# RIVERSIDE CALIFORNIA

CITY OF RIVERSIDE

## PUBLIC WORKS DEPARTMENT
## IOWA AVENUE GRADE SEPARATION
## IOWA AVENUE SEWER
### FROM PALMYRITA AVENUE TO CITRUS STREET

**IMPORTANT NOTICE**
Section 4216/4217 of the Government Code requires a Dig Alert Identification Number to be issued before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

## GENERAL NOTES:

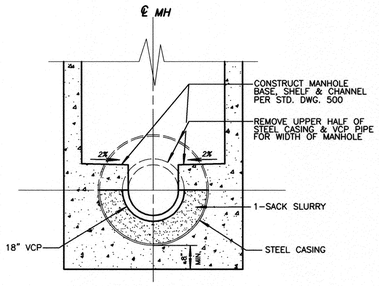
1. EXISTING UTILITIES SHOWN ON THE PLAN ARE PLOTTED FROM UTILITY RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO LOCATE AND PROTECT ALL UTILITIES WHETHER OR NOT SHOWN ON THIS PLAN.
2. PRIME CONTRACTORS BIDDING THIS WORK SHALL HAVE A CLASS "A","C-34", OR A "C-42" LICENSE.
3. ALL ELEVATIONS SHOWN ON THE PLAN SHALL BE STAKED IN THE FIELD.
4. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE STANDARD DRAWINGS AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.
5. TRENCHES SHALL EITHER BE BACKFILLED AND COMPACTED PER STD. DWG. 453 OR COVERED WITH TRAFFIC RATED STEEL PLATES AT THE END OF EACH WORK DAY AS SPECIFIED IN THE SPECIAL PROVISIONS.
6. WATER VALVES ENCOUNTERED DURING PIPELINE CONSTRUCTION OR DURING RESTORATION OF SURFACE IMPROVEMENTS SHALL BE PROTECTED IN PLACE, RESTORED TO PRECONSTRUCTION CONDITION AND/OR ADJUSTED TO GRADE.
7. PIPE BEDDING SHALL BE PER STD. DWG. 452 AND CASE II AS SPECIFIED ON THE PLANS.
8. CONTRACTOR SHALL PERFORM A PRECONSTRUCTION VIDEO OF THE SEWER MAIN LINES. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VIDEOING ALL SEWER LATERALS FROM THE MAINLINE TO PROPERTY LINE ON SINGLE FAMILY RESIDENCES (SFR).
9. PIPE JOINTS FOR PROPOSED VCP SHALL BE TYPE "G", PER SECTION 208-2.3 OF THE STANDARD SPECIFICATIONS. PIPE JOINTS FOR JOINING EXISTING VCP TO PROPOSED VCP SHALL BE TYPE "Z", PER SECTION 208-5 OF THE STANDARD SPECIFICATIONS.
10. SERVICE LATERALS REPAIR SHALL BE PERFORMED AFTER CCTV INSPECTION REPORT HAS BEEN REVIEWED AND APPROVED BY THE ENGINEER.
11. ANY WORK THAT WILL CAUSE DAMAGE TO THE DETECTOR LOOPS SHALL NOT BE PERFORMED UNTIL TRAFFIC SIGNAL MAINTENANCE PERSONNEL HAVE BEEN NOTIFIED AND THE NECESSARY TIMING ADJUSTMENTS ARE MADE TO MAINTAIN SIGNAL OPERATION.
12. CONTRACTOR SHALL REPLACE ALL EXISTING TRAFFIC DETECTOR LOOPS AFFECTED BY CONSTRUCTION.
13. PIPE JOINTS FOR PROPOSED VCP SHALL BE TYPE "G", PER SECTION 208-2.3 OF THE STANDARD SPECIFICATIONS. PIPE JOINTS FOR JOINING EXISTING VCP TO PROPOSED VCP SHALL BE TYPE "Z", PER SECTION 208-5 OF THE STANDARD SPECIFICATIONS.

## SPECIFIC CONSTRUCTION NOTES

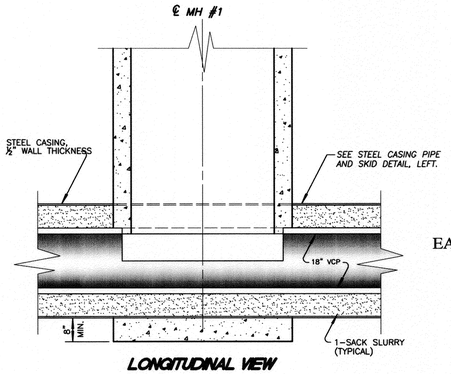
*NUMBERS ABOVE 100 IN A HEXAGON ON THE PLAN REFER TO THE RESPECTIVE STANDARD DRAWING AND SHALL BE CONSTRUCTED ACCORDINGLY. UNLESS MODIFICATIONS ARE NOTED ON THE PLAN OR COVER SHEET. ANY NUMBER SHOWN BELOW THE STANDARD DRAWING NUMBER INDICATES THE SPECIFIC ALTERNATE TO BE CONSTRUCTED.*

1. *EXISTING AT & T, PAC-BELL/SBC-TELEPHONE UNDERGROUND CABLE – PROTECT IN PLACE*
2. *PROTECT EXISTING WATER PIPELINE IN PLACE*
3. *8" EXISTING VCP TO BE REMOVED.*
4. *PROTECT IN PLACE EXISTING TELEPHONE 4" CONDUIT WITH 2-FIBER OPTIC CABLES (6" STEEL CASING).*

S. *STEEL PIPE ENCASEMENT, SEE STEEL CASING PIPE AND SKID DETAIL, BELOW.*




**CROSS SECTION VIEW**

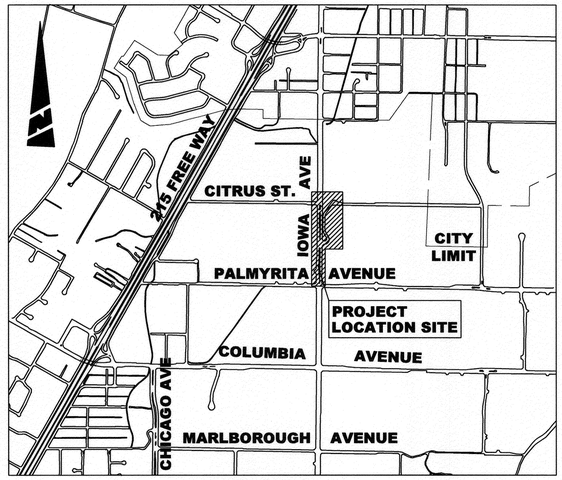



**LONGITUDINAL VIEW**

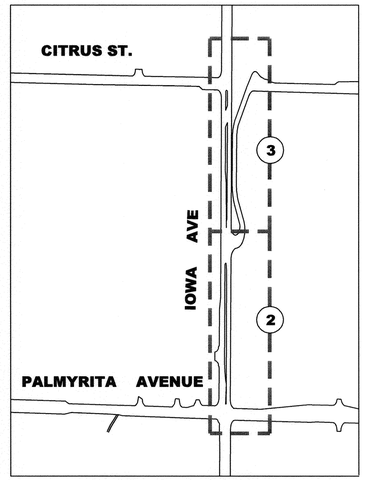
*MH DETAIL*

***SEE PLAN SHEET 2***

*NOT TO SCALE*




**LOCATION MAP**
NTS




**INDEX MAP**
NTS

## EXISTING TOPOGRAPHY:

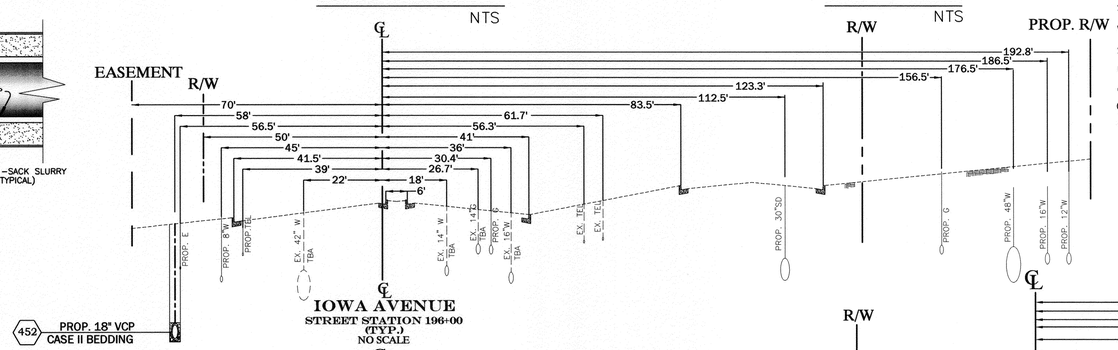
- SANITARY SEWER M.H.
- WATER GATE VALE
- ELECTRIC M.H.
- TELEPHONE M.H.
- WATER METER
- FIRE HYDRANT
- IRRIGATION METER
- BLOW-OFF VALVE
- TRAFFIC SIGN
- POWER POLE
- GUY ANCHOR
- STREET LIGHT ON MAST ARM
- ELECTRICAL TEST STATION (PIPELINE)
- PALM TREE
- MISC. TREE
- BUILDING
- TOP OF SLOPE
- TOE OF SLOPE
- DIRECTION DRAINAGE FLOW
- EDGE OF PAVEMENT

## EXISTING UTILITIES:

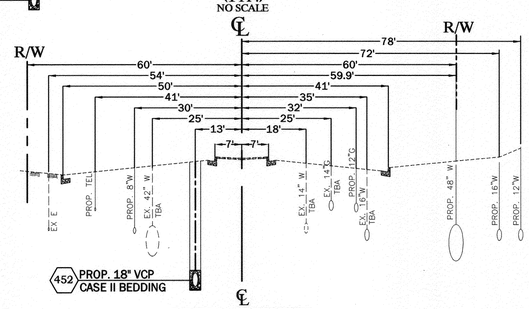
- SANITARY SEWER — EX SWR
- WATER LINE — EX WTR
- STORM DRAIN — EX SD
- UNDERGROUND ELEC. — (UGE)
- OVERHEAD ELEC. — (OHE)
- GAS — (G)
- UNDERGROUND TELE. — (UGT)

## LEGEND:

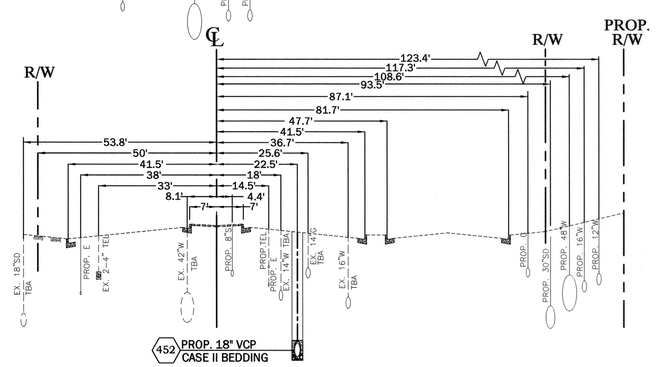
- ℄, CL – CENTER LINE
- E – ELECTRICAL
- EX. – EXISTING
- G – GAS
- INV. – INVERT
- LAT – LATERAL
- LF – LINEAR FEET
- MH – MANHOLE
- PROP. – PROPOSED
- R/W – RIGHT OF WAY
- SD – STORM DRAIN
- TBA – TO BE ABANDONED




**IOWA AVENUE**
**STREET STATION 196+00**
**(TYP.)**
**NO SCALE**



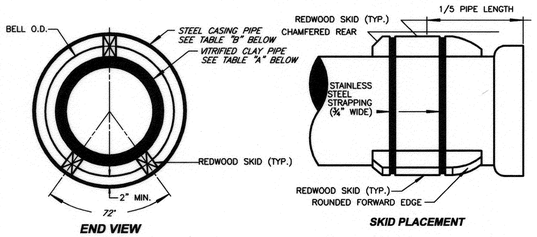

**IOWA AVENUE**
**STREET STATION 190+00**
**(TYP.)**
**NO SCALE**




**IOWA AVENUE**
**STREET STATION 198+50**
**(TYP.)**
**NO SCALE**

## NOTES

1. SKIDS SHALL BE REDWOOD, 30" LONG, 4" WIDE, AND OF SUFFICIENT HEIGHT TO PROVIDE A MINIMUM 2" CLEARANCE BETWEEN INVERT OF CASING AND BELL OF VCP. ALL SKIDS SHALL BE OF EQUAL DIMENSIONS AND POSITIONED UNIFORMLY.
2. ALL STEEL CASING PIPE FIELD JOINTS SHALL BE WELDED WITH A CONTINUOUS CIRCUMFERENTIAL WELD.
3. CARRIER PIPE SHALL BE AIR TESTED PRIOR TO SLURRY BACKFILLING AND SEALING CASING.
4. VOID BETWEEN CASING AND CARRIER PIPE SHALL BE FILLED WITH A ONE SACK PCC SLURRY MIX.
5. UPSTREAM AND DOWNSTREAM ELEVATIONS TO BE VERIFIED PRIOR TO SEALING CASING.
6. ENDS OF CASING TO BE SEALED WITH BRICK AND MORTAR. PLACE 1" ø MINIMUM PVC PIPE AT DOWNSTREAM INVERT OF CASING (THROUGH BRICK) AND SURROUND WITH 2 CUBIC FEET CRUSHED ROCK.




**END VIEW** **SKID PLACEMENT**

*STEEL CASING PIPE AND SKID TYPICAL DETAIL*

N.T.S.

| A | B |
|---|---|
| 18" VCP (BELL & SPIGOT) | 36"ø x 3/8" THICK |
| 18" VCP (MICROTUNNEL) | 30"ø x 3/8" THICK |

BENCHMARK
POINT ID – J8F2
CHISLED SQUARE AT THE TOP OF THE CATCH BASIN ON THE NORTHERLY SIDE OF THE CENTER STREET EAST OF TRANSIT AVENUE.

952.77600 (NGVD 29)

ENGINEER IN RESPONSIBLE CHARGE
LONNY LEW YOUNG
R.C.E. No. 43216, expires 03-31-2014
DATE 03/02/2012

REGISTERED PROFESSIONAL ENGINEER LONNY LEW YOUNG No. 43216 Exp. 03-31-2014 CIVIL STATE OF CALIFORNIA

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|

DESIGNED BY SP DRAWN BY SP CHECKED BY LLY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGINEER | | |
| INSPECTOR | | |
| SURVEYOR | | |
| ENGINEERING MANAGER | | |

APPROVED BY
CITY ENGINEER
DATE 4/6/2012

IOWA AVENUE GRADE SEPARATION
IOWA AVENUE SEWER
FROM PALMYRITA AVENUE TO CITRUS STREET
SCALE: AS SHOWN

ACC. No. 9589923203
W.O. 1119480
S-2088
SHEET 1 OF 3

AS BUILT 9-11-15 JC

INDEXED 9-11-15 JC

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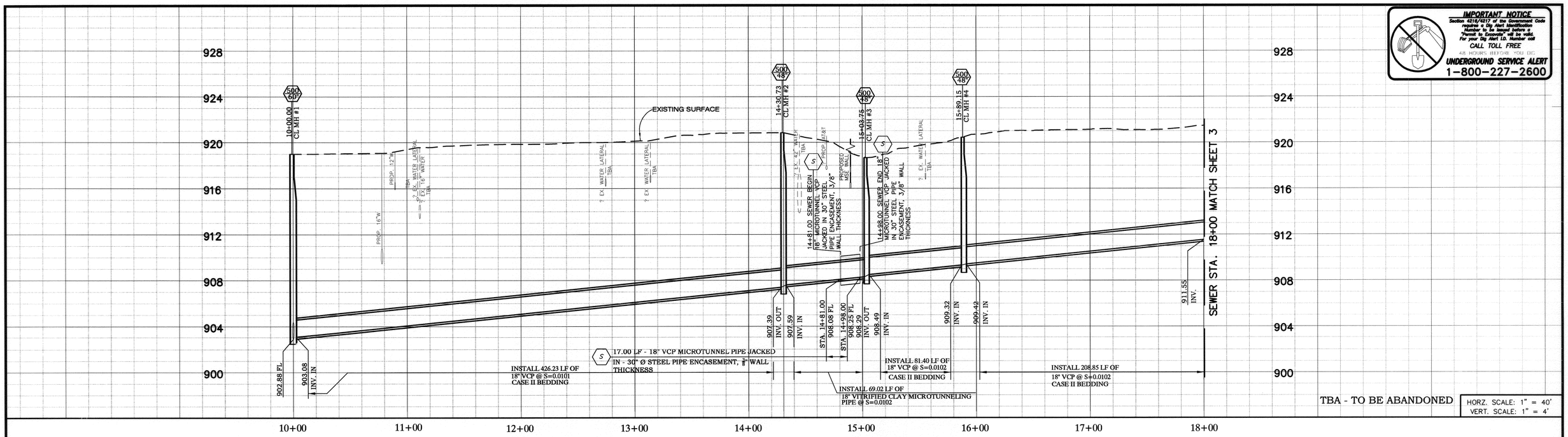
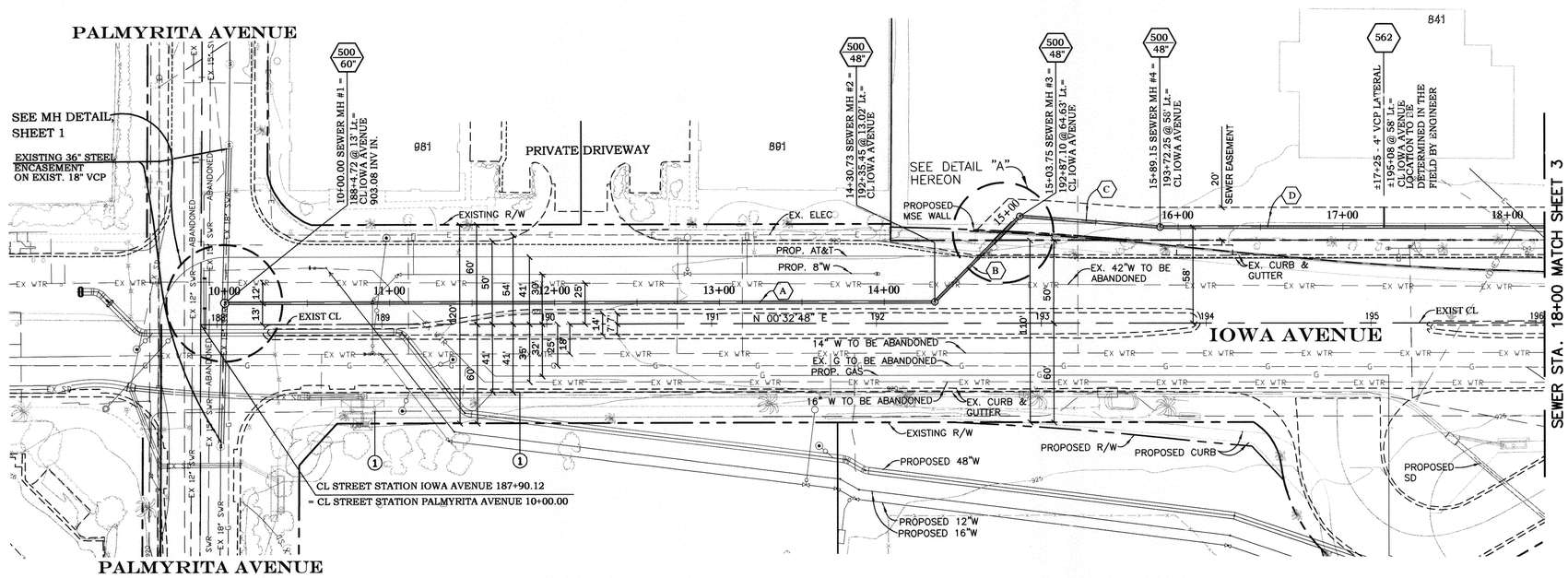



SUPERSEDED, SEE SHEET 2A

| LINE & CURVE DATA | | | | |
|---|---|---|---|---|
| NO. | BEARING/DELTA | RADIUS | LENGTH | TANGENT |
| A | N 00°32'48" E | - | 430.73' | - |
| B | N 44°25'49" W | - | 69.31' | - |
| C | N 05°00'01" E | - | 85.41' | - |
| D | N 00°32'48" E | - | 210.85' | - |




## SPECIFIC CONSTRUCTION NOTES

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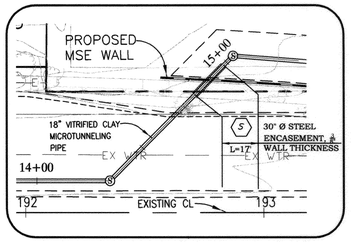
(1) EXISTING AT & T, PAC-BELL/SBC-TELEPHONE UNDERGROUND CABLE - PROTECT IN PLACE




DETAIL A
SCALE 1:30

AS BUILT 9-11-15 JC

Z

40 0 40 80 120
SCALE: 1"=40'

BENCHMARK

POINT ID – J8F2
CHISLED SQUARE AT THE TOP OF THE CATCH BASIN ON THE NORTHERLY SIDE OF THE CENTER STREET EAST OF TRANSIT AVENUE.

952.77600 (NGVD 29)

CITY OF RIVERSIDE

ENGINEER IN RESPONSIBLE CHARGE

LONNY LEW YOUNG
R.C.E. No. 43216 expires 03-31-2014
DATE 03/07/2012

REGISTERED PROFESSIONAL ENGINEER LONNY LEW YOUNG No. 43216 Exp. 03-31-2014 CIVIL STATE OF CALIFORNIA

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|
| | | | |

DESIGNED BY SP DRAWN BY SP CHECKED BY LLY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGINEER | | |
| INSPECTOR | | |
| SURVEYOR | | |
| ENGINEERING MANAGER | EM | 4/3/12 |

APPROVED BY
CITY ENGINEER
DATE 4/6/2012

IOWA AVENUE GRADE SEPARATION
# IOWA AVENUE SEWER
FROM PALMYRITA AVENUE TO CITRUS STREET

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

ACC. No. 9589923203
W.O. 1119480

S-2088

SHEET 2 OF 3

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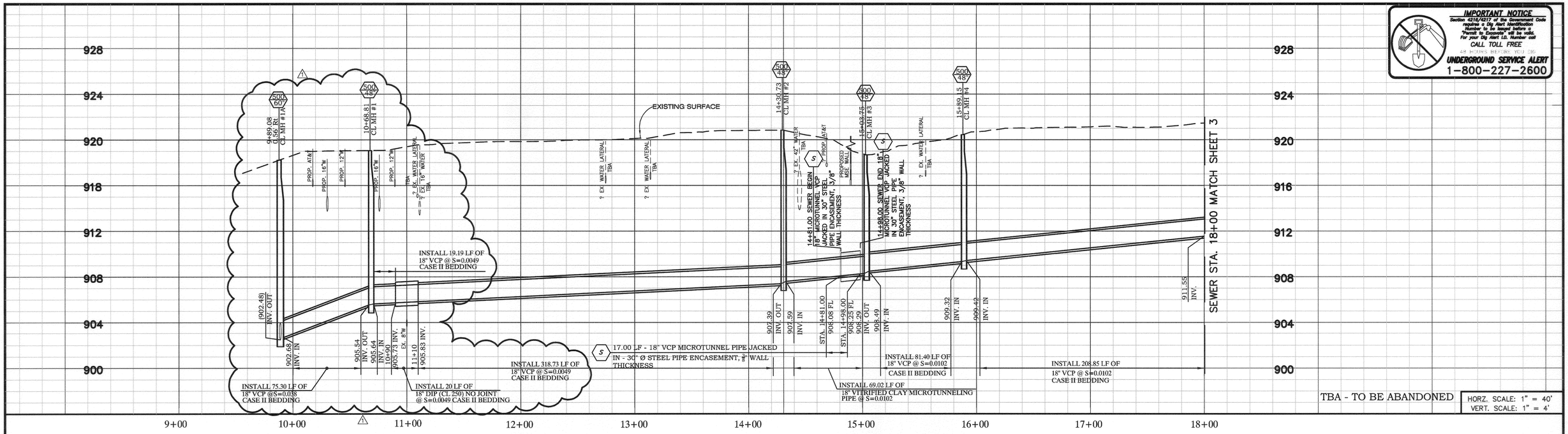
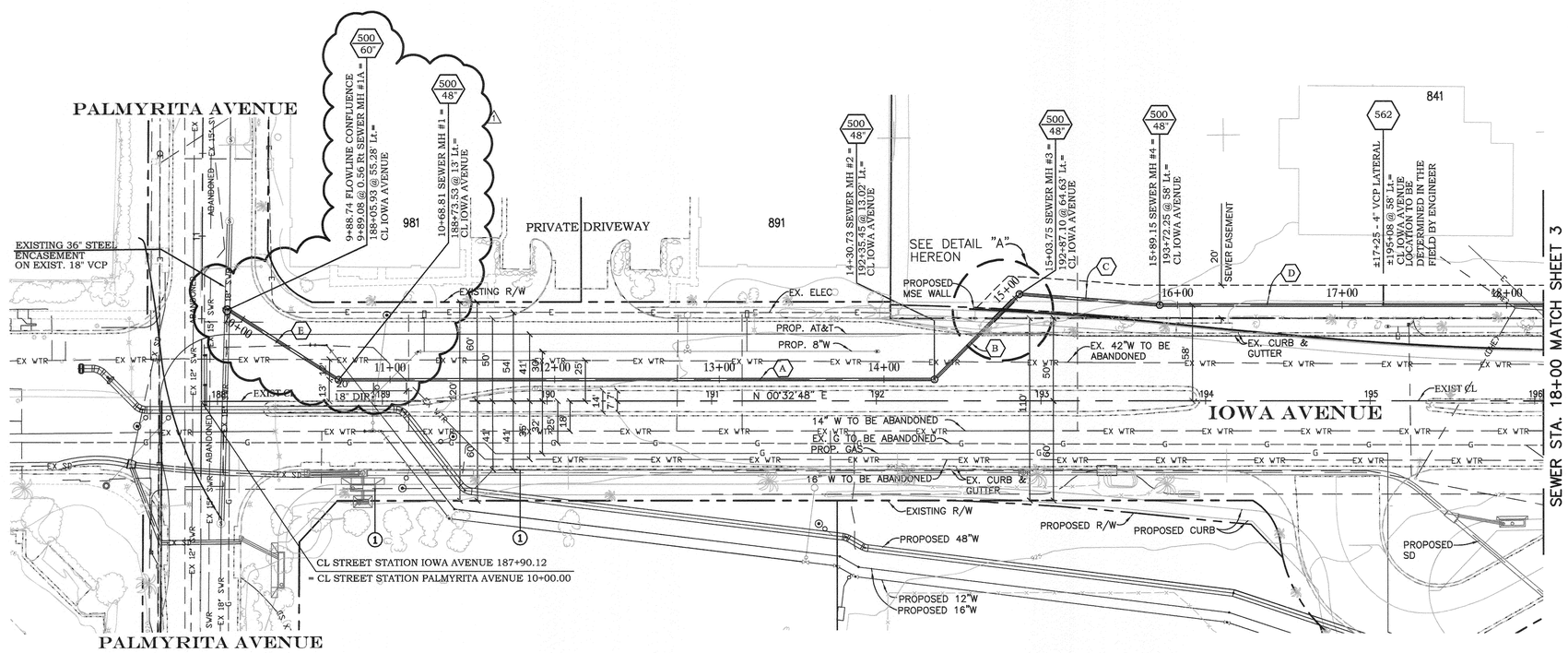
INDEXED 9-11-15 JC




| LINE & CURVE DATA | | | | |
|---|---|---|---|---|
| NO. | BEARING/DELTA | RADIUS | LENGTH | TANGENT |
| A | N 00°32'48" E | - | 400.73' | - |
| B | N 44°25'49" W | - | 69.31' | - |
| C | N 05°00'01" E | - | 85.41' | - |
| D | N 00°32'48" E | - | 210.85' | - |
| E | N 32°25'38.56" E | - | 80.07' | - |

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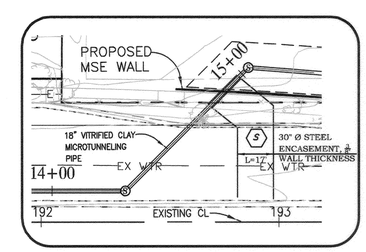


DETAIL A
SCALE 1:30

AS BUILT 9-11-15 IC

40 0 40 80 120
SCALE: 1"=40'

**BENCHMARK**

POINT ID – J8F2
CHISLED SQUARE AT THE TOP OF THE CATCH BASIN ON THE NORTHERLY SIDE OF THE CENTER STREET EAST OF TRANSIT AVENUE

952.77600 (NGVD 29)

RIVERSIDE

ENGINEER IN RESPONSIBLE CHARGE

LONNY LEW YOUNG
R.C.E. No. 43216 expires 03-31-2014
DATE

REGISTERED PROFESSIONAL ENGINEER LONNY LEW YOUNG No. 43216 Exp. 03-31-2014 CIVIL STATE OF CALIFORNIA

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|
| 1 | REVISED SEWER ALIGNMENT FROM STA. 9+40.06 TO 10+45 | | 10/18/12 |

DESIGNED BY SP DRAWN BY SP CHECKED BY LLY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGINEER | | |
| INSPECTOR | | |
| SURVEYOR | | |
| ENGINEERING MANAGER | | |

APPROVED BY
CITY ENGINEER
DATE

IOWA AVENUE GRADE SEPARATION
# IOWA AVENUE SEWER
FROM PALMYRITA AVENUE TO CITRUS STREET

ACC. No. 9589923203
W.O. 1119480

# S-2088

HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'
SHEET 2A OF 3

INDEXED 9-11-15 IC

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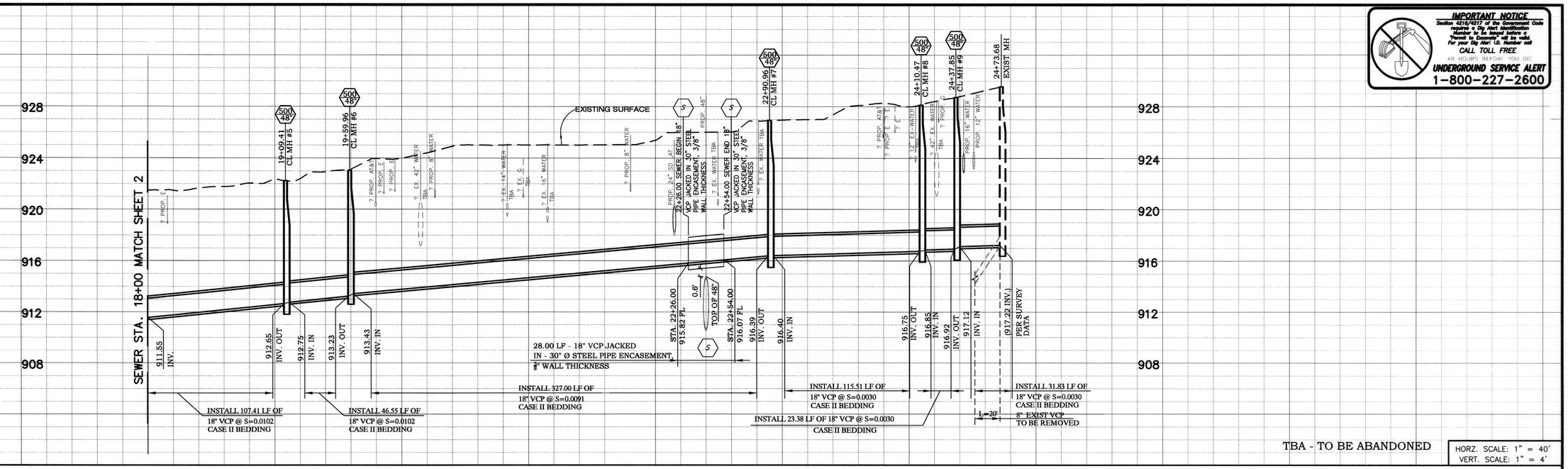


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CALL TOLL FREE
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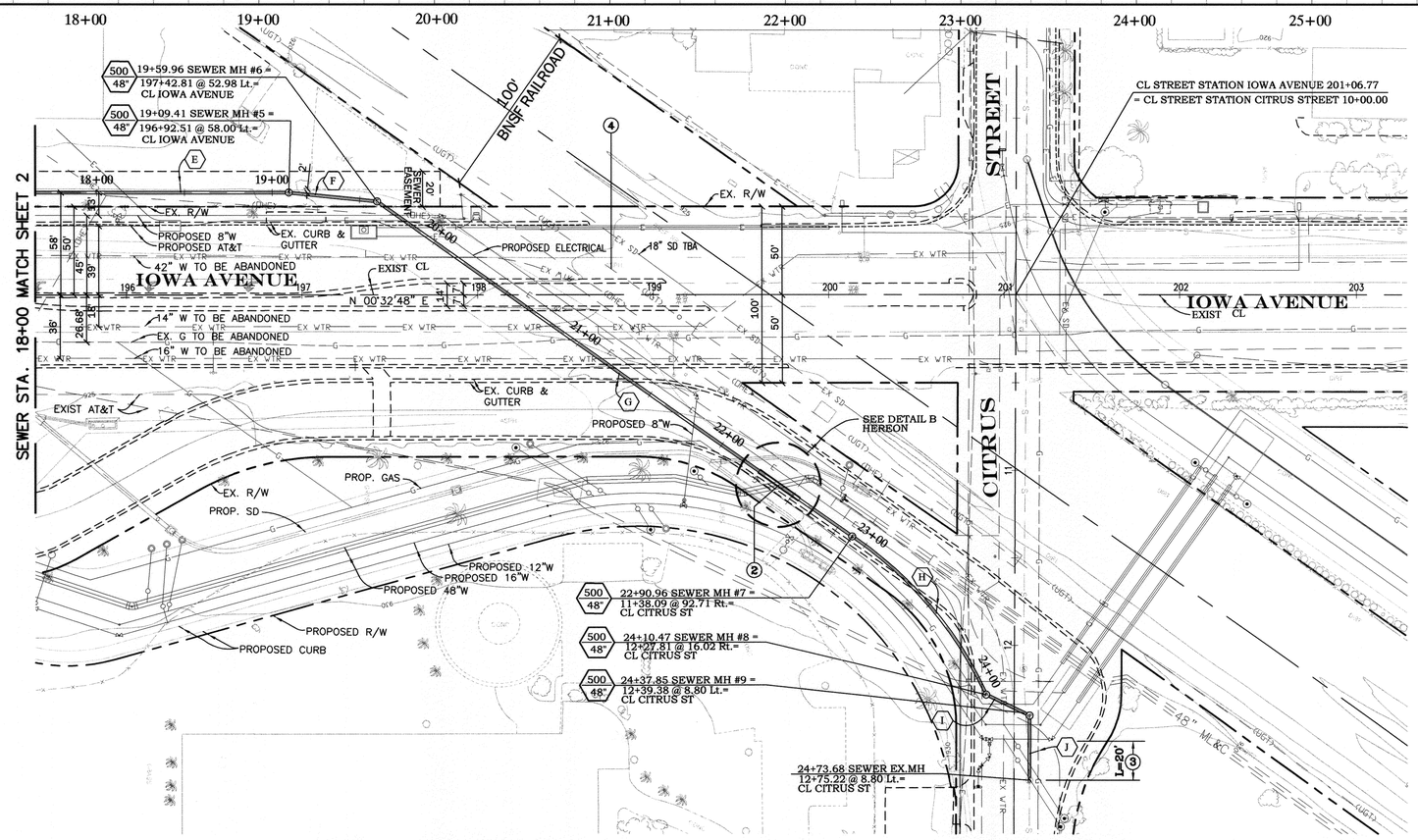
1-800-227-2600




| SEWER LINE & CURVE DATA | | | | |
|---|---|---|---|---|
| NO. | BEARING/DELTA | RADIUS | LENGTH | TANGENT |
| E | N 00°32'48" E | - | 109.41' | - |
| F | N 06°14'34"E | - | 50.54' | - |
| G | N 35°42'43"W | - | 331.00' | - |
| H | 31°18'05" | 218.75' | 119.51' | 61.28' |
| I | N 25°49'52"E | - | 27.38' | - |
| J | N 89°10'53"W | - | 35.83' | - |

## SPECIFIC CONSTRUCTION NOTES

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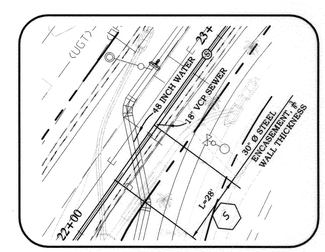
(2) PROTECT EXISTING WATER PIPELINE IN PLACE

(3) 8" EXIST VCP TO BE REMOVED.

(4) PROTECT IN PLACE EXISTING TELEPHONE 4" CONDUIT WITH 2-FIBER OPTIC CABLES (6" STEEL CASING).




DETAIL B
SCALE 1:30

AS BUILT 9-11-15 DC

**BENCHMARK**
POINT ID – J8F2
CHISLED SQUARE AT THE TOP OF THE CATCH BASIN ON THE NORTHERLY SIDE OF THE CENTER STREET EAST OF TRANSIT AVENUE.
952.77600 (NGVD 29)

ENGINEER IN RESPONSIBLE CHARGE
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R.C.E. No. 43216 expires 03-31-2014
DATE 03/01/2012

REGISTERED PROFESSIONAL ENGINEER LONNY LEW YOUNG No. 43216 Exp. 03-31-2014 CIVIL STATE OF CALIFORNIA

| MARK | REVISIONS | APPR. | DATE |
|---|---|---|---|
| | | | |

DESIGNED BY SP DRAWN BY SP CHECKED BY LLY

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

| APPROVED BY | BY | DATE |
|---|---|---|
| PRINCIPAL ENGINEER | | |
| INSPECTOR | | |
| SURVEYOR | | |
| ENGINEERING MANAGER | | |

APPROVED BY
CITY ENGINEER
DATE 4/6/2012

IOWA AVENUE GRADE SEPARATION
# IOWA AVENUE SEWER
FROM PLAMYRITA AVENUE TO CITRUS STREET

ACC. No. 9589923203
W.O. 1119480

# S-2088

HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'
SHEET 3 OF 3

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INDEXED 9-11-15 DC