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
CONDUIT SIZE (INCH)	2	2	2	2	2	2	2	1	2	3	2	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2	3	2	2	3	2	2	2
				SP	SP			EX					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															
VEHICLE SIGNAL Ø41		3	3								3					3				3															
VEHICLE SIGNAL Ø44		3	3								3					3				3															
PED SIGNAL Ø48P		2	2								2					2				2															
APS PPB FOR XING FELL ES ON POLE D		2	2								2					2				2															
VEHICLE SIGNAL Ø42						3				3		3					3			3															
PED SIGNAL Ø89P						2				2		2					2			2															
APS PPB FOR XING VAN NESS NS ON POLE B							2		2	2		2					2			2															
VEHICLE SIGNAL Ø21								3	3	3		3					3			3															
PED SIGNAL Ø28P								2	2	2		2					2			2															
APS PPB FOR XING FELL ES ON POLE A								2	2	2		2					2			2															
VEHICLE SIGNAL Ø24															3		3			3															
VEHICLE SIGNAL Ø27															3		3			3															
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 FELL WS ON POLE G																							2	2					2						
PED SIGNAL Ø88P																											2		2						
APS PPB FOR XING FELL 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	3				2		2							2						4	2					1	2							
#14 SPARE			3							3	3	3				3	3			6				3					3						
TOTAL #14 WIRES	9	13	20			7	2	9	9	17	20	17			8	20	23			43		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)																																			
#8 WIRES (BBS)																																		2	2
#8 GROUND (BBS)																																		1	1
TSP RECEIVER (10 CONDUCTOR CABLE)																						1		1					1						

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

DESIGNED K Ng
DRAWN K Ng
CHECKED Cheryl Lin
REVIEWED Cheryl Lin
RECOMMENDED
APPROVED
DATE 12/11/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LIN 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

APPROVED
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

FELL STREET
CONDUIT & WIRING SCHEDULES

1289

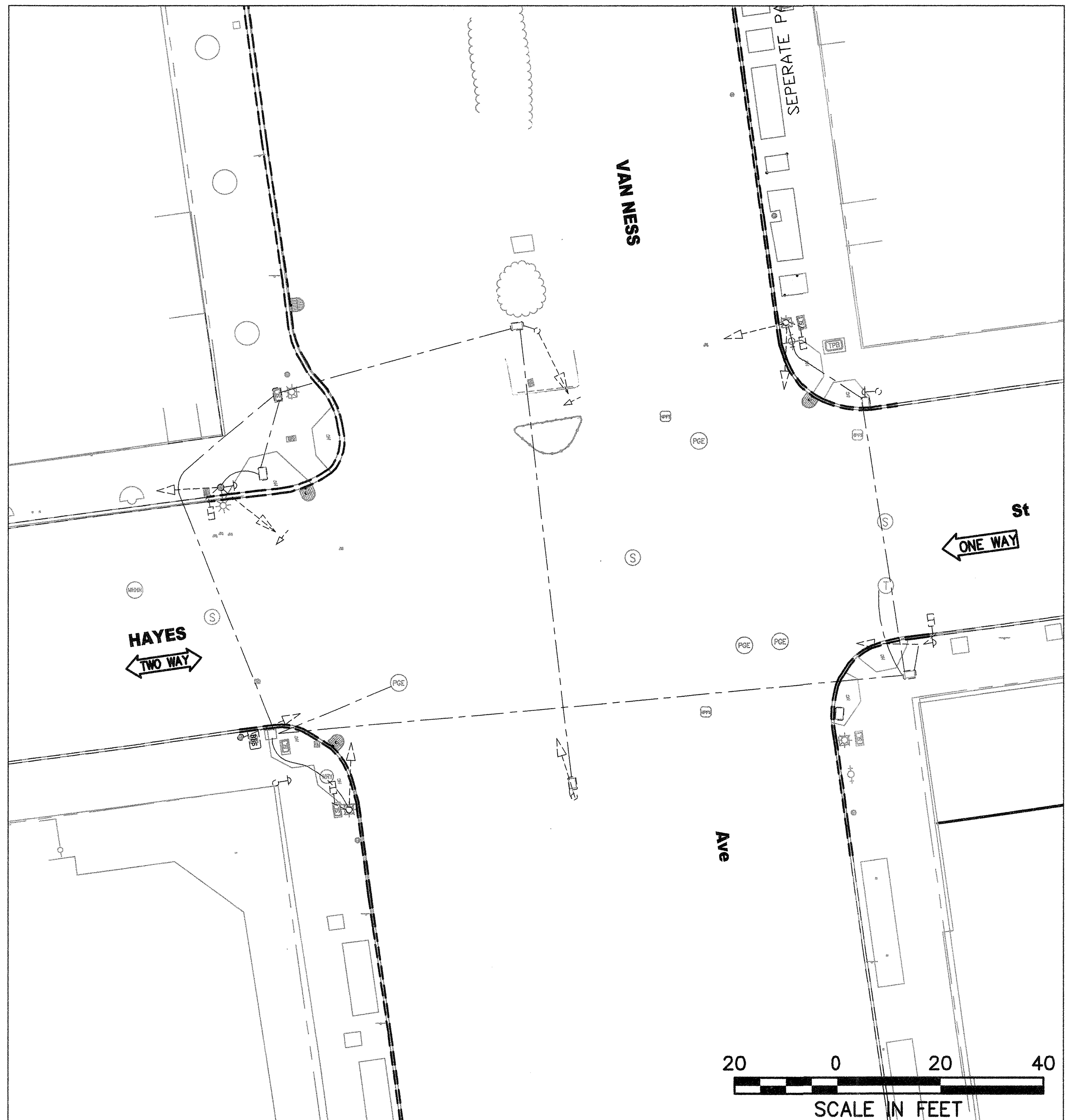
ET-103.2

ET-204

REVISION

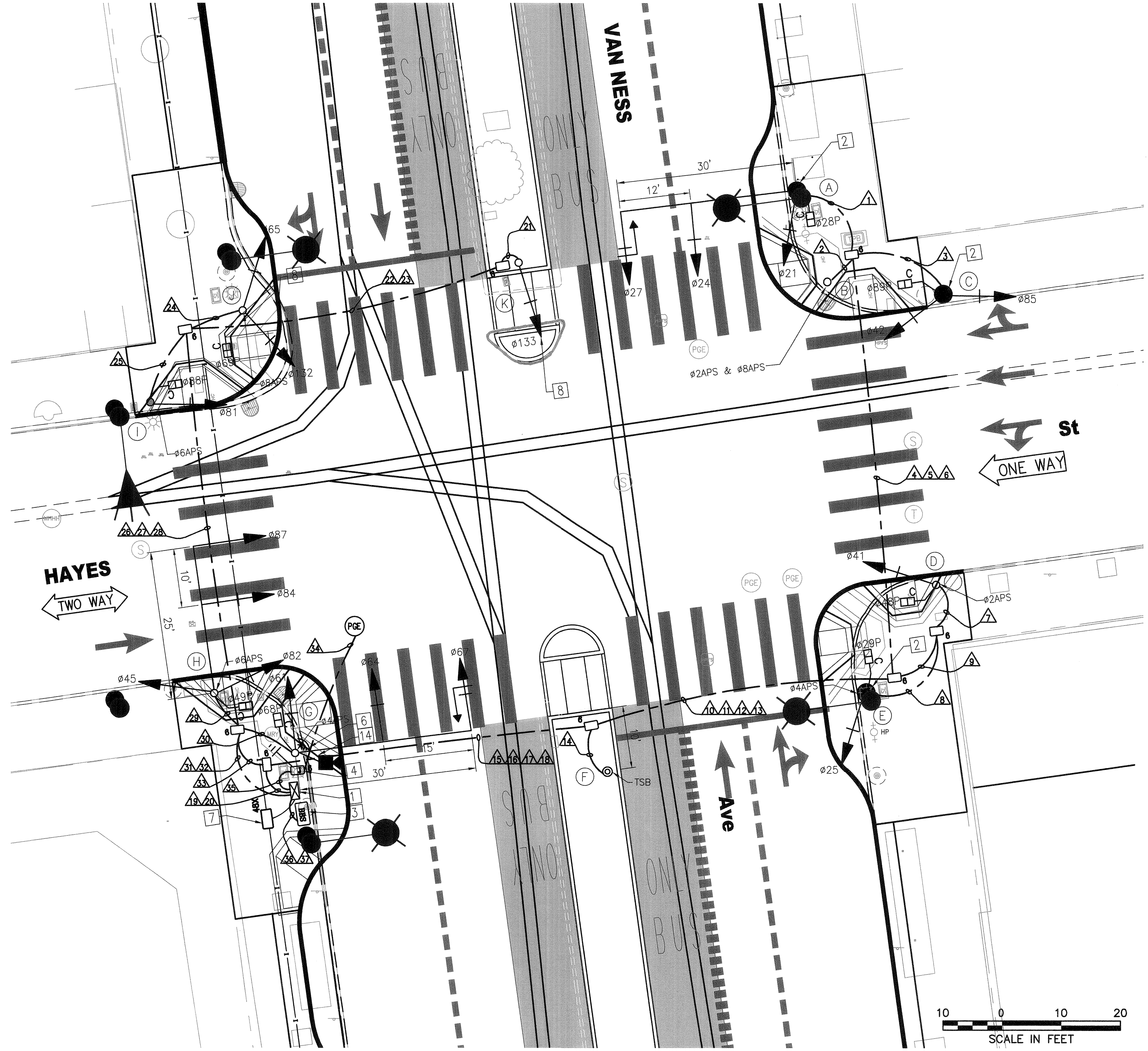
T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD_CP16401ETBS - 100% ReVised.dwg kkwong Tue Nov 24,2015 - 4:11 pm

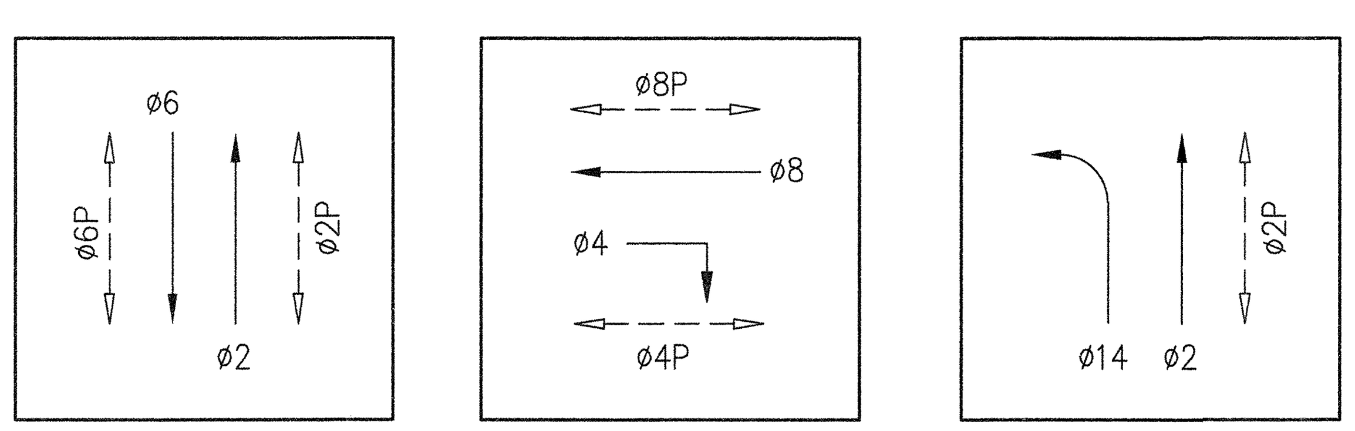
BORDER REVISED 11/17/05



9 10 11

EXISTING EQUIPMENT





PHASE DIAGRAM

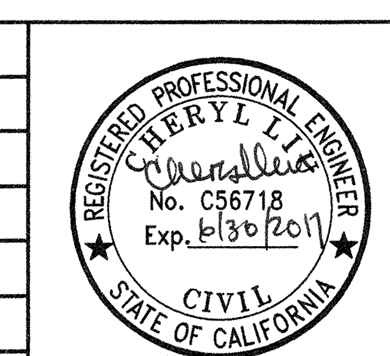
NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CPT6401ETBS.dwg kkwong Tue Jul 14,2015 – 9:49 am

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



SEAL OF THE CITY AND COUNTY OF SAN FRANCISCO

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

HAYES STREET
TRAFFIC SIGNAL WORK

1289

REVISION

ET-104.0

ET-204

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		
Ⓐ	SL SIGNAL, & OCS COMBO POLE	30	202 / 22	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')	–		–	–	–	–		–	–	–	–	APS X 2 ◇1
Ⓒ	SIGNAL & OCS COMBO POLE	–	196 /	42 85	3S12"FY 3S12"	SV-2-TA	T T		89	1S-COUNT	SP-1	–	
Ⓓ	1-A (10')	–		41	3S12"FY	TV-1-T	T		48	1S-COUNT	SP-1	–	APS ◇1
Ⓔ	SIGNAL, SL & OCS COMBO POLE	–	190 / 18	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 TSP ◇2 TRAFFIC CAMERA ◇3
Ⓗ	18-3-100	25		45 82 84 87	3S12" 3S12" 3S12" 3S12"	SV-2-TA MAS MAS	T T T T		49	1S-COUNT	SP-1	–	APS ◇1
Ⓘ	1-A (10')	–		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
Ⓚ	1-A (10')	–		133	3S12"LB	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.

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

BORDER REVISED 11/17/05

DESIGNED
DRAWN
CHECKED
REVIEWED
RECOMMENDED
APPROVED
DATE 12/9/2015

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
HAYES STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

1289
ET-104.1
REVISION
ET-204

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CP7840HETB5.dwg kkwong Tue Jul 07,2015 - 3:46 pm

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
CONDUIT SIZE (INCH)	2	1	2	2	2	2	2	2	3	2	2	2	2	1	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	3	2	2	3	2	2	2
					SP	SP						SP	SP	GRS			SP	SP		SP			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																	
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 HAYES ES ON POLE B		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 HAYES ES ON POLE D							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 E								2	2		2					2			2																	
TSB ON POLE F														2		2			2																	
TRANSIT SIGNAL Ø133																					3	3				3					3					
TRANSIT SIGNAL Ø132																								3		3					3					
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					
PED SIGNAL Ø88P																									2	2					2					
APS PPB FOR XING HAYES WS ON POLE I																									2	2					2					
VEHICLE SIGNAL Ø45																													3		3					
VEHICLE SIGNAL Ø82																													3		3					
VEHICLE SIGNAL Ø84																													3		3					
VEHICLE SIGNAL Ø87																													3		3					
PED SIGNAL Ø49P																													2		2					
APS PPB FOR XING HAYES 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	2																3	2				5	4						
#14 SPARE				3					3	3	3				3	3			6			3				3					3	3					
TOTAL #14 WIRES	15	4	10	26			9	9	17	26	17			2	26	19			45		3	6		13	9	23			21	17	23	32					
#10 WIRES NEUTRAL				1					1	1	1				1	1			2			1				1					2	1					
#6 WIRES (120 V SERVICE)																																		2			
#8 WIRES (120 V SERVICE)																																			2		
#6 BSCW (SEE GENERAL NOTE 10)																																					
#8 WIRES (BBS)																																				2	2
#8 GROUND (BBS)																																				1	1
TSP RECEIVER (10 CONDUCTOR CABLE)																														1	1					
CCTV CAMERA WIRES (CAT5e & 3#18)																														1	1					

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

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

REGISTERED PROFESSIONAL ENGINEER — CHERYL L. ENGINEER — 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

HAYES STREET
CONDUIT & WIRING SCHEDULES

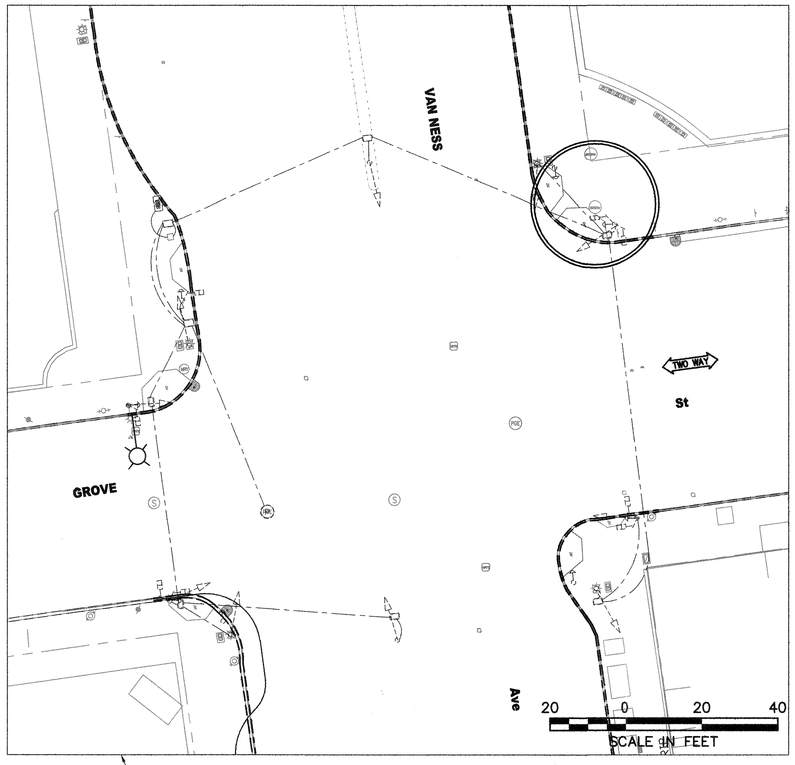
1289

ET-104.2
ET-204

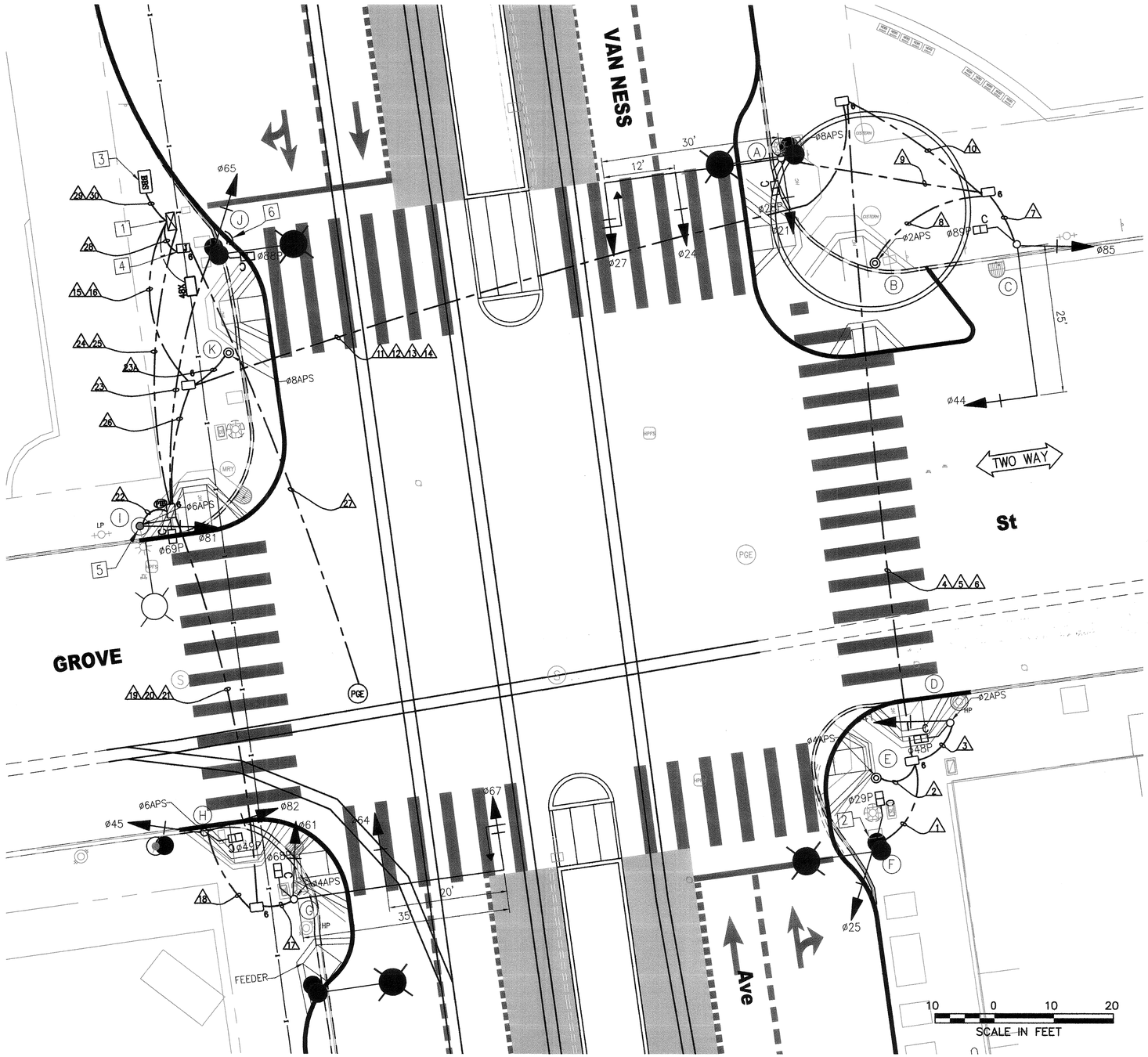
REVISION

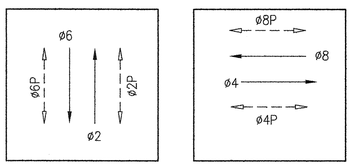
P:\V_E_FILES\Sfgo\Projects\Van Ness BRT\Signal Design\CADD\ OPT640ETBS.dwg kkeong Tue Jul 07,2015 - 3:46 pm

BORDER REVISED 11/17/05



EXISTING EQUIPMENT





PHASE DIAGRAM

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

DESIGNED RP
DRAWN RP
CHECKED CM
REVIEWED CM
RECOMMENDED
APPROVED R.O.G.
DATE 12/9/2015

REGISTERED PROFESSIONAL ENGINEER
CHERYL MILLER
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

1289

GROVE STREET
TRAFFIC SIGNAL WORK

ET-105.0
ET-204

REVISION

T:\V_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CPT6401ETBS - 100% Revised1.dwg kkwong Mon Nov 23,2015 - 12:21 pm

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	300 / 32	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
Ⓑ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ◇1
Ⓒ	18-2-100	25		44 85	3S12" 3S12"	MAS SV-1-T	T T		89	1S-COUNT	SP-1	–	
Ⓓ	1-A (10')	–		41	3S12"	TV-1-T	T		48	1S-COUNT	SP-1	–	APS ◇1
Ⓔ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ◇1
Ⓕ	SIGNAL, SL & OCS COMBO POLE	–	260 / 28	25	3S12"	SV-1-T	T		29	1S-COUNT	SP-1	–	
Ⓖ	SPECIAL MAST ARM POLE (23-3-100)	35		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
Ⓗ	1-A (10')	–		45 82	3S12" 3S12"	TV-2-T	T		49	1S-COUNT	SP-1	–	APS ◇1
Ⓘ	EXISTING SL/OCS	–	/ 214	81	3S12"	SV-1-T	T		69	1S-COUNT	SP-1	–	APS ◇1
Ⓙ	SIGNAL, SL & OCS COMBO POLE	–	303 / 31	65	3S12"	TV-1-T	T		88	1S-COUNT	SP-1-T	–	TSP ◇2 EXTERNAL CONDUIT
Ⓚ	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 L. CHESTNUT
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

APPROVED
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

1289

GROVE STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

ET-105.1
ET-204

REVISION

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CPT640IETBS – 100% Revised1.dwg kkwong Mon Nov 23,2015 – 12:21 pm

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	23A	24	25	26	27	28	29	30				
CONDUIT SIZE (INCH)	2	1	2	2	2	2	2	1	2	3	2	2	2	2	3	2	2	2	2	2	2	2	2	2	3	2	2	3	2	2	2				
					SP	SP							SP	SP						SP	SP					SP	SP								
VEHICLE SIGNAL Ø25	3			3							3				3																				
PED SIGNAL Ø29P	2			2							2				2																				
APS PPB FOR XING VAN NESS SS ON POLE E		2		2							2				2																				
VEHICLE SIGNAL Ø41			3	3							3				3																				
PED SIGNAL Ø48P			2	2							2				2																				
APS PPB FOR XING GROVE ES ON POLE D			2	2							2				2																				
VEHICLE SIGNAL Ø44							3			3		3				3																			
VEHICLE SIGNAL Ø85							3			3		3				3																			
PED SIGNAL Ø89P							2			2		2				2																			
APS PPB FOR XING GROVE 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 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 GROVE WS ON POLE H																		2	2						2										
VEHICLE SIGNAL Ø81																						3			3										
PED SIGNAL Ø69P																						2			2										
APS PPB FOR XING GROVE WS ON POLE I																						2			2										
VEHICLE SIGNAL Ø65																							3		3										
PED SIGNAL Ø88P																							2		2										
APS PPB FOR XING VAN NESS NS ON POLE K															2									2											
#14 NEUTRAL	2		2				3		4								4	2				2	2												
#14 SPARE				3						3	3	3			3	3			3						3										
TOTAL #14 WIRES	7	2	9	17			14	2	17	26	17	26			19	26	17	12	23			9	7	2	38										
#10 WIRES NEUTRAL				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)																																			
#8 WIRES (BBS)																															2	2			
#8 GROUND (BBS)																															1	1			
TSP RECEIVER (10 CONDUCTOR CABLE)																							1			1									

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CPT6401ETBS - 100% Revised.dwg kkwong Tue Nov 24,2015 - 12:11 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

DESIGNED K. Kwong
DRAWN K. Kwong
CHECKED Cheryl Liu
REVIEWED Cheryl Liu
RECOMMENDED
APPROVED
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LIU 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

APPROVED
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

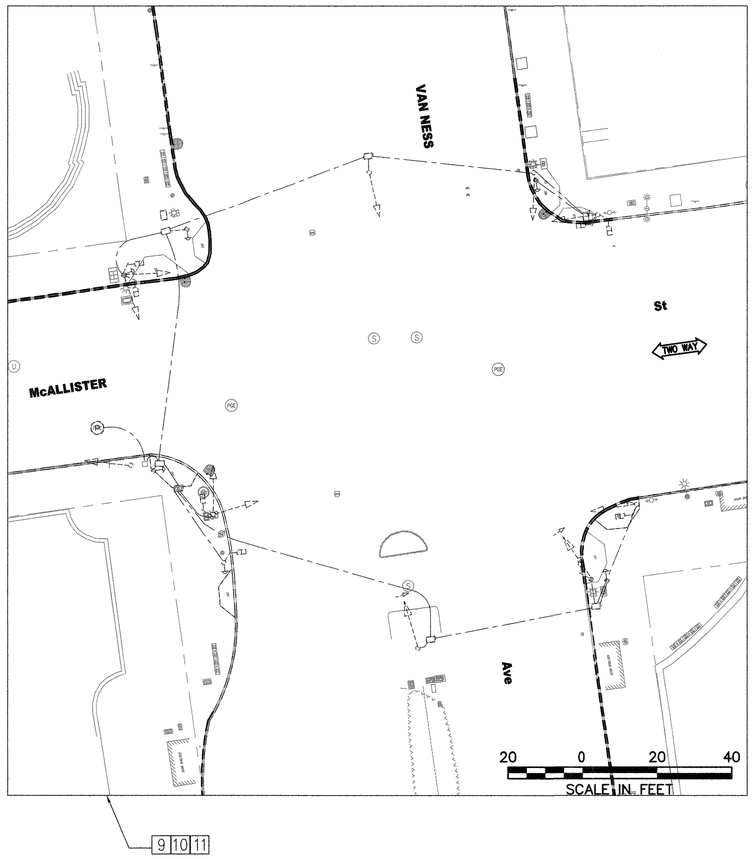
GROVE STREET
CONDUIT & WIRING SCHEDULES

1289

ET-105.2

ET-204

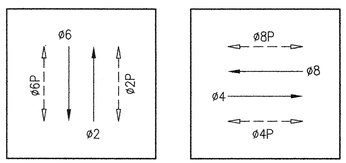
REVISION



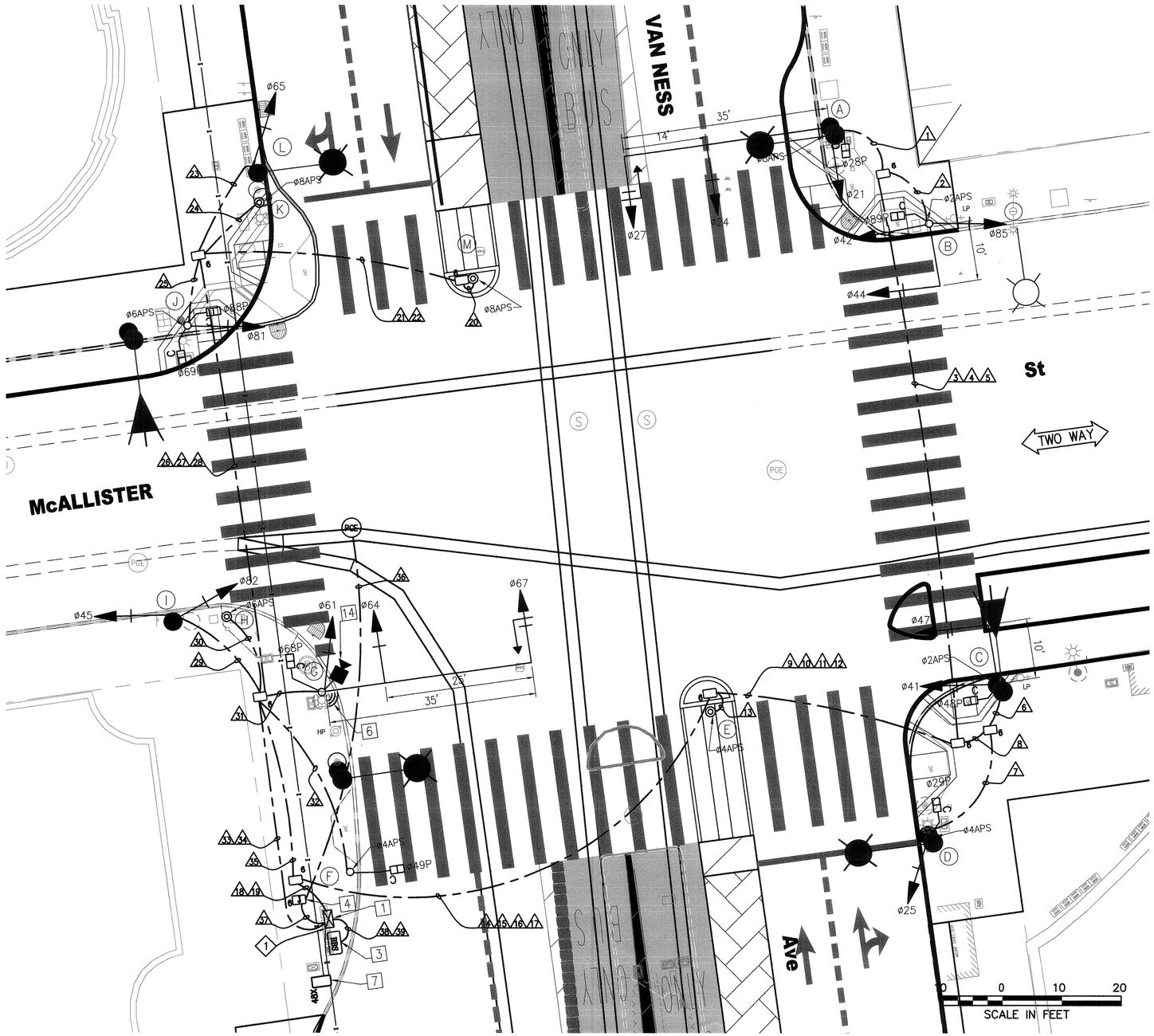
EXISTING EQUIPMENT

DETAIL NOTES:

1. THE CONTRACTOR SHALL CONTACT CLEAR CHANNEL TO RELOCATE NEWSPAPER RACKS TO INSTALL TRAFFIC SIGNAL CABINET.



PHASE DIAGRAM



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 CERYL LEE No. C56718 Exp. 6/30/2017 CIVIL STATE OF CALIFORNIA

CITY AND COUNTY OF SAN FRANCISCO

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

MCALLISTER STREET
TRAFFIC SIGNAL WORK

1289

ET-106.0 REVISION

ET-204

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD_CPT8401ETB5.dwg kkwong Tue Jul 07 2015 - 3:47 pm

355

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	35	500 / 52	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
Ⓑ	16-1-100	10		44 42 85	3S12" 3S12" 3S12"	MAS SV-2-TA	T T T		89	1S-COUNT	SP-1	–	APS ①
Ⓒ	SL SIGNAL, & OCS COMBO POLE	10	499 / 47	41 47	3S12" 3S12"	SV-1-T MAS	T T		48	1S-COUNT	SP-1		SIGNAL MA MOUNT AT 20' HIGH APS ①
Ⓓ	SIGNAL, SL & OCS COMBO POLE	–	486 / 48	25	3S12"	SV-1-T	T		29	1S-COUNT	SP-1	–	APS ①
Ⓔ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ①
Ⓕ	1-A (7')	–		–	–	–	–		49	1S-COUNT	TP-1	–	APS ①
Ⓖ	SPECIAL MAST ARM POLE (23-5460)	35		64 67 61	3S12"GUA 3S12" 3S12"	MAS MAS SV-1-T	T T T		68	1S-COUNT	SP-1	–	SIGNAL MA MOUNT AT 22.5' HIGH TSP ② TRAFFIC CAMERA ③
Ⓗ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ①
Ⓘ	SIGNAL & OCS COMBO POLE	–	507	45 82	3S12" 3S12"	SV-2-TA	T T		–	–	–	–	
Ⓙ	1-A (10')	–		81	3S12"	TV-1-T	T		69 88	1S-COUNT 1S-COUNT	SP-1 (SFG 2") SP-1 (22")	–	APS ①
Ⓚ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ①
Ⓛ	NEW SL	–	51	65	3S12"	SV-1-T	T					–	
Ⓜ	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.

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD_CPT840IETBS.dwg kkwong Tue Jul 07,2015 - 3:47 pm

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

McALLISTER STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

1289

REVISION

ET-106.1

ET-204

556

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	39
CONDUIT SIZE (INCH)	2	2	2	2	2	2	2	3	2	2	2	2	1	2	2	2	2	3	2	1	2	2	2	1	2	2	2	2	2	1	2	2	3	2	2	3	2	2	2
				SP	SP						SP	SP				SP	SP					SP					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 Ø42		3	3						3					3				3																					
VEHICLE SIGNAL Ø44		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 McALLISTER ES ON POLE B		2	2						2					2				2																					
VEHICLE SIGNAL Ø41						3		3		3					3				3																					
VEHICLE SIGNAL Ø47						3		3		3					3				3																					
PED SIGNAL Ø48P						2		2		2					2				2																					
APS PPB FOR XING McALLISTER 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																					
APS PPB FOR XING VAN NESS SS ON POLE E													2		2				2																					
APS PPB FOR XING VAN NESS NS ON POLE M																				2	2					2							2							
VEHICLE SIGNAL Ø65																							3			3							3							
APS PPB FOR XING VAN NESS NS ON POLE K																								2		2							2							
VEHICLE SIGNAL Ø81																									3	3							3							
PED SIGNAL Ø69P																									2	2							2							
PED SIGNAL Ø88P																									2	2							2							
APS PPB FOR XING McALLISTER WS ON POLE J																									2	2							2							
VEHICLE SIGNAL Ø45																													3				3							
VEHICLE SIGNAL Ø82																													3				3							
APS PPB FOR XING McALLISTER 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							
PED SIGNAL Ø49P																																2	2							
APS PPB FOR XING VAN NESS SS ON POLE F																																2	2							
#14 NEUTRAL	4	3				3	2																1		3				1		4	1							
#14 SPARE			3					3	3	3				3	3			3	3							3							3							
TOTAL #14 WIRES	17	16	29			13	9	20	29	20			2	29	22			29	22	2	2		4	2	12	19			7	2	15	5	42							
#10 WIRES NEUTRAL			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)																																								
#8 WIRES (BBS)																																						2	2	
#8 GROUND (BBS)																																						1	1	
TSP RECEIVER (10 CONDUCTOR CABLE)																															1		1							
CCTV CAMERA WIRES (CAT5e & 3#18)																															1		1							

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 L. CLEMENTSON 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

McALLISTER STREET
CONDUIT & WIRING SCHEDULES

1289

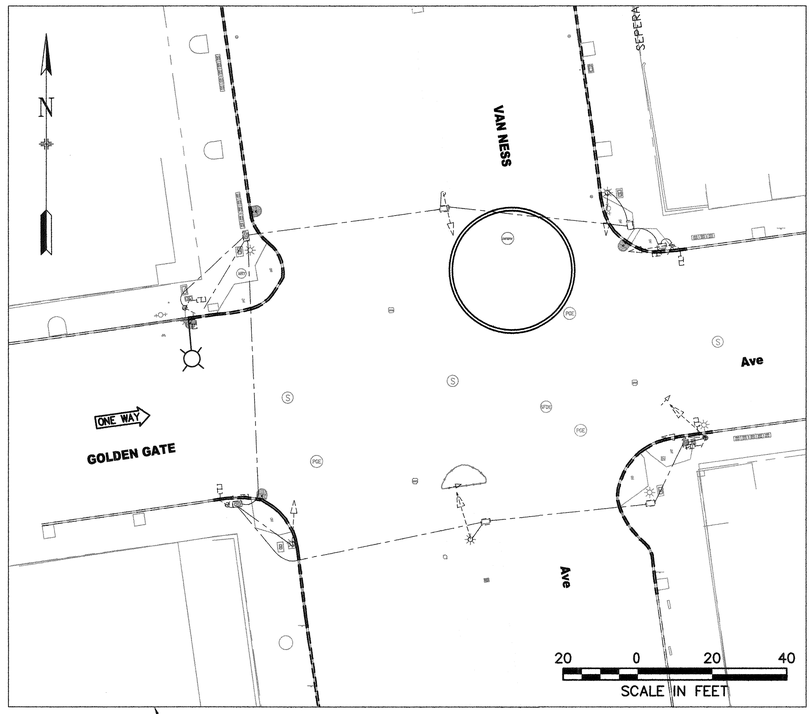
ET-106.2

REVISION

ET-204

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ OPTB40IETBS.dwg kkwong Tue Jul 07,2015 - 3:47 pm

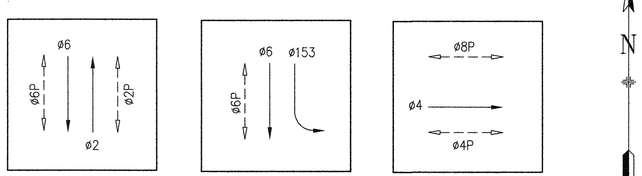
551



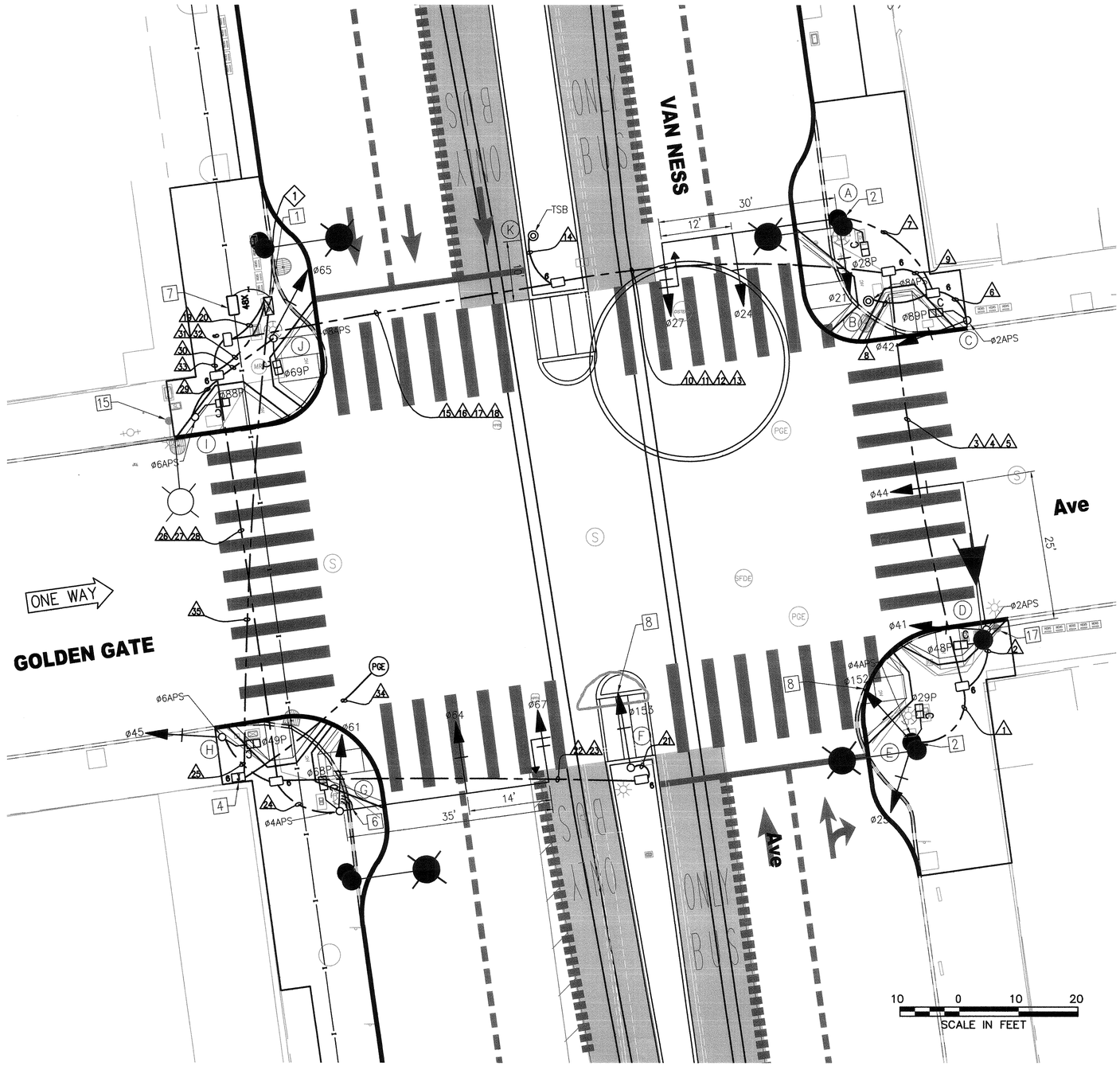
EXISTING EQUIPMENT

DETAIL NOTES:

1. THE CONTRACTOR SHALL CONTACT CLEAR CHANNEL TO RELOCATE NEWSPAPER RACKS TO INSTALL TRAFFIC SIGNAL CABINET.



PHASE DIAGRAM



NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

DESIGNED K Wong
DRAWN K Wong
CHECKED C Mueller
REVIEWED C Mueller
RECOMMENDED R Ow
APPROVED R Ow
DATE 12/9/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LYNN MUELLER 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

GOLDEN GATE AVENUE
TRAFFIC SIGNAL WORK

1289

REVISION

ET-107.0

ET-204

F:\T_E_ FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CPTB401ETBS.dwg kkwong Tue Jul 07,2015 - 3:47 pm

BORDER REVISED 11/17/05

558

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	602 / 62	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
Ⓒ	1-A (10')	–		42	3S12"	TV-1-T	T		89	1S-COUNT	SP-1	–	APS ◇1
Ⓓ	19-2-100	25	/ 53	41 44	3S12" 3S12"	SV-1-T MAS	T T		48	1S-COUNT	SP-1	–	APS ◇1
Ⓔ	SIGNAL, SL & OCS COMBO POLE	–	590 / 58	25 152	3S12" 3S12"LB	SV-2-TA	T		29	1S-COUNT	SP-1	–	APS ◇1
Ⓕ	1-A (10')	–		153	3S12"LB	TV-1-T	T		–	–	–	–	
Ⓖ	SPECIAL MAST ARM POLE (23-3-100)	35		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')	–		45	3S12"	TV-1-T	T		49	1S-COUNT	SP-1	–	APS ◇1
Ⓘ	1-A (7')	–		–	–	–	–		88	1S-COUNT	TP-1	–	APS ◇1
Ⓙ	1-A (10')	–		65	3S12"	TV-1-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.

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CPTR401ETBS.dwg kkwong Tue Jul 07,2015 - 3:47 pm

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 L. Chrysellium 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

GOLDEN GATE AVENUE
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

1289

REVISION

ET-107.1
ET-204

559

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
CONDUIT SIZE (INCH)	2	2	2	2	2	2	2	1	3	2	2	2	2	1	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	3	2	2	3	2
				SP	SP							SP	SP	GRS			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 E	2		2							2					2				2																
VEHICLE SIGNAL Ø44		3	3							3					3				3																
VEHICLE SIGNAL Ø41		3	3							3					3				3																
PED SIGNAL Ø48P		2	2							2					2				2																
APS PPB FOR XING GOLDEN GATE ES ON POLE D		2	2							2					2				2																
VEHICLE SIGNAL Ø42						3			3		3					3			3																
PED SIGNAL Ø89P						2			2		2					2			2																
APS PPB FOR XING GOLDEN GATE 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																
TSB ON POLE K														2	2				2																
TRANSIT SIGNAL Ø153																					3	3			3	3					3				
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				
PED SIGNAL Ø49P																									2	2					2				
APS PPB FOR XING GOLDEN GATE WS ON POLE H																									2	2					2				
PED SIGNAL Ø88P																												2			2				
APS PPB FOR XING GOLDEN GATE 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	3	3				2	4																4	2				1	2						
#14 SPARE			3						3	3	3				3	3			6			3				3				3					
TOTAL #14 WIRES	13	13	23			9	15	2	23	23	23			2	25	23			48		3	6		17	9	26			5	9	37				
#10 WIRES NEUTRAL			1						1	1	1				1	1			2		1	1				2					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					1				

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

DESIGNED K Kong
DRAWN K Kong
CHECKED C Rosellini
REVIEWED C Rosellini
RECOMMENDED Project Manager
APPROVED R Olea
DATE 12/14/2015

REGISTERED PROFESSIONAL ENGINEER
CHERYL L. ROSELLINI
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

APPROVED
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

GOLDEN GATE AVENUE
CONDUIT & WIRING SCHEDULES

1289

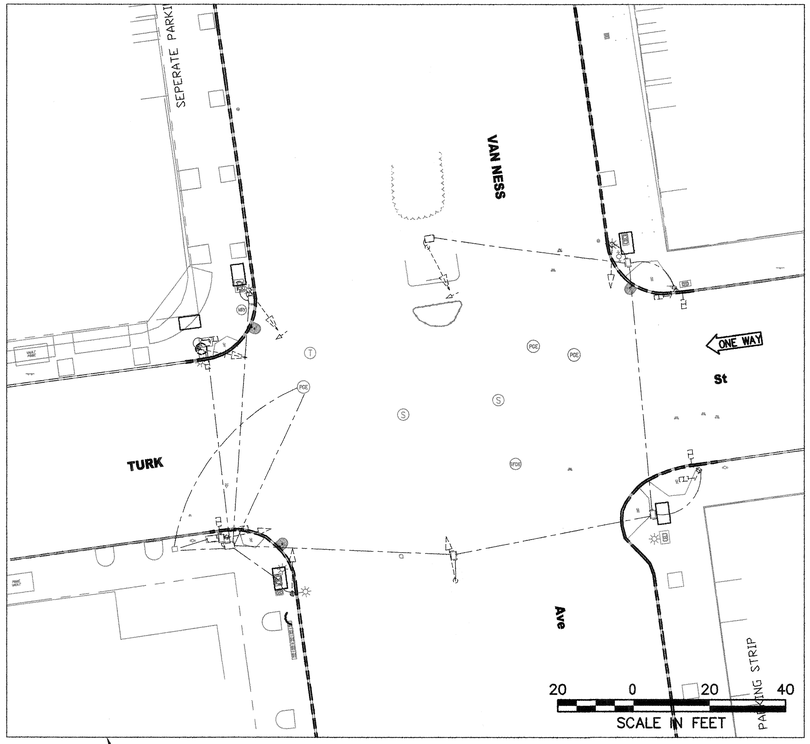
ET-107.2

REVISION

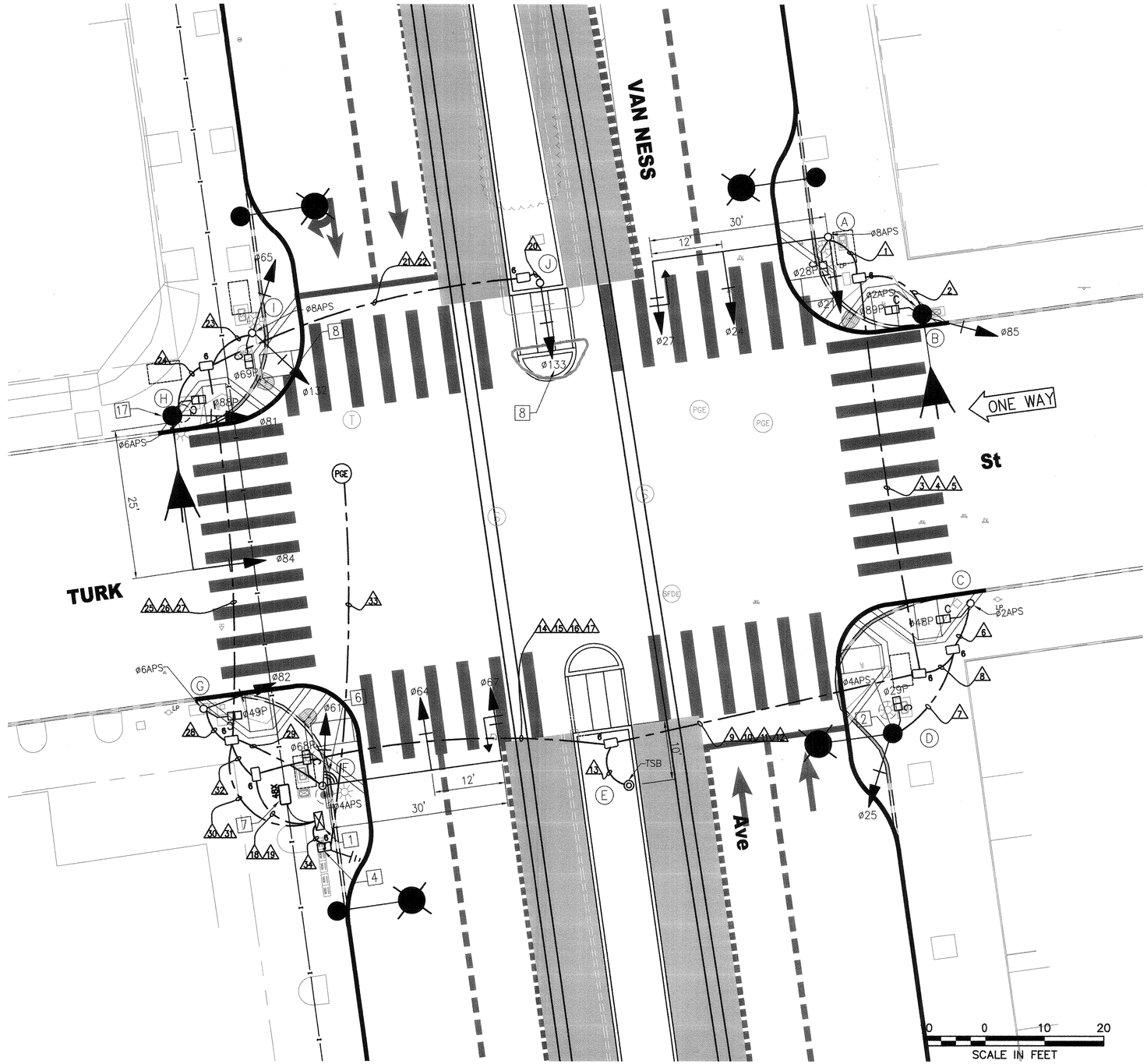
ET-204

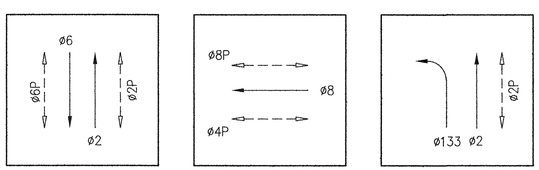
T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CP76401ETBS.dwg kkwong Tue Jul 07,2015 - 3:47 pm

560



EXISTING EQUIPMENT





PHASE DIAGRAM

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

DESIGNED K Ling
DRAWN K Ling
CHECKED C Cwan-Lin
REVIEWED C Cwan-Lin
RECOMMENDED
APPROVED R Oleo
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL C TAM 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

1289

TURK STREET
TRAFFIC SIGNAL WORK

ET-108.0
ET-204

REVISION

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CPT6401ETBS - 100% Revised.dwg kkwong Tue Nov 24,2015 - 11:35 am

BORDER REVISED 11/17/05

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		
Ⓐ	SPECIAL MAST ARM POLE (18-3-100)	30		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
Ⓑ	NEW SL	–		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	–	690 / 68	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 TSP ②
Ⓖ	1-A (10')	–		82	3S12"	TV-1-T	T		49	1S-COUNT	SP-1	–	APS ①
Ⓗ	19-2-100	25	/ 72	81 84	3S12" 3S12"	SV-1-T MAS	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
Ⓙ	1-A (10')	–		133	3S12"LB	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.

T:\V_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CPTE401ETBS.dwg kkwong Tue Jul 07,2015 - 3:48 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

DESIGNED K Kwong
DRAWN K Kwong
CHECKED C Chengalliur
REVIEWED C Chengalliur
RECOMMENDED for Andrew
APPROVED R Lee
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER
CHERYL LIU
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

TURK STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

1289

ET-108.1
ET-204

REVISION

562

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	1	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2	2	3	2	2	3	2
				SP	SP						SP	SP	GRS			SP	SP		SP			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 TURK ES ON POLE B		2	2						2					2				2																
PED SIGNAL Ø48P						2		2		2					2			2																
APS PPB FOR XING TURK 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																
TSB ON POLE E													2		2			2																
TRANSIT SIGNAL Ø143																				3	3				3					3				
TRANSIT SIGNAL Ø142																							3		3					3				
VEHICLE SIGNAL Ø65																							3		3					3				
PED SIGNAL Ø69P																							2		2					2				
APS PPB FOR XING VAN NESS NS ON POLE I																							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 TURK WS ON POLE H																								2	2					2				
VEHICLE SIGNAL Ø82																												3		3				
PED SIGNAL Ø49P																												2		2				
APS PPB FOR XING TURK WS ON POLE G																												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 F																													2	2				
#14 NEUTRAL	4	2				1	2																2	3				2	4					
#14 SPARE			3					3	3	3				3	3			6			3				3					3				
TOTAL #14 WIRES	17	9	23			5	9	14	23	14			2	23	16			39		3	6		12	13	26			9	17	46				
#10 WIRES NEUTRAL			1					1	1	1				1	1			2		1	1				2					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				

T:\T_E_FILES\Sfgo\Projects\Van Ness BRT\Signal Design\CADD\ CPT6401ETBS.dwg kkwong Tue Jul 07,2015 - 3:48 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

DESIGNED K King
DRAWN K King
CHECKED C Chrysallis
REVIEWED C Chrysallis
RECOMMENDED
APPROVED R Oleo
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL L CHRYSALLIS 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

APPROVED
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

TURK STREET
CONDUIT & WIRING SCHEDULES

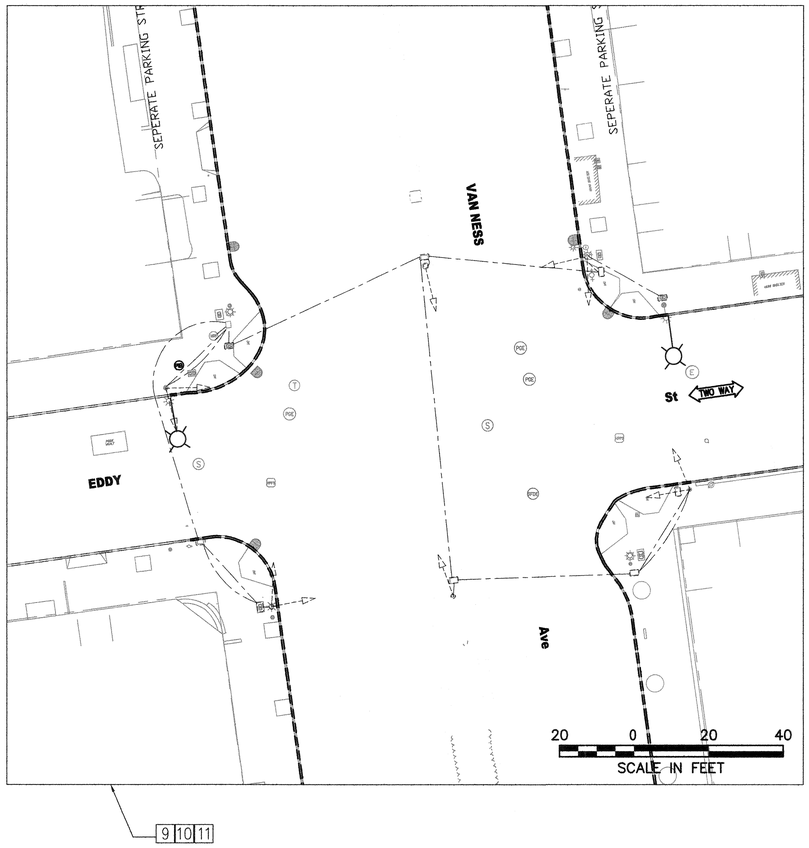
1289

ET-108.2

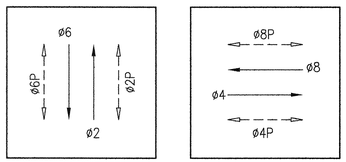
REVISION

ET-204

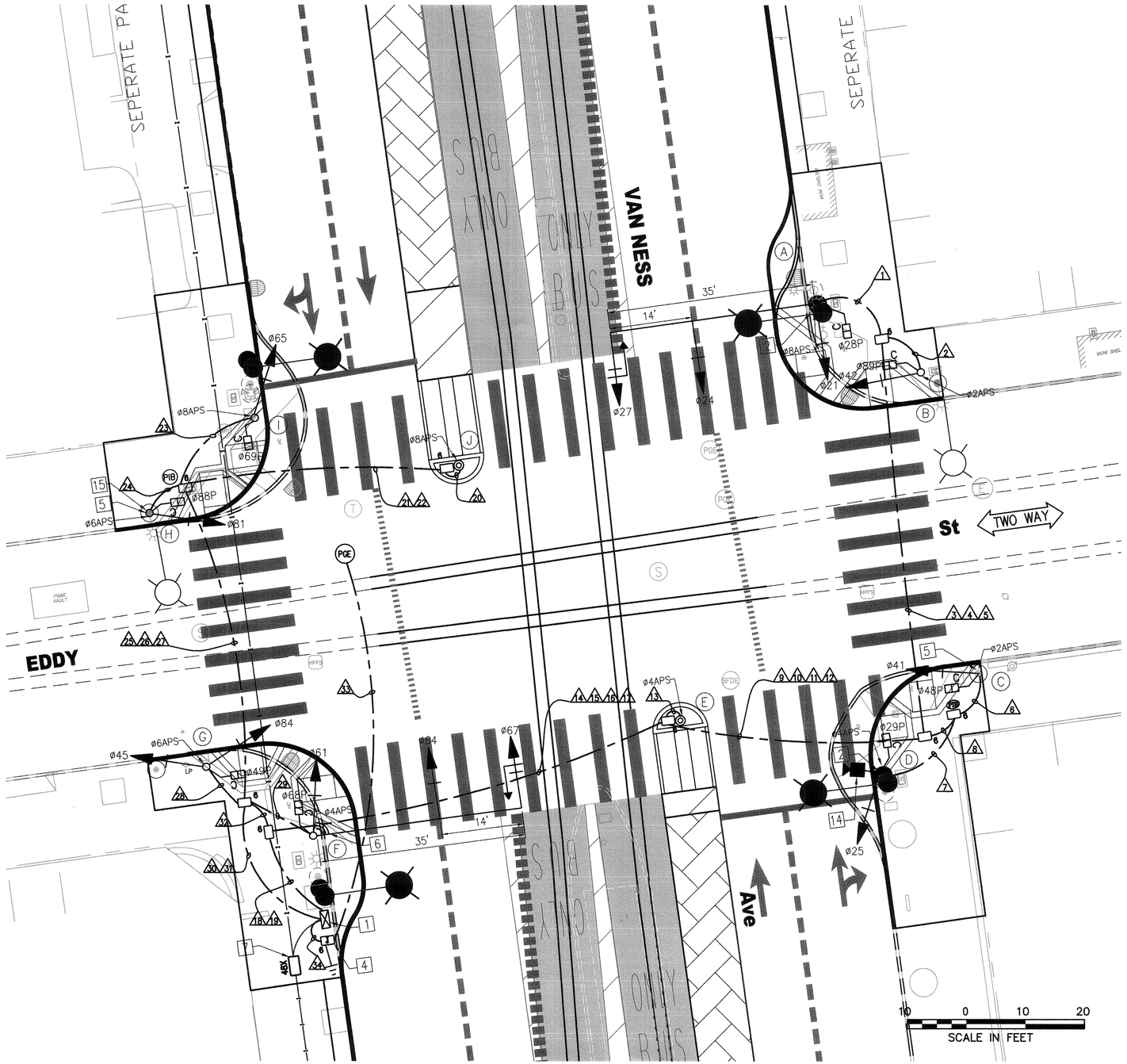
563



EXISTING EQUIPMENT



PHASE DIAGRAM



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 LI
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

APPROVED
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

1289

EDDY STREET
TRAFFIC SIGNAL WORK

ET-109.0

REVISION

ET-204

I:\T_E_FILES\SFgov\Projects\Van Ness BRT\Signal Design\CADD\ CP18401ETBS.dwg kkwong Tue Jul 07,2015 - 3:48 pm

564

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	35	800A / 82	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')	–		42	3S12"	TV-1-T	T		89	1S-COUNT	SP-1	–	APS ◇1
Ⓒ	EXISTING OCS POLE	–	799 /	41	3S12"	SV-1-T	T		48	1S-COUNT	SP-1	–	APS ◇1
Ⓓ	SIGNAL, SL & OCS COMBO POLE	–	790 / 78	25	3S12"	SV-1-T	T		29	1S-COUNT	SP-1	–	APS ◇1 TRAFFIC CAMERA ◇3
Ⓔ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ◇1
Ⓕ	SPECIAL MAST ARM POLE (23-3-100)	35		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')	8		45 84	3S12" 3S12"	TV-2-T	T T		49	1S-COUNT	SP-1	–	APS ◇1
Ⓗ	EXISTING SL & OCS	–	800 /	81	3S12"	SV-1-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
Ⓙ	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 K Ring
DRAWN K Ring
CHECKED C Mueller
REVIEWED C Mueller
RECOMMENDED for Woo
APPROVED R Dea
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL L. MUELLER 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

EDDY STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

1289

ET-109.1 REVISION
ET-204

F:\T_E_FILES\SFgov\Projects\Van Ness BRT\Signal Design\CADD_CPT6401ETBS.dwg kkwong Tue Jul 07,2015 - 3:48 pm

605

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	1	2	2	2	2	3	2	1	2	2	2	2	2	2	2	2	2	3	2	2	3	2
				SP	SP	EX					SP	SP				SP	SP		SP			SP		EX		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 Ø42		3	3						3					3				3																
PED SIGNAL Ø89P		2	2						2					2				2																
APS PPB FOR XING EDDY ES ON POLE B		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 EDDY 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																
APS PPB FOR XING VAN NESS SS ON POLE E													2		2			2																
APS PPB FOR XING VAN NESS NS ON POLE J																				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 I																							2		2					2				
VEHICLE SIGNAL Ø81																								3	3					3				
PED SIGNAL Ø88P																								2	2					2				
APS PPB FOR XING EDDY WS ON POLE H																								2	2					2				
VEHICLE SIGNAL Ø45																												3		3				
VEHICLE SIGNAL Ø84																												3		3				
PED SIGNAL Ø49P																												2		2				
APS PPB FOR XING EDDY WS ON POLE G																												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 F																													2	2				
#14 NEUTRAL	4	2				2	2																2	2					2	4				
#14 SPARE			3					3	3	3				3	3			6							3						3				
TOTAL #14 WIRES	17	9	23			9	9	17	23	17			2	23	19			42		2	2		9	9	19				12	17	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				
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
REVIEWED
RECOMMENDED
APPROVED
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL L. TAM No. C56718 Exp. 6/30/17 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

EDDY STREET
CONDUIT & WIRING SCHEDULES

1289

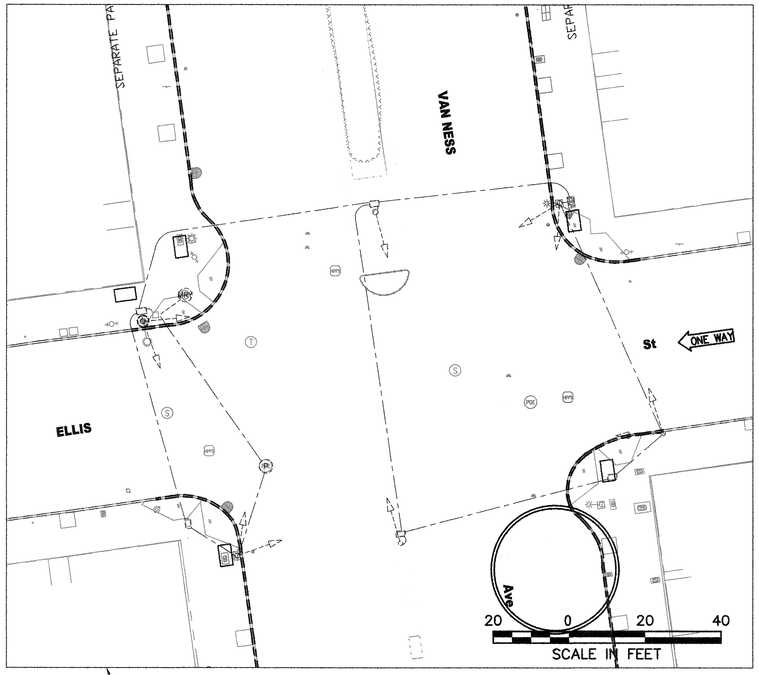
ET-109.2

REVISION

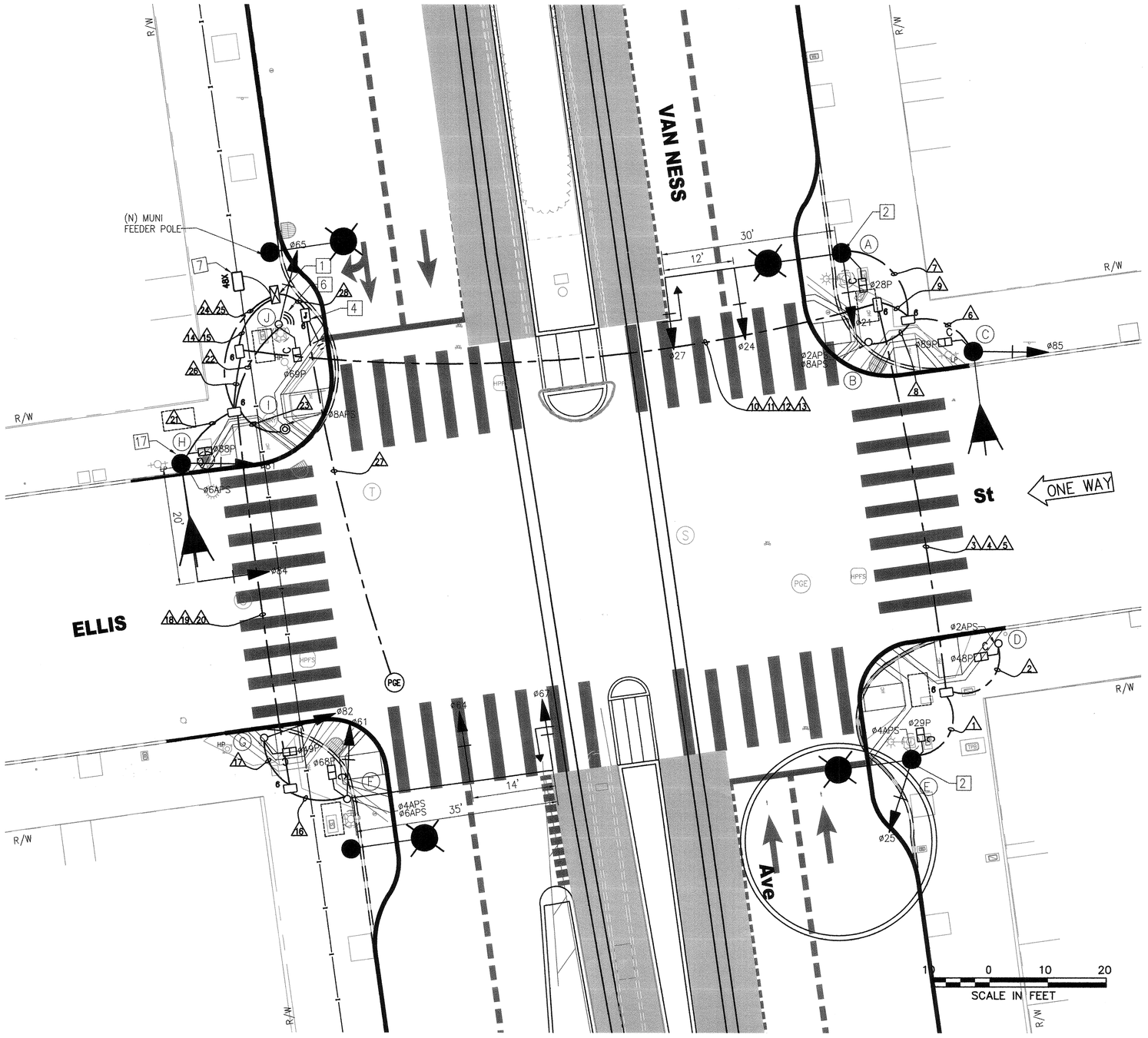
ET-204

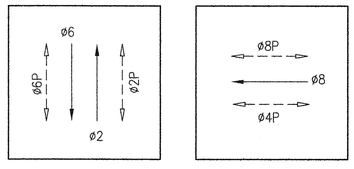
T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CPT6401ETBS.dwg kkwong Tue Jul 07,2015 - 3:48 pm

566



EXISTING EQUIPMENT





PHASE DIAGRAM

N

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

DESIGNED K Ng
DRAWN K Ng
CHECKED Cheryl Lee
REVIEWED Cheryl Lee
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

1289

ELLIS STREET
TRAFFIC SIGNAL WORK

ET-110.0
ET-204

REVISION

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CAD0\ CPT640IETBS – 100% Revised.dwg ldwong Tue Nov 24,2015 – 11:35 am

BORDER REVISED 11/17/05

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	902 / 92	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')	–		–	–	–	–		–	–	–	–	APS ① APS ①
Ⓒ	NEW SL	–		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	–	896 / 88	25	3S12"	SV-1-T	T		29	1S-COUNT	SP-1	–	APS ①
Ⓕ	SPECIAL MAST ARM POLE (23-3-100)	35		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 X 2 ①
Ⓖ	1-A (10')	–		82	3S12"	TV-1-T	T		49	1S-COUNT	SP-1	–	
Ⓗ	17-2-100	20	/ 92	81 84	3S12" 3S12"	SV-1-T MAS	T T		88	1S-COUNT	SP-1	–	APS ①
Ⓘ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ①
Ⓙ	1-A (10')	–		65	3S12"	TV-1-T	T		69	1S-COUNT	SP-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.

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CP1640IETBS - 100% Revised.dwg kkwong Tue Nov 24,2015 - 4:14 pm

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED
		REVISIONS			

BORDER REVISED 11/17/05

DESIGNED K Ling
DRAWN K Ling
CHECKED C Chamberlain
REVIEWED C Chamberlain
RECOMMENDED Peter Wilson
APPROVED R Ow
DATE 12/9/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL L CHAMBERLAIN 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

APPROVED
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

1289

ELLIS STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

ET-110.1
ET-204

REVISION

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
CONDUIT SIZE (INCH)	2	2	2	2	2	2	2	2	3	2	2	2	2	3	2	2	2	2	2	2	2	2	1	3	2	2	3	2
				SP	SP							SP	SP		SP				SP	SP					SP	SP		
VEHICLE SIGNAL Ø25	3		3							3				3														
PED SIGNAL Ø29P	2		2							2				2														
APS PPB FOR XING VAN NESS SS ON POLE E	2		2							2				2														
PED SIGNAL Ø48P		2	2							2				2														
APS PPB FOR XING ELLIS ES ON POLE D		2	2							2				2														
VEHICLE SIGNAL Ø85						3			3		3			3														
PED SIGNAL Ø89P						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 ELLIS ES ON POLE B								2	2		2			2														
APS PPB FOR XING VAN NESS NS ON POLE B								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				
APS PPB FOR XING ELLIS WS ON POLE F																2		2						2				
VEHICLE SIGNAL Ø82																	3	3						3				
PED SIGNAL Ø49P																	2	2						2				
VEHICLE SIGNAL Ø81																					3			3				
VEHICLE SIGNAL Ø84																					3			3				
PED SIGNAL Ø88P																					2			2				
APS PPB FOR XING ELLIS 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	1				2	4									4	2				3	2						
#14 SPARE			3						3	3	3			6				3						3				
TOTAL #14 WIRES	9	5	14			7	15	4	23	14	23			37		19	7	23			13	7	2	40				
#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

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CPT640TETBS - 100% Revised.dwg kkwong Tue Nov 24,2015 - 4:14 pm

DESIGNED	
DRAWN	
CHECKED	
REVIEWED	
RECOMMENDED	
APPROVED	
DATE	12/9/2015

REGISTERED PROFESSIONAL ENGINEER
CHERYL L. CLARELLI
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

APPROVED

for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM

VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

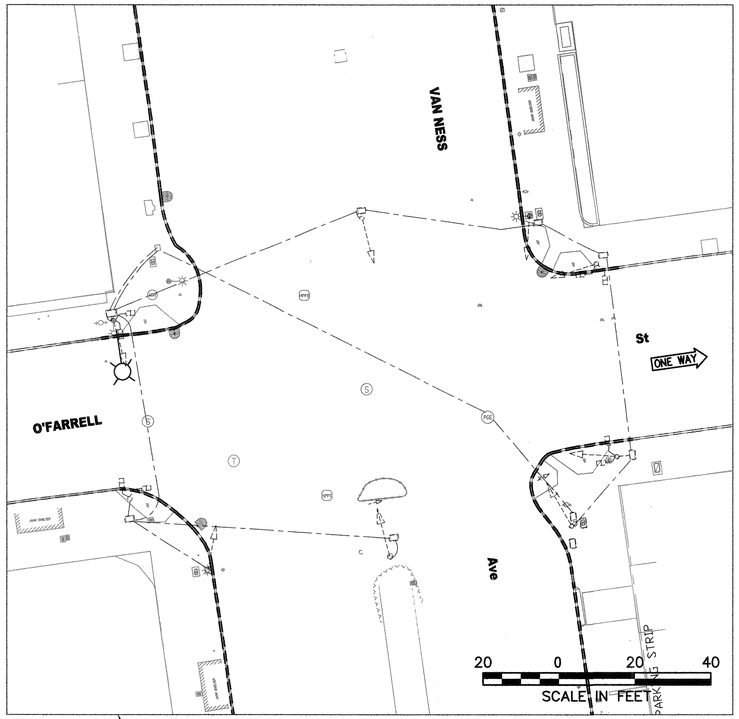
ELLIS STREET
CONDUIT & WIRING SCHEDULES

1289

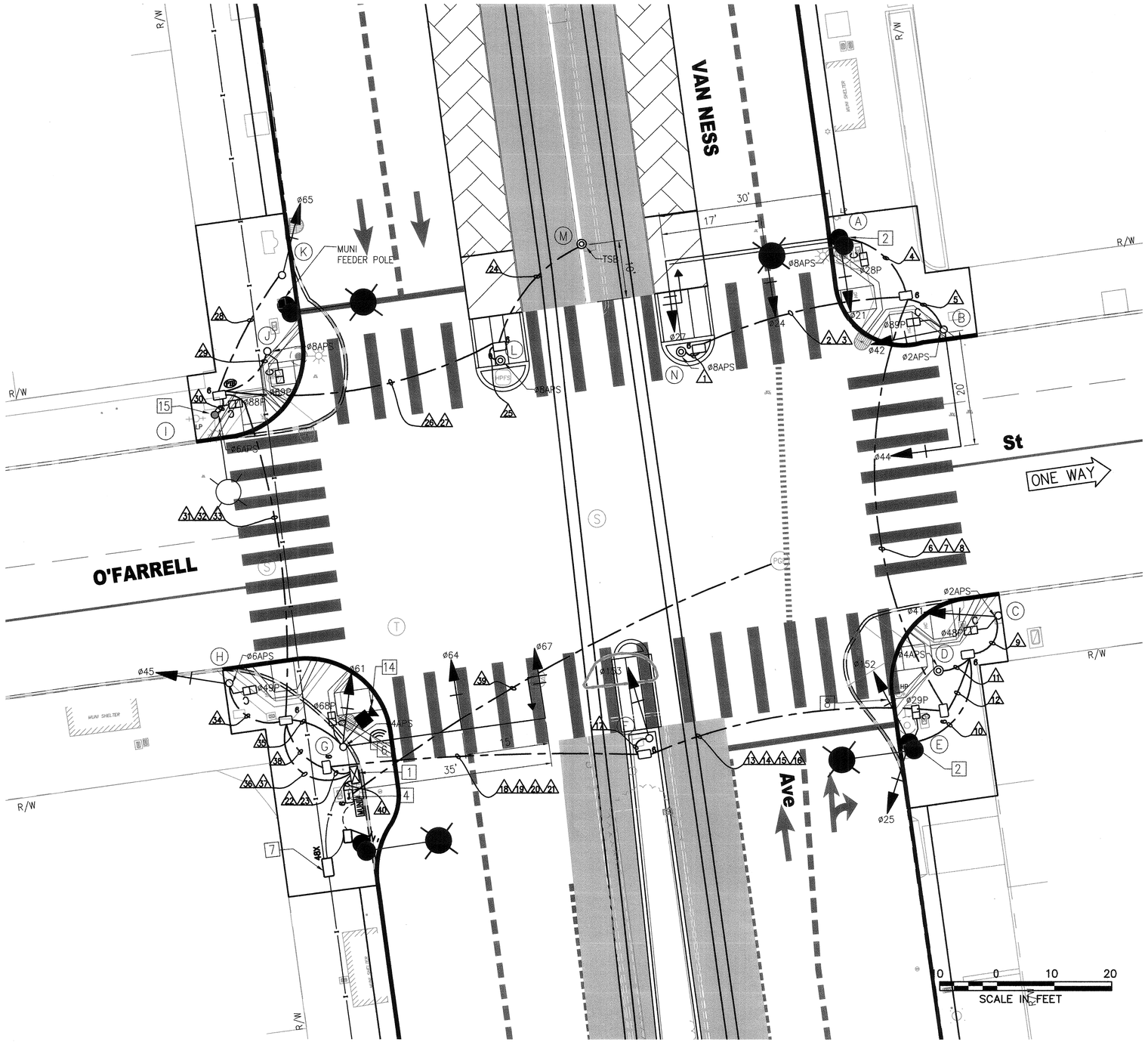
REVISION

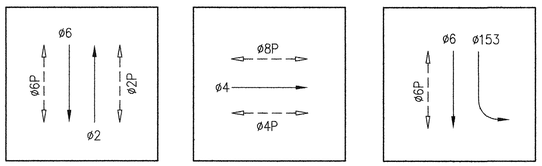
ET-110.2

ET-204



EXISTING EQUIPMENT





PHASE DIAGRAM

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

DESIGNED K Ray
DRAWN K Ray
CHECKED C Lum
REVIEWED C Lum
RECOMMENDED for the Director
APPROVED R Oles
DATE 12/4/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LUM 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

APPROVED
for the DIRECTOR OF TRANSPORTATION

MUNI BUS RAPID TRANSIT SYSTEM
VAN NESS CORRIDOR TRANSIT IMPROVEMENT PROJECT

1289

O'FARRELL STREET
TRAFFIC SIGNAL WORK

ET-111.0
ET-204

REVISION

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CPT640IETBS.dwg kkwong Tue Jul 14,2015 - 5:41 pm

BORDER REVISED 11/17/05

610

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	1000 / 102	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
Ⓑ	16-2-100	20		42 44	3S12" 3S12"	SV-1-T MAS	T T		89	1S-COUNT	SP-1	–	APS ①
Ⓒ	1-A (10')	–		41	3S12"	TV-1-T	T		48	1S-COUNT	SP-1	–	APS ①
Ⓓ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ①
Ⓔ	SIGNAL, SL & OCS COMBO POLE	–	994 / 98	25 152	3S12" 3S12"LB	SV-2-TA	T T		29	1S-COUNT	SP-1	–	
Ⓕ	1-A (10')	–		153	3S12"LB	TV-1-T	T		–	–	–	–	
Ⓖ	SPECIAL MAST ARM POLE (23-3700)	35		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 TRAFFIC CAMERA ③
Ⓗ	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 (7')	–		–	–	–	–		69	1S-COUNT	TP-1	–	APS ①
Ⓚ	1-A (10')	–		65	3S12"	TV-1-T	T		–	–	–	–	
Ⓛ	PPBP POLE	–		–	–	–	–		–	–	–	–	APS ①
Ⓜ	TSB POLE	–		–	–	–	–		–	–	–	–	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 K Ng
DRAWN K Ng
CHECKED PS 2/ Cheryl Lin
REVIEWED Cheryl Lin
RECOMMENDED Jack Wilson
APPROVED RO Lee
DATE 12/4/2015

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

1289

O'FARRELL STREET
CONDUCTOR POLE AND EQUIPMENT SCHEDULES

ET-111.1
ET-204

REVISION

T:\VF_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD\ CPT6401ETBS.dwg kkwong Tue Jul 07,2015 - 3:49 pm

511

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	39	40
CONDUIT SIZE (INCH)	1	2	2	2	2	2	2	2	2	2	1	3	2	2	2	2	2	2	2	2	2	3	2	1	1	2	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		
APS PPB FOR XING VAN NESS NS ON POLE N	2	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																		
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 O'FARRELL ES ON POLE B					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 O'FARRELL ES ON POLE C									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 D											2	2							2				2																	
TRANSIT SIGNAL Ø153																	3		3				3																	
TSB ON POLE M																								2		2					2					2				
APS PPB FOR XING VAN NESS NS ON POLE L																									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 J																													2		2					2				
PED SIGNAL Ø88P																														2	2					2				
APS PPB FOR XING O'FARRELL WS ON POLE I																														2	2					2				
VEHICLE SIGNAL Ø45																																	3			3				
PED SIGNAL Ø49P																																	2			2				
APS PPB FOR XING O'FARRELL 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	3				2	3																		1	1	1				2	4					
#14 SPARE						3						3	3	3				3	3			3	3								3					3				
TOTAL #14 WIRES	2	2		17	13	28			9	11	2	20	28	18			3	28	23			28	23	2	2	4		4	5	5	16			9	17	36				
#10 WIRES NEUTRAL						1						1	1	1			1	1	2			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			

NO.	DATE	DESCRIPTION	REVISED	CHECKED	APPROVED

REVISIONS

BORDER REVISED 11/17/05

T:\T_E_FILES\SFgo\Projects\Van Ness BRT\Signal Design\CADD_CPT640TEBS.dwg kkwong Tue Jul 07,2015 - 3:49 pm

DESIGNED K King
DRAWN K King
CHECKED FSZ
REVIEWED
RECOMMENDED
APPROVED
DATE 12/9/2015

REGISTERED PROFESSIONAL ENGINEER CHERYL LEE No. C58718 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

O'FARRELL STREET
CONDUIT & WIRING SCHEDULES

1289

ET-111.2

ET-204

REVISION