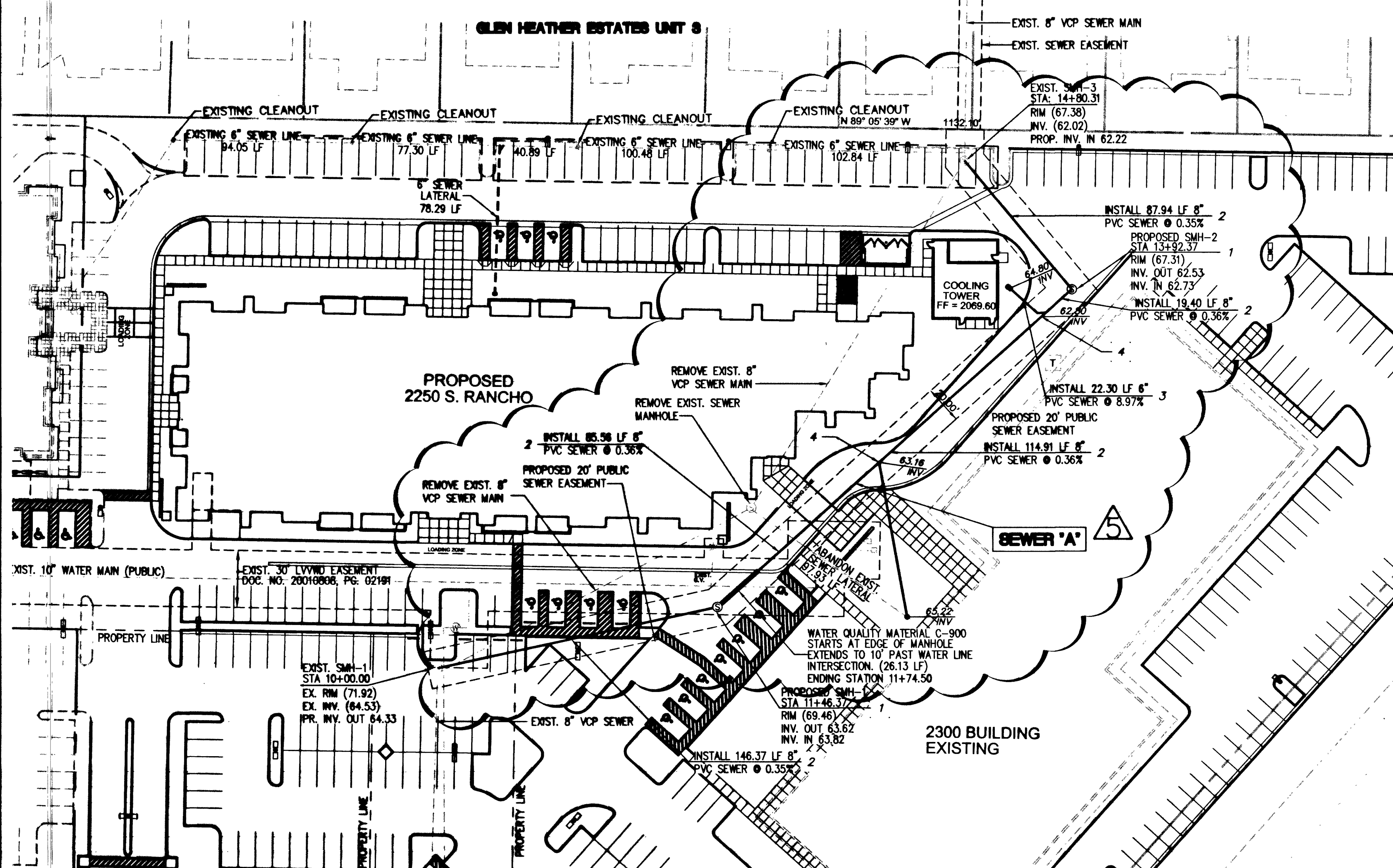
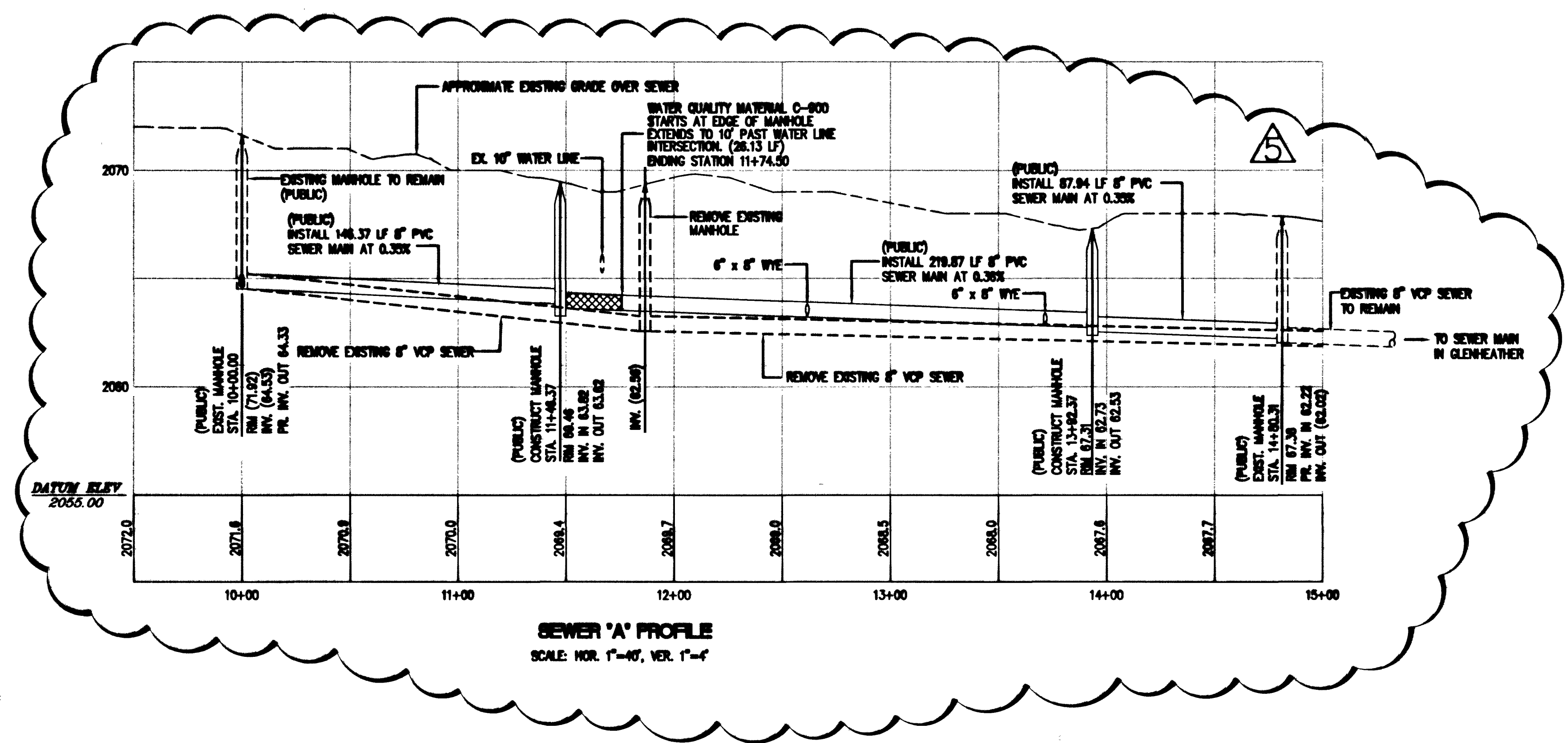


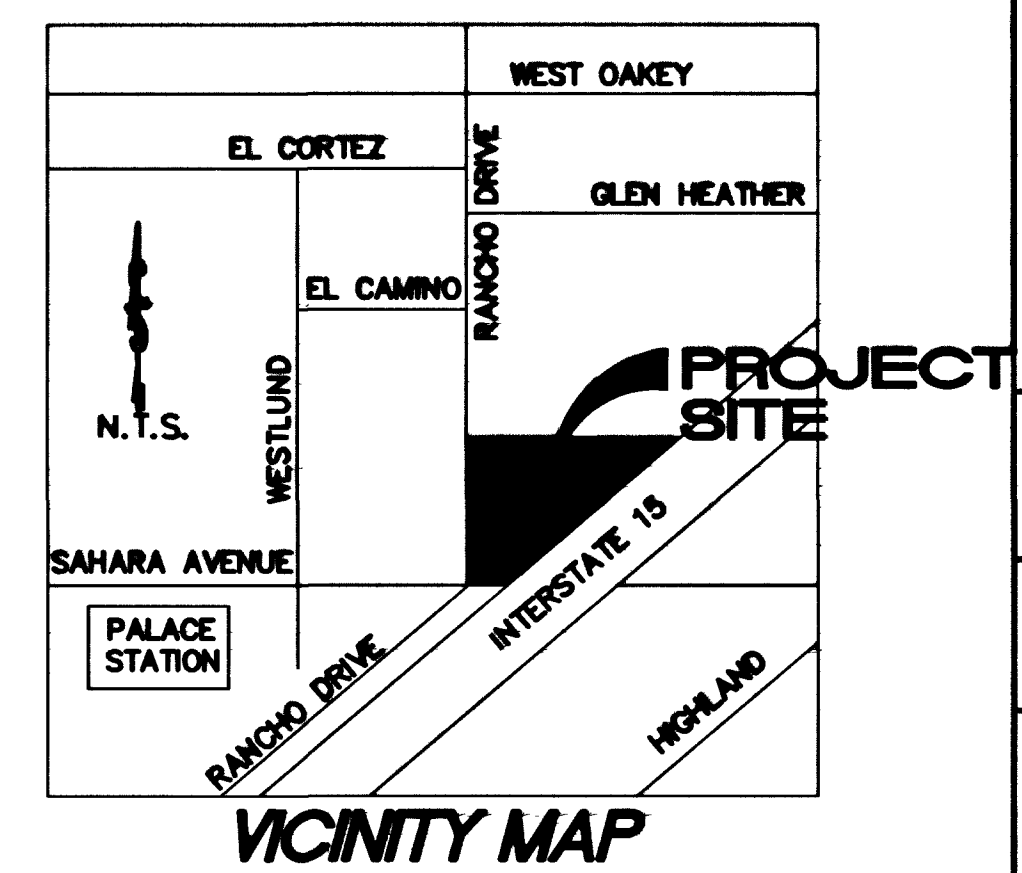


NOTE: SEE SHEET MU-1A FOR WATER INFORMATION



CITY OF LAS VEGAS SEWER NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION (U.S.C.) IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS. ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET THE APPROVAL OF THE CITY ENGINEER.
3. CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER CURB.
4. POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE.
5. ALL MANHOLES PAVED IN STREETS EIGHTY (80') FOOT R/W AND LARGER SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80') FOOT R/W REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.
6. TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER. CONNECTIONS TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. IN LINE "Y" SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
7. WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVWD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.
8. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA CLASS "A" CONTRACTORS.
9. 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 AT ANY LOCATION. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED OR REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.
10. INSTALLATION OF CURVED SEWER REQUIRES SPECIAL CONSTRUCTION PROCEDURES AND INSPECTIONS. CONTACT CITY OF LAS VEGAS CONSTRUCTION SERVICES 24 HOURS PRIOR TO INSTALLATION.



NOTE

ALL DIMENSIONS TO UTILITIES ARE TO CENTERLINE OF PIPES UNLESS INDICATED OTHERWISE.

CONTRACTORS SHALL VERIFY HORIZONTAL AND VERTICAL ALIGNMENT OF EXISTING UTILITIES AND TO NOTIFY THE DESIGN ENGINEER IMMEDIATELY ON ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

ALL EXISTING UTILITY STRUCTURES WITHIN CONSTRUCTION AREA SHALL BE ADJUSTED TO MATCH FINISHED GRADE (I.E. WY. BOX, WMH, ANNODE BOX, FH, TEL. BOX, ETC.)

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS PROJECT IS GRID NORTH, AS DEFINED BY THE NEVADA COORDINATE SYSTEM OF 1983 (NCS83), EAST ZONE, AS DETERMINED BY PUBLISHED VALUES BY NATIONAL GEODETIC SURVEY - HIGH ACCURACY REFERENCE NETWORK AS SHOWN BY MAP ON FILE IN FILE 88, PAGE 53 OF SURVEYS IN THE CLARK COUNTY, NEVADA RECORDER'S OFFICE.

BENCHMARK

CITY OF LAS VEGAS BENCHMARK STATION 7C11 4SW5

DESCRIPTION
A RIVET & PLATE IN THE TOP OF CURB ON THE NORTHEAST RETURN OF RANCHO ROAD AND SAHARA AVENUE
NAVD '88 ELEV. = 632.6872 METERS (2075.74 FEET)

SEWER CONSTRUCTION NOTES

No.	ITEM
1	48" DIA. SEWER MANHOLE PER STD. DWG. NO. SD-1
2	INSTALL 8" DIA. PVC (SDR-35) SEWER MAIN
3	INSTALL 6" DIA. PVC (SDR-35) SEWER MAIN
4	INSTALL 6" x 8" WYE

THE KEITH COMPANIES

SAHARA RANCHO OFFICE CENTER, LLC
RANCHO OFFICE PARK
ON-SITE SEWER MAIN PLAN

MU-1B

13 OF 15 SHEETS
CLV #4646

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Phone: (702) 453-0500 Fax: (702) 453-0529
Email: info@keithco.com Website: www.keithco.com

Major Accounts Land Planning Civil Engineering Land Surveying Mapping Environmental Services

DATE: 11/13/13
BY: KLS
CHECKED: 11/13/13
APPROVED: 11/13/13