

**RAILROAD MAINTENANCE AGREEMENT
FOR THE PENINSULA CORRIDOR ELECTRIFICATION PROJECT IN THE CITY
OF SAN JOSÉ**

THIS AGREEMENT is made effective this _____ day of _____, 2020, by and between the City of San Jose, hereinafter referred to as “CITY” and the Peninsula Corridor Joint Powers Board, a joint powers agency created under Government Code Section 6500 et seq., hereinafter referred to as “JPB” and collectively referred to as “PARTIES.”

SECTION I

RECITALS

1. WHEREAS, CITY is a government entity which owns lands and property rights for public roadway purposes and is responsible for the planning, construction and maintenance of its street system; and
2. WHEREAS, the JPB operates the Caltrain commuter rail system, for which it owns the right of way between San Francisco and San Jose (Caltrain Right-of-Way), and upon which it is developing the Peninsula Corridor Electrification Project (PCEP), which will electrify the rail operation on the Caltrain Right-of-Way; and
3. WHEREAS, the CITY and JPB entered into that certain Comprehensive Agreement, dated as of September 27, 2016, regarding the PCEP; and
4. WHEREAS, as noted in the Comprehensive Agreement, the PCEP will utilize certain portions of CITY's streets and roadways pursuant to Public Utilities Code §103282; and
5. WHEREAS, the PCEP requires the installation of certain enhanced barriers on certain public street overcrossings ("Overcrossings") over the Caltrain Right-of-Way, in order to separate the overhead roadway from the electrified rail system; and
6. WHEREAS, the PCEP will be attaching certain fixtures to the underside of the Overcrossings at West Hedding Street and West San Carlos Street which will require the installation of safety barriers; and
7. WHEREAS, the PCEP will be installing additional PCEP Facilities on City right of way, including electrical ductbanks, overhead catenary poles and wires, and connection to City's storm drain system; and
8. WHEREAS, PARTIES desire to address the long-term maintenance and operational responsibilities of PCEP facilities, fixtures and safety barriers (collectively, the "Facilities") that are located on the Overcrossings.

NOW THEREFORE IT IS AGREED:

SECTION II

AGREEMENT

1. JPB agrees to maintain the safety bridge screening on bridge structures, overhead catenary system attachments underneath bridge structures, overhead catenary poles and wires, electrical ductbanks, and connection to City's storm drain system shown on the map and photographs attached hereto, marked Exhibit A, and made a part hereof by this reference.
2. JPB must obtain the necessary encroachment permits from CITY prior to entering CITY right of way to perform JPB maintenance responsibilities on the roadways or to make modifications to the PCEP Facilities that will affect CITY structure or roadway. JPB or its contractor will pay all fees associated with the permit application and inspection.
3. VEHICULAR AND PEDESTRIAN OVERCROSSINGS
 - 3.1. CITY will continue to inspect and maintain, at CITY expense, the entire structure of any CITY constructed vehicular and pedestrian overcrossings of the JPB Right-of-Way.
 - 3.2. JPB will inspect and maintain, at JPB expense, safety barriers on the overcrossings and any PCEP fixtures attached to the underside of the overcrossings. JPB shall reimburse CITY for any costs related to the removal and reattachment of PCEP Facilities to Overcrossing structures, should such structures require reconstruction. JPB will also keep the PCEP Facilities reasonably free of debris and graffiti.
 - 3.3. CITY will perform emergency repairs and maintenance of any safety barriers that are damaged and require repairs or maintenance work in order to protect public safety or the orderly operation of the public roadway. JPB will be responsible for reimbursing CITY for the cost of such emergency repairs and maintenance that are not recovered from third parties who have caused the damage.
 - 3.4. CITY may contact JPB at the following numbers:
 - Accidents/Emergencies: Caltrain Emergency Dispatch San Jose (Central Control Facility-CCF) 408-271-4987
 - Routine Maintenance: Deputy Director, Rail Infrastructure 650-508-7780
 - Future Improvements: Deputy Director, Capital Program Delivery, 650-508-7783
4. LEGAL RELATIONS AND RESPONSIBILITIES
 - 4.1. Nothing within the provisions of this Agreement is intended to create duties or obligations to or rights in third parties not PARTIES to this Agreement or to affect the legal liability of a PARTY to the Agreement by imposing any standard of care with respect to the operation and maintenance of CITY roadways and local facilities different from the standard of care imposed by law.

- 4.2. Neither JPB nor any officer or employee thereof is responsible for any injury, damage or liability occurring by reason of anything done or omitted to be done by CITY, under or in connection with any work, authority or jurisdiction conferred upon CITY arising under this Agreement. It is understood and agreed that CITY shall fully defend, indemnify and save harmless JPB and all of their officers and employees from all claims, suits or actions of every name, kind and description brought forth under, including, but not limited to, tortious, contractual, inverse condemnation and other theories or assertions of liability occurring by reason of anything done or omitted to be done by CITY under this Agreement.
- 4.3. Neither CITY nor any officer or employee thereof is responsible for any injury, damage or liability occurring by reason of anything done or omitted to be done by JPB under or in connection with any work, authority or jurisdiction conferred upon JPB and arising under this Agreement. It is understood and agreed that JPB shall fully defend, indemnify and save harmless CITY and all of its officers and employees from all claims, suits or actions of every name, kind and description brought forth under, including, but not limited to, tortious, contractual, inverse condemnation or other theories or assertions of liability occurring by reason of anything done or omitted to be done by JPB under this Agreement.
5. INSURANCE - JPB and its contractors shall maintain in force, during the term of this agreement, a policy of general liability insurance, including coverage of bodily injury liability and property damage liability, naming the CITY, its officers, agents and employees as the additional insured in an amount of \$1 million per occurrence and \$2 million in aggregate and \$5 million in excess. Coverage shall be evidenced by a certificate of insurance in a form satisfactory to the CITY that shall be delivered to the CITY with a signed copy of this Agreement.
6. TERMINATION - This Agreement may be terminated by timely mutual written consent by PARTIES, and JPB's failure to comply with the provisions of this Agreement may be grounds for a Notice of Termination by CITY.
7. TERM OF AGREEMENT - This Agreement shall become effective on the date first shown on its face sheet and shall remain in full force and effect until amended or terminated at any time upon mutual consent of the PARTIES or until terminated by CITY for cause.

PARTIES are empowered by law to enter into this Agreement and have delegated to the undersigned the authority to execute this Agreement on behalf of the respective agencies and covenants to have followed all the necessary legal requirements to validly execute this Agreement.

IN WITNESS WHEREOF, PARTIES hereto have set their hands and seals the day and year first above written.

PENINSULA CORRIDOR JOINT
POWERS BOARD

CITY OF SAN JOSE

By: _____
Executive Director

By: _____
City Clerk

Approved as to form:

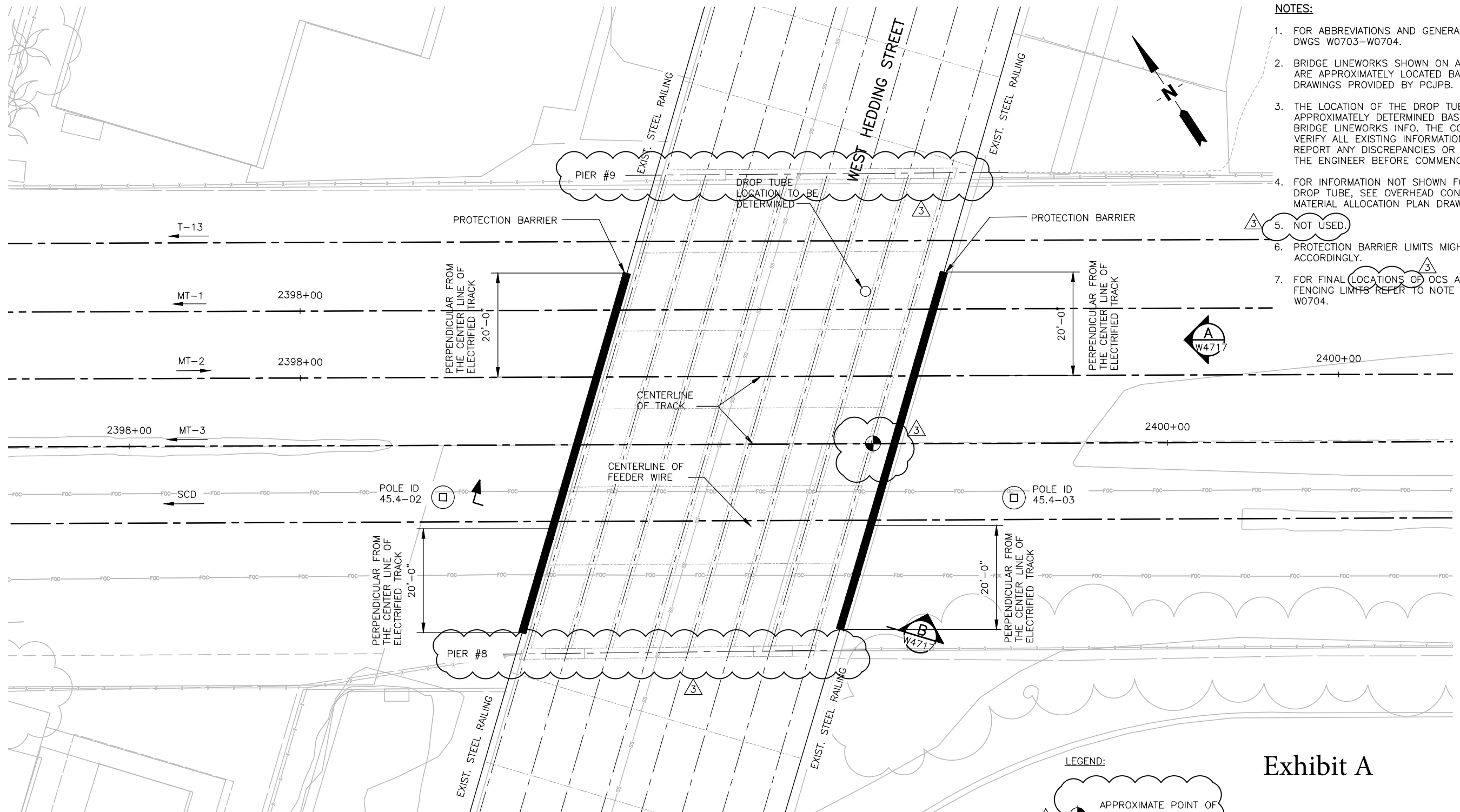
Approved as to form:

By: _____
JPB Attorney

By: _____
City Attorney

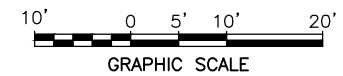
NOTES:

- FOR ABBREVIATIONS AND GENERAL NOTES, SEE DWGS W0703-W0704.
- BRIDGE LINWORKS SHOWN ON ALL THE DRAWINGS ARE APPROXIMATELY LOCATED BASED ON AS-BUILT DRAWINGS PROVIDED BY PCJPB.
- THE LOCATION OF THE DROP TUBES ARE APPROXIMATELY DETERMINED BASED ON AVAILABLE BRIDGE LINWORKS INFO. THE CONTRACTOR SHALL VERIFY ALL EXISTING INFORMATION AND SHALL REPORT ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER BEFORE COMMENCING WORK.
- FOR INFORMATION NOT SHOWN FOR OCS POLE AND DROP TUBE, SEE OVERHEAD CONTACT SYSTEM, OCS MATERIAL ALLOCATION PLAN DRAWINGS.
- NOT USED.
- PROTECTION BARRIER LIMITS MIGHT BE ADJUSTED ACCORDINGLY.
- FOR FINAL LOCATIONS OF OCS ATTACHMENTS AND FENCING LIMITS REFER TO NOTE 19 ON DWG W0704.



OVERHEAD BRIDGE PLAN

SCALE: 1"=10'



LEGEND:

- OCS DROP TUBE (NOT TO SCALE)
- POLE (NOT TO SCALE)
- △ APPROXIMATE POINT OF EXISTING MINIMUM VERTICAL CLEARANCE (SEE GENERAL NOTE 21 ON DWG W0704)

Exhibit A

CALTRANS INFORMATION	
BRIDGE NAME:	HEDDING STREET OH/HEDDING STREET
BRIDGE NUMBER:	37C0279
DIST-COUNTY-ROUTE-PM:	
CALTRANS EA:	04-1K9904
CALTRANS PID:	0416000339
CALTRANS DESIGN OVERSIGHT	SIGN OFF DATE

CDRL34710

REV	DATE	BY	SUB	APP	DESCRIPTION
3	110918				REVISED, DCN 058
2	072318				REVISED, DCN 041
1	031518				REVISED, DCN 020
0	121817				ISSUED FOR CONSTRUCTION

DESIGNED
W. CHOO
DRAWN
R. FERRO
CHECKED
M. YU
IN CHARGE
M. YU
DATE
11092018



Balfour Beatty Infrastructure Inc.
PGH WONG ENGINEERING INC.
AMC CONSULTING ENGINEERS, INC.

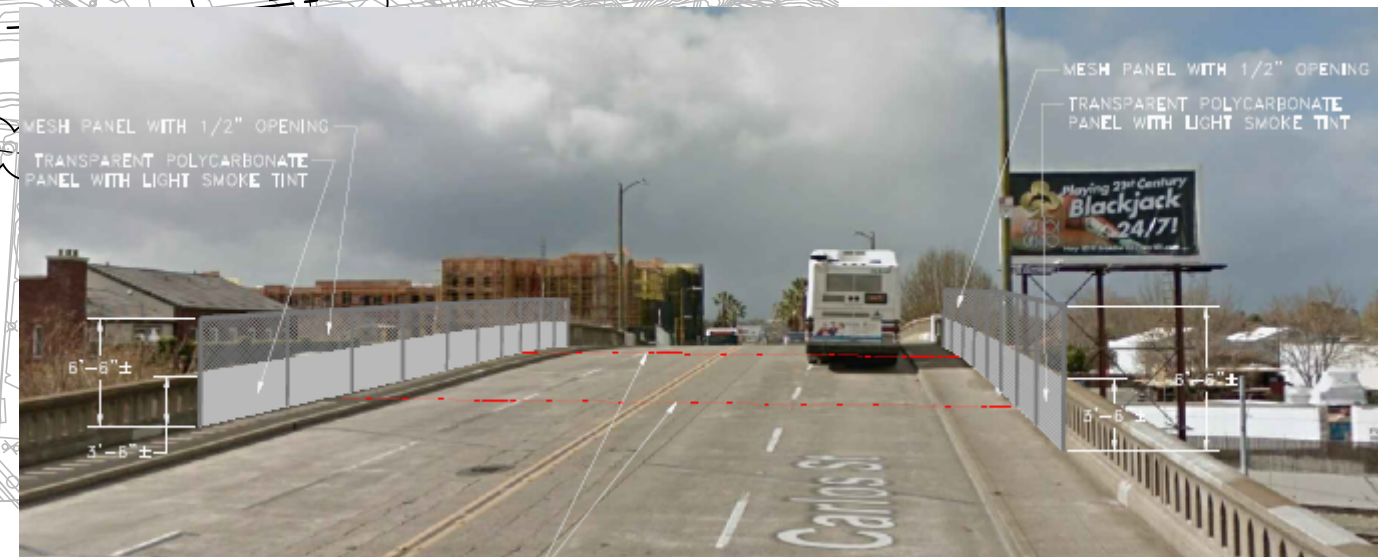
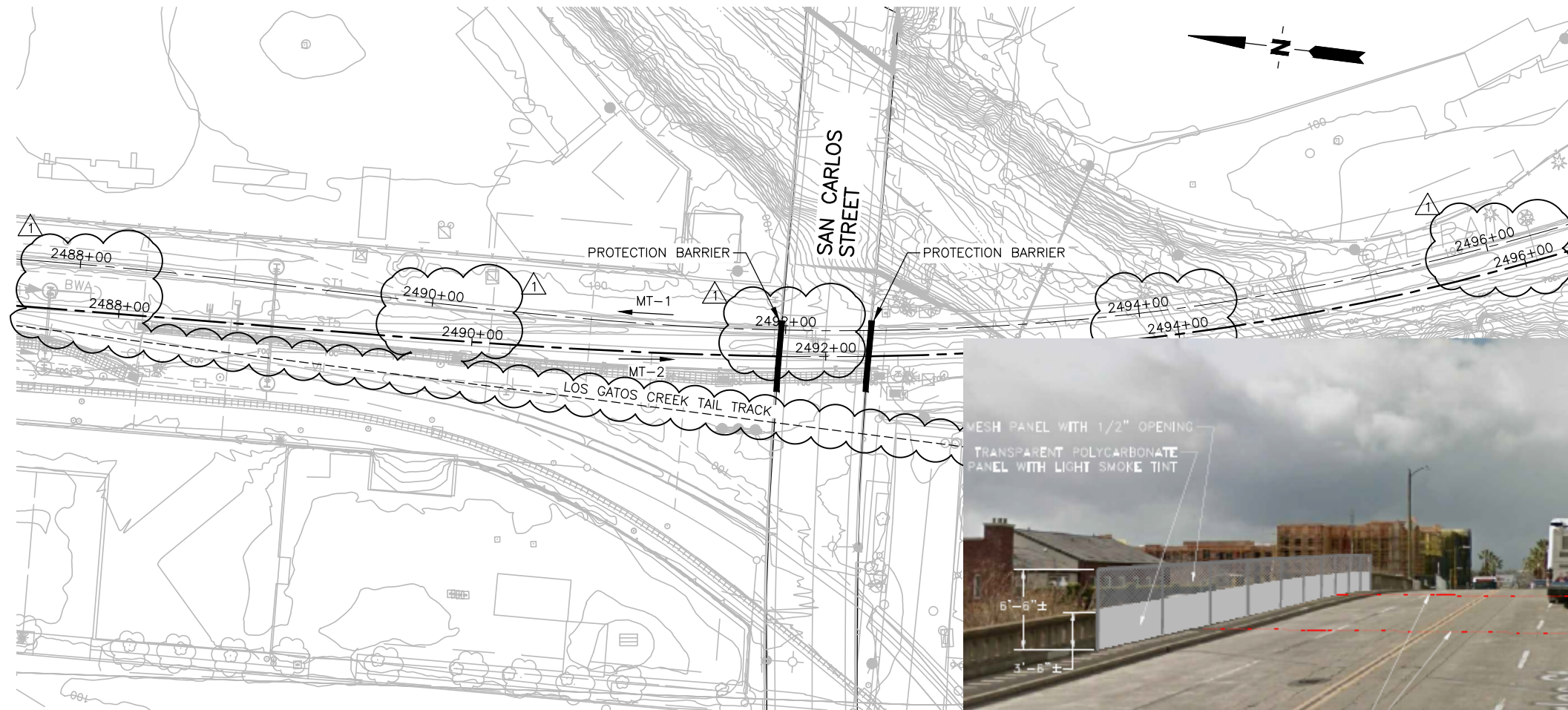


DEPUTY DIRECTOR
PROJECT MANAGEMENT
STRUCTURES
TRACK/CIVIL

PENINSULA CORRIDOR JOINT POWERS BOARD
ELECTRIFICATION PROJECT
HEDDING STREET
HEDDING STREET OVERHEAD
BRIDGE NO. 37C0279
OVERHEAD PLAN

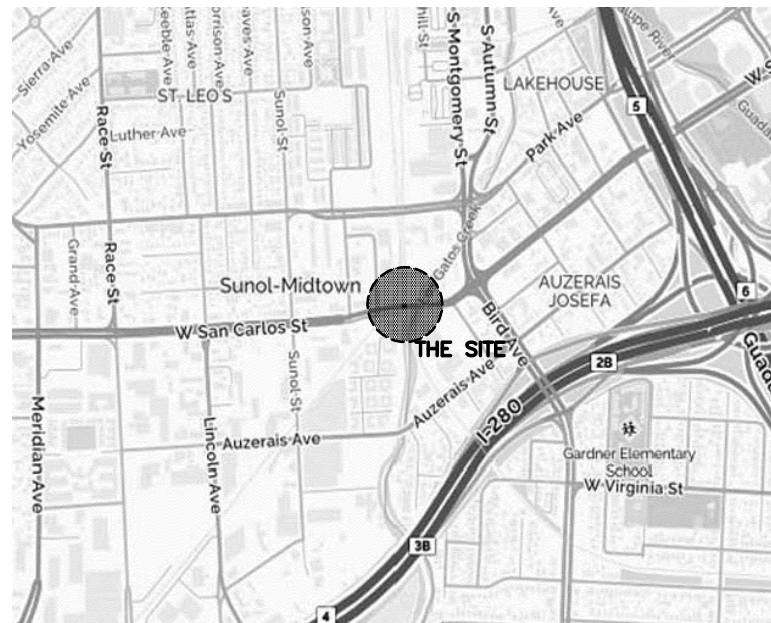
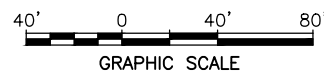
CADD FILE NAME	CADD DATE
TEEW4716	11092018
SCALE	1"=10'
CONTRACT NO	MILEPOST
14-PCJPB-P-053	
DWG NO	REV
W4716	3
PAGE NO	40

c:\bmsa\pgh-pw\maria.dade\dms09493\TEEW4716.dwg



SITE PLAN

SCALE: 1"=40'



LOCATION PLAN

N. T. S.

Exhibit A

CALTRANS INFORMATION	
BRIDGE NAME:	LOS GATOS CREEK BOH/SAN CARLOS STREET
BRIDGE NUMBER:	37C0195
DIST-COUNTY-ROUTE-PM:	
CALTRANS EA:	04-1K9904
CALTRANS PID:	0416000339
CALTRANS DESIGN OVERSIGHT	SIGN OFF DATE

CDRL34710

REV	DATE	BY	SUB	APP	DESCRIPTION
0	031518				REVISED, DCN 020
1	121817				ISSUED FOR CONSTRUCTION
2	40272	1770974			

DESIGNED	W. CHOO
DRAWN	R. FERRO
CHECKED	M. YU
IN CHARGE	M. YU
DATE	03142018



Balfour Beatty Infrastructure Inc.
 WSG PGM WONG ENGINEERING INC.
 AMC CONSULTING ENGINEERS, INC.
 APPROVED

Caltrain.
 1250 San Carlos Avenue
 San Carlos, CA 94070

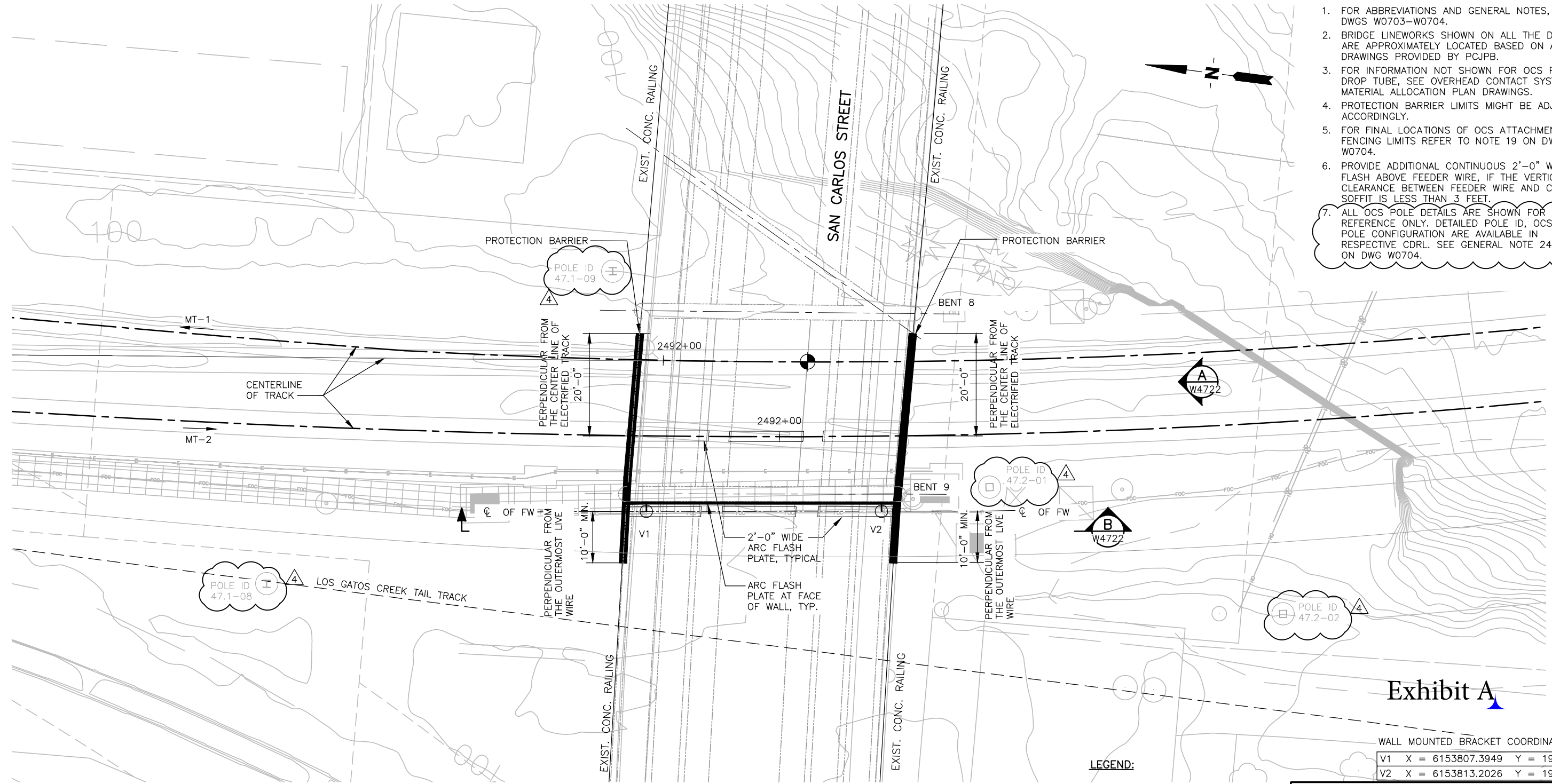
DEPUTY DIRECTOR
PROJECT MANAGEMENT
STRUCTURES
TRACK/CIVIL

PENINSULA CORRIDOR JOINT POWERS BOARD

**ELECTRIFICATION PROJECT
 SAN CARLOS STREET
 LOS GATOS CREEK BOH
 BRIDGE NO. 37C0195
 SITE PLAN**

CADD FILE NAME	TEEW4720	CADD DATE	03142018
SCALE	1"=40'	CONTRACT NO	14-PCJPB-P-053
DWG NO	W4720	REV	1
MILEPOST		PAGE NO	42

- NOTES:**
- FOR ABBREVIATIONS AND GENERAL NOTES, SEE DWGS W0703-W0704.
 - BRIDGE LINWORKS SHOWN ON ALL THE DRAWINGS ARE APPROXIMATELY LOCATED BASED ON AS-BUILT DRAWINGS PROVIDED BY PCJPB.
 - FOR INFORMATION NOT SHOWN FOR OCS POLE AND DROP TUBE, SEE OVERHEAD CONTACT SYSTEM, OCS MATERIAL ALLOCATION PLAN DRAWINGS.
 - PROTECTION BARRIER LIMITS MIGHT BE ADJUSTED ACCORDINGLY.
 - FOR FINAL LOCATIONS OF OCS ATTACHMENTS AND FENCING LIMITS REFER TO NOTE 19 ON DWG W0704.
 - PROVIDE ADDITIONAL CONTINUOUS 2'-0" WIDE ARC FLASH ABOVE FEEDER WIRE, IF THE VERTICAL CLEARANCE BETWEEN FEEDER WIRE AND CONCRETE SOFFIT IS LESS THAN 3 FEET.
 - ALL OCS POLE DETAILS ARE SHOWN FOR REFERENCE ONLY. DETAILED POLE ID, OCS AND POLE CONFIGURATION ARE AVAILABLE IN RESPECTIVE CDRL. SEE GENERAL NOTE 24 AND 25 ON DWG W0704.



OVERHEAD BRIDGE PLAN
SCALE: 1"=10'
GRAPHIC SCALE

LEGEND:

- APPROXIMATE POINT OF EXISTING MINIMUM VERTICAL CLEARANCE (SEE GENERAL NOTE 21 ON DWG W0704)
- WALL MOUNTED BRACKET (NOT TO SCALE)
- POLE FOR REFERENCE ONLY (NOT TO SCALE)

Exhibit A

WALL MOUNTED BRACKET COORDINATES

V1	X = 6153807.3949	Y = 1943559.9340
V2	X = 6153813.2026	Y = 1943514.4307

CALTRANS INFORMATION	
BRIDGE NAME:	LOS GATOS CREEK BOH/SAN CARLOS STREET
BRIDGE NUMBER:	35C0195
DIST-COUNTY-ROUTE-PM:	
CALTRANS EA:	04-1K9904
CALTRANS PID:	0416000339
CALTRANS DESIGN OVERSIGHT:	SIGN OFF DATE

CDRL34710

REV	DATE	BY	SUB	APP	DESCRIPTION	REV	DATE	BY	SUB	APP	DESCRIPTION
4	030119				REVISED, DCN 097						
3	110918				REVISED, DCN 058						
2	072318				REVISED, DCN 041						
1	031518				REVISED, DCN 020						
0	121817				ISSUED FOR CONSTRUCTION						

DESIGNED
W. CHOO
DRAWN
R. FERRO
CHECKED
M. YU
IN CHARGE
M. YU
DATE
03012019



Balfour Beatty Infrastructure Inc.
PGH WONG ENGINEERING INC.
AMC CONSULTING ENGINEERS, INC.

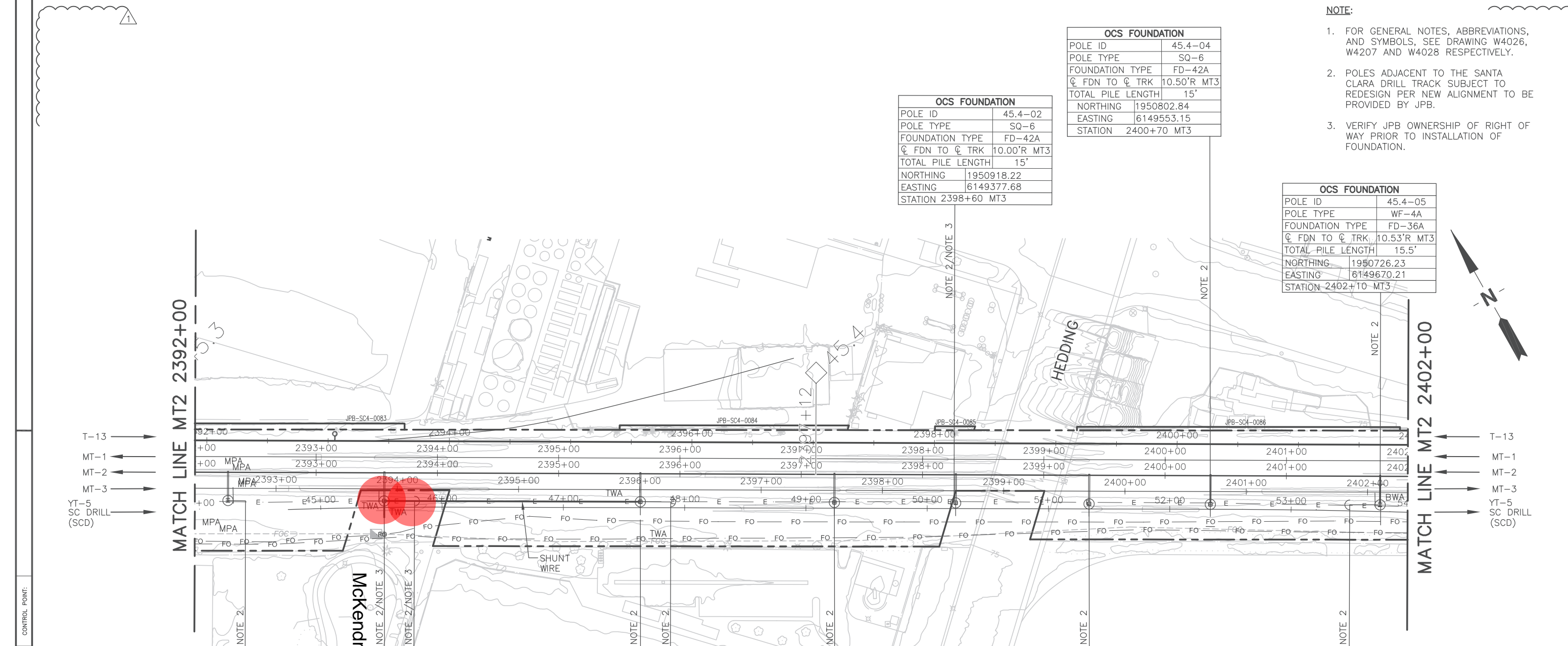
Caltrain.
1250 San Carlos Avenue
San Carlos, CA 94070

DEPUTY DIRECTOR
PROJECT MANAGEMENT
STRUCTURES
TRACK/CIVIL

PENINSULA CORRIDOR JOINT POWERS BOARD
ELECTRIFICATION PROJECT
SAN CARLOS STREET
LOS GATOS CREEK BOH
BRIDGE NO. 35C0195
OVERHEAD PLAN

CADD FILE NAME	TEEW4721	CADD DATE	03012019
SCALE	1"=10'	CONTRACT NO	14-PCJPB-P-053
DWG NO	W4721	REV	4
		PAGE NO	43

AMC Mar 08, 2019 12:19pm C:\bms\pgh-pw\mario.dada\dms094933\TEEW4721.dwg



OCS FOUNDATION	
POLE ID	45.4-04
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	10.50'R MT3
TOTAL PILE LENGTH	15'
NORTHING	1950918.22
EASTING	6149553.15
STATION	2400+70 MT3

OCS FOUNDATION	
POLE ID	45.4-02
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	10.00'R MT3
TOTAL PILE LENGTH	15'
NORTHING	1950918.22
EASTING	6149377.68
STATION	2398+60 MT3

OCS FOUNDATION	
POLE ID	45.4-05
POLE TYPE	WF-4A
FOUNDATION TYPE	FD-36A
☐ FDN TO ☐ TRK	10.53'R MT3
TOTAL PILE LENGTH	15.5'
NORTHING	1950726.23
EASTING	6149670.21
STATION	2402+10 MT3

OCS FOUNDATION	
POLE ID	45.3-01
POLE TYPE	WF-4A
FOUNDATION TYPE	FD-36A
☐ FDN TO ☐ TRK	10.00'R MT3
TOTAL PILE LENGTH	15.5'
NORTHING	1951246.69
EASTING	6148875.57
STATION	2392+60 MT3

DOWN GUY FOUNDATION	
POLE ID	45.3-D01
POLE TYPE	-
FOUNDATION TYPE	DG-2
☐ FDN TO ☐ TRK	10.00'R MT3
TOTAL PILE LENGTH	12'
NORTHING	1951162.44
EASTING	6149004.33
STATION	2394+14 MT3

DOWN GUY FOUNDATION	
POLE ID	45.3-D02
POLE TYPE	-
FOUNDATION TYPE	DG-1
☐ FDN TO ☐ TRK	10.00'R MT3
TOTAL PILE LENGTH	12'
NORTHING	1951046.86
EASTING	6149181.02
STATION	2396+25 MT3

DOWN GUY FOUNDATION	
POLE ID	45.4-D01
POLE TYPE	-
FOUNDATION TYPE	DG-2
☐ FDN TO ☐ TRK	10.50'R MT3
TOTAL PILE LENGTH	12'
NORTHING	1950739.94
EASTING	6149649.30
STATION	2401+85 MT3

OCS FOUNDATION	
POLE ID	45.3-02
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	10.00'R MT3
TOTAL PILE LENGTH	15'
NORTHING	1951176.14
EASTING	6148983.41
STATION	2393+89 MT3

OCS FOUNDATION	
POLE ID	45.3-03
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	10.00'R MT3
TOTAL PILE LENGTH	15'
NORTHING	1951060.55
EASTING	6149160.10
STATION	2396+00 MT3

OCS FOUNDATION	
POLE ID	45.4-01
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	10.00'R MT3
TOTAL PILE LENGTH	15'
NORTHING	1950972.97
EASTING	6149294.00
STATION	2397+60 MT3

OCS FOUNDATION	
POLE ID	45.4-03
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	10.50'R MT3
TOTAL PILE LENGTH	15'
NORTHING	1950857.58
EASTING	6149469.46
STATION	2399+71 MT3

- NOTE:**
- FOR GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS, SEE DRAWING W4026, W4207 AND W4028 RESPECTIVELY.
 - POLES ADJACENT TO THE SANTA CLARA DRILL TRACK SUBJECT TO REDESIGN PER NEW ALIGNMENT TO BE PROVIDED BY JPB.
 - VERIFY JPB OWNERSHIP OF RIGHT OF WAY PRIOR TO INSTALLATION OF FOUNDATION.

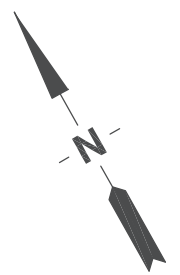


Exhibit A



COUNTY: CITY: CONTROL POINT:

REV	DATE	BY	SUB	APP	DESCRIPTION
0	12/21/17				ISSUED FOR CONSTRUCTION
1	09/13/18				REVISED, DCN-023

DESIGNED
M. QUIJANO
 DRAWN
B. JEFFERS
 CHECKED
B. HO
 IN CHARGE
J. KATZ
 DATE
12/01/17



Balfour Beatty
 Infrastructure Inc.
 PGH WONG
 ENGINEERING INC.
 APPROVED

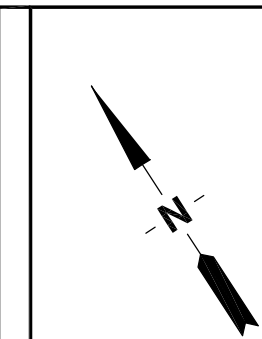


DEPUTY DIRECTOR
 PROJECT MANAGEMENT
 STRUCTURES
 TRACK/CIVIL

PENINSULA CORRIDOR JOINT POWERS BOARD
 ELECTRIFICATION PROJECT
 OVERHEAD CONTACT SYSTEM
 FOUNDATION AND POLE LAYOUT PLAN
 STA 2392+00 TO STA 2402+00
 SEGMENT 4A.Z1

CDRL34631	
CADD FILE NAME	TEEW4209
CADD DATE	11/11/2016
SCALE	1:40
CONTRACT NO	14-PCJPB-P-053
MILEPOST	
DWG NO	W4209
REV	1
PAGE NO	14

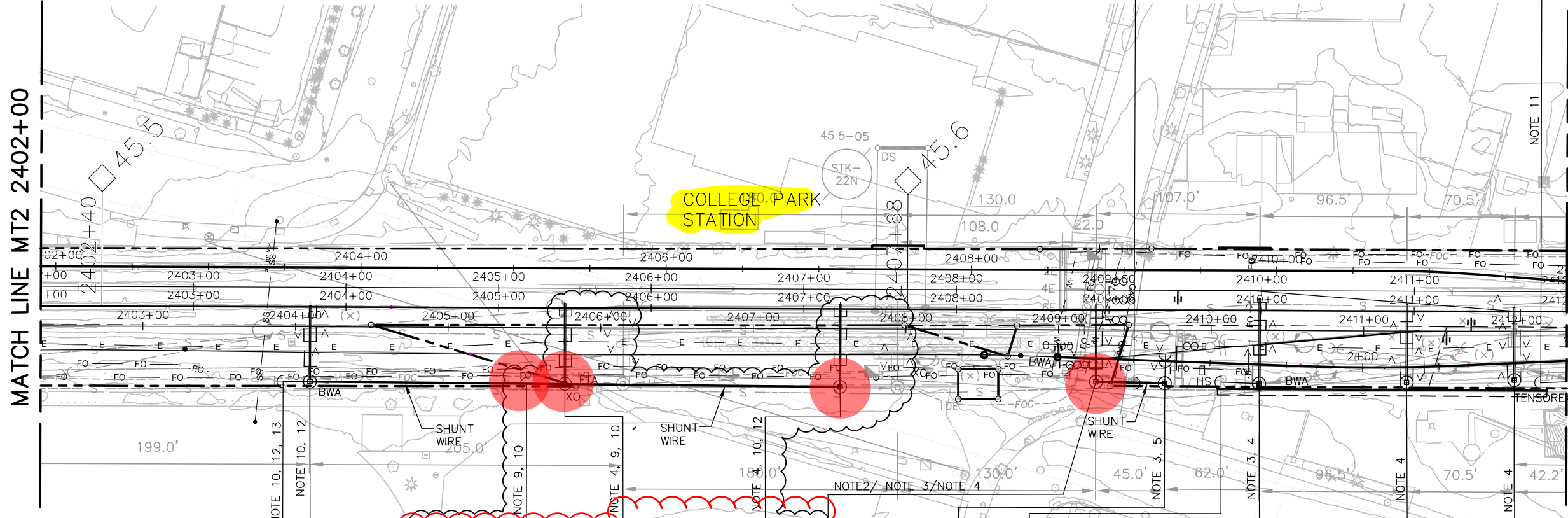
somuro Mar 18, 2020 - 5:48pm C:\bms\pgh-pw_sylvia.omuro\dms32422\TEEW4210.dwg



DOWN GUY FOUNDATION	
POLE ID	45.6-D01
POLE TYPE	-
FOUNDATION TYPE	DG-2
☐ FDN TO ☐ TRK	15.25'R NL
TOTAL PILE LENGTH	12'
NORTHING	1950300.89
EASTING	6150275.32
STATION	0+51 NL

DOWN GUY FOUNDATION	
POLE ID	45.6-D04
POLE TYPE	-
FOUNDATION TYPE	DG-1
☐ FDN TO ☐ TRK	13.50'R NL
TOTAL PILE LENGTH	12'
NORTHING	1950156.00
EASTING	6150498.94
STATION	3+16 NL

- NOTE:**
- FOR GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS, SEE DRAWING W4026, W4207 AND W4028 RESPECTIVELY.
 - POLE SHIFTED TO CLEAR E/W UTILITIES IDENTIFIED. N/S UTILITIES RELOCATED.
 - POLE MOVED DUE TO KNOWN JPB FIBER OPTIC.
 - POLE LOCATION CHANGED DUE TO JPB CN-013.
 - MOVED TO CLEAR SIGNAL CABLES.
 - (NOTE REMOVED)
 - (NOTE REMOVED)
 - POLES ADJACENT TO THE SANTA CLARA DRILL TRACK WERE REEVALUATED PER NEW ALIGNMENT PROVIDED BY JPB. CONFLICTS WITH UTILITIES WILL REQUIRE FIELD VERIFICATION.
 - FOUNDATIONS SHIFTED TOWARDS TRACK TO CLEAR BELLARMINE SCHOOL FENCE. DCN-146 LOCATION FOR 45.5-03 WAS IN CONFLICT WITH RAISED PG&E COMM LINE. LOCATIONS 45.5-D03, 45.5-03, 45.5-05 SHIFTED NORTH ACCORDINGLY TO CLEAR COMM LINE.



DOWN GUY FOUNDATION	
POLE ID	45.5-D01
POLE TYPE	-
FOUNDATION TYPE	DG-3
☐ FDN TO ☐ TRK	35.92'R MT3
TOTAL PILE LENGTH	12'
NORTHING	1950605.51
EASTING	6149808.36
STATION	2403+92 MT3

DOWN GUY FOUNDATION	
POLE ID	45.5-D03
POLE TYPE	-
FOUNDATION TYPE	DG-2
☐ FDN TO ☐ TRK	36.76'R MT3
TOTAL PILE LENGTH	12'
NORTHING	1950517.34
EASTING	6149941.45
STATION	2405+52 MT3

OCS FOUNDATION	
POLE ID	45.5-05
POLE TYPE	SQ-15/C3
FOUNDATION TYPE	FD-48S
☐ FDN TO ☐ TRK	38.07'R MT3
TOTAL PILE LENGTH	23'
NORTHING	1950403.75
EASTING	6150112.48
STATION	2407+57 MT3

OCS FOUNDATION	
POLE ID	45.6-02A
POLE TYPE	SQ-4B
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	14.50'R NL
TOTAL PILE LENGTH	15'
NORTHING	1950289.96
EASTING	6150292.16
STATION	0+71 NL

OCS FOUNDATION	
POLE ID	45.6-04
POLE TYPE	SQ-8
FOUNDATION TYPE	FD-42S
☐ FDN TO ☐ TRK	12.50'R NL
TOTAL PILE LENGTH	17'
NORTHING	1950255.97
EASTING	6150343.97
STATION	1+33 NL

OCS FOUNDATION	
POLE ID	45.5-01
POLE TYPE	SQ-15
FOUNDATION TYPE	FD-48S
☐ FDN TO ☐ TRK	35.92'R MT3
TOTAL PILE LENGTH	23'
NORTHING	1950595.89
EASTING	6149823.08
STATION	2404+10 MT3

OCS FOUNDATION	
POLE ID	45.5-03
POLE TYPE	SQ-15/C3
FOUNDATION TYPE	FD-48S
☐ FDN TO ☐ TRK	36.71'R MT3
TOTAL PILE LENGTH	23'
NORTHING	1950503.68
EASTING	6149962.40
STATION	2405+77 MT3

OCS FOUNDATION	
POLE ID	45.6-02
POLE TYPE	SQ-8/C3
FOUNDATION TYPE	FD-42S
☐ FDN TO ☐ TRK	15.25'R NL
TOTAL PILE LENGTH	17'
NORTHING	1950315.27
EASTING	6150254.86
STATION	0+26 NL

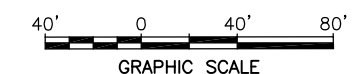
DOWN GUY FOUNDATION	
POLE ID	45.6-D02
POLE TYPE	-
FOUNDATION TYPE	DG-2
☐ FDN TO ☐ TRK	12.50'R NL
TOTAL PILE LENGTH	12'
NORTHING	1950270.35
EASTING	6150323.52
STATION	1+08 NL

OCS FOUNDATION	
POLE ID	45.6-07
POLE TYPE	SQ-8
FOUNDATION TYPE	FD-42S
☐ FDN TO ☐ TRK	10.00'R NL
TOTAL PILE LENGTH	17'
NORTHING	1950204.04
EASTING	6150425.36
STATION	2+29 NL

OCS FOUNDATION	
POLE ID	45.6-09
POLE TYPE	SQ-8
FOUNDATION TYPE	FD-42S
☐ FDN TO ☐ TRK	11.00'R NL
TOTAL PILE LENGTH	17'
NORTHING	1950166.88
EASTING	6150485.45
STATION	2+99 NL

- NOTE (CONT'D):**
- STATIONING AND OFFSET CHANGED FROM SCDT TO MT3 PER JPB DIRECTION.
 - POLE SHIFTED TO CLEAR FIBER OPTIC DUCTBANK.
 - POLE SHIFTED TO CLEAR JPB FIBER OPTIC. CLEARANCE WAIVER REQUIRED. CONFIRM WITH JPB PRIOR TO CONSTRUCTION.
 - DOWN GUY MOVED TO CLEAR SEWER.

Exhibit A



REV	DATE	BY	SUB	APP	DESCRIPTION	REV	DATE	BY	SUB	APP	DESCRIPTION
4	062119				REVISED, DCN-126						
3	041219				REVISED, DCN-083						
2	030119				REVISED, DCN-065	7	022820				REVISED, DCN-167
1	091318				REVISED, DCN-023	6	101819				REVISED, DCN-146
0	122217				ISSUED FOR CONSTRUCTION	5	072619				REVISED, DCN-128

DESIGNED M. QUIJANO
DRAWN B. JEFFERS
CHECKED B. HO
IN CHARGE J. KATZ
DATE 120117

Balfour Beatty
Infrastructure Inc.

PGH WONG
ENGINEERING INC.

Jeffrey L. Katz
APPROVED

Caltrain

1250 San Carlos Avenue
San Carlos, CA 94070

DEPUTY DIRECTOR
PROJECT MANAGEMENT
STRUCTURES
TRACK/CIVIL

PENINSULA CORRIDOR JOINT POWERS BOARD

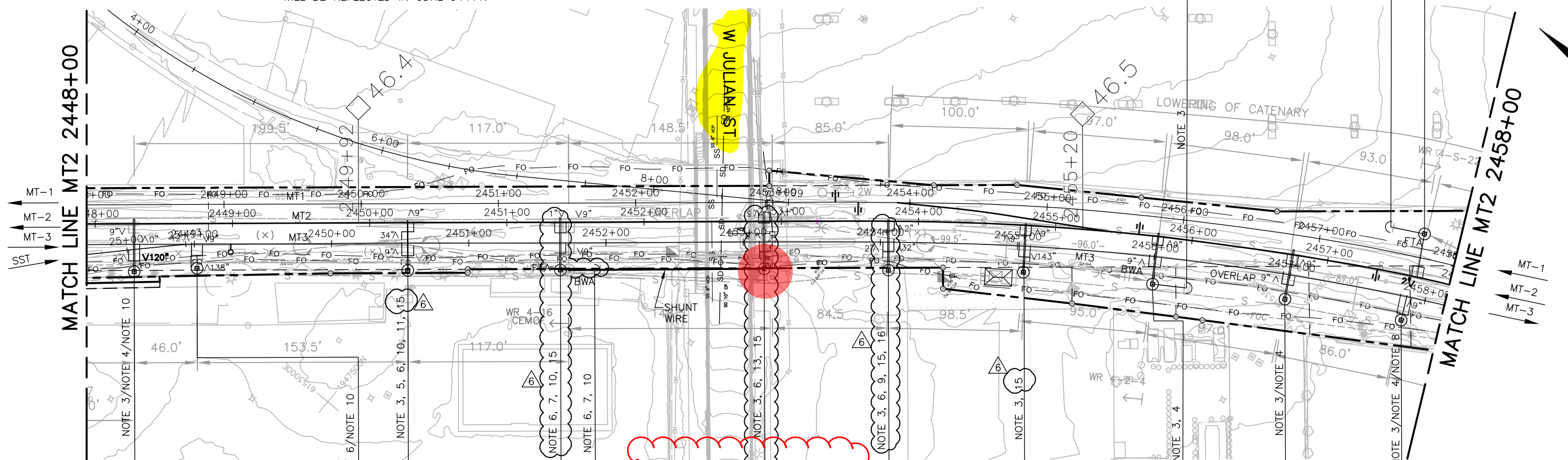
ELECTRIFICATION PROJECT
OVERHEAD CONTACT SYSTEM
FOUNDATION AND POLE LAYOUT PLAN
STA 2402+00 TO STA 2412+00
SEGMENT 4A.Z1

CDRL34631	
CADD FILE NAME TEEW4210	CADD DATE 11112016
SCALE 1:40	MILEPOST
CONTRACT NO 14-PCJPB-P-053	DWG NO W4210
REV 7	PAGE NO 15

NOTES:

- FOR GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS, SEE DRAWING W4026, W4207 AND W4028 RESPECTIVELY.
- FOR PORTALS, SEE OPPOSITE SIDE FOR POLE TYPE.
- POLE MOVED TO CLEAR FIBER OPTIC.
- POLE LOCATIONS CHANGED DUE TO JPB CN-013.
- POLE MOVED TO CLEAR DUCTILE IRON PIPES.
- VERIFY JPB OWNERSHIP OF ROW PRIOR TO INSTALLATION OF POLES.
- POLE MOVED TO CLEAR SIGNAL CABLES.
- POLE AND FOUNDATION SIZE CHANGED DUE TO FW/SW ANALYSIS PER REJECTION DVR-007.
- POLE MOVED TO CLEAR FIBER OPTIC CONDUIT. POLE CANNOT SHIFT DUE TO EXCESS RADIAL LOAD ON ANCHOR WIRE. JPB TO PROVIDE CLEARANCE WAIVER.
- VERIFY LOCATION WITH JPB AND JPB REAL ESTATE DUE TO ROW ACQUISITION NOT BEING FINALIZED ADJACENT TO PG&E PROPERTY.
- INSTALL EMBEDDED FOUNDATION PER DISCUSSION WITH JPB AND INT-RFI-489.
- WIRE RUN CONFIGURATION AND PLACEMENT OF MOD CHANGED DUE TO REMOVAL OF CROSSOVER AT CP SHARK, CN-076. CONFIRM WITH JPB AND ENGINEER PRIOR TO INSTALLATION OF FOUNDATION. CHANGES IN WIRE RUNS WILL BE REFLECTED IN CDRL 34411.

- POLE MOVED TO CLEAR SIGNAL BOX, CLEAR JPB FO, MINIMIZE ROW TAKE, AND CLEAR THE DIRIDON HOSPITALITY PROPERTY PER BBII-RFI-441. SPAN NORTH SHIFTED ACCORDINGLY.
- (NOTE REMOVED)
- PER JPB-RFI-62, FEASIBILITY OF RE-ROUTING FEEDER WIRE AND STATIC WIRE ROUTING FOR THE PURPOSES OF REMAINING INSIDE JPB ROW AND MINIMIZING ESZ/ROW ACQUISITION WILL BE REFLECTED IN CDRL 34411.
- POLE SHIFTED TO CLEAR FIBER OPTIC AND COORDINATED WITH JPB ROW TO MINIMIZE IMPACT TO DIRIDON HOSPITALITY PROPERTY.



DOWN GUY FOUNDATION	
POLE ID	46.5-D01B
POLE TYPE	-
FOUNDATION TYPE	DG-2
☐ FDN TO ☐ TRK	20.00'R MT3
TOTAL PILE LENGTH	14'
NORTHING	1947073.67
EASTING	6153465.84
STATION	2456+26 MT1

DOWN GUY FOUNDATION	
POLE ID	46.5-D01A
POLE TYPE	-
FOUNDATION TYPE	DG-2
☐ FDN TO ☐ TRK	17.50'L MT1
TOTAL PILE LENGTH	14'
NORTHING	1946988.21
EASTING	6153595.66
STATION	2457+49 MT1

OCS FOUNDATION	
POLE ID	46.5-05
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	17.50'L MT1
TOTAL PILE LENGTH	22'
NORTHING	1946966.18
EASTING	6153607.47
STATION	2457+74 MT1

OCS FOUNDATION	
POLE ID	46.4-01
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	19.66'R MT3
TOTAL PILE LENGTH	21'
NORTHING	1947516.77
EASTING	6153110.82
STATION	2450+56 MT3

OCS FOUNDATION	
POLE ID	46.4-03
POLE TYPE	SQ-8
FOUNDATION TYPE	FD-42S
☐ FDN TO ☐ TRK	19.33'R MT3
TOTAL PILE LENGTH	22'
NORTHING	1947318.63
EASTING	6153278.73
STATION	2453+15 MT3

OCS FOUNDATION	
POLE ID	46.4-05
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	19.00'R MT3
TOTAL PILE LENGTH	22'
NORTHING	1947172.20
EASTING	6153398.15
STATION	2455+05 MT3

OCS FOUNDATION	
POLE ID	46.5-03
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	18.00'R MT3
TOTAL PILE LENGTH	22'
NORTHING	1947013.59
EASTING	6153505.67
STATION	2456+99 MT3

OCS FOUNDATION	
POLE ID	46.5-06
POLE TYPE	SQ-3A
FOUNDATION TYPE	FD-36
☐ FDN TO ☐ TRK	17.50'R MT3
TOTAL PILE LENGTH	18.5'
NORTHING	1946938.86
EASTING	6153548.46
STATION	2457+86 MT3

OCS FOUNDATION	
POLE ID	46.3-07
POLE TYPE	SQ-8
FOUNDATION TYPE	FD-42S
☐ FDN TO ☐ TRK	16.00'R SST
TOTAL PILE LENGTH	23'
NORTHING	1947668.93
EASTING	6152981.99
STATION	25+03 SST

OCS FOUNDATION	
POLE ID	46.3-08
POLE TYPE	SQ-3B
FOUNDATION TYPE	FD-36
☐ FDN TO ☐ TRK	17.66'R SST
TOTAL PILE LENGTH	20.5'
NORTHING	1947635.37
EASTING	6153013.20
STATION	2449+01 MT3

OCS FOUNDATION	
POLE ID	46.4-02
POLE TYPE	SQ-8
FOUNDATION TYPE	FD-42S
☐ FDN TO ☐ TRK	19.83'R MT3
TOTAL PILE LENGTH	23'
NORTHING	1947431.75
EASTING	6153182.47
STATION	2451+67 MT3

DOWN GUY FOUNDATION	
POLE ID	46.4-D01B
POLE TYPE	-
FOUNDATION TYPE	DG-2
☐ FDN TO ☐ TRK	19.83'R MT3
TOTAL PILE LENGTH	13'
NORTHING	1947412.66
EASTING	6153198.60
STATION	2451+92 MT3

OCS FOUNDATION	
POLE ID	46.4-04
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	20.25'R MT3
TOTAL PILE LENGTH	22'
NORTHING	1947248.70
EASTING	6153336.16
STATION	2454+06 MT3

OCS FOUNDATION	
POLE ID	46.5-01
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	20.00'R MT3
TOTAL PILE LENGTH	22'
NORTHING	1947094.52
EASTING	6153452.05
STATION	2456+00 MT3

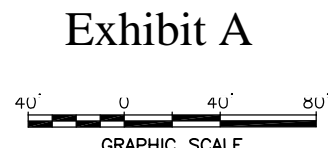


Exhibit A

somuro Mar 26, 2020 1:54pm C:\bms\pgh-pw_sylvia.omuro\dms32422\TEEM421B.dwg

REV	DATE	BY	SUB	APP	DESCRIPTION
4	072619				REVISED, DCN-128
3	041219				REVISED, DCN-083
2	030119				REVISED, DCN-065
1	091318				REVISED, DCN-023
0	122217				ISSUED FOR CONSTRUCTION

DESIGNED
M. QUIJANO
DRAWN
B. JEFFERS
CHECKED
B. HO
IN CHARGE
J. KATZ
DATE
120117



Balfour Beatty
Infrastructure Inc.
PGH WONG
ENGINEERING INC.
Jeffery A. Katz
APPROVED



DEPUTY DIRECTOR
PROJECT MANAGEMENT
STRUCTURES
TRACK/CIVIL

PENINSULA CORRIDOR JOINT POWERS BOARD
ELECTRIFICATION PROJECT
OVERHEAD CONTACT SYSTEM
FOUNDATION AND POLE LAYOUT PLAN
STA 2448+00 TO STA 2458+00
SEGMENT 4A.Z1

CDRL34631	
CADD FILE NAME	TEEW4218
CADD DATE	11142016
SCALE	1:40
CONTRACT NO	14-PCJPB-P-053
MILEPOST	
DWG NO	W4218
REV	6
PAGE NO	23

NOTES:

- FOR GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS, SEE DRAWING W4016, W4017, AND W4018 RESPECTIVELY.
- FOR PORTALS, SEE OPPOSITE SIDE FOR POLE TYPE.
- POLE SHIFTED TO CLEAR DUCTBANK. CLEARANCE WAIVER REQUIRED TO SIGNAL TROUGH.
- POLE LOCATIONS CHANGED DUE TO JPB CN-013.
- (NOTE REMOVED)
- RELOCATED DUE TO SIGNAL CONFLICT.
- POLE MOVED TO CLEAR RETAINING WALL.
- (NOTE REMOVED)
- POLE MOVED TO CLEAR EXISTING UTILITIES.
- PENDING JPB TO CONFIRM UTILITIES. CONFIRM WITH ENGINEER PRIOR TO INSTALLATION OF FOUNDATION.
- POLE MOVED TO CLEAR SIGNAL BOX.
- FOR PS-5C DETAILS SEE CDRL 34230.
- FIELD VERIFY OFFSET TO ADJACENT TRACK IS GREATER THAN 10.00' MINIMUM.
- (NOTE REMOVED)
- (NOTE REMOVED)
- POLE ON HOLD PENDING SIGNAL RELOCATION DESIGN.
- POLE AND FOUNDATION SIZE CHANGED DUE TO FW/SW ANALYSIS PER REJECTION OF DVR-007.
- POLE MOVED BACK TO DCN 082 COORDINATES PER INT-RFI 555.

19. POLE TYPE CHANGED DUE TO THE REQUIRED USE OF A V-SUPPORT TO ADDRESS INCREASED LOADING.

OCS FOUNDATION		DOWN GUY FOUNDATION		OCS FOUNDATION		OCS FOUNDATION		OCS FOUNDATION		DOWN GUY FOUNDATION		OCS FOUNDATION			
POLE ID	46.9-08	POLE ID	46.9-D02	POLE ID	47.0-05	POLE ID	47.0-06	POLE ID	47.0-10	POLE ID	47.0-D01	POLE ID	47.1-02		
POLE TYPE	SQ-7/C3	POLE TYPE	-	POLE TYPE	WF-4A	POLE TYPE	SQ-3	POLE TYPE	SQ-6	POLE TYPE	-	POLE TYPE	SQ-3		
FOUNDATION TYPE	FD-48S	FOUNDATION TYPE	DC-2	FOUNDATION TYPE	FD-36A	FOUNDATION TYPE	FD-36	FOUNDATION TYPE	FD-42A	FOUNDATION TYPE	FD-42A	FOUNDATION TYPE	DC-2	FOUNDATION TYPE	FD-36
Q FDN TO Q TRK	15.66'L ST1	Q FDN TO Q TRK	13.75'L ST1	Q FDN TO Q TRK	16.75'L ST1	Q FDN TO Q TRK	11.41'R ST6	Q FDN TO Q TRK	10.33'L ST5	Q FDN TO Q TRK	17.75'L ST1	Q FDN TO Q TRK	10.33'L ST5		
TOTAL PILE LENGTH	25.5'	EMBEDMENT DEPTH	12.5'	TOTAL PILE LENGTH	19'	TOTAL PILE LENGTH	13.5'	TOTAL PILE LENGTH	15.5'	TOTAL PILE LENGTH	12.5'	TOTAL PILE LENGTH	13.5'		
NORTHING	1944727.82	EASTING	6153838.23	NORTHING	1944452.38	NORTHING	1944392.09	NORTHING	1944110.74	NORTHING	1944087.34	NORTHING	1943965.05		
EASTING	6153841.77	NORTHING	1944635.58	EASTING	6153758.87	EASTING	6153800.48	EASTING	6153800.48	EASTING	6153835.21	EASTING	6153807.25		
STATION	2480+32 ST1	STATION	2481+23 ST1	STATION	2483+06 ST1	STATION	2483+59 ST6	STATION	2486+25 ST5	STATION	2486+73 ST1	STATION	2487+70 ST5		

OCS FOUNDATION	
POLE ID	46.9-05
POLE TYPE	SQ-5/C3
FOUNDATION TYPE	FD-42S
Q FDN TO Q TRK	16.00'L ST1
TOTAL PILE LENGTH	23'
NORTHING	1944857.46
EASTING	6153835.85
STATION	2479+02 ST1

OCS FOUNDATION	
POLE ID	46.9-11
POLE TYPE	SQ-4/C3
FOUNDATION TYPE	FD-42A
Q FDN TO Q TRK	13.75'L ST1
TOTAL PILE LENGTH	19.5'
NORTHING	1944660.50
EASTING	6153839.55
STATION	2480+98 ST1

OCS FOUNDATION	
POLE ID	46.9-14
POLE TYPE	PS-3/C3
FOUNDATION TYPE	FD-42
Q FDN TO Q TRK	16.25'L ST1
TOTAL PILE LENGTH	19.5'
NORTHING	1944607.57
EASTING	6153839.09
STATION	2481+51 ST1

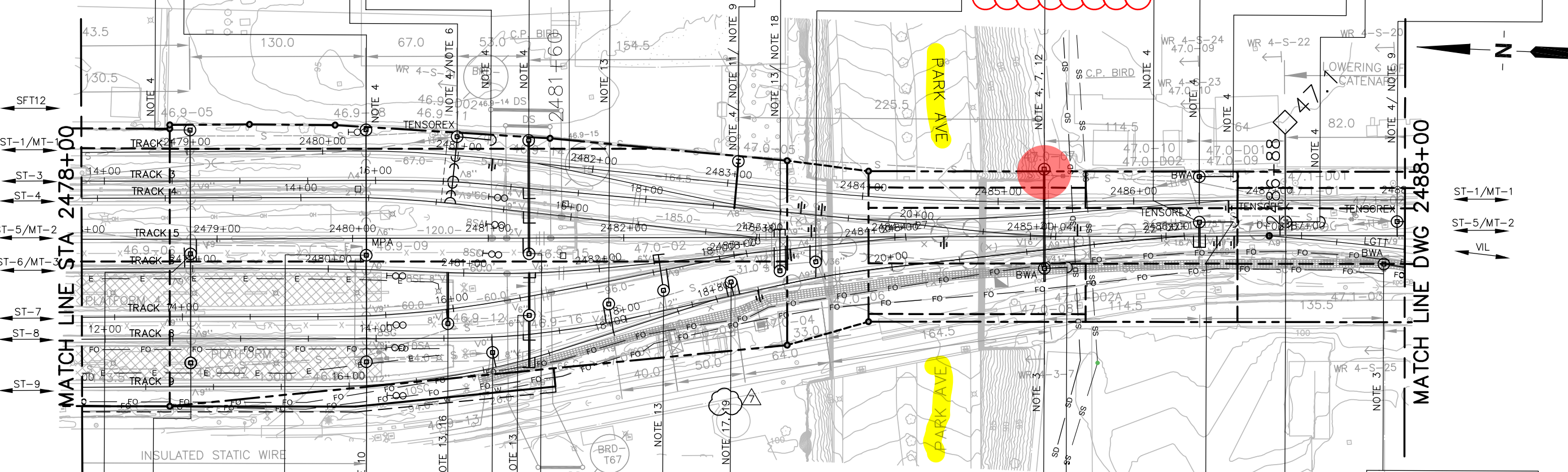
OCS FOUNDATION	
POLE ID	47.0-01
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
Q FDN TO Q TRK	16.16'R ST7
TOTAL PILE LENGTH	19.5'
NORTHING	1944543.29
EASTING	6153721.15
STATION	17+13 ST7

OCS FOUNDATION	
POLE ID	47.0-04
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
Q FDN TO Q TRK	15.31'R ST6
TOTAL PILE LENGTH	19.5'
NORTHING	1944418.19
EASTING	6153751.05
STATION	2483+32 ST6

OCS FOUNDATION	
POLE ID	47.0-07
POLE TYPE	PS-5C
FOUNDATION TYPE	FD-42A
Q FDN TO Q TRK	23.75'L ST1
TOTAL PILE LENGTH	15.5'
NORTHING	1944226.83
EASTING	6153834.51
STATION	2485+34 ST1

OCS FOUNDATION	
POLE ID	47.0-09
POLE TYPE	SQ-3
FOUNDATION TYPE	FD-36
Q FDN TO Q TRK	17.75'L ST1
TOTAL PILE LENGTH	13.5'
NORTHING	1944112.31
EASTING	6153834.01
STATION	2486+48 ST1

DOWN GUY FOUNDATION	
POLE ID	47.1-D01
POLE TYPE	-
FOUNDATION TYPE	DG-2
Q FDN TO Q TRK	10.33'L ST5
TOTAL PILE LENGTH	12.5'
NORTHING	1944022.02
EASTING	6153804.60
STATION	2487+13 ST5



OCS FOUNDATION	
POLE ID	46.9-07
POLE TYPE	SQ-5/C3
FOUNDATION TYPE	FD-42S
Q FDN TO Q TRK	17.73'L ST9
TOTAL PILE LENGTH	23'
NORTHING	1944849.44
EASTING	6153664.22
STATION	15+15 ST9

OCS FOUNDATION	
POLE ID	46.9-10
POLE TYPE	SQ-7/C3
FOUNDATION TYPE	FD-48S
Q FDN TO Q TRK	17.27'L ST9
TOTAL PILE LENGTH	25.5'
NORTHING	1944719.99
EASTING	6153670.62
STATION	16+45 ST9

OCS FOUNDATION	
POLE ID	46.9-13
POLE TYPE	SQ-3C/C3
FOUNDATION TYPE	FD-36
Q FDN TO Q TRK	11.33'R ST8
TOTAL PILE LENGTH	16.5'
NORTHING	1944627.36
EASTING	6153681.60
STATION	17+00 ST8

OCS FOUNDATION	
POLE ID	46.9-15
POLE TYPE	NOTE 2
FOUNDATION TYPE	FD-42
Q FDN TO Q TRK	11.63'R ST5
TOTAL PILE LENGTH	19.5'
NORTHING	1944603.72
EASTING	6153755.57
STATION	2481+30 ST5

OCS FOUNDATION	
POLE ID	47.0-03
POLE TYPE	SQ-4D
FOUNDATION TYPE	FD-42A
Q FDN TO Q TRK	10.00'L ST8
TOTAL PILE LENGTH	19.5'
NORTHING	1944453.92
EASTING	6153741.20
STATION	18+81 ST8

DOWN GUY FOUNDATION	
POLE ID	47.0-D02
POLE TYPE	-
FOUNDATION TYPE	DG-2
Q FDN TO Q TRK	10.33'L ST5
TOTAL PILE LENGTH	12.5'
NORTHING	1944085.76
EASTING	6153801.64
STATION	2486+50 MT2

OCS FOUNDATION	
POLE ID	47.1-03
POLE TYPE	SQ-3B
FOUNDATION TYPE	FD-36
Q FDN TO Q TRK	12.50'R VIL
TOTAL PILE LENGTH	13.5'
NORTHING	1943973.41
EASTING	6153775.50
STATION	1+14 VIL

OCS FOUNDATION	
POLE ID	46.9-06
POLE TYPE	SQ-5/C3
FOUNDATION TYPE	FD-42S
Q FDN TO Q TRK	11.00'R MT2
TOTAL PILE LENGTH	23'
NORTHING	1944853.19
EASTING	6153744.60
STATION	2478+80 MT2

OCS FOUNDATION	
POLE ID	46.9-09
POLE TYPE	SQ-7/C3
FOUNDATION TYPE	FD-48S
Q FDN TO Q TRK	12.35'R MT2
TOTAL PILE LENGTH	25.5'
NORTHING	1944723.59
EASTING	6153749.28
STATION	2480+10 MT2

OCS FOUNDATION	
POLE ID	46.9-12
POLE TYPE	SQ-1/C3
FOUNDATION TYPE	FD-36A
Q FDN TO Q TRK	10.60'R ST7
TOTAL PILE LENGTH	19'
NORTHING	1944661.22
EASTING	6153701.46
STATION	15+95 ST7

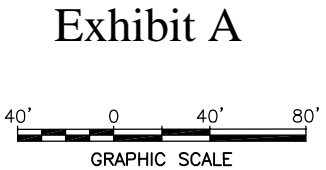
OCS FOUNDATION	
POLE ID	46.9-16
POLE TYPE	SQ-2/C3
FOUNDATION TYPE	FD-42S
Q FDN TO Q TRK	13.90'R ST7
TOTAL PILE LENGTH	21'
NORTHING	1944601.56
EASTING	6153710.15
STATION	16+54 ST7

OCS FOUNDATION	
POLE ID	47.0-02
POLE TYPE	SQ-1
FOUNDATION TYPE	FD-36A
Q FDN TO Q TRK	14.42'R ST7
TOTAL PILE LENGTH	19'
NORTHING	1944503.42
EASTING	6153732.87
STATION	17+55 ST7

OCS FOUNDATION	
POLE ID	47.0-08
POLE TYPE	NOTE 2
FOUNDATION TYPE	FD-42A
Q FDN TO Q TRK	13.50'R ST8
TOTAL PILE LENGTH	15.5'
NORTHING	1944223.40
EASTING	6153761.34
STATION	21+12 ST8

DOWN GUY FOUNDATION	
POLE ID	47.0-D02A
POLE TYPE	-
FOUNDATION TYPE	DG-2
Q FDN TO Q TRK	14.50'R ST8
TOTAL PILE LENGTH	13.5'
NORTHING	1944206.86
EASTING	6153762.90
STATION	21+28 ST8

OCS FOUNDATION	
POLE ID	47.1-01
POLE TYPE	WF-5
FOUNDATION TYPE	FD-36
Q FDN TO Q TRK	10.33'L ST5
TOTAL PILE LENGTH	13.5'
NORTHING	1944047.00
EASTING	6153803.43
STATION	2486+88 ST5



REV	DATE	BY	SUB	APP	DESCRIPTION
4	032219				REVISED, DCN 082
3	121418				REVISED, DCN 066
2	100518				REVISED, DCN 024 RESUBMITTAL
1	082418				REVISED, DCN 024
0	110317				ISSUED FOR CONSTRUCTION
	140272 / 1770974				

DESIGNED	DATE	BY	SUB	APP	DESCRIPTION
M. QUIJANO					
DRAWN					
B. JEFFERS					
CHECKED					
B. HO					
IN CHARGE					
J. KATZ					
DATE					
11032017					

Balfour Beatty
Infrastructure Inc.
PGH WONG
ENGINEERING INC.
APPROVED

Caltrain
1250 San Carlos Avenue
San Carlos, CA 94070

DEPUTY DIRECTOR
PROJECT MANAGEMENT
STRUCTURES
TRACK/CIVIL

PENINSULA CORRIDOR JOINT POWERS BOARD

ELECTRIFICATION PROJECT
OVERHEAD CONTACT SYSTEM
FOUNDATION AND POLE LAYOUT PLAN
STA 2478+00 TO STA 2488+00
SEGMENT 4B

CDRL34635	
CADD FILE NAME	CADD DATE
TEEW4222	03012017
SCALE	MILEPOST
1:40	
CONTRACT NO	REV
14-PCJPB-P-053	7
DWG NO	PAGE NO
W4222	7

COUNTY: SOMERSET
 CITY: BOSTON
 PROJECT: PENINSULA CORRIDOR JOINT POWERS BOARD
 DRAWING: W4017, W4018, W4019, W4020, W4021, W4022, W4023, W4024, W4025, W4026, W4027, W4028, W4029, W4030, W4031, W4032, W4033, W4034, W4035, W4036, W4037, W4038, W4039, W4040, W4041, W4042, W4043, W4044, W4045, W4046, W4047, W4048, W4049, W4050, W4051, W4052, W4053, W4054, W4055, W4056, W4057, W4058, W4059, W4060, W4061, W4062, W4063, W4064, W4065, W4066, W4067, W4068, W4069, W4070, W4071, W4072, W4073, W4074, W4075, W4076, W4077, W4078, W4079, W4080, W4081, W4082, W4083, W4084, W4085, W4086, W4087, W4088, W4089, W4090, W4091, W4092, W4093, W4094, W4095, W4096, W4097, W4098, W4099, W4100, W4101, W4102, W4103, W4104, W4105, W4106, W4107, W4108, W4109, W4110, W4111, W4112, W4113, W4114, W4115, W4116, W4117, W4118, W4119, W4120, W4121, W4122, W4123, W4124, W4125, W4126, W4127, W4128, W4129, W4130, W4131, W4132, W4133, W4134, W4135, W4136, W4137, W4138, W4139, W4140, W4141, W4142, W4143, W4144, W4145, W4146, W4147, W4148, W4149, W4150, W4151, W4152, W4153, W4154, W4155, W4156, W4157, W4158, W4159, W4160, W4161, W4162, W4163, W4164, W4165, W4166, W4167, W4168, W4169, W4170, W4171, W4172, W4173, W4174, W4175, W4176, W4177, W4178, W4179, W4180, W4181, W4182, W4183, W4184, W4185, W4186, W4187, W4188, W4189, W4190, W4191, W4192, W4193, W4194, W4195, W4196, W4197, W4198, W4199, W4200, W4201, W4202, W4203, W4204, W4205, W4206, W4207, W4208, W4209, W4210, W4211, W4212, W4213, W4214, W4215, W4216, W4217, W4218, W4219, W4220, W4221, W4222, W4223, W4224, W4225, W4226, W4227, W4228, W4229, W4230, W4231, W4232, W4233, W4234, W4235, W4236, W4237, W4238, W4239, W4240, W4241, W4242, W4243, W4244, W4245, W4246, W4247, W4248, W4249, W4250, W4251, W4252, W4253, W4254, W4255, W4256, W4257, W4258, W4259, W4260, W4261, W4262, W4263, W4264, W4265, W4266, W4267, W4268, W4269, W4270, W4271, W4272, W4273, W4274, W4275, W4276, W4277, W4278, W4279, W4280, W4281, W4282, W4283, W4284, W4285, W4286, W4287, W4288, W4289, W4290, W4291, W4292, W4293, W4294, W4295, W4296, W4297, W4298, W4299, W4300, W4301, W4302, W4303, W4304, W4305, W4306, W4307, W4308, W4309, W4310, W4311, W4312, W4313, W4314, W4315, W4316, W4317, W4318, W4319, W4320, W4321, W4322, W4323, W4324, W4325, W4326, W4327, W4328, W4329, W4330, W4331, W4332, W4333, W4334, W4335, W4336, W4337, W4338, W4339, W4340, W4341, W4342, W4343, W4344, W4345, W4346, W4347, W4348, W4349, W4350, W4351, W4352, W4353, W4354, W4355, W4356, W4357, W4358, W4359, W4360, W4361, W4362, W4363, W4364, W4365, W4366, W4367, W4368, W4369, W4370, W4371, W4372, W4373, W4374, W4375, W4376, W4377, W4378, W4379, W4380, W4381, W4382, W4383, W4384, W4385, W4386, W4387

NOTE:

- FOR GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS, SEE DRAWING W4016, W4017, AND W4018 RESPECTIVELY.
- FIELD VERIFY EXISTING FOUNDATION LOCATION.
- POLE LOCATIONS CHANGED DUE TO JPB CN-013.
- POLE CANNOT SHIFT FURTHER NORTH DUE TO BBII-RF1-326-OCS AT LOW CLEARANCE BRIDGES - PLUS ZERO TRACK TOLERANCE AND CATENARY LOWERING. CONFIRM WITH ENGINEER PRIOR TO INSTALLATION OF FOUNDATION.
- (NOTE REMOVED)
- POLE MOVED TO CLEAR CONFLICT WITH LOS GATOS BRIDGE FOOTING.
- POLE 47.2-06 MOVED TO CLEAR UTILITIES AT IFC LOCATION. HOWEVER, THE POLE WAS RELOCATED DUE TO CN-013, DESIGN THEN CONFLICTED WITH DRAIN PIPE, FIBER OPTIC CABLES AND PROPERTY OWNER. POLE RELOCATED AGAIN TO CLEAR CONFLICTS.
- POLE MOVED TO CLEAR FIBER OPTIC CONDUITS AND SURFACE CONFLICTS.
- FIELD VERIFY OFFSET TO ADJACENT TRACK IS GREATER THAN 10.33' MINIMUM.
- POLES CHANGED PER SHUNT WIRE CHANGE NOTICE (CN-005).
- (NOTE REMOVED)
- POLE SHIFTED BACK TO MT-1 DUE TO EXISTING CONFLICTS AND CONSTRUCTIBILITY. JPB TO CONFIRM LOCATION WITH UPRR.
- (NOTE REMOVED)
- POLE MOVED TO CLEAR SPRINT, QUEST AND 3RD PARTY FO CONDUITS

OCS FOUNDATION	
POLE ID	47.1-08
POLE TYPE	WF-4A
FOUNDATION TYPE	FD-36A
☐ FDN TO ☐ TRK	10.33'R LGTT
TOTAL PILE LENGTH	15.5'
NORTHING	1943631.62
EASTING	6153783.99
STATION	4+53 LGTT

OCS FOUNDATION	
POLE ID	47.2-01
POLE TYPE	SQ-1/C1
FOUNDATION TYPE	FD-36A
☐ FDN TO ☐ TRK	14.83'R LGTT
TOTAL PILE LENGTH	15.5'
NORTHING	1943489.90
EASTING	6153792.76
STATION	5+94 LGTT

DOWN GUY FOUNDATION	
POLE ID	47.2-D01A
POLE TYPE	-
FOUNDATION TYPE	DG-2
☐ FDN TO ☐ TRK	18.75'R MT2
TOTAL PILE LENGTH	13.5'
NORTHING	1943071.33
EASTING	6153942.84
STATION	2496+78 MT2

OCS FOUNDATION	
POLE ID	47.1-05
POLE TYPE	WF-4A
FOUNDATION TYPE	FD-36A
☐ FDN TO ☐ TRK	10.51'R VIL
TOTAL PILE LENGTH	15.5'
NORTHING	1943846.86
EASTING	6153769.48
STATION	2+39 VIL

OCS FOUNDATION	
POLE ID	47.1-09
POLE TYPE	SQ-1/C1
FOUNDATION TYPE	FD-36A
☐ FDN TO ☐ TRK	21.00'L ST1
TOTAL PILE LENGTH	15.5'
NORTHING	1943572.43
EASTING	6153856.91
STATION	2491+90 ST1

OCS FOUNDATION	
POLE ID	47.2-02
POLE TYPE	SQ-6/C1
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	14.00'R LGTT
TOTAL PILE LENGTH	15.5'
NORTHING	1943434.14
EASTING	6153803.32
STATION	6+50 LGTT

OCS FOUNDATION	
POLE ID	47.2-03
POLE TYPE	SQ-9B
FOUNDATION TYPE	EXISTING
☐ FDN TO ☐ TRK	
TOTAL PILE LENGTH	
NORTHING	
EASTING	
STATION	

OCS FOUNDATION	
POLE ID	47.2-04
POLE TYPE	SQ-8
FOUNDATION TYPE	FD-42S
☐ FDN TO ☐ TRK	17.00'L MT1
TOTAL PILE LENGTH	20'
NORTHING	1943240.68
EASTING	6153926.43
STATION	2495+34 MT1

OCS FOUNDATION	
POLE ID	47.2-06
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	18.75'R MT2
TOTAL PILE LENGTH	17'
NORTHING	1943057.88
EASTING	6153949.46
STATION	2496+93 MT2

DOWN GUY FOUNDATION	
POLE ID	47.1-D03
POLE TYPE	-
FOUNDATION TYPE	DG-2
☐ FDN TO ☐ TRK	13.50'R VIL
TOTAL PILE LENGTH	12.5'
NORTHING	1943948.59
EASTING	6153772.72
STATION	1+39 VIL

DOWN GUY FOUNDATION	
POLE ID	47.1-D02
POLE TYPE	-
FOUNDATION TYPE	DG-3
☐ FDN TO ☐ TRK	10.33'L ST5
TOTAL PILE LENGTH	13.5'
NORTHING	1943940.08
EASTING	6153808.41
STATION	2487+95 ST5

OCS FOUNDATION	
POLE ID	47.1-07
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	10.33'R LGTT
TOTAL PILE LENGTH	15.5'
NORTHING	1943692.23
EASTING	6153781.64
STATION	3+67 LGTT

OCS FOUNDATION	
POLE ID	47.2-05
POLE TYPE	SQ-6
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	11.37'R LGTT
TOTAL PILE LENGTH	20'
NORTHING	1943127.40
EASTING	6153908.61
STATION	9+72 LGTT

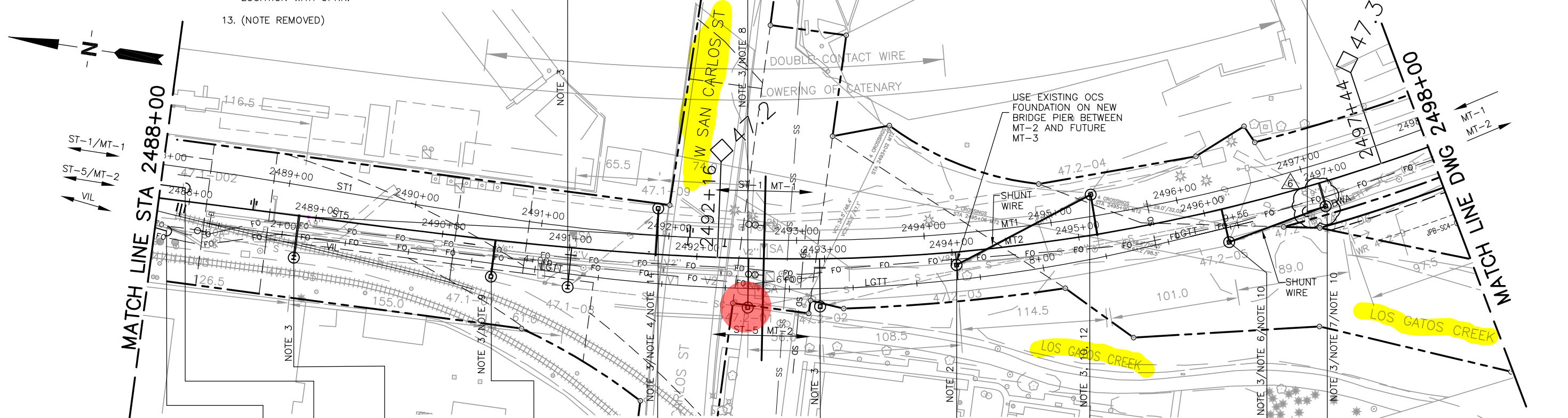
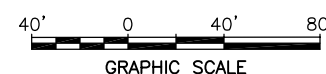


Exhibit A



somuro Mar 19, 2020 1:52pm C:\bms\pgh-pw_sylvia\omura\dms32423\TEEM4223.dwg

REV	DATE	BY	SUB	APP	DESCRIPTION
4	080219				REVISED, DCN 127
3	032219				REVISED, DCN 082
2	121418				REVISED, DCN 066
1	082418				REVISED, DCN 024
0	110317				ISSUED FOR CONSTRUCTION
	140272				1770974

DESIGNED
M. QUIJANO
DRAWN
B. JEFFERS
CHECKED
B. HO
IN CHARGE
J. KATZ
DATE
11/03/2017



Balfour Beatty
Infrastructure Inc.
PGH WONG
ENGINEERING INC.
Benny M. Ho
APPROVED



DEPUTY DIRECTOR
PROJECT MANAGEMENT
STRUCTURES
TRACK/CIVIL

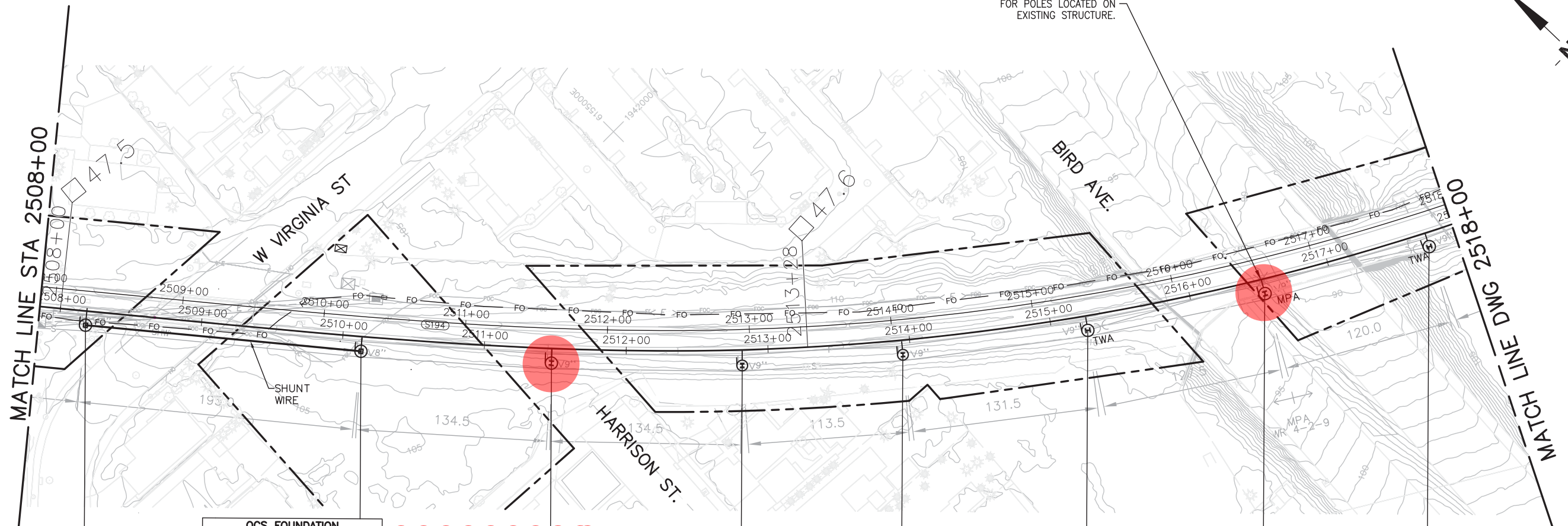
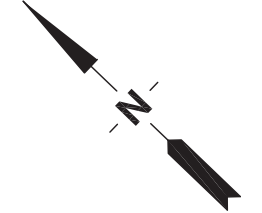
PENINSULA CORRIDOR JOINT POWERS BOARD
ELECTRIFICATION PROJECT
OVERHEAD CONTACT SYSTEM
FOUNDATION AND POLE LAYOUT PLAN
STA 2488+00 TO STA 2498+00
SEGMENT 4B

CDRL34635	
CADD FILE NAME	TEEW4223
CADD DATE	03/01/2017
SCALE	1:40
CONTRACT NO	14-PCJPB-P-053
MILEPOST	
DWG NO	W4223
REV	6
PAGE NO	8

NOTES:

1. FOR GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS, SEE DRAWING W4016, W4017, AND W4018 RESPECTIVELY.
2. POLE TO BE ATTACHED TO BIRD AVE. FOR POLE ATTACHMENT REQUIREMENTS, SEE SHEET W6720 TO W6722 IN CDRL 34710 POLE HEIGHT SUBJECT TO CHANGE DUE TO BRIDGE ATTACHMENT DESIGN AND FEEDER HEIGHT. CONFIRM WITH ENGINEER PRIOR TO CONSTRUCTION.

USE ALTERNATE FOUNDATIONS FOR POLES LOCATED ON EXISTING STRUCTURE.



OCS FOUNDATION	
POLE ID	47.5-02
POLE TYPE	SQ-9A/C1
FOUNDATION TYPE	FD-36A
☐ FDN TO ☐ TRK	10.33'R MT2
TOTAL PILE LENGTH	16.5'
NORTHING	1942016.49
EASTING	6154764.69
STATION	2510+14 MT2

OCS FOUNDATION	
POLE ID	47.5-03
POLE TYPE	WF-3/C1
FOUNDATION TYPE	FD-30
☐ FDN TO ☐ TRK	10.33'R MT2
TOTAL PILE LENGTH	13.5'
NORTHING	1941915.63
EASTING	6154853.71
STATION	2511+48 MT2

OCS FOUNDATION	
POLE ID	47.5-04
POLE TYPE	WF-3/C1
FOUNDATION TYPE	FD-30
☐ FDN TO ☐ TRK	11.01'R MT2
TOTAL PILE LENGTH	13.5'
NORTHING	1941819.31
EASTING	6154947.65
STATION	2512+82 MT2

OCS FOUNDATION	
POLE ID	47.6-01
POLE TYPE	WF-3/C1
FOUNDATION TYPE	FD-30
☐ FDN TO ☐ TRK	10.33'R MT2
TOTAL PILE LENGTH	13.5'
NORTHING	1941744.56
EASTING	6155033.11
STATION	2513+94 MT2

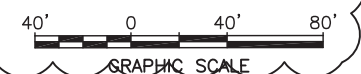
OCS FOUNDATION	
POLE ID	47.6-02
POLE TYPE	WF-7/C1
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	10.33'R MT2
TOTAL PILE LENGTH	19.5'
NORTHING	1941664.49
EASTING	6155137.43
STATION	2515+25 MT2

OCS FOUNDATION	
POLE ID	47.6-04
POLE TYPE	WF-7/C1
FOUNDATION TYPE	FD-42A
☐ FDN TO ☐ TRK	10.00'R MT2
TOTAL PILE LENGTH	19.5'
NORTHING	1941536.07
EASTING	6155349.36
STATION	2517+72 MT2

OCS FOUNDATION	
POLE ID	47.5-01
POLE TYPE	SQ-9A/C1
FOUNDATION TYPE	FD-36A
☐ FDN TO ☐ TRK	10.00'R MT2
TOTAL PILE LENGTH	16.5'
NORTHING	1942166.75
EASTING	6154640.40
STATION	2508+19 MT2

OCS FOUNDATION	
POLE ID	47.6-03
POLE TYPE	WF-5T/C1
FOUNDATION TYPE	NOTE 2
☐ FDN TO ☐ TRK	
TOTAL PILE LENGTH	
NORTHING	
EASTING	
STATION	

Exhibit A



COUNTY: CITY: CONTROL POINT: FILE: Aug 29, 2018 - 9:50am C:\bms\pgh-pw\ju-lin\lru\dms\18265\TEEW4225.dwg

REV	DATE	BY	SUB	APP	DESCRIPTION
1	082418				REVISED, DCN 024
0	110317				ISSUED FOR CONSTRUCTION
	140272			1770974	

DESIGNED
M. QUIJANO
 DRAWN
B. JEFFERS
 CHECKED
B. HO
 IN CHARGE
J. KATZ
 DATE
11032017



Balfour Beatty
Infrastructure Inc.
 PGH WONG
 ENGINEERING INC.
Jeffery K. Katz
 APPROVED

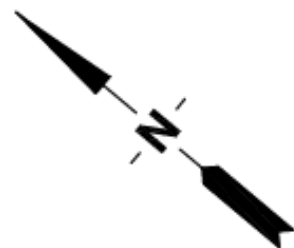


DEPUTY DIRECTOR
 PROJECT MANAGEMENT
 STRUCTURES
 TRACK/CIVIL

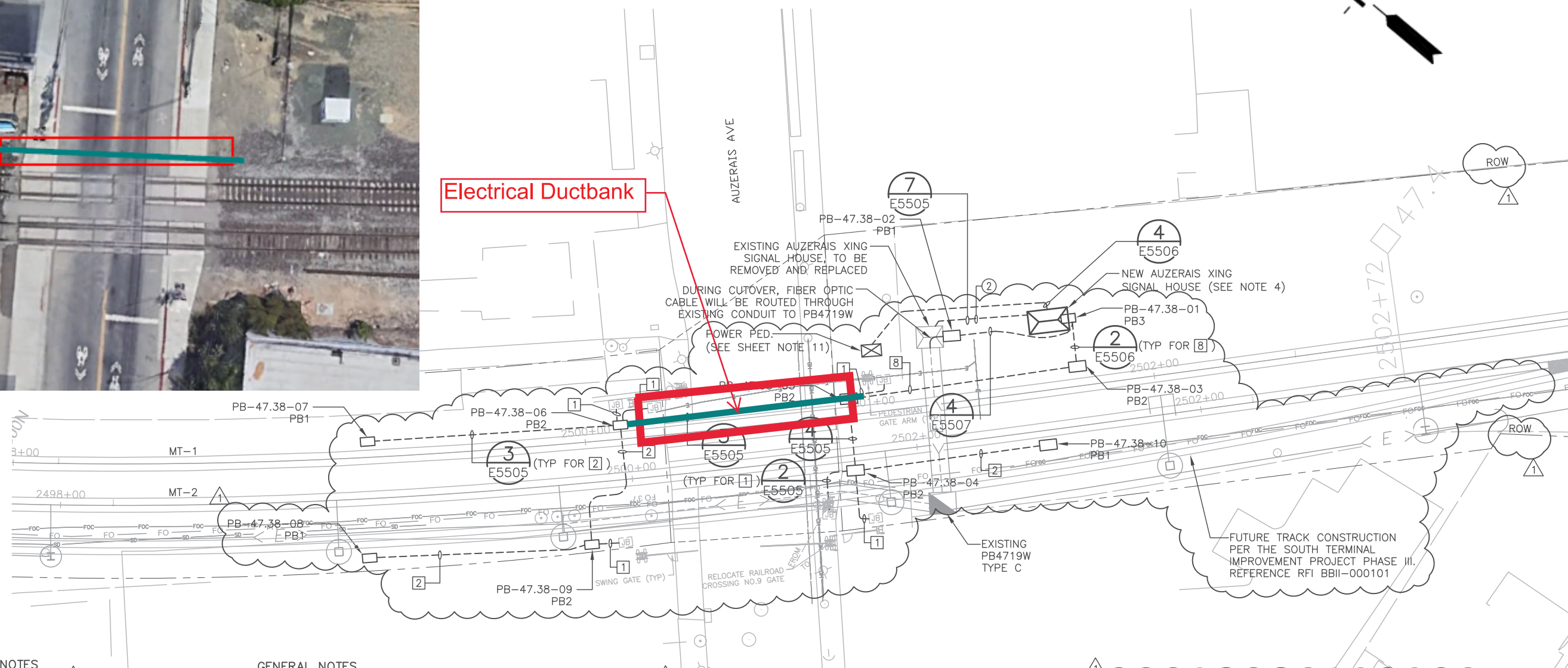
PENINSULA CORRIDOR JOINT POWERS BOARD
ELECTRIFICATION PROJECT
OVERHEAD CONTACT SYSTEM
FOUNDATION AND POLE LAYOUT PLAN
STA 2508+00 TO STA 2518+00
SEGMENT 4B

CDRL34635	
CADD FILE NAME	TTEW4225
CADD DATE	03012017
SCALE	1:40
CONTRACT NO	14-PCJPB-P-053
MILEPOST	
DWG NO	W4225
REV	1
PAGE NO	10

CONTRACT DRAWINGS



Electrical Ductbank



SHEET NOTES

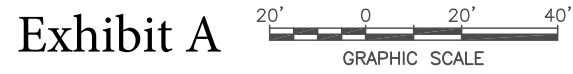
- ① NOT USED.
- ② NUMBER OF PHASING CONDUITS TO BE CONFIRMED BY CUTOVER PLANS.

GENERAL NOTES

- 1. SEE SIGNAL SYMBOLS AND ABBREVIATIONS SHEET FOR ADDITIONAL INFORMATION ON LEGEND AND ABBREVIATIONS.
- 2. IN LIEU OF DUCTBANKS, CABLE TROUGHS MAY BE UTILIZED.
- 3. JUNCTION BOXES (JB) SHOWN ARE PART OF EXISTING SIGNAL SYSTEM. FIELD VERIFY EXACT LOCATION.
- 4. LIMITED CLEARANCE IN REFERENCE TO THE TRACK, UTILITIES AND POLE FOUNDATIONS AT ALL CONDUIT RUNS AT THIS LOCATION. SEE GENERAL NOTES DRAWING B0906 FOR CLEARANCE DETAILS.
- 5. FOR SIGNAL HOUSE LOCATION AND CONSTRUCTION DETAILS SEE DRAWING C4911 AND C5901.

- 6. SEE CDRL 34635 FOR CONFIRMATION OF OCS POLE LOCATIONS AND FOUNDATION SIZES.
- 7. SEE DRAWING E5501 FOR PULL BOX DETAILS.
- 8. SEE CDRL 36110 FOR INSULATED JOINT AND IMPEDANCE BOND LOCATIONS.
- 9. SEE CDRL 36235 FOR GROUNDING DESIGN AT AUZERAI'S GRADE CROSSING.
- 10. SEE APPENDIX FOR ADDITIONAL CONDUIT REQUIRED FOR GROUNDING ENCLOSURES AND EQUIPMENT WITHIN THE OCLZ AT THIS LOCATION. SEE DRAWING E5526 FOR GROUNDING CONDUIT DETAILS.

- 11. APPROXIMATE LOCATION OF EXISTING 100 AMP POLE MOUNTED POWER METER #1009715992. PER BBII-RFI-000286, THE EXISTING POWER METER MAY BE REUSED IF THE CONTRACTOR CONFIRMS IT IS IN GOOD PHYSICAL CONDITION, HAS SUFFICIENT POWER CAPACITY AND IS COMPATIBLE WITH THE DESIGN. IF THE METER DOES NOT MEET THESE CRITERIA, REMOVED AND REPLACED WITH A NEW 100 AMP SERVICE. EXISTING POLE TO BE REMOVE AND REPLACE. SEE DRAWINGS E5509 & E5525 FOR PEDESTAL DETAILS. CONTRACTOR SHALL COORDINATE DISCONNECT/RECONNECT WITH PG&E.



COUNTY: CITY: JUN 27, 2018 10:45am C:\bms\pgh-pw\info\dms05469\TEEE4865.dwg

DESIGNED G. WONG	062918	REVISED, DCN 035
DRAWN K. LIN	0117118	ISSUED FOR CONSTRUCTION
CHECKED E. WONG	140272 / 1770974	
IN CHARGE E. WONG		
DATE 01172018		

REGISTERED PROFESSIONAL ENGINEER
 E. WONG
 No. 10438
 Exp. 9-30-2018
 ELECTRICAL
 STATE OF CALIFORNIA

Balfour Beatty Infrastructure Inc.
 PGH WONG ENGINEERING INC.
 F.W.A. ASSOCIATES, INC.
 CONSULTING ENGINEERS
 APPROVED

Caltrain
 1250 San Carlos Avenue
 San Carlos, CA 94070

DEPUTY DIRECTOR
 PROJECT MANAGEMENT
 STRUCTURES
 TRACK/CIVIL

PENINSULA CORRIDOR JOINT POWERS BOARD
 ELECTRIFICATION PROJECT
 SYSTEMS DUCTBANKS
 SITE CONDUIT LAYOUT PLAN
 AUZERAI'S AVE XING
 MP 47.38

CDRL35270	
CADD FILE NAME TEEE4865	CADD DATE 03042017
SCALE 1"=20'	MILEPOST 47.38
CONTRACT NO 14-PCJPB-P-053	DWG NO E4865
REV 1	PAGE NO 39

