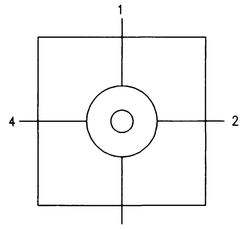
QUADRANT



ARM, SIGNAL, PED BUTTON
(TOP VIEW)

NOTE: ALL STREET LIGHT POLES AND SERVICE POINTS THAT ARE TO BE REMOVED SHALL NOT BE RE-USED. ALL EQUIPMENT SHALL BE RETURNED TO CLV ELECTRICAL SHOP AT 3100 E. BONANZA ROAD.

BENCH MARK

BENCHMARK #OC0229N4
RIVET AND PLATE IN TC, SW RETURN
MARION DR. AND OWENS DR.
ELEV. 1784.65

BASIS OF BEARING

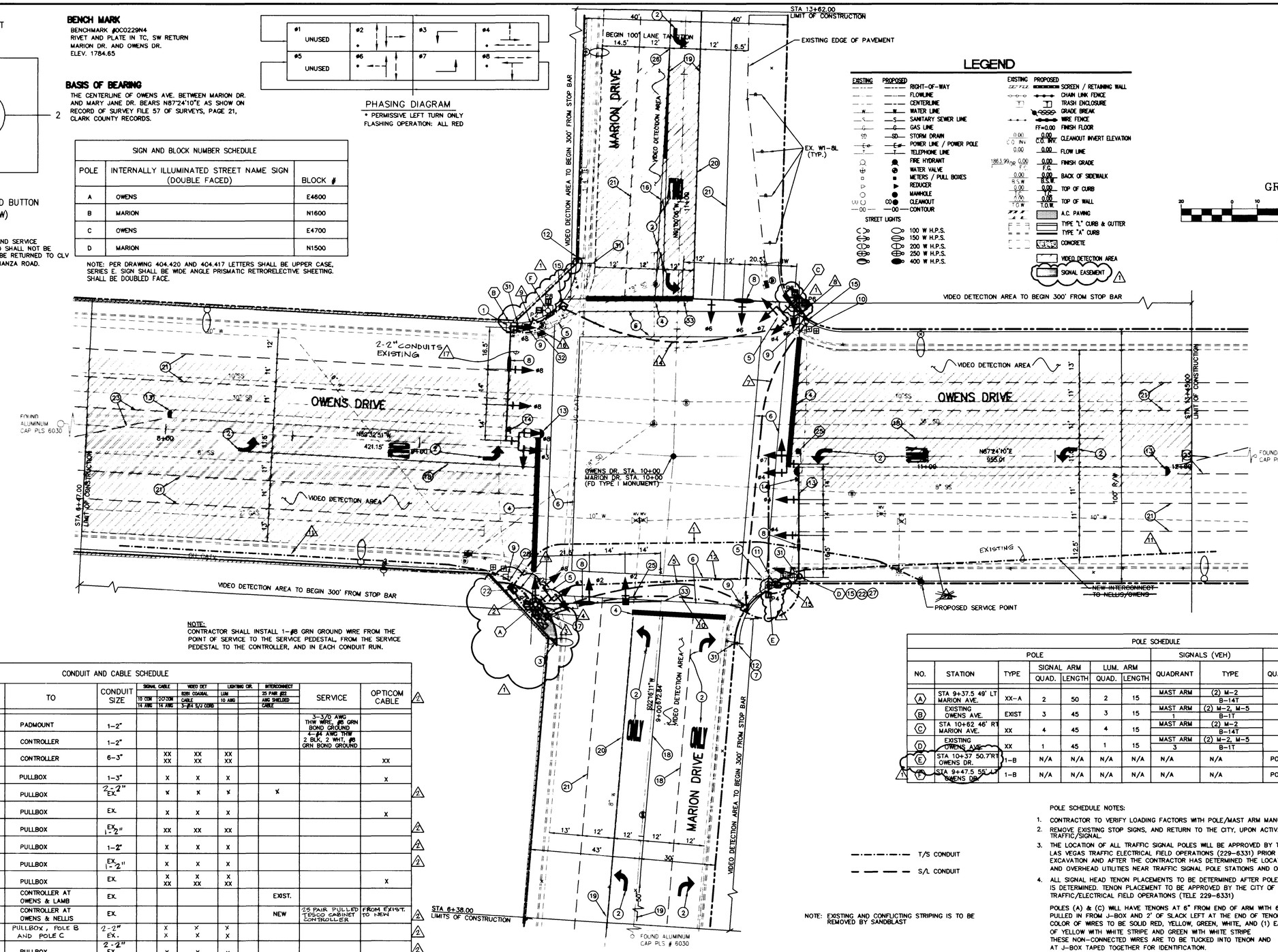
THE CENTERLINE OF OWENS AVE. BETWEEN MARION DR. AND MARY JANE DR. BEARS N87°24'10"E AS SHOW ON RECORD OF SURVEY FILE 57 OF SURVEYS, PAGE 21, CLARK COUNTY RECORDS.

SIGN AND BLOCK NUMBER SCHEDULE		
POLE	INTERNALLY ILLUMINATED STREET NAME SIGN (DOUBLE FACED)	BLOCK #
A	OWENS	E4600
B	MARION	N1600
C	OWENS	E4700
D	MARION	N1500

NOTE: PER DRAWING 404.420 AND 404.417 LETTERS SHALL BE UPPER CASE, SERIES E. SIGN SHALL BE WIDE ANGLE PRISMATIC RETROREFLECTIVE SHEETING. SHALL BE DOUBLED FACE.

PHASING DIAGRAM

* PERMISSIVE LEFT TURN ONLY
FLASHING OPERATION: ALL RED



LEGEND

EXISTING	PROPOSED	
		RIGHT-OF-WAY
		FLOWLINE
		CENTERLINE
W	W	WATER LINE
S	S	SANITARY SEWER LINE
G	G	GAS LINE
SD	SD	STORM DRAIN
E	E	POWER LINE / POWER POLE
T	T	TELEPHONE LINE
		FIRE HYDRANT
		WATER VALVE
		METERS / PULL BOXES
		REDUCER
		MANHOLE
CO	CO	CLEANOUT
00	00	CONTOUR

STREET LIGHTS

100 W H.P.S.
150 W H.P.S.
200 W H.P.S.
250 W H.P.S.
400 W H.P.S.

EXISTING	PROPOSED	
		SCREEN / RETAINING WALL
		CHAIN LINK FENCE
T	T	TRASH ENCLOSURE
		GRADE BREAK
		WIRE FENCE
	FF=0.00	FINISH FLOOR
0.00	0.00	CLEANOUT INVERT ELEVATION
C.O. INV.	C.O. INV.	
0.00	0.00	FLOW LINE
186.99 TOP 0.00 F.G.	0.00 F.G.	FINISH GRADE
0.00 B.S.W.	0.00 B.S.W.	BACK OF SIDEWALK
0.00 T.C.	0.00 T.C.	TOP OF CURB
0.00 T.W.	0.00 T.W.	TOP OF WALL
		A.C. PAVING
		TYPE "L" CURB & GUTTER
		TYPE "A" CURB
		CONCRETE
		VIDEO DETECTION AREA
		SIGNAL EASEMENT

GRAPHIC SCALE

20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

CONDUIT AND CABLE SCHEDULE											
RUN NO.	FROM	TO	CONDUIT SIZE	SIGNAL CABLE 16 CON 14 AWG	SIGNAL CABLE 2/C CON 14 AWG	VIDEO DET 82BI COAXIAL CABLE	VIDEO DET 5-#14 S/C CORD	LIGHTING CIR. LUM. 10 AWG	LIGHTING CIR.	INTERCONNECT 25 PAIR #22 AWG SHIELDED CABLE	INTERCONNECT	SERVICE	OPTICOM CABLE
1	SERVICE POINT	PADMOUNT	1-2"									3-3/0 AWG THW WIRE, #6 GRN BOND GROUND	
2	PADMOUNT	CONTROLLER	1-2"									4-#4 AWG THW 2 BLK, 2 WHT, #8 GRN BOND GROUND	
3	PULLBOX	CONTROLLER	6-3"		XX XX	XX XX	XX XX						XX
4	POLE A	PULLBOX	1-3"		X	X	X						X
5	PULLBOX	PULLBOX	2-2" EX.		X	X	X			X			
6	POLE D	PULLBOX	EX.		X	X	X						X
7	PULLBOX	PULLBOX	EX. 1-2"		XX	XX	XX						
8	POLE C	PULLBOX	1-2"		X	X	X						
9	POLE B	PULLBOX	EX. 1-2"		X	X	X						
10	PULLBOX	PULLBOX	EX.		X XX	X XX	X XX						X
11	CONTROLLER	CONTROLLER AT OWENS & LAMB	EX.							EXIST.			
12	CONTROLLER	CONTROLLER AT OWENS & NELLIS	EX.							NEW		25 PAIR PULLED TESCO CABINET CONTROLLER	FROM EXIST. TO NEW
17	CONTROLLER	PULLBOX, POLE B AND POLE C	2-2" EX.		X X	X X	X X						
14	PULLBOX	PULLBOX	2-2" EX.		X	X	X						
15	POLE D	POLE E	1-2"	#6	X								
16	POLE B	POLE F	1-2"	#6	X								

NOTE:
CONTRACTOR SHALL INSTALL 1-#8 GRN GROUND WIRE FROM THE POINT OF SERVICE TO THE SERVICE PEDESTAL, FROM THE SERVICE PEDESTAL TO THE CONTROLLER, AND IN EACH CONDUIT RUN.

T/S CONDUIT
S/L CONDUIT

NOTE: EXISTING AND CONFLICTING STRIPING IS TO BE REMOVED BY SANDBLAST

POLE SCHEDULE											
		POLE					SIGNALS (VEH)		SIGNALS (PED)		PED. PUSH BUTTON
NO.	STATION	TYPE	SIGNAL ARM QUAD.	SIGNAL ARM LENGTH	LUM. ARM QUAD.	LUM. ARM LENGTH	QUADRANT	TYPE	QUADRANT	MOUNTING	QUADRANT / ARROW
A	STA 9+37.5 49' LT MARION AVE.	XX-A	2	50	2	15	MAST ARM	(2) M-2	4	W-3T	2 RT
								B-14T			1 LT
B	EXISTING OWENS AVE.	EXIST	3	45	3	15	MAST ARM	(2) M-2, M-5			
							1	B-1T			
C	STA 10+62.46' RT MARION AVE.	XX	4	45	4	15	MAST ARM	(2) M-2	2	W-3T	4 RT
								B-14T			3 LT
D	EXISTING OWENS AVE.	XX	1	45	1	15	MAST ARM	(2) M-2, M-5			
							3	B-1T			
E	STA 10+37 50.7'RT OWENS DR.	1-B	N/A	N/A	N/A	N/A	N/A	N/A	POST TOP	W-2T	1 RT
											4 LT
F	STA 9+47.5 55' LT OWENS DR.	1-B	N/A	N/A	N/A	N/A	N/A	N/A	POST TOP	W-2T	3 RT
											2 LT

POLE SCHEDULE NOTES:

1. CONTRACTOR TO VERIFY LOADING FACTORS WITH POLE/MAST ARM MANUFACTURER.
2. REMOVE EXISTING STOP SIGNS, AND RETURN TO THE CITY, UPON ACTIVATION OF TRAFFIC/SIGNAL.
3. THE LOCATION OF ALL TRAFFIC SIGNAL POLES WILL BE APPROVED BY THE CITY OF LAS VEGAS TRAFFIC ELECTRICAL FIELD OPERATIONS (229-6331) PRIOR TO ANY POLE EXCAVATION AND AFTER THE CONTRACTOR HAS DETERMINED THE LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES NEAR TRAFFIC SIGNAL POLE STATIONS AND OFFSETS.
4. ALL SIGNAL HEAD TENON PLACEMENTS TO BE DETERMINED AFTER POLE PLACEMENT IS DETERMINED. TENON PLACEMENT TO BE APPROVED BY THE CITY OF LAS VEGAS TRAFFIC/ELECTRICAL FIELD OPERATIONS (TELE 229-6331)

POLES (A) & (C) WILL HAVE TENONS AT 6" FROM END OF ARM WITH 6 WIRES PULLED IN FROM J-BOX AND 2' OF SLACK LEFT AT THE END OF TENON. COLOR OF WIRES TO BE SOLID RED, YELLOW, GREEN, WHITE, AND (1) EACH OF YELLOW WITH WHITE STRIPE AND GREEN WITH WHITE STRIPE. THESE NON-CONNECTED WIRES ARE TO BE TUCKED INTO TENON AND AT J-BOX TAPED TOGETHER FOR IDENTIFICATION.

AS BUILT

CONSTRUCTION NOTES:

1. CONTRACTOR TO INSTALL MAST ARM ON EXISTING XX-A POLE.
2. INSTALL COLD POLYMER FILM WORD OR SYMBOL MARKING AS SHOWN PER USD 246 USING 3M N-440 OR APPROVED EQIVALENT.
3. CONTRACTOR TO REMOVE LIGHT POLE AND INSTALL #3 1/2 PULLBOX-EXISTING TRAFFIC SIGNAL FOUNDATION TO BE REMOVED TO 18" (MIN) BELOW GRADE.
4. INSTALL 24" WIDE COLD POLYMER FILM STOP BAR PER USD NO. 254 USING 3M N-440 OR APPROVED EQUIVALENT
5. INSTALL NEW WHEELCHAIR RAMPS IN ACCORDANCE WITH USD 235 AND DETAIL 1/07 REMOVED & REPLACE EXISTING CONCRETE TO NEAREST EXPANSION JOINT AS NECESSARY
6. INSTALL COLD POLYMER FILM 10' WIDE CROSSWALK PER USD NO. 254 USING 3M N-440 OR APPROVED EQUIVALENT
7. INSTALL R3-7R (30" X 30")
8. INSTALL VIDEO DETECTION INTERFACE CAMERAS MOUNTED ON HIGHPOINT OF THE LUMINAIRE ARM. EITHER PEEKVISION VIDEO TRAK 900 OR ECONOLITE AUTOSCOPE 2004 VIDEO SYSTEMS ARE ACCEPTABLE. 8281 COAXIAL CABLE AND 3-#14 AWG S/I CORD MUST BE RUN FROM THE CABINET TO EACH POLE. ONLY BNC CONNECTIONS ARE ACCEPTED FOR TERMINATIONS.
9. EXISTING NO. 5 PULLBOX
10. EXISTING # 3 1/2 PULLBOX
11. REMOVE EXIST. SPLICE BOX AND REPLACE WITH #5 PULLBOX. THE CABLE ENTERING THE SPLICE BOX FROM THE WEST SHALL BE BACKPULLED TO THE CABINET. NEW INTERCONNECT SHALL THEN BE PULLED FROM THE CABINET TO NELLIS/OWENS WITHOUT SPLICES. FIRE PRE-EMPTION SHALL BE PHASES 2 & 6 OR PHASES 4 & 8.
12. REMOVE EX. STOP SIGN AND POST WHEN TURNED ON AND RETURN BOTH TO THE CITY OF LAS VEGAS
13. INSTALL MEDIAN NOSE MARKERS PER USD NO. 248
14. INSTALL R10-12 (24" X 30") IMMEDIATELY ADJACENT TO THE M-5 SIGNAL HEAD.
15. CONTRACTOR SHALL REMOVE EXISTING STREET LIGHT AND ADAPTER PLATE
16. INSTALL 100 LF TRANSITION SECTION LANE DELINEATION PER USD NO. 245
17. INSTALL #7 PULLBOX PER USD NO. 404.130
18. INSTALL 100 LF OF STORAGE LANE LINE PER USD NO. 246
19. INSTALL 100 LF OF TYPE 2 CENTERLINE.
20. INSTALL 200 LF OF TYPE 1 CENTERLINE.
21. INSTALL 300 LF OF TYPE 5 LANE LINE PER USD NO. 244A
22. POLE D SHALL HAVE ZERO RISE LUMINAIRE ARM
23. INSTALL 150' LF OF TRANSITION SECTION LANE DELINEATION PER USD NO. 245
24. SERVICE SHALL HAVE 1-60 AMP SINGLE POLE BREAKER FOR SIGNAL AND 2-40 AMP SINGLE POLE BREAKERS FOR INTERSECTION STREET LIGHTS. SERVICE SHALL BE A 200 AMP PADMOUNT.
25. THE CONTRACTOR SHALL PROVIDE AND INSTALL OPTICOM EQUIPMENT FOR FIRE PRE-EMPTION AS SPECIFIED IN THE CONTRACT BID DOCUMENTS. INSTALLATION OF OPTICOM EQUIPMENT IS CONSIDERED PART OF THE NEW CONTROLLER EQUIPMENT AND THUS THE CONTRACTOR'S BID FOR NEW CONTROLLER AND CABINET SHALL COVER ALL EXPENSE RELATED TO OPTICOM INSTALLATION.

OPTICOM DETECTORS SHALL BE MOUNTED ON TOP OF THE SIGNAL HEADS AT THE END OF THE MAST ARMS OF POLES A AND D. OPTICOM DETECTOR CABLE SHALL RUN FROM DETECTOR ON POLES A AND D TO THE OPTICOM UNIT IN CABINET.

26. INSTALL 50 LF OF STORAGE LANE LINE PER USD NO. 246
27. CONTRACTOR SHALL INSTALL NEW SIGNAL POLE ON EXISTING TYPE "H" FOUNDATION
28. CONTRACTOR TO LOCATE EXISTING INTERCONNECT CONDUIT FROM CONTROLLER AT LAMB AND OWENS AND BACKPULL THE INTERCONNECT CABLE FROM THE EXISTING SPLICE BOX TO THE CONTROLLER CABINET. NEW INTERCONNECT CABLE WILL THEN BE PULLED FROM THE CONTROLLER CABINET TO THE CONTROLLER AT NELLIS AND OWENS.
29. ALL PEDESTRIAN PUSH BUTTONS SHALL BE ADA COMPATIBLE.
30. ALL RED LIGHT INDICATIONS SHALL BE OF LIGHT EMITTING DIODE TYPE VIA L.E.D. RETROFIT MODULE/KIT PER C.L.V. SPECIFICIATIONS.
31. REMOVE AND REPLACE EXISTING SIDEWALK PER USD NO. 234.
32. EXISTING DROP INLET TO REMAIN UNDISTURBED.
33. INSTALL SIGNAL HEAD TENON 6" FROM END OF MAST ARM.
34. INSTALL TYPE "R" CABINET PER USD 404.307. CITY OF LAS VEGAS WILL SUPPLY TIMING UNIT.

NOTE: ALL STREET LIGHT POLES AND SERVICE POINTS THAT ARE TO BE REMOVED SHALL NOT BE RE-USED. ALL EQUIPMENT SHALL BE RETURNED TO CLV ELECTRICAL SHOP AT 3100 BONANZA ROAD.

AVOID CUTTING UNDERGROUND UTILITY LINES. IT'S COSTLY.	AVOID OVERHEAD POWER LINE CONTACT
Call before you Dig— 1-800-227-2600 UNDERGROUND SERVICE ALERT (U.S.A.)	Call before you OVERHEAD 1-702-593-6111 NEVADA POWER ENVIRONMENT AND SAFETY SERVICES DEPARTMENT

MARTIN & MARTIN ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS. THE UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY THE LOCATION 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.

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CIVIL ENGINEERS
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LAS VEGAS, NEVADA 89102
PHONE (702) 248-8000

MARTIN & MARTIN

CIVIL ENGINEER-STATE OF NEVADA
GABRIEL MENENDEZ
CIVIL
NO. #09649
5/5/98

SIGNALIZATION PLAN OWENS DRIVE AND MARION DRIVE

BID NUMBER 98.1730.18

no	description of revisions	date	name
1	REVISION FOR ADDENDUM 1	4/30/98	GPM
2	AS - BUILT		

date	12-05-97
job number	1824.01
design by	D. SWALLOW
drawn by	T. ORTIZ
checked by	G. MENENDEZ P.E.

sheet number

2 OF 7

DRAWING NUMBER
107-V2712

16582

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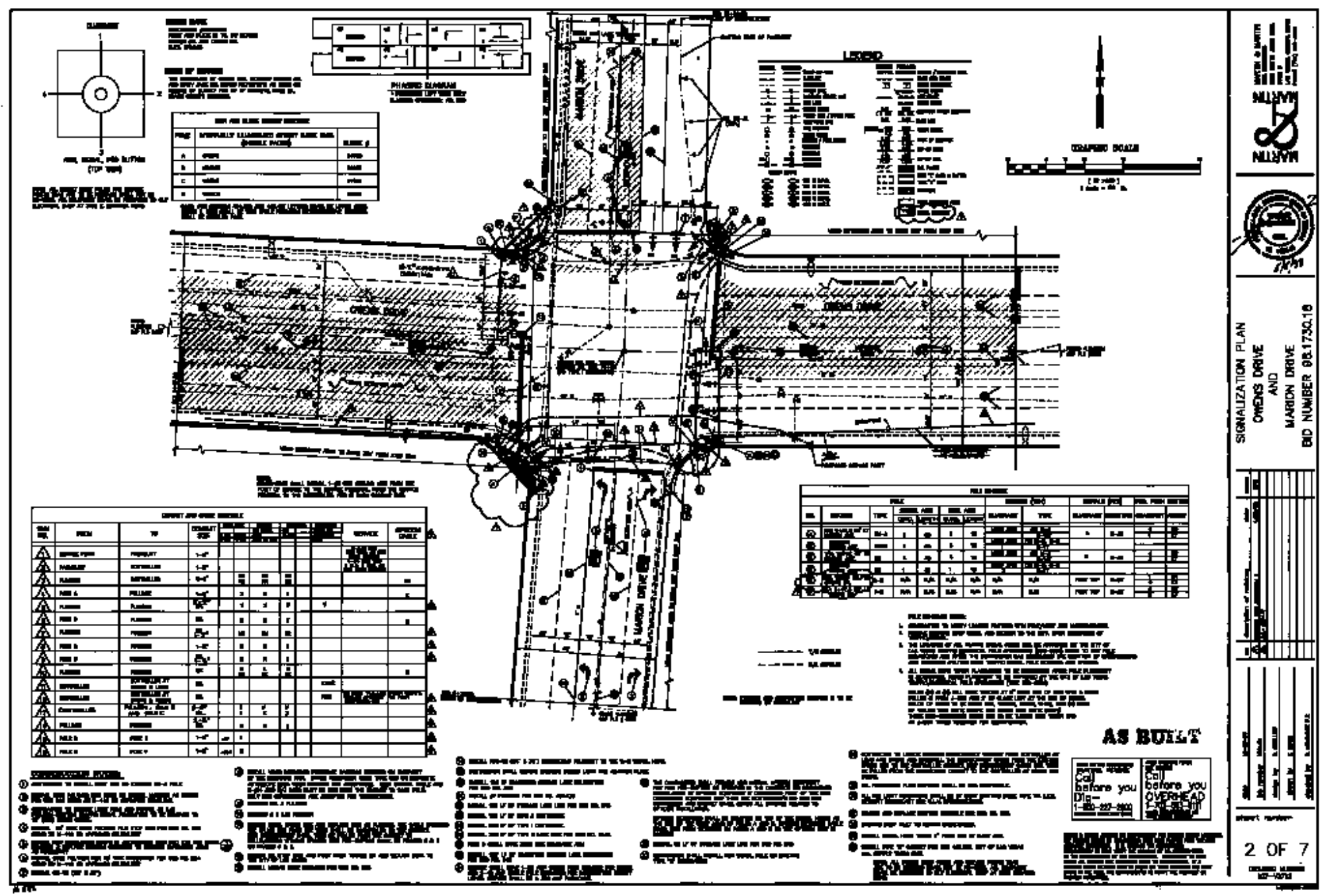

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AND
MARION DRIVE
BID NUMBER 98-1730-18