

**EXHIBIT A
EL DORADO
IRRIGATION DISTRICT (EID)
CONFLICT WORK**

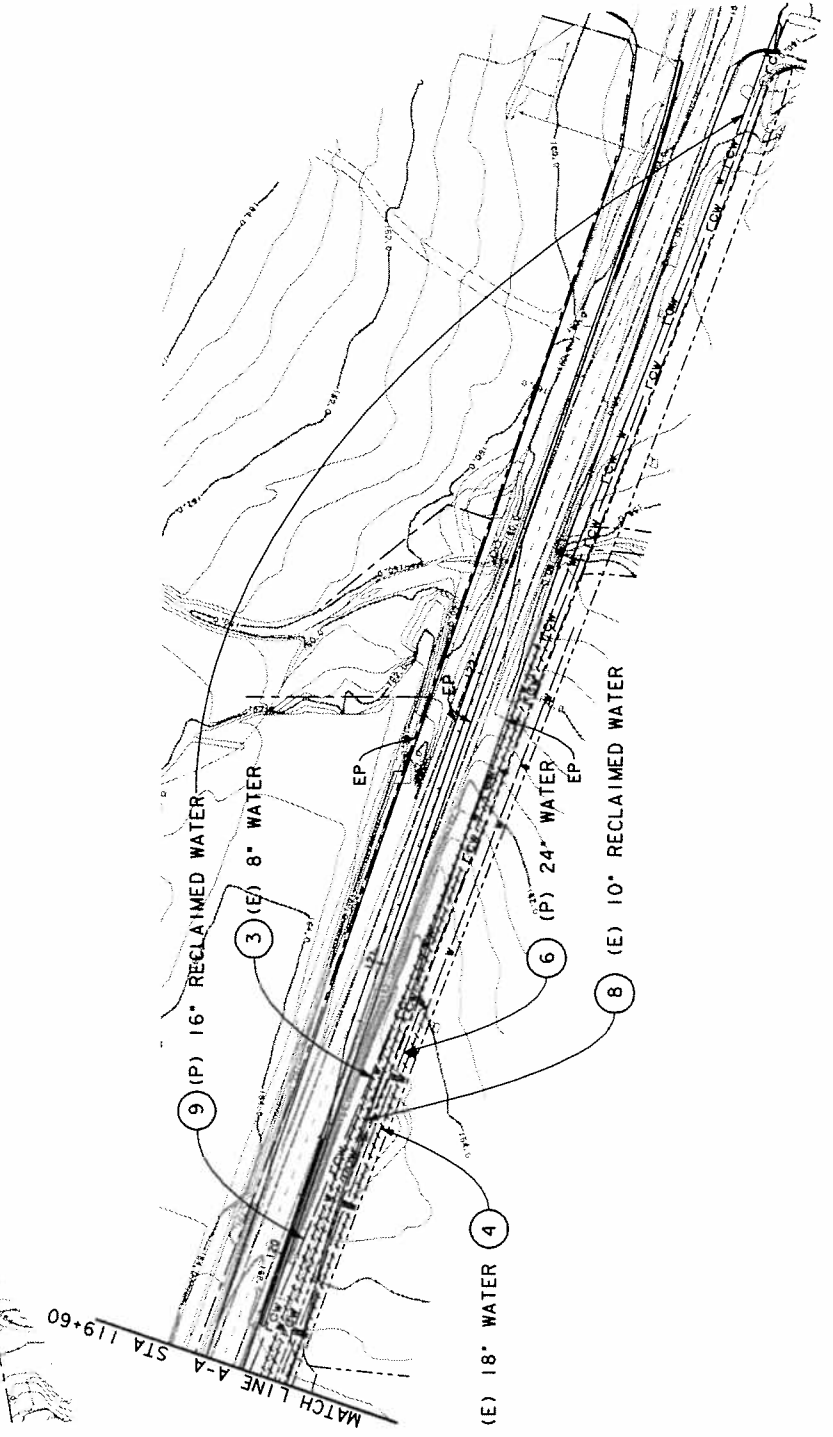
- LEGEND**
- REMOVE PIPE
 - ABANDON PIPE
 - PROPOSED PROJECT
 - EXISTING FEATURES
 - - - - RIGHT OF WAY
 - - - - UTILITY EASEMENT

(X) SEE SHEET 2 FOR CALLOUT DETAILS

DATE: JANUARY 2008 SCALE: NO SCALE

PREPARED BY: **DE DOKKEN ENGINEERING**
 2365 Iron Point Rd Suite 200
 Fortson, CA 95630 (916) 859-0642
 ...VEID-EDC Agreement Exhibit A-CONFLICTS-Block.dwg.wlts.dgn

SHEET 1 OF 3



WATER SYSTEM

EXHIBIT ID	PIPE DIAMETER (IN) & MATERIAL	BEGIN PIPE LOCATION (M)		END PIPE LOCATION (M)		LENGTH OF PIPE (M)			VALVE (EA)		
		STATION	OFFSET	STATION	OFFSET	ABANDON	REMOVE	NEW	ABANDON	REMOVE	NEW
1	12" / ACP	'L' 113+51	15.3 RT	115+83	16.3 LT	236.5			0		
2	12" / ACP	'L' 115+83	16.3 LT	117+05	5.4 LT		125.0			1	
3	8" / ACP	'L' 117+05	5.4 LT	124+19	25.4 RT		723.6			2	
4	18" / DIP	'L' 117+05	5.4 LT	120+92	19.2 RT		395.8			4	
5	24" / DIP	'L' 117+18	31.3 LT	117+05	5.4 LT		30.9			2	
6	24" / DIP	'L' 113+57	18.6 RT	120+92	19.2 RT			772.0			9
TOTAL						236.5	1275.3	772.0	0	9	9

RECYCLED WATER SYSTEM

EXHIBIT ID	PIPE DIAMETER (IN) & MATERIAL	BEGIN PIPE LOCATION (M)		END PIPE LOCATION (M)		LENGTH OF PIPE (M)			VALVE (EA)		
		STATION	OFFSET	STATION	OFFSET	ABANDON	REMOVE	NEW	ABANDON	REMOVE	NEW
7	10" / ACP	'L' 114+95	36.4 LT	115+82	13.9 LT	99.0			2		
8	10" / ACP	'L' 115+82	13.9 LT	124+29	27.1 RT		857.9			4	
9	16" / PVC	'L' 115+15	52.7 LT	124+29	27.1 RT			949.5			4
TOTAL						99.0	857.9	949.5	2	4	4

EXHIBIT A
EL DORADO
IRRIGATION DISTRICT (EID)
CONFLICT WORK

DATE: JANUARY 2008 SCALE: NO SCALE

PREPARED BY:



2365 Iron Point Rd Suite 200
 Folsom, CA. 95630 (916) 859-0642
 ...EID-EDC Agreement Exhibit_Conflicts_Block_and_valves.dgn

DETERMINATION OF EID AND COUNTY RESPONSIBILITIES FOR EID INSTALLATION WORK

- A) There are existing 8-inch, 12-inch and 24-inch water line facilities within the project area, with portions of each conflicting with the proposed road improvements. EID has prior land rights for these facilities so that the County is responsible for relocating the portions of the water lines that are in conflict. Exhibit B titled "Cost Estimate for EID Relocations - County Responsibility" identifies the costs related to the water line relocations.
- B) There is an existing 10-inch recycled water line facility within the project area, with portions of this line conflicting with the proposed road improvements. EID has prior land rights for this facility so that the County is responsible for relocating the portions of the recycled water line that is in conflict. Exhibit B titled "Cost Estimate for EID Relocations - County Responsibility" identifies the costs related to the recycled water line relocations.
- C) The County costs for items A) and B) above are estimated to be \$780,424, including a 10% contingency, as shown on Exhibit B titled "Cost Estimate for EID Relocations - County Responsibility".
- D) EID does not want the conflicts resolved through abandonment and relocation of the existing facilities as reflected in the Exhibits A and B. EID has requested and the County has agreed to the EID Installation Work consisting of new upgraded water and recycled water lines generally located in a longitudinal alignment along the easterly limits of the County project, and to abandon the existing water and recycled water lines addressed in Items A) and B) above. The total cost for this EID Installation Work is estimated to be \$2,105,466, including a 10% contingency, as shown on Exhibit C titled "EID and County Cost Responsibility Cost Estimate".
- E) Sheet 1 and 2 of this Exhibit A detail the location of existing facilities to be abandoned or removed and proposed new facilities.
- F) The County's estimated percent of the cost for this EID Installation Work is 37.07% (estimated cost of \$780,423.60 divided by estimated total cost of \$2,105,466.00); and the EID responsibility for the EID Installation Work is 62.93% (estimated cost of \$1,325,042.40 divided by estimated total cost of \$2,105,466.00) (See Exhibits B through D).

EXHIBIT A EL DORADO IRRIGATION DISTRICT (EID) CONFLICT WORK

DATE: JANUARY 2008

SCALE: NO SCALE

PREPARED BY:



2365 Iron Point Rd Suite 200
Folsom, CA. 95630
(916)858-0642

...\\EID.EDC.Agreement.Exhibit.CONFLICTS.Black.and.white.dgn

EXHIBIT B - COST ESTIMATE for EID RELOCATIONS - COUNTY RESPONSIBILITY

Jan-08

8 inch ACP Water				
Sta 117+05 (5.4m LT) to 117+55 (14.4 m LT), Sta 119+55 (6.2m RT) to 121+73 (13.5 m LT)				
ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
8" PVC PIPE	M	269	\$ 375.00	\$ 100,875.00
8" GATE VALVE	EA	1	\$ 2,520.00	\$ 2,520.00
2" ARV	EA	2	\$ 5,000.00	\$ 10,000.00
RELOCATE BLOW OFF	EA	1	\$ 1,000.00	\$ 1,000.00
CONNECT TO EXIST WATERLINE	EA	3	\$ 5,000.00	\$ 15,000.00
REMOVE VALVE	EA	2	\$ 1,000.00	\$ 2,000.00
REMOVE PIPELINE	M	269	\$ 50.00	\$ 13,450.00
CONTINGENCY			10%	\$ 14,484.50
SUBTOTAL				\$ 159,329.50

10 inch ACP Reclaimed Water				
Sta 115+90 (12.3m LT) to 117+55 (11.8 m LT),Sta 119+55 (8.5m RT) to 121+60 (15.5 m RT)				
ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
10" PVC PIPE	M	373.9	\$ 465.00	\$ 173,863.50
2" ARV	EA	2	\$ 5,000.00	\$ 10,000.00
RELOCATE BLOW OFF	EA	1	\$ 1,000.00	\$ 1,000.00
CONNECT TO EXIST WATERLINE	EA	4	\$ 5,000.00	\$ 20,000.00
REMOVE PIPELINE	M	373.9	\$ 50.00	\$ 18,695.00
CONTINGENCY			10%	\$ 22,355.85
SUBTOTAL				\$ 245,914.35

12 inch ACP Water				
Sta 115+95 (13.8m LT) to 117+04 (4.5 m RT)				
ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
12" PVC PIPE	M	112.3	\$ 580.00	\$ 65,134.00
12" GATE VALVE	EA	1	\$ 2,750.00	\$ 2,750.00
CONNECT TO EXIST WATERLINE	EA	1	\$ 5,000.00	\$ 5,000.00
REMOVE VALVE	EA	1	\$ 1,000.00	\$ 1,000.00
REMOVE PIPELINE	M	112.3	\$ 50.00	\$ 5,615.00
CONTINGENCY			10%	\$ 7,949.90
SUBTOTAL				\$ 87,448.90

18 inch DIP Water				
117+05 (5.4 m LT) to 117+55 (8.6 m LT), Sta 119+50 (14.4m RT) to 120+80 (18.9m RT)				
ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
18" DIP PIPE	M	187.9	\$ 815.00	\$ 153,138.50
18" BUTTERFLY VALVE	EA	1	\$ 6,000.00	\$ 6,000.00
6" ARV	EA	1	\$ 13,000.00	\$ 13,000.00
RELOCATE BLOW OFF	EA	1	\$ 2,000.00	\$ 2,000.00
CONNECT TO EXIST WATERLINE	EA	3	\$ 5,000.00	\$ 15,000.00
REMOVE VALVE	EA	3	\$ 1,000.00	\$ 3,000.00
REMOVE PIPELINE	M	187.9	\$ 50.00	\$ 9,395.00
CONTINGENCY			10%	\$ 20,153.35
SUBTOTAL				\$ 221,686.85

24 inch DIP Water				
117+09 (21.0 m LT) to 117+05 (5.4 m LT)				
ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
24" DIP PIPE	M	17.6	\$ 975.00	\$ 17,160.00
24" BUTTERFLY VALVE	EA	1	\$ 9,000.00	\$ 9,000.00
6" ARV	EA	1	\$ 13,000.00	\$ 13,000.00
CONNECT TO EXIST WATERLINE	EA	1	\$ 5,000.00	\$ 5,000.00
REMOVE VALVE	EA	0	\$ 1,000.00	\$ -
REMOVE PIPELINE	M	17.6	\$ 50.00	\$ 880.00
CONTINGENCY			10%	\$ 4,504.00
SUBTOTAL				\$ 49,544.00

PROJECT WIDE ITEMS				
ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT
TRENCH SHEILDS/SHORING	LS	1	\$ 15,000.00	\$ 15,000.00
CONTINGENCY			10%	\$ 1,500.00
SUBTOTAL				\$ 16,500.00

Total County Responsibility	\$ 780,424
Total EID Installation Work Cost	\$ 2,105,466
Total EID Estimated Cost	\$ 1,325,042

**Exhibit C - EID and County Cost Responsibility
Cost Estimate**

Jan-08

Project #72403 - Latrobe Road Widening, Realignment and Bridge - Surcast to Golden Foothill
EID Water and Recycled Water Facilities to be Installed

Item	Description	Unit	Quantity	Unit Price	Amount
1	610 mm DIP Class 350 waterline	M	775	\$ 975.00	\$ 755,625.00
2	406 mm C900 PVC CL200 waterline	M	951	\$ 735.00	\$ 698,985.00
3	610 mm Butterfly Valve	EA	5	\$ 9,000.00	\$ 45,000.00
4	457 mm Butterfly Valve	EA	1	\$ 6,000.00	\$ 6,000.00
5	406 mm Butterfly Valve	EA	4	\$ 5,000.00	\$ 20,000.00
6	305 mm Butterfly Valve	EA	1	\$ 3,000.00	\$ 3,000.00
7	254 mm Gate Valve	EA	2	\$ 2,500.00	\$ 5,000.00
8	6" combination air release	EA	4	\$ 13,000.00	\$ 52,000.00
9	4" combination air release	EA	3	\$ 10,000.00	\$ 30,000.00
10	6" Blow Off	EA	4	\$ 11,000.00	\$ 44,000.00
11	4" Blow Off	EA	3	\$ 8,000.00	\$ 24,000.00
12	2" Blow Off	EA	3	\$ 6,000.00	\$ 18,000.00
13	Connection to existing waterline	EA	4	\$ 5,000.00	\$ 20,000.00
14	Trench Shields, Sheeting, Shoring and Bracing	LS	1	\$ 15,000.00	\$ 15,000.00
15	Abandon pipeline	LS	3	\$ 2,500.00	\$ 7,500.00
16	Remove ARV	EA	5	\$ 1,000.00	\$ 5,000.00
17	Remove Blow Off	EA	3	\$ 1,000.00	\$ 3,000.00
18	Remove Valve	EA	6	\$ 1,000.00	\$ 6,000.00
19	Remove Pipeline	M	1700	\$ 50.00	\$ 85,000.00
20	600 mm DOUBLE BALL EXPANSION JOINT	EA	2	\$ 12,000.00	\$ 24,000.00
21	600 MM WELDED STEEL PIPE (6.35 MM THICK) ((METRIC))	M	40	\$ 650.00	\$ 26,000.00
22	600 mm WSP CASING (BRIDGE)	M	17	\$ 650.00	\$ 11,050.00
23	860 mm WSP CASING (BRIDGE)	M	11	\$ 900.00	\$ 9,900.00
24	Contingency			10%	\$ 191,406.00
Total Project Cost					\$ 2,105,466.00

Exhibit D
COST ESTIMATE SUMMARY

Jan-08

COUNTY COST SUMMARY	EXHIBIT B	\$780,424
*COUNTY COST TOTAL (37.07% of EID INSTALLATION WORK):		\$780,424

EID COST SUMMARY		\$1,325,042
*EID COST TOTAL (62.93% of EID INSTALLATION WORK):		\$1,325,042

*TOTAL COSTS - EID INSTALLATION WORK:	EXHIBIT C	\$ 2,105,466.00
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* All costs are estimates as of 1/03/2008

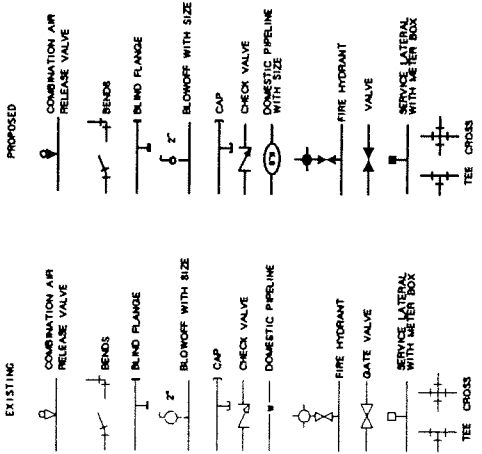


DE DOKKEN
ENGINEERING
2885 FOUNTAIN VALLEY ROAD
FOUNTAIN VALLEY, CA 92708
PH: 918-585-0645 FAX: 918-585-0845

ABBREVIATIONS

- AC ASBESTOS CONCRETE
- AV AIR RELEASE VALVE
- BY BUTTERFLY VALVE
- BO BLOW OFF
- DIP DUCTILE IRON PIPE
- FCA FLANGE COUPLING ADAPTER
- CV GATE VALVE
- LN LINEAR METERS
- MM MILLIMETER
- TB THRUST BLOCK

LEGEND



GENERAL NOTES:

1. ALL WORK SHALL BE ACCOMPLISHED UNDER THE APPROVAL, INSPECTION AND TO THE SATISFACTION OF THE EL DORADO IRRIGATION DISTRICT (E.I.D.). ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND ACCOMPANYING SPECIFICATIONS AND SPECIAL PROVISIONS.
2. LOCATION OF ALL UNDERGROUND FACILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION AND DEPTH OF ALL FACILITIES PRIOR TO ANY TRENCHING. THE CONTRACTOR SHALL REPAIR ALL UTILITIES DAMAGED BY THE CONSTRUCTION AT NO ADDED COST.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL UNDERGROUND FACILITIES AFFECTED BY THE WORK.
4. WHETHER E.I.D. OR ITS EMPLOYEES, SHALL BE LIABLE FOR CLAIMS, LOSSES, DAMAGE, INJURY OR DEATH OF ANY PERSON OR PROPERTY OR FROM THE PRESENT OR FUTURE OPERATION OF ANY FACILITIES CAUSED OR CONNECTED WITH THE PERFORMANCE BY CONTRACTOR, SUBCONTRACTOR OF THEIR EMPLOYEES.
5. ALL TIE-INS TO DISTRICT FACILITIES SHALL BE DONE BY A LICENSED CONTRACTOR IN ACCORDANCE WITH E.I.D. TIE-IN PROCEDURES. THE CONTRACTOR SHALL PROVIDE LICENSED VERIFICATION TO E.I.D. PRIOR TO TIE-IN.
6. ALL BLOW-OFFS AND ARYS LOCATED ABOVE GROUND TO BE LOCATED 1.2 m MIN FROM BACK OF DITCH.
7. FOR ADDITIONAL UTILITY INFORMATION NOT SHOWN ON WATERLINE SHEETS, SEE UTILITY SHEETS.

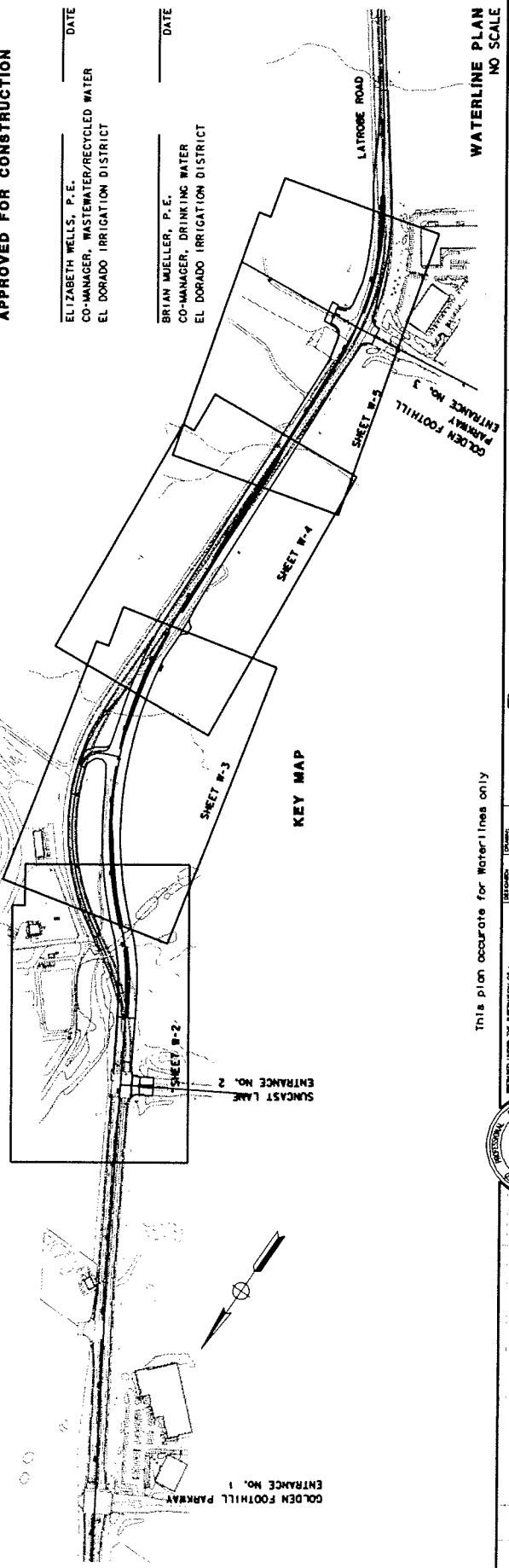
APPROVED FOR CONSTRUCTION

ELIZABETH WELLS, P. E.
CO-MANAGER, WASTEWATER/RECYCLED WATER
EL DORADO IRRIGATION DISTRICT

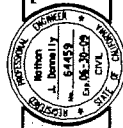
DATE _____

BRIAN MUELLER, P. E.
CO-MANAGER, DRINKING WATER
EL DORADO IRRIGATION DISTRICT

DATE _____



This plan accurate for Waterlines only



EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION

**LATROBE ROAD REALIGNMENT,
WIDENING & BRIDGE PROJECT
SUNCAST TO GOLDEN FOOTHILL**

SHEET **W-1**
69 OF 73
JOB NO. 72403

SHEET W-3
MATCH LINE



16' 315-03.600 POT.
SEE DETAIL 'A'
'L' 115-14.851
52.715 LT

INSTALL 45' 180°
'L' 115-36.189
29.238 LT

24' 215-56.529 EC
PLUS 11.25' BEND
'L' 115-79.776
26.724 LT

24' 215-56.529 EC
PLUS 11.25' BEND
'L' 115-79.776
26.724 LT

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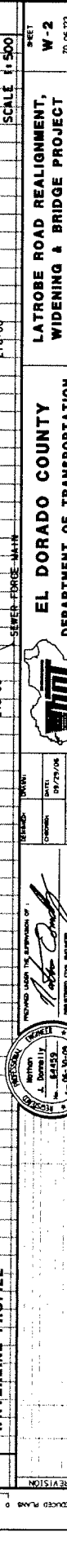
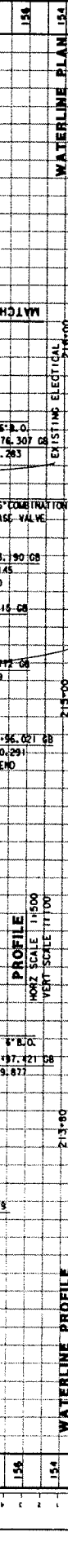
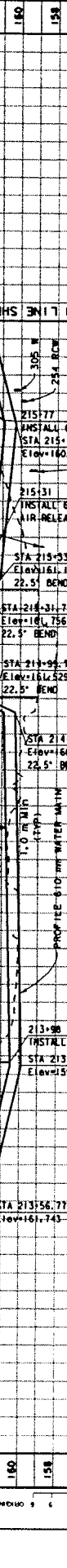
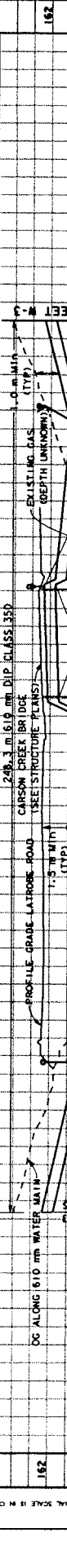
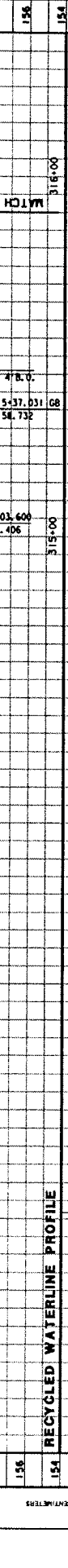
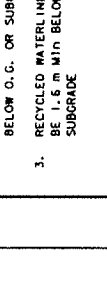
24' 215-56.529 EC
PLUS 11.25' BEND
'L' 115-79.776
26.724 LT

24' 215-56.529 EC
PLUS 11.25' BEND
'L' 115-79.776
26.724 LT

CURVE DATA

NO	R	Δ	T	L
1	308.9	10°03'40"	27.191	54.242
2	1052.369	3°06'01"	28.479	56.945
3	320.5	6°54'44"	19.356	38.666
4	549.5	3°15'26"	15.624	31.239
5	285	46°18'36"	121.886	230.354

NOTES:
1. RECYCLED WATERLINE TO BE EITHER:
C909 DR18
C909 CLASS 200
DIP CLASS 350
2. WATERLINE TO BE 1.0 m MIN BELOW O.G. OR SUBGRADE
3. RECYCLED WATERLINE TO BE 1.8 m MIN BELOW O.G. OR SUBGRADE



EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION

WATERLINE PLAN
SCALE 1:500

WATERLINE PROFILE
SCALE 1:500

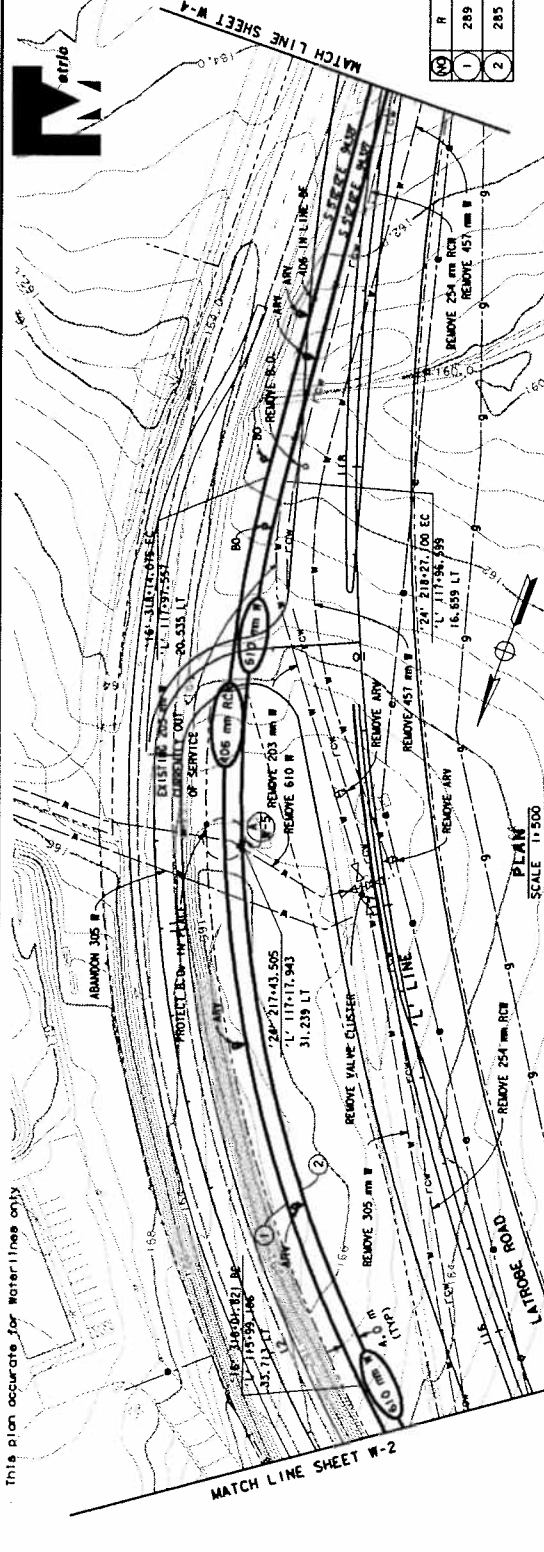
REVISIONS

DATE: 07/27/04

PROJECT: LATROBE ROAD REALIGNMENT, WIDENING & BRIDGE PROJECT BUNCAST TO GOLDEN FOOTHILL

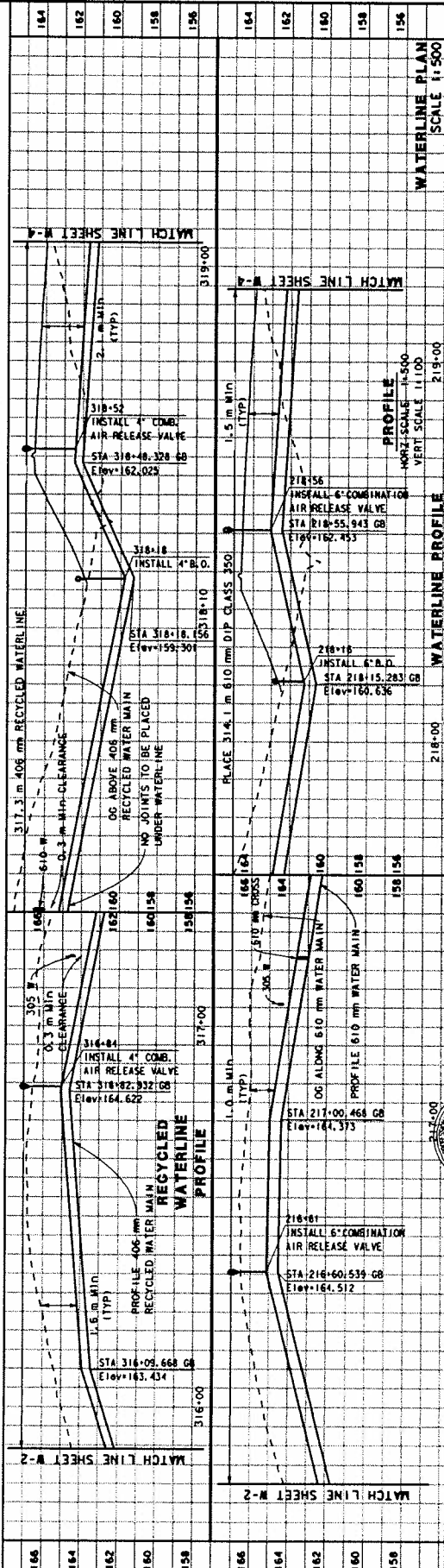
DR: [Signature]

This plan accurate for waterlines only



NO	R	Δ	T	L
1	289	42° 04' 49"	111.169	212.253
2	285	49° 18' 36"	121.886	230.354

CURVE DATA



STATION	ELEVATION	PIPE SIZE	DEPTH	DIAPHRAGM	VALVE
216+00	163.434	406 mm	1.6 m	1.0 m	4\"/>
216+52	162.025	4\"/>			
218+10	163.301	4\"/>			
218+15	160.636	6\"/>			
218+55	162.455	6\"/>			
219+00	162.500	6\"/>			

WATERLINE PROFILE
SCALE: 1:100

EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION

LATROBE ROAD REALIGNMENT,
WIDENING & BRIDGE PROJECT
SUNCAST TO GOLDEN FOOTHILL

PROJECT NO. 09-29-004
DATE: 09-29-04
DRAWN BY: JJR
CHECKED BY: JLR

REVISIONS
NO. DATE DESCRIPTION

1747888

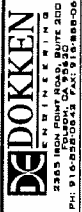
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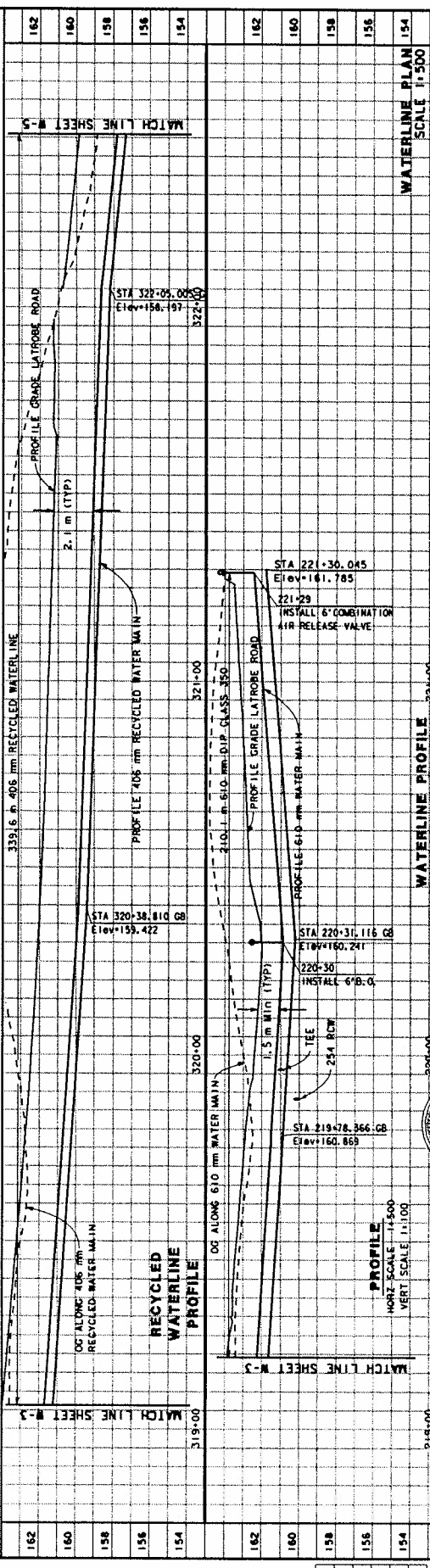
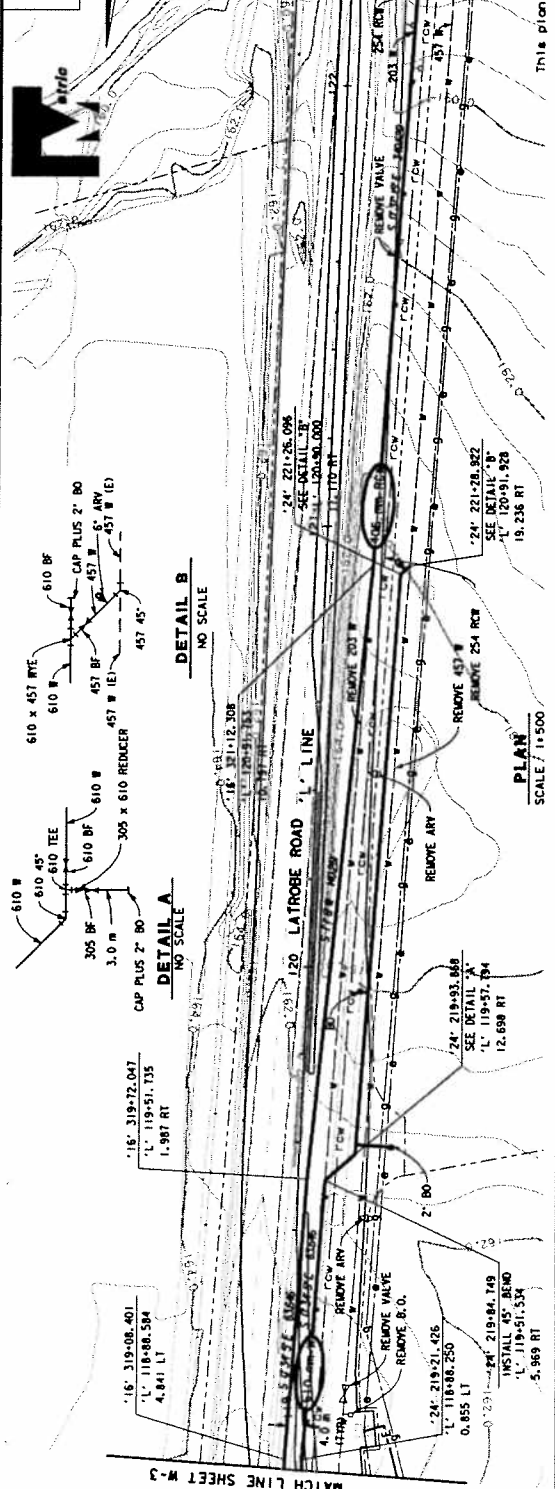
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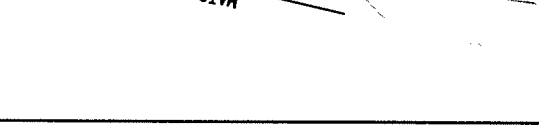
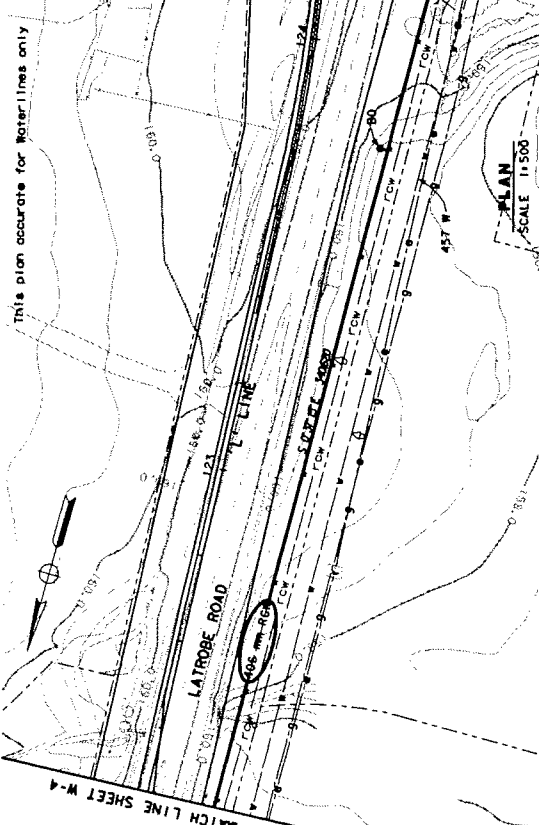
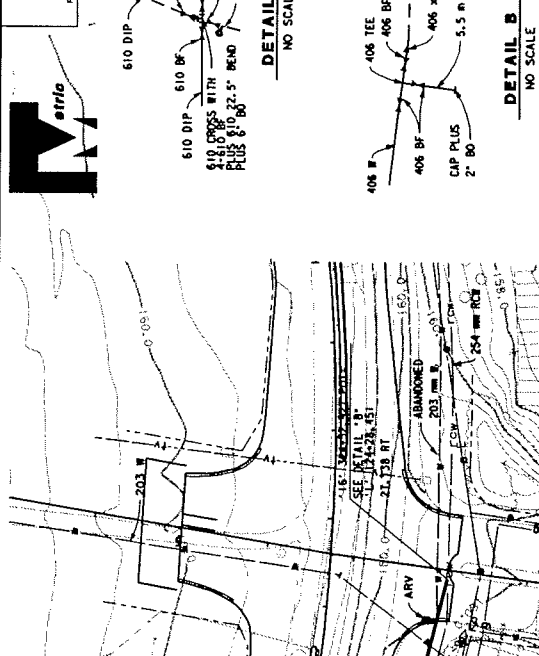


2505 HIGH POINT ROAD, SUITE 200
PH: 910-885-0045 FAX: 910-885-0643

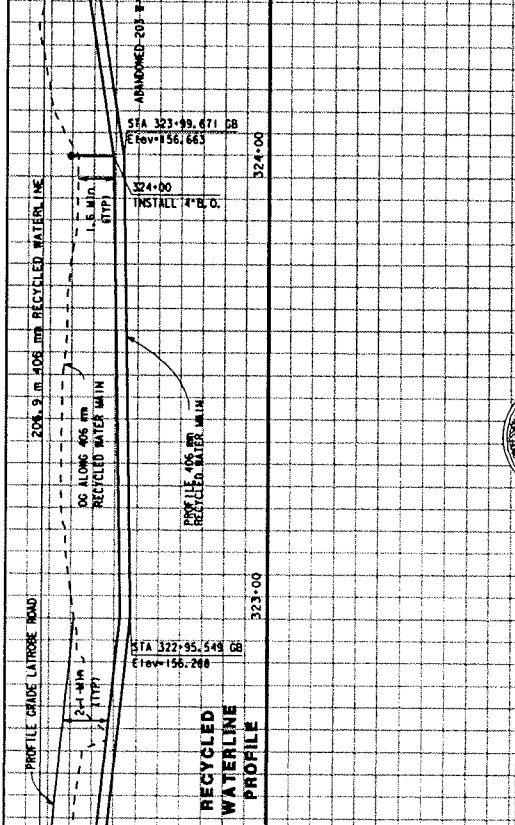


162	160	158	156	154	162	160	158	156	154
MATCH LINE SHEET W-3									
MATCH LINE SHEET W-5									
WATERLINE PLAN SCALE 1" = 500'									
WATERLINE PROFILE SCALE 1" = 500'									
EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION 									
LATROBE ROAD REALIGNMENT, W-4 WIDENING & BRIDGE PROJECT SUNCAST TO GOLDEN FOOTHILL									
SHEET W-4 72 OF 123 7/27/2018 72403									
REVISION DATE BY CHECKED DATE APPROVED DATE 									
APPROVED FOR THE ENGINEER OF J. DENNIS LEECH CIVIL ENGINEER 14-003-2019 02-21-19									
1/27/2018									

EXHIBIT E
SHEET 4 OF 7



WATERLINE QUANTITIES		
ITEM	UNIT	QUANTITY
610 mm DIP CLASS 350 WATERLINE	m	772.5
406 mm C900 PVC CL200 WATERLINE	m	950.1
610 mm BUTTERFLY VALVE	EA	5
457 mm BUTTERFLY VALVE	EA	1
406 mm BUTTERFLY VALVE	EA	4
305 mm BUTTERFLY VALVE	EA	1
234 mm GATE VALVE	EA	2
6" COMBINATION AIR RELEASE VALVE	EA	4
4" COMBINATION AIR RELEASE VALVE	EA	3
6" BLOW OFF	EA	4
4" BLOW OFF	EA	4
2" BLOW OFF	EA	3
CONNECTION TO EXISTING WATERLINE	EA	4
REMOVE ARV	EA	4
REMOVE BLOW OFF	EA	5
REMOVE VALVE	EA	2
REMOVE PIPELINE	EA	6
ABANDON PIPELINE	m	1700
ABANDON PIPELINE	EA	3



WATERLINE PLAN		
ITEM	UNIT	QUANTITY
610 mm DIP CLASS 350 WATERLINE	m	772.5
406 mm C900 PVC CL200 WATERLINE	m	950.1
610 mm BUTTERFLY VALVE	EA	5
457 mm BUTTERFLY VALVE	EA	1
406 mm BUTTERFLY VALVE	EA	4
305 mm BUTTERFLY VALVE	EA	1
234 mm GATE VALVE	EA	2
6" COMBINATION AIR RELEASE VALVE	EA	4
4" COMBINATION AIR RELEASE VALVE	EA	3
6" BLOW OFF	EA	4
4" BLOW OFF	EA	4
2" BLOW OFF	EA	3
CONNECTION TO EXISTING WATERLINE	EA	4
REMOVE ARV	EA	4
REMOVE BLOW OFF	EA	5
REMOVE VALVE	EA	2
REMOVE PIPELINE	EA	6
ABANDON PIPELINE	m	1700
ABANDON PIPELINE	EA	3

REVISION

DATE

BY

1/27/08

142

160

158

156

154

152

140

130

120

110

100

90

80

70

60

50

40

30

20

10

0

1' ORIGINAL SCALE IS IN CENTIMETERS

FOR REDUCED PLANS

PROVIDED UNDER THE SUPERVISION OF

REGISTERED CIVIL ENGINEER

DATE: 02-21-08

PROJECT NO: 000

ISSUE DATE: 03/29/08

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION

SCALE: 1"=50'

WATERLINE PLAN

SCALE: 1"=50'

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION

LATROBE ROAD REALIGNMENT, WIDENING & BRIDGE PROJECT

BUNCAST TO GOLDEN FOOTHILL

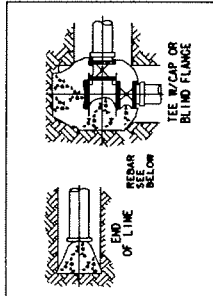
W-5

73 OF 83

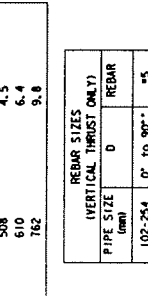
72403

EXHIBIT E

SHEET 5 OF 7

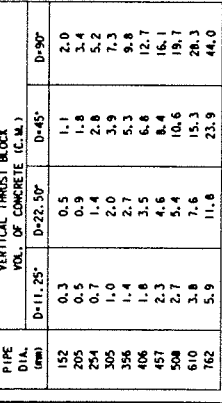
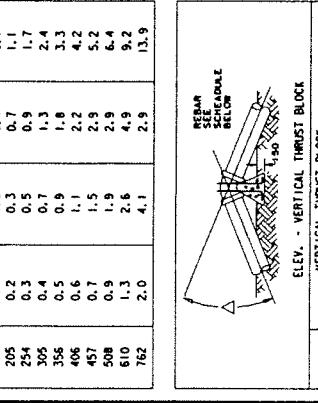
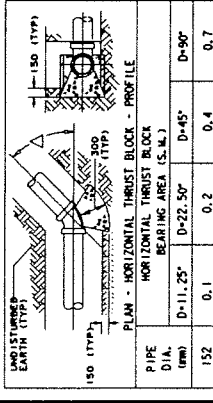


PIPE D.I.A. (mm)	D=11.25'	D=22.50'	D=45'	D=90'
152	0.1	0.2	0.4	0.7
205	0.2	0.3	0.7	1.1
254	0.3	0.5	0.9	1.7
305	0.4	0.7	1.3	2.4
356	0.5	0.9	1.8	3.3
406	0.6	1.1	2.2	4.2
457	0.7	1.5	2.9	5.2
508	0.9	1.9	3.9	6.4
610	1.3	2.6	4.9	9.2
762	2.0	4.1	7.9	13.9



PIPE D.I.A. (mm)	ELEV. - VERTICAL THRUST BLOCK			
	D=11.25'	D=22.50'	D=45'	D=90'
152	0.3	0.5	1.1	2.0
205	0.5	0.9	1.8	3.4
254	0.7	1.4	2.8	5.2
305	1.0	2.0	3.9	7.3
356	1.4	2.7	5.3	9.8
406	1.8	3.5	6.4	12.7
457	2.3	4.6	8.4	16.1
508	3.0	5.4	10.6	19.7
610	3.8	7.6	15.3	28.3
762	5.9	11.8	23.9	44.0

PIPE SIZE (mm)	REBAR SIZES	
	VERTICAL THRUST (ONLY)	REBAR
102-254	0° to 90°	#5
305-457	0° to 22.5°	#5
305-457	45°	#7
305-457	90°	#8
610	0° to 22.5°	2#6
610	45°	2#8
610	90°	4#8



6" COMBINATION AIR RELEASE VALVE
 NO SCALE

WATERLINE DETAILS
 NO SCALE

6" COMBINATION AIR RELEASE VALVE AND ENCLOSURE PLAN

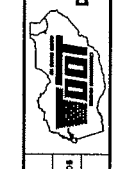
TYPICAL SECTION

TYPICAL SECTION

6" COMBINATION AIR RELEASE VALVE AND ENCLOSURE PLAN

WATERLINE DETAILS
 NO SCALE

FOR REDUCED PLANS 0 1 2 3 4 5 6 ORIGINAL SCALE IS IN CENTIMETERS

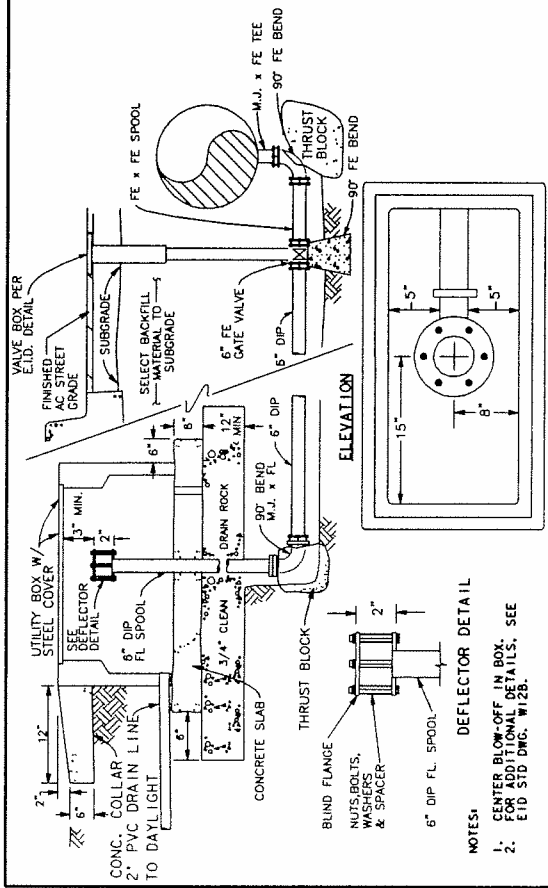


EL DORADO COUNTY
 DEPARTMENT OF TRANSPORTATION

APPROVED UNDER THE SUPERVISION OF:
 J. Donnelly
 84459
 CIVIL ENGINEER
 08-20-29
 08-29-08

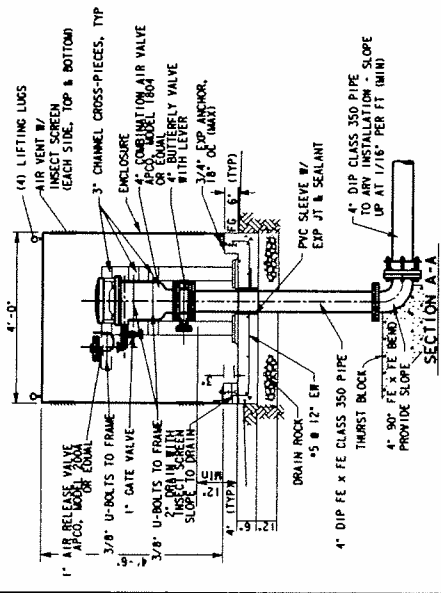
REVISION
 NO. DATE BY
 1 7/27/08

PROJECT: WIDENING & BRIDGE PROJECT
 SHEET: W-6
 OF: 74
 DRAWING NO.: 72403



6" BLOW-OFF VALVE ASSEMBLY
NO SCALE

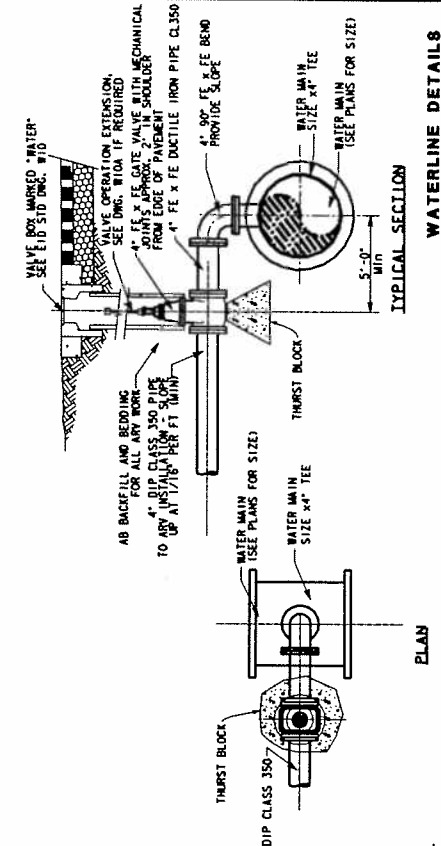
- NOTES:
- CENTER BLOW-OFF IN BOX. USE STANDARD DETAILS, SEE EIT STD DNG. W/28.
 -



TYPICAL 4" COMBINATION AIR RELEASE VALVE AND ENCLOSURE PLAN
NO SCALE

NOTE: AIR RELEASE VALVE ENCLOSURE TO BE MARKED "RCR" WHEN CONNECTED TO RECYCLED WATER MAIN.

4" COMBINATION AIR RELEASE VALVE
NO SCALE



WATERLINE DETAILS
NO SCALE



		EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION		LATROBE ROAD REALIGNMENT, WIDENING & BRIDGE PROJECT SUNCAST TO GOLDEN FOOTHILL	
PREPARED UNDER THE SUPERVISION OF  REGISTERED CIVIL ENGINEER DATE: 09-21-06	CHECKED BY: DATE: 09/29/06	DRAWN BY: DATE: 09/29/06	DESIGNED BY: DATE: 09/29/06	SHEET W-7 OF 623	PROJECT NO. 72-403
REVISIONS:					

Exhibit F

Estimate of EID's Cost Share of Miscellaneous Construction Items

Jan-08

Project #72403 - Latrobe Road Widening, Realignment and Bridge - Suncastr to Golden Foothill
EID Water and Recycled Water Facilities

Item	Description	Estimate Amount	EID Share 62.93%
1	610 mm DIP Class 350 waterline	\$ 755,625	\$475,541
2	406 mm C900 PVC CL200 waterline	\$ 698,985	\$439,895
3	610 mm Butterfly Valve	\$ 45,000	\$28,320
4	457 mm Butterfly Valve	\$ 6,000	\$3,776
5	406 mm Butterfly Valve	\$ 20,000	\$12,587
6	305 mm Butterfly Valve	\$ 3,000	\$1,888
7	254 mm Gate Valve	\$ 5,000	\$3,147
8	6" combination air release	\$ 52,000	\$32,725
9	4" combination air release	\$ 30,000	\$18,880
10	6" Blow Off	\$ 44,000	\$27,691
11	4" Blow Off	\$ 24,000	\$15,104
12	2" Blow Off	\$ 18,000	\$11,328
13	Connection to existing waterline	\$ 20,000	\$12,587
14	Trench Shields, Sheeting, Shoring and Bracing	\$ 15,000	\$9,440
15	Abandon pipeline	\$ 7,500	\$4,720
16	Remove ARV	\$ 5,000	\$3,147
17	Remove Blow Off	\$ 3,000	\$1,888
18	Remove Valve	\$ 6,000	\$3,776
19	Remove Pipeline	\$ 85,000	\$53,493
20	600 mm DOUBLE BALL EXPANSION JOINT	\$ 24,000	\$15,104
21	600 MM WELDED STEEL PIPE (6.35 MM THICK) (METRIC))	\$ 26,000	\$16,363
22	600 mm WSP CASING (BRIDGE)	\$ 11,050	\$6,954
23	860 mm WSP CASING (BRIDGE)	\$ 9,900	\$6,230
24	Contingency	\$ 191,406	\$120,458
Total Estimate		\$ 2,105,466	
Construction Cost Subtotal (EID Share)			\$1,325,042
Miscellaneous Construction Items			
	Flagging Traffic	2.0%	\$26,501
	Traffic Control Systems	2.0%	\$26,501
	Water and Dust Pollution Control	1.0%	\$13,250
	Construction Management	13.0%	\$172,256
	Mobilization	8.0%	\$106,003
Subtotal Miscellaneous Construction Items (EID Share)		26.0%	\$344,511
Total Direct Costs (EID Share)			\$1,669,553