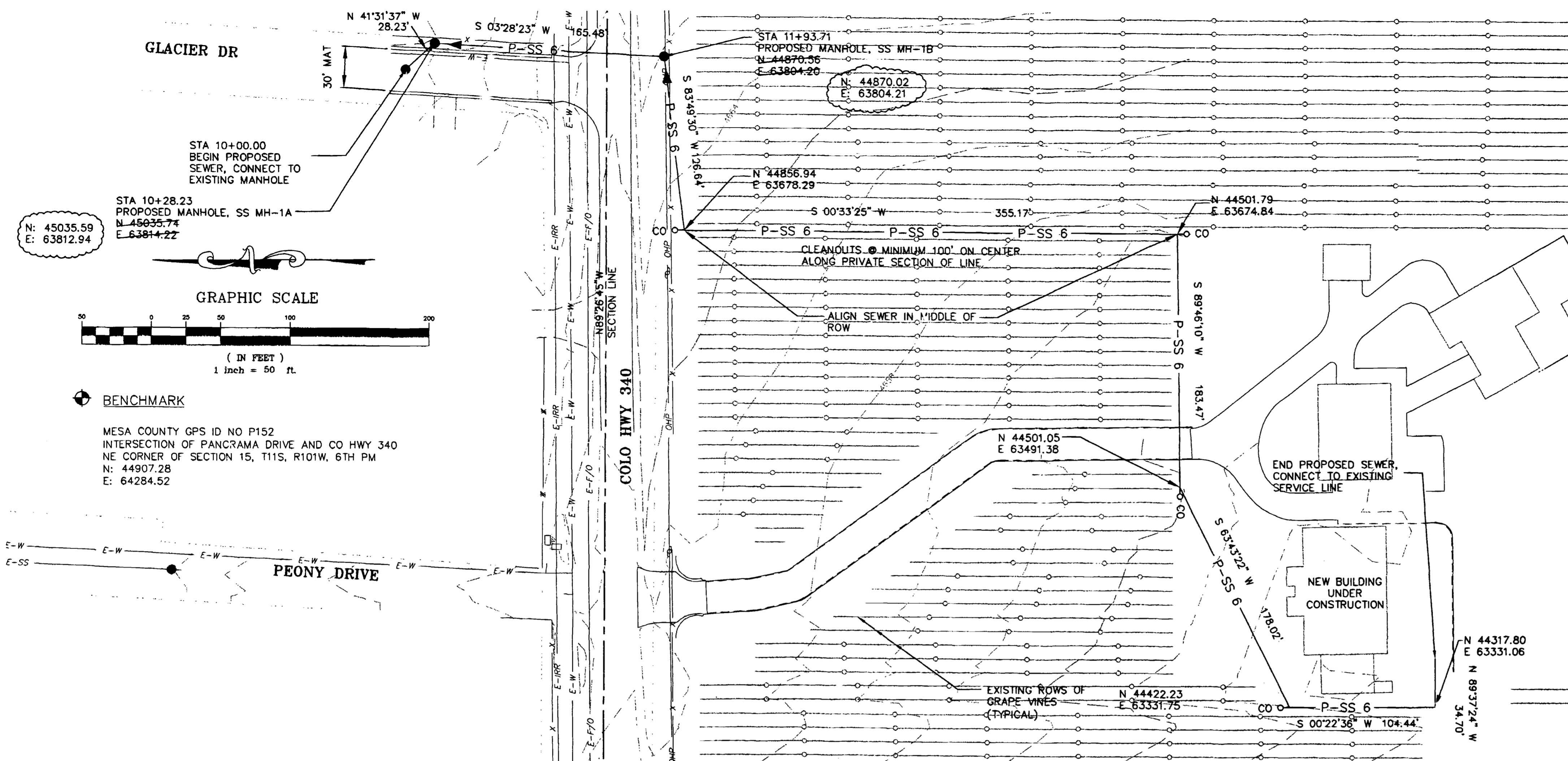


GENERAL SEWER NOTES

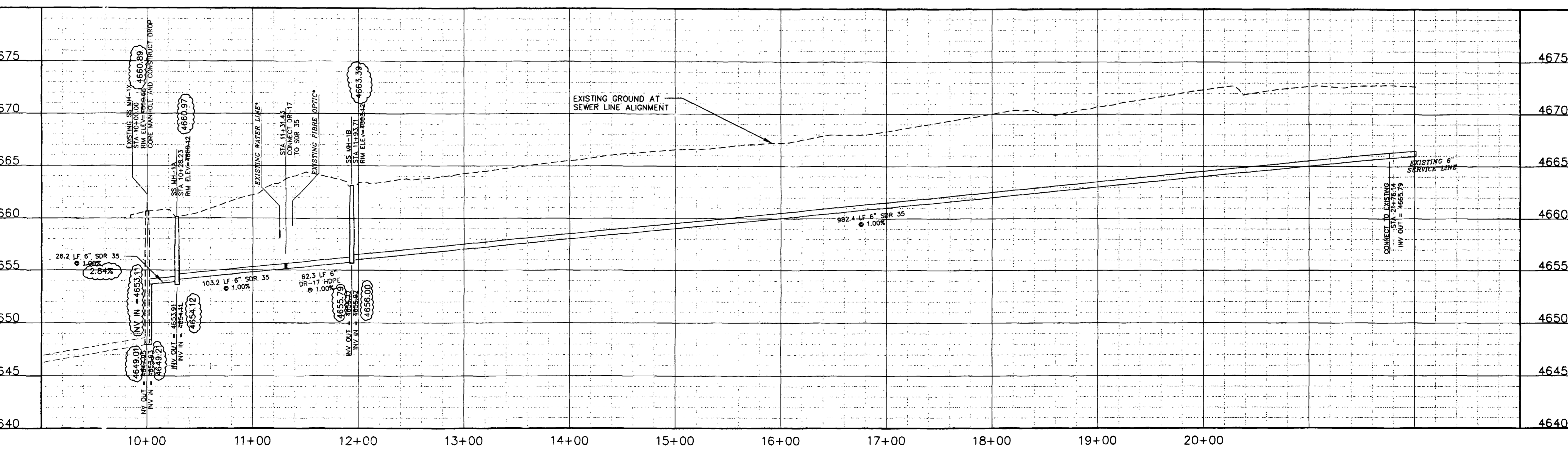
- A. CONTRACTOR SHALL HAVE ONE SIGNED COPY OF PLANS AND A COPY OF THE CITY OF GRAND JUNCTION'S STANDARD SPECIFICATIONS AT THE JOB SITE AT ALL TIMES.
- B. ALL SEWER MAINS SHALL BE PVC SDR 35 (ASTM 3034) UNLESS OTHERWISE NOTED.
- C. ALL SEWER MAINS SHALL BE LAID TO GRADE UTILIZING A PIPE LASER.
- D. ALL SERVICE LINE CONNECTIONS TO NEW MAINS SHALL BE ACCOMPLISHED WITH FULL BODY WYES OR TEES. TAPPING SADDLES WILL NOT BE ALLOWED.
- E. SERVICE LINE CONNECTIONS TO EXISTING NON-PVC MAINS SHALL BE ACCOMPLISHED USING "INSERTA TEES" MANUFACTURED BY FOWLER MANUFACTURING COMPANY OF HILLSBORO, OREGON. FOR EXISTING PVC MAINS, TAPPING SADDLES SHALL BE USED.
- F. NO 4 INCH SERVICES SHALL BE CONNECTED DIRECTLY INTO MANHOLES. ALL 6 INCH SERVICES SHALL BE ACCOMPLISHED INSIDE OF A MANHOLE.
- G. THE CONTRACTOR SHALL NOTIFY THE CITY INSPECTOR 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- H. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED SEWER LINE TESTING TO BE COMPLETED IN THE PRESENCE OF THE ENGINEER OR HIS REPRESENTATIVE. PRESSURE TESTING WILL BE PERFORMED AFTER INSTALLATION OF DRY UTILITIES, AFTER ALL COMPACTION OF STREET SUBGRADE AND PRIOR TO STREET PAVING. FINAL LAMPING WILL ALSO BE ACCOMPLISHED AFTER PAVING IS COMPLETED. THESE TESTS SHALL BE THE MINIMUM BASIS OF ACCEPTANCE OF THE SEWER LINE EXTENSION.
- I. THE CONTRACTOR SHALL OBTAIN CITY OF GRAND JUNCTION STREET CUT PERMIT FOR ALL WORK WITHIN EXISTING CITY RIGHT-OF-WAY PRIOR TO CONSTRUCTION.
- J. A CLAY CUT-OFF WALL SHALL BE PLACED 10 FEET UPSTREAM FROM ALL NEW MANHOLES UNLESS OTHERWISE NOTED. THE CUT-OFF WALL SHALL EXTEND FROM 6 INCHES BELOW TO 6 INCHES ABOVE GRANULAR BACKFILL MATERIAL AND SHALL BE 2 FEET WIDE. IF NATIVE MATERIAL IS NOT SUITABLE, THE CONTRACTOR SHALL IMPORT MATERIAL APPROVED BY THE ENGINEER.
- K. SEWER SERVICE STUB OUTS SHALL BE CAPPED AND PLUGGED. STUB OUT SHALL BE MARKED WITH A 4X4 INCH POST PAINTED GREEN BURIED WITH 3 FEET ABOVE GRADE. AS-BUILT SURVEYING FOR VERTICAL GRADE OF STUB OUT REQUIRED PRIOR TO BACKFILL.
- L. RED LINE AS-BUILTS SHALL BE SUBMITTED TO THE CITY UTILITY ENGINEER AT LEAST 72 HOURS PRIOR TO PAVING FOR REVIEW.

MANHOLE NOTES

- 1. CONCRETE SHALL BE COLORADO DEPARTMENT OF TRANSPORTATION CLASS "B" (SECTION 601.02)
- 2. ALL CEMENT USED IN MORTAR, CONCRETE BASES, GRADE RINGS, RISER SECTIONS, CONES, AND FLAT TOPS, FOR SANITARY SEWER MANHOLES, SHALL BE TYPE V OR MODIFIED TYPE II PORTLAND CEMENT WITH LESS THAN 5% TRICALCIUM ALUMINATE.
- 3. MANHOLE RISER SECTIONS, CONES, FLAT TOPS, AND GRADE RINGS SHALL BE PRECAST REINFORCED CONCRETE CONFORMING TO ASTM C-478 OR AASHTO M-199.
- 4. BACKFILL AROUND MANHOLES AND OTHER STRUCTURES SHALL BE PLACED IN 8" MAX. LIFTS AND COMPACTED TO 95% AASHTO T-99.
- 5. ALL WORK SHALL BE IN ACCORDANCE WITH APPROVED PLANS AND CITY SPECIFICATION.
- 6. MANHOLE CONE AND FLAT TOP SECTIONS SHALL BE POSITIONED SUCH THAT THE MANHOLE RING AND COVER IS CENTERED ON THE UPSTREAM FLOW LINE. IF THE CONE IS FURNISHED WITH STEPS, THE MANHOLE RING AND COVER WILL BE SHIFTED SO THAT THE STEPS ARE INSTALLED AT A 12" OFFSET FROM THE INLET PIPE TO FACILITATE CLEANING AND TV EQUIPMENT.
- 7. IF THE MANHOLE SECTIONS ARE FURNISHED WITH STEPS THEY SHALL BE INSTALLED AT A 12" OFFSET FROM THE INLET PIPE TO FACILITATE CLEANING AND TV EQUIPMENT.
- 8. MANHOLE RING AND COVER SHALL BE SET TO FINISH GRADE USING RAPID ROAD REPAIR (OR APPROVED EQUAL) GROUT TO ADJUST RIM ELEVATION. GROUT SHALL NOT EXCEED 0.10 FT. THICKNESS. GROUT SHALL BE PLACED BETWEEN TOP OF CONCRETE GRADE RING AND RING AND COVER. STEEL PAVING RINGS ARE NOT ALLOWED FOR GRADE ADJUSTMENT UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 9. INVERTED CASTINGS WILL NOT BE ALLOWED UNLESS APPROVED BY THE ENGINEER.



\*UTILITY LOCATIONS ARE AN APPROXIMATION FOR INFORMATION ONLY. CONTRACTOR IS TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL CONFLICTING UTILITIES AND INFORM THE ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.



NO.	DATE	BY	DESCRIPTION
1	09/26/02	JWM	AS BUILTS

**TWO RIVERS WINERY  
SANITARY SEWER-GLACIER DRIVE  
AS-BUILT PLAN & PROFILE**

**THOMPSON-LANGFORD CORP.**  
ENGINEERS AND LAND SURVEYORS  
629 25 1/2 RD., SUITE 2210  
GRAND JUNCTION, COLORADO  
PH. (970) 243-8067  
FAX (970) 241-2845  
tlc@tlcwest.com

DRAWN BY: JWM  
CHECKED BY: DAT

**COLORADO REGISTERED PROFESSIONAL ENGINEER**  
30637  
2/20/02

DATE: 02/20/02  
SCALE: Horiz: 1"=50'  
Project No: 0377-004  
SHEET NO: 1 OF 1