

CITY OF LAS TRAFFIC SIGNAL NOTES (CIP)

1. ALL WORK PERFORMED ON ANY TRAFFIC SIGNAL COMPONENT MUST BE UNDER THE DIRECT ON-SITE SUPERVISION OF AN IMSA CERTIFIED TECHNICIAN. THE LEVEL OF CERTIFICATION REQUIRED SHALL BE LEVEL II.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ALL EXISTING UTILITIES. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES TO VERIFY IN THE FIELD THE LOCATIONS OF THEIR INSTALLATIONS 72 HOURS PRIOR TO CONSTRUCTION.
- CALL-BEFORE-YOU-OVERHEAD 1-702-227-2929
CALL-BEFORE-YOU-DIG 1-800-227-2600
STREETLIGHTS 1-702-229-6331
F.A.S.T. 1-702-432-5300
3. ALL TRAFFIC SIGNAL INSTALLATIONS SHALL CONFORM TO THE UNIFORM STANDARD DRAWINGS SPECIFICATIONS AND SPECIAL PROVISIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, VOLUMES I AND II, ADOPTED BY THE REGIONAL TRANSPORTATION COMMISSION APRIL 8, 1992 WITH ALL SUBSEQUENT REVISIONS. BRACKET MOUNTED (SIDE-MOUNTED) VEHICLE SIGNAL ASSEMBLIES WITH 2 OR MORE SIGNAL HEADS SHALL HAVE AN ADDITIONAL ELBOW AS SHOWN IN UNIFORM STANDARD DRAWING NUMBER 863 AND SHOWN AS OPTION B IN UNIFORM STANDARD DRAWING NUMBER 844, AND SHALL HAVE A MENEFALLAC SUPPORT AS SHOWN IN UNIFORM STANDARD DRAWING NUMBER 863 IF ONE OF THE SIGNAL HEADS CONTAINS 4 OR MORE SIGNAL MODULES.
4. NOT USED
5. NOT USED
6. NOT USED
7. NOT USED
8. CHECK CONDUIT AND CABLE SCHEDULE FOR CONDUIT, CABLE, AND WIRE SIZE. VERIFY ALL EXISTING CONDUIT RUNS.
9. NOT USED
10. NOT USED
11. NOT USED
12. NOT USED
13. NOT USED
14. NOT USED
15. NOT USED
16. NOT USED
17. NOT USED
18. NOT USED
19. VIDEO DETECTION SYSTEMS SHALL BE TS2 COMPATIBLE AND SHALL INPUT DETECTOR CALLS TO THE CONTROLLER THROUGH AN SDLC CABLE. SYSTEMS WILL BE ITERIS EDGE, 2-IN PROCESSORS WITH VRACKS-PS, EDGE2-TS2-IM-PAK AND EDGECONNECT PAK (IF ADDRESSABLE). WHEN VIDEO DETECTION IS SPECIFIED ON THE TRAFFIC SIGNAL PLANS, ALL VIDEO DETECTION SYSTEMS WILL BE STAND ALONE SYSTEMS TO INCLUDE ALL NECESSARY EQUIPMENT TO PROGRAM THE VIDEO DETECTION SYSTEM. A PROGRAMMING "MOUSE", KEYPAD OR LAPTOP COMPUTER (IF REQUIRED FOR PROGRAMMING THE VIDEO DETECTION SYSTEM) AND APPROPRIATE SOFTWARE WILL BE SUPPLIED WITH EACH VIDEO SYSTEM. PERSONAL COMPUTERS (PCs) MAY NOT BE SUBSTITUTED FOR LAPTOPS. A VIDEO MONITOR (COLOR FLAT SCREEN) 9" TO 13" WILL BE SUPPLIED WITH EACH VIDEO DETECTION SYSTEM. EACH VIDEO CAMERA WILL HAVE POWER AND VIDEO CABLE DIRECTLY FROM THE CABINET. COAXIAL CABLE WILL BE TYPE 8281 (SOLID CENTER CONDUCTOR). CAMERAS THAT USE A PREFABRICATED CABLE INTEGRATING POWER AND COAXIAL CABLE INTO A SINGLE WEATHERPROOF CONNECTOR ARE ACCEPTABLE. "BNC" ARE THE ONLY ACCEPTABLE TERMINATION OF COAXIAL CABLES. CAMERAS WILL BE MOUNTED PER MANUFACTURER'S RECOMMENDATIONS AND PER CLV TRAFFIC ENGINEER APPROVAL. VIDEO CAMERAS SHALL BE COLOR AND SHALL BE MOUNTED ON A MINIMUM 6 FOOT RISER ON THE SIGNAL MAST ARM WITH EXTENSION BRACKETS (TYPE AG-0175-74-62 OR EQUIVALENT). THE LOCATION OF THE CAMERA ON THE MAST ARM SHALL BE APPROVED BY THE TETO TRAFFIC SIGNAL SUPERVISOR. A VIDEO FILTER (CXD6-BNYC OR EQUIVALENT) WILL BE INSTALLED IN THE SIGNAL CABINET FOR EACH CAMERA VIDEO INPUT. VIDEO DETECTION PROCESSORS AND COMMUNICATIONS CARDS SHALL BE PROVIDED WITH THE LATEST VERSIONS OF THE MANUFACTURER'S SOFTWARE. THE CONTRACTOR SHALL AIM CAMERAS AND PROGRAM AND CONFIGURE THE VIDEO DETECTION PROCESSORS TO PROVIDE A FULLY FUNCTIONING SYSTEM.
20. NOT USED
21. OPTICAL PREEMPTION UNITS WILL BE GLOBAL TRAFFIC TECHNOLOGIES (ENCODING CAPABLE), MODEL 764 OPTICOM PHASE SELECTOR INSTALLED IN A MODEL 760 RACK WITH A MODEL 768 AUXILIARY INTERFACE PANEL (AIP) MOUNTED IN THE CABINET AND FULLY WIRED FOR GREEN SENSE CAPABILITIES. OPTICAL SENSORS WILL BE MODEL 721 WITH ONE DETECTOR PER DIRECTION, UNLESS SHOWN OTHERWISE IN THE PLANS, AND WILL BE INTERFACED TO THE TRAFFIC SIGNAL CONTROLLER CABINET WITH M-138 CABLE. THE SOUTHBOUND OPTICOM DETECTOR SHALL BE WIRED TO INPUT PREEMPTS ON CHANNEL 1 IN THE PHASE SELECTOR, EASTBOUND ON CHANNEL 2, NORTHBOUND ON CHANNEL 3, AND WESTBOUND ON CHANNEL 4, UNLESS VARIATIONS ARE APPROVED BY THE TRAFFIC SIGNAL SUPERVISOR. WHEN 764 PHASE SELECTORS ARE ADDED TO A CABINET WITHOUT A 768 AIP, THE CONTRACTOR SHALL INSTALL AND WIRE A NEW 768 AIP.
22. IF THE IMPROVEMENTS NECESSITATE THE OBLITERATION, TEMPORARY CONSTRUCTION, TEMPORARY REMOVAL, OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE CITY.
23. INTERCONNECT CABLE SHALL BE AS SHOWN IN THE WIRE SCHEDULE.
24. NOT USED
25. WHERE THE PLANS CALL FOR REMOVAL AND SALVAGE OF EXISTING TRAFFIC SIGNAL EQUIPMENT, THE CONTRACTOR SHALL CALL 702-229-6331 TO SPEAK TO A TRAFFIC FIELD SUPERVISOR TO ARRANGE FOR DELIVERY TIMES AND LOCATIONS.
26. THE CONTRACTOR SHALL MAINTAIN EXISTING SIGNALS THROUGH THE LIFE OF THE PROJECT PER SECTION 623.6.03.01N OF THE CLV SPECIAL PROVISIONS.

REVISED NOVEMBER 21, 2018

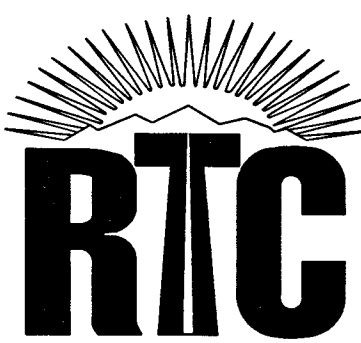
LEGEND

10+00	CENTERLINE
-----	EASEMENT LINE
-----	EXISTING RIGHT-OF-WAY LINE
-----TEL-----	EXISTING TELEPHONE LINE
-----CATV-----	EXISTING CABLE TV LINE
-----SD-----	EXISTING STORM DRAIN LINE
-----ELE-----	EXISTING UNDERGROUND POWER LINE
-----DHP-----	EXISTING OVERHEAD POWER LINE
-----SS-----	EXISTING SANITARY SEWER LINE
-----GAS-----	EXISTING GAS LINE
-----DHP/TEL-----	EXISTING OVERHEAD POWER LINE AND TELEPHONE
	EXISTING NVE TRANSFORMER
	EXISTING 200 AMP PADMOUNTED SERVICE PEDESTAL
	EXISTING POWER POLE
	EXISTING CABLE TV PULL BOX
	EXISTING TELEPHONE PULL BOX
-----	EXISTING TRAFFIC SIGNAL CONDUIT
-----2" ITS-----	EXISTING 2" FIBER OPTIC CONDUIT
-----3" ITS-----	EXISTING 3" FIBER OPTIC CONDUIT
-----4" ITS-----	EXISTING 4" FIBER OPTIC CONDUIT
	EXISTING CONTROLLER CABINET
	EXISTING CCTV CAMERA
	EXISTING OPTICOM DETECTOR
	EXISTING NO. 3 1/2 PULL BOX
	EXISTING NO. 5 PULL BOX
	EXISTING NO. 7 PULL BOX
	EXISTING P30 PULL BOX
	EXISTING TYPE 200 SPLICE VAULT
	EXISTING CONDUIT NO. (SEE CONDUIT AND WIRE SCHEDULE)
	NEW CCTV CAMERA
	NEW GPS EMERGENCY VEHICLE PRE-EMPTION
-----	NEW TRAFFIC SIGNAL CONDUIT
-----2" ITS-----	NEW 2" FIBER OPTIC CONDUIT
-----3" ITS-----	NEW 3" FIBER OPTIC CONDUIT
-----4" ITS-----	NEW 4" FIBER OPTIC CONDUIT
	NEW CONTROLLER CABINET
	NEW NO. 3 1/2 PULL BOX
	NEW NO. 5 PULL BOX
	NEW NO. 7 PULL BOX
	NEW P30 PULL BOX
	NEW TYPE 200 SPLICE VAULT
	NEW CONDUIT NO. (SEE CONDUIT AND WIRE SCHEDULE)

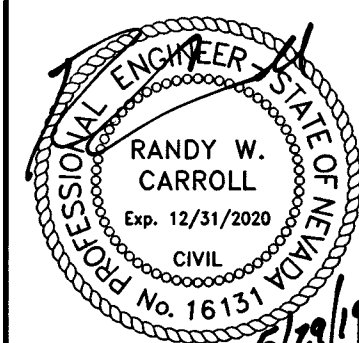
ABBREVIATIONS

AVAR	AIR VACUUM AIR RELIEF VALVE	SL	STREET LIGHT
AVE	AVENUE	SNWA	SOUTHERN NEVADA WATER AUTHORITY
BC	BACK OF CURB	SS	SANITARY SEWER
BLVD	BOULEVARD	STA	STATION
BSW	BACK OF SIDEWALK	STD	STANDARD
CATV	UNDERGROUND CABLE TV	ST	STREET
CCPW	CLARK COUNTY PUBLIC WORKS	STL	STEEL
CCTV	CLOSED CIRCUIT TELEVISION	SV	SPLICE VAULT
CCWRD	CLARK COUNTY WATER RECLAMATION DISTRICT	SW	SOUTHWEST/SIDEWALK
CDCA	COMMUNICATION DISTRIBUTION CABLE ASSEMBLY	TEL	TELEPHONE
CG	CURB AND GUTTER	TS	TRAFFIC SIGNAL
CL	CENTERLINE	TYP	TYPICAL
CONC	CONCRETE	USD	UNIFORM STANDARD DRAWING
DB	DIRECT BURY	USS	UNIFORM STANDARD SPECIFICATIONS
DR	DRIVE	W	WATER or WEST
DWG	DRAWING		
E	EAST	ALIGNMENT ABBREVIATIONS	
EA	EACH	"CB"	CHARLESTON BOULEVARD
ELEC	ELECTRICAL		(COMMERCE STREET TO FREMONT STREET)
EP or EOP	EDGE OF PAVEMENT		
ESMT	EASEMENT		
EVP	EMERGENCY VEHICLE PRE-EMPTION		
EX	EXISTING		
FAST	FREEWAY & ARTERIAL SYSTEM OF TRANSPORTATION		
FC	FACE OF CURB		
FT	FOOT/FEET		
GPS	GLOBAL POSITIONING SYSTEM		
IC	INTERCONNECT		
ITS	INTELLIGENT TRANSPORTATION SYSTEM		
LF	LINEAR FEET		
LN	LANE		
LT	LEFT		
LVVWD	LAS VEGAS VALLEY WATER DISTRICT		
MAX	MAXIMUM		
MH	MANHOLE		
MIN	MINIMUM		
N	NORTH		
NDOT	NEVADA DEPARTMENT OF TRANSPORTATION		
NE	NORTHEAST		
NO	NUMBER		
NTS	NOT TO SCALE		
NVE	NV ENERGY		
NW	NORTHWEST		
OC	ON CENTER		
OHP	OVERHEAD POWER LINE		
PB	PULL BOX		
PKWY	PARKWAY		
PP	POWER POLE		
PR	PAIR		
PROP	PROPOSED		
PVMT	PAVEMENT		
RD	ROAD		
RDWY	ROADWAY		
RT	RIGHT		
R/W	RIGHT-OF-WAY		
S	SOUTH		
SD	STORM DRAIN		
SE	SOUTHEAST		
SHT	SHEET		

REV. NO.	DATE	DESCRIPTION	APPROVED



CHARLESTON BOULEVARD ITS INFRASTRUCTURE
INDEX OF DRAWINGS AND ABBREVIATIONS
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA



PROJECT No: TSC1802	DRAWN BY: JAS	SCALE	DRAWING NO.
DESIGNED BY: JAS	CHECKED BY: JSR	HORIZ: AS SHOWN	G-2
APPROVED BY:		VERT: AS SHOWN	SHT. 2 OF 11
		FIELD BOOK	49-00948
			115-442



CITY OF LAS VEGAS SEWER NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE DESIGN AND CONSTRUCTION STANDARDS FOR WASTEWATER COLLECTION SYSTEMS AND THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS' CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA, AS AMENDED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BE AWARE OF THE CONTENTS OF THE ABOVE SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM CONSTRUCTION AS PER PLANS, ANY ADDITIONS, DELETIONS, OR CHANGES SHALL FIRST MEET WITH THE APPROVAL OF THE CITY ENGINEER.
3. CHISEL "S" OR "C" IN CURBS WHERE SEWER OR GAS LATERALS PASS UNDER THE CURB.
4. POLYVINYL (PVC) SEWER PIPE SHALL MEET ASTM D-3034 SDR 35 SPECIFICATIONS, INSTALLED WITH SAND BEDDING AND BACKFILL OF TYPE II AGGREGATE BASE.
5. ALL MANHOLES PAVED IN STREETS EIGHTY (80') FOOT R/W AND LARGER SHALL HAVE CONCRETE COLLARS. STREETS LESS THAN EIGHTY (80') FOOT R/W WILL REQUIRE RETROFIT IF PAVING DOES NOT CONFORM TO CITY STANDARDS AT THE MANHOLE.
6. TEE SADDLES SHALL BE USED TO CONNECT SEWER LATERALS TO EXISTING MAIN LINES UP TO TWELVE INCH (12") DIAMETER, CONNECTIONS TO FIFTEEN INCH (15") OR LARGER MAINS SHALL REQUIRE SPECIAL PROCEDURES. IN LINE "Y" SHALL BE USED ON LINES TWELVE INCHES (12") OR ABOVE.
7. WATER MAINS SHALL BE PROTECTED IN ACCORDANCE WITH LVWD STANDARDS WHENEVER A SEWER MAIN CROSSES OVER A WATER MAIN OR THE SEWER IS LESS THAN EIGHTEEN INCH (18") UNDER A WATER MAIN.
8. ALL CONTRACTORS INSTALLING SEWER MAINS THAT WILL BE UNDER THE JURISDICTION OF THE CITY OF LAS VEGAS MUST BE STATE OF NEVADA CLASS "A" CONTRACTORS.
9. THE CITY OF LAS VEGAS WILL NOT ACCEPT ANY SEWER MAINS WHICH HAVE A VERTICAL DEFLECTION OF MORE THAN ONE TENTH (0.1) OF A FOOT FROM THE APPROVED CONSTRUCTION PLANS AT ANY LOCATION. SEWER MAINS FOUND TO EXCEED THIS TOLERANCE WILL HAVE TO BE REPAIRED OR REMOVED OR REPLACED TO THE SATISFACTION OF THE CITY ENGINEER PRIOR TO ACCEPTANCE BY THE CITY OF LAS VEGAS.
10. INSTALLATION OF CURVED SEWER REQUIRES THE USE OF C-900 PIPE WHICH ALLOWS FOR PIPE DEFLECTION AT THE JOINTS.

REVISED 04/15/10

1. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATED IN, THE PUBLIC RIGHTS OF WAY OF CLARK COUNTY AS A RESULT OF CONSTRUCTION ACTIVITY. CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE CONSTRUCTION PROJECT. SUCH MATERIALS SHALL BE PREVENTED FROM ENTERING THE STORM SEWER SYSTEM.
2. ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER OR CONTRACTOR TO PREVENT POLLUTANTS FROM ENTERING THE STORM SEWER SYSTEM. THESE PRACTICES SHALL MEET THE PERFORMANCE STANDARD IN THE USDOCA AND THE LAS VEGAS VALLEY CONSTRUCTION SITE BMP GUIDANCE MANUAL.
3. TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS POSSIBLE AND NO LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. SOME EXCEPTIONS MAY APPLY; REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR100000, SECTION III.A.5.
4. ALL PLANS, SIGNAGE, AND MATERIALS SHALL BE PROTECTED FROM DAMAGE. SIGNAGE SHALL BE USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMPs WEEKLY, AND WITHIN 24 HOURS AFTER ANY RAIN EVENT OF 0.5 INCHES OR GREATER. CONTRACTORS SHALL MAINTAIN UPDATES TO THE SIGNAGE AND MATERIALS STORAGE AND PREVENTION PLAN AS NECESSARY. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS SUSPENSION OF LAND DISTURBANCE ACTIVITIES. REFER TO THE NEVADA STORMWATER GENERAL PERMIT FOR CONSTRUCTION ACTIVITY NVR 100000, SECTION III.A.12.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS. STREET NAME SIGNS SHALL CONFORM TO THE NOTICE TO CLARK COUNTY AREA STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH CLARK COUNTY AREA STANDARDS. ALL SIGNS SHALL USE TYPE III SHEETING.

1. 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 THE START OF CONSTRUCTION. FOR FUTURE INSPECTION, THE LVVWD INSPECTION DIVISION SHALL BE ADVISED PRIOR TO THE COMPLETION OF LVVWD INSPECTION. WHEN REQUESTING INSPECTIONS, PLEASE REFER TO THE PROJECT NUMBER IDENTIFIED ABOVE.
2. 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.
3. ALL WORK EXCEPT FOR THE WORK DESCRIBED IN 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, IMPROVEMENTS, CLARK COUNTY AREA.
4. A SLOPE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE TYPE K COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
6. ALL WATER METER LOCATIONS SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. ALL WATER AND STORM DRAIN OR SANITARY SEWER CROSSINGS SHALL CONFORM TO SECTION 2.22 OF THE 2010 EDITION.
9. ALL WATER FACILITIES AND APPURTENANCES SHALL BE DISINFECTED, PRESSURE TESTED, AND HAVE AN ACCEPTABLE PASTING HOST WATER SAMPLE OBTAINED, PRIOR TO OPERATION AND USE.
10. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) WORKING DAYS PRIOR TO METER PICKUP. CALLERS: TELEPHONE 3152 OR 258-7171. TWO (2) WORKING DAYS PRIOR TO METER PICKUP.
11. 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 THE LVVWD PRIOR TO ANY SHUTDOWNS.
12. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD APPROVED PRODUCTS LIST FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS BY SUBMITTING SHOP DRAWINGS.
13. TELEPHONE "CALL FOR YOU DIG" AT "B11" OR 1-800-227-2600.
14. THE INSTALLATION OF 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 WORK DONE BY THE CONTRACTOR TO EXCEED THE UNIFORM STANDARD SPECIFICATIONS, INCLUDING THE PLACEMENT OF AN APPROPRIATELY SIZED ASPHALT REPAIR PATCH ON THE STREET SURFACE.

LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
LWVD PROJECT NO. 136352 FIRST APPROVED DATE: 6-3-19

3. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLICWORKS CONSTRUCTION OFFSITE IMPROVEMENTS, CLARK COUNTY AREA NEVADA," LATEST EDITION; THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, CLARK COUNTY AREA NEVADA," LATEST REVISED EDITION; THE "SUMMERLIN IMPROVEMENT STANDARDS" FOR WORK IN THE SUMMERLIN AREA; AND OTHER APPLICABLE APPROVED STANDARDS ISSUED BY THE CONTROLLING AGENCY; THE UNIFORM BUILDING CODE; AND ALL LOCAL CITY CODES AND ORDINANCES APPLICABLE, EXCEPT AS NOTED ON THIS SHEET AS "DEVIATIONS FROM STANDARDS".
4. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. EXISTING UTILITIES AS SHOWN FROM CIVIL PLANS LIBRARY ARE APPROXIMATE AND FOR RECORD PURPOSES. EXISTING UTILITIES ARE LOCATED ON PLANS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR. EXISTING UTILITY SERVICE LATERALS MAY NOT BE SHOWN ON THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, LOCATE ALL UNDERGROUND AND OVERHEAD INTERFERENCE WHICH MAY AFFECT HIS OPERATION DURING CONSTRUCTION AND SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE. TO SAME, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING WITH OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT, AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
5. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING UTILITY LINES, STRUCTURES AND STREET IMPROVEMENTS WHICH ARE TO REMAIN IN PLACE, FROM DAMAGE, AND ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED SATISFACTORY TO THE CITY ENGINEER AND OWNING UTILITY COMPANY AT THE EXPENSE OF THE CONTRACTOR.
6. ALL CONSTRUCTION SHALL BE AS SHOWN ON THESE PLANS, ANY REVISIONS SHALL HAVE THE PRIOR WRITTEN APPROVAL OF THE CITY ENGINEER.
7. TYPE V CEMENT SHALL BE USED IN ALL OFF-SITE CONCRETE WORK. CONCRETE TO BE 3000 P.S.I. MINIMUM @ 28 DAYS. MIX DESIGNS TO BE APPROVED BY THE CITY, PRIOR TO THE USE ON THE PROJECT.
8. PERMITS ARE REQUIRED FOR ANY WORK IN THE PUBLIC RIGHT-OF-WAY. THE CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS REQUIRED FOR THIS CONSTRUCTION.
9. EXPANSION JOINTS REQUIRED, MAXIMUM EVERY 300' IN EXTRUDED-TYPE CURB.
10. AC PAVEMENT TO BE ONE-HALF INCH (1/2") ABOVE LIP OF ALL GUTTERS AFTER COMPACTION, EXCEPT AT SIDEWALK RAMPS AND CROSS GUTTERS.
11. CURB AND GUTTER FACING TO BE UNACCEPTABLE TO THE CITY OF LAS VEGAS SHALL BE REMOVED AND REPLACED PER STANDARD DRAWING 216.
12. SIDEWALK RAMPS SHALL BE CONSTRUCTED IN EACH QUADRANT OF AN INTERSECTION PER STANDARD DRAWING 235. EXACT LOCATION OF RAMPS MAY BE ADJUSTED IN THE FIELD BY A CITY INSPECTOR.
13. CONTRACTOR SHALL PROVIDE ALL NECESSARY HORIZONTAL AND VERTICAL TRANSITIONS BETWEEN NEW CONSTRUCTION AND EXISTING SURFACES TO PROVIDE FOR PROPER DRAINAGE AND FOR INGRESS AND EGRESS TO NEW CONSTRUCTION, THE EXTENT OF THE TRANSITIONS TO BE AS SHOWN ON PLANS.
14. ALL GRADING WORK SHALL CONFORM TO THE SOILS REPORT AS PREPARED BY THE (COMPANY, REPORT #, DATE) APPROVED BY THE CITY ENGINEER, AND AS SHOWN ON THESE PLANS.
15. EXACT LOCATION OF ALL SAWCUT LINES MAY BE ADJUSTED OR DETERMINED IN THE FIELD BY A CITY OF LAS VEGAS ENGINEER IF LOCATION ON PLANS IS NOT CLEARLY SHOWN, OR EXISTING PAVEMENT CONDITION REQUIRES RELOCATIONS.
16. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING PERMANENT SURVEY MONUMENTS, ANY MONUMENTS DISTURBED SHALL BE REPLACED AND ADJUSTED PER AVAILABLE RECORDS IN ACCORDANCE WITH STATUTE NO. 625.380 & CITY OF LAS VEGAS TITLE 18, APPENDIX D.
17. UTILITY COMPANY METER BOXES, MANHOLE LIDS, VALVE COVERS, ETC., SHALL BE LOCATED OUT OF DRIVEWAYS, DRIVEWAY APRONS, FLOWLINES, AND CROSS GUTTERS UNLESS WRITTEN APPROVAL IS GRANTED BY THE UTILITY COMPANY AND THE CITY ENGINEER.

16. ALL WALLS, NEW OR EXISTING, ARE ONLY SHOWN ON CIVIL PLANS FOR THE PURPOSE OF REVIEWING GRADING RELATIONSHIPS; FLOOD CONTROL AND SIGHT DISTANCE AT INTERSECTIONS. NEW WALLS REQUIRE A SEPARATE PERMIT AND INSPECTION BY THE BUILDING DEPARTMENT.
 17. ASPHALT MIX DESIGN MUST BE SUBMITTED AND APPROVED BY THE CITY ENGINEER PRIOR TO THE PLACEMENT OF ASPHALT WITHIN CITY RIGHT OF WAY.
 18. CONTRACTOR SHALL ADJUST ALL NEW AND EXISTING INLETS, VALVE BOXES, MANHOLE RIMS, AND SEWER CLEAN OUTS, ETC. TO FINISH GRADE AS APPLICABLE WHETHER OR NOT THEY ARE SHOWN ON THE PLANS.
 19. MATERIALS, HANDLING AND PLACEMENT OF PORTLAND CEMENT CONCRETE SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF NDOT OR THE CLARK COUNTY AREA SPECIFICATIONS (AS APPLICABLE) AND THE PLANS AND DETAILS SHOWN HEREON.
 20. WHEN INSTALLING UNDERGROUND FACILITIES THAT REQUIRE UNDERGROUND LOCATING DEVICES SUCH AS MARKER BALLS, LOCATING RIBBON, ETC., THE CONTRACTOR SHALL PROVIDE WRITTEN DOCUMENTATION TO OFSITE INSPECTION AND TESTING CERTIFYING THAT ALL DEVICES HAVE BEEN PLACED AND VERIFIED TO BE IN GOOD WORKING CONDITION PRIOR TO THE CONSTRUCTION OF ANY ROAD BASE.
 21. AFTER HAUNCHING AND PRIOR TO BACKFILL OPERATIONS WHICH WOULD COVER SANITARY SEWER AND STORM DRAIN FACILITIES, CONTRACTOR IS REQUIRED TO SCHEDULE CLIP OPEN-TRENCH UTILITY SURVEY INSPECTION FOR DETERMINATION OF FINAL LOCATION COORDINATES. FACILITIES TO BE LOCATED BY CLV SHALL INCLUDE AT A MINIMUM THE HORIZONTAL AND VERTICAL (INVERT) LOCATION OF PUBLIC SEWER MANHOLES, STORM DRAIN MANHOLES AND TRANSITION STRUCTURES, STORM DRAIN LATERALS AT THE CONNECTION TO THE STORM DRAIN MAIN AND AT THE CONNECTION TO A DROP INLET, THE CONNECTION OF SEWER SERVICE LATERALS TO THE SEWER MAIN AND WHERE THE SEWER SERVICE LATERALS EXIT THE PUBLIC RIGHT-OF-WAY, SEWER AND STORM DRAIN MAIN ALIGNMENT, INCLUDING DEFLECTION POINTS.
- OR
- (MAY BE USED ONLY ON PROJECTS ASSOCIATED WITH A TENTATIVE MAP CONTAINING 5 LOTS OR MORE)

1. ALL STREET LIGHTING INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE STREET LIGHTING PLANS, THE "UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION, AND THE "UNIFORM STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION OFF-SITE IMPROVEMENTS, CLARK COUNTY AREA, NEVADA", LATEST REVISION, AND ANY ADOPTED SPECIAL AREA STANDARDS.
2. NO DEVIATION OF STREET LIGHT, PULL BOX, CONDUITS (ETC.) LOCATIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL OF TRAFFIC ENGINEERING AND THE CITY ENGINEER.
3. ALL EXISTING STREET LIGHTING SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
4. ALL STREET LIGHTING CONDUITS STUB SHALL HAVE AT LEAST ONE GREEN #8 THW WIRE INSTALLED, AS TRACER WIRE. WHEN "EMPTY" CONDUIT IS COMPLETELY INSTALLED FROM PB TO PB, IT SHALL HAVE MINIMUM OF 2 #4 AND 1 #8 THW WIRE WITH THE ENDS TAPED OR "SAFE OFF" PRIOR TO FINAL INSPECTION.
5. ANY STRUCTURE SUCH AS BLOCK WALLS, CHAIN LINK FENCES, RETAINING WALLS, ETC., SHALL LEAVE A MINIMUM CLEARANCE IN ACCORDANCE WITH THE USD NO. 320A.
6. AS-BUILT DRAWINGS SHALL BE SUPPLIED TO THE TFO PRIOR TO ANY PRE-FINAL INSPECTION. THE AS-BUILT DRAWING NEEDS TO BE STAMPED AS-BUILT AND SIGNED BY THE PREPARER.
7. SERVICE POINT SHALL BE COORDINATED WITH NV ENERGY COMPANY, AND WHEREVER POSSIBLE, BE LOCATED NEAR THE CENTER OF THE CIRCUIT. SERVICE POINTS SHALL BE SHOWN ON THE CIVIL PLANS.
8. IT SHALL BE ASSUMED THAT IN THE ABSENCE OF AN EXISTING, WORKABLE CIRCUIT TO ATTACH TO, ALL INSTALLATIONS SHALL REQUIRE A NEW SERVICE FOR OPERATION OF THE CIRCUIT.
9. WHEREVER THERE IS AN OVERHEAD UTILITY THAT MAY CONFLICT WITH THE INSTALLATION OF STREET LIGHTING CIRCUITS AND/OR POLES, THESE CONFLICTS MUST BE RESOLVED BETWEEN THE DEVELOPER AND THE UTILITIES INVOLVED, AT NO EXPENSE TO THE CITY OF LAS VEGAS. BEFORE STREET LIGHTING BARES ARE INSTALLED.
10. THE CONTRACTOR SHALL FURNISH COMPLETE SERVICE TO TRANSFORMERS AND CONTROL SYSTEMS IF REQUIRED ON PLANS.
11. THE DEVELOPER/OWNER WILL BE REQUIRED TO SUPPLY POWER TO ALL NEW PUBLIC STREET LIGHTS INSTALLED UNDER THIS DESIGN PRIOR TO BOND RELEASE OR PROJECT COMPLETION. THE DEVELOPER/OWNER WILL BE RESPONSIBLE FOR ALL ITEMS ASSOCIATED WITH THE INSTALLATION, CONSTRUCTION, ENERGIZING, MAINTENANCE AND OPERATIONAL COST OF SAID STREET LIGHTS PRIOR TO PROJECT COMPLETION. REFER TO THE PLAN FOR ANY NEW SERVICE REQUIREMENTS, THE TRANSFER OF OWNERSHIP FROM THE DEVELOPER/OWNER TO THE CITY OF LAS VEGAS WILL BE NEW PUBLIC STREET LIGHT S/W AND/OR SERVICE/S INSTALLED UNDER THIS PLAN DESIGN WILL BE IN CONJUNCTION WITH THIS PROJECT COMPLETION. COORDINATE ALL MAINTENANCE AND OPERATIONAL TRANSFERS WITH THE CITY OF LAS VEGAS TRAFFIC ENGINEERING DEPARTMENT (TEFO) AT (702) 229-6331.

1. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE LAS VEGAS FIRE AND RESCUE ADOPTED FIRE CODE ORDINANCE # 6325 FOR HYDRANT SPECIFICATIONS AND HYDRANT INSTALLATION SPECIFICATIONS.
2. ONLY FIRE HYDRANTS THAT ARE ON THE LAS VEGAS VALLEY WATER DISTRICTS--APPROVED PRODUCTS LIST ARE ALLOWED TO BE INSTALLED.
3. A PERMIT IS REQUIRED FROM LAS VEGAS FIRE AND RESCUE FOR THE INSTALLATION OF ON-SITE WATER LINES AND ACCESS ROADS TO FIRE HYDRANTS. THE PERMIT CERTIFICATE FOR UNDERGROUND PIPING FORM SHALL BE OBTAINED FROM THE FIRE PROTECTION ENGINEER BEFORE COMMENCEMENT OF WORK. [FC § 105.7.12]
4. ON-RESIDENTIAL STREET INSTALLATIONS, FIRE HYDRANTS SHALL BE INSTALLED AND FIRE APPARATUS ACCESS ROADS SHALL BE MAINTAINED BEFORE COMMENCEMENT OF ANY COMBUSTIBLE CONSTRUCTION. ALL FIRE HYDRANTS SHALL BE IN GOOD WORKING ORDER AND SHALL BE CAPABLE OF DELIVERING THE REQUIRED FIRE FLOW. [FC § 3310, FC § 3312]
5. ALL HYDRANT ACCESS ROADS SHALL BE MAINTAINED AND SHALL BE PLACED A BLUE REFLECTIVE MARKER AT THE CENTER LINE OF THE STREET ADJACENT TO THE FIRE HYDRANTS. [FC § 507.5.7.3]
6. ALL UNDERGROUND INSPECTIONS, PRESSURE AND FLUSH VERIFICATIONS OF ALL FIRE HYDRANTS AND FIRE APPARATUS ACCESS ROADS SHALL BE COMPLETED BY THE FIRE DEPT. 48 HOURS PRIOR TO THE HYDRO TESTS WITH PRIOR FIRE PREVENTION APPROVAL. [FC § 106.3]
7. ALL ON-SITE UNDERGROUND WATER MAINS AND MATERIALS SHALL BE U.L. LISTED, A.W.W.A. APPROVED AND SHALL BE RATED FOR THE APPROPRIATE WORKING PRESSURE. [FC § 507.2.1, NFPA 1600]
8. PAINTING OF CURBS, FIRE HYDRANTS, PADS, PROTECTION OF FIRE HYDRANTS FROM PHYSICAL DAMAGE, AND ALL OTHER WORK NECESSARY PER PLANS SHALL BE COMPLETED BEFORE APPROVAL BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION. [FC § 507]
9. PRIOR TO THE FINAL OCCUPANCY, A FIRE FLOW TEST SHALL BE WITNESSED BY LAS VEGAS FIRE AND RESCUE, FIRE PREVENTION DIVISION TO VERIFY AVAILABILITY OF THE REQUIRED FIRE FLOW. [FC § 507]
11. FIRE HYDRANT SPACING SHALL BE AS FOLLOWS: [FC § C102]
 - RESIDENTIAL - 500 FT UNSPRINKLERED; 600 FT SPRINKLERED
 - COMMERCIAL - 300 FT UNSPRINKLERED; 400 FT SPRINKLERED
12. WHERE THE WATER MAINS AND FIRE HYDRANTS ON NEW STREETS ARE INSTALLED WHERE FIRE HYDRANTS ARE NOT NEEDED FOR PROTECTION OF THE STRUCTURES, FIRE HYDRANTS SHALL BE INSTALLED AT A MAXIMUM OF 1000 FT SPACING, TO PROVIDE FOR TRANSPORTATION HAZARDS. WHERE STREETS ARE PROVIDED WITH MEDIAN DIVIDERS OR HAVE FOUR (4) OR MORE TRAFFIC LANES WITH A TURN LANE, A TRAILER MAY BE TURNED AT 90 DEGREES. TURNING LANE ARE REQUIRED ON EACH SIDE OF THE STREET SPACED AT 500 FT ON AN ALTERNATING BASIS. [FC § C102.8]
13. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN THE RADIUS OF A CUL-DE-SAC OR WITHIN 20 FT OF THE END OF A CUL-DE-SAC.
14. NO FIRE HYDRANTS SHALL BE LOCATED WITHIN 6 FT OF ANY CURB RETURN, DRIVEWAY, POWER POLE, STREETLIGHT OR ANY OTHER OBSTRUCTION. [FC § C102.12]
15. A MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A ONE-TWO FAMILY DWELLING SHALL NOT EXCEED 300 FT. MEASURED BY A PARALLEL PARKING PERMITTED ON BOTH SIDES.
16. THE MAXIMUM DISTANCE FROM A FIRE HYDRANT TO A FIRE DEPARTMENT CONNECTION (FDC) SHALL NOT EXCEED 100 FT, AS MEASURED BY AN APPROVED ROUTE. [FC § C102.7]
17. THE MAXIMUM DISTANCE FROM A HYDRANT TO THE END OF A DEAD-END STREET SHALL NOT EXCEED 200 FT.
18. TWO (2) SOURCES OF SUPPLY ARE REQUIRED WHENEVER THERE IS 4 OR MORE FIRE HYDRANTS (SPRINKLER LEAD-INS ARE INSTALLED ON A SINGLE SYSTEM, SECTIONAL CONTROL VALVES SHALL BE INSTALLED SO THAT NO MORE THAN 2 FIRE HYDRANTS CAN BE OUT OF SERVICE DUE TO A BREAK). [FC § 503.2.1]
19. ALL FIRE APPARATUS ACCESS ROADS SHALL BE PAVED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES, AND SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF THE FIRE APPARATUS. [FC § 503.2.2]
20. THE GRADIENT FOR THE FIRE APPARATUS ACCESS ROADS SHALL NOT EXCEED 12% ANGLES OF APPROACH AND ANGLES OF FIRE DEPARTURE SHALL NOT EXCEED 6% FOR 25 FT PRIOR TO OR AFTER THE GRADE CHANGE. ADJACENT TO THE STRUCTURES GRADIENT SHALL NOT EXCEED 6%. [FC § 503.2.3]
21. THE TURNING RADIUS OF THE FIRE APPARATUS ACCESS ROADS SHALL BE NO LESS THAN 52 FT OUTSIDE AND 28 FT INSIDE TURNING RADIUS. [FC § 503.2.4]
22. VERTICAL CLEARANCE OF ALL FIRE APPARATUS ACCESS ROADS SHALL NOT BE LESS THAN 13FT 6". [FC § 503.2.5]
23. FIRE DEPARTMENT ACCESS ROADS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF NOT LESS THAN 40 FT FLOW LINE TO FLOW LINE WITH PARALLEL PARKING PERMITTED ON BOTH SIDES. NOT LESS THAN 32 FT FLOW LINE TO FLOW LINE WITH PARALLEL PARKING PERMITTED ON ONLY ONE SIDE OF THE FIRE APPARATUS ACCESS ROAD. NOT LESS THAN 24 FT WIDE, FLOW-LINE TO FLOW-LINE, WHERE NO PARKING IS PERMITTED ON EITHER SIDE. FIRE LANES THROUGH PARKING LOTS SHALL BE NOT LESS THAN 30 FT. [FC § 503.2.6]
24. IF A FIRE APPARATUS ACCESS ROAD SIGN IS REQUIRED WHEN ANY PORTION OF AN EXTERIOR WALL OF THE FIRST STORY IS LOCATED MORE THAN 150 FT FROM A FIRE DEPARTMENT VEHICLE ACCESS, THIS DISTANCE COULD BE INCREASED TO 250 FT IF THE BUILDING IS SPRINKLERED. [FC § 503.1.1]
25. ALL DEAD-ENDS OF ROADS AND DRIVEWAYS SHALL BE PROVIDED FOR 100 FEET OR MORE SWEELING UNITS, ROAD(S) WITH DEAD-ENDS OR WITH A SINGLE POINT OF ACCESS IN EXCESS OF 600 FT, COMMERCIAL AND INDUSTRIAL DEVELOPMENTS WHERE BUILDINGS EXCEED 2 STORIES OR 30 FEET IN HEIGHT, OR EXCEEDING 62,000 SQUARE FEET IN AREA. [FC § 503.1.2]
26. ALL DEAD-ENDS OF ROADS AND DRIVEWAYS SHALL BE PROVIDED FOR 100 FEET OR MORE SWEELING UNITS, ROAD(S) WITH DEAD-ENDS OR WITH A SINGLE POINT OF ACCESS IN EXCESS OF 150 FT IN LENGTH SHALL BE PROVIDED WITH AN APPROVED TURN AROUND HAVING A MINIMUM DIAMETER OF 81 FT. [FC § 503.2.5.2]
27. ALL FIRE APPARATUS ACCESS ROADS SHALL BE MARKED BY PLACING APPROVED SIGNS AT THE END OF THE ROAD. THE DESIGNATED FIRE LANE, ONE SIGN AT THE END OF THE FIRE LANE AND WITH SIGNS AT INTERVALS OF 100 FT ALONG THE DESIGNATED FIRE LANE. SIGNS TO BE PLACED ON BOTH SIDES OF AN ACCESS ROADWAY IF NEEDED TO PREVENT PARKING ON EITHER SIDE. SIGNS TO BE PLACED ON HIGHWAYS OR HIGHWAYS WITH A TURN LANE SHALL BE PLACED ON THE TURN LANE OR ALONG OR ON THE PAVEMENT OR CEMENT (IF NO CURB IS PROVIDED) SHALL BE PAINTED WITH A RED WEATHER RESISTANT PAINT IN ADDITION TO THE SIGNS. [FC § 503.3]
28. ELECTRICALLY CONTROLLED ACCESS GATEWAY SHALL BE INSTALLED WITH AN APPROVED EMERGENCY VEHICLE DETECTOR RECEIVER SYSTEM. SAID SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE FC § 503.6 AND FC APPENDIX M.

1. SLACK SHALL BE PROVIDED IN EACH P30 P.B. (30 FT) AND TYPE 200 S.V. (120 FT) UNLESS OTHERWISE NOTED.
2. PULL BOXES/SPICE VAULTS SHALL NOT BE INSTALLED IN SIDEWALK RAMPS OR DRIVEWAYS.
3. JUMP HOLES SHALL BE PROVIDED IN ALL NEW AND EXISTING TYPE 200 SPICE VAULTS FOR DRAINAGE.
4. 1-6 PR PE 32" J22 AWG INTERCONNECT CABLE SHALL BE INSTALLED IN NEW AND EXISTING CONDUIT AS SHOWN IN CONDUIT AND WIRE SCHEDULE.
5. TRENCHING FOR NEW CONDUIT SHALL BE PER DETAILS ON DRAWING IC-XX.
6. CONDUIT ROUTING IS FOR GENERAL PURPOSE ONLY. FOR THE PURPOSE OF CLARITY AND MAY DIFFER FROM ACTUAL INSTALLATION. FINAL LOCATION SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
7. ALL EXISTING ITS INFRASTRUCTURE SHALL BE MAINTAINED UNLESS OTHERWISE DIRECTED BY ENGINEER.
8. LOCATIONS OF THE PROPOSED FIBER OPTIC SYSTEM PULL BOXES SHOWN ON THE PLANS ARE APPROXIMATE. THE EXACT LOCATION OF THE PULL BOXES SHALL BE DETERMINED IN THE FIELD. THESE LOCATIONS SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER BEFORE INSTALLATION.

1. IN THE EVENT THAT ANY UNFORESEEN CONDITIONS NOT COVERED BY THESE NOTES ARE ENCOUNTERED DURING GRADING OPERATIONS, THE OWNER/ENGINEER SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTION.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ALL NECESSARY CUTS AND FILLS WITHIN THE LIMITS OF THIS PROJECT AND THE RELATED OFF-SITE WORK, SO AS TO GENERATE THE DESIRED SUBGRADE, FINISH GRADES AND SLOPES SHOWN.
3. CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ALL EXCAVATION. ADEQUATE SHORING SHALL BE DESIGNED AND PROVIDED BY THE CONTRACTOR TO PREVENT UNDERMINING OF ANY ADJACENT FEATURES OR FACILITIES AND/OR CAVING OF THE EXCAVATION.
4. THE CONTRACTOR IS WARNED THAT AN EARTHWORK BALANCE WAS NOT NECESSARILY THE INTENT OF THIS PROJECT. ANY ADDITIONAL MATERIAL REQUIRED OR LEFTOVER MATERIAL FOLLOWING EARTHWORK OPERATIONS BECOMES THE RESPONSIBILITY OF THE CONTRACTOR.
5. THE GRADING CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER TO PROVIDE FOR THE REQUIREMENTS OF THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ASSOCIATED PERMIT.
6. CONTRACTOR SHALL GRADE TO THE LINES AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION, IN THE AREAS INDICATED:

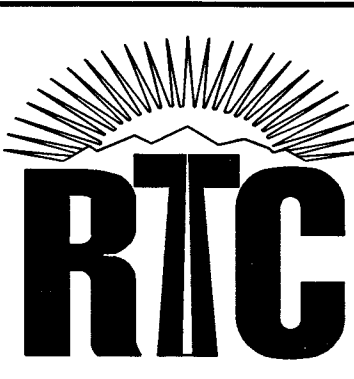
A. PAVEMENT AREA SUBGRADE	0.1+ 0.5+	HORIZONTAL VERTICAL	+0.0' TO -0.1' +0.1' TO -0.1'	SEE SOILS REPORT SEE SOILS REPORT
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7. COMPACTION TESTING WILL BE PERFORMED BY THE OWNER OR HIS REPRESENTATIVE.
8. ALL CUT AND FILL SLOPES SHALL BE PROTECTED UNTIL EFFECTIVE EROSION CONTROL HAS BEEN ESTABLISHED.
9. THE USE OF POTABLE WATER WITHOUT A SPECIAL PERMIT FOR BUILDING OR CONSTRUCTION PURPOSES INCLUDING CONSOLIDATION OF BACKFILL OR DUST CONTROL IS PROHIBITED. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR CONSTRUCTION WATER.
10. THE CONTRACTOR SHALL MAINTAIN THE STREETS, SIDEWALKS AND ALL OTHER PUBLIC RIGHT-OF-WAY IN A CLEAN, SAFE AND USABLE CONDITION. ALL SPILLS OF SOIL, ROCK OR CONSTRUCTION DEBRIS SHALL BE PROMPTLY REMOVED FROM THE PUBLICLY OWNED PROPERTY DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. ALL ADJACENT PROPERTY, PRIVATE OR PUBLIC SHALL BE MAINTAINED IN A CLEAN, SAFE AND USABLE CONDITION.
11. IN THE EVENT THAT ANY TEMPORARY CONSTRUCTION ITEM IS REQUIRED THAT IS NOT SHOWN ON THESE DRAWINGS, THE OWNER AGREES TO PROVIDE AND INSTALL SUCH ITEM AT HIS OWN EXPENSE AND AT THE DIRECTION OF THE ENGINEER. TEMPORARY CONSTRUCTION INCLUDES DITCHES, BERMES, ROAD SIGNS AND BARRICADES, ETC.

1. ALL CONSTRUCTION SIGNING, BARRICADING, AND TRAFFIC DELINEATION SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
2. THE STREET SIGN CONTRACTOR SHALL OBTAIN STREET NAMES AND BLOCK NUMBERING FROM THE PLANNING DEPARTMENT PRIOR TO THE BEGINNING OF ANY CONSTRUCTION.
3. BEFORE ANY WORK IS STARTED IN THE RIGHT-OF-WAY, THE CONTRACTOR SHALL INSTALL ALL ADVANCE WARNING SIGNS FOR THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL INSTALL TEMPORARY STOP SIGNS AT ALL NEW STREET ENCROACHMENTS INTO EXISTING CITY STREETS WHERE WARRANTED IMMEDIATELY AFTER FIRST PAVING WORK IS ACCOMPLISHED, AND SHALL MAINTAIN SAID SIGNS UNTIL PERMANENT SIGNS ARE INSTALLED.
4. WHEN A DESIGNATED "SUGGESTED ROUTE TO SCHOOL" IS ENCLOSED UPON BY A CONSTRUCTION WORK ZONE AND PUBLIC WORKS STAFF IDENTIFIES A NEED FOR STUDENTS TO BE ASSISTED IN THE SAFE CROSSING THROUGH THE CONSTRUCTION ZONE, THE CONTRACTOR SHALL WITH A DIAMOND GRADE CLASS 5 "CROSSING GUARD". THE GUARD SHALL BE PRESENT FOR THE FULL DURATION OF TIME THAT CHILDREN ARE LIKELY TO BE PRESENT.
5. WHEN NECESSARY TO NECESSITATE THE OBLITERATION, TEMPORARY OBSTRUCTION, TEMPORARY REMOVAL OR RELOCATION OF ANY EXISTING TRAFFIC PAVEMENT MARKING, SUCH PAVEMENT MARKING SHALL BE RESTORED OR REPLACED WITH LIKE MATERIALS TO THE SATISFACTION OF THE CITY TRAFFIC ENGINEER.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL PERMANENT SIGNS SHOWN ON THE PLANS AND ALL PLANS SHALL BE IN ACCORDANCE WITH THE CITY STANDARD CLASS 5 REFLECTIVE SHEETING OR APPROVED EQUIVALENT. ALL NEW TRAFFIC SIGNS, EXCEPT STREET NAME AND SCHOOL SPEED LIMIT SIGNS, SHALL HAVE 1/4" SERIES 1160 OR APPROVED EQUIVALENT ANTI-GRAFFITI PROTECTIVE OVERLAYS ON ALL SIGNS. ALL PLANS SHALL BE IN ACCORDANCE WITH THE CITY STANDARD CLASS 5 REFLECTIVE FILM. STREET NAME SIGNS SHALL CONFORM IN THEIR ENTIRETY TO CURRENT CITY STANDARDS. ALL OTHER SIGNS SHALL BE STANDARD SIZE UNLESS OTHERWISE SPECIFIED ON THE PLANS. ALL SIGN POSTS SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT CITY STANDARDS.
7. ALL PROPOSED SIGNPOSTS SHALL BE LOCATED AT LEAST FIVE (5') FEET OF ANY PROPOSED SIGN SHOWN ON THE PLANS TO BE MOUNTED ON A SIGNPOST. THE SIGN SHALL BE MOUNTED ON THE STREET LIGHT STANDARD AND THE SIGNPOST SHALL BE ELIMINATED.
8. ALL PERMANENT TRAFFIC CONTROL DEVICES CALLED FOR HEREON SHALL BE IN PLACE AND IN FINAL POSITION PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. ALL PORTIONS OF THE ROADWAY BEING IMPROVED HERE UNDER, REGARDLESS OF THE STATUS OF COMPLETION OF PAVING OR OTHER OFF-SITE IMPROVEMENTS CALLED FOR BY THESE PLANS.
9. STREET SIGNS AND STOP SIGNS SHALL BE INSTALLED PER CITY STANDARD SPECIFICATIONS FOR PLACEMENT OF STREET NAME SIGNS.
10. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL DEVICES AND FLAGGERS TO INSURE THE SAFETY OF THE PUBLIC IN OR AROUND THE WORK AREA. THE CONTRACTOR SHALL HAVE A CERTIFIED TRAFFIC CONTROL PERSONNEL ON SITE AT ALL TIMES TO SET UP, MAINTAIN AND/OR REMOVE ALL TRAFFIC CONTROL DEVICES IN THE CITY OF LAS VEGAS RIGHT OF WAY.
11. WORK IN PUBLIC STREETS, ONCE BEGUN, SHALL BE EXPEDITED TO COMPLETION SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE CITY OF LAS VEGAS (C.A.T.) IF THE CONSTRUCTION INTERRUPTS OR RELOCATES A BUS STOP OR HAS AN ADVERSE EFFECT ON BUS SERVICE ON THAT STREET TO ARRANGE FOR TEMPORARY RELOCATION OF STOP.
13. THE CONTRACTOR SHALL OBTAIN BY CITY OF LAS VEGAS TRAFFIC ENGINEER, POLICE DEPARTMENT SPECIAL EVENTS UNIT (PHONE # 828-) PERMIT FOR ALL PROJECTS OFFERS PROPERLY TRAINED IN TRAFFIC CONTROL. FEES FOR THE USE OF THESE OFFICERS SHALL BE SET BY METRO AND WILL BE PAID BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL ARRANGEMENTS WITH METRO.
14. ANY WORK WITHIN 30' OF A SIGNALIZED INTERSECTION WILL BE NIGHT-WORK, UNLESS DIRECTED BY THE CITY OF LAS VEGAS.
15. THE CONTRACTOR SHALL CONTACT THE TRAFFIC ENGINEERING DIVISION (TRANSPORTATION SECTION) THROUGH THE PROJECT'S OFFSITE INSPECTOR PRIOR TO INITIATING PAVING TO RECEIVE DIRECTION FOR ANY PERMANENT OR TEMPORARY MODIFICATIONS TO THE APPROVED DRAWINGS REGARDING FINAL PAVEMENT MARKINGS AND MARKING MATERIALS. THE CONTRACTOR SHALL PROVIDE A DRAWING FOR APPROVAL BY THE TRAFFIC ENGINEERING DIVISION DEPICTING ANY ADJUSTMENTS TO THE FINAL PAVEMENT MARKINGS AND SIGNAGE, WHICH MAY INCLUDE OMITTING, ADDING OR MODIFYING MARKINGS AND TRAFFIC CONTROL DEVICES. TRANSITIONS AND LANE TERMINATIONS BETWEEN ADJACENT ROADWAY SEGMENTS ARE CONSTRUCTED

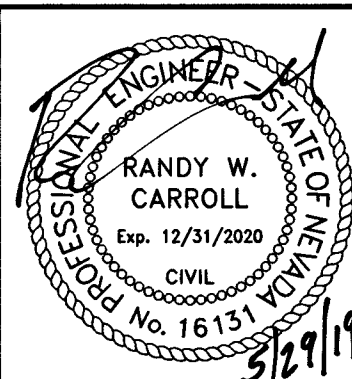
NV ENERGY, CENTRAL TELEPHONE CO, DBA CENTURY LINK TELEPHONE, AND SOUTHWEST GAS SHOW FOR INFORMATIONAL PURPOSES ONLY. REFERENCE NV ENERGY, CENTRAL TELEPHONE CO, DBA CENTURY LINK TELEPHONE, AND SOUTHWEST GAS DRAWINGS FOR CONSTRUCTION DETAILS. CONTRACTOR TO COORDINATE WITH UTILITIES FOR REMOVAL AND INSTALLATION OF FACILITIES.

ALL EXISTING UTILITY LOCATIONS SHOW HEREON ARE APPROXIMATE ONLY. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO SUBMIT A VERIFICATION OF ALL HORIZONTAL LOCATION OF ALL EXISTING UTILITY UNDERGROUND UTILITIES PRIOR TO COMMENCING CONSTRUCTION. NO REPRESENTATION IS MADE THAT ALL UTILITIES ARE SHOWN HEREON. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR UTILITIES NOT SHOWN IN THEIR EXISTING LOCATION. THE DEPTH OF ALL UTILITIES SHOWN ON THIS PLAN Varies. THE PLANS VARIES THROUGHOUT THE PROJECT AREA. THE CONTRACTOR SHALL EXERCISE EXTREME CARE WHERE EXCAVATING AND GRADING THE SUBBASE IN THE VICINITY OF UTILITIES TO AVOID DAMAGE TO THE LATTER.

ALL EXISTING UTILITIES SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE NOTED.

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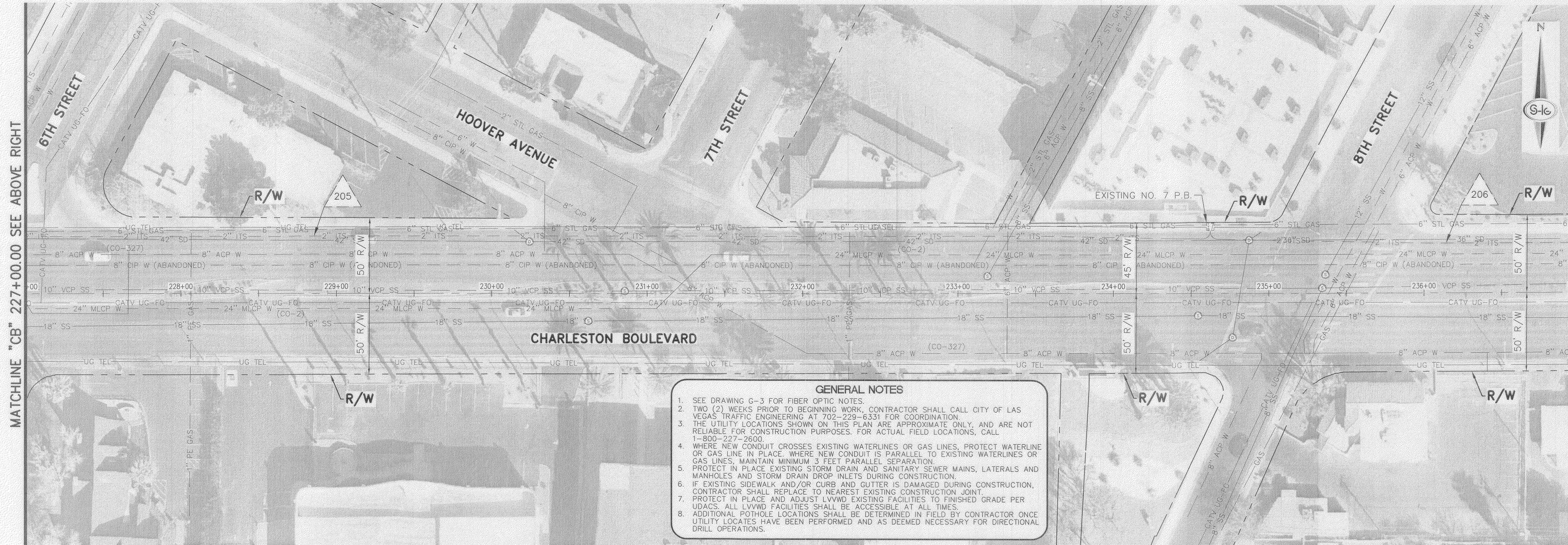
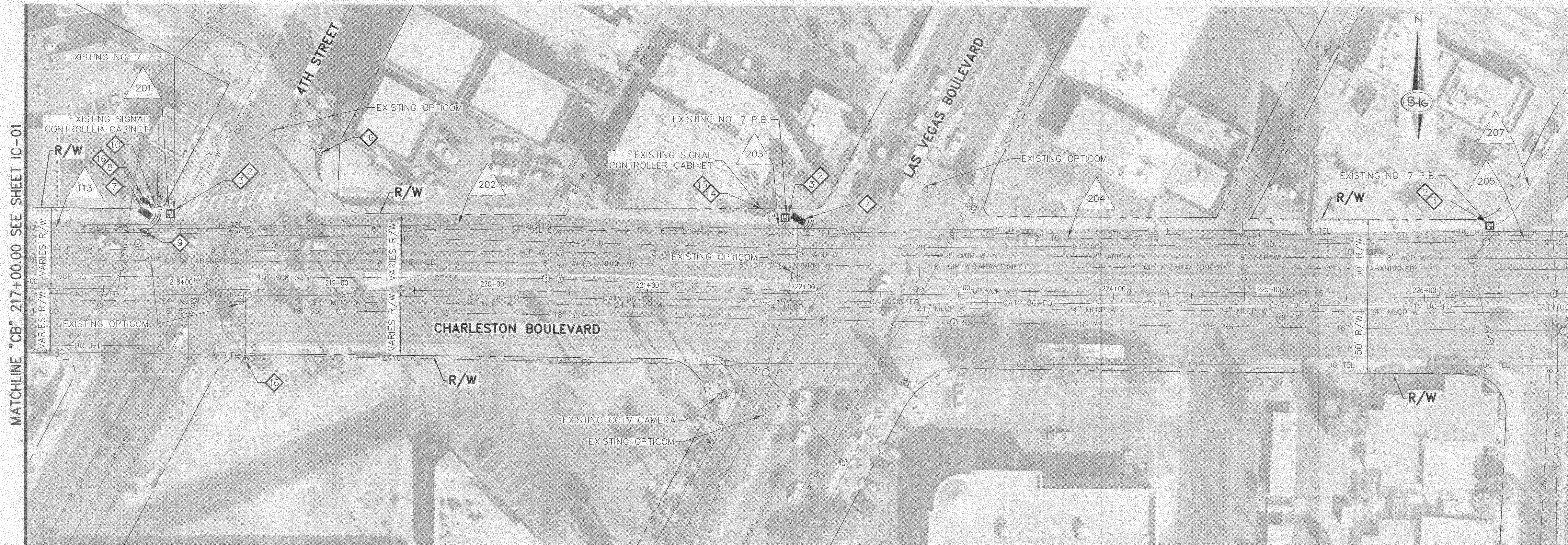
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA



PROJECT No: TSC1802	DRAWN BY: JAS	SCALE	DRAWING NO.
DESIGNED BY: JAS	CHECKED BY: JSR	HORIZ: AS SHOWN	G-3
APPROVED BY		VERT: AS SHOWN	
	 SLATER HANIFF GROUP a Westwood firm 570 E. AVILEE STREET #216, LAS VEGAS, NV 89118 PHONE (702) 264-6368 FAX (702) 264-6369	FIELD BOOK	SHT. 13 OF 11
			L19-00988
			115-442

MATCHLINE "CB" 217+00.00 SEE SHEET IC-01

MATCHLINE "CB" 227+00.00 SEE ABOVE RIGHT



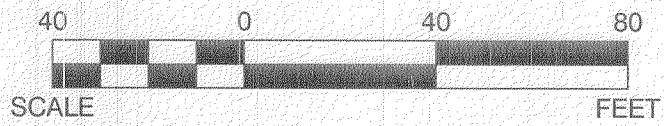
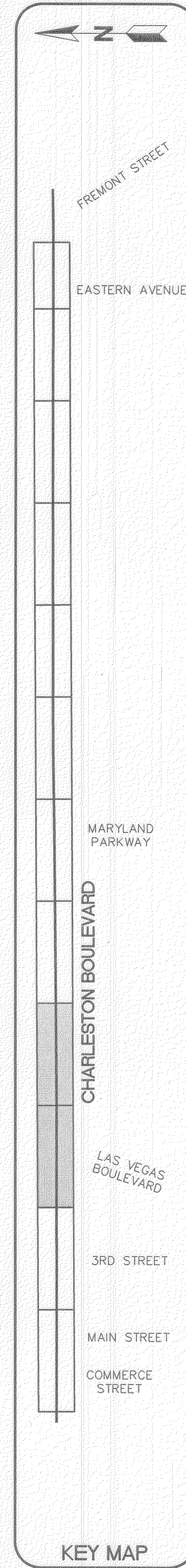
- GENERAL NOTES**
1. SEE DRAWING G-3 FOR FIBER OPTIC NOTES.
 2. TWO (2) WEEKS PRIOR TO BEGINNING WORK, CONTRACTOR SHALL CALL CITY OF LAS VEGAS TRAFFIC ENGINEERING AT 702-228-6331 FOR COORDINATION.
 3. THE UTILITY LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY, AND ARE NOT RELIABLE FOR CONSTRUCTION PURPOSES. FOR ACTUAL FIELD LOCATIONS, CALL 1-800-227-2600.
 4. WHERE NEW CONDUIT CROSSES EXISTING WATERLINES OR GAS LINES, PROTECT WATERLINE OR GAS LINE IN PLACE. WHERE NEW CONDUIT IS PARALLEL TO EXISTING WATERLINES OR GAS LINES, MAINTAIN MINIMUM 3 FEET PARALLEL SEPARATION.
 5. PROTECT IN PLACE EXISTING STORM DRAIN AND SANITARY SEWER MAINS, LATERALS AND MANHOLES AND STORM DRAIN DROP INLETS DURING CONSTRUCTION.
 6. IF EXISTING SIDEWALK AND/OR CURB AND GUTTER IS DAMAGED DURING CONSTRUCTION, CONTRACTOR SHALL REPLACE TO NEAREST EXISTING CONSTRUCTION JOINT.
 7. PROTECT IN PLACE AND ADJUST LIVING EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LIVING FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
 8. ADDITIONAL POT HOLE LOCATIONS SHALL BE DETERMINED IN FIELD BY CONTRACTOR ONCE UTILITY LOCATES HAVE BEEN PERFORMED AND AS DEEMED NECESSARY FOR DIRECTIONAL DRILL OPERATIONS.

MATCHLINE "CB" 227+00.00 SEE BELOW LEFT

MATCHLINE "CB" 237+00.00 SEE SHEET IC-03

- CONSTRUCTION NOTES**
1. INSTALL P30 PULL BOX (USDCCA STD. DWG NOS. 761 & 763)
 2. INSTALL TYPE 200 SPICE VAULT (USDCCA STD. DWG NOS. 762 & 763)
 3. REMOVE EXISTING PULL BOX
 4. REPAIR BROKEN CONDUIT (SEE DETAIL 1, DRAWING IC-08 FOR PAVEMENT PATCH)
 5. REPAIR BROKEN CONDUIT (SEE DETAIL 2, DRAWING IC-08 FOR PAVEMENT PATCH)
 6. INTERCEPT AND EXTEND EXISTING CONDUIT TO PULL BOX
 7. INSTALL OPTICOM GPS EVP ON TRAFFIC SIGNAL POLE. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CABINET. INSTALL OPTICOM GPS EVP CABINET EQUIPMENT IN EXISTING RACKS
 8. INSTALL CCTV CAMERA AND EXTENSION ON POLE. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. INSTALL CONTROL UNIT AND ENCODER IN CONTROLLER CABINET WITH ALL ASSOCIATED CABLES AND CONDUCTORS
 9. INSTALL TRAFFICCAST DSRG AND BLUETOOTH RSU ON MAST ARM. ROUTE CABLES THROUGH MAST ARM, SIGNAL POLE AND EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. MOUNT ASSOCIATED CABINET EQUIPMENT IN EXISTING CONTROLLER CABINET
 10. REMOVE AND SALVAGE EXISTING VIDEO DETECTION EQUIPMENT IN TRAFFIC SIGNAL CABINET AND REPLACE WITH NEW VIDEO DETECTION EQUIPMENT. EXISTING VIDEO DETECTION CAMERAS AND CABLES/CONDUCTORS SHALL REMAIN OR BE RELOCATED. SEE EQUIPMENT TABLE ON IC-07
 11. INSTALL NEW VIDEO DETECTION SYSTEM FOR COUNTING THROUGH THE SDLC CONNECTION TO THE CONTROLLER USING BIU'S 10 THROUGH 12. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. INSTALL NEW VIDEO DETECTION CAMERA ON EACH POLE. SEE EQUIPMENT TABLE ON IC-07
 12. INSTALL MODEL 721 INFRARED OPTICOM DETECTOR CENTERED ON THE APPROACH AND ALL ASSOCIATED CABLES/CONDUCTORS AND EQUIPMENT IN EXISTING CONDUIT AND CABINETS
 13. REMOVE AND SALVAGE OPTICOM DETECTOR. USE EXISTING M-138 CABLE FOR NEW OPTICOM DETECTOR INSTALLATION
 14. REMOVE AND SALVAGE EXISTING OPTICOM PHASE SELECTOR AND INSTALL NEW 764 CARD
 15. INSTALL 768 AIP BOARD WITH GREEN SENSE HARNESS
 16. RELOCATE EXISTING VIDEO DETECTION CAMERA FROM LUMINAIRE ARM TO MAST ARM ON NEW RISER CENTERED OVER LEFT TURN/INSIDE THROUGH LANE LINE WITH NEW CONDUCTORS TO CABINET THROUGH EXISTING CONDUIT

APPROVED FOR CONSTRUCTION
John M. Shady
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 136352 FIRST APPROVED DATE: 6-3-19



Call before you dig
UnderGround.
1-702-432-5300
SYSTEM OF TRANSPORTATION

Call before you dig
1-800-227-2600

CALL BEFORE YOU DIG
1-702-227-2929

REV. NO.	DATE	DESCRIPTION	APPROVED

CHARLESTON BOULEVARD ITS INFRASTRUCTURE
FIBER OPTIC SYSTEM PLAN
"CB" 217+00.00 TO "CB" 237+00.00
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

PROJECT No: TSC1802
DESIGNED BY: JAS
APPROVED BY: JSR

DRAWN BY: JAS
CHECKED BY: JSR

TRANSCORE

SLATER HANIFAN GROUP
4 WILLOW BLVD
SUITE 200
LAS VEGAS, NV 89101
PHONE (702) 284-0300 FAX (702) 284-0300

SCALE

HORIZ: AS SHOWN

VERT: AS SHOWN

FIELD BOOK

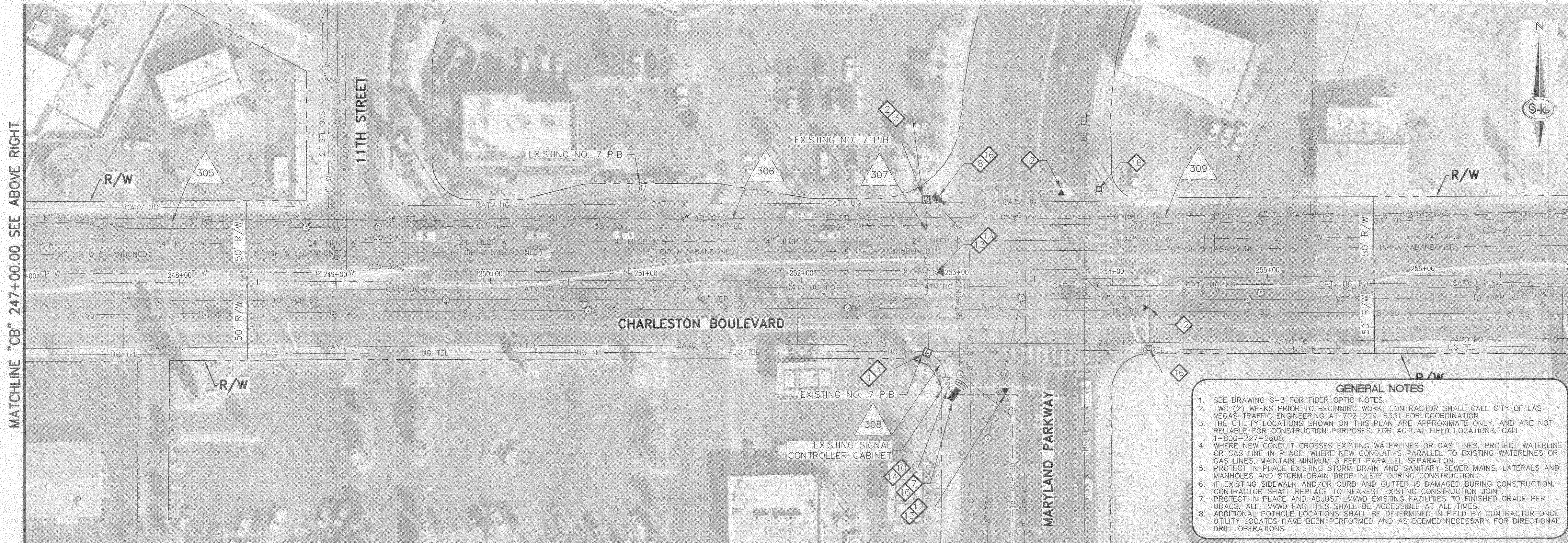
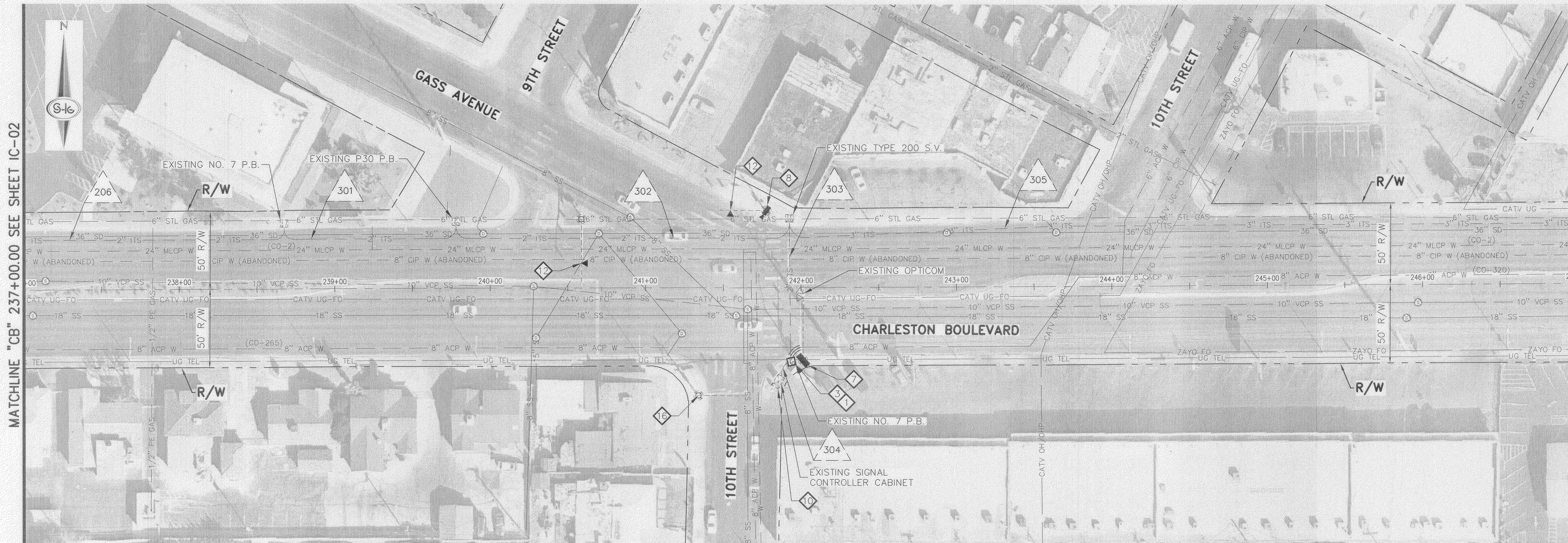
DRAWING NO.

IC-02

SHT. 5 OF 11

619-00948

115-442

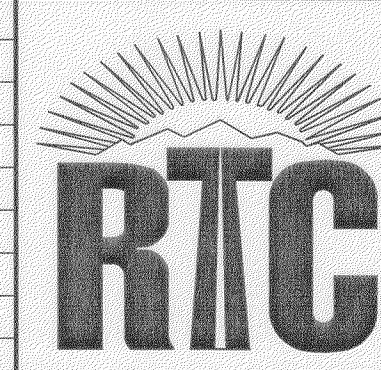


- ### CONSTRUCTION NOTES
- INSTALL P30 PULL BOX (USDOCA STD. DWG NOS. 761 & 763)
 - INSTALL TYPE 200 SPLICE VAULT (USDOCA STD. DWG NOS. 762 & 763)
 - REMOVE EXISTING PULL BOX
 - REPAIR BROKEN CONDUIT (SEE DETAIL 1, DRAWING IC-08 FOR PAVEMENT PATCH)
 - REPAIR BROKEN CONDUIT (SEE DETAIL 2, DRAWING IC-08 FOR PAVEMENT PATCH)
 - INTERCEPT AND EXTEND EXISTING CONDUIT TO PULL BOX
 - INSTALL OPTICOM GPS EVP ON TRAFFIC SIGNAL POLE. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CABINET. INSTALL OPTICOM GPS EVP CABINET EQUIPMENT IN EXISTING RACKS
 - INSTALL CCTV CAMERA AND EXTENSION ON POLE. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. INSTALL CONTROL UNIT AND ENCODER IN CONTROLLER CABINET WITH ALL ASSOCIATED CABLES AND CONDUCTORS
 - INSTALL TRAFFICCAST DSRC AND BLUETOOTH RSU ON MAST ARM. ROUTE CABLES THROUGH MAST ARM, SIGNAL POLE AND EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. MOUNT ASSOCIATED CABINET EQUIPMENT IN EXISTING CONTROLLER CABINET
 - REMOVE AND SALVAGE EXISTING VIDEO DETECTION EQUIPMENT IN TRAFFIC SIGNAL CABINET AND REPLACE WITH NEW VIDEO DETECTION EQUIPMENT. EXISTING VIDEO DETECTION CAMERAS AND CABLES/CONDUCTORS SHALL REMAIN OR BE RELOCATED. SEE EQUIPMENT TABLE ON IC-07
 - INSTALL NEW VIDEO DETECTION SYSTEM FOR COUNTING THROUGH THE SDLC CONNECTION TO THE CONTROLLER USING BIU'S 10 THROUGH 12. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. INSTALL NEW VIDEO DETECTION CAMERA ON EACH POLE. SEE EQUIPMENT TABLE ON IC-07
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 - REMOVE AND SALVAGE OPTICOM DETECTOR. USE EXISTING M-138 CABLE FOR NEW OPTICOM DETECTOR INSTALLATION
 - REMOVE AND SALVAGE EXISTING OPTICOM PHASE SELECTOR AND INSTALL NEW 764 CARD
 - INSTALL 768 AIP BOARD WITH GREEN SENSE HARNESS
 - RELOCATE EXISTING VIDEO DETECTION CAMERA FROM LUMINAIRE ARM TO MAST ARM ON NEW RISER CENTERED OVER LEFT TURN/INSIDE THROUGH LANE LINE WITH NEW CONDUCTORS TO CABINET THROUGH EXISTING CONDUIT

APPROVED FOR CONSTRUCTION
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 136352 FIRST APPROVED DATE: 6-3-19

- ### GENERAL NOTES
- SEE DRAWING G-3 FOR FIBER OPTIC NOTES.
 - TWO (2) WEEKS PRIOR TO BEGINNING WORK, CONTRACTOR SHALL CALL CITY OF LAS VEGAS TRAFFIC ENGINEERING AT 702-259-5331 FOR COORDINATION.
 - THE UTILITY LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY, AND ARE NOT RELIABLE FOR CONSTRUCTION PURPOSES. FOR ACTUAL FIELD LOCATIONS, CALL 1-800-227-2600.
 - WHERE NEW CONDUIT CROSSES EXISTING WATERLINES OR GAS LINES, PROTECT WATERLINE OR GAS LINE IN PLACE. WHERE NEW CONDUIT IS PARALLEL TO EXISTING WATERLINES OR GAS LINES, MAINTAIN MINIMUM 3 FEET PARALLEL SEPARATION.
 - PROTECT IN PLACE EXISTING STORM DRAIN AND SANITARY SEWER MAINS, LATERALS AND MANHOLES AND STORM DRAIN DROP INLETS DURING CONSTRUCTION.
 - IF EXISTING SIDEWALK AND/OR CURB AND GUTTER IS DAMAGED DURING CONSTRUCTION, CONTRACTOR SHALL REPLACE TO NEAREST EXISTING CONSTRUCTION JOINT.
 - PROTECT IN PLACE AND ADJUST LVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
 - ADDITIONAL POTHOLE LOCATIONS SHALL BE DETERMINED IN FIELD BY CONTRACTOR ONCE UTILITY LOCATES HAVE BEEN PERFORMED AND AS DEEMED NECESSARY FOR DIRECTIONAL DRILL OPERATIONS.

REV. NO.	DATE	DESCRIPTION	APPROVED



CHARLESTON BOULEVARD ITS INFRASTRUCTURE

FIBER OPTIC SYSTEM PLAN

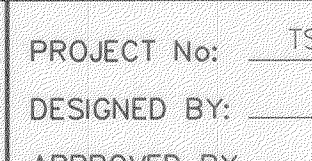
"CB" 237+00.00 TO "CB" 257+00.00

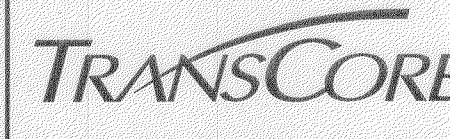
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA



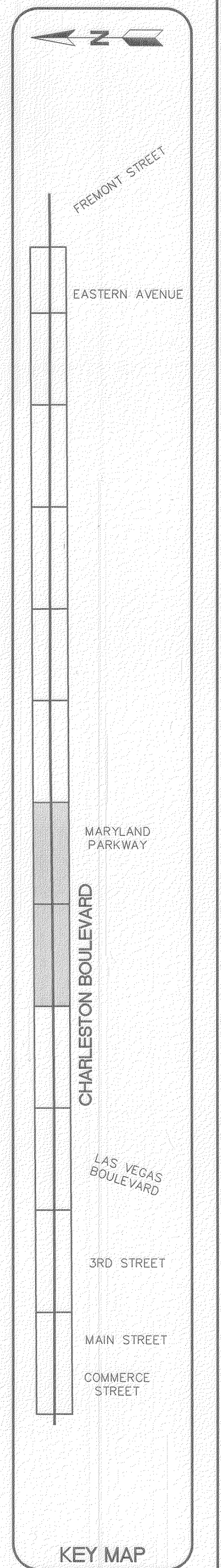
PROJECT No: TSC1802 DRAWN BY: JAS

DESIGNED BY: JAS CHECKED BY: JSR

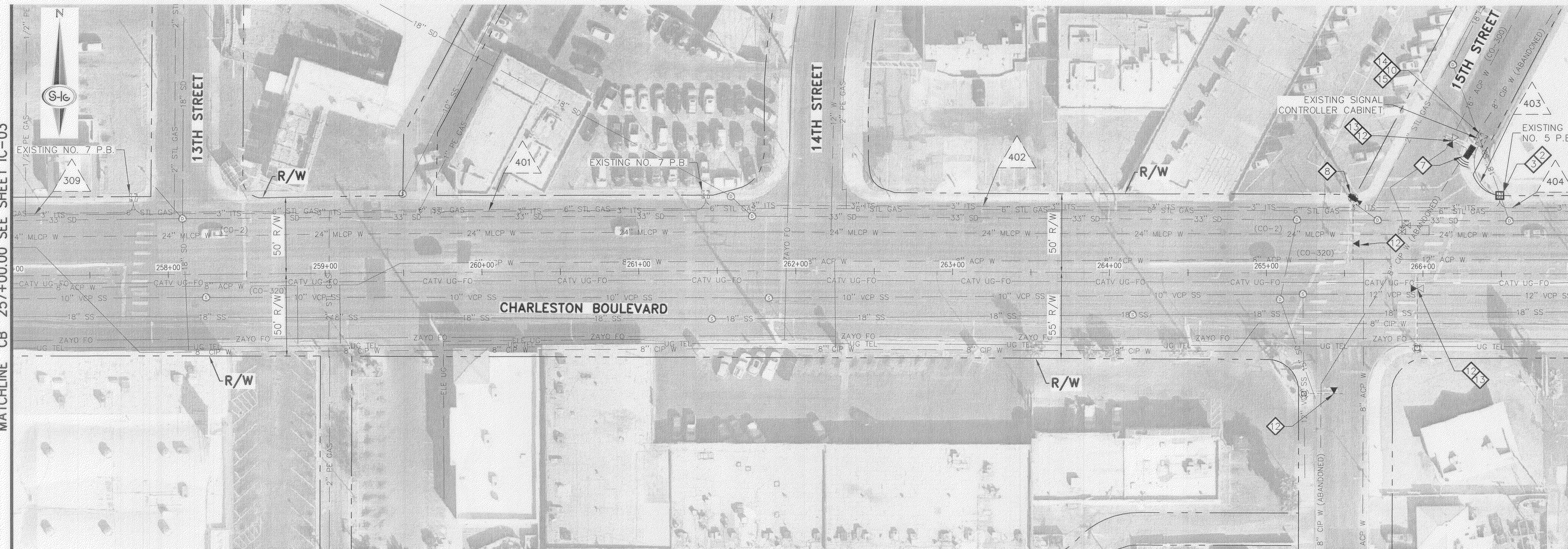
APPROVED BY: 



SCALE	DRAWING NO.
HORIZ: AS SHOWN	IC-03
VERT: AS SHOWN	SHT. 6 OF 11
FIELD BOOK	219-00948
	115-442

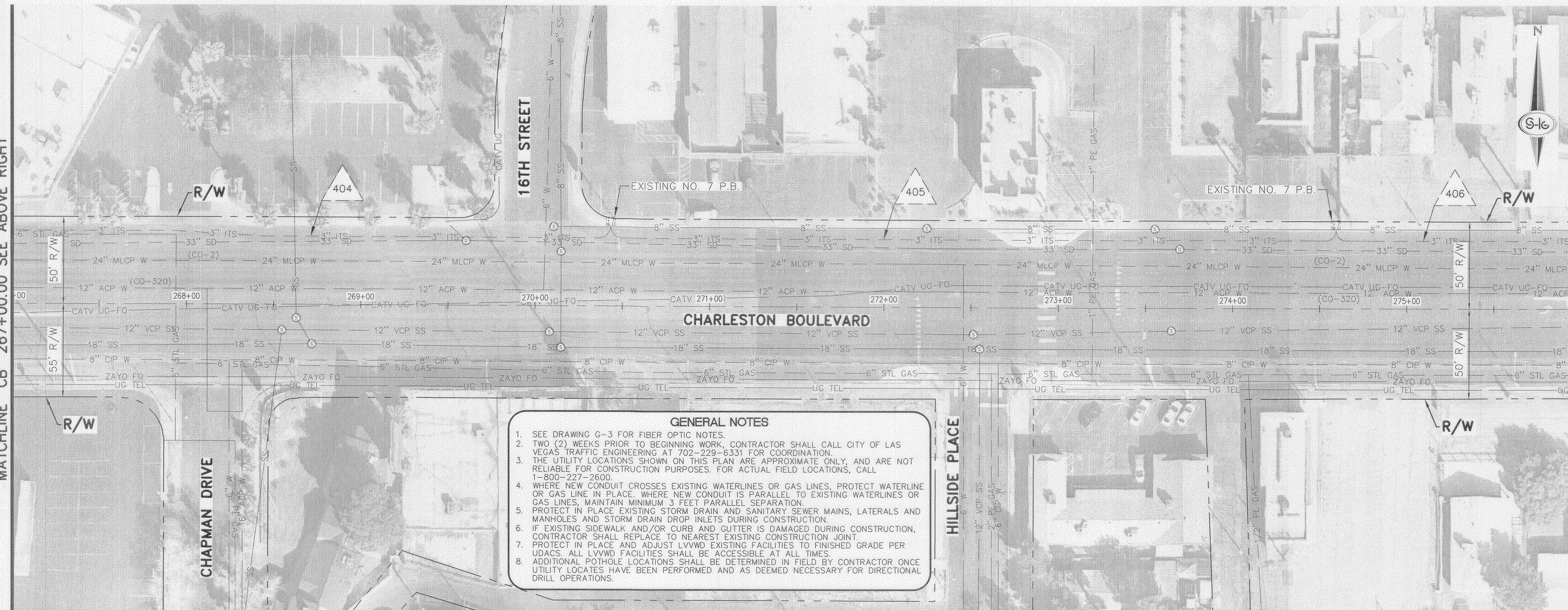


MATCHLINE "CB" 257+00.00 SEE SHEET IC-03



MATCHLINE "CB" 267+00.00 SEE BELOW LEFT

MATCHLINE "CB" 267+00.00 SEE ABOVE RIGHT



MATCHLINE "CB" 276+00.00 SEE SHEET IC-05

- GENERAL NOTES**
- SEE DRAWING G-3 FOR FIBER OPTIC NOTES.
 - TWO (2) WEEKS PRIOR TO BEGINNING WORK, CONTRACTOR SHALL CALL CITY OF LAS VEGAS TRAFFIC ENGINEERING AT 702-225-6331 FOR COORDINATION.
 - THE UTILITY LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY, AND ARE NOT RELIABLE FOR CONSTRUCTION PURPOSES. FOR ACTUAL FIELD LOCATIONS, CALL 1-800-227-2600.
 - WHERE NEW CONDUIT CROSSES EXISTING WATERLINES OR GAS LINES, PROTECT WATERLINE OR GAS LINE IN PLACE. WHERE NEW CONDUIT IS PARALLEL TO EXISTING WATERLINES OR GAS LINES, MAINTAIN MINIMUM 3 FEET PARALLEL SEPARATION.
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 - IF EXISTING SIDEWALK AND/OR CURB AND GUTTER IS DAMAGED DURING CONSTRUCTION, CONTRACTOR SHALL REPLACE TO NEAREST EXISTING CONSTRUCTION JOINT.
 - PROTECT IN PLACE AND ADJUST LVWD EXISTING FACILITIES TO FINISHED GRADE PER UDACS. ALL LVWD FACILITIES SHALL BE ACCESSIBLE AT ALL TIMES.
 - ADDITIONAL POT HOLE LOCATIONS SHALL BE DETERMINED IN FIELD BY CONTRACTOR ONCE UTILITY LOCATES HAVE BEEN PERFORMED AND AS DEEMED NECESSARY FOR DIRECTIONAL DRILL OPERATIONS.

- CONSTRUCTION NOTES**
- INSTALL P30 PULL BOX (USDCCA STD. DWG NOS. 761 & 763)
 - INSTALL TYPE 200 SPLICE VAULT (USDCCA STD. DWG NOS. 762 & 763)
 - REMOVE EXISTING PULL BOX
 - REPAIR BROKEN CONDUIT (SEE DETAIL 1, DRAWING IC-08 FOR PAVEMENT PATCH)
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 - INSTALL OPTICOM GPS EVP ON TRAFFIC SIGNAL POLE. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CABINET. INSTALL OPTICOM GPS EVP CABINET EQUIPMENT IN EXISTING RACKS
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 - INSTALL TRAFFICAST DSRC AND BLUETOOTH RSU ON MAST ARM. ROUTE CABLES THROUGH MAST ARM, SIGNAL POLE AND EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. MOUNT ASSOCIATED CABINET EQUIPMENT IN EXISTING CONTROLLER CABINET
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 - INSTALL NEW VIDEO DETECTION SYSTEM FOR COUNTING THROUGH THE SDLC CONNECTION TO THE CONTROLLER USING BIU'S 10 THROUGH 12. ROUTE CABLES/CONDUCTORS THROUGH EXISTING TRAFFIC SIGNAL CONDUIT TO CONTROLLER CABINET. INSTALL NEW VIDEO DETECTION CAMERA ON EACH POLE. SEE EQUIPMENT TABLE ON IC-07
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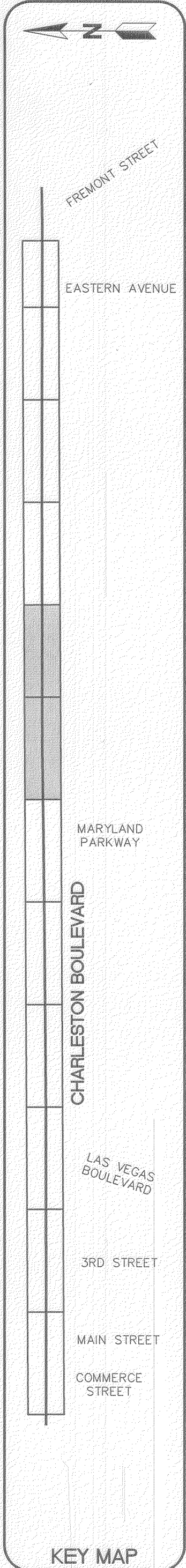
APPROVED FOR CONSTRUCTION

[Signature]
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 136352 FIRST APPROVED DATE: 6-3-19

Call before you dig
UnderGround.
1-702-432-5300
UTILITY LOCATION
SYSTEM OF TRANSPORTATION

Call before you dig
1-800-227-2600

CALL BEFORE YOU DIG
1-702-227-2929



REV. NO.	DATE	DESCRIPTION	APPROVED

CHARLESTON BOULEVARD ITS INFRASTRUCTURE
FIBER OPTIC SYSTEM PLAN
"CB" 257+00.00 TO "CB" 276+00.00
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA

PROJECT No: TSC1802 DRAWN BY: JAS
DESIGNED BY: JAS CHECKED BY: JSR
APPROVED BY: *[Signature]*

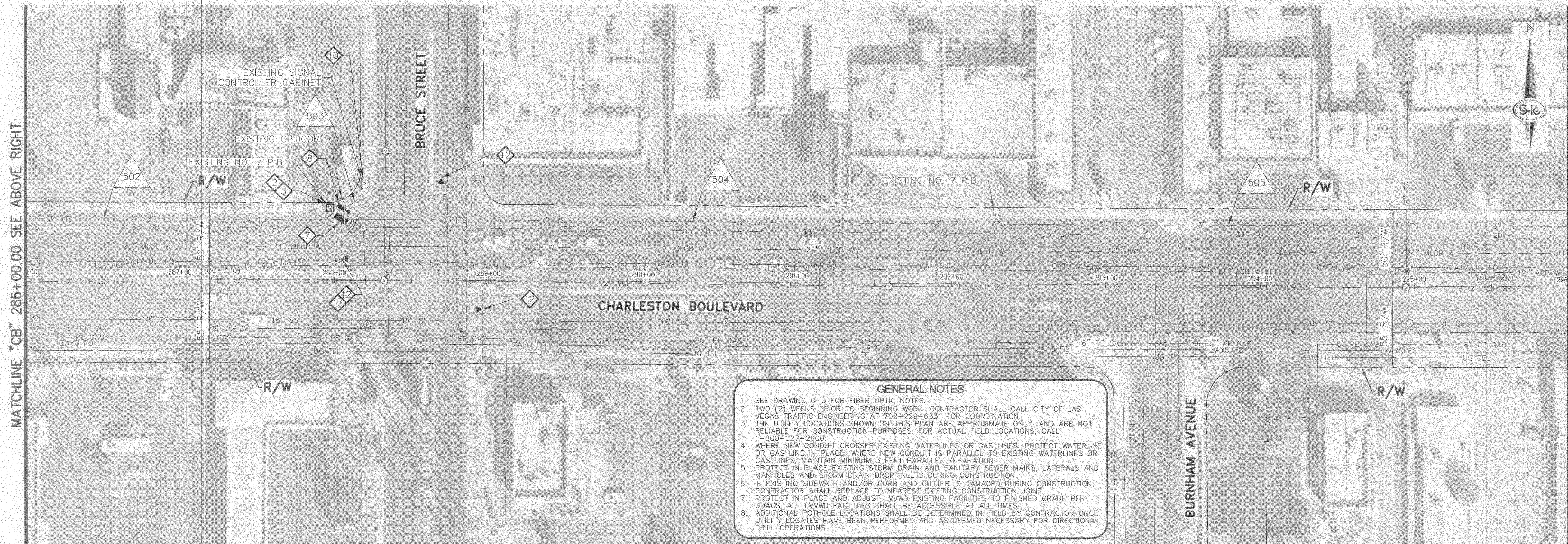
SLATER HANIFAN GROUP
1740 S. ARVILLE STREET #215, LAS VEGAS, NV 89111
PHONE (702) 284-5300 FAX (702) 284-5309

SCALE
HORIZ: AS SHOWN
VERT: AS SHOWN
FIELD BOOK

DRAWING NO.
IC-04
SHT: 7 OF 11
419-00948
115-442

MATCHLINE "CB" 276+00.00 SEE SHEET IC-04

MATCHLINE "CB" 286+00.00 SEE ABOVE RIGHT



- GENERAL NOTES**
- SEE DRAWING Q-3 FOR FIBER OPTIC NOTES.
 - TWO (2) WEEKS PRIOR TO BEGINNING WORK, CONTRACTOR SHALL CALL CITY OF LAS VEGAS TRAFFIC ENGINEERING AT 702-228-6531 FOR COORDINATION.
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MATCHLINE "CB" 286+00.00 SEE BELOW LEFT

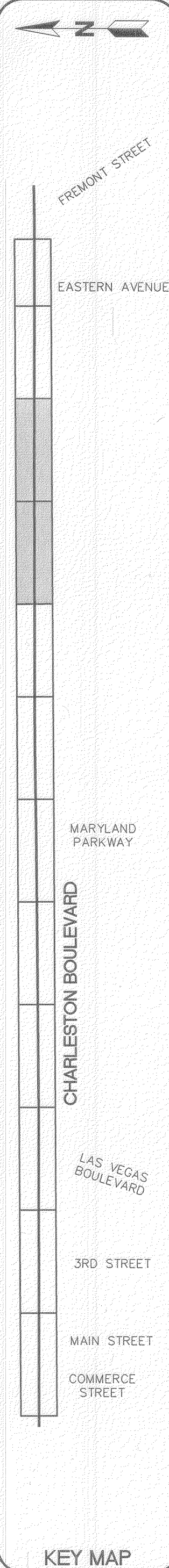
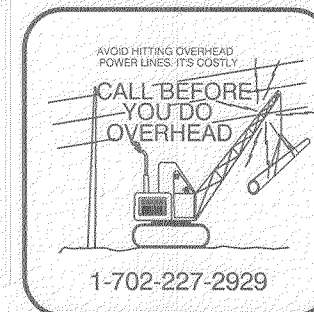
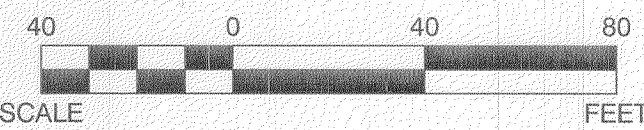
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CONSTRUCTION NOTES

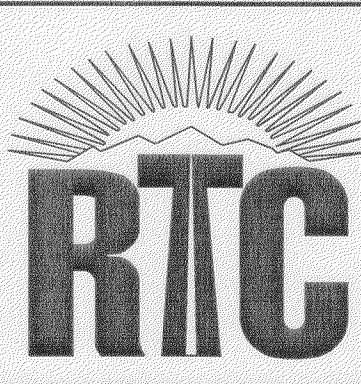
- INSTALL P30 PULL BOX (USDOCA STD. DWG NOS. 761 & 763)
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APPROVED FOR CONSTRUCTION

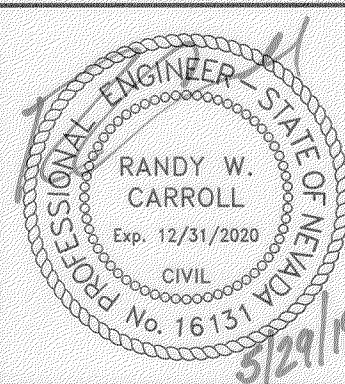
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES
PROJECT NO. 136352 FIRST APPROVED DATE: 6-3-19



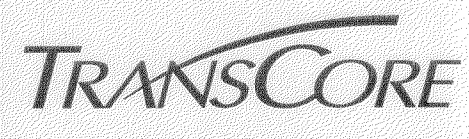
REV. NO.	DATE	DESCRIPTION	APPROVED



CHARLESTON BOULEVARD ITS INFRASTRUCTURE
FIBER OPTIC SYSTEM PLAN
"CB" 276+00.00 TO "CB" 296+00.00
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA



PROJECT No: TSC1802
DESIGNED BY: JAS
APPROVED BY: JAS
DRAWN BY: JAS
CHECKED BY: JSR



SCALE	DRAWING NO.
HORIZ: AS SHOWN	IC-05
VERT: AS SHOWN	SHT. 8 OF 11
FIELD BOOK	L19-00948
	115-442

CONDUIT & WIRE SCHEDULE

CONDUIT NO.	FROM	TO	NO.	SIZE (IN)	LENGTH (FT)	FIBER OPTIC CABLE (# OF STRANDS)	CONDUCTOR	REMARKS
101	TYPE 200 S.V. (E)	P30 P.B. (E)	1(E)	4(E)	350(E)	96	25 PR #22 (RS) 6 PR #22	
102	P30 P.B. (E)	TYPE 200 S.V. (E)	1(E)	4(E)	75(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
103	TYPE 200 S.V. (E)	P30 P.B. (E)	1(E)	4(E)	130(E)	12 CDCA	25 PR #22 (RS) 2 - 6 PR #22	
104	P30 P.B. (E)	P30 P.B. (E)	1(E)	4(E)	80(E)	12 CDCA	25 PR #22 (RS) 2 - 6 PR #22	
105	P30 P.B. (E)	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
106	TYPE 200 S.V. (E)	P30 P.B.	1(E)	2(E)	75(E)	96	25 PR #22 (RS) 6 PR #22	
107	P30 P.B.	TYPE 200 S.V.	1(E)	2(E)	285(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
108	TYPE 200 S.V.	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
109	TYPE 200 S.V.	TYPE 200 S.V. (E)	1(E)	2(E)	395(E)	96	25 PR #22 (RS) 6 PR #22	
110	TYPE 200 S.V. (E)	P30 P.B.	1(E)	2(E)	135(E)	12 CDCA	25 PR #22 (RS) 2 - 6 PR #22	
111	P30 P.B.	CONTROLLER CABINET (E)	1(E)	2(E)	15(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
112	TYPE 200 S.V. (E)	NO. 7 P.B. (E)	1(E)	2(E)	215(E)	96	25 PR #22 (RS) 6 PR #22	
113	NO. 7 P.B. (E)	TYPE 200 S.V. (E)	1(E)	4(E)	5(E)	96	6 PR #22	COIL 96-STRAND FIBER OPTIC CABLE FOR FUTURE SPLICE BY CLV
114	TYPE 200 S.V. (E)	P30 P.B. (E)	1(E)	4(E)	110(E)	96	6 PR #22	
115	P30 P.B. (E)	TYPE 200 S.V.	1(E)	2(E)	335(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
116-200 NOT USED								
201	TYPE 200 S.V.	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	100 PR #22 (E)	
202	TYPE 200 S.V.	TYPE 200 S.V.	1(E)	2(E)	410(E)	96	100 PR #22 (E)	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
203	TYPE 200 S.V.	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	2 - 100 PR #22 (E)	
204	TYPE 200 S.V.	TYPE 200 S.V.	1(E)	2(E)	465(E)	96	100 PR #22 (E)	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
205	TYPE 200 S.V.	NO. 7 P.B. (E)	1(E)	2(E)	830(E)	96	100 PR #22 (E)	
206	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	2(E)	415(E)	96	25 PR #22 (RS) 6 PR #22	
207	TYPE 200 S.V.	(E)	1(E)	(E)	(E)	36(E)	25 PR #22 (E)	
208-300 NOT USED								
301	NO. 7 P.B. (E)	P30 P.B. (E)	1(E)	2(E)	115(E)	96	25 PR #22 (RS) 6 PR #22	
302	P30 P.B. (E)	TYPE 200 S.V. (E)	1(E)	2(E)	125(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
303	TYPE 200 S.V. (E)	P30 P.B.	1(E)	2(E)	95(E)	12 CDCA	25 PR #22 (RS) 2 - 6 PR #22	
304	P30 P.B.	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
305	TYPE 200 S.V. (E)	NO. 7 P.B. (E)	1(E)	3(E)	940(E)	96	25 PR #22 (RS) 6 PR #22	
306	NO. 7 P.B. (E)	TYPE 200 S.V.	1(E)	3(E)	200(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
307	TYPE 200 S.V.	P30 P.B.	1(E)	3(E)	100(E)	12 CDCA	25 PR #22 (RS) 2 - 6 PR #22	
308	P30 P.B.	CONTROLLER CABINET (E)	1(E)	3(E)	15(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
309	TYPE 200 S.V.	NO. 7 P.B. (E)	1(E)	3(E)	510(E)	96	25 PR #22 (RS) 6 PR #22	
310-400 NOT USED								
401	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	375(E)	96	25 PR #22 (RS) 6 PR #22	
402	NO. 7 P.B. (E)	TYPE 200 S.V.	1(E)	3(E)	515(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
403	TYPE 200 S.V.	CONTROLLER CABINET (E)	1(E)	3(E)	40(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
404	TYPE 200 S.V.	NO. 7 P.B. (E)	1(E)	3(E)	405(E)	96	25 PR #22 (RS) 6 PR #22	
405	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	430(E)	96	25 PR #22 (RS) 6 PR #22	
406	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	505(E)	96	25 PR #22 (RS) 6 PR #22	
407-500 NOT USED								
501	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	490(E)	96	25 PR #22 (RS) 6 PR #22	
502	NO. 7 P.B. (E)	TYPE 200 S.V.	1(E)	3(E)	370(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
503	TYPE 200 S.V.	CONTROLLER CABINET (E)	1(E)	3(E)	25(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
504	TYPE 200 S.V.	NO. 7 P.B. (E)	1(E)	3(E)	440(E)	96	25 PR #22 (RS) 6 PR #22	
505	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	465(E)	96	25 PR #22 (RS) 6 PR #22	
506-600 NOT USED								
601	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	460(E)	96	25 PR #22 (RS) 6 PR #22	
602	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	540(E)	96	25 PR #22 (RS) 6 PR #22	

CONDUIT & WIRE SCHEDULE

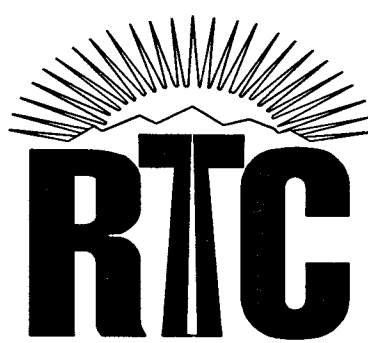
CONDUIT NO.	FROM	TO	NO.	SIZE (IN)	LENGTH (FT)	FIBER OPTIC CABLE (# OF STRANDS)	CONDUCTOR	REMARKS
603	NO. 7 P.B. (E)	TYPE 100 S.V. (E)	1	4	20	96	6 PR #22	INSTALL NEW CONDUIT.
604	TYPE 100 S.V. (E)	TYPE 200 S.V. (E)	1(E)	4(E)	105(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
605	TYPE 200 S.V. (E)	CONTROLLER CABINET (E)	1(E)	2(E)	15(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
606	TYPE 200 S.V. (E)	NO. 7 P.B. (E)	1(E)	4(E)	270(E)	96	25 PR #22 (RS) 6 PR #22	

(RS) = REMOVE AND SALVAGE EXISTING
(E) = EXISTING

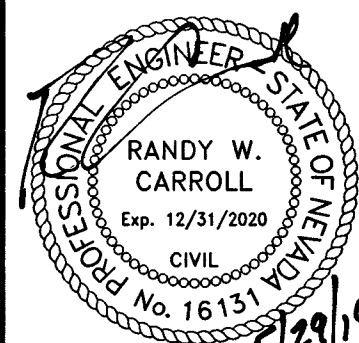
VIDEO DETECTION EQUIPMENT SCHEDULE

INTERSECTION	EDGECONNECT-PAK	EDGE2-SDLG-IM-PAK	VRACK5-PS	EDGE2-TS2-IM-PAK	EDGE2-1N-PAK
CASINO CENTER BOULEVARD/ART WAY	INSTALL	-	INSTALL	INSTALL	INSTALL (4)
3RD STREET/CASINO CENTER BOULEVARD	INSTALL	INSTALL	-	-	INSTALL (4)
4TH STREET	INSTALL	INSTALL	-	-	INSTALL (4)
GASS AVENUE/10TH STREET	INSTALL	INSTALL	-	-	INSTALL (4)
MARYLAND PARKWAY	INSTALL	INSTALL	-	-	INSTALL (4)
15TH STREET	INSTALL	-	INSTALL	INSTALL	INSTALL (4)
BRUCE STREET	INSTALL	-	INSTALL	INSTALL	INSTALL (4)
EASTERN AVENUE	INSTALL	-	INSTALL	INSTALL	INSTALL (4)

REV. NO.	DATE	DESCRIPTION	APPROVED



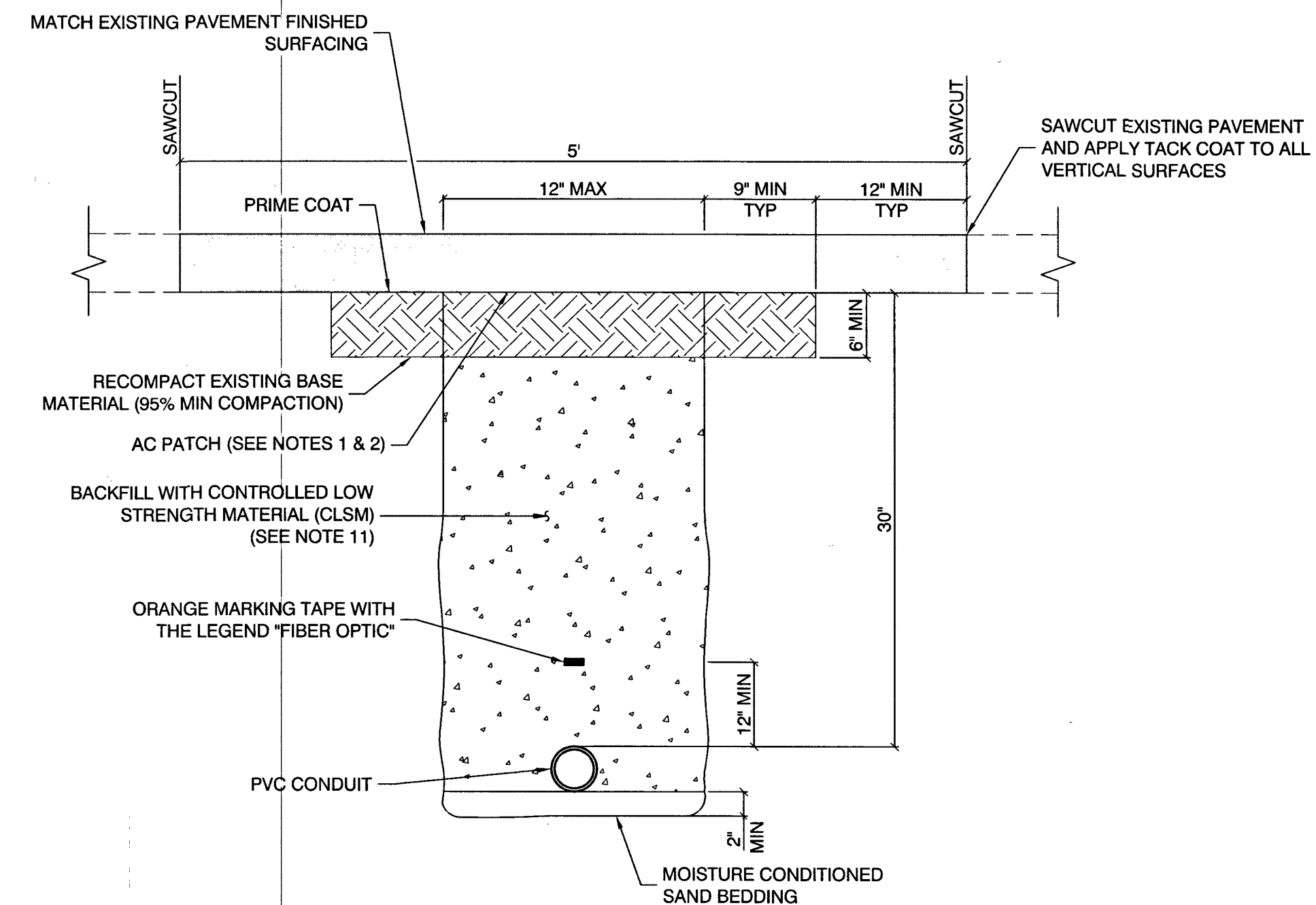
CHARLESTON BOULEVARD ITS INFRASTRUCTURE
CONDUIT AND WIRE SCHEDULE
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA



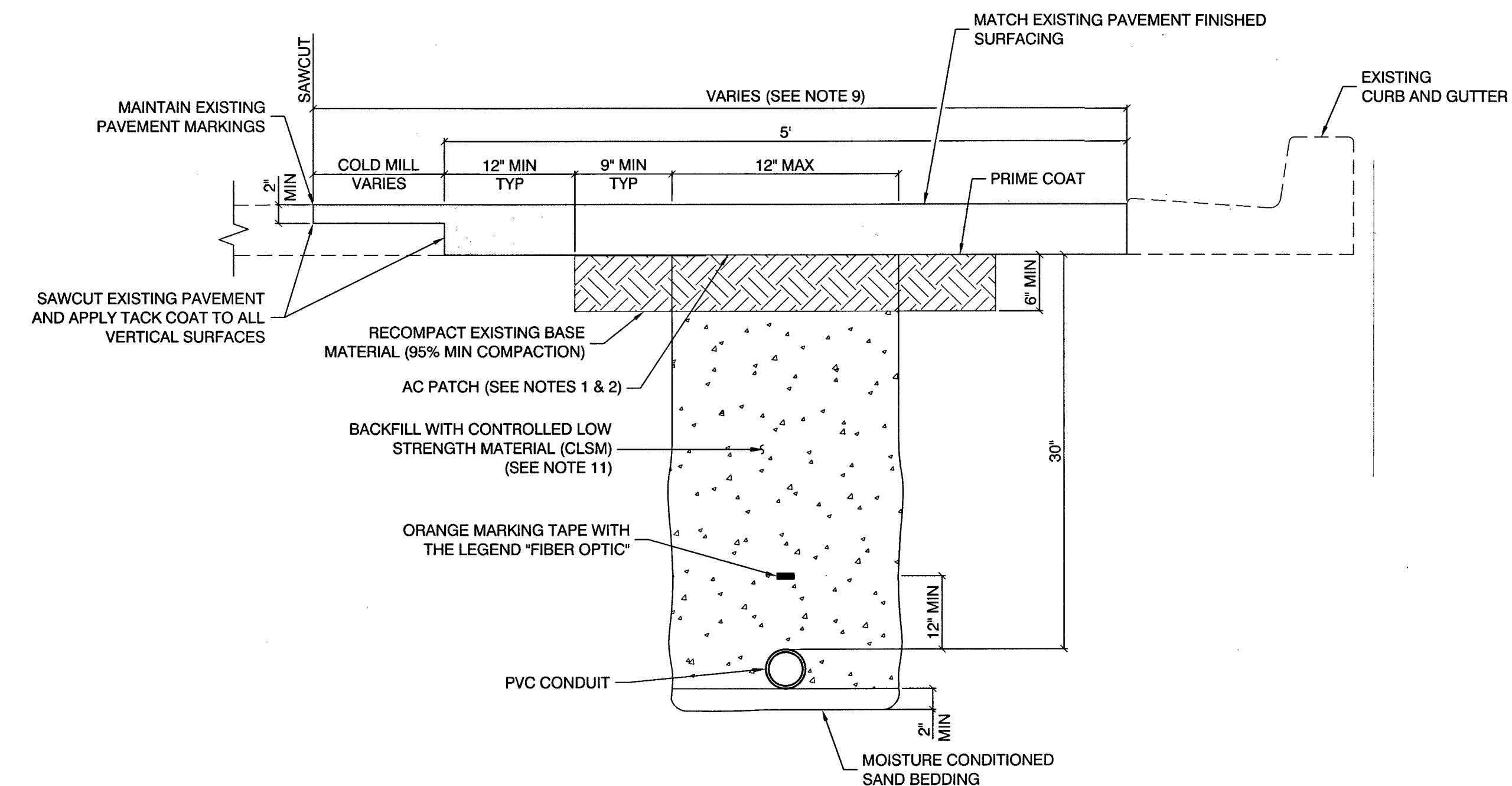
PROJECT No: TSC1802
DESIGNED BY: JAS
APPROVED BY: _____
DRAWN BY: JAS
CHECKED BY: JSR



SCALE	DRAWING NO.
HORIZ: AS SHOWN	IC-07
VERT: AS SHOWN	SHT. 10 OF 11
FIELD BOOK	L19-00948
	115-442



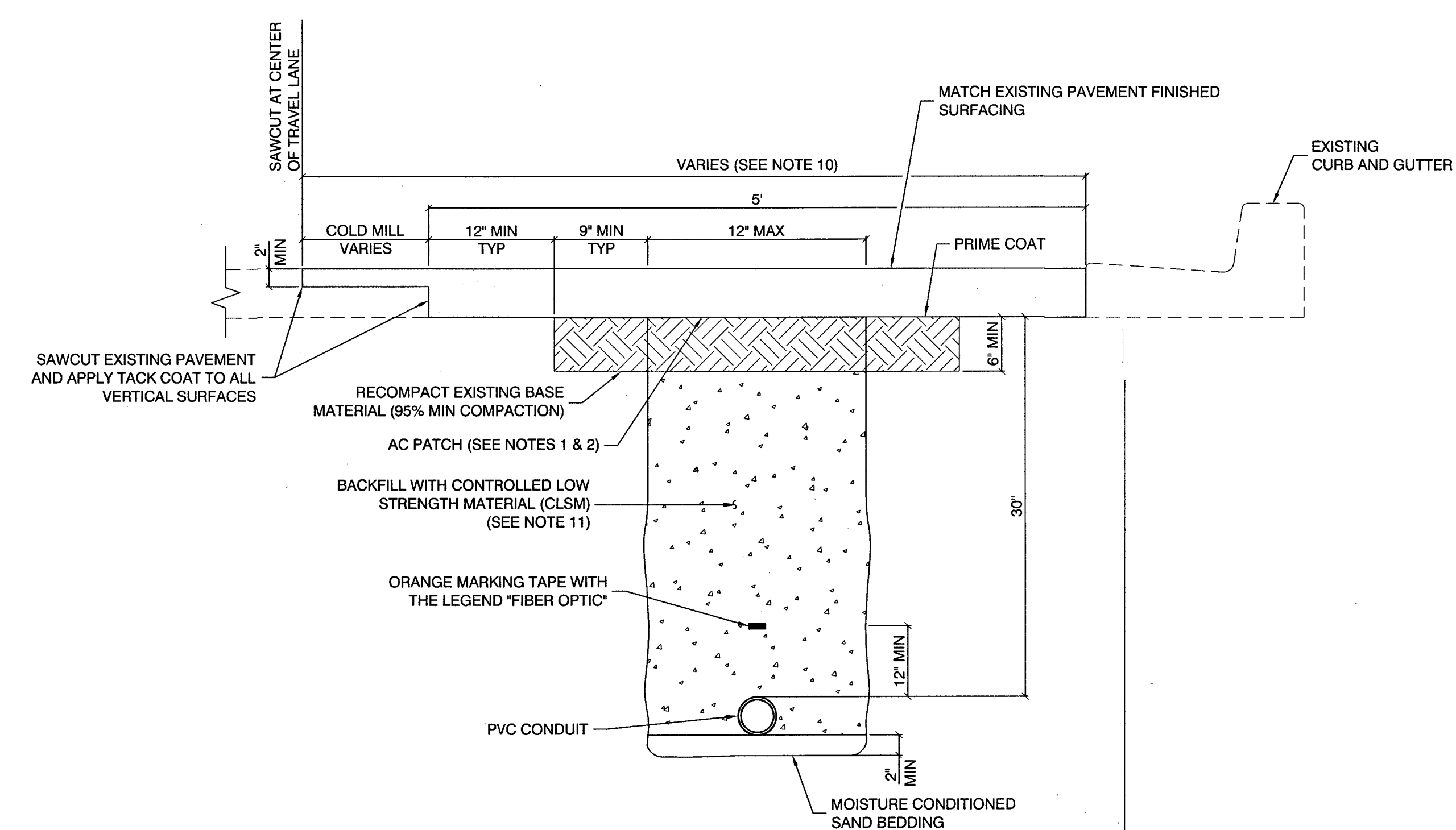
TRANSVERSE CONDUIT TRENCH 3
NOT TO SCALE



LONGITUDINAL CONDUIT TRENCH ALONG LIP OF GUTTER 2
NOT TO SCALE

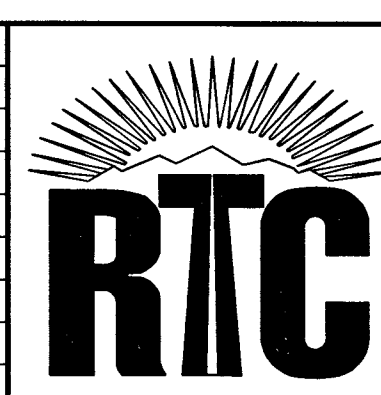
NOTES:

1. DEPTH TO MATCH EXISTING AC PAVEMENT, BUT NOT LESS THAN 4", PLACED IN MULTIPLE LIFTS OF EQUAL THICKNESS.
2. PATCH WIDTH SHALL BE SUFFICIENT TO ACCOMMODATE MECHANICAL PLACEMENT USING AGENCY APPROVED SPREADER BOX OR PAVING MACHINE, ROLLING AND COMPACTION PER UNIFORM STANDARD SPECIFICATION SECTION 401.03.11.
3. IF SAWCUT IS WITHIN 3 FEET OF EDGE OF EXISTING ASPHALT CONCRETE SURFACE OR OTHER PATCH, REMOVE EXISTING PAVEMENT TO THAT EDGE AND REPLACE ENTIRE SECTION.
4. IF 30" COVER IS NOT POSSIBLE, THEN RED CONCRETE ENCASEMENT MIN. 4" ABOVE CONDUIT IS REQUIRED.
5. CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE INSTALLED TO FINAL GRADE FOR TEMPORARY PATCHING.
6. PERMANENT PATCH MIX DESIGN SHALL BE AS REQUIRED BY ENGINEER.
7. NO STONES OR LUMPS GREATER THAN 3" PERMITTED.
8. TRANSVERSE PAVEMENT PATCHES SHALL BE A MINIMUM WIDTH OF 4 FEET.
9. LONGITUDINAL PAVEMENT PATCHES SHALL BE ONE TRAVEL LANE IN WIDTH WITH SAWCUTS MADE AT THE EDGE OF THE TRAVEL LANE, OR THE SHOULDER IF IT IS A PAVED, MARKED SHOULDER, OR THE BIKE LANE IF IT IS A PAVED, MARKED BIKE LANE.
10. LONGITUDINAL PAVEMENT PATCHES WITHIN AREAS TO RECEIVE FUTURE PAVEMENT REHABILITATION (TO BE APPROVED BY AGENCY) SHALL BE TO CENTER OF TRAVEL LANE WITH SAWCUTS MADE AT THE CENTER OF TRAVEL LANE.
11. CONTRACTOR SHALL ENSURE THAT CONDUIT DOES NOT FLOAT OR SHIFT DURING CLSM BACKFILL OPERATIONS.

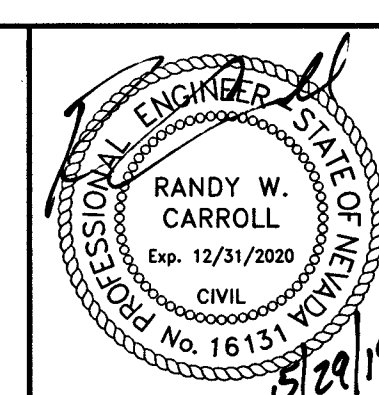


LONGITUDINAL CONDUIT TRENCH ALONG LIP OF GUTTER (IN AREAS WITH FUTURE PAVEMENT REHABILITATION) 1
NOT TO SCALE

REV. NO.	DATE	DESCRIPTION	APPROVED



CHARLESTON BOULEVARD ITS INFRASTRUCTURE
DETAILS
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA



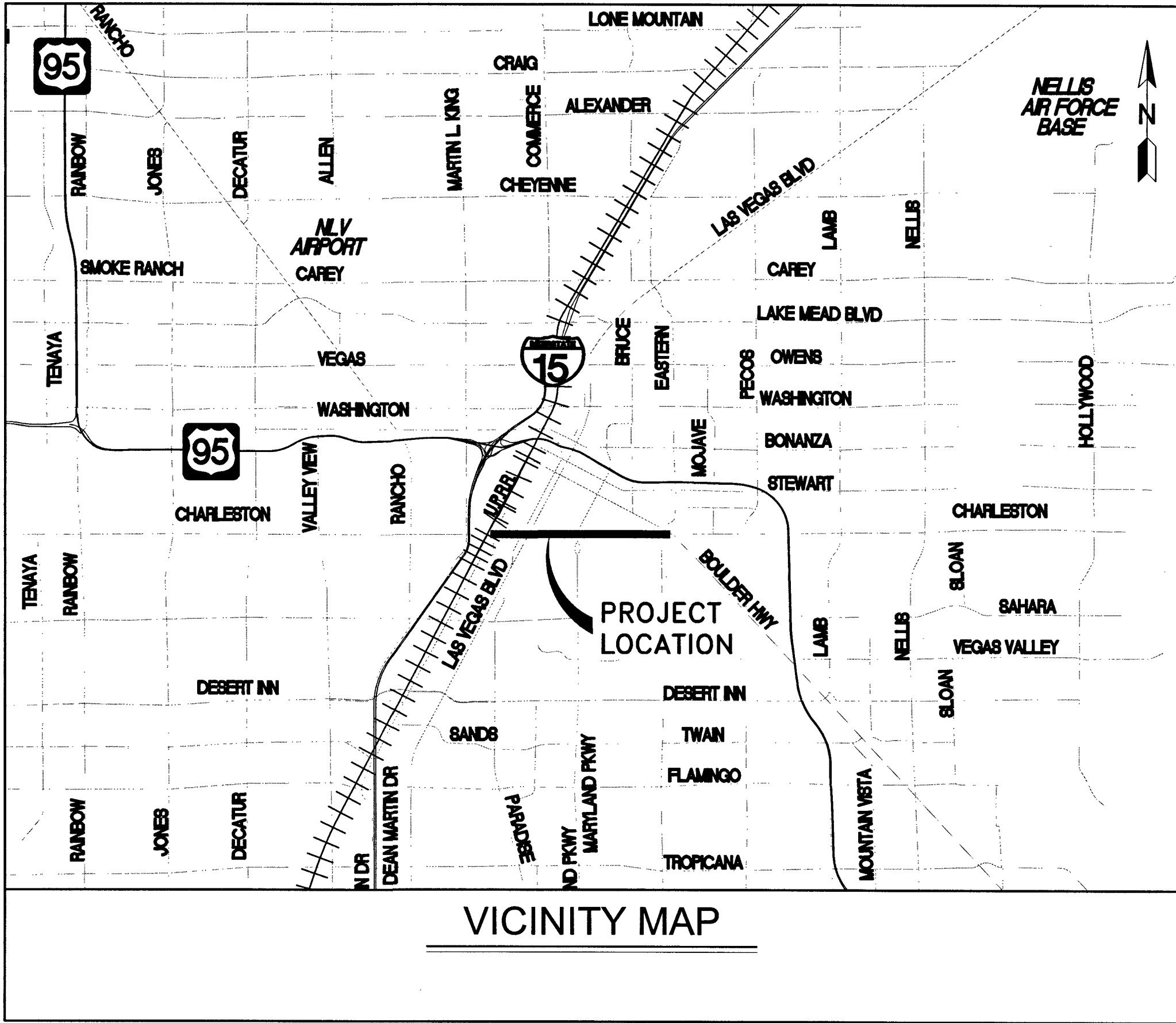
PROJECT No: TSC1802 DRAWN BY: JAS
DESIGNED BY: JAS CHECKED BY: JSR
APPROVED BY: _____

TransScore
S-16 SLATER HANIFAN GROUP
2740 S. ARVILLE STREET #210, LAS VEGAS, NV 89118
PHONE (702) 284-0380 FAX (702) 284-0381

SCALE
HORIZ: AS SHOWN
VERT: AS SHOWN
FIELD BOOK

DRAWING NO.
IC-08
SHT. 11 OF 11
219-00948
115-442

REGIONAL TRANSPORTATION COMMISSION
OF SOUTHERN NEVADA



2019
IMPROVEMENT PLANS FOR
CHARLESTON BOULEVARD
ITS INFRASTRUCTURE
PHASE 2
COMMERCE STREET TO FREMONT STREET

REGIONAL TRANSPORTATION COMMISSION
OF SOUTHERN NEVADA

APPROVED

Shital K. Patel

6-10-19

TRANSCORE

S-I-G SLATER
HANIFAN
GROUP
a Westwood team
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118
PHONE (702) 284-5300 FAX (702) 284-5399

FUNDED BY
FUEL REVENUE INDEXING



INDEX OF DRAWINGS

SHEET	DWG. NO.	SHEET DESCRIPTION
1		COVER SHEET
2	G-2	INDEX OF DRAWINGS AND ABBREVIATIONS
3	G-3	GENERAL NOTES
4-9	IC-01 THRU IC-06	FIBER OPTIC SYSTEM PLAN
10	IC-07	CONDUIT AND WIRE SCHEDULE
11	IC-08	DETAILS

APPROVALS

Allen Paveles
CITY ENGINEER

6-12-19
DATE

APPROVAL OF THESE PLANS BY THE CITY ENGINEER IS LIMITED TO THOSE IMPROVEMENTS CONSTRUCTED IN THE DEDICATED RIGHT-OF-WAY, AND/OR DEDICATED EASEMENTS. THIS APPROVAL DOES NOT AUTHORIZE CONSTRUCTION OF ANY IMPROVEMENTS THAT DEVIATE FROM ADOPTED STANDARDS AND/OR SPECIFICATIONS EXCEPT THOSE SPECIALLY LISTED UNDER DEVIATIONS FROM STANDARDS. THE ENGINEER SHALL RESOLVE ANY DEVIATION OTHER THAN THOSE LISTED IN DEVIATIONS FROM STANDARDS IN FAVOR OF THE UNIFORM STANDARD DRAWINGS AND SPECIFICATIONS, CLARK COUNTY AREA, NEVADA.

John W. Shuck
LAS VEGAS VALLEY WATER DISTRICT ENGINEERING SERVICES

PROJECT NO. 136352
SHEETS G-1, G-3, IC-01 THRU IC-06
FIRST APPROVED DATE: 6-3-19
DATE

AGENCY			PLANS REVIEWED BY			DATE			REVISIONS			DATE	COVER SHEET
FAST									NUMBER	DESCRIPTION			
									Δ	REVISED CONDUIT PAVING	AK 8/26/2019	7/31/19	L19-00948 115-442

CONDUIT & WIRE SCHEDULE

CONDUIT NO.	FROM	TO	NO.	SIZE (IN)	LENGTH (FT)	FIBER OPTIC CABLE (# OF STRANDS)	CONDUCTOR	REMARKS
101	TYPE 200 S.V. (E)	P30 P.B. (E)	1(E)	4(E)	350(E)	96	25 PR #22 (RS) 6 PR #22	
102	P30 P.B. (E)	TYPE 200 S.V. (E)	1(E)	4(E)	75(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
103	TYPE 200 S.V. (E)	P30 P.B. (E)	1(E)	4(E)	130(E)	12 CDCA	25 PR #22 (RS) 2 - 6 PR #22	
104	P30 P.B. (E)	P30 P.B. (E)	1(E)	4(E)	80(E)	12 CDCA	25 PR #22 (RS) 2 - 6 PR #22	
105	P30 P.B. (E)	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
106	TYPE 200 S.V. (E)	P30 P.B.	1(E)	2(E)	75(E)	96	25 PR #22 (RS) 6 PR #22	
107	P30 P.B.	TYPE 200 S.V.	1(E)	2(E)	285(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
108	TYPE 200 S.V.	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
109	TYPE 200 S.V.	TYPE 200 S.V. (E)	1(E)	2(E)	395(E)	96	25 PR #22 (RS) 6 PR #22	
110	TYPE 200 S.V. (E)	P30 P.B.	1(E)	2(E)	135(E)	12 CDCA	25 PR #22 (RS) 2 - 6 PR #22	
111	P30 P.B.	CONTROLLER CABINET (E)	1(E)	2(E)	15(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
112	TYPE 200 S.V. (E)	NO. 7 P.B. (E)	1(E)	2(E)	215(E)	96	25 PR #22 (RS) 6 PR #22	
113	NO. 7 P.B. (E)	TYPE 200 S.V. (E)	1(E) 1	4(E) 4	5(E) 5	96	6 PR #22	COIL 96--STRAND FIBER OPTIC CABLE FOR FUTURE SPLICE BY CLV
114	TYPE 200 S.V. (E)	P30 P.B. (E)	1(E)	4(E)	110(E)	96	6 PR #22	
115	P30 P.B. (E)	TYPE 200 S.V.	1(E) 1	2(E) 2	335(E) 10	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
116-200 NOT USED								
201	TYPE 200 S.V.	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	100 PR #22 (E)	
202	TYPE 200 S.V.	TYPE 200 S.V.	1(E)	2(E)	410(E)	96	100 PR #22 (E)	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
203	TYPE 200 S.V.	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	2 - 100 PR #22 (E)	
204	TYPE 200 S.V.	TYPE 200 S.V.	1(E)	2(E)	465(E)	96	100 PR #22 (E)	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
205	TYPE 200 S.V.	NO. 7 P.B. (E)	1(E)	2(E)	830(E)	96	100 PR #22 (E)	
206	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	2(E)	415(E)	96	25 PR #22 (RS) 6 PR #22	
207	TYPE 200 S.V.	(E)	1(E)	(E)	(E)	36(E)	25 PR #22 (E)	
208-300 NOT USED								
301	NO. 7 P.B. (E)	P30 P.B. (E)	1(E)	2(E)	115(E)	96	25 PR #22 (RS) 6 PR #22	
302	P30 P.B. (E)	TYPE 200 S.V. (E)	1(E)	2(E)	125(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
303	TYPE 200 S.V. (E)	P30 P.B.	1(E)	2(E)	95(E)	12 CDCA	25 PR #22 (RS) 2 - 6 PR #22	
304	P30 P.B.	CONTROLLER CABINET (E)	1(E)	2(E)	10(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
305	TYPE 200 S.V. (E)	P30 P.B.	1	4	450	96	6 PR #22	INSTALL NEW CONDUIT BY DIRECTIONAL DRILLING
305A	P30 P.B.	NO. 7 P.B. (E)	1	4	455	96	6 PR #22	INSTALL NEW CONDUIT BY DIRECTIONAL DRILLING
306	NO. 7 P.B. (E)	TYPE 200 S.V.	1(E)	3(E)	200(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
307	TYPE 200 S.V.	P30 P.B.	1(E)	3(E)	100(E)	12 CDCA	25 PR #22 (RS) 2 - 6 PR #22	
308	P30 P.B.	CONTROLLER CABINET (E)	1(E)	3(E)	15(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
309	TYPE 200 S.V.	NO. 7 P.B. (E)	1(E)	3(E)	510(E)	96	25 PR #22 (RS) 6 PR #22	
310-400 NOT USED								
401	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	375(E)	96	25 PR #22 (RS) 6 PR #22	
402	NO. 7 P.B. (E)	TYPE 200 S.V.	1(E)	3(E)	515(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
403	TYPE 200 S.V.	CONTROLLER CABINET (E)	1(E)	3(E)	40(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
404	TYPE 200 S.V.	NO. 7 P.B. (E)	1(E)	3(E)	405(E)	96	25 PR #22 (RS) 6 PR #22	
405	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	430(E)	96	25 PR #22 (RS) 6 PR #22	
406	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	505(E)	96	25 PR #22 (RS) 6 PR #22	
407-500 NOT USED								
501	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	490(E)	96	25 PR #22 (RS) 6 PR #22	
502	NO. 7 P.B. (E)	TYPE 200 S.V.	1(E)	3(E)	370(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
503	TYPE 200 S.V.	CONTROLLER CABINET (E)	1(E)	3(E)	25(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
504	TYPE 200 S.V.	NO. 7 P.B. (E)	1(E)	3(E)	440(E)	96	25 PR #22 (RS) 6 PR #22	
505	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	465(E)	96	25 PR #22 (RS) 6 PR #22	
506-600 NOT USED								
601	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	460(E)	96	25 PR #22 (RS) 6 PR #22	

CONDUIT & WIRE SCHEDULE

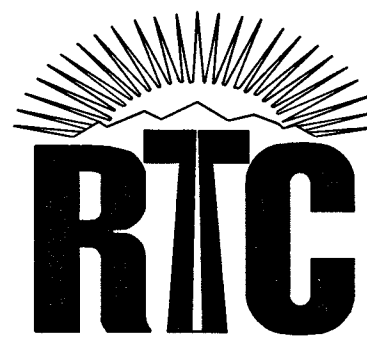
CONDUIT NO.	FROM	TO	NO.	SIZE (IN)	LENGTH (FT)	FIBER OPTIC CABLE (# OF STRANDS)	CONDUCTOR	REMARKS
602	NO. 7 P.B. (E)	NO. 7 P.B. (E)	1(E)	3(E)	540(E)	96	25 PR #22 (RS) 6 PR #22	
603	NO. 7 P.B. (E)	TYPE 100 S.V. (E)	1	4	20	96	6 PR #22	INSTALL NEW CONDUIT.
604	TYPE 100 S.V. (E)	TYPE 200 S.V. (E)	1(E)	4(E)	105(E)	96	25 PR #22 (RS) 6 PR #22	INSTALL ENCLOSURE AND PERFORM FIBER OPTIC SPLICE PER FAST PROVIDED SPLICE DIAGRAM
605	TYPE 200 S.V. (E)	CONTROLLER CABINET (E)	1(E)	2(E)	15(E)	12 CDCA	2 - 25 PR #22 (RS) 2 - 6 PR #22	
606	TYPE 200 S.V. (E)	NO. 7 P.B. (E)	1(E)	4(E)	270(E)	96	25 PR #22 (RS) 6 PR #22	

(RS) = REMOVE AND SALVAGE EXISTING
(E) = EXISTING

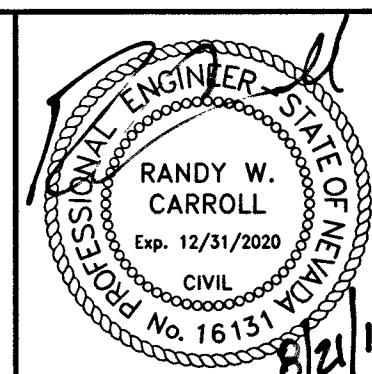
VIDEO DETECTION EQUIPMENT SCHEDULE

INTERSECTION	EDGECONNECT-PAK	EDGE2-SDLC-IM-PAK	VRACK5-PS	EDGE2-TS2-IM-PAK	EDGE2-1N-PAK
CASINO CENTER BOULEVARD/ART WAY	INSTALL	-	INSTALL	INSTALL	INSTALL (4)
3RD STREET/CASINO CENTER BOULEVARD	INSTALL	INSTALL	-	-	INSTALL (4)
4TH STREET	INSTALL	INSTALL	-	-	INSTALL (4)
GASS AVENUE/10TH STREET	INSTALL	INSTALL	-	-	INSTALL (4)
MARYLAND PARKWAY	INSTALL	INSTALL	-	-	INSTALL (4)
15TH STREET	INSTALL	-	INSTALL	INSTALL	INSTALL (4)
BRUCE STREET	INSTALL	-	INSTALL	INSTALL	INSTALL (4)
EASTERN AVENUE	INSTALL	-	INSTALL	INSTALL	INSTALL (4)

7/31/19	REVISED CONDUIT ROUTING	8/26/2019	RWC
REV. NO.	DATE	DESCRIPTION	APPROVED



CHARLESTON BOULEVARD ITS INFRASTRUCTURE
CONDUIT AND WIRE SCHEDULE
REGIONAL TRANSPORTATION COMMISSION OF SOUTHERN NEVADA



PROJECT No:	TSC1802	DRAWN BY:	JAS
DESIGNED BY:	JAS	CHECKED BY:	JSR
APPROVED BY:			
TRANSCORE			
SLATER HANIFAN GROUP			
5740 S. ARVILLE STREET #216, LAS VEGAS, NV 89118 PHONE (702) 284-0300 FAX (702) 284-0309			

SCALE	DRAWING NO.
HORIZ: AS SHOWN	IC-07
VERT: AS SHOWN	SHT. 10 OF 11
FIELD BOOK	219-00948
	115-442