

I:\CITYAPPS\SAMPLE SIGNAL PLAN LAYOUTS\SAMPLE SIGNAL PLAN LAYOUT.DWG 1/24/2022

- #

POLE NUMBER (#) SHOWN.
- EX

L
- PROTECT EXISTING TYPE 'A' RESIDENTIAL STREET LIGHT STANDARD, WIRING AND FIXTURE.

RX

LED

REMOVE EXISTING LED FIXTURE AND RETURN TO CITY OF VANCOUVER OPERATIONS CENTER, COORDINATE WITH KEVAN BATTAN (360)771-6131. PROTECT STREET LIGHT STANDARD AND WIRING.

C

P

INSTALL COV NEMA TYPE "P" CONTROLLER CABINET, FOUNDATION AND INTELIGHT X3 TS2-2 CONTROLLER WITH MAXTIME SOFTWARE. SEE DETAILS T20-38B, T20-38D, T20-38E, T20-42A TO T20-42E AND T20-41 ON SHEETS D10 AND D11.

SC

INSTALL SERVICE CABINET AND FOUNDATION. SEE DETAILS T20-39A, T20-39B, T20-38B, T20-38E AND T20-41 ON SHEET D10.

RDO

INSTALL WIRELESS ETHERNET RADIO WITH INTEGRATED ANTENNA COMPLETE SYSTEM (SEE SHEET COM01 FOR ADDITIONAL INFORMATION).

COM

PROVIDE AND INSTALL COMMUNICATIONS EQUIPMENT (SEE SHEET COM01 FOR ADDITIONAL INFORMATION).

HDD

INSTALL CONDUIT BY HORIZONTAL DIRECTIONAL DRILLING. CHECK FOR ANY UNDERGROUND UTILITY CONFLICTS PRIOR TO DRILLING.

S

T

INSTALL (S) INCH, (T) TYPE ELECTRICAL CONDUIT. CONDUIT LOCATION SHOWN AS APPROXIMATE ONLY. FINAL LOCATION TO BE DETERMINED IN THE FIELD.

TSS

T

INSTALL TRAFFIC SIGNAL STANDARD, TYPE (T). SEE DETAILS T20-01, T20-02 AND T20-03 ON SHEET D05. INSTALL CONCRETE FOUNDATION, SEE DETAILS T20-15 ON SHEET D06 AND WSDOT STANDARDS J-26.10-03 ON SHEET D07.

MA

L

INSTALL (L) FT MAST ARM. SEE DETAIL T20-01 ON SHEET D05.

LA

L

INSTALL (L) FT. LUMINAIRE ARM. SEE DETAIL T20-02 ON SHEET D05.

LED

#

INSTALL (# WATTS) LEOTEK LED STREET LIGHT. FIXTURES SHALL BE LEOTEK GCL2-60G-MV-NW-2S-GY-750-BBL-PCR7-WL-SC.

PS

INSTALL PEDESTRIAN SIGNAL STANDARD, SEE DETAILS T20-05, T20-09B, T20-10A, T20-16, WSDOT STANDARDS J-20.11-02, J-20.16-02, J-20.26-01 AND J-21.10-04 ON SHEETS D05 TO D08.

PPB

INSTALL PEDESTRIAN PUSH BUTTON SIGNAL STANDARD, SEE DETAILS T20-05, T20-09B, T20-10A, T20-16, WSDOT STANDARDS J-20.11-02, J-20.16-02, J-20.26-01 AND J-21.10-04 ON SHEETS D05 TO D08.

T

INSTALL TENON ON MAST ARM FOR FUTURE USE.

V

PH

INSTALL PHASE (PH) VEHICLE SIGNAL HEAD WITH LEDS.

PC

INSTALL PHOTO ELECTRIC CONTROL RELAY (RIPLEY 6390LL-BK) ON TWISTLOCK RECEPTICLE (INTERMATIC K122). FACE NORTH. USE 3/4" CONDUIT LB IRON WITH MIN. 1" CLEARANCE TO POLE INSTALL MIN. 20' FROM GROUND.

PS

PH

INSTALL PHASE (PH) COUNTDOWN PEDESTRIAN SIGNAL WITH LEDS, TYPE D MOUNT ON TYPE PS TRAFFIC SIGNAL STANDARD. SEE DETAILS T20-05 AND J-20.20-02 ON SHEETS D05 AND D08.

PBS

PH

INSTALL PHASE (PH) COUNTDOWN PEDESTRIAN SIGNAL WITH LEDS, TYPE C MOUNT ON TYPE PS TRAFFIC SIGNAL STANDARD. SEE DETAILS T20-05 AND J-20.20-02 ON SHEETS D05 AND D08.

PE

CH

INSTALL CHANNEL (CH) EMERGENCY VEHICLE COMBINATION PRE-EMPTION DETECTOR/INDICATOR UNIT. SEE DETAIL T20-11A ON SHEET D06.

PEF

CH

INSTALL CHANNEL (CH) EMERGENCY VEHICLE PRE-EMPTION FEEDER CABLE.

MMU

INSTALL RENO MMU-1600GE CONFLICT MONITOR IN CONTROLLER CABINET.

NAV

INSTALL POLARA APS NAVIGATOR CCU2EN, INTERCONNECT BOARD AND ASSOCIATED WIRE HARNESS.

#

CAT6

INSTALL (#) OF CAT6 CABLES.

GS

CPU

INSTALL GRIDSMART PROCESSOR (GS-3-GS2) WITH PERFORMANCE PLUS MODULE, SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. WORK WITH CITY OF VANCOUVER ENGINEER AND TECHNICIANS. COORDINATE WITH KEVAN BATTAN (360)771-6131 AT LEAST 10 WORKING DAYS IN ADVANCE. SHALL BE COMPLETE SYSTEM INCLUDING TS2 MODULE AND INTERFACE CABLE.

CAM

BELL

INSTALL GRIDSMART BELL VIDEO CAMERA (GS-3-CAM), USE 3'X3' SMARTMOUNT. SEE DETAIL T20-37D ON SHEET D07. SEE SPECIFICATIONS. WORK WITH CITY OF VANCOUVER ENGINEER AND TECHNICIANS FOR PLACEMENT. COORDINATE WITH KEVAN BATTAN (360)771-6131.

PE

GPS

INSTALL OPTICOM MODEL 3100 GPS RADIO UNIT INCLUDING ANTENNA WITH REQUIRED ADDITIONAL EQUIPMENT IN CABINET. SEE DETAIL T20-11B ON SHEET D06.

PE

OC

INSTALL OPTICOM 1070 5-PAIR GPS CABLE.

- L

EXT
- INSTALL PEDESTRIAN PUSHBUTTON EXTENSION, LENGTH (L). FIELD VERIFY LENGTH PRIOR TO ORDERING. SEE DETAIL T20-09E ON SHEET D06.

APS

PH

INSTALL ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTON POLARA 2-WIRE NAVIGATOR PUSHBUTTON STATIONS, PHASE (PH). PEDESTRIAN PUSHBUTTONS SHALL BE EQUIPPED WITH LOCATOR TONE DURING "DON'T WALK". TEXTILE ARROW, SPEECH WALK MESSAGE FOR WALK PHASE AND SPEECH PUSHBUTTON INFO MESSAGE. MINIMUM HEIGHT OF 3'-6", MAXIMUM HEIGHT OF 4'-0". (PH) PHASE (#) NUMBER. SEE DETAILS T20-09B, T20-10A, T20-47, AND J-20.26-01 ON SHEETS D05, D06, D08 AND D11.

SNS

N

INSTALL STREET NAME SIGN (N) ON SIGNAL POLE. SEE DETAIL T20-07 ON SHEET D05, SIGN LEGEND ON SHEET S01.

OS

N

INSTALL OVERHEAD REGULATORY SIGN (N) ON MAST ARM. SEE DETAIL T20-08 ON SHEET D05 AND SIGN LEGEND ON SHEET S01.

JB

T

INSTALL TYPE (T) JUNCTION BOX. SEE WSDOT STANDARD PLANS J-40.10-04 ON SHEET D09.

EX

W

PROTECT EXISTING WIRING.

X

#

G

INSTALL (X) CONTROL CABLES WITH (#) AWG. NO. (G) CONDUCTORS.

#

-

6

INSTALL (#) AWG. NO. 6 CONDUCTORS (GROUNDING).

#

-

T

INSTALL (#) AWG. NO. 14 STRANDED COPPER WIRE (TRACER/TONE).

#

G

INSTALL (#) AWG. NO. (G) CONDUCTORS.

UED6

INSTALL UED6 SECONDARY PEDESTAL ASSEMBLY. COORDINATE WITH CLARK PUBLIC UTILITIES FOR FINAL PLACEMENT LOCATION. SEE DETAIL ON SHEET D11.

WIRE

COIL 10' OF 350 AL-TX AT BASE OF TRANSFORMER #11310.

PWR

FINAL CONNECTION TO POWER SOURCE COORDINATE ELECTRICAL CONNECTION WITH RYAN ENGELBART (CLARK PUBLIC UTILITIES) AT (360)992-8860.

#

=

NUMBER SHOWN

X

=

NUMBER OF CABLES SHOWN

PH

=

PHASE SHOWN

T

=

TYPE SHOWN

S

=

SIZE SHOWN

G

=

AWG SIZE SHOWN

PVC

=

SCH. 80 PVC PIPE

HDPE

=

HIGH DENSITY POLYETHYLENE PIPE

L

=

LENGTH SHOWN

D

=

WSDOT TYPE "D" ARM MOUNT

M

=

WSDOT TYPE "M" ARM MOUNT

N

=

SIGN NAME OR TYPE

LAM

=

LUMINAIRE ARM MOUNT


FUT.

=

FUTURE

- CIVIL CONSTRUCTION NOTE
- 1

INSTALL DETECTABLE WARNING PATTERN ON EXISTING ADA RAMP. SEE DETAIL T02-15 ON SHEET D04.

TRAFFIC SIGNAL AND LIGHTING POLE SCHEDULE																														
STATIONING AND OFFSET ALONG SE 1ST ST.	POLE TYPE	POLE 	DIMENSIONS (FT.) (Z)												WIND LOAD AREA (FT²) (X)(Y)								(X)(Y)(Z) TOTAL (FT³)	FOUNDATION DEPTH (FT.)			TOP OF FOUNDATION ELEVATION	COMMENTS		
			A	B	C	D	E	F	G	H	I	J	L	PE GPS	RDO	VIDEO	A	B	C	D	E	F		G	H	I			3' RD.	4' RD.
20+49.87, 31.58' RT.	II	1	36	—	26	14	—	11	—	20	—	15	19	—	—	—	11.6*	—	9.2	9.2	—	14.5	—	—	—	895	6	6	296.26	FOUNDATION DEPTH BASED ON 2500 PSF ALLOWABLE BEARING PRESSURE.(1)
20+40.90, 34.91' RT.	PS	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	296.21	SEE STANDARD PLAN T20-16 ON SHEET D06
19+43.75, 30.20' RT.	III	3	53	—	42	30	—	18	—	20	—	15	37	—	—	LAM	11.6*	—	9.2	9.2	—	9	—	—	—	1,547	9	7	296.68	FOUNDATION DEPTH BASED ON 2500 PSF ALLOWABLE BEARING PRESSURE.(1)
19+52.74, 35.28' RT.	PPB	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	296.29	SEE STANDARD PLAN T20-16 ON SHEET D06
19+57.80, 42.18' RT.	PPB	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	296.16	SEE STANDARD PLAN T20-16 ON SHEET D06
19+46.72, 32.31' LT.	III	6	30	—	24	13	—	11	—	20	—	15	21	—	—	—	11.6*	—	9.2	9.2	—	14.5	—	—	—	787	7	6	297.06	FOUNDATION DEPTH BASED ON 2500 PSF ALLOWABLE BEARING PRESSURE.(1)
19+57.77, 40.83' LT.	PPB	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	296.42	SEE STANDARD PLAN T20-16 ON SHEET D06
19+65.50, 38.37' LT.	PS	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	296.30	SEE STANDARD PLAN T20-16 ON SHEET D06
20+48.57, 27.39' LT.	III	9	50	—	43	32	—	10	19	20	22**	15	26	13	12	LAM	11.6*	—	9.2	9.2	—	14.5	14.1**	—	7.5***	1,860	9	7	296.14	FOUNDATION DEPTH BASED ON 2500 PSF ALLOWABLE BEARING PRESSURE.(1)
20+33.00, 37.81' LT.	PPB	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	296.65	SEE STANDARD PLAN T20-16 ON SHEET D06
20+36.80, 40.23' LT.	PS	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	296.71	SEE STANDARD PLAN T20-16 ON SHEET D06

* FUTURE 4 SECTION FLASHING YELLOW SIGNAL HEAD.
** FUTURE 5 SECTION RIGHT TURN SIGNAL HEAD.
*** R3-5R RIGHT TURN ONLY SIGN 30"x36".
(1) ALLOWABLE BEARING PRESSURE IS ASSUMED. CONTRACTOR TO FIELD VERIFY. SEE COV STD. PLAN T20-15 AND WSDOT STD. PLAN J-26.10.

- SIGNAL GENERAL NOTES

1.

SEE SHEET G02 FOR GENERAL NOTES, ABBREVIATIONS AND LEGEND.

2.

PROTECT ALL EXISTING UTILITIES UNLESS INDICATED ON PLANS TO BE ADJUSTED, ABANDONED OR REMOVED.


3.


SEE STANDARD PLANS D05 TO D11 FOR TRAFFIC DETAILS.

4.


PRIOR TO EXCAVATION FOR ANY OF THE SIGNAL STANDARDS, POTHOLE AREA FOR ANY UNDERGROUND UTILITY CONFLICTS, SOME ARE DIRECT BURIAL AND NOT IN CONDUITS.

CALL
2 BUSINESS DAYS
BEFORE YOU DIG
1-800-424-5555
"It's the Law"





PUBLIC WORKS
TRANSPORTATION
P.O. BOX 1995
VANCOUVER, WA
98688-1995
360-487-7750
FAX: 360-487-4781



CLARK COUNTY UTILITIES COORDINATING COUNCIL
3648
PROFESSIONAL

DATE: JULY 2020

DESIGNED BY: RAW

DRAWN BY: RAW

CHECKED BY: RWG

APPROVED BY: CJC

REVISIONS

BRWING071231S01-
NUMBER S02

SCALE

HORIZONTAL: NO SCALE

VERTICAL:

DATE

No.

SE HEARTHWOOD BLVD. AT
SE 1ST ST.
TRAFFIC SIGNAL INSTALLATION

SIGNAL PLAN NOTES

PROJECT NUMBER
PRJ071231

COST CENTER NUMBER
CC0179

S02

SHEET 4 OF 21

ICU #337