



**CITY OF TACOMA**  
**Public Works Engineering**

**ADDENDUM NO. 02**

**DATE: 11/03/2020**

**REVISIONS TO:**

**Request for Bids Specification No. PW20-0261F**

**S 19<sup>th</sup> St Signal & Crosswalk Improvements at Yakima Ave and Tacoma Ave**

**NOTICE TO ALL BIDDERS:**

This addendum is issued to clarify, revise, add to or delete from, the original specification documents for the above project. This addendum, as integrated with the original specification documents, shall form the specification documents. The noted revisions shall take precedence over previously issued specification documents and shall become part of this contract.

**REVISIONS TO THE SUBMITTAL DEADLINE:**

The submittal deadline is unchanged.

**REVISIONS TO THE GENERAL INFORMATION AND REQUIREMENTS:**

Submittal Opening: Submittals in response to a RFB will be recorded as received. As soon as possible on the day of submittal deadline, preliminary results will be posted to [www.TacomaPurchasing.org](http://www.TacomaPurchasing.org).

This public bid opening will be held via webinar only. Registration is required to attend. Register in advance for this webinar:

[https://us02web.zoom.us/webinar/register/WN\\_x9H2NE75Q2mvwfhFGD4d1w](https://us02web.zoom.us/webinar/register/WN_x9H2NE75Q2mvwfhFGD4d1w)

After registering, you will receive a confirmation email containing information about joining the webinar.

**REVISIONS TO THE PLANS:**

The following plan sheets have been reprinted to address legibility issues: SG-01, SG-03, SG-04, SG-06

**REVISIONS TO THE SPECIFICATIONS:**

Revise Section 1-06 "Buy America" to correct foreign steel amounts, as attached.

**QUESTIONS AND ANSWERS:**

**Question 1: Missing plans: sheets HC-01 & D-01**

**Answer 1:** References to HC-01 and D-01 removed from cover sheet of plan set.

**Question 2: I don't see a B/I for CSTC or CSBC for the HMA replacement , Concrete Flatwork and Conc. Road Panels for PW20-0261f. ( S 19<sup>th</sup> St Signal and Crosswalk ) The M & P section doesn't list it as an incidental either.**

Answer 2: "Section 8-20.3(5)E1 from the revised WSDOT specification provides information on the fill to be used for the conduit trenches. The trenches are to be filled with this material to the level of the existing base. There is no excavation work required beyond the removal of the concrete panels and asphalt for the conduit trenches. The material required for the conduit trenches is sufficient for pavement and sidewalk replacement. Any material disturbed by the pavement removal outside of the trenches is expected to be compacted to meet density requirements before placement of HMA, concrete flatwork, and/or concrete road panels. There is no expectation that additional base material will be required for the roadway replacement. The fill material for the trenches is considered subsidiary to the cost the bid item "Traffic Signal System Tacoma Avenue, per lump sum".

**Question 3: Most of the wire run numbers on plan sheets SG-01 and SG-04 are illegible. Can you upload new sheets with legible numbers?**

Answer 3: SG-01, SG-03, SG-04, SG-06 have been rescanned to increase legibility.

**Question 4: Plan Pages SG-01 & SG-04 are very blurry and we are unable to read wire notes or construction notes on these pages. When plans are enlarged they become blurred even further. Will another set of plans be published?**

Answer 4: SG-01, SG-03, SG-04, SG-06 have been rescanned to increase legibility.

**Question 5: On Sheets SG-01 and SG-04 many of the Wire Note numbers are not legible. I have tried downloading and enlarging the drawings but am still unable to read the numbers. Is there a clearer copy of these sheets that could be made available?**

Answer 5: SG-01, SG-03, SG-04, SG-06 have been rescanned to increase legibility.

**Question 6: Do you anticipate extending the bid due date?**

Answer 6: Bid Due Date will remain 11/10/2020

**Question 7: What additional details are you willing to provide, if any, beyond what is stated in bid documents concerning how you will identify the winning bid?**

Answer 7: No additional details will be provided.

**Question 8: Was this bid posted to the nationwide free bid notification website at [www.mygovwatch.com/free](http://www.mygovwatch.com/free)?**

Answer 8: No

**Question 9: Other than your own website, where was this bid posted?**

Answer 9: This bid was posted on our website and distributed by ARC. The solicitation was advertised in the City's official publication and the Daily Journal of Commerce.

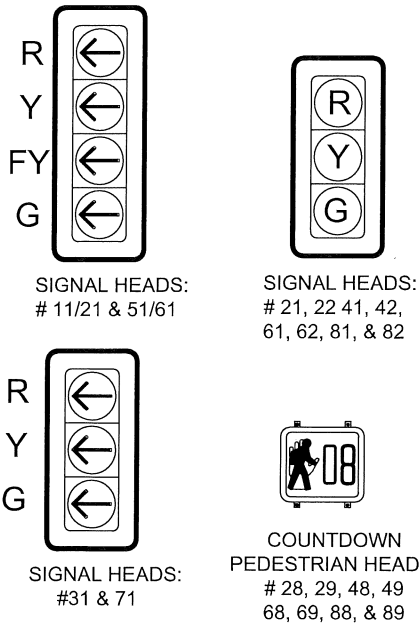
NOTE: Acknowledge receipt of this addendum by initialing the corresponding space as indicated on the proposal page. Vendors who have already submitted their bid/proposal may contact the Purchasing Division at 253-502-8468 and request return of their bid/proposal for acknowledgment and re-submittal. Or, a letter acknowledging receipt of this addendum may be submitted in an envelope marked Request for Bids Specification No. PW19-0267F Addendum No. 01. The City reserves the right to reject any and all bids, including, in certain circumstances, for failure to appropriately acknowledge this addendum.

cc: Nick Correll / Public Works Engineering

LEGEND

DESCRIPTION	SYMBOL
CONSTRUCTION NOTE	#
SIGNAL POLE CONSTRUCTION NOTE	#
WIRE NOTE	#
TYPE PPB POST W/PUSHBUTTON(S)	⬇
SIGNAL POLE WITH MAST ARM	⬇
TYPE 1 SIGNAL POLE	⊗
VEHICLE SIGNAL HEAD	→
PEDESTRIAN SIGNAL HEAD	↔
EMERGENCY PREEMPTION DETECTOR	■
EXISTING STRAIN POLE (WITH LUMINAIRE)	⊗
MAST ARM MOUNTED SIGN	⊥
PEDESTRIAN PUSHBUTTON	+
VIDEO DETECTION CAMERA	⬆
TYPE 1 JUNCTION BOX	⊠
TYPE 2 JUNCTION BOX	⊠
TYPE B JUNCTION BOX	⊠
PULL BOX	⊠
EXISTING JUNCTION BOX	⊠
CONTROLLER CABINET	⊠
SERVICE PEDESTAL	⊠
CONDUIT	---

SIGNAL DISPLAYS



VIDEO DETECTION

DETECTOR	PHASE(S)	ZONES COVERED
VX	ALL	STOPBAR

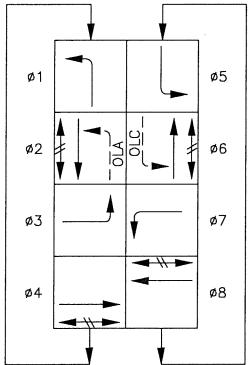
PRE-EMPTION SCHEDULE

CIRCUIT DIRECTION	
CIRCUIT	PHASE(S)
A	N
B	S
C	E
D	W

CONSTRUCTION NOTES

- DISCONNECT AND REMOVE EXISTING PEDESTRIAN SIGNAL HEADS. FURNISH AND INSTALL TWO COUNTDOWN PEDESTRIAN SIGNAL HEADS AND TERMINAL CABINET ON EXISTING STRAIN POLE.
- FURNISH AND INSTALL ACCESSIBLE PEDESTRIAN PUSH BUTTON POST PER WSDOT STD PLAN J-20.10. FURNISH AND INSTALL TWO APS PUSHBUTTON ASSEMBLIES WITH EXTENSIONS PER WSDOT STANDARD DRAWING IS-2. PUSH BUTTONS SHALL BE WITHIN A 10 INCH REACH FROM LANDING AREA.
- DISCONNECT AND REMOVE EXISTING PEDESTRIAN SIGNAL HEADS. FURNISH AND INSTALL TWO COUNTDOWN PEDESTRIAN SIGNAL HEADS AND TERMINAL CABINET ON EXISTING STRAIN POLE.
- FURNISH AND INSTALL ACCESSIBLE BREAKAWAY PEDESTRIAN PUSH BUTTON POST PER WSDOT STD PLAN J-20.15. FURNISH AND INSTALL TWO APS PUSHBUTTON ASSEMBLIES. PUSH BUTTONS SHALL BE WITHIN A 10 INCH REACH FROM LANDING AREA.
- FURNISH AND INSTALL ACCESSIBLE PEDESTRIAN PUSH BUTTON POST PER WSDOT STD PLAN J-20.10. FURNISH AND INSTALL TWO APS PUSHBUTTON ASSEMBLIES WITH EXTENSIONS PER WSDOT STANDARD PLAN IS-2. PUSH BUTTONS SHALL BE WITHIN A 10 INCH REACH FROM LANDING AREA.
- DISCONNECT AND REMOVE EXISTING PEDESTRIAN SIGNAL HEADS. FURNISH AND INSTALL TWO COUNTDOWN PEDESTRIAN SIGNAL HEADS AND TERMINAL CABINET ON EXISTING STRAIN POLE.
- DISCONNECT AND REMOVE EXISTING PEDESTRIAN SIGNAL HEADS. FURNISH AND INSTALL TWO COUNTDOWN PEDESTRIAN SIGNAL HEADS, TWO APS PUSHBUTTON ASSEMBLIES, AND TERMINAL CABINET ON EXISTING STRAIN POLE. PROVIDE A PUSH BUTTON EXTENSION PER WSDOT FOR PPB229. PUSH BUTTONS SHALL BE WITHIN A 10 INCH REACH FROM LANDING AREA.
- FURNISH AND INSTALL NEW SIGNAL HEAD WITH 12" INDICATIONS, BACKPLATE AND REFLECTIVE BORDER PER PHASING AND SIGNAL SCHEDULE ON THIS SHEET. INSTALL SIGNAL HEAD ON EXISTING SPAN WIRE WITH NEW HANGER AND DROP PIPE. PROVIDE NEW 5C CABLE TO TERMINAL CABINET.
- REMOVE EXISTING SIGNAL HEAD AND REPLACE WITH NEW SIGNAL HEAD WITH 12" INDICATIONS, BACKPLATE, AND REFLECTIVE BORDER PER PHASING AND SIGNAL SCHEDULE THIS SHEET. INSTALL SIGNAL HEAD ON EXISTING SPAN WITH NEW HANGER, DROP PIPE, AND 5C CABLE TO TERMINAL CABINET.
- REMOVE EXISTING SIGNAL HEAD AND REPLACE WITH NEW SIGNAL HEAD WITH 12" INDICATIONS, BACKPLATE, AND REFLECTIVE BORDER PER PHASING AND SIGNAL SCHEDULE THIS SHEET. INSTALL SIGNAL HEAD ON EXISTING SPAN WITH NEW HANGER, DROP PIPE, AND JUMPER CABLE TO MATCHING HEAD ON SPAN
- REPLACE EXISTING TRAFFIC SIGNAL CABINET WITH NEW TRAFFIC SIGNAL CABINET AND ALL CABINET APPURTENANCES ON EXISTING CONCRETE FOUNDATION. INCLUDE NEW TRAFFIC SIGNAL CONTROLLER CONTROLLER, APS CENTRAL CONTROL UNIT, AND GRIDSMART VIDEO PROCESSOR. PROTECT EXISTING TWISTED PAIR COMMUNICATIONS CABLE. THE FOLLOWING EXISTING EQUIPMENT SHALL BE TRANSFERRED TO THE NEW CABINET:
  - OPTICOM DETECTION CARD
  - ACTELIS NETWORK SWITCH
- EXISTING OPTICOM DETECTOR AND CABLE SHALL REMAIN. ADJUST DETECTOR LOCATION AS NEEDED.
- FURNISH AND INSTALL NEW GRIDSMART VIDEO DETECTION CAMERA AND ASSOCIATED EQUIPMENT PER MANUFACTURES REQUIREMENTS.
- REMOVE 'ALL RED' SIGNAL INDICATOR AND ASSOCIATED CABLES AND ATTACHMENTS.
- REPLACE EXISTING JUNCTION BOX WITH NEW TYPE 2 JUNCTION BOX WITH CONCRETE BOARDER PER CITY OF TACOMA STD. PLAN TS-08. PROTECT EXISTING WIRES.
- INSTALL NEW TYPE 2 JUNCTION WITH CONCRETE BOARDER PER CITY OF TACOMA STD. PLAN TS-08. EXTEND EXISTING STUB-OUT FROM TRAFFIC SIGNAL POLE TO JUNCTION BOX.

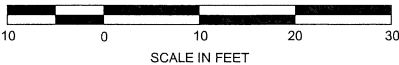
SIGNAL PHASING



- PERMISSIVE MOVEMENT  
→ PROTECTED MOVEMENT  
↔ PEDESTRIAN MOVEMENT  
OLA = ø1 + ø2  
OLC = ø5 + ø6



HORIZ. DATUM: N.A.D. 83/91  
VERT. DATUM: N.G.V.D. 29  
BENCH MARK: SBM  
INTERSECTION OF S. 19TH ST.  
AND MARKET ST.  
ELEVATION = 122.00



NOTES:

1. WIRING CHART DOES NOT INCLUDE EXISTING WIRING FOR CLARITY.
2. EXISTING WIRING NOT USED SHALL BE REMOVED FROM SPAN WIRES OR CONDUIT.
3. EXISTING 5C CABLES TO BE REMOVED AFTER INSTALLATION OF NEW CABLES.
4. EXISTING EVPE DEVICES TO REMAIN ON SPAN WIRES AND MAINTAIN EXISTING OVERHEAD WIRING.
5. INSTALL GROUND WIRE IN ANY EXISTING CONDUIT WITHOUT AN EXISTING GROUND.

VEHICLE	PEDESTRIAN	CYCLIST
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The diagram consists of 10 horizontal lines. From top to bottom, the lines have the following features:

- Line 1: A vertical segment on the left, followed by a curved segment that goes down and then right.
- Line 2: A vertical segment on the left, followed by a curved segment that goes down and then right.
- Line 3: A vertical segment on the left, followed by a curved segment that goes down and then right.
- Line 4: A vertical segment on the left, followed by a curved segment that goes down and then right.
- Line 5: A vertical segment on the left, followed by a curved segment that goes down and then right.
- Line 6: A vertical segment on the left, followed by a curved segment that goes down and then right.
- Line 7: A vertical segment on the left, followed by a curved segment that goes down and then right.
- Line 8: A vertical segment on the left, followed by a curved segment that goes down and then right.
- Line 9: A vertical segment on the left, followed by a curved segment that goes down and then right.
- Line 10: A vertical segment on the left, followed by a curved segment that goes down and then right.

POLE NO. 1

POLE NO. 3

POLE NO. 6

POLE NO. 7

[illegible]

***CALL BEFORE YOU DIG***  
EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS  
ONLY PER BEST AVAILABLE INFO, AND MAY BE INCOMPLETE.  
CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING,  
POTHOLING AND AVOIDING ALL EXISTING UTILITIES.


**CALL TWO BUSINESS DAYS BEFORE YOU DIG**  
**(1-800-424-5555) OR VISIT ONLINE: [www.callbeforeyoudig.org](http://www.callbeforeyoudig.org)**



NO	R E V I S I O N	DATE APPD

FINAL CONSTRUCTION CHECKED	DATE	SCALE
	Sep 2020	NTS
BY	DESIGNED	CHECKED
	KN	VM
DATE	DRAWN	PROJECT NAME
	KN	HP-S19TACYAK
FIELD BOOKS	DRAWING NAME	
	S19TACYAK-CONST	

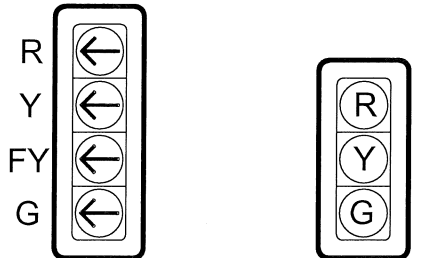


CITY OF TACOMA		
DEPARTMENT OF PUBLIC WORKS		
DocuSigned by:  Chris Larson	CONSTRUCTION PLAN S. 19TH ST. SIGNAL & CROSSWALK IMPROVEMENTS S. YAKIMA AVE. & TACOMA AVE. S.	PWK-G0039-01 SHEET NO. SG-03 OF SG-06

LEGEND

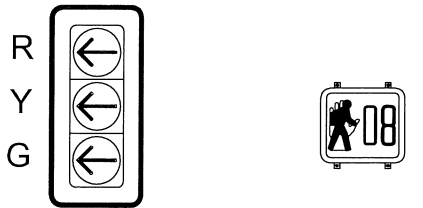
DESCRIPTION	SYMBOL
CONSTRUCTION NOTE	#
SIGNAL POLE CONSTRUCTION NOTE	#
WIRE NOTE	#
TYPE PPB POST W/PUSHBUTTON(S)	⌚
SIGNAL POLE WITH MAST ARM	—
TYPE 1 SIGNAL POLE	⊗
VEHICLE SIGNAL HEAD	→
PEDESTRIAN SIGNAL HEAD	→
EMERGENCY PREEMPTION DETECTOR	■
EXISTING STRAIN POLE (WITH LUMINAIRE)	⊗--X
MAST ARM MOUNTED SIGN	TT
PEDESTRIAN PUSHBUTTON	+
VIDEO DETECTION CAMERA	📹
TYPE 1 JUNCTION BOX	⊠
TYPE 2 JUNCTION BOX	⊠
TYPE 8 JUNCTION BOX	⊠
PULL BOX	⊠
EXISTING JUNCTION BOX	⊠
CONTROLLER CABINET	⊠
SERVICE PEDESTAL	⊠
CONDUIT	---

SIGNAL DISPLAYS



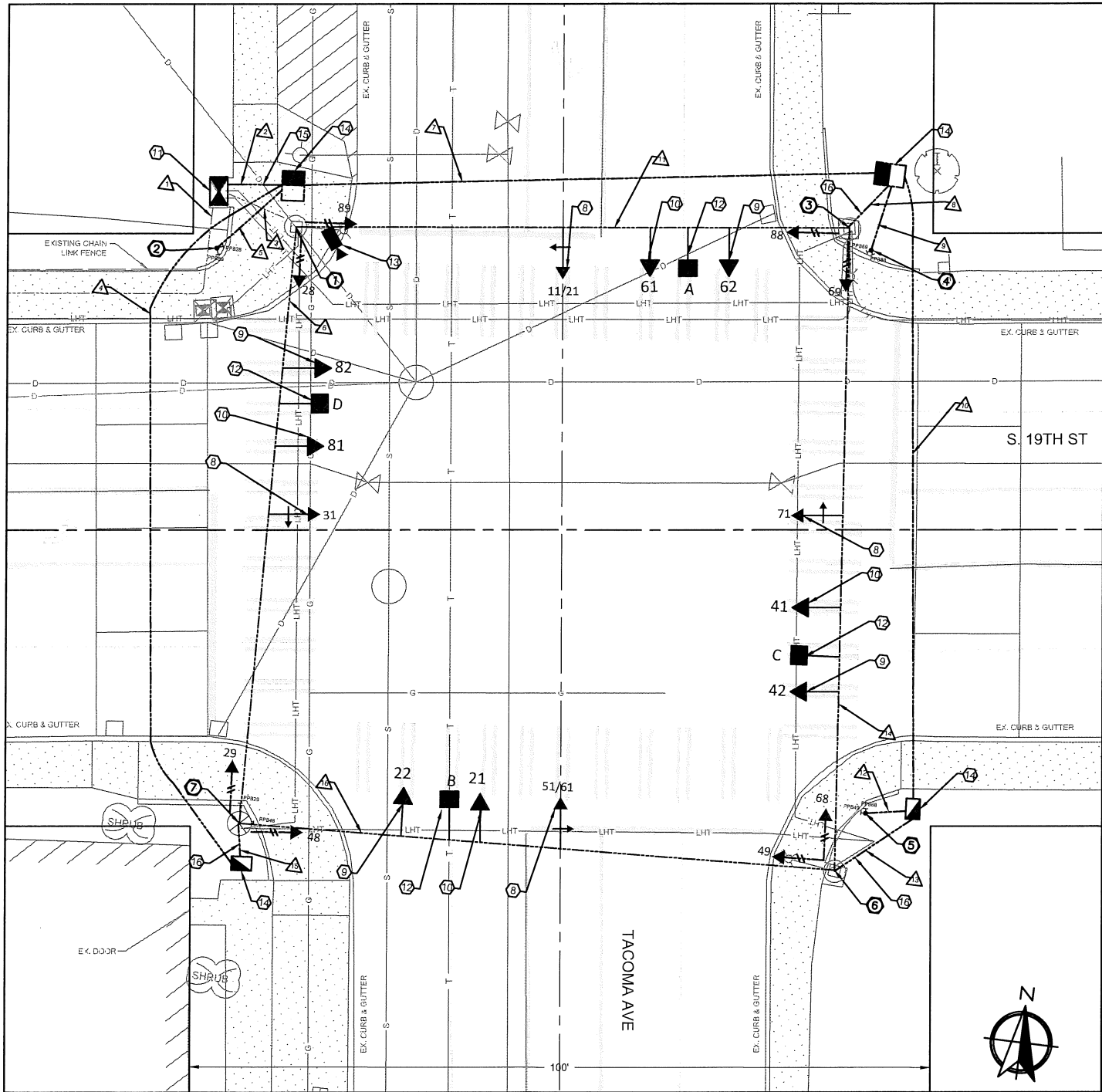
SIGNAL HEADS:  
# 11/21 & 51/61

SIGNAL HEADS:  
# 21, 22 41, 42,  
61, 62, 81, & 82



SIGNAL HEADS:  
#31 & 71

COUNTDOWN  
PEDESTRIAN HEADS:  
# 28, 29, 48, 49  
68, 69, 88, & 89



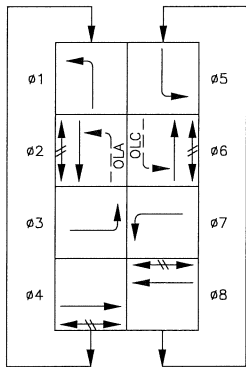
VIDEO DETECTION

DETECTOR	PHASE(S)	ZONES COVERED
VX	ALL	STOPBAR

PRE-EMPTION SCHEDULE

CIRCUIT DIRECTION	
CIRCUIT	PHASE(S)
A	N
B	S
C	E
D	W

SIGNAL PHASING



— PERMISSIVE MOVEMENT  
→ PROTECTED MOVEMENT  
→ PEDESTRIAN MOVEMENT  
OLA = ø1 + ø2  
OLC = ø5 + ø6

CONSTRUCTION NOTES

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- FURNISH AND INSTALL ACCESSIBLE PEDESTRIAN PUSH BUTTON POST WSDOT STD PLAN J-20.10. FURNISH AND INSTALL TWO APS PUSHBUTTON ASSEMBLIES WITH EXTENSIONS PER WSDOT STANDARD PLAN IS-2. PUSH BUTTONS SHALL BE WITHIN A 10 INCH REACH FROM LANDING AREA.
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- DISCONNECT AND REMOVE EXISTING PEDESTRIAN SIGNAL HEADS. FURNISH AND INSTALL TWO COUNTDOWN PEDESTRIAN SIGNAL HEADS AND TERMINAL CABINET ON EXISTING STRAIN POLE.
- DISCONNECT AND REMOVE EXISTING PEDESTRIAN SIGNAL HEADS. FURNISH AND INSTALL TWO COUNTDOWN PEDESTRIAN SIGNAL HEADS, TWO APS PUSHBUTTON ASSEMBLIES, AND TERMINAL CABINET ON EXISTING STRAIN POLE. PROVIDE PUSH BUTTON EXTENSION PER WSDOT PLAN IS-2 FOR PPB29.
- FURNISH AND INSTALL NEW SIGNAL HEAD WITH 12" INDICATIONS, BACKPLATE AND REFLECTIVE BORDER PER PHASING AND SIGNAL SCHEDULE ON THIS SHEET. INSTALL SIGNAL HEAD ON EXISTING SPAN WIRE WITH NEW HANGER AND DROP PIPE. PROVIDE NEW 5C CABLE TO TERMINAL CABINET.
- REMOVE EXISTING SIGNAL HEAD AND REPLACE WITH NEW SIGNAL HEAD WITH 12" INDICATIONS, BACKPLATE, AND REFLECTIVE BORDER PER PHASING AND SIGNAL SCHEDULE THIS SHEET. INSTALL SIGNAL HEAD ON EXISTING SPAN WITH NEW HANGER DROP PIPE AND 5C CABLE TO TERMINAL CABINET.
- REMOVE EXISTING SIGNAL HEAD AND REPLACE WITH NEW SIGNAL HEAD WITH 12" INDICATIONS, BACKPLATE, AND REFLECTIVE BORDER PER PHASING AND SIGNAL SCHEDULE THIS SHEET. INSTALL SIGNAL HEAD ON EXISTING SPAN WITH NEW HANGER DROP PIPE AND JUMPER CABLE TO MATCHING SIGNAL HEAD ON SPAN.
- REPLACE EXISTING TRAFFIC SIGNAL CABINET WITH NEW TRAFFIC SIGNAL CABINET AND CABINET APPURTENANCES ON EXISTING CONCRETE FOUNDATION. INCLUDE NEW TRAFFIC SIGNAL CONTROLLER CONTROLLER, APS CENTRAL CONTROL UNIT, GRIDSMART VIDEO PROCESSOR. PROTECT EXISTING TWISTED PAIR COMMUNICATIONS CABLE. THE FOLLOWING EXISTING EQUIPMENT SHALL BE TRANSFERRED TO THE NEW CABINET:
  - OPTICOM DETECTION CARD
  - ACTELIS NETWORK SWITCH
- EXISTING OPTICOM DETECTOR AND CABLE SHALL REMAIN. ADJUST DETECTOR LOCATION AS NEEDED.
- FURNISH AND INSTALL NEW GRIDSMART VIDEO DETECTION CAMERA AND ASSOCIATED EQUIPMENT PER MANUFACTURES REQUIREMENTS.
- INSTALL NEW TYPE 2 JUNCTION WITH CONCRETE BOARDER PER CITY OF TACOMA STD. PLAN TS-08.
- CONNECT NEW 2" CONDUITS TO EXISTING STUB-OUTS FROM TRAFFIC SIGNAL FOUNDATION.
- CONNECT CONDUIT TO EXISTING CONDUIT STUB-OUT FROM EXISTING STRAIN POLE.
- TRENCH CONDUIT ACROSS INTERSECTION MINIMUM DEPTH OF 24 INCHES. RESTORE PAVEMENT PER COT STANDARD PLAN SU-14. RESTORE PAVEMENT MARKINGS IMPACTED BY REMOVAL.



HORIZ. DATUM: N.A.D. 83/91  
VERT. DATUM: N.G.V.D. 29  
BENCH MARK: SBM  
INTERSECTION OF S. 19TH ST.  
AND MARKET ST.  
ELEVATION = 122.00

SCALE IN FEET

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NO

REVISION

DATE

APPD

FINAL  
CONSTRUCTION  
CHECKED  
BY  
DATE  
FIELD BOOKS

DATE  
DESIGNED  
DRAWN  
DRAWING NAME

SCALE  
1" = 20'  
CHECKED  
PROJECT NAME  
HP-S19TACYAK  
S19TACYAK-CONST



CITY OF TACOMA  
DEPARTMENT OF PUBLIC WORKS

DocuSigned by:

Chris Larson

CONSTRUCTION PLAN  
S. 19TH ST. SIGNAL & CROSSWALK IMPROVEMENTS  
S. YAKIMA AVE. & TACOMA AVE. S.

PWK-G0039-01

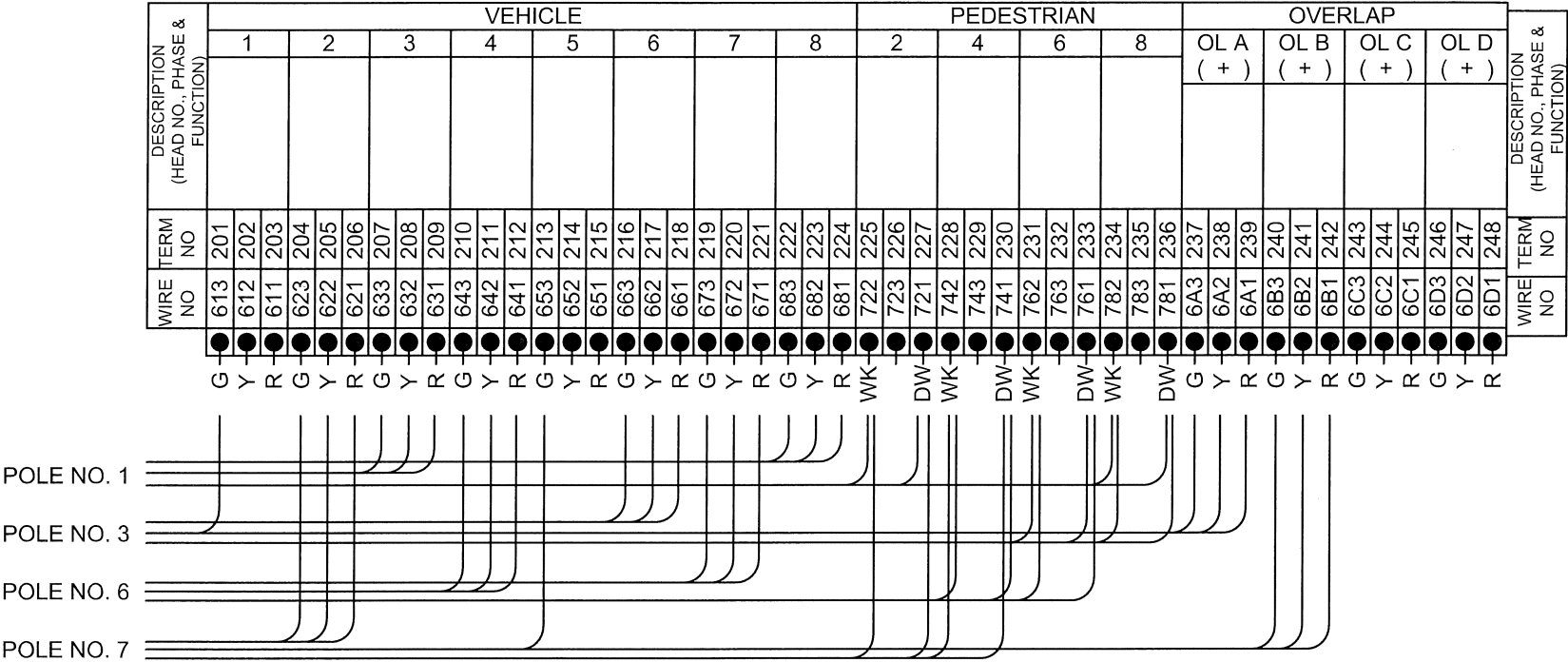
SHEET NO.

SG-04 OF SG-06

RUN NO. Δ	CONDUIT SIZE	PED PPB 2CS	PED HEAD 5C	VIDEO CABLE CAT 5E	VEHICLE HEAD 5C	GROUND #8	INTERCONNECT (TWISTED CU)	RUN LENGTH	NOTES
1	EX-1-1/4"					1			EXIST. Signal Power
2	2"		3		6	1		10	EXIST. STUB-OUT
	2"	6				1		10	EXIST. STUB-OUT
3	EX-1-1/2"		1	1	2	1		10	
4	2"					1		100	
	3"	2				1		100	
	3"		1		2	1		100	
5	1"	2				1		10	
6	EX-SPAN				2			60	
7	2"					1		80	
	3"	4				1		80	
	3"		2		4	1		80	
8	2"		1		2	1		10	EXIST. STUB-OUT
9	1"	2				1		10	
10	2"					1		90	
	3"	2				1		90	
	3"		1		2	1		90	
11	EX-SPAN				2			70	
12	2"	2				1		10	
13	2"		1		2	1		10	EXIST. STUB-OUT
14	EX-SPAN				2			70	
15	1"	2	1		2	1		10	EXIST. STUB-OUT
16	EX-SPAN				2			70	

- NOTES:
1. WIRING CHART DOES NOT INCLUDE EXISTING WIRING FOR CLARITY.
  2. EXISTING WIRING NOT USED SHALL BE REMOVED FROM SPAN WIRES OR CONDUIT.
  3. EXISTING 5C CABLES TO BE REMOVED AFTER INSTALLATION OF NEW CABLES.
  4. EXISTING EVPE DEVICES TO REMAIN ON SPAN WIRES AND MAINTAIN EXISTING OVERHEAD WIRING.

OUTPUT DISPLAY TERMINATIONS  
GROUNDS/COMMONS SHALL BE CONNECTED TO CABINET GROUND GB1 OR GB2



## 1-06 CONTROL OF MATERIAL

### ***Buy America***

**(August 6, 2012)**

In accordance with Buy America requirements contained in 23 CFR 635.410, the major quantities of steel and iron construction material that is permanently incorporated into the project shall consist of American-made materials only. Buy America does not apply to temporary steel items, e.g., temporary sheet piling, temporary bridges, steel scaffolding and falsework.

Minor amounts of foreign steel and iron may be utilized in this project provided the cost of the foreign material used does not exceed one-tenth of one percent of the total contract cost or \$2,500, whichever is greater.

American-made material is defined as material having all manufacturing processes occurring domestically. To further define the coverage, a domestic product is a manufactured steel material that was produced in one of the 50 States, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States.

If domestically produced steel billets or iron ingots are exported outside of the area of coverage, as defined above, for any manufacturing process then the resulting product does not conform to the Buy America requirements. Additionally, products manufactured domestically from foreign source steel billets or iron ingots do not conform to the Buy America requirements because the initial melting and mixing of alloys to create the material occurred in a foreign country.

Manufacturing begins with the initial melting and mixing, and continues through the coating stage. Any process which modifies the chemical content, the physical size or shape, or the final finish is considered a manufacturing process. The processes include rolling, extruding, machining, bending, grinding, drilling, welding, and coating. The action of applying a coating to steel or iron is deemed a manufacturing process. Coating includes epoxy coating, galvanizing, aluminizing, painting, and any other coating that protects or enhances the value of steel or iron. Any process from the original reduction from ore to the finished product constitutes a manufacturing process for iron.

Due to a nationwide waiver, Buy America does not apply to raw materials (iron ore and alloys), scrap (recycled steel or iron), and pig iron or processed, pelletized, and reduced iron ore.

The following are considered to be steel manufacturing processes:

1. Production of steel by any of the following processes:
  - a. Open hearth furnace.
  - b. Basic oxygen.
  - c. Electric furnace.
  - d. Direct reduction.
2. Rolling, heat treating, and any other similar processing.

3. Fabrication of the products
  - a. Spinning wire into cable or strand.
  - b. Corrugating and rolling into culverts.
  - c. Shop fabrication.

A certification of materials origin will be required for any items comprised of, or containing, steel or iron construction materials prior to such items being incorporated into the permanent work. The certification shall be on DOT Form 350-109EF provided by the Engineer, or such other form the Contractor chooses, provided it contains the same information as DOT Form 350-109EF.

(\*\*\*\*\*)

The contract includes items containing foreign steel in the amount of \$13.76, which shall be deducted from the foreign steel exclusion of the contract.

## 1-06.6 Recycled Materials (January 4, 2016 APWA GSP)

*Delete this section, including its subsections, and replace it with the following:*

The Contractor shall make their best effort to utilize recycled materials in the construction of the project. Approval of such material use shall be as detailed elsewhere in the Standard Specifications.

Prior to Physical Completion the Contractor shall report the quantity of recycled materials that were utilized in the construction of the project for each of the items listed in Section 9-03.21. The report shall include hot mix asphalt, recycled concrete aggregate, recycled glass, steel furnace slag and other recycled materials (e.g. utilization of on-site material and aggregates from concrete returned to the supplier). The Contractor's report shall be provided on DOT form 350-075 Recycled Materials Reporting.

**END OF SECTION**