

GENERAL UTILITY NOTES

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION.
- SOME LOCATIONS OF EXISTING UTILITIES HAVE SHALLOW COVERS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO AVOID DAMAGE TO THESE UTILITIES DURING ALL PHASES OF CONSTRUCTION.
- ALL EXISTING MANHOLES, VALVE BOXES, AND UTILITY INVERTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE MAINTAINED TO ORIGINAL DEPTHS AND CONDITIONS.
- REFER TO W.P. & E. DRAWINGS FOR THE EXACT LOCATION AND SIZES OF BUILDING SERVICE LATERALS.
- EXISTING WATER MAINS SHALL BE ACP, PVC, OR APPROVED EQUAL AND SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE UNIFORM PLUMBING CODE.
- THE QUANTITY ESTIMATES SHOWN HEREON ARE APPROXIMATE AND NO ONE IS TO RELY UPON THEM FOR PAY QUANTITIES. EACH AND EVERY CONTRACTOR SHALL HAVE A SET OF APPROVED PLANS AND SPECIFICATIONS OF THE JOB SITE AT ALL TIMES AND SHALL RELY ON THEM TO A HIGHER DEGREE THAN THE CONSTRUCTION STAGES IN PROTECTING THE WORK.
- PRIVATE AND PUBLIC UTILITIES AS SHOWN ON THE PLANS REFLECT AVAILABLE RECORDED DATA AND THEIR SIZE AND LOCATION HAVE NOT BEEN VIEWED IN THE FORM OF UNDERGROUND BORING EXPLORATION, BUT RAISED RESTRICTED TO SURFACE MOBILE TRAIL.

LAS VEGAS VALLEY WATER DISTRICT NOTES

- NO WORK SHALL BEGUN UNLESS THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVWD FOLLOWING WATER PLAN APPROVAL. 48 HOUR NOTICE SHALL BE GIVEN TO THE LVWD COMMUNICATIONS SUPPORT CENTER (228-7777) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO A LVWD RESPONSE.
- ALL WORK SHALL CONFORM TO THE LVWD'S STANDARD PLANS, DRAWINGS, AND SPECIFICATIONS AND THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDCAS), LATEST EDITION.
- ALL WORK, EXCEPT AS NOTED 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 (UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION) 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.
- A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVWD.
- ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE OF COPPER TUBING WITH LVWD APPROVED SERVICE SADDLES.
- ALL WATER MAINS SHALL BE LOCATED OUTSIDE OF DRIVEWAYS AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEYS AND CURB OUTCUTS.
- THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT A WATER LINE AND SANITARY OR STORM SEWER LINE CROSS:
 - A MINIMUM (EIGHT) (8) INCH VERTICAL SEPARATION (OUTSIDE TO OUTSIDE) MUST BE MAINTAINED WHEN THE WATER LINE IS INSTALLED OVER THE SANITARY OR STORM SEWER AND IF THE VERTICAL SEPARATION CANNOT BE MAINTAINED ON THE WATER LINE MUST BE PLACED UNDER THE SANITARY OR STORM SEWER LINE. THE SADDLES OF 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).
 - SEALING WITH POTABLE WATER SUPPLY QUALITY MATERIAL.
 - EACH PROVISION MUST EXTEND ALONG THE SANITARY OR STORM SEWER ON EITHER SIDE OF THE MAIN. A MINIMUM TO FOOT DISTANCE PERPENDICULAR TO THE WATER MAIN EXTERIOR.
- WARNING TAP SHALL BE REQUIRED ON ALL MAINS, ALL SIX (6) INCH DIAMETER AND LARGER SERVICE LATERALS, AND ANY SERVICE LATERAL NOT INSTALLED PERPENDICULAR TO THE MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.
- ALL WATER FACILITIES SHALL BE FILLED, DISPECTED, PRESSURE TESTED, FLUSHED, FLEED AND AN ACCEPTABLE WATER SAMPLE OBTAINED PRIOR TO CONNECTION TO THE LVWD'S DISTRIBUTION SYSTEM.
- THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVWD CENTRAL STORES. TELEPHONE 228-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.
- CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVWD APPROVAL AND PROPER NOTIFICATION, BETWEEN THE HOURS OF 6:00 AM AND 5:00 PM. UNUSUAL CIRCUMSTANCES MAY REQUIRE TEMPORARY SERVICE FEEDS BE INSTALLED, WITHOUT LVWD REIMBURSEMENT. ANY TEMPORARY SERVICE FEED MUST HAVE PROPER LABELING.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVWD'S PRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.

CLV FIRE DEPARTMENT NOTES

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS", "HYDRANT INSTALLATION SPECIFICATIONS" AND ORDINANCE 3844.
- AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:
 - KENNEDY OUMDAM
 - WHEELER A-232 CENTURION
 - LOW MODEL 254 MEDICAL
- ON ANY NEW HOME OR BUILDING INSTALLATION ACCESSIBLE FIRE HYDRANTS SHALL BE INSTALLED BEFORE COMPLETION OF CONSTRUCTION. CONSTRUCTION SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT CENTER-LINE OF STREET ADJACENT TO FIRE HYDRANT AS REQUIRED IN ORDINANCE 3844 TO INDICATE FIRE HYDRANT LOCATIONS.
- CALL THE LAS VEGAS BUILDING DEPARTMENT AT 228-2071 FOR UNDERGROUND INSPECTION, PRESSURE AND FLUSH VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COMMENCE.
- PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER ORDINANCE 3844 SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- A PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT FOR ON-SITE WATER LINE AND FIRE HYDRANT. THE PERMIT AND CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER (FPE) TO ANY WORK BEGINNING.
- PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED.
- A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.
- ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND APPROVED.
- FIRE HYDRANT SPACING:
 - RESIDENTIAL - 500 FEET UNSPRINKLED; 1,000 FEET SPINKLED
 - COMMERCIAL, INCLUDING MULTI-FAMILY - 500 FEET UNSPRINKLED; 600 FEET SPINKLED
- WHERE NEW WATER MAINS ARE EXTENDED ALONG STREETS, WHERE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF STRUCTURES, FIRE HYDRANTS SHALL BE SPACED AT MAXIMUM 1,000 FOOT SPACING TO PROVIDE FOR TRANSPORTATION HAZARDS.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADII OF A CURB-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADII OF THE CURB-DE-SAC.
- NO FIRE HYDRANT SHALL BE LOCATED WITHIN 8 FEET OF ANY CURB, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
- TWO SOURCES OF SUPPLY ARE REQUIRED WHEN THERE ARE 4 OR MORE FIRE HYDRANTS INSTALLED ON A SINGLE SYSTEM.
- NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.
- FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNRESTRICTED WIDTH OF NOT LESS THAN 20 FEET PROVIDED PARKING IS ALLOWED, NOT LESS THAN 28 FEET IF PARALLEL PARKING IS ALLOWED ON ONE SIDE, AND NOT LESS THAN 36 FEET IF PARALLEL PARKING IS ALLOWED ON BOTH SIDES. VERTICAL CLEARANCE SHALL NOT BE LESS THAN 13 FEET 6 INCHES.
- THE TURNING RADII FOR ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE, SHALL BE NOT LESS THAN 40 FEET OUTSIDE RADII AND 22 FEET INSIDE RADII.
- A FIRE APPARATUS ROAD SHALL BE REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FEET FROM A FIRE DEPARTMENT VEHICLE ACCESS. (SEE EXCERPTS IN U.P.C. 94, SECTION 902.2.)
- ALL DEAD END FIRE APPARATUS ACCESS ROADS, AND/OR FIRE LANES, PUBLIC OR PRIVATE, IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURNAROUND AREA. (SEE ORDINANCE 3844.)
- ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE START OF THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS OF 10 FEET ALONG THE DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING OR OTHER OBSTRUCTION. SIGNS TO BE NOT MORE THAN 10 FEET OR LESS THAN 8 FEET FROM ROADWAY LEVEL. THE CURBS ALONG ON THE PARKING SIDE OF THE FIRE LANE, IF NOT PRESENT, SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.
- ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR SYSTEM. LAD SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF LAS VEGAS GUIDELINES FOR AUTOMATIC EMERGENCY VEHICLE ACCESS GATES.

CLV STREET LIGHT NOTE

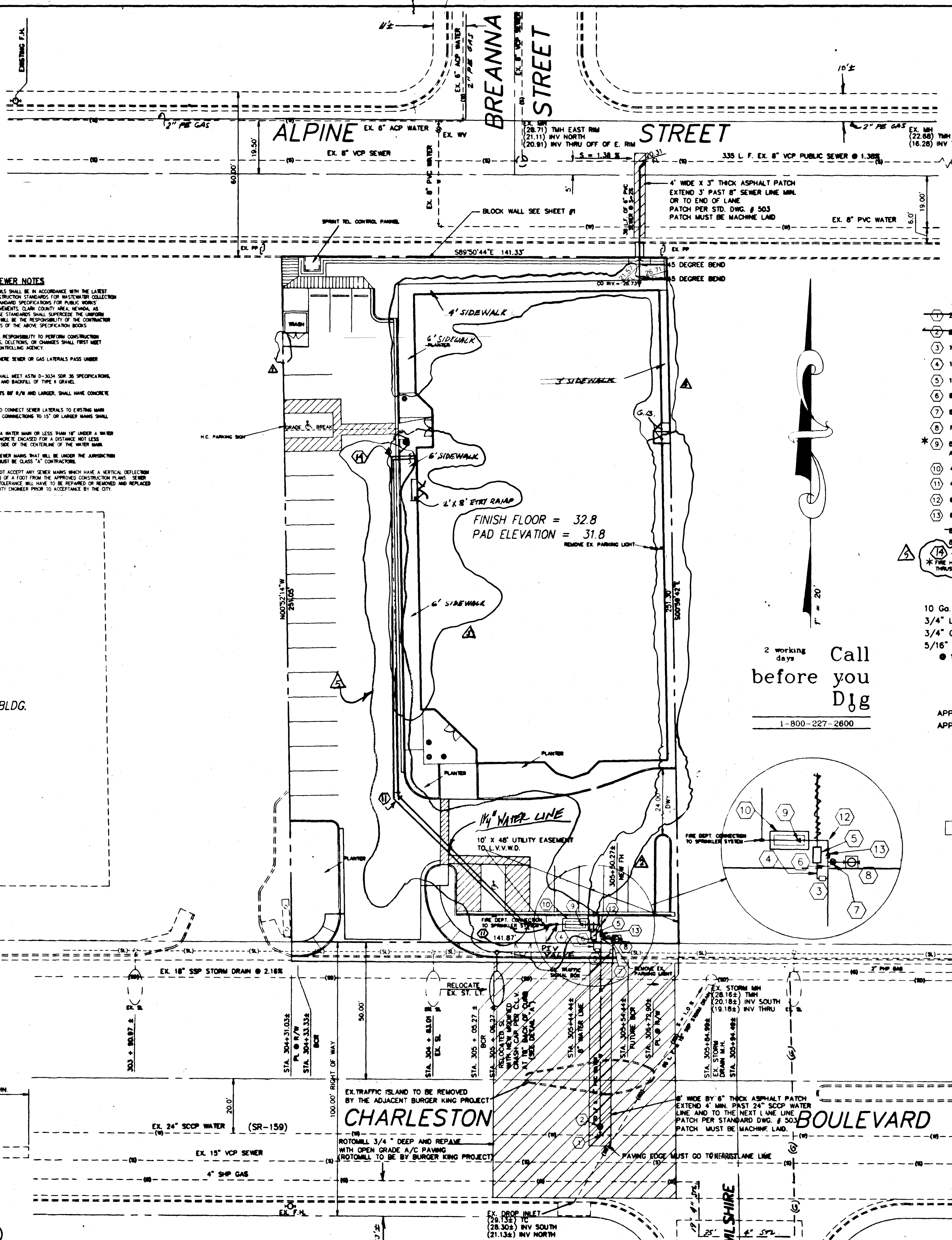
ALL STREET LIGHTING INSTALLATIONS SHALL CONFORM TO THE LATEST ISSUE OF THE STANDARD DETAILS AND SPECIFICATIONS OF THE CITY OF LAS VEGAS, AND SHALL CONFORM TO THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OF OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, LATEST EDITION. NOTES: ALL HAND HOLES COVERS MUST BE INSTALLED, POLE CAPS PAINTED AND SHALL BE LIDS BOLTED DOWN PRIOR TO ENERGIZING CIRCUIT. ALL WIRE MUST HAVE THE INSULATORS.

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 (UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION) 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 BE MET WITH THE APPROVAL OF THE CONTROLLING AGENCY.
- CHANEL, 12" OR 16" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL CHLORIDE (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATION, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE 4 GRAVEL.
- ALL MANHOLES IN PAVED STREETS BY 8" AND LARGER, SHALL HAVE CONCRETE COLLARS.
- TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO 12" DIA. 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 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. 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.

EX. BLDG.

STREET LIGHT MODIFIED CRASH CAP



OFF-SITE WATER QUANTITIES ESTIMATE

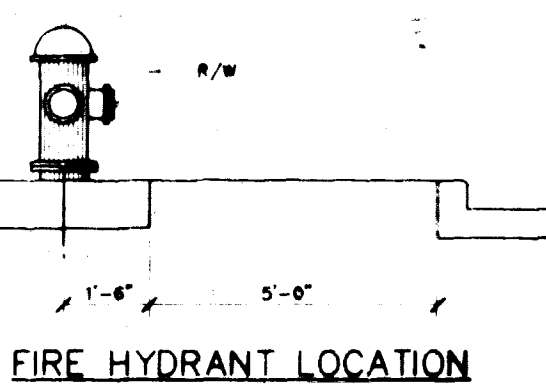
- ① 24" x 8" WELD-ON TAP 1 EA
- ② 8" TAPPING VALVE 1 EA
- ③ 1" WATER METER 1 EA
- ④ 1" WATER SERVICE 1 EA
- ⑤ 1" R.P.P.A. 1 EA
- ⑥ 8" x 8" x 6" CAST IRON TEE 1 EA
- ⑦ 8" GATE VALVE 1 EA
- ⑧ FIRE HYDRANT ASSEMBLY 1 EA
- * ⑨ 8" x 4" REDUCER ABOVE D.C.D.A. SLAB 1 EA
- ⑩ 4" DOUBLE CHECK DETECTOR 1 EA
- ⑪ 4" CAST IRON 45° BEND 2 EA
- ⑫ 6" CAST IRON 90° BEND 1 EA
- ⑬ 8" x 6" CAST IRON REDUCER 1 EA

⑭ 8" PVC 74 LF
⑮ 8" PVC 10 LF
⑯ 24" SCCP

- 10 Ga. 0.1345
- 3/4" Lining
- 3/4" Coating
- 5/16" Rod Reinforcing
- 1.41" spacing

SEWER CONTRIBUTION

APPROX. AVERAGE FLOW = 800 GPD
APPROX. PEAK FLOW = 2320 GPD



FIRE HYDRANT LOCATION

INSTALLATION OF DOUBLE CHECK DETECTOR ASSEMBLY 4"
THE DOUBLE CHECK DETECTOR ASSEMBLY SHALL BE INSTALLED IN ACCORDANCE WITH THE WITH THE DISTRICT'S STANDARD PLATE 26-B.
ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE ASSEMBLY TO ALLOW THE DISTRICT DIRECT ACCESS FROM THE ADJACENT RIGHT-OF-WAY.

RELEASED PRESSURE PRINCIPLE ASSEMBLY (RPPA) 1" - 1"
AN APPROVED RELEASED PRESSURE PRINCIPLE ASSEMBLY (RPPA) SHALL BE INSTALLED PER STANDARD PLATE NO. 26-B. THE WATER SHALL BE TAKEN FROM A SERVICE REQUIRING BACKFLOW PREVENTION UNTIL THE RPPA HAS BEEN SUCCESSFULLY TESTED BY THE LVWD.
ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE RPPA FROM THE ADJACENT RIGHT-OF-WAY.

APPROVALS:

[Signature] 3/26/98
LAS VEGAS VALLEY WATER DISTRICT DATE

[Signature] ES 10-28-97
NEVADA POWER CO. DATE

[Signature] 10-28-97
CLV FIRE MARSHALL DATE

[Signature] 3-27-98
SOUTHWEST GAS DATE

LAS VEGAS FIRE DEPARTMENT

Fire Flow Requirement is 1750 gallons per minute at 20 pounds per square inch residual.

Based on: 15,169

Largest area between area separation walls: N/A

Height: 27'

Type of Construction: TYPE V-N

Exposures: 35'

Sprinkler System: YES

Occupancy: M

Roof Construction: TILE

Reviewed By: *[Signature]*

Date: 10-28-97

PROJECT NAME: **Kid's Bizzz**
P-C-2
This project water plan complies with the Las Vegas Valley Water District's technical requirements. However, this water plan is **NOT APPROVED FOR CONSTRUCTION** at this time and the signature does not provide or imply a water commitment.

[Signature] 10-28-97
LVWD DATE

[Signature] 1-20-98
Rev. *[Signature]* 1-20-98

REVISIONS

10-27-98 10:00 AM 10:00 AM 10:00 AM 10:00 AM
1-20-98 10:00 AM 10:00 AM 10:00 AM 10:00 AM
1-20-98 10:00 AM 10:00 AM 10:00 AM 10:00 AM

JOHN R. VEGA
CONSULTING ENGINEERS INC.
KIDZ BIZZZ
UTILITY PLAN
DRAWN BY: JRV
CHECKED BY: JRV
DATE: 11-10-97
SHEET: C-2 OF 2

