

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

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PLAN & PROFILE
CORSON AVE LATERALS
CONNECTOR PIPE PROFILES
ACCESS ROAD PLAN & PROFILE
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TRAFFIC CONTROL PLAN

R.C.F.C. & W.C.D. STANDARD DRAWING

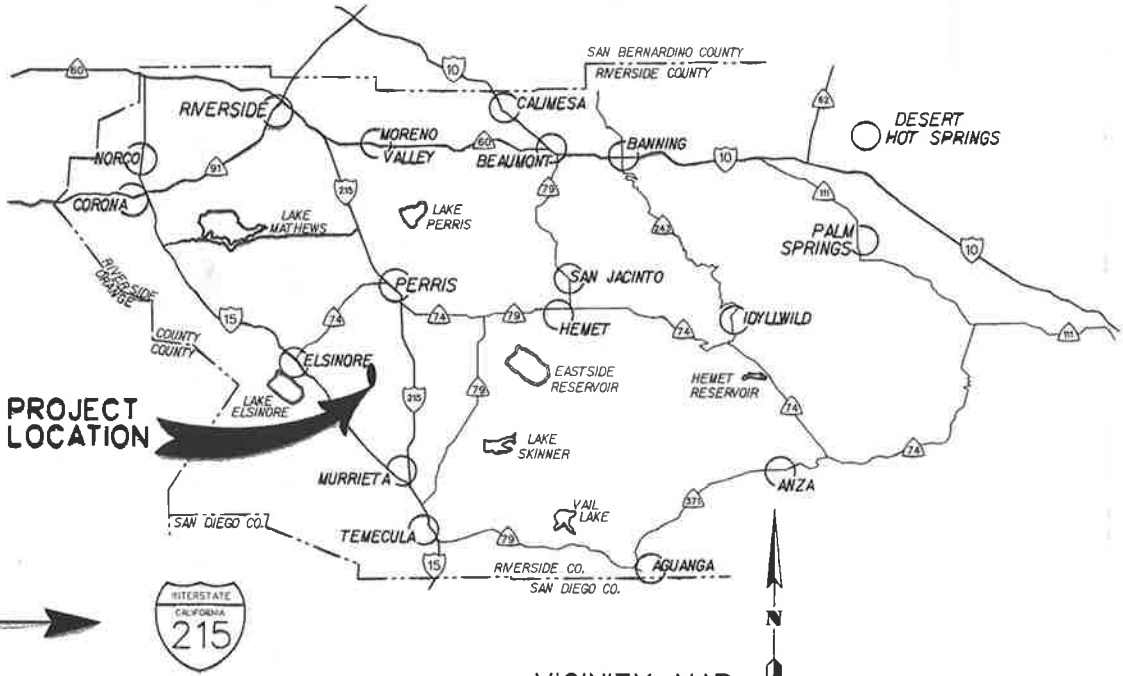
- CB103 MANHOLE FRAME AND COVER
- CB110 CONCRETE DROP INLET
- JS229 JUNCTION STRUCTURE NO. 4
- MH252 MANHOLE NO. 2
- MH254 MANHOLE NO. 4
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- M803 CONCRETE COLLAR FOR PIPE 12" THROUGH 66"
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- M815 BEDDING AND PAY LINES
- M816 CONCRETE BULKHEAD

CALTRANS STANDARD DRAWINGS

- A73A MARKERS
- B11-47 CABLE RAILING
- D89 PIPE HEADWALLS
- D90 PIPE CULVERT HEADWALLS, ENDWALLS AND WINGWALLS

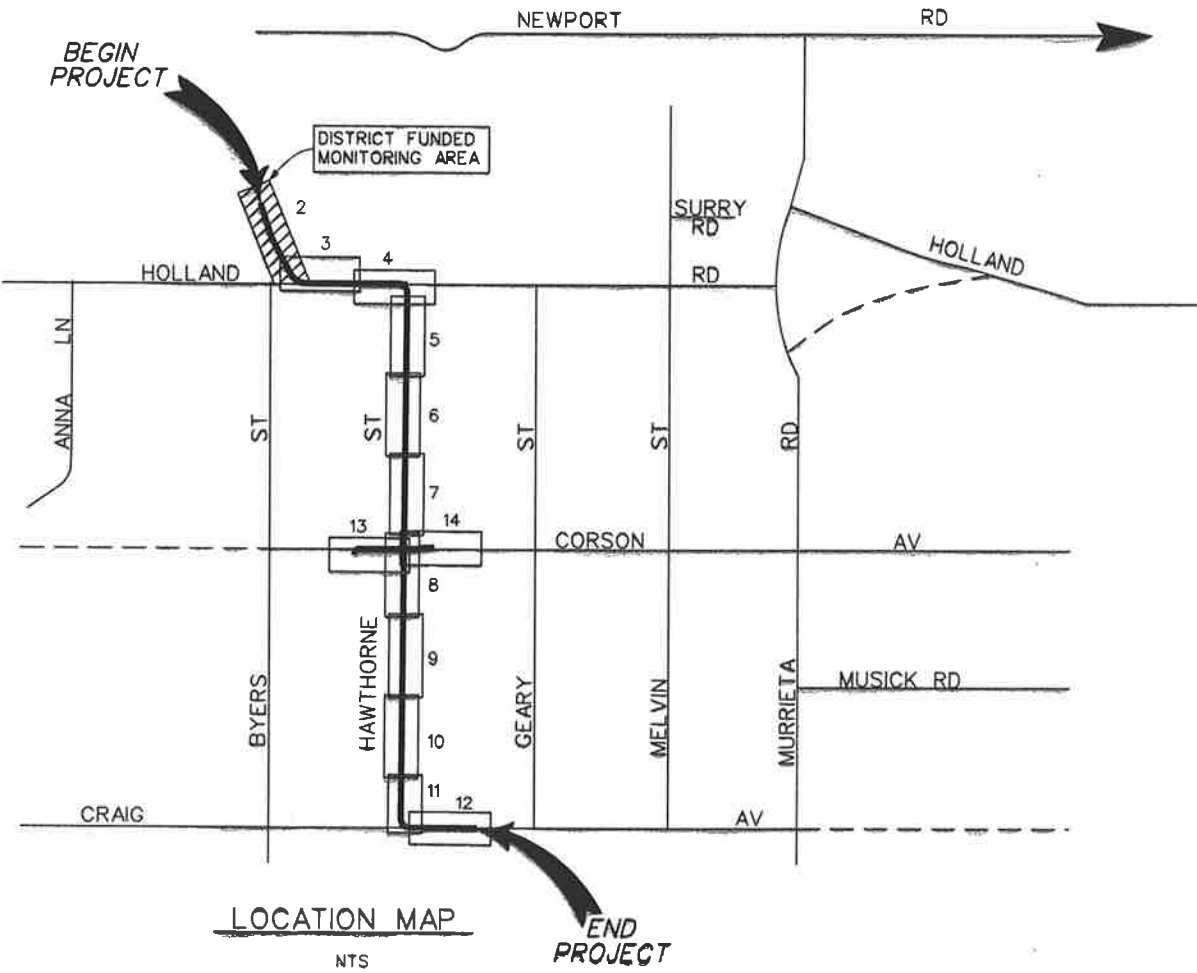
APWA STANDARDS

- 360-1 SLOPED PROTECTION BARRIER



GENERAL NOTES

1. BEDDING AND PAYLINES ARE SHOWN ON RCFC STANDARD DRAWING M815 UNLESS SHOWN OTHERWISE ON THESE PLANS.
2. ALL STATIONING REFERS TO CENTERLINE OF CONSTRUCTION.
3. ALL CHANNEL/STORM DRAIN REFERENCES AND CROSS SECTIONS ARE TAKEN LOOKING DOWNSTREAM.
4. 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 06-30-2004.
5. THE VERTICAL DATUM IS DERIVED FROM NAVD 88. THE HORIZONTAL DATUM IS DERIVED FROM NAD 83.
6. STANDARD DRAWINGS CALLED FOR ON THE PLAN & PROFILE SHALL CONFORM TO LATEST EDITION RCFC & WCD STD DRAWINGS, OR CALTRANS COUNTY STANDARD PLANS.
7. 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.
8. THE CONTRACTOR IS REQUIRED TO CONTACT ALL UTILITY AGENCIES REGARDING TEMPORARY SUPPORT AND SHORING REQUIREMENTS FOR THE VARIOUS UTILITY LINES SHOWN ON THESE PLANS.
9. 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.
10. 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 (FOR PAVED SECTIONS ONLY).
11. 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.
12. ● INDICATES APPROX. SOIL BORING LOCATION PER SOILS REPORT DATED 08/31/07.



CITY OF MENIFEE

APPROVED BY: *Donald R. Allison* 02/04/2010
DONALD R. ALLISON PCE 19466
DIRECTOR OF PUBLIC WORKS/CITY ENGINEER

RECOMMENDED BY: *Mark Smith* 01/28/2010
DATE:



BENCH MARK
B.M. NO. Z-11242
1" IPW/LS3962 TAG, DN 0.70',
INTERSECTION OF CORSON AVE
AND BYERS ST.
1486.348 EL.

REVISIONS		
REF.	DESCRIPTION	APPR. DATE

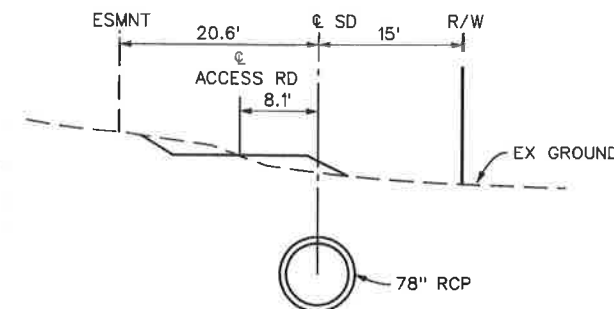
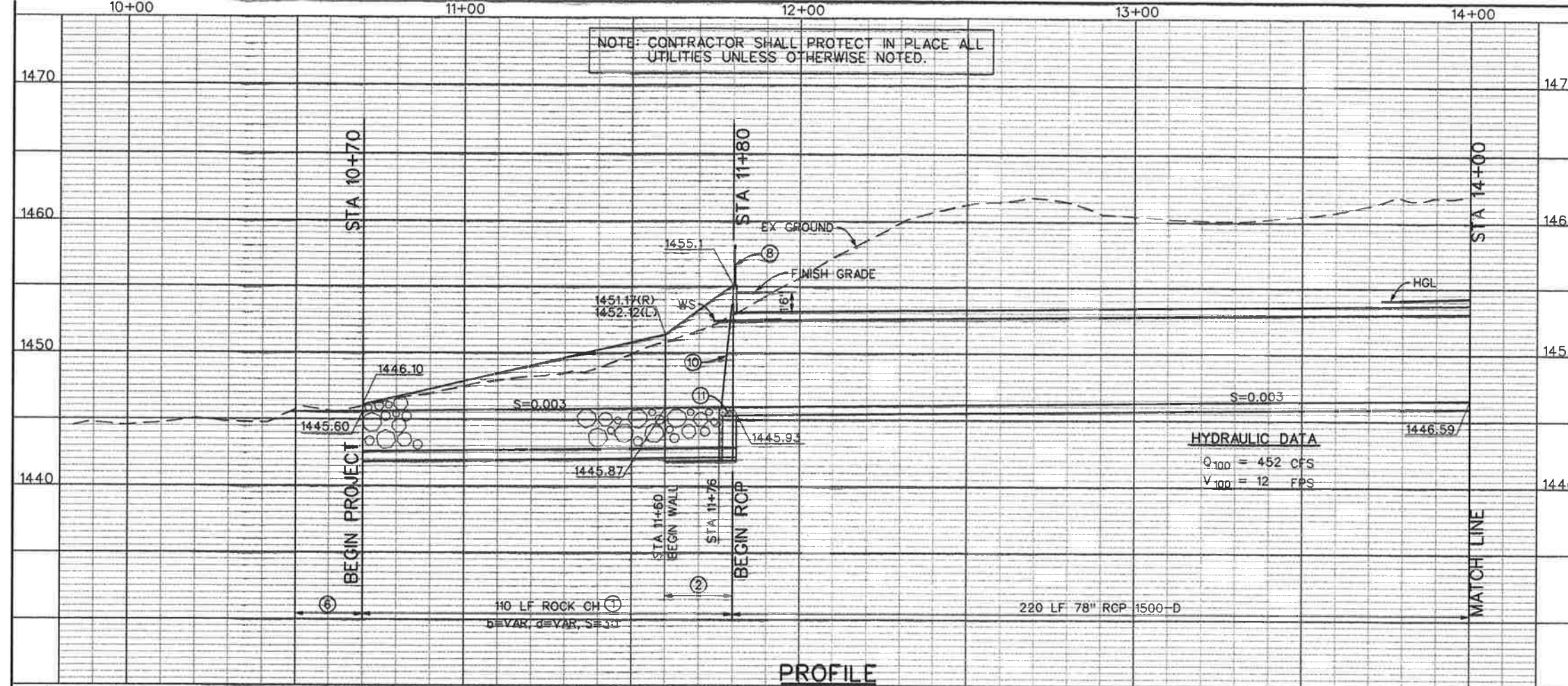
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DESIGNED BY: D. MUAREGA
DRAWN BY: T. DECKER
DATE DRAWN: JAN 2010

RECOMMENDED FOR APPROVAL BY: *Robert J. Cullen*
CHIEF, DESIGN & CONSTRUCTION
DATE: 2-2-10 R.E. No. 44684

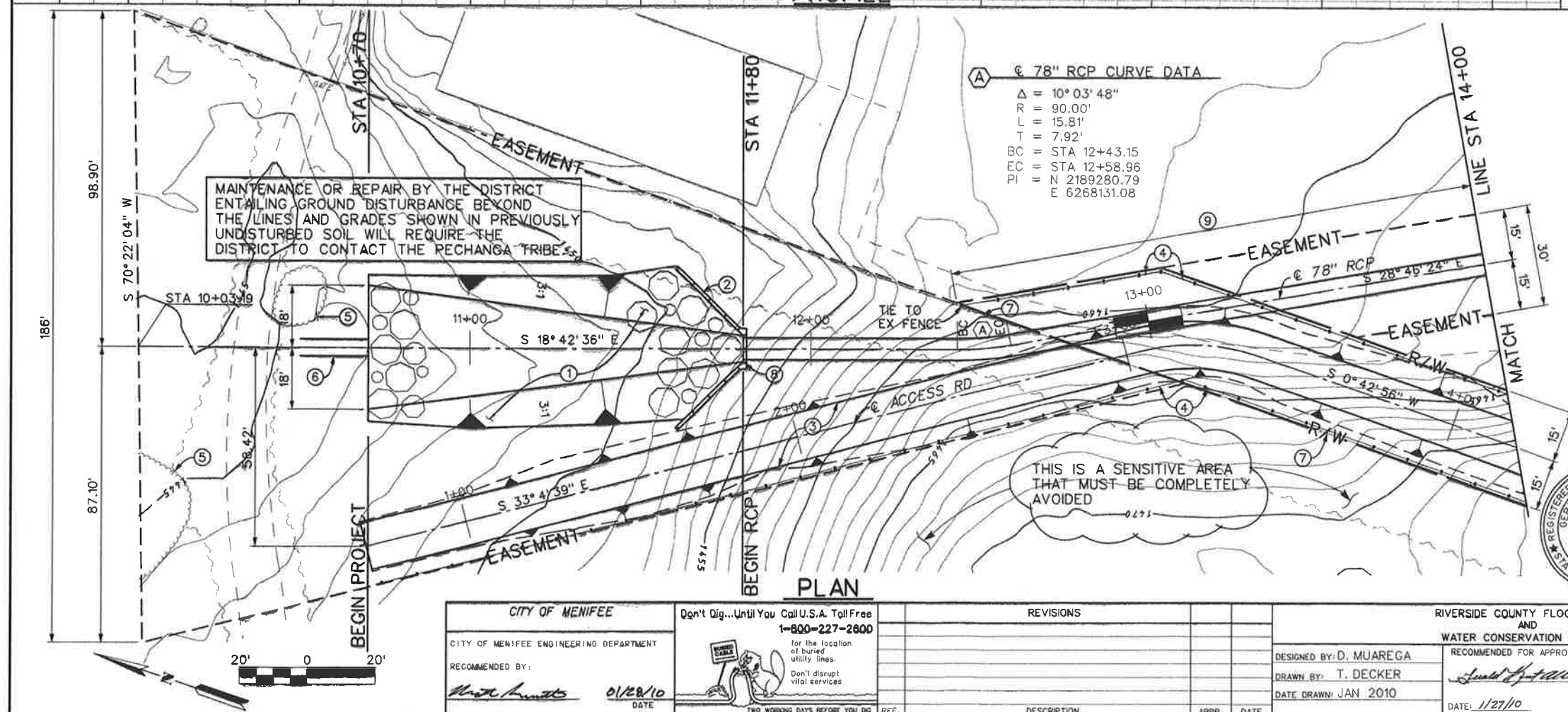
APPROVED BY: *Warren D. Williams*
CHIEF ENGINEER
DATE: 2/16/10 R.E. No. 32336

MENIFEE-HAWTHORNE
AVENUE STORM DRAIN
STAGE 1
TITLE SHEET



NOTES

- PLACE 36" THICK ROCK SLOPE PROTECTION 1/4 TON CLASS OVER 9" FILTER BLANKET NO. 2 BACKING CLASS AND FILTER FABRIC. SEE SECTIONS ON SHEET 18.
- CONSTRUCT PIPE CULVERT HEADWALL AND WING WALLS TYPE A PER CALTRANS STD D90. SEE LAYOUT SHEET 18.
- SEE SHEET 17 FOR ACCESS ROAD PLAN AND PROFILE.
- INSTALL 6' CHAIN LINK FENCE PER STD M801.
- WARNING-CONTRACTOR SHALL PROTECT BUSHES IN PL
- GRADE 5' WIDE DITCH TO DRAIN, AS DIRECTED BY ENGR
- REMOVE EXISTING FENCE.
- INSTALL 3' CABLE RAILING PER CALTRANS STD B11-47.
- INSTALL 6' TEMPORARY CHAIN LINK FENCE.
- CONSTRUCT SLOPED PROTECTION BARRIER PER APWA STD PLAN 360-1 AND DETAILS ON SHEET 19.
- CONSTRUCT A 12" WIDE X 3'9" DEEP CLASS "B" CONC BEARING SUPPORT AND 8" THICK SLAB PER DETAILS ON SHEET 19.



CITY OF MENIFEE

CITY OF MENIFEE ENGINEERING DEPARTMENT

RECOMMENDED BY: *[Signature]*

DATE: 01/28/10

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2800

for the location of buried utility lines. Don't disrupt vital services

TWO WORKING DAYS BEFORE YOU DIG

REVISIONS

NO.	DESCRIPTION	DATE

DESIGNED BY: D. MUAREGA

DRAWN BY: T. DECKER

DATE DRAWN: JAN 2010

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

RECOMMENDED FOR APPROVAL BY: *[Signature]*

DATE: 1/27/10

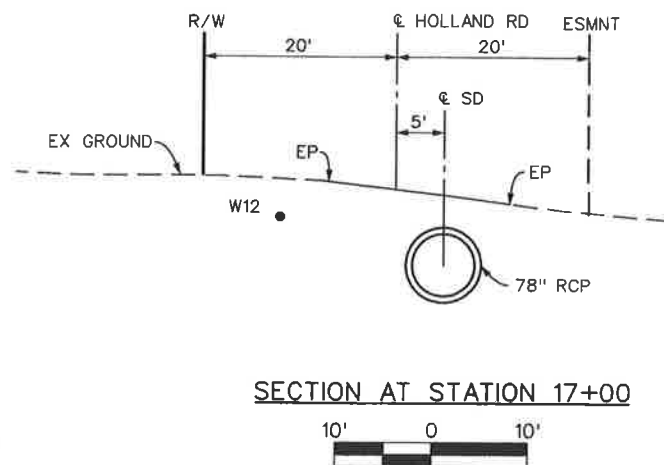
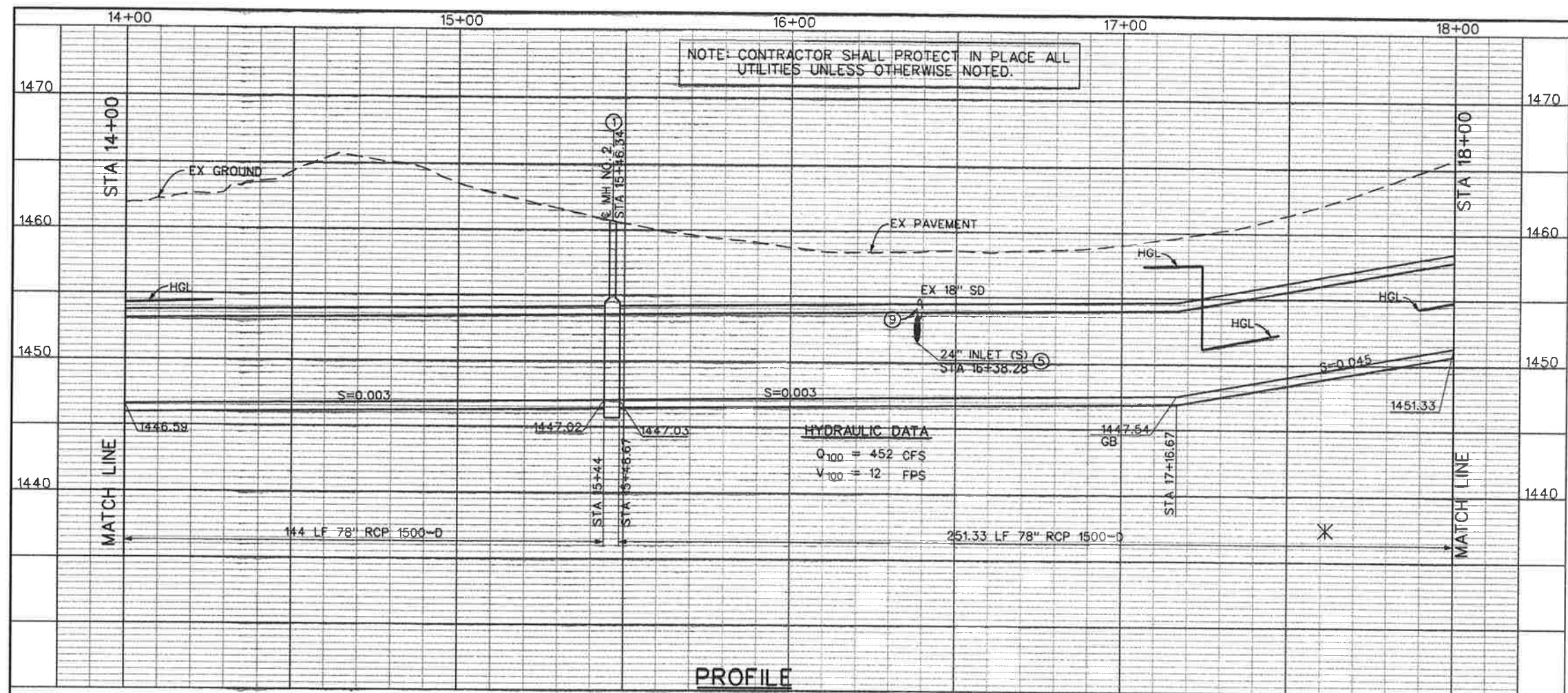
APPROVED BY: *[Signature]*

DATE: 28-JAN-2010

MENIFEE-HAWTHORNE AVENUE STORM DRAIN

STAGE 1

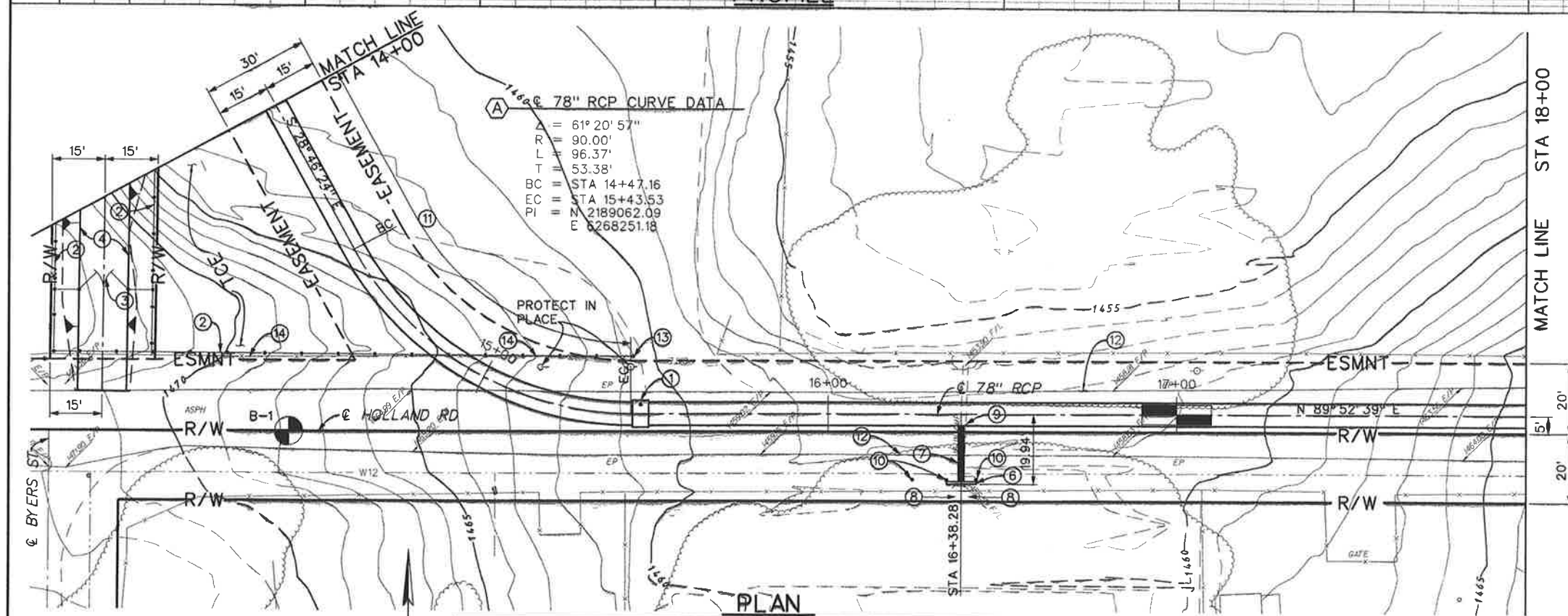
STA 10+70 TO STA 14+00



* FROM STA 17+00 TO STA 22+25.34 THE CONCRETE PIPE THICKNESS MUST BE INCREASED TO PROVIDE A MINIMUM OF 1-1/2" COVER OVER THE REINFORCING ST. THE CONCRETE DESIGN STRENGTHS ON THESE REACHES SHALL BE $f'_c = 5,000$ PSI.

NOTES

- ① CONSTRUCT MH NO. 2 PER STD MH252.
- ② INSTALL 6' CHAIN LINK FENCE PER STD M801.
- ③ INSTALL 14' DOUBLE DRIVE GATE PER STD M801.
- ④ SEE SHEET 17 FOR ACCESS ROAD PLAN AND PROFILE.
- ⑤ CONSTRUCT JS NO. 4 PER STD JS229.
- ⑥ CONSTRUCT PIPE CULVERT STRAIGHT HEADWALL PER CALTRANS STD D89.
- ⑦ CONSTRUCT 18 LF 24" RCP CL IV. SEE SHEET 15 FOR PROFILE.
- ⑧ GRADE TO DRAIN. AS DIRECTED BY ENGINEER.
- ⑨ REMOVE EXISTING 18" STORM DRAIN.
- ⑩ INSTALL 3 OBJECT MARKERS TYPE L-2 PER CALTRANS STD A73A AT EACH DROP INLET AS DIRECTED BY THE ENGINEER.
- ⑪ INSTALL 6' TEMPORARY CHAIN LINK FENCE ALONG EASEMENT LINE.
- ⑫ TRIM EX TREES AS REQUIRED.
- ⑬ JOIN EX FENCE.
- ⑭ REMOVE EX CHAIN LINK FENCE.



CITY OF MENIFEE
CITY OF MENIFEE ENGINEERING DEPARTMENT
RECOMMENDED BY: *[Signature]*
DATE: 01/28/10

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2800
for the location of buried utility lines.
Don't disrupt vital services.
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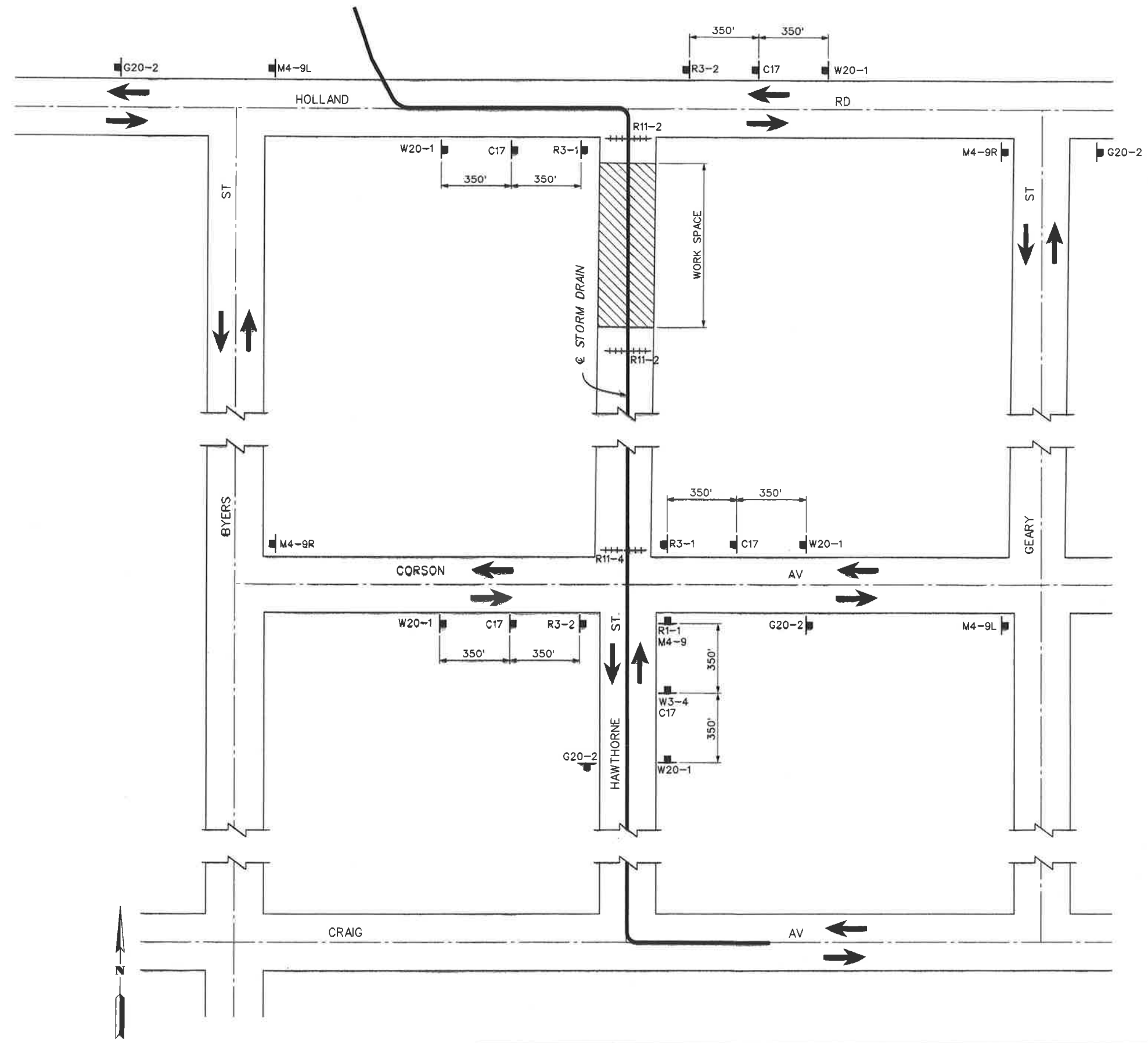
REVISIONS	DESCRIPTION	APPR.	DATE

DESIGNED BY: D. MUAREGA
DRAWN BY: T. DECKER
DATE DRAWN: JAN 2010

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: *[Signature]*
DATE: 1/27/10

APPROVED BY: *[Signature]*
DATE: 28/1/10

MENIFEE-HAWTHORNE AVENUE STORM DRAIN
STAGE 1
STA 14+00 TO STA 18+00



LEGEND

- CONSTRUCTION SIGNS
- +++ TYPE III BARRICADE
- ← DIRECTION OF TRAVEL
- ▨ CONSTRUCTION AREA
- ⚡ FLASHING ARROW SIGN

- C17 ROAD WORK SPEED LIMIT 25
- G20-2 END ROAD WORK
- M4-9 DETOUR
- M4-9R DETOUR RIGHT
- M4-9L DETOUR LEFT
- R1-1 STOP
- R3-1 NO RIGHT TURN
- R3-2 NO LEFT TURN
- R11-2 ROAD CLOSED
- R11-4 ROAD CLOSED TO THRU TRAFFIC
- W3-4 BE PREPARED TO STOP
- W20-1 ROAD WORK AHEAD

NOTES

1. THESE ARE THE MINIMUM TRAFFIC CONTROL REQUIREMENTS. TRAFFIC CONTROL MAY BE REQUIRED TO FACILITATE PUBLIC SAFETY AND TRAFFIC FLOW IF DEEMED NECESSARY BY THE ENGINEER OR RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT.
2. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2003 EDITION AND THE MUTCD 2006 CALIFORNIA SUPPLEMENT, LATEST ADDITIONS AND WITH ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL AGENCIES.
3. FLASHING YELLOW BEACONS, TYPE B, SHALL ILLUMINATE ALL W20-1 SIGNS AND TYPE III BARRICADES USED AT THE WORK ZONE DURING HOURS OF DARKNESS.
4. ALL TRENCHES SHALL BE BACK FILLED OR PLATED AT THE END OF EACH WORK DAY.
5. PRIVATE PROPERTY AND EMERGENCY ACCESS SHALL BE MAINTAINED AT ALL TIMES.

TYPICAL HAWTHORNE STREET CLOSURE SIGNING
NTS

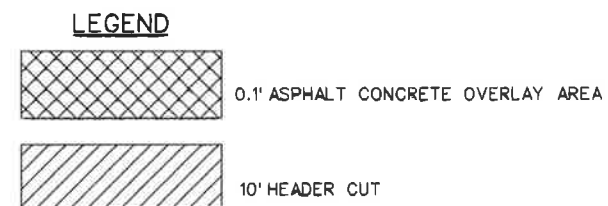
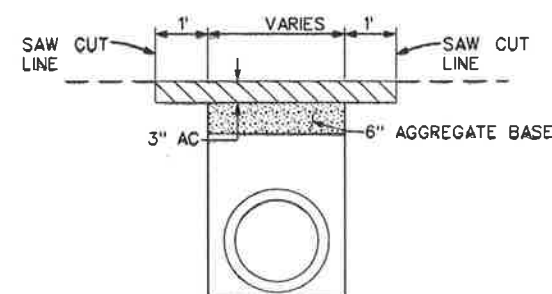
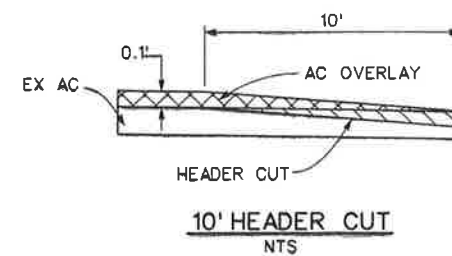
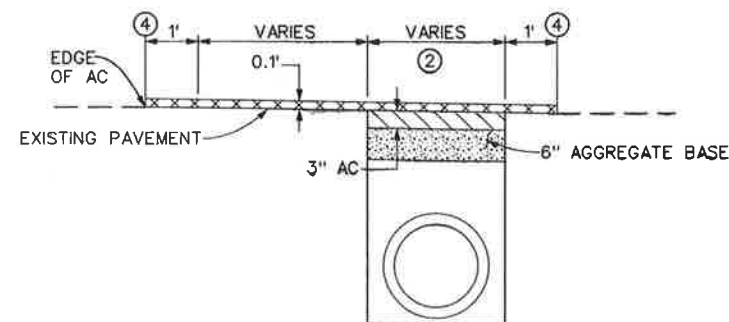
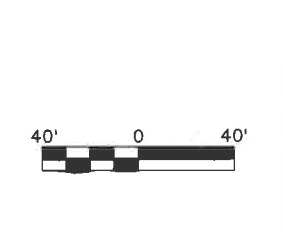
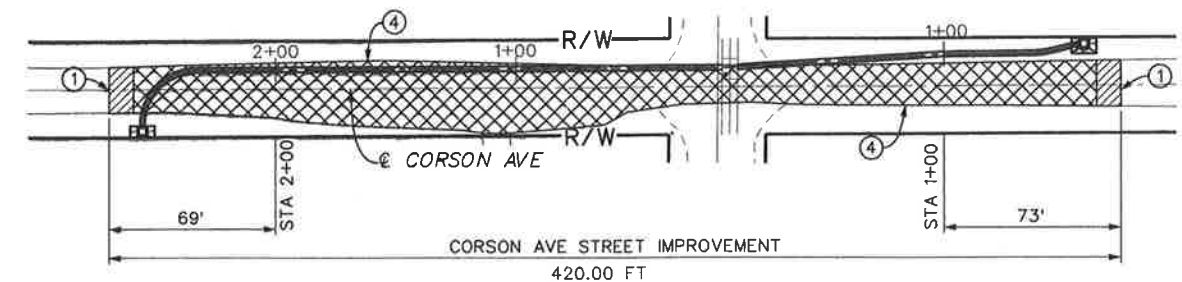
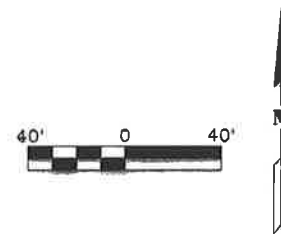
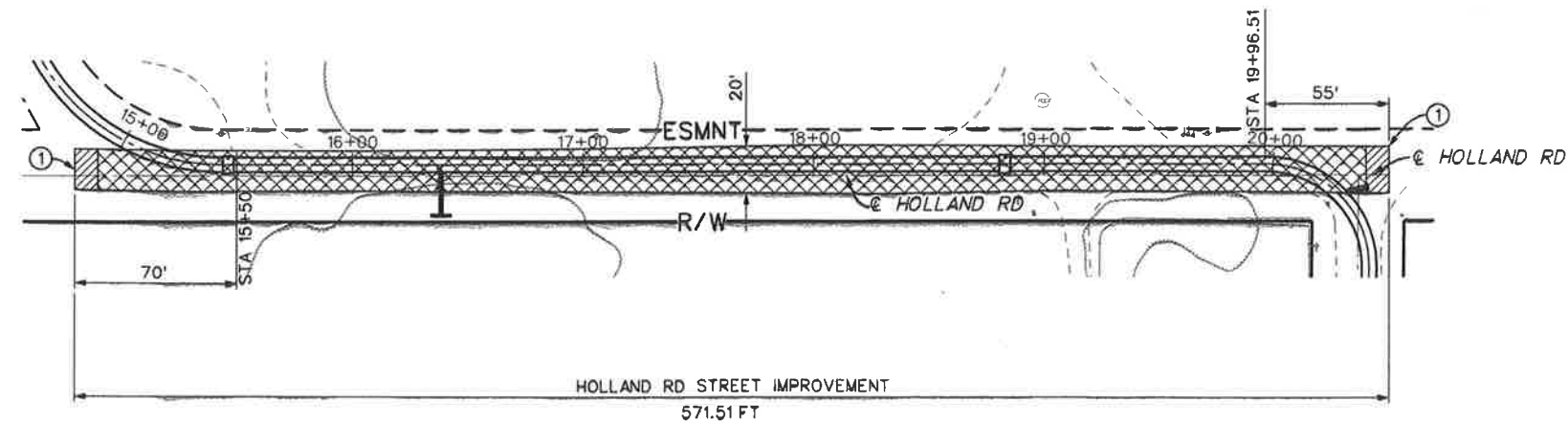


CITY OF MENIFEE		REVISIONS		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
CITY OF MENIFEE ENGINEERING DEPARTMENT				DESIGNED BY: D. MUAREGA	
RECOMMENDED BY:				RECOMMENDED FOR APPROVAL BY:	
<i>[Signature]</i> 01/28/10				<i>[Signature]</i>	
DATE				DATE DRAWN: JAN 2010	
REF.	DESCRIPTION	APPR.	DATE	DATE: 1/27/10	APPROVED BY: <i>[Signature]</i>
					DATE: 20-Jan 2010

MENIFEE-HAWTHORNE AVENUE STORM DRAIN

STAGE 1

TRAFFIC CONTROL



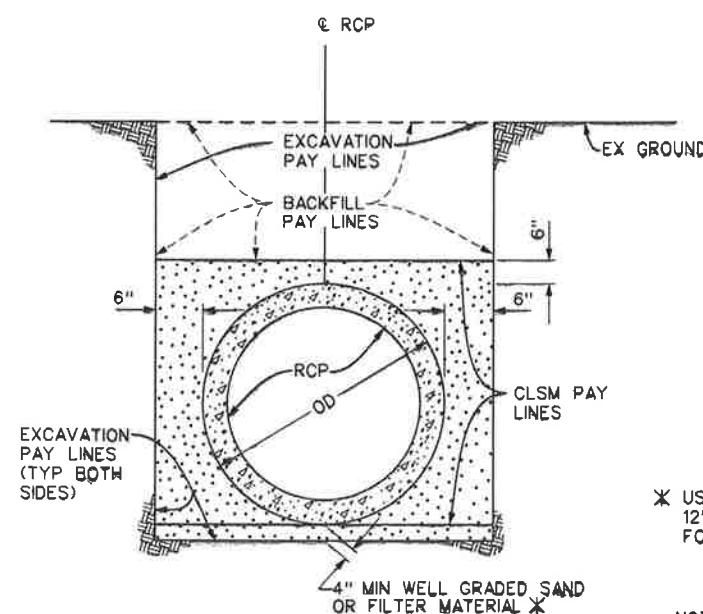
NOTES

- 10' HEADER CUT.
- WITHIN TRENCH LIMITS, MINIMUM STREET RECONSTRUCTION SHALL BE 3" CONCRETE TYPE "B" OVER 6" AGGREGATE BASE.
- PROTECT IN PLACE ALL MANHOLES / VALVES. ADJUST TO GRADE AS SHOWN.
- PAVING SHALL EXTEND TO EDGE OF EXISTING PAVEMENT.
- REPLACE ALL DISTURBED STRIPING, YELLOW CENTER LINE, WHITE EDGE LINES AND REFLECTIVE PAVEMENT.
- ALL SIGNING, STRIPING AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH SECTION 84 OF THE CALTRANS STANDARD SPECIFICATIONS (LATEST EDITIONS) AND WITH ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL LAWS.



CITY OF MENIFEE		REVISIONS		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
CITY OF MENIFEE ENGINEERING DEPARTMENT				DESIGNED BY: D. MUAREGA	
RECOMMENDED BY: <i>[Signature]</i>				DRAWN BY: T. DECKER	
DATE: 01/28/10				DATE DRAWN: JAN 2010	
REF.	DESCRIPTION	APPR.	DATE	DATE: 1/27/10	APPROVED BY: <i>[Signature]</i>
				DATE: 20 Jan 2010	

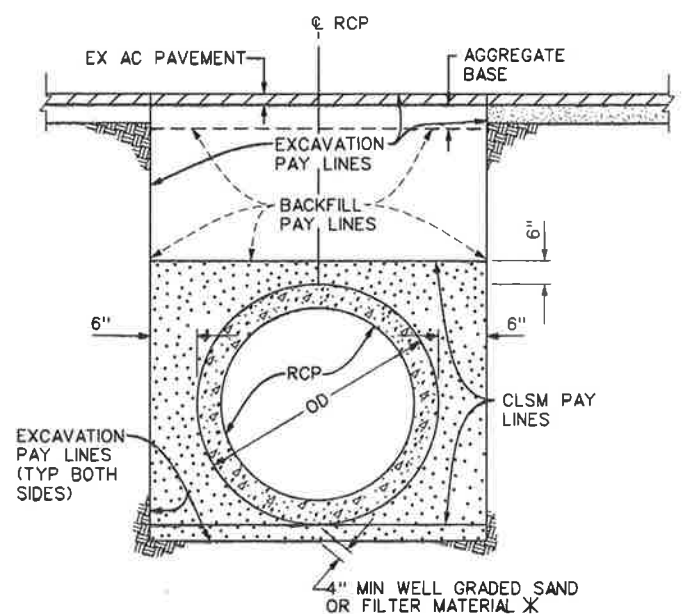
**MENIFEE-HAWTHORNE
AVENUE STORM DRAIN
STAGE 1
STREET IMPROVEMENT PLAN**



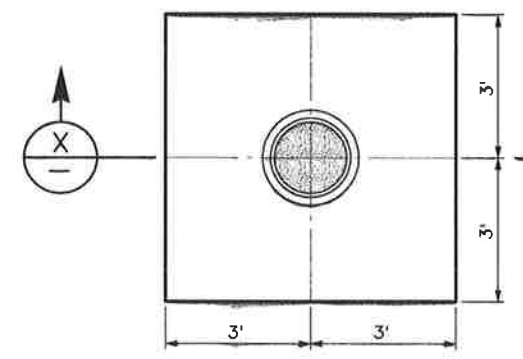
**RCP BEDDING & PAY LINES
WHERE THERE IS NO PAVEMENT**
NTS

* USE 9" THICK TYPICAL,
12" MAX FILTER MATERIAL
FOR GROUND WATER CONDITION.

NOTE:
GROUND OR PAVEMENT SURFACE
ELEVATIONS WILL BE ESTABLISHED
BY FIELD SURVEYS.

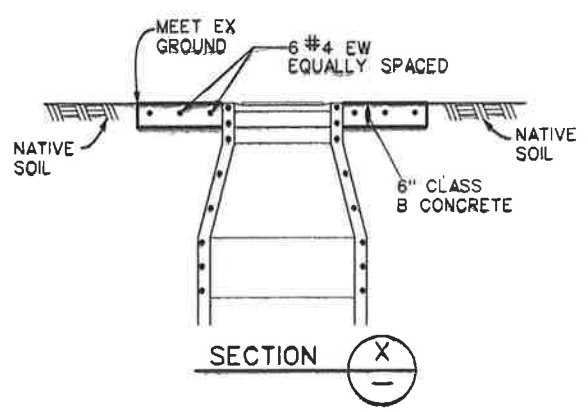


**RCP BEDDING & PAY LINES
WHERE THERE IS PAVEMENT**
NTS

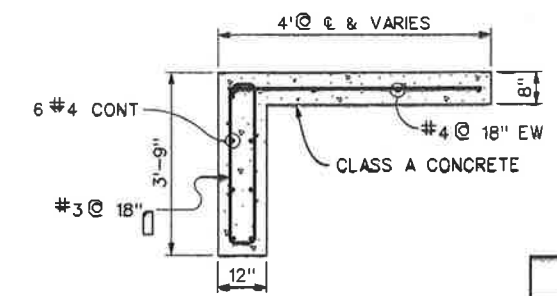


PLAN VIEW

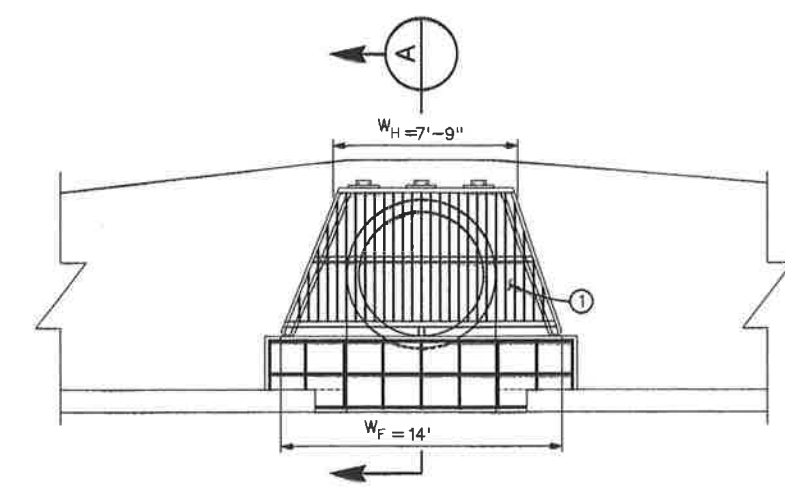
CONCRETE PAD DETAIL
NTS



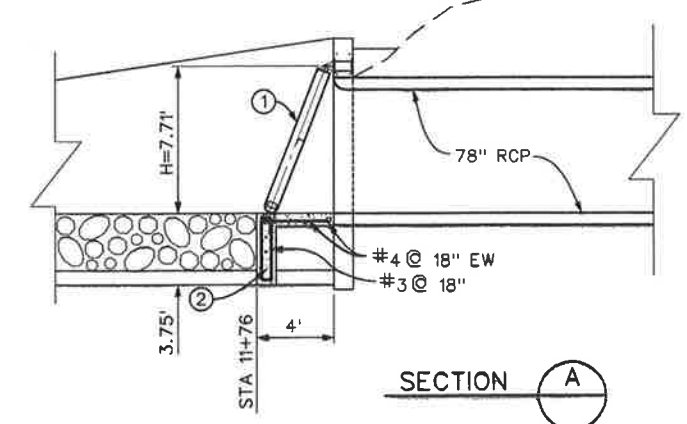
SECTION X-X



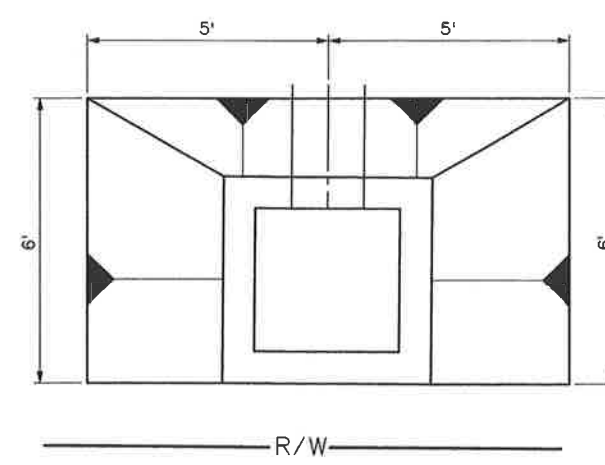
DETAIL C



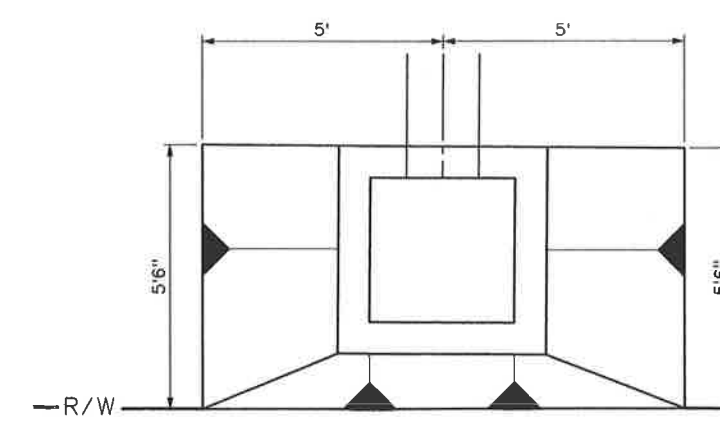
SLOPED PROTECTION BARRIER
NTS



SECTION A-A



CONCRETE APRON DETAIL "B"
NTS



CONCRETE APRON DETAIL "A"
NTS

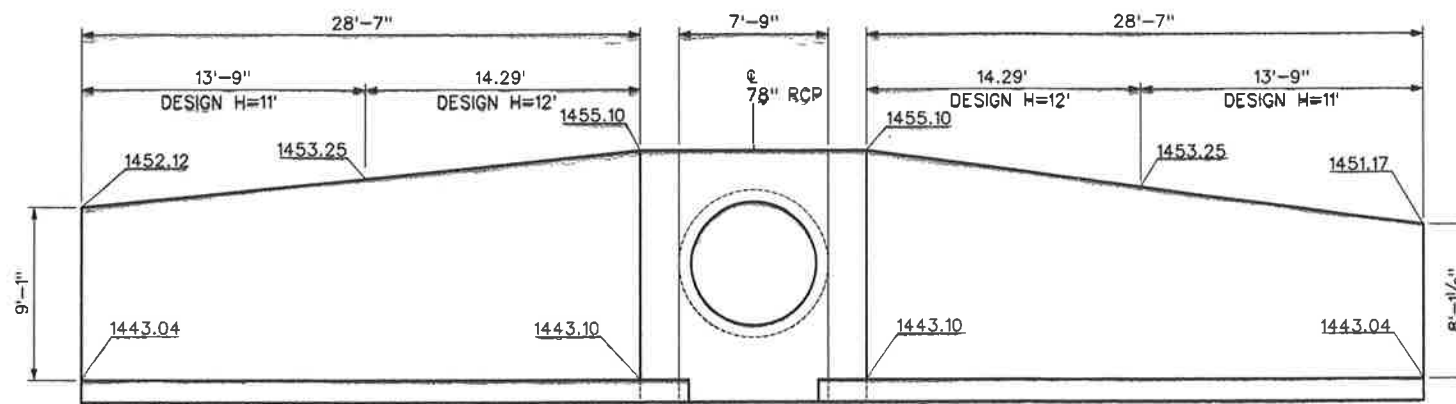
NOTES

- ① CONSTRUCT SLOPED PROTECTION PER APWA STANDARD PLAN 360-
- ② CONSTRUCT CONCRETE SUPPORT THICK SLAB PER DETAIL "C".



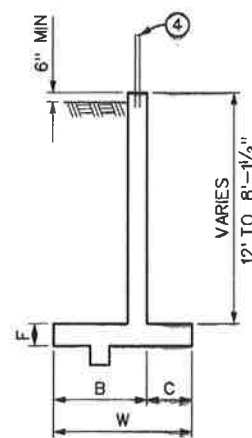
CITY OF MENIFEE		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
CITY OF MENIFEE ENGINEERING DEPARTMENT		DESIGNED BY: D. MUAREGA	
RECOMMENDED BY: <i>Mark Lando</i>		DRAWN BY: T. DECKER	
DATE: 01/18/10		DATE DRAWN: JAN 2010	
REF.		DATE: 1/22/10	
DESCRIPTION		APPROVED BY: <i>Robert J. Cullen</i>	
APPR.		DATE: 2-1-2010	
DATE			

**MENIFEE-HAWTHORNE
AVENUE STORM DRAIN**
STAGE 1
MISCELLANEOUS DETAILS



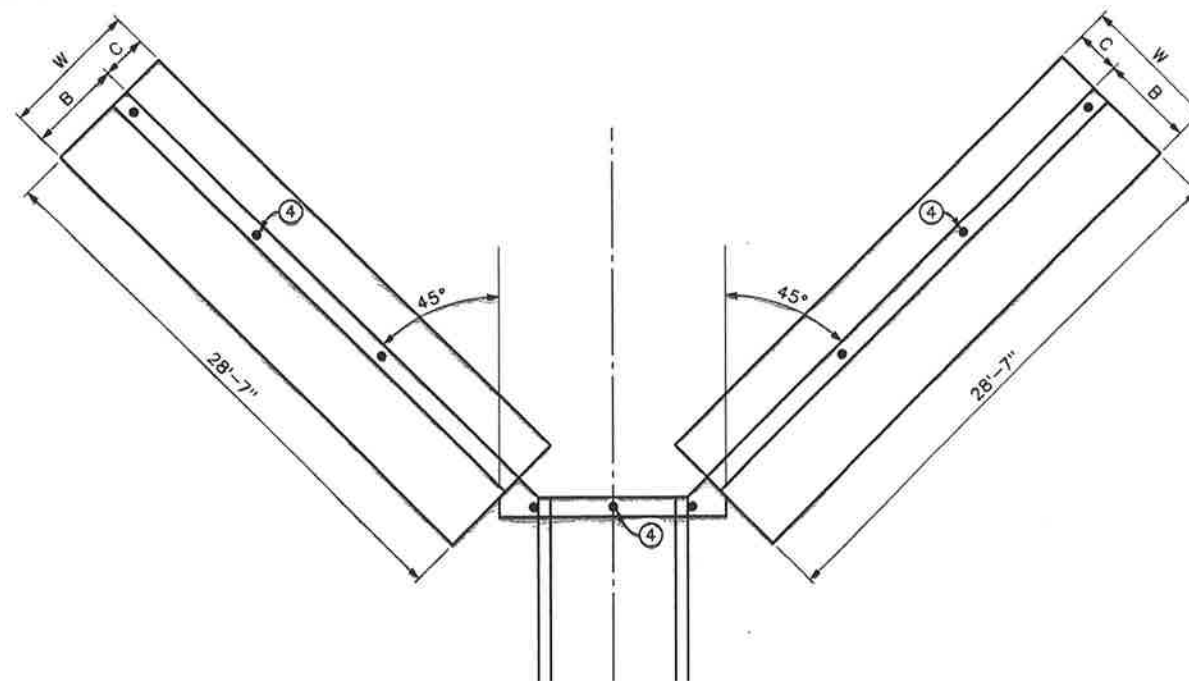
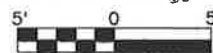
PIPE CULVERT HEADWALL & WINGWALL ELEVATION ③

SEE PLAN AND PROFILE SHEET 2 & DETAIL SHEET 19



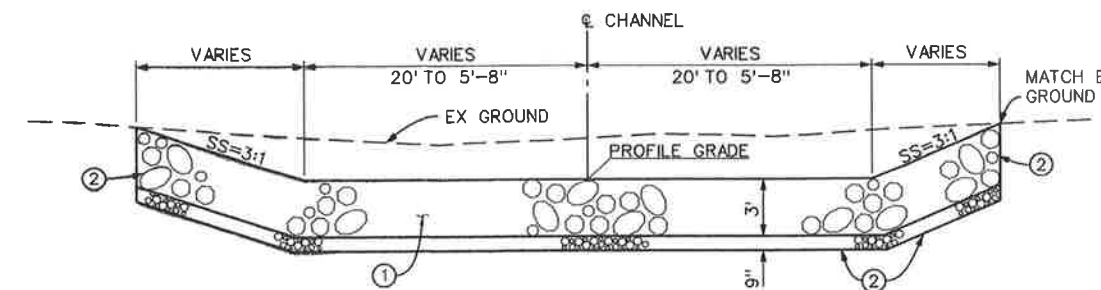
TYPICAL WINGWALL SECTION ③

SEE PLAN AND PROFILE SHEET 2



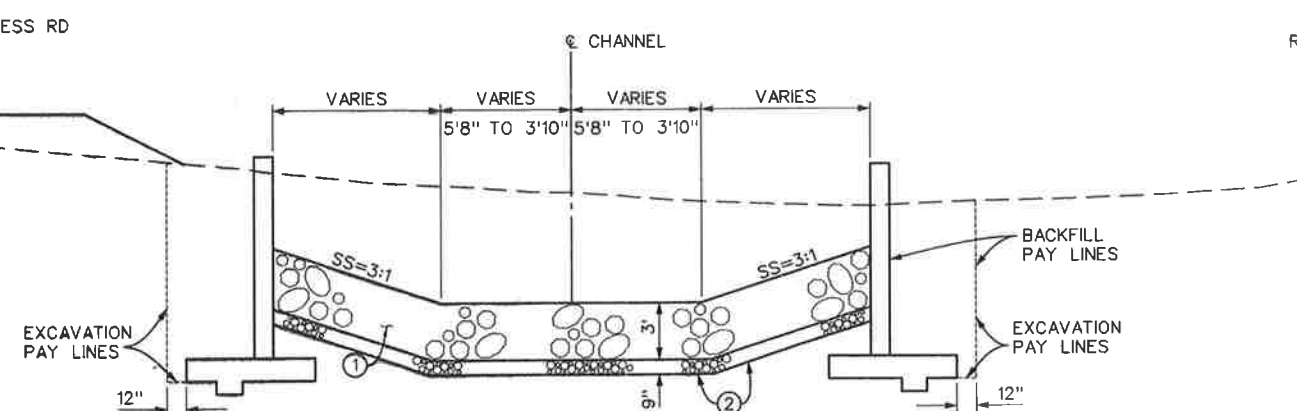
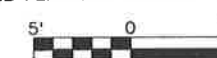
WINGWALL FOOTING DETAIL

SEE PLAN AND PROFILE SHEET 2



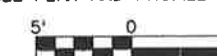
STA 10+70 TO STA 11+70

SEE PLAN AND PROFILE SHEET 2



STA 11+70 TO STA 11+80

SEE PLAN AND PROFILE SHEET 2



NOTES

- 1 PLACE 36" THICK ROCK SLOPE PRO 1/4 TON CLASS OVER 9" FILTER B NO. 2 BACKING CLASS.
- 2 PLACE FILTER FABRIC (MIRAFI 1100N EQUIVALENT ALL AROUND.
- 3 CONSTRUCT PIPE CULVERT HEADWALL WING WALLS TYPE A PER CALTRANS.
- 4 INSTALL 3' CABLE RAILING PER CALTRANS STD B11-47.



CITY OF MENIFEE	
CITY OF MENIFEE ENGINEERING DEPARTMENT	
RECOMMENDED BY:	DATE
<i>[Signature]</i>	01/28/2010

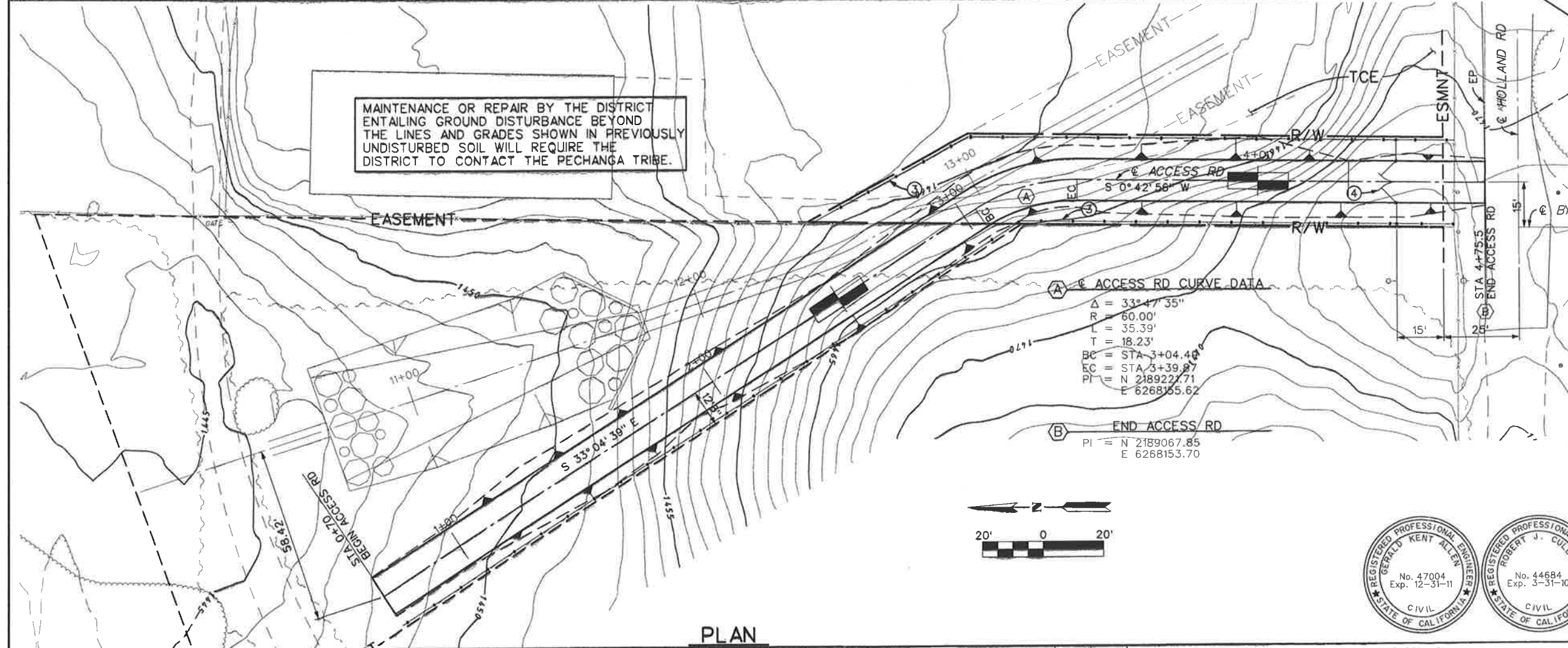
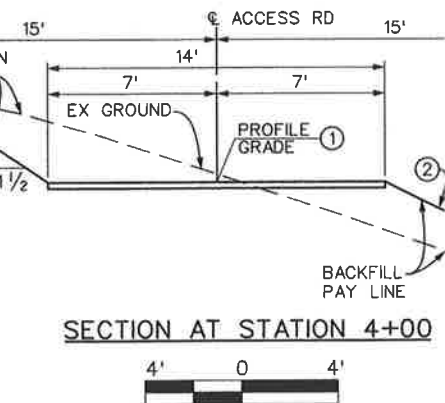
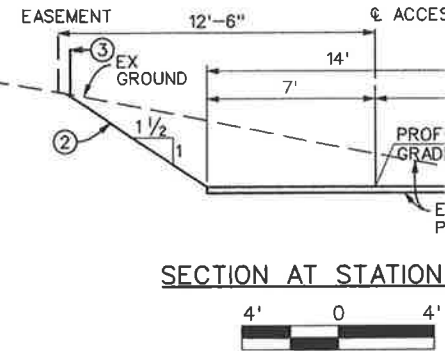
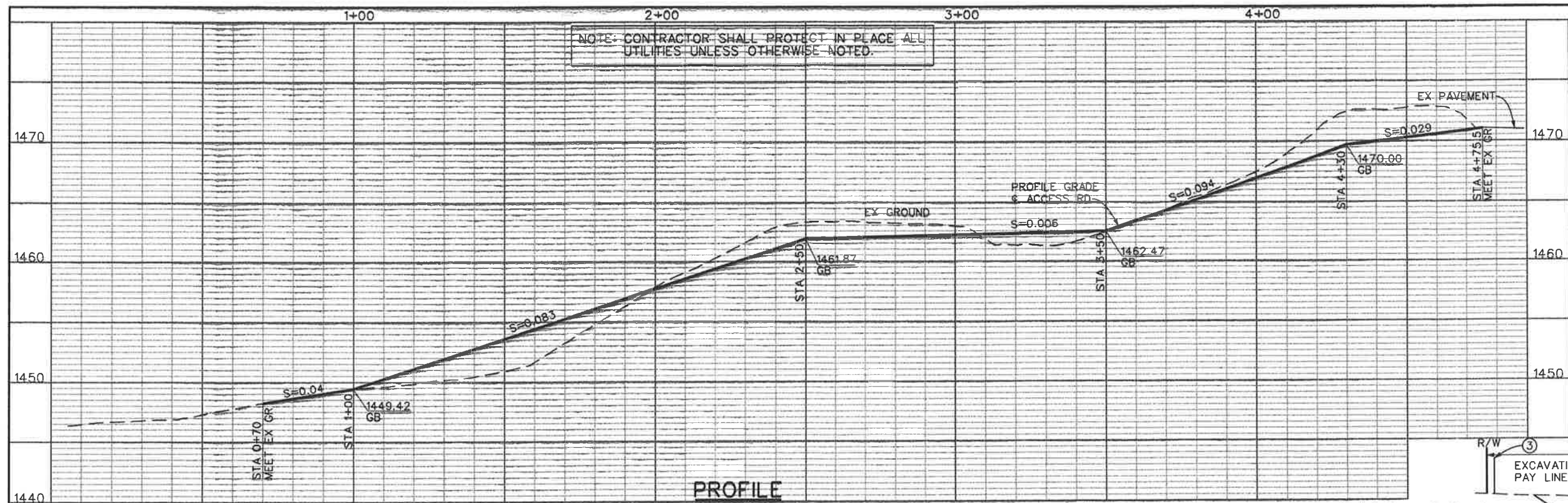
WINGWALL FOOTING DETAIL

SEE PLAN AND PROFILE SHEET 2

REVISIONS			
REF.	DESCRIPTION	APPR.	DATE

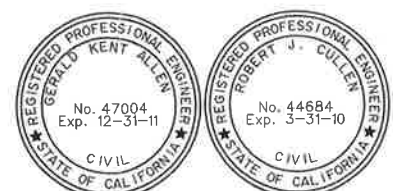
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT	
DESIGNED BY: D. MUAREGA	RECOMMENDED FOR APPROVAL BY: <i>[Signature]</i>
DRAWN BY: T. DECKER	APPROVED BY: <i>[Signature]</i>
DATE DRAWN: JAN 2010	DATE: 1/27/10
	DATE: 26 Jan -2010

MENIFEE-HAWTHORNE AVENUE STORM DRAIN	
STAGE 1	
MISCELLANEOUS DETAILS	



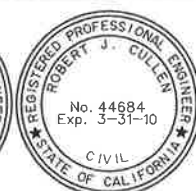
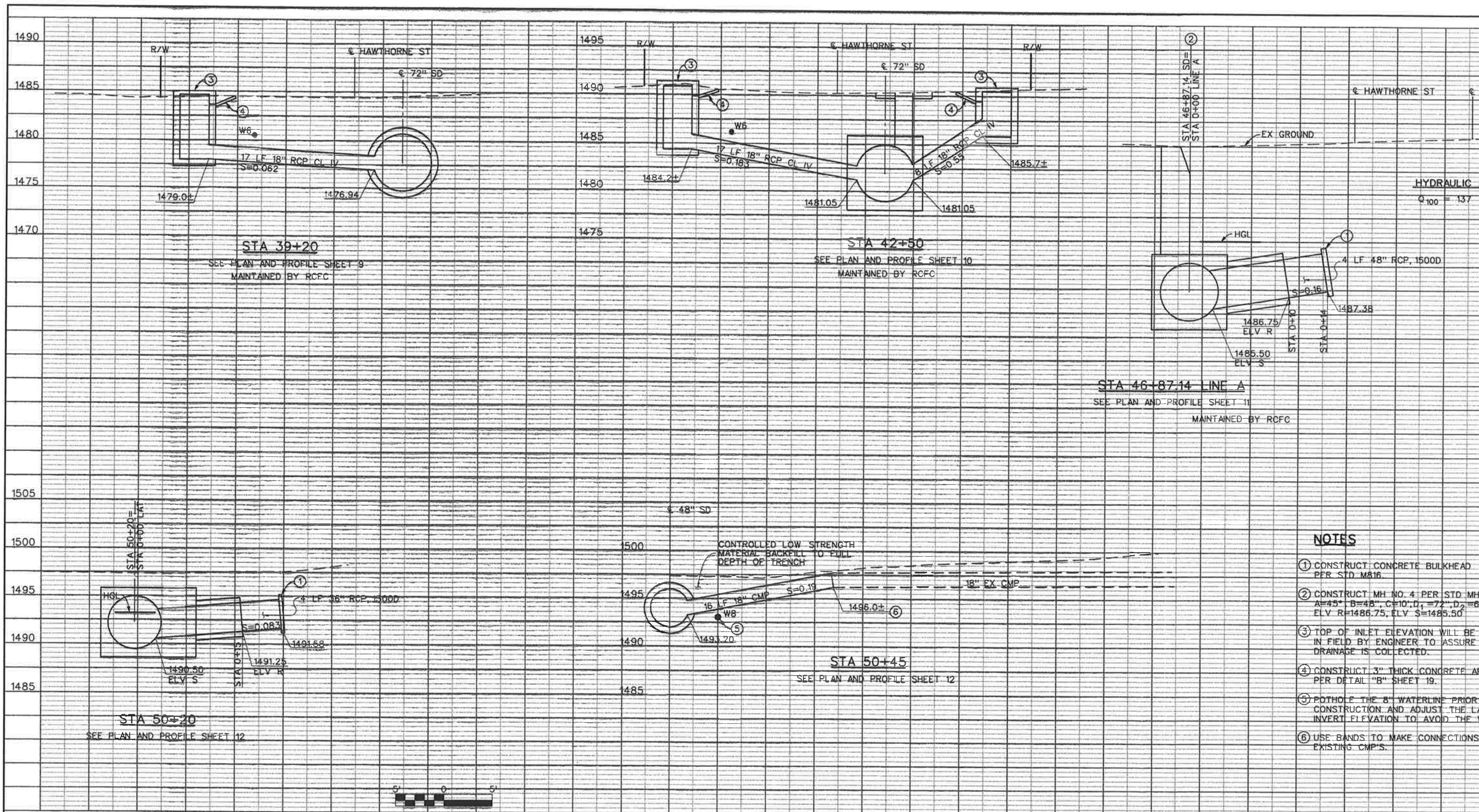
NOTES

- PLACE 3" CLASS 2 AGGREGATE BASE
- CUT SLOPES ARE 1 1/2 TO 1 AND FILL ARE 2 TO 1.
- INSTALL 6' CHAIN LINK FENCE PER ST
- INSTALL 14' DOUBLE DRIVE GATE PER



CITY OF MENIFEE CITY OF MENIFEE ENGINEERING DEPARTMENT RECOMMENDED BY: <i>[Signature]</i> DATE: 01/28/10		Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2809 for the location of buried utility lines. Don't disrupt vital services. TWO WORKING DAYS BEFORE YOU DIG		REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>APPR.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DESCRIPTION	APPR.	DATE					RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT DESIGNED BY: D. MUAREGA DRAWN BY: T. DECKER DATE DRAWN: JAN 2010 RECOMMENDED FOR APPROVAL BY: <i>[Signature]</i> DATE: 1/27/10 APPROVED BY: <i>[Signature]</i> DATE: 28-JAN-2010	
NO.	DESCRIPTION	APPR.	DATE												

MENIFEE-HAWTHORNE AVENUE STORM DRAIN
 STAGE 1
 ACCESS ROAD PLAN AND PROFILE



CITY OF MENIFEE
CITY OF MENIFEE ENGINEERING DEPARTMENT
RECOMMENDED BY: *[Signature]*
DATE: 01/28/10

Don't Dig...Until You Call U.S.A. Toll Free
1-800-227-2800
for the location of buried utility lines.
Don't disrupt vital services.
TWO WORKING DAYS BEFORE YOU DIG

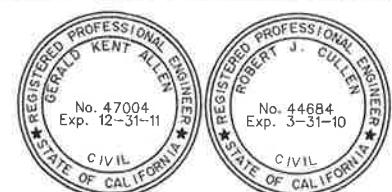
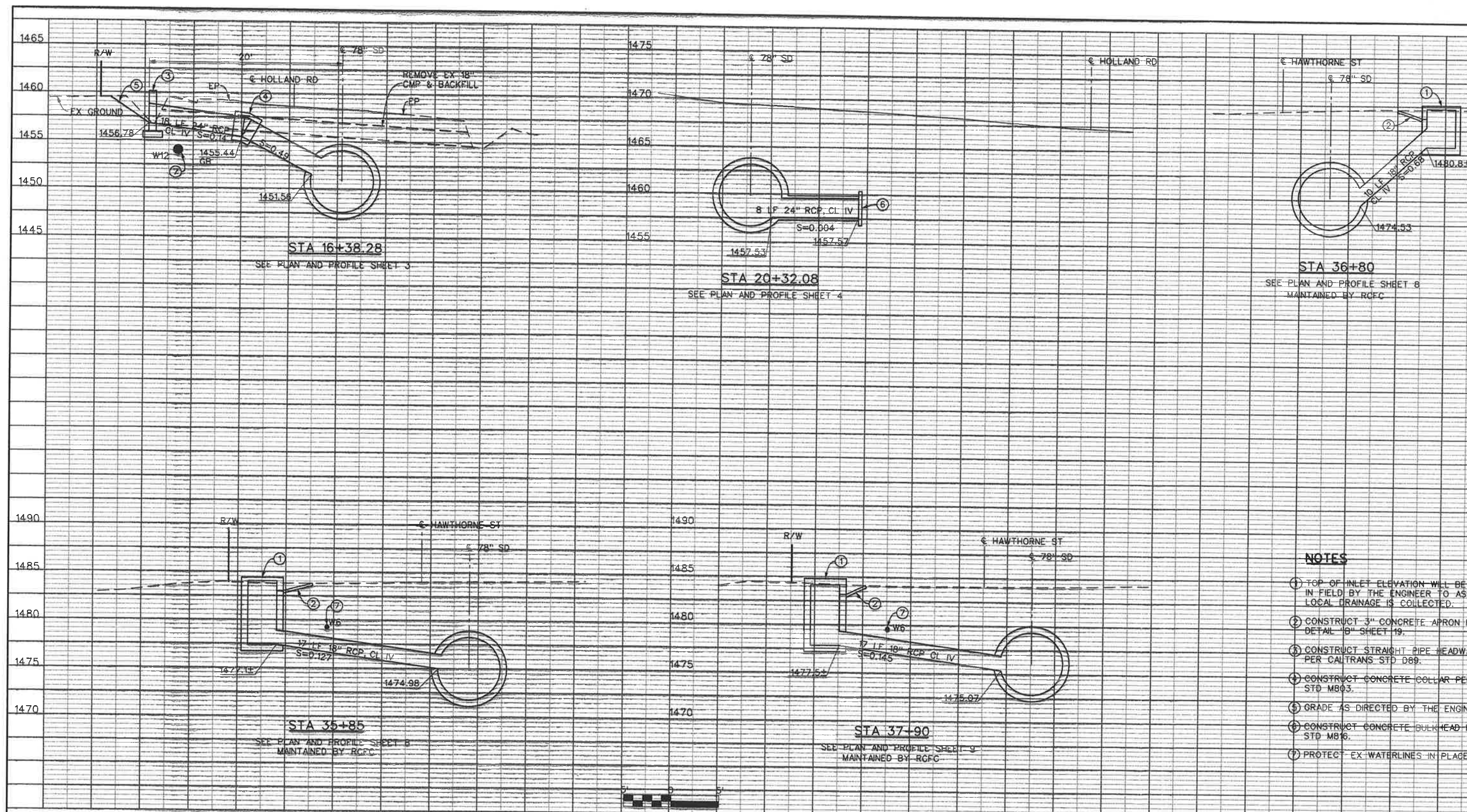
REVISIONS	DESCRIPTION	APPR.	DATE

DESIGNED BY: D. MUAREGA
DRAWN BY: T. DECKER
DATE DRAWN: JAN 2010

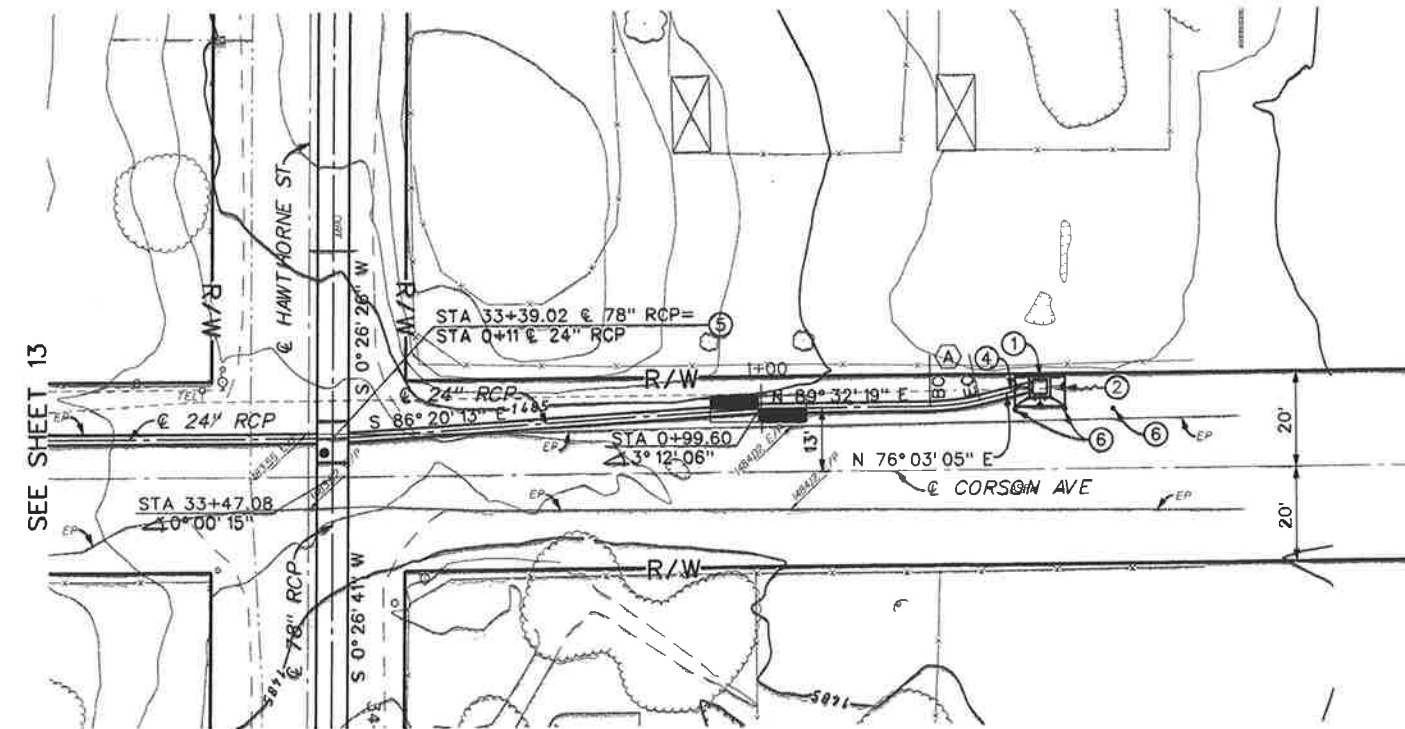
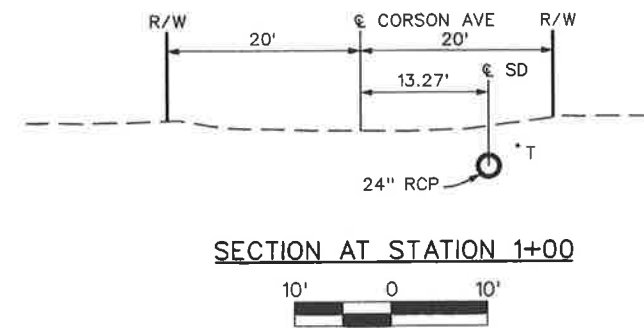
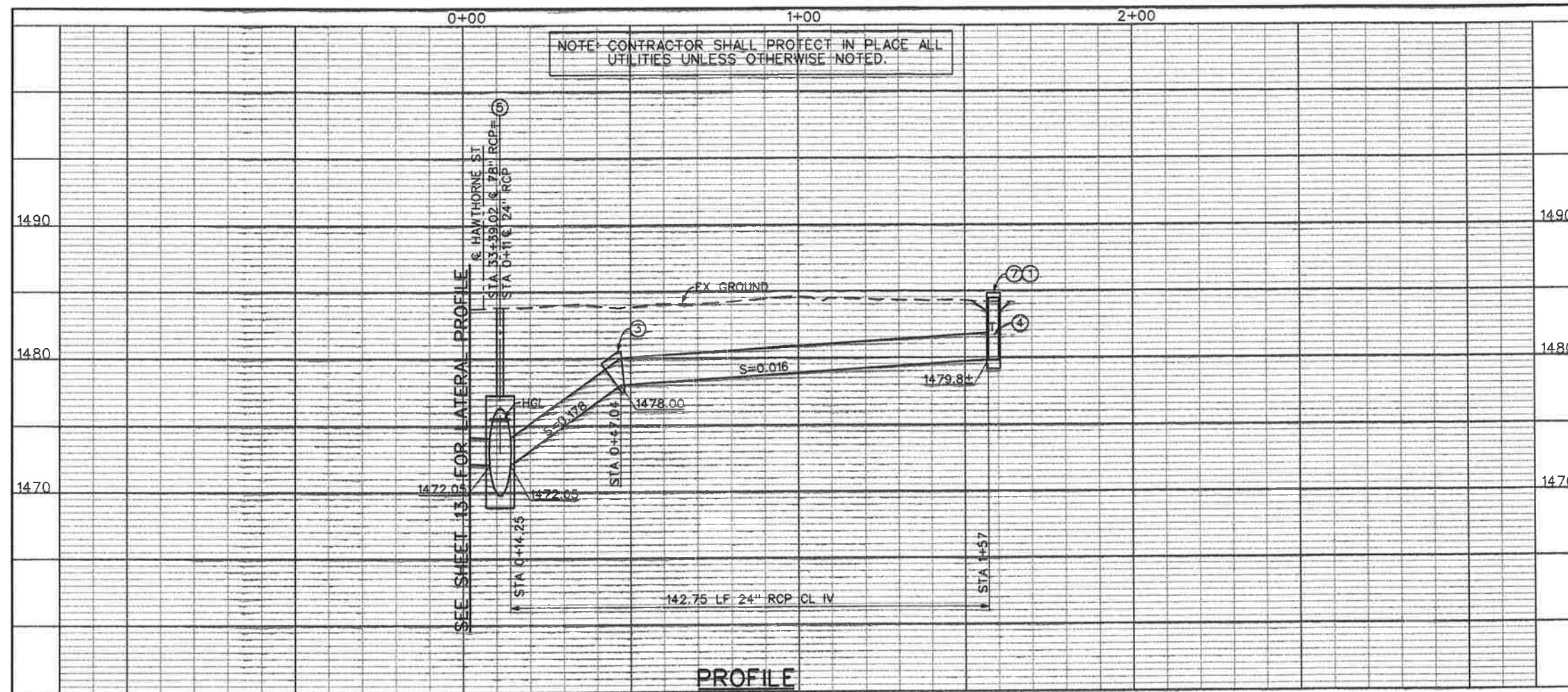
RIVERSIDE COUNTY FLOOD CONTROL
AND
WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: *[Signature]*
DATE: 1/27/10

APPROVED BY: *[Signature]*
DATE: 28 Jan 2010

**MENIFEE-HAWTHORNE
AVENUE STORM DRAIN**
STAGE 1
CONNECTOR PIPE PROFILES



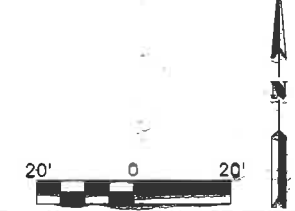
CITY OF MENIFEE CITY OF MENIFEE ENGINEERING DEPARTMENT RECOMMENDED BY: <i>Mark Lantz</i> DATE: <i>01/28/10</i>		Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2600 for the location of buried utility lines. Don't disrupt vital services. TWO WORKING DAYS BEFORE YOU DIG		REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>APPR.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DESCRIPTION	APPR.	DATE					RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT DESIGNED BY: D. MUAREGA DRAWN BY: T. DECKER DATE DRAWN: JAN 2010 RECOMMENDED FOR APPROVAL BY: <i>David J. Allen</i> DATE: <i>1/27/10</i> APPROVED BY: <i>Robert J. Cullen</i> DATE: <i>20 JAN 2010</i>		MENIFEE-HAWTHORNE AVENUE STORM DRAIN STAGE 1 CONNECTOR PIPE PROFILES	
NO.	DESCRIPTION	APPR.	DATE														



24" RCP CURVE DATA

Δ	= 13° 29' 14"
R	= 45.00'
L	= 10.59'
T	= 5.32'
BC	= STA 1+35.12
EC	= STA 1+45.71
PI	= N 2187752.47 E 6268922.12

- NOTES**
1. CONSTRUCT CONCRETE DROP INLET WITH WEST, SOUTH AND EAST SIDES OPEN PER STD CB110, H=12", V=5'.
 2. GRADE TO DRAIN AND CONSTRUCT A 3" CONCRETE APRON PER DETAIL "B" SHEET 19.
 3. CONSTRUCT CONCRETE COLLAR PER STD M803.
 4. TELEPHONE LINE TO BE RELOCATED BY OTHERS.
 5. CONSTRUCT MH NO. 2 PER STD MH252.
 6. INSTALL 3 OBJECT MARKERS TYPE L-2 PER CALTRANS STD A73A AT EACH DROP INLET AS DIRECTED BY THE ENGINEER.
 7. TOP OF INLET ELEVATION WILL BE SET IN FIELD BY THE ENGINEER TO ASSURE LOCAL DRAINAGE IS COLLECTED.



CITY OF MENIFEE

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2800 for the location of buried utility lines. Don't disrupt vital services.

RECOMMENDED BY: *Not Listed* DATE: 01/28/10

REVISIONS	DESCRIPTION	APPR.	DATE

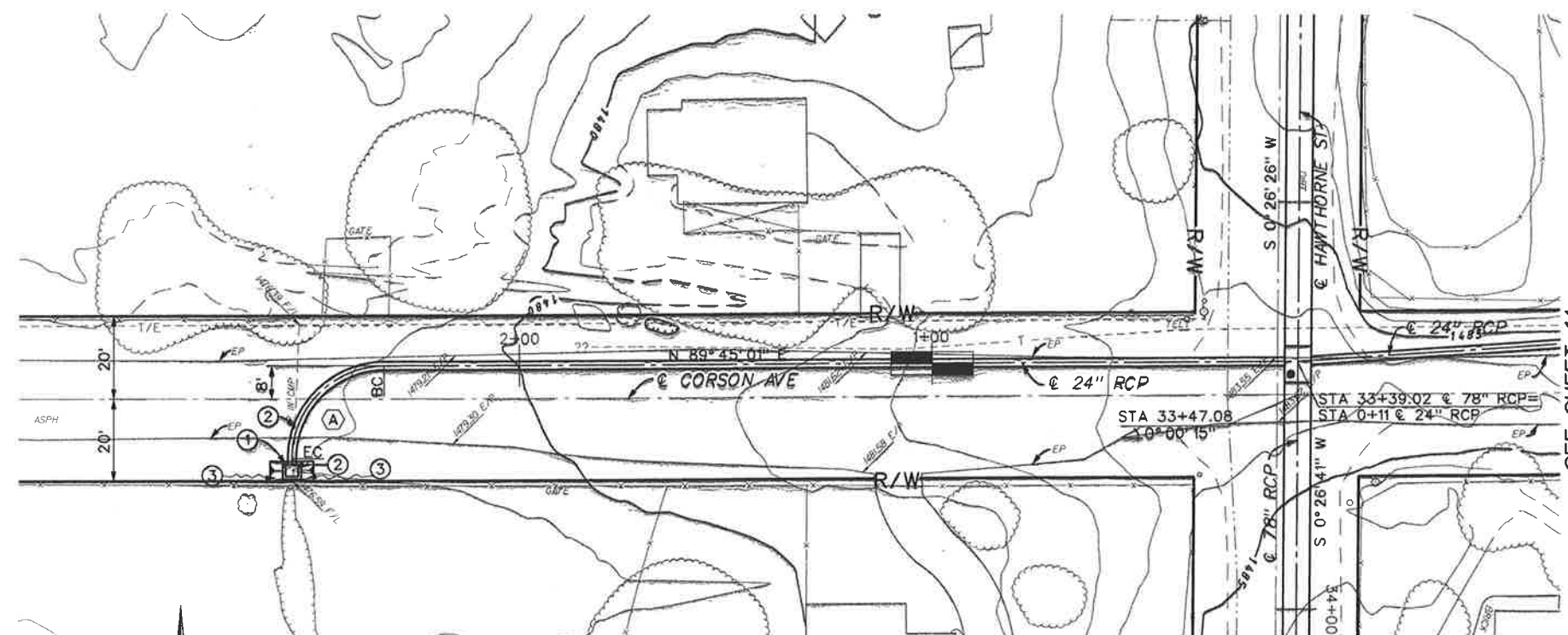
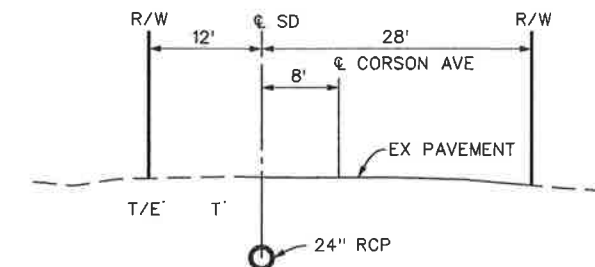
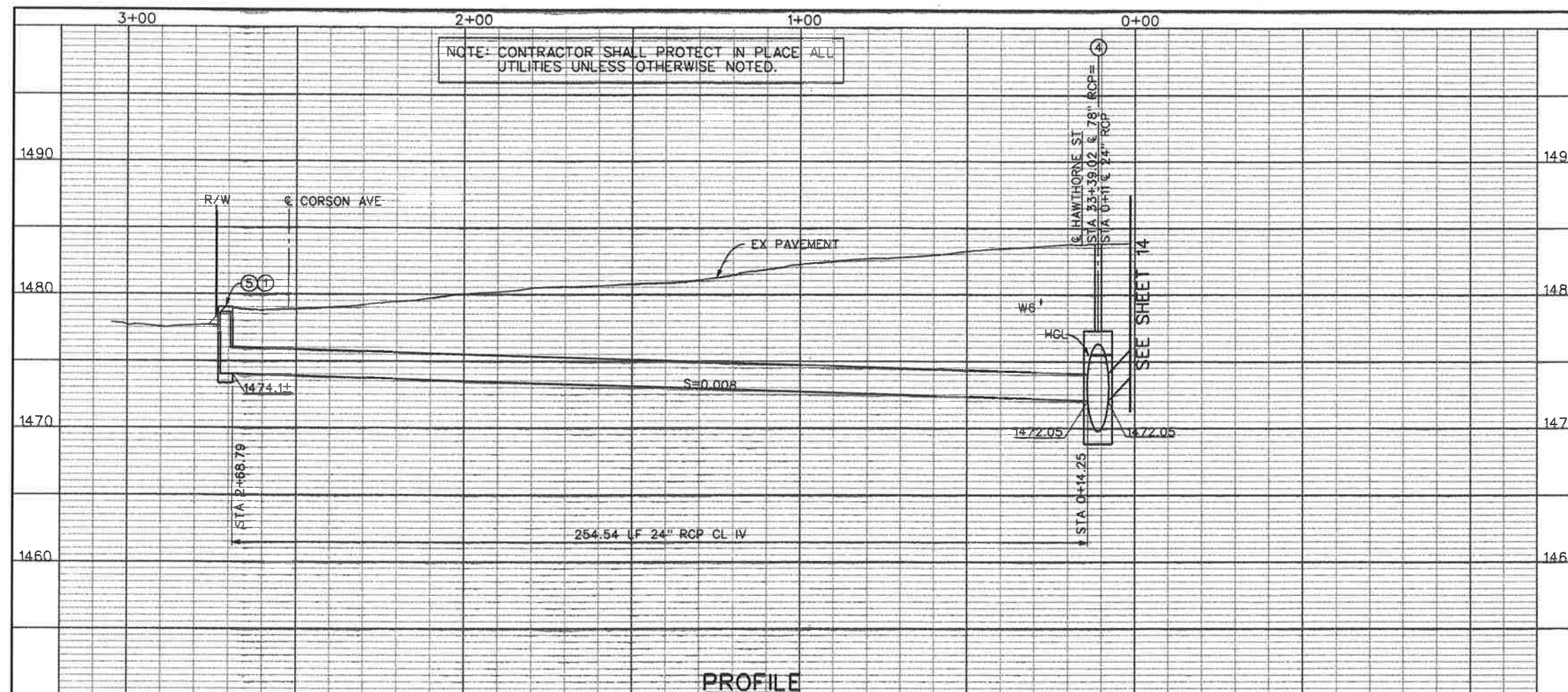
RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

DESIGNED BY: D. MUAREGA
DRAWN BY: T. DECKER
DATE DRAWN: JAN 2010

RECOMMENDED FOR APPROVAL BY: *[Signature]*
DATE: 1/27/10

APPROVED BY: *[Signature]*
DATE: 20/12-2010

MENIFEE-HAWTHORNE AVENUE STORM DRAIN
STAGE 1
CORSON AVE LATERAL (EAST)

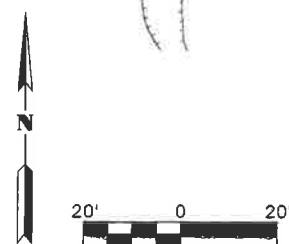


A 24" RCP CURVE DATA

$\Delta = 90^\circ$
 $R = 22.50'$
 $L = 35.34'$
 $T = 22.50'$
 $BC = \text{STA } 2+32.78$
 $EC = \text{STA } 2+68.12$
 $PI = N \ 2187745.42$
 $E \ 6268548.59$

NOTES

- CONSTRUCT CONCRETE DROP INLET WITH EAST, WEST AND SOUTH SIDES OPEN PER STD CB110, H=12", V=5'.
- REMOVE INTERFERING PORTION OF THE EX 12" CMP AND PLUG.
- GRADE TO DRAIN AND CONSTRUCT 3" CONCRETE APRON PER DETAIL "A" SHEET 19.
- CONSTRUCT MH NO. 2 PER STD MH252.
- TOP OF INLET ELEVATION WILL BE SET IN FIELD BY THE ENGINEER TO ASSURE LOCAL DRAINAGE IS COLLECTED.



CITY OF MENIFEE
 CITY OF MENIFEE ENGINEERING DEPARTMENT
 RECOMMENDED BY: *[Signature]*
 DATE: 01/28/10

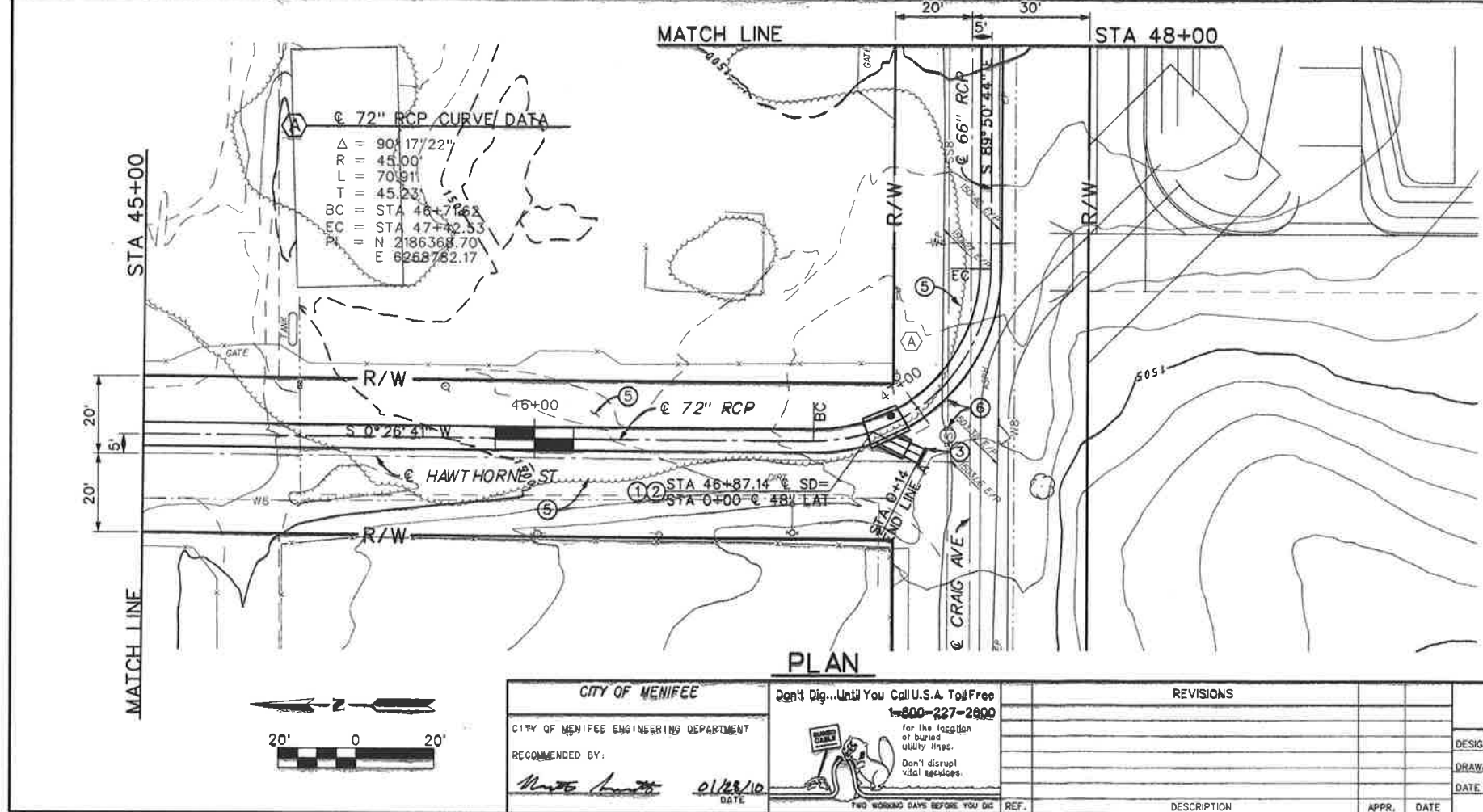
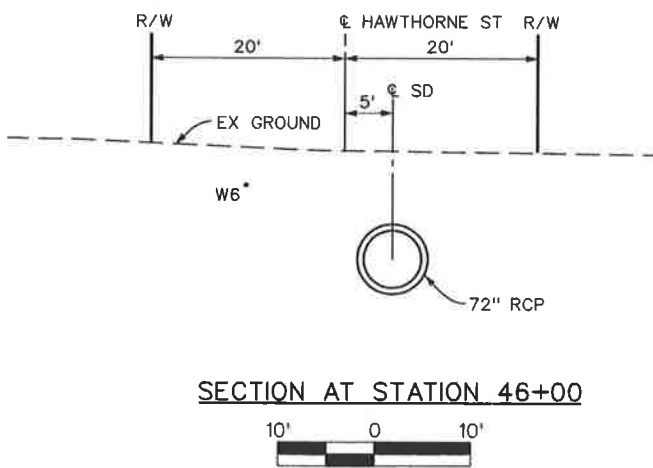
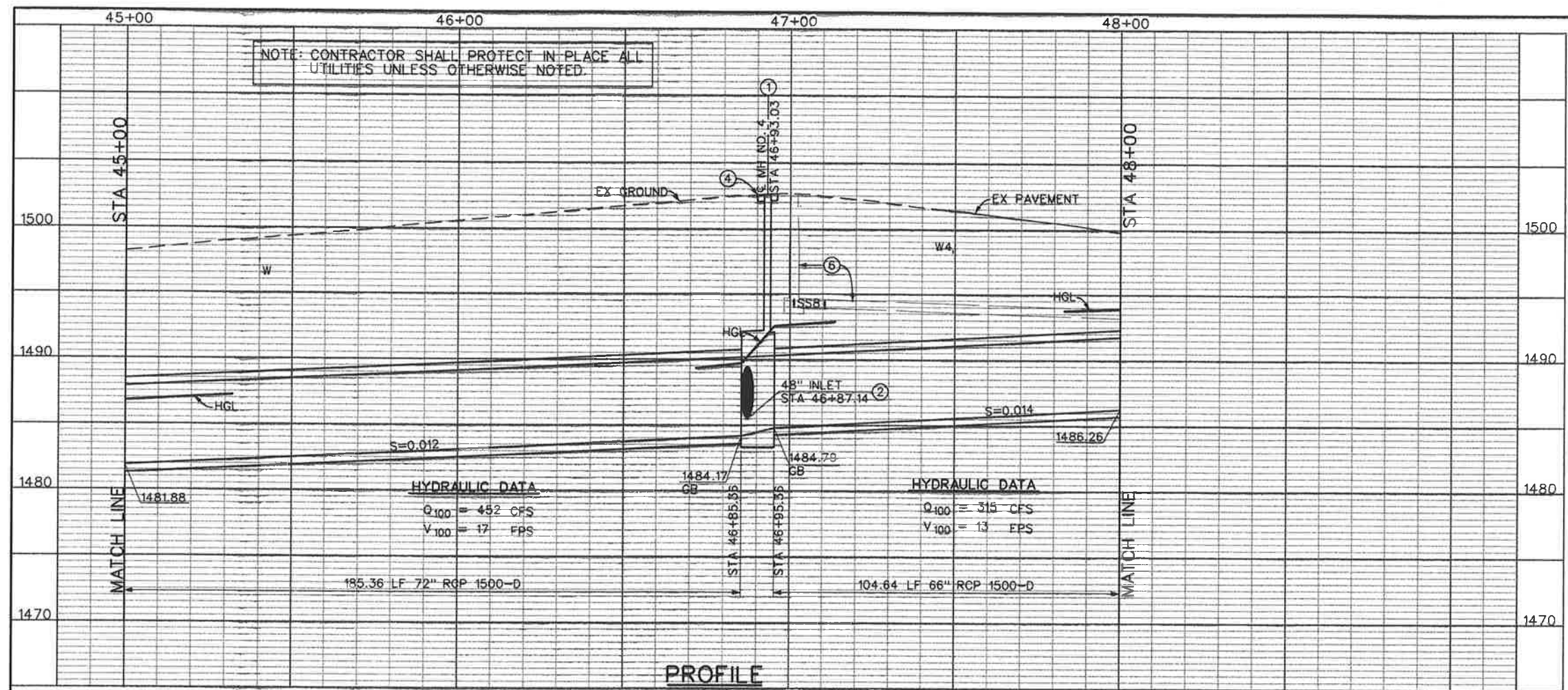
Don't Dig...Until You Call U.S.A. Toll Free
 1-800-227-2800
 for the location of buried utility lines.
 Don't disrupt vital services.
 TWO WORKING DAYS BEFORE YOU DIG.

REVISIONS	DESCRIPTION	APPR.	DATE

DESIGNED BY: D. MUAREGA
 DRAWN BY: T. DECKER
 DATE DRAWN: JAN 2010

RIVERSIDE COUNTY FLOOD CONTROL
 AND
 WATER CONSERVATION DISTRICT
 RECOMMENDED FOR APPROVAL BY: *[Signature]*
 DATE: 1/27/10
 APPROVED BY: *[Signature]*
 DATE: 2-1-2010

MENIFEE-HAWTHORNE
 AVENUE STORM DRAIN
 STAGE 1
 CORSON AVE LATERAL (WEST)



NOTES

- CONSTRUCT MH NO.4 PER STD MH254.
A=45", B=48", C=10', D₁=72", D₂=66",
ELV R=1486.75, ELV S=1485.50
- SEE SHEET 16 FOR LINE A PROFILE.
- CONSTRUCT CONCRETE BULKHEAD PER STD M816.
- CONSTRUCT A 6'x6'x6" CONCRETE PAD PER
DETAIL SHEET 19.
- TRIM TREES AS NEEDED.
- PROTECT EXISTING SEWER MANHOLE AND SEWER
LINE IN PLACE.



CITY OF MENIFEE
CITY OF MENIFEE ENGINEERING DEPARTMENT
RECOMMENDED BY: *[Signature]*
DATE: 01/23/10

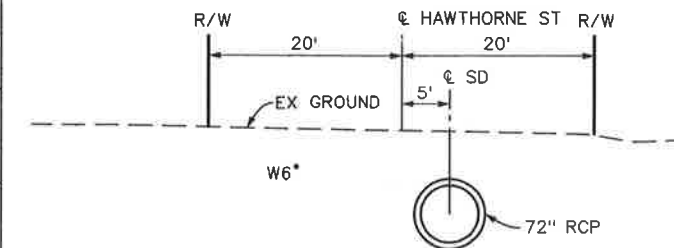
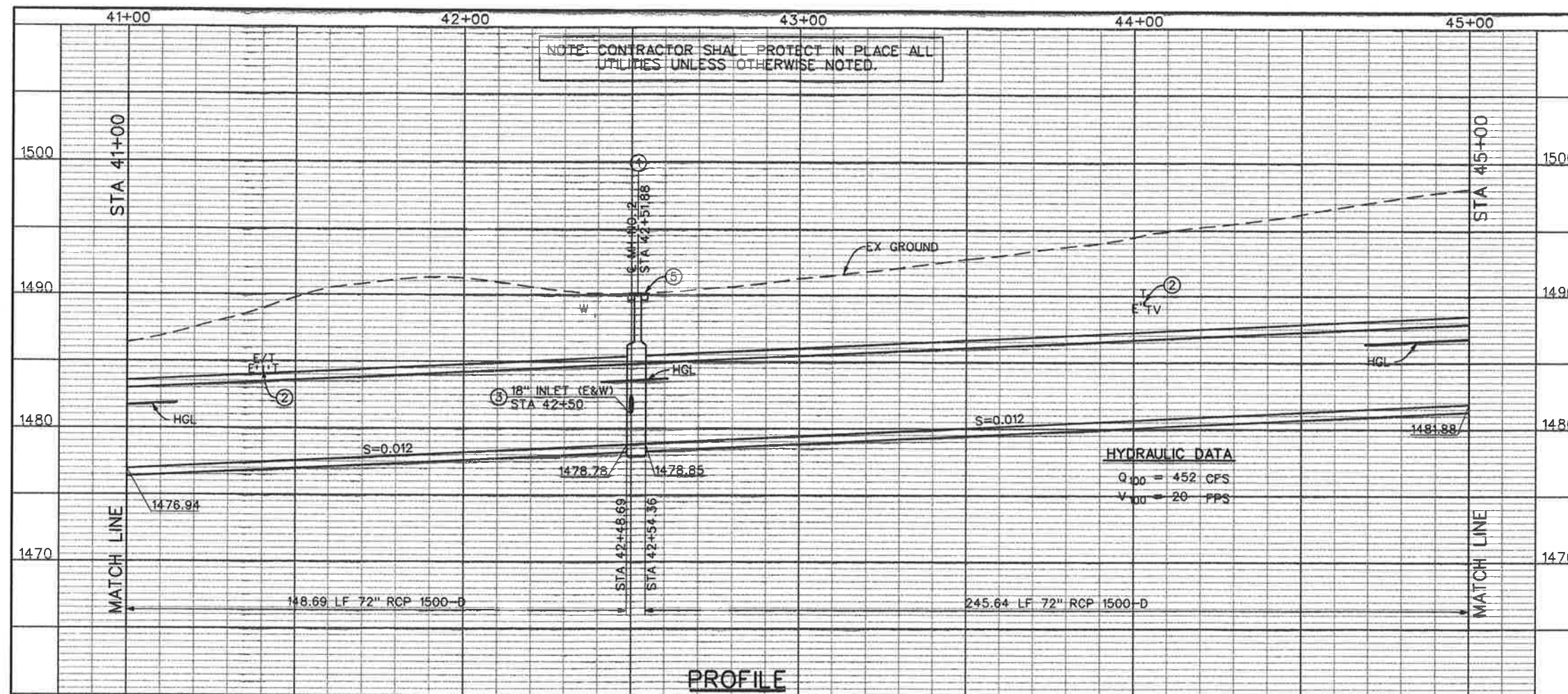
Don't Dig...Until You Call U.S.A. Toll Free
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TWO WORKING DAYS BEFORE YOU DIG

REVISIONS	DESCRIPTION	APPR.	DATE

DESIGNED BY: D. MUAREGA
DRAWN BY: T. DECKER
DATE DRAWN: JAN 2010

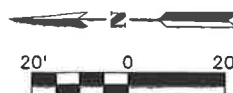
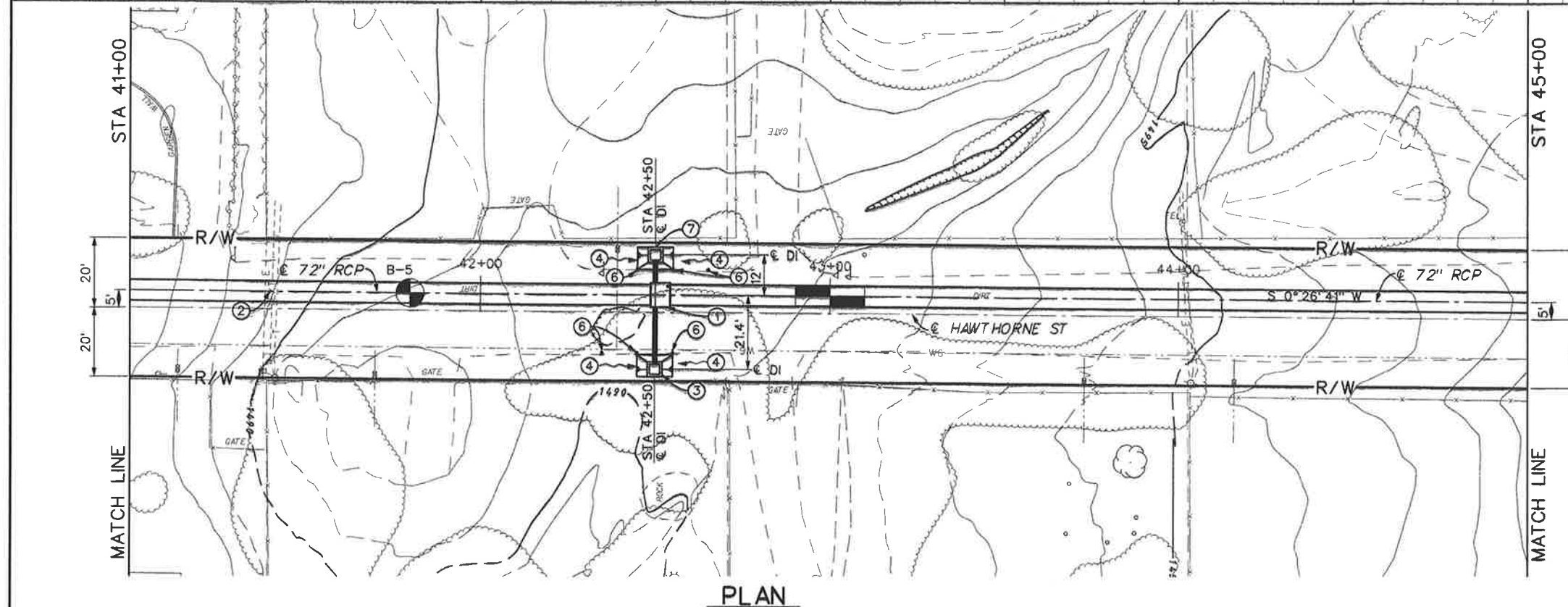
RIVERSIDE COUNTY FLOOD CONTROL
AND
WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: *[Signature]*
APPROVED BY: *[Signature]*
DATE: 1/27/10

MENIFEE-HAWTHORNE
AVENUE STORM DRAIN
STAGE 1
STA 45+00 TO STA 48+00



NOTES

1. CONSTRUCT MH NO. 2 PER STD MH252.
2. E/T LINES TO BE PROTECTED IN PLACE.
3. CONSTRUCT CONCRETE DROP INLET WITH EAST, NORTH AND SOUTH SIDES OPEN PER STD CB110. $V=7'$, $H=12'$, 17 LF-18" RCP CL IV. SEE PROFILE SHEET 16.
4. GRADE TO DRAIN AS DIRECTED BY THE ENGINEER AND CONSTRUCT A 3" CONCRETE APRON PER DETAIL "B" SHEET 19.
5. CONSTRUCT A 6'x6'x6" CONCRETE PAD PER DETAIL SHEET 19.
6. INSTALL 3 OBJECT MARKERS TYPE L-2 PER CALTRA STD A73A AT EACH DROP INLET AS DIRECTED BY THE ENGINEER.
7. CONSTRUCT CONCRETE DROP INLET WITH WEST, NORTH AND SOUTH SIDES OPEN PER STD CB110. $V=5'$, $H=12'$, 8 LF-18" RCP CL IV, SEE PROFILE SHEET 16.



CITY OF MENIFEE
 CITY OF MENIFEE ENGINEERING DEPARTMENT
 RECOMMENDED BY: *[Signature]*
 DATE: 01/28/10

Don't Dig...Until You Call U.S.A. Toll Free
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 for the location of buried utility lines.
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 TWO WORKING DAYS BEFORE YOU DIG

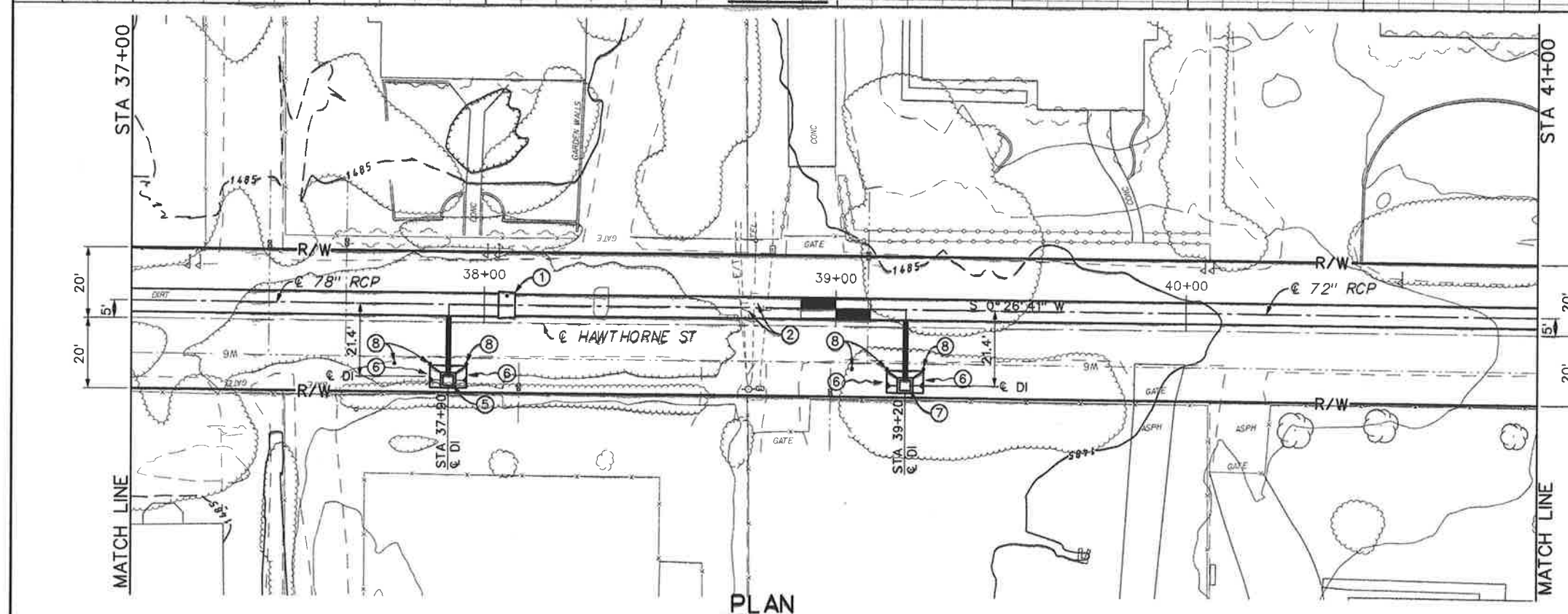
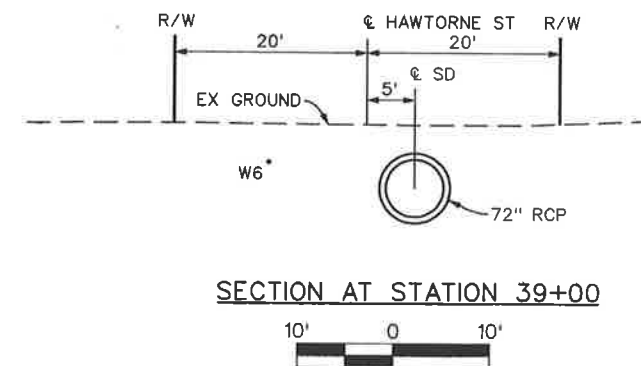
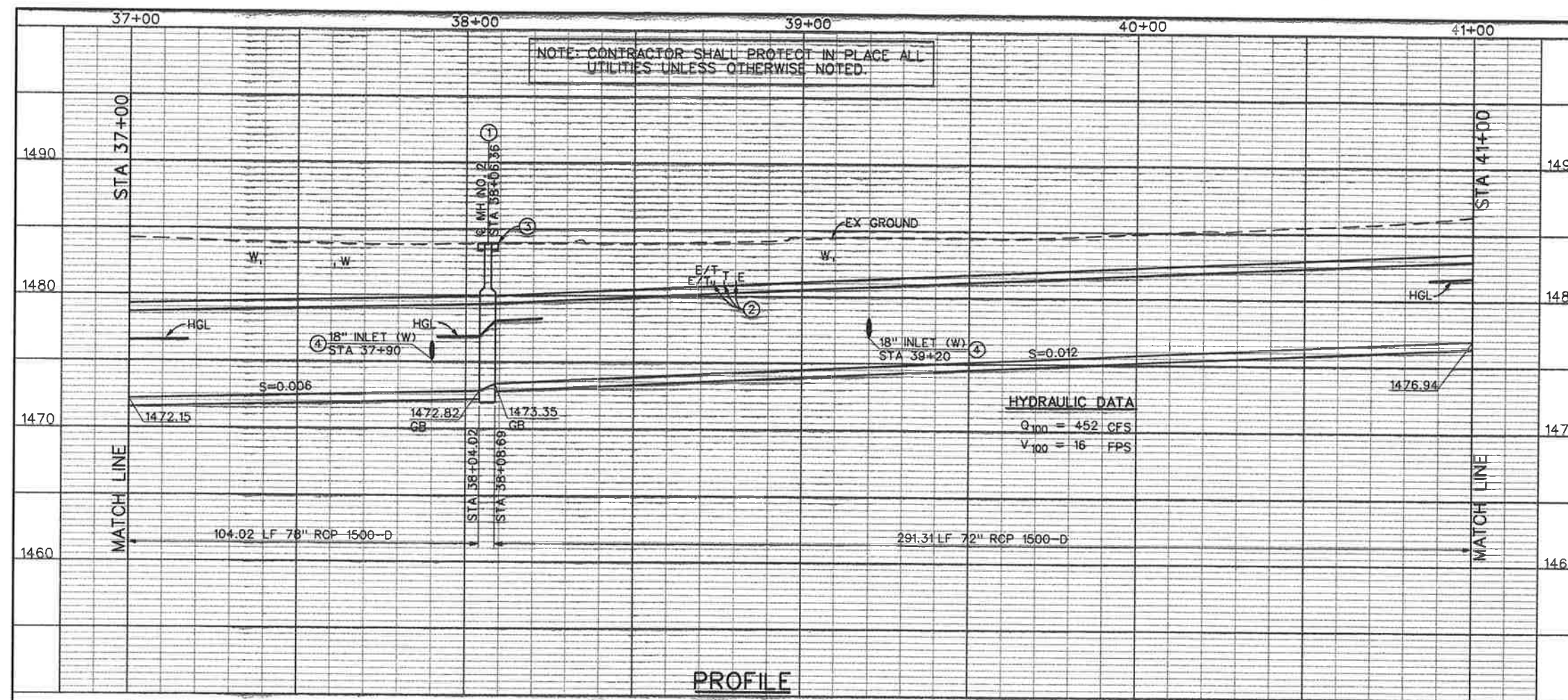
REVISIONS	DESCRIPTION	APPR.	DATE

DESIGNED BY: D. MUAREGA
 DRAWN BY: T. DECKER
 DATE DRAWN: JAN 2010

RIVERSIDE COUNTY FLOOD CONTROL
 AND
 WATER CONSERVATION DISTRICT
 RECOMMENDED FOR APPROVAL BY: *[Signature]*
 DATE: 1/27/10

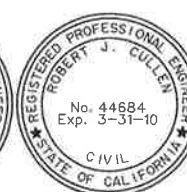
APPROVED BY: *[Signature]*
 DATE: 2/1/10

**MENIFEE-HAWTHORNE
 AVENUE STORM DRAIN**
 STAGE 1
 STA 41+00 TO STA 45+00



NOTES

- CONSTRUCT MH NO. 2 PER STD MH252.
- E/T LINES TO BE PROTECTED IN PLACE.
- CONSTRUCT A 6'x6'x6" CONCRETE PAD PER DETAIL SHEET 19.
- CONSTRUCT JUNCTION STRUCTURE NO. 4 PER STD JS229.
- CONSTRUCT CONCRETE DROP INLET WITH EAST, NORTH AND SOUTH SIDES OPEN PER STD CB110. $V=7'$, $H=12'$, 17 LF-18" RCP CL IV. SEE PROFILE SHEET 15.
- GRADE TO DRAIN AS DIRECTED BY THE ENGINEER AND CONSTRUCT A 3" CONCRETE APRON PER DETAIL "B" SHEET 19.
- CONSTRUCT CONCRETE DROP INLET WITH EAST, NORTH AND SOUTH SIDES OPEN PER STD CB110. $V=7'$, $H=12'$, 17 LF-18" RCP CL IV. SEE PROFILE SHEET 16.
- INSTALL 3 OBJECT MARKERS TYPE L-2 PER CALTRANS STD A73A AT EACH DROP INLET AS DIRECTED BY THE ENGINEER.



CITY OF MENIFEE
 CITY OF MENIFEE ENGINEERING DEPARTMENT
 RECOMMENDED BY: *[Signature]*
 DATE: 01/28/10

Don't Dig...Until You Call U.S.A. Toll Free
 1-800-227-2800
 for the location of buried utility lines.
 Don't disrupt vital services.
 TWO WORKING DAYS BEFORE YOU DIG

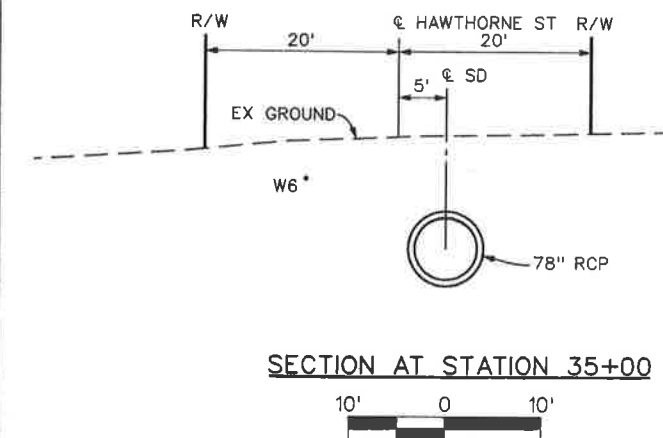
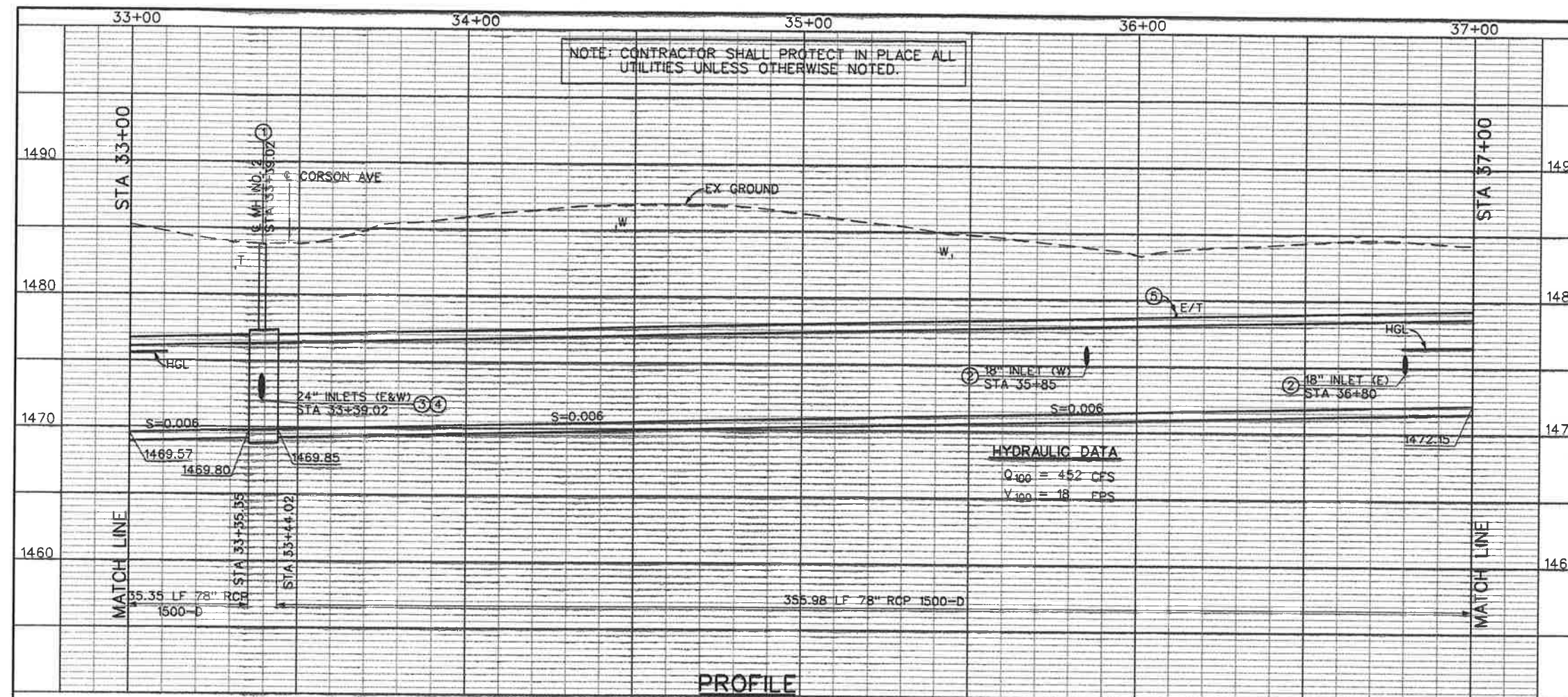
REVISIONS	DESCRIPTION	APPR.	DATE

DESIGNED BY: D. MUAREGA
 DRAWN BY: T. DECKER
 DATE DRAWN: JAN 2010

RIVERSIDE COUNTY FLOOD CONTROL
 AND
 WATER CONSERVATION DISTRICT
 RECOMMENDED FOR APPROVAL BY: *[Signature]*
 DATE: 1/27/10

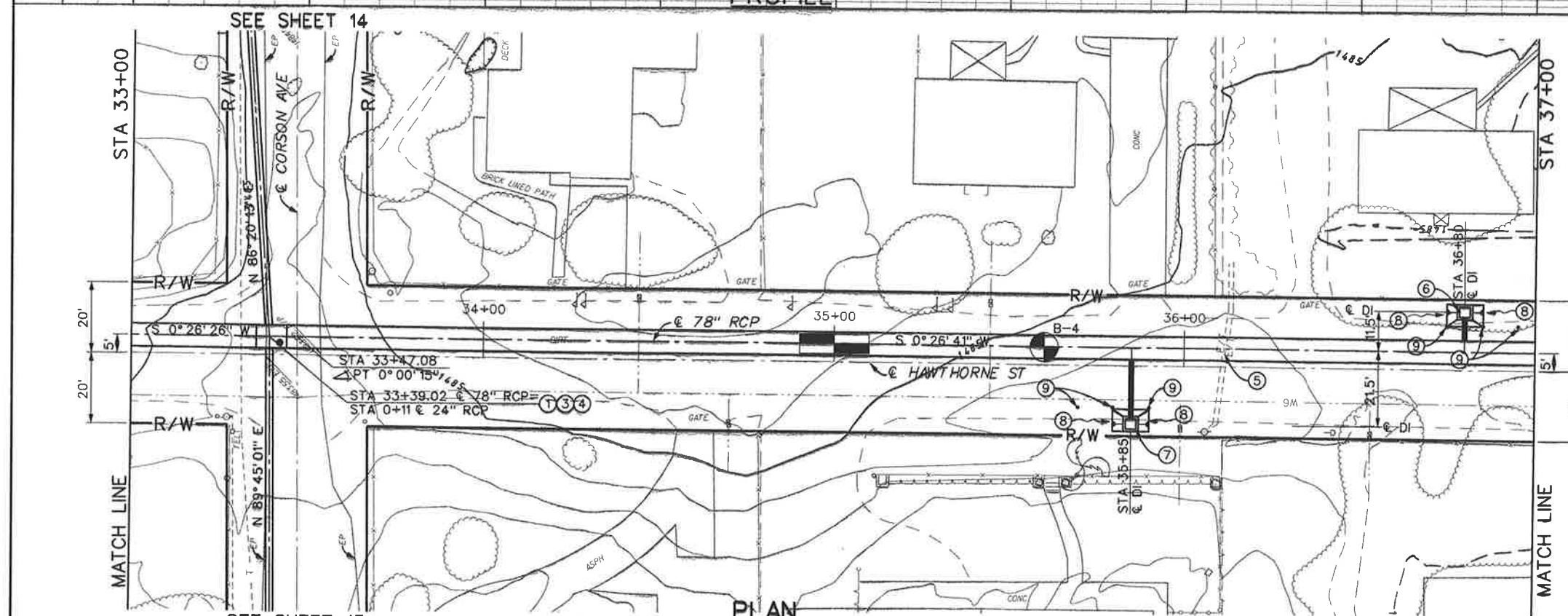
APPROVED BY: *[Signature]*
 DATE: 2/2/2010

MENIFEE-HAWTHORNE
 AVENUE STORM DRAIN
 STAGE 1
 STA 37+00 TO STA 41+00



NOTES

- 1 CONSTRUCT MH NO. 2 PER STD MH252.
- 2 CONSTRUCT JUNCTION STRUCTURE NO.4 PER STD JS229.
- 3 SEE SHEET 14 FOR 24\" RCP (CORSON AVE EAST LA PLAN AND PROFILE.
- 4 SEE SHEET 13 FOR 24\" RCP (CORSON AVE WEST LA PLAN AND PROFILE.
- 5 E/T LINES TO BE PROTECTED IN PLACE.
- 6 CONSTRUCT CONCRETE DROP INLET WITH WEST, NORTH AND SOUTH SIDES OPEN PER STD CB110. V=4', H=12\", 10 LF-18\" RCP CL IV. SEE PROFILE SHEET 15.
- 7 CONSTRUCT CONCRETE DROP INLET WITH EAST, NORTH AND SOUTH SIDES OPEN PER STD CB110. V=7', H=12\", 17 LF-18\" RCP CL IV. SEE PROFILE SHEET 15.
- 8 GRADE TO DRAIN AS DIRECTED BY THE ENGINEER AND CONSTRUCT 3\" CONCRETE APRON PER DETAIL \"B\" SHEET 15.
- 9 INSTALL 3 OBJECT MARKERS TYPE L-2 PER CALTRA STD A73A AT EACH DROP INLET AS DIRECTED BY ENGINEER.



CITY OF MENIFEE
CITY OF MENIFEE ENGINEERING DEPARTMENT
RECOMMENDED BY: *Mark Smith*
DATE: 01/28/10

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2800
for the location of buried utility lines.
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TWO WORKING DAYS BEFORE YOU DIG

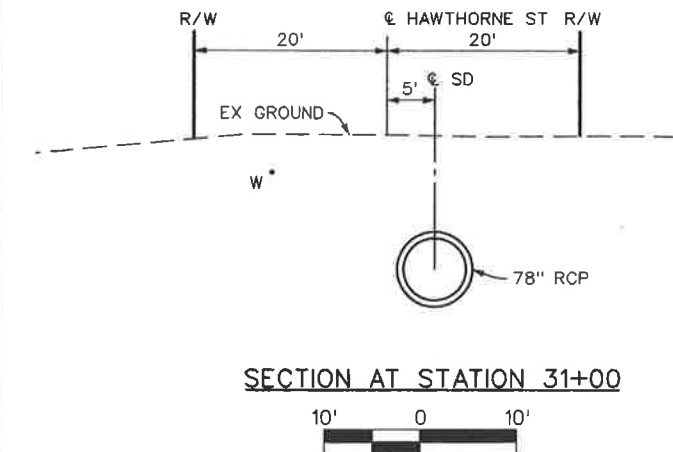
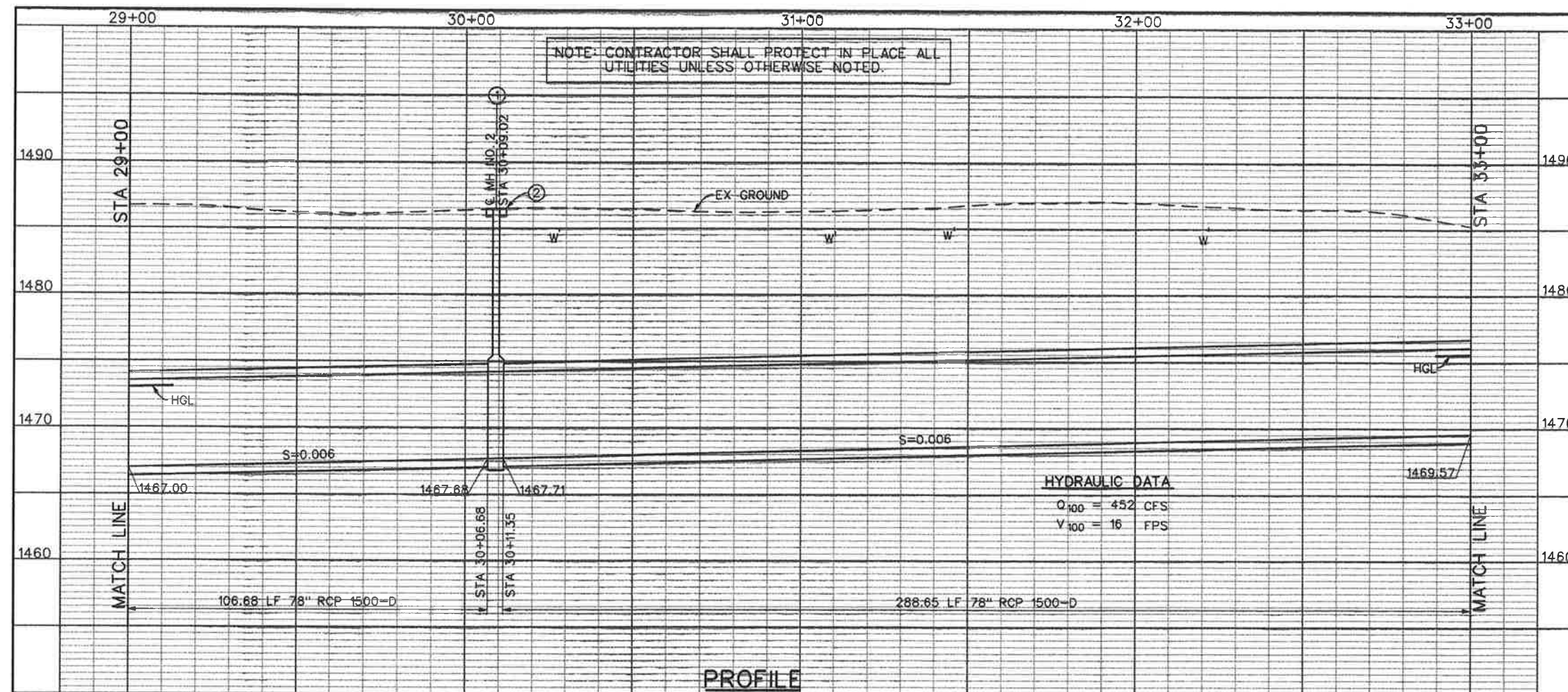
REVISIONS	DESCRIPTION	APPR.	DATE

DESIGNED BY: D. MUAREGA
DRAWN BY: T. DECKER
DATE DRAWN: JAN 2010

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
RECOMMENDED FOR APPROVAL BY: *Handwritten Signature*
DATE: 1/27/10

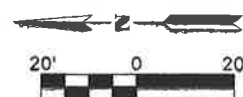
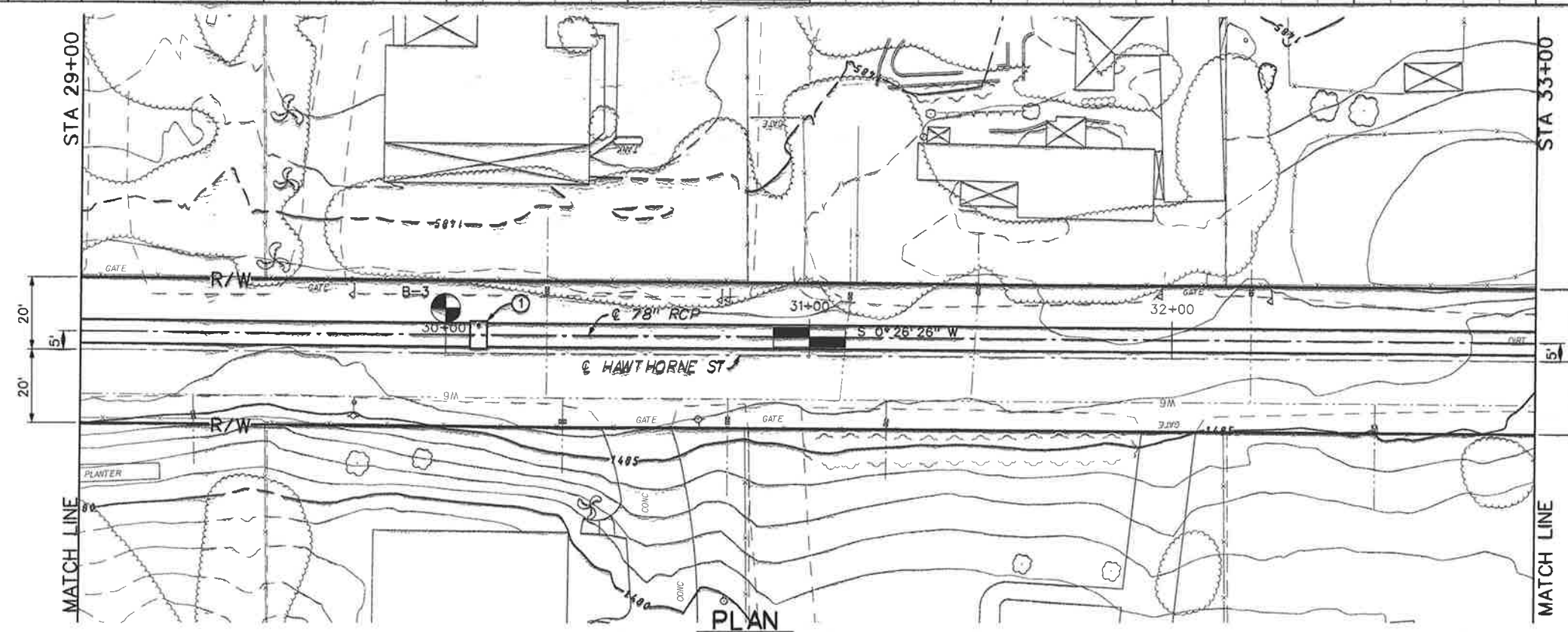
APPROVED BY: *Handwritten Signature*
DATE: 2-8-10

MENIFEE-HAWTHORNE AVENUE STORM DRAIN
STAGE 1
STA 33+00 TO STA 37+00



NOTES

- ① CONSTRUCT MH NO. 2 PER STD MH252.
- ② CONSTRUCT A 6'x6'x6" CONCRETE PAD PER DETAIL SHEET 19.



CITY OF MENIFEE

CITY OF MENIFEE ENGINEERING DEPARTMENT

RECOMMENDED BY: *[Signature]*

DATE: 01/28/10

Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2800

for the location of buried utility lines. Don't disrupt vital services.

TWO WORKING DAYS BEFORE YOU DIG

REVISIONS	DESCRIPTION	APPR.	DATE

DESIGNED BY: D. MUAREGA

DRAWN BY: T. DECKER

DATE DRAWN: JAN 2010

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

RECOMMENDED FOR APPROVAL BY: *[Signature]*

APPROVED BY: *[Signature]*

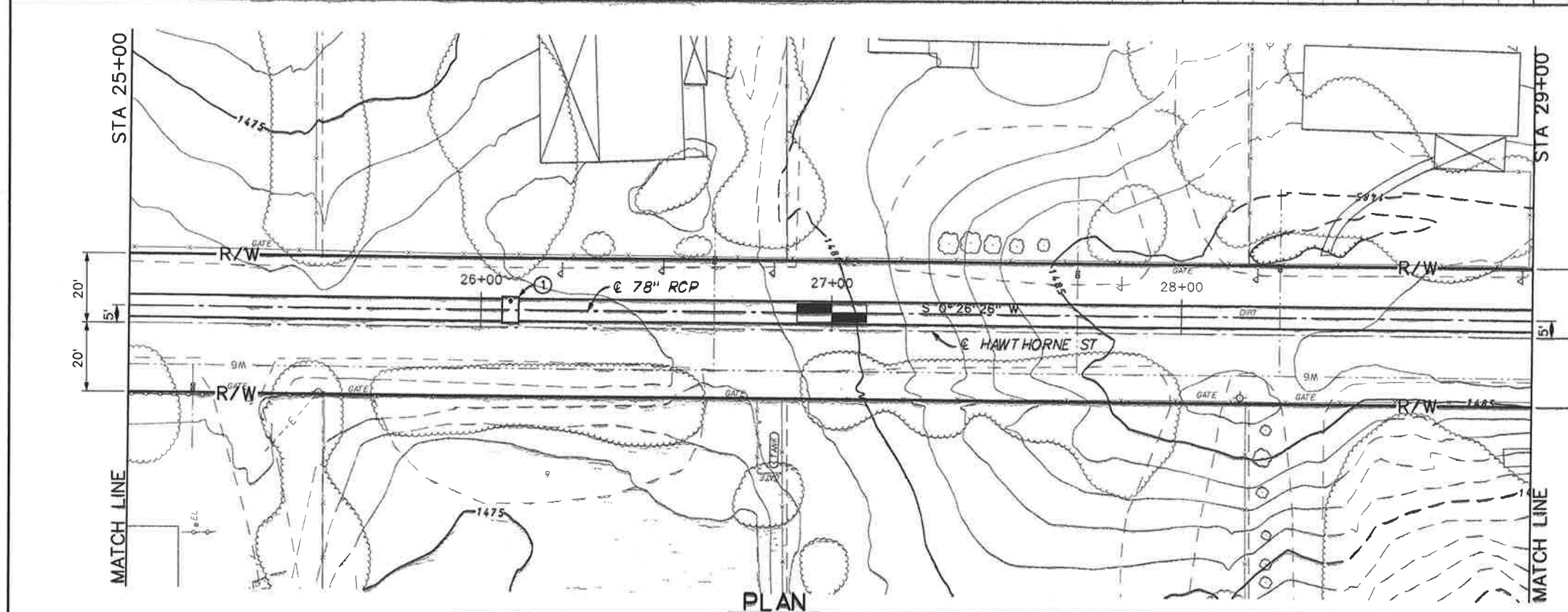
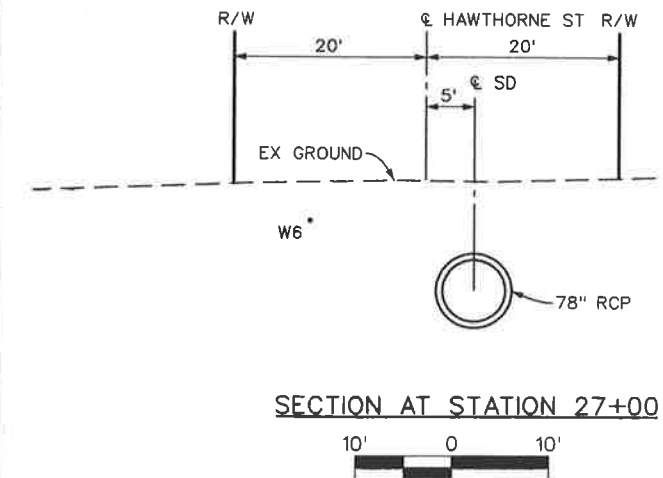
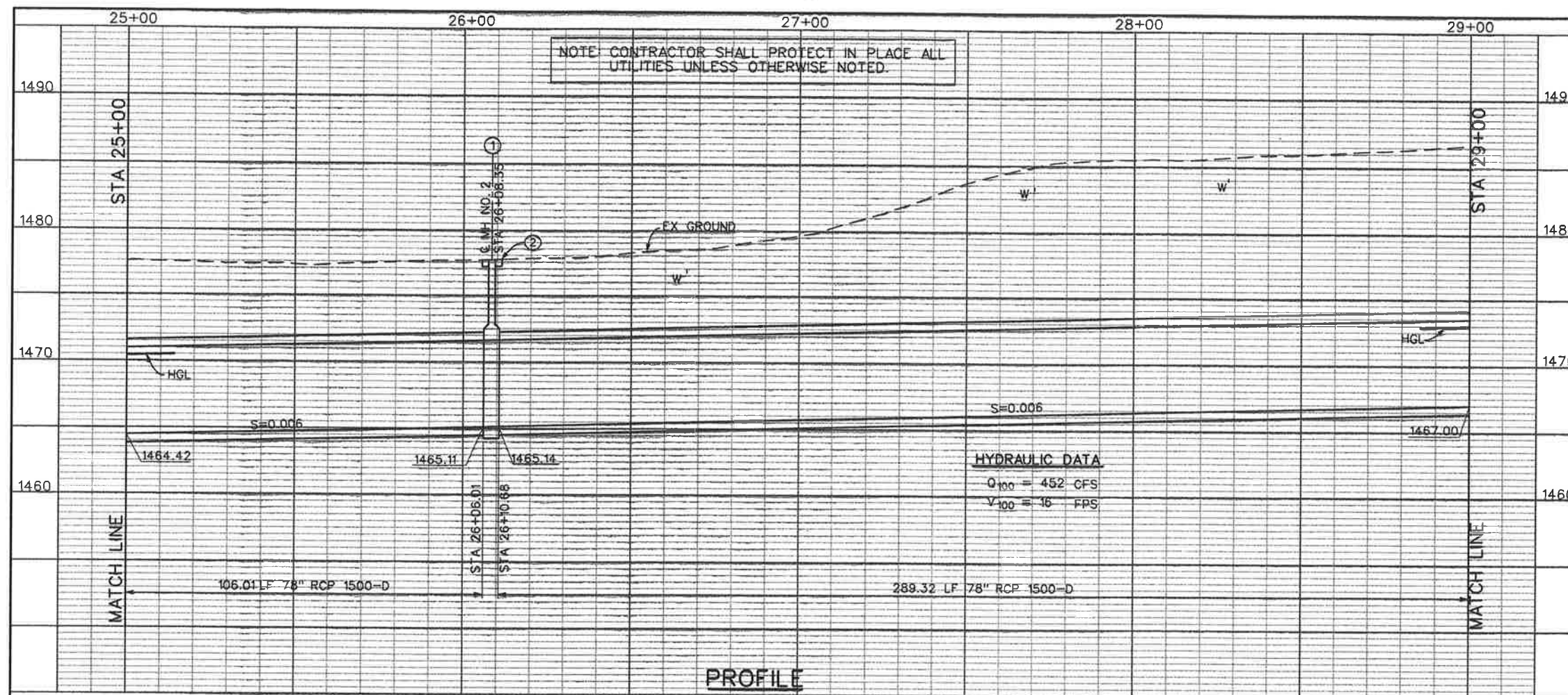
DATE: 1/27/10

DATE: 20-1-2010

MENIFEE-HAWTHORNE AVENUE STORM DRAIN

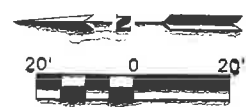
STAGE 1

STA 29+00 TO STA 33+00



NOTES

- CONSTRUCT MH NO. 2 PER STD MH252.
- CONSTRUCT A 6'x6'x6" CONCRETE PAD PER DETAIL SHEET 19.



CITY OF MENIFEE

CITY OF MENIFEE ENGINEERING DEPARTMENT

RECOMMENDED BY: *[Signature]*

DATE: 01/28/10

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for the location of buried utility lines. Don't disrupt vital services.

TWO WORKING DAYS BEFORE YOU DIG

REVISIONS	DESCRIPTION	APPR.	DATE

DESIGNED BY: D. MUAREGA

DRAWN BY: T. DECKER

DATE DRAWN: JAN 2010

RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

RECOMMENDED FOR APPROVAL BY: *[Signature]*

DATE: 1/27/10

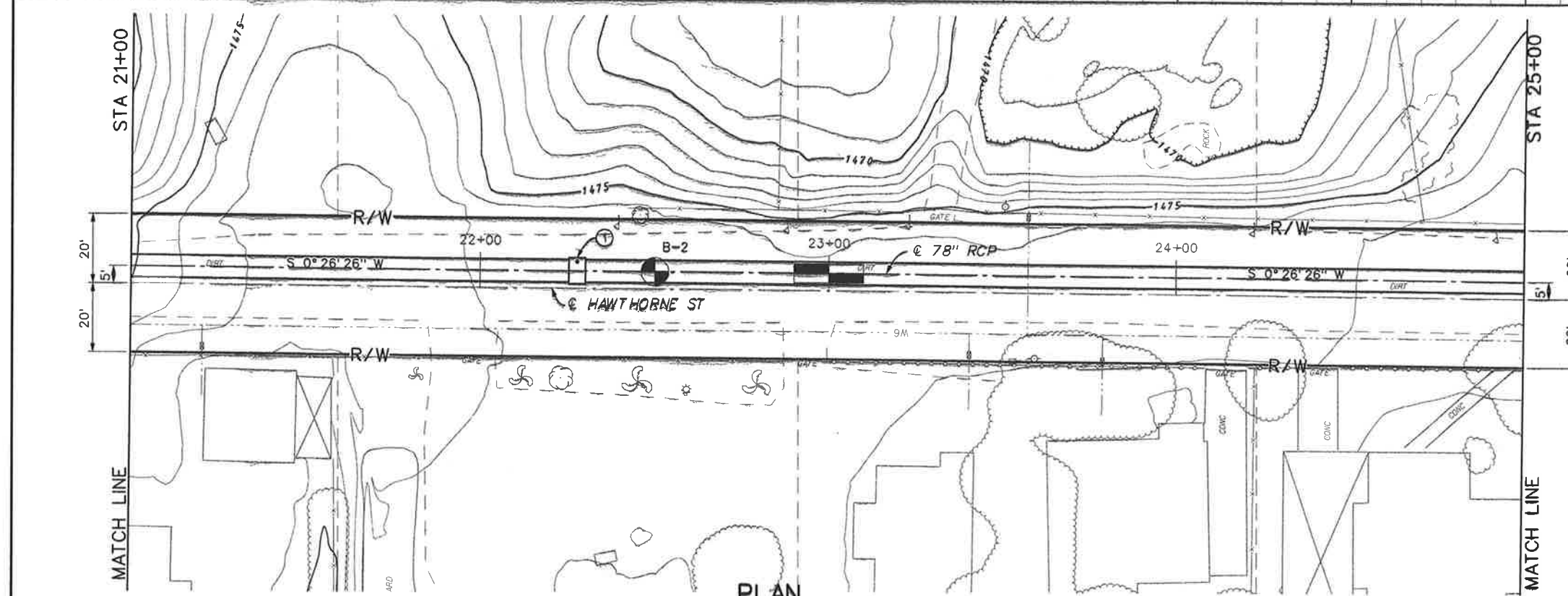
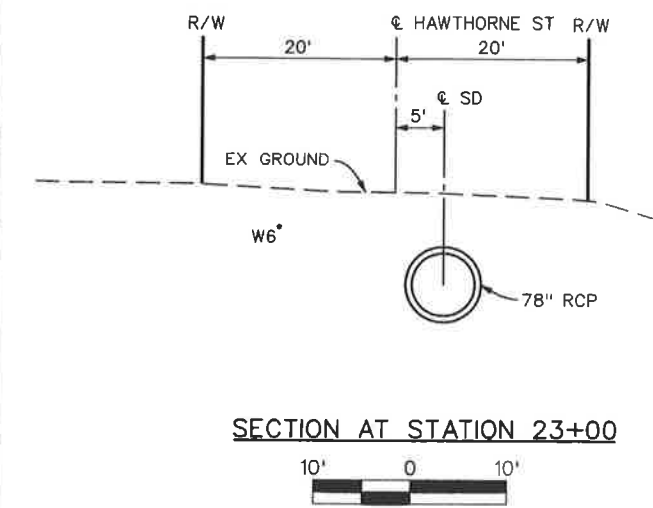
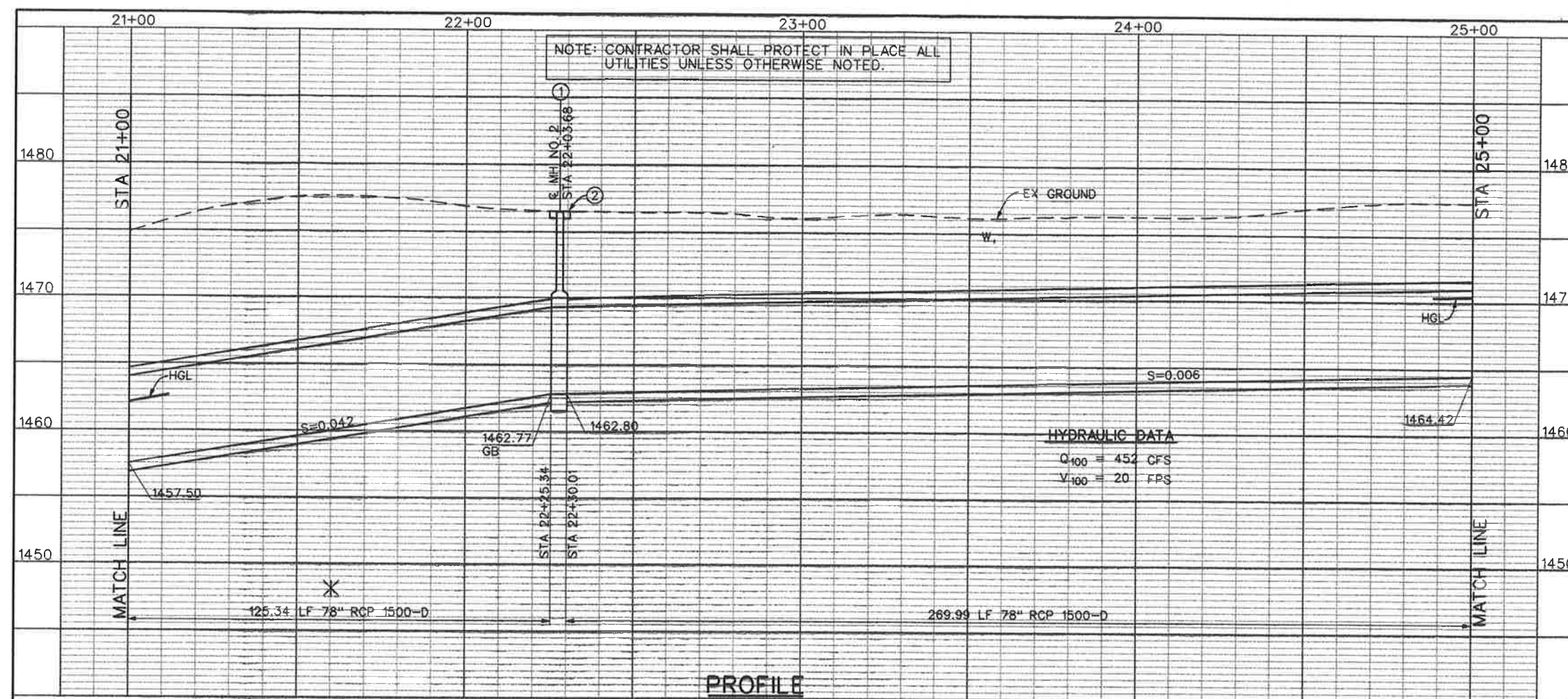
APPROVED BY: *[Signature]*

DATE: 28 Jan 2010

MENIFEE-HAWTHORNE AVENUE STORM DRAIN

STAGE 1

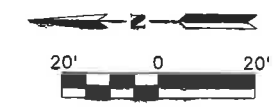
STA 25+00 TO STA 29+00



NOTES

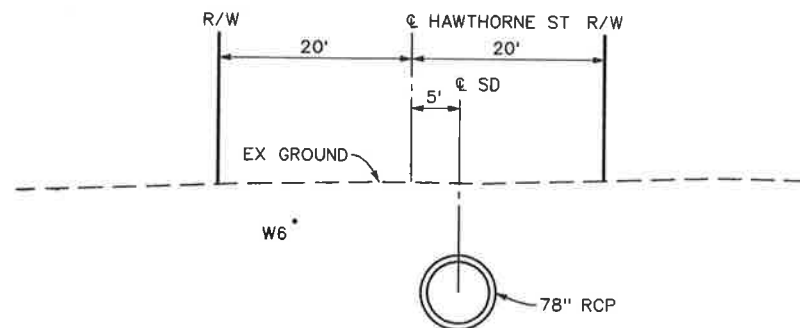
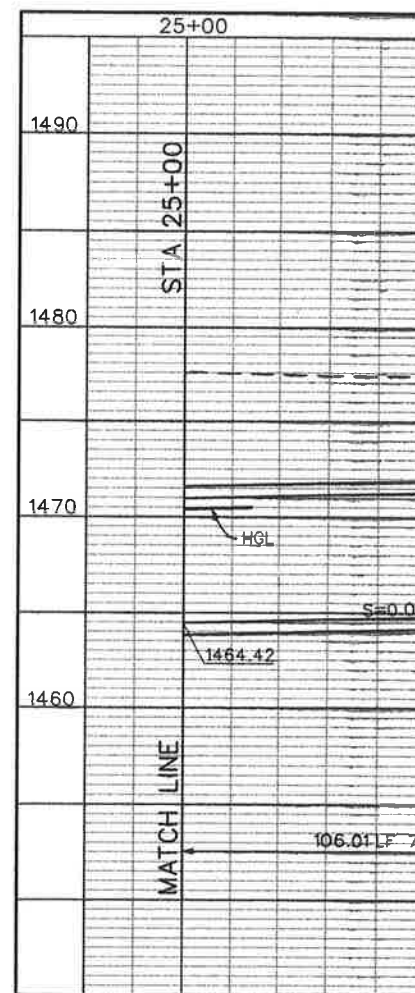
1. CONSTRUCT MH NO. 2 PER STD MH252.
2. CONSTRUCT A 6'x6'x6" CONCRETE PAD PER DETAIL SHEET 19.

✱ FROM STA 17+00 TO STA 22+25.34 THE CONCRETE PIPE THICKNESS MUST BE INCREASED TO PROVIDE A MINIMUM OF 1-1/2" COVER OVER THE REINFORCING STEEL. THE CONCRETE DESIGN STRENGTHS ON THESE REACHES SHALL BE $f'_c = 5,000 \text{ PSI}$.

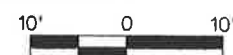


CITY OF MENIFEE CITY OF MENIFEE ENGINEERING DEPARTMENT RECOMMENDED BY: <i>[Signature]</i> DATE: 01/28/10		Don't Dig...Until You Call U.S.A. Toll Free 1-800-227-2600 for the location of buried utility lines. Don't disrupt vital services. TWO WORKING DAYS BEFORE YOU DIG		REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>APPR.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		NO.	DESCRIPTION	APPR.	DATE					DESIGNED BY: D. MUAREGA DRAWN BY: T. DECKER DATE DRAWN: JAN 2010		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT RECOMMENDED FOR APPROVAL BY: <i>[Signature]</i> DATE: 1/27/10 APPROVED BY: <i>[Signature]</i> DATE: 28-JAN-2010	
NO.	DESCRIPTION	APPR.	DATE														

MENIFEE-HAWTHORNE AVENUE STORM DRAIN
 STAGE 1
 STA 21+00 TO STA 25+00

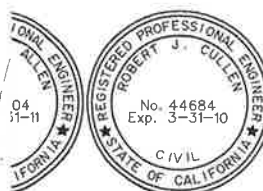
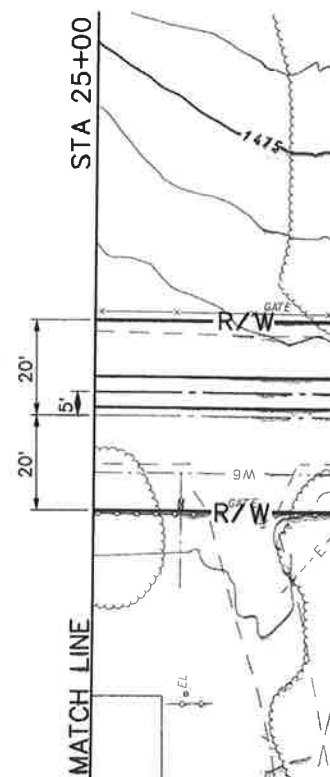


SECTION AT STATION 27+00



NOTES

- ① CONSTRUCT MH NO. 2 PER STD MH252.
- ② CONSTRUCT A 6'x6'x6" CONCRETE PAD PER DETAIL SHEET 19.



APPROVED BY: *[Signature]*

DATE: 28 Jan 2010

MENIFEE-HAWTHORNE AVENUE STORM DRAIN

STAGE 1

STA 25+00 TO STA 29+00

PROJECT NO.
4-0-0163
DRAWING NO.
4-960
SHEET NO.
6 OF 23

LEGEND

CONSTRUCTION SIGNS

TYPE III BARRICADE

DIRECTION OF TRAVEL

CONSTRUCTION AREA

FLASHING ARROW SIGN

C17

ROAD WORK SPEED LIMIT 25

G20-2

END ROAD WORK

M4-9

DETOUR

M4-9R

DETOUR RIGHT

M4-9L

DETOUR LEFT

R1-1

STOP

R3-1

NO RIGHT TURN

R3-2

NO LEFT TURN

R11-2

ROAD CLOSED

R11-4

ROAD CLOSED TO THRU TRAFFIC

W3-4

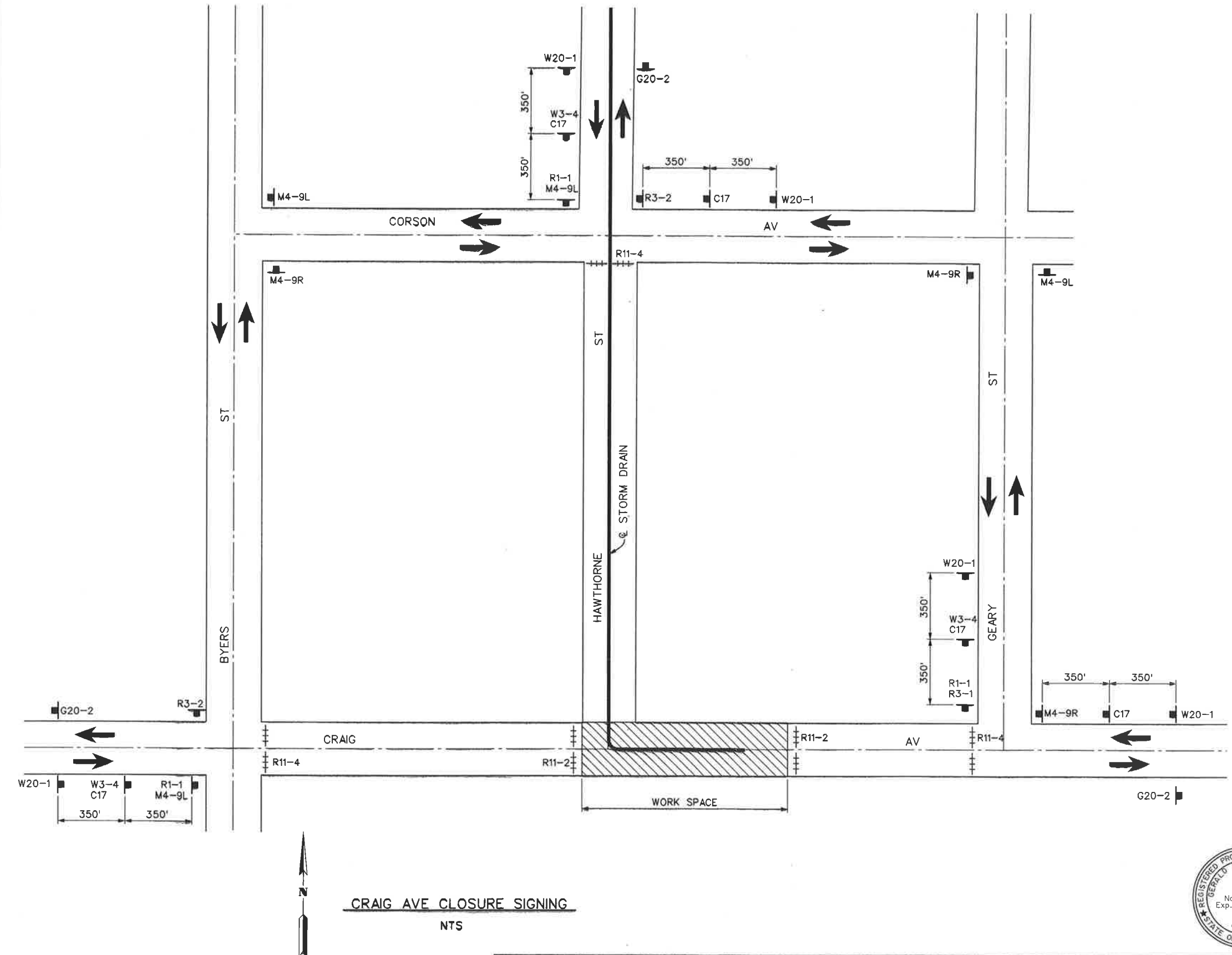
BE PREPARED TO STOP

W20-1

ROAD WORK AHEAD

NOTES

- THESE ARE THE MINIMUM TRAFFIC CONTROL REQUIREMENTS. TRAFFIC CONTROL MAY BE REQUIRED TO FACILITATE PUBLIC SAFETY AND TRAFFIC FLOW IF DEEMED NECESSARY BY THE ENGINEER OR RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT.
- ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2003 EDITION AND THE MUTCD 2006 CALIFORNIA SUPPLEMENT, LATEST EDITION AND WITH ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL AGENCIES.
- FLASHING YELLOW BEACONS, TYPE B, SHALL ILLUMINATE ALL W20-1 SIGNS AND TYPE III BARRICADES USED AT THE WORK SPACE DURING HOURS OF DARKNESS.
- ALL TRENCHES SHALL BE BACK FILLED OR PLATED AT THE END OF EACH WORK DAY.
- PRIVATE PROPERTY AND EMERGENCY ACCESS SHALL BE MAINTAINED AT ALL TIMES.



CRAIG AVE CLOSURE SIGNING
NTS



CITY OF MENIFEE		REVISIONS		RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT		MENIFEE-HAWTHORNE AVENUE STORM DRAIN STAGE 1 TRAFFIC CONTROL
CITY OF MENIFEE ENGINEERING DEPARTMENT				DESIGNED BY: D. MUAREGA		
RECOMMENDED BY: <i>[Signature]</i>				DRAWN BY: T. DECKER		
DATE: 01/28/10				DATE DRAWN: JAN 2010		
REF.	DESCRIPTION	APPR.	DATE	DATE: 1/27/10	DATE: 28-1-2010	