MUD LAKE BASIN SIPHON IMPROVEMENT PROJECT- PHASE II

OR 8206

IN THE ORCUTT AREA OF SANTA BARBARA COUNTY, CALIFORNIA



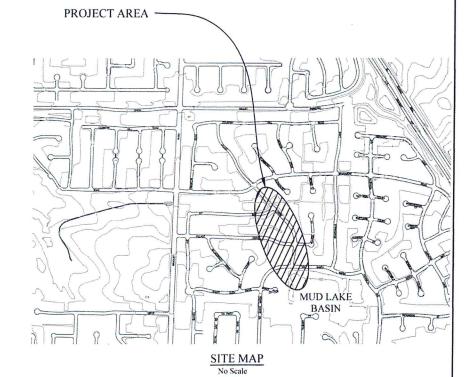
DISTRICT BOARD OF DIRECTORS

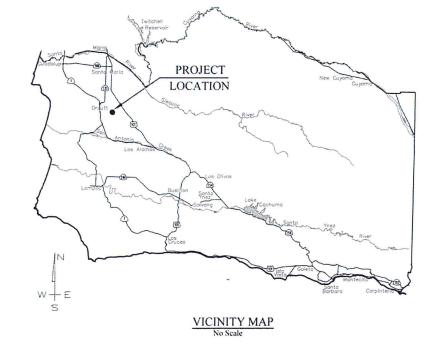
FIRST DISTRICT SECOND DISTRICT THIRD DISTRICT FOURTH DISTRICT FIFTH DISTRICT

Salud Carbajal Janet Wolf Doreen Farr Peter Adam Steve Lavagnino

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DESCRIPTION

DATE

APR

DESCRIPTION

DATE

APR

DESIGNED BY:

1-000 CONTROL DESIGN ENGINEER

TODO CONTROL DESIGN ENGINEER

TOD

SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT 130 E. VICTORIA STREET SANTA BARBARA, CA 93101 (805) 568-3440



MUD LAKE BASIN
SIPHON IMPROVEMENT PROJECT
PHASE II
AREA OF ORCUTT
SANTA BARBARA COUNTY, CALIFORNIA

TITLE SHEET

DESIGNED BY:
M.G.

DRAWN BY:
O.R.

CHECKED BY:
J.F.

DESIGNED BY:
SHEET 1 OF 6
Frenome: Mud_Lider_Bisths_FC_Phose 8-HOD.dec

SYMBOL LEGEND						
CONTROL POINT	۵	EX. SEWER CLEANOUT	O.	EX. TREE		
EX. CABLE TV BOX	CIY	EX. SEWER MANHOLE	(\$)	EX. WATER METER	MW	
EX. ELECTRIC BOX	EBOX	EX. SIGNAGE	-0-	EX. WATER VALVE	₩V	
EX. FIRE HYDRANT	党	EX. STORM DRAIN MANHOLE	(
EX. GAS VALVE	S∨	EX. TELEPHONE BOX	твох			
EX. ELECTRIC LIGHT	₽	EX. BUSH/HEDGE				
EX. MAILBOX	MB mo					
l	1					

<u>LINETYP</u>	<u>PE LEGEND</u>	
		CITY OF SA B-367 W-21A
BOUNDARY RIGHT OF WAY LINE	EX. STRUCTURE CONCRETE	
CONTOURLINE—MAJOR	EX. STRUCTURE CONC. FLOWLINE	
CONTOURLINE—MINOR	EX. STORM DRAIN ————————————————————————————————————	
EX. CURB FLOWLINE	EX. STRUCTURE CONC. WALL	
EX. CURB TOP	EX. UNDERGR. UTILITY ELECTRIC — — — — E —	
EX. DRAINAGE	EX. UNDERGR. UTILITY GAS — G	ACP
EX. DRAINAGE FLOWLINE	EX. UNDERGR. UTIL. TELEPHONE	APN APWA AT
EX. FENCE (CHAINLINK) —	EX. UNDERGR. UTIL. SEWER FL - S - S - S -	BLDG BOT
EX. FENCE (WOOD)	EX. UTILITY OVERHEAD — OH — OH — OH — OH — OH —	BW CFS
EX. SIDEWALK	EX. VEGETATION BRUSH	CL or C/L CALTRANS
	EX. WATERLINE W	COUNTY CMP
		CP CTV
		DI DW

EXISTING UTILITY INFORMATION

ALL UNDERGROUND UTILITIES SHOWN ARE PLOTTED BASED ON INFORMATION PROVIDED BY OTHERS, AND ARE APPROXIMATE.

OVERHEAD UTILITIES ARE NOT SHOWN. NOTE THAT INDIVIDUAL

SERVICE LATERALS AND CONNECTIONS ARE NOT PLOTTED ON

THE SANTA BARBARA COUNTY FLOOD CONTROL DISTRICT IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS INFORMATION. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT A MINIMUM OF TWO WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION @ 1-800-422-4133.

UTILITY DISPOSITION NOTE SYMBOLS:

- FACILITIES TO BE REMOVED BY OTHERS
- FACILITIES TO BE RE-LOCATED BY OTHERS TO A LOCATION IN CLOSE PROXIMITY TO THE WORK. NEW FACILITY TO BE PROTECTED IN PLACE BY THE CONTRACTOR.
- FACILITIES TO BE RELOCATED BY
- PROTECT EXISTING UTILITY IN PLACE. EXACT HORIZONTAL AND VERTICAL LOCATION UNKNOWN
- ㈜ ABANDONED UTILITY IN PLACE. INTERFERING PORTIONS TO BE REMOVED BY CONTRACTORS

STANDARD DETAILS AND PLANS LIST

STANDARD

DESCRIPTION

STATE DEPARTMENT OF TRANSPORTATION STANDARD PLANS (2010 EDITION)
The Standard Plan sheets applicable to this contract include, but are not limited to those indicated below.
The Revised Standard Plans (RSP) and New Standard Plans (NSP) which apply are attached to the contract.

A10B A10C **ABBREVIATIONS** LINES AND SYMBOLS A10D LINES AND SYMBOLS A10E D75B LINES AND SYMBOLS CONCRETE PIPE INLETS PIPE INLETS LADDER AND TRASH RACK DETAILS TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

223-2 HOUSE CONNECTION REMODELING

321-2 MANHOLE - PIPE TO PIPE (ONE OR BOTH MAIN LINE ID'S 33" OR SMALLER 324-2 MANHOLE SHAFT WITH ECCENTRIC REDUCER

380-4 CONCRETE COLLAR RCP 12" THROUGH 72" 24" MANHOLE FRAME AND COVER

ASBESTOS CEMENT PIPE

ASSESSORS PARCEL NUMBER

635 - 3STEEL STEP

EGL

FIFC

FD

GB

HDD HDPE

SANTA BARBARA COUNTY DEPARTMENT OF PUBLIC WORKS TRANSPORTATION DIVISION STANDARDS
3-080 STORM DRAIN MANHOLES

CITY OF SANTA MARIA STANDARD PLANS B-367 VALVE STEM EXTENSION VALVE BOX & RISER

ABBREVIATIONS

	The state of the s	<i>""</i> *	WC11	
	AMERICAN PUBLIC WORKS ASSOC.	JS	JUNCTION STRUCTURE	-
	ARCHITRCTURAL TEXTURE	LOL	LAYOUT LINE	
	BUILDING	MJ	MECHANICAL JOINT	
	BOTTOM	n	MANNING'S COEFFICIENT	-
	BOTH WAYS	N	NORTH OR NORTHING	
	CUBIC FEET PER SECOND	NTS	NOT TO SCALE	
<u>'</u>	CENTER LINE	OC	ON CENTER	
5	STATE OF CALIFORNIA	PK	PK NAIL	_
	DEPARTMENT OF TRANSPORTATION	Q	FLOW VELOCITY	
	COUNTY OF SANTA BARBARA	R1	RECORD PER BOOK NN.	
	CORRUGATED METAL PIPE	12.5	PAGE NN OF MAPS	
	CONTROL POINT	S	SEWER OR SLOPE OR SOUTH	-
	CABLE TELEVISION	SDMH	STORM DRAIN MANHOLE	
	DUCTILE IRON OR DROP INLET	SH	SHINER	
	DRIVEWAY	SPK	SPIKE	
	EAST OR EASTING	S/W	SIDEWALK	L
	EXISTING GROUND	TW or tw		
	ENERGY GRADE LINE	TCE	TEMPORARY CONSTRUCTION EASE	LICALT
	ELEVATION	TBM	TEMPORARY BENCH MARK	MEIVI
	EDGE OF PAVEMENT	TSW	TOP OF SIDEWALK	
	ELECTRIC	TP	TOP OF PAVEMENT	
	FOUND	W	WEST	
	FEET	W or WL	WATER LINE	
	GRAVITATIONAL CONSTANT	WF	WALL FACE	
	GAS LINE	WWF		
	GRADE BREAK	V	WELDED WIRE FABRIC VELOCITY	
	HORIZONTAL DIRECTIONAL DRILLING	VB		
	HIGH DENSITY POLYETHYLENE	VB	VALVE BOX	
	DETOTT TOLTETTE			

HORIZONTAL AND VERTICAL CONTROL

Surveyor's Notes:

Horizontal positions were derived from GPS observation holding Continuously Operating Reference Stations (CORS) Vandenberg Airforce Base (WNDP), Cuyama Valley High School (CUHS), Figueroa Station (FGST) and Olga Reed Elementary School (ORES) fixed as shown on Record of Survey book 171 pages 22 and 23 based on California Coordinate System 1983 (CCS83) 1991.35 epoch.

Elevations (orthometric heights) were derived by GPS observation and converted to the North American Vertical Datum 1988 (NAVD88) using the National Geodetic Survey's program GEOID99 holding Continuously Operating Reference Stations (CORS) Vandenberg Airforce Base (VNDP), Cuyama Valley High School (CUHS), Figueroa Station (FGST) and Olga Reed Elementary School (ORES) fixed as shown on Record of Survey book 171 pages 22 and 23.

Benchmark Note: Local Benchmark CP2 held at 440.39

All coordinate values shown are grid values. All distances are based on the U.S. Survey Foot (one survey foot = 1200/3937 meters).

Basis of Bearings:
The Basis of Bearing is between CORS stations ORES and VNDP measured and record, S58'11'32"W, 121451.60', per RS 171/22. ORES N: 2099097.30 E: 5877193.97 VNDP N: 2035083.85 E: 5773981.71

Ground to Grid Factors

Convergence Factor: -01'22'43.24478" Scale Factor: 0.999924632 Combined Factor: 0.999903682 Factors Calculated for: CP3

Boundary Note:

Right of Way boundary calculated per MB121/29-34 and MB126/85-92; fit to monuments CP5 and Cp13 for graphical purposes only.

		<u>CONTR</u>	<u>ROL POIN</u>	<u>T TABLE</u>	
CONTROL POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION	RECORD
CP1	2150708.010	5836347.960	445.820	FD P-K NAIL	5148
CP2	2151048.110	5836368.100	440.385	FD P-K NAIL	5148
CP3	2151203.490	5836332.360	438.030	FD 3" BRASS DISC	5148
CP4	2149023.130	5837750.156	472.582	FD N&T "LS3485"	BK121/29-34
CP5	2149022.283	5837850.374	472.418	FD N&T "LS3485"	BK121/29-34
CP6	2149267.063	5837895,643	471.884	FD N&T "LS3485"	BK121/29-34
CP7	2149614.877	5837789.190	470.452	FD N&T "LS3485"	BK121/29-34
CP8	2149801.559	5837605.597	465.174	FD N&T "LS3485"	BK121/29-34
CP9	2149864.293	5837543.856	459.705	FD 1/2" IP W/TAG "LS3146"	BK121/29-34
CP10	2149885.706	5837522.767	457.956	FD N&T "LS4597"	BK126/85-92
CP11	2149945.635	5837470.852	454.053	FD N&T "LS4597"	BK126/85-92
CP12	2150010.826	5837413.667	451.353	FD N&T "LS4597"	BK126/85-92
CP13	2150091.881	5837332.176	450.075	FD N&T "LS4597"	BK126/85-92

THE SANTA BARBARA COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT AND ITS EMPLOYEES WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL PROPOSED CHANGES TO THE PLANS MUST BE PRESENTED IN WRITING TO THE DISTRICT AND APPROVED IN WRITING BY THE DISTRICT PRIOR TO IMPLEMENTATION.

DATE	APR	SECTION C CO CE	DESIGNED BY: MAN
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		# [m 9-30-2014] #	//
	DATE	DATE APR	DATE APR

SALE OF CALIFORNIA

V
1 '

SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT 130 E. VICTORIA STREET SANTA BARBARA, CA 93101 (805) 568-3440

HYDRAULIC GRADE LINE



MUD LAKE BASIN SIPHON IMPROVEMENT PROJECT PHASE II

AREA OF ORCUTT SANTA BARBARA COUNTY, CALIFORNIA

IRON PIPE

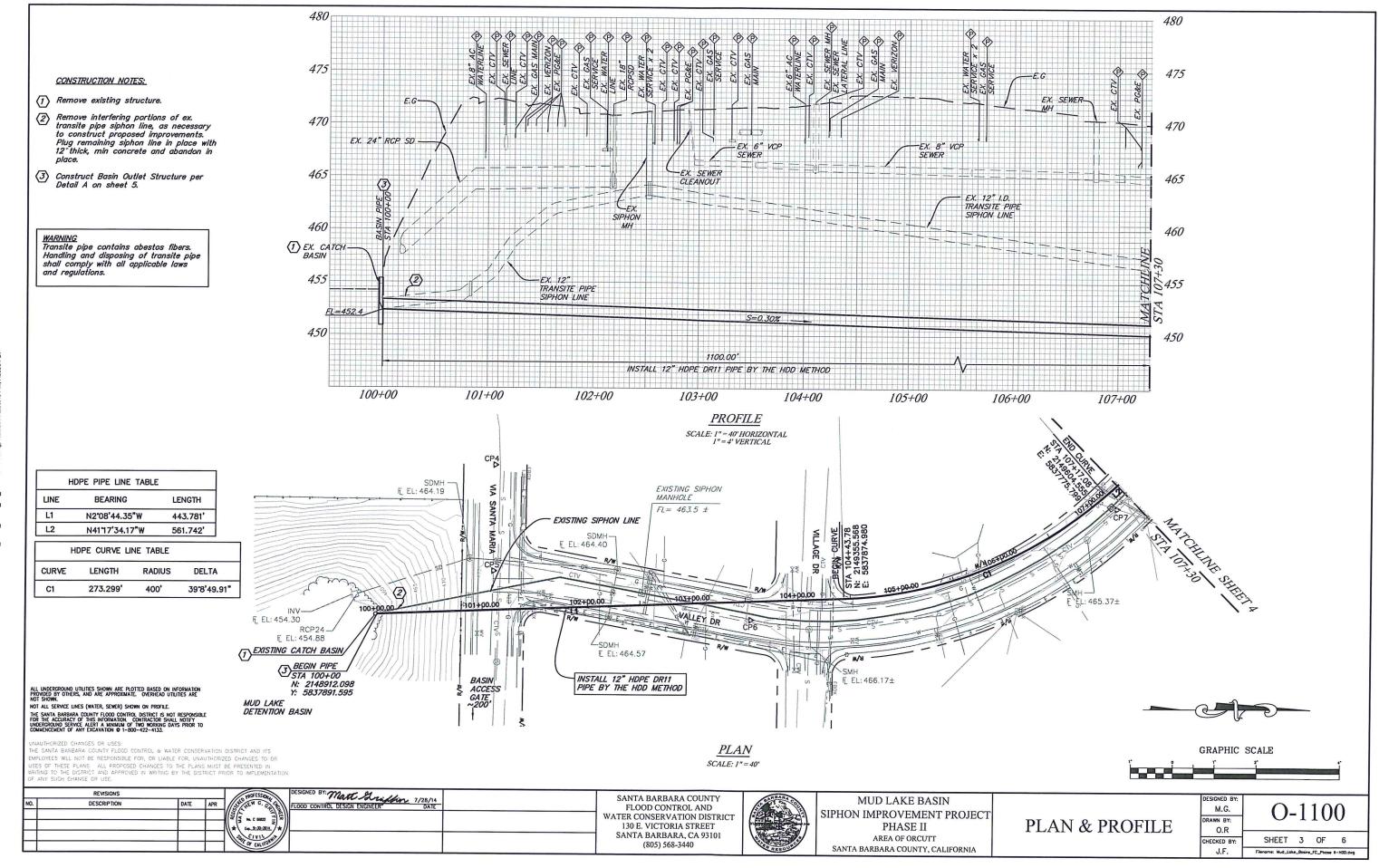
GENERAL INFORMATION

	_
DESIGNED BY:	
M.G.	(
DRAWN BY:	1 '
O.R.	_
CHECKED BY:	1

J.F.

SHEET 2 OF 6

Filename: Mud_Lake_Basins_FC_Phase II-HDO.dwg



CONSTRUCTION NOTES:

- Remove interfering portions of ex. transite pipe siphon line, as necessary to construct proposed improvements. Plug remaining siphon line in place with 12 thick, min concrete and abandon in place.
- 4 Pothole existing transite pipe storm drain to determine existing FL Elev. prior to HDPE pipe construction.
- 5 Remove existing transite pipe storm
- (6) Construct Manhole Pipe to Pipe (one or both Mainline IDs 33" or smaller) per SPPWC 321–2 and Co. of SB Standard Detail 3-080 (where Note 2 shall not apply).
- (Z) Install Gate Valve with Valve Stem Extension and Valve Box & Riser per City of Santa Maria Standard Plans B-367 and WA-21A, respectively.
- (8) Construct Concrete Collar Connection to existing pipe per SPPWC 380-4
- (9) Roping (R=400' min) of HDPE pipe at GB is permissible if X =1" or less.

 HDPE pipe within open trench method may be installed at S=0.3% min in order to account for Elevation differences due to HDD installation
- (10) Place asphaltic emulsion (Fog Seal Coat) 2' beyond longitudinal end of trench cuts, EP to EP.
- (1) Reconstruct Sewer Lateral per SPPWC 223–2, as needed to construct proposed improvements.

Transite pipe contains abestos fibers.
Handling and disposing of transite pipe
shall comply with all applicable laws
and regulations.

		HDPE PIPE LINE TABLE	
	LINE	BEARING	LENGTH
Ì	L2	N41"17'34.17"W	561.742'

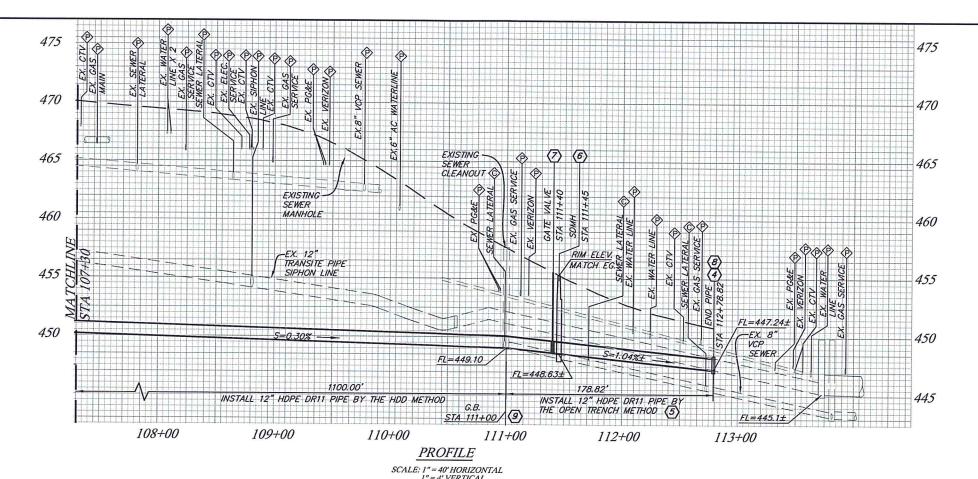
NOT ALL SERVICE LINES (WATER, SEWER) SHOWN ON PROFILE

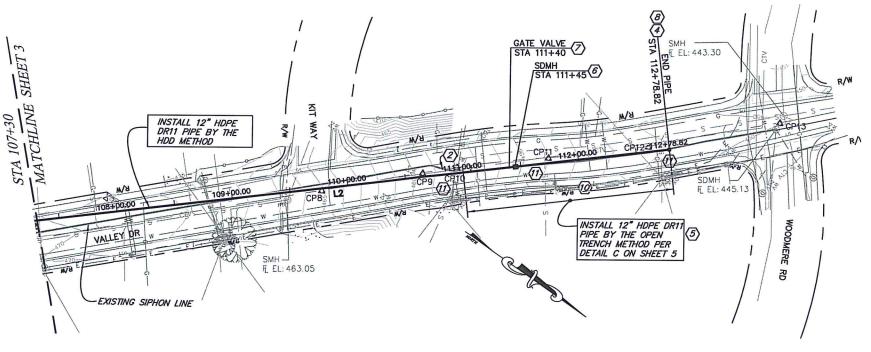
VAUTHORIZED CHANGES OR USES:

E SANTA BARBARA COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT AND ITS

#FLOYEES WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR

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WITHOR TO THE DISTRICT AND APPROVED IN WRITING BY THE DISTRICT PRIOR TO INPLEMENTATION.





PLANSCALE: 1" = 40'

MUD LAKE BASIN SIPHON IMPROVEMENT PROJECT PHASE II AREA OF ORCUTT

SANTA BARBARA COUNTY, CALIFORNIA

PLAN & PROFILE

O-1100 M.G. RAWN BY: O.R. HECKED BY: SHEET 4 OF J.F. Filename: Mud_Lake_Basins_FC_Phase II-HOO.dw

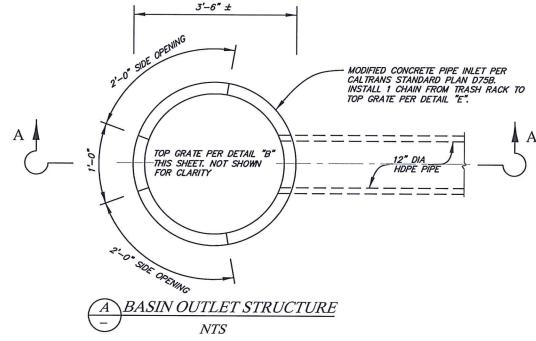
GRAPHIC SCALE

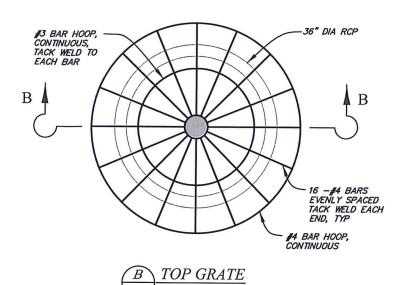
REVISIONS SELLINEW C. CAP. DESCRIPTION 4 [sp. 8-30-2019.

BY Mart Graffin 7/28/14

DATE

SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT 130 E. VICTORIA STREET SANTA BARBARA, CA 93101 (805) 568-3440







SUBGRADE

EG/FG-

SAWCUT 12"

STRUCTURAL-

TRENCH BACKFILL MATERIAL (DEPTH VARIES)

PIPE ZONE MATERIAL-

BEDDING MATERIAL— 6" MIN

SECTION

ALTERNATE TRENCHING

12"MIN

12"MIN, TYP

2. Bedding material shall conform to the requirements listed in the Special Provisions. Shape bedding material to provide uniform support for pipe as shown. Compact to a minimum of 95% relative compaction.

1/3 00

MIN

Pipe zone material shall conform to the requirements listed in the Special Provisions. Compact to a minimum of 95% relative compaction.

4. Trench backfill shall conform to the requirements listed in the Special Provisions. Compact to a minimum of 95% relative compaction.

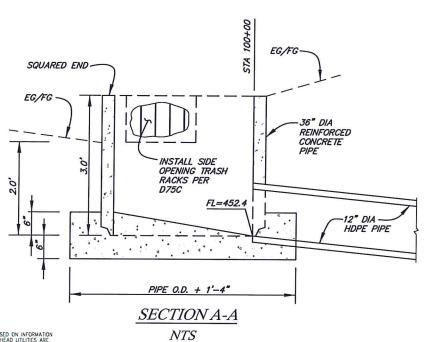
Compaction by flooding, ponding or jetting shall not be permitted.

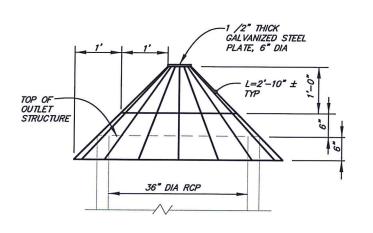
6. Unsuitable bottom of trench conditions may require additional subgrade overexcavation as directed by

7. Structural section shall match existing with minimum thickness of 6" class II aggregate base under 6" asphalt concrete conforming to the requirements listed in the special provisions.

Compact to a minimum of 95% relative compaction.

Scarify and compact subgrade to 90% relative compaction to a minimum depth of 6 inches.





SECTION B-B NTS

URAD UNDIGED CHANGES OR USES:
THE SANTA BARBARA COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT AND ITS
EMPLOYEES WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR
USES OF THESE PLANS. ALL PROPOSED CHANGES TO THE PLANS MUST BE PRESENTED IN
WRITING TO THE DISTRICT AND APPROVED IN WRITING BY THE DISTRICT PRIOR TO IMPLEMENTATION
DF ANY SUCH CHANGE OR USE.

	REVISIONS			OROF E231099	DESIGNED BY:
NO.	DESCRIPTION	DATE	APR	SOUTH C. CALE	DESIGNED BY: MATE STATE FLOOD CONTROL DESIGN ENGINEERS
_				# Cus. 8-20-2014	
				SA CIVIL ON	

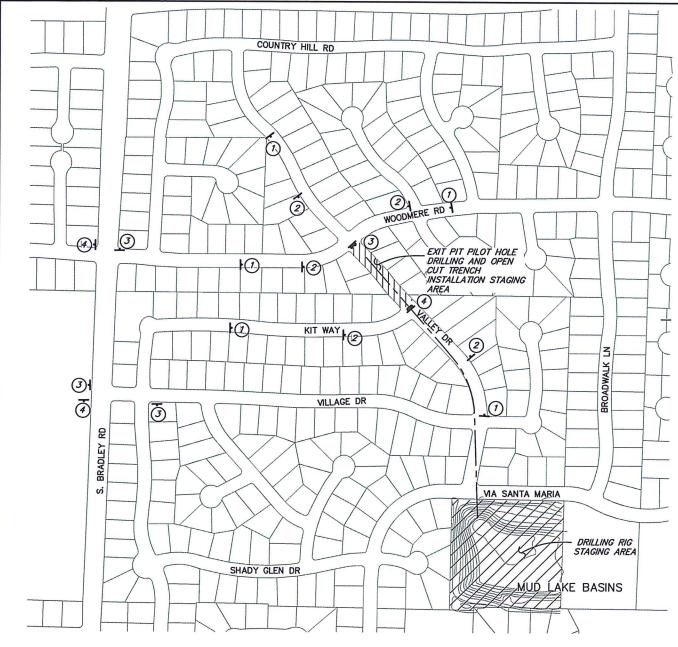
SANTA BARBARA COUNTY 7/28/14 DATE FLOOD CONTROL AND WATER CONSERVATION DISTRICT 130 E. VICTORIA STREET SANTA BARBARA, CA 93101 (805) 568-3440



MUD LAKE BASIN SIPHON IMPROVEMENT PROJECT PHASE II AREA OF ORCUTT SANTA BARBARA COUNTY, CALIFORNIA

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0.R					
CHECKED BY:	SHEET	5	OF	6	
J.F.	Filename: Mud_Lal	e_Bosins	_FC_Phose	II-HDD.dwg	_

DETAILS



PILOT HOLE DRILLING AND OPEN CUT TRENCH INSTALLATION

TRAFFIC CONTROL NOTES:

- Sign locations shown are approximate. Exact location shall be determined in field in conformance with "Work Area Traffic Control Handbook" and as approved by Engineer.
- 2. Detour for Pilot hole drilling and open cut trench installation may only be in place during working hours and not before 8:00 a.m.
- 3. Maintain local traffic and driveway access at all times.

LEGEND:

m Type III barricade with sign, as shown

4

3

7 2 3

- Temporary sign, as shown
- Staging area

CONSTRUCTION AREA SIGNS:

SIGN#	SIGN CODE	DESCRIPTION	
1	W20-1	ROAD WORK AHEAD	
2	R11-3a	ROAD CLOSED AHEAD LOCAL TRAFFIC ONLY	
3	M4-10 AND GUIDE SIGN	DETOUR RIGHT	
4	M4-10 AND GUIDE SIGN	DETOUR LEFT	

PIPE PULLBACK INSTALLATION

TRAFFIC CONTROL NOTES:

1. Sign locations shown are approximate. Exact location shall be determined in field in conformance with "Work Area Traffic Control Handbook" and as approved by Engineer.

(4)(1)

(1)

– DRILLING RIG STAGING AREA

MUD LAKE BASINS

(2)

.0

MA SANTA MARIA

- EXIT PIT AND PIPE PULLBACK STAGING AREA

WOODMERE RD

(3) COUNTRY HILL RD

KIT WAY

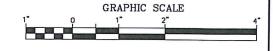
2

VILLAGE DR

1

SHADY GLEN DR

- Detour and road closure for Pipe Pullback Installation may only be in place for 5 consecutive calendar days total and may not be left in place during weekends or Holidays.
- 3. Maintain local traffic and driveway access at all times.



W

SANTA BARBARA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT 130 E. VICTORIA STREET SANTA BARBARA, CA 93101 (805) 568-3440



MUD LAKE BASIN SIPHON IMPROVEMENT PROJECT PHASE II AREA OF ORCUTT

SANTA BARBARA COUNTY, CALIFORNIA

CONSTRUCTION AREA SIGNS AND STAGING AREAS

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HECKED BY:	SHEET	6	OF	6

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