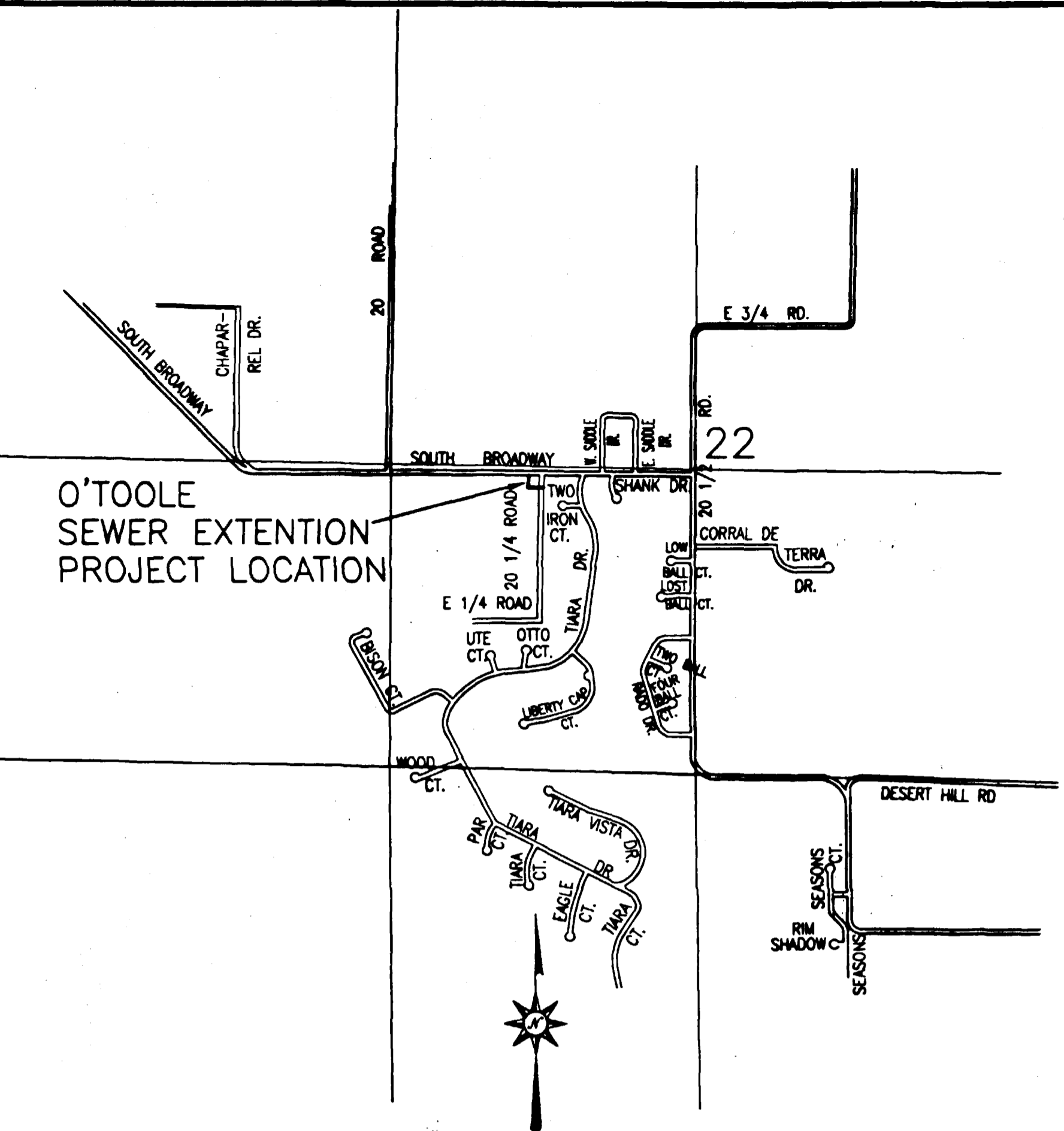


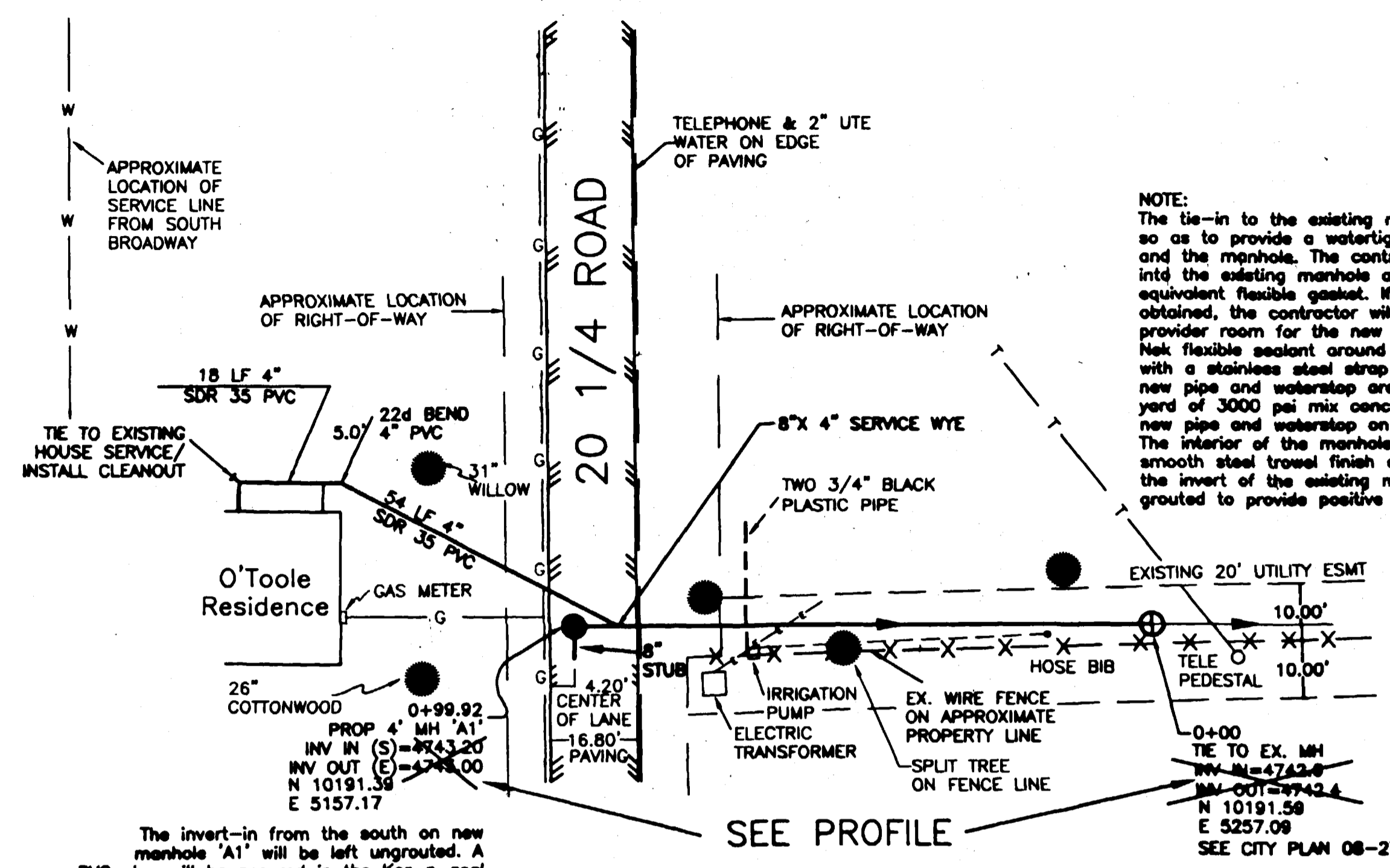
**O'TOOLE SEWER EXTENTION PROJECT LOCATION**



VICINITY MAP  
NTS

- NOTE:**
1. Contractor shall have one signed copy of plans and a copy of the City of Grand Junction's Standard specifications at the job at all times.
  2. All sewer mains shall be PVC SDR 35 (ASTM 3034) unless otherwise noted.
  3. All sewer lines shall be laid to grade utilizing a pipe laser.
  4. All service line connections to the new main shall be accomplished with full body wyes or tees.
  5. No 4" services shall be connected directly into manholes.
  6. The contractor shall notify the City inspector 48 hours prior to commencement of construction.
  7. The Contractor is responsible for all required sewer line testing to be completed in the presence of the City inspector. Pressure testing will be performed 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 basis for acceptance of the sewer line extension.
  8. The Contractor shall obtain City of Grand Junction Street Cut Permit for all work within existing City right-of-way prior to construction.
  9. A clay cut-off wall shall be placed 10' upstream from all new manholes unless otherwise noted. The cut-off wall shall extend from 6" below to 6" above the granular backfill material and shall be 2' wide. If native material is not suitable, the contractor shall import material approved by the engineer.
  10. Sewer stubs shall be capped and plugged. As-built surveying of stub-out required prior to backfilling. Stub-out shall be identified with a steel fence post buried 1' below finished grade.
  11. Existing landscaping and irrigation systems will be restored to original condition if disturbed by construction of the new sewer extension.
  12. The contractor will be responsible for location and protection of existing utilities during construction of the new sewer extension. Any property located utility per Colorado Statute which is damaged by the contractor will be repaired at no cost to the owner.
  13. Benchmark - PK nail along west side of pavement at new manhole - elev=4750.59  
PK nail at southwest corner of S. Broadway & 20 1/4 Rd. - elev=4747.75

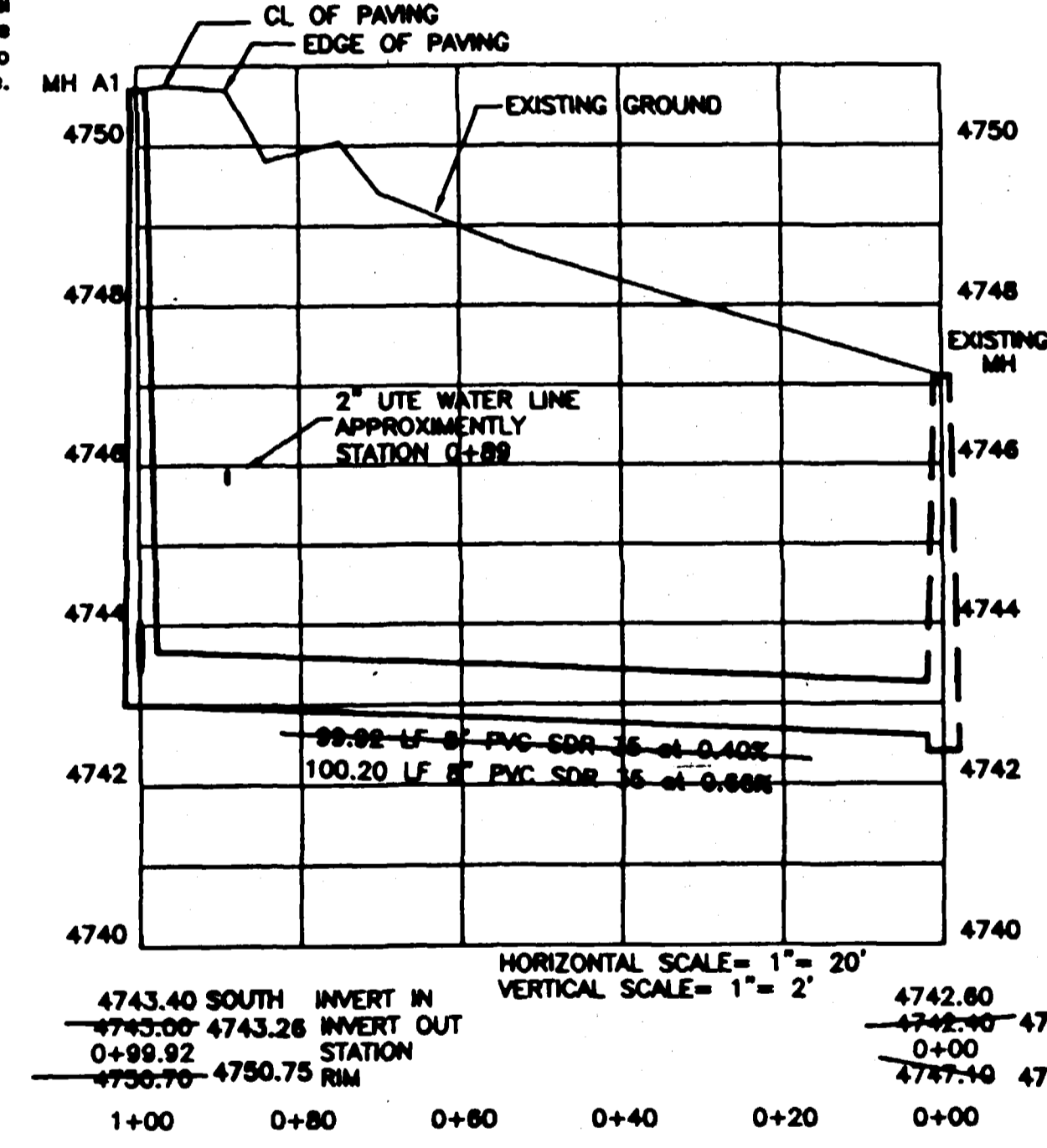
**SOUTH BROADWAY**



**NOTE:**  
The tie-in to the existing manhole will be accomplished so as to provide a watertight seal between the new pipe and the manhole. The contractor shall core a 12" hole into the existing manhole and snap in a Kor-n-seal or equivalent flexible gasket. If a clean core cannot be obtained, the contractor will jackhammer the core to provide room for the new pipe and one wrap of Rub'R-Hak flexible sealant around the pipe, held in place with a stainless steel strap as a water stop. After the new pipe and waterstop are in place, a minimum of 1/2 yard of 3000 psi mix concrete will be poured around the new pipe and waterstop on the exterior of the manhole. The interior of the manhole will be grouted to provide a smooth steel trowel finish around the new pipe and through the invert of the existing manhole. The invert will be grouted to provide positive flow through the manhole.

The invert-in from the south on new manhole 'A1' will be left ungrouted. A PVC plug will be secured in the Kor-n-seal gasket so it can be removed for future tie-in. The invert-out will be grouted to provide positive flow through the manhole.

SEE PROFILE



**RECORD DRAWING**

CITY OF GRAND JUNCTION  
APPROVED FOR CONSTRUCTION FOR ONE YEAR FROM THIS DATE.  
BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
ACCEPTED AS CONSTRUCTED  
BY: \_\_\_\_\_ DATE: \_\_\_\_\_

SEWER PLAN & PROFILE  
**O'TOOLE SEWER EXTENTION**  
**LANDesign**  
ENGINEERS • SURVEYORS • PLANNERS  
259 GRAND AVENUE  
GRAND JUNCTION, COLORADO 81501 (970) 246-0088  
PROJECT NO. 97096 DRAWN CHK'D APP'D SHEET OF  
DATE: AUGUST, 1997 jpc/jps 1 2

DATE:	NO:	REVISIONS:	By:
8/22/97	1	REVISE AS PER CITY COMMENTS	JPC
8/28/97	2	REVISE AS PER CITY COMMENTS	jps

REC'D 10/20/97  
02089401.tif