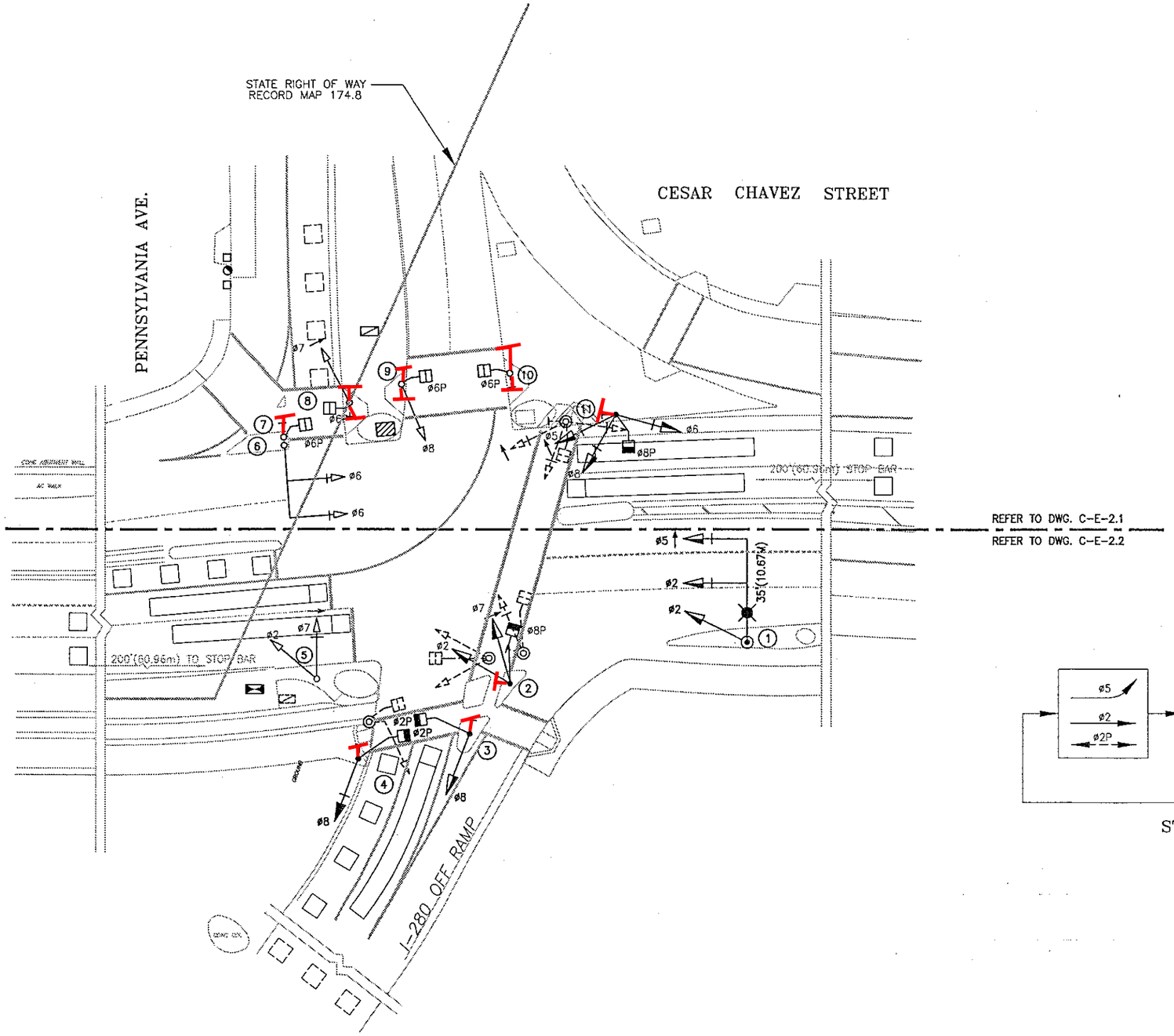


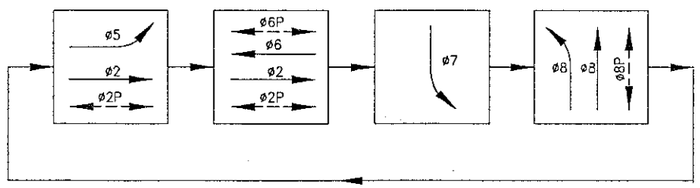


STEADY DEMAND SEQUENCE
PHASE DIAGRAM
(EXISTING TO REMAIN)

| NO. | DATE | DESCRIPTION | BY | APP. |
|---|---|---|---|---|
| 1 | 3-3-22 | CHANGE PPB TO APS PER SRC 2021-308 | D.Yeung | G. de Leon |

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**DEPARTMENT OF PUBLIC WORKS**
**CITY AND COUNTY OF SAN FRANCISCO**

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|---|---|
| DESIGNED: JM | DATE: 5/97 |
| DRAWN: DB/EF/JS | DATE: 5/97 |
| CHECKED: HLK | DATE: 5/97 |

APPROVED
SECTION MANAGER DATE:
DIVISION MANAGER DATE:
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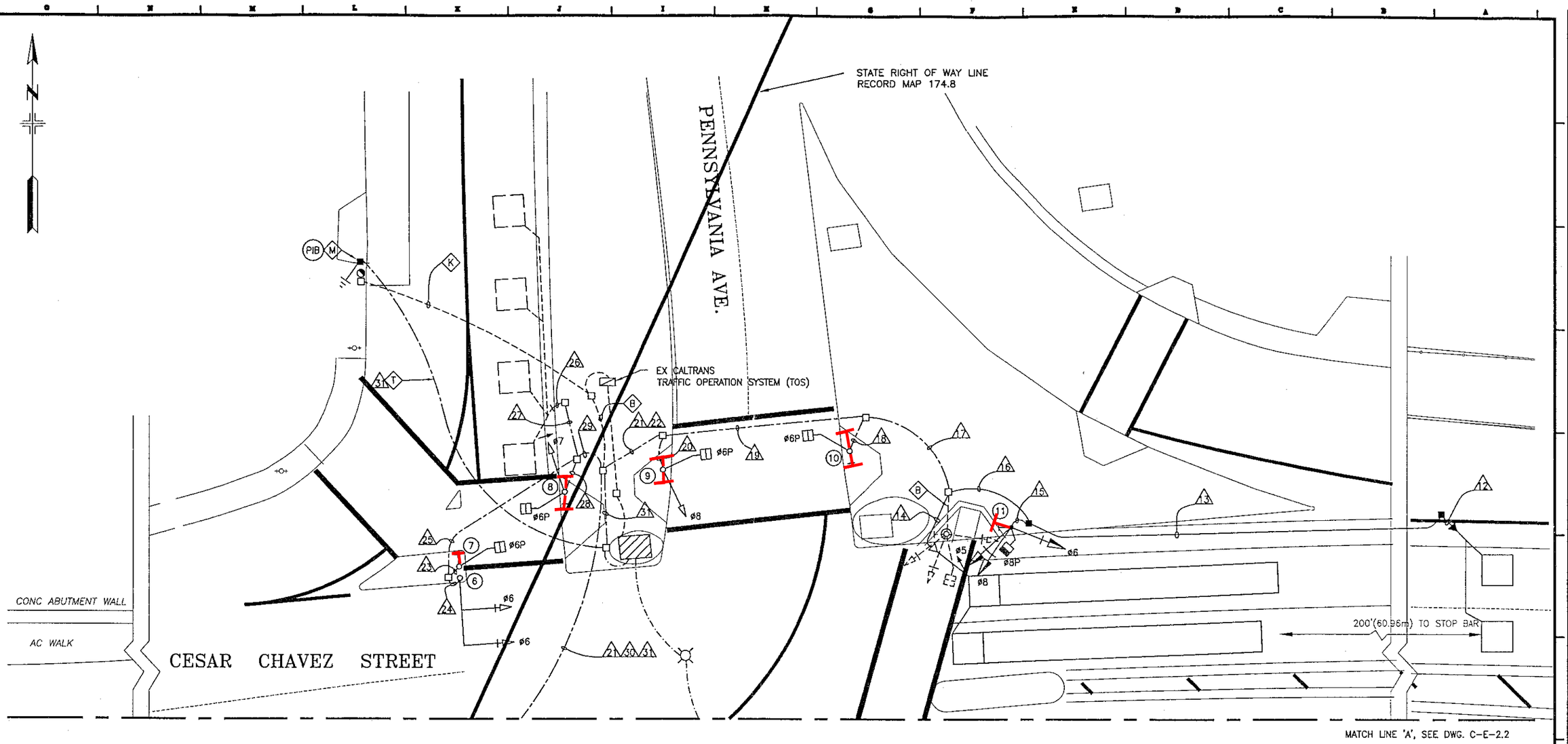
SCALE: 1"=20'-0"
SHEET OF SHEETS: 53 OF 88

SAN FRANCISCO
CESAR CHAVEZ WIDENING AND
BAYSHORE CHANNELIZATION PROJECTS

TRAFFIC SIGNAL IMPROVEMENTS
CESAR CHAVEZ ST./PENNSYLVANIA AVE. -

| | |
|---|---|
| SPECIFICATION NO. | 1109N |
| DRAWING NO. | C-E-2 |
| FILE NO. | 66,172 |
| REV. NO. | 1 |




## SHEET NOTES:

1. THE EXISTING CALTRANS OPERATING SYSTEM SHALL BE PROTECTED. ANY INTERRUPTION AND/OR DAMAGE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

## DETAIL NOTES:

- (B) EX CONDUIT AND WIRING. R/C EX WIRING. ABANDON CONDUIT IN PLACE.
- (K) R/C EX WIRES EXCEPT CALTRANS SERVICE WIRES.
- (M) F/I 40A FUSE AND WATER PROOF FUSE BOOT FOR TRAFFIC SIGNAL SERVICE.
- (N) R/C EX PULL BOX, RESTORE SIDEWALK OR PAVEMENT TO MATCH EX OR NEW CONDITION.
- (T) R/C EX WIRES EXCEPT STREET LIGHT WIRES. F/I WIRING AS SHOWN ON SHEDULE.

DRAWING INFORMATION:
FILE NAME: C-E-2.1
ORIGIN: ELECTRICAL
DATE: --/--/--

LIMITS: (0,0), (34',22')
PLOT SCALE: 1=120

| NO. | DATE | DESCRIPTION | BY | APP. |
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| 1 | 3-3-22 | CHANGE PPB TO APS PER SRC 2021-308 | D.Yeung | G.de Leon |

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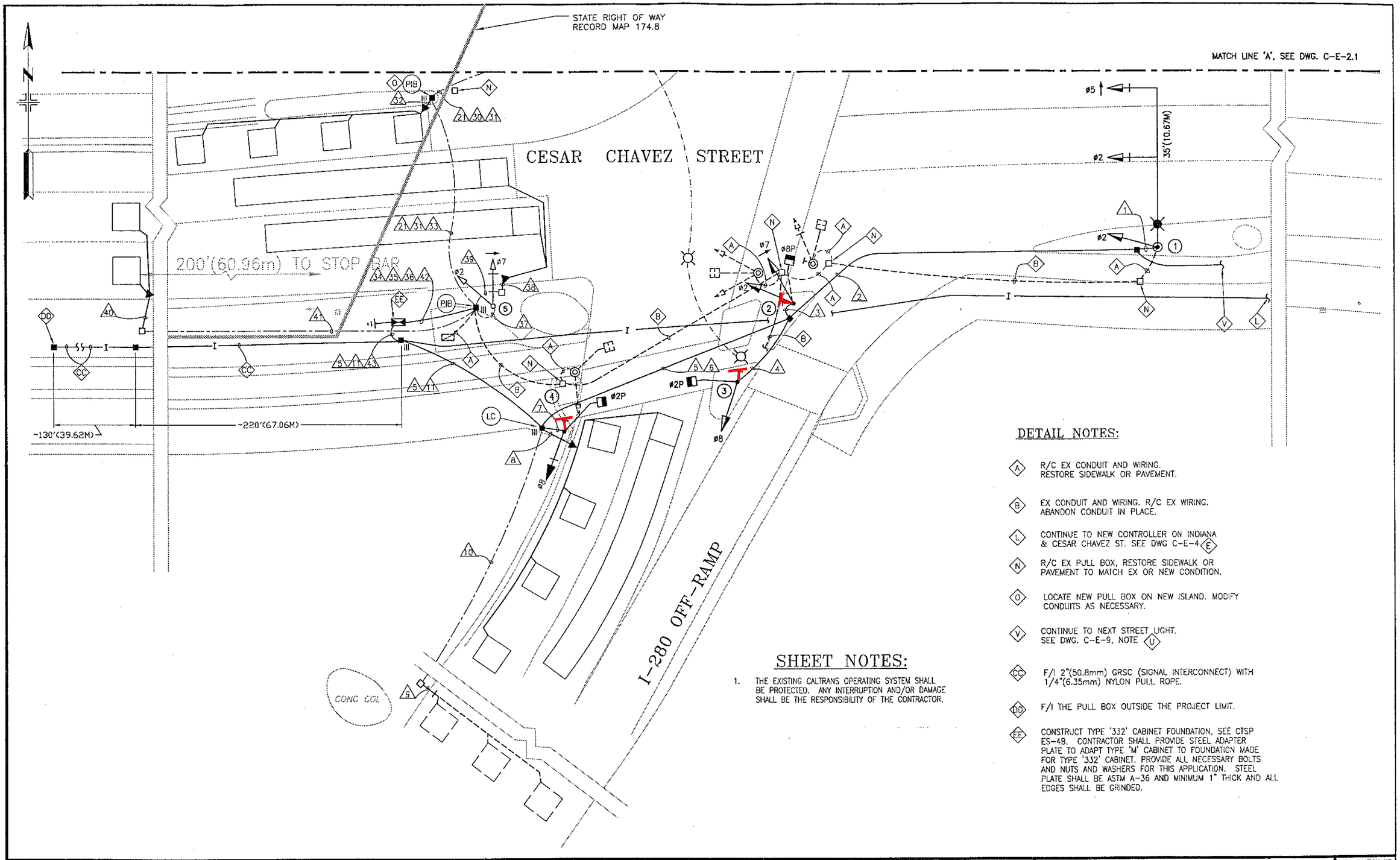
APPROVED
SECTION MANAGER DATE:
DIVISION MANAGER DATE:
CITY ENGINEER DATE:

SCALE: 1"=10'-0"
SHEET OF SHEETS: 54 OF 88

SAN FRANCISCO
CESAR CHAVEZ WIDENING AND
BAYSHORE CHANNELIZATION PROJECTS

TRAFFIC SIGNAL IMPROVEMENTS
CESAR CHAVEZ ST./PENNSYLVANIA AVE.

SPECIFICATION NO. 1109N
DRAWING NO. C-E-2.1
FILE NO. 66,173
REV. NO. 1




## DETAIL NOTES:

- (A) R/C EX CONDUIT AND WIRING. RESTORE SIDEWALK OR PAVEMENT.
- (B) EX CONDUIT AND WIRING. R/C EX WIRING. ABANDON CONDUIT IN PLACE.
- (L) CONTINUE TO NEW CONTROLLER ON INDIANA & CESAR CHAVEZ ST. SEE DWG C-E-4 (E)
- (N) R/C EX PULL BOX, RESTORE SIDEWALK OR PAVEMENT TO MATCH EX OR NEW CONDITION.
- (O) LOCATE NEW PULL BOX ON NEW ISLAND. MODIFY CONDUITS AS NECESSARY.
- (V) CONTINUE TO NEXT STREET LIGHT. SEE DWG. C-E-9, NOTE (U)
- (CC) F/I 2"(50.8mm) GRSC (SIGNAL INTERCONNECT) WITH 1/4"(6.35mm) NYLON PULL ROPE.
- (DD) F/I THE PULL BOX OUTSIDE THE PROJECT LIMIT.
- (EE) CONSTRUCT TYPE '332' CABINET FOUNDATION, SEE CTSP ES-4B. CONTRACTOR SHALL PROVIDE STEEL ADAPTER PLATE TO ADAPT TYPE 'M' CABINET TO FOUNDATION MADE FOR TYPE '332' CABINET. PROVIDE ALL NECESSARY BOLTS AND NUTS AND WASHERS FOR THIS APPLICATION. STEEL PLATE SHALL BE ASTM A-36 AND MINIMUM 1" THICK AND ALL EDGES SHALL BE GRINDED.

## SHEET NOTES:

1. THE EXISTING CALTRANS OPERATING SYSTEM SHALL BE PROTECTED. ANY INTERRUPTION AND/OR DAMAGE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

| NO. | DATE | DESCRIPTION | BY | APP. |
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| 1 | 3-3-22 | CHANGE PPB TO APS PER SRC 2021-308 | D. Yeung, G. de Leon | |

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SHEET OF SHEETS 55 OF 88

SAN FRANCISCO
CESAR CHAVEZ WIDENING AND
BAYSHORE CHANNELIZATION PROJECTS

TRAFFIC SIGNAL IMPROVEMENTS
CESAR CHAVEZ ST./PENNSYLVANIA AVE.

| | |
|---|---|
| SPECIFICATION NO. | 1109N |
| DRAWING NO. | C-E-2.2 |
| FILE NO. | 66,174 |
| REV. NO. | 1 |

# 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 | 41 | 42 | 43 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CONDUIT SIZE (INCH) | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | EX | EX | 2 | 2 | 2 | 2 | 2 | 2 | EX | EX | EX | EX | EX | EX | EX | EX | EX | EX | EX | EX | EX | EX | EX | EX | 2 | 2 | 1 1/2 | EX | 2 | EX | 2 | EX | 2 | 2 |
| | CONDUIT SIZE (mm) | 50.8 | 50.8 | 50.8 | 50.8 | 50.8 | 50.8 | 50.8 | 50.8 | | | 50.8 | 50.8 | 50.8 | 50.8 | 50.8 | 50.8 | | | | | | | | | | | | | | | | | | | 50.8 | 50.8 | 38.1 | | 50.8 | | 50.8 | | 50.8 | 50.8 |
| WIRING (F/I) | #14 WIRES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SIGNAL ø2 | 3 | 3 | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SIGNAL ø5 | 3 | 3 | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SIGNAL ø2 | 3 | 3 | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SIGNAL ø8P | | | 2 | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SIGNAL ø7 | | | 3 | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SIGNAL ø2 | | | 3 | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PPB | | | 2 | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SIGNAL ø2P | | | | 2 | | 2 | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SIGNAL ø8 | | | | 3 | | 3 | | | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PPB | | | | 2 | | 2 | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SIGNAL ø8 | | | | | | | 3 | | | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SIGNAL ø2P | | | | | | | 2 | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PPB | | | | | | | 2 | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SIGNAL ø6 | | | | | | | | | | | | | | | 3 | 3 | 3 | | 3 | | 3 | | | | | | | | | | | | | | 3 | | | | | | | | | |
| | SIGNAL ø8P | | | | | | | | | | | | | | | 2 | 2 | 2 | | 2 | | 2 | | | | | | | | | | | | | | 2 | | | | | | | | | |
| | SIGNAL ø8 | | | | | | | | | | | | | | | 3 | 3 | 3 | | 3 | | 3 | | | | | | | | | | | | | | 3 | | | | | | | | | |
| | SIGNAL ø5 | | | | | | | | | | | | | | | 3 | 3 | 3 | | 3 | | 3 | | | | | | | | | | | | | | 3 | | | | | | | | | |
| | PPB | | | | | | | | | | | | | | | 2 | 2 | 2 | | 2 | | 2 | | | | | | | | | | | | | | 2 | | | | | | | | | |
| | EX SIGNAL ø6P | | | | | | | | | | | | | | | | | | 2 | 2 | | 2 | | | | | | | | | | | | | | 2 | | | | | | | | | |
| | EX PPB | | | | | | | | | | | | | | | | | | 2 | 2 | | 2 | | | | | | | | | | | | | | 2 | | | | | | | | | |
| | EX SIGNAL ø6P | | | | | | | | | | | | | | | | | | | | 2 | 2 | | | | | | | | | | | | | | 2 | | | | | | | | | |
| | EX PPB | | | | | | | | | | | | | | | | | | | | 2 | 2 | | | | | | | | | | | | | | 2 | | | | | | | | | |
| | EX SIGNAL ø8 | | | | | | | | | | | | | | | | | | | | 3 | 3 | | | | | | | | | | | | | | 3 | | | | | | | | | |
| | EX SIGNAL ø6P | | | | | | | | | | | | | | | | | | | | | | | 2 | | 2 | | | | 2 | 2 | | | 2 | | 2 | | | | | | | | |
| | EX PPB | | | | | | | | | | | | | | | | | | | | | | | 2 | | 2 | | | | 2 | 2 | | | 2 | | 2 | | | | | | | | |
| | EX SIGNAL ø6 | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3 | | | | 3 | 3 | | | 3 | | 3 | | | | | | | | |
| | EX SIGNAL ø6 | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3 | | | | 3 | 3 | | | 3 | | 3 | | | | | | | | |
| | EX SIGNAL ø7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 3 | 3 | | | 3 | | 3 | | | | | | | | |
| | EX PPB | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | | | 2 | | 2 | | | | | | | | |
| | EX SIGNAL ø6P | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | | | 2 | | 2 | | | | | | | | |
| | EX SIGNAL ø2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | | | | | 3 | | |
| | EX SIGNAL ø7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | . | | | | 3 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SPARE | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | | | 3 | | | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | | | 3 | 3 | 3 | | | 3 | 3 | 3 | | 3 | | | | | 3 | | |
| | TOTAL #14 WIRES | 12 | 12 | 13 | 10 | 22 | 10 | 10 | | | | 17 | | | | 16 | 16 | 16 | 7 | 20 | 10 | 27 | | 7 | 9 | 13 | | | 10 | 20 | 20 | | | 20 | 27 | 20 | | 9 | | | | | 9 | | |
| | #10 WIRES NEUTRAL | 3 | 1 | 2 | 2 | 1 | 1 | 2 | | | | 1 | | | | 2 | 1 | 1 | 1 | 2 | 2 | 1 | | 1 | 2 | 1 | | | 2 | 1 | 1 | | | 1 | 1 | 1 | | 1 | | | | | 1 | | |
| | #8 WIRES (120V SERVICE) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | 2 | | | | | | | |
| | #8 WIRES (STREET LTG) | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DETECTOR WIRES | | | | | | | | 10 | 6 | | | 4 | | 4 | | | | | | | | | | | | 8 | | | | | | 8 | | | | | 4 | | 4 | | | | |
| | DETECTOR LEAD-IN CABLE | | | | | | | | | | 3 | 5 | | 2 | | | 2 | 4 | | 4 | | | 4 | | | | | 1 | | 1 | 5 | | | 7 | | 7 | | | 2 | | 2 | 4 | | | |
| | 12-CONDUCTOR CABLE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | |
| | 1/4"(6.35mm)PULL ROPE | | | | | 1 | 1 | | | | | 1 | | | | | | | | 1 | | 1 | | | | | | | | | 1 | | | 1 | | | | | | | | | | |

| NO. | DATE | DESCRIPTION | BY | APP. |
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SCALE: NONE
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SAN FRANCISCO
CESAR CHAVEZ WIDENING AND
BAYSHORE CHANNELIZATION PROJECTS
TRAFFIC SIGNAL IMPROVEMENTS
CESAR CHAVEZ ST./PENNSYLVANIA ST.
SCHEDULE

SPECIFICATION NO. 1109N
DRAWING NO. C-E-3
FILE NO. 66,175
REV. NO.