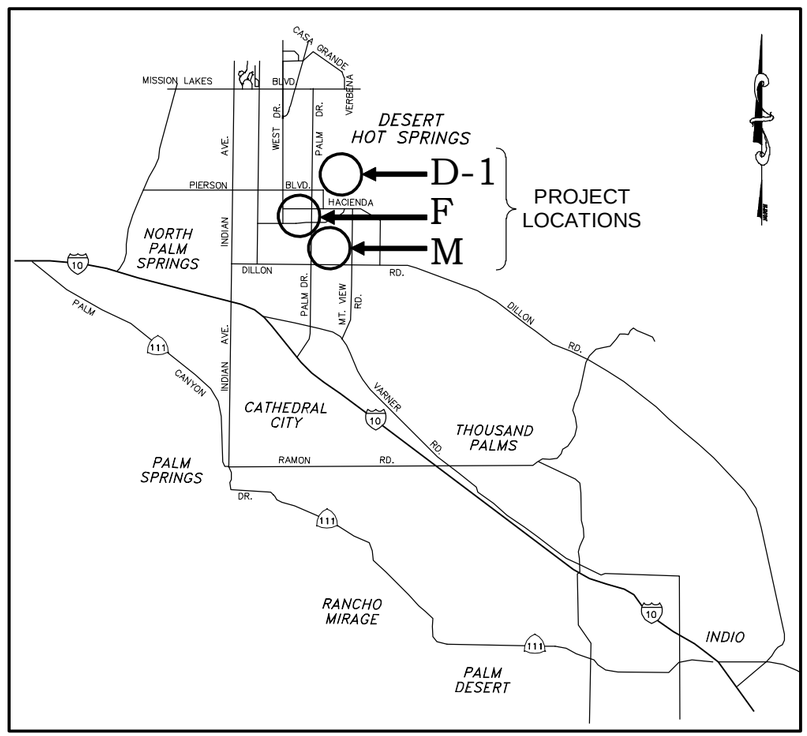
MISSION SPRINGS WATER DISTRICT

COUNTY OF RIVERSIDE, CALIFORNIA

A.D. 12 SERVICE AREAS M, F, AND D PHASE 1
SANITARY SEWER LINE CONSTRUCTION PROJECT
CITY OF DESERT HOT SPRINGS

DRAWINGS

JUNE 2009



VICINITY MAP

N.T.S.

BOARD OF DIRECTORS

NANCY S. WRIGHT	PRESIDENT
JOHN FURBEE	VICE-PRESIDENT
JOHN BROWN	DIRECTOR
MARY M. GIBSON	DIRECTOR
RANDY DUNCAN	DIRECTOR

DISTRICT ADMINISTRATION

ARDEN WALLUM	GENERAL MANAGER
BRENT GRAY	DIRECTOR OF OPERATIONS
DAN PATNEAUDE	ENGINEERING MANAGER
DANNY FRIEND	SENIOR PROJECT MANAGER

US Army Corps of Engineers

DIGALERT — DIAL BEFORE YOU DIG — TWO WORKING DAYS BEFORE YOU DIG — TOLL FREE 811 — A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

MSWD Mission Springs Water District

#	REVISIONS	DATE	APP.
6			
5			
4			
3			
2			
1			

BENCHMARK: SEE SHEET G-2

BASIS OF BEARING: SEE SHEET G-2

PREPARED BY: URS — 3500 PORSCHE WAY SUITE 300, ONTARIO, CA 91764, TEL: (909) 980-4000 FAX: (909) 980-1399; 8181 E. TUFTS AVENUE, DENVER, CO 80237-2637, TEL: (303) 694-2770 FAX: (303) 694-3946

SCALE:	1" = 50'
PLOT DATE:	06/18/09
DESIGN BY:	NRK
DRAWN BY:	
CHECKED BY:	BSP

REGISTERED PROFESSIONAL ENGINEER — TIMOTHY R. VOLZ — C 049832 Exp. Sept. 30 — CIVIL — STATE OF CALIFORNIA

PREPARED UNDER THE DIRECT SUPERVISION OF: _____ DATE

MSWD PLAN REVIEW COMPLETED BY: _____ DATE

RECOMMENDED FOR APPROVAL BY: DAN PATNEAUDE, ENGINEERING MGR. — DATE

APPROVED BY MISSION SPRINGS WATER DISTRICT: ARDEN WALLUM, GENERAL MGR. — DATE

MISSION SPRINGS WATER DISTRICT

SEWER IMPROVEMENT PLANS

COVER SHEET

SECTIONS 30 & 31 TOWNSHIP 20 S RANGE 50 E

DWG. G-1 — 1 OF 119

PRIVATE REFERENCE #

MSWD REFERENCE #

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BENCHMARK:

RIVERSIDE COUNTY BRASS BENCH MARK DISK STAMPED 603–66–68 IN TOP OF CONCRETE POST LOCATED ON THE SOUTH SIDE OF PIERSON BOULEVARD, 187' EAST OF THE CENTERLINE OF LITTLE MORONGO ROAD, 47' SOUTH OF THE CENTERLINE OF PIERSON BOULEVARD AND 15' SOUTH OF THE SOUTH CURB AND 10' SOUTH OF PP#31364 AND 2' NORTH OF WITNESS POST.

NGS PUBLISHED ELEVATION 1102.860' NAVD 88

BASIS OF BEARINGS:

THE BASIS OF BEARINGS IS PER THE CALIFORNIA STATE PLANE COORDINATE SYSTEM, CCS83, ZONE 6

GEOTECHNICAL INFORMATION:

REFERENCE: GEOTECHNICAL INVESTIGATION REPORT – PROPOSED SEWER IMPROVEMENTS AREAS J AND D–2, URS CORPORATION, DATE

SURVEY INFORMATION:

EXISTING TOPOGRAPHY FROM AERIAL PHOTO TAKEN NOVEMBER, 2008. AERIAL MAPPING BY DIGITAL MAPPING INC. OF HUNTINGTON BEACH, CA. GROUND SURVEY INCLUDING ALL SURVEY ELEVATIONS OF EXISTING FACILITIES WERE PROVIDED BY HACKER ENGINEERING OF PALM DESERT, CA.

SEWER CONSTRUCTION NOTES:

1. STATIONS SHOWN ARE HORIZONTAL DISTANCES ALONG THE CENTERLINE OF PIPE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY NOT TO EXCEED THE PIPE MANUFACTURER'S DEFLECTIONS SPECIFICATIONS. SHORT LENGTH PIPES MAY BE REQUIRED IN SOME CASES.
3. ALL MANHOLE STUB–OUTS ARE NOT TO EXCEED 18 INCHES BEYOND MANHOLE BASE. PLUG END WITH REMOVABLE WATERTIGHT CAP AS MANUFACTURED BY PIPE MANUFACTURER AND APPROVED BY THE ENGINEER.
4. THE LOCATION OF NEW SEWER LATERALS SHALL BE MARKED AS FOLLOWS: STREETS WITH CURBS: A LETTER "S" SHALL BE CHISELED OR PERMANENTLY MARKED ON THE CURB AT THE LOCATION OF THE SEWER LATERAL, AND AN APPROPRIATE MID–RANGE OR FULL RANGE MAGNETIC MARKER LOCATOR (EMS) OR EQUAL SHALL BE PLACED ONE FOOT BELOW THE FINISHED GROUND SURFACE DIRECTLY ABOVE THE TERMINUS OF THE LATERAL. IF FINISH GRADE IS UNKNOWN, THE MARKER SHALL BE INSTALLED TWO FEET BELOW THE ASSUMED FINISHED GROUND SURFACE.
5. ALL SEWER LATERALS TO BE 4 INCHES IN DIAMETER (PER M.S.W.D STD. DWG. S–13, S–14, OR S–15) UNLESS OTHERWISE NOTED ON PLANS. LOCATIONS SHALL BE DETERMINED IN THE FIELD PRIOR TO CONSTRUCTION. SEE SPECIFICATIONS FOR DETAILS.
6. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO SUPPORT AND PROTECT IN PLACE ALL EXISTING UTILITIES PARALLEL AND/OR PERPENDICULAR TO THE PROPOSED SEWER LINE. EXISTING UTILITIES SHALL REMAIN IN OPERATION AT ALL TIMES UNLESS APPROVED IN WRITING BY APPROPRIATE UTILITY COMPANY.
7. AIR TESTING OF ALL SEWER LINES SHALL BE IN ACCORDANCE WITH THE 2006 "GREENBOOK" STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION SECTION 306–1.4.4 "AIR PRESSURE TEST" AND IN THE PRESENCE OF THE INSPECTOR.
8. ALL SEWER MAIN, LATERAL CONNECTIONS, AND MANHOLES MUST BE WASHED AND VIDEOED IN THE PRESENCE OF THE INSPECTOR. THE DISTRICT REQUIRES A VIDEO COPY IN A DVD FORMAT OF THE ENTIRE VIDEO INSPECTION AT NO ADDITIONAL COST TO THE DISTRICT.
9. ANY CONTRACTOR/SUBCONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE HIMSELF WITH THE SITE AND SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY FROM HIS OPERATIONS. SAID EXISTING IMPROVEMENTS SHALL INCLUDE BUT ARE NOT LIMITED TO BERMS, DITCHES, FENCES, AND PLANTS. ANY REMOVAL OR DAMAGE TO EXISTING IMPROVEMENTS SHALL BE REPLACE OR REPAIRED BY THE CONTRACTOR AT HIS EXPENSE AND SHALL BE APPROVED BY THE DISTRICT.
10. IN THE EVENT TRAFFIC STRIPING AND/OR LANE MARKINGS ARE OBLITERATED, THEY SHALL BE REPLACED IN KIND AS DIRECTED BY AGENCY HAVING JURISDICTION.
11. CONTRACTOR SHALL SHORE ALL TRENCHES AND CONDUCT ALL CONSTRUCTION AND OPERATIONS IN ACCORDANCE WITH CAL–OSHA REQUIREMENTS.
12. ALL BACKFILL AND REPLACEMENT PAVING SHALL BE IN ACCORDANCE WITH THE ENCROACHMENT PERMIT AND AS DETAILED IN THE PROJECT SPECIFICATIONS AT NO ADDITIONAL COST TO THE DISTRICT.
13. NO CONSTRUCTION OR INSTALLATION SHALL BE PERMITTED ON FILL MATERIAL WITHOUT MEETING THE COMPACTION REQUIREMENTS AS DETERMINED BY THE FIELD ENGINEER.
14. APPROXIMATE ELEVATIONS SHOWN ON THE PROFILE FOR EXISTING/PROPOSED UTILITIES AT CROSSINGS ARE TO THE OUTSIDE OF CONDUIT (TOP/BOTTOM) UNLESS OTHERWISE INDICATED. ELEVATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR NO LESS THAN 72 HOURS PRIOR TO CROSSING AND ANY VARIANCE WITH THE PLANS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
15. IN CASE OF ANY ACCIDENTS INVOLVING SAFETY MATTERS COVERED BY SECTION 6409.1(B) OF THE CALIFORNIA LABOR CODE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE STATE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH.
16. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF THE EXISTING SEWER MAIN(S) AND NOTIFY THE ENGINEER OF ANY VARIATION FROM DESIGN.
17. THE CONTRACTOR IS REQUIRED TO CONTACT M.S.W.D.'S INSPECTOR 48 HOURS PRIOR TO START OR RESTART OF ANY CONSTRUCTION.
18. THE LOCATIONS OF LATERALS DEPICTED ON THE DRAWINGS ARE TENTATIVE LOCATIONS. THE DISTRICT WILL DETERMINE THE EXACT LOCATION IN THE FIELD AT THE TIME OF CONSTRUCTION.

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TWO WORKING DAYS BEFORE YOU DIG
TOLL FREE 811
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

GENERAL NOTES:

1. ALL CONSTRUCTION UNDER COUNTY, CITY OR CAL–TRANS JURISDICTION SHALL CONFORM TO ALL PROVISIONS OF THE PROJECT SPECIFICATIONS, SPECIAL CONDITIONS, STANDARD AND CONSTRUCTION DRAWINGS, ALL INCLUSIVE UNDER THIS CONTRACT. IN THE EVENT OF ANY CONFLICT, THE MOST STRINGENT REQUIREMENT SHALL GOVERN.
2. ALL WORK SHALL BE DONE IN STRICT CONFORMANCE WITH THE PROJECT SPECIFICATIONS, STANDARD DRAWINGS AND THE SPECIAL REQUIREMENTS FOR THIS PROJECT.
3. CONSTRUCTION WILL BE DONE ONLY UNDER SIGNED AND APPROVED PLANS. CUT SHEETS SHALL BE PROVIDED TO THE DISTRICT FOR REVIEW 24–HOURS PRIOR TO CONSTRUCTION.
4. THE SANITARY SEWER WILL BE INSTALLED BEFORE ANY OTHER UNDERGROUND FACILITIES ARE CONSTRUCTED EXCEPT WHEN OTHER UTILITIES ARE PROPOSED THAT WILL BE DEEPER THAN THE SANITARY SEWERS. INSTALLATION INCLUDES, BUT IS NOT LIMITED TO, STAKING, PIPELINE INSTALLATION, COMPACTION TESTING, AIR TEST, WASH AND VIDEO REVIEWS. AIR RESTS, WASH AND VIDEO WILL BE COMPLETED PRIOR TO INSTALLATION OF DOMESTIC WATER AND SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION "GREENBOOK" OR AS DIRECTED BY THE DISTRICT RESIDENT INSPECTOR/REPRESENTATIVE. THE DISTRICT RESERVES THE RIGHT TO REQUEST ADDITIONAL AIR TESTS, WASHES AND VIDEO REVIEWS PRIOR TO FINAL ACCEPTANCE OF FACILITIES.
5. REPLACEMENT PAVING (ONSITE & OFFSITE), TRAFFIC CONTROL, RE–STRIPING SPECIAL TRENCH BACKFILL, BASE REQUIREMENTS, ETC. SHALL BE IN ACCORDANCE WITH THE RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT ENCROACHMENT PERMIT AND/OR THE CITY OF DESERT HOT SPRINGS PERMIT REQUIREMENTS AND AS DETAILED IN THE PROJECT SPECIFICATIONS AT NO ADDITIONAL COST TO THE DISTRICT. THE CONTRACTOR SHALL NOTIFY THE COUNTY AND/OR CITY AT LEAST 48 WORKING HOURS PRIOR TO STARTING CONSTRUCTION. IF THE PROPOSED PIPELINE CROSSES A PAVED STREET AT OTHER THAN 90 DEGREES, THE LIMITS OF PAVEMENT OVERLAY SHALL BE AT RIGHT ANGLES TO THE STREET CENTERLINE AND SHALL ENCOMPASS THE ENTIRE TRENCH PAVING.
6. PIPE SHALL BE HANDLED SO AS TO PROTECT PIPE, JOINTS, AND LININGS AND COATING. THE PIPE SHALL BE BEDDED CAREFULLY TO PROVIDE CONTINUOUS BEARING AND PREVENT UNEVEN SETTLEMENT; PIPE SHALL BE PROTECTED AGAINST FLOTATION AT ALL TIMES, OPEN ENDS SHALL BE SEALED AT ALL TIMES WHEN CONSTRUCTION IS IN PROGRESS.
7. PIPE JOINTS SHALL NOT BE DEFLECTED AT ANY ANGLE GREATER THAN THE MAXIMUM DEFLECTION RECOMMENDED BY THE PIPE MANUFACTURER.
8. ALL REVISIONS TO THESE DRAWINGS MUST BE APPROVED IN WRITING BY THE MSWD PRINCIPAL ENGINEER OR DESIGNEE, RCE#_____ DATE_____ PRIOR TO ACTUAL CONSTRUCTION.
9. ALL CONTRACTOR(S)/SUBCONTRACTOR(S) PERFORMING WORK ON THIS PROJECT SHALL BE FAMILIAR WITH THE SITE AND SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES DIRECTLY OR INDIRECTLY FROM OPERATIONS. SAID EXISTING IMPROVEMENTS SHALL INCLUDE, BUT ARE NOT LIMITED TO, DIRT, BERMS, DITCHES, FENCES, AND PLANTS. ANY REMOVAL OR DAMAGE TO EXISTING IMPROVEMENTS SHALL BE REPLACED OR REPAIRED AT THE CONTRACTOR'S EXPENSE AND SHALL BE APPROVED BY THE DISTRICT.
10. ALL CONTRACTOR(S)/SUBCONTRACTOR(S) SHALL EXAMINE CAREFULLY THE SITE OF THE WORK CONTEMPLATED AS WELL AS THE PLANS AND SPECIFICATIONS. THE SUBMISSION OF A BID SHALL BE CONCLUSIVE EVIDENCE THAT THE CONTRACTOR/SUBCONTRACTOR HAS INVESTIGATED THE PROJECT SITE AND REVIEWED THE PLANS & SPECIFICATIONS AND IS SATISFIED AS TO THE REQUIREMENTS, QUALITY, THE SCOPE OF WORK TO BE PERFORMED AND THE QUANTITIES OF MATERIALS TO BE FURNISHED.
11. ALL EXCESS MATERIAL GENERATED FROM THE PROJECT EXCAVATION AND/OR COMPACTION SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF AT THE CONTRACTOR'S EXPENSE UNLESS OTHERWISE NOTED.
12. ALL EXISTING AND NEW INFRASTRUCTURE (VALVE CANS, MANHOLES, ETC.) MUST BE ACCESSIBLE TO GRADE THROUGHOUT THE ENTIRE COURSE OF CONSTRUCTION.
13. SITE PAVING SHALL NOT BE PLACED UNTIL ALL UNDERGROUND FACILITIES HAVE BEEN INSTALLED, TESTED, AND APPROVED BY THE DISTRICT.
14. THE MINIMUM DEPTH OF COVER FOR THE VARIOUS UNDERGROUND UTILITIES IS DEPICTED IN THE PROFILE AND GIVEN BELOW. THE DEPTHS ARE BASED UPON AVAILABLE INFORMATION. THE ACCURACY OF THIS INFORMATION; HOWEVER, NOT GUARANTEED BY THE DISTRICT OR THE ENGINEER, NO ADDITIONAL COMPENSATION SHALL BE MADE BY THE DISTRICT FOR UTILITIES AT ELEVATIONS DIFFERENT THAN DEPICTED OR GIVEN BELOW:

WATER: 36" TO 48"	TELEPHONE CABLES: 30"
ELECTRICAL CABLES: 30"	CABLE TV. CABLES: 30"
GAS MAINS: 36"	

15. CONTRACTOR IS RESPONSIBLE FOR KEEPING–UP–TO–DATE RECORD DRAWINGS (RED–LINES) OF ANY CHANGES TO THE PLANS DURING CONSTRUCTION.
16. CONTRACTOR SHALL PROVIDE AN ACCURATE AND LEGIBLE COPY OF THE "RECORD DRAWING" PLANS TO THE DESIGN ENGINEER. THE ENGINEER WILL SUPPLY THE DISTRICT WITH A COPY OF "RECORD DRAWING", MYLAR PLANS, ALONG WITH AN ELECTRONIC FILE (PDF & AUTOCAD FORMAT) AT NO ADDITIONAL COST TO THE DISTRICT.
17. THE DISTRICT RESERVES THE RIGHT TO MAKE ANY MODIFICATION TO THE PLANS DURING CONSTRUCTION AS NECESSARY AT NO ADDITIONAL COST TO THE DISTRICT.

WATER NOTES:

1. ALL WATER VALVE BOXES WITHIN ASPHALT PULVERIZATION LIMITS WILL BE REINSTALLED AND MODIFIED TO INCLUDE A CONCRETE COLLAR TO BE INSTALLED WITH FINISH PAVING AS PER MSWD STANDARD DRAWINGS W–2 AND W–2A.

NOTIFICATIONS:

1. THE EXISTENCE AND LOCATIONS OF ALL UNDERGROUND UTILITIES SHOWN (MAIN LINES – NO LATERALS OR SERVICES SHOWN) ON THE DRAWINGS WERE OBTAINED FROM AVAILABLE RECORDS AND ARE APPROXIMATE. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY FOR UTILITIES NOT SHOWN OR NOT IN THE LOCATION SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL DETERMINE THE DEPTH AND LOCATION OF EXISTING UNDERGROUND UTILITIES, LATERALS AND SERVICES PRIOR TO TRENCHING AND SHALL BE REQUIRED TO TAKE ALL PRECAUTIONARY MEASURES TO PROTECT ALL LINES SHOWN AND/OR ANY OTHER UNDERGROUND UTILITIES NOT OF RECORD OR NOT SHOWN ON THE PLANS. CALL UNDERGROUND SERVICE ALERT (USA) 1–800–227–2600 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION.
2. UNDERGROUND GAS SERVICES/LATERAL INFORMATION RECEIVED FROM SOUTHERN CALIFORNIA GAS AND SHOWN AS SUBMITTED. SOME PROPERTIES DO NOT SHOW GAS SERVICES, HOWEVER CONTRACTOR SHALL VERIFY ALL GAS LATERAL LOCATIONS PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR IS REQUIRED TO NOTIFY THE EXISTING ORGANIZATIONS IN THE AREA BEFORE THE START OF ANY WORK. THE UTILITIES IN THE AREA ARE:

WATER/SEWER	MISSION SPRINGS WATER DISTRICT (760) 329–6448
ROADS	RIVERSIDE COUNTY ROAD DEPARTMENT (760) 863–7044
STREETS	CITY OF DESERT HOT SPRINGS (760) 329–6411
ELECTRICITY	SOUTHERN CALIFORNIA EDISON (714) 796–9920
GAS	SOUTHERN CALIFORNIA GAS (909) 335–7651
TELEPHONE	VERIZON (760) 778–3620
CABLE TV	ADELPHIA (760) 329–6310
FLOOD CONTROL	RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT (909) 955–1200
UNDERGROUND FACILITIES	UNDERGROUND SERVICE ALERT (800) 227–2600

ABBREVIATIONS:

Δ	Delta angle
CATV	Cable Television
D	Depth
DIA	Diameter
DIP	Ductile Iron Pipe
DWG	Drawing
E	Electric
EA	Each
EX	Existing
G	Gas
INV	Invert
L	Length
LF	Linear Feet
MH	Manhole
MSWD	Mission Springs Water District
R	Radius
RW	Right of Way
S	Slope
SF	Square Feet
STA	Station
T	Telephone, Tangent
VCP	Vitrified Clay Pipe
W	Water

LEGEND:

	EXISTING STREET CENTERLINE
	EXISTING RIGHT–OF–WAY
N00°11'34"W	PROPOSED SEWERLINE (SIZE NOTED)
	ASPHALT PULVERIZATION LIMITS
	EXISTING MANHOLE
	PROPOSED MANHOLE
	PROPOSED CLEANOUT
CATV	EXISTING CABLE TELEVISION
W	EXISTING WATERLINES (SIZE NOTED)
S	EXISTING SEWERLINES (SIZE NOTED)
G	EXISTING GAS LINES (SIZE NOTED)
T	EXISTING UNDERGROUND TELEPHONE LINES (VERIZON)
E	EXISTING TELEPHONE TERMINAL (VERIZON)
	EXISTING TELEPHONE POLE (VERIZON)
	EXISTING TELEPHONE PEDESTAL (VERIZON)
	EXISTING TELEPHONE TERMINAL READY ACCESS (VERIZON)
E	EXISTING UNDERGROUND ELECTRIC LINES
	EXISTING ELECTRIC RISER POLE (SCE)
	EXISTING ELECTRIC BURIED SWITCH ENCLOSURE (SCE)
SD	PROPOSED / EXISTING STORM DRAINS
	WATER METER
	MAIL BOX
EX	EXISTING
	EXISTING CONTOUR

MSWD Mission Springs Water District

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6			
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BENCHMARK: SEE SHEET G–2

BASIS OF BEARING: SEE SHEET G–2

PREPARED BY: URS
3500 PORSCHE WAY SUITE 300
ONTARIO, CA 91764
TEL: (909) 980–4000 FAX: (909) 980–1399
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REGISTERED PROFESSIONAL ENGINEER TIMOTHY R. VOLZ C 049832 Exp. Sept. 30 CIVIL STATE OF CALIFORNIA

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RECOMMENDED FOR APPROVAL BY: _____ DATE
DAN PATNEAUDE
ENGINEERING MGR.

APPROVED BY MISSION SPRINGS WATER DISTRICT: _____ DATE
ARDEN WALLUM
GENERAL MGR.

MISSION SPRINGS WATER DISTRICT

SEWER IMPROVEMENT PLANS
GENERAL NOTES,
NOTIFICATIONS AND SURVEY CONTROL

SECTIONS 30 & 31 TOWNSHIP 20 S RANGE 50 E

DWG. G–2
2 OF 119
PRIVATE REFERENCE #
MSWD REFERENCE #

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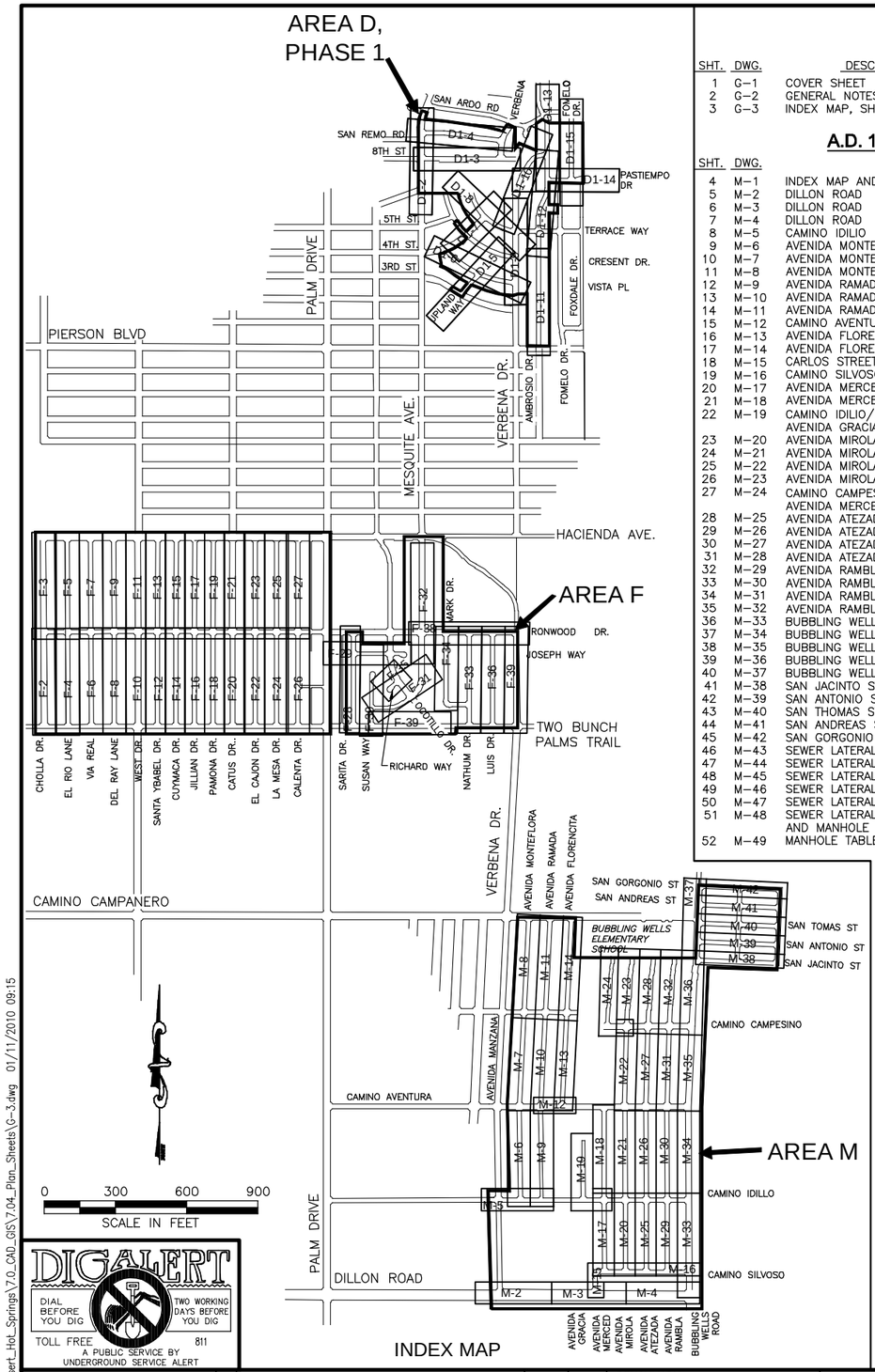

SHEET INDEX

GENERAL

SHT.	DWG.	DESCRIPTION
1	G–1	COVER SHEET
2	G–2	GENERAL NOTES, LEGEND, NOTIFICATIONS, AND SURVEY CONTROL
3	G–3	INDEX MAP, SHEET INDEX, CONSTRUCTION NOTES AND QUANTITY ESTIMATE

A.D. 12 SERVICE AREA M

SHT.	DWG.	DESCRIPTION	
4	M–1	INDEX MAP AND SHEET INDEX	
5	M–2	DILLON ROAD	STA 10+00.00 TO STA 17+50.00
6	M–3	DILLON ROAD	STA 17+50.00 TO STA 28+00.00
7	M–4	DILLON ROAD	STA 28+00.00 TO STA 36+83.39
8	M–5	CAMINO IDILIO	STA 10+00.00 TO STA 16+22.20
9	M–6	AVENIDA MONTEFLORA	STA 10+00.00 TO STA 22+50.00
10	M–7	AVENIDA MONTEFLORA	STA 22+50.00 TO STA 35+50.00
11	M–8	AVENIDA MONTEFLORA	STA 35+50.00 TO STA 49+18.88
12	M–9	AVENIDA RAMADA	STA 10+00.00 TO STA 22+50.00
13	M–10	AVENIDA RAMADA	STA 22+50.00 TO STA 35+50.00
14	M–11	AVENIDA RAMADA	STA 35+50.00 TO STA 49+27.28
15	M–12	CAMINO AVENTURA	STA 10+00.00 TO STA 13+00.42
16	M–13	AVENIDA FLORENCIA	STA 10+00.00 TO STA 22+50.00
17	M–14	AVENIDA FLORENCIA	STA 22+50.00 TO STA 36+07.49
18	M–15	CARLOS STREET	STA 10+00.00 TO STA 13+04.03
19	M–16	CAMINO SILVOSO	STA 10+00.00 TO STA 22+50.00
20	M–17	AVENIDA MERCED	STA 10+00.00 TO STA 21+00.00
21	M–18	AVENIDA MERCED	
22	M–19	CAMINO IDILIO/	STA 21+00.00 TO STA 32+70.00
		AVENIDA GRACIA	STA 10+00.00 TO STA 21+00.00
23	M–20	AVENIDA MIROLA	STA 10+00.00 TO STA 21+00.00
24	M–21	AVENIDA MIROLA	STA 21+00.00 TO STA 32+60.00
25	M–22	AVENIDA MIROLA	STA 32+60.00 TO STA 43+50.00
26	M–23	AVENIDA MIROLA	STA 43+50.00 TO STA 54+00.00
27	M–24	CAMINO CAMPESINO/	
		AVENIDA MERCED	STA 10+00.00 TO STA 22+50.00
28	M–25	AVENIDA ATEZADA	STA 10+00.00 TO STA 21+00.00
29	M–26	AVENIDA ATEZADA	STA 21+00.00 TO STA 32+60.00
30	M–27	AVENIDA ATEZADA	STA 32+60.00 TO STA 43+20.00
31	M–28	AVENIDA ATEZADA	STA 43+20.00 TO STA 54+00.00
32	M–29	AVENIDA RAMBLA	STA 10+00.00 TO STA 21+00.00
33	M–30	AVENIDA RAMBLA	STA 21+00.00 TO STA 32+60.00
34	M–31	AVENIDA RAMBLA	STA 32+60.00 TO STA 43+50.00
35	M–32	AVENIDA RAMBLA	STA 43+50.00 TO STA 53+80.00
36	M–33	BUBBLING WELLS ROAD	STA 10+00.00 TO STA 21+50.00
37	M–34	BUBBLING WELLS ROAD	STA 21+50.00 TO STA 32+70.00
38	M–35	BUBBLING WELLS ROAD	STA 32+70.00 TO STA 44+10.00
39	M–36	BUBBLING WELLS ROAD	STA 44+10.00 TO STA 56+10.00
40	M–37	BUBBLING WELLS ROAD	STA 56+10.00 TO STA 67+26.84
41	M–38	SAN JACINTO STREET	STA 10+00.00 TO STA 20+90.00
42	M–39	SAN ANTONIO STREET	STA 10+00.00 TO STA 20+50.00
43	M–40	SAN THOMAS STREET	STA 10+00.00 TO STA 20+72.00
44	M–41	SAN ANDREAS STREET	STA 10+00.00 TO STA 20+50.00
45	M–42	SAN GORGONIO STREET	STA 10+00.00 TO STA 20+10.00
46	M–43	SEWER LATERAL DATA–1	
47	M–44	SEWER LATERAL DATA–2	
48	M–45	SEWER LATERAL DATA–3	
49	M–46	SEWER LATERAL DATA–4	
50	M–47	SEWER LATERAL DATA–5	
51	M–48	SEWER LATERAL DATA–6 AND MANHOLE TABLE–1	
52	M–49	MANHOLE TABLE–2	

A.D. 12 SERVICE AREA F

SHT.	DWG.	DESCRIPTION	
53	F–1	VICINITY MAP, INDEX MAP, NOTES AND INDEX SHEET	
54	F–2	CHOLLA DRIVE	STA 10+00.00 TO STA 23+00.00
55	F–3	CHOLLA DRIVE	STA 23+00.00 TO STA 35+98.83
56	F–4	EL RIO LANE	STA 10+00.00 TO STA 23+00.00
57	F–5	EL RIO LANE	STA 23+00.00 TO STA 35+97.11
58	F–6	VIA REAL	STA 10+00.00 TO STA 23+00.00
59	F–7	VIA REAL	STA 23+00.00 TO STA 35+96.05
60	F–8	DEL RAY LANE	STA 10+00.00 TO STA 35+89.28
61	F–9	DEL RAY LANE	STA 23+00.00 TO STA 35+89.28
62	F–10	WEST DRIVE	STA 10+00.00 TO STA 23+00.00
63	F–11	WEST DRIVE	STA 23+00.00 TO STA 35+88.30
64	F–12	SANTA YSABEL LANE	STA 10+00.00 TO STA 23+00.00
65	F–13	SANTA YSABEL LANE	STA 23+00.00 TO STA 35+20.00
66	F–14	CUYAMACA DRIVE	STA 10+00.00 TO STA 23+00.00
67	F–15	CUYAMACA DRIVE	STA 23+00.00 TO STA 35+20.00
68	F–16	JULIAN DRIVE	STA 10+00.00 TO STA 23+00.00
69	F–17	JULIAN DRIVE	STA 23+00.00 TO STA 35+20.00
70	F–18	RAMONA DRIVE	STA 10+00.00 TO STA 23+00.00
71	F–19	RAMONA DRIVE	STA 23+00.00 TO STA 35+40.00
72	F–20	CACTUS DRIVE	STA 10+00.00 TO STA 23+00.00
73	F–21	CACTUS DRIVE	STA 23+00.00 TO STA 35+20.00
74	F–22	EL CAJON DRIVE	STA 10+00.00 TO STA 23+00.00
75	F–23	EL CAJON DRIVE	STA 23+00.00 TO STA 35+38.53
76	F–24	LA MESA DRIVE	STA 10+00.00 TO STA 23+00.00
77	F–25	LA MESA DRIVE	STA 23+00.00 TO STA 35+30.02
78	F–26	CALIENTE DRIVE	STA 10+00.00 TO STA 23+00.00
79	F–27	CALIENTE DRIVE	STA 23+00.00 TO STA 35+29.35
80	F–28	SARITA DRIVE	STA 10+00.00 TO STA 21+81.83
81	F–29	JOSEPH WAY	STA 10+00.00 TO 13+50.00 – WEST AND 10+00.00 TO 12+30.00 – EAST
82	F–30	SUSAN WAY	STA 10+00.00 TO STA 17+48.00
83	F–31	MESQUITE AVENUE	STA 10+00.00 TO 14+65.00 – WEST AND 10+00.00 TO 17+00.00 – EAST
84	F–32	MESQUITE AVENUE	STA 17+00.00 TO STA 31+38.57
85	F–33	NAHUM DRIVE	STA 10+00.00 TO STA 21+66.33
86	F–34	MARK DRIVE	STA 10+00.00 TO STA 21+73.54
87	F–35	RICHARD WAY	STA 10+00.00 TO STA 11+40.00
88	F–36	LUIS DRIVE	STA 10+00.00 TO STA 23+00.00
89	F–37	IRONWOOD DRIVE – WEST	
90	F–38	IRONWOOD DRIVE – EAST	
91	F–39	VERBENA DRIVE AND TWO BUNCH PALMS TRAIL	
92	F–40	SEWER LATERAL DATA – 1	
93	F–41	SEWER LATERAL DATA – 2	
94	F–42	SEWER LATERAL DATA –3	
95	F–43	SEWER LATERAL DATA – 4	
96	F–44	SEWER LATERAL DATA – 5	
97	F–45	SEWER LATERAL DATA – 6	
98	F–46	SEWER LATERAL DATA – 7	
99	F–47	SEWER LATERAL DATA – 8	
100	F–48	MANHOLE TABLES – 1	
101	F–49	MANHOLE TABLES – 2	

A.D. 12 SERVICE AREA D1

SHT.	DWG.	DESCRIPTION	
102	D1–1	VICINITY MAP, INDEX MAP, NOTES AND SHEET INDEX	
103	D1–2	MESQUITE AVENUE	STA 10+00.00 TO STA 23+00.79
104	D1–3	8TH STREET	STA 10+00.00 TO STA 21+30.00
105	D1–4	SAN REMO ROAD	STA 10+00.00 TO STA 21+39.03
106	D1–5	UPLAND WAY	STA 10+00.00 TO STA 13+79.98
107	D1–6	VISTA PLACE	STA 10+00.00 TO STA 14+65.00 W
			STA 10+00.00 TO STA 13+85.00 E
108	D1–7	4TH STREET	STA 10+00.00 TO STA 13+76.00
109	D1–8	TERRACE WAY	STA 10+00.00 TO STA 13+00.00 NW
			STA 10+00.00 TO STA 13+50.00 N
110	D1–9	VERBENA DRIVE	STA 10+00.00 TO STA 21+00.00
111	D1–10	VERBENA DRIVE / SAN LORENZO DRIVE	STA 21+00.00 TO STA 30+45.00
112	D1–11	AMBROSIO DRIVE	STA 10+00.00 TO STA 22+00.00
113	D1–12	AMBROSIO DRIVE	STA 22+00.00 TO STA 35+00.00
114	D1–13	AMBROSIO DRIVE	STA 35+00.00 TO STA 41+50.00
115	D1–14	PASATIEMPO DRIVE	STA 10+00.00 TO STA 13+39.12
116	D1–15	POMELO DRIVE	STA 10+00.00 TO STA 17+74.00
117	D1–16	SEWER LATERAL DATA–1	
118	D1–17	SEWER LATERAL DATA–2	
119	D1–18	MANHOLE TABLE	

CONSTRUCTION NOTES & QUANTITY ESTIMATE

NO.	ITEM	QUANTITY	UNIT
1	CONSTRUCT 8" DIA V.C.P. WITH NATIVE BEDDING, CLASS D PER M.S.W.D DWG S–02A & S–01.	81,015	LF
2	CONSTRUCT 4' DIA MANHOLE PER M.S.W.D. DWG. NO. S–4 & S–5.	311	EA
3	CONSTRUCT 5' DIA MANHOLE PER M.S.W.D. STD. DWG. NO. S–4 & S–6.	24	EA
4	CONSTRUCT 6' DIA MANHOLE PER M.S.W.D. DWG. NO. S–4 AND S–6. MODIFY INNER DIAMETER OF MANHOLE TO 72".	7	EA
5	CONSTRUCT 4" DIA. V.C.P. SEWER LATERAL PER M.S.W.D. DWG. NO. S–13 (SEE GENERAL NOTES FOR SEWER PLANS, NOTES 5, 10, AND 16, DRAWING G–2).	79,831	LF
6	CONSTRUCT 4" DIA V.C.P. SEWER LATERAL PER M.S.W.D. DWG. NO. S–14.	0	LF
7	CONSTRUCT 6" DIA V.C.P. SEWER LATERAL PER M.S.W.D. DWG. NO. S–13.	270	LF
8	CONSTRUCT 8" DIA V.C.P. CLEANOUT PER M.S.W.D. DWG. NO. S–12.	4	EA
9	REMOVE EX. PLUG OR CAP AND CONNECT NEW V.C.P. SEWER TO EX. STUB AT MANHOLE.	2	EA
10	CONTRACTOR SHALL VERIFY THE PIPE EXTENSION LENGTHS., ALIGNMENTS, AND ELEVATION. IF DIFFERENT,FROM THAT AS SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER, REMOVE EXISTING PLUG, AND CONSTRUCT NEW MANHOLE AT STUB LOCATION.	10	EA
11	REMOVE AND REPLACE EXISTING CROSS GUTTER.	8475	SF
12	CONSTRUCT 4' DIA TERMINUS MANHOLE WITH LATERALS PER M.S.W.D. DWG. NO. S–07.	5	EA
13	CONSTRUCT 8" DIA. V.C.P. WITH SPECIAL BEDDING, CLASS B PER M.S.W.D. DWG. NO. S–02A & S–01.	7896	LF
14	CONSTRUCT 10" DIA V.C.P. WITH NATIVE BEDDING, CLASS D PER M.S.W.D. DWG. NO. S–02A & S–01.	3415	LF
15	CONSTRUCT 10" DIA V.C.P. WITH SPECIAL BEDDING, CLASS B, PER M.S.W.D. DWG. NO. S–02A AND S–01.	0	LF
16	CONSTRUCT 12" DIA V.C.P. WITH NATIVE BEDDING, CLASS D PER M.S.W.D. DWG. NO. S–02A & S–01.	296	LF
17	CONSTRUCT 12" DIA V.C.P. WITH SPECIAL BEDDING CLASS B PER M.S.W.D. DWG. NO. S–02A & S–01.	1038	LF
18	CONSTRUCT 15" DIA V.C.P. WITH NATIVE BEDDING, CLASS D PER M.S.W.D. DWG. NO. S–02A & S–01.	1629	LF
19	CONSTRUCT 15" DIA V.C.P. WITH SPECIAL BEDDING, CLASS B PER M.S.W.D. DWG. NO. S–02A & S–01.	1017	LF
20	CONSTRUCT 21" DIA V.C.P. WITH NATIVE BEDDING, CLASS D PER M.S.W.D. DWG. NO. S–02A & S–01.	975	LF
21	CONSTRUCT 21" DIA V.C.P. WITH SPECIAL BEDDING, CLASS B PER M.S.W.D. DWG. NO. S–02A & S–01.	325	LF
22	CONSTRUCT 24" DIA V.C.P. WITH NATIVE BEDDING, CLASS D PER M.S.W.D. DWG. NO. S–02A & S–01.	319	LF
23	CONSTRUCT 24" DIA V.C.P. WITH SPECIAL BEDDING, CLASS B PER M.S.W.D. DWG. NO. S–02A & S–01.	956	LF
24	LIMIT OF ASPHALT PULVERIZATION	3,687,805	SF
25	HOT TAP MANHOLE AND REFERENCE M.S.W.D. DWG. NO. S–10.	8	EA
26	EXCAVATE EXISTING MANHOLE, CORE DRILL MANHOLE WALL AND USING KOR–N–SEAL OR APPROVED EQUAL.	7	EA
27	CONSTRUCT 8" DIA D.I.P. WITH NATIVE BEDDING, CLASS D PER M.S.W.D DWG S–02A & S–01.	240	LF
28	CONNECT 8" V.C.P. TO 8" D.I.P. WITH BAND SEAL OR APPROVED EQUAL.	10	EA
29	CONSTRUCT 8" V.C.P. STUB–OUT FOR FUTURE CONNECTION. PLUG END WITH REMOVABLE WATERTIGHT CAP AS MANUFACTURED BY PIPE MANUFACTURER.	3	LS
30	CONSTRUCT 12" V.C.P. STUB–OUT FOR FUTURE CONNECTION. PLUG END WITH REMOVABLE WATERTIGHT CAP AS MANUFACTURED BY PIPE MANUFACTURER.	1	LS
31	CONSTRUCT 21" V.C.P. STUB–OUT FOR FUTURE CONNECTION. PLUG END WITH REMOVABLE WATERTIGHT CAP AS MANUFACTURED BY PIPE MANUFACTURER.	1	LS
32	CONSTRUCT 24" V.C.P. STUB–OUT FOR FUTURE CONNECTION. PLUG END WITH REMOVABLE WATERTIGHT CAP AS MANUFACTURED BY PIPE MANUFACTURER.	1	LS
33	CONSTRUCT OUTSIDE DROP MANHOLE PER M.S.W.D. DWG. NO. S–11.	0	EA
34	CONSTRUCT 24" DIA. CASING STEEL PIPE WITH 8" DIA. D.I.P. CARRIER PIPE. CONSTRUCT BORE PIT AND RECEIVING PIT NECESSARY FOR INSTALLATION. SEE SPECIFICATIONS.	80	LF
35	PROTECT OR SIPHON EXISTING ACTIVE LATERAL DURING CONSTRUCTION. CONSTRUCT NEW LATERAL FOR TIE–IN ON COMPLETION.	2	EA
36	CONSTRUCT 4" DIA. V.C.P. HOT TAP SEWER LATERAL PER M.S.W.D. DWG. NO. S–16 (SEE GENERAL NOTES FOR SEWER PLANS, NOTES 5, 10, & 16 DRAWING G–2)	885	LF

DIGALERT
DIAL BEFORE YOU DIG
TWO WORKING DAYS BEFORE YOU DIG
TOLL FREE 811
A PUBLIC SERVICE BY UNDERGROUND SERVICE ALERT

MSWD Mission Springs Water District

#	REVISIONS	DATE	APP.
6			
5			
4			
3			
2			
1	R.O.W. ROTATION BY HACKER	11/11/09	SRC

BENCHMARK: SEE SHEET G–2

BASIS OF BEARING: SEE SHEET G–2

PREPARED BY: URS
3500 PORSCHE WAY SUITE 300 ONTARIO, CA 91764 TEL: (909) 980–4000 FAX: (909) 980–1399
8181 E. TUFTS AVENUE DENVER, CO 80237–2637 TEL: (303) 694–2770 FAX: (303) 694–3946

SCALE:	AS SHOWN
PLOT DATE:	06/18/09
DESIGN BY:	NRK
DRAWN BY:	
CHECKED BY:	BSP

REGISTERED PROFESSIONAL ENGINEER TIMOTHY R. VOLZ C 049832 Exp. Sept. 30 CIVIL STATE OF CALIFORNIA

PREPARED UNDER THE DIRECT SUPERVISION OF: _____ DATE

MSWD PLAN REVIEW COMPLETED BY: _____ DATE

RECOMMENDED FOR APPROVAL BY: DAN PATNEAUDE, ENGINEERING MGR. DATE

APPROVED BY MISSION SPRINGS WATER DISTRICT: ARDEN WALLUM, GENERAL MGR. DATE

MISSION SPRINGS WATER DISTRICT

SEWER IMPROVEMENT PLANS

INDEX MAP, SHEET INDEX, CONSTRUCTION NOTES AND QUANTITY ESTIMATE

SECTIONS 30 & 31 TOWNSHIP 20 S RANGE 50 E

DWG. G–3
3 OF 119
PRIVATE REFERENCE #
MSWD REFERENCE #

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