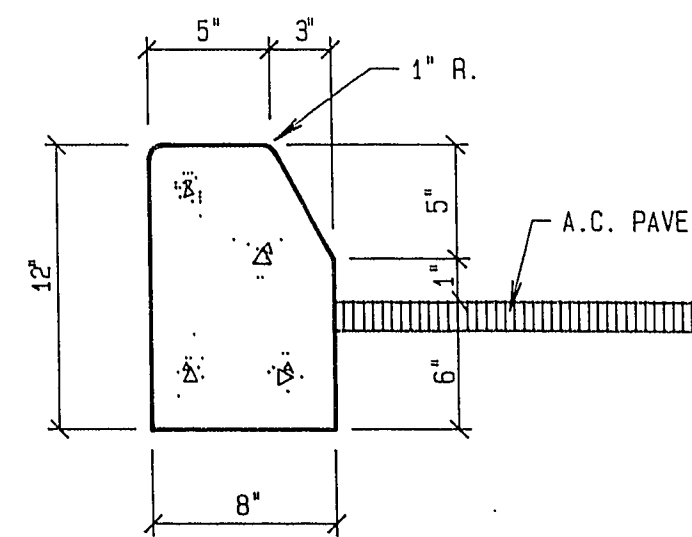


**C L V GENERAL NOTES**

- 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 SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CITY OF LAS VEGAS, ANY OTHER APPLICABLE REVISED STANDARDS ISSUED BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE.
- THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE DRAWINGS. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS ARE NOT SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING 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 RECONSTRUCTED SATISFACTORY TO THE OWNER AT THE EXPENSE OF THE CONTRACTOR.
- THE CONTRACTOR SHALL NOT BACKFILL ANY TRENCHES IN WHICH WATER LINES HAVE BEEN UNCOVERED UNTIL THE WATER LINES HAVE BEEN INSPECTED BY THE LAS VEGAS VALLEY WATER DISTRICT. THE WATER DISTRICT SHALL BE NOTIFIED 48 HOURS IN ADVANCE OF CONSTRUCTION IN THE VICINITY OF WATER LINES.
- ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS. ANY ALTERATIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
- TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE DESIGNED FOR A 5.5 SACK MIX WITH A MAXIMUM WATER/CEMENT RATIO OF 0.45 (OR AS DESIGNED BY THE SOILS ENGINEER). MIX DESIGN TO BE APPROVED BY THE QUALITY CONTROL DIVISION PRIOR TO USE ON THE PROJECT.
- THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL OVERHEAD INTERFERENCES 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 OR UNDERGROUND POWER AND/OR TELEPHONE FACILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COSTS AND LIABILITY IN CONNECTION THEREWITH.
- PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
- EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED TYPE CURB.
- AC PAVEMENT TO BE 1/2" ABOVE LIP OF ALL GUTTERS & VALLEY GUTTER AFTER COMPACTION.
- APPLY FOG SEAL ONLY AFTER ALL CORRECTIONS & ADJUSTMENTS HAVE BEEN MADE.
- CURB & GUTTER WITH A GRADE OF LESS THAN FOUR TENTHS OF ONE PERCENT SHALL BE CONSTRUCTED BY FORMING. EACH JOINT SHALL BE CHECKED FOR GRADE PRIOR TO CONSTRUCTION AND WATER TESTED AS SOON AS POSSIBLE AFTER CONSTRUCTION.
- WHEELCHAIR RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 022A. 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 SAID CONSTRUCTION. EXTENT OF TRANSITIONS TO BE DETERMINED BY THE CITY ENGINEER AND AS SHOWN ON PLANS.
- ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE SOILS ENGINEER OR PER THESE PLANS.
- EXACT LOCATION OF ALL SMCUT LINES MAY BE DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS INSPECTOR IF 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 ADJUSTED PER AVAILABLE RECORDS WITH N.R.S. STATUTE NO. 625.550.

**ONSITE "A" TYPE CONC. CURB DETAIL**



**C L V FIRE DEPT. NOTES**

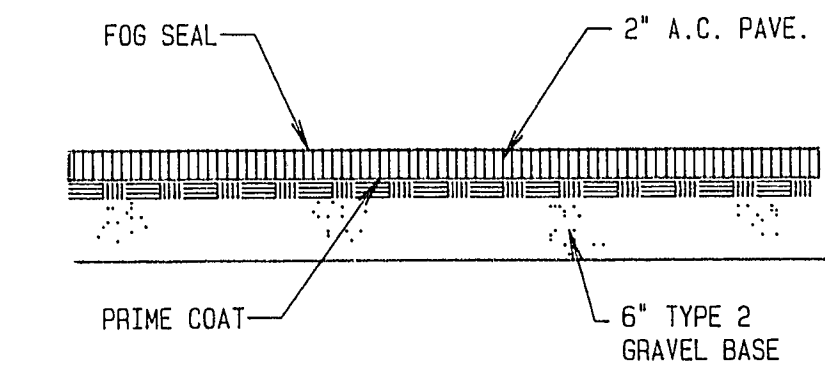
- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS" AND "HYDRANT INSTALLATION SPECIFICATIONS".
- AUTHORIZED HYDRANTS FOR THIS PROJECT ARE:  
A - KEENEY GUARDIAN  
B - MUELLER 4-423 CENTURIAN
- ON ANY NEW HOME OR BUILDING CONSTRUCTION, ACCESSIBLE 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 HYDRANT.
- CALL THE LAS VEGAS FIRE DEPARTMENT AT 383-2888 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.

**C L V SEWER 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 "8" OR "6" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
- POLYVINYL CHLORIDE (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, AND INSTALLED WITH SAND BEDDING AND BACKFILL OR TYPE II GRAVEL.
- 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.

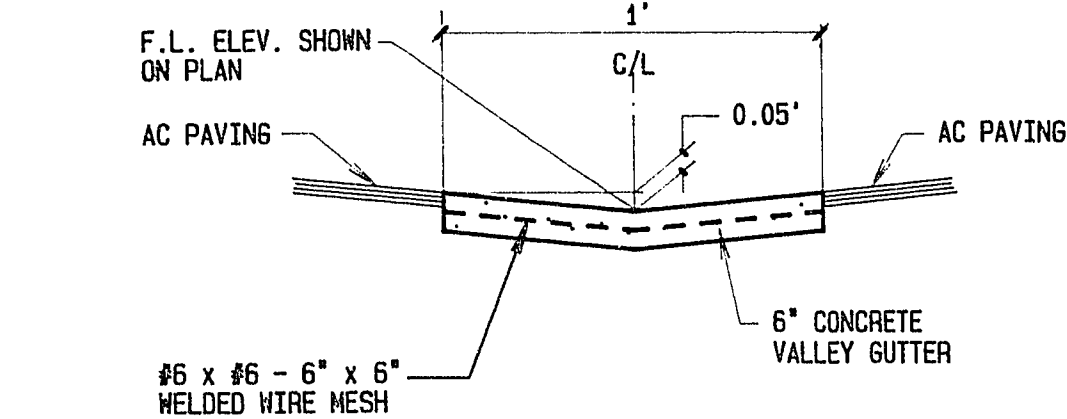
**C L V STREETLIGHT NOTES**

- ALL STREET LIGHT 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.



**ONSITE A.C. PAVING DETAIL**

MINIMUM PAVEMENT SECTION. REFER TO SOILS REPORT FOR EXACT PAVEMENT SECTION.



**VALLEY GUTTER DETAIL**

**C L V TRAFFIC NOTES**

- BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS IMMEDIATELY AFTER FIRST GRADING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
- ALL CONSTRUCTION SIGNING, BARRICAADING, AND TRAFFIC DELINEATION IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM TO THE NEVADA HIGHWAY ZONE TRAFFIC CONTROL HANDBOOK-1985, AND TO THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" LATEST EDITION WITH REVISION NO. 4, MAR. 1986.
- THE DEVELOPER SHALL BE RESPONSIBLE TO PROVIDE AND INSTALL ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CITY STANDARDS. ALL OTHER SIGNS SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARDS.
- IF A PROPOSED STREET LIGHT STANDARD IS FIELD LOCATED TO WITHIN FIVE (5) FEET OF ANY SIGN SHOWN HEREON TO BE MOUNTED ON A SIGN POST, THEN CHANGE SIGN MOUNTING TO ONE ON THE STREET LIGHT STANDARD.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL, OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKINGS, SUCH PAVEMENT MARKINGS SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.
- 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.

**UTILITY NOTE:**

THE LOCATION OF UNDERGROUND UTILITIES SHOWN HEREON HAS BEEN DETERMINED FROM SURFACE EVIDENCE OF THEIR EXISTENCE OR FROM INFORMATION OBTAINED FROM THE UTILITY COMPANIES. THE ENGINEER ACCEPTS NO LIABILITY FOR THE EXISTENCE OR NON-EXISTENCE OF UTILITY LINES. CONTRACTORS AND OTHERS USING THIS MAP MUST CONFIRM THE LOCATION OF UNDERGROUND LINES OR STRUCTURES WITH THE UTILITY COMPANIES PRIOR TO COMMENCING ANY EXCAVATION OR ORDERING OF MATERIALS.

CALL 1-800-227-2600 BEFORE ANY EXCAVATION TAKES PLACE

**CLV TRAFFIC NOTE: ADDENDUM**

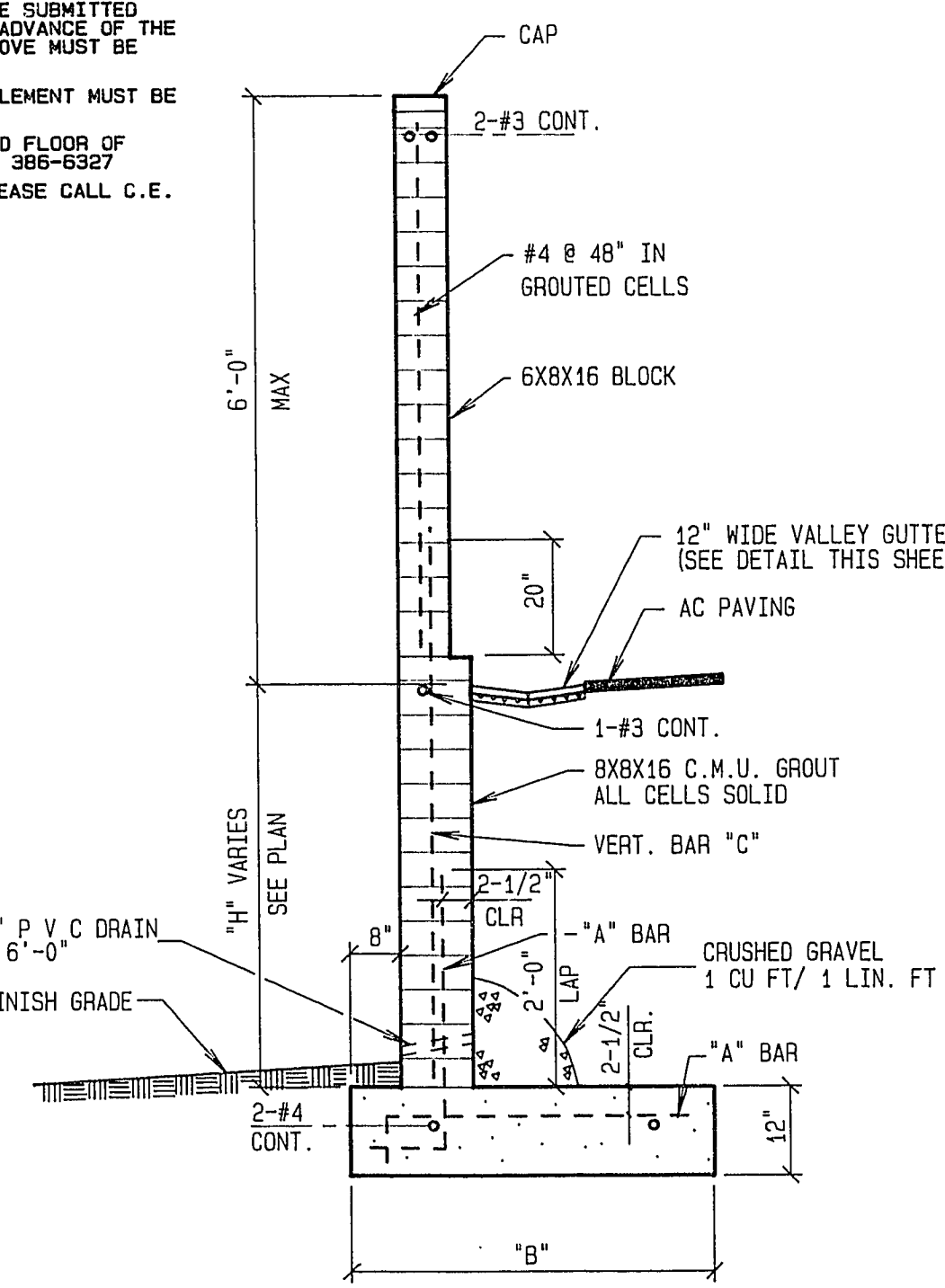
DISRUPTION OF VEHICULAR OR PEDESTRIAN TRAFFIC AT LAMB BOULEVARD WILL BE A SERIOUS BURDEN ON THE TRAVELING PUBLIC OR ADJACENT PROPERTY OWNERS. THEREFORE, DISRUPTION MUST BE HELD TO A MINIMUM. THE GENERAL CONTRACTOR WILL BE REQUIRED TO OBTAIN A PERMIT FROM THE CITY OF LAS VEGAS (CLV) TO WORK IN THE PUBLIC RIGHT-OF-WAY. THE TOTAL PERIOD OF TIME IN WHICH DISRUPTION CAN BE ALLOWED WILL BE CONSIDERABLY LESS THAN THE TOTAL PROJECT WORK PERIOD SHOWN ON THE FACE OF THE PERMIT. SPECIFIC RESTRICTIONS ARE AS FOLLOWS:

SEWER & WATER LINES  
 1 NIGHT WORK ONLY REQUIRED  
 2 SEWER TAP MUST BE PERFORMED CONCURRENTLY WITH WATER LINE CONSTRUCTION  
 3 MAXIMUM WORK-TIME ALLOWANCES:  
 (a) BEGIN CUT TO TEMP. PATCH: 5-WORK DAYS  
 (b) TEMP. PATCH TO FINAL PATCH: 5-WORK DAYS

IN ADDITION, A TRAFFIC CONTROL AND BARRICAADING PLAN MUST BE SUBMITTED TO THE TRAFFIC ENGINEER FOR APPROVAL, AT LEAST 48 HOURS IN ADVANCE OF THE BEGINNING OF THE WORK. THE SPECIFIC RESTRICTIONS LISTED ABOVE MUST BE NOTED ON THE PLAN. A COPY OF THE APPROVED PLAN, AND THE PERMIT WITH THIS SUPPLEMENT MUST BE AVAILABLE AT THE JOBSITE AT ALL TIMES DURING CONSTRUCTION. THE OFFICE OF THE TRAFFIC ENGINEER IS LOCATED ON THE SECOND FLOOR OF CITY HALL AT 400 EAST STEWART AVENUE. HIS PHONE NUMBER IS 386-8327. IF YOU HAVE ANY QUESTIONS REGARDING THESE REQUIREMENTS, PLEASE CALL C. E. (GIL) GILPIN, CLV LAND DEVELOPMENT ENGINEER, AT 386-8566.

**RETAINING WALL WITH 6'-0" BLOCK WALL FENCE**

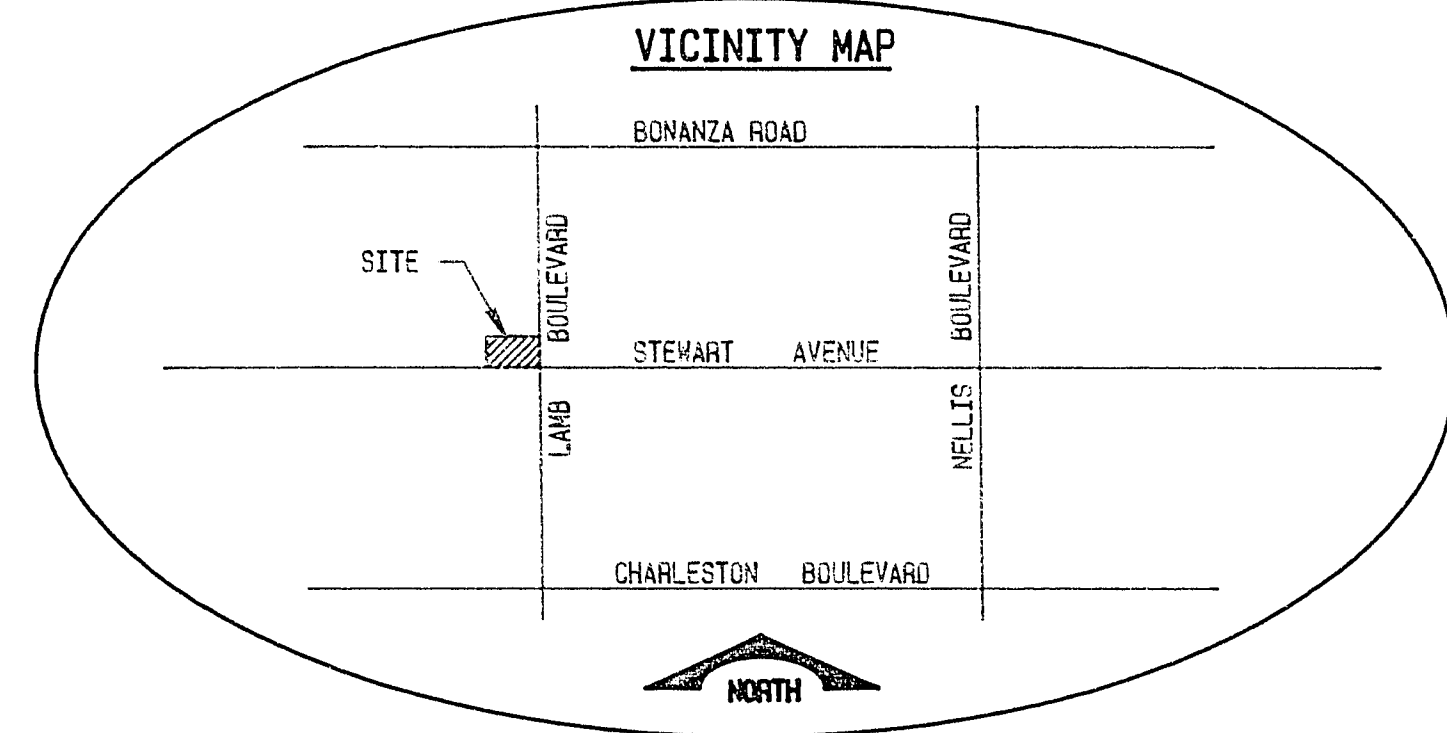
H	A	B	C
5'-0"	#4 @ 16" O C	3'-10"	#4 @ 16" O C
4'-6"	#5 @ 16" O C	3'-8"	#4 @ 16" O C
4'-0"	#4 @ 16" O C	3'-6"	#4 @ 16" O C
3'-6"	#4 @ 16" O C	3'-4"	#4 @ 16" O C
3'-0"	#4 @ 24" O C	3'-0"	#4 @ 24" O C
2'-6"	#4 @ 24" O C	2'-7"	#4 @ 24" O C
2'-0"	#4 @ 24" O C	2'-3"	#4 @ 24" O C



**RETAINING WALL (ONSITE)**

**WATER NOTES**

- ALL WORK TO CONFORM TO LAS VEGAS VALLEY WATER DISTRICT STANDARD PLATES.
- ALL WORK, EXCEPT AS MODIFIED HEREON OR BY NOTE NO. 1, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA.
- NOTICE IS TO BE GIVEN TO THE 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 SERVICES. DOUBLE TAP COLLARS ARE NOT PERMITTED.
- ALL LINES TO BE PRESSURE TESTED TO 200 PSI.
- DEFLECTION ANGLE SHALL NOT EXCEED 2.5 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 16 INCHES.
- ALL METERS SHALL BE LOCATED OUTSIDE OF DRIVEWAYS.
- DETECTOR TAP IS 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.



**INDEX OF DRAWINGS**

SHEET NO.	TITLE
C1	COVER SHEET
C2	EXISTING TOPOGRAPHY
C3	GRADING PLAN
C4	WATER PLAN
C5	SEWER PLAN

**LEGEND**

- ===== EXISTING CURB & GUTTER
- ===== NEW CURB & GUTTER
- EXISTING FIRE HYDRANT
- NEW FIRE HYDRANT
- - - - - EXISTING CONTOUR
- + [99.99] EXISTING SPOT ELEVATIONS
- [99.99] EXISTING ELEVATION
- [99.99] PROPOSED ELEVATION
- TC CONCRETE
- MH MANHOLE
- INV. INVERT
- WV WATER VALVE
- CO CLEAN OUT
- BC BACK OF CURB
- BH BACK OF HALK
- PP POWER POLE
- F.F. FINISH FLOOR
- F6 FINISH GRADE
- AC ASPHALT
- FL FLOW LINE
- SH SIDEWALK
- GB GRADE BREAK
- - - - - PROPERTY LINE
- - - - - CENTER LINE
- EXISTING STREET LIGHT
- NEW STREET LIGHT (250 HPS)
- NEW STREET LIGHT (100 HPS)
- AREA LIGHT

**OFFSITE IMPROVEMENT APPROVALS**

<i>Henry Davis</i>	8-24-87
CLV ELECTRICAL SUPERVISOR	DATE
<i>William Ross</i>	8/14/87
CLV ELECTRICAL COORDINATOR	DATE
N/A	
CLV QUALITY CONTROL ENGINEER	DATE
<i>Bill Delpino</i>	10-1-87
CLV ENGINEER	DATE
N/A	
CLV SANITATION CHIEF	DATE
<i>Del P. Davis</i>	8/24/87
CLV TRAFFIC ENGINEER	DATE
<i>Raymond R. Peoples</i>	9/4/87
CLV FIRE MARSHALL	DATE
<i>Bill Delpino</i>	10-1-87
CLV CHIEF, LAND DEVELOPMENT AND FLOOD CONTROL	DATE

HEWNER ENGINEERING  
 CIVIL ENGINEERING & DESIGN  
 LAND PLANNING & DEVELOPMENT  
 4441 South Pahr Avenue, Las Vegas, Nevada 89103  
 Phone: (702) 798-1900

SHOPPING CENTER  
 STEWART AVENUE AND LAMB BOULEVARD  
 COVER SHEET - NOTES & DETAILS

SHEET NO.

C1

SHSLCS

5-3-89

107-V1508