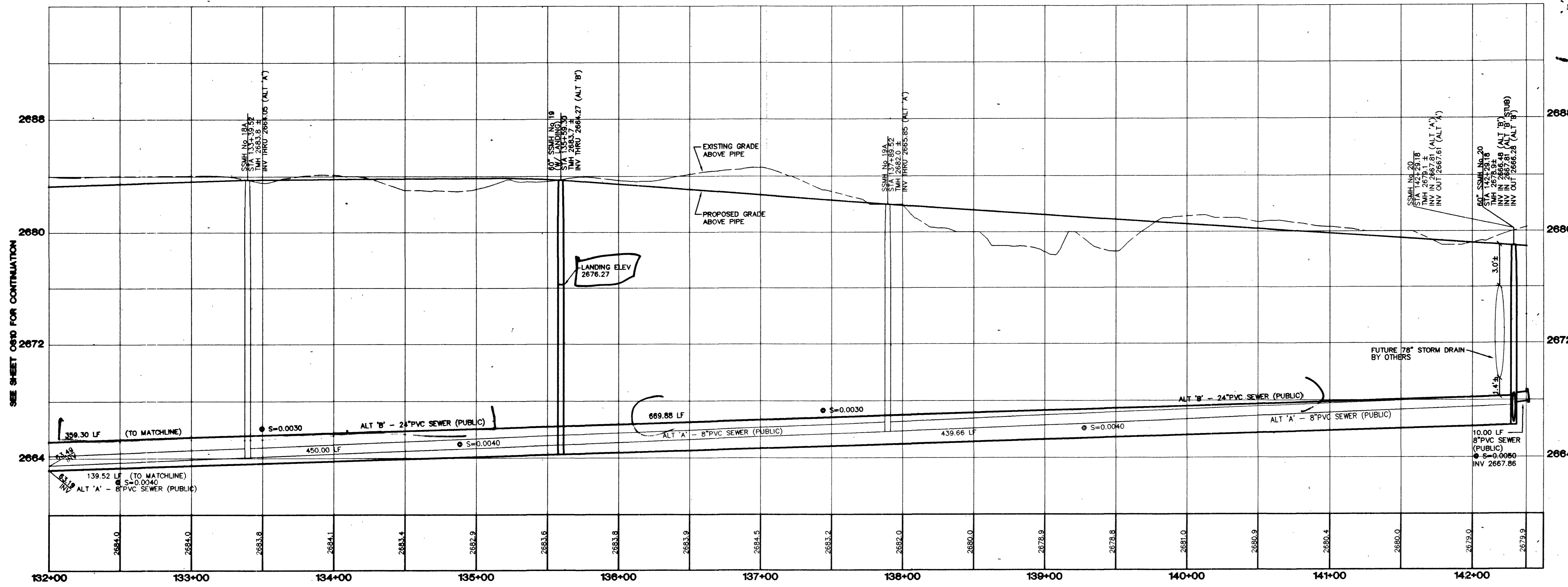


ALL SEWER PIPE AND FITTINGS MANUFACTURED BY J&M MANUFACTURING
ALL MANHOLE COMPONENTS MANUFACTURED BY JENSEN PRECAST
ALL LANDINGS SET PER PLAN
ALT 'B' CONSTRUCTED

AS-BUILT
DDW INDUSTRIES
4/2/03 BY M.M.



NOTE:
 EXISTING UTILITY LOCATIONS SHOWN HEREIN ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT VERTICAL AND HORIZONTAL LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL EXISTING UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN OR UTILITIES NOT SHOWN IN THEIR PROPER LOCATIONS. CALL BEFORE YOU DIG: 1 (800) 227-2800.

CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES AND NOTIFY THE DESIGN ENGINEER IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

BENCHMARK
 PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAV88)
 CLARK COUNTY BENCHMARK: OC001798
 NAVD83 ELEVATION: 799.117 METERS (2621.77 FEET)
 RIVET AND SQUARE ALUMINUM PLATE IN TOP CENTER OF HEADWALL ON THE WEST SIDE OF U.S. 95 NEAR MILE MARKER 90.15.

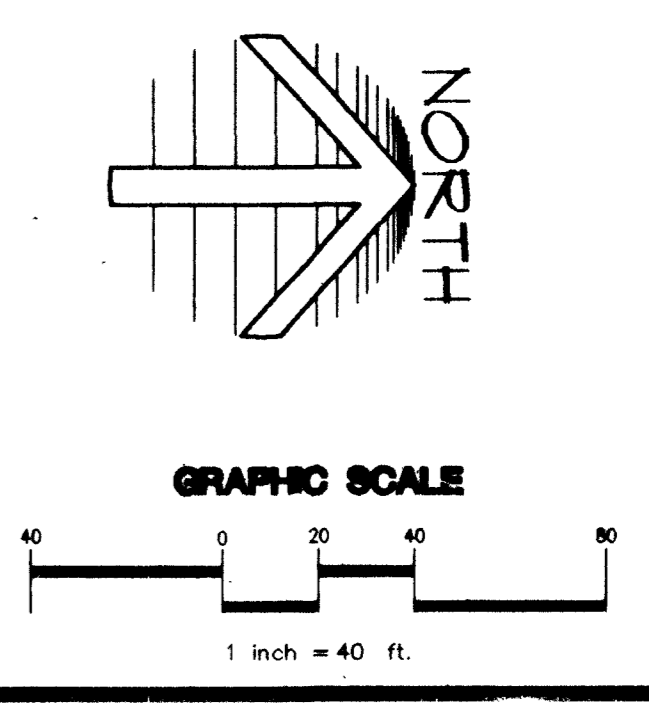
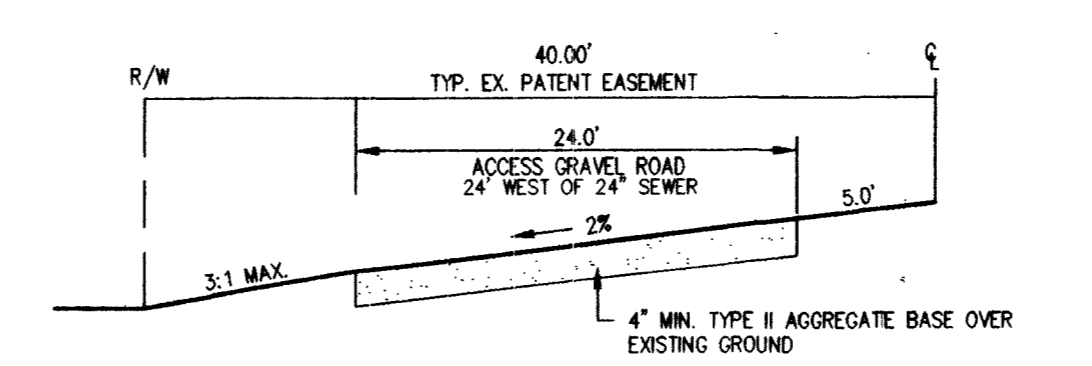
BASIS OF BEARING:
 N 89°09'50" W-BEING THE BEARING OF THE SOUTH LINE OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 7, TOWNSHIP 19 SOUTH, RANGE 59 EAST, M.D.M., CLARK COUNTY, NEVADA, AS SHOWN BY THAT RECORD OF SURVEY ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN BOOK 114 OF SURVEYS, AT FILE 57.

NOTE:
 MANHOLES SHALL HAVE AN APPROVED LOCKING COVER PER PARAGRAPH 2.2.9 OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS.

NOTE:
 ALTERNATE 'A' SEWER DESIGN IS FOR BIDDING PURPOSES ONLY. 'ALT B' TO BE CONSTRUCTED.

NOTE:
 FOR MANHOLE DEPTHS OVER 18', SEE DETAIL SHEET OS3.

PROFILE
 HORIZONTAL 1"=40'
 VERTICAL 1"=4'



Call before you Dig
 1-800-227-2600

Call before you Overhead
 1-702-593-6111

GRAND CANYON PARTNERS, LLC.
 3320 NORTH BUFFALO DRIVE SUITE 203
 LAS VEGAS, NEVADA 89128
 (702) 350-2000

CITY OF LAS VEGAS

2727 SOUTH RAINBOW BOULEVARD LAS VEGAS, NEVADA 89146-5148
 PH. (702) 873-7550 FAX (702) 362-2597
 nevada CONSULTING ENGINEERS • PLANNERS • LAND SURVEYORS

PROFESSIONAL ENGINEER - STATE OF NEVADA
 DANIEL A. HOOVER
 LICENSE NO. 12811

PROJECT: FORT APACHE ROAD 132+00.00 - 142+40.76
DESIGN: GRAND CANYON APARTMENTS OFF-SITE SEWER

DATE: JAN 2002
DESIGNED BY: JULY 2001
CHECKED BY:

PROJECT NO.: 8038-OS
SCALE: 1"=40' HORIZ. VERT. 1"=4'

EXPIRES: 06-30-03

SHEET OS11
 14 OF 18 SHEETS
 DRAWING NO. 07-V-3625-05