EXISTING POLE SCHEDULE

	LOCATION STATION	POLE TYPE	SIGNAL ARM QUAD	SIGNAL ARM LENGTH	LUMINAIRE ARM QUAD	LUMINAIRE ARM LENGTH	VEHICLE SIGNALS QUAD	VEHICLE SIGNALS TYPE	PED SIGNALS QUAD	PED SIGNALS TYPE	PED PUSH BUTTON QUAD	PED PUSH BUTTON SIGN ARROW	REMARKS
A	EXISTING	XX-A	1	50'	1	15'	MA 3	(3)M-2 B-2T	N/A	N/A	N/A	N/A	EXISTING POLE TO REMAIN
B	EXISTING	XX-A	2	50'	2	15	MA 4	(3)M-2 B-2T	N/A	N/A	N/A	N/A	EXISTING POLE TO REMAIN
C	EXISTING	XX-A	3	50'	3	15'	MA 1	(3)M-2 B-2T	N/A	N/A	N/A	N/A	EXISTING POLE TO REMAIN
D	EXISTING	XX-A	4	50'	4	15'	MA 2	(3)M-2 B-2T	N/A	N/A	N/A	N/A	EXISTING POLE/MAST ARM/ SIGNAL TO BE RETURNED TO CLV
E	EXISTING	1-A	N/A	N/A	N/A	N/A	N/A	N/A	3	W-3T	1 4	RT LT	EXISTING POLE TO REMAIN
F	EXISTING	1-A	N/A	N/A	N/A	N/A	N/A	N/A	4	W-3T	1 2	RT LT	EXISTING POLE TO REMAIN
G	EXISTING	1-A	N/A	N/A	N/A	N/A	N/A	N/A	1	W-3T	2 3	RT LT	EXISTING POLE TO REMAIN
H	EXISTING	1-A	N/A	N/A	N/A	N/A	N/A	N/A	2	W-3T	3 4	RT LT	EXISTING POLE/MAST ARM/ SIGNAL TO BE RETURNED TO CLV
I	STA. 30+99.74 90.96 LT. (GRAND CENTRAL)	XX-A	4	50'	4	15'	MA 2	(3)M-2 B-2T	N/A	N/A	N/A	N/A	(2) R3-5L (S) Ø3 & Ø1 ALL ARROWS
J	STA. 31+08.35 72.65 LT. (GRAND CENTRAL)	1-A	N/A	N/A	N/A	N/A	N/A	N/A	2	W-3T	3 4	LT RT	

EXISTING CONDUIT AND WIRE SCHEDULE

WIRE AND 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	28	29
2 #6, 2 #10, 1 #4 GND THW	METER PEDESTAL	CONTROLLER																													
25 COND 2 #10 THW	CONTROLLER	POLE A	●										●	●																	
25 COND 2 #10 THW	CONTROLLER	POLE B																	●			●									
25 COND 2 #10 THW	CONTROLLER	POLE C		●																											
25 COND 2 #10 THW	CONTROLLER	POLE D						●	●																						
25 COND 2 #10 THW	CONTROLLER	POLE E											●															●			
25 COND 2 #10 THW	CONTROLLER	POLE F																				●							●		
25 COND 2 #10 THW	CONTROLLER	POLE G																												●	
25 COND 2 #10 THW	CONTROLLER	POLE H						●																			●				
25 COND. 2 #10 THW	CONTROLLER	POLE I						●																							
25 COND. 2 #10 THW	CONTROLLER	POLE J						●																							●
TWO LOOP CABLES	CONTROLLER	DET 2C & 2D						●		●	●																				
ONE LOOP CABLES	CONTROLLER	DET 2A & 2B						●		●																					
ONE LOOP CABLES	CONTROLLER	DET 5A & 5B						●		●		●																			
ONE LOOP CABLES	CONTROLLER	DET 4A & 4B		●																											
TWO LOOP CABLES	CONTROLLER	DET 4C & 4D		●	●																										
ONE LOOP CABLES	CONTROLLER	DET 7A & 7B		●		●																									
ONE LOOP CABLES	CONTROLLER	DET 6A & 6B																			●	●									
TWO LOOP CABLES	CONTROLLER	DET 6C & 6D																		●	●	●									
ONE LOOP CABLES	CONTROLLER	DET 1A & 1B																					●								
ONE LOOP CABLES	CONTROLLER	DET 8A & 8B											●			●															
TWO LOOP CABLES	CONTROLLER	DET 8C & 8D											●			●	●														
ONE LOOP CABLES	CONTROLLER	DET 3A & 3B																●				●									
OPTICOM CABLE	CONTROLLER	POLE C		●																											
OPTICOM CABLE	CONTROLLER	POLE B																	●			●									
3 #3/0 THW	TRANSFORMER	METER PEDESTAL																						●							
CONDUIT ONLY	TRANSFORMER	NPCO PB IRON HORSE																							●						
2 CONDUITS ONLY	NPCO PB BONNIEVILLE	NPCO PB BONNIEVILLE																								●					
CONDUIT SIZE			EX-2"	EX-3"	EX-2"	EX-2"	EX-2"	EX-3" *	EX-2"	EX-2"	EX-2" *	EX-2" *	EX-(2)3" *	EX-2"	EX-2"	EX-2"	EX-2"	EX-2"	EX-2"	EX-2"	EX-2"	EX-(2) 3"	EX-2"	EX-2"	EX-4"	EX-(2) 6"	EX-(2)	EX-(2)	EX-(2)	EX-(2)

NOTE: INCLUDE IN EACH CONDUIT A #8 GREEN GROUNDING CONDUCTOR. *NOTE: EXTEND CONDUIT TO NEW LOCATION AND REPULL WIRE

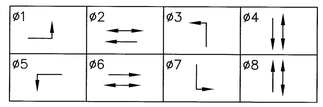
77818

SIGNALIZATION SYMBOLS

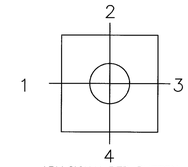
SYMBOL — PROPOSED / EXISTING — DESCRIPTION

- PULL BOX
- SIGNAL LUMINAIRE POLE, POST
- UTILITY POLE
- CONTROL CABINET
- CONDUIT RUN
- AERIAL CABLE
- LOOP DETECTOR
- PADMOUNT
- HIGH PRESSURE SODIUM LUMINAIRE – 400 WATT
- TRAFFIC SIGNAL INDICATION WITH BACKPLATE
- TRAFFIC SIGNAL INDICATION WITH DIRECTIONAL ARROW AND BACKPLATE
- PEDESTRIAN INDICATION
- STREET NAME SIGN – INTERNALLY ILLUMINATED
- CURB FLASHER
- VEHICLE MOVEMENT (STOPPED)
- CONDUIT RUN NUMBER
- PEDESTRIAN MOVEMENT
- TRAFFIC SIGNAL MAST ARM
- TRAFFIC SIGNAL AND LUMINAIRE ON MAST ARMS
- PEDESTRIAN PUSH BUTTON INDICATING DIRECTION OF CONTROL
- TRAFFIC SIGNAL WITH ALL COLORS LOUVERED
- M-5 TRAFFIC SIGNAL HEAD W/DIRECTIONAL SIGNAL & BACKPLATE
- INDICATES CONDUIT–SEE CONDUIT SCHEDULE.

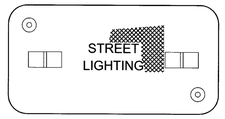
EXISTING PHASING DIAGRAM



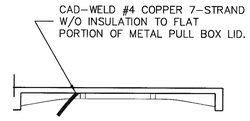
QUADRANT



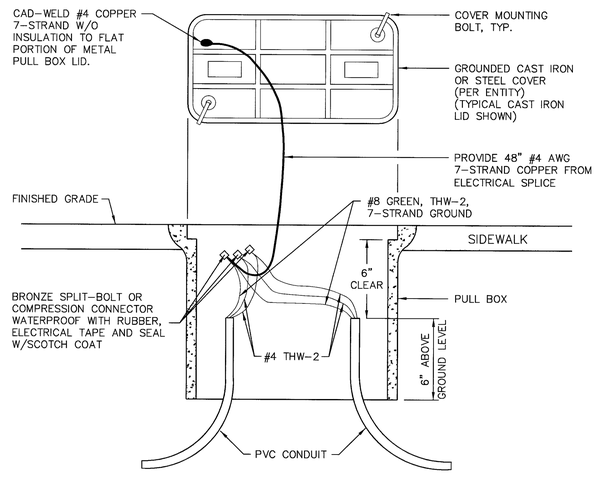
ARM,SIGNAL,PED BUTTON (TOP VIEW)



PULL BOX COVER – TOP VIEW



PULL BOX COVER – SIDE VIEW



NOTES:

1. ALL CONDUIT OPENINGS SHALL BE SEALED WITH DUCT SEAL OR APPROVED EQUIVALENT.
2. SPARE CONDUITS SHALL CONTAIN A #8 AWG COPPER CONDUCTOR WITH GREEN THW INSULATION AND SHALL BE CAPPED WITH A PLASTIC INSERT WITH J HOOK.
3. WIRE TAILS SHALL EXTEND 12 INCHES ABOVE FINISHED GRADE OF THE SIDEWALK.
4. PULL BOX LID SHALL BE MARKED AS "STREET LIGHTING" OR "TRAFFIC SIGNAL" AS APPROPRIATE.
5. ALL METAL PULL BOX LIDS SHALL BE CONNECTED TO THE BONDING GROUND USING COPPER, #4 AWG 7–STRAND CONDUCTOR WITHOUT INSULATION.

PULL BOX COVER BONDING DETAIL

Not to Scale

AVOID HITTING OVERHEAD POWER LINES. IT'S COSTLY.
CALL BEFORE YOU DO OVERHEAD
CALL 1-702-227-2929
AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.
Call before you Dig.
1-800-227-2600
UNDERGROUND SERVICE (USA)

MARTIN & MARTIN ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS AND ELEVATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. IF A CONFLICT EXISTS BETWEEN WHAT IS SHOWN ON THESE DRAWINGS AND WHAT EXISTS IN THE FIELD, THE CONTRACTOR IS TO NOTIFY THE ARCHITECT OR ENGINEER IMMEDIATELY.

1. ALL SIGNAL CABLE SHALL CONFORM TO I.M.S.A. #20–1. OPTICOM CABLE SHALL BE 3 PAIR NO. 20, 3M MODEL 138. ALL CABLE SHALL BE RUN FROM TERMINAL TO TERMINAL WITHOUT SPLICING.
2. ONE #8 CONDUCTOR SHALL BE RUN FROM THE CONTROLLER TO ALL POLES AS A BONDING GROUND.
3. RETAIN TRAFFIC SIGNAL CABLE, NO. 3–½ PULLBOX MAY BE USED AT OTHER LOCATIONS. ALL PULLBOXES SHALL BE CONCRETE AND HAVE GROUNDED METAL COVERS MARKED "TRAFFIC SIGNAL" OR "STREET LIGHTING". THE GROUNDING CONDUCTOR SHALL BE WELDED TO THE PULL BOX COVER USING A THERMAL WELDING PROCESS. SEE GROUNDING DETAIL THIS SHEET.
4. CONDUIT ROUTING AND PULLBOX LOCATION ARE SCHEMATIC FOR THE PURPOSE OF CLARITY AND MAY DIFFER FROM ACTUAL INSTALLATION. FINAL LOCATION OF PULLBOXES SHALL BE DETERMINED IN THE FIELD. PULLBOXES SHALL NOT BE INSTALLED IN SIDEWALK RAMPS.
5. ALL CONDUIT BENDS FOR TRAFFIC SIGNALS TERMINATING IN PULL BOXES, TRAFFIC SIGNAL POLES AND TRAFFIC CONTROLLER CABINET SHALL BE PVC COATED RIGID STEEL UNLESS INCLUDED IN A CONDUIT RUN THAT IS SHORTER THAN 30 FEET. TRAFFIC SIGNAL CONDUIT BENDS SHALL HAVE A 24 INCH MINIMUM RADIUS.
6. EXISTING TRAFFIC SIGNAL AND/OR LIGHTING EQUIPMENT REMOVED AND NOT RELOCATED SHALL BE SALVAGED BY THE CONTRACTOR AND DELIVERED TO CLARK COUNTY TRAFFIC OPERATIONS, 4315 S. STEPHANIE ST., LAS VEGAS, NV. BY APPOINTMENT ONLY. 702–455–7544.
7. ALL POLE ASSEMBLIES, BASE COVERS, AND LUMINARIES BRACKETS SHALL BE HOT DIP GALVANIZED IN CONFORMANCE WITH A.S.T.M. DESIGNATION A123 AND SHALL NOT BE PAINTED. CLARK COUNTY RESERVES THE RIGHT TO REJECT SIGNAL POLES AND ASSEMBLIES WITCH HAVE A "STRIPED" APPEARANCE.
8. THE FINAL POLE LOCATIONS SHALL BE DETERMINED AT THE TIME OF CONSTRUCTION AND SHALL BE APPROVED BY THE CITY OF LAS VEGAS.
9. INTERSECTION LUMINARIES SHALL BE 400 WATT HPS WITH IES MC3 DISTRIBUTION WITH 120 VOLT MAGNETIC REGULATOR BALLAST (G.E. #MSCL40S1M22FMC3, SYLVANIA LAMP LU400/SBY (NAED CODE #67584) AS INDICATED ON THE PLANS. EACH POLE SUPPORTING ONE OR MORE LUMINARIES SHALL BE ELECTRICALLY FED BY AN INDIVIDUAL 120V – 1P–30A BREAKER IN THE ELECTRICAL SERVICE PEDESTAL AND A HOMERUN OF 3–#10 AWG THW–2 COPPER WIRES (BLACK, WHITE AND GREEN) FROM EACH POLE TO THE ELECTRICAL SERVICE.
10. THE CONTRACTOR SHALL ENSURE THE CONTINUITY OF THE EXISTING 240 VOLT STREETLIGHT CIRCUIT WHILE REPLACING THE LUMINARIES.
11. CONTRACTOR SHALL INSURE THAT THE TRAFFIC SIGNAL POLES ARE PLUMB AFTER THE INSTALLATION OF MAST ARMS AND TRAFFIC SIGNAL HEADS.
12. PEDESTRIAN PUSH BUTTONS SHALL MEET THE AMERICANS WITH DISABILITY ACT (ADA) ACCESSIBILITY GUIDELINES AND BE INSTALLED ON POLE AT A HEIGHT BETWEEN 36 INCHES AND 42 INCHES FROM FINISHED GRADE. PEDESTRIAN SIGN SHALL BE R1–3B.
13. ALL PEDESTRIAN SIGNAL ASSEMBLIES SHALL BE SUPPLIED WITH SIDE BY SIDE 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 SPECIAL PROVISIONS. THE SYMBOLS SHALL BE ENTIRELY LIGHTED AND NOT HOLLOW.
14. ALL VEHICLE SIGNAL INDICATIONS SHALL BE LIGHT EMITTING DIODE (L.E.D.).
15. ALL L.E.D. MODULES SHALL BE DIALIGHT OR APPROVED EQUAL.
16. THE CONTRACTOR SHALL USE 3 INDIVIDUAL NO. 10 CONDUCTOR (BLUE, WHITE AND GREEN) FOR POWERING THE VIDEO CAMERAS.
17. MODEL 722 (TWO–WAY) OPTICOM DETECTORS SHALL BE MOUNTED ON TOP OF OF LEFT–MOST SIGNAL HEAD OR MAST ARM. THE CONTROLLER SHALL BE EQUIPPED FOR OPTICOM PRE–EMPTION USING A CONTRACTOR SUPPLIED MODEL 752 PHASE SELECTOR (POLE F).
18. REMOVAL AND REPLACEMENT OF ANY CURB, GUTTER AND SIDEWALK REQUIRED TO INSTALL THE TRAFFIC SIGNAL FACILITIES SHALL BE INCLUDED IN THE LUMP SUM COST.
19. CONTRACTOR SHALL INSTALL TRUNCATED DOMES PER UNIFORM STD. DWG. NO. 235 REVISED 2–13–2003 IN ALL FOUR (4) EXISTING SIDEWALK RAMPS IN INTERSECTION.
20. THE CONTRACTOR SHALL BE RESPONSIBLE LOCATING AND PROTECTING ALL UNDERGROUND AND AERIAL UTILITIES AND CONSTRUCTIONS.

NOTE:

CONTRACTOR SHALL CONTACT CITY OF LAS VEGAS OPERATIONS AT 229–6448 TWO (2) WEEKS PRIOR TO ANY SIGNAL WORK.

NOTE:

CONSTRACTOR SHALL ENSURE THAT THE EXISTING SIGNAL IS OPERATIONAL AT ALL TIMES DURING CONSTRUCTION.

no	description of revisions	date	name
1	ADDED SHEET	3/1/05	JRW

WORLD MARKET CENTER
350 S. Beverly Hills Dr. Suite 330
Beverly Hills CA. 90212
phone: (310)284–8600
fax: (310)284–8100

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2101 S. JONES, SUITE 120
LAS VEGAS, NV 89146
PHONE (702) 248–8000
FAX (702) 248–8070

sheet: TRAFFIC NOTES AND DETAILS SHEET

title: WORLD MARKET CENTER PHASE I

date	8/18/04
job number	1913.01
design by	JON R. WAKENHUT, P.E.
drawn by	D. BUTZ
checked by	JAMES R. DAVIS, P.E.

seal: PROFESSIONAL ENGINEER–STATE OF NEVADA — JAMES R. DAVIS — Exp. 12-31-06 — CIVIL — No. 8292

sheet: C7.02

SHEET 19 OF 25

drawing number: 10713916

REPLAT