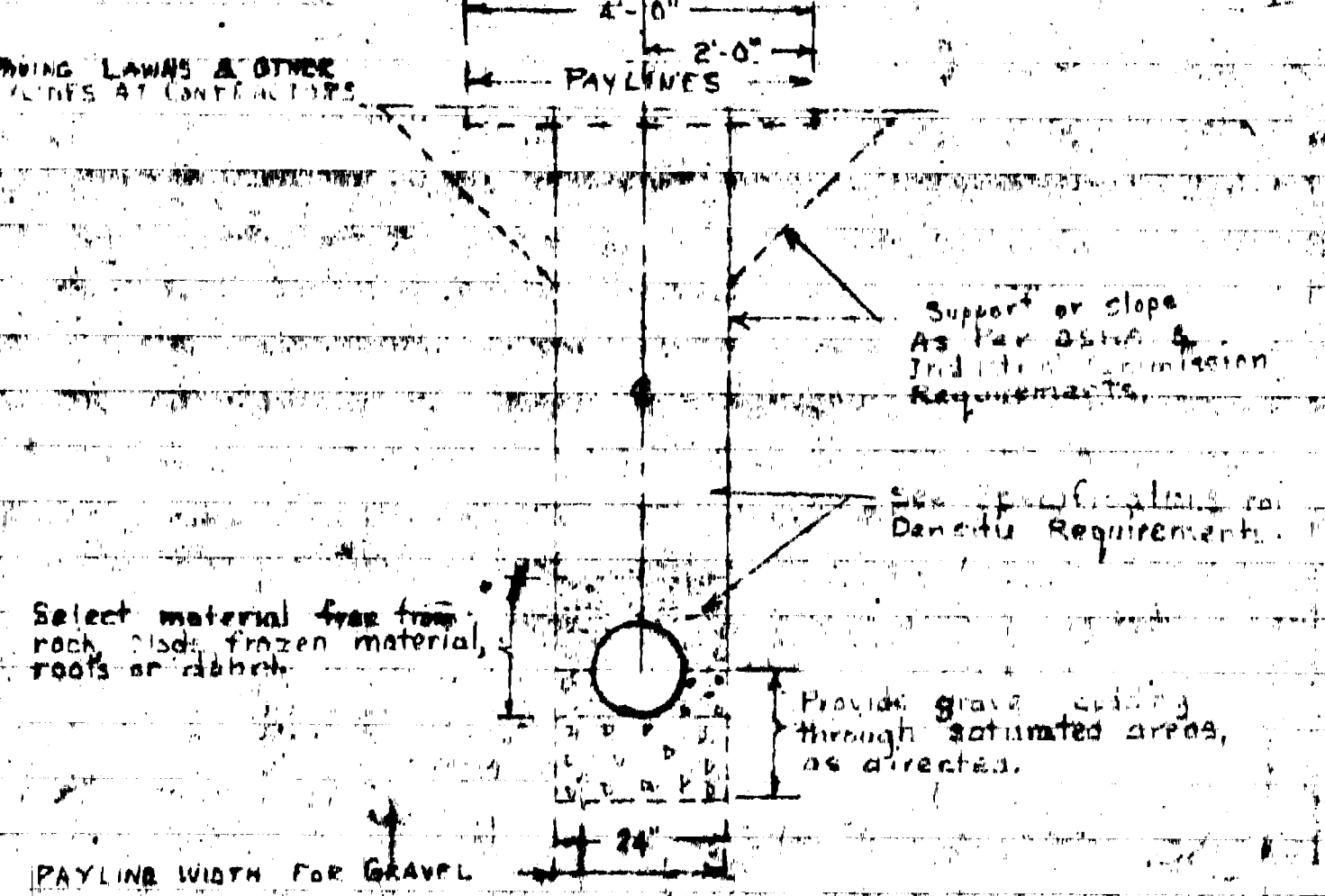
Miscellaneous
Items such as culverts, miscellaneous concrete and other items shall be as shown on the drawings or as directed during construction.

Installation: Concrete and vitrified clay pipe shall be installed according to provisions of ASTM Designation C12. Asbestos cement and PVC pipe to be installed in accordance with provisions of the manufacturers installation manual.
Manholes shall be placed on monolithically placed concrete bases, as shown on the drawings or as directed. Connection to the existing Horizon Drive Manhole No. 22 to be made as required by the City of Grand Junction. Appurtenances such as wyes, service stubs and cleanouts to be installed as directed.

Backfilling Operations: Backfill shall be placed promptly following pipe laying operations. Backfill around pipe and to ground surface under roadways and driveways shall be compacted to 85% of Modified Proctor densities or to Mesa County Road Depart-ment specifications, where applicable. Backfill under lawns and other improve-ments shall meet the same density requirements. Other backfill shall be placed such that no settlement will occur when it is put to its normal use. Puddling will not be permitted when freezing may occur or in areas where the soil is already saturated. Through areas of unstable ground, pipe shall be bedded on gravel as directed.
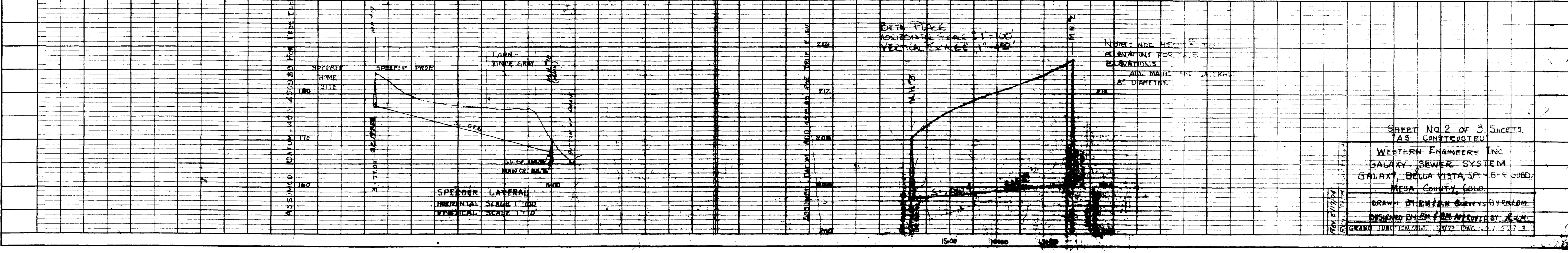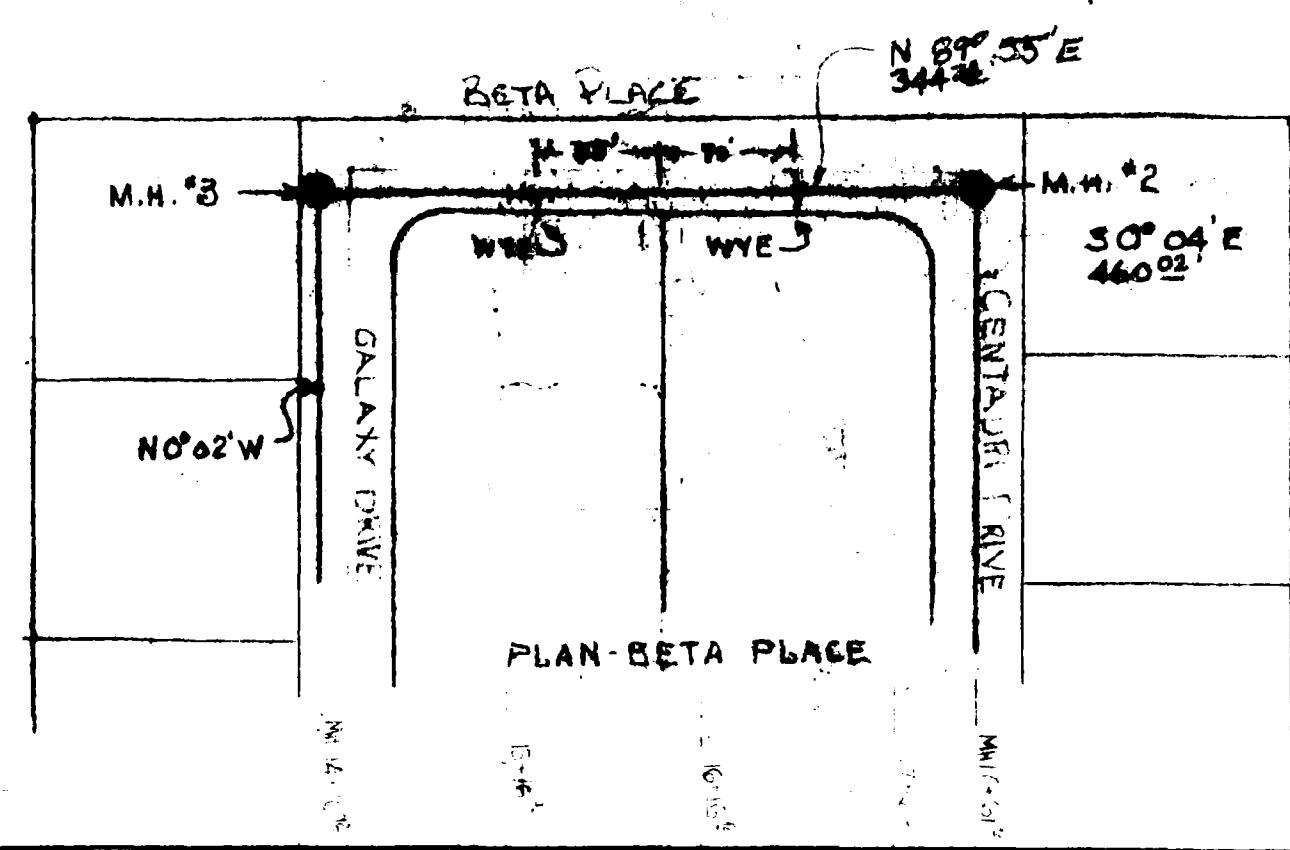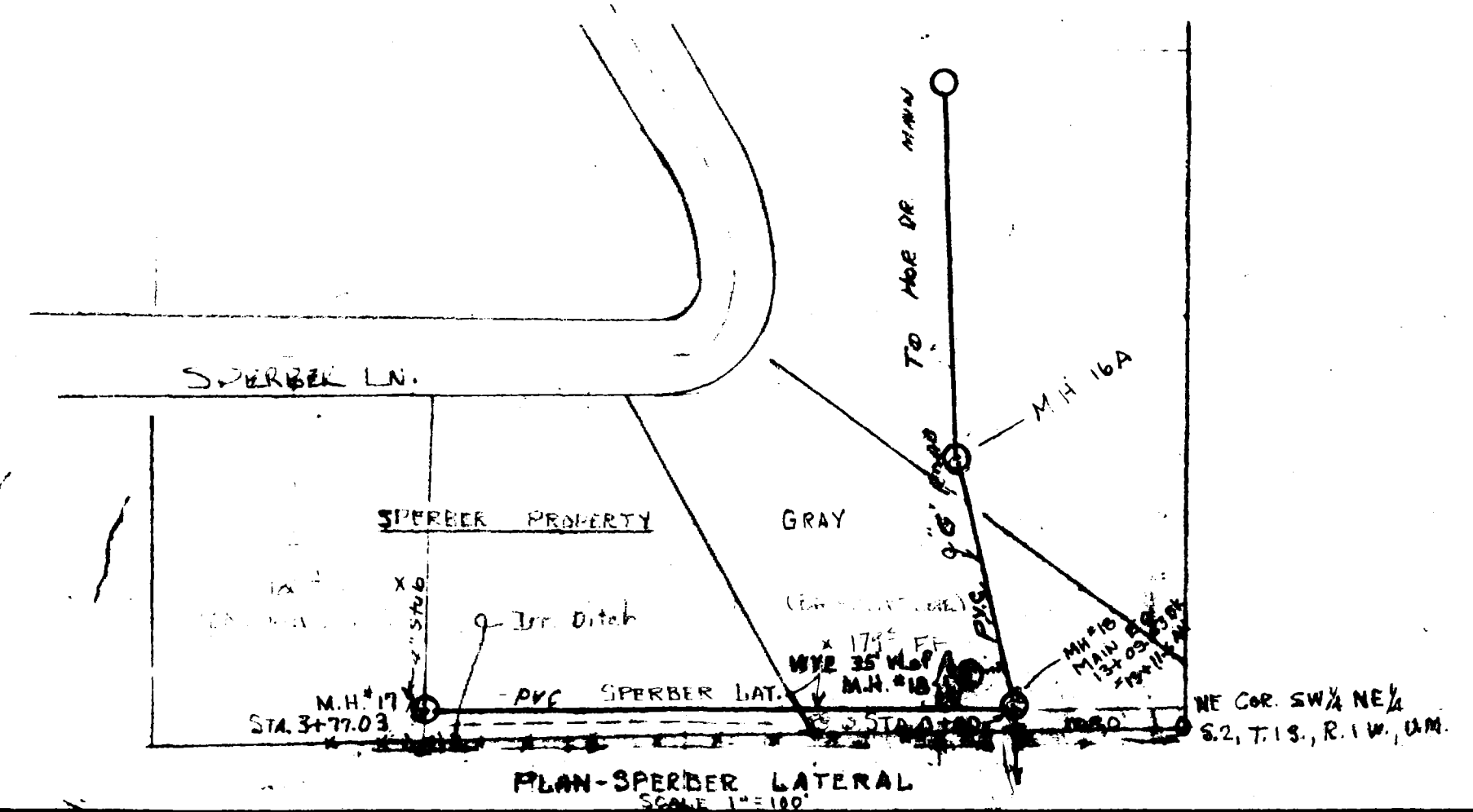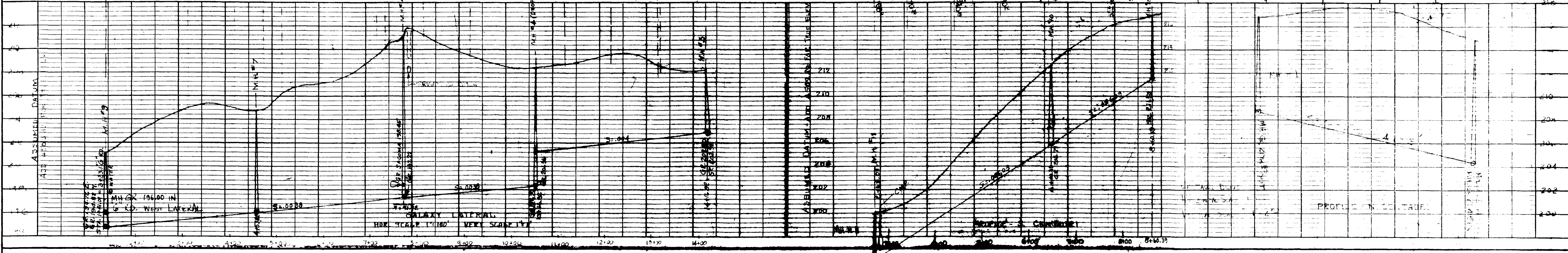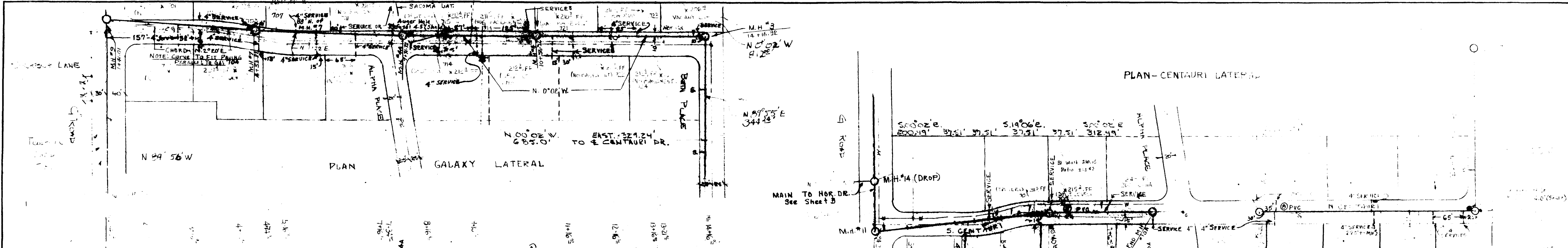
Miscellaneous: The contractor shall repair, replace and otherwise return all damaged or disturbed improvements to their original or better condition. If no bid item is provided, the cost of this work shall be included in prices bid for other items of work.
The contractor shall advise all utility companies, the Mesa County Road Depart-ment and affected irrigation companies of their activities and secure all permits necessary for completing the project. The Engineer will assist by providing necessary plans, sketches and descriptions as may be required.

TYPICAL TRENCH SECTION
Scale 1' 2'

CULVERT DETAIL - HORIZON DRIVE BORROW DITCH
MAIN STA 26+65

STANDARD MANHOLE SECTION — MANHOLE BASE — DROP MANHOLE DETAIL

MANHOLE DETAILS
APPROX. SCALE — 1"=2.0'

ENGINEER: In Intent

PLAN - CENTAURI LATERAL

PLAN GALAXY LATERAL

GALAXY LATERAL
HOR SCALE 1"=100'   VERT SCALE 1"=10'

PROFILE - S. CENTAURI

PROFILE IN CENTAURI

PLAN - SPERBER LATERAL
SCALE 1"=100'

PLAN - BETA PLACE

SPERBER LATERAL
HORIZONTAL SCALE 1"=100'
VERTICAL SCALE 1"=10'

BETA PLACE
HORIZONTAL SCALE 1"=100'
VERTICAL SCALE 1"=10'

NOTE: ADD 400 TO
ELEVATIONS FOR TRUE
ELEVATIONS
ALL MAINS AND LATERAL
8" DIAMETER

PLAN OF MAIN SEWER
SCALE 1"=100'

PROFILE OF MAIN SEWER

PLAN - SACOMA & SCHOOL LATERALS
SCALE 1"=100'

PLAN "G" ROAD
SCALE 1"=100'

TYPICAL SECTION "G" ROAD
(Recommended by Merc. Co. Road Dept.)

PROFILE SACOMA LATERAL