





SHEET INDEX

SHT. NO.	SHT. TITLE
1	TITLE SHEET
2	CONSTRUCTION PLAN - SHEET INDEX MAP
3	SEWER MAIN B - FROM STATION 10+00.00 TO STATION 18+50.00
4	SEWER MAIN B - FROM STATION 18+50.00 TO TRANSITION STRUCTURE

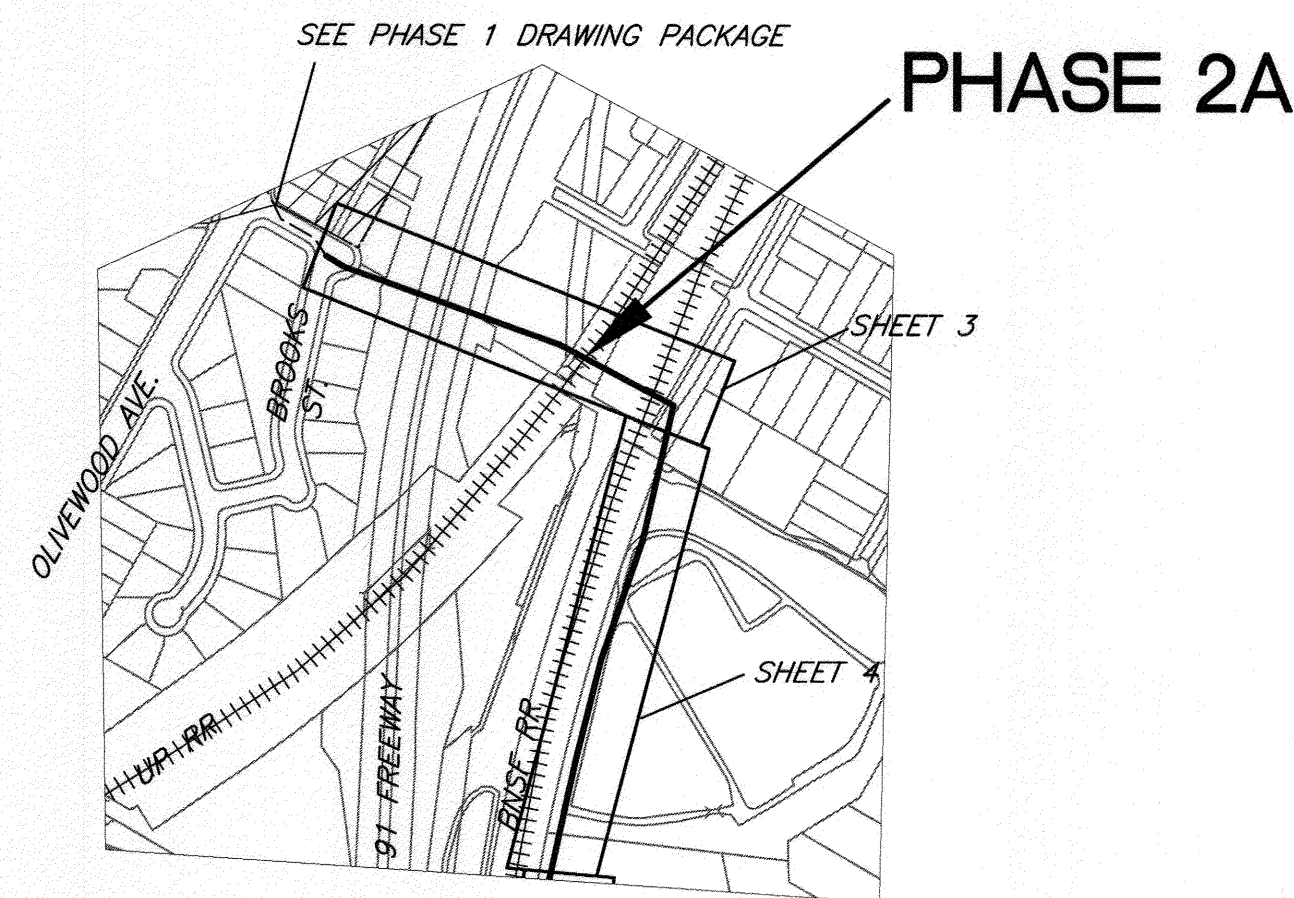
**SPECIFIC CONSTRUCTION NOTES**

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.

EXAMPLE:

431  
M STD. DWG. 431 MODIFIED PER DETAIL 1 AND 2 ON SHT. 5.

- 1 PROTECT AND MAINTAIN EXISTING SEWER SERVICE DURING CONSTRUCTION.
- 2 PROTECT AND SUPPORT EXISTING UTILITY IN PLACE. VERIFY LOCATION PRIOR TO CONSTRUCTION.
- 3 PROTECT EXISTING RETAINING WALL IN PLACE.
- 4 PROTECT EXISTING FENCE IN PLACE.
- 5 PROTECT TRANSMISSION POLE IN PLACE.
- 6 ABANDON SEWER MAIN AND MANHOLES TO EXTENT NOTED AND DEMOLITION SPECIFICATIONS PRIOR TO CONSTRUCTING 36" MAIN.
- 7 PROTECT STREAM BED AND BANKS FROM DAMAGE DURING CONSTRUCTION PER CONSTRUCTION SPECIFICATIONS.
- 8 PROTECT AND SUPPORT EXISTING STORM CHANNEL IN PLACE.
- 9 PROTECT EXISTING ELECTRICAL POWER POLE/STREET LIGHT IN PLACE.
- 10 PROTECT EXISTING STORM DRAIN MANHOLE IN PLACE.
- 11 PLUG EXISTING 27" AND 10" INLETS PER DEMOLITION SPECIFICATIONS.
- 12 ~~INSTALL 30" VCP AND CONSTRUCT A TRANSITION STRUCTURE PER DETAIL AND PROFILE AS SHOWN AND PER "GREENBOOK" STANDARD PLAN 340-2, "TRANSITION STRUCTURE - PIPE TO PIPE".~~  
CONSTRUCT 72"  $\phi$  MH W/ 24"  $\phi$  OUTLET TO NEW 36" X 24" WYE.
- 13 PLUG EXISTING 10" OUTLET PER DEMOLITION SPECIFICATIONS AND RESHAPE BOTTOM OF MANHOLE AS NECESSARY.
- 14 DEMOLISH INTERFERING PORTIONS OF EXISTING 10" SEWER MAIN AS REQUIRED AND PER DEMOLITION SPECIFICATIONS.
- 15 RESHAPE BOTTOM OF MANHOLE AS NECESSARY TO ACCOMMODATE INSTALLATION OF 10" BYPASS.
- 16 AFTER COMPLETION OF TRANSITION STRUCTURE CONNECTION DEMOLISH EXISTING MANHOLE AND ABANDON 24 AND 27" SEWER MAIN WHERE NOTED AND PER DEMOLITION SPECIFICATIONS.
- 17 AFTER COMPLETION OF CONNECTION TO NEW 36" MAIN PLUG EXISTING 27" MAIN PER DEMOLITION SPECIFICATIONS.
- 18 INSTALL JACKING AND RECEIVING PITS PER PLAN OR EQUIVALENT. JACKING AND RECEIVING PIT CONSTRUCTION SHALL BE PER SPECIFICATIONS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND OBTAIN APPROVAL FROM THE ENGINEER BEFORE STARTING CONSTRUCTION. JACKING AND RECEIVING PITS SHALL BE OF THE MINIMUM SIZE POSSIBLE COMMENSURATE WITH SAFE WORKING PRACTICES AND LOCATED AS SHOWN ON PLANS.



SHEET INDEX MAP - CONSTRUCTION

BENCHMARK NO. 15-A3  
CITY OF RIVERSIDE BRASS DISK IN A STANDARD MONUMENT WELL STAMPED "15-A" ON THE CENTERLINE OF TEQUESQUITE 506.74 FEET SOUTHWESTERLY OF THE P.I. AT THE LANDFILL ENTRANCE  
ELEV - 753.831

**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

**BIRGE ENGINEERING**  
800 N. Mountain Ave. Suite 6204, Highland, CA 91766  
Phone: (909) 578-0842 Fax: (909) 578-0804

ENGINEER IN RESPONSIBLE CHARGE  
STEVEN B. FRIESON  
R.C.E. No. C42110 expires 03/31/12  
DATE Dec 8, 2011



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA  
PUBLIC WORKS DEPARTMENT  
APPROVED BY: [Signature]  
INSPECTOR: [Signature]  
SURVEYOR: [Signature]  
ENGINEERING MANAGER: [Signature]

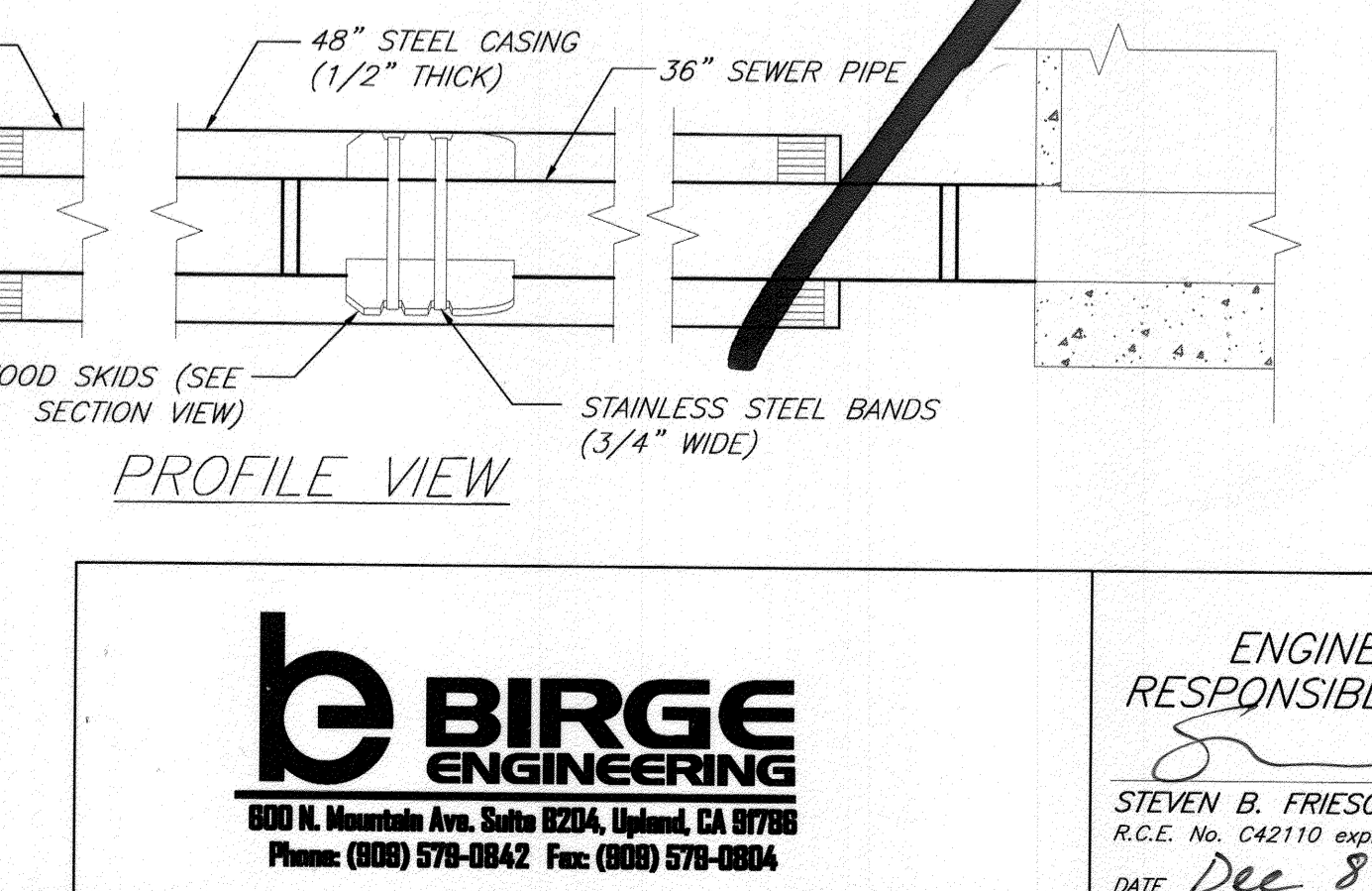
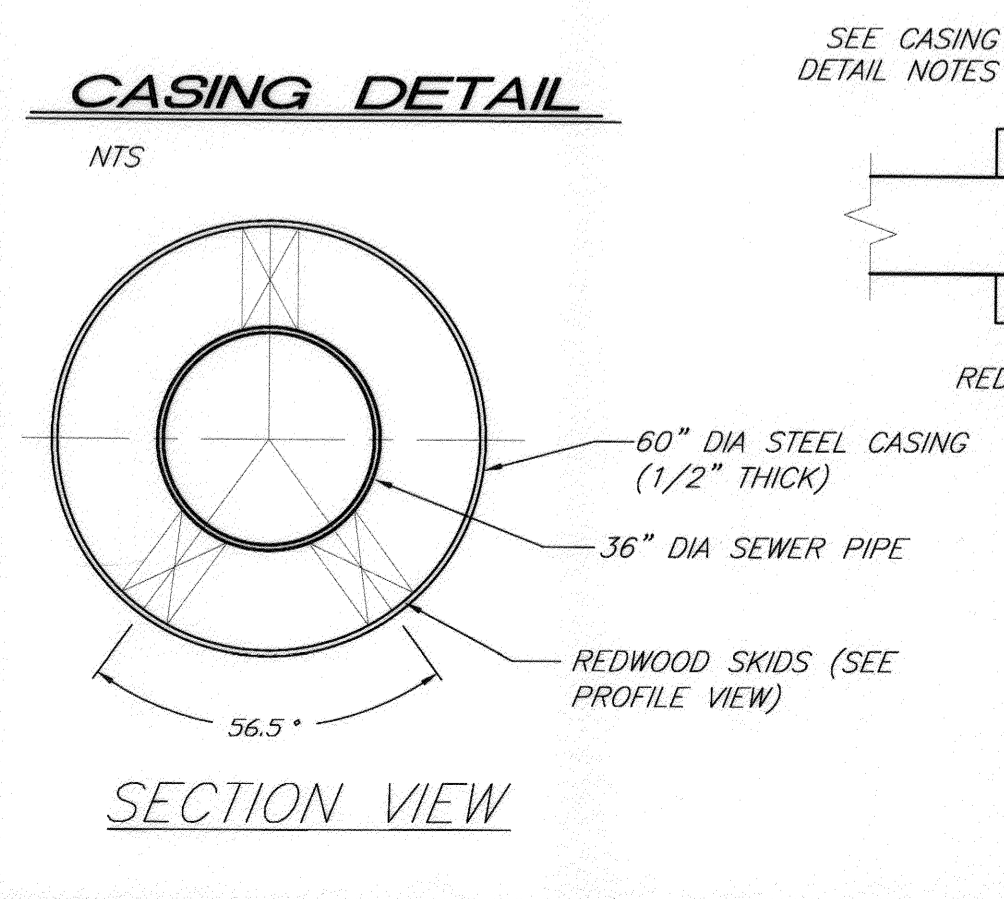
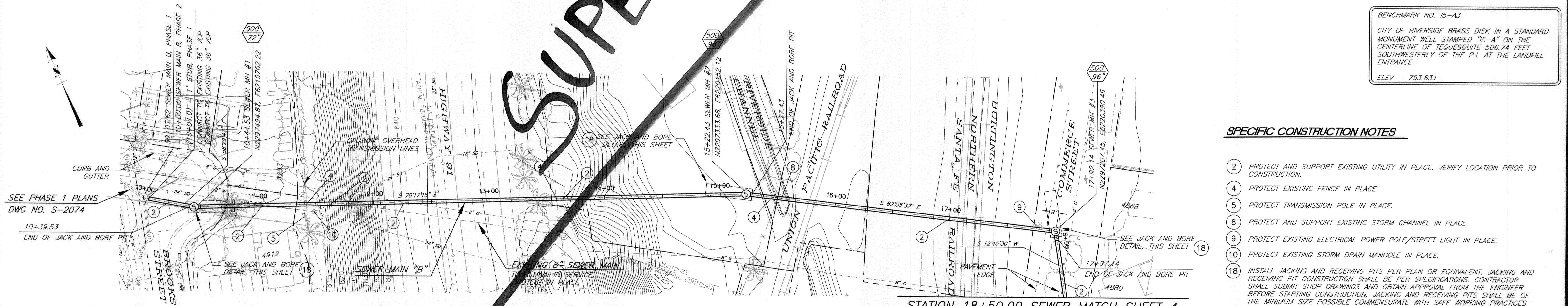
TEQUESQUITE ARROYO  
TRUNK SEWER IMPROVEMENTS  
CONSTRUCTION PLAN - PHASE 2A  
SHEET INDEX MAP  
SCALE: AS SHOWN

ACC. No. \_\_\_\_\_ W.O. \_\_\_\_\_  
S-2095  
SHEET 2 OF 4

V:\Projects\108601001\_Tequessuite\CD\CD003\Phase2\plans\East\Top\_Sheet2.DWG 12/08/11 10:05



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



**SPECIFIC CONSTRUCTION NOTES**

- PROTECT AND SUPPORT EXISTING UTILITY IN PLACE. VERIFY LOCATION PRIOR TO CONSTRUCTION.
- PROTECT EXISTING FENCE IN PLACE.
- PROTECT TRANSMISSION POLE IN PLACE.
- PROTECT AND SUPPORT EXISTING STORM CHANNEL IN PLACE.
- PROTECT EXISTING ELECTRICAL POWER POLE/STREET LIGHT IN PLACE.
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BENCHMARK NO. 15-A3  
 CITY OF RIVERSIDE BRASS DISK IN A STANDARD MONUMENT WELL STAMPED "15-A" ON THE CENTERLINE OF TEQUESQUITE 506.74 FEET SOUTHWESTERLY OF THE P.I. AT THE LANDFILL ENTRANCE  
 ELEV - 753.831

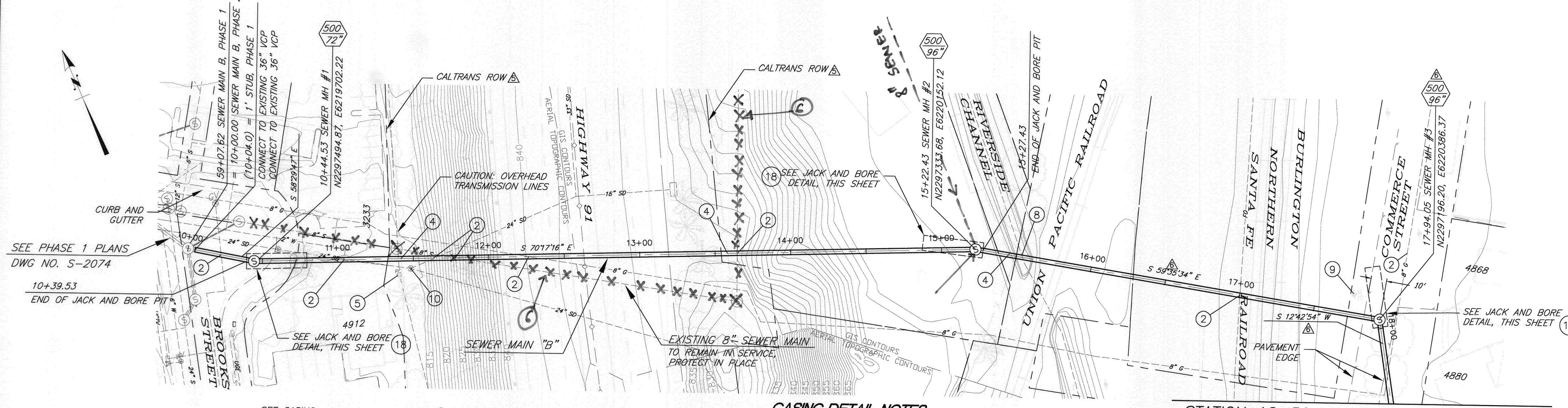
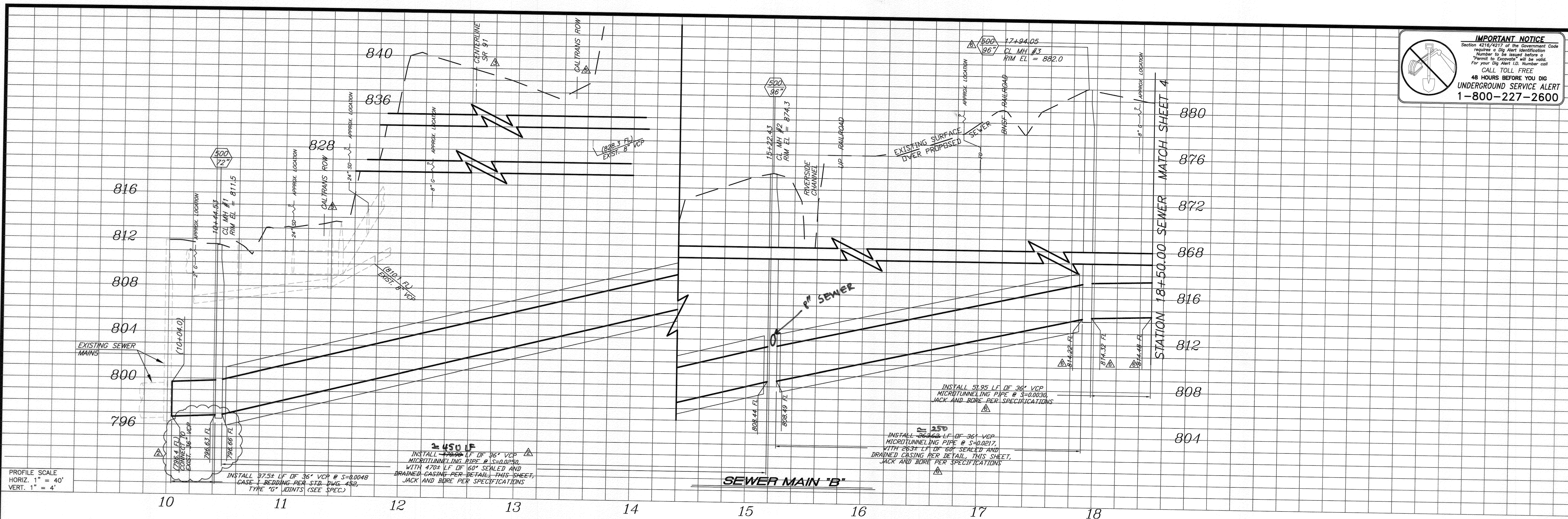
**SUPERSEDED BY SH. 3A**

V:\Projects\0800\001\_Tequesquite\CAD\CDCS\Phase2\Plans\EastTopSheet3.DWG 12/08/11 10:10

<p><b>BIRGE ENGINEERING</b>        800 N. Mountain Ave. Suite B204, Upland, CA 91786        Phone: (800) 578-0842 Fax: (800) 578-0804</p>	<p>ENGINEER IN RESPONSIBLE CHARGE</p> <p>STEVEN B. FRIESON        R.G.E. No. C42110 expires 03/31/12        DATE Dec 8, 2011</p>		<p>CITY OF RIVERSIDE, CALIFORNIA        PUBLIC WORKS DEPARTMENT</p> <p>APPROVED BY: [Signature]        CITY ENGINEER</p>	<p>TEQUESQUITE ARROYO        TRUNK SEWER IMPROVEMENTS        HIGHWAY 91, UP RR AND BNSF RR, PH 2A        FROM STATION 10+00.00 TO STATION 18+50.00</p>	<p>ACC. No. _____        W.O. _____  <b>S-2095</b></p>
	<p>DESIGNED BY: CDRAKE DRAWN BY: CDRAKE CHECKED BY: SBF</p>	<p>APPROVED BY: [Signature]        CIVIL ENGINEER</p>	<p>DATE: 12/8/11</p>	<p>SHEET 3 OF 4</p>	

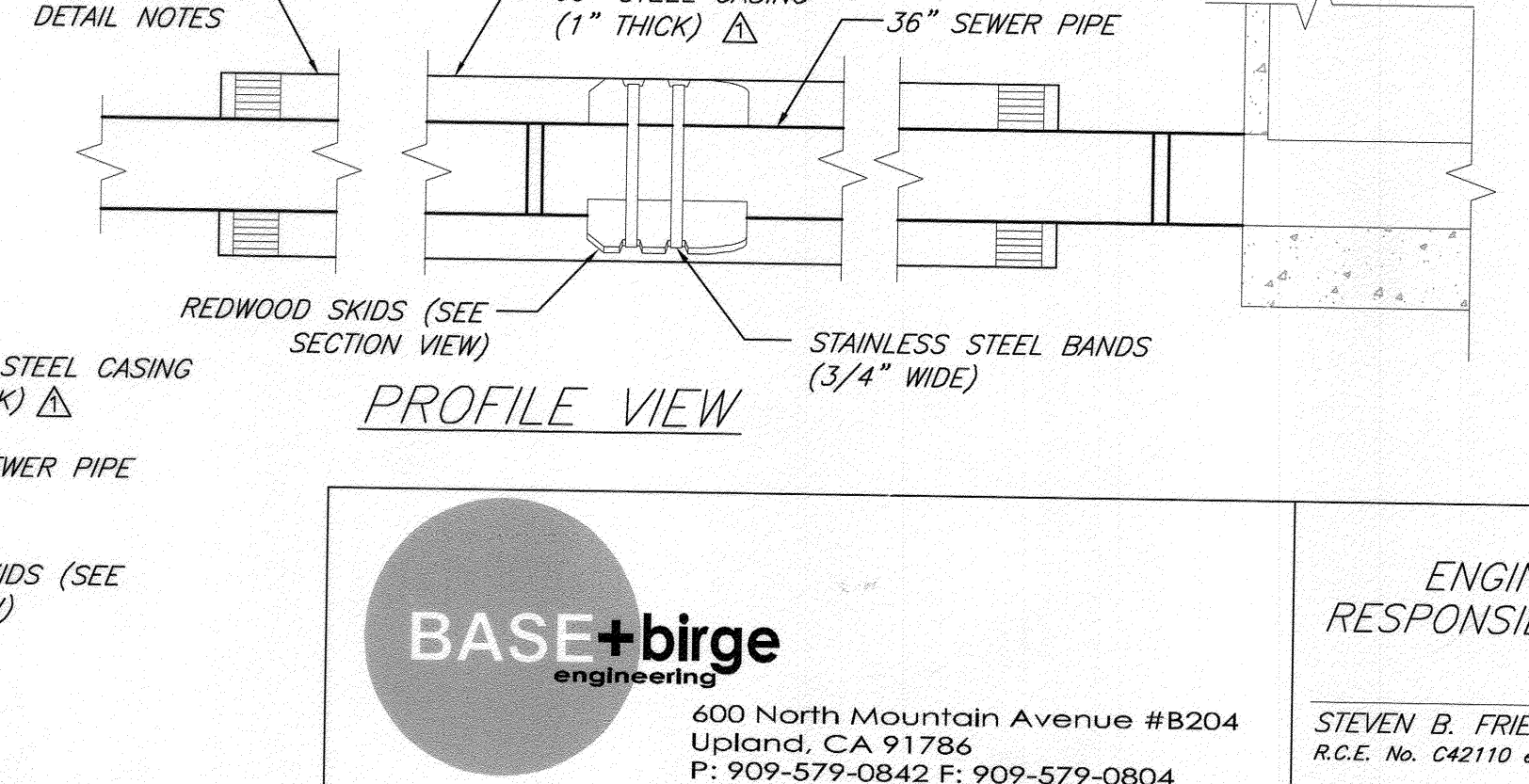
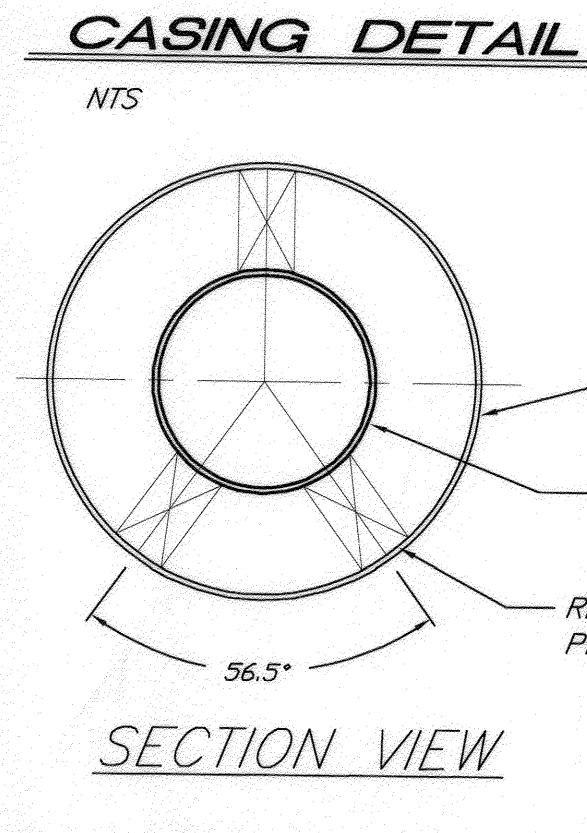


**IMPORTANT NOTICE**  
 Section 4218.0217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

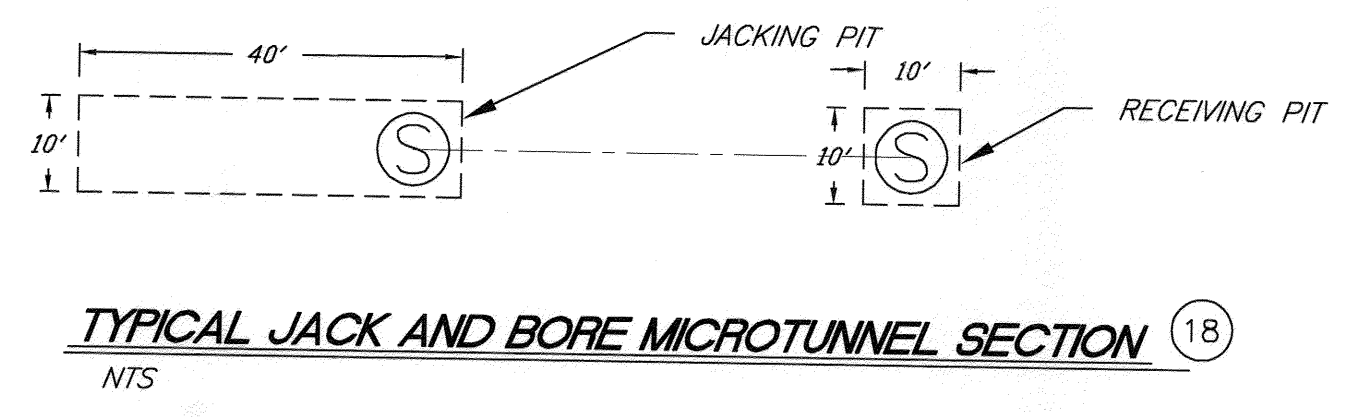


BENCHMARK NO. 15-A3  
 CITY OF RIVERSIDE BRASS DISK IN A STANDARD MONUMENT WELL STAMPED "15-A" ON THE CENTERLINE OF TEQUESQUITE 506.74 FEET SOUTHWESTERLY OF THE P.I. AT THE LANDFILL ENTRANCE  
 ELEV - 753.831

- SPECIFIC CONSTRUCTION NOTES**
- 2 PROTECT AND SUPPORT EXISTING UTILITY IN PLACE. VERIFY LOCATION PRIOR TO CONSTRUCTION.
  - 4 PROTECT EXISTING FENCE IN PLACE.
  - 5 PROTECT TRANSMISSION POLE IN PLACE.
  - 8 PROTECT AND SUPPORT EXISTING STORM CHANNEL IN PLACE.
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- CASING DETAIL 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 OD 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 WELDS.
  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" DIA MINIMUM PVC PIPE AT INVERT OF CASING (THROUGH BRICK) AND SURROUND WITH 2 CUBIC FEET CRUSHED ROCK.



**BASE+birge**  
 engineering

600 North Mountain Avenue #B204  
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 www.base-architecture.com

ENGINEER IN RESPONSIBLE CHARGE

STEVEN B. FRIESON  
 R.C.E. No. C42110 expires 03/31/14  
 DATE

revised alignment to omit MH#5  
 added CALTRANS ROW note to plan and profile  
 added CALTRANS permit number  
 changed profile to show I-10 freeway surface  
 changed to match Phase 1 as-built flow line  
 changed 48" to 60" and 1/2" thick to 1" thick

DESIGNED BY CDRAKE DRAWN BY CDRAKE CHECKED BY SBF

CITY OF RIVERSIDE, CALIFORNIA  
 PUBLIC WORKS DEPARTMENT

APPROVED BY \_\_\_\_\_ BY DATE \_\_\_\_\_

INSPECTOR \_\_\_\_\_ SURVEYOR \_\_\_\_\_ ENGINEERING MANAGER \_\_\_\_\_

CITY ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

TEQUESQUITE ARROYO  
 TRUNK SEWER IMPROVEMENTS  
 HIGHWAY 91, UP RR AND BNSF RR, PH 2A  
 FROM STATION 10+00.00 TO STATION 18+50.00

ACC. No. \_\_\_\_\_ W.O. \_\_\_\_\_

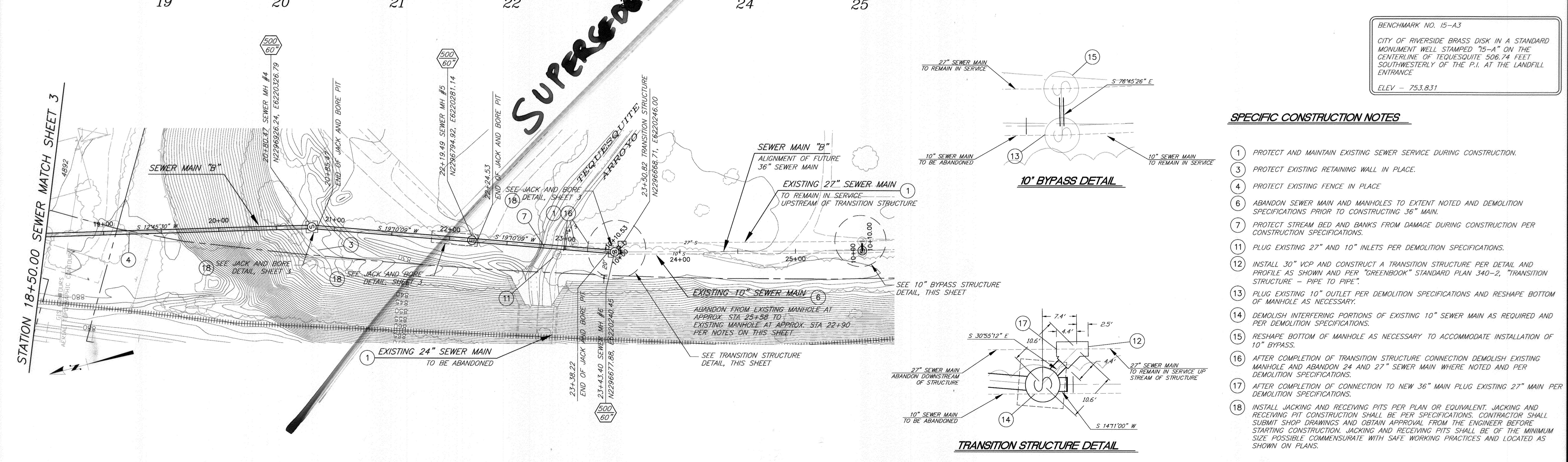
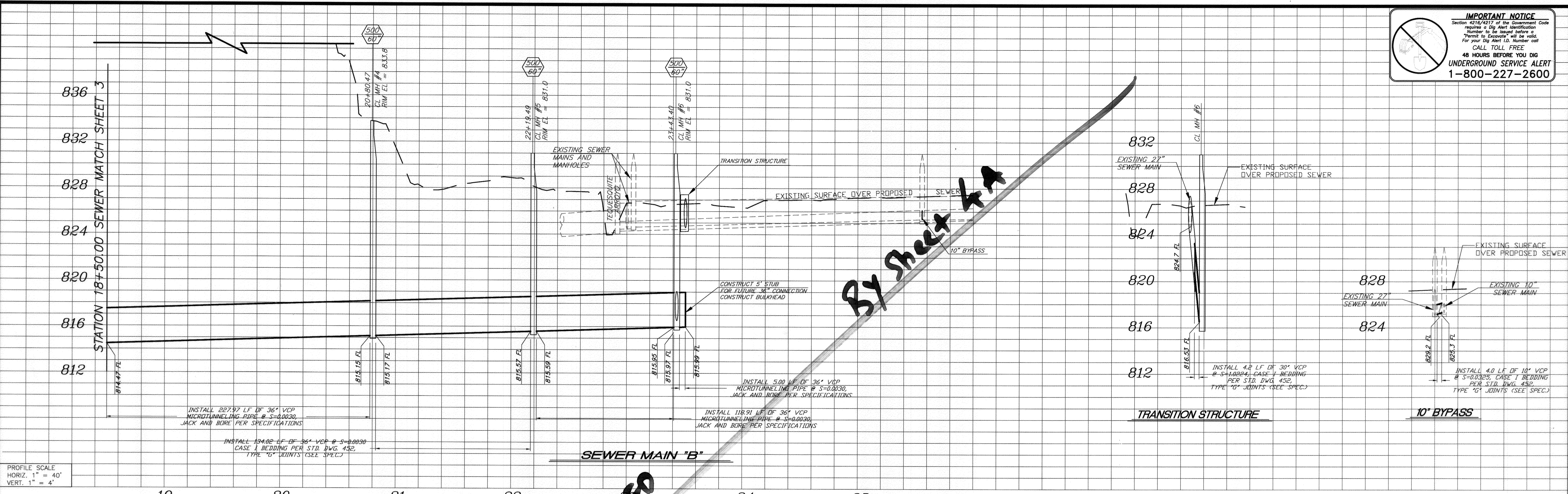
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SHEET 3A OF 4

SUBMITTED 08/29/12

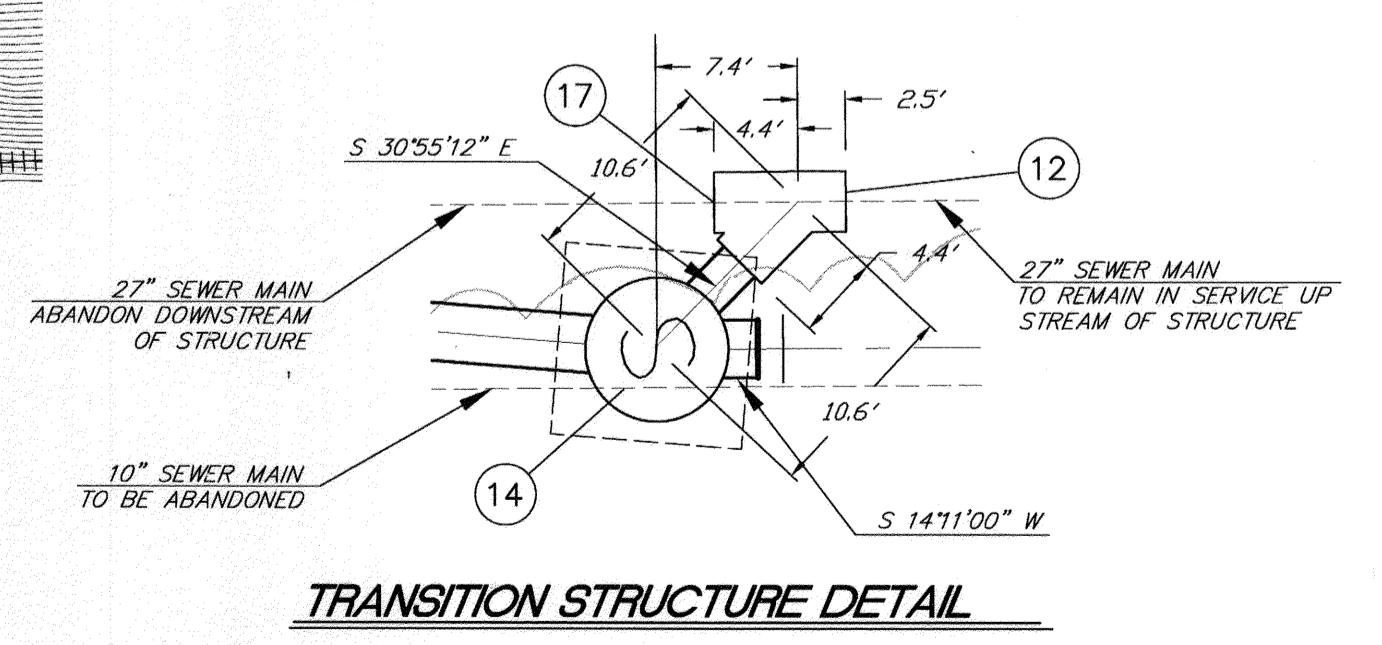
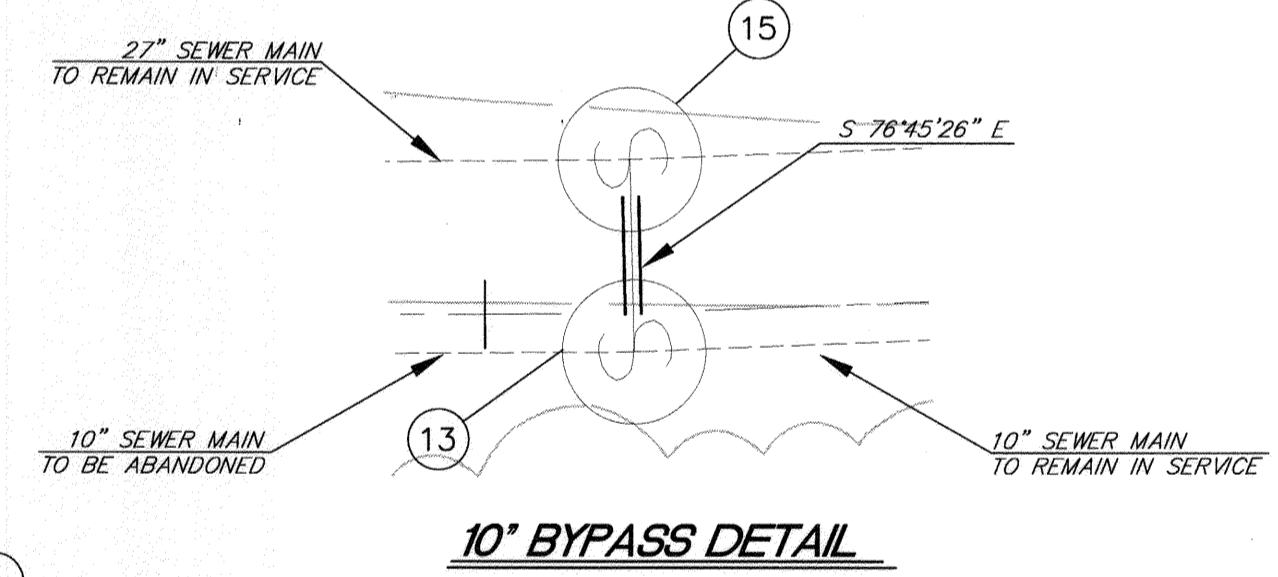


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 ELEV. = 753.831

- SPECIFIC CONSTRUCTION NOTES**
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  - PLUG EXISTING 27" AND 10" INLETS PER DEMOLITION SPECIFICATIONS.
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MARK	REVISIONS	APPR.	DATE

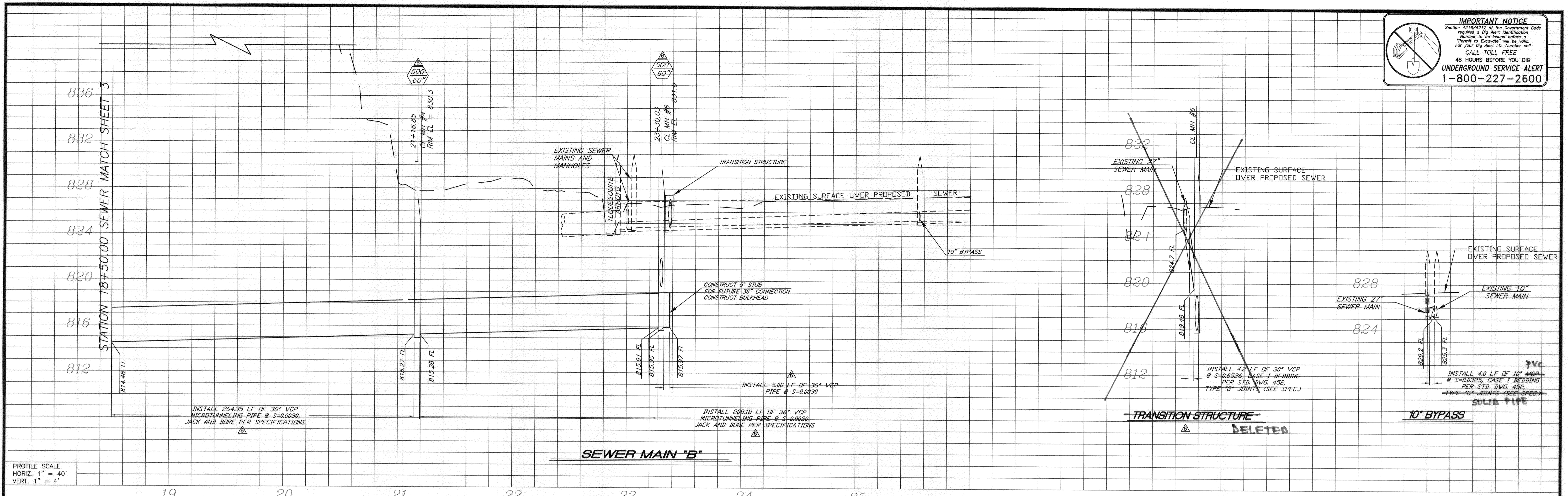
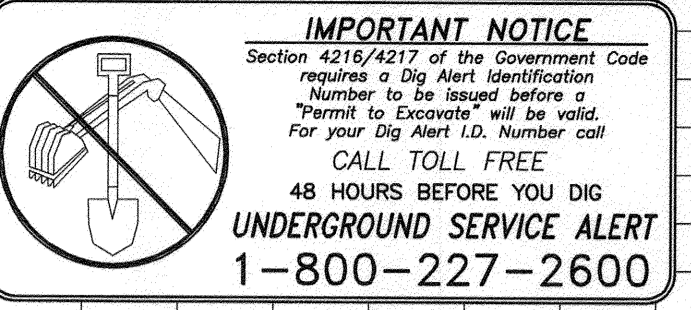
CITY OF RIVERSIDE, CALIFORNIA  
 PUBLIC WORKS DEPARTMENT  
 APPROVED BY: [Signature]  
 DATE: 12/19/11  
 DESIGNED BY: CDRAKE, DRAWN BY: CDRAKE, CHECKED BY: SBF

TEQUESQUITE ARROYO  
 TRUNK SEWER IMPROVEMENTS  
 TEQUESQUITE ARROYO, PHASE 2A  
 FROM STATION 18+50.00 TO TRANSITION STRUCTURE

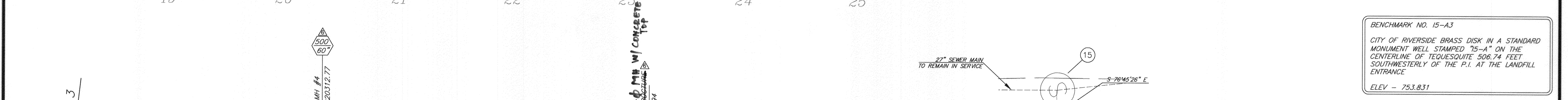
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 SHEET 4 OF 4

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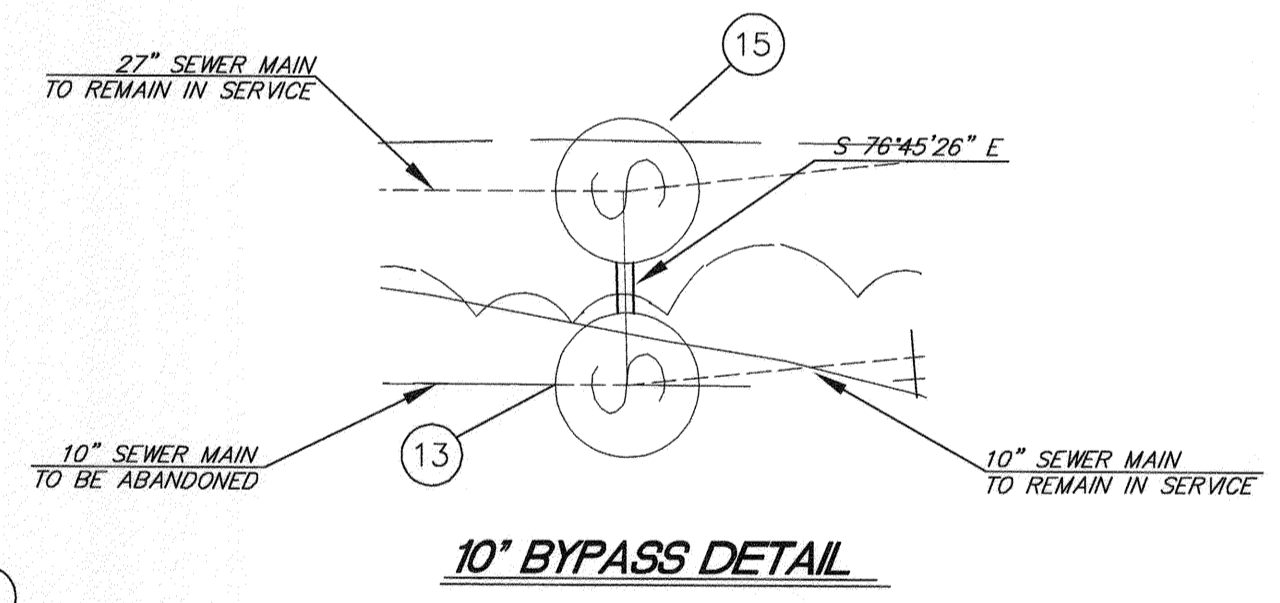
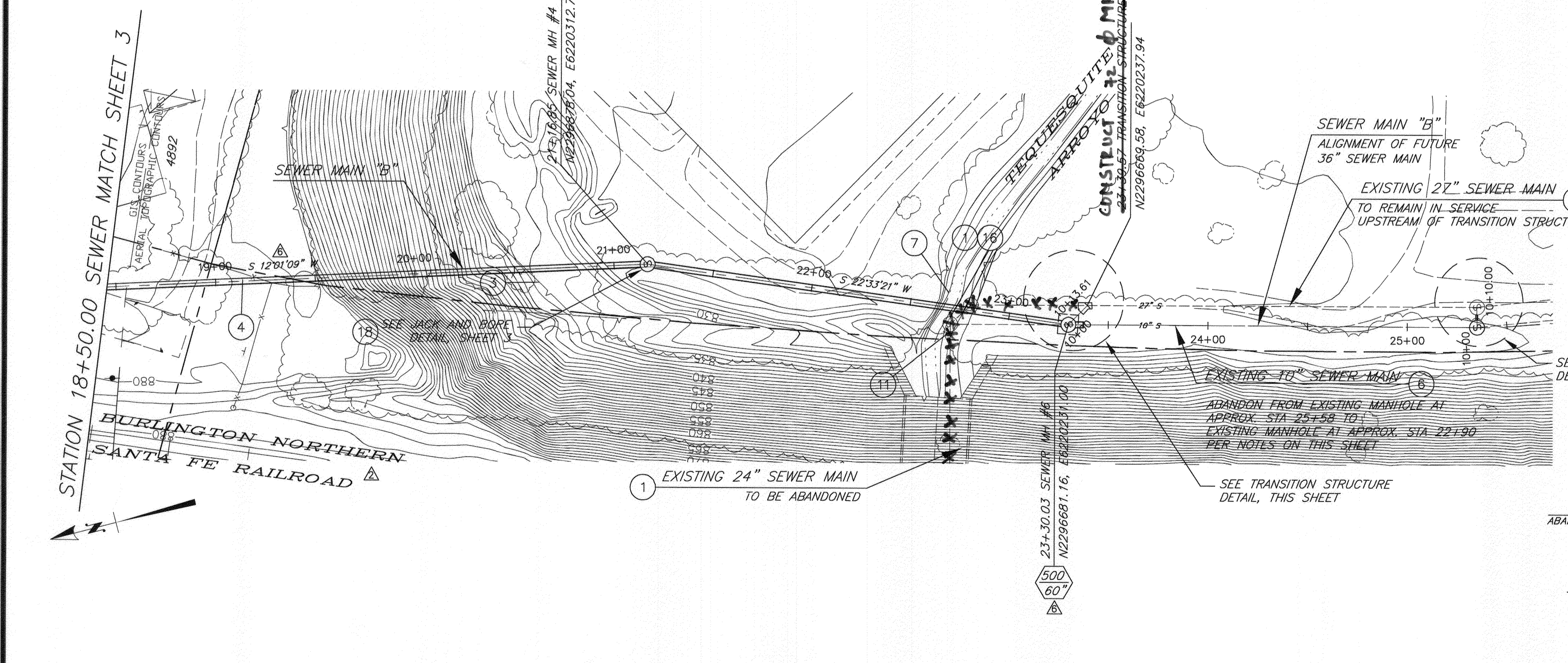




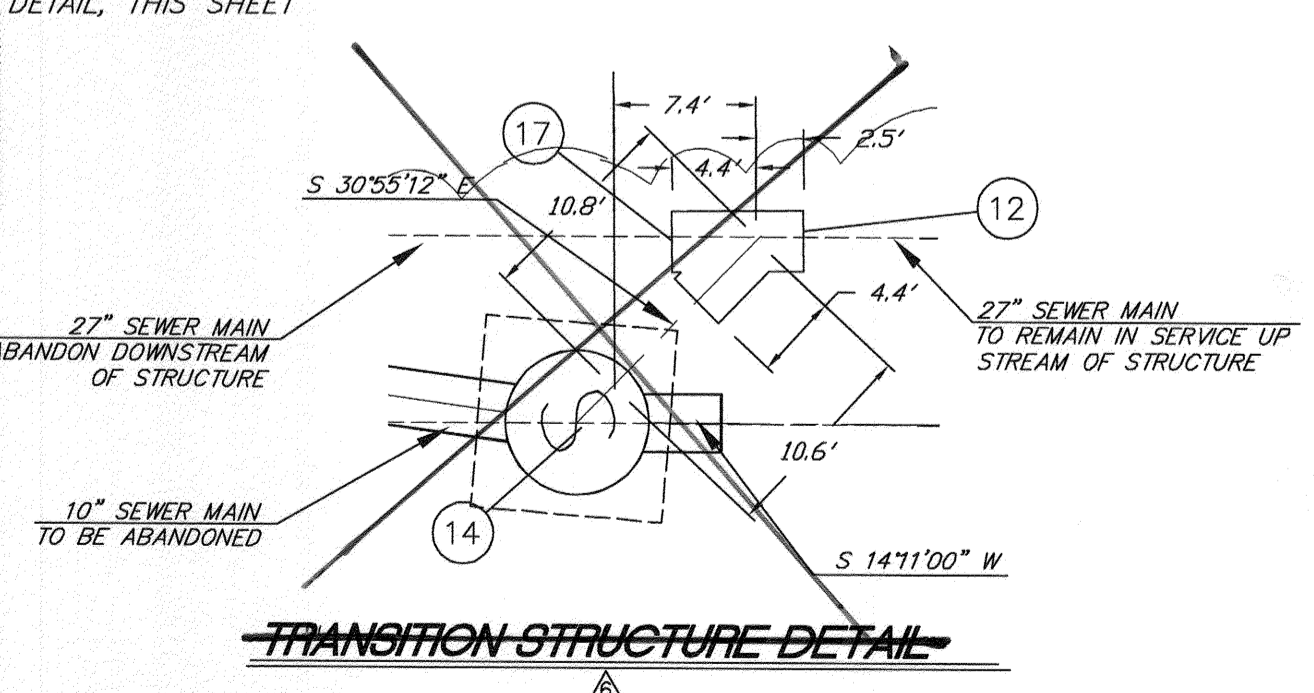
PROFILE SCALE  
HORIZ. 1" = 40'  
VERT. 1" = 4'



BENCHMARK NO. 15-A3  
CITY OF RIVERSIDE BRASS DISK IN A STANDARD MONUMENT WELL STAMPED "15-A" ON THE CENTERLINE OF TEQUESQUITE ARROYO 506.74 FEET SOUTHWESTERLY OF THE P.I. AT THE LANDFILL ENTRANCE  
ELEV - 753.831



10" BYPASS DETAIL



TRANSITION STRUCTURE DETAIL

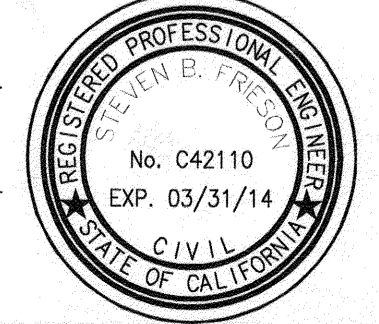
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△ CALTRANS PERMIT #08-11-N-TN-0908

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**STEVEN B. FRIESON**  
R.C.E. No. C42110 expires 03/31/14  
DATE



DESIGNED BY	CDRAKE	DRAWN BY	CDRAKE	CHECKED BY	SBF
APPROVED BY		BY		DATE	
PRINCIPAL ENGINEER		INSPECTOR		SURVEYOR	
ENGINEERING MANAGER					

CITY OF RIVERSIDE, CALIFORNIA  
PUBLIC WORKS DEPARTMENT  
APPROVED BY: \_\_\_\_\_  
CITY ENGINEER: \_\_\_\_\_  
DATE: \_\_\_\_\_

TEQUESQUITE ARROYO  
TRUNK SEWER IMPROVEMENTS  
TEQUESQUITE ARROYO, PHASE 2A  
FROM STATION 18+50.00 TO TRANSITION STRUCTURE

ACC. No. \_\_\_\_\_ W.G. \_\_\_\_\_  
**S-2095**  
SHEET 4A OF 4

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REVISED 6/12/13