



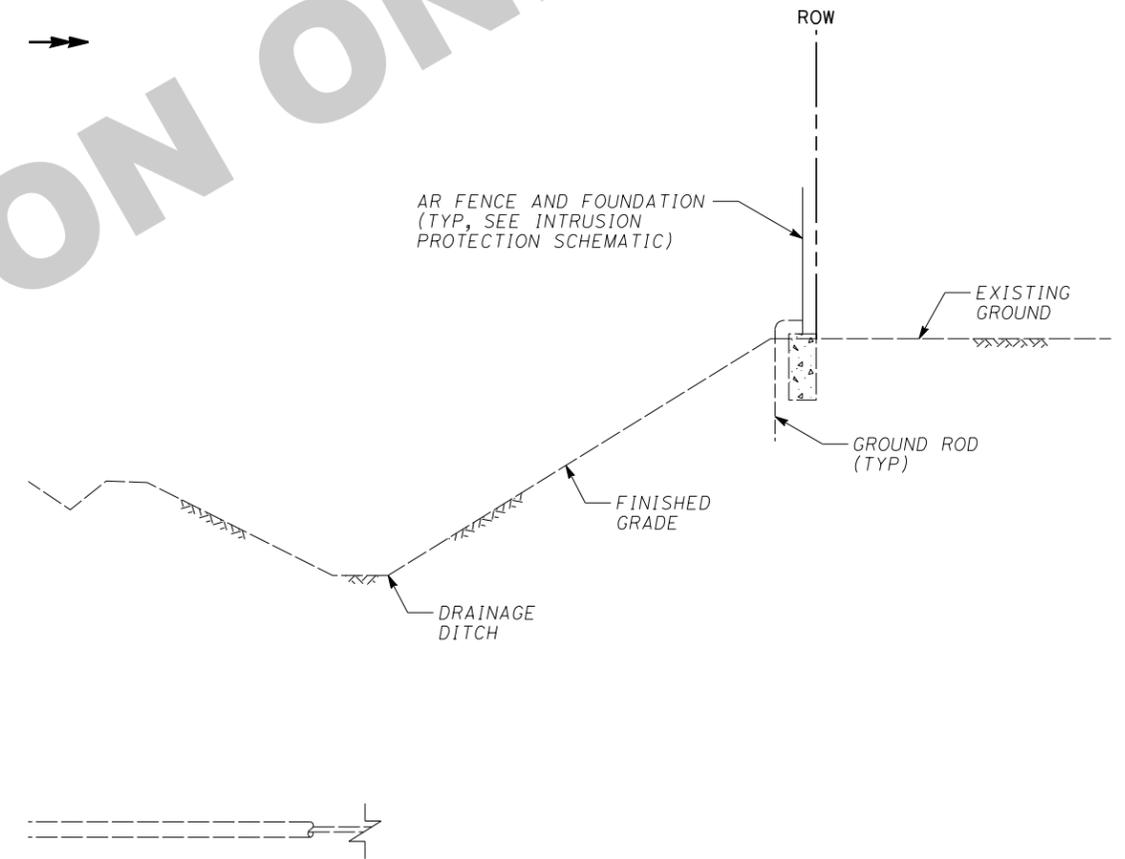
NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA M-NU-L, -ND DIRECTIVE DR-WINGS FOR ADDITION-L INFORMATION -ND REQUIREMENTS.

CONCRETE BARRIER

SECTION

ROAD



THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR AS DESIGN DIRECTIVE.

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

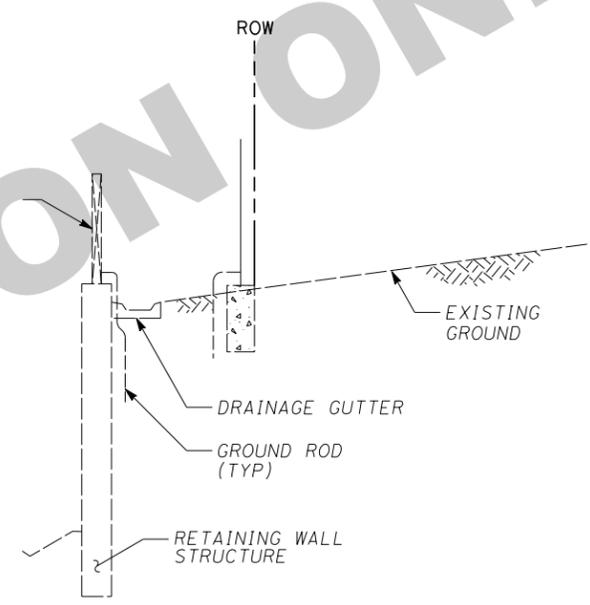
CALIFORNIA HIGH-SPEED RAIL PROJECT

-T-GRADE CUT AND FILL TYPICAL SECTION
SOW-TS-001



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA M-NU-L, -ND DIRECTIVE DR-WINGS FOR ADDITION-L INFORMATION -ND REQUIREMENTS.
3. SEE SOW-TS-001 FOR INTRUSION PROTECTION SCHEM-TIC.



THESE TYPIC-L SECTIONS -RE SCHEM-TIC -ND FOR ILLUSTR-TION PURPOSES ONLY. THEY SH-LL NOT BE USED FOR CONSTRUCTION OR -S - DESIGN DIRECTIVE.

TS1 - INDUSTRY DRAFT - 2019-0501



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

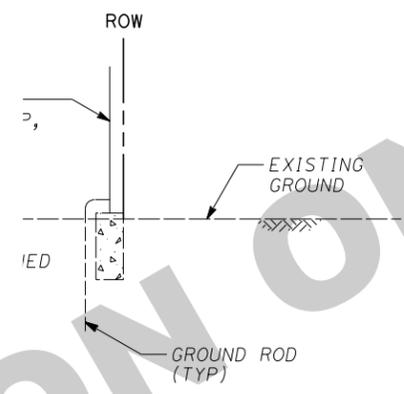
CALIFORNIA HIGH-SPEED RAIL PROJECT

RET-INED CUT -ND FILL TYPIC-L SECTION
SOW-TS-002



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIAL MANUAL, AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. TRENCH STRUCTURE GROUNDING AND BONDING PROVISIONS WERE PROVIDED BY PREVIOUS CONTRACT.
4. SEE SOW-TS-001 FOR INTRUSION PROTECTION SCHEMATIC.



METAL FASCIA WALL

PERIMETER PROOFING

VERTICAL JUMPER CONDUCTOR
(SEE NOTE 3)

HERMATIC WELD (SEE NOTE 3)

TYPICAL COLLECTOR REBAR (SEE NOTE 3)

PRECAST CONCRETE WALL
(SEE NOTE 3)

THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR DESIGN DIRECTIVE.

TS1 - INDUSTRY DRAFT - 2019-0501



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

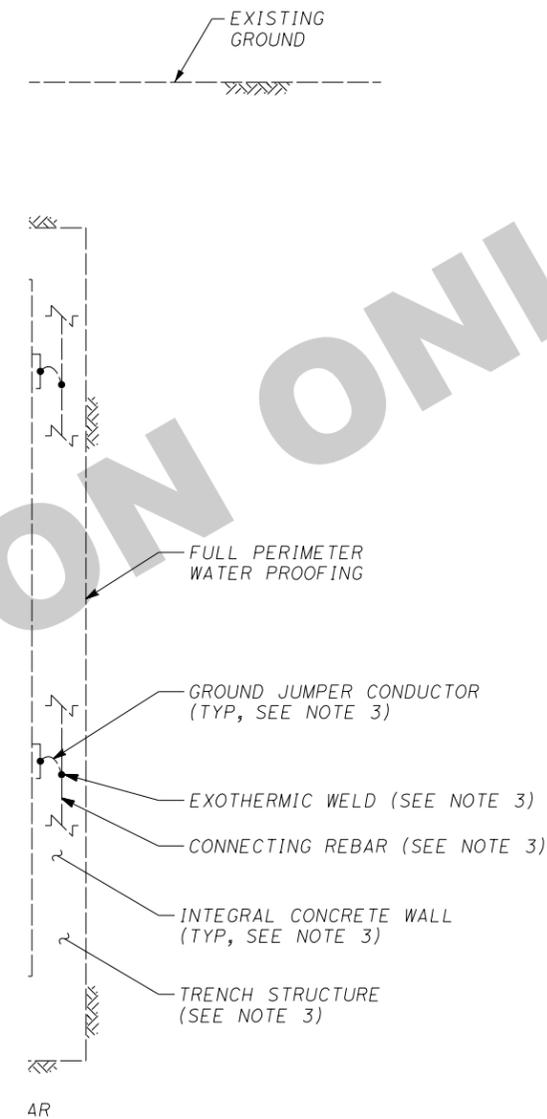
CALIFORNIA HIGH-SPEED RAIL PROJECT

TRENCH STRUCTURE TYPICAL SECTION
SOW-TS-003



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIAL MANUAL, AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. CUT-AND-COVER TUNNEL STRUCTURE GROUNDING AND BONDING PROVISIONS WERE PROVIDED BY PREVIOUS CONTRACT.



THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR DESIGN DIRECTIVE.

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

CALIFORNIA HIGH-SPEED RAIL PROJECT

CUT-AND-COVER TUNNEL - EXISTING ONLY
SOW-TS1-004



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA MANUAL AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. STRUCTURE GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTRACTS.

— GROUND JUMPER
CONDUCTOR (TYP)

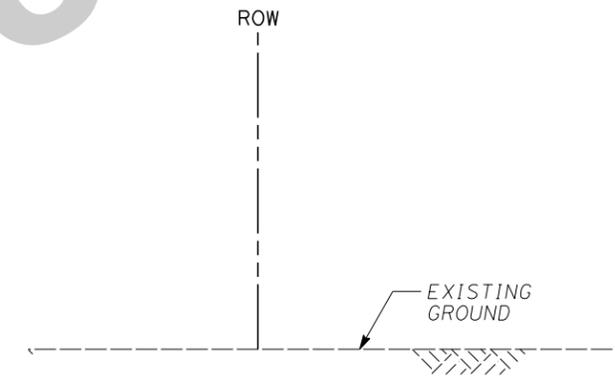
POLE SUPPORT (TYP)

R CONDUCTOR

ING REBAR (SEE NOTE 3)

S REBAR (SEE NOTE 3)

NDUIT



RTICAL REBAR (TYP,
: NOTE 3)

THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR DESIGN DIRECTIVE.

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

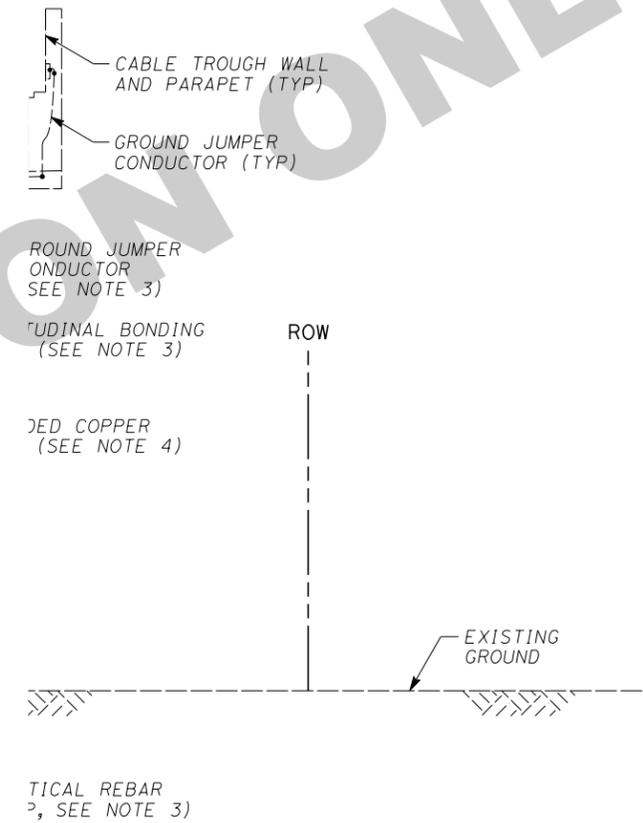
CALIFORNIA HIGH-SPEED RAIL PROJECT

TWO TRACK BOX GIRDER SERIAL
STRUCTURE TYPICAL SECTION
SOW-TS-005



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA MANUAL, AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. STRUCTURE GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTRACTS.



THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR AS DESIGN DIRECTIVE.

SECTION



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

CALIFORNIA HIGH-SPEED RAIL PROJECT

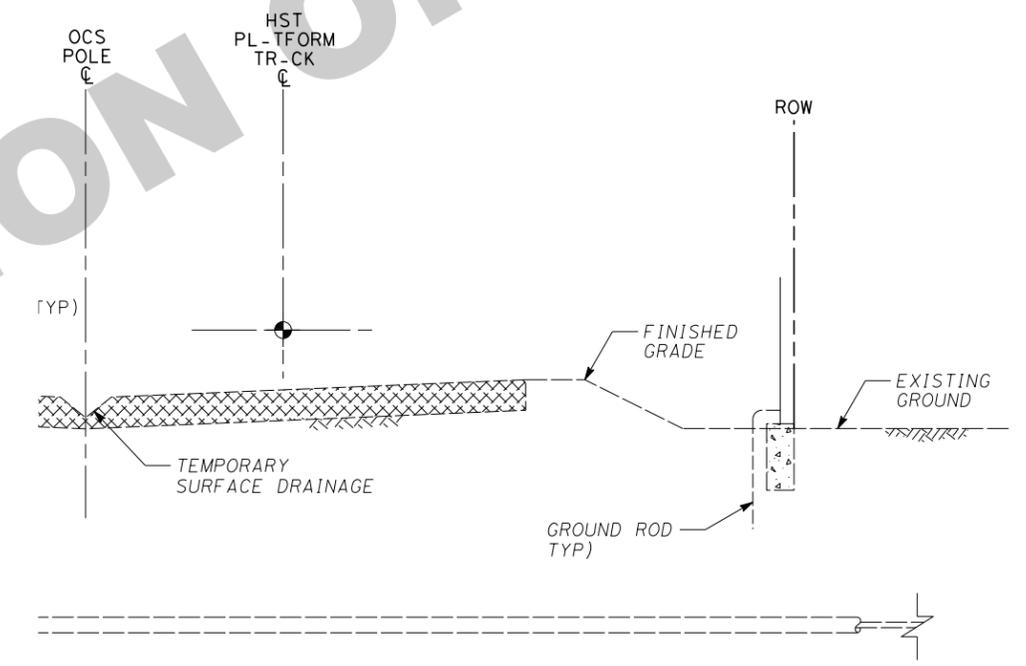
TWO TRACK BULB TEE STRUCTURE TYPICAL SECTION
SOW-TS-006



W. Alma Ave

NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA MANUAL AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. SEE SOW-TS-001 FOR INTRUSION PROTECTION SCHEMATIC.



THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR DESIGN DIRECTIVE.

SECTION

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

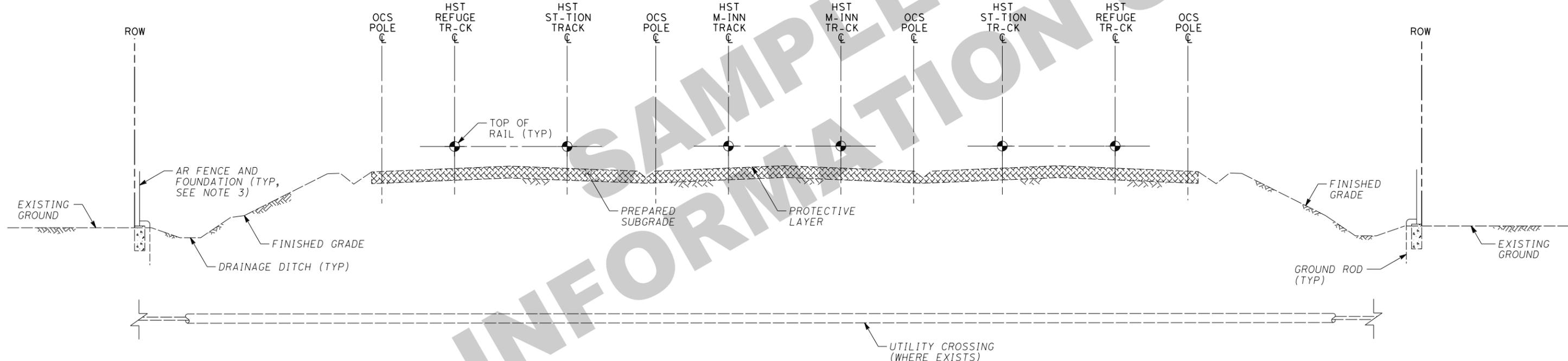
CALIFORNIA HIGH-SPEED RAIL PROJECT

FOUR TRACK ELEVATED HST STATION
PLATFORM TYPICAL SECTION
SOW-TS-007

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9/23/2016 9:19:51 AM CAHSRP.tbl CHSR_PDF_half_black.plt
GuraA

NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA MANUAL, AND DIRECTIVE DR-010 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. SEE SOW-TS-001 FOR INTRUSION PROTECTION SCHEMATIC.



DATE: 09/23/2016

SECTION H
SIX TRACK STATION PLATFORM TYPICAL SECTION

THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR DESIGN DIRECTIVE.

TS1 - INDUSTRY DRAFT - 2019-0501

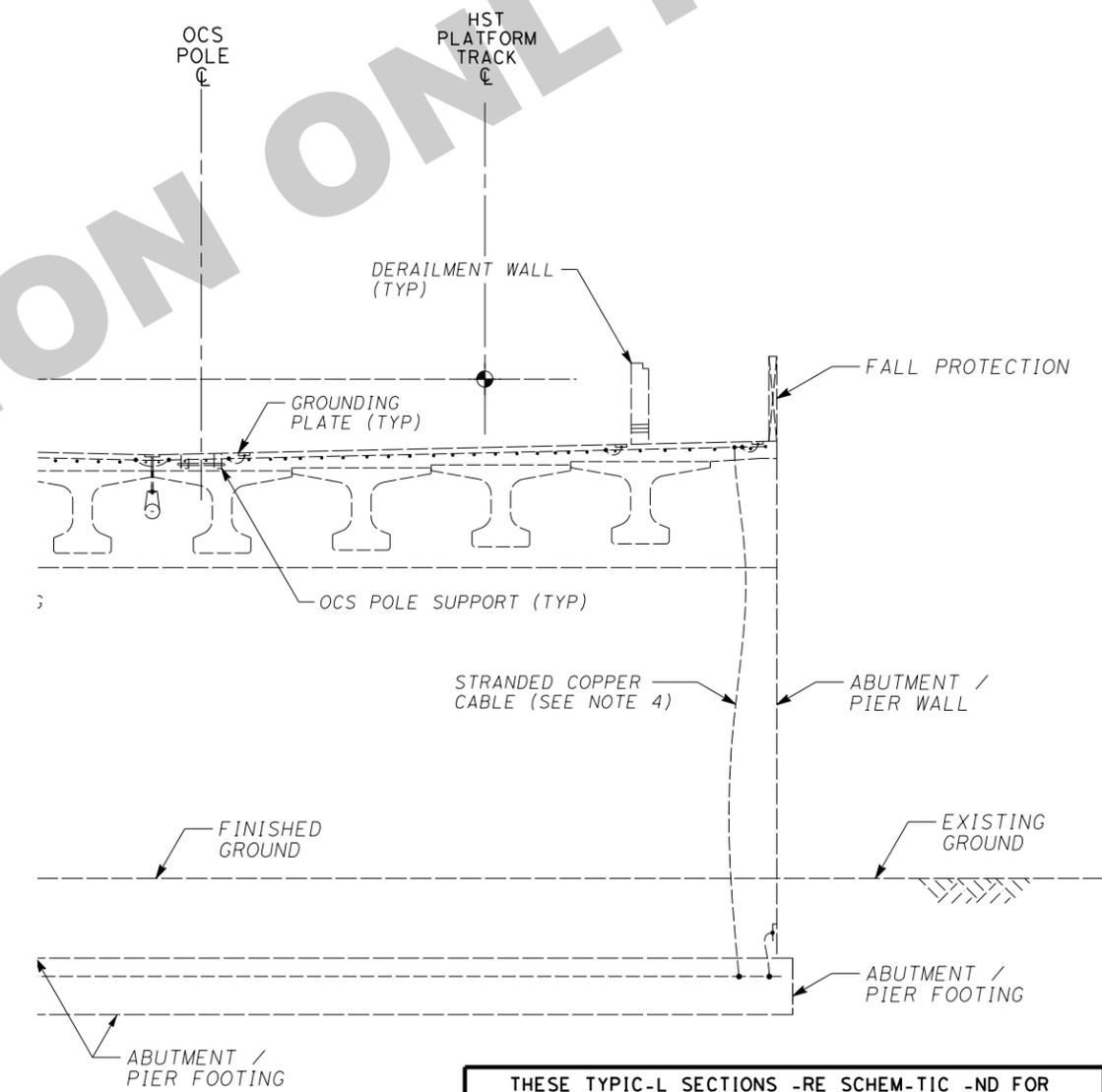


CALIFORNIA HIGH-SPEED RAIL PROJECT
SIX TRACK STATION PLATFORM TYPICAL SECTION
SOW-TS-008



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA MANUAL, -ND DIRECTIVE DRAWINGS FOR -DDITIONAL INFORMATION AND REQUIREMENTS.
3. STRUCTURE GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTR-CTS.



THESE TYPIC-L SECTIONS -RE SCHEM-TIC -ND FOR ILLUSTR-TION PURPOSES ONLY. THEY SH-LL NOT BE USED FOR CONSTRUCTION OR -S - DESIGN DIRECTIVE.

:-L SECTION

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

CALIFORNIA HIGH-SPEED RAIL PROJECT

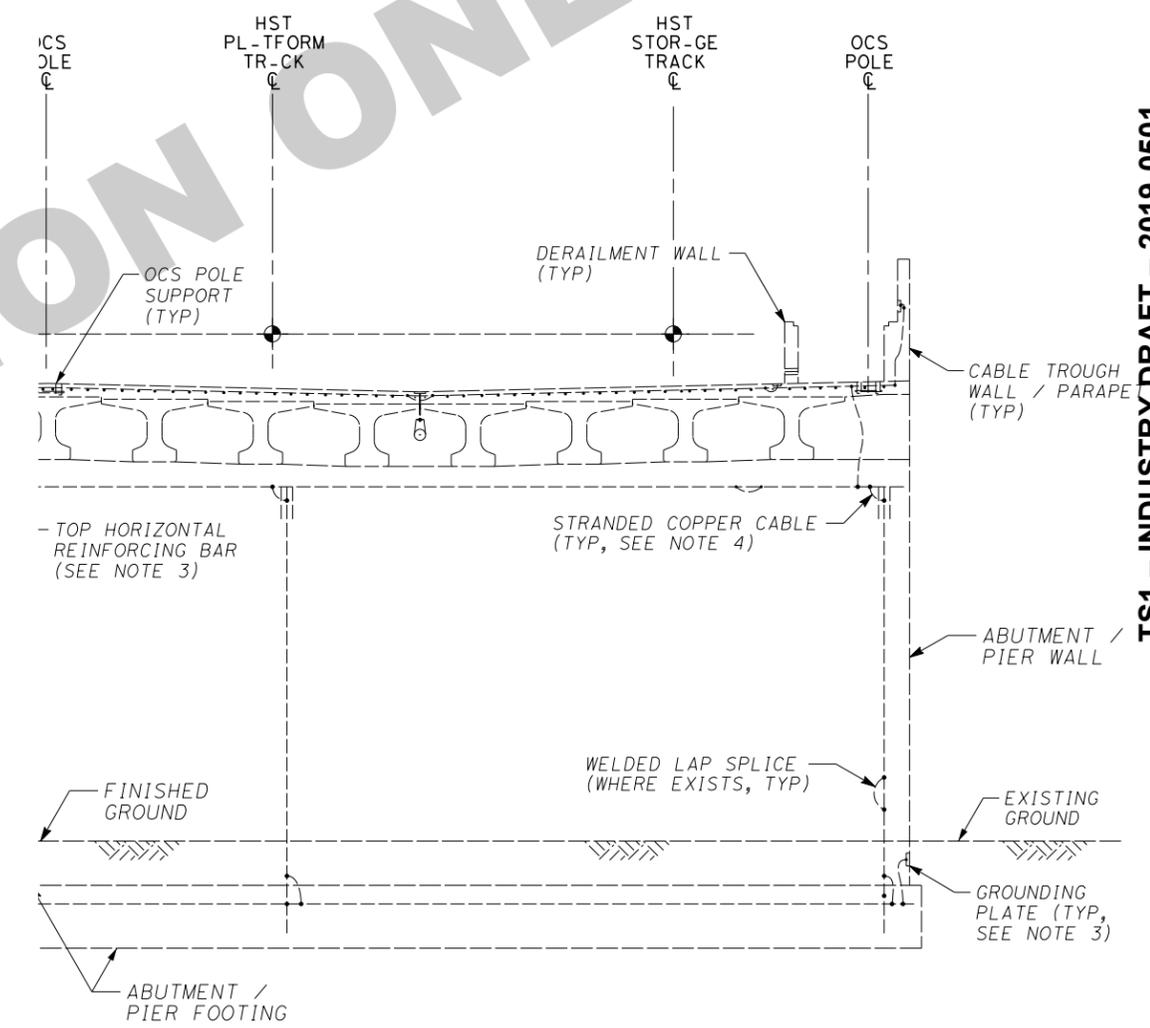
FOUR TRACK DERAILING STRUCTURE -T
STATION PLATFORM TYPIC-L SECTION
SOW-TS-009



W. Alma Ave

NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA - MINIMUM - AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. STRUCTURE GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTRACTS.



THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR DESIGN DIRECTIVE.

SECTION

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

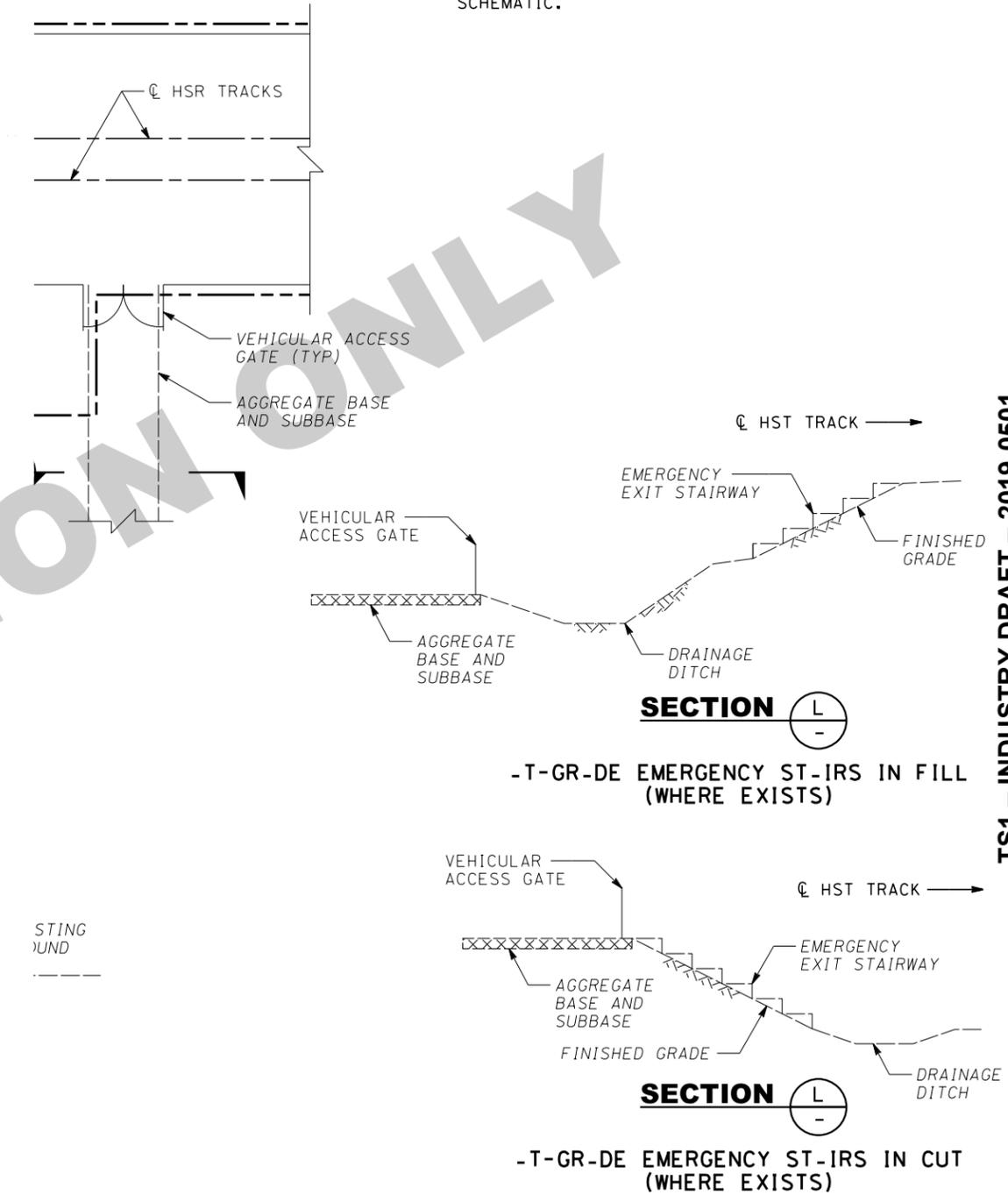
CALIFORNIA HIGH-SPEED RAIL PROJECT

SIX TRACK-BASED STRUCTURE - T
STATION - PROPOSED TYPICAL SECTION
SOW-TS-010



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA, MANUAL, AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. SEE SOW-TS-001 FOR INTRUSION PROTECTION SCHEMATIC.



THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR DESIGN DIRECTIVE.

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

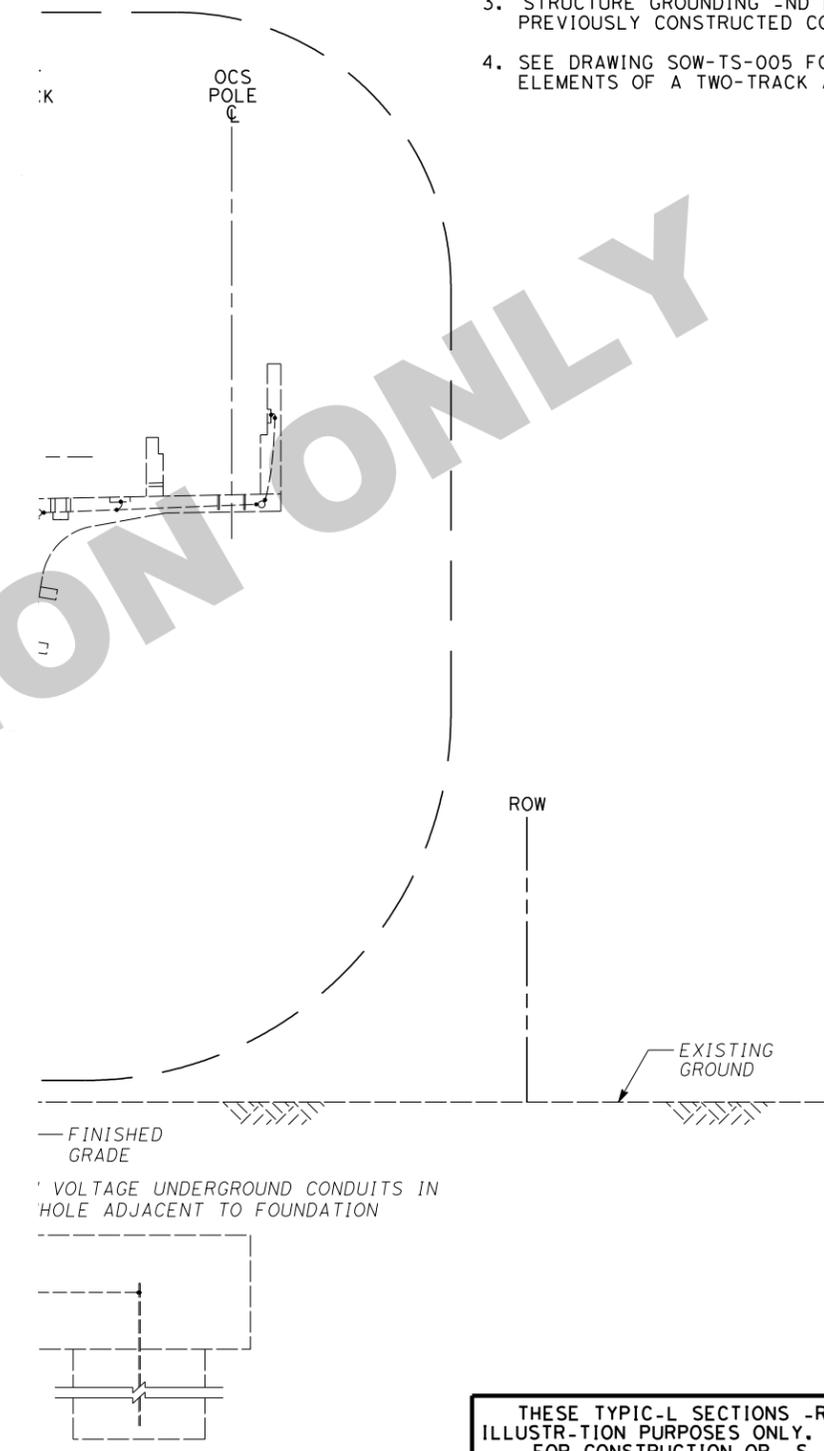
CALIFORNIA HIGH-SPEED RAIL PROJECT

ACCESS ROADS, GATES AND
STAIRS SCHEMATIC
SOW-TS-011



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA MANUAL, AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. STRUCTURE GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTRACTS.
4. SEE DRAWING SOW-TS-005 FOR BASE DESIGN ELEMENTS OF A TWO-TRACK AERIAL STRUCTURE.



TYPICAL SECTION

THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR DESIGN DIRECTIVE.

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

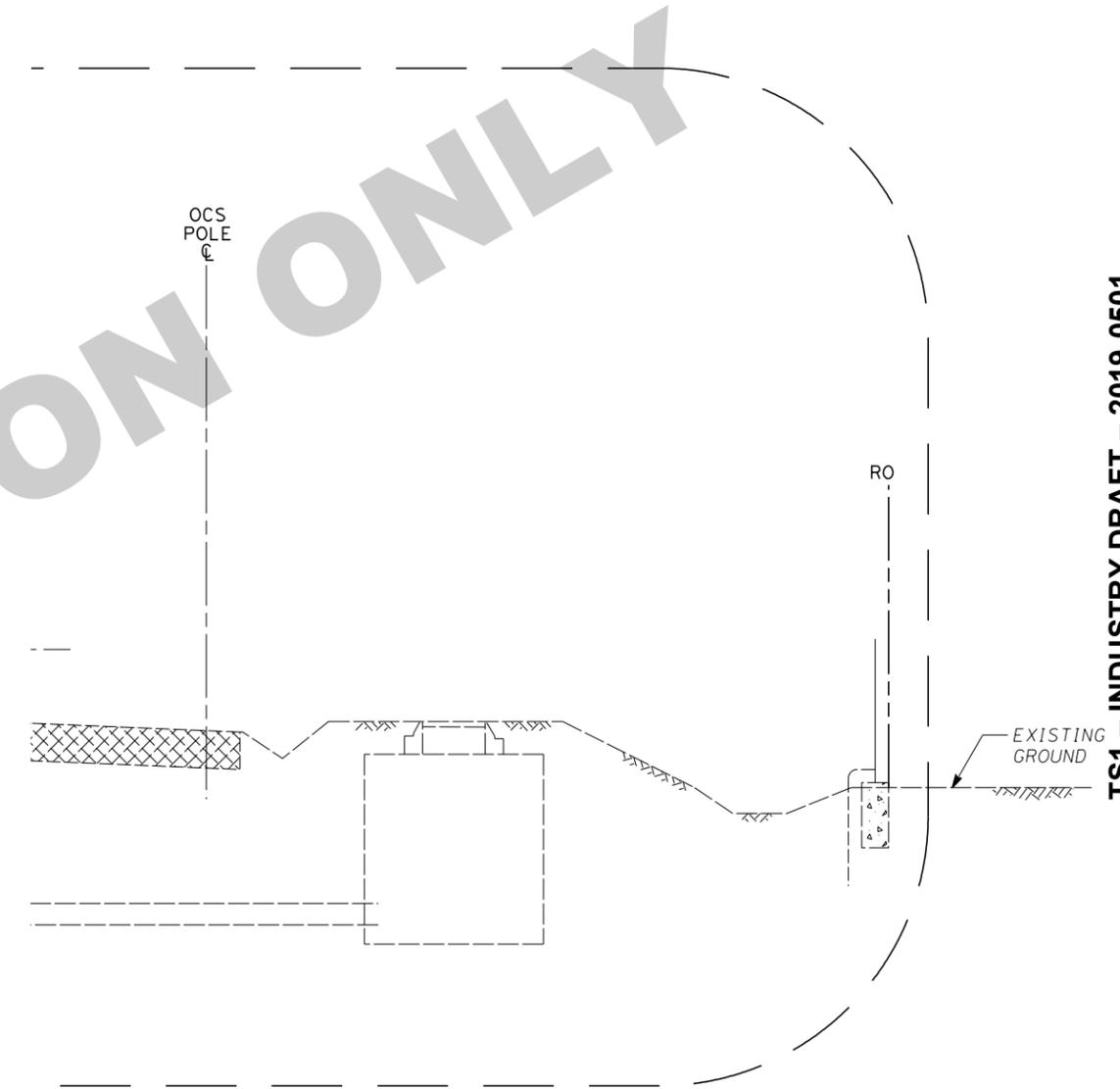
CALIFORNIA HIGH-SPEED RAIL PROJECT

SYSTEMS FACILITY ADJACENT TO
SERIAL STRUCTURE TYPICAL SECTION
SOW-TS-012



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA, MANUAL, AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. SEE DRAWING SOW-TS-001 FOR BASE DESIGN ELEMENTS OF THE TYPICAL CUT AND FILL SECTION.



THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR AS DESIGN DIRECTIVE.

SECTION

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

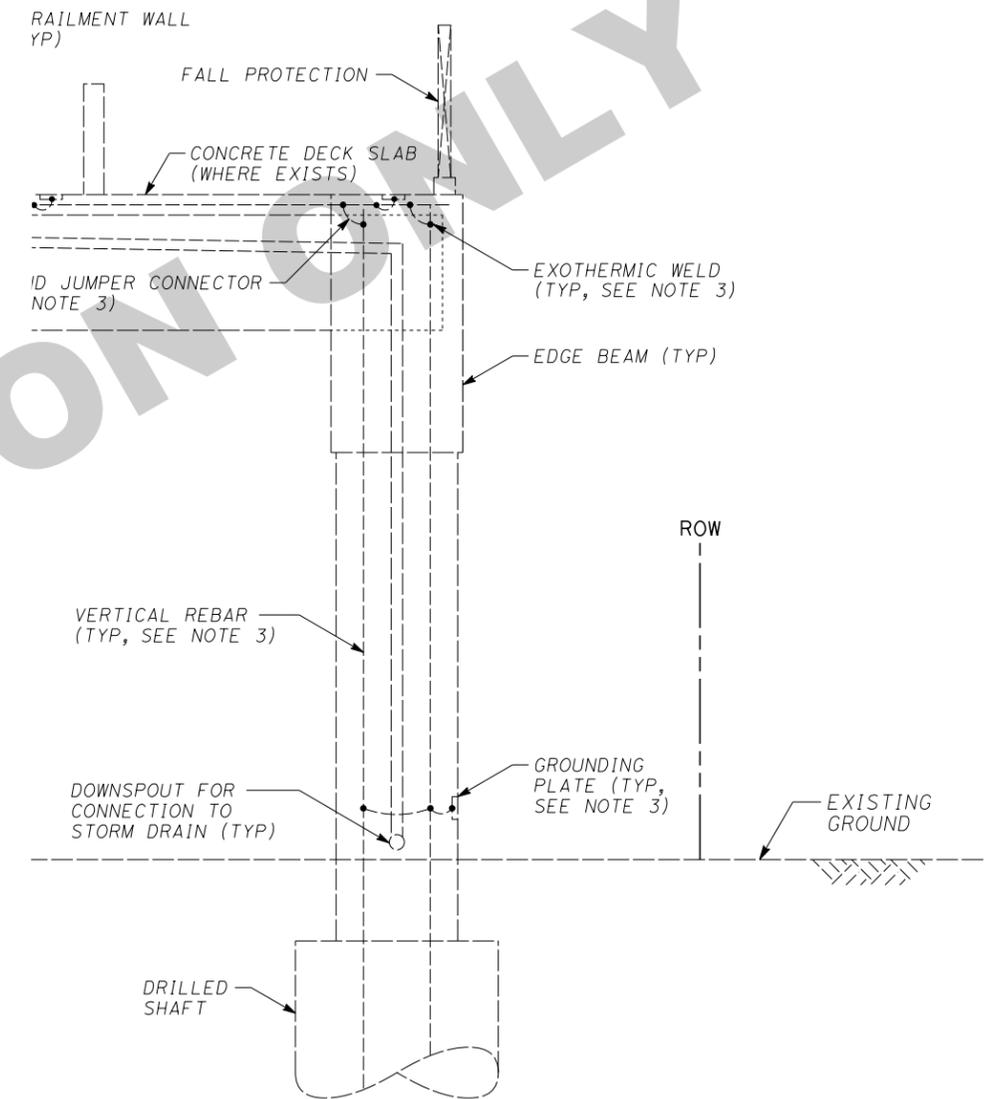
CALIFORNIA HIGH-SPEED RAIL PROJECT

SYSTEMS FACILITY ADJACENT TO
TYPICAL SECTION
SOW-TS-013



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA, MANUAL, AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. STRUCTURE GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTRACTS.



THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR AS DESIGN DIRECTIVE.

ON

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

CALIFORNIA HIGH-SPEED RAIL PROJECT

TWO TRACK PERGOLA STRUCTURE
TYPICAL SECTION
SOW-TS-014



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA MANUAL, -ND DIRECTIVE DRAWINGS FOR -DDITIONAL INFORMATION AND REQUIREMENTS.
3. STRUCTURE GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTR-CTS.



CABLE TROUGH WALL AND PARAPET (TYP)

LONGITUDINAL BONDING REBAR (SEE NOTE 3)

CONNECTING BONDING REBAR (TYP, SEE NOTE 3)

ERMIC WELD (TYP, SEE NOTE 3)

JUMPER CONDUCTOR (TYP, SEE NOTE 3)

(TYP)



SHED

EXISTING GROUND



FOOTING / PILE CAP (TYP)

THESE TYPIC-L SECTIONS ARE SCHEM-TIC -ND FOR ILLUSTR-TION PURPOSES ONLY. THEY SH-LL NOT BE USED FOR CONSTRUCTION OR -S - DESIGN DIRECTIVE.

CTION

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

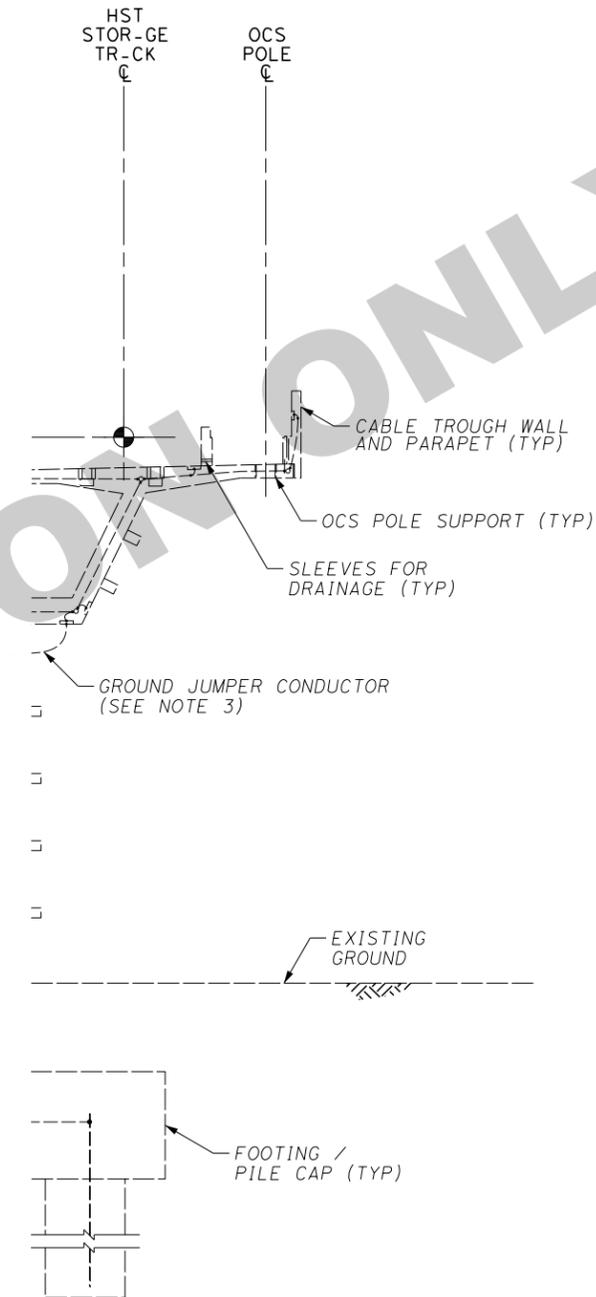
CALIFORNIA HIGH-SPEED RAIL PROJECT

FOUR TRACK -ERIAL STRUCTURE -T
ST-TION PLATFORM TYPIC-L SECTION
SOW-TS-015



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA MANUAL, -ND DIRECTIVE DRAWINGS FOR -DDITIONAL INFORMATION AND REQUIREMENTS.
3. STRUCTURE GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTR-CTS.



THESE TYPIC-L SECTIONS -RE SCHEM-TIC -ND FOR ILLUSTR-TION PURPOSES ONLY. THEY SH-LL NOT BE USED FOR CONSTRUCTION OR -S - DESIGN DIRECTIVE.

TS1 - INDUSTRY DRAFT - 2019-0501



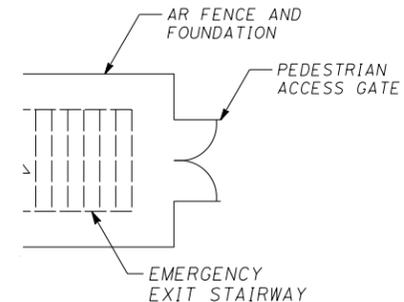
HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

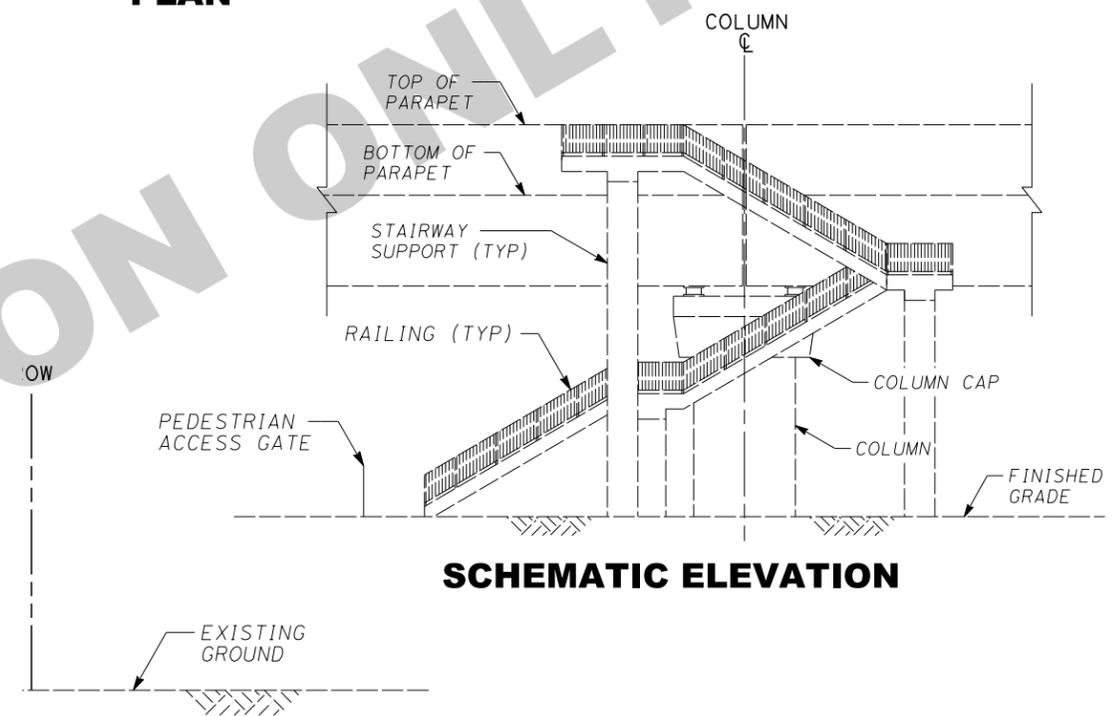
CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

CALIFORNIA HIGH-SPEED RAIL PROJECT

FIVE TRACK -ERIAL STRUCTURE -T
ST-TION -PPRO-CH TYPIC-L SECTION
SOW-TS-016



SCHEMATIC PLAN



SCHEMATIC ELEVATION

- NOTES:**
1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
 2. SEE DESIGN CRITERIA MANUAL, AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
 3. STRUCTURE GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTRACTS.
 4. SEE DRAWING SOW-TS-005 FOR BASE DESIGN ELEMENTS OF TWO-TRACK SERIAL STRUCTURE.

THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR DESIGN DIRECTIVE.

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

CALIFORNIA HIGH-SPEED RAIL PROJECT

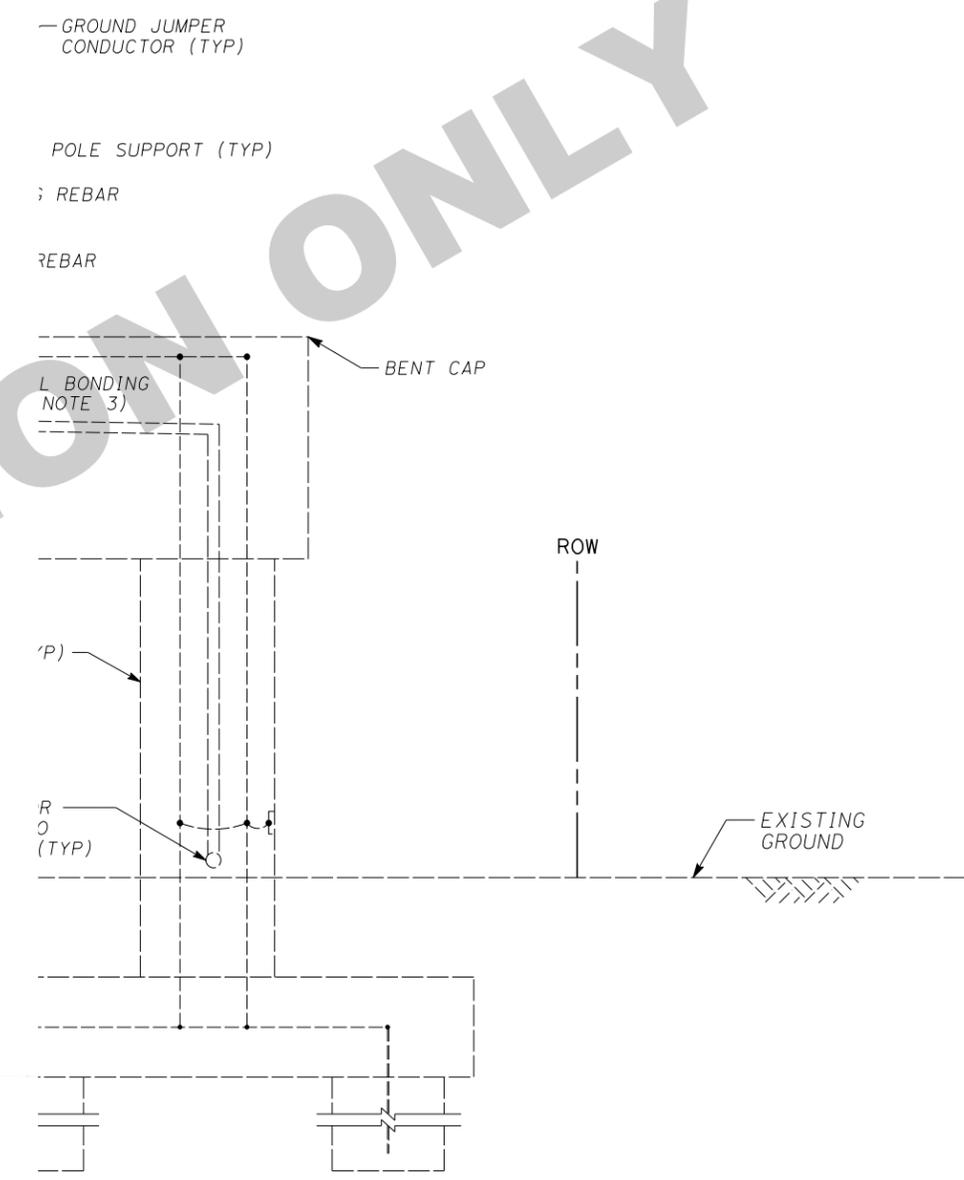
BOX GIRDER SERIAL STRUCTURE
WITH STAIRWAY TYPICAL SECTION
SOW-TS-017



W. Alma Ave

NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA, MANUAL, AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. STRUCTURE GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTRACTS.



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TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

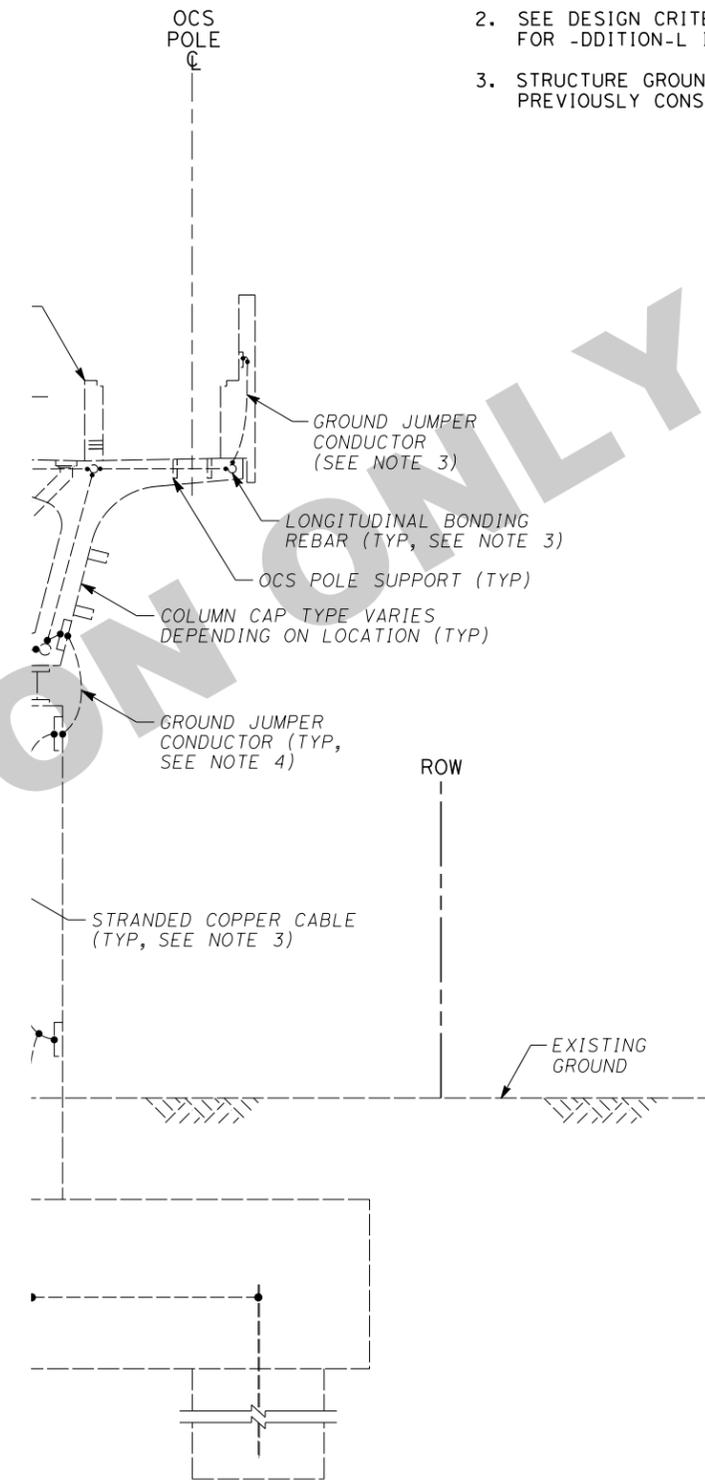
CALIFORNIA HIGH-SPEED RAIL PROJECT

TWO TRACK STRADDLE BENT STRUCTURE TYPICAL SECTION
SOW-TS-018



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA MANUAL, AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. STRUCTURE GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTRACTS.



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TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

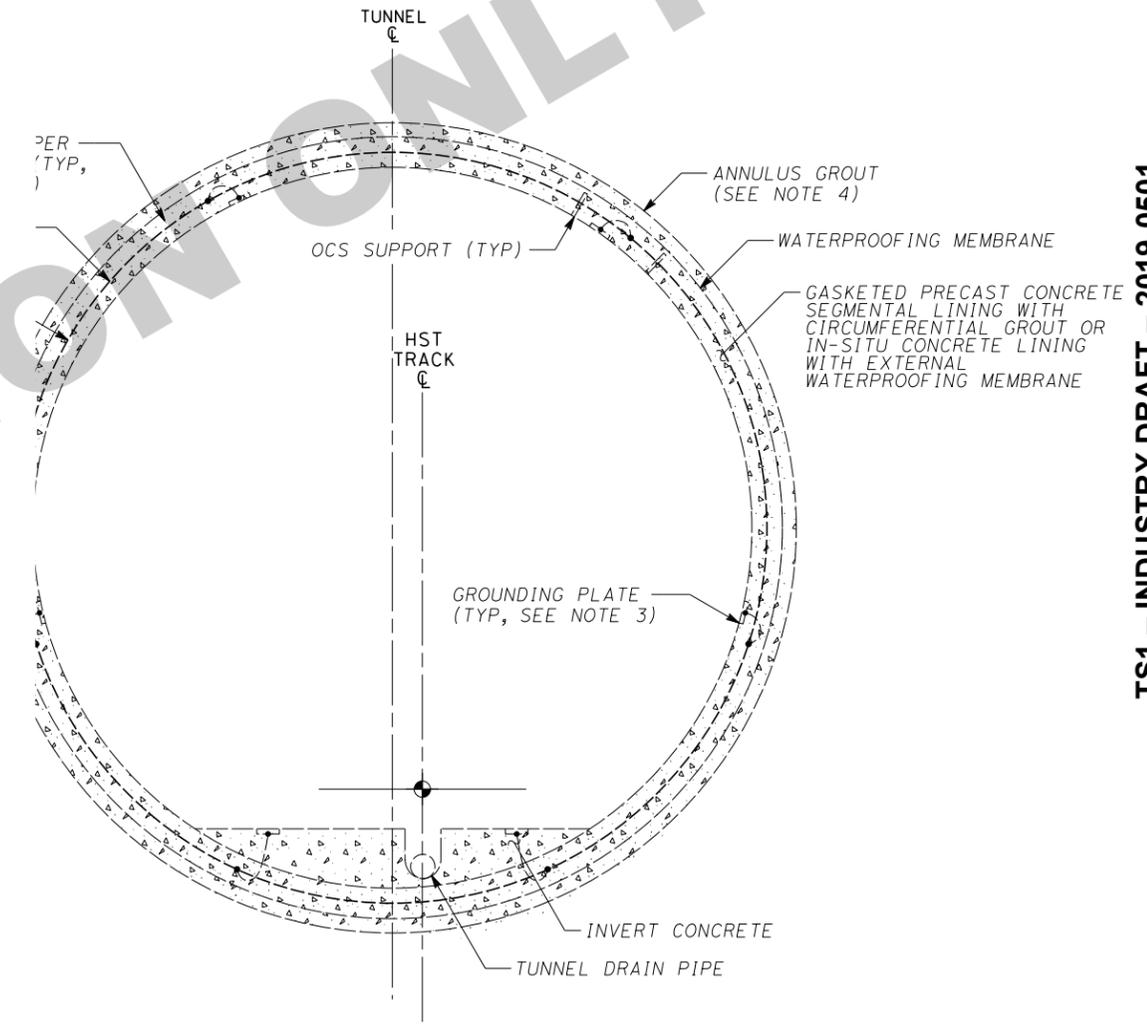
CALIFORNIA HIGH-SPEED RAIL PROJECT

TWIN SINGLE TRACK SERIAL
STRUCTURES TYPICAL SECTION
SOW-TS-019



NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA MANUAL, AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. TUNNEL GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTRACTS.
4. ANNULUS GROUT IS REQUIRED ONLY IF CONCRETE LINING IS PRECAST.



THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR AS A DESIGN DIRECTIVE.

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

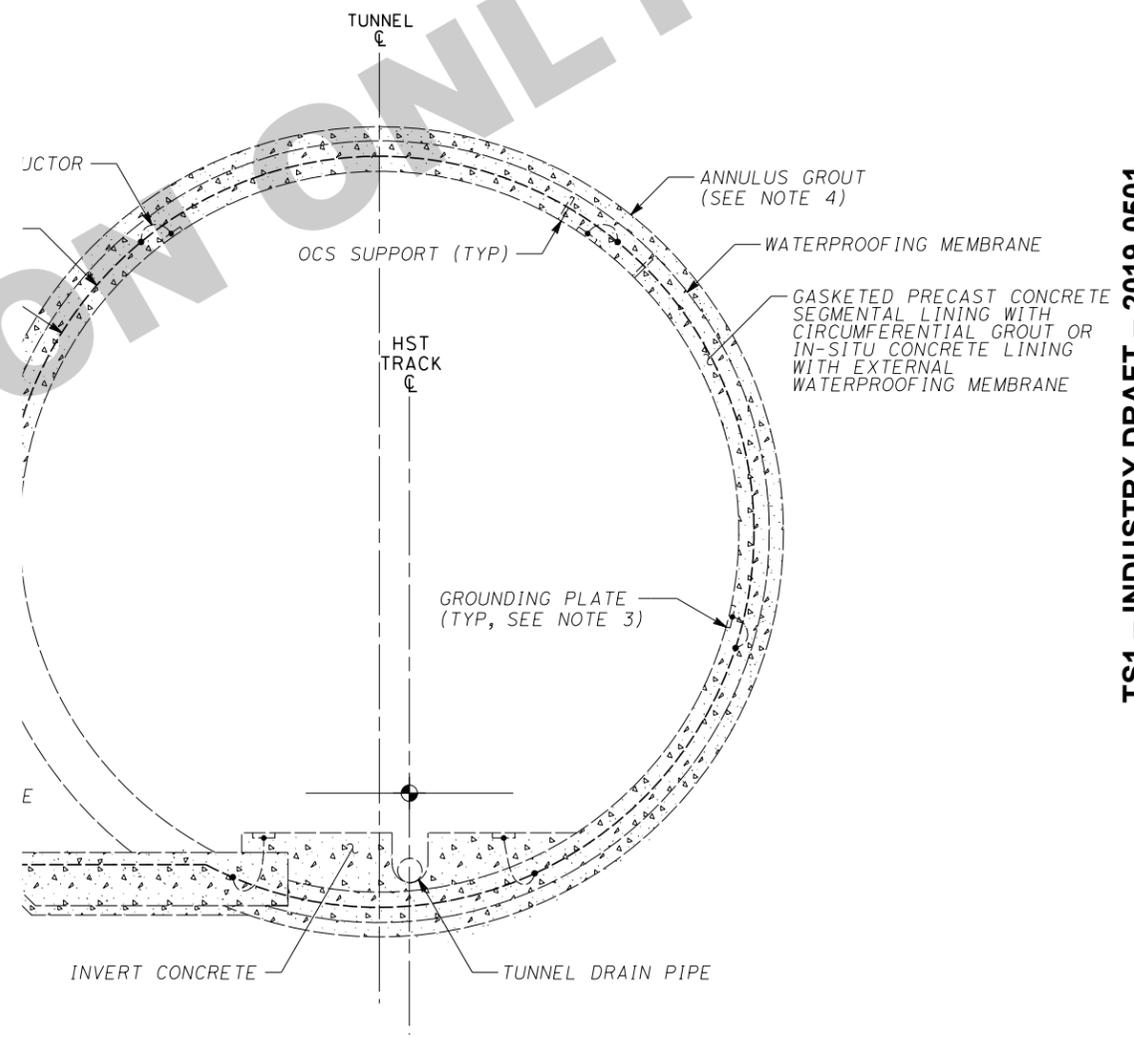
CALIFORNIA HIGH-SPEED RAIL PROJECT

TWIN BORED TUNNELS TYPICAL SECTION
SOW-TS-020



4RY SPRAYED
RETE LINING
RPROOFING
RANE
DARY
ETE LINING

- NOTES:**
1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
 2. SEE DESIGN CRITERIA MANUAL, AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
 3. TUNNEL GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTRACTS.
 4. ANNULUS GROUT IS REQUIRED ONLY IF CONCRETE LINING IS PRECAST.



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SECTION

TS1 - INDUSTRY DRAFT - 2019-0501



HIGH-SPEED RAIL:
CONNECTING AND
TRANSFORMING CALIFORNIA

**CALIFORNIA HIGH-SPEED TRAIN PROJECT
SAN JOSE TO GILROY
TAMIEN STATION TO COMMUNICATION HILL**

CONTRACT NO.	
DRAWING NO.	
SCALE	NO SCALE
SHEET NO.	OF ###

**CALIFORNIA HIGH-SPEED RAIL PROJECT
4.0 - TS1 BASE DESIGN TYPICAL SECTIONS
TWIN BORED TUNNEL WITH CROSS PASSAGE
TYPICAL SECTION
SOW-TS-021**



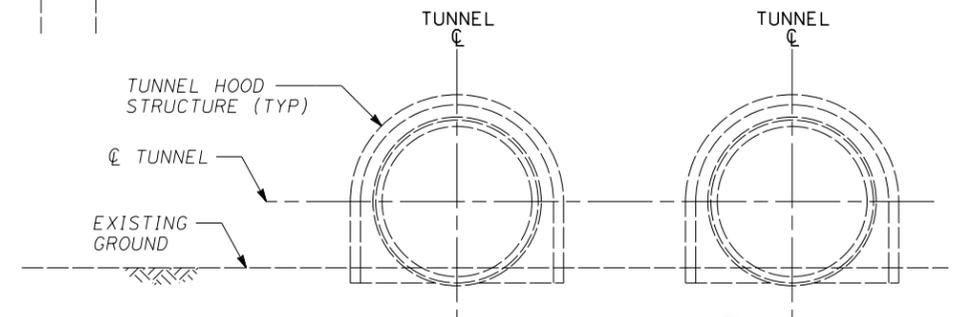
NOTES:

1. SEE CIVIL DESIGN DOCUMENTS FOR ADDITIONAL INFORMATION.
2. SEE DESIGN CRITERIA MANUAL, AND DIRECTIVE DRAWINGS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. STRUCTURE GROUNDING AND BONDING PROVIDED IN PREVIOUSLY CONSTRUCTED CONTRACTS.

AGGREGATE BASE AND SURFACING

CONTROL ZONE

GATE BASE JRFACING



SECTION
NO SC-LE



TUNNEL PORTAL FACILITY SECTION

THESE TYPICAL SECTIONS ARE SCHEMATIC AND FOR ILLUSTRATION PURPOSES ONLY. THEY SHALL NOT BE USED FOR CONSTRUCTION OR DESIGN DIRECTIVE.

TS1 - INDUSTRY DRAFT - 2019-0501



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CALIFORNIA HIGH-SPEED RAIL PROJECT
4.0 - TS1 **BASE DESIGN TYPICAL SECTIONS**
TUNNEL PORTAL FACILITY SCHEMATIC
SOW-TS-022