DEPARTMENT OF TRANSPORTATION
DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS-10D
OAKLAND, CA 94623-0660
PHONE (510) 286-5528
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

March 12, 2020

SCH #2020029059
GTS # 04-ALA-2020-00516
GTS ID: 18718
Co/Rt/Pm: ALA/880/11.85

Jim Browne
Alameda County Flood Control & Water Conservation District
399 Elmhurst Street
Hayward, CA 94544

Lower Alameda Creek Fish Restoration in Flood Control District Zone 5, Cities of Fremont and Union City, California – Initial Study with Mitigated Negative Declaration/Environmental Assessment (ISMND/EA)

Dear Jim Browne:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for this project. We are committed to ensuring that impacts to the State's multimodal transportation system and to our natural environment are identified and mitigated to support a safe, sustainable, integrated and efficient transportation system. The following comments are based on our review of the February 2020 ISMND/EA.

Project Understanding

The Alameda County Flood Control and Water Conservation District proposes 1) the optimization of the existing low flow channel within the 230-foot wide flood control channel (Alameda Creek) from the scour pool immediately downstream of the BART Weir to about 600 feet downstream of the Union Pacific Railroad crossing, 2) modification of the RD2/Larinier fishway concrete structure, 3) modification of existing grade control structures, 4) modification of bridge footings in the channel, 5) modification of UPRR bridge footing in the channel, 6) protect PG&E gas main channel crossing upstream of UPRR, 7) installation of a new modified grade control structure, 8) installation of boulders to improve habitat, and 9) planting native shrubs and grasses on the new low flow channel terrace or flood plain between the levees. An overpass that carries Interstate (I)-880 over Alameda Creek is located within the project area.

Hydraulics

Caltrans has an existing outfall culvert with sacked concrete slope protection at the southbound embankment that should be identified and worked around (see attached as-built plan).

According to Appendix A, Existing and Proposed Profiles, it appears that at the riverbed at the I-880 overcrossing will be raised. Please ensure that this reduced cross section can accommodate flows by completing a hydraulics analysis. This analysis should be reviewed and approved by Caltrans.

Utilities

Any utilities that are proposed, moved or modified within Caltrans' Right-of-Way (ROW) shall be discussed. If utilities are impacted by the project, provide site plans that show the location of existing and/or proposed utilities. These modifications require a Caltrans-issued encroachment permit.

Lead Agency

As the Lead Agency, the Alameda County Flood Control and Water Conservation District is responsible for all project mitigation, including any needed improvements to the State Transportation Network (STN). The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Encroachment Permit

Please be advised due to work being performed near I-880, an encroachment permit will likely be required. To obtain an encroachment permit, a completed encroachment permit application, environmental documentation, six (6) sets of plans clearly indicating the State ROW, and six (6) copies of signed, dated and stamped (include stamp expiration date) traffic control plans must be submitted to: Office of Encroachment Permits, Caltrans District 4, P.O. Box 23660, Oakland, CA 94623-0660. To download the permit application and obtain more information, visit https://dot.ca.gov/programs/traffic-operations/ep/applications.

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Andrew Chan at 510-622-5433 or andrew.chan@dot.ca.gov.

Sincerely,

Mark Leong
District Branch Chief
Local Development - Intergovernmental Review

c: State Clearinghouse

Dist.	County	Route	Post Miles Total Project	Sheet No.
04	Ala	880	2.3/12.8	24

E T [signature]
DESIGN ENGINEER

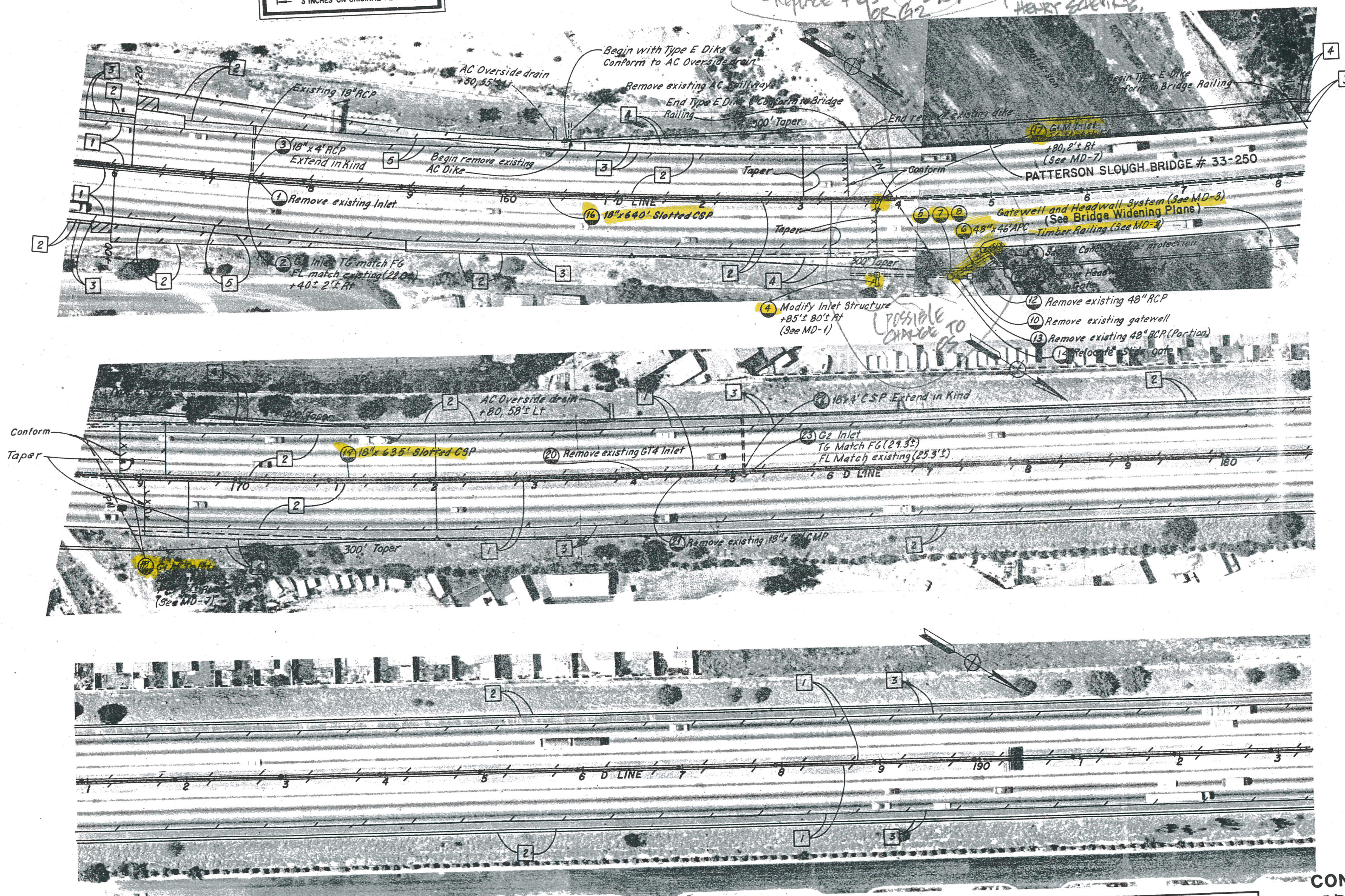
REGISTERED CIVIL ENGINEER NO. 8935

DATE APPROVED April 27, 1987

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

NOTE :
See Paving Conform Limit Detail
Conforms Exact location to be determined by the Engineer.

CCO 4-25-89
Replace FES w/ O.S. or G2
Requested by Henry Schelling.



FOR NOTES, ABBREVIATIONS &OR LEGEND, SEE SHEET CD-1

CONSTRUCTION AND DRAINAGE DETAILS
SCALE 1" = 50'

10814

FOR REDUCED PLANS 0 1 2 3

Dist.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	Ala	880	2.3/12.8	61	101

E F Graham
DESIGN ENGINEER
REGISTERED CIVIL ENGINEER NO. 8935
DATE APPROVED April 27, 1987

SHOULDER BACKING

Sheet No.	Location	Station
CD-1	Rt El 107+00 to 126+55	19.6
"	Lt El 107+00 to 126+55	19.6
CD-2	Lt El 126+55 to 152+00	25.5
"	Rt El 126+55 to 152+00	25.5
CD-3	Lt El 152+00 to 155+75	3.8
"	Lt El 158+00 to 167+50	9.5
"	Rt El 152+00 to 156+00	4.0
"	Rt El 158+00 to 167+50	9.5
CD-4	Lt El 167+50 to 215+00	47.5
"	Rt El 167+50 to 215+00	47.5
CD-5	Lt El 215+00 to 246+00	31.0
"	Rt El 215+00 to 246+00	31.0
CD-7	Lt El 246+00 to 293+50	47.5
"	Rt El 246+00 to 293+50	47.5
CD-8	Lt El 293+50 to 314+00	20.5
"	Lt El 316+00 to 339+50	23.5
"	Rt El 293+50 to 314+00	20.5
"	Rt El 316+00 to 339+50	23.5
CD-9	Lt El 339+50 to 359+00	19.5
"	Rt El 339+50 to 359+00	19.5
CD-10	Lt El 359+00 to 373+00	14.0
"	Rt El 359+00 to 373+00	14.0
CD-11	Lt El 373+00 to 416+00	43.0
"	Rt El 373+00 to 416+00	43.0
CD-12	Lt El 416+00 to 420+00	4.0
"	Lt El 421+50 to 445+00	23.5
"	Rt El 416+00 to 445+00	29.0
CD-13	Lt El 445+00 to D 15+50	14.2
"	Rt El 445+00 to D 15+50	14.2
CD-15	Lt D 15+50 to Dl 58+50	43.0
"	Rt D 15+50 to Dl 58+50	43.0
CD-16	Lt Dl 58+50 to 84+00	25.5
"	Lt Dl 86+50 to 102+00	15.5
"	Rt Dl 58+50 to 84+00	25.5
"	Rt Dl 86+50 to 102+00	15.5
CD-17	Lt Dl 102+00 to 104+50	2.5
"	Lt Dl 106+50 to 142+00	35.5
"	Rt Dl 102+00 to 103+50	1.5
"	Rt Dl 106+00 to 142+00	36.0
CD-18	Rt D 143+50 to 150+50	7.0
"	Lt D 144+50 to 151+00	6.5
"	Rt D 153+00 to 155+50	2.5
"	Lt D 153+50 to 155+50	2.0
CD-19	Lt D 155+50 to 161+00	5.5
"	Lt D 171+00 to 193+00	22.0
"	Rt D 155+50 to 161+00	5.5
"	Rt D 172+00 to 193+00	21.0
CD-20	Lt D 193+00 to 216+00	23.0
"	Rt D 193+00 to 216+00	23.0
	Total	1056.4

PAVEMENT TRANSITION TAPER

Sheet No.	Description	SQYD
CD-1	NB Lanes, Beginning of Project	80
"	SB Lanes, Beginning of Project	80
CD-3	NB Lanes, South End Fremont Bl OC	180
"	NB Lanes, North End Fremont Bl OC	180
"	SB Lanes, South End Fremont Bl OC	180
"	SB Lanes, North End Fremont Bl OC	180
CD-8	NB Lanes, South End Stevenson Bl OC	180
"	NB Lanes, North End Stevenson Bl OC	180
"	SB Lanes, South End Stevenson Bl OC	180
"	SB Lanes, North End Stevenson Bl OC	180
CD-12	SB Lanes, South End Central Ave OC	180
"	SB Lanes, North End Central Ave OC	180
CD-16	NB Lanes, South End Decoto Road OC	180
"	NB Lanes, North End Decoto Road OC	180
"	SB Lanes, South End Decoto Road OC	180
"	SB Lanes, North End Decoto Road OC	180
CD-17	NB Lanes, Approach End Crandall Creek Br	80
"	NB Lanes, Leaving End Crandall Creek Br	80
"	SB Lanes, Leaving End Crandall Creek Br	80
"	SB Lanes, Approach End Crandall Creek Br	80
CD-18	NB Lanes, South End Fremont Bl OC (Br 33-248)	180
"	NB Lanes, North End Fremont Bl OC (Br 33-248)	180
"	SB Lanes, South End Fremont Bl OC (Br 33-248)	180
"	SB Lanes,North End Fremont Bl OC (Br 33-248)	180
"	NB Lanes, South End Alvarado-Fremont Bl OC	180
"	NB Lanes, North End Alvarado-Fremont Bl OC	180
"	SB Lanes, South End Alvarado-Fremont Bl OC	180
"	SB Lanes, North End Alvarado-Fremont Bl OC	180
CD-19	NB Lanes, Approach End Patterson Slough Br	80
"	NB Lanes, Leaving End Patterson Slough Br	80
"	SB Lanes, Leaving End Patterson Slough Br	80
"	SB Lanes, Approach End Patterson Slough Br	80
CD-20	NB Lanes, Approach End Alameda Creek Br	80
"	SB Lanes Leaving End Alameda Creek Br	80
	Total	4920

ASPHALT CONCRETE DIKE

Sheet No.	Location	Place AC Dike Type A	Place AC Dike Type E	Remove Dike	Asphalt Concrete Type A
		LF	LF	LF	Ton
CD-1	Lt El 106+00 to 119+25	1325		1325	33.3
CD-9	Lt El 353+00 to 357+15		415		8.1
"	Rt El 5+50 to 7+85		235		4.6
CD-15	Rt T2 20+50 to Rt D 22+00		375		7.3
CD-16	Lt Dl 63+00 to 72+50		950	950	18.5
"	Lt Dl 72+55 to 76+65		410		8.0
"	Rt Dl 63+00 to 75+00		1200	1200	23.4
"	Rt Dl 75+05 to 78+60		355		6.9
"	Rt Dl 94+25 to 102+00		775		15.1
CD-17	Rt Dl 102+00 to 104+00		200		3.9
"	Rt Dl 105+50 to 108+40 ±		295		5.8
"	Lt Dl 137+00 to 141+00		400		7.8
CD-19	Lt D 160+50 to 163+50		300		5.8
"	Lt D 160+70 to 163+50			280	
"	Lt D 168+20 to 176+70 ±		845	845	16.4
	Total	1325	6,755	4,600	*164.9

*For Information Only Quantities Included With Structural Section Quantities.

AS BUILT PLANS
Contract No. 04-108144
Date Completed 8-30-89
Document No.

NO CONSTRUCTION CHANGES
CONTRACT No. 04-108144
DATE ACCEPTED 8-30-89
AS BUILT
RESIDENT ENGINEER H. SCHEVING

EARTHWORK

Location	Description	(N) Embankment	Roadway Excavation
		CY	CY
Lt El 160+25 to 180+00	Widen Truck Acceleration Lane Shoulder		550
Lt El 319+25 to 330+00	Ramp Extension SB Off-ramp to Stevenson		650
Lt D 160+55 to 163+57	South Abutment, Patterson Slough	760	
Rt D 161+40 to 164+60	South Abutment, Patterson Slough	770	
Lt D 168+24 to 171+25	North Abutment, Patterson Slough	600	
Rt D 169+00 to 172+00	North Abutment, Patterson Slough	840	
Lt Dl 101+00 to 105+00	South Abutment, Crandall Creek	250	
Rt Dl 101+00 to 105+00	South Abutment, Crandall Creek	280	
Lt Dl 105+00 to 111+00	North Abutment, Crandall Creek	0	
Rt Dl 105+00 to 111+00	North Abutment, Crandall Creek	0	
Lt & Rt E 107+00 to D 216+00	Section [3] & [5] Base & Surface Removal		41600
	Shoulder Backing	2850	
	Total	6,350	42,800

36,450 CY Surplus to be stored at the designated sites as shown on sheets CD-5, CD-10, and CD-16.

(N) Not a Pay Item.

SUMMARY OF QUANTITIES

Q/3

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

M.D.

108141

Dist	County	Route	Post Miles Total Project	Sheet No	Total Sheets
04	Ala	880	2.3/12.8	67	101

DESIGN ENGINEER: E. F. Graham (signature)
REGISTERED CIVIL ENGINEER No. 8935
DATE APPROVED April 27, 1987

NO CONSTRUCTION CHANGES
CONTRACT No. 04-108144
DATE ACCEPTED 8-30-89
AS BUILT
RESIDENT ENGINEER H. SCHEVING

TABLE OF ALTERNATIVE PIPE CULVERT

Size	Allowable Kinds of Pipe
48"	RCP, 0.079" thick Bit Cld CSP
18"&24"	RCP, Class III ACP, 0.079" thick Bit Cld CSP

* For information only. Item paid by lump sum
(F) Final Pay Items

STRUCTURE LIST (DRAINAGE)

SHEET NO	ITEM NO	Adjust Cleanout Box to Grade (Ea)	Adjust Inlet (Ea)	Reseal Culvert Joint 27" (Ea)	Reseal Culvert Joint 33" (Ea)	Inspect & Test Culvert Pipes 27" (LF)	Inspect & Test Culvert Pipes 33" (LF)	18" Slotted CSP (0.79" thick) (LF)	18" to 12" Corrugated Steel Eccentric Reducer (.079" thick) (Ea)	Modify Inlet to Manhole (Ea)	Modify OS Inlet (Ea)	Modify Inlet Structure (Ea)	Height of Inlet (Ft)	Minor Conc (Minor Str) (CY)	Class A Concrete Structure (F) (CY)	Frame & Grate (Type)	Misc Iron & Steel (F) (Lb)	48" APC (LF)	24" APC (LF)	18" APC (LF)	18" CSP (.079" thick) (LF)	18" RCP (LF)	24" Alt Flared End Section (Ea)	Cap Inlet (Ea)	Pipe Joint Classification	Bar Reinf. Steel (F) (Lb)	48" Automatic Drainage Gate (Ea)	Relocate Slide Gate (Ea)	SCSP (CY)	* Remove Concrete (CY)	Remove Pipes: Remove 18" RCP (LF)	Remove Pipes: Remove 12" RCP (LF)	Remove Pipes: Remove 48" RCP (LF)	Remove Pipes: Remove 18" CMP (LF)	Remove Flap Gate (Ea)	Remodel Inlet Type I (Ea)	Remodel Inlet Type II (Ea)	Remodel Inlet Type III (Ea)	Remodel Inlet Type IV (Ea)	Remove Inlet (Ea)	Remove Inlet GT4 (Ea)	Remodel Inlet GOL (Ea)	Maximum Cover (Ft)	DESCRIPTION	ITEM NO	SHEET NO
CD-17	9							390	2																Std																			18" Slotted Pipe CSP	9	CD-17
	10															24-12 18-9	575																			1								Remodel Inlet Type I	10	
	11																						1																					24" APC Flared End Section	11	
	12																		100						Std																		2.0	24" APC	12	
	13																						1																					24" APC Flared End Section	13	
	14							400	2																Std																			18" Slotted Pipe CSP	14	
	15															24-12 18-9	575																			1								Remodel Inlet Type I	15	
	16							450	2																Std																			18" Slotted Pipe CSP	16	
	17															24-12 18-9	575																			1								Remodel Inlet Type I	17	
	18							600	2																Std																			18" Slotted Pipe CSP	18	
	19															24-12 18-9	575																			1								Remodel Inlet Type I	19	
CD-17	20																														20								1				Remove Inlet & 12" RCP	20	CD-17
CD-18	1																																							1			Remove Inlet GT4	1	CD-18
	2											2.0	1.3		24-12	326																												G2 Inlet	2	
CD-18	3							340	2																Std																			18" Slotted Pipe CSP	3	CD-18
CD-19	1																																						1				Remove Inlet	1	CD-19
	2											2.0	1.3		24-12	326																												G2 Inlet	2	
	3																					4			Std																		4.0	18" RCP	3	
	4										1																																	Modify Inlet Structure	4	
	5											18.2	20.5		24-9	789																												Gatewell	5	
	6																	46							Std																		15.0	48" APC	6	
	7													4.6												300																		Pipe Headwall	7	
	8																										1																	48" Automatic Drainage Gate	8	
	9																												40															Sacked Conc Slope Protection	9	
	10																													21														Remove Existing Gatewell	10	
	11																													16														Remove Headwall & Apron	11	
	12																																24											Remove 48" RCP	12	
	13																																21											Remove 48" RCP (portion)	13	
	14																											1																Relocate Slide Gate	14	
	15																																		1									Remove Flap Gate	15	
	16							640	2																Std																			18" Slotted Pipe CSP	16	
	17											2.0	1.5		24-12	326																												GI M Inlet	17	
	18											2.0	1.5		24-12	326																												GI M Inlet	18	
	19							635	2																Std																			18" Slotted Pipe CSP	19	
	20																																							1			Remove Inlet GT 4	20	
	21																																	96										Remove 18" CMP	21	
	22																				4				Std																		3.0	18" CSP	22	
CD-19	23											2.0	1.3		24-12	326																												G2 Inlet	23	CD-19
CD-20	1																							1																				Cap Exist A3 Inlet	1	CD-20
								3455	14			1		27.4			4719	46	100		4	4	2	1		300	1	1	40	37		20	45	96	1	4				2	2			SHEET Q-9 TOTAL		
		1	6					2382	20	2	2			19.8			9564		164	114	350										20	20				2		2		2		2		SHEET Q-8 TOTAL		
		1	8	30	20	454	314	3406	26	1				17.7			8337			184	100	4										20						5	3	1				SHEET Q-7 TOTAL		
			17					3633	26					6.0			7824															120					2		1	6				SHEET Q-6 TOTAL		
Totals		2	31	30	20	454	314	12876	86	3	2	1		70.9	4.6		30,444	46	264	298	454	8	2	1		300	1	1	40	37	20	180	45	96	1	6	2	7	4	11	2	2		Totals		

AS BUILT PLANS
Contract No. 04-108144
Date Completed 8-30-89
Document No. ________

SUMMARY OF QUANTITIES
Q-9

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

108141

ZFA2:[331,6]410814400.DGN;1
ZFA2:[331,3]410814409.DGN;1

TAMERAN

30X