

**CITY OF LAS VEGAS GENERAL NOTES**

- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, LATEST EDITION; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA, NEVADA, LATEST REVISION; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS "DEVIATIONS FROM STANDARDS".
- THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CLV PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD UTILITIES WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COSTS AND LIABILITY IN CONNECTION THEREWITH.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER OR OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
- TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE SHORTCUT WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGN TO BE APPROVED BY THE CITY, PRIOR TO THE START OF THE PROJECT.
- PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSURANCES REQUIRED FOR THIS CONSTRUCTION.
- EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED TYPE CURB.
- AS PAVEMENT TO BE ONE-HALF (1/2") ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMP AND CROSS GUTTERS.
- CURB & GUTTER FOUND TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
- SIDEWALK RAMP SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION. THE EXTENT OF TRANSITIONS TO BE AS SHOWN ON PLANS.
- ALL GRADING SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER, AND APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
- EXACT LOCATION OF ALL SAWCUT LINES MAY BE ADJUSTED OR DETERMINED IN THE FIELD BY LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATION. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE REPLACED AND RECORDED PER AVAILABLE RECORDS IN ACCORDANCE WITH N.R.S. STATUTE NO. 625.550.
- UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.
- ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF DRAINING RELATIONSHIPS, FLOOD CONTROL, AND SIGHT DISTANCE AT INTERSECTIONS. NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
- ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER WITHIN CITY RIGHT OF WAY.
- CONTRACTOR SHALL ADJUST ALL NEW & EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
- MATERIALS AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.

**CITY OF LAS VEGAS GRADING NOTES**

- IN THE EVENT THAT ANY UNFORSEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
  - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
  - CONTRACTOR SHALL TAKE RESPONSIBILITY FOR ALL EXCAVATION, ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
  - THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
  - THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED.
  - CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED.
- |                           | HORIZONTAL | VERTICAL COMPACTION |
|---------------------------|------------|---------------------|
| A. PAVEMENT AREA SUBGRADE | 0.1+/-     | +0.01 to -0.1"      |
| B. ENGINEERING FILL       | 0.5+/-     | +0.01 to -0.1"      |
- COMPACTON TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.
- ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
  - THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
  - THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM ALL PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
  - IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE CITY ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMS, ROAD SIGNS AND BARRICADES, ETC.

**CITY OF LAS VEGAS SEWER NOTES**

- 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 OFF-SITE 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.
- 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 CITY PLANNING ENGINEER.
- CHISEL "S" OR "G" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- PURVYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE.
- ALL MANHOLES PAVED IN STREETS EIGHTY (80') FOOT R/W AND LARGER SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80') FOOT R/W WILL REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.
- TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES. UP TO TWELVE (12") DIAMETER CONNECTIONS TO FIFTEEN (15") OR LARGER SHALL REQUIRE SPECIAL PROCEDURES. IN LINE "Y" S SHALL BE USED TWELVE (12") OR ABOVE.
- WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN (18") INCH ABOVE THE WATER MAIN.
- 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.
- 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 AND REPLACED TO THE SATISFACTION OF THE CITY PLANNING ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.
- INSTALLATION OF CURVED SEWER REQUIRES SPECIAL CONSTRUCTION PROCEDURES AND INSPECTIONS. CONTACT CITY OF LAS VEGAS CONSTRUCTION SERVICES 24 HOURS PRIOR TO INSTALLATION.

**CITY OF LAS VEGAS STREETLIGHT NOTES**

- ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, LATEST REVISION, AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, LATEST REVISION, AND THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, LATEST REVISION.
- NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS (ETC.) LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF THE TRAFFIC/ELECTRICAL FIELD OPERATIONS DIVISION AND THE CITY ENGINEER. ANY DEVIATION FROM THE PLAN LOCATION WILL REQUIRE COMPLIANCE WITH SECTION 623.10.03 (E) OF THE SPECIFICATIONS.
- ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
- ALL EMPTY CONDUIT SHALL HAVE FULL STRINGS INSTALLED PRIOR TO FINAL INSPECTION.
- ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE OF EIGHTEEN (18") TO THE FACE OF STREET LIGHTING POLE ON ALL SIDES WHEN STREETLIGHT IS INSTALLED BEHIND SIDEWALK, AND SHALL AT NO TIME COMPLETELY ENCLOSE THE STREET LIGHTING POLE.
- AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE ELECTRICAL SERVICES SECTION PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
- SERVICE POINT SHALL BE COORDINATED WITH NEVADA POWER COMPANY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICE POINTS SHALL BE SHOWN ON THE PLANS.
- IT SHALL BE ASSUMED THAT IN THE ABSENCE OF AN EXISTING, WORKABLE CIRCUIT TO ATTACH TO, ALL INSTALLATIONS SHALL REQUIRE A NEW SERVICE FOR OPERATION OF THE CIRCUIT.
- WHEREVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION OF STREET LIGHTING CIRCUITS AND/OR POLES, THESE CONFLICTS MUST BE RESOLVED BETWEEN THE DEVELOPER AND THE UTILITIES INVOLVED BEFORE STREETLIGHT BASES ARE INSTALLED AT NO EXPENSE TO THE CITY OF LAS VEGAS.
- CONTRACTOR SHALL FURNISH COMPLETE SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON PLANS.

**CITY OF LAS VEGAS TRAFFIC NOTES**

- ALL CONSTRUCTION SIGNING, BARRICADING AND TRAFFIC DELINEATION SHALL CONFORM TO THE "NEVADA WORK ZONE TRAFFIC CONTROL HANDBOOK" LATEST EDITION, AND TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
- THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM PLANNING DEPARTMENT PRIOR TO CONSTRUCTION.
- BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS WHERE WARRANTED IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
- WHEN A DESIGNATED "SAFE ROUTE TO SCHOOL" IS ENCLOSED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORK STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THAT WORK ZONE, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A QUALIFIED "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH CURRENT CITY STANDARDS.
- WHEN A PROPOSED STREET LIGHT STANDARD IS LOCATED WITHIN FIVE (5) FEET OF ANY SIGN SHOW ON THE PLANS TO BE MOUNTED ON A SIGNPOST, THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGNPOST SHALL BE ELIMINATED.
- ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO ALLOWING ANY PUBLIC TRAFFIC ONTO THE PORTIONS OF THE ROAD(S) BEING IMPROVED HEREUNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
- STREET SIGNS AND STOP SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATION FOR PLACEMENT OF STREET NAMES SIGNS.
- THE CONTRACTOR SHALL PROVIDE BARRICADES, SIGNS, FLASHERS, OTHER EQUIPMENT AND FLAG PERSONS NECESSARY TO INSURE THE SAFETY OF WORKERS AND VISITORS.
- WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE EXPEDITED TO COMPLETION SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING CITIZENS AREA TRANSIT (C.A.T.) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
- GUARDS SHALL BE OBTAINED BY CONTACTING THE METROPOLITAN POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE NO: 229-3442) WHO WILL PROVIDE OFFICERS PROPERLY TRAINED IN TRAFFIC CONTROL FEES FOR THE USE OF THESE OFFICERS SHALL BE SET UP BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.

**CITY OF LAS VEGAS FIRE DEPARTMENT NOTES**

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT WATER MAIN APPROVAL AND 48 HOUR NOTICE SHALL BE GIVEN TO THE LVVMD 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 LVVMD INSPECTION.
- AUTOMATIC FIRE HYDRANTS ON THE PROJECT SHALL BE MAINTAINED AND "HYDRANT INSTALLATION SPECIFICATION".
- A. KENNEDY - GUARDIAN MODELS K81A AND K81D  
B. MUELLER - SUPER CENTURIUM 250 MODEL A-423  
C. LOW - MEDALLION MODEL F-2584BLY
- ON ANY RESIDENTIAL OR COMMERCIAL INSTALLATIONS FIRE HYDRANTS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY COMBUSTIBLE CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW.
- TO IDENTIFY THE FIRE HYDRANT LOCATIONS, CONTRACTOR SHALL PLACE A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF STREET ADJACENT TO THE FIRE HYDRANTS AS REQUIRED BY ORDINANCE # 5116.
- ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH TESTS, AND VERIFICATION OF THE ON-SITE WATER LINES AND FIRE HYDRANTS, SHALL BE CONDUCTED BEFORE COVERING THE LINES. CALL THE CITY OF LAS VEGAS FIRE DEPARTMENT AT 229-2071 TO REQUEST AN INSPECTION BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- PAINTING OF THE CURBS AND FIRE HYDRANTS AND ALL OTHER WORK NECESSARY AS REQUIRED BY ORDINANCE # 5116, FOR THE PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE, SHALL BE COMPLETED BEFORE APPROVAL BY THE CITY OF LAS VEGAS FIRE DEPARTMENT.
- A PERMIT IS REQUIRED FROM THE CITY OF LAS VEGAS FIRE DEPARTMENT FOR THE ON-SITE WATER LINES AND FIRE HYDRANTS. THE PERMIT AND CONTRACTOR'S MATERIAL AND TEST CERTIFICATE SHALL BE OBTAINED AND SUBMITTED TO THE CITY OF LAS VEGAS FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK.
- PRIVATE FIRE HYDRANTS SHALL BE PAINTED RED. PRIVATE FIRE HYDRANTS SHALL BE LOCATED WITHIN THE REQUIRED RADIUS OF THE CUL-DE-SAC OR WITHIN 20 FEET OF THE PERIMETER OF THE RADIUS OF THE CUL-DE-SAC.
- ALL FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FEET OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREET LIGHT OR ANY OTHER OBSTRUCTION.
- THE MAXIMUM DISTANCE FROM A FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 45 FEET OUTSIDE AND 22 FEET INSIDE TURNING RADIUS.
- TWO SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE ARE 4 OR MORE FIRE HYDRANTS/SPRINKLER LEAD-INS ARE INSTALLED ON A SINGLE SYSTEM.
- SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS CAN BE OUT OF SERVICE DUE TO A BREAK IN A WATER MAIN.
- FIRE APPARATUS ACCESS ROADS SHALL HAVE AN OBSTRUCTED WIDTH OF NOT LESS THAN 20 FEET (LIP OF THE GUTTER TO THE LIP OF THE GUTTER) PROVIDED NO PARKING IS ALLOWED ON EITHER SIDE OF THE GUTTER. IF PARALLEL PARKING IS ALLOWED, 36 FEET OF CLEARANCE SHALL BE PROVIDED TO THE GUTTER. IF PARALLEL PARKING IS ALLOWED ON BOTH SIDES, VERTICAL CLEARANCE SHALL BE NOT LESS THAN 13 FEET 6 INCHES.
- ALL DRIVEWAYS, DRIVEWAY APRONS, DRIVEWAY RAMP AND DRIVEWAY APPARATUS SHALL BE PAVED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES AND SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF THE FIRE APPARATUS.
- THE GRADIENT FOR A FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 12% ANGLES OF APPROACH AND ANGLES OF DEPARTURE SHALL NOT EXCEED 6% FOR 25 FEET PRIOR TO OR AFTER THE GRADE CHANGE.
- THE TURNING RADIUS OF A FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 45 FEET OUTSIDE AND 22 FEET INSIDE TURNING RADIUS.
- A FIRE APPARATUS ACCESS ROAD SHALL BE REQUIRED WHEN ANY MORE THAN 150 FEET FROM A FIRE DEPARTMENT VEHICLE ACCESS (SEE EXCEPTIONS IN UFG SECTION 902.2)
- ROAD-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 TURN AROUND AREA HAVING A MINIMUM DIAMETER OF 81 FEET (BACK OF THE CURB TO THE CURB).
- ALL FIRE APPARATUS 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 INTERSECTIONS 100 FEET ALONG ALL DESIGNATED FIRE LANES. SIGNS TO BE PLACED ON BOTH SIDES OF THE PAVEMENT OR CEMENT IF CURB IS NOT PROVIDED PARKING ON EITHER SIDE. SIGNS TO BE INSTALLED NO HIGHER THAN 10 FEET OR LESS THAN 5 FEET FROM ROADWAY LEVEL. THE CURBS ALONG OR ON THE PAVEMENT OR CEMENT IF CURB IS NOT PROVIDED 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/RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF LAS VEGAS GUIDELINES FOR AUTOMATIC EMERGENCY VEHICLE ACCESS GATES.

REVISED 1/99

**CONSTRUCTION NOTES**

- CONSTRUCT SIDEWALK PER U.S.D. 234
- CONSTRUCT CURB & GUTTER PER U.S.D. 216
- CONSTRUCT SIDEWALK RAMP CASE I PER U.S.D. 235
- CONSTRUCT 8' VALLEY GUTTER PER U.S.D. 228
- CONSTRUCT STORM DRAIN MH TYPE I PER U.S.D. 403

**DEVIATION FROM STANDARDS**

- NONE

**PROJECT BENCHMARK**

TBM, T169 3" BRASS CAP USC & G5 50' EAST OF US 95 & 200' ± SOUTH OF CENTENNIAL ON 88 DATUM MEAS 734.5745=2410.02 FEET TBM # 1L9028N866

**BASIS OF BEARINGS**

THE BASIS OF BEARINGS FOR THIS PROJECT IS GRID NORTH, AS DEFINED BY THE NEVADA COORDINATE SYSTEM OF 1983 (NC583), EAST ZONE, (2701), AS DETERMINED BY NORTH LAS VEGAS HARN CONTROL POINTS 700, 704 AND 714, AS SHOWN ON A RECORD OF SURVEY ON FILE IN THE CLARK COUNTY, NEVADA, RECORDER'S OFFICE IN FILE 82 OF SURVEYS, AT PAGE 52.

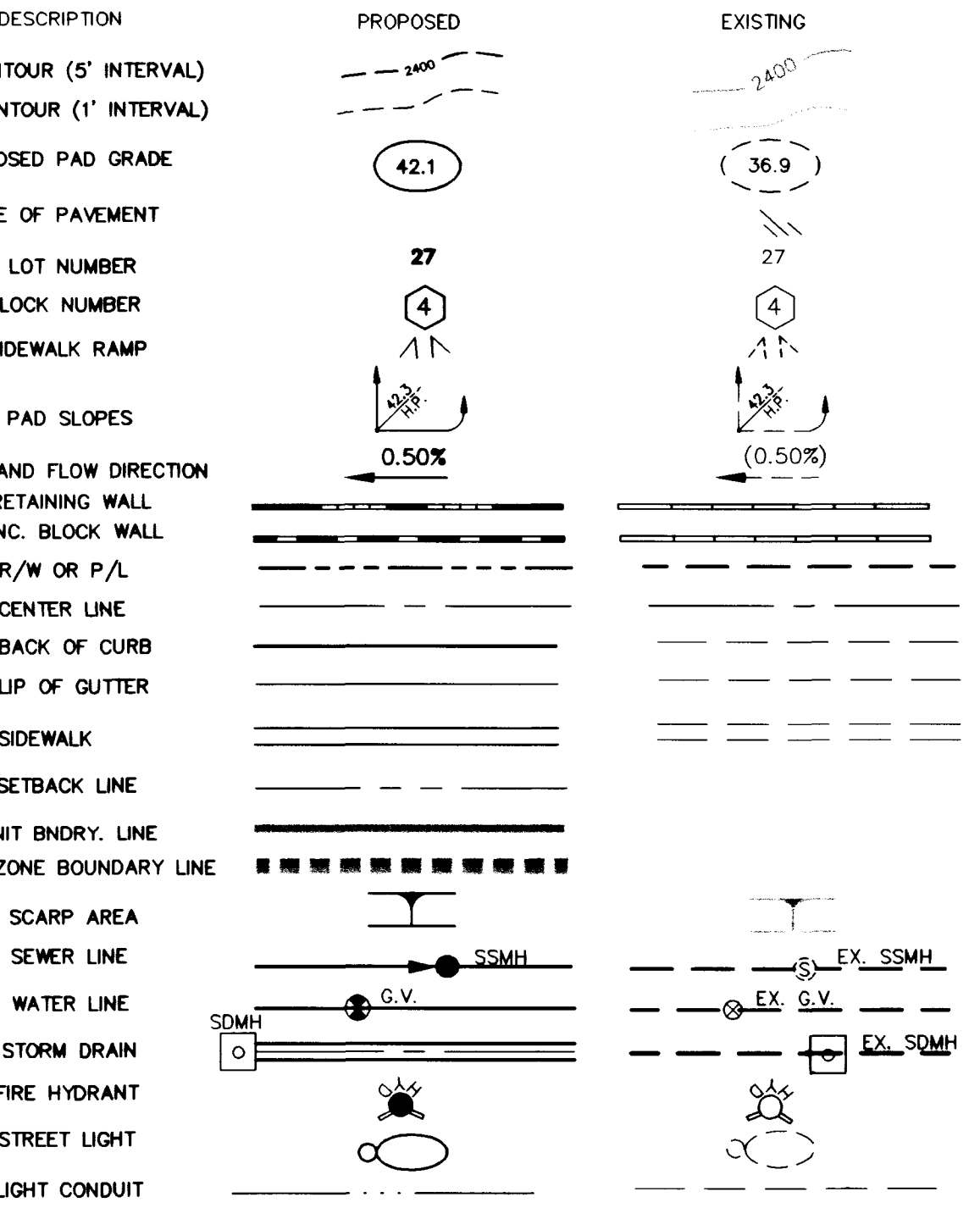
**WATER DISTRICT STANDARD NOTES**

- NO WORK SHALL BEGUN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVMD. THE FOLLOWING WATER PLAN APPROVAL 48 HOUR NOTICE SHALL BE GIVEN TO THE LVVMD 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 LVVMD INSPECTION.
- ALL WORK SHALL CONFORM TO LVVMD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS (UDACS), LATEST EDITION.
- ALL WATER METER BOXES SHALL BE MAINTAINED ON THESE PLANS OR 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 IMPROVEMENTS, CLARK COUNTY AREA.
- A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVMD.
- ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE COPPER TUBING WITH LVVMD APPROVED SERVICE SADDLES.
- ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
- ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
- THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT A WATER LINE AND A SANITARY OR STORM SEWER LINE CROSS:  
A. 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 OF THE FOLLOWING OR, AS SHOWN ON THESE PLANS:  
B. POTABLE WATER SUPPLY QUALITY MATERIAL, ENCASEMENT, WITH FOUR (4) INCH CONCRETE (MINIMUM) C. SLEEVING WITH POTABLE WATER SUPPLY QUALITY PIPE.  
EACH PROVISION MUST BE EXTENDED ALONG THE SANITARY OR STORM SEWER, ON EITHER SIDE OF THE MAIN, A MINIMUM 10 FOOT DISTANCE PERPENDICULAR TO THE WATER MAIN EXTENSION.
- 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.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, ELDIPLY FILLED AND AIR BE USED THROUGHOUT THE PROJECT PRIOR TO CONNECTION TO THE LVVMD'S DISTRIBUTION SYSTEM.
- THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVMD CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO INSTALLATION.
- CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVVMD 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 LVVMD REIMBURSEMENT, ANY TEMPORARY SERVICE FEE MUST HAVE PRIOR LVVMD APPROVAL.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST AS LISTED ON THE LVVMD'S PRE-APPROVED MATERIALS AND MANUFACTURERS LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.
- APPROVAL OF THESE PLANS FOR THE WATER STUBOUT INSTALLATION WILL NOT BE CONSTRUED AS A COMMITMENT FOR WATER SERVICE TO THIS PROPERTY.
- CONDITIONAL APPROVAL OF VALVED OUTLET (8" AND LARGER)**  
IN THE EVENT THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS, INSTALLATIONS OF THESE OUTLETS IS ACCEPTABLE, HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTIONS TO THE ACTIVE MAIN IN ACCORDANCE WITH THE DISTRICT'S STANDARD AND AT THE DEVELOPER'S EXPENSE.
- WATER CROSSING NOTE**  
THE FOLLOWING ARE THE REQUIREMENTS THAT MUST BE MET WHEN THERE IS A WATER SEWER CROSSING:  
WHEN PROTECTION OF THE WATER LINE IS CONSIDERED, THE MINIMUM VERTICAL DISTANCE OF EIGHTEEN (18") MUST BE MAINTAINED WHEN THE WATER LINE IS INSTALLED OVER THE SEWER/LINE. IF THE DISTANCE CANNOT BE MAINTAINED BECAUSE OF PHYSICAL OBSTRUCTION OR THE WATER LINE MUST BE PLACED UNDER UNDER THE SEWER/STORM LINE. THE SEWER/LINE MUST BE CONSTRUCTED WITH ANY ONE OF THE FOLLOWING:  
A. EXTRA HEAVY CAST IRON OR DUCTILE IRON PIPE  
B. WATER SUPPLY QUALITY  
C. ENCASEMENT WITH 4 INCHES MINIMUM OF CONCRETE OR SLEEVING WITH WATER QUALITY PIPE.  
EACH OF THESE PROVISIONS MUST BE EXTENDED FOR TEN FEET (10') ON EITHER SIDE OF THE WATER LINE AT 90 DEGREES TO THE CROSSING.

**ABBREVIATIONS**

FF	FINISH FLOOR	C/L	CENTER LINE
FG	FINISH GRADE	O/C	OFFSET CROWN
FL	FLOW LINE	BC	BACK OF CURB
TRC	TOP OF CURB	BCR	BEGIN CURB RETURN
TRC	TOP OF ROLL CURB	BCL	BACK OF CURB LENGTH
EP	EDGE OF PAVEMENT	TF	TOP OF FOOTING
FUT.	FUTURE	GB	GRADE BREAK
EV	EXISTING	PC	POINT OF CURVATURE
VG	VALLEY GUTTER	PT	POINT OF TANGENCY
NG	NATURAL GROUND	PRC	POINT OF REVERSE CURVATURE
H.P.	HIGH POINT	PCC	POINT OF COMPOUND CURVATURE
L.P.	LOW POINT	BVC	BEGIN VERTICAL CURVE
SMH	SEWER MANHOLE	MVC	MID-POINT OF VERTICAL CURVE
W	WATER LINE	EVG	END VERTICAL CURVE
SD	STORM DRAIN	PRVC	POINT OF REVERSE VERTICAL CURVE
ROP	REINFORCED CONCRETE PIPE		

**LEGEND**



**GENERAL NOTES**

**TITLE**

DRAWN BY: MARCH 1999

DESIGNED BY: DEH / atb

CHECKED BY: N/A

PROJECT NO: 5522

SCALE: N/A

HORIZ. VERT.

SHEET

6-24-99

3 OF 17 SHEETS

DRAWING NO. 107-V310B

SEAL

THOMAS E. HAYES

CIVIL

NO. 9428

STATE OF NEVADA

107-V310B

107-V310B

107-V310B

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BY

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DEER SPRINGS APARTMENTS

GENERAL NOTES

107-V310B

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