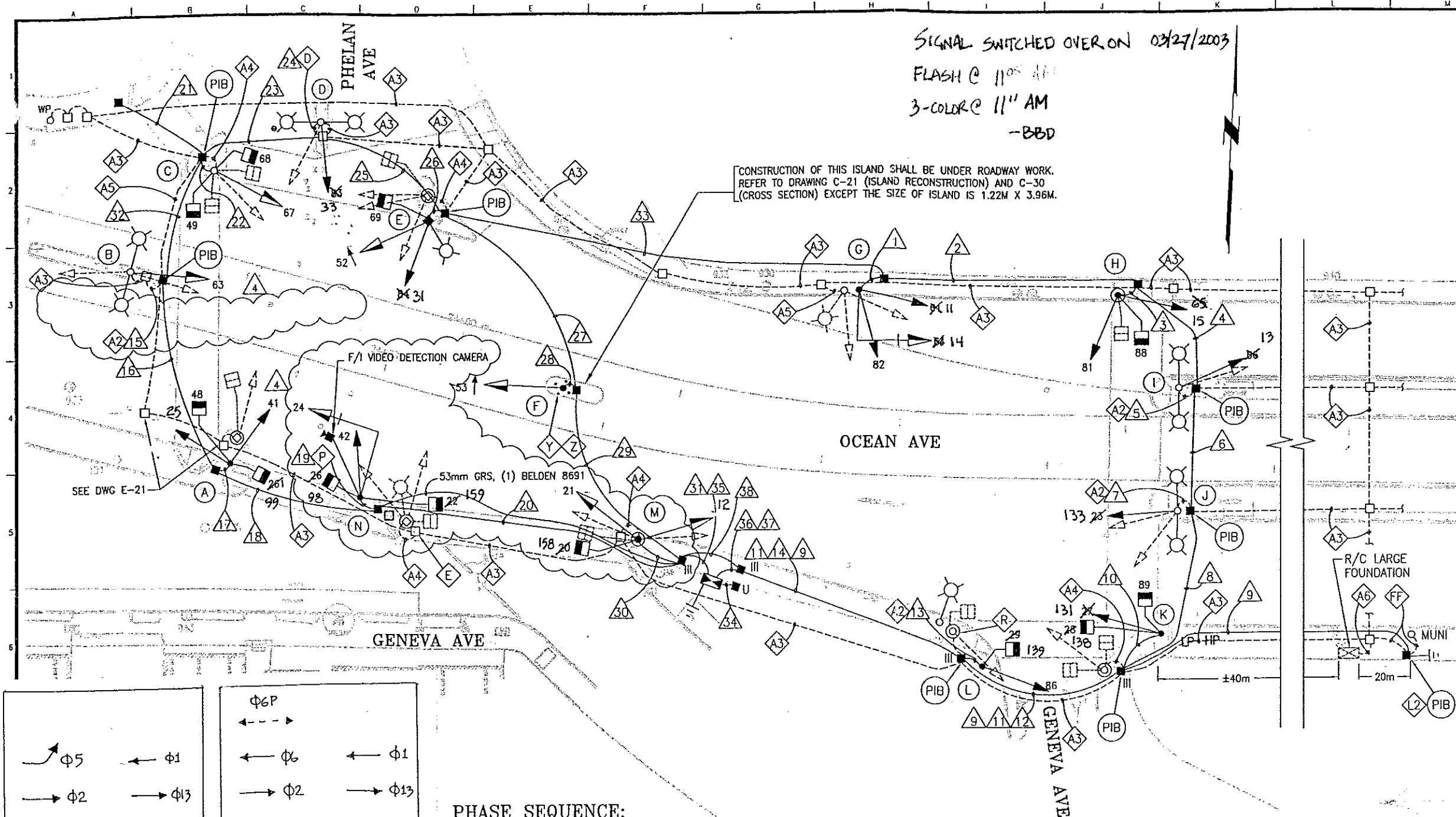




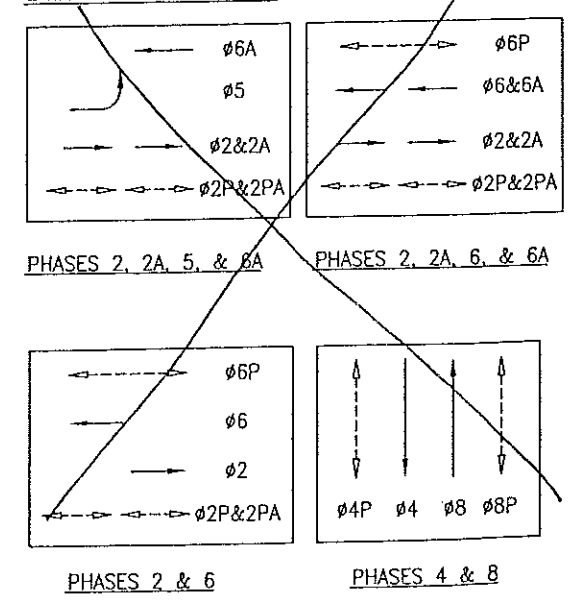
SHEET NOTES:

1. R/C EX EXTERNAL CONDUIT.
2. PLUG ALL UNUSED HOLES ON EX POLES.
3. ADDITIONAL CONDUIT AND 12/C TO BE FURNISHED AND INSTALLED AT THIS INTERSECTION ARE SHOWN ON DWG ET-47.
4. CONDUIT RUNS CROSSING MUNI TRACKS SHALL BE INSTALLED BY JACKING, PUSHING OR PULLING IF TRACKS ARE NOT REPLACED AS PART OF THIS CONTRACT.

DETAIL NOTES:

- A2 EX CONDUIT AND WIRING. R/C EX TS WIRING. SL WIRING TO REMAIN. F/I NEW WIRING AS NOTED.
- A3 EX CONDUIT AND WIRING. R/C EX TS WIRING. EX SL WIRING TO REMAIN.
- A4 EX CONDUIT AND WIRING. R/C EX WIRING AND CONDUIT. REPAIR SIDEWALK TO MATCH EX.
- A5 EX CONDUIT AND WIRING. R/C EX WIRING. CUT CONDUIT FLUSH TO PULL BOX OR 12" DEPTH. CAP CONDUIT END.
- A6 EX CONDUIT AND IC SERVICE WIRES. R/C EX WIRING AFTER CONNECTION OF NEW SERVICE POINT TO NEW IC. CUT CONDUIT APPROX 2' FORM PULL BOX AND R/C CUT PORTION. ABANDON REMAINING CONDUIT IN PLACE.
- D CHIP EX FOUNDATION CAREFULLY TO BRING CONDUIT INTO BASE OF STANDARD OR CONTROLLER CABINET AND REPAIR AFTER INSTALLATION.
- E R/C EX PULL BOX. REPAIR SIDEWALK TO MATCH EX.
- F/I IN-LINE FUSE HOLDER W/ 40A FUSE FOR IC SERVICE. SPLICE NEW WIRES TO EX PG&E SERVICE TO SUPPORT NEW IC.
- P SL CONDUIT AND WIRE INSTALLED UNDER MUNI. SEE E-SERIES PLANS.
- R EX MUNI POLE TO BE REMOVED BY MUNI
- Y F/I 6" GUARD POST (BOLLARD) PER SFDOWSP #LA-021.
- Z F/I ISLAND PER SFDOWSP #LL-24,457. POLE FOUNDATION TO BE INSTALLED PRIOR TO ISLAND CONSTRUCTION TO PROTECT TRACK BALLAST.
- FF EX PG&E SERVICE WIRES TO REMAIN.

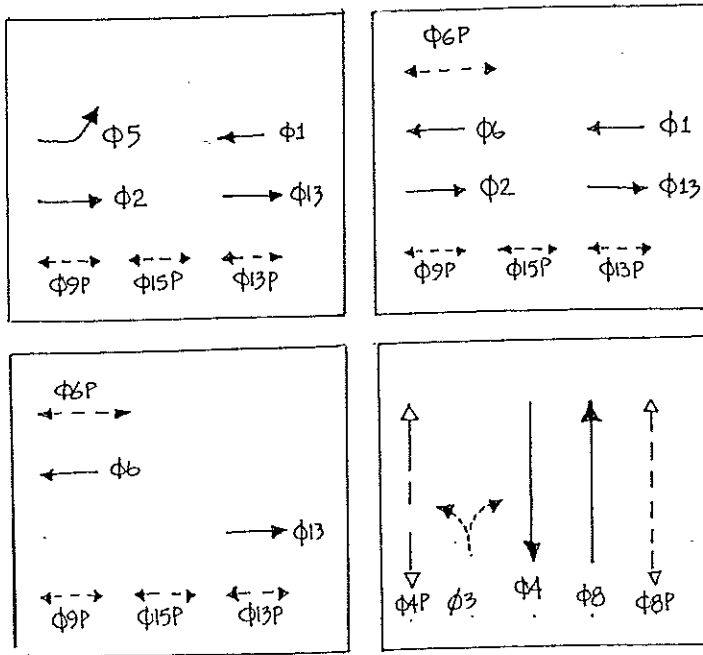
PHASE DIAGRAM:



PHASE SEQUENCE:

G	Y	R	OCEAN AVE (E/W Bd - NEAR SIDE)
G	Y	R	OCEAN AVE (E Bd - FAR SIDE)
R	G	Y	OCEAN AVE (W Bd - FAR SIDE)
G	Y	R	OCEAN AVE (E Bd - LEFT TURN)
R	G	Y	GENEVA/PHELAN
R	FY	SY	PARKING LOT
RH	WM	FRH	PED XING OCEAN
RH	WM	FRH	PED XING PHELAN
WM	FRH	RH	PED XING GENEVA

Signal Head Numbering Revised on 03/25/03.
-BBD



NO.	DATE	DESCRIPTION	BY	APP.
12/02	PCO#4	ADDED VIDEO DETECTION, LOOP DELETED	BC	BBD
3/02	PCO#3	REISSUE PCO#1 (SUPERSEDES REV. 2)	BC	BBD
5/15/01		PER NEW M-SF REQUIREMENT	BC	BBD
12/1/00		ADDED SHEET NOTE 4.	BC	BBD
		DESCRIPTION	BY	APP.

TABLE OF REVISIONS
CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION



BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO

DESIGNED: DATE:	APPROVED	SCALE:
CL/CF/JM 8/00		1 : 200
DRAWN: DATE:	SECTION MANAGER DATE:	
EF/JS 8/00		
CHECKED: DATE:	DIVISION MANAGER DATE:	
TS/NKS 8/00		
	CITY ENGINEER DATE:	

MUNI METRO SYSTEM	SPECIFICATION NO.
OCEAN AVENUE RECONSTRUCTION AND IMPROVEMENTS PROJECT	MR-1130
OCEAN AVE TRAFFIC SIGNAL UPGRADE	DRAWING NO.
OCEAN, GENEVA AND PHELAN AVES	ET-27
	FILE NO.
	75,277
	REV. NO.
	4

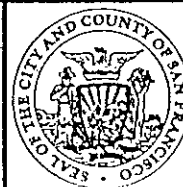
CONDUIT AND WIRING SCHEDULE																																								
CONDUIT RUN NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38		
CONDUIT SIZE (MM)	53	53	53	53	EX	53	EX	53	40	53	53	53	53	53	EX	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	53	40	53	53	53	53	
No. OF CONDUIT																	F																	SP	SP	U				
#14 WRES																																								
SIGNAL 64 11	3	3		3		3		3			3																											3		
SIGNAL 84 14	3	3		3		3		3			3																											3		
SIGNAL 82	3	3		3		3		3			3																											3		
SIGNAL 85 15			3	3		3		3			3																											3		
SIGNAL 81			3	3		3		3			3																											3		
SIGNAL 88			2	2		2		2			2																											2		
SIGNAL 86 13					3	3		3			3																											3		
SIGNAL 23 133							3	3			3																											3		
SIGNAL 22 131										3		3		3																								3		
SIGNAL 28 133										2		2		2																								2		
SIGNAL 89 139										2		2		2																								2		
SIGNAL 86													3	3																								3		
SIGNAL 29												2	2																									2		
SIGNAL 63															3	3		3		3																				
SIGNAL 25																3	3		3		3																			
SIGNAL 41																3	3		3		3																			
SIGNAL 48																2	2		2		2																			

POLE AND EQUIPMENT SCHEDULE								
POLE No.	TYPE OF POLE	VEHICLE SIGNAL			PEDESTRIAN SIGNAL			REMARKS
		No.	TYPE	MOUNTING (F/I)	No.	TYPE	MOUNTING (F/I)	
(A)	1-A (10')	25 41	3S8" V1 3S8" V1	SV-2-TA	48 281 99	1S-IN 1S-IN	SP-1 SP-1	
(B)	EX SL	63	PV3S12"	SV-1 S				SIGNAL 63 MOUNT AT 13'
(C)	EX STANDARD	67	PV3S12"	SV-1-T S	68 49	1S-IN 1S-IN	SP-1 SP-1	SIGNAL 67 MOUNT AT 13'
(D)	EX SL	33 33	3S8" FY V1	SV-1				
(E)	COMBINATION POLE MUNI #1000: 0-21	52 31	3S12" LA 3S8" FY V1	SV-2-TA	69	1S-IN	SP-1	
(F)	1-A (8')	53	3S12" LA V1	TV-1				
(G)	16-1-70 WITH 8' MASTARM	82 14	3S8" V1 3S8" V1 3S12" V3	SV-2-TA MAS				BACKPLATE
(H)	1-A (10')	81 15	3S8" V1 3S8" V1	TV-2-T	88	1S-IN	SP-1	
(I)	EX SL	66 13	3S8" V1	SV-1-T				
(J)	EX SL	23 133	PV3S12"	SV-1-T S				SIGNAL 23 MOUNT AT 13'
(K)	1-A (13')	27 131	PV3S12"	TV-1-T	28 138 89	1S-IN 1S-IN	SP-1 SP-1	SIGNAL 27 MOUNT AT 13'
(L)	1-A (10')	86	3S8" V1	TV-1	29 139	1S-IN	SP-1	SIGNAL 86 W/ EXTENDER
(U)	1-A (10')	21 12	PV3S12" 3S12" V1	TV-2-T	20 158	1S-IN	SP-1	
(N)	17-1-70 WITH 20' MASTARM	24 42	3S12" V3 3S8" V1	MAS SV-1-T	27 159 26 98	1S-IN 1S-IN	SP-1 SP-1	BACKPLATE VIDEO DETECTOR CAMERA

- ◇ F SIGNALS SHALL USE NEW EXTERNAL CONDUIT. SURFACE MOUNTED CONDUIT SHALL BE INSTALLED ON THE SIDE OPPOSITE THE ROADWAY OR INTERSECTION.
- ◇ S THE MOUNTING HEIGHT SHALL BE 13'.
- ◇ V1 LED RED, INCANDESCENT YELLOW, LED GREEN
- ◇ V3 LED RED, LED YELLOW, LED GREEN
- ◇ V6 LED RED, INCANDESCENT YELLOW, LED GREEN, ALL LEFT ARROW

DESIGNED: DATE:	APPROVED	SCALE:	MUNI METRO SYSTEM	SPECIFICATION NO. MR-1130
CL/ET/JM 8/00		NONE	OCEAN AVENUE RECONSTRUCTION AND IMPROVEMENTS PROJECT	DRAWING NO. ET-28
DRAWN: DATE:	SECTION MANAGER DATE:			
EF/JS 8/00		SHEET OF SHEETS	OCEAN AVE TRAFFIC SIGNAL UPGRADE OCEAN AND PIELAN AVES SCHEDULES	FILE NO. 75,278
CHECKED: DATE:	DIVISION MANAGER DATE:			REV. NO. 3
IS/HKS 8/00				

A	12/02	PCO75 - ADDED VIDEO DETECTION WIRING	BC	BBO	
A	3/02	PCO75 - REISSUE PCO71 (SUPERSEDES REV. 1)	BC	BBO	
A	5/15/01	PER NEW M-SF REQUIREMENT	BC	BBO	
NO.	DATE	DESCRIPTION	BY	APP	
CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION					



BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO