

LAS VEGAS VALLEY WATER DIST. NOTES

- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, 48 HOUR NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO A LVVWD INSPECTION.
- ALL WORK SHALL CONFORM TO THE LVVWD'S STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS AND THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS), LATEST EDITION.
- ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
- A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
- ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
- THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT A WATER LINE AND SANITARY OR STORM SEWER LINE CROSS:

A MINIMUM EIGHTEEN (18) INCH VERTICAL SEPARATION (OUTSIDE TO OUTSIDE) MUST BE MAINTAINED WHEN THE WATER LINE IS INSTALLED OVER THE SANITARY OR STORM SEWER LINE. IF THE VERTICAL SEPARATION CANNOT BE MAINTAINED OR THE WATER LINE MUST BE PLACED UNDER THE SANITARY OR STORM SEWER LINE, THE SANITARY OR STORM SEWER LINE MUST BE CONSTRUCTED WITH ONE OF THE FOLLOWING OR, AS SHOWN ON THESE PLANS:

- POTABLE WATER SUPPLY QUALITY MATERIAL.
- ENCASEMENT WITH FOUR (4) INCH CONCRETE (MINIMUM).
- SLEEVING WITH POTABLE WATER SUPPLY QUALITY PIPE.

EACH PROVISION MUST EXTEND ALONG THE SANITARY OR STORM SEWER, ON EITHER SIDE OF THE MAIN, A MINIMUM 10 FOOT DISTANCE PERPENDICULAR TO THE WATER MAIN EXTERIOR.

- WARNING TAPE SHALL BE REQUIRED OVER ALL MAINS, ALL SIX (6) INCH DIAMETER AND LARGER SERVICE LATERALS, AND ANY SERVICE LATERAL NOT INSTALLED PERPENDICULAR TO THE WATER MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD'S DISTRIBUTION SYSTEM.
- THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.
- CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVVWD APPROVAL AND PROPER NOTIFICATION, BETWEEN THE HOURS OF 10 P.M. AND 6 A.M.. CIRCUMSTANCES MAY REQUIRE TEMPORARY SERVICE FEEDS BE INSTALLED, WITHOUT LVVWD REIMBURSEMENT. ANY TEMPORARY SERVICE FEED MUST HAVE PRIOR LVVWD APPROVAL.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD'S PRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THE PLANS.

REVISED: April 25, 1995

ABANDONMENT OF EXISTING SERVICE LATERALS (3" AND LARGER)

THE CONTRACTOR SHALL NOTIFY THE AGENCY 2 FULL BUSINESS DAYS PRIOR TO THE REQUESTED REMOVAL TIME TO ALLOW THE AGENCY TO TAKE THE FINAL METER READING AND TO NOTIFY THE AGENCY'S INSPECTOR OF THE IMPENDING WORK. THE CONTRACTOR MAY THEN BEGIN REMOVAL PROCEDURES FOR THE AFFECTED SERVICE AS FOLLOWS:

ALL VALVES TO BE ABANDONED SHALL BE ABANDONED IN THE CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP 12 INCHES OF THE VALVE BOX AND THEN FILLING THE REMAINING PORTION OF THE VALVE BOX WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST 2,000 PSI. THE REMAINDER OF THE HOLE MAY BE FILLED WITH CONCRETE OR ASPHALT CEMENT. THE CONTRACTOR SHALL CUT THE EXISTING PIPE A MINIMUM OF 3 FEET BEYOND THE ABANDONED VALVE AND INSTALL A CAP. WHERE A JOINT OF COUPLING IN THE EXISTING PIPE IS UNCOVERED AT THE CUT AND CAP LOCATIONS, THE INSTALLATION OF A PLUG MAY BE PERMITTED WITH AGENCY APPROVAL. THE CONTRACTOR SHALL INSTALL A CONCRETE THRUST BLOCK IN ACCORDANCE WITH THE PROVISIONS OF THE AGENCY'S STANDARD PLATE AT ALL CAP OR PLUG LOCATION.

THE EXISTING METER(S) SHALL BE REMOVED AND DELIVERED TO THE AGENCY. THE CONTRACTOR SHALL THEN REMOVE AND/OR BACKFILL THE ABANDONED VAULT WITH TYPE II MATERIAL.

C.L.V. FIRE FLOW DATA

FIRE FLOW REQUIREMENT IS 1500 GALLONS PER MINUTE AT 20 POUNDS PER SQUARE INCH RESIDUAL BASED ON:

LARGEST SQUARE FOOTAGE: 2400 ± SQ.FT.

LARGEST AREA BETWEEN 4-HOUR AREA SEPARATION WALLS: 2400 ± SQ.FT.

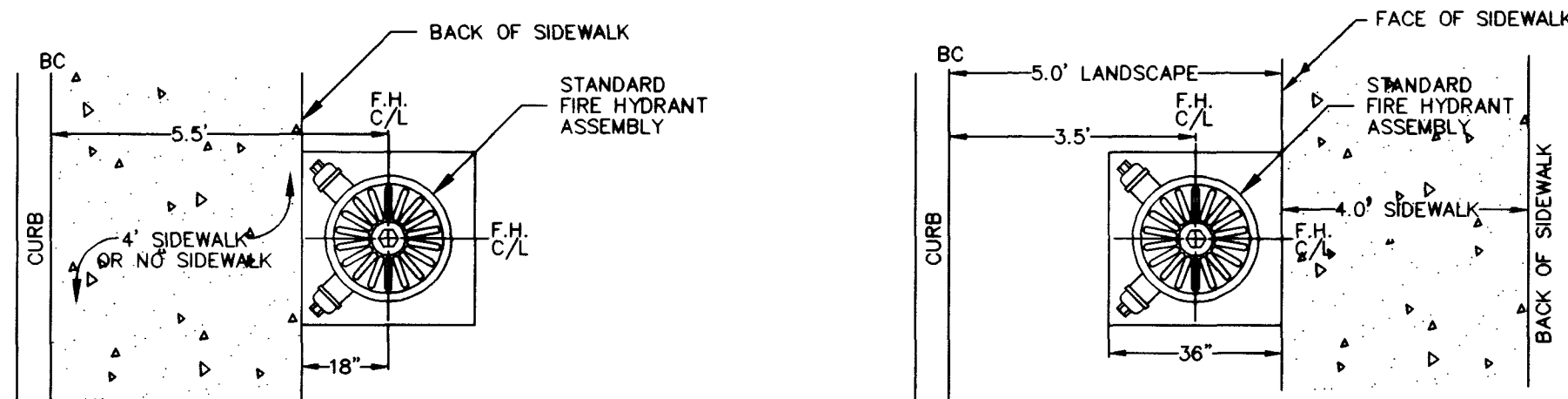
TYPE OF CONSTRUCTION: (VN)

OCCUPANCY: SINGLE FAMILY

FULL AUTOMATIC FIRE SPRINKLER SYSTEM: NO

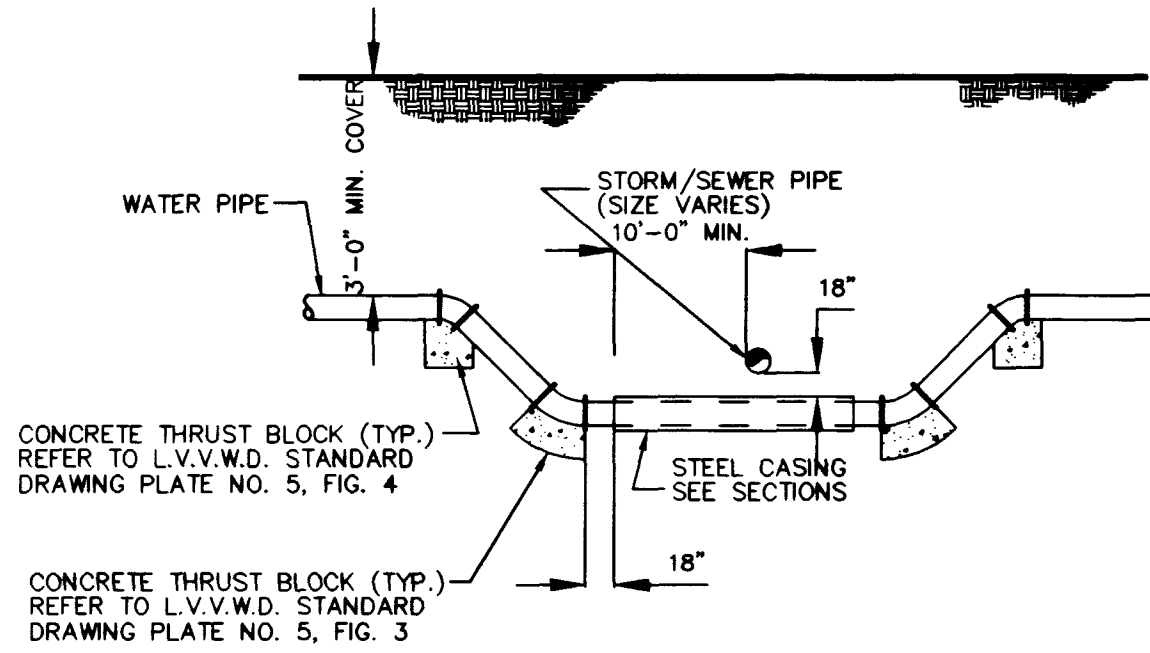
REVIEWED BY: _____

DATE: _____



FIRE HYDRANT LOCATION

PER SUMMERLIN STD. DWG. NO. U-13



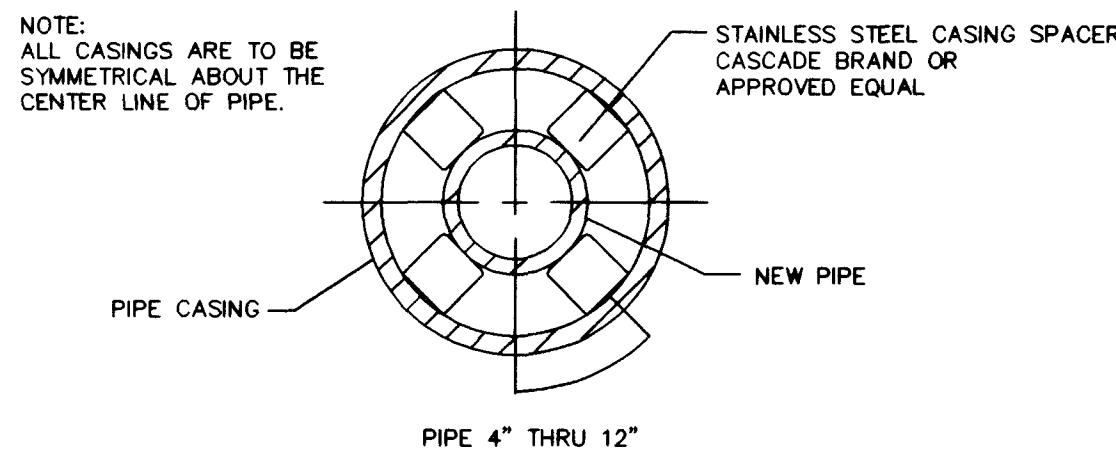
WHERE THE WATER LINE IS LESS THAN 18 INCHES OVER THE SEWER LINE, WHERE THE WATER LINE IS UNDER THE SEWER LINE, AND WHERE THE HORIZONTAL SEPARATION, AS REQUIRED BY THE WATER SUPPLY REGULATIONS, CANNOT BE MAINTAINED BECAUSE OF PHYSICAL OBSTRUCTIONS, THE WATER LINE SHALL BE PROTECTED BY CONSTRUCTION OF THE STORM/SEWER LINE AS FOLLOWS:

- EXTRA HEAVY CAST IRON PIPE
- WATER SUPPLY QUALITY MATERIALS; OR
- ENCASEMENT WITH FOUR INCHES, MINIMUM, OF CONCRETE OR SLEEVING WITH WATER SUPPLY QUALITY PIPE.

EACH OF THESE PROVISIONS SHALL ALSO BE EXTENDED FOR OTHER THAN 90 DEGREE CROSSINGS TO THE POINT AT WHICH THE TEN FOOT SEPARATION BETWEEN THE WATER AND SEWER LINES IS ACHIEVED (10/SINE OF CROSSING ANGLE).

A - STORM/SEWER WATER CROSSING DETAIL

TYPICAL CASING DETAIL



- STEEL PIPE CASING SHALL BE FABRICATED FROM A MINIMUM OF 1/4" THICK STEEL PLATES, CONFORMING TO THE REQUIREMENTS OF ASTM A283, GRADE B, C, OR D. ALL JOINTS SHALL BE WELDED. INTERIOR JOINTS SHALL BE GROUNDED TO A SMOOTH FINISH. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C201, "AWWA STANDARD FOR FABRICATED ELECTRICALLY WELDED STEEL WATER PIPE." COATINGS FOR STEEL CASING ARE NOT REQUIRED.
- PIPE CASING SHALL BE LAID TRUE TO LINE AND GRADED WITH NO BENDS OR CHANGES IN GRADE FOR THE FULL LENGTH OF THE CASING.
- THE PIPE SHALL BE SUPPORTED AT EACH END OF EACH JOINT WITH SPACERS. AFTER INSTALLATION OF THE PIPE, THE CASING SHALL BE SEALED AT BOTH ENDS WITH CASING END SEALS.

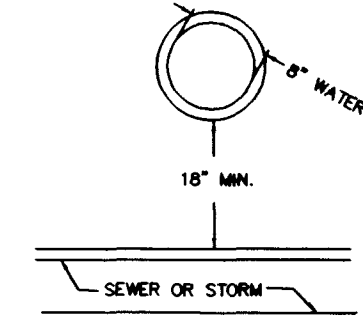
REDUCED PRESSURE PRINCIPLE ASSEMBLY

(1 - 1" AND 1 - 3/4")

APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY(S) SHALL BE INSTALLED PER THE UDACS PLATE NO. 11A. NO WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE REDUCED PRESSURE PRINCIPLE ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY THE LVVWD.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S) TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY. (ESN. 026)

UTILITY CROSSING TYPICAL DETAIL



SEWER CONNECTION NOTE:

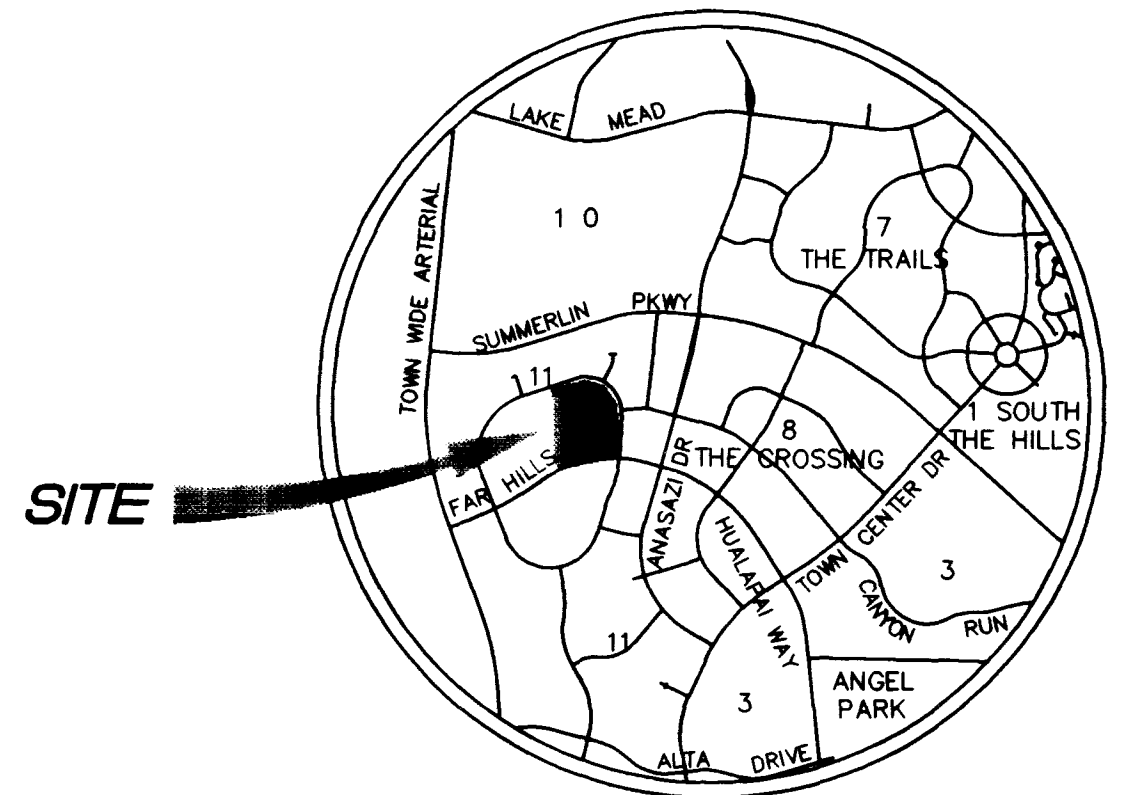
ONE OR MORE SEGMENTS OF THE DOWNSTREAM SEWER SYSTEM THAT WILL SERVE THIS PROJECT HAS NOT BEEN COMPLETED AND/OR ACCEPTED FOR MAINTENANCE BY THE CITY OF LAS VEGAS. ANY WORK DONE ON THIS PROJECT PRIOR TO THE COMPLETION AND/OR ACCEPTANCE OF THE DOWNSTREAM SEWER SYSTEM(S) SHALL BE DONE AT THE DEVELOPER'S 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.

UNIT 1 PROJECT SEWER FLOW CONTRIBUTIONS

AVERAGE DAILY FLOW = 250 GPD x 31 = 7,750 GPD
PEAK DAILY FLOW = 3.4 (250 GPD) x 31 = 26,350 GPD

SEWER NOTE:

ALL SEWER MAINS SHOWN ARE PUBLIC AND WILL BE MAINTAINED BY THE CITY OF LAS VEGAS.



LOCATION MAP

QUANTITIES:

PUBLIC WATER QUANTITIES

8" WATER	3400 LF
8" x 12" REDUCER	1 EA
12"x8"x12" WELDED TAPPING TEE & 8" TAPPING VALVE	1 EA
8" TEE	6 EA
8" 45°	6 EA
8" 22.5°	-
1" LATERAL WITH 3/4" METER	31 EA
1" LATERAL WITH 3/4" METER (IRRIG.)	2 EA
1" LATERAL WITH 1" METER (IRRIG.)	2 EA
8" GATE VALVE	5 EA
STD. F.H. ASSY. W/ 8x6x8 TEE, 6" GV AND LATERAL	6 EA
2" BLOWOFF VALVE	3 EA
3/4" RPPA	1 EA
1" RPPA	1 EA

PUBLIC SEWER QUANTITIES

8" SEWER	3550 LF
48" MANHOLE	14 EA
4" LATERAL (PRIVATE)	1540-1500 LF
BACK WATER VALVE (PRIVATE)	5 EA
4" CLEAN OUT (PRIVATE)	1 EA

PRIVATE STREET LIGHT QUANTITIES

100 W.H.P.S.	12 EA
150 W.H.P.S.	1 EA
#3-1/2 PULLBOX	3 EA
1-1/4" CONDUIT	2000 LF
DOUBLE METER PADMOUNT & PHOTO EYE	1 EA

PUBLIC STORM DRAIN QUANTITIES

18" RCP STORM DRAIN (CLASS III)	285 LF
30" RCP STORM DRAIN	425 LF
42" RCP STORM DRAIN	142 LF
MODIFIED TYPE 'C' DROP INLET	1 EA
48" STORM MANHOLE	1 EA
TYPE 3 STORM MANHOLE	1 EA

PRIVATE BACK WATER VALVE SCHEDULE

LOTS - 17,19,20,21 AND 114

NOTE: CONTRACTOR TO VERIFY DEPTH OF EXISTING SEWER STUB BEFORE COMMENCING CONSTRUCTION. ANY DISCREPANCY IN PLAN AND ACTUAL ELEVATION IS TO BE BROUGHT TO THE ENGINEERS' ATTENTION IN WRITING IMMEDIATELY!

APPROVALS:

LAS VEGAS VALLEY WATER DISTRICT 4/27/98 DATE

ENGINEERING COMPANY

ALPHA & CHRISTOPHER HOMES

UTILITY NOTES AND DETAILS

VINEYARDS UNIT 1 THE ARBORS @ SUMMERLIN

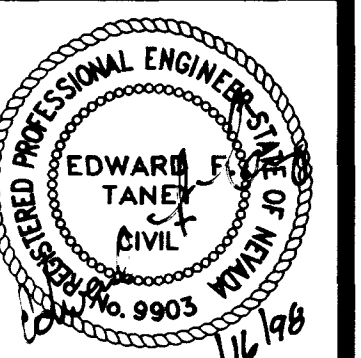
SHEET

DRAWN BY: ET / HL 2-17-98

DESIGNED BY: HL / RF 2-17-98

CHECKED BY: HL 2-17-98

PROJECT NO: 714905 SCALE: NONE



SHEET U6 13 OF 20 SHEETS DRAWING NO. 307Y-4546-1

