

CONDUIT & WIRE SCHEDULE															VIA CONDUIT															
WIRE & CABLE	FROM	TO	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
15 COND	CNTRLR	POLE A																												
		POLE B																												
		POLE C																												
		POLE D																												
		POLE E																												
		POLE F																												
		POLE G																												
		POLE H																												
2#10 THW		LUM ● A																												
		LUM ● B																												
		LUM ● C																												
		LUM ● D																												
1 PR		2A,2B,2C																												
4 PR		2D-2F,5																												
1 PR		4A,4B																												
3 PR		4C,4D,4E																												
1 PR		6A,6B,6C																												
4 PR		6D,6E,1																												
1 PR		8A																												
3 PR		8B,8C,8D																												
2#4 & 2#10	SERV PED	CNTRLR																												
OPTICOM	CNTRLR	POLE A																												
OPTICOM	CNTRLR	POLE B																												
INTERCONNECT CABLE & CONDUIT			(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
CONDUIT SIZE (INCHES)			(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
																3														

NOTE: A NO. 8 GREEN GROUND WIRE SHALL BE RUN FROM THE BASE OF EACH TRAFFIC SIGNAL POLE TO THE CONTROLLER CABINET AND FROM THE CONTROLLER TO THE SERVICE PEDESTAL.

(E) INDICATES EXISTING

WASHINGTON AVE.

No. 3 1/2 PULLBOX

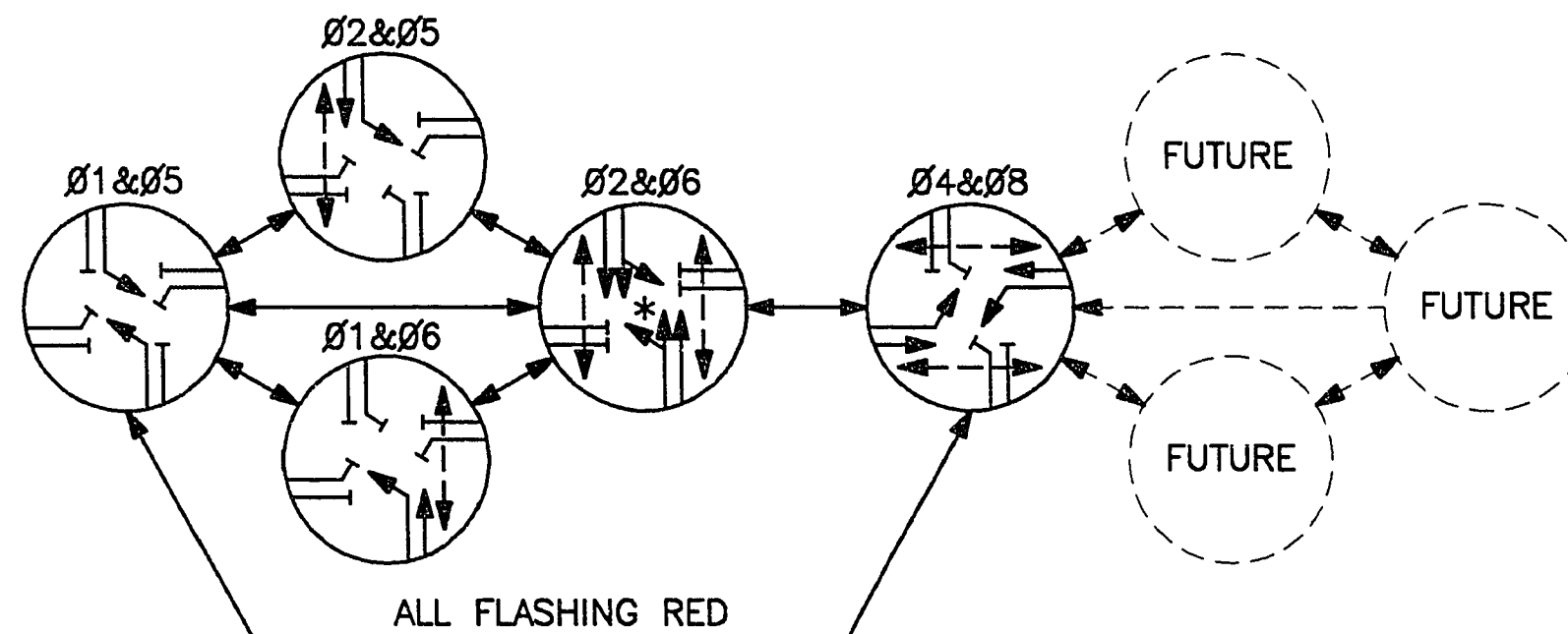
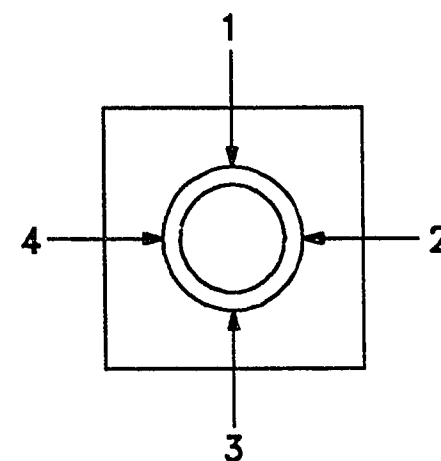
POLE SCHEDULE

POLE		SIGNALS (VEH.)		SIGNALS (PED.)		PED. PUSH BUTTON		REMARKS
POLE	LOCATION-STA.	TYPE	SIG. ARM QUAD. LING. QUAD. LING.	TYPE	QUAD.	TYPE	QUAD.	
(A)	SEE NOTE 25	XX	4 50' 4 15'	(3M-2) (1M-5) (1B-1T)	MA 2	—	—	R10-12 ON MA
(B)	EXISTING	XX	1 40' 1 15'	(2M-2) (1B-1T)	MA 3	—	—	
(C)	SEE NOTE 25	XX	2 50' 2 15'	(3M-2) (1M-5) (1B-1T)	MA 4	—	—	R10-12 ON MA
(D)	EXISTING	XX	3 40' 3 15'	(2M-2) (1B-1T)	MA 1	—	—	
(E)	STA. 84+34	1-B	— — —	—	—	W-2T	TOP	3 LT 4 RT
(F)	STA. 84+28	1-A	— — —	A-16T	TOP	W-3T	2	1 RT 4 LT
(G)	STA. 83+19	1-B	— — —	—	—	W-2T	TOP	1 LT 2 RT
(H)	STA. 83+23	1-A	— — —	A-16T	TOP	W-3T	4	2 LT 3 RT

NELLIS BLVD.

EXISTING No. 3 1/2 PULLBOX

QUADRANT LOCATOR



PHASE DIAGRAM

SHEET NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ALL EXISTING UTILITIES.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXACT LOCATION AND DEPTH OF ALL UTILITIES FOR THIS PROJECT. THE UTILITY COMPANIES SHALL BE NOTIFIED AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION. CALL BEFORE YOU DIG 1-800-227-2800.
- ALL SIGNAL CABLE SHALL BE #14AWG AND CONFORM WITH I.M.S.A. NO. 19-1 OR NO. 20-1. ALL LOOP CABLE SHALL CONFORM TO I.M.S.A. NO. 19-2 OR NO. 20-2.
- ALL CABLE AND WIRING SHALL BE INSTALLED TERMINAL TO TERMINAL, NO SPLICES ALLOWED.
- INTERSECTION LIGHTING LUMINAIRES SHALL BE 400 WATT HIGH PRESSURE SODIUM WITH M-C-III DISTRIBUTION COMPLETE WITH 120 V MAGNETIC REGULATOR TYPE BALLAST, CHARCOAL OPTICAL FILTER, AND INDIVIDUAL PHOTOCELL CONTROL (G.E. NO. M4AC4051M26MC32 CUTOFF TYPE OR EQUAL).
- ALL PEDESTRIAN PUSH BUTTON SIGNS SHALL BE 9" X 12" WITH FULL MOUNTING BRACKET.
- THE PLACING OF POLES AND CABINETS SHALL BE AS INDICATED ON THE PLANS. ALL CHANGES SHALL BE APPROVED BY THE COUNTY TRAFFIC ENGINEER.
- CONTROLLER SHALL BE MOUNTED IN A TYPE "R" CABINET WITH EXHAUST FAN AND THERMOSTAT CONTROL. CABINET SHALL BE PAINTED WHITE, INSIDE AND OUT.
- EACH LOOP DETECTOR HOMERUN REPRESENTS A SEPARATE AMPLIFIER UNIT REQUIRED.
- ALL NECESSARY AMPLIFIER UNITS, MODULES, LIGHT CONTROL UNITS, SWITCHES, OPTICOM, FLASHERS, AREA WIDE COMPUTER CONTROL, ETC. SHALL BE WIRED IN CABINET TO ACTIVATE THE PHASE OPERATION AS SHOWN. CONTRACTOR SHALL PREPARE AS BUILT DRAWINGS UPON COMPLETION OF PROJECT DETAILING ANY CHANGES TO CONTROLLER OPERATION.
- INSTALL THE 3M MODEL 205 OPTICOM SENSORS ON THE TRAFFIC SIGNAL HEADS AS SHOWN ON THIS DRAWING. RUN OPTICOM DETECTOR CABLE, 3M MODEL 138, FROM THE CONTROLLER TO POLES A AND B AS SHOWN IN THE CONDUIT AND WIRE SCHEDULE. WIRE CONTROLLER AND PROVIDE OPTICOM MODEL 268 OR MODEL 262PL IN CABINET FOR PREEMPTION OPERATION.
- INTERCONNECT CABLE SHALL BE 12 PAIR TELEPHONE, 22 AWG, PER REA SPECIFICATION PE-39.
- ALL NEW CONDUITS AND NEW PULLBOXES SHALL BE LOCATED WITHIN THE EXISTING RIGHT-OF-WAY.
- EXISTING CONDUIT LOCATIONS AS SHOWN ON THE DRAWINGS ARE DIAGRAMMATIC ONLY AND WERE TAKEN FROM RECORD DRAWINGS.
- EACH INTERSECTION LUMINAIRE SHALL BE FUSED IN POLE BASE USING IN-LINE FUSEHOLDERS.
- PROVIDE NEW (4) 3" CONDUITS FROM EXISTING NO. 7 PULLBOX TO NEW CONTROLLER BASE FOR CABLE ROUTING.
- ALL REMOVED STREET LIGHTING EQUIPMENT SHALL BE RETURNED TO THE COUNTY ELECTRICAL DIVISION, 5821 E. FLAMINGO ROAD.
- ALL PLACEMENTS OF POLES AND CABINETS SHALL PROVIDE 36" MINIMUM CLEAR SIDEWALK WIDTH.
- CENTER ALL DETECTOR LOOPS IN PROPOSED LANES. LOCATE THE FRONT OF ALL INTERSECTION LOOPS 2' IN ADVANCE OF THE STOP BARS.
- REMOVE EXISTING INTERCONNECT JUNCTION CABINET COMPLETE. CHIP BASE TO REMOVE COMPLETELY MAINTAINING EXISTING CONDUITS STUBBED-UP. PROVIDE NEW CONTROLLER AND BASE SET OVER EXISTING INTERCONNECT CONDUITS. PROVIDE NEW TRAFFIC SIGNAL CONDUITS PER NOTE 25 FOR CABLE ROUTING TO NEW CONTROLLER.
- REMOVE EXISTING CONDUCTORS FEEDING FOUR (4) EXISTING INTERSECTION LIGHTING LUMINAIRES TO BE REMOVED. MAINTAIN CIRCUIT CONTINUITY AS REQUIRED TO EXISTING STREET LIGHTS NORTH AND SOUTH, BOTH SIDES, NELLIS BLVD.
- MAINTAIN EXISTING INTERCONNECT CABLE AND EXISTING CONDUITS. RECONNECT AND TERMINATE AT NEW CONTROLLER AS REQUIRED.
- SERVICE PEDESTAL IS EXISTING TO REMAIN IN SERVICE, 200A, 120/240V, SINGLE PHASE, 3W. PROVIDE NEW 60A, 1 POLE AND 30A, 1 POLE CIRCUIT BREAKERS IN SPACE AVAILABLE TO MATCH EXISTING FOR NEW CONTROLLER AND INTERSECTION LIGHTING LUMINAIRES.
- REMOVE EXISTING STREET LIGHTS COMPLETE WITH BASE ADAPTER PLATES AND CIRCUITING TO SOURCE IN PREPARATION FOR ERECTION OF NEW TYPE XX POLES.
- PROVIDE NEW TYPE "L" FOUNDATION 5' FROM CENTERLINE OF EXISTING FOUNDATION AS INDICATED. REMOVE EXISTING STREET LIGHT COMPLETE WITH BASE ADAPTER PLATE AND CIRCUITING TO SOURCE. CHIP EXISTING BASE DOWN 24" BELOW GRADE AND BURN OFF REINFORCING, ANCHOR BOLTS, ETC. INTERCEPT EXISTING CONDUIT AND EXTEND LIKE SIZE TO NEW FOUNDATION. PATCH SIDEWALK TO MATCH EXISTING.
- ALL PLACEMENTS OF NEW AND RELOCATED POLE SHALL PROVIDE 36" MINIMUM CLEAR SIDEWALK WIDTH.
- CROSSWALKS AND STOP BARS LOCATED BY CLV, COORDINATE FRONT LOOP LOCATIONS IN FIELD PRIOR TO INSTALLATION.

STREET NAME SIGN SCHEDULE

POLE	ILLUMINATED STREET NAME SIGN	BLOCK # SIGN
A	WASHINGTON	E5100
B	NELLIS	N900
C	WASHINGTON	E5000
D	NELLIS	N800

NOTE: SIGNS IN ACCORDANCE WITH USD 404.417 AND 404.420

HARRIS ENGINEERS, INC.
MECHANICAL/ELECTRICAL CONSULTANTS
2785 East Desert Inn Road, Suite 260
Las Vegas, Nevada 89121
702/798-0225

DEPARTMENT OF PUBLIC WORKS

WASHINGTON AVENUE
ROADWAY PROJECT

TRAFFIC SIGNAL PLAN
WASHINGTON AVE. AND
NELLIS BOULEVARD

92001.00

DRAWING NO.
107-V1982

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74/74