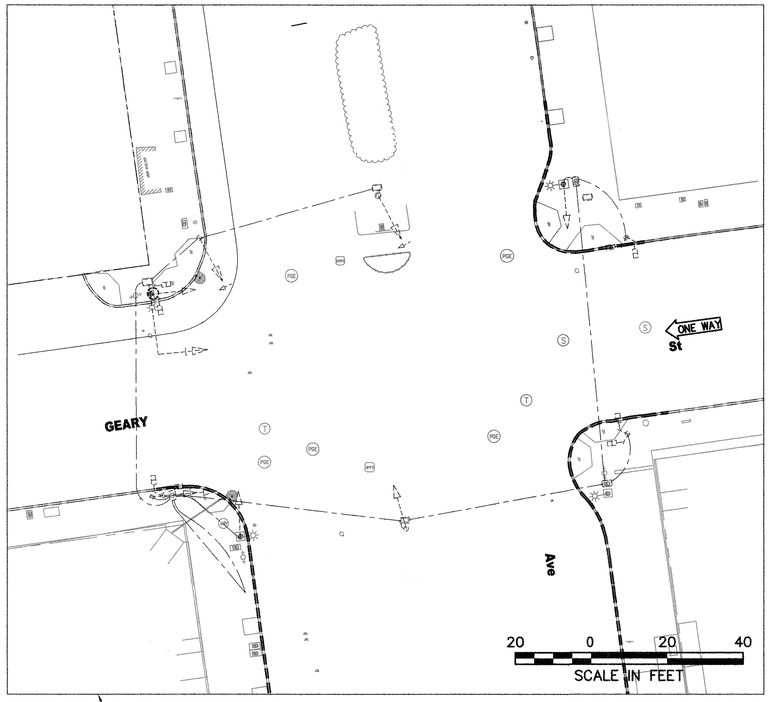
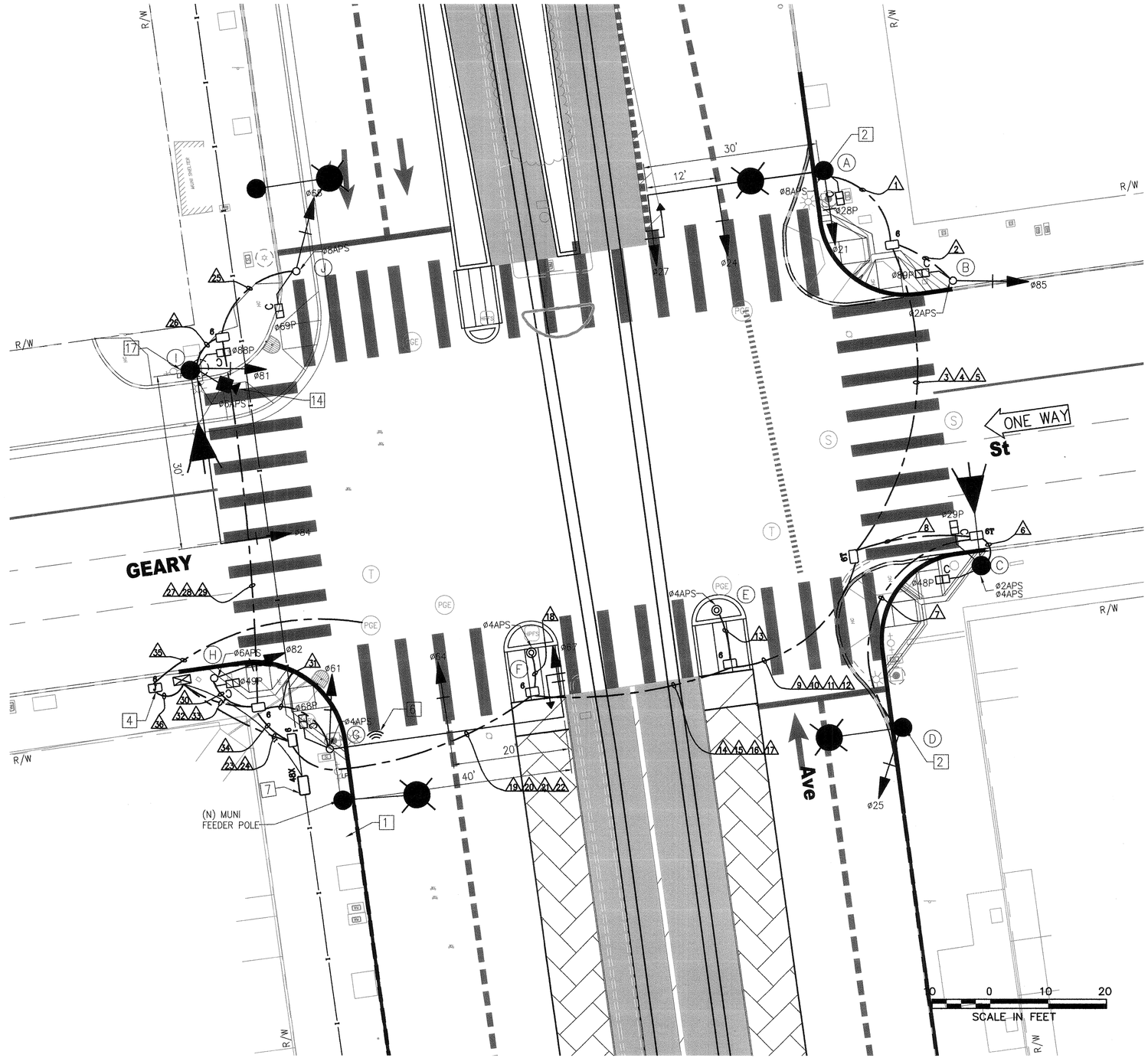


EXISTING EQUIPMENT



PHASE DIAGRAM

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

DESIGNED JC King
DRAWN JC King
CHECKED Cheryl Lin
REVIEWED Cheryl Lin
RECOMMENDED Patrick Wan
APPROVED R Oler
DATE 12/9/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LIN No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED

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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

GEARY STREET
TRAFFIC SIGNAL WORK

1289

ET-112.0

ET-204

REVISION

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POLE AND EQUIPMENT SCHEDULE

POLE NO.	POLE STANDARD			VEHICLE SIGNAL					PEDESTRIAN SIGNAL			HPS LUMINAIRE (WATTS)	SPECIAL REQUIREMENTS
	TYPE	SIG. MA (FEET)	OCS / SL	No.	TYPE	MOUNTING	VISORS	LOUVERS	No.	TYPE	MOUNTING		
Ⓐ	SIGNAL, SL & OCS COMBO POLE	30	1102 /	21 24 27	3S12" 3S12" 3S12"GUA	SV-1-T MAS MAS	T T T		28	1S-COUNT	SP-1	–	SIGNAL MA MOUNT AT 20' HIGH APS ◇1
Ⓑ	1-A (10')	–	/	85	3S12"	TV-1-T	T		89	1S-COUNT	SP-1	–	APS ◇1
Ⓒ	NEW SL	–	/	–	–	–	–		29 48	1S-COUNT 1S-COUNT	SP-1-SF(12") SP-1(22")	–	APS ◇1 SPECIAL POLE FOUNDATION
Ⓓ	SIGNAL, SL & OCS COMBO POLE	–	1060 / 108	25	3S12"	SV-1-T	T		–	–	–	–	
Ⓔ	PPBP POLE	–	/	–	–	–	–		–	–	–	–	APS ◇1
Ⓕ	PPBP POLE	–	/	–	–	–	–		–	–	–	–	APS ◇1
Ⓖ	SPECIAL MAST ARM POLE (27-3-100)	40	/	61 64 67	3S12" 3S12" 3S12"GUA	SV-1-T MAS MAS	T T T		68	1S-COUNT	SP-1	–	SIGNAL MA MOUNT AT 20' HIGH APS ◇1 TSP ◇2
Ⓗ	1-A (13')	–	/	82	3S12"	TV-1-T	T		49	1S-COUNT	SP-1	–	APS ◇1
Ⓘ	19-2-100	30	/	81 84	3S12" 3S12"	SV-1-T MAS	T T		88	1S-COUNT	SP-1	–	APS ◇1 TRAFFIC CAMERA ◇3 COORDINATE W/ CPMC HOSPITAL CONSTRUCTION
Ⓙ	1-A (10')	–	/	65	3S12"	TV-1-T	T		69	1S-COUNT	SP-1	–	APS ◇1 COORDINATE W/ CPMC HOSPITAL CONSTRUCTION
			/										
			/										
			/										

*OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS, AND STANDARD SPECIFICATIONS.
FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN SIGNAL MOUNTING, SEE CALTRANS STANDARD PLANS OR DETAIL DRAWINGS.

◇1 INSTALL APS WIRING AS SHOWN IN CONDUIT AND WIRING SCHEDULE. CITY FORCES TO INSTALL CITY FURNISHED APS UNIT.
◇2 INSTALL CITY FURNISHED TSP WIRING FROM TS OR COMBINED POLES WITH 3 FEET OF SLACK TO TS CABINET.
◇3 INSTALL CITY FURNISHED TRAFFIC CAMERA AND CONTRACTOR FURNISHED WIRING.
◇4 FOR STREETLIGHT WORK, SEE SL-SERIES PLANS.

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

BORDER REVISED 11/17/05

DESIGNED
DRAWN
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REVIEWED
RECOMMENDED
APPROVED
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LEE No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

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for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

GEARY STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

1289

ET-112.1

REVISION

ET-204

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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
CONDUIT SIZE (INCH)	2	2	2	2	2	2	2	3	2	2	2	2	1	2	2	2	2	1	2	2	2	2	3	2	2	2	2	2	2	2	2	3	2	3	2	
				SP	SP						SP	SP				SP	SP				SP	SP		SP				SP	SP				SP				
VEHICLE SIGNAL Ø21	3		3						3					3					3				3													
VEHICLE SIGNAL Ø24	3		3						3					3					3				3													
VEHICLE SIGNAL Ø27	3		3						3					3					3				3													
PED SIGNAL Ø28P	2		2						2					2					2				2													
APS PPB FOR XING VAN NESS NS ON POLE A	2		2						2					2					2				2													
VEHICLE SIGNAL Ø85		3	3						3					3					3				3													
PED SIGNAL Ø89P		2	2						2					2					2				2													
APS PPB FOR XING GEARY ES ON POLE B		2	2						2					2					2				2													
PED SIGNAL Ø29P						2		2		2					2					2			2													
PED SIGNAL Ø48P						2		2		2					2					2			2													
APS PPB FOR XING GEARY ES ON POLE C						2		2		2					2					2			2													
APS PPB FOR XING VAN NESS SS ON POLE C						2		2		2					2					2			2													
VEHICLE SIGNAL Ø25							3	3		3					3					3			3													
APS PPB FOR XING VAN NESS SS ON POLE E													2		2					2			2													
APS PPB FOR XING VAN NESS SS ON POLE F																		2		2			2													
VEHICLE SIGNAL Ø65																									3		3					3				
PED SIGNAL Ø69P																									2		2					2				
APS PPB FOR XING VAN NESS NS ON POLE J																									2		2					2				
VEHICLE SIGNAL Ø81																										3	3					3				
VEHICLE SIGNAL Ø84																										3	3					3				
PED SIGNAL Ø88P																										2	2					2				
APS PPB FOR XING GEARY WS ON POLE I																										2	2					2				
VEHICLE SIGNAL Ø82																														3		3				
PED SIGNAL Ø49P																														2		2				
APS PPB FOR XING GEARY WS ON POLE H																														2		2				
VEHICLE SIGNAL Ø61																															3	3				
VEHICLE SIGNAL Ø64																															3	3				
VEHICLE SIGNAL Ø67																															3	3				
PED SIGNAL Ø68P																															2	2				
APS PPB FOR XING VAN NESS SS ON POLE G																															2	2				
#14 NEUTRAL	4	2				2	1																		2	3				2	4				
#14 SPARE			3					3	3	3				3	3				3	3			6				3					3				
TOTAL #14 WIRES	17	9	23			10	4	14	23	14			2	23	16			2	23	18			41		9	13	20			9	17	40				
#10 WIRES NEUTRAL			1					1	1	1				1	1				1	1			2				1					2				
#6 WIRES (120 V SERVICE)																																		2		
#8 WIRES (120 V SERVICE)																																			2	
#6 BSCW (SEE GENERAL NOTE 10)																																				
TSP RECEIVER (10 CONDUCTOR CABLE)																															1	1				
CCTV CAMERA WIRES (CAT5e & 3#18)																										1	1					1				

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

DESIGNED K Fung
DRAWN K Fung
CHECKED
REVIEWED
RECOMMENDED
APPROVED
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LIU No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

THE CITY AND COUNTY OF SAN FRANCISCO

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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
GEARY STREET
CONDUIT & WIRING SCHEDULES

1289
ET-112.2
ET-204
REVISION

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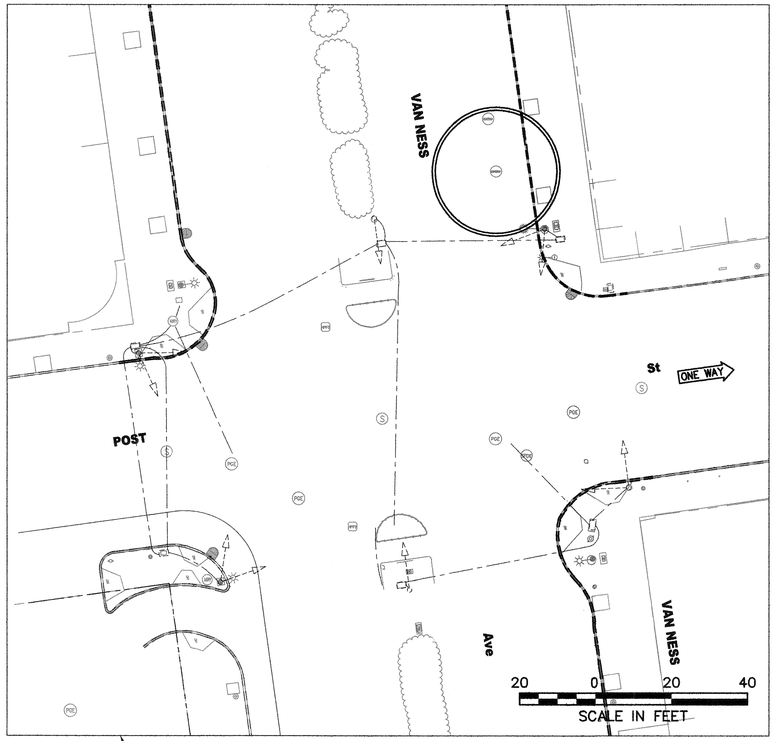

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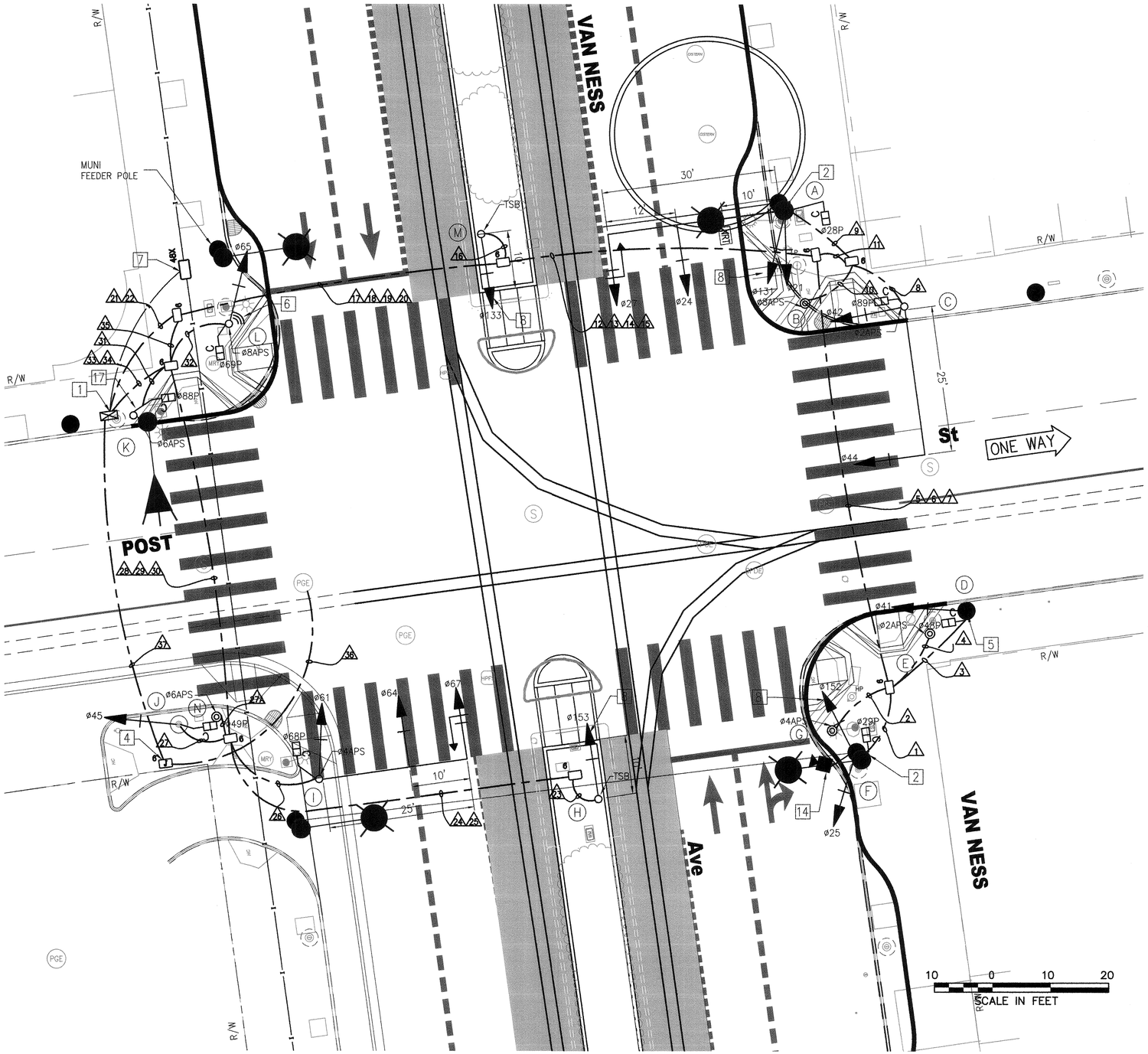

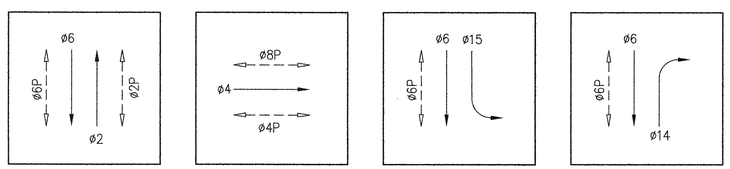

PHASE DIAGRAM

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

DESIGNED R King
DRAWN R King
CHECKED PSP/ Cmueller
REVIEWED Cmueller
RECOMMENDED
APPROVED
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL L. MUELLER No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

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MUNICIPAL TRANSPORTATION AGENCY

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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

1289

POST STREET
TRAFFIC SIGNAL WORK

ET-113.0
ET-204

REVISION

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POLE AND EQUIPMENT SCHEDULE

POLE NO.	POLE STANDARD			VEHICLE SIGNAL					PEDESTRIAN SIGNAL			HPS LUMINAIRE (WATTS)	SPECIAL REQUIREMENTS
	TYPE	SIG. MA (FEET)	OCS / SL	No.	TYPE	MOUNTING	VISORS	LOUVERS	No.	TYPE	MOUNTING		
Ⓐ	SIGNAL, SL & OCS COMBO POLE	30	1204 /	21 24 27 131	3S12" 3S12" 3S12"GUA 3S12"RB	SV-1-T MAS MAS SV-1-T	T T T T		28	1S-COUNT	SP-1	–	SIGNAL MA MOUNT AT 20' HIGH SIGNAL 131 MOUNT AT 15' HIGH "NO RIGHT TURN" BLANK-OUT SIGN
Ⓑ	PPBP POLE	–	/	–	–	–	–		–	–	–	–	APS ◇1
Ⓒ	18-2-100	25	/	42 44	3S12" 3S12"	SV-1-T MAS	T T		89	1S-COUNT	SP-1	–	APS ◇1
Ⓓ	SIGNAL & OCS COMBO POLE	–	1197 /	41	3S12"	SV-1-T	T		48	1S-COUNT	SP-1	–	
Ⓔ	PPBP POLE	–	/	–	–	–	–		–	–	–	–	APS ◇1
Ⓕ	SIGNAL, SL & OCS COMBO POLE	–	1152 / 118	25 152	3S12" 3S12"LB	SV-2-TA	T T		29	1S-COUNT	SP-1	–	TRAFFIC CAMERA ◇3
Ⓖ	PPBP POLE	–	/	–	–	–	–		–	–	–	–	APS ◇1
Ⓗ	1-A (10')	–	/	153	3S12"LB	TV-1-T	T		–	–	–	–	TSB
Ⓘ	SPECIAL MAST ARM POLE (18-3-100)	25	/	61 64 67	3S12" 3S12" 3S12"GUA	SV-1-T MAS MAS	T T T		68	1S-COUNT	SP-1	–	APS ◇1 COORDINATE W/ CPMC HOSPITAL CONSTRUCTION
Ⓙ	EX. SIGNAL & OCS COMBO POLE	–	1201 /	45	3S12"	SV-1-T	T		49	1S-COUNT	SP-1	–	COORDINATE W/ CPMC HOSPITAL CONSTRUCTION
Ⓚ	SIGNAL & SL COMBO POLE	–	/	–	–	–	–		88	1S-COUNT	SP-1	–	APS ◇1
Ⓛ	1-A (10')	–	/	65	3S12"	TV-1-T	T		69	1S-COUNT	SP-1	–	APS ◇1 TSP ◇2
Ⓜ	1-A (10')	–	/	133	3S12"RB	TV-1-T	T		–	–	–	–	TSB
Ⓝ	PPBP POLE	–	/	–	–	–	–		–	–	–	–	APS ◇1

*OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS, AND STANDARD SPECIFICATIONS.
FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN SIGNAL MOUNTING, SEE CALTRANS STANDARD PLANS OR DETAIL DRAWINGS.

◇1 INSTALL APS WIRING AS SHOWN IN CONDUIT AND WIRING SCHEDULE. CITY FORCES TO INSTALL CITY FURNISHED APS UNIT.
◇2 INSTALL CITY FURNISHED TSP WIRING FROM TS OR COMBINED POLES WITH 3 FEET OF SLACK TO TS CABINET.
◇3 INSTALL CITY FURNISHED TRAFFIC CAMERA AND CONTRACTOR FURNISHED WIRING.
◇4 FOR STREETLIGHT WORK, SEE SL-SERIES PLANS.

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

DESIGNED
DRAWN
CHECKED
REVIEWED
RECOMMENDED
APPROVED
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LEE No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

POST STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

1289

ET-113.1

REVISION

ET-204

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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	27A	28	29	30	31	32	33	34	35	36	37
CONDUIT SIZE (INCH)	2	1	2	1	2	2	2	2	2	1	3	2	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2	1	2	2	2	2	2	3	2	2	3	2
						SP	SP							SP	SP				SP	SP		SP			SP					SP	SP				SP	SP			
TRANSIT SIGNAL Ø152	3				3							3					3				3																
VEHICLE SIGNAL Ø25	3				3							3					3				3																
PED SIGNAL Ø29P	2				2							2					2				2																
APS PPB FOR XING VAN NESS SS ON POLE G		2			2							2					2				2																
VEHICLE SIGNAL Ø41			3		3							3					3				3																
PED SIGNAL Ø48P			2		2							2					2				2																
APS PPB FOR XING POST ES ON POLE D				2	2							2					2				2																
VEHICLE SIGNAL Ø42								3			3		3					3				3																
VEHICLE SIGNAL Ø44								3			3		3					3				3																
PED SIGNAL Ø89P								2			2		2					2				2																
APS PPB FOR XING POST ES ON POLE C								2			2		2					2				2																
TRANSIT SIGNAL Ø131									3		3		3					3				3																
VEHICLE SIGNAL Ø21									3		3		3					3				3																
VEHICLE SIGNAL Ø24									3		3		3					3				3																
VEHICLE SIGNAL Ø27									3		3		3					3				3																
PED SIGNAL Ø28P									2		2		2					2				2																
APS PPB FOR XING VAN NESS NS ON POLE B										2	2		2					2				2																
TRANSIT SIGNAL Ø133																3		3				3																
TRANSIT SIGNAL Ø153																							3	3					3					2				
VEHICLE SIGNAL Ø61																										3			3					3				
VEHICLE SIGNAL Ø64																										3			3					3				
VEHICLE SIGNAL Ø67																										3			3					3				
PED SIGNAL Ø68P																										2			2					2				
APS PPB FOR XING VAN NESS SS ON POLE I																										2			2					2				
VEHICLE SIGNAL Ø45																											3		3					3				
PED SIGNAL Ø49P																											2		2					2				
APS PPB FOR XING POST WS ON POLE N																												2	2					2				
PED SIGNAL Ø88P																															2			2				
APS PPB FOR XING POST WS ON POLE K																															2			2				
VEHICLE SIGNAL Ø65																																	3	3				
PED SIGNAL Ø69P																																	2	2				
APS PPB FOR XING VAN NESS NS ON POLE L																																	2	2				
#14 NEUTRAL	3		2					3	5							1										4	2				1	2						
#14 SPARE					3						3	3	3				3	3			3	3		3					3					3				
TOTAL #14 WIRES	11	2	7	2	20			13	19	2	29	20	29			4	20	32			20	32	3	6		17	7	2	26		5	9	37				
#10 WIRES NEUTRAL					1						1	1	1				1	1			1	1	1						1				3				
#6 WIRES (120 V SERVICE)																																				2		
#8 WIRES (120 V SERVICE)																																					2	
#6 BSCW (SEE GENERAL NOTE 10)																																						
TSP RECEIVER (10 CONDUCTOR CABLE)																															1	1						
NO RIGHT TURN EMS WIRES (1#14, 1#10 & 1#6 GROUND)									1		1		1					1				1																
CCTV CAMERA WIRES (CAT5e & 3#18)	1				1							1					1				1																

DETAIL NOTES:

1. FOR VMS CONDUIT AND WIRING, CONTRACTOR SHALL REFER TO SHEET ET–133.

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

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APPROVED
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL CHERYL No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

SEAL OF THE CITY AND COUNTY OF SAN FRANCISCO

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for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

POST STREET
CONDUIT & WIRING SCHEDULES

1289

ET–113.2

REVISION

ET–204

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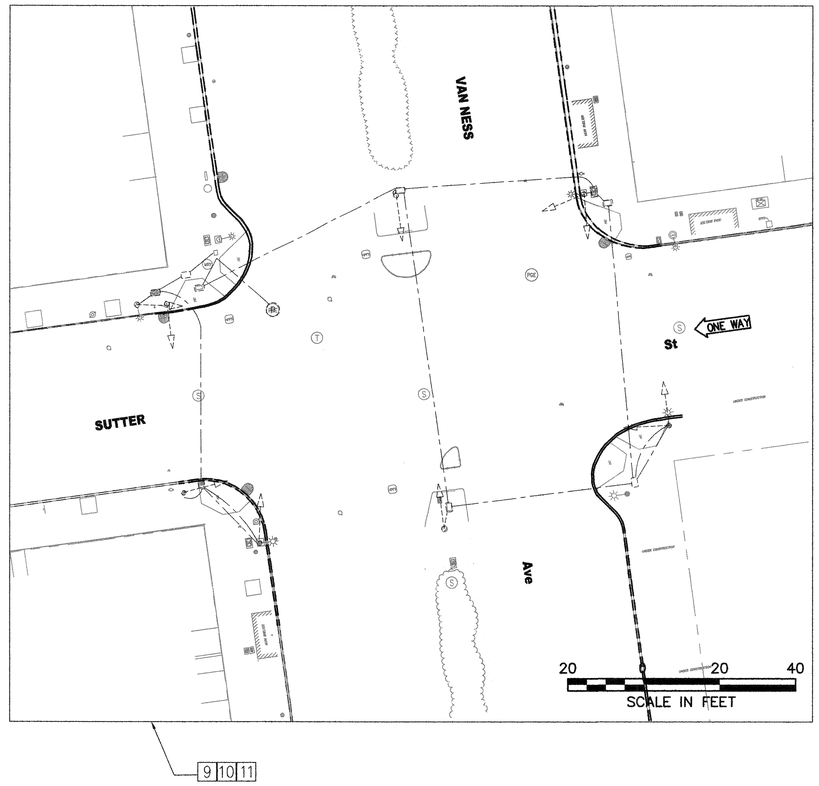
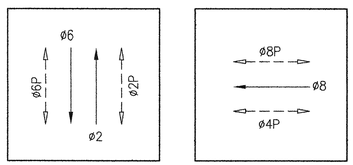
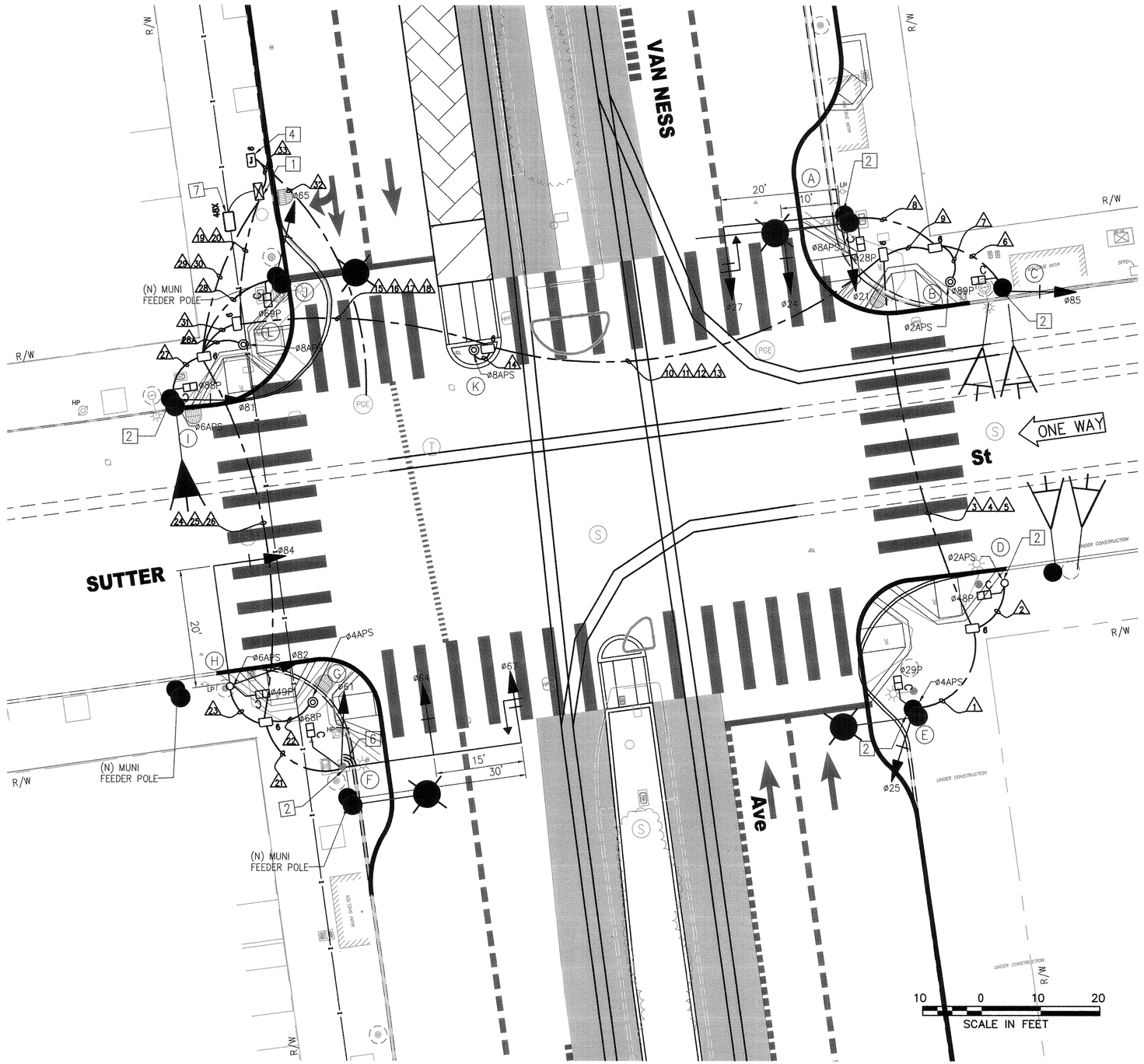


EXISTING EQUIPMENT



PHASE DIAGRAM



NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

BORDER REVISED 11/17/05

DESIGNED	K Kuo
DRAWN	K Kuo
CHECKED	C Chevalier
REVIEWED	C Chevalier
RECOMMENDED	J Fortunato
APPROVED	R Oen
DATE	12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL CHEVALIER No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

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CITY AND COUNTY OF SAN FRANCISCO
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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

1289

SUTTER STREET
TRAFFIC SIGNAL WORK

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POLE AND EQUIPMENT SCHEDULE

POLE NO.	POLE STANDARD			VEHICLE SIGNAL					PEDESTRIAN SIGNAL			HPS LUMINAIRE (WATTS)	SPECIAL REQUIREMENTS
	TYPE	SIG. MA (FEET)	OCS / SL	No.	TYPE	MOUNTING	VISORS	LOUVERS	No.	TYPE	MOUNTING		
Ⓐ	SIGNAL, SL & OCS COMBO POLE	20	1304 /	21 24 27	3S12" 3S12" 3S12"GUA	SV-1-T MAS MAS	T T T		28	1S-COUNT	SP-1	–	APS ◇1
Ⓑ	PPBP POLE	–	/	–	–	–	–		–	–	–	–	APS ◇1
Ⓒ	SIGNAL, SL & OCS COMBO POLE	–	1288 /	85	3S12"	SV-1-T	T		89	1S-COUNT	SP-1	–	
Ⓓ	1-A (7')	–	/	–	–	–	–		48	1S-COUNT	TP-1	–	APS ◇1
Ⓔ	SIGNAL, SL & OCS COMBO POLE	–	1242 / 128	25	3S12"	SV-1-T	T		29	1S-COUNT	SP-1	–	APS ◇1
Ⓕ	SPECIAL MAST ARM POLE (18-3-100)	30	/	61 64 67	3S12" 3S12" 3S12"GUA	SV-1-T MAS MAS	T T T		68	1S-COUNT	SP-1	–	
Ⓖ	PPBP POLE	–	/	–	–	–	–		–	–	–	–	APS ◇1
Ⓗ	16-2-100	20	/	82 84	3S12" 3S12"	SV-1-T MAS	T T		49	1S-COUNT	SP-1	–	SIGNAL 82 MOUNT AT 13' HIGH APS ◇1
Ⓘ	SIGNAL, SL & OCS COMBO POLE	–	1300A / 132	81	3S12"	SV-1-T	T		88	1S-COUNT	SP-1	–	SIGNAL 81 MOUNT AT 13' HIGH APS ◇1
Ⓙ	SIGNAL, SL & OCS COMBO POLE (FEEDER)	–	1300B / 131	65	3S12"	SV-1-T	T		69	1S-COUNT	SP-1-T	–	TSP ◇2 EXTERNAL CONDUIT
Ⓚ	PPBP POLE	–	/	–	–	–	–		–	–	–	–	APS ◇1
Ⓛ	PPBP POLE	–	/	–	–	–	–		–	–	–	–	APS ◇1

*OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS, AND STANDARD SPECIFICATIONS.
FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN SIGNAL MOUNTING, SEE CALTRANS STANDARD PLANS OR DETAIL DRAWINGS.

◇1 INSTALL APS WIRING AS SHOWN IN CONDUIT AND WIRING SCHEDULE. CITY FORCES TO INSTALL CITY FURNISHED APS UNIT.
◇2 INSTALL CITY FURNISHED TSP WIRING FROM TS OR COMBINED POLES WITH 3 FEET OF SLACK TO TS CABINET.
◇3 INSTALL CITY FURNISHED TRAFFIC CAMERA AND CONTRACTOR FURNISHED WIRING.
◇4 FOR STREETLIGHT WORK, SEE SL-SERIES PLANS.

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

DESIGNED RKy
DRAWN RKy
CHECKED BSP Cheryl Lin
REVIEWED Cheryl Lin
RECOMMENDED Peter Wu
APPROVED RDeLeon
DATE 12/9/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LIN No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

SUTTER STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

1289

ET-114.1

REVISION

ET-204

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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	28A	29	30	31	32	33
CONDUIT SIZE (INCH)	2	2	2	2	2	2	1	2	3	2	2	2	2	1	2	2	2	2	3	2	2	1	2	2	2	2	2	2	1	3	2	2	3	2
				SP	SP							SP	SP				SP	SP		SP					SP	SP					SP	SP			
VEHICLE SIGNAL Ø25	3		3							3					3				3															
PED SIGNAL Ø29P	2		2							2					2				2															
APS PPB FOR XING VAN NESS SS ON POLE E	2		2							2					2				2															
PED SIGNAL Ø48P		2	2							2					2				2															
APS PPB FOR XING SUTTER ES ON POLE D		2	2							2					2				2															
VEHICLE SIGNAL Ø85						3			3		3					3			3															
PED SIGNAL Ø89P						2			2		2					2			2															
APS PPB FOR XING SUTTER ES ON POLE B							2		2		2					2			2															
VEHICLE SIGNAL Ø21								3	3		3					3			3															
VEHICLE SIGNAL Ø24								3	3		3					3			3															
VEHICLE SIGNAL Ø27								3	3		3					3			3															
PED SIGNAL Ø28P								2	2		2					2			2															
APS PPB FOR XING VAN NESS NS ON POLE A								2	2		2					2			2															
APS PPB FOR XING VAN NESS NS ON POLE K														2		2			2															
VEHICLE SIGNAL Ø61																					3			3						3				
VEHICLE SIGNAL Ø64																					3			3						3				
VEHICLE SIGNAL Ø67																					3			3						3				
PED SIGNAL Ø68P																					2			2						2				
APS PPB FOR XING VAN NESS SS ON POLE G																						2		2						2				
VEHICLE SIGNAL Ø82																							3	3						3				
VEHICLE SIGNAL Ø84																							3	3						3				
PED SIGNAL Ø49P																							2	2						2				
APS PPB FOR XING SUTTER WS ON POLE H																							2	2						2				
VEHICLE SIGNAL Ø81																											3			3				
PED SIGNAL Ø88P																											2			2				
APS PPB FOR XING SUTTER WS ON POLE I																											2			2				
VEHICLE SIGNAL Ø65																												3		3				
PED SIGNAL Ø69P																												2		2				
APS PPB FOR XING VAN NESS NS ON POLE L																													2	2				
#14 NEUTRAL	2	1				2		4													4		3				2	2						
#14 SPARE			3						3	3	3				3	3			6					3						3				
TOTAL #14 WIRES	9	5	14			7	2	17	23	14	23			2	14	25			39		15	2	13	26			9	7	2	40				
#10 WIRES NEUTRAL			1						1	1	1				1	1			2					1						2				
#6 WIRES (120 V SERVICE)																															2			
#8 WIRES (120 V SERVICE)																																2		
#6 BSCW (SEE GENERAL NOTE 10)																																		
TSP RECEIVER (10 CONDUCTOR CABLE)																					1			1						1				

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

BORDER REVISED 11/17/05

DESIGNED	K Zung
DRAWN	K Zung
CHECKED	Cheryl Lee
REVIEWED	Cheryl Lee
RECOMMENDED	for Director
APPROVED	RDeen
DATE	12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LEE No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO
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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

SUTTER STREET
CONDUIT & WIRING SCHEDULES

1289

REVISION

ET-114.2
ET-204

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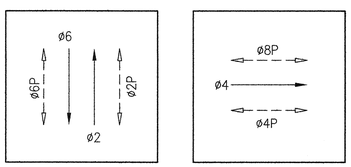
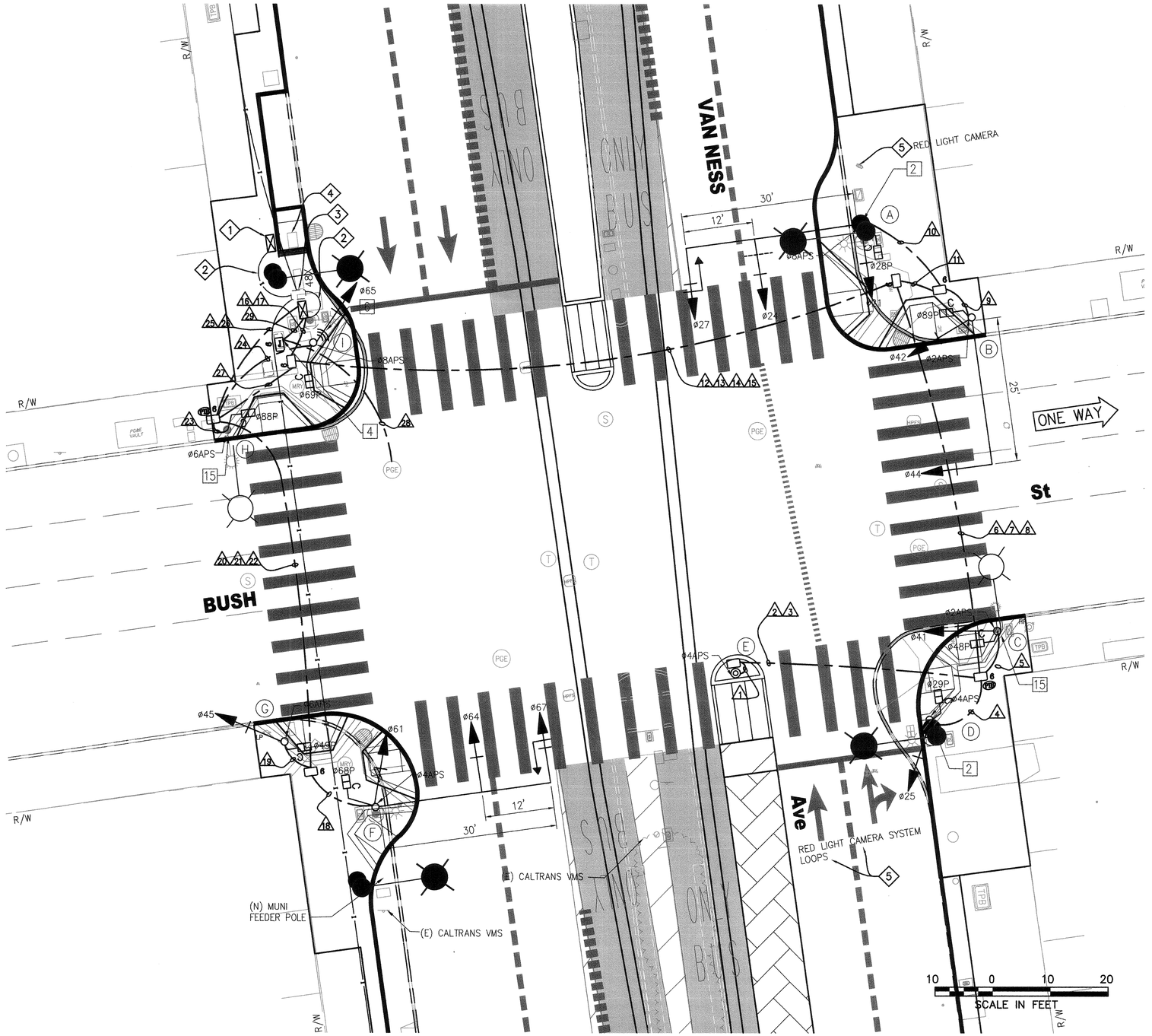
EXISTING EQUIPMENT



PHASE DIAGRAM



DETAIL NOTES:

1. F/I NEW MODEL 342 COMMUNICATIONS HUB CABINET AND MODEL 332 FOUNDATION.
2. F/I 2–2" HDPE CONDUIT SETS FROM TYPE 48X PULL BOX TO NEW COMMUNICATIONS HUB AND TRAFFIC SIGNAL CABINET.
3. CONNECT NEW VAN NESS INTERCONNECT CONDUITS TO EXISTING TYPE 48X PULL BOX.
4. R/S EXISTING COMMUNICATIONS HUB CABINET AND R/C EXISTING HUB CABINET FOUNDATION.
5. COORDINATE WITH THE XEROX CORPORATION TO REMOVE RED LIGHT CAMERA SYSTEM.

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
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RECOMMENDED
APPROVED
DATE 12/4/2015

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VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

1289

BUSH STREET
TRAFFIC SIGNAL WORK

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ET–204

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582

POLE AND EQUIPMENT SCHEDULE

POLE NO.	POLE STANDARD			VEHICLE SIGNAL					PEDESTRIAN SIGNAL			HPS LUMINAIRE (WATTS)	SPECIAL REQUIREMENTS
	TYPE	SIG. MA (FEET)	OCS ㎟ / SL ㎟	No.	TYPE	MOUNTING	VISORS	LOUVERS	No.	TYPE	MOUNTING		
Ⓐ	SIGNAL, SL & OCS COMBO POLE	30	1400 / 142	21 24 27	3S12" 3S12" 3S12"GUA	SV-1-T MAS MAS	T T T		28	1S-COUNT	SP-1	–	SIGNAL MA MOUNT AT 20' HIGH APS ◇1
Ⓑ	18-2-100	25		42 44	3S12" 3S12"	SV-1-T MAS	T T		89	1S-COUNT	SP-1	–	APS ◇1
Ⓒ	EXISTING SL	–		41	3S12"	SV-1-T	T		48	1S-COUNT	SP-1	–	APS ◇1
Ⓓ	SIGNAL, SL & OCS COMBO POLE	–	1356 / 138	25	3S12"	SV-1-T	T		29	1S-COUNT	SP-1	–	APS ◇1
Ⓔ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ◇1
Ⓕ	SPECIAL MAST ARM POLE (18-3-100)	30		61 64 67	3S12" 3S12" 3S12"GUA	SV-1-T MAS MAS	T T T		68	1S-COUNT	SP-1	–	SIGNAL MAST ARM MOUNT AT 20' HIGH APS ◇1
Ⓖ	1-A (10')	–		45	3S12"	TV-1-T	T		49	1S-COUNT	SP-1	–	APS ◇1
Ⓗ	EXISTING SL	–		–	–	–	–		88	1S-COUNT	SP-1	–	APS ◇1
Ⓘ	1-A (10')	–		65	3S12"	TV-1-T	T		69	1S-COUNT	SP-1	–	APS ◇1 TSP ◇2

*OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS, AND STANDARD SPECIFICATIONS.
FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN SIGNAL MOUNTING, SEE CALTRANS STANDARD PLANS OR DETAIL DRAWINGS.

◇1 INSTALL APS WIRING AS SHOWN IN CONDUIT AND WIRING SCHEDULE. CITY FORCES TO INSTALL CITY FURNISHED APS UNIT.
◇2 INSTALL CITY FURNISHED TSP WIRING FROM TS OR COMBINED POLES WITH 3 FEET OF SLACK TO TS CABINET.
◇3 INSTALL CITY FURNISHED TRAFFIC CAMERA AND CONTRACTOR FURNISHED WIRING.
◇4 FOR STREETLIGHT WORK, SEE SL-SERIES PLANS.

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		REVISIONS			

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CHECKED
REVIEWED
RECOMMENDED
APPROVED
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL L. CHEUNG No. C56718 Exp. 6/30/2016 CIVIL STATE OF CALIFORNIA

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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

1289

BUSH STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

ET-115.1
ET-204

REVISION

583

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
CONDUIT SIZE (INCH)	2	2	2	2	2	2	2	2	2	2	3	2	2	2	2	3	2	2	2	2	2	2	2	2	3	2	2	3	2
			SP				SP	SP						SP	SP		SP				SP	SP	EX			SP	SP		
APS PPB FOR XING VAN NESS SS ON POLE E	2	2				2						2				2													
VEHICLE SIGNAL Ø25				3		3						3				3													
PED SIGNAL Ø29P				2		2						2				2													
APS PPB FOR XING VAN NESS SS ON POLE D				2		2						2				2													
VEHICLE SIGNAL Ø41					3	3						3				3													
PED SIGNAL Ø48P					2	2						2				2													
APS PPB FOR XING BUSH ES ON POLE C					2	2						2				2													
VEHICLE SIGNAL Ø42									3		3		3			3													
VEHICLE SIGNAL Ø44									3		3		3			3													
PED SIGNAL Ø89P									2		2		2			2													
APS PPB FOR XING BUSH ES ON POLE B									2		2		2			2													
VEHICLE SIGNAL Ø21										3	3		3			3													
VEHICLE SIGNAL Ø24										3	3		3			3													
VEHICLE SIGNAL Ø27										3	3		3			3													
PED SIGNAL Ø28P										2	2		2			2													
APS PPB FOR XING VAN NESS NS ON POLE A										2	2		2			2													
VEHICLE SIGNAL Ø61																		3		3					3				
VEHICLE SIGNAL Ø64																		3		3					3				
VEHICLE SIGNAL Ø67																		3		3					3				
PED SIGNAL Ø68P																		2		2					2				
APS PPB FOR XING VAN NESS SS ON POLE F																		2		2					2				
VEHICLE SIGNAL Ø45																			3	3					3				
PED SIGNAL Ø49P																			2	2					2				
APS PPB FOR XING BUSH WS ON POLE G																			2	2					2				
PED SIGNAL Ø88P																							2		2				
APS PPB FOR XING BUSH WS ON POLE H																							2		2				
VEHICLE SIGNAL Ø65																								3	3				
PED SIGNAL Ø69P																								2	2				
APS PPB FOR XING VAN NESS NS ON POLE I																								2	2				
#14 NEUTRAL				2	2				3	4								4	2				1	2					
#14 SPARE						3					3	3	3			6				3					3				
TOTAL #14 WIRES	2	2		9	9	19			13	17	26	19	26			45		17	9	23			5	9	34				
#10 WIRES NEUTRAL						1					1	1	1			2				1					2				
#6 WIRES (120 V SERVICE)																												2	
#8 WIRES (120 V SERVICE)																													2
#6 BSCW (SEE GENERAL NOTE 10)																													
TSP RECEIVER (10 CONDUCTOR CABLE)																							1	1					

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

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DRAWN
CHECKED
REVIEWED
RECOMMENDED
APPROVED
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LEE No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

BUSH STREET
CONDUIT & WIRING SCHEDULES

1289

ET-115.2 REVISION

ET-204

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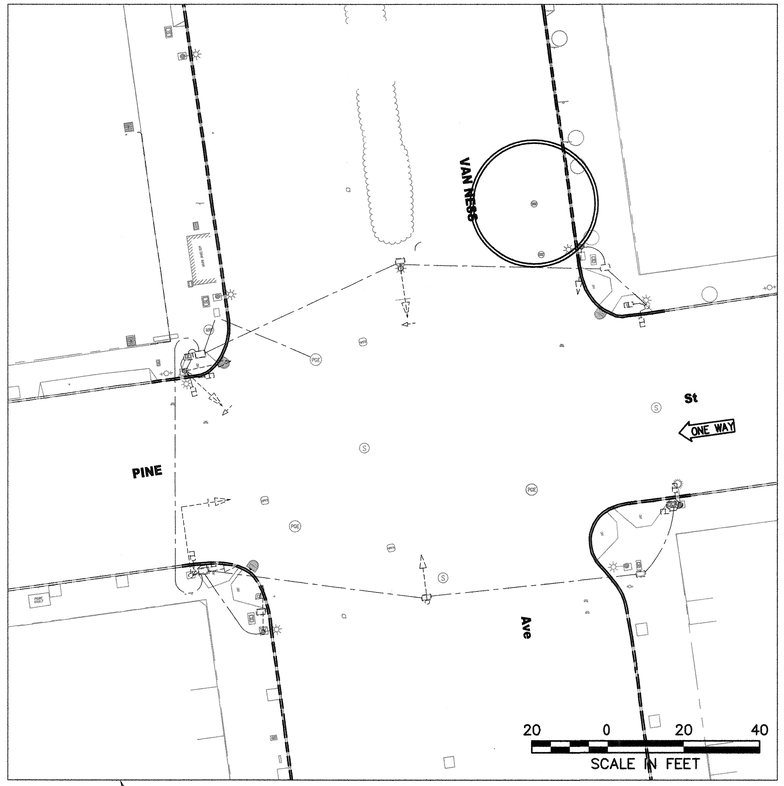
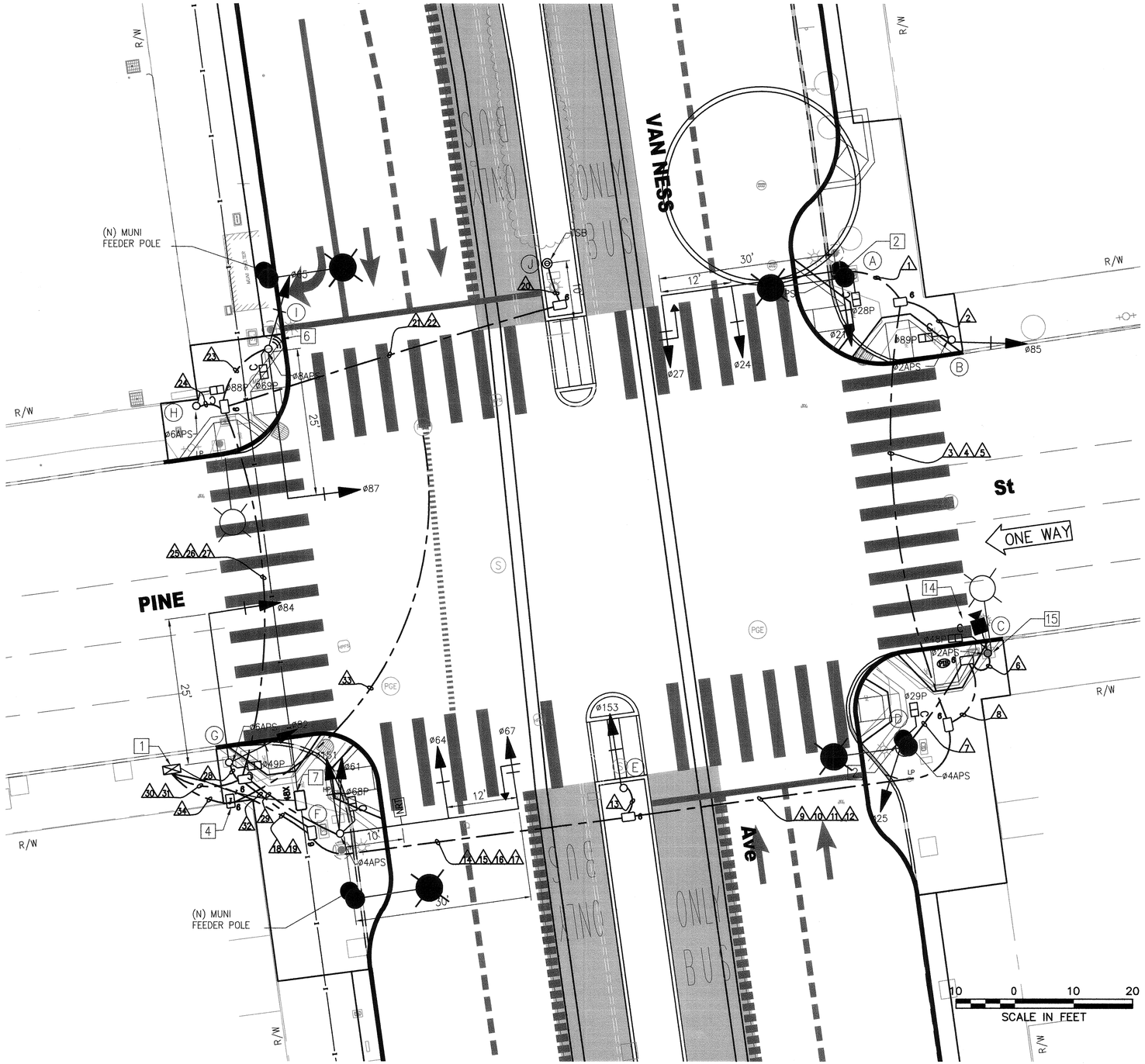
-584



EXISTING EQUIPMENT

PHASE DIAGRAM



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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

BORDER REVISED 11/17/05

DESIGNED	K. Kwong
DRAWN	K. Kwong
CHECKED	C. Chamberlain
REVIEWED	C. Chamberlain
RECOMMENDED	for Director
APPROVED	for Director
DATE	12/4/2015

REGISTERED PROFESSIONAL ENGINEER — CHERYL L. CHAMBERLAIN — No. C56718 — Exp. 6/30/2017 — CIVIL — STATE OF CALIFORNIA

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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

PINE STREET
TRAFFIC SIGNAL WORK

1289

ET-116.0
ET-204

REVISION

POLE AND EQUIPMENT SCHEDULE

POLE NO.	POLE STANDARD			VEHICLE SIGNAL					PEDESTRIAN SIGNAL			HPS LUMINAIRE (WATTS)	SPECIAL REQUIREMENTS
	TYPE	SIG. MA (FEET)	OCS NO. / SL NO.	No.	TYPE	MOUNTING	VISORS	LOUVERS	No.	TYPE	MOUNTING		
Ⓐ	SIGNAL, SL & OCS COMBO POLE	30	1500 / 152	21 24 27	3S12" 3S12" 3S12"GUA	SV-1-T MAS MAS	T T T		28	1S-COUNT	SP-1	–	SIGNAL MA MOUNT AT 20' HIGH APS ①
Ⓑ	1-A (10')	–		85	3S12"	TV-1-T	T		89	1S-COUNT	SP-1	–	APS ①
Ⓒ	EXISTING SL	–	/	–	–	–	–		48	1S-COUNT	SP-1	–	APS ① TRAFFIC CAMERA ③
Ⓓ	SIGNAL, SL & OCS COMBO POLE	–	1482 / 148	25	3S12"	SV-1-T	T		29	1S-COUNT	SP-1	–	APS ①
Ⓔ	1-A (10')	–		153	3S12"RB	TV-1-T	T		–	–	–	–	
Ⓕ	SPECIAL MAST ARM POLE (18-3-100)	30		61 64 67 151	3S12" 3S12" 3S12"GUA 3B12"RB	SV-1-T MAS MAS SV-1-T	T T T T		68	1S-COUNT	SP-1	–	SIGNAL MA MOUNT AT 20' HIGH SIGNAL 151 MOUNT AT 15' HIGH "NO RIGHT TURN" BLANK-OUT SIGN APS ①
Ⓖ	18-2-100	25		82 84	3S12" 3S12"	SV-1-T MAS	T T		49	1S-COUNT	SP-1	–	SIGNAL 82 MOUNT AT 13' APS ①
Ⓗ	1-A (7')	–		–	–	–	–		88	1S-COUNT	TP-1	–	APS ①
Ⓘ	18-2-100	25		65 87	3S12" 3S12"	SV-1-T MAS	T T		69	1S-COUNT	SP-1	–	APS ① TSP ②
Ⓙ	TSB POLE	–		–	–	–	–		–	–	–	–	TSB

*OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS, AND STANDARD SPECIFICATIONS.
FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN SIGNAL MOUNTING, SEE CALTRANS STANDARD PLANS OR DETAIL DRAWINGS.

① INSTALL APS WIRING AS SHOWN IN CONDUIT AND WIRING SCHEDULE. CITY FORCES TO INSTALL CITY FURNISHED APS UNIT.
② INSTALL CITY FURNISHED TSP WIRING FROM TS OR COMBINED POLES WITH 3 FEET OF SLACK TO TS CABINET.
③ INSTALL CITY FURNISHED TRAFFIC CAMERA AND CONTRACTOR FURNISHED WIRING.
④ FOR STREETLIGHT WORK, SEE SL-SERIES PLANS.

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

DESIGNED R. Yu
DRAWN R. Yu
CHECKED C. Chen
REVIEWED C. Chen
RECOMMENDED [illegible]
APPROVED [illegible]
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL L. CHEN No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

PINE STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

1289

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ET-204

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5986

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
CONDUIT SIZE (INCH)	2	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2	2	3	2	1	2	2	2	2	2	2	2	2	2	3	2	2	3	2
				SP	SP						SP	SP				SP	SP		SP	GRS		SP				SP	SP				SP	SP		
VEHICLE SIGNAL Ø21	3		3						3					3				3																
VEHICLE SIGNAL Ø24	3		3						3					3				3																
VEHICLE SIGNAL Ø27	3		3						3					3				3																
PED SIGNAL Ø28P	2		2						2					2				2																
APS PPB FOR XING VAN NESS NS ON POLE A	2		2						2					2				2																
VEHICLE SIGNAL Ø85		3	3						3					3				3																
PED SIGNAL Ø89P		2	2						2					2				2																
APS PPB FOR XING PINE ES ON POLE B		2	2						2					2				2																
PED SIGNAL Ø48P						2		2		2					2			2																
APS PPB FOR XING PINE ES ON POLE C						2		2		2					2			2																
VEHICLE SIGNAL Ø25							3	3		3					3			3																
PED SIGNAL Ø29P							2	2		2					2			2																
APS PPB FOR XING VAN NESS SS ON POLE D							2	2		2					2			2																
TRANSIT SIGNAL Ø153													2		2			2																
TSB ON POLE J																				2	2				2					2				
VEHICLE SIGNAL Ø65																							3		3					3				
VEHICLE SIGNAL Ø87																							3		3					3				
PED SIGNAL Ø69P																							2		2					2				
APS PPB FOR XING VAN NESS NS ON POLE I																							2		2					2				
PED SIGNAL Ø88P																								2	2					2				
APS PPB FOR XING PINE WS ON POLE H																								2	2					2				
VEHICLE SIGNAL Ø82																												3		3				
VEHICLE SIGNAL Ø84																												3		3				
PED SIGNAL Ø49P																												2		2				
APS PPB FOR XING PINE WS ON POLE G																												2		2				
TRANSIT SIGNAL Ø151																													3	3				
VEHICLE SIGNAL Ø61																													3	3				
VEHICLE SIGNAL Ø64																													3	3				
VEHICLE SIGNAL Ø67																													3	3				
PED SIGNAL Ø68P																													2	2				
APS PPB FOR XING VAN NESS SS ON POLE F																													2	2				
#14 NEUTRAL	4	2				1	2																3	1				3	5					
#14 SPARE			3					3	3	3				3	3			6							3					3				
TOTAL #14 WIRES	17	9	23			5	9	14	23	14			2	23	16			39		2	2		13	5	19			13	21	45				
#10 WIRES NEUTRAL			1					1	1	1			1	1	2			3							1					2				
#6 WIRES (120 V SERVICE)																																2		
#8 WIRES (120 V SERVICE)																																	2	
#6 BSCW (SEE GENERAL NOTE 10)																																		
TSP RECEIVER (10 CONDUCTOR CABLE)																							1		1					1				
NO RIGHT TURN EMS WIRES (1#14, 1#10 & 1#6 GROUND)																													1	1				
CCTV CAMERA WIRES (CAT5e & 3#18)						1		1		1					1			1																

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

BORDER REVISED 11/17/05

DESIGNED
DRAWN
CHECKED FS
REVIEWED
RECOMMENDED
APPROVED
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER
CHERYL LEE
No. C56718
Exp. 6/30/201
CIVIL
STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

PINE STREET
CONDUIT & WIRING SCHEDULES

1289

ET-116.2

REVISION

ET-204

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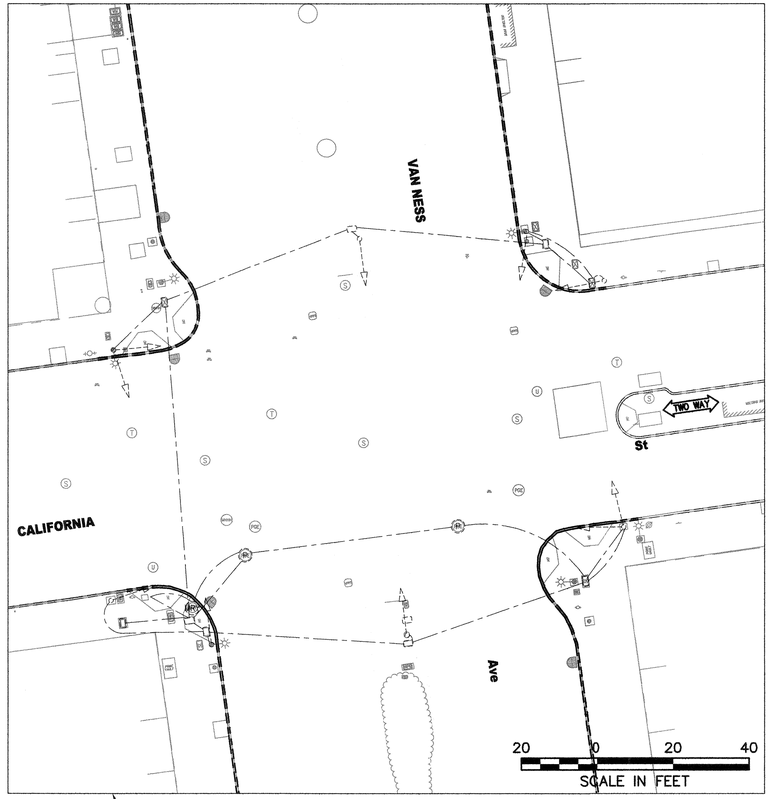
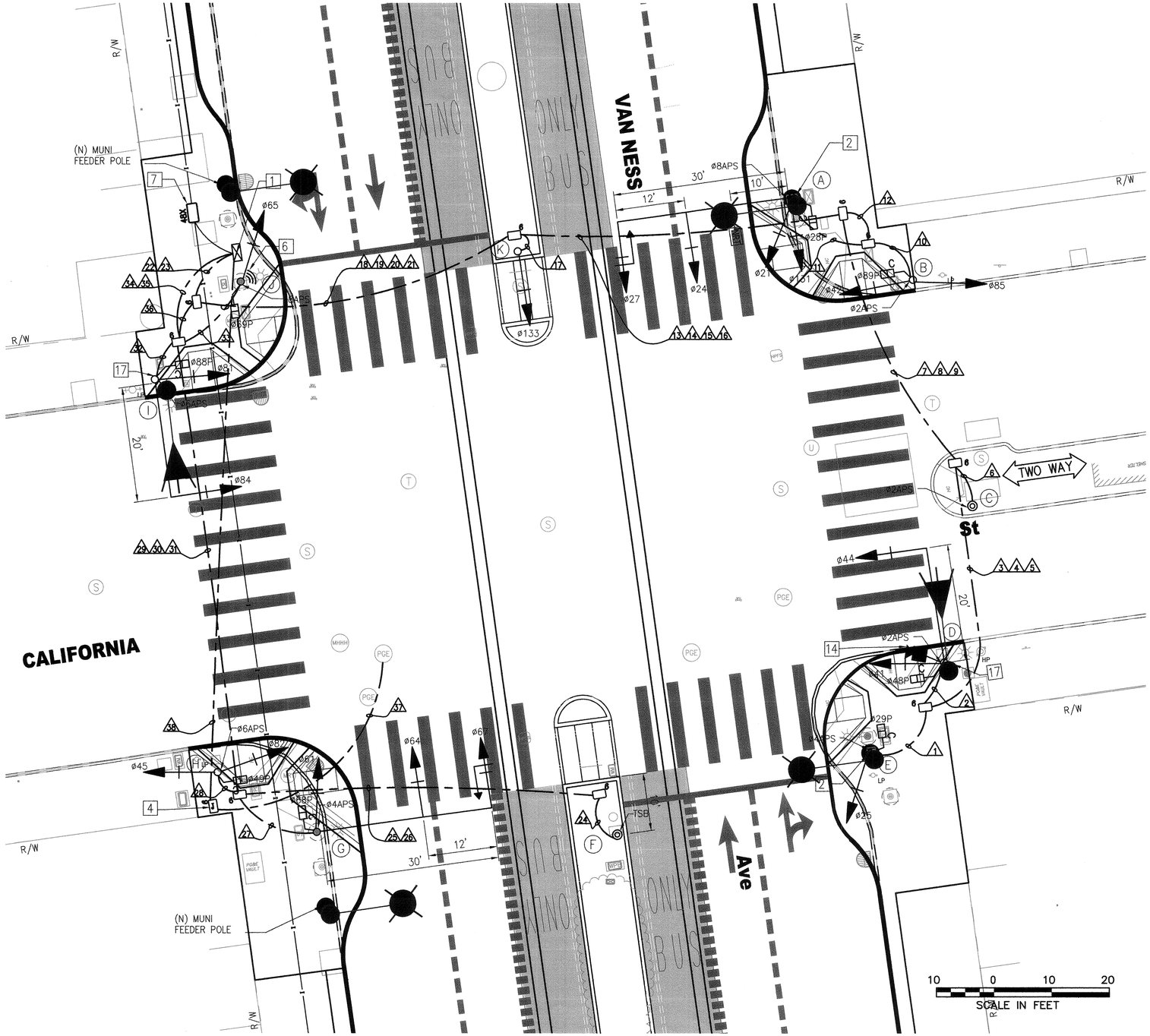
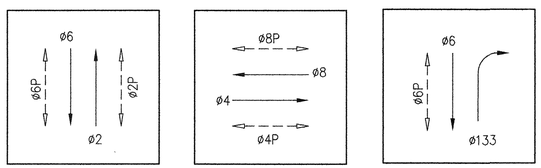
587



EXISTING EQUIPMENT



PHASE DIAGRAM



N

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

BORDER REVISED 11/17/05

DESIGNED
DRAWN
CHECKED
REVIEWED
RECOMMENDED
APPROVED
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER — CHERYL CHUNG — No. C56718 — Exp. 6/30/2017 — CIVIL — STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

CALIFORNIA STREET
TRAFFIC SIGNAL WORK

1289

ET-117.0

ET-204

REVISION

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580

POLE AND EQUIPMENT SCHEDULE

POLE NO.	POLE STANDARD			VEHICLE SIGNAL					PEDESTRIAN SIGNAL			HPS LUMINAIRE (WATTS)	SPECIAL REQUIREMENTS
	TYPE	SIG. MA (FEET)	OCS NO. / SL NO.	No.	TYPE	MOUNTING	VISORS	LOUVERS	No.	TYPE	MOUNTING		
Ⓐ	SIGNAL, SL & OCS COMBO POLE	30	1600 / 162	21 24 27 131	3S12" 3S12" 3S12"GUA 3S12"RB	SV-1-T MAS MAS SV-1-T	T T T T		28	1S-COUNT	SP-1	–	SIGNAL MA MOUNT AT 20' HIGH SIGNAL 131 MOUNT AT 15' HIGH "NO RIGHT TURN" BLANK-OUT SIGN APS ◇1
Ⓑ	1-A (10')	–		42 85	3S12" 3S12"	TV-2-T	T T		89	1S-COUNT	SP-1	–	APS ◇1
Ⓒ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ◇1
Ⓓ	17-2-100	20	/ 163	41 44	3S12" 3S12"	SV-1-T MAS	T T		48	1S-COUNT	SP-1	–	APS ◇1 TRAFFIC CAMERA ◇3
Ⓔ	SIGNAL, SL & OCS COMBO POLE	–	1560 / 158	25	3S12"	SV-1-T	T		29	1S-COUNT	SP-1	–	APS ◇1
Ⓕ	TSB POLE	–		–	–	–	–		–	–	–	–	TSB
Ⓖ	SPECIAL MAST ARM POLE (18-3-100)	30		61 64 67	3S12" 3S12" 3S12"GUA	SV-1-T MAS MAS	T T T		68	1S-COUNT	SP-1	–	SIGNAL MA MOUNT AT 20' HIGH APS ◇1
Ⓗ	1-A (10')	–		82 45	3S12" 3S12"	TV-2-T	T T		49	1S-COUNT	SP-1	–	APS ◇1
Ⓘ	17-2-100	20	/ 172	81 84	3S12" 3S12"	SV-1-T MAS	T T		88	1S-COUNT	SP-1	–	APS ◇1
Ⓙ	1-A (10')	–		65	3S12"	TV-1-T	T		69	1S-COUNT	SP-1	–	APS ◇1 TSP ◇2
Ⓚ	1-A (10')	–		133	3S12"RB	TV-1-T	T		–	–	–	–	

*OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS, AND STANDARD SPECIFICATIONS.
FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN SIGNAL MOUNTING, SEE CALTRANS STANDARD PLANS OR DETAIL DRAWINGS.

◇1 INSTALL APS WIRING AS SHOWN IN CONDUIT AND WIRING SCHEDULE. CITY FORCES TO INSTALL CITY FURNISHED APS UNIT.
◇2 INSTALL CITY FURNISHED TSP WIRING FROM TS OR COMBINED POLES WITH 3 FEET OF SLACK TO TS CABINET.
◇3 INSTALL CITY FURNISHED TRAFFIC CAMERA AND CONTRACTOR FURNISHED WIRING.
◇4 FOR STREETLIGHT WORK, SEE SL-SERIES PLANS.

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NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

BORDER REVISED 11/17/05

DESIGNED K Kwong
DRAWN K Kwong
CHECKED Cheryl Lin
REVIEWED Cheryl Lin
RECOMMENDED Peter Wan
APPROVED [signature]
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LIN No. C56718 Exp. 6/30/201 CIVIL STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY
APPROVED
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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT
1289

CALIFORNIA STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES
ET-117.1
ET-204
REVISION

589

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 (INCH)	2	2	2	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2	2	3	2	1	2	2	2	2	2	2	2	2	2	3	2	2	3	2
				SP	SP			SP	SP						SP	SP				SP	SP			GRS		SP				SP	SP				SP	SP		
VEHICLE SIGNAL Ø25	3		3				3						3					3				3																
PED SIGNAL Ø29P	2		2				2						2					2				2																
APS PPB FOR XING VAN NESS SS ON POLE E	2		2				2						2					2				2																
VEHICLE SIGNAL Ø41		3	3				3						3					3				3																
VEHICLE SIGNAL Ø44		3	3				3						3					3				3																
PED SIGNAL Ø48P		2	2				2						2					2				2																
APS PPB FOR XING CALIFORNIA ES ON POLE D		2	2				2						2					2				2																
APS PPB FOR XING CALIFORNIA ES ON POLE C						2	2						2					2				2																
VEHICLE SIGNAL Ø42										3		3		3					3			3																
VEHICLE SIGNAL Ø85										3		3		3					3			3																
PED SIGNAL Ø89P										2		2		2					2			2																
APS PPB FOR XING CALIFORNIA ES ON POLE B										2		2		2					2			2																
TRANSIT SIGNAL Ø131											3	3		3					3			3																
VEHICLE SIGNAL Ø21											3	3		3					3			3																
VEHICLE SIGNAL Ø24											3	3		3					3			3																
VEHICLE SIGNAL Ø27											3	3		3					3			3																
PED SIGNAL Ø28P											2	2		2					2			2																
APS PPB FOR XING VAN NESS NS ON POLE A											2	2		2					2			2																
TRANSIT SIGNAL Ø133																	3		3			3																
TSB ON POLE F																								2	2				2					2				
VEHICLE SIGNAL Ø61																											3		3					3				
VEHICLE SIGNAL Ø64																											3		3					3				
VEHICLE SIGNAL Ø67																											3		3					3				
PED SIGNAL Ø68P																											2		2					2				
APS PPB FOR XING VAN NESS SS ON POLE G																											2		2					2				
VEHICLE SIGNAL Ø45																												3	3					3				
VEHICLE SIGNAL Ø82																												3	3					3				
PED SIGNAL Ø49P																												2	2					2				
APS PPB FOR XING CALIFORNIA WS ON POLE H																												2	2					2				
VEHICLE SIGNAL Ø81																															3			3				
VEHICLE SIGNAL Ø84																															3			3				
PED SIGNAL Ø88P																															2			2				
APS PPB FOR XING CALIFORNIA WS ON POLE I																															2			2				
VEHICLE SIGNAL Ø65																																3		3				
PED SIGNAL Ø69P																																2		2				
APS PPB FOR XING VAN NESS NS ON POLE J																																2		2				
#14 NEUTRAL	2	3								2	5						1										4	2					3	2				
#14 SPARE			3				3					3	3	3				3	3			3	3						3					3				
TOTAL #14 WIRES	9	13	20			2	22			13	22	29	22	29			4	22	32			22	32	2	2		17	13	26			13	9	43				
#10 WIRES NEUTRAL			1				1					1	1	1				1	1			1	1						1					2				
#6 WIRES (120 V SERVICE)																																			2			
#8 WIRES (120 V SERVICE)																																				2		
#6 BSCW (SEE GENERAL NOTE 10)																																						
TSP RECEIVER (10 CONDUCTOR CABLE)																																	1	1				
NO RIGHT TURN EMS WIRES (1#14, 1#10 & 1#6 GROUND)											1	1		1					1			1																
CCTV CAMERA WIRES (CAT5e & 3#18)		1	1				1						1					1				1																

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

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APPROVED
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER
CHERYL LLOYD
No. C56718
Exp. 6/30/2017
CIVIL
STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

1289

CALIFORNIA STREET
CONDUIT & WIRING SCHEDULES

ET-117.2
ET-204

REVISION

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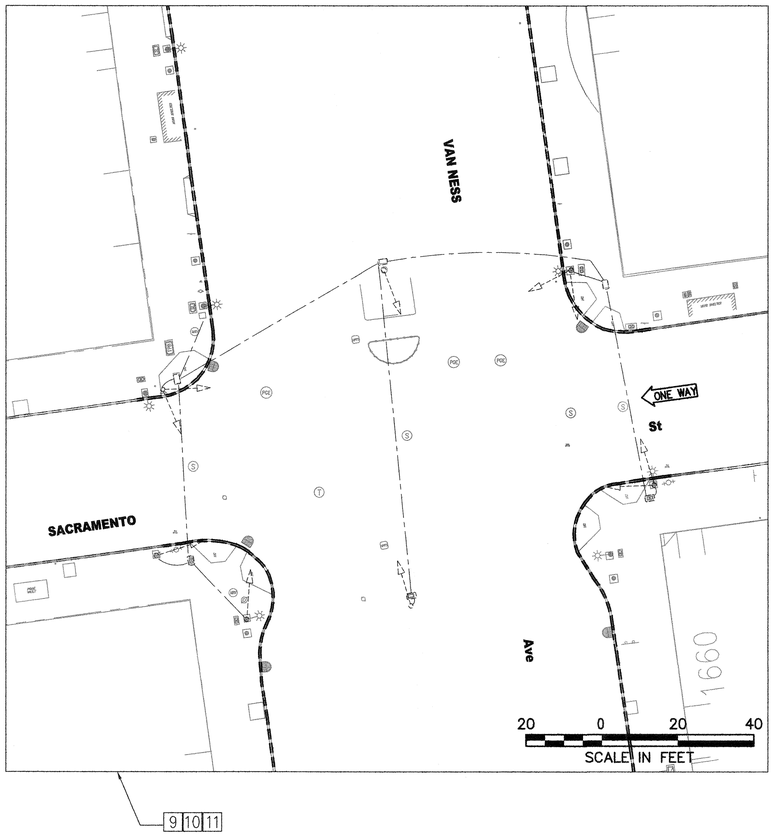
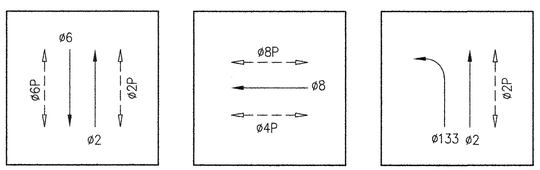
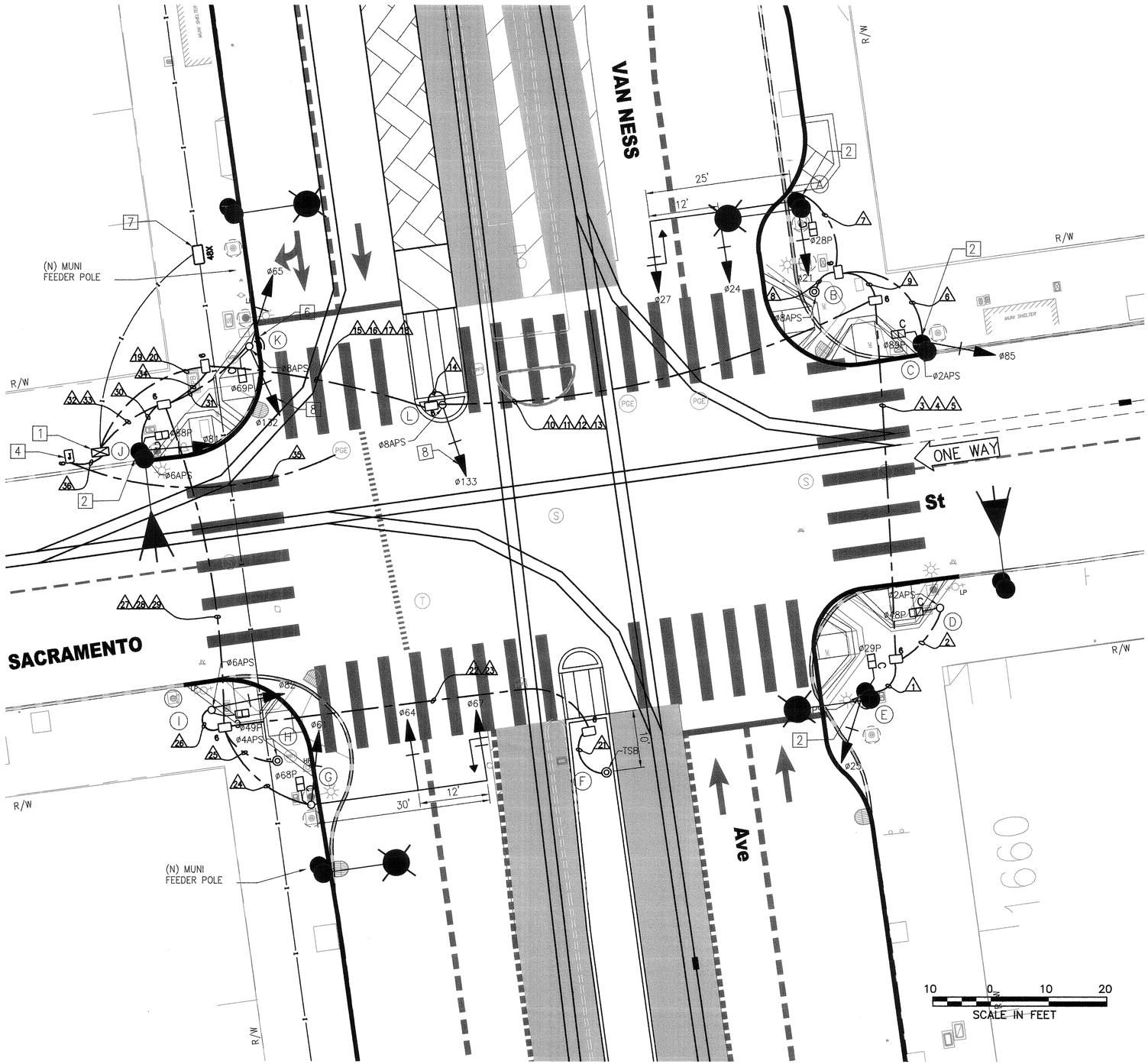


EXISTING EQUIPMENT



PHASE DIAGRAM



NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

DESIGNED K Fung
DRAWN K Fung
CHECKED C Mueller
REVIEWED C Mueller
RECOMMENDED
APPROVED
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL L. MUELLER No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

SEAL OF THE CITY AND COUNTY OF SAN FRANCISCO

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

1289

SACRAMENTO STREET
TRAFFIC SIGNAL WORK

ET-118.0
ET-204

REVISION

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POLE AND EQUIPMENT SCHEDULE

POLE NO.	POLE STANDARD			VEHICLE SIGNAL					PEDESTRIAN SIGNAL			HPS LUMINAIRE (WATTS)	SPECIAL REQUIREMENTS
	TYPE	SIG. MA (FEET)	OCS NO. / SL NO.	No.	TYPE	MOUNTING	VISORS	LOUVERS	No.	TYPE	MOUNTING		
Ⓐ	SIGNAL, SL & OCS COMBO POLE	25	1704 / 172	21 24 27	3S12" 3S12" 3S12"GUA	SV-1-T MAS MAS	T T T		28	1S-COUNT	SP-1	–	SIGNAL MA MOUNT AT 20' HIGH
Ⓑ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ①
Ⓒ	SIGNAL, & OCS COMBO POLE	–	1798 /	85	3S12"	SV-1-T	T		89	1S-COUNT	SP-1	–	APS ①
Ⓓ	1-A (7')	–		–	–	–	–		48	1S-COUNT	TP-1	–	APS ①
Ⓔ	SIGNAL, SL & OCS COMBO POLE	–	1694 / 168	25	3S12"	SV-1-T	T		29	1S-COUNT	SP-1	–	APS ①
Ⓕ	TSB POLE	–		–	–	–	–		–	–	–	–	TSB
Ⓖ	SPECIAL MAST ARM POLE (18-3-10D)	30		61 64 67	3S12" 3S12" 3S12"GUA	SV-1-T MAS MAS	T T T		68	1S-COUNT	SP-1	–	SIGNAL MA MOUNT AT 20' HIGH
Ⓗ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ①
Ⓘ	1-A (10')	8		82	3S12"	TV-1-T	T		49	1S-COUNT	SP-1	–	APS ①
Ⓙ	SIGNAL, SL & OCS COMBO POLE	–	1802 / 182	81	3S12"	SV-1-T	T		88	1S-COUNT	SP-1	–	APS ①
Ⓚ	1-A (10')	–		65 132	3S12" 3S12"LB	TV-2-T	T T		69	1S-COUNT	SP-1	–	APS ① TSP ②
Ⓛ	1-A (10')			133	3S12"LB	TV-1-T	T						APS ①

*OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS, AND STANDARD SPECIFICATIONS.
FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN SIGNAL MOUNTING, SEE CALTRANS STANDARD PLANS OR DETAIL DRAWINGS.

① INSTALL APS WIRING AS SHOWN IN CONDUIT AND WIRING SCHEDULE. CITY FORCES TO INSTALL CITY FURNISHED APS UNIT.
② INSTALL CITY FURNISHED TSP WIRING FROM TS OR COMBINED POLES WITH 3 FEET OF SLACK TO TS CABINET.
③ INSTALL CITY FURNISHED TRAFFIC CAMERA AND CONTRACTOR FURNISHED WIRING.
④ FOR STREETLIGHT WORK, SEE SL-SERIES PLANS.

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

BORDER REVISED 11/17/05

DESIGNED R.Key
DRAWN K.Kwong
CHECKED C.Chan
REVIEWED C.Chan
RECOMMENDED Jason Nelson
APPROVED R.Olea
DATE 12/14/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL L. CHAN No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

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for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

SACRAMENTO STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

1289

ET-118.1
ET-204

REVISION

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592

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
CONDUIT SIZE (INCH)	2	2	2	2	2	2	2	1	3	2	2	2	2	2	2	2	2	2	3	2	1	2	2	2	1	2	2	2	2	2	2	3	2	2	2	3
				SP	SP							SP	SP				SP	SP		SP	GRS		SP					SP	SP				SP	SP			
VEHICLE SIGNAL Ø25	3		3							3					3				3																	
PED SIGNAL Ø29P	2		2							2					2				2																	
APS PPB FOR XING VAN NESS SS ON POLE F	2		2							2					2				2																	
PED SIGNAL Ø48P		2	2							2					2				2																	
APS PPB FOR XING SACRAMENTO ES ON POLE E		2	2							2					2				2																	
VEHICLE SIGNAL Ø85						3			3		3					3			3																	
PED SIGNAL Ø89P						2			2		2					2			2																	
APS PPB FOR XING SACRAMENTO ES ON POLE C						2			2		2					2			2																	
VEHICLE SIGNAL Ø21							3		3		3					3			3																	
VEHICLE SIGNAL Ø24							3		3		3					3			3																	
VEHICLE SIGNAL Ø27							3		3		3					3			3																	
PED SIGNAL Ø28P							2		2		2					2			2																	
APS PPB FOR XING VAN NESS NS ON POLE B								2	2		2					2			2																	
TRANSIT SIGNAL Ø133														3	3				3																	
APS PPB FOR XING VAN NESS NS ON POLE M														2	2				2																	
TSB ON POLE G																					2	2						2					2			
VEHICLE SIGNAL Ø61																								3				3					3			
VEHICLE SIGNAL Ø64																								3				3					3			
VEHICLE SIGNAL Ø67																								3				3					3			
PED SIGNAL Ø68P																								2				2					2			
APS PPB FOR XING VAN NESS SS ON POLE I																										2		2					2			
VEHICLE SIGNAL Ø82																											3	3					3			
PED SIGNAL Ø49P																											2	2					2			
APS PPB FOR XING SACRAMENTO WS ON POLE J																											2	2					2			
VEHICLE SIGNAL Ø81																														3		3				
PED SIGNAL Ø88P																													2		2					
APS PPB FOR XING SACRAMENTO WS ON POLE K																													2		2					
VEHICLE SIGNAL Ø65																														3	3					
TRANSIT SIGNAL Ø132																														3	3					
PED SIGNAL Ø69P																														2	2					
APS PPB FOR XING VAN NESS NS ON POLE L																														2	2					
#14 NEUTRAL 2		1				2	4							1										4		2			2	3						
#14 SPARE			3						3	3	3				3	3			6								3					3				
TOTAL #14 WIRES 9		2	14			9	15	2	23	14	23			6	19	23			42		2	2		15	2	9	25		9	13	42					
#10 WIRES NEUTRAL			1						1	1	1				1	1			2								1				2					
#6 WIRES (120 V SERVICE)																																		2		
#8 WIRES (120 V SERVICE)																																			2	
#6 BSCW (SEE GENERAL NOTE 10)																																				
TSP RECEIVER (10 CONDUCTOR CABLE)																														1	1					

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

DESIGNED
DRAWN
CHECKED
REVIEWED
RECOMMENDED
APPROVED
DATE 12/14/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LEE No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

APPROVED
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

SACRAMENTO STREET
CONDUIT & WIRING SCHEDULES

1289

ET-118.2

REVISION

ET-204

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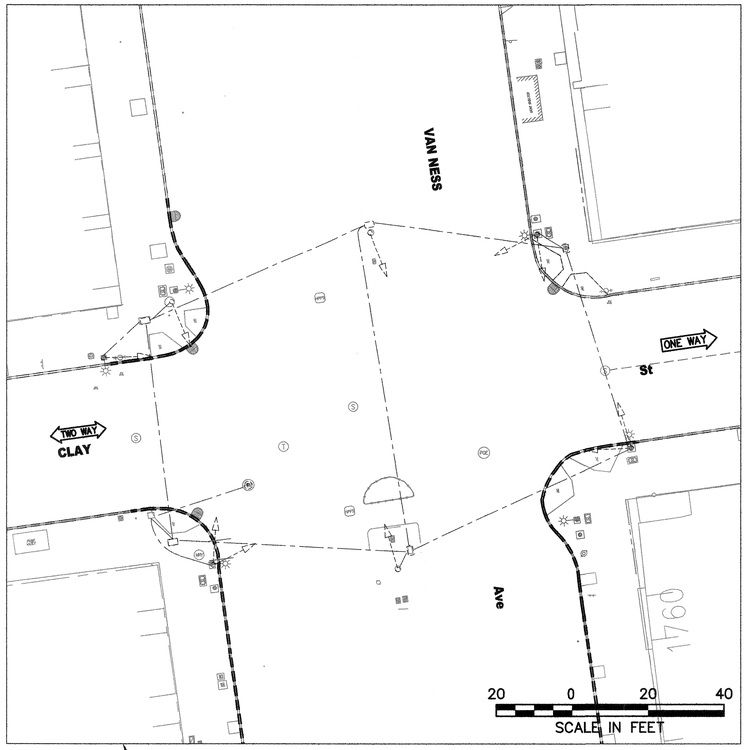
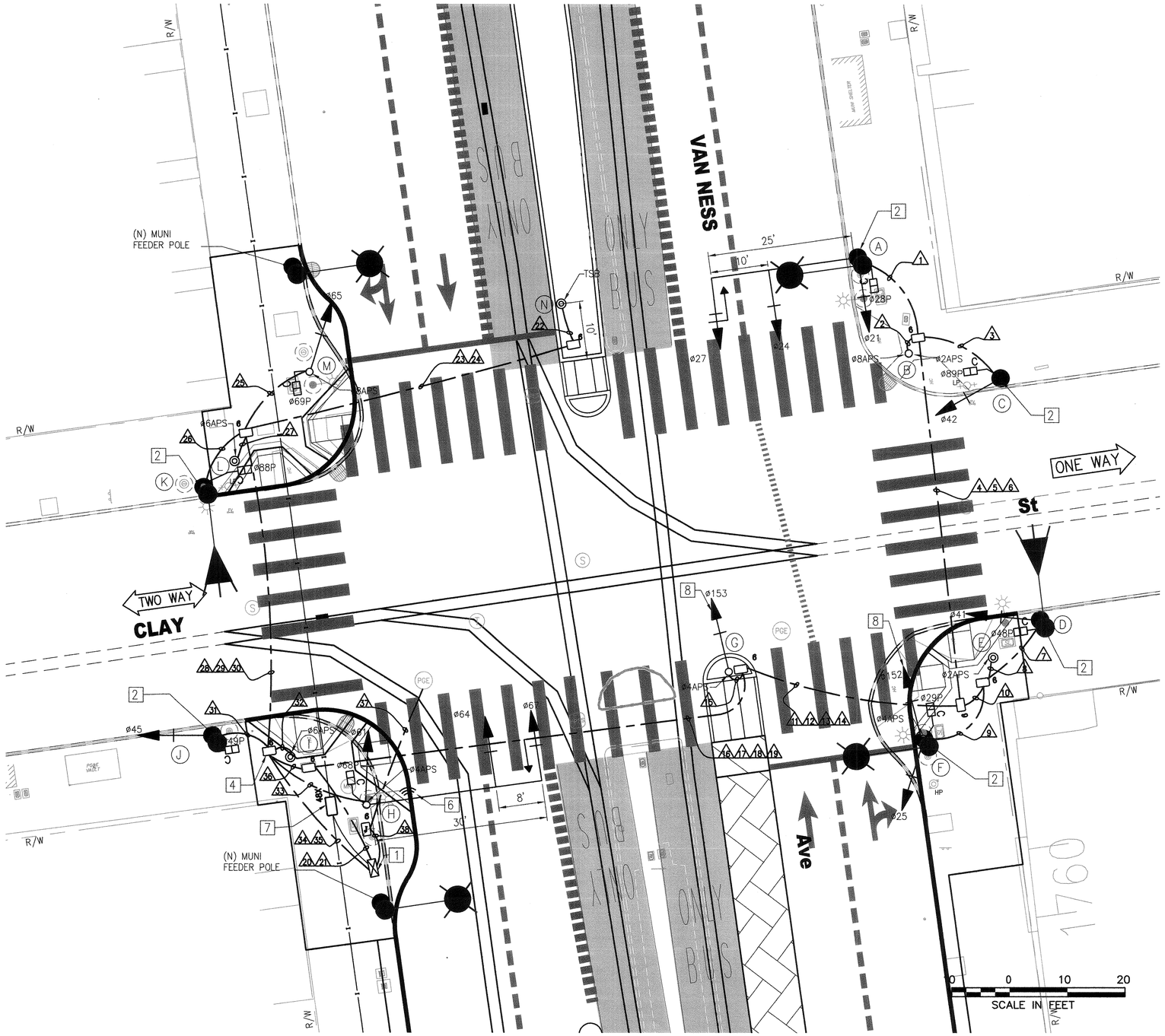
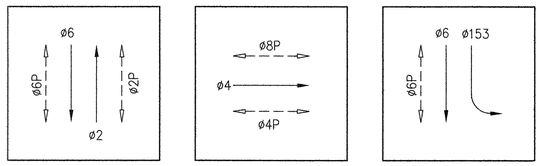


EXISTING EQUIPMENT





PHASE DIAGRAM

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
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BORDER REVISED 11/17/05

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REGISTERED PROFESSIONAL ENGINEER
CHERYL L. CLARK
No. C56718
Exp. 6/30/2017
CIVIL
STATE OF CALIFORNIA

SEAL OF THE CITY AND COUNTY OF SAN FRANCISCO

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

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MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

CLAY STREET
TRAFFIC SIGNAL WORK

1289

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POLE AND EQUIPMENT SCHEDULE

POLE NO.	POLE STANDARD			VEHICLE SIGNAL					PEDESTRIAN SIGNAL			HPS LUMINAIRE (WATTS)	SPECIAL REQUIREMENTS
	TYPE	SIG. MA (FEET)	OCS NO. / SL NO.	No.	TYPE	MOUNTING	VISORS	LOUVERS	No.	TYPE	MOUNTING		
Ⓐ	SIGNAL, SL & OCS COMBO POLE	25'	1804 /	21 24 27	3S12" 3S12" 3S12"GUA	SV-1-T MAS MAS	T T T		28	1S-COUNT	SP-1	–	SIGNAL MA MOUNT AT 20' HIGH
Ⓑ	1-A (5')	–		–	–	–	–		–	–	–	–	APSx2 ◇1
Ⓒ	SIGNAL & OCS COMBO POLE	–	1796 /	42	3S12"	SV-1-T	T		89	1S-COUNT	SP-1	–	
Ⓓ	SL SIGNAL,& OCS COMBO POLE	–	1799 / 177	41	3S12"	SV-1-T	T		48	1S-COUNT	SP-1	–	
Ⓔ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ◇1
Ⓕ	SIGNAL, SL & OCS COMBO POLE	–	1792 / 178	25 152	3S12" 3S12"LB	SV-2-TA	T T		29	1S-COUNT	SP-1	–	APS ◇1
Ⓖ	1-A (10')	–		153	3S12"LB	TV-1-T	T		–	–	–	–	APS ◇1
Ⓗ	SPECIAL MAST ARM POLE (18-3-100)	30		61 64 67	3S12" 3S12" 3S12"GUA	SV-1-T MAS MAS	T T T		68	1S-COUNT	SP-1	–	SIGNAL MA MOUNT AT 22.5' HIGH APS ◇1 TSP ◇2
Ⓘ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ◇1
Ⓙ	SIGNAL & OCS COMBO POLE	–	1809 /	45	3S12"	SV-1-T	T		49	1S-COUNT	SP-1	–	
Ⓚ	SIGNAL, SL & OCS COMBO POLE	–	1808 /	–	–	–	–		88	1S-COUNT	SP-1	–	
Ⓛ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ◇1
Ⓜ	1-A (10')	–		65	3S12"	TV-1-T	T		69	1S-COUNT	SP-1	–	APS ◇1
Ⓝ	TSB POLE												TSB

*OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS, AND STANDARD SPECIFICATIONS.
FOR TYPE OF STANDARD, VEHICLE AND PEDESTRIAN SIGNAL MOUNTING, SEE CALTRANS STANDARD PLANS OR DETAIL DRAWINGS.

◇1 INSTALL APS WIRING AS SHOWN IN CONDUIT AND WIRING SCHEDULE. CITY FORCES TO INSTALL CITY FURNISHED APS UNIT.
◇2 INSTALL CITY FURNISHED TSP WIRING FROM TS OR COMBINED POLES WITH 3 FEET OF SLACK TO TS CABINET.
◇3 INSTALL CITY FURNISHED TRAFFIC CAMERA AND CONTRACTOR FURNISHED WIRING.
◇4 FOR STREETLIGHT WORK, SEE SL-SERIES PLANS.

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C. BRYL, LLP
No. C56718
Exp. 6/30/2017
CIVIL
STATE OF CALIFORNIA

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CLAY STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

ET-119.1
ET-204

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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 (INCH)	2	1	2	2	2	2	2	1	2	3	2	2	2	2	2	2	2	2	2	3	2	1	2	2	2	2	1	2	2	2	2	1	2	3	2	2	3	2
					SP	SP							SP	SP				SP	SP			GRS		SP					SP	SP					SP	SP			
VEHICLE SIGNAL Ø21	3			3							3					3				3																			
VEHICLE SIGNAL Ø24	3			3							3					3				3																			
VEHICLE SIGNAL Ø27	3			3							3					3				3																			
PED SIGNAL Ø28P	2			2							2					2				2																			
APS PPB FOR XING VAN NESS NS ON POLE B		2		2							2					2				2																		
APS PPB FOR XING CLAY ES ON POLE B		2		2							2					2				2																		
VEHICLE SIGNAL Ø42			3	3							3					3				3																		
PED SIGNAL Ø89P			2	2							2					2				2																		
VEHICLE SIGNAL Ø41							3			3		3					3				3																		
PED SIGNAL Ø48P							2			2		2					2				2																		
APS PPB FOR XING CLAY ES ON POLE E								2		2		2					2				2																		
TRANSIT SIGNAL Ø152									3	3		3					3				3																		
VEHICLE SIGNAL Ø25									3	3		3					3				3																		
PED SIGNAL Ø29P									2	2		2					2				2																		
APS PPB FOR XING VAN NESS SS ON POLE F									2	2		2					2				2																		
TRANSIT SIGNAL Ø153															3		3				3																		
APS PPB FOR XING VAN NESS SS ON POLE G															2		2				2																		
TSB ON POLE N																						2	2					2						2				
VEHICLE SIGNAL Ø65																									3			3						3				
PED SIGNAL Ø69P																									2			2						2				
APS PPB FOR XING VAN NESS NS ON POLE M																									2			2						2				
PED SIGNAL Ø88P																										2		2						2				
APS PPB FOR XING CLAY WS ON POLE L																											2	2						2				
VEHICLE SIGNAL Ø45																															3				3			
PED SIGNAL Ø49P																															2				2			
APS PPB FOR XING CLAY WS ON POLE I																																2			2			
VEHICLE SIGNAL Ø61																																	3		3			
VEHICLE SIGNAL Ø64																																	3		3			
VEHICLE SIGNAL Ø67																																	3		3			
PED SIGNAL Ø68P																																	2		2			
APS PPB FOR XING VAN NESS SS ON POLE H																																	2		2			
#14 NEUTRAL	4		2				2		3						1										2	1					2		4					
#14 SPARE				3						3	3	3				3	3			3	3							3						3	3			
TOTAL #14 WIRES	15	4	7	23			7	2	13	20	23	20			6	23	25			26	25	2	2		9	3	2	16			7	2	17	16	23			
#10 WIRES NEUTRAL				1						1	1	1				1	1			1	1							1					1					
#6 WIRES (120 V SERVICE)																																				2		
#8 WIRES (120 V SERVICE)																																					2	
#6 BSCW (SEE GENERAL NOTE 10)																																						
TSP RECEIVER (10 CONDUCTOR CABLE)																																	1		1			

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REGISTERED PROFESSIONAL ENGINEER — CHERYL C. LEE — No. C56718 Exp. 6/30/2017 — CIVIL — STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO
MUNICIPAL TRANSPORTATION AGENCY

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for the DIRECTOR OF TRANSPORTATION

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CLAY STREET
CONDUIT & WIRING SCHEDULES

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ET-204

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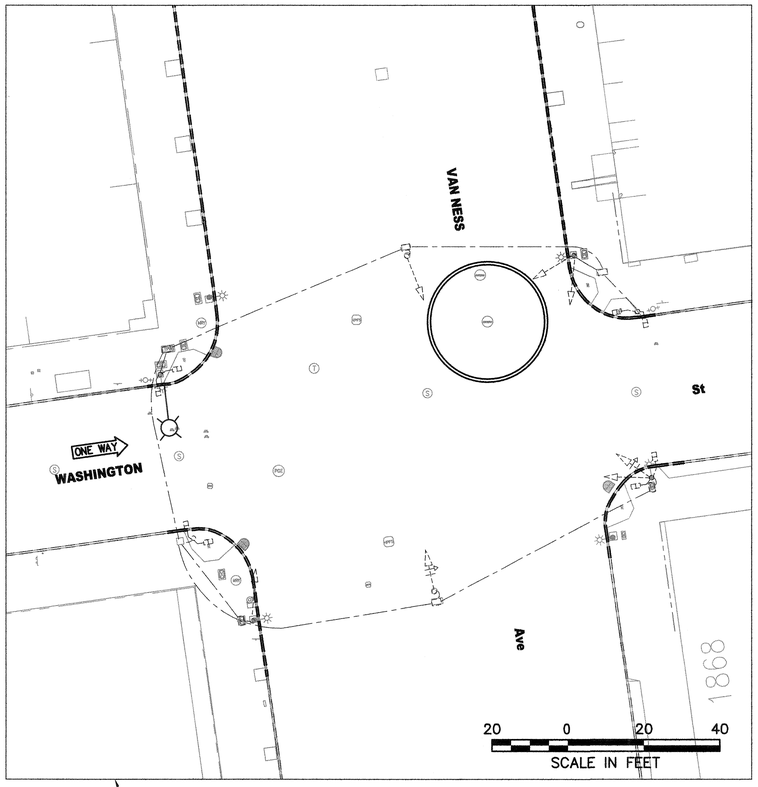

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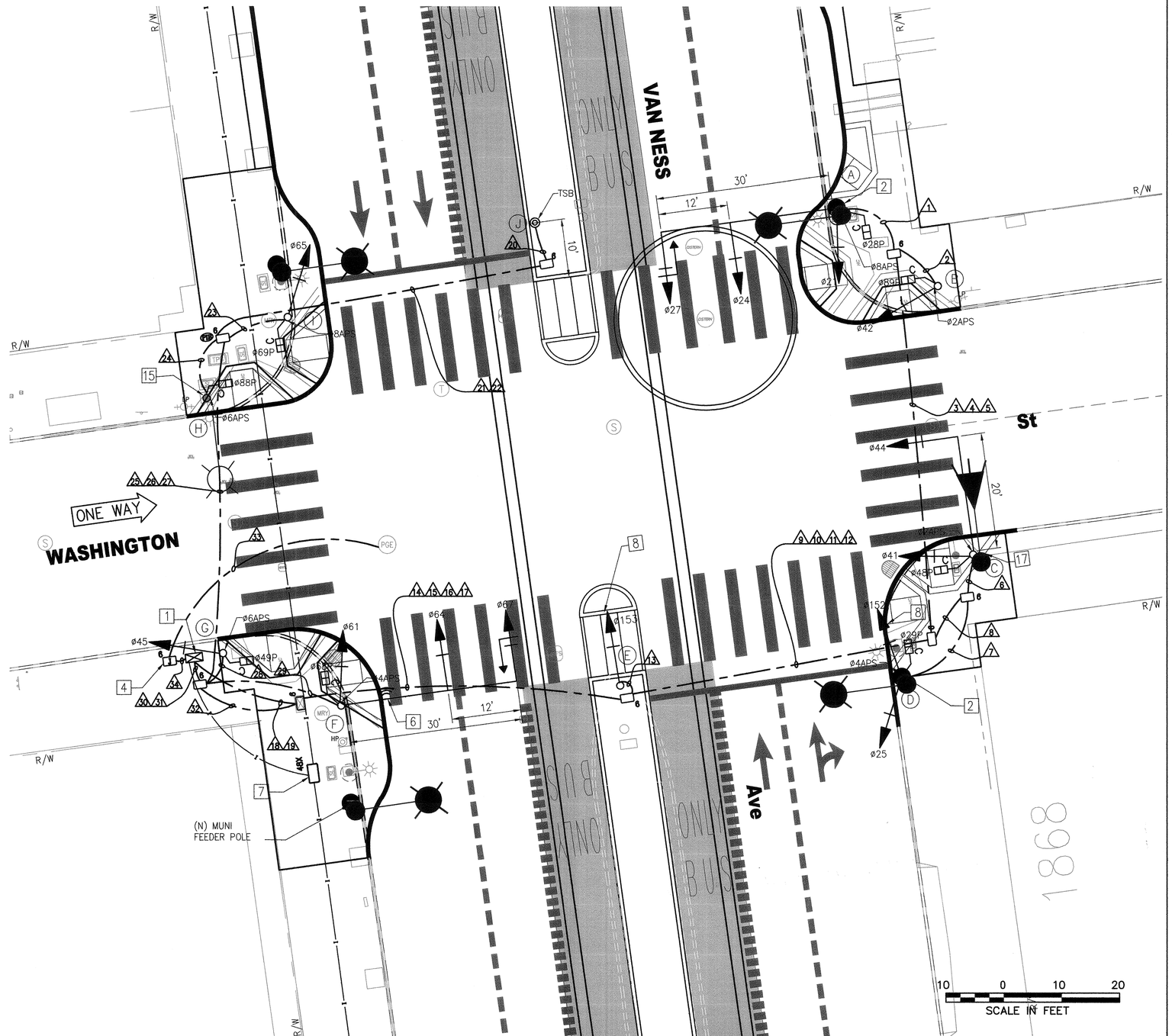

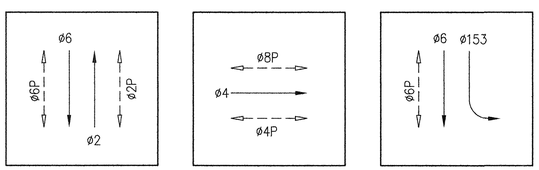

PHASE DIAGRAM

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REGISTERED PROFESSIONAL ENGINEER
CHERYL L. CRUZALLEBRO
No. C56718
Exp. 6/30/2016
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WASHINGTON STREET
TRAFFIC SIGNAL WORK

ET-120.0
ET-204

REVISION

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