

ABBREVIATIONS

A.C.	ASPHALTIC CONCRETE	D.C.	ON CENTER
A.C.P.	ASBESTOS CEMENT PIPE	D.	OUTSIDE DIAMETER
ADJ.	ADJUST, ADJUSTABLE	P.	PUMP LINE
AL	ARC LENGTH	P.C.	POINT OF CURVATURE
B.C.	BEARING OF CURB OR BACK OF CURB	P.C.C.	PORTLAND CEMENT CEMENT
B.C.R.	BEARING OF CURB RETURN OR BACK OF CURB RADIUS	P.G.	PAV. GRADE
B.R.	BRIER	P.H.P.	PASTURE HIGH PRESSURE
BEG.	BEGIN	P.I.	POINT OF INTERSECTION
B.W.	BACK WALK	P.L.	PROPERTY LINE
B.W.C.	BACK OF SIDEWALK	P.P.	PUMP POLE
B.V.C.	BEARING OF VERTICAL CURVE	P.R.C.	POINT OF REVERSE CURVE
C.B.G.	CURB AND GUTTER	P.R.P.	POINT OF REVERSE CURVE
C.F.	CURB FACE	P.T.	POINT OF TANGENT
C.I.P.	CAST IRON PIPE	P.V.C.	POLYVINYL CHLORIDE PIPE
C.L.	CENTERLINE	P.V.I.	POINT OF VERTICAL INTERSECTION
C.M.P.	CORRUGATED METAL PIPE	P.W.	PAVEMENT
CONC.	CONCRETE	Q.	RATE OF FLOW
CONSTR.	CONSTRUCT, CONSTRUCTION	R.	RADIUS
D.C.	DEPRESSED CURB	R.C.P.	REINFORCED CONCRETE PIPE
D.I.	DRIVE INLET	R.T.	RIGHT
D.M.	DRAIN	R/W	RIGHT OF WAY
D.M.H.	DRAIN MANHOLE	S.	SOUTH
D.P.	DRAIN PIPE	SS	SANITARY SEWER
D.M.H.	DRAIN MANHOLE	S.D.	STORM DRAIN
E.C.	END OF CURVE	S.H.P.	STEEL HIGH PRESSURE
E.C.R.	END OF CURB RETURN	S.H.T.	SHEET
EL.	ELEVATION	S.P.	SPECIAL MANHOLE
E.P.	EDGE OF PAVING	STA.	STATION
E.V.C.	EDGE OF VERTICAL CURVE	STD.	STANDARD
EXST., EX.	EXISTING	STL.	STEEL
FIN. FLR.	FINISHED FLOOR	SW	SEWER
F.D.C.	FIRE DEPARTMENT CONNECTION	T.	TANGENT DISTANCE
F.H.	FIRE HYDRANT	T.E.	TELEPHONE
FL.	FLOWLINE	T.O.C.	TOP OF CURB
G.	GAS	T.O.M.	TOP OF MANHOLE
G.B.	GRADE BREAK	T.O.W.	TOP OF WALL
HGT.	HEIGHT	TRANS.	TRANSITION
HORIZ.	HORIZONTAL	T.S.C.	TRAFFIC SIGNAL CONDUIT
H.P.	HIGH POINT	T.S.W.	TOP OF SIDEWALK
IND.	INCH DIAMETER	V.C.	VERTICAL CURVE
INV.	INVERT	V.C.P.	VERTICAL CLAY PIPE
LS.	LANDSCAPE	V.G.	VERTICAL
LAT.	LATERAL	V.G.U.	VALLEY GUTTER
LF.	LINEAL FEET	W.	WEST WATER
LT.	LEFT		
MAX.	MAXIMUM		
M.H.	MANHOLE		
MIN.	MINIMUM		
N/C	NOT IN CONTRACT		
NO.	NUMBER		

LAS VEGAS VALLEY WATER DISTRICT STANDARD NOTES

1. NO WORK SHALL BEGIN ON THE WATER PLANS UNTIL THEY HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD FOLLOWING WATER PLAN APPROVAL. 48 HOUR NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATIONS SUPPORT CENTER DEPARTMENT (248-7777) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO A LVVWD INSPECTION.	2. ALL WORK SHALL CONFORM TO LVVWD'S LATEST STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS AND THE LVVWD DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS), LATEST EDITION.	3. 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 OFF-SITE IMPROVEMENT, CLARK COUNTY AREA.	4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.	5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.	6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.	7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB CUTTERS.	8. 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, THE WATER LINE MUST BE PLACED UNDER THE SANITARY OR STORM SEWER LINE. THE SANITARY OR STORM SEWER LINE MUST BE CONSTRUCTED WITH ONE (1) INCH THICKNESS OF 12" OR 18" RCP OR 12" OR 18" C.P. PIPE. B. POTABLE WATER SUPPLY QUALITY MATERIAL. C. ENCASMENT WITH FOUR (4) INCH CONCRETE (MINIMUM). D. 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.	9. 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 MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.	10. 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.	11. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE: 258-3152. FORTY-THREE HOURS PRIOR TO PICKUP.	12. CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVVWD APPROVAL AND PROPER NOTIFICATION, BETWEEN THE HOURS OF 10 PM AND 6 AM, SUNDAY THROUGH THURSDAY. CIRCUMSTANCES MAY REQUIRE TEMPORARY SERVICE FEES BE INSTALLED, WITHOUT LVVWD REIMBURSEMENT. ANY TEMPORARY SERVICE FEE MUST HAVE PRIOR LVVWD APPROVAL.	13. 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 THESE PLANS.
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REVISED: JUNE 20, 1994

C.L.V. SEWER NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF DESIGN AND 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.
2. 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.
3. CHISEL "S" OR "T" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
4. POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM-D3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II GRAVEL.
5. ALL MANHOLES IN PAVED STREETS 8'0" R/W AND LARGER, SHALL HAVE CONCRETE CULLARS.
6. 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.
7. A SEWER MAIN CROSSING OVER A WATER MAIN OR LESS THAN 18" UNDER A WATER MAIN MUST BE REINFORCED CONCRETE PIERS FOR A DISTANCE NOT LESS THAN TEN FEET (10) TO EACH SIDE OF THE CENTERLINE OF THE WATER MAIN.
8. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CONTROLLING AGENCY MUST BE LEAST "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. 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.

C.L.V. FIRE DEPT. NOTES

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT HYDRANT SPECIFICATIONS AND HYDRANT INSTALLATION SPECIFICATIONS AND ORDINANCE #3944.	2. AUTHORIZED HYDRANTS FOR THIS PROJECT ARE: A - KENNEDY GARDEN B - MULLER A-423 CENTRAL C - CLV MODEL 2546 MEDALLION	3. ON ANY NEW HOME OR BUILDING INSTALLATION, 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.	4. CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT CENTERLINE OF STREET ADJACENT TO THE FIRE HYDRANT LOCATIONS IN ORDINANCE #3944 TO IDENTIFY THE FIRE HYDRANT LOCATIONS.	5. CALL THE LAS VEGAS FIRE DEPARTMENT AT 229-2071 FOR UNDERGROUND INSPECTION, PRESSURE AND FLOW VERIFICATION OF ALL FIRE HYDRANTS AND FIRE LINES BEFORE COVERING.	6. PAINTING OF THE CURBS AND HYDRANT AND ANY WORK NECESSARY FOR PROTECTION OF HYDRANTS FROM PHYSICAL DAMAGE PER ORDINANCE #3944 SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.	7. A PERMIT IS REQUIRED FROM THE FIRE DEPARTMENT FOR ON-SITE WATER LINE AND FIRE HYDRANT. THE PERMIT AND 200% ACTORS MATERIAL AND TEST CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER PRIOR TO ANY WORK BEGINNING.	8. PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED.	9. A FLOW TEST MUST BE WITNESSED BY THE FIRE DEPARTMENT PRIOR TO OCCUPANCY FOR VERIFICATION OF REQUIRED ON-SITE WATER SUPPLY.	10. ALL ON-SITE FIRE MAIN MATERIALS MUST BE U.L. LISTED AND A WMA APPROVED.	11. FIRE HYDRANT SPACING: RESIDENTIAL - 300 FEET UNDEPRINKLED, 1000 FEET SPRINKLERED. COMMERCIAL, INCLUDING MULTI-FAMILY - 300 FEET UNDEPRINKLED, 600 FEET SPRINKLERED.	12. WHERE NEW WATER MAINS ARE EXTENDED ALONG STREETS, WHERE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF STRUCTURES, FIRE HYDRANTS SHALL BE SPACED AT MAXIMUM 1000 FEET SEPARATION TO PROVIDE FOR TRANSPORTATION HAZARDS.	13. NO FIRE HYDRANT SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF A CURB-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CURB-DE-SAC.	14. NO FIRE HYDRANT SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, PUMP POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.	15. TWO SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE ARE 4 OR MORE FIRE HYDRANTS INSTALLED ON A SINGLE SYSTEM.	16. NOT MORE THAN 2 HYDRANTS CAN BE OUT OF SERVICE DUE TO A SINGLE MAIN BREAK.	17. A FIRE APPARATUS ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET PROVIDED NO 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 BE NOT LESS THAN 13 FEET 6 INCHES.	18. THE TURNING RADIUS OF ANY FIRE APPARATUS ACCESS ROAD AND/OR FIRE LANE, PUBLIC OR PRIVATE SHALL BE NOT LESS THAN 45 FEET OUTSIDE RADIUS AND 22 FEET INSIDE RADIUS.	19. 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 EXEMPTIONS IN UFG 94, SECTION 902.2)	20. ALL DEAD END FIRE APPARATUS ACCESS ROADS AND/OR FIRE LINES PUBLIC OR PRIVATE IN EXCESS OF 150 FEET IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURNAROUND AREA. SEE ORDINANCE #3944.	21. 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 100 FEET ALONG ALL DESIGNATED FIRE LINES. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IS NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED NO HIGHER THAN 10 FEET OR LESS THAN 6 FEET FROM ROADWAY LEVEL. THE CURBS ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PRESENT, SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS.	22. ELECTRICALLY CONTROLLED ACCESS GATES SHALL BE PROVIDED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF LAS VEGAS GUIDELINES FOR AUTOMATIC EMERGENCY VEHICLE ACCESS GATES.
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DATE REVISED: 1/96

VICINITY MAP	
SHEET INDEX	
C0.00	COVER & APPROVAL SHEET
C1.01	PLAN & PROFILE - FAIRFIELD AVE.
C1.02	PLAN & PROFILE - CHICAGO AVENUE
C1.03	PLAN & PROFILE - PHILADELPHIA AVENUE
C1.04	PLAN & PROFILE - COMMERCE STREET
C1.05	PLAN & PROFILE - COMMERCE STREET
C1.06	PLAN & PROFILE - OAKLEY BLVD.

LEGEND

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