

SAN. SEWER LEGEND

- SS SANITARY SEWER LINE W/SIZE & FLOW
- SANITARY SEWER CLEANOUT
- SANITARY SEWER SERVICE LATERAL

WATER LEGEND

- WATER LINE (SIZE SHOWN)
- PIPE HIGHLIGHT APPROXIMATE WATER MAIN & TAP
- WATER VALVE
- WATER TAP VALVE
- WATER TAP (1/2" OR 3/4")
- WATER TAP (1/2" OR 3/4")

LARGEST BUILDING AREA = 16,920 SQ. FT.
BLDG. CONSTRUCTION TYPE V
BLDG. SPRINKLER SYSTEM (X) YES () NO
BLDG'S 12,15,18 WILL BE SPRINKLERED
REQUIRED FIRE FLOW = 3500 GPM
EXIST. STATIC WATER PRESSURE IS 55 PSI

LAS VEGAS VALLEY WATER DISTRICT GENERAL NOTES:

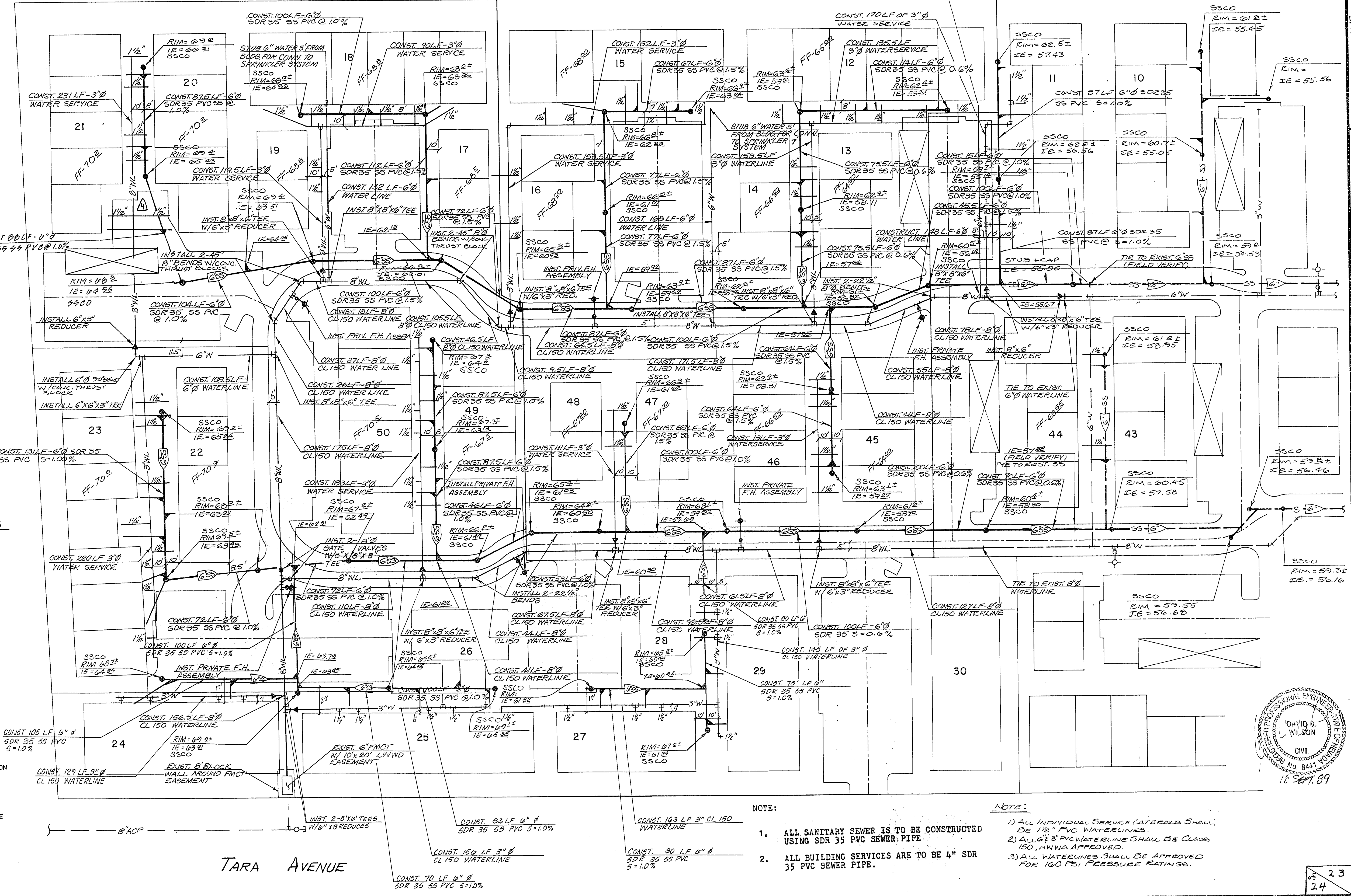
- ALL WORK TO CONFORM TO THE LAS VEGAS VALLEY WATER DISTRICT LATEST STANDARD PLATES AND SPECIFICATIONS.
 - ALL WORK, EXCEPT AS MODIFIED HEREON OR BY NOTE NO. 1, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORK CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA. NOTICE TO BE GIVEN ENGINEERING DEPARTMENT OF THE LAS VEGAS VALLEY WATER DISTRICT 48 HOURS PRIOR TO ACTUAL CONSTRUCTION.
 - SERVICE SADDLES OR TAPPED COLLARS WILL BE REQUIRED ON ALL 3/4-INCH AND 1-INCH SERVICE LATERALS. SERVICE SADDLES ONLY WILL BE PERMITTED ON 1 1/2-INCH AND 2-INCH SERVICE LATERALS. DOUBLE TAPPED COLLARS ARE NOT PERMITTED.
 - ALL LINES TO BE PRESSURE TESTED TO 200 PSI.
 - DEFLECTION ANGLES SHALL NOT EXCEED 2 1/2 DEGREES PER 13 FOOT SECTION OF PIPE FOR PIPE SIZES SMALLER THAN 14-INCHES, AND SHALL NOT EXCEED 2 DEGREES FOR PIPE SIZES BETWEEN 14-INCHES AND 18-INCHES.
 - ALL METERS SHALL BE LOCATED OUTSIDE OF DRIVEWAYS.
 - DETECTOR TAPE REQUIRED IN ACCORDANCE WITH STANDARD PLATE NO. 27 WHERE INDICATED ON THE PLANS AND AS FOLLOWS:
A. OVER ALL MAINS NOT INSTALLED AT 6 FEET FROM BACK OF CURB.
B. OVER ALL SERVICE LATERALS NOT INSTALLED AT RIGHT ANGLES TO MAINS.
 - ALL SERVICE LATERALS NOT INSTALLED IN SIDEWALKS MUST BE INSTALLED AS PER LAS VEGAS VALLEY WATER DISTRICT STD. PLATES 1A.
- CALL BEFORE YOU DIG - 1-800-227-2600

CITY OF LAS VEGAS SANITATION NOTES:

- ALL SANITARY SEWER INSTALLATIONS SHALL CONFORM TO THE STANDARD DETAILS AND SPECIFICATIONS OF THE CITY OF LAS VEGAS, AND SHALL ALSO CONFORM TO THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, LATEST EDITION, UNLESS OTHERWISE NOTED.
- 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 OR ASTM F949 SPECIFICATIONS, AND INSTALLED WITH SAND BEDDING AND BACKFILL OR TYPE II GRAVELL.
- 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" DIA. 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 PIPE FOR A DISTANCE NOT LESS THAN TEN FEET (10') TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.
- ADD 2.00 FEET TO ALL ELEVATIONS SHOWN HEREON.

CITY OF LAS VEGAS FIRE DEPARTMENT NOTES

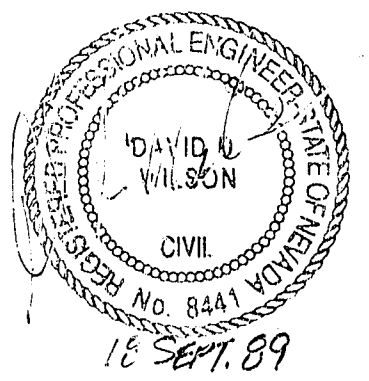
- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS" AND "HYDRANT INSTALLATION SPECIFICATIONS".
- AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
A - KENNEDY GUARDIAN
B - MUELLER A-423 CENTURIAN
C - CLOW MODEL 2546 MEDALLION
- ON ANY NEW HOME OR BUILDING CONSTRUCTION, ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMBUSTIBLE CONSTRUCTION COMMENCES AND SAID FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER WITH AN ADEQUATE WATER SUPPLY.
- CONTRACTOR SHALL PLACE A GREEN REFLECTIVE MARKER AT CENTERLINE OF STREET ADJACENT TO FIRE HYDRANTS.
- CALL THE LAS VEGAS FIRE DEPARTMENT AT 393-2888 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.
- PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER THE "HYDRANT INSTALLATION SPECIFICATIONS" SHALL BE COMPLETED BEFORE APPROVAL OF THE HYDRANTS BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- LAS VEGAS VALLEY WATER DISTRICT TO DETERMINE THAT HYDRANTS ARE CONNECTED TO A WATER SUPPLY CAPABLE OF SUPPLYING THE REQUIRED FIRE FLOW.
- FIRE HYDRANT SPACING:
RESIDENTIAL 500 FT. MAXIMUM
COMMERCIAL 500 FT. MAXIMUM
FIRE HYDRANTS SHALL BE LOCATED WITHIN 500 FT. OF ANY CONSTRUCTION OR COMBUSTIBLE OPEN STORAGE, AND SHALL BE INSTALLED PRIOR TO CONSTRUCTION.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6' OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT, OR ANY OTHER OBSTRUCTION.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CUL-DE-SAC OR WITHIN 20' OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
- A PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT FOR WATER-LINE AND FIRE HYDRANT INSTALLATIONS ON THE PRIVATE SIDE OF THE METER.
- A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT FOR VERIFICATION OF ON-SITE WATER SUPPLY.
- ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND F.M. APPROVED.



TARA AVENUE

- NOTE:
- ALL SANITARY SEWER IS TO BE CONSTRUCTED USING SDR 35 PVC SEWER PIPE.
 - ALL BUILDING SERVICES ARE TO BE 4" SDR 35 PVC SEWER PIPE.

- NOTE:
- ALL INDIVIDUAL SERVICE LATERALS SHALL BE 1/2" PVC WATERLINES.
 - ALL 6" PVC WATERLINES SHALL BE CLASS 150, ANNA APPROVED.
 - ALL WATERLINES SHALL BE APPROVED FOR 160 PSI PRESSURE RATINGS.



SUMMIT ENGINEERING CORPORATION
CONSULTING ENGINEERS AND SURVEYORS
115 EAST VANDER AVENUE, SUITE 202, LAS VEGAS, NEVADA 89101
PHONE: (702) 461-1801 FAX: (702) 738-0642

DESIGNED BY: JMF
DRAWN BY: TUK/DW
CHECKED BY: JUNE, 1989
DATE:

MASTER UTILITY PLAN
GUALI ESTATES WEST
THE RIBEIRO CORPORATION
CLARK COUNTY, NEVADA

REV.	DATE	DESCRIPTION	BY	APP'D.
1	6-89	REV. WATER	JMF	DAVID L. WILSON
2	6-89	REV. SEWER	JMF	DAVID L. WILSON
3	10/20/89	REV. WATER & SEWER FOR FIRE DEPT. DED. DED.	JMF	DAVID L. WILSON
4	4/30/90	REV. PARKING, C.V. E.D.	JMF	DAVID L. WILSON

SCALE: 1" = 40'

SHEET 23 OF 24

JOB NO. 7236