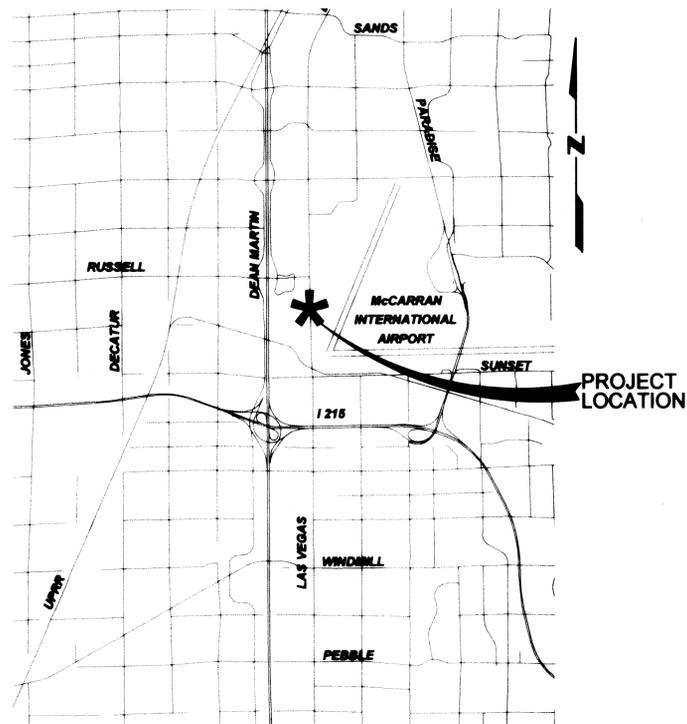


# DEPARTMENT OF PUBLIC WORKS



**Vicinity Map**  
NOT TO SCALE



County Manager

Donald G Burnette

Director of Public Works

Approved:

*[Signature]*  
Denise Cederburg

County Commissioners

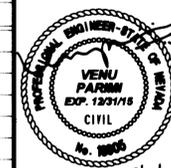
- Steve Sisolak, Chairman
- Larry Brown, Vice Chairman
- Susan Brager
- Tom Collins
- Chris Giunchigliani
- Mary Beth Scow
- Lawrence Weekly

**2014**

## **WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**

FUNDED BY  
CLARK COUNTY

AGENCY	PLANS REVIEWED BY	DATE	DEPARTMENT OF PUBLIC WORKS	BY	DATE	NUMBER	REVISIONS DESCRIPTION	DATE
CENTRAL TELEPHONE COMPANY DBA CENTURYLINK	<i>[Signature]</i>	5-21-14	DESIGN ENGINEERING DIVISION	<i>[Signature]</i>	6-19-14			
LAS VEGAS VALLEY WATER DISTRICT	<i>[Signature]</i>	6-12-14	CONSTRUCTION MANAGEMENT DIVISION	<i>[Signature]</i>	6-19-14			
SOUTHWEST GAS CORPORATION	<i>[Signature]</i>	5-29-14	MAINTENANCE MANAGEMENT DIVISION	<i>[Signature]</i>	6-19-14			
NV ENERGY COMPANY (TRANSMISSION)	<i>[Signature]</i>	5-21-14	TRAFFIC MANAGEMENT DIVISION	<i>[Signature]</i>	6-27-14			
NV ENERGY COMPANY (DISTRIBUTION)	<i>[Signature]</i>	5-21-14	COUNTY SURVEYOR'S OFFICE	<i>[Signature]</i>	06/19/2014			
COX COMMUNICATIONS, LAS VEGAS, INC	<i>[Signature]</i>	5-21-14						
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION	<i>[Signature]</i>	6-11-14						



5/21/14

DESIGN ENGINEERING DIVISION

COVER SHEET

**L-2042**

WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD

# INDEX OF SHEETS

SHEET NO.	SHEET DESCRIPTION
G-1	COVER SHEET
G-2	INDEX OF SHEETS, GENERAL NOTES ABBREVIATIONS & LEGEND
G-3 TO G-4	UTILITY & TRAFFIC NOTES
HC-1	HORIZONTAL CONTROL PLAN
R-1 TO R-2	REMOVAL PLAN
TY-1 TO TY-2	TYPICAL SECTIONS
C-1 TO C-2A	CONSTRUCTION PLAN
D-1	PEDESTRIAN CONTAINMENT BARRIER DETAILS
D-2	MISCELLANEOUS DETAILS
S-1 TO S-2	SIGNING & STRIPING PLAN
L-1 TO L-3	LIGHTING PLAN
TS-1 TO TS-2	TRAFFIC SIGNAL PLAN

# LEGEND

	REMOVAL ITEM, CONSTRUCTION ITEM, TRAFFIC ITEM
	EXISTING/PROPOSED CONDUIT RUN NUMBER
	CENTERLINE W/STATION
	RIGHT-OF-WAY LINE
	PROPERTY LINE
	EXISTING/PROPOSED STREETLIGHT
	EXISTING DROP INLET
	EXISTING/PROPOSED CURB & GUTTER
	EXISTING UTILITY PIPE/CONDUIT/MRE (INITIALS INDICATE OWNERSHIP AND NUMBER INDICATES SIZE) SHOWN AT WIDTH WHEN > 12"
	EXISTING MANHOLE (INITIAL INDICATE OWNERSHIP)
	EXISTING PULLBOX/VAULT (INITIAL INDICATE OWNERSHIP)
	EXISTING VALVE
	EXISTING/PROPOSED EDGE OF PAVEMENT
	EXISTING/PROPOSED DRIVEWAY
	EXISTING FENCE
	CURVE DATA NOTATION
	EXISTING TELEPHONE AND/OR POWER POLE
	EXISTING FIRE HYDRANT
	EXISTING SERVICE PEDESTAL
	EXISTING WATER METER
	SAWCUT LINE
	PROPOSED FLOWLINE
	PROPOSED LIGHTING CONDUIT
	PROPOSED ITS CONDUIT
	PROPOSED SIGNAL CONDUIT
	EXISTING/PROPOSED SIDEWALK RAMP

# GENERAL NOTES

- ALL CONSTRUCTION AND TRAFFIC SIGNAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA". THE MANUAL CAN BE FOUND HERE: [HTTP://RTCWS.RTCNV.COM/MPO/STREETS/FILES/COMPLETESETS/DRAWINGS%20SET.PDF](http://rtcws.rtcnv.com/mppo/streets/files/completesets/drawings%20set.pdf)
- ALL CONSTRUCTION AND TRAFFIC SIGNAL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", AND APPENDICES. THE MANUAL CAN BE FOUND HERE: [HTTP://RTCWS.RTCNV.COM/MPO/STREETS/FILES/COMPLETESETS/SPECIFICATIONS%20SET.PDF](http://rtcws.rtcnv.com/mppo/streets/files/completesets/specifications%20set.pdf)
- PER SPECIAL PROVISIONS SECTION 637.03.03, PLEASE REFER TO THE "THE LAS VEGAS VALLEY CONSTRUCTION SITE BEST MANAGEMENT PRACTICES GUIDANCE MANUAL", SECTION 3.5.1 FOR THE STORMWATER MANAGEMENT NOTES AND APPENDIX B FOR THE VARIOUS REQUIRED CHECKLISTS. THE MANUAL CAN BE FOUND HERE: [HTTP://ACEQUIA.CCRFCD.ORG/PDF\\_ARCH1/NPDES/SSWGVEBDOCS/LV%20CONSTRUCTION%20SITE%20BMP%20GUIDANCE%20MANUAL\\_JAN%202009.PDF](http://acequia.ccrfcd.org/pdf_arch1/npdes/sswgvebdocs/lv%20construction%20site%20bmp%20guidance%20manual_jan%202009.pdf)
- ALL UTILITY LOCATIONS ON THESE PLANS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES LIKELY TO BE AFFECTED AND TO PROTECT IN PLACE, ALL UTILITIES SHOWN HEREIN. THE CONTRACTOR SHALL DETERMINE THE LOCATION AND DEPTH OF SUSPECTED UTILITY INTERFERENCES, AND SHALL FURNISH INFORMATION ON THE SAME TO THE ENGINEER, NOT LESS THAN TEN (10) DAYS PRIOR TO THE ANTICIPATED IMPACT OF THESE SUSPECTED INTERFERENCES ON HIS WORK. IF CONFLICTS EXIST, THE CONTRACTOR WILL IMMEDIATELY CONTACT THE ENGINEER AND PROVIDE THE ENGINEER WITH ALL THE NECESSARY DATA SUCH AS ELEVATIONS, HORIZONTAL LOCATIONS, ETC., AND PROVIDE THE ENGINEER WITH SKETCHES INDICATING THE PROPOSED IMPROVEMENT AND THE UTILITY CONFLICT. THE ENGINEER WILL EXAMINE AND REVIEW ALL THE DATA AND SKETCHES PROVIDED, AND WILL PROVIDE THE CONTRACTOR WITH AN ALTERNATIVE DESIGN WITHIN FIVE (5) DAYS AFTER RECEIPT OF DATA AND SKETCHES.
- CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO BEGINNING CONSTRUCTION
- SIGNATURES SHOWN ON THE COVER OF THESE PLANS, BY THE LOCAL UTILITY COMPANIES DOES NOT ASSUME OR GUARANTEE THEIR LIABILITY FOR KNOWN OR UNKNOWN CONFLICTS WITH EXISTING OR PROPOSED IMPROVEMENTS. RESOLUTION OF ANY CONFLICTS WILL BE ACCOMPLISHED PURSUANT TO LOCAL ORDINANCES, NEVADA REVISED STATUTES AND/OR PUBLIC UTILITY COMMISSION RULES AND REGULATIONS.
- THE CONTRACTOR SHALL COORDINATE WITH THE NV ENERGY COMPANY, CENTURYLINK, LOCAL CABLE COMPANY AND THE SOUTHWEST GAS CORPORATION FOR THE RELOCATION OF UNDERGROUND OR OVERHEAD UTILITIES THAT INTERFERE WITH THE REQUIRED IMPROVEMENTS AS SHOWN ON THE PLANS.
- CONTRACTOR SHALL CALL SOUTHWEST GAS AT 702-365-2286 FOR STANDBY WHEN EXCAVATING OVER OR NEAR HIGH PRESSURE GAS LINES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERTICAL ADJUSTMENT OF ALL LAS VEGAS VALLEY WATER DISTRICT FACILITIES AND CLARK COUNTY WATER RECLAMATION DISTRICT MANHOLES TO FINISHED GRADE AS INDICATED ON THE PLANS OR IN THE SPECIAL PROVISIONS UNLESS OTHERWISE INDICATED.
- ALL SANITARY SEWER LINES SHOWN ON THESE PLANS ARE CLARK COUNTY WATER RECLAMATION DISTRICT PUBLIC LINES, UNLESS OTHERWISE NOTED. ALL COWRD SANITARY SEWER LID ADJUSTMENTS SHALL BE PER DSCWCS SD-5 AND SECTION 630 OF THE PROJECT SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT REMOVE TREES, SHRUBS, LAWNS, WALLS, FENCES, SIGNS, STRUCTURE, LIGHTS OR ANY OTHER IMPROVEMENTS OUTSIDE THE RIGHT-OF-WAY EXCEPT WHERE REQUIRED TO DO SO BY THE CONTRACT DRAWINGS OR AS DIRECTED BY THE ENGINEER.
- EXACT LOCATIONS OF ALL SAWCUT LINES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. THOSE SAWCUTS THAT ARE LONGITUDINAL TO THE ROADWAY MAY BE WHEEL CUT WITH EQUIPMENT AS APPROVED BY THE ENGINEER. ALL OTHER SAWCUTS SHALL BE MADE BY A ROTARY SAW.
- IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL, OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING REQUIRED TO REMAIN, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE COUNTY TRAFFIC MANAGER.
- FAST INTERCONNECT CABLE POLICY IS IN EFFECT. INTERCONNECT/FIBER OPTIC CABLE MUST BE MAINTAINED AT ALL TIMES. CONTRACTOR SHALL PROVIDE TEMPORARY OVERHEAD INTERCONNECT/FIBER OPTIC CABLE WHILE PERMANENT CABLE IS BEING RELOCATED. TEMPORARY AERIAL INSTALLATION MUST BE ACCEPTABLE TO THE COUNTY TRAFFIC MANAGER AND TO FAST. ANY DAMAGE TO THIS CABLE IS DEEMED AN EMERGENCY BY FAST. CITY OF LAS VEGAS, CLARK COUNTY AND NDOT AND MUST BE REPAIRED IMMEDIATELY TO FAST ACCEPTANCE. DAMAGES MAY BE ASSESSED AGAINST THE CONTRACTOR AFTER 24 HOURS HAS ELAPSED FROM THE TIME OF BREAK OR DAMAGE. \$2,500 PER DAY DAMAGES WILL BE ASSESSED AFTER TWENTY-FOUR (24) HOURS HAS ELAPSED FROM THE TIME OF BREAK OR DAMAGE TO COPPER WIRED INTERCONNECT CABLE AND \$7,500 PER DAY FOR DAMAGE TO FIBER OPTIC CABLE.
- ALL STORM DRAIN MANHOLE ACCESS COVERS SHALL HAVE A MINIMUM DIAMETER OF THIRTY (30") INCHES

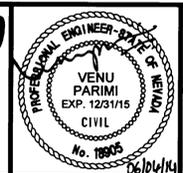
# ABBREVIATIONS

AC	ASPHALT CONCRETE/CEMENT
ACP	ASBESTOS CEMENT PIPE
AGG	AGGREGATE
AP	ANGLE POINT
BC	BACK OF CURB
CC	CLARK COUNTY
CCPW	CLARK COUNTY PUBLIC WORKS
C&G	CURB AND GUTTER
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
COMM DWY	COMMERCIAL DRIVEWAY
CONC	CONCRETE
CONST	CONSTRUCTION OR CONSTRUCT
DSCWCS	DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEM
DI	DROP INLET
DIA	DIAMETER
DIAG	DIAGONAL
DWS	DRAWING
DWY	DRIVEWAY
ELEC	ELECTRICAL
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
EX	EXISTING
EXIST	EXISTING
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FND	FOUNDATION
FO	FIBER OPTIC
GB	GRADE BREAK
HPS	HIGH PRESSURE SODIUM
INV	INVERT
ITS	INTELLIGENT TRANSPORTATION SYSTEMS
LF	LINEAR FEET
LT	LEFT
MATL	MATERIAL
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
No	NUMBER
NTS	NOT TO SCALE
NVE	NV ENERGY
OC	ON CENTER
OHE	OVERHEAD ELECTRICAL
PBS	PLANT MIX BITUMINOUS SURFACE
PC	POINT OF CURVATURE
PE	POLYETHYLENE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PMF	PAVEMENT MARKING FILM
PT	POINT OF TANGENCY
PMI	POINT OF VERTICAL INTERSECTION
PVMINT	PAVEMENT
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
REP	REPLACEMENT
RP	RADIUS POINT
RPM	RAISED PAVEMENT MARKING
RT	RIGHT
RW	RIGHT OF WAY
SCCP	STEEL CYLINDER CONCRETE PIPE
SD	STORM DRAIN
STD	STANDARD
STL	STEEL
STLT	STREET LIGHT
SW or SW	SIDEWALK
TBC	TOP BACK CURB
TC	TOP OF CURB
TCE	TEMPORARY CONSTRUCTION EASEMENT
TDC	TOP BACK DEPRESSED CURB
TELE	TELEPHONE
TRANS	TRANSITION
TRANS	TRANSMISSION
(TYP)	TYPICAL
UGE	UNDERGROUND ELECTRICAL
UCT	UNDERGROUND TELEPHONE
USD	UNIFORM STANDARD DRAWING
USDCCA	UNIFORM STANDARD DRAWINGS CLARK COUNTY AREA
UTACS	ULTRA THIN ASPHALT CONCRETE SURFACE
VCP	VERTICAL CURVE
VG	VITRIFIED CLAY PIPE
VLV	VALLEY GUTTER/ CONC CROSS GUTTER
VPI	VERTICAL POINT OF INTERSECTION
VPC	VERTICAL POINT OF CURVE
VPT	VERTICAL POINT OF TANGENCY
WTR	WATER

REV No.	DATE	DESCRIPTION	APPROVED



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
**INDEX OF SHEETS, GENERAL NOTES**  
**ABBREVIATIONS & LEGEND**  
**CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS**



DESIGNED BY: V. PARIMI  
 DRAWN BY: D. PUBLLOW  
 CHECKED BY: K. GILBRETH  
 DATE: June 4, 2014  
**CH2MHILL.**  
 2485 VILLAGE VIEW DRIVE, SUITE 350  
 HENDERSON, NEVADA 89074  
 PHONE 702-369-6175, FAX 702-369-1107

**FAST**  
 Call before you Dig  
 Call before you Overhead  
 1-702-227-2929  
 NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT  
 478136-LVSGN-Genard.dwg

SCALE	L-2042
HORIZ: NONE	DRAWING NO.
VERT: NONE	<b>G-2</b>
FIELD BOOK	PROJECT No. 478136
WORK ORDER	SHT: 2 OF 23

WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD

**LVVWD NOTES**

PROJECT # 122758

- NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) TWO (2) WORKING DAYS PRIOR TO START OF CONSTRUCTION. FOR FUTURE INSPECTIONS, NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO THE REQUESTED LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT # IDENTIFIED ABOVE.
- ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND TO THE 2010 EDITION OF THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR POTABLE WATER SYSTEMS (UDACS). THE LATEST EDITION OF UDACS SHALL SUPERSEDE ANY CONFLICTS CONTAINED IN THE APPROVED DRAWINGS AND/OR SPECIFICATIONS.
- ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2 ABOVE, SHALL BE DONE IN ACCORDANCE WITH THE MOST RECENT 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 TYPE K COPPER TUBING WITH LVVWD 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.
- ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION OF THE UDACS.
- ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD DISTRIBUTION SYSTEM.
- THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 OR 258-3802 TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
- ANY INTERRUPTION OF SERVICE MUST BE PERFORMED IN ACCORDANCE WITH UDACS SECTION 3.14.01, AND APPROVED BY THE LVVWD INSPECTION DIVISION PRIOR TO SHUTDOWN. PROPER WRITTEN NOTIFICATION MUST BE GIVEN TO ALL AFFECTED CUSTOMERS.
- ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE LISTED ON THE LVVWD PRE-APPROVED MATERIAL AND MANUFACTURER'S LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.
- TELEPHONE "CALL BEFORE YOU DIG" AT \*811\* OR 1-800-227-2600.
- THE INSTALLATION OF LAS VEGAS VALLEY WATER DISTRICT (LVVWD) MUNICIPAL WATER FACILITIES WITHIN ALL STREETS IS ASSUMED TO BE IN COMPLIANCE WITH THE UNIFORM STANDARDS, INCLUDING THE PLACEMENT OF ASPHALT PAVING STREET SURFACES. ANY REPAIR WORK DONE BY THE LVVWD TO THE MUNICIPAL WATER FACILITIES WILL INCLUDE PLACEMENT OF A APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.

ANY DECORATIVE PAVING SURFACE WITHIN THE STREET IS THE RESPONSIBILITY OF THE OWNER'S ASSOCIATION, OR THE INDIVIDUAL PROPERTY OWNERS IF NO OWNER'S ASSOCIATION IS IN EXISTENCE, OR THE AGENCY HAVING JURISDICTION. DECORATIVE SURFACE MATERIALS PLACED WITHIN THE TEN FOOT EASEMENT ABUTTING A PUBLIC OR PRIVATE STREET, IF DISTURBED BY THE LVVWD DURING THE REPAIR OR OPERATION OF ITS FACILITIES, WILL BE REPLACED BY LVVWD WITH AN APPROPRIATELY SIZED PLAIN FINISH CONCRETE PATCH. THE LVVWD WILL NOT RESTORE, AND WILL NOT BE RESPONSIBLE FOR THE RESTORATION OF, ANY DECORATIVE PAVING SURFACE WITHIN THE STREET. THE LVVWD WILL NOT ATTEMPT TO MATCH COLOR OR FINISH OF ANY ADJACENT MATERIALS.



**TRAFFIC SIGNAL NOTES**

**GENERAL**

- THESE NOTES ARE EFFECTIVE AS OF 01/01/14 AND SHALL SUPERSEDE ALL PREVIOUS VERSIONS.
- THE CONSTRUCTION SHALL CONFORM TO THESE PLANS AND SHALL BE IN ACCORDANCE TO THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS.
- INSTALLATION OF TRAFFIC SIGNAL COMPONENTS SHALL BE SUPERVISED BY A CERTIFIED IMSA LEVEL II TRAFFIC SIGNAL ELECTRICIAN OR LEVEL II TRAFFIC SIGNAL TECHNICIAN. THIS SHALL INCLUDE THE INSTALLATION OF ALL UNDERGROUND CONDUIT AND CONDUIT BENDS. A CLARK COUNTY LICENSED JOURNEYMAN ELECTRICIAN SHALL MAKE ALL ELECTRICAL TERMINATIONS. CONTRACTOR PERFORMING WORK ON THE TRAFFIC SIGNAL SHALL HOLD A VALID C-2 ELECTRICAL LICENSE ISSUED BY THE STATE OF NEVADA.
- TWO (2) WEEKS PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL CALL CLARK COUNTY TRAFFIC OPERATIONS AT (702) 455-6000 AND INFORM THE TRAFFIC SYSTEMS SUPERVISOR OF THE WORK START DATE FOR COORDINATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND AND AERIAL UTILITIES AND INFRASTRUCTURES LIKELY TO BE AFFECTED BY THEIR WORK. THE LOCATION OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED PROMPTLY IN A MANNER SATISFACTORY TO THE UTILITIES OWNERS AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE TO RESTORE ANY DAMAGE OR MODIFICATION TO LANDSCAPE/IRRIGATION TO PRE-CONSTRUCTION CONDITION (MODIFIED LANDSCAPE SHALL BE PAID FOR AS PART OF TRAFFIC SIGNAL LUMP SUM).
- REMOVAL AND REPLACEMENT OF ANY CURB, GUTTER AND SIDEWALK REQUIRED TO INSTALL THE TRAFFIC SIGNAL INFRASTRUCTURE SHALL BE INCLUDED IN THE LUMP SUM COST OF THE TRAFFIC SIGNAL.
- CONTRACTOR SHALL RESTORE ALL PAVEMENT MARKINGS DAMAGED DUE TO OR BY CONSTRUCTION OR AS SHOWN ON THE PLANS. THE TRAFFIC SIGNAL SHALL NOT BE ENERGIZED WITHOUT THE PROPER PAVEMENT MARKINGS IN-PLACE.
- ALL STOP SIGNS, STOP AHEAD SIGNS AND/OR FLASHING BEACON ASSEMBLIES OR ANY OTHER TRAFFIC CONTROL DEVICES THAT MAY BE IN CONFLICT WITH THE TRAFFIC SIGNAL SHALL BE REMOVED AT TIME OF TRAFFIC SIGNAL ACTIVATION AND RETURNED TO THE CLARK COUNTY TRAFFIC OPERATIONS, 5821 E. FLAMINGO ROAD, LAS VEGAS, NEVADA 89122. THE CONTRACTOR SHALL REMOVE SIGN POSTS AND POST ANCHORS AND PATCH HOLES WITH CONCRETE.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL INSTALLED INDUCTION LOOPS AND ENSURING THAT THE FRONT EDGE OF EACH STOP BAR IS LOCATED TWO (2) FEET BEHIND THE FRONT EDGE OF THE INDUCTION LOOP.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT ALL EXISTING INDUCTION LOOPS AND HOME RUNS TO THE PULL BOXES ARE IN OPERATIONAL CONDITION ON THE FIRST DAY OF CONSTRUCTION. ANY LOOPS AND/OR HOME RUNS THAT ARE DAMAGED SHALL BE REPORTED IN WRITING TO THE TRAFFIC MANAGER IMMEDIATELY. AFTER WORK HAS COMMENCED, ANY DAMAGE TO EXISTING LOOPS AND HOME RUNS SHALL BE REPLACED AND/OR REPAIRED AT THE CONTRACTOR'S EXPENSE.
- ANY SIGN TEMPORARILY COVERED ON A MAST ARM SHALL BE MASKED WITH A COVER APPROVED BY THE CLARK COUNTY TRAFFIC MANAGER. TAPE SHALL NOT BE APPLIED TO THE FACE OF ANY SIGN. ANY SIGN THAT HAS HAD TAPE APPLIED TO THE REFLECTIVE SURFACE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- ALL MAST ARM MOUNTED SIGNS, INCLUDING THE HORIZONTAL BLANK SIGN, SHALL BE MOUNTED USING BACK-BRACING STRAPS. STRAPS SHALL BE ALUMINUM STRAPS OF A MINIMUM SIZE OF 1/8-INCH THICKNESS X 2-INCH WIDE. BRACKETS SHALL BE 12 GAUGE ZINC PLATED STAINLESS STEEL FLARED LEG BRACKET, WITH 5/16-INCH DIAMETER STAINLESS STEEL THEFT-PROOF BOLT OR STANDARD HEX WASHER FACE BOLT, A FENDER WASHER OF A MINIMUM SIZE OF 1-INCH DIAMETER SHALL BE INSTALLED ON THE FRONT SIDE OF THE SIGN IN ADDITION TO THE NEOPRENE WASHER, AND ALSO BEHIND THE BRACKET STRAP, WITH LOCK AND NUT. SIGNS 24-INCH (WIDTH) OR SMALLER SHALL HAVE A MINIMUM OF ONE (1) STRAP. SIGNS 24-INCH (WIDTH) OR LARGER AND SMALLER THAN 48-INCH (WIDTH) SHALL HAVE A MINIMUM OF TWO (2) STRAPS. SIGNS 48-INCH (WIDTH) OR LARGER SHALL HAVE A MINIMUM OF THREE (3) STRAPS. DOUBLE PANEL SIGNS REQUIRE SPECIAL BRACKET MOUNTING SYSTEM, AND SHALL BE DESIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER IN NEVADA. SEE SIGN MOUNTING ILLUSTRATION IN THE UNIFORM STANDARD DRAWINGS FOR ADDITIONAL DETAILS.
- THE FOLLOWING CLARK COUNTY UNDERGROUND FACILITIES MAY BE LOCATED IN YOUR PROJECT AREA: FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION (F.A.S.T.) INTERCONNECT CABLE. CONTRACTOR MUST CONTACT F.A.S.T. AT 702-432-5300 FOR UNDERGROUND LINE LOCATIONS. CONTRACTOR SHALL MAINTAIN IN OPERATION ALL EXISTING ITS INFRASTRUCTURE WITHIN THE PROJECT LIMITS AT ALL TIMES. ANY DAMAGE TO THE ITS INFRASTRUCTURE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPLACED AND/OR REPAIRED PROMPTLY IN A MANNER SATISFACTORY TO RTCP/FAST. IF ANY EXISTING FIBER OPTIC CABLE IS TO BE CUT AND/OR SPLICED, CONTRACTOR SHALL CONTACT JESUS "CHUY" MARMOLEJO (RTCP/FAST MANAGER TRAFFIC SYSTEMS MAINTENANCE) AT (702) 604-7078.
- TRAFFIC SIGNAL INFRASTRUCTURE, INCLUDING BUT NOT LIMITED TO LOOP DETECTORS, LOOP LEAD-IN CABLES, CONDUITS, CONDUCTORS, AND PULL BOXES MAY HAVE BEEN INSTALLED IN YOUR PROJECT AREA FOR EXISTING AND/OR FUTURE TRAFFIC SIGNAL SYSTEMS. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING TRAFFIC SIGNAL INFRASTRUCTURE WITHIN THE PROJECT LIMITS. ANY DAMAGE TO THE TRAFFIC SIGNAL INFRASTRUCTURE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPLACED AND/OR REPAIRED PROMPTLY IN A MANNER SATISFACTORY TO THE TRAFFIC MANAGER AT THE CONTRACTOR'S EXPENSE.
- CROSSWALKS SHALL BE INSTALLED IN A STRAIGHT LINE, WITH THE CENTER OF CROSSWALK EXTENDING FROM THE MIDPOINT OF A SIDEWALK RAMP TO THE MIDPOINT OF THE OTHER SIDEWALK RAMP. ANGLE POINTS ARE NOT PERMITTED.
- CONTRACTOR SHALL EXERCISE CARE WITH ALL SALVAGED ITEMS AND SHALL ASSUME THAT ITEMS WILL BE RE-USED AGAIN BY CLARK COUNTY. ALL SALVAGED TRAFFIC SIGNAL POLES SHALL INCLUDE LUMINAIRE ARMS, LUMINAIRES, MAST ARMS, AND SIGNAL HEADS DISASSEMBLED FROM THE POLE AND LAMPS REMOVED AND DISPOSED OF PROPERLY. ALL SALVAGED STREETLIGHT POLES SHALL INCLUDE LUMINAIRE ARMS AND LUMINAIRES DISASSEMBLED FROM THE POLE, AND LAMPS REMOVED AND DISPOSED OF PROPERLY. ALL SALVAGED EQUIPMENT SHALL HAVE ALL COMPONENTS INCLUDED AND DISASSEMBLED FROM THEIR MAIN COMPONENTS. SALVAGED SIGNS THAT ARE ATTACHED TO SALVAGED SIGN POSTS, MAST ARMS OR SIGNAL POLES SHALL BE DISASSEMBLED AND SEPARATED FROM THE SIGN POSTS, MAST ARMS OR SIGNAL POLES PRIOR TO DELIVERY. ANY ITEMS TO BE RETURNED TO CLARK COUNTY TRAFFIC OPERATIONS SHALL INCLUDE A TRANSMITTAL FORM WITH THE CONTRACTOR'S COMPANY LETTERHEAD. THE TRANSMITTAL FORM SHALL INCLUDE THE ASSOCIATED PROJECT NAME AND NUMBER, AND A LIST OF THE ITEMS AND THE QUANTITIES OF ITEMS BEING RETURNED. CONTRACTOR SHALL CALL (702) 455-6000 TO MAKE AN APPOINTMENT FOR DROPPING OFF SALVAGED ITEMS.

**CONDUITS/PULL BOXES/CABLES**

- F.A.S.T. INTERCONNECT CABLE POLICY IS IN EFFECT. INTERCONNECT CABLE MUST BE MAINTAINED AT ALL TIMES. DEVELOPER OR CONTRACTOR SHALL PROVIDE TEMPORARY OVERHEAD INTERCONNECT CABLE WHILE PERMANENT CABLE IS BEING RELOCATED OR REPAIRED. THE TEMPORARY AERIAL INSTALLATION MUST BE ACCEPTABLE TO CLARK COUNTY TRAFFIC MANAGEMENT AND TO F.A.S.T. ANY DAMAGE TO ANY INTERCONNECT CABLE IS DEEMED AN EMERGENCY BY CLARK COUNTY, F.A.S.T., CITY OF LAS VEGAS, CITY OF NORTH LAS VEGAS, CITY OF HENDERSON, AND NDOT AND MUST BE REPORTED AND REPAIRED IMMEDIATELY TO F.A.S.T. ACCEPTANCE.
- DAMAGES MAY BE ASSESSED AGAINST THE CONTRACTOR AFTER 24 HOURS HAS ELAPSED FROM THE TIME OF BREAK OR DAMAGE. **\$2,500 PER DAY FOR DAMAGE TO COPPER WIRED INTERCONNECT CABLE AND \$7,600 PER DAY FOR DAMAGE TO FIBER OPTIC CABLE.**
- ALL SIGNAL CABLE SHALL CONFORM TO I.M.S.A. #20-1 AND SHALL BE A 25 CONDUCTOR CABLE. ALL CABLES SHALL BE INSTALLED FROM TERMINAL TO TERMINAL WITHOUT SPLICING.
- SIX (6) SINGLE CONDUCTOR UF WIRES SHALL BE PROVIDED FROM ALL EMPTY TENONS TO THE "J" BOX ON THE MAST ARM POLE. EACH WIRE SHALL BE A DIFFERENT COLOR.
- ALL EMPTY TRAFFIC SIGNAL OR STREET LIGHTING CONDUITS SHALL HAVE A #8 AWG THW-2 OR XHHW-2 GREEN CONDUCTOR RUN FROM PULL BOX TO PULL BOX.
- ALL INTERCONNECT / I.T.S. CONDUITS SHALL HAVE A 6-PAIR PE-39 #22 AWG TWISTED WIRE PAIR CABLE, WITH PULL STRING, CABLE IN EACH CONDUIT RUN BETWEEN EACH PULL BOX OR SPLICE VAULT.
- EACH CONDUCTOR OR LOOP CABLE SHALL HAVE A MINIMUM OF SIX (6) FEET AND A MAXIMUM OF TEN (10) FEET OF COILED SLACK WIRE IN EACH PULL BOX THE CONDUCTOR GOES THROUGH OR TERMINATES WITHIN.
- OPTICOM CABLE SHALL BE 3 PAIR NO. 20, GLOBAL TRAFFIC TECHNOLOGIES (GTT) MODEL 138. ALL CABLES SHALL BE RUN FROM TERMINAL TO TERMINAL WITHOUT SPLICING.
- ONE #8 GREEN CONDUCTOR SHALL BE RUN FROM THE CONTROLLER TO ALL POLES AND PULL BOXES AS A BONDING GROUND. ALL PROPOSED CONDUITS SHALL HAVE A #8 AWG GREEN THW-2 OR XHHW-2 CONDUCTOR INSTALLED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR GROUNDING THE COMPLETE TRAFFIC SIGNAL ELECTRICAL SYSTEM INCLUDING ALL EXISTING POLES, CABINETS, SERVICE PEDESTALS, PULL BOXES AND ELECTRICAL DEVICES IN ACCORDANCE WITH THE CURRENT NATIONAL ELECTRICAL CODE AND THE UNIFORM STANDARD DRAWINGS.
- ALL EXISTING TRAFFIC SIGNAL RELATED NO. 3-1/2, NO. 5, AND NO. 7 METAL PULL BOX COVERS SHALL BE REPLACED WITH A HEAVY DUTY, SOLID (FULL DEPTH WITH NO VOIDS UNDER THE LID), RESIN POLYMER REINFORCED NON-CONDUCTIVE COVER MARKED "STREET LIGHTING". ALL EXISTING METAL PULL BOX COVERS SHALL BE SALVAGED AND DELIVERED TO CLARK COUNTY TRAFFIC OPERATIONS.
- ALL EXISTING TRAFFIC SIGNAL INTERCONNECT RELATED METAL P30 PULL BOX COVERS SHALL BE REPLACED WITH A HEAVY DUTY, SOLID (FULL DEPTH WITH NO VOIDS UNDER THE LID), RESIN POLYMER REINFORCED NON-CONDUCTIVE COVER MARKED "FIBER OPTIC". ALL EXISTING METAL PULL BOX COVERS SHALL BE SALVAGED AND DELIVERED TO CLARK COUNTY TRAFFIC OPERATIONS.
- ALL EXISTING STREET LIGHTING RELATED METAL PULL BOX COVERS SHALL BE REPLACED WITH A HEAVY DUTY, SOLID (FULL DEPTH WITH NO VOIDS UNDER THE LID), RESIN POLYMER REINFORCED NON-CONDUCTIVE COVER MARKED "STREET LIGHTING". ALL EXISTING METAL PULL BOX COVERS SHALL BE SALVAGED AND DELIVERED TO CLARK COUNTY TRAFFIC OPERATIONS.
- ALL NEW PULL BOX ASSEMBLIES (BOX WITH COVER SECURELY ATTACHED) SHALL BE DESIGNED FOR A VERTICAL STATIC LOAD OF 16,000 POUNDS APPLIED WITH A 1.3 SAFETY FACTOR. A VERTICAL TEST LOAD OF 20,800 POUNDS APPLIED TO A 10-INCHX10-INCH STEEL PLATE CENTERED ON THE COVER'S SURFACE SHALL NOT CAUSE FAILURE ON ANY PART OF THE ASSEMBLY.
- MANUFACTURER'S CERTIFIED TEST RESULTS, SHOWING COMPLIANCE WITH SPECIFIED DESIGN LOADS AND SAFETY FACTORS ALONG WITH A PHYSICAL DESCRIPTION OF THE TESTING METHODS USED TO ACHIEVE THOSE RESULTS, WILL BE REQUIRED FOR EACH TYPE OF PULL BOX BEING FURNISHED. TEST RESULTS SHALL SHOW THE PROJECT NUMBER, CONTROL NUMBER, AND PROJECT LOCATION AND SHALL BE SIGNED BY AN AUTHORIZED REPRESENTATIVE OF THE FIRM MANUFACTURING THE PULL BOX.
- ALL NEW TRAFFIC SIGNAL RELATED PULL BOXES SHALL BE CONCRETE AND HAVE A COVER MARKED "TRAFFIC SIGNAL". THE COVER SHALL BE A HEAVY DUTY, SOLID (FULL DEPTH WITH NO VOIDS UNDER THE LID), RESIN POLYMER REINFORCED NON-CONDUCTIVE COVER, WHICH CAN WITHSTAND THE STATIC LOADS AS REQUIRED ABOVE.
- ALL NEW INTERCONNECT RELATED P30 PULL BOX SHALL BE POLYMER CONCRETE AND HAVE A COVER MARKED "FIBER OPTIC". THE COVER SHALL BE A HEAVY DUTY, SOLID (FULL DEPTH WITH NO VOIDS UNDER THE LID), RESIN POLYMER REINFORCED NON-CONDUCTIVE COVER, WHICH CAN WITHSTAND THE STATIC LOADS AS REQUIRED ABOVE.
- ALL NEW INTERCONNECT RELATED T200 PULL BOX SHALL BE CONCRETE AND HAVE AN ADJUSTABLE TORSION SPRING ASSISTED METAL COVER MARKED "FIBER OPTIC". THE PULL BOX ASSEMBLY SHALL HAVE A DESIGN LOAD OF H-20 WHEEL LOADINGS. PULL BOX COVER SHALL BE GROUNDED PER THE PULL BOX COVER BONDING DETAIL.
- ALL NEW STREET LIGHTING PULL BOXES SHALL BE CONCRETE AND HAVE A COVER MARKED "STREET LIGHTING". THE COVER SHALL BE A HEAVY DUTY, SOLID, RESIN POLYMER REINFORCED NON-CONDUCTIVE COVER, WHICH CAN WITHSTAND THE STATIC LOADS AS REQUIRED ABOVE.
- FOR NEW CONSTRUCTION OR AS SHOWN IN THE PLANS, TRAFFIC SIGNAL RELATED PULL BOXES SHALL BE 34-3/4-INCH X 21-3/4-INCH X 24-INCH (LENGTH X WIDTH X DEPTH), WALLS AND BOTTOM SHALL BE OF MONOLITHIC CONCRETE CONSTRUCTION.
- FOR RETROFITS OR AS SHOWN IN THE PLANS, TRAFFIC SIGNAL RELATED PULL BOXES SHALL BE DOUBLE STACKED NO. 7 PULL BOXES, WITH A 12-INCH DEEP PRECAST REINFORCED CONCRETE BODY WITH A PRECAST REINFORCED CONCRETE EXTENSION AS SHOWN IN THE UNIFORM STANDARD DRAWINGS. CONTRACTOR SHALL USE GROUT TO FILL IN ANY GAPS BETWEEN THE PULL BOX AND THE PULL BOX EXTENSION. SPACERS SUCH AS ROCKS, GINDER BLOCKS AND WOOD PIECES SHALL NOT BE USED BETWEEN THE PULL BOX AND THE PULL BOX EXTENSION.
- CONDUIT ROUTING AND PULL BOX LOCATION ARE SCHEMATIC FOR THE PURPOSE OF CLARITY AND MAY DIFFER FROM ACTUAL INSTALLATION. FINAL LOCATION OF PULL BOXES SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- PULL BOXES SHALL NOT BE INSTALLED WITHIN SIDEWALK RAMPS, WITHIN ANY DRIVEWAY, OR WITHIN TEN FEET OF ANY DRIVEWAY. PULL BOXES SHALL NOT BE INSTALLED WITHIN THE ROADWAY, SHOULDER, NOR BIKE LANE.
- ALL CONDUIT BENDS FOR TRAFFIC SIGNALS TERMINATING IN PULL BOXES, VAULTS, TRAFFIC SIGNAL POLES AND TRAFFIC CONTROLLER CABINETS SHALL BE PVC COATED RIGID STEEL UNLESS THE CONDUIT RUN IS SHORTER THAN THIRTY (30) FEET.
- TRAFFIC SIGNAL AND STREET LIGHTING CONDUIT BENDS SHALL HAVE A 18-INCH MINIMUM RADIUS.

- INTERCONNECT CONDUITS BENDS SHALL HAVE A 24-INCH MINIMUM RADIUS.
- ALL CONDUITS SHALL EXTEND A MINIMUM OF SIX (6) INCHES ABOVE THE GROUND LEVEL OF THE BOTTOM OF A PULL BOX.
- ALL PULL BOX COVERS SHALL HAVE A MINIMUM SIX (6) INCH CLEARANCE FROM ANY CONDUIT.
- ALL CONDUIT OPENINGS SHALL BE SEALED WITH DUCT SEAL OR APPROVED EQUIVALENT. ALL ELECTRICAL CONDUIT, FITTINGS, AND COUPLINGS SHALL BE JOINED TOGETHER PER THE CURRENT NATIONAL ELECTRICAL CODE.
- CONTRACTOR SHALL SUPPLY AND INSTALL THW-2 OR XHHW-2 WIRE IN LIEU OF THW WIRE AT LOCATIONS WHERE THW WIRE IS SPECIFIED IN THE STD DWG.

**DETECTION**

- IF LOOPS ARE TO BE INSTALLED FOR THE TRAFFIC SIGNAL SYSTEM, CONTRACTOR SHALL FURNISH AND INSTALL FIVE (5) 4-CHANNEL DETECTION LOOP AMPLIFIERS, AND FOUR (4) SINGLE-CHANNEL LOOP AMPLIFIERS CAPABLE OF EXTENSION/DELAY TIMING.
- ALL LOOP LEAD-IN CABLE SHALL BE 1 PAIR NO. 12 AWG, TINNED COPPER, 19 STRANDS EACH PER IMSA SPECIFICATION 50.2.
- LOOP WIRE OTHER THAN PRE-FORMED LOOPS FOR INSTALLATION IN SAW CUTS SHALL MEET IMSA SPECIFICATION 51-5. IT SHALL BE SINGLE CONDUCTOR NO. 14 AWG, COPPER WIRE WITH 19 STRANDS. THE INSULATION SHALL BE 15 MILS OF ORANGE PVC COMPLYING WITH UL 62 WITH AN OVERALL JACKET OF CLEAR NYLON IN ACCORDANCE WITH ASTM D4085.
- INDUCTION LOOP WIRES FROM THE PULL BOX TO THE INDUCTION LOOPS SHALL NOT BE INSTALLED IN AREAS WHERE FUTURE LOOPS MAY BE INSTALLED.
- ALL NEW OR REPLACEMENT INDUCTION LOOPS SHALL BE INSTALLED (AS SHOWN ON THE PLANS) USING CABLE-IN-DUCT WRING OR PRE-FORMED LOOPS AND SHALL HAVE INDEPENDENT LEAD-IN CABLE TO THE CONTROLLER CABINET FOR EACH LEFT TURN, STRAIGHT THROUGH AND RIGHT TURN LANES. ADVANCED LOOPS SHALL HAVE ONE LEAD-IN CABLE PER APPROACH, AND NOT PER LANE. EACH LEAD-IN SHALL BE INDIVIDUALLY TAGGED.
- THE INDUCTION LOOP WIRES SHALL BE SOLDERED AND SEALED TO THE LOOP LEAD-IN WIRES.
- IF REQUIRED BY THE TRAFFIC SIGNAL PLANS, THE CONTRACTOR SHALL FURNISH AND INSTALL A VEHICLE VIDEO DETECTION SYSTEM WHICH SHALL BE ECONOLITE AUTOSCOPE RACK VISION, ITERIS EDGE 2 OR PEEK VIDEOTRAK IQ. CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT AND INSTALL ALL VIDEO EQUIPMENT ON THE TOP SHELF IN CONTROLLER CABINET. CONTRACTOR SHALL MOUNT CAMERAS ON THE LUMINAIRE ARM USING A PELCO ATTACHMENT CONSISTING OF AN ASTRO BRACKET WITH A SIX (6) FOOT RISER. THE LOCATION OF THE CAMERA SHALL BE PLACED AT THE LOCATIONS AS SHOWN ON PLANS. CAMERAS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION.
- IF REQUIRED BY THE TRAFFIC SIGNAL PLANS, THE CONTRACTOR SHALL FURNISH AND INSTALL A VIDEO DETECTION SYSTEM WHICH SHALL HAVE THE CAPABILITY OF SENSING A VEHICLE ANYWHERE WITHIN THE "MINIMUM LIMITS OF DETECTION ZONE". ONE (1) COAXIAL CABLE AND THREE (3) - #10 THW-2 OR XHHW-2 (BLUE, WHITE AND GREEN) SHALL RUN FROM THE CONTROLLER CABINET TO EACH CAMERA. COAXIAL CABLE SHALL BE BELDEN 8281 WITH A BNC CONNECTOR AT EACH END. THE CAMERA COAXIAL CABLE SHALL RUN FROM THE VPJ TO THE TRAFFIC SIGNAL POLE HAND HOLE, WITHOUT A SPLICE. THE CONTRACTOR SHALL PROVIDE SIX (6) FEET COAXIAL CABLE SLACK ON THE CAMERA SIDE OF THE COAXIAL CABLE RUN. WHERE POSSIBLE, THE CONTRACTOR SHALL SEPARATE SIGNAL CABLE FROM OPTICOM AND DETECTOR CABLE IN CONDUIT RUNS.
- IF REQUIRED BY THE TRAFFIC SIGNAL PLANS, THE CONTRACTOR SHALL FURNISH AND INSTALL A WAVETRONIX ADVANCE DETECTOR SYSTEM COMPLETE, IN-PLACE AND OPERATIONAL. THE CONTRACTOR SHALL PROVIDE A WAVETRONIX SMARTSENSOR ADVANCE MODEL 200 DETECTOR AT EACH LOCATION SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROVIDE, AS PART OF THE EQUIPMENT, A DIN RAIL WITH WAVETRONIX "CLICK" MODULES (POWER CONVERTER, SURGE PROTECTION AND CONTACT CLOSURES). THE CONTRACTOR SHALL PROVIDE ALL CABLING AND WRING PER MANUFACTURER'S REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE, SETUP AND INSTALL ALL VENDOR OPERATIONAL SOFTWARE REQUIRED FOR THE DIFFERENT SYSTEMS IDENTIFIED ON THESE PLANS.
- IF REQUIRED BY THE TRAFFIC SIGNAL PLANS, THE CONTRACTOR SHALL FURNISH AND INSTALL A RADAR DETECTION SYSTEM WHICH SHALL HAVE THE CAPABILITY OF SENSING A VEHICLE ANYWHERE WITHIN ONE HUNDRED (100) FEET OF SENSOR TO THREE HUNDRED AND SIXTY (360) FEET IN ADVANCE OF STOP LINE FOR THE THROUGH LANES. ONE (1) BELDEN 9331 CABLE SHALL RUN FROM THE CONTROLLER CABINET TO EACH SENSOR. THE BELDEN 9331 CABLE SHALL RUN FROM THE CONTROLLER CABINET TO THE RADAR DETECTOR WITHOUT A SPLICE. THE CONTRACTOR SHALL PROVIDE SIX (6) FEET CABLE SLACK ON THE SENSOR SIDE OF THE BELDEN 9331 CABLE RUN. WHERE POSSIBLE, THE CONTRACTOR SHALL SEPARATE SIGNAL CABLE FROM OPTICOM AND DETECTOR CABLE IN CONDUIT RUNS.
- THE FRONT OF THE ADVANCED INDUCTION LOOPS SHALL NORMALLY BE PLACED IN ADVANCE OF THE FRONT OF THE PRESENCE LOOPS (AT THE STOP BAR) IN ACCORDANCE WITH THE ULTIMATE FULL STREET RIGHT OF WAY (R.O.W.) WIDTH: 90 FOOT OR GREATER R.O.W. - 360 FEET 70 TO LESS THAN 90 FEET R.O.W. - 250 FEET LESS THAN 70 FOOT R.O.W. - 155 FEET
- VARIANCES MUST BE APPROVED BY THE TRAFFIC MANAGER.
- 6 FEET DIAMETER CIRCULAR DETECTION LOOPS MAY BE USED IN LIEU OF 6 FEET BY 6 FEET SQUARE DETECTION LOOPS. SPACING BETWEEN EACH LOOP AND THE NUMBER OF LOOPS SHALL BE AS SPECIFIED IN THE PLANS.
- EACH DETECTION LOOP SHALL BE INDIVIDUALLY HOME RUN TO THE CONTROLLER CABINET FOR TRAFFIC COUNTS.

**FAST**  
 Call before you Dig  
 UnderGround  
 1-702-432-5300  
 FREEMAN AND ARTERIAL SYSTEM OF TRANSPORTATION

Call before you Dig  
 Call  
 811  
 Call before you Dig  
 Overhead  
 1-702-227-2929  
 HENDERSON, NEVADA 89074  
 SAFETY SERVICES DEPARTMENT

478136-LVSGN-General.dwg

REV NO	DATE	DESCRIPTION	APPROVED



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
 UTILITY & TRAFFIC NOTES

CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS



DESIGNED BY: V. PARIMI  
 DRAWN BY: D. PUBLLOW  
 CHECKED BY: K. GILBRETH  
 DATE: June 4, 2014

**CH2MHILL**  
 2485 VILLAGE VIEW DRIVE, SUITE 350  
 HENDERSON, NEVADA 89074  
 PHONE 702-369-6175, FAX 702-369-1107

SCALE	L-2042
HORIZ: NONE	DRAWING NO.
VERT: NONE	<b>G-3</b>
FIELD BOOK	SHT: 3 OF 23
WORK ORDER	
PROJECT No. 478136	

WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD

**TRAFFIC SIGNAL NOTES (CONTINUED)**

**RTC TRANSIT NOTES**

**POLES AND HARDWARE**

- 300. POLE ASSEMBLIES, TRAFFIC SIGNAL MAST ARMS, LUMINAIRE MAST ARMS AND BRACKETS, ANCHOR-BOLT AND HANDLE COVERS AND POLE AND MAST ARM CAPS SHALL BE HOT-DIP GALVANIZED IN CONFORMANCE WITH ASTM DESIGNATION A123. ASSOCIATED HARDWARE SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION A153. FLAWS IN THE APPEARANCE OF GALVANIZED COMPONENTS SHALL BE CAUSE FOR REJECTION BY THE OWNER. THE OWNER SHALL REJECT GALVANIZED MATERIALS WITH FINISHES THAT HAVE A STRIPED OR UNEVEN APPEARANCE, A BUILD-UP OF ZINC HYDROXIDE, RUST STAINS, ASH INCLUSIONS, GROSS PROTRUSIONS AND/OR FLUX INCLUSIONS. GALVANIZED MATERIALS THAT EXHIBIT A SPIDERY APPEARANCE, A BLOTCHY OR SPOTTED APPEARANCE, OR THAT HAVE A GENERAL SURFACE ROUGHNESS OR EXHIBIT LUMPINESS OR RUNS IN THE FINISH SHALL ALSO BE REJECTED.
- 301. EXISTING TRAFFIC SIGNAL AND/OR LIGHTING EQUIPMENT REMOVED AND NOT REUSED ON THE PROJECT SHALL BE SALVAGED BY THE CONTRACTOR AND DELIVERED TO CLARK COUNTY TRAFFIC OPERATIONS, 5821 E. FLAMINGO ROAD, LAS VEGAS, NEVADA. ALL DELIVERIES SHALL BE BY APPOINTMENT ONLY BY CALLING (702) 455-6000 AND COORDINATING WITH THE TRAFFIC SYSTEMS SUPERVISOR AND/OR THE STREETLIGHT SUPERINTENDENT. ALL STREET LIGHTING LAMPS SHALL BE SEPARATED FROM THE LUMINAIRES PRIOR TO DELIVERY TO THE COUNTY AND THE LAMPS SHALL BE DISPOSED OF PROPERLY.
- 302. THE FINAL INSTALLED POLE LOCATIONS SHALL ONLY DEVIATE FROM THE PROPOSED LOCATIONS SHOWN ON THE PLANS UPON APPROVAL BY THE TRAFFIC MANAGER. ALL SIGNAL POLE INSTALLATIONS SHALL BE IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS AND SHALL NOT BE DRILLED WITHOUT PRIOR APPROVAL OF THE CLARK COUNTY TRAFFIC MANAGER.
- 303. CONTRACTOR SHALL ENSURE THAT THE TRAFFIC SIGNAL POLES ARE PLUMB AFTER THE INSTALLATION OF THE MAST ARMS AND TRAFFIC SIGNAL HEADS. WHEN EXISTING SIGNAL POLES ARE USED, CONTRACTOR SHALL BREAK EXISTING CRASH CAPS AND REPLUMB THE SIGNAL POLES AFTER LIVE ARM LOAD IS ATTACHED. CONTRACTOR SHALL ALSO RESTORE AND/OR REPLACE CRASH CAPS AND ALL ASSOCIATED HARDWARE.
- 304. THE CONTRACTOR IS TO INSTALL BLANK 24" x 30" SIGN PANEL(S) HORIZONTALLY ON ALL MAST ARMS REQUIRING VIDEO DETECTION CAMERA AND/OR IF THE MAST ARM EXCEEDS SIXTY (60) FEET IN LENGTH. COORDINATE WITH THE TRAFFIC SYSTEMS SUPERVISOR AT (702) 455-6000 FOR DETAILS.
- 305. CONTRACTOR SHALL INSTALL McCain RED LIGHT VIOLATOR DETECTION UNIT, CURRENT MODELS FOR RED AND BLUE INDICATORS, AS SHOWN ON THE POLE SCHEDULE FOR EACH INTERSECTION. THE RED INDICATOR SHALL BE MOUNTED BETWEEN SIXTEEN (16) TO TWENTY (20) FEET ABOVE THE BASE PLATE OF THE SIGNAL POLE AND SHALL DETECT THE MAST ARM STRAIGHT THROUGH SIGNAL RED INDICATION. THE BLUE INDICATOR SHALL BE MOUNTED ONE (1) ABOVE THE RED INDICATOR AND SHALL DETECT THE SIDE MOUNT LEFT TURN RED INDICATION. THE INDICATORS SHALL BE MOUNTED AS SHOWN AND INDICATED ON DWG NO. 811.51. CONTRACTOR SHALL INSTALL THE INDICATORS AT A MOUNTING HEIGHT WHERE THEY WILL NOT BE OBSTRUCTED BY ANY SIDE MOUNTED SIGNAL HARDWARE. CONTRACTOR SHALL WIRE INDICATORS DIRECTLY TO BUSS IN "J" BOX PER CALL OUT PHASING IN POLE SCHEDULE.
- 306. MODEL 722 (TWO-WAY) OPTICOM DETECTORS SHALL BE MOUNTED AS SHOWN. THE CONTROLLER SHALL BE EQUIPPED FOR OPTICOM PRE-EMPTION USING ONE (1) CONTRACTOR SUPPLIED GTT MODEL 764 PHASE SELECTOR. CONTRACTOR SHALL SUPPLY AND DELIVER ONE (1) ADDITIONAL GTT MODEL 764 PHASE SELECTOR TO CLARK COUNTY TRAFFIC OPERATIONS, 5821 E. FLAMINGO ROAD, LAS VEGAS, NEVADA 89122.
- 307. ON LOCATIONS WHERE SINGLE DIRECTIONAL DETECTORS ARE REQUIRED AND SHOWN ON THE PLANS, MODEL 722 (TWO-WAY) DETECTORS SHALL BE USED AND SHALL BE MOUNTED OVER THE CENTER OF THE LANES FOR EACH DIRECTION. THE CONTROLLER SHALL BE EQUIPPED FOR OPTICOM PRE-EMPTION USING ONE (1) CONTRACTOR SUPPLIED GTT MODEL 764 PHASE SELECTOR. CONTRACTOR SHALL SUPPLY AND DELIVER ONE (1) ADDITIONAL GTT MODEL 764 PHASE SELECTOR TO CLARK COUNTY TRAFFIC OPERATIONS, 5821 E. FLAMINGO ROAD, LAS VEGAS, NEVADA 89122.
- 308. ALL MAST ARM WIRING SHALL TERMINATE AT A SIDE MOUNTED JUNCTION BOX ON TRAFFIC SIGNAL POLES. IF ONE IS NOT EXISTING, CONTRACTOR SHALL SUPPLY AND INSTALL THE JUNCTION BOX.
- 309. AT LOCATIONS WITH FULL OFFSITE IMPROVEMENTS, CONTRACTOR SHALL DRILL HOLES FOR THE PEDESTRIAN SIGNALS ON THE SIDE OF PEDESTRIAN SIGNAL POLE OR TRAFFIC SIGNAL POLE 180-DEGREES OPPOSITE THE CURB LINE PER STD DWG 885 AND 886 AND AT 7-FEET, 6-INCHES ABOVE FINISHED GRADE PER STD DWG 823. AT LOCATIONS WITHOUT FULL OFFSITE IMPROVEMENTS, CONTRACTOR SHALL DRILL THE HOLES FOR THE PEDESTRIAN SIGNALS IN THE TRAFFIC SIGNAL POLE AS INDICATED IN THE TABLE BELOW. (QUADRANT SIGNAL LOCATION IS DEFINED AS 1-NORTH, 2-EAST, 3-SOUTH, 4-WEST.) IF PEDESTRIAN SIGNALS ARE NOT REQUIRED PER PLAN, CONTRACTOR SHALL DRILL HOLES AS INDICATED ABOVE AND SUPPLY AND INSTALL JUNCTION BOXES TO COVER THE HOLES PER STD DWG 880.

INTERSECTION CORNER	QUADRANT SIGNAL LOCATION
NE	2
SE	3
SW	4
NW	1

- 310. THE BOLT PATTERN FOR THE PEDESTRIAN POLE FOUNDATIONS SHALL BE ORIENTED IN THE SAME DIRECTION AS THE BOLT PATTERN FOR THE ADJACENT TRAFFIC SIGNAL POLE FOUNDATION AND NOT THE ADJACENT CURB LINE.
- 311. MULTI-SIDED (MINIMUM OF 18 SIDES) STEEL TRAFFIC SIGNAL MAST ARMS MAY BE USED.
- 312. CONTRACTOR SHALL ALSO SUPPLY AND INSTALL 9"X12" PEDESTRIAN PUSH BUTTON SIGNS AND PUSH BUTTON FRAME ADAPTORS FOR USE WITH 9"X12" PEDESTRIAN PUSH BUTTON SIGNS. PEDESTRIAN PUSH BUTTON SIGNS SHALL CONFORM TO MUTCD REQUIREMENTS UNLESS OTHERWISE SPECIFIED. SIGNS SHALL BE 9"X12" IN SIZE AND SHALL HAVE TYPE XI RETROREFLECTIVE SHEETING WITH PROTECTIVE OVERLAY FILM, AND WITH FOUR (4) DRILLED AND TAPPED HOLES FOR MOUNTING THE SIGN ON THE PED PUSH BUTTON ASSEMBLY. FOUR (4) 10-32/3/8-INCH STAINLESS STEEL TAMPER-PROOF SCREWS PER EACH PUSH BUTTON ASSEMBLY SHALL BE USED TO MOUNT THE PEDESTRIAN PUSH BUTTON SIGN.
- 313. ALL PEDESTRIAN PUSH BUTTON SIGNS SHALL CONFORM TO MUTCD REQUIREMENTS UNLESS OTHERWISE SPECIFIED. SIGNS SHALL BE 9"X12" IN SIZE AND SHALL HAVE TYPE XI RETROREFLECTIVE SHEETING WITH PROTECTIVE OVERLAY FILM.

**STREETLIGHTING**

- 400. EXISTING INTERSECTION LUMINAIRES AND FIXTURES SHALL BE REMOVED AND REPLACED WITH 400 WATT EQUIVALENT LIGHT EMITTING DIODE (LED) LUMINAIRES AND FIXTURES. AN ELECTRONIC PHOTOCELL (TYCO ELECTRONICS #SST-PV-IES-BL OR APPROVED EQUIVALENT) SHALL BE INSTALLED ON EACH LUMINAIRE. IF 20-FOOT HEIGHT TRAFFIC SIGNAL POLE IS USED, AN ELECTRONIC PHOTOCELL SHALL BE INSTALLED ON THE POLE CAP (TYCO ELECTRONICS # SST-PV-IES-BL OR APPROVED EQUIVALENT). EACH POLE SUPPORTING ONE OR MORE LUMINAIRES SHALL BE ELECTRICALLY FED BY AN INDIVIDUAL 120V - 1P-30A BREAKER IN THE ELECTRICAL SERVICE PEDESTAL AND A HOMERUN OF TWO (2) #10 AWG THW-2 OR XHHW-2 COPPER WIRES (BLACK AND WHITE) FROM EACH POLE TO THE CONTROLLER CABINET. THE GREEN GROUND WIRE (THW-2 OR XHHW-2) SHALL BE CONNECTED TO THE GROUND BUSS WITHIN THE CONTROLLER CABINET.
- 401. 240 VOLT STREET LIGHT CONDUITS SHALL BE SEPARATE FROM TRAFFIC SIGNAL AND INTERSECTION LIGHTING CONDUITS. EACH SHALL HAVE SEPARATE PULL BOXES.
- 402. IF REQUIRED BY THE TRAFFIC SIGNAL PLANS AND/OR STREET LIGHT PLANS, CONTRACTOR SHALL REMOVE AND SALVAGE EXISTING STREET LIGHT POLE ASSEMBLY; CHIP FOUNDATION EIGHTEEN (18) INCHES BELOW FINISHED GRADE OR EXISTING GRADE; INTERCEPT EXISTING CONDUIT AND WRING INTO A No. 3/4 PULL BOX, WHILE MAINTAINING THE EXISTING STREET LIGHT CIRCUIT. LAMPS SHALL BE SEPARATED FROM THE LUMINAIRES AND DISPOSED OF PROPERLY, PRIOR TO DELIVERING THE SALVAGED LUMINAIRES TO CLARK COUNTY TRAFFIC OPERATIONS. EXISTING LUMINAIRE ARMS SHALL ALSO BE REMOVED AND DISASSEMBLED PRIOR TO DELIVERING THE SALVAGED STREETLIGHT POLES AND LUMINAIRE ARMS TO CLARK COUNTY TRAFFIC OPERATIONS.
- 403. AT LOCATIONS WHERE EXISTING INTERSECTION LIGHTING IS ON AN EXISTING 240V STREETLIGHT CIRCUIT, THE CONTRACTOR SHALL REPLACE THE EXISTING 400W, 240V STREETLIGHT FIXTURE WITH A NEW 120V, 400W EQUIVALENT LIGHT EMITTING DIODE (LED) LAMP AND CUTOFF STREETLIGHT FIXTURE. ALL REMAINING STREETLIGHTS SHALL REMAIN FULLY OPERATIONAL ON THE EXISTING STREETLIGHT CIRCUIT. THE CONTRACTOR SHALL ENSURE THE CONTINUITY OF THE EXISTING 240V STREETLIGHT CIRCUIT WHILE REPLACING THE LUMINAIRES AT THE SIGNALIZED INTERSECTION. INTERSECTION LIGHTING AND THE TRAFFIC SIGNAL SHALL BE FED FROM THE SAME SERVICE POINT.

**VEHICLE/PEDESTRIAN HEADS**

- 500. ALL TRAFFIC SIGNAL VEHICLE INDICATIONS SHALL USE A 12 INCH SIGNAL LENS.
- 501. ALL TRAFFIC SIGNAL PEDESTRIAN INDICATIONS SHALL USE A 9 INCH HIGH INDICATION.
- 502. ALL TRAFFIC SIGNAL VEHICLE HEADS SHALL USE FULL-CIRCLE VISORS UNLESS OTHERWISE NOTED ON THE PLANS.
- 503. AT LOCATIONS WHERE VISUALLY ORIENTED TRAFFIC SIGNAL VEHICULAR HEADS ARE REQUIRED, GEOMETRICALLY PROGRAMMED LOUVER WITH ASSOCIATED ADJUSTABLE 12-INCH FULL CIRCLE VISOR SHALL BE USED. CONTRACTOR SHALL SUPPLY AND INSTALL A GEOMETRICALLY PROGRAMMED LOUVER THAT PERMITS INCREMENTAL TILTING FROM 7 DEGREES TO 15 DEGREES ABOVE OR BELOW THE HORIZONTAL WHILE MAINTAINING A COMMON VERTICAL AXIS THROUGH COUPLERS AND MOUNTING.
- 504. ALL TRAFFIC SIGNAL VEHICLE HEADS SHALL HAVE LOUVERED BACKPLATES. BACKPLATES SHALL BE PAINTED OR POWDER COATED BLACK (FRONT SIDE)/GREEN (BACKSIDE).
- 505. PEDESTRIAN PUSH BUTTONS SHALL MEET THE AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES AND BE INSTALLED ON POLE AT A HEIGHT BETWEEN THIRTY-SIX (36) INCHES AND FORTY-TWO (42) INCHES FROM FINISHED GRADE. PEDESTRIAN PUSH BUTTON SIGN SHALL BE R10-3e (9"X12").
- 506. ALL PEDESTRIAN SIGNAL ASSEMBLIES SHALL BE SUPPLIED WITH L.E.D. MESSAGE MODULES. THE "HAND" SHALL BE PORTLAND ORANGE L.E.D., THE "WALKING PERSON" SHALL BE LUNAR WHITE L.E.D. AS SPECIFIED IN THE STANDARD SPECIFICATIONS. THE SYMBOLS SHALL BE ENTIRELY LIGHTED AND NOT HOLLOW.
- 507. ALL PEDESTRIAN SIGNALS SHALL BE EQUIPPED TO COUNT DOWN THE PEDESTRIAN CLEARANCE INTERVAL. EXISTING NON-COUNT DOWN PEDESTRIAN SIGNAL HEADS SHALL BE CHANGED TO COUNT DOWN TYPE.
- 508. ALL TRAFFIC SIGNAL VEHICLE INDICATIONS SHALL BE LIGHT EMITTING DIODE (L.E.D.) AS SPECIFIED IN THE SPECIAL PROVISIONS AND THE MOST RECENT ITE SPECIFICATIONS.
- 509. ALL L.E.D. MODULES SHALL COMPLY WITH THE MOST RECENT SPECIFICATIONS AND TECHNOLOGY AS ADOPTED AND APPROVED BY THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE).
- 510. CONTRACTOR SHALL SUPPLY AND INSTALL TRAFFIC SIGNAL, FLASHER AND PEDESTRIAN HEAD COVERS ON EACH INSTALLED NEW SIGNAL AND PEDESTRIAN HEAD. THE COVER SHALL BE TRAFFIC JACKETS SUPPLIED BY PHOENIX HIGHWAY PRODUCTS, OR AN APPROVED EQUAL BY CLARK COUNTY TRAFFIC MANAGER. THE COVERS SHALL BE BRIGHT ORANGE WITH A VERTICAL MESSAGE "NOT IN SERVICE" IN BLACK ON EACH COVER, FOR NEW CONSTRUCTION. THE COVERS SHALL BE BLACK WITH A VERTICAL MESSAGE "NOT IN SERVICE" IN WHITE ON EACH COVER, FOR MODIFICATIONS TO A TRAFFIC SIGNAL ALREADY IN OPERATION. THE TRAFFIC SIGNAL, FLASHER AND/OR PEDESTRIAN HEAD COVERS REMAIN THE PROPERTY OF THE CONTRACTOR UNTIL THE SIGNAL IS ENERGIZED AND IS ACCEPTED BY CLARK COUNTY, UPON WHICH THEY BECOME THE PROPERTY OF CLARK COUNTY.

**CONTROLLER AND SERVICE PEDESTAL**

- 600. THE NEVADA ENERGY TRANSFORMER SHALL BE A MAXIMUM OF THREE HUNDRED AND FIFTY (350) FEET FROM THE SERVICE PEDESTAL, UNLESS APPROVED OTHERWISE BY THE TRAFFIC MANAGER.
- 601. THE SERVICE PEDESTAL SHALL BE A MAXIMUM OF FIVE (5) FEET FROM THE CONTROLLER CABINET.
- 602. ALL ELECTRONIC PHOTOCELLS FOR STREET LIGHTS SHALL BE INSTALLED IN THE SERVICE PEDESTALS FROM WHICH THE STREET LIGHTS ARE FED. THE ELECTRONIC PHOTOCELLS SHALL BE TYCO ELECTRONICS # SST-PV-IES-BL OR APPROVED EQUIVALENT.
- 603. CONTRACTOR SHALL SUPPLY NAZTEC MODEL 980 ATC SIGNAL CONTROLLER AND A LICENSE OF APOGEE ACTUATED SIGNAL CONTROLLER SOFTWARE (LATEST VERSION) TO RTC/FAST. CONTRACTOR SHALL SUPPLY TWO (2) GTT MODEL 764 EMERGENCY VEHICLE PHASE SELECTORS FOR EACH TRAFFIC SIGNAL SYSTEM. CONTRACTOR SHALL DELIVER THE CONTROLLER CABINET, CONTROLLER AND EMERGENCY VEHICLE PHASE SELECTORS TO CLARK COUNTY TRAFFIC OPERATIONS, FOURTEEN (14) DAYS PRIOR TO SIGNAL TURN-ON FOR TESTING. THE CONTRACTOR SHALL PICK-UP THE CONTROLLER CABINET AT CLARK COUNTY TRAFFIC OPERATIONS, 5821 E. FLAMINGO ROAD BY APPOINTMENT ONLY. THE CONTRACTOR SHALL NOTIFY CLARK COUNTY AT (702) 455-6000 SEVEN (7) DAYS PRIOR TO PICK-UP.

- 604. FOR CLARK COUNTY PUBLIC WORKS FUNDED PROJECTS, THE CONTRACTOR SHALL INSTALL THE COUNTY-SUPPLIED CONTROLLER CABINET ON A CONTRACTOR FURNISHED FOUNDATION. FOR NON-CLARK COUNTY PUBLIC WORKS FUNDED PROJECTS, THE CONTRACTOR SHALL INSTALL A CONTRACTOR-SUPPLIED COUNTY STANDARD CONTROLLER CABINET ON A CONTRACTOR FURNISHED FOUNDATION. ALL EQUIPMENT TO BE INSTALLED WITHIN THE CABINET SHALL BE FURNISHED BY THE CONTRACTOR.
- 605. ALL TRAFFIC SIGNALS SHALL BE POWERED FROM A 200 AMP SERVICE PEDESTAL.
- 606. ALL 200AMP SERVICE PEDESTAL SHALL INCLUDE THE FOLLOWING:
  - ONE (1) 200 AMP DOUBLE POLE CIRCUIT BREAKER (MAIN)
  - ONE (1) 80 AMP SINGLE POLE CIRCUIT BREAKER (TRAFFIC SIGNAL)
  - FOUR (4) 30 AMP SINGLE POLE CIRCUIT BREAKERS (INTERSECTION LIGHTING)
  - ONE (1) 15 AMP SINGLE POLE CIRCUIT BREAKER (PHOTO CELL)
  - TWO (2) 80 AMP 240V DOUBLE POLE CIRCUIT BREAKERS (STREET LIGHTING)
  - TWO (2) DOUBLE POLE LIGHTING CONTACTOR W/120VOLT COIL (GE# CR360.40202AAAZ OR APPROVED EQUAL)
  - ONE (1) 120 VOLT ELECTRONIC PHOTO ELECTRIC CONTROLS (TYCO ELECTRONICS # SST-PV-IES-BL OR APPROVED EQUAL)
- IF AN EXISTING SERVICE PEDESTAL IS USED TO POWER THE TRAFFIC SIGNAL, CONTRACTOR SHALL INSPECT THE EXISTING SERVICE PEDESTAL, AND SUPPLY AND INSTALL ANY MISSING BREAKERS.
- 607. NEW SERVICE PEDESTALS AND TRAFFIC SIGNAL CABINETS AND THE DOORS OF THIS EQUIPMENT SHALL BE FINISHED INSIDE AND OUT WITH GLOSS POLYURETHANE POWDER COATING CONSISTING OF FEDERAL SPECIFICATION 595 POLYURETHANE, INDUSTRIAL GRADE HIGH GLOSS POWDER PAINT WITH 1.7 MIL THICKNESS MINIMUM. SERVICE PEDESTALS SHALL BE MINT GREEN (FEDERAL COLOR 14672) AND TRAFFIC CONTROL CABINETS SHALL BE HIGH GLOSS PURE WHITE. THE FINISH SHALL PRESENT A SMOOTH SURFACE, UNIFORM IN COLOR AND FREE OF RUNS, SAGS OR OTHER IRREGULARITIES.

**ILLUMINATED STREET NAME SIGNS**

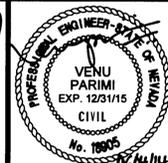
- 700. CONTRACTOR SHALL PROVIDE AND INSTALL THE NUMBER OF ILLUMINATED STREET NAME SIGNS AS SHOWN IN THE PLANS.
- 701. ALL ILLUMINATED STREET NAME SIGNS SHALL BE EIGHT (8) FEET IN LENGTH.
- 702. ALL ILLUMINATED STREET NAME SIGNS SHALL USE TRANSLUCENT WHITE WIDE ANGLE PRISMATIC REFLECTIVE SIGN FACE SHEETING. SHEETING SHALL CONFORM TO ASTM D4856, TYPE XI SHEETING. STREET NAMES SHALL BE APPLIED ON TOP OF THE PRISMATIC REFLECTIVE SIGN FACE SHEETING BY EITHER REVERSE-SCREENED WITH MANUFACTURER'S RECOMMENDED GREEN INK AND CLEAR COATING OR OVER-LAYED WITH GREEN ELECTRONIC CUTTABLE TRANSPARENT OVERLAY FILM, APPLIED TO A CLEAR HIGH IMPACT RESISTANT, REINFORCED ACRYLIC PANEL.
- 703. STREET NAME SHALL BE IN UPPER AND LOWER CASE LETTERS USING 12-INCH SERIES D WITH THE STREET CARDINAL DIRECTION, SUFFIX AND BLOCK NUMBER IN 5-INCH SERIES C AND IN ALL UPPER CASE. KERNING VALUE IS 110%. WIND LOADING SHALL BE A MINIMUM OF 90 MPH. IF NECESSARY TO MAKE SPACING FIT, 12-INCH SERIES C LETTERS MAY BE USED. LOWER CASE LETTERS SHALL BE 8-INCH IN HEIGHT.
- 704. APPROVAL OF SHOP DRAWINGS OF SIGN FACE LAYOUT BY THE PROJECT ENGINEER IS REQUIRED PRIOR TO FABRICATION OF SIGN.
- 705. SHEETING SHALL BE APPLIED IN A VERTICAL ORIENTATION IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.
- 706. THE HOT LEAD SHALL BE CONNECTED TO THE LOAD SIDE OF THE LUMINAIRE P.E. CONTROL OF THE RELATED STREET LIGHT. THIS TERMINATION SHALL BE MADE AND ACCESSIBLE IN THE HANDHOLD LOCATED AT THE BASE OF THE TRAFFIC SIGNAL POLE. THE NEUTRAL WIRE SHALL BE CONNECTED TO THE STREET LIGHT NEUTRAL AT THE HANDHOLE. No. 12 THW-2 OR XHHW-2 CONDUCTOR SHALL BE USED. THE STREET NAME SIGN SHALL BE WIRED TO THE LUMINAIRE PHOTO CELL ON THE RELATED STREET LIGHT DIRECTLY OVER MAST ARM. ALL THESE TERMINATIONS SHALL BE MADE AND ACCESSIBLE IN THE HANDHOLD LOCATED AT THE BASE OF THE TRAFFIC SIGNAL POLE.
- 707. ALL ILLUMINATED STREET NAME SIGNS SHALL BE DOUBLE FACED UNLESS OTHERWISE NOTED IN THE POLE SCHEDULE.
- 708. TWO (2) 8-FOOT BI-DIRECTIONAL LIGHT EMITTING DIODE (LED) TUBE LAMPS WITH 180-DEGREE LIGHT DISTRIBUTION AND INTERNAL DRIVERS ARE REQUIRED FOR EACH ILLUMINATED STREET NAMES SIGN. LAMP SHALL HAVE SINGLE PIN FA8 CONTACT AT EACH END.
- 709. CONTRACTOR SHALL SUPPLY AND INSTALL ONE 1/43 STRANDED SEOWOW CORD THAT SHALL RUN CONTINUOUSLY FROM THE INTERNALLY ILLUMINATED STREET NAME SIGN ENCLOSURE, THROUGH TWO STRAIN RELIEF CONNECTORS, TO THE HAND HOLE AT THE BASE OF THE TRAFFIC SIGNAL POLE. ONE NO. 10 RED CONDUCTOR SHALL RUN FROM THE PHOTOCELL ON TOP OF THE LUMINAIRE TO THE HAND HOLE AT THE BASE OF THE TRAFFIC SIGNAL POLE. CONNECTIONS BETWEEN THE STREET NAME SIGN AND THE PHOTOCELL SHALL BE MADE AT THE HAND HOLE AT THE BASE OF THE POLE.
- 710. THE STRAIN RELIEF CONNECTORS SHALL BE STRAIGHT ALUMINIUM DELUXE CORD GRIP/STRAIN RELIEF CONNECTORS THAT ARE COMPATIBLE WITH A 0.005-INCH TO 0.625-INCH CORD DIAMETER. STRAIN RELIEF CONNECTOR SHALL BE HUBBELL F2 OR AN APPROVED EQUIVALENT BY THE TRAFFIC MANAGER.
- 711. THE SEOWOW CORD SHALL HAVE THREE (3) NO. 14 AWG CONDUCTORS (BLACK, GREEN AND WHITE), AND HAVE THERMOPLASTIC ELASTOMER (TPE) INSULATION AND THERMOPLASTIC ELASTOMER (TPE) JACKET. THE SEOWOW CORD SHALL BE WATER-RESISTANT, UL LISTED, RATED FOR 600 VOLTS, WITH TEMPERATURE RANGE FROM 105 DEGREES CELSIUS TO -50 DEGREES CELSIUS. SEOWOW CORD SHALL BE CCI SEOPRENE 105 14 AWG 3/C SEOWOW OR AN APPROVED EQUIVALENT BY THE TRAFFIC MANAGER.

REV NO.	DATE	DESCRIPTION	APPROVED
1	07/02/14	PARKING LOT LIGHT REVISIONS	



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
UTILITY & TRAFFIC NOTES

CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS



DESIGNED BY:	V. PARIMI
DRAWN BY:	D. PUBLOW
CHECKED BY:	K. GILBRETH
DATE:	July 2, 2014

**CH2MHILL.**  
2485 VILLAGE VIEW DRIVE, SUITE 350  
HENDERSON, NEVADA 89074  
PHONE 702-369-6175, FAX 702-369-1107

SCALE	HORIZ: NONE
VERT: NONE	FIELD BOOK
WORK ORDER	PROJECT No. 478136

478136-LVSGN-Generel.dwg
<b>L-2042</b>
DRAWING NO.
<b>G-4</b>
SHT: 4 OF 23

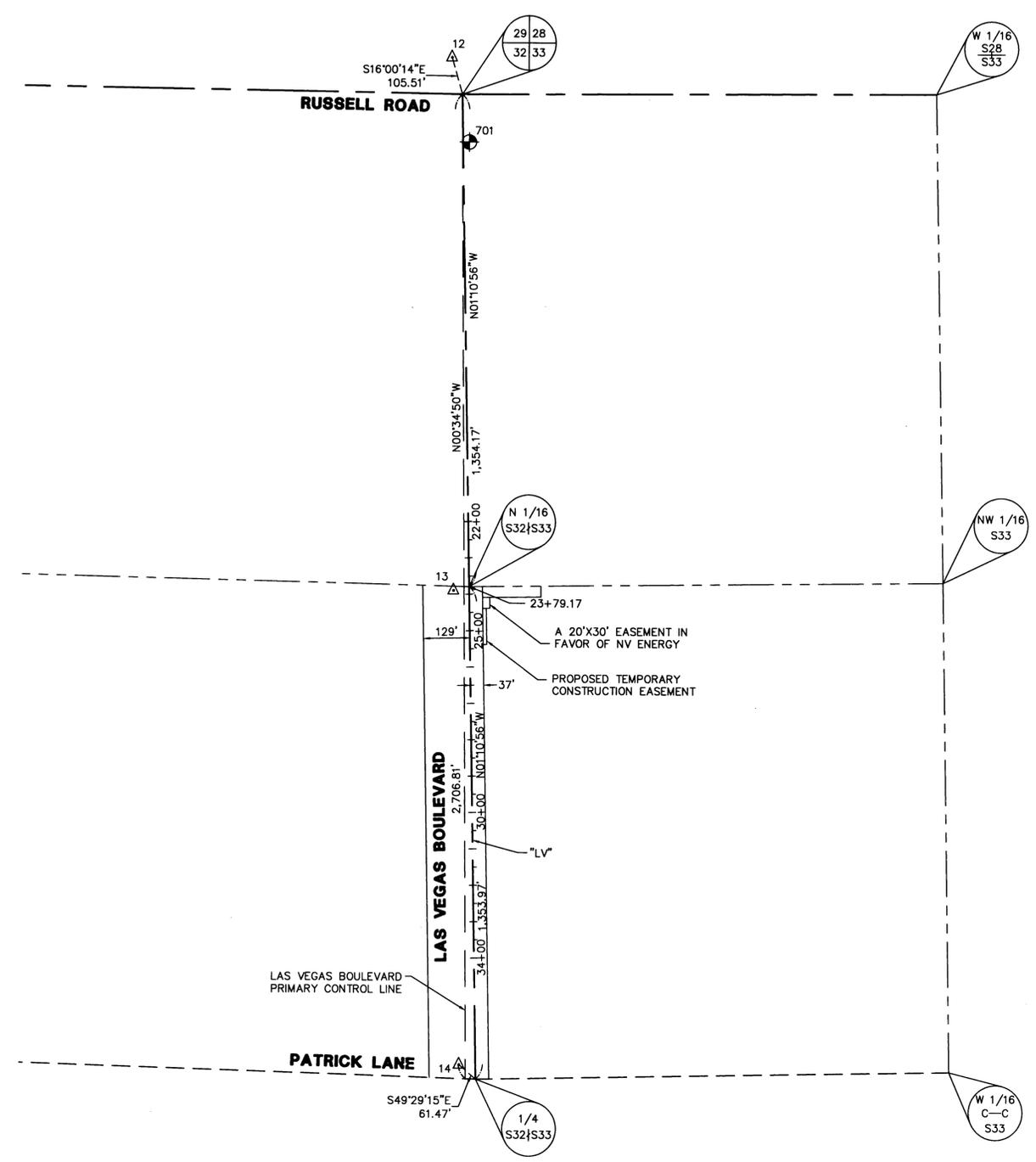
**FAST**  
Call before you Dig  
Underground  
1-702-432-5300  
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

AVOID OVERHEAD POWER LINE CONTACT. IT'S COSTLY.  
Call before you Dig  
Overhead  
1-702-227-2929  
NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

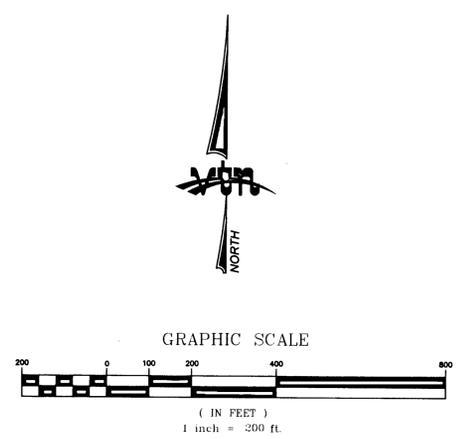
Call before you Dig  
Avoid Cutting Underground Utility Lines. It's Costly.  
Call  
811

WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD

WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD



POINT TABLE			
POINT #	NORTHING	EASTING	DESCRIPTION
12	738034.2884	77611.4238	BRASS CAP PLS 5571 CP 103
13	736568.4396	77625.1362	BRASS CAP PLS 5571 CP 102
14	735265.2417	77649.6616	BRASS CAP PLS 5571 CP 101
701	737801.6610	77660.9100	BENCHMARK



LEGEND	
	PROJECT BENCHMARK
	CONTROL POINT PER ROS 149-88
	SECTION LINE
	QUARTER SECTION LINE
	SIXTEENTH SECTION LINE
	RIGHT-OF-WAY LINE
	PRIMARY CONTROL LINE PER ROS 149-88

**BASIS OF BEARINGS**

NORTH 01°10'56" WEST, BEING THE BEARING OF THE WEST LINE OF THE NORTHWEST QUARTER OF SECTION 33, TOWNSHIP 21 SOUTH, RANGE 61 EAST, M.D.M., CLARK COUNTY, NEVADA AS SHOWN ON A RECORD OF SURVEY ON FILE IN THE OFFICE OF THE COUNTY RECORDER, CLARK COUNTY, NEVADA, IN FILE 149 AT PAGE 88.

**PROJECT BENCHMARK**

PROJECT DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)  
 CLARK COUNTY BENCHMARK: 4C11:33NWS  
 NAVD88 ELEVATION: 658.763 METERS (2161.29 FEET)  
 RIVET AND SQUARE ALUMINUM PLATE IN TOP OF CURB, EAST SIDE OF LAS VEGAS BLVD. 150' SOUTH OF RUSSELL RD.

Call before you Dig  
UnderGround  
1-702-432-5300

FREIGHTWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

AVOID OVERHEAD POWER LINE CONTACT. IT'S COSTLY.

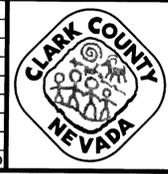
Call before you Overhead  
1-702-227-2929

NEVADA ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

Call before you Dig  
Call 811

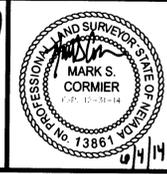
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.

REV No.	DATE	DESCRIPTION	APPROVED



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
 HORIZONTAL CONTROL PLAN

CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS



DESIGNED BY: \_\_\_\_\_  
 DRAWN BY: MSC  
 CHECKED BY: TZ  
 DATE: 6/4/2014

2727 SOUTH RAINBOW BOULEVARD  
 LAS VEGAS, NEVADA 89146  
 (702) 873-7550

SCALE

HORIZ: 1"=200'

VERT: NA

FIELD BOOK

WORK ORDER 7570

PROJECT No. 478136

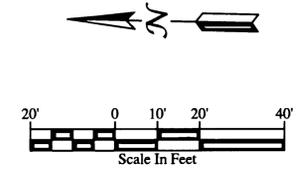
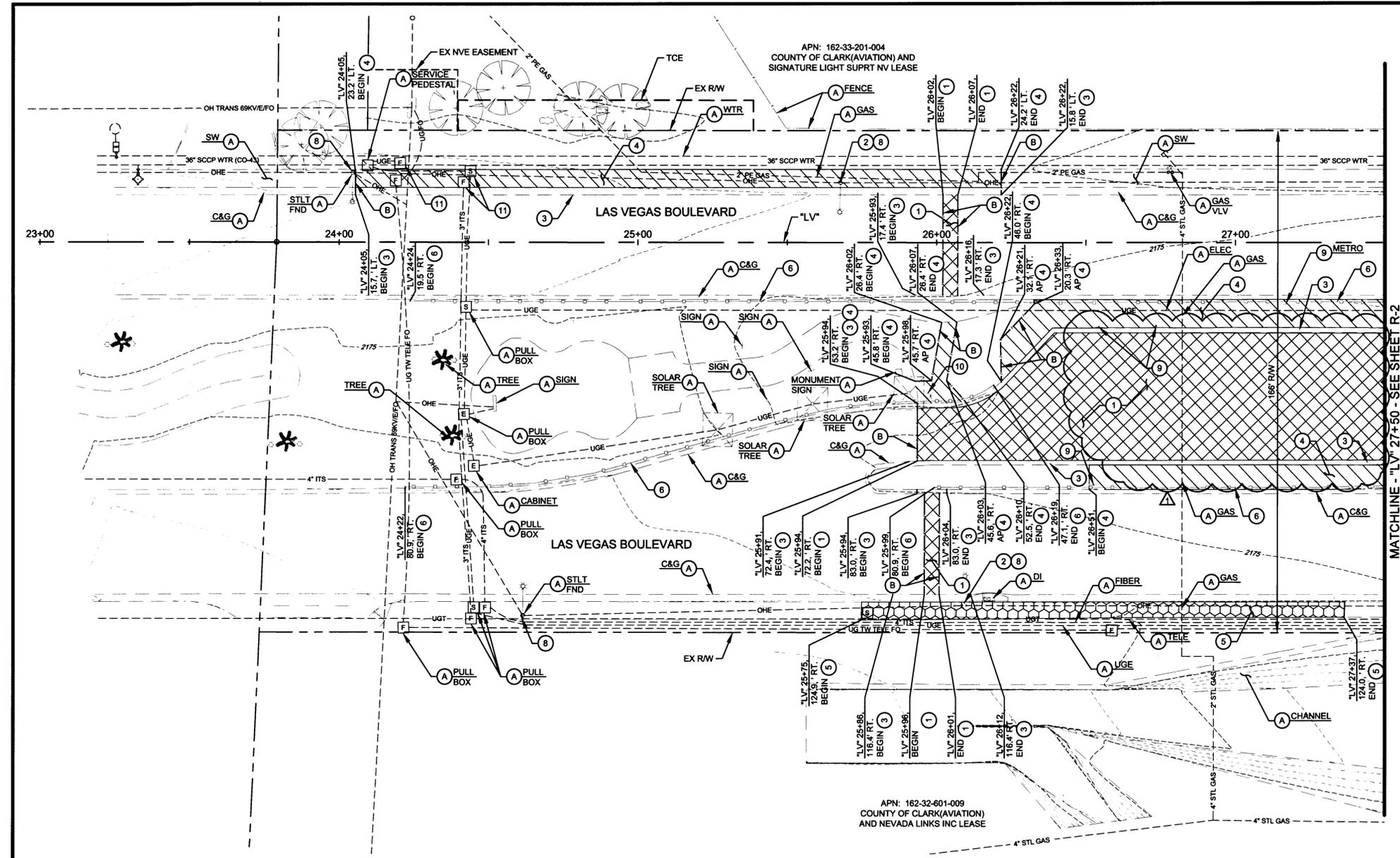
L-2042

DRAWING NO.

**HC-1**

SHT: 5 OF 22

WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD



**REMOVAL NOTES:**

- (A) PROTECT-IN-PLACE
- (B) SAWCUT AND MATCH EXISTING
- (1) REMOVE BITUMINOUS SURFACE
- (2) REMOVE STREET LIGHT FOUNDATION
- (3) REMOVE CURB AND GUTTER
- (4) REMOVE CONCRETE SIDEWALK
- (5) REMOVE ASPHALT SIDEWALK
- (6) REMOVE AND SALVAGE PEDESTRIAN CONTAINMENT FENCE
- (8) REMOVE AND SALVAGE STREET LIGHT
- (9) REMOVE AND SALVAGE SIGN(S)
- (10) REMOVE AND RELOCATE IRRIGATION VALVES, LANDSCAPE LIGHTING, GARBAGE CAN, AND MISCELLANEOUS LANDSCAPING APPURTENANCES
- (11) REMOVE UTILITY PULL BOX/Vault

**LEGEND:**

- LIMITS OF PBS REMOVAL
- LIMITS OF CONCRETE SIDEWALK REMOVAL
- LIMITS OF ASPHALT SIDEWALK REMOVAL

APN: 162-33-201-004  
COUNTY OF CLARK(AVIATION) AND  
SIGNATURE LIGHT SUPRT NV LEASE

APN: 162-32-601-009  
COUNTY OF CLARK(AVIATION)  
AND NEVADA LINKS INC LEASE

MATCHLINE - LV 27+50 - SEE SHEET R-2

APPROVED FOR CONSTRUCTION  
Date 7/16/14 Project No. 122758

**FAST**  
Call before you Dig  
UnderGround  
1-702-432-5300  
FREEWAY AND ARTERIAL  
SYSTEM OF TRANSPORTATION

AVOID OVERHEAD POWER LINE CONTACT.  
IT'S COSTLY.  
Call before you Dig  
Overhead  
1-702-227-2929  
NV ENERGY ENVIRONMENT AND  
SAFETY SERVICES DEPARTMENT

Call before you Dig  
Call  
811  
AVOID CUTTING UNDERGROUND  
UTILITY LINES. IT'S COSTLY.

478136-LVSN-Removd.dwg

8			
7			
6			
5			
4			
3			
2			
1			
0	07/15/2014	REVISED PAVEMENT LIMITS PER ADDENDUM 3	V. PARIMI
REV No	DATE	DESCRIPTION	APPROVED



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
REMOVAL PLAN  
"LV" 23+00 TO "LV" 27+50  
CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS



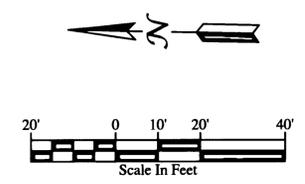
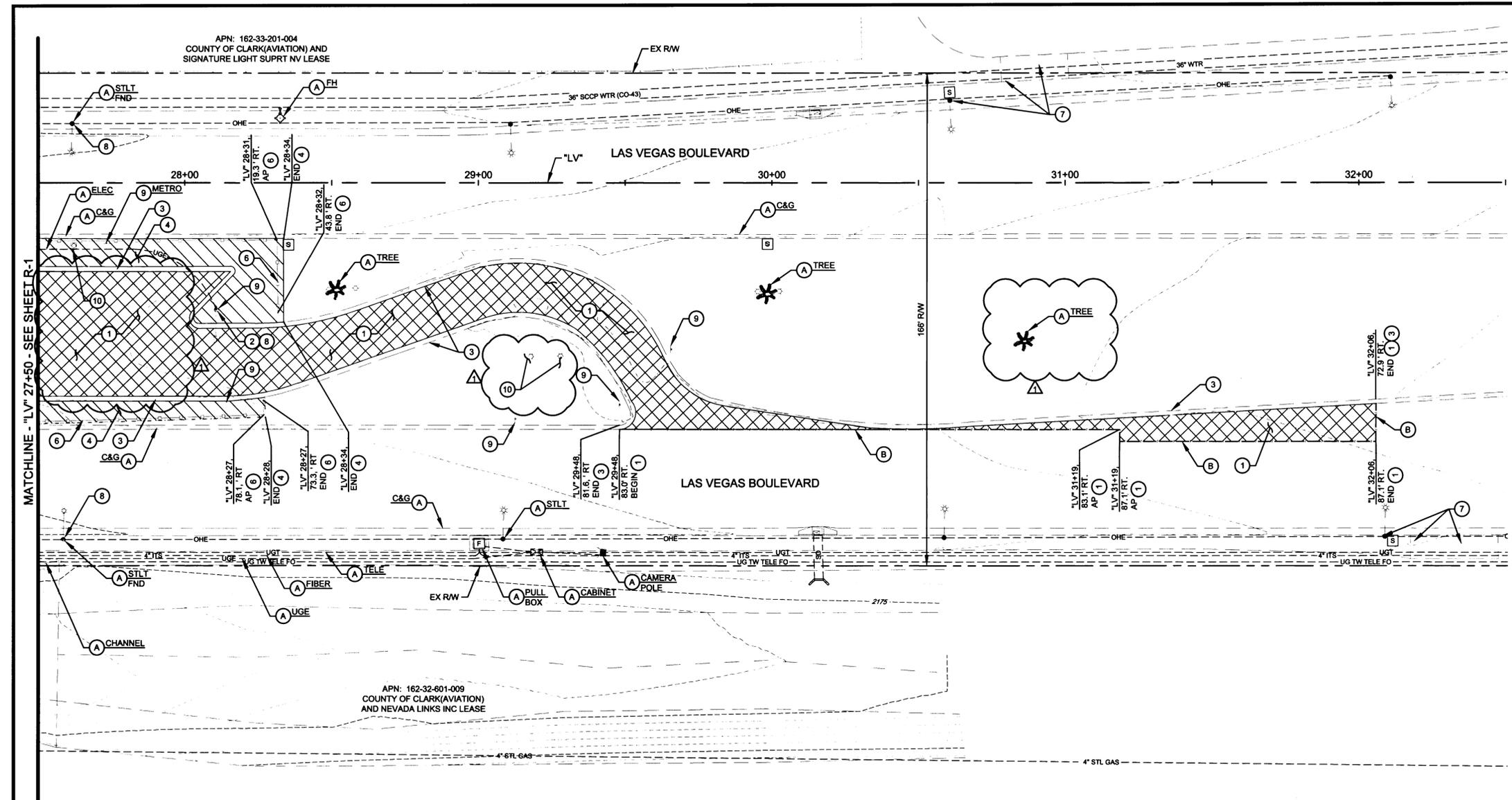
DESIGNED BY: V. PARIMI  
DRAWN BY: D. PUBLLOW  
CHECKED BY: K. GILBRETH  
DATE: July 15, 2014

**CH2MHILL.**  
2485 VILLAGE VIEW DRIVE, SUITE 350  
HENDERSON, NEVADA 89074  
PHONE: 702-369-6175, FAX: 702-369-1107

SCALE  
HORIZ: 1"=20'  
VERT: NONE  
FIELD BOOK  
WORK ORDER  
PROJECT No. 478136

L-2042  
DRAWING NO.  
**R-1**  
SHT: 6 OF 23

WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD



- REMOVAL NOTES:**
- (A) PROTECT-IN-PLACE
  - (B) SAWCUT AND MATCH EXISTING
  - (1) REMOVE BITUMINOUS SURFACE
  - (2) REMOVE STREET LIGHT FOUNDATION
  - (3) REMOVE CURB AND GUTTER
  - (4) REMOVE CONCRETE SIDEWALK
  - (6) REMOVE AND SALVAGE PEDESTRIAN CONTAINMENT FENCE
  - (7) REMOVE RTC BUS SHELTER, BENCHES, GARBAGE CAN AND SIGN
  - (8) REMOVE AND SALVAGE STREET LIGHT
  - (9) REMOVE AND SALVAGE SIGN(S)
  - (10) REMOVE AND RELOCATE IRRIGATION VALVES, LANDSCAPE LIGHTING, GARBAGE CAN, AND MISCELLANEOUS LANDSCAPING APPURTENANCES

- LEGEND:**
- LIMITS OF PBS REMOVAL
  - LIMITS OF SIDEWALK REMOVAL

MATCHLINE - "LV" 27+50 - SEE SHEET R-1

APN: 162-33-201-004  
COUNTY OF CLARK(AVIATION) AND  
SIGNATURE LIGHT SUPRT NV LEASE

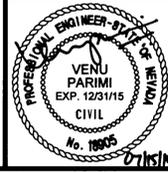
APN: 162-32-601-009  
COUNTY OF CLARK(AVIATION)  
AND NEVADA LINKS INC LEASE



REV No.	DATE	DESCRIPTION	APPROVED
1	07/15/2014	REVISED PAVEMENT LIMITS AND EX TREE LOCATION PER ADD 3	V. PARIMI



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
**REMOVAL PLAN**  
**"LV" 27+50 TO "LV" 32+50**  
 CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS

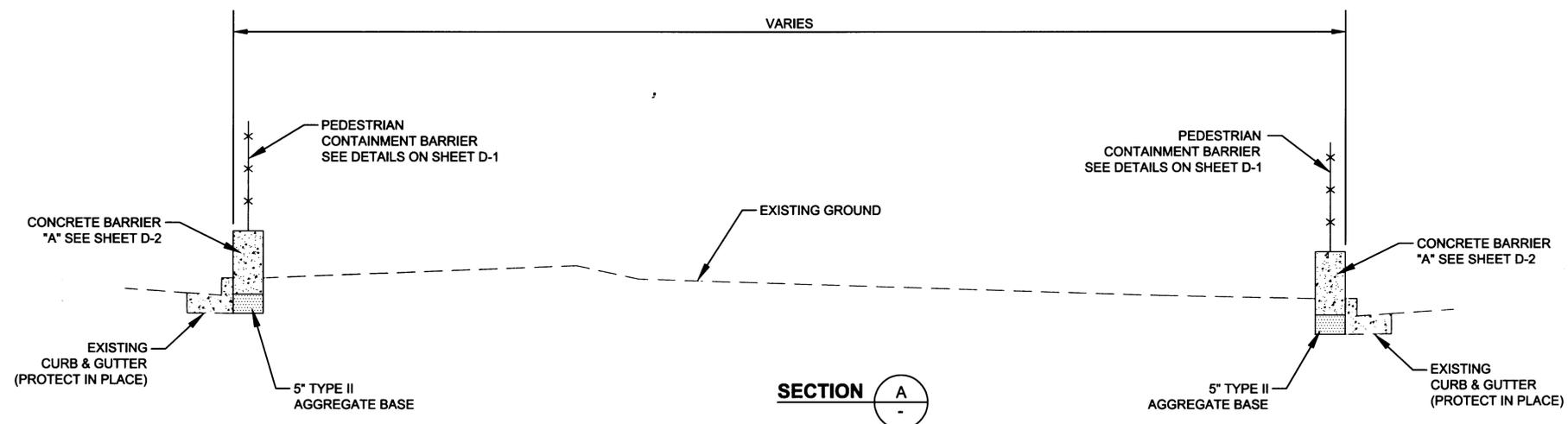


DESIGNED BY: V. PARIMI  
 DRAWN BY: D. PUBLOW  
 CHECKED BY: K. GILBRETH  
 DATE: July 15, 2014

**CH2MHILL.**  
 2485 VILLAGE VIEW DRIVE, SUITE 350  
 HENDERSON, NEVADA 89074  
 PHONE 702-369-6175, FAX 702-369-1107

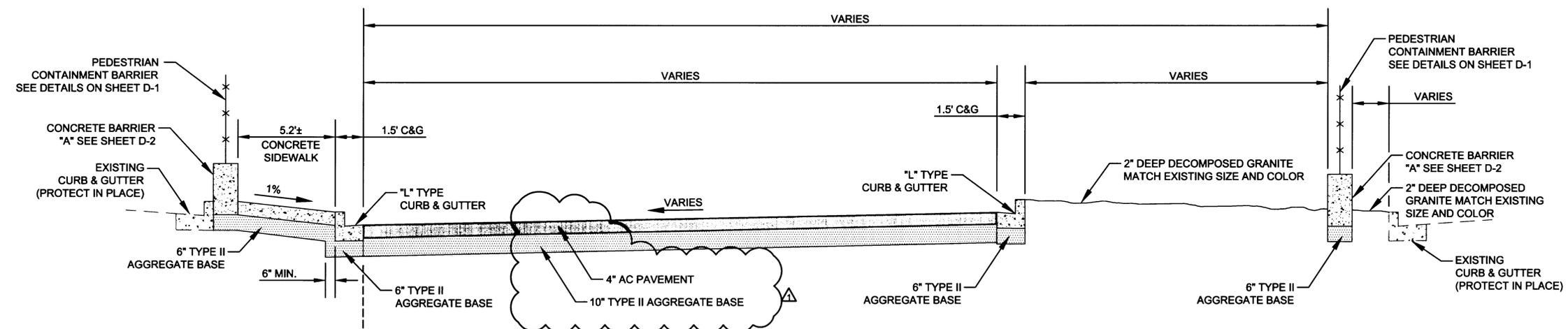
SCALE	L-2042
HORIZ: 1"=20'	DRAWING NO.
VERT: NONE	<b>R-2</b>
FIELD BOOK	
WORK ORDER	
PROJECT No. 478136	SHT. 7 OF 23

478136-LVSN-Removal.dwg



SECTION A

PARKING LOT



SECTION B



AVOID OVERHEAD POWER LINE CONTACT. IT'S COSTLY.  
Call before you dig  
Call before you UnderGround  
1-702-227-2929  
NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT



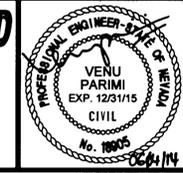
478136-LVSGN-Typicals.dwg

REV No.	DATE	DESCRIPTION	APPROVED
1	07/15/2014	REVISED PAVEMENT SECTION PER ADDENDUM 3	V. PARIMI



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
TYPICAL SECTIONS

CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS

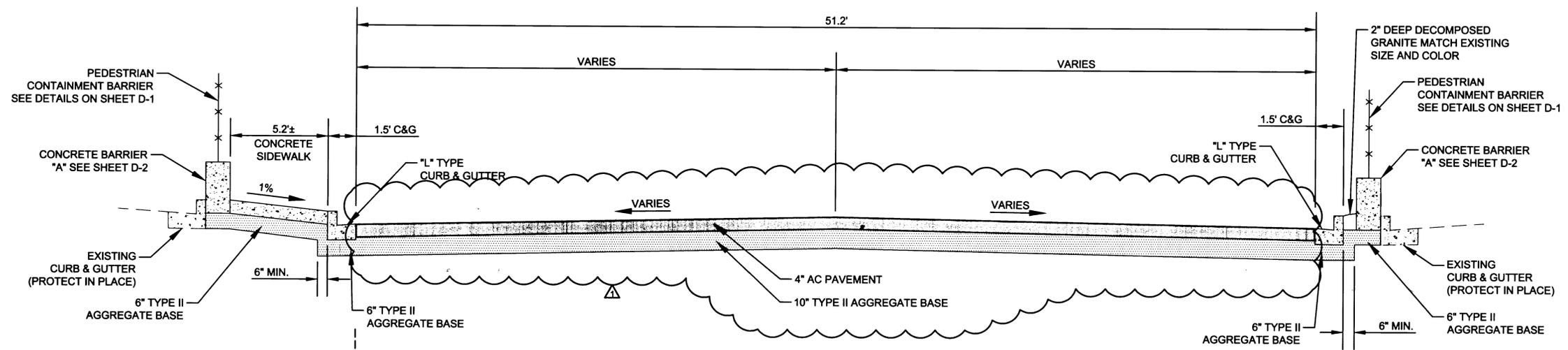


DESIGNED BY: V. PARIMI  
DRAWN BY: D. PUBLLOW  
CHECKED BY: K. GILBRETH  
DATE: July 15, 2014  
**CH2MHILL.**  
2485 VILLAGE VIEW DRIVE, SUITE 350  
HENDERSON, NEVADA 89074  
PHONE 702-369-6175, FAX 702-369-1107

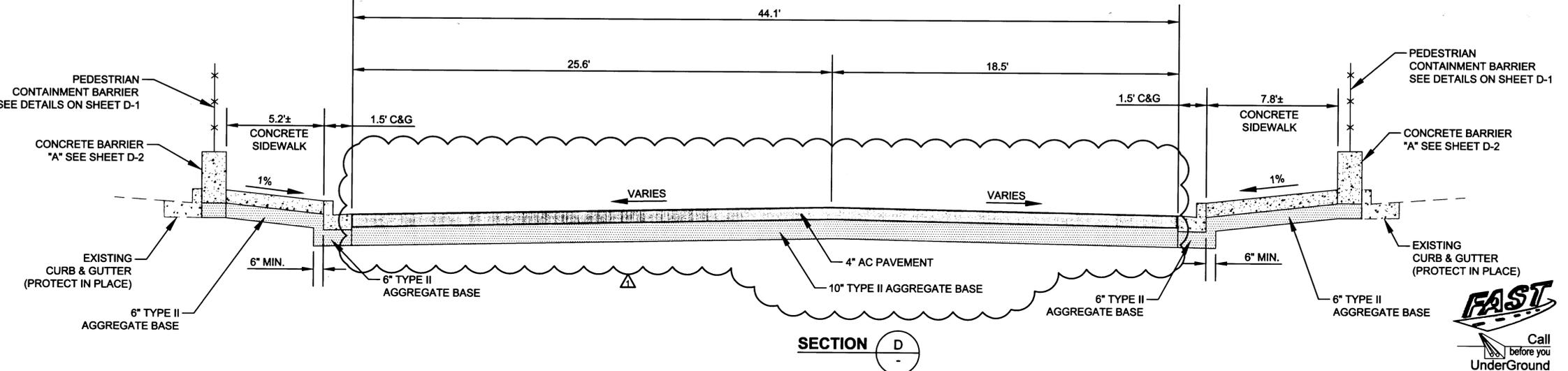
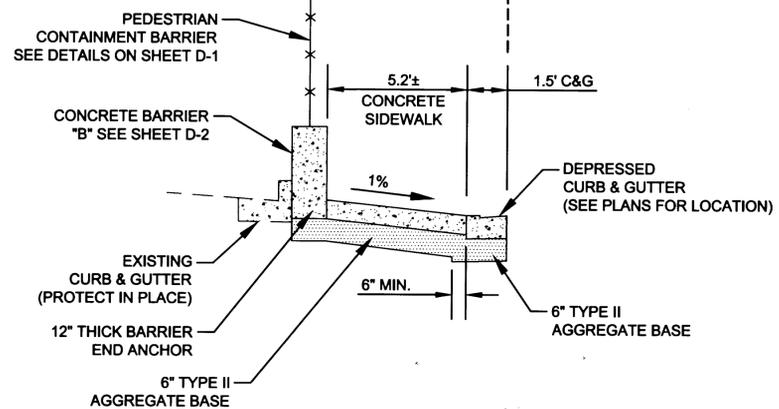
SCALE	HORIZ: NONE
VERT: NONE	FIELD BOOK
WORK ORDER	PROJECT No. 478136

**L-2042**  
DRAWING NO.  
**TY-1**  
SHT: 8 OF 23

WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD



SECTION C



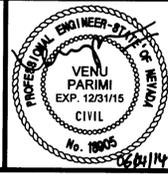
SECTION D

REV No.	DATE	DESCRIPTION	APPROVED
07/15/2014		REVISED PAVEMENT SECTION PER ADDENDUM 3	V. PARIMI



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
TYPICAL SECTIONS

CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS



DESIGNED BY: V. PARIMI  
 DRAWN BY: D. PUBLLOW  
 CHECKED BY: K. GILBRETH  
 DATE: July 15, 2014

**CH2MHILL**  
 2485 VILLAGE VIEW DRIVE, SUITE 350  
 HENDERSON, NEVADA 89074  
 PHONE 702-369-6175, FAX 702-369-1107

SCALE	
HORIZ:	NONE
VERT:	NONE
FIELD BOOK	
WORK ORDER	
PROJECT No.	478136

478136-LVSGN-Typicals.dwg

**L-2042**

DRAWING NO.

**TY-2**

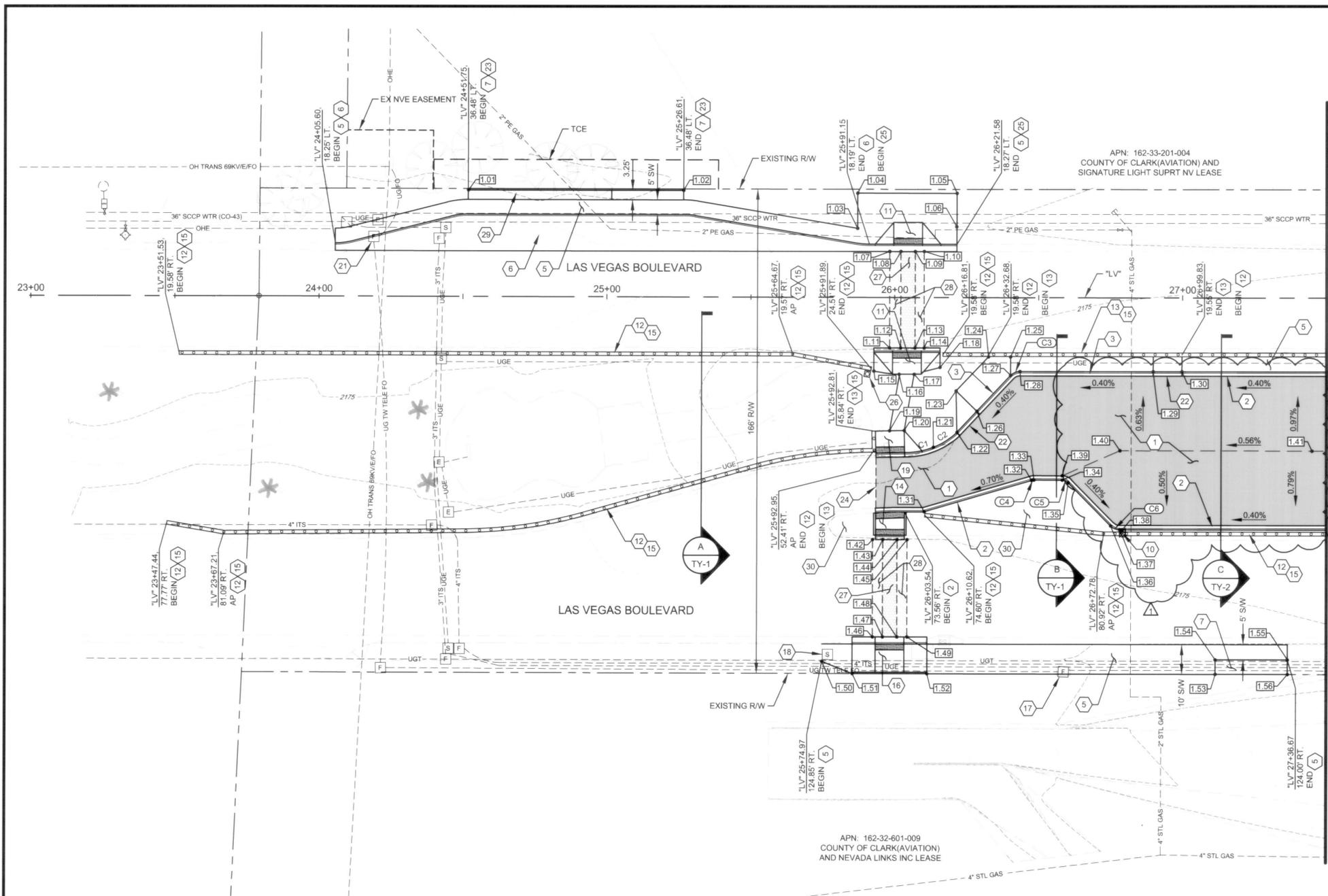
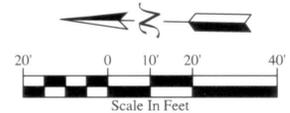
SHT: 9 OF 23



Call before you Dig  
 UnderGround  
 1-702-432-5300



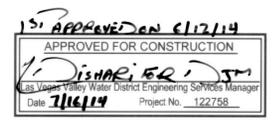
Call before you Dig  
 Call Overhead  
 1-702-227-2929



- CONSTRUCTION NOTES:**
- 1 CONSTRUCT 4" PBS OVER 10" AGGREGATE BASE PER TY-1
  - 2 CONSTRUCT CONCRETE "L" TYPE CURB AND GUTTER PER USGCCA STD DWG NO. 216.1 S1
  - 3 CONSTRUCT CONCRETE DEPRESSED "L" TYPE CURB AND GUTTER PER DETAIL ON DRAWING D-2
  - 4 NOT USED
  - 5 CONSTRUCT CONCRETE SIDEWALK PER USGCCA STD DWG NO. 234
  - 6 CONSTRUCT CONCRETE BUS TURN-OUT PER USGCCA STD DWG NO. 234.1
  - 7 CONSTRUCT CONCRETE BUS LOADING PAD PER USGCCA STD DWG NO. 234.2
  - 10 CONSTRUCT SIDEWALK DRAIN PER USGCCA STD DWG NO. 236
  - 11 CONSTRUCT MODIFIED SIDEWALK RAMP SIMILAR TO USGCCA STD DWG NO. 235 CASE III (A&B=6.5) WITH 10" WIDE RAMP LANDING AND DETECTABLE WARNING (TRUNCATED DOMES)
  - 12 CONSTRUCT CONCRETE BARRIER "A" PER DETAIL ON DRAWING D-2
  - 13 CONSTRUCT CONCRETE BARRIER "B" PER DETAIL ON DRAWING D-2
  - 14 CONSTRUCT SIDEWALK ISLAND PER DETAIL ON DRAWING D-2
  - 15 CONSTRUCT PEDESTRIAN CONTAINMENT BARRIER (BARRIER MOUNTED) PER DETAIL ON DRAWING D-1
  - 16 CONSTRUCT MODIFIED SIDEWALK RAMP SIMILAR TO USGCCA STD DWG NO. 235 CASE I (A&B=6.5) WITH 10" WIDE RAMP LANDING AND DETECTABLE WARNING (TRUNCATED DOMES)
  - 17 ADJUST EXISTING FIBER OPTIC BOX TO GRADE (BY TW TELECOM)
  - 18 ADJUST EXISTING STREET LIGHT PULL BOX TO GRADE
  - 19 CONSTRUCT RAMP & BARRIER PER DETAIL ON DRAWING D-2
  - 21 RELOCATE EXISTING FIBER OPTIC VAULT/PULL BOX (BY TW TELECOM)
  - 22 CONSTRUCT CONCRETE CURB TRANSITION FROM "L" CURB TO DEPRESSED CURB AND GUTTER
  - 23 CONSTRUCT STEM WALL PER DETAIL DRAWING D-2
  - 24 SAWCUT AND MATCH
  - 25 CONSTRUCT CONCRETE "L" TYPE CURB AND GUTTER PER USGCCA STD DWG NO. 216
  - 26 INSTALL RELOCATED IRRIGATION VALVE, LANDSCAPE LIGHTING, GARBAGE CAN, AND MISCELLANEOUS LANDSCAPING APPURTENANCES
  - 27 REPLACE PAVEMENT AND BASE (MATCH EXISTING)
  - 28 MILL 1" AND INSTALL 1" OPEN GRADE PBS OVERLAY
  - 29 CONSTRUCT MODIFIED CONCRETE BUS LOADING PAD SIMILAR TO USGCCA STD DWG NO. 234.2
  - 30 INSTALL 2" DEEP DECOMPOSED GRANITE WITHIN LIMITS OF UNPAVED MEDIAN AREA PER LANDSCAPE DETAIL ON DRAWING D-2

- LEGEND:**
- PBS OVER AGGREGATE BASE (SEE TY-1)
  - REPLACE PAVEMENT AND BASE (MATCH EXISTING)
  - MILL 1" AND INSTALL 1" OPEN GRADE PBS OVERLAY
  - CONSTRUCTION DESIGN POINT NUMBER (SEE C-1A FOR DESIGN POINT TABLE)
  - C99 or (C99) CURVE NUMBER (SEE C1-A FOR CURVE TABLE)

**NOTES:**  
SEE DRAWING C-1A FOR DESIGN POINT AND CURVE DATA



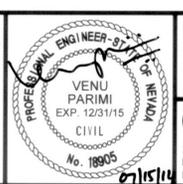
**FAST**  
Call before you Dig  
UnderGround  
1-702-432-5300

AVOID OVERHEAD POWER LINE CONTACT. IT'S COSTLY.  
**Call before you Dig Overhead**  
1-702-227-2929  
NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

Call before you Dig  
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.  
**Call 811**

REV No.	DATE	DESCRIPTION	APPROVED
1	07/15/2014	REMOVE UTACS, UPDATE PAVEMENT LIMITS Per ADD 3	V. PARIMI

**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
 CONSTRUCTION PLAN  
 "LV" 23+00 TO "LV" 27+50  
 CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS



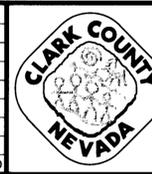
DESIGNED BY: V. PARIMI	SCALE: L-2042
DRAWN BY: D. PUBLLOW	HORIZ: 1"=20'
CHECKED BY: K. GILBRETH	VERT: NONE
DATE: July 15, 2014	FIELD BOOK
<b>CH2MHILL</b> 2485 VILLAGE VIEW DRIVE, SUITE 350 HENDERSON, NEVADA 89074 PHONE 702-369-6175, FAX 702-369-1107	WORK ORDER
	PROJECT No: 478136
	SHT: 10 OF 23

DESIGN POINTS				
POINT NO	STATION	OFFSET	ELEVATION	DESCRIPTION
1.01	"LV" 24+51.82	36.50' LT	2174.09	BACK OF BUS PAD
1.02	"LV" 25+26.60	36.50' LT	2174.58	BACK OF BUS PAD
1.03	"LV" 25+87.05	23.60' LT	2174.74	BACK OF SIDEWALK - AP
1.04	"LV" 25+87.06	35.69' LT	2175.00	BACK OF SIDEWALK - AP
1.05	"LV" 26+21.57	35.67' LT	2175.23	BACK OF SIDEWALK - AP
1.06	"LV" 26+21.49	24.21' LT	2174.9±	BACK OF SIDEWALK - END / MATCH EX
1.07	"LV" 25+98.23	15.76' LT	2174.3±	BEGIN PVMNT MILL
1.08	"LV" 26+02.11	15.76' LT	2174.3±	END PVMNT MILL / BEGIN PVMNT REP
1.09	"LV" 26+07.11	15.76' LT	2174.3±	END PVMNT REP / BEGIN PVMNT MILL
1.10	"LV" 26+10.23	15.77' LT	2174.4±	END PVMNT MILL
1.11	"LV" 25+98.25	17.36' RT	2174.9±	BEGIN PVMNT MILL
1.12	"LV" 26+02.09	17.35' RT	2174.9±	END PVMNT MILL / BEGIN PVMNT REP
1.13	"LV" 26+07.09	17.35' RT	2175.0±	END PVMNT REP / BEGIN PVMNT MILL
1.14	"LV" 26+10.25	17.34' RT	2175.0±	END PVMNT MILL
1.15	"LV" 25+92.82	25.31' RT	2175.3±	CONCRETE SW
1.16	"LV" 26+01.60	26.36' RT	2175.3±	BEGIN SIDEWALK REP
1.17	"LV" 26+06.82	26.37' RT	2175.3±	END SIDEWALK REP
1.18	"LV" 26+15.82	23.98' RT	2175.4±	CONCRETE SW
1.19	"LV" 25+98.34	45.72' RT	2175.2±	BEGIN SIDEWALK REP
1.20	"LV" 26+03.43	45.61' RT	2175.3±	END SIDEWALK REP
1.21	"LV" 26+13.58	51.34' RT	2175.45	TBC - POC
1.22	"LV" 26+21.75	46.18' RT	2175.55	TBC / SIDEWALK TRANSITION
1.23	"LV" 26+21.43	32.05' RT	2175.44	SIDEWALK TRANSITION - AP
1.24	"LV" 26+32.68	20.34' RT	2175.49	SIDEWALK TRANSITION - AP
1.25	"LV" 26+40.36	20.34' RT	2175.31	END SIDEWALK TRANSITION
1.26	"LV" 26+28.64	38.98' RT	2175.13	TDC
1.27	"LV" 26+40.36	26.73' RT	2175.20	TDC - PC
1.28	"LV" 26+43.61	25.34' RT	2175.21	TDC - PT
1.29	"LV" 26+89.83	25.34' RT	2175.40	TDC
1.30	"LV" 26+99.83	25.34' RT	2175.89	TBC

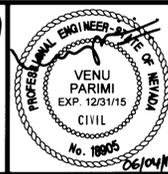
DESIGN POINTS				
POINT NO	STATION	OFFSET	ELEVATION	DESCRIPTION
1.31	"LV" 26+10.43	73.42' RT	2175.62	BEGIN "L" CURB
1.32	"LV" 26+47.71	62.64' RT	2175.89	TBC - PC
1.33	"LV" 26+48.55	62.53' RT	2175.90	TBC - PT
1.34	"LV" 26+58.24	62.53' RT	2175.95	TBC - PC - GB
1.35	"LV" 26+60.36	63.41' RT	2175.94	TBC - PT
1.36	"LV" 26+75.16	78.21' RT	2175.85	TBC - PC
1.37	"LV" 26+78.34	79.52' RT	2175.85	TBC - PT
1.38	"LV" 26+79.25	79.52' RT	2175.86	TBC - LOW POINT
1.39	"LV" 26+58.25	61.03' RT	2175.49	AC CROWN - BEGIN
1.40	"LV" 26+78.35	52.43' RT	2175.51	AC CROWN - AP
1.41	"LV" 27+45.00	52.43' RT	2175.88	AC CROWN - POINT ON LINE
1.42	"LV" 25+92.54	83.04' RT	2174.8±	BEGIN PVMNT MILL
1.43	"LV" 25+96.05	83.04' RT	2174.9±	END PVMNT MILL / BEGIN PVMNT REP
1.44	"LV" 26+01.05	83.04' RT	2174.9±	END PVMNT REP / BEGIN PVMNT MILL
1.45	"LV" 26+04.54	83.04' RT	2174.9±	END PVMNT MILL
1.46	"LV" 25+92.57	116.40' RT	2174.1±	BEGIN PVMNT MILL
1.47	"LV" 25+96.05	116.40' RT	2174.1±	BEGIN PVMNT REP
1.48	"LV" 26+01.05	116.40' RT	2174.2±	END PVMNT REP / BEGIN PVMNT MILL
1.49	"LV" 26+04.57	116.39' RT	2174.2±	END PVMNT MILL
1.50	"LV" 25+74.97	124.85' RT	2174.58	BEGIN SIDEWALK
1.51	"LV" 25+85.56	129.00' RT	2174.72	BACK OF SIDEWALK - AP
1.52	"LV" 26+11.56	129.00' RT	2174.84	BACK OF SIDEWALK
1.53	"LV" 27+11.67	129.00' RT	2175.40	BACK OF SIDEWALK - AP
1.54	"LV" 27+11.67	124.00' RT	2175.30	BACK OF SIDEWALK - AP
1.55	"LV" 27+36.67	124.00' RT	2175.41	BACK OF SIDEWALK
1.56	"LV" 27+36.67	129.00' RT	2175.51	BUS LOADING PAD

CURVE TABLE				
CURVE NO	LENGTH	RADIUS	DELTA	TANGENT
C1	8.79'	26.05'	019°20'16"	4.44'
C2	9.72'	26.05'	021°23'05"	4.92'
C3	3.63'	4.50'	046°16'16"	1.92'
C4	0.85'	3.00'	016°09'16"	0.43'
C5	2.35'	3.00'	044°58'04"	1.24'
C6	3.53'	4.50'	045°00'00"	1.86'

REV No	DATE	DESCRIPTION	APPROVED
1	07/15/2014	UPDATE DESIGN POINTS	V. PARIMI



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
**CONSTRUCTION NOTES**  
**"LV" 27+50 TO "LV" 32+50**  
**CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS**



DESIGNED BY: V. PARIMI  
 DRAWN BY: D. PUBLLOW  
 CHECKED BY: K. GILBRETH  
 DATE: July 15, 2014  
**CH2MHILL.**  
 2485 VILLAGE VIEW DRIVE, SUITE 350  
 HENDERSON, NEVADA 89074  
 PHONE 702-369-6175, FAX 702-369-1107

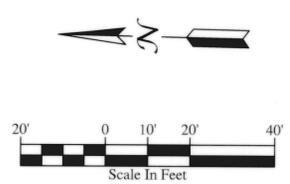
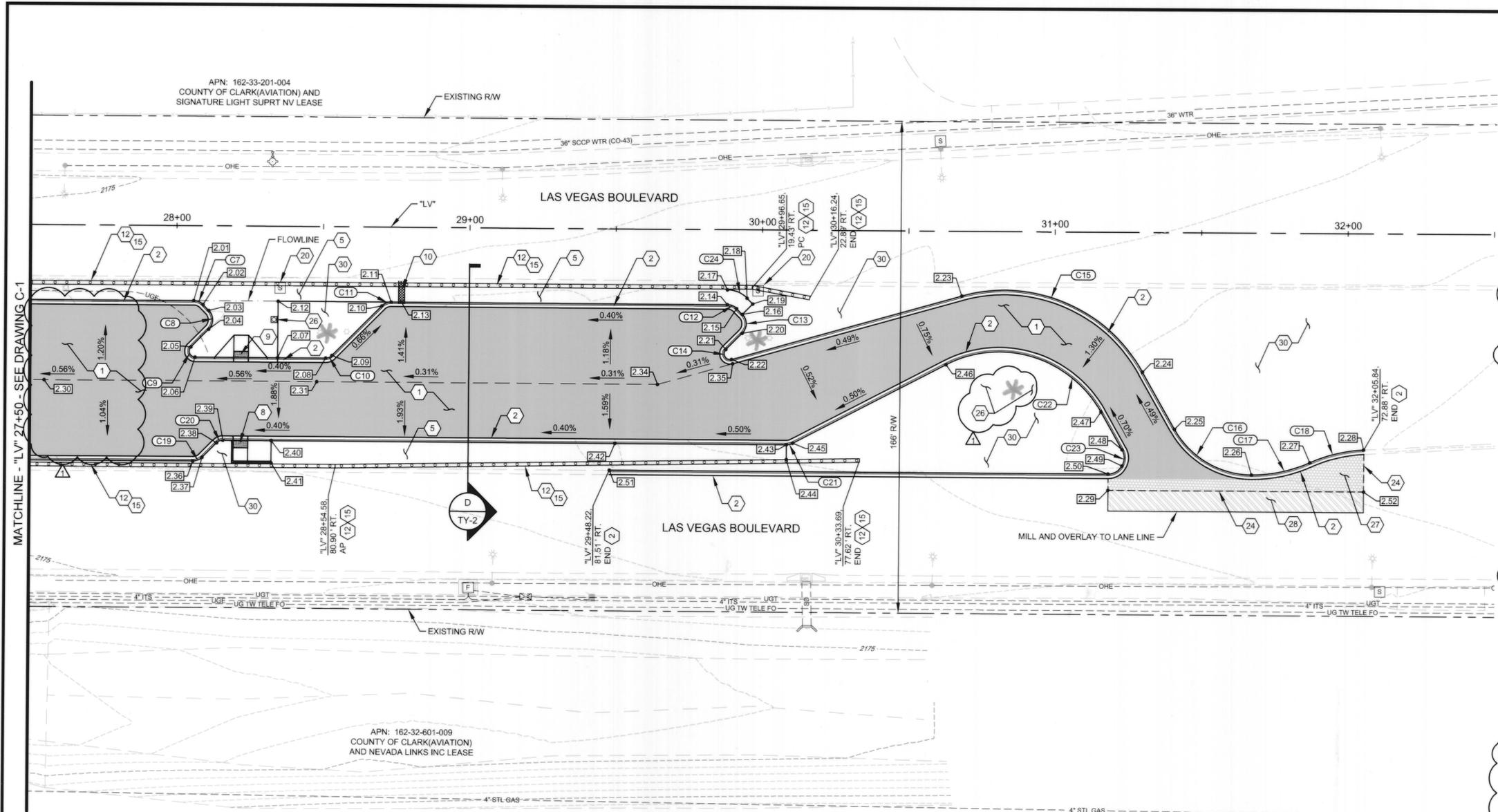
SCALE  
 HORIZ: NONE  
 VERT: NONE  
 FIELD BOOK  
 WORK ORDER  
 PROJECT No. 478136

L-2042  
 DRAWING NO.  
**C-1A**  
 SHT. 11 OF 23



478136-LVSGN-Grading.dwg

WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD



- CONSTRUCTION NOTES:**
- 1 CONSTRUCT 4" PBS OVER 10" AGGREGATE BASE PER TY-1
  - 2 CONSTRUCT CONCRETE "L" TYPE CURB AND GUTTER PER USGCCA STD DWG NO. 216.1 S1
  - 4 NOT USED
  - 5 CONSTRUCT CONCRETE SIDEWALK PER USGCCA STD DWG NO. 234
  - 8 CONSTRUCT CONCRETE SIDEWALK RAMP PER USGCCA STD DWG NO. 235, CASE I (A&B=6.5')
  - 9 CONSTRUCT CONCRETE SIDEWALK RAMP PER USGCCA STD DWG NO. 235, CASE II (A&B=6.5')
  - 10 CONSTRUCT SIDEWALK DRAIN PER USGCCA STD DWG NO. 236
  - 12 CONSTRUCT CONCRETE BARRIER "A" PER DETAIL ON DRAWING D-2
  - 15 CONSTRUCT PEDESTRIAN CONTAINMENT BARRIER (BARRIER MOUNTED) PER DETAIL ON DRAWING D-1
  - 20 RELOCATE EXISTING STREET LIGHT PULL BOX AWAY FROM CONCRETE BARRIER AND EXTEND CONDUIT AND WIRE AS NECESSARY
  - 24 SAWCUT AND MATCH
  - 26 INSTALL RELOCATED IRRIGATION VALVE, LANDSCAPE LIGHTING, GARBAGE CAN, AND MISCELLANEOUS LANDSCAPING APPURTENANCES
  - 27 REPLACE PAVEMENT AND BASE (MATCH EXISTING)
  - 28 MILL 1" AND INSTALL 1" OPEN GRADE PBS OVERLAY
  - 30 INSTALL 2" DEEP DECOMPOSED GRANITE WITHIN LIMITS OF UNPAVED MEDIAN AREA PER LANDSCAPE DETAIL ON DRAWING D-2

- LEGEND:**
- PBS OVER AGGREGATE BASE (SEE TY-1)
  - REPLACE PAVEMENT AND BASE (MATCH EXISTING)
  - MILL 1" AND INSTALL 1" OPEN GRADE PBS OVERLAY
  - CONSTRUCTION DESIGN POINT NUMBER (SEE C-2A FOR DESIGN POINT TABLE)
  - CURVE NUMBER (SEE C-2A FOR CURVE TABLE)

**NOTES:**  
SEE DRAWING C-2A FOR DESIGN POINT AND CURVE DATA

APPROVED FOR CONSTRUCTION  
  
 Las Vegas Valley Water District Engineering Services Manager  
 Date 7/16/14 Project No. 122758

**FAST**  
 Call before you UnderGround  
 1-702-432-5300  
 FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

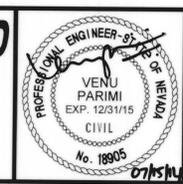
AVOID OVERHEAD POWER LINE CONTACT. IT'S COSTLY.  
 Call before you Dig  
 AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.  
 Call before you Overhead  
 1-702-227-2929  
 NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

**811**

REV No.	DATE	DESCRIPTION	APPROVED
1	07/15/2014	UPDATE PAVEMENT LIMITS AND REMOVE UTACS AND TREE	V. PARIMI



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
**CONSTRUCTION PLAN**  
 "LV" 27+50 TO "LV" 32+50  
 CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS



DESIGNED BY: V. PARIMI  
 DRAWN BY: D. PUBLLOW  
 CHECKED BY: K. GILBRETH  
 DATE: July 15, 2014

**CH2MHILL**  
 2485 VILLAGE VIEW DRIVE, SUITE 350  
 HENDERSON, NEVADA 89074  
 PHONE 702-369-6175, FAX 702-369-1107

SCALE  
 HORIZ. 1"=20'  
 VERT. NONE  
 FIELD BOOK  
 WORK ORDER  
 PROJECT No. 478136

478136-LVSGN-Grading.dwg  
**L-2042**  
 DRAWING NO.  
**C-2**  
 SHT. 12 OF 23

DESIGN POINTS				
POINT NO	STATION	OFFSET	ELEVATION	DESCRIPTION
2.01	"LV" 28+05.86	25.35' RT	2176.32	TBC - PC - GB / BEGIN FL
2.02	"LV" 28+09.05	26.67' RT	2176.35	TBC - PT
2.03	"LV" 28+11.05	28.66' RT	2176.39	TBC - PC
2.04	"LV" 28+11.05	35.03' RT	2176.45	TBC - PT
2.05	"LV" 28+05.05	41.02' RT	2176.57	TBC - PC
2.06	"LV" 28+06.46	44.44' RT	2176.68	TBC - PT - GB
2.07	"LV" 28+34.68	44.44' RT	2176.79	TBC / EDGE OF SIDEWALK
2.08	"LV" 28+51.02	44.44' RT	2176.85	TBC - PC - GB
2.09	"LV" 28+53.14	43.56' RT	2176.83	TBC - PT
2.10	"LV" 28+70.06	26.67' RT	2176.68	TBC - PC
2.11	"LV" 28+73.24	25.35' RT	2176.66	TBC - PT
2.12	"LV" 28+34.68	25.35' RT	2176.45	SIDEWALK - AP / END FL
2.13	"LV" 28+76.80	25.35' RT	2176.64	TBC - LOW POINT
2.14	"LV" 29+88.13	25.35' RT	2177.09	TBC - PC
2.15	"LV" 29+91.31	26.67' RT	2177.10	TBC - PT
2.16	"LV" 29+93.26	28.62' RT	2177.11	TBC - PC - GB/ END SIDEWALK
2.17	"LV" 29+88.13	20.35' RT	2177.14	BACK OF SIDEWALK - PC
2.18	"LV" 29+94.84	23.14' RT	2177.15	BACK OF SIDEWALK - PT
2.19	"LV" 29+96.79	25.08' RT	2177.16	END SIDEWALK
2.20	"LV" 29+93.26	34.98' RT	2177.16	TBC - PT
2.21	"LV" 29+87.76	40.48' RT	2177.25	TBC - PC
2.22	"LV" 29+89.71	43.82' RT	2177.36	TBC - PT - GB
2.23	"LV" 30+68.22	21.86' RT	2177.75	TBC - PC
2.24	"LV" 31+30.11	47.12' RT	2178.09	TBC - PT
2.25	"LV" 31+41.19	66.33' RT	2178.20	TBC - PC
2.26	"LV" 31+67.61	81.60' RT	2178.37	TBC - PCC - GB
2.27	"LV" 31+87.49	77.33' RT	2178.64	TBC - PRC
2.28	"LV" 32+05.82	72.91' RT	2178.89	TBC - PT
2.29	"LV" 31+18.54	87.10' RT	2177.4±	PVMNT REP - AP / MATCH EX
2.30	"LV" 27+55.00	52.44' RT	2175.93	AC CROWN - POINT ON LINE

DESIGN POINTS				
POINT NO	STATION	OFFSET	ELEVATION	DESCRIPTION
2.31	"LV" 28+48.03	52.44' RT	2176.46	AC CROWN - GB
2.32				NOT USED
2.33				NOT USED
2.34	"LV" 29+64.46	52.44' RT	2176.82	AC CROWN - AP
2.35	"LV" 29+90.11	45.27' RT	2176.90	AC CROWN - END
2.36	"LV" 28+05.96	79.53' RT	2176.36	TBC - PC
2.37	"LV" 28+09.14	78.21' RT	2176.37	TBC - PT
2.38	"LV" 28+14.04	73.32' RT	2176.40	TBC - PC
2.39	"LV" 28+16.16	72.44' RT	2176.41	TBC - PT
2.40	"LV" 28+32.68	72.44' RT	2176.48	TBC - POL
2.41	"LV" 28+32.68	79.94' RT	2176.55	BACK OF SIDEWALK - BEGIN
2.42	"LV" 29+50.08	72.44' RT	2176.94	TBC - AP - GB
2.43	"LV" 30+08.68	72.44' RT	2177.24	TBC - PC / END SIDEWALK
2.44	"LV" 30+08.68	77.46' RT	2177.29	BACK OF SIDEWALK - END
2.45	"LV" 30+10.74	71.94' RT	2177.25	TBC - PT
2.46	"LV" 30+63.01	45.04' RT	2177.54	TBC - PC
2.47	"LV" 31+15.97	60.62' RT	2177.87	TBC - PT - GB
2.48	"LV" 31+23.30	73.35' RT	2177.97	TBC - PC
2.49	"LV" 31+23.30	78.85' RT	2178.02	TBC - POC - GB
2.50	"LV" 31+18.54	81.60' RT	2177.99	TBC - PT
2.51	"LV" 29+48.22	81.51' RT	2176.99	TBC
2.52	"LV" 32+05.92	87.10' RT	2178.1±	PVMNT REP - AP / MATCH EX

CURVE TABLE				
CURVE NO	LENGTH	RADIUS	DELTA	TANGENT
C7	3.53'	4.50'	045°00'00"	1.86'
C8	7.07'	4.50'	090°00'00"	4.50'
C9	4.71'	2.00'	134°59'55"	4.83'
C10	2.32'	3.00'	044°20'13"	1.22'
C11	3.53'	4.50'	044°58'05"	1.86'
C12	3.53'	4.50'	045°00'00"	1.86'
C13	7.07'	4.50'	090°00'00"	4.50'
C14	5.26'	2.00'	150°37'47"	7.63'
C15	71.97'	54.50'	075°39'41"	42.32'
C16	31.96'	30.50'	060°02'01"	17.62'
C17	20.49'	48.50'	024°12'09"	10.40'
C18	18.98'	51.50'	021°07'15"	9.60'
C19	3.53'	4.50'	045°00'00"	1.86'
C20	2.36'	3.00'	045°00'00"	1.24'
C21	2.14'	4.50'	027°14'14"	1.09'
C22	60.93'	40.00'	087°16'09"	38.14'
C23	11.52'	5.50'	119°57'59"	9.52'
C24	7.46'	9.50'	045°00'00"	3.94'

REV No	DATE	DESCRIPTION	APPROVED
07/15/2014		UPDATE DESIGN POINTS	V. PARIMI



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
**CONSTRUCTION NOTES**  
**"LV" 27+50 TO "LV" 32+50**  
 CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS



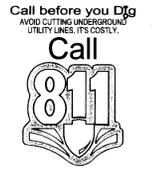
DESIGNED BY: V. PARIMI  
 DRAWN BY: D. PUBLLOW  
 CHECKED BY: K. GILBRETH  
 DATE: July 15, 2014  
**CH2MHILL.**  
 2485 VILLAGE VIEW DRIVE, SUITE 350  
 HENDERSON, NEVADA 89074  
 PHONE 702-368-6175, FAX 702-368-1107

SCALE  
 HORIZ: NONE  
 VERT: NONE  
 FIELD BOOK  
 WORK ORDER  
 PROJECT No. 478136

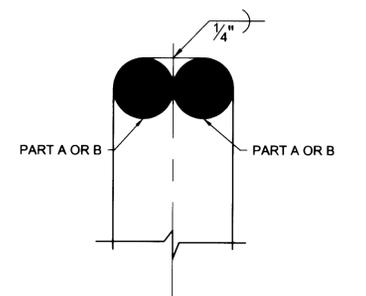
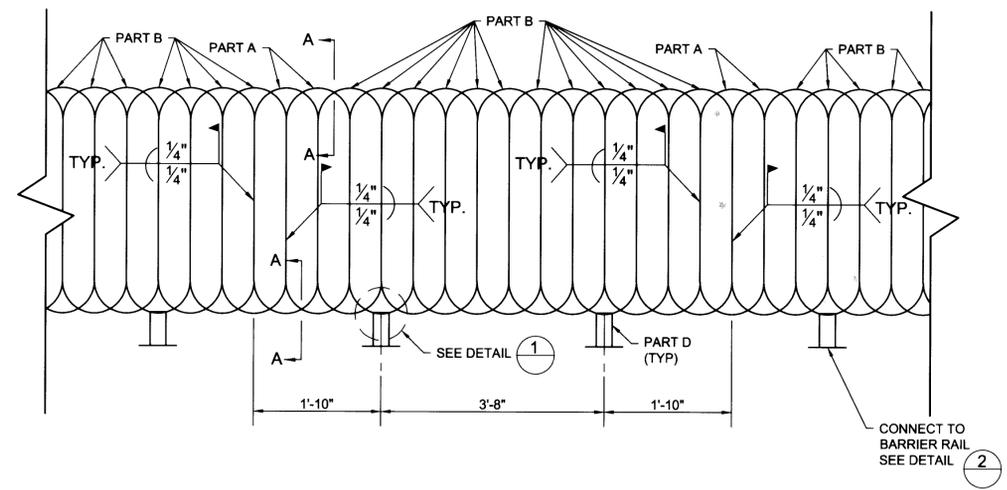
**L-2042**  
 DRAWING NO.  
**C-2A**  
 SHT. 13 OF 23



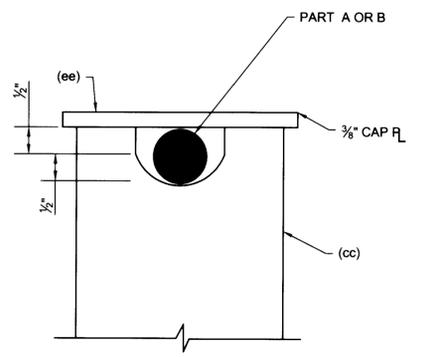
AVOID OVERHEAD POWER LINE CONTACT. IT'S COSTLY.  
 Call before you Overhead 1-702-227-2929  
 NEVADA ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT



478136-LVSGN-Grading.dwg



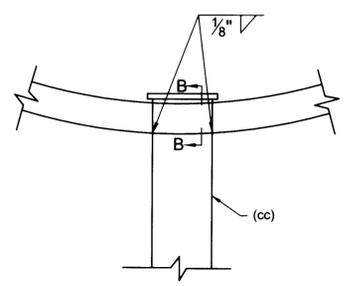
**SECTION A-A**  
NOT TO SCALE



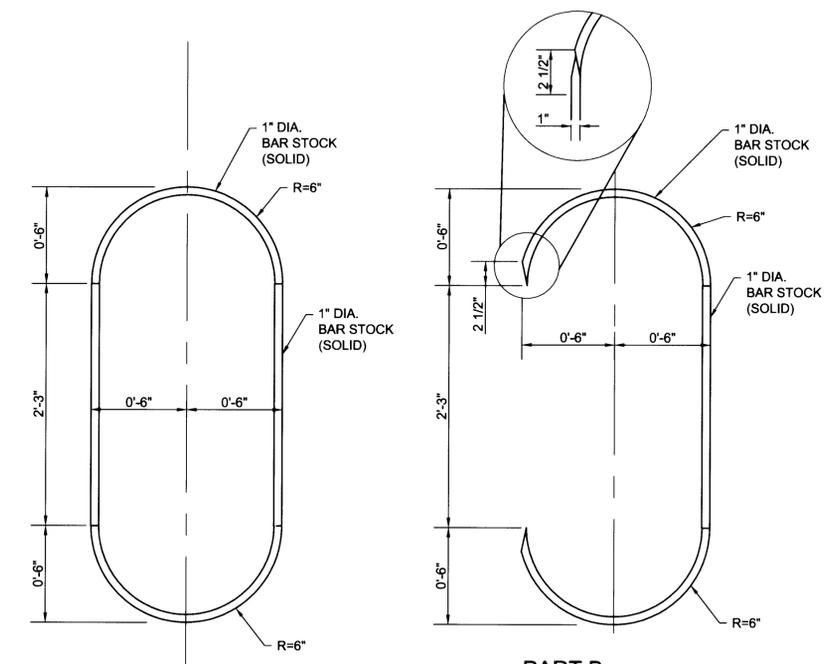
**SECTION B-B**  
NOT TO SCALE

**TYPICAL ASSEMBLY**  
NOT TO SCALE

**NOTE:**  
PEDESTRIAN CONTAINMENT SYSTEM TO BE POWDER COATED. COLOR TO MATCH EXISTING. CCPW TO APPROVE COLOR.

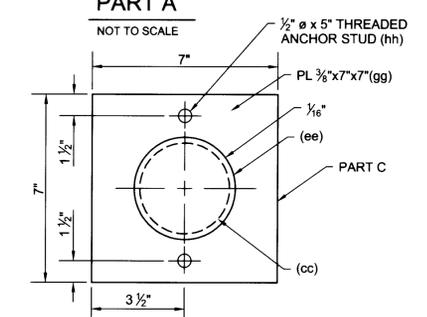


**1** DETAIL  
NOT TO SCALE

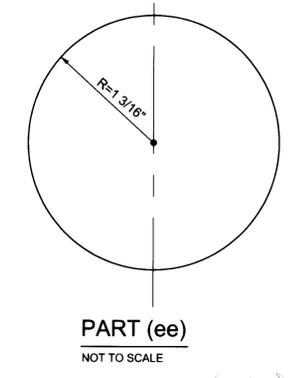


**PART A**  
NOT TO SCALE

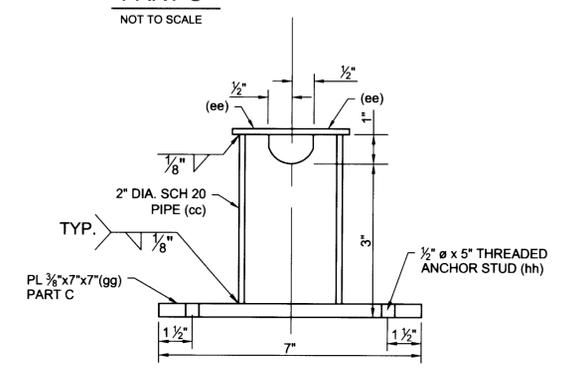
**PART B**  
NOT TO SCALE



**PART C**  
NOT TO SCALE



**PART (ee)**  
NOT TO SCALE



**PART D**  
NOT TO SCALE

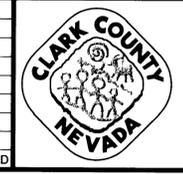
**2** DETAIL  
NOT TO SCALE

**FAST**  
Call before you UnderGround  
1-702-432-5300  
FREWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

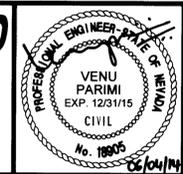
AVOID OVERHEAD POWER LINE CONTACT. IT'S COSTLY.  
**Call before you Overhead**  
1-702-227-2929  
NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

Call before you Dig  
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.  
**Call 811**

REV No.	DATE	DESCRIPTION	APPROVED



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
PEDESTRIAN CONTAINMENT BARRIER DETAILS  
CONCRETE BARRIER RAIL MOUNTED  
CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS

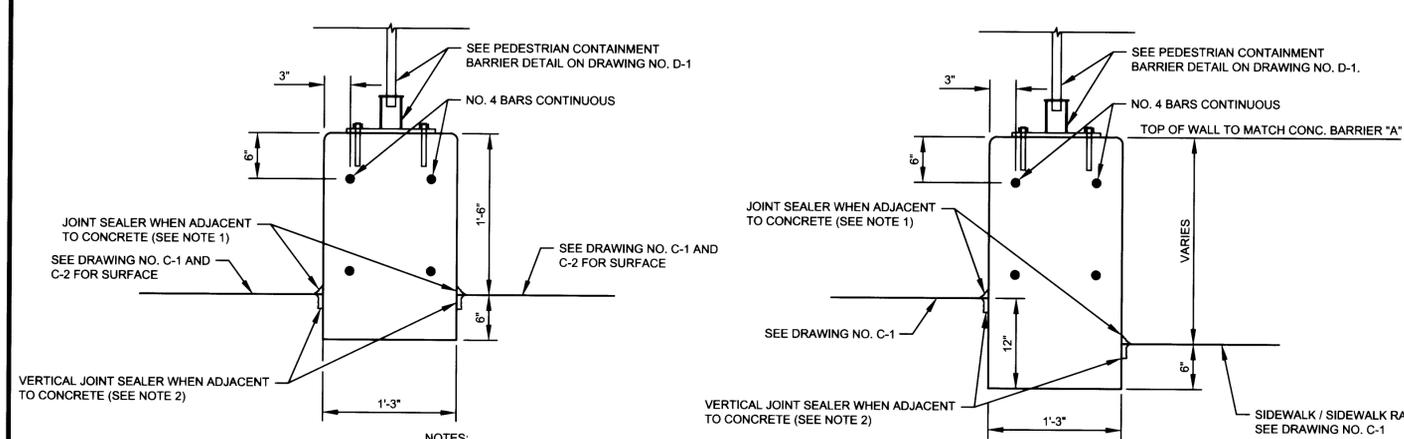


DESIGNED BY: V. PARIMI  
DRAWN BY: D. PUBLW  
CHECKED BY: K. GILBRETH  
DATE: June 4, 2014  
**CH2MHILL**  
2485 VILLAGE VIEW DRIVE, SUITE 350  
HENDERSON, NEVADA 89074  
PHONE 702-369-8175, FAX 702-369-1107

SCALE	HORIZ: NONE
VERT: NONE	FIELD BOOK
WORK ORDER	PROJECT No. 478136

478136-LVSGN-Detail.dwg  
**L-2042**  
DRAWING NO.  
**D-1**  
SHT. 14 OF 23

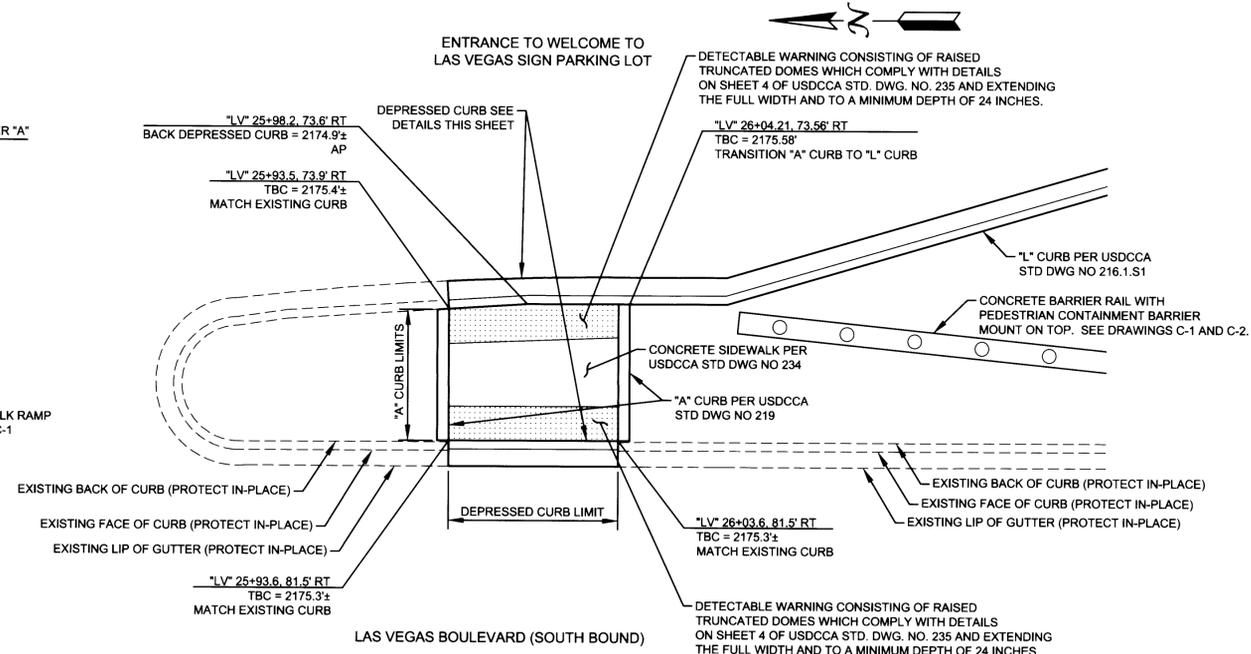
WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD



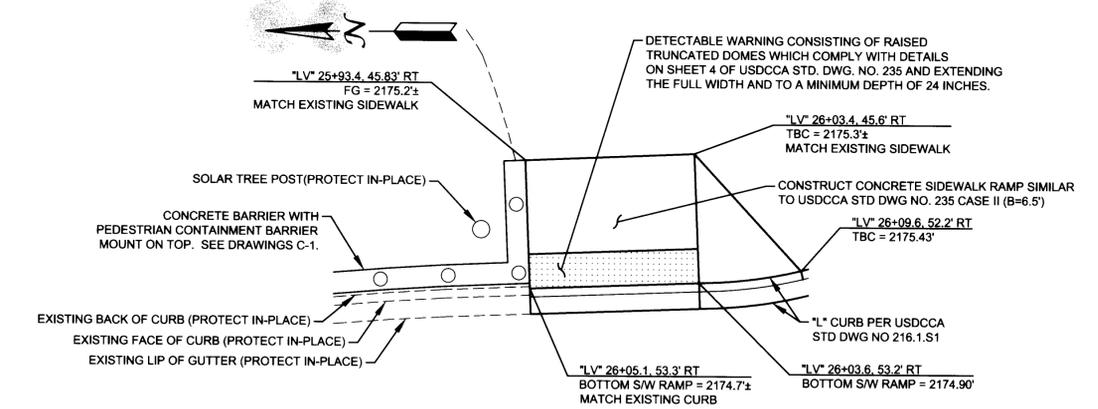
**CONCRETE BARRIER "A"**  
NOT TO SCALE

**CONCRETE BARRIER "B"**  
NOT TO SCALE

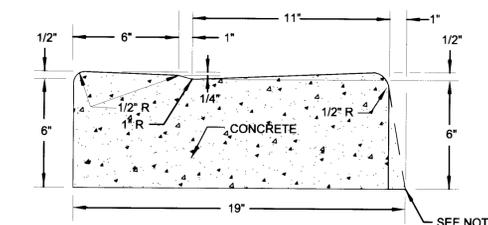
- NOTES:**
1. JOINT SEALER SHALL BE A SINGLE COMPONENT HOT APPLIED SEALANT 1" THICK.
  2. VERTICAL JOINTS SHALL HAVE A SINGLE COMPONENT HOT APPLIED SEALANT FULL DEPTH OF JOINT.
  3. PAINT CONCRETE BARRIER TO MATCH POWDER COATED COLOR OF PEDESTRAIN CONTAINMENT SYSTEM. CCPW TO APPROVE COLOR.



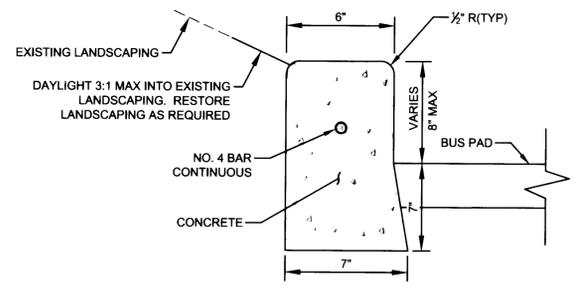
**SIDEWALK ISLAND DETAIL**  
NOT TO SCALE



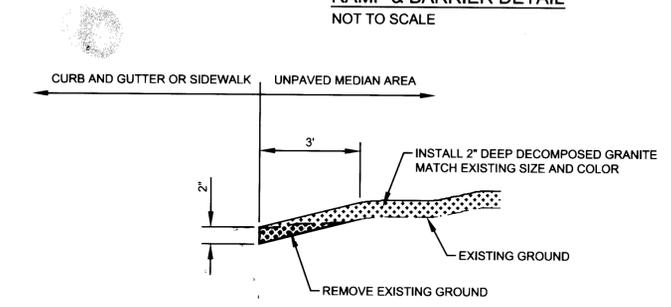
**RAMP & BARRIER DETAIL**  
NOT TO SCALE



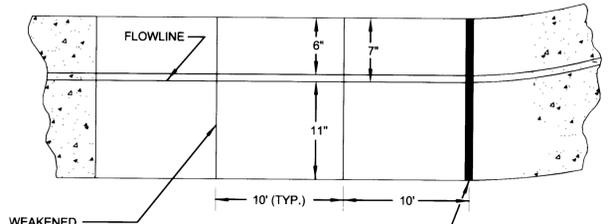
**CURB SECTION**



**STEM WALL**  
NOT TO SCALE



**LANDSCAPE DETAIL**  
NOT TO SCALE



**TYPICAL PLAN**

- NOTES:**
1. 1" BATTER ON GUTTER FACE OPTIONAL.

**"DEPRESSED" CURB AND GUTTER DETAIL**  
NOT TO SCALE

- 1/2" EXPANSION JOINT AT ALL COLD JOINTS, AT BEGINNING AND END OF RETURN AND AT 300' MAX. INTERVALS FOR EXTRUDED CURB AND 30' MAX. INTERVALS FOR FORMED CURB. FOR JOINT DETAIL SEE USDCCA STD DWG NO. 234

**FAST**  
Call before you UnderGround  
1-702-432-5300  
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

**Call before you Overhead**  
1-702-227-2929  
NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

**Call before you Dig**  
Call 811  
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY!

REV No	DATE	DESCRIPTION	APPROVED



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
**MISCELLANEOUS DETAILS**

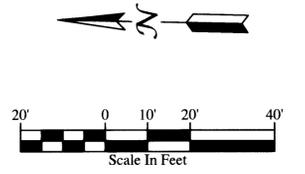
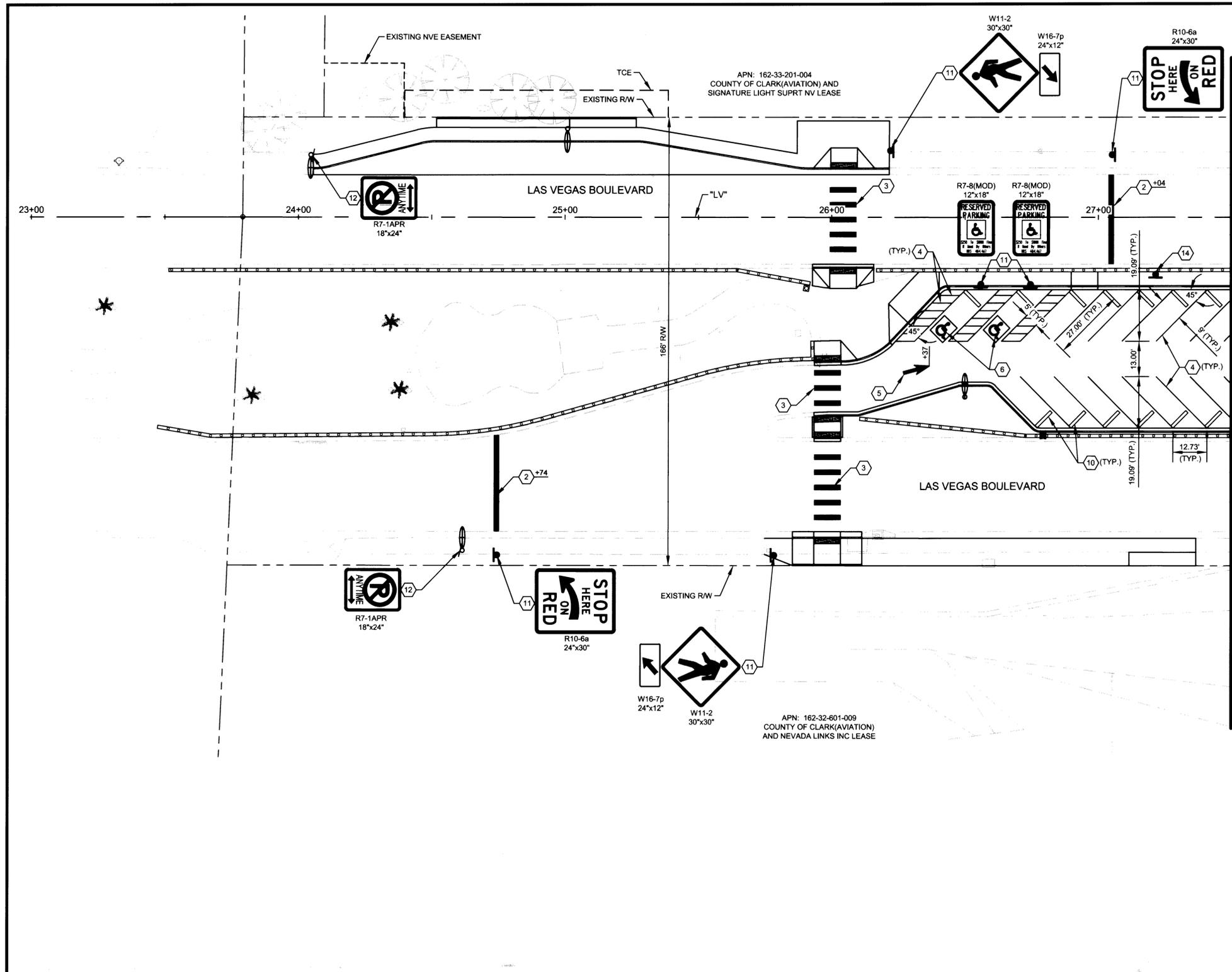
CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS



DESIGNED BY: V. PARIMI  
DRAWN BY: D. PUBLOW  
CHECKED BY: K. GILBRETH  
DATE: June 4, 2014  
**CH2MHILL**  
2485 VILLAGE VIEW DRIVE, SUITE 350  
HENDERSON, NEVADA 89074  
PHONE 702-369-6175, FAX 702-369-1107

SCALE	HORIZ: NONE
VERT: NONE	FIELD BOOK
WORK ORDER	PROJECT No. 478136

478136-LVSN-Detail.dwg  
**L-2042**  
DRAWING NO.  
**D-2**  
SHT. 15 OF 21



- SIGNING & STRIPING NOTES:**
- (2) INSTALL STOP BAR (TYPE 2 PMF) PER USDOCA STD DWG NO. 254
  - (3) INSTALL CROSSWALK (TYPE 2 PMF) PER USDOCA STD DWG NO. 254
  - (4) INSTALL 4-INCH SOLID WHITE LINE (PAINT)
  - (5) INSTALL "ARROW" LEGEND (TYPE 2 PMF)
  - (6) INSTALL "HANDICAP PARKING" LEGEND (TYPE 2 PMF)(BLUE WITH WHITE)
  - (10) INSTALL PRECAST BUMPER BLOCK PER USDOCA STD DWG NO. 238
  - (11) INSTALL NEW SIGN(S) (GROUND MOUNTED)
  - (14) INSTALL SALVAGED METRO SIGN (GROUND MOUNTED)



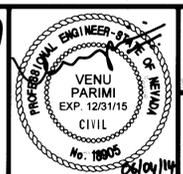
REV NO	DATE	DESCRIPTION	APPROVED

**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**

**SIGNING AND STRIPING PLAN**

**"LV" 23+00 TO "LV" 27+50**

**CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS**



DESIGNED BY: V. PARIMI	SCALE:	<b>L-2042</b>
DRAWN BY: D. PUBLOW	HORIZ: 1"=20'	
CHECKED BY: K. GILBRETH	VERT: NONE	
DATE: June 4, 2014	FIELD BOOK	
<b>CH2MHILL.</b>		WORK ORDER
2485 VILLAGE VIEW DRIVE, SUITE 350 HENDERSON, NEVADA 89074 PHONE 702-369-6175, FAX 702-369-1107		PROJECT No. 478136

SHT. 16 OF 23
---------------

Call before you Dig  
UnderGround  
1-702-432-5300

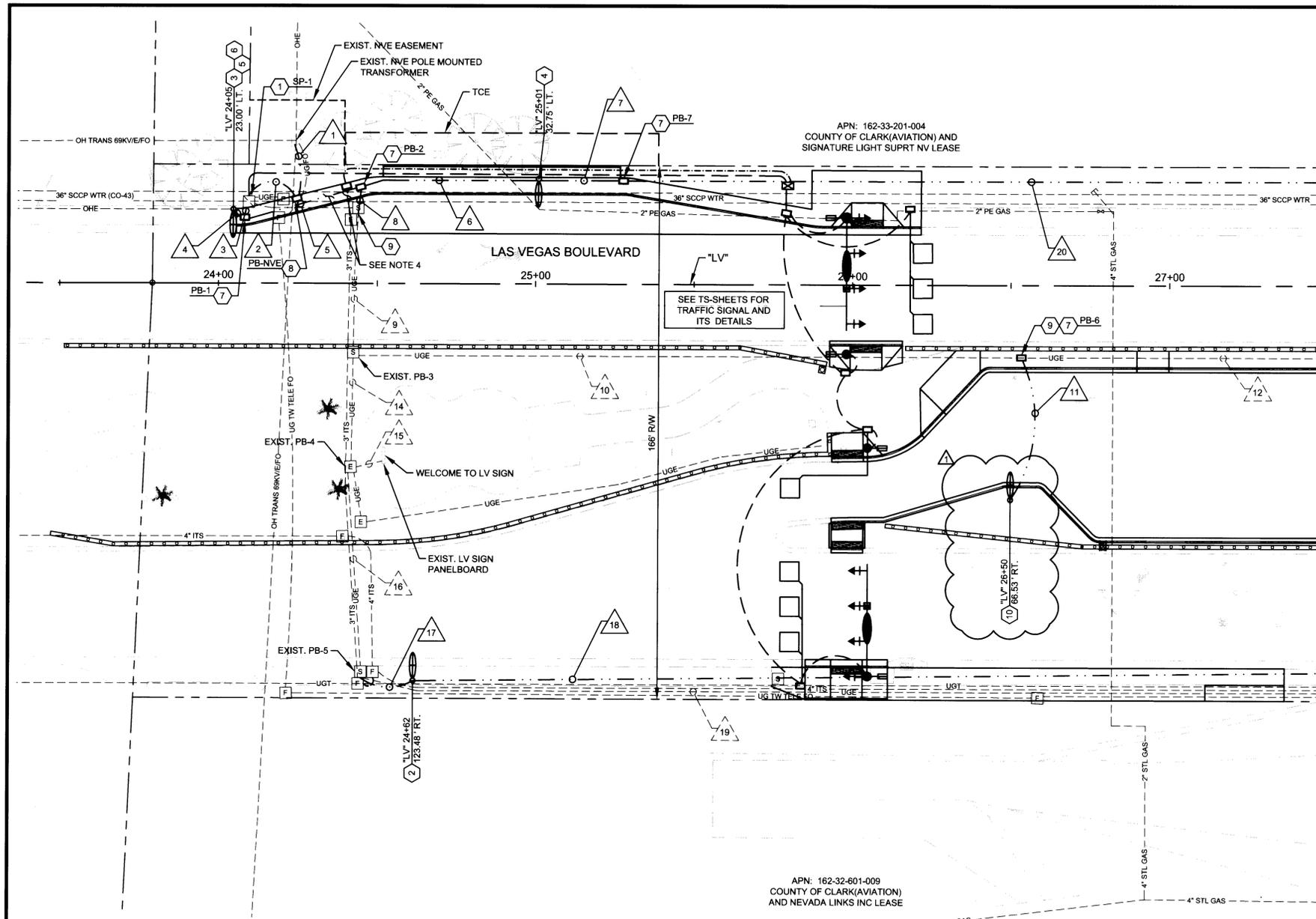
FREEWAY AND ARTERIAL  
SYSTEM OF TRANSPORTATION

Call before you Dig  
Overhead  
1-702-227-2929

NV ENERGY ENVIRONMENT AND  
SAFETY SERVICES DEPARTMENT

Call before you Dig  
Call  
811





- LIGHTING NOTES:**
- 1 EXISTING 200-AMP PAD MOUNTED SERVICE PEDESTAL (PROTECT IN PLACE)
  - 2 INSTALL 11-GAUGE STREET LIGHT ASSEMBLY WITH 250W HPS LUMINAIRE PER USDOCA STD DWGS NO. 314, 320, 321
  - 3 INSTALL 11-GAUGE STREET LIGHT POLE WITH 250W HPS LUMINAIRE ON EXISTING FOUNDATION. CHIP INTO EXISTING FOUNDATION FOR NEW 1-1/4" CONDUIT INSTALLATION PER USDOCA STD DWGS NO. 314, 321.1 S1
  - 4 INSTALL 11-GAUGE STREET LIGHT ASSEMBLY WITH 15-FT LUMINAIRE ARM AND 250W HPS LUMINAIRE PER USDOCA STD DWGS NO. 316, 320, 321
  - 5 CONNECT TO EXISTING OVERHEAD CIRCUIT
  - 6 RUN 2-#4, 1-#8 GRD. THW STREET LIGHT CONDUCTORS THROUGH POLE AND CONNECT TO OVERHEAD CIRCUIT
  - 7 INSTALL NO. 5 PULL BOX PER USDOCA STD DWG NO. 706
  - 8 INSTALL NO. 7 PULL BOX PER USDOCA STD DWG NO. 707
  - 9 INTERCEPT AND CONNECT TO EXISTING CONDUIT
  - 10 INSTALL TYPE 2A STREET LIGHT ASSEMBLY WITH 255W LED LUMINAIRE (XGB3-FTA-LED-176-450-CW-JE-BRZ OR APPROVED EQUAL) PER DETAILS ON SHEET L-4

- NOTES:**
1. ALL CONDUIT RUNS AND PULLBOXES SHOWN ON THE DRAWING ARE FOR CLARITY OF RUNS AND EQUIPMENT ONLY. THE CONTRACTOR SHALL ENSURE THAT ALL EQUIPMENT IS INSTALLED PER THE APPROPRIATE STANDARD DRAWINGS. SPECIAL PROVISIONS AND MANUFACTURER'S RECOMMENDATIONS. CONDUIT CROSSING LAS VEGAS BOULEVARD SHALL BE PLACED WITHIN PAVEMENT REPLACEMENT LIMITS AS SHOWN ON SHEET C-1.
  2. SEE DRAWING NO. L-3 FOR CONDUIT AND CONDUCTOR SCHEDULE, CIRCUIT CAPACITY VERIFICATION, AND SERVICE PEDESTAL CIRCUIT BREAKER SCHEDULE.
  3. SEE DRAWINGS NO. TS-1 AND TS-2 FOR TRAFFIC SIGNAL AND ITS CONDUIT CONDUIT INSTALLATION INFORMATION.
  4. PROVIDE A MIN. 12" VERTICAL CLEARANCE BETWEEN EXIST. WATER MAIN AND PROPOSED DRY UTILITY PER UDACS SECTION 2.04.06

APPROVED FOR CONSTRUCTION  
*[Signature]*  
 Las Vegas Valley Water District Engineering Services Manager  
 Date: 7/1/14 Project No. 122758

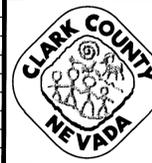
**FAST**  
 Call before you UnderGround  
 1-702-432-5300

AVOID OVERHEAD POWER LINE CONTACT. IT'S COSTLY.  
**Call before you Overhead**  
 1-702-227-2929

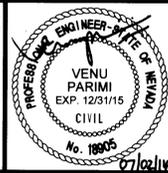
Call before you Dig  
 AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.  
**Call 811**

FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

REV No.	DATE	DESCRIPTION	APPROVED
7			
6			
5			
4			
3			
2			
1	07/02/14	PARKING LOT LIGHT REVISIONS	



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
**LIGHTING PLAN**  
 "LV" 23+00 TO "LV" 27+50  
 CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS



DESIGNED BY: V. PARIMI  
 DRAWN BY: D. PUBLLOW  
 CHECKED BY: K. GILBRETH  
 DATE: July 2, 2014

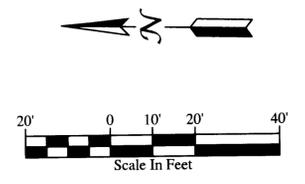
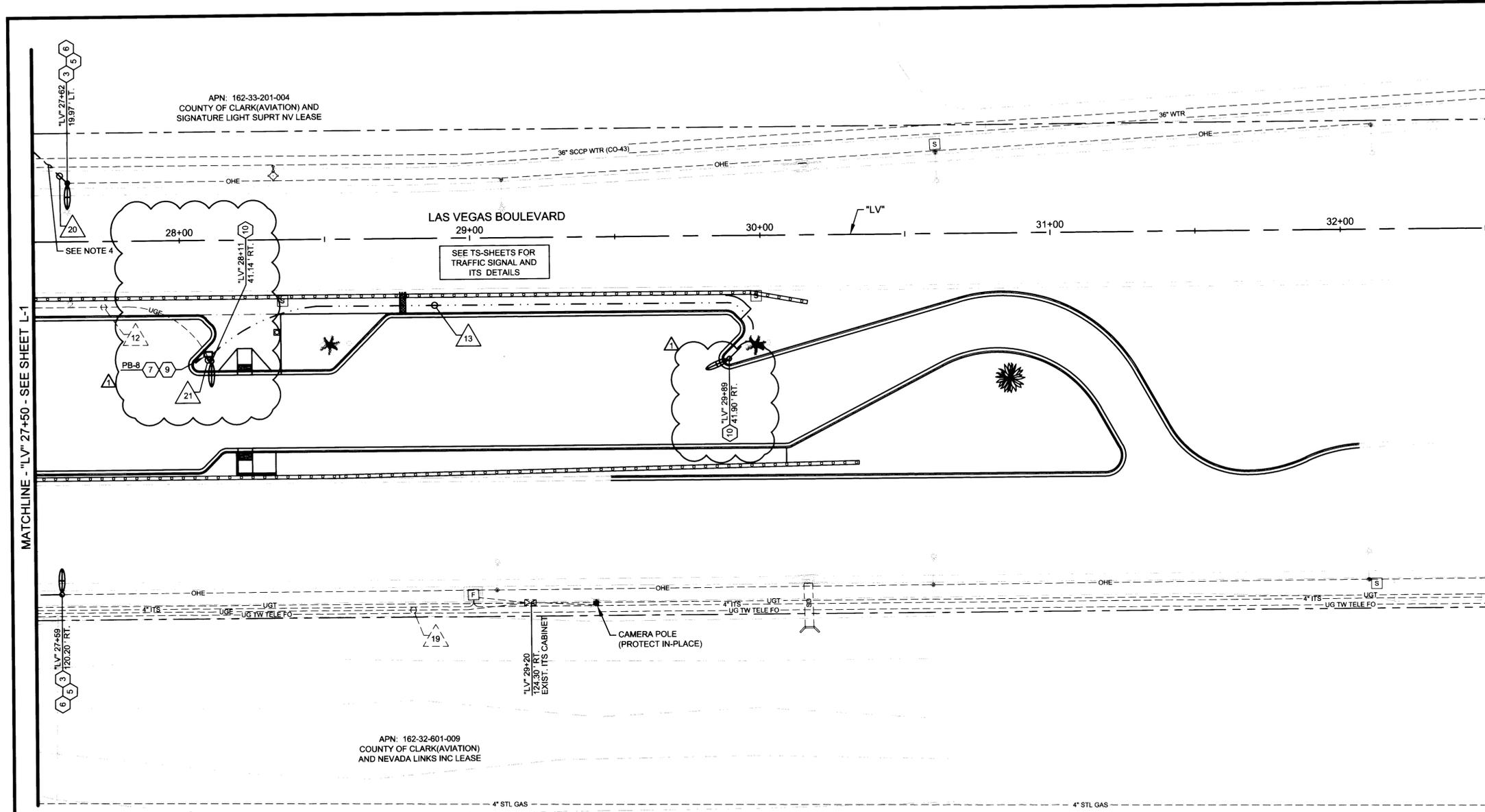
**CH2MHILL.**  
 2485 VILLAGE VIEW DRIVE, SUITE 350  
 HENDERSON, NEVADA 89074  
 PHONE 702-369-6175, FAX 702-369-1107

SCALE	HORIZ: 1"=20'
VERT: NONE	FIELD BOOK
WORK ORDER	PROJECT No. 478136

**L-2042**  
 DRAWING NO.  
**L-1**  
 SHT: 18 OF 23

WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD

MATCHLINE - "LV" 27+50 - SEE SHEET L-2



- LIGHTING NOTES:**
- 3 INSTALL 11-GAUGE STREET LIGHT POLE WITH 250W HPS LUMINAIRE ON EXISTING FOUNDATION. CHIP INTO EXISTING FOUNDATION FOR NEW 1-1/4" CONDUIT INSTALLATION PER USDCCA STD DWGS NO. 314, 321.1.S1
  - 5 CONNECT TO EXISTING OVERHEAD CIRCUIT
  - 6 RUN 2-#4, 1-#8 GRD. THW STREET LIGHT CONDUCTORS THROUGH POLE AND CONNECT TO OVERHEAD CIRCUIT
  - 8 INTERCEPT AND CONNECT TO EXISTING CONDUIT
  - 10 INSTALL TYPE 2A STREET LIGHT ASSEMBLY WITH 255W LED LUMINAIRE (XGB3-FTA-LED-176-450-CW-UE-BRZ OR APPROVED EQUAL) PER DETAILS ON SHEET L-4

- NOTES:**
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  2. SEE DRAWING NO. L-3 FOR CONDUIT AND CONDUCTOR SCHEDULE, CIRCUIT CAPACITY VERIFICATION, AND SERVICE PEDESTAL CIRCUIT BREAKER SCHEDULE.
  3. SEE DRAWINGS NO. TS-1 AND TS-2 FOR TRAFFIC SIGNAL AND ITS CONDUIT CONDUIT INSTALLATION INFORMATION.
  4. PROVIDE A MIN. 12" VERTICAL CLEARANCE BETWEEN EXIST. WATER MAIN AND PROPOSED DRY UTILITY PER UDACS SECTION 2.04.06

APPROVED FOR CONSTRUCTION  
*H. DISHAR*  
 Las Vegas Valley Water District Engineering Services Manager  
 Date: 7/2/14 Project No.: 122758

**FAST**  
 Call before you Dig  
 Call before you Overhead  
 Call before you UnderGround  
 1-702-432-5300  
 AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY!  
 Call 811  
 NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT  
 PREWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

REV No.	DATE	DESCRIPTION	APPROVED
07/02/14		PARKING LOT LIGHT REVISIONS	

**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
**LIGHTING PLAN**  
 "LV" 27+50 TO "LV" 32+50  
 CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS

DESIGNED BY: V. PARIMI  
 DRAWN BY: D. PUBLOW  
 CHECKED BY: K. GILBRETH  
 DATE: July 2, 2014

**CH2MHILL.**  
 2485 VILLAGE VIEW DRIVE, SUITE 350  
 HENDERSON, NEVADA 89074  
 PHONE 702-369-6175, FAX 702-369-1107

SCALE	HORIZ: 1"=20'
VERT: NONE	
FIELD BOOK	
WORK ORDER	
PROJECT No. 478136	SHT: 19 OF 23

**L-2042**  
 DRAWING NO.  
**L-2**

WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD

CONDUIT AND CONDUCTOR SCHEDULE						
CONDUIT NO.	NO.	CONDUIT SIZE (IN)	FROM	TO	CONDUCTORS	COMMENTS
1	1	4	EXIST. NVE TRANSFORMER	PB-NVE	BY NVE	
2	1	4	PB-NVE	EXIST. SP-1	BY NVE	
3	1	3	EXIST. SP-1	PB-1	6#4, 3-1/0, 1#6G	
4	1	1 1/4	PB-1	STREET LIGHT ("LV" 24+05, LT.)	2#4, 1#8G	
5	1	3	PB-1	PB-2	4#4, 3-1/0, 1#6G	
6	1	1 1/4	PB-2	STREET LIGHT ("LV" 25+01, LT.)	2#4, 1#8G	
7	1	1 1/4	STREET LIGHT ("LV" 25+01, LT.)	PB-7	2#4, 1#8G	
8	1	3	PB-2	INTERCEPTION PT.	4#4, 3-1/0, 1#6G	
9	EXIST.	3	INTERCEPTION PT.	EXIST. PB-3	4#4, 3-1/0, 1#6G	REMOVE EXISTING CONDUCTORS FROM CONDUIT
10	EXIST.	1 1/4	EXIST. PB-3	PB-6	2#4, 1#8G	REMOVE EXISTING CONDUCTORS FROM CONDUIT
11	1	1 1/4	PB-6	STREET LIGHT ("LV" 26+50, RT.)	2#4, 1#8G	
12	EXIST.	1 1/4	PB-6	PB-8	2#4, 1#8G	REMOVE EXISTING CONDUCTORS FROM CONDUIT
13	1	1 1/4	PB-8	STREET LIGHT ("LV" 29+89, RT.)	2#4, 1#8G	
14	EXIST.	3	EXIST. PB-3	EXIST. PB-4	4#4, 3-1/0, 1#6G	REMOVE EXISTING CONDUCTORS FROM CONDUIT
15	EXIST.	3	EXIST. PB-4	EXIST. LV SIGN PANELBOARD	3-1/0, 1#6G	REMOVE EXISTING CONDUCTORS FROM CONDUIT
16	EXIST.	3	EXIST. PB-4	EXIST. PB-5	4#4, 1#8G	REMOVE EXISTING CONDUCTORS FROM CONDUIT
17	1	1 1/4	EXIST. PB-5	STREET LIGHT ("LV" 24+62, RT.)	2#4, 1#8G	
18	1	1 1/4	STREET LIGHT ("LV" 24+62, RT.)	STREET LIGHT ("LV" 27+59, RT.)	2#4, 1#8G	
19	EXIST.	3	EXIST. PB-5	EXIST ITS CABINET ("LV" 29+20, RT.)	2#4, 1#8G	REMOVE EXISTING CONDUCTORS FROM CONDUIT
20	1	1 1/4	PB-7	STREET LIGHT ("LV" 27+62, LT.)	2#4, 1#8G	
21	1	1 1/4	PB-8	STREET LIGHT ("LV" 28+11, RT.)	2#4, 1#8G	

CIRCUIT BREAKER SCHEDULE		
<b>100 AMP 240V PAD MOUNTED SERVICE NVE #5100</b>		
WITH		
1	2 POLE 125 AMP CIRCUIT BREAKERS	LV SIGN (CURRENTLY LABELED "LAS VEGAS SIGN" REMOVE 60A & REPLACE WITH 125A)
EX	1 POLE 15 AMP CIRCUIT BREAKER	PHOTOCELL B
EX	1 POLE 20 AMP CIRCUIT BREAKER	SPARE (CURRENTLY LABELED "ITS CABINET" CHANGE TO "SPARE")
EX	2 POLE 20 AMP CIRCUIT BREAKERS	SPARE (CURRENTLY LABELED "LANDSCAPE LIGHTING A" CHANGE TO "SPARE")
EX	2 POLE 20 AMP CIRCUIT BREAKERS	SPARE (CURRENTLY LABELED "LANDSCAPE LIGHTING B" CHANGE TO "SPARE")
EX	2 POLE 20 AMP CIRCUIT BREAKERS	SPARE (CURRENTLY LABELED "LANDSCAPE LIGHTING C" CHANGE TO "SPARE")
EX	1 POLE 20 AMP CIRCUIT BREAKER	SPARE (CURRENTLY LABELED "PARKING LOT POLE" CHANGE TO "SPARE")
<b>100 AMP 240V PAD MOUNTED SERVICE NVE #5147</b>		
WITH		
EX	2 POLE 60 AMP CIRCUIT BREAKERS (SL)	STREET LIGHTS EAST (CURRENTLY LABELED "ALL NORTH SIDE")
EX	2 POLE 60 AMP CIRCUIT BREAKERS (SL)	STREET LIGHTS WEST (CURRENTLY LABELED "ALL SOUTH SIDE")
EX	1 POLE 15 AMP CIRCUIT BREAKER	PHOTOCELL A
1	1 POLE 60 AMP CIRCUIT BREAKER (TSC)	TRAFFIC SIGNAL CABINET
1	1 POLE 40 AMP CIRCUIT BREAKER (IL)	INTERSECTION LIGHTING
1	1 POLE 20 AMP CIRCUIT BREAKER	ITS CABINET
EX	BY-PASS SWITCH PER CONTACTOR (SL)	

CIRCUIT CAPACITY VERIFICATION		
METERED SERVICE NO. 5100 IN SERVICE PEDESTAL SP-1		
CIRCUIT NAME:	5100 SP-1 (A)	
CIRCUIT TYPE:	LV SIGN	
VOLTAGE:	240	
CIRCUIT BREAKER SIZE:	125	
MAXIMUM CONTINUOUS DRAW IS 80% OF THE CIRCUIT CAPACITY:	100	
EXISTING LOAD (AMPS)	58.5	
REMOVED LOAD	QTY.	AMPS
250 WATT SINGLE LUMINAIRE AT 240V = 1.5 AMPS	1	-1.5
PROPOSED ADDED LOAD TO CIRCUIT:	QTY.	AMPS
255 WATT LED SINGLE LUMINAIRE AT 240V = 2 AMPS	3	6
PROPOSED LOAD (AMPS)	63	
REMAINING CIRCUIT CAPACITY (AMPS)	37	
METERED SERVICE CAPACITY (AMPS)	100	
MAXIMUM CONTINUOUS ALLOWABLE DRAW (AMPS)	80	
TOTAL PROPOSED LOAD (AMPS)	63	
TOTAL REMAINING SERVICE CAPACITY (AMPS)	17	

CIRCUIT CAPACITY VERIFICATION								
METERED SERVICE NO. 5147 IN SERVICE PEDESTAL SP-1								
CIRCUIT NAME:	5147 SP-1 (A)		5147 SP-1 (B)		5147 SP-1 (C)		5147 SP-1 (D)	
CIRCUIT TYPE:	STREET LIGHTING (EAST)		STREET LIGHTING (WEST)		TRAFFIC SIGNAL LIGHTING		ITS CABINET	
VOLTAGE:	240		240		120		120	
CIRCUIT BREAKER SIZE:	60		60		20		20	
MAXIMUM CONTINUOUS DRAW IS 80% OF THE CIRCUIT CAPACITY:	48		48		16		16	
EXISTING LOAD (AMPS)	27		25		0		15.6	
REMOVED LOAD	QTY.	AMPS	QTY.	AMPS	QTY.	AMPS	QTY.	AMPS
250 WATT SINGLE LUMINAIRE AT 240V = 1.5 AMPS	3	-4.5	3	-4.5	0	0	0	0
PROPOSED ADDED LOAD TO CIRCUIT:	QTY.	AMPS	QTY.	AMPS	QTY.	AMPS	QTY.	AMPS
250 WATT SINGLE LUMINAIRE AT 240V = 1.5 AMPS	3	4.5	2	3	0	0	0	0
258 WATT LED SINGLE LUMINAIRE AT 120V = 4.0 AMPS	0	0	0	0	2	8	0	0
EXISTING + PROPOSED LOAD (AMPS)	27		23.5		8		15.6	
REMAINING CIRCUIT CAPACITY (AMPS)	21		24.5		8		0.4	
METERED SERVICE CAPACITY (AMPS)	100							
MAXIMUM CONTINUOUS ALLOWABLE DRAW (AMPS)	80							
TOTAL PROPOSED LOAD (AMPS)	74.1							
TOTAL REMAINING SERVICE CAPACITY (AMPS)	5.9							

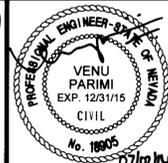
REV NO.	DATE	DESCRIPTION	APPROVED
1	07/02/14	PARKING LOT LIGHT REVISIONS	



## WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD

### LIGHTING SCHEDULES

CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS



DESIGNED BY: V. PARIMI  
 DRAWN BY: D. PUBLLOW  
 CHECKED BY: K. GILBRETH  
 DATE: July 2, 2014

**CH2MHILL.**  
 2485 VILLAGE VIEW DRIVE, SUITE 350  
 HENDERSON, NEVADA 89074  
 PHONE 702-369-6175, FAX 702-369-1107

SCALE  
 HORIZ: 1"=20'  
 VERT: NONE

FIELD BOOK  
 WORK ORDER

PROJECT No. 478136

478136-LVSGN-Lighting.dwg

**L-2042**

DRAWING NO.  
**L-3**

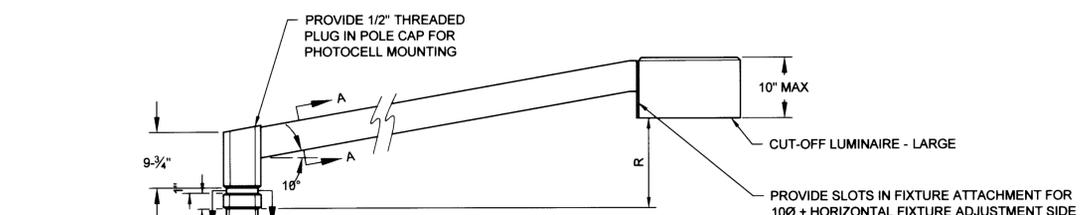
SHT: 20 OF 23

**FAST**  
 Call before you UnderGround  
 1-702-432-5300  
FREEWAY AND ARTERIAL SYSTEM OF TRANSPORTATION

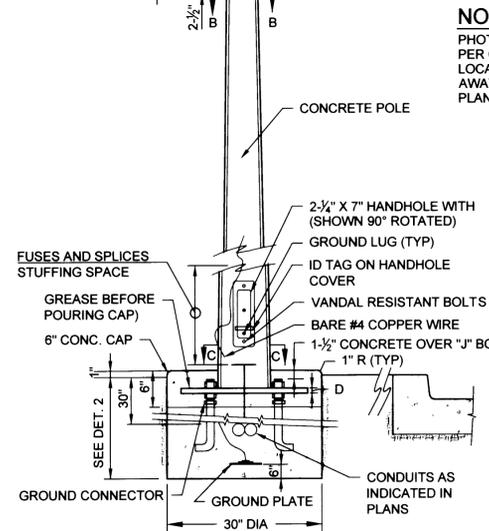
AVOID OVERHEAD POWER LINE CONTACT. IT'S COSTLY.  
 Call before you Overhead  
 1-702-227-2929  
NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

Call before you Dig  
 AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.  
 Call 811

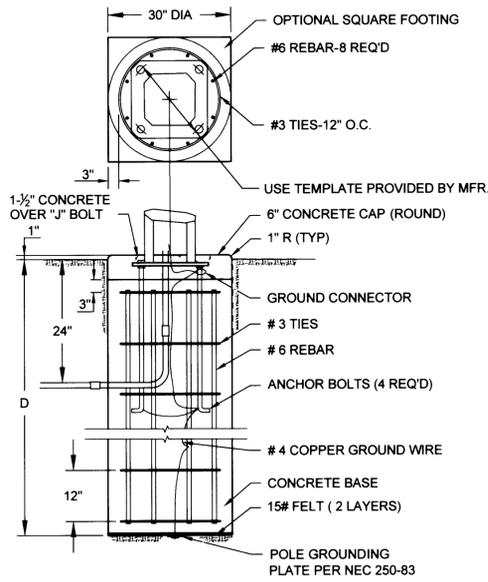
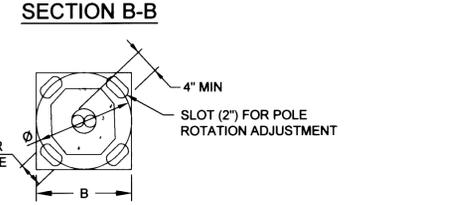
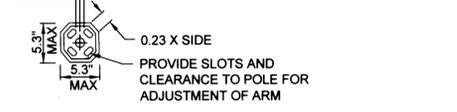
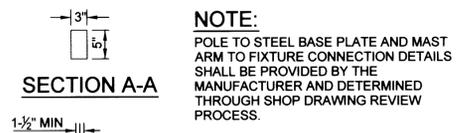
### STREET LIGHT POLE MAST ARM AND LUMINAIRE



**NOTE:**  
PHOTO EYE AND WIRING FOR BREAKER TO BE PER CLARK COUNTY STANDARDS CABINET LOCATIONS PER CORNER MUST BE LOCATED AWAY FROM TRAFFIC AND WITH LANDSCAPE PLAN CONSIDERATION.



**NOTE:**  
ALL INTERNAL AND EXTERNAL METALLIC COMPONENTS OF POLE, REINFORCING STEEL MOUNTING PLATE, HANDHOLD AND POLE CAP SHALL BE ELECTRICALLY BONDED TOGETHER TO GROUND.



	DEPTH "D"	ANCHOR BOLT
TYPE 2	5'-6"	1" X 36" X 4"

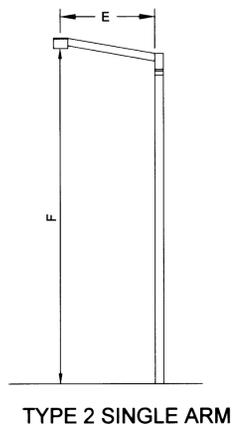
- NOTES:**
- ALL CONCRETE SHALL BE TYPE V. CONCRETE CLASS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS.
  - PLACE CONCRETE AGAINST UNDISTURBED EARTH OR 95% COMPACTED BACKFILL (10' MIN AROUND FOUNDATION).
  - CALCULATION SHEETS AND DETAILS WILL BE SUBMITTED, SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER TO CLARK COUNTY FOR REVIEW AND APPROVAL FOR FOUNDATION DESIGNS OTHER THAN SHOWN PER THIS STANDARD.

### 2 STREETLIGHT POLE FOUNDATION

NTS PER WT-1865-95 TOGETHER WITH TM-0286-95

- NOTES:**
- LUMINAIRES, ARMS, POLES AND FOUNDATION SHALL BE PROVIDED AND INSTALLED PER UNIFORM STANDARD DRAWINGS, CLARK COUNTY AREA.
  - LUMINAIRE SHALL BE 19" (LARGE, 255W LED) CUTOFF LUMINAIRE WITH EXTRUDED ALUMINUM HOUSING WITH BRONZE POLYESTER FINISH. LUMINAIRE SHALL HAVE IES TYPE 3 MEDIUM CUTOFF ALUMINUM SEGMENTED REFLECTORS WITH CLEAR TEMPERED FLAT GLASS LENSES UNLESS OTHERWISE NOTED. HOUSING AND DOOR SHALL BE GASKETED AND RAIN TIGHT. BALLAST SHALL BE HIGH POWER FACTOR, MAGNETIC REGULATOR TYPE. LUMINAIRE SHALL BE EQUAL TO XGB3-FTA-LED-175-450-CW-UE-BRZ OR APPROVED EQUAL. ARM AND POLE SHALL BE MANUFACTURED FOR SUMMERLIN BY AMERON, OR APPROVED EQUAL UNLESS OTHERWISE NOTED. BOTH LUMINAIRE AND ARM SHALL HAVE POWDER COAT PAINT FINISH. TRAFFIC SIGNAL POLES AND LUMINAIRE ARMS SHALL BE FINISHED WITH AMERSHIELD SYSTEM NO. 5442C "HUMMINGBIRD BROWN" OR APPROVED EQUIVALENT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

- POLE**
- A. THIS SPECIFICATION COVERS GENERAL REQUIREMENTS FOR TAPERED, PRESTRESSED, SQUARE CONCRETE POLES WITH CHAMFERED CORNERS FOR USE IN STRUCTURAL SUPPORTS FOR STREET LIGHTS.
- B. POLES SHALL BE DESIGNED FOR DEAD LOADS AND WIND LOADS INDUCED BY FIXTURES AND ATTACHMENTS WHICH PRODUCE BENDING AND TORSION IN THE SHAFT. DESIGN STRESSES DUE TO LOADING AND PRESTRESSING SHALL CONFORM TO ACI 318.71.
- C. POLES SHALL BE DESIGNED FOR ULTIMATE STRENGTHS IN ACCORDANCE WITH THE BASIC ASSUMPTIONS AND REQUIREMENTS OF AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", LATEST EDITION.
- D. AASHTO WIND LOADING CRITERIA SHALL APPLY AND SHALL BE SPECIFIED TO THE CITY OF LAS VEGAS AREA OF 80 M.P.H.
- E. THE MANUFACTURER SHALL FURNISH THE PURCHASER FABRICATION AND DETAIL DRAWINGS.
- COLOR**
- F. SUMMERLIN BEIGE AMERON #2123 DATED 6-3-88, SAMPLE NO. 361. ALL POLE AGGREGATE COLOR TO BE MATCHED BY PRE-APPROVED SAMPLES. PURCHASER WILL PROVIDE COLOR SAMPLE AND FINAL COLOR APPROVAL. EXTERIOR SURFACE SEALER SHALL BE CLEAN URETHANE "LITHONTHANE" AS MANUFACTURED BY L. M. SCOFIELD COMPANY OR APPROVED EQUAL.
- CEMENT**
- G. PORTLAND CEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C150, TYPE III. AGGREGATES SHALL CONFORM TO REQUIREMENTS OF ASTM C33 AND C330 EXCEPT THAT THE REQUIREMENTS FOR GRADATION SHALL NOT APPLY. WATER USED FOR CURING, WASHING AGGREGATES AND MIXING CONCRETE SHALL BE FREE OF OILS, ORGANIC MATTER, AND OTHER SUBSTANCES IN AMOUNTS THAT MAY BE DELETERIOUS TO CONCRETE AND IT SHALL NOT CONTAIN CONCENTRATIONS OF CHLORIDE IONS IN EXCESS OF 500 PARTS PER MILLION OF SULFATE IONS IN EXCESS OF 1,000 PARTS PER MILLION.
- H. ADMIXTURES SHALL BE USED FOR COLOR CONDITIONING ONLY AND SHALL COMPLY WITH UBC STANDARD NO. 26-12. THE PIGMENT COMPONENT MUST CONSIST OF PURE MINERAL OXIDES ONLY.
- STEEL**
- I. SEVEN STRAND MINIMUM, UNCOATED, STREE RELIEVED, PRESTRESSING STEEL SHALL CONFORM TO ASTM A416. NON-TENSIONED REINFORCEMENT SHALL CONFORM TO ASTM A615 AND ASTM A82. BASE PLATES, ANCHOR BOLTS AND TOP MOUNT COUPLINGS SHALL CONFORM TO ASTM SPECIFICATIONS.
- ALUMINUM**
- J. CAST ALUMINUM FOR POLE CAP TO CONFORM TO ASTM SF 70A. EXTRUDED ALUMINUM SHAPES FOR LUMINAIRE ARMS SHALL CONFORM TO THE ALUMINUM ASSOCIATION DESIGNATION 6063-T6.
- LUMINAIRE**
- K. LUMINAIRE PERFORMANCE SHALL INCLUDE TESTING IN ACCORDANCE WITH CURRENT IES TEST PROCEDURES.
- L. LUMINAIRE/LAMP COMBINATION SHALL PROVIDE A LIGHT DISTRIBUTION MEETING THE REQUIREMENTS FOR AN IES CLASSIFICATION: TYPE I, TYPE II, AND/OR TYPE III, MEDIUM CUTOFF.
- M. AVERAGE MAINTAINED ILLUMINANCE AND UNIFORM OF ILLUMINANCE SHALL CONFORM TO IES RECOMMENDATION.
- N. THE TOTAL DOWNWARD COEFFICIENT OF UTILIZATION FOR LUMINAIRE SHALL BE NO LESS THAN 72%.
- O. THE TOTAL CONTRIBUTION OF LIGHT ABOVE 75-DEGREE VERTICAL ANGLE SHALL NOT EXCEED 3% OF RATED LAMP LUMENS ON THE STREETSIDE AND 0.9% ON THE HOUSE SIDE.
- P. THE MAXIMUM CANDLEPOWER AT A VERTICAL ANGLE OF 80 DEGREES AND ABOVE IN ANY PLANE SHALL NOT BE GREATER THAN 59 CANDELA PER 1,000 RATED LAMP LUMENS. NADIR CANDLEPOWER SHALL NOT EXCEED 145 CANDELA PER 1,000 RATED LAMP LUMENS.
- Q. WHEN THE LUMINAIRE IS EQUIPPED WITH THE CORRESPONDING LAMP RATING AND MOUNTED AT THE SPECIFIED HEIGHT ABOVE THE PAVEMENT, THE LUMINAIRE SHALL PROVIDE WITHIN ± 5% THE RECOMMENDED INITIAL MINIMUM HORIZONTAL FOOT-CANDLE VALUES ON THE PAVEMENT.
- R. FIXTURES SHALL BE CONSTRUCTED WITH PROPER GASKETING AND CORROSION RESISTANT MATERIALS AND/OR COATINGS. CONSTRUCT METAL FIXTURE CHANNELS, END CAPS, INTERIOR BARRIERS, REFLECTORS, ETC., OF ADEQUATE GAUGE AND MATERIAL.
- WIRING**
- S. ALL FIXTURE WIRES SHALL CONFORM TO THE LATEST REQUIREMENTS OF UNDERWRITERS LABORATORIES AND BE CONCEALED WITHIN THE FIXTURE CONSTRUCTION WIRING FROM BASE OF POLE TO LUMINAIRE MUST BE 10-2UF WITH GROUND.
- BALLAST**
- T. HIGH-INTENSITY DISCHARGE BALLASTS SHALL BE CONSTANT-WATTAGE MAGNETIC REGULATING PER ANSI C78.1351 TRAPEZOID LIMITATION AND POWER FACTOR 90% MINIMUM.
- COLOR AND FINISH**
- U. FIXTURE, MAST, ARM, AND POLE CAP SHALL ALL HAVE MATCHING COLOR BRONZE ANODIZED ALUMINUM FINISH. ALUMINUM ASSOCIATION ARCHITECTURAL CLASS 1.
- INDEPENDENT TESTING**
- V. TESTS TO VERIFY COMPLIANCE WITH ABOVE SPECS SHALL BE PERFORMED BY A CERTIFIED INDEPENDENT LABORATORY.



TYPE 2 SINGLE ARM

	"B"	"D"	"E"	"F"	"R"	SHAFT BASE	FOOTING	CUTOFF LUMINAIRE	
TYPE 2A	14"	14"	3/4"	8"	31'-2"	2.16'	9-3/16"	30"Ø X 5'-6"	LARGE

### 3 STREETLIGHT POLE, ARM AND FIXTURE DETAIL

NTS PER WT-1865-95 TOGETHER WITH TM-0286-95

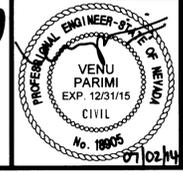
REV No	DATE	DESCRIPTION	APPROVED
07/02/14		PARKING LOT LIGHT REVISIONS	



## WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD

### TYPE 2A SUMMERLIN STREETLIGHT ASSEMBLY DETAILS

CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS



DESIGNED BY: V. PARIMI  
 DRAWN BY: D. PUBLLOW  
 CHECKED BY: K. GILBRETH  
 DATE: July 2, 2014

**CH2MHILL.**  
 2485 VILLAGE VIEW DRIVE, SUITE 350  
 HENDERSON, NEVADA 89074  
 PHONE 702-369-6175, FAX 702-369-1107

SCALE  
 HORIZ: 1"=20'  
 VERT: NONE

FIELD BOOK  
 WORK ORDER  
 PROJECT No. 478136

L-2042  
 DRAWING NO.  
**L-4**  
 SHT. 21 OF 23

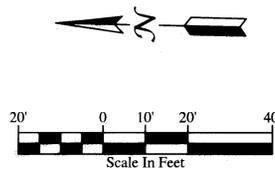
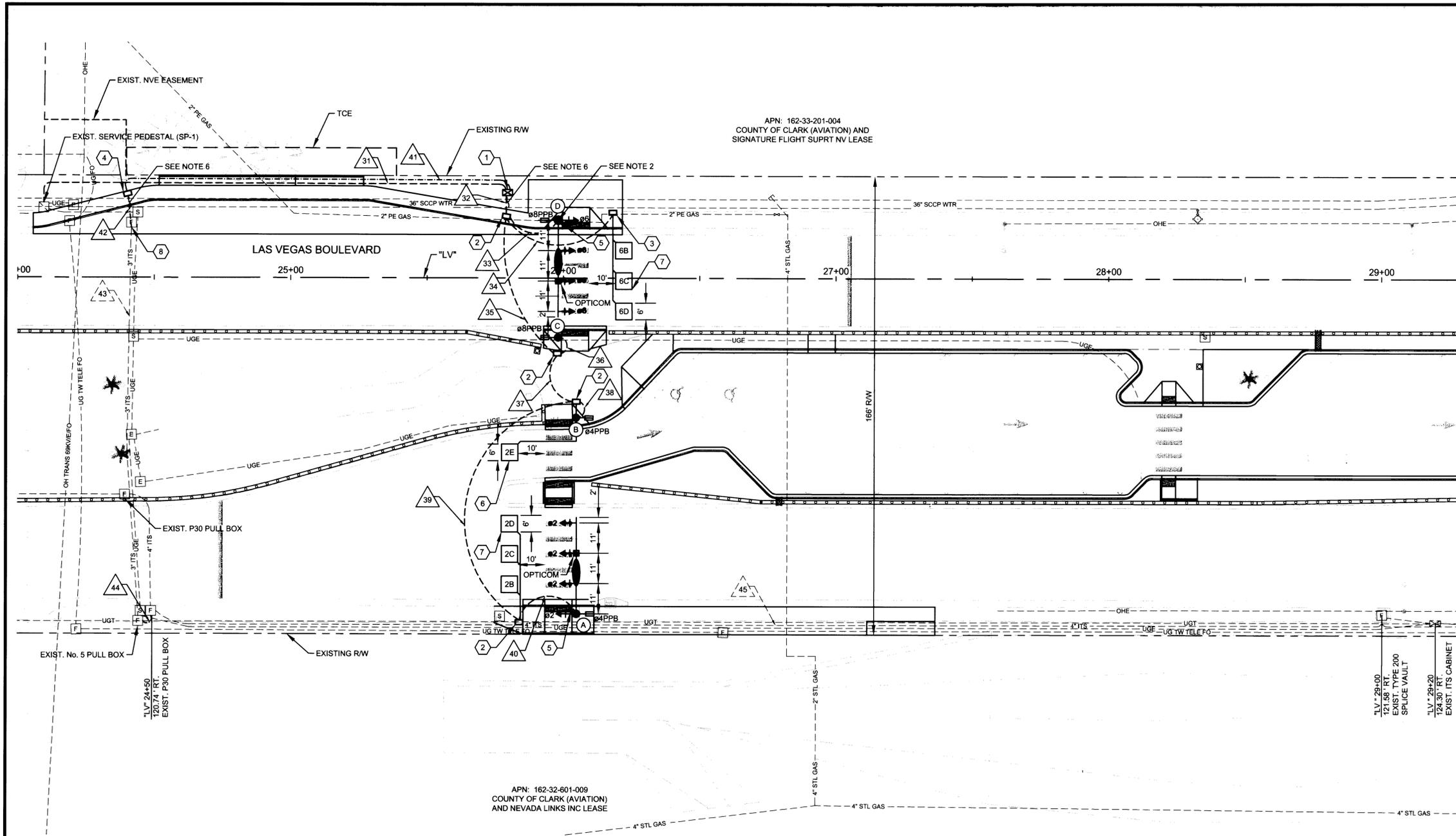


AVOID OVERHEAD POWER LINE CONTACT. IT'S COSTLY.  
 Call before you Call Overhead 1-702-227-2929  
 NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

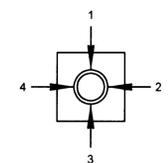


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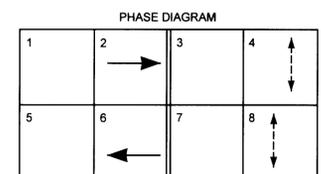
WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD



- TRAFFIC SIGNAL NOTES:**
1. INSTALL TYPE VIII "R" CONTROLLER CABINET PER USDCCA DWG NO. 803 (TO BE SUPPLIED BY CCPW)
  2. INSTALL DOUBLE STACKED NO. 7 PULL BOX PER USDCCA STD. DWG. NO. 707
  3. INSTALL NO. 5 PULL BOX PER USDCCA STD. DWG. NO. 706
  4. INSTALL P30 PULL BOX PER USDCCA STD. DWG. NO. 76 1
  5. INSTALL CCTV CAMERA AND 10' EXTENSION POLE PER USDCCA STD. DWG. NO. 766. FURNISH CCTV FIELD EQUIPMENT AND CONNECT CAMERA TO CONTROLLER CABINET
  6. INSTALL LOOP DETECTOR ASSEMBLY (TRAFFIC COUNTS) PER USDCCA STD. DWGS. NO. 826, 827, AND 828
  7. INSTALL LOOP DETECTOR ASSEMBLY (TRAFFIC COUNTS) PER USDCCA STD. DWGS. NO. 826, 827, AND 832
  8. INTERCEPT AND TIE INTO EXISTING CONDUIT

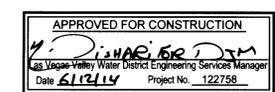


QUADRANT ARM OR SIGNAL LOCATION (TOP VIEW)



1. FLASHING OPERATION SHALL BE ALL RED.  
2. OPTICOM PREEMPTION FOR PHASES 2 AND 6.

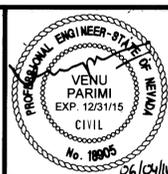
- NOTES:**
1. ALL CONDUIT RUNS AND PULLBOXES SHOWN ON THE DRAWING ARE FOR CLARITY OF RUNS AND EQUIPMENT ONLY. THE CONTRACTOR SHALL ENSURE THAT ALL EQUIPMENT IS INSTALLED PER THE APPROPRIATE STANDARD DRAWINGS. SPECIAL PROVISIONS AND MANUFACTURER'S RECOMMENDATIONS. CONDUIT CROSSING LAS VEGAS BOULEVARD SHALL BE PLACED WITHIN PAVEMENT REPLACEMENT LIMITS AS SHOWN ON SHEET C-1.
  2. CONTRACTOR TO POTHOLE AND VERIFY LOCATION OF 36" WATER LINE PRIOR TO TRAFFIC SIGNAL FOUNDATION AND CONTROLLER CABINET INSTALLATION.
  3. CONTRACTOR SHALL PROVIDE LAYER 2 FIELD-HARDENED ETHERNET SWITCH TO RTC/FAST PER USSCCA SEC. NO. 684
  4. CONTRACTOR SHALL PROVIDE A VIDEO ENCODER FOR EACH CCTV CAMERA TO RTC/FAST PER USSCCA SEC. NO. 685
  5. EACH DETECTION LOOP SHALL BE INDIVIDUALLY HOME RUN TO THE CONTROLLER CABINET FOR TRAFFIC COUNTS.
  6. PROVIDE A MIN. 12" VERTICAL CLEARANCE BETWEEN EXIST. WATER MAIN AND PROPOSED DRY UTILITY PER UDACS SECTION 2.04.06



REV No.	DATE	DESCRIPTION	APPROVED



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
**TRAFFIC SIGNAL PLAN**  
**WELCOME TO LAS VEGAS SIGN / LAS VEGAS BOULEVARD**  
**CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS**



DESIGNED BY: V. PARIMI  
 DRAWN BY: D. PUBLLOW  
 CHECKED BY: K. GILBRETH  
 DATE: JUNE 4, 2014

**CH2MHILL.**  
 2485 VILLAGE VIEW DRIVE, SUITE 350  
 HENDERSON, NEVADA 89074  
 PHONE: 702-369-6175, FAX: 702-369-1107

SCALE	HORIZ: 1"=20'	VERT: NONE	FIELD BOOK	WORK ORDER	PROJECT No. 478136	SHT: 22 OF 23
L-2042			DRAWING NO.		<b>TS-1</b>	

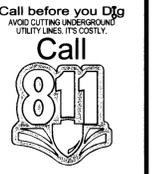
478136-LVSN-Traffic.dwg

CONDUIT AND WIRE SCHEDULE																		
WIRE & CABLE	FROM	TO	VIA CONDUIT															
			31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	
(4) #4 THW & (1) #8 GROUND	SERVICE PEDESTAL	CONTROLLER	X															
25 CONDUCTOR #14	CONTROLLER	POLE A		X														
15 CONDUCTOR #14	CONTROLLER	POLE B		X														
15 CONDUCTOR #14	CONTROLLER	POLE C		X														
25 CONDUCTOR #14	CONTROLLER	POLE D		X														
(2) #10 THW & (1) #8 GROUND	CONTROLLER	LUMINAIRE A		X														
(2) #10 THW & (1) #8 GROUND	CONTROLLER	LUMINAIRE D		X														
M138 OPTICAL CABLE	CONTROLLER	POLE A		X														
M138 OPTICAL CABLE	CONTROLLER	POLE D		X														
6 PAIR #18 MULTI CONDUCTOR LOOP LEAD-IN CABLES	CONTROLLER	COUNT LOOPS 2B, 2C, 2D		X														
6 PAIR #18 MULTI CONDUCTOR LOOP LEAD-IN CABLES	CONTROLLER	COUNT LOOP 2E		X														
6 PAIR #18 MULTI CONDUCTOR LOOP LEAD-IN CABLES	CONTROLLER	COUNT LOOPS 6B, 6C, 6D		X														
CCTV COAXIAL AND DATA CABLE PER MANUFACTURER	CONTROLLER	POLE A		X														
CCTV COAXIAL AND DATA CABLE PER MANUFACTURER	CONTROLLER	POLE D		X														
12-STRAND CDCA CABLE	CONTROLLER	EXIST. TYPE 200 SPLICE VAULT											X	X	X	X	X	
6 PAIR PE 39 #22 AWG CABLE	CONTROLLER	EXIST. P30 PULL BOX											X	X	X	X	X	
(QUANTITY) CONDUIT SIZE IN INCHES			(1) 3"	(6) 3"	(1) 3"	(1) 2"	(3) 3"	(1) 2"	(3) 3"	(1) 2"	(3) 3"	(1) 3"	(1) 3"	(1) 4"	(1) 3"	(EX) 3"	(1) 4"	(EX) 4"

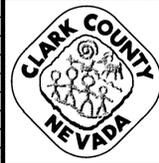
POLE SCHEDULE														
POLE NO.	LOCATION STATION (OFFSET)	POLE				SIGNAL (VEH.)			SIGNAL (PED.)		PEDESTRIAN PUSH BUTTON		REMARK	
		TYPE	SIGNAL ARM		LUM. ARM		TYPE	QTY.	QUAD.	TYPE	QUAD.	QUAD. (PHASE)		SIGN
			QUAD.	LENGTH	QUAD.	LENGTH								
A	"LV" 26+05 121.61' RT	XX-A-30	1	35'	1	15'	M-2 B-TT	3 1	MAST ARM 3	W-0T	3	2	RT	INSTALL POLE ON TYPE "L" FOUNDATION PER USDCCA DWG NO. 722
B	"LV" 26+05 50.52' RT	1-B								W-1T	POST TOP	4	RT	INSTALL POLE ON TYPE "C" FOUNDATION PER USDCCA DWG NO. 717
C	"LV" 25+98 21.50' RT	1-B								W-1T	POST TOP	2	RT	INSTALL POLE ON TYPE "C" FOUNDATION PER USDCCA DWG NO. 717
D	"LV" 25+98 20.92' LT	XX-A-30	3	35'	3	15'	M-2 B-TT	3 1	MAST ARM 1	W-0T	1	4	RT	INSTALL POLE ON TYPE "L" FOUNDATION PER USDCCA DWG NO. 722



AVOID OVER-HEAD POWER LINE CONTACT. IT'S COSTLY.  
**Call before you Dig**  
**Overhead**  
 1-702-227-2929  
 NV ENERGY ENVIRONMENT AND SAFETY SERVICES DEPARTMENT



REV NO.	DATE	DESCRIPTION	APPROVED



**WELCOME TO LAS VEGAS SIGN PARKING LOT ON SOUTH LAS VEGAS BOULEVARD**  
 TRAFFIC SIGNAL PLAN  
**WELCOME TO LAS VEGAS SIGN / LAS VEGAS BOULEVARD**  
 CLARK COUNTY, NEVADA DEPARTMENT OF PUBLIC WORKS



DESIGNED BY: V. PARIMI  
 DRAWN BY: D. PUBLLOW  
 CHECKED BY: K. GILBRETH  
 DATE: June 4, 2014  
**CH2MHILL.**  
 2485 VILLAGE VIEW DRIVE, SUITE 350  
 HENDERSON, NEVADA 89074  
 PHONE 702-369-6175, FAX 702-369-1107

SCALE  
 HORIZ: 1"=20'  
 VERT: NONE  
 FIELD BOOK  
 WORK ORDER  
 PROJECT No. 478136

L-2042  
 DRAWING NO.  
**TS-2**  
 SHT. 23 OF 23