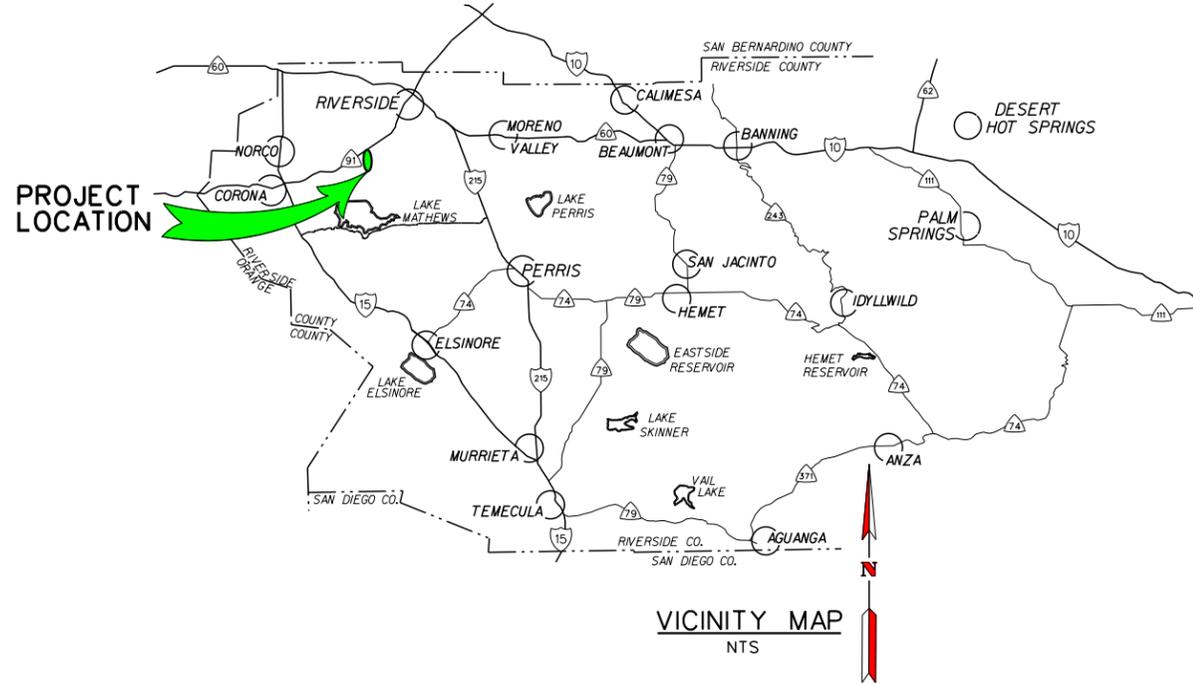


# RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

## INDEX

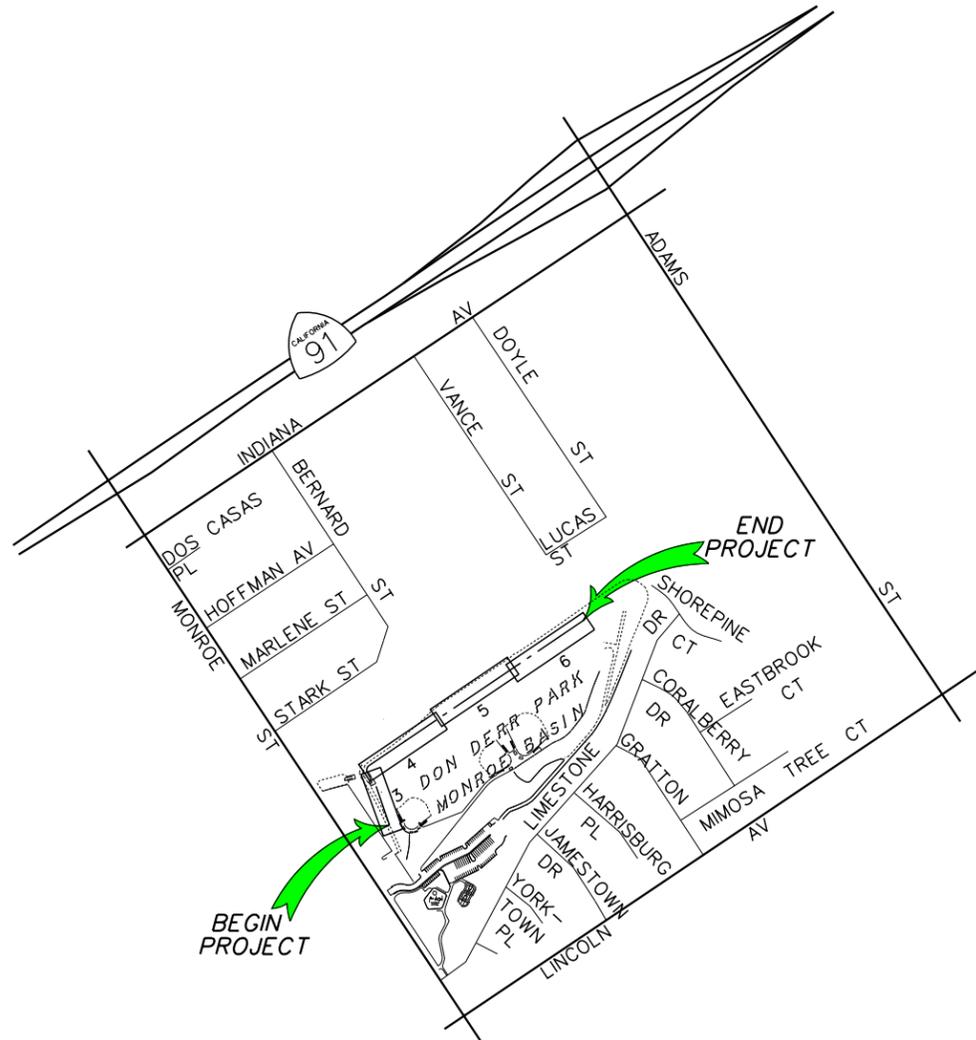
SHEET NO.:

TITLE SHEET	1
SURVEY CONTROL INFORMATION	2
ACCESS RAMP	3
PLAN AND PROFILE	4-6
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MISCELLANEOUS DETAILS	8
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### GENERAL NOTES

- BEDDING AND PAYLINES ARE SHOWN ON RCFC STANDARD DRAWING M815 UNLESS SHOWN OTHERWISE ON THESE PLANS.
- ALL STATIONING REFERS TO CENTERLINE OF CONSTRUCTION.
- ALL CHANNEL/STORM DRAIN REFERENCES AND CROSS SECTIONS ARE TAKEN LOOKING DOWNSTREAM.
- TOPOGRAPHY BY DIGITAL PHOTOGRAMMETRIC METHODS. AERIAL PHOTOGRAPHS TAKEN AT AN ALTITUDE NOT TO EXCEED A FLYING HEIGHT TO CONTOUR INTERVAL RATIO OF 1800. PHOTOGRAPHY DATED 11-30-2004.
- THE VERTICAL DATUM IS DERIVED FROM NAVD 88. THE HORIZONTAL DATUM IS DERIVED FROM NAD 83.
- STANDARD DRAWINGS CALLED FOR ON THE PLAN & PROFILE SHALL CONFORM TO RCFC & WCD STD DRAWINGS, OR CALTRANS/CITY/COUNTY STANDARD PLANS.
- ELEVATIONS AND LOCATIONS OF UTILITIES WERE OBTAINED FROM AVAILABLE INFORMATION AND ARE SHOWN APPROXIMATELY ON THESE PLANS. 48 HOURS BEFORE EXCAVATION CALL UNDERGROUND SERVICE ALERT AT 1-800-227-2600. ALL UTILITIES SHALL BE PROTECTED IN PLACE EXCEPT AS NOTED ON PLANS AND SPECIFICATIONS.
- THE CONTRACTOR IS REQUIRED TO CONTACT ALL UTILITY AGENCIES REGARDING TEMPORARY SUPPORT AND SHORING REQUIREMENTS FOR THE VARIOUS UTILITY LINES SHOWN ON THESE PLANS.
- ALL OPENINGS RESULTING FROM CUTTING OR PARTIAL REMOVAL OF EXIST. CULVERTS, PIPES, OR SIMILAR STRUCTURES TO BE ABANDONED, SHALL BE SEALED AT BOTH ENDS WITH 6" MIN CLASS "B" CONCRETE.
- UNLESS OTHERWISE SPECIFIED, MINIMUM STREET RECONSTRUCTION SHALL BE 0.25' TYPE "B" ASPHALT CONCRETE OVER 6" CLASS 2 AGGREGATE BASE OR AS SPECIFIED BY THE ENGINEER.
- ALL RECONSTRUCTION, RESURFACING AND PAVEMENT DELINEATION, CURBS, SIDEWALKS AND OTHER IMPROVEMENTS ARE TO BE RECONSTRUCTED IN KIND AT THE SAME LOCATIONS AND ELEVATIONS AS THE EXISTING IMPROVEMENTS, UNLESS OTHERWISE NOTED.
- FOR COMPLETE RIGHT-OF-WAY AND TEMPORARY EASEMENT REFER TO DRAWING NO. 1-336, SHT 1 TO 3.



### LOCATION MAP

NTS

### R.C.F.C. & W.C.D. STANDARD DRAWINGS

CH326 TRAPEZOIDAL CHANNEL STRUCTURAL DETAILS

### CITY OF RIVERSIDE

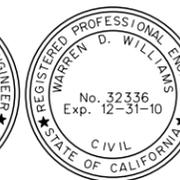
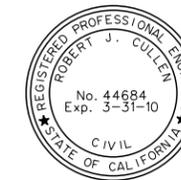
110 6" PCC GUTTER  
200 TYPE II CURB

### CALTRANS STANDARD DRAWINGS

B3-3 TYPE 1A RETAINING WALL  
B11-47 CABLE RAILING

### APWA STANDARD DRAWINGS

360-1 TRAPEZOIDAL OUTLET BARRIER



★ PRELIMINARY ★

SUBJECT TO REVISION

Don't Dig...Until You Call U.S.A. Toll Free  
**1-800-227-2600**  
for the location of buried utility lines.  
Don't disrupt vital services.  
TWO WORKING DAYS BEFORE YOU DIG

BENCH MARK  
B.M. NO. Z-10187  
FD 3/4" IP W/RCFC TBM  
PLUG, DN 0.3' ± 36" ELY  
OF RR SWITCH HOUSE "C".  
836.15 EL. NAVD 88

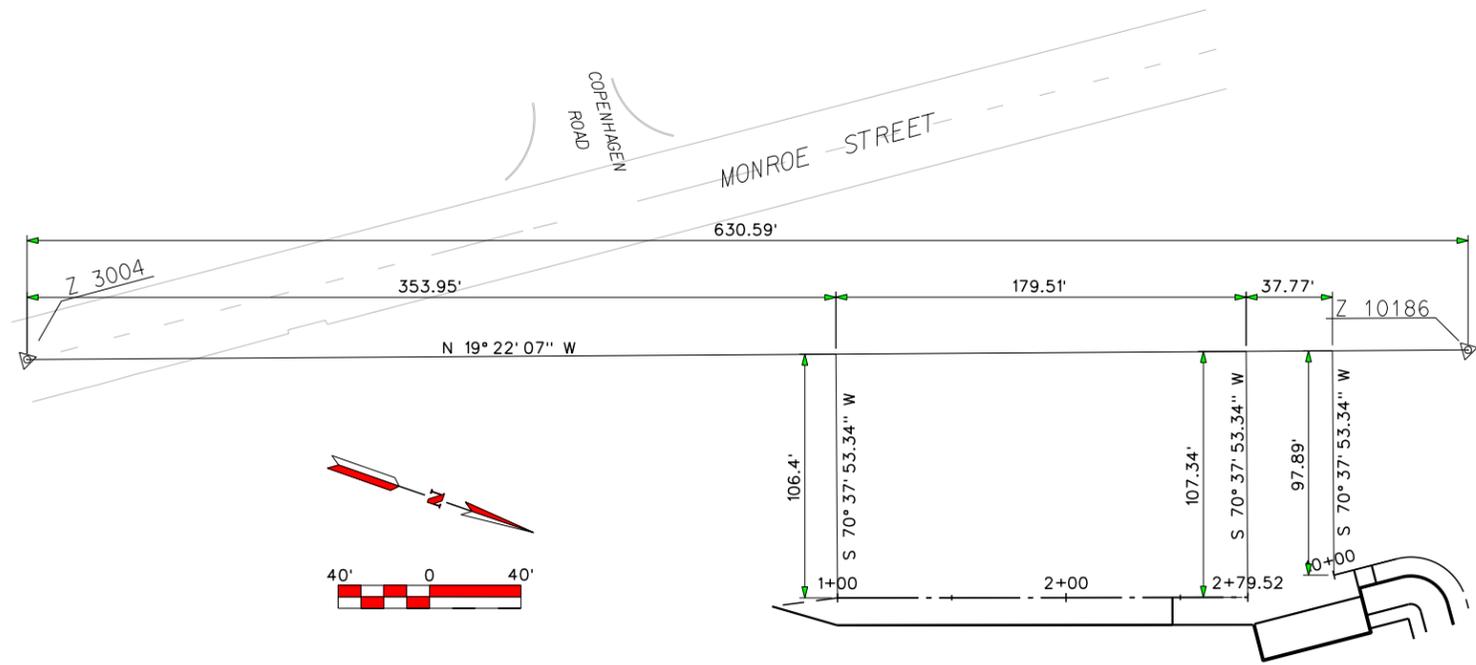
REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
DESIGNED BY: R. VASQUEZ	RECOMMENDED FOR APPROVAL BY:	APPROVED BY:
DRAWN BY: T. DECKER	CHIEF, DESIGN & CONSTRUCTION	CHIEF ENGINEER
DATE DRAWN: FEB 2009	DATE: _____ R.E. No. 44684	DATE: _____ R.E. No. 32336

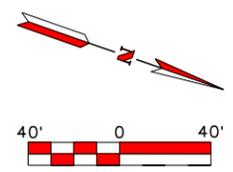
**MONROE MASTER DRAINAGE PLAN RETENTION BASIN REHABILITATION**

TITLE SHEET

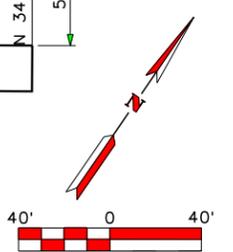
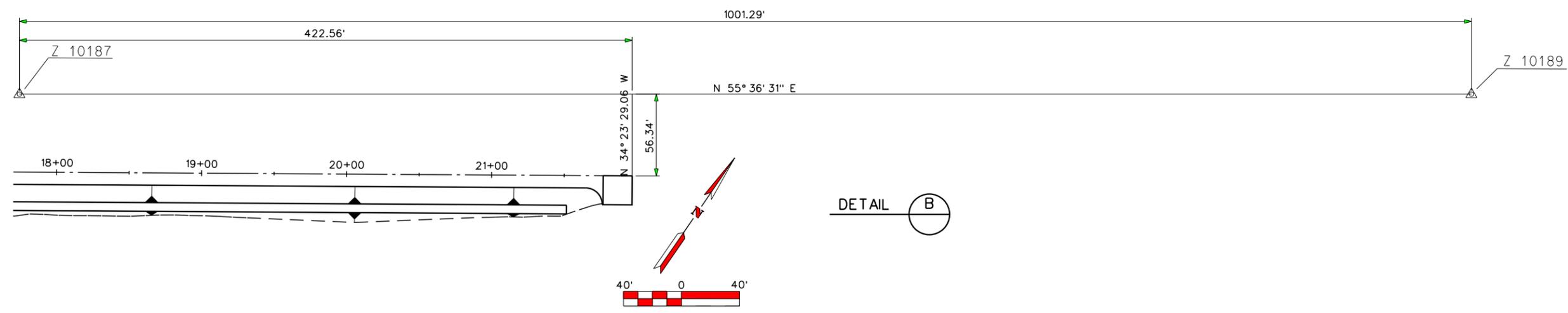
PROJECT NO.  
**1-0-0071**  
DRAWING NO.  
**1-674**  
SHEET NO.  
**1 OF 10**



Z	NORTHING	EASTING
3004	2279608.63	6205865.16
10186	2280203.53	6205656.03
10187	2280678.15	6206314.87
10189	2281243.72	6207141.13



DETAIL A



DETAIL B



★ PRELIMINARY ★  
SUBJECT TO REVISION

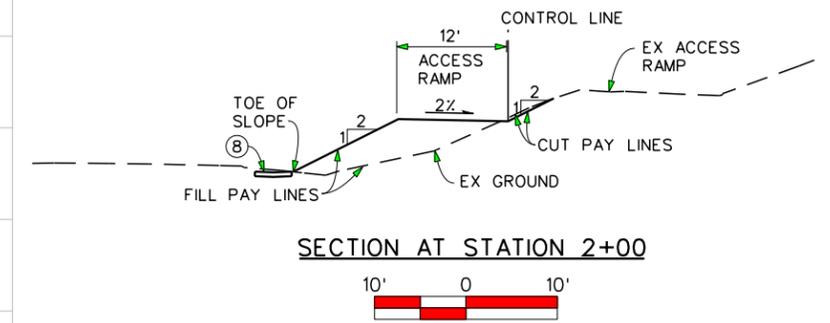
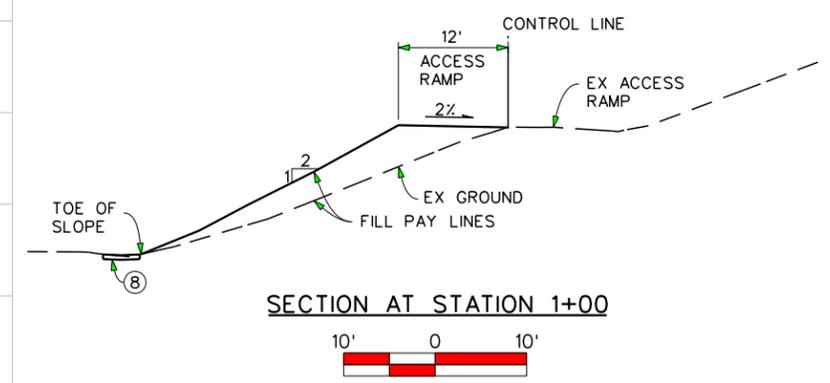
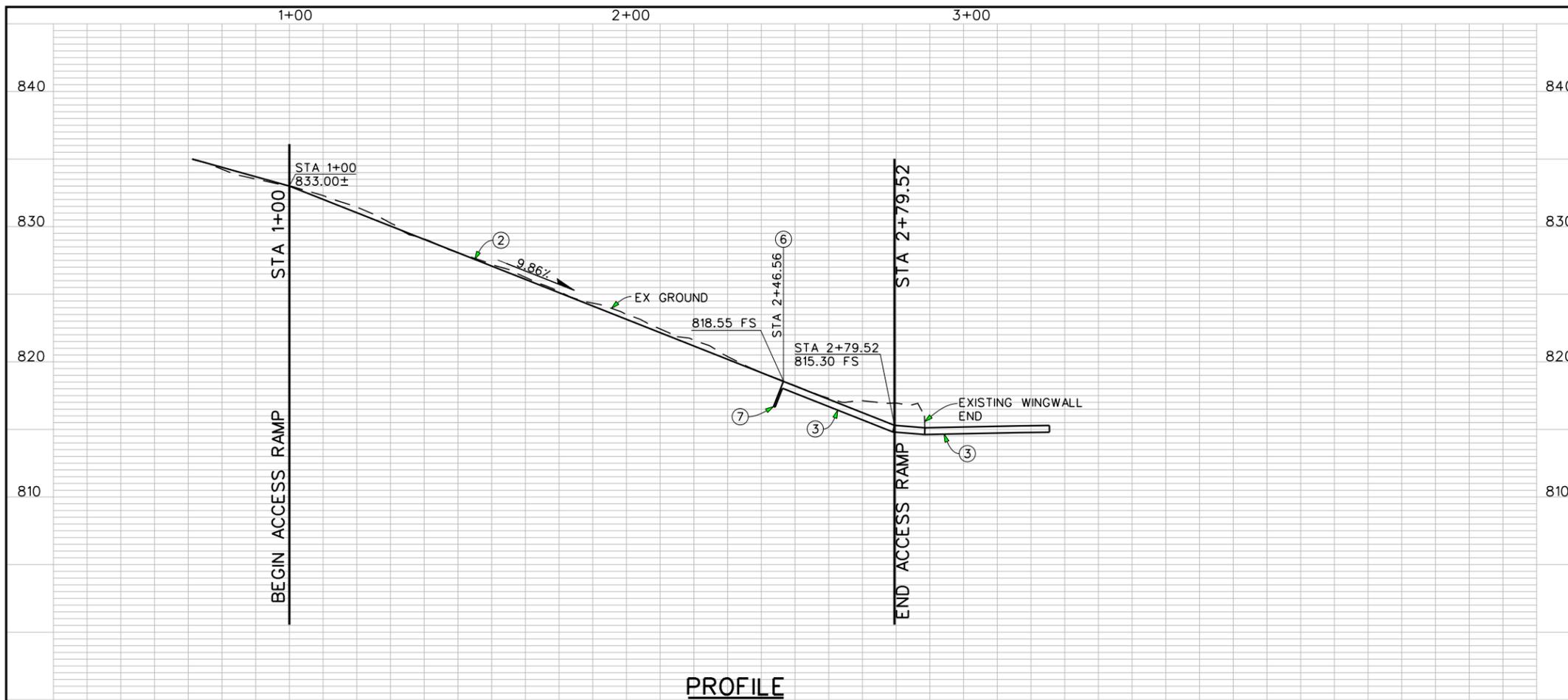
REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
DESIGNED BY: R. VASQUEZ	RECOMMENDED FOR APPROVAL BY:	APPROVED BY:
DRAWN BY: T. DECKER	SENIOR CIVIL ENGINEER	CHIEF, DESIGN & CONSTRUCTION
DATE DRAWN: FEB 2009	DATE: _____ R.E. No. 47004	DATE: _____ R.E. No. 44684

**MONROE MASTER DRAINAGE PLAN RETENTION BASIN REHABILITATION**

SURVEY CONTROL INFORMATION

PROJECT NO.	1-0-0071
DRAWING NO.	1-674
SHEET NO.	2 OF 10

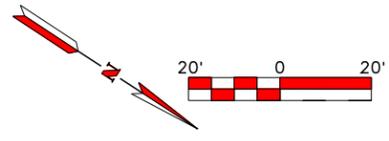


**NOTES**

- ① FOR SURVEY CONTROL INFORMATION SEE DETAIL A SHEET 2.
- ② CONSTRUCT ACCESS RAMP. 3" OF CLASS 2 AGGREGATE BASE.
- ③ CONSTRUCT 6" THICK CLASS "A" CONCRETE SLAB WITH #4 REBAR @18" OC BOTH WAYS.
- ④ CONSTRUCT 5.5' TYPE 1A RETAINING WALL PER CALTRANS STD PLAN B3-3. USE H=6' FOR REINFORCING STEEL DATA. INSTALL CABLE RAILING PER CALTRANS STD B11-47. SEE SHEET 7 FOR DETAILS.
- ⑤ PROTECT IN PLACE EXISTING HEADWALL STRUCTURE.
- ⑥ REMOVE EXISTING TREES AS NECESSARY.
- ⑦ CONSTRUCT 2' CONCRETE CUT OFF WALL PER DETAIL "B" OF RCFC STD CH326.
- ⑧ CONSTRUCT 6" CONCRETE GUTTER PER CITY OF RIVERSIDE STD DWG 110.
- ⑨ CONSTRUCT CONCRETE GUTTER TRANSITION. SEE SHEET 10 FOR DETAIL.
- ⑩ PROTECT IN PLACE EXISTING POST.
- ⑪ REMOVE EXISTING CONCRETE GUTTER.
- ⑫ INSTALL 6' TEMPORARY CHAIN LINK FENCE.



**★ PRELIMINARY ★**  
SUBJECT TO REVISION

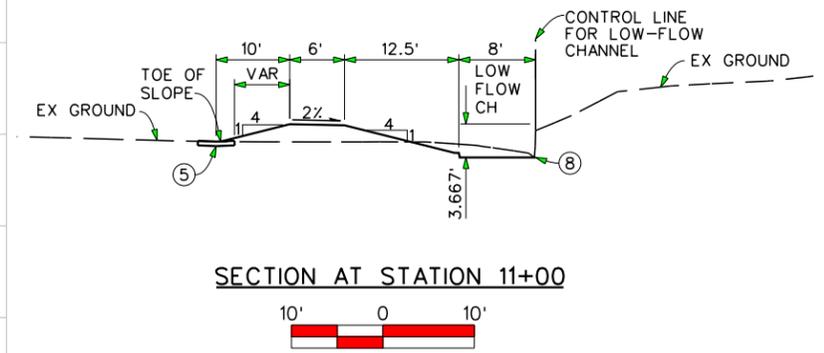
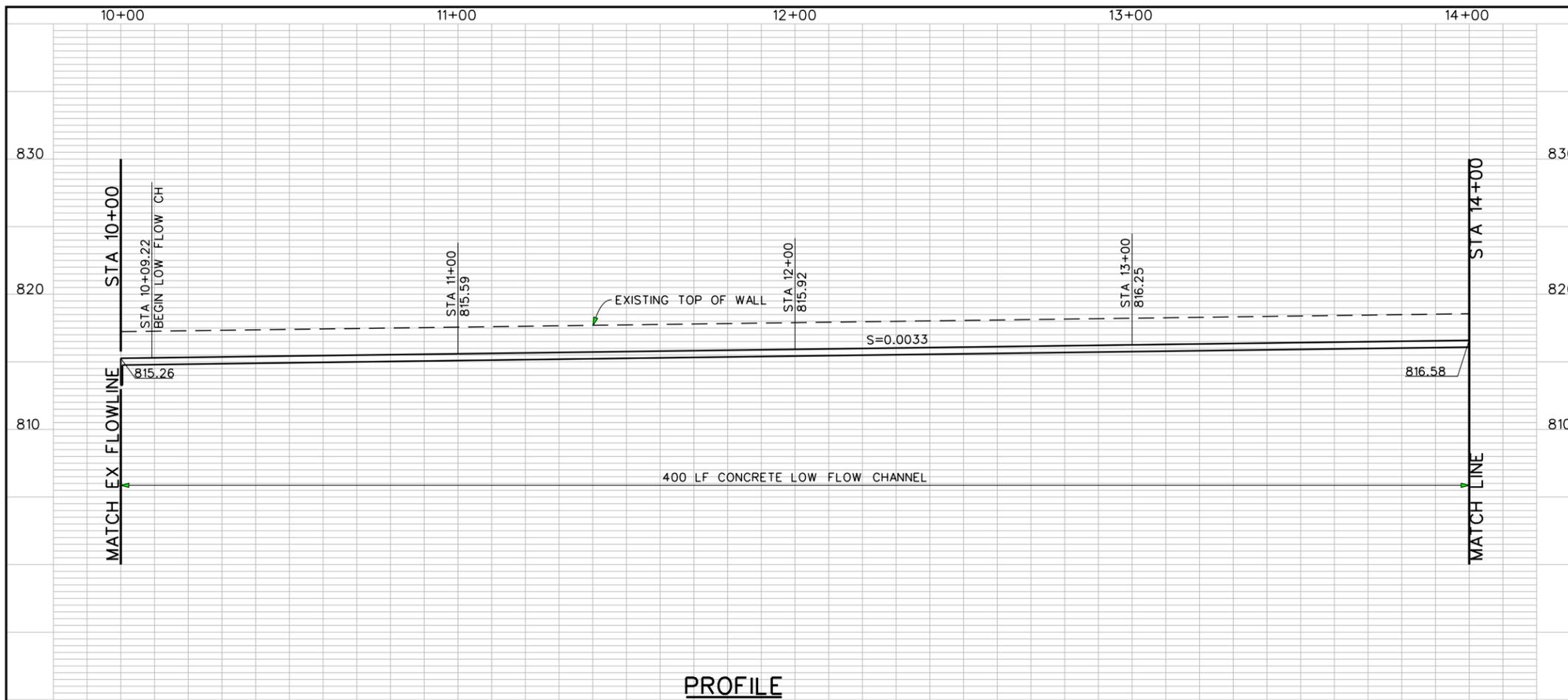


REVISIONS	
REF.	DESCRIPTION

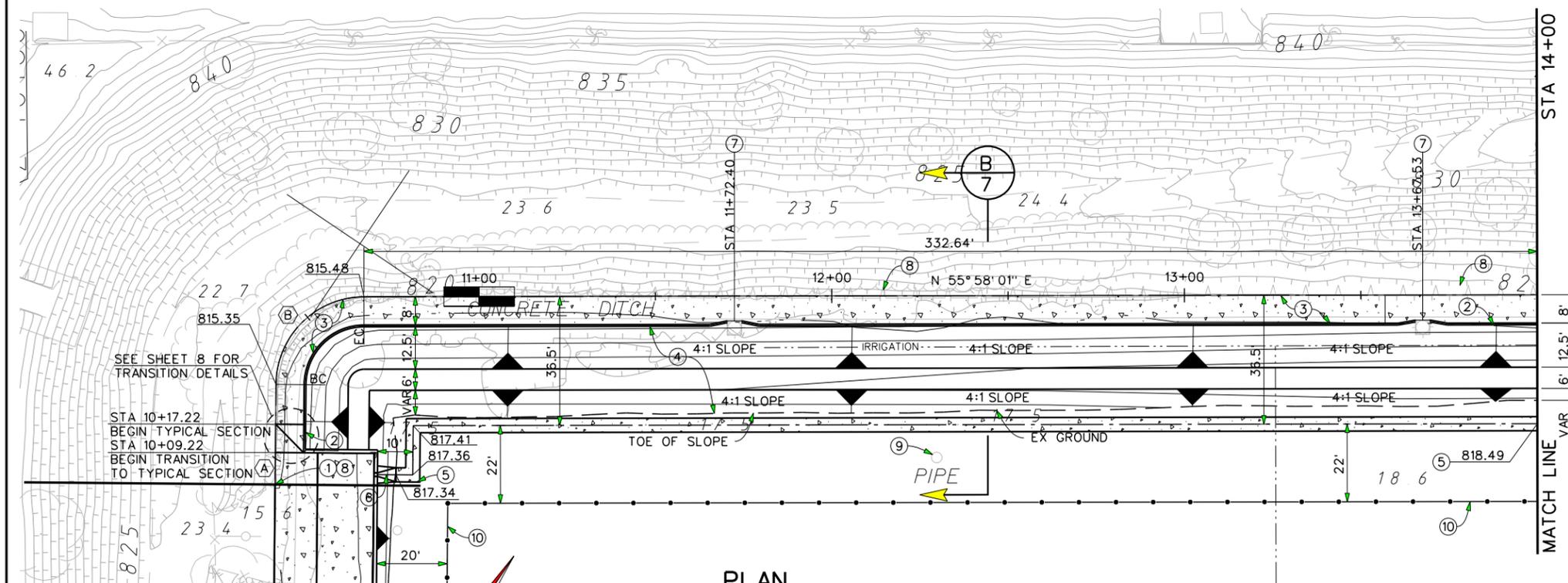
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
DESIGNED BY: R. VASQUEZ	RECOMMENDED FOR APPROVAL BY:	APPROVED BY:
DRAWN BY: T. DECKER	SENIOR CIVIL ENGINEER	CHIEF, DESIGN & CONSTRUCTION
DATE DRAWN: FEB 2009	DATE: _____ R.E. No. 47004	DATE: _____ R.E. No. 44684

<b>MONROE MASTER DRAINAGE PLAN RETENTION BASIN REHABILITATION</b>	PROJECT NO.
	1-0-0071
	DRAWING NO.
	1-674
SHEET NO.	3 OF 10

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2600  
for the location of buried utility lines. Don't disrupt vital services.  
TWO WORKING DAYS BEFORE YOU DIG



**PROFILE**

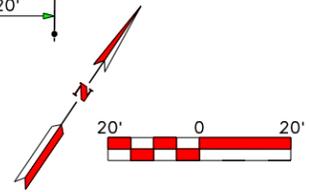


**PLAN**

- NOTES**
- ① FOR SURVEY CONTROL INFORMATION SEE DETAIL "B" SEE SHEET 2.
  - ② CONSTRUCT 8" TYPE II CURB PER CITY OF RIVERSIDE STD DWG 200.
  - ③ SAW CUT & REMOVE EXISTING LOW FLOW CHANNEL. REPLACE WITH 8' LOW FLOW CHANNEL. SEE SHEET 8 FOR DETAILS.
  - ④ CONSTRUCT 3' HIGH BERM. SEE SHEET 7 FOR TYPICAL SECTION.
  - ⑤ CONSTRUCT 6" CONCRETE GUTTER PER CITY OF RIVERSIDE STD DWG 110.
  - ⑥ CONSTRUCT CONCRETE GUTTER TRANSITION. SEE SHEET 10 FOR DETAILS.
  - ⑦ PROTECT IN PLACE EXISTING LIGHT. TRANSITION CURB AROUND BASE OF LIGHT PER DETAIL ON SHEET 8.
  - ⑧ PROTECT IN PLACE EXISTING WALL.
  - ⑨ PROTECT IN PLACE EXISTING POST.
  - ⑩ INSTALL 6' TEMPORARY CHAIN LINK FENCE.
- A** € LOW FLOW LINE DATA  
 BEARING = N 33° 25' 54" W  
 DISTANCE = 28.36'
- B** € LOW FLOW CURVE DATA  
 $\Delta = 89^\circ 23' 55.28''$   
 R = 25.00'  
 L = 39.01'  
 T = 24.74'  
 BC = STA 10+28.36  
 EC = STA 10+67.36  
 PI = N 2280224.31  
 E 6205738.80



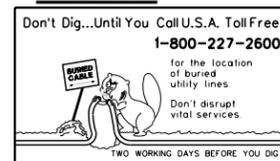
**★ PRELIMINARY ★**  
 SUBJECT TO REVISION

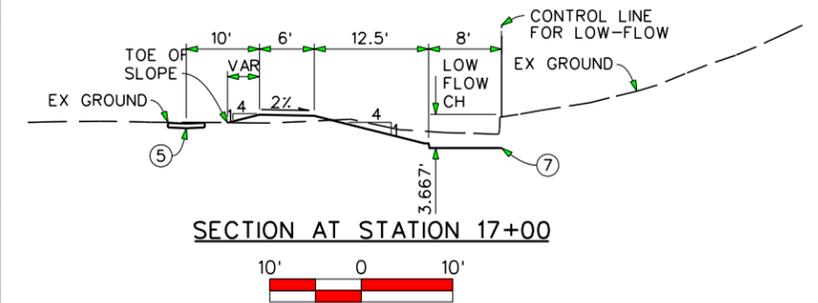
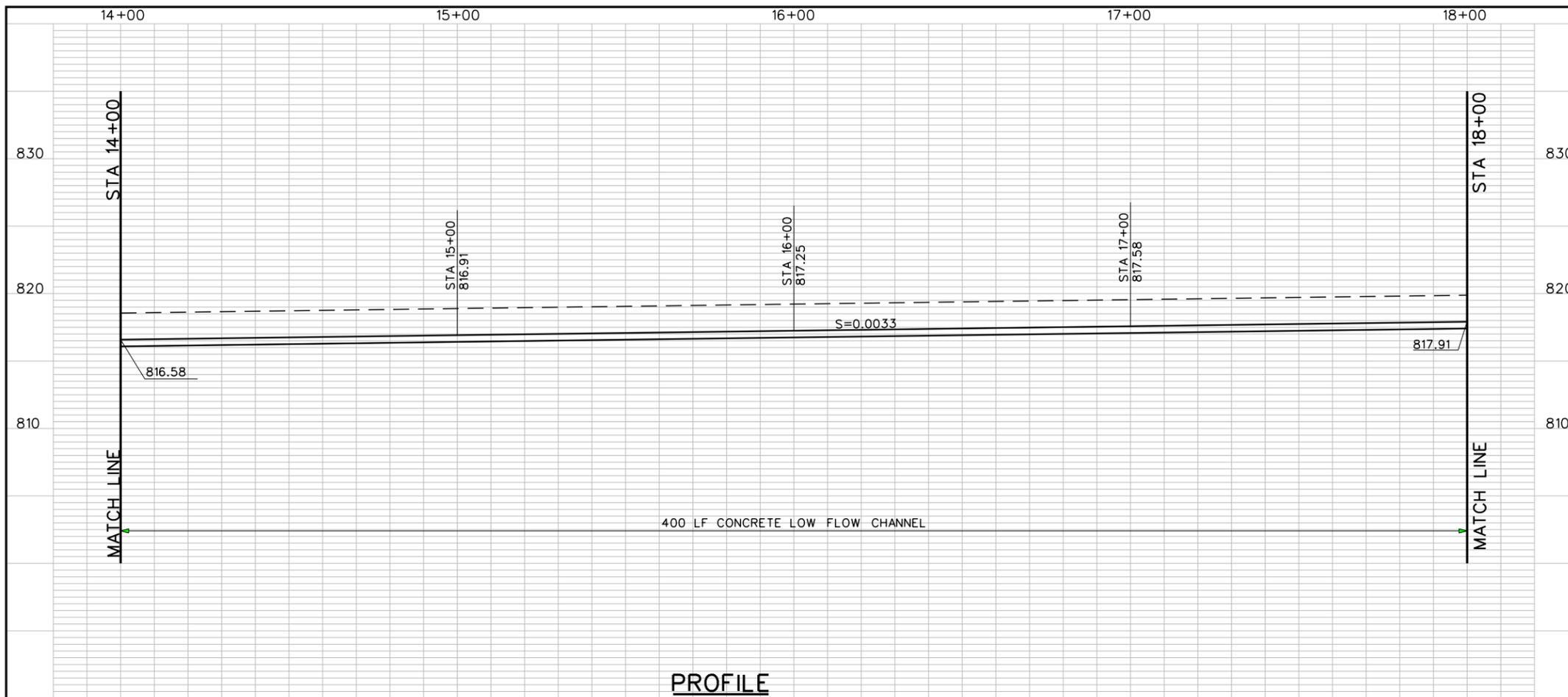


NO.	REVISIONS	DATE

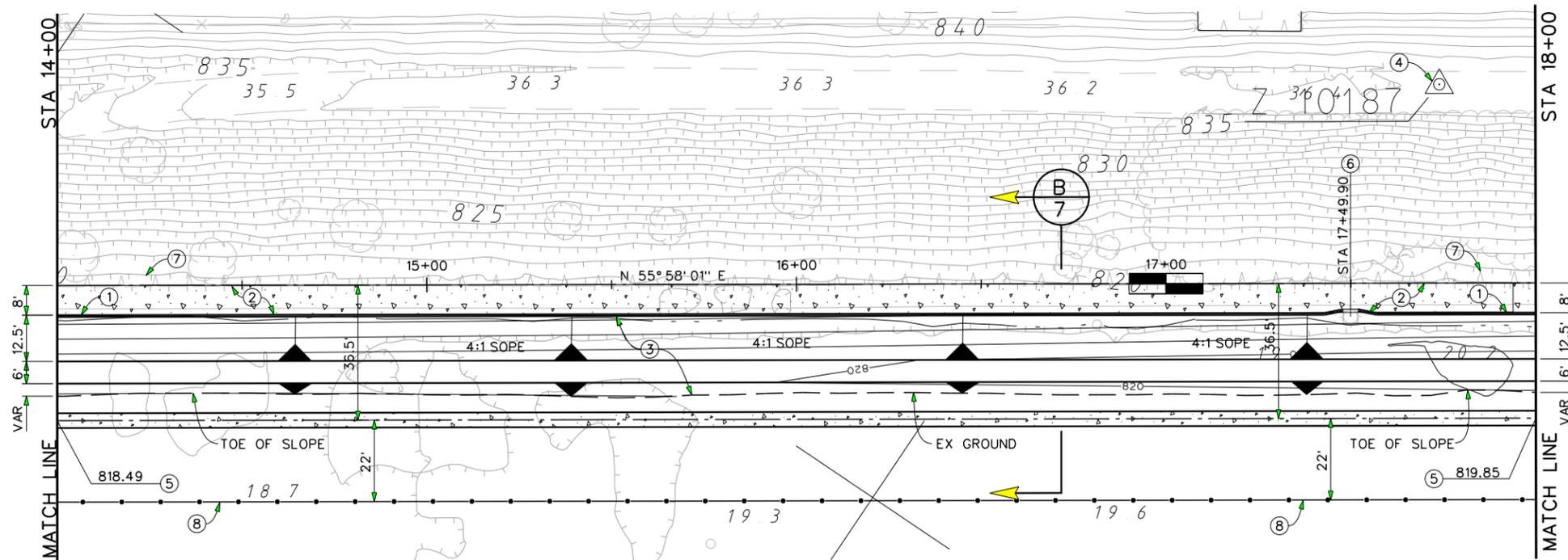
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
DESIGNED BY: R. VASQUEZ	RECOMMENDED FOR APPROVAL BY:	APPROVED BY:
DRAWN BY: T. DECKER	SENIOR CIVIL ENGINEER	CHIEF, DESIGN & CONSTRUCTION
DATE DRAWN: FEB 2009	DATE: _____ R.E. No. 47004	DATE: _____ R.E. No. 44684

<b>MONROE MASTER DRAINAGE PLAN RETENTION BASIN REHABILITATION</b>	PROJECT NO. 1-0-0071
	DRAWING NO. 1-674
	SHEET NO. 4 OF 10
	STA 10+00 TO STA 14+00





PROFILE



PLAN

NOTES

- ① CONSTRUCT 8" TYPE II CURB PER CITY OF RIVERSIDE STD DWG 200.
- ② SAW CUT & REMOVE EXISTING LOW FLOW CHANNEL. REPLACE WITH 8" LOW FLOW CHANNEL. SEE SHEET 8 FOR DETAILS.
- ③ CONSTRUCT 3' HIGH BERM. SEE SHEET 7 FOR TYPICAL SECTION.
- ④ FOR SURVEY CONTROL INFORMATION SEE DETAIL B SHEET 2.
- ⑤ CONSTRUCT 6" CONCRETE GUTTER PER CITY OF RIVERSIDE STD DWG 110.
- ⑥ PROTECT IN PLACE EXISTING LIGHT. TRANSITION CURB AROUND BASE OF LIGHT PER DETAIL ON SHEET 8.
- ⑦ PROTECT IN PLACE EXISTING WALL.
- ⑧ INSTALL 6' TEMPORARY CHAIN LINK FENCE.

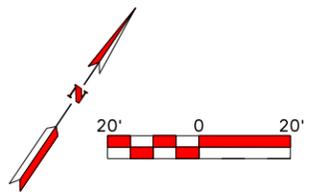


★ PRELIMINARY ★  
SUBJECT TO REVISION

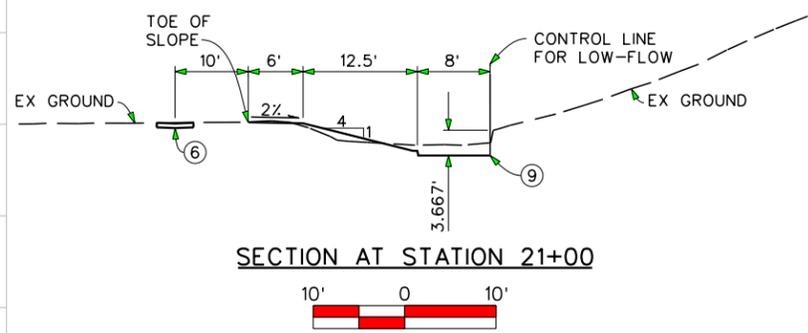
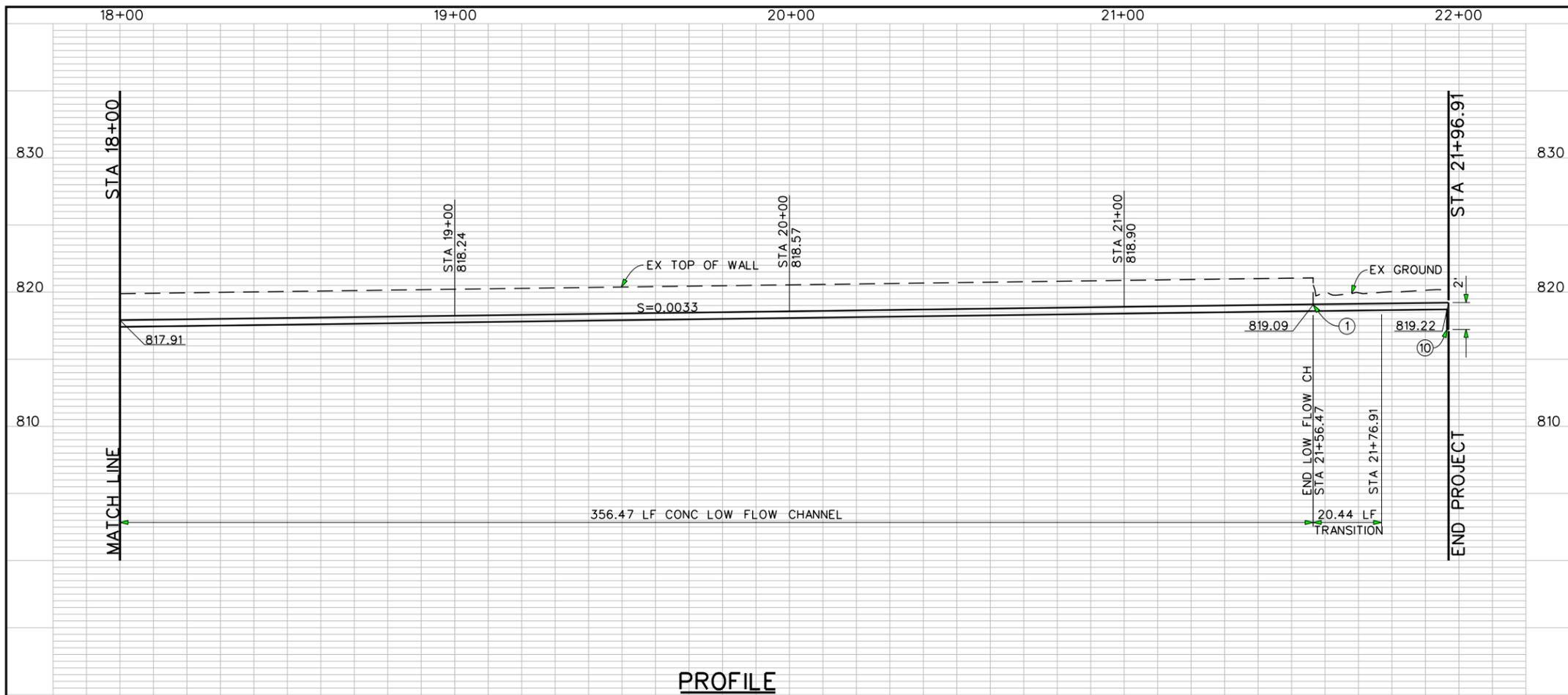
REVISIONS	
REF.	DESCRIPTION

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
DESIGNED BY: R. VASQUEZ	RECOMMENDED FOR APPROVAL BY:	APPROVED BY:
DRAWN BY: T. DECKER	SENIOR CIVIL ENGINEER	CHIEF, DESIGN & CONSTRUCTION
DATE DRAWN: FEB 2009	DATE: _____ R.E. No. 47004	DATE: _____ R.E. No. 44684

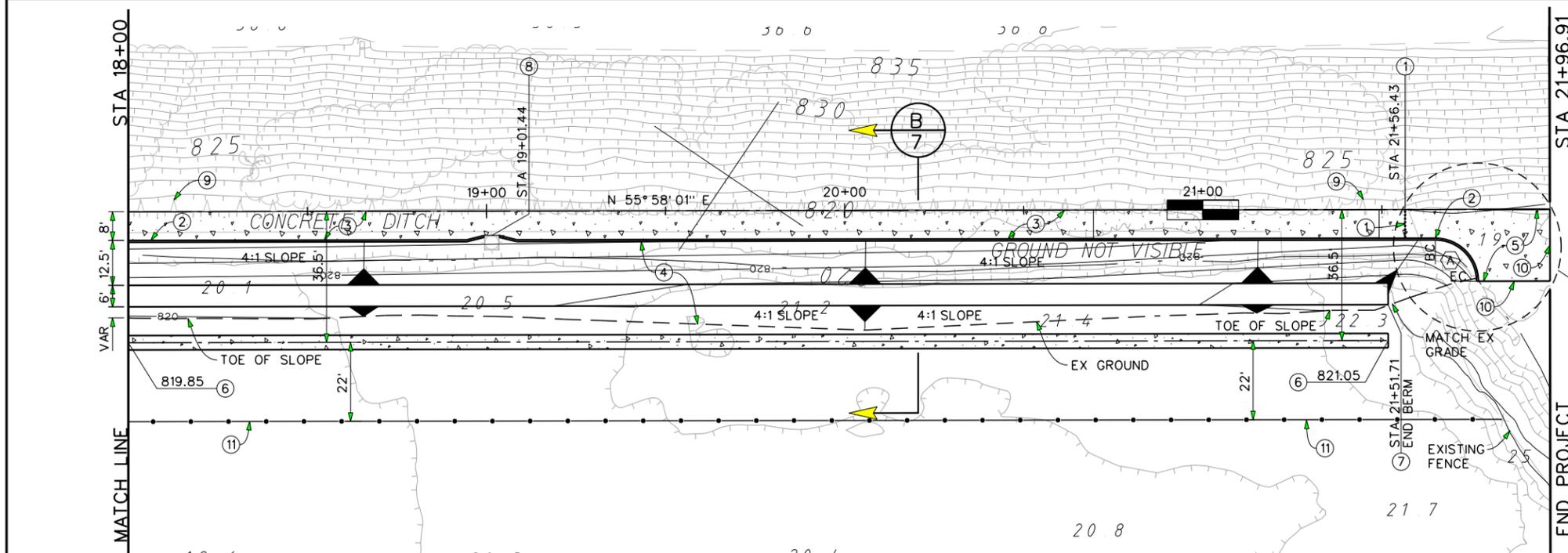
<b>MONROE MASTER DRAINAGE PLAN RETENTION BASIN REHABILITATION</b>  STA 14+00 TO STA 18+00	PROJECT NO. 1-0-0071
	DRAWING NO. 1-674
	SHEET NO. 5 OF 10



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for the location of buried utility lines.  
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TWO WORKING DAYS BEFORE YOU DIG



PROFILE



Ⓐ CURB LINE CURVE DATA

Δ	= 90° 00' 00"
R	= 12.00'
L	= 18.85'
T	= 12.00'
BC	= STA 21+64.91
EC	= STA 21+76.91
PI	= N 2280852.51 E 6206683.29

NOTES

- ① CONSTRUCT DEBRIS RACK PER DETAILS ON SHEET 9.
- ② CONSTRUCT 8" TYPE II CURB PER CITY OF RIVERSIDE STD DWG 200.
- ③ SAWCUT & REMOVE EXISTING LOW FLOW CHANNEL. REPLACE WITH 8' LOW FLOW CHANNEL. SEE SHEET 8 FOR DETAILS.
- ④ CONSTRUCT 3' HIGH BERM. SEE SHEET 7 FOR TYPICAL SECTION.
- ⑤ CONSTRUCT 6" THICK CLASS "A" CONCRETE SLAB WITH #4 REBAR @18" OC BOTH WAYS 3" CLEAR. SEE SHEET 8 FOR DETAILS.
- ⑥ CONSTRUCT 6" CONCRETE GUTTER PER CITY OF RIVERSIDE STD DWG 110.
- ⑦ END 6' WIDE BENCH AND GRADE SLOPE TO MATCH EXISTING. SLOPE NO STEEPER THAN 4:1 OR AS DIRECTED BY THE ENGINEER.
- ⑧ PROTECT IN PLACE EXISTING LIGHT. TRANSITION CURB AROUND BASE OF LIGHT PER DETAIL ON SHEET 8.
- ⑨ PROTECT IN PLACE EXISTING WALL.
- ⑩ CONSTRUCT 2' CONCRETE CUTOFF WALL PER DETAIL "B" OF STD CH326.
- ⑪ INSTALL 6' TEMPORARY CHAIN LINK FENCE.



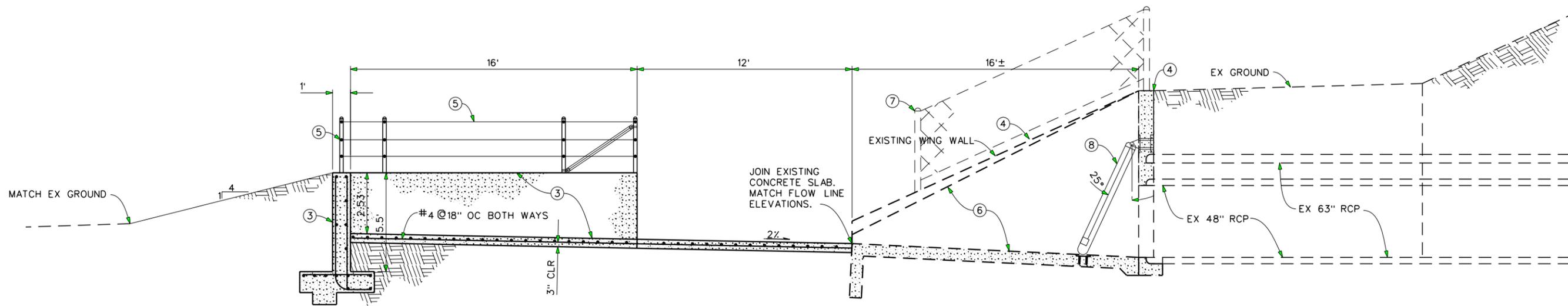
★ PRELIMINARY ★  
SUBJECT TO REVISION

PLAN

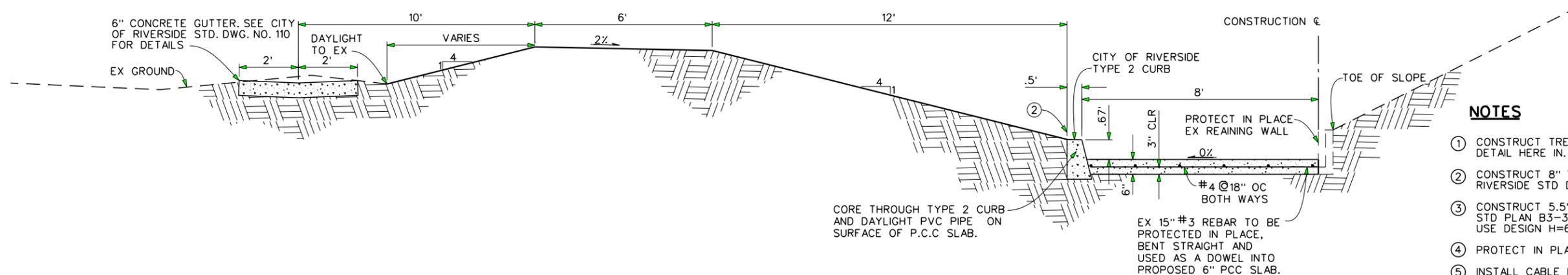
Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2600 for the location of buried utility lines. Don't disrupt vital services. TWO WORKING DAYS BEFORE YOU DIG		REVISIONS	REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
DESIGNED BY: R. VASQUEZ	RECOMMENDED FOR APPROVAL BY:	APPROVED BY:
DRAWN BY: T. DECKER	SENIOR CIVIL ENGINEER	CHIEF, DESIGN & CONSTRUCTION
DATE DRAWN: FEB 2009	DATE: _____ R.E. No. 47004	DATE: _____ R.E. No. 44684

MONROE MASTER DRAINAGE PLAN RETENTION BASIN REHABILITATION		PROJECT NO. 1-0-0071
		DRAWING NO. 1-674
		SHEET NO. 6 OF 10
STA 18+00 TO STA 21+96.91		



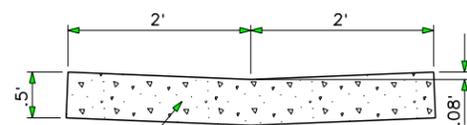
INLET/OUTLET STRUCTURE TYPICAL SECTION A  
NTS



3' BERM & TRENCH DRAIN TYPICAL SECTION B  
NTS

**NOTES**

- ① CONSTRUCT TRENCH DRAIN SYSTEM PER DETAIL HERE IN.
- ② CONSTRUCT 8" TYPE II CURB PER CITY OF RIVERSIDE STD DWG 200.
- ③ CONSTRUCT 5.5' TYPE 1A RETAINING WALL PER CALTRANS STD PLAN B3-3. SEE STD PLAN FOR REINFORCING DETAILS. USE DESIGN H=6' FOR REINFORCING STEEL DIMENSIONS DATA.
- ④ PROTECT IN PLACE EXISTING HEADWALL AND WING WALLS.
- ⑤ INSTALL CABLE RAILING PER CALTRANS STD B11-47 FOR NEW CONSTRUCTION.
- ⑥ REMOVE SPLITTER WALL. RESURFACE CONCRETE TO ORIGINAL FINISH.
- ⑦ PROTECT IN PLACE EXISTING CHAIN LINK FENCE.
- ⑧ REMOVE EXISTING DEBRIS RACK AND REPLACE WITH TRAPEZOIDAL OUTLET BARRIER PER APWA STANDARD PLAN 360-1. W<sub>H</sub>=12.5', W<sub>F</sub>=16'



6" CONCRETE GUTTER. SEE CITY OF RIVERSIDE STD DWG NO. 110 FOR DETAILS

GUTTER DRAIN DETAIL TYPICAL



★ PRELIMINARY ★

SUBJECT TO REVISION

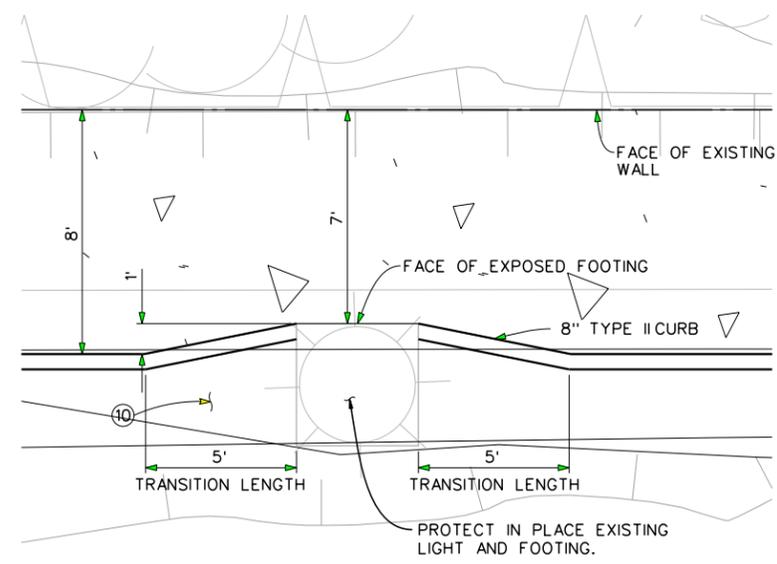
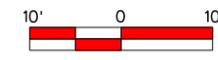
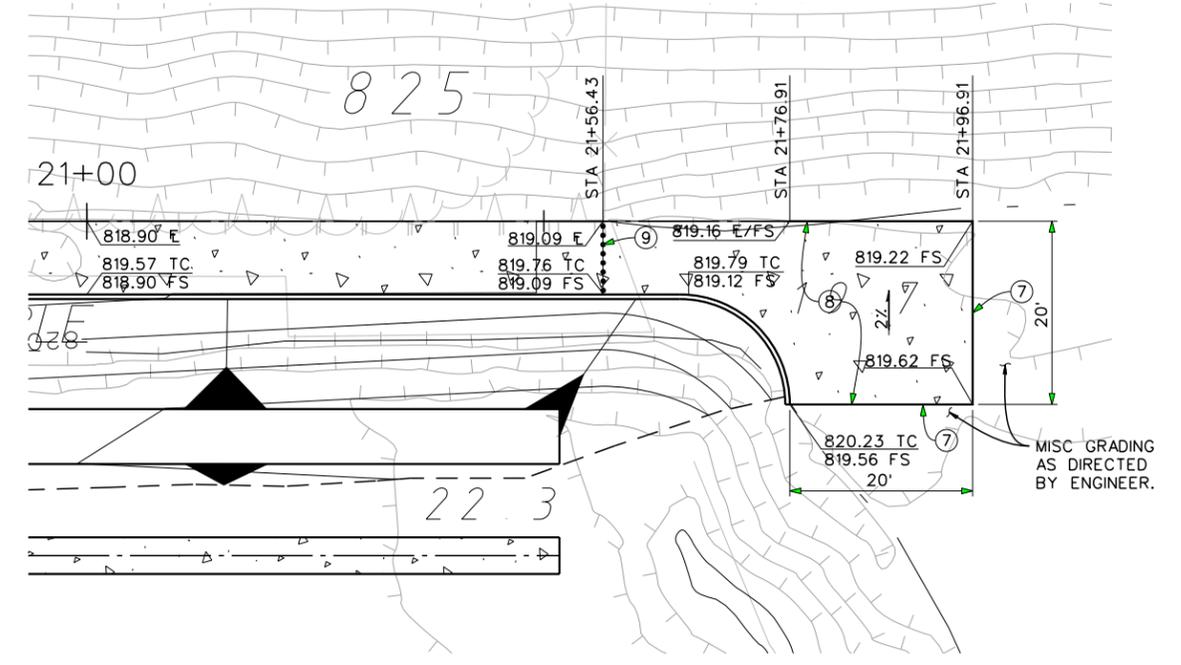
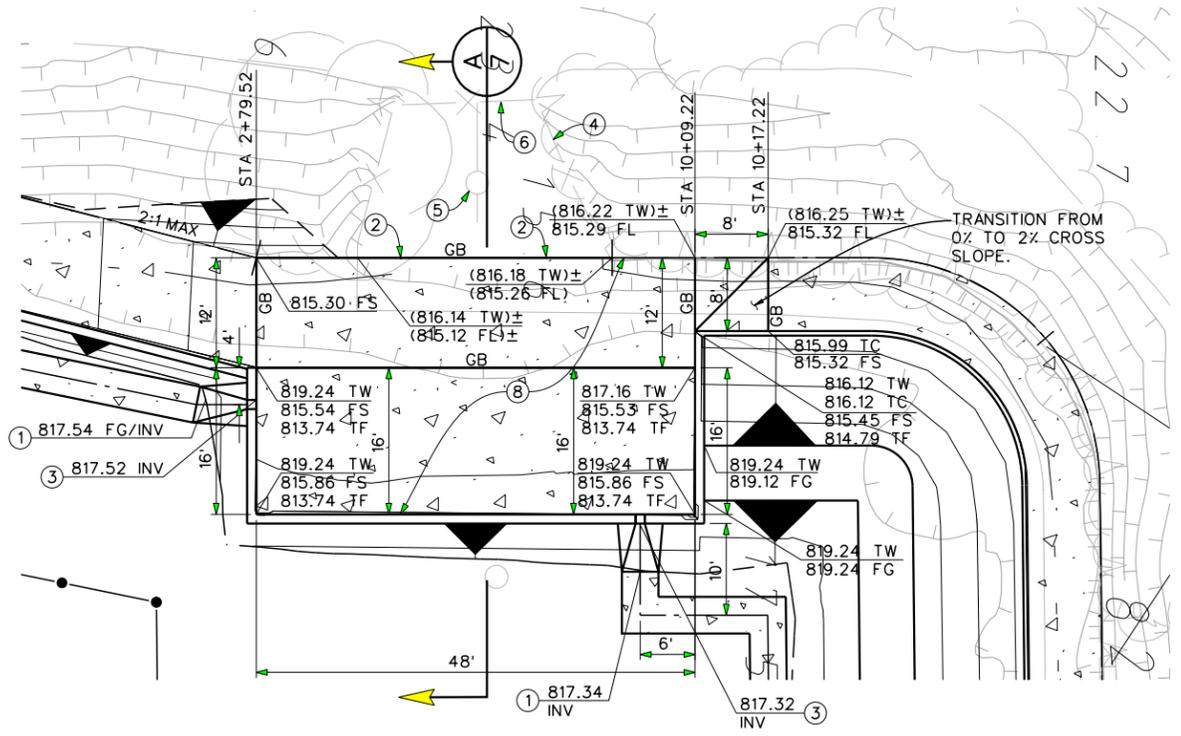
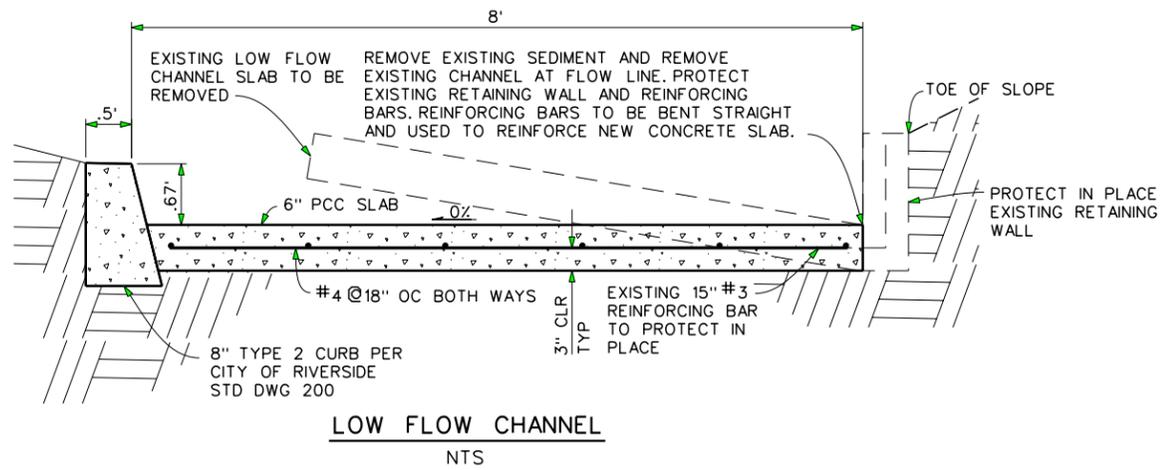
REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
DESIGNED BY: R. VASQUEZ	RECOMMENDED FOR APPROVAL BY:	APPROVED BY:
DRAWN BY: T. DECKER	SENIOR CIVIL ENGINEER	CHIEF, DESIGN & CONSTRUCTION
DATE DRAWN: FEB 2009	DATE: _____ R.E. No. 47004	DATE: _____ R.E. No. 44684

**MONROE MASTER DRAINAGE PLAN RETENTION BASIN REHABILITATION**

TYPICAL SECTIONS

PROJECT NO.	1-0-0071
DRAWING NO.	1-674
SHEET NO.	7 OF 10



- NOTES**
1. CONSTRUCT CONCRETE GUTTER TRANSITION PER DETAILS ON SHEET 10.
  2. MATCH EXISTING INVERT ELEVATION.
  3. CONSTRUCT OUTLET PER DETAILS ON SHEET 10.
  4. PROTECT IN PLACE EXISTING HEADWALL STRUCTURE.
  5. REMOVE SPLITTER WALL. RESURFACE CONCRETE TO ORIGINAL FINISH.
  6. REMOVE EXISTING DEBRIS RACK AND REPLACE WITH TRAPEZOIDAL OUTLET BARRIER PER APWA STANDARD PLAN 360-1.  $W_H = 12.5'$ ,  $W_F = 16'$
  7. CONSTRUCT 2' CUT OFF WALL PER DETAIL "B" OF STD CH326.
  8. CONSTRUCT 6" THICK CLASS "A" CONCRETE SLAB WITH #4 REBAR @18" OC BOTH WAYS (EW), 3" CLEAR.
  9. CONSTRUCT DEBRIS RACK PER DETAILS ON SHEET 9.
  10. VARY SLOPE GRADING AROUND LIGHT POLE AS DIRECTED BY THE ENGINEER.



★ **PRELIMINARY** ★  
SUBJECT TO REVISION

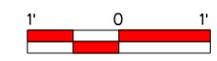
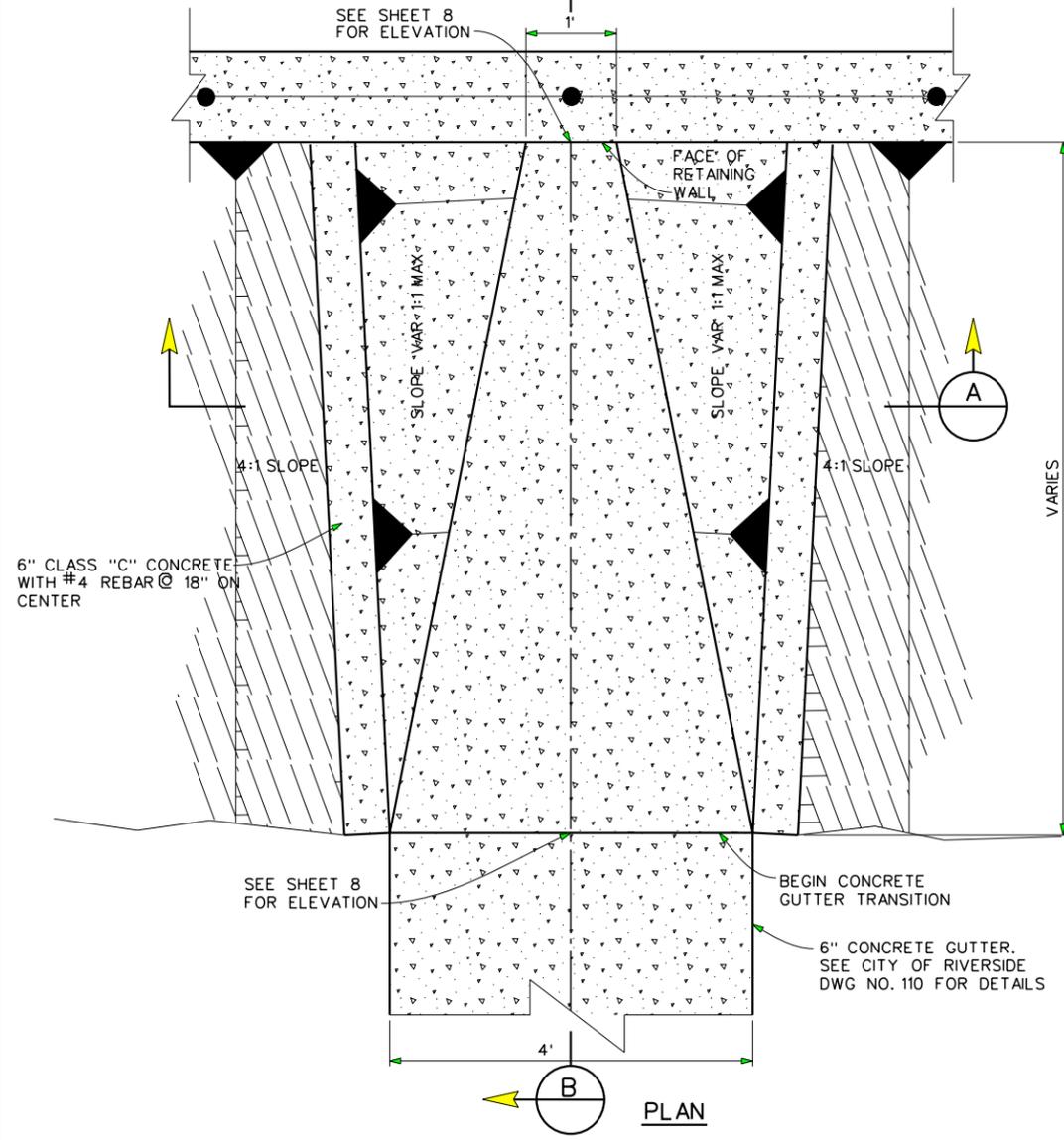
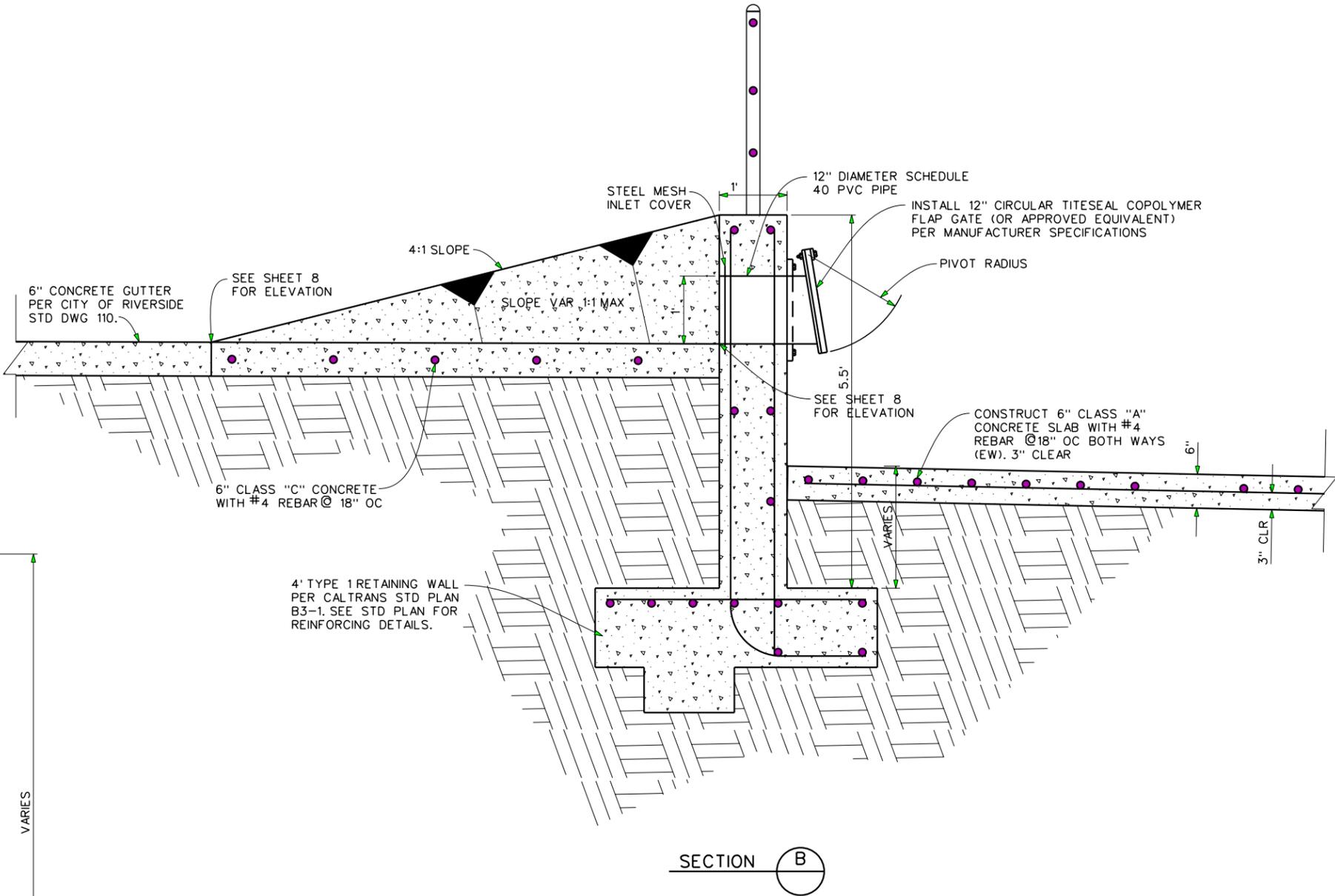
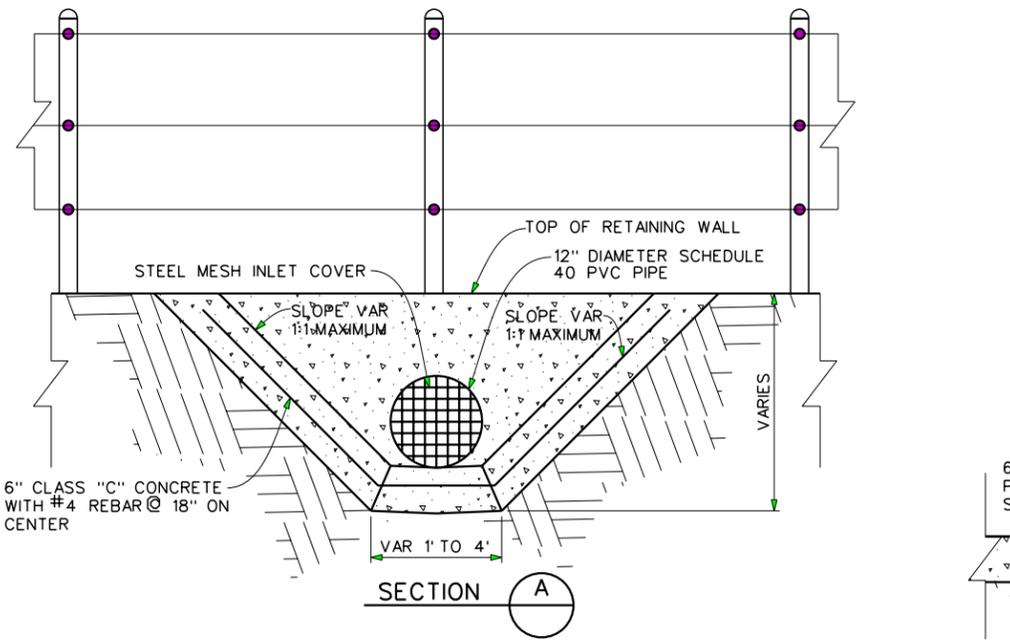
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DESIGNED BY: R. VASQUEZ	RECOMMENDED FOR APPROVAL BY:	APPROVED BY:
DRAWN BY: T. DECKER	SENIOR CIVIL ENGINEER	CHIEF, DESIGN & CONSTRUCTION
DATE DRAWN: FEB 2009	DATE: _____ R.E. No. 47004	DATE: _____ R.E. No. 44684

**MONROE MASTER DRAINAGE PLAN RETENTION BASIN REHABILITATION**  
MISCELLANEOUS DETAILS

PROJECT NO. 1-0-0071  
DRAWING NO. 1-674  
SHEET NO. 8 OF 10





★ PRELIMINARY ★  
SUBJECT TO REVISION

REF.	DESCRIPTION	APPR.	DATE

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		
DESIGNED BY: R. VASQUEZ	RECOMMENDED FOR APPROVAL BY:	APPROVED BY:
DRAWN BY: T. DECKER	SENIOR CIVIL ENGINEER	CHIEF, DESIGN & CONSTRUCTION
DATE DRAWN: FEB 2009	DATE: _____ R.E. No. 47004	DATE: _____ R.E. No. 44684

**MONROE MASTER DRAINAGE  
PLAN RETENTION BASIN  
REHABILITATION**

MISCELLANEOUS DETAILS

PROJECT NO. 1-0-0071
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