

JPB CAC

CORRESPONDENCE
AS OF

July 20, 2021

Givens, Patrice

From: Roland Lebrun <ccss@msn.com>
Sent: Friday, June 25, 2021 10:13 AM
To: Board (@caltrain.com); Baltao, Elaine [board.secretary@vta.org]; SFCTA Board Secretary; MTC Info; SFCTA CAC; cacsecretary [@caltrain.com]
Subject: Repayment to SamTrans for the acquisition of the Caltrain right of way
Importance: High

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Dear Caltrain Board,

Please add an information item to the 6/28 Finance Committee agenda to inform the expediting of the repayments to SamTrans for the acquisition of the Caltrain right of way.

Thank You.

Roland Lebrun

CC

MTC Commissioners
SFCTA Commissioners
VTA Board of Directors
VTA PAC
SFCTA CAC
Caltrain CAC
VTA CAC

Givens, Patrice

From: Brook, Jean
Sent: Monday, June 28, 2021 2:32 PM
To: cacsecretary [@caltrain.com]
Subject: FW: Governor Newsom Executive Order N-8-21 Paragraph 42
Attachments: Executive Order N-8-21 Paragraph 42.pdf

This was sent to SamTrans CAC when the intention was to CC the Caltrain CAC.

From: Roland Lebrun <ccss@msn.com>
Sent: Wednesday, June 23, 2021 2:52 PM
To: Board (@caltrain.com) <BoardCaltrain@samtrans.com>
Cc: cacsecretary [@samtrans.com] <cacsecretary@samtrans.com>
Subject: Governor Newsom Executive Order N-8-21 Paragraph 42

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Dear Caltrain Board,

Kindly be advised that Governor Newsom's Executive Order N-29-20 Paragraph 3 was replaced by Executive Order N-8-21 Paragraph 42 on June 16th:
<https://www.gov.ca.gov/wp-content/uploads/2021/06/6.11.21-EO-N-08-21-signed.pdf> and direct staff to draft future agendas accordingly.

EXECUTIVE DEPARTMENT STATE OF CALIFORNIA

EXECUTIVE DEPARTMENT STATE OF CALIFORNIA EXECUTIVE ORDER N-08-21 WHEREAS on March 4, 2020, I proclaimed a State of Emergency to exist in California as a result of the threat of COVID-19; and

www.gov.ca.gov

Please find Paragraph 42 attached for your convenience.

Sincerely,

Roland Lebrun

CC

Caltrain CAC

42) Executive Order N-29-20, Paragraph 3, is withdrawn and replaced by the following text:

Notwithstanding any other provision of state or local law (including, but not limited to, the Bagley-Keene Act or the Brown Act), and subject to the notice and accessibility requirements set forth below, a local legislative body or state body is authorized to hold public meetings via teleconferencing and to make public meetings accessible telephonically or otherwise electronically to all members of the public seeking to observe and to address the local legislative body or state body. All requirements in both the Bagley-Keene Act and the Brown Act expressly or impliedly requiring the physical presence of members, the clerk or other personnel of the body, or of the public as a condition of participation in or quorum for a public meeting are hereby waived.

In particular, any otherwise-applicable requirements that

- (i) state and local bodies notice each teleconference location from which a member will be participating in a public meeting;
- (ii) each teleconference location be accessible to the public;
- (iii) members of the public may address the body at each teleconference conference location;
- (iv) state and local bodies post agendas at all teleconference locations;
- (v) at least one member of the state body be physically present at the location specified in the notice of the meeting; and
- (vi) during teleconference meetings, a least a quorum of the members of the local body participate from locations within the boundaries of the territory over which the local body exercises jurisdiction

are hereby suspended.

A local legislative body or state body that holds a meeting via teleconferencing and allows members of the public to observe and address the meeting telephonically or otherwise electronically, consistent with the notice and accessibility requirements set forth below, shall have satisfied any requirement that the body allow members of the public to attend the meeting and offer public comment. Such a body need not make available any physical location from which members of the public may observe the meeting and offer public comment.

Accessibility Requirements: If a local legislative body or state body holds a meeting via teleconferencing and allows members of the public to observe and address the meeting telephonically or otherwise electronically, the body shall also:

- (i) Implement a procedure for receiving and swiftly resolving requests for reasonable modification or accommodation from individuals with disabilities, consistent with the Americans with Disabilities Act and resolving any doubt whatsoever in favor of accessibility; and
- (ii) Advertise that procedure each time notice is given of the means by which members of the public may observe the meeting and offer public comment, pursuant to subparagraph (ii) of the Notice Requirements below.

Notice Requirements: Except to the extent this Order expressly provides otherwise, each local legislative body and state body shall:

- (i) Give advance notice of the time of, and post the agenda for, each public meeting according to the timeframes otherwise prescribed by the Bagley-Keene Act or the Brown Act, and using the means otherwise prescribed by the Bagley-Keene Act or the Brown Act, as applicable; and
- (ii) In each instance in which notice of the time of the meeting is otherwise given or the agenda for the meeting is otherwise posted, also give notice of the means by which members of the public may observe the meeting and offer public comment. As to any instance in which there is a change in such means of public observation and comment, or any instance prior to the issuance of this Order in which the time of the meeting has been noticed or the agenda for the meeting has been posted without also including notice of such means, a body may satisfy this requirement by advertising such means using "the most rapid means of communication available at the time" within the meaning of Government Code, section 54954, subdivision (e); this shall include, but need not be limited to, posting such means on the body's Internet website.

All of the foregoing provisions concerning the conduct of public meetings shall apply through September 30, 2021.

43) Executive Order N-32-20:

- a. Paragraph 1;
- b. Paragraph 2; and
- c. Paragraph 3.

44) Executive Order N-35-20:

- a. Paragraph 2; and
- b. Paragraph 12.

45) Executive Order N-39-20:

- a. Paragraph 2;
- b. Paragraph 3; and
- c. Paragraph 6.

Givens, Patrice

From: Roland Lebrun <ccss@msn.com>
Sent: Tuesday, June 29, 2021 3:26 AM
To: Board (@caltrain.com)
Cc: MTC Commission; Baltao, Elaine [board.secretary@vta.org]; CHSRA Board; SFMTA Municipal Transportation Agency; SFCTA Board Secretary; SFCTA CAC; cacsecretary [@caltrain.com]
Subject: Item #8 Contract with Alstom Signaling Operation LLC for Signal Systems Modification
Attachments: Electrification RFP list of suitable manufacturers.pdf
Importance: High

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Dear Caltrain Board,

Further to my email of August 1, 2018 (below) which closed with a recommendation to "**Decouple all resignaling from the DB electrification contract and reach out to Siemens (and Wabtec) for a Constant Warning Time solution for electrified territory.**" and the **SYSTEMATIC MISREPRESENTATION OF FACTS** by Ms. Bouchard and her staff, I am **STRONGLY** recommending that the Board amend the staff recommendation as follows:

1. Accept MRS agreement to transfer responsibility for signal conversion to the JPB
2. **Suspend all future contracts with Alstom Signaling LLC (formerly GE Signaling) until the gate activation issues at Virginia and Auzerais have been resolved at no cost to the JPB** (separate email will follow)
3. **Enter into a sole source contract with Siemens**, including **FUNCTIONAL** Constant Warning Time (CWT) equipment at **every** crossing between San Francisco and San Jose

Background

The staff recommendation states: "***Because Alstom is the legacy manufacturer of Caltrain's existing rail system requiring modification to accommodate electrification, Alstom is the only firm that can perform this Signal System Work and as such, the JPB has negotiated this contract with Alstom on a single source basis.***"

THIS IS ABSOLUTELY FALSE for the following reasons:

1) Alstom is NOT "***the legacy manufacturer of Caltrain's existing rail system***"

Specifically, **GE divested GE Signaling to Alstom** as part of its acquisition of Alstom's power generation facilities on November 2, 2015:

"This activity, representing 1,200 employees, opens the **SIGNALING FREIGHT MARKET** to Alstom, while strengthening its presence in North America."

<https://www.alstom.com/press-releases-news/2015/11/alstom-refocused-on-rail-transport-with-strong-leadership-positions>

2) **Alstom is NOT “the only firm that can perform this Signal System Work”**

Specifically, **Section 34 42 23.01, Signal Systems Miscellaneous Products** of the Caltrain Electrification RFP mentions TWO firms suitable for the manufacture and supply of AC track circuits (see list of suitable manufacturers attached for your convenience):

“2.22 AUDIO FREQUENCY OVERLAY TRACK CIRCUITS

A. Audio frequency overlay track circuits shall be AFTAC-II manufactured by Alstom (formerly GETS Global Signaling), **PSO manufactured by Siemens** (formerly Invensys Rail), or equivalent.

2.23 AUDIO FREQUENCY ISLAND TRACK CIRCUITS

A. Audio frequency island track circuits shall be AFTAC-II manufactured by Alstom, **PSO manufactured by Siemens**, or equivalent.

2.24 AC TRACK CIRCUITS

A. AC Track Circuits shall be steady energy 100 Hz such as the **SE-3 manufactured by Siemens** (formerly Invensys Rail) or equivalent. **Vane Relays shall not be used.”**

The last sentence in section 2.24 is particularly significant because it **specifically**

EXCLUDES Alstom Vane Relays as devices suitable for AC track circuits.

Thank you in advance for your careful consideration of this recommendation.

Sincerely,

Roland Lebrun

CC

MTC Commissioners
SFCTA Commissioners
VTA Board of Directors
CHSRA Board of Directors
VTA PAC
Caltrain CAC
SFCTA CAC
VTA CAC

From: Roland Lebrun <ccss@msn.com>

Sent: Wednesday, August 1, 2018 5:12 AM

To: Caltrain Board <board@caltrain.com>

Cc: MTC Commission <info@mtc.ca.gov>; Steve Stamos, Clerk of the Board <clerk@sfcta.org>; VTA Board Secretary <board.secretary@vta.org>; CHSRA Board <boardmembers@hsr.ca.gov>; SFMTA Municipal Transportation Agency <sfmta@public.govdelivery.com>

Subject: item #7 (d) CHANGE ORDER FOR INSTALLATION OF INSULATED JOINTS

Dear Chair Bruins and Members of the Caltrain Board of Directors,

The only known device capable of supporting Constant Warning Time (CWT) in electrified territory does not require insulated rail joints:

*"The PSO 4000 couples to the track with a bandpass, low impedance connection—**you don't have to have insulated rail joints on the track.**"*

http://download.siemens.com.au/index.php?action=filemanager&doc_form_name=download&folder_id=5633&doc_id=17039

Please consider deferring your vote on item #7 (d) **CHANGE ORDER FOR INSTALLATION OF INSULATED JOINTS** until after confirming the requirement for insulated rail joints with VTA signal engineers (the VTA purchased a PSO 4000 for \$38,688.32 last year).

On a related note, Balfour Beatty continue to experience difficulties at RTD in Denver and are now in arbitration after requesting a \$40M 599-day contract extension.

<http://www.cpr.org/news/story/rtd-and-contractor-battle-over-blame-for-n-line-commuter-train-delays>



RTD And Contractor Battle Over Blame For N Line Commuter ...

www.cpr.org

The Regional Transportation District and a private contractor are in the midst of a dispute over which party is responsible for construction delays on the \$343 million N Line commuter train line from Denver to Thornton. The disagreement is laid out in Denver District Court documents filed earlier ...

Recommendation:

Decouple all resignaling from the DB electrification contract and reach out to Siemens (and Wabtec) for a Constant Warning Time solution for electrified territory.

Sincerely,

Roland Lebrun

cc

Metropolitan Transportation Commission
VTA Board of Directors
SFCTA Board of Directors
High Speed Rail Authority Board of Directors

1. ABB Secheron
2. Siemens Transportation Systems
3. Balfour Beatty Rail Power Systems
4. Areva T & D
5. Powell Industries (Traction Power Systems)
6. Or approved equal

PART 2 – PRODUCTS

2.1 GENERAL REQUIREMENTS

- A. The pre-packaged switchgear shall consist of an assembly of air insulated, vacuum circuit breaker switchgear and associated components. Switchgear shall be complete with draw-out type vacuum circuit breakers, current and potential transformers, control switches, indicating lamps, protective apparatus and all other devices as indicated on the Contract Drawings and as required for the intended operation. The switchgear shall be housed in a pre-fabricated switchgear building with integral control room.
- B. The design of the switchgear shall provide features for safety of personnel during operation, maintenance and repair and be constructed in accordance with the applicable requirements of ANSI C37.20.2 and/or IEC 298.

2.2 SINGLE-POLE SWITCHGEAR RATINGS

- A. The minimum ratings for the single-pole switchgear assemblies shall be as follows:
 1. Nominal Voltage Un 25 kV
 2. Rated Voltage U_{Ne} 27.5 kV
 3. Maximum Non-permanent Voltage U_{max2} 29 kV
 4. Rated Insulation Voltage U_{Nm} 27.5 kV
 5. Rated Impulse Withstand Voltage/BIL 200 kV
 6. Rated Power Frequency Withstand Voltage 95 kV
 7. Internal Arc Classification 25kA
 8. Rated Busbar and Feeder Normal (Continuous) Current As indicated on the Contract Drawings
 9. Frequency, Hz 60
 10. Rated Short Circuit Breaking Current I_{Nss} 25 kA

- D. Catalog Cuts: Provide catalog information for the following as a minimum:
 - 1. Circuit breakers
 - 2. Protective devices
 - 3. Control switches
 - 4. Switchgear lights
 - 5. Switchgear heaters
 - 6. Switchgear convenience outlets
 - 7. Instrument transformer characteristic curves and burdens
 - 8. Switchgear fuses
 - 9. Relays and meters
 - 10. Test switches
- E. Operating and maintenance (O&M) manuals for circuit breakers, relays, meters, transducers, ground and test devices: The manual shall provide comprehensive detailed information on the approved installation, operation and use, troubleshooting, parts list, lubrication and periodic maintenance, source of replacement parts and service for the items of equipment covered. Fifteen copies of O&M manuals shall be submitted by the Contractor to PCJPB.

1.5 ACCEPTABLE MANUFACTURERS

- A. Subject to compliance with requirements of the Contract Documents, vendors offering products and services which may be considered for this Project include, but are not limited to, the following:
 - 1. Siemens Transportation Systems
 - 2. ABB Secheron
 - 3. Balfour Beatty Rail Power Systems
 - 4. Or approved equal

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS

- A. The pre-packaged switchgear shall consist of an assembly of air insulated, vacuum circuit breaker switchgear and associated components. Switchgear shall be complete with draw-out type vacuum circuit breakers, current and potential transformers, control switches, indicating lamps, protective apparatus and all other devices as indicated on the Contract Drawings and as required for the intended operation. The switchgear shall be housed in a pre-fabricated switchgear building with integral control room.
- B. The design of the switchgear shall provide features for safety of personnel during operation, maintenance and repair and be constructed in accordance with the applicable requirements of IEC 62271-200.

1.5 SUBMITTALS

- A. The Contractor shall prepare detailed designs for each of the required assemblies based on the information specified on the Contract Documents, including details for mounting switches, insulators, operating mechanisms and other related assemblies on the structure, including necessary catenary feeding/sectionalizing jumpers, showing details and dimensions of the parts and their relationship to each other, and describing the material composing the various parts, together with technical, mechanical and electrical characteristics.
- B. The Contractor shall include the following:
 - 1. Complete manufacturer's descriptions, catalog data, and information including model and parts numbers.
 - 2. Manufacturer's general and detail arrangement drawings, and installation instructions.
 - 3. Operation and maintenance manual with a list of recommended spare parts.
- C. Submit details of tests proposed and the procedures and forms to be used during tests and inspection.
- D. Specific warranties, guarantees, spare parts list and manuals.

1.6 ACCEPTABLE MANUFACTURERS

- A. Alstom
- B. Artwell Electric
- C. S&C Electric Company
- D. Turner Switch
- E. Southern States
- F. Siemens Electric
- G. Or, approved equal

PART 2 - PRODUCTS

2.1 GENERAL

- A. Materials shall comply with UL testing and product requirements.
- B. Disconnect switch insulators shall be station post type NEMA TR-208, or approved equal.

2.9 INSULATED TEST LINK

- A. Type 024620-1X as manufactured by Siemens (formerly Invensys Rail) or equivalent.

2.10 LIGHTNING ARRESTERS AND EQUALIZERS

- A. Siemens (formerly Invensys Rail) Clearview No. 022485-28X, Equalizer No. 022700-1X, or equivalent. Lightning arresters and equalizers shall be mounted on a type of base indicated by JPB's action in accordance with the SONO or SOO defined in the General Provisions and shall be in accordance with the recommendations of AREMA C&S Manual Part 11.3.1.

2.11 SURGE PROTECTORS

- A. Siemens (formerly Invensys Rail) SP-17, SP-18, SP-19, SP-20, or equivalent. Surge Protectors shall be in accordance with the recommendations of AREMA C&S Manual Part 11.3.3.

2.12 TERMINALS FOR WIRES AND CABLES

- A. Solderless terminals shall be in accordance with the recommendations of AREMA C&S Manual, Part 14.1.1, unless otherwise specified herein.
- B. Terminals shall be of the solderless crimp-on type. Samples of all solderless terminals shall be submitted for the JPB's action in accordance with the SONO or SOO defined in the General Provisions.
- C. Stranded copper wire shall be fitted with a type of terminal indicated by the JPB's action in accordance with the SONO or SOO defined in the General Provisions at all points where the wires are to be terminated on terminal binding posts.
- D. The terminating means shall be of four types:
 - 1. A lug for terminating heavy wires or signal power wires.
 - 2. A solderless type of terminal as manufactured by TE Connectivity, Inc., under the trade name of "Pre-Insulated Flags" with translucent insulation similar to Catalog No. 322313, or equivalent, for terminating No. 16 and No. 14, American Wire Gauge (AWG) stranded wires.
 - 3. An AMP Solistrand "Ring Tongue-Flat" terminal, similar to that shown on the AMP Drawing P64-044, together with slip-on nylon post insulator, similar to that shown on AMP Drawing P64-0264, or equivalent, for terminating wires having a diameter larger than No. 14 AWG to a maximum diameter over the insulation of 0.40-inch.
 - 4. An AMP preinsulated; diamond grip ring nylon insulated wire terminal shall be used for terminating other stranded wires, No. 20 and No. 18 AWG, having maximum diameter of 0.125-inch. AMP Catalog No. 320554, or equivalent, shall be furnished for No. 8 studs and AMP Catalog No. 320571, or equivalent, shall be furnished for 1/4-inch studs.
- E. Terminals shall be for attaching to the ends of the conductor in such a manner that the flexibility of the conductor will not be destroyed and the possibility of breakage at the terminal will be reduced to a minimum.

- B. Junction boxes shall be provided to terminate underground cables at all switch-and-lock movements and all switch circuit controllers.
- C. Junction boxes shall be provided with means for applying padlock.

2.20 LUBRICATION

- A. Lubrication for switch tie plates for all switch-and-lock movement layouts installed by the Design-Builder shall be a graphite lubricant, similar to Dixon's Graphite "Railroad 60" per the JPB's action in accordance with the SONO or SOO defined in the General Provisions.

2.21 ENVIRONMENTAL PROTECTION (CORROSION PREVENTIVE COMPOUND)

- A. Protection, as hereinafter specified for machine-finished surfaces, threaded rods, nuts, and other parts that are susceptible to rusting or corroding, shall be a corroding preventive compound, NO-OX-IDE No. 90918, or equivalent. The product shall have sufficient body to resist weather and rusting for at least 6 months.

2.22 AUDIO FREQUENCY OVERLAY TRACK CIRCUITS

- A. Audio frequency overlay track circuits shall be AFTAC-II manufactured by Alstom (formerly GETS Global Signaling), PSO manufactured by Siemens (formerly Invensys Rail), or equivalent.

2.23 AUDIO FREQUENCY ISLAND TRACK CIRCUITS

- A. Audio frequency island track circuits shall be AFTAC-II manufactured by Alstom, PSO manufactured by Siemens, or equivalent.

2.24 AC TRACK CIRCUITS

- A. AC Track Circuits shall be steady energy 100 Hz such as the SE-3 manufactured by Siemens (formerly Invensys Rail) or equivalent. Vane Relays shall not be used.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Material and apparatus specified herein shall be installed by the Design-Builder in accordance with the details of respective Sections of the Specifications, other Contract Documents, manufacturer's recommendations, and in accordance with the Design-Builder's installation drawings per the JPB's action in accordance with the SONO or SOO defined in the General Provisions.

END OF SECTION

- C. Furnish one test tool or relay wrench for each shelter where relays are installed.
- D. Furnish 12 inserting/extracting tools for each type of contact requiring a special tool.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Relays shall be in dustproof enclosures, except a provision shall be made for ventilation where required for heat dissipation.

2.2 VITAL DC RELAYS

- A. General:

1. Vital Relays shall be Alstom Type B, Siemens (formerly Invensys Rail) Type "ST", or equivalent. Design-Builder shall use relays for the intended application, e.g. line, switch control, or track.
2. Vital dc relays shall be of the plug-in type and rack-mounted. Relays shall have a transparent dust cover made of a composition that will not support combustion.
3. Vital Relays, with a nominal operating voltage of 10 to 16 volts, shall be capable of operating continuously without resultant damage, with a minimum voltage range of 7 to 21 volts inclusive, applied to their operating circuits.
4. Vital relays shall have a test terminal to allow convenient measurement of the coil voltage.
5. Design biased neutral vital relays so that gravity alone will prevent the armature from picking up if the permanent magnet is de-energized or if no current is applied to the coil, due to interruption of the normal magnetic circuit.
6. All front contacts shall be silver-to-metal carbon, meeting the recommendations of the AREMA C&S Manual Part 6.2.1.
7. When three dc vital relays, suppressed as specified herein, are connected in parallel and operated as a test load from normal working voltage, a vital relay front or back contact that breaks this load shall be capable of at least five million operations at this load without the contact resistance, measured with 10 milliamp current, exceeding 5 ohms.
8. Arc suppression for vital relays shall be built into the relay or into its plugboard.
9. Equip vital plug-in relays, except vital time-element relays and special application relays, with front current testing facilities. Provide facilities to enable the testing of voltage from the front of the relay, without having to remove the relay or remove adjacent relays.
10. Equip vital relays with a registration plate to prevent relays of the wrong style, contact arrangement, or operating characteristics, from being inserted into the plugboard.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Properly fasten and brace equipment shipped within shelters and cases to prevent damage during transit. The Design-Builder shall replace any equipment damaged during transit or prior to in-service operation at no cost to the JPB.
- B. The Design-Builder shall package all vital relays, batteries, and electronic plug-in modules in separate containers for shipment and do not install until the shelter is set at its final location.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Furnish factory-wired equipment shelters or cases, as described herein and as required by the Design-Builder's design. These shelters shall be complete with all the equipment required to provide the necessary functionality. Wiring shall conform to NEMA Standard ICS-70, or National Electrical Code (NEC), and the recommendations of the AREMA C&S Manual, as applicable. All signal shelters containing electronic equipment shall be supplied with an air conditioning system. AC units shall be placed in a vandal-proof cage readily accessible for maintenance.
- B. Equipment shelters shall be products manufactured by P.T.M.W., Siemens (formerly Invensys Rail) or equivalent.
- C. The Design-Builder shall develop equipment shelter sizes and layouts in accordance with site-specific requirements.
- D. Equipment shelters shall be rain-tight and dust-tight, National Electrical Manufacturers Association (NEMA) 3R, ventilated, and have hinged doors with three-point latch and handle that include support to securely lock the doors with standard JPB signal padlocks.
- E. Equipment shelters shall be constructed of 12-gauge galvanized steel for floors, walls, and doors. Roofs shall be no less than 14-gauge galvanized steel with a minimum of 50 lb/ft² load rating.
- F. The entire structure shall be powder coated on the outside with TGIC Polyester Powder (or equal polyester powder) with a nominal thickness of four (4) mils, but no less than three (3) mils at any point on the surface of the enclosure in accordance with AREMA C&S Manual Part 1.5.10. The exterior color shall be light gray.
- G. The steel instrument enclosures shall be complete with moveable shelves, wire chase, and backboard.
- H. The equipment shelters shall provide access to underground and aerial cable entrance behind the main terminal racks. The top and sides shall be lined with heat and cold insulating material and constructed to prevent sweating. Provide ventilation openings as required for the size of the shelter proposed. No ventilation opening shall be made in the roof of the shelter. Provide lift rings to facilitate the movement of the shelter.
- I. Provide ventilation openings in each door. The exterior of the ventilation openings shall be hooded to minimize the entrance of precipitation. Equip the interior of ventilation opening with sliding plate to allow the adjustment of airflow and with a replaceable dust filter. The doors shall be hinged and gasketed so that they will provide a dust proof and

Givens, Patrice

From: Roland Lebrun <ccss@msn.com>
Sent: Wednesday, June 30, 2021 4:20 PM
To: Board (@caltrain.com)
Cc: MTC Info; SFCTA Board Secretary; Baltao, Elaine [board.secretary@vta.org]; CHSRA Board; cacsecretary [@caltrain.com]; SFCTA CAC
Subject: Item #8 Background behind recommendation to terminate Contract with Alstom Signaling Operation LLC
Attachments: Consistent Warning Time (CWT) or two (2) speed check (2SC) for Grade Crossings.pdf

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Dear Caltrain Board,

This email is intended to substantiate and elaborate on the recommendation I made in my 6/29 email to **"Suspend all future contracts with Alstom Signaling LLC (formerly GE Signaling) until the gate activation issues at Virginia and Auzerais have been resolved at no cost to the JPB"**

Background:

- **February 4 Board Meeting**

"John Funghi, CalMod Chief Officer, reported that subcontractor successfully converted grade crossings to alternating current (AC) compatible systems over the weekend. He stated the Federal Railroad Administration (FRA) was pleased with the quality and testing performance achieved."

<https://www.caltrain.com/Assets/feb+bod+mins.pdf> (page 3)

- **February 8 PRA issued** requesting the following information about the West Virginia and Auzerais grade crossing conversions:
 - 1) Engineering drawings
 - 2) Parts list including manufacturer, part/model number and quantities
 - 3) Task and/or work order(s)
 - 4) Observed warning times at the following approach speeds: 5 MPH, 10 MPH, 15 MPH, 20 MPH, 25 MPH, 30 MPH, 35 MPH and 40 MPH
- **February 25 SamTrans response**

"Please note that the COVID-19 pandemic has caused staff-time shortages and put inordinate stress on all JPB functions. We will provide you a status update as to your request as soon as possible"
- **May 3 FOIA request to the FTA**

"Please provide electronic copies of all Caltrain Program Management Committee (PMOC) reports submitted after November 3, 2020"

<https://www.caltrain.com/projectsplans/CaltrainModernization/CalMod Document Library.html>

- May 6 SamTrans response to February 25 PRA
 1. No engineering drawings
 2. Equipment is GE Transportation Systems Audio Frequency Train Activated Circuit (AFTAC) II
 3. Design
 - a. Auzeais: 32-second CONSTANT Warning Time for a maximum 35 MPH approach speed.
 - b. West Virginia: 34-second CONSTANT Warning Time for a maximum 35 MPH approach speed.
 4. Observed results (*"Unable to reach designed Maximum Authorized Speed (MAS) due to Civil speed restriction"*)
 - a. Auzeais
 - i. 51-second warning for a 17 MPH approach speed
 - ii. 57-second warning for a 13 MPH approach speed
 - iii. 78 to 149-second warning for a 9 MPH approach speed
 - iv. 96 to 172-second warning for an 8 MPH approach speed
 - b. West Virginia
 - i. 65-second warning for an 18 MPH approach speed
 - ii. 110 to 130-second warning for a 9 MPH approach speed
 - iii. 128-second warning for an 8 MPH approach speed

- June 7 FTA response to May 2 FOIA
 - October 29, 2020 Two-Tiered Quarterly Progress Review Meeting No. 14
 - January 26, 2021 Two-Tiered Quarterly Progress Review Meeting No. 15
 - **April 27, 2021 Project Monitoring Report (PMR) March 2021** (page 3 attached for your convenience)
 -
 - *"The FRA and CPUC have observed the installation of 2SC at a location in Segment 4, and the test data has been supplied to the FRA.*
 - ***The FRA has suggested that PCEP complete a few more tests before submitting its RFA."***
 -
 - Please note that, per Board direction (Director Pine), this PMR should have been posted to https://www.caltrain.com/projectsplans/CaltrainModernization/CalMod_Document_Library.htm **OVER TWO MONTHS AGO**
 -

Recommendation:

1. Accept MRS agreement to transfer responsibility for signal conversion to the JPB
2. **Suspend all future contracts with Alstom Signaling LLC (formerly GE Signaling) until the gate activation issues at Virginia and Auzerais have been resolved at no cost to the JPB**
3. **Enter into a sole source contract with Siemens**, including **FUNCTIONAL** Constant Warning Time (CWT) equipment at every crossing between San Francisco and San Jose

Respectfully submitted for your **thoughtful** consideration.

Roland Lebrun

CC

MTC Commissioners
SFCTA Commissioners
VTA Board of Directors
CHSRA Board of Directors
VTA PAC
VTA CAC
Caltrain CAC
SFCTA CAC

Status	The System Integration Lead is only part-time and needs assistance. Scheduling capacity continues to be insufficient to meet the routine demands of the project. Rail Activation Planning is currently being managed by a member of the safety team with rail activation experience until a permanent Rail Activation Manager is hired.
Project Sponsor Action	The JPB reports that it is attempting to hire an additional scheduler to assist with delay analysis. Rail Operations has engaged an independent consultant to assist it in developing materials for incorporation into the overall Rail Activation Plan (RAP). <i>The Rail Activation process is currently being managed as two concurrent processes with coordination at the committee level. Communication between the PCEP and Rail Operations teams requires improvement.</i>
PMOC Recommendation	<i>Add scheduling support and assign technical staff to assist in Systems Integration and testing, and commissioning coordination and oversight.</i>

Summary of Issue/Concern	OCS Construction Progress
Date Identified	May 2018
Status	Overall progress on the OCS foundations and follow-on electrification work is much slower than originally planned. <i>Foundations in Segments 3 and 4 are complete and foundation work at the CEMOF recently started. This problem continues to impact design and construction of OCS foundations. Approximately 26%, or 806 of the planned 3108 foundations, remain to be constructed as of 3/30/2021.</i>
Project Sponsor Action	<i>The PCEP team continues to coordinate closely with the contractor in an effort to avoid changes in pole locations, particularly those that would require additional rights-of-way. The JPB now expects OCS foundation work to be complete in September 2021.</i>
PMOC Recommendation	Complete potholing of the remaining foundations as early as possible.

Summary of Issue/Concern	Consistent Warning Time (CWT) or two (2) speed check (2SC) for Grade Crossings
Date Identified	<i>February 2018</i>
Status	The Electrification contractor is moving forward with design using a two (2) speed check (2SC) solution which apparently will satisfy FRA and California Public Utilities Commission (CPUC) requirements.
Project Sponsor Action	JPB to submit a Request for Amendment (RFA) to Caltrain's Positive Train Control Safety Plan (PTCSP) under 49 CFR Sec. 236, Subpart I; the RFA will document the design and performance of its 2SC grade crossing warning system. <i>The FRA and CPUC have observed the installation of 2SC at a location in Segment 4, and the test data has been supplied to the FRA. The FRA has suggested that PCEP complete a few more tests before submitting its RFA. The JPB now expects to submit its Request for Amendment (RFA) in late spring 2021.</i>
PMOC Recommendation	<i>Continue close coordination with FRA and CPUC. Resume preparation of GO 88B applications for upcoming jurisdictions.</i>

Summary of Issue/Concern	<i>Timely Completion of Signals Design and Installation</i>
Date Identified	<i>2019</i>
Status	<i>The pace of signals design is slower than required to achieve a satisfactory completion date for the project. The mediation process currently underway is intended to resolve the underlying issues and result in an improved plan for</i>

Givens, Patrice

From: Roland Lebrun <ccss@msn.com>
Sent: Tuesday, July 6, 2021 12:02 AM
To: Board (@caltrain.com)
Cc: MTC Info; SFCTA Board Secretary; Baltao, Elaine [board.secretary@vta.org]; cacsecretary [@caltrain.com]; SFCTA CAC
Subject: Stadler EMU interim revenue service (Plan B)
Attachments: EMU RFP Section 5 Couplers.pdf

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders.

Dear Caltrain Board,

Further to the recent announcement that the first EMUs will be delivered in 2022 but that electrification (including signaling) may not be fully operational until mid-2025, I believe that the time has come for the Board to consider a diesel-electric hybrid alternative during the transition to fully-electrified revenue service.

Background

- Gallery railcars are over 35 years-old (5 years above life expectancy) <https://www.caltrain.com/about/statsandreports/commutefleets.html>
- There is no existing secure storage capacity for EMUs while the current railcars are in service
- The Stadler warranty period will start when the EMUs are delivered (NOT when they enter revenue service)
- **The EMUs were designed with coupler adapters designed to rescue a stranded train in an emergency** (EMU RFP Section 5 attached for your convenience).

"5.4 COUPLER ADAPTER

*If automatic couplers are provided, **the Contractor shall supply coupler adapters for coupling to the existing diesel fleet.** Each cab car shall be equipped with one coupler adapter to allow it to be connected to a conventional AAR Type-E, F, or H coupler. The removable adapter shall have a maximum weight of 65 pounds and be located outside of the car and in a position such that it will require minimal effort for the Operator to remove, install and replace the adapter in its holder. It shall be able to withstand 100,000 pounds in buff or draft without permanent deformation. The operator shall be able to manually install or remove the adapter alone and without tools. **It is anticipated that the adapter will be used during emergency or rescue situations only.**"*

Proposed testing plan

The proposal is to send two Caltrain locomotives (one F40 and one MP36) to the FRA's testing facility in Pueblo, Colorado and **certify that the coupler adapters, as designed, are capable of supporting safe and reliable revenue service in push/pull mode for a minimum of three years**, as follows: six push and six pull 7-car EMU tests at the following speeds: 65, 70, 75, 80, 85, 90 MPH for a total of 12 tests/locomotive.

The above 24 tests will be repeated with an 8-car EMU consist (total 48 tests).

The objective of these tests is to certify the following:

- That hybrid consists can be operated **safely and reliably in revenue service** at speeds of 60-79 MPH
- The existing F45 and MP36 locomotives are powerful enough to push/pull 7 and 8-car EMU consists **loaded at 150% of capacity** (Baby Bullet and special event service)
- The optimal consist configurations for Baby Bullet, Express and Local service (observed acceleration/deceleration curves)
- **That the coupler adapters, as designed, will survive the delivery trip from Salt Lake City and/or Pueblo to the JPB** <https://www.railwayage.com/passenger/intercity/first-siemens-brightline-cars-depart-sacramento/>



First Siemens Brightline trainset departs Sacramento - Railway Age

Siemens announced Dec. 14 that its first Brightline trainset, comprised of two locomotives and four coaches adorned in Brightline Blue, is complete and has left the company's manufacturing hub in Sacramento, Calif.. The first trainset is approximately 489 feet long and is being transported across the country via rail, journeying 3,052 miles from Sacramento to Florida.

www.railwayage.com

Respectfully submitted for your consideration.

Roland Lebrun

CC

MTC Commissioners
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VTA Board of Directors
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SFCTA CAC
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SECTION 5 - COUPLERS, DRAWBARS AND DRAFT GEAR

Contents

SECTION 5 - COUPLERS, DRAWBARS AND DRAFT GEAR	5-i
5.1 GENERAL	5-1
5.2 CONVENTIONAL COUPLERS.....	5-1
5.2.1 MECHANICAL.....	5-1
5.2.1.1 Coupler and Yoke.....	5-1
5.2.1.2 Draft Gear.....	5-2
5.2.1.3 Coupler Carrier.....	5-2
5.2.1.4 Uncoupling Lever.....	5-2
5.2.1.5 Energy Absorption.....	5-2
5.2.2 ELECTRICAL.....	5-3
5.2.3 PNEUMATIC.....	5-3
5.3 AUTOMATIC COUPLERS.....	5-3
5.3.1 MECHANICAL COUPLER.....	5-3
5.3.1.1 General.....	5-3
5.3.1.2 Geometric Requirements.....	5-3
5.3.1.3 Coupler Head.....	5-4
5.3.1.4 Strength.....	5-4
5.3.1.5 Energy Absorption.....	5-4
5.3.1.6 Self Centering.....	5-4
5.3.1.7 Draft Gear.....	5-4
5.3.2 ELECTRICAL COUPLER.....	5-5
5.3.2.1 Electric Coupler Head.....	5-5
5.3.2.2 Trainline Circuits.....	5-5
5.3.2.3 Electrical Contact Requirements.....	5-5
5.3.2.4 Contact Springs.....	5-6
5.3.2.5 Current Interruption Protection.....	5-6
5.3.2.6 Connections.....	5-6
5.3.2.7 Housing.....	5-7
5.3.2.8 Contact Holder.....	5-7
5.3.2.9 Electric Coupler Cover.....	5-7
5.3.2.10 Electrical Isolation.....	5-7
5.3.2.11 Non-Cab End.....	5-7
5.3.3 PNEUMATIC COUPLER.....	5-8
5.3.4 CONTROL.....	5-8
5.3.4.1 General.....	5-8
5.3.4.2 Coupler Control.....	5-9
5.3.4.3 Automatic Coupling/Uncoupling.....	5-9
5.4 COUPLER ADAPTER	5-10
5.5 REQUIRED CONTRACT SUBMITTALS.....	5-10
5.6 CITED REFERENCES	5-10

5.1 GENERAL

The coupler system shall be service proven and shall meet the requirements of all applicable FRA regulations, and APTA and AAR Standards and Recommended Practices. All like vehicle types shall have identical coupler systems. The coupler system shall be either a conventional system, using an APTA Type-H Tightlock coupler or an automatic system that will make all mechanical, pneumatic, and electrical trainline connections. Semi-permanent couplers, such as drawbars, may also be proposed for use at non-cab ends of cars.

The coupler connections shall permit operation of up to eight vehicles in a train under normal conditions through electric and pneumatic trainlines. If automatic couplers are used, coupler controls shall be located in each operator's cab and outside the vehicle near each automatic coupler.

The coupler and draft gear shall have the strength needed to allow, under emergency conditions, a train of eight vehicles with an AW3 passenger load to push or pull an inoperable train of up to eight vehicles with an AW3 passenger load, without damage to the coupler or its anchorage.

Pushback couplers shall meet all the requirements of APTA PR-CS-RP-019-11, Pushback Couplers in Passenger Rail Equipment.

The Contractor shall provide a complete System Functional Description (SFD) for all systems, subsystems, components and devices, contained within this specification section. The SFD shall be in the form of a narrative description, with attendant electrical schematics and mechanical drawings, sufficient for the JPB to fully understand every aspect of the design and operation of the equipment specified in this section, and to make an engineering-based decision as to its acceptability for the Caltrain application.

5.2 CONVENTIONAL COUPLERS

Where conventional couplers are provided, they shall be of an APTA Type-H Tightlock design. Electric and pneumatic connections shall be made through use of inter-car jumpers utilizing AAR pneumatic fittings and Amtrak style electric connectors.

There shall be no permanent deformation in the couplers or in any other component during a 4 mph collision. Reference Section 3.1.4.1.1 for the parameters of this collision scenario.

5.2.1 MECHANICAL

5.2.1.1 Coupler and Yoke

Type-H Tightlock couplers and yokes shall comply with APTA Recommended Practice RP-M-003-98. Each coupler shall have an automatic horizontal centering device that aligns an unloaded coupler to carbody centerline. It shall be possible for two cars to automatically couple on a maximum degree horizontal curve shown on the Caltrain profile and alignment charts. An override of the centering device shall be provided to allow coupling in tight curves.

The gathering range of the coupler shall not be less than 3 3/8 inches in all directions with the coupler at the nominal operating height. The coupler gathering range shall be sufficient for two

cars to automatically couple on tangent track when each coupler is maintained within the tolerance stated in Section 5.2.1.3, and each coupler is positioned at the opposite limit of the gathering range. Tests shall be conducted to confirm the gathering range.

5.2.1.2 Draft Gear

The draft gear shall have rubber cushioning which shall be effective in both buff and draft in normal train operation.

For alternative structural compliance designs, a push-back, release function shall be incorporated. The draft gear shall not engage non-recoverable energy absorption below 4 mph (reference CEM collision Scenario 1 of Section 3.1.4.1.1). At speeds over 4 mph, the coupler will push back and engage the energy absorption device. The Contractor shall provide calculations detailing the energy management of this feature. A telltale device shall be incorporated to provide obvious indication that the function has been triggered.

For Tier I compliant structural designs, the above requirements shall apply if a CEM coupler design is offered.

5.2.1.3 Coupler Carrier

Each coupler shall have a carrier that maintains nominal coupler height while allowing vertical dynamic motion. The coupler carrier shall be designed to adequately and consistently support the coupler through its full range of vertical and horizontal movement, and shall maintain the coupler at a nominal height of 34.5" ATOR. The coupler carrier and centering device shall be adjustable to allow maintenance personnel to correct for wheel, truck, suspension, and carbody wear. The coupler location shall be maintained within ± 0.75 inches vertically and ± 0.75 inches horizontally of its nominal, centered position on level, tangent track with new wheels under all static conditions from AW0 to AW3. Coupler adjustment shall not be required more frequently than 92-day intervals.

5.2.1.4 Uncoupling Lever

Uncoupling levers shall be provided that comply with APTA Standard SS-M-016-06 and 49 CFR 238. The uncoupling lever shall not cause unintentional uncoupling as a result of any possible coupler movement.

5.2.1.5 Energy Absorption

For alternative structural compliance designs, an energy absorption feature shall be provided that will automatically engage when the push-back release function is triggered. The minimum stroke of the system shall be sufficient to allow the anti-climbers to fully engage. The device shall have a replaceable cartridge or be of a self-resetting hydraulic design.

For Tier I compliant structural designs, the above requirements shall apply if a CEM coupler design is offered.

The Contractor shall submit all energy-absorption system design information, including an energy-absorption analysis and actual test results showing applied force, compression distance traveled, and calculations demonstrating the performance of the energy absorption system.

5.2.2 ELECTRICAL

Electrical connectors shall be provided at the cab ends to maintain trainline continuity when EMU's are coupled. Intercar jumper cable assemblies shall be provided for each connector. The control system shall automatically reconfigure the trainlines and car ends after the cars are coupled and intercar jumpers connected.

The Contractor shall provide an special MU jumper cable between locomotive and the EMU to release the EB brakes and activate any other trainlines as needed to fully use the pneumatic brake pipe to safely tow and brake a dead 8 car EMU with functioning pneumatic brakes for maintenance and emergency operations.

5.2.3 PNEUMATIC

Pneumatic hoses shall be coupled manually and shall comply with applicable AAR standards. Each end of each vehicle shall be equipped with a 1-1/4 in self-locking ball type AAR approved angle cock on the air brake trainline pipe. Each end of every vehicle shall be provided with a 1 inch self-vented cut-out cock with a locking handle on the main reservoir trainline pipe. The system shall be compatible with JPB locomotives for rescue. Unintentional uncoupling and break-aparts shall cause emergency brakes to be applied.

5.3 AUTOMATIC COUPLERS

Where automatic couplers are provided, they shall provide fully automatic mechanical, electrical and pneumatic connections between mating cars.

There shall be no permanent deformation in the couplers or in any other component during a 4 mph collision. Reference Section 3.1.4.1.1 for the parameters of this collision scenario.

5.3.1 MECHANICAL COUPLER

5.3.1.1 General

The mechanical coupler shall be slack free and self-locking. The coupler shall be supported such that nominal coupler height is maintained while allowing vertical dynamic motion. The Contractor shall provide technical specifications, drawings, schematics, maintenance instructions and any other information requested by JPB to determine the suitability of the mechanical head.

The Contractor shall provide all special tools, as necessary for the maintenance and repair of the coupler and coupler mechanism.

5.3.1.2 Geometric Requirements

The coupler, drawbar, and draft gear shall be designed and constructed such that coupled cars shall be able to negotiate the horizontal and vertical curves on all classes of track, as specified in Section 2.2.2. This requirement shall remain valid when one car has worn wheels and deflated air springs and the other has new wheels and the air springs are at their up-stop limits.

The coupler support and centering device shall be adjustable to allow maintenance personnel to correct for wheel, truck, suspension, and carbody wear. The coupler location shall be maintained within ± 0.75 inches vertically and ± 0.75 inches horizontally of its nominal

position on level, tangent track with new wheels under all static conditions from AW0 to AW3. Coupler adjustment shall not be required more frequently than 92-day intervals.

The gathering range of the coupler shall not be less than 3 3/8 inches in all directions with the coupler at the nominal operating height. The coupler gathering range shall be sufficient for two cars to automatically couple on tangent track when each coupler is maintained within the above stated tolerance, and each coupler is positioned at the opposite limit of the gathering range. Tests shall be conducted to confirm the gathering range.

5.3.1.3 Coupler Head

The coupler head shall be slack free and self-locking.

5.3.1.4 Strength

The coupler, draft gear and anchorage to the carbody shall comply with the requirements of APTA PR-CS-RP-019-12. This shall include a draft strength capable of handling the normal and rescue operations described in Section 2.3.7.

All parts of the coupler assembly on which it is possible for a person to stand shall withstand a vertical load of 400 lbf (1780 N) without deformation.

5.3.1.5 Energy Absorption

For alternative structural compliance designs, an energy absorption feature shall be provided that will automatically engage when the push-back release function is triggered. The minimum stroke of the system shall be sufficient to allow the anti-climbers to fully engage. The device shall have a replaceable cartridge or be of a self-resetting hydraulic design.

For Tier I compliant structural designs, the above requirements shall apply if a CEM coupler design is offered.

The Contractor shall submit the energy-absorption system design information, including an energy-absorption analysis and actual test results showing applied force, compression distance traveled, and calculations demonstrating the performance of the energy absorption system.

5.3.1.6 Self Centering

Each coupler shall have an automatic horizontal centering device that aligns an unloaded coupler to carbody centerline. An override of the centering device must be provided to allow coupling in tight curves. When coupled, the centering device shall not prevent coupler movement necessary for normal operation.

5.3.1.7 Draft Gear

The draft gear shall have cushioning which shall be effective in both buff and draft in normal train operation.

For alternative structural compliance designs, a push-back, energy absorbing function shall be incorporated. The draft gear shall not engage non-recoverable energy absorption below 4 mph (reference CEM collision Scenario 1 of Section 3.1.4.1.1). At speeds over 4 mph, the coupler will push back and engage the energy absorption device. The Contractor shall provide calculations detailing the energy management of this feature. A telltale device shall be incorporated to provide obvious indication that the function has been triggered

For Tier I compliant structural designs, the above requirements shall apply if a CEM coupler design is offered.

5.3.2 ELECTRICAL COUPLER

5.3.2.1 Electric Coupler Head

Each coupler assembly shall be provided with an electrical coupler head or heads. The electrical portion of the coupling equipment shall perform the following functions:

- a) Sense the uncoupled state and control the car relays needed to establish the adjacent car end as a train end
- b) When coupled to another vehicle, sense the coupled state and control the car relays to establish the car end as middle, or coupled end
- c) Sense an unintentional uncoupling through the use of a loop circuit and apply emergency brakes in the train
- d) Provide for isolation by Cab control or local manual control

There shall be a minimum of 10 percent spare contacts in the electric coupler head.

Electric coupler contacts and trainlines shall be symmetrically arranged about the vertical centerline so that they may be reversed with respect to any other car and the specified functions will not be affected.

The electrical coupler heads shall be heated, if required, to operate correctly over the full temperature range described in Section 2.2.5, environmental conditions.

The mounting of the electric coupler head on the mechanical coupler shall provide for easy removal and replacement of the entire assembly without the removal of any other adjacent component.

The Contractor shall submit a design analysis report on the electrical coupler to confirm compliance with the requirements of this Section.

5.3.2.2 Trainline Circuits

The circuit assignments shall be selected by function such as, but not limited to, ATC, Door, Communications and MU Operation (propulsion, braking, auxiliary power and battery, cab control, data bus network, etc.).

5.3.2.3 Electrical Contact Requirements

Butt-type or pin and socket contacts shall be used.

5.3.2.3.1 Butt Contacts

Butt-type contacts for high energy (battery level) signals shall be silver plated. Contacts for low energy (train bus, etc) signals shall be gold plated.

The contact tips shall be replaceable by removal through the front of the coupler block without disassembling the coupler or its wiring.

The contacts shall mate with a wiping action. Fritting currents shall be employed where necessary to maintain low resistance pin contact for data bus and other low voltage, low current sensitive circuits. The disconnect operation shall be rapid to avoid damage by arcing.

5.3.2.3.2 Pin and Socket Contacts

The electrical coupler head shall be retractable. The electric heads shall not mate until mechanical coupling has been achieved, and shall un-mate prior to mechanical uncoupling.

Guide pins shall be provided to ensure that pin and sockets are correctly aligned.

Contacts shall have sufficient lead-in to ensure that they will always mate correctly under worst case conditions of guide pin wear.

Fritting currents shall be employed where necessary to maintain low resistance pin contact for data bus and other low voltage, low current sensitive circuits.

Electric coupler head mating forces and speed shall not be greater than necessary.

The Contractor shall supply details of the design that describes how misalignment and mis-mating of contacts is avoided.

5.3.2.4 Contact Springs

No current shall flow through the contact springs.

5.3.2.5 Current Interruption Protection

To prevent electric coupler pin contacts from arcing during uncoupling, a separate set of switching functions shall be included for the automatic disconnect of all circuits which might cause arcing damage, prior to separation of the current carrying contacts.

5.3.2.6 Connections

Each contact, except spares, shall be permanently marked to identify its actual circuit designation by engraving its identification on the contact block. Spares shall be identified with decals only, designating "SPARE" and its number.

Connections to the back of the electrical coupler contacts shall be non-corroding, designed to prevent interference between adjacent connections, and shall be accessible for maintenance. Cable entry to the electrical coupler shall be waterproof.

Connections from the electrical coupler head to the carbody mounted trainline junction box shall be by means of flexible cables with multi-way, locking type connectors at the carbody ends.

Sufficient conductors shall be provided to wire all coupler contacts, including all spares, back to the junction box.

The method of connection and support shall minimize stress in all operating positions and shall prevent chafing of the cables. Strain relief bushings shall be used in this regard.

The connections shall permit removal and replacement of the complete electrical coupler without disturbing the mechanical and pneumatic portions of the coupler.

5.3.2.7 Housing

The housing shall be provided with an opening on the bottom, covered with a removable plate of sufficient size to make connections and to inspect and repair the terminals, cross-connections and other internal parts of the coupler.

5.3.2.8 Contact Holder

The electrical coupler contact block shall be of a non-hygroscopic material, of adequate strength to withstand, without damage, mechanical forces imposed by normal revenue service.

The design of the insulating block, contacts and edge seals shall preclude the entry of water and debris of any kind into the electrical housing, and shall be mechanically stable over the full range of temperatures defined in Section 2.2.5.

An elastomeric gasket shall be attached to the perimeter of the electric coupler contact block. When the electrical heads mate during coupling, the gasket material shall form a waterproof seal to protect the contacts. This gasket shall also form a waterproof seal with the electrical head cover when it is in the closed position.

Dielectric strength shall meet the requirements of Section 16.17.3 for wiring insulation resistance from pin-to-pin and from pin-to-ground. Creepage distance between adjacent contacts and between the contacts and any metal part connected to the carbody shall be in accordance with EN50124.

The contact block shall be removable for repairs or replacement.

5.3.2.9 Electric Coupler Cover

Each electric coupler shall be provided with a waterproof cover which shall protect the coupler contacts from dirt, dust, water and ice when it is closed in the uncoupled position. The cover shall be spring-closed and shall automatically open as the electric heads mate during coupling and shall close as the electric heads separate during uncoupling. The cover shall not be damaged by maintenance personnel using the cover as a step. A prop rod or other hold-open device shall be provided.

5.3.2.10 Electrical Isolation

Electrical isolation shall be possible without mechanically uncoupling by activating the Trainline Isolation Bypass switch in the cab. This shall cause the electric heads to retract after proper electrical isolation has occurred automatically. It shall not be necessary to return the Trainline Isolation Bypass switch to its normal position in order to mechanically uncouple using the "UNCOUPLE" pushbutton.

5.3.2.11 Non-Cab End

5.3.2.11.1 Electrical Connections

Intercar electrical connections utilizing semi-permanent jumper cables with connectors at each end, connected to car junction boxes are required. Since the disconnection of the inter-car connectors is a manual process, means shall be provided to safely remove all circuits with potential differences of more than 50 volts and/or currents in excess of 10 amps prior to disconnection.

5.3.3 PNEUMATIC COUPLER

The coupler shall be capable of making all necessary connections for trainlining the main reservoirs and the control pressure (brake pipe). Car-to-car brake pipe connections shall be made automatically when couplers are fully engaged mechanically and locked. Connections shall be provided in the coupler for the control pressure pipe, main reservoir pipe and any other connections necessary for the automatic coupling and uncoupling of the cars. Manually operated, self-locking, non-vented cut-out cocks shall be provided at each end of each pneumatic pipe that is trainlined.

A readily replaceable, self-closing valve shall be provided which shall automatically close off the emergency pipe and main reservoir pipe when cars are uncoupled and open between coupled cars. The design of the coupler and controls shall ensure that during intentional uncoupling the emergency brakes shall apply on the cars being parked. The uncoupling operation shall not cause an emergency brake application on the controlling car and shall not result in the loss of brake pipe air. Unintentional uncoupling and break-aparts shall cause emergency brakes to be applied.

Provisions shall be made to prevent undesired buildup of air pressure in the uncoupling cylinder due to uncoupling valve leakage.

The air connections at the rear of the coupler head shall be tapped for standard iron pipe size connections. All piping and fittings on or about the coupler shall be of approved materials. The air line at the face of the coupler shall be free-flow connected by means of spring loaded rubber gasketed bushings or approved equal. These gaskets shall be retained to prevent their becoming dislodged during uncoupling.

All piping and fittings on or about the coupler shall be of approved materials.

To prevent debris from entering the pneumatic trainlines, a tappet valve shall be provided in the face of the coupler for each pneumatic trainline. The tappet valve shall automatically open upon mechanical coupling and automatically close upon mechanical uncoupling.

5.3.4 CONTROL

5.3.4.1 General

Coupler design shall permit automatic coupling when bringing cars together. If the displacement of the couplers is within the gathering range specified, coupling shall occur when the couplers come into full contact.

Coupler control shall be arranged so that the complete uncoupling operation can be performed only from an active coupler control station at the uncoupling location.

Single point failures in the uncoupling control shall not produce uncoupling. Uncoupling must be manually initiated, and protected by a key-switch. Uncoupling shall only be possible at no motion.

5.3.4.2 Coupler Control

The electric and pneumatic control system shall provide the functional features to permit automatic coupling and uncoupling of the cars from within the adjacent cab car-end. Manual, electric and pneumatic coupling and uncoupling features shall also be provided.

Auxiliary equipment shall be supplied as part of the coupler equipment to energize in both cars the activating relays and magnet valves performing the following functions:

- a) Sense the uncoupled state and operate the drum switch accordingly, or equivalent. Close the loop circuits and open all other switched trainline circuits; close the air trainlines and open the coupler hook.
- b) Sense the coupled state and operate the drum switch accordingly, or equivalent. Open the looping circuits, restore continuity of trainlines and open the air trainlines. Manual means must also be provided by which specified air and electric trainlines can be opened or closed
- c) Provide a manual means by which specified trainlines can be broken.

5.3.4.3 Automatic Coupling/Uncoupling

5.3.4.3.1 Coupling

When contact with a second coupler is made, the couplers shall automatically couple mechanically and pneumatically (if applicable).

Once mechanically coupled, the ISOLATE/TRAINLINE switch in one coupled cab should be momentarily moved to the TRAINLINE position to make the electrical trainlines in the opposite cab. This operation should be repeated in the other coupled cab to complete the coupling process.

Coupling of a live train to a "dead" (no air) train should commence with the electrical coupling, and not require that the dead train be fully pneumatically charged before the electric portions of the couplers functionally engage. This may be effected via the use of a pilot valve on the live train. The rationale for this requirement is to energize the air compressor controls on the dead train so as not to rely on the live train alone to pneumatically charge the dead train. All of this shall occur automatically upon coupling.

Once a cab is detected as coupled, it shall no longer be an Operating cab.

5.3.4.3.2 Uncoupling

The uncoupling operation shall be electrically controlled from the adjacent Operator's console. During uncoupling, the emergency brakes shall be automatically applied on the cars to be parked and remain released on the cars to be moved.

In the event of an unintentional uncoupling, an emergency brake application to all sections of the train shall be caused by exhausting the emergency pipe.

The uncoupling control shall be interlocked such that its activation is restricted to a powered Operator's console with the car speed below the no-motion detection point of the no-motion detection system. The couplers shall be controllable only from the cab control panels adjacent to the point of separation. Coupler control shall not be trainlined. The uncoupling sequence shall be as follows:

- d) A cab adjacent to the coupler where the uncoupling is to occur is activated.
- e) The UNCOUPLE pushbutton in the active cab is depressed and latches electrically after a predetermined length of time (adjustable). This causes the electric heads to retract after proper electrical isolation has occurred automatically. Subsequently, mechanical uncoupling is initiated. Once this sequence commences, it shall continue to the fully uncoupled state even if the UNCOUPLE button is released. It shall not be necessary to operate the car in forward, to buff the couplers, to achieve mechanical uncoupling.
- f) The reverser is placed in REVERSE and the train backs away from the opposing, uncoupled portion of the train.

5.3.4.3.3 Manual Operation Requirements

Devices shall be provided to permit the cars to be mechanically uncoupled without the use of tools in the event of a power loss or control failure. Sufficient mechanical advantage shall be provided to allow JPB personnel to manually operate these devices in an emergency using a force of 60 pounds or less.

It shall be possible to manually turn the drum switch to effect electrical isolation.

All manual functions shall be independent and be capable of being operated in any sequence or combination.

If a manually retractable electric coupler head is provided, it shall not require more than 35 pounds force to engage or disengage.

5.4 COUPLER ADAPTER

If automatic couplers are provided, the Contractor shall supply coupler adapters for coupling to the existing diesel fleet. Each cab car shall be equipped with one coupler adapter to allow it to be connected to a conventional AAR Type-E, F, or H coupler. The removable adapter shall have a maximum weight of 65 pounds and be located outside of the car and in a position such that it will require minimal effort for the Operator to remove, install and replace the adapter in its holder. It shall be able to withstand 100,000 pounds in buff or draft without permanent deformation. The operator shall be able to manually install or remove the adapter alone and without tools. It is anticipated that the adapter will be used during emergency or rescue situations only.

5.5 REQUIRED CONTRACT SUBMITTALS

The Contractor shall submit for JPB review and approval those documents identified in the CSR that demonstrate compliance with this section. Refer to section 1.7.

5.6 CITED REFERENCES

The following standards or references were cited in this Section:

STANDARD	TITLE
EN50124	European Standard, "Railway applications. Insulation coordination. Basic requirements. Clearances and creepage distances for all electrical and electronic equipment"

PCEP Procurement of Bi-Level EMU Vehicles

STANDARD	TITLE
APTA RP-M-003-98	American Public Transportation Association, "Recommended Practice for the Purchase and Acceptance of Type H-Tightlock Couplers"
APTA SS-M-016-06	American Public Transportation Association, "Standard for Safety Appliances for Rail Passenger Cars"
49 CFR 238.205	Code of Federal Regulations, "Rail Passenger Equipment Safety Standards" Anti-climbing mechanism.
49 CFR 238.207	Code of Federal Regulations, "Passenger Equipment Safety Standards" Link between coupling mechanism and car body.
APTA PR-CS-RP-019-12	American Public Transportation Association, "Recommended Practice for Pushback Couplers in Passenger Rail Equipment"

Givens, Patrice

From: Jeff Carter <jcartrain@aol.com>
Sent: Friday, July 16, 2021 1:27 PM
To: cacsecretary [@caltrain.com]
Cc: JCRTRAIN@aol.com
Subject: Real Time Clipper/Ridership Data On Caltrain

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders.

To the JPB/Caltrain Citizens Advisory Committee 16-July-2021

It has been stated that Caltrain has technology limitations that prevent real-time reporting like BART does.

See: <https://www.greencaltrain.com/2021/06/caltrain-baby-bullet-back-in-august-and-more-trains-at-caltrain-board-thursday/>

I have also heard public comments on this subject.

What are the technology limitations?

Yes, BART has faregates and Caltrain is an open system. However, Caltrain does use Clipper, as does BART, so Caltrain should be able to provide tag-on/tag-off data. I can log in to Clipper and it will show that I rode Caltrain from Millbrae to 23rd Street on mm/dd/yyyy at hh:mm or that I rode BART from Millbrae to SSF on mm/dd/yyyy at hh:mm. My BART trip will be included with the BART station-to-station/O&D ridership data. My trip on Caltrain is somewhat delayed (about 2 months) in Caltrain reporting but detailed as zone-to-zone data, which is used to compile the monthly ridership statistics reported to the Board. The detailed zone-to-zone reports are not available without submitting a PRA request. Yes, BART is distance-based and Caltrain is zone-based. However, this should not prevent Caltrain from providing more detailed and timely ridership data. Additionally, Caltrain should be able to provide TVM data such as date, time, and origin station to destination zone for paper fare products. Clipper data goes to MTC and the agencies then receive the data from MTC. Caltrain TVMs should be connected to a central location/database, which detailed sales/revenue data should be available. If I can login to Clipper to see my activity, what technology limitations prevent Caltrain from Real-time ridership data?

Caltrain started the Go-Pass on Clipper program with a limited number of Go-Pass companies a few years ago in order to better keep track of Go-Pass usage. Caltrain has yet to provide any Go-Pass details to the Board or public.

I have checked the SMART Train website and the ridership data through 31-May-2021 is available by day of week showing Clipper tags, Fare App Activations, and Onboard Count.

See: <https://sonomamarintrain.org/RidershipReports>

I do see that this subject is slated for the October 20, 2021 CAC Agenda.

Regards,

Jeff Carter

Givens, Patrice

From: Roland Lebrun <ccss@msn.com>
Sent: Monday, July 19, 2021 2:41 AM
To: Board (@caltrain.com)
Cc: MTC Info; Baltao, Elaine [board.secretary@vta.org]; cacsecretary (@caltrain.com); cityclerk@cityofgilroy.org
Subject: July 26 Finance Committee Agenda: Gilroy Caltrain station acquisition
Attachments: Gilroy Caltrain station and parking.pdf; VTA TOD Portfolio.pdf; 841-13-017.pdf

ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders.

Dear Chair Zmuda,

Further to VTA having declared its intention to turn the entire Gilroy Caltrain station and parking lot (attached) over to affordable housing development (<https://www.vta.org/projects/gilroy-transit-center-transit-oriented-development>), please direct staff to agendize a Finance Committee resolution to initiate negotiations for the acquisition of a 7.38-acre parcel (APN 841-13-017) hosting the Caltrain station building, parking lot and four siding tracks for overnight train storage and forward this resolution to the Caltrain Board for approval.



Background

The Gilroy Caltrain station is the southern bookend of the Board-adopted Caltrain Business Plan and was supported by 3 separate sales tax measures approved by the voters of Santa Clara County over the last 20 years as follows:

- 2000 Measure A

• **Improve Caltrain: Double Track to Gilroy and Electrify from Palo Alto to Gilroy**
Extend the Caltrain double track from the San Jose Tamien Station through Morgan Hill to Gilroy. Provide VTA's funds for the partnership with San Francisco and San Mateo counties to electrify Caltrain from San Francisco to Gilroy.

• **Increase Caltrain Service, specifically**
Purchase new locomotive train sets for **increased Caltrain service in Santa Clara County from Gilroy to Palo Alto** and provide additional facilities to support the increased service.

- **2016 Measure B**

• **Caltrain Corridor Capacity Improvements—Estimated at \$314Million of Program Tax Revenues in 2017 dollars.**

To fund Caltrain corridor capacity improvements and increased service in Santa Clara County in order to ease highway congestion, including: **increased service to Morgan Hill and Gilroy, station improvements, level boarding, extended platforms, and service enhancements.**

- **2020 Measure RR**

1. To support the operation of Caltrain service levels throughout the corridor **from San Francisco to Gilroy;**

2. To support the expansion of Caltrain peak hour service from six trains per hour per direction to eight trains per hour per direction, **as well as the expansion of the Gilroy service to a minimum of five morning and five afternoon trains;**

Funding

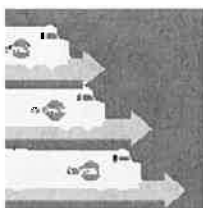
2016 Measure B has accumulated \$39.55M in Caltrain Corridor Capacity Improvements which can be matched 50/50 with Measure RR revenues for a total of approximately \$80M

FY21: \$10.2M (\$13.1M-\$2.9M)

FY22: \$12.34M

FY23: \$17.01M

Total: \$39.55M as follows:



CALTRAIN CORRIDOR CAPACITY IMPROVEMENTS

- No 2016 Measure B activities in April or May 2021.
- Allocation through FY21: \$13.1M.
- Expenditure through May 2021: \$2.9M.

<http://santaclaravta.igmp2.com/Citizens/FileOpen.aspx?Type=6&ID=1825>

	FY2022	FY2023
Need/Capacity-based Programs		
BART Phase II	-	
Caltrain Corridor Capacity	\$ 12.34	\$17.01
County Expressways	-	
SR 85 Corridor	-	
Highway Interchanges	Board action	
Caltrain Grade Separations	December 2021	
TOTAL	\$29.35	

<http://santaclaravta.iqm2.com/Citizens/FileOpen.aspx?Type=4&ID=10447&MeetingID=3389>

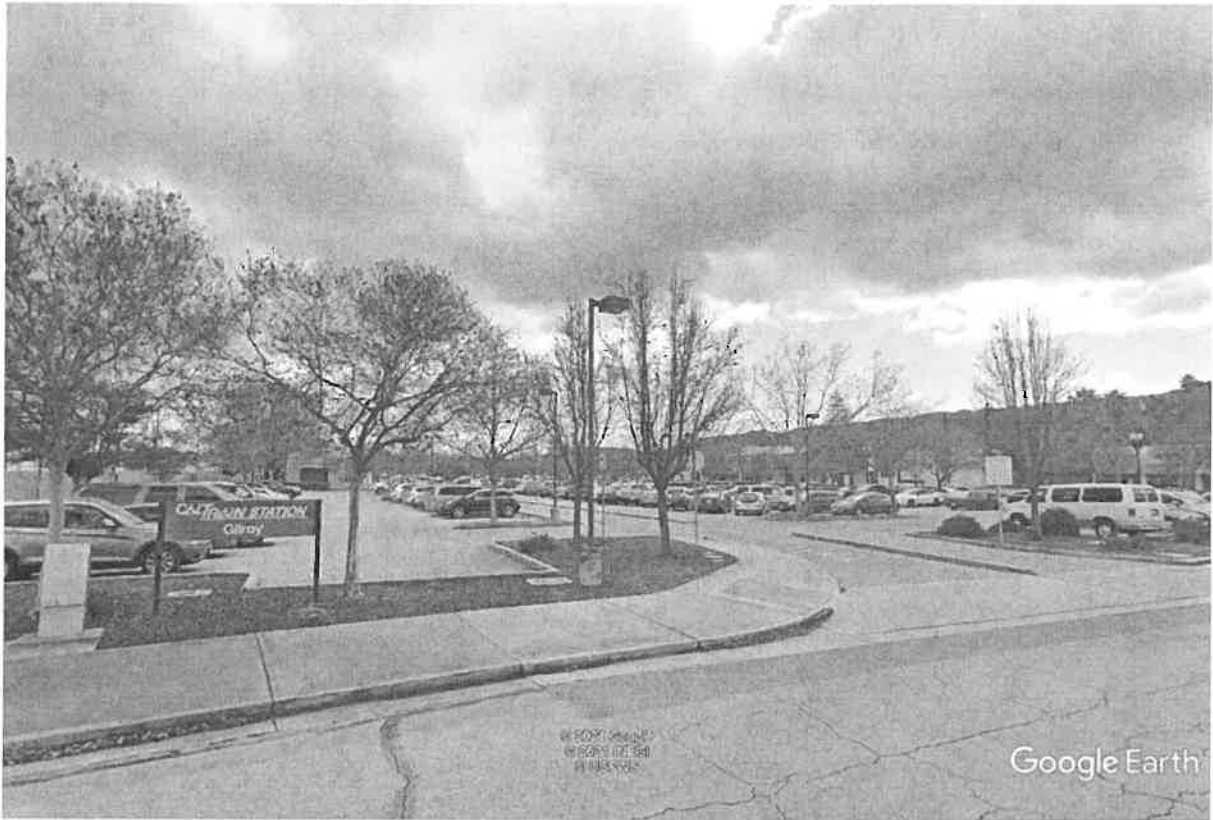
Thank you in advance for your support of the acquisition of this critical piece of Caltrain infrastructure.

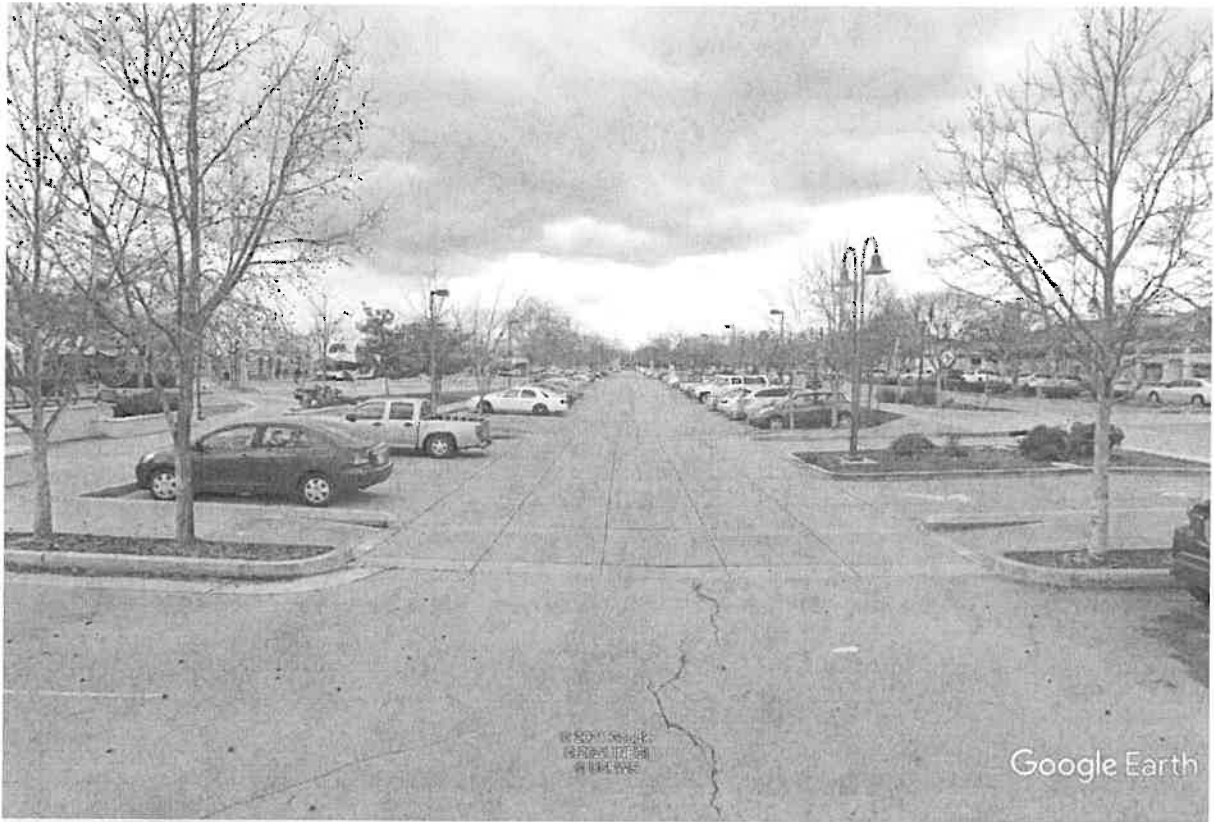
Roland Lebrun

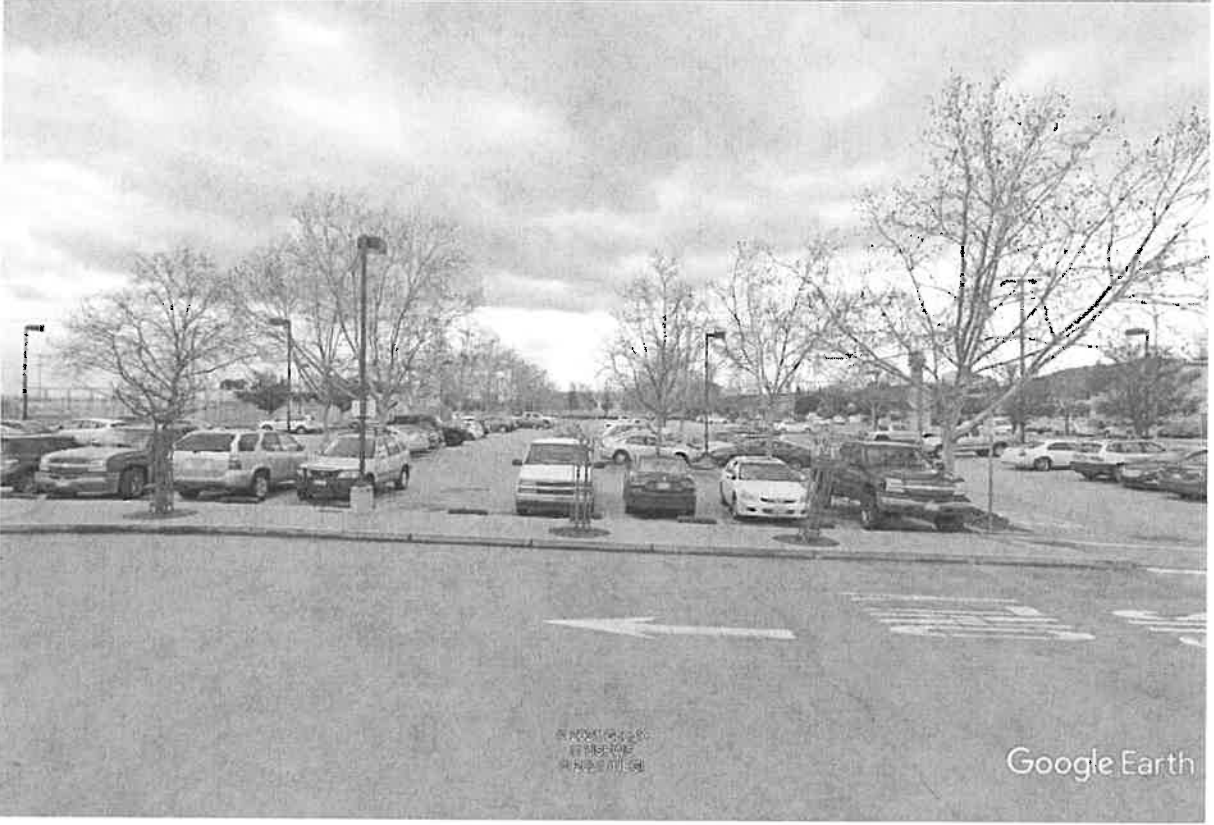
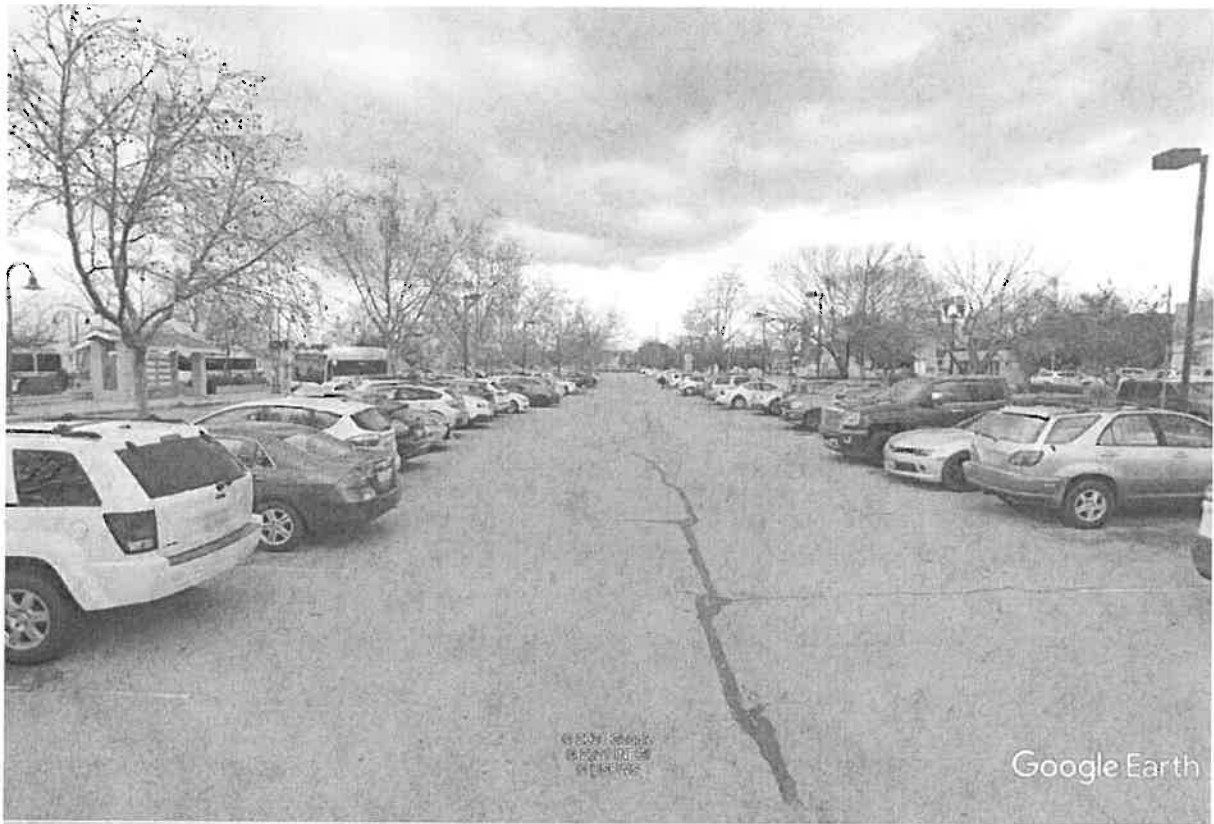
CC

City of Gilroy Mayor and Council
MTC Commissioners
VTA Board of Directors
VTA PAC
VTA CAC
Caltrain CAC

Attachments:
Gilroy station building and parking lot
VTA TOD Portfolio
SCC Assessor map











VTA Transit-Oriented Development Portfolio



Santa Clara Valley
Transportation
Authority

Solutions that move you



May 2019

Dear Current and Future VTA Partners;

VTA is pleased to present this book that provides information on properties it owns throughout Santa Clara County that the VTA Board of Directors has designated as available for Transit-Oriented Development (TOD).

VTA's goals for TOD projects, as set forth in the Board-adopted policy, include:

- Revenue generation to fund other VTA transit investments and operations;
- Increased ridership on VTA transit services; and
- Catalyze the creation of Transit-Oriented Communities that provide amenities for transit riders and residents and attract TOD to privately-owned land around transit stations.

We seek to create mixed-use and mixed-income developments through public-private partnerships, with experienced developers who enter into long-term ground leases with VTA. The VTA Board has also established objectives to incorporate affordable housing development in TOD projects, and to create apprenticeship opportunities for construction careers.

We will work with developers to define an optimal approach to retention of transit parking and replacement parking.

Please note that many of these sites were acquired for federally-funded transportation projects, and therefore have a federal interest. Development on these sites is subject to approval pursuant to *Federal Transit Administration Guidance on Joint Development*, FTA Circular C 7050.1A, dated August 25, 2014 and Revision 1 dated December 29, 2016.

VTA's Real Estate & TOD Department is responsible for working with interested developers, local jurisdictions, community members, and other stakeholders to realize the full potential of the properties described in this book. We welcome the opportunity to discuss your thoughts and interests on the enclosed sites, as well as VTA's TOD Program. Please feel free to contact:

Ms. Jessie O'Malley Solis
TOD Manager
408.321.5950
Jessie.O'MalleySolis@vta.org

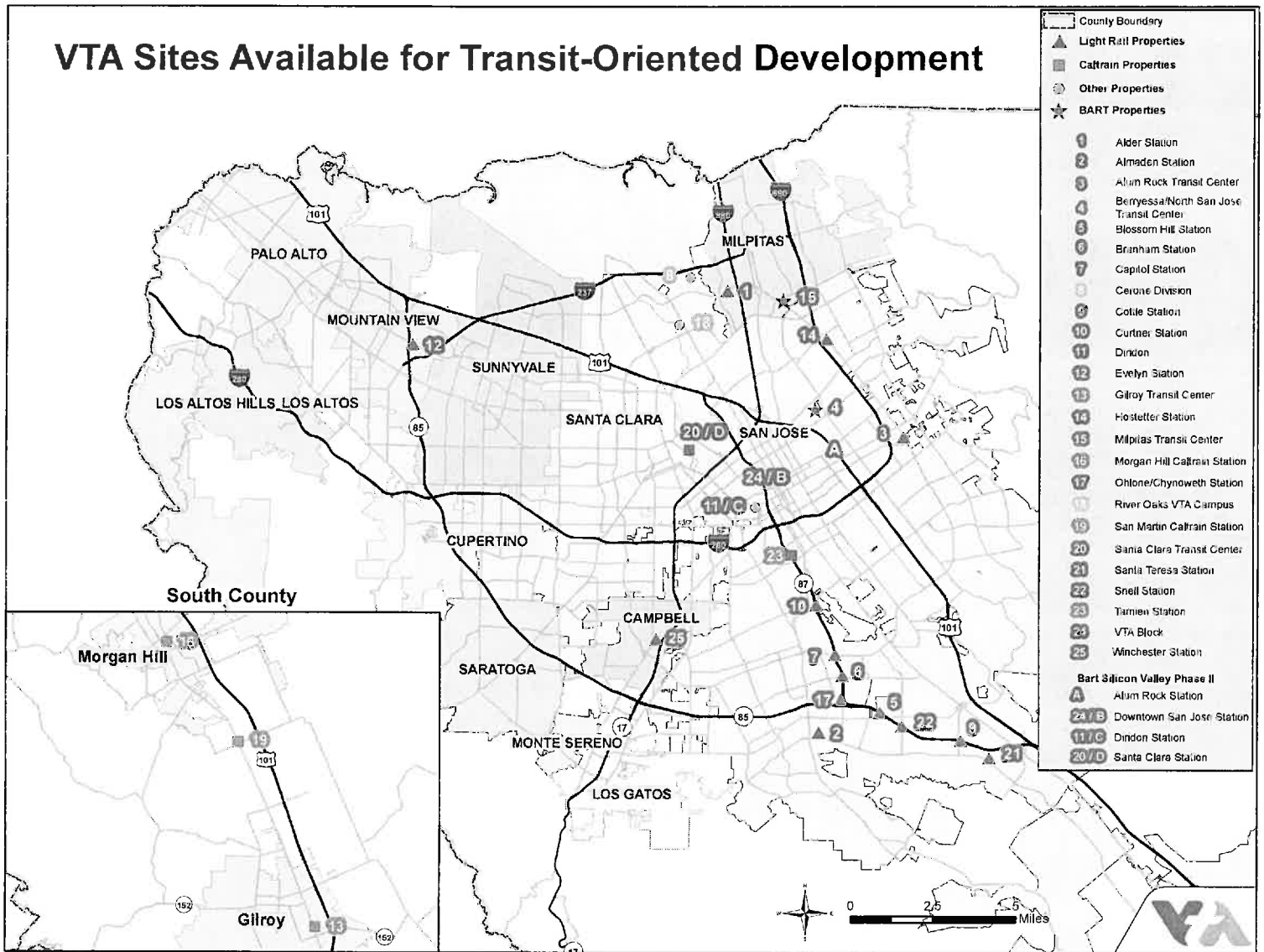
We hope to speak with you soon!

Sincerely,

A handwritten signature in black ink that reads 'Ron Golem'.

Ron Golem
Director, Real Estate & TOD

VTA Sites Available for Transit-Oriented Development



13

GILROY TRANSIT CENTER

Monterey Highway @ 7th Street, Gilroy, CA 95020



SITE DETAILS

APN: 841-13-001, 017-020

Acreage: 7.8

Title: VTA

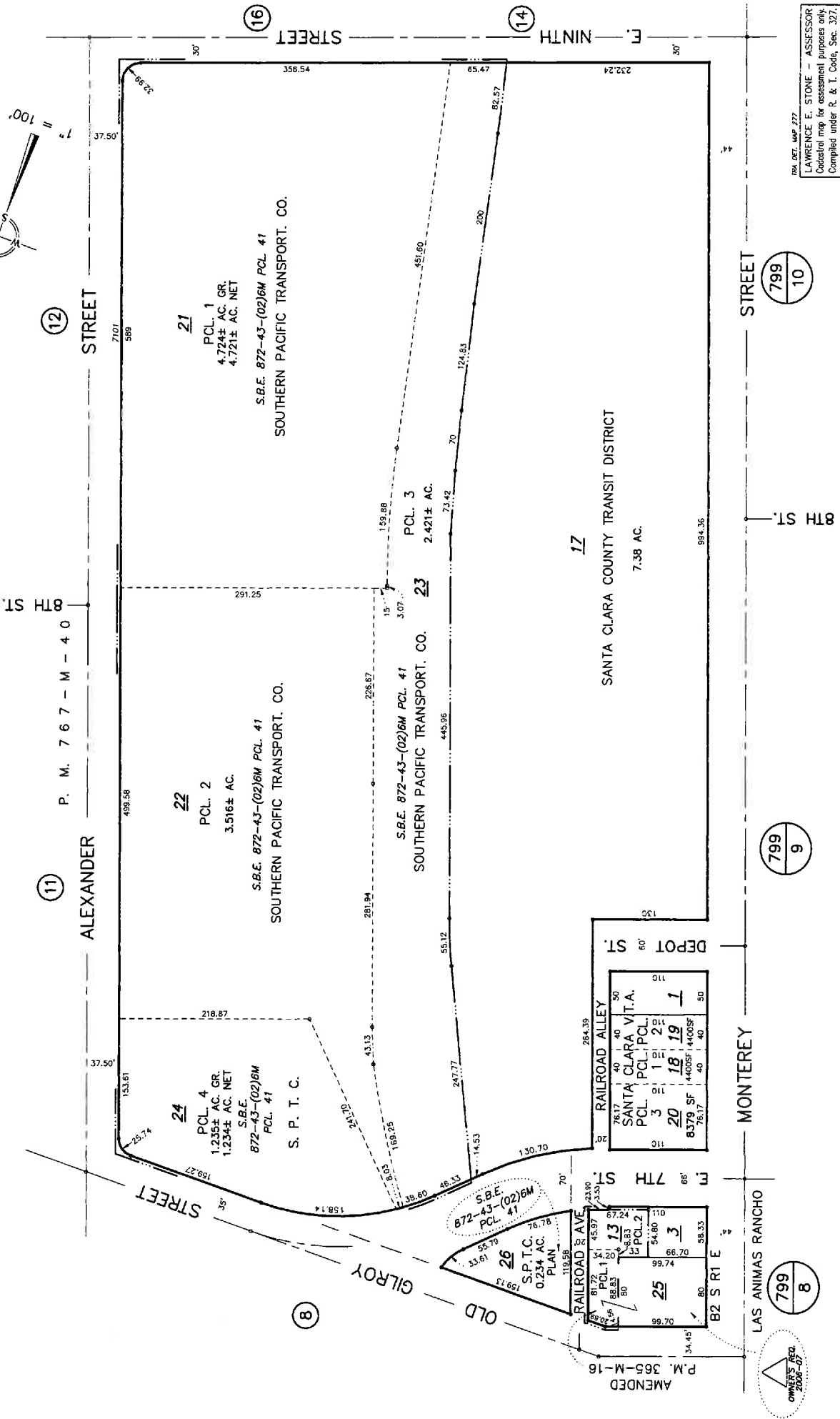
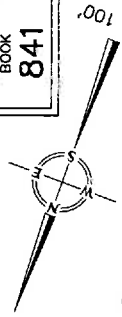
Transit: Caltrain, Bus, Future HSR

Current Use: Park & Ride Lot

Zoning: Downtown Specific
Plan Historic District

General Plan: Downtown
Specific Plan Historic District

School District: Gilroy
Unified



LAWRENCE E. STONE — ASSESSOR
 Cadastral map for assessment purposes only.
 Compiled under R. & T. Code, Sec. 327.
 Effective Roll Year 2021-2022

