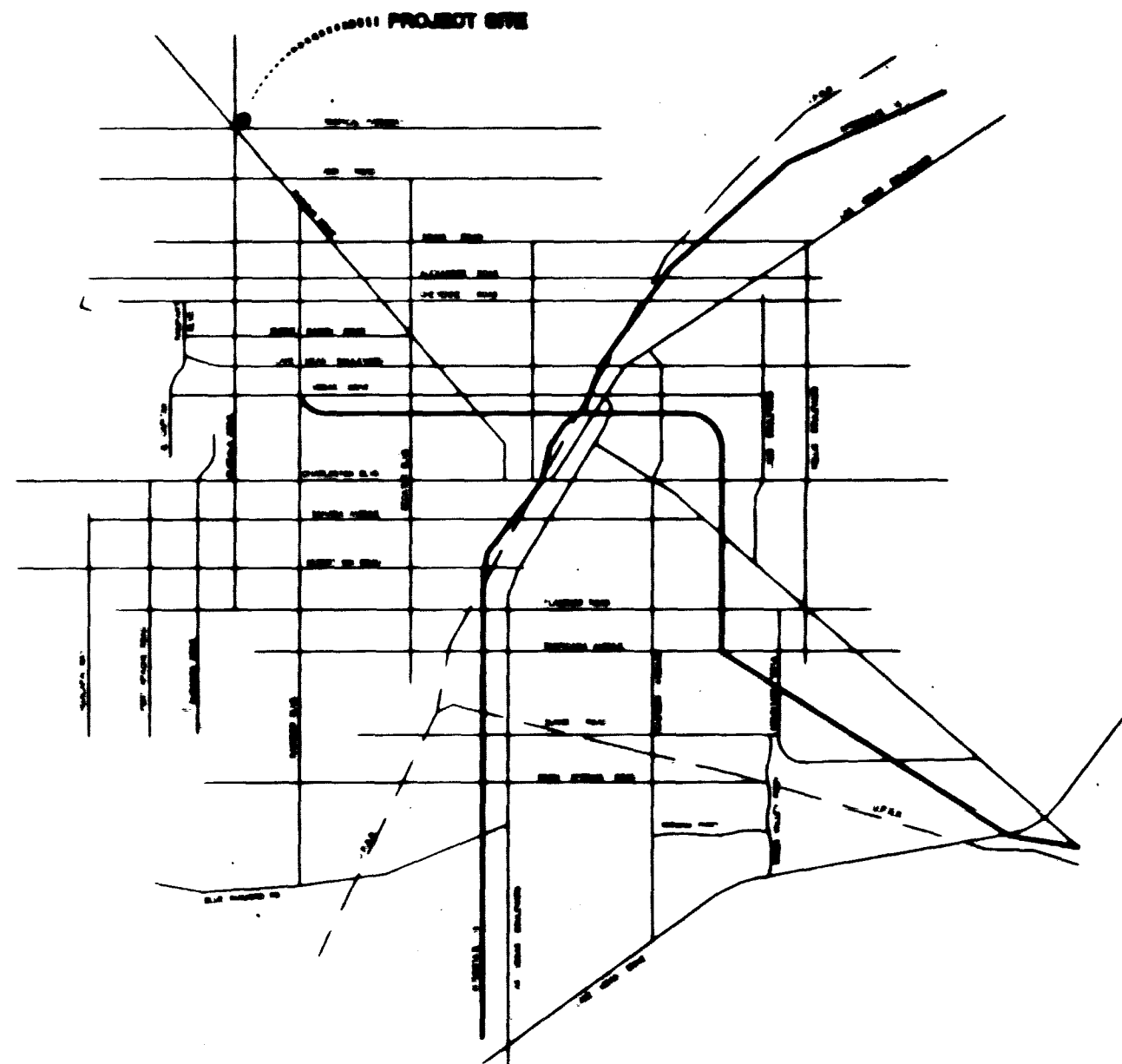




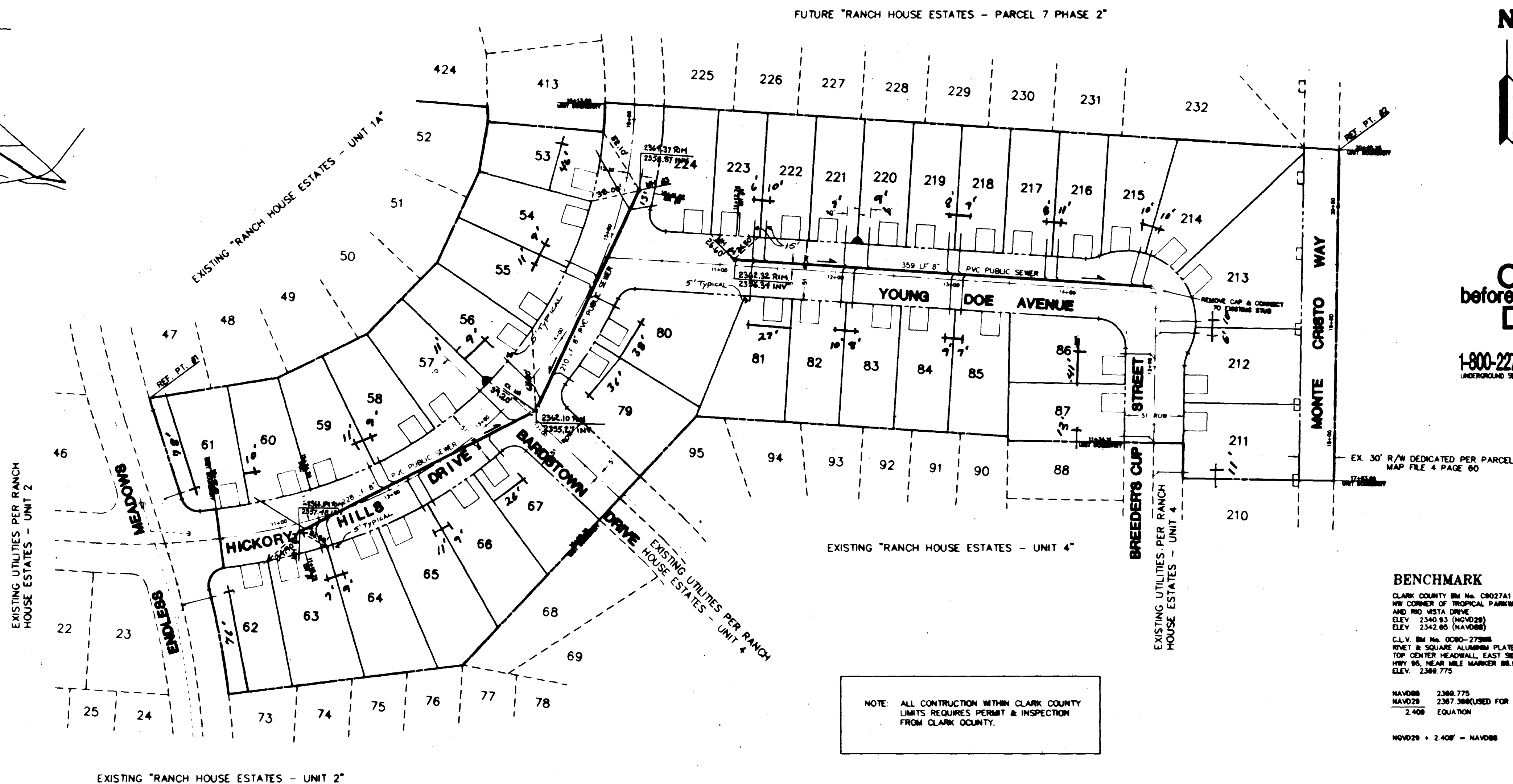
VICINITY MAP

MANHOLE CONTROL TABLE

MH #	NORTHING	EASTING
1	4093.67	6436.82
3	4387.24	6728.90
4	4327.37	6811.56
REFERENCE POINTS		
1	4208.38	6307.28
2	4421.77	7331.59

VERTICAL CONTROL

MH #	TMH	INVERT IN	INVERT OUT
1	63.6±	55.20	57.48
2	62.0±	55.20	55.00
3	64.4±	55.77	56.77
4	62.3±	56.18	56.18



Call
before you
Dig
1-800-227-2800
UNDERGROUND SERVICE (USA)

BENCHMARK

CLARK COUNTY BM No. C0027A1
NW CORNER OF TROPICAL PARKWAY
AND RIO VISTA DRIVE
ELEV. 2340.83 (NGVD29)
ELEV. 2342.85 (NAVD83)
CLV BM No. 00060-27000
RIVET & SQUARE ALUMINUM PLATE IN
TOP CENTER HEADWALL, EAST SIDE OF
VISTA 90, NEAR MILE MARKER 86.90
ELEV. 2340.775
NAVD83 2340.775
NAVD29 2387.300 (USED FOR THESE PLANS)
2.408 EQUATION
NAVD29 + 2.408 = NAVD83

NOTE: ALL CONSTRUCTION WITHIN CLARK COUNTY
LIMITS REQUIRES PERMIT & INSPECTION
FROM CLARK COUNTY.

QUANTITY ESTIMATE

4" DIAMETER MANHOLE.....3 EA
8" SEWER MAIN.....797 LF
4" SEWER LATERALS.....1308 LF

NOTE: THESE QUANTITIES ARE ONLY ESTIMATES.
CONTRACTOR TO VERIFY.

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 LOCATION.

PROJ. SEWER CONTRIBUTION

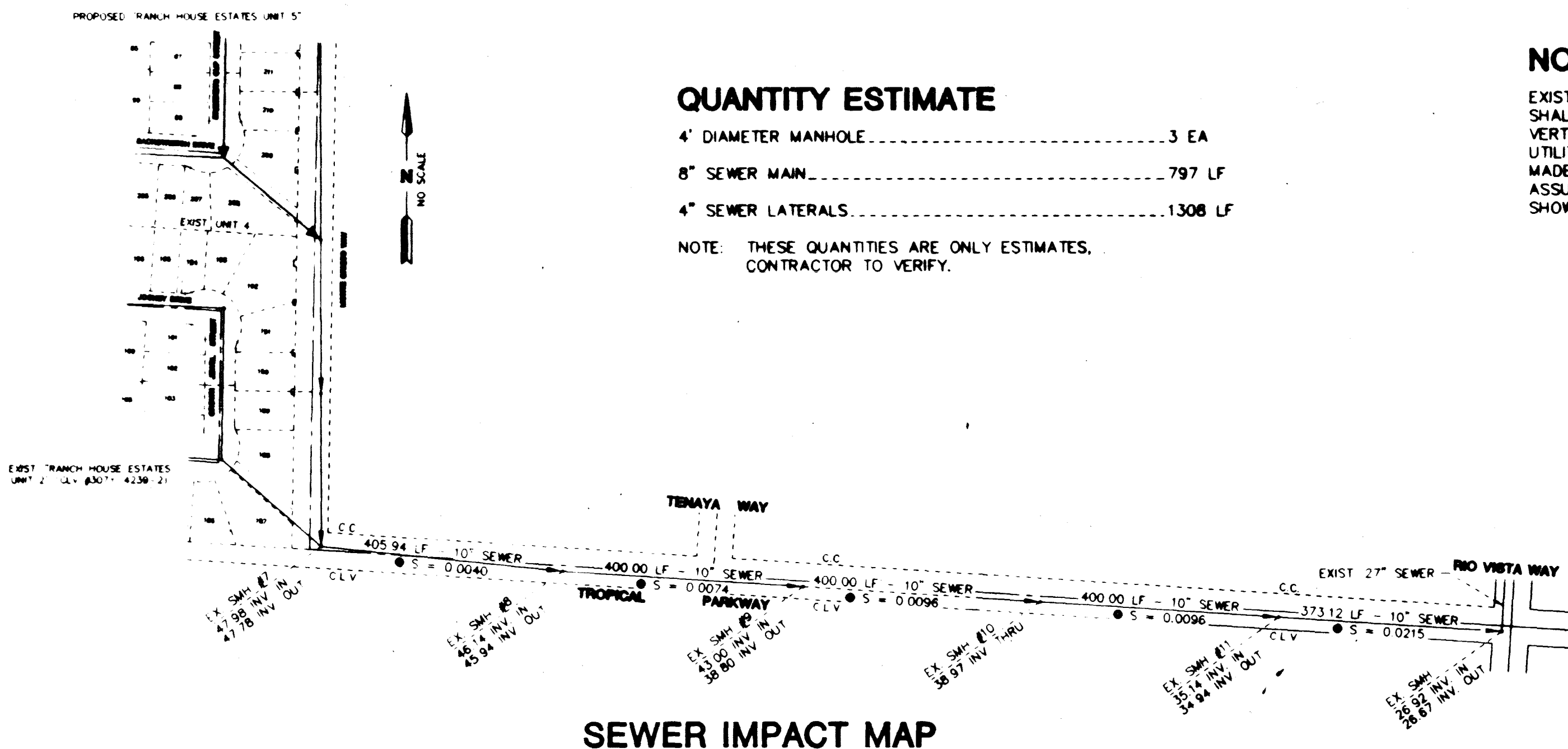
250 AVG. GPD/UNIT x 38 = 9500 GPD
3.6 PEAKING FACTOR
3.6 x 9500 = 34600 GPD PEAK

SEWER CONNECTION NOTE:

ONE OR MORE SEGMENTS OF THE DOWNSTREAM SEWER SYSTEM
THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED
AND/OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS.
ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION
AND/OR ACCEPTANCE OF THE DOWNSTREAM SEWER SYSTEM(S)
SHALL BE DONE AT THE DEVELOPER'S OWN RISK. THE CITY
OF LAS VEGAS RESERVES THE RIGHT TO PREVENT THE PHYSICAL
CONNECTION OF THIS PROJECT INTO THE DOWNSTREAM SEWER
SYSTEM UNTIL ALL SEGMENTS HAVE BEEN COMPLETED AND
ACCEPTED FOR MAINTENANCE, OR UNTIL SUCH TIME AS THEY
ARE DEEMED AVAILABLE FOR SERVICE.

CITY OF LAS VEGAS SEWER NOTES

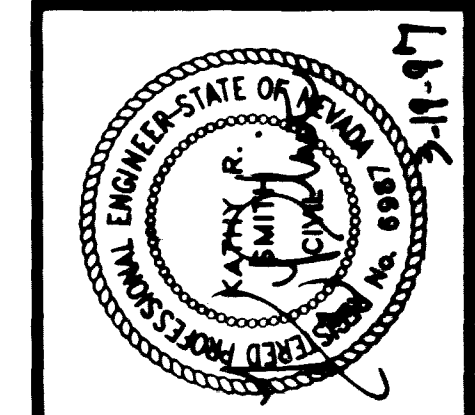
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN & CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IN ALL CASES, THESE STANDARDS SHALL SUPERSEDE THE UNIFORM STANDARD SPECIFICATIONS. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATION BOOKS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CONTROLLING AGENCY.
- CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II GRAVEL.
- ALL MANHOLES IN PAVED STREETS 80' R/W AND LARGER, SHALL HAVE CONCRETE COLLARS.
- TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO 12" DIAMETER IN SIZE. CONNECTIONS TO 15" OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES.
- A SEWER MAIN CROSSING OVER A WATER MAIN, OR LESS THAN 18" UNDER A WATER MAIN, MUST BE REINFORCED CONCRETE ENCASED FOR A DISTANCE OF NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.
- ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CONTROLLING AGENCY MUST BE CLASS "A" CONTRACTORS.
- THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED AND REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY.



SEWER IMPACT MAP

APPROVAL	DATE	REVISION
BY	11/11/95	1
BY	2/12/97	2

MASTER SEWER PLAN
RECORD DRAWING
RANCH HOUSE ESTATES - UNIT 5



ESI ENGINEERS AND
SURVEYORS INC.
PLANNERS • CONSULTING ENGINEERS • SURVEYORS
7540 WEST SHARARA AVENUE • LAS VEGAS, NEVADA 89121 • 702.481.8400
W.D. # 924 B645
BY: SCF
DATE: 06/01/96
SCALE: 1"=60'
SHEET 7 OF 12

19-60-27

"As Built"

307Y-4239-5

