

CITY OF COLTON
RIGHT OF WAY CONTRACT

LA CADENA BRIDGE REPLACEMENT PROJECT

1403 S. La Cadena Drive, & W. Side of S. La Cadena Dr. and
the Santa Ana River, Colton, CA 92324

Property Address

0163-361-13

0163-361-18

APN.

92013005 & 92013006

Federal Project No.

Title Order No.

RIGHT-OF-WAY CONTRACT

San Bernardino County Flood Control District, a body corporate and politic (hereinafter, "Grantor"), owns the real property located at 1403 S. La Cadena Drive and at the W. Side of S. La Cadena Dr. and the Santa Ana River, Colton, California 92324 in San Bernardino County, identified as Assessor's Parcel Numbers 0163-361-13 and 0163-361-18 (the "Property"). A portion of the Property is needed to construct the La Cadena Bridge Replacement Project, a City of Colton (the "City") project designed to replace the existing La Cadena bridge over the Santa Ana River to accommodate four travel lanes, a raised median, a bike lane, and a sidewalk in each direction. The project will also replace the existing access to the Santa Ana River Trail (SART) parking lot and a portion of the existing bike trail connection between the SART and southbound side of La Cadena Drive (the "Project"). The documents in the form of a Temporary Construction Easement, a copy of which is attached hereto as **Exhibit "1"** and incorporated herein by reference, and an Easement Deed (Public Road), a copy of which is attached hereto as **Exhibit "2"** and incorporated herein by reference, cover the property interests as described and depicted in **Exhibit "1" and "2"** (the "Property Interest").

In consideration of which, and the other considerations hereinafter set forth, it is mutually agreed as follows:

1. (A) The parties have herein set forth the whole of their agreement ("Agreement"). The performance of this Agreement constitutes the entire consideration for the Property Interest.
- (B) The City requires said Property Interest described in the Temporary Construction Easement and Easement Deed (Public Road) for the Project, a public use for which the City has the authority to exercise the power of eminent domain. Grantor is compelled to sell, and the City is compelled to acquire the Property Interest.
- (C) Both Grantor and the City recognize the expense, time, effort and risk to both parties in determining the compensation for the Property Interest by eminent domain litigation. The compensation set forth herein for the Property Interest is in compromise and settlement, in lieu of such litigation.
- (D) It is agreed that the City shall open an escrow in accordance with this Agreement at an escrow company of the City's choice ("Escrow Agent"). This Agreement constitutes the joint escrow instructions of the City and the Grantor, and Escrow Agent to whom these instructions are delivered is hereby empowered to act under this Agreement. The parties hereto agree to perform all acts reasonably necessary to close this escrow within sixty (60) days following the opening of escrow.

CITY OF COLTON
RIGHT OF WAY CONTRACT

2. (A) The City shall pay the undersigned Grantor the sum of **Sixty-Four Thousand One Hundred Dollars and Zero Cents (\$64,100.00)** for the Property Interest conveyed by the Temporary Construction Easement and the Easement Deed (Public Road) plus a not to exceed amount of \$28,785 for reimbursement of Grantor's administrative costs associated with this transaction.
- (B) The City will pay all usual escrow and recording fees incurred in this transaction, and if title insurance is desired by the City, the premium charged therefor. Due to the City's status as a public agency, no recording fees will be payable (pursuant to Government Code section 27383) and no documentary transfer tax will be payable (pursuant to Revenue & Taxation Code section 11922). This transaction may be handled through an external escrow with Commonwealth Land Title Company or another selected escrow company to be determined.
- (C) The City shall have the authority to deduct and pay from the amount shown in Clause 2(A) above, any amount necessary to satisfy any bond demands and delinquent taxes due in any year except the year in which this escrow closes, together with penalties and interest thereon, and/or delinquent and unpaid non-delinquent assessments which have become a lien at the close of escrow.
- (D) There shall be no proration of real property taxes through escrow. Escrow Agent is authorized and instructed to comply with the following tax adjustment procedures.
- (i) Pay and charge Grantor for any unpaid delinquent taxes and/or penalties and interest thereon, and for any delinquent or non-delinquent assessments or bonds against the Property.
 - (ii) If escrow closes between July 1 and November 1, and the current tax information is not available, Escrow Agent is instructed to withhold from Grantor's proceeds an amount equal to one hundred twenty percent (120%) of the amount payable on the prior fiscal year's second half tax bill. At such time as current tax information is available, Escrow Agent shall pay the first installment of real property taxes and assessments to the County Tax Collector and in the event the amount withheld is not sufficient, Grantor agrees to immediately pay the difference to Escrow Agent.
 - (iii) If close of escrow occurs at a time when current tax information is available, Escrow Agent shall withhold from Grantor's proceeds and pay to the County Tax Collector the full amount of the current installment of real property taxes and assessments.
3. FULL AND COMPLETE SETTLEMENT. Grantor hereby acknowledges that it is the sole and lawful owner of the Property and the compensation paid to Grantor through this Agreement constitutes the full and complete settlement of any and all claims against the City (hereafter, individually and collectively, "Releasee") by reason of the acquisition of the Property Interest, including, but not limited to, any and all rights or claims that Grantor had, currently has or may in the future have under Article 1, Section 19 of the California Constitution, the Eminent Domain Law, or any other law or regulation, except as provided herein. Grantor, on behalf of itself and its successors and assigns, further knowingly and voluntarily waives and expressly releases and discharges Releasee and any and all of Releasee's employees, agents, officers, servants, representatives, contractors, attorneys, partner agencies and assigns, from liability in regard to any claims for the following associated with City's acquisition of the Property Interest under

CITY OF COLTON
RIGHT OF WAY CONTRACT

this Right of Way Contract: pre-condemnation damages, any right to challenge the adoption of a resolution of necessity, any right to receive any notices pursuant to Code of Civil Procedure Section 1245.235, any right to enforce any obligation pursuant to the Eminent Domain Law, and claims for litigation expenses, attorney's fees, statutory interest and/or costs (collectively, "Released Claims"). Grantor further consents to the dismissal of any Eminent Domain proceeding that is filed pertaining to the Property Interest and further waives all attorney's fees, costs, claims to money on deposit, disbursements and expenses in connection with the dismissal of said proceeding.

4. The parties intend that this Agreement will result in a full, complete and final resolution and settlement of the Released Claims, causes of action or disputes which exist, or may exist, between them as expressly provided herein. It is therefore understood that the waiver, under this Agreement, of any rights, damages, compensation or benefits to which Grantor is, or may be, entitled is intended to be full and complete. Accordingly, except as provided herein:

(A) Pursuant to the releases set forth in this Agreement, Grantor specifically waives the provision of section 1542 of the Civil Code of the State of California which provides:

"A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS THAT THE CREDITOR OR RELEASING PARTY DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE AND THAT, IF KNOWN BY HIM OR HER, WOULD HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR OR RELEASED PARTY."

(B) Grantor represents and warrants that it understands the effect of this waiver of section 1542 and has had the opportunity to discuss the effect of this waiver with counsel of its choice.

5. Any monies payable under this Agreement up to and including the total amount of unpaid principal and interest on note(s) secured by mortgage(s) or deed(s) of trust, if any, and all other amounts due and payable in accordance with the terms and conditions of said deed(s) of trust or mortgage(s), shall upon demand(s) be made payable to the mortgagee(s) or beneficiary(ies) entitled thereunder; said mortgagee(s) or beneficiary(ies) are to furnish Grantor with good and sufficient receipt showing said monies credited against the indebtedness secured by said mortgage(s) or deed(s) of trust.
6. Grantor represents and warrants that it is the fee simple owner of the Property and that it has the right to convey the Property Interest. Grantor will defend and indemnify the City, its successors and/or assigns against any and all claims, demands, causes of action filed against the City, its successors and/or assigns by someone challenging City's legal interest in or right to the Property Interest, or any portion thereof. Grantor represents and warrants that it has made no assignment of the Property Interest, as herein defined.
7. Reserved.
8. It is understood and agreed by and between the parties hereto that included in the amount payable under Clause 2(A) above is payment in full to compensate the Grantor for the purchase of the following improvements: 2 medium trees. All purchased improvements listed above will not be replaced by the City. Grantor agrees that it is not entitled to compensation for any other

CITY OF COLTON
RIGHT OF WAY CONTRACT

improvements located within the areas of the Property Interest being purchased pursuant to this Agreement.

9. It is understood and agreed by and between the parties hereto that City will demolish and construct all improvements to Grantor and County facilities in accordance with the Plans dated March 8, 2017 consisting of 73 Sheets, attached hereto as **Exhibit "3"** and incorporated herein by this reference.
10. The City shall not take actual/physical possession of the Property Interest until thirty (30) days advance notice by the City or the City's contractor is given to Grantor of the City's taking actual/physical possession of the Property Interest. Prior to the City's actual/physical possession of the Property Interest, the City shall not be deemed to have control of the areas within the Property Interest nor duty to maintain the areas within the Property Interest in a safe condition prior to the time the City or the City's contractor take actual/physical possession of the areas within the Property Interest.
11. Reserved.
12. Grantor and City acknowledge they have received and reviewed the Preliminary Title Report, dated July 15, 2020, and agree none of the title exceptions in the Preliminary Title Report will be removed. Any assessments that are the responsibility of Grantor as the underlying fee owner shall remain the obligation of the Grantor. City is not assuming responsibility for any Schedule B exceptions in the Preliminary Title Report by virtue of acquiring the Property Interests. Payment for the Property Interest acquired under this transaction is made upon the basis that the Grantor retains its obligation to the levying body respecting said assessments.
13. The Temporary Construction Easement (**Exhibit "1"**) shall be for a period of twenty-four (24) months ("TCE Term"). The TCE Term shall commence as provided in the Temporary Construction Easement. Grantor shall be provided at least thirty (30) days written notice prior to commencement of work within the Temporary Construction Easement area.
14. It is agreed and confirmed by the parties hereto that notwithstanding other provisions in this contract, the right of possession and use of the property described in the Easement Deed (**Exhibit "2"**) by the City, including the right to remove and dispose of improvements if allowed by the easements, shall commence on the date the amount of funds as specified in Clause 2(A) herein are deposited into the escrow controlling this transaction. The amount shown in Clause 2A herein includes, but is not limited to, full payment for such possession and use.
15. Any notice either party may or is required to give the other shall be in writing and shall be either personally delivered or sent by registered or certified mail, return receipt requested. If by mail, service shall be deemed to have been received by such party at the time the notice is delivered to the following addresses:

To Grantor:

San Bernardino County Flood Control District
825 E. 3rd Street
San Bernardino, CA 92415
Attn.: David Drake

CITY OF COLTON
RIGHT OF WAY CONTRACT

To City:
City of Colton
650 North La Cadena Drive
Colton, CA 92324
Attn: Victor Ortiz

16. It is understood and agreed by and between the parties hereto that this Agreement inures to the benefit of, and is binding on, the parties, their respective heirs, personal representatives, subsequent purchasers, successors, and/or assignees. The City may freely assign any or all of its interest or rights under this Agreement.
17. It is understood and agreed that the fully executed Temporary Construction Easement and Easement Deed (Public Road) may be recorded in the Recorder's Office for San Bernardino County.
18. The City shall, pursuant to Section 21.7(a) of Title 49, Code of Federal Regulations, comply with all elements of Title VI of the Civil Rights Act of 1964. This requirement under Title VI and the Code of Federal Regulations is to complete the USDOT- Non-Discrimination Assurance requiring compliance with Title VI of the Civil Rights Act of 1964, 49 C.F.R. Parts 21 and 28 C.F.R. Section 50.3.
19. Further, no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity that is the subject of this contract.
20. This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter of this Agreement and may not be modified except by an instrument in writing signed by the party to be bound thereby.
21. If any term or provision of this Agreement shall be held to be invalid or unenforceable, the remainder of the Agreement shall remain in full force and effect.
22. Each individual executing this Agreement on behalf of an entity represents and warrants that he or she has been authorized to do so by the entity on whose behalf he or she executes this Agreement and that said entity will thereby be obligated to perform the terms of this Agreement.
23. This Agreement may be executed in counterparts, including by facsimile and/or electronic mail, each of which so executed shall, irrespective of the date of its execution and delivery, be deemed an original, and all such counterparts together shall constitute one and the same instrument.
24. This Agreement may be subject to approval by the City Council.

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK
SIGNATURE PAGE FOLLOWS

CITY OF COLTON
RIGHT OF WAY CONTRACT

In Witness Whereof, the parties have executed this Right of Way Contract on the day and year set forth below.

GRANTOR
San Bernardino County Flood Control District, a body corporate
and politic

By: _____
DATE

Its:

By: _____
DATE

Its:

CITY OF COLTON

By: _____
William R. Smith DATE
City Manager

APPROVED AS TO FORM:

By: _____
Mark Easter DATE
Best, Best & Krieger, LLP
City of Colton

CITY OF COLTON
RIGHT OF WAY CONTRACT

EXHIBIT "1"
TEMPORARY CONSTRUCTION EASEMENT

Recording Requested By:

CITY OF COLTON

**When Recorded Mail Document
and Tax Statement To:**

CITY OF COLTON
190 S. 10TH STREET
COLTON, CA 92324

ATTN: ENGINEERING DIVISION

Record without fee subject to Gov't Code
6103 and 27383

Project: Santa Ana River
System No.:2-701
Parcel No.: RE-114
Dept. Code: 11600

**TEMPORARY
CONSTRUCTION EASEMENT**

D.P.: 2-701
APN: 0163-361-13 (ptn)
Date: March 22, 2023

The undersigned grantor(s) declare(s):

DOCUMENTARY TRANSFER TAX \$

- computed on full value of property conveyed, or
- computed on full value less liens and encumbrances remaining at the time of sale
- Unincorporated Area City: Colton

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, the **SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT**, a body corporate and politic, hereinafter referred to as "**Grantor**", does hereby **grant** to **CITY OF COLTON, A CALIFORNIA MUNICIPAL CORPORATION**, hereinafter referred to as "**Grantee**", an **exclusive temporary construction easement** (hereinafter this "easement" or "grant") for **Grantee's** use as a temporary construction yard. Said **easement** is located on a certain portion ("**Easement Property**") of **Grantor's** real property ("**Fee Property**") situated in the County of San Bernardino, State of California, and more particularly described in **Exhibit "C"**, Legal Description attached hereto and made a part hereof, which **Easement Property** is more particularly described in **Exhibit "A"**, Legal Description and shown on **Exhibit "B"**, Plat, attached hereto and made a part hereof.

The term of the easement described herein shall commence _____ upon recordation of this document, and expire twenty-four (24) months thereafter.

Mail Tax Statement As Directed Above

This easement is also subject to the following terms, conditions and restrictions:

1. The **Easement Property** shall only be used and occupied by **Grantee**, and its respective employees, agents, contractors and invitees as a temporary construction yard for its La Cadena Avenue Bridge Widening Project (“Project”) including the right to fence said **Easement Property**, and use said **Easement Property** for Project personnel, materials, equipment, machinery, vehicles, job trailer(s), tools and other appurtenances and uses necessary for said construction project work, and for no other purposes.
2. Prior to commencing any work on the Easement Property, including any grading, **Grantee** shall submit plans to **Grantor** for **Grantor’s** review and approval, with **Grantor** to issue to **Grantee** an encroachment permit if such plans are approved by **Grantor** in **Grantor’s** sole, reasonable discretion. Any encroachment permit requirements stated in the permit that are not stated herein will be in addition to the terms and conditions herein.
3. **Grantee** shall be responsible for securing and maintaining all necessary permits and approvals from other appropriate local, state and federal agencies for its use of the **Easement Property**, and **Grantee** shall comply with all applicable laws and regulations concerning its use of the **Easement Property**. **Grantor** shall cooperate, in good faith, with **Grantee** in obtaining any necessary permits and approvals.
4. **Grantee** shall at all times, and at its sole cost and expense, maintain the **Easement Property** in good condition and repair, and protect against oil, gasoline, fuel and chemical or toxic spills and toxic discharges of any nature. **Grantee** shall be responsible for any damage to or pollution of the **Easement Property**, including the actions, inactions and use of the **Easement Property** by **Grantee’s** respective employees, agents, contractors, subcontractors and invitees, and **Grantee** shall promptly repair to **Grantor’s** reasonable satisfaction all such damage at **Grantee’s** sole expense.
5. Any costs incurred by **Grantor** for **Grantor’s** use of the **Easement Property** or the **Fee Property**, including (but not limited to) any costs incurred by **Grantor** for the construction, reconstruction, maintenance, and use of any **Grantor** flood control improvements on the **Easement Property** or the **Fee Property** attributable to the presence of **Grantee’s** construction yard or the La Cadena Avenue Bridge Widening Project shall be borne by **Grantee**, at **Grantee’s** sole cost. Upon the termination of this temporary construction easement, **Grantee** shall restore the **Easement Property** and **Fee Property** to as good a condition as existed on the date the easement was signed by **Grantor**, or as specified in the permit issued pursuant to Paragraph 2. In the event this easement and the encroachment permit conflict, the encroachment permit will govern.
6. **Grantee** agrees to indemnify, defend (with counsel reasonably approved by **Grantor**) and hold harmless the **Grantor**, the County of San Bernardino, and their authorized officers, employees, agents and volunteers (“Indemnitees”) from any and all claims, actions, losses, damages, and/or liability arising out of this grant of easement from any cause whatsoever, including the acts, errors or omissions of any person and for any costs or expenses incurred by Indemnitees on account of any claim except where such indemnification is prohibited by law. This indemnification provision shall apply regardless of the existence or degree of fault of Indemnitees. The **Grantee’s** indemnification obligation applies to Indemnitees’ “active” as well as “passive” negligence but does not apply to the Indemnitees’ “sole negligence” or “willful misconduct” within the meaning of Civil Code Section 2782.

7. **Grantee** agrees to comply with the following insurance requirements: **Grantor** and **Grantee** are authorized self-insured public entities for purposes of Professional Liability, General Liability, Automobile Liability, and Worker’s Compensation and warrant that through their respective programs of self-insurance, they have adequate coverage or resources to protect against liabilities arising out of the performance of the terms, conditions or obligations of this easement.

8. This **easement** shall be governed by the laws of the State of California.

9. This grant may only be amended by a writing executed by both **Grantor** and **Grantee** and recorded in the Official Records of the County of San Bernardino.

10. If any legal action is instituted to enforce any party’s rights hereunder, each party shall bear its own costs and attorneys’ fees, regardless of who is the prevailing party. This Paragraph shall not apply to those costs and attorneys’ fees directly arising from a third-party legal action against a party hereto and payable under Paragraph 6.

11. If a court of competent jurisdiction declares any provision of this easement invalid, illegal, or otherwise unenforceable, the remaining provisions shall continue in full force and effect, unless the purpose of this easement is frustrated.

IN WITNESS WHEREOF **Grantor** and **Grantee** have executed this Temporary Construction Easement Deed on the day and year written below and have agreed to be bound by the terms and provisions hereof.

GRANTOR:

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

By: _____

Name: Dawn Rowe

Title: Chair, Board of Supervisors

Date: _____

ACCEPTANCE OF TERMS AND CONDITIONS

This is to certify that the interest in real property conveyed by the Temporary Construction Easement Deed by the SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT to the CITY OF COLTON, is accepted by the undersigned officer on behalf of Grantee and Grantee agrees to be bound by the terms, conditions, restrictions and provisions hereof.

GRANTEE: CITY OF COLTON

By: _____

Name: _____

Title: _____

Date: _____

July 27, 2021
BKF Job No: 20191182

LEGAL DESCRIPTION
EXHIBIT A: TEMPORARY CONSTRUCTION EASEMENT
APN 0163-361-13

Real property situate in the City of Colton, County of San Bernardino, State of California, described as follows:

Being a portion of the lands of the San Bernardino County Flood Control District (S.B.C.F.C.D.), a body corporate and politic, as described in that certain Grant Deed recorded June 17, 1971 in Book 7690, Page 128, Official Records of San Bernardino County, being also a portion of Jurupa Rancho as per the map recorded in Book 9 of Maps at Page 33, in the Office of the County Recorder of said County, more particularly described as follows:

BEGINNING at the northeasterly corner of the lands described in Grant Deed recorded on December 6, 2019 as Document No. 2019-0451639, Official Records of San Bernardino County being the point of intersection of the southerly line of the lands of S.B.C.F.C.D. with the westerly line of La Cadena Drive, said point being also the beginning of a curve to the right, concave North, having a radius of 2,525.00 feet, from said point a radial line bears North 10°36'03" East;

Thence westerly along said curve being the southerly line of said lands of S.B.C.F.C.D. (Bk. 7690, Pg. 128, O.R.), through a central angle of 0°26'00", for an arc length of 19.10 feet;

Thence leaving said line the following four (4) courses:

- 1) North 8°04'52" East, 4.49 feet;
- 2) North 74°04'38" West, 61.75 feet;
- 3) North 15°23'00" East, 50.06 feet;
- 4) South 74°31'46" East, 74.15 feet to the said westerly line of La Cadena Drive;

Thence along said westerly line South 7°42'40" West, 53.95 feet to the **POINT OF BEGINNING**.

Containing an area of 3,976 square feet, more or less.

For: BKF Engineers



Davis Thresh, P.L.S. No. 6868

7/27/2021

Dated



LANDS OF SAN
 BERNARDINO COUNTY
 FLOOD CONTROL DISTRICT
 BK. 7690, PG. 128, O.R.
 APN 0163-361-13

NOTE: THIS PLAT IS SOLELY
 AN AID IN LOCATING THE
 PARCEL DESCRIBED IN THE
 ATTACHED DOCUMENT, IT IS
 NOT A PART OF THE WRITTEN
 DESCRIPTION THEREIN.

LEGEND & ANNOTATION

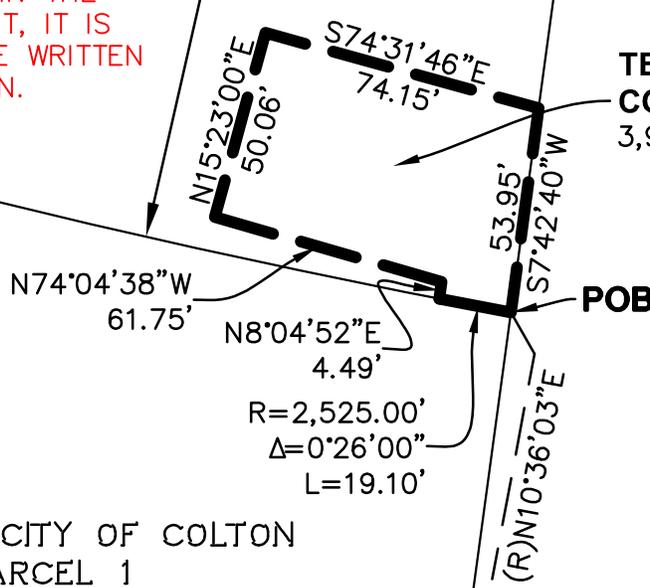
POB = POINT OF BEGINNING

————— = DESCRIBED AREA
 ————— = LOT LINE



**TEMPORARY
 CONSTRUCTION EASEMENT**
 3,976 SQ. FT.±

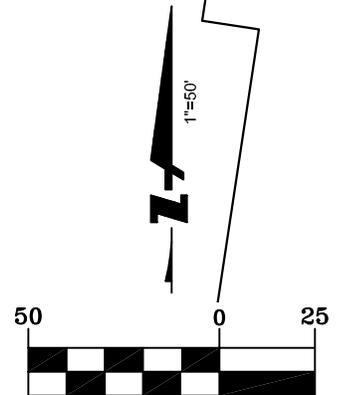
1050' * PETERS RIGHT OF WAY
 BK. 5574, PG. 77, O.R.



LANDS OF CITY OF COLTON
 PARCEL 1
 D.N. 2019-0451639
 APN 0275-192-07

S. LA CADENA DR.

W. TROPICA RANCHO RD.



(SCALE IN FEET)



4675 MACARTHUR COURT
 SUITE 400
 NEWPORT BEACH, CA 92660
 949-526-8460
 949-526-8499 (FAX)

Subject EXHIBIT B – TEMP CONSTRUCTION EASE
PLAT TO ACCOMPANY LEGAL DESCRIPTION
 Job No. 20191182
 By MGR Date 7/27/21 Chkd. WS
 SHEET 1 OF 1

Exhibit C

ALL THAT CERTAIN REAL PROPERTY SITUATED IN THE COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

THAT PORTION OF THAT PART OF JURUPA RANCHO AS PER PLAT RECORDED IN [BOOK 9, PAGE 33](#) OF MAPS, RECORDS OF SAID COUNTY, SAID PART DESCRIBED IN DOCUMENT RECORDED IN [BOOK 481, PAGE 73](#) OF DEEDS, RECORDS OF SAID COUNTY, SAID PORTION BEING ALL OF SAID PART LYING WITHIN A STRIP OF LAND 1050 FEET WIDE, BEING 525 FEET ON EACH SIDE OF THE FOLLOWING DESCRIBED CENTERLINE, LYING WITHIN THAT PARCEL SET FORTH AND DESCRIBED ASSESSORS PARCEL MAPS OF SAID COUNTY.

EXCEPT THEREFROM THAT PORTION OF SAID LAND CONVEYED TO THE COUNTY OF SAN BERNARDINO AS SET FORTH AND DESCRIBED IN THAT CERTAIN DOCUMENT RECORDED SEPTEMBER 15, 1965 AS [BOOK 6472, PAGE 698 OF OFFICIAL RECORDS](#)

BEGINNING AT A POINT IN THE WESTERLY LINE OF RANCHO SAN BERNARDINO AS PER PLAT RECORDED IN [BOOK 7 OF MAPS, PAGE 2](#), RECORDS OF SAID COUNTY, DISTANT NORTH 19° 36' 20" WEST ALONG SAID WESTERLY LINE, 2083.09 FEET FROM A ONE-INCH IRON PIPE MARKING THAT CERTAIN CORNER OF SAID RANCHO SAN BERNARDINO COMMONLY KNOWN AS R.S.B. NO. 2; THENCE NORTHWESTERLY 902.41 FEET ALONG A NON-TANGENT CURVE CONCAVE TO THE NORTHEAST, HAVING A RADIUS OF 2000 FEET AND A CENTRAL ANGLE OF 25° 51' 08" THE BEGINNING TANGENT THEREOF BEARING NORTH 84°06'56" WEST; THENCE NORTH 58°15'48" WEST, 1542.71 FEET; THENCE SOUTHWESTERLY 5321.53 FEET ALONG A TANGENT CURVE CONCAVE TO THE SOUTH, HAVING A RADIUS OF 2950 FEET AND A CENTRAL

ANGLE OF 103° 21' 22"; THENCE SOUTH 18° 22' 50" WEST, 2713.73 FEET; THENCE WESTERLY 1534.19 FEET ALONG A TANGENT CURVE CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 5000 FEET AND A CENTRAL ANGLE OF 17° 34' 50"; THENCE SOUTH 35° 57' 40" WEST 3253.02 FEET TO THE POINT OF TERMINATION IN THE CENTERLINE OF RIVERSIDE-RIALTO ROAD (A 66 FEET STREET), DISTANT ALONG SAID CENTERLINE SOUTH 12° 57' 07" EAST, 4753.39 FEET FROM THE INTERSECTION OF SAID CENTERLINE WITH THE CENTERLINE OF AGUA MANSA ROAD (A 60 FEET STREET).

THE OUTSIDE BOUNDARIES SHALL BE PROLONGED OR SHORTENED AS NECESSARY TO BEGIN AND END IN THE SAME LINES AS SAID CENTERLINE BEGINS AND ENDS.

NOTE: THIS COMPANY HAS PROVIDED SAID DESCRIPTION AS AN ACCOMMODATION FOR THE PURPOSE OF FACILITATING THIS REPORT. SAID DESCRIPTION MAY NOT BE AN INSURABLE PARCEL PURSUANT TO THE SUBDIVISION MAP ACT OF THE STATE OF CALIFORNIA AND SHOULD NOT BE RELIED UPON TO CONVEY OR ENCUMBER SAID LAND, UNTIL APPROVED BY THE APPROPRIATE GOVERNING AGENCY.

Assessor's Parcel Number: [0163-361-13-0-000](#)

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by the TCE Easement Deed _____, 202__, from San Bernardino County Flood Control District, a body corporate and politic, to the City of Colton, a California Municipal Corporation, by the within instrument, the provisions of which are incorporated by this reference as though fully set forth in this Certification, is hereby accepted by the undersigned officer(s) on behalf of the City of Colton pursuant to authority conferred by the City Council and the Grantee consents to recordation thereof by its duly authorized officer.

Dated: _____

By: _____

William R. Smith
City Manager

CITY OF COLTON
RIGHT OF WAY CONTRACT

EXHIBIT "2"
EASEMENT DEED (PUBLIC ROAD)

Recording Requested By:

City of Colton

Mail To:

City of Colton

160 S. 10th Street

Colton, CA 92324

ATTN: Engineering Division

Record without fee subject to Gov't Code 6103 and 27383

Project: Santa Ana River
System No.: 2.701
Parcel No.: 114
Dept. Code: 11600

**EASEMENT DEED
(Public Road)**

D.P. No.: 2-700
APN: 0163-361-18 (portion)
Date: March 22, 2023

The undersigned grantor(s) declare(s):

DOCUMENTARY TRANSFER TAX \$

- computed on full value of property conveyed, or
- computed on full value less liens and encumbrances remaining at the time of sale
- Unincorporated Area City: Colton

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, the **SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT**, a body corporate and politic, hereinafter referred to as "**Grantor**", does hereby **grant** to **CITY of COLTON, a California municipal corporation**, hereinafter referred to as "**Grantee**", a **non-exclusive easement** (hereinafter "easement" or "grant") for street, highway, road and/or bridge purposes including, without limitation, appurtenances such as culverts, slopes, embankments, curbs and sidewalks located on a certain portion ("**Easement Property**") of **Grantor's** real property ("**Fee Property**") situated in the County of San Bernardino, State of California and more particularly described in **Exhibit "A"**, Legal Description attached hereto and made a part hereof, and shown on **Exhibit "B"**, Plat, attached hereto and made a part hereof.

This easement is granted subject to all permits, agreements, licenses, leases, easements, reservations, restrictions, terms, conditions, covenants, encumbrances, liens and claims of title which may affect said **Easement Property**. The use of the word "grant" herein shall not imply any warranty on the part of the **Grantor** with respect to the **Easement Property**.

Mail Tax Statement As Directed Above

This easement is also subject to the following terms, conditions and restrictions:

1. This easement is subject to the **Grantor's** superior right to use the **Easement Property**, and **Grantor** reserves to itself and its successors and assigns a continuing right to use and make any improvements to the **Easement Property** for **Grantor's** use.
2. **Grantor** may grant further permits, agreements, licenses, leases, easements, reservations, restrictions, terms, conditions, covenants, encumbrances, liens, or other rights over the **Easement Property** (or portions thereof) for the benefit of other entities not parties to this grant, provided that such further grants do not materially and adversely interfere with **Grantee's** use of the **Easement Property**, as determined by **Grantor** in its sole discretion.
3. Prior to commencing the construction or replacement of **Grantee's** street, highway, road and/or bridge, and appurtenances pursuant to this grant, **Grantee** shall submit all plans for the excavation, construction, installation, removal, and replacement of such improvements to **Grantor** for **Grantor's** review and approval with **Grantor** to issue to **Grantee** a permit if such plans are approved by **Grantor** in **Grantor's** sole, reasonable discretion. The existence of **Grantee's** street, highway, road and/or bridge and attendant easement does not give **Grantee** any rights to do further work of any type within the **Easement Property** without first obtaining additional permit(s) from **Grantor** pursuant to the above-stated requirements and conditions.
4. **Grantee** shall be responsible for securing and maintaining all necessary permits and approvals from other appropriate local, state and federal agencies for its use of the **Easement Property**, and **Grantee** shall comply with all applicable laws and regulations concerning the construction of the street, highway, road and/or bridge and its use of **Easement Property**. **Grantor** shall cooperate with **Grantee**, in good faith, in obtaining any necessary permits and approvals.
5. Any street, highway, road, bridge or culvert constructed by or on behalf of **Grantee** on the **Easement Property** shall be designed to not interfere with or impede **Grantor's** conveyance of storm water or **Grantor's** flood control improvements, if any, now existing or later installed on the **Easement Property** by **Grantor**. **Grantee's** construction of its street, highway, road and/or bridge shall be in accordance with the plan approved by **Grantor** in accordance with paragraph 3 and must further meet all applicable construction standards and applicable laws,
6. **Grantee** shall not change the existing grade, modify the topography, or impede or diminish the floodwater conveyance capacity of the **Easement Property or the Fee Property** without prior written consent of **Grantor** (in **Grantor's** sole discretion).
7. **Grantee** shall at all times, and at its sole cost and expense, maintain the **Easement Property** and its street, highway, road and/or bridge improvement project constructed (or caused to be constructed) by **Grantee** and/or its agents in good condition and repair, and free of trash, debris, weeds and unauthorized uses. **Grantee** shall perform all necessary maintenance associated with the entire improvement project, such as bridge structure, box culverts and appurtenant structures including but not limited to wingwalls, curb and gutter, sidewalks and appurtenances thereto constructed within the **Easement Property** in conjunction with the street, highway, road and/or bridge project, and shall remove graffiti, and any unauthorized uses or encroachments within or on any part of the box culvert structure and its appurtenances, as well as performing all necessary weed abatement work within the **Easement Property**.

8. **Grantor** shall at all times have free and clear access through and over the **Easement Property** (except as temporarily approved by **Grantor** during periods of **Grantee's** construction and/or maintenance).

9. Any costs incurred by **Grantor** for **Grantor's** use of the **Easement Property**, including (but not limited to) any costs incurred by **Grantor** for the construction, reconstruction, maintenance, and use of any **Grantor** flood control improvements, if any, now existing or later installed on the **Easement Property** or the **Fee Property** attributable to the presence of **Grantee's** street, highway, road and/or bridge shall be borne by **Grantee**, at **Grantee's** sole cost. In the event that **Grantor** requires that **Grantee's** street, highway, road and/or bridge located on the **Easement Property** be relocated, modified, or protected due to **Grantor's** existing or future use of the **Easement Property** or the **Fee Property**, **Grantee** shall promptly relocate, modify, or protect **Grantee's** street, highway, road and/or bridge as directed by **Grantor** and **Grantee** shall bear, at its sole expense, all such relocation, modification and protection costs. **Grantee** shall pothole its facilities and provide such information to **Grantor** upon **Grantor's** request, or **Grantor** shall perform such potholing at **Grantee's** expense. Notwithstanding anything to the contrary in this paragraph, prior to relocation, modification or protection of **Grantee's** street, highway, road and/or bridge except in cases of emergency as determined by **Grantor** in its sole discretion when no prior notice is required, **Grantor** shall provide **Grantee** with written notice and 2 years to complete any required relocation, modification or protection within the **Easement Property**.

10. **Grantor** shall not be required to contribute any part of the costs associated with **Grantee's** street, highway, road and/or bridge on the **Easement Property** and furthermore, if **Grantor** is included in an assessment district to pay such costs, **Grantee** shall promptly reimburse **Grantor** for any assessment therefore levied upon it upon **Grantor** demand.

11. **Grantee** agrees to indemnify, defend (with counsel reasonably approved by **Grantor**) and hold harmless the **Grantor**, the **County of San Bernardino** and their authorized officers, employees, agents and volunteers (**Indemnitees**) from any and all claims, actions, losses, damages, and/or liability arising out of this grant of easement from any cause whatsoever, including the acts, errors or omissions of any person and for any costs or expenses incurred by **Grantor** on account of any claim except where such indemnification is prohibited by law. This indemnification provision shall apply regardless of the existence or degree of fault of **Indemnitees**. The **Grantee's** indemnification obligation applies to **Indemnitees'** "Active" as well as "passive" negligence but does not apply to the **Indemnitees'** "sole negligence" or "willful misconduct" within the meaning of Civil Code Section 2782.

12. **Grantee** agrees to comply with the following insurance requirements (for the purpose of this paragraph, **Grantor** shall be deemed to include the **County of San Bernardino**):

A. Additional Insured - All policies, except for the Workers' Compensation policy, shall contain endorsements naming the **Grantor** and its officers, employees, agents and volunteers as additional insureds with respect to liabilities arising out of this easement. The additional insured endorsements shall not limit the scope of coverage for the **Grantor** to vicarious liability but shall allow coverage for the **Grantor** to the full extent provided by the policy. Such additional insured coverage shall be at least as broad as Additional Insured (Form B) endorsement form ISO, CG 2010.11 85.

B. Waiver of Subrogation Rights - **Grantee** shall require the carriers of required coverages to waive all rights of subrogation against the **Grantor**, its officers, employees, agents, volunteers, contractors and subcontractors. All general or auto liability insurance coverage provided shall not prohibit **Grantee** and **Grantee's** employees or agents from waiving the right of subrogation prior to a loss or claim. **Grantee** hereby waives all rights of subrogation against the **Grantor**.

C. Policies Primary and Non-Contributory - All policies required herein are to be primary and noncontributory with any insurance or self-insurance programs carried or administered by the **Grantor**.

D. Severability of Interests - **Grantee** agrees to ensure that coverage provided to meet these requirements is applicable separately to each insured and there will be no cross liability exclusions that preclude coverage for suits between **Grantee** and the **Grantor** or between the **Grantor** and any other insured or additional insured under the policy.

E. Proof of Coverage - **Grantee** shall furnish Certificates of Insurance to **Grantor** evidencing the insurance coverage, including endorsements, as required, prior to **Grantee's** execution of this easement document, which certificates shall provide that such insurance shall not be terminated or expire without thirty (30) days written notice to **Grantor**, and **Grantee** shall maintain such insurance throughout the term of the easement. Within fifteen (15) days of the **Grantee's** acceptance of this easement, **Grantee** shall furnish a copy of the Declaration page for all applicable policies and will provide complete certified copies of the policies and endorsements immediately upon request.

F. Acceptability of Insurance Carrier - Unless otherwise approved by the San Bernardino County Department of Risk Management (hereinafter "Risk Management"), insurance shall be written by insurers authorized to do business in the State of California and with a minimum "Best" Insurance Guide rating of "A- VII".

G. Deductibles and Self-Insured Retention - Any and all deductibles or self-insured retentions in excess of \$10,000 shall be declared to and approved by Risk Management.

H. Failure to Procure Coverage - In the event that any policy of insurance required under this easement does not comply with the requirements, is not procured, or is canceled and not replaced, the **Grantor** has the right but not the obligation or duty to obtain insurance if it deems necessary and any premiums paid by the **Grantor** will be promptly reimbursed by **Grantee**.

I. Insurance Review - Insurance requirements are subject to periodic review by the **Grantor**. **Grantor's** Director of Risk Management or designee is authorized, but not required, to increase, reduce, waive or suspend any insurance requirements whenever Risk Management determines that any of the required insurance is not available, is unreasonably priced, or needed, or not needed, to protect the interests of the **Grantor**. In addition, if Risk Management determines that heretofore unreasonably priced or unavailable types of insurance coverage or coverage limits become reasonably priced or available, the Director of Risk Management or designee is authorized, but not required, to change the above insurance requirements to require additional types of insurance coverage or higher coverage limits, provided that any such change is reasonable in light of past claims against the **Grantor**, inflation, or any other item reasonably related to the **Grantor's** risk.

J. Any failure, actual or alleged, on the part of the **Grantor** to monitor or enforce compliance with any of the insurance and indemnification requirements will not be deemed as a waiver of any rights on the part of the **Grantor**.

K. **Grantee** agrees to provide insurance set forth in accordance with the requirements herein. If **Grantee** uses existing coverage to comply with these requirements and that coverage does not meet the specified requirements, **Grantee** agrees to amend, supplement or endorse the existing coverage to do so. The type(s) of insurance required is determined by the scope of this easement.

L. Without in any way affecting the indemnity herein provided and in addition thereto, **Grantee** shall secure and maintain throughout the duration of the easement the following types of insurance with limits as shown:

(1) Workers' Compensation/Employers Liability - A program of Workers' Compensation insurance or a state-approved, self-insurance program in an amount and form to meet all applicable requirements of the Labor Code of the State of California, including Employer's Liability with \$250,000 limits covering all persons including volunteers providing services on behalf of **Grantee** and all risks to such persons under this easement.

If **Grantee** has no employees, it may certify or warrant to the **Grantor** that it does not currently have any employees or individuals who are defined as "employees" under the Labor Code and the requirement for Workers' Compensation coverage will be waived by the **Grantor's** Director of Risk Management.

With respect to **Grantees** that are non-profit corporations organized under California or Federal law, volunteers for such entities are required to be covered by Workers' Compensation insurance.

(2) Commercial/General Liability Insurance - **Grantee** shall carry General Liability Insurance covering all operations performed by or on behalf of **Grantee** providing coverage for bodily injury and property damage with a combined single limit of not less than one million dollars (\$1,000,000), per occurrence. The policy coverage shall include:

- (a) Premises operations and mobile equipment.
- (b) Products and completed operations.
- (c) Broad form property damage (including completed operations).
- (d) Explosion, collapse and underground hazards.
- (e) Personal injury
- (f) Contractual liability.
- (g) \$2,000,000 general aggregate limit.

(3) Automobile Liability Insurance – Primary insurance coverage shall be written on ISO Business Auto coverage form for all owned, hired and non-owned automobiles or symbol 1 (any auto). The

policy shall have a combined single limit of not less than one million dollars (\$1,000,000) for bodily injury and property damage, per occurrence. If **Grantee** is transporting one or more non-employee passengers in **Grantee's** use of the **Easement Property**, the automobile liability policy shall have a combined single limit of two million dollars (\$2,000,000) for bodily injury and property damage per occurrence. If **Grantee** owns no autos, a non-owned auto endorsement to the General Liability policy described above is acceptable.

(4) **Umbrella Liability Insurance** - An umbrella (over primary) or excess policy may be used to comply with limits or other primary coverage requirements. When used, the umbrella policy shall apply to bodily injury/property damage, personal injury/advertising injury and shall include a "dropdown" provision providing primary coverage for any liability not covered by the primary policy. The coverage shall also apply to automobile liability.

(5) **Environmental Liability Insurance** with a combined single limit of not less than five million (\$5,000,000) per claim or occurrence. The required additional insured endorsement shall protect **Grantor** without any restrictions.

If insurance coverage is provided on a "claims made" policy, the "retroactive date" shall be shown and must be before the date the easement was signed by **Grantor**. The claims made insurance shall be maintained or "tail" coverage provided throughout the duration of the easement and for a minimum of five (5) years after termination of this easement.

(6) **Subcontractor Insurance Requirements**. **Grantee** agrees to require all parties, including (but not limited to) subcontractors, architects, or others it hires or contracts with related to the excavation, construction, installation, replacement, maintenance and repair, removal, use, or any other work performed by or on behalf of **Grantee** for the street, highway, road and/or bridge at the **Easement Property** to provide insurance covering the contracted operation with the same policies and provisions required of **Grantee** in this easement and with builder's risk property insurance, providing all risk, including theft coverage for all property and materials to be used for or related to the street, highway, road and/or bridge and said insurance policies shall not have any coinsurance penalty. All policies required under this provision shall include waiver of subrogation rights against **Grantor** and shall name **Grantor** as an additional insured. **Grantee** agrees to monitor and review all such coverage and assumes all responsibility ensuring that such coverage is provided as required herein.

13. In the event of **Grantee's** default of the terms, conditions and/or restrictions set forth herein, **Grantor** shall give written notice to **Grantee** of the same. Except in the case of the emergency as determined by **Grantor** in its sole discretion, **Grantee** shall have thirty (30) calendar days from the date of the **Grantor's** notice to cure the default. If **Grantee**, within thirty (30) calendar days from the date of the **Grantor's** notice to cure the default (except in the case of an emergency as determined by **Grantor** in its sole, reasonable discretion), commences the elimination of such default and continuously and diligently proceeds in good faith to eliminate such default, then the period for correction shall be extended for such length of time as is reasonably necessary to complete such correction. In the event **Grantee** fails to cure the default within the time prescribed herein, **Grantor** has the right but not the obligation to cure said default at the sole expense of **Grantee**, or **Grantee's** successors and assigns, and without liability to **Grantor** for loss thereof. **Grantee** and **Grantee's** successors and assigns agree to pay **Grantor** on demand all expenses incurred by **Grantor** in curing such default of **Grantee**. In addition, **Grantor** may pursue all other remedies available to it at law or in equity and such remedies shall be cumulative.

14. The easement, as well as the terms, conditions and restrictions, created hereby shall constitute covenants running with the land and shall be binding upon and shall benefit all successors and assigns of **Grantor** and **Grantee** respectively.

15. This easement shall be governed by the laws of the State of California.

16. This grant may only be amended by a writing executed by both **Grantor** and **Grantee** and recorded in the Official Records of the County of San Bernardino.

17. If any legal action is instituted to enforce any party's rights hereunder, each party shall bear its own costs and attorneys' fees, regardless of who is the prevailing party. This paragraph shall not apply to those costs and attorneys' fees directly arising from a third-party legal action against a party hereto and payable under paragraph 11.

18. If a court of competent jurisdiction declares any provision of this easement invalid, illegal, or otherwise unenforceable, the remaining provisions shall continue in full force and effect, unless the purpose of this easement is frustrated.

IN WITNESS WHEREOF **Grantor** and **Grantee** have executed this Easement Deed for street, highway, road and/or bridge purposes on the day and year written below and have agreed to be bound by the terms and provisions hereof.

GRANTOR:

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

By: _____

Name: _____

Title: Chair, Board of Supervisors

Date: _____

ACCEPTANCE OF TERMS AND CONDITIONS

This is to certify that the interest in real property conveyed by the Easement Deed for street, highway, road and/or bridge purposes by the SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT to the CITY OF COLTON, is accepted by the undersigned officer on behalf of Grantee and Grantee agrees to be bound by the terms and provisions hereof.

GRANTEE:

By: _____

Name: _____

Title: _____

Date: _____

Exhibit "A"

Legal Description of Easement Property

July 27, 2021
BKF Job No: 20191182

LEGAL DESCRIPTION
EXHIBIT A: ROADWAY EASEMENT
APN 0163-361-18

Real property situate in the City of Colton, County of San Bernardino, State of California, described as follows:

Being a portion of the lands of the San Bernardino County Flood Control District (S.B.C.F.C.D.), a body corporate and politic, being a portion of Lot 11 of Bandini Donation as shown by map on file in Book 3 of Maps at Page 24, Records of San Bernardino County lying within that certain Grant Deed recorded on October 4, 1974 in Book 8530, Page 995 of Official Records of San Bernardino together with any portion of the vacated Riverside Road by the Resolution of the City Council of the City of Colton recorded on November 7, 1960 in Book 5278, Page 150 of Official Records of San Bernardino County and excepting those portions known as Peters Right of Way described in that Grant Deed recorded June 15, 1964 in Book 6169, Page 721 of Official Records of San Bernardino County, more particularly described as follows:

COMMENCING at a point in the southerly line of right-of-way described in that deed to State of California recorded on May 31, 1939 in Book 1349, Page 292 of Official Records of San Bernardino County said point being South 84°18'19" West, 51.76 feet (per record "South 84°45'39" West, 51.76") from the southeasterly corner of said Lot 11 of Bandini Donation (3 M.B. 24) said point being the southeasterly corner of the exception to Parcel G said Grant Deed (Bk. 6169, Pg. 721, O.R.);

Thence continuing along the last described course being the southerly line of said exception, South 84°18'19" West, 137.82 feet to the southeasterly corner of said Parcel G, said point being the **TRUE POINT OF BEGINNING**;

Thence along the easterly line of said Parcel G and the northerly extension thereof North 7°42'40" East, 308.99 feet;

Thence South 84°55'20" East, 25.28 feet to the westerly line of South La Cadena Drive;

Thence along said westerly line South 5°04'04" West, 301.15 feet to an angle point in said westerly line being also the southeasterly corner of said lands of S.B.C.F.C.D.;

Thence along the southerly line of said lands South 84°18'19" West, 40.24 feet to the **TRUE POINT OF BEGINNING**.

Containing an area of 9,854 square feet, more or less.

For: BKF Engineers



Davis Thresh, P.L.S. No. 6868

11/16/2020

Dated



Exhibit "B"

Plat of Easement Property

LANDS OF SAN BERNARDINO COUNTY
 FLOOD CONTROL DISTRICT
 POR. LOT 11 OF 3 MB 24 WITHIN BK. 8530,
 PG. 995, O.R. WITH BK. 5278, PG. 150,
 O.R., EXCEPTING BK. 6169, PG. 721, O.R.
 APN 0163-361-18

LEGEND & ANNOTATION

POC = POINT OF COMMENCEMENT
 TPOB = TRUE POINT OF BEGINNING
 ——— = DESCRIBED AREA
 ——— = LOT LINE

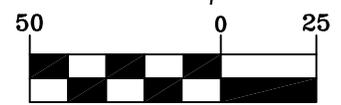
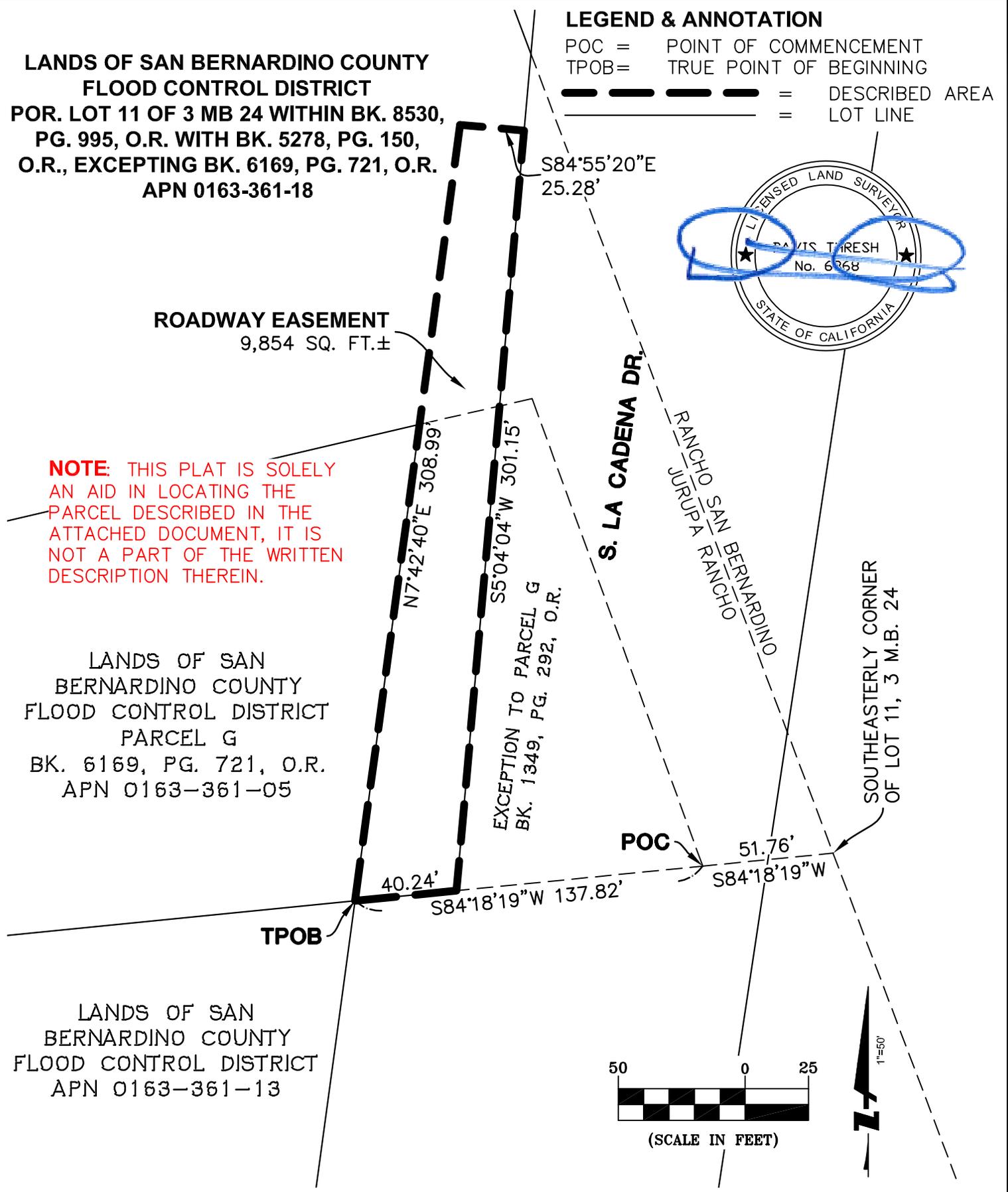


ROADWAY EASEMENT
 9,854 SQ. FT.±

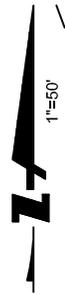
NOTE: THIS PLAT IS SOLELY
 AN AID IN LOCATING THE
 PARCEL DESCRIBED IN THE
 ATTACHED DOCUMENT, IT IS
 NOT A PART OF THE WRITTEN
 DESCRIPTION THEREIN.

LANDS OF SAN
 BERNARDINO COUNTY
 FLOOD CONTROL DISTRICT
 PARCEL G
 BK. 6169, PG. 721, O.R.
 APN 0163-361-05

LANDS OF SAN
 BERNARDINO COUNTY
 FLOOD CONTROL DISTRICT
 APN 0163-361-13



(SCALE IN FEET)



4675 MACARTHUR COURT
 SUITE 400
 NEWPORT BEACH, CA 92660
 949-526-8460
 949-526-8499 (FAX)

Subject EXHIBIT B – ROADWAY EASEMENT
PLAT TO ACCOMPANY LEGAL DESCRIPTION
 Job No. 20191182
 By MGR Date 7/27/21 Chkd. WS
 SHEET 1 OF 1

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by the Easement Deed _____, 202__, from San Bernardino County Flood Control District, a body corporate and politic, to the City of Colton, a California Municipal Corporation, by the within instrument, the provisions of which are incorporated by this reference as though fully set forth in this Certification, is hereby accepted by the undersigned officer(s) on behalf of the City of Colton pursuant to authority conferred by the City Council and the Grantee consents to recordation thereof by its duly authorized officer.

Dated: _____

By: _____

William R. Smith
City Manager

CITY OF COLTON
RIGHT OF WAY CONTRACT

EXHIBIT "3"
PLANS DATED MARCH 8, 2017

STREET IMPROVEMENT GENERAL NOTES

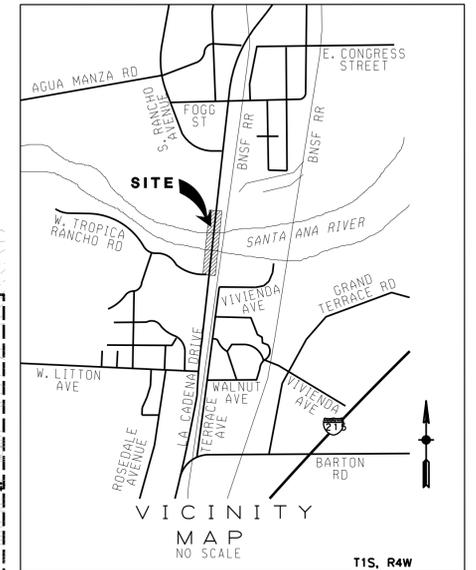
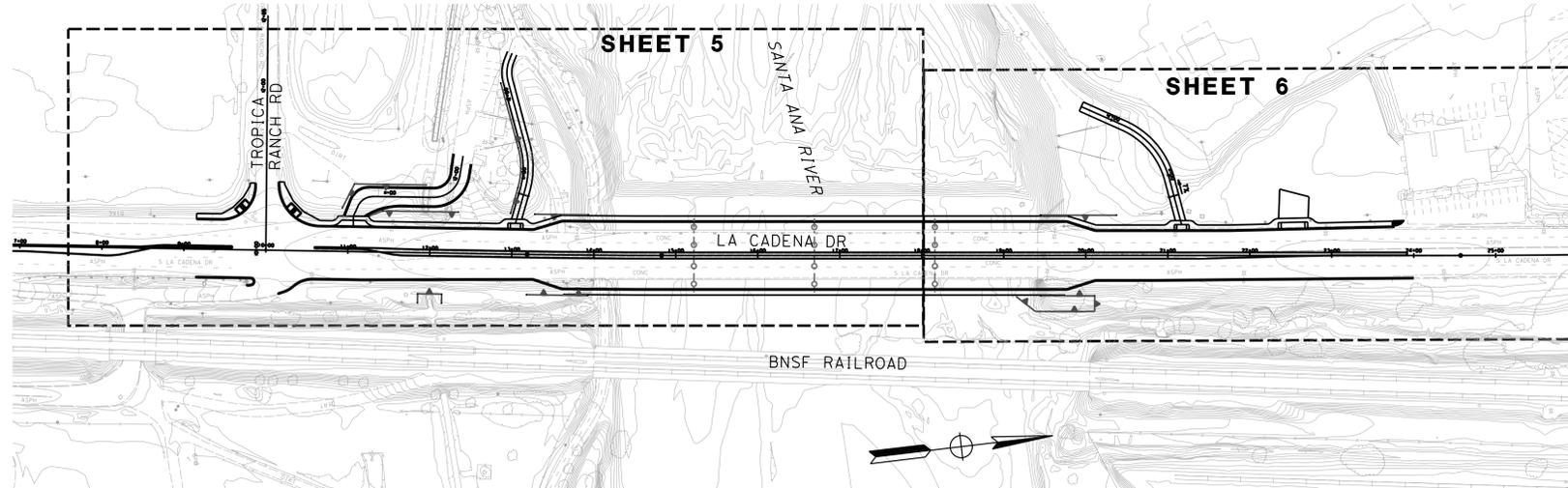
- ALL WORK SHALL CONFORM TO THE "STANDARD PLANS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION"(GREENBOOK), LATEST EDITION, INCLUDING SUPPLEMENTS, TO THE CITY OF COLTON STANDARD PLANS & SPECIFICATIONS, AND TO THE CITY OF COLTON PUBLIC WORKS DEPARTMENT, ENGINEERING DIVISION "STANDARD CONSTRUCTION DRAWINGS"
- NO WORK SHALL BE DONE WITHOUT APPROVAL FROM THE CITY ENGINEER; ALL OFFSITE IMPROVEMENTS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY ENGINEER.
- CONTRACTOR SHALL IMPLEMENT ALL CITY, COUNTY, STATE AND FEDERAL JOB SITE SAFETY REQUIREMENTS AS THEY RELATE TO DUST CONTROL, EQUIPMENT MOVEMENT, NOISE, HOURS OF WORK AND CONSTRUCTION HAZARDOUS MATERIALS AND SHALL MINIMIZE ANY INCONVENIENCE TO THE PUBLIC.
- THE CONTRACTOR SHALL NOT CONDUCT ANY OPERATIONS OR PERFORM ANY WORK PERTAINING TO THE PROJECT BETWEEN THE HOURS OF 5:00 P.M. AND 7:00 A.M., ON ANY DAY NOR ON SATURDAY, SUNDAY OR ANY HOLIDAY AT ANY TIME WITHOUT PRIOR APPROVAL, IN WRITING, OF THE CITY ENGINEER.
- CONTRACTOR SHALL REMOVE AND REPLACE ALL BROKEN, CRACKED OR RAISED SIDEWALK, DRIVE APPROACH, OR CURB AND GUTTER WITHIN PROPERTY FRONTAGE. FOR CORNER LOTS, BOTH STREET FRONTAGES SHALL BE INCLUDED.
- THESE NOTES SHALL TAKE PRECEDENCE OVER THE INFORMATION APPEARING ON THE PLANS.
- ALL WORK PROPOSED IN THE PUBLIC RIGHT OF WAY REQUIRES A SEPARATE PERMIT (STREET CUT PERMIT, STREET IMPROVEMENT PERMIT, ENCROACHMENT PERMIT, ETC.) ISSUED BY THE PUBLIC SERVICES DEPARTMENT, ENGINEERING DIVISION.
- A CONSTRUCTION WATER METER IS AVAILABLE FROM THE WATER/WASTEWATER DEPARTMENT, LOCATED AT 160 S. 10TH STREET, COLTON, CA 92324, AND HAS A NON-REFUNDABLE APPLICATION FEE OF \$22.00, AND A REFUNDABLE DEPOSIT OF \$650.00. THE PROPERTY OWNER/CONTRACTOR/DEVELOPER IS RESPONSIBLE FOR THE COST OF THE WATER.
- THESE PLANS HAVE BEEN CHECKED BASED ON THE ASSUMPTION THAT ALL INFORMATION SHOWN OR IMPLIED ON THESE PLANS IS TRUE, AND HAVE BEEN CHECKED BY THE CITY ONLY IN CONFORMANCE WITH CITY STANDARDS, COMPLIANCE WITH DEVELOPMENT CONDITIONS AND FOR GENERAL CONCEPTUAL APPROVAL OF THE DRAINAGE AND PARKWAY IMPROVEMENTS SHOWN HEREON. NO DETAILED MATHEMATICAL CHECK OR FIELD SURVEY WAS MADE BY THE CITY FOR THE ACCURACY OF THE EXISTING UTILITIES SHOWN OR NOT SHOWN. NO CHECKS WERE MADE ON THE EXISTING DESIGN INFRASTRUCTURES AND STRUCTURES SHOWN ON THESE PLANS; THESE PLANS WERE CHECKED ON THE ASSUMPTION THAT ALL BUILDING LAYOUTS, SETBACKS AND SITE PLANS WERE INITIALLY APPROVED BY THE APPROPRIATE ENTITIES.
- THE REGISTERED CIVIL ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE WORK HEREON, IN THE EVENT ANY DISCREPANCIES ARISING DURING CONSTRUCTION, HE SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING THE PROPOSED WORK AREA OF ALL DELETERIOUS MATTER PER THE FINAL APPROVED GRADING PLAN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAR THE RIGHT OF WAY IN ACCORDANCE WITH THE PROVISIONS OF LAW AS IT AFFECTS EACH UTILITY INCLUDING IRRIGATION LINES AND APPURTENANCES AND AT NO COST TO THE CITY.
- ALL UTILITY INSTALLATIONS WITHIN THE PUBLIC RIGHT OF WAY REQUIRE A STREET CUT PERMIT ISSUED BY PUBLIC WORKS DEPARTMENT, ENGINEERING DIVISION. IN ADDITION, AN INSTALLATION PERMIT WILL BE REQUIRED FOR WATER OR SEWER LINES, AND IS ISSUED BY THE WATER/WASTEWATER DEPARTMENT, LOCATED AT 160 S. 10TH STREET, COLTON, CA 92324.
- FOR INFORMATION REGARDING ELECTRICAL INSTALLATIONS WITHIN THE PUBLIC RIGHT OF WAY CONTACT THE ELECTRIC DEPARTMENT, LOCATED AT 150 S. 10TH STREET, COLTON, CA, 92324. IN ADDITION, A STREET CUT PERMIT ISSUED BY THE PUBLIC SERVICES DEPARTMENT, ENGINEERING DIVISION.
- GAS, PHONE AND CABLE UTILITIES HAVE FRANCHISE AGREEMENTS WITH THE CITY OF COLTON, AND ARE REQUIRED TO SECURE THEIR OWN STREET IMPROVEMENT PERMIT AND/OR STREET CUT PERMIT FROM PUBLIC WORKS DEPARTMENT, ENGINEERING.
- PRIOR TO THE COMMENCEMENT OF ANY WORK IN PUBLIC STREETS, OR WITHIN THE PUBLIC RIGHT OF WAY, CONTRACTOR SHALL PROVIDE A TRAFFIC CONTROL PLAN (IN TRIPLICATE) TO THE CITY ENGINEER FOR REVIEW.
 - TRAFFIC CONTROL PLANS FOR MINOR PUBLIC RIGHT OF WAY IMPROVEMENTS SHALL CONFORM TO THE "WORK AREA TRAFFIC CONTROL HANDBOOK" (W.A.T.C.H. MANUAL); TRAFFIC CONTROL PLANS FOR LARGER PROJECTS SHALL BE PREPARED (IN TRIPLICATE) BY A REGISTERED CIVIL ENGINEER, AND EACH SET SHALL BE "WET-SIGNED" AND SUBMITTED TO THE CITY ENGINEER FOR REVIEW.
 - THE DECISION AS TO WHAT CONSTITUTES A MINOR IMPROVEMENT VERSUS A LARGER PROJECT SHALL BE AT THE SOLE DISCRETION OF THE CITY ENGINEER.
- CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITY LINES OR STRUCTURES WHETHER SHOWN OR NOT SHOWN ON THIS PLAN, AND SHALL BE RESPONSIBLE FOR PROTECTING THEM FROM DAMAGE. THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT AT 1-800-422-4133 A MINIMUM OF TWO WORKING DAYS BEFORE DIGGING. THE USA NUMBER SHALL BE PROVIDED TO THE CITY ENGINEER.
- NO WORK MAY BEGIN WITHOUT AN APPROVED TRAFFIC CONTROL PLAN, AND ONCE BEGUN, CONTRACT SHALL ENDEAVOR TO COMPLETE WORK IN THE STREET AND/OR PUBLIC RIGHT OF WAY WITHOUT DELAY SO AS TO PROVIDE MINIMUM INCONVENIENCE TO ADJACENT PROPERTY OWNERS AND TO THE TRAVELING PUBLIC.
- ANY CONTRACTOR WORKING WITHIN THE PUBLIC RIGHT OF WAY IS SUBJECT TO THE LICENSING AND INSURANCE REQUIREMENTS OF THE CITY.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY AND PROPER PRECAUTIONS TO PROTECT ADJACENT PROPERTIES FORM ANY AND ALL DAMAGE THAT MAY OCCUR FROM STORM WATER RUNOFF AND/OR ANY DEPOSIT OF WATER RUNOFF AND/OR DEBRIS RESULTING FROM ANY AND ALL WORK IN CONNECTION WITH CONSTRUCTION.
- TREES, FOLIAGE, SIGNS, AND OTHER IMPROVEMENTS SHALL BE PROTECTED IN PLACE AND ANY DAMAGE TO EXISTING IMPROVEMENTS SHALL BE REPAIRED OR REPLACED IN KIND TO THE SATISFACTION OF THE CITY ENGINEER.
- CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITY LINES OR STRUCTURES WHETHER SHOWN OR NOT SHOWN ON THIS PLAN, AND SHALL BE RESPONSIBLE FOR PROTECTING THEM FROM DAMAGE. THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT AT 1-800-422-4133 A MINIMUM OF TWO WORKING DAYS BEFORE DIGGING.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL SUBSTRUCTURES WITHIN THE ALIGNMENT OF THE PROPOSED IMPROVEMENTS, AND IN THE EVENT OF SUBSTRUCTURE DAMAGE, THE CONTRACTOR SHALL VERIFY THE TOTAL COST OF REPAIR OR REPLACEMENT.
- IF ANY UTILITIES OR FACILITIES CONFLICT WITH PROPOSED IMPROVEMENTS, ALL WORK SHALL STOP, AND THE CITY ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
- THE CONTRACTOR IS ADVISED THAT ALL EXCAVATED MATERIALS SHALL BECOME HIS PROPERTY AND SHALL BE REMOVED FROM THE JOB SITE UNLESS INSTRUCTED BY THE CITY ENGINEER, IN WRITING, TO DO OTHERWISE.
- NO TRENCHES, REGARDLESS OF DEPTH OR WIDTH AND WHETHER ON-SITE OR OFF-SITE, MAY BE LEFT OPEN OVERNIGHT UNLESS PERMIT APPROVAL IS SECURED, IN WRITING, FROM THE CITY ENGINEER.
- TRENCHES DEEPER THAN 5'0" WILL REQUIRE A CAL-OSHA PERMIT. A COPY OF THE PERMIT SHALL BE PROVIDED TO THE CITY ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE DURING ALL PHASES OF THE WORK TO PROVIDE FOR PUBLIC SAFETY AND CONVENIENCE. THE CONTRACTOR SHALL ESTABLISH ADEQUATE ACCESS TO DRIVEWAYS AT THE END OF EACH WORKING DAY TO THE SATISFACTION OF THE CITY ENGINEER.
- THE CONTRACTOR SHALL PROVIDE A 72-HOUR NOTIFICATION TO THE AFFECTED PROPERTIES, THE POLICE DEPARTMENT, AND THE FIRE DEPARTMENT IN THE EVENT OF A CHANGE IN STREET CLOSURE TO TRAFFIC AND/OR PUBLIC SAFETY VEHICLES, PARKING RESTRICTIONS, AND ON EACH MONDAY MORNING DURING THE CONSTRUCTION PERIOD.
- ROAD CLOSURES IN EXCESS OF TWENTY-FOUR (24) HOURS SHALL REQUIRE APPROVAL OF THE CITY OF COLTON CITY COUNCIL. PROCESSING TIME FOR THIS REQUEST IS SIX TO EIGHT (6 TO 8) WEEKS, AND A WRITTEN APPLICATION (TEMPORARY ROAD CLOSURE PERMIT) MUST BE SUBMITTED TO THE CITY ENGINEER IN SUFFICIENT TIME TO PROCESS THE REQUEST.
- ALL INSPECTION REQUESTS FOR WORK PERFORMED IN THE PUBLIC RIGHT OF WAY SHALL BE DIRECTED TO THE ENGINEERING DIVISION, PUBLIC WORKS DEPARTMENT, AND SHALL BE MADE BY THE CONTRACTOR A MINIMUM OF TWENTY-FOUR (24) HOURS BEFORE THE SERVICES THEREOF WILL BE REQUIRED.
- FOR NEW STREET CONSTRUCTION, RECONSTRUCTION OR REHABILITATION OF AN EXISTING STREET, AND/OR MATCH UP AC PAVEMENT, MATERIAL SHALL MEET THE MINIMUM REQUIREMENTS OF AR4000 ASPHALT PAVEMENT; ALL BASE USED UNDER ASPHALT OR CONCRETE IMPROVEMENTS SHALL BE CLASS II BASE.
- ALL PORTLAND CEMENT CONCRETE (PCC) AND ASPHALTIC CONCRETE (AC) SHALL BE REMOVED TO A NEAT CLEAN EDGE. UPON INSTALLATION OF NEW ASPHALT OR MATCH-UP ASPHALT CONCRETE, CONTRACTOR SHALL USE CITY OF COLTON STANDARD CONSTRUCTION DRAWING NO. 124-TRENCH REPAIR AS A GUIDELINE.
- ALL TRAFFIC CONTROL DEVICES, SIGNS, MARKINGS OR TEMPORARY STRIPING MARKERS SHALL BE IN PLACE PRIOR TO PAVING. STREET STRIPING SHALL BE COMPLETED PRIOR TO STREET OPENING.
- THE CONTRACTOR SHALL ADJUST ALL MANHOLES AND VALVE COVERS TO FINISHED GRAD, AS NOTED ON THE PLANS.
- AS REQUIRED BY THE CITY ENGINEER, THE CONTRACTOR SHALL FURNISH AND OPERATE A SELF-LOADING MOTOR SWEEPER WITH SPRAY NOZZLES AT LEAST TWICE EACH WORKING DAY TO KEEP PAVED AREAS ACCEPTABLE CLEAN WHEREVER CONSTRUCTION, INCLUDING RESTORATION, IS COMPLETE.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE CITY ENGINEER TO INSTALL STREET CENTERLINE MONUMENTS AS REQUIRED BY CITY ORDINANCE AND PER CITY OF COLTON STANDARD CONSTRUCTION DRAWING NO. 800, NO. 801 & NO. 802, FOR NEW DEVELOPMENTS AND REPLACEMENT OF DISTURBED OR COVERED EXISTING MONUMENTS.
- THE BENCHMARK USED TO DETERMINE ELEVATION DATA USED TO CALCULATE GRADE SHALL BE NOTED ON PLAN.
- CONTRACTOR SHALL COMPLY WITH THESE REQUIREMENTS AND CITY ENGINEER'S DIRECTIONS DURING THE COURSE OF CONSTRUCTION.

NOTE CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION

95% PS&E SUBMITTAL FOR INTERNAL USE ONLY NOT FOR CONSTRUCTION

CITY OF COLTON COUNTY OF SAN BERNARDINO, CALIFORNIA

LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT BRIDGE NO. 54C-0077 PROJECT NO. BRLS-5065(014)



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET, INDEX MAP, SHEET INDEX AND GENERAL NOTES
2-3	DEMOLITION AND REMOVAL PLAN
4	CONSTRUCTION NOTES AND TYPICAL SECTIONS
5-6	PLAN AND PROFILE
7-10	DETAILS
11-12	STORM DRAIN IMPROVEMENTS
13-14	UTILITY PLAN
15	CONSTRUCTION AREA SIGN PLAN
16-21	STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN
22	SANTA ANA RIVER TRAIL DETOUR PLAN
23	SIGNING AND STRIPING PLAN
24	STREET LIGHT PLAN

N.P.D.E.S. REQUIREMENTS

ALL CONSTRUCTION ON OFF-SITE OR ON-SITE IMPROVEMENTS SHALL ADHERE TO N.P.D.E.S. (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM) BEST MANAGEMENT PRACTICES TO PREVENT DELETERIOUS MATERIALS OR POLLUTANTS FROM ENTERING THE CITY OR COUNTY STORM DRAIN SYSTEMS.

THE FOLLOWING SHOULD BE ADHERED TO:

- HANDLE, STORE AND DISPOSE OF MATERIALS PROPERLY.
- AVOIDING EXCAVATION AND GRADING ACTIVITIES DURING WET WEATHER.
- CONSTRUCT DIVERSION DIKES AND DRAINAGE SWALES AROUND WORKING SITES.
- COVER STOCKPILES AND EXCAVATED SOIL WITH SECURED TARPS OR PLASTIC SHEETING.
- DEVELOP AND IMPLEMENT EROSION CONTROL PLANS AND PROVIDE A COPY FOR CITY APPROVAL.
- CHECK AND REPAIR LEAKING EQUIPMENT AWAY FROM CONSTRUCTION SITE.
- DESIGNATE A LOCATION AWAY FROM STORM DRAINS FOR REFUELING.
- COVER AND SEAL CATCH BASINS WHENEVER WORKING IN THEIR VICINITY.
- USE VACUUM WITH ALL CONCRETE SAWING OPERATIONS.
- NEVER WASH EXCESS MATERIAL FROM AGGREGATE, CONCRETE OR EQUIPMENT ONTO A STREET.
- CATCH DRIPS FROM PAVER WITH DRIP PANS OR ABSORBENT MATERIAL.
- CLEAN UP ALL SPILLS USING DRY METHODS.
- SWEEP ALL GUTTERS AT THE END OF EACH WORKING DAY. GUTTERS SHALL BE KEPT CLEAN AFTER LEAVING CONSTRUCTION SITE.

UTILITY PURVEYORS

AT&T TRANSMISSION.....	714-963-7964
AT&T CALIFORNIA, DISTRIBUTION, SUBSTRUCTURE.....	714-507-3526
CITY OF COLTON - ELECTRIC.....	909-370-5144
CITY OF COLTON - WATER & WASTEWATER.....	909-370-6192
CITY OF GRAND TERRACE.....	909-430-2225
EMPIRE WATER - CANAL.....	949-215-1100
LEVEL 3 COMMUNICATIONS.....	720-888-4465
RIVERSIDE HIGHLAND WATER.....	909-825-4128
SAN BERNARDINO MUNICIPAL WATER DEPARTMENT.....	909-522-3403
SANTA ANA WATERSHED PROJECT AUTHORITY.....	951-354-4220
SOUTHERN CALIFORNIA EDISON.....	909-335-7955
SOUTHERN CALIFORNIA GAS.....	949-842-9870
SPRINT.....	951-278-0400
SUNESYS.....	909-975-3398
TIME WARNER CABLE.....	

N.P.D.E.S. REQUIREMENTS (CONTINUED)

- DURING CONSTRUCTION, DUMPSTER(S) SHALL BE SET ON SITE AT ALL TIMES.
- CALL 911 IN CASE OF A HAZARDOUS SPILL.
- KEEP A RUNNING LOG OF ALL ACTIVITIES IN CONNECTION WITH THE STORMWATER POLLUTION PREVENTION PLAN (S.W.P.P.P.)
- NAME A PERSON, ON SITE RESPONSIBLE FOR COMPLYING WITH S.W.P.P.P.
- THE FOLLOWING BMP'S AS OUTLINED IN, BUT NOT LIMITED TO, THE "BEST MANAGEMENT PRACTICE HANDBOOK, CALIFORNIA STORM WATER QUALITY TASK FORCE, SACRAMENTO, CALIFORNIA, 1993", OR THE LATEST REVISED EDITION, MAY APPLY DURING THE CONSTRUCTION OF THIS PROJECT. (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY COUNTY INSPECTORS):

CA001	-DEWATERING OPERATIONS	ESC21	-DUST CONTROLS
CA002	-PAVING OPERATIONS	ESC23	-CONSTRUCTION ROAD STABILIZATION
CA003	-STRUCTURE CONSTRUCTION AND PAINTING	ESC24	-STABILIZED CONSTRUCTION ENTRANCE
CA010	-MATERIAL DELIVERY AND STORAGE	ESC30	-EARTH DIKE
CA011	-MATERIAL USE	ESC31	-TEMPORARY DRAINS AND SWALES
CA012	-SPILL PREVENTION AND CONTROL	ESC32	-SLOPE DRAIN
CA020	-SOLID WASTE MANAGEMENT	ESC40	-OUTLET PROTECTION
CA021	-HAZARDOUS WASTE MANAGEMENT	ESC41	-CHECK DAMS
CA022	-CONTAMINATED SOIL MANAGEMENT	ESC42	-SLOPE ROUGHENING/TERRACING
CA023	-CONCRETE WASTE MANAGEMENT	ESC50	-SILT FENCE
CA030	-VEHICLE AND EQUIPMENT CLEANING	ESC51	-STRAW BALE BARRIERS
CA031	-VEHICLE AND EQUIPMENT FUELING	ESC52	-SAND BAG BARRIER
CA032	-VEHICLE AND EQUIPMENT MAINTENANCE	ESC53	-BRUSH OR ROCK FILTER
CA040	-EMPLOYEE/SUBCONTRACTOR TRAINING	ESC54	-STORM DRAIN INLET PROTECTION
ESC01	-SCHEDULING	ESC55	-SEDIMENT TRAP
ESC02	-PRESERVATION OF EXISTING VEGETATION	ESC56	-SEDIMENT BASIN
ESC10	-SEEDING AND PLANTING		
ESC11	-MULCHING		
ESC20	-GEOTEXTILES AND MATS		

INDEX MAP
SCALE 1" = 100'

ABBREVIATIONS

AC	- ASPHALT CONCRETE
AB	- AGGREGATE BASE
BC	- BEGIN CURVE
BCR	- BEGIN CURB RETURN
CB	- CATCH BASIN
C	OR C/L - CENTERLINE
C & G	- CURB AND GUTTER
CB	- CRUSHED AGGREGATE BASE
ECB	- END CURVE
ECL	- END CURB RETURN
ELEV.	- ELEVATION
EP	- EDGE OF PAVEMENT
EVC	- END VERTICAL CURVE
FES	- FLARED END SECTION
FH	- FIRE HYDRANT
HMA	- HOT-MIX ASPHALT (TYPE A)
LT	- LEFT
MGS	- MIDWEST GUARDRAIL SYSTEM
MH	- MAN HOLE
MVC	- MIDDLE OF VERTICAL CURVE
OC	- ON CURB
OG	- ORIGINAL GROUND
PCC	- PORTLAND CEMENT
PRVC	- POINT OF REVERSE VERTICAL CURVE
PROP	- PROPOSED
PVI	- POINT OF VERTICAL INTERSECTION
RSP	- ROCK SLOPE PROTECTION
RT	- RIGHT
R/W	- RIGHT-OF-WAY
Sto	- STATION
TAN	- TANGENT
TC	- TOP OF CURB
TI	- TRAFFIC INDEX
VC	- VERTICAL CURVE

LEGEND

	PROPOSED AC PAVEMENT
	PROPOSED SIDEWALK/DRIVEWAY
	REMOVE EXISTING AC PAVEMENT
	REMOVE EXISTING BRIDGE
	(0.1) COLD MILL AND OVERLAY

ENGINEER'S NOTICE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THESE LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR, SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN ALIGNMENT AND/OR GRADE OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURE TO PROTECT ANY UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

THE EXISTING UNDERGROUND UTILITIES AND SUBSTRUCTURES IDENTIFIED ON THESE PLANS WERE TAKEN FROM AVAILABLE RECORDS AND SHOWN ACCORDINGLY. IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION PART 1 SECTION 5, THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING UNDERGROUND SERVICE ALERT (OR CALTRANS ON STATE HIGHWAYS) TO IDENTIFY ALL EXISTING UTILITIES, WHETHER SHOWN ON THESE PLANS OR NOT, AND SHALL DETERMINE THEIR LOCATIONS & DEPTHS, INCLUDING SERVICE CONNECTIONS WHICH MAY AFFECT OR BE AFFECTED BY ITS OPERATIONS PRIOR TO STARTING WORK ON THE PROJECT. IF CONFLICTING UTILITIES ARE NOT BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO THE START OF THE CONTRACTOR'S WORK, THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY CHANGES, REVISIONS OR MODIFICATIONS.

CONTRACTOR'S RESPONSIBILITY FOR SAFETY

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATION" OF THE DEPARTMENT OF U.S. LABOR, AND WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS".

THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR OR WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS".

IN SUBMITTING A BID FOR THIS WORK THE CONTRACTOR AGREES HE SHALL ASSUME THE SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK IN THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

GEOTECHNICAL ENGINEER:

EARTH MECHANICS, INC
17800 NEWHOPE STREET, SUITE B
FOUNTAIN VALLEY, CA 92708
PHONE: (714) 751-3826
FAX: (714) 751-3928

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TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK

CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)

A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A AT&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER

PREPARED BY:

JACOBS
3257 E. GUASTI ROAD
SUITE 120
ONTARIO, CA 91761

CITY OF COLTON

PUBLIC WORKS DEPARTMENT

CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. EXPIRES: 06/30/17
R.C.E.: 73848

ACCEPTED: _____ DATE: _____

PLAN NO. 1305-1

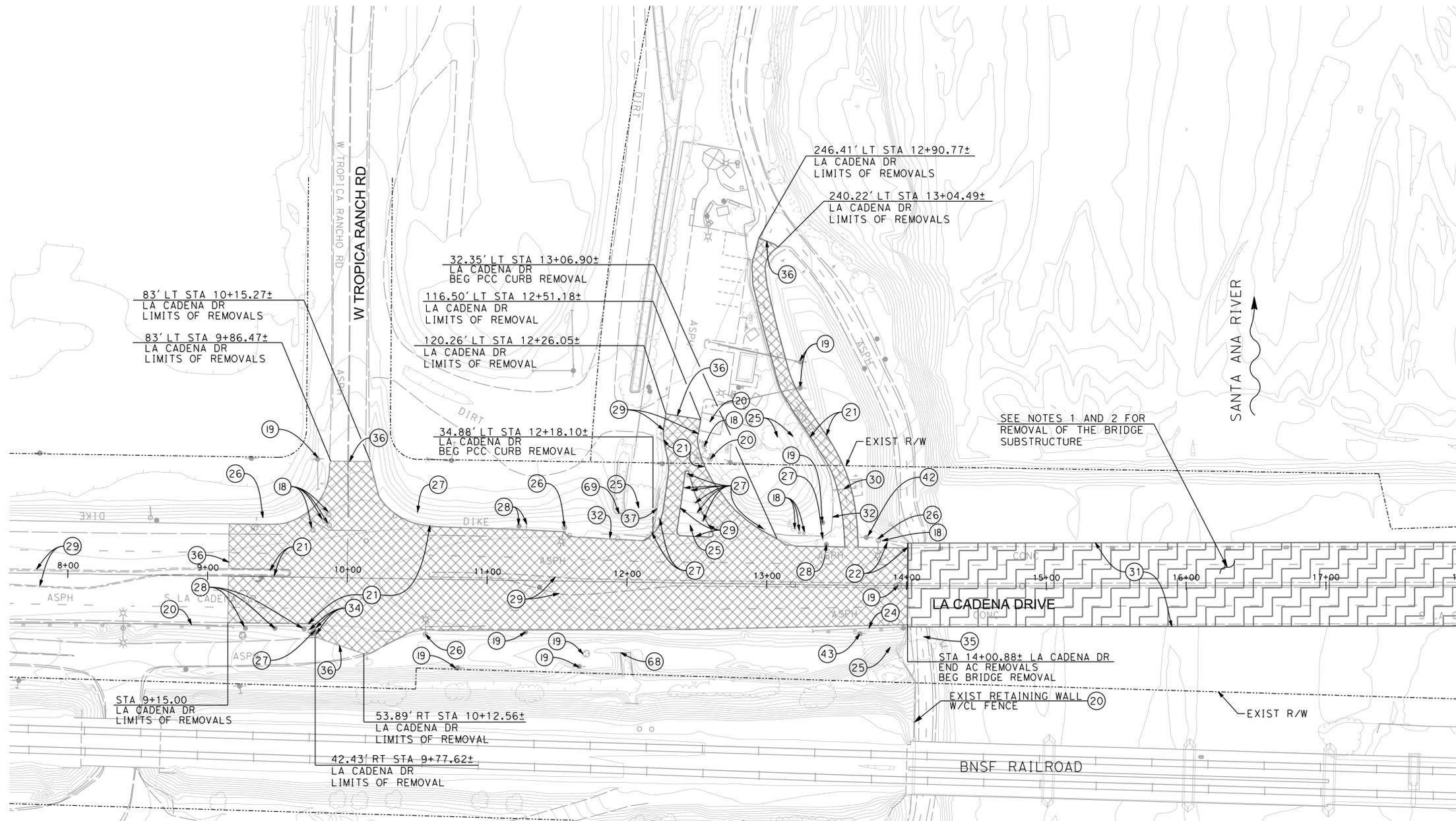
REVISIONS	DATE	APPR.
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT STREET IMPROVEMENT PLANS		
TITLE SHEET		
SCALE		
HORI:		
VERT:		
DATE: 03-08-17		
SHEET 1 OF 24		

NOTES

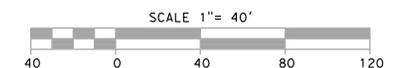
- FOR THE REMOVAL OF THE EXISTING ABUTMENT PILES, CUT OFF THE EXISTING PILES 5' BELOW THE BOTTOM ELEVATION OF THE NEW ABUTMENT FOOTING. REMOVE THE PORTION OF THE EXISTING PILES ABOVE THIS CUT OFF ELEVATION AND LEAVE IN PLACE THE PORTION BELOW THIS ELEVATION. SEE THE FOUNDATION PLAN IN THE BRIDGE PLANS.
- FOR THE REMOVAL OF THE EXISTING PIER PILES, PULL OUT AND REMOVE THE ENTIRE PILE FOR THOSE PILES LOCATED IN CLOSE PROXIMITY TO ANY OF THE THREE PROPOSED BENT LOCATIONS. THE REMAINING EXISTING PIER PILES SHALL BE CUT OFF 3' BELOW THE EXISTING GROUND ELEVATION. REMOVE THE PORTION OF THE EXISTING PILES ABOVE THIS CUT OFF ELEVATION AND LEAVE IN PLACE THE PORTION BELOW THIS ELEVATION. SEE THE FOUNDATION PLAN IN THE BRIDGE PLANS.
- SEE DETAILS ON SHEET 9 FOR ADDITIONAL REMOVALS BEYOND LIMITS SHOWN.

CONSTRUCTION NOTES

- (18) REFER TO WATER PLANS FOR DISPOSITION
- (19) REFER TO UTILITY PLANS FOR DISPOSITION
- (20) PROTECT IN PLACE
- (21) REMOVE AC PAVEMENT AND/OR DIKE
- (22) REMOVE PCC SIDEWALK
- (24) REMOVE EXISTING METAL BEAM GUARD RAIL
- (25) REMOVE EXISTING TREE
- (26) REMOVE OR RELOCATE EXISTING STREET LIGHT. SEE STREET LIGHT PLAN.
- (27) REMOVE OR RELOCATE EXISTING SIGN. SEE SIGNING AND STRIPING PLAN.
- (28) REMOVE OR RELOCATE EXISTING DELINEATOR
- (29) REMOVE EXISTING PCC CURB
- (30) REMOVE AND RELOCATE SBCFCD PIPE GATE
- (31) REMOVE EXISTING BRIDGE
- (32) REMOVE AND/OR REPLACE EXISTING VINYL RAIL FENCE
- (34) REMOVE AND REPLACE EXISTING BOLLARDS IN-KIND
- (35) REPLACE OBLITERATED AC TRAIL PAVEMENT IN-KIND
- (36) SAWCUT EXISTING PAVEMENT
- (37) REMOVE RETAINING WALL
- (42) REMOVE COLTON POWER POLE
- (43) REMOVE COLTON GUY ANCHOR
- (68) REMOVE EXISTING CONCRETE SOFFIT
- (69) REMOVE PORTION OF EXISTING 7' X 4' CONCRETE TRAPEZOIDAL CHANNEL, SEE STORM DRAIN IMPROVEMENT PLANS



MATCHLINE STA. 18+00.00
SEE SHEET 3



NOTE CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION

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TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)
A STANDARD SAN BERNARDINO COUNTY
SURVEYOR'S BRASS DISC SET IN THE
TOP OF THE NORTH ABUTMENT
OF A AT&SF RAILWAY STEEL GIRDER
BRIDGE CROSSING THE SANTA ANA RIVER



PREPARED BY:
JACOBS
3257 E. GAUSTI ROAD
SUITE 120
ONTARIO, CA 91761

**CITY OF COLTON
PUBLIC WORKS DEPARTMENT**
CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848
ACCEPTED: _____ DATE: _____
EXPIRES: 06/30/17
PLAN NO. 1305-1

REVISIONS	DATE	APPR.

LA CADENA DRIVE OVER
SANTA ANA RIVER
BRIDGE REPLACEMENT PROJECT
STREET IMPROVEMENT PLANS
DEMOLITION AND REMOVAL PLAN
STA 8+00.00 - 18+00.00

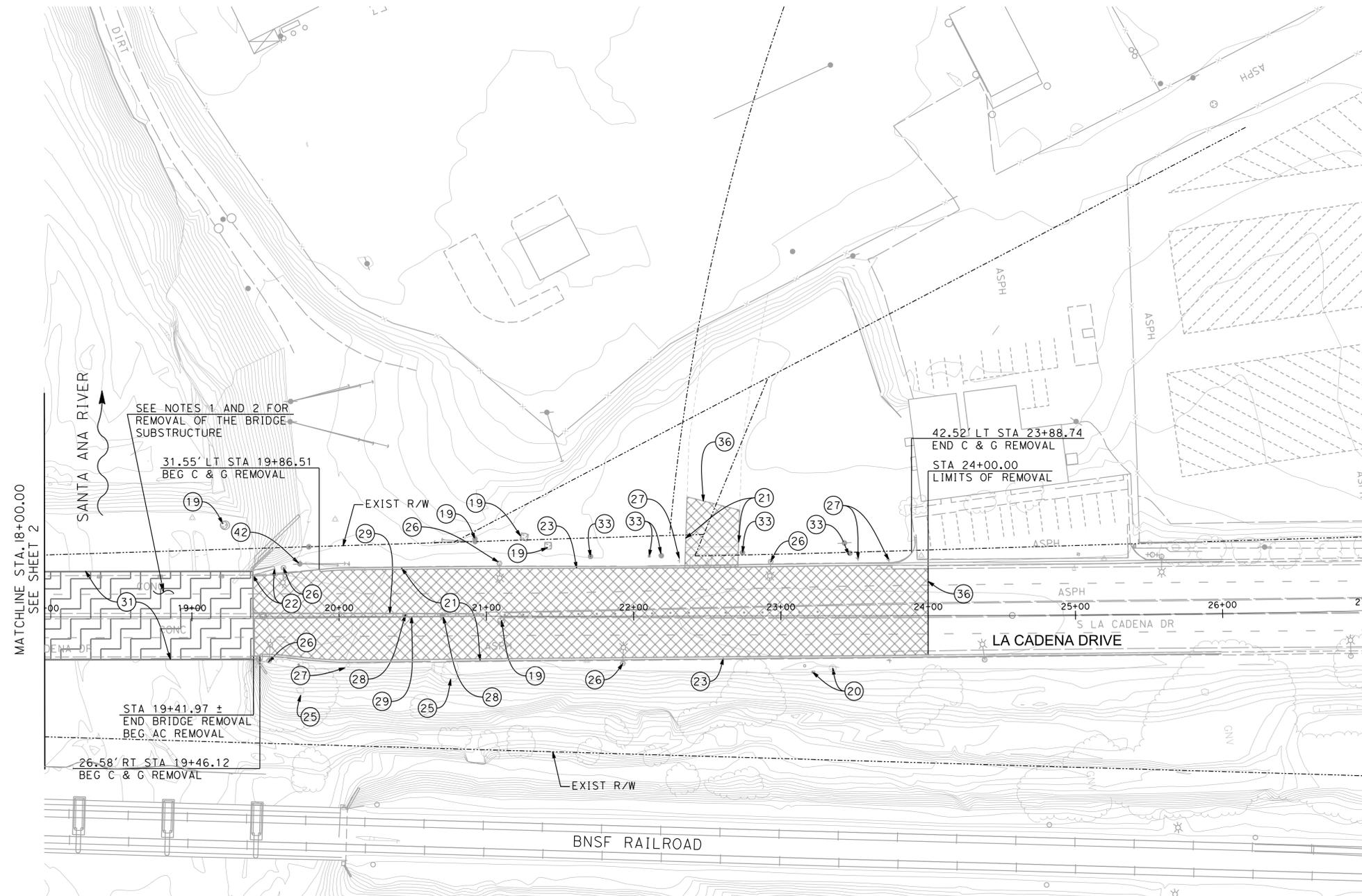
SCALE
HORZ: _____
VERT: _____
DATE: 03-08-17
SHEET 2 OF 24

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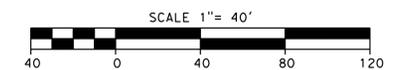
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CONSTRUCTION NOTES

- (19) REFER TO UTILITY PLANS FOR DISPOSITION
- (20) PROTECT IN PLACE
- (21) REMOVE AC PAVEMENT AND/OR DIKE
- (22) REMOVE PCC SIDEWALK
- (23) REMOVE EXISTING CURB & GUTTER TO LIMITS SHOWN
- (25) REMOVE EXISTING TREE
- (26) REMOVE OR RELOCATE EXISTING STREET LIGHT. SEE STREET LIGHT PLAN.
- (27) REMOVE OR RELOCATE EXISTING SIGN. SEE SIGNING AND STRIPING PLAN.
- (28) REMOVE OR RELOCATE EXISTING DELINEATOR
- (29) REMOVE EXISTING PCC CURB
- (31) REMOVE EXISTING BRIDGE
- (33) REMOVE EXISTING METAL POST
- (36) SAWCUT EXISTING PAVEMENT
- (42) REMOVE COLTON POWER POLE



MATCHLINE STA. 18+00.00
SEE SHEET 2



NOTE CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION

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BEFORE YOU DIG

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK

CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)

A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A AT&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER



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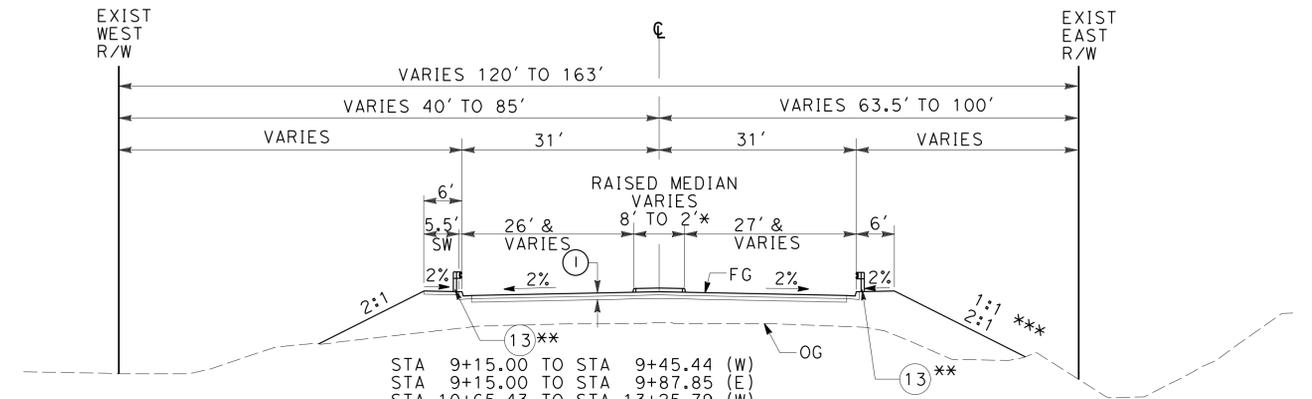
CITY OF COLTON PUBLIC WORKS DEPARTMENT	
CITY ENGINEER	EXPIRES: 06/30/17
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848	DATE: 03-08-17
ACCEPTED: _____	DATE: _____
PLAN NO. 1305-1	

REVISIONS	DATE	APPR.	SCALE
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT STREET IMPROVEMENT PLANS DEMOLITION AND REMOVAL PLAN STA 18+00.00 - 28+00.00			SHEET 3 OF 24

CONSTRUCTION NOTES

- 1 CONSTRUCT 6" HMA-A OVER 8" CAB PER SOILS ENGINEER'S RECOMMENDATION
- 2 CONSTRUCT 8" CURB AND GUTTER PER CITY OF COLTON STD 106
- 3 CONSTRUCT 6" TRAFFIC ISLAND CURB ONLY PER CITY OF COLTON STD 107
- 4 CONSTRUCT COMMERCIAL DRIVEWAY PER CITY OF COLTON STD III
- 5 CONSTRUCT LOCAL DEPRESSION PER CITY OF COLTON STD 200
- 6 CONSTRUCT DRIVE APPROACH PER DETAILS ON SHEETS 7 AND/OR 8
- 7 CONSTRUCT PEDESTRIAN RAMP PER CITY OF COLTON STD 120
- 8 CONSTRUCT 4" THICK SIDEWALK W/ SCORING PER CITY OF COLTON STD 109
- 9 COLDMILL AND OVERLAY (0.1') EXISTING PAVEMENT PER JOIN DETAIL ON SHEET 10
- 10 CONSTRUCT 3" HMA-A OVER 4" CAB
- 11 CONSTRUCT PEDESTRIAN RAMP PER SPPWC STD III-5 CASE D, TYPE 2
- 12 CONSTRUCT 4" THICK STAMPED CONCRETE MEDIAN PAVEMENT; COLOR AND PATTERN TO MATCH EXISTING
- 13 CONSTRUCT MGS PER CALTRANS STD PLAN A77L1, SEE MGS PLACEMENT DETAIL ON SHEET 10
- 14 CONSTRUCT MGS IN-LINE TERMINAL END TREATMENT PER CALTRANS STD PLAN A77N6
- 15 CONSTRUCT MGS FLARED TERMINAL END TREATMENT PER CALTRANS STD PLAN A77N6
- 16 CONSTRUCT MGS CONNECTION TO BRIDGE RAILING USING TRANSITION RAILING (TYPE WB-3) PER CALTRANS STD PLANS A77U2 AND A77U4
- 17 INSTALL END ANCHOR ASSEMBLY (TYPE SF7) PER CALTRANS STD PLAN A77S1
- 18 REFER TO WATER PLANS FOR DISPOSITION
- 19 REFER TO UTILITY PLANS FOR DISPOSITION
- 20 PROTECT IN PLACE
- 21 REMOVE AC PAVEMENT AND/OR DIKE
- 22 REMOVE PCC SIDEWALK
- 23 REMOVE EXISTING CURB & GUTTER TO LIMITS SHOWN
- 24 REMOVE EXISTING METAL BEAM GUARD RAIL
- 25 REMOVE EXISTING TREE
- 26 REMOVE OR RELOCATE EXISTING STREET LIGHT. SEE STREET LIGHT PLAN.
- 27 REMOVE OR RELOCATE EXISTING SIGN. SEE SIGNING AND STRIPING PLAN.
- 28 REMOVE OR RELOCATE EXISTING DELINEATOR
- 29 REMOVE EXISTING PCC CURB
- 30 REMOVE AND RELOCATE SBCFCD PIPE GATE
- 31 REMOVE EXISTING BRIDGE
- 32 REMOVE AND/OR REPLACE EXISTING VINYL RAIL FENCE
- 33 REMOVE EXISTING METAL POST
- 34 REMOVE AND REPLACE EXISTING BOLLARDS IN-KIND
- 35 REPLACE OBLITERATED AC TRAIL PAVEMENT IN-KIND
- 36 SAWCUT EXISTING PAVEMENT
- 37 REMOVE RETAINING WALL
- 38 INSTALL PIPE GATE PER SBCFCD STANDARD PLAN 209
- 39 INSTALL COLTON 5'X8.5' ELECTRIC PULL BOX
- 40 RELOCATE COLTON OH ELECTRIC 4 - 5" CONDUITS TO BRIDGE CELL AND UNDERGROUND
- 41 INSTALL COLTON 9'X14' ELECTRIC VAULT WITH APPURTENANCES
- 42 REMOVE COLTON POWER POLE
- 43 REMOVE COLTON GUY ANCHOR
- 44 ADJUST MANHOLE TO FINISH GRADE
- 45 CONSTRUCT CONCRETE COLLAR PER SPPWC STD PLAN NO 380-4

- 60 CONSTRUCT CURB INLET CATCH BASIN PER CITY OF COLTON STD 200 WITH TRITON CATCH BASIN FILTER TYPE TRC7 INSERTS OR APPROVED EQUAL
- 61 CONSTRUCT 18" RCP (D-LOAD PER PLAN)
- 62 CONSTRUCT 24" RCP (D-LOAD PER PLAN)
- 63 CONSTRUCT 5' X 4' RCBC PER CALTRANS STD PLAN D81
- 64 CONSTRUCT TYPE G2 INLET WITH BICYCLE GRATE PER CALTRANS STD PLANS D73A AND D77B WITH TRITON CATCH BASIN FILTER TYPE TRC4 INSERTS OR APPROVED EQUAL
- 65 CONSTRUCT CONCRETE FLARED END SECTION
- 66 CONSTRUCT STORMDRAIN MANHOLE PER CITY OF COLTON STD 209
- 67 CONSTRUCT 6" THICK CONCRETE ENCASEMENT PER DETAIL ON SHEET 10
- 68 REMOVE EXISTING CONCRETE SOFFIT
- 69 REMOVE PORTION OF EXISTING 7' X 4' CONCRETE TRAPEZOIDAL CHANNEL, SEE STORM DRAIN IMPROVEMENT PLANS
- 70 REMOVE EXISTING 36" RCP
- 71 CONSTRUCT ROCK SLOPE PROTECTION, 1/4 TON, PER DETAIL SHEET 10
- 72 CONSTRUCT 18" CSP RISER PER WALL DRAIN DETAIL ON SHEET 10
- 73 NOT USED
- 74 CONSTRUCT 18" CSP RISER, CONNECT TO INLET AND RCP STORM DRAIN PER CALTRANS STD PLAN D93B
- 75 CONSTRUCT 8" STEEL PIPE STUB OUT
- 76 CONSTRUCT TRANSITION STRUCTURE PIPE TO PIPE PER SPPWC STD PLAN 340-2
- 77 REMOVE INTERFERING PORTION OF ABANDONED WATERLINE
- 78 NOT USED
- 79 CONSTRUCT TYPE "D" STRAIGHT WINGWALL PER CALTRANS STD PLAN D85

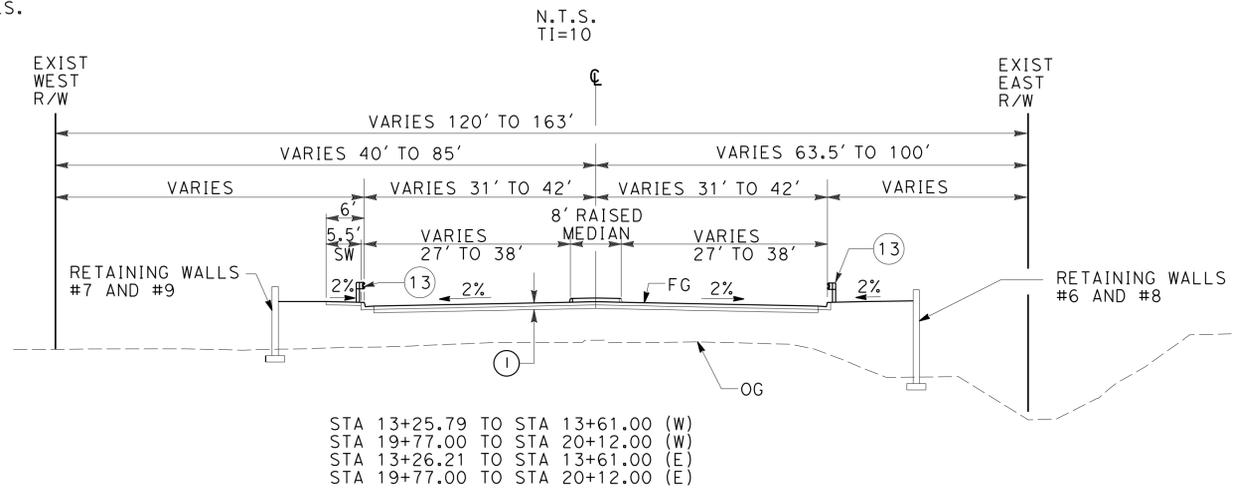


NOTES:
 1. OMIT MEDIAN FROM STA 9+59.21 TO STA 10+58.97
 2. RAISED MEDIAN OCCURS BEYOND LIMITS OF IMPROVEMENTS FROM STA 6+34.76 TO STA 9+15.00
 3. SEE SHEET 8A FOR MEDIAN DETAILS.

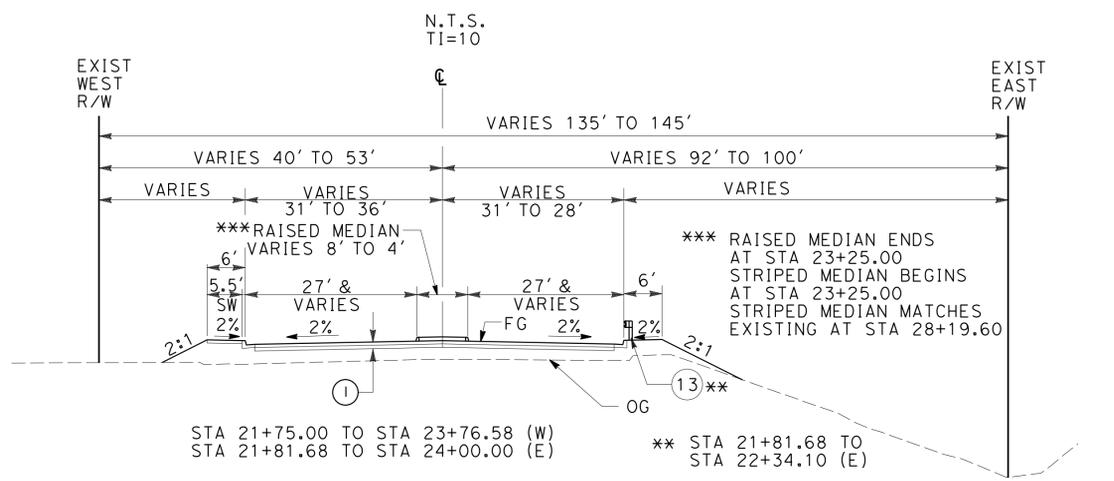
* 3' WIDE RAISED MEDIAN STA 9+15.00 TO STA 9+59.21
 * 2' WIDE RAISED MEDIAN STA 10+58.97 TO STA 11+11.82

** STA 13+16.39 TO STA 13+25.79 (W)
 STA 11+39.49 TO STA 13+26.21 (E)
 STA 20+12.00 TO STA 20+96.78 (W)
 STA 20+12.00 TO STA 21+81.68 (E)

LA CADENA DRIVE TYPICAL SECTION

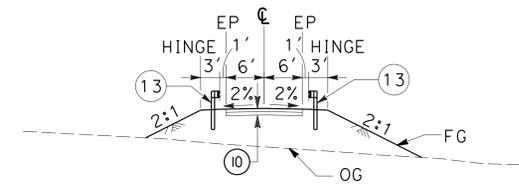


LA CADENA DRIVE TYPICAL SECTION

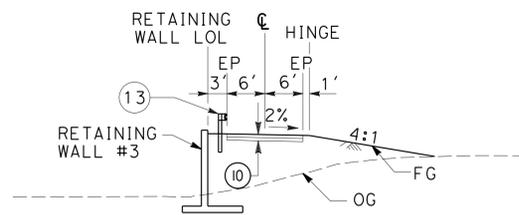


LA CADENA DRIVE TYPICAL SECTION

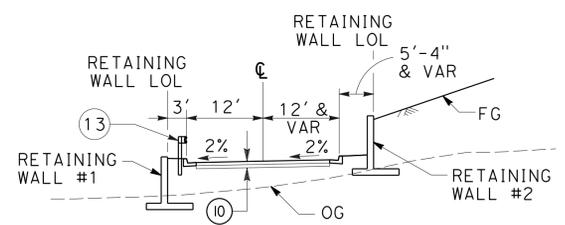
SBCFCD ACCESS ROAD TO CHANNEL (NORTH) TYPICAL SECTION



SBCFCD ACCESS ROAD TO CHANNEL (SOUTH) TYPICAL SECTION



ACCESS ROAD TO SANTA ANA RIVER TRAIL PARKING LOT TYPICAL SECTION



NOTE CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION

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 FOUNTAIN VALLEY, CA 92708
 PHONE: (714) 751-3826
 FAX: (714) 751-3928

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 Call: TOLL FREE 1-800-422-4133
 TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
 CITY OF COLTON BENCH MARK 703-2
 ELEV = 909.840 FEET (NGVD 29)
 A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A 41&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER

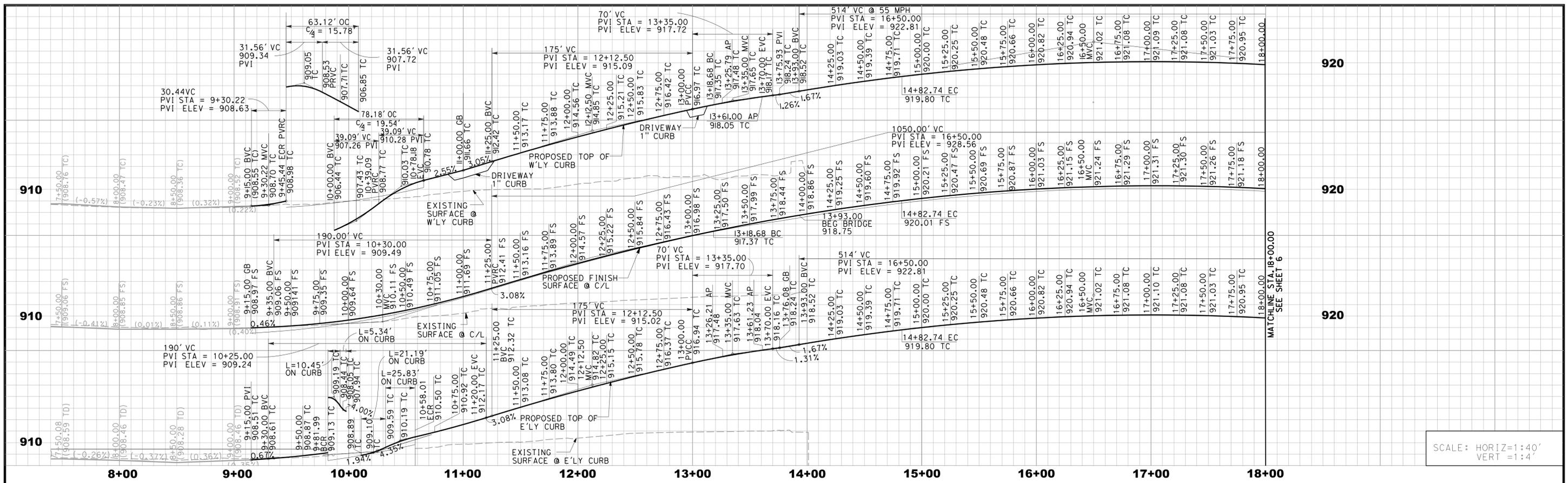
GENE CHING
 No. 52155
 Exp. 12/31/18
 CIVIL ENGINEER
 STATE OF CALIFORNIA

PREPARED BY:
JACOBS
 3257 E. GUASTI ROAD
 SUITE 120
 ONTARIO, CA 91761

CITY OF COLTON
 PUBLIC WORKS DEPARTMENT
 CITY ENGINEER
 NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848
 ACCEPTED: _____ DATE: _____
 PLAN NO. 1305-1

REVISIONS	DATE	APPR.	SCALE
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT STREET IMPROVEMENT PLANS CONSTRUCTION NOTES AND TYPICAL SECTIONS			

SHEET 4 OF 24



SCALE: HORIZ=1:40'
VERT=1:4'

LINE DATA

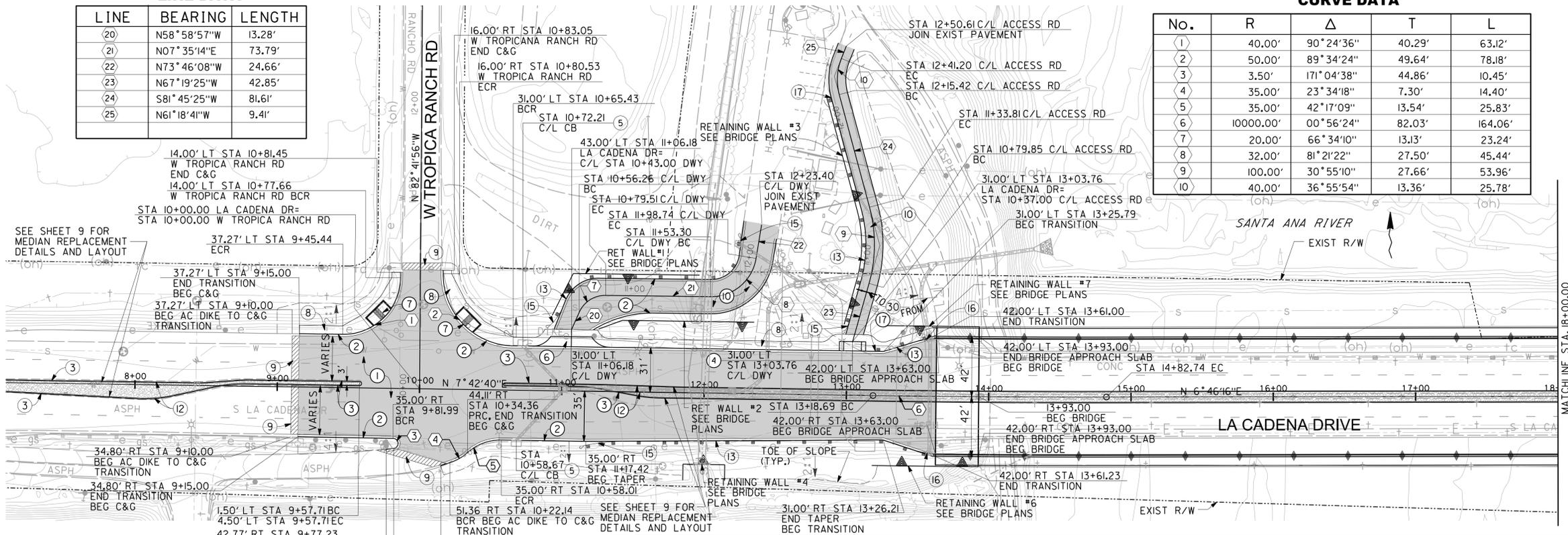
LINE	BEARING	LENGTH
(20)	N58°58'57"W	13.28'
(21)	N07°35'14"E	73.79'
(22)	N73°46'08"W	24.66'
(23)	N67°19'25"W	42.85'
(24)	S81°45'25"W	81.61'
(25)	N61°18'41"W	9.41'

CURVE DATA

No.	R	Δ	T	L
(1)	40.00'	90°24'36"	40.29'	63.12'
(2)	50.00'	89°34'24"	49.64'	78.18'
(3)	3.50'	171°04'38"	44.86'	10.45'
(4)	35.00'	23°34'18"	7.30'	14.40'
(5)	35.00'	42°17'09"	13.54'	25.83'
(6)	10000.00'	00°56'24"	82.03'	164.06'
(7)	20.00'	66°34'10"	13.13'	23.24'
(8)	32.00'	81°21'22"	27.50'	45.44'
(9)	100.00'	30°55'10"	27.66'	53.96'
(10)	40.00'	36°55'54"	13.36'	25.78'

CONSTRUCTION NOTES

- (1) CONSTRUCT 6" HMA-A OVER 8" CAB PER SOILS ENGINEER'S RECOMMENDATION
- (2) CONSTRUCT 8" CURB AND GUTTER PER CITY OF COLTON STD 106
- (3) CONSTRUCT 6" TRAFFIC ISLAND CURB ONLY PER CITY OF COLTON STD 107
- (4) CONSTRUCT COMMERCIAL DRIVEWAY PER CITY OF COLTON STD III
- (5) CONSTRUCT LOCAL DEPRESSION PER CITY OF COLTON STD 200
- (6) CONSTRUCT DRIVE APPROACH PER DETAILS ON SHEETS 7 AND/OR 8
- (7) CONSTRUCT PEDESTRIAN RAMP PER CITY OF COLTON STD 120
- (8) CONSTRUCT 4" THICK SIDEWALK W/ SCORING PER CITY OF COLTON STD 109
- (9) COLDMILL AND OVERLAY (O.P.) EXISTING PAVEMENT PER JOIN DETAIL ON SHEET 10
- (10) CONSTRUCT 3" HMA-A OVER 4" CAB
- (11) CONSTRUCT 4" THICK STAMPED CONCRETE MEDIAN PAVEMENT; COLOR AND PATTERN TO MATCH EXISTING
- (12) CONSTRUCT MGS PER CALTRANS STD PLAN A77LL; SEE MGS PLACEMENT DETAIL ON SHEET 10
- (13) CONSTRUCT MGS FLARED TERMINAL END TREATMENT PER CALTRANS STD PLAN A77N6
- (14) CONSTRUCT MGS CONNECTION TO BRIDGE RAILING USING TRANSITION RAILING (TYPE WB-30) PER CALTRANS STD PLANS A77U2 AND A77U4
- (15) INSTALL END ANCHOR ASSEMBLY (TYPE SFT) PER CALTRANS STD PLAN A77S1
- (16) REMOVE AND RELOCATE SBCFCD PIPE GATE



NOTE CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION

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TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK

CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)

A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A AT&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER



PREPARED BY:
JACOBS
3257 E. GUASTI ROAD
SUITE 120
ONTARIO, CA 91761

CITY OF COLTON
PUBLIC WORKS DEPARTMENT

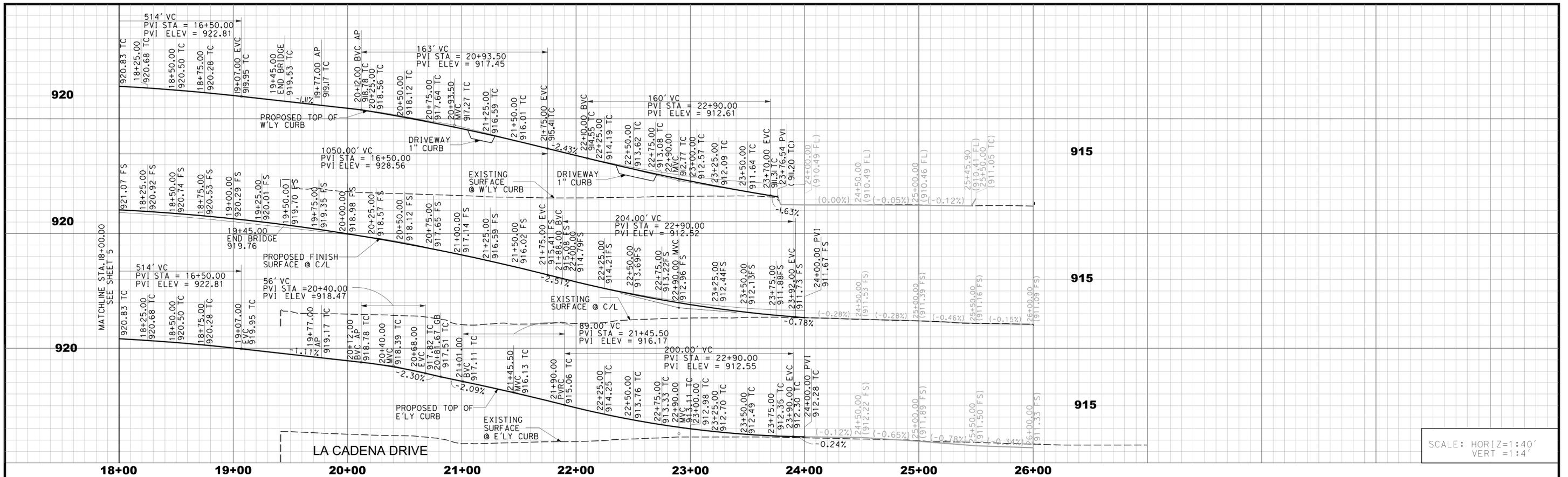
CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848
ACCEPTED: _____ DATE: _____

EXPIRES: 06/30/17

PLAN NO. 1305-1

REVISIONS	DATE	APPR.
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT		
STREET IMPROVEMENT PLANS		
PLAN AND PROFILE STA 8+00.00 - 18+00.00		

SCALE: DATE: 03-08-17 SHEET 5 OF 24



SCALE: HORIZ=1:40'
VERT =1:4'

CURVE DATA

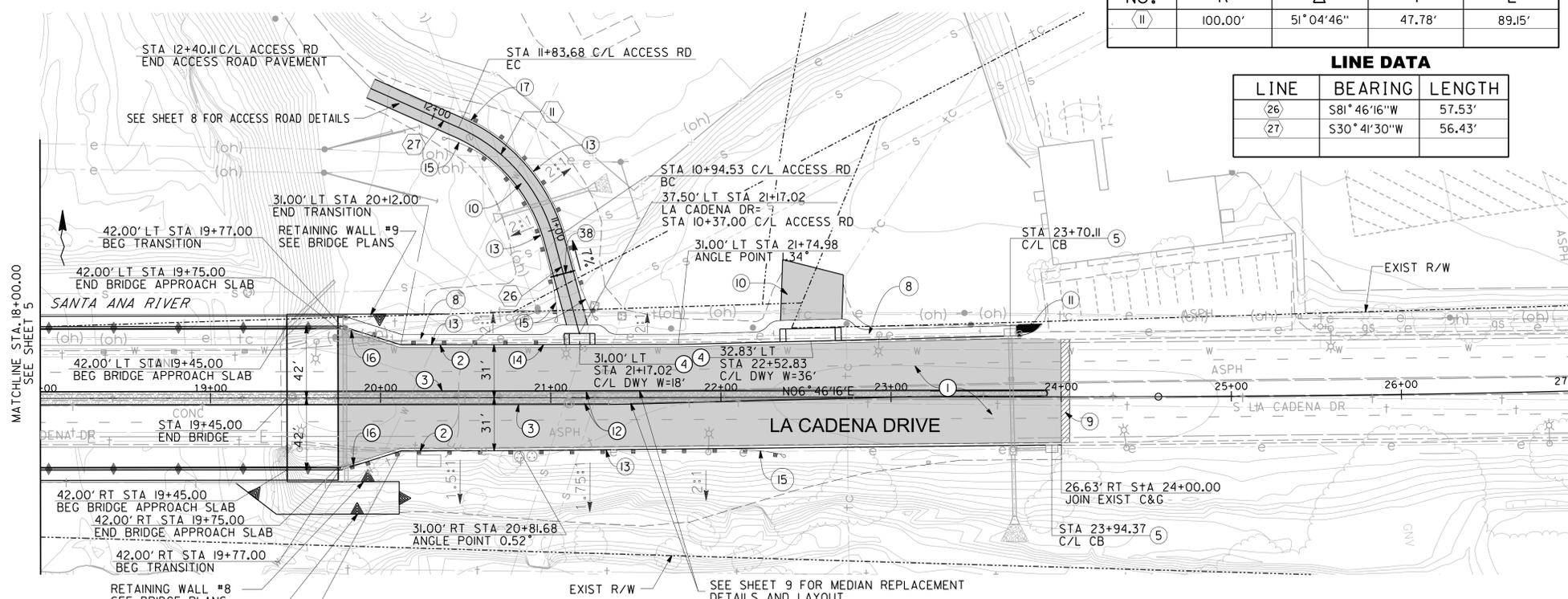
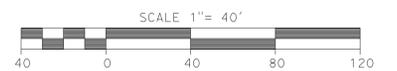
No.	R	Δ	T	L
II	100.00'	51°04'46"	47.78'	89.15'

LINE DATA

LINE	BEARING	LENGTH
(26)	S81°46'16"W	57.53'
(27)	S30°41'30"W	56.43'

CONSTRUCTION NOTES

- ① CONSTRUCT 6" HMA-A OVER 8" CAB PER SOILS ENGINEER'S RECOMMENDATION
- ② CONSTRUCT 8" CURB AND GUTTER PER CITY OF COLTON STD 106
- ③ CONSTRUCT 6" TRAFFIC ISLAND CURB ONLY PER CITY OF COLTON STD 107
- ④ CONSTRUCT COMMERCIAL DRIVEWAY PER CITY OF COLTON STD III
- ⑤ CONSTRUCT LOCAL DEPRESSION PER CITY OF COLTON STD 200
- ⑧ CONSTRUCT 4" THICK SIDEWALK W/ SCORING PER CITY OF COLTON STD 109
- ⑨ COLDMILL AND OVERLAY (0.1') EXISTING PAVEMENT PER JOIN DETAIL ON SHEET 10
- ⑩ CONSTRUCT 3" HMA-A OVER 4" CAB
- ⑪ CONSTRUCT PEDESTRIAN RAMP PER SPPWC STD III-5 CASE D, TYPE 2
- ⑫ CONSTRUCT 4" THICK STAMPED CONCRETE MEDIAN PAVEMENT; COLOR AND PATTERN TO MATCH EXISTING
- ⑬ CONSTRUCT MGS PER CALTRANS STD PLAN A77LI, SEE MGS PLACEMENT DETAIL ON SHEET 10
- ⑭ CONSTRUCT MGS IN-LINE TERMINAL END TREATMENT PER CALTRANS STD PLAN A77NG
- ⑮ CONSTRUCT MGS FLARED TERMINAL END TREATMENT PER CALTRANS STD PLAN A77NG
- ⑯ CONSTRUCT MGS CONNECTION TO BRIDGE RAILING USING TRANSITION RAILING (TYPE WB-3) PER CALTRANS STD PLANS A77U2 AND A77U4
- ⑰ INSTALL END ANCHOR ASSEMBLY (TYPE SFT) PER CALTRANS STD PLAN A77SI
- ⑳ INSTALL PIPE GATE PER SBCFCD STANDARD PLAN 209



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BENCHMARK

CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)

A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A AT&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER

PREPARED BY:
JACOBS
3257 E. GUASTI ROAD
SUITE 120
ONTARIO, CA 91761

CITY OF COLTON
PUBLIC WORKS DEPARTMENT

CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. EXPIRES: 06/30/17
R.C.E.: 73848

ACCEPTED: _____ DATE: _____

PLAN NO. 1305-1

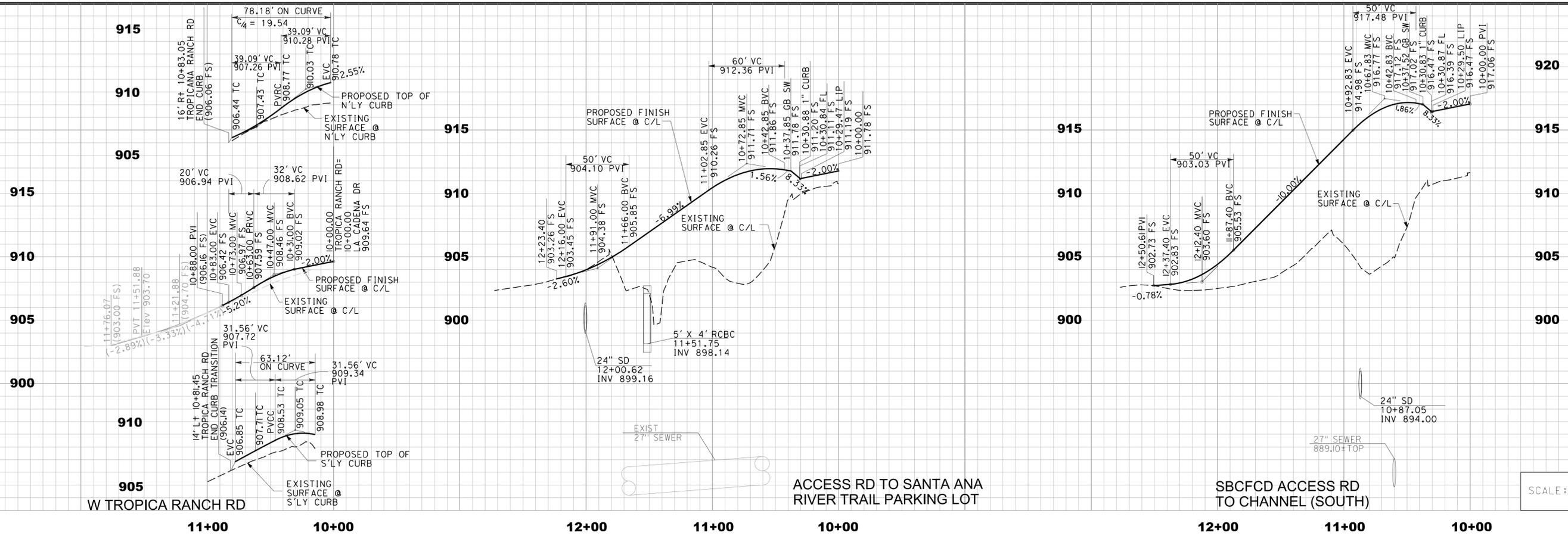
REVISIONS	DATE	APPR.

LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT
STREET IMPROVEMENT PLANS
PLAN AND PROFILE
STA 18+00.00 - 26+00.00

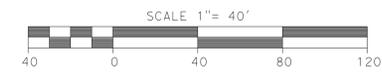
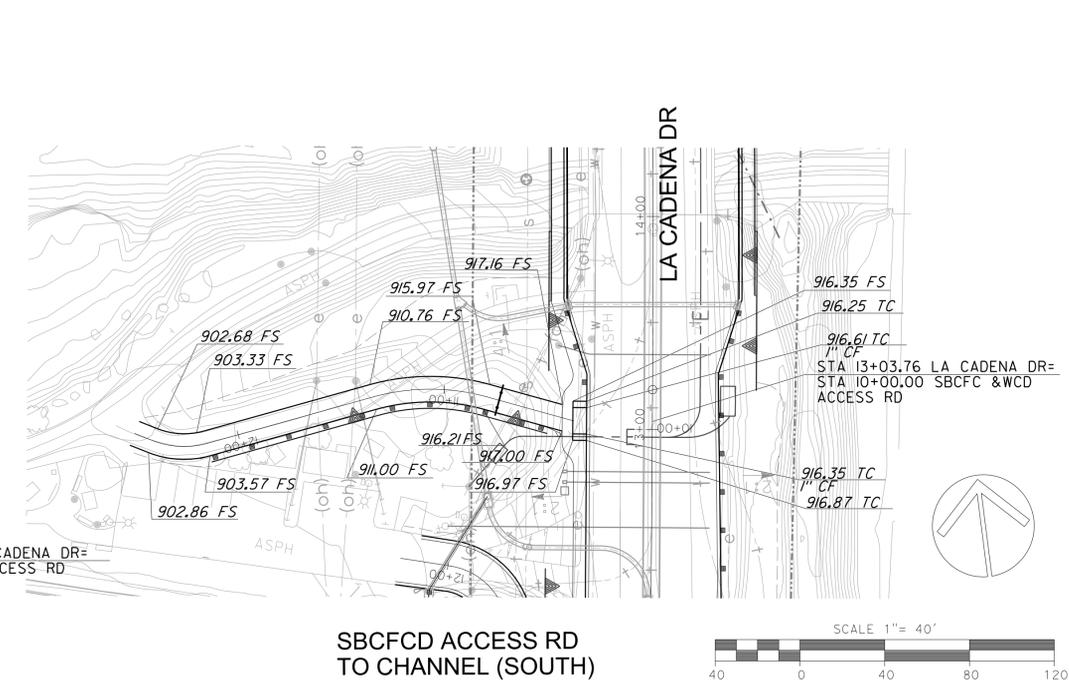
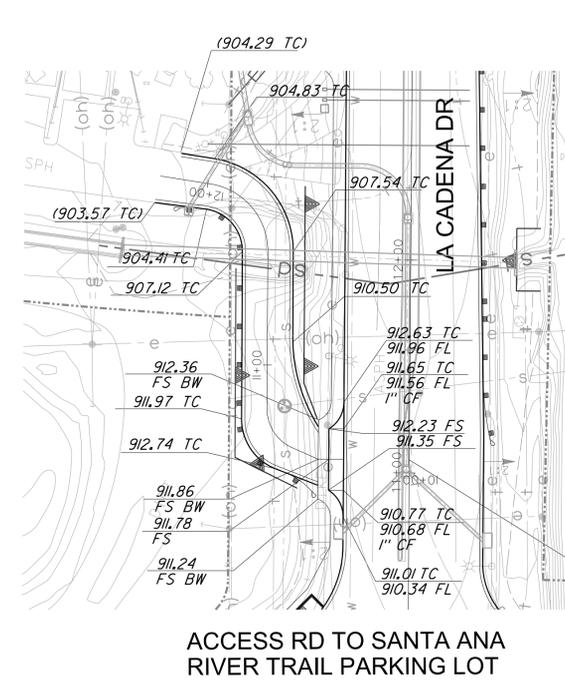
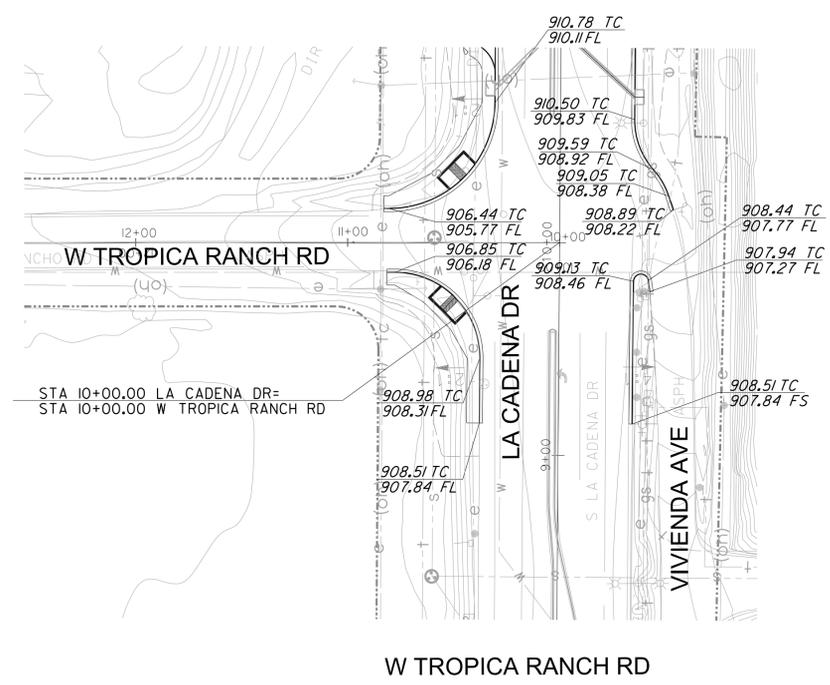
SCALE
HORIZ: _____
VERT: _____

DATE: 03-08-17

SHEET 6 OF 24



SCALE: HORIZ=1:40'
VERT =1:4'



NOTE CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION

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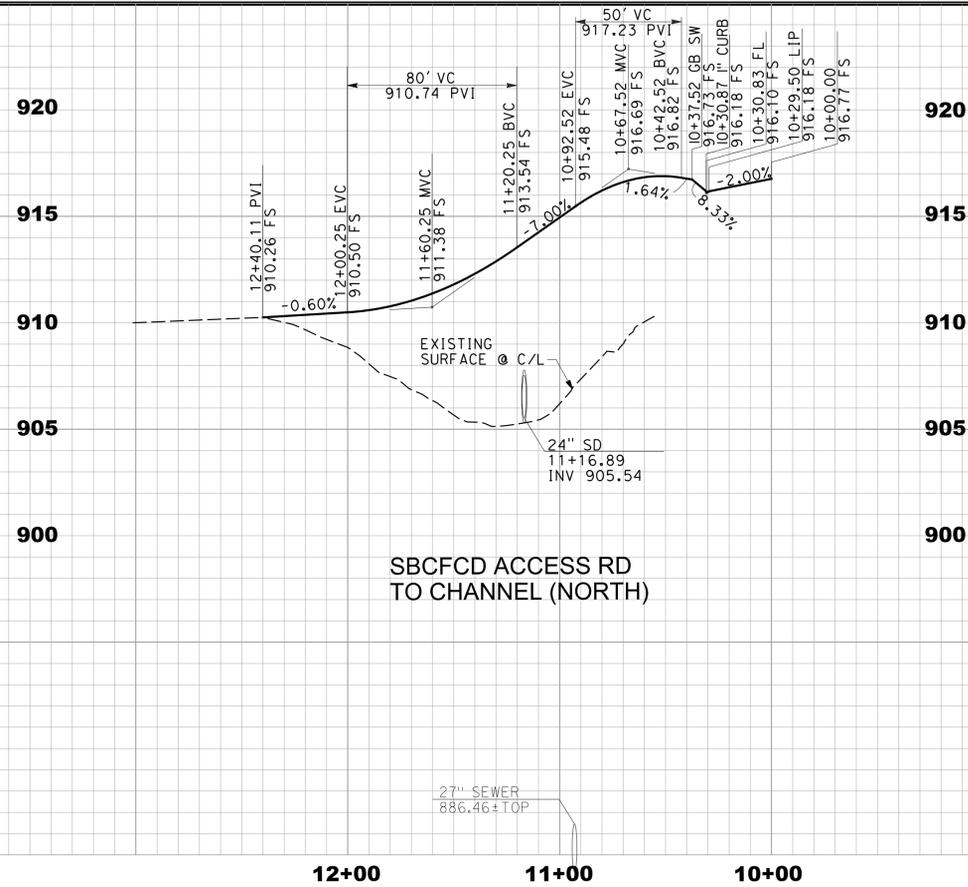


PREPARED BY:
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ONTARIO, CA 91761

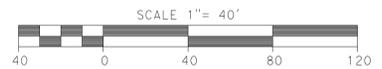
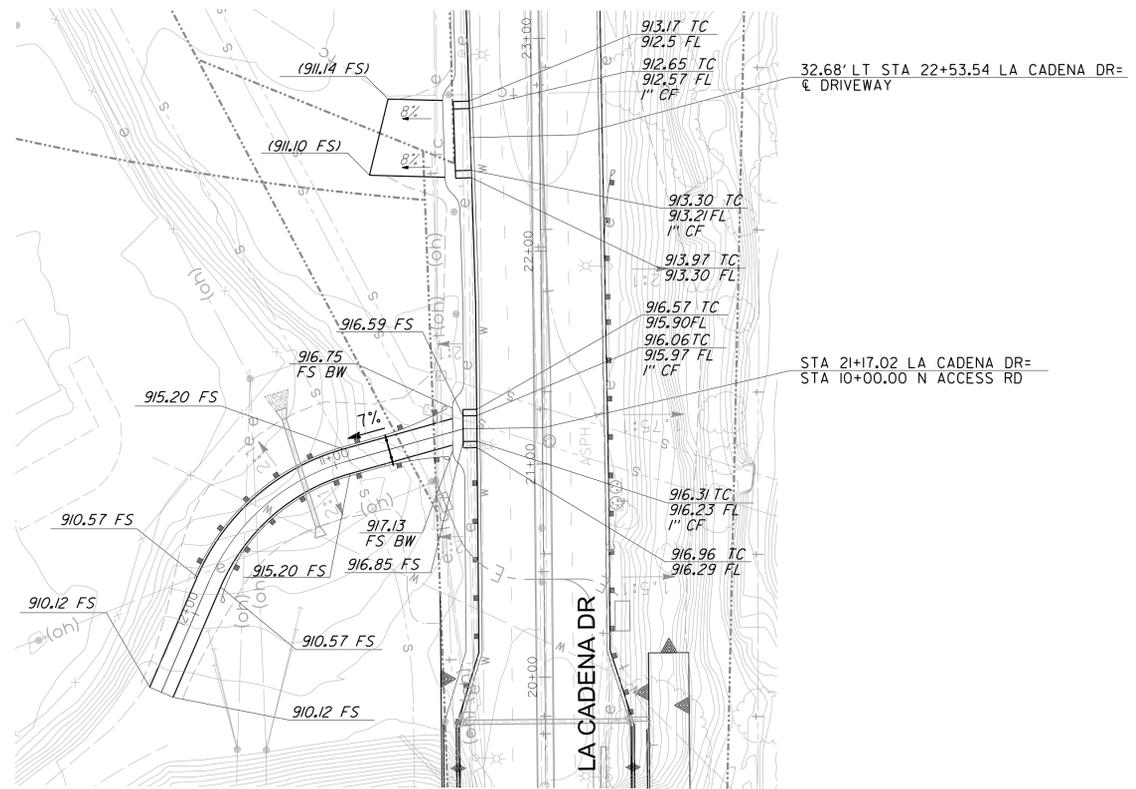
CITY OF COLTON
PUBLIC WORKS DEPARTMENT
CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848
EXPIRES: 06/30/17
ACCEPTED: _____ DATE: _____
PLAN NO. 1305-1

REVISIONS	DATE	APPR.

LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT
STREET IMPROVEMENT PLANS
DETAILS
SHEET 7 OF 24



SCALE: HORIZ=1:40'
VERT =1:4'



SBCFCD ACCESS RD
TO CHANNEL (NORTH)

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PREPARED BY:
JACOBS
3257 E. GUASTI ROAD
SUITE 120
ONTARIO, CA 91761

CITY OF COLTON
PUBLIC WORKS DEPARTMENT

CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848 EXPIRES: 06/30/17

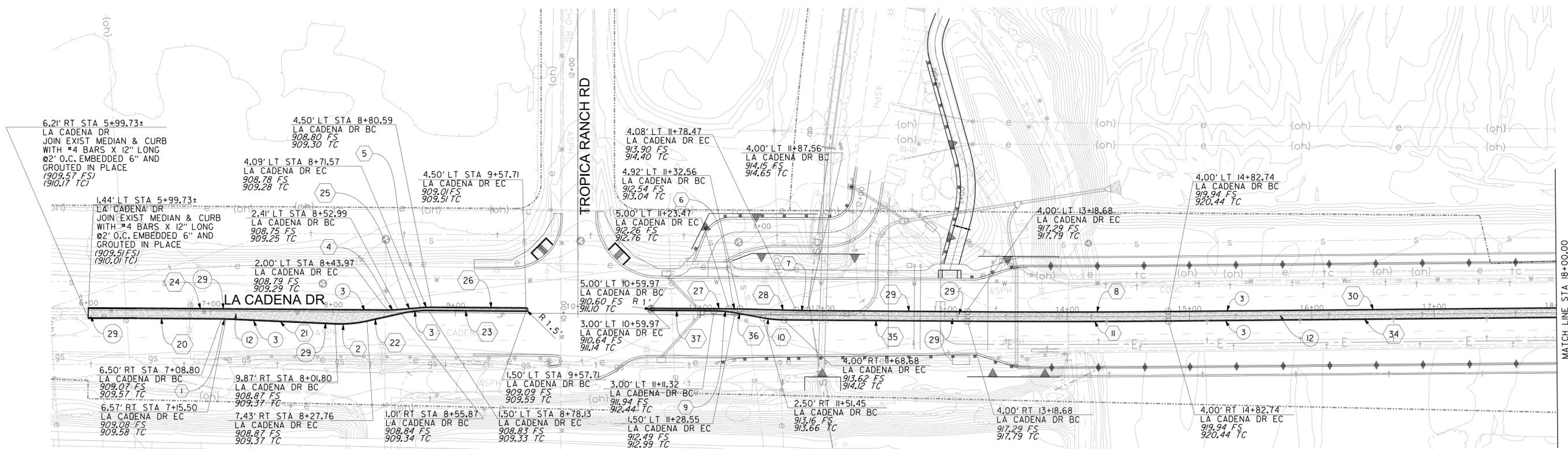
ACCEPTED: _____ DATE: _____

PLAN NO. 1305-1

REVISIONS	DATE	APPR.

LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT
STREET IMPROVEMENT PLANS
DETAILS

SCALE: _____
HORIZ: _____
VERT: _____
DATE: 03-08-17
SHEET 8 OF 24



MATCH LINE STA 18+00.00
SEE BELOW LEFT

CURVE DATA

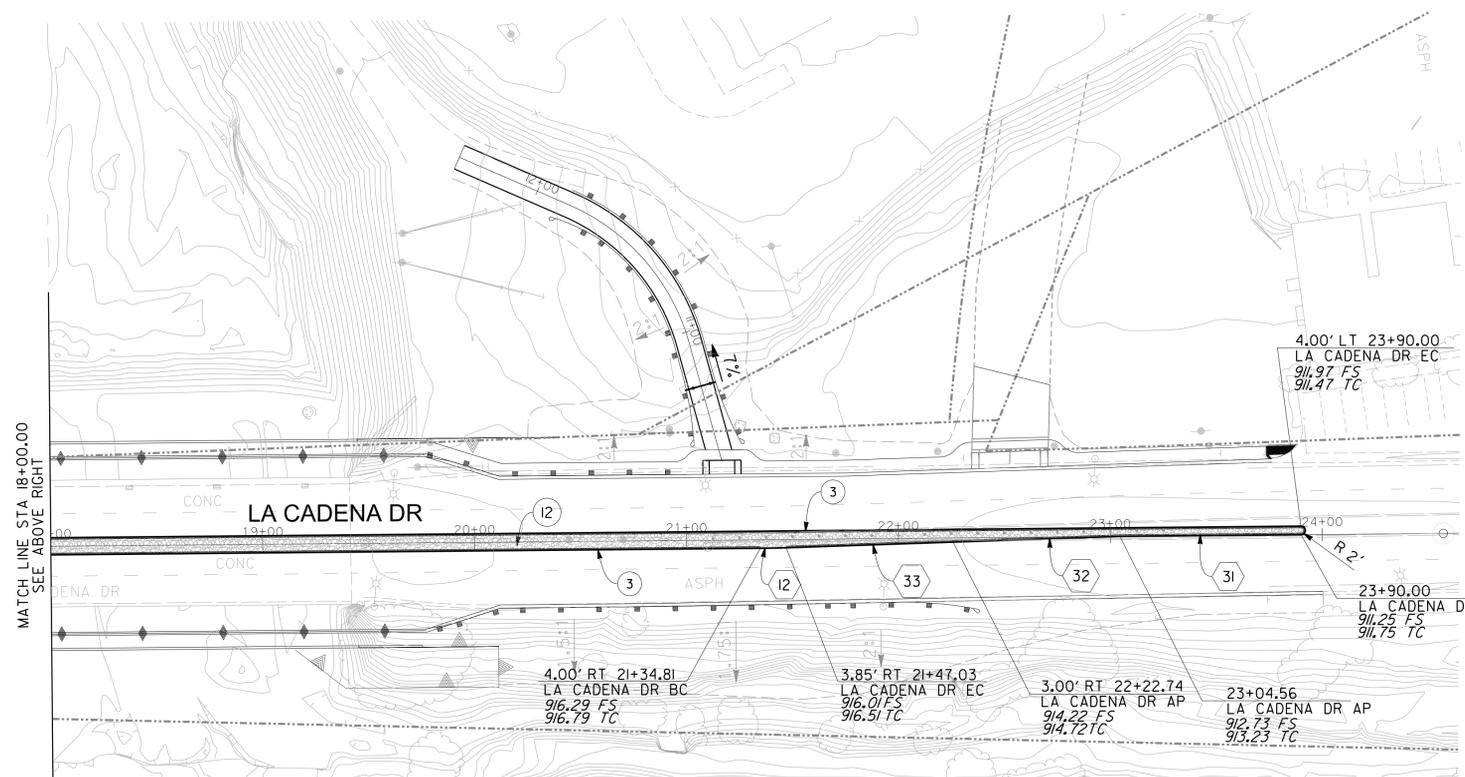
No.	R	Δ	T	L
1	100.00'	02°16'13"	1.98'	3.96'
2	100.00'	14°59'02"	13.15'	26.15'
3	100.00'	12°51'56"	11.27'	22.45'
4	100.00'	05°11'07"	4.53'	9.05'
5	100.00'	05°10'44"	4.52'	9.04'
6	500.00'	01°02'30"	4.55'	9.09'
7	500.00'	01°02'30"	4.55'	9.09'
8	9996.00'	0°56'24"	82.00'	164.00'
9	100.00'	09°55'34"	8.68'	17.32'
10	100.00'	09°55'34"	8.68'	17.32'
11	10004.00'	0°56'24"	82.07'	164.12'
12	500.00'	01°24'01"	6.11'	12.22'

LINE DATA

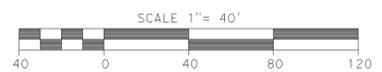
LINE	BEARING	LENGTH
20	N07°33'33"E	108.84'
21	N09°49'46"E	89.23'
22	N05°09'16"W	28.83'
23	N07°42'40"E	79.58'
24	N07°43'03"E	244.09'
25	N02°31'56"E	18.64'
26	N07°42'40"E	77.12'
27	N07°42'40"E	63.50'
28	N08°45'10"E	45.92'
29	N07°42'40"E	131.12'
30	N06°46'16"E	907.26'
31	N06°46'16"E	85.44'
32	N05°22'15"E	81.84'
33	N05°22'15"E	75.73'
34	N06°46'16"E	652.07'
35	N07°42'40"E	150.00'
36	N17°38'14"E	23.24'
37	N07°42'40"E	51.34'

CONSTRUCTION NOTES

- 3 CONSTRUCT 6" TRAFFIC ISLAND CURB ONLY PER CITY OF COLTON STD 107
- 12 CONSTRUCT 4" THICK STAMPED CONCRETE MEDIAN PAVEMENT; COLOR AND PATTERN TO MATCH EXISTING
- 29 REMOVE EXISTING PCC CURB



PAVED MEDIAN DETAIL



NOTE CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION

95% PS&E SUBMITTAL FOR INTERNAL USE ONLY NOT FOR CONSTRUCTION

GEOTECHNICAL ENGINEER:
EARTH MECHANICS, INC
17800 NEWHOPE STREET, SUITE B
FOUNTAIN VALLEY, CA 92708
PHONE: (714) 751-3826
FAX: (714) 751-3928

Underground Service Alert
Call: TOLL FREE 1-800-422-4133
TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)
A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A 41&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER

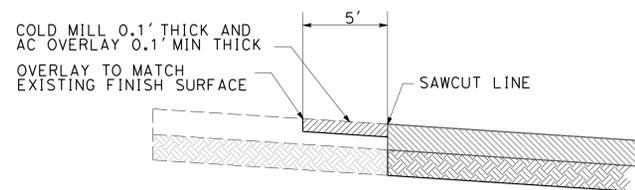


PREPARED BY:
JACOBS
3257 E. GUASTI ROAD
SUITE 120
ONTARIO, CA 91761

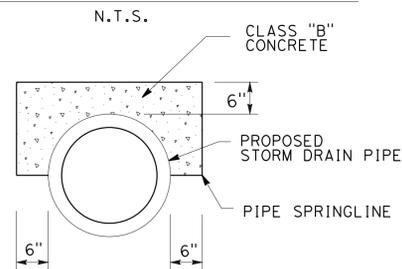
CITY OF COLTON PUBLIC WORKS DEPARTMENT
CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 7384B
EXPIRES: 06/30/17
ACCEPTED: _____ DATE: _____
PLAN NO. 1305-1

REVISIONS	DATE	APPR.

LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT
STREET IMPROVEMENT PLANS DETAILS
SHEET 2 OF 24



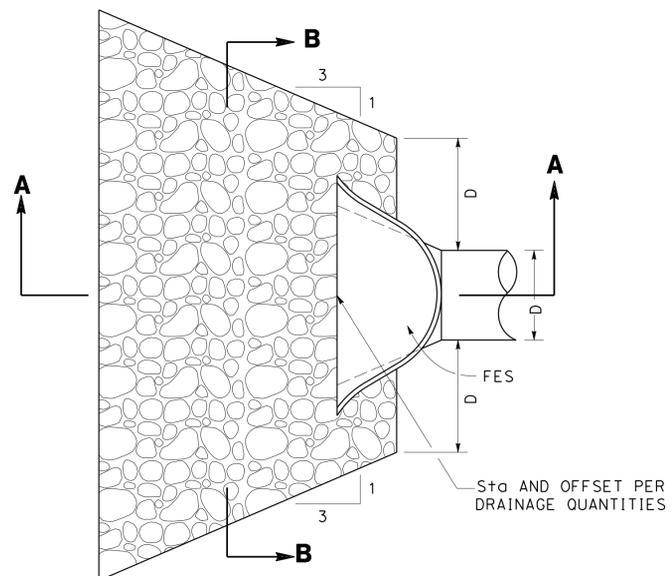
A.C. PAVEMENT JOIN DETAIL



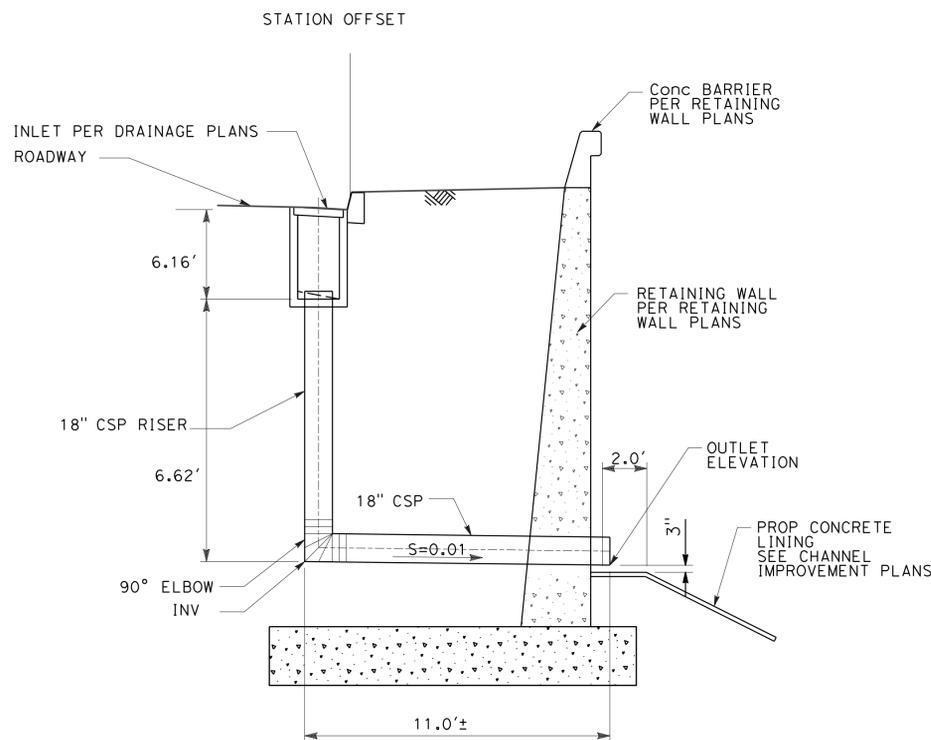
CONCRETE ENCASEMENT DETAIL

NOTES:

1. FOR FES DIMENSIONS SEE CALTRANS Std PLANS D94A AND D94B.
2. ANY ROCK SLOPE PROTECTION SHALL BE NATURAL EXISTING IRREGULAR FORM, COLOR AND CHARACTER OF THE EXISTING ROCK OUTCROPPINGS.

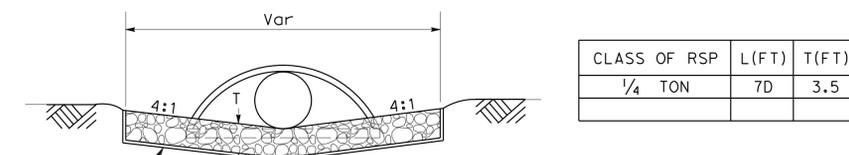


PLAN VIEW



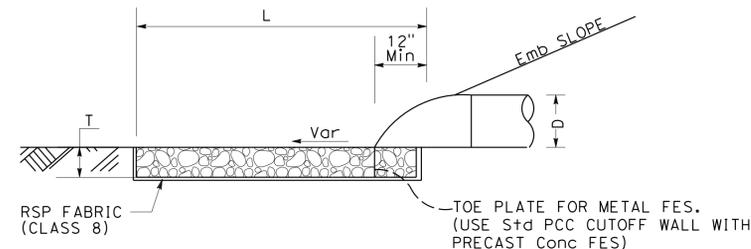
WALL DRAIN DETAIL

N.T.S.



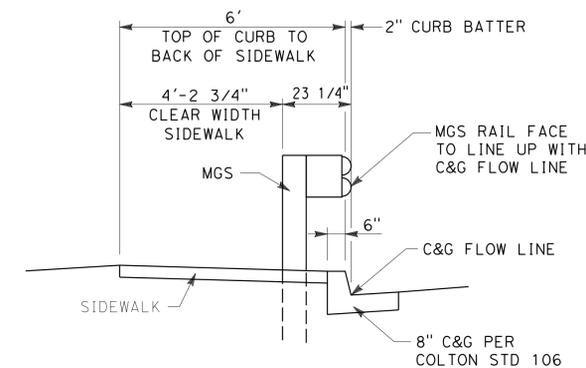
SECTION B-B

CLASS OF RSP	L(FT)	T(FT)
1/4 TON	7D	3.5



SECTION A-A

FLARED END SECTION/FREE OUTLET



**MGS PLACEMENT DETAIL
(FOR MGS'S LOCATED ALONG CURB AND GUTTER)**

NOTE:
FOR MGS'S NOT LOCATED ALONG CURB AND GUTTER (AT THE 2 SBCFCD ACCESS ROADS), SEE TYPICAL SECTIONS ON SHEET 4 FOR MGS PLACEMENT

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BENCHMARK
CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)
A STANDARD SAN BERNARDINO COUNTY
SURVEYOR'S BRASS DISC SET IN THE
TOP OF THE NORTH ABUTMENT
OF A AT&SF RAILWAY STEEL GIRDER
BRIDGE CROSSING THE SANTA ANA RIVER



PREPARED BY:
JACOBS
3257 E. GUASTI ROAD
SUITE 120
ONTARIO, CA 91761

CITY OF COLTON
PUBLIC WORKS DEPARTMENT
CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848
EXPIRES: 06/30/17
ACCEPTED: _____ DATE: _____
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REVISIONS	DATE	APPR.

LA CADENA DRIVE OVER
SANTA ANA RIVER
BRIDGE REPLACEMENT PROJECT
STREET IMPROVEMENT PLANS
DETAILS
SCALE
DATE: 03-08-17
SHEET 10 OF 24

915

905

895

885

915

905

895

885

915

905

895

915

905

895

CURVE/LINE DATA

	DELTA/BEARING	RADIUS	LENGTH	TANGENT
A	N01°33'04"W		70.61'	
B	N01°33'04"W		98.85'	
C	80°44'16"	22.50'	31.71'	19.13'
D	N82°17'20"W		30.53'	
E	90°00'00"	22.50'	35.34'	22.50'
F	N07°42'40"E		119.87'	
G	N52°42'40"E		41.76'	
H	N40°00'00"W		49.30'	
I	N39°26'56"E		51.43'	
J	N80°50'32"W		185.19'	
K	N82°42'26"W		77.06'	
L	N86°14'53"W		27.89'	
M	47°12'03"	22.50'	18.54'	9.83'
N	N46°33'04"W		8.14'	

14+00

LINE "A"

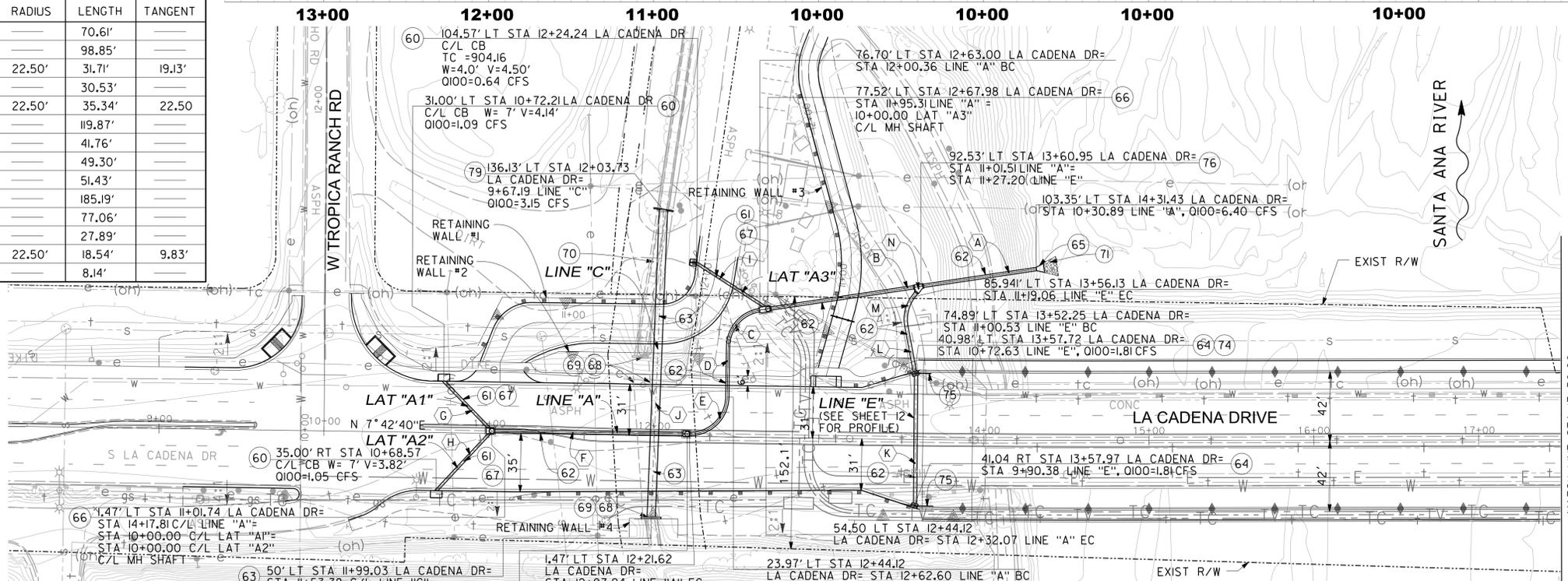
LAT "A1"

LAT "A2"

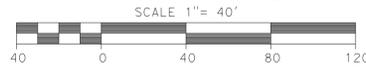
LAT "A3"

LINE "C"

SCALE: HORIZ=1:40' VERT=1:4'



- CONSTRUCTION NOTES**
- (60) CONSTRUCT CURB INLET CATCH BASIN PER CITY OF COLTON STD 200 WITH TRITON CATCH BASIN FILTER TYPE TRC7 INSERTS OR APPROVED EQUAL
 - (61) CONSTRUCT 18" RCP (D-LOAD PER PLAN)
 - (62) CONSTRUCT 24" RCP (D-LOAD PER PLAN)
 - (63) CONSTRUCT 5' X 4' RCBC PER CALTRANS STD PLAN D81
 - (64) CONSTRUCT TYPE G2 INLET WITH BICYCLE GRATE PER CALTRANS STD PLANS D73A AND D77B WITH TRITON CATCH BASIN FILTER TYPE TRC4 INSERTS OR APPROVED EQUAL
 - (65) CONSTRUCT CONCRETE FLARED END SECTION
 - (66) CONSTRUCT STORMDRAIN MANHOLE PER CITY OF COLTON STD 209
 - (67) CONSTRUCT 6" THICK CONCRETE ENCASUREMENT PER DETAIL ON SHEET 10
 - (68) REMOVE EXISTING CONCRETE SOFFIT
 - (69) REMOVE PORTION OF EXISTING 7' X 4' CONCRETE TRAPEZOIDAL CHANNEL
 - (70) REMOVE EXISTING 36" RCP
 - (71) CONSTRUCT ROCK SLOPE PROTECTION, 1/4 TON, PER DETAIL SHEET 10
 - (74) CONSTRUCT 18" CSP RISER, CONNECT TO INLET AND RCP STORM DRAIN PER CALTRANS STD PLAN D93B
 - (75) CONSTRUCT 8" STEEL PIPE STUB OUT
 - (76) CONSTRUCT TRANSITION STRUCTURE PIPE TO PIPE PER SPPW STD PLAN 340-2
 - (79) CONSTRUCT TYPE "D" STRAIGHT WINGWALL PER CALTRANS STD PLAN D85



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PREPARED BY:
JACOBS
 3257 E. GUASTI ROAD
 SUITE 120
 ONTARIO, CA 91761

CITY OF COLTON
 PUBLIC WORKS DEPARTMENT

CITY ENGINEER
 NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848
 EXPIRES: 06/30/17

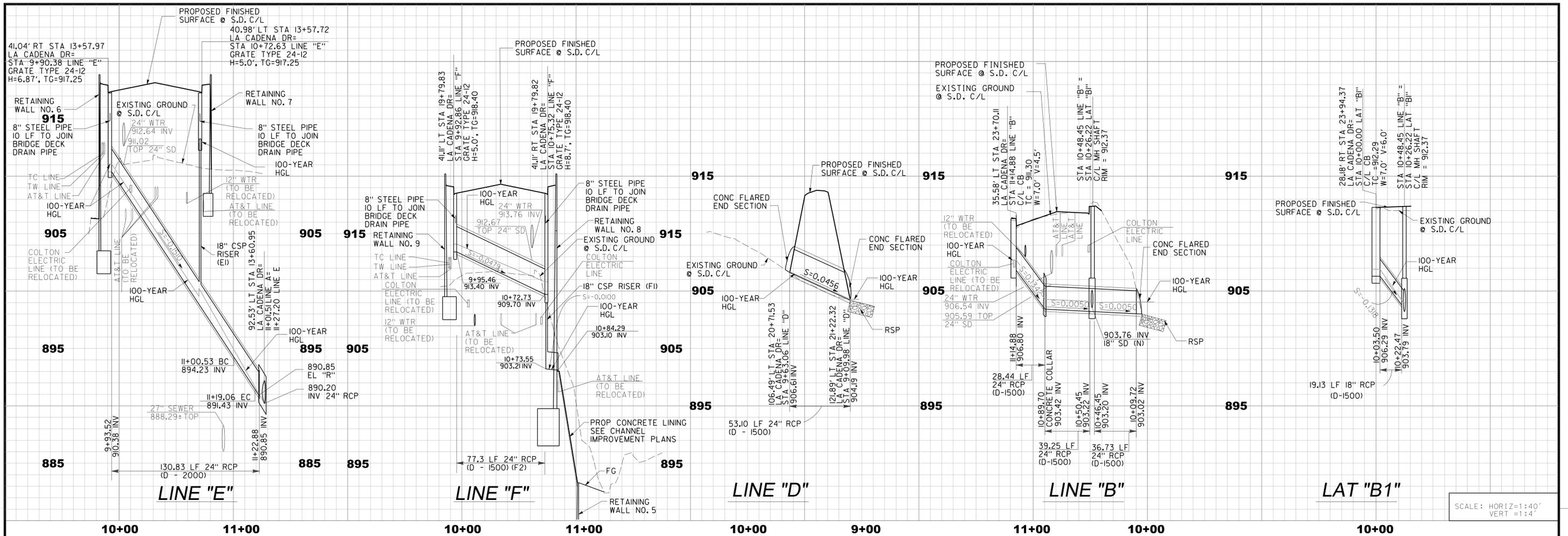
ACCEPTED: _____ DATE: _____

PLAN NO. 1305-1

REVISIONS	DATE	APPR.

LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT
 STREET IMPROVEMENT PLANS
 STORM DRAIN IMPROVEMENTS
 LINE "A", LINE "C" AND LAT "A2" AND "A3"

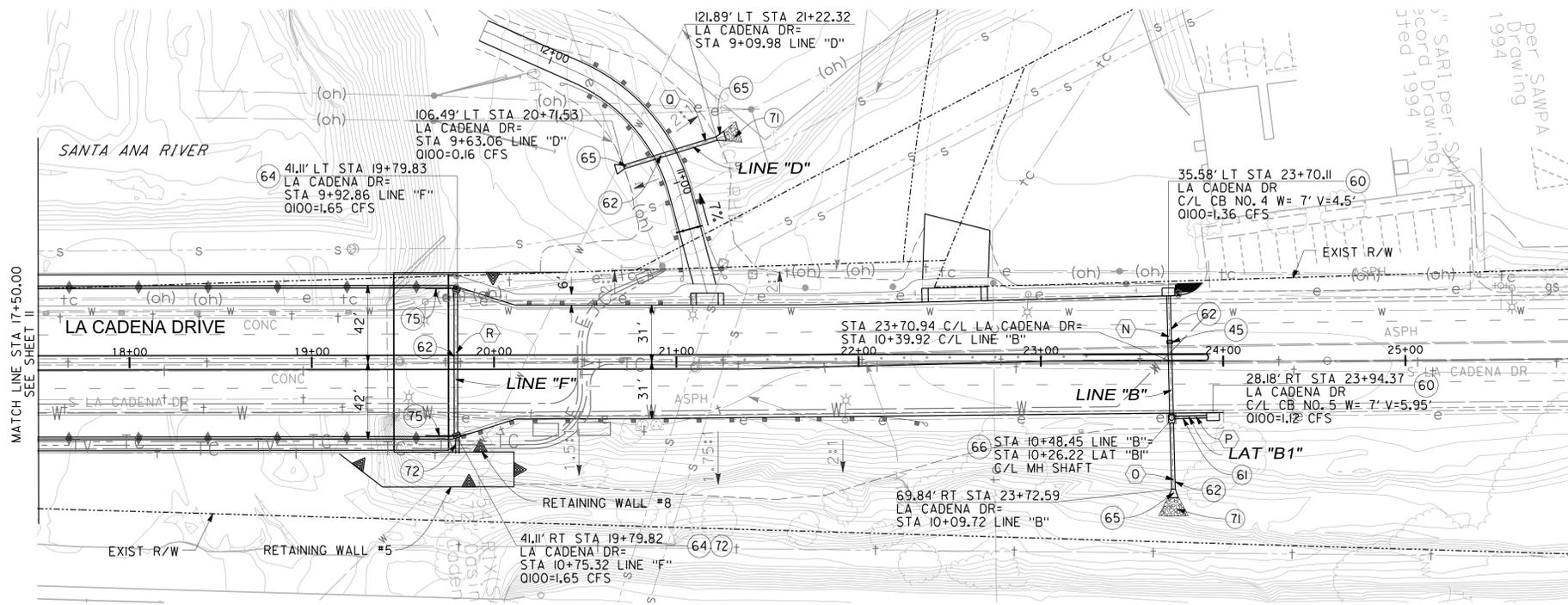
SCALE: _____
 HORIZ: _____
 VERT: 11-11-11
 SHEET 11 OF 24



SCALE: HORIZ=1:40'
VERT=1:4'

LINE DATA

BEARING	LENGTH
(N) N84°34'23"W	64.82'
(O) N84°34'23"W	35.16'
(P) N5°25'37"E	17.48'
(Q) N10°05'52"W	53.08'
(R) N83°13'44"W	77.27'



CONSTRUCTION NOTES

- (45) CONSTRUCT CONCRETE COLLAR PER SPPWC STD PLAN NO 380-4
- (60) CONSTRUCT CURB INLET CATCH BASIN PER CITY OF COLTON STD 200. WITH TRITON CATCH BASIN FILTER TYPE TRC7 INSERTS OR APPROVED EQUAL
- (61) CONSTRUCT 18" RCP (D-LOAD PER PLAN)
- (62) CONSTRUCT 24" RCP (D-LOAD PER PLAN)
- (64) CONSTRUCT TYPE G2 INLET WITH BICYCLE GRATE PER CALTRANS STD PLANS D73A AND D77B WITH TRITON CATCH BASIN FILTER TYPE TRC4 INSERTS OR APPROVED EQUAL
- (65) CONSTRUCT CONCRETE FLARED END SECTION
- (66) CONSTRUCT STORMDRAIN MANHOLE PER CITY OF COLTON STD 209.
- (71) CONSTRUCT ROCK SLOPE PROTECTION, 1/4 TON, PER DETAIL SHEET 10
- (72) CONSTRUCT 18" CSP RISER PER WALL DRAIN DETAIL ON SHEET 10
- (75) CONSTRUCT 8" STEEL PIPE STUB OUT



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SUITE 120
ONTARIO, CA 91761

CITY OF COLTON
PUBLIC WORKS DEPARTMENT

CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 7384B
EXPIRES: 06/30/17

ACCEPTED: _____ DATE: _____
PLAN NO. 1305-1

REVISIONS	DATE	APPR.
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT		
STREET IMPROVEMENT PLANS		
STORM DRAIN IMPROVEMENTS		
LINE "B", LAT "B1", LINE "D", LINE "E" AND LINE "F"		

SCALE: _____
DATE: 11-11-11
SHEET 12 OF 24

GENERAL NOTES

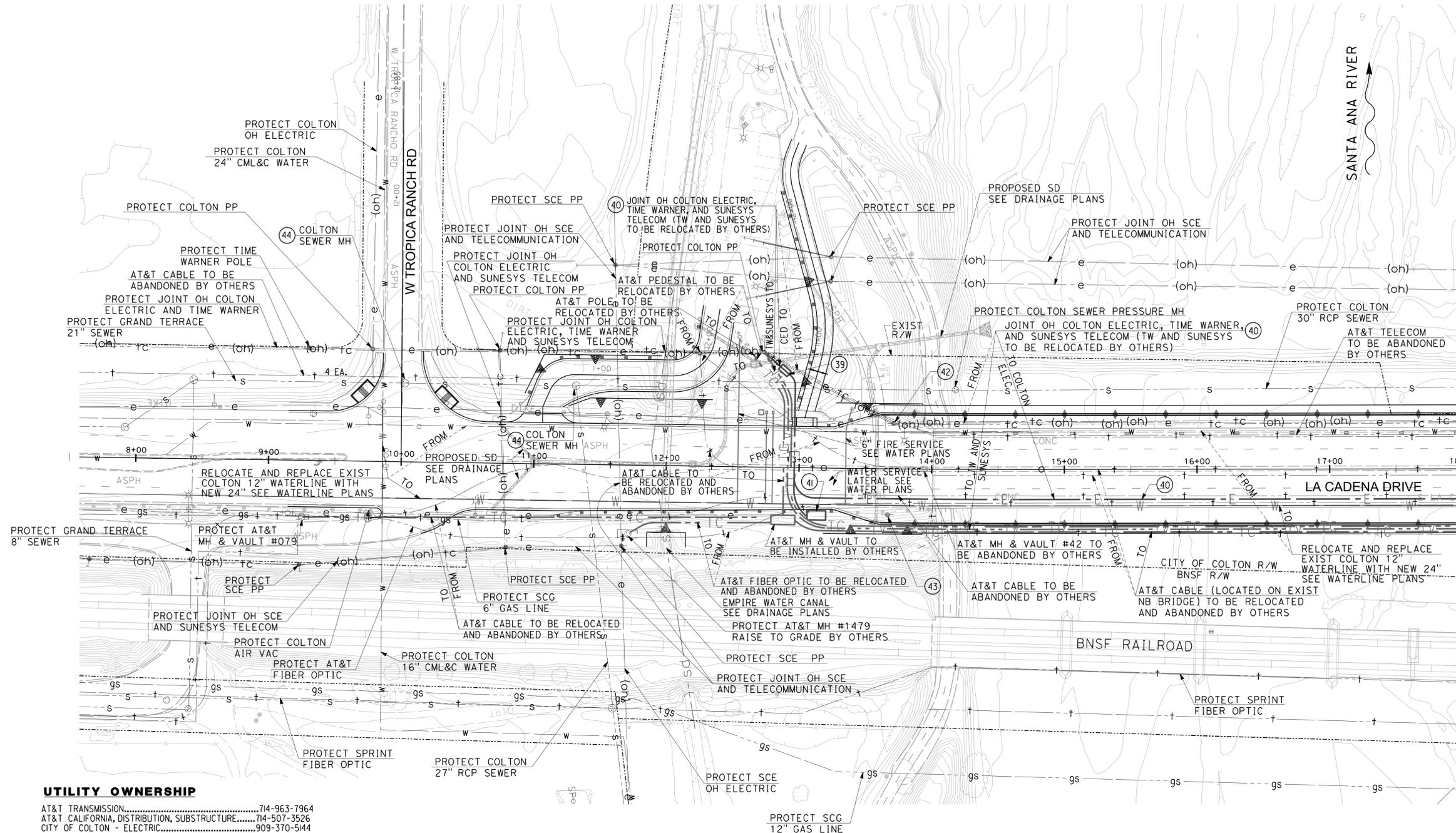
1. SEE ELECTRICAL PLANS FOR EXISTING AND NEW LIGHTING.
2. SEE DRAINAGE PLANS FOR STORM DRAIN SYSTEM.
3. COLTON POWER POLES/OH ELECTRIC SHALL NOT BE REMOVED/RELOCATED UNTIL CITY OF COLTON ELECTRIC RE-ROUTES CIRCUIT.

ABBREVIATIONS:

- AT&T - AMERICAN TELEPHONE AND TELEGRAPH
- AIR VAC - AIR VACUUM
- COLTON - CITY OF COLTON
- CML&C - CEMENT MORTAR LINED & CONCRETE
- OH - OVERHEAD
- PP - POWER POLE
- MH - MANHOLE
- RCP - REINFORCED CONCRETE PIPE
- R/W - RIGHT OF WAY
- SBMWD - SAN BERNARDINO MUNICIPAL WATER DEPARTMENT
- SCE - SOUTHERN CALIFORNIA EDISON
- TW - TIME WARNER

CONSTRUCTION NOTES

- 39 INSTALL COLTON 5'X8.5' ELECTRIC PULL BOX
- 40 RELOCATE COLTON OH ELECTRIC 4 - 5" CONDUITS TO BRIDGE CELL AND UNDERGROUND
- 41 INSTALL COLTON 9'X14' ELECTRIC VAULT WITH APPURTENANCES
- 42 REMOVE COLTON POWER POLE
- 43 REMOVE COLTON GUY POLE
- 44 ADJUST MANHOLE TO FINISH GRADE



MATCHLINE STA. 18+00.00
SEE SHEET 14

UTILITY OWNERSHIP

AT&T TRANSMISSION.....	714-963-7964
AT&T CALIFORNIA, DISTRIBUTION, SUBSTRUCTURE.....	714-507-3526
CITY OF COLTON - ELECTRIC.....	909-370-5144
CITY OF COLTON - WATER & WASTEWATER.....	909-370-6192
CITY OF GRAND TERRACE.....	909-430-2225
EMPIRE WATER - CANAL.....	949-215-1100
LEVEL 3 COMMUNICATIONS.....	720-888-4465
RIVERSIDE HIGHLAND WATER.....	909-825-4128
SAN BERNARDINO MUNICIPAL WATER DEPARTMENT.....	909-522-3403
SANTA ANA WATERSHED PROJECT AUTHORITY.....	951-354-4220
SOUTHERN CALIFORNIA EDISON.....	909-335-7955
SOUTHERN CALIFORNIA GAS.....	949-842-9870
SPRINT.....	951-278-0400
SUNESYS.....	909-975-3398
TIME WARNER CABLE.....	909-975-3398

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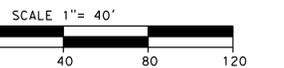


PREPARED BY:

JACOBS
3257 E. GUASTI ROAD
SUITE 120
ONTARIO, CA 91761

CITY OF COLTON PUBLIC WORKS DEPARTMENT

CITY ENGINEER	EXPIRES: 06/30/17
NAME: VICTOR ORTIZ, P.E.	R.C.E.: 73848
ACCEPTED: _____	DATE: _____
PLAN NO. 1305-1	



REVISIONS	DATE	APPR.	SCALE
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT			
UTILITY PLAN STA 8+00.00 - 18+00.00			

SHEET 13 OF 24

GENERAL NOTES

1. SEE ELECTRICAL PLANS FOR EXISTING AND NEW LIGHTING.
2. SEE DRAINAGE PLANS FOR STORM DRAIN SYSTEM.
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CONSTRUCTION NOTES

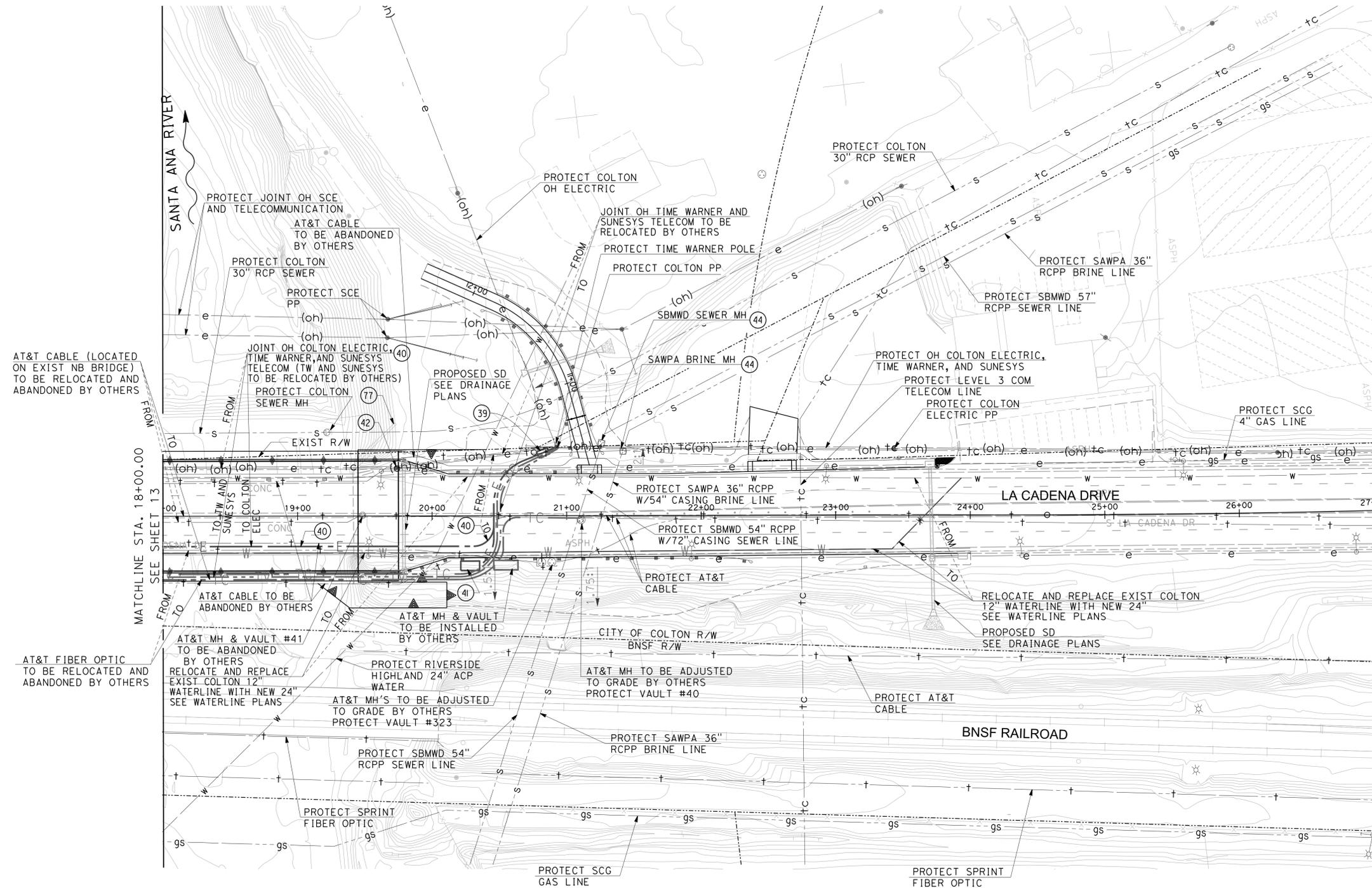
39. INSTALL COLTON 5'X8.5' ELECTRIC PULL BOX
40. RELOCATE COLTON OH ELECTRIC 4 - 5" CONDUITS TO BRIDGE CELL AND UNDERGROUND
41. INSTALL COLTON 9'X14' ELECTRIC VAULT WITH APPURTENANCES
42. REMOVE COLTON POWER POLE
44. ADJUST MANHOLE TO FINISH GRADE
77. REMOVE INTERFERING PORTION OF ABANDONED WATERLINE

ABBREVIATIONS:

AT&T - AMERICAN TELEPHONE AND TELEGRAPH
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AT&T CABLE (LOCATED ON EXIST NB BRIDGE) TO BE RELOCATED AND ABANDONED BY OTHERS

AT&T FIBER OPTIC TO BE RELOCATED AND ABANDONED BY OTHERS

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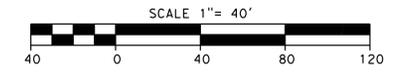
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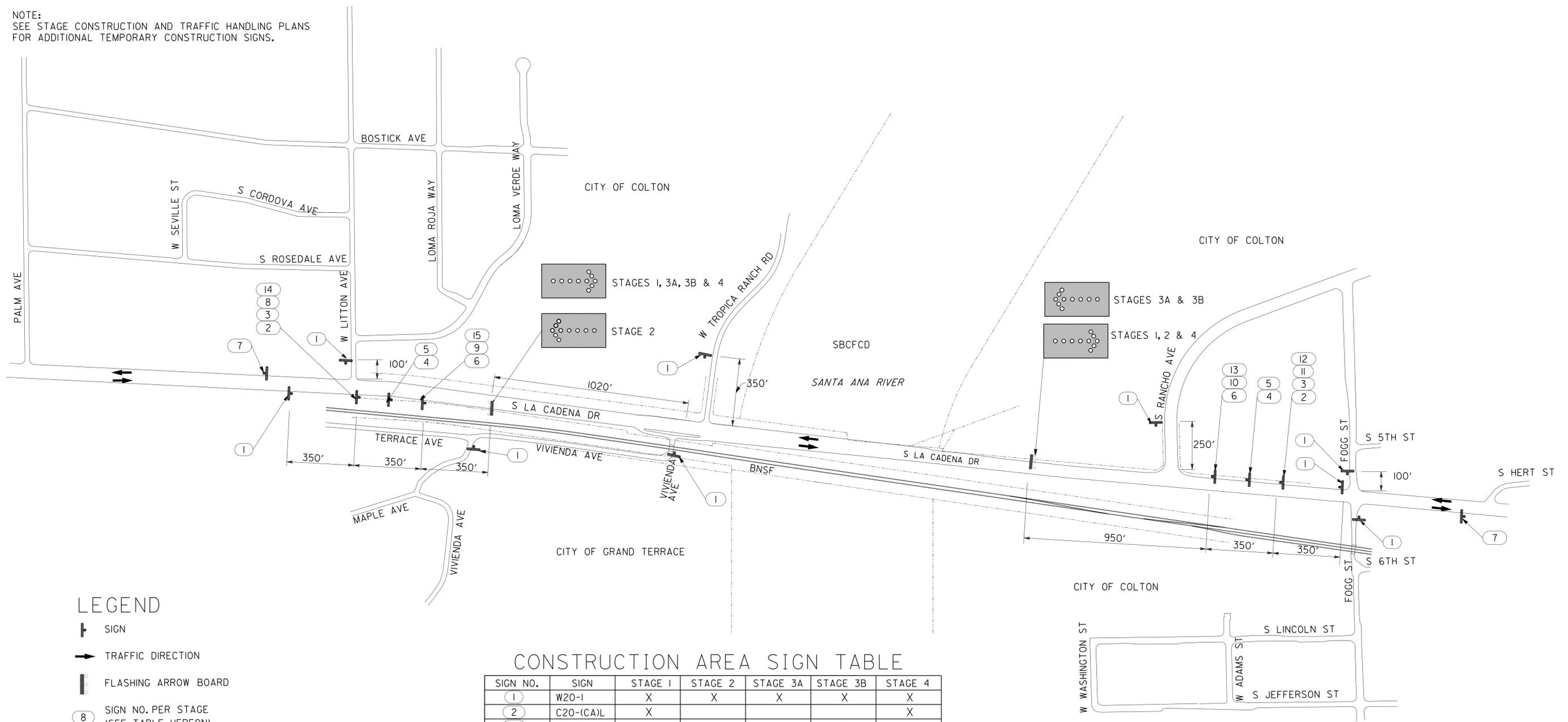


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NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848	EXPIRES: 06/30/17	DATE: _____	
ACCEPTED: _____	DATE: _____	PLAN NO. 1305-1	
REVISIONS		DATE	APPR.
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT		SCALE	
STREET IMPROVEMENT PLANS		DATE: 03-08-17	
UTILITY PLAN STA 18+00.00 - 26+00.00		SHEET 14 OF 24	

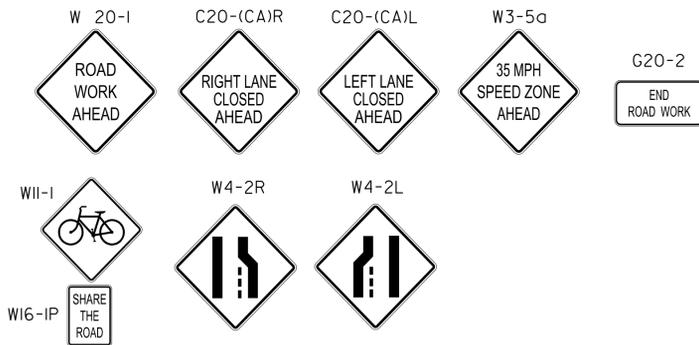


NOTE:
SEE STAGE CONSTRUCTION AND TRAFFIC HANDLING PLANS
FOR ADDITIONAL TEMPORARY CONSTRUCTION SIGNS.



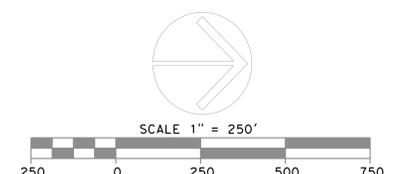
LEGEND

- SIGN
- TRAFFIC DIRECTION
- FLASHING ARROW BOARD
- SIGN NO. PER STAGE
(SEE TABLE HEREON)



CONSTRUCTION AREA SIGN TABLE

SIGN NO.	SIGN	STAGE 1	STAGE 2	STAGE 3A	STAGE 3B	STAGE 4
1	W20-1	X	X	X	X	X
2	C20-(CA)L	X				X
3	W3-5a	X	X	X	X	X
4	W11-1	X	X	X	X	X
5	W16-1P	X	X	X	X	X
6	W4-2L	X				X
7	G20-2	X	X	X	X	X
8	C20-(CA)R		X			
9	W4-2R		X			
10	W4-2L		X			
11	C20-(CA)L		X			
12	C20-(CA)R			X	X	
13	W4-2R			X	X	
14	C20-(CA)L			X	X	
15	W4-2L			X	X	



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PLAN NO. 1305-1

REVISIONS	DATE	APPR.
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT STREET IMPROVEMENT PLANS CONSTRUCTION AREA SIGN PLAN		

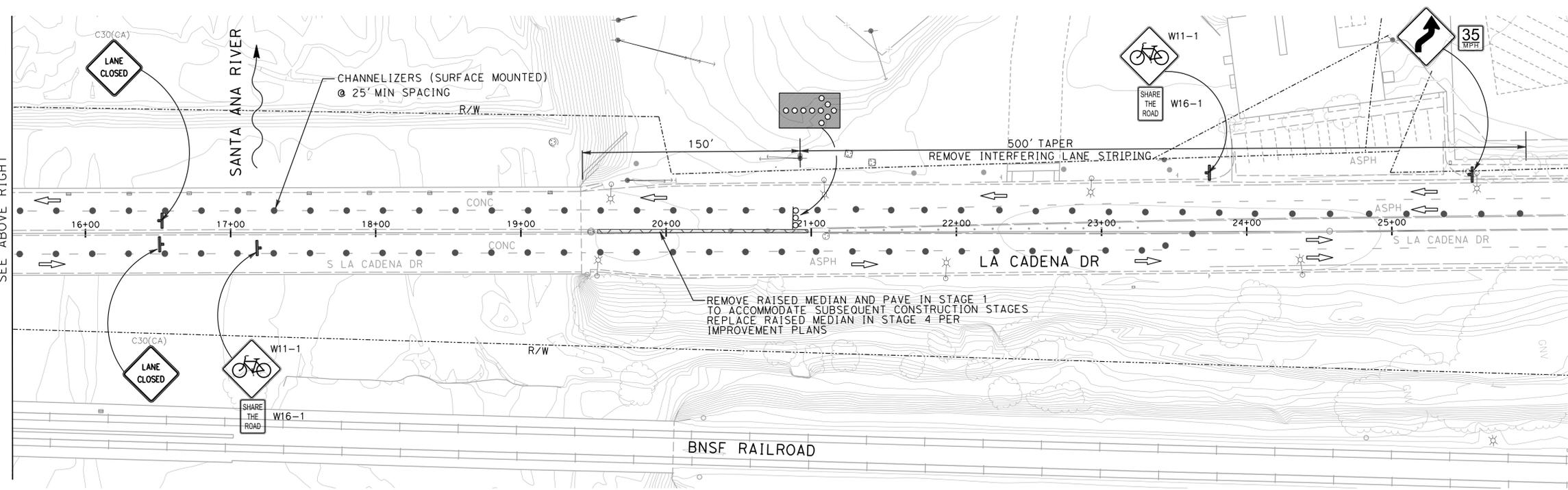
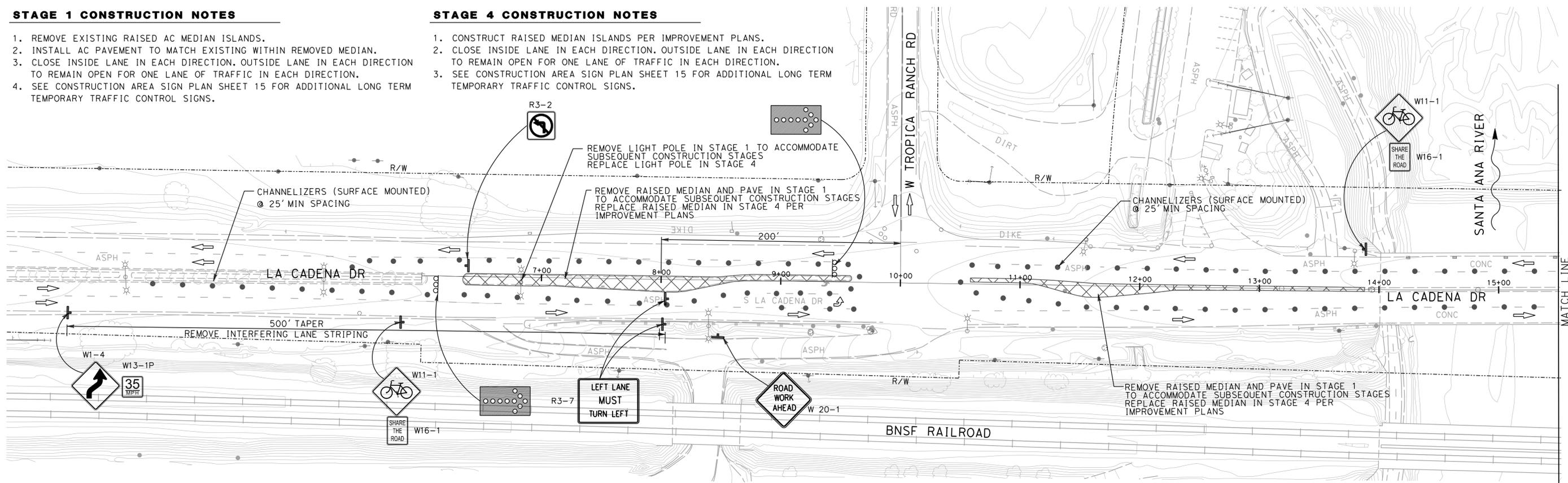
DATE: 03-08-17
SHEET 15 OF 24

STAGE 1 CONSTRUCTION NOTES

1. REMOVE EXISTING RAISED AC MEDIAN ISLANDS.
2. INSTALL AC PAVEMENT TO MATCH EXISTING WITHIN REMOVED MEDIAN.
3. CLOSE INSIDE LANE IN EACH DIRECTION. OUTSIDE LANE IN EACH DIRECTION TO REMAIN OPEN FOR ONE LANE OF TRAFFIC IN EACH DIRECTION.
4. SEE CONSTRUCTION AREA SIGN PLAN SHEET 15 FOR ADDITIONAL LONG TERM TEMPORARY TRAFFIC CONTROL SIGNS.

STAGE 4 CONSTRUCTION NOTES

1. CONSTRUCT RAISED MEDIAN ISLANDS PER IMPROVEMENT PLANS.
2. CLOSE INSIDE LANE IN EACH DIRECTION. OUTSIDE LANE IN EACH DIRECTION TO REMAIN OPEN FOR ONE LANE OF TRAFFIC IN EACH DIRECTION.
3. SEE CONSTRUCTION AREA SIGN PLAN SHEET 15 FOR ADDITIONAL LONG TERM TEMPORARY TRAFFIC CONTROL SIGNS.



LEGEND

- STAGE CONSTRUCTION AREA
- CONSTRUCTION LAY DOWN AREA AND CONSTRUCTION ACCESS RAMP TO CHANNEL
- REMOVALS
- DIRECTION OF TRAFFIC
- TEMPORARY RAILING, TYPE K
- CHANNELIZING DEVICE
- TEMPORARY CRASH CUSHION
- TYPE 3 BARRICADE
- SIGN
- FLASHING ARROW BOARD

SCALE 1" = 40'

NOTE CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION

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BENCHMARK

CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)

A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A AT&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER



PREPARED BY:
JACOBS
3257 E. GUASTI ROAD
SUITE 120
ONTARIO, CA 91761

CITY OF COLTON
PUBLIC WORKS DEPARTMENT

CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848
EXPIRES: 06/30/17

ACCEPTED: _____ DATE: _____
PLAN NO. 1305-1

REVISIONS	DATE	APPR.

SCALE

HORIZ: _____
VERT: _____
DATE: 03-08-17

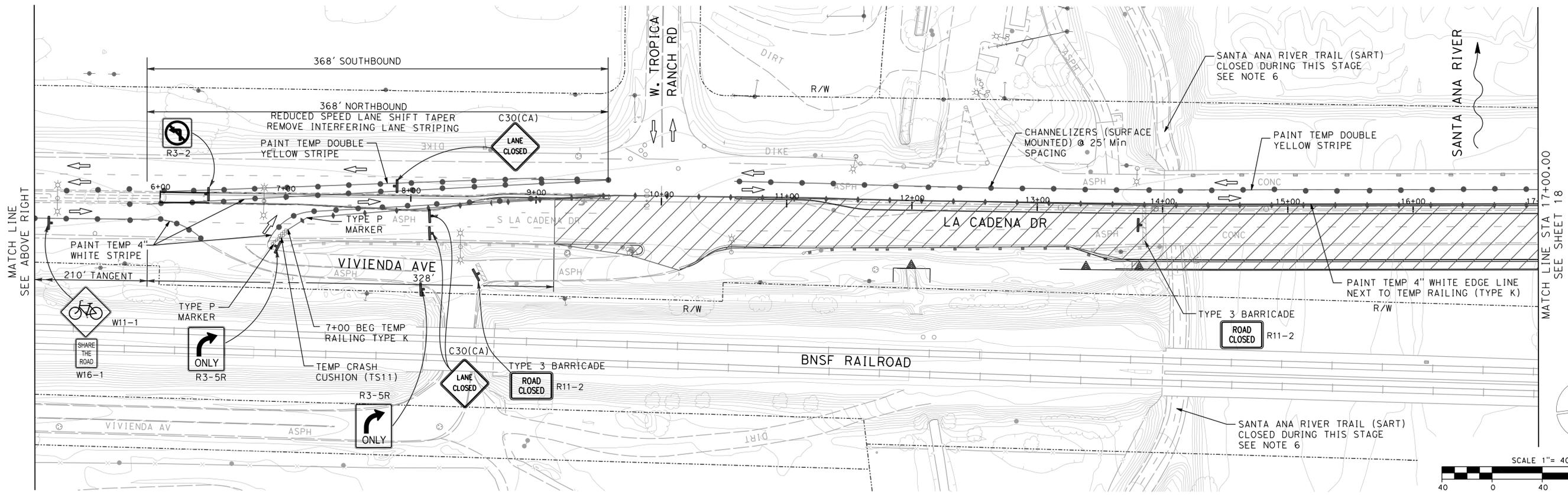
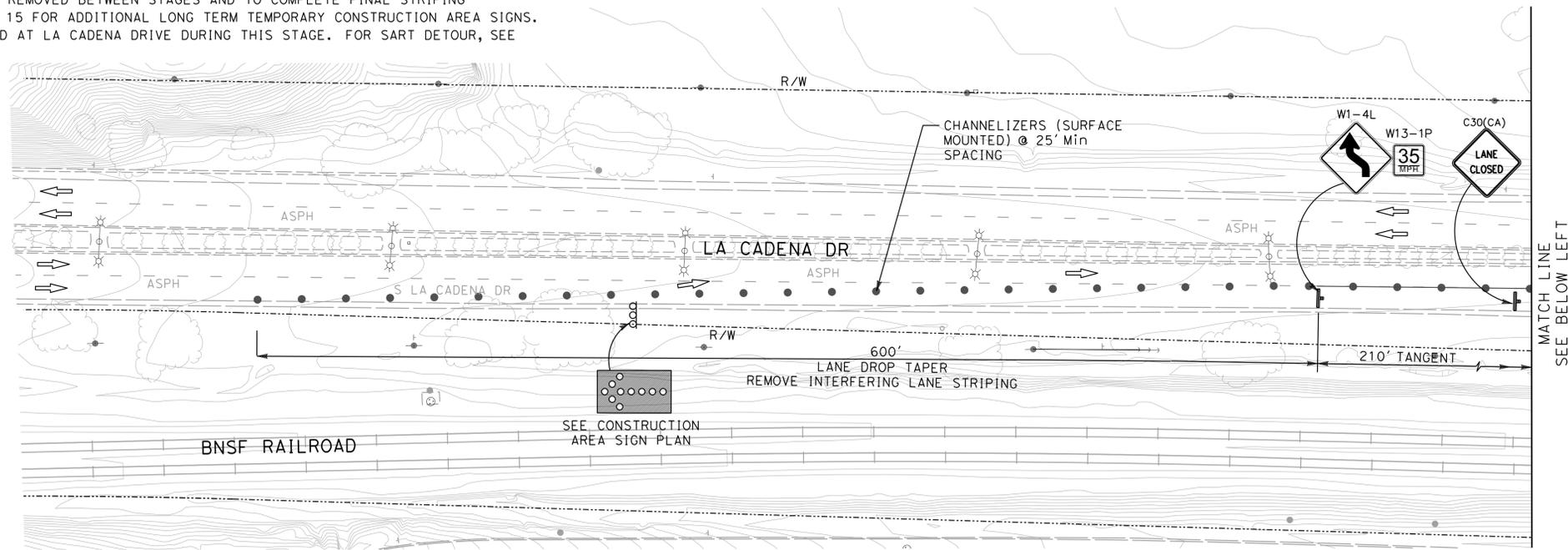
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT STREET IMPROVEMENT PLANS

STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN STAGE 1 AND STAGE 4

SHEET 16 OF 24

STAGE 2 CONSTRUCTION NOTES

1. SHIFT TWO-WAY TRAFFIC TO WEST SIDE OF LA CADENA DRIVE OVER BRIDGE WITH ONE LANE IN EACH DIRECTION
2. UTILIZE CONSTRUCTION LAY DOWN AREA AND CONSTRUCTION ACCESS TO CHANNEL FOR BRIDGE CONSTRUCTION AND CHANNEL IMPROVEMENT CONSTRUCTION IN NORTHWEST QUADRANT OF LA CADENA DR BRIDGE AND SANTA ANA RIVER CROSSING
3. CONSTRUCT ROADWAY IMPROVEMENTS AND NEW BRIDGE FOR THE EAST SIDE OF LA CADENA DR.
4. TEMPORARY INTERFERING STRIPING WILL BE REMOVED BETWEEN STAGES AND TO COMPLETE FINAL STRIPING
5. SEE CONSTRUCTION AREA SIGN PLAN SHEET 15 FOR ADDITIONAL LONG TERM TEMPORARY CONSTRUCTION AREA SIGNS.
6. THE SANTA ANA RIVER TRAIL (SART) CLOSED AT LA CADENA DRIVE DURING THIS STAGE. FOR SART DETOUR, SEE SART DETOUR PLAN SHEET 22



NOTE CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION

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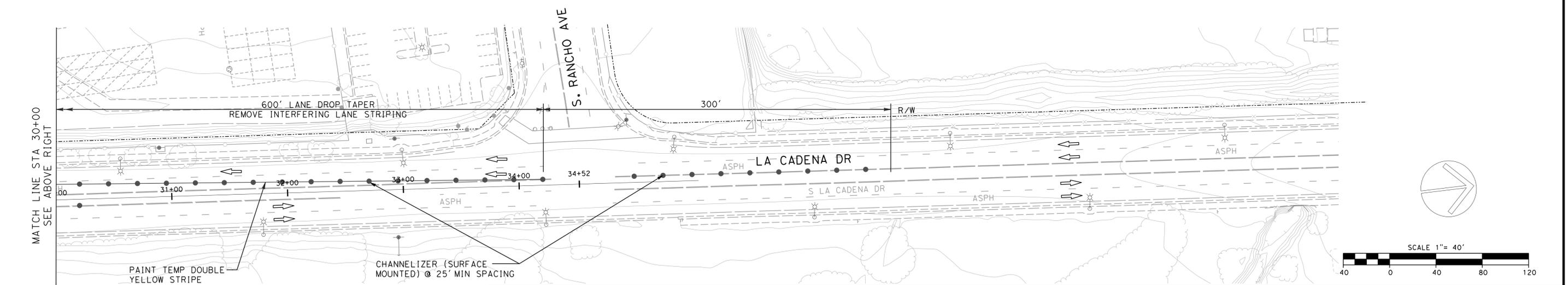
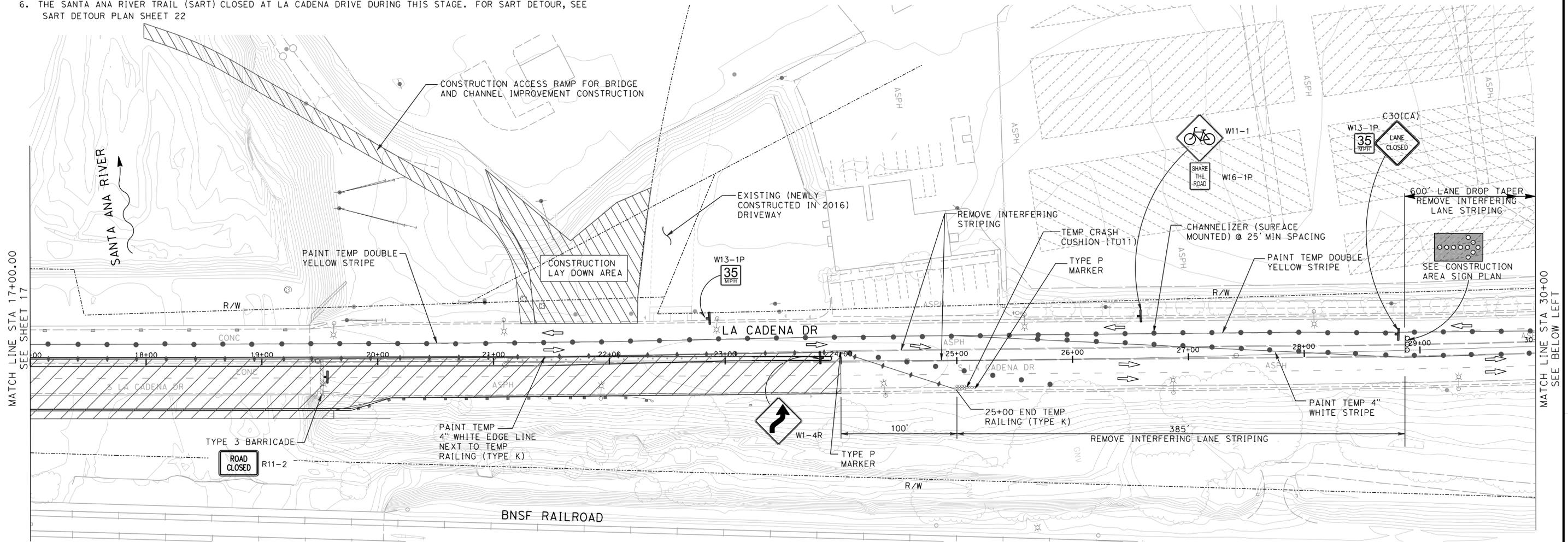
CITY OF COLTON
PUBLIC WORKS DEPARTMENT
CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 7384B EXPIRES: 06/30/17
ACCEPTED: DATE:
PLAN NO. 1305-1

REVISIONS	DATE	APPR.	SCALE
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT STREET IMPROVEMENT PLANS STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN STAGE 2	03-08-17		

SHEET 17 OF 24

STAGE 2 CONSTRUCTION NOTES

1. SHIFT TWO-WAY TRAFFIC TO WEST SIDE OF LA CADENA DRIVE OVER BRIDGE WITH ONE LANE IN EACH DIRECTION
2. UTILIZE CONSTRUCTION LAY DOWN AREA AND CONSTRUCTION ACCESS TO CHANNEL FOR BRIDGE CONSTRUCTION AND CHANNEL IMPROVEMENT CONSTRUCTION IN NORTHWEST QUADRANT OF LA CADENA DR BRIDGE AND SANTA ANA RIVER CROSSING
3. CONSTRUCT ROADWAY IMPROVEMENTS AND NEW BRIDGE FOR THE EAST SIDE OF LA CADENA DR.
4. TEMPORARY INTERFERING STRIPING WILL BE REMOVED BETWEEN STAGES AND TO COMPLETE FINAL STRIPING
5. SEE CONSTRUCTION AREA SIGN PLAN SHEET 15 FOR ADDITIONAL LONG TERM TEMPORARY CONSTRUCTION AREA SIGNS.
6. THE SANTA ANA RIVER TRAIL (SART) CLOSED AT LA CADENA DRIVE DURING THIS STAGE. FOR SART DETOUR, SEE SART DETOUR PLAN SHEET 22



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PREPARED BY:
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 ONTARIO, CA 91761

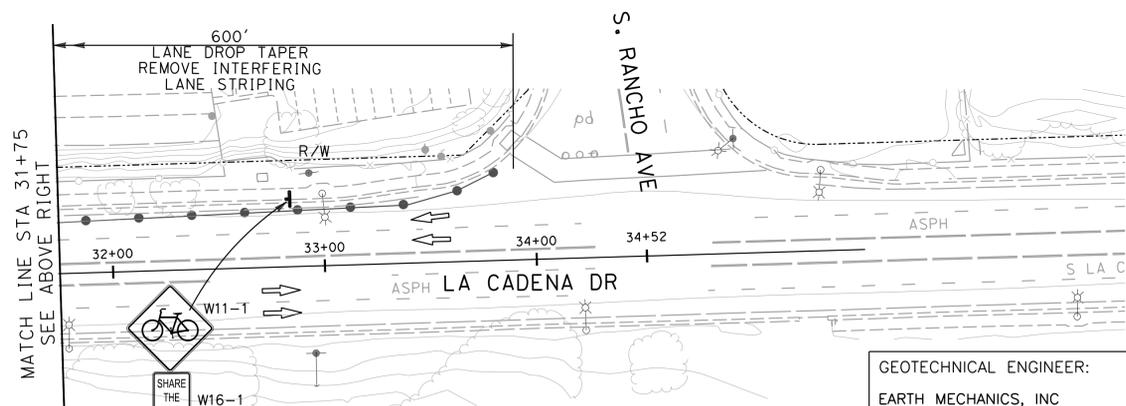
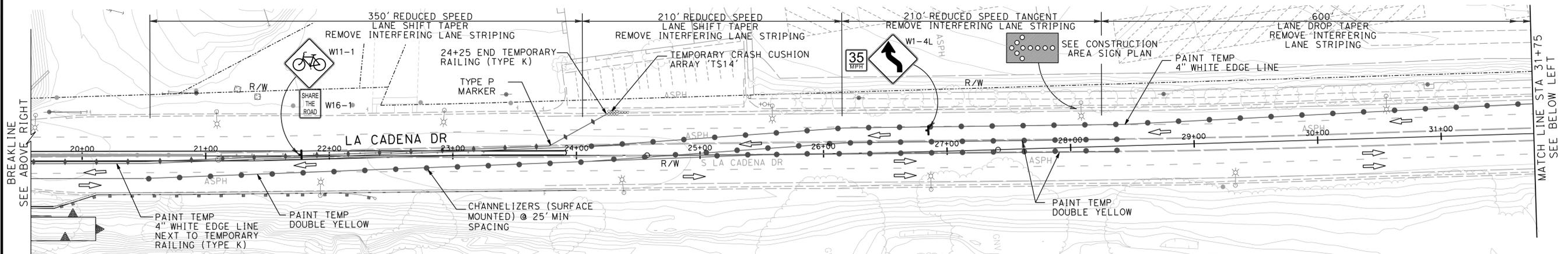
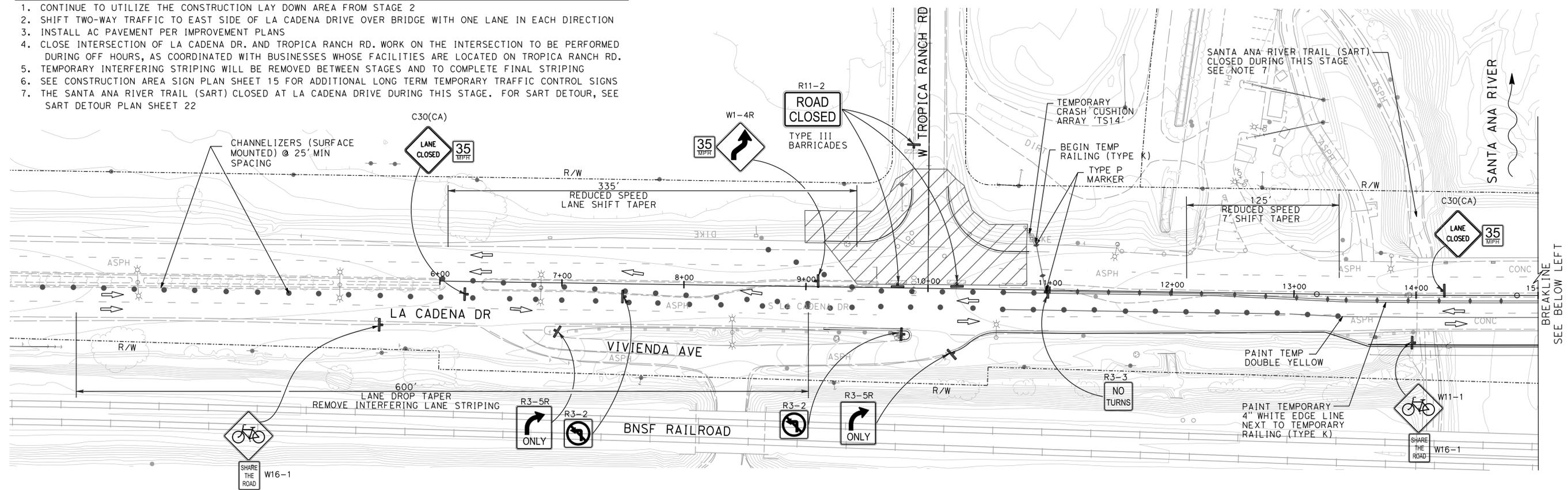
CITY OF COLTON
 PUBLIC WORKS DEPARTMENT
 CITY ENGINEER
 NAME: VICTOR ORTIZ, P.E. EXPIRES: 06/30/17
 R.C.E.: 73848
 ACCEPTED: DATE:
 PLAN NO. 1305-1

REVISIONS	DATE	APPR.	SCALE
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT STREET IMPROVEMENT PLANS STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN STAGE 2	03-08-17		

SHEET 18 OF 24

STAGE 3A CONSTRUCTION NOTES

1. CONTINUE TO UTILIZE THE CONSTRUCTION LAY DOWN AREA FROM STAGE 2
2. SHIFT TWO-WAY TRAFFIC TO EAST SIDE OF LA CADENA DRIVE OVER BRIDGE WITH ONE LANE IN EACH DIRECTION
3. INSTALL AC PAVEMENT PER IMPROVEMENT PLANS
4. CLOSE INTERSECTION OF LA CADENA DR. AND TROPICA RANCH RD. WORK ON THE INTERSECTION TO BE PERFORMED DURING OFF HOURS, AS COORDINATED WITH BUSINESSES WHOSE FACILITIES ARE LOCATED ON TROPICA RANCH RD.
5. TEMPORARY INTERFERING STRIPING WILL BE REMOVED BETWEEN STAGES AND TO COMPLETE FINAL STRIPING
6. SEE CONSTRUCTION AREA SIGN PLAN SHEET 15 FOR ADDITIONAL LONG TERM TEMPORARY TRAFFIC CONTROL SIGNS
7. THE SANTA ANA RIVER TRAIL (SART) CLOSED AT LA CADENA DRIVE DURING THIS STAGE. FOR SART DETOUR, SEE SART DETOUR PLAN SHEET 22



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CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)
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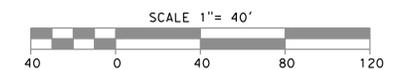


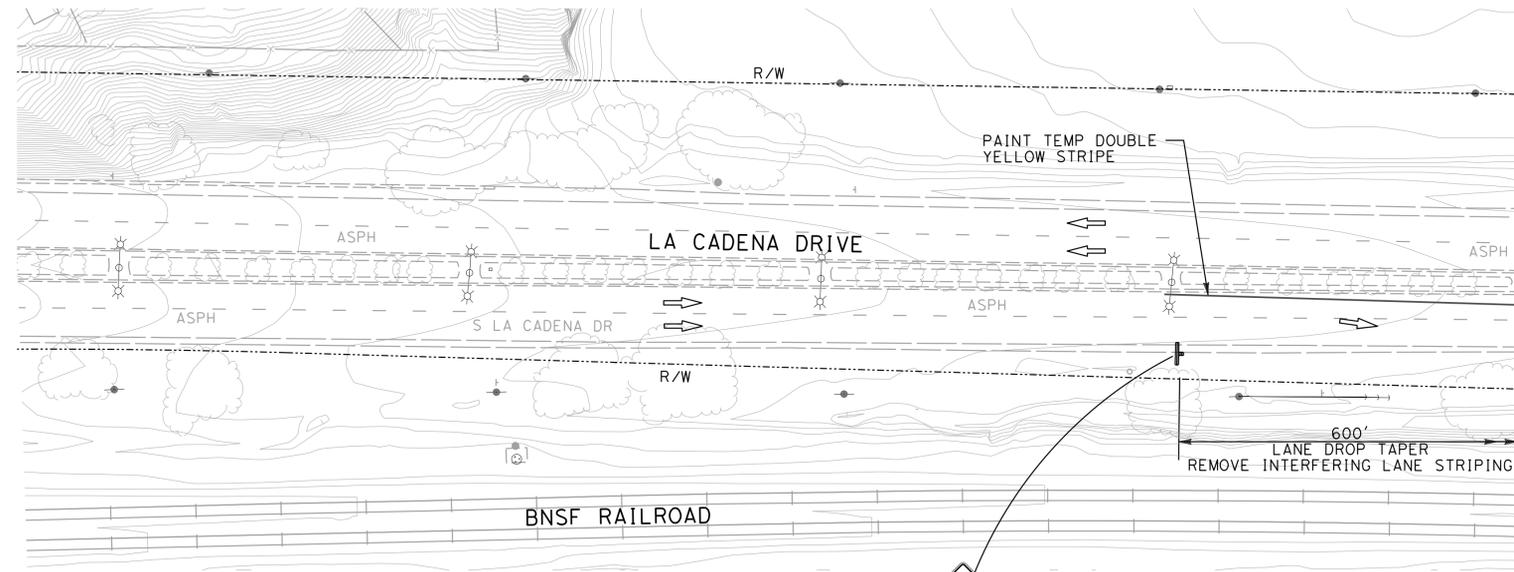
PREPARED BY:
JACOBS
3257 E. GUASTI ROAD
SUITE 120
ONTARIO, CA 91761

CITY OF COLTON
PUBLIC WORKS DEPARTMENT
CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848
EXPIRES: 06/30/17
ACCEPTED: _____ DATE: _____
PLAN NO. 1305-1

REVISIONS	DATE	APPR.	SCALE
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT STREET IMPROVEMENT PLANS STAGE 3A			
STAGE 3A			

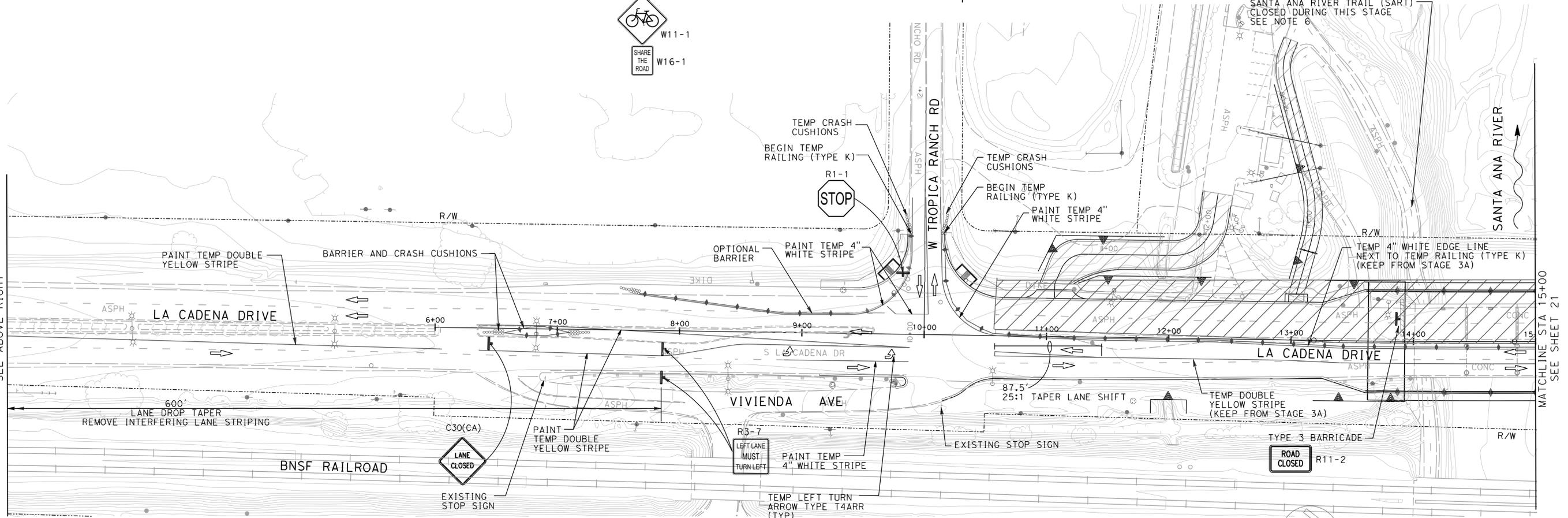
SHEET 19 OF 24





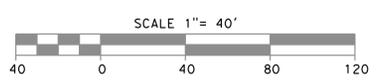
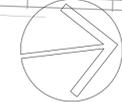
STAGE 3B CONSTRUCTION NOTES

1. CONTINUE TO UTILIZE THE CONSTRUCTION LAY DOWN AREA AND CHANNEL ACCESS RAMP FROM STAGE 2
2. MAINTAIN TWO-WAY TRAFFIC FROM STAGE 3A ON EAST SIDE OF LA CADENA DRIVE OVER BRIDGE WITH ONE LANE IN EACH DIRECTION
3. CONSTRUCT CHANNEL IMPROVEMENTS, ROADWAY IMPROVEMENTS AND NEW BRIDGE FOR THE WEST SIDE OF LA CADENA DR.
4. TEMPORARY INTERFERING STRIPING WILL BE REMOVED BETWEEN STAGES AND TO COMPLETE FINAL STRIPING.
5. SEE CONSTRUCTION AREA SIGN PLAN SHEET 15 FOR ADDITIONAL LONG TERM TEMPORARY CONSTRUCTION AREA SIGNS.
6. THE SANTA ANA RIVER TRAIL (SART) CLOSED AT LA CADENA DRIVE DURING THIS STAGE. FOR SART DETOUR, SEE SART DETOUR PLAN SHEET 22



MATCHLINE SEE ABOVE RIGHT

MATCHLINE STA 15+00 SEE SHEET 21



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PREPARED BY:
JACOBS
3257 E. GUASTI ROAD
SUITE 120
ONTARIO, CA 91761

CITY OF COLTON
PUBLIC WORKS DEPARTMENT

CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848 EXPIRES: 06/30/17
ACCEPTED: _____ DATE: _____

PLAN NO. 1305-1

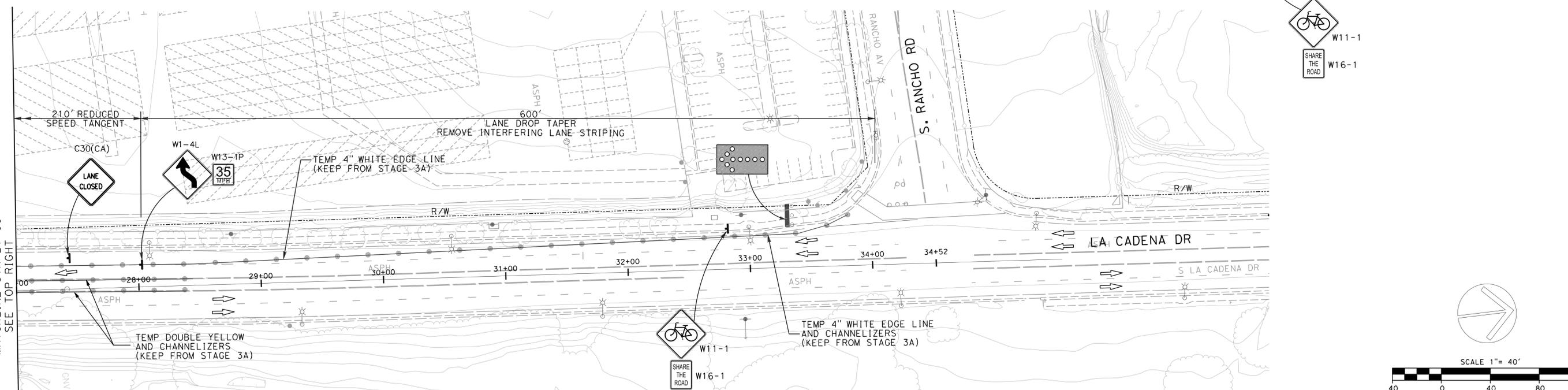
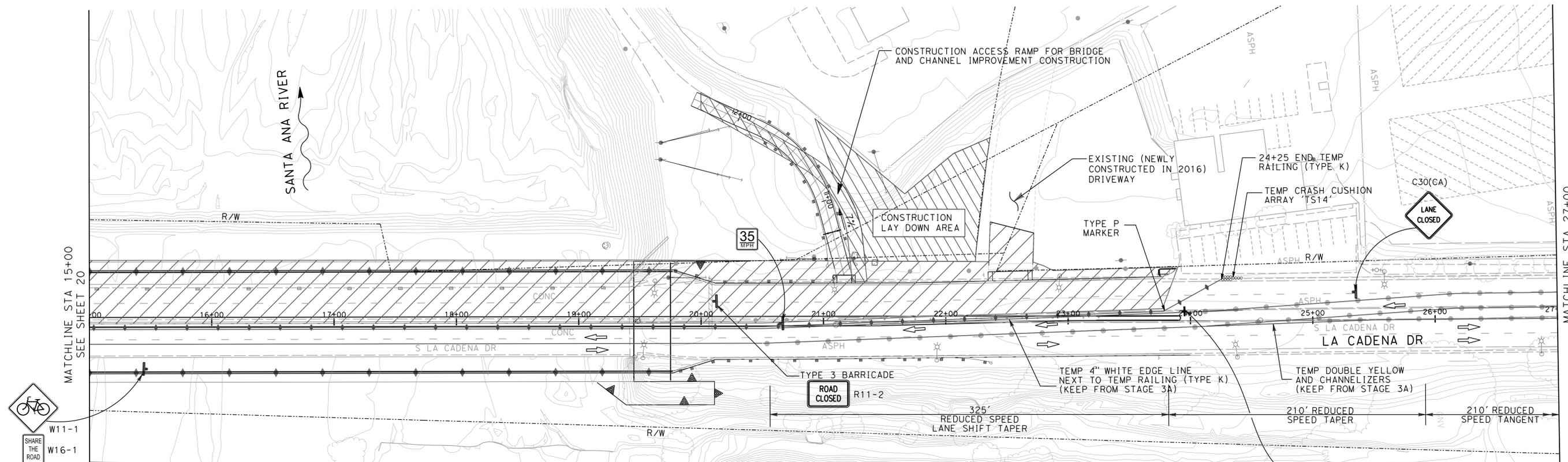
REVISIONS	DATE	APPR.

LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT STREET IMPROVEMENT PLANS STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN STAGE 3B

DATE: 03-08-17
SHEET 20 OF 24

STAGE 3B CONSTRUCTION NOTES

1. CONTINUE TO UTILIZE CONSTRUCTION LAY DOWN AREA AND CHANNEL ACCESS RAMP FROM STAGE 2
2. MAINTAIN TWO-WAY TRAFFIC FROM STAGE 3A ON EAST SIDE OF LA CADENA DRIVE OVER BRIDGE WITH ONE LANE IN EACH DIRECTION
3. CONSTRUCT CHANNEL IMPROVEMENTS, ROADWAY IMPROVEMENTS AND NEW BRIDGE FOR THE WEST SIDE OF LA CADENA DR.
4. TEMPORARY INTERFERING STRIPING WILL BE REMOVED BETWEEN STAGES AND TO COMPLETE FINAL STRIPING.
5. SEE CONSTRUCTION AREA SIGN PLAN SHEET 15 FOR ADDITIONAL LONG TERM TEMPORARY CONSTRUCTION AREA SIGNS.
6. THE SANTA ANA RIVER TRAIL (SART) CLOSED AT LA CADENA DRIVE DURING THIS STAGE. FOR SART DETOUR, SEE SART DETOUR PLAN SHEET 22



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A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A A18&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER

PREPARED BY:
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ONTARIO, CA 91761

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PUBLIC WORKS DEPARTMENT

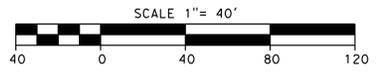
CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848
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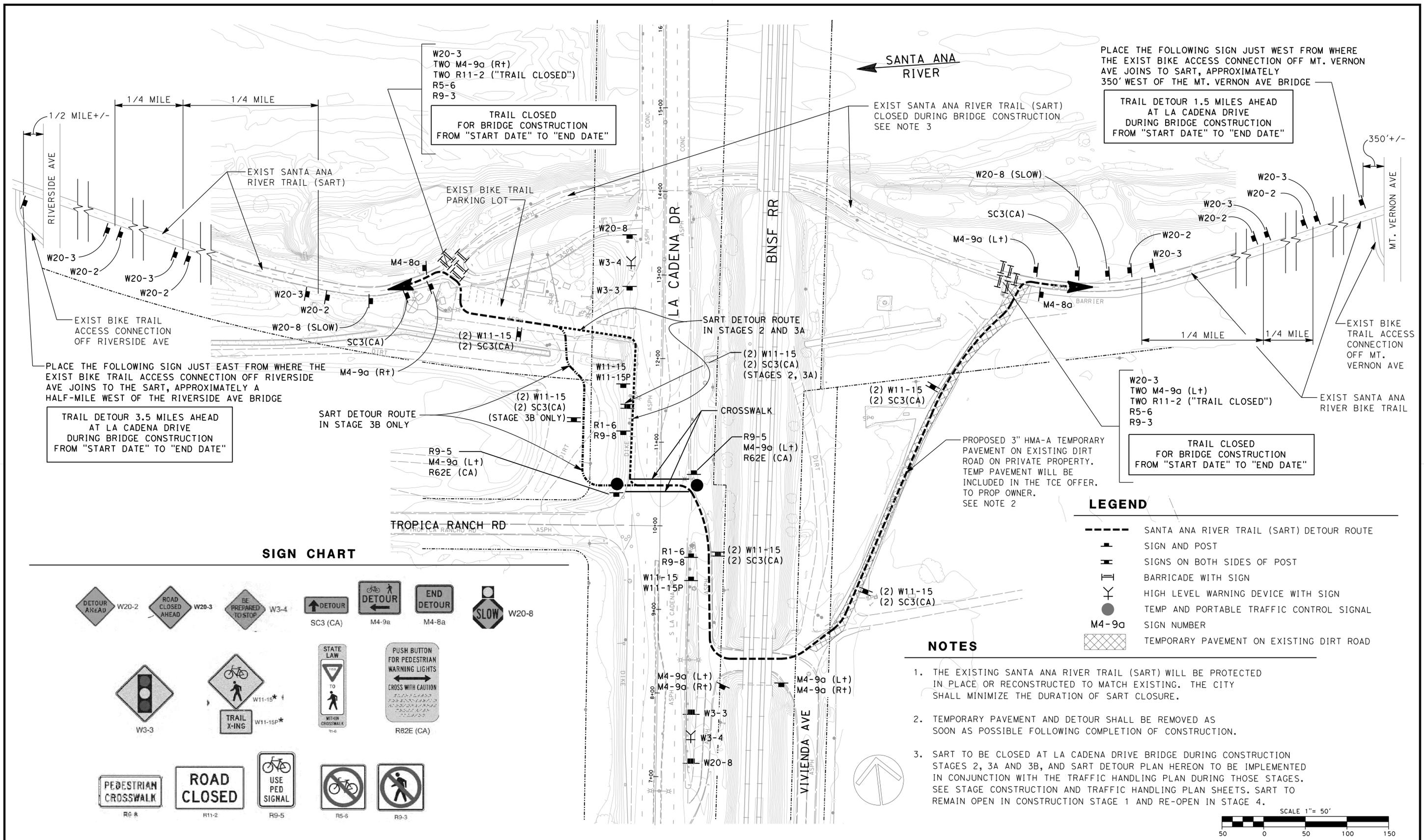
EXPIRES: 06/30/17

PLAN NO. 1305-1

REVISIONS	DATE	APPR.	SCALE
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT STREET IMPROVEMENT PLANS STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN STAGE 3B	03-08-17		

SHEET 21 OF 24





PLACE THE FOLLOWING SIGN JUST WEST FROM WHERE THE EXIST BIKE ACCESS CONNECTION OFF MT. VERNON AVE JOINS TO SART, APPROXIMATELY 350' WEST OF THE MT. VERNON AVE BRIDGE

TRAIL DETOUR 1.5 MILES AHEAD AT LA CADENA DRIVE DURING BRIDGE CONSTRUCTION FROM "START DATE" TO "END DATE"

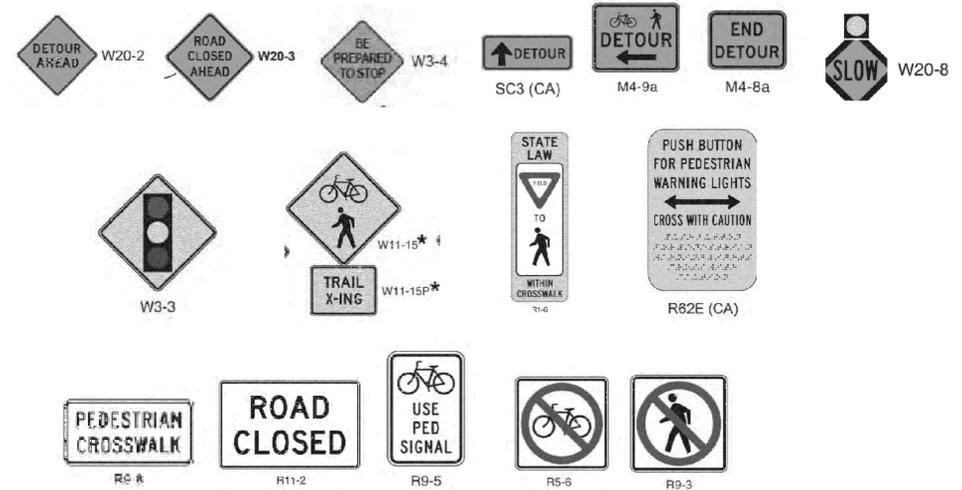
PLACE THE FOLLOWING SIGN JUST EAST FROM WHERE THE EXIST BIKE TRAIL ACCESS CONNECTION OFF RIVERSIDE AVE JOINS TO THE SART, APPROXIMATELY A HALF-MILE WEST OF THE RIVERSIDE AVE BRIDGE

TRAIL DETOUR 3.5 MILES AHEAD AT LA CADENA DRIVE DURING BRIDGE CONSTRUCTION FROM "START DATE" TO "END DATE"

TRAIL CLOSED FOR BRIDGE CONSTRUCTION FROM "START DATE" TO "END DATE"

TRAIL CLOSED FOR BRIDGE CONSTRUCTION FROM "START DATE" TO "END DATE"

SIGN CHART

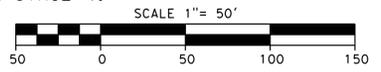


LEGEND

- SANTA ANA RIVER TRAIL (SART) DETOUR ROUTE
- SIGN AND POST
- SIGNS ON BOTH SIDES OF POST
- BARRICADE WITH SIGN
- HIGH LEVEL WARNING DEVICE WITH SIGN
- TEMP AND PORTABLE TRAFFIC CONTROL SIGNAL
- SIGN NUMBER
- TEMPORARY PAVEMENT ON EXISTING DIRT ROAD

NOTES

1. THE EXISTING SANTA ANA RIVER TRAIL (SART) WILL BE PROTECTED IN PLACE OR RECONSTRUCTED TO MATCH EXISTING. THE CITY SHALL MINIMIZE THE DURATION OF SART CLOSURE.
2. TEMPORARY PAVEMENT AND DETOUR SHALL BE REMOVED AS SOON AS POSSIBLE FOLLOWING COMPLETION OF CONSTRUCTION.
3. SART TO BE CLOSED AT LA CADENA DRIVE BRIDGE DURING CONSTRUCTION STAGES 2, 3A AND 3B, AND SART DETOUR PLAN HEREON TO BE IMPLEMENTED IN CONJUNCTION WITH THE TRAFFIC HANDLING PLAN DURING THOSE STAGES. SEE STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN SHEETS. SART TO REMAIN OPEN IN CONSTRUCTION STAGE 1 AND RE-OPEN IN STAGE 4.



NOTE CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION

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BENCHMARK
CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)
A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A AT&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER

PREPARED BY:
JACOBS
3257 E. GUASTI ROAD
SUITE 120
ONTARIO, CA 91761

CITY OF COLTON
PUBLIC WORKS DEPARTMENT
CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848
ACCEPTED: _____ DATE: _____
EXP. DATE: 06/30/17
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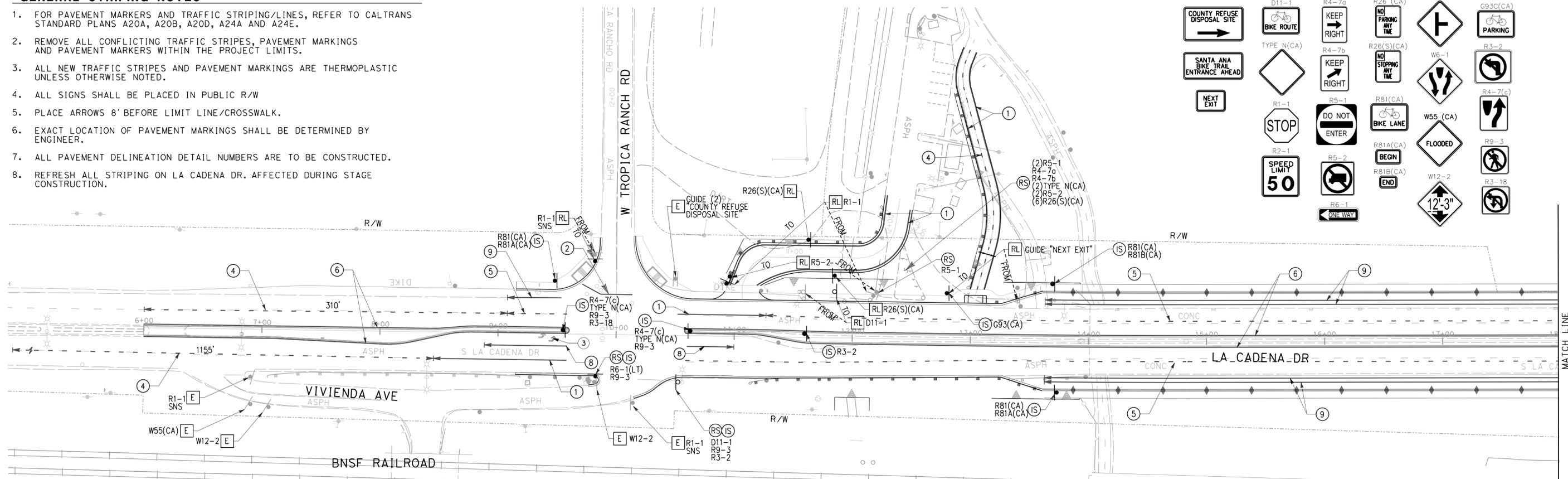
REVISIONS	DATE	APPR.	SCALE
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT			
STREET IMPROVEMENT PLANS			
SANTA ANA RIVER TRAIL DETOUR PLAN			

SHEET 22 OF 24

GENERAL STRIPING NOTES

- FOR PAVEMENT MARKERS AND TRAFFIC STRIPING/LINES, REFER TO CALTRANS STANDARD PLANS A20A, A20B, A20D, A24A AND A24E.
- REMOVE ALL CONFLICTING TRAFFIC STRIPES, PAVEMENT MARKINGS AND PAVEMENT MARKERS WITHIN THE PROJECT LIMITS.
- ALL NEW TRAFFIC STRIPES AND PAVEMENT MARKINGS ARE THERMOPLASTIC UNLESS OTHERWISE NOTED.
- ALL SIGNS SHALL BE PLACED IN PUBLIC R/W
- PLACE ARROWS 8' BEFORE LIMIT LINE/CROSSWALK.
- EXACT LOCATION OF PAVEMENT MARKINGS SHALL BE DETERMINED BY ENGINEER.
- ALL PAVEMENT DELINEATION DETAIL NUMBERS ARE TO BE CONSTRUCTED.
- REFRESH ALL STRIPING ON LA CADENA DR. AFFECTED DURING STAGE CONSTRUCTION.

SIGN LEGEND

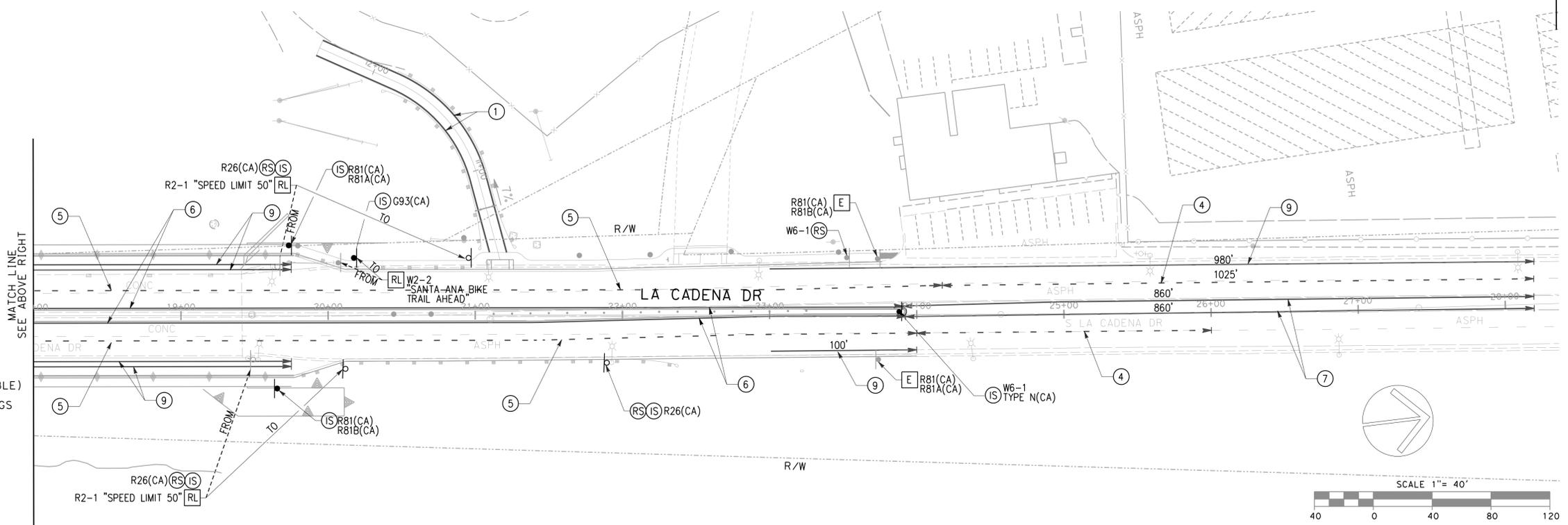


CONSTRUCTION NOTES

- INSTALL 4" SOLID WHITE LINE
- INSTALL 12" SOLID WHITE LINE
- INSTALL TYPE IV (L) WHITE ARROW PAVEMENT MARKING
- INSTALL 4" WHITE LANE LINE PER CALTRANS DETAIL 8
- INSTALL 4" WHITE LANE LINE WITH PAVEMENT MARKERS PER CALTRANS DETAIL 9
- INSTALL TYPE H RETROREFLECTIVE MARKERS PER DETAIL 26
- INSTALL YELLOW TWO-WAY LEFT TURN LANE LINE PER CALTRANS DETAIL 31
- INSTALL 8" WHITE CHANNELIZING LINE PER CALTRANS DETAIL 38
- INSTALL 6" WHITE BIKE LANE LINE PER CALTRANS DETAIL 39

LEGEND

- CHANGE IN PAVEMENT DELINEATION DETAIL
- EXISTING SIGN TO REMAIN
- FURNISH & INSTALL SIGN(S) & POST (IF APPLICABLE)
- REMOVE EXISTING, CONFLICTING PAVEMENT MARKINGS
- REMOVE AND SALVAGE SIGN AND POST AS NOTED
- RELOCATE EXISTING TRAFFIC SIGN
- SNS STREET NAME SIGN
- EXISTING SIGN
- EXISTING SIGN (ON STREET LIGHT)
- PROPOSED SIGN
- PROPOSED SIGN (ON STREET LIGHT)



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EARTH MECHANICS, INC
17800 NEWHOPE STREET, SUITE B
FOUNTAIN VALLEY, CA 92708
PHONE: (714) 751-3826
FAX: (714) 751-3928

Underground Service Alert
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TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)
A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A AT&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER

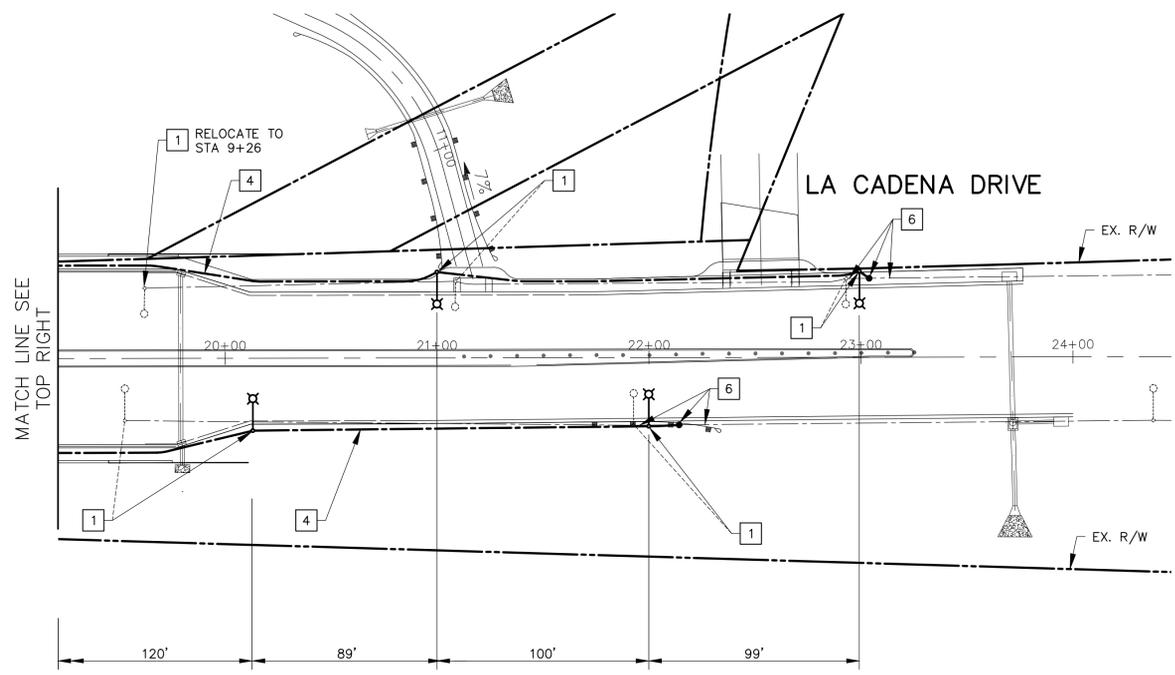
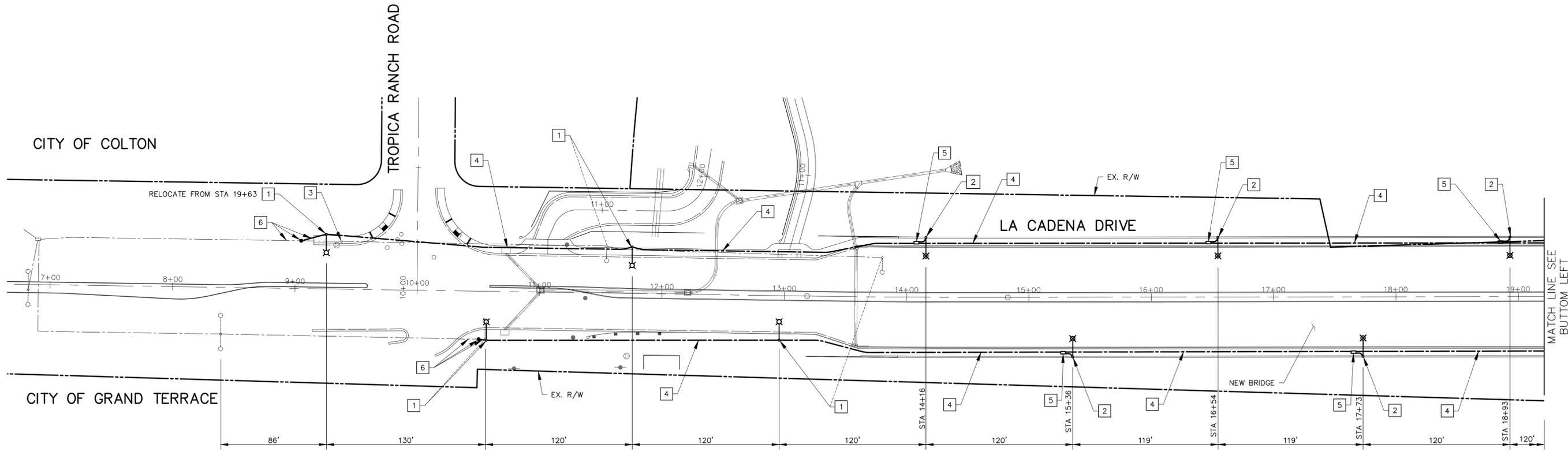


PREPARED BY:
JACOBS
3257 E. GUASTI ROAD
SUITE 120
ONTARIO, CA 91761

CITY OF COLTON
PUBLIC WORKS DEPARTMENT
CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848
EXPIRES: 06/30/17
ACCEPTED: DATE:
PLAN NO. 1305-1

REVISIONS	DATE	APPR.	SCALE
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT STREET IMPROVEMENT PLANS SIGNING AND STRIPING PLAN			

SHEET 23 OF 24



GENERAL NOTES

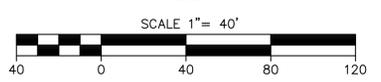
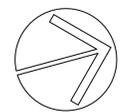
1. ALL STREET LIGHT WORK SHALL CONFORM TO THE CITY OF COLTON ELECTRIC UTILITY DEPARTMENT (CED) CONSTRUCTION STANDARDS AND REQUIREMENTS UNLESS OTHERWISE NOTED. COORDINATE WITH ANNETTA BAKER (909) 370-5144, abaker@ci.colton.ca.us, CED ELECTRIC UTILITY SYSTEMS DESIGNER, WELL IN ADVANCE OF NEED. SECONDARY CONTACT FOR CED IS MARTY RAGELS (909)370-6190 or mragels@coltonca.gov).
2. SEE UTILITY PLANS SHEET FOR APPROXIMATE LOCATION OF ABOVE AND UNDERGROUND FACILITIES IN THE VICINITY OF THE WORK. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY OR INDIRECTLY FROM HIS OPERATIONS, WHETHER OR NOT SUCH FACILITIES ARE SHOWN ON THE PLANS.
3. STREET LIGHT POLES ON BRIDGE SHALL CONFORM TO THE STATE OF CALIFORNIA STANDARDS AND SPECIFICATIONS, LATEST EDITION.
4. LUMINAIRES SHALL BE CREE XSP2 LED STREET/AREA LUMINAIRE - DOUBLE MODULE - VERSION B. OBTAIN ORDER DETAILS FROM CED.
5. ALL EXISTING CONDUIT NOT TO BE REUSED SHALL BE REMOVED OR ABANDONED IN PLACE AND CONDUCTORS REMOVED.

CONSTRUCTION NOTES:

- 1 INSTALL NEW FOUNDATION BASE. COORDINATE WITH CED FOR RELOCATION (BY CED) OF EXISTING STREET LIGHT POLE AND LUMINAIRE TO NEW FOUNDATION BASE. COMPLETELY REMOVE AND DISPOSE OF EXISTING FOUNDATION BASE.
- 2 FURNISH AND INSTALL TYPE 15 STREET LIGHT STANDARD WITH LED LUMINAIRE ON CONCRETE BARRIER RAIL TYPE 732 SW PER CALTRANS STANDARD PLAN ES-6A, ES-6B, AND BRIDGE STANDARD DETAIL SHEET XS16-110.
- 3 COMPLETELY REMOVE AND DISPOSE EXISTING FOUNDATION BASE.
- 4 FURNISH AND INSTALL 2" SCHEDULE 40 PVC CONDUIT WITH PULL TAPE. COORDINATE WITH CED FOR INSTALLATION OF CONDUCTORS.
- 5 FURNISH AND INSTALL 17"x30" SECONDARY PULL BOX.
- 6 COORDINATE WITH CED FOR REMOVAL OF EXISTING CONDUCTORS BACK TO NEAREST STREET LIGHT BASE OR PULL BOX TO REMAIN. FURNISH AND INSTALL CONDUIT (MATCH EXISTING) AND JOIN TO EXISTING CONDUIT. FURNISH AND INSTALL PULL TAPE BACK TO NEAREST STREET LIGHT BASE OR PULL BOX TO REMAIN. COORDINATE WITH CED FOR INSTALLATION OF CONDUCTORS.

LEGEND

- EXISTING STREET LIGHT POLE AND 250W (EQUIVALENT) LED LUMINAIRE.
- ⊗—⊗ STREET LIGHT POLE AND 250W (EQUIVALENT) LED LUMINAIRE TO BE FURNISHED OR RELOCATED BY CED.
- ⊗—⊗ NEW CALTRANS TYPE 15 STREET LIGHT POLE INSTALLED ON BRIDGE BARRIER RAIL.



**PRELIMINARY
NOT FOR CONSTRUCTION**

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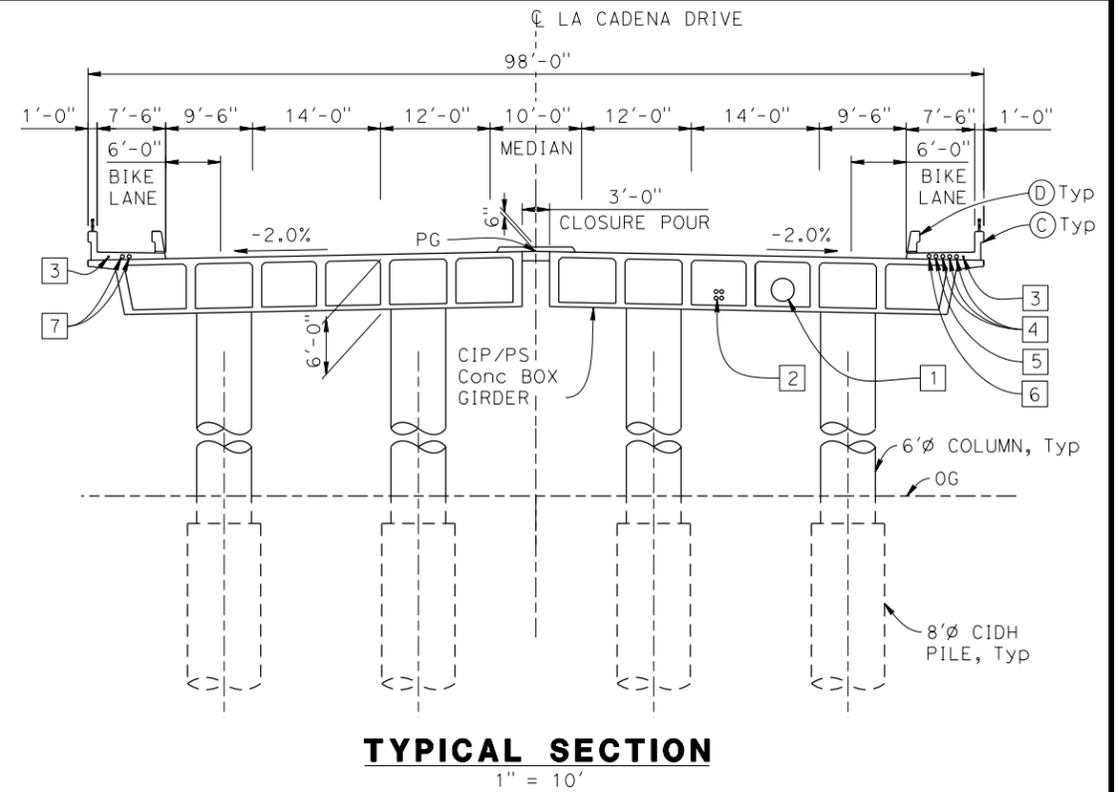
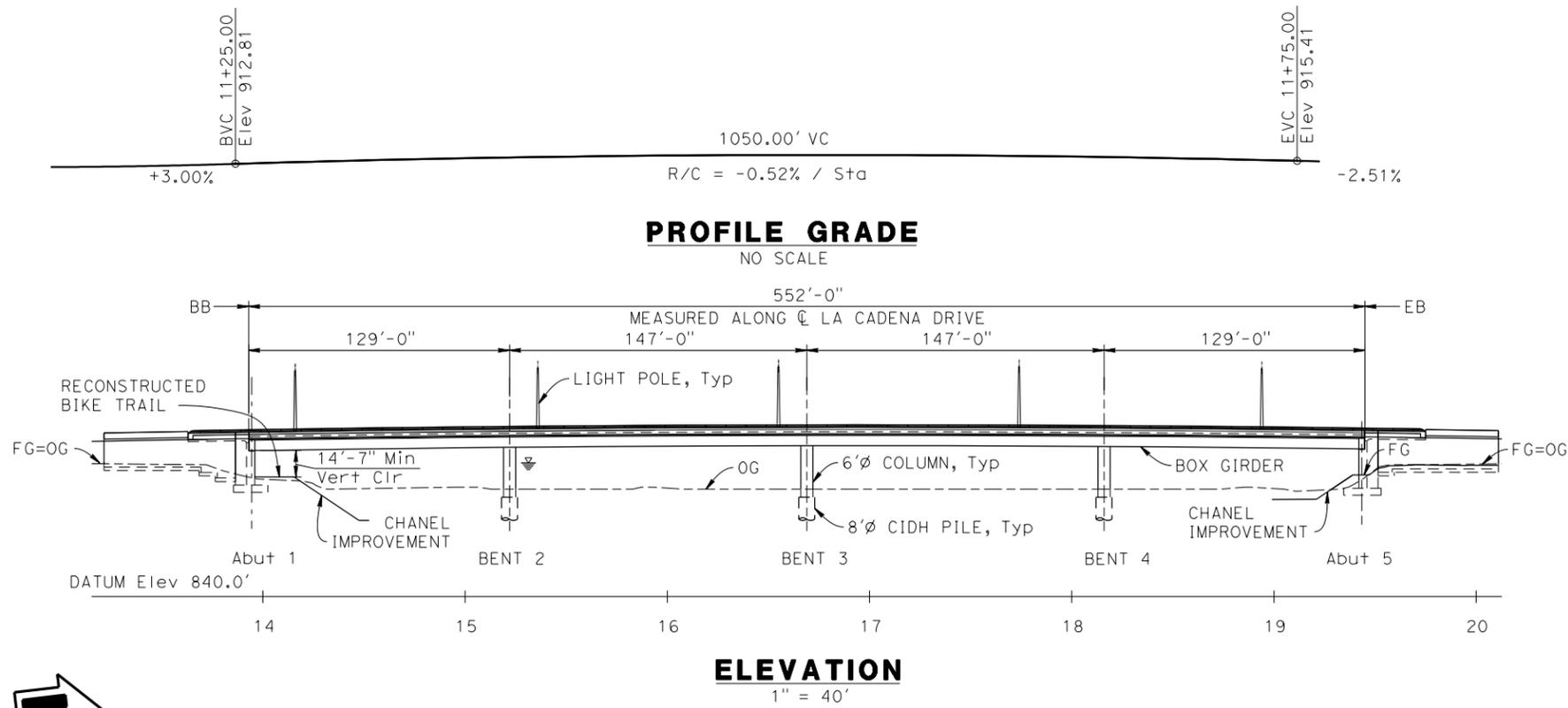
BENCHMARK
 CITY OF COLTON BENCH MARK 703-2
 ELEV = 909.840 FEET (NGVD 29)
 A STANDARD SAN BERNARDINO COUNTY
 SURVEYOR'S BRASS DISC SET IN THE
 TOP OF THE NORTH ABUTMENT
 OF A AT&SF RAILWAY STEEL GIRDER
 BRIDGE CROSSING THE SANTA ANA RIVER

PREPARED BY:
Transportation & Energy Solutions, Inc.
 441 W. SKYLINE DRIVE,
 LA HABRA HEIGHTS, CA 90631
 PHONE: (562) 691-6635 FAX: (562) 694-0688

CITY OF COLTON
 PUBLIC WORKS DEPARTMENT
 CITY ENGINEER
 NAME: VICTOR ORTIZ, P.E. EXPIRES: 06/30/17
 R.C.E.: 73848
 ACCEPTED: _____ DATE: _____
 PLAN NO. #####

REVISIONS	DATE	APPR.
LA CADENA DRIVE BRIDGE REPLACEMENT PROJECT		
STREET LIGHT PLAN LA CADENA DRIVE		
SHEET _ OF _		

Lo Cadena DR - SL(01).dwg - 2:05pm Nov/22/2016



UTILITIES LEGEND:

- 1 CITY OF COLTON (WATER) 24"Ø WATER LINE
- 2 CITY OF COLTON (ELECTRIC) 4-5"Ø CONDUITS
- 3 BRIDGE LIGHTING 1-2"Ø CONDUIT WITHIN NB & SB SIDEWALKS
- 4 AT&T CALIFORNIA 3-4"Ø CONDUITS WITHIN SB SIDEWALK (BY OTHERS) AT&T TRANSMISSION (LESSEE)
- 5 TIME WARNER CABLE 3"Ø CONDUITS WITHIN NB SIDEWALK (BY OTHERS)
- 6 SUNESYS CABLE 4"Ø CONDUITS WITHIN NB SIDEWALK (BY OTHERS)
- 7 2-4"Ø CONDUITS FOR FUTURE UTILITY

KEY NOTES:

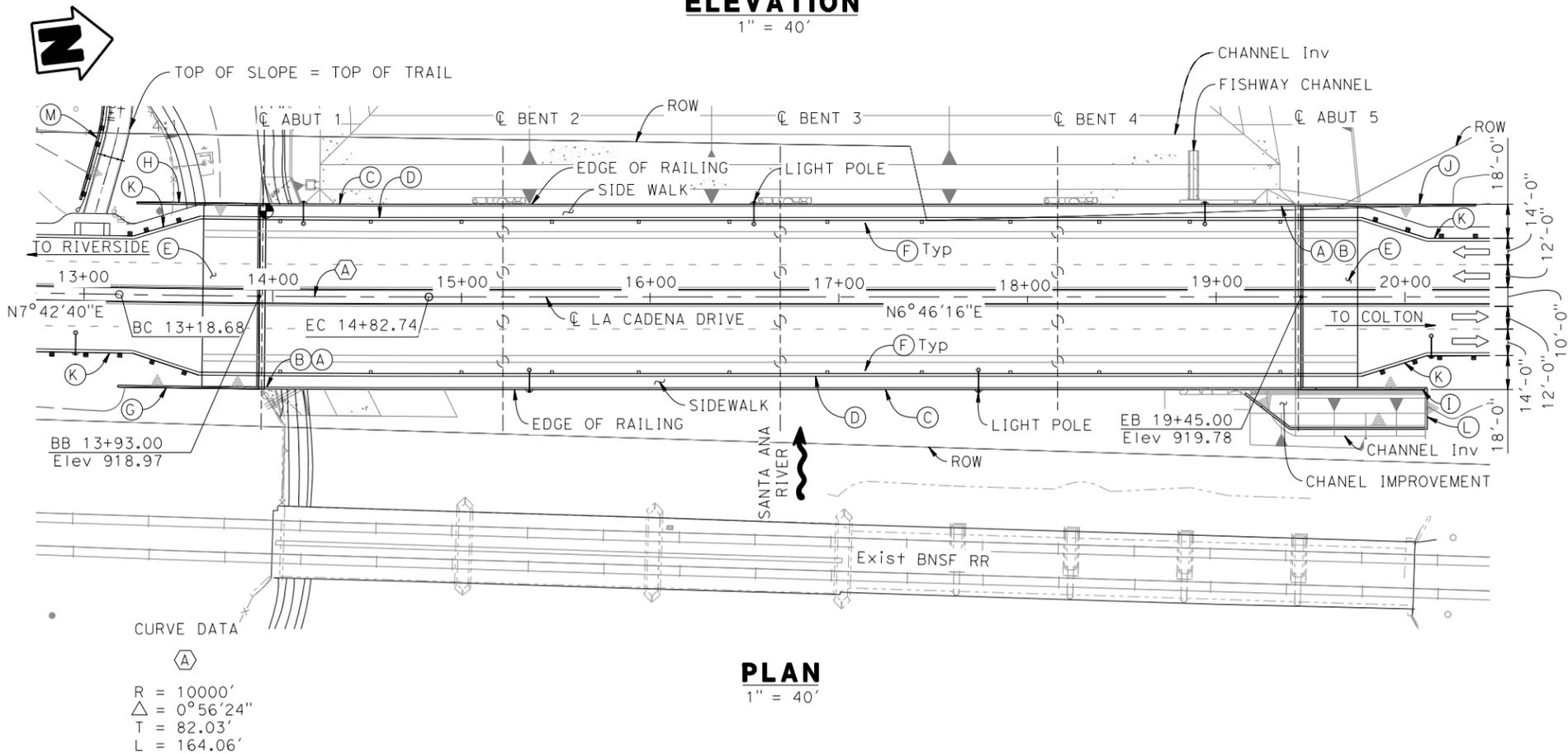
- (A) Paint "Bridge No. ??-???"
- (B) Paint "LA CADENA DRIVE BRIDGE"
- (C) Concrete Barrier Type 732SW (Modified), with Tubular Hand Railing, B11-51
- (D) Concrete Barrier Type 736
- (E) Structure Approach Type N(30S)
- (F) Deck Drain Intake
- (G) RW NO.6, See "RETAINING WALL LAYOUT NO.1 SHEET"
- (H) RW NO.7, See "RETAINING WALL LAYOUT NO.1 SHEET"
- (I) RW NO.8, See "RETAINING WALL LAYOUT NO.2 SHEET"
- (J) RW NO.9, See "RETAINING WALL LAYOUT NO.2 SHEET"
- (K) MGS, See Civil Roadway Plans
- (L) RW NO.5, See "RETAINING WALL LAYOUT NO.5 SHEET"
- (M) RW NO.3, See "RETAINING WALL LAYOUT NO.4 SHEET"

LEGEND:

- ⊙ Point of Minimum Vertical Clearance
- Indicates Direction of Travel
- Existing Structure
- New Structure
- ~ Direction of Flow

NOTES:

1. For channel improvement, see "CHANNEL IMPROVEMENTS PLANS".
2. For light pole locations, see "Street Light Plan".



REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	
3					SPEC		

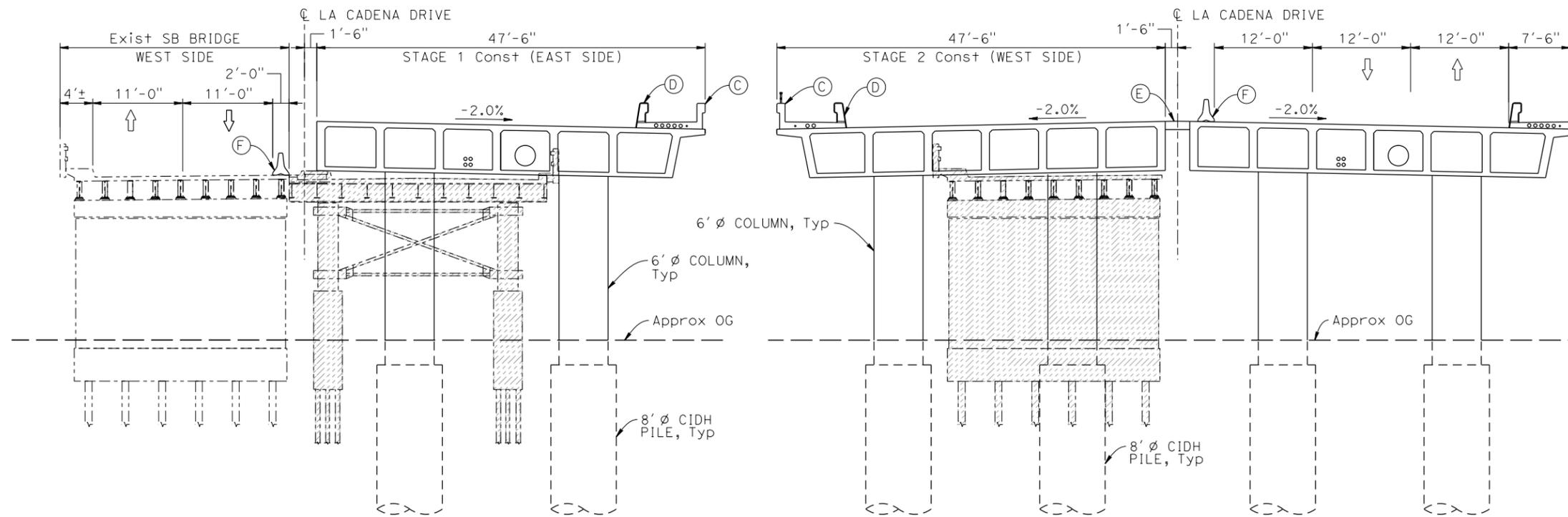


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Tel (714) 520-9070 Fax (714) 520-9068

CITY OF COLTON
PUBLIC WORKS DEPARTMENT
City Engineer: Victor Ortiz, P.E.
Date:
R.C.E: 73848 Exp: 06/30/17

LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER
GENERAL PLAN

BRIDGE NO.	??-???
POST MILES	-
SHEET	1
OF	36



TYP SECTION - STAGE 1

1/8" = 1'-0"

TYP SECTION - STAGE 2

1/8" = 1'-0"

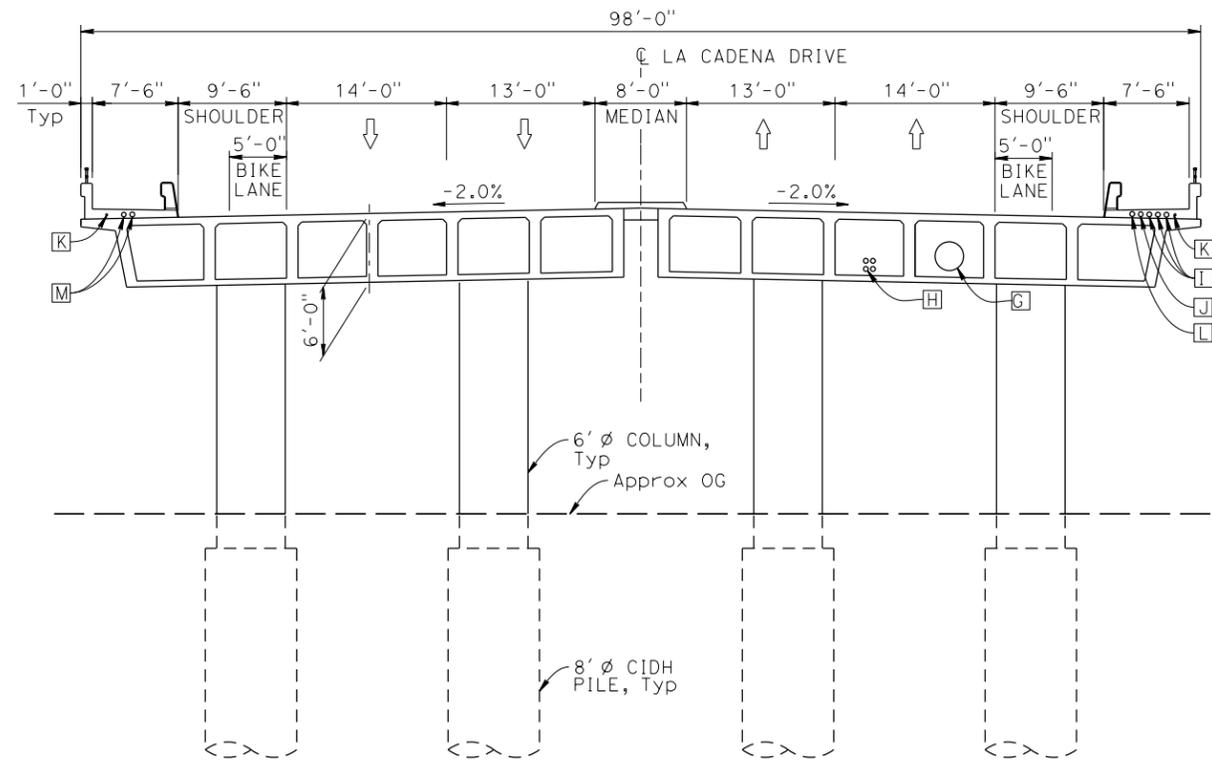
- LEGEND:**
- Indicates existing Structure
 - Indicates new Structure
 - ➔ Indicates Direction of Travel
 - ▨ Indicates Bridge Removal

- KEY NOTES:**
- (C) Concrete Barrier, Type 732SW (Modified), with Tubular Hand Railing, B11-51
 - (D) Concrete Barrier, Type 736
 - (E) Closure Pour
 - (F) Temporary Railing, Type K, see note 3 for edge distance and rod connection

T3A

- UTILITIES LEGEND:**
- (G) 2'-0" Ø Water Pipe
 - (H) Utility Pipes
 - (I) AT&T California Conduits
 - (J) Time Warner Cable Conduits
 - (K) Bridge Lighting Conduits
 - (L) Sunesys Cable Conduits
 - (M) Conduits For Future Utility

- STAGE CONSTRUCTION:**
- STAGE 1:**
1. Remove existing east side bridge, keep traffic on west side bridge.
 2. Install CIDH piles & construct substructures of the east side new bridge in dry season.
 3. Construct superstructure of the new east side bridge.
 4. Install temporary 'K' railing and open to the traffic.
- STAGE 2:**
1. Install temporary 'K' railing.
 1. Remove existing west side bridge, keep traffic on east side bridge.
 2. Install CIDH piles & construct substructures of the west side new bridge in dry season.
 3. Construct superstructure of the new west side bridge.
 4. Pour deck closure.
 5. Install median, stripping and open to the traffic.



TYP SECTION - CONSTRUCTION COMPLETE

1/8" = 1'-0"

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
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2					QUANTITIES	G. Estepa	-
3					SPEC	-	-



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**CITY OF COLTON
 PUBLIC WORKS DEPARTMENT**

City Engineer: Victor Ortiz, P.E.
 Date:
 R.C.E: 73848 Exp: 06/30/17

**LA CADENA DRIVE BRIDGE (REPLACE)
 OVER SANTA ANA RIVER**

CONSTRUCTION STAGE

BRIDGE NO.	??-???
POST MILES	-
SHEET	2
OF	36

GENERAL NOTES

Load and resistance factor design:

Design: AASHTO LRFD Bridge design specifications, 6th edition with Caltrans amendments, preface dated January, 2014

Seismic Design: Caltrans Seismic Design Criteria(SDC), Version 1.7, April 2013

Additional Dead Loads: Sidewalk and barrier: 1790 plf each side
Utility: 350 plf
Future wearing: 35 psf

Live Loading: HL93 with "Low Boy"
Permit Design Vehicle (CA-P15)
Pedestrian Load of 75 psf

Seismic Loading: Modified SDC ARS Curve For Soil Profile Type D (M=7.25±0.25), Fault (Reverse-Oblique) Distance = 2.0 km.(Peak Rock Acceleration = 0.7g)

Design acceleration spectrum curve, design soil parameters and foundation data are based on "GEOTECHNICAL AND STRUCTURES FOUNDATION REPORT" dated April 25, 2016 by Earth Mechanics, Inc.

PLAN SYMBOLS

 Standard Plan Sheet No.
 Detail No.
 Section Designation

CONCRETE STRENGTH AND TYPE LIMITS

NO SCALE

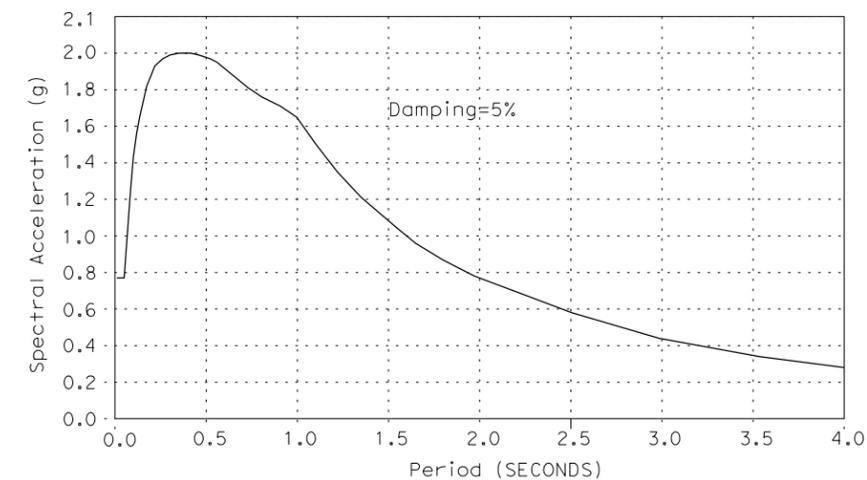
	Structural Concrete, Bridge (f'c = 4.0 ksi @ 28 days)		Structural Concrete, Bridge Footing (f'c = 4.0 ksi @ 28 days)
	Structural Concrete Bridge, see "Prestressing notes" on "GIRDER DETAILS" sheet		Structural Concrete, CIDH Concrete Pile (f'c = 4.0 ksi @ 28 days)
	Structural Concrete, Retaining Wall (f'c = 3.6 ksi @ 28 days)		Structure Concrete, Approach Slab, see "STRUCTURE APPROACH TYPE N (30S)" sheet
			Structure Concrete, Bridge (Polymer Fiber) - Bridge Deck (f'c = 4.0 ksi @ 28 days)

STANDARD PLANS 2015 EDITION

A3A	ABBREVIATIONS (SHEET 1 OF 3)
A3B	ABBREVIATIONS (SHEET 2 OF 3)
A3C	ABBREVIATIONS (SHEET 3 OF 3)
A10A	LINES AND SYMBOLS (SHEET 1 OF 5)
A10B	LINES AND SYMBOLS (SHEET 2 OF 5)
A10C	LINES AND SYMBOLS (SHEET 3 OF 5)
A10D	LINES AND SYMBOLS (SHEET 4 OF 5)
A10E	LINES AND SYMBOLS (SHEET 5 OF 5)
A10F	SOIL (SHEET 1 OF 2)
A10G	SOIL (SHEET 2 OF 2)
A10H	SOIL (ROCK)
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE
B0-1	BRIDGE DETAILS
B0-3	BRIDGE DETAILS
B0-5	BRIDGE DETAILS
B0-13	BRIDGE DETAILS
B7-1	BOX GIRDER DETAILS
B7-6	DECK DRAINS TYPES D-1 AND D-2
B7-10	UTILITY OPENING BOX GIRDER
B7-11	UTILITY DETAILS
B8-5	CAST-IN-PLACE PRESTRESSED GIRDER DETAILS
B11-51	TUBULAR HAND RAILING
B11-52	CHAIN LINK RAILING TYPE 7
B11-54	CONCRETE BARRIER TYPE 732SW
B11-56	CONCRETE BARRIER TYPE 736

ABBREVIATIONS:

Abut	Abutment
BB	Begin of Bridge
Brg	Bearing
Cl	Center Line
EB	End of Bridge
Elev	Elevation
Exist	Existing
Exp	Expansion
FG	Finish Grade
Galv	Galvanized
Jt	Joint
LOL	Line of Layout
OG	Original Grade
Pl	Plate
Reinf	Reinforcement
ROW	Right of Way
RW	Retaining Wall
Sta	Station
Typ	Typical
UON	Unless Otherwise Noted
W/	With



Reinforced Concrete: $f_y = 60,000$ psi (ASTM A706)
 $f'_c =$ See "concrete strength and type limits"

Prestressed Concrete: See "Prestressing Notes" on "Girder Layout" sheet

INDEX TO PLANS

SHEET NO. TITLE

1	GENERAL PLAN
2	CONSTRUCTION STAGES
3	GENERAL NOTES AND INDEX TO PLANS
4	DECK CONTOURS
5	FOUNDATION PLAN NO.1
6	FOUNDATION PLAN NO.2
7	ABUTMENT 1 LAYOUT
8	ABUTMENT 5 LAYOUT
9	ABUTMENT DETAILS NO.1
10	ABUTMENT DETAILS NO.2
11	BENT LAYOUT
12	BENT DETAILS
13	TYPICAL SECTION
14	GIRDER LAYOUT NO.1
15	GIRDER LAYOUT NO.2
16	GIRDER DETAILS
17	ADDITIONAL REINFORCEMENT NO.1
18	ADDITIONAL REINFORCEMENT NO.2
19	JOINT SEAL ASSEMBLY DETAILS (MAXIMUM MR=4")
20	MEDIAN DETAIL AND JOINT ARMOR FOR PEDESTRIAN WALKWAYS
21	CONCRETE BARRIRE TYPE 732SW DETAILS NO.1
22	CONCRETE BARRIRE TYPE 732SW DETAILS NO.2
23	DECK DRAINAGE LAYOUT
24	DECK DRAINAGE DETAILS
25	STRUCTURE APPROACH TYPE N (30S)
26	STRUCTURE APPROACH DRAINAGE DETAILS
27	RETAINING WALL LAYOUT NO.1
28	RETAINING WALL LAYOUT NO.2
29	RETAINING WALL LAYOUT NO.3
30	RETAINING WALL LAYOUT NO.4
31	RETAINING WALL LAYOUT NO.5
32	RETAINING WALL TYPE I (MOD) DETAILS
33	WATER LINE AND SUPPORT LAYOUT
34	UTILITIES SUPPORT AND MISC DETAILS NO.1
35	UTILITIES SUPPORT AND MISC DETAILS NO.2
36	CHANNEL IMPROVEMENT

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-

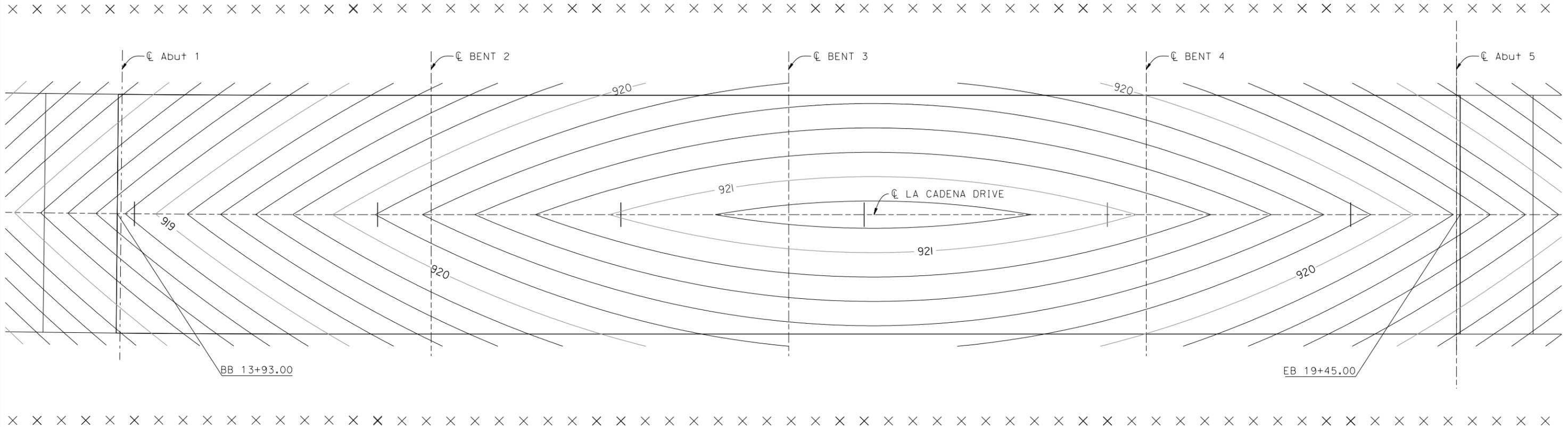


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CITY OF COLTON
PUBLIC WORKS DEPARTMENT
City Engineer: Victor Ortiz, P.E.
Date:
R.C.E: 73848 Exp: 06/30/17

LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER
GENERAL NOTES AND INDEX TO PLANS

BRIDGE NO.	??-???
POST MILES	-
SHEET	3
OF	36



PLAN
1" = 20'-0"

NOTES:

1. Contour interval is 0.2'.
2. Contours do not include camber.

LEGEND:

× Indicates 10'-0" intervals.

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-



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 City Engineer: Victor Ortiz, P.E.
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LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER

DECK CONTOURS

BRIDGE NO.	
??-???	
POST MILES	
-	
SHEET	OF
4	36

SCOUR DATA TABLE

Location	Long Term (Degradation and Contraction) Scour Elevation (ft)	Short Term (Local) Scour Depth (ft)
Abut 1	NA	NA
Bent 2	890.5	19.9
Bent 3	890.5	19.9
Bent 4	890.5	19.9
Abut 5	NA	NA

HYDROLOGIC SUMMARY

	Design Flood	Base Flood
Frequency (Years)	100	100
Discharge (cubic feet/second)	140,000	140,000
Water Surface (Elev at Bridge)	910.55	910.55

NOTES: 1. Santa Ana River (Upstream of La Cadena Drive Bridge) drainage area:787 square miles.

EXISTING UTILITY TABLE

UTILITY	OWNER	DISPOSITION
1 30"Ø RCP Sewer Line	City of Colton	Protect in place
2 12"Ø Water Line	City of Colton	To be relocated
3 Cable Line	AT&T	To be relocated
4 Telephone Line	AT&T	To be relocated
5 Electric Line (OH)	Colton Electric	Protect in place
6 Telecom Line (OH)	Time Warner	Protect in place
7 24"Ø Water Line	Riverside Highland	To be relocated
8 Electric Line (OH)	SCE	Protect in place
9 Telecom Line	Sprint	Protect in place
10 Telecom Line	Sunsys	Protect in place

CURVE DATA

Ⓐ
 R = 10000'
 Δ = 0°56'24"
 T = 82.03'
 L = 164.06'

LEGEND:

- ⓧ Indicates existing Utility
- XX.XX Indicates bottom of Footing elevation
- Indicates existing structure
- ⊕ 8'-0"Ø CIDH Piles
- ▨ Indicates existing structure removal
- ⊗ Indicates bent which existing pile to be removed, see note 5

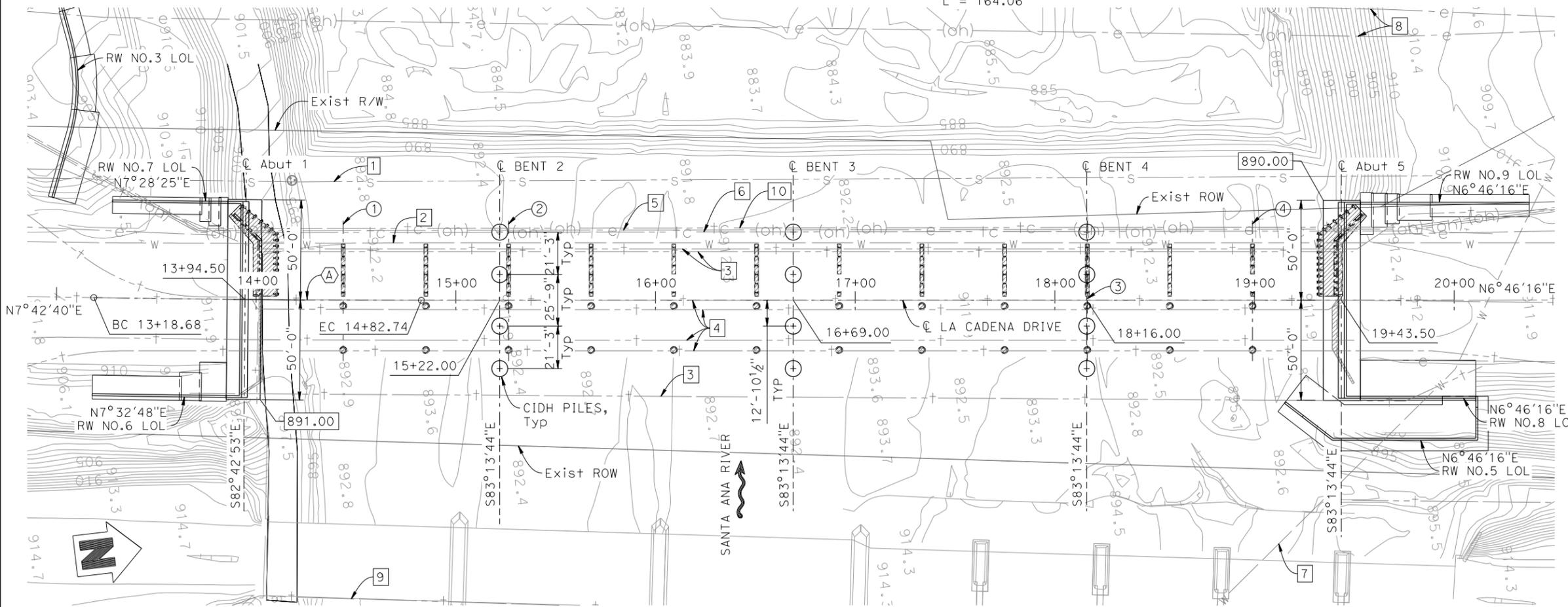
NOTES:

- For Abutment footing size & reinforcement, see "ABUTMENT DETAILS" sheets.
- For Retaining Walls, see "RETAINING WALL DETAILS" sheets.
- For CIDH size & reinforcement, see "BENT DETAILS" sheet.
- For Spread Footing,
 - a. Controlling load combination is the one resulting in the highest ratio of q_{sw}/q_u for foundations on soil, or q_{sw}/q_u for foundations on rock.
 - b. Controlling load combination for Service Limit State is the one resulting in the highest ratio of q_{sw}/q_u for foundations on soil, or q_{sw}/q_u for foundations on rock.
 - c. Controlling load combination for Strength, Construction, and Extreme Event is the one resulting in the highest ratio of q_{sw}/q_u for foundations on soil, or q_{sw}/q_u for foundations on rock.
- Pull out existing piles at four bent locations as shown. The existing piles at other pier locations shall be cut 3'-0" below the existing ground surface.
- The existing piles at abutment locations shall be cut 5'-0" below bottom elevation of the new abutment footing.

BENCHMARK

CITY OF COLTON BENCH MARK 703-2
 ELEV = 909.840 FEET (NGVD 29)

A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A AT&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER.



PLAN
 1" = 30'

VERT.DATUM NGVD 29 HORZ.DATUM NDA 83

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	
3					SPEC		



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CITY OF COLTON
PUBLIC WORKS DEPARTMENT
 City Engineer: Victor Ortiz, P.E.
 Date:
 R.C.E: 73848 Exp: 06/30/17

LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER
FOUNDATION PLAN NO.1

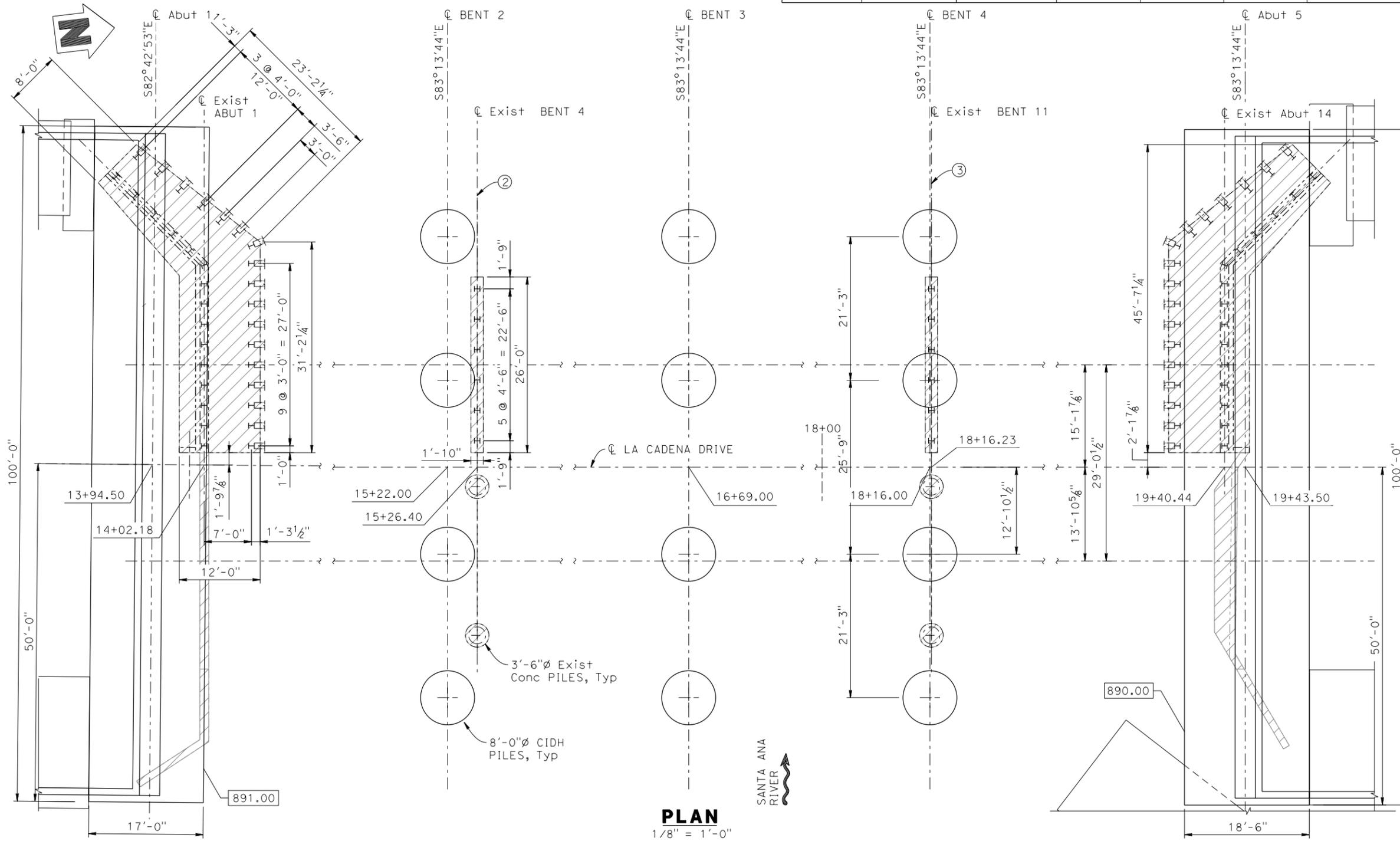
BRIDGE NO.	??-???
POST MILES	-
SHEET	5
OF	36

SPREAD FOOTING DATA TABLE

Location	Service Permissible Net Contact Stress (Settlement) (ksf)	Strength/Construction Factored Gross Nominal Bearing Resistance $\phi = 0.55$ (ksf)	Extreme Event Factored Gross Nominal Bearing Resistance $\phi = 1.00$ (ksf)
Abut 1	6.5	11.1	N/A
Abut 5	6.5	11.1	N/A

PILE DATA TABLE

Location	Pile Type	Nominal Resistance (kips)		Cut-off Elevation (ft)	Design Tip Elevation (ft)	Specified Tip Elevation (ft)
		Compression	Tension			
Bent 2	96" CIDH	3857	862	889	+760 (a)	760
Bent 3	96" CIDH	3857	862	889	+835 (b) +810 (c)	760
Bent 4	96" CIDH	3857	862	889	+780 (d)	760



LEGEND:

- XX.XX Indicates bottom of Footing elevation
- Indicates existing Structure
- H Existing Steel Piles
- ⊠ Existing Battered Steel Piles
- ▨ Indicates existing Structure
- ⊗ Indicates bent which existing pile to be removed, see note 3

NOTES:

1. Design tip elevations were evaluated for: (a) Compression, (b) Tension, (c) Settlement, and (d) Lateral Load.
2. The specified tip elevations shall not be raised above the design tip elevations for settlement and lateral load.
3. Pull out existing piles at four bent locations (see "FOUNDATION PLAN NO.1"). The existing piles at other pier locations shall be cut 3'-0" below the existing ground surface.
4. The existing piles at abutment locations shall be cut 5'-0" below bottom elevation of the new abutment footing.

PLAN
1/8" = 1'-0"



VERT.DATUM NGVD 29 HORZ.DATUM NDA 83

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-

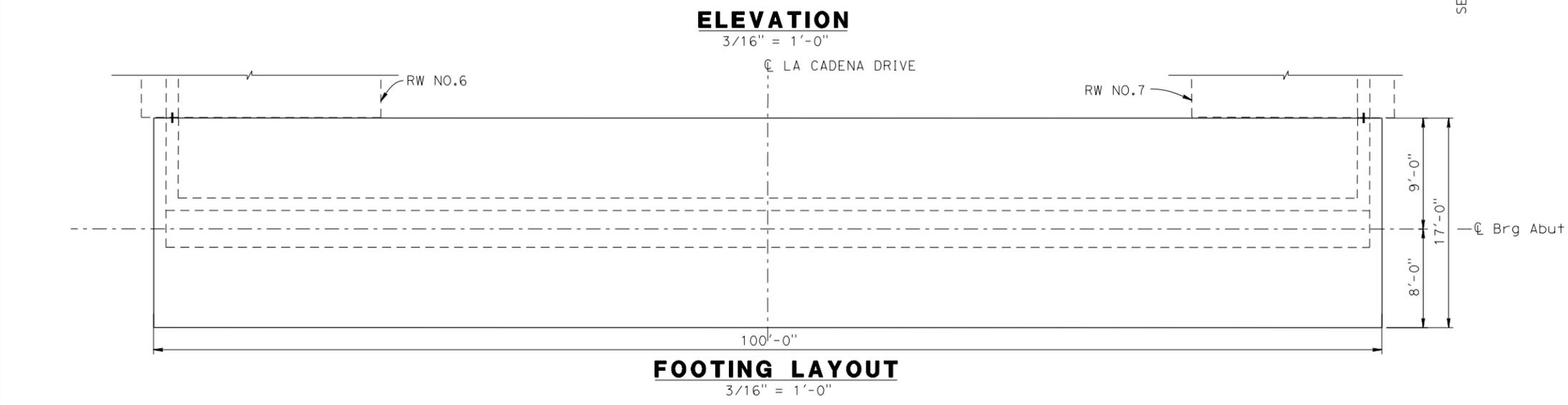
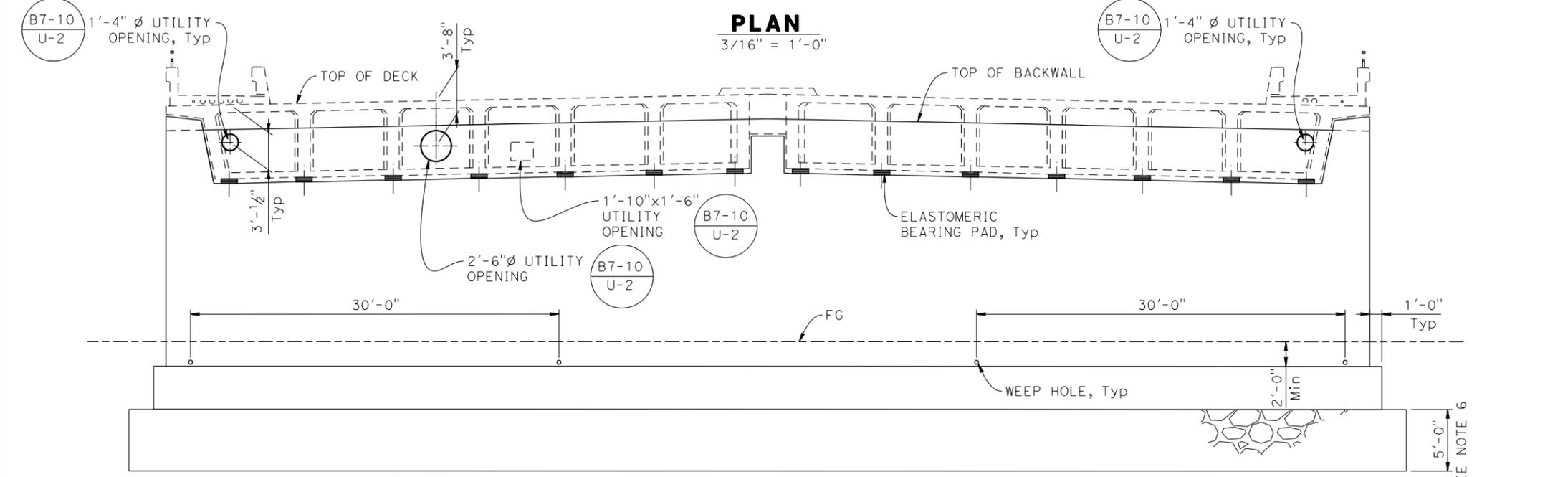
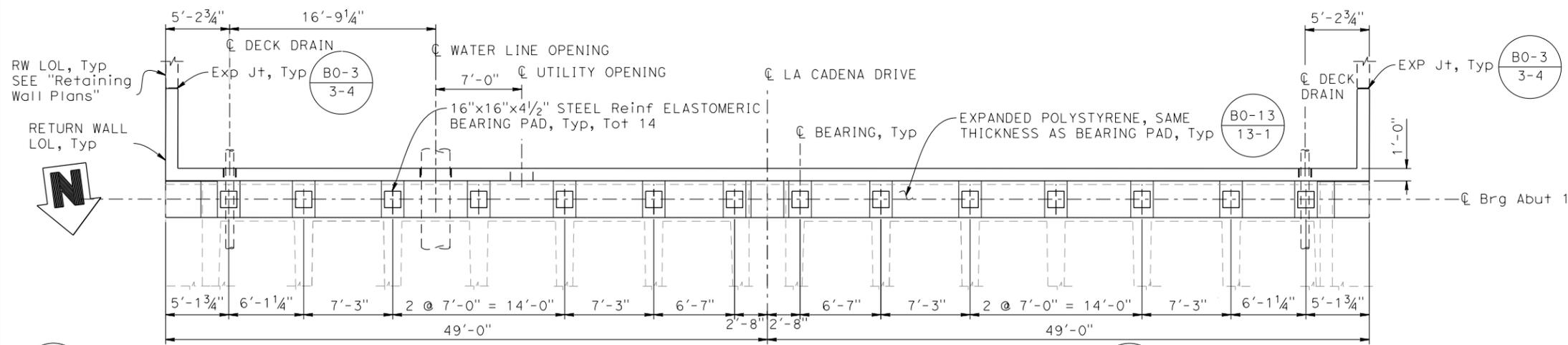


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Date:
R.C.E: 73848 Exp: 06/30/17

LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER
FOUNDATION PLAN NO.2

BRIDGE NO.	??-???
POST MILES	-
SHEET	6
OF	36



- NOTES:**
1. For Section, see "ABUTMENT DETAILS NO.1" sheet.
 2. For Abutment Shear Key details, see "ABUTMENT DETAILS NO.2" sheet.
 3. For Drainage Outlet details, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet.
 4. For Deck Drain layout & details, see "DECK DRAINAGE LAYOUT" & "DECK DRAINAGE DETAILS" sheets.
 5. For Bearing Pad details, see "ABUTMENT DETAILS NO.1" sheet.
 6. 5 Ft over excavation and compacted aggregate base, see geotechnical report in construction document package.

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-



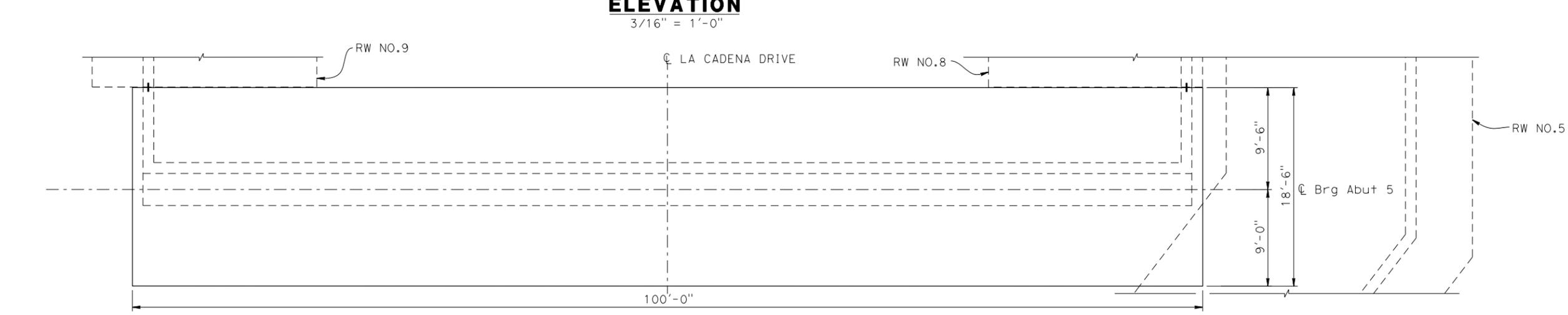
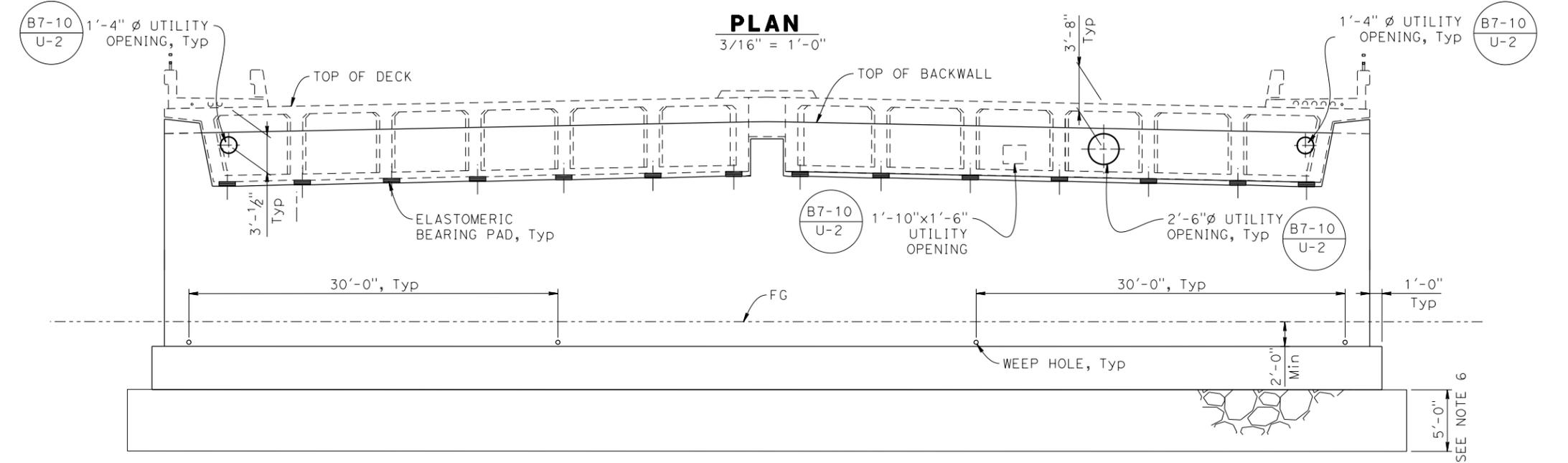
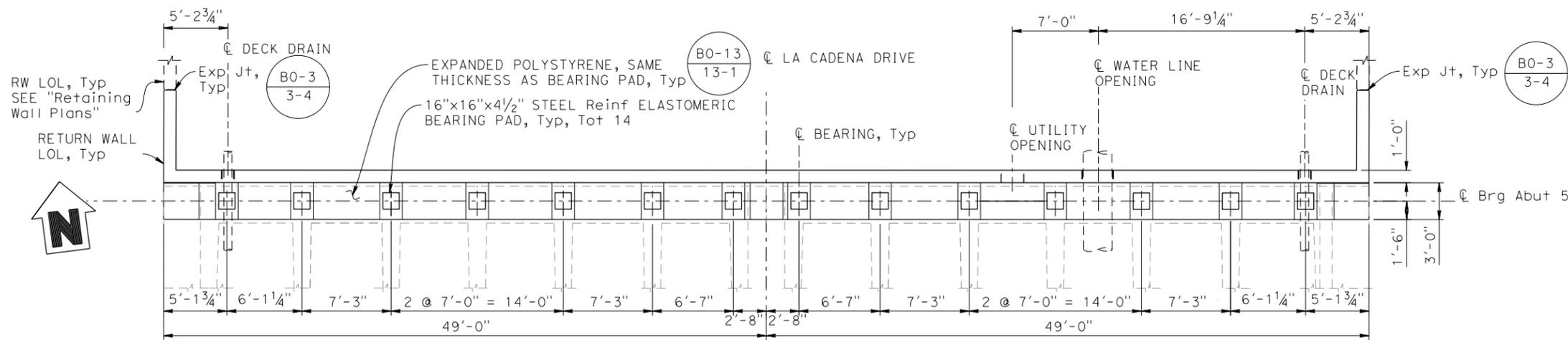
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LA CADENA DRIVE BRIDGE (REPLACE) OVER SANTA ANA RIVER

ABUTMENT 1 LAYOUT

BRIDGE NO.	??-???
POST MILES	-
SHEET	7
OF	36



- NOTES:**
1. For Section, see "ABUTMENT DETAILS NO.1" sheet.
 2. For Abutment Shear Key details, see "ABUTMENT DETAILS NO.2" sheet.
 3. For Drainage Outlet details, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet.
 4. For Deck Drain layout & details, see "DECK DRAINAGE LAYOUT" & "DECK DRAINAGE DETAILS" sheets.
 5. For Bearing Pad details, see "ABUTMENT DETAILS NO.1" sheet.
 6. 5 ft over excavation and compacted aggregate base, see geotechnical report in construction document package.

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-



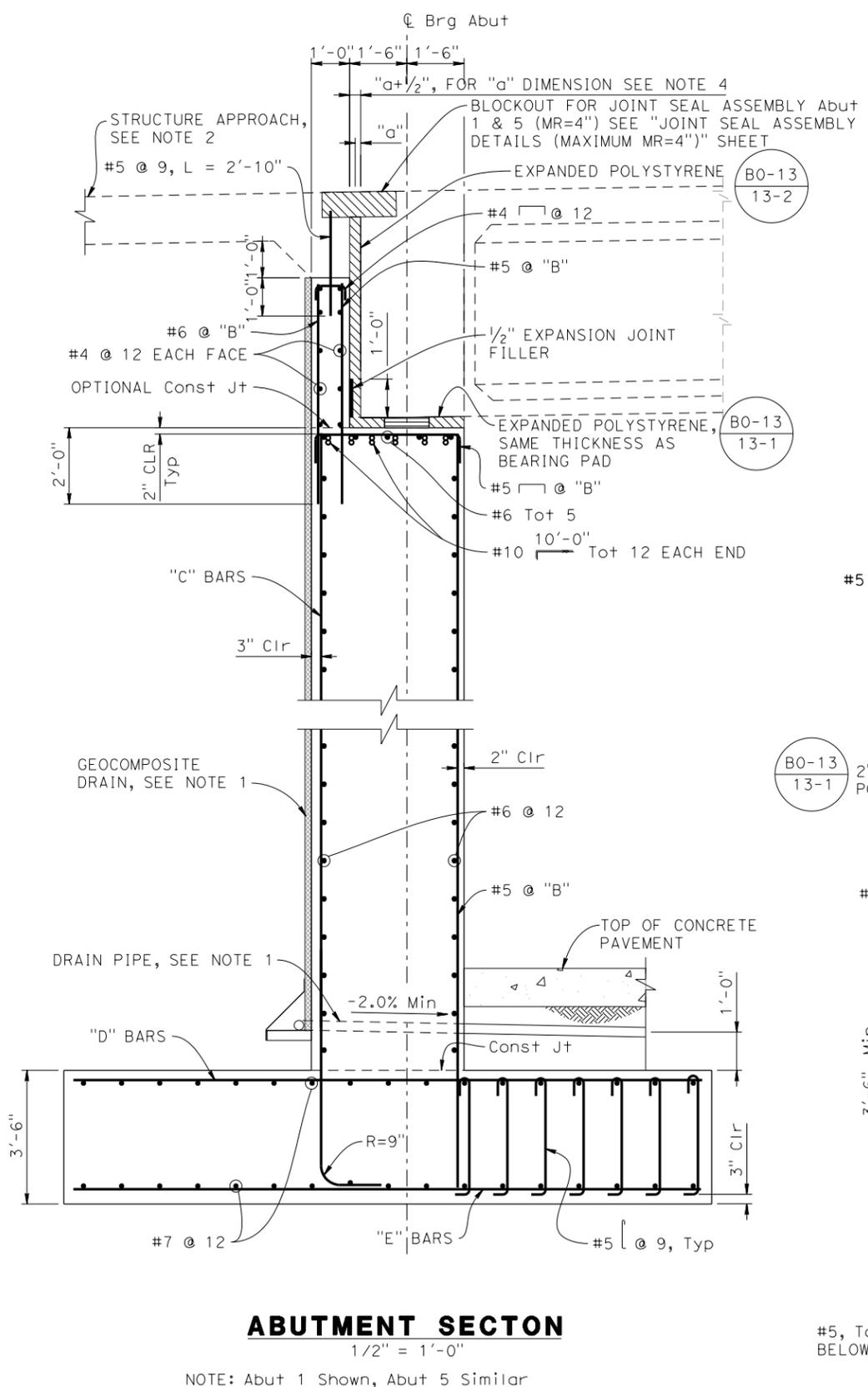
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**LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER**

ABUTMENT 5 LAYOUT

BRIDGE NO.	??-???
POST MILES	-
SHEET	8
OF	36



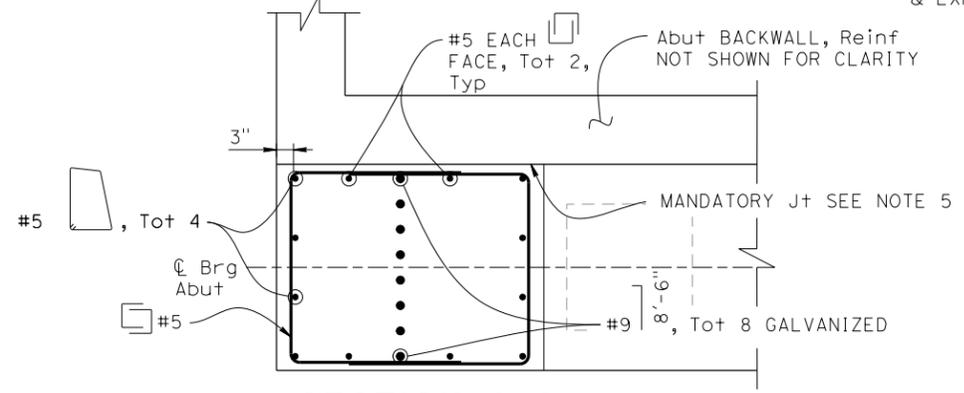
ABUTMENT SECTION
1/2" = 1'-0"

NOTE: Abut 1 Shown, Abut 5 Similar

- NOTES:**
- For Geocomposite Drain, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet.
 - For Structure Approach, see "STRUCTURE APPROACH TYPE N(30S)" sheet.
 - Shear Key and Bearing Pad details shown are for Abutment 1, Abutment 5 is similar.
 - For "a" Dimension, See "Joint Seal Assembly Details (Maximum MR=4)" Sheet.
 - Mandatory joint surface with stem wall and backwall shall be trowel-finished smooth and lined with 15 pound construction paper.
 - The thickness call-out of steel reinforced elastomeric bearing pad is for elastomer only.

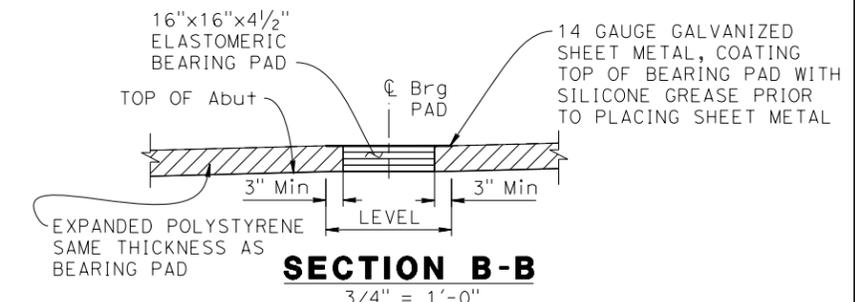
ABUTMENT TABLE

LOCATION	"B"	"C" BARS	"D" BARS	"E" BARS
Abut 1	12"	#10 @ 9	#8 @ 9	#9 @ 9
Abut 5	12"	#11 @ 9	#8 @ 9	#11 @ 9

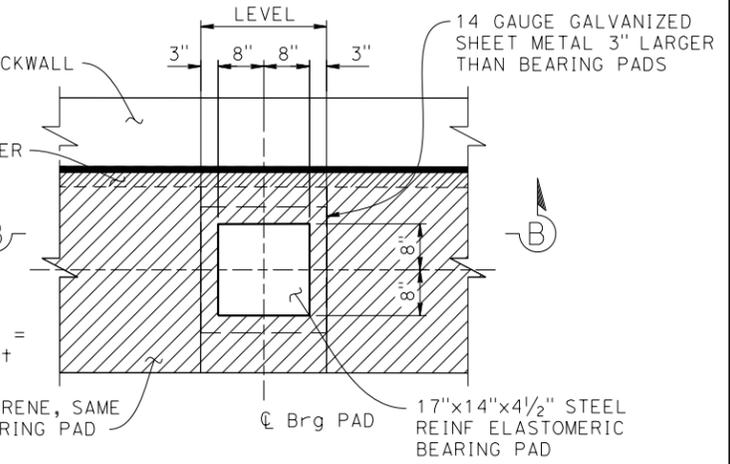


SECTION A-A
3/4" = 1'-0"

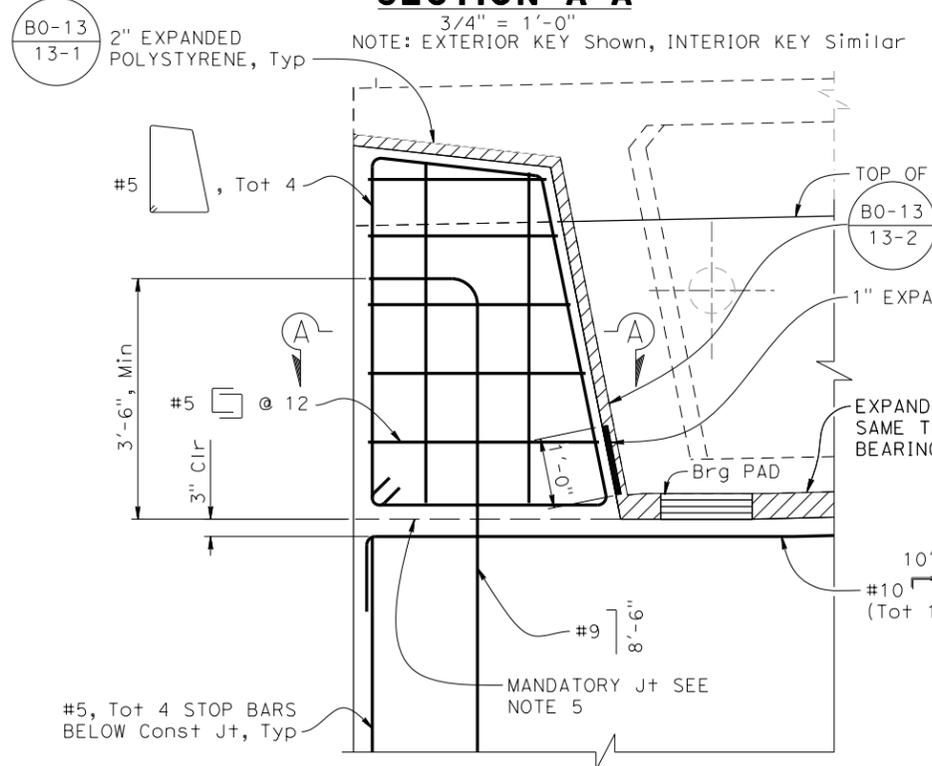
NOTE: EXTERIOR KEY Shown, INTERIOR KEY Similar



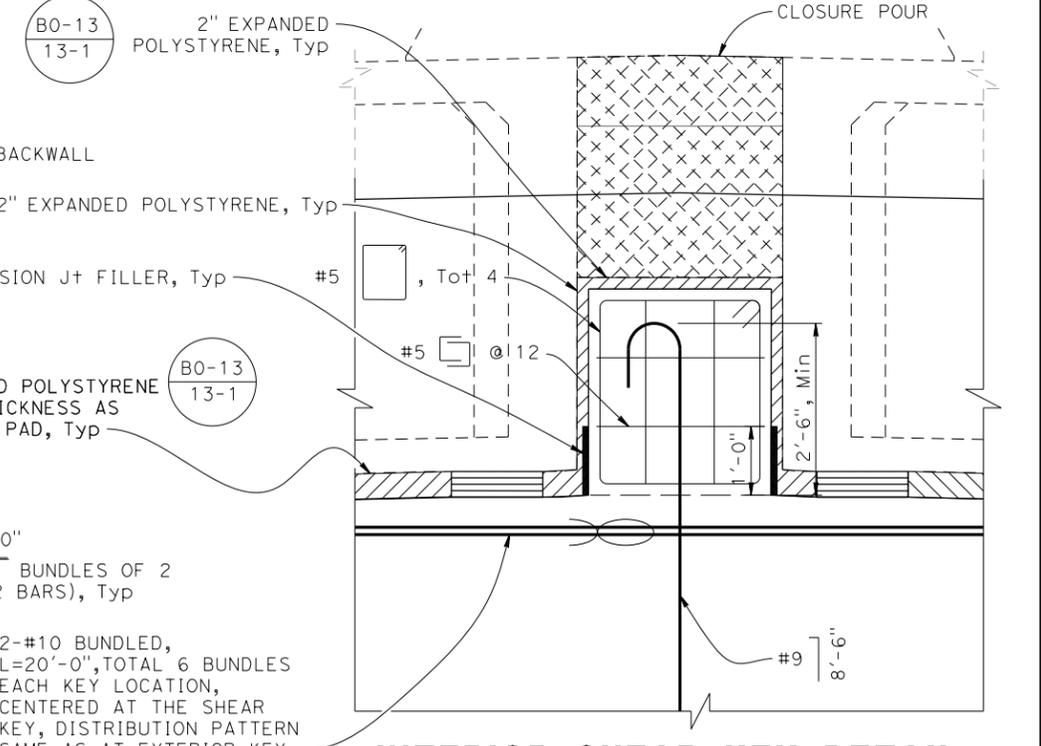
SECTION B-B
3/4" = 1'-0"



BEARING PAD DETAIL
3/4" = 1'-0"



SHEAR KEY DETAIL
3/4" = 1'-0"



INTERIOR SHEAR KEY DETAIL
3/4" = 1'-0"

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	
3					SPEC		

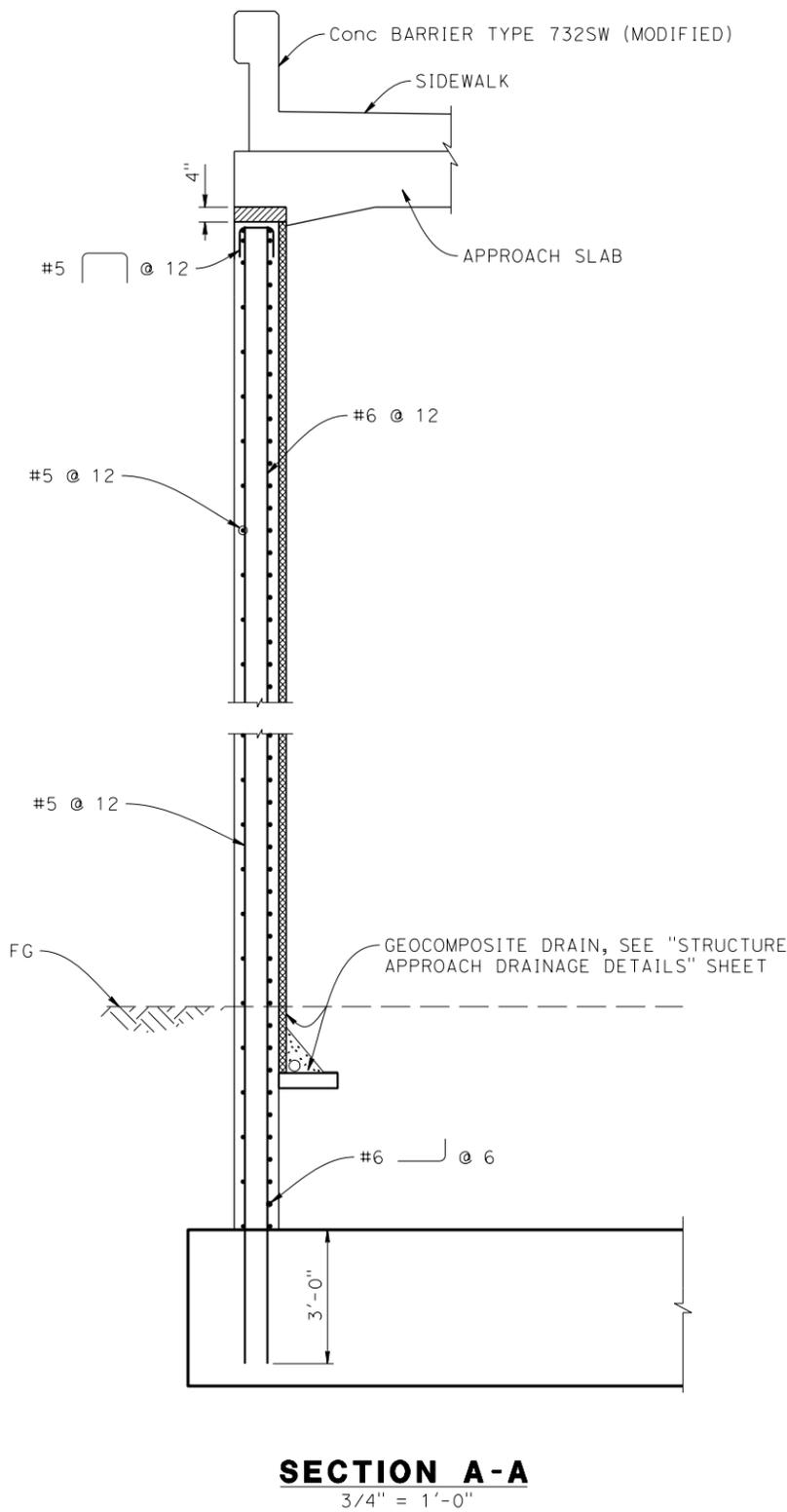
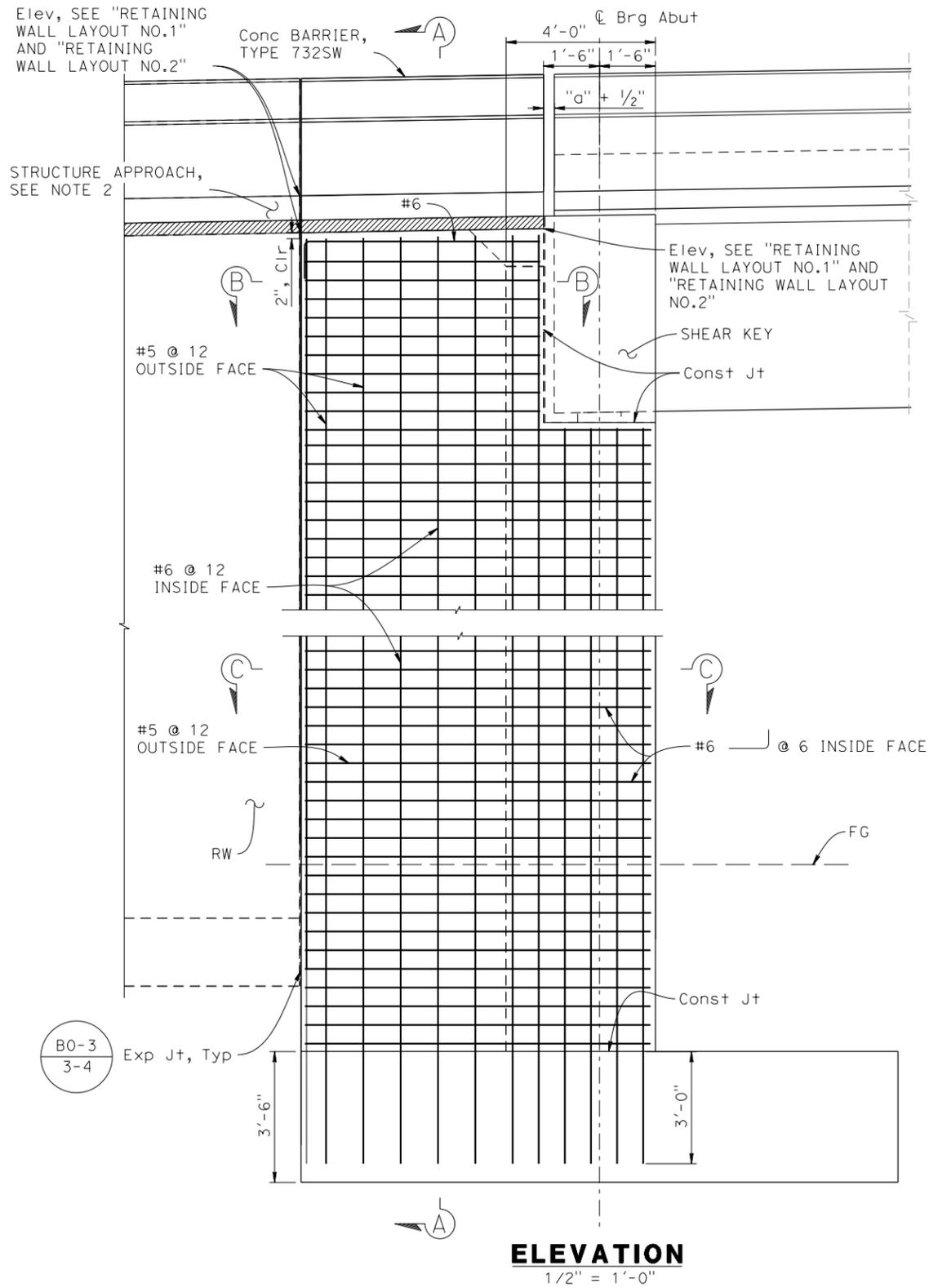


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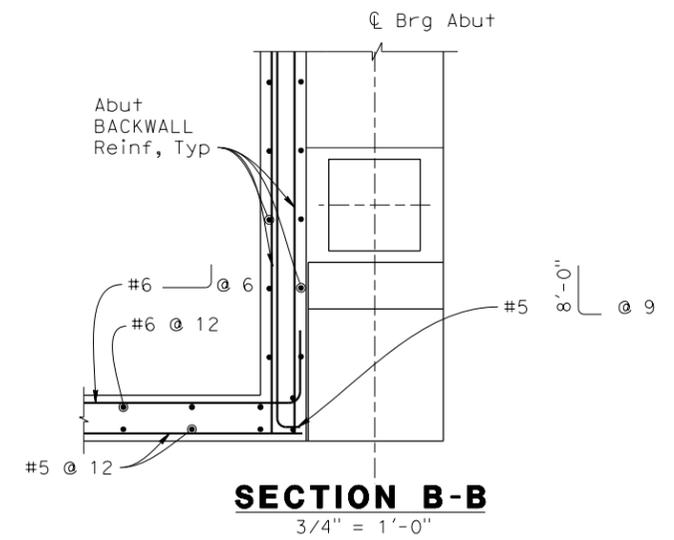
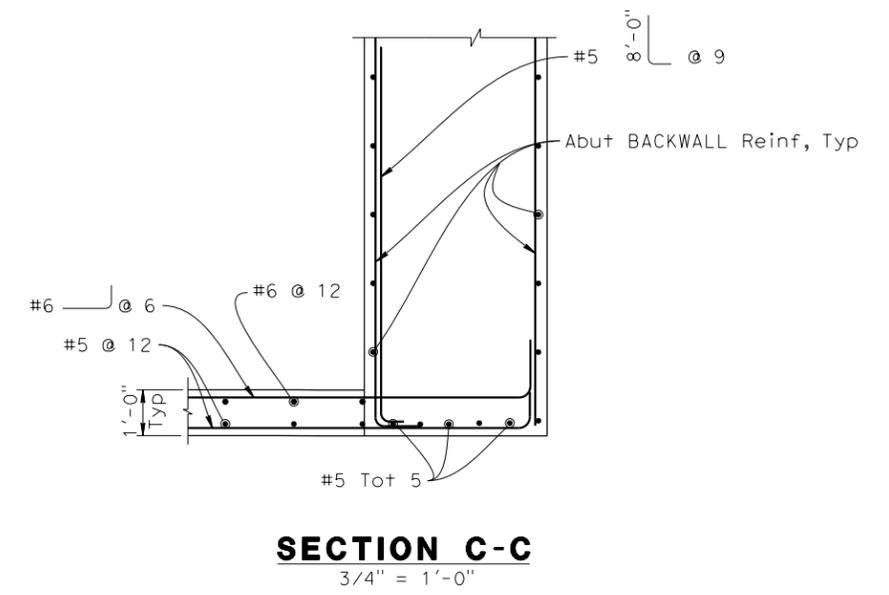
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City Engineer: Victor Ortiz, P.E.
Date:
R.C.E: 73848 Exp: 06/30/17

LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER
ABUTMENT DETAILS NO.1

BRIDGE NO.	??-???
POST MILES	-
SHEET	9
OF	36



- NOTES:**
1. For Geocomposite Drain, see "Structure Approach Drainage Details" sheet.
 2. For Structure Approach, see "Structure Approach Type N(30S)" sheet.
 3. ABUT 1 shown, ABUT 5 similar.



REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-

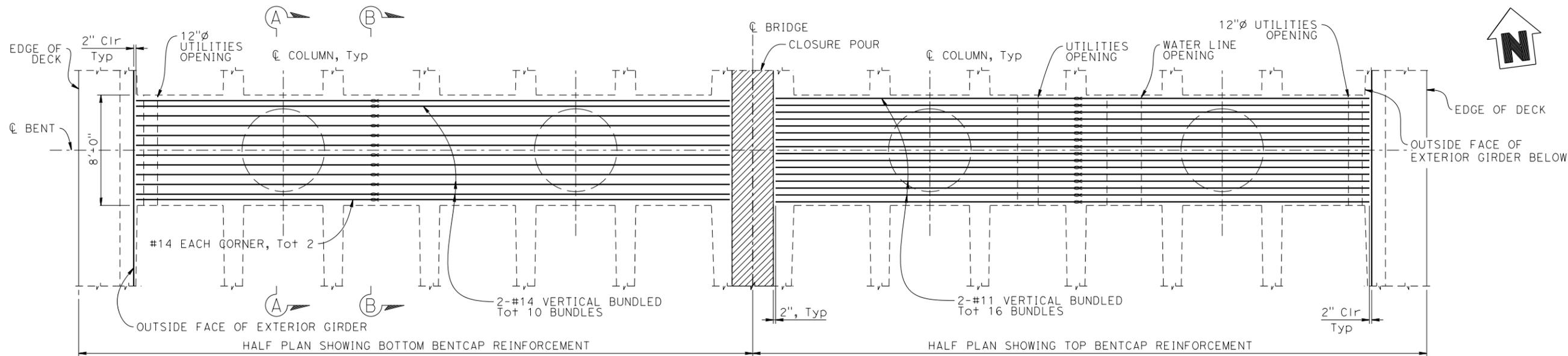


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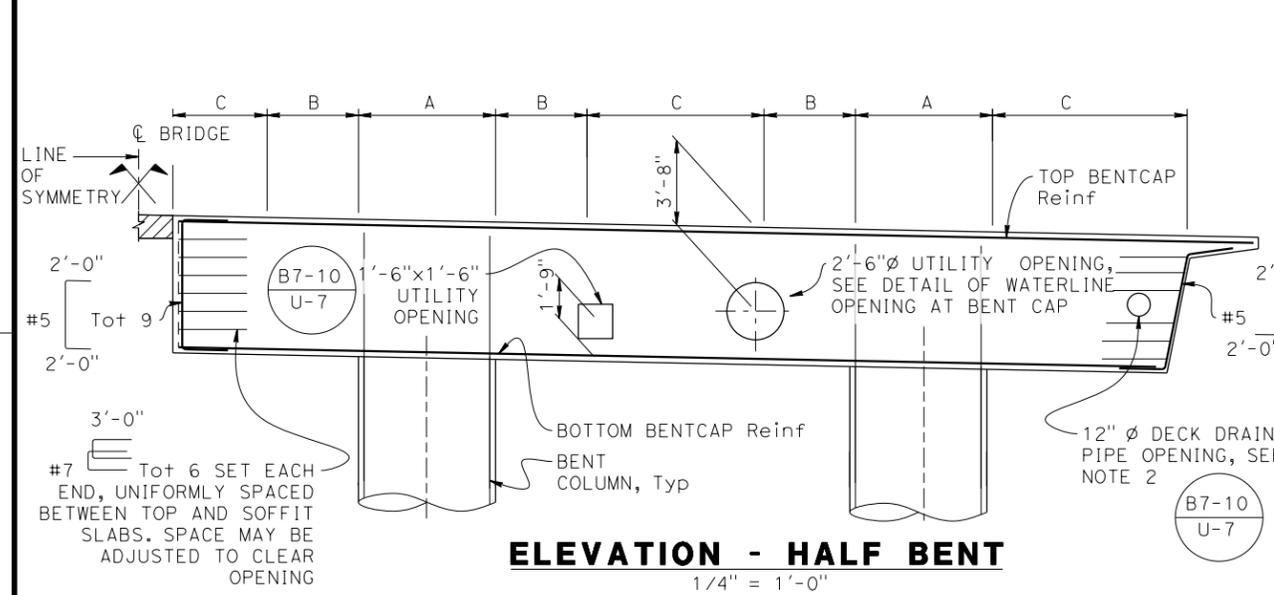
**LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER**
ABUTMENT DETAILS NO.2

BRIDGE NO.	??-???
POST MILES	-
SHEET	10
OF	36



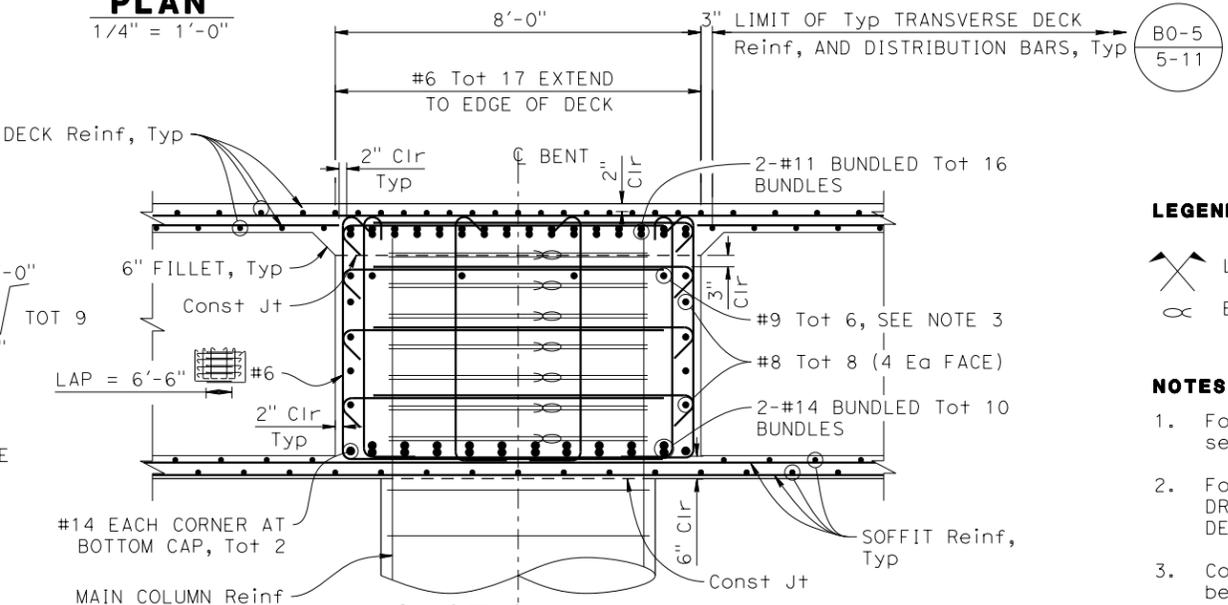
PLAN

1/4" = 1'-0"



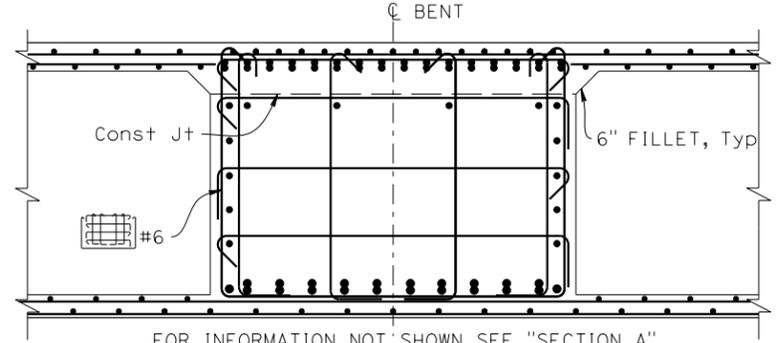
ELEVATION - HALF BENT

1/4" = 1'-0"



SECTION A-A

1/2" = 1'-0"



SECTION B-B

1/2" = 1'-0"

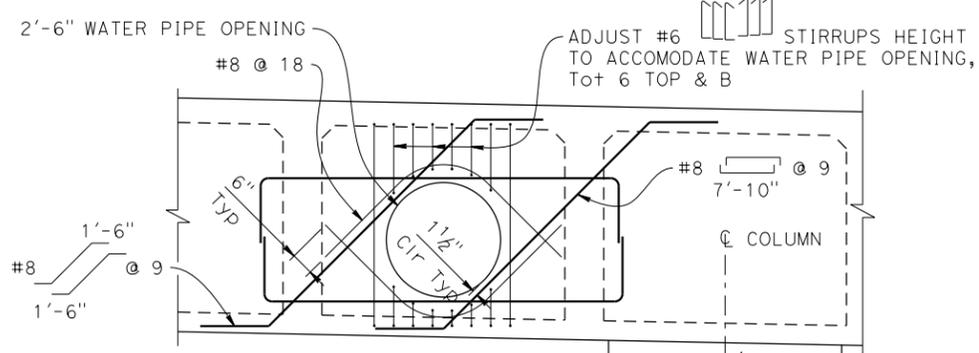
LEGEND:

- LINE OF SYMMETRY
- BUNDLED REINFORCEMENT

NOTES:

1. For Bent Column reinforcements, see "BENT DETAILS" sheet.
2. For Deck Drain details see "DECK DRAINAGE LAYOUT" & "DECK DRAINAGE DETAILS" sheet.
3. Construction reinforcement may be bent or lowered to clear P/S ducts.
4. No splices allowed in bent cap and column main reinf.

BENT 2, 3, 4 TABLE			
LOCATION	A	B	C
DIMENSION	6'-0"	4'-0"	-
STIRRUP SIZE	#6	#6	#6
STIRRUP AND CROSS TIES SPACING (UON)	TOTAL 9 SETS	TOTAL 9 SETS	@ 9



WATER LINE OPENING AT BENT CAP

1/2" = 1'-0"

NOTE: Regular Bent Cap Stirrups see "BENT LAYOUT SHEET"

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	
3					SPEC		



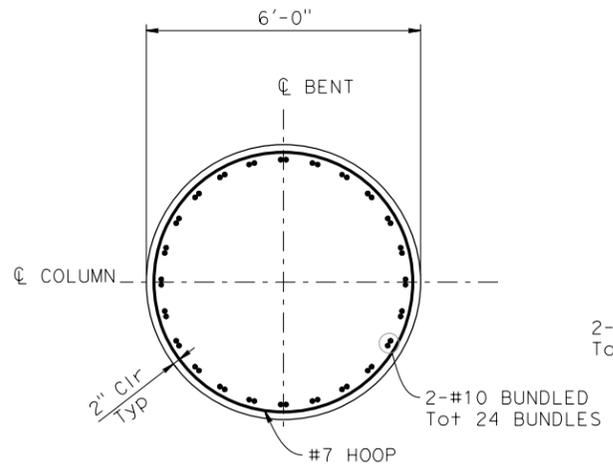
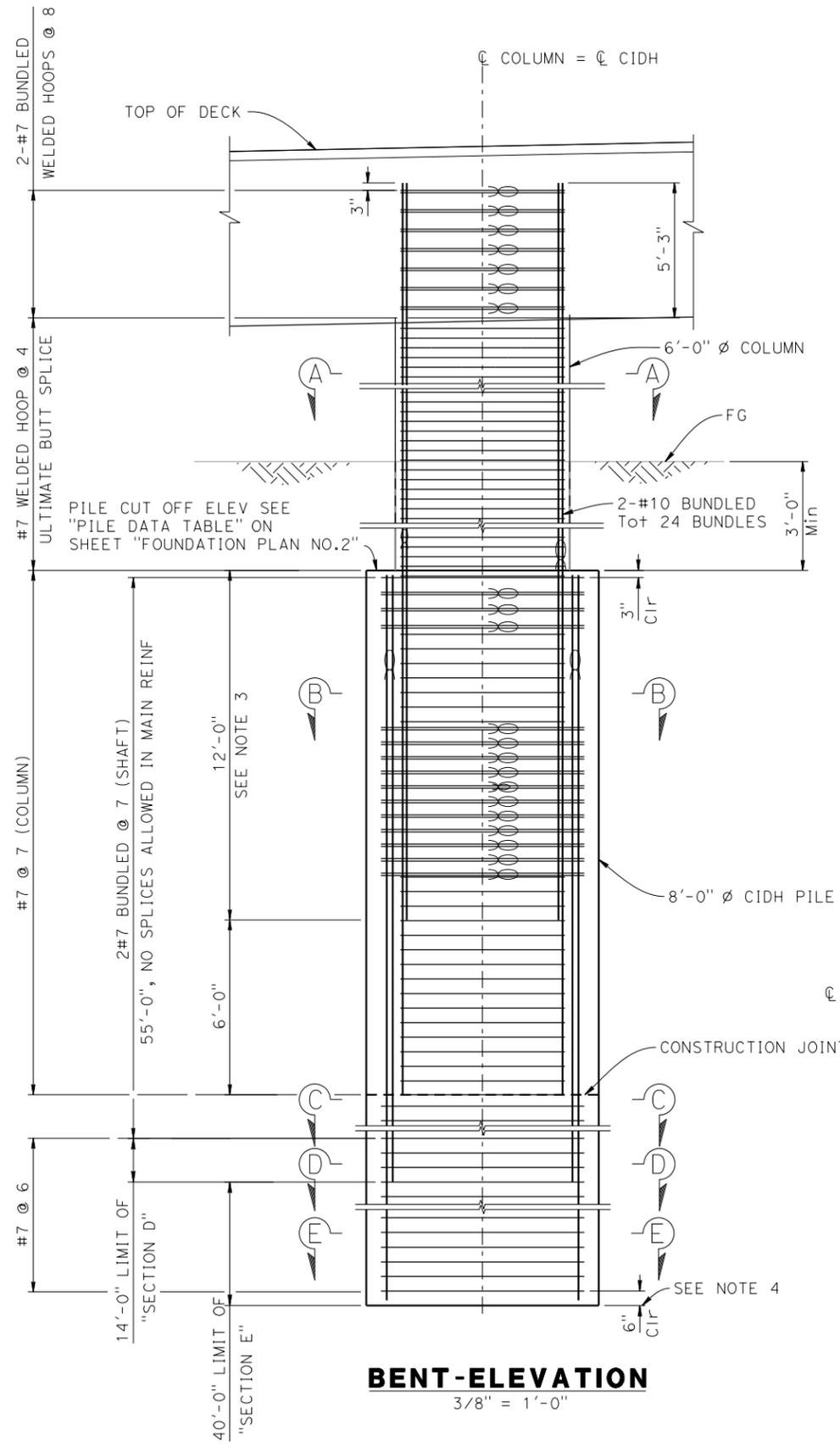
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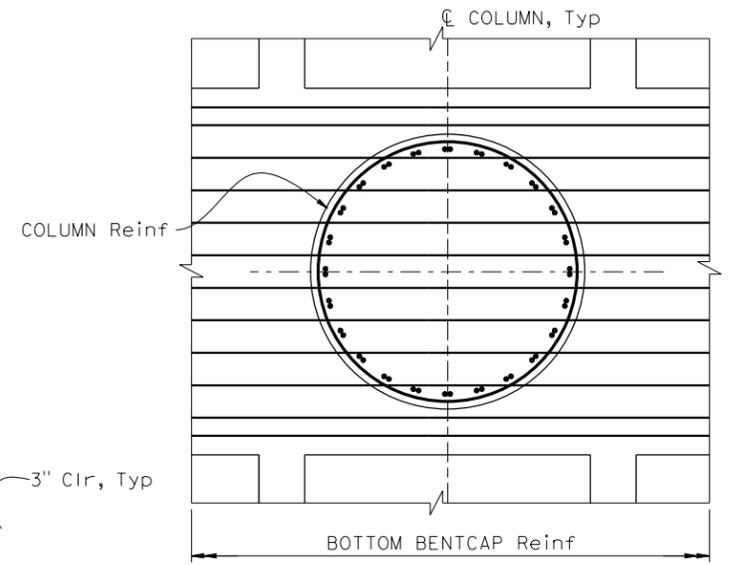
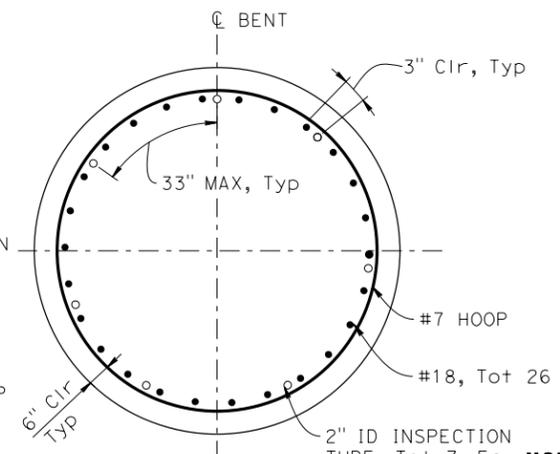
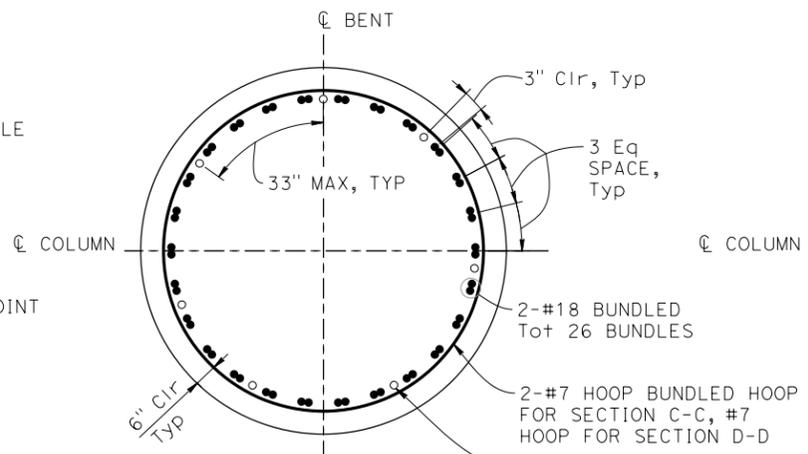
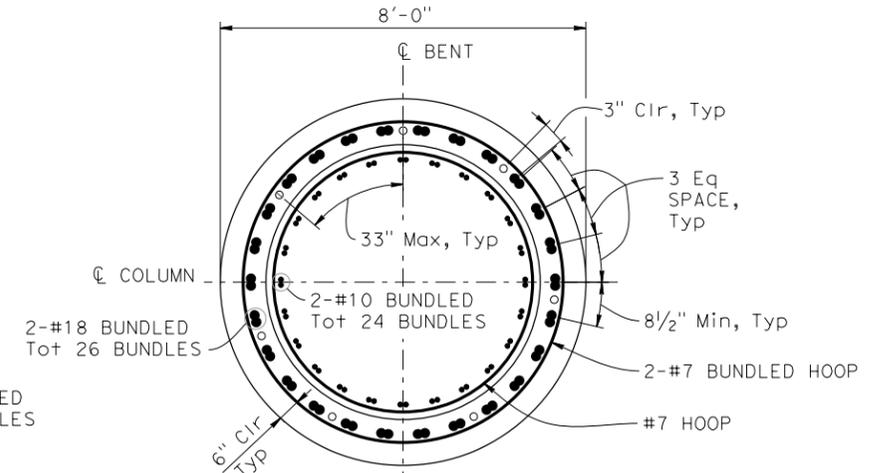
LA CADENA DRIVE BRIDGE (REPLACE) OVER SANTA ANA RIVER

BENT LAYOUT

BRIDGE NO.	??-???
POST MILES	-
SHEET	11
OF	36



NOTE: Column Vertical Reinf to be equally spaced at each half.



- NOTES:**
- No splices allowed in bent cap and column main reinf.
 - Not all reinf shown.
 - Column reinf shall be staggered & embedded into shaft as shown.
 - Specified tip elevation see pile data on "FOUNDATION PLAN NO.2" sheet.
 - All #7 hoops in column and CIDH shaft shall be Ultimate Butt Splice welded hoop.

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-



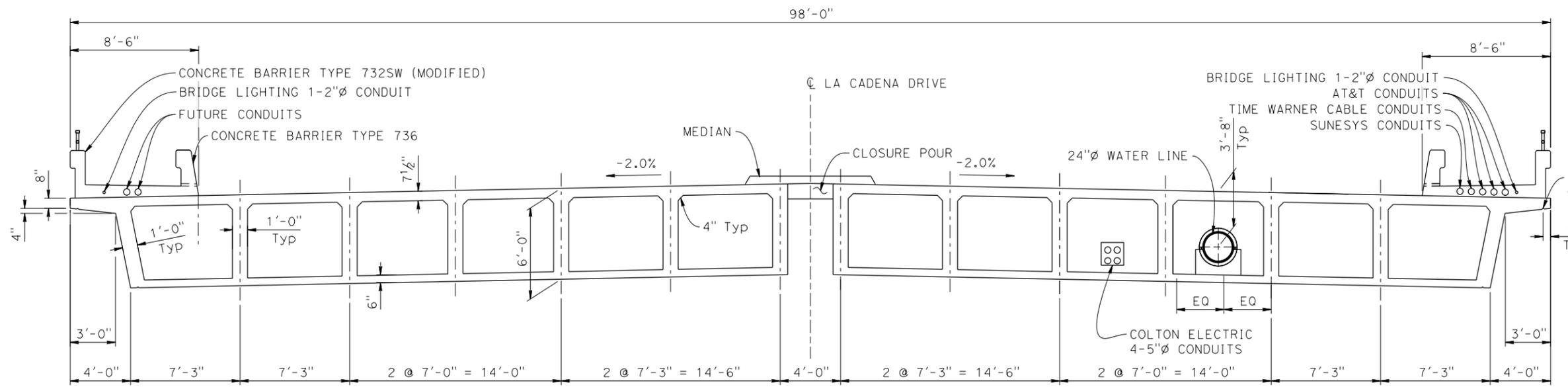
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LA CADENA DRIVE BRIDGE (REPLACE) OVER SANTA ANA RIVER

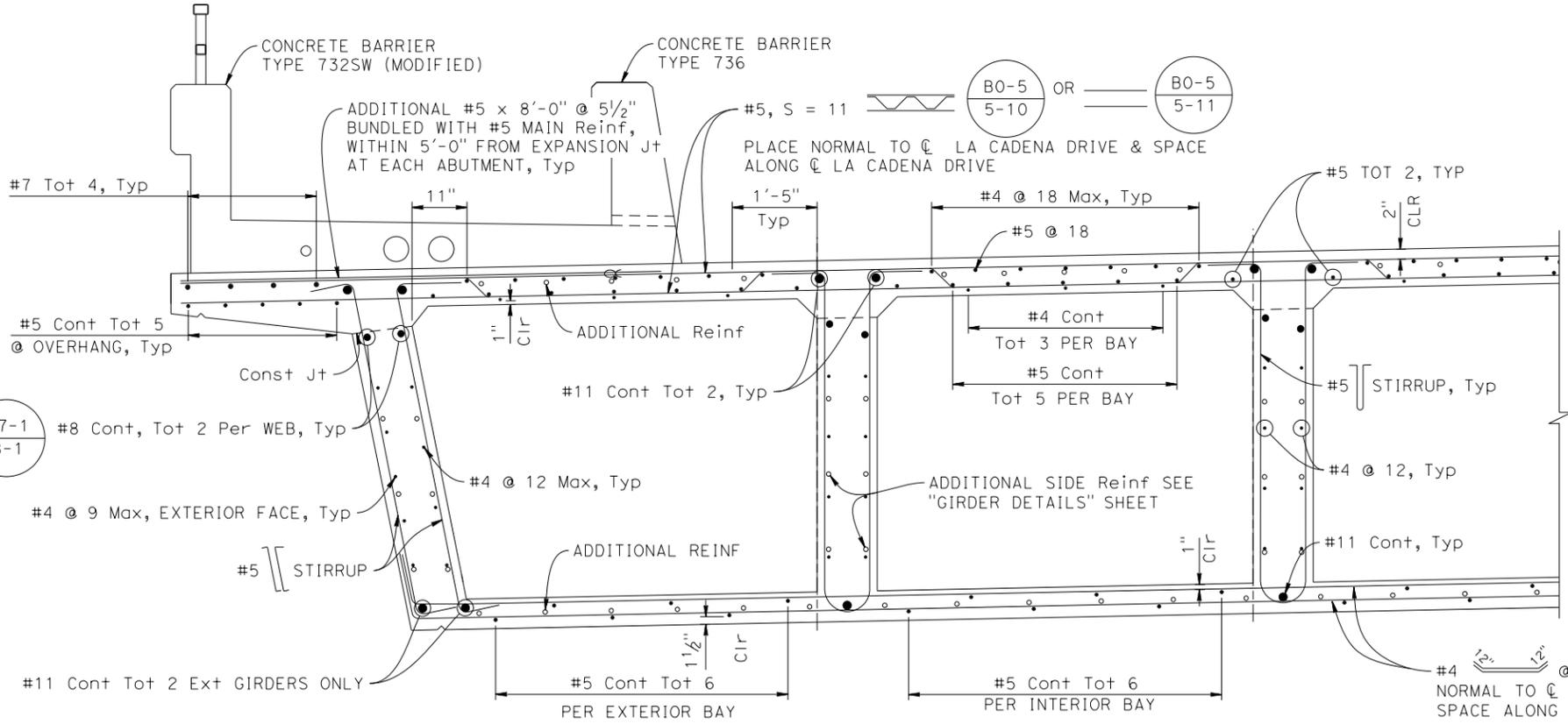
BENT DETAILS

BRIDGE NO.	??-???
POST MILES	-
SHEET	12
OF	36

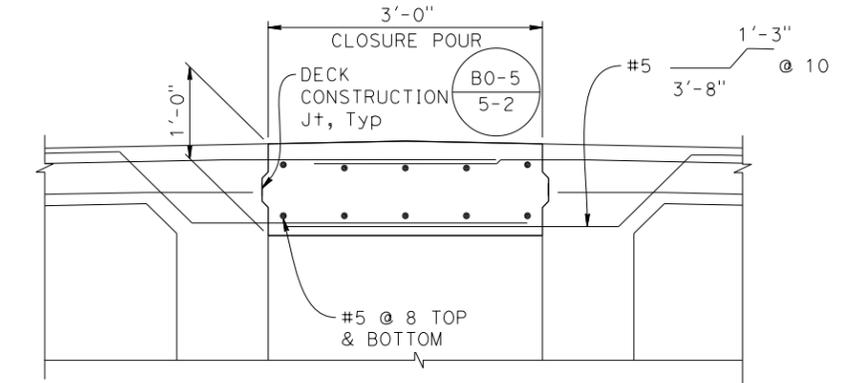


TYPICAL SECTION
1/4" = 1'-0"

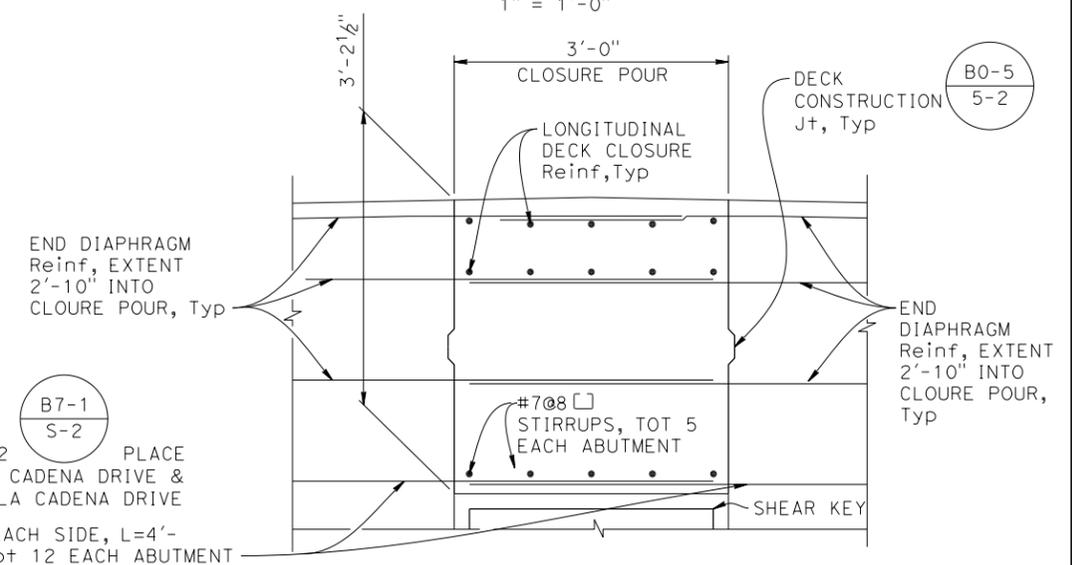
- NOTES:**
- For additional deck, soffit and web side face reinforcement, see "ADDITIONAL REINFORCEMENT" sheet.
 - The anchor dowels/bolts for water line supporting cradles and utility brackets must be in place prior to casting concrete soffit slab. The utilities support layout and details see "WATER LINE AND SUPPORT LAYOUT" sheet, "UTILITIES SUPPORT AND MISC DETAILS NO. 1" and "UTILITIES SUPPORT AND MISC DETAILS NO. 2" sheets.
 - For details of concrete barrier type 732SW (modified) and concrete barriers 736 see "CONCRETE BARRIER TYPE 732SW DETAILS NO. 1" and "CONCRETE BARRIER TYPE 732SW DETAILS NO. 2" sheets.



PART TYPICAL SECTION
3/4" = 1'-0"



DECK CLOSURE POUR DETAIL
1" = 1'-0"



END DIAPHRAGM CLOSURE POUR DETAIL
1" = 1'-0"

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	
3					SPEC		

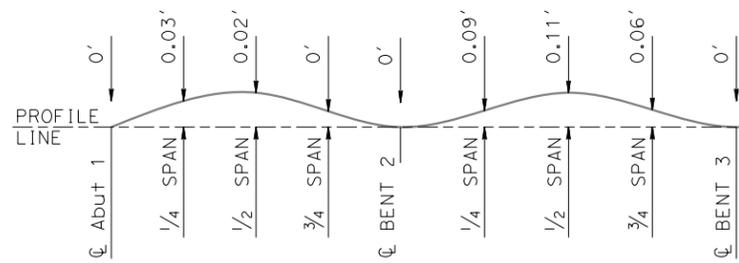


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LA CADENA DRIVE BRIDGE (REPLACE) OVER SANTA ANA RIVER
TYPICAL SECTION

BRIDGE NO.	??-???
POST MILES	-
SHEET	13
OF	36



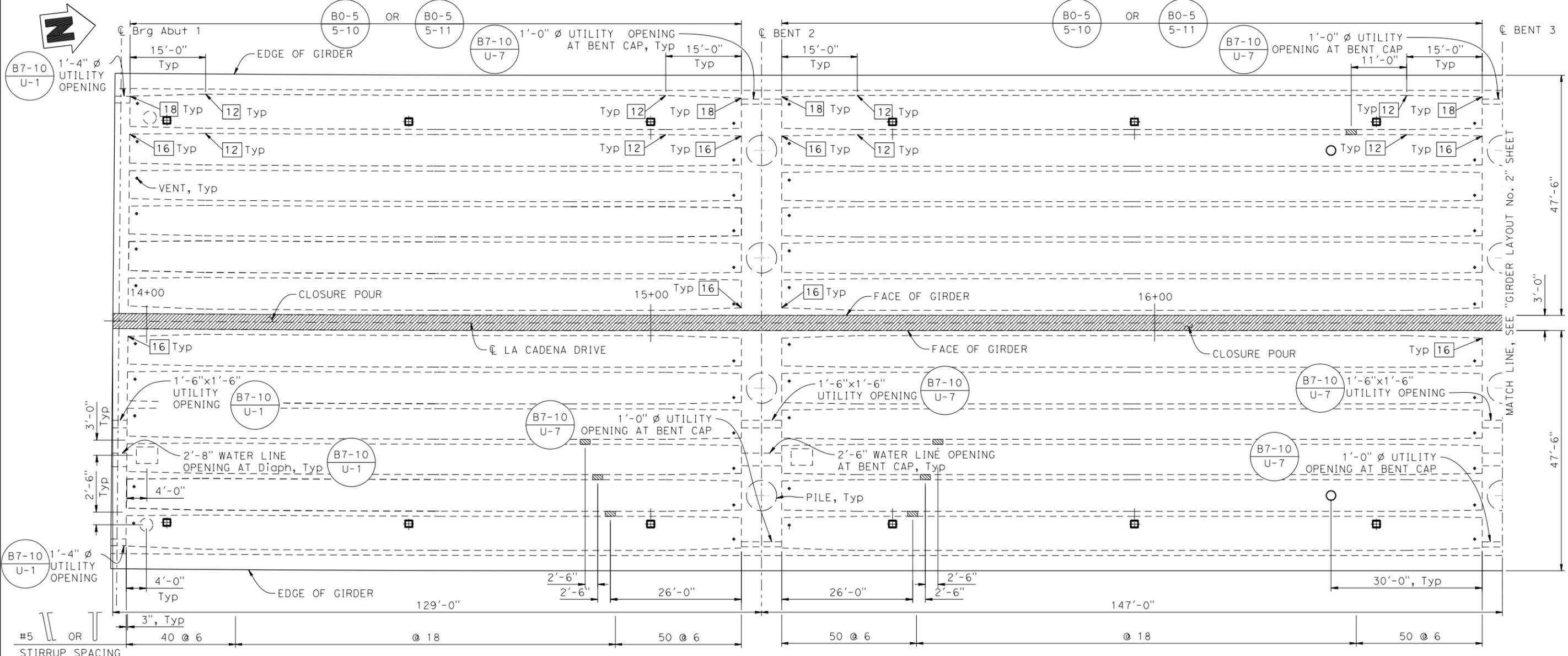
CAMBER DIAGRAM
NO SCALE

LEGEND:

- 18 Indicates Girder Stem Width in inches
- Indicates Closure Pour
- + Indicates Vent hole in bottom slab, adjust location to clear girder reinforcement
- Indicates Soffit access opening, Typ
- Indicates Deck drainage
- Indicates Girder stem access opening, Typ
- Indicates 2'-0" \varnothing Deck access opening, Typ
- Indicates Soffit grate opening, Typ

NOTES:

1. For Girder Reinforcement, see "TYPICAL SECTION" sheet.
2. For Girder End Diaphragm and additional girder side Reinforcement at bent, see "GIRDER DETAILS" sheet.
3. For Bent Reinforcement, see "BENT DETAILS" sheet.
4. For additional Deck, and Soffit Reinforcement, see "ADDITIONAL REINFORCEMENT" sheets.
5. For Girder longitudinal section with P/S path, see "GIRDER DETAILS" sheet.
6. For Deck Drain Locations, see "DECK DRAINAGE LAYOUT" sheet.
7. For Water Line Opening at bent cap see "BENT LAYOUT" sheet.
8. For Soffit Grate Opening, see "UTILITY SUPPORT AND MISC DETAILS NO.2" sheet.



PARTIAL PLAN
1" = 10'

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	
3					SPEC		

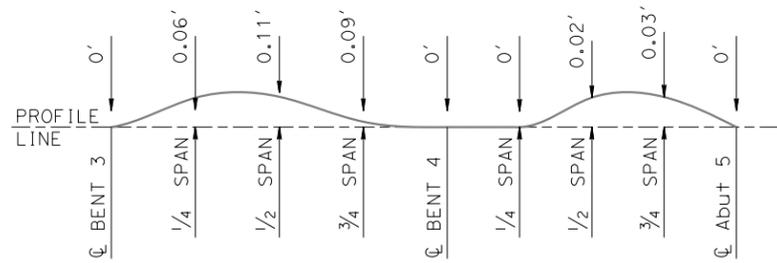


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LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER
GIRDER LAYOUT NO.1

BRIDGE NO.	??-???
POST MILES	-
SHEET	14
OF	36



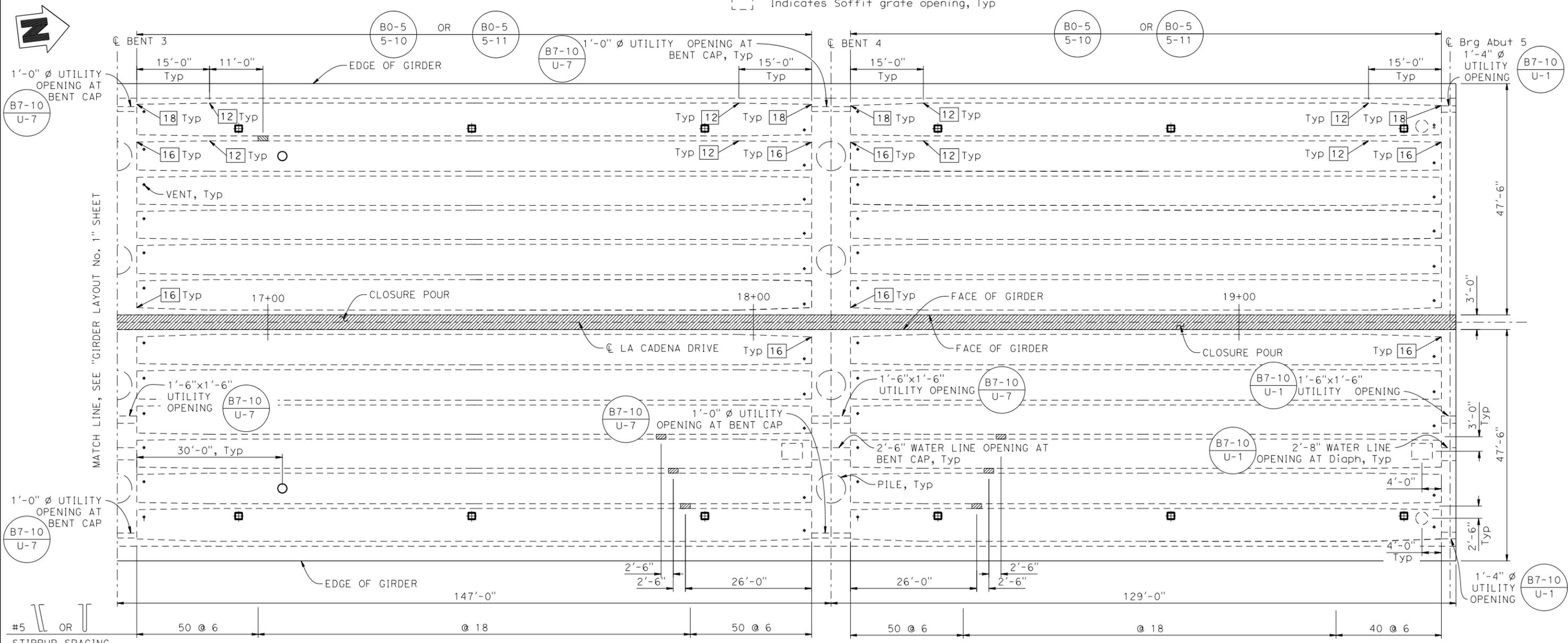
CAMBER DIAGRAM
NO SCALE

LEGEND:

- 18 Indicates Girder Stem Width in inches
- Indicates Closure Pour
- ⊕ Indicates Vent hole in bottom slab, adjust location to clear girder reinforcement
- () Indicates Soffit access opening, Typ
- Indicates Deck drainage
- Indicates Girder stem access opening, Typ
- Indicates 2'-0" ∅ Deck access opening, Typ
- Indicates Soffit grate opening, Typ

NOTES:

1. For Girder Reinforcement, see "TYPICAL SECTION" sheet.
2. For Girder End Diaphragm and additional girder side reinforcement at bent, see "GIRDER DETAILS" sheet.
3. For Bent Reinforcement, see "BENT DETAILS" sheet.
4. For additional Deck, and Soffit Reinforcement, see "ADDITIONAL REINFORCEMENT" sheets.
5. For Girder longitudinal section with P/S path, see "GIRDER DETAILS" sheet.
6. For Deck Drain Locations, see "DECK DRAINAGE LAYOUT" sheet.
7. For Water Line Opening at bent cap see "BENT LAYOUT" sheet.
8. For Soffit Grate Opening, see "UTILITY SUPPORT AND MISC DETAILS NO.2" sheet.



PARTIAL PLAN
1" = 10'

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	
3					SPEC		

REGISTERED PROFESSIONAL ENGINEER

XIAOYUN WU

No. 051245

Exp. 9/30/17

CIVIL

STATE OF CALIFORNIA

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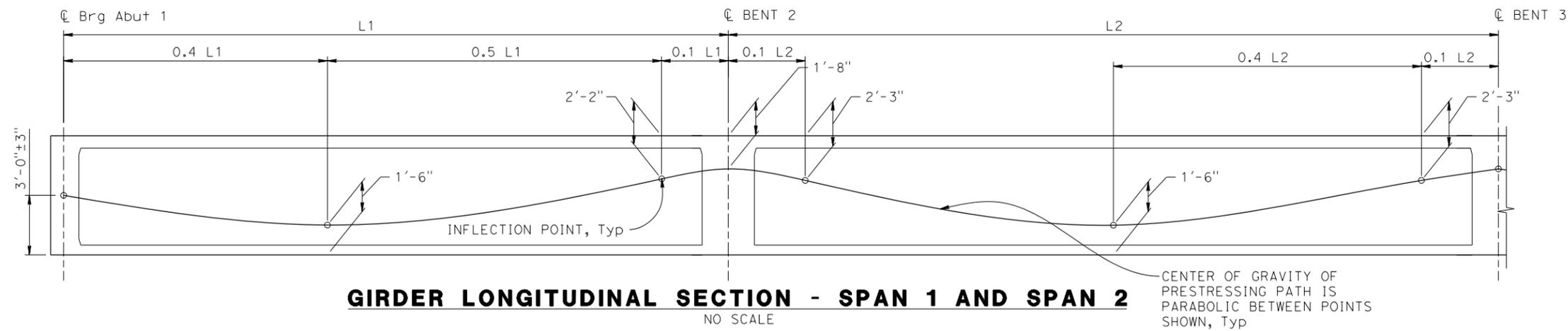
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LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER

GIRDER LAYOUT NO.2

BRIDGE NO.	??-???
POST MILES	-
SHEET	OF
15	36

DATE PLOTTED => 3/7/2017 USERNAME => 1009 TIME PLOTTED => 4:03:04 PM

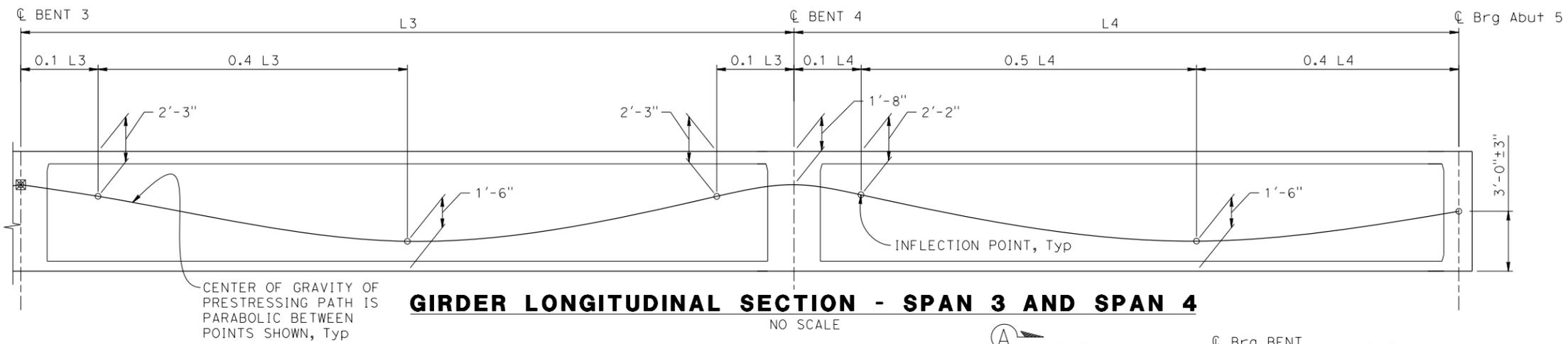


GIRDER LONGITUDINAL SECTION - SPAN 1 AND SPAN 2
NO SCALE

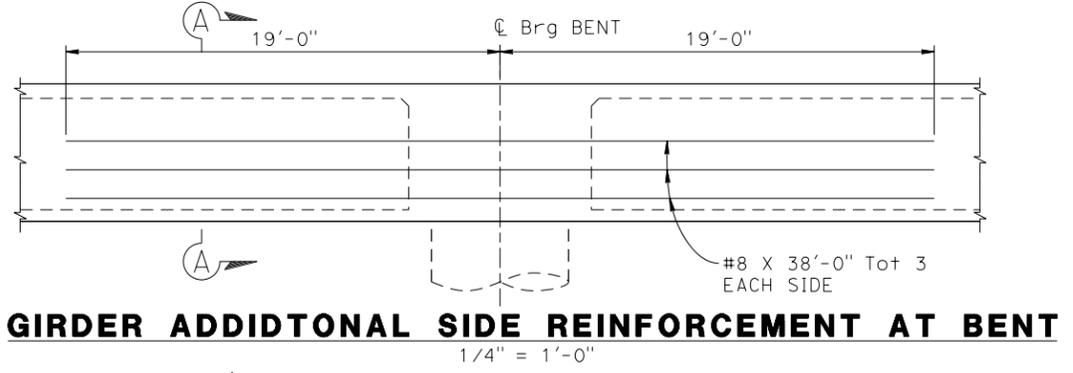
- PRESTRESSING NOTES:**
- A. 270 ksi low relaxation strand:
 $P_{jack} = 13,200$ kips
 (Sections A-A, B-B and P_{jack} are for East Side Bridge (West Side Bridge similar). Total number of girders for East Side Bridge = 7)
 $Anchor\ set = 3/8"$
 $Friction\ curvature\ coefficient\ \mu = 0.15$ (1/rad)
 $Friction\ wobble\ coefficient\ k = 0.0002$ (1/ft)
 - B. Distribution of prestress force (p_{jack}) between girders shall not exceed the ratio of 3:2.
 - C. Maximum final force variation between girders shall not exceed 725 kips.
 - D. Concrete:
 $f'_c = 5$ ksi @ 28 days
 $f'_ci = 3.5$ ksi @ time of stressing
 - E. Contractor shall submit elongation calculations based on initial stress at $\epsilon = 0.879$ times jacking stress.
 - F. Both end stressing shall be performed.

- FALSEWORK RELEASE:**
- Alternative 1:
 Falsework shall be released as soon as permitted by the specification. Closure pour shall not be placed sooner than 60 days after the falsework has been released.
 - Alternative 2:
 Falsework shall not be released less than 28 days after the last concrete has been placed. Closure pour shall not be placed sooner than 14 days after the falsework has been released. When falsework release alternative 2 is used, camber values are 0.75 times those shown.

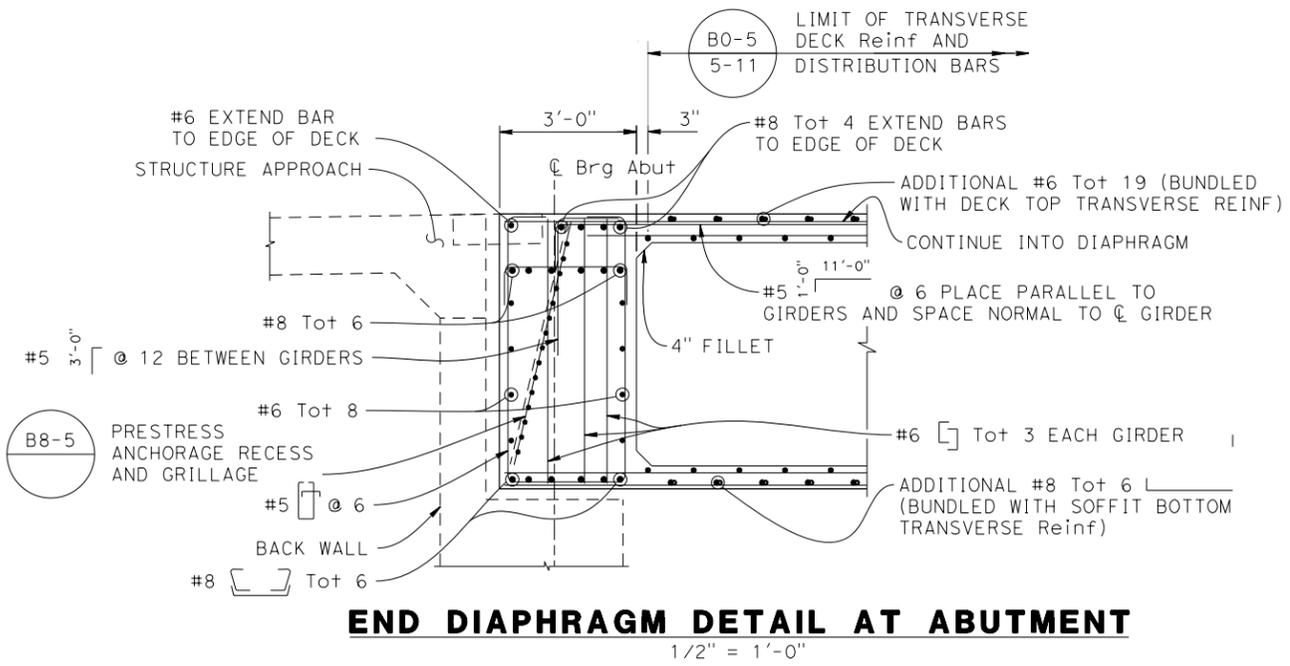
LEGEND:
 ☒ Theoretical point of no movement



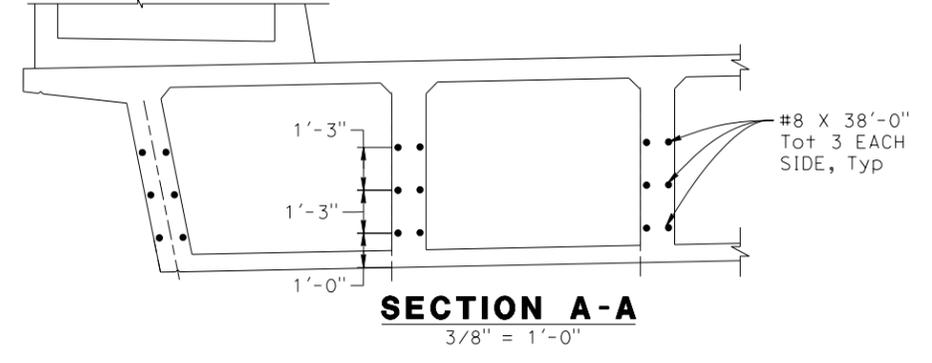
GIRDER LONGITUDINAL SECTION - SPAN 3 AND SPAN 4
NO SCALE



GIRDER ADDITIONAL SIDE REINFORCEMENT AT BENT
1/4" = 1'-0"



END DIAPHRAGM DETAIL AT ABUTMENT
1/2" = 1'-0"



SECTION A-A
3/8" = 1'-0"

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	
3					SPEC		



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 City Engineer: Victor Ortiz, P.E.
 Date:
 R.C.E: 73848 Exp: 06/30/17

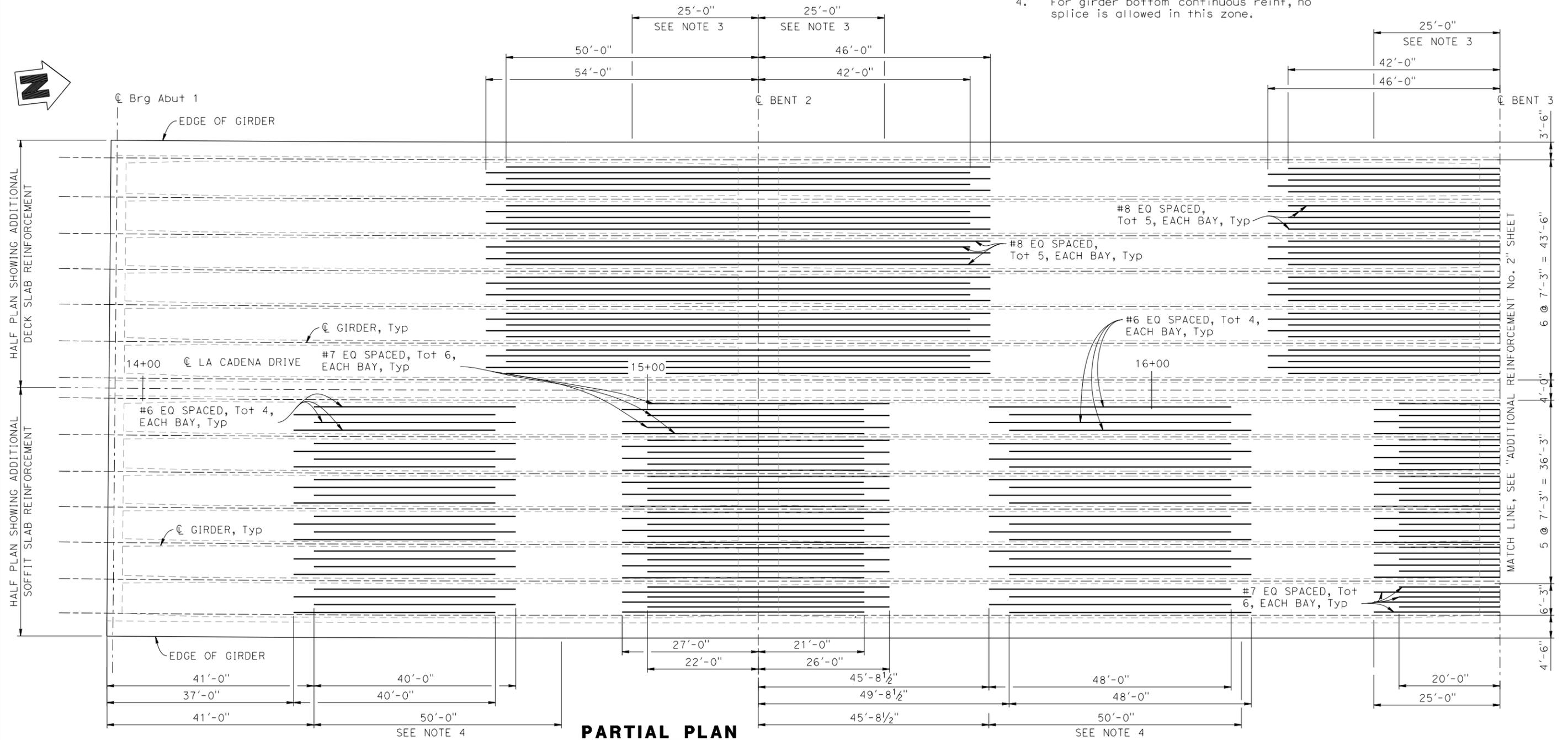
LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER
GIRDER DETAILS

BRIDGE NO.	??-???
POST MILES	-
SHEET	16
OF	36

DATE PLOTTED => 3/17/2017 USERNAME => toon TIME PLOTTED => 4:03:05 PM

NOTES:

1. Additional Reinforcement shall be placed parallel to CL La Cadena Ave and spaced equally along CL Bent.
2. Rebar splicing is allowed for continuous reinforcement in box girder. The splice shall conform to the requirements of "Service Butt Splice".
3. For girder top continuous longitudinal reinf, no splice is allowed in this zone.
4. For girder bottom continuous reinf, no splice is allowed in this zone.



PARTIAL PLAN
1" = 10'

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-



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Date: R.C.E: 73848 Exp: 06/30/17

**LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER**

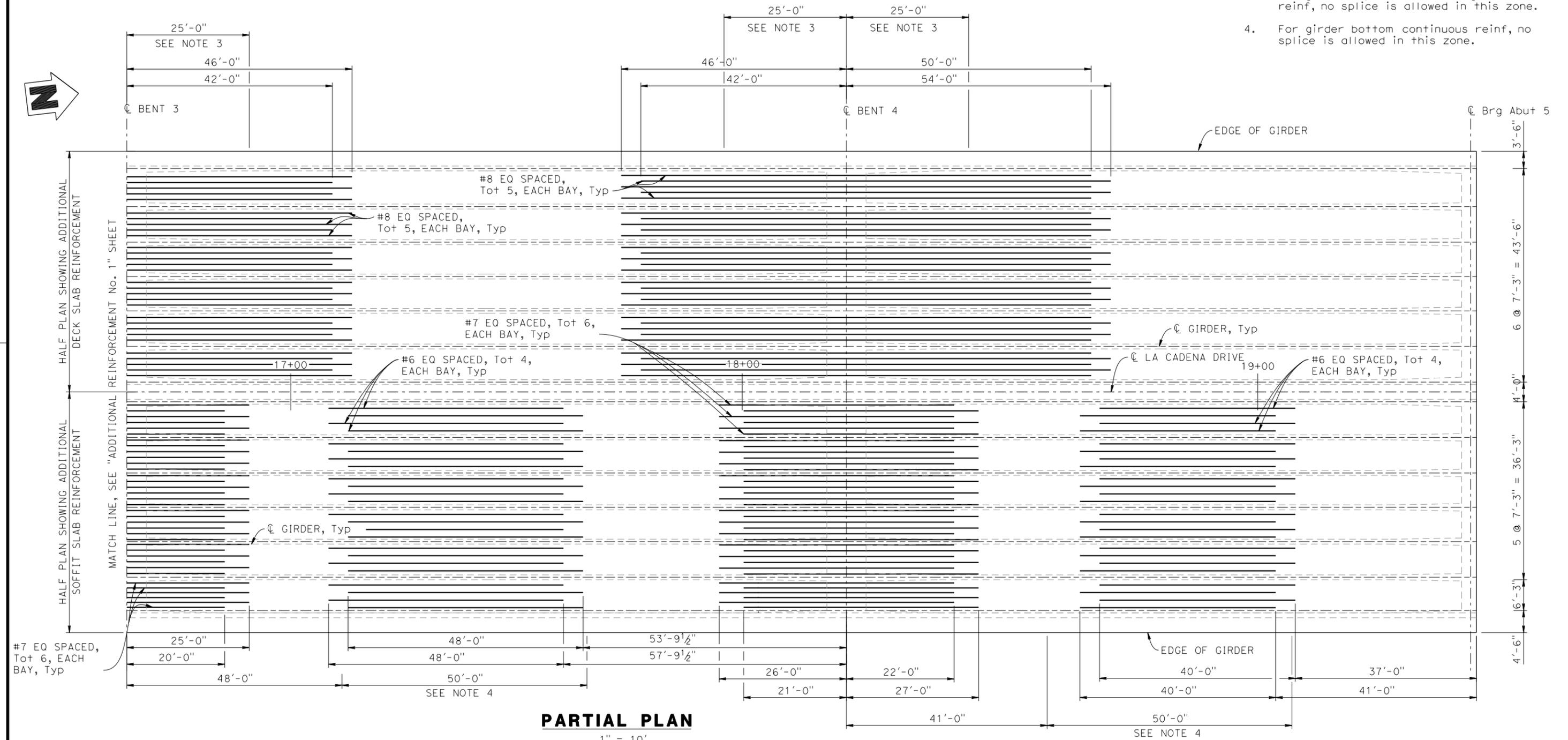
ADDITIONAL REINFORCEMENT NO.1

BRIDGE NO.	??-???
POST MILES	-
SHEET	17
OF	36

DATE PLOTTED => 3/7/2017 USERNAME => foon TIME PLOTTED => 4:03:06 PM

NOTES:

1. Additional Reinforcement shall be placed parallel to CL La Cadena Ave and spaced equally along CL Bent.
2. Rebar splicing is allowed for continuous reinforcement in box girder. The splice shall conform to the requirements of "Service Butt Splice".
3. For girder top continuous longitudinal reinf, no splice is allowed in this zone.
4. For girder bottom continuous reinf, no splice is allowed in this zone.



HALF PLAN SHOWING ADDITIONAL DECK SLAB REINFORCEMENT
HALF PLAN SHOWING ADDITIONAL SOFFIT SLAB REINFORCEMENT
MATCH LINE, SEE "ADDITIONAL REINFORCEMENT NO. 1" SHEET

DATE PLOTTED => 3/7/2017
USERNAME => foon
TIME PLOTTED => 4:03:07 PM

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-

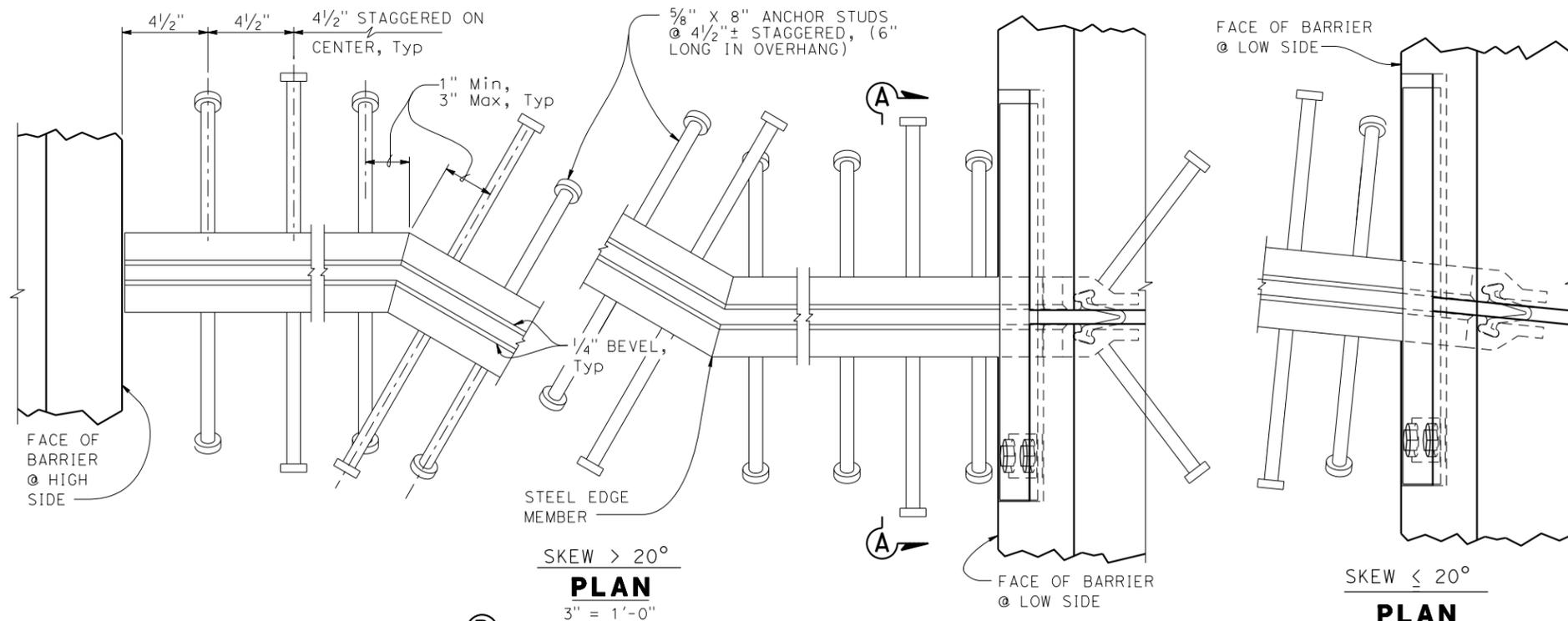


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City Engineer: Victor Ortiz, P.E.
Date:
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**LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER**
ADDITIONAL REINFORCEMENT NO.2

BRIDGE NO.	??-???
POST MILES	-
SHEET	18
OF	36

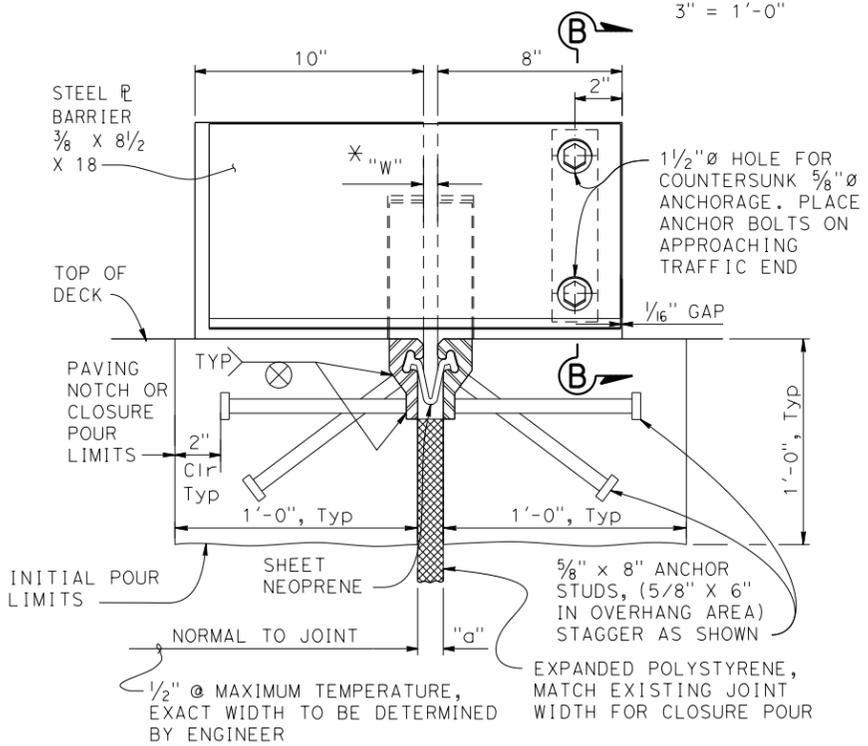


PLAN
3" = 1'-0"

PLAN
3" = 1'-0"

NOTES:

1. Alternatively, fillet or complete penetration welds may be used at anchor studs.
2. Alternate types of anchor studs may be permitted subject to the authorization by the Engineer.
3. Joint seal assembly to be used in conjunction with closure pour. (See other sheets for limits). Closure pour shall not be placed until final deck surface is within the tolerances specified.
4. Use joint at crown of roadway, at any change in traverse slope in deck and at changes in horizontal direction. Place other joints at or near lanes. All metal parts to be painted or galvanized after fabrication.
5. Sheet Neoprene shall be fabricated in one continuous piece and shall be fabricated to bend around corners. Field splices of the neoprene are not allowed.
6. Insert assembly or expansion anchorage for 5/8" x 1 3/4" bolts. Use installation bolts extended 1/2" minimum past nut and coat with bond breaker, after concrete has cured, remove installation bolts, install HS bolts and sheet neoprene.
7. Use sidewalk detail at all sidewalk joints. Use barrier detail low side at both sides if the roadway is crowned, or if the difference in elevation between the ends of the seal is 6 inches or less.
8. a_c , a_s , are the thermal expansion coefficients for concrete and steel respectively.
9. Anchor studs shall conform to ASTM 108.

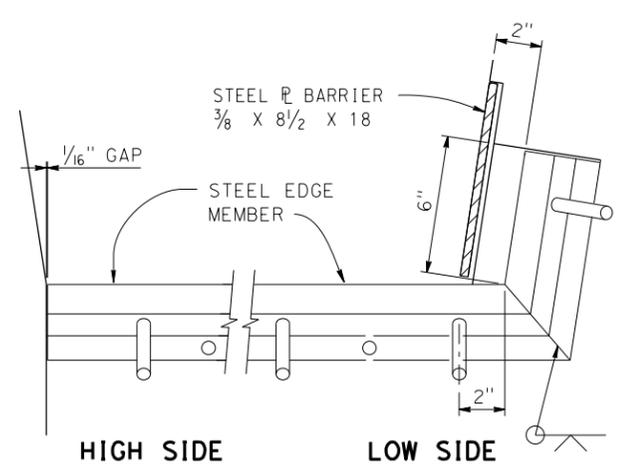


SECTION A-A
3" = 1'-0"

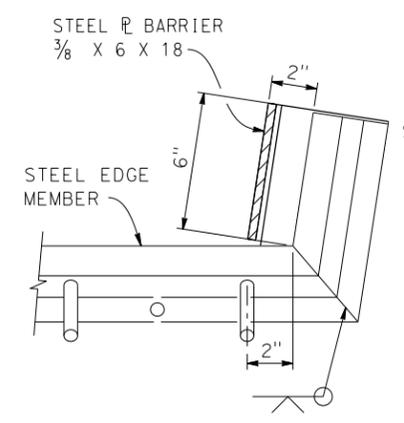
JOINT INFORMATION			"a" DIMENSIONS		
LOCATION	MOVEMENT RATING (MR)	SKEW	WINTER	SPRING & FALL	SUMMER
Abut 1	3 1/2"	-	1 3/4"	1 3/8"	7/8"
Abut 5	3 1/2"	-	1 3/4"	1 3/8"	7/8"

SCHEMATIC STEEL EDGE MEMBER

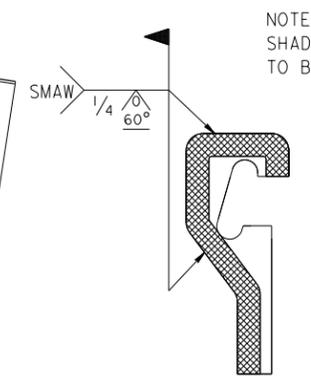
NO SCALE



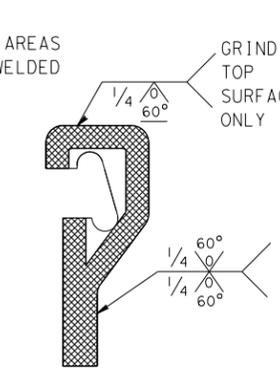
BARRIER DETAIL
3" = 1'-0"



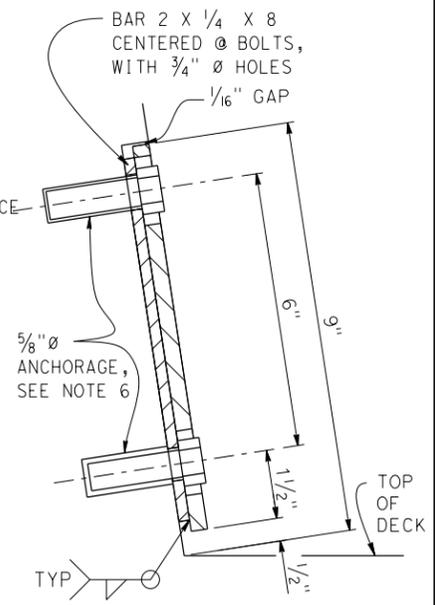
SIDEWALK DETAIL
3" = 1'-0"



SCHEMATIC FIELD WELD DETAIL



SCHEMATIC SHOP WELD DETAIL



SECTION B-B
6" = 1'-0"

* TO SET MINIMUM JOINT OPENING "W"

$$W = \frac{1}{2} + [(Max \text{ Str temperature in } ^\circ F) - (actual \text{ Str temperature in } ^\circ F)] * (a_c) * (12) * (\text{contributory L in feet})$$

"W" = $\frac{1}{2}$ " Minimum
 $a_c = 0.0000060$

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-

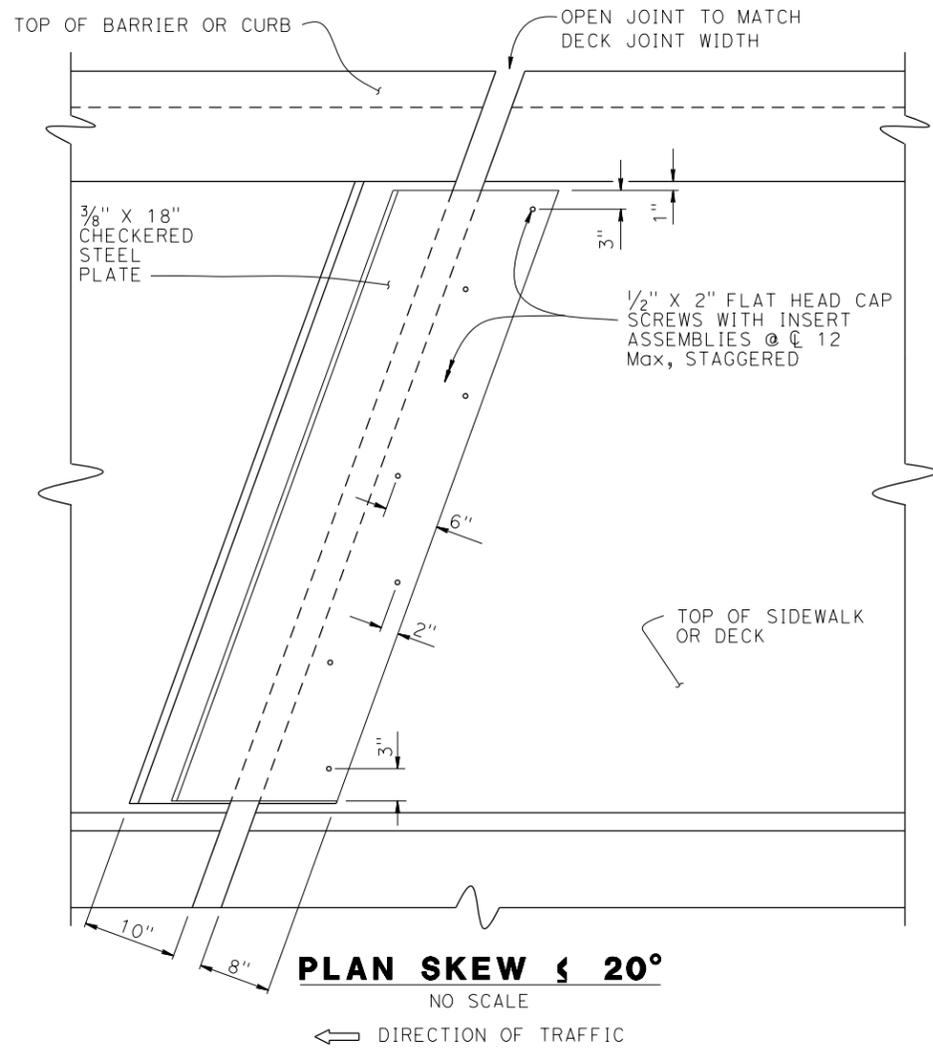


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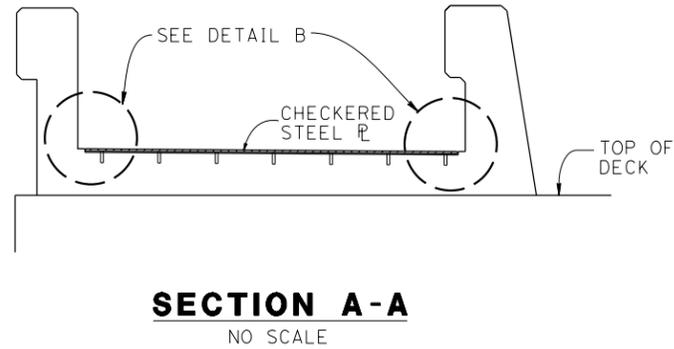
CITY OF COLTON
PUBLIC WORKS DEPARTMENT
 City Engineer: Victor Ortiz, P.E.
 Date:
 R.C.E: 73848 Exp: 06/30/17

LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER
JOINT SEAL ASSEMBLY DETAILS (Maximum MR=4")

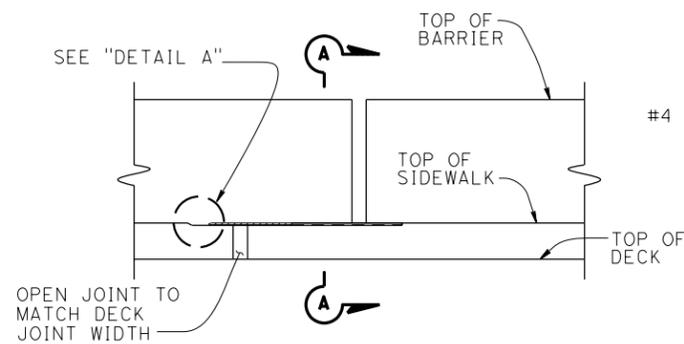
BRIDGE NO.	??-???
POST MILES	-
SHEET	19
OF	36



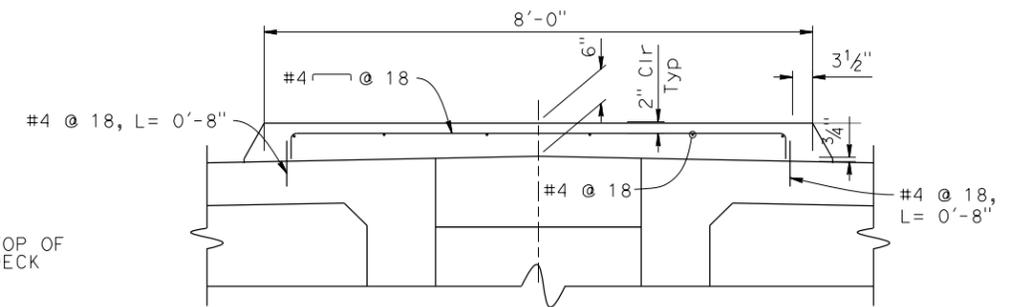
PLAN SKEW $\leq 20^\circ$
NO SCALE
← DIRECTION OF TRAFFIC



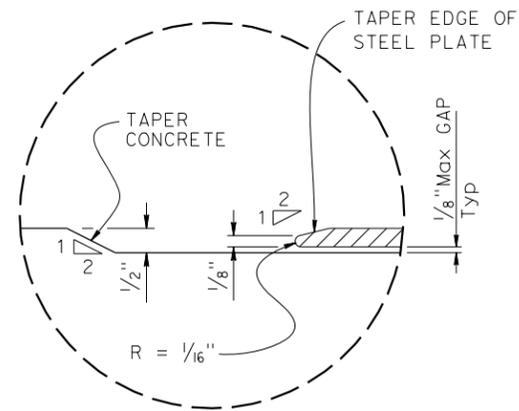
SECTION A-A
NO SCALE



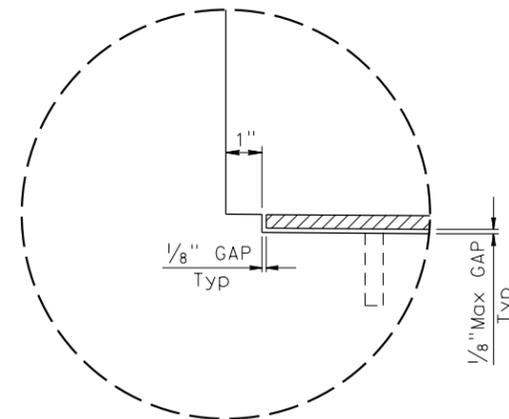
ELEVATION
NO SCALE



MEDIAN DETAIL
 $\frac{3}{4}'' = 1'-0''$



DETAIL A
NO SCALE



DETAIL B
NO SCALE

NOTES:

1. Utility openings and expansion joints not shown for clarity.
2. Recess concrete $\frac{1}{2}''$ for plates.
3. Plates to be galvanized.
4. Architectural treatment not shown

REV	BY	APPROVED	DATE	DESIGN	BY	CHECKED
1				DETAILS	W. Chen	L. Liu
2				QUANTITIES	G. Estepa	-
3				SPEC	-	-

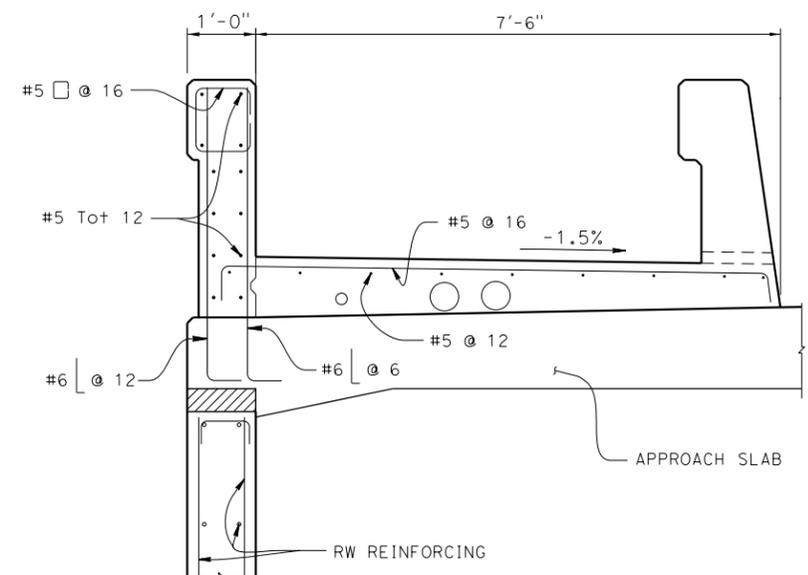


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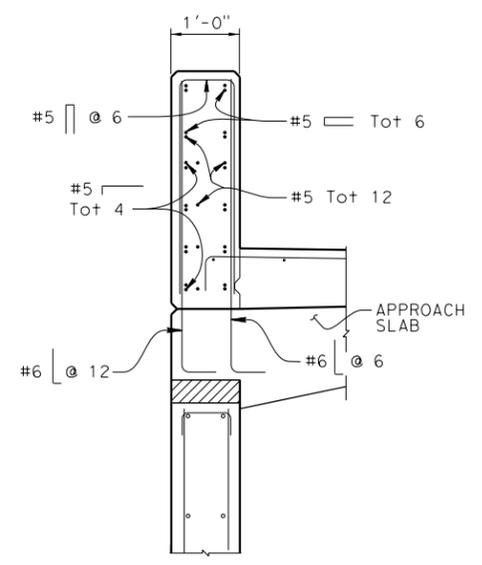
**CITY OF COLTON
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City Engineer: Victor Ortiz, P.E.
Date:
R.C.E: 73848 Exp: 06/30/17

**LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER**
**MEDIAN DETAIL AND
JOINT ARMOR FOR PEDESTRIAN WALKWAYS**

BRIDGE NO.	??-???
POST MILES	-
SHEET	20
OF	36

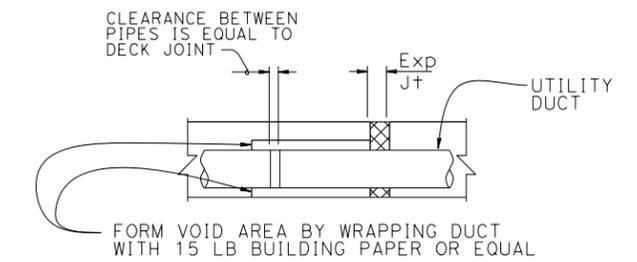


(WITH APPROACH SLAB)
SECTION C-C
3/4" = 1'-0"

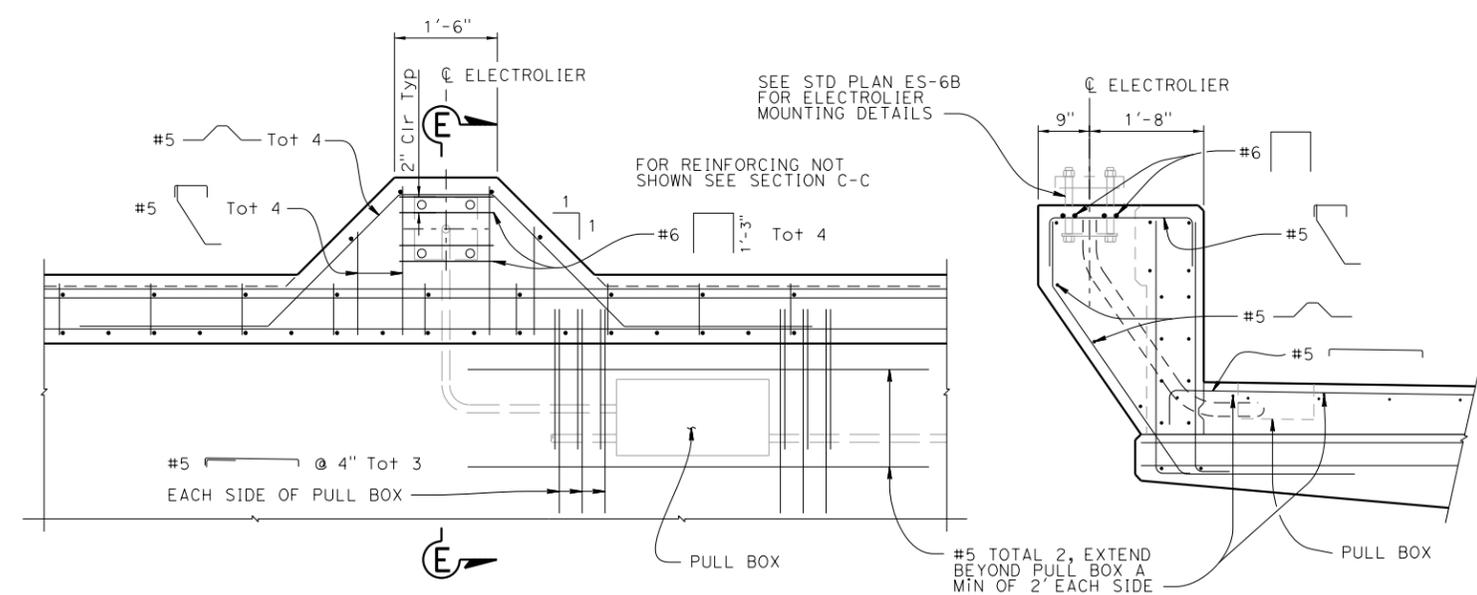


NOTE:
FOR SIDEWALK SEE SECTION C-C
SECTION D-D
3/4" = 1'-0"

NOTES:
RAILING AND FENCE NOT SHOWN FOR CLARITY



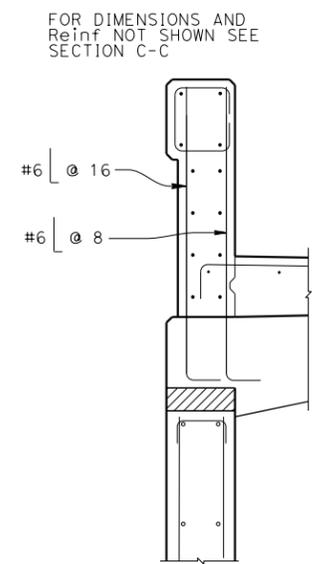
UTILITY DUCT EXPANSION JOINT
1/2" = 1'-0"



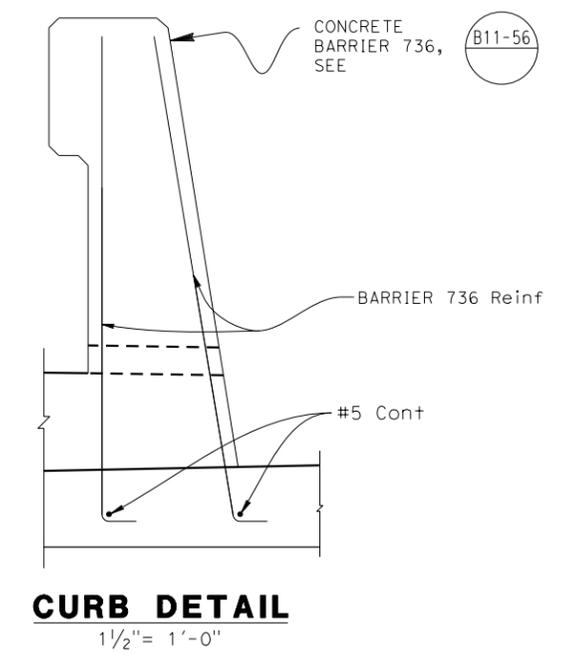
PEDESTAL PLAN
3/4" = 1'-0"

PEDESTAL DETAILS
3/4" = 1'-0"

SECTION E-E
3/4" = 1'-0"

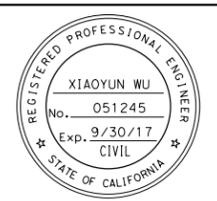


SECTION F-F
3/4" = 1'-0"



CURB DETAIL
1/2" = 1'-0"

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-



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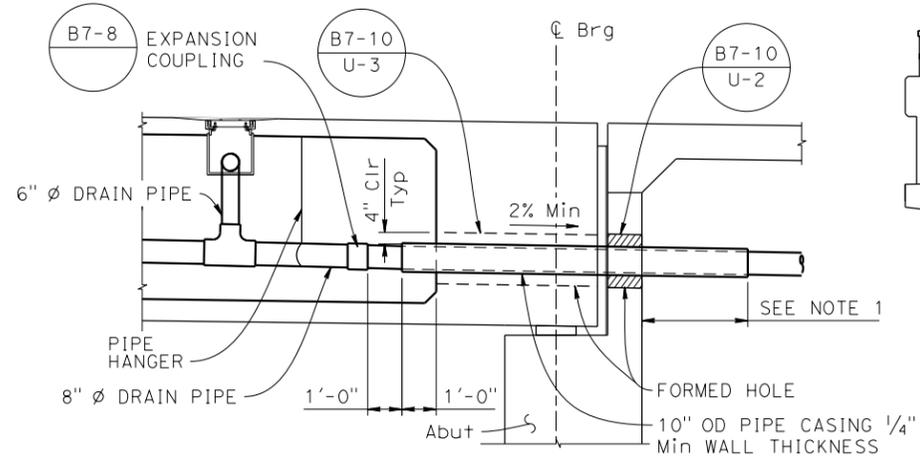
CITY OF COLTON
PUBLIC WORKS DEPARTMENT
City Engineer: Victor Ortiz, P.E.
Date: R.C.E: 73848 Exp: 06/30/17

**LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER**
CONCRETE BARRIRE TYPE 732SW DETAILS NO.2

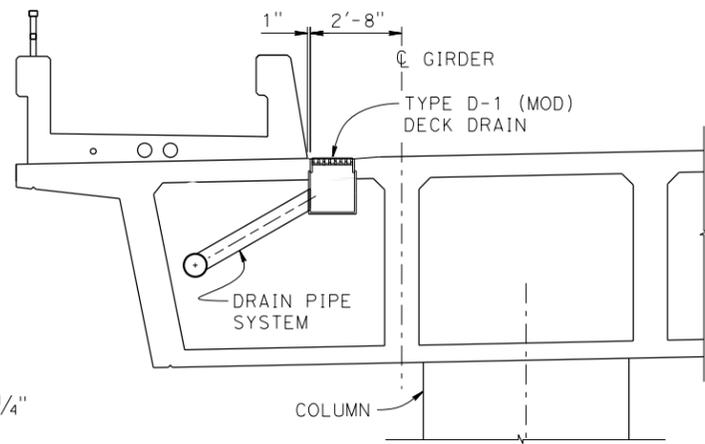
BRIDGE NO.	??-???
POST MILES	-
SHEET	22
OF	36

NOTES:

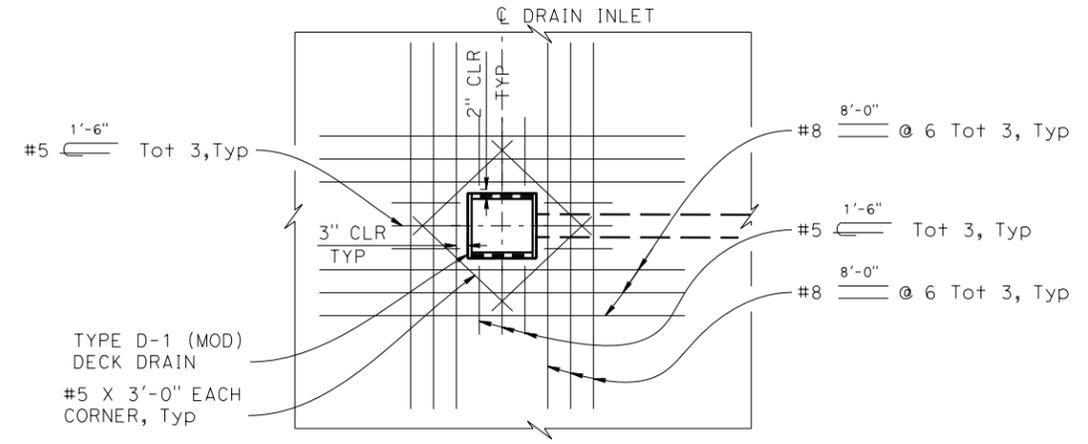
1. Casing shall extend to 5'-0" beyond the end of approach slab.
2. For drain outlet details, see "Deck Drainage Details" sheet.



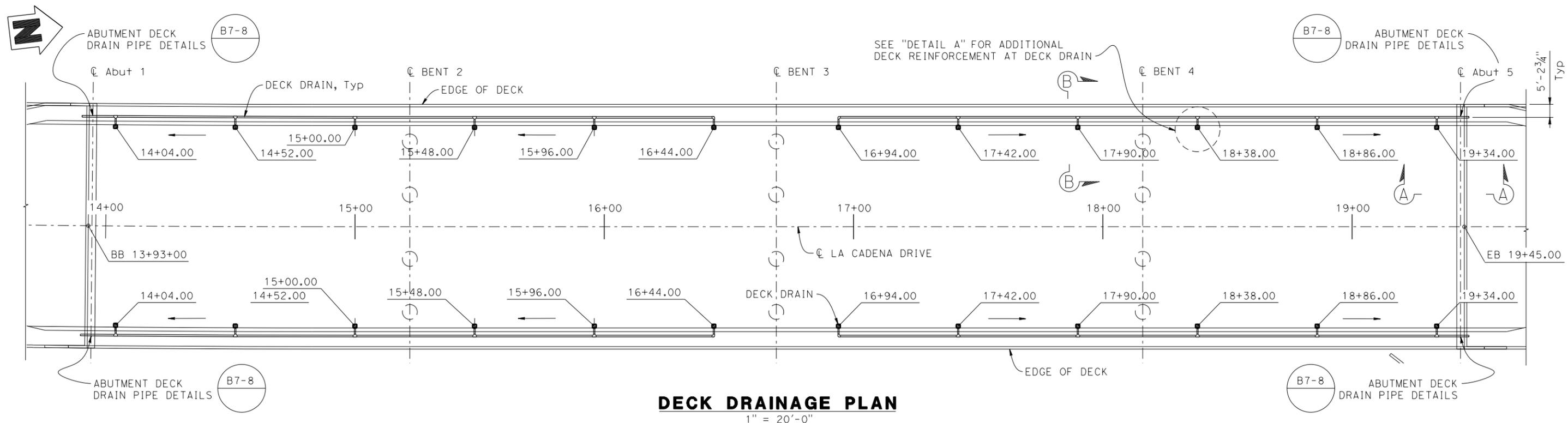
SECTION A-A
3/8" = 1'-0"



SECTION B-B
3/8" = 1'-0"



DETAIL A
1/2" = 1'-0"



DECK DRAINAGE PLAN
1" = 20'-0"

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-



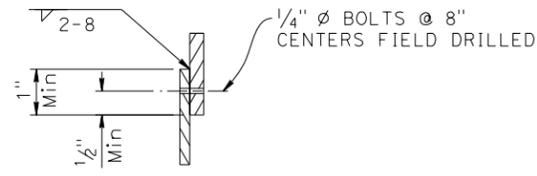
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**CITY OF COLTON
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R.C.E: 73848 Exp: 06/30/17

**LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER**

DECK DRAINAGE LAYOUT

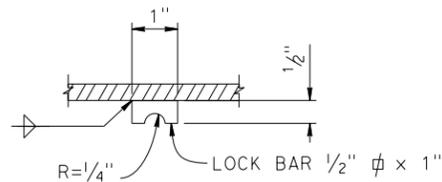
BRIDGE NO.	??-???
POST MILES	-
SHEET	23
OF	36



BOLT OR WELD AT CONTRACTOR'S OPTION

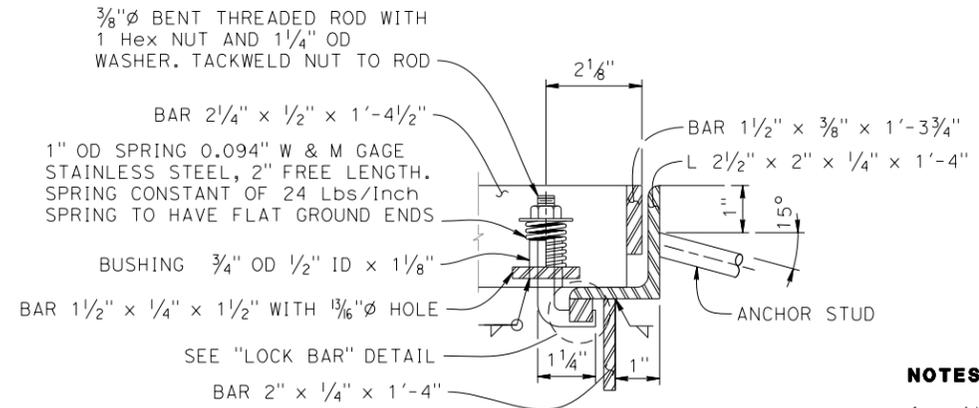
DETAIL B

6" = 1'-0"



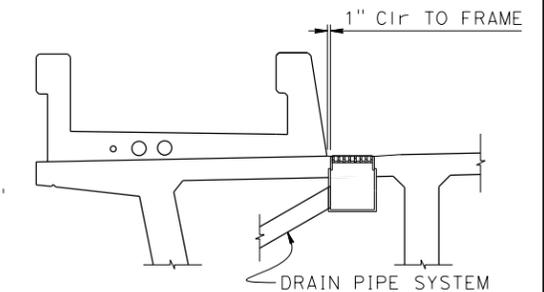
LOCK BAR

6" = 1'-0"



DETAIL A

6" = 1'-0"

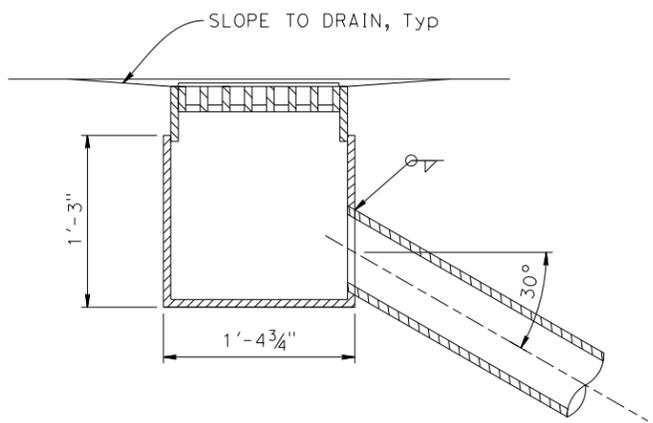


ELEVATION DECK DRAIN LOCATION

3/8" = 1'-0"

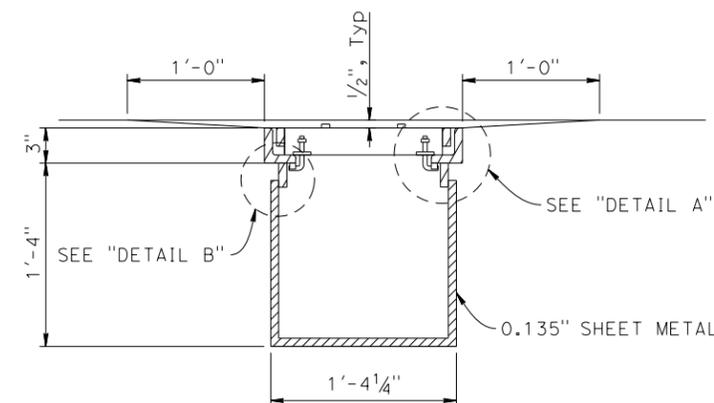
NOTES:

1. All pipe to be NPS 6 x 0.135" welded steel pipe except as noted and galvanized if not encased in concrete. fittings and bends shall have a minimum wall thickness of 1/8".
2. All joints or connections to be butt welded or connected by a steel pipe sleeve and to be smooth throughout inside of pipe except as noted.
3. All bends to be on 1'-6" minimum radius measured along pipe. all bends to be smooth.
4. Pipes not encased in concrete to be supported by suitable galvanized hangers @ 10'-0" maximum spacing throughout.
5. Galvanize deck drain assembly after fabrication.
6. For details not shown, see B7-6



SECTION B-B

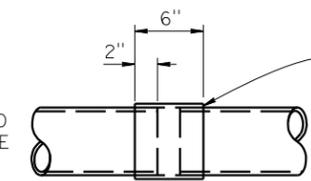
1 1/2" = 1'-0"



SECTION A-A

1 1/2" = 1'-0"

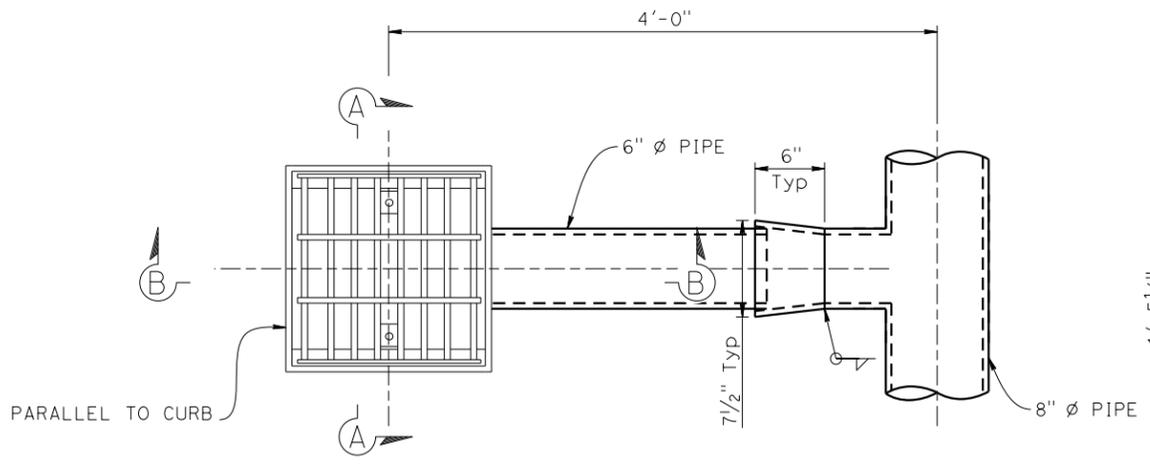
SLEEVE INSIDE DIAMETER NO GREATER THAN PIPE OUTSIDE DIAMETER + 1/16"



SLEEVE CONNECTION

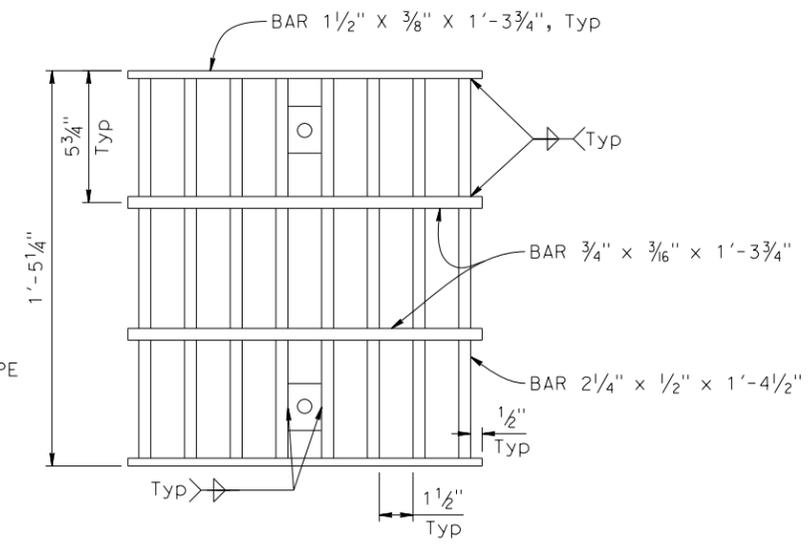
1 1/2" = 1'-0"

APPLY ADHESIVE SEALANT ON PIPE PERIPHERY TO SEAL JOINT. SECURE EACH END OF SLEEVE TO PIPE WITH 3-#10-24 x 1/2" SELF TAPPING Hex HEAD SCREWS



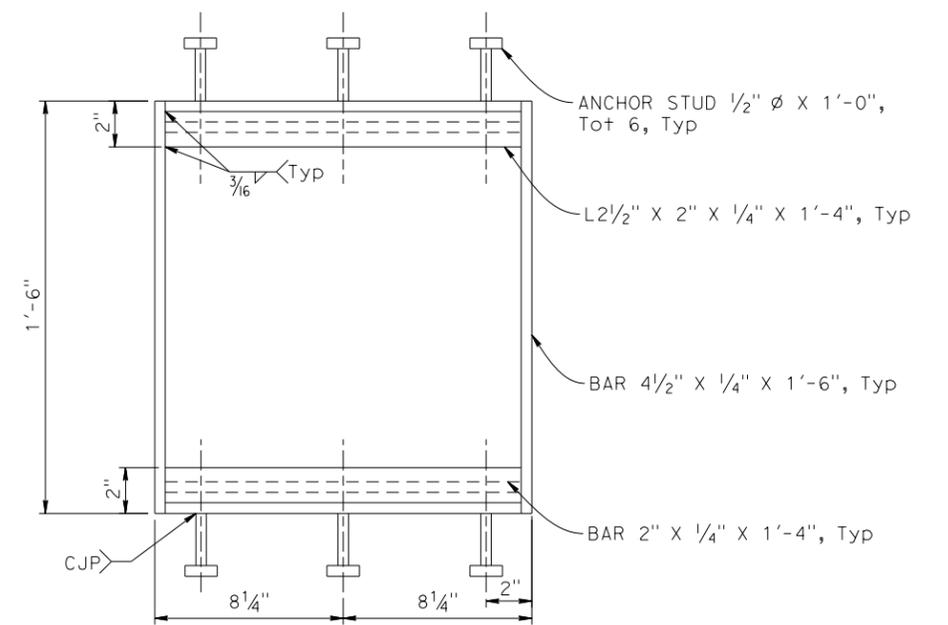
DECK DRAINAGE TYPE D-1(MOD) PLAN

1 1/2" = 1'-0"



GRATE

3" = 1'-0"



FRAME

3" = 1'-0"

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	
3					SPEC		

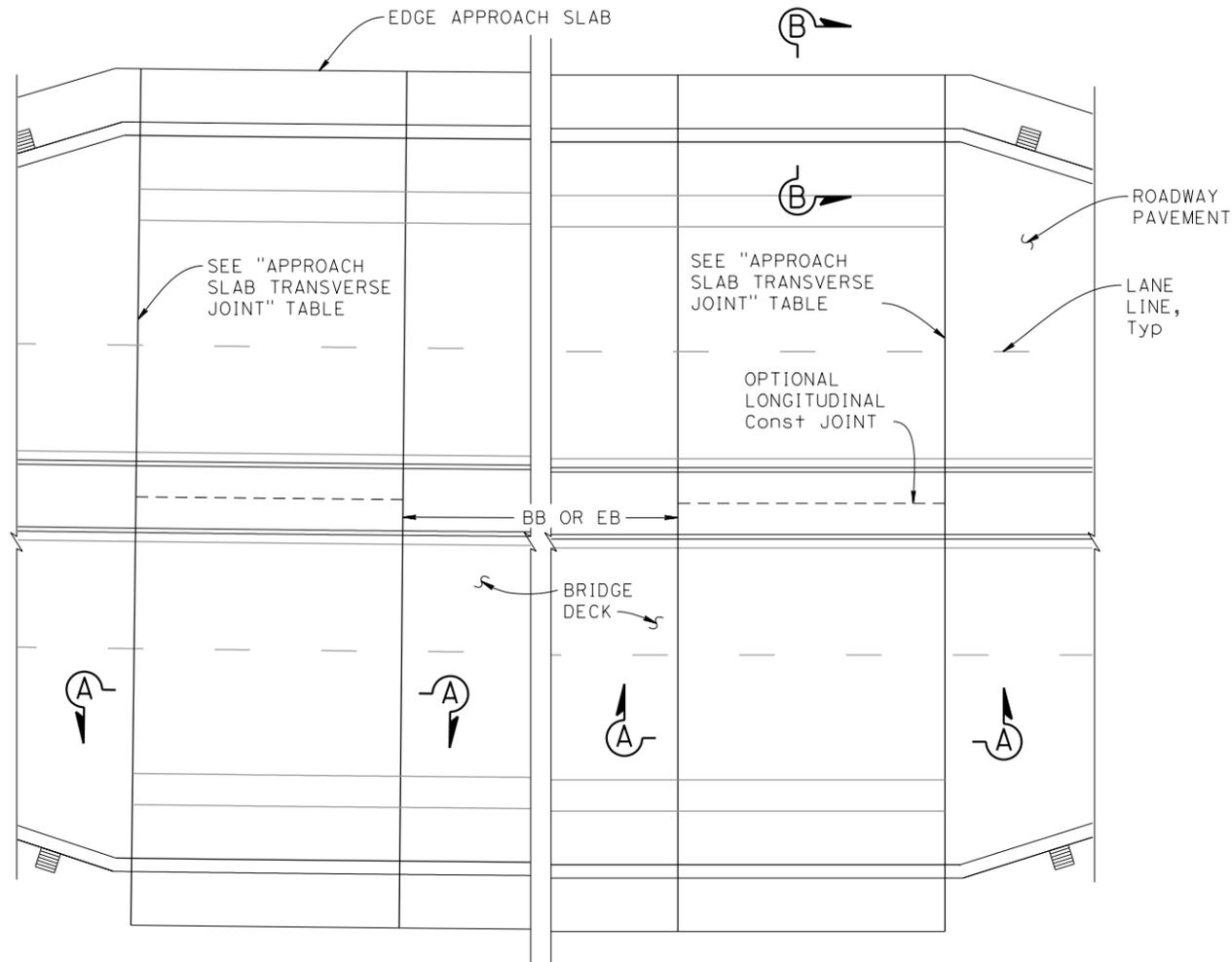


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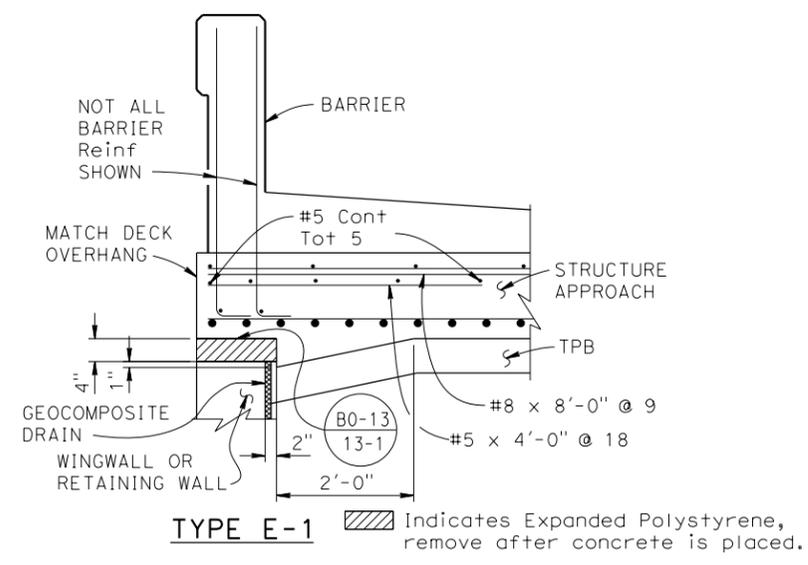
CITY OF COLTON
PUBLIC WORKS DEPARTMENT
 City Engineer: Victor Ortiz, P.E.
 Date:
 R.C.E: 73848 Exp: 06/30/17

LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER
DECK DRAINAGE DETAILS

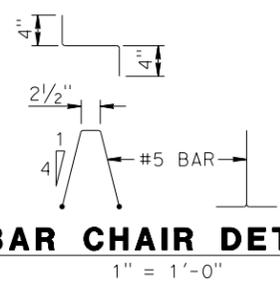
BRIDGE NO.	??-???
POST MILES	-
SHEET	24
OF	36



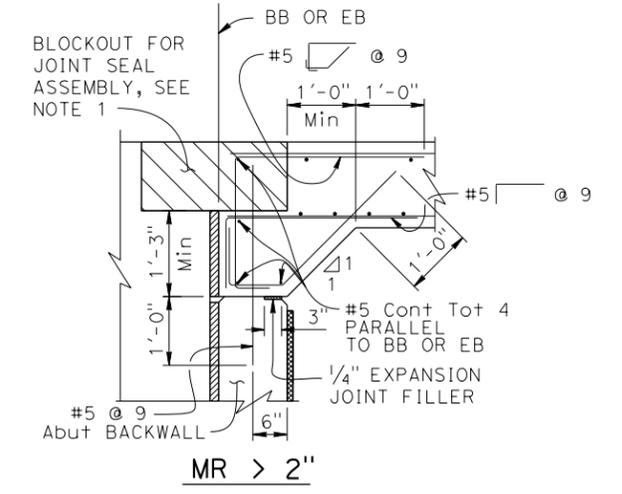
PLAN
1" = 10'-0"



SECTION B-B
3/4" = 1'-0"

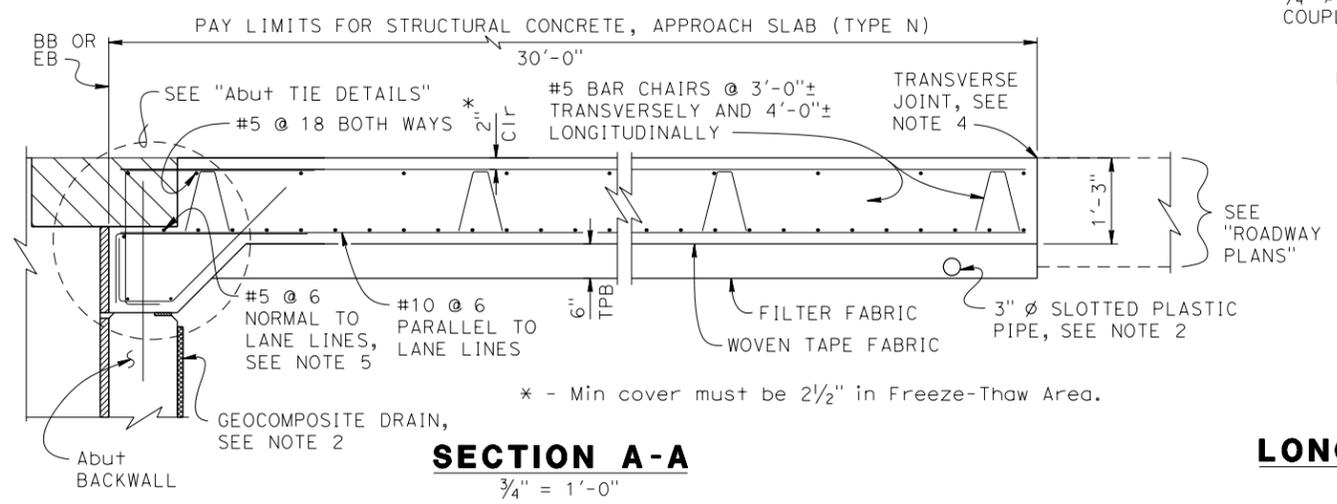


BAR CHAIR DETAIL
1" = 1'-0"

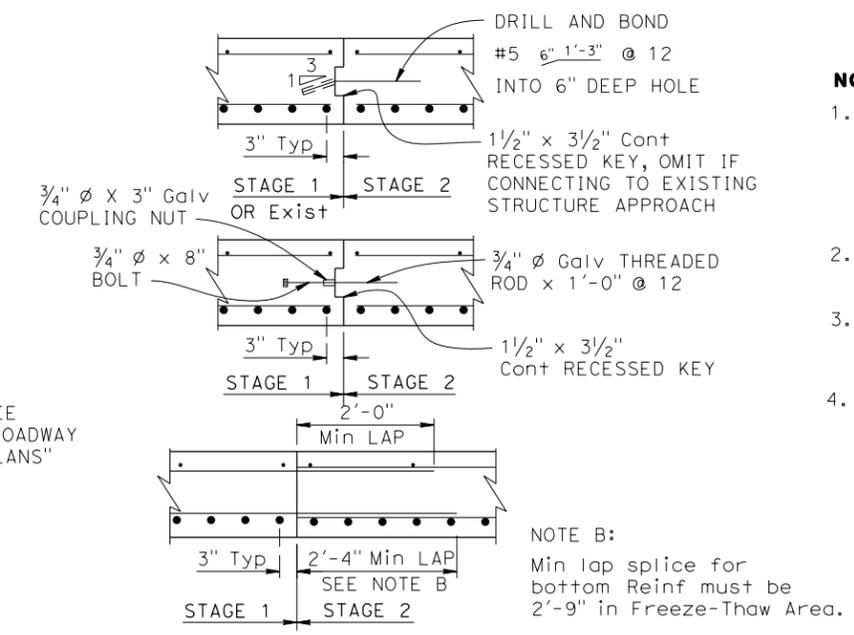


ABUTMENT TIE DETAIL
3/4" = 1'-0"

DESIGN NOTES:
 DESIGN: AASHTO LRFD Bridge Design Specifications, 2012 Edition with Caltrans Amendments, preface dated January 2014
 LIMIT STATES: Service I, Strength I & II, Extreme II and Fatigue I ($\gamma_{FAT} = 1.0$)
 DEAD LOAD: Includes 35 psf for future wearing surface
 LIVE LOAD: HL93 and permit design load
 Equivalent strip width method: $W_1 = 12$ ft
 Slab span: $L_1 = 24.5$ ft
 REINFORCED CONCRETE:
 $f_y = 60$ ksi
 $f'_c = 3.6$ ksi
 $n = 8$



SECTION A-A
3/4" = 1'-0"



LONGITUDINAL CONSTRUCTION JOINT ALTERNATIVES
3/4" = 1'-0"

- NOTES:**
- For joint protection details, breakout dimensions for joint seal assembly, and other details not shown, see other plan sheets. Haunch reinforcement placed for joint seal assembly breakout must be normal to BB or EB and spaced to avoid joint seal assembly anchorage.
 - For drainage details, see "STRUCTURE APPROACH DRAINAGE DETAILS" sheet.
 - Transverse Joint must be a minimum of 5'-0" from an existing or constructed weakened plane joint in approach PCC roadway pavement. Refer to Standard Plans P10 and P14.
 - Approach slab transverse reinforcement be placed parallel to BB or EB. Spacing of transverse reinforcement is measured along \perp roadway.

APPROACH SLAB TRANSVERSE JOINT		
APPROACH SKEW	WITH HMA ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 20°	PARALLEL TO BB OR EB	PARALLEL TO BB OR EB

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	
3					SPEC		

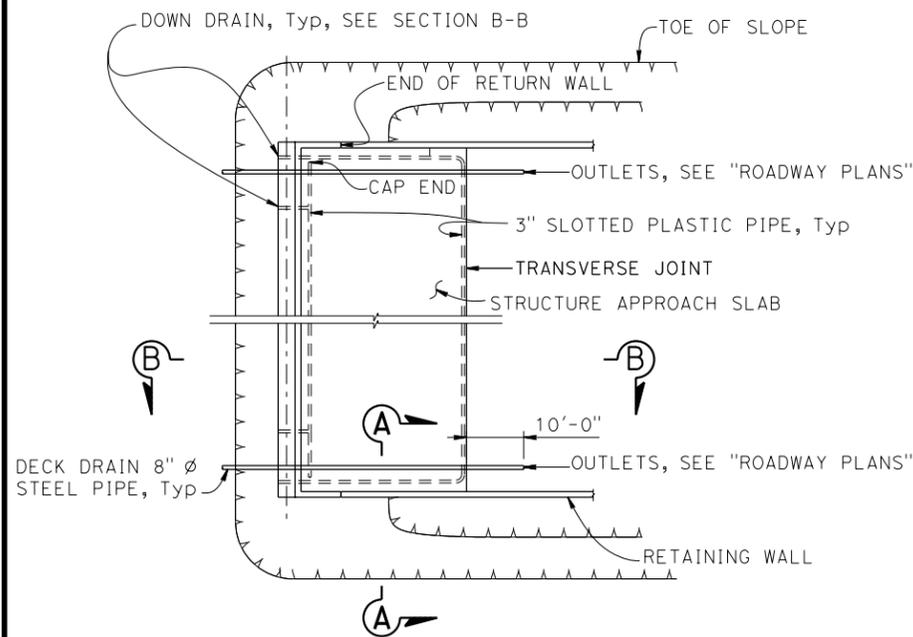


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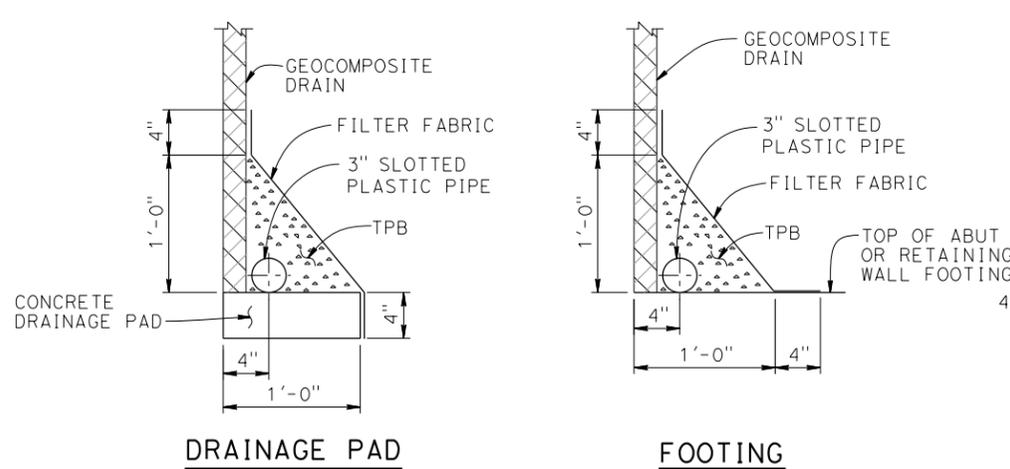
CITY OF COLTON
PUBLIC WORKS DEPARTMENT
 City Engineer: Victor Ortiz, P.E.
 Date: R.C.E: 73848 Exp: 06/30/17

LA CADENA DRIVE BRIDGE (REPLACE) OVER SANTA ANA RIVER
STRUCTURE APPROACH TYPE N (30S)

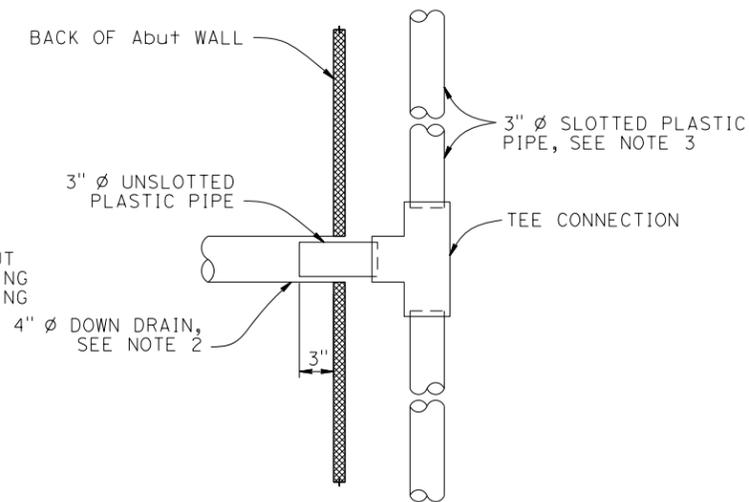
BRIDGE NO.	??-???
POST MILES	-
SHEET	25
OF	36



PLAN
1/16" = 1'-0"



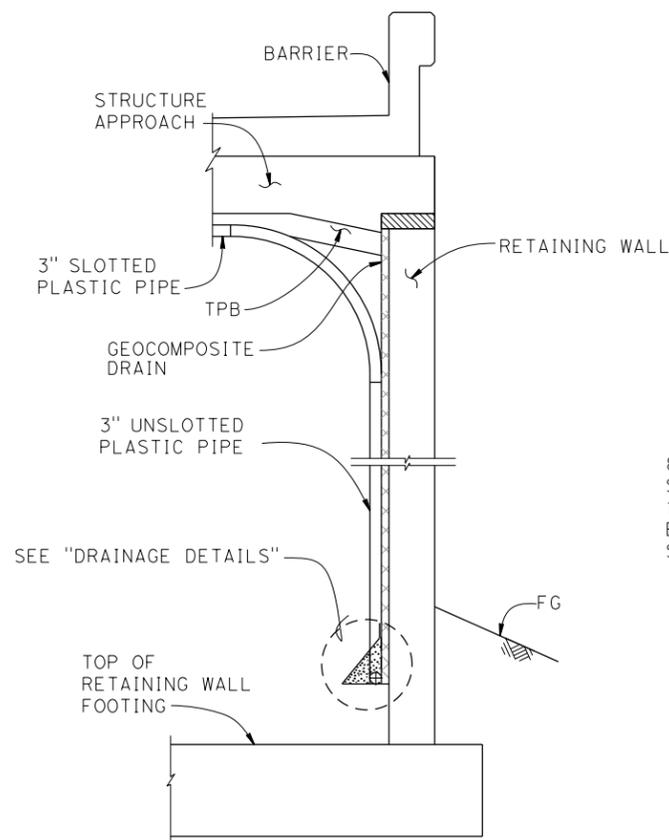
DRAINAGE DETAIL
1/2" = 1'-0"



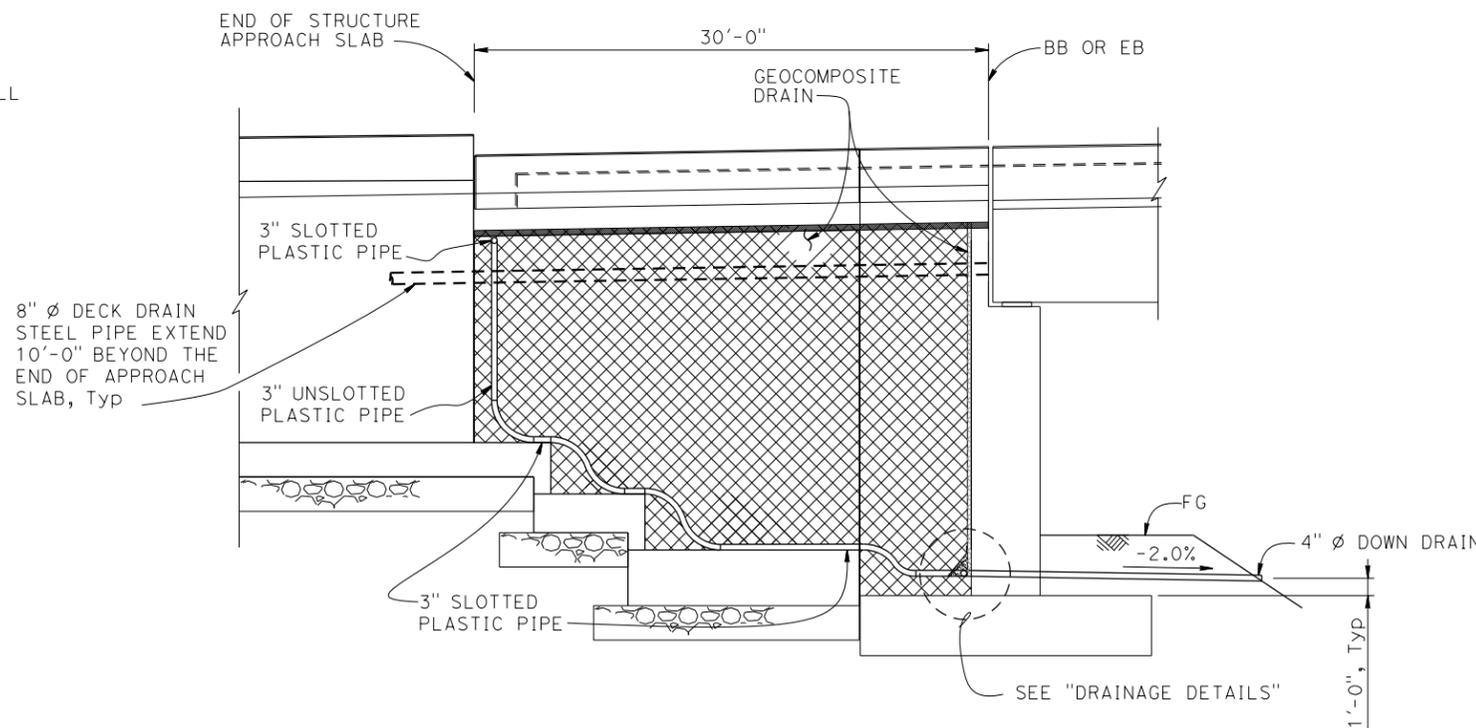
WEEP HOLE DETAIL
1/2" = 1'-0"

NOTES:

1. For structural approach and other details not shown, see other plan sheets.
2. All bends in plastic pipe must have 3'-0" minimum radius. Plastic pipe used for bends is not required to be slotted.



SECTION A-A
3/4" = 1'-0"



SECTION B-B NOTE: TPB not shown for clarity
3/16" = 1'-0"
Abut 1 shown, Abut 5 similar

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-

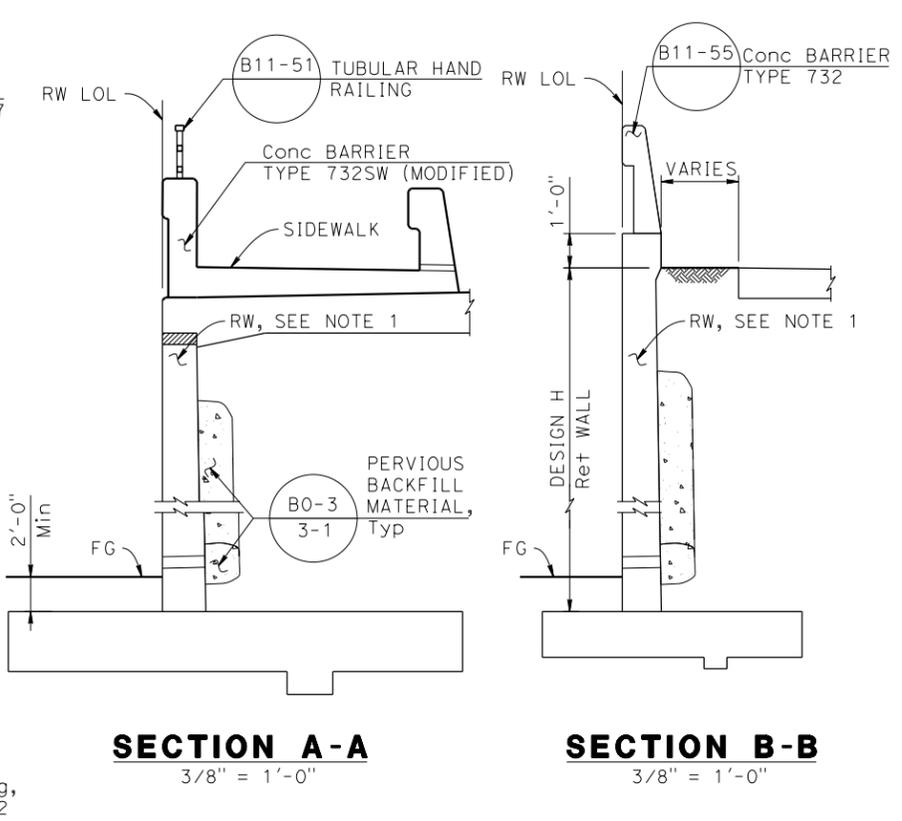
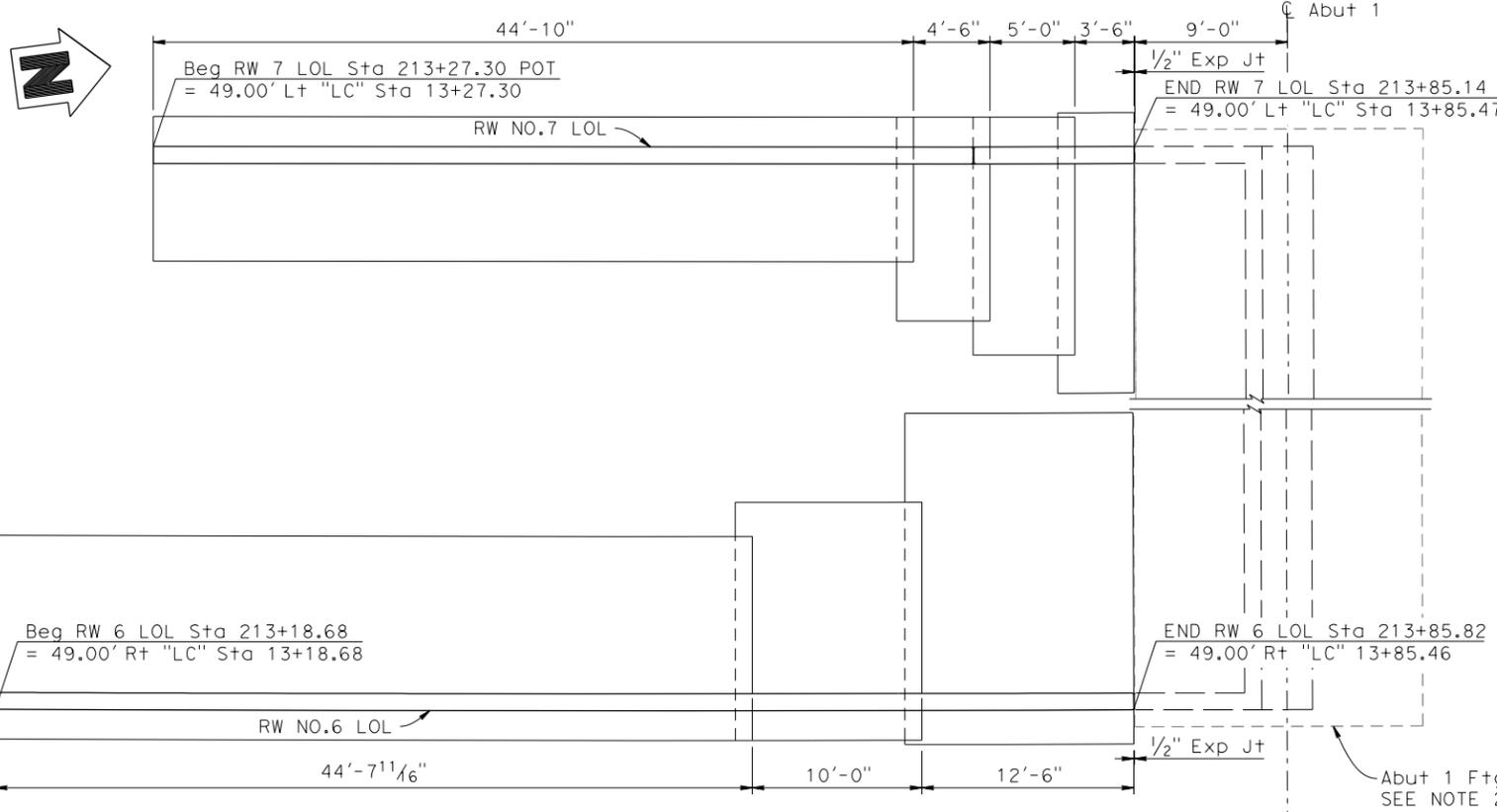


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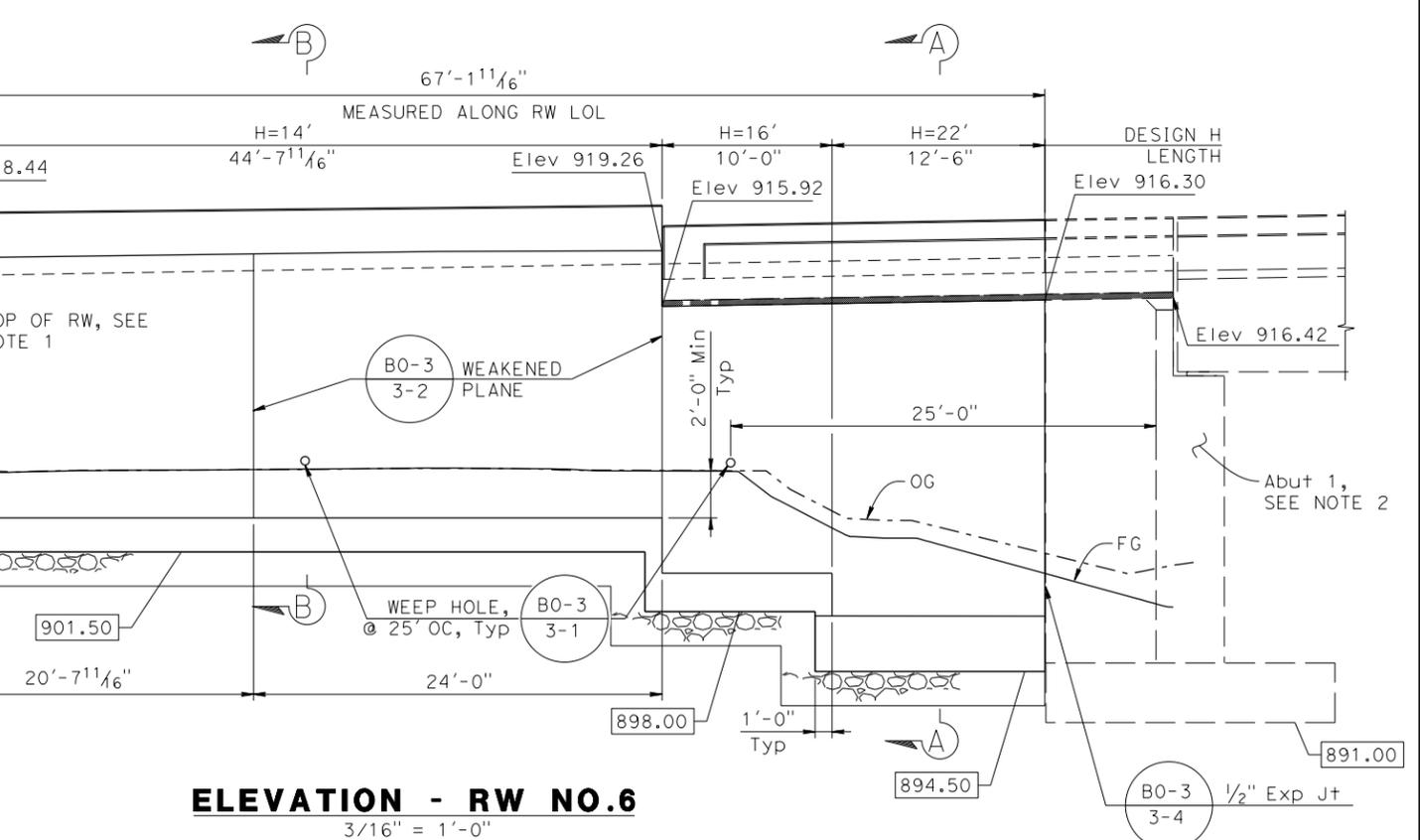
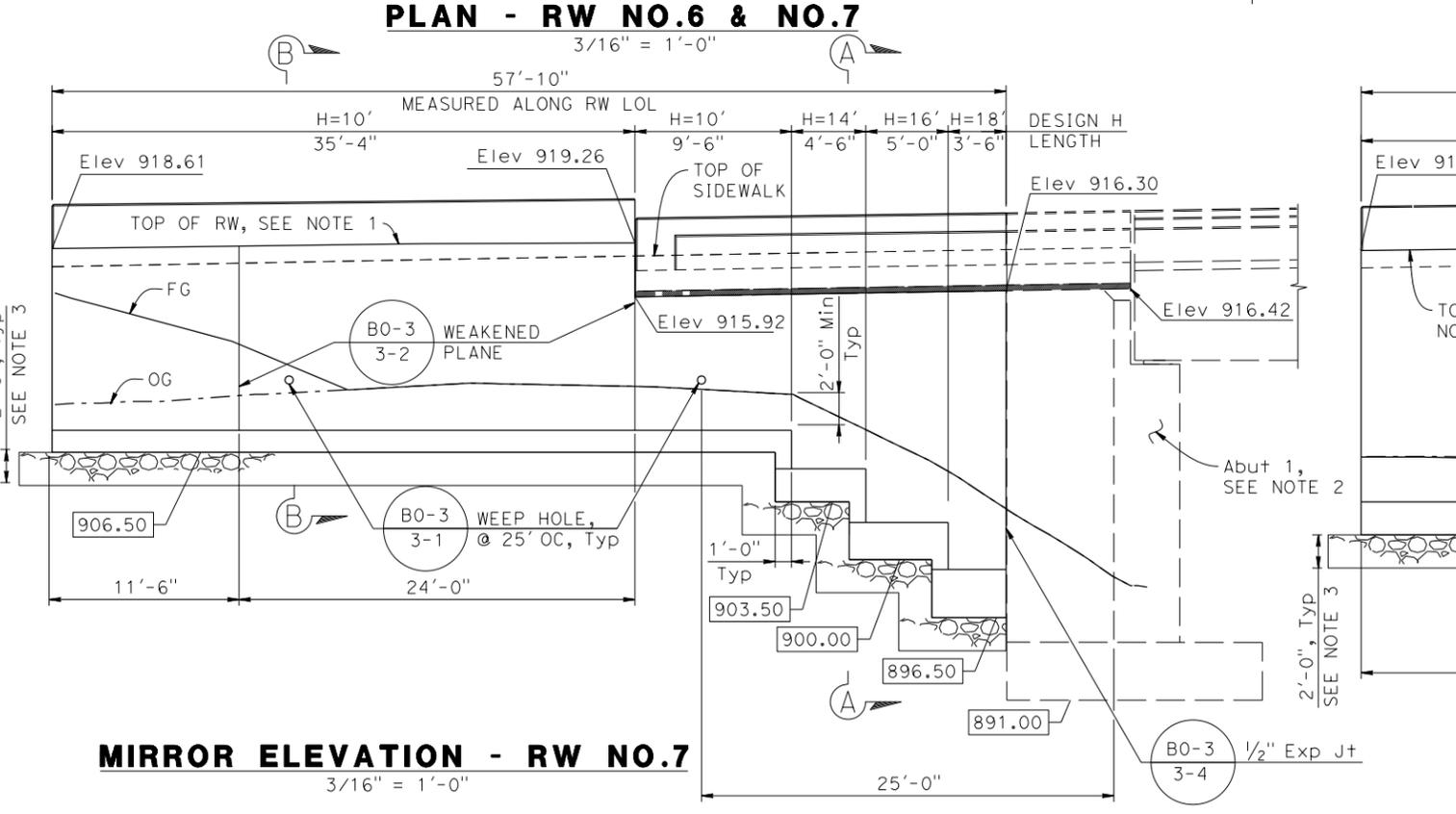
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Date:
R.C.E: 73848 Exp: 06/30/17

LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER
STRUCTURE APPROACH DRAINAGE DETAILS

BRIDGE NO.	??-???
POST MILES	-
SHEET	26
OF	36



- NOTES:**
1. For Retaining Wall Cross Section dimensions and reinforcement, see "RETAINING WALL TYPE 1 (MOD) DETAILS" sheet.
 2. For abutment layout & details, see "ABUTMENT LAYOUT & ABUTMENT DETAILS" Sheets.
 3. 2 Ft over excavation and compacted aggregate base, see geotechnical report in construction document package.
- LEGEND:**
- XXX.XX Indicates Bottom of Footing



REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	
3					SPEC		

REGISTERED PROFESSIONAL ENGINEER
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 No. 051245
 Exp. 9/30/17
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 Date:
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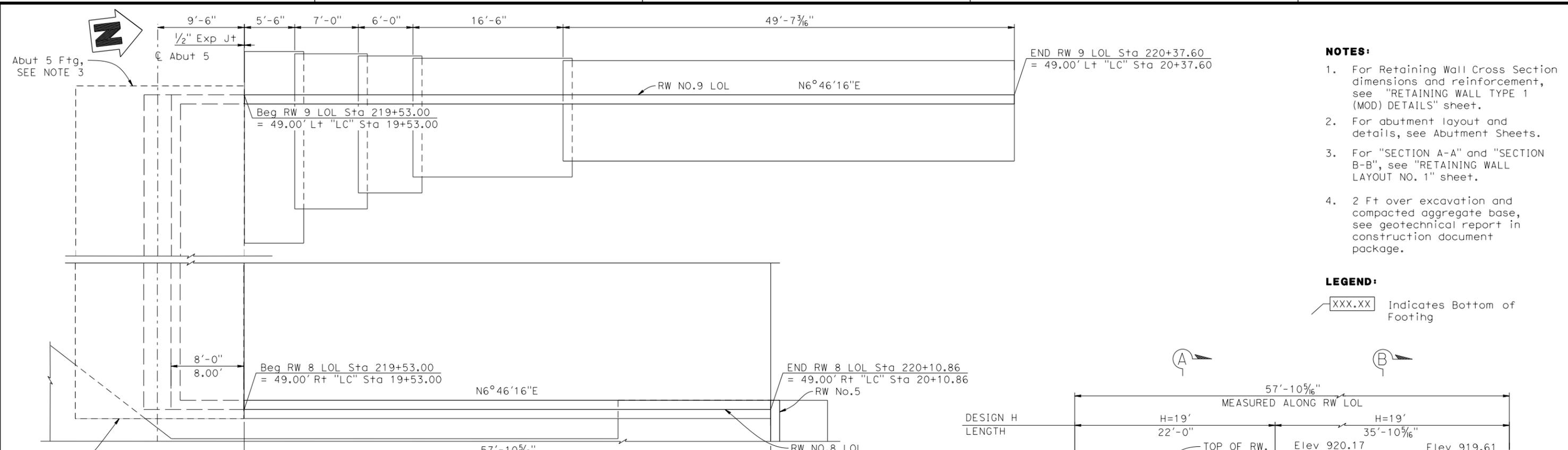
**LA CADENA DRIVE BRIDGE (REPLACE)
 OVER SANTA ANA RIVER**

RETAINING WALL LAYOUT NO.1

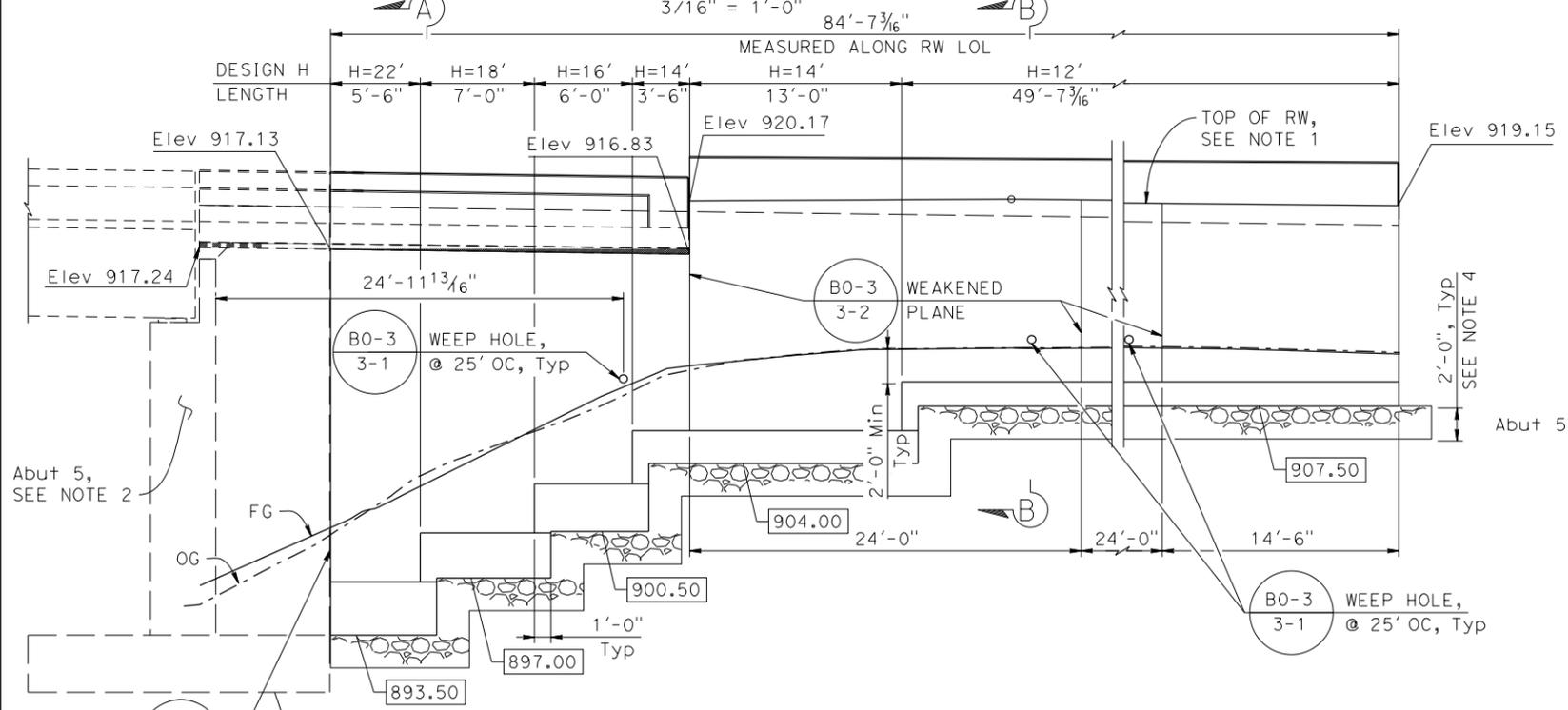
BRIDGE NO. ??-???

POST MILES -

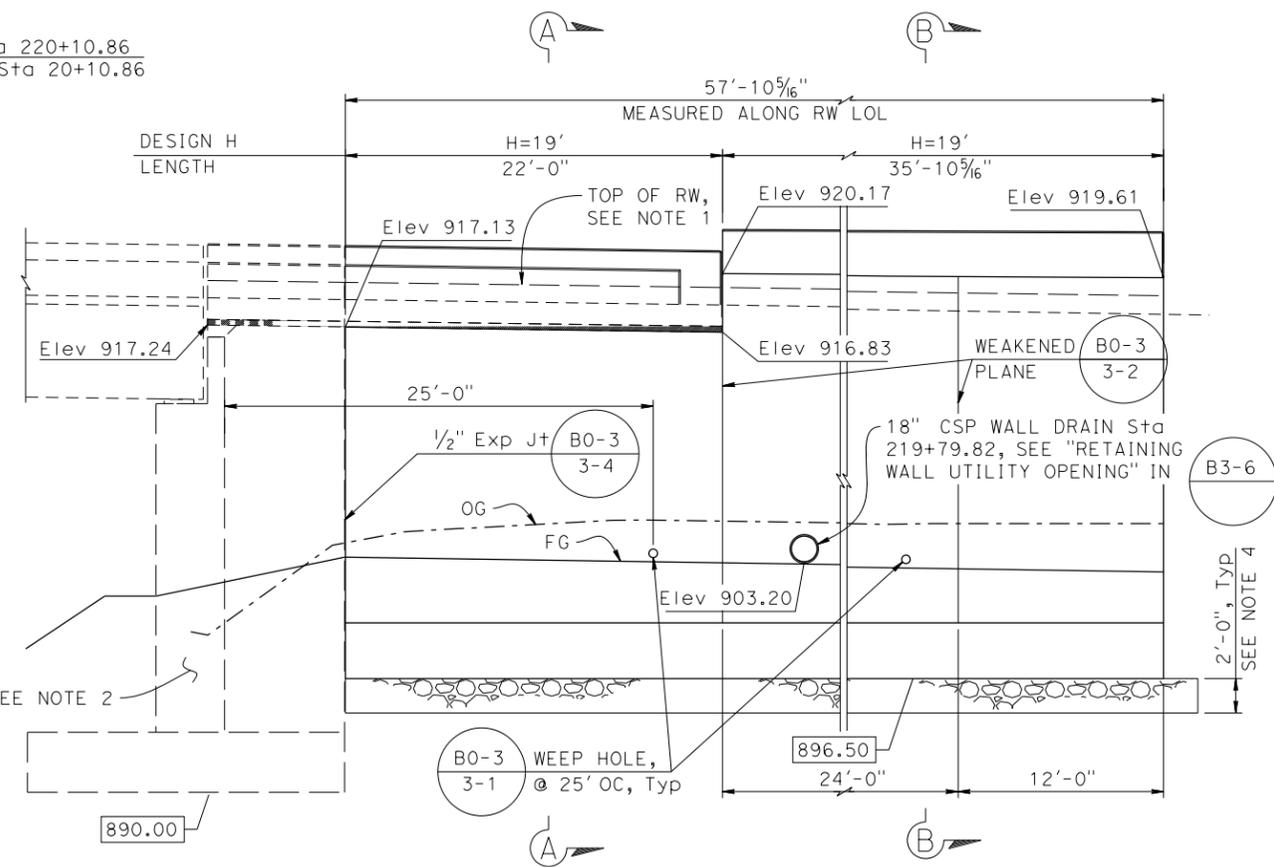
SHEET 27 OF 36



PLAN - RW NO.8 & NO.9
3/16" = 1'-0"



MIRROR ELEVATION - RW NO.9
3/16" = 1'-0"



ELEVATION - RW NO.8
3/16" = 1'-0"

- NOTES:**
1. For Retaining Wall Cross Section dimensions and reinforcement, see "RETAINING WALL TYPE 1 (MOD) DETAILS" sheet.
 2. For abutment layout and details, see Abutment Sheets.
 3. For "SECTION A-A" and "SECTION B-B", see "RETAINING WALL LAYOUT NO. 1" sheet.
 4. 2 Ft over excavation and compacted aggregate base, see geotechnical report in construction document package.

LEGEND:
XXX.XX Indicates Bottom of Footing

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-

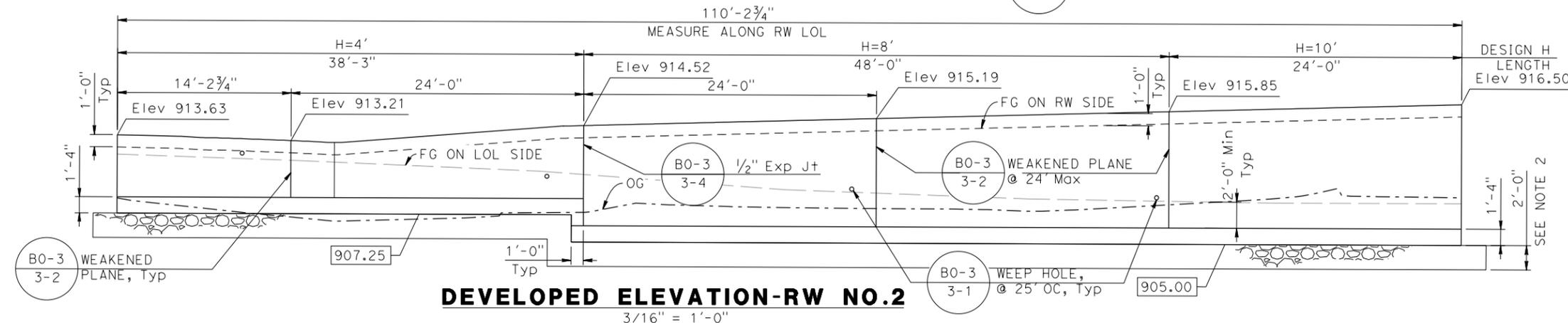
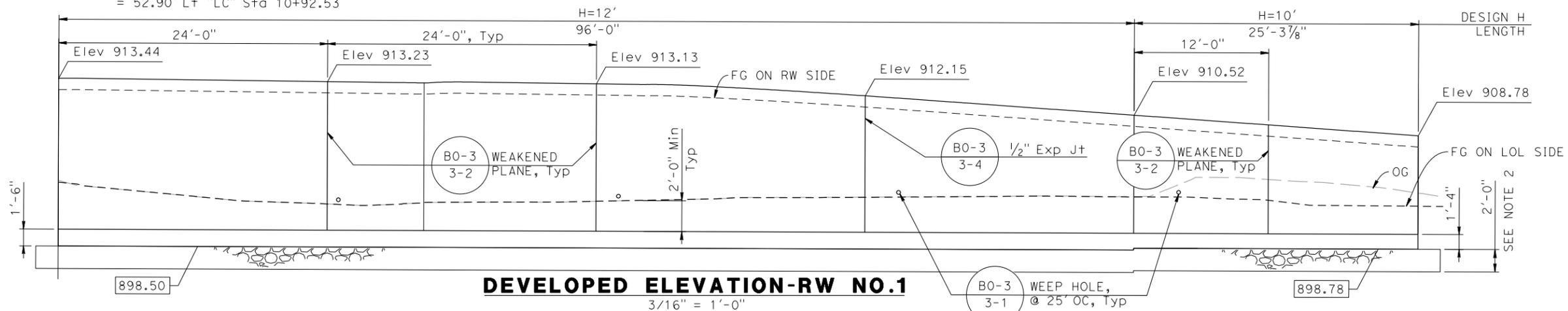
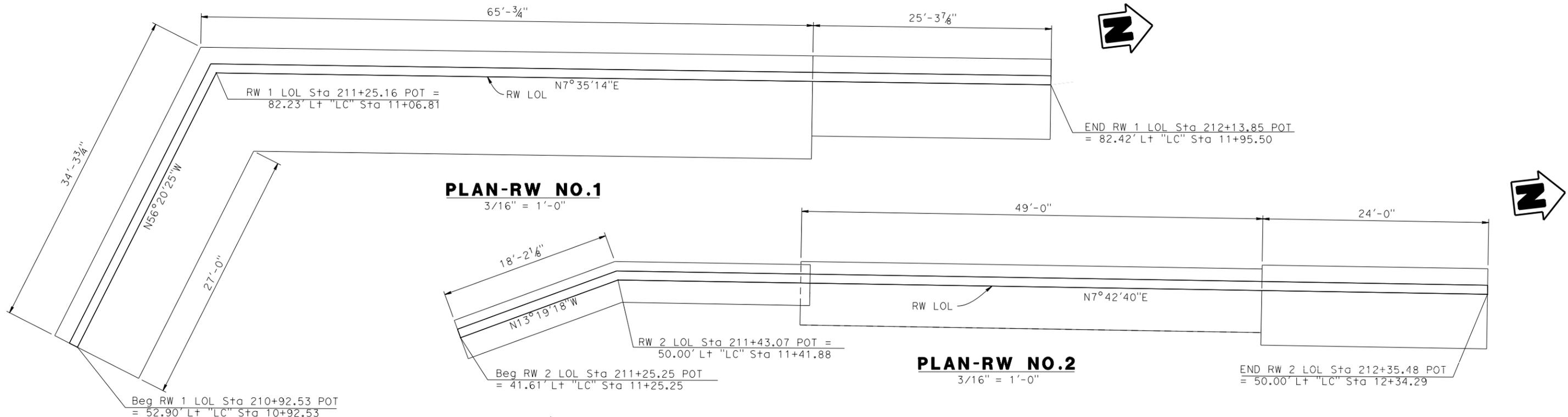


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LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER
RETAINING WALL LAYOUT NO.2

BRIDGE NO.	??-???
POST MILES	-
SHEET	28
OF	36



- NOTES:**
- For Retaining Wall Locations, see Civil Roadway Plans, For Retaining Wall Cross Section dimensions and reinforcement, see "RETAINING WALL TYPE 1 (MOD) DETAILS" sheet.
 - 2 Ft over excavation and compacted aggregate base, see geotechnical report in construction document package.

LEGEND:
 XXX.XX Indicates Bottom of Footing

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-



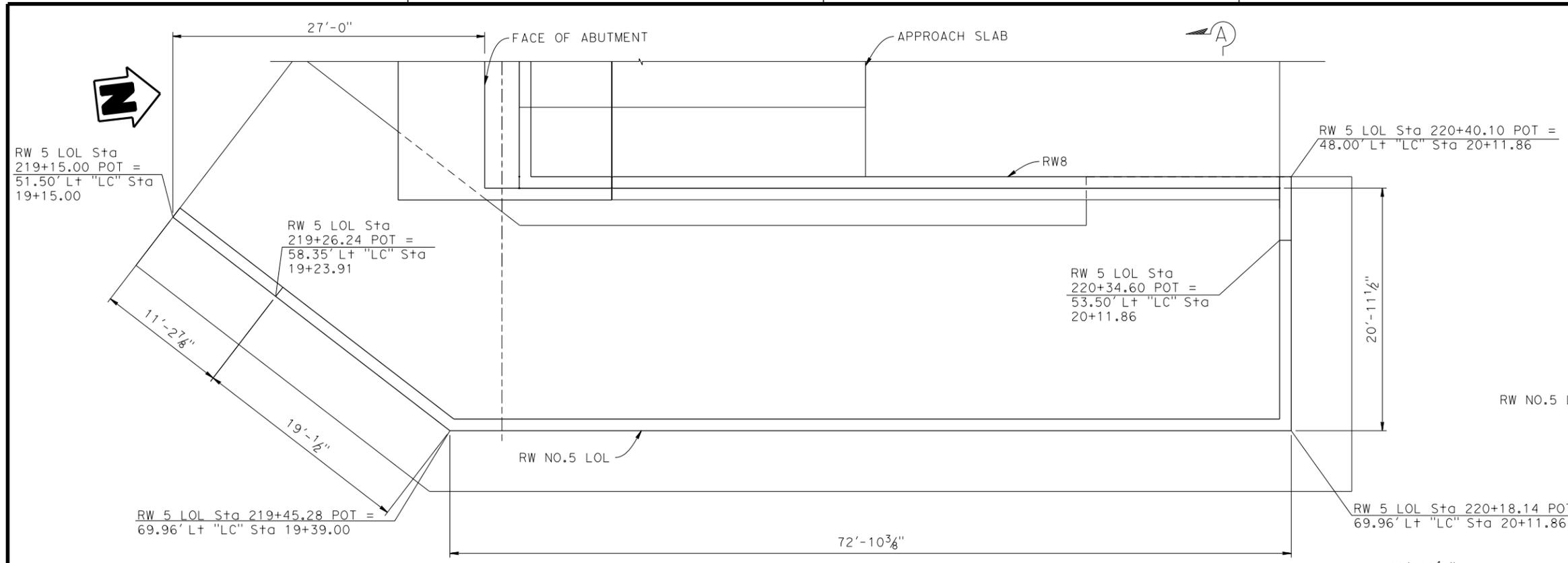
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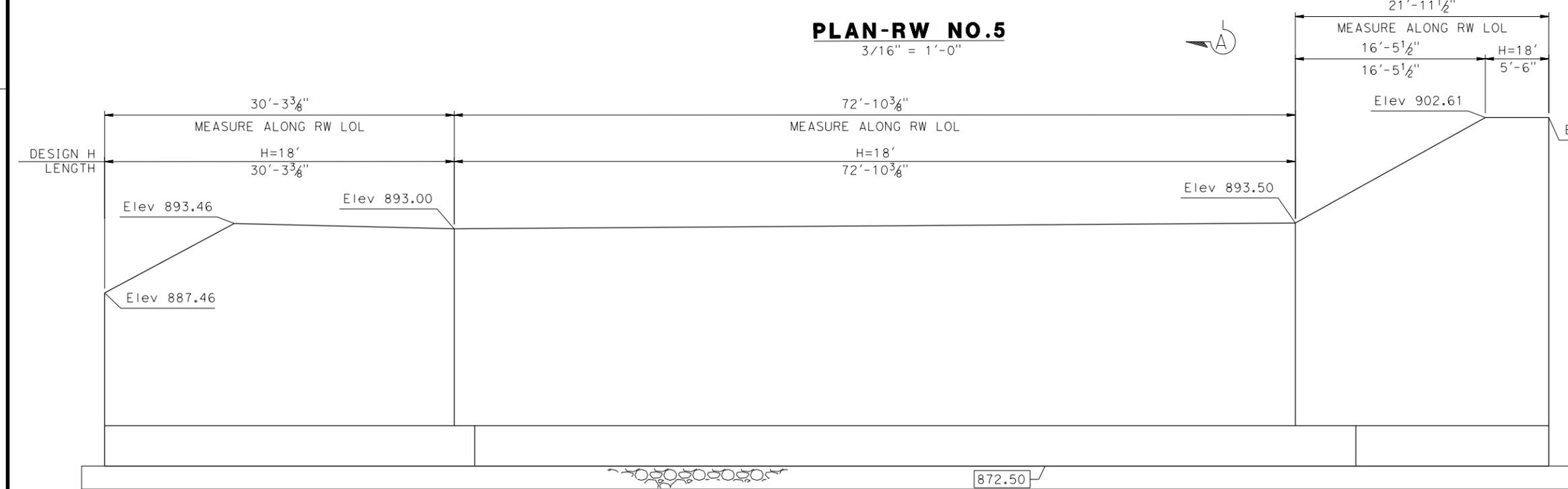
**LA CADENA DRIVE BRIDGE (REPLACE)
 OVER SANTA ANA RIVER**
RETAINING WALL LAYOUT NO.3

BRIDGE NO.	??-???
POST MILES	-
SHEET	29
OF	36

DATE PLOTTED => 3/7/2017 USERNAME => foon

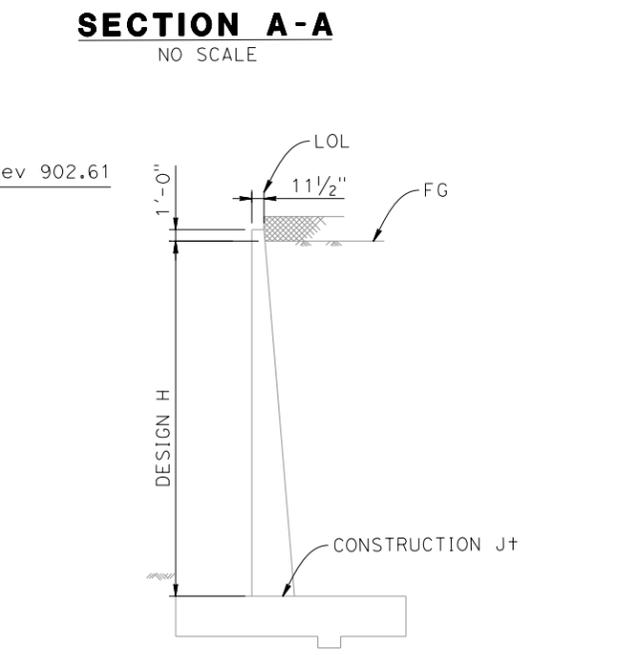
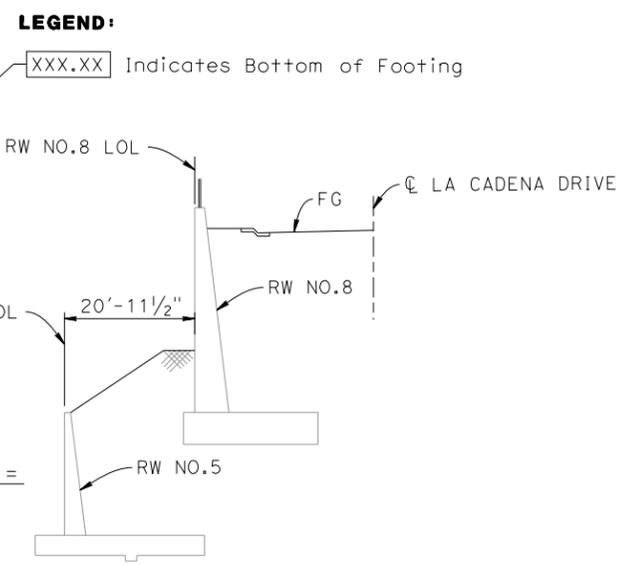


PLAN-RW NO.5
3/16" = 1'-0"



DEVELOPED ELEVATION-RW NO.5
3/16" = 1'-0"

- NOTES:**
- For Retaining Wall Cross Section dimensions and reinforcement, see "RETAINING WALL TYPE 1 (MOD) DETAILS" sheet.
 - 2 Ft over excavation and compacted aggregate base, see geotechnical report in construction document package.



REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-

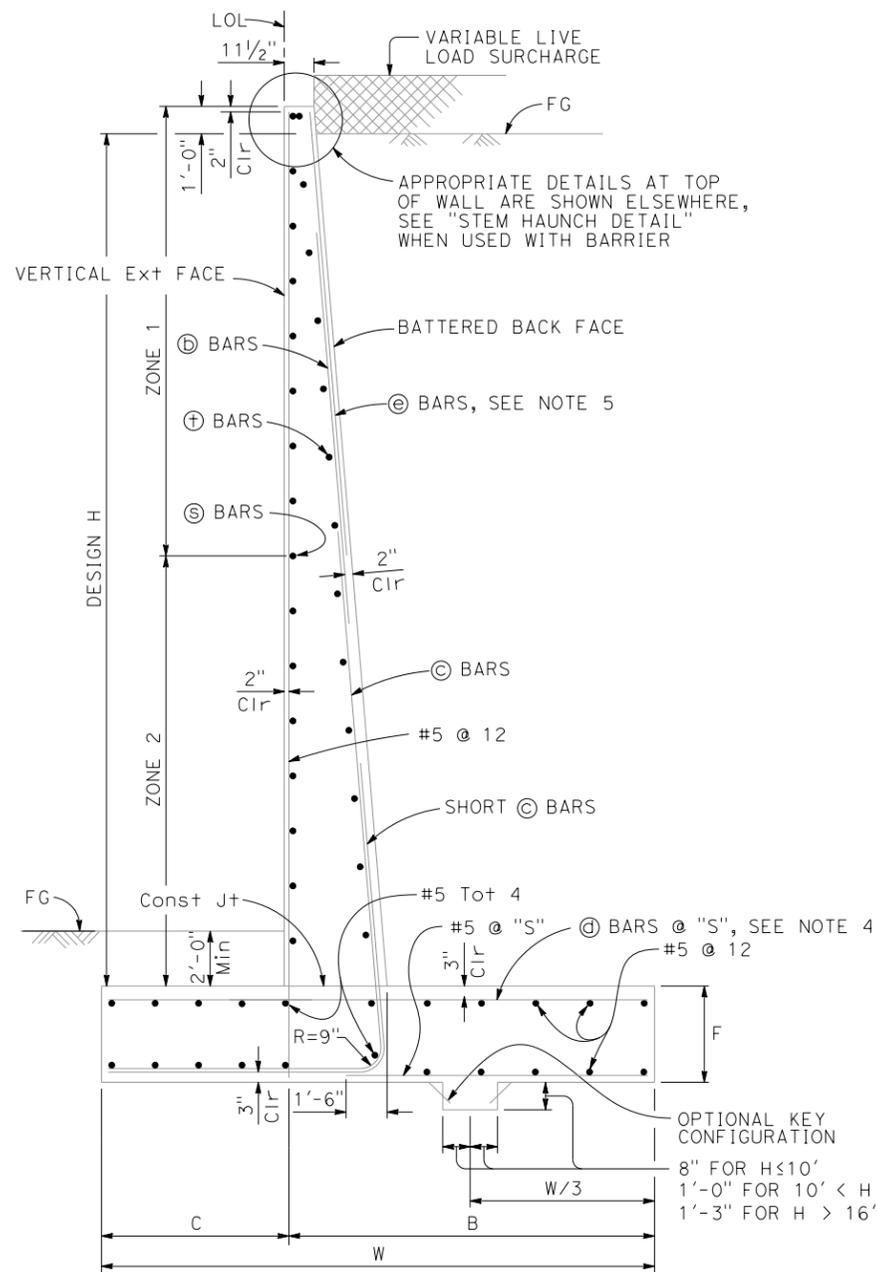


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LA CADENA DRIVE BRIDGE (REPLACE) OVER SANTA ANA RIVER
RETAINING WALL LAYOUT NO.5

BRIDGE NO.	??-???
POST MILES	-
SHEET	31
OF	36



RW NO.1 TO RW NO.9 (EXCEPT RW NO.5 AND RW NO.8)

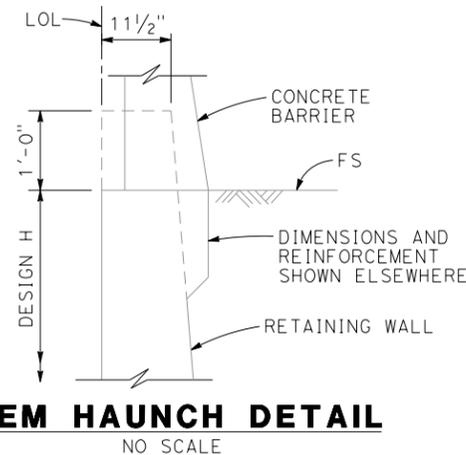
TABLE OF REINFORCING STEEL, DIMENSIONS AND DATA

DESIGN H	4'	6'	8'	10'	12'	14'	16'	18'	22'
W	4'-4"	5'-3"	6'-9"	8'-6"	10'-0"	12'-0"	14'-0"	16'-6"	19'-6"
C	1'-0"	1'-2"	1'-4"	1'-9"	1'-9"	1'-9"	2'-0"	2'-0"	2'-0"
B	3'-4"	4'-1"	5'-5"	6'-9"	8'-3"	10'-3"	12'-3"	14'-6"	17'-6"
F	1'-4"	1'-4"	1'-4"	1'-4"	1'-6"	2'-0"	2'-3"	2'-9"	3'-3"
BATTER	1/2: 12	1/2: 12	1/2: 12	1/2: 12	1/2: 12	1/2: 12	1/2: 12	1/2: 12	3/4: 12
SPACING "S"	9"	9"	9"	6"	6"	6"	6"	6"	6"
Ⓟ BARS	-	-	-	-	-	-	-	-	-
Ⓞ BARS	-	-	-	-	-	-	#6	#7	#8
Ⓢ BARS	#5	#5	#5	#5	#5	#6	#8	#9	#11
Ⓣ BARS	#5	#5	#5	#6	#7	#7	#8	#9	#11
h1	-	-	-	4'-0"	5'-0"	5'-6"	5'-6"	7'-3"	10'-0"
h2	-	-	-	-	-	-	11'-0"	12'-6"	16'-0"
ZONE 1 Ⓢ BARS	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18
ZONE 2 Ⓢ BARS	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 18	#5 @ 12	#5 @ 12	#5 @ 12
ZONE 1 Ⓣ BARS	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18
ZONE 2 Ⓣ BARS	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18

NOTE: Footing size and additional reinforcement at RW NO.4 culvert opening location, see S-30
"RW layout NO.4" sheet

TABLE OF REINFORCING STEEL, DIMENSIONS AND DATA

DESIGN H	RW NO.5	RW NO.8
DESIGN H	18'	19'
W	23'-0"	19'-0"
C	5'-3"	1'-0"
B	17'-9"	18'-0"
F	3'-6"	3'-3"
BATTER	1/2: 12	1/2: 12
SPACING "S"	6"	6"
Ⓞ BARS	#8	#8
Ⓢ BARS	#11	#11
Ⓣ BARS	#11	#11
h1	8'-6"	8'-6"
h2	14'-0"	14'-0"
ZONE 1 Ⓢ BARS	#5 @ 18	#5 @ 18
ZONE 2 Ⓢ BARS	#5 @ 12	#5 @ 12
ZONE 1 Ⓣ BARS	#4 @ 18	#4 @ 18
ZONE 2 Ⓣ BARS	#4 @ 18	#4 @ 18



RETAINING WALL TYPICAL SECTION
NO SCALE

ELEVATION
NO SCALE

NOTES:

- For details not shown and drainage notes see B3-5
- For wall stem joint details see B0-3/3-3 and B0-3/3-4
- At Ⓢ bars:
H < 6', no splices are allowed within 1'-8" above the top of footing.
H > 6', no splices are allowed within H/4 above the top of footing.
- Provide #6 @ 10" x 15'-0" Ⓢ bars over a distance of 8'-0" measured from all expansion joints, begin wall and end wall locations. For H < 14', hook Ⓢ bar into footing and reduce bar length as needed to maintain Min Clr cover.

DESIGN NOTES:

- DESIGN: AASHTO LRFD Bridge Design Specifications, 6th Edition with California Amendments, January 2014.
- LS: Varied surcharge on level ground surface
- DC: Stem Architectural Treatment of thickness up to 6" of concrete (75 psf) considered
- CT: 54 Kip Max traffic impact loading applied at H=32' and evenly distributed over 10' at top of the barrier and 1:1 distribution down and outward. Distribution below footing taken no less than 40'.
- SEISMIC: $K_h = 0.265$, $K_v = 0.0$
- SOIL: $\phi = 34^\circ$, $\gamma = 120$ pcf
- REINFORCED CONCRETE: $f'_c = 3,600$ psi
 $f_y = 60,000$ psi

LOAD COMBINATIONS AND LIMIT STATES:

- Service I $Q = 1.00DC + 1.00EV + 1.00EH + 1.00LS$
- Strength I $Q = aDC + \beta EV + \eta EH + 1.75LS$
- Extreme Ia $Q = 1.00DC + 1.00EV + 1.00EH + 1.00EQE + 0.50EQD$
- Extreme Ib $Q = 1.00DC + 1.00EV + 1.00EH + 0.50EQE + 1.00EQD$
- Extreme II $Q = 1.00DC + 1.00EV + 1.00EH + 1.00CT$

Where:

- Q: Force Effects
- a: 1.25 or 0.90, Whichever Controls Design
- β : 1.35 or 1.00, Whichever Controls Design
- η : 1.50 or 0.90, Whichever Controls Design
- CT: Vehicular Collision Force
- DC: Dead Load of Structure Components
- EH: Horizontal Earth Fill Pressure
- EV: Vertical Earth Pressure from Earth Fill Weight
- LS: Live Load Surcharge
- EQE: Seismic Earth Pressure
- EQD: Soil and Structural and Nonstructural Components Inertia

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
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2					QUANTITIES	G. Estepa	-
3					SPEC	-	-



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**LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER**

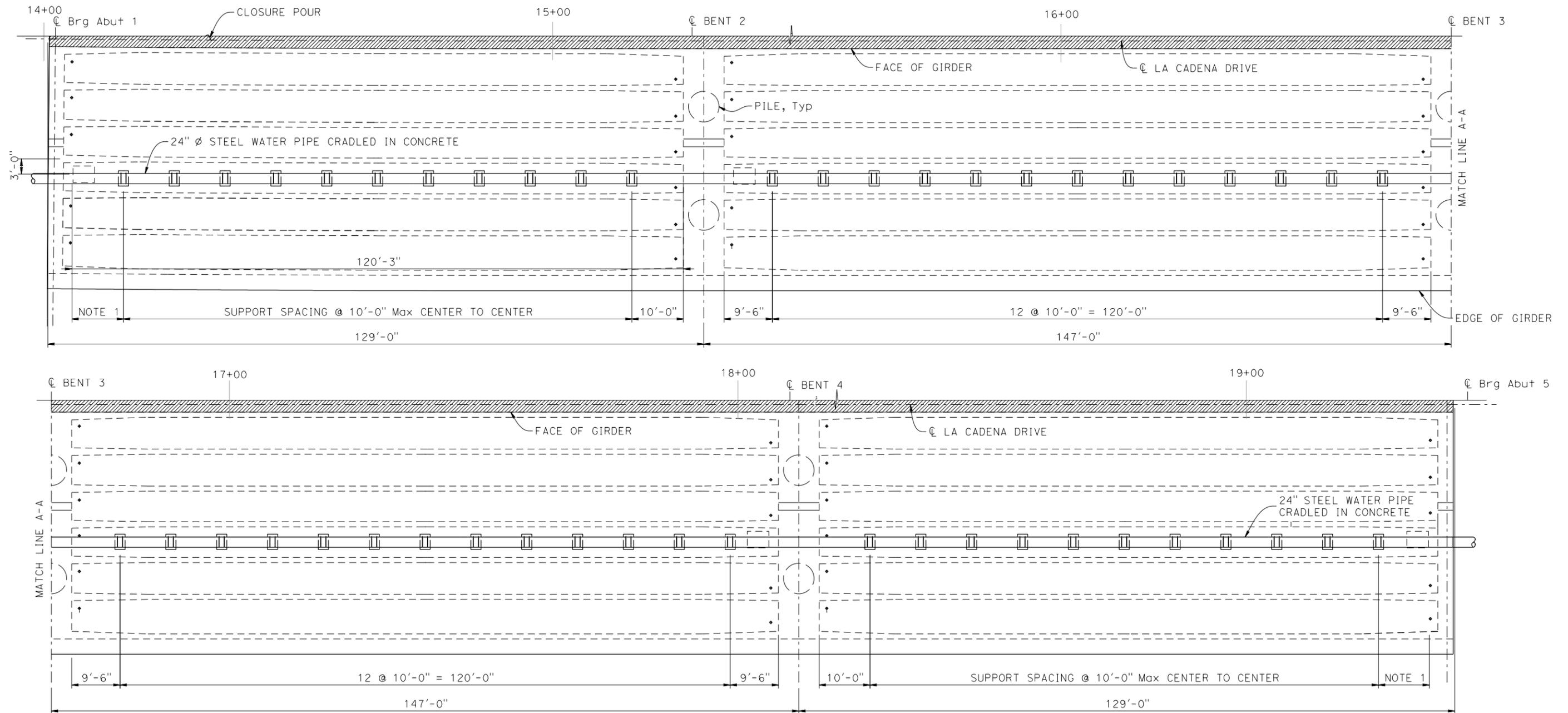
RETAINING WALL TYPE I (MOD) DETAILS

BRIDGE NO.	??-???
POST MILES	-
SHEET	32
OF	36



NOTES:

1. Location of the first support from abutment, see "WATER LINE INSTALLATION DETAIL" on "UTILITIES SUPPORT AND MISC DETAIL NO.2" sheet.



PLAN
1" = 10'

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-



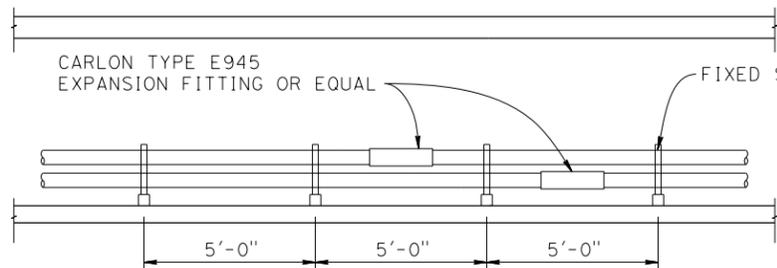
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**LA CADENA DRIVE BRIDGE (REPLACE)
 OVER SANTA ANA RIVER**

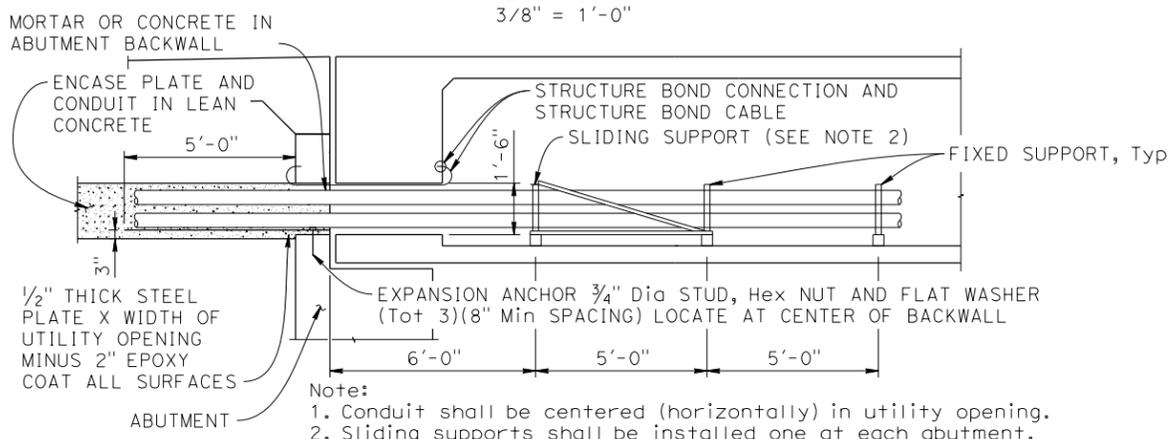
WATER LINE AND SUPPORT LAYOUT

BRIDGE NO.	??-???
POST MILES	-
SHEET	33
OF	36



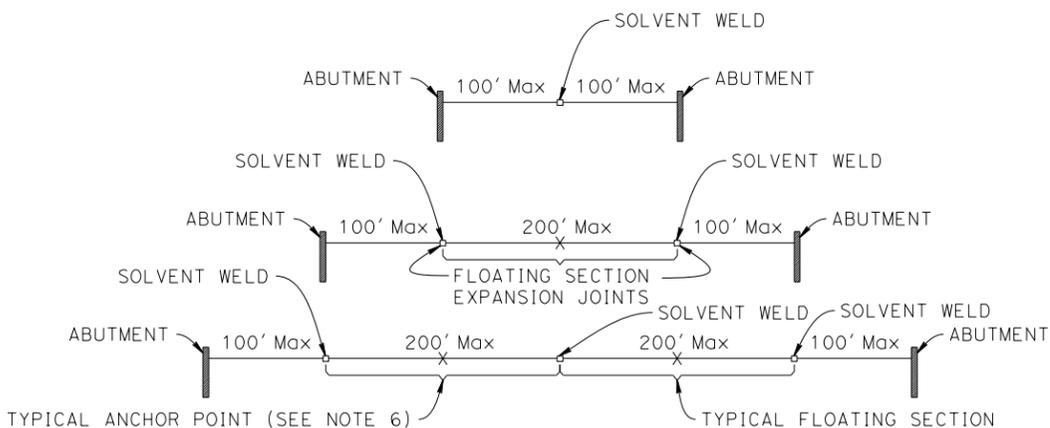
- Note:
1. Install expansion fittings a minimum of 28' from all sliding supports.
 2. Center expansion fittings between supports and stagger as shown.

BRIDGE EXPANSION FITTINGS

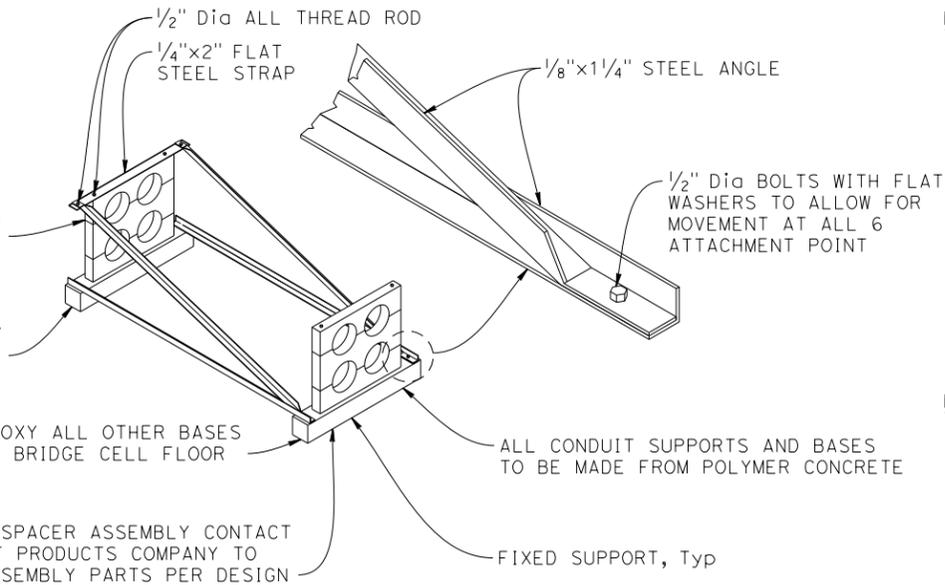


- Note:
1. Conduit shall be centered (horizontally) in utility opening.
 2. Sliding supports shall be installed one at each abutment.

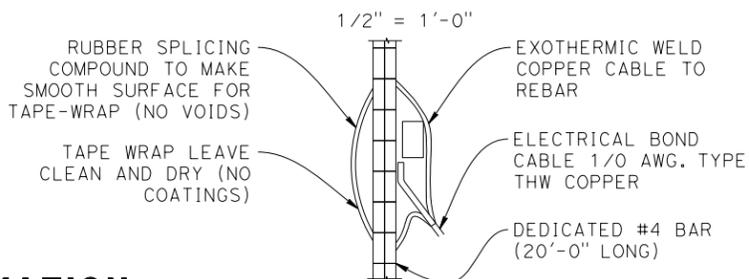
BRIDGE ABUTMENT CONDUIT SUPPORT INSTALLATION - ELEVATION



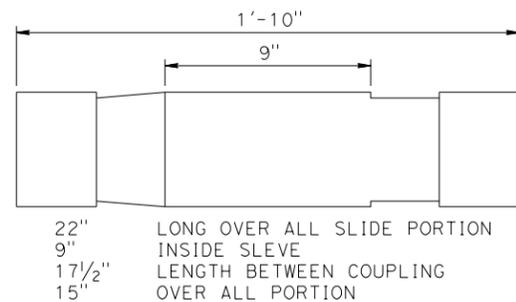
- Note:
1. The expansion joint is a length of coupling stock extruded from the same material as the conduit that it joins.
 2. The mating ends of conduit shall be beveled to provide a smooth transition within the joint.
 3. The expansion joint shall be solvent welded 3 to 4 inches onto one end of the conduit.
 4. The mating end of the conduit shall then be positioned 22" into the free end of the expansion joint. Do not solvent weld.
 5. Install all expansion joints at the midway point between conduit supports so the maximum distance can be maintained from all spacers, supports, or straps.
 6. Install the expansion joint within 100' of the bridge abutment. when only one expansion joint is required. Do not anchor the expansion joint or conduit. When two or more expansion joints are required, each section of floating conduit must be anchored at mid-point between the expansion joints to prevent excessive longitudinal movement. Conduit to be anchored by solvent welding collars at each side of hanger support.



PVC CONDUIT DEFLECTION SUPPORT



STRUCTURE BOND CONNECTION DETAIL



EXPANSION JOINT FOR PLASTIC CONDUIT

3" = 1'-0" CARLON TYPE E945, OR EQUAL

MATERIALS REQ'D PER SLIDING CONDUIT SUPPORT

- 10-1/2"-13 HOT DIPPED GALVANIZED NUT
- 10-1/2" HOT DIPPED GALVANIZED FLAT WASHER
- 8-1/2" HOT DIPPED GALVANIZED LOCK WASHER
- 6-1/2"-13X1 1/4" HOT DIPPED GALVANIZED BOLTS
- 4-1/2"-13X2'-4" HOT DIPPED GALVANIZED ALL-TREAD ROD
- 2-3 7/8"X3 7/8"X2'-4" POLYMER CONCRETE BLOCK
- 1-1/8"X2"X2'-4" HOT DIPPED GALVANIZED STEEL STRAP
- 2-1 1/4"X1 1/4"X1/8"X64" ANGLE
- 2-1 1/4"X1 1/4"X1/8"X66" ANGLE
- 1-POLYMER CONCRETE BLOCK "A"
- 1-POLYMER CONCRETE BLOCK "B"
- 1-POLYMER CONCRETE BLOCK "C"

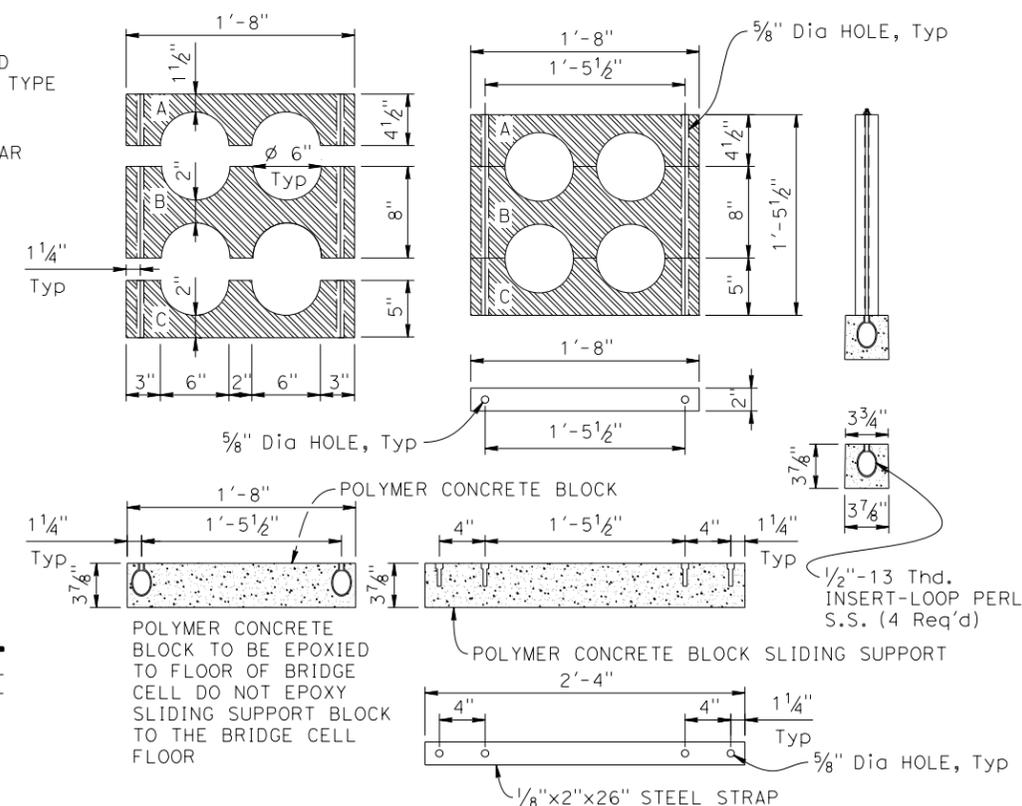
4 SUPPORTS REQ'D
ALL PARTS OF SUPPORT (EXCLUDING BLOCK) TO BE HOT DIPPED GALVANIZED AFTER FABRICATION

MATERIALS REQ'D PER SOLID CONDUIT SUPPORT

- 2-1/2"-13 HOT DIPPED GALVANIZED NUT
- 2-1/2" HOT DIPPED GALVANIZED WASHER
- 2-1/2" HOT DIPPED GALVANIZED LOCK WASHER
- 2-1/2"-13X30" HOT DIPPED GALVANIZED ALL-TREAD ROD
- 1-3 7/8"X3 7/8"X1'-8" POLYMER CONCRETE BLOCK
- 1-POLYMER CONCRETE BLOCK "A"
- 1-POLYMER CONCRETE BLOCK "B"
- 1-POLYMER CONCRETE BLOCK "C"

552.0' BRIDGE/5' SPACING
105 SUPPORTS REQ'D
ALL PARTS OF SUPPORT (EXCLUDING BLOCK) TO BE HOT DIPPED GALVANIZED AFTER FABRICATION

12 EXPANSION JOINT(S) REQ'D PER UGS-CD191 (4-5")



PVC CONDUIT DEFLECTION SUPPORT DETAILS

1/2" = 1'-0"

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	
3					SPEC		



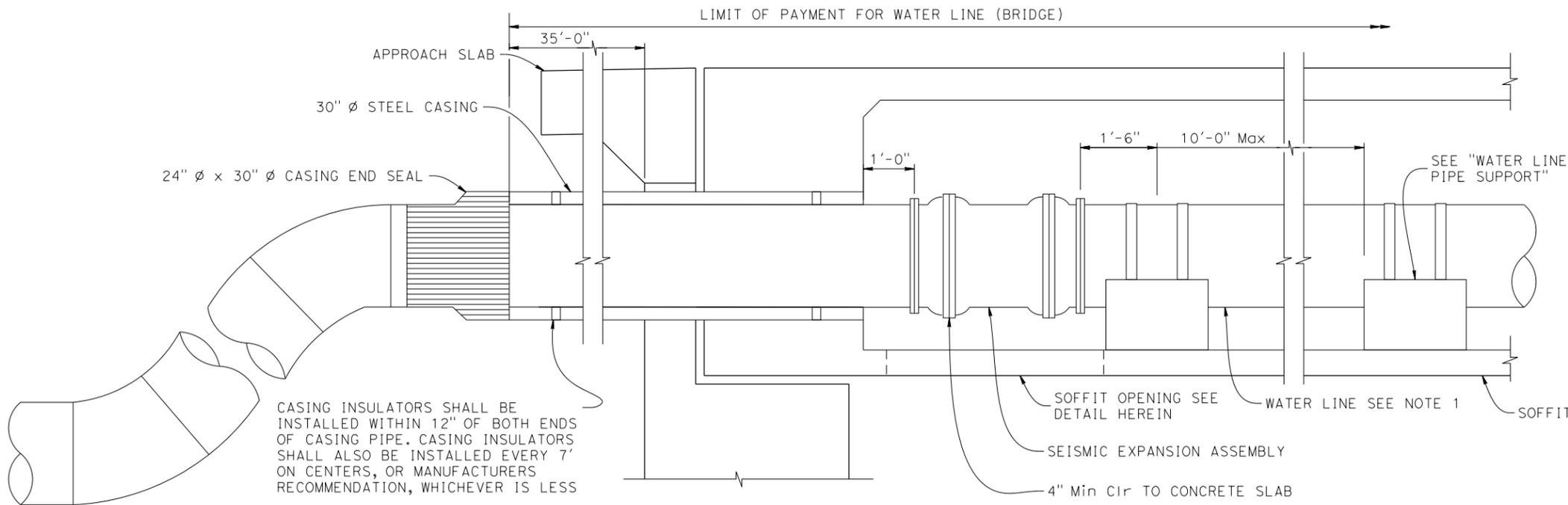
inc
Consulting Engineers, Inc.
300 S Harbor Blvd. Suite 710
Anaheim, CA 92805
Tel (714) 520-9070 Fax (714) 520-9068

**CITY OF COLTON
PUBLIC WORKS DEPARTMENT**
City Engineer: Victor Ortiz, P.E.
Date:
R.C.E: 73848 Exp: 06/30/17

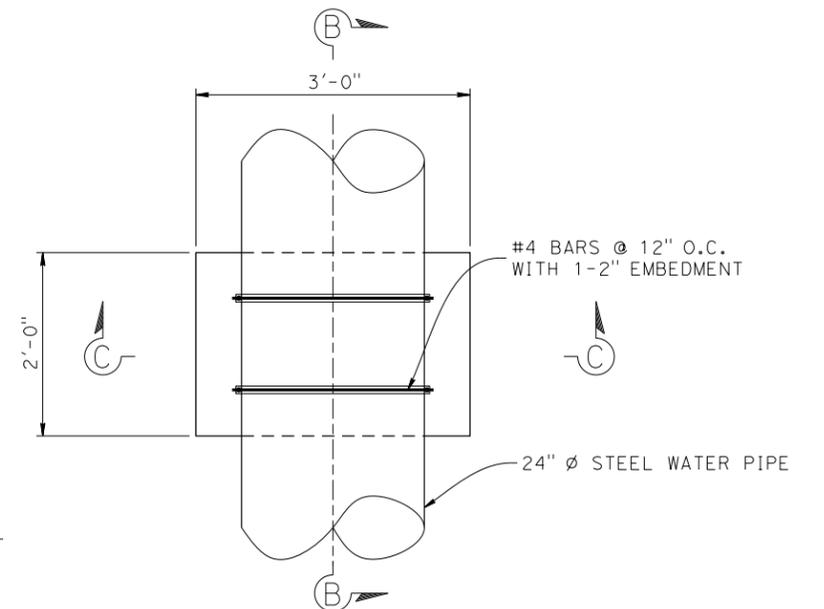
**LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER**

UTILITIES SUPPORT AND MISC DETAILS NO.1

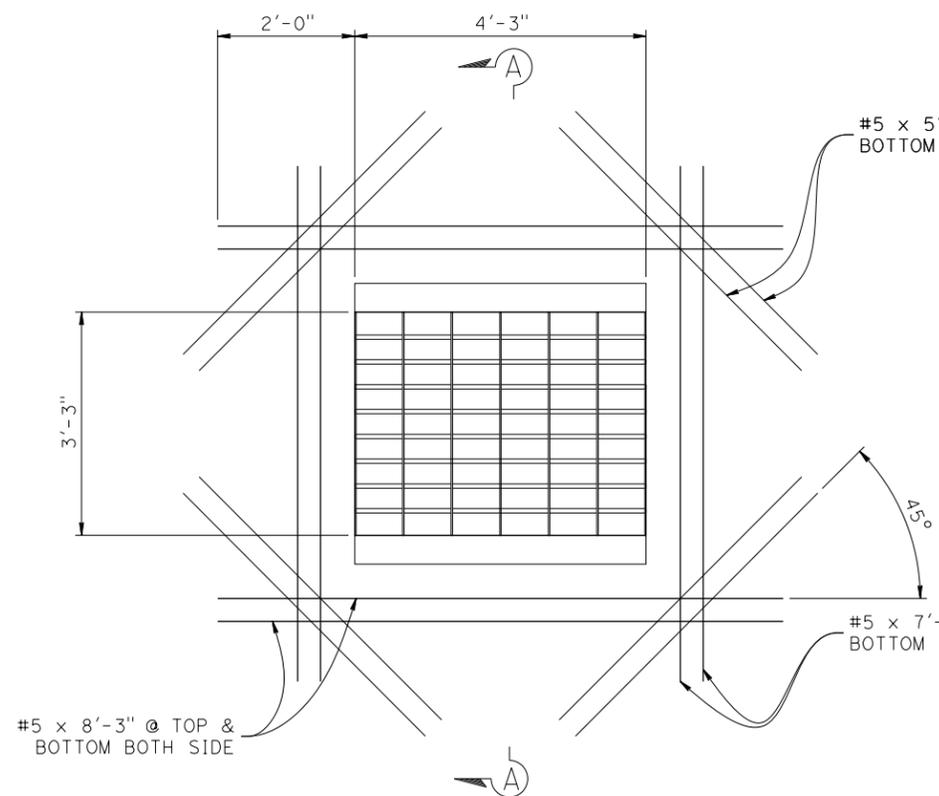
BRIDGE NO.	??-???
POST MILES	-
SHEET	34
OF	36



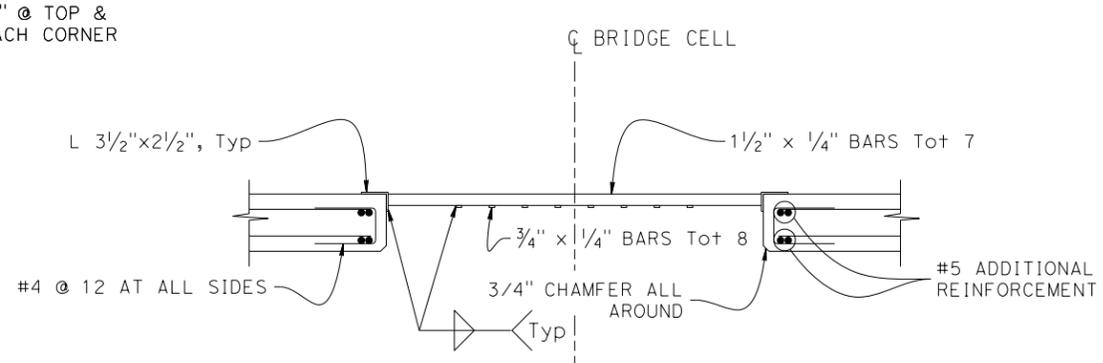
WATER LINE INSTALLATION DETAIL
3/4" = 1'-0" AT ABUTMENT 1 AND 5



WATER LINE PIPE SUPPORT PLAN
1" = 1'-0"



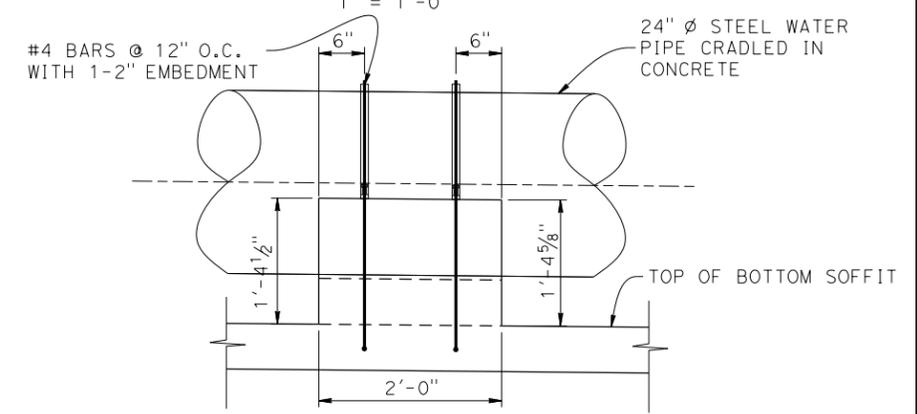
SOFFIT OPENING - PLAN
3/4" = 1'-0"



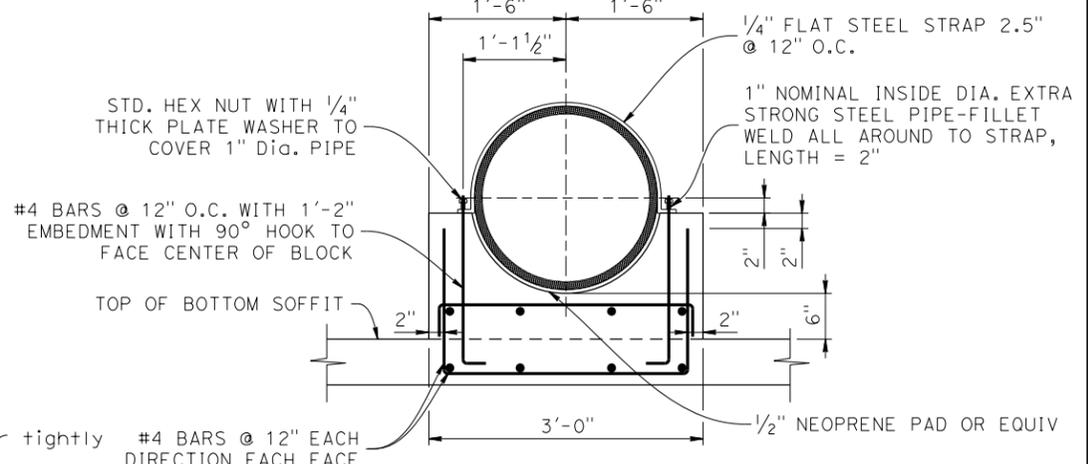
SECTION A-A
1" = 1'-0"

Note: All material to be galvanized after fabrication

- NOTES:**
1. Water line shall be installed parallel to centerline of girder.
 2. For continuation of waterline at ends, see "ROAD PLANS".
 3. Seal steel casing at abutments with concrete or mortar, after tightly wrapping steel casing with 2 layers of 15 lbs building paper.



SECTION B-B
1" = 1'-0"



SECTION C-C
1" = 1'-0"

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1					DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-

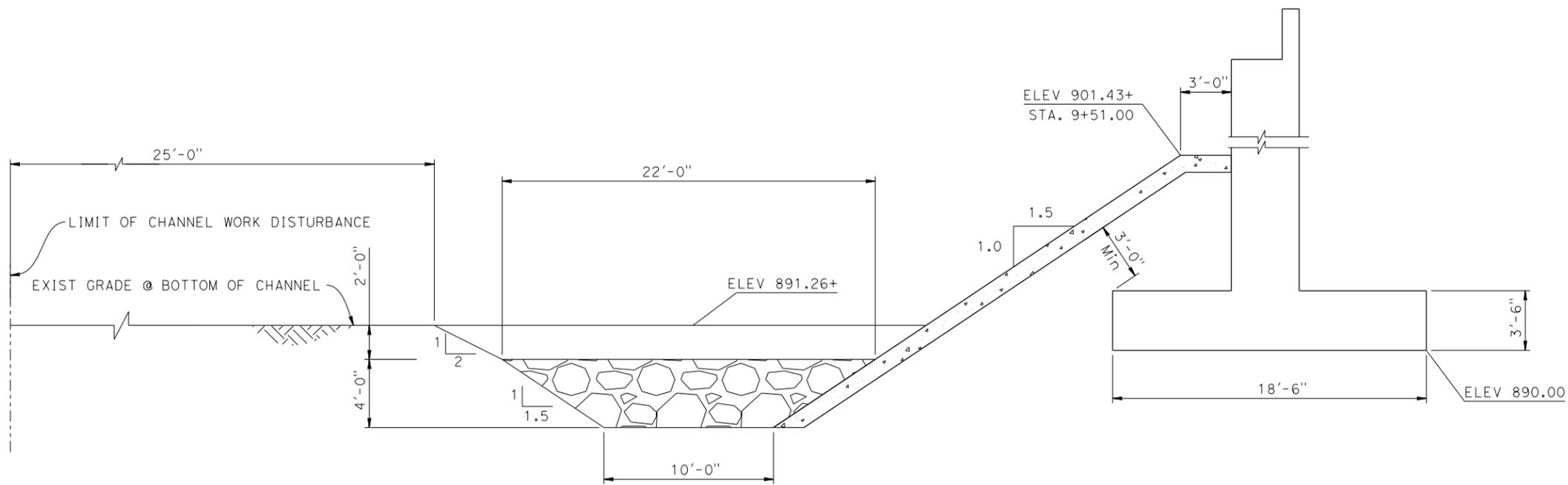


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City Engineer: Victor Ortiz, P.E.
Date:
R.C.E: 73848 Exp: 06/30/17

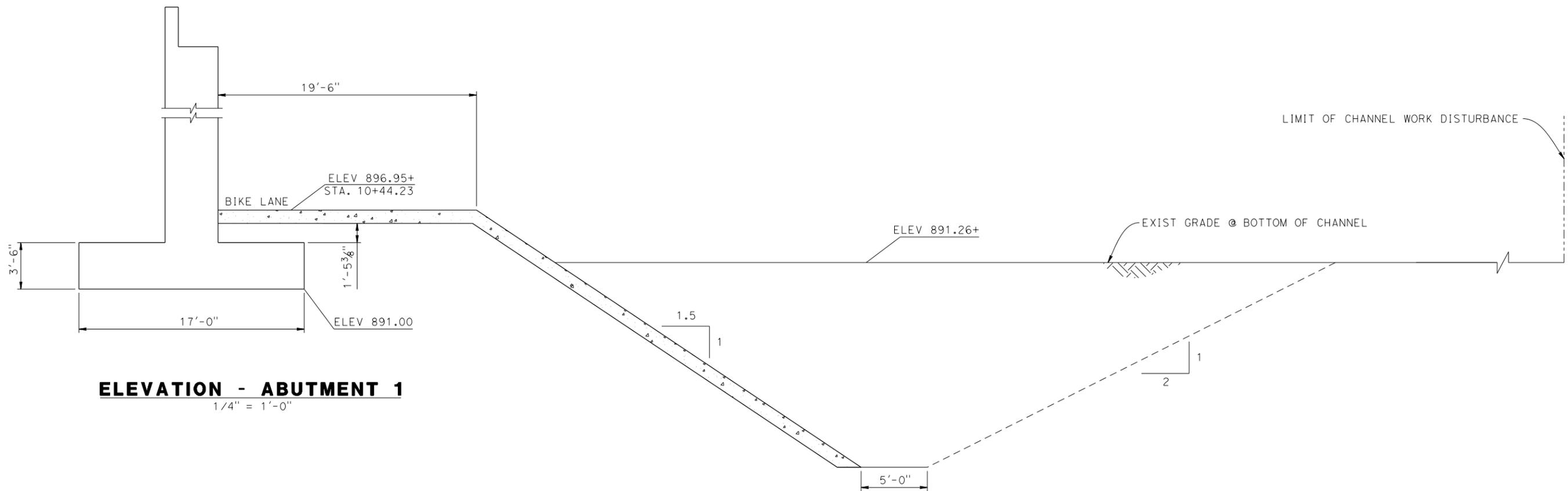
**LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER**
UTILITIES SUPPORT AND MISC DETAILS NO.2

BRIDGE NO.	??-???
POST MILES	-
SHEET	35
OF	36



ELEVATION - ABUTMENT 5

1/4" = 1'-0"



ELEVATION - ABUTMENT 1

1/4" = 1'-0"

REV	BY	DESCRIPTION	APPROVED	DATE	DESIGN	BY	CHECKED
1			G. Estepa		DETAILS	W. Chen	L. Liu
2					QUANTITIES	G. Estepa	-
3					SPEC	-	-



idc
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CITY OF COLTON
PUBLIC WORKS DEPARTMENT
 City Engineer: Victor Ortiz, P.E.
 Date:
 R.C.E: 73848 Exp: 06/30/17

LA CADENA DRIVE BRIDGE (REPLACE)
OVER SANTA ANA RIVER
CHANEL IMPROVEMENT

BRIDGE NO.	??-???
POST MILES	-
SHEET	36
OF	36

IN THE CITY OF COLTON, SAN BERNARDINO COUNTY, STATE OF CALIFORNIA

CHANNEL IMPROVEMENT PLAN FOR THE SANTA ANA RIVER

AT LA CADENA DRIVE BRIDGE

GENERAL NOTES

- SEE SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS PERMIT NO. P-22015002 AND "SPECIAL PROVISIONS" FOR ADDITIONAL CONSTRUCTION INFORMATION & DETAILS.
- IN GENERAL, ALL MATERIALS & CONSTRUCTION METHODS SHALL CONFORM TO THE "STANDARD PLANS AND SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION" (GREENBOOK), LATEST EDITION, INCLUDING SUPPLEMENTS, TO THE CITY OF COLTON STANDARD PLANS & SPECIFICATIONS, AND TO THE CITY OF COLTON PUBLIC WORKS DEPARTMENT, ENGINEERING DIVISION "STANDARD CONSTRUCTION DRAWINGS" UNLESS OTHERWISE SPECIFIED.
- THESE PLANS DEPICT ALL ACTIVE UTILITIES KNOWN BY THE ENGINEER TO EXIST AT THIS TIME. LOCATIONS ARE APPROXIMATE & SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO ANY EXCAVATION. OPERATORS OF OVERHEAD UTILITIES SHALL BE NOTIFIED PRIOR TO START OF CONSTRUCTION.
- THE CONTRACTOR SHALL CALL "UNDERGROUND SERVICE ALERT", 1-800-227-2600 AT LEAST 48 HOURS IN ADVANCE OF ANY WORK WITHIN THE PROJECT AREA TO ALLOW UTILITY OPERATORS TO CHECK & MARK LOCATIONS OF EXISTING FACILITIES.
- THE CONTRACTOR(S) SHALL COORDINATE CONSTRUCTION WITH ALL UTILITY AGENCIES AND OTHER IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO GAS, TELEPHONE, ELECTRICAL, DOMESTIC WATER, STORM DRAINAGE, FLOOD CONTROL SYSTEMS, ETC.
- CONTRACTOR SHALL PROTECT ALL UTILITIES, POLES, SIGNS, AND EXISTING IMPROVEMENTS IN PLACE UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS NOTED ON THE PLANS.
- NO CONCRETE SHALL BE PLACED UNTIL THE FORMS AND REINFORCING STEEL HAVE BEEN PLACED, INSPECTED AND APPROVED BY THE FLOOD CONTROL DISTRICT REPRESENTATIVE AND ENGINEER.
- THE WALLS AND FACES OF ALL EXCAVATIONS, GREATER THAN FIVE (5) FEET IN DEPTH SHALL BE EFFECTIVELY GUARDED BY A SHORING SYSTEM, SLOPING OF THE GROUND OR OTHER EQUIVALENT MEANS. TRENCHES LESS THAN FIVE (5) FEET IN DEPTH SHALL ALSO BE GUARDED WHEN EXAMINATION INDICATES HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED.
- NO STRUCTURE BACKFILL SHALL TAKE PLACE WITHOUT PRIOR APPROVAL OF THE FLOOD CONTROL DISTRICT REPRESENTATIVE AND ENGINEER.
- ALL MATERIALS TESTING SHALL BE PROVIDED BY OTHERS IN ACCORDANCE WITH THE NUMBER, LOCATION, AND FREQUENCY REQUIRED BY THE FLOOD CONTROL DISTRICT REPRESENTATIVE AND THE SPECIFICATIONS.
- ALL EXCAVATION SHALL MEET THE REQUIREMENTS OF OSHA 29, CFR PART 1926, SUB-PART P, EXCAVATIONS.
- ALL EXCAVATIONS OVER TWENTY (20) FEET IN DEPTH SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER, (OSHA SUB-PART P, APPENDIX TABLE B-1).
- CITY SHALL PROTECT THE DISTRICT'S TRAIL IN PLACE AND REMOVE THE TEMPORARY DETOUR AND ASSOCIATED ASPHALT AS SOON AS POSSIBLE AFTER COMPLETION OF THE PROPOSED PROJECT. CITY SHALL MINIMIZE THE DURATION OF SART CLOSURE.

GENERAL CONSTRUCTION NOTES:

- THE CONTRACTOR SHALL FURNISH ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO COMPLETE ALL WORK AS INDICATED ON THE CONSTRUCTION DOCUMENTS.
- THE CONTRACTOR SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR REVIEWING CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND FOR CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION.
- ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL RECEIVE IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
- ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
- THE CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING THE BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THIS CONTRACT.
- DETAILS ARE INTENDED TO DEPICT FINAL RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO MEET SITE CONDITIONS AND DIMENSIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
- THE CONTRACTOR SHALL MAKE ALL NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, ROADWAY, DRAINAGE WAYS, CULVERTS, AND VEGETATION UNTIL SUCH ITEMS ARE TO BE DISTURBED OR REMOVED AS INDICATED ON THE CONSTRUCTION DOCUMENTS.
- THE CONTRACTOR SHALL KEEP THE JOB SITE AREA CLEAN, HAZARDOUS FREE, AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH, AT COMPLETION OF PROJECT. CONTRACTOR SHALL REMOVE ALL MATERIAL AND EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY.

N.P.D.E.S. REQUIREMENTS:

ALL CONSTRUCTION ON OFF-SITE OR ON-SITE IMPROVEMENTS SHALL ADHERE TO NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT DELETERIOUS MATERIAL OR POLLUTANTS FROM ENTERING THE CITY OR COUNTY STORM DRAIN SYSTEMS.

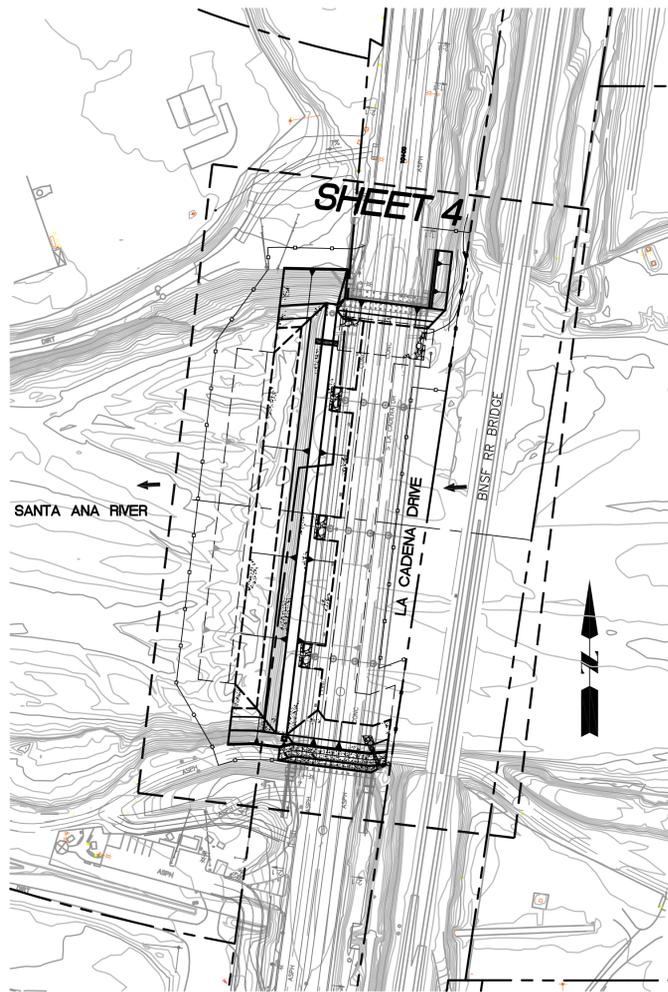
THE FOLLOWING SHOULD BE ADHERED TO:

- HANDLE, STORE AND DISPOSE OF MATERIALS PROPERLY.
- AVOID EXCAVATION AND GRADING ACTIVITIES DURING WET WEATHER.
- CONSTRUCT DIVERSION DIKS AND DRAINAGE SWALES AROUND WORKING SITES.
- COVER STOCKPILES AND EXCAVATED SOIL WITH SECURED TARPS OR PLASTIC SHEETING.
- DEVELOP AND IMPLEMENT EROSION CONTROL PLANS AND PROVIDE A COPY TO THE ENGINEERING DIVISION, PUBLIC SERVICES DEPARTMENT FOR APPROVAL BY THE CITY ENGINEER.
- CHECK AND REPAIR LEAKING EQUIPMENT AWAY FROM CONSTRUCTION SITE.
- DESIGNATE A LOCATION AWAY FROM STORM DRAINS FOR REFUELING VEHICLES.
- WHEN WORKING NEAR CATCH BASINS, COVER AND SEAL EACH BASIN PRIOR TO THE START OF CONSTRUCTION.
- USE VACUUM WITH ALL CONCRETE SAWING OPERATIONS.
- NEVER WASH EXCESS MATERIAL FROM AGGREGATE, CONCRETE OR EQUIPMENT ONTO A STREET.
- CATCH DRIPS FROM PAVER WITH DRIP PANS OR ABSORBENT MATERIAL.
- CLEAN UP ALL SPILLS USING DRY METHODS.
- GUTTERS SHALL BE KEPT CLEAN AFTER LEAVING CONSTRUCTION SITE. SWEEP ALL GUTTERS AT THE END OF EACH WORKING DAY.
- DURING CONSTRUCTION, DUMPSTER(S) SHALL BE ON SITE AT ALL TIMES.
- CALL 911 IN CASE OF A HAZARDOUS SPILL.
- KEEP A RUNNING LOG OF ALL ACTIVITIES IN CONNECTION WITH THE "STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
- NAME A PERSON ON-SITE TO BE RESPONSIBLE FOR COMPLYING WITH SWPPP.
- THE FOLLOWING BMP'S AS OUTLINED IN, BUT NOT LIMITED TO, THE "BEST MANAGEMENT PRACTICES HANDBOOK, CALIFORNIA STORMWATER QUALITY TASK FORCE, SACRAMENTO, CALIFORNIA, 1993", OR THE LATEST REVISED EDITION, MAY APPLY DURING THE CONSTRUCTION OF THIS PROJECT. (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY COUNTY INSPECTORS.

19. BEST MANAGEMENT PRACTICES:
- | | |
|-------|-----------------------------------|
| CA001 | DEWATERING OPERATIONS |
| CA002 | PAVING OPERATIONS |
| CA003 | STRUCTURE CONSTRUCTION & PAINTING |
| CA010 | MATERIAL DELIVERY AND STORAGE |
| CA011 | MATERIAL USE |
| CA012 | SPILL PREVENTION AND CONTROL |
| CA020 | SOLID WASTE MANAGEMENT |
| CA021 | HAZARDOUS WASTE MANAGEMENT |
| CA022 | CONTAMINATED SOIL MANAGEMENT |
| CA023 | CONCRETE WASTE MANAGEMENT |
| CA030 | VEHICLE & EQUIPMENT CLEANING |
| CA031 | VEHICLE & EQUIPMENT FUELING |
| CA032 | VEHICLE & EQUIPMENT MAINTENANCE |
| CA040 | EMPLOYEE/SUBCONTRACTOR TRAINING |
| ESC01 | SCHEDULING |
| ESC02 | PRESERVATION OF EXIST VEGETATION |
| ESC10 | SEEDING AND PLANTING |
| ESC11 | MULCHING |
| ESC20 | GEOTEXTILES AND MATS |
| ESC21 | DUST CONTROLS |
| ESC23 | CONSTRUCTION ROAD STABILIZATION |
| ESC24 | STABILIZED CONSTRUCTION ENTRANCE |
| ESC30 | EARTH DIKE |
| ESC31 | TEMPORARY DRAINS AND SWALES |
| ESC32 | SLOPE DRAIN |
| ESC40 | OUTLET PROTECTION |
| ESC41 | CHECK DAMS |
| ESC42 | SLOPE ROUGHENING/TERRACING |
| ESC50 | SILT FENCE |
| ESC51 | STRAW BALE BARRIERS |
| ESC52 | SAND BAG BARRIER |
| ESC53 | BRUSH OR ROCK FILTER |
| ESC54 | STORM DRAIN INLET PROTECTION |
| ESC55 | SEDIMENT TRAP |
| ESC56 | SEDIMENT BASIN |

LEGEND

- | | |
|--|---------------------------------------|
| | LIMITS OF CHANNEL WORK DISTURBANCE |
| | RETAINING WALL |
| | 4' CHANNELIZER |
| | CONCRETE |
| | RIPRAP |
| | REMOVAL OF EXIST. CONCRETE BIKE TRAIL |
| | 2" SOLID GALVANIZED STEEL PLATE |



INDEX MAP
SCALE 1" = 100'

ABBREVIATIONS

- | | |
|------------|---------------------|
| BB | - BEGIN BRIDGE |
| C | OR C/L - CENTERLINE |
| CLR. | - CLEARANCE |
| EB | - END BRIDGE |
| ELEV. | - ELEVATION |
| EXIST. | - EXISTING |
| FG | - FINISH GRADE |
| FL | - FLOW LINE |
| FS | - FINISH SURFACE |
| GB | - GRADE BREAK |
| INV. | - INVERT |
| LF | - LINEAR FOOT |
| LT | - LEFT |
| MAX | - MAXIMUM |
| N.T.S. | - NOT TO SCALE |
| PROP. | - PROPOSED |
| RET. WALL | - RETAINING WALL |
| RT | - RIGHT |
| R/W OR ROW | - RIGHT OF WAY |
| ST | - STREET |
| STA. | - STATION |
| SD | - STORM DRAIN |
| TC | - TOP OF CURB |
| TF | - TOP OF FOOTING |
| TS | - TOP OF SLOPE |
| TW | - TOP OF WALL |

INDEX OF SHEETS:

SHEET No.(s)	DESCRIPTION
1:	TITLE SHEET AND INDEX MAP
2:	GRADING NOTES
3:	DEMOLITION PLAN
4:	CHANNEL PLAN
5:	CHANNEL PROFILE
6:	CROSS SECTIONS
7:	SANTA ANA RIVER TRAIL PLAN, PROFILE, AND SECTIONS
8:	DETAILS
9:	DETAILS

UTILITY PURVEYORS:

WATER - CITY OF COLTON UTILITIES DEPARTEMENT
SEWER - CITY OF COLTON PUBLIC WORKS DEPARTMENT
ELECTRICAL - CITY OF COLTON UTILITIES DEPARTMET
GAS - SOUTHERN CALIFORNIA GAS
TELEPHONE - SBC

NOTIFICATIONS:

CONTRACTOR SHALL NOTIFY CITY OF COLTON, AT LEAST 2 WORKING DAYS IN ADVANCE OF STARTING CONSTRUCTION.

AT LEAST 2 WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION CONTRACTOR SHALL NOTIFY:

CITY OF COLTON PUBLIC WORKS: (909) 370-5065
CITY OF COLTON WATER AND WASTEWATER DEPARTMENT : (909) 370-6131

CONSTRUCTION NOTES

- CONSTRUCT 8-INCH THICK CONCRETE SLOPE LINING AND CUTOFF WALL USING CLASS "A" CONCRETE WITH #4 REBARS @ 12" O.C. (SEE SECTION A-A ON SHEET 7).
- CONSTRUCT 12-INCH THICK ANCHOR WALL USING CLASS "B" CONCRETE WITH #4 REBARS @ 12" O.C. (SEE SECTION D-D ON SHEET 7).
- TOE EXCAVATION AND TOE BACKFILL. 39.715/36,398 CY
- CONSTRUCT 1-TON ROCK RIPRAP LAUNCH PAD PER CALTRANS SPECS 72-2; T=PER PLAN. 1,365 CY
- CONSTRUCT 6" PCC PAVEMENT PER TYPICAL SECTIONS ON SHEET 7. 49 CY
- INSTALL 4' CHANNELIZER AT 4' O.C. 255 LF
- REMOVE AND REPLACE EXISTING PAVEMENT. 1,646 SF
- CONSTRUCT CONCRETE PIPE CONNECTION PER SBCFCD STD. FILE NO. S.P. 200A. 1 EA
- INSTALL 36" RCP. (D=2000) 20 LF
- CONSTRUCT CONCRETE COLLAR PER SBCFCD STD. FILE NO. S.P. 167. TO JOIN EXISTING 36" RCP STORM DRAIN (FIELD VERIFY EXISTING PIPE INVERT). 1 EA
- ADJUST EXISTING SEWER MANHOLE RIM TO GRADE. SEE DETAIL "J" ON SHEET 8. 2 EA
- CONSTRUCT SEWER MANHOLE CONCRETE PAD. SEE DETAIL "J" ON SHEET 8. 1 EA
- PROPOSED FISHWAY CONCRETE RECTANGULAR CHANNEL (B=48", D=44"). 7 CY
- PROPOSED TEMPORARY 2" ANGLED SOLID GALVANIZED STEEL PLATE. PER SAN BERNARDINO CO. TRANS. DEPT. DWG. NO. 211. (STEEL PLATE COVER) 69 SF
- PROPOSED 2" SOLID GALVANIZED STEEL PLATE. PER SAN BERNARDINO CO. TRANS. DEPT. DWG. NO. 211. (STEEL PLATE COVER) 60 SF
- PROPOSED BONDOUT FOR STOP LOG SLOT. 2 EA
- CONSTRUCT TEMPORARY SHEET PILES. 139 LF

ENGINEER'S NOTICE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. THESE LOCATIONS ARE APPROXIMATE AND SHALL BE CONFIRMED IN THE FIELD BY THE CONTRACTOR, SO THAT ANY NECESSARY ADJUSTMENT CAN BE MADE IN ALIGNMENT AND/OR GRADE OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURE TO PROTECT ANY UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

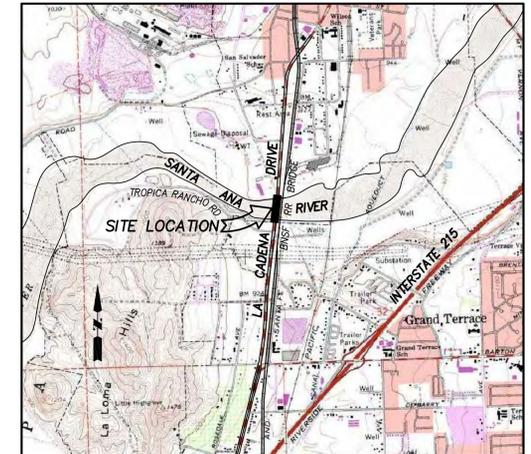
THE EXISTING UNDERGROUND UTILITIES AND SUBSTRUCTURES IDENTIFIED ON THESE PLANS WERE TAKEN FROM AVAILABLE RECORDS AND SHOWN ACCORDINGLY. IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION PART 1 SECTION 5, THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING UNDERGROUND SERVICE ALERT (OR CALTRANS ON STATE HIGHWAYS) TO IDENTIFY ALL EXISTING UTILITIES, WHETHER SHOWN ON THESE PLANS OR NOT, AND SHALL DETERMINE THEIR LOCATIONS & DEPTHS, INCLUDING SERVICE CONNECTIONS WHICH MAY AFFECT OR BE AFFECTED BY ITS OPERATIONS PRIOR TO STARTING WORK ON THE PROJECT. IF CONFLICTING UTILITIES ARE NOT BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO THE START OF THE CONTRACTOR'S WORK, THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY CHANGES, REVISIONS OR MODIFICATIONS.

CONTRACTOR'S RESPONSIBILITY FOR SAFETY

ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATION" OF THE DEPARTMENT OF U.S. LABOR, AND WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS".

THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR OR WITH THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS' "CONSTRUCTION SAFETY ORDERS".

IN SUBMITTING A BID FOR THIS WORK THE CONTRACTOR AGREES HE SHALL ASSUME THE SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT; INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEPEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK IN THIS PROJECT, EXCEPT FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.



VICINITY MAP
N.T.S.

ESTIMATED QUANTITIES

TOTAL	UNITS
1,806	CY
90	CY
39.715/36,398	CY
1,365	CY
49	CY
255	LF
1,646	SF
1	EA
20	LF
1	EA
2	EA
1	EA
7	CY
69	SF
60	SF
2	EA
139	LF

Underground Service Alert

Call: TOLL FREE
1-800
422-4133

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK

CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)

A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A AT&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER

REGISTERED PROFESSIONAL ENGINEER

CEAZAR V. ADULAR

No. 41679
Exp. 03/31/18
CIVIL

STATE OF CALIFORNIA

PREPARED BY:

ACI
AGUILAR CONSULTING INC.

2155 CHICAGO AVENUE, SUITE 301
RIVERSIDE, CA 92507
PH. (951) 300-1431 FAX (951) 300-1435

CITY OF COLTON
PUBLIC WORKS DEPARTMENT

CITY ENGINEER

NAME: VICTOR ORTIZ, P.E. EXPIRES: 6/30/17
R.C.E.: 73848

ACCEPTED: _____ DATE: _____

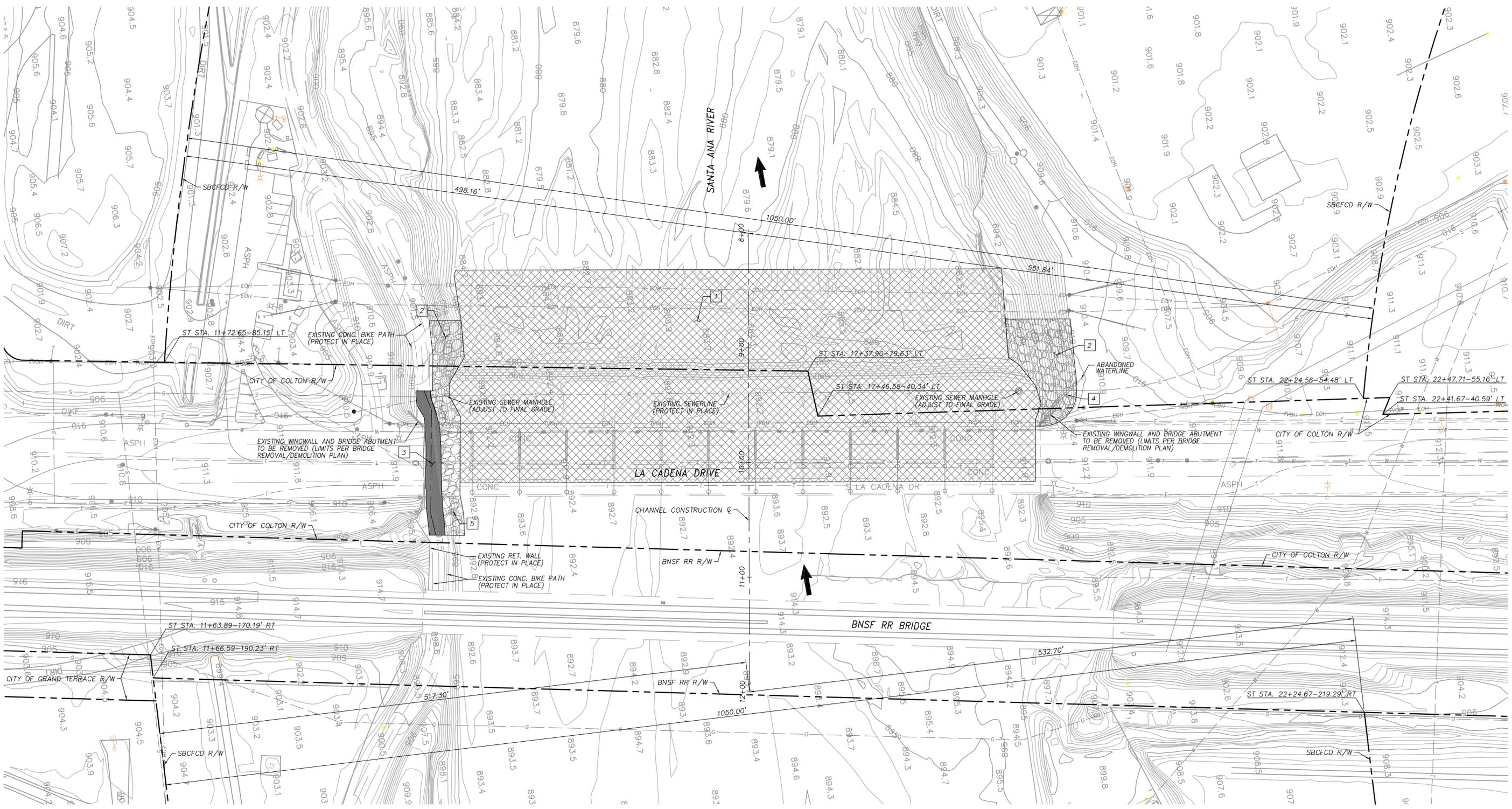
PLAN NO. #####

REVISIONS	DATE	APPR.

SCALE
HORIZ: 1"=100'
VERT: NA
DATE: ##-##-##

CHANNEL IMPROVEMENT PLANS
CONCRETE GRADE STABILIZER STRUCTURE
UNDER LA CADENA DRIVE BRIDGE
TITLE SHEET

SHEET 1 OF 9



DEMOLITION NOTES

- 1 REMOVE EXISTING UTILITY PROTECTION BLANKET.
- 2 REMOVE EXISTING GROUTED RIPRAP.
- 3 REMOVE EXISTING CONCRETE BIKE PATH.
- 4 REMOVE PORTION OF EXISTING WATERLINE AND CONCRETE ENCLOSURE TO FACILITATE CONSTRUCTION OF CONCRETE LINING.
- 5 REMOVE EXISTING 36" STORM DRAIN AND OUTLET STRUCTURE TO FACILITATE CONSTRUCTION OF CONCRETE CHANNEL LINING AND BIKE TRAIL.

ESTIMATED QUANTITIES

TOTAL	UNITS
1	LS
1	LS
1,699	SF
48	LF
12	LF

LEGEND

- REMOVE EXISTING UTILITY PROTECTION BLANKET
- REMOVE EXISTING GROUTED RIPRAP
- REMOVE EXISTING CONCRETE BIKE PATH.

Underground Service Alert

Call: TOLL FREE 1-800-422-4133

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK

CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)

A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A AT&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER

REGISTERED PROFESSIONAL ENGINEER

CEAZAR V. AGUILAR
No. 41679
Exp. 03/31/18
CIVIL
STATE OF CALIFORNIA

PREPARED BY:

AGUILAR CONSULTING INC.
2155 CHICAGO AVENUE, SUITE 301
RIVERSIDE, CA 92507
PH (951) 300-1431 FAX (951) 300-1435

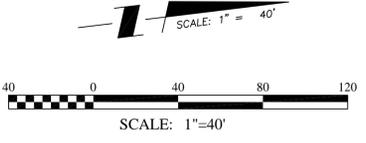
CITY OF COLTON PUBLIC WORKS DEPARTMENT

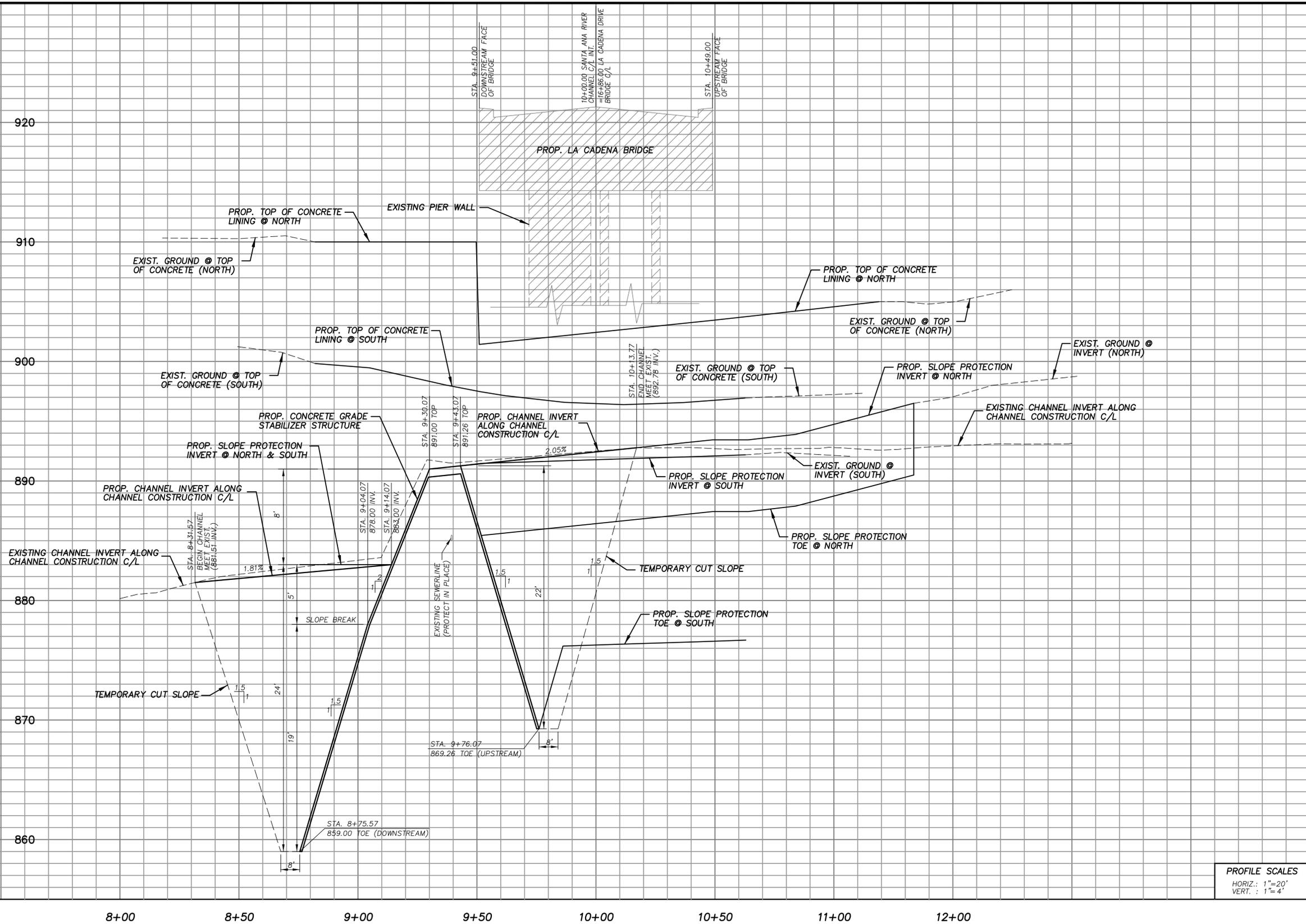
CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E. 73848
ACCEPTED: _____ DATE: _____
EXPIRES: 6/30/17
PLAN NO. #####

REVISIONS	DATE	APPR.

**CHANNEL IMPROVEMENT PLANS
CONCRETE GRADE STABILIZER STRUCTURE
UNDER LA CADENA DRIVE BRIDGE
CHANNEL DEMOLITION PLAN**

SCALE: 1"=40'
DATE: ##-##-##
SHEET 3 OF 9

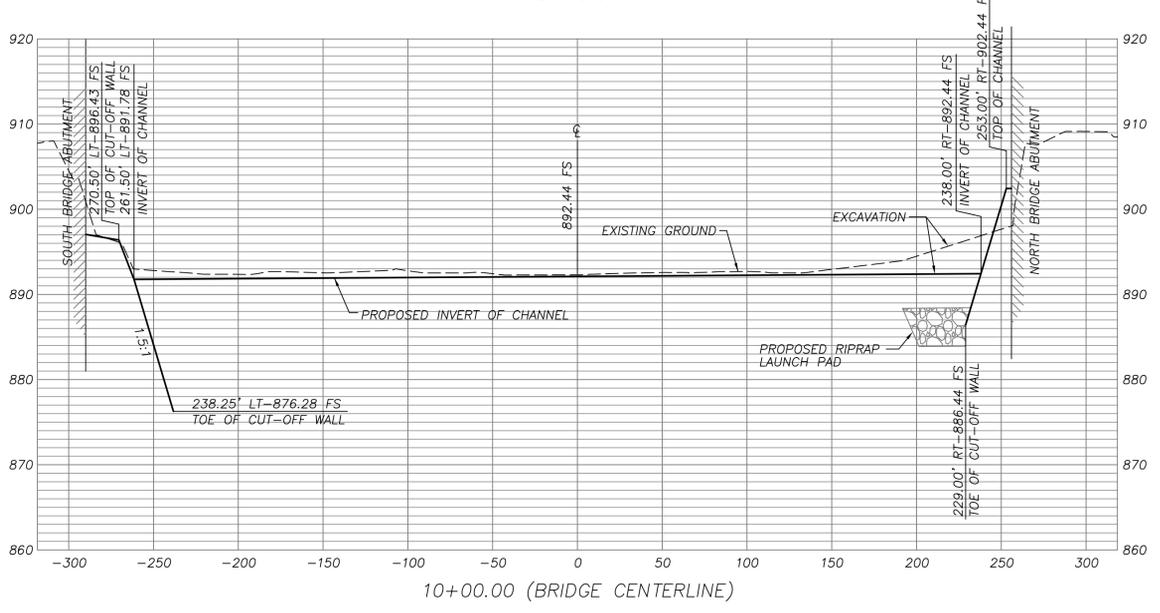
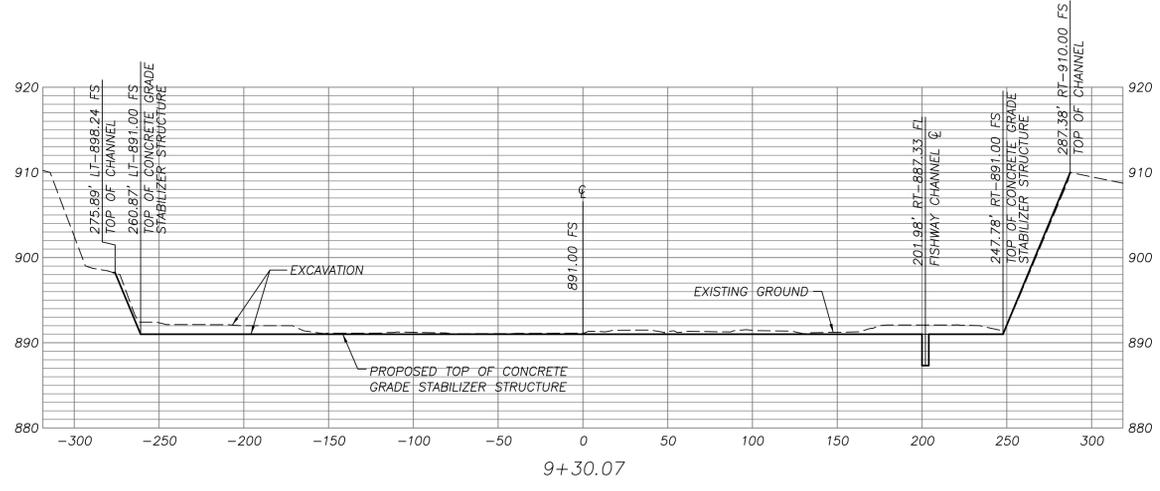
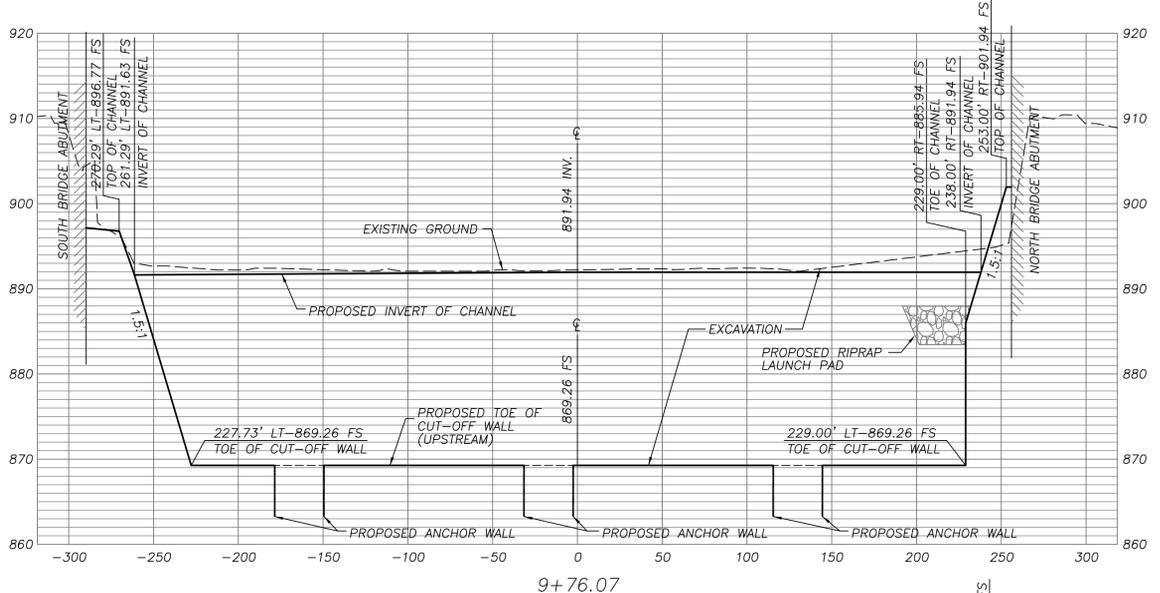
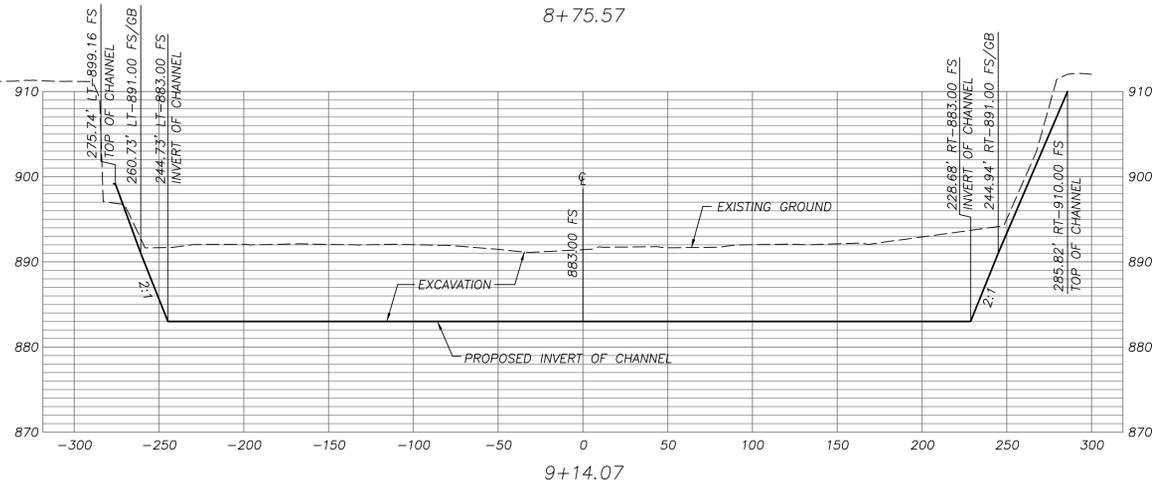
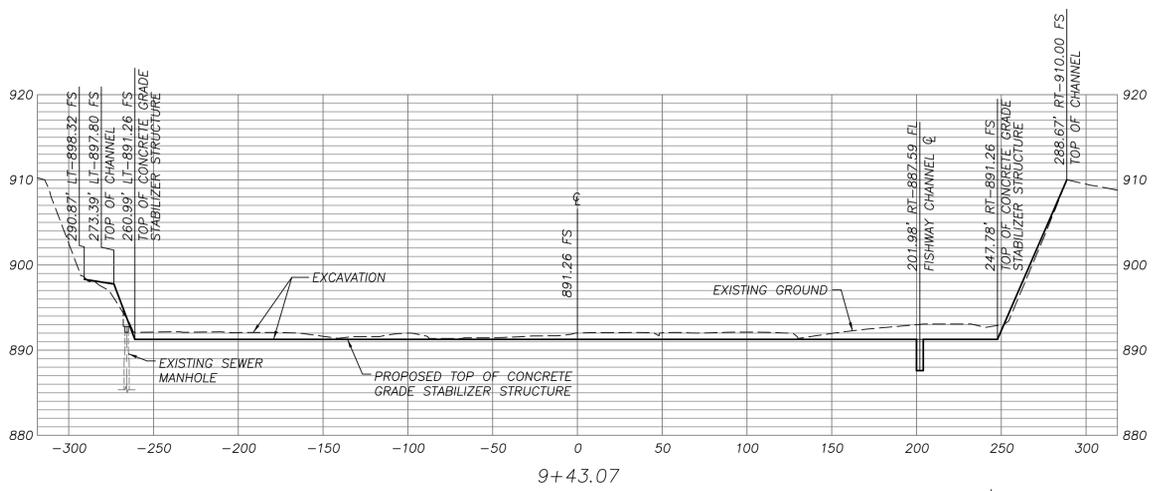
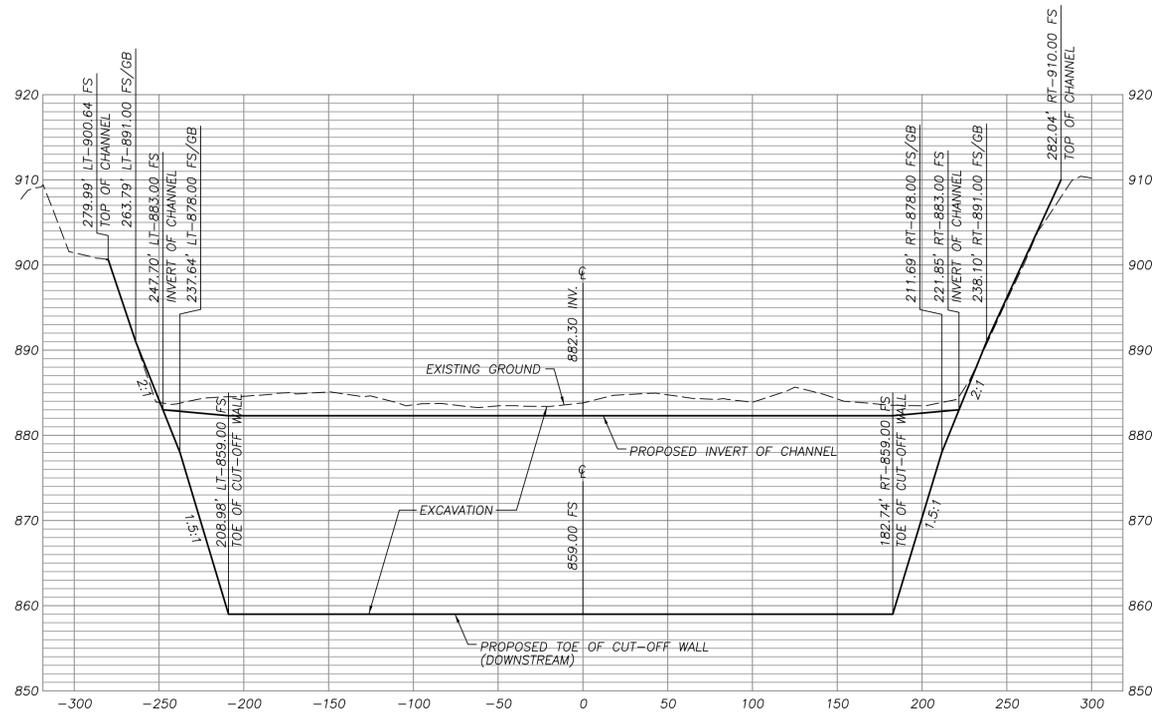




PROFILE SCALES
 HORIZ.: 1"=20'
 VERT.: 1"=4'

ELEVATIONS AND STATIONS ON PROFILE ARE REFERENCED PERPENDICULAR TO CHANNEL CENTERLINE AS SHOWN ON SHEET 4.

<p>Underground Service Alert</p> <p>Call: TOLL FREE 1-800 422-4133</p> <p>TWO WORKING DAYS BEFORE YOU DIG</p>	<p>BENCHMARK</p> <p>CITY OF COLTON BENCH MARK 703-2 ELEV = 909.840 FEET (NGVD 29)</p> <p>A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A AT&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER</p>	<p>PREPARED BY:</p> <p>AGUILAR CONSULTING INC. 2155 CHICAGO AVENUE, SUITE 301 RIVERSIDE, CA 92507 PH: (951) 300-1431 FAX: (951) 300-1435</p>	<p>CITY OF COLTON PUBLIC WORKS DEPARTMENT</p> <p>CITY ENGINEER NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848 EXPIRES: 6/30/17</p> <p>ACCEPTED: _____ DATE: _____</p> <p>PLAN NO. #####</p>	<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>APPR.</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DATE	APPR.			
				NO.	DATE	APPR.				
<p>SCALE</p> <p>HORIZ: AS NOTED</p> <p>VERT: AS NOTED</p> <p>DATE: ##-##-##</p> <p>SHEET 5 OF 9</p>										



Underground Service Alert
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 1-800
 422-4133
 TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
 CITY OF COLTON BENCH MARK 703-2
 ELEV = 909.840 FEET (NGVD 29)
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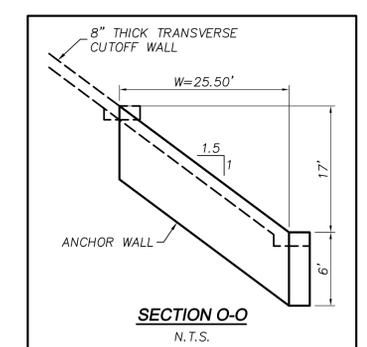
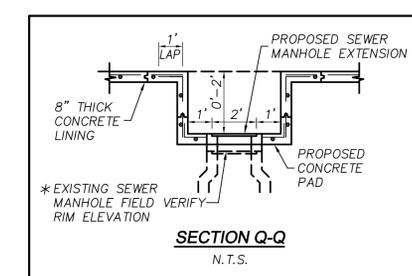
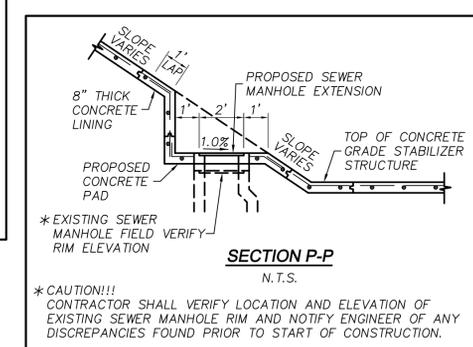
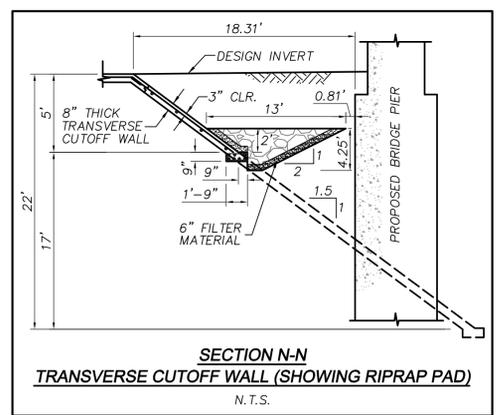
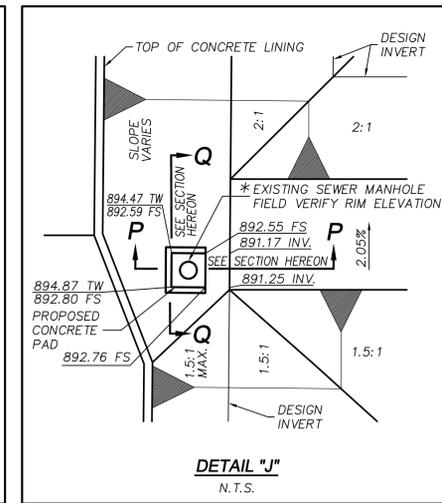
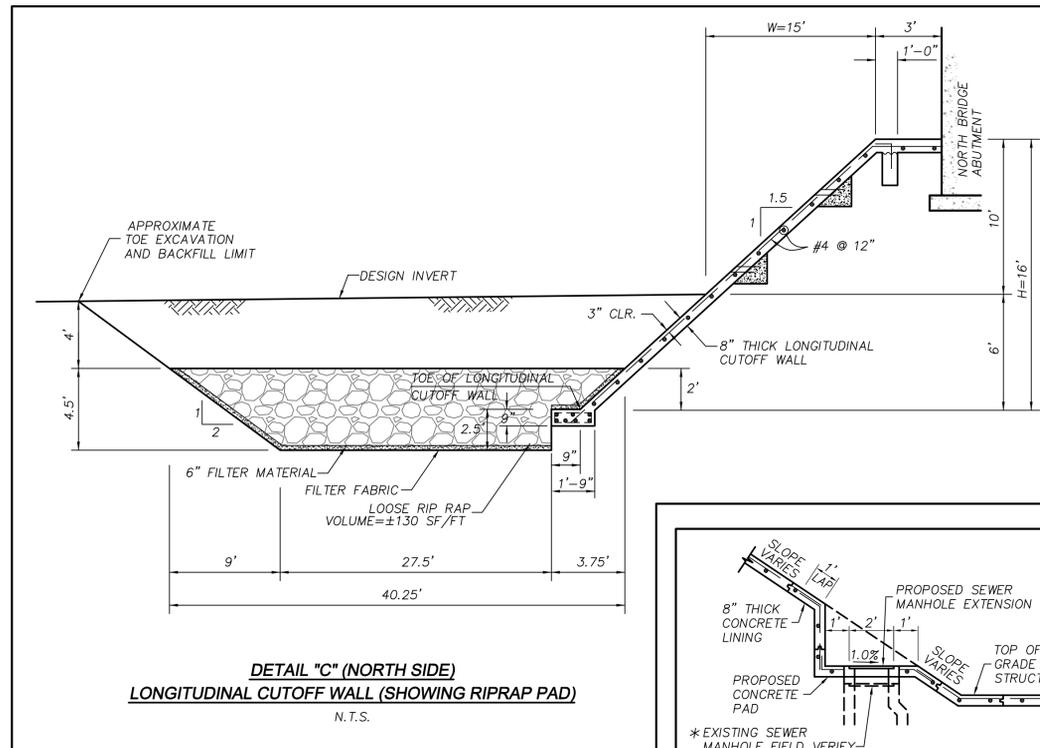
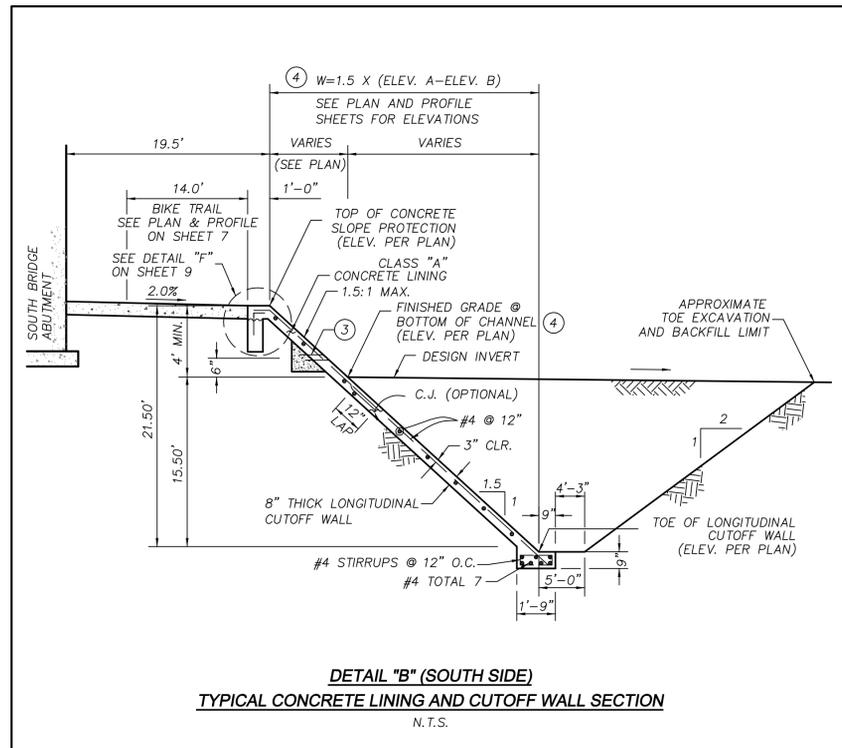
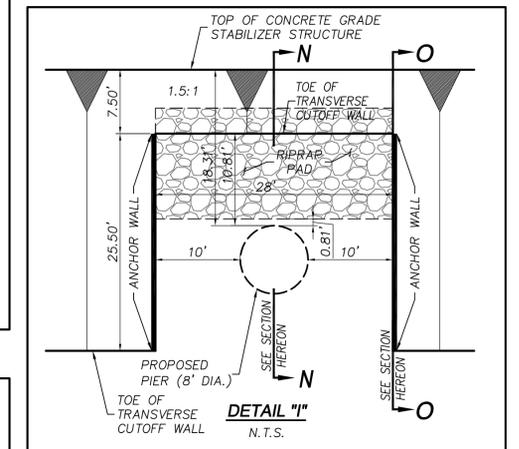
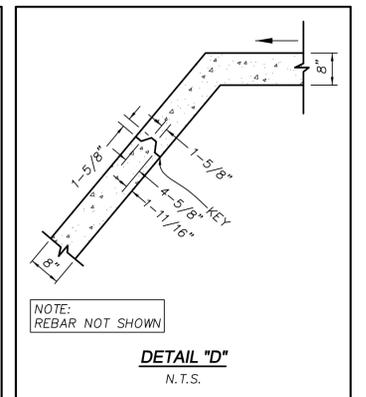
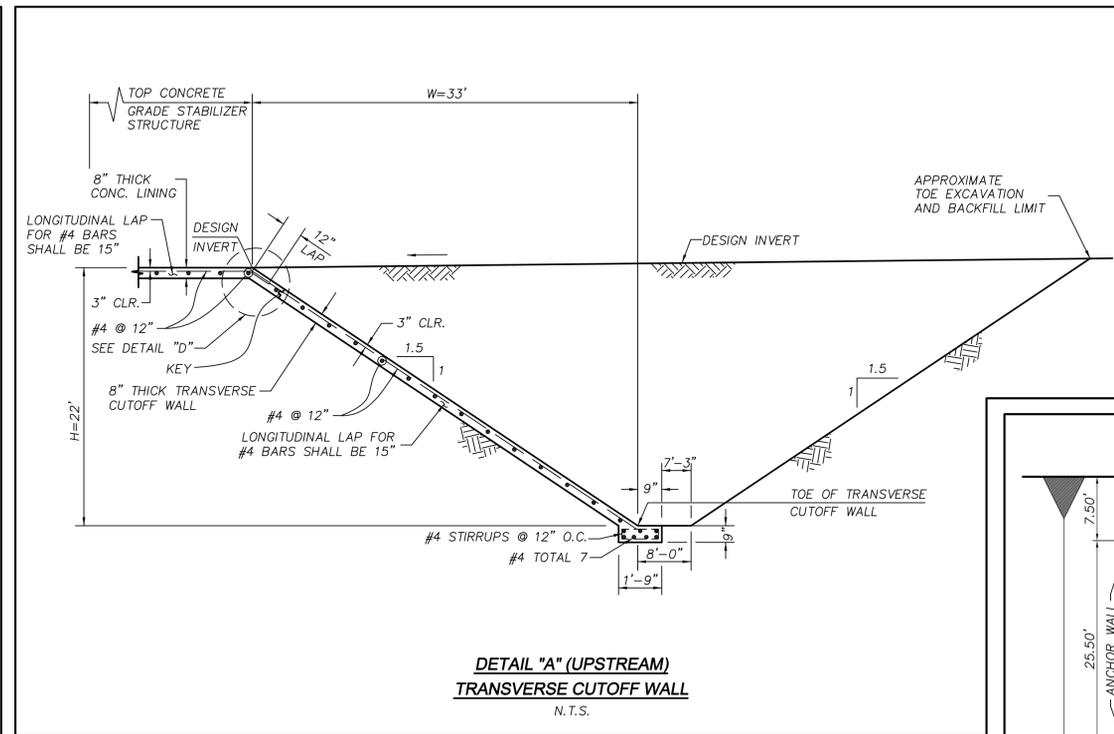
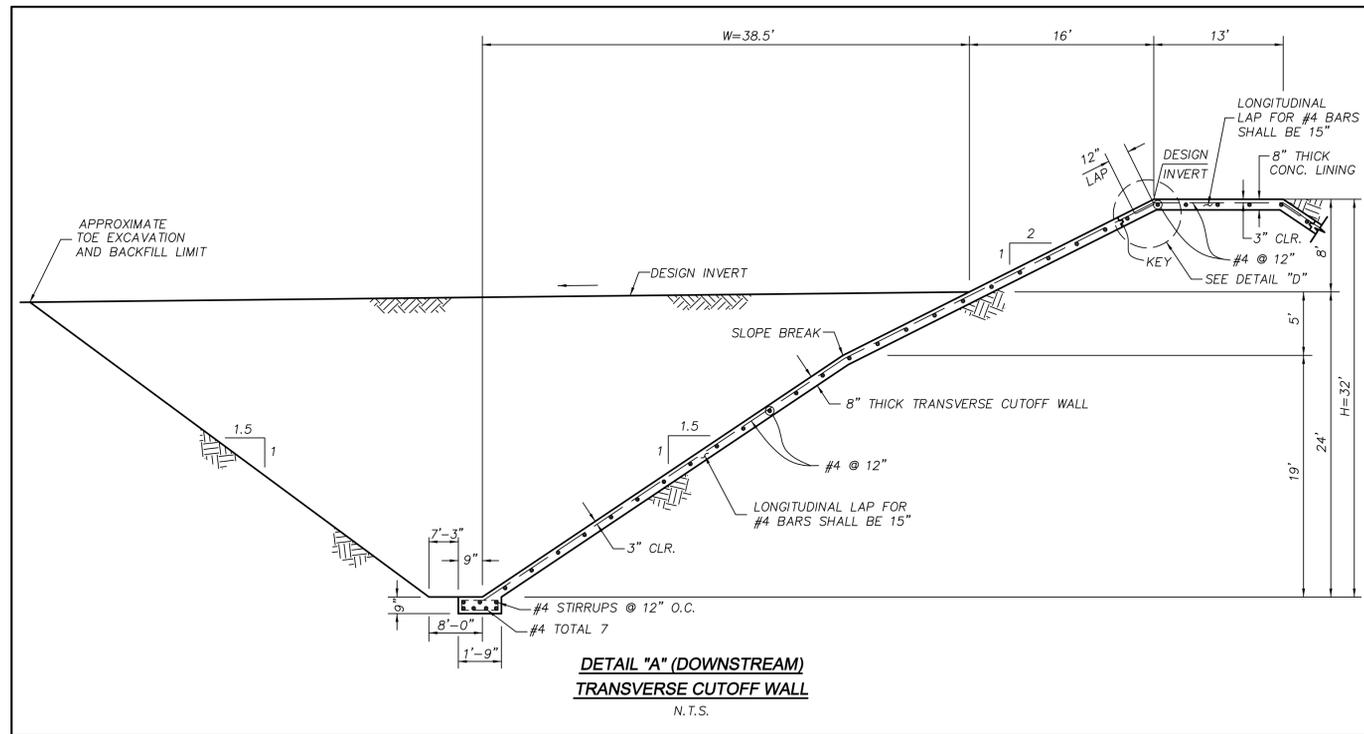
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CITY OF COLTON
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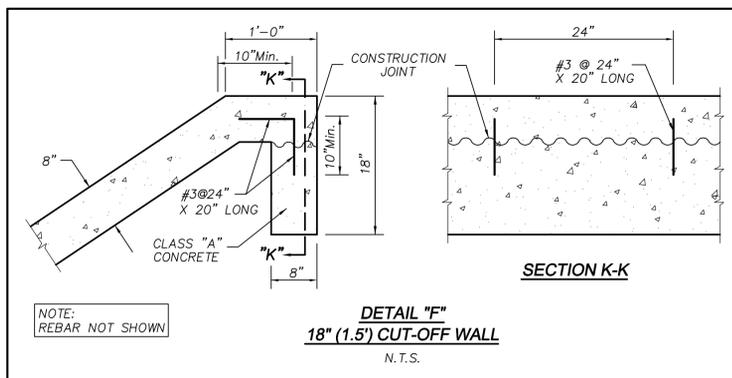
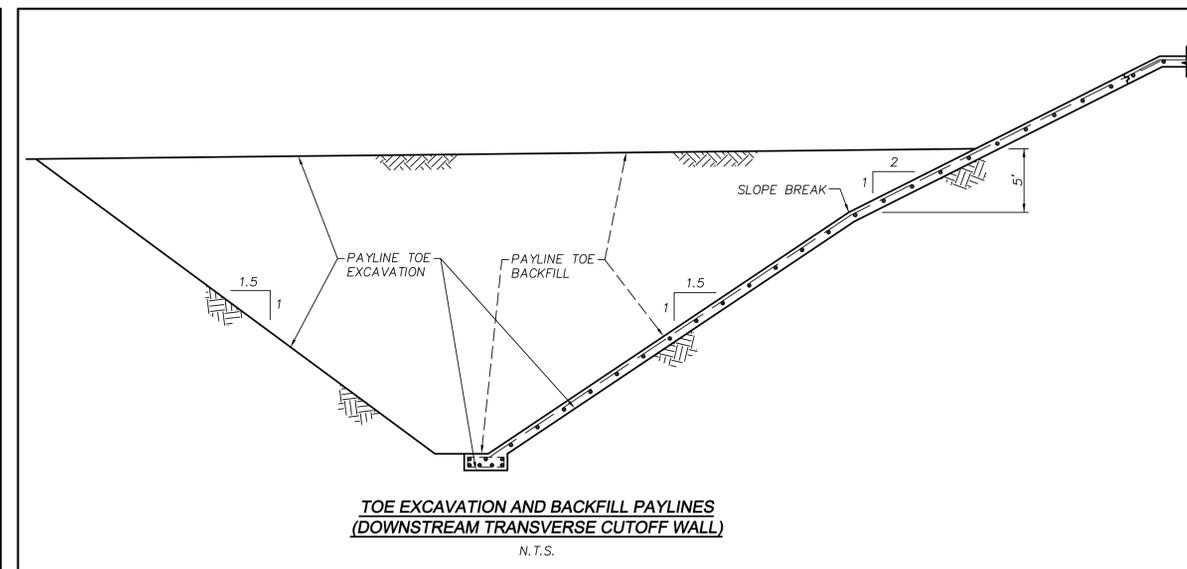
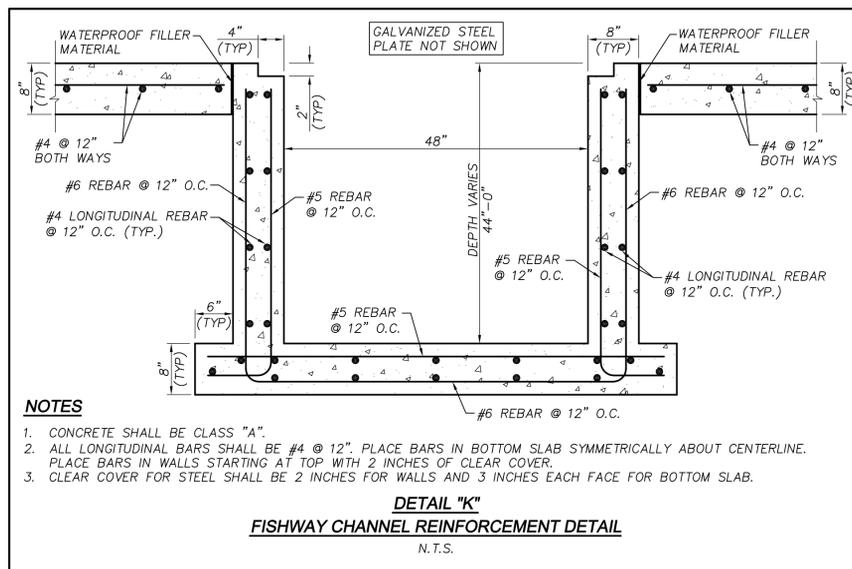
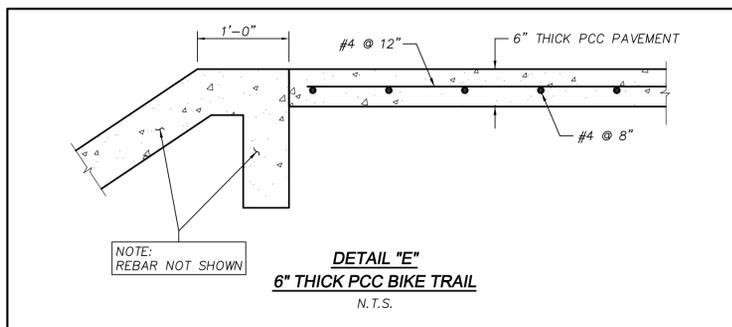
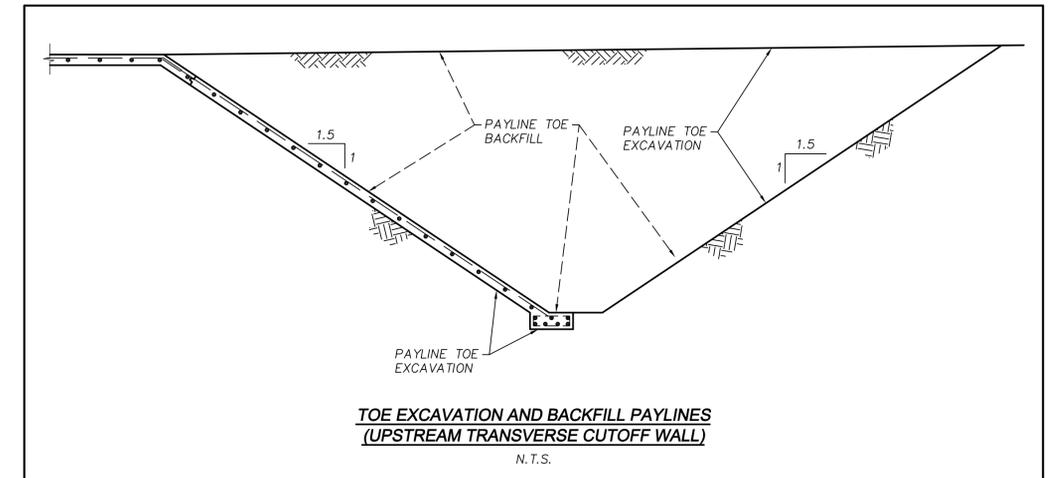
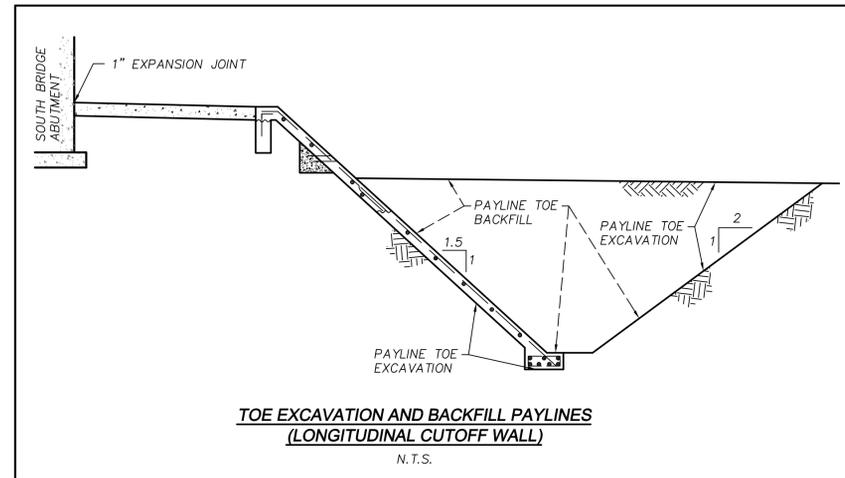
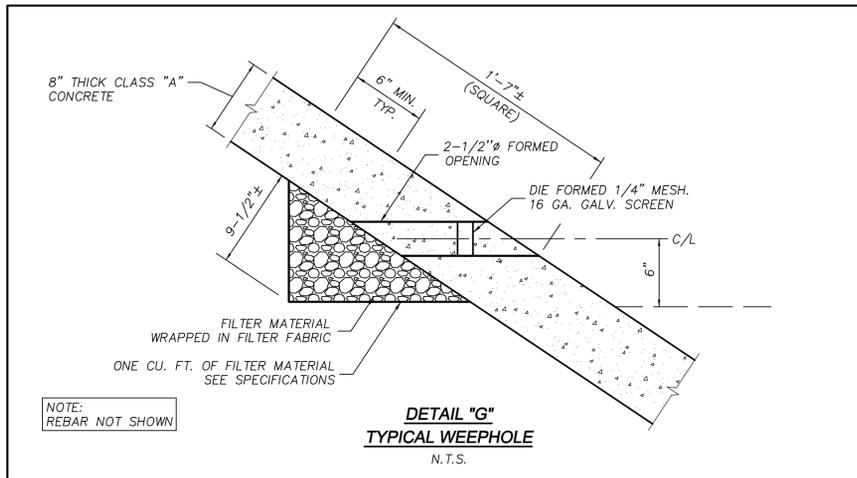
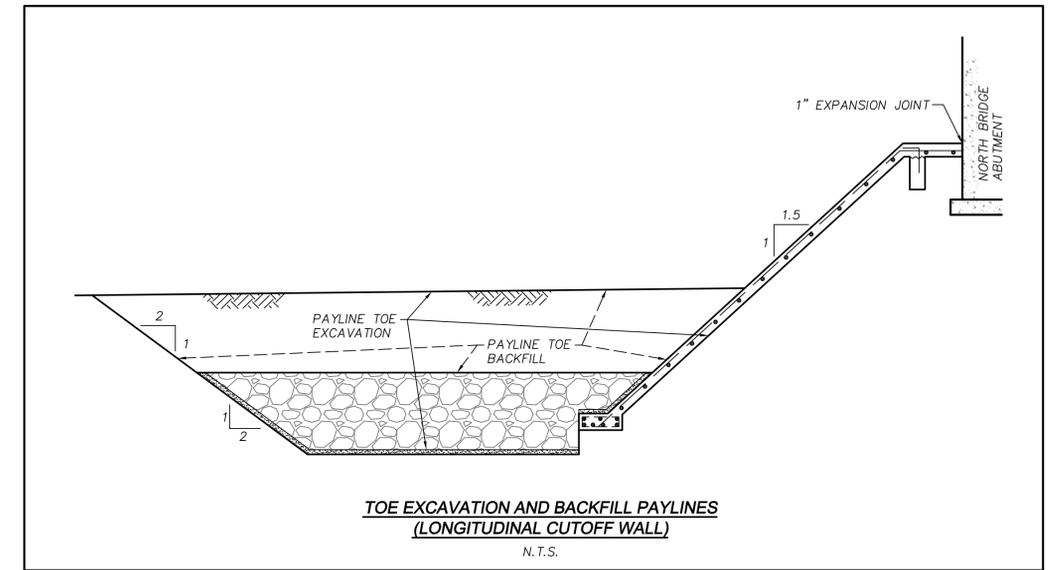
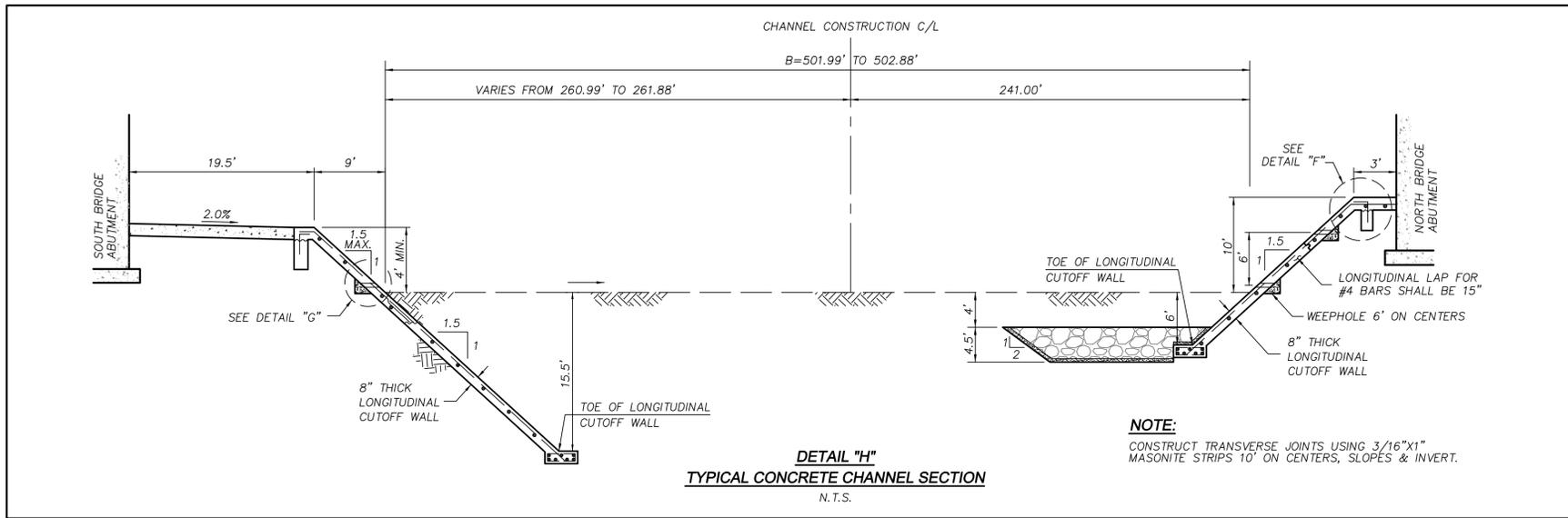
REVISIONS	DATE	APPR.

SCALE
 HORIZ: 1"=50'
 VERT: 1"=10'
 DATE: ##-##-##
 SHEET 6 OF 9



- NOTES**
- WEAKENED PLANE JOINTS AT 15' ARE REQUIRED AT A MINIMUM OF 25', ALSO AT ALL GRADE CHANGES. TRANSVERSE JOINTS SHALL BE ALIGNED FROM TOP OF LEVEE TO BOTTOM OF SLOPE PROTECTION AND REINFORCEMENT SHALL BE CONTINUOUS THRU ALL JOINTS
 - LONGITUDINAL LAP FOR #4 BARS SHALL BE 15"
 - 2-1/2" DIA. WEEPHOLE WITH FILTER MATERIAL @ 10' O.C. PER RCFC STD. DWG. CH 326
 - SEE PLAN AND PROFILE SHEETS FOR ELEVATIONS, HEIGHTS (D), AND WIDTHS (W).

<p>Underground Service Alert</p> <p>Call: TOLL FREE 1-800-422-4133</p> <p>TWO WORKING DAYS BEFORE YOU DIG</p>	<p>BENCHMARK</p> <p>CITY OF COLTON BENCH MARK 703-2 ELEV = 909.840 FEET (NGVD 29)</p> <p>A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A AT&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER</p>	<p>REGISTERED PROFESSIONAL ENGINEER</p> <p>CEAZAR V. AGUILAR No. 41679 Exp. 03/31/18 CIVIL STATE OF CALIFORNIA</p>	<p>PREPARED BY:</p> <p>ACI AGUILAR CONSULTING INC.</p> <p>2155 CHICAGO AVENUE, SUITE 301 RIVERSIDE, CA 92507 PH (951) 300-1431 FAX (951) 300-1435</p>	<p>CITY OF COLTON PUBLIC WORKS DEPARTMENT</p> <p>CITY ENGINEER</p> <p>NAME: VICTOR ORTIZ, P.E. R.C.E. 73848 ACCEPTED: _____ DATE: _____ EXP. 6/30/17</p> <p>PLAN NO. #####</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>DATE</th> <th>APPR.</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	NO.	DATE	APPR.				<p>SCALE</p> <p>HORIZ: NA VERT: NA DATE: ##-##-##</p>
					NO.	DATE	APPR.					
<p>CHANNEL IMPROVEMENT PLANS CONCRETE GRADE STABILIZER STRUCTURE UNDER LA CADENA DRIVE BRIDGE DETAILS</p>				<p>SHEET 8 OF 9</p>								



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REVISIONS	DATE	APPR.

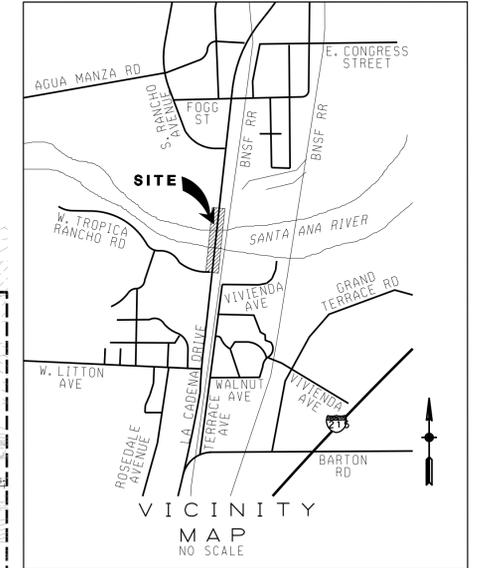
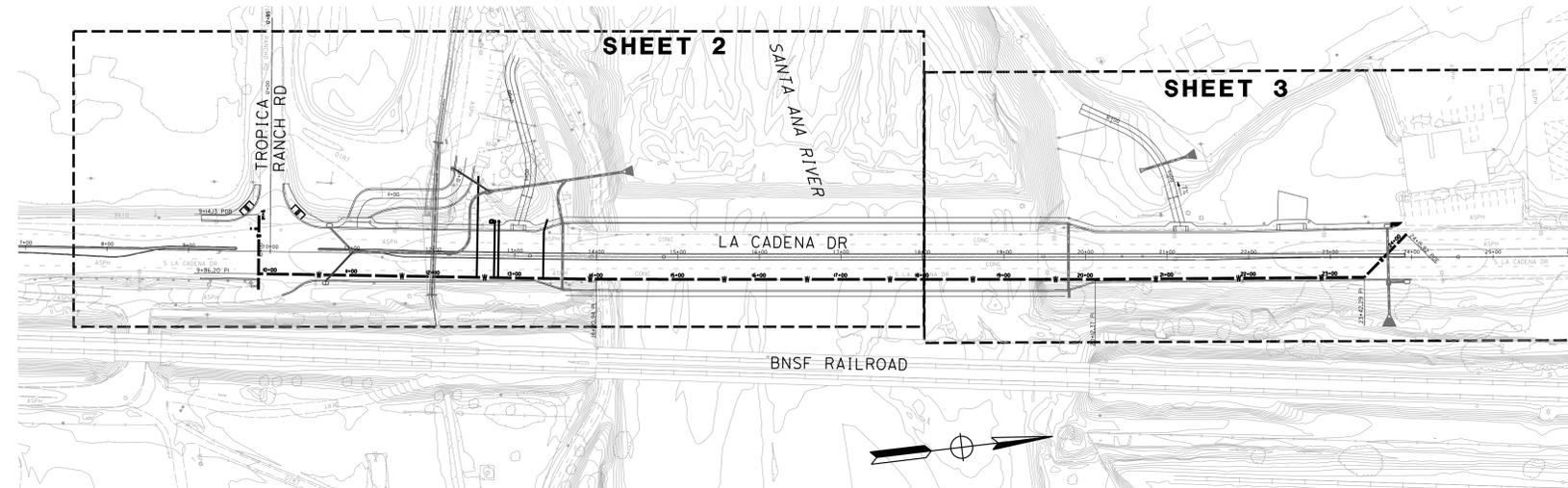
SCALE
 HORIZ: NA
 VERT: NA
 DATE: ##-##-##
 SHEET 9 OF 9

CITY OF COLTON COUNTY OF SAN BERNARDINO, CALIFORNIA

LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT BRIDGE NO. 54C-0077 PROJECT NO. BRLS-5065(014) WATER IMPROVEMENT PLANS -PLAN NO 7676

WATER GENERAL NOTES

1. WATER MAINS TO HAVE A MINIMUM 36" OF COVER.
2. WATER LINE SHALL BE CHLORINATED AT 50PPM FOR A PERIOD OF 24 HOURS PRIOR TO USE. AT LEAST 24 HOURS MUST ELAPSE BETWEEN THE TIME THE LINE IS FLUSHED AND THE TIME THE SAMPLE IS TAKEN.
3. PRESSURE TEST WATER LINE AT 50 PSI ABOVE THE CLASS OF THE PIPE FOR A PERIOD OF FOUR HOURS. IF THE TEST IS MADE AFTER CHLORINATION, CHLORINATED WATER WILL BE REQUIRED FOR THE TEST.
4. ALL TEES, GATE VALVES AND ANGLES SHALL HAVE THRUST BLOCKS PER CITY OF COLTON STD. DWG. NO. 703.
5. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF COLTON PUBLIC WORKS DEPARTMENT.
6. MINIMUM DISTANCE TO BE MAINTAINED BETWEEN WATER AND SEWER LINES AS PER CURRENT CALIFORNIA STATE HEALTH DEPARTMENT REGULATIONS.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY NOT TO EXCEED THE PIPE MANUFACTURERS REQUIREMENTS FOR MAXIMUM DEFLECTIONS IN THE INSTALLATION OF VERTICAL AND HORIZONTAL CURVES. SHORT LENGTH PIPES MAY BE REQUIRED IN SOME CASES.
8. NO WATER METERS OR AIR/VAC VALVES SHALL BE LOCATED WITHIN 7' OF THE PROPERTY LINES OR WITHIN 5' OF THE EDGE OF DRIVEWAYS UNLESS OTHERWISE APPROVED BY THE WATER DIVISION. FIRE HYDRANTS ARE NOT TO BE WITHIN 5' OF THE EDGE OF DRIVEWAYS.
9. NO. 8 BARE LOCATOR WIRE TO BE PLACED ABOVE ALL WATER MAINS.
10. REDUCED PRESSURE BACKFLOW DEVICES REQUIRED ON ALL COMMERCIAL OR INDUSTRIAL BUILDINGS AND ALSO ON ALL IRRIGATION SYSTEMS.
11. NO WATER METER SHALL SERVICE MORE THAN ONE PARCEL, REGARDLESS OF PROJECT SIZE. PARCELS MUST BE MERGED.
12. FIRE HYDRANTS MAY NEED 6" STEEL GUARD POSTS AS DETERMINED BY THE INSPECTOR.
13. ANY WATER MAIN CROSSING, WHICH CAUSES A CHANGE IN ELEVATION, MAY REQUIRE AN AIR/VAC VALVE.
14. FIRE FLOW REQUIREMENTS FOR THIS PROJECT IS 1875 GPM AT 20 PSI RESIDUAL AND SHALL BE MET BY MEANS APPROVED BY THE CITY OF COLTON FIRE DEPARTMENT.
15. THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA), PHONE #1-800-422-4122, TWO (2) WORKING DAYS BEFORE DIGGING. NO INSPECTION WILL BE PROVIDED AND NO CONSTRUCTION PERMIT ISSUED BY THE PUBLIC WORKS DEPARTMENT INVOLVING EXCAVATION FOR UNDERGROUND FACILITIES WILL BE VALID UNLESS APPLICATION HAS PROVIDED AN INQUIRY IDENTIFICATION NUMBER BY USA.
16. ALL FIRE HYDRANTS SHALL BE LOCATED BEHIND CURB PER CITY OF COLTON STANDARD DRAWING NO. 700 UNLESS OTHERWISE SPECIFIED BY THE CITY OF COLTON FIRE DEPARTMENT.
17. DISINFECTION OF POTABLE WATER SUPPLY SHALL BE DONE BY THE CONTRACTOR. DISINFECTION SHALL BE DONE BY CHLORINATION EITHER AT THE SAME TIME OR AFTER TESTING, BUT BEFORE THE PIPING IS CONNECTED TO THE EXISTING SYSTEM. ALL DISINFECTION PROCEDURES SHALL CONFORM TO AWWA STANDARD C651.86. SUBSEQUENT TO THE FINAL FLUSHING, BUT PRIOR TO FINAL CONNECTIONS TO THE EXISTING WATER MAINS, A BACTERIOLOGICAL TEST SHALL BE MADE BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT MAKE ANY CONNECTIONS UNTIL THE RESULTS OF SUCH TESTS ARE RECEIVED BY THE WATER/WASTEWATER MANAGEMENT DEPARTMENT AND ARE NEGATIVE. IN THE EVENT THE TEST RESULTS ARE POSITIVE, THE CONTRACTOR SHALL RE-CHLORINATE THE PIPELINE UNTIL RESULTS ARE OBTAINED TO THE SATISFACTION OF THE WATER/WASTEWATER DEPARTMENT. ALL TESTING SHALL BE AT THE CONTRACTOR'S EXPENSE.
18. IT SHALL BE THE WATER CONTRACTOR'S RESPONSIBILITY TO ADJUST ALL VALVE CAN LIDS TO FINISH GRADE AFTER FINAL PAVING.
19. BEFORE PIPELINE CONTRACTOR SUBMITS FINAL BID TO OWNER, CONTRACTOR SHALL CONTACT WATER/WASTEWATER DEPARTMENT FOR UPDATED DRAWINGS.
20. INSPECTION OF ANY PART OF THE PROJECT BY WATER/WASTEWATER DEPARTMENT DOES NOT CONSTITUTE ACCEPTANCE OF PROJECT OR ANY PART THEREOF.
21. "CONTRACTOR SHALL NOTE THAT SURVEY MONUMENTS, BY STATE LAW, SHALL BE PROTECTED AND PERPETUATED. WHEN MONUMENTS ARE NEAR THE PATH OF CONSTRUCTION, THE CONTRACTOR SHALL HAVE THE MONUMENT LOCATED AND REFERENCED OUT BY A LICENSED LAND SURVEYOR OR A REGISTERED CIVIL ENGINEER (AUTHORIZED TO PRACTICE LAND SURVEYING) PRIOR TO THE TIME OF CONSTRUCTION AND RESET, AFTER CONSTRUCTION, AS ALLOWED BY STATE LAW. CORNER RECORDS ARE TO BE FILLED PROMPTLY WITH THE COUNTY SUPERVISOR FOR NEW MONUMENTATION."
22. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS REGARDING STORMWATER POLLUTION PREVENTION. AS SUCH, THE CONTRACTOR SHALL FOLLOW THE CITY'S ORDINANCE(S) FOR STORMWATER BEST MANAGEMENT PRACTICES. SHOULD THE CONTRACTOR VIOLATE ANY OF THE FEDERAL, STATE AND LOCAL REGULATIONS REGARDING STORMWATER POLLUTION PREVENTION, AND THE VIOLATION RESULTS IN THE STATE OF CALIFORNIA, REGIONAL WATER QUALITY CONTROL BOARD ISSUING A FINE, THE CONTRACTOR WILL BE HELD RESPONSIBLE AND SHALL PAY THE FINE.
23. ALL WATER CONNECTIONS AND INSTALLATIONS SHALL BE INSTALLED BY CONTRACTOR POSSESSING AN "A" LICENSE. DOMESTIC WATER METER SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR.



INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET, INDEX MAP, SHEET INDEX AND GENERAL NOTES
2-3	WATER LINE PLAN AND PROFILE
4	TYPICAL SECTIONS

UTILITY PURVEYORS

AT&T TRANSMISSION.....	714-963-7964
AT&T CALIFORNIA, DISTRIBUTION, SUBSTRUCTURE.....	714-507-3526
CITY OF COLTON - ELECTRIC.....	909-370-5144
CITY OF COLTON - WATER & WASTEWATER.....	909-370-6192
CITY OF GRAND TERRACE.....	909-430-2225
EMPIRE WATER - CANAL.....	949-215-1100
LEVEL 3 COMMUNICATIONS.....	720-888-4465
RIVERSIDE HIGHLAND WATER.....	909-825-4128
SAN BERNARDINO MUNICIPAL WATER DEPARTMENT.....	909-522-3403
SANTA ANA WATERSHED PROJECT AUTHORITY.....	951-354-4220
SOUTHERN CALIFORNIA EDISON.....	
SOUTHERN CALIFORNIA GAS.....	909-335-7955
SPRINT.....	949-842-9870
SUNESYS.....	951-278-0400
TIME WARNER CABLE.....	909-975-3398

LEGEND

	TRUST BLOCK
	WATER VALVE
	PROPOSED WATER LINE
	PROPOSED STORM DRAIN LINE
	PROPOSED TELECOM LINE
	PROPOSED CABLE TV LINE
	PROPOSED ELECTRICAL LINE
	EXISTING GAS LINE
	EXISTING CABLE LINE
	EXISTING ELECTRICAL LINE
	EXISTING TELECOMMUNICATIONS LINE
	EXISTING WATER LINE
	EXISTING SEWER LINE

ABBREVIATIONS:

BOP - BOTTOM OF PIPE
 CITY - CITY OF COLTON
 SAWPA - SANTA ANA WATERSHED PROJECT AUTHORITY
 SCE - SOUTHERN CALIFORNIA EDISON
 SCG - SOUTHERN CALIFORNIA GAS
 TWC - TIME WARNER CABLE
 TWT - TIME WARNER TELECOM

WATER CONSTRUCTION NOTES

- 1 ABANDON IN PLACE AND DEWATER COLTON 12" WATER AFTER CONSTRUCTION OF NEW 24" WATER AND SWITCH OVER OF WATER SERVICE
- 2 REMOVE CONFLICTING FITTINGS AND WATER LINES
- 3 INSTALL 24" DP-CL-250 PIPE & PIPE BEDDING WITH BONDED JOINTS PER CITY OF COLTON STD'S & SPECS
- 4 INSTALL 24" DP-CL-250 PIPE WITH BONDED JOINTS (REFER TO BRIDGE PLANS FOR PIPE SUPPORT DETAILS FOR INSTALLATION WITHIN BRIDGE LIMITS)
- 5 PROTECT EXISTING 24" B.F.V.
- 6 RELOCATE EXISTING BACK FLOW PREVENTER
- 7 INSTALL AIR VACUUM ASSEMBLY PER CITY OF COLTON STD 707
- 8 INSTALL 24" 45° ELBOW
- 9 INSTALL 24" DUCTILE IRON EXPANSION JOINT DOUBLE-BALL TYPE
- 10 INSTALL THRUST BLOCK PER CITY OF COLTON STD 703
- 11 INSTALL 12" VALVE (B.F.V.)
- 12 INSTALL 24" VALVE (B.F.V.)
- 13 INSTALL 24" X 18" TEE
- 14 INSTALL 24" X 24" TEE
- 15 INSTALL 24" X 16" REDUCER
- 16 INSTALL 18" X 12" REDUCER
- 17 INSTALL 24" X 12" REDUCER
- 18 INSTALL 12" COUPLING CONNECT TO EXISTING
- 19 INSTALL 16" COUPLING CONNECT TO EXISTING
- 20 CAP 12" WATERLINE
- 21 RAISE VALVE COVERS TO FINISH GRADE
- 22 CONSTRUCT 6" FIRE HYDRANT ASSEMBLY WITH VALVE PER CITY OF COLTON STD 700
- 23 INSTALL 1-1/2" WATER METER FOR LANDSCAPE IRRIGATION PER CITY OF COLTON STD 702
- 24 INSTALL 1" WATER METER PER CITY OF COLTON STD 701
- 25 INSTALL BLUE RETROREFLECTIVE PAVEMENT MARKER PER CITY OF COLTON FIRE DEPT STD

QUANTITIES

NOTE CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION

**95% PS&E SUBMITTAL
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GEOTECHNICAL ENGINEER:

EARTH MECHANICS, INC
 17800 NEWHOPE STREET, SUITE B
 FOUNTAIN VALLEY, CA 92708
 PHONE: (714) 751-3826
 FAX: (714) 751-3928

Underground Service Alert



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 1-800
 422-4133

TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK

CITY OF COLTON BENCH MARK 703-2
 ELEV = 909.840 FEET (NGVD 29)
 A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A AT&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER



PREPARED BY:

JACOBS
 3257 E. GUASTI ROAD
 SUITE 120
 ONTARIO, CA 91761

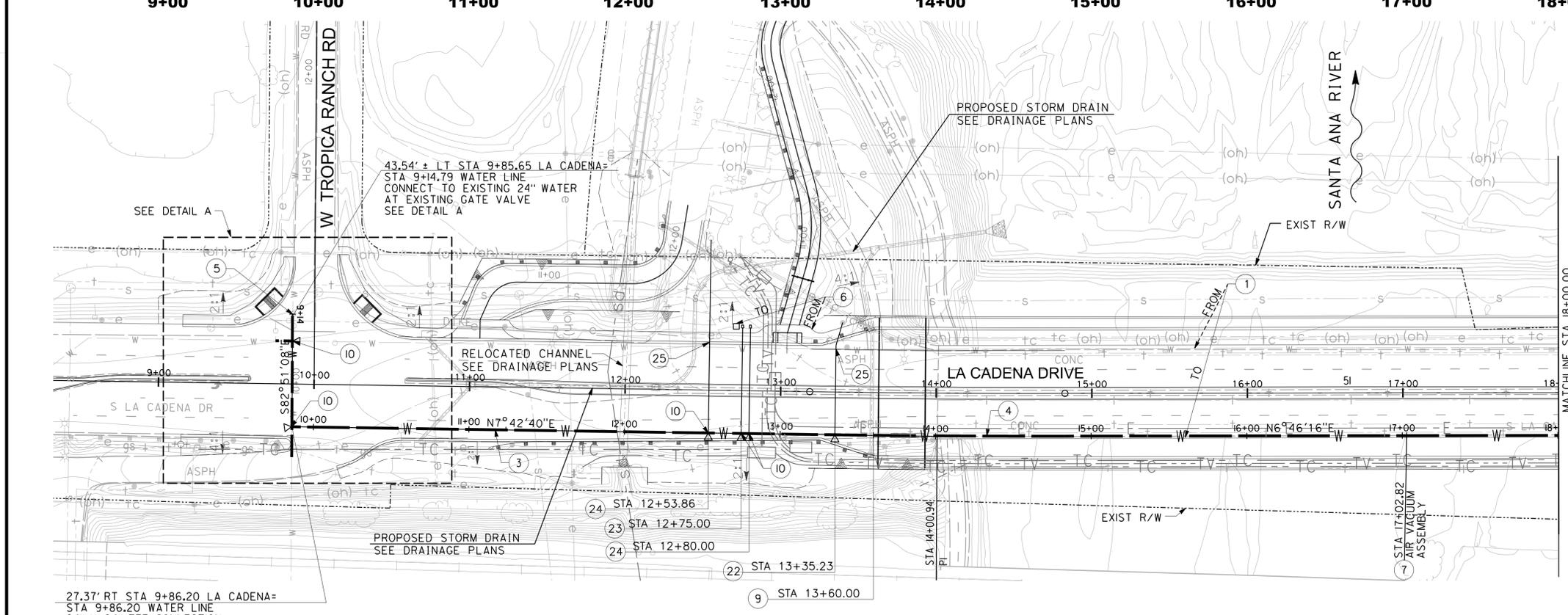
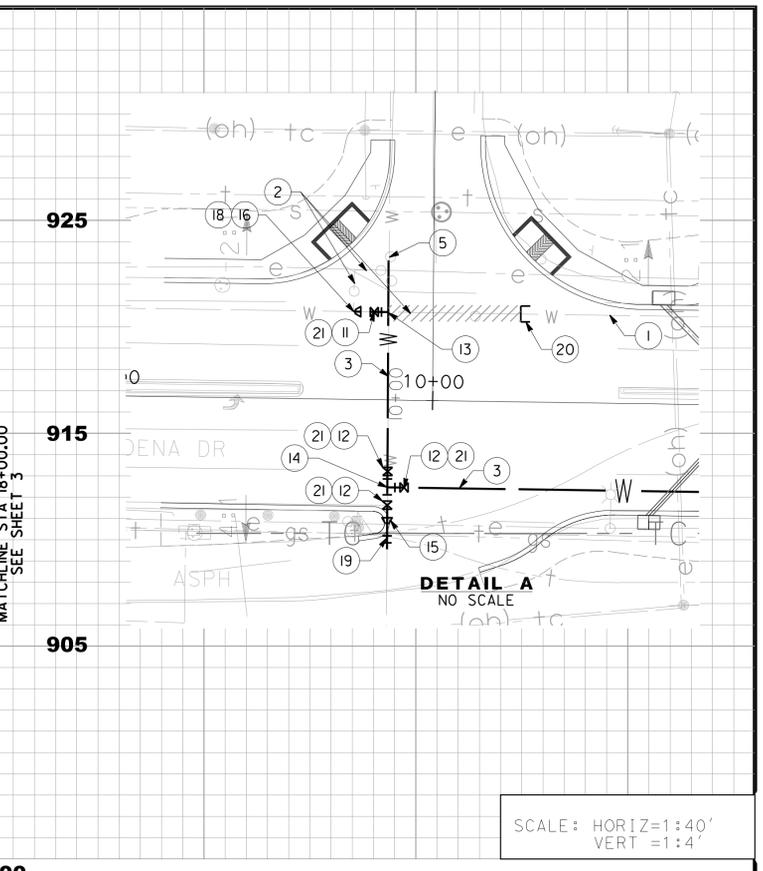
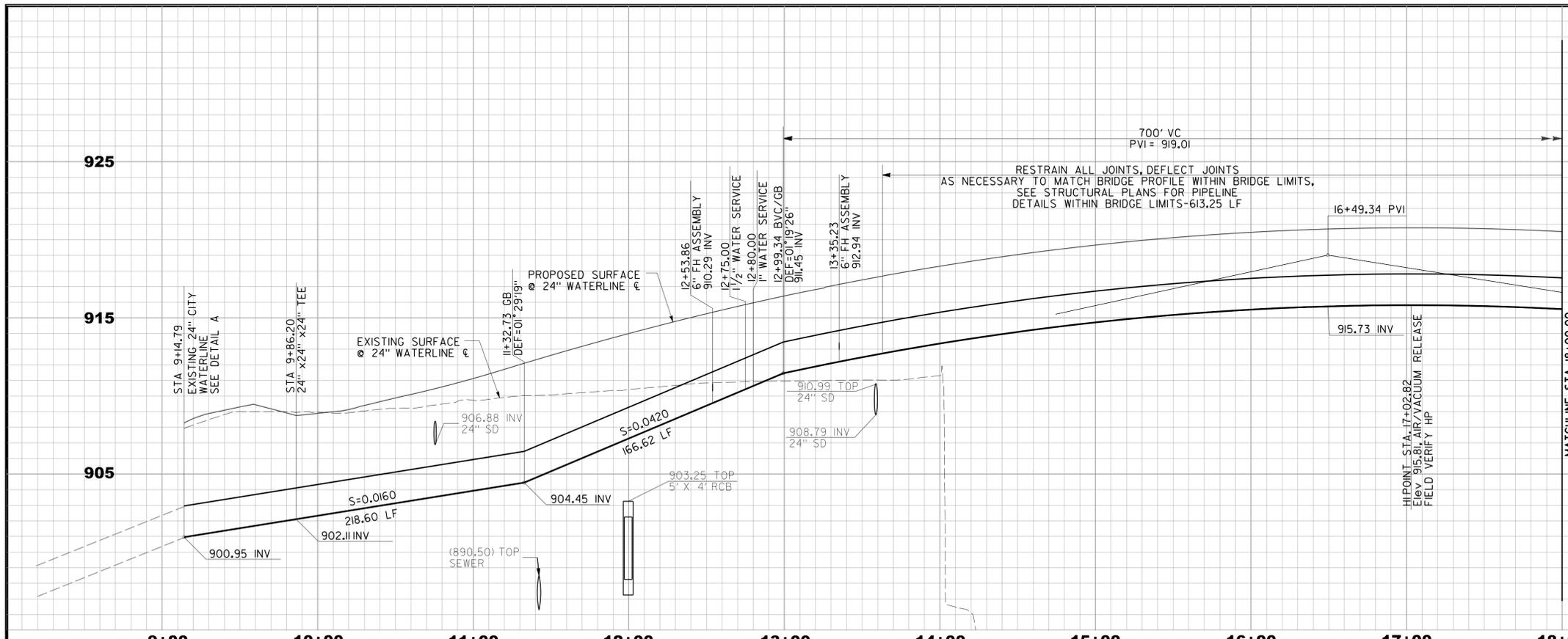
CITY OF COLTON

PUBLIC UTILITIES
 WATER/WASTEWATER DEPARTMENT

CITY ENGINEER
 NAME: VICTOR OTIZ, P.E. EXPIRES: 06/30/17
 R.C.E.: 73848
 ACCEPTED: _____ DATE: _____
 PLAN NO. 7676

REVISIONS	DATE	APPR.
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT WATER IMPROVEMENT PLANS PLAN NO 7676 TITLE SHEET		

SHEET 1 OF 4



- ### WATER CONSTRUCTION NOTES
- 1 ABANDON IN PLACE AND DEWATER COLTON 12" WATER AFTER CONSTRUCTION OF NEW 24" WATER AND SWITCH OVER OF WATER SERVICE
 - 2 REMOVE CONFLICTING FITTINGS AND WATER LINES
 - 3 INSTALL 24" DIP, CL-250 PIPE & PIPE BEDDING WITH BONDED JOINTS PER CITY OF COLTON STDS & SPECS
 - 4 INSTALL 24" DIP, CL-250 PIPE WITH BONDED JOINTS (REFER TO BRIDGE PLANS FOR PIPE SUPPORT DETAILS FOR INSTALLATION WITHIN BRIDGE LIMITS)
 - 5 PROTECT EXISTING 24" B.F.V.
 - 6 RELOCATE EXISTING BACK FLOW PREVENTER
 - 7 INSTALL AIR VACUUM ASSEMBLY PER CITY OF COLTON STD 707
 - 9 INSTALL 24" DUCTILE IRON EXPANSION JOINT DOUBLE-BALL TYPE
 - 10 INSTALL THRUST BLOCK PER CITY OF COLTON STD 703
 - 11 INSTALL 12" VALVE (B.F.V.)
 - 12 INSTALL 24" VALVE (B.F.V.)
 - 13 INSTALL 24" X 18" TEE
 - 14 INSTALL 24" X 24" TEE
 - 15 INSTALL 24" X 16" REDUCER
 - 16 INSTALL 18" X 12" REDUCER
 - 18 INSTALL 12" COUPLING CONNECT TO EXISTING
 - 19 INSTALL 16" COUPLING CONNECT TO EXISTING
 - 20 CAP 12" WATERLINE
 - 21 RAISE VALVE COVERS TO FINISH GRADE
 - 22 CONSTRUCT 6" FIRE HYDRANT ASSEMBLY WITH VALVE PER CITY OF COLTON STD 700
 - 23 INSTALL 1-1/2" WATER METER FOR LANDSCAPE IRRIGATION PER CITY OF COLTON STD 702
 - 24 INSTALL 1" WATER METER PER CITY OF COLTON STD 701
 - 25 INSTALL BLUE RETROREFLECTIVE PAVEMENT MARKER PER CITY OF COLTON FIRE DEPT STDS

NOTE UTILITIES OTHER THAN THE WATERLINE ARE SHOWN HEREON FOR REFERENCE ONLY. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.

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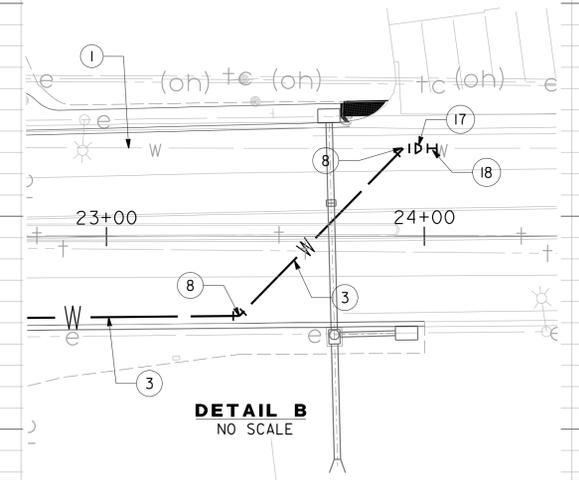
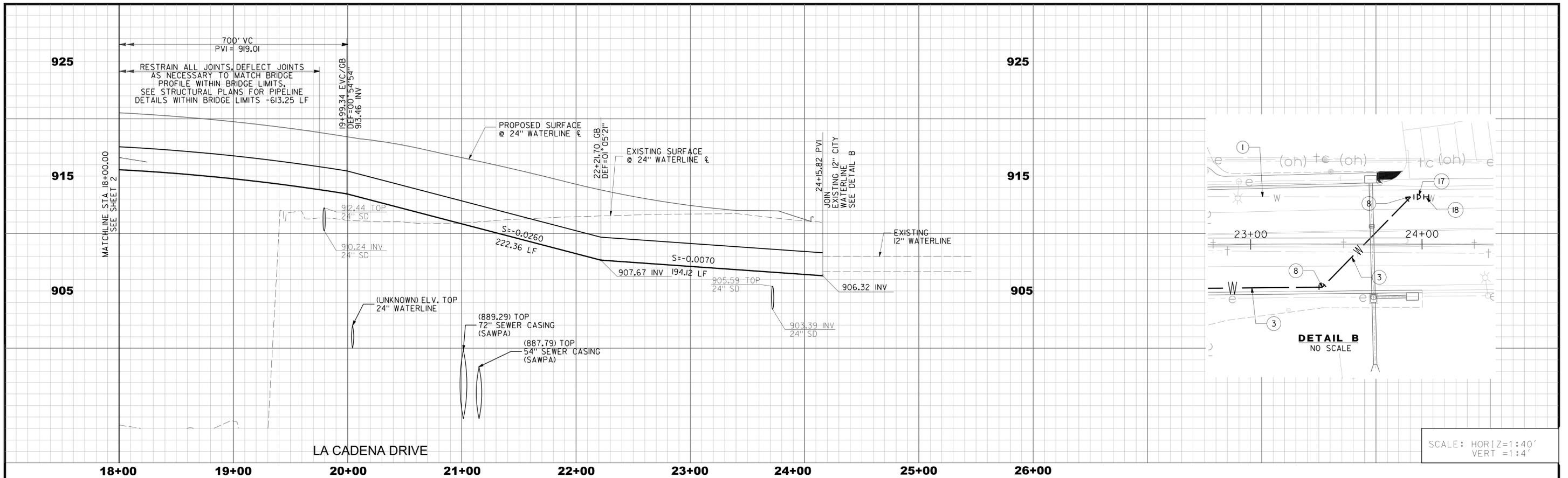
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TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK
CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)
A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A A18&SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER

PREPARED BY:
JACOBS
3257 E. GUASTI ROAD
SUITE 120
ONTARIO, CA 91761

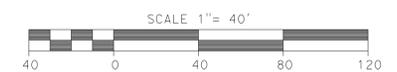
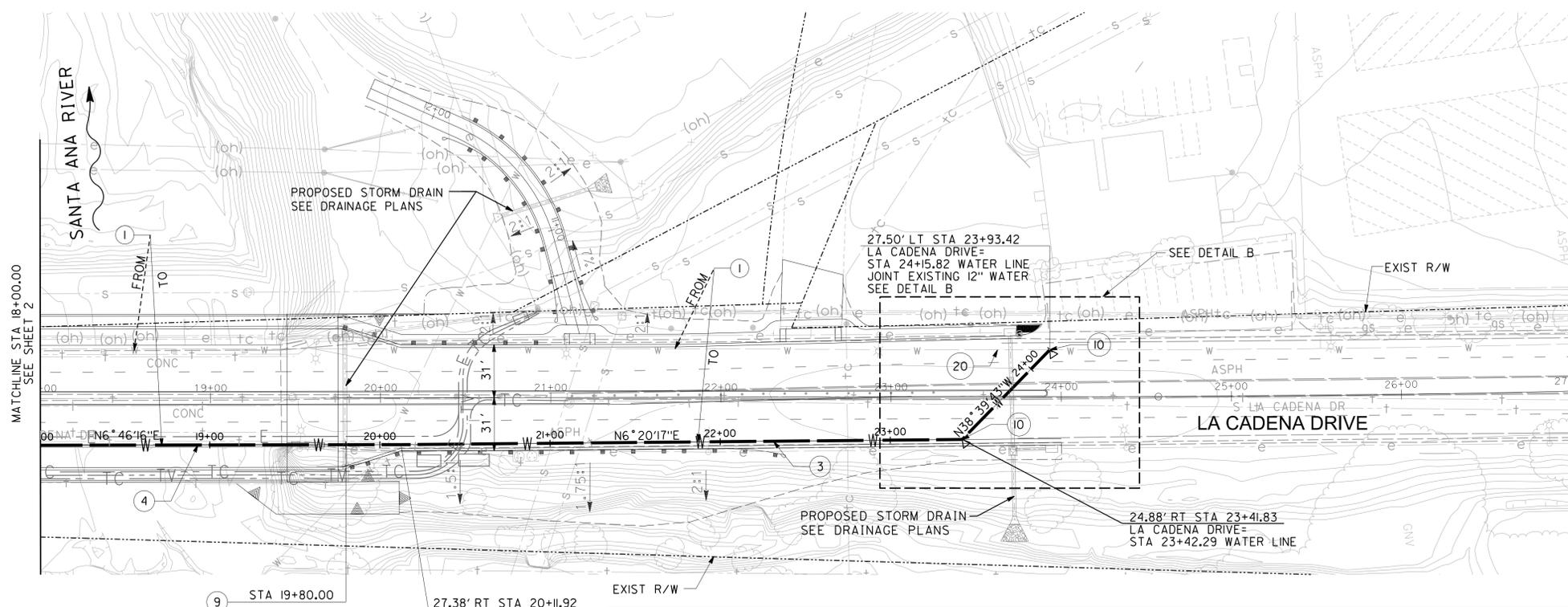
CITY OF COLTON PUBLIC UTILITIES WATER/WASTEWATER DEPARTMENT CITY ENGINEER		REVISIONS LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT WATER IMPROVEMENT PLANS WATERLINE PLAN AND PROFILE STA 8+00.00 - 18+00.00
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848	EXPIRES: 06/30/17	DATE: 03-08-17 SHEET 2 OF 4
ACCEPTED: _____ PLAN NO. 7676	DATE: _____	SCALE



SCALE: HORIZ=1:40'
VERT=1:4'

WATER CONSTRUCTION NOTES

- 1 ABANDON IN PLACE AND DEWATER COLTON 12" WATER AFTER CONSTRUCTION OF NEW 24" WATER AND SWITCH OVER OF WATER SERVICE
- 3 INSTALL 24" DIP, CL-250 PIPE & PIPE BEDDING WITH BONDED JOINTS PER CITY OF COLTON STDS & SPECS
- 4 INSTALL 24" DIP, CL-250 PIPE WITH BONDED JOINTS (REFER TO BRIDGE PLANS FOR PIPE SUPPORT DETAILS FOR INSTALLATION WITHIN BRIDGE LIMITS)
- 8 INSTALL 24" 45° ELBOW
- 9 INSTALL 24" DUCTILE IRON EXPANSION JOINT DOUBLE-BALL TYPE
- 10 INSTALL THRUST BLOCK PER CITY OF COLTON STD 703
- 17 INSTALL 24" X 12" REDUCER
- 18 INSTALL 12" COUPLING CONNECT TO EXISTING
- 20 CAP 12" WATERLINE



NOTE
UTILITIES OTHER THAN THE WATERLINE ARE SHOWN HEREON FOR REFERENCE ONLY. CONTRACTOR TO VERIFY LOCATION AND DEPTH OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.

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TWO WORKING DAYS BEFORE YOU DIG

BENCHMARK

CITY OF COLTON BENCH MARK 703-2
ELEV = 909.840 FEET (NGVD 29)

A STANDARD SAN BERNARDINO COUNTY SURVEYOR'S BRASS DISC SET IN THE TOP OF THE NORTH ABUTMENT OF A 178' SF RAILWAY STEEL GIRDER BRIDGE CROSSING THE SANTA ANA RIVER



PREPARED BY:
JACOBS
3257 E. GUASTI ROAD
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CITY OF COLTON
PUBLIC UTILITIES
WATER/WASTEWATER DEPARTMENT

CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848
EXPIRES: 06/30/17

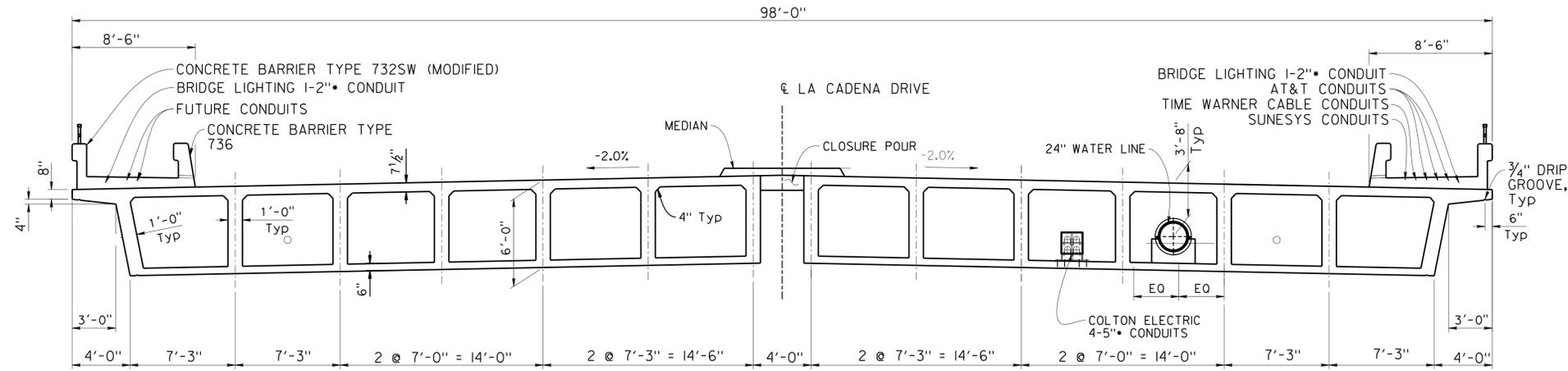
PLAN NO. 7676

REVISIONS	DATE	APPR.

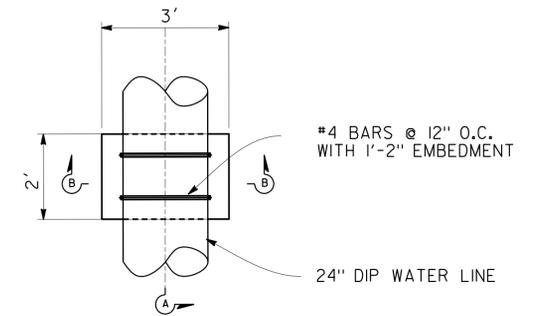
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT
WATER IMPROVEMENT PLANS
WATERLINE PLAN AND PROFILE
STAB: 18+00.00 - 26+00.00

DATE: 03-08-17
SHEET 3 OF 4

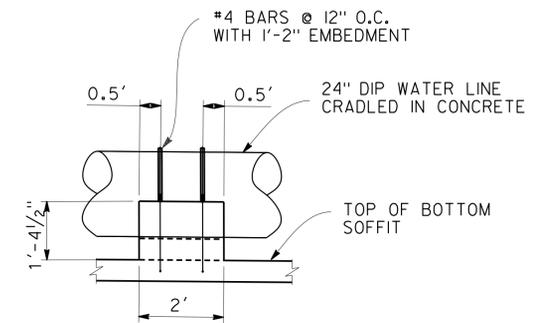
NOTE:
BRIDGE TYPICAL SECTION AND WATER PIPE SUPPORT DETAILS ARE SHOWN
FOR INFORMATION ONLY. SEE APPROVED BRIDGE PLANS FOR FINAL LAYOUT.



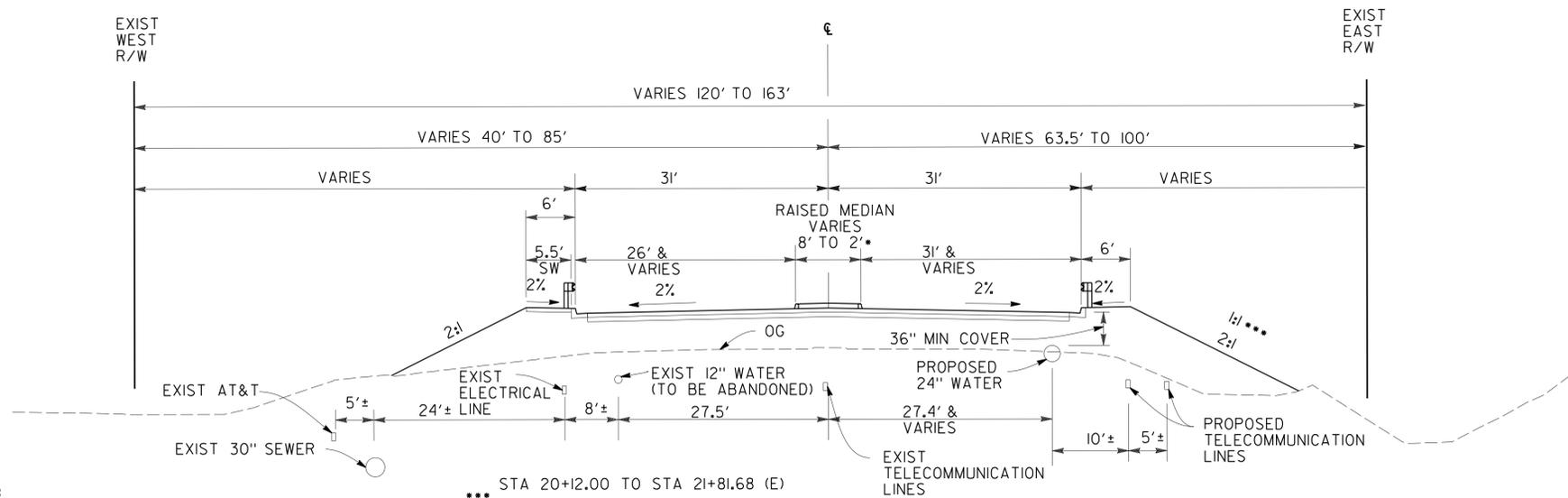
BRIDGE TYPICAL SECTION



WATER LINE PIPE SUPPORT PLAN
N.T.S.

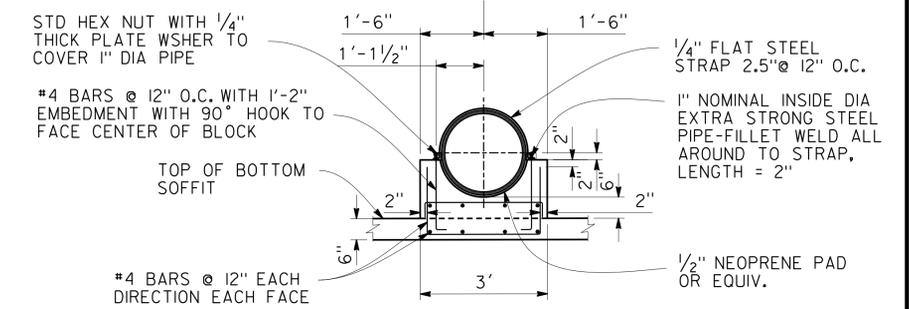


SECTION A-A
N.T.S.



LA CADENA DRIVE TYPICAL SECTION OUTSIDE OF BRIDGE

N.T.S.
TI=10



SECTION B-B
N.T.S.

NOTES:
1. OMIT MEDIAN FROM STA 9+59.21 TO STA 10+58.97
2. RAISED MEDIAN OCCURS BEYOND LIMITS OF IMPROVEMENTS FROM STA 6+34.76 TO STA 9+15.00

- 3' WIDE RAISED MEDIAN STA 9+15.00 TO STA 9+59.21
- 2' WIDE RAISED MEDIAN STA 10+58.97 TO STA 11+11.82

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GENE CHING
No. 52155
Exp. 12/31/18
CIVIL
STATE OF CALIFORNIA

PREPARED BY:
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ONTARIO, CA 91761

CITY OF COLTON
PUBLIC UTILITIES
WATER/WASTEWATER DEPARTMENT
CITY ENGINEER
NAME: VICTOR ORTIZ, P.E. R.C.E.: 73848
ACCEPTED: _____ DATE: _____
EXPIRES: 06/30/17
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REVISIONS	DATE	APPR.	SCALE
LA CADENA DRIVE OVER SANTA ANA RIVER BRIDGE REPLACEMENT PROJECT WATER IMPROVEMENT PLANS TYPICAL SECTIONS			