Los Osos Community Services District
Los Osos, California

Volume V – Drawings for the Construction of

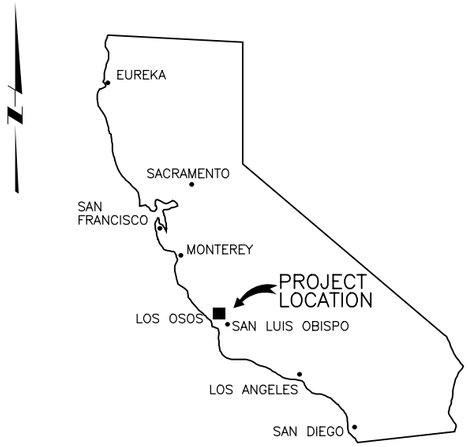
Los Osos Wastewater Project
Area A and Area D

February 2004

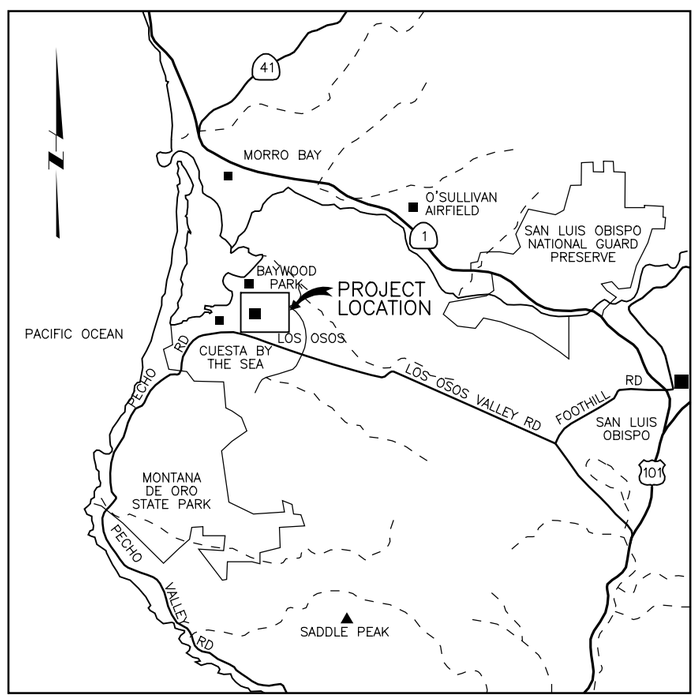
REVIEWED BY LOS OSOS COMMUNITY SERVICES DISTRICT DATE

REVIEWED BY COUNTY OF SLO DATE

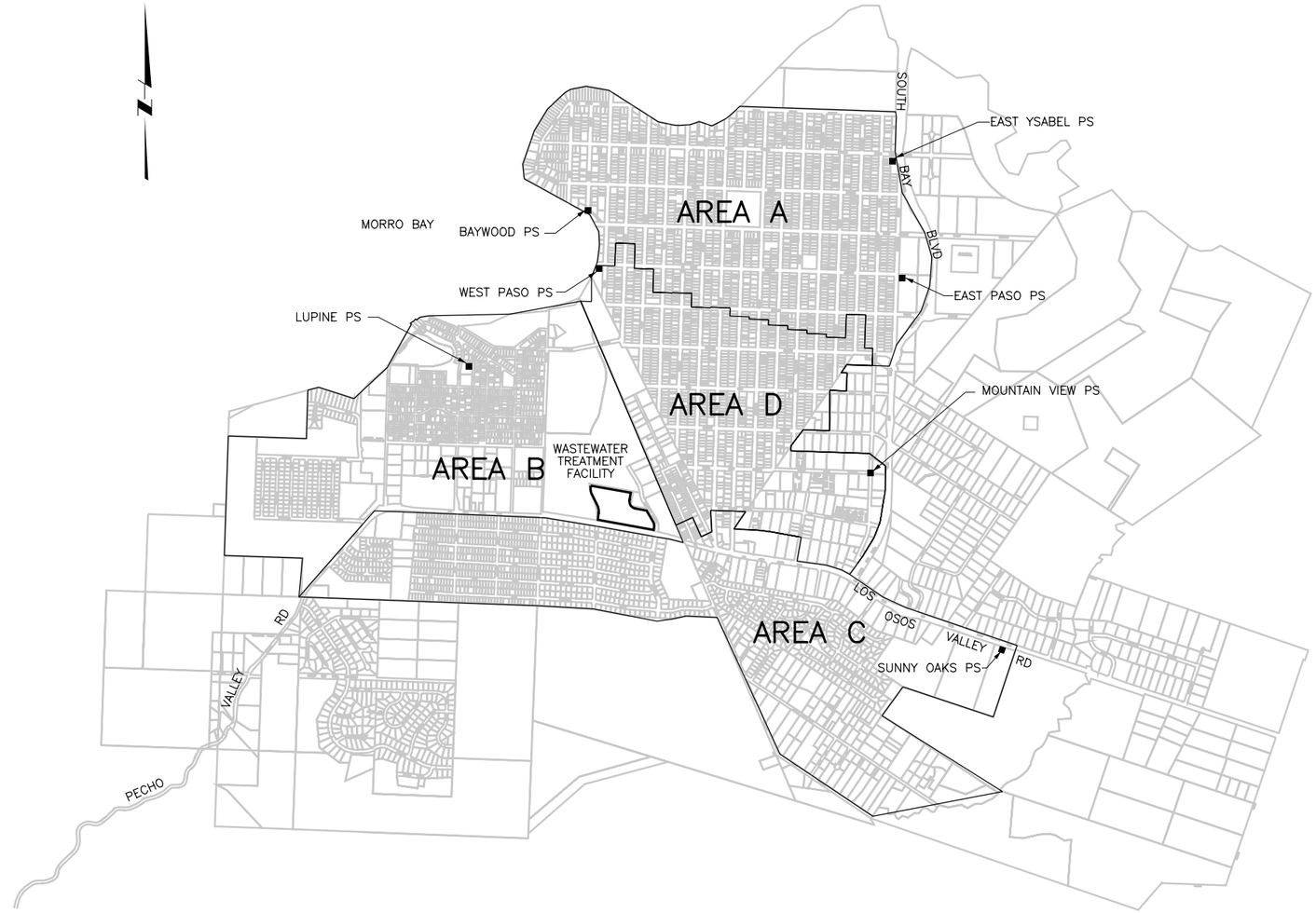
MWH



LOCATION MAP



VICINITY MAP



SITE PLAN

REGISTERED PROFESSIONAL ENGINEER
JOHN ARTHUR BERGEN
NO. C31069
Exp. 3-31-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L. WONG
DRAWN E. WISNIEWSKI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
GENERAL

LOCATION MAP, VICINITY MAP, AND SITE PLAN

SHEET AD-G-002

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\AD\gen\AD-G-002.dgn Plot Date: 09-FEB-2004 13:58

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GENERAL

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AD-TC-T14 RAMP CLOSURE
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GENERAL CIVIL

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AD-GC-068 EROSION CONTROL DETAILS

COLLECTION SYSTEM - AREA A

A-PP-100	PLAN AND PROFILE - 3RD STREET	STA. 7+79.94	TO 14+58.52
A-PP-101	PLAN AND PROFILE - EL MORRO AVE.	STA. 4+24.75	TO 13+50
A-PP-102	PLAN AND PROFILE - EL MORRO AVE.	STA. 13+50	TO 25+50
A-PP-103	PLAN AND PROFILE - EL MORRO AVE.	STA. 25+50	TO 37+26.42
A-PP-104	PLAN AND PROFILE - 13TH STREET	STA. 36+00	TO 41+60.47
A-PP-105	PLAN AND PROFILE - 13TH STREET	STA. 24+74	TO 36+00
A-PP-106	PLAN AND PROFILE - 4TH STREET	STA. 18+34	TO 21+38.88
A-PP-107	PLAN AND PROFILE - 5TH STREET	STA. 22+20	TO 28+18.19
A-PP-108	PLAN AND PROFILE - 5TH STREET	STA. 28+18.19	TO 38+75
A-PP-109	PLAN AND PROFILE - 5TH STREET	STA. 38+75	TO 40+25
A-PP-110	PLAN AND PROFILE - 6TH STREET	STA. 26+70	TO 34+95.23
A-PP-111	PLAN AND PROFILE - 6TH STREET	STA. 34+95.23	TO 43+50
A-PP-112	PLAN AND PROFILE - 6TH STREET	STA. 43+50	TO 50+60
A-PP-113	PLAN AND PROFILE - 7TH STREET	STA. 38+50	TO 41+75.61
A-PP-114	PLAN AND PROFILE - 7TH STREET	STA. 30+38	TO 38+50
A-PP-115	PLAN AND PROFILE - 7TH STREET	STA. 41+75.61	TO 51+00
A-PP-116	PLAN AND PROFILE - 7TH STREET	STA. 51+00	TO 55+50
A-PP-117	PLAN AND PROFILE - 7TH STREET	STA. 55+50	TO 57+30
A-PP-118	PLAN AND PROFILE - 8TH STREET	STA. 44+50	TO 48+56.04
A-PP-119	PLAN AND PROFILE - 8TH STREET	STA. 36+14	TO 44+50
A-PP-120	PLAN AND PROFILE - 8TH STREET	STA. 48+56.04	TO 58+00
A-PP-121	PLAN AND PROFILE - 8TH STREET	STA. 58+00	TO 60+50
A-PP-122	PLAN AND PROFILE - SANTA YSABEL AV.	STA. 32+32.60	TO 30+50
	SANTA YSABEL AV.	STA. 27+20	TO 29+06
A-PP-123	PLAN AND PROFILE - 8TH STREET	STA. 60+50	TO 64+00
A-PP-124	PLAN AND PROFILE - 9TH STREET	STA. 50+50	TO 54+99.46
A-PP-125	PLAN AND PROFILE - 9TH STREET	STA. 41+94	TO 50+50
A-PP-126	PLAN AND PROFILE - 9TH STREET	STA. 54+99.46	TO 66+00
A-PP-127	PLAN AND PROFILE - 9TH STREET	STA. 66+00	TO 71+61
A-PP-128	PLAN AND PROFILE - SANTA MARIA AVE.	STA. 33+66.30	TO 39+06
A-PP-129	PLAN AND PROFILE - 10TH STREET	STA. 32+89.27	TO 66+50
A-PP-130	PLAN AND PROFILE - 10TH STREET	STA. 66+50	TO 74+32
A-PP-131	PLAN AND PROFILE - 10TH STREET	STA. 50+50	TO 56+07.62
A-PP-132	PLAN AND PROFILE - 10TH STREET	STA. 41+20	TO 50+50
A-PP-133	PLAN AND PROFILE - 11TH STREET	STA. 42+00	TO 48+54.51
A-PP-134	PLAN AND PROFILE - 11TH STREET	STA. 32+78	TO 42+00
A-PP-135	PLAN AND PROFILE - 11TH STREET	STA. 48+54.51	TO 56+00
A-PP-136	PLAN AND PROFILE - 11TH STREET	STA. 56+50	TO 62+00
A-PP-137	PLAN AND PROFILE - 11TH STREET	STA. 62+60	TO 68+74
A-PP-138	PLAN AND PROFILE - 12TH STREET	STA. 30+75	TO 41+75.41
A-PP-139	PLAN AND PROFILE - 12TH STREET	STA. 25+67	TO 30+50
A-PP-140	PLAN AND PROFILE - PISMO AVENUE	STA. 24+06.79	TO 33+13
A-PP-141	PLAN AND PROFILE - 12TH STREET	STA. 41+75.41	TO 50+14
A-PP-142	PLAN AND PROFILE - 13TH STREET	STA. 41+60.47	TO 49+50
A-PP-143	PLAN AND PROFILE - SANTA YSABEL AVE.	STA. 52+50	TO 60+81.34
A-PP-144	PLAN AND PROFILE - SANTA YSABEL AVE.	STA. 41+00	TO 52+50
A-PP-145	PLAN AND PROFILE - 12TH STREET	STA. 50+57	TO 55+43.17
A-PP-146	PLAN AND PROFILE - 17TH STREET	STA. 61+80	TO 70+19.89
A-PP-147	PLAN AND PROFILE - 17TH STREET	STA. 70+19.89	TO 76+50
A-PP-148	PLAN AND PROFILE - 16TH STREET	STA. 34+42	TO 41+82.89
A-PP-149	PLAN AND PROFILE - 16TH STREET	STA. 41+82.89	TO 48+15
A-PP-150	PLAN AND PROFILE - 15TH STREET	STA. 35+65	TO 41+83.16
A-PP-151	PLAN AND PROFILE - 15TH STREET	STA. 41+83.16	TO 47+60
A-PP-152	PLAN AND PROFILE - 14TH STREET	STA. 42+12	TO 48+63.54
A-PP-153	PLAN AND PROFILE - 14TH STREET	STA. 48+63.54	TO 54+96
A-PP-154	PLAN AND PROFILE - 13TH STREET	STA. 49+44	TO 55+28.67
A-PP-155	PLAN AND PROFILE - 13TH STREET	STA. 55+28.67	TO 61+63
A-PP-156	PLAN AND PROFILE - 12TH STREET	STA. 55+43.17	TO 61+74
A-PP-157	PLAN AND PROFILE - 18TH STREET	STA. 5+11.28	TO 1+00
	18TH STREET	STA. 26+60	TO 29+95.23
A-PP-158	PLAN AND PROFILE - PASO ROBLES AVE.	STA. 45+00	TO 53+76.76
A-PP-159	PLAN AND PROFILE - PASO ROBLES AVE.	STA. 37+23.88	TO 45+00
	14TH STREET	STA. 26+75	TO 30+25
A-PP-160	PLAN AND PROFILE - 14TH STREET	STA. 30+25	TO 41+39
A-PP-161	PLAN AND PROFILE - 14TH STREET	STA. 3+00	TO 14+50
A-PP-162	PLAN AND PROFILE - 18TH STREET	STA. 1+78	TO 3+00
A-PP-163	PLAN AND PROFILE - 18TH STREET	STA. 14+50	TO 25+67
A-PP-164	PLAN AND PROFILE - EL MORRO AVE.	STA. 53+80.08	TO 57+54.42
A-PP-165	PLAN AND PROFILE - 17TH STREET	STA. 38+50	TO 49+65.98
A-PP-166	PLAN AND PROFILE - 17TH STREET	STA. 36+56	TO 38+50
A-PP-167	PLAN AND PROFILE - 17TH STREET	STA. 49+65.98	TO 61+40
A-PP-168	PLAN AND PROFILE - 16TH STREET	STA. 14+94	TO 21+29.49
A-PP-169	PLAN AND PROFILE - 16TH STREET	STA. 21+29.49	TO 31+50
A-PP-170	PLAN AND PROFILE - 16TH STREET	STA. 31+50	TO 33+95
A-PP-171	PLAN AND PROFILE - 15TH STREET	STA. 10+28	TO 21+30.29
A-PP-172	PLAN AND PROFILE - 15TH STREET	STA. 21+30.29	TO 30+50
A-PP-173	PLAN AND PROFILE - 15TH STREET	STA. 30+50	TO 34+17
A-PP-174	PLAN AND PROFILE - 14TH STREET	STA. 17+52	TO 28+11.17
A-PP-175	PLAN AND PROFILE - 2ND STREET	STA. 2+87.82	TO 14+00.00
A-PP-176	PLAN AND PROFILE - SANTA YSABEL AVE.	STA. 9+22.86	TO 20+63
A-PP-177	PLAN AND PROFILE - 2ND STREET	STA. 14+00	TO 20+20
A-PP-178	PLAN AND PROFILE - 3RD STREET	STA. 28+17.83	TO 31+34
A-PP-179	PLAN AND PROFILE - 4TH STREET	STA. 32+50	TO 34+97.84
A-PP-180	PLAN AND PROFILE - 4TH STREET	STA. 34+97.87	TO 41+28.92
A-PP-181	PLAN AND PROFILE - SANTA LUCIA AVE.	STA. 1+64.51	TO 11+56.91
A-PP-182	PLAN AND PROFILE - 3RD STREET	STA. 31+92	TO 35+02.83
A-PP-183	PLAN AND PROFILE - 5TH STREET	STA. 41+77.19	TO 45+50
A-PP-184	PLAN AND PROFILE - SANTA MARIA AVE.	STA. 0+98.43	TO 10+56.31
A-PP-185	PLAN AND PROFILE - PASADENA DRIVE	STA. 0+99.91	TO 8+00
A-PP-186	PLAN AND PROFILE - PASADENA DRIVE	STA. 8+00	TO 14+14.23
	SANTA LUCIA AVENUE	STA. 1+02.34	TO 1+64.51
A-PP-187	PLAN AND PROFILE - 1ST STREET	STA. 5+25	TO 17+00
A-PP-188	PLAN AND PROFILE - 1ST STREET	STA. 17+00	TO 21+43.70
A-PP-189	PLAN AND PROFILE - BAYWOOD WAY	STA. 0+98.31	TO 5+95
A-PP-190	PLAN AND PROFILE - SANTA YSABEL AVE.	STA. 0+99.85	TO 7+72
A-PP-191	PLAN AND PROFILE - SANTA MARIA AVE.	STA. 10+56.33	TO 17+14.10
A-PP-192	PLAN AND PROFILE - 4TH STREET	STA. 22+04	TO 28+14.46
A-PP-193	PLAN AND PROFILE - 4TH STREET	STA. 28+14.46	TO 32+50
A-PP-194	PLAN AND PROFILE - 3RD STREET	STA. 15+60	TO 21+34.11
A-PP-195	PLAN AND PROFILE - 3RD STREET	STA. 21+34.11	TO 26+66
A-PP-196	PLAN AND PROFILE - EL MORRO F.M.	STA. 1+00	TO 4+18.43
A-PP-197	PLAN AND PROFILE - PASO ROBLES F.M.	STA. 54+00	TO 37+34
A-PP-198	PLAN AND PROFILE - SANTA YSABEL F.M.	STA. 45+45	TO 60+45
	S.Y.F.M. - 13TH STREET	STA. 49+00	TO 55+25
D-PP-100	PLAN AND PROFILE - PASO ROBLES AVE.	STA. 4+22.64	TO 5+94.20
D-PP-101	PLAN AND PROFILE - 3RD STREET	STA. 7+29.86	TO 0+94.04
D-PP-102	PLAN AND PROFILE - PISMO AVENUE	STA. 1+09.34	TO 4+38.99
D-PP-103	PLAN AND PROFILE - 4TH STREET	STA. 6+73.69	TO 0+04.37

PUMP STATIONS AND WELLS - AREA A

A-C-200 AREA A KEY PLAN
A-C-201 BAYWOOD PS SITE PLAN
A-C-202 WEST PASO PS SITE PLAN
A-C-203 BAYWOOD / WEST PASO STANDBY POWER SITE PLAN
A-C-204 EAST YSABEL PS AND STANDBY POWER SITE PLAN
A-C-205 EAST PASO PS AND STANDBY POWER SITE PLAN
A-C-206 PPS 04A, 07A, 08A, 09A SITE PLANS
A-C-207 PPS 10A, 11A, 12A, 13A SITE PLANS
A-C-208 EROSION CONTROL PLAN – 1
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ED-C-335 EDS SITE PLAN - SANTA MARIA
ED-C-336 EDS SITE PLAN - PISMO
ED-C-337 EDS SECTIONS AND DETAILS - 1
ED-C-338 EDS SECTIONS AND DETAILS - 2
ED-C-339 EDS SECTIONS AND DETAILS - 3

A-PP-308	PLAN AND PROFILE: 4TH STREET	STA. 2+00	TO 8+00
A-PP-309	PLAN AND PROFILE: PISMO AVENUE	STA. 4+00	TO 15+50
A-PP-310	PLAN AND PROFILE: PISMO AVENUE	STA. 15+50	TO 25+50
A-PP-311	PLAN AND PROFILE: PISMO AVENUE	STA. 25+50	TO 36+00
A-PP-312	PLAN AND PROFILE: PISMO AVENUE	STA. 36+00	TO 46+00
A-PP-313	PLAN AND PROFILE: PISMO AVENUE	STA. 46+00	TO 51+00
A-PP-314	PLAN AND PROFILE: 18TH STREET	STA. 7+50	TO 17+50
A-PP-315	PLAN AND PROFILE: 18TH STREET	STA. 17+50	TO 29+00
A-PP-316	PLAN AND PROFILE: 17TH STREET	STA. 63+00	TO 71+00
A-PP-317	PLAN AND PROFILE: SANTA YSABEL AVE.	STA. 58+00	TO 61+00
A-PP-320	PLAN AND PROFILE: SANTA MARIA AVE.	STA. 40+00	TO 51+50
A-PP-321	PLAN AND PROFILE: SANTA MARIA AVE.	STA. 51+50	TO 63+50
A-PP-323	PLAN AND PROFILE: EL MORO AVE.	STA. 20+00	TO 31+50
A-PP-324	PLAN AND PROFILE: EL MORO AVE.	STA. 32+50	TO 43+00
A-PP-325	PLAN AND PROFILE: EL MORO AVE.	STA. 43+00	TO 54+00

COLLECTION SYSTEM - AREA D

D-PP-100	PLAN AND PROFILE: PASO ROBLES AVE.	STA. 4+22.64	TO 5+94.20
D-PP-101	PLAN AND PROFILE: 3RD STREET	STA. 7+29.86	TO 0+94.04
D-PP-102	PLAN AND PROFILE: PISMO AVENUE	STA. 1+09.34	TO 4+38.99
D-PP-103	PLAN AND PROFILE: 4TH STREET	STA. 6+73.69	TO 0+4.37
D-PP-104	PLAN AND PROFILE: RAMONA AVENUE	STA. 20+36.01	TO 23+47.53
D-PP-105	PLAN AND PROFILE: 5TH STREET	STA. 7+76.02	TO 0+94.24
D-PP-106	PLAN AND PROFILE: SAN LUIS AVENUE	STA. 1+86.12	TO 7+66.42
D-PP-107	PLAN AND PROFILE: 7TH STREET	STA. 14+52.06	TO 7+74.29
D-PP-108	PLAN AND PROFILE: NIPOMO AVENUE	STA. 4+37.45	TO 14+26.19
D-PP-109	PLAN AND PROFILE: NIPOMO AVENUE	STA. 14+26.19	TO 17+56.25
D-PP-110	PLAN AND PROFILE: 11TH STREET	STA. 14+52.67	TO 4+52.67
D-PP-111	PLAN AND PROFILE: 11TH STREET	STA. 4+52.67	TO 1+00.35
D-PP-112	PLAN AND PROFILE: LOS OLIVOS AVE.	STA. 7+66.68	TO 14+39.46
D-PP-113	PLAN AND PROFILE: LOS OLIVOS AVE.	STA. 14+39.46	TO 24+17.62
D-PP-114	PLAN AND PROFILE: PISMO AVENUE	STA. 4+38.99	TO 14+27.82
D-PP-115	PLAN AND PROFILE: PISMO AVENUE	STA. 14+27.82	TO 17+57.46
D-PP-116	PLAN AND PROFILE: 8TH STREET	STA. 34+92.31	TO 28+13.54
D-PP-117	PLAN AND PROFILE: RAMONA AVENUE	STA. 33+35.91	TO 43+26.69
D-PP-118	PLAN AND PROFILE: RAMONA AVENUE	STA. 43+26.69	TO 53+15.92
D-PP-119	PLAN AND PROFILE: RAMONA AVENUE	STA. 53+15.92	TO 59+76.01
D-PP-120	PLAN AND PROFILE: 16TH STREET	STA. 7+71.72	TO 14+19.32
D-PP-121	PLAN AND PROFILE: 6TH STREET	STA. 7+71.48	TO 14+18.75
D-PP-122	PLAN AND PROFILE: 6TH STREET	STA. 7+71.48	TO 2+64.91
D-PP-123	PLAN AND PROFILE: NIPOMO AVENUE	STA. 4+37.45	TO 2+20.06
D-PP-124	PLAN AND PROFILE: 7TH STREET	STA. 7+74.29	TO 3+04.21
D-PP-125	PLAN AND PROFILE: 8TH STREET	STA. 14+54.62	TO 20+98.78
D-PP-126	PLAN AND PROFILE: 8TH STREET	STA. 14+54.62	TO 7+74.50
D-PP-127	PLAN AND PROFILE: SANTA YNEZ AVE.	STA. 4+31.28	TO 7+61.81
D-PP-128	PLAN AND PROFILE: 9TH STREET	STA. 14+18.08	TO 5+77.85
D-PP-129	PLAN AND PROFILE: 9TH STREET	STA. 20+98.74	TO 27+76.51
D-PP-130	PLAN AND PROFILE: SAN LUIS AVENUE	STA. 14+26.29	TO 17+55.16
D-PP-131	PLAN AND PROFILE: 10TH STREET	STA. 28+84.80	TO 24+70.87
D-PP-132	PLAN AND PROFILE: 9TH STREET	STA. 20+98.74	TO 14+64.04
D-PP-133	PLAN AND PROFILE: 10TH STREET	STA. 22+05.83	TO 24+31.89
D-PP-134	PLAN AND PROFILE: 10TH STREET	STA. 22+05.83	TO 15+26.20
D-PP-135	PLAN AND PROFILE: 10TH STREET	STA. 15+26.20	TO 8+53.22
D-PP-136	PLAN AND PROFILE: 11TH STREET	STA. 14+52.67	TO 20+58.81
D-PP-137	PLAN AND PROFILE: NIPOMO AVE.	STA. 17+56.25	TO 26+65.76
D-PP-138	(NOT USED)		
D-PP-139	PLAN AND PROFILE: FAIRCHILD WAY	STA. 9+69.36	TO 5+60.33
D-PP-140	PLAN AND PROFILE: FERRELL AVE.	STA. 34+62.48	TO 32+50.65
D-PP-141	PLAN AND PROFILE: FERRELL AVE.	STA. 32+50.65	TO 25+46.65
D-PP-142	PLAN AND PROFILE: FERRELL AVE.	STA. 25+46.65	TO 16+78.28
D-PP-143	PLAN AND PROFILE: FERRELL AVE.	STA. 16+78.28	TO 7+71.62
D-PP-144	PLAN AND PROFILE: 4TH STREET	STA. 6+73.69	TO 17+18.22
D-PP-145	PLAN AND PROFILE: 5TH STREET	STA. 14+54.00	TO 20+78.36
D-PP-146	PLAN AND PROFILE: 5TH STREET	STA. 14+54.00	TO 8+22.24
D-PP-147	PLAN AND PROFILE: 6TH STREET	STA. 21+31.19	TO 26+37.46
D-PP-148	PLAN AND PROFILE: 6TH STREET	STA. 21+31.19	TO 14+99.03
D-PP-149	PLAN AND PROFILE: 7TH STREET	STA. 28+11.69	TO 30+46.65
D-PP-150	PLAN AND PROFILE: 7TH STREET	STA. 28+11.69	TO 18+31.46
D-PP-151	PLAN AND PROFILE: 7TH STREET	STA. 18+31.46	TO 14+97.15
D-PP-152	PLAN AND PROFILE: 8TH STREET	STA. 28+13.54	TO 21+77.84
D-PP-153	PLAN AND PROFILE: 9TH STREET	STA. 34+56.96	TO 41+42.06
D-PP-154	PLAN AND PROFILE: 9TH STREET	STA. 34+56.96	TO 31+11.69
D-PP-155	PLAN AND PROFILE: 10TH STREET	STA. 35+65.07	TO 41+12.79
D-PP-156	PLAN AND PROFILE: 10TH STREET	STA. 35+65.07	TO 31+52.34
D-PP-157	PLAN AND PROFILE: 11TH STREET	STA. 28+11.68	TO 33+20.36
D-PP-158	PLAN AND PROFILE: 11TH STREET	STA. 28+11.68	TO 21+31.68
D-PP-159	PLAN AND PROFILE: SAN LUIS AVE.	STA. 20+86.14	TO 22+62.41
D-PP-160	PLAN AND PROFILE: 12TH STREET	STA. 21+32.47	TO 25+51.23
D-PP-161	PLAN AND PROFILE: 12TH STREET	STA. 21+32.47	TO 14+52.67
D-PP-162	PLAN AND PROFILE: 13TH STREET	STA. 21+17.88	TO 24+73.77
D-PP-163	PLAN AND PROFILE: 13TH STREET	STA. 21+17.96	TO 14+80.82
D-PP-164	PLAN AND PROFILE: 14TH STREET	STA. 14+52.61	TO 17+52.19
D-PP-165	PLAN AND PROFILE: 14TH STREET	STA. 14+52.61	TO 5+04.14
D-PP-166	PLAN AND PROFILE: 14TH STREET	STA. 5+04.14	TO 4+62.67
D-PP-167	PLAN AND PROFILE: 15TH STREET	STA. 7+72.13	TO 10+17.02
D-PP-168	PLAN AND PROFILE: 15TH STREET	STA. 7+72.13	TO 1+48.72
D-PP-169	PLAN AND PROFILE: SANTA YNEZ AVE.	STA. 4+31.28	TO 2+14.91
D-PP-170	PLAN AND PROFILE: 8TH STREET	STA. 7+74.50	TO 4+57.45
D-PP-171	PLAN AND PROFILE: 9TH STREET	STA. 27+76.51	TO 30+75.80
D-PP-172	PLAN AND PROFILE: 10TH STREET	STA. 9+45.58	TO 10+94.16
D-PP-172A	PLAN AND PROFILE: SANTA YNEZ AVE.	STA. 28+84.80	TO 31+30.81
D-PP-173	PLAN AND PROFILE: 12TH STREET	STA. 7+73.39	TO 13+77.95
D-PP-174	PLAN AND PROFILE: 12TH STREET	STA. 7+73.39	TO 1+20.07
D-PP-175	PLAN AND PROFILE: SANTA YNEZ AVE.	STA. 17+52.51	TO 24+03.54
D-PP-176	PLAN AND PROFILE: FAIRCHILD WAY	STA. 17+03.39	TO 10+03.03
D-PP-177	PLAN AND PROFILE: 13TH STREET	STA. 7+58.75	TO 14+38.27
D-PP-177A	PLAN AND PROFILE: SAN LUIS AVENUE	STA. 27+45.25	TO 25+97.21
D-PP-178	PLAN AND PROFILE: 13TH STREET	STA. 7+58.75	TO 5+54.63
D-PP-179	PLAN AND PROFILE: BUSH DRIVE	STA. 16+07.63	TO 6+21.17
D-PP-179A	PLAN AND PROFILE: SAN LUIS AVENUE	STA. 30+70.37	TO 33+12.25
D-PP-180	PLAN AND PROFILE: SANTA YNEZ AVENUE	STA. 17+09.08	TO 8+46.57
D-PP-181	PLAN AND PROFILE: MOUNTAIN VIEW AVE.	STA. 8+49.15	TO 1+96.07
D-PP-182	PLAN AND PROFILE: MOUNTAIN VIEW AVE.	STA. 34+01.29	TO 24+35.67
D-PP-183	PLAN AND PROFILE: SANTA YNEZ AVENUE	STA. 27+57.68	TO 24+41.08
D-PP-184	PLAN AND PROFILE: SANTA YNEZ AVENUE WEST PASO ROBLES PUMP		
D-PP-185	PROFILE: STATION FORCE MAIN "OMIT"		
D-PP-186	PROFILE: FORCE MAINS "OMIT"		
D-PP-187	PROFILE: FORCE MAINS "OMIT"		

PUMP STATIONS AND WELLS - AREA D

D-C-200 AREA D KEY PLAN
D-C-201 MOUNTAIN VIEW PS SITE PLAN
D-C-202 MOUNTAIN VIEW STANDBY POWER SITE PLAN
D-C-203 PPS 09B, 09C, 15B SITE PLANS
D-C-204 EROSION CONTROL PLAN - 1
D-C-205 EROSION CONTROL PLAN - 2

LANDSCAPE

GENERAL LANDSCAPING

AD-GL-200 IRRIGATION DETAILS - 1
AD-GL-201 IRRIGATION DETAILS - 2
AD-GL-202 PLANTING DETAILS

LANDSCAPING - AREA A

A-L-200 EAST YSABEL PUMP STATION - IRRIGATION PLAN
A-L-201 EAST PASO PUMP STATION AND HARVEST WELL - IRRIGATION PLAN
A-L-202 WEST PASO PUMP STATION - IRRIGATION PLAN
A-L-203 EAST YSABEL PUMP STATION - PLANTING PLAN
A-L-204 EAST PASO PUMP STATION AND HARVEST WELL - PLANTING PLAN
A-L-205 WEST PASO PUMP STATION - PLANTING PLAN

STRUCTURAL

GENERAL STRUCTURAL

AD-GS-200 GENERAL NOTES
AD-GS-201 STANDARD STRUCTURAL DETAILS - 1
AD-GS-202 STANDARD STRUCTURAL DETAILS - 2
AD-GS-203 STANDARD STRUCTURAL DETAILS - 3
AD-GS-204 STANDARD STRUCTURAL DETAILS - 4

STRUCTURAL - AREAS A AND D

AD-S-200 SUBMERSIBLE PUMP STATION AND VALVE VAULTS - FOUNDATION AND TOP PLAN
AD-S-201 SUBMERSIBLE PUMP STATION AND VALVE VAULTS - SECTION AND DETAILS
AD-S-202 STANDBY POWER BUILDING - FOUNDATION AND ROOF PLAN
AD-S-203 STANDBY POWER BUILDING - SECTIONS AND DETAILS
AD-S-204 POCKET PUMP STATION - FOUNDATION AND TOP PLAN
AD-S-205 POCKET PUMP STATION - SECTION AND DETAILS
AD-S-206 HARVEST WELL BUILDING - FOUNDATION AND ROOF PLAN
AD-S-207 HARVEST WELL BUILDING - SECTION AND DETAILS

ARCHITECTURAL

GENERAL ARCHITECTURAL

AD-GA-200 STANDARD ARCHITECTURAL DETAILS

ARCHITECTURAL - AREA A

A-A-200 STANDBY POWER BUILDINGS ELEVATIONS
A-A-201 STANDBY POWER BUILDINGS SECTIONS
A-A-202 HARVEST WELLS ELEVATIONS AND SECTIONS

ARCHITECTURAL - AREA D

D-A-200 STANDBY POWER BUILDINGS ELEVATIONS
D-A-201 STANDBY POWER BUILDINGS SECTIONS
D-A-202 HARVEST WELLS ELEVATIONS AND SECTIONS

MECHANICAL

GENERAL MECHANICAL

AD-GM-200 STANDARD MECHANICAL DETAILS - 1
AD-GM-201 STANDARD MECHANICAL DETAILS - 2

MECHANICAL - AREAS A AND D

AD-M-200 POCKET PUMP STATIONS
AD-M-201 SUBMERSIBLE PUMP STATIONS - DUPLEX LAYOUT
AD-M-202 SUBMERSIBLE PUMP STATIONS - TRIPLEX LAYOUT
AD-M-203 STANDBY POWER BUILDING - DIESEL PLAN AND SECTIONS
AD-M-204 STANDBY POWER BUILDING - NATURAL GAS PLAN AND SECTIONS
AD-M-205 HARVEST WELL BUILDING AND SECTIONS

REGISTERED PROFESSIONAL ENGINEER ARTHUR BERGEN NO. C31069 Exp. 3-31-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L. WONG
DRAWN E. WISNIEWSKI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
GENERAL
LIST OF DRAWINGS – 1

SHEET AD-G-003

Job No: 1481166 File: n:\Projects\los_osos\Collect_Sys\AD\gen\AD-G-003.dgn Plot Date: 09-FEB-2004 17:44 $$time$$

LIST OF DRAWINGS (CONTINUED)

ELECTRICAL

GENERAL ELECTRICAL

AD-GE-000 STANDARD ELECTRICAL SYMBOLS – 1
AD-GE-001 STANDARD ELECTRICAL SYMBOLS – 2 & LIGHTING FIXTURE SCHEDULE
AD-GE-002 STANDARD ELECTRICAL ABBREVIATIONS AND GENERAL NOTES
AD-GE-003 STANDARD ELECTRICAL DETAILS – 1
AD-GE-004 STANDARD ELECTRICAL DETAILS – 2
AD-GE-005 STANDARD ELECTRICAL DETAILS AND PANEL SCHEDULES

ELECTRICAL – AREAS A AND D

AD-E-200 POCKET PUMP STATIONS – TYPICAL SINGLE LINE DIAGRAM
AD-E-201 POCKET PUMP STATIONS – TYPICAL CONTROL DIAGRAM
AD-E-202 STANDBY POWER BUILDING – TYPICAL ELECTRICAL POWER, LIGHTING AND GROUNDING PLAN
AD-E-203 PS AND STANDBY POWER – TYPICAL CONTROL DIAGRAM – 1
AD-E-204 PS AND STANDBY POWER – TYPICAL CONTROL DIAGRAM – 2

ELECTRICAL – AREA A

A-E-200 GENERAL AREA PLAN – AREA A
A-E-201 POCKET PUMP STATIONS 04A, 07A, 08A, 09A ELECTRICAL SITE PLAN
A-E-202 POCKET PUMP STATIONS 10A, 11A, 12A, 13A ELECTRICAL SITE PLAN
A-E-203 BAYWOOD SUBMERSIBLE PUMP STATION SITE– ELECTRICAL POWER, LIGHTING AND GROUNDING PLAN
A-E-204 WEST PASO SUBMERSIBLE PUMP STATION SITE – ELECTRICAL POWER, LIGHTING AND GROUNDING PLAN
A-E-205 WEST PASO / BAYWOOD STANDBY POWER FACILITY – ELECTRICAL POWER, LIGHTING AND GROUNDING PLAN
A-E-206 WEST PASO / BAYWOOD PS AND STANDBY POWER – SINGLE LINE
A-E-207 EAST PASO SUBMERSIBLE PUMP STATION SITE– ELECTRICAL POWER, LIGHTING AND GROUNDING PLAN
A-E-208 EAST PASO PS AND STANDBY POWER – SINGLE LINE
A-E-209 EAST YSABEL SUBMERSIBLE PUMP STATION SITE – ELECTRICAL POWER, LIGHTING AND GROUNDING PLAN
A-E-210 EAST YSABEL PS AND STANDBY POWER – SINGLE LINE
A-E-211 EAST PASO HARVEST WELL BUILDING – ELECTRICAL POWER, LIGHTING AND GROUNDING PLAN
A-E-212 HARVEST WELL BUILDING – CONTROL DIAGRAM
A-E-300 SANTA MARIA EFFLUENT DISPOSAL VAULT – ELECTRICAL SITE PLAN
A-E-301 PISMO EFFLUENT DISPOSAL VAULT – ELECTRICAL SITE PLAN
A-E-302 EFFLUENT DISPOSAL VAULT – TYPICAL SINGLE LINE

ELECTRICAL – AREA D

D-E-200 GENERAL AREA PLAN – AREA D
D-E-201 POCKET PUMP STATIONS 09B, 09C, 13B, 15B ELECTRICAL SITE PLAN
D-E-202 MOUNTAIN VIEW SUMERSIBLE PUMP STATION SITE – ELECTRICAL POWER, LIGHTING, AND GROUNDING PLAN
D-E-203 MOUNTAIN VIEW PS AND STANDBY POWER – SINGLE LINE

INSTRUMENT AND CONTROL

GENERAL INSTRUMENTATION

AD-GI-200 INSTRUMENTATION SYMBOLS AND ABBREVIATIONS – 1
AD-GI-201 INSTRUMENTATION SYMBOLS AND ABBREVIATIONS – 2
AD-GI-202 SCADA SYSTEM ARCHITECTURE
AD-GI-203 FIBER OPTIC CONDUIT PLAN

INSTRUMENTATION – AREA A

A-I-200 EAST PASO HARVEST WELL P & ID
A-I-201 AREA A PUMP STATIONS – TYPICAL
A-I-202 THREE POCKET PUMP STATIONS – TYPICAL
A-I-203 AREA A INSTRUMENT SCHEDULES
A-I-204 PISMO AND SANTA MARIA EFFLUENT DISPOSAL SITES P & ID

INSTRUMENTATION – AREA D

D-I-200 AREA D PUMP STATIONS – TYPICAL
D-I-201 AREA D INSTRUMENT SCHEDULE

SURVEY DATA

HORIZONTAL POSITIONS AND ELLIPSOID HEIGHTS ARE BASED ON NORTH AMERICAN DATUM OF 1983, 1991.35 EPOCH ADJUSTMENT OF THE HIGH PRECISION GEODETIC NETWORK AS REFERENCED BY #1315 IN THIS SURVEY, NGS DESIGNATION "A 1315" AND #14, NGS DESIGNATION "942110 TIDAL 14 RESET." THE NAD83 DATUM SUPERSEDED THE NAD27 DATUM

ORTHOMETRIC HEIGHTS (ELEVATIONS) ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAND88) PER #1315 AND #14 AS REFERENCED ABOVE. IN ADDITION AS FIRST ORDER CLASS 1 BENCHMARK NGS DESIGNATION "B 1314" (PT #1314) WAS USED FOR QUALITY CONTROL. THE ORTHOMETRIC HEIGHTS WITHIN THE PROJECT SITE WAS USED FOR QUALITY CONTROL. THE OROTHOMETRIC HEIGHTS WITHIN THE PROJECT SITE ARE APPROXIMATELY ONLY, DUE TO THE DISTANCE BETWEEN THE SITE AND THE BENCHMARKS. THE PURPOSE OF THE MODELING WITHIN THE SITE WAS TO DETERMINE A GOOD ORTHOMETRIC MODEL WITHIN THE SITE AREA ITSELF. NO ATTEMPT WAS MADE TO MAKE THIS MODEL TO EXACTLY MATCH NAVD88.

POTHOLE DATA

AREA	POTHOLE ID	DRAWING	EXISITING GRADE	DEPTH TO TOP	EXISTING AC THICKNESS	LOCATION	DESCRIPTION	NORTHING	EASTING
A	1	A-PP-148	90.4	56"	4"	16TH ST/SANTA YSABEL	10" W	2,318,189.66	5,718,991.79
~~A~~	~~2~~			~~–~~	~~3"~~	~~12TH ST/SANTA YSABEL~~	~~FO – NOT FOUND~~	~~X~~	~~X~~
A	2A	A-PP-145	93.59	152"	4"	12TH ST/SANTA YSABEL	MULTIPLE FO COND	2,318,278.60	5,713,515.63
A	3	A-PP-185	9	8"	8" CONCRETE	PASADENA AVE	CONCRETE SD	2,315,408.49	5,717,266.93
A	13	A-PP-135	101.88	T=52" : B=72"	DIRT ROAD	1620 11TH STREET	FO – DUCT BANK	2,316,941.44	5,717,265.41
A	16	A-PP-103	48.48	T=87" : B=110"	7"	EL MORO/11TH ST	MULTIPLE FO COND	2,318,255.67	5,717,995.15
A	17	A-PP-154	99.12	103"	6"	13TH ST/SANTA YSABEL	MULTIPLE 2" FO COND	2,318,244.24	5,718,331.32
A	18	A-PP-152	92.63	T=80" : B=104"	6"	14TH ST/SANTA YSABEL	MULTIPLE 2" FO COND	2,318,211.13	5,719,315.04
A	19	A-PP-146	84.06	110"	7"	17TH ST/SANTA YSABEL	MULTIPLE FO COND	2,318,265.72	5,717,669.82
D	10	D-PP-135	125.13	T=50" : B=66"	DIRT ROAD	10TH ST/LOS OLIVOS	12 – 4" FO COND	2,312,275.89	5,716,827.99
D	11	D-PP-113	122 +/–	T=107"	4"	LOS OLIVOS/FAIRCHILD	MULTIPLE FO COND	–	–
D	12	D-PP-183	122.66	–	5"	LOS OLIVOS/MOUNTAIN VIEW	FO – NOT FOUND	2,311,939.31	5,719,098.82
D	20	D-PP-134	–	–	8"	10TH ST/SANTA YNEZ	FO – NOT FOUND	–	–
D	20A	D-PP-135	126.55	T=99" : B=116"	8"	10TH ST/LOS OLIVOS	MULTIPLE FO COND	2,312,266.75	5,716,816.45
D	32	D-PP-134	104.99	T=56" : B=72"	10"	10TH ST/SANTA YNEZ	9 – 4" FO COND	2,312,888.22	5,716,847.88

AGENCY CONTACT INFORMATION

WATER

LOCSD
GEORGE MILANES
UTILITIES MANAGER
2122 9TH ST. P.O. BOX 6064
LOS OSOS, CA 93412
(805) 528-9370

CALIFORNIA CITIES WATER CO.
TERRY MAUGHMER
1140 LOS OLIVOS AVE.
LOS OSOS, CA 93402
(805) 528-7341

S&T MUTUAL WATER CO.
DAVE TOLLEY
P.O. BOX 6391
LOS OSOS, CA 93412
(805) 528-0643

STORM DRAINS

COUNTY OF SAN LUIS OBISPO
ROSEMARIE GAGLIONE
DEPARTMENT OF PUBLIC WORKS
COUNTY GOVERNMENT CENTER
ROOM 207
SAN LUIS OBISPO, CA 93408
(805) 788-2318

GAS

SOUTHERN CALIFORNIA GAS CO.
LARRY PEDERSEN
P.O. BOX 818
GOLETA, CA 93116
(805) 681-8029

ELECTRIC

PG&E
CLAIRE MASTIN
4325 S. HIGUERA
SAN LUIS OBISPO, CA 93401
(805) 546-3888

FIRE DEPARTMENT

SOUTH BAY FIRE DEPARTMENT
CHIEF BRUCE PICKENS
2315 BAYVIEW HEIGHTS DR.
LOS OSOS, CA 93402
(805) 528-1053

PHONES/FIBER OPTIC & CABLE TV

SBC
JIM PIERCE/NIEL ZAKARIA
102 CROSS ST.
SAN LUIS OBISPO, CA 93401
(805) 546-7012

AT&T
KEN WEAVER/TERRY MAR
9401 LOS OSOS VALLEY RD.
SAN LUIS OBISPO, CA 93405
(805) 546-2230

QWEST
MIKE GARRISON
9643 SANTA FE SPRINGS ROAD
SANTA FE SPRINGS, CA 90670
562-777-2225

SPRINT
TIBOR LACKEY
1350 W. LAMBERT RD. STE. B
BREA, CA 92821
(714) 781-7051

MCI (USE TO BE WORLDCOM)
DON BECKERMANN
115 W. PALMETTO DR.
PASADENA, CA 91105-2511
(626) 666-3526
FAX (626) 666-3540

CHARTER COMMUNICATIONS
RICK CORDSEN
7555 SAN LUIS AVE.
ATASCADERO, CA 93422
(805) 466-4423

UMAN / FIBER OPTIC

SAN LUIS COASTAL UNIFIED SCHOOL DISTRICT

REGISTERED PROFESSIONAL ENGINEER
JOHN ARTHUR BERGEN
NO. C31069
Exp. 3-31-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN BCT
CHECKED JAB

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

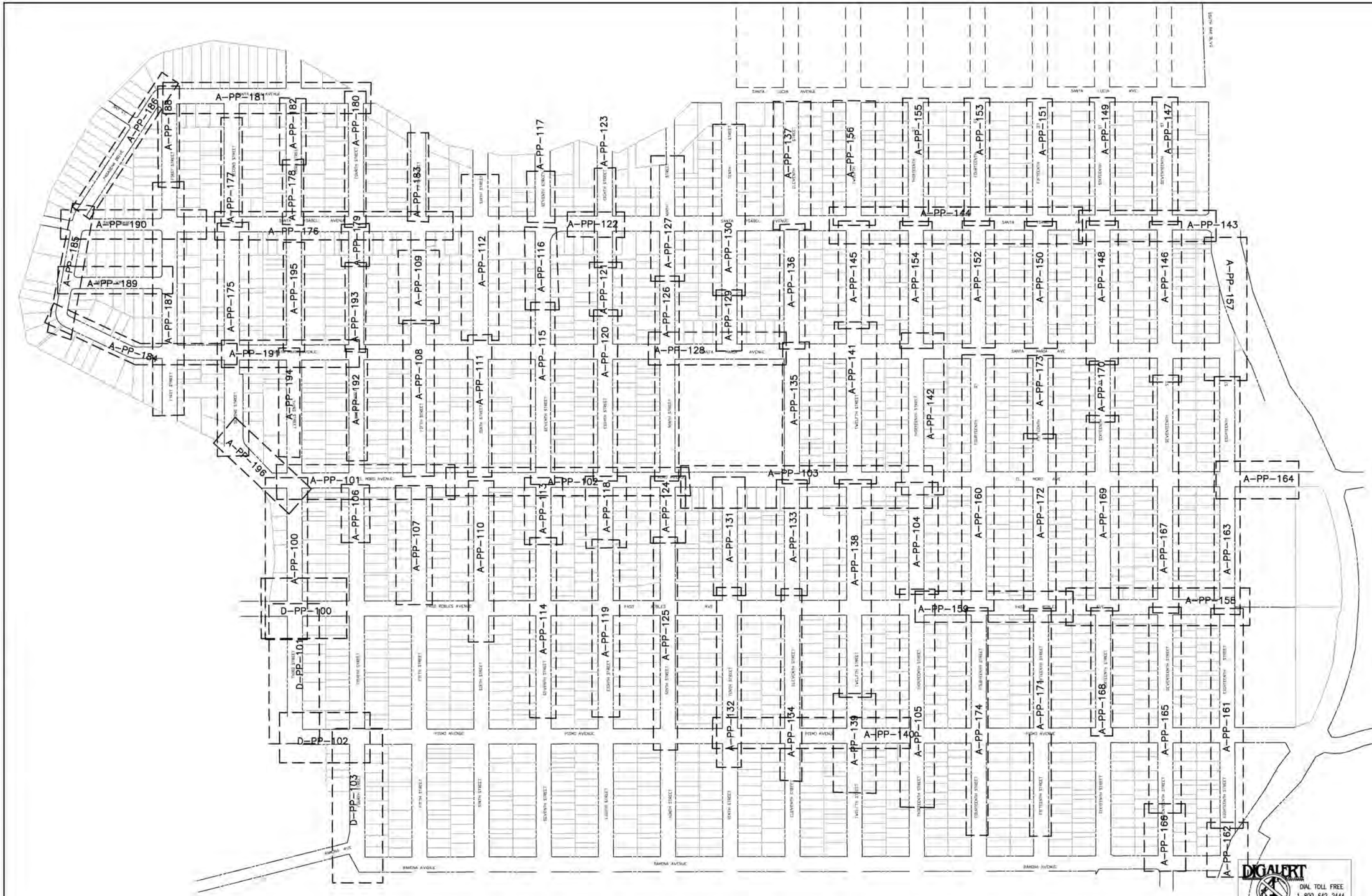
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
GENERAL
LIST OF DRAWINGS –2,
SURVEY DATA, POTHOLE DATA,
AGENCY CONTACT INFORMATION

SHEET AD-G-004

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\AD\gen\AD-G-004.dgn Plot Date: 09-FEB-2004 13:59



DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 250'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT

AREA A KEY PLAN AND INDEX

SHEET AD-G-005

\\Extra-w\Off-site\Projects on \\nicolai\\los_osos\Collect_Sys\A\in\A-G-107.dwg, Layout1, Feb 05, 2004 7:16pm, KRTurner

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REV	DATE	BY	DESCRIPTION

SCALE 1"=300'

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

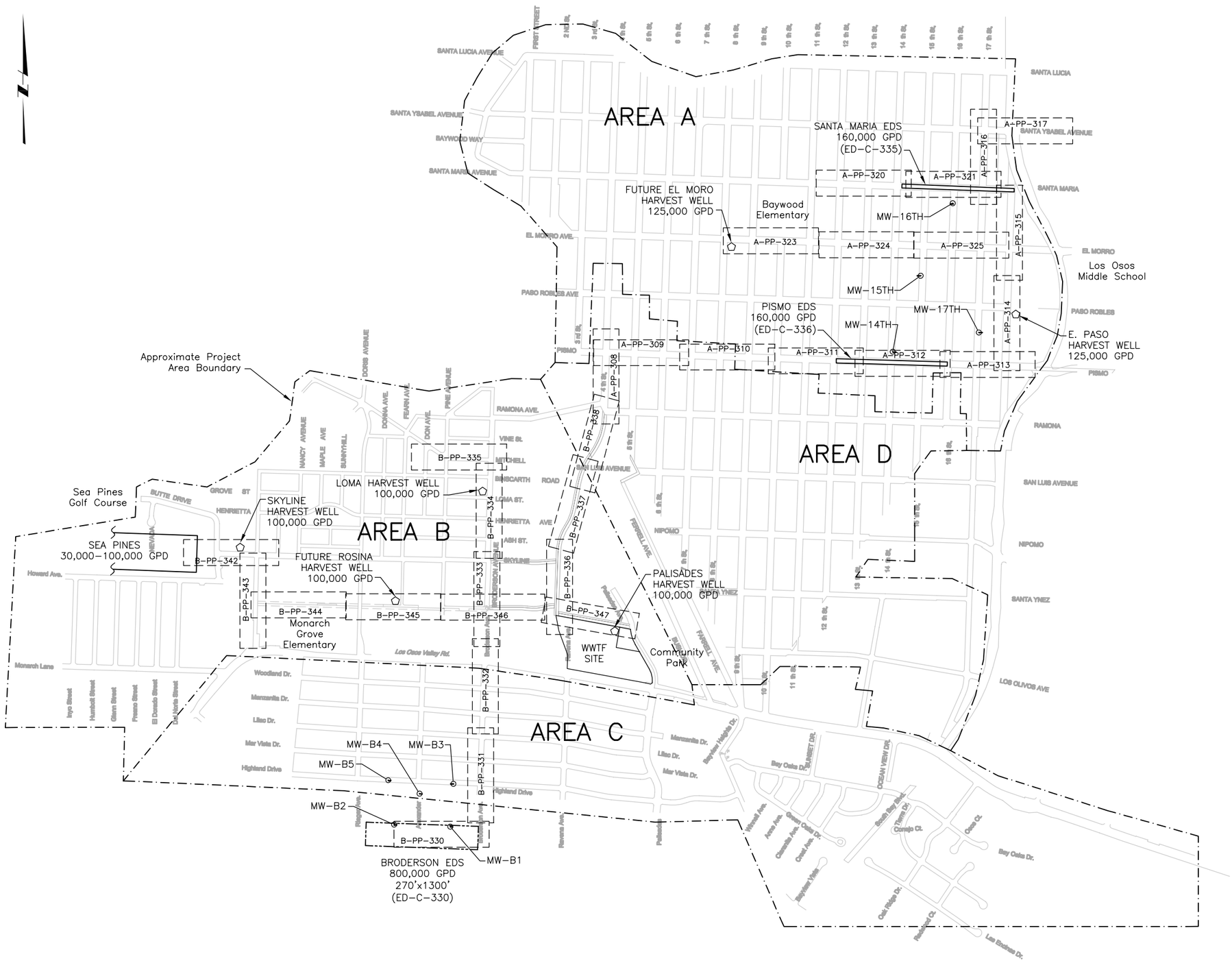
SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
GENERAL CIVIL
AREA D – KEY PLAN

SHEET AD-G-006



MONITORING WELL LOCATIONS FOR EDS		
MONITORING WELL NAMES	NORTHIING	EASTING
MW-B1	2310180.53	5713135.97
MW-B2	2310204.46	5712486.41
MW-B3	2310674.50	5713171.68
MW-B4	2310561.20	5712780.87
MW-B5	2310717.59	5712417.75
MW-14TH	2315673.58	5718252.17
MW-15TH	2316551.11	5718575.41
MW-16TH	2317390.89	5718946.10
MW-17TH	2315895.95	5719247.72

NOTE:
INSTALL MONITORING WELLS PER DETAILS ED-96 AND ED-97 ON DRAWING ED-C-339 AND SPECIFICATIONS.

REGISTERED PROFESSIONAL ENGINEER
FAN KAT
No. C-60027
Exp. 6-30-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=600'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
EFFLUENT DISPOSAL SYSTEM
OVERALL KEY PLAN

SHEET AD-G-007

XREF: los_ed_bdr c-ed-drn c-ed-bs x-feat-aerl x-feat-row x-feat-topo ppkeyplan x-sup-topo Morro and Corr Easement
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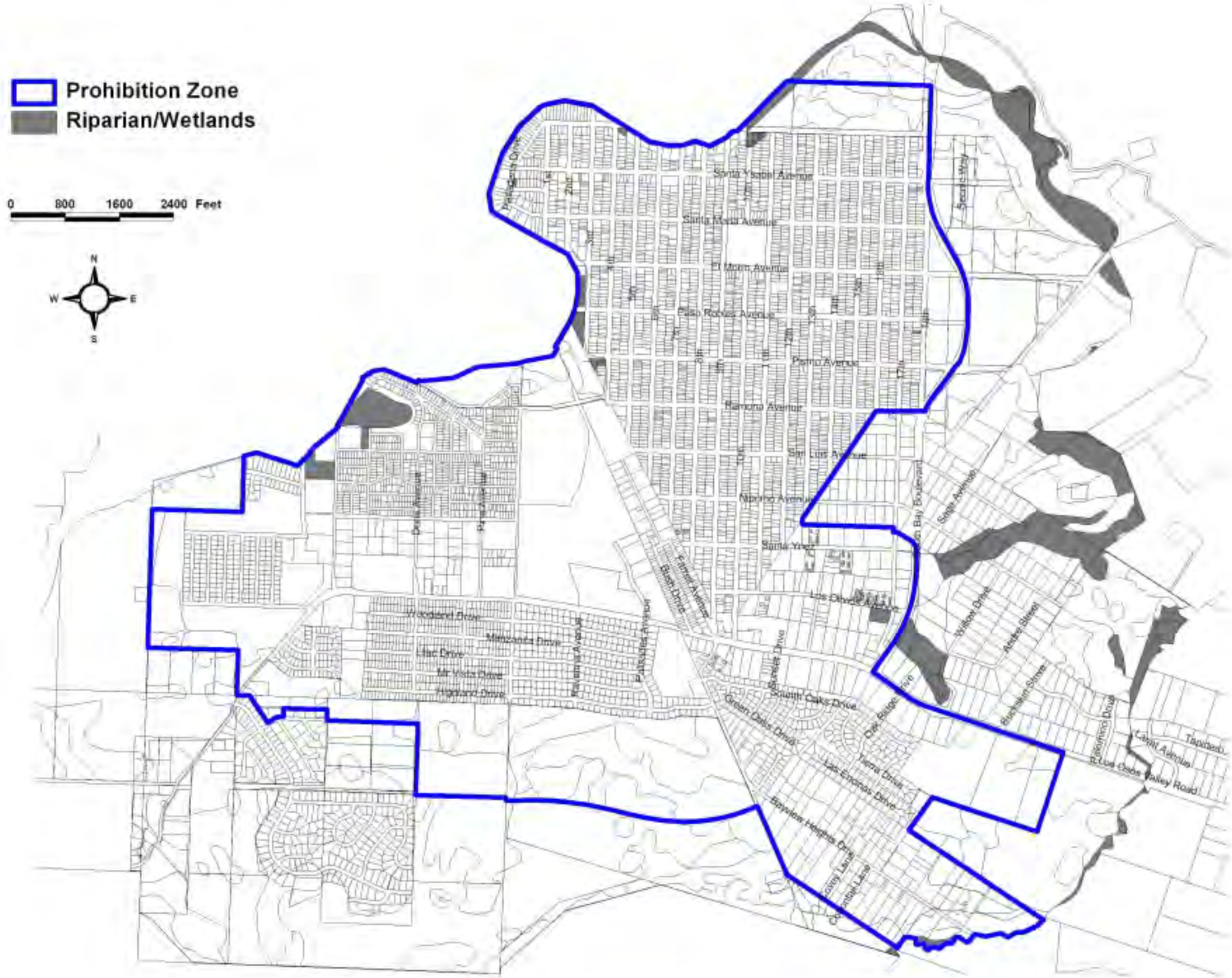

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED CMCA
DRAWN CMCA
CHECKED CMCA

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

Crawford Multari & Clark Associates

LOS OSOS WASTEWATER PROJECT

RIPARIAN AND WETLANDS LOCATIONS

SHEET AD-G-008

REGISTERED PROFESSIONAL ENGINEER ARTHUR BERGEN NO. C31069 Exp. 3-31-04 CIVIL STATE OF CALIFORNIA

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\AD\gen\AD-G-008.dgn Plot Date: 09-FEB-2004 14:00

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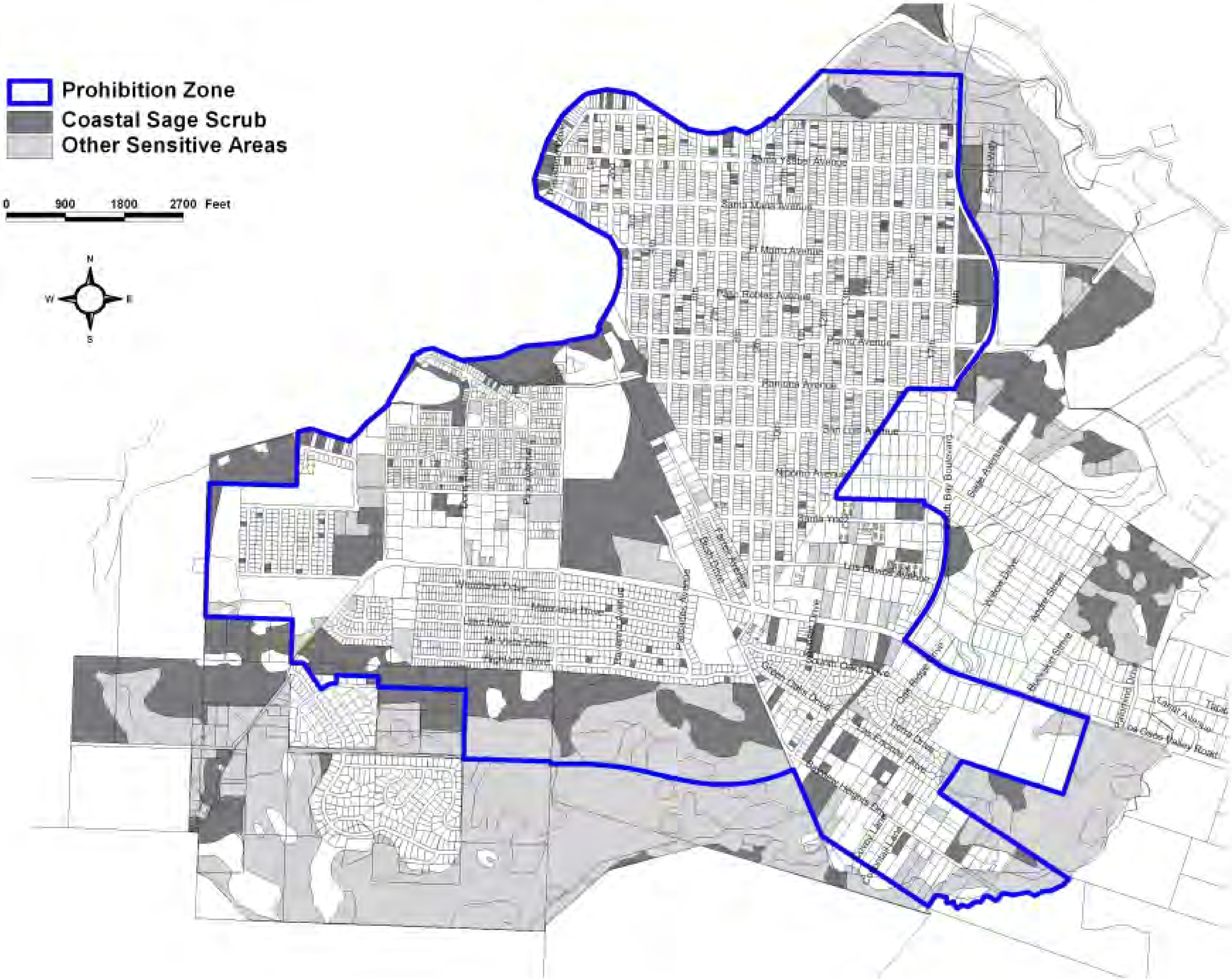

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED CMCA
DRAWN CMCA
CHECKED CMCA

SUBMITTED BY

JOHN A. BERGEN	C31069 LICENSE NO.	2/16/2004 DATE
STEVE J. HYLAND	C23892 LICENSE NO.	2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 — AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

Crawford Multari & Clark Associates

LOS OSOS WASTEWATER PROJECT

COASTAL SAGE SCRUB AND OTHER SENSITIVE AREAS

SHEET AD-G-009

REGISTERED PROFESSIONAL ENGINEER JOHN ARTHUR BERGEN NO. C31069 Exp. 3-31-04 CIVIL STATE OF CALIFORNIA

GENERAL NOTES

1. APPROVED PLANS – NO CONSTRUCTION SHALL BE STARTED WITHOUT PLANS APPROVED BY THE LOS OSOS COMMUNITY SERVICES DISTRICT (LOCSD). THE LOCSD INSPECTOR SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO STARTING OF CONSTRUCTION. ANY CONSTRUCTION DONE WITHOUT APPROVED PLANS AND PRIOR TO NOTIFICATION TO THE LOCSD INSPECTOR WILL BE REJECTED AND WILL BE AT THE CONTRACTOR'S AND/OR OWNER'S RISK.

   THE CONTRACTOR SHALL HAVE COPIES OF THE APPROVED PLANS FOR THIS PROJECT ON THE SITE AT ALL TIMES AND SHALL BE FAMILIAR WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS.

2. STANDARD SPECIFICATIONS – ALL CONSTRUCTION WORK AND INSTALLATIONS SHALL CONFORM TO THE LOCSD STANDARD PLANS AND SPECIFICATIONS, AND ALL WORK SHALL BE SUBJECT TO THE APPROVAL OF THE LOCSD ENGINEER.

3. INSPECTION AGREEMENT – AN EXECUTED INSPECTION AGREEMENT IS REQUIRED PRIOR TO THE START OF CONSTRUCTION.

4. INSPECTION – THE LOCSD INSPECTOR, ACTING ON BEHALF OF THE LOCSD ENGINEER, MAY REQUIRE REVISIONS TO THE APPROVED PLANS AND SPECIFICATIONS TO SOLVE UNFORESEEN PROBLEMS THAT MAY ARISE IN THE FIELD.

5. ENCROACHMENT PERMITS – NO WORK WITHIN A COUNTY OR CALTRANS RIGHT–OF–WAY SHALL BE PERFORMED WITHOUT AN ENCROACHMENT PERMIT.

6. UTILITY NOTIFICATION – PRIOR TO BEGINNING ANY EARTHWORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL AGENCIES INVOLVED AND SHALL LOCATE ALL FACILITIES PRIOR TO EXCAVATION IN ANY AREA. THE CONTRACTOR SHALL CALL DIG ALERT (USA), TOLL FREE AT 1–800–642–2444 AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

7. EXISTING UTILITIES – THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES WHERE SHOWN ON THEPLANS ARE BASED ON AVAILABLE RECORDS, AND ARE APPROXIMATE ONLY. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR LOCATING OR HAVING LOCATED ALL UNDERGROUND UTILITIES AND OTHER FACILITIES AND FOR PROTECTING THE SAME DURING THE COURSE OF CONSTRUCTING THE PROJECT. ANY DEVIATIONS FROM THE PLAN LOCATION OF ANY EXISTING FACILITIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE LOCSD INSPECTOR.

8. SAFETY – NEITHER THE LOS OSOS COMMUNITY SERVICES DISTRICT, THE ENGINEER OF RECORD, THE CONSTRUCTION MANAGER, OR OTHER DISTRICT ACENTS WILL BE RESPONSIBLE FOR COMPLIANCE WITH SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL, SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS.

9. INDEMNIFICATION – THE CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE CONDITION OF THE JOB SITE DURING THE COURSE OF THE PROJECT, INCLUDING THE SAFETY OF PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE DISTRICT AND DISTRICT'S AGENTS, EMPLOYEES AND CONSULTANTS HARMLESS FROM ANY AND ALL CLAIMS, DEMANDS, DAMAGES, COSTS, EXPENSES (INCLUDING ATTORNEY'S FEES), JUDGEMENTS OR LIABILITIES ARISING OUT OF THE PERFORMANCE OR ATTEMPTED PERFORMANCE OF THE WORK ON THIS PROJECT; EXCEPT THOSE CLAIMS, DEMANDS, DAMAGES, COSTS, EXPENSES (INCLUDING ATTORNEY'S FEES), JUDGEMENTS OR LIABILITIES RESULTING FROM THE NEGLIGENCE OR WILLFUL MISCONDUCT OF THE DISTRICT.

10. PROTECTION OF PROPERTY – THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF PUBLIC AND PRIVATE PROPERTY ADJACENT TO HIS WORK, AND SHALL EXERCISE DUE CAUTION TO AVOID DAMAGE TO SUCH PROPERTY. THE CONTRACTOR SHALL REPLACE OR REPAIR TO THEIR ORIGINAL CONDITION, ALL IMPROVEMENTS WITHIN OR ADJACENT TO THE WORK AREA WHICH ARE NOT DESIGNATED FOR REMOVAL, AND WHICH ARE DAMAGED OR REMOVED AS A RESULT OF HIS OPERATIONS.

11. SITE CONDITIONS – THE CONTRACTOR SHALL CONTINUALLY REVIEW JOB SITE CONDITIONS. CONDITIONS REQUIRING CONSTRUCTION DIFFERENT FROM THAT SHOWN ON THE PLANS SHALL BE REPORTED TO THE LOCSD INSPECTOR PRIOR TO PROCEEDING WITH THE AFFECTED CONSTRUCTION.

12. CONTRACTORS RECORD OF CHANGES – THE CONTRACTOR SHALL MAINTAIN A CURRENT, COMPLETE, AND ACCURATE RECORD OF ALL CHANGES WHICH DEVIATE FROM THE CONSTRUCTION AS SHOWN ON THESE PLANS AND SPECIFICATIONS FOR THE PURPOSE OF PROVIDING THE ENGINEER OF RECORD WITH A BASIS FOR THE PREPARATION OF RECORD DRAWINGS.

13. RECORD DRAWINGS – THE CONTRACTOR SHALL MAINTAIN A SET OF MARKED UP AS–BID DRAWINGS SHOWING ACTUAL INSTALLED AND FIELD CONDITIONS.

14. PLAN CORRECTIONS – NOT USED.

15. MANHOLE ENTRY SHALL BE IN COMPLIANCE WITH THE CONFINED SPACE ENTRY REQUIREMENTS OF CAL–OSHA, THE COUNTY OF SAN LUIS OBISPO AND THE LOS OSOS COMMUNITY SERVICES DISTRICT.

16. EXISTING UTILITIES IN THE PROJECT AREA INCLUDING ACP WATER MAINS MAY BE IN A FRAGILE CONDITION. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING NEAR TO EXISTING UTILITIES.

17. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL LOCATE ALL TRAFFIC SIGNAL LOOPS, CABLES, AND CONDUITS IN THE VICINITY OF THE WORK. TRAFFIC SIGNALS SHALL BE MAINTAINED IN OPERATION DURING CONSTRUCTION AT ALL TIMES. CONTRACTOR SHALL PROTECT EXISTING TRAFFIC SIGNAL LOOPS AND FACILITIES. DAMAGED FACILITIES SHALL BE RESTORED TO THEIR EXISTING CONDITION. TRAFFIC SIGNAL FACILITIES RECORD DRAWINGS ARE AVAILABLE FROM THE COUNTY. SENSOR LOOPS, CABLES AND CONDUITS THAT ARE DAMAGED BY THE WORK SHALL BE REPLACED AT NO COST TO THE OWNER. REPLACEMENT OF DAMAGED ITEMS SHALL BE TO THE SATISFACTION OF THE GOVERNING AGENCY.

18. PLAN ELEVATIONS OR DEPTHS FOR EXISTING UNDERGROUND UTILITIES ARE BASED ON RECORD DRAWINGS AND SURVEY INFORMATION AND ARE APPROXIMATE ONLY. WHERE NO ELEVATIONS ARE SHOWN, NO SUCH INFORMATION WAS AVAILABLE DURING DESIGN AND CONTRACTOR SHALL EXPOSE THESE UTILITIES FOR FIELD VERIFICATION PRIOR TO CONSTRUCTION.

19. UTILITY SERVICES AND THEIR LOCATION ARE NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO LOCATE AND PROTECT SERVICES DURING CONSTRUCTION. NO INTERRUPTION OF UTILITY SERVICES SHALL BE ALLOWED.

20. DIMENSIONS FOR ALL OTHER EXISTING STRUCTURES, REFERENCING PIPING, PAVING, AND OTHER NON–STRUCTURAL, ITEMS ARE APPROXIMATE. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS AND REPORT ALL MAJOR DISCREPANCIES TO THE ENGINEER 5 DAYS IN ADVANCE OF CONSTRUCTION IN THE AREA.

21. THE CONTRACTOR SHALL PROTECT ALL EXISTING IMPROVEMENTS NOT DESIGNATED FOR DEMOLITION OR REMOVAL AND REPLACEMENT. ALL DAMAGED EXISTING IMPROVEMENTS AND THOSE IMPROVEMENTS THAT HAVE BEEN REMOVED OR TEMPORARILY RELOCATED SHALL BE RESTORED BY THE CONTRACTOR TO A CONDITION EQUAL TO OR BETTER THAN ITS CONDITION PRIOR TO CONSTRUCTION. IMPROVEMENTS DESIGNATED FOR DEMOLITION SHALL BE DEMOLISHED AND DISPOSED OF BY THE CONTRACTOR. DURING THE CONSTRUCTION PERIOD, ANY DAMAGE TO THE ADJACENT IMPROVEMENTS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE DISTRICT.

22. FOR ALL STANDARD MANHOLES THE COORDINATE LOCATIONS REPRESENT THE CENTERLINE OF THE MANHOLE BASE UNLESS INDICATED OTHERWISE ON THESE DRAWINGS. MANHOLES LOCATED AT THE INTERSECTIONS MAY BE ADJUSTED SUBJECT TO FIELD VERIFICATION BY THE CONTRACTOR. LOCATIONS OF MANHOLES THAT ARE NOT AT PIPELINE INTERSECTIONS MAY BE ADJUSTED SUBJECT TO APPROVAL BY THE ENGINEER.

23. CONTRACTOR SHALL OBTAIN A PERMIT FROM THE DISTRICT OR APPROPRIATE WATER COMPANY FOR THE USE OF CONSTRUCTION WATER. THE PERMIT SHALL BE APPROVED BY THE DISTRICT'S FIRE DEPARTMENT.

24. THE CONTRACTOR SHALL ARRANGE A PRE–CONSTRUCTION CONFERENCE. NOTIFY THE DISTRICT AT LEAST 5 WORKING DAYS PRIOR TO START OF WORK.

25. DISCREPANCIES BETWEEN COORDINATES, BEARINGS AND LENGTHS, AND STATIONING SHALL BE RESOLVED IN THE FOLLOWING ORDER OF PRECEDENCE:
    1. COORDINATES
    2. BEARINGS AND LENGTHS
    3. STATIONING – STATIONING IS BASED ON CONSTRUCTION BASELINE.

26. IN ALL LOCATIONS WHERE TRENCH PLATE IS USED ON THIS PROJECT THE CONTRACTOR SHALL SUPPLY SKID RESISTANT COATING ON THE TRENCH PLATE AND COLD MIX A.C. AT THE EDGES. TRENCH PLATES SHALL BE NOTCHED INTO AC PAVING, WEDGED, AND SHIMMED TO PREVENT SLIPPAGE AND ROCKING UNDER TRAFFIC.

27. MECHANICAL EQUIPMENT USED ON THIS PROJECT SHALL BE SELECTED TO MINIMIZE DAMAGE TO THE EXISTING PAVEMENT ALONG THE PROJECT SITE AND TO THE PROJECT. THE CONTRACTOR SHALL REPLACE DAMAGED A.C. PAVEMENT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AT NO ADDITIONAL COST TO THE DISTRICT.

28. NOT USED.

29. SANITARY SEWER INSTALLATION MAY REQUIRE CURB, GUTTER AND SIDEWALK, AND CONCRETE V–DITCH/VALLEY GUTTER REMOVAL AND REPLACEMENT. THE CONTRACTOR SHALL INCLUDE ALL COSTS IN ITS BID THEREFOR.

30. ALL PAVEMENT SHALL BE SAWCUT PRIOR TO EXCAVATION AND PRIOR TO PAVEMENT PATCHING. AREAS OF A.B. UNDERMINING SHALL BE SAW CUT 12 INCHES BEYOND UNDERMINING AND AC PAVED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL GOVERNING AGENCY OR THESE DRAWINGS, WHICHEVER ARE MORE STRINGENT.

31. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL SURPLUS EXCAVATION MATERIAL AND DEBRIS, PROMPTLY FROM THE SITE AND SHALL MAINTAIN THE SITE IN A NEAT AND ORDERLY CONDITION. CONTRACTOR SHALL OBTAIN ALL NECESSARY FILL AND GRADING PERMITS.

32. THE CONTRACTOR IS RESPONSIBLE FOR ARRANGING FOR REQUIRED INSPECTIONS. THE PRESENCE OR ABSENCE OF AN INSPECTOR WILL NOT RELIEVE THE CONTRACTOR OF FULL RESPONSIBILITY FOR THE PROPER PERFORMANCE OF WORK.

33. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH DISTRICT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.

34. THE CONTRACTOR SHALL MAINTAIN VEHICLE ACCESS TO ALL PROPERTIES ADJACENT TO THE WORK THROUGHOUT THE PERIOD OF CONSTRUCTION.

35. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, COUNTY, AND DISTRICT LAWS AND ORDINANCES RELATING TO THE SAFETY AND CHARACTER OF WORK, EQUIPMENT AND LABOR PERSONNEL. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO, THE SHORING OF TRENCHES, VENTILATORS OF CONFINED SPACES, CONFORMANCE TO TRAFFIC CONTROL REQUIREMENTS INCLUDING THE PROVISION AND MAINTENANCE OF BARRICADES AND THE PREPARATION AND IMPLEMENTATION OF TRAFFIC CONTROL PLANS AS REQUIRED.

36. PIPE LENGTHS ARE THROUGH MANHOLE AS INDICATED. STATIONING IS ALONG THE CONSTRUCTION BASELINE.

37. ALL OPEN CUT CONSTRUCTION FOR PIPING, ACCESS PITS, AND MANHOLES SHALL HAVE SHORING SYSTEMS IN COMPLIANCE WITH CAL OSHA, COUNTY OF SAN LUIS OBISPO AND DISTRICT REQUIREMENTS. THE APPROVED SHORING SYSTEM SHALL BE USED FOR CONSTRUCTION OF OPEN CUT INTERCEPTOR PIPING AND MICROTUNNELING PITS. CONTRACTOR SHALL REPAIR AND REPLACE WITH LIKE AND KIND ANY DAMAGE CAUSED BY INSTALLATION AND REMOVAL OF SHORING SYSTEMS TO PRECONSTRUCTION CONDITION.

38. CONTRACTOR SHALL SUBMIT A STORM WATER POLUTION PREVENTION PLAN (SWPPP) TO THE COUNTY AND SHALL COMPLY WITH ALL PROVISIONS OF ITS SWPPP. REFER TO THE SPECIFICATIONS.

39. THE CONTRACTOR SHALL ABIDE BY ALL PERMITS OBTAINED BY THE DISTRICT. SEE SPECIFICATIONS SECTION 01060.

40. THE CONTRACTOR SHALL OBTAIN CONSTRUCTION PERMITS FROM REGULATORY, UTILITY, AND ANY OTHER AGENCIES REQUIRING PERMITING FOR THIS CONSTRUCTION WORK. THE CONTRACTOR SHALL PROVIDE A WRITTEN SIGNED RELEASE FROM EACH AGENCY UPON COMPLETION OF CONSTRUCTION.

41. ALL DEWATERING WATER SHALL BE DISCHARGED IN ACCORDANCE WITH RWQCB, COUNTY OF SAN LUIS OBISPO AND DISTRICT PERMIT REQUIREMENTS INCLUDING DESILTING, AND ONLY TO APPROVED DISCHARGE LOCATIONS. DEWATERING WELLS SHALL BE ABANDONED ACCORDING TO RWQCB, COUNTY OF SAN LUIS OBISPO AND DISTRICT REQUIREMENTS.

42. CONTRACTOR SHALL PROTECT AND MAINTAIN EXISTING STORM DRAIN FACILITIES AT ALL TIMES.

43. CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY PAVEMENT AT ALL TIMES.

44. CONTRACTOR SHALL BACKFILL TRENCH TO GRADE AND/OR TRAFFIC PLATE AT THE END OF EACH DAY.

45. CONTRACTOR SHALL MAINTAIN SANITARY SEWER SERVICE AT ALL TIMES. PROVIDE BYPASS PUMPING FACILITIES INCLUDING STANDBY PUMPS AND GENERATORS. EXISTING SEPTIC TANK SYSTEMS SHALL BE MAINTAINED UNTIL THE NEW SANITARY SEWER SYSTEM IS READY FOR LATERAL CONNECTIONS TO BE MADE.

46. EROSION CONTROL METHODS SHALL BE IMPLEMENTED AT ALL DISTURBED UNPAVED AREAS THAT ARE NOT LANDSCAPED. LANDSCAPED AREAS SHALL BE RESTORED TO EXISTING CONDITION.

47. PROVIDE K–RAIL AND CHAINLINK FENCING AROUND ALL TUNNEL ACCESS PITS. K–RAIL AND FENCE SHALL CONFORM TO THE STANDARD PLANS AND SPECIFICATIONS. PROVIDE BARRICADES WITH FLASHING LIGHTS AT EACH PIT LOCATION.

48. CONTRACTOR SHALL IDENTIFY AND PROTECT EXISTING MONUMENTS THAT WILL BE IMPACTED BY CONSTRUCTION. IF DISTURBED OR DESTROYED, THE CONTRACTOR SHALL RESTABLISH MONUMENTS WITH RECORD OF SURVEY AT ITS COST.

49. AERIAL PHOTOS USED TO PREPARE SURFACE FEATURES SHOWN ON PLANS WERE TAKEN IN 1995 AND MAY NOT ACCURATELY DEPICT EXISTING CONDITIONS. CONTRACTOR SHALL FIELD VERIFY CONDITIONS PRIOR TO CONSTRUCTION AND INCLUDE COSTS IN IT'S BID THEREFOR.

50. ALL SEWERS SHALL STRICTLY CONFORM TO THE LINES AND GRADES SHOWN ON THE DRAWINGS.

51. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHILE WORKING AROUND GAS, FIBER OPTIC AND ELECTRIC UTILITIES.

52. CONTRACTOR SHALL MONITOR GROUND SURFACE AND UNDERGROUND UTILITIES FOR THE PRESENCE OF MICROTUNNEL SLURRY OR EVIDENCE OF HYDROFRACTURE AT ALL TIMES DURING MICROTUNNEL ACTIVITIES ALONG ENTIRE MICROTUNNELED ALIGNMENT.

53. LOW OVERHEAD ELECTRICAL AND TELEPHONE LINES ARE PRESENT IN THE PROJECT AREA. CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHILE WORKING AROUND OVERHEAD UTILITIES.

54. BORE AND RECEIVING PITS SIZING SHALL BE DETERMINED BY CONTRACTOR AND SHALL BE SOLID SHEETED WITH CONTINUOUSLY INTERLOCKED SHEET PILES.

55. CONTRACTOR SHALL MAINTAIN TRAFFIC AND ACCESS PER THE TRAFFIC CONTROL REQUIREMENTS OF THE CONTRACT DOCUMENTS AND THE COUNTY OF SAN LUIS OBISPO.

REGISTERED PROFESSIONAL ENGINEER
JOHN ARTHUR BERGEN
NO. C31069
Exp. 3-31-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L. WONG
DRAWN E. WISNIEWSKI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
GENERAL
GENERAL NOTES

SHEET AD–G–010

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\AD\gen\AD-G-010.dgn Plot Date: 09-FEB-2004 14:01

FLUID ABBREVIATION	FUNCTION THIS LIST INCLUDES SOME LINES NOT USED IN THIS PROJECT	PIPING MATERIALS (SEE SCH AT RIGHT) EXPOSED PIPING (SEE NOTE 14) 2" DIA AND SMALLER	EXPOSED PIPING 2½" DIA AND LARGER	BURIED PIPING (SEE NOTE 13) 2" DIA AND SMALLER	BURIED PIPING 2½" DIA AND LARGER	FIELD TEST REQUIREMENTS (SEE NOTE 3 AND NOTE 4) MINIMUM TEST PRESSURE PSI	TEST MEDIUM	LEAKAGE ALLOWANCE (SEE NOTE 2)
A	AERATION	1,16,18	5,11,16,18	1,16,18	5,11,16,18	25	AIR	(A)(D)
AW	FILTER AIR WASH	16	16	16	16	25	AIR	(A)(D)
BD	BOTTOM DRAIN	--	26	--	26	50	WATER	(A)
BP	BYPASS	--	8	--	8	25	WATER	(A)
BW	FILTER BACKWASH	--	8	--	8	75	WATER	(A)
C	CONDENSATE	29*	29*	29*	29*	125	WATER	(A)
CAW	CHANNEL AGITATION WATER	16	16	16	16	25	WATER	(A)
CD	CHEMICAL DRAIN AND VENT	13,17,23	13,17,23	13,17,23	13,17,23	NOTE 7	--	--
CL	CHLORINE (GAS OR LIQUID STATE)	10	--	10	--	300	DRY AIR	(A)(D)
CLS	CHLORINE SOLUTION	16	16	16	16	125	WATER	(A)
CLV	CHLORINE GAS UNDER VACUUM	16	16	16	16	15 IN Hg	VACUUM	(A)(E)
CN	CENTRATE	--	26	--	26	50	WATER	(A)
CI	CORROSION INHIBITOR	16	16	16	16	125	WATER	(A)
CSL	CIRCULATED SLUDGE	--	30	--	30	50	WATER	(A)
CV	CHLORINATOR VENT AND DETECTION LINE	16	16	16	16	NOTE 8	--	--
DCS	DEFOAMING CHEMICAL SOLUTION	16	16	16	16	125	WATER	(A)
DM	DISPOSAL MAIN	25	11,25	16	11,33	150	WATER	(A)
DN	DECANT	--	26	--	26	50	WATER	(A)
DSL	DIGESTED SLUDGE	--	30	--	30	50	WATER	(A)
DW	DEMINERALIZED WATER	16,18	16,18	16,18	16,18	125	WATER	(A)
EE	ENGINE EXHAUST	14*	14*	14	14	NOTE 8	--	--
EWR	ENGINE COOLING WATER RETURN	1*	1*	1	1	125	WATER	(A)
EWS	ENGINE COOLING WATER SUPPLY	1*	1*	1	1	125	WATER	(A)
F	FROTH	30	30	30	30	50	WATER	(A)
FA	FOUL AIR	--	18	--	18	10	AIR	(A)(D)
FE	FINAL EFFLUENT	--	8	--	8	50	WATER	(A)
FM	FORCE MAIN	25	11,25	16	11,33	125	WATER	(A)
FOR	FUEL OIL RETURN	9	9	9	9	125	AIR	(A)(D)
FOS	FUEL OIL SUPPLY	9	9	9	9	125	AIR	(A)(D)
FS	FROTH SPRAY	2	2	2	2	125	WATER	(A)
FSP	FIRE PROTECTION SPRINKLER SYSTEM	NOTE 10	NOTE 10	NOTE 10	NOTE 10	NOTE 9	WATER	--
G	GRIT	--	26	--	26	50	WATER	(A)
H	HYPOCHLORITE	16	16	16	16	125	WATER	(A)
HM	HARVEST MAIN	25	25	16	11,33	150	WATER	(A)
HR	HEATING WATER RETURN	1*	1*	1*	1*	125	WATER	(A)
HS	HEATING WATER SUPPLY	1*	1*	1*	1*	125	WATER	(A)
HWR	DOMESTIC HOT WATER RETURN	24*	2*	24*	2*	125	WATER	(A)
HWS	DOMESTIC HOT WATER SUPPLY	24*	2*	24*	2*	125	WATER	(A)
IA	INSTRUMENT AIR	24	2	24	2	125	AIR	(A)(D)
IE	INTERMEDIATE EFFLUENT	--	8	--	8,28	50	WATER	8(A) 28(B)
LA	LIQUID ALUM	16	16	16	16	125	WATER	(A)
LO	LUBE OIL	9	9	9	9	125	AIR	(A) (D)
LPG	LIQUEFIED PETROLEUM GAS	3	3	3	3	NOTE 7	AIR	--
LS	LIME SLURRY	NOTE 15	NOTE 15	NOTE 15	NOTE 15	NOTE 8	--	--
LSP	LANDSCAPING SPRINKLER SYSTEM	2,16	2,16	2,16	2,16	NOTE 7	--	--
MA	MURIATIC ACID	25	25	25	25	125	AIR	(A)(D)
ML	MIXED LIQUOR	2	2,8,26,28	2	2,8,26,28	50	WATER	2,8,26(A) 28(B)
NG	NATURAL GAS	9	9	9	9	NOTE 7	AIR	--
O	OZONE	15	15	15	15	50	AIR	(A)(D)
OF	OVERFLOW	--	8	--	8	25	WATER	(A)
PA	PLANT AIR	7	7	7	7	300	AIR	(A)(D)
PD	PLANT DRAIN	2	8,12	2	8,12,22,28	NOTE 6	WATER	2,8(A) 12,28(B) 22(C)
PEA	POLYMER - ANIONIC	16	16	16	16	125	WATER	(A)
PEC	POLYMER-CATIONIC	16	16	16	16	125	WATER	(A)
PEF	PRIMARY EFFLUENT	--	8,26	--	8,26	25	WATER	(A)
PEN	POLYMER-NONIONIC	16	16	16	16	125	WATER	(A)
PI	PLANT INFLUENT	--	21,26	--	21,26	NOTE 6	WATER	(B)
PO	PLANT OVERFLOW	2	8	2	8,28	NOTE 6	WATER	2,8(A) 28(B)
PW	POTABLE WATER	2,24	2	2,24	2,11	125	WATER	2,11,24(A) 19(B)
RAS	RETURN ACTIVATED SLUDGE	--	26	--	26	50	WATER	(A)
REW	RECLAIMED WATER	--	8	--	8	75	WATER	(A)
RSL	RAW SLUDGE	--	30	--	30	50	WATER	(A)
RW	RAW WATER	2	8	2	8,28	125	WATER	2,8(A) 28(B)
RWL	RAINWATER LEADER	4,12	4,12	12	12	NOTE 7	--	--
S	SCUM	--	30	--	30	50	WATER	(A)
SA	SAMPLE LINE (SEE LIST AT RIGHT)	16,18,24	--	16,18,24	--	125	WATER	(A)
SC	SPARE CHEMICAL	16	16	16	16	125	WATER	(A)
SD	SANITARY DRAIN AND VENT	4,12	12	27	27	NOTE 7	--	--
SDR	STORM DRAIN	--	8	--	22,28	NOTE 6	WATER	8(A) 28(B) 22(C)
SE	SECONDARY EFFLUENT	--	8,26	--	8,26	50	WATER	(A)
SF	SLUDGE FILTRATE	--	26	--	26	50	WATER	(A)
SG	SLUDGE GAS	31	31	31	31	15	AIR	(A)(D)
SI	SODIUM SILICATE	6,16	6,16	6,16	6,16	125	WATER	(A)
SN	SUPERNATANT	--	26	--	26	50	WATER	(A)
SO	SULFUR DIOXIDE (GAS OR LIQUID STATE)	10	--	10	--	300	DRY AIR	(A)(D)
SOA	SULFURIC ACID	25	25	--	--	125	AIR	(A)(D)
SOS	SULFUR DIOXIDE SOLUTION	16	16	16	16	125	WATER	(A)
SOV	SULFUR DIOXIDE GAS UNDER VACUUM	16	16	16	16	15 IN Hg	VACUUM	(A)(E)
SPD	SUMP PUMP DISCHARGE	2	26	2	26	50	WATER	(A)
SS	SANITARY SEWER	--	11	--	27	NOTE 7	WATER OR AIR	NOTE 7
ST	STEAM (LOW PRESSURE TO 10 PSI)	29*	29*	29*	29*	125	WATER	(A)
SU	STRUCTURE UNDERDRAIN	--	--	--	20	NO TEST REQ'D		
SUC	STRUCTURE UNDERDRAIN COLLECTOR	--	12	--	12,21	NOTE 6	WATER	(C)
SW	FILTER SURFACE WASHWATER	14,16,18	8,14,15,16,18	2,16,18	2,8,15,16,18	125	WATER	(A)
TPR	THICKENER PRESSURIZED RECYCLE	--	26	--	26	50	WATER	(A)
TS	THICKENER SUBNATANT	--	26	--	26	50	WATER	(A)
TSL	THICKENED SLUDGE	--	30	--	30	50	WATER	(A)
TSO	THICKENER SUBNATANT OVERFLOW	--	26	--	26	50	WATER	(A)
UW	UTILITY WATER (NON-POTABLE WATER)	2,24	2,11	2,24	2,11,19	125	WATER	2,11,24(A) 19(B)
V	VACUUM	24	2	24	2	15 IN Hg	VACUUM	(A)(E)
WAS	WASTE ACTIVATED SLUDGE	--	26	--	26	50	WATER	(A)
WLO	WASTE LUBE OIL	9	9	9	9	50	AIR	(A)(D)
WW	FILTER WASTE WASHWATER	--	8	--	8	NOTE 6	WATER	(A)

(* SEE NOTE 5)

PIPING MATERIAL SCH (SEE NOTE 4)

GROUP NO	PIPE (SEE NOTE 13)	FITTINGS	VALVES, 6" AND SMALLER (SEE NOTE 1, 11 & 16)
1	STEEL, ASTM A53, SCH 40, BLACK WELDED.	2½" AND SMALLER, MALLEABLE IRON, ANSI B16.3, THREADED, BANDED, BLACK, 150 PSI OR STEEL, ANSI B16.9, BUTT-WELDED. 3" AND LARGER, CAST IRON, ANSI B16.1, 125 PSI FLGD OR MECH CPLG.	BRONZE, THREADED, GATE, CRANE NO. 428 UB OR STOCKHAM B-105. GLOBE, CRANE NO. 14-1/2P OR STOCKHAM B-29, CHECK, CRANE NO. 37 OR STOCKHAM B-319. STEEL, LUBRICATED PLUG, ROCKWELL FIG. 142 OR 143 OR POWELL FIG 2200 OR 2201, ECCENTRIC PLUG, DEZURIK SERIES 118 KEYSTONE 1512. BALL, JENKINS NO. 900T OR JAMESBURY FIG. 351
2	STEEL, ASTM A53, SCH 40, BLACK WELDED, GALVANIZED	2½" AND SMALLER, MALLEABLE IRON, ANSI B16.3, THREADED, BANDED, GALVANIZED 150 PSI. 3" AND LARGER, CAST IRON, ANSI B16.1, 125 PSI FLGD OR MECH CPLG.	2½" AND SMALLER, ECCENTRIC PLUG, SYNTHETIC RUBBER FACED, DEZURIK 118S OR HOMESTEAD 1512. BALL, JENKINS NO. 900T OR JAMESBURY FIG. 351 3" AND LARGER, ECCENTRIC PLUG, SYNTHETIC RUBBER FACED, DEZURIK 118F OR KEYSTONE 1522 OR 1532 EWG. GATE, AWWA 500. BUTTERFLY, AWWA, FLGD.
3	STEEL, ASTM A106 OR A53, SCH 80, SEAMLESS, BLACK.	FORGED STEEL, ANSI B16.11, SOCKET WELDED OR THREADED. BLACK, 2000 PSI, OR STEEL, ANSI B16.9, BUTT-WELDED, SCH 80.	CAST IRON, LUBRICATED PLUG, ROCKWELL FIG. 214 OR 305 OR POWELL FIG. 2210 OR 2211.
4	SAME AS GROUP NO. 1	CAST IRON, ANSI B16.12, THREADED, DRAINAGE PATTERN.	--------
5	WELDED STEEL, AWWA C200, UNLINED.	WELDED STEEL, FABRICATED, AWWA C200, UNLINED.	AS INDICATED ON DRAWINGS
6	STEEL, ASTM A106, OR A53, SCH 40, SEAMLESS, BLACK.	STEEL, ANSI B16.9, BUTT-WELDED. CAST IRON, ANSI B16.1, 125 PSI, FLGD. FORGED STEEL, SOCKET WELDED, ANSI B16.11, 2000 PSI OR STEEL, ANSI B16.5, 150 PSI FLGD.	CAST IRON, FLGD, LUBRICATED PLUG, ROCKWELL FIG 143 OR POWELL FIG 2201.
7	SAME AS GROUP NO. 2.	MALLEABLE IRON, ANSI B16.3, THREADED, BANDED, GALVANIZED, 300 PSI.	BRONZE THREADED, GLOBE, CRANE NO. 212P OR 229C OR STOCKHAM B-62 OR B-32. BALL, JENKINS NO. 900T OR JAMESBURY FIG. 351 CHECK, CRANE NO. 27 OR STOCKHAM B-322.
8	WELDED STEEL, AWWA C200.	WELDED STEEL, AWWA C200, FABRICATED.	AS INDICATED ON DRAWINGS.
9	SAME AS GROUP NO. 1.	2½" AND SMALLER, MALLEABLE IRON, ANSI B16.3, THREADED, BANDED, BLACK, 150 PSI. 3" AND LARGER, STEEL, ANSI B16.9, BUTT-WELDED	ECCENTRIC PLUG, DEZURIK SERIES 118 OR KEYSTONE 1512, CHECK, CRANE NO. 336E OR WALWORTH NO. 904 OR POWELL FIG 668Y. BALL, JENKINS NO. 900T OR JAMESBURY FIG. 351.
10	SAME AS GROUP NO. 3.	1-1/4" AND SMALLER, FORGED STEEL, ANSI B16.11, THREADED OR SOCKET WELDED, BLACK, 3000 PSI, WITH FLGD AMMONIA UNIONS. 1-1/2" AND LARGER, STEEL, ANSI B16.9, BUTT-WELDED OR FLGD, SCH 80	SEMI-PLUG AND YOKE TYPE OR BALL FOR CHLORINE SERVICE, FORGED CARBON STEEL
11	DUCTILE IRON, ANSI A21.51, (AWWA C151) OR CAST IRON ANSI A21.6, 150 PSI, BELL AND SPIGOT, MECH JTS, MECH CPLG, OR 125 PSI FLGD (TYPICAL SERVICE - WATER LINES)	DUCTILE IRON OR CAST IRON, ANSI A21.10, OR AWWA C110, BELL AND SPIGOT, MECH CPLG, FLGD OR MECH JTS, 250 PSI, (PRESSURE RATING) 12" AND SMALLER, 150 PSI, (PRESSURE RATING) 14" AND LARGER, WITH 125 PSI ANSI B16.1 FLANGES.	GATE, AWWA C500, 'O' RING SEALS, MECH JTS ENDS, MUELLER A-2380-20, OR EDDY-IOWA (CLOW) F-5155. BUTTERFLY, AWWA. ECCENTRIC PLUG, DEZURIK SERIES 118 OR KEYSTONE 1512, OR BALL, PRATT OR W-K-M.
12	CAST IRON SOIL, ANSI/ASTM A-74, SERVICE WEIGHT, BELL AND SPIGOT OR HUBLESS. AT THE OPTION OF THE CONTRACTOR, DUCTILE IRON (GROUP NO. 11) MAY BE SUBSTITUTED	CAST IRON SOIL, ANSI/ASTM A-74, SERVICE WEIGHT, BELL AND SPIGOT OR HUBLESS. AT THE OPTION OF THE CONTRACTOR, DUCTILE IRON (GROUP NO 11) MAY BE SUBSTITUTED.	AS INDICATED ON DRAWINGS.
13	CORROSION RESISTANT (HIGH SILICON CONTENT) CAST IRON, SERVICE WEIGHT, BELL AND SPIGOT OR HUBLESS.	CORROSION RESISTANT (HIGH SILICON CONTENT) CAST IRON, SERVICE WEIGHT, BELL AND SPIGOT OR HUBLESS.	--------
14	STAINLESS STEEL, TYPE 316, ASTM A312, SCH 40S.	STAINLESS STEEL, TYPE 316 ANSI B16.3, SCREWED, 150 PSI, ANSI B16.9, BUTT-WELDED, SCH 40S, OR 150 PSI FLGD.	STAINLESS STEEL, BALL, FLGD, LADISH NO. 4202, OR JAMESBURY TYPE A/D150F. CHECK, LADISH, NO.5272 OR STOCKHAM FIG. 15 SF 316 OR AS SHOWN ON DRAWINGS.
15	STAINLESS STEEL, TYPE 316, ASTM A312, SCH 10S.	STAINLESS STEEL, TYPE 316 ANSI B16.9 BUTT-WELDED SCH 150 PSI FLGD.	STAINLESS STEEL, AS INDICATED ON DRAWINGS.
16	POLYVINYL CHLORIDE, SCH 80, NORMAL IMPACT. ASTM D1785	POLYVINYL CHLORIDE, SCH 80, NORMAL IMPACT, SOCKET SOLVENT WELD JTS, ASTM D2467.	POLYVINYL CHLORIDE, BALL, DIAPHRAGM, BUTTERFLY, BALL OR LIFT CHECK. CHEMTROL, HILLS-MCCANNA OR GSR-R.G. SLOAN CO.
17	POLYPROPYLENE, ASTM D2146, SCH 40, WITH HEAT FUSED JTS.	POLYPROPYLENE, SCH 40, DRAINAGE TYPE WITH HEAT FUSED SOCKET JTS.	--------
18	FIBERGLASS REINFORCED PLASTIC, ASTM D2996, FILAMENT-WOUND, SOCKET AND SPIGOT ENDS, ADHESIVE BONDED.	FIBERGLASS REINFORCED PLASTIC, FILAMENT-WOUND, SOCKET ENDS, ADHESIVE BONDED, OR FIBERGLASS FLGD.	PLASTIC LINED, FLGD. FLANGES TO MATCH 150 PSI ANSI B16.5 DIMENSIONS, OR AS INDICATED ON DRAWINGS.
19	POLYVINYL CHLORIDE PRESSURE PIPE ASTM D2241 WITH BELL AND SPIGOT JTS.	CAST IRON, 150 PSI, FOR POLYVINYL CHLORIDE PIPE, AWWA C110 CEMENT MORTAR LINED, AWWA C104.	SAME AS GROUP NO. 11.
20	NOT USED	NOT USED	--------
21	NOT USED	NOT USED	--------
22	REINFORCED CONCRETE, ASTM C76, T&G JTS. (TYPICAL SERVICE-CULVERTS)	SAME AS GROUP NO. 8	--------
23	TEMPERED GLASS. (ARMORED, WHERE BURIED). ANSI/ASTM C599	TEMPERED GLASS DRAINAGE TYPE WITH COMPRESSION CPLG AND TEFLON JTS. ANSI/ASTM C599 (ARMORED WHERE BURIED)	--------
24	COPPER, ASTM B88, TYPE K, SOFT TEMPERED WHERE BURIED, HARD TEMPERED WHERE EXPOSED.	WROUGHT COPPER OR CAST BRONZE, ANSI B16.22, SOLDER JOINT, 150 PSI, OR COMPRESSION FITTINGS. (FOR OXYGEN PIPING USE SILVER SOLDER, FOR COMPRESSED AIR PIPING USE 95-5 TIN-ANTIMONY SOLDER)	BRONZE, SOLDER JOINT, GLOBE, CRANE NO. 1310 OR STOCKHAM B-14. CHECK, CRANE NO. 1342 OR 36, OR STOCKHAM B-309 OR B-345. GATE, CRANE NO. 1320 OR 426, OR STOCKHAM B-104 OR B-105.
25	STEEL, ASTM A106 OR A53, SCH 40, SEAMLESS, BLACK, SARAN OR POLYPROPYLENE-LINED	STEEL, ANSI B16.5, 150 PSI FLGD, SARAN OR POLYPROPYLENE-LINED.	CAST STEEL PLUG, DIAPHRAGM OR CHECK, 150 PSI FLGD, SARAN OR POLYPROPYLENE-LINED.
26	SAME AS GROUP NO. 11 (TYPICAL SERVICE - SLUDGE AND SEWAGE LINES)	SAME AS GROUP NO. 11.	ECCENTRIC PLUG, SYNTHETIC RUBBER FACED, DEZURIK 118F OR KEYSTONE 1522. SWING TYPE CHECK, CRANE NO. 383 OR POWELL FIG. 559. BALL, PRATT OR W-K-M.
27	POLYVINYL CHLORIDE GRAVITY SEWER PIPE, ASTM D3034, BELL AND SPIGOT. (SDR 35)	POLYVINYL CHLORIDE, ANSI/ASTM D3034, BELL AND SPIGOT. (SDR 35)	--------
28	REINFORCED CONCRETE, AWWA C302, CLASS-SEE DRAWINGS. (TYPICAL SERVICE - PRESSURE PIPELINES)	SAME AS GROUP NO. 8.	AS INDICATED ON DRAWINGS.
29	SAME AS GROUP NO. 1.	2" AND SMALLER, MALLEABLE IRON, ANSI B16.3, THREADED, BANDED, BLACK, 150 PSI. 2-½" AND LARGER, STEEL ANSI B16.9, BUTT-WELDED.	SAME AS GROUP NO 1, EXCEPT LUBRICATED PLUG SHALL BE ROCKWELL FIG. 114 OR 115, OR POWELL FIG 2202 OR 2203.
30	SAME AS GROUP NO. 11, GLASS-LINED OR STEEL ASTM A53, SCH 40, GLASS LINED	SAME AS GROUP NO. 11, GLASS-LINED OR STEEL, ANSI B16.9, SCH 40, GROOVED WITH MECH CPLG, GLASS-LINED.	SAME AS GROUP NO 26.
31	2-1/2 " AND SMALLER, STEEL, ASTM A106 OR A53, SCH 80, SEAMLESS, BLACK. 3" AND LARGER DUCTILE IRON, ANSI A21.51 (AWWA C151) OR CAST IRON ANSI A21.6 OR A21. MECH CPLG OR 125 PSI FLGD.	2-½" AND SMALLER, FORGED STEEL, ANSI B16.11, SOCKET WELDED OR THREADED, BLACK, 2000 PSI, OR STEEL, ANSI B16.9, BUTT-WELDED SCH 80. 3" AND LARGER, DUCTILE IRON OR CAST IRON, ANSI A21.10 OR AWWA C110, MECH COUPLING OR 125 PSI FLGD.	CAST IRON, LUBRICATED PLUG, ROCKWELL FIG 142 OR 143, OR POWEL FIG 2200 OR 2201.
33	POLYVINYL CHLORIDE, AWWA C-900.	POLYVINYL CHLORIDE, AWWA C-110, CLASS 250.	--------

LIST OF SAMPLE LINES

PIPE DESIGNATION	SAMPLE POINT

TYPICAL PIPE DESIGNATION:

2" UW (24)

MATERIAL GROUP NUMBER (SEE NOTE 12)

PIPE DIAMETER — FLUID ABBREVIATION

NOTES:

GENERAL NOTE
ALTHOUGH SEVERAL PIPING MATERIALS ARE SHOWN THAT MAY BE USED FOR A GIVEN FUNCTION, ONLY THE CALLED PIPING MATERIAL SHOWN ON THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS SHALL BE USED. THE CONTRACTOR DOES NOT HAVE THE OPTION TO USE A DIFFERENT MATERIAL.

NOTE 1
PROPRIETARY NAMES HAVE BEEN QUOTED FOR IDENTIFICATION PURPOSES ONLY. SUBSTITUTIONS WILL BE PERMITTED SUBJECT TO PROVISIONS OF THE SPECIFICATIONS.

NOTE 2
LEAKAGE ALLOWANCE IS AS FOLLOWS:

(A) PIPES SO DESIGNATED SHALL SHOW ZERO LEAKAGE.
(B) PIPES SO DESIGNATED SHALL SHOW ZERO LEAKAGE FOR UNBURIED PIPE AND NOT MORE THAN 0.02 GALLON PER HOUR PER INCH DIAMETER PER 100 FEET OF BURIED PIPE.
(C) PIPES SO DESIGNATED SHALL NOT SHOW A LEAKAGE OF MORE THAN 0.15 GALLON PER HOUR PER INCH OF DIAMETER PER 100 FEET OF PIPE
(D) PIPES SO DESIGNATED SHALL NOT SHOW A LOSS OF PRESSURE OF MORE THAN 5 PERCENT
(E) PIPE SO DESIGNATED SHALL NOT SHOW A LOSS OF VACUUM OF MORE THAN 4 INCHES MERCURY COLUMN

NOTE 3
FOR FIELD TEST PROCEDURES AND ADDITIONAL TEST REQUIREMENTS, SEE PIPING SECTION OF SPECIFICATIONS.

NOTE 4
ANY DEVIATION FROM THE PIPING MATERIALS OR FIELD TEST REQUIREMENTS SHOWN WILL BE NOTED IN THE SPECIFICATION OR ON THE DRAWINGS.

NOTE 5
PIPING GROUP NUMBER SHOWN THUS * SHALL BE INSULATED. SEE PIPING SECTION OF SPECIFICATIONS FOR INSULATING MATERIALS.

NOTE 6
STATIC WATER TEST WITH SURFACE 5 FEET ABOVE HIGH POINT OF PIPE.

NOTE 7
INSPECTION AND TESTING SHALL BE IN ACCORDANCE WITH APPLICABLE PLUMBING CODE AND SPECIFICATIONS.

NOTE 8
NO APPARENT LEAKS UNDER NORMAL OPERATING CONDITIONS.

NOTE 9
INSPECTION AND TESTING SHALL BE IN ACCORDANCE WITH APPLICABLE NATIONAL FIRE PROTECTION ASSOCIATION STANDARDS.

NOTE 10
PIPING MATERIALS SHALL BE IN ACCORDANCE WITH NATIONAL FIRE PROTECTION ASSOCIATION STANDARDS.

NOTE 11
FOR VALVES 8" AND LARGER SEE VALVE SCH FOR SPECIAL VALVES SEE SPECIFICATIONS.

NOTE 12
CHANGE IN PIPING MATERIAL GROUP NUMBER IS INDICATED THUS: ——◆

NOTE 13
FOR PIPE LINING AND COATING, SEE SPECIFICATIONS.

NOTE 14
EXPOSED PIPING SHALL BE PAINTED IN ACCORDANCE WITH SPECIFICATIONS. COLORS TO BE SELECTED BY ENGINEER.

NOTE 15
PIPING MATERIAL SHALL BE NON-ABRASIVE FLEXIBLE RUBBER HOSE AND QUICK CONNECTION CPLG WITH GROUP NO 1 AT EQUIPMENT.

NOTE 16
VALVES 2½" AND SMALLER MAY HAVE SCREWED ENDS. VALVES 3" AND LARGER SHALL HAVE FLGD ENDS UNLESS OTHERWISE INDICATED.

REGISTERED PROFESSIONAL ENGINEER — JOHN ARTHUR BERGEN — NO. C31069 — Exp. 3-31-04 — CIVIL — STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L. WONG
DRAWN E. WISNIEWSKI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH — Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

GENERAL PIPING SCHEDULE

SHEET AD-G-011

Plot Date: 09-FEB-2004 14:01
File: N:\Projects\los_osos\Collect_Sys\AD\gen\AD-G-011.dgn
Job No: 1481166

STRUCTURE OR FACILITY

EXISTING STRUCTURE OR FACILITY

FUTURE STRUCTURE OF FACILITY

EARTH

GRAVEL/DRAINROCK/AGGREGATE BASE (IN SECTION)

ASPHALT CEMENT PAVING

CONCRETE PAVING

GRAVEL PAVING

EARTH (IN SECTION)

COMPACTED EARTH (IN SECTION)

CONCRETE CURB

CONCRETE CURB AND GUTTER

DROP INLET CATCH BASIN

CURBSIDE DROP INLET CATCH BASIN WITH LOCAL DEPRESSION

SIDE INLET CATCH BASIN WITH LOCAL DEPRESSION

CONCRETE WALK

DRIVEWAY / ACCESS RAMP

1388 STREET ADDRESS

NOTE: ALL EXISTING FEATURES EXCEPT BURIED PIPELINES ARE SCREENED.

PIPE IN SECTION

PIPE/UTILITIES IN SECTION (PROFILE)

GP GRINDER PUMP

POCKET PUMP STATION

PROPERTY/RIGHT-OF-WAY LINE

ESMT EASEMENT LINE

TEMP_ESMT TEMPORARY EASEMENT LINE

FOR GRAVITY PLAN AND PROFILE ONLY

NEW SANITARY SEWER WITH MANHOLE

EXISTING SANITARY SEWER WITH MANHOLE

FM NEW FORCE MAIN

DM FUTURE DISTRIBUTION MAIN

HM FUTURE HARVEST MAIN

SD FUTURE STORM DRAIN

10+00 11+00 12+00 CONSTRUCTION BASELINE

6"SS PLUG & ABANDON EXIST SANITARY SEWER, SEWER AND MANHOLE SHALL BE FILLED WITH GROUT

STATE OF CALIFORNIA RIGHT OF WAY ACCESS CONTROLLED AREA

W EXISTING WATERLINE

FO EXISTING FIBER OPTIC

SD EXISTING STORM DRAIN

CATV EXISTING CABLE TV

E EXISTING BURIED ELECTRICAL

T EXISTING TELEPHONE

G EXISTING GAS

TS EXISTING TRAFFIC SIGNAL

FENCE (NEW)

FENCE (EXISTING) - SCREENED

WATER COURSE

TRAIL OF DIRT ROAD

125 MAJOR CONTOUR LINE (NEW)

125 MAJOR CONTOUR LINE (EXISTING) - SCREENED

EXISTING VEGETATION - SCREENED

PP EXISTING POWER POLE - SCREENED

HORIZONTAL/VERTICAL CONTROL

BENCH MARK

COORDINATE TICK MARK

STREET LIGHT W/POLE

TRAFFIC SIGNAL W/POLE

B-8 SOIL BORING

POTHOLE LOCATION

STA. 13+88 (6") INV. 1.68' LATERAL STATION, SIZE (4" IF NOT INDICATED) AND INVERT

AV/AR VALVE (IN PROFILE)

AV/AR VALVE (IN PLAN)

FOR DISPOSAL MAIN PLAN AND PROFILE ONLY

DM DISPOSAL MAIN

HM HARVEST MAIN

SS SANITARY SEWER

FM FORCE MAIN

AVAR OR AR IN PLAN

AVAR OR AR IN PROFILE

BLOW-OFF IN PLAN

BLOW-OFF IN PROFILE

DISPOSAL WELL

FOR PUMP STATION ONLY

PIPELINE (CIVIL SHEETS) 6" DIA AND LARGER

PIPELINE (CIVIL SHEETS) SMALLER THAN 6" DIA

ISOLATION VAULT & MAJOR BLOWOFF VAULT (IN PLAN)

T CATHODIC TEST STATION (IN PROFILE)

T CATHODIC TEST STATION (IN PLAN)
TYPES:
CTS CORROSION TEST STATION
CATS CASING TEST STATION
IJTS INSULATING JOINT TEST STATION
FPTS FOREIGN PIPELINE TEST STATION
CSTS CURRENT SPAN TEST STATION

FH FIRE HYDRANT

PCOTG PRESSURE CLEANOUT TO GRADE

COTG CLEANOUT TO GRADE

REDUCER OR INCREASER (PROVIDE SIZE)

ETS ELECTROLYSIS TEST STATION

CHANGE IN PIPING MATERIAL

BACKWATER VALVE

BACKFLOW PREVENTER

GATE VALVE, BURIED WITH VALVE BOX

BUTTERFLY VALVE, BURIED WITH VALVE BOX

ECCENTRIC PLUG VALVE, BURIED WITH VALVE BOX

LUBRICATED PLUG VALVE, BURIED WITH VALVE BOX

GATE VALVE

BUTTERFLY VALVE

CAPPED END OR PLUGGED END

BLIND FLANGE

REDUCER OR INCREASER

FLOOR DRAIN

DRAIN TRAP

2"_UW_(2) PIPE CALLOUT (SEE PIPING SCHEDULE)

ME-2 EQUIPMENT NUMBER (SEE EQUIPMENT SCHEDULE)

ECCENTRIC PLUG VALVE

BALL VALVE

CHECK VALVE

M P MOTOR OPERATOR FOR VALVES (M = ELECTRIC, P = PNEUMATIC)

S SOLENOID VALVE

PRESSURE RELIEF VALVE

HOSE BIBB (H/B)

CENTRIFUGAL OR TURBINE PUMP OR FAN

METERING PUMP

PROGRESSING CAVITY, POSITIVE DISPLACEMENT PUMP

AIR VACUUM AND AIR RELEASE ASSEMBLY

G PRESSURE GAUGE

G PRESSURE GAUGE WITH DIAPHRAGM SEAL

S PRESSURE SWITCH

S PRESSURE SWITCH WITH DIAPHRAGM SEAL

DRAIN

M M MAGNETIC METER

ROTAMETER

SECTION AND DETAIL IDENTIFICATION

SECTION IDENTIFICATION

SECTION LETTER

A 3S-5 — SHEET ON WHICH SECTION IS SHOWN

SECTION A 3S-1 — SHEET ON WHICH SECTION IS CUT

DETAIL IDENTIFICATION

DETAIL NUMBER

3 2M-3 — SHEET ON WHICH DETAIL IS SHOWN

DETAIL 3 2M-2 — SHEET ON WHICH DETAIL IS CALLED-OUT

STANDARD DETAIL IDENTIFICATION

DETAIL NUMBER

C-302

DETAIL C-302

STANDARD DETAILS ARE LOCATED ON DISCIPLINE GENERAL SHEETS, IN NUMERICAL ORDER

ELEVATION IDENTIFICATION

ELEVATION NUMBER

1 1A-3 — SHEET ON WHICH ELEVATION IS SHOWN

ELEVATION 1 1A-1 — SHEET ON WHICH ELEVATION IS CALLED-OUT

PIPING IDENTIFICATION

SEE PIPING SCHEDULE

MATERIAL GROUP NUMBER

12" RAS (27)

PIPE DIAMETER — FLUID ABBREVIATION

EQUIPMENT IDENTIFICATION

SEE EQUIPMENT SCHEDULE/SPECIFICATIONS

EQUIPMENT DESIGNATOR — EQUIPMENT NUMBER

12MAU-05

AREA NUMBER

MISCELLANEOUS

4-12 ROOM NUMBER

2-16 DOOR NUMBER

1-8 WINDOW NUMBER

13 ACCESSORY NUMBER

4 WALL TYPE NUMBER

DISCIPLINE SPECIFIC SYMBOLS ARE SHOWN ON THE DISCIPLINE GENERAL DRAWINGS.

FOR WELDING SYMBOLS USE AMERICAN WELDING SOCIETY STANDARD SYMBOLS.

REGISTERED PROFESSIONAL ENGINEER JOHN ARTHUR BERGEN NO. C31069 Exp. 3-31-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L. WONG
DRAWN E. WISNIEWSKI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
GENERAL
SYMBOLS

SHEET AD-G-012

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\AD\gen\AD-G-012.dgn Plot Date: 09-FEB-2004 14:02

A	AIR
A/C	AIR CONDITIONING
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AB	ANCHOR BOLT
ABAN	ABANDON
ABAND	ABANDONED
ABBR	ABBREVIATION
ABS	ABSOLUTE TEMPERATURE
AC	ACTIVATED CARBON / ASPHALTIC CONCRETE / ALTERNATING CURRENT
ACI	AMERICAN CONCRETE INTERNATIONAL
ACOUS	ACOUSTIC / ACOUSTICAL
ACP	ASBESTOS CEMENT PIPE / ASPHALTIC CONCRETE PAVEMENT
ADD	ADDITIONAL
ADH	ADHESIVE
ADJ	ADJUSTABLE
AER	AERATION
AFF	ABOVE FINISHED FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
ALUM	ALUMINUM
AMB	AMBIENT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
API	AMERICAN PETROLEUM INSTITUTE
APPD	APPROVED
APPROX	APPROXIMATE
APPURTS	APPURTENANCES
ARCH	ARCHITECTURE
AREA	AMERICAN RAILWAY ENGINEERING ASSOCIATION
ASME	AMERICAN SOCIETY OF MECHANICAL ENGINEERS
ASPH	ASPHALT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AT	ACOUSTICAL TILE
ATM	ATMOSPHERE
AV/AR	AIR VACUUM AND AIR RELEASE VALVE
AVE	AVENUE
AWPA	AMERICAN WOOD PRESERVERS ASSOCIATION
AWS	AMERICAN WELDING SOCIETY
AWWA	AMERICAN WATER WORKS ASSOCIATION
B&S	BELL AND SPIGOT
B/W	BACK OF WALL / BACK OF WALK
BC	BEGIN CURVE/BOLT CIRCLE/BETWEEN CENTERS
BCR	BEGIN CURB RETURN
BD	BOARD
BDRY	BOUNDARY
BF	BLIND FLANGE / BOTTOM OF FOOTING
BFP	BACK FLOW PREVENTER
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BLK	BLACK / BLOCK
BLKG	BLOCKING
BLVD	BOULEVARD
BM	BEAM / BENCH MARK
BO	BLOW-OFF ASSEMBLY
BOD	BIOCHEMICAL OXYGEN DEMAND
BOP	BOTTOM OF PIPE
BOT	BOTTOM
BPV	BACK PRESSURE VALVE
BRK	BRICK / BREAK
BSMT	BASEMENT
BT	BOLT
BTU	BRITISH THERMAL UNIT
BV	BUTTERFLY VALVE
BVC	BEGIN VERTICAL CURVE
BWV	BACK WATER VALVE
C	CENTIGRADE / CHANNEL / CEMENT
C&G	CURB AND GUTTER
CAB	CABINET / CRUSHED AGGREGATE BASE
CAP	CAPACITY
CATS	CASING TEST STATION
CB	CATCH BASIN / CHALK BOARD / CURB
CBL	CONSTRUCTION BASELINE
CC	CLOSED CIRCUIT TV / CENTER TO CENTER
CD	CEILING DIFFUSER
CEM	CEMENT
CF	CURB FACE OF CUBIC FOOT
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
CHEM	CHEMICAL
CHG	CHANGE
CHKD	CHECKERED
CI	CAST IRON
CIP	CAST IRON PIPE / CAST IN PLACE
CIPP	CAST IN PLACE PIPE
CJ	CONSTRUCTION JOINT
CL	CHLORINE GAS / CHLORINATOR / CENTERLINE
CLF	CHAIN LINK FENCE
CLG	CEILING
CLOS	CLOSET
CLR	CLEAR / CLEARANCE
CM	CENTIMETER
CMB	CRUSHED MISCELLANEOUS BASE
CMC	CEMENT MORTAR-COATED
CML	CEMENT MORTAR-LINED
CML&C	CEMENT LINED AND COATED
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CO	CLEANOUT
COL	COLUMN
COMP	COMPRESSOR
CONC	CONCRETE / CONCENTRIC
COND	CONDENSER / CONDENSATE
CONN	CONNECTION
CONST	CONSTRUCT / CONSTRUCTION
CONT	CONTINUED / CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
COR	CORNER
COTG	CLEANOUT TO GRADE
CPLG	COUPLING
CPVC	CHLORINATED POLYVINYL CHLORIDE
CS	CAUSTIC SODA / CAST STEEL
CSP	CORRUGATED STEEL PIPE
CSTS	CURRENT SPAN TEST STATION
CT	CERAMIC TILE
CTR	CENTER
CTS	CORROSION TEST STATION
CTSK	COUNTERSUNK
CU	COPPER / CUBIC
CULV	CULVERT
CV	CHECK VALVE
CY	CUBIC YARD
CYL	CYLINDER
d	PENNY
DAD	DOUBLE ACTING DOOR
DAFT	DISSOLVED AIR FLOTATION THICKENER
DB	DIRECT BURY
DBL	DOUBLE
DC	DIRECT CURRENT
DEG	DEGREEE
DET	DUCTILE IRON
DF	DRINKING FOUNTAIN / DOUGLAS FIR
DG	DOUBLE HUNG
DH	DOUBLE HUNG
DI	DUCTILE IRON
DIA	DIAMETER
DIAG	DIAGONAL
DIAPH	DIAPHRAGM
DIFF	DIFFUSER / DIFFERENTIAL
DIP	DUCTILE IRON PIPE
DIR	DIRECTION
DISCH	DISCHARGE
DISP	DISPENSER
DL	DEAD LOAD
DM	DISPOSAL MAIN
DMH	DROP MANHOLE
DN	DOWN
DO	DISSOLVED OXYGEN / DITTO
DR	DOOR / DRAIN
DS	DRENCH SHOWER AND EYE WASH
DT	DRAIN TILE
DWG	DRAWING
DWLS	DOWELS
DWY	DRIVEWAY
E	EAST
E/O	EAST OF
EA	EACH
EB	EXPANSION BOLT OR ANCHOR
EC	END CURVE
ECC	ECCENTRIC
ECR	END CURB RETURN
EF	EACH FACE / EXHAUST FAN
EFF	EFFLUENT
EG	EXISTING GRADE / EDGE OF GUTTER / EXHAUST GRILLE
EGL	ENERGY GRADE LINE
EL	ELEVATION
ELEC	ELECTRICAL / ELECTRONIC
EN	EDGE NAILING
ENCL	ENCLOSURE
ENG	ENGINE
ENGR	ENGINEER
ENT	ENTRANCE
EP	EDGE OF PAVEMENT
EPT	ETHYLENE PROPYLENE
EQ	EQUAL
EQUIP	EQUIPMENT
ESMT	EASEMENT
ETB	EMULSION TREATED BASE
ETC	ET CETERA
EVAP	EVAPORATOR
EVC	END VERTICAL CURVE
EW	EACH WAY / EYE WASH
EX	EXISTING
EXC	EXCAVATION
EXH	EXHAUST
EX-HY	EXTRA HEAVY
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR / EXTENSION
EXTR	EXTRUDED
F	FAHRENHEIT / FINISH
F TO F	FACE TO FACE
F&C	FRAME AND COVER
F&I	FURNISH AND INSTALL
FAB	FABRICATE / FABRICATION
FAI	FRESH AIR INTAKE
FB	FLAT BAR / FLOOR BEAM / FIELD BOOK
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
FDR	FEEDER
FE	FIRE EXTINGUISHER / FINAL EFFLUENT
FEM	FEMALE (PIPE THREAD)
FF	FLAT FACE / FAR FACE / FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT / FLAT HEAD
FIG	FIGURE
FIN	FINISHED
FIX	FIXTURE
FL	FLOWLINE / FLOOR
FLEX	FLEXIBLE
FLG	FLANGE / FLOORING
FLGD	FLANGED
FLOCC	FLOCCULATOR / FLOCCULATION
FLR	FLOOR
FLSG	FLASHING
FM	FACTORY MUTUAL (LAB. APPROVED) / FORCE MAIN
FMH	FLEXIBLE METAL HOSE
FN	FIELD NAILING
FND	FOUNDATION
FO	FIBER OPTIC
FOC	FACE OF CONCRETE / FIBER OPTIC CABLE
FOCC	FIBER OPTIC CABLE CONDUIT
FOM	FACE OF MASONRY
FOS	FACE OF STUDS
FOW	FACE OF WALL
FPC	FLEXIBLE PIPE COUPLING
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FPTS	FOREIGN PIPE TEST STATION
FR	FRAME
FRP	FIBERGLASS REINFORCED PLASTIC
FS	FINISHED SURFACE / FARSIDE / FLOOR SINK / FORGED STEEL / FROTH SPRAY
FT	FEET / FOOT
FTG	FOOTING
FUR	FURRING
FUT	FUTURE
FV	FIELD VERIFY
FWD	FORWARD
G	GAS
GA	GAGE / GAUGE
GAL	GALLON
GALV	GALVANIZED
GANC	GUY ANCHOR
GB	GRADE BREAK
GEN	GENERAL / GENERATOR
GFA	GROOVED FLANGE ADAPTER
GI	GALVANIZED IRON
GIP	GALVANIZED IRON PIPE
GL	GLASS / GROUND LINE / GRADE LINE
GLB	GLUE LAMINATED BEAM
GLV	GLOBE VALVE
GM	GAS METER
GP	GUY POLE
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRADE
GRD	GRADE / GROUND
GRTG	GRATING
GSP	GALVANIZED STEEL PIPE
GV	GATE VALVE
GYP	GYPSUM
H	HIGH / HEIGHT
H&V	HEATING AND VENTILATING
H/B	HOSE BIBB
HC	HOUSE CONNECTION
HDR	HEADER
HDW	HARDWARE
HDWL	HEADWALL
HEX	HEXAGONAL
Hg	MERCURY
HGL	HYDRAULIC GRADE LINE
HGR	MANGER
HM	HOLLOW METAL / HARVEST MAIN
HORZ	HORIZONTAL
HP	HIGH POINT / HORSE POWER / HIGH PRESSURE
HPG	HIGH PRESSURE GAS
HR	HEAT RETURN / HOUR
HTG	HEATING
HTR	HEATER
HV	HORIZONTAL AND VERTICAL CONTROL POINT
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
HW	HOT WATER / HEADWORK
HWD	HARDWOOD
HWL	HIGH WATER LEVEL
HWO	HANDWHEEL OPERATED
HYD	HYDRAULIC / HYDRANT
I&O	INSIDE AND OUTSIDE
ID	INSIDE DIAMETER
IF	INSIDE FACE
IJTS	INSULATING JOINT TEST STATION
IN	INCH
INCL	INCLUDE / INCLUDING
INFL	INFLUENT
INSL	INSULATION
INSP	INSPECTION
INST	INSTRUMENT
INT	INTERIOR
INV	INVERT
IP	IRON PIPE
IPS	IRON PIPE SIZE
IRRG	IRRIGATION
JAN	JANITOR
JC	JUNCTION CHAMBER
JCT	JUNCTION
JS	JUNCTION STRUCTURE
JSTS	JOISTS
JT	JOINT
K	KELVIN / KILO / KARAT
KG	KILOGRAM
KM	KILOMETER
KV	KILOVOLT
KW	KILOWATT
KWH	KILOWATT HOUR
L	LITER / LENGTH / ANGLE
LAB	LABORATORY
LAM	LAMINATED
LAT	LATERAL
LAV	LAVATORY
LB	POUND
LCP	LOCAL CONTROL PANEL
LD	LOCAL DEPRESSION
LDG	LANDING
LEV	LEVEL
LF	LINEAR FOOT
LG	LENGTH / LONG
LH	LAMP HOLE / LEFT HAND
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	LOCATION
LOCSD	LOS OSOS COMMUNITY SERVICES DISTRICT
LOL	LAYOUT LINE
LONG	LONGITUDINAL
LP	LOW POINT / LOW PRESSURE / LAMP POST
LT	LEFT / LIGHT
LTS	LIME TREATED SOIL
LW	LOW WATER
LWL	LOW WATER LEVEL
LWR	LOWER
M	METER / MALE (PIPE THREAD)
MACH	MACHINE
MAG	MAGNETIC
MAINT	MAINTENANCE
MAN	MANUAL
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MB	MAIL BOX / MACHINE BOLT
MCC	MOTOR CONTROL CENTER
MCR	MIDDLE OF CURB RETURN
MEAS	MEASURE
MECH	MECHANICAL
MED	MEDIUM
MEMB	MEMBER
MFRD	MANUFACTURED
MGD	MILLION GALLONS PER DAY
MH	MANHOLE
MHT	MEAN HIGH TIDE
MHW	MEAN HIGH WATER
MI	MALLEABLE IRON / MILE
MICRON	1/1,000,000 METER
MIL	MILITARY / 1/1,000 TH INCH
MIN	MINIMUM / MINUTE
MIR	MIRROR
MISC	MISCELLANEOUS
MK	MARK
MLW	MEAN LOW WATER
mm	MILLIMETER
MO	MOTOR OPERATED / MASONRY OPENING
MOD	MODEL
MON	MONUMENT
MOR	MORTAR
MS	MOP SINK
MSL	MEAN SEA LEVEL
MTC	MECHANICAL-TYPE COUPLING
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MTR	MOTOR
N	NORTH
NaOCL	SODIUM HYPOCHLORITE
NaOH	SODIUM HYDROXIDE (CAUSTIC SODA)
NBS	NATIONAL BUREAU OF STANDARDS
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION
NF	NEAR FACE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NG	NATURAL GRADE / NATURAL GAS
NIC	NOT IN CONTRACT
NO	NUMBER / NORMALLY OPEN
NOM	NOMINAL
NPS	NOMINAL PIPE SIZE
NPT	NATIONAL PIPE THREAD
NRCP	NONREINFORCED CONCRETE PIPE
NRS	NON-RISING STEM
NS	NEAR SIDE
NTS	NOT TO SCALE
OBJ	OBJECT
OC	ON CENTER / OVER-CROSSING
OD	OUTSIDE DIAMETER / OVERALL DIMENSION
OE	OUTER EDGE
OF	OVERFLOW / OUTSIDE FACE
OFD	OVERFLOW DRAIN
OFF	OFFICE
OH	OVER HEAD
OPER	OPERATOR / OPERATING
OPNG	OPENING
OPP	OPPOSITE
ORIG	ORIGINAL
OS&Y	OUTSIDE SCREW AND YOKE
OSA	OUTSIDE AIR
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OWG	OIL, WATER, GAS
OZ	OUNCE
P	POLE / PAGE / PIPE
P/S	POLE AND SHELF
PA	PLANTING AREA
PART	PARTITION
PAVMT	PAVEMENT
PB	POLYBUTYLENE / PULL BOX
PC	POINT OF CURVATURE / PRIMARY CLARIFIER / PORTLAND CEMENT
PCC	PORTLAND CEMENT CONCRETE / POINT OF COMPOUND CURVE
PCOTG	PRESSURE CLEANOUT TO GRADE
PCVC	POINT OF COMPOUND VERTICAL CURVE
PE	POLYETHYLENE / PLANT EFFLUENT / POLYELECTROLYTE POLYMER
PG	PRESSURE GAGE
pH	HYDROGEN ION CONCENTRATION
PI	PLANT INFLUENT / POINT OF INTERSECTION
PK	PARKING
PL	PLATE / PROPERTY LINE / PLACE
PLAS	PLASTER / PLASTIC
PLT	PLANT
PLWD	PLYWOOD
PM	PRESSED METAL
PNEU	PNEUMATIC
PNL	PANEL
POB	POINT OF BEGINNING
POC	POINT OF CONNECTION
POT	POINT OF TANGENT
PP	POWER POLE / POLYPROPYLENE / PLAN AND PROFILE
PPD	POUNDS PER DAY
PPH	POUNDS PER HOUR
PPM	POUNDS PER MINUTE
PR	PAIR
PRC	POINT OF REVERSE CURVE
PRCT	PRECAST
PREFAB	PREFABRICATED
PRESS	PRESSURE
PROF	PROFILE
PRV	PRESSURE REGULATING, RELIEF OR REDUCING VALVE
PRVC	POINT OF REVERSE VERTICAL CURVE
PS	PRESSURE SWITCH
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAUGE
PT	POINT OF TANGENCY / PAINT / PRESSURE TREATED
PTFE	POLYTETRAFLUOROETHYLENE (TEFLON)
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
PVDF	POLYVINYLIDENE FLUORIDE (KYNAR)
QT	QUARRY TILE
QTY	QUANTITY
QUAD	QUADRANGLE / QUADRANT
R	RADIUS / RISER / RATE OF SLOPE
R&O	ROCK AND OIL
R/W	RIGHT OF WAY
RAC	RECYCLED ASPHALT CONCRETE
RAG	RETURN AIR GRILLE
RAP	RECLAIMED ASPHALT PAVEMENT
RAS	RETURN ACTIVATED SLUDGE
RC	REINFORCED CONCRETE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD / ROOF DRAIN / ROUND
RED	REDUCER / REDUCING
REF	REFERENCE / REFER / REFRIGERATOR
REG	REGULATING
REINF	REINFORCE / REINFORCED
REQD	REQUIRED
RESIL	RESILIENT
RET	RETAINING / RETURN
REV	REVISION
RF	ROOF / RAISED FOUNDATION / ROUGH FACE
RFG	ROOFING
RGE	REGISTERED GEOTECHNICAL ENGINEER
RH	REDHEAD / RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
RPM	REVOLUTIONS PER MINUTE
RR	RAILROAD
RS	RISING STEM
RSL	RAW SLUDGE
RT	RIGHT
RTP	REINFORCED THERMOSETTING PLASTIC
RW	REDWOOD
RWL	RAINWATER LEADER
S	SOUTH / SCUM / SINK / SECOND / SLOPE / SAND
S/O	SOUTH OF
SA	SAMPLE
SAN	SANITARY
SBC	SOUTHWEST BELL CORPORATION
SBR	STYRENE BUTADENE (RUBBER)
SC	SPARE CHEMICAL / SECONDARY CLARIFIER
SCCP	STEEL CYLINDER CONCRETE PIPE
SCD	SCREWED
SCFM	STANDARD CUBIC FEET PER MINUTE
SCH	SCHEDULE
SD	STORM DRAIN
SDR	STANDARD THERMOPLASTIC PIPE DIMENSION RATIO
SEC	SECONDARY / SECTION
SER	SERIES
SETT	SETTING
SF	SQUARE FOOT
SH	SHOWER
SHELV	SHELVING
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SL	SLUDGE
SLDG	SLIDING
SLG	SLUICE GATE
SOG	SLAB ON GRADE
SOLN	SOLUTION
SP	STATIC PRESSURE
SPEC	SPECIFICATION
SPK	SPIKE
SQ	SQUARE
SS	STAINLESS STEEL / SANITARY SEWER / SERVICE SINK
SSB	SELECT SUB-BASE
SSPWC	STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION
SSU	SECONDS SAYBOLT UNIVERSAL
ST	STREET / STATE
STA	STATION
STC	SLEEVE-TYPE COUPLING
STD	STANDARD
STK	STAKE
STL	STEEL
STM	STEAM
STR	STRAIGHT / STRUCTURAL
SUCT	SUCTION
SV	SOLENOID VALVE
SW	SIDEWALK
SWD	SIDEWALK DRAIN
SWGR	SWITCHGEAR
SWR	SIDEWALL REGISTER
SY	SQUARE YARD
SYM	SYMMETRICAL / SYMBOL
SYS	SYSTEM
T	THERMOSTAT / TREAD OF STAIR / TANGENT / TOP
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TAN	TANGENT
TB	TACK BOARD
TBE	THREAD BOTH ENDS
TBM	TEMPORARY BENCH MARK
TC	TOP OF CURB
TCV	TEMPERATURE CONTROL VALVE
TEL	TELEPHONE
TEMP	TEMPERATURE / TEMPORARY
TF	TOP OF FOOTING
TH	TEST HOLE
THK	THICK / THICKNESS
THR	THRESHOLD
THR'D	THREADED
TK	TANK / TACK
TL	TRAVERSE LINE
TOC	TOP OF CONCRETE
TOE	THREAD ONE END
TOL	TOILET
TOM	TOP OF MASONRY
TOP	TOP OF PIPE
TOPO	TOPOGRAPHIC
TOS	TOP OF STEEL
TOW	TOP OF WALL
TP	TELEPHONE POLE
TR	TRACT
TRANS	TRANSMITTER / TRANSITION /TRANSMISSION
TS	TRAFFIC SIGNAL
TSB	TOP SET BASE
TSC	TRAFFIC SIGNAL CONDUIT
TV	THERMOSTATIC VALVE / TELEVISION
TW	THERMOMETER WELL /TRAVELED WAY
TYP	TYPICAL
UB	UNION BONNET
UBC	UNIFORM BUILDING CODE
UC	UNDER-CROSSING
UG	UNDERGROUND
UGC	UNDERGROUND CONDUIT
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
UOI	UNLESS OTHERWISE INDICATED
UR	URINAL
USA	UNDERGROUND SERVICE ALERT
USGS	UNITED STATES GEOLOGICAL SURVEY
V	VALVE / VERTICAL / VENT / VOLT / VOLUME
VAC	VACUUM
VAR	VARIES / VARIABLE
VB	VALVE BOX
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
VOL	VOLUME
VPI	VERTICAL POINT OF INTERSECTION
VTC	VENT TO CEILING
VTR	VENT THROUGH ROOF
VWC	VINYL WALL COVERING
VWM	VERIFY WITH MANUFACTURE
W	WEST / WASTE / WIDTH / WIDE FLANGE
W/	WITH
W/O	WEST OF / WITHOUT
WC	WATER COLUMN / WATER CLOSET
WCO	WALL CLEANOUT
WD	WOOD
WDW	WINDOW
WH	WATER HEATER
WI	WROUGHT IRON
WM	WATER METER
WOG	WATER, OIL, OR GAS
WP	WATER PROOFING / WORKING PRESSURE / WORK POINT
WPJ	WEAKEN PLANE JOINT
WS	WATER SURFACE
WSTP	WATER STOP
WT	WEIGHT
WWF	WELDED WIRE FABRIC
WWP	WATER WORKING PRESSURE
WWTF	WASTEWATER TREATMENT FACILITY
XCONN	CROSS CONNECTION
XS	EXTRA STRONG
XSEC	CROSS SECTION
XXS	DOUBLE EXTRA STRONG
YD	YARD
YR	YEAR
Z	ZERO / ZONE
ZN	ZINC
#	POUND
&	AND
@	AT

FOR ADDITIONAL ABBREVIATIONS SEE:

PIPING - SHEET *
ELECTRICAL - SHEET *
INSTRUMENTATION - SHEET *

OTHER ABBREVIATIONS CONFORM TO ANSI STANDARD ABBREVIATIONS Z32.2.3

REGISTERED PROFESSIONAL ENGINEER
JOHN ARTHUR BERGEN
NO. C31069
Exp. 3-31-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L. WONG
DRAWN E. WISNIEWSKI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS — COMMUNITY SERVICES DISTRICT

MWH — Walnut Creek, California

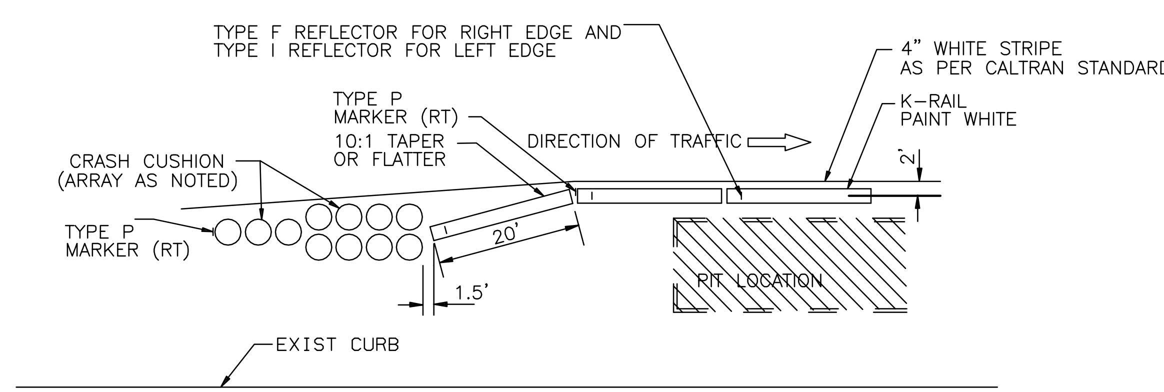
LOS OSOS WASTEWATER PROJECT
GENERAL
ABBREVIATIONS

SHEET AD-G-013

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\AD\gen\AD-G-013.dgn Plot Date: 09-FEB-2004 14:02

GENERAL NOTES:

1. TRAFFIC CONTROL PLANS DO NOT SHOW ALL WORK REQUIRED TO BE COMPLETED. WORK NOT NECESSARY FOR TRAFFIC CONTROL MAY BE COMPLETED AT ANY TIME AND IS NOT SHOWN.
2. CONTRACTOR SHALL INSTALL AND MAINTAIN THE TRAFFIC CONTROL DEVICES AS SHOWN HEREIN, AS WELL AS ANY ADDITIONAL TRAFFIC CONTROL DEVICES AS MAY BE REQUIRED TO ENSURE THE SAFE MOVEMENT OF TRAFFIC AND PEDESTRIANS THROUGH OR AROUND THE CONSTRUCTION AREA AND TO PROVIDE MAXIUM PROTECTION AND SAFETY TO CONSTRUCTION WORKERS.
3. THE ENGINEER RESERVES THE RIGHT TO OBSERVE THESE TRAFFIC CONTROL PLANS IN USE AND TO MAKE NECESSARY CHANGES AS FIELD CONDITIONS WARRANT. ANY CHANGES SHALL SUPERSEDE THESE PLANS AND SHALL BE PROVIDED AT NO ADDITIONAL COST/TIME TO THE OWNER.
4. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED FOLLOWING COMPLETION OF EACH CONSTRUCTION PHASE.
5. CONTRACTOR SHALL COVER ALL EXISTING SPEED LIMIT SIGNS AND REPLACE WITH C17 (25 MPH ROAD WORK SPEED LIMIT SIGN) DURING CONSTRUCTION HOURS. C17 SIGNS SHALL BE VISIBLE AND LEFT IN PLACE ONLY WHEN WORKERS ARE PRESENT.
6. CONTRACTOR SHALL REPLACE OR REPAIR ALL DAMAGED STRIPING WITH TEMPORARY STRIPING OR RAISED PAVEMENT MARKERS AT THE END OF EACH WORKING DAY.
7. CONTRACTOR SHALL COVER OR REMOVE ALL CONFLICTING SIGNS.
8. ALL SIGNS, STRIPING, PAVEMENT MARKINGS, CHANNELIZERS, BARRICADES, TEMPORARY RAILING, TEMPORARY CRASH CUSHION AND OTHER TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST CALTRANS STANDARD PLANS AND STANDARD SPECIFICATIONS, AND CALTRANS DRAWINGS AND SPECIFICATIONS.
9. ALL EXISTING SIGNING NOT IN CONFORMANCE WITH THE DETOUR PLANS SHALL BE COVERED FOR THE DURATION OF THE DETOUR. ALL EXISTING STOP SIGNS SHALL BE RELOCATED AS REQUIRED TO BE VISIBLE FROM ALL RELOCATED TRAFFIC LANES.
10. ALL EXISTING FACILITIES, INCLUDING SIGNING, STRIPING, SIGNS, MARKING, AND MARKERS NOT INDICATED TO BE REMOVED SHALL BE RESTORED TO THE ORIGINAL CONDITION AND/OR LOCATION AT THE END OF THE CONSTRUCTION PERIOD.
11. ALL TEMPORARY FACILITIES CONSTRUCTED FOR THE PURPOSES OF EACH DETOUR SHALL BE REMOVED AT THE COMPLETION OF THE CONSTRUCTION PERIOD.
12. CONSTRUCTION TRAFFIC CONTROL SHALL CONFORM TO THE LATEST CALTRANS MANUAL OF TRAFFIC CONTROLS.
13. ALL STRIPING, MARKINGS, SIGNINGS, BARRICADES, AND MARKERS SHALL BE INSTALLED PER THE SSPWC, PER CALTRANS TRAFFIC MANUAL AND PER REQUIREMENTS OF THE COUNTY.
14. ALL ADVANCE WARNING SIGNS FOR DETOURS SHALL BE 48"X48" MINIMUM OR LARGER UNLESS OTHERWISE SPECIFIED.
15. ALL ADVANCE WARNING SIGNS SHALL BE REFLECTORIZED.
16. THE LOCATION OF ALL SIGNS SHOWN ARE ONLY APPROXIMATE AND THE EXACT LOCATION SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
17. THE CONTRACTOR SHALL PROVIDE SAFE AND CONTINUOUS PASSAGE OF PEDESTRIANS AND VEHICULAR TRAFFIC AT ALL TIMES.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER INSTALLATION, CONTINUAL MAINTENANCE AND THE REMOVAL OF TRAFFIC CONTROL DEVICES SPECIFIED IN THE MANUAL OF TRAFFIC CONTROL.
19. CONTRACTOR SHALL NOTIFY THE COUNTY TRAFFIC SIGNAL AND STREET LIGHTING SUPERVISOR FIVE(5) WORKING DAYS PRIOR TO ANY EXCAVATION OR CONSTRUCTION WITHIN 20 FEET OF EXISTING TRAFFIC SIGNAL DETECTOR LOOPS, CONDUITS, INTERCONNECTS, OR FIBER OPTIC CABLE.
20. ANY DAMAGE TO TRAFFIC SIGNAL DETECTOR LOOPS, CONDUITS, INTERCONNECTS, FIBER OPTIC CABLE OR COMMUNICATION CABLE SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTORS AT THEIR OWN EXPENSE. REPAIR SHALL BE A COMPLETE REINSTALLATION OF NEW CONDUCTORS FOR THE ENTIRE LENGTH FROM THE TERMINAL CABINET. IN-LINE SPLICING IS NOT ALLOWED, DELAYS IN REPAIR OF INTERCONNECT OR FIBER OPTIC CABLE WILL REQUIRE THE PAYMENT OF LIQUIDATED DAMAGES MANAGEMENT TO THE COUNTY OF SAN LUIS OBISPO, DEPARTMENT OF ENVIRONMENTAL AND PUBLIC WORKS.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE WET SANDBLASTING, TURBOBLASTING OR HYDROBLASTING OF CONFLICTING STRIPING AND PAVEMENT MARKINGS INCLUDING THE CLEANUP OF ALL RESULTING DEBRIS COVERING OF EXISTING STRIPING WITH BLACK PAINT IS NOT PERMITTED.
22. ANY VEHICULAR OR PEDESTRIAN SIGNS THAT ARE OBSCURED, OR HAVE IMPAIRED OR REDUCED VISIBILITY, SHALL BE REPLACED IMMEDIATELY BY THE CONTRACTOR UPON IDENTIFICATION AND NOTIFICATION BY THE COUNTY TRAFFIC ENGINEER.
23. A 2-FOOT MINIMUM CLEARANCE MUST BE MAINTAINED BETWEEN SURFACE MOUNTED CHANNELIZERS AND THE LANE AT ALL TIMES. A MINIMUM 10-FOOT WIDE LANE IS REQUIRED ADJACENT TO CURBS, AND WHERE THERE ARE VERTICAL OBSTRUCTIONS.
24. THE CONTRACTOR SHALL INSTALL A 4-INCH SOLID WHITE RIGHT EDGE LINE (DETAIL 27B) AND A 4-INCH SOLID YELLOW LEFT EDGE LINE (DETAIL 25) OR MEDIAN ISLANDS (DETAIL 29) LOCATED AT A MINIMUM OF TWO FEET FROM THE EDGE OF A FENCE, CANOPY, OR K-RAIL TO DELINEATE THE EDGE OF TRAVELLED ROADWAY. EDGE LINES MUST ALLOW FOR A MINIMUM 10-FOOT LANE BETWEEN EDGE LINE AND LANE OR CENTER LINE.
25. CONTRACTOR SHALL PROVIDE FLAGGERS FOR SINGLE LANE TRAFFIC CONTROL AND IN OTHER CASES IF NECESSARY FOR THE SAFE PASSAGE OF TRAFFIC. THE FLAGGER SHALL USE ONLY THE APPROVED OCTAGONAL STOP/SLOW PADDLE, SHALL WEAR AN ORANGE SAFETY VEST (REFLECTORIZED FOR NIGHT WORK) AND HARD HAT, AS REQUIRED BY THE CALTRANS MANUAL, AND MUST BE PROPERLY TRAINED BY THE CONTRACTOR IN PERFORMING THE WORK SAFELY. APPROPRIATE ADVANCE SIGNS MUST ALSO BE INSTALLED, PER THE CALTRANS MANUAL AND "WATCH" MANUAL.
26. ALL TRAFFIC SIGNAL CONTROLLER, SIGNAL STANDARDS, AND OTHER ASSOCIATED SIGNAL EQUIPMENT AND PULL BOXES MUST BE ACCESSIBLE AT ALL TIMES TO THE COUNTY'S TRAFFIC SIGNAL REPAIR (TSR) PERSONNEL. ALL FENCES MUST BE INSTALLED SUCH AS TO PERMIT ACCESS BY TSR PERSONNEL AT ALL TIMES.
27. THERE SHALL BE NO STORAGE OF CONSTRUCTION MATERIALS OR EQUIPMENT OUTSIDE THE DESIGNATED WORK AREA AS INDICATED IN THE WORK SITE TRAFFIC PLANS. STORAGE OF CONSTRUCTION MATERIALS OR EQUIPMENT WITHIN THE DESIGNATED AREA SHALL BE DONE IN A MANNER NOT TO CREATE VISIBILITY OBSTRUCTIONS TO THE MOTORING PUBLIC AS DETERMINED BY THE ENGINEER.
28. WHEN WORK IS NOT IN PROGRESS, CONTRACTOR SHALL PROVIDE TEMPORARY STRIPING IN AREAS WHERE EXISTING STRIPING HAS BEEN REMOVED.
29. THE NAME AND PHONE NUMBER (24 HOUR AVAILABILITY) OF THE CONTRACTOR'S SAFETY COORDINATOR AND TRAFFIC CONTROL DEVICE MAINTENANCE MONITOR WILL BE PROVIDED TO THE AUTHORITY AND THE COUNTY'S TRAFFIC ENGINEER AND ANY CHANGE IN ASSIGNED PERSONNEL OR PHONE NUMBER WILL BE REPORTED IMMEDIATELY TO AUTHORITY AND THE COUNTY'S TRAFFIC ENGINEER.
30. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED FOLLOWING COMPLETION OF EACH CONSTRUCTION PHASE. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE RESTORATION OF THE STRIPING, PAVEMENT MARKINGS, AND TRAFFIC CONTROL DEVICES TO THE PERMANENT CONDITION USING CALTRANS APPROVED MATERIALS. THE COUNTY ENGINEER SHALL APPROVE THE CONTRACTORS STRIPING MARKOUT BEFORE THE FINAL INSTALLATION OF STRIPING BY THE CONTRACTOR. NOTIFY THE TRAFFIC ENGINEER TEN (10) WORKING DAYS PRIOR TO FINAL STRIPING INSTALLATION.
31. ALL DRIVEWAYS AND SIDE STREETS SHALL BE KEPT OPEN AT ALL TIMES EXCEPT WHEN CONSTRUCTION TAKES PLACE DIRECTLY IN FRONT OF DRIVEWAY OR SIDE STREET. ALL OPEN EXCAVATIONS ON PUBLIC STREETS SHALL BE BACK-FILLED OR STEEL-PLATED (TRAFFIC RATED, ANTI-SKID) FOR TRAFFIC OUTSIDE THE WORKING HOURS. TRAFFFIC SHALL BE RESTORED TO NORMAL CONDITIONS OUTSIDE THE WORKING HOURS.
32. NOTIFY LOCAL FIRE DEPARTIMENT, POLICE DEPARTMENT, AMBULANCE SERVICES AND TRASH SERVICES 48 HOURS IN ADVANCE OF CONSTRUCTION IN THE VARIOUS STAGE AREAS.
33. CONTRACTOR SHALL INSTALL C40A SIGNS (TRAFFIC FINES DOUBLED IN CONSTRUCTION AREA) ONE FOR EACH DIRECTION, AT THE BEGINNING OF EACH WORK ZONE.
34. ALSO SEE SPECIFICATIONS SECTION 01570 – TRAFFIC CONTROL FOR ADDITIONAL REQUIREMENTS.

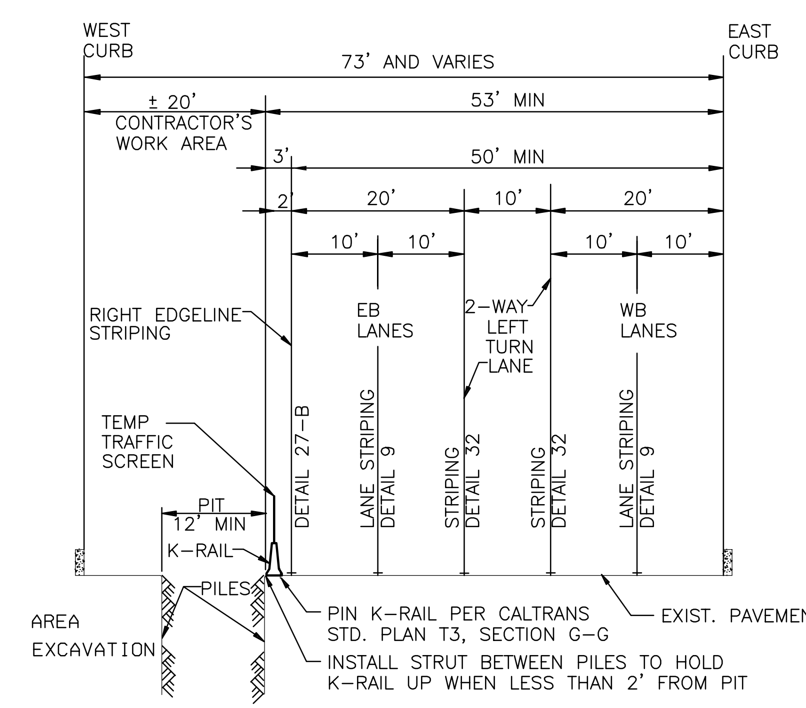


TYPICAL INSTALLATION OF CRASH CUSHIONS AND K-RAILS – TAPER 10:1 OR FLATTER

NO SCALE

LEGEND:

- CONSTRUCTION AREA
- FIRST ORDER OF WORK
- DIRT STOCKPILE
- TEMPORARY RAILING (TYPE K) WITH TRAFFIC SCREEN
- TEMPORARY CRASH CUSHION MODULES (ARRAY AS NOTED)
- ONE POST SIGN LOCATION
- SURFACE MOUNTED CHANNELIZER
- FLASHING ARROW SIGN
- BARRICADE
- P — TYPE P MARKER
- NO. (diamond) — CONSTRUCTION SIGN NUMBER
- NO. (circle) — TEMPORARY PAVEMENT DELINEATION DETAIL
- DIRECTION OF TRAVEL



TYPICAL CONSTRUCTION SECTION

NO SCALE

REGISTERED PROFESSIONAL ENGINEER BENJAMIN C. TAI No. C62032 Exp. 9/30/05 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED BCT
DRAWN BCT
CHECKED JAB

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVEN J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

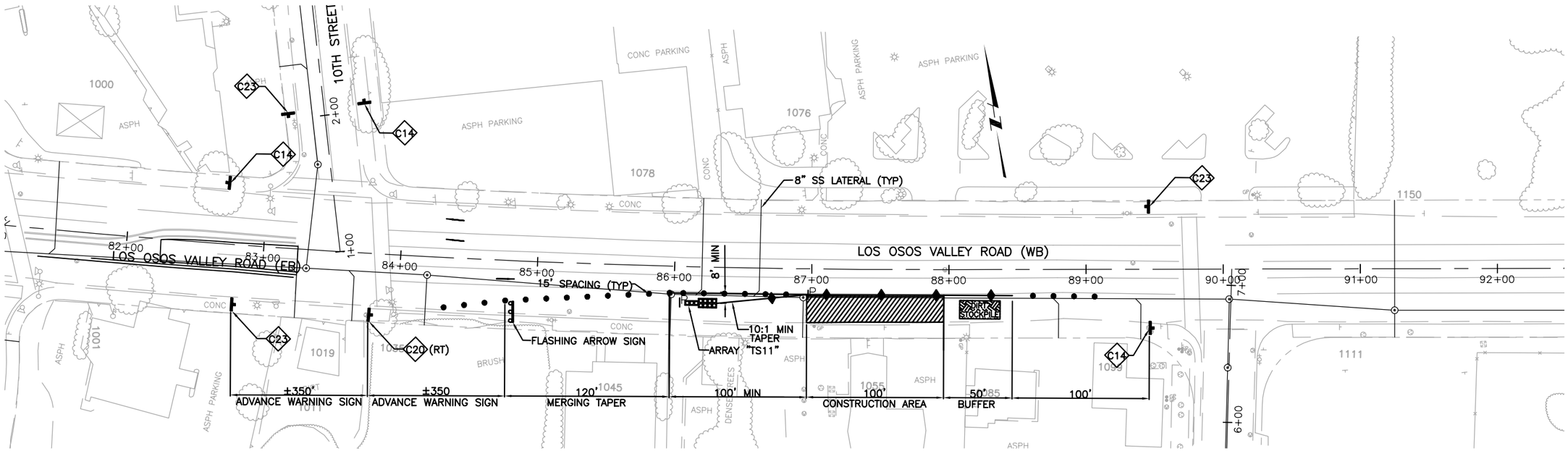
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

TRAFFIC CONTROL GENERAL NOTES, LEGEND AND ABBREVIATIONS

SHEET AD-TC-01

XREF: los_osos_tc_bdr traffic
FILE: N:\Projects\los_osos\Collect_Sys\Traffic\AD-TC-01.dwg USER: bctai Feb 07, 2004 4:45pm Job No: 1481166



LOS OSOS VALLEY ROAD –TYPICAL MID–BLOCK CONSTRUCTION

NOTES:

1. THIS DRAWING SHOWS ONLY ONE STAGE OF TRAFFIC CONTROL. THE CONTRACTOR SHALL INCLUDE IT'S STAGING PLAN IN IT'S OWN TRAFFIC CONTROL PLAN SUBMITTAL. SUBMIT TO THE ENGINEER FOR REVIEW.
2. ALSO SEE EROSION CONTROL PLANS FOR THOSE REQUIREMENTS.

REGISTERED PROFESSIONAL ENGINEER BENJAMIN C. TAI No. C62032 Exp. 9/30/05 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED BCT
DRAWN BCT
CHECKED JAB

SUBMITTED BY
JOHN A. BERGEN — C31069 — 2-16-2004 (LICENSE NO. / DATE)
STEVEN J. HYLAND — C23892 — 2-16-2004 (LICENSE NO. / DATE)

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

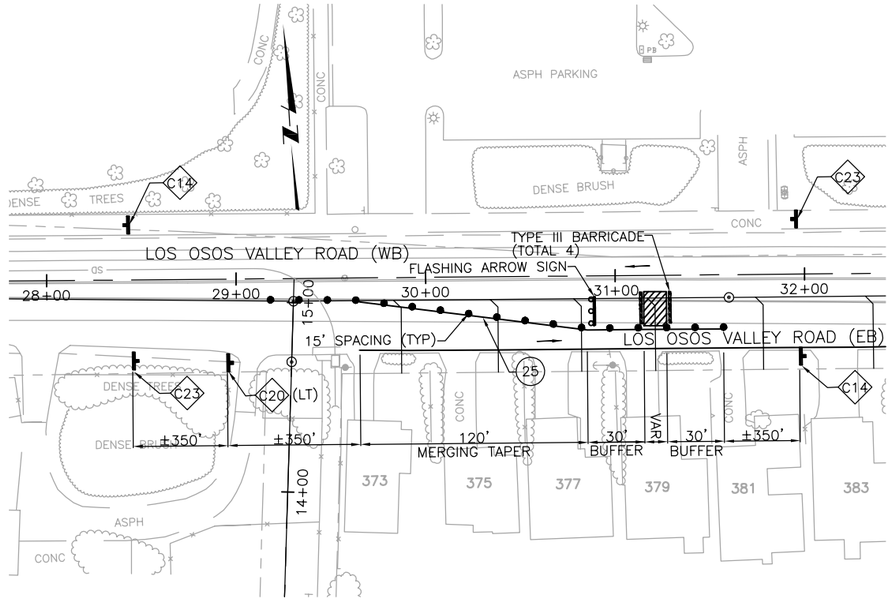
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

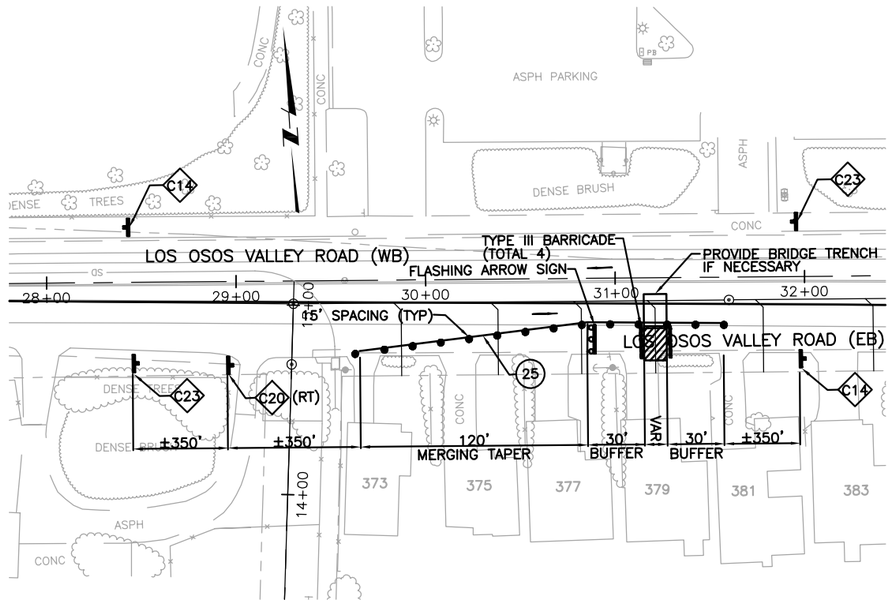
LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL
LOS OSOS VALLEY ROAD 1
TYPICAL MID–BLOCK CONSTRUCTION

SHEET AD–TC–02

XREF: N-FEAT-CNBL N-FEAT-PROF X-FEAT-ADDR X-FEAT-APN X-FEAT-GOED X-FEAT-ROW los_osos_tc_bdr N-UTIL-SS ML X-FEAT-AERL X-UTIL-STRM traffic
FILE: N:\Projects\los_osos\Collect_Sys\Traffic\AD-TC-02.dwg USER: bctai Feb 07, 2004 4:53pm Job No: 1481166



LOS OSOS VALLEY ROAD – TYPICAL SS LATERAL CONSTRUCTION (STAGE 1)



LOS OSOS VALLEY ROAD – TYPICAL SS LATERAL CONSTRUCTION (STAGE 2)

REGISTERED PROFESSIONAL ENGINEER BENJAMIN C. TAN No. C62032 Exp. 9/30/05 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED BCT
DRAWN BCT
CHECKED JAB

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

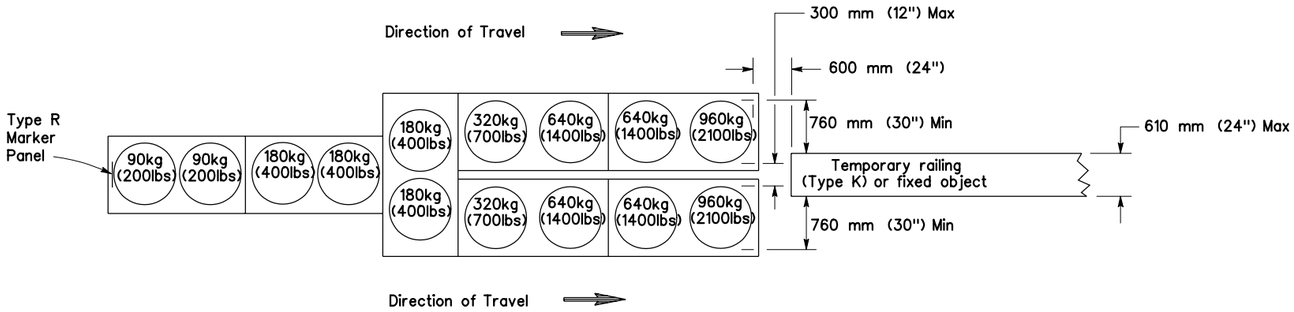
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL
LOS OSOS VALLEY ROAD 2
TYPICAL SS LATERAL CONSTRUCTION

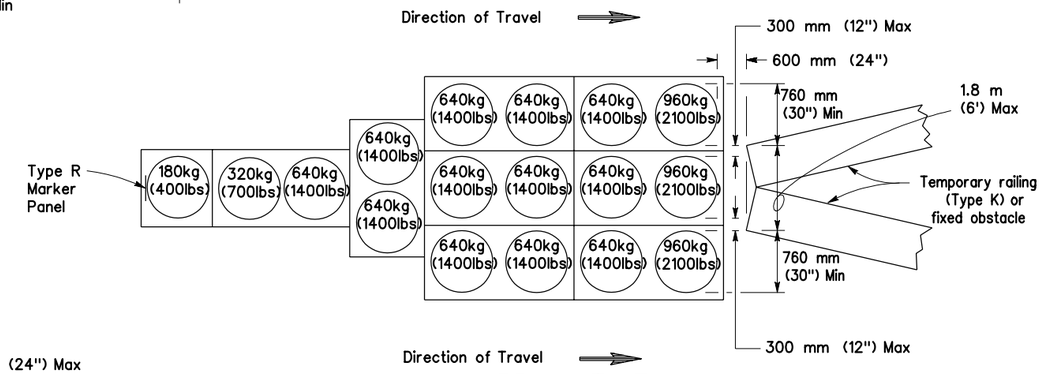
SHEET AD-TC-03

XREF: N-FEAT-CNBL N-FEAT-PROF X-FEAT-ADDR X-FEAT-APN X-FEAT-GOED X-FEAT-ROW los_osos_tc_bdr N-UTIL-SS ML X-FEAT-AERL X-UTIL-STRM traffic
FILE: N:\Projects\los_osos\Collect_Sys\Traffic\AD-TC-03.dwg USER: bctai Feb 07, 2004 5:10pm Job No: 1481166



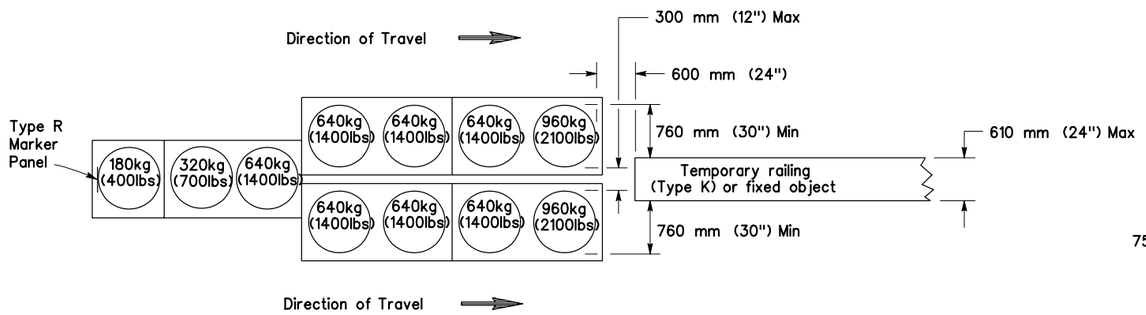
ARRAY 'TU14'

Approach speed 100 km/h (62 mph) or less



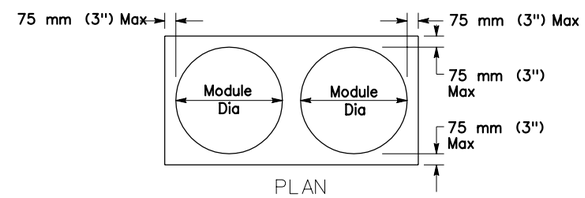
ARRAY 'TU17'

Approach speed 70 km/h (43 mph) or less

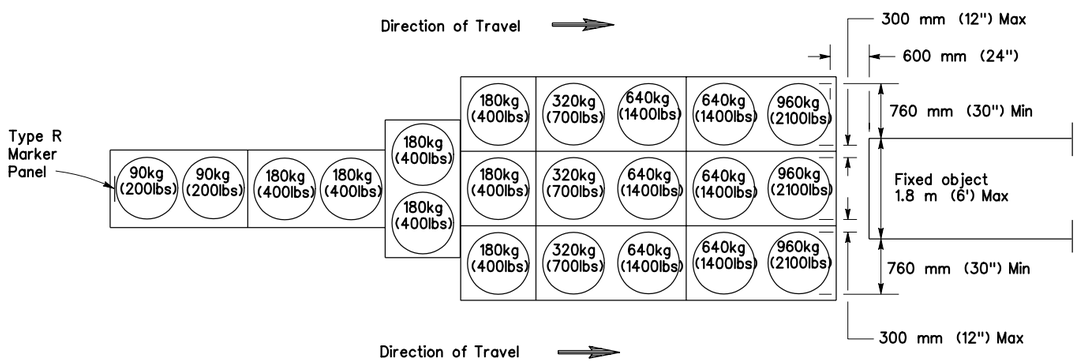


ARRAY 'TU11'

Approach speed 70 km/h (43 mph) or less

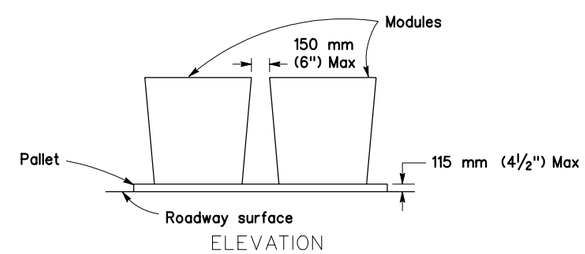


PLAN



ARRAY 'TU21'

Approach speed 100 km/h (62 mph) or less



ELEVATION

CRASH CUSHION PALLET DETAIL

NOTES:

1. (XXX) Indicates sand filled module location and mass of sand in kilograms (weight of sand in pounds) for each module. Module spacing is based on the greater diameter of the module.
2. All sand masses are (weights) nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the top of Type R marker panel 25 mm (1") below the module lid.
5. Refer to Standard Plan A73B for marker details.

These "Standard Plans for Construction of Local Streets and Roads" contain units in two systems of measurement: International System of Units (SI or "metric") and United States Standard Measures shown in the parentheses ( ). The measurements expressed in the two systems are not necessarily equal or interchangeable. See the "Foreword" at the beginning of this publication.

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

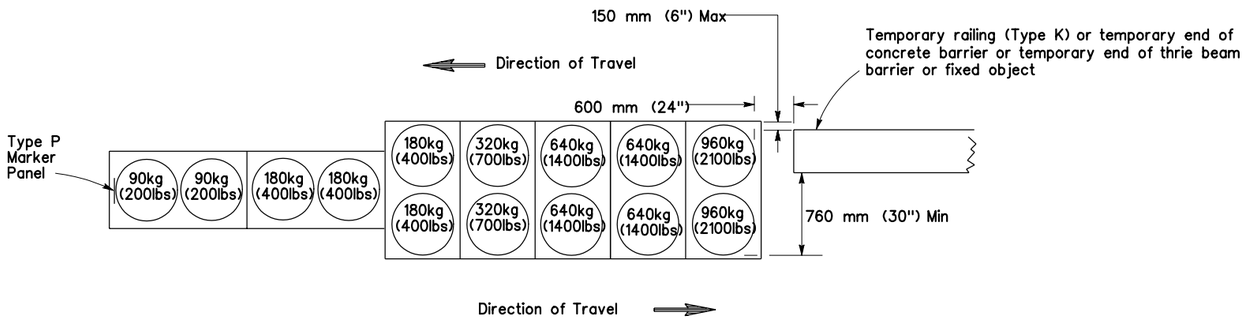
SUBCONSULTANT'S LOGO

LOS OSOS WASTEWATER PROJECT

TRAFFIC CONTROL PLAN
TEMPORARY CRASH CUSHION, SAND FILLED

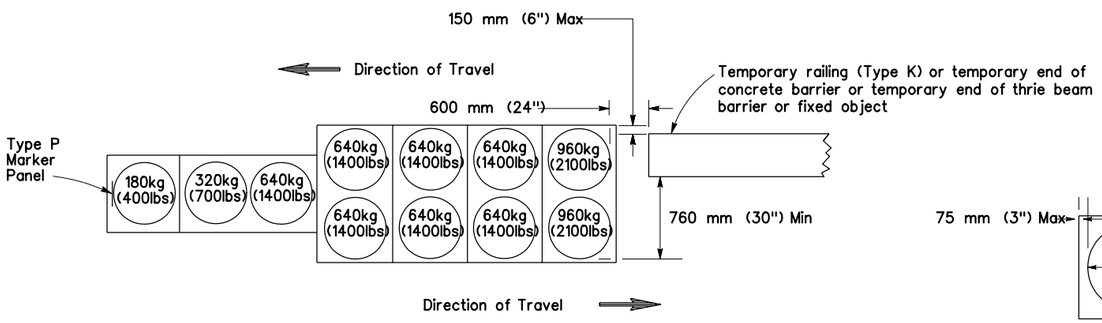
SHEET AD-TC-T01A

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\Traffic\ad-tc-t01a.dgn Plot Date: 07-FEB-2004 16:37



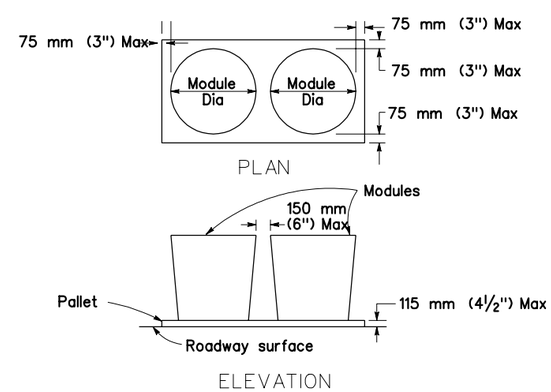
ARRAY 'TB14'

Approach speed 100 km/h (62 mph) or less



ARRAY 'TB11'

Approach speed 70 km/h (43 mph) or less



CRASH CUSHION PALLET DETAIL

NOTES:

1. (XXX) Indicates sand filled module location and mass of sand in kilograms (weight of sand in pounds) for each module. Module spacing is based on the greater diameter of the module.
2. All sand masses (weight) are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the Type P marker panel so that the bottom of the panel rests upon the pallet.
5. Refer to Standard Plan A73B for marker details.

These "Standard Plans for Construction of Local Streets and Roads" contain units in two systems of measurement: International System of Units (SI or "metric") and United States Standard Measures shown in the parentheses ( ). The measurements expressed in the two systems are not necessarily equal or interchangeable. See the "Foreword" at the beginning of this publication.

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\Traffic\ad-tc-t01b.dgn Plot Date: 07-FEB-2004 16:37

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

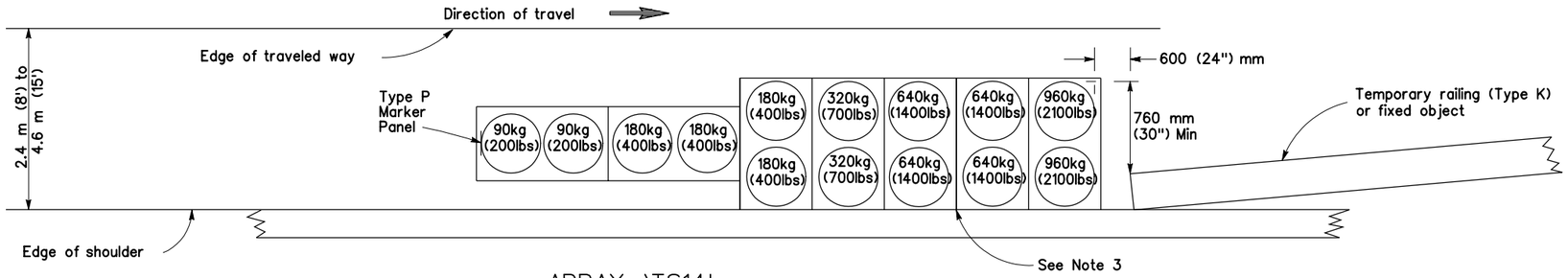
MWH Walnut Creek, California

SUBCONSULTANT'S LOGO

LOS OSOS WASTEWATER PROJECT

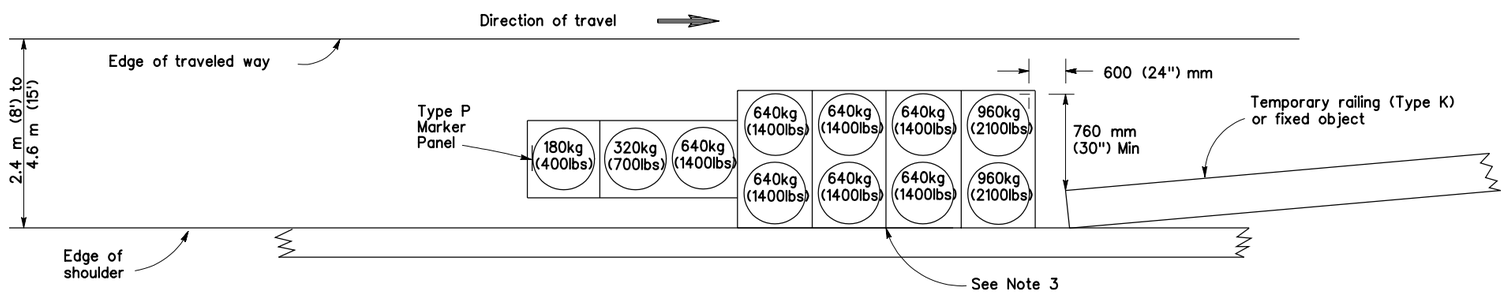
TRAFFIC CONTROL PLAN
TEMPORARY CRASH CUSHION, SAND FILLED (BIDIRECTIONAL)

SHEET AD-TC-T01B



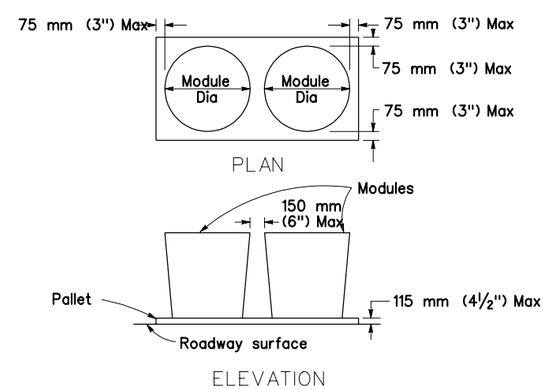
ARRAY 'TS14'

Approach speed 100 km/h (62 mph) or less
See Note 9



ARRAY 'TS11'

Approach speed 70 km/h (43 mph) or less
See Note 9



CRASH CUSHION PALLET DETAIL

NOTES:

1. (XXX) Indicates sand filled module location and mass of sand in kilograms (weight of sand in pounds) for each module. Module spacing is based on the greater diameter of the module.
2. All sand masses (weights) are nominal.
3. The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
4. If the fixed object or approach end of the temporary railing is less than 4.60 m (15') from the edge of traveled way, a temporary crash cushion is required.
5. Temporary crash cushion arrays shall not encroach on the traveled way.
6. Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
7. Place the Type P marker panel so that the bottom of the panel rest upon the pallet and faces traffic.
8. *Refer to Standard Plan A73B for marker details.*
9. *For shoulder widths less than 2.4 m (8'), appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.*
10. *Approach speeds indicated conform to NCHRP 350 Report criteria.*

These "Standard Plans for Construction of Local Streets and Roads" contain units in two systems of measurement: International System of Units (SI or "metric") and United States Standard Measures shown in the parentheses ( ). The measurements expressed in the two systems are not necessarily equal or interchangeable. See the "Foreword" at the beginning of this publication.

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\Traffic\ad-tc-t02.dgn Plot Date: 07-FEB-2004 16:37

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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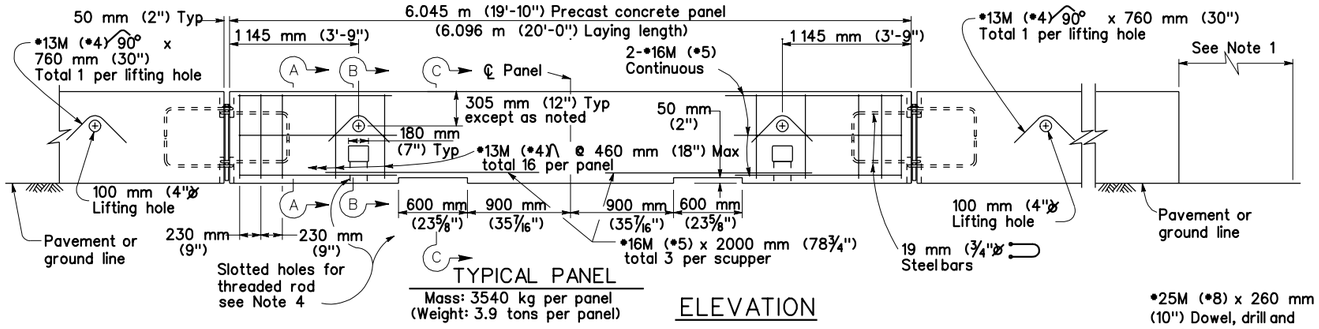
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

SUBCONSULTANT'S LOGO

LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL PLAN
TEMPORARY CRASH CUSHION
SAND FILLED (SHOULDER INSTALLATIONS)

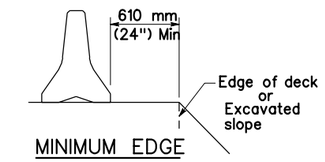
SHEET AD-TC-T02



TYPICAL PANEL

Mass: 3540 kg per panel
(Weight: 3.9 tons per panel)

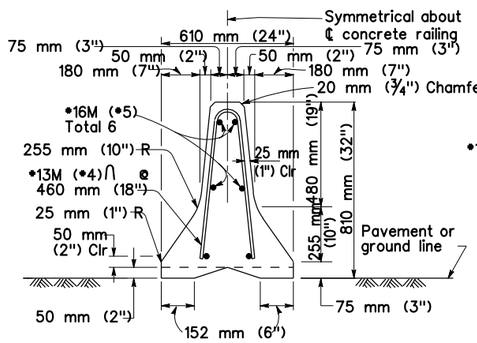
ELEVATION



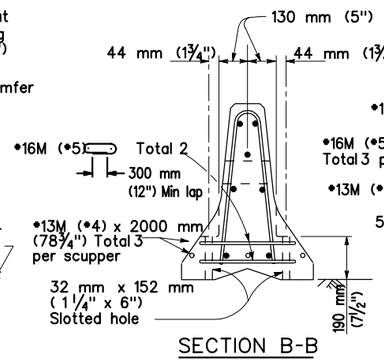
MINIMUM EDGE DISTANCE

NOTES:

1. For end treatment, layout and crash cushions, where needed, see Project Plans or Special Provisions.
2. All 90 mm (3½") gaps at removable panels are to be backed at the base with •25M (•8") x 260 mm (10") dowel or 25.4 mm (1") ø pin each side of joint. See Section G-G.
3. Where Temporary Railing (Type K) is placed on curves and radii that are too severe to connect panels with bolted joints, the railing is to be backed continuously with earth fill. See Section F-F.
4. Attach units to deck slabs when required by Bridge Plans.

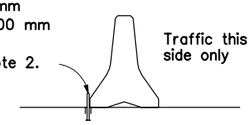


SECTION A-A



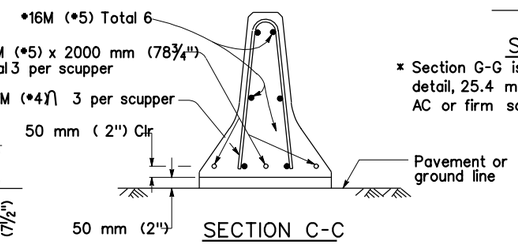
SECTION B-B

•25M (•8) x 260 mm (10") Dowel, drill and bond in hole 130 mm (5") deep within 300 mm (12") of removable panel joint. See Note 2.

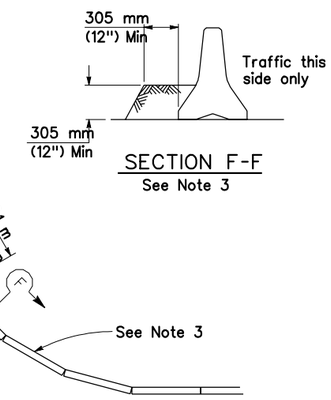


SECTION G-G *

* Section G-G is for PCC pavement. Alternative detail, 25.4 mm (1"ø pins 610 mm (24") long driven in AC or firm soil permitted, minimum 460 mm (18") deep.

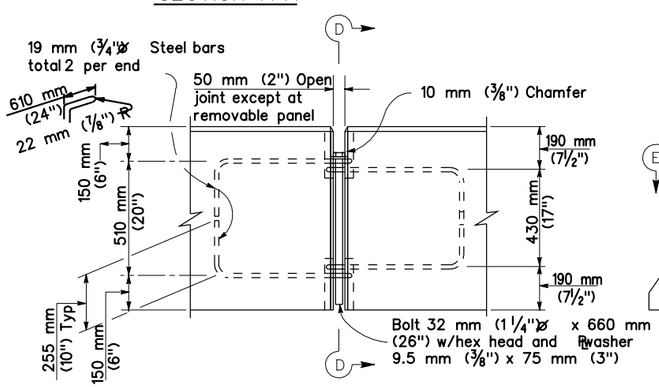


SECTION C-C

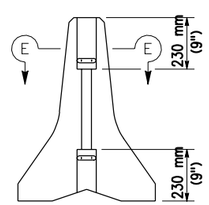


SECTION F-F

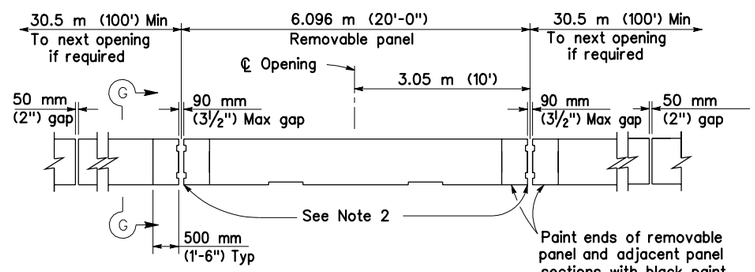
See Note 3



ELEVATION

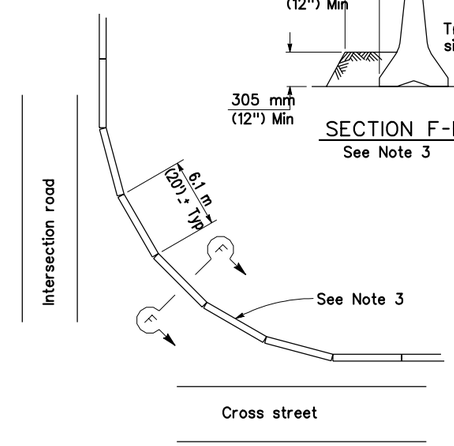


VIEW D-D

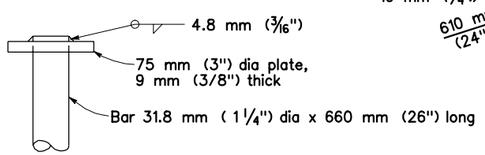


ELEVATION

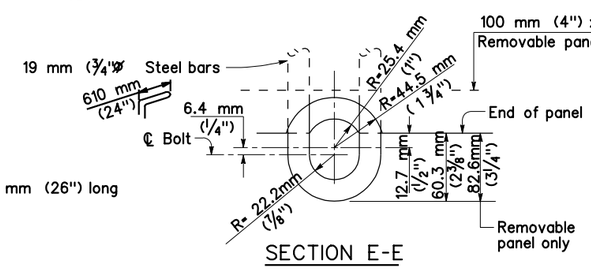
TYPICAL OPENING DETAIL



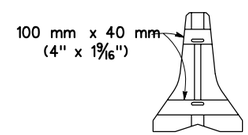
CURVED LAYOUT



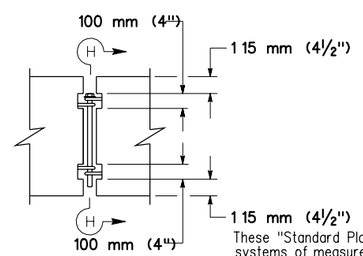
ALTERNATIVE HEAD DETAIL



SECTION E-E



SECTION H-H



ELEVATION

BOLT CONNECTION DETAIL

REMOVABLE PANEL GROOVE DETAILS

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REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

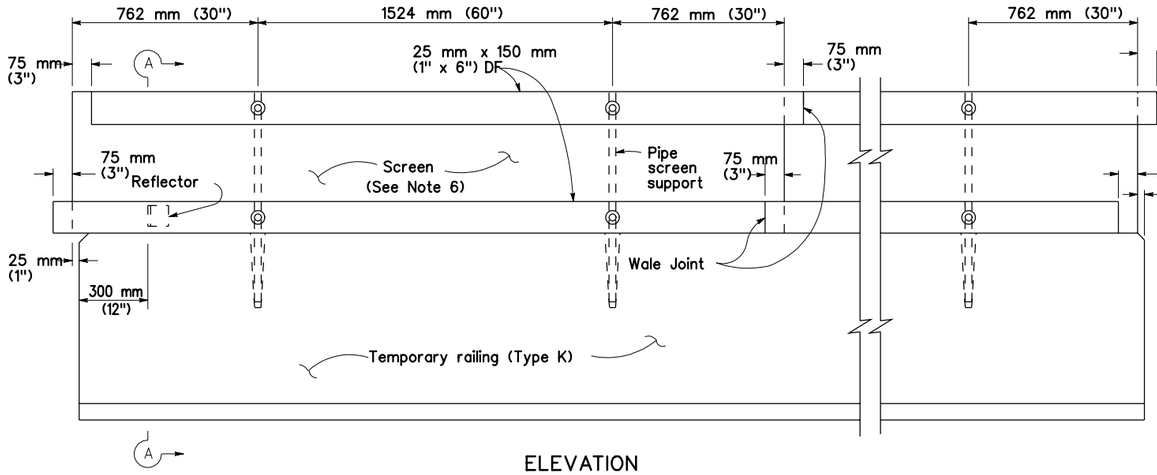
MWH Walnut Creek, California

SUBCONSULTANT'S LOGO

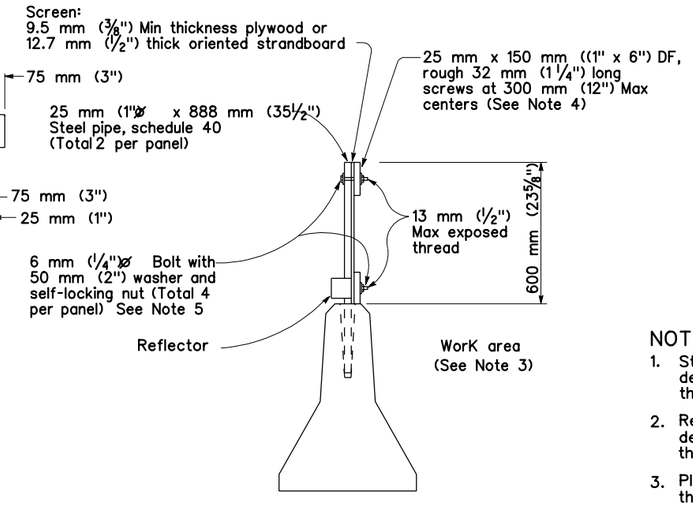
LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL PLAN
TEMPORARY RAILING
(TYPE K)

SHEET AD-TC-T03

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\Traffic\ad-tc-t03.dgn Plot Date: 07-FEB-2004 16:38



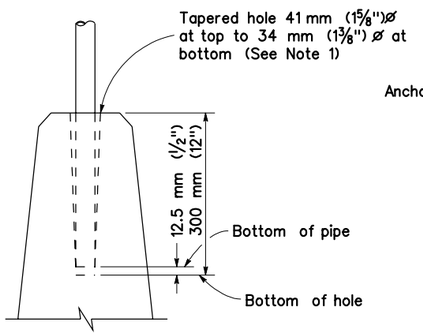
ELEVATION



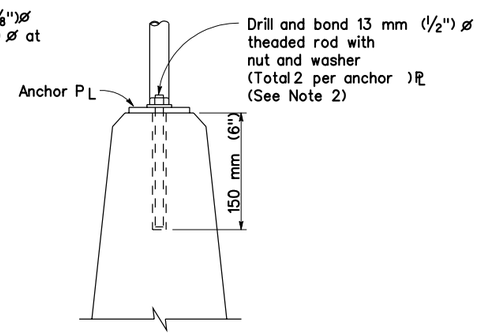
SECTION A-A

NOTE:

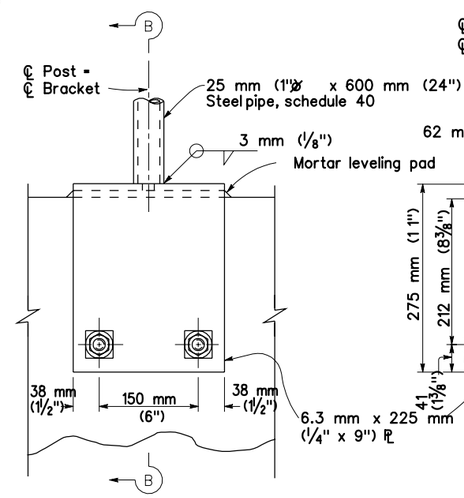
1. Straight holes 38 mm (1 1/2") ø of the depth shown may be used in lieu of the tapered holes.
2. Resin capsule-type anchorage devices may be substituted for threaded rods.
3. Place screen on work area side of the temporary railing where traffic will only be on one side of the temporary railing.
4. Clinched 8d box nails may be substituted for screws. The nails shall be clinched on the work area side of the screen where traffic will only be on one side of the temporary railing.
5. U-bolts may be substituted for 6 mm (1/4"ø bolts.
6. Openings in the screen of 1.0 m (3') length shall be provided at 60 m (200') intervals.



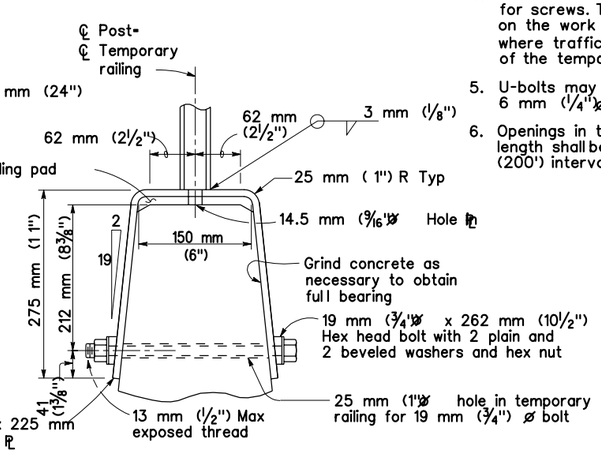
SCREEN ANCHORAGE DETAIL



SCREEN ANCHORAGE DETAIL
ALTERNATIVE 'A'

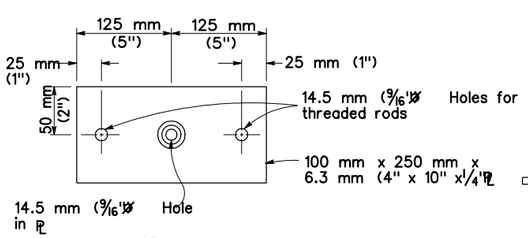


ELEVATION

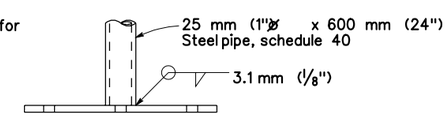


SECTION B-B

SCREEN ANCHORAGE DETAIL
ALTERNATIVE 'B'



PLAN



ELEVATION

ANCHOR PLATE DETAIL
ALTERNATIVE 'A'

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Plot Date: 07-FEB-2004 16:38
File: N:\Projects\los_osos\Collect_Sys\Traffic\ad-tc-t04.dgn
Job No: 1481166

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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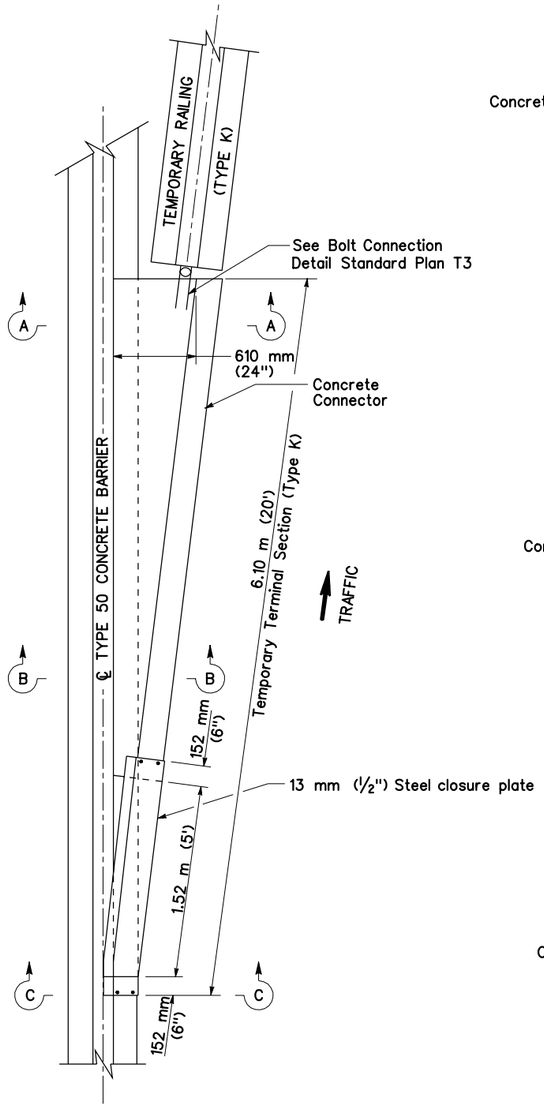
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

SUBCONSULTANT'S LOGO

LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL PLAN
TEMPORARY TRAFFIC SCREEN

SHEET AD-TC-T04



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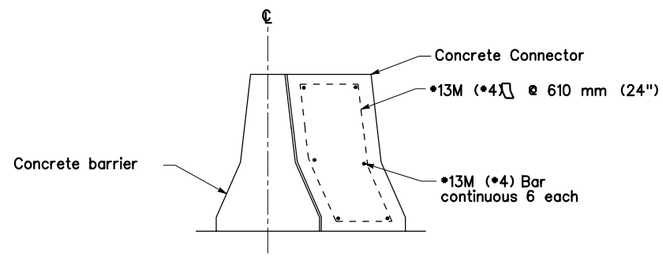
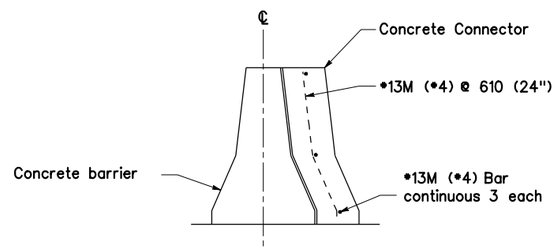
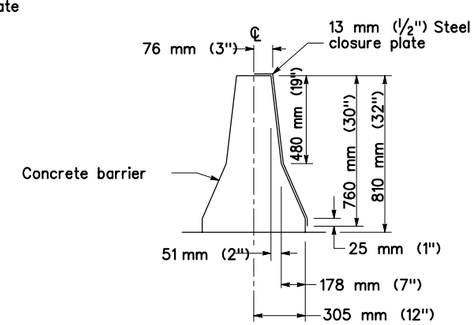


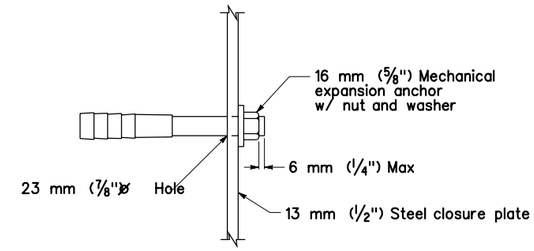
SECTION A-A



SECTION B-B



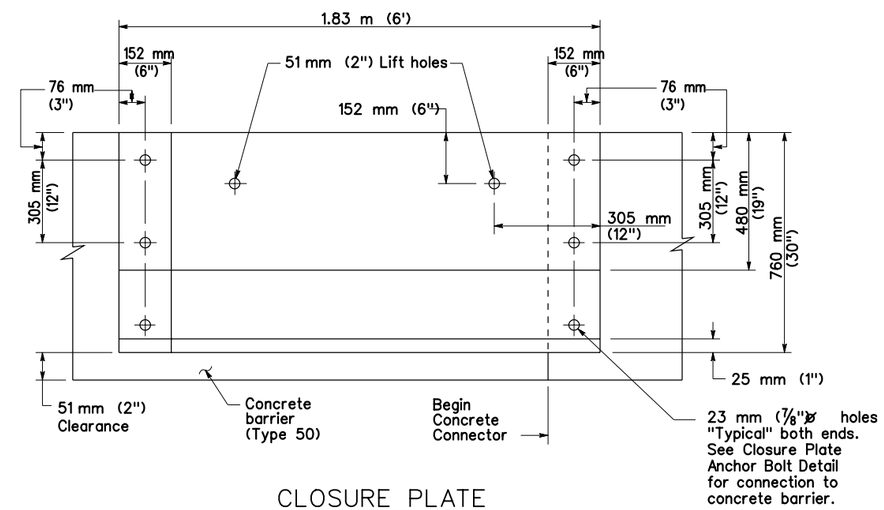
SECTION C-C



CLOSURE PLATE
ANCHOR BOLT DETAIL

NOTE:

1. If lifting holes are used with the concrete connector, they shall conform to the lifting hole details shown on Standard Plan T3.
2. Paint closure plate white.
3. When the temporary terminal section (Type K) is no longer required and is to be removed, the anchor bolts connecting the closure plate and the barrier shall be removed or cut flush with the face of the concrete barrier. If the anchor bolts are removed, the resulting holes shall be filled with grout.



CLOSURE PLATE
(SIDE VIEW)

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Plot Date: 07-FEB-2004 16:38
File: N:\Projects\los_osos\Collect_Sys\Traffic\ad-tc-t05.dgn
Job No: 1481166

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

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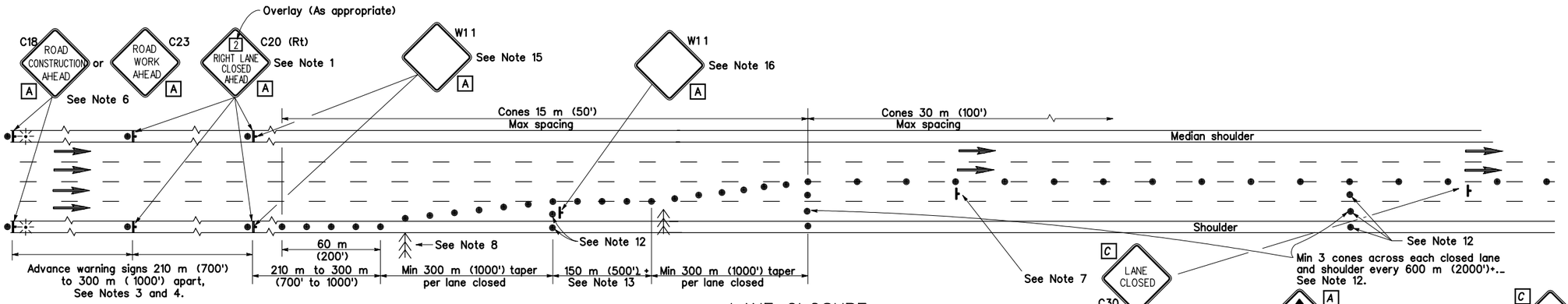
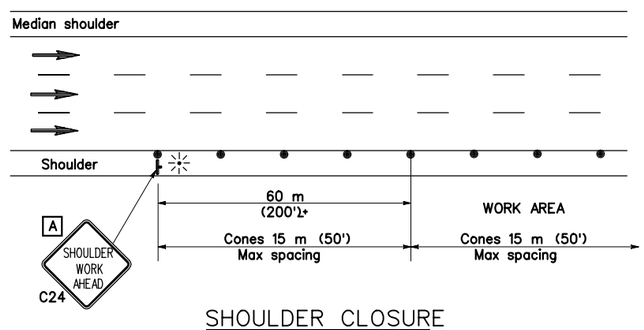
LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL PLAN
TEMPORARY TERMINAL SECTION
(TYPE K)

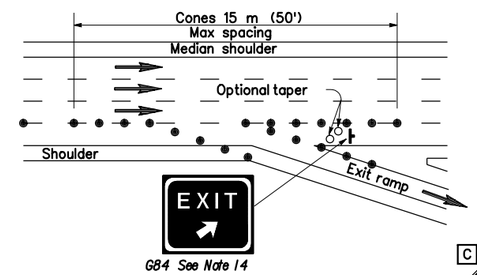
SHEET AD-TC-T05



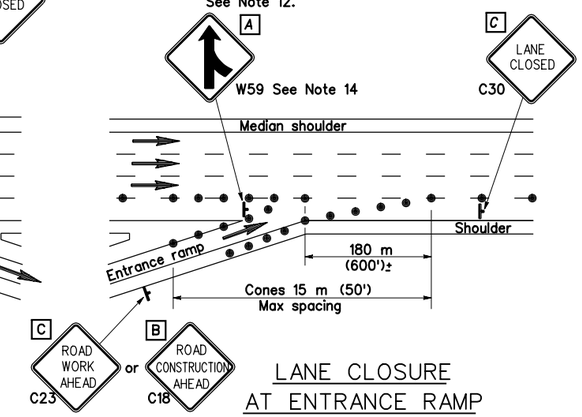
LANE CLOSURE



SHOULDER CLOSURE



LANE CLOSURE AT EXIT RAMP



LANE CLOSURE AT ENTRANCE RAMP

NOTES

1. Median lane closures shall conform to the details for outside lane closures except that C20 (Lt) signs shall be used.

2. Not less than one person shall be assigned to full time maintenance of traffic control devices on all night lane closures or day-time closures exceeding 1.6 km (1 mile) in length, including taper.

3. Duplicate sign installations are not required:
   a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
   b) In the median, if the width of the median shoulder is less than 2.4 m (8') and the outside lanes are to be closed.

4. All advance warning sign installations shall be equipped with flags for daytime closures. Flashing beacons shall be placed at the locations indicated during night lane closure.

5. A C13 "END CONSTRUCTION" or C14 "END ROAD WORK" signs, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.

6. If the C18 (or C23) sign would follow within 600 m (2000') of a stationary C18, C23 or C11 "STATE HIGHWAY CONSTRUCTION NEXT_____ MILES", use a C20 sign for the first advance warning sign.

7. Place a C30 sign every 600 m (2000') throughout length of lane closure.

8. One flashing arrow sign for each lane closed, The first flashing arrow sign shall be Type 1. All others may be either Type 1 or Type 11.

9. A minimum 450 m (1500') of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.

10. All cones used for night lane closures shall be fitted with reflective sleeves as specified in the specifications.

11. Portable delineators, place at one-half the spacing indicated for traffic cones may be used in lieu of cones for daytime closures only.

12. Unless otherwise specified in the Special Provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 600 m (2000') as shown on the "LANE CLOSURE" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.

13. Unless otherwise specified in the Special Provisions, the 150 m (500') section of the lane closure shown along lanelines shall be used between the 300 m (1000') lane closure tapers when two or more adjacent traffic lanes are to be closed

14. Unless otherwise specified in the Special Provisions, the G84 and W59 signs shall be used as shown.

15. Where specified in the Special Provisions, a W11 "LANE REDUCTION SYMBOL" sign is to be used in place of the C20 "RIGHT LANE CLOSED AHEAD" sign.

16. The W11 "LANE REDUCTION SYMBOL" sign shown at this location is to be used where the W11 sign is used as advance warning as described in Note 15.

SIGN PANEL SIZE (Min)

A	1219 mm x 1219 mm (48" x 48")
B	914 mm x 914 mm (36" x 36")
C	762 mm x 762 mm (30" x 30")

LEGEND

- Traffic Cone
- Traffic Cone (optional taper)
- Portable Sign
- Flashing Arrow Sign
- Direction of Travel
- Portable Flashing Beacon

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REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

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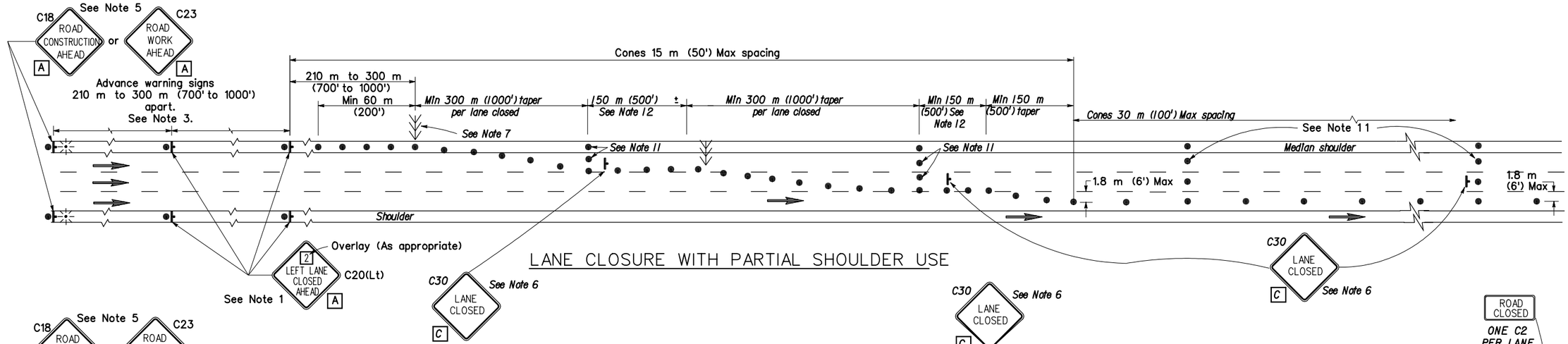
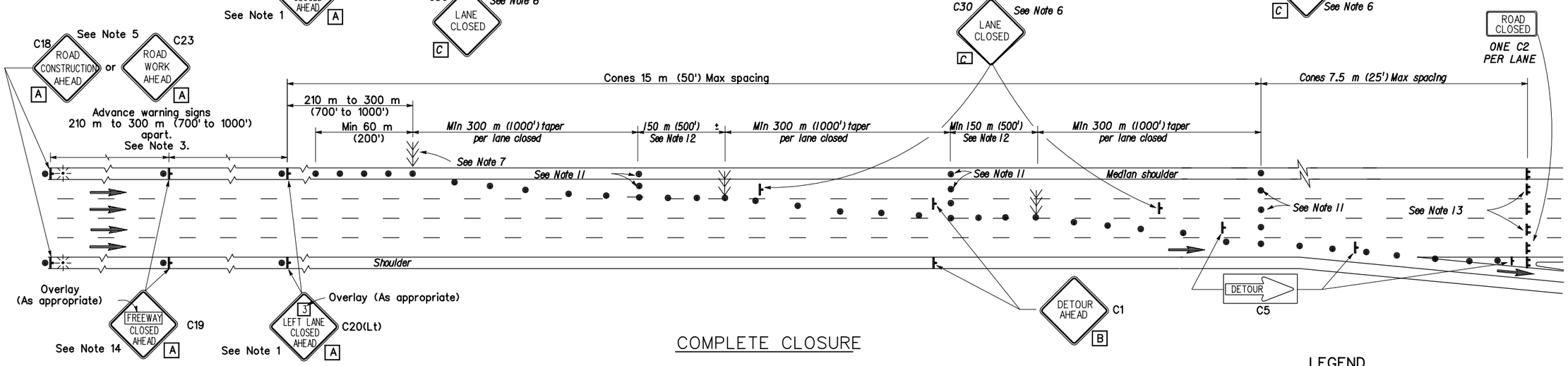
LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL PLAN
LANE CLOSURE ON
FREEWAYS AND EXPRESSWAYS

SHEET AD-TC-T10

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\Traffic\ad-tc-t10.dgn Plot Date: 07-FEB-2004 16:38



LANE CLOSURE WITH PARTIAL SHOULDER USE



COMPLETE CLOSURE

NOTES:

1. Lane closures on the right side using partial median shoulder as a traffic lane shall conform to the details for inside lane closure except that C20(Rt) signs shall be used.
2. Not less than one person shall be assigned to full time maintenance of traffic control devices on all compete closures, on all night lane closures and daytime closures exceeding 1.6 km (one mile) in length, including taper.
3. All advance warning sign installations shall be equipped with flags for daytime closure. Flashing beacons shall be placed at the locations indicated during night lane closures.
4. A C13 "END CONSTRUCTION" or C14 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.
5. If the C18 (or C23) sign would follow within 600 m (2000') of a stationary C18, C23 or C 1 1 "STATE HIGHWAY CONSTRUCTION NEXT___ MILES" use a C20 sign for the first advance warning sign.
6. Place a C30 sign every 600 m (2000') throughout length of lane closure.
7. One flashing arrow sign for each lane closed. The first flashing arrow sign shall be Type 1. All others may be either Type 1 or Type 1 1.
8. A minimum 450 m (1500') of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
9. All cones used for night lane closures shall be fitted with reflective sleeves as specified in the specifications.
10. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used in lieu of cones for daytime closures only.
11. Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 600 m (2000') as shown on the "Lane Closure With Partial Shoulder Use" detail. Two Type 11 barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
12. Unless otherwise specified in the special provisions, the 150 m (500') section of the lane closure shown along lanelines shall be used between the 300 m (1000') lane closure tapers when two or more adjacent traffic lanes are to be closed.
13. A minimum of Two Type 1 1 barricades shall be placed across each closed lane and shoulder at the location shown and every 600 m (2000') within the complete closure area. Within the complete closure area, the transverse alignment of the barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
14. Where specified in the special provisions, a C1 "DETOUR AHEAD" sign is to be used in place of the C19 "FREEWAY CLOSED AHEAD" sign.

LEGEND

- Traffic Cone
- Portable Sign
- Flashing Arrow Sign
- Direction of Travel
- Portable Flashing Beacon

SIGN PANEL SIZE (Min)

A	1219 mm x 1219 mm (48" x 48")
B	914 mm x 914 mm (36" x 36")
C	762 mm x 762 mm (30" x 30")

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REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

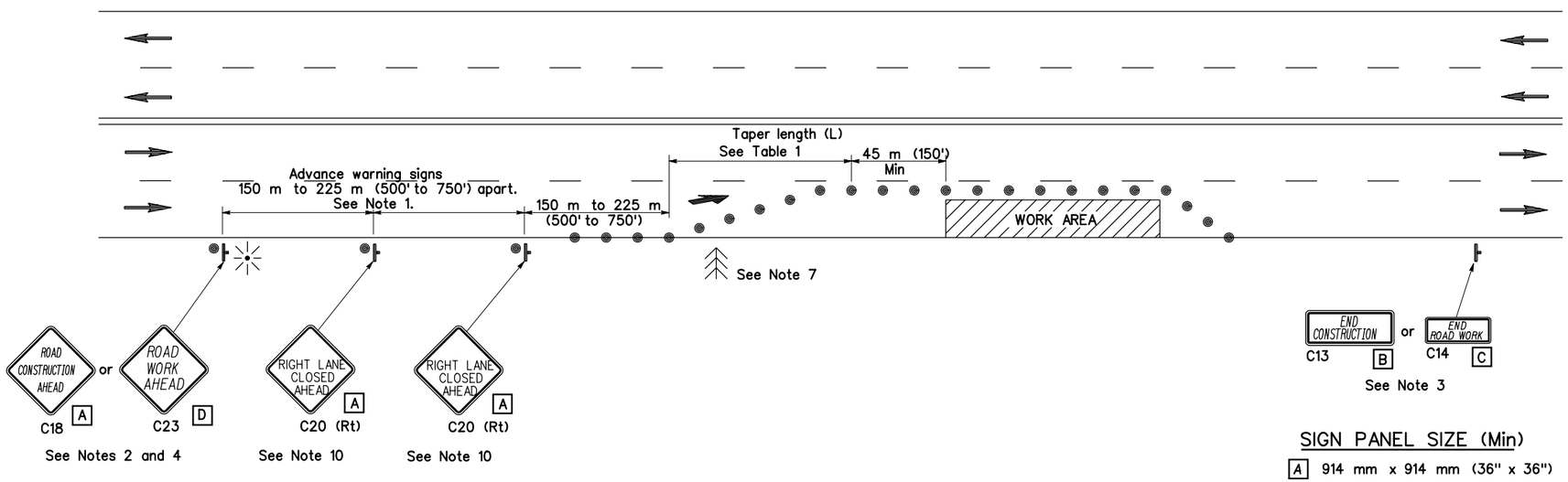
SUBCONSULTANT'S LOGO

LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL PLAN
LANE AND COMPLETE CLOSURES ON FREEWAYS AND EXPRESSWAYS

SHEET AD-TC-T10A

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\Traffic\ad-tc-t10a.dgn Plot Date: 07-FEB-2004 16:38

TYPICAL LANE CLOSURE



SIGN PANEL SIZE (Min)

A	914 mm x 914 mm (36" x 36")
B	1219 mm x 457 mm (48" x 18")
C	914 mm x 457 mm (36" x 18")
D	762 mm x 762 mm (30" x 30")

LEGEND

- Traffic Cone
- Portable Sign
- Direction of Travel
- Flashing Arrow Sign
- Portable Flashing Beacon

NOTES:

1. Where approach speeds are low, signs may be placed at 90 m (300') spacing, and in urban areas, closer.
2. All advance warning sign installations shall be equipped with flags for daytime closures. Flashing Beacons shall be placed at the locations indicated for nighttime closures.
3. A C13 "END CONSTRUCTION" or C14 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
4. If the C18 (or C23) sign would follow within 600 m (2000') of a stationary C18, C23, or C11 "STATE HIGHWAY CONSTRUCTION NEXT_____ MILES". use a C20 sign for the first advance warning sign.
5. All cones used for night lane closures shall be fitted with reflective sleeves as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used in lieu of cones for daytime closures only.
7. Flashing arrow sign shall be either Type 1 or Type 11.
8. The maximum spacing between cones in a taper shall be approximately as shown in Table 1 and 15 m (50') maximum spacing on tangent.
9. For approach speeds over 80 km/h (50 mph), use the "Traffic Control System for Lane Closure On Freeways and Expressways" plan for lane closure details and requirements.
10. Where specified in the special provisions, a W11 "LANE REDUCTION SYMBOL" sign is to be used in place of the C20 "RIGHT LANE CLOSED AHEAD" sign.

TABLE 1

Approach Speed	* Taper Length (L)	* Number of Cones for Taper	Spacing of Cones Along Taper
0-40 km/h (0-25 mph)	38m (125')	6	7.5 m (25')±
40-65 km/h (25-40 mph)	98 m (320')	9	12 m (40')±
65-80km/h (40-50 mph)	183 m (600')	13	15 m (50')±
Over 80 km/h (50 mph)	See Note 9		

* Based on 3.6 (12') wide lane. This column is also appropriate for lane widths Less than 3.6 m (12')

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Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\Traffic\ad-tc-t11.dgn Plot Date: 07-FEB-2004 16:38

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

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DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

SUBCONSULTANT'S LOGO

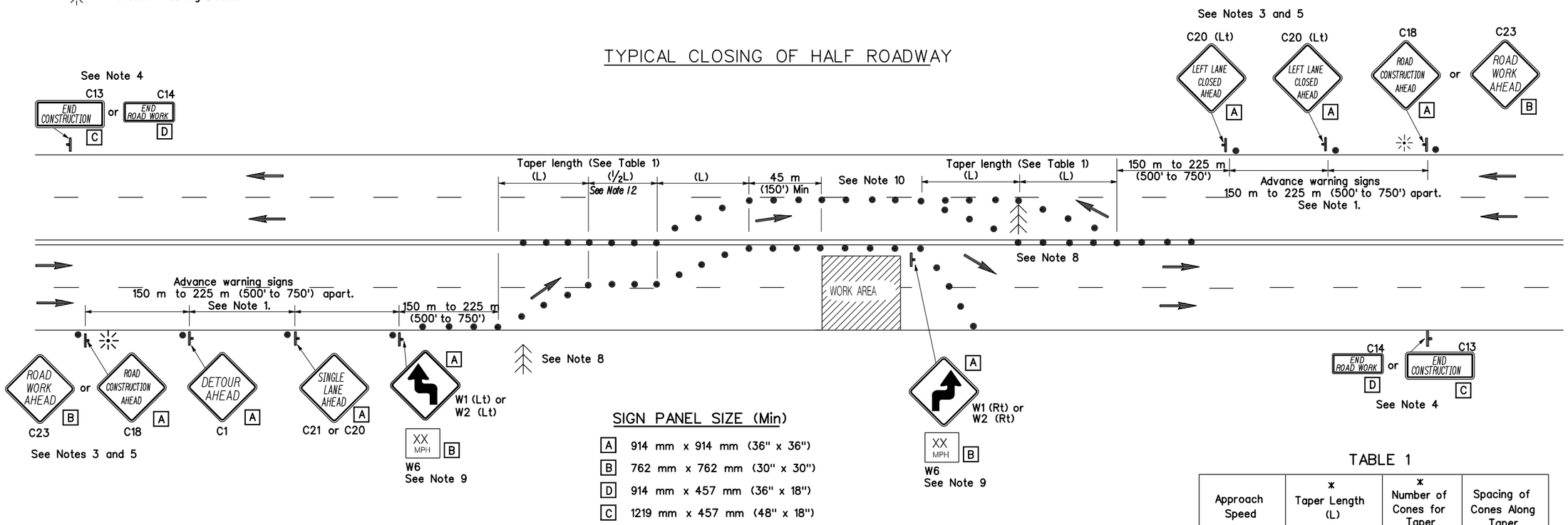
LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL PLAN
LANE CLOSURE ON
MULTILANE CONVENTIONAL HIGHWAYS 1

SHEET AD-TC-T11

LEGEND

- Traffic Cone
- Portable Sign
- Flashing Arrow Sign
- Direction of Travel
- Portable Flashing Beacon

TYPICAL CLOSING OF HALF ROADWAY



SIGN PANEL SIZE (Min)

- A 914 mm x 914 mm (36" x 36")
- B 762 mm x 762 mm (30" x 30")
- D 914 mm x 457 mm (36" x 18")
- C 1219 mm x 457 mm (48" x 18")

TABLE 1

Approach Speed	* Taper Length (L)	* Number of Cones for Taper	Spacing of Cones Along Taper
0-40 km/h (0-25 mph)	38 m (125')	6	7.5 m (25')
40-65 km/h (25-40 mph)	98 m (320')	9	12 m (40')
65-80 km/h (40-50 mph)	183 m (600')	13	15 m (50')
Over 80 km/h (50 mph)	See Note 11		

* Based on 3.6 m (12') wide lane. This column is also appropriate for lane widths less than 3.6 m (12').

NOTES:

1. Where Approach speeds are low, signs may be placed at 90 m (300') spacing and in urban areas, closer.
2. Not less than one person shall be assigned to full time maintenance of traffic control devices on all night lane closures.
3. All advance warning sign installations shall be equipped with flags for daytime closures. Flashing beacons shall be placed at the locations indicated during night lane closures.
4. A C13 "END CONSTRUCTION" or C14 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
5. If the C18 (or C23) sign would follow within 600 m (2000') of a stationary C18, C23, C 11 "STAT HIGHWAY CONSTRUCTION NEXT _____ MILES", use a C20 sign for the first advance warning sign.
6. All cones used for night lane closures shall be fitted with reflective sleeves as specified in the specifications.
7. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used in lieu of cones for daytime closures only.
8. Flashing arrow signs shall be either Type I or Type II.
9. Advisory speed will be determined by the Engineer. The W6 Sign will not be required when advisory speed is more than the posted or maximum speed limit.
10. The maximum spacing between cones within a taper shall be approximately as shown in Table 1 and the maximum spacing on tangent shall be 15 m (50').
11. For approach speeds over 80 km/h (50 mph), use the "Traffic Control System For Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
12. Unless otherwise specified in the special provisions, the (1/2L) shown between the two (L) lane closure tapers shall be used.

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REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

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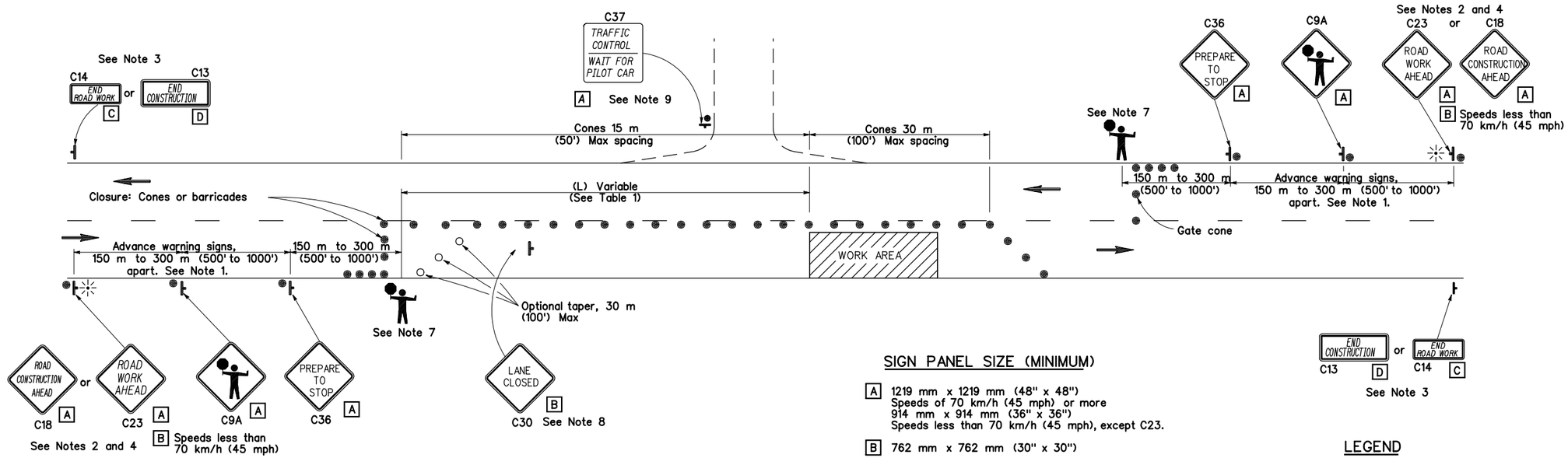
LOS OSOS WASTEWATER PROJECT

TRAFFIC CONTROL PLAN
LANE CLOSURE ON
MULTILANE CONVENTIONAL HIGHWAYS 2

SHEET AD-TC-T12

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\Traffic\ad-tc-t12.dgn Plot Date: 07-FEB-2004 16:38

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



SIGN PANEL SIZE (MINIMUM)

- A 1219 mm x 1219 mm (48" x 48")
  Speeds of 70 km/h (45 mph) or more
  914 mm x 914 mm (36" x 36")
  Speeds less than 70 km/h (45 mph), except C23.
- B 762 mm x 762 mm (30" x 30")
- C 914 mm x 457 mm (36" x 18")
- D 1219 mm x 457 mm (48" x 18")

LEGEND

- Traffic Cone
- Traffic Cone (Optional Taper)
- Portable Sign
- Direction of Travel
- Portable Flashing Beacon
- Flagger

NOTES

1. Where approach speeds are low, signs may be placed at 90 m (300') spacing and in urban areas, closer.
2. All advance warning sign installations shall be equipped with flags for daytime closures. Flashing beacons shall be placed at the locations indicated during night lane closures.
3. A C13 "END CONSTRUCTION" or C14 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
4. If the C18 (or C23) sign would follow within 600 m (2000') of a stationary C18, C23, or C11 "STATE HIGHWAY CONSTRUCTION NEXT _____ MILES", use a C9A sign for the first advance warning sign.
5. All cones used for night lane closures shall be fitted with reflective sleeves as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used in lieu of cones for daytime closures only.
7. Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. Nighttime flagger station shall be illuminated as provided in the current edition of the "Manual of Traffic Controls" published by the State of California, Department of Transportation. Place a minimum of four cones at 15 m (50') intervals in advance of flagger station as shown.
8. Place C30 "LANE CLOSED" sign at 150 to 300 m (500' to 1000') intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
9. When a pilot car is used, place a C37 "TRAFFIC CONTROL-WAIT FOR PILOT CAR" sign at all intersections within traffic control area. Signs shall be clean and visible at all times.

TABLE 1

Approach Speed	* (L)
0-50 km/h (0-30 mph)	60 m (200')
50-70 km/h (30-45 mph)	90 m (310')
over 70 km/h (45 mph)	150 m (500')

* Increase by 20 percent on sustained downgrades steeper than 3 percent and longer than 1.6 km (one mile).

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Job No: 1481166

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

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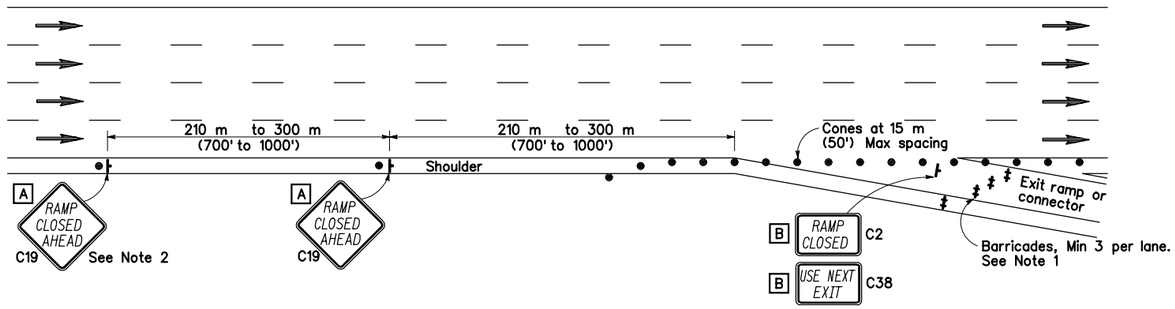
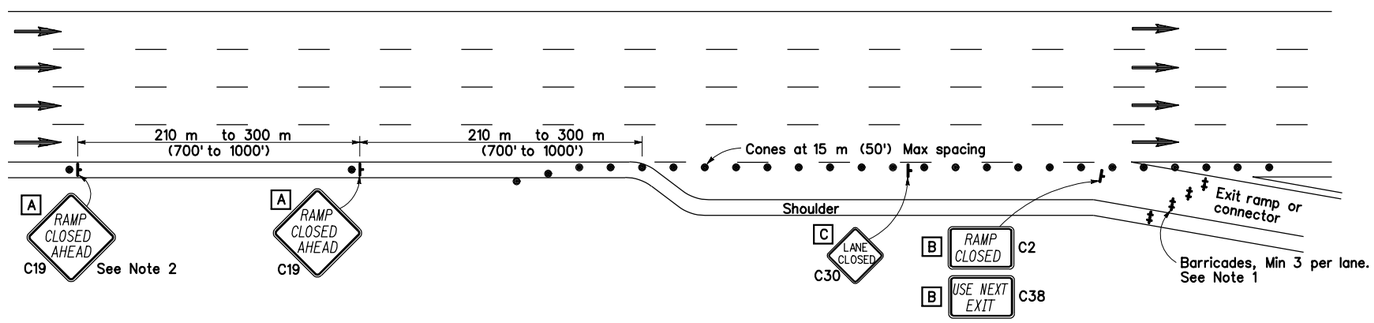
LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL PLAN
LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

SHEET AD-TC-T13

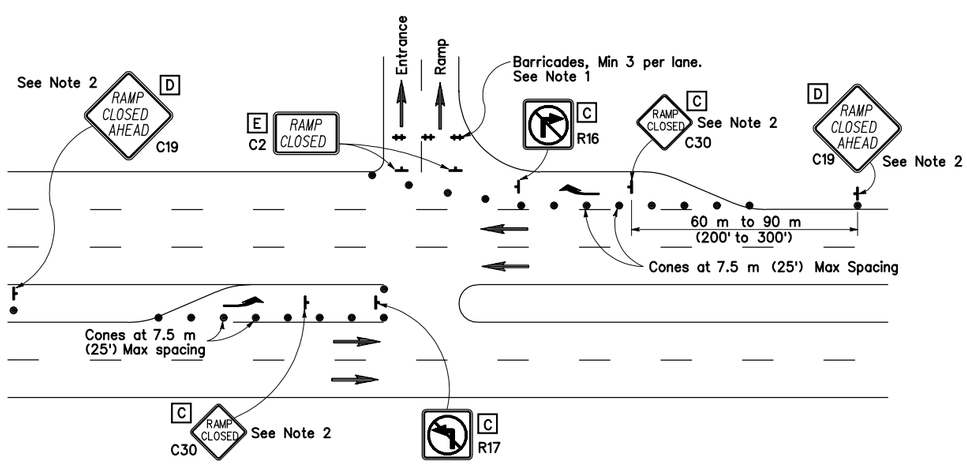
TYPICAL RAMP CLOSURES



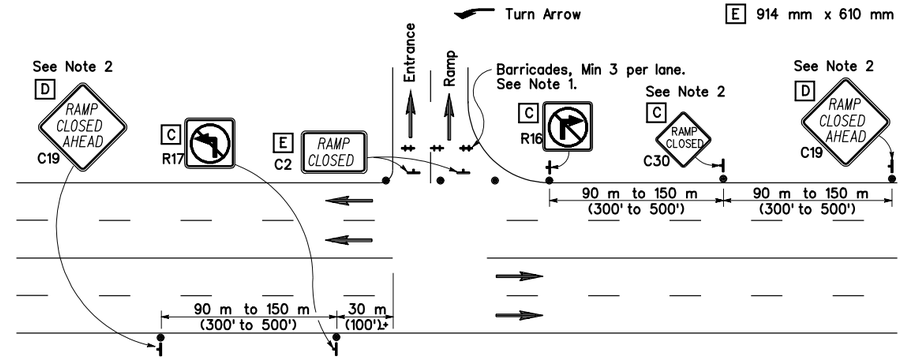
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

NOTES

1. Barricades shall be Type 1, 11, or 111 for closures lasting one week or less and Type 111 for closures lasting longer than one week.
2. In lieu of placing the C19 "RAMP CLOSED AHEAD" and C30 "RAMP CLOSED" signs. black on orange overlay plates with the word "CLOSED" may be mounted, as directed by the Engineer, on all guide signs that refer to the closed ramp. The letter size on the overlay shall be the same as the guide sign.
3. All advance warning sign installations shall be equipped with flags for daytime closures.
4. All cones used for night lane closures shall be fitted with reflective sleeves as specified in the specifications.
5. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used in lieu of cones for daytime ramp closures only.
6. During nighttime ramp closures, at least one person shall be assigned full time for maintenance of traffic control devices.

LEGEND

- Traffic Cone
- Sign
- Barricades
- Direction of Travel
- Turn Arrow

SIGN PANEL SIZE (Min)

A	1219 mm x 1219 mm	(48" x 48")
B	1219 mm x 762 mm	(48" x 30")
C	762 mm x 762 mm	(30" x 30")
D	914 mm x 914 mm	(36" x 36")
E	914 mm x 610 mm	(36" x 24")

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REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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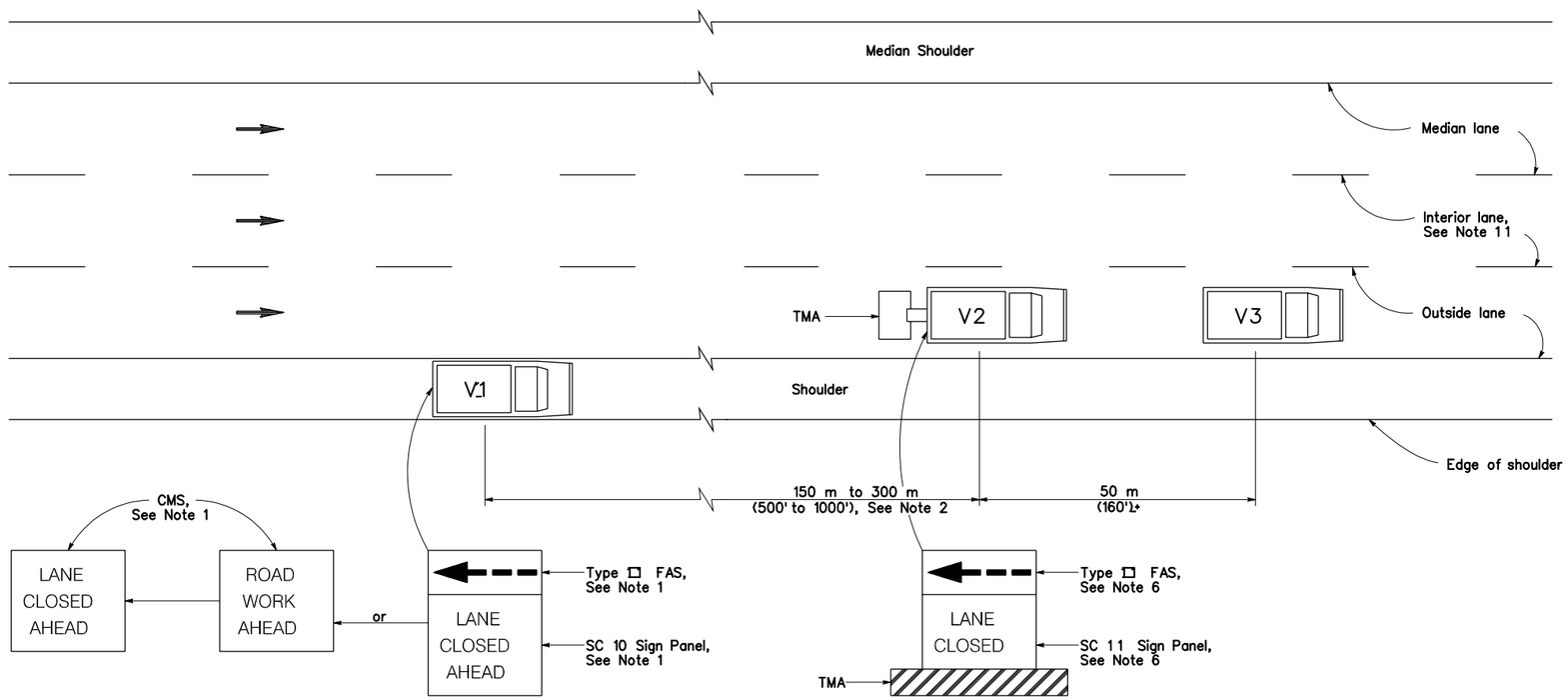
LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL PLAN
RAMP CLOSURE

SHEET AD-TC-T14



MOVING LANE CLOSURE ON MEDIAN OR OUTSIDE LANE OF MULTILANE HIGHWAYS

LEGEND

V1	Sign Vehicle
V2	Shadow Vehicle
V3	Work/Application Vehicle
FAS	Flashing Arrow Sign
CMS	Changeable Message Sign
TMA	Truck-Mounted Attenuator
→	Direction of Travel

NOTES

1. Either the SC 10 sign panel shown or a changeable message sign shall be mounted on the rear of sign vehicle V1. A Type 1 flashing arrow sign shall be mounted on the rear of sign vehicle V1 and used with the SC 10 sign panel. A Type 11 flashing arrow sign will not be required with the changeable message sign provided the flashing arrow sign symbol may be displayed on the changeable message sign board. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "LANE CLOSED AHEAD" message and then the flashing arrow sign symbol. For median lane closure, the flashing arrow sign symbol shall be reversed with the arrowhead on the right.

2. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.

3. A minimum sight distance of 450 m (1500') should be provided in advance of sign vehicle V1.

4. Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 450 m (1500').

5. Vehicle-mounted sign panels shall be Type 11 or 1V reflective sheeting, black on white or black on orange with 150 mm (6") minimum series D letters per Caltrans sign specifications.

6. Gross Vehicle Weight of shadow vehicle V2 shall be a minimum of 9000 kilograms (20,000 pounds) and shall be equipped with a truck-mounted attenuator (TMA). The sign panel shown and a Type 11 flashing arrow sign shall be mounted on the rear of shadow vehicle V2. For median lane closure, the flashing arrow sign symbol shall be reversed with the arrowhead on the right.

7. All vehicles used for lane closures shall be equipped with two-way radios and the vehicle operators shall maintain communication during the work or application operation.

8. All vehicles shall be equipped with flashing or rotating amber lights.

9. Where sufficient shoulder width is not available, sign vehicle V1 may encroach into the traffic lane staying as close to the edge of shoulder as practicable. When operating in this mode, both V1 and V2 shall be equipped with a truck-mounted attenuator (TMA) and Gross Vehicle Weight of V1 and V2 shall be a minimum of 9000 kilograms (20,000 pounds) each.

10. Where workers would be on foot in the work area, a stationary type lane closure (Standard Plan T10, T11, etc., as applicable) shall be used instead of this plan.

11. For moving lane closure on interior lane of multilane highways, see Standard Plan T16.

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Job No: 1481166

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SCALE: NONE

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DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

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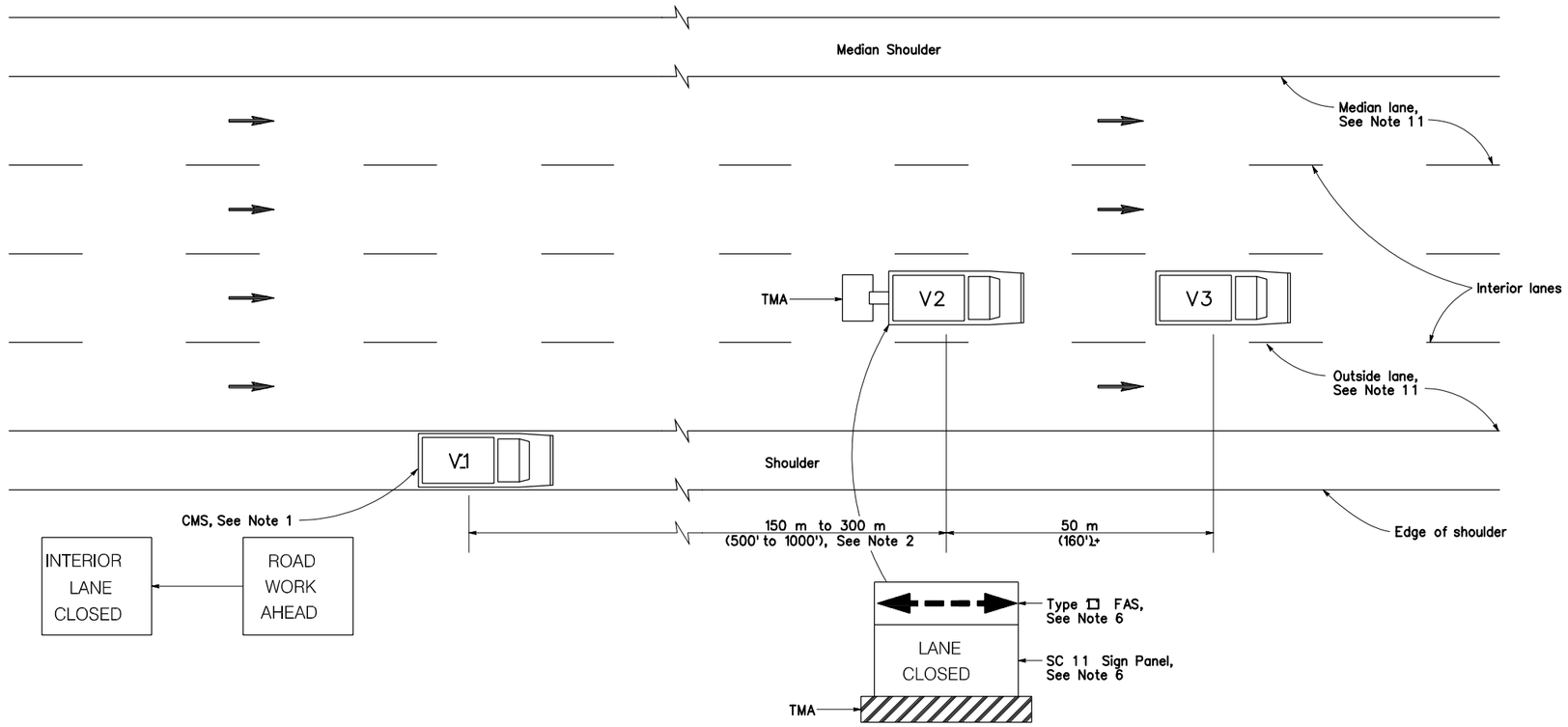
LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL PLAN
MOVING LANE CLOSURE ON MULTILANE HIGHWAYS 1

SHEET AD-TC-T15



MOVING LANE CLOSURE ON INTERIOR LANE OF MULTILANE HIGHWAYS

LEGEND

V1	Sign Vehicle
V2	Shadow Vehicle
V3	Work/Application Vehicle
FAS	Flashing Arrow Sign
CMS	Changeable Message Sign
TMA	Truck-Mounted Attenuator
→	Direction of Travel

NOTES

1. A changeable message sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "INTERIOR LANE CLOSED" message. The message "CENTER LANE CLOSED" may be used in place of the "INTERIOR LANE CLOSED" message.

2. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.

3. A minimum sight distance of 450 m (1500') should be provided in advance of sign vehicle V1.

4. Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 450 m (1500').

5. Vehicle-mounted sign panels shall be Type 111 or 1V reflective sheeting, black on white or black on orange with 150 mm (6") minimum series D letters per Caltrans sign specifications.

6. Gross Vehicle Weight of shadow vehicle V2 shall be a minimum of 9000 kilograms (20,000 pounds) and shall be equipped with a truck-mounted attenuator (TMA). The sign panel shown and a Type 11 flashing arrow sign shall be mounted on the rear of shadow vehicle V2. For median lane closure, the flashing arrow sign symbol shall be reversed with the arrowhead on the right.

7. All vehicles used for lane closures shall be equipped with two-way radios and the vehicle operators shall maintain communication during the work or application operation.

8. All vehicles shall be equipped with flashing or rotating amber lights.

9. Where sufficient shoulder width is not available, sign vehicle V1 may encroach into the traffic lane staying as close to the edge of shoulder as practicable. When operating in this mode, both V1 and V2 shall be equipped with a truck-mounted attenuator (TMA) and Gross Vehicle Weight of V1 and V2 shall be a minimum of 9000 kilograms (20,000 pounds) each.

10. Where workers would be on foot in the work area, a stationary type lane closure (Standard Plan T10, T11, etc., as applicable) shall be used instead of this plan.

11. For moving lane closure on median or outside lanes of multilane highways, see Standard Plan T15.

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Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\Traffic\ad-tc-t16.dgn Plot Date: 07-FEB-2004 16:39

REV	DATE	BY	DESCRIPTION

SCALE: NONE

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DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

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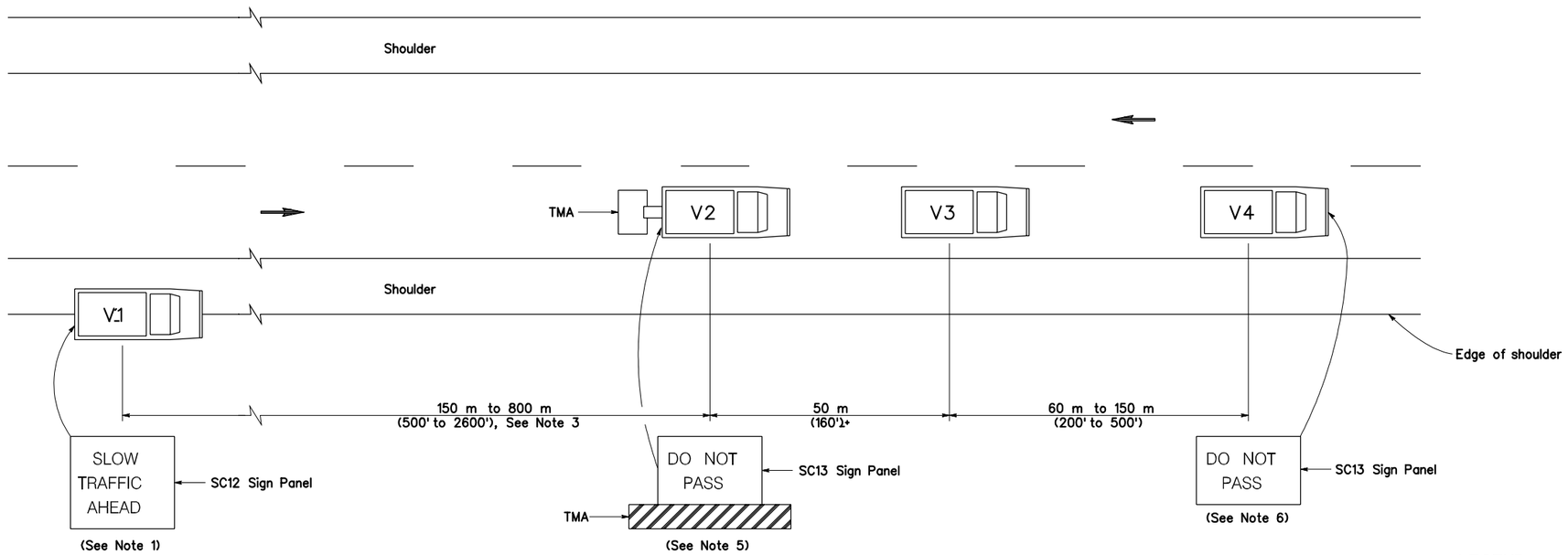
LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL PLAN
MOVING LANE CLOSURE ON MULTILANE HIGHWAYS 2

SHEET AD-TC-T16



LEGEND

V1	Sign Vehicle
V2	Shadow Vehicle
V3	Work/Application Vehicle
V4	Sign Vehicle
TMA	Truck-Mounted Attenuator
→	Direction of Travel

NOTES

1. Either the sign panel shown or a changeable message sign which can display the "SLOW TRAFFIC AHEAD" message shall be mounted on the rear of sign vehicle V1.
2. Sign vehicle V1 should be positioned where highly visible when shoulders are not available.
3. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue.
4. Vehicle-mounted sign panels shall be Type 111 or 1V reflective sheeting, black on white or black on orange with 150 mm (6") minimum series D letters per Caltrans sign specifications.
5. Gross Vehicle Weight of shadow vehicle shall be a minimum of 9000 kilograms (20,000 pounds) and shall be equipped with a truck-mounted attenuator (TMA). The sign panel shown shall be mounted on the rear of shadow vehicle V2. The message "LANE CLOSED" may be used in place of the "DO NOT PASS" message.
6. The sign panel shown shall be mounted on the front of sign vehicle V4, facing opposing traffic. The message "CAUTION" may be used in place of the "DO NOT PASS" message.
7. All vehicles shall be equipped with flashing or rotating amber lights.
8. Sign vehicle V4 will not be required when the work and vehicles V2 and V3 are 0.6 m (2') or more from the centerline of the highway during the work or application operations.
9. All vehicles used for lane closures shall be equipped with two-way radios and the vehicle operators shall maintain communication during the work or application operation.
10. This plan shall not be used where workers would be on foot in the work area. Use a stationary type lane closure (Standard Plan T13) for this condition.

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Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\Traffic\ad-tc-t17.dgn Plot Date: 07-FEB-2004 16:39

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED B. TAI
DRAWN B. TAI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
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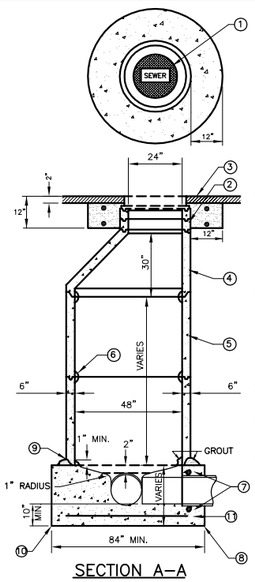
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

SUBCONSULTANT'S LOGO

LOS OSOS WASTEWATER PROJECT
TRAFFIC CONTROL PLAN
MOVING LANE CLOSURE
ON TWO LANE HIGHWAYS

SHEET AD-TC-T17



① COVER, MANHOLE FRAMES AND COVER SHALL HAVE A 24" CLEAR OPENING AND A SEALED BLIND PICKHOLE (PINKERTON A-640 OR APPROVED EQUAL). THE COVER SHALL BE LETTERED "SEWER". COVER TO BE RATTLE-FREE WITHOUT THE USE OF SEALANT.

② ADJUSTMENT, RINGS SHALL BE 3" OR 6". TOP OF CONE TO TOP OF FRAME SHALL NOT EXCEED 15". GRADE RINGS AND MANHOLE FRAME SHALL BE SEALED AT EVERY JOINT WITH BUTYL RUBBER (CONSEAL CS-102 OR EQUAL) AND GROUTED ON THE INSIDE.

③ CONCRETE COLLAR, COLLAR SHALL BE CLASS A CONCRETE. THE COLLAR SHALL BE ALLOWED TO CURE 48 HOURS PRIOR TO ANY TRAFFIC USE. REINF WITH 2-#4 HOOPS AND #4 VERTS.

④ CONE, CONE SHALL BE ECCENTRIC AND CONFORM TO THE REQUIREMENTS FOR RISERS. THE STRAIGHT SIDE OF THE CONE SHALL BE POSITIONED OVER THE MANHOLE OUTLET. CONCENTRIC CONES MAY BE USED ONLY IN SPECIAL CASES WITH THE PRIOR WRITTEN CONSENT OF THE ENGINEER.

⑤ MANHOLE RISERS, MANHOLE RISERS SHALL BE 48" IN DIAMETER, PRECAST CONCRETE CONFORMING TO ASTM C478-94 FOR PRECAST REINFORCED MANHOLE SECTIONS.

⑥ JOINTS, JOINTS SHALL BE SET WITH PREFORMED MASTIC SEALANT (RAMNEK, KENT SEAL, OR EQUAL). INSIDE OF JOINTS SHALL BE GROUTED WITH NON-SHRINK GROUT.

⑦ WATER STOPS, WHEN PVC USED, I.E. ADAPTER RINGS.

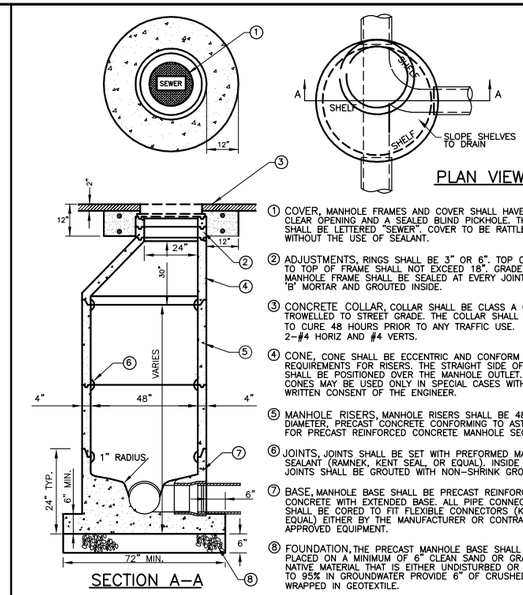
⑧ BASE, MANHOLE BASE SHALL BE 10" DEEP MINIMUM. CLASS "B" CONCRETE SHALL BE USED AND SHALL NOT FALL OVER 6 FEET UNLESS AN "ELEPHANTS TRUNK" OR AN "ADJUSTABLE PIPE" IS USED. CONCRETE WORK IN CHANNEL SHALL BE A STEEL TROWEL FINISH AND SHELF AREAS SHALL BE A BROOM FINISH. BASE SHALL BE MONOLITHICALLY PLACED.

⑨ BASE, USE STEEL IMPRESSION RING IN WET CONCRETE TO FORM GROOVE FOR FIRST RISER SECTION. SET FIRST RISER SECTION ON PREFORMED MASTIC SEALANT.

⑩ IN GROUNDWATER, PROVIDE 6" OF CRUSHED ROCK WRAPPED IN GEOTEXTILE BENEATH MANHOLE BASE. OTHERWISE SCARIFY AND RECOMPACT NATIVE MATERIAL TO 95%.

⑪ MANHOLES 10 FEET AND GREATER IN DEPTH SHALL HAVE #4 AT 12" E.W. REINFORCING.

STANDARD SEWER MANHOLE — C-100



① COVER, MANHOLE FRAMES AND COVER SHALL HAVE A 24" CLEAR OPENING AND A SEALED BLIND PICKHOLE. THE COVER SHALL BE LETTERED "SEWER". COVER TO BE RATTLE FREE WITHOUT THE USE OF SEALANT.

② ADJUSTMENTS, RINGS SHALL BE 3" OR 6". TOP OF CONE TO TOP OF FRAME SHALL NOT EXCEED 18". GRADE RINGS AND MANHOLE FRAME SHALL BE SEALED AT EVERY JOINT WITH CLASS "B" MORTAR AND GROUTED INSIDE.

③ CONCRETE COLLAR, COLLAR SHALL BE CLASS A CONCRETE. TROWELLED TO STREET GRADE. THE COLLAR SHALL BE ALLOWED TO CURE 48 HOURS PRIOR TO ANY TRAFFIC USE. REINF WITH 2-#4 HORIZ AND #4 VERTS.

④ CONE, CONE SHALL BE ECCENTRIC AND CONFORM TO THE REQUIREMENTS FOR RISERS. THE STRAIGHT SIDE OF THE CONE SHALL BE POSITIONED OVER THE MANHOLE OUTLET. CONCENTRIC CONES MAY BE USED ONLY IN SPECIAL CASES WITH THE PRIOR WRITTEN CONSENT OF THE ENGINEER.

⑤ MANHOLE RISERS, MANHOLE RISERS SHALL BE 48" IN DIAMETER, PRECAST CONCRETE CONFORMING TO ASTM C478-94 FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS.

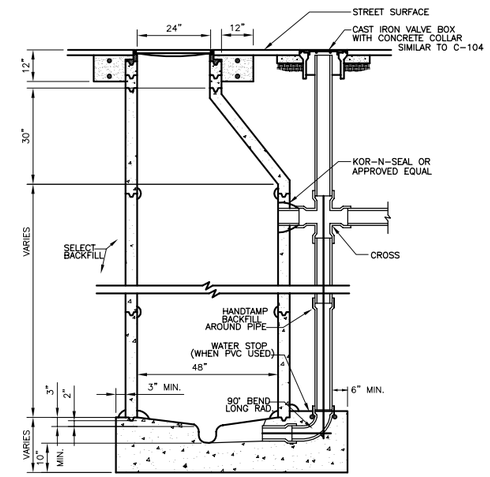
⑥ JOINTS, JOINTS SHALL BE SET WITH PREFORMED MASTIC SEALANT (RAMNEK, KENT SEAL, OR EQUAL). INSIDE OF JOINTS SHALL BE GROUTED WITH NON-SHRINK GROUT.

⑦ BASE, MANHOLE BASE SHALL BE PRECAST REINFORCED CLASS B CONCRETE WITH EXTENDED BASE. ALL PIPE CONNECTIONS SHALL BE CORED TO FIT FLEXIBLE CONNECTORS (KOR-N-SEAL OR EQUAL) EITHER BY THE MANUFACTURER OR CONTRACTOR USING APPROVED EQUIPMENT.

⑧ FOUNDATION, THE PRECAST MANHOLE BASE SHALL BE PLACED ON A MINIMUM OF 6" CLEAN SAND OR GRAVEL OVER NATIVE MATERIAL THAT IS EITHER UNDISTURBED OR COMPACTED TO 95% IN GROUNDWATER PROVIDE 6" OF CRUSHED ROCK WRAPPED IN GEOTEXTILE.

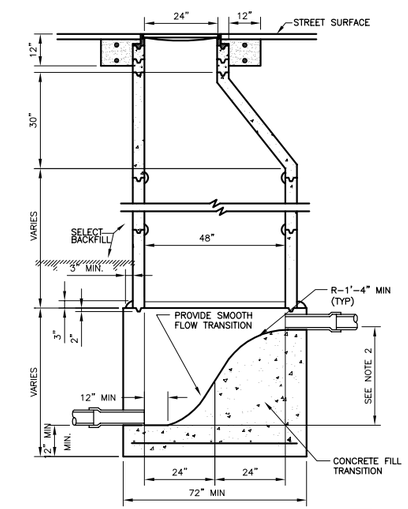
PRE-CAST BASE SEWER MANHOLE — C-101

1. DETAILS NOT SHOWN SHALL BE IN ACCORDANCE WITH LOCSD DRAWING C-100.
2. DROP MANHOLES MAY ONLY BE USED WHEN SHOWN OR WITH SPECIAL PERMISSION FROM THE DISTRICT ENGINEER.
3. PIPE AND FITTINGS SHALL BE PVC SDR 35 UNLESS OTHERWISE APPROVED BY THE DISTRICT ENGINEER.
4. BASE, USE STEEL IMPRESSION RING IN WET CONCRETE TO FORM GROOVE FOR FIRST RISER SECTION. SET FIRST RISER SECTION ON PREFORMED MASTIC SEALANT.

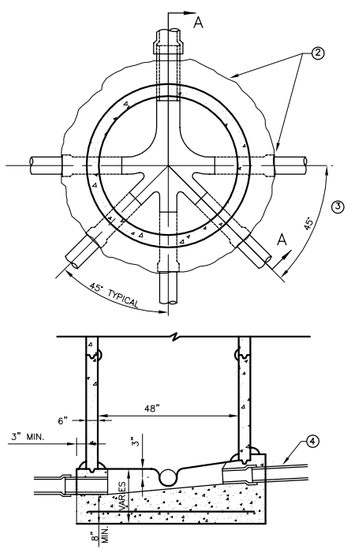


SEWER DROP MANHOLE — C-102

1. DETAILS NOT SHOWN SHALL BE IN ACCORDANCE WITH LOCSD DRAWING C-100.
2. INVERT ELEVATION DIFFERENCE = 30" MAX. FOR GREATER USE C-102
3. PIPE AND FITTINGS SHALL BE PVC SDR 35 UNLESS OTHERWISE APPROVED BY THE DISTRICT ENGINEER.
4. BASE, USE STEEL IMPRESSION RING IN WET CONCRETE TO FORM GROOVE FOR FIRST RISER SECTION. SET FIRST RISER SECTION ON PREFORMED MASTIC SEALANT.
4. MANHOLE CHANNEL SHALL BE CONSTRUCTED SIMILAR TO C-100.

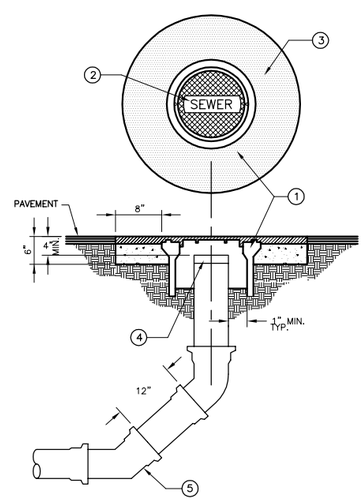


SEWER BEAVER SLIDE MANHOLE — C-102A



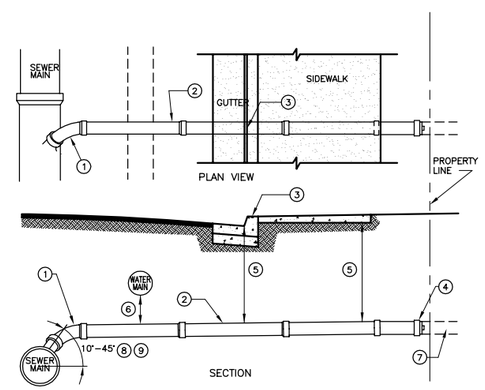
① FOR DETAILS NOT SHOWN ON THIS DRAWING – SEE DRAWING C-100 OR C-101.
② NO CONNECTIONS ARE ALLOWED IN THE DOWNSTREAM HALF OF THE MANHOLE.
③ A MAXIMUM OF 5 SIDE SEWER CONNECTIONS MAY BE MADE TO THE MANHOLE.
④ SIDE SEWERS SHALL BE RAISED TO MATCH THE SOFFIT OF THE OUTLET PIPE, OR TO PROVIDE 2" OF THE SLOPE IN THE MANHOLE, WHICHEVER IS HIGHER.

CUL-DE-SAC SEWER MANHOLE — C-103



① TRAFFIC VALVE WELL AND COVER: CHRISTY G-5 FOR 4" PIPE, AND CHRISTY G-12 FOR LARGER DIAMETER PIPES, SAME SIZE AS MAIN RECOMMENDED. BE SURE CLEANING EQUIPMENT WILL PASS THROUGH.
② TRAFFIC LID MARKED "SEWER".
③ CLASS A CONCRETE COLLAR, TROWELLED TO STREET GRADE. ALLOW TO CURE 48 HOURS PRIOR TO TRAFFIC USE.
④ REMOVABLE CAP OR PLUG.
⑤ 2 – 45° BENDS SPACED 12 INCHES APART. 22 1/2° OR SWEEP IS PREFERABLE. ALL PIPES SHALL MATCH SEWER MAIN DIAMETER.

SEWER CLEANOUT — C-104



① FACTORY-FABRICATED WYE CONNECTION TO NEW SEWER MAINS (SADDLE AND TAPPED CONNECTION TO EXISTING SEWER MAINS), WITH 1/8 BEND. BEND SHALL POINT DOWNSTREAM AND ENTER MAIN AT A VERTICAL ANGLE.
② SEWER LATERAL PIPE AND FITTINGS SHALL BE SDR 35 PVC WITH A MINIMUM DIAMETER OF 4", AND A MINIMUM SLOPE OF 1/4" PER FOOT. LATERAL INSTALLATION SHALL BEGIN AT MAIN AND PROCEED TO END. GRADE SHALL BE UNIFORM FROM MAIN TO PROPERTY LINE. CHANGES IN GRADE OF LATERAL SHALL BE MADE USING LONG-RADIUS BENDS. PROVIDE WATER TIGHT PLUG AT END OF PIPE.
③ TOP OF CURB SHALL BE MARKED WITH AN "S" DIRECTLY OVER LATERAL. THE "S" SHALL BE STAMPED IN NEW CONCRETE OR CHISELED INTO EXISTING CONCRETE, AND SHALL NOT BE LESS THAN 3" LONG, 2" WIDE AND 3/16" DEEP. IN AREAS WITHOUT CURB PROVIDE 4" SQUARE CONC MARKER MARKED "S".
④ PROVIDE WATER TIGHT MECHANICAL PLUG.
⑤ DEPTH OF LATERAL SHALL NOT BE LESS THAN 36" FROM TOP OF PIPE UNLESS ENCASED IN CONCRETE OR IRON PIPE. MAXIMUM DEPTH AT GUTTERLINE SHALL BE 60" WHEN TERRAIN IS FLAT, UNLESS OTHERWISE NOTED.
⑥ A MINIMUM SEPARATION OF 12" SHALL BE MAINTAINED WHEN CROSSING WATER LINES. ROUTE LATERAL UNDER WATER MAINS WHEN POSSIBLE. IF VERTICAL DEFLECTIONS NECESSARY USE 22 1/2° LONG RADIUS ELBOWS.
⑦ SEWER LATERAL ON PRIVATE PROPERTY WITH CLEANOUTS SPACED AT 100 FOOT MAXIMUM INTERVALS AND WHERE LATERALS CHANGE DIRECTION.
⑧ DEEP LATERAL IN WHICH WYE IS INSTALLED VERTICALLY WILL BE ALLOWED ON CASE BY CASE BASIS. PROVIDE LONG RADIUS 22 1/2° ELBOW AT TOP.
⑨ FOR BELOW STREET GRADE HOMES THE WYE ANGLE MAY BE REDUCED TO LESS THAN 10° ON CASE BY CASE BASIS. PROVIDE 1/8" PER FOOT SLOPE MINIMUM.

SEWER LATERAL — C-105

REGISTERED PROFESSIONAL ENGINEER — JOHN ARTHUR BERGEN — NO. C31069 — Exp. 3-31-2004 — CIVIL — STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L. WONG
DRAWN E. WISNIEWSKI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

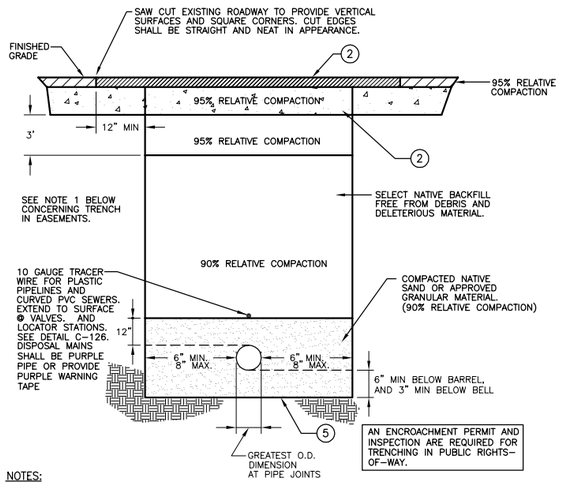
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

GENERAL CIVIL
STANDARD CIVIL DETAILS – 1

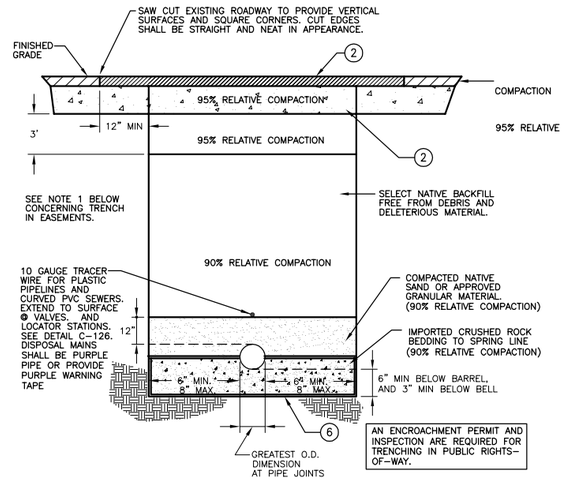
SHEET AD-GC-060



NOTES:

1. A MINIMUM OF 90% RELATIVE COMPACTION IS PERMITTED IN A NON-ROADWAY TRENCH WHEN NO STRUCTURES ARE TO BE BUILT OVER THE TRENCH. IF STRUCTURES ARE TO BE BUILT OVER THE TRENCH, USE RELATIVE COMPACTIONS SHOWN ON THE TRENCH SECTION ABOVE.
2. PAVEMENT SECTIONS SHALL BE NO LESS THAN EXISTING STRUCTURAL SECTIONS, AND AS REQUIRED BY THE COUNTY FOR TRENCHES WITHIN A COUNTY RIGHT-OF-WAY. SEE DETAIL C-120.
3. SEE DETAIL C-116B FOR WET TRENCH SECTION.
4. A DRY TRENCH IS A TRENCH IN NON-GROUNDWATER AREAS.
5. WHERE THE BOTTOM OF THE TRENCH HAS BEEN DISTURBED, THE CONTRACTOR SHALL SCARIFY AND COMPACT THE SUBGRADE TO 90% RELATIVE COMPACTION.

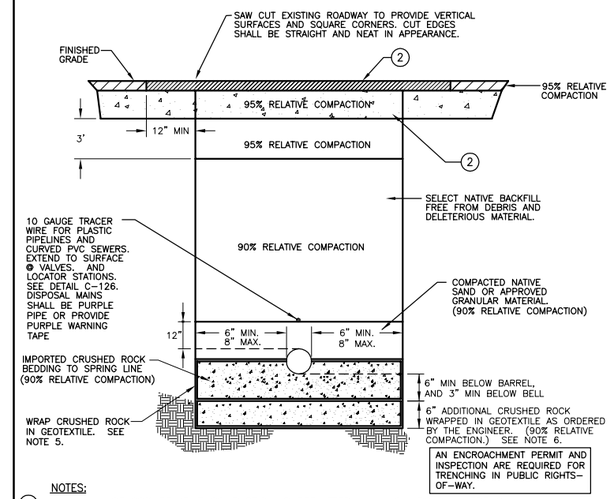
PIPELINE DRY TRENCH SECTION 10" AND SMALLER — C-116



NOTES:

1. A MINIMUM OF 90% RELATIVE COMPACTION IS PERMITTED IN A NON-ROADWAY TRENCH WHEN NO STRUCTURES ARE TO BE BUILT OVER THE TRENCH. IF STRUCTURES ARE TO BE BUILT OVER THE TRENCH, USE RELATIVE COMPACTIONS SHOWN ON THE TRENCH SECTION ABOVE.
2. PAVEMENT SECTIONS SHALL BE NO LESS THAN EXISTING STRUCTURAL SECTIONS, AND AS REQUIRED BY THE COUNTY FOR TRENCHES WITHIN A COUNTY RIGHT-OF-WAY. SEE DETAIL C-120.
3. SEE DETAIL C-116B FOR WET TRENCH SECTION.
4. A DRY TRENCH IS A TRENCH IN NON-GROUNDWATER AREAS.
5. ENDS OF GEOTEXTILE SHALL TOUCH PIPE BARREL. GEOTEXTILE MAY BE LAPPED UNDER PIPE IF DESIRED.
6. WHERE THE BOTTOM OF THE TRENCH HAS BEEN DISTURBED, THE CONTRACTOR SHALL SCARIFY AND COMPACT THE SUBGRADE TO 90% RELATIVE COMPACTION.

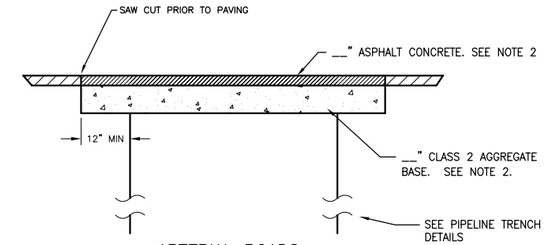
PIPELINE DRY TRENCH SECTION 12" AND LARGER — C-116A



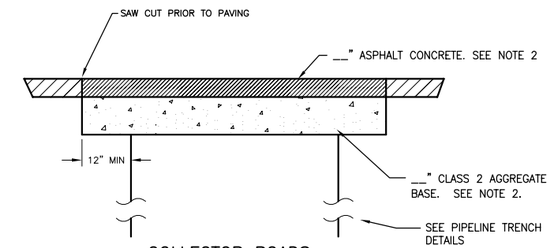
NOTES:

1. A MINIMUM OF 90% RELATIVE COMPACTION IS PERMITTED IN A NON-ROADWAY TRENCH WHEN NO STRUCTURES ARE TO BE BUILT OVER THE TRENCH. IF STRUCTURES ARE TO BE BUILT OVER THE TRENCH, USE RELATIVE COMPACTIONS SHOWN ON THE TRENCH SECTION ABOVE.
2. PAVEMENT SECTIONS SHALL BE NO LESS THAN EXISTING STRUCTURAL SECTIONS, AND AS REQUIRED BY THE COUNTY FOR TRENCHES WITHIN A COUNTY RIGHT-OF-WAY. SEE DETAIL C-120.
3. SEE DETAILS C-116 AND C-116A FOR DRY TRENCH SECTIONS.
4. A WET TRENCH IS A TRENCH IN GROUNDWATER AREAS BUT HAS BEEN DEWATERED IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS.
5. ENDS OF GEOTEXTILE SHALL TOUCH PIPE BARREL. GEOTEXTILE MAY BE LAPPED UNDER PIPE IF DESIRED.
6. SHALL BE COMPENSATED IN ACCORDANCE WITH THE EXTRA WORK PROVISIONS OF THE CONTRACT OR UNIT PRICE BID ITEM, IF PROVIDED.

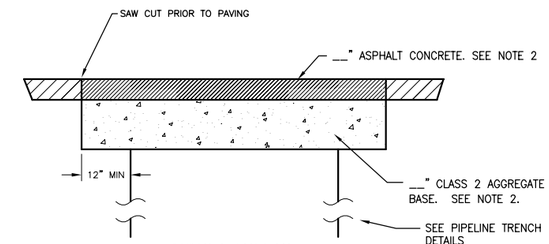
PIPELINE WET TRENCH SECTION ALL DIAMETERS — C-116B



ARTERIAL ROADS



COLLECTOR ROADS



MINOR ROADS

ARTERIAL ROADS	COLLECTOR ROADS	MINOR ROADS
LOS OSOS VALLEY ROAD SOUTH BAY BOULEVARD PECHO VALLEY ROAD	SANTA YSABEL AVENUE RAMONA AVENUE NIPOMO AVENUE NINTH STREET PINE AVENUE SEVENTH STREET ELEVENTH STREET EL MORO AVENUE SECOND STREET TENTH STREET DORIS AVENUE BINSCARTH ROAD PECHO ROAD	ALL OTHER ROADS WITHIN PROJECT AREA

NOTES:

1. MINIMUM ASPHALT CONCRETE THICKNESS SHALL BE 2 1/2".
2. MATCH EXISTING ASPHALT CONCRETE AND AGGREGATE BASE THICKNESSES IF THICKER.
3. ASPHALT CONCRETE SHALL BE CALTRANS 3/4" MAXIMUM, MEDIUM GRADING.
4. GRAVEL AND BASE ROCK PAVED ROADS SHALL BE RESTORED TO MATCH EXISTING SECTION.
5. PROVIDE AND MAINTAIN TEMPORARY PAVEMENT UNTIL PERMANENT PAVEMENT IS INSTALLED.
6. SEE SPECIFICATIONS SECTION 02460-1.1C REGARDING WHEN A.C. OVERLAY REQUIRED.

PAVEMENT RESTORATION STRUCTURAL SECTION — C-120

CRITERIA FOR THE SEPARATION OF WATER MAINS AND SANITARY SEWERS

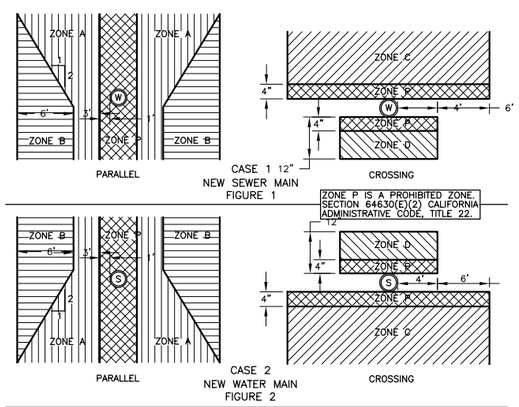
CASE 1
NEW SEWER MAIN BEING INSTALLED
(SEE FIGURE 1)

ZONE	SPECIAL CONSTRUCTION REQUIRED FOR SEWER:
A	SEWER LINES PARALLEL TO WATER MAINS SHALL NOT BE PERMITTED IN THIS ZONE WITHOUT APPROVAL FROM THE RESPONSIBLE HEALTH AGENCY AND WATER SUPPLIER.
B	A SEWER LINE PLACED PARALLEL TO A WATER LINE SHALL BE CONSTRUCTED OF: 1. PLASTIC SEWER PIPE WITH RUBBER RING JOINTS (PER ASTM D3034) OR EQUIVALENT. 2. CAST OR DUCTILE IRON PIPE WITH COMPRESSION JOINTS.
C	A SEWER LINE CROSSING A WATER MAIN SHALL BE CONSTRUCTED OF: 1. DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING AND MECHANICAL JOINTS. 2. A CONTINUOUS SECTION OF CLASS 200 (DR 14 PER AWWA C900) PLASTIC PIPE, OR EQUIVALENT. CENTERED OVER THE PIPE BEING CROSSED. 3. ANY SEWER PIPE WITHIN A CONTINUOUS SLEEVE.
D	A SEWER LINE CROSSING A WATER MAIN SHALL BE CONSTRUCTED OF: 1. A CONTINUOUS SECTION OF DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING. 2. A CONTINUOUS SECTION OF CLASS 200 (DR 14 PER AWWA C900) PLASTIC PIPE OR EQUIVALENT. CENTERED OVER THE PIPE BEING CROSSED. 3. ANY SEWER PIPE WITHIN A CONTINUOUS SLEEVE. 4. ANY SEWER PIPE SEPARATED BY A TEN-FOOT BY TEN-FOOT, FOUR-INCH THICK REINFORCED CONCRETE SLAB.

CASE 2
NEW WATER MAIN BEING INSTALLED
(SEE FIGURE 2)

ZONE	SPECIAL CONSTRUCTION REQUIRED FOR WATER:
A	NO WATER MAINS PARALLEL TO SERVICE SHALL BE CONSTRUCTED WITHOUT APPROVAL FROM THE HEALTH AGENCY.
B	IF THE SEWER PARALLELING THE WATER MAIN DOES NOT MEET THE CASE 1, ZONE B REQUIREMENTS, THE WATER MAIN SHALL BE CONSTRUCTED OF: 1. DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING. 2. DIPPED AND WRAPPED ONE-FOURTH-INCH-THICK WELDED STEEL PIPE. 3. CLASS 200 PRESSURE RATED PLASTIC WATER PIPE (DR 14 PER AWWA C900) OR EQUIVALENT. 4. REINFORCED CONCRETE PRESSURE PIPE, STEEL CYLINDER TYPE, PER AWWA (C300-74, C301-79 OR C303-70). 5. CLASS 200, TYPE II, ASBESTOS-CEMENT PRESSURE PIPE.
C	IF THE SEWER CROSSING THE WATER MAIN DOES NOT MEET THE CASE 1, ZONE C REQUIREMENTS, THE WATER MAIN SHALL HAVE NO JOINTS IN ZONE C AND BE CONSTUCTED OF: 1, 2, 3 OR 4 AS IN ZONE B, ABOVE.
D	IF THE SEWER CROSSING THE WATER MAIN DOES NOT MEET THE CASE 1, ZONE D REQUIREMENTS, THE WATER MAIN SHALL HAVE NO JOINTS WITHIN FOUR FEET FROM EITHER SIDE OF THE SEWER AND SHALL BE CONSTRUCTED OF: 1, 2, 3 OR 4 AS IN ZONE B, ABOVE.

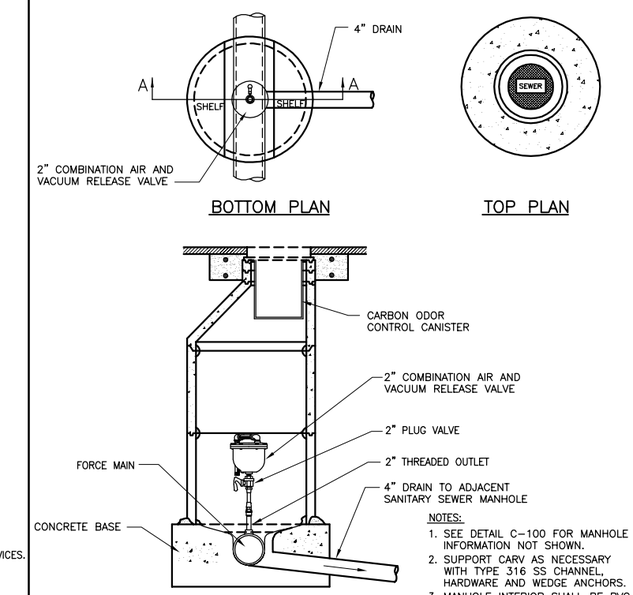
WATER AND SEWER SEPARATION NOTES — C-117



NOTES AND DEFINITIONS

- COMPRESSION JOINT – A PUSH-ON JOINT THAT SEALS BY MEANS OF THE COMPRESSION OF A RUBBER RING OR GASKET BETWEEN THE PIPE AND A BELL OF COUPLING.
- DIMENSIONS ARE FROM THE OUTSIDE OF WATER MAIN TO OUTSIDE OF SEWER LINE OR MANHOLE.
- FUSED JOINT – THE JOINING OF SECTIONS OF PIPE USING THERMAL OR CHEMICAL BONDING PROCESSES.
- GROUND WATER – SUBSURFACE WATER FOUND IN THE SATURATION ZONE.
- HEALTH AGENCY – THE STATE DEPOARTMENT OF HEALTH SERVICES. FOR THOSE WATER SYSTEMS SUPPLYING LESS THAN 200 SERVICE CONNECTIONS, THE LOCAL HEALTH OFFICER SHALL ACT FOR THE DEPARTMENT OF HEALTH SERVICES.
- HOUSE LATERAL – A SEWER PIPE CONNECTING THE BUILDING DRAIN AND THE MAIN SEWER LINE.
- LOW HEAD WATER MAIN – ANY WATER MAIN WHICH HAS A PRESSURE OF 5 PSI OR LESS AT ANY TIME AT ANY POINT IN THE MAIN.
- MECHANICAL JOINT – BOLTED JOINT
- RATED WORKING WATER PRESSURE OR PRESSURE CLASS – A PIPE CLASSIFICATION SYSTEM BASED UPON INTERNAL WORKING PRESSURE OF THE FLUID IN THE PIPE, TYPE OF PIPE MATERIAL, AND THE THICKNESS OF THE PIPE WALL.
- SLEEVE – A PROTECTIVE TUBE OF STEEL WITH A WALL THICKNESS OF NOT LESS THAN ONE-FOURTH INCH INTO WHICH A PIPE IS INSERTED.
- WATER SUPPLIER – ANY PERSON WHO OWNS OR OPERATES A PUBLIC WATER SYSTEM

WATER AND SEWER SEPARATION DIAGRAM — C-118



NOTES:

1. SEE DETAIL C-100 FOR MANHOLE INFORMATION NOT SHOWN.
2. SUPPORT CARV AS NECESSARY WITH TYPE 316 SS CHANNEL, HARDWARE AND WEDGE ANCHORS.
3. MANHOLE INTERIOR SHALL BE PVC T-LOCK LINED. COAT MANHOLE SHELF AREA WITH EPOXY: POLYBRID, EUCOPOXY, OR EQUAL.
4. PROVIDE SHORT STYLE CARV TO FIT SPACE AVAILABLE.

COMBINATION AIR/ VACUUM RELEASE VALVE MANHOLE — C-119

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L. WONG
DRAWN E. WISNIEWSKI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2/16/2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2/16/2004 — DATE

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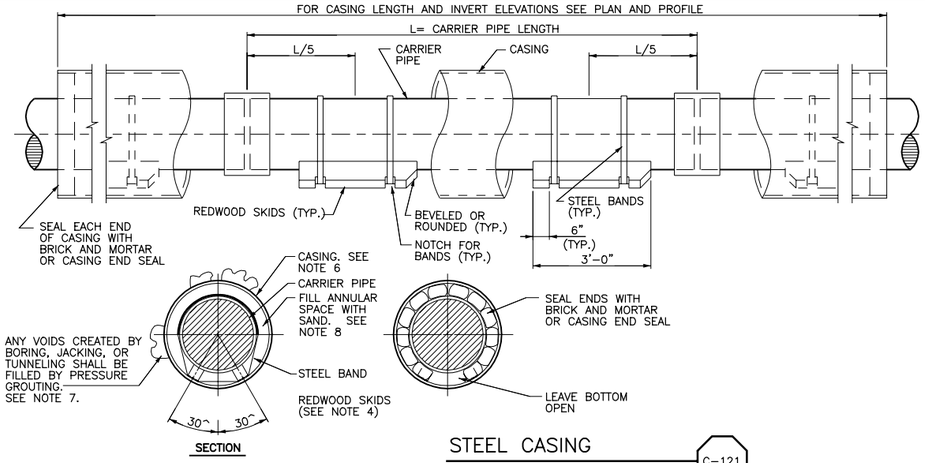
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
GENERAL CIVIL
STANDARD CIVIL DETAILS – 2

SHEET AD-GC-061



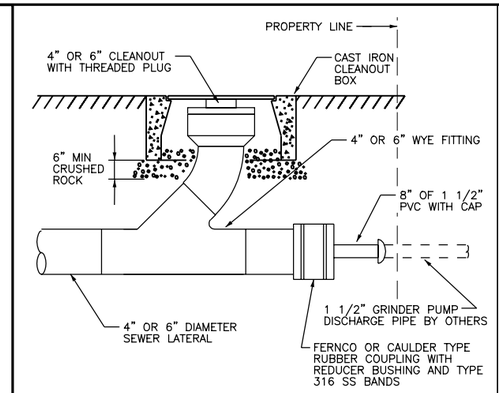
NOTES:

1. CASING SHALL BE SMOOTH PIPE.
2. CARRIER PIPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
3. CARRIER PIPE SHALL BE TESTED BEFORE SEALING ENDS OF PIPE.
4. SKIDS SHALL BE GREASED TO FACILIATE CARRIER PIPE INSTALLATION.
5. SEE SPECIFICATION SECTION 02340 BORING AND JACKING FOR ADDITIONAL REQUIREMENTS.
6. CASING I.D. SHALL BE PIPE O.D. PLUS 12" MIN.
7. PROVIDE THREADED GROUT PORTS IN CASING TO ENABLE PRESSURE GROUTING. SEAL WITH THREADED CAST IRON OR STEEL PLUGS UPON COMPLETION.
8. BLOCK CARRIER PIPE TO PREVENT PIPE FLOTATION OR DISTURBANCE DURING SAND BACKFILLING.

CASING SIZE	CASING WALL THICKNESS (a)	SKID SIZE
20", 22"	1/2" MIN	4" x 4"
24"	1/2" MIN	4" x 4"
26"	1/2" MIN	4" x 4"
30"	1/2" MIN	4" x 4"
34"	1/2" MIN	4" x 4"
40"	5/8" MIN	6" x 6"
44"	5/8" MIN	6" x 6"
54"	5/8" MIN	6" x 6"
64"	5/8" MIN	8" x 8"

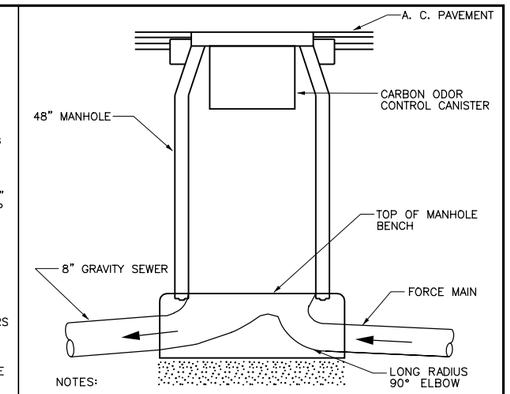
STEEL CASING

C-121



GRINDER PUMP DISCHARGE TO SEWER LATERAL

C-122

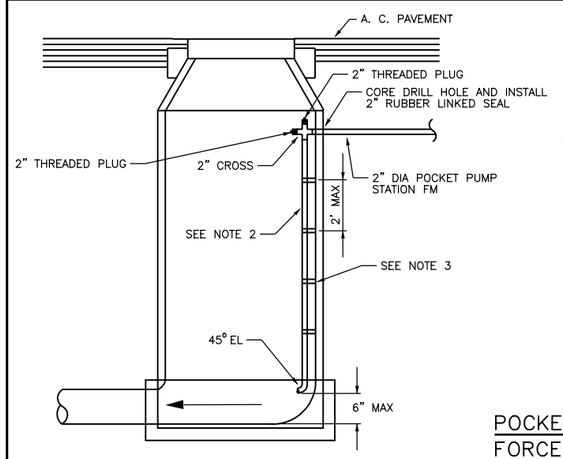


NOTES:

1. DETAILS NOT SHOWN SHALL BE IN ACCORDANCE WITH C-100
2. SEE NOTE 4, C-124

FORCE MAIN TO GRAVITY SEWER TRANSITION MANHOLE

C-123

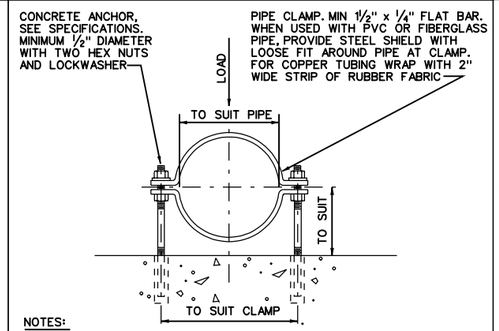


NOTES:

1. DETAILS NOT SHOWN SHALL BE IN ACCORDANCE WITH C-100.
2. ALL 2" PIPE WITHIN MANHOLE SHALL BE 2" SOLVENT WELDED SCHEDULE 40 PVC.
3. SUPPORT 2" PIPE AS CLOSE AS POSSIBLE ON MANHOLE WALL WITH TYPE 316 SS PIPE CLAMPS PER C-125.
4. MANHOLE INTERIOR SHALL BE PVC T-LOCK LINED. COAT MANHOLE BENCH AREA WITH EPOXY; POLYBRID, EUCOPOXY, OR EQUAL.
5. CHANNELIZE AND SLOPE BOTTOM OF MANHOLE TO DRAIN TO GRAVITY SEWER.

POCKET PUMP STATION FORCE MAIN TO GRAVITY SEWER TRANSITION MANHOLE

C-124



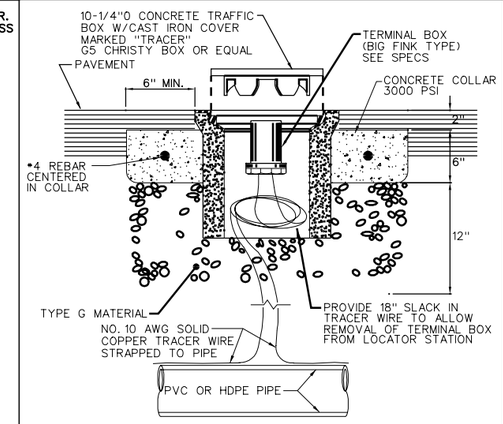
NOTES:

1. PIPE CLAMP, NUTS, LOCKWASHERS, ANCHORS AND SHIELDS TO BE TYPE 316 STAINLESS STEEL.
2. THIS PIPE CLAMP IS LIMITED TO PIPES UP TO 4" DIAMETER INCLUSIVE
3. FOR ADDITIONAL REQUIREMENTS SEE SPECIFICATIONS SECTION 'PIPE SUPPORTS'

PIPE CLAMP

(FOR PIPE 4" DIAMETER AND SMALLER)

C-125



FLUSH MOUNTED LOCATOR STATION CONCRETE BOX

C-126

REGISTERED PROFESSIONAL ENGINEER JOHN ARTHUR BERGEN NO. C31069 Exp. 3-31-04 CIVIL STATE OF CALIFORNIA

Plot Date: 09-FEB-2004 14:58

File: N:\Projects\los_osos\Collect_Sys\AD\civ\AD-GC-062.dgn

Job No: 1481166

REV	DATE	BY	DESCRIPTION

SCALE: H: 1"=40' V: 1"=4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L WONG
DRAWN E WISNIEWSKI
CHECKED J BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

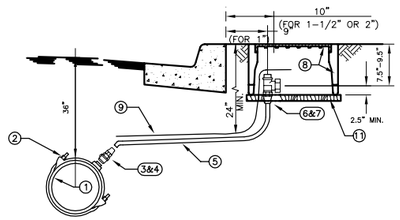
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

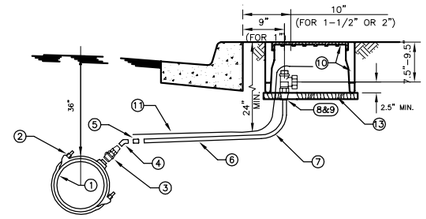
GENERAL CIVIL
STANDARD CIVIL DETAILS – 3

SHEET AD-GC-062



		3/4" AND 1" METERS
1	WATER MAIN	PER PLAN
2	SERVICE SADDLE	BRONZE, DOUBLE STRAP, JAMES JONES J-979 FOR AC PIPE JAMES JONES J-969 FOR PVC PIPE OR APPROVED EQUAL
3	CORPORATION STOP	GROUNDKEY: JAMES JONES J-1944 1" SIZE ONLY, MIP X MIP #41
4	ADAPTER	1" FIP X INSTATITE, MUELLER H15456
5	SERVICE LATERAL	1" POLYETHELYNE ONLY IPS SIZE, 200 PSI MINIMUM, WESTFLEX GOLD LABEL 3408, DRISCOPIPE, OR APPROVED EQUAL.
6	ANGLE METER STOP (BALL TYPE)	JAMES JONES J-1527 (1"X1" OR 1"X 3/4")
7	ADAPTER	1" MIP X INSTATIGHT H15456
8	METER BOX AND LID	3/4" AND 1" METERS USE, BROOKS 37 SERIES (TRAFFIC LID IN TRAFFIC AREA ONLY)
9	10 GAGE TRACER WIRE PER SPECIFICATIONS.	
10	IN UNPAVED AREAS, RAISE METER BOX 1" ABOVE THE ADJACENT FINISHED SURFACE.	
11	1" X 12" CONCRETE BASE	
12	CUSTOMER SIDE CURB STOP – JONES J 1913W	

SINGLE WATER SERVICE C-110



		1-1/2" AND 2" METERS
1	WATER MAIN	PER PLAN
2	SERVICE SADDLE	BRONZE, DOUBLE STRAP, JAMES JONES J-979 FOR AC PIPE JAMES JONES J-969 FOR PVC PIPE OR APPROVED EQUAL
3	CORPORATION STOP	BALL VALVE: JAMES JONES J-1943 2" SIZE ONLY, MIP X MIP
4	BRASS 45° EL	2" 45° ELBOW ONLY
5	ADAPTER	FORD 2" PAC COUPLING X MIP
6	SERVICE LATERAL	2" SCH 80 PVC ONLY
7	90° ELBOW	2" SCH 80 90° ELBOW
8	ANGLE METER STOP (BALL TYPE)	FORD FB11027
9	ADAPTER	2" SCH 80 MIP X SOC
10	METER BOX AND LID	1 1/2" METERS USE, BROOKS 38 SERIES 2" METERS USE, BROOKS 65 SERIES (TRAFFIC LID IF IN DRIVEWAY)
11	10 GAGE TRACER WIRE PER SPECIFICATIONS.	
12	IN UNPAVED AREAS, RAISE METER BOX 1" ABOVE THE ADJACENT FINISHED SURFACE.	
13	1" X 12" CONCRETE BASE	
14	CUSTOMER SIDE CURB STOP – JF108	

SINGLE WATER SERVICE C-111

REGISTERED PROFESSIONAL ENGINEER
JOHN ARTHUR BERGEN
NO. C31069
Exp. 3-31-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L. WONG
DRAWN E. WISNIEWSKI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

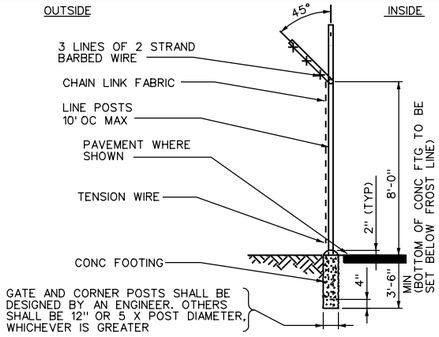
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

GENERAL CIVIL
STANDARD CIVIL DETAILS – 4

SHEET AD-GC-063

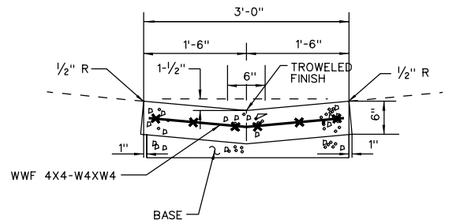


NOTES:

1. SEE SPECIFICATIONS FOR FENCE MATERIAL, COATINGS, AND INSTALLATION REQUIREMENTS
2. EXTENSION ARM MAY BE TURNED IN AT OPTION OF OWNER.

CHAIN LINK FENCE

REV 040302 C-126



NOTES:

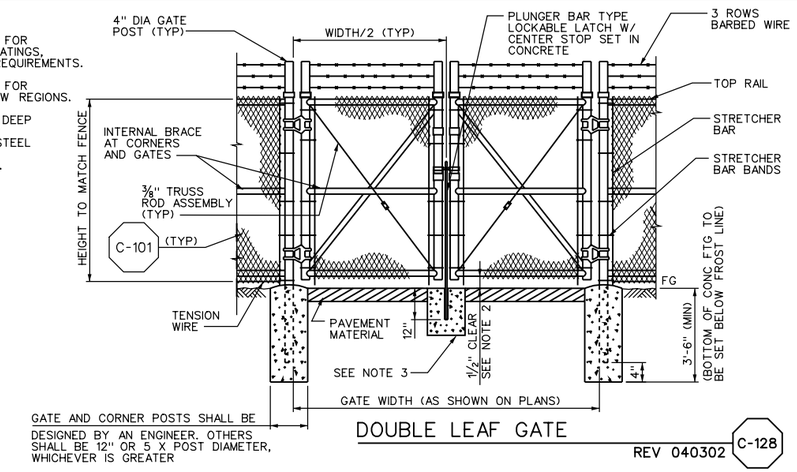
1. EXPANSION JOINTS OF 1/2" PREMOLDED JOINT FILLER SHALL BE PLACED 50 FOOT SPACING AND WHERE GUTTER BUTTS OTHER CONCRETE STRUCTURES
2. BASE AND SUBGRADE PREPARATION SHALL MATCH ADJACENT PAVING

CONCRETE CROSS GUTTER

C-127

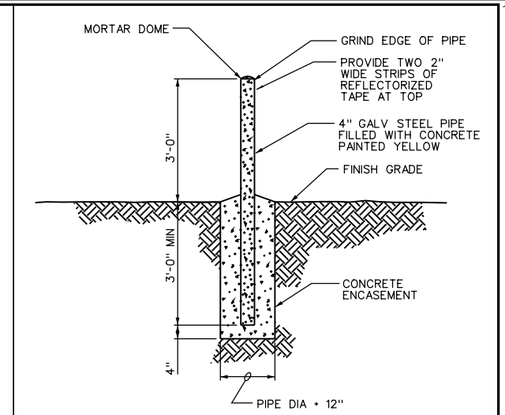
NOTES:

1. SEE SPECIFICATIONS FOR FENCE MATERIAL, COATINGS, AND INSTALLATION REQUIREMENTS.
2. SEE SPECIFICATIONS FOR CLEARANCES IN SNOW REGIONS.
3. 12" DIAMETER X 18" DEEP CONCRETE STOP W/ 6-#4 BARS, 20 GA STEEL PLUNGER SLEEVE. DIA = ROD OD + 1/2".



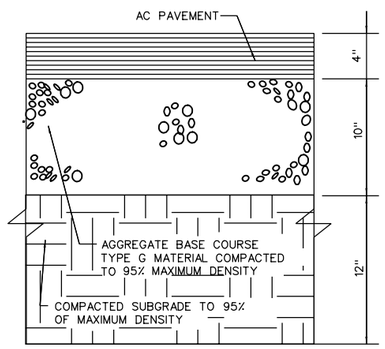
DOUBLE LEAF GATE

REV 040302 C-128



GUARD POST

REV 040302 C-129

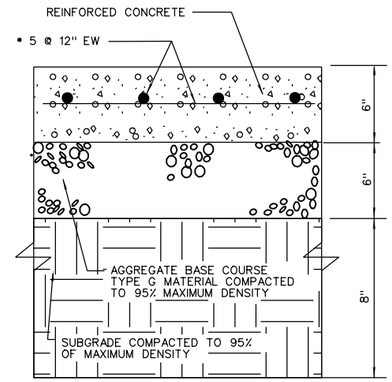


ASPHALTIC CONCRETE (AC) PAVEMENT

NOT TO SCALE

(SEE C-120 FOR PAVEMENT RESTORATION DETAIL)

C-130

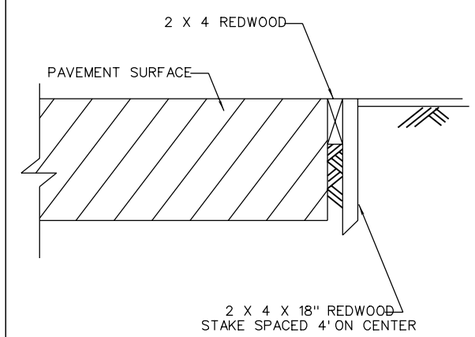


CONCRETE PAVEMENT

NOT TO SCALE

C-131

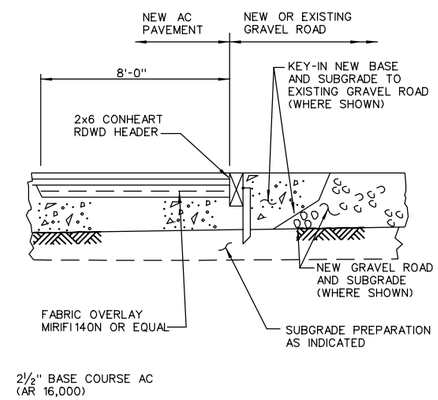
NOTE: ON CURVES USE 4 LAYERED REDWOOD BENDER BOARDS



REDWOOD HEADER

NOT TO SCALE

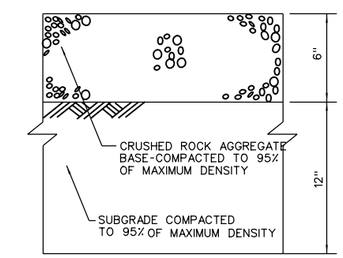
C-134



AC PAVEMENT-GRAVEL TRANSITION

NOT TO SCALE

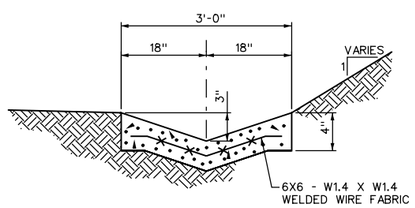
C-141



GRAVEL PAVING

NOT TO SCALE

C-144

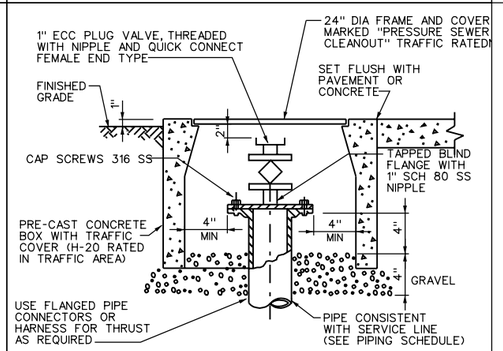


NOTES:

1. EXPANSION JOINTS OF ONE-HALF INCH BITUMINOUS MATERIAL SHALL BE PLACED AT 50-FEET SPACING AND WHERE SWALE BUTTS OTHER CONCRETE STRUCTURES.
2. PREPARE BASE AND SUBBASE PER PAVING DETAIL C-130

CONCRETE LINED SWALE

REV 030602 C-206



PRESSURIZED SYSTEM CLEANOUT TO GRADE (PCOTG)

REV 010500 C-305

REGISTERED PROFESSIONAL ENGINEER ARTHUR BERGEN NO. C31069 Exp. 3-31-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED: L WONG
DRAWN: F WISNIEWSKI
CHECKED: J BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

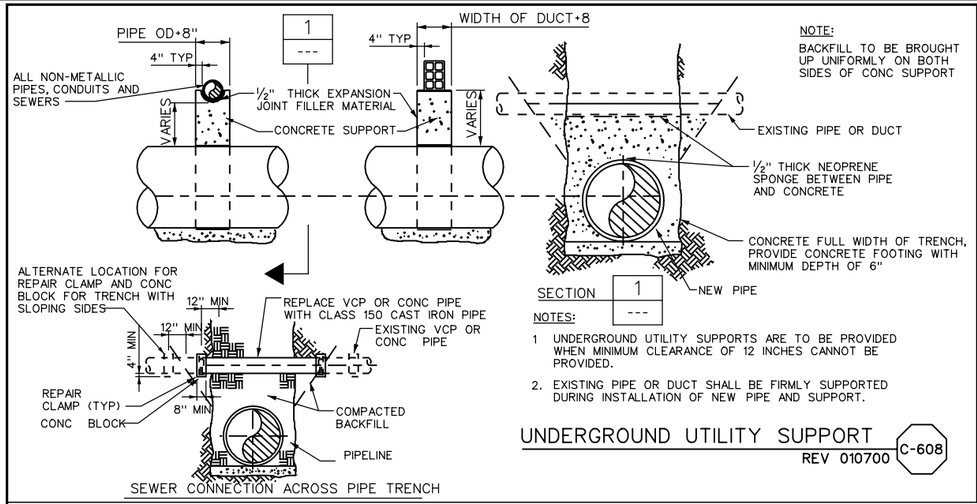
MWH Walnut Creek, California

SUBCONSULTANT'S LOGO

LOS OSOS WASTEWATER PROJECT
GENERAL CIVIL
GENERAL CIVIL DETAILS – 5

SHEET AD-GC-064

Plot Date: 09-FEB-2004 14:59
File: N:\Projects\los_osos\Collect_Sys\AD\civ\AD-GC-064.dgn
Job No: 1481166

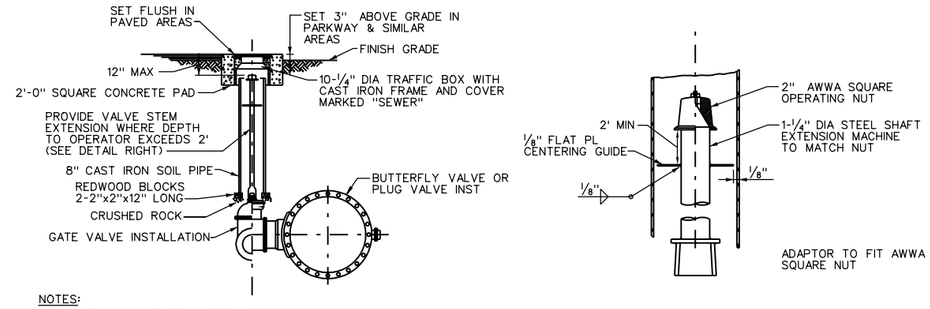


NOTE:
BACKFILL TO BE BROUGHT UP UNIFORMLY ON BOTH SIDES OF CONC SUPPORT

NOTES:
1 UNDERGROUND UTILITY SUPPORTS ARE TO BE PROVIDED WHEN MINIMUM CLEARANCE OF 12 INCHES CANNOT BE PROVIDED.
2. EXISTING PIPE OR DUCT SHALL BE FIRMLY SUPPORTED DURING INSTALLATION OF NEW PIPE AND SUPPORT.

UNDERGROUND UTILITY SUPPORT

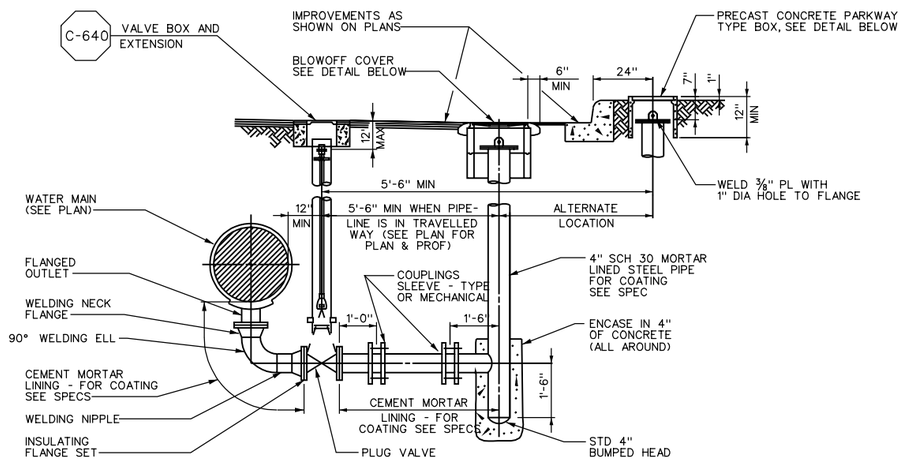
REV 010700 C-608

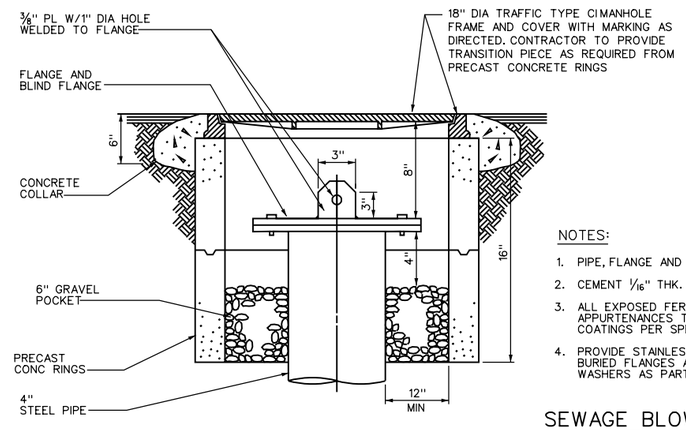


NOTES:
PROVIDE PROTECTIVE COATING TO EXTERIOR SURFACE OF VALVE BODY IN ACCORDANCE WITH SPECS.
FOR LUBRICATED PLUG VALVE, EXTEND LUBRICATION LINE TO GRADE PER MANUFACTURES INSTRUCTIONS.

BURIED VALVE INSTALLATION

REV 011200 C-640

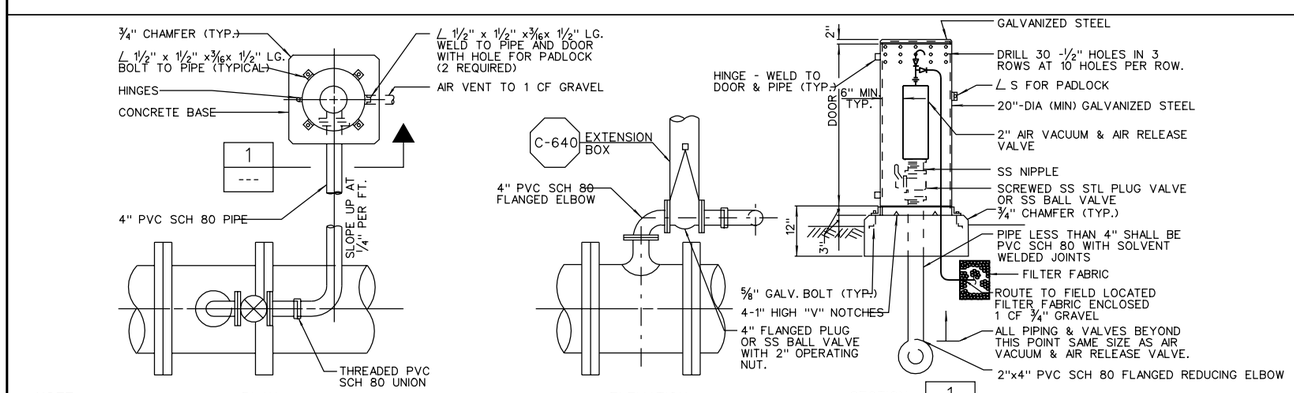




NOTES:
1. PIPE, FLANGE AND BLIND FLANGE SAME CLASS AS PIPELINE.
2. CEMENT 1/16" THK. FULL COVER GASKET TO FLANGE.
3. ALL EXPOSED FERROUS SURFACES OF BURIED PIPE AND APPURTENANCES TO BE PROVIDED WITH PROTECTIVE COATINGS PER SPECIFICATIONS.
4. PROVIDE STAINLESS STEEL NUTS, BOLTS AND WASHERS TO BURIED FLANGES AND COUPLINGS EXCEPT FOR NON-METALLIC WASHERS AS PART OF INSULATING FLANGE SET.

SEWAGE BLOWOFF

REV 030602 C-620



NOTE:
1. THIS ASSEMBLY TO BE USED IN AREAS WHERE VAULT NOT REQUIRED OR WHERE MAIN PIPELINE IS TOO SHALLOW TO PERMIT USE OF VAULT.
2. ALL FERROUS SURFACES OF PIPE AND APURTENANCES TO BE PROVIDED WITH PROTECTIVE COATING PER SPECS.
3. PROVIDE STAINLESS STL. NUTS, BOLTS AND WASHERS TO BURIED FLANGES AND COUPLINGS, EXCEPT FOR NONMETALLIC WASHERS TO BE PROVIDED AS PART OF INSULATING FLANGE SET.

SEWAGE AIR VACUUM/ AIR RELEASE VALVE

REV 030602 C-906

(ALSO SEE C-119 COMBINATION AIR/ VACUUM RELEASE VALVE MANHOLE)

REGISTERED PROFESSIONAL ENGINEER JOHN ARTHUR BERGEN NO. C31069 Exp. 3-31-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED: L WONG
DRAWN: E WISNIEWSKI
CHECKED: J BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

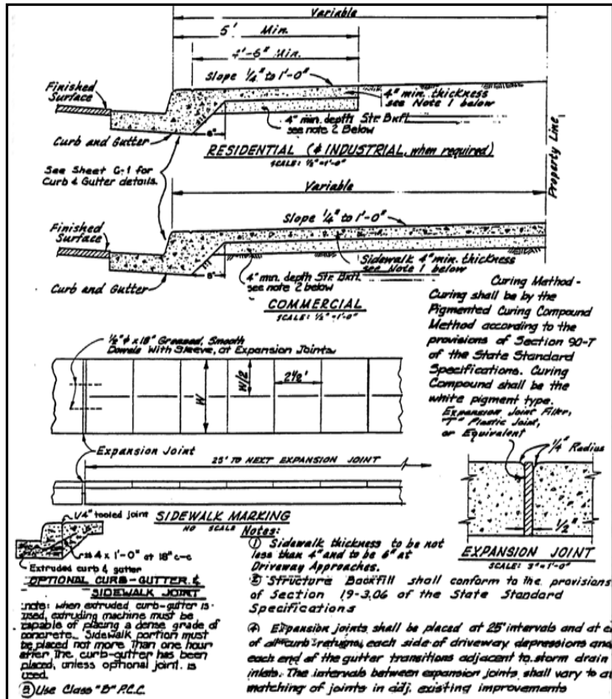
MWH Walnut Creek, California

SUBCONSULTANT'S LOGO

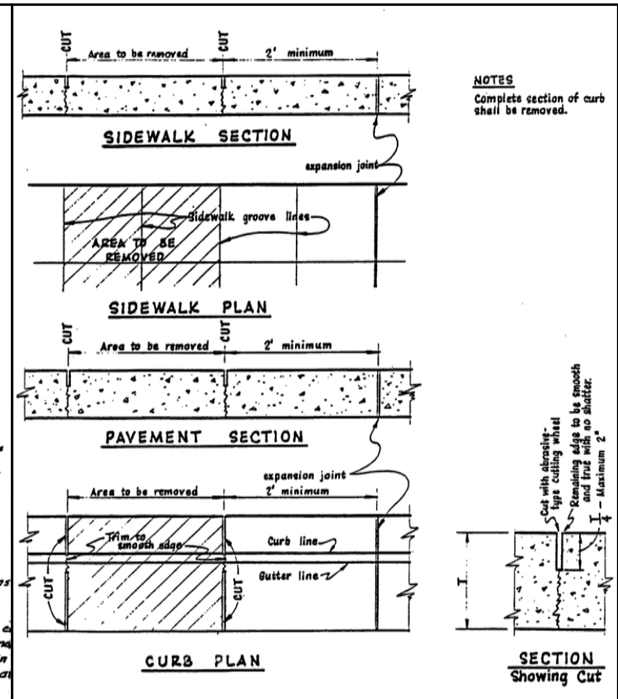
LOS OSOS WASTEWATER PROJECT
GENERAL CIVIL
GENERAL CIVIL DETAILS – 6

SHEET AD–GC–065

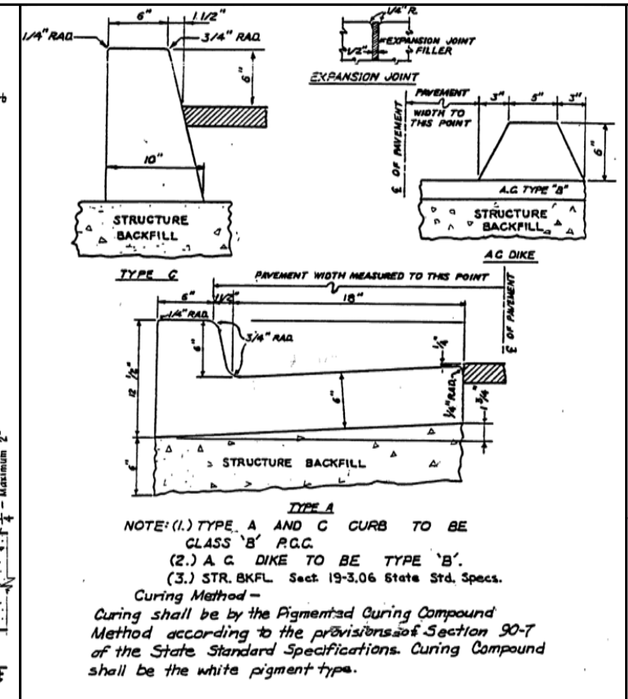
Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\AD\civ\AD-GC-065.dgn Plot Date: 09-FEB-2004 14:59



SLOC STANDARD DETAIL NO. B-5



SLOC STANDARD DETAIL NO. B-6



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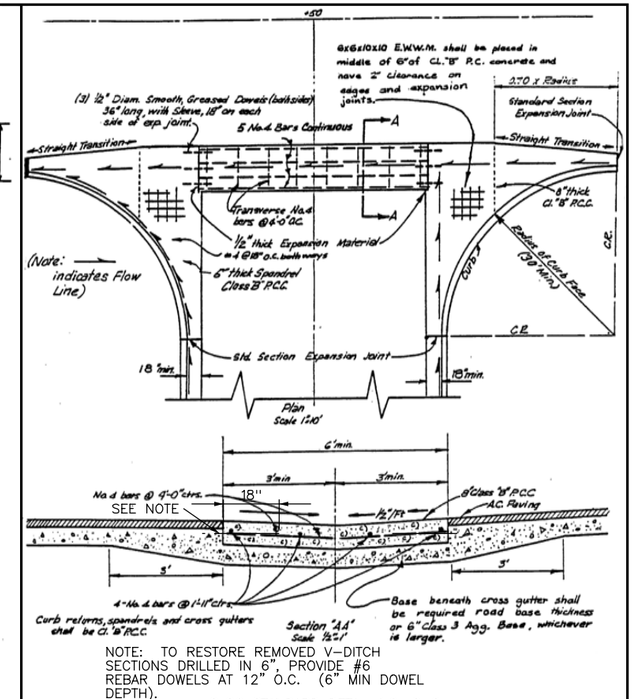
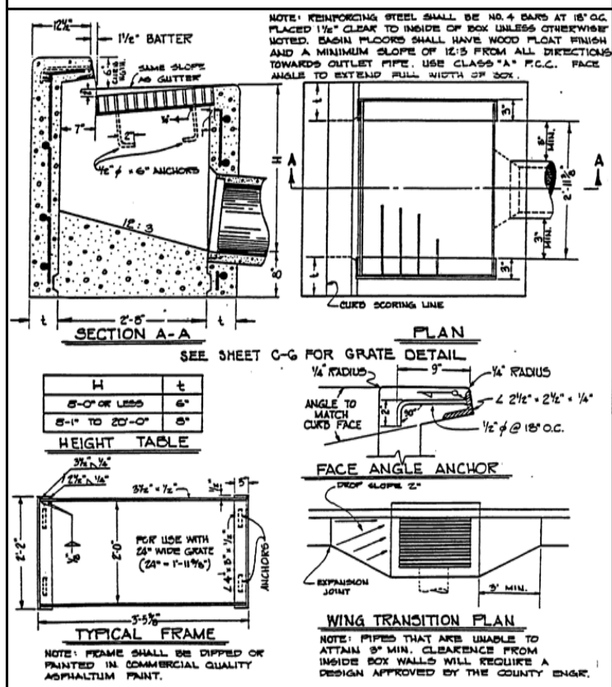
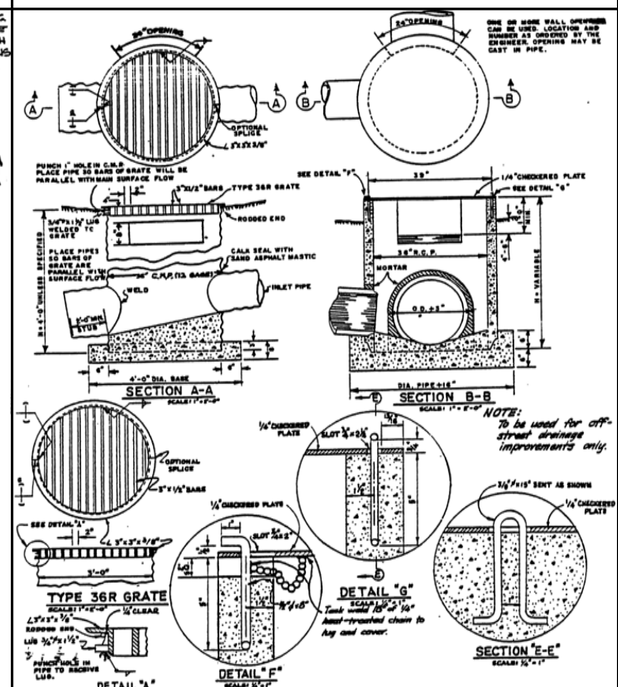


NOTE: TO RESTORE REMOVED V-DITCH SECTIONS DRILLED IN 6", PROVIDE #6 REBAR DOWELS AT 12" O.C. (6" MIN DOWEL DEPTH).

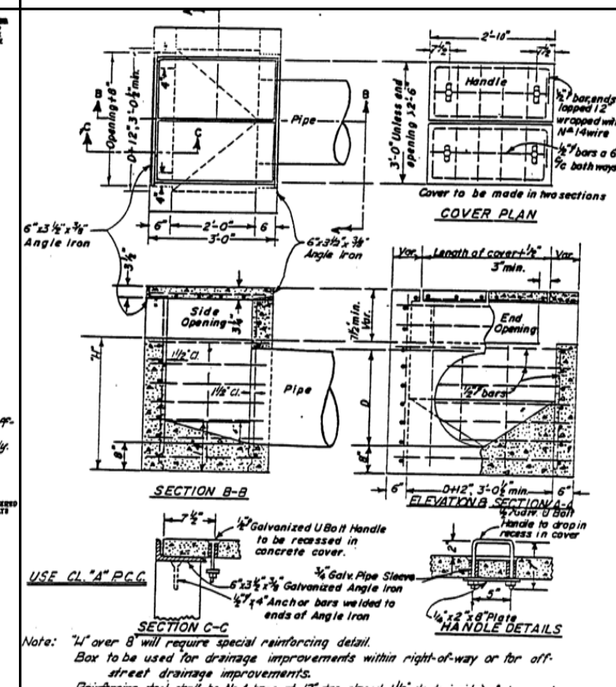
SLOC STANDARD DETAIL NO. C-2



SLOC STANDARD DETAIL NO. C-3



SLOC STANDARD DETAIL NO. C-4



SLOC STANDARD DETAIL NO. C-5

REGISTERED PROFESSIONAL ENGINEER ARTHUR J. BERGEN NO. C31069 Exp. 3-31-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L. WONG
DRAWN E. WISNIEWSKI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

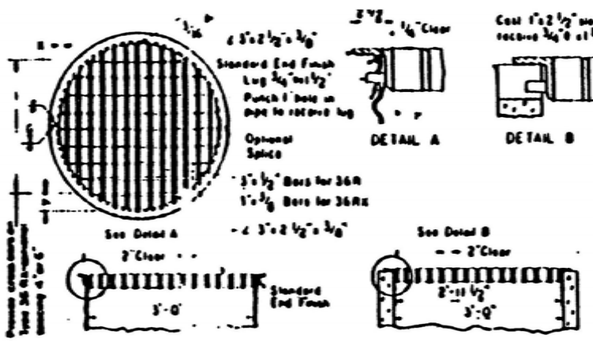
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

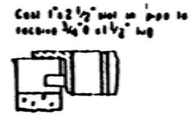
LOS OSOS WASTEWATER PROJECT
GENERAL CIVIL
SAN LUIS OBISPO COUNTY
STANDARD CIVIL DETAILS – 1

SHEET AD-GC-066

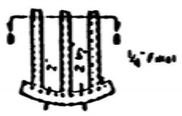
Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\AD\civ\AD-GC-066.dgn Plot Date: 09-FEB-2004 14:59



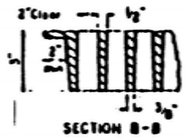
DETAIL A



DETAIL B

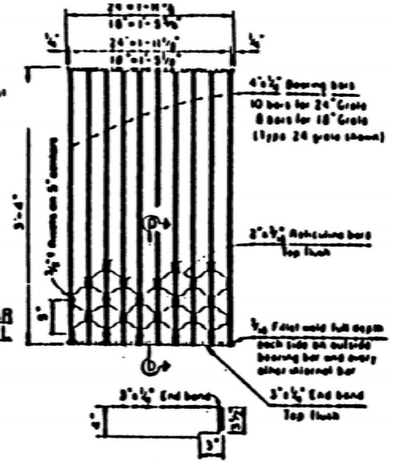


TYPE 36R & 36RX GRATE DETAILS



SECTION B-B

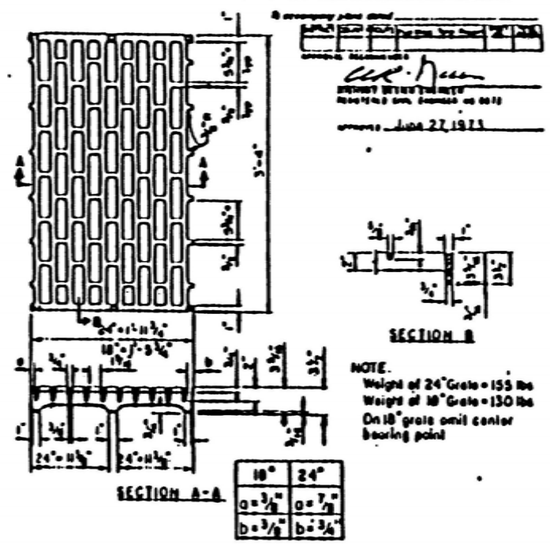
ALTERNATIVE CAST NODULAR IRON GRATE OR CAST STEEL GRATE TYPE 36R & 36RX



SECTION D-D

NOTE Weight of 24" Grate = 182 lbs
Weight of 18" Grate = 145 lbs

TYPE 18-8S & 24-10S GRATE
(WELDED STEEL)
RETICULINE TYPE



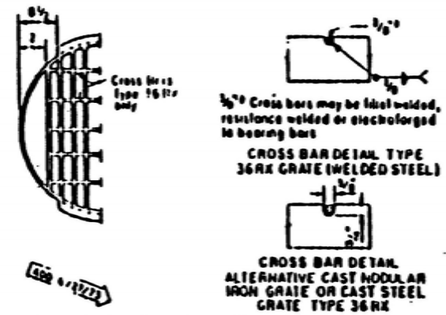
SECTION A-A

18"	24"
a = 3/8"	a = 7/8"
b = 3/8"	b = 3/4"

SECTION B

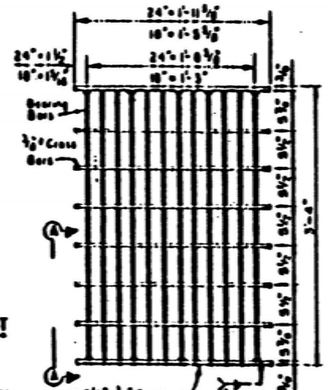
NOTE.
Weight of 24" Grate = 155 lbs
Weight of 18" Grate = 130 lbs
On 18" grate omit center bearing point

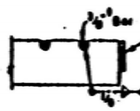
TYPE 18-8C & 24-10C GRATE
(CAST NODULAR IRON)



MODIFIED TYPE 36R & 36RX GRATE FOR ODI INLET

NOTE: Grates shall be dipped or painted in commercial quality asphaltum paint.

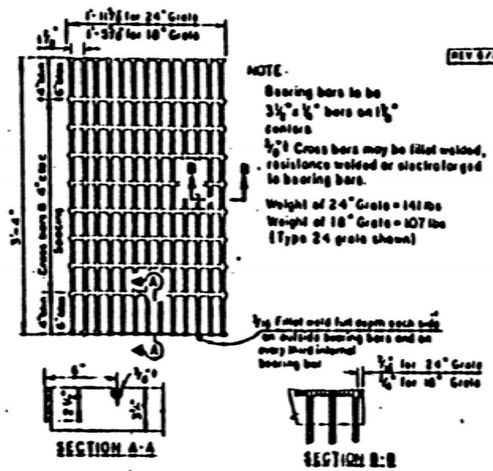




SECTION A-A

NOTE:
Bearing bars to be 3 1/2"x3/8" bars on 1 7/8" centers
12 bars for 24" Grate - 9 bars for 18" Grates
Type 24 grate shown
Weight of 24" Grate = 192 lbs
Weight of 18" Grate = 145 lbs
3/8"Ø Cross bars may be fillet welded, resistance welded or electroforged to bearing bars

TYPE 18-9X & 24-12X GRATE
(WELDED STEEL)



NOTE.
Bearing bars to be 3 1/2"x1/4" bars on 1 7/8" centers
3/8"Ø Cross bars may be fillet welded, resistance welded or electroforged to bearing bars.
Weight of 24" Grate = 141 lbs
Weight of 18" Grate = 107 lbs
(Type 24 grate shown)

SECTION A-A

SECTION B-B

TYPE 18-10 & 24-13 GRATE
(WELDED STEEL)

REV 6/28/73

BASIS FOR MISC. IRON & STEEL FINAL PAY WEIGHTS FOR DRAINAGE INLETS.

INLET TYPE	GRATE TYPE	NO GRATES	WEIGHT LBS
CDD	24-10C	1	291
	24-10S	1	291
	24-10X	1	291
	18-8C	1	130
	18-8S	1	130
	18-9X	1	130
CD, CDL, CI, CS, CS, CS (24")	24-10C	1	291
	24-10S	1	291
	24-10X	1	291
CD (18") CS, CS	18-8C	1	130
	18-8S	1	130
	18-9X	1	130
CI-1, CI-2	24-10C	1	291
	24-10S	1	291
	24-10X	1	291
	18-8C	1	130
	18-8S	1	130
	18-9X	1	130
CI-3, CI-4	24-10C	1	291
	24-10S	1	291
	24-10X	1	291
	18-8C	1	130
	18-8S	1	130
	18-9X	1	130

NOTES:
1. When alternative grates are allowed - Final pay based on alternative with the lowest weight.
2. Seal welding of all surfaces not required when grates are galvanized.
3. Use Frame shown on Standard Plan D77-A

NOTE
This plan sheet supersedes plan sheet D77-B, page 47 of the Standard Plans dated January, 1973

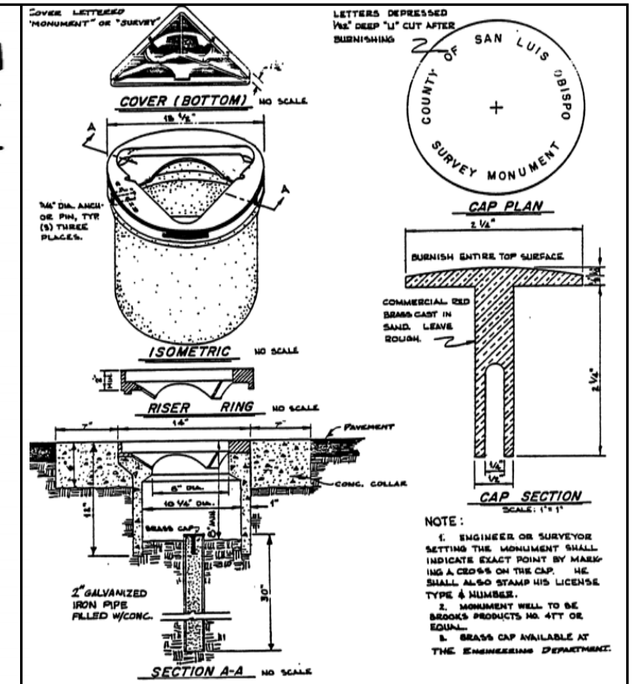
SPECIAL DETAILS
GRATE DETAILS

GRATE BAR SPACING TABLE

TYPE	NO BARS	CLEAR BAR	X	3" SPACING	6" SPACING	Z
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

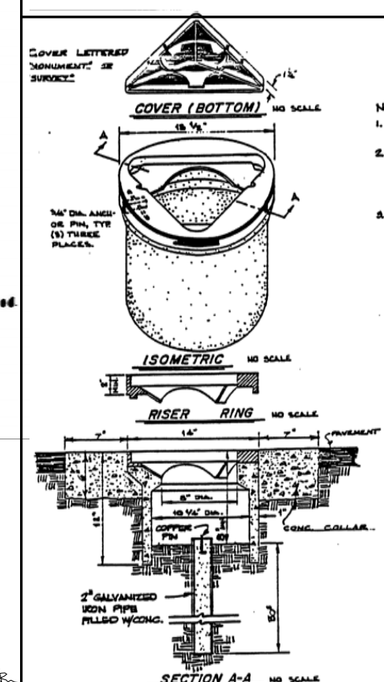
INLET TYPE	GRATE TYPE	NO GRATES	WEIGHT LBS.
ODI	[illegible]	[illegible]	[illegible]
CMP, CCP, ECP	[illegible]	[illegible]	[illegible]
ODI	[illegible]	[illegible]	[illegible]
CMP, CCP, ECP	[illegible]	[illegible]	[illegible]

SLOC STANDARD DETAIL NO. C-6



NOTE:
1. ENGINEER OR SURVEYOR SETTING THE MONUMENT SHALL INDICATE EXACT POINT BY MARKING A CROSS ON THE CAP. HE SHALL ALSO STAMP HIS LICENSE TYPE & NUMBER.
2. MONUMENT WELL TO BE BROOKS PRODUCTS NO. 4TT OR EQUAL.
3. BRASS CAP AVAILABLE AT THE ENGINEERING DEPARTMENT.

SLOC STANDARD DETAIL NO. M-1



NOTES:
1. MONUMENT WELL TO BE BROOKS PRODUCTS NO. 4TT OR EQUAL.
2. MONUMENT WELL AND IRON PIPE TO BE SET BY CONTRACTOR. CONCRETE IN PIPE AND COPPER PIN TO BE SET BY ENGINEER OR SURVEYOR.
3. EXACT POINT TO BE SET WITH A COPPER PIN, OR EQUAL, AND A STANDARD SURVEYOR'S TAG.

SLOC STANDARD DETAIL NO. M-2

REGISTERED PROFESSIONAL ENGINEER JOHN ARTHUR BERGEN NO. C31069 Exp. 3-31-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L. WONG
DRAWN E. WISNIEWSKI
CHECKED J. BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVEN J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

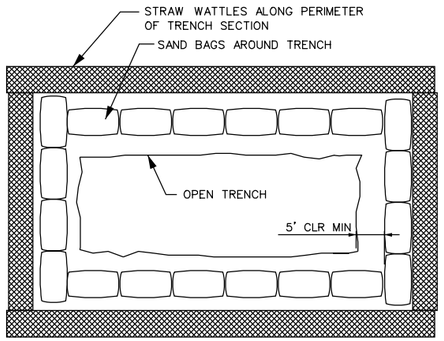
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

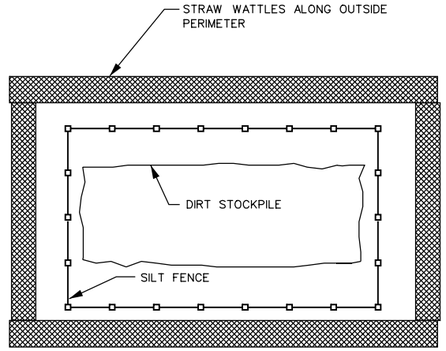
LOS OSOS WASTEWATER PROJECT
GENERAL CIVIL
SAN LUIS OBISPO COUNTY
STANDARD CIVIL DETAILS – 2

SHEET AD-GC-067

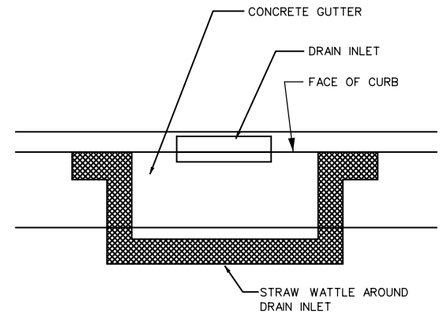
Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\AD\civ\AD-GC-067.dgn Plot Date: 09-FEB-2004 15:00



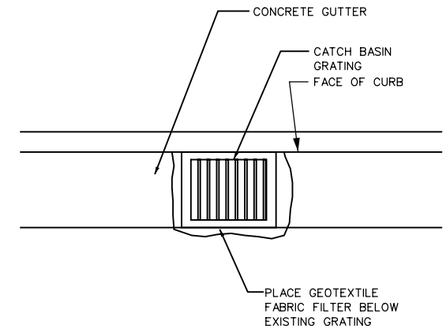
EROSION CONTROL
TRENCH PROTECTION
EC-01



EROSION CONTROL
EXCAVATION STOCKPILE
EC-02



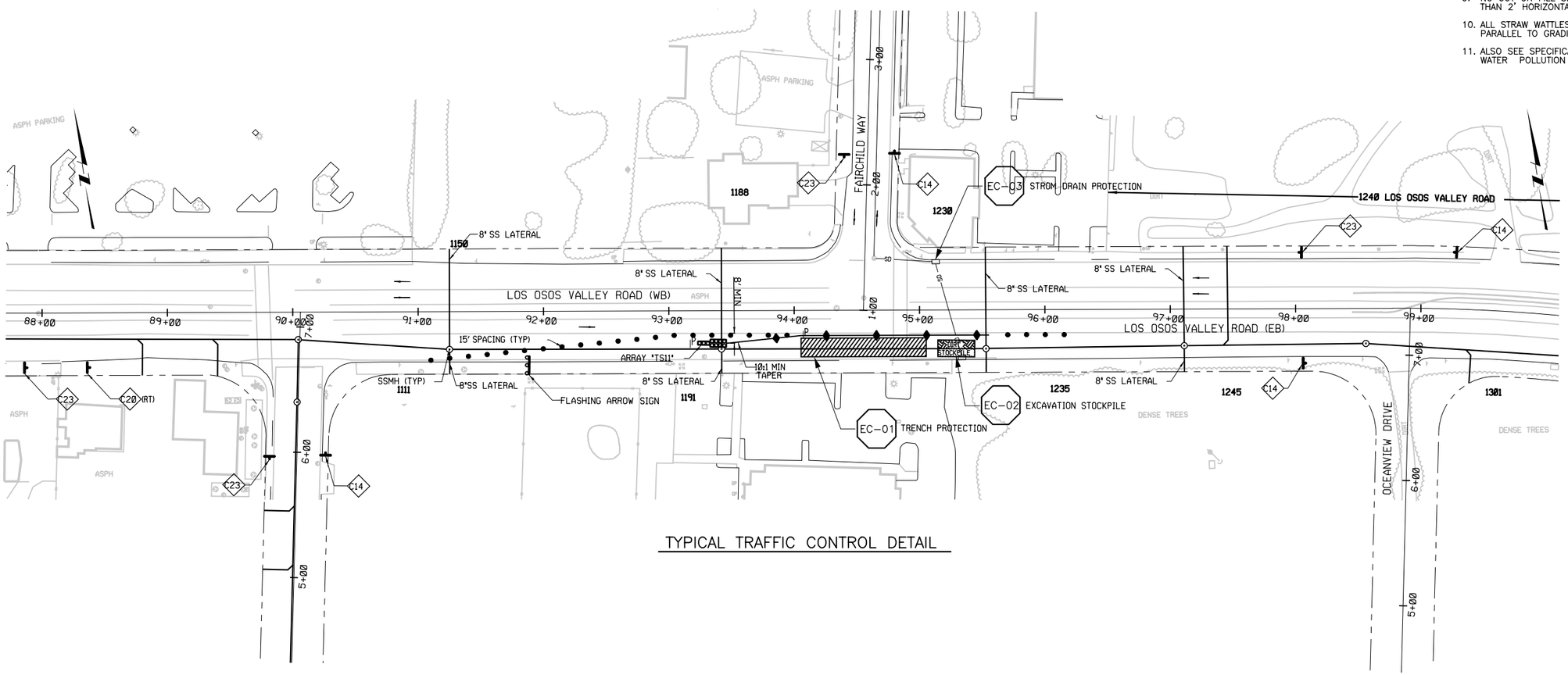
EROSION CONTROL
STORM DRAIN PROTECTION – 1
EC-03



EROSION CONTROL
STORM DRAIN PROTECTION – 2
EC-04

EROSION CONTROL NOTES:

1. DURING CONSTRUCTION THE CONTRACTOR MUST DIRECT ALL RUNOFF TO NON ERODIBLE LOCATIONS
2. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSSARY MATERIALS SHALL BE AVAILABLE AND STOCKPILLED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
3. THE CONTRACTOR SHALL CONTROL TEMPORARY EROSION CONTROL MEASURES AS SHOWN ON THIS PLAN AND/OR AS DIRECTED BY THE ENGINEER TO CONTROL DRAINAGE WHICH HAS BEEN AFFECTED BY GRADING AND/OR TRENCHING OPERATIONS.
4. ALL PERMANENT SLOPES AND DISTURBED AREAS SHALL BE PLANTED FOR EROSION CONTROL WITH APPROVED PERENNIAL VEGETATION WHICH SHALL BE DENSE AND GROWING PRIOR TO FINAL ACCEPTANCE (SEE THE HYDROSEEDING SPECIFICATION).
5. ALL PROTECTIVE DEVICES TO BE INSTALLED SHALL BE IN PLACE AT THE END OF EACH WORK DAY WHEN THE FIVE-DAY RAIN PROBABILITY EXCEEDS 40 PERCENT.
6. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS AND SEDIMENTATION BASIN AND THE BASIN PUMPED DRY.
7. THE CONTRACTOR MAY BE REQUIRED TO INSTALL AND/OR CONSTRUCT ADDITIONAL DRAINAGE STRUCTURES AS NECESSARY TO PREVENT OR CONTROL EROSION.
8. THE CONTRACTOR IS RESPONSABLE FOR CLEANING ANY EROSION OR DEBRIS SPILLING ONTO A PUBLIC STREET.
9. NO CUT OR FILL SLOPES SHALL BE STEEPER THAN 2' HORIZONTAL TO 1' VERTICAL.
10. ALL STRAW WATTLES TO BE INSTALLED PARALLEL TO GRADING CONTOURS.
11. ALSO SEE SPECIFICATION SECTION 01570 STORM WATER POLLUTION PREVENTION PLAN.



TYPICAL TRAFFIC CONTROL DETAIL

REGISTERED PROFESSIONAL ENGINEER
JOHN ARTHUR BERGEN
NO. C31069
Exp. 3-31-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: AS NOTED

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED L WONG
DRAWN E WISNIEWSKI
CHECKED J BERGEN

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

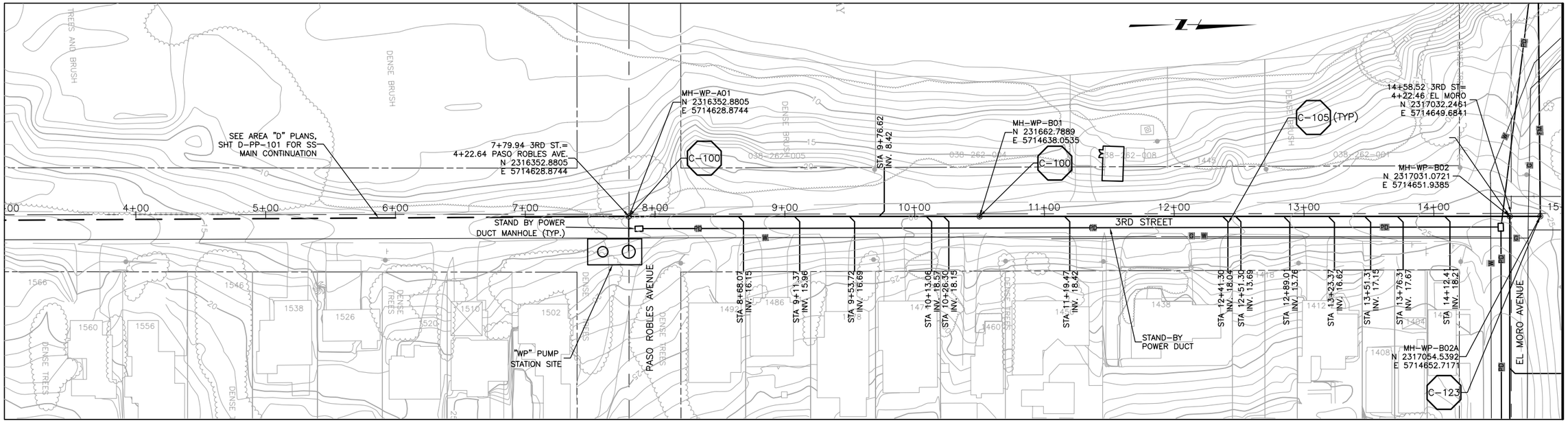
LOS OSOS WASTEWATER PROJECT

GENERAL CIVIL
EROSION CONTROL
DETAILS

SHEET AD-GC-068

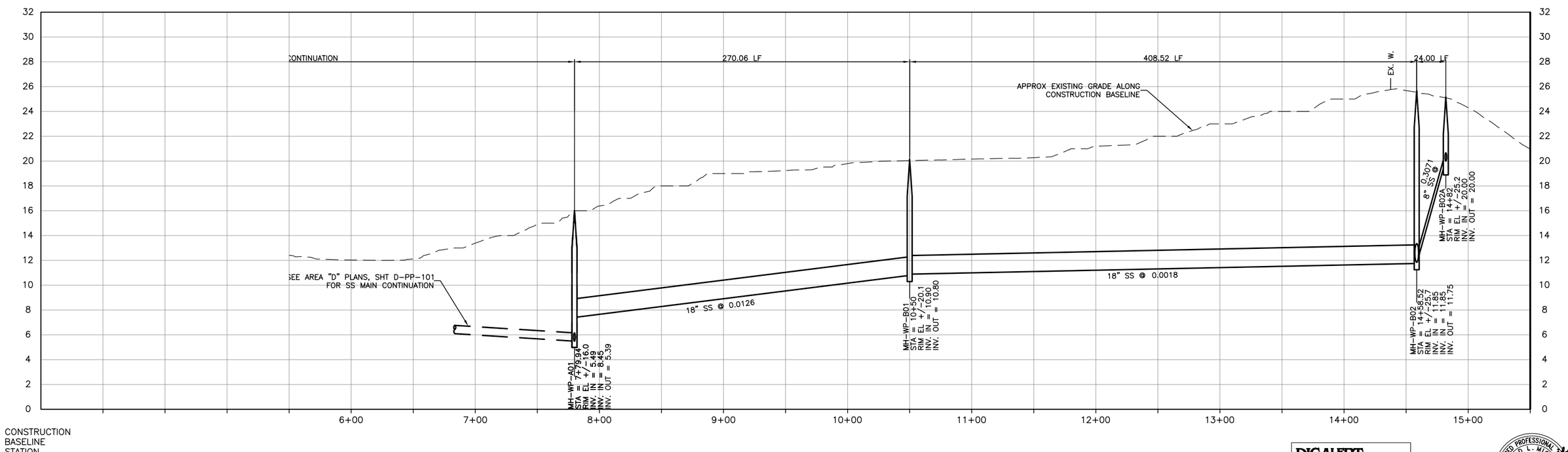
Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\AD\civ\AD-GC-068.dgn Plot Date: 09-FEB-2004 15:01

SEE SHEET A-PP-196
FOR CONTINUATION



SEE SHEET A-PP-101
FOR CONTINUATION

PLAN ON 3RD STREET



PROFILE ON 3RD STREET

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UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MICHAEL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' 1" = 4'

WARNING: 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
3RD STREET
STA 7+79.94 TO 14+58.52

SHEET A-PP-100

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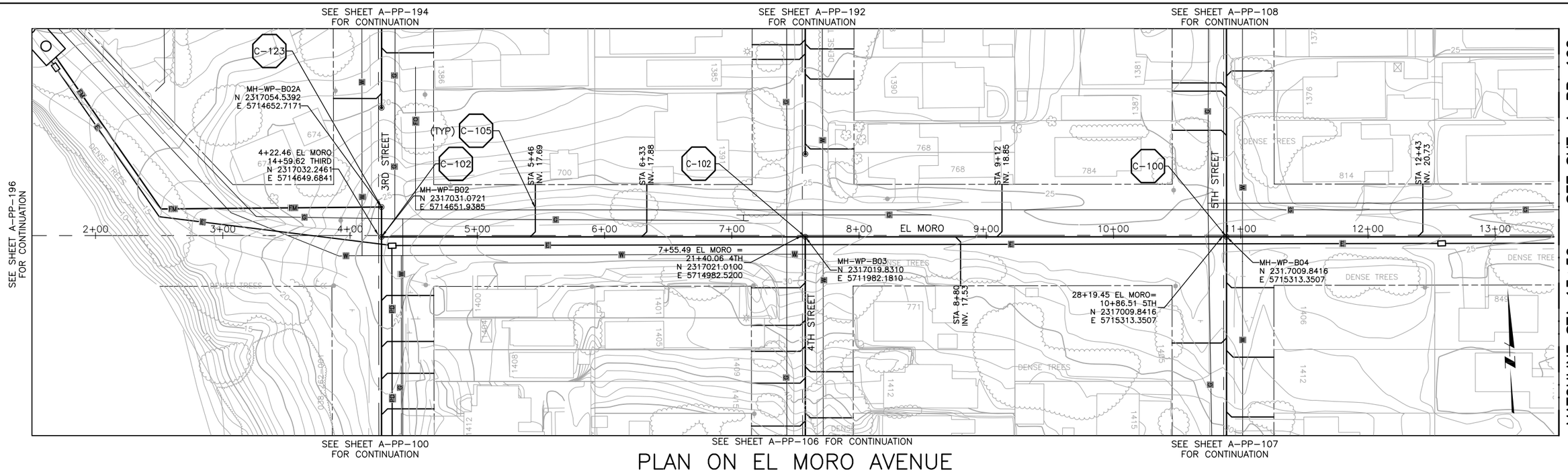
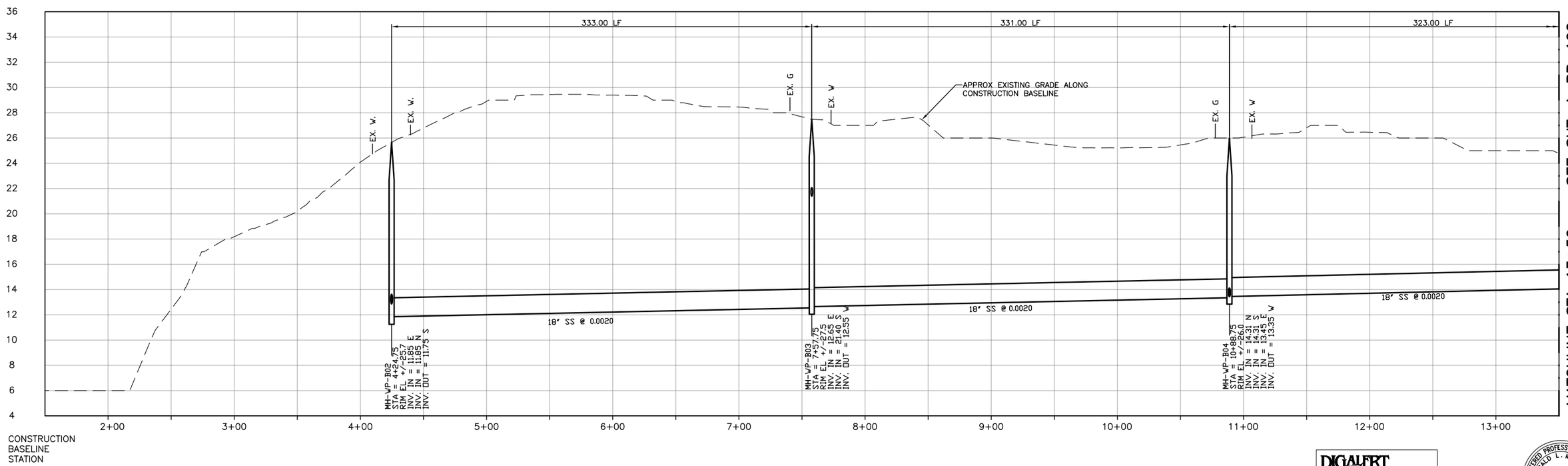


PLAN ON EL MORO AVENUE



PROFILE ON EL MORO AVENUE

DIGALERT
DIAL TOLL FREE
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AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
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LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
EL MORO AVENUE
STA 4+24.75 TO 13+50

SHEET
A-PP-101

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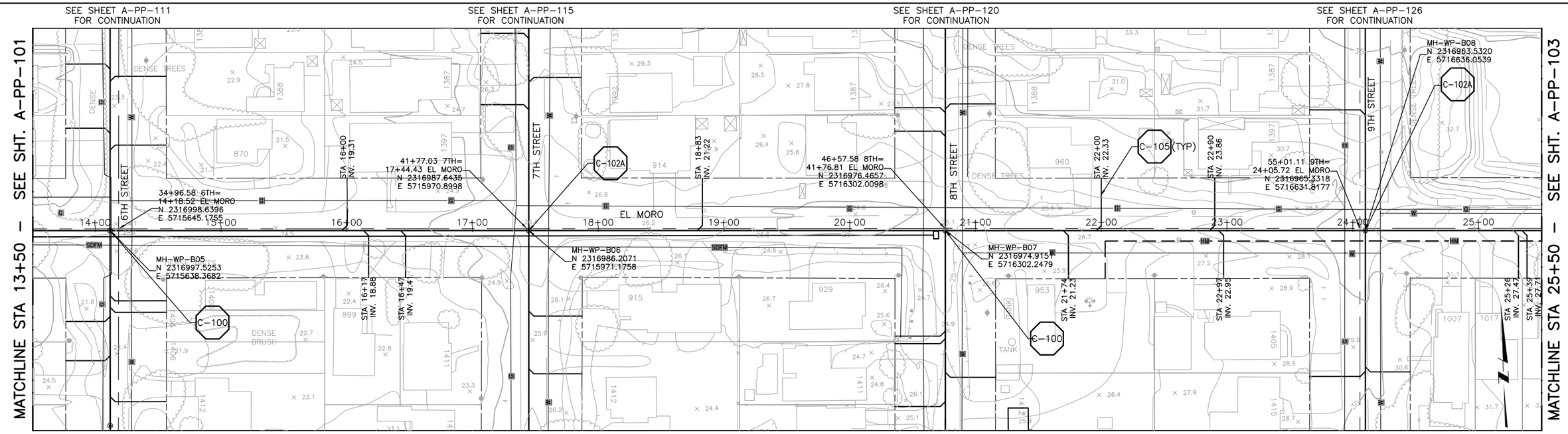
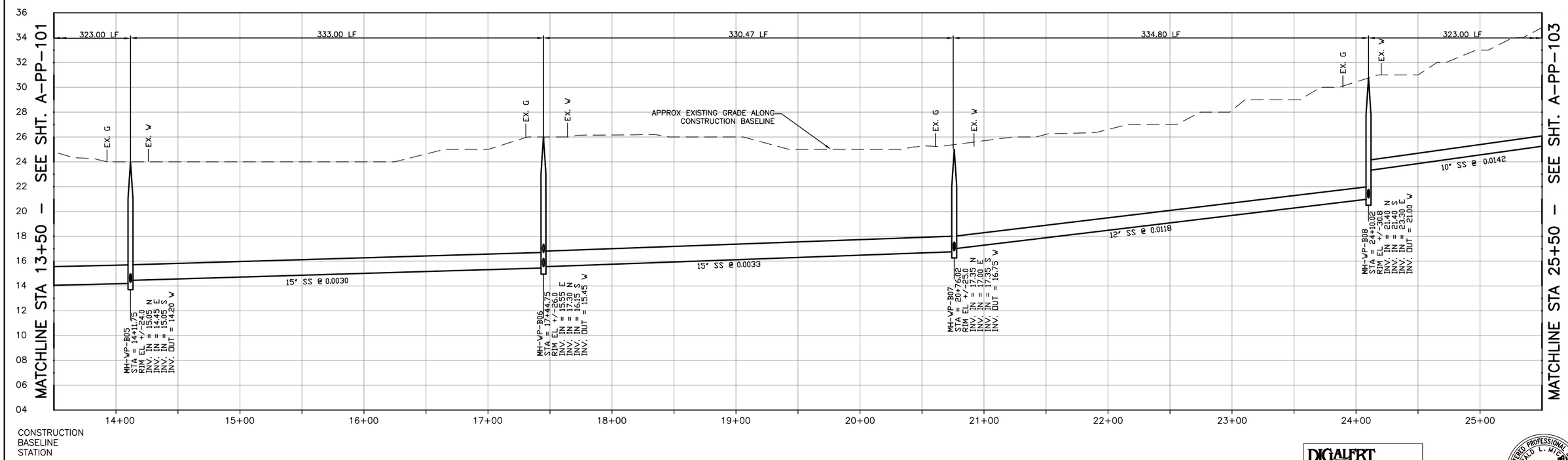


PLAN ON EL MORO AVENUE



PROFILE ON EL MORO AVENUE

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UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MICHAEL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA
DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
EL MORO AVENUE
STA 13+50 TO 25+50

SHEET A-PP-102

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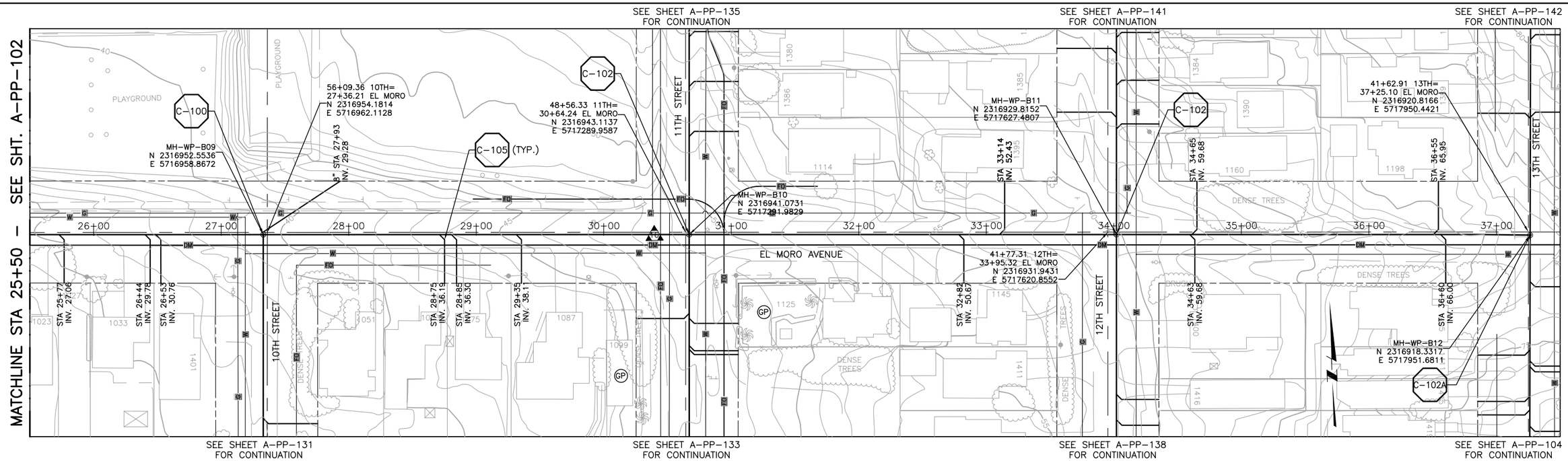
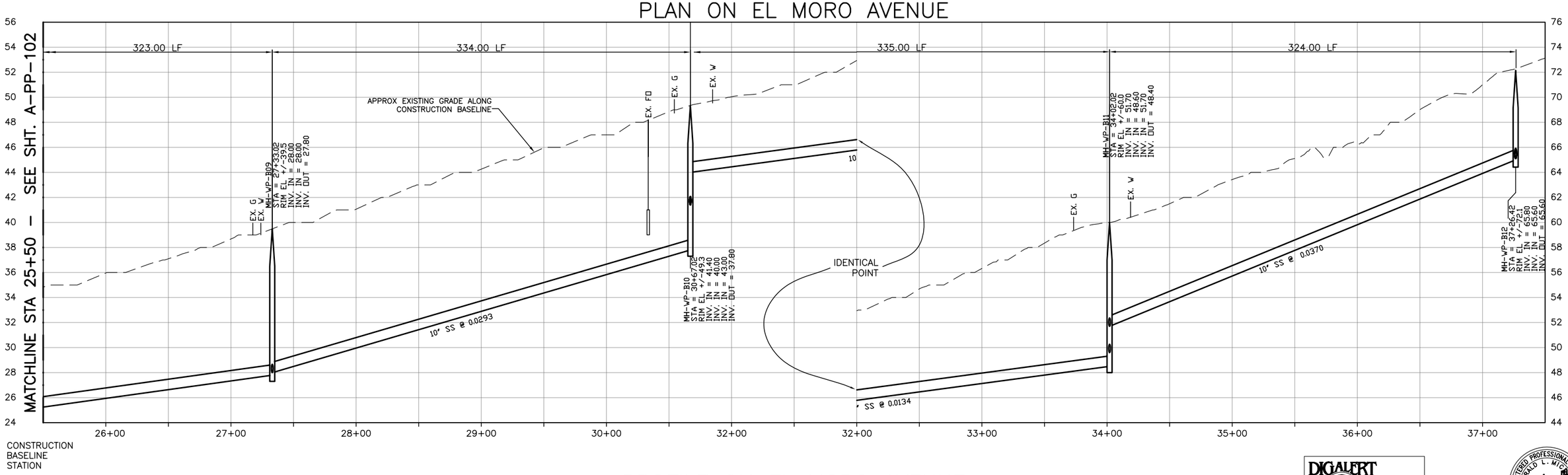


PLAN ON EL MORO AVENUE



PROFILE ON EL MORO AVENUE

DIGALERT
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1-800-642-2444
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UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MCGRAEL No. 46895 CIVIL STATE OF CALIFORNIA
DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
EL MORO AVENUE
STA 25+50 TO 37+26.42

SHEET A-PP-103

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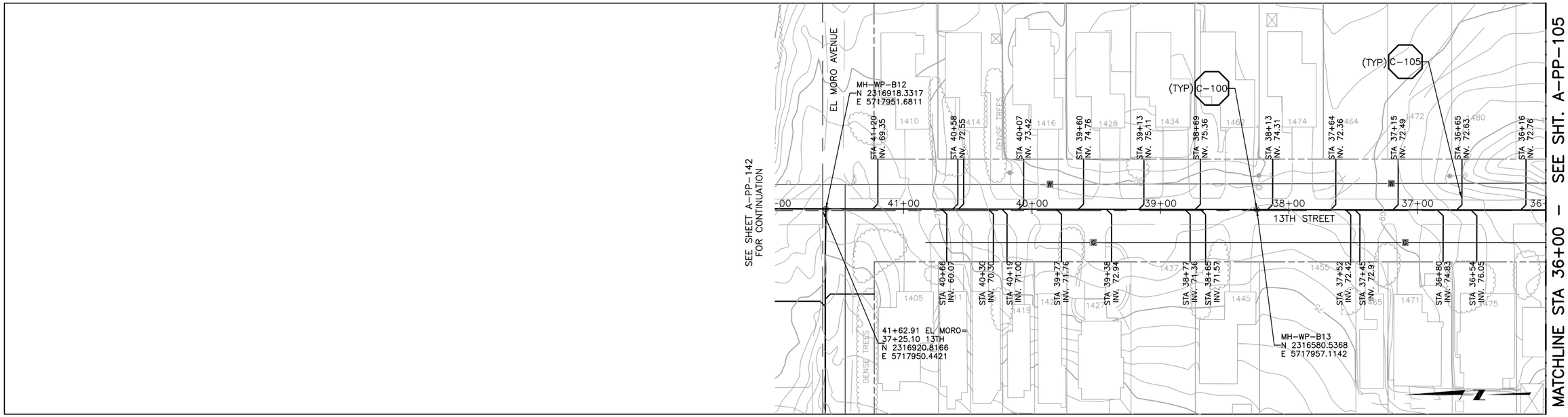
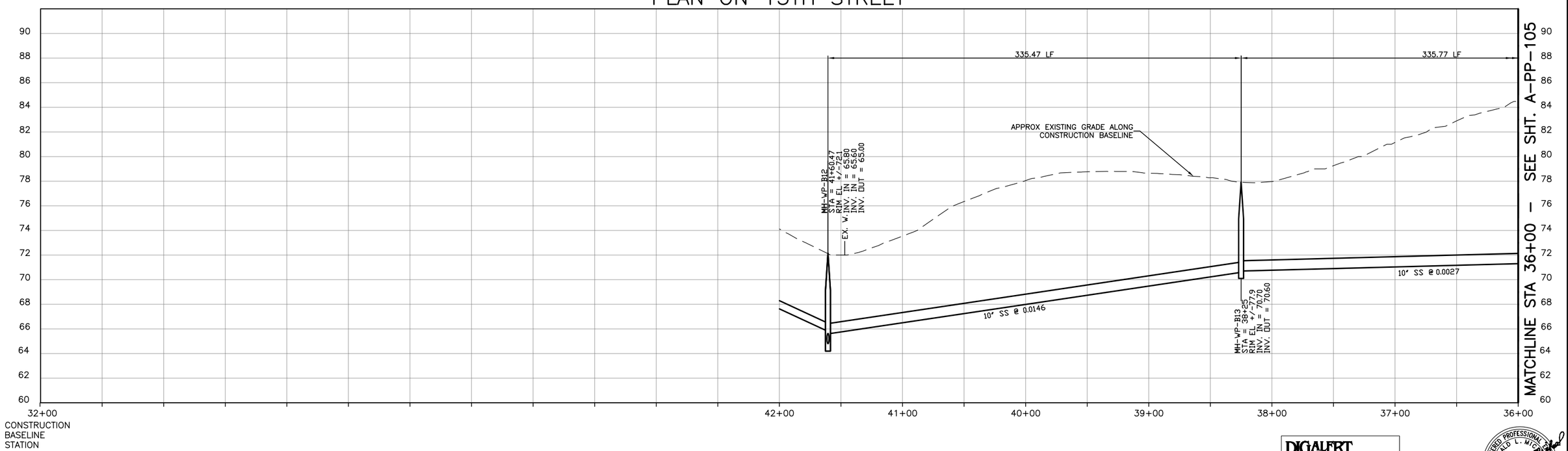


PLAN ON 13TH STREET



PROFILE ON 13TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MICHAEL No. 46895 CIVIL STATE OF CALIFORNIA
6/30/04
DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
13TH STREET
STA 36+00 TO STA 41+60.47

SHEET
A-PP-104

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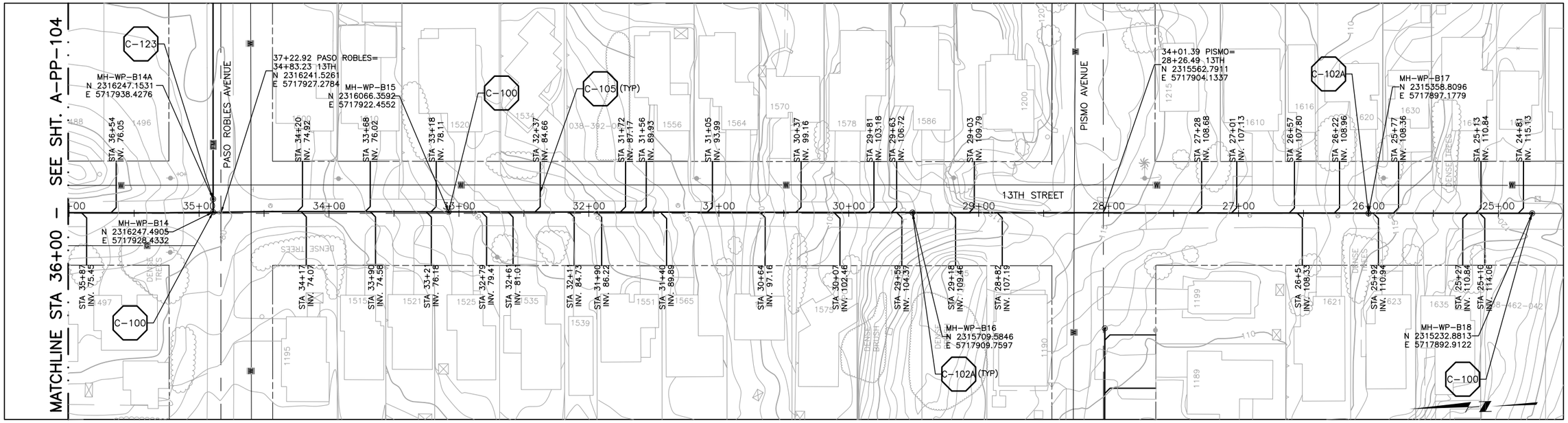
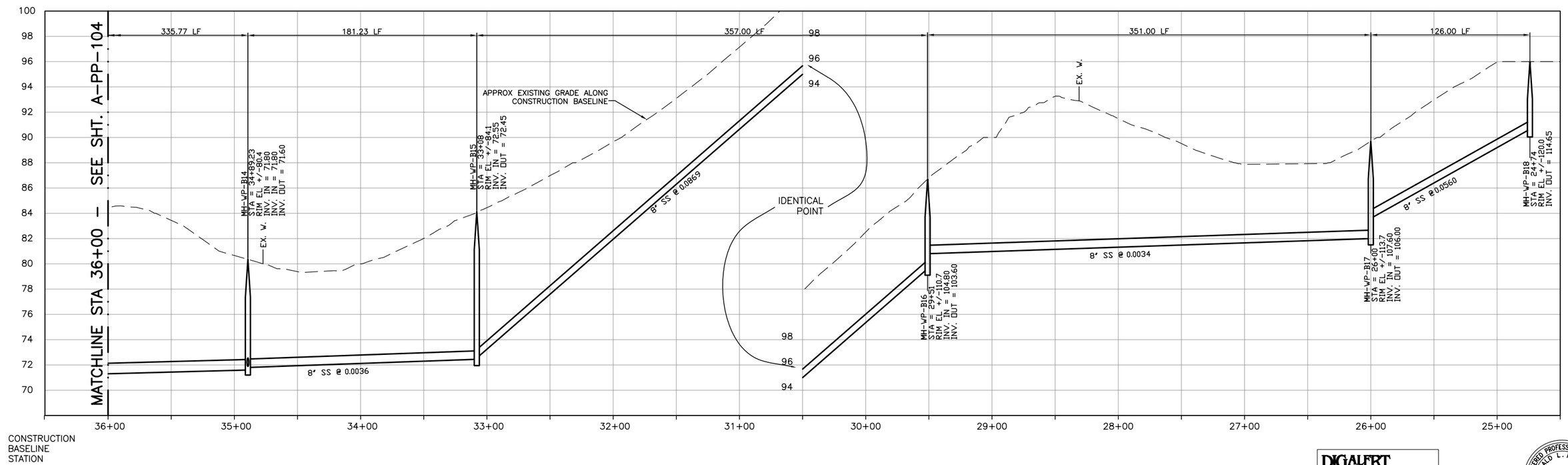


PLAN ON 13TH STREET



PROFILE ON 13TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA
DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

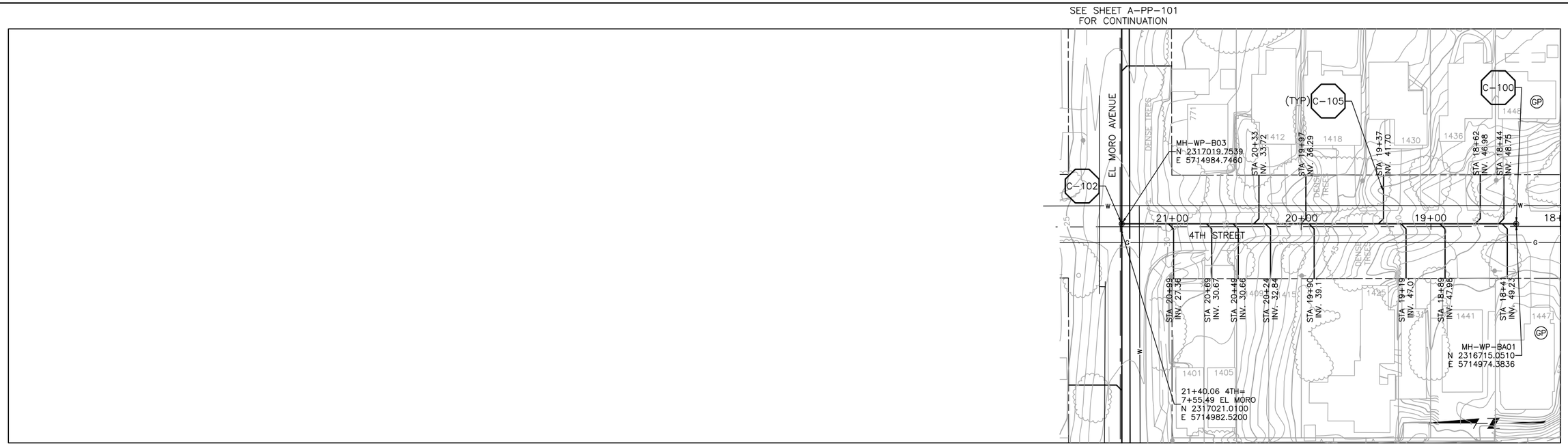
RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
13TH STREET
STA 24+74 TO 36+00

SHEET
A-PP-105

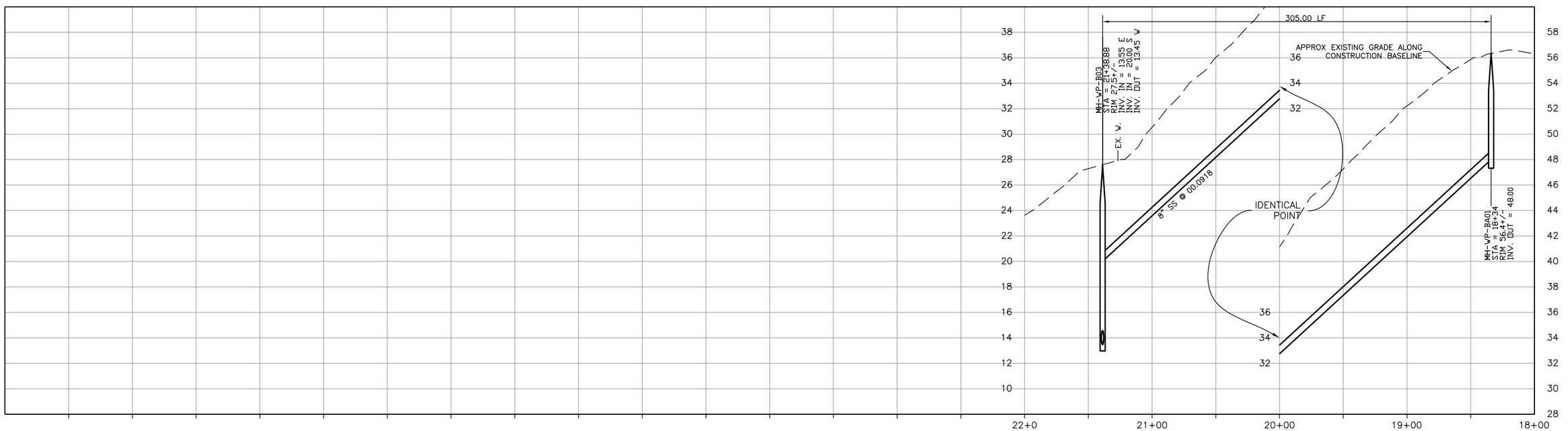
L:\los_osos\Collect_Sys\A\civ\A-PP-105.dwg, Condocs, Feb 05, 2004 6:24pm, DKHickman

SEE SHEET A-PP-101
FOR CONTINUATION



SEE SHEET A-PP-101
FOR CONTINUATION

PLAN ON 4TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 4TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

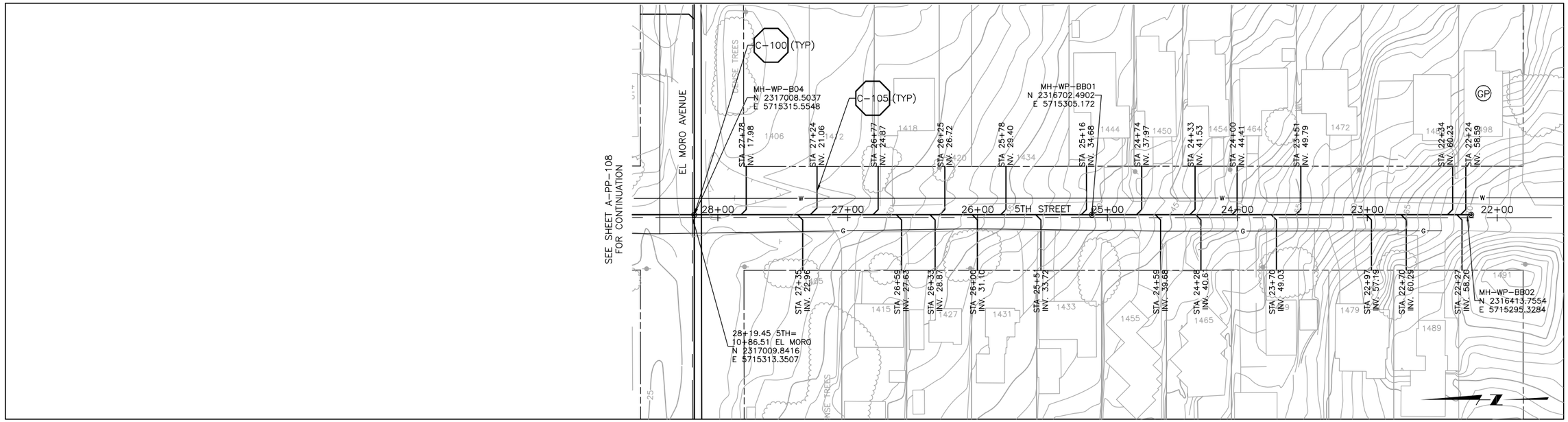
RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
4TH STREET
STA 18+34 TO STA 21+38.88

SHEET
A-PP-106

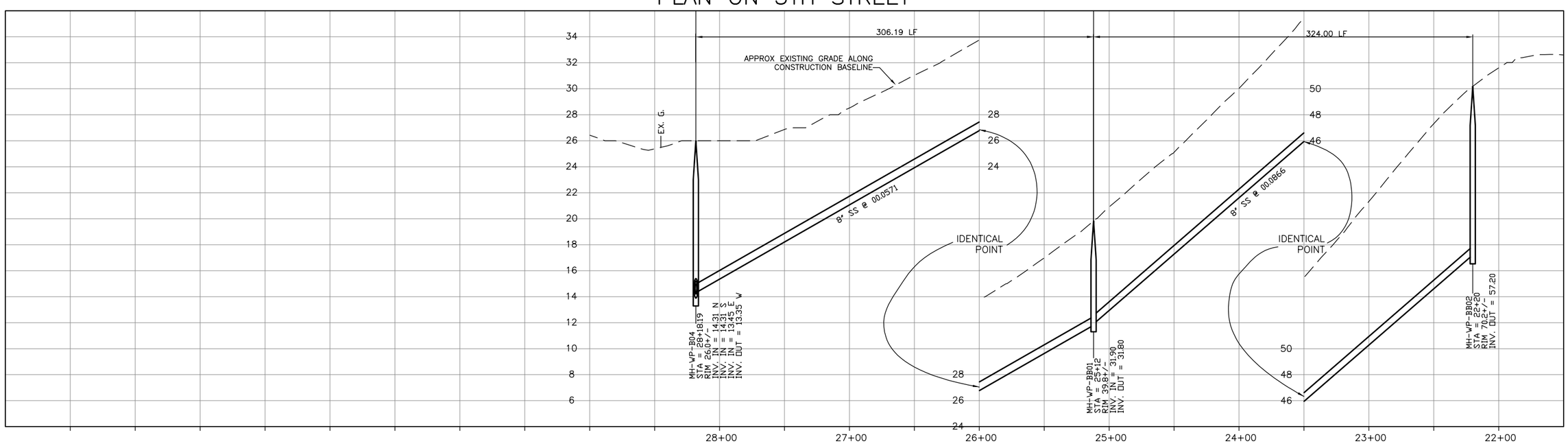
L:\los_osos\Collect_Sys\A\civ\A-PP-106.dwg, Condocs, Feb 05, 2004 7:23pm, HWHamilton

SEE SHEET A-PP-101
FOR CONTINUATION



SEE SHEET A-PP-101
FOR CONTINUATION

PLAN ON 5TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 5TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 56895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

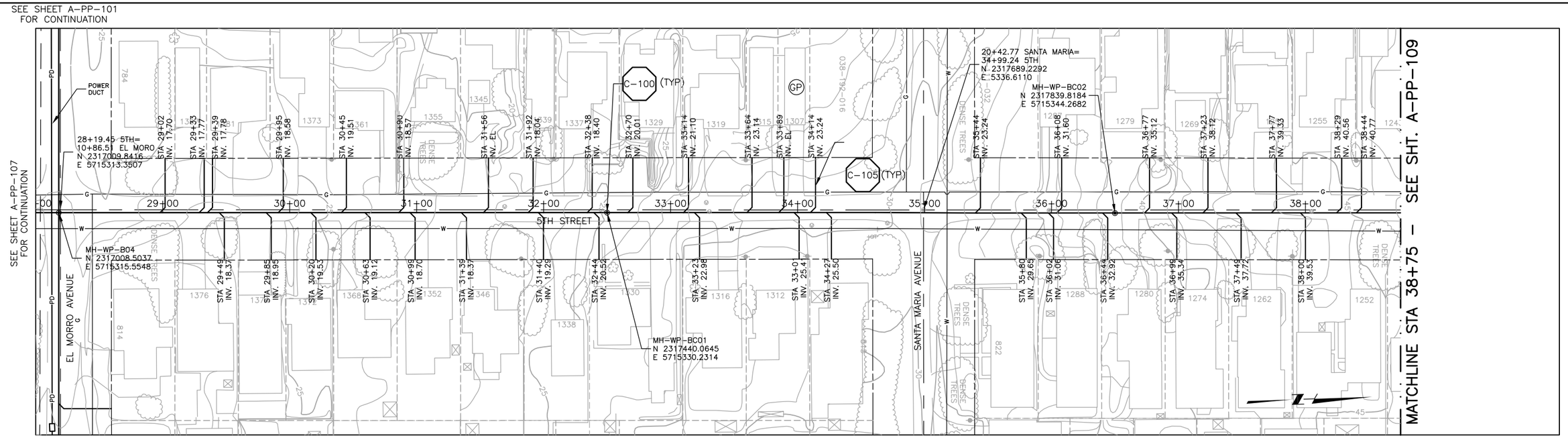
MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
5TH STREET
STA 22+20 TO STA 28+18.19

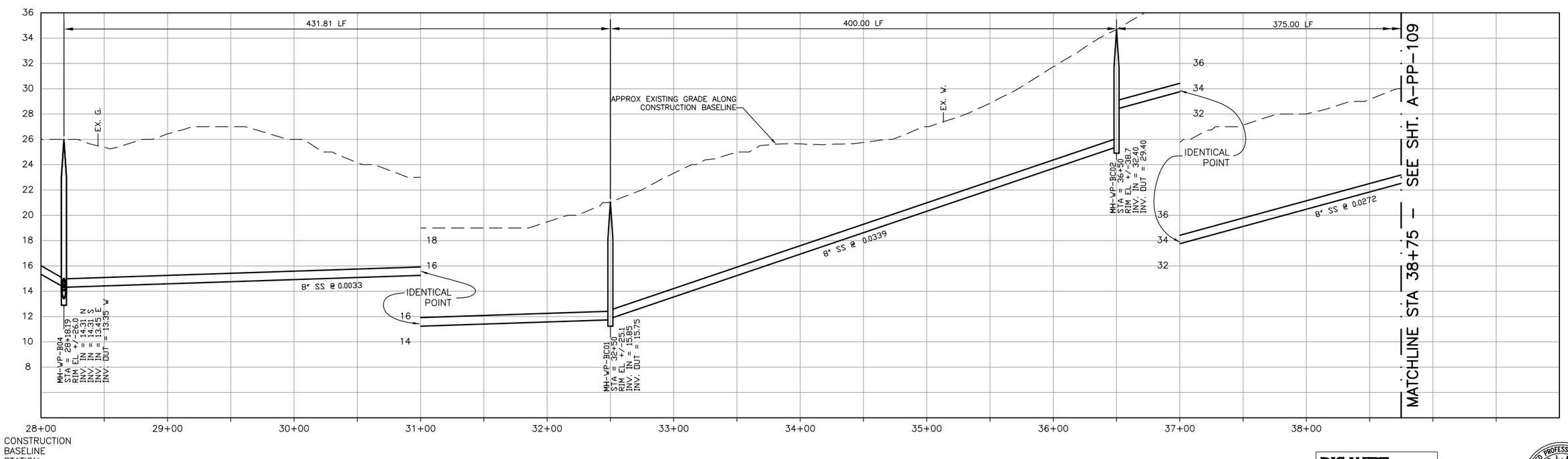
SHEET
A-PP-107

L:\los_osos\Collect_Sys\A\civ\A-PP-107.dwg, Condocs, Feb 05, 2004 4:26pm, HWHamilton



SEE SHEET A-PP-101
FOR CONTINUATION

PLAN ON 5TH STREET



PROFILE ON 5TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

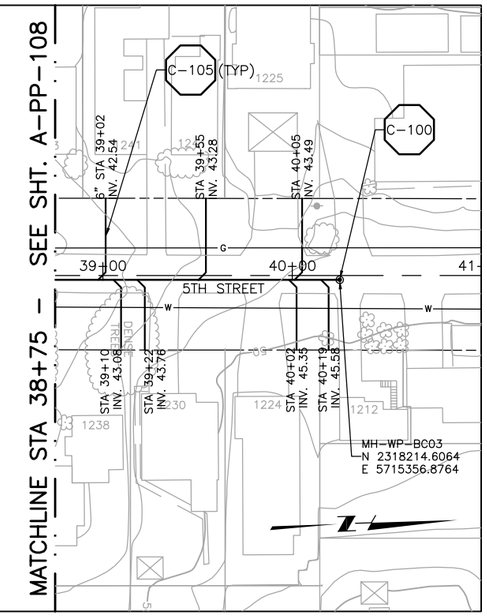
MWH
Walnut Creek, California

RRM DESIGN GROUP

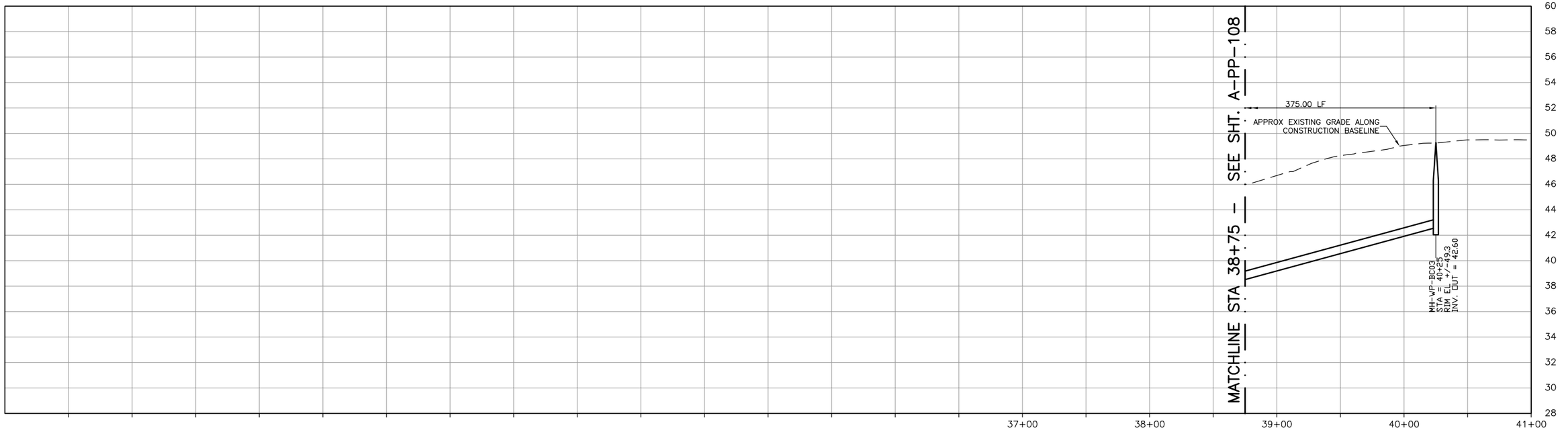
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
5TH STREET
STA 28+18.19 TO 38+75

SHEET
A-PP-108

L:\Los_osos\Collect_Sys\A\civ\A-PP-108.dwg, Candace, Feb 05, 2004 4:31pm, HWHamilton



PLAN ON 5TH STREET



PROFILE ON 5TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MICHEL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

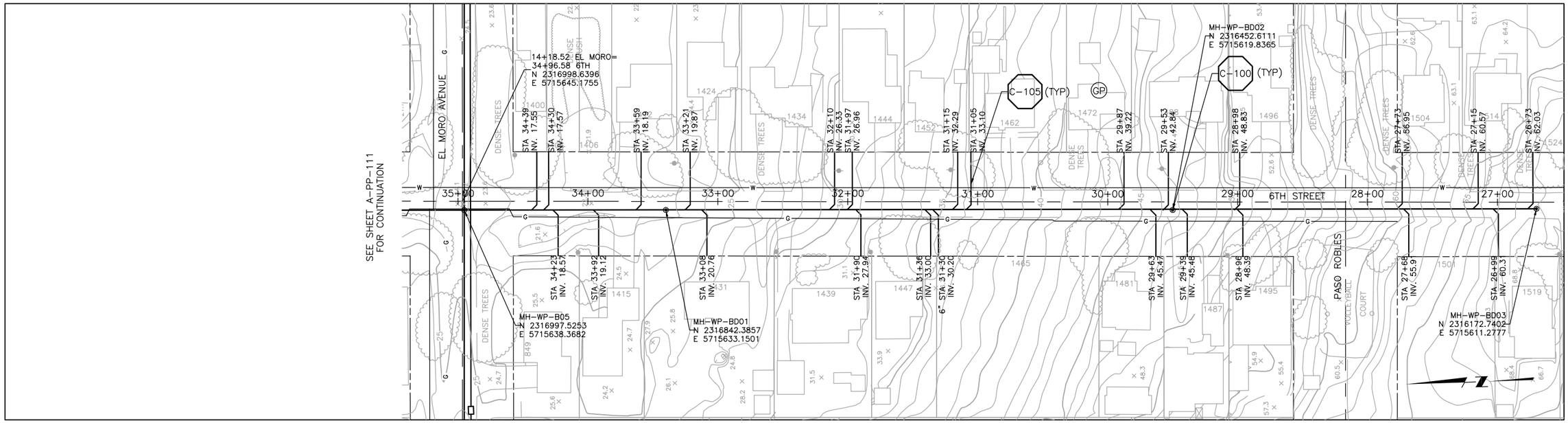
RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
5TH STREET
STA 38+75 TO 40+25

SHEET A-PP-109

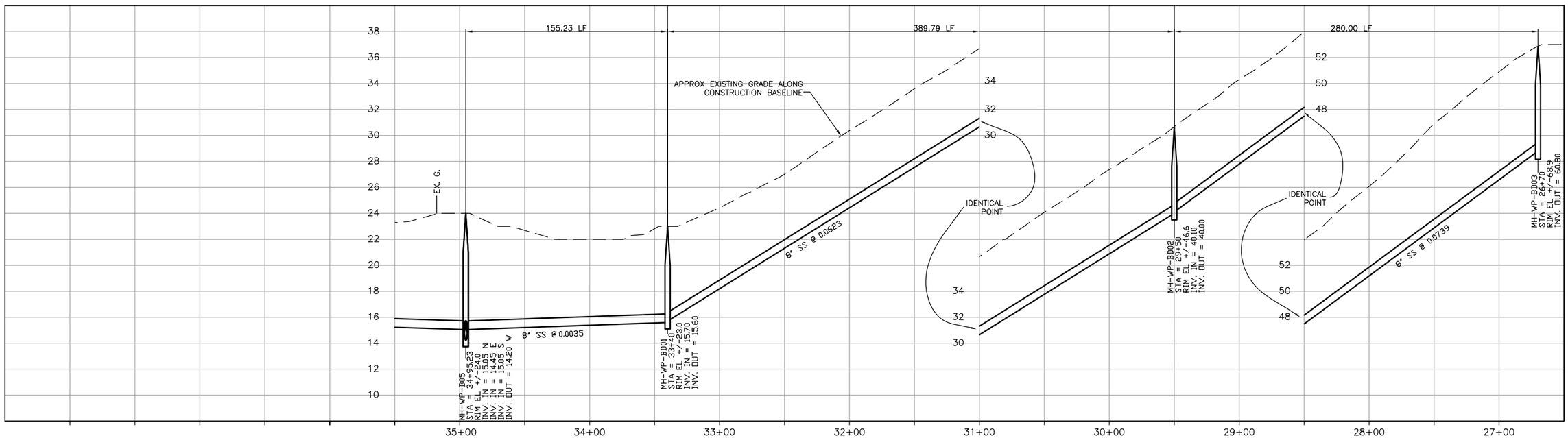
L:\Los_osos\Collect_Sys\A\civ\A-PP-109.dwg, Candocs, Feb 05, 2004 4:36pm, HWHamilton

SEE SHEET A-PP-102
FOR CONTINUATION



SEE SHEET A-PP-102
FOR CONTINUATION

PLAN ON 6TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 6TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

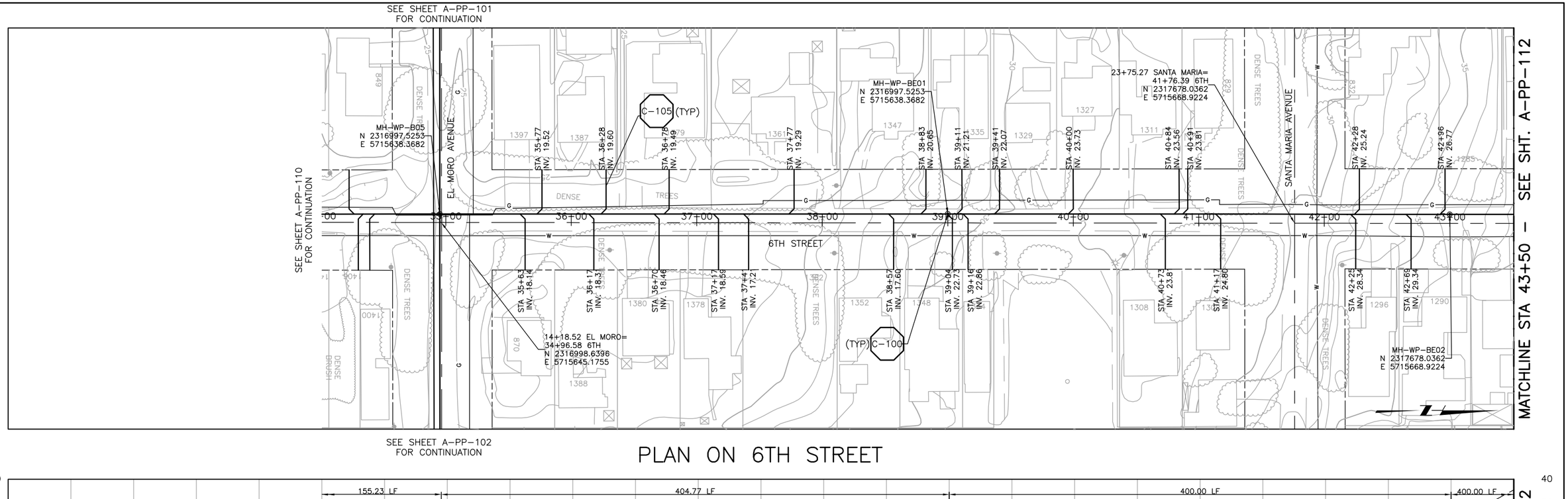
MWH
Walnut Creek, California

RRM DESIGN GROUP

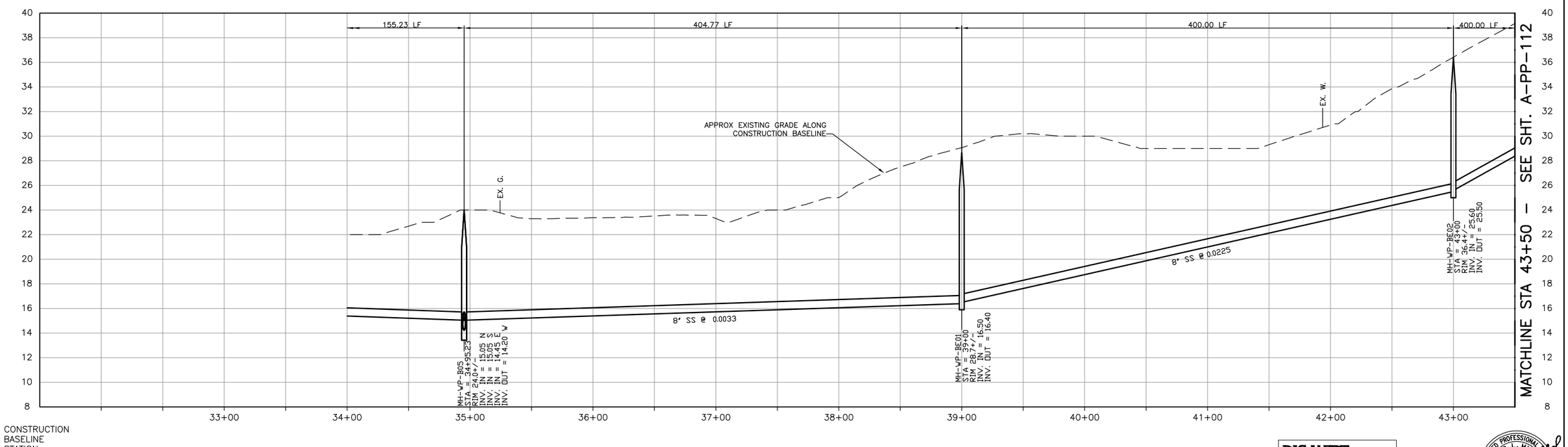
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
6TH STREET
STA 26+70 TO 34+95.23

SHEET
A-PP-110

L:\Los_osos\Collect_Sys\A\civ\A-PP-110.dwg, Candace, Feb 05, 2004 4:43pm, HWHamilton



PLAN ON 6TH STREET



PROFILE ON 6TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICK
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
6TH STREET
STA 34+95.23 TO 43+50

SHEET
A-PP-111

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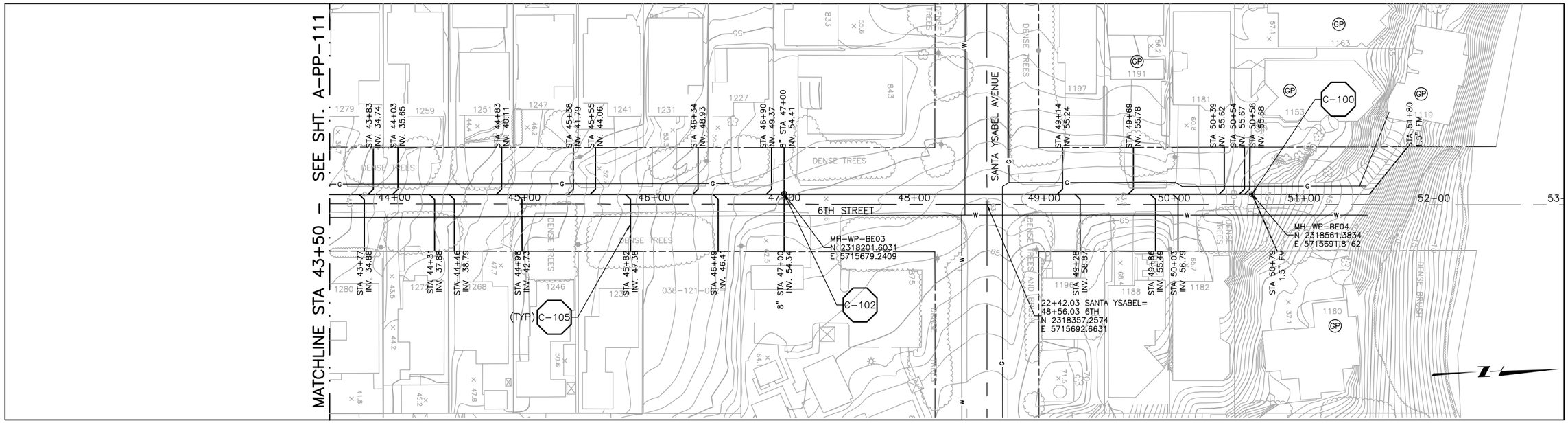
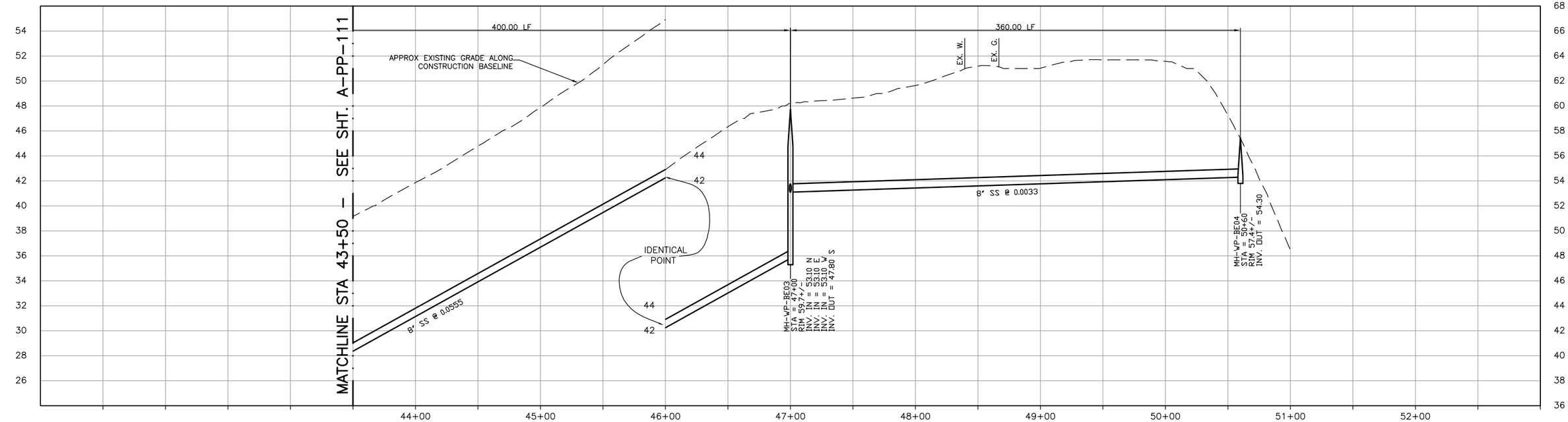


PLAN ON 6TH STREET



PROFILE ON 6TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
6TH STREET
STA 43+50 TO 50+60

SHEET A-PP-112

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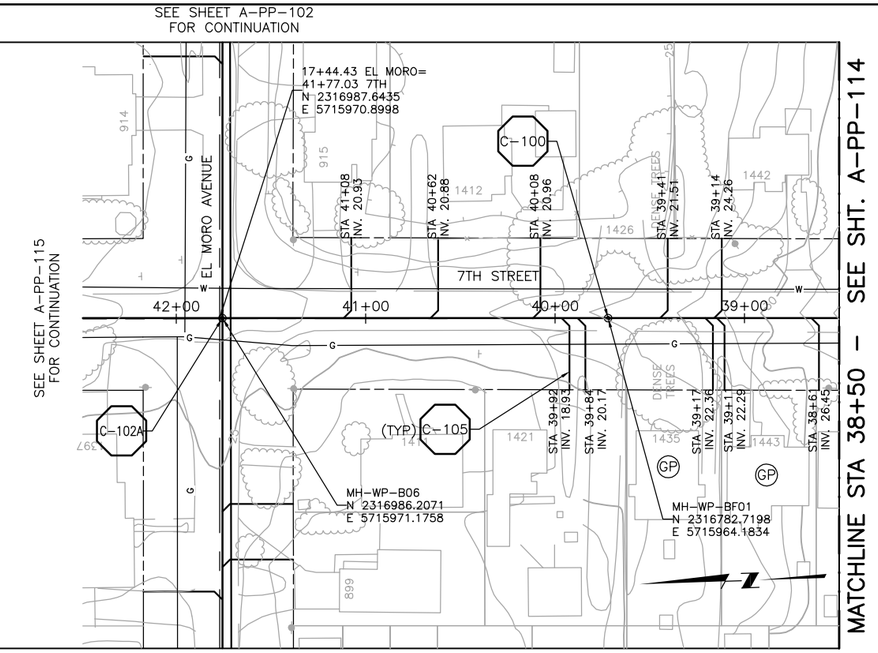
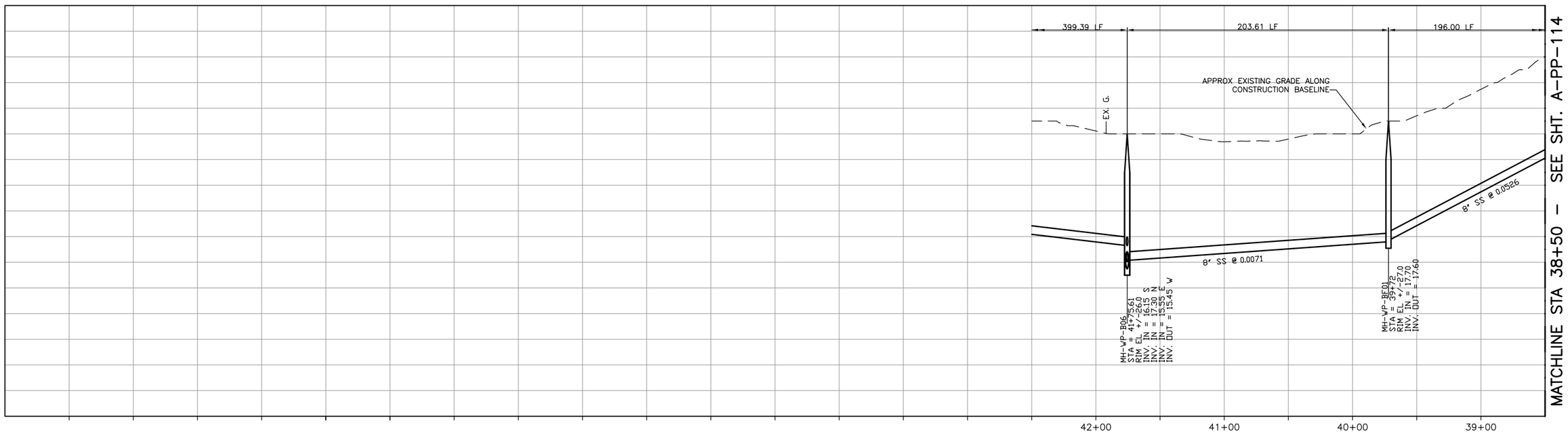


MATCHLINE STA 38+50 – SEE SHT. A-PP-114

PLAN ON 7TH STREET



MATCHLINE STA 38+50 – SEE SHT. A-PP-114

CONSTRUCTION
BASELINE
STATION

PROFILE ON 7TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
7TH STREET
STA 38+50 TO 41+78.61

SHEET
A-PP-113

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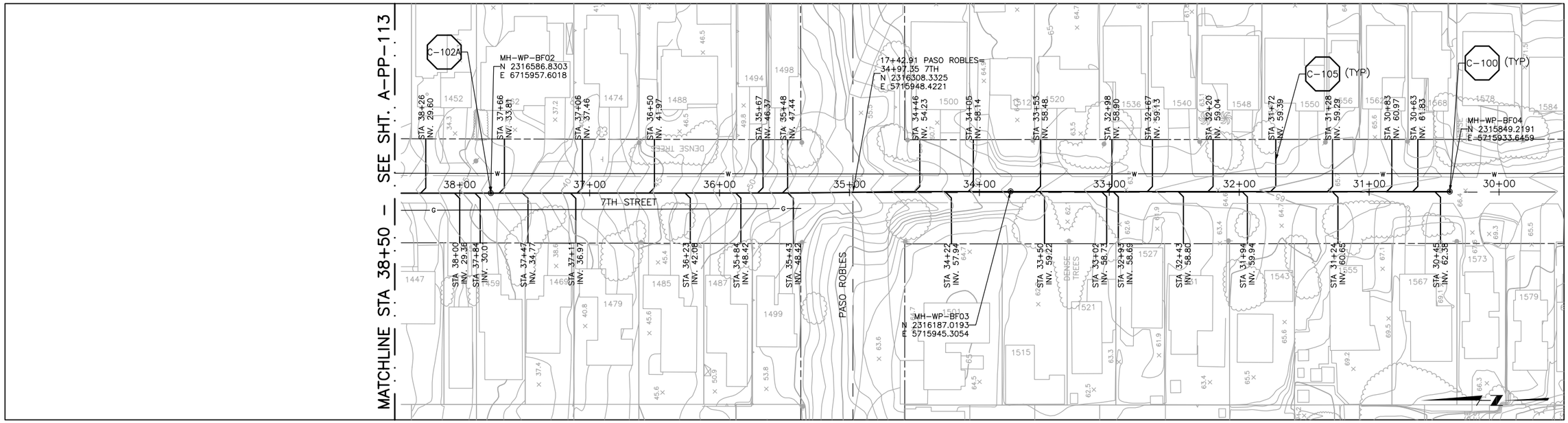
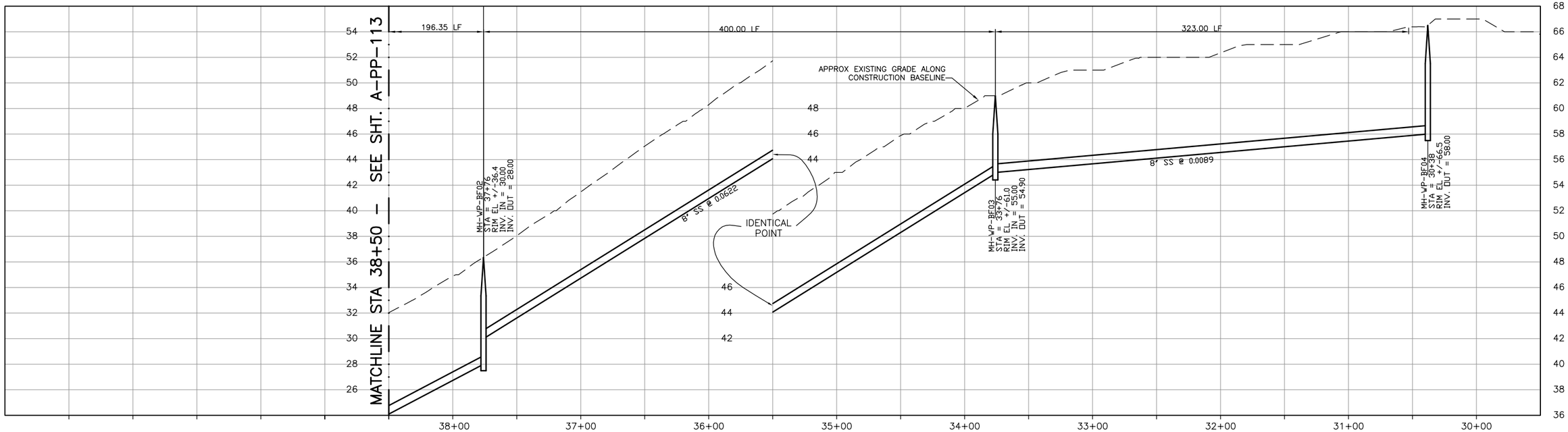


PLAN ON 7TH STREET



PROFILE ON 7TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

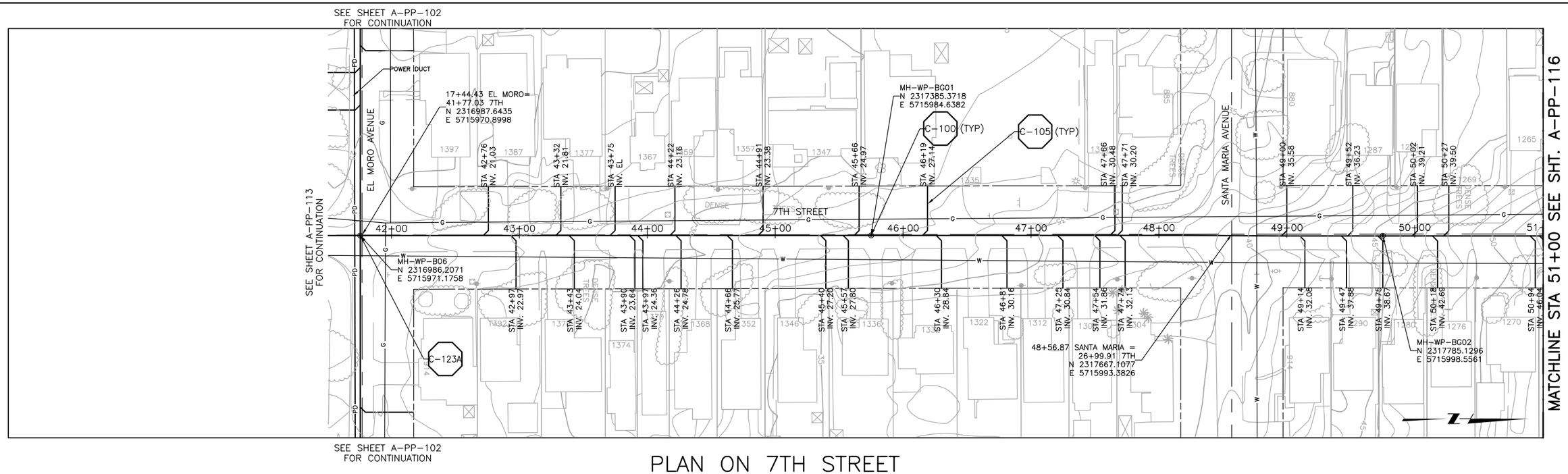
MWH Walnut Creek, California

RRM DESIGN GROUP

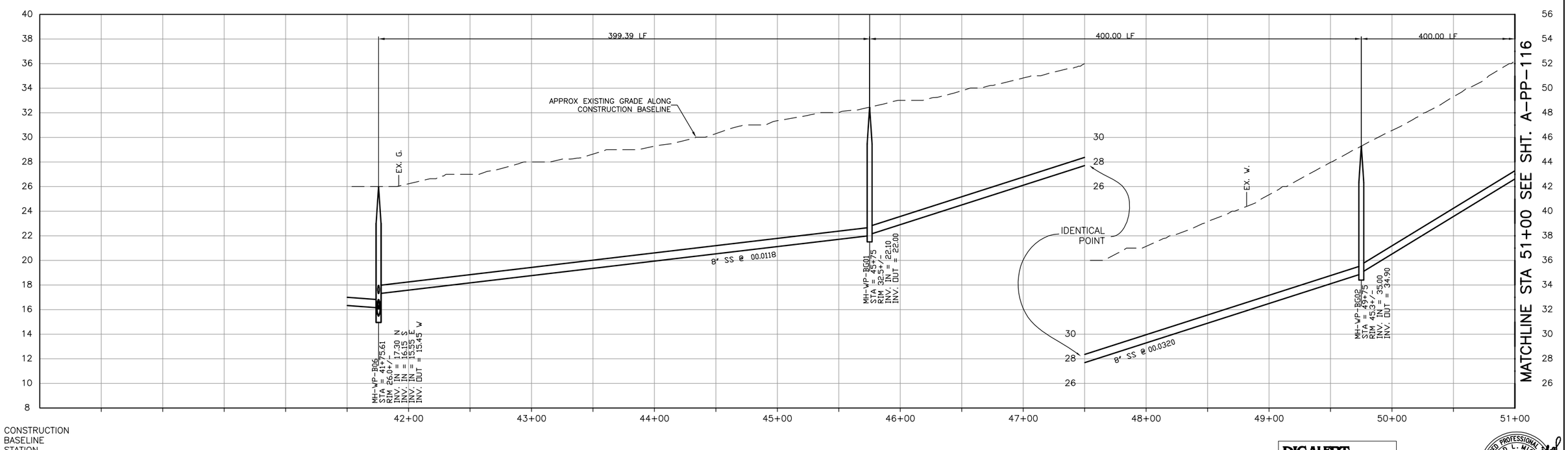
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
7TH STREET
STA 30+38 TO 38+50

SHEET A-PP-114

L:\Los_osos\Collect_Sys\A\civ\A-PP-114.dwg, Candace, Feb 05, 2004 4:57pm, HWHamilton



PLAN ON 7TH STREET



PROFILE ON 7TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

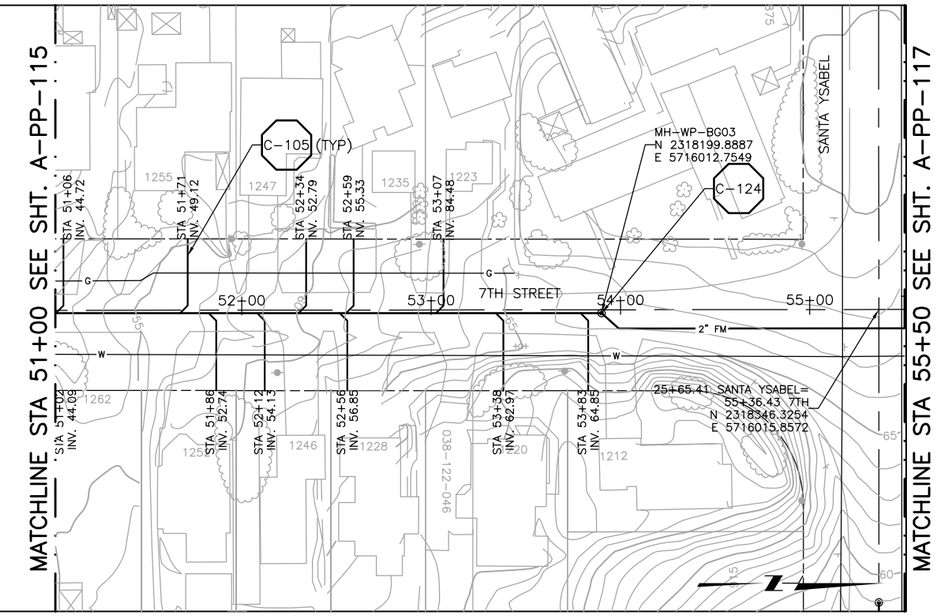
MWH Walnut Creek, California

RRM DESIGN GROUP

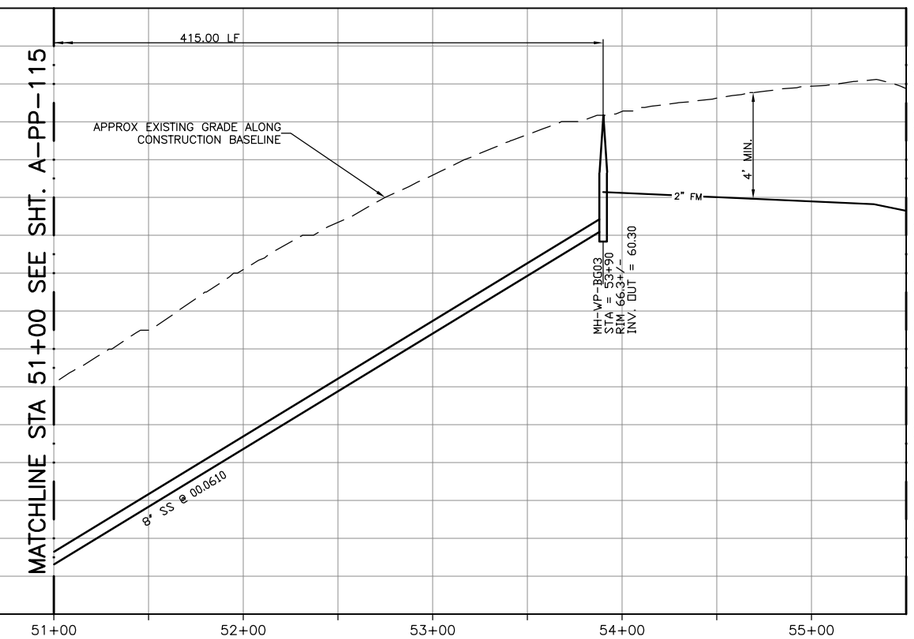
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
7TH STREET
STA 41+75.61 TO 51+00

SHEET A-PP-115

L:\Los_osos\Collect_Sys\A\civ\A-PP-115.dwg, Candace, Feb 05, 2004 4:59pm, HWHamilton



PLAN ON 7TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 7TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

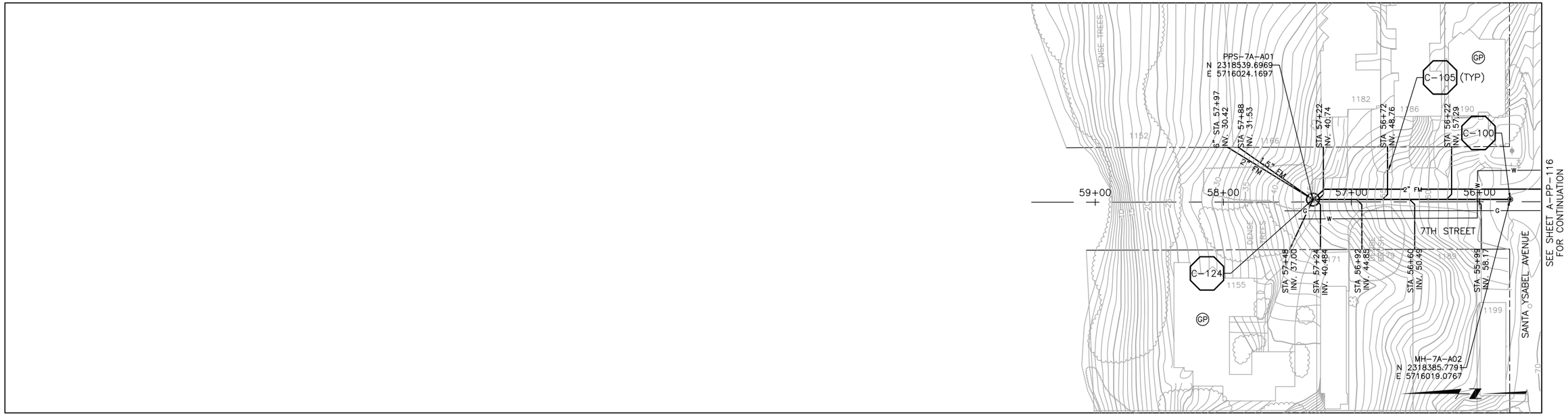
MWH
Walnut Creek, California

RRM DESIGN GROUP

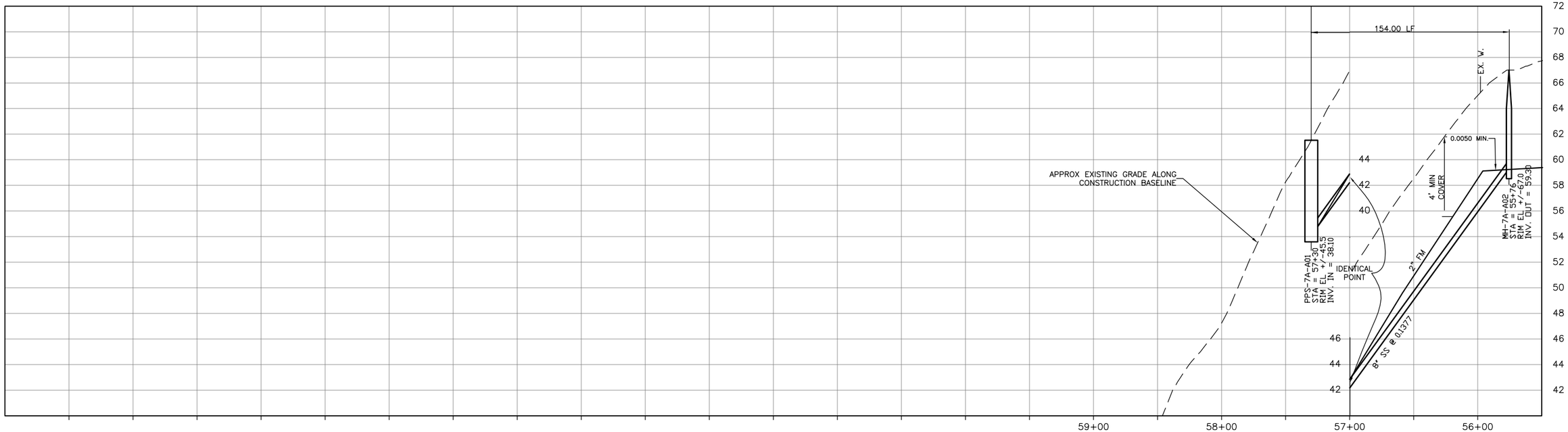
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
7TH STREET
STA 51+00 TO STA 55+50

SHEET
A-PP-116

L:\Los_osos\Collect_Sys\A\civ\A-PP-116.dwg, Candace, Feb 05, 2004 5:01pm, HWHamilton



PLAN ON 7TH STREET



PROFILE ON 7TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 16895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

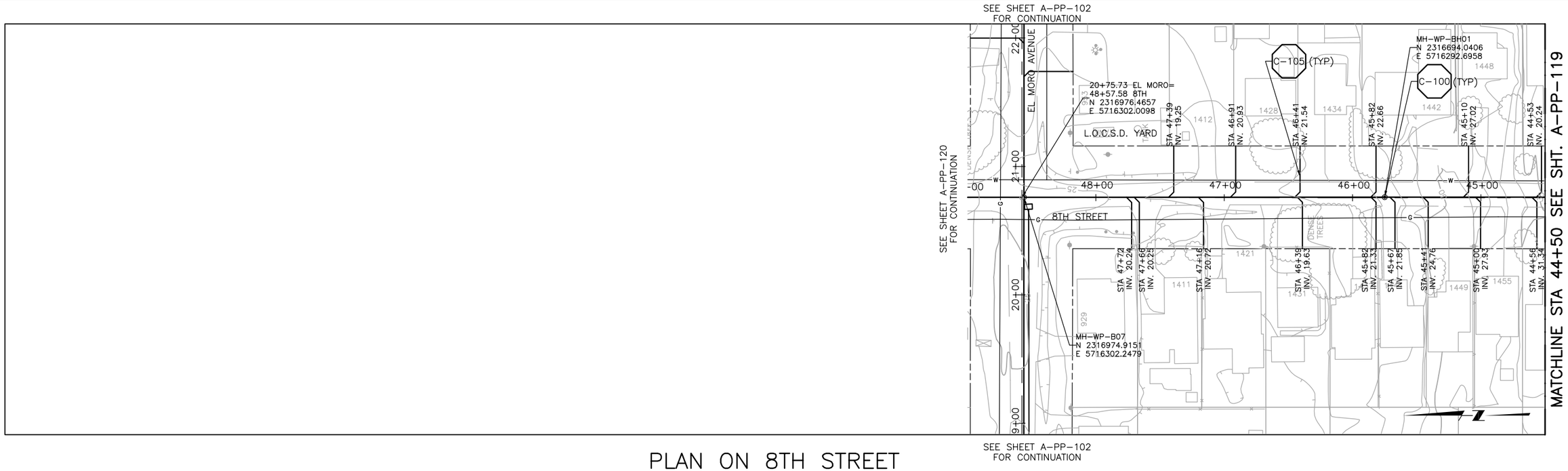
MWH Walnut Creek, California

RRM DESIGN GROUP

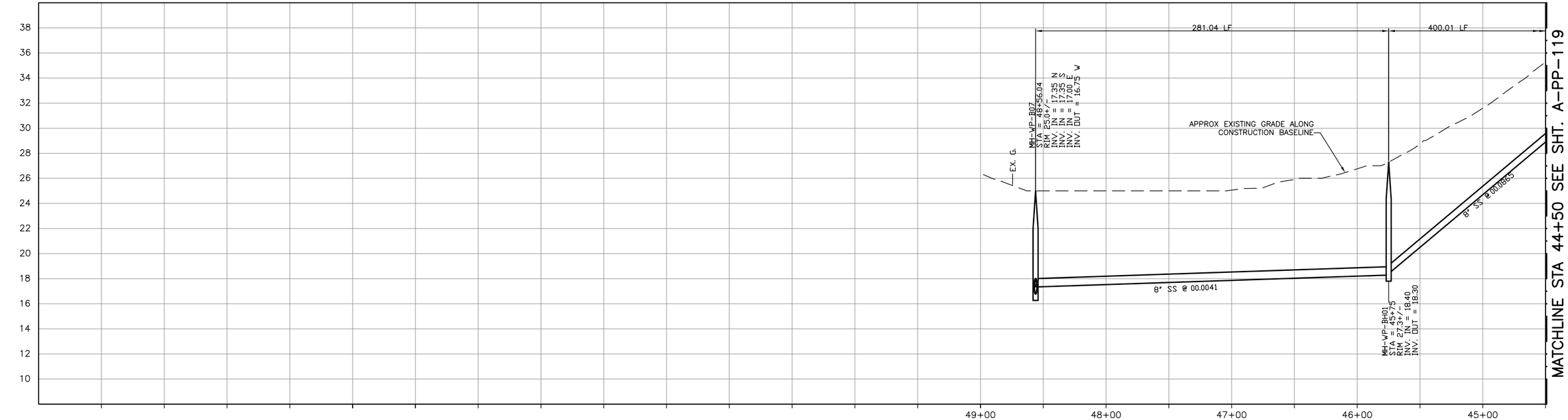
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
7TH STREET
STA 55+50 TO STA 57+30

SHEET A-PP-117

L:\Los_osos\Collect_Sys\A\civ\A-PP-117.dwg, Candace, Feb 05, 2004 5:03pm, HWHamilton



PLAN ON 8TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 8TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MIGLIORE
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

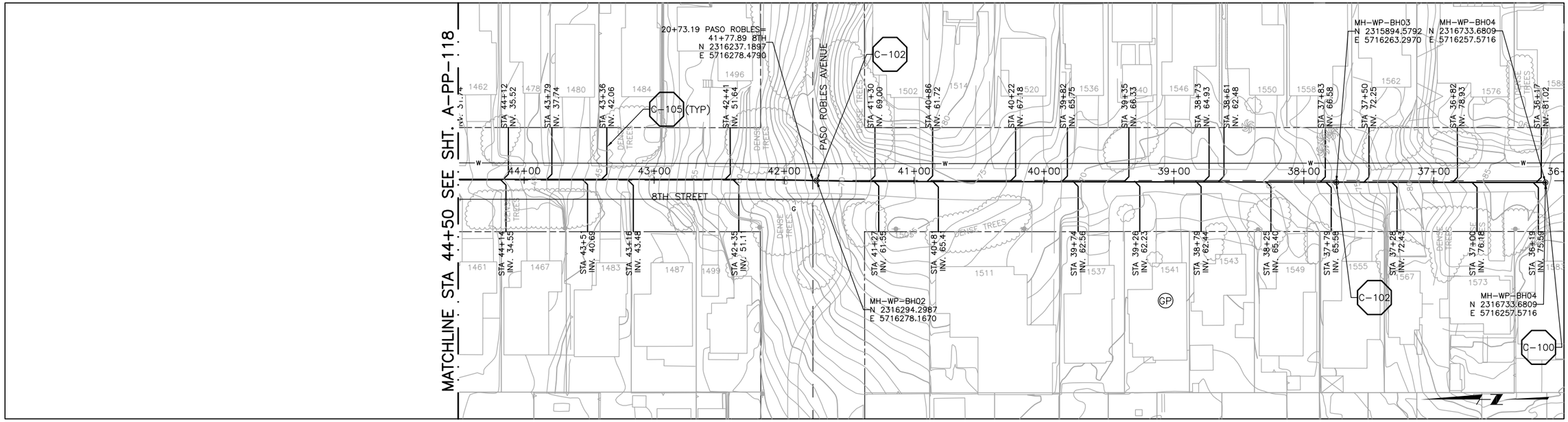
MWH
Walnut Creek, California

RRM DESIGN GROUP

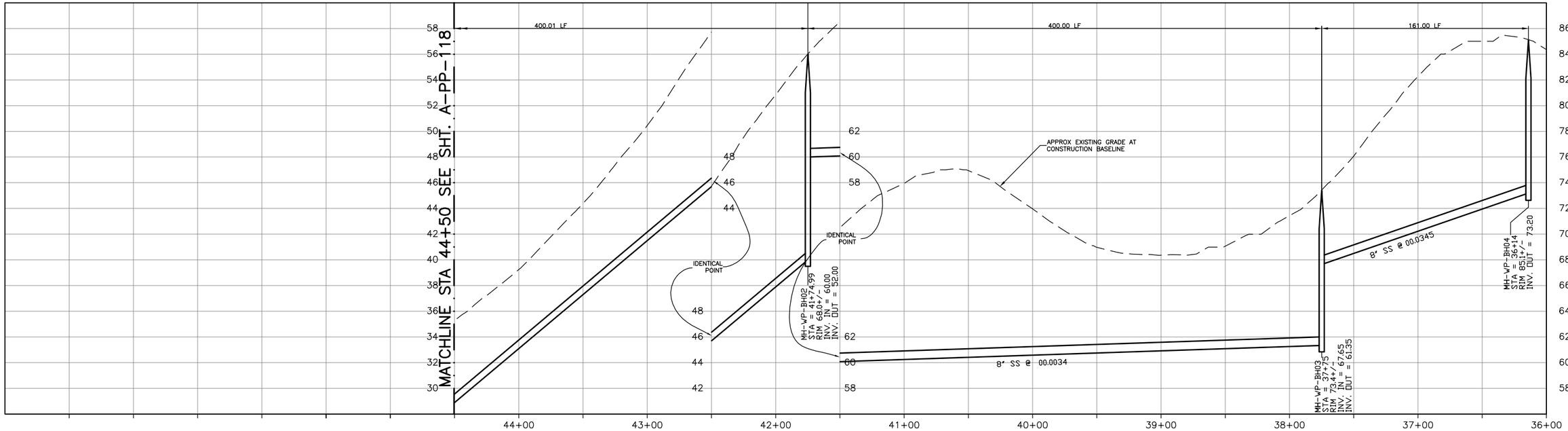
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
8TH STREET
STA 44+50 TO STA 48+56.04

SHEET
A-PP-118

L:\los_osos\Collect_Sys\A\cir\A-PP-118.dwg, Condocs, Feb 05, 2004 5:07pm, HWHamilton



PLAN ON 8TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 8TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
8TH STREET
STA 36+14 TO STA 44+50

SHEET
A-PP-119

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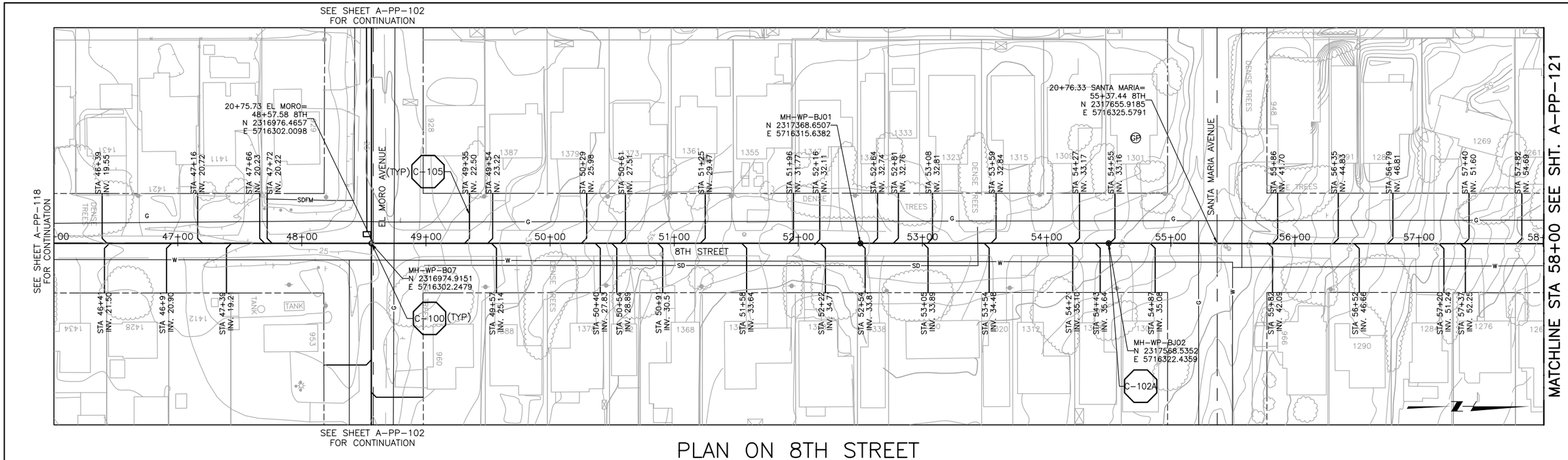
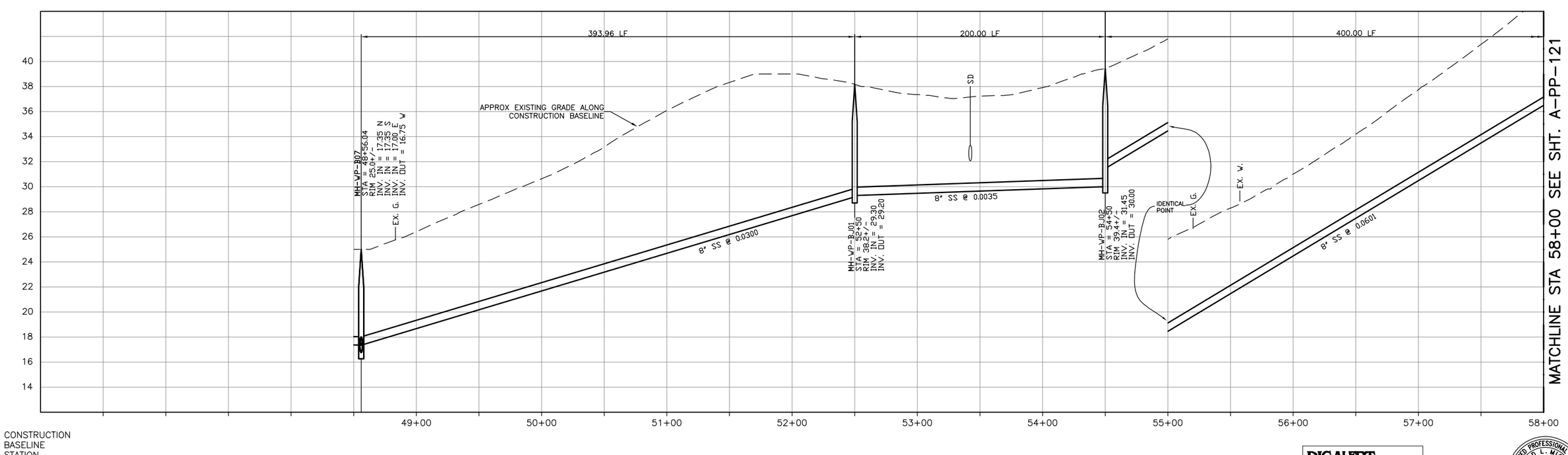


PLAN ON 8TH STREET



PROFILE ON 8TH STREET

DIGALERT
DIAL TOLL FREE 1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
8TH STREET
STA 48+56.04 TO STA 58+00

SHEET A-PP-120

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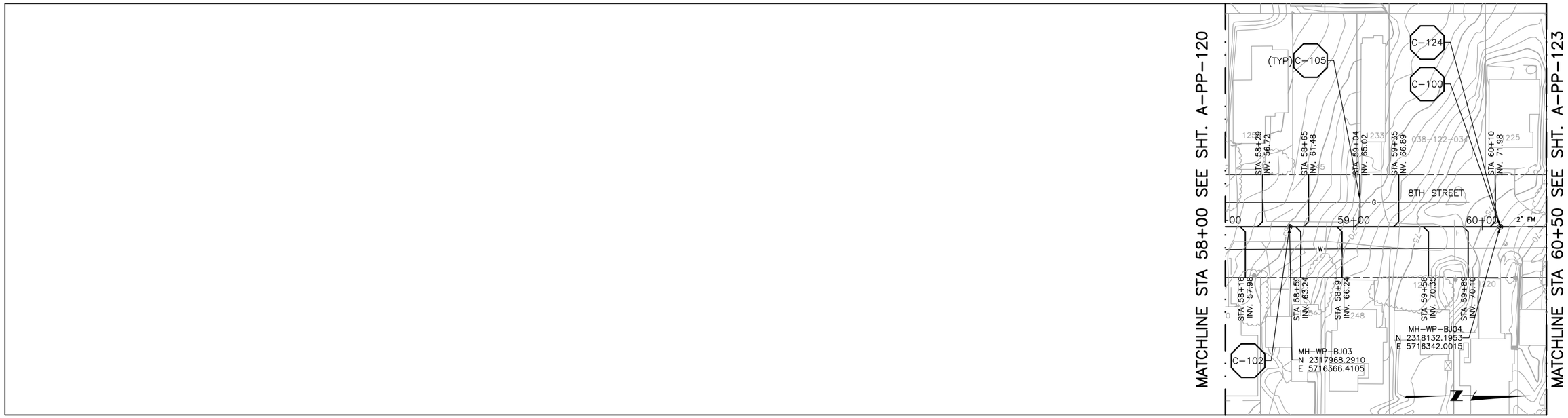
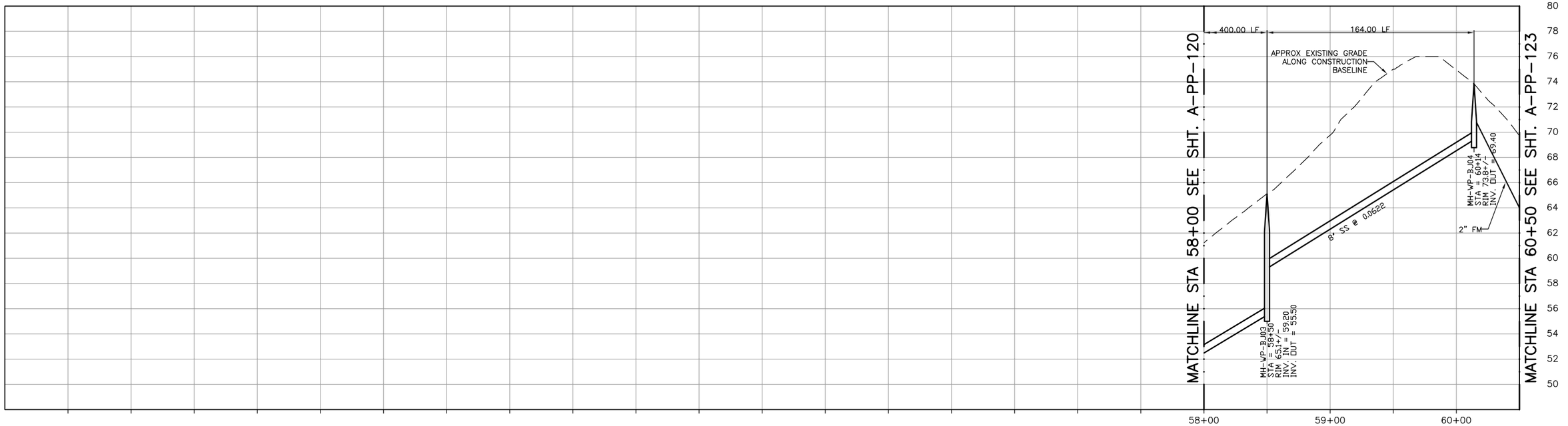


PLAN ON 8TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 8TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

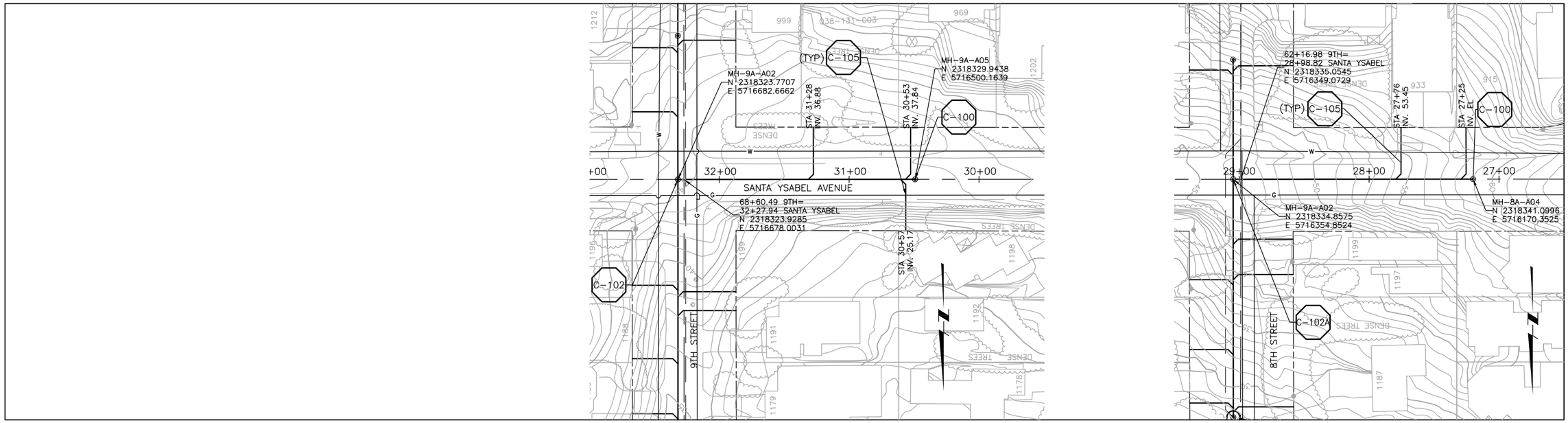
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
8TH STREET
STA 58+00 TO STA 60+50

SHEET
A-PP-121

L:\Los_osos\Collect_Sys\A\civ\A-PP-121.dwg, Candace, Feb 05, 2004 5:12pm, HWHamilton

SEE SHEET A-PP-127
FOR CONTINUATION

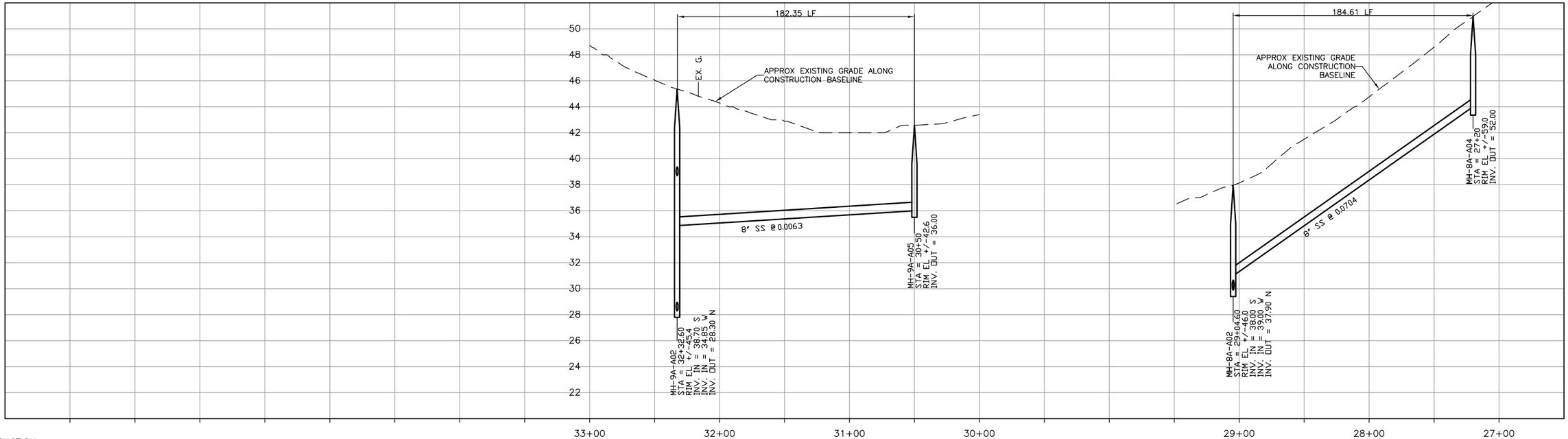
SEE SHEET A-PP-123
FOR CONTINUATION



SEE SHEET A-PP-127
FOR CONTINUATION

PLAN ON SANTA YSABEL AVENUE

SEE SHEET A-PP-123
FOR CONTINUATION



CONSTRUCTION
BASELINE
STATION

PROFILE ON SANTA YSABEL AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MIGLIORE
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA YSABEL 32+32.60 TO 30+50
SANTA YSABEL 29+06.00 TO 27+20

SHEET
A-PP-122

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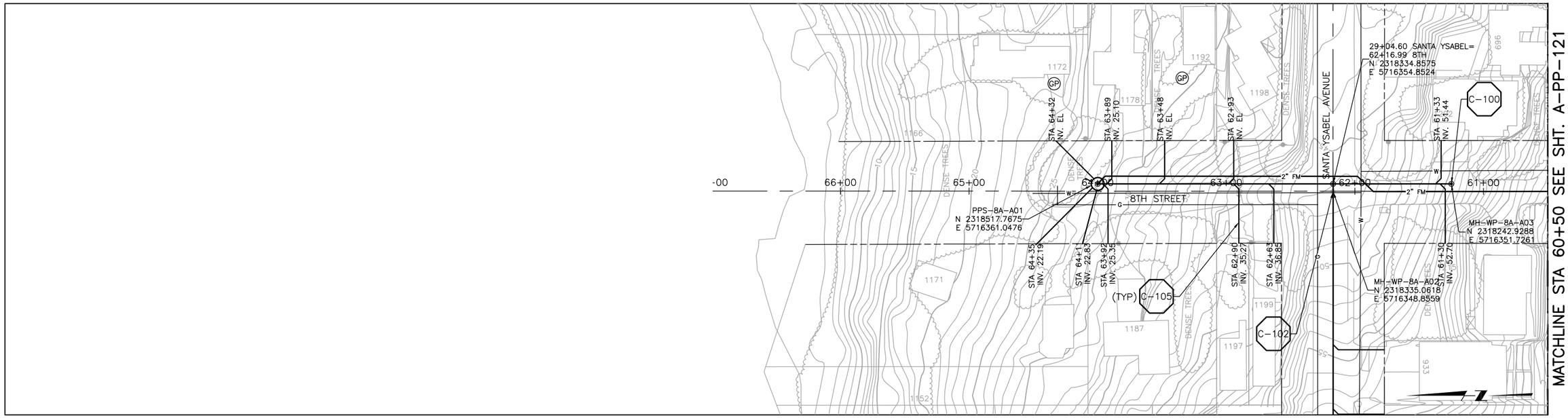
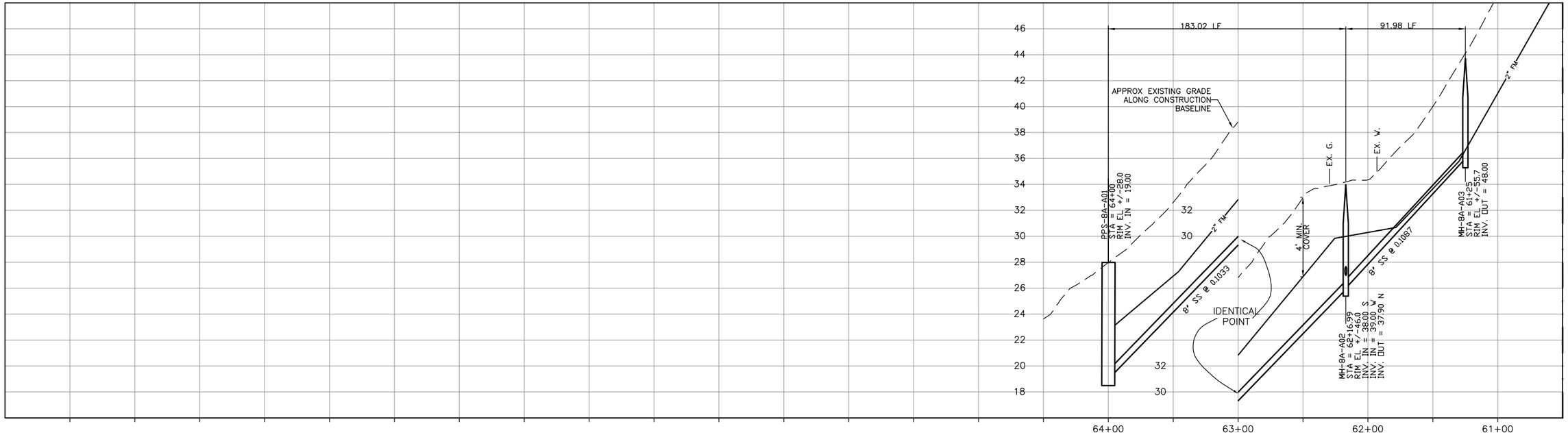


MATCHLINE STA 60+50 SEE SHT. A-PP-121

SEE SHEET A-PP-122
FOR CONTINUATION

PLAN ON 8TH



MATCHLINE STA 60+50 SEE SHT. A-PP-121

CONSTRUCTION
BASELINE
STATION

PROFILE ON 8TH

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
8TH STREET
STA 60+50 TO STA 64+00

SHEET
A-PP-123

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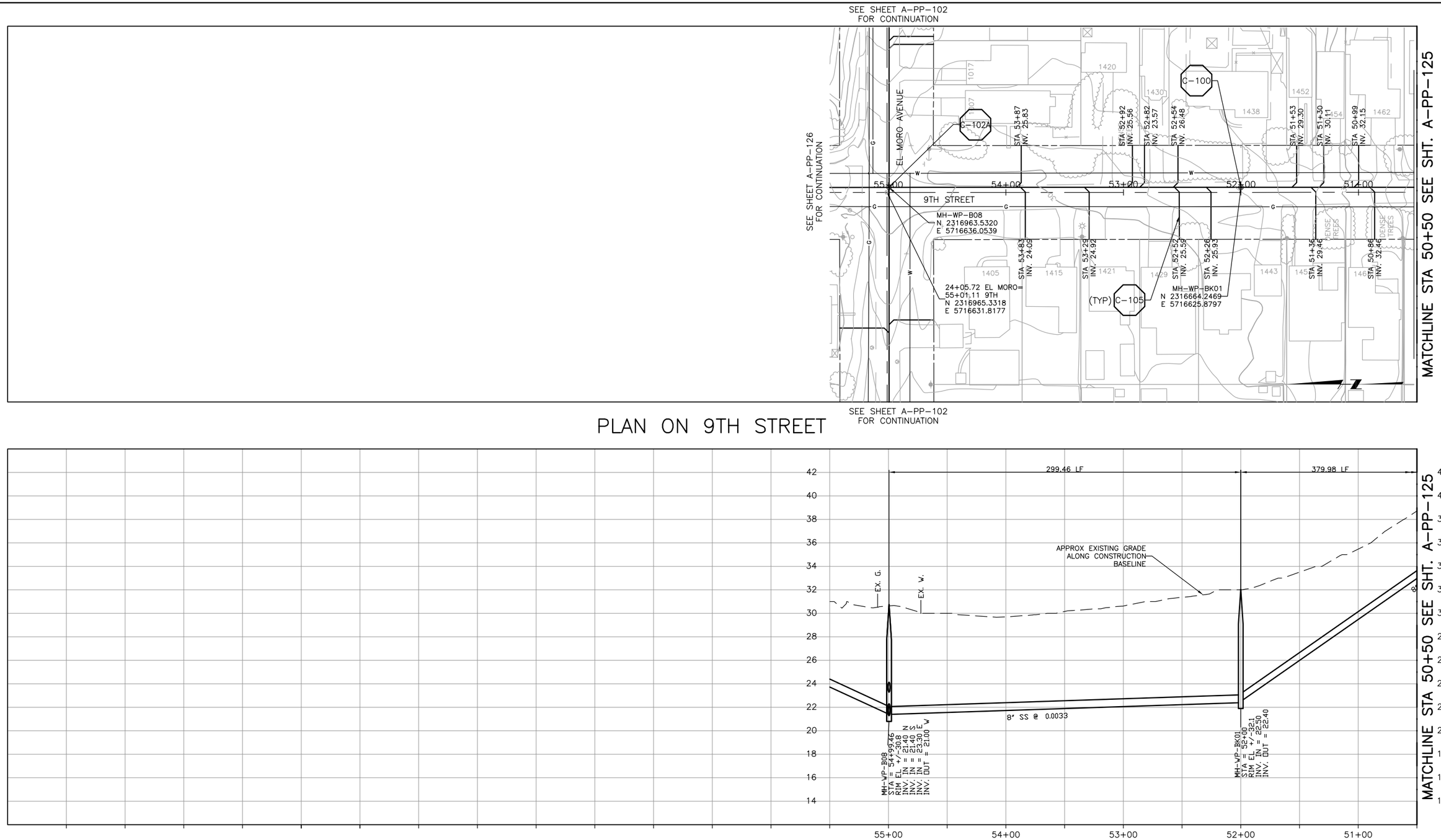

PLAN ON 9TH STREET

CONSTRUCTION
BASELINE
STATION

PROFILE ON 9TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
9TH STREET
STA 50+50 TO STA 54+99.46

SHEET
A-PP-124

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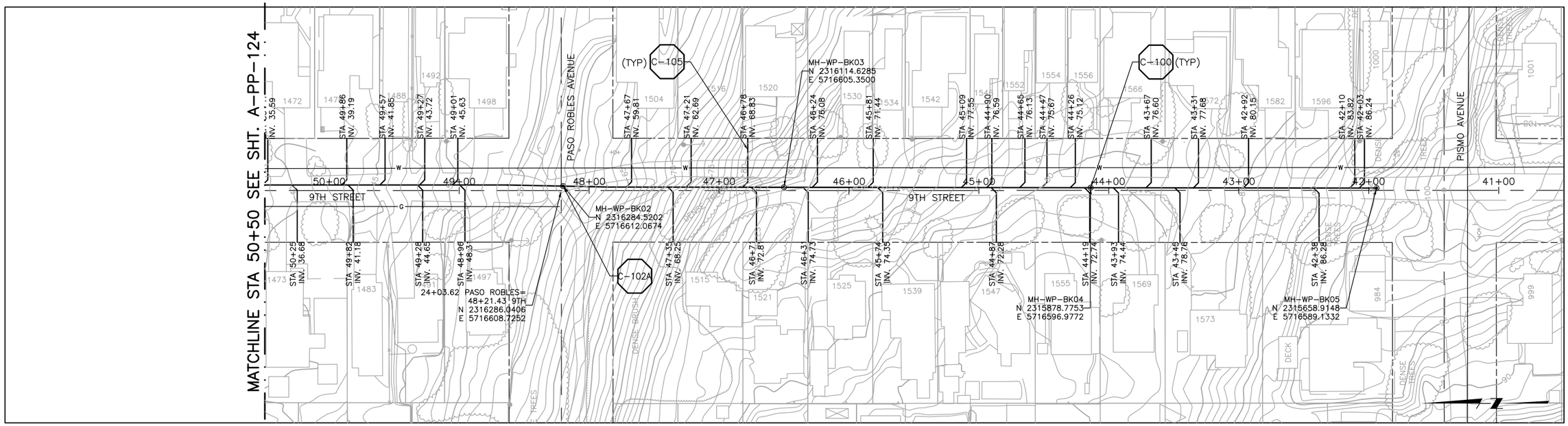
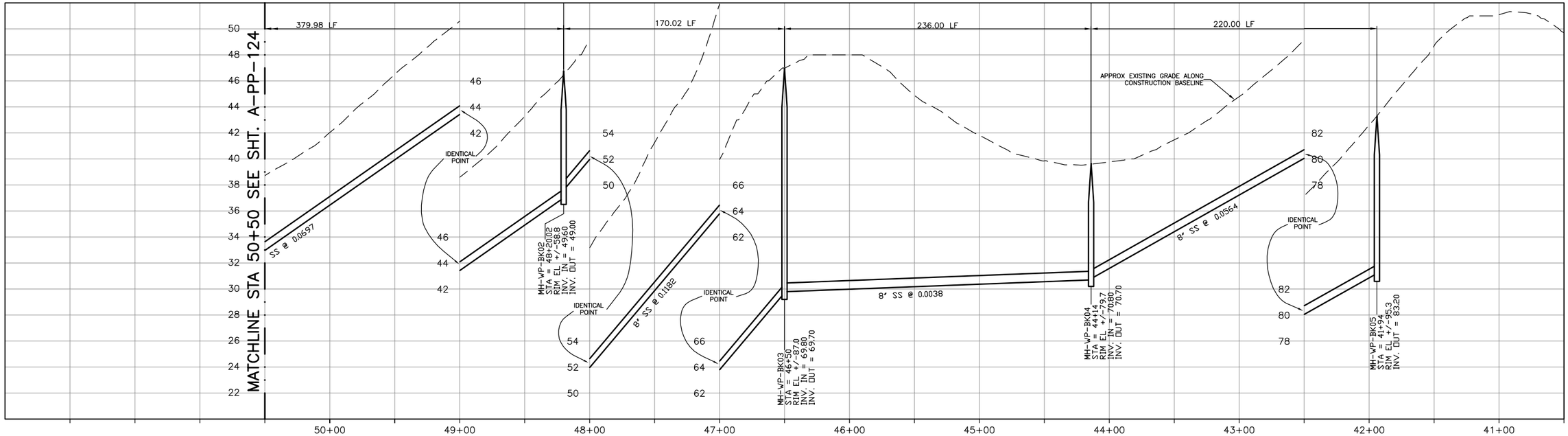


PLAN ON 9TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 9TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
9TH STREET
STA 41+94 TO STA 50+50

SHEET
A-PP-125

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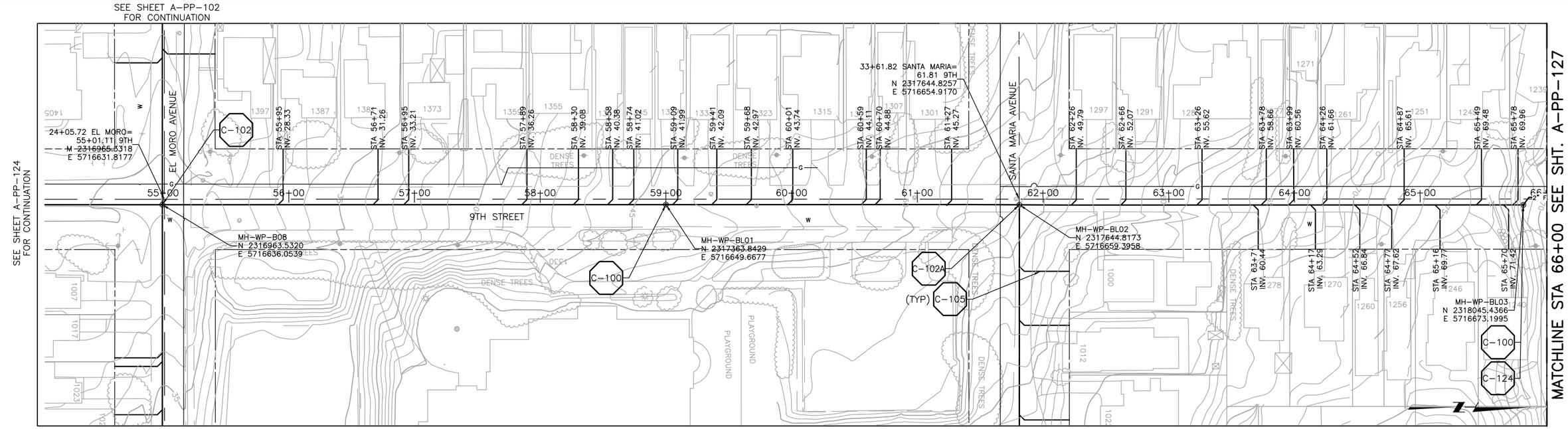
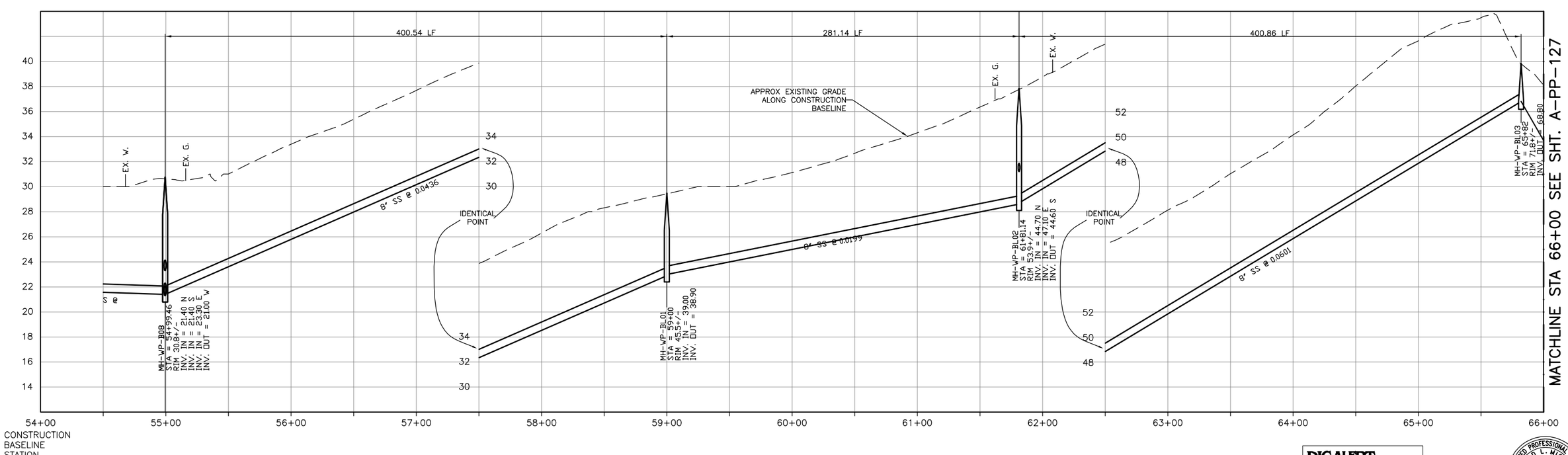


PLAN ON 9TH STREET



PROFILE ON 9TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
9TH STREET
STA 54+99.46 TO STA 66+00

SHEET
A-PP-126

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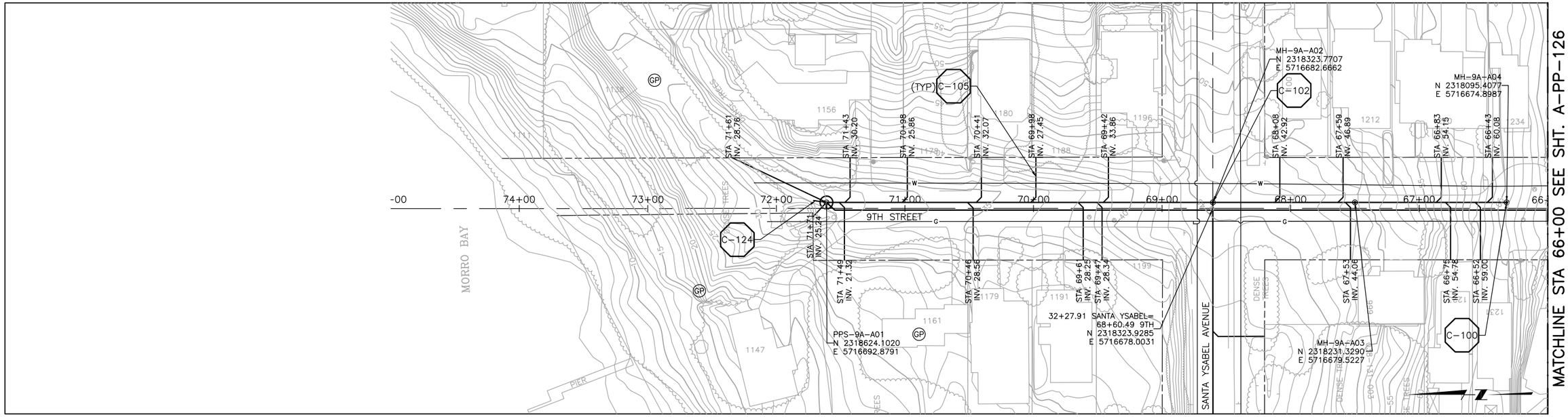
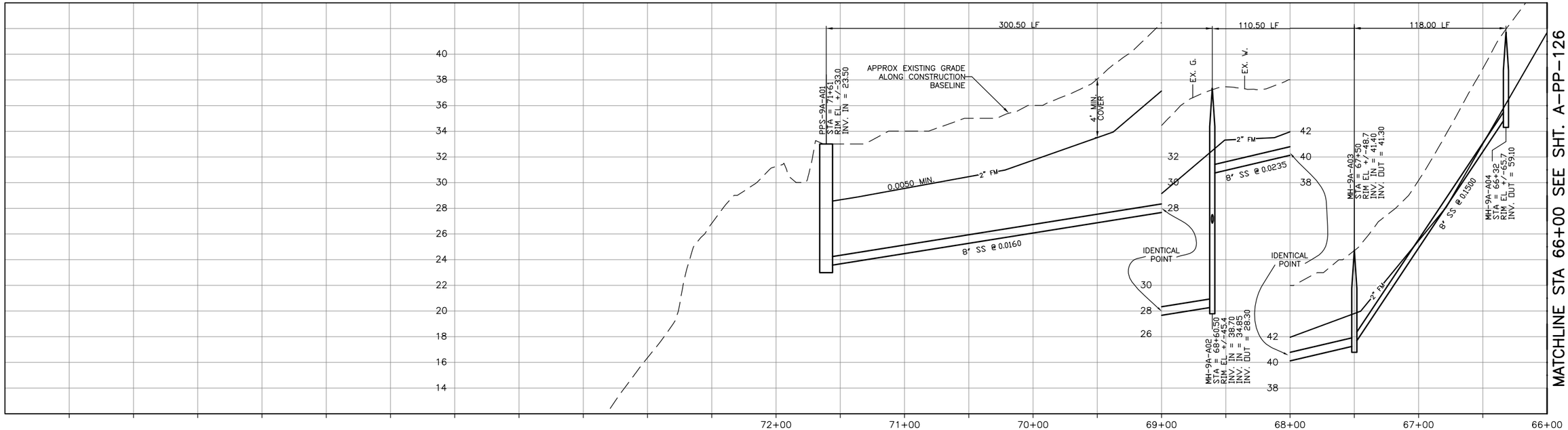


SEE SHEET A-PP-122
FOR CONTINUATION

PLAN ON 9TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 9TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
9TH STREET
STA 66+00 TO STA 71+61

SHEET
A-PP-127

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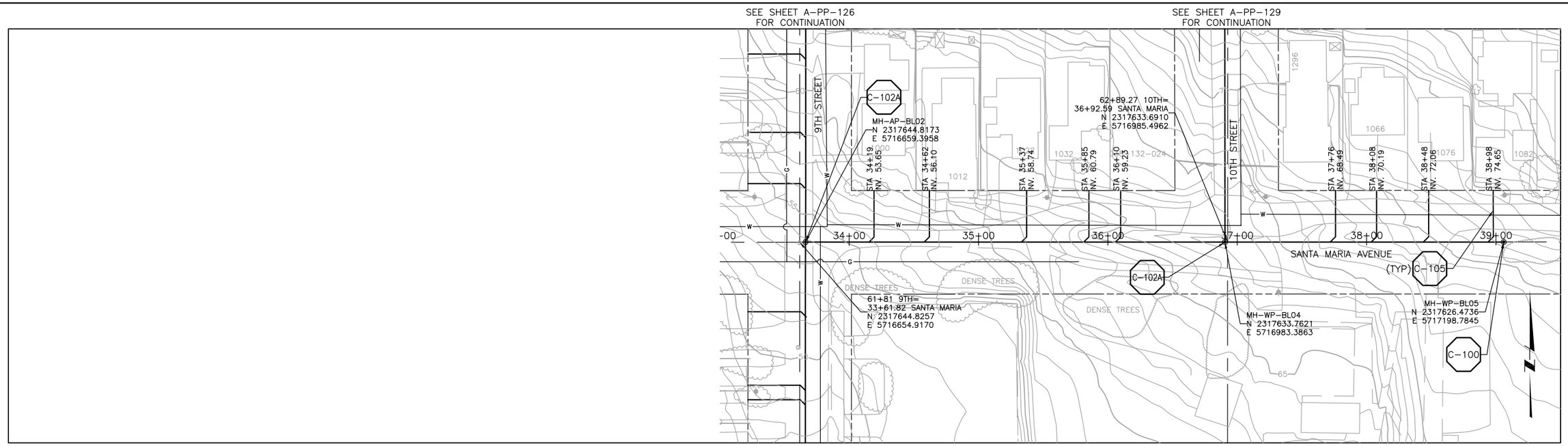
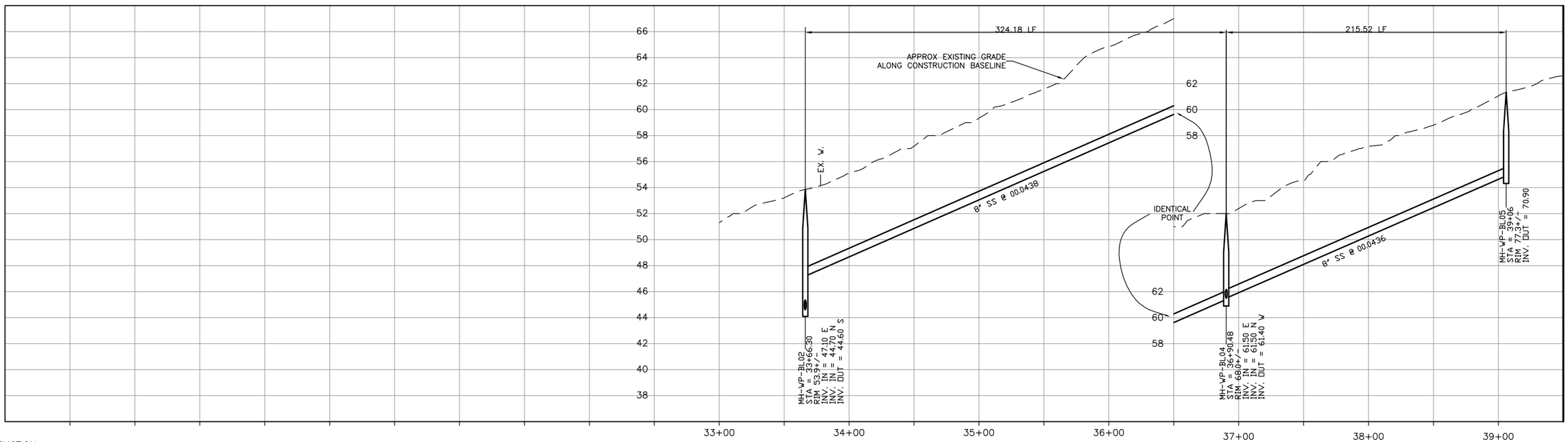


PLAN ON SANTA MARIA AVENUE



PROFILE ON SANTA MARIA AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA MARIA AVENUE
STA 33+66.30 TO STA 39+06

SHEET A-PP-128

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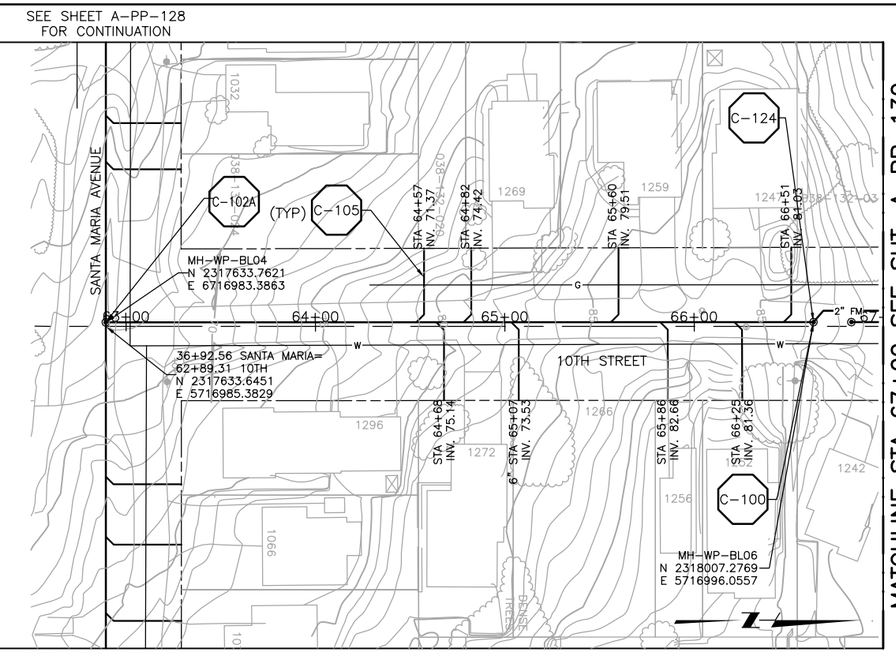
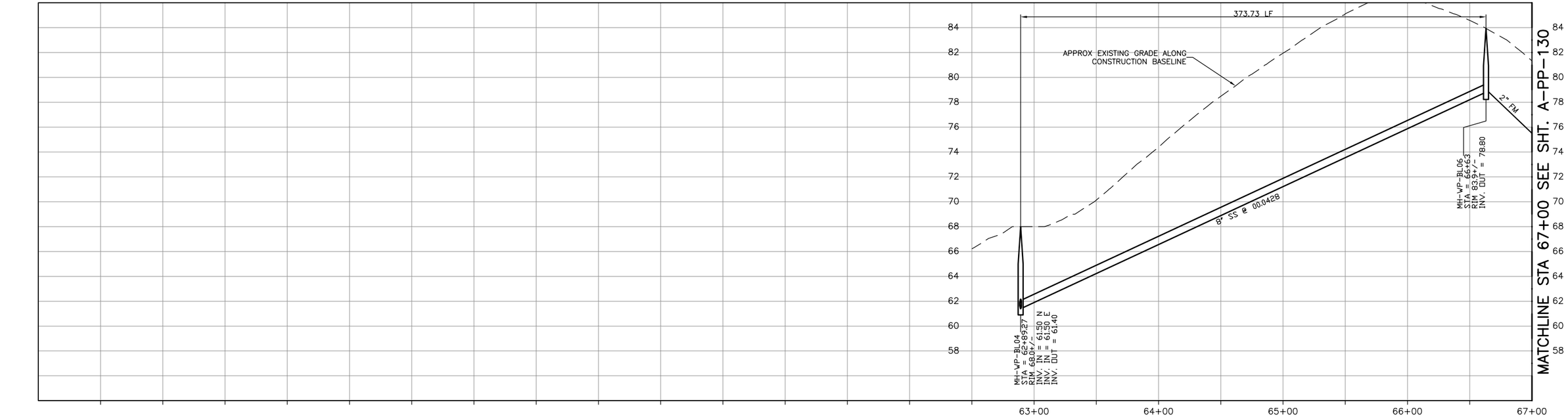
SEE SHEET A-PP-128
FOR CONTINUATION



SEE SHEET A-PP-128
FOR CONTINUATION

MATCHLINE STA 67+00 SEE SHT. A-PP-130

PLAN ON 10TH STREET



MATCHLINE STA 67+00 SEE SHT. A-PP-130

CONSTRUCTION
BASELINE
STATION

PROFILE ON 10TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

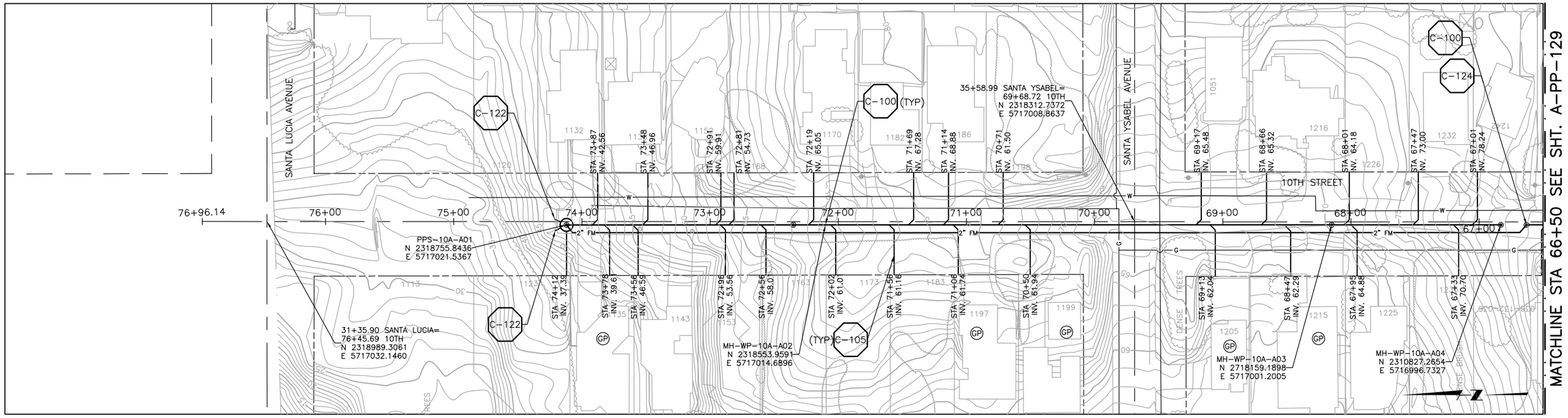
MWH
Walnut Creek, California

RRM DESIGN GROUP

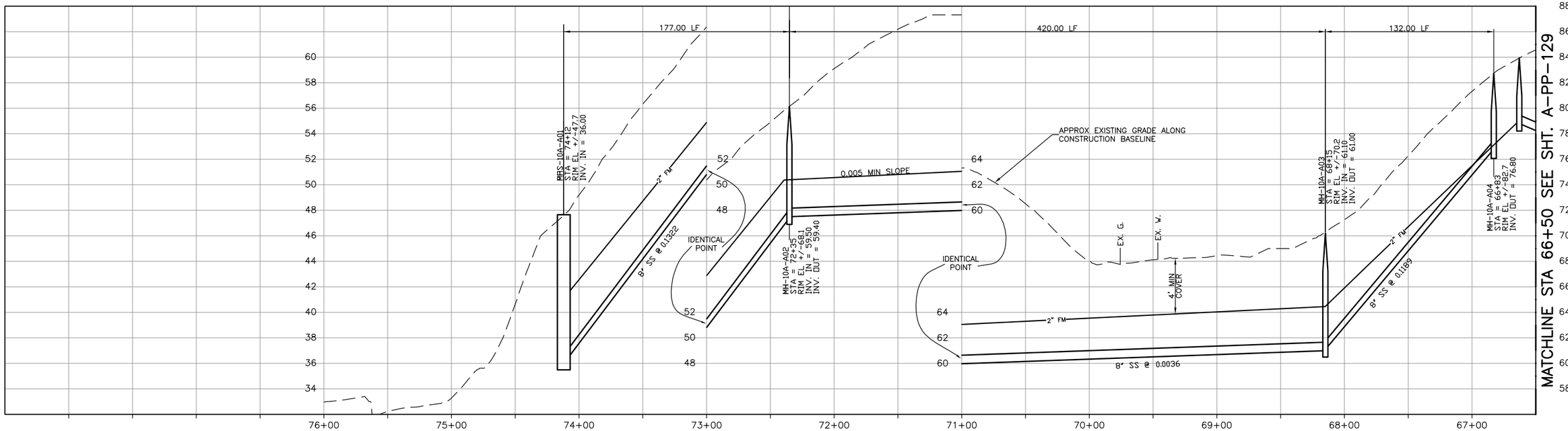
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
10TH STREET
STA 62+89.27 TO STA 66+75

SHEET
A-PP-129

L:\los_osos\Collect_Sys\A\civ\A-PP-129.dwg, Condocs, Feb 05, 2004 5:35pm, HWHamilton



PLAN ON 10TH STREET



CONSTRUCTION BASELINE STATION

PROFILE ON 10TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

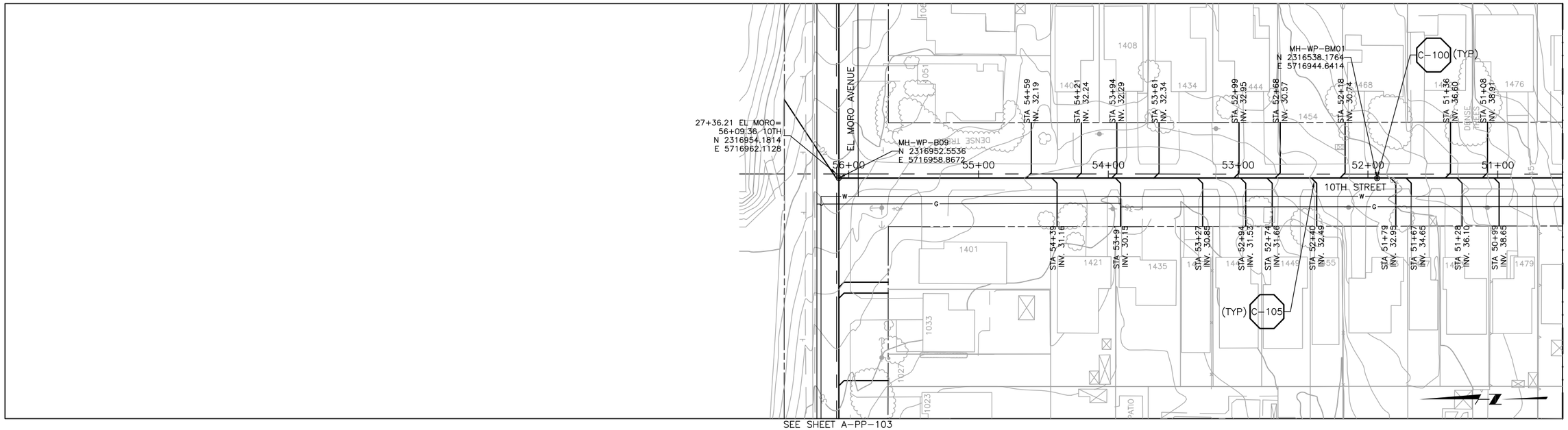
RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
10TH STREET
STA 66+50 TO STA 74+32

SHEET A-PP-130

L:\Los_osos\Collect_Sys\A\civ\A-PP-130.dwg, Candocs, Feb 05, 2004 5:37pm, HWHamilton

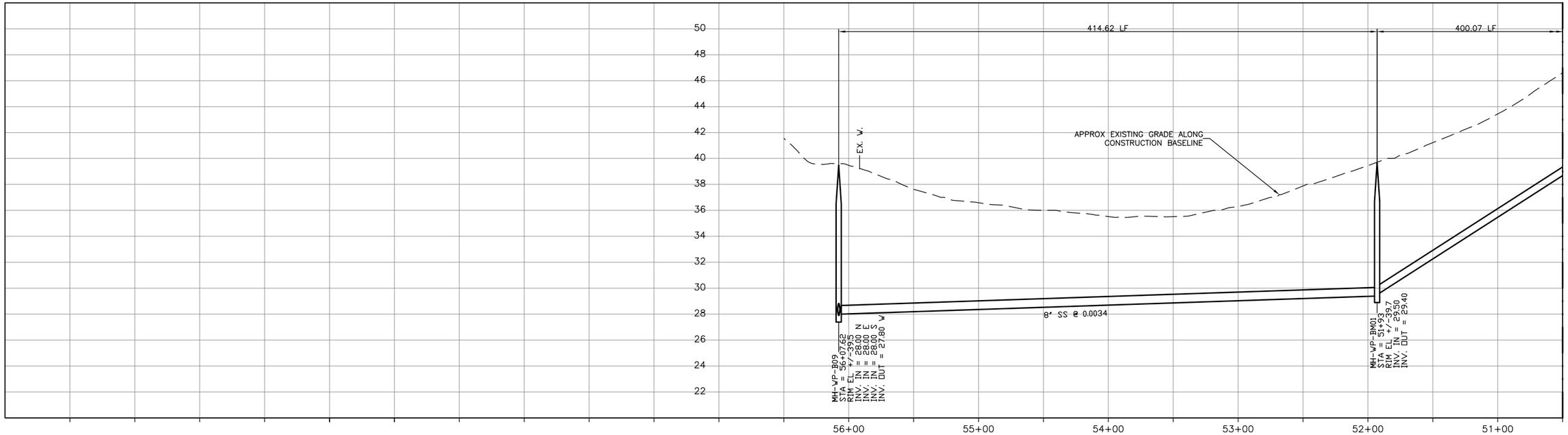
SEE SHEET A-PP-103
FOR CONTINUATION



SEE SHEET A-PP-103
FOR CONTINUATION

MATCHLINE STA 50+50 SEE SHT. A-PP-132

PLAN ON 10TH STREET



MATCHLINE STA 50+50 SEE SHT. A-PP-132

CONSTRUCTION
BASELINE
STATION

PROFILE ON 10TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
10TH STREET
STA 50+50 TO STA 56+07.62

SHEET
A-PP-131

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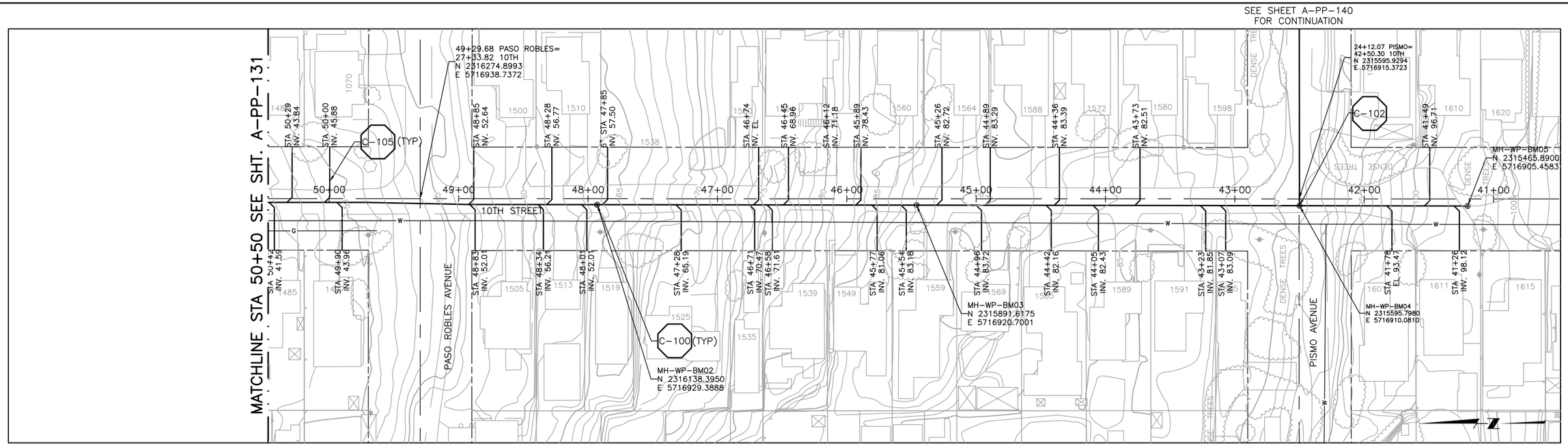
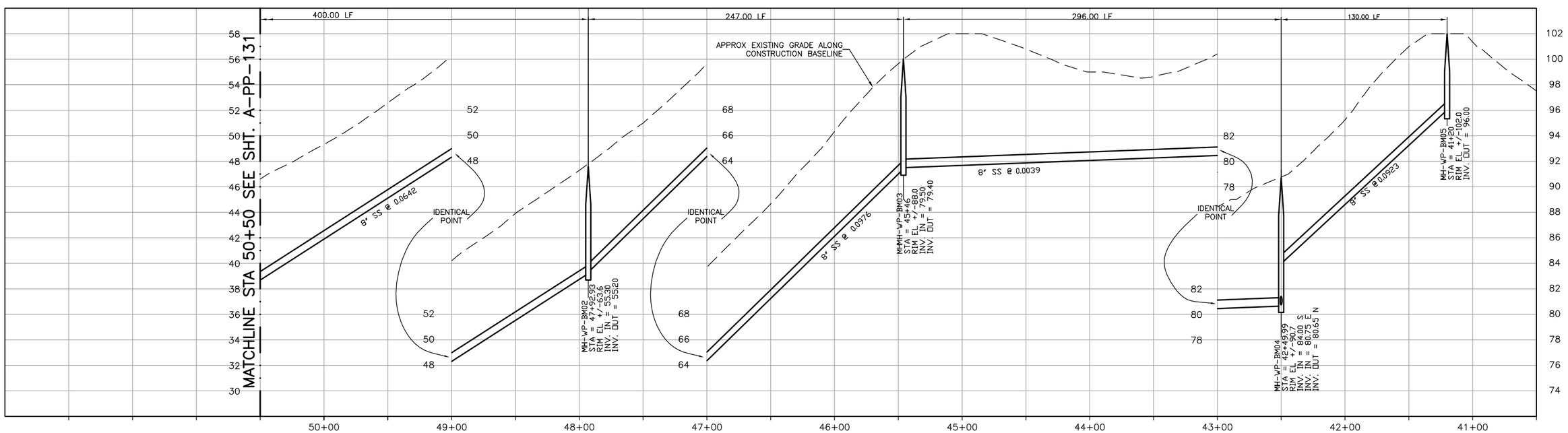


PLAN ON 10TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 10TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
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WARNING
0 1/2 1
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DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
10TH STREET
STA 41+20 TO STA 50+50

SHEET
A-PP-132

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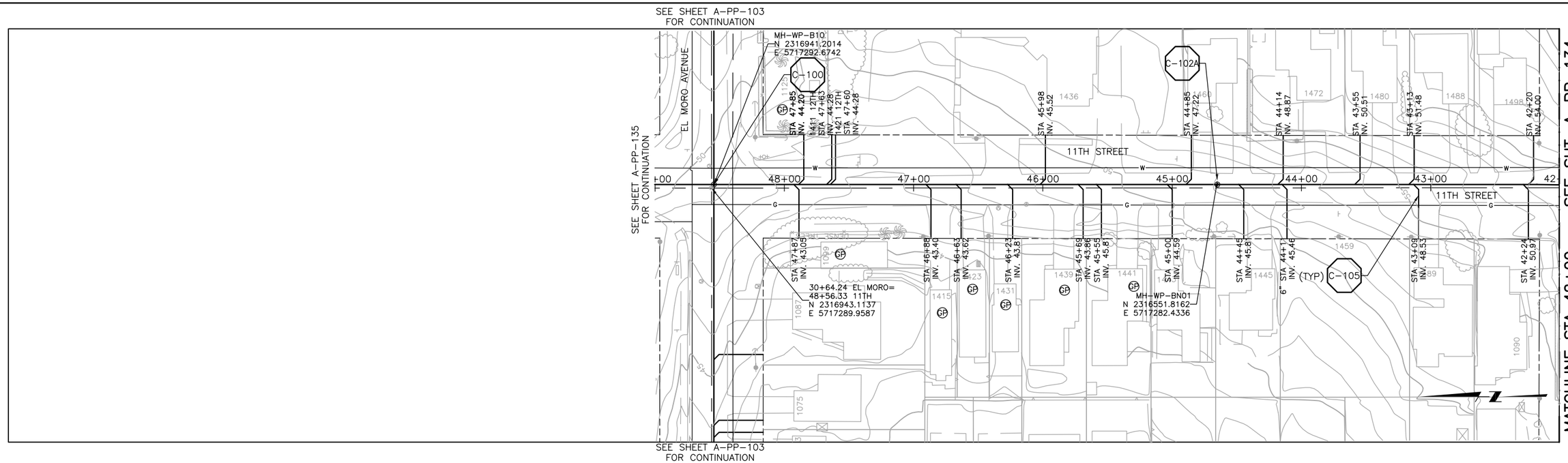
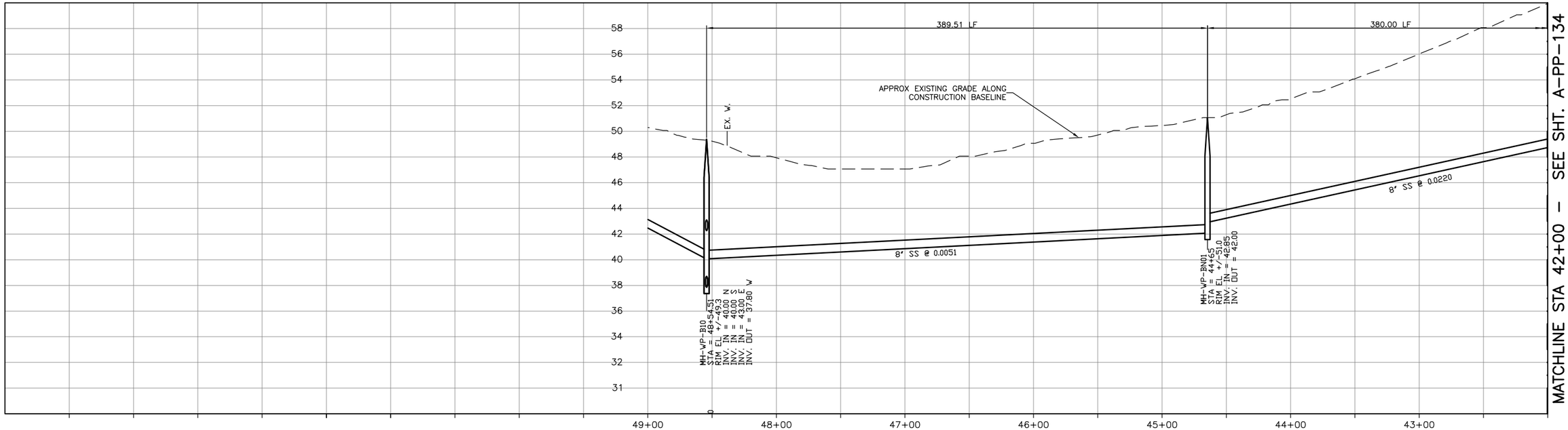


PLAN ON 11TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 11TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
11TH STREET
STA 42+00 TO STA 48+54.51

SHEET
A-PP-133

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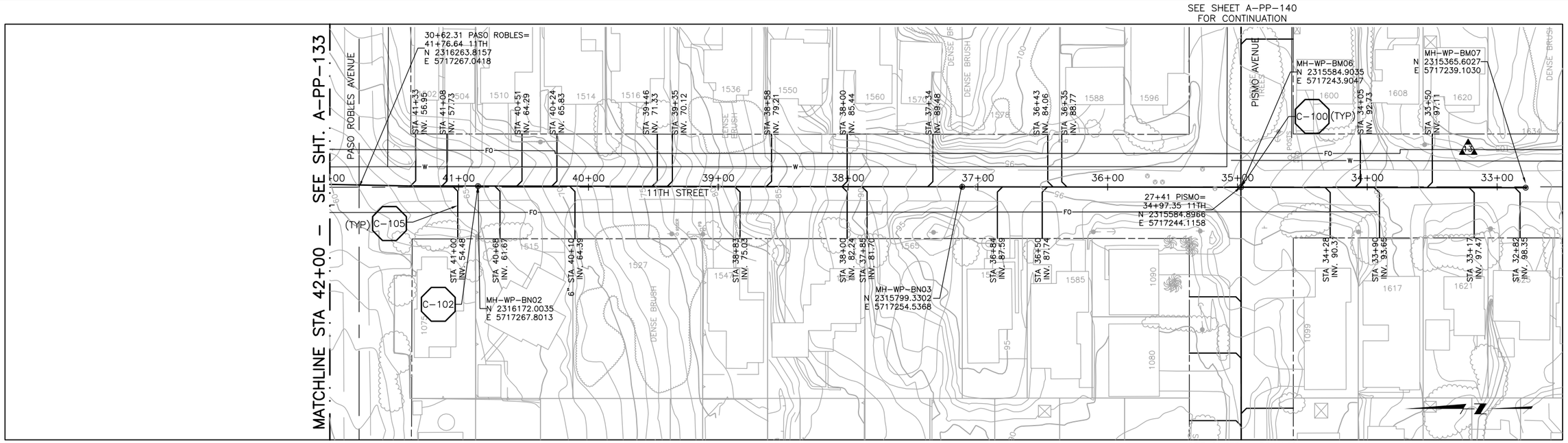
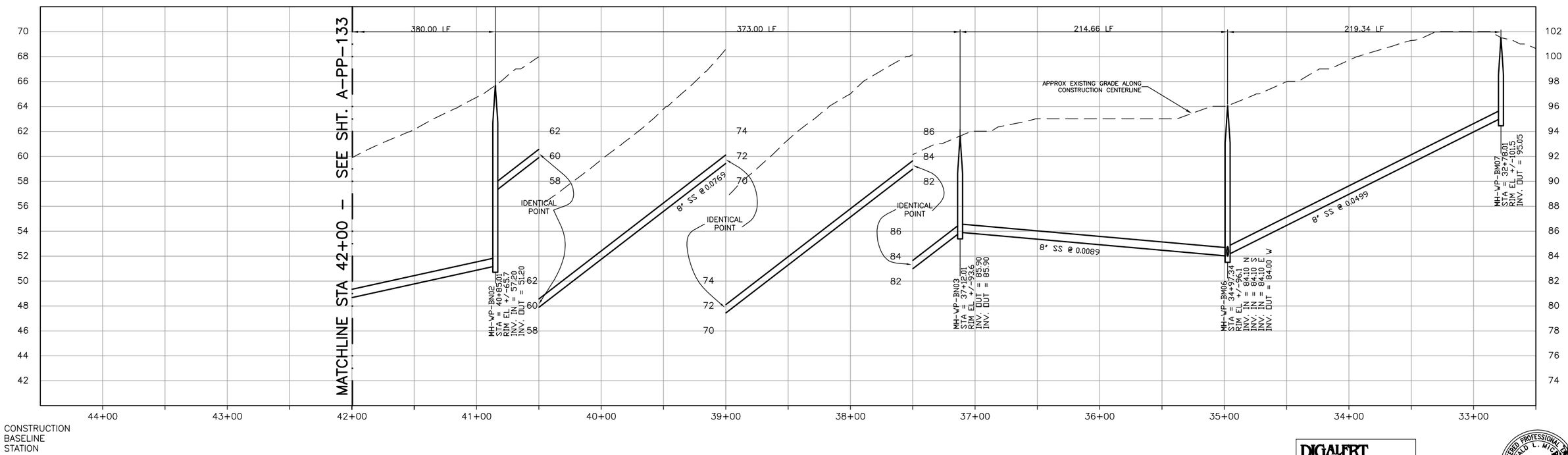


PLAN ON 11TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 11TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
11TH STREET
STA 32+78 TO STA 42+00

SHEET
A-PP-134

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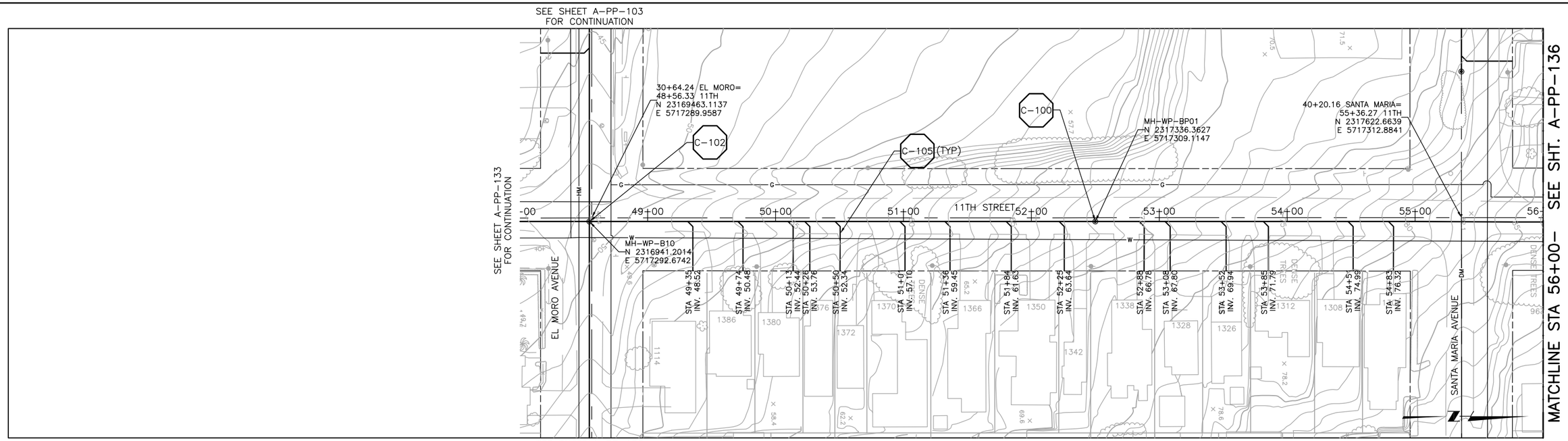
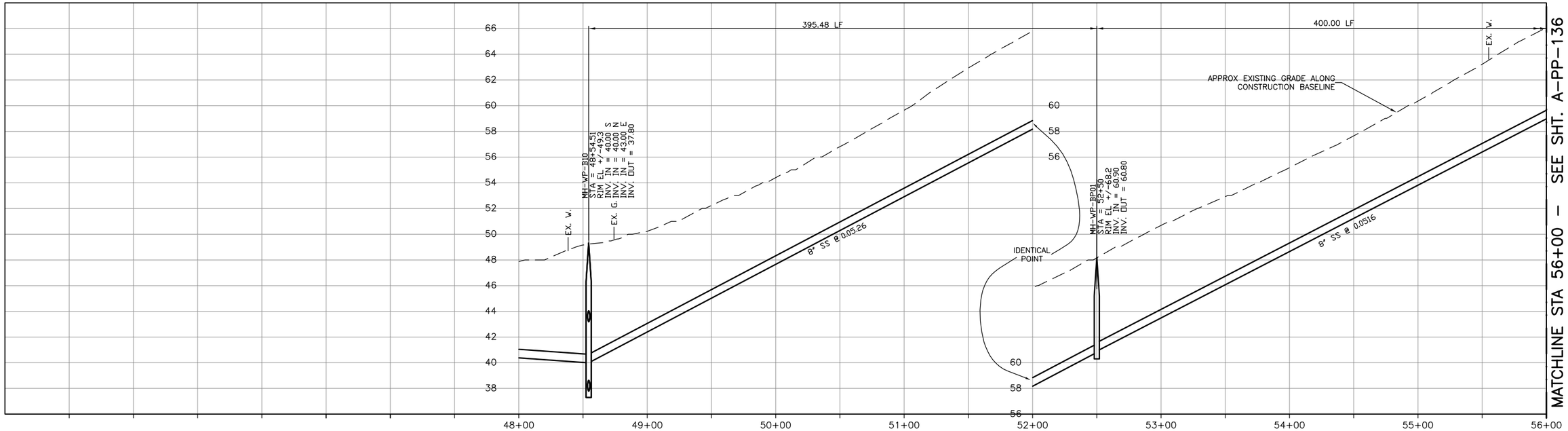


PLAN ON 11TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 11TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
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DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
11TH STREET
STA 48+54.51 TO STA 56+00

SHEET
A-PP-135

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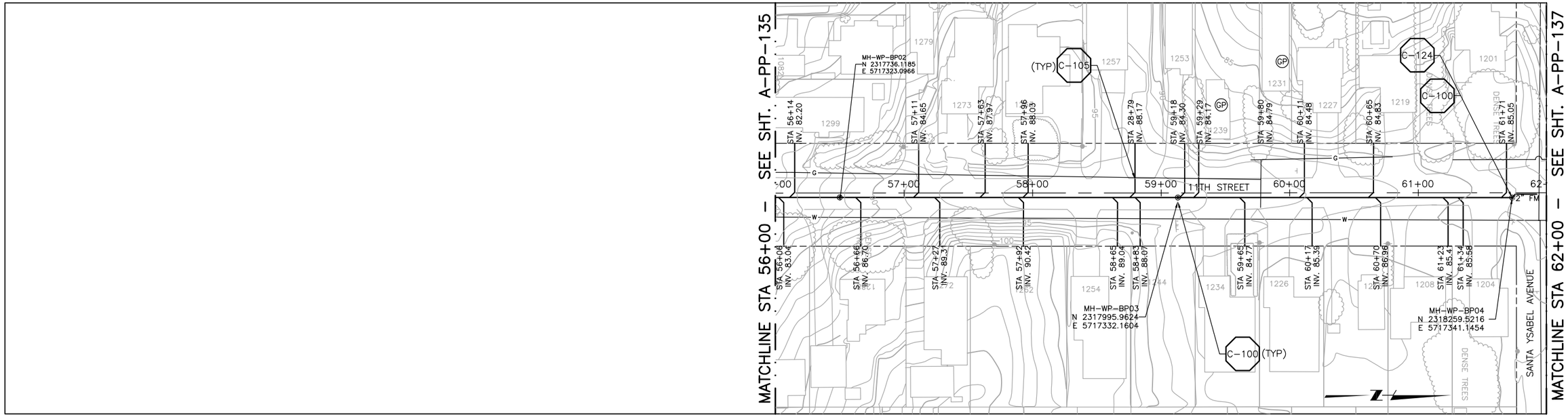
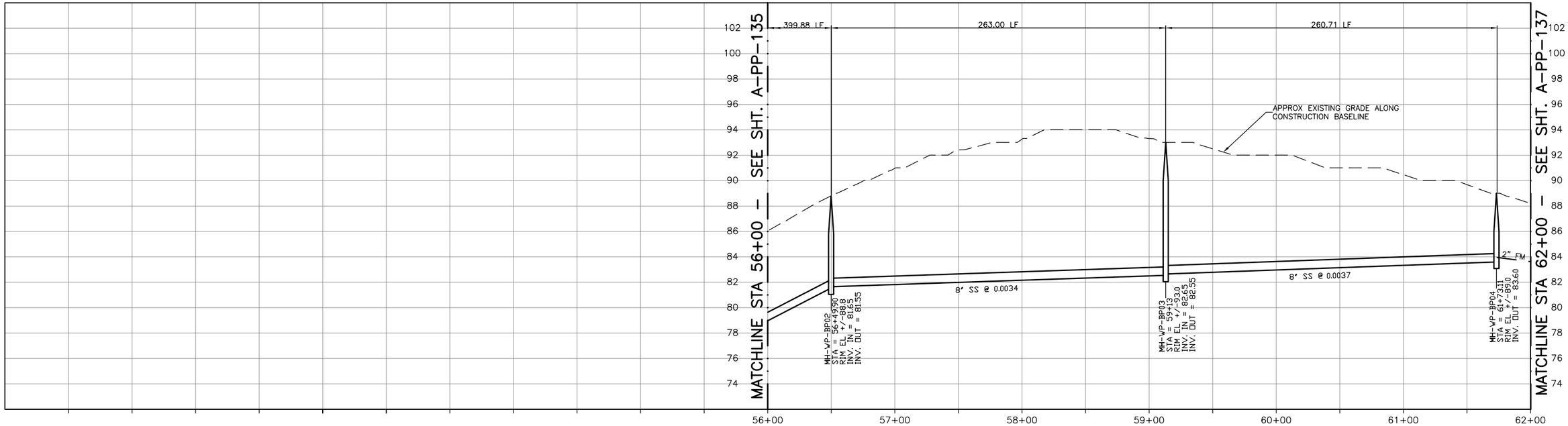


PLAN ON 11TH STREET



CONSTRUCTION BASELINE STATION

PROFILE ON 11TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
11TH STREET
STA 56+00 TO STA 62+00

SHEET
A-PP-136

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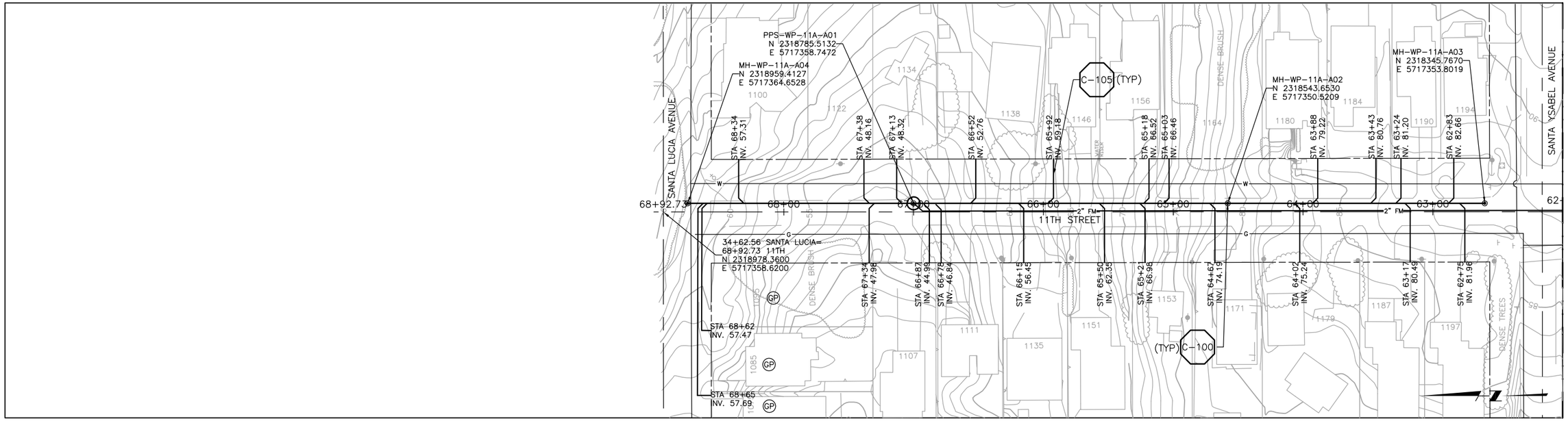
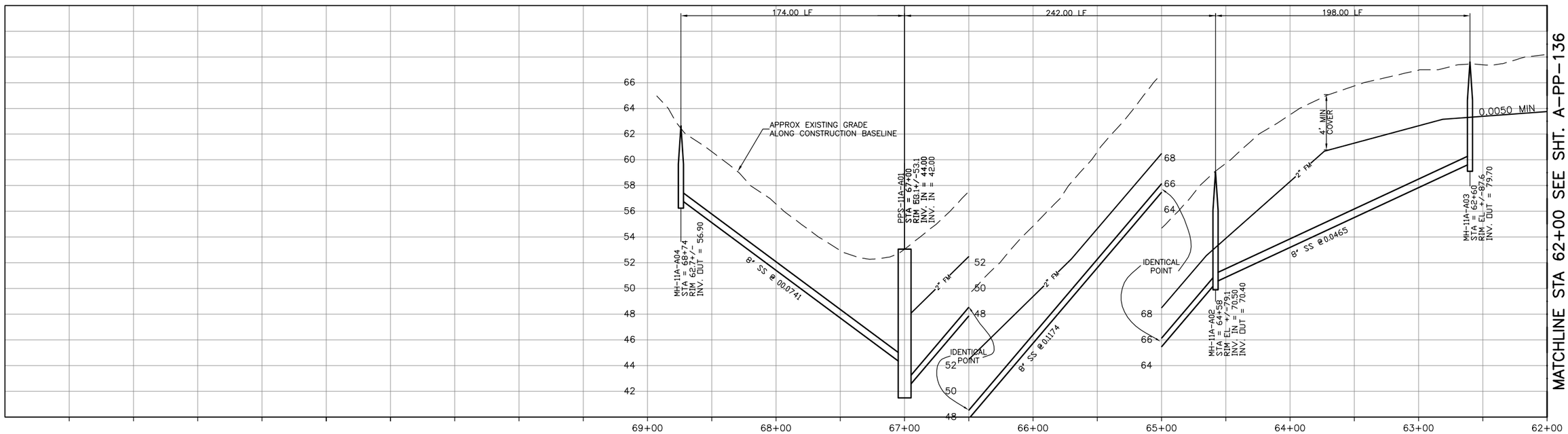


PLAN ON 11TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 11TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
11TH STREET
STA 62+00 TO STA 68+74

SHEET A-PP-137

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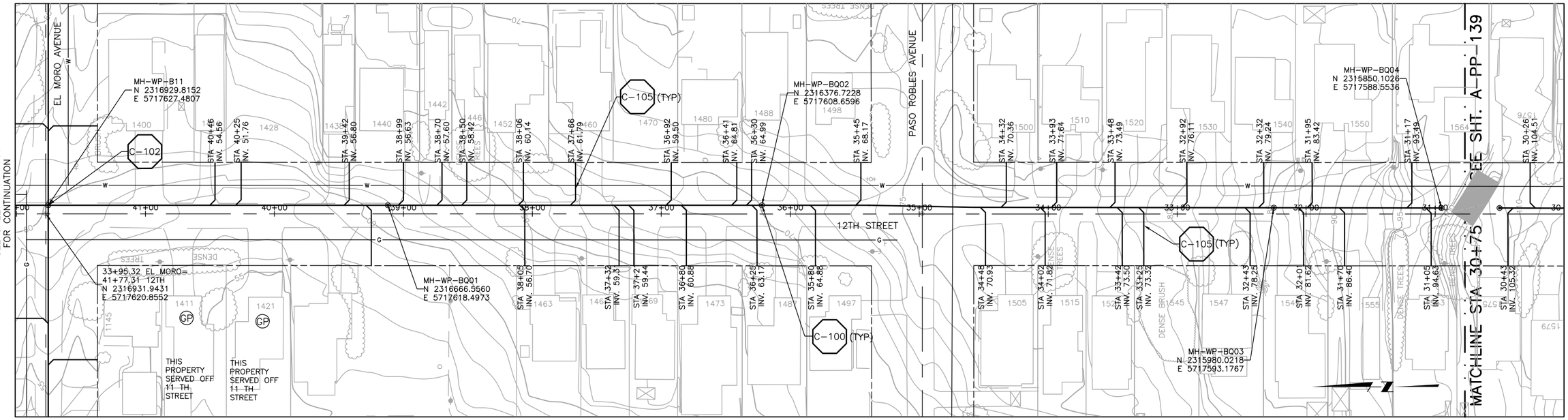
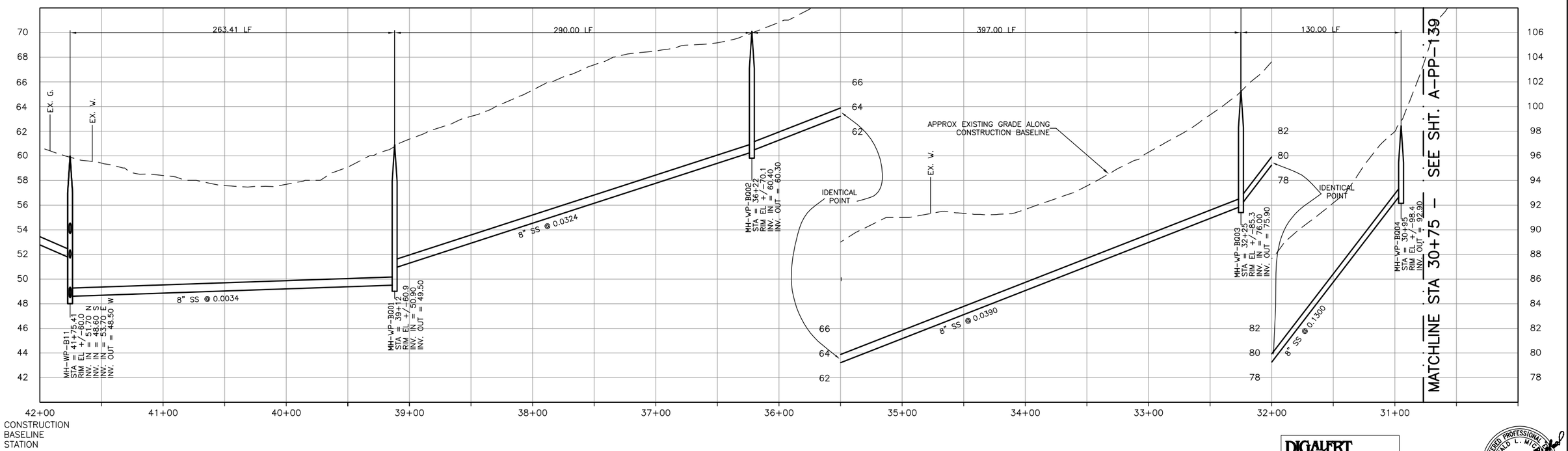
SEE SHEET A-PP-103
FOR CONTINUATION



SEE SHEET A-PP-103
FOR CONTINUATION

SEE SHEET A-PP-141
FOR CONTINUATION

PLAN ON 12TH STREET



PROFILE ON 12TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
12TH STREET
STA 30+75 TO STA 41+75.41

SHEET
A-PP-138

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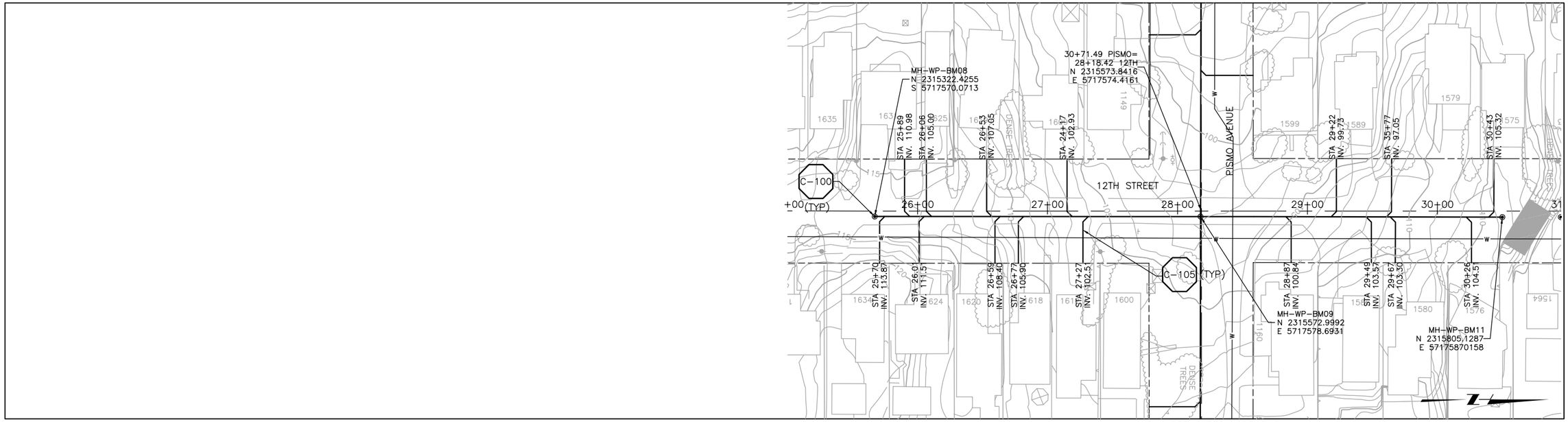
SEE SHEET A-PP-140
FOR CONTINUATION



SEE SHEET A-PP-140
FOR CONTINUATION

PLAN ON 12TH STREET

CONSTRUCTION
BASELINE
STATION

PROFILE ON 12TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
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WARNING
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DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
12TH STREET
STA 25+67 TO STA 30+50

SHEET
A-PP-139

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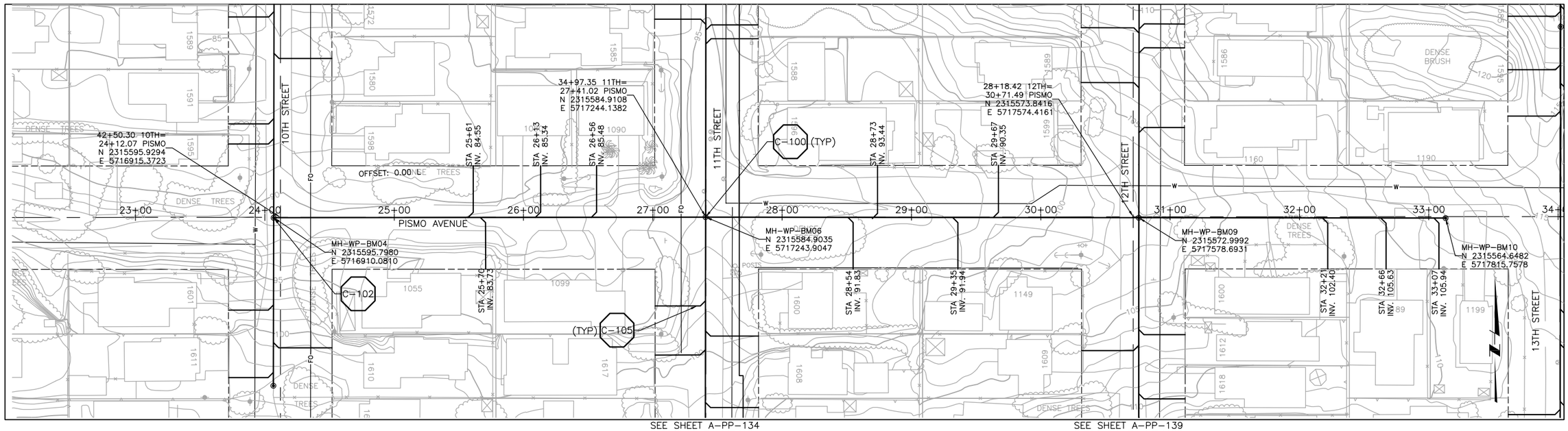
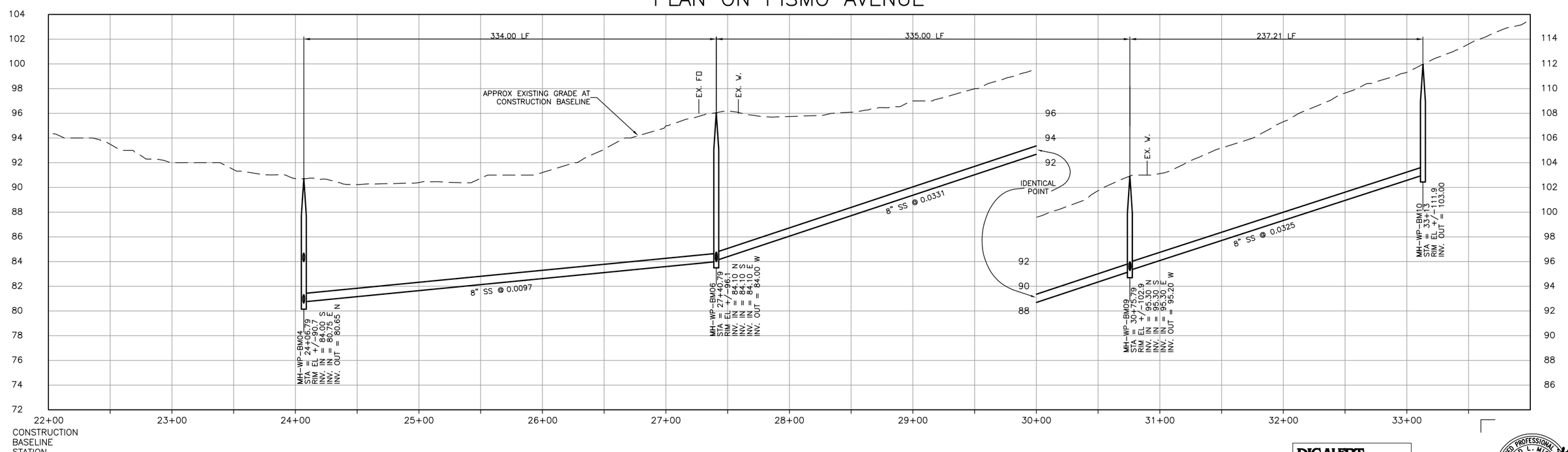


PLAN ON PISMO AVENUE



PROFILE ON PISMO AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
PISMO AVENUE
STA 24+06.79 TO STA 33+13

SHEET A-PP-140

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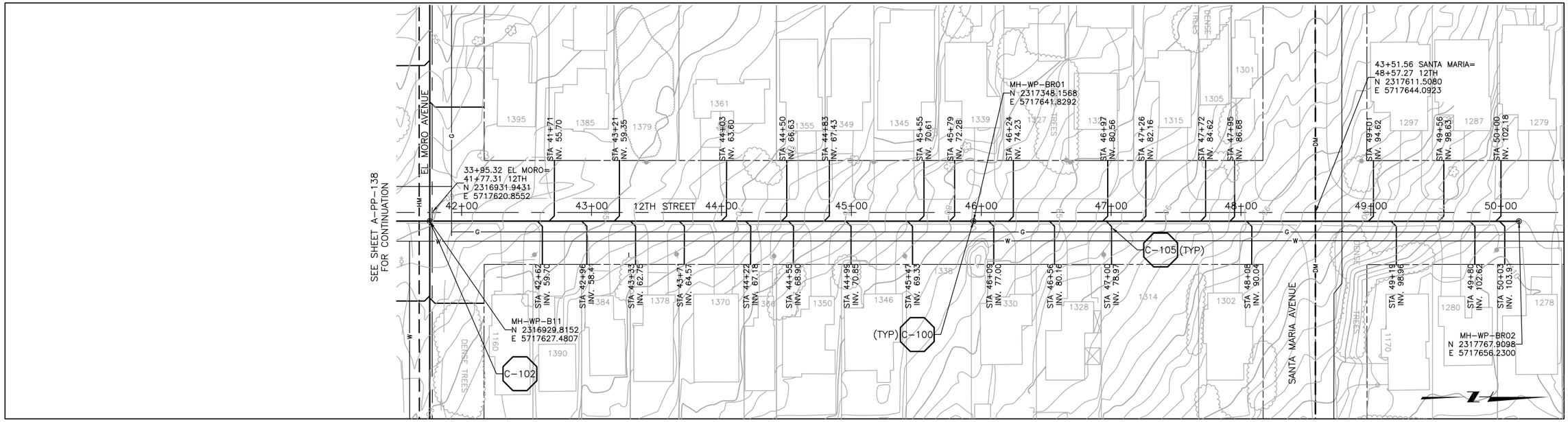
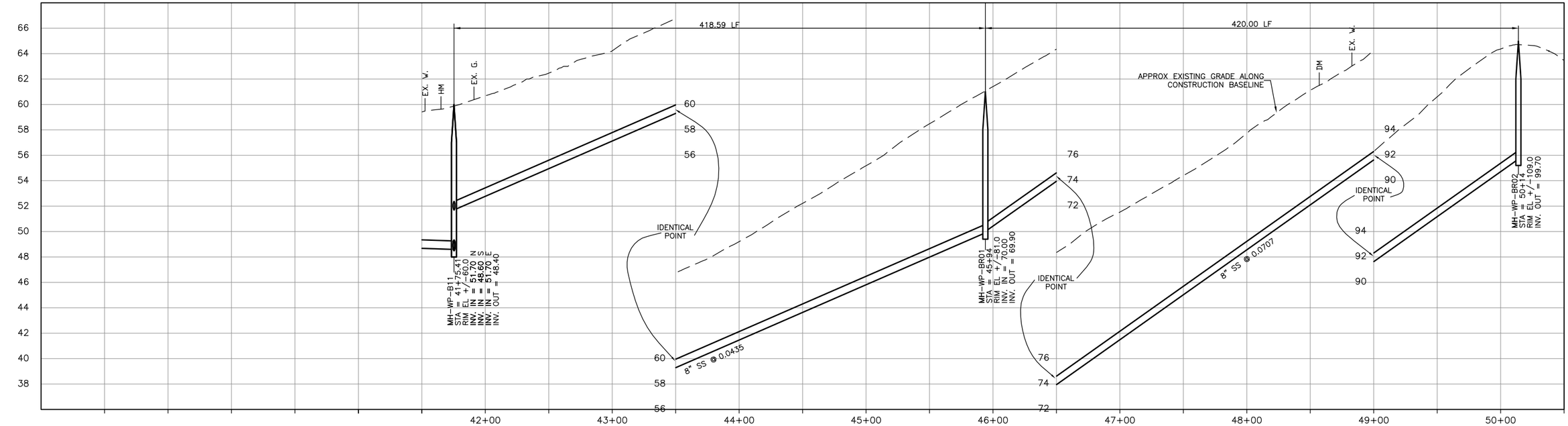


PLAN ON 12TH STREET



PROFILE ON 12TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
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DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
12TH STREET
STA 41+75.41 TO STA 50+14

SHEET
A-PP-141

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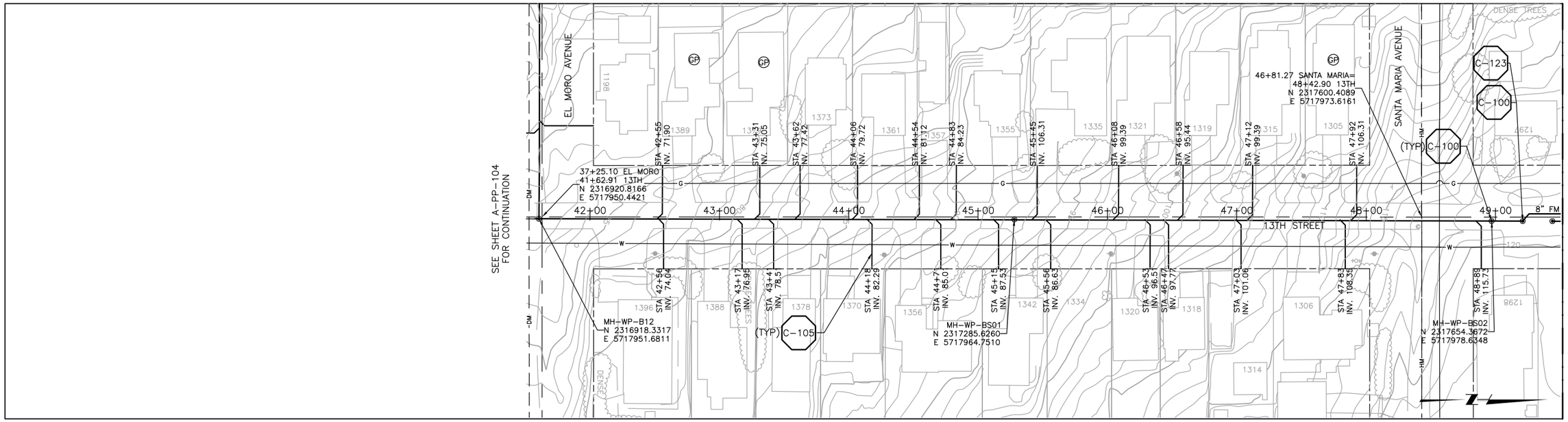
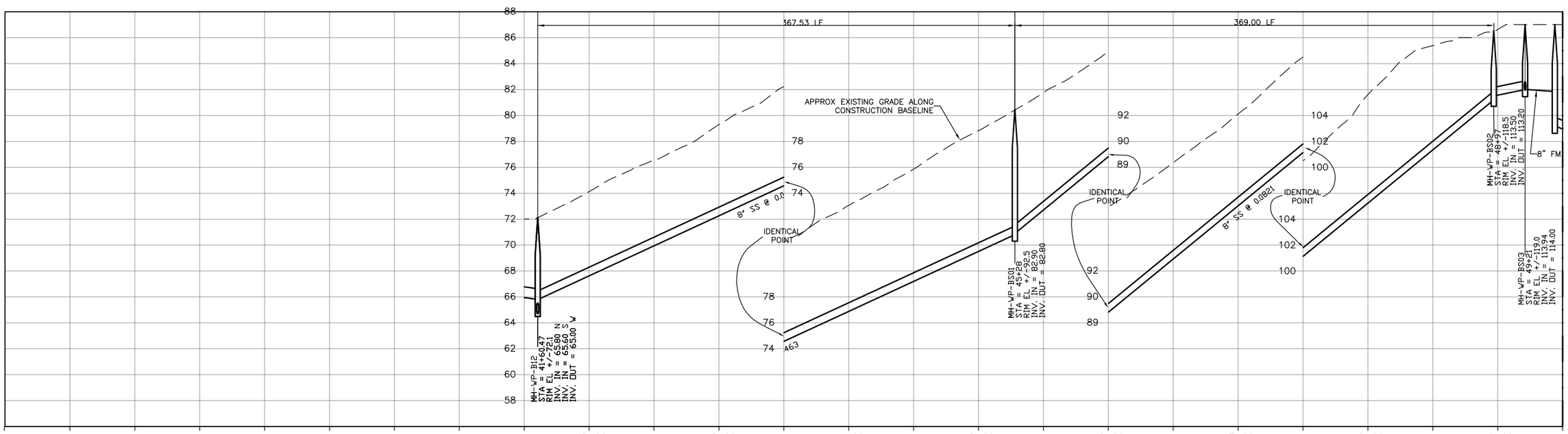


PLAN ON 13TH STREET



CONSTRUCTION BASELINE STATION

PROFILE ON 13TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA
DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
13TH STREET
STA 41+60.47 TO STA 49+50

SHEET A-PP-142

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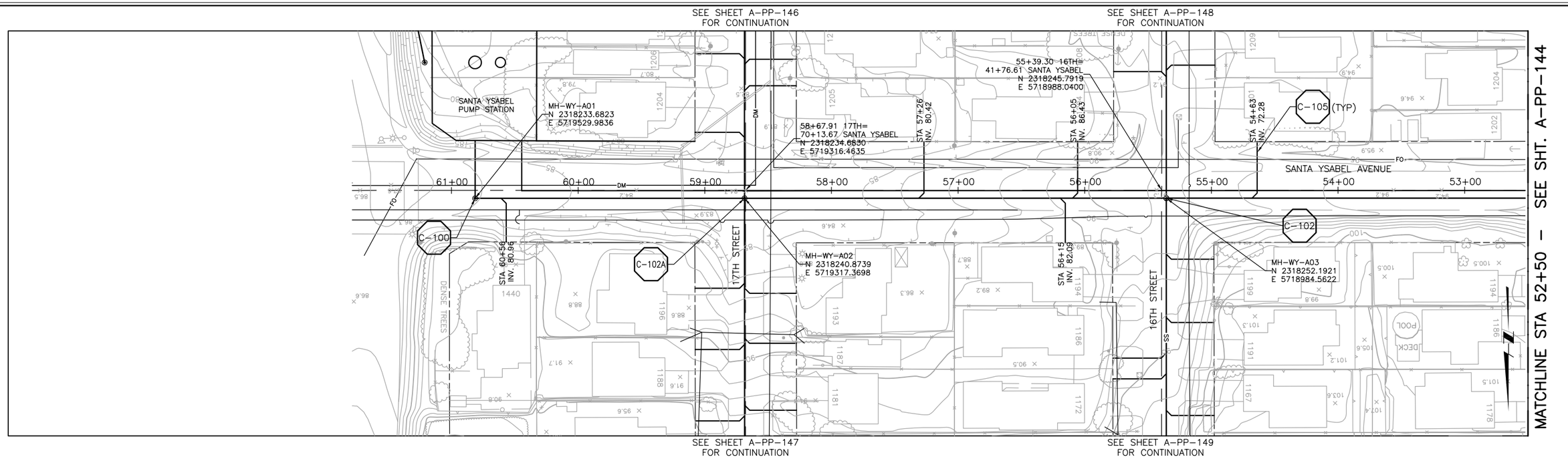
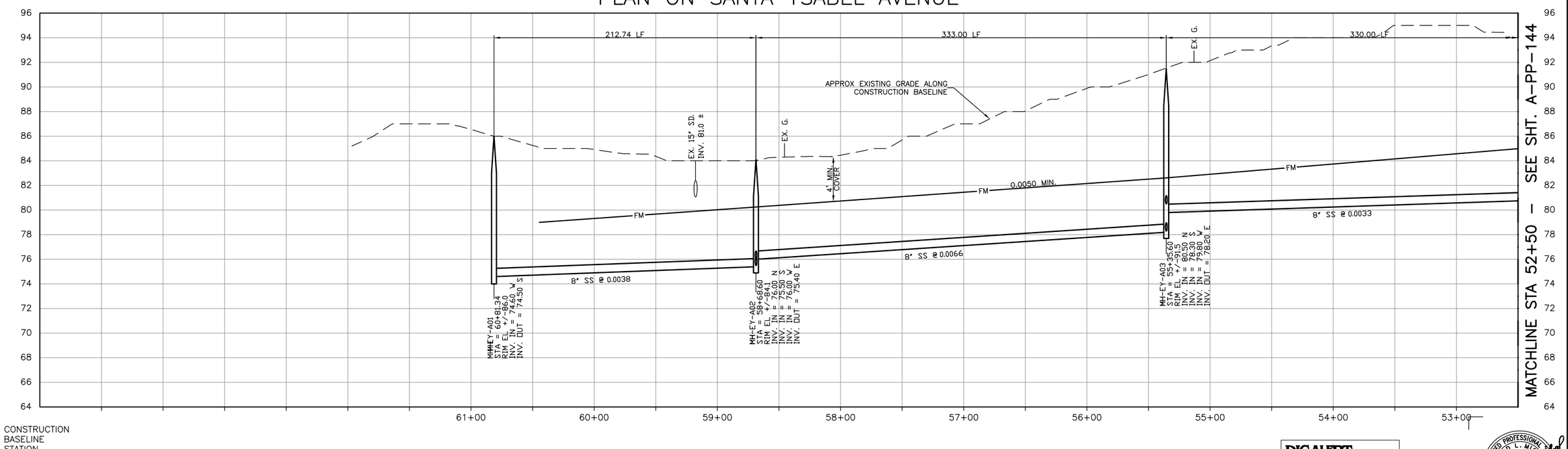


PLAN ON SANTA YSABEL AVENUE



PROFILE ON SANTA YSABEL AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

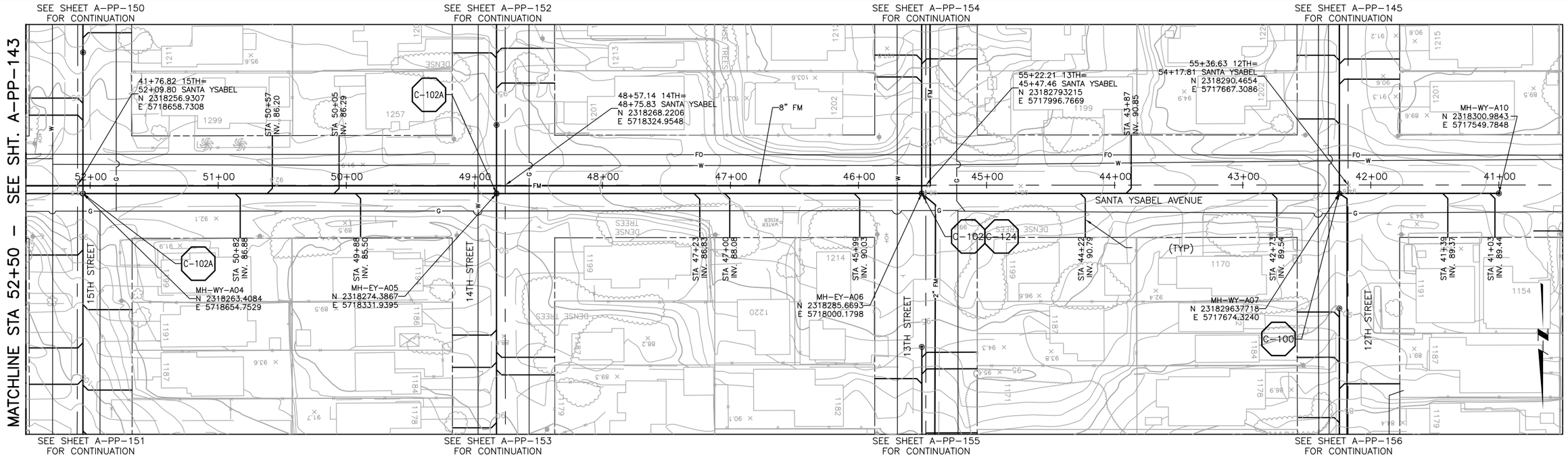
MWH
Walnut Creek, California

RRM DESIGN GROUP

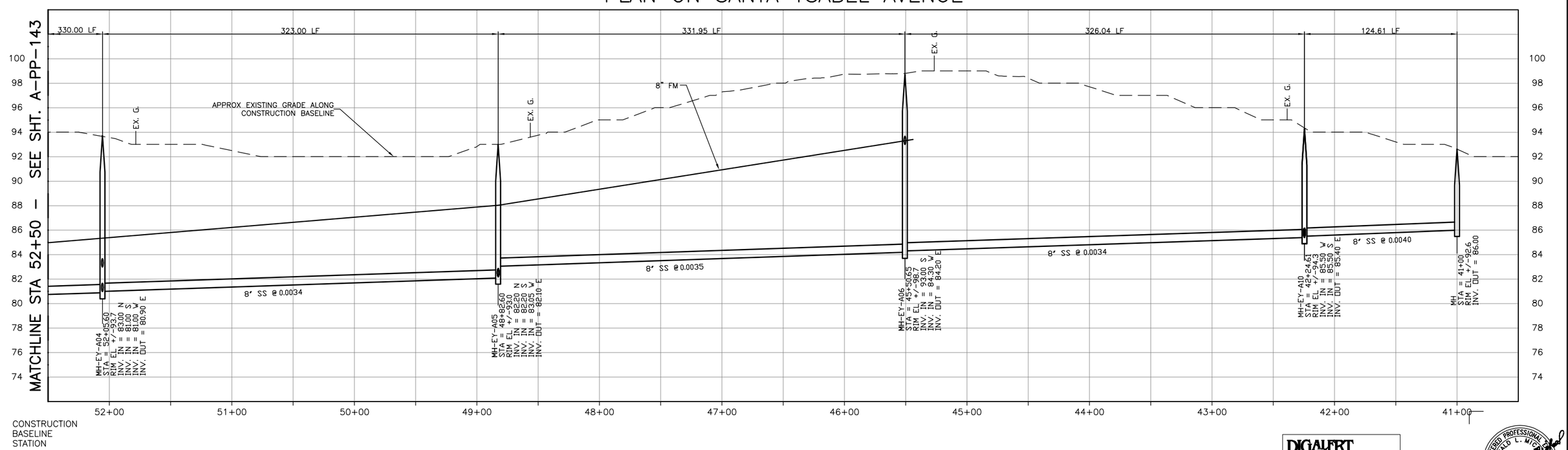
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA YSABEL AVENUE
STA 52+50 TO STA 60+81.34

SHEET
A-PP-143

\\Extra-sr\Off-site\Projects on 'usloss1s01'\los_osos\Collect_Sys\A\civ\A-PP-143.dwg, Condocs, Feb 05, 2004 6:14pm, KRTumler



PLAN ON SANTA YSABEL AVENUE



PROFILE ON SANTA YSABEL AVENUE

DIGALERT
DIAL TOLL FREE 1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MICHAEL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' 1" = 4'

WARNING: 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

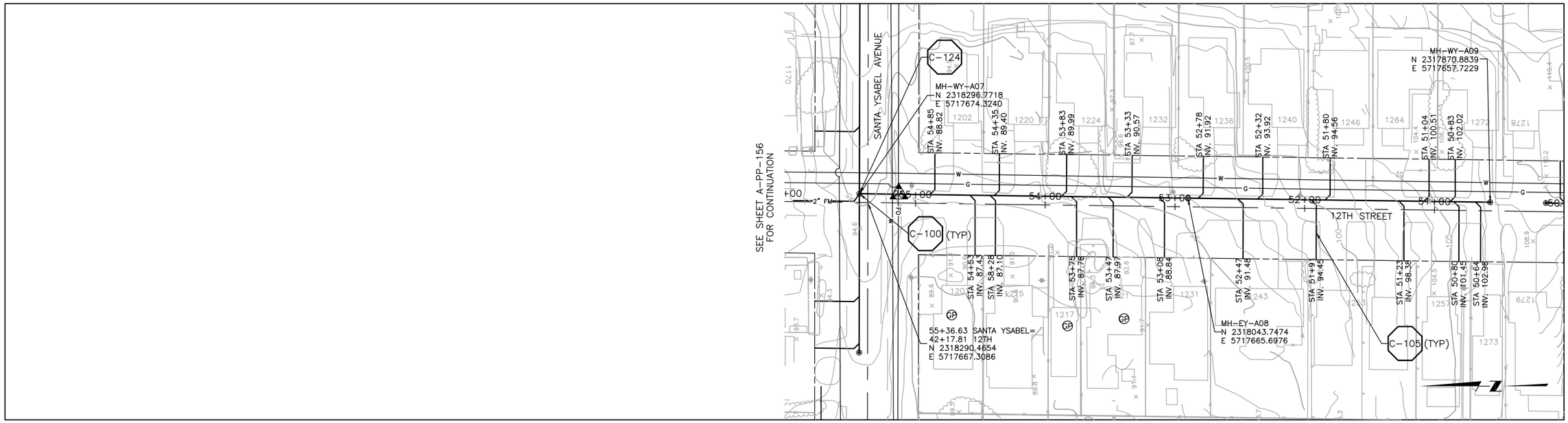
MWH Walnut Creek, California

RRM DESIGN GROUP

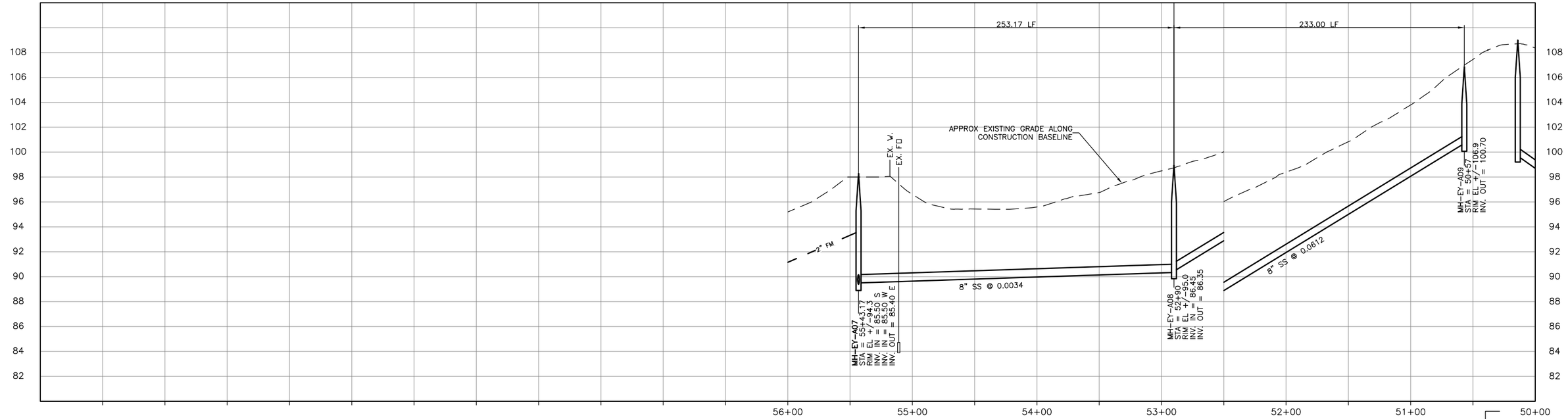
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA YSABEL AVENUE
STA 41+00 TO STA 52+50

SHEET A-PP-144

\\Extra-sr\Off-site\Projects on 'uslos1s01'\los_osos\Collect_Sys\A\civ\A-PP-144.dwg, Condocs, Feb 05, 2004 6:17pm, KRTumler



PLAN ON 12TH STREET



PROFILE ON 12TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL C 46895 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
12TH STREET
STA 50+57 TO STA 55+43.17

SHEET A-PP-145

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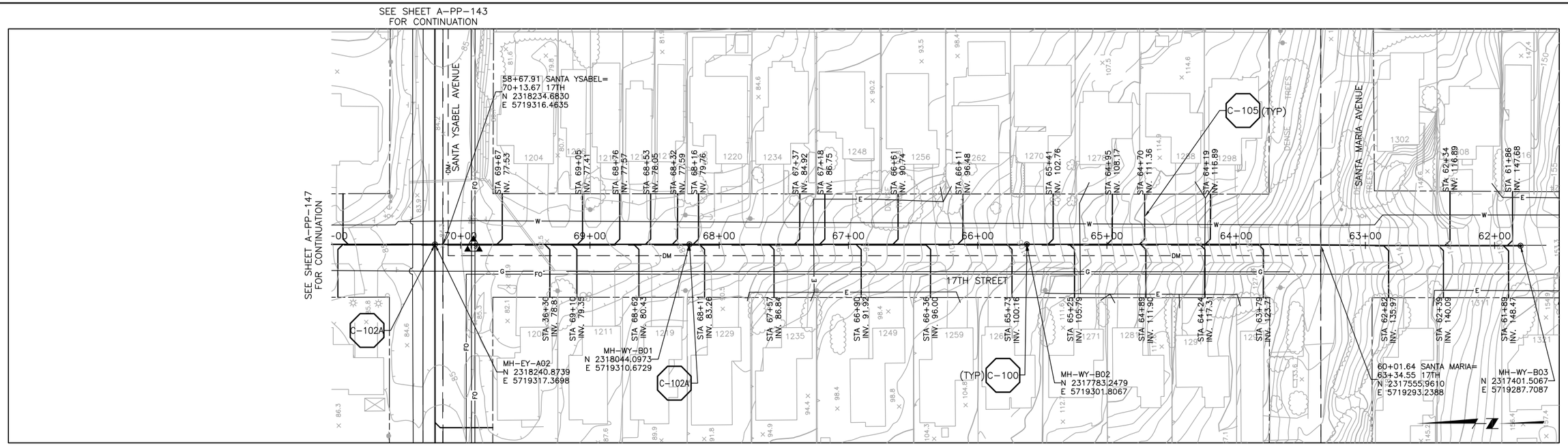
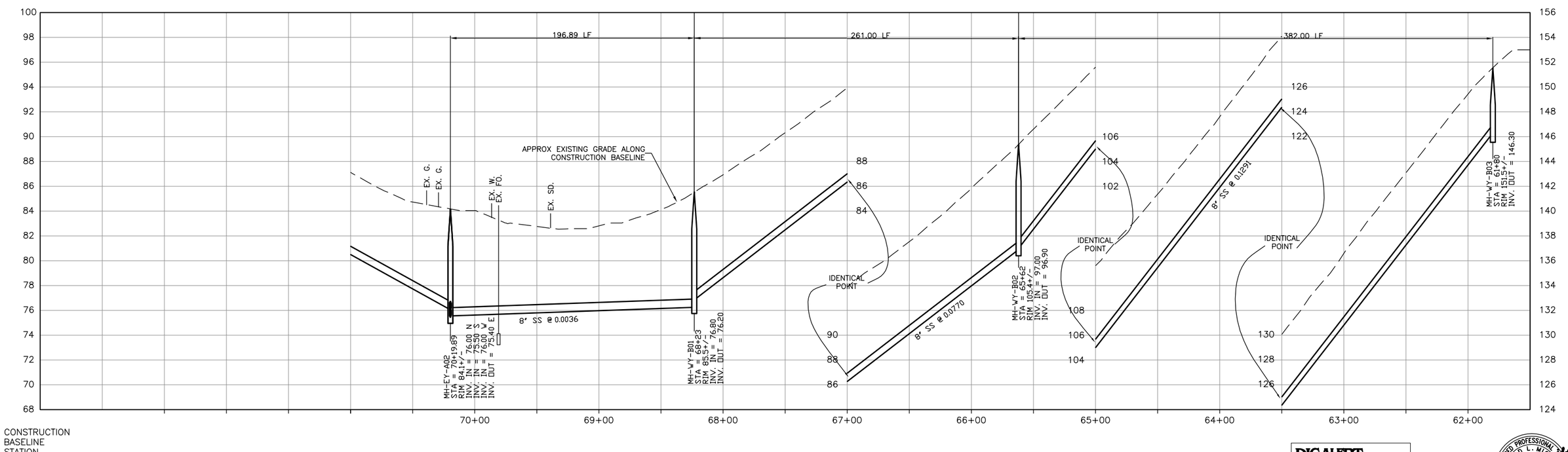


PLAN ON 17TH STREET



PROFILE ON 17TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SEVENTEENTH STREET
STA 61+80 TO STA 70+19.89

SHEET
A-PP-146

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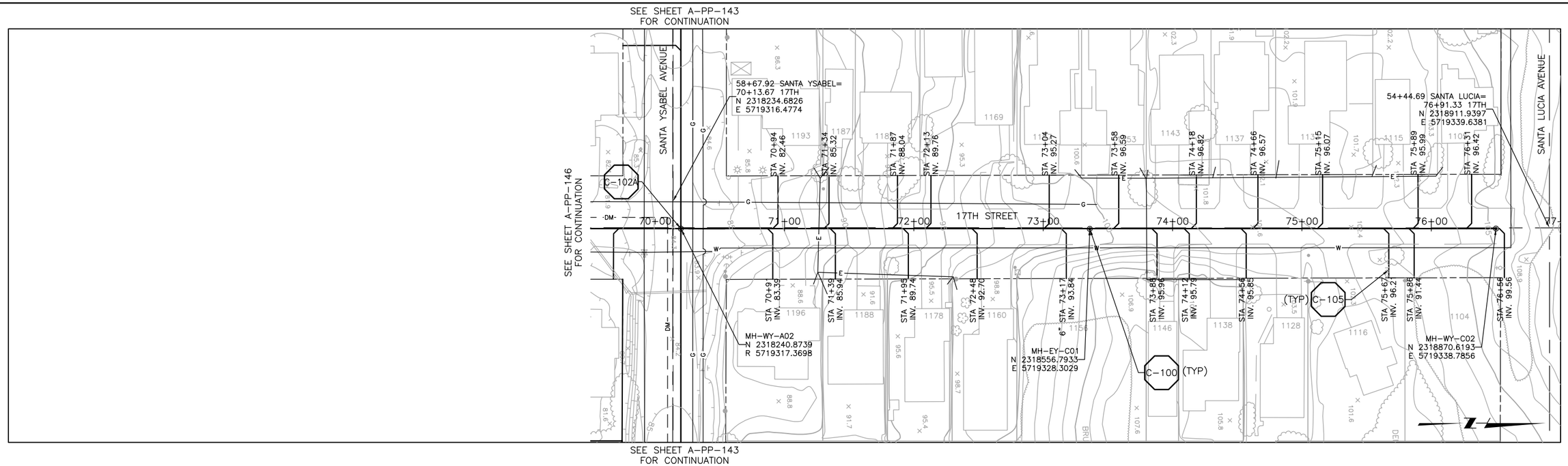
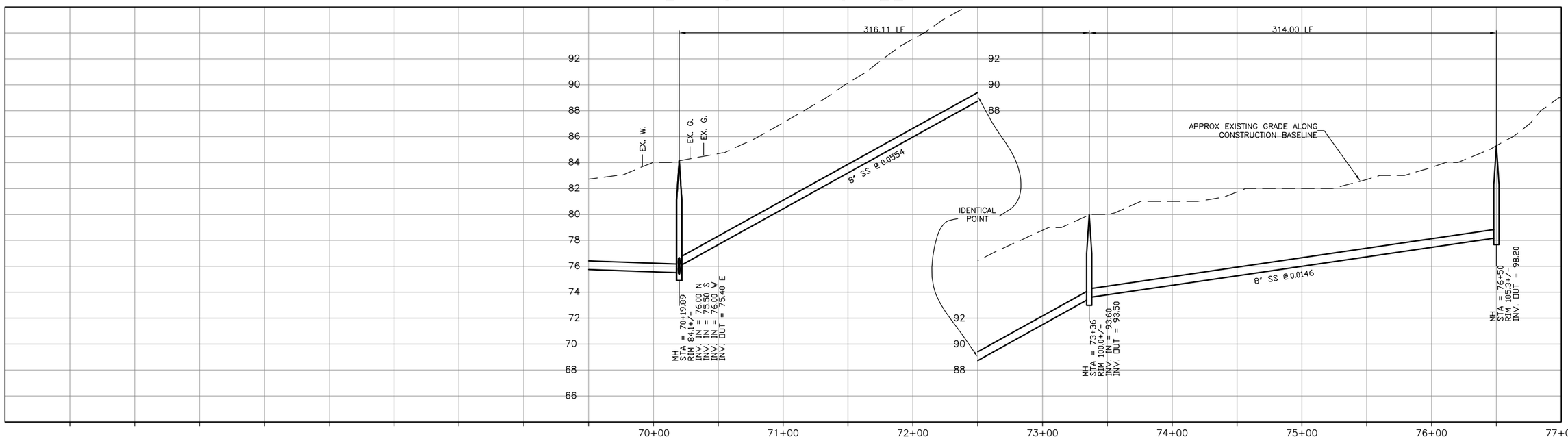


PLAN ON 17TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 17TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
17TH STREET
STA 70+19.89 TO STA 76+50

SHEET
A-PP-147

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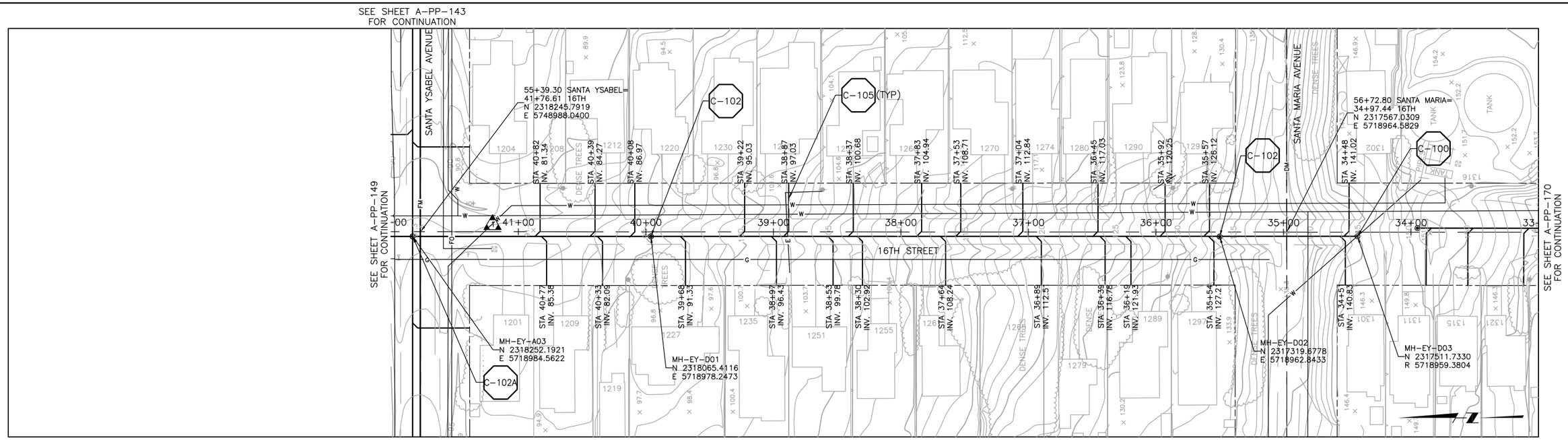
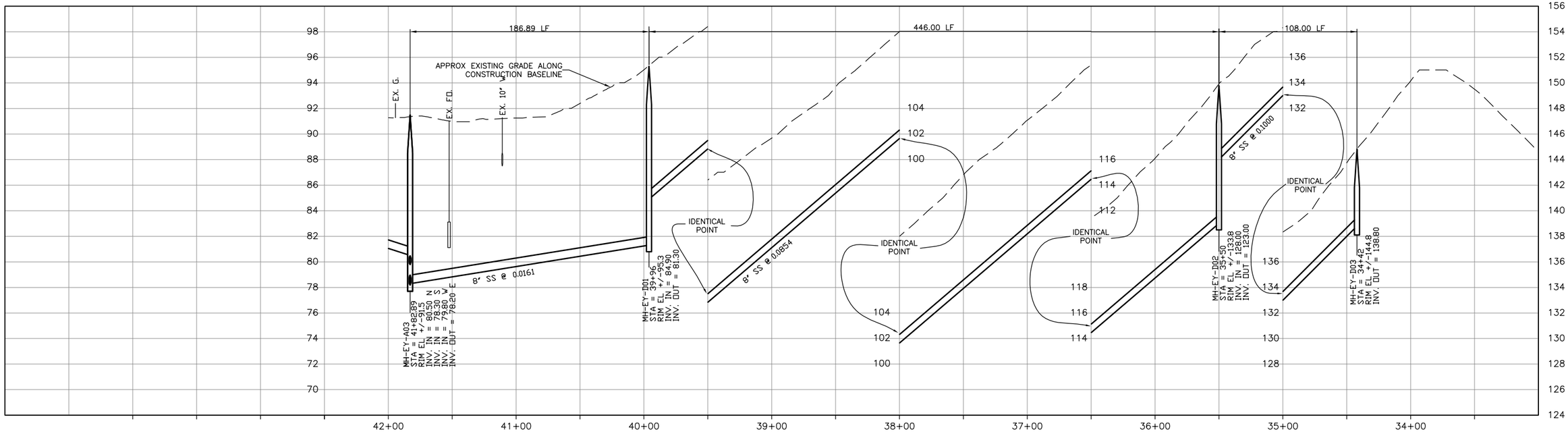


PLAN ON 16TH STREET



PROFILE ON 16TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
16TH STREET
STA 34+42 TO STA 41+82.89

SHEET A-PP-148

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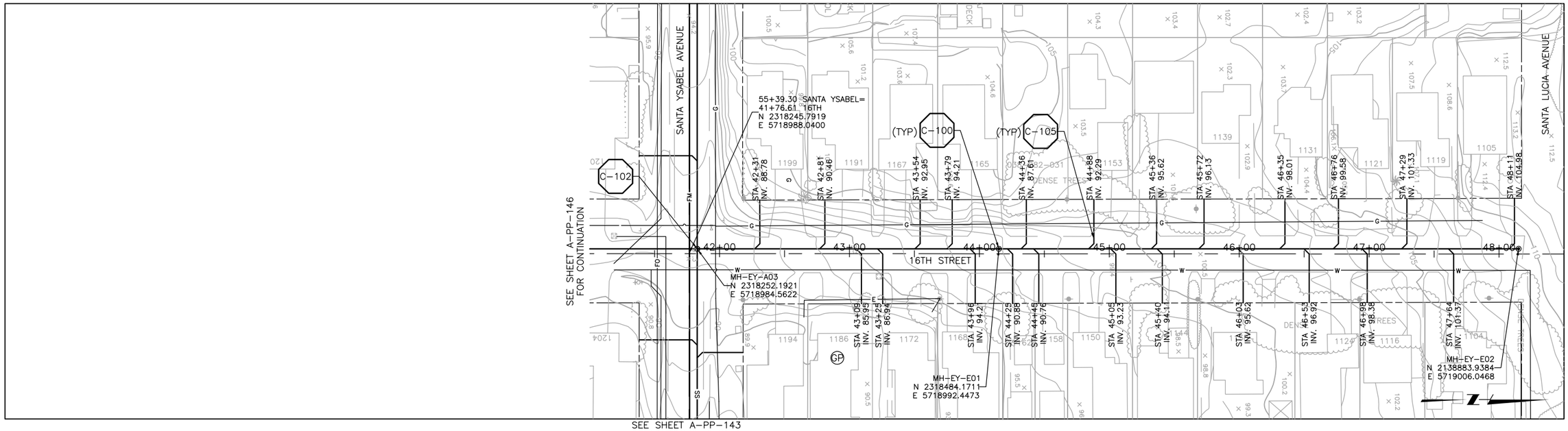
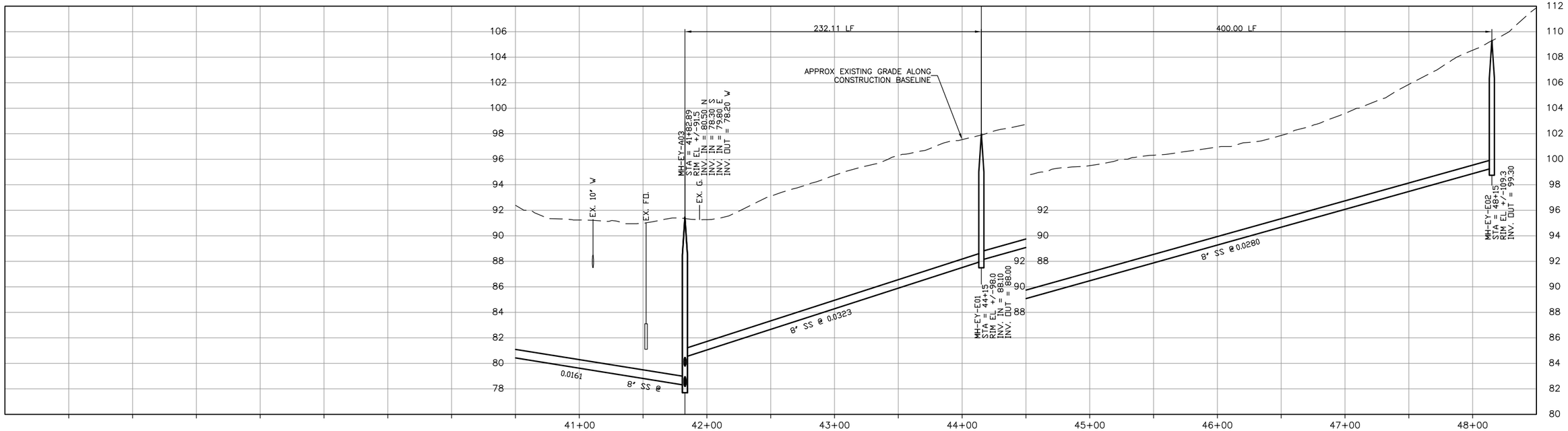
SEE SHEET A-PP-143
FOR CONTINUATION



SEE SHEET A-PP-146
FOR CONTINUATION

SEE SHEET A-PP-143
FOR CONTINUATION

PLAN ON 16TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 16TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
16TH STREET
STA 41+82.89 TO STA 48+15

SHEET
A-PP-149

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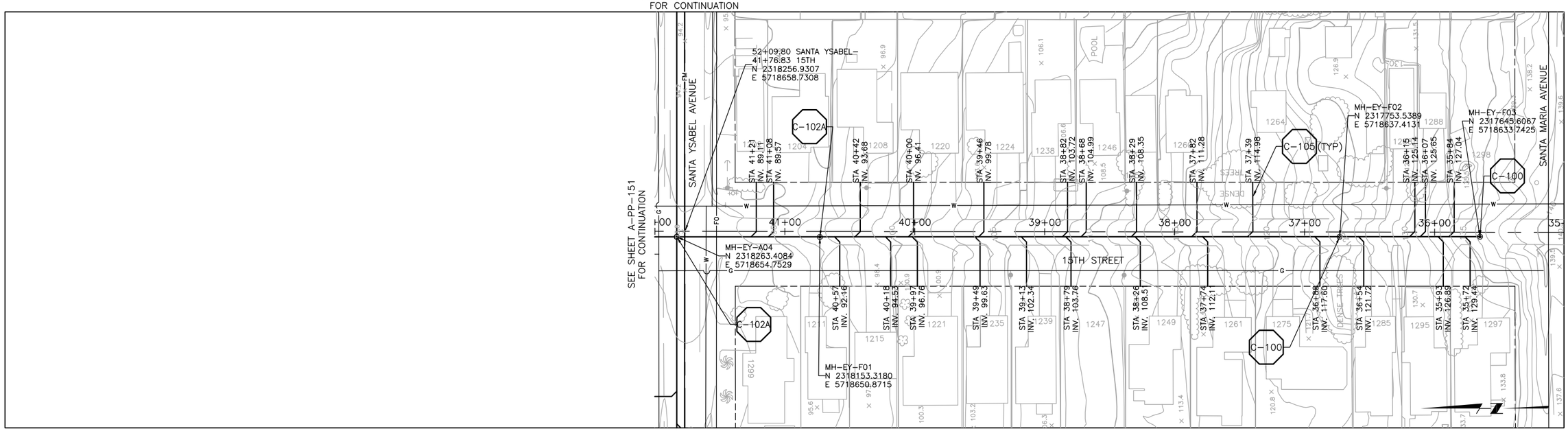
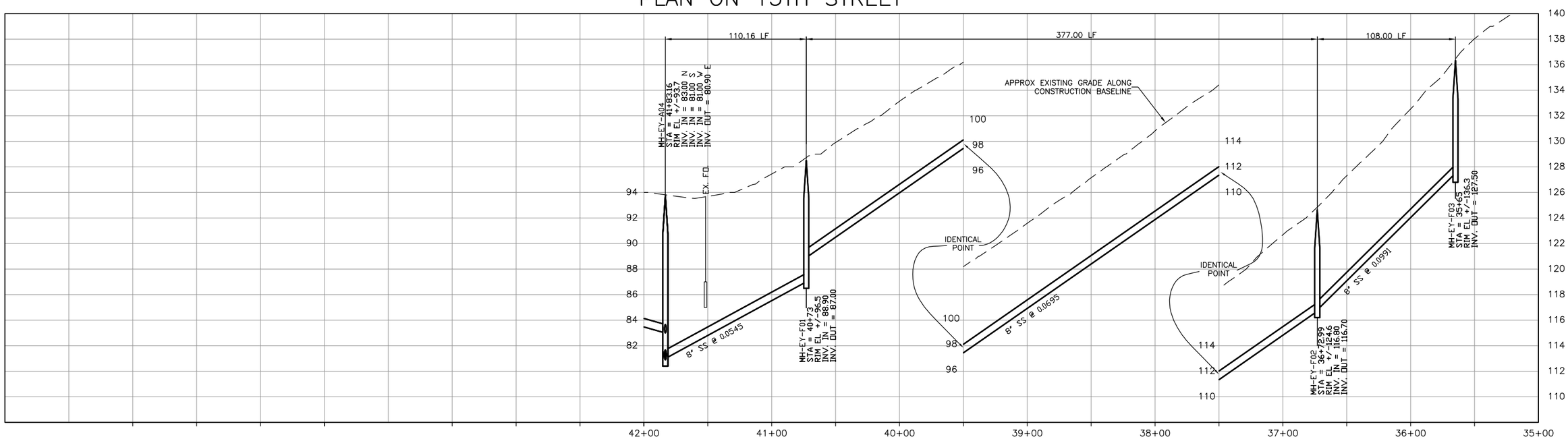
SEE SHEET A-PP-144
FOR CONTINUATION



SEE SHEET A-PP-144
FOR CONTINUATION

PLAN ON 15TH STREET



PROFILE ON 15TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
15TH STREET
STA 35+65 TO STA 41+83.16

SHEET
A-PP-150

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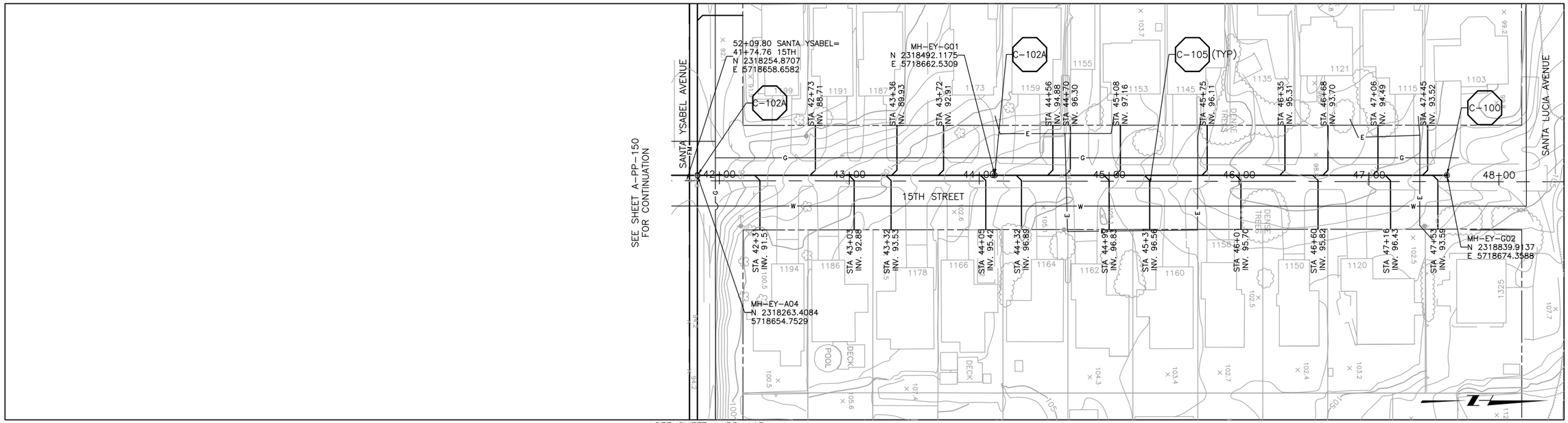
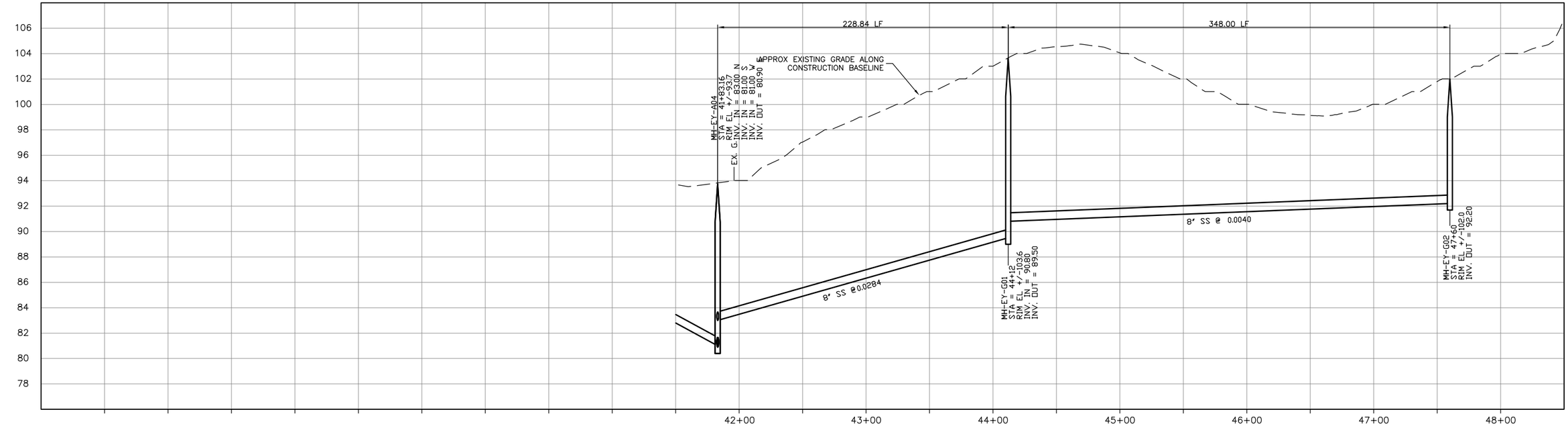
SEE SHEET A-PP-143
FOR CONTINUATION



SEE SHEET A-PP-143
FOR CONTINUATION

PLAN ON 15TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 15TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
15TH STREET
STA 41+83.16 TO STA 47+60

SHEET
A-PP-151

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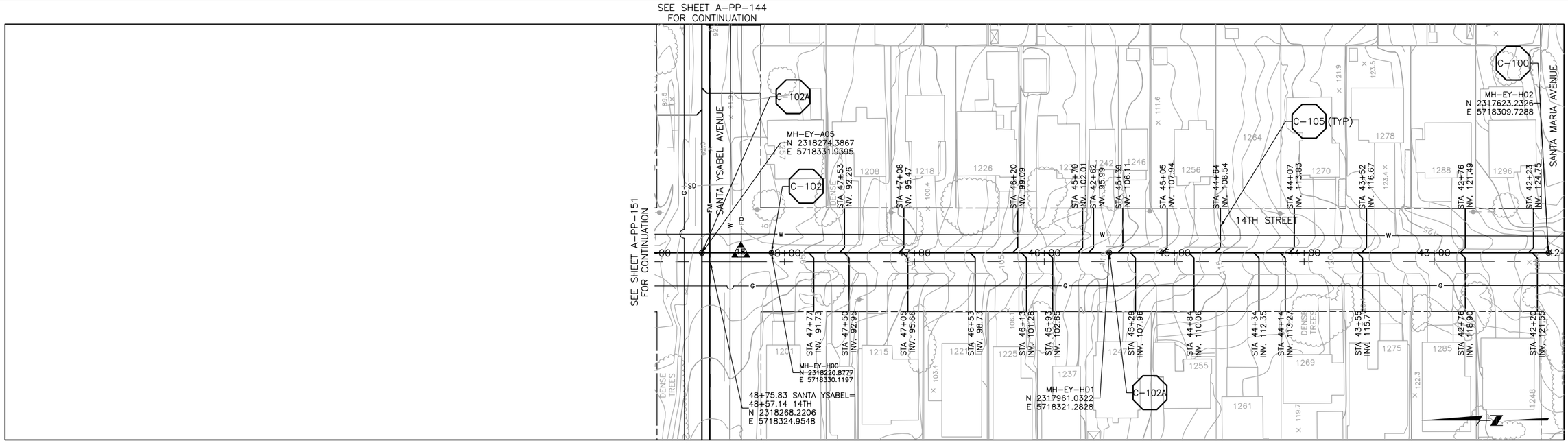
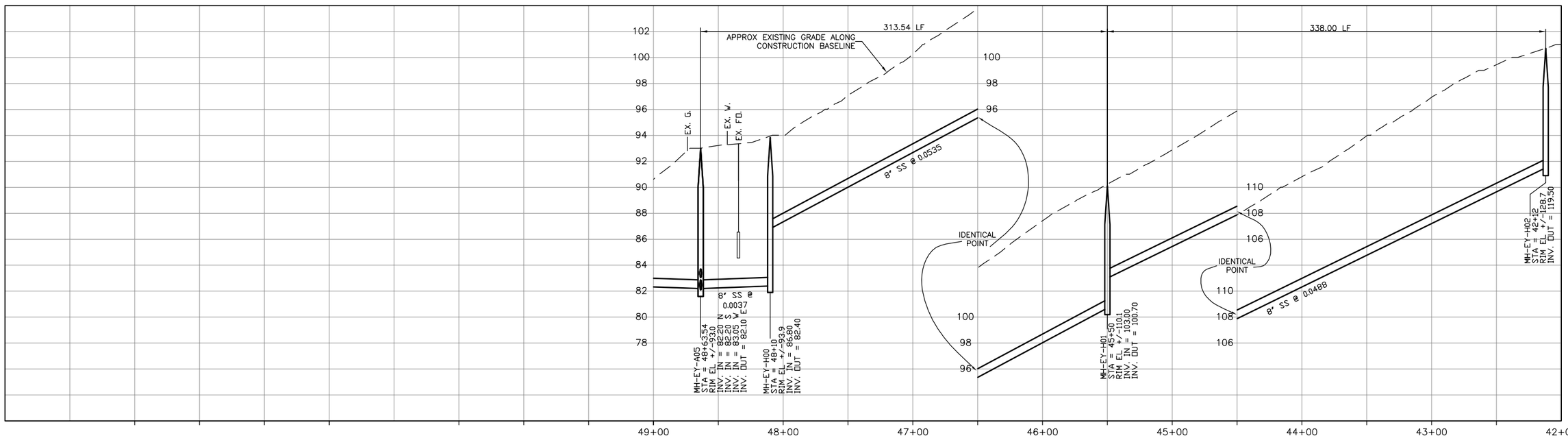


SEE SHEET A-PP-144
FOR CONTINUATION

PLAN ON 14TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 14TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
14TH STREET
STA 42+12 TO STA 48+63.54

SHEET
A-PP-152

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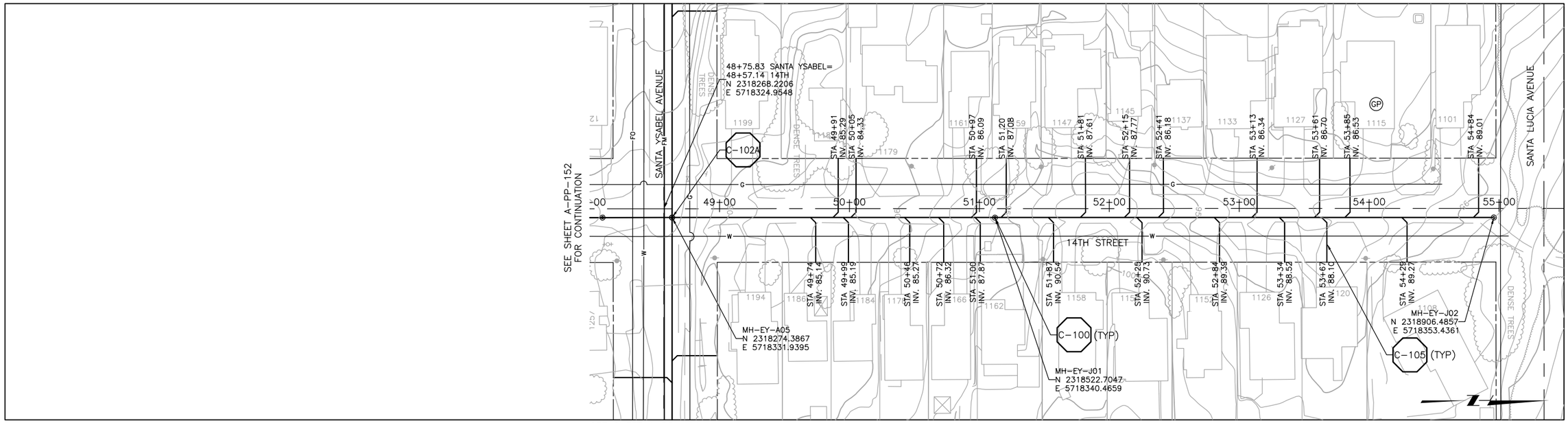
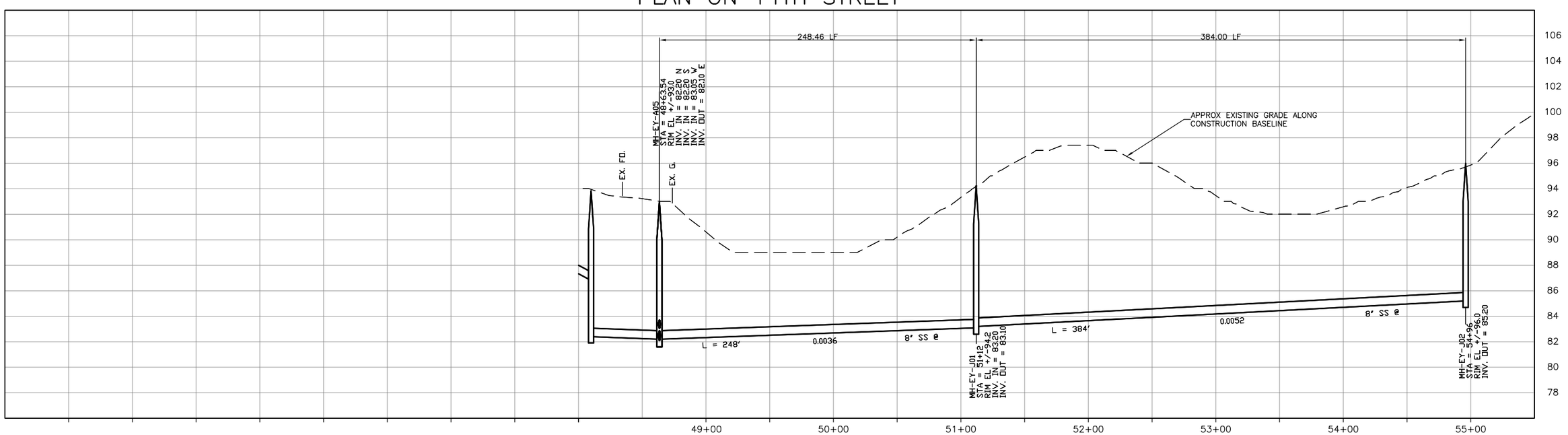
SEE SHEET A-PP-144
FOR CONTINUATION



SEE SHEET A-PP-144
FOR CONTINUATION

PLAN ON 14TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 14TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
14TH STREET
STA 48+63.54 TO STA 54+96

SHEET
A-PP-153

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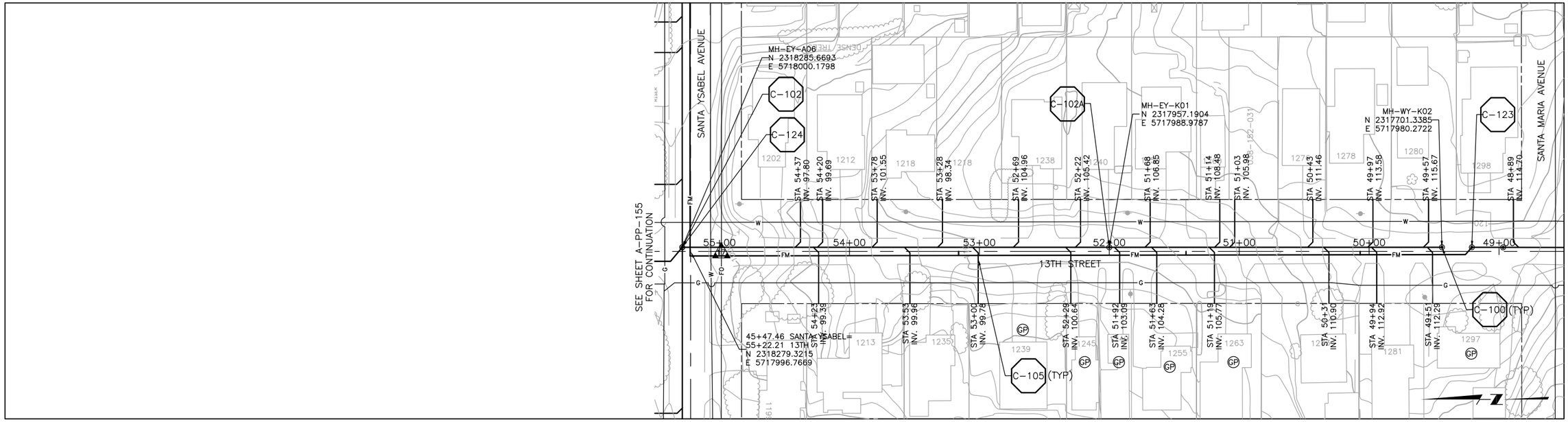
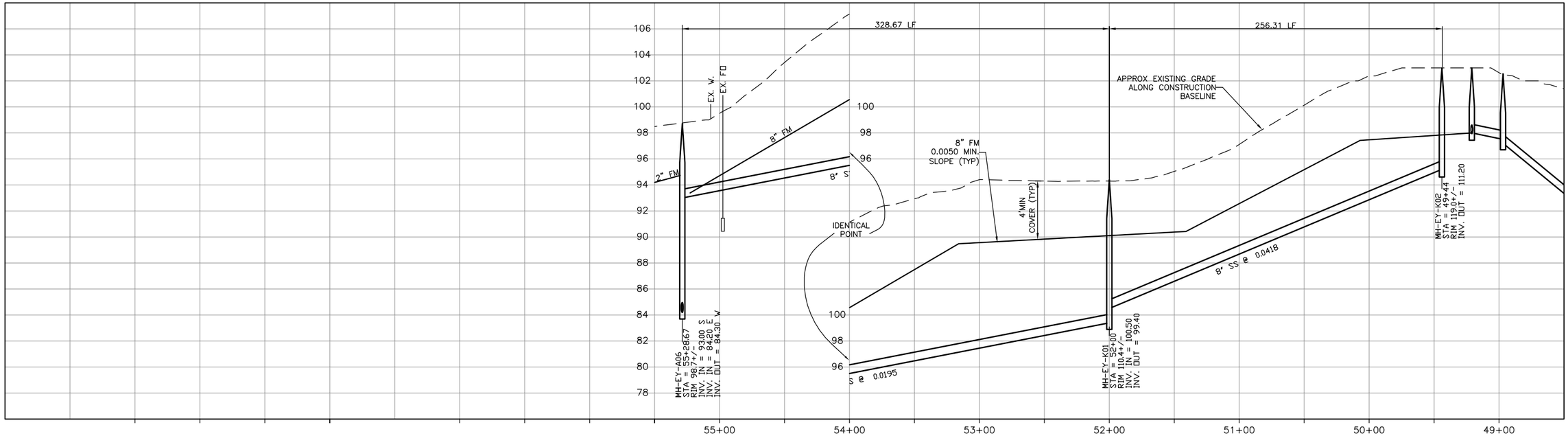
SEE SHEET A-PP-144
FOR CONTINUATION



SEE SHEET A-PP-144
FOR CONTINUATION

SEE SHEET A-PP-155
FOR CONTINUATION

PLAN ON 13TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 13TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
13TH STREET
STA 49+44 TO STA 55+28.67

SHEET
A-PP-154

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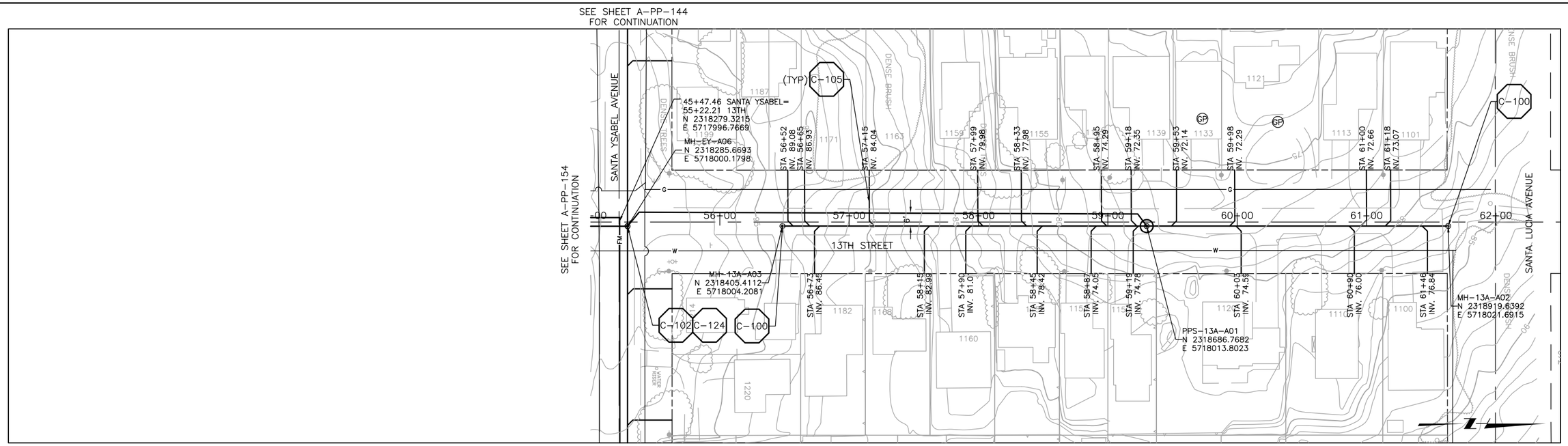
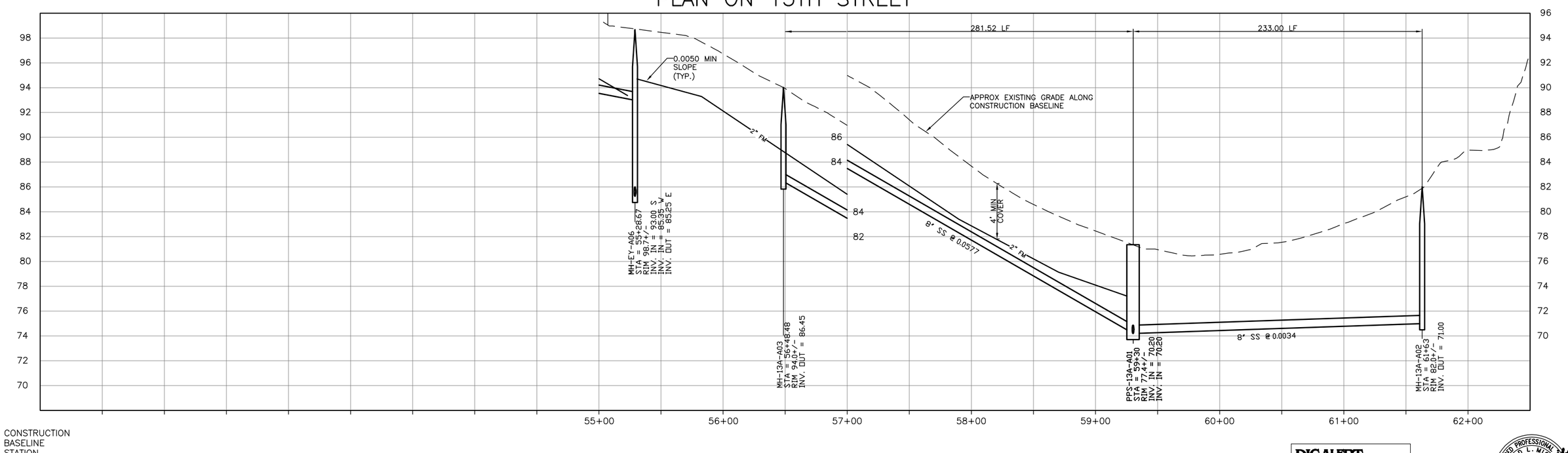


PLAN ON 13TH STREET



PROFILE ON 13TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
13TH STREET
STA 55+25.67 TO STA 61+63

SHEET
A-PP-155

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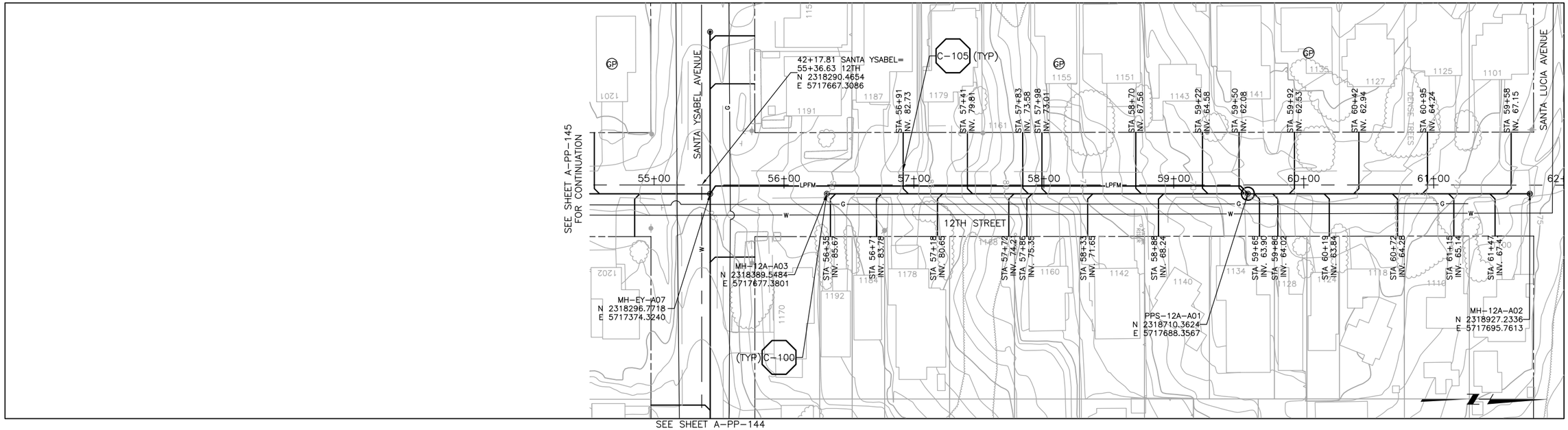
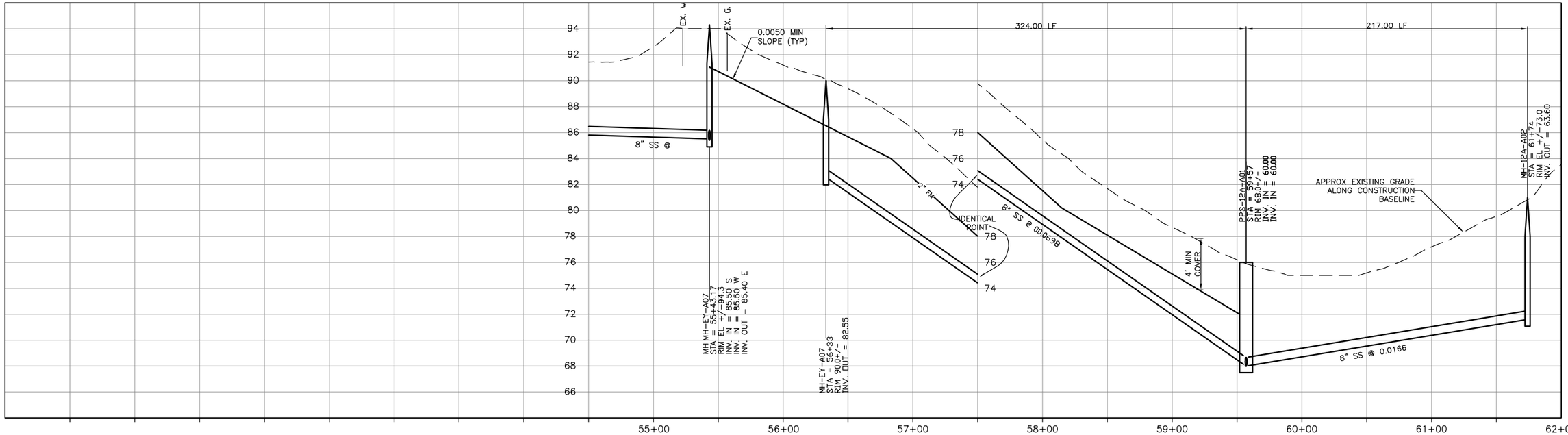


PLAN ON 12TH STREET



CONSTRUCTION BASELINE STATION

PROFILE ON 12TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MICHEL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' 1" = 4'

WARNING: 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
12TH STREET
STA 55+43.17 TO STA 61+74

SHEET A-PP-156

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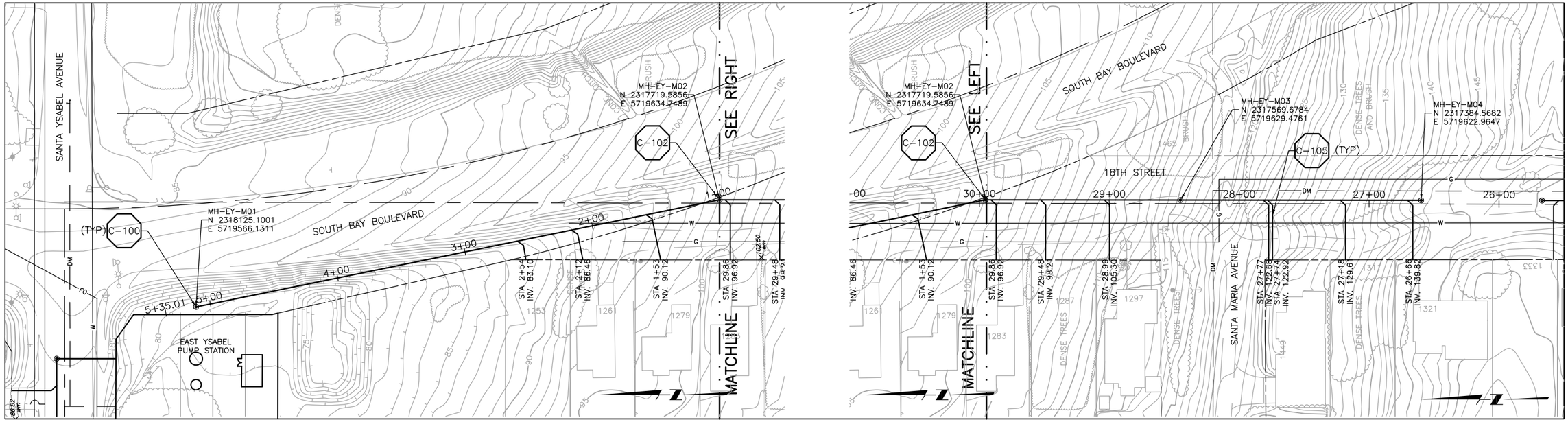
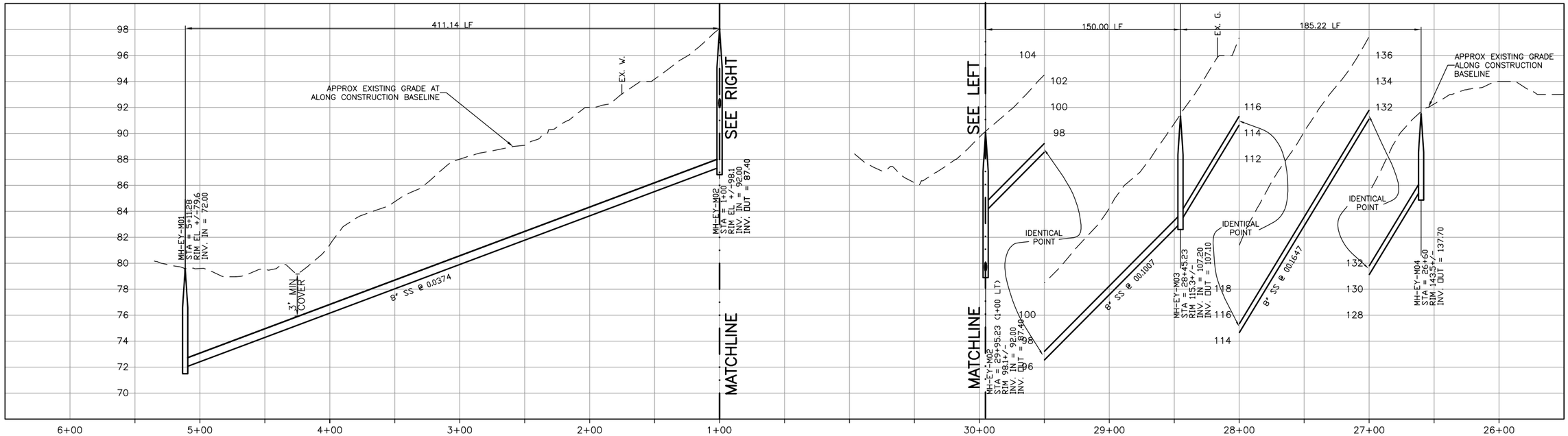


PLAN ON 18TH STREET



CONSTRUCTION BASELINE STATION

PROFILE ON 18TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
18TH STREET, 1+00 TO 5+11.28
26+60 TO 29+95.23

SHEET
A-PP-157

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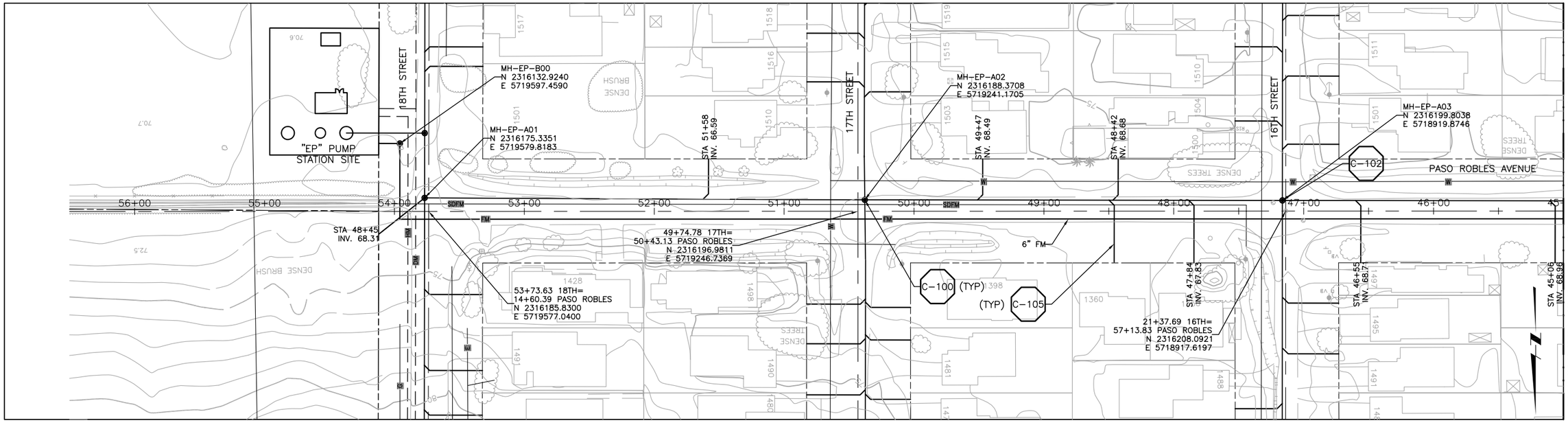
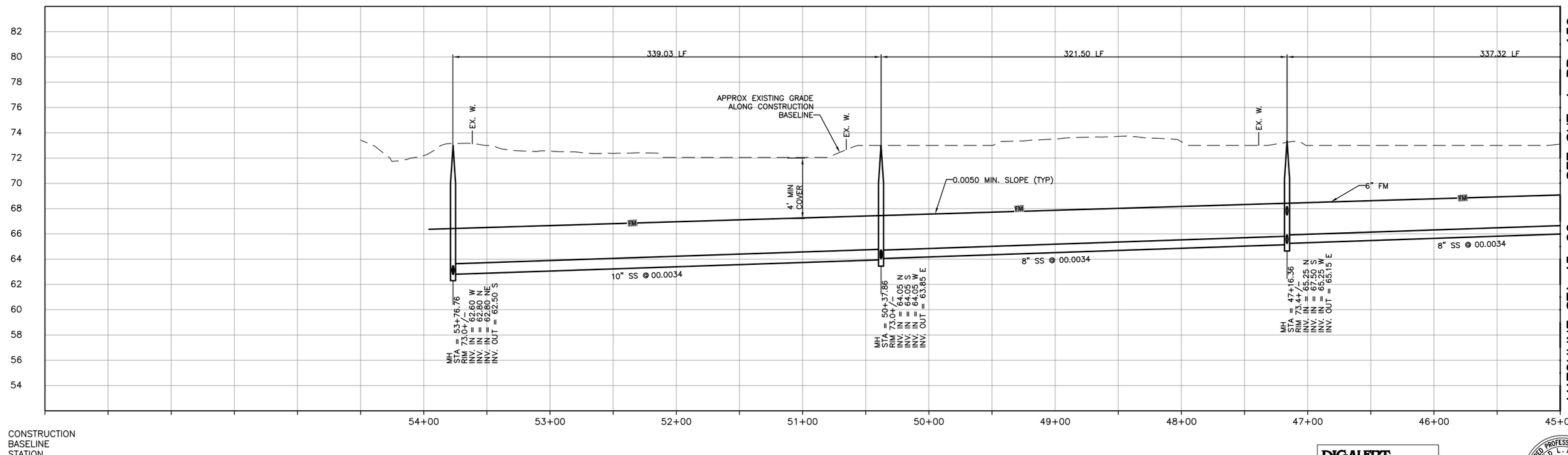


PLAN ON PASO ROBLES AVENUE



PROFILE ON PASO ROBLES AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA
DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
PASO ROBLES STREET
STA 45+00 TO STA 53+76.76

SHEET
A-PP-158

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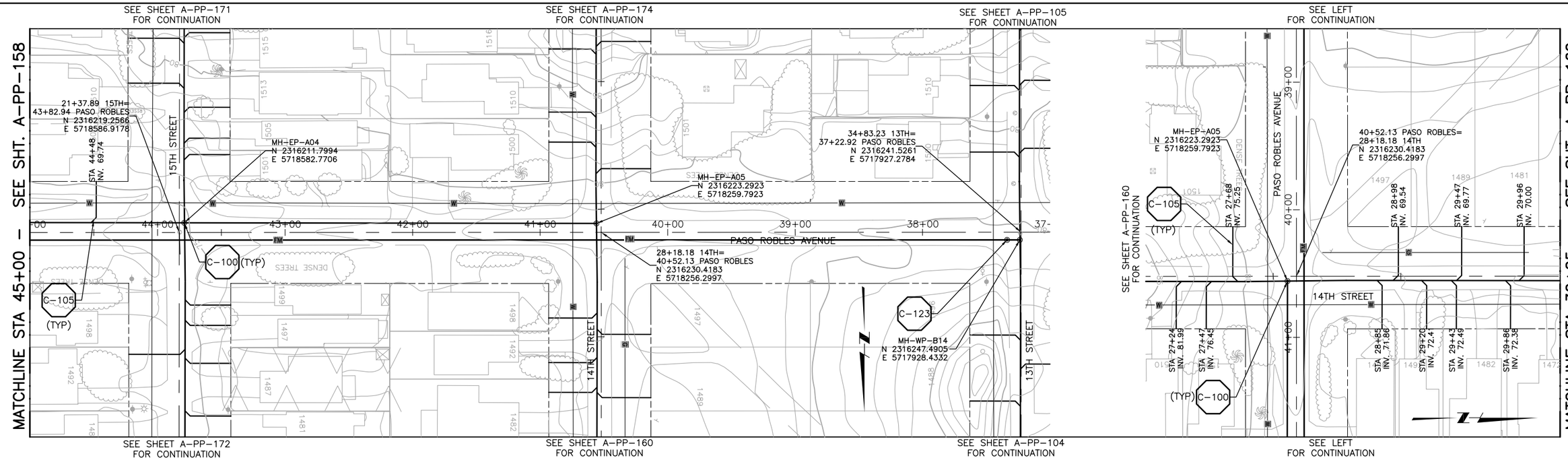
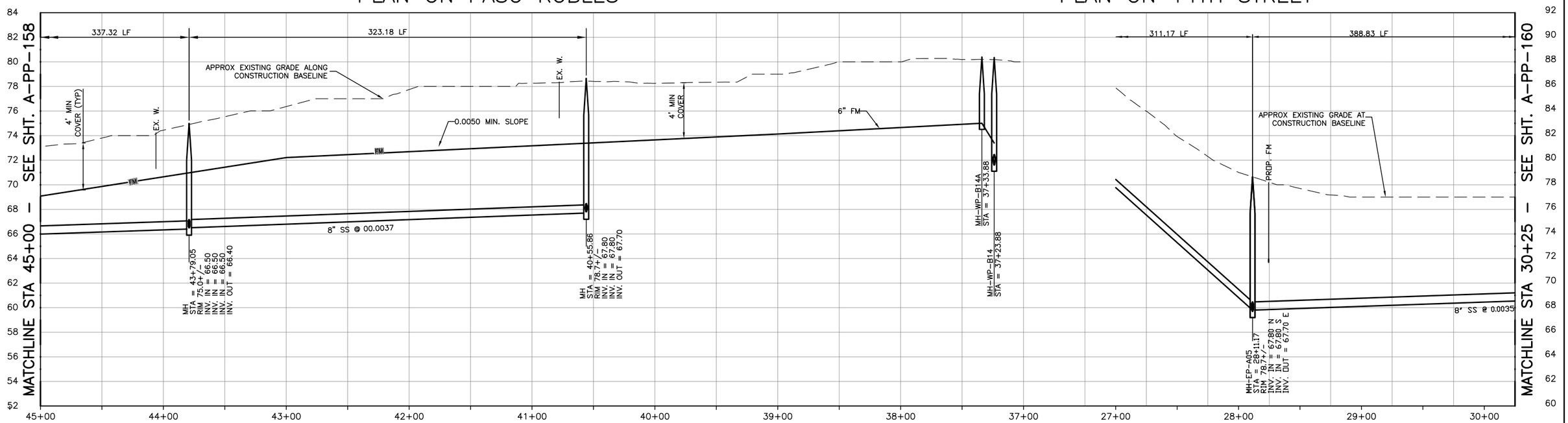


PLAN ON PASO ROBLES

PLAN ON 14TH STREET



PROFILE ON PASO ROBLES

PROFILE ON 14TH STREET

DIGALERT
DIAL TOLL FREE 1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MICHAEL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' 1" = 4'

WARNING: 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
14TH STREET STA 26+75 TO 30+25
PASO ROBLES 45+00 TO 37+23.88

SHEET A-PP-159

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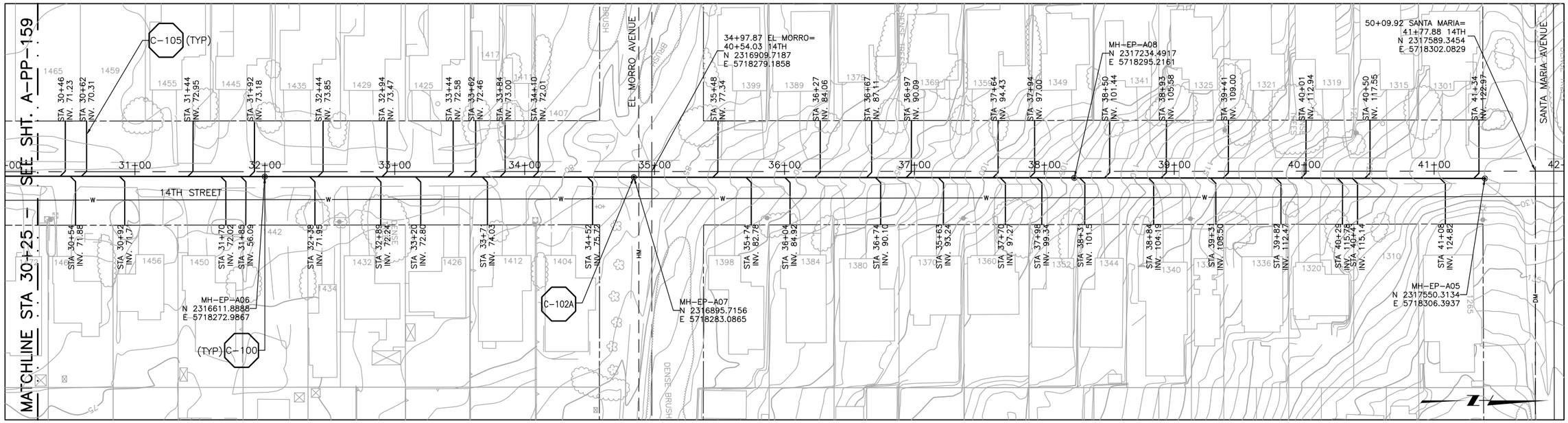
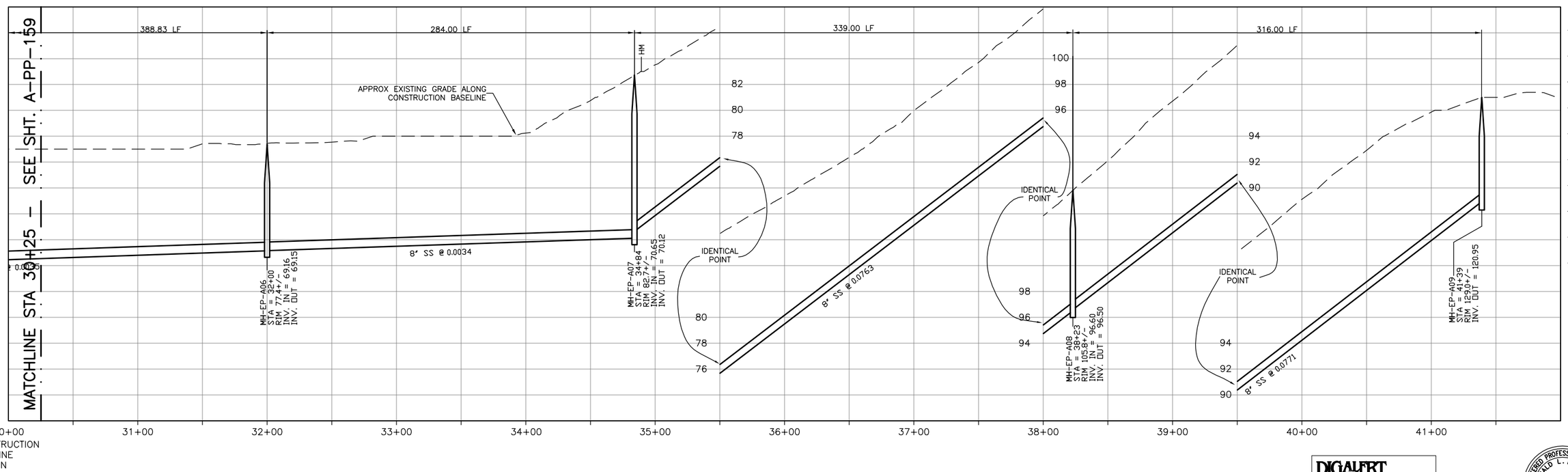


PLAN ON 14TH STREET



PROFILE ON 14TH STREET

DIGALERT
DIAL TOLL FREE 1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MICHEL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE 1" = 40' 1" = 4'

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
14TH STREET
STA 30+25 TO 41+39

SHEET A-PP-160

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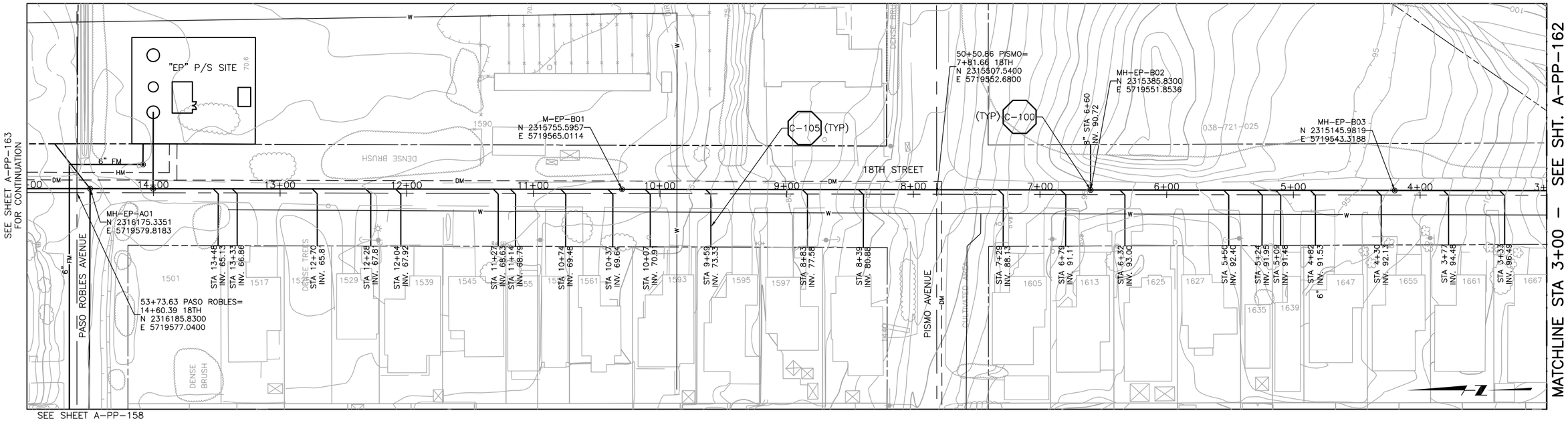
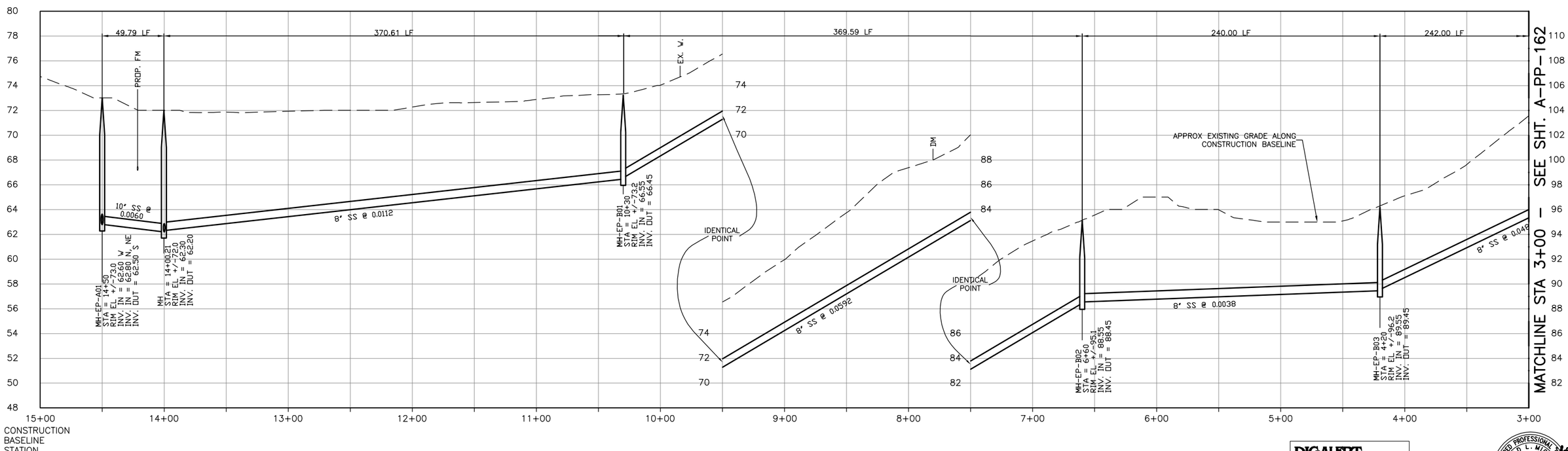


PLAN ON 18TH STREET



PROFILE ON 18TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
18TH STREET
STA 14+50 TO 3+00

SHEET A-PP-161

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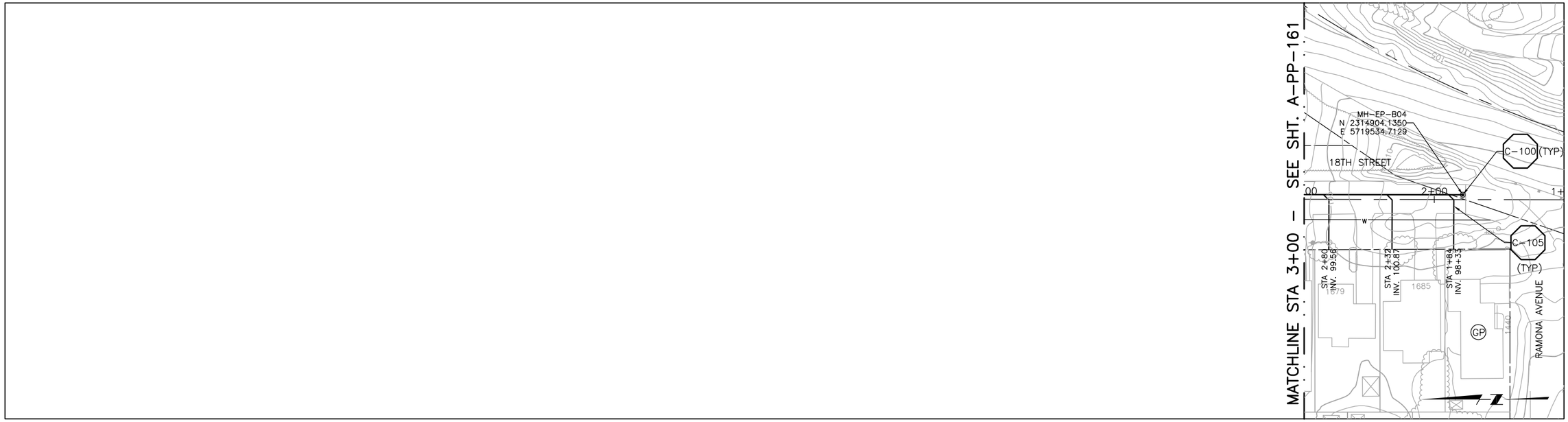

PLAN ON 18TH STREET

PROFILE ON 18TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
18TH STREET
STA 1+78 TO STA 3+00

SHEET
A-PP-162

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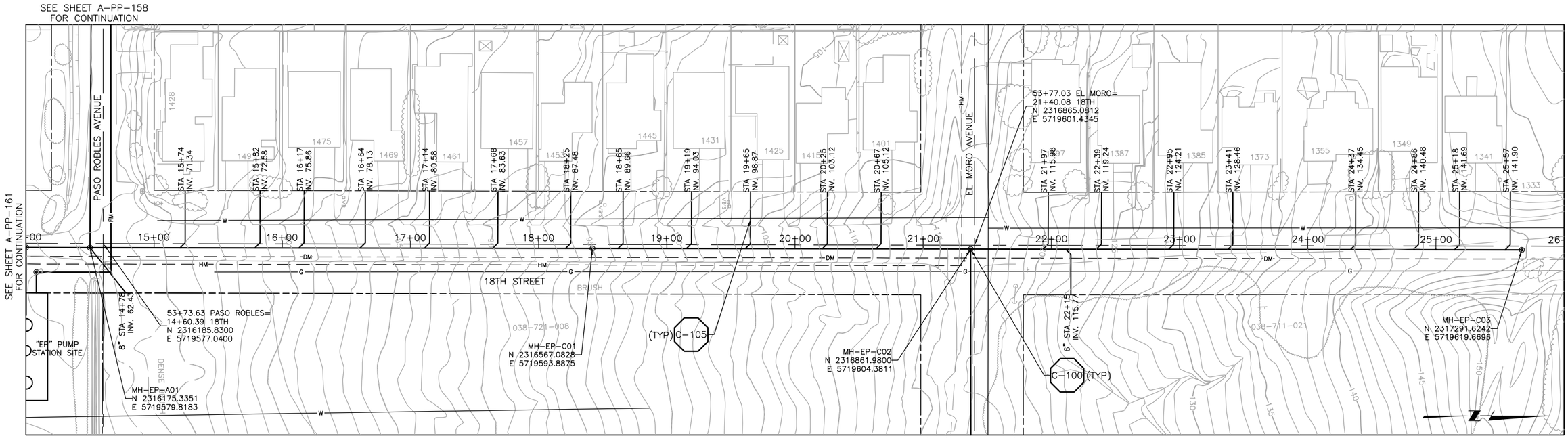
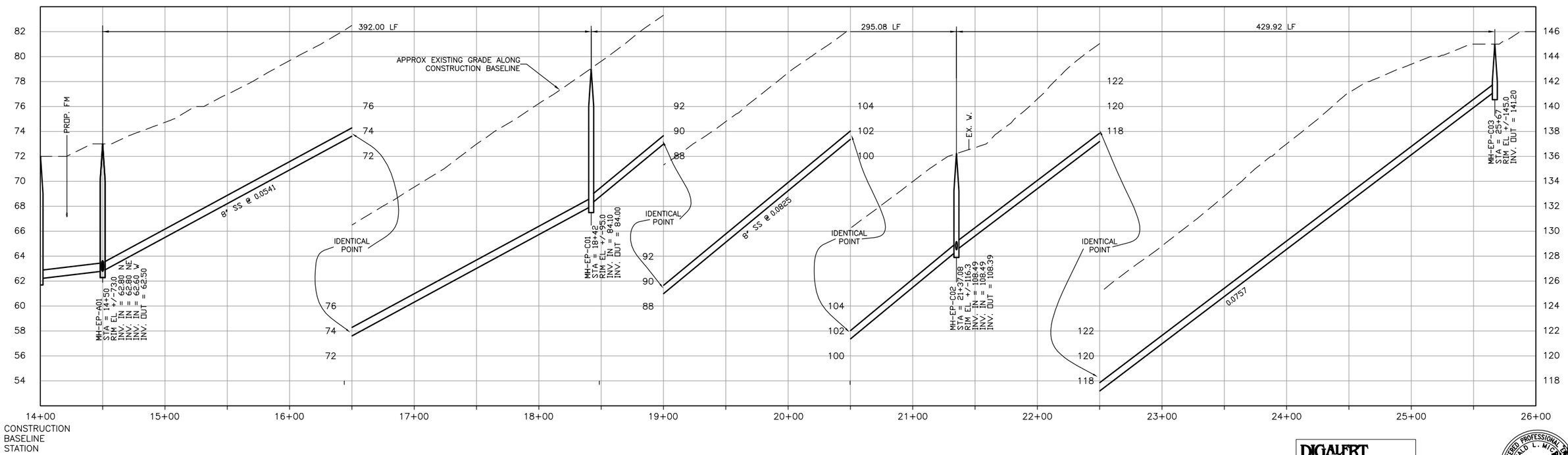


PLAN ON 18TH STREET



PROFILE ON 18TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
18TH STREET
STA 14+50 TO STA 25+67

SHEET
A-PP-163

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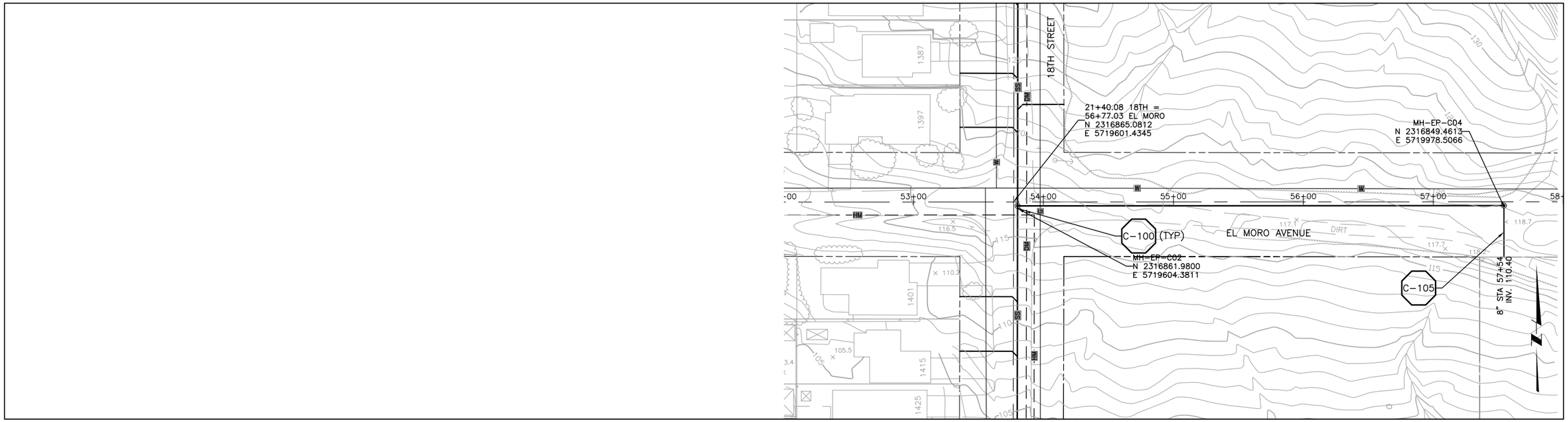
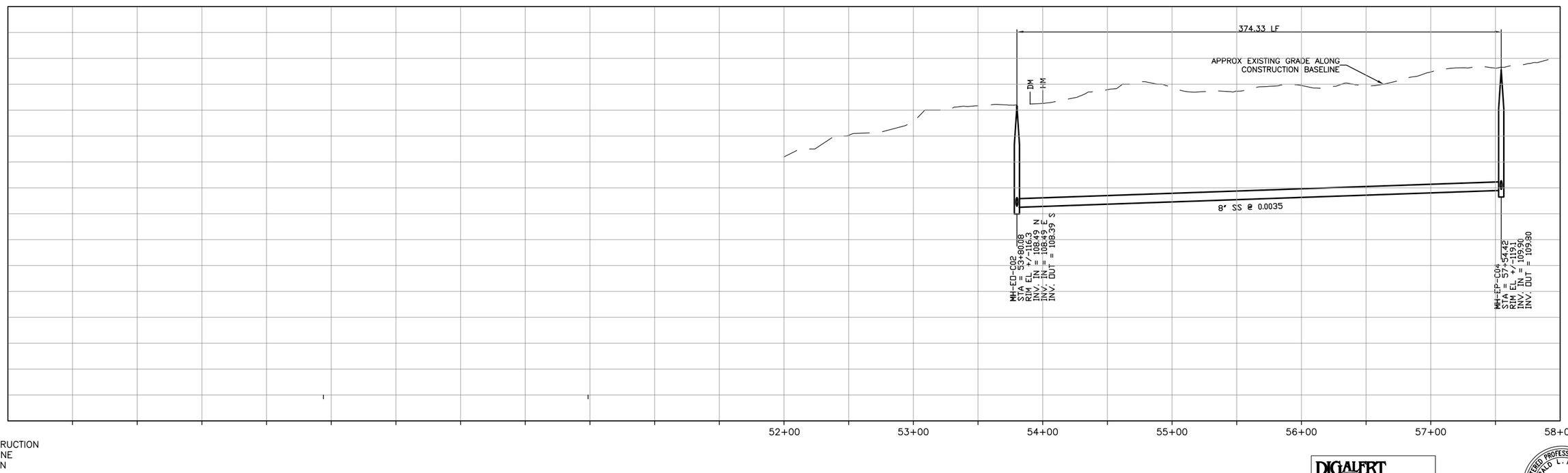
SEE SHEET A-PP-163
FOR CONTINUATION



SEE SHEET A-PP-163
FOR CONTINUATION

PLAN ON EL MORO AVENUE



PROFILE ON EL MORO AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 56895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
EL MORO AVENUE
STA 53+80.08 TO STA 57+54.42

SHEET
A-PP-164

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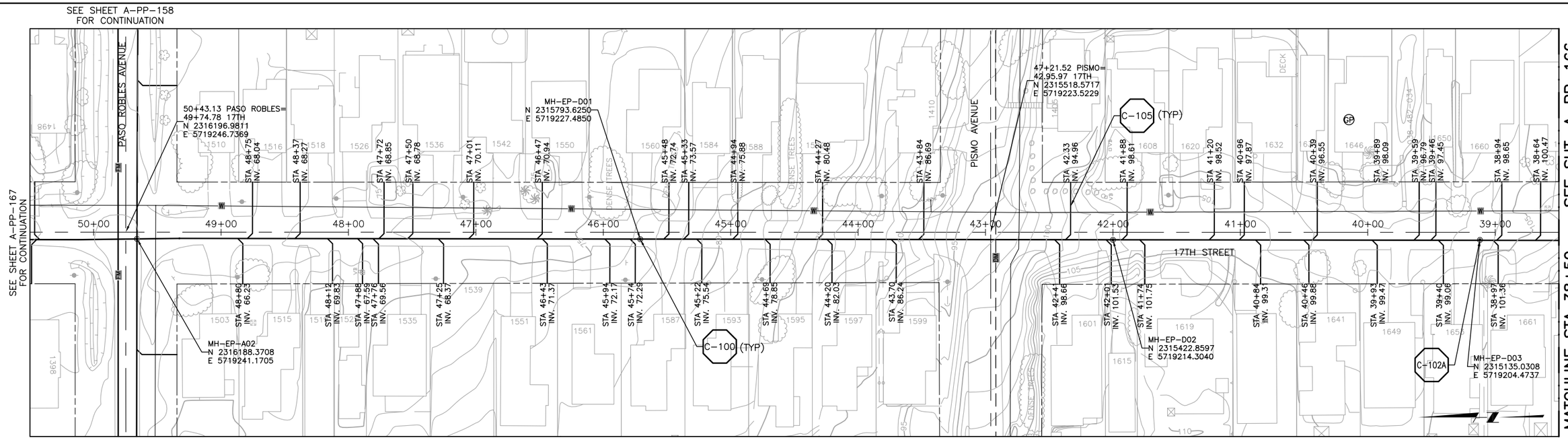
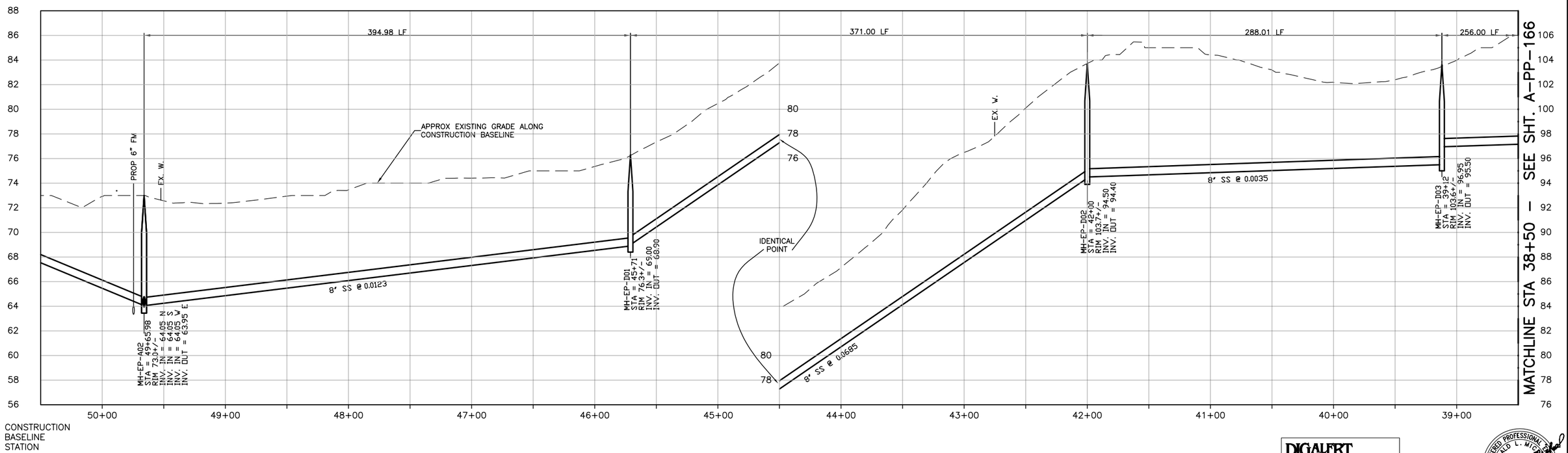


PLAN ON 17TH STREET



PROFILE ON 17TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
17TH STREET
STA 38+50 TO STA 49+65.98

SHEET
A-PP-165

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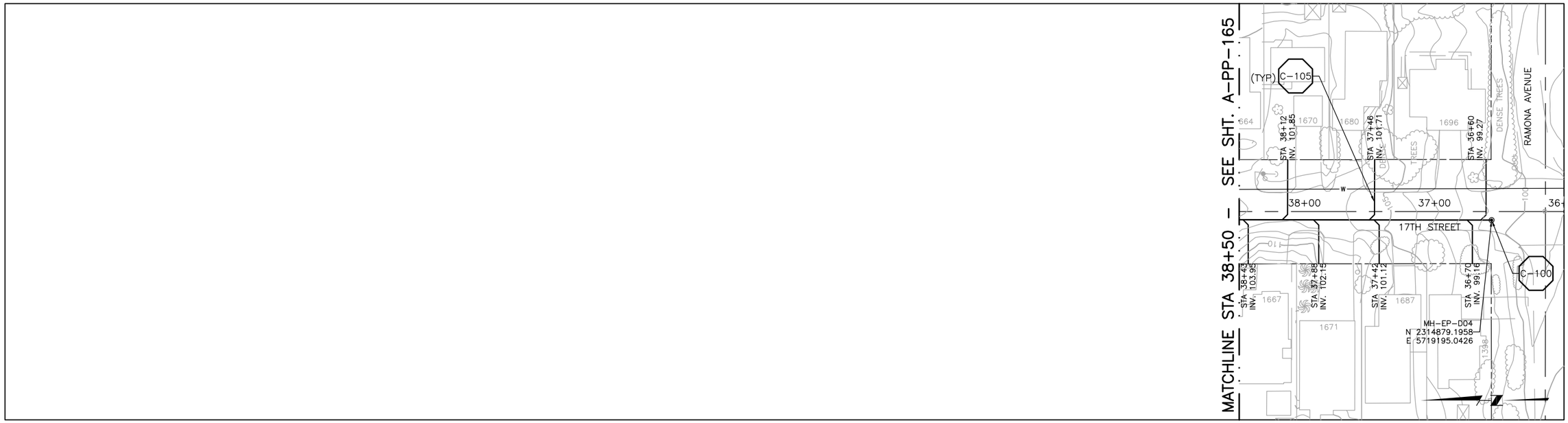
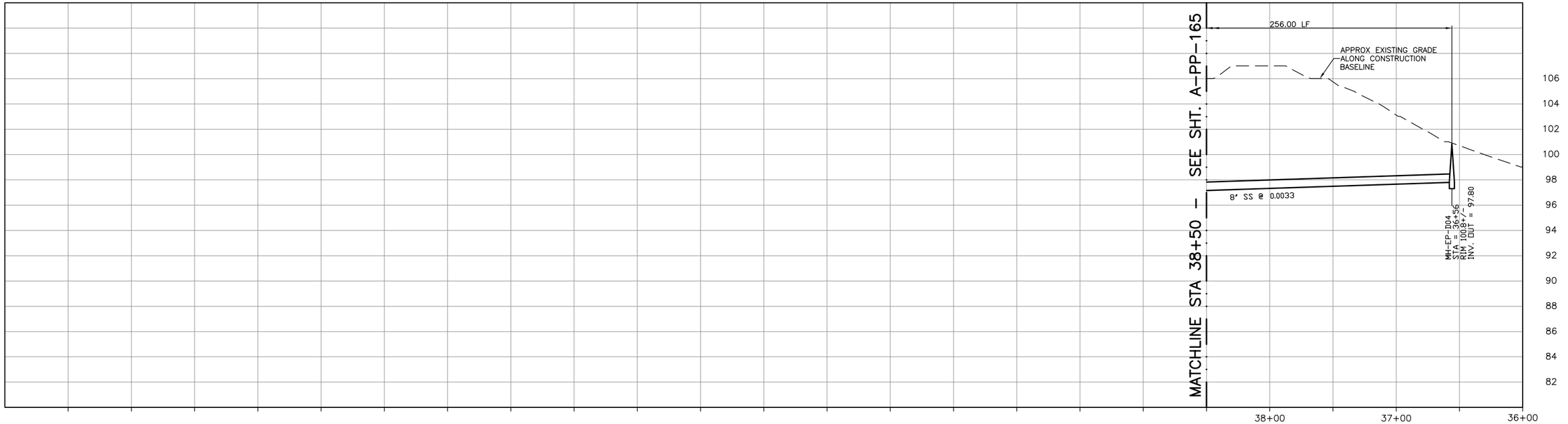


PLAN ON 17TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 17TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

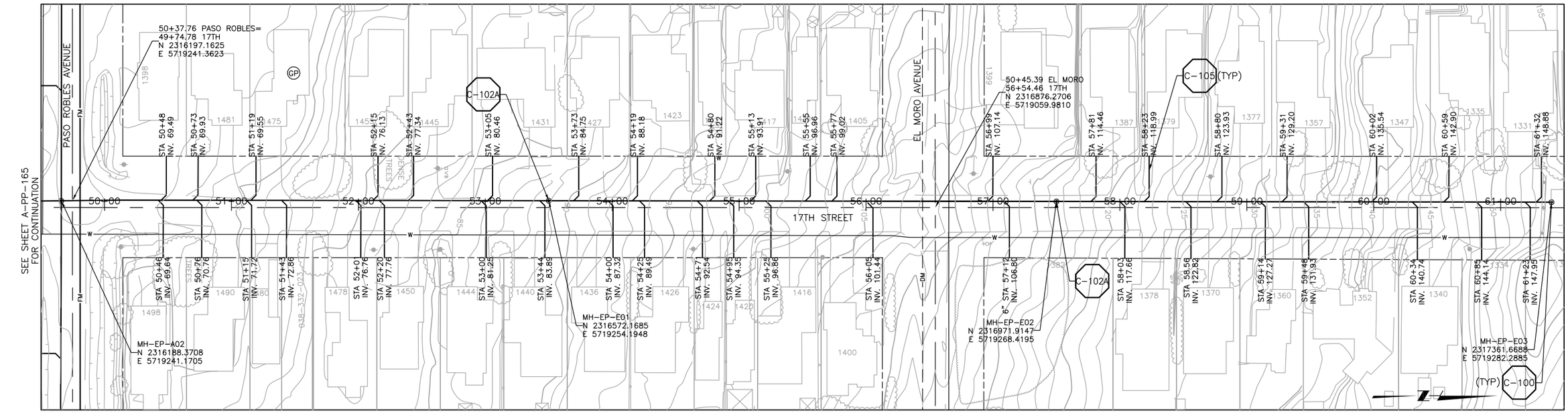
RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
17TH STREET
STA 36+56 TO STA 38+50

SHEET
A-PP-166

L:\los_osos\Collect_Sys\A\civ\A-PP-166.dwg, Condocs, Feb 05, 2004 6:28pm, KRTumler

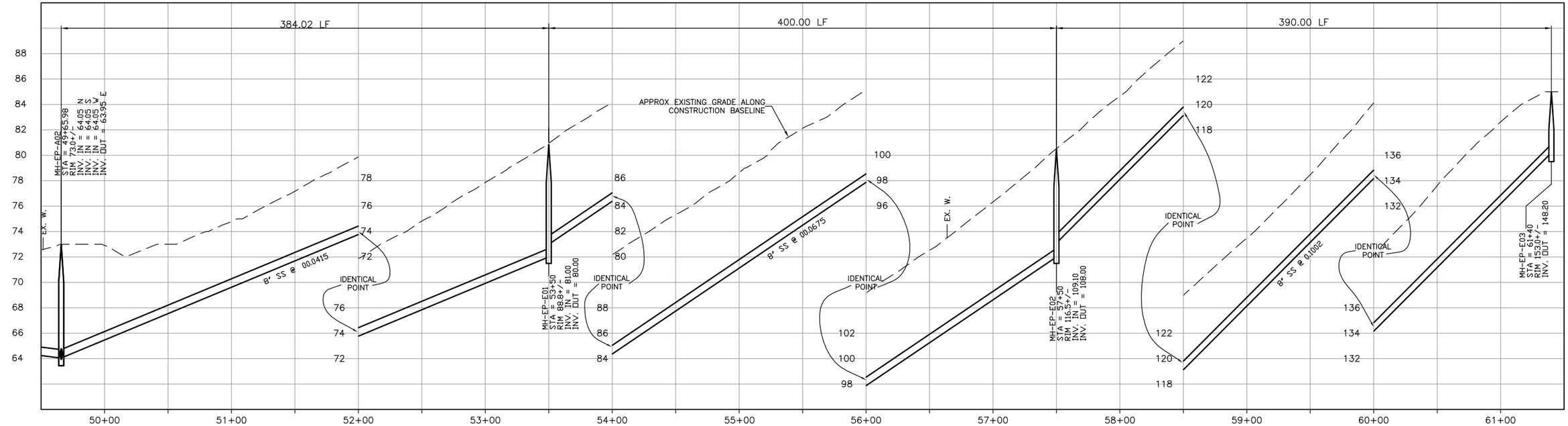
SEE SHEET A-PP-158
FOR CONTINUATION



SEE SHEET A-PP-158
FOR CONTINUATION

SEE SHEET A-PP-165
FOR CONTINUATION

PLAN ON 17TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 17TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
17TH STREET
STA 49+65.98 TO STA 61+40

SHEET
A-PP-167

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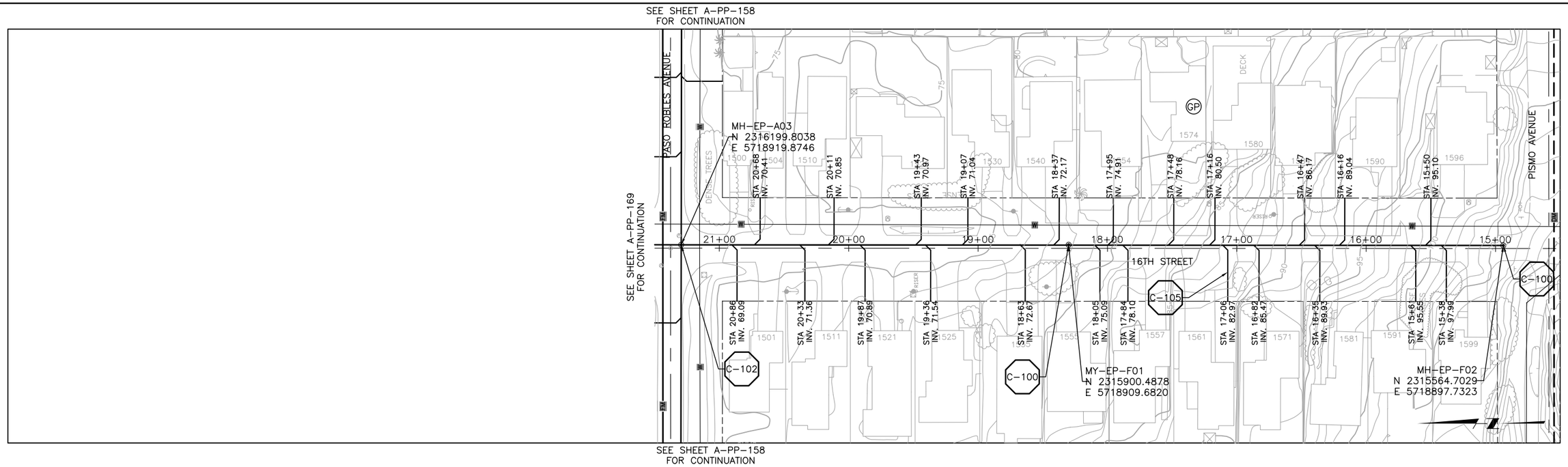
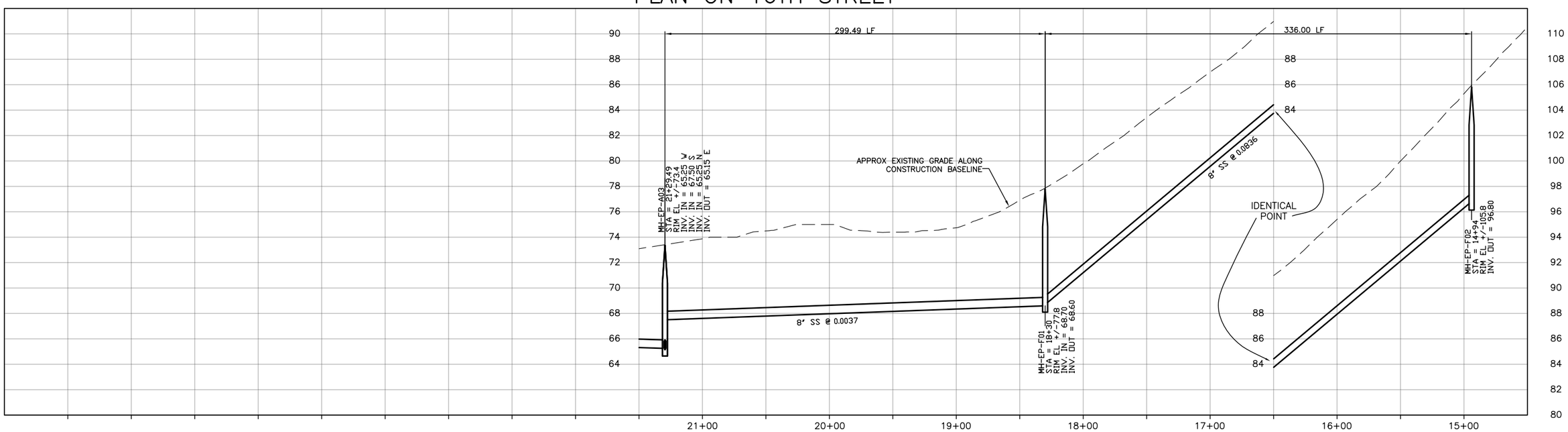


PLAN ON 16TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 16TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
16TH STREET
STA 14+94 TO 21+29.49

SHEET
A-PP-168

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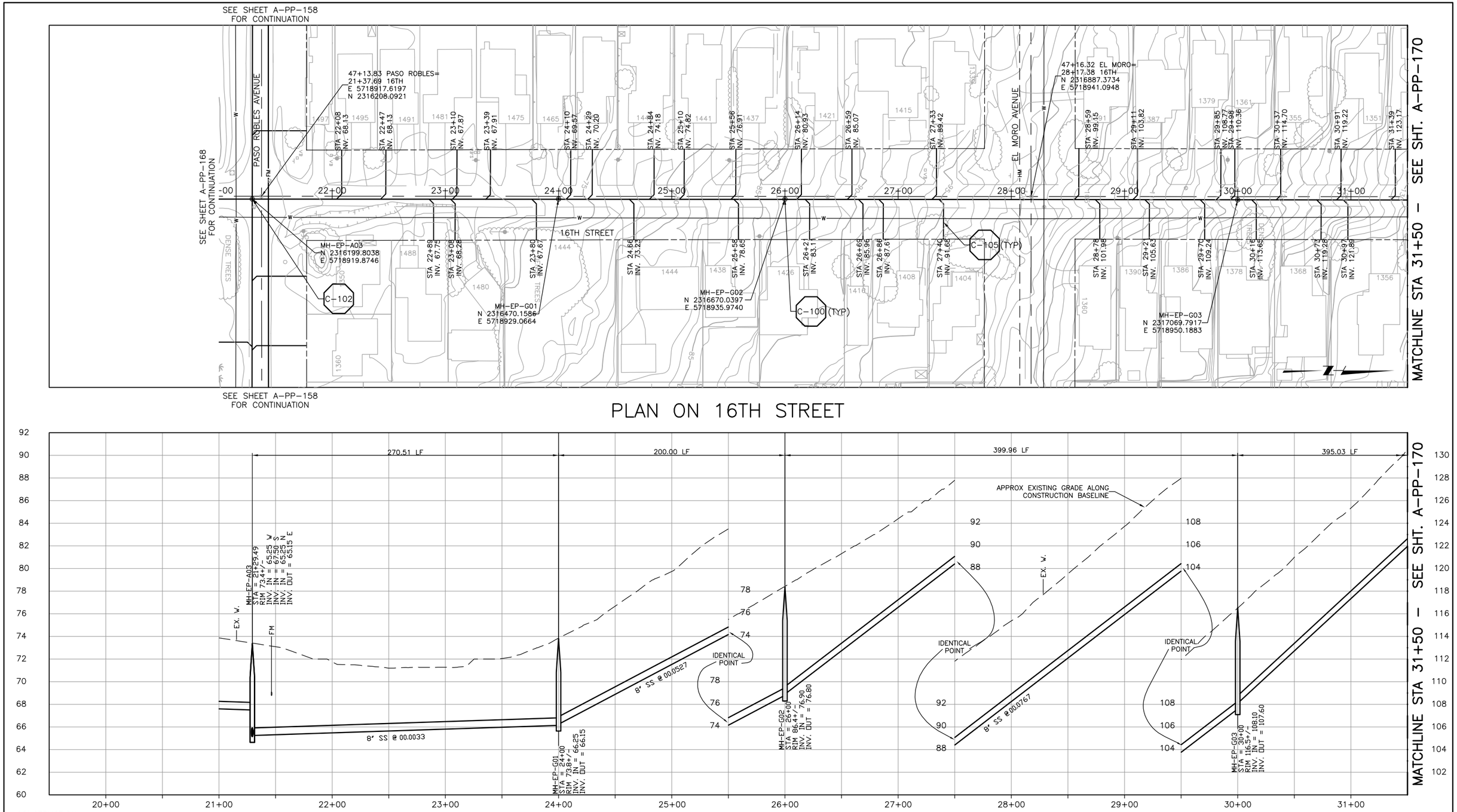

PLAN ON 16TH STREET

PROFILE ON 16TH STREET

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
16TH STREET
STA 21+29.49 TO STA 31+50

SHEET A-PP-169

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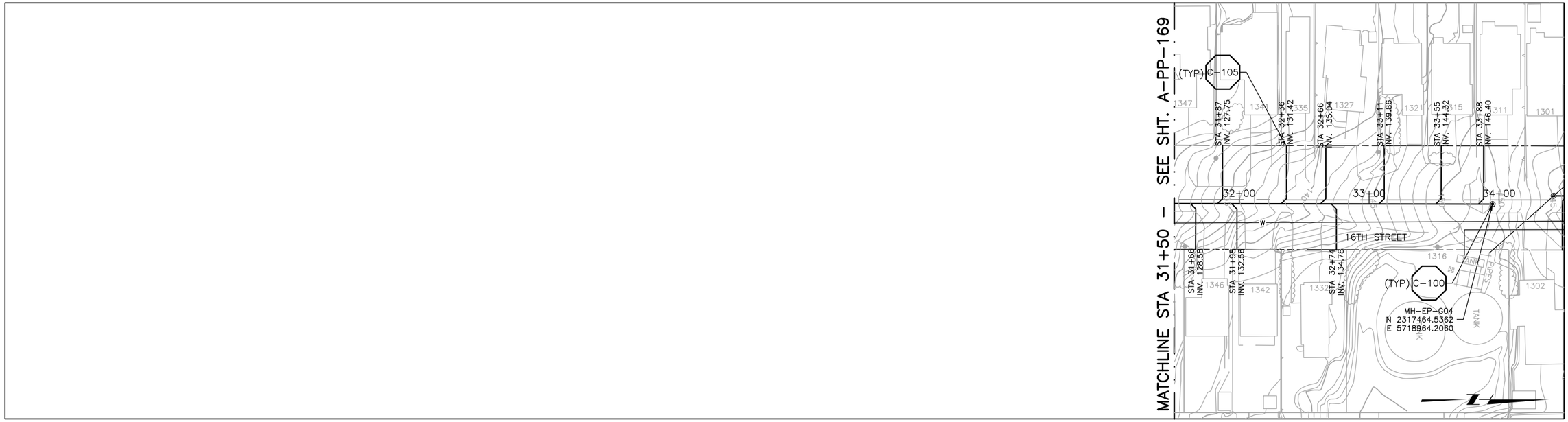
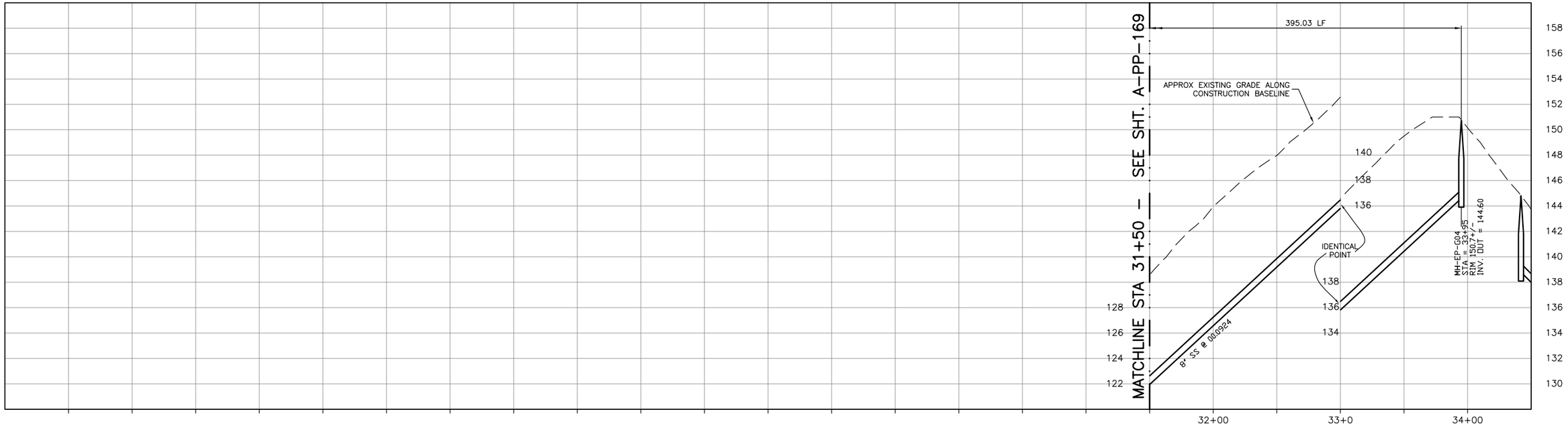


PLAN ON 16TH STREET



CONSTRUCTION BASELINE STATION

PROFILE ON 16TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
16TH STREET
STA 31+50 TO 33+95

SHEET
A-PP-170

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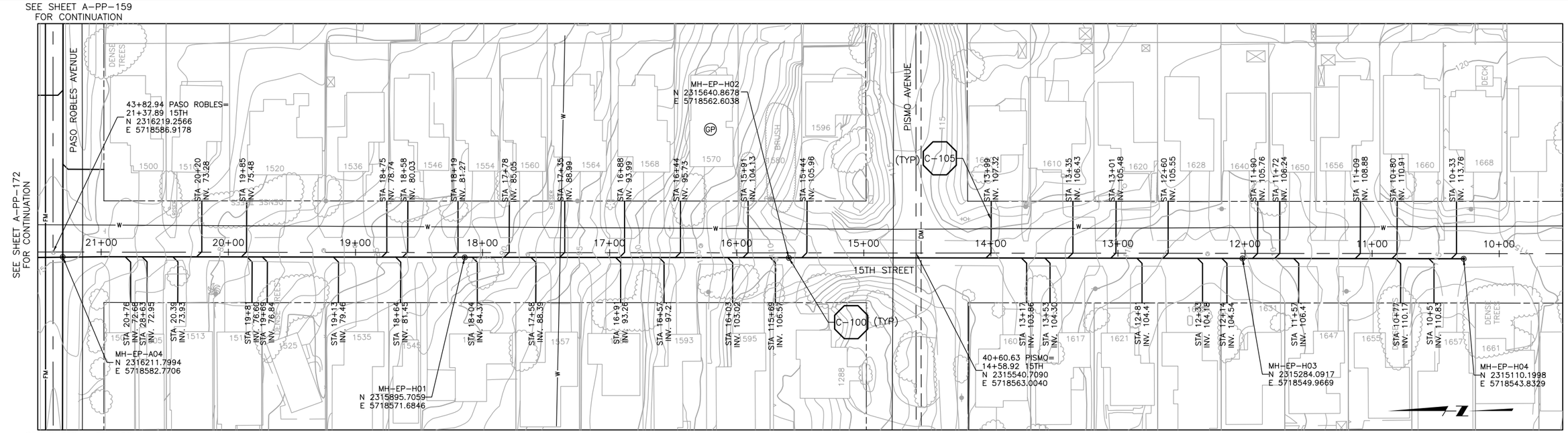
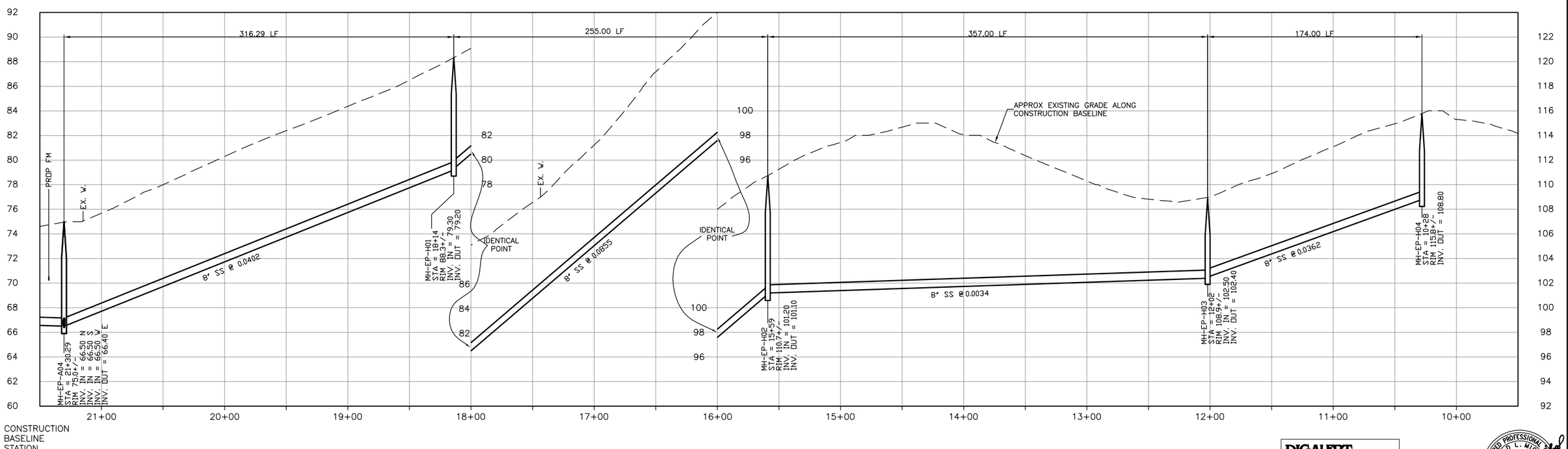


PLAN ON 15TH STREET



PROFILE ON 15TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
15TH STREET
STA 10+28 TO STA 21+30.29

SHEET A-PP-171

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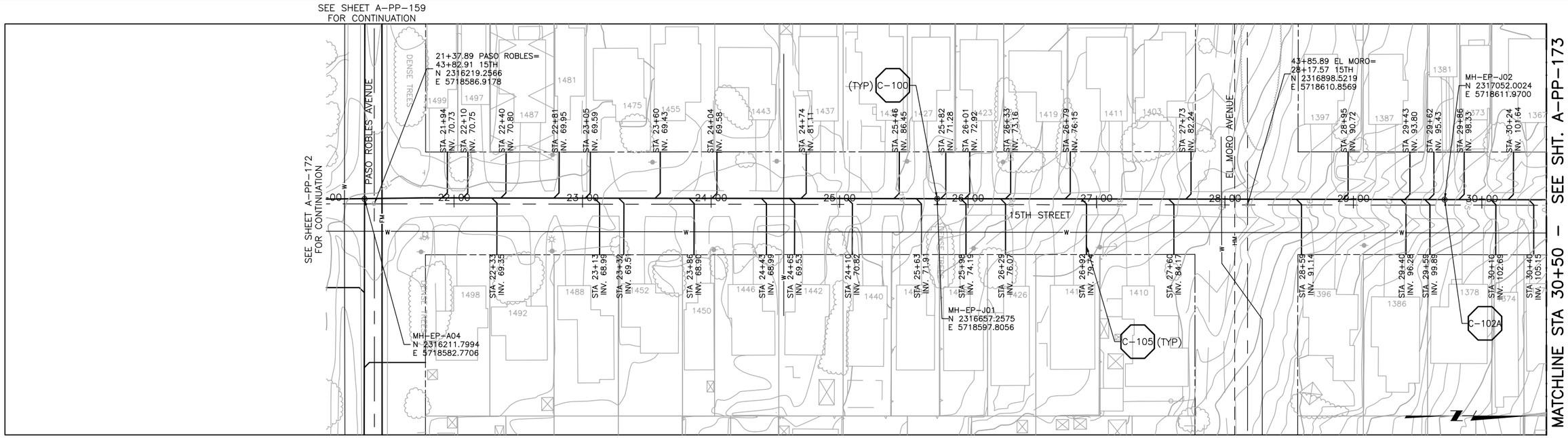
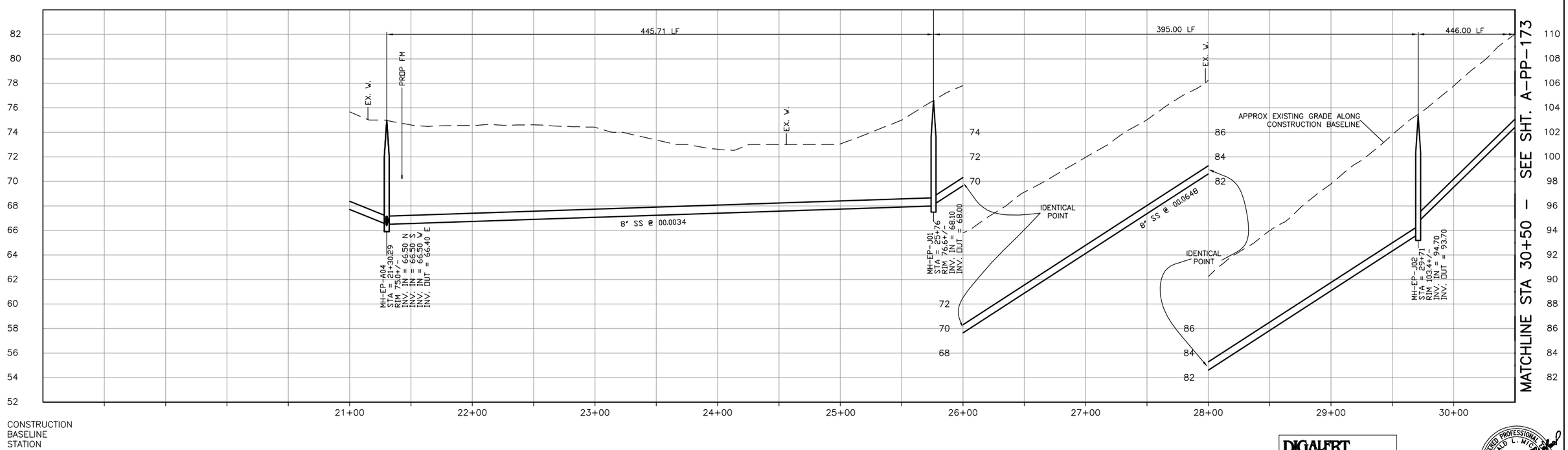


PLAN ON 15TH STREET



PROFILE ON 15TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA
DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
15TH STREET
STA 21+30.29 TO STA 30+50

SHEET
A-PP-172

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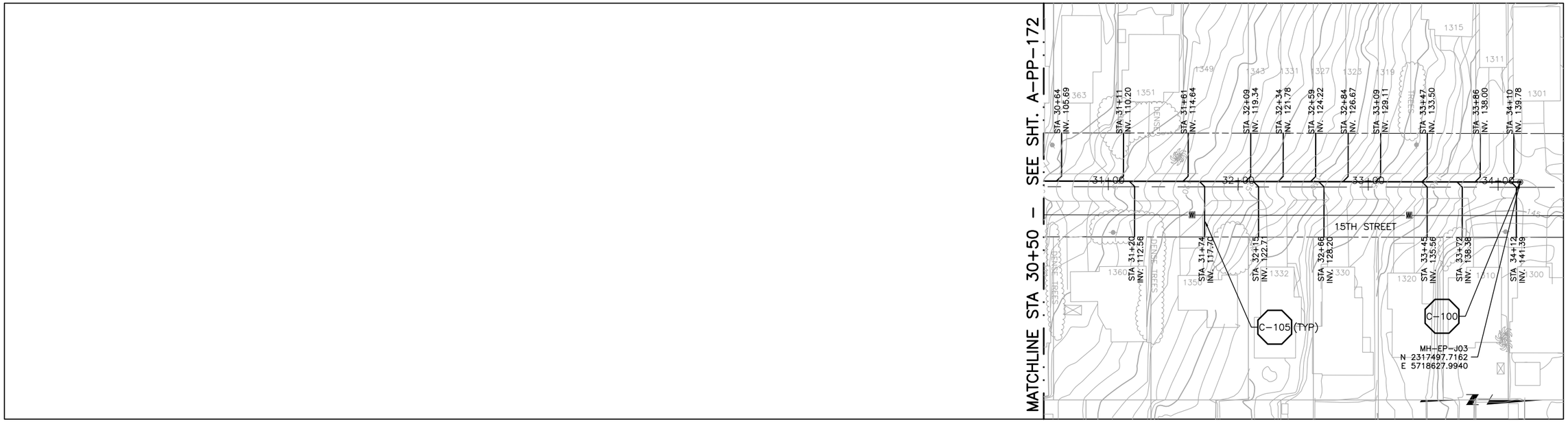
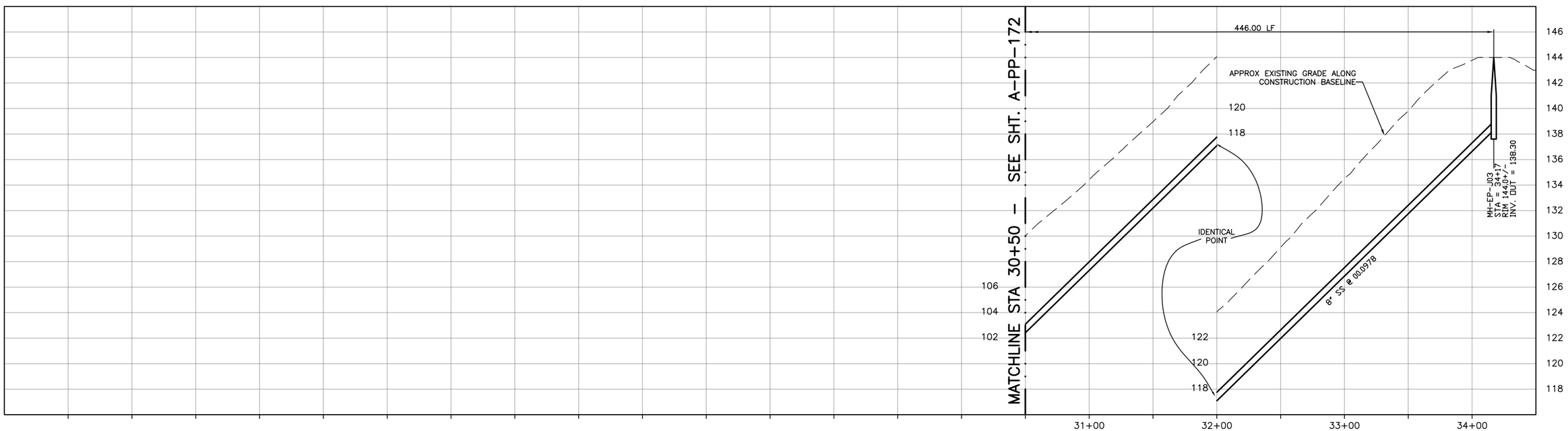


PLAN ON 15TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 15TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 56895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
15TH STREET
STA 30+50 TO STA 34+17

SHEET
A-PP-173

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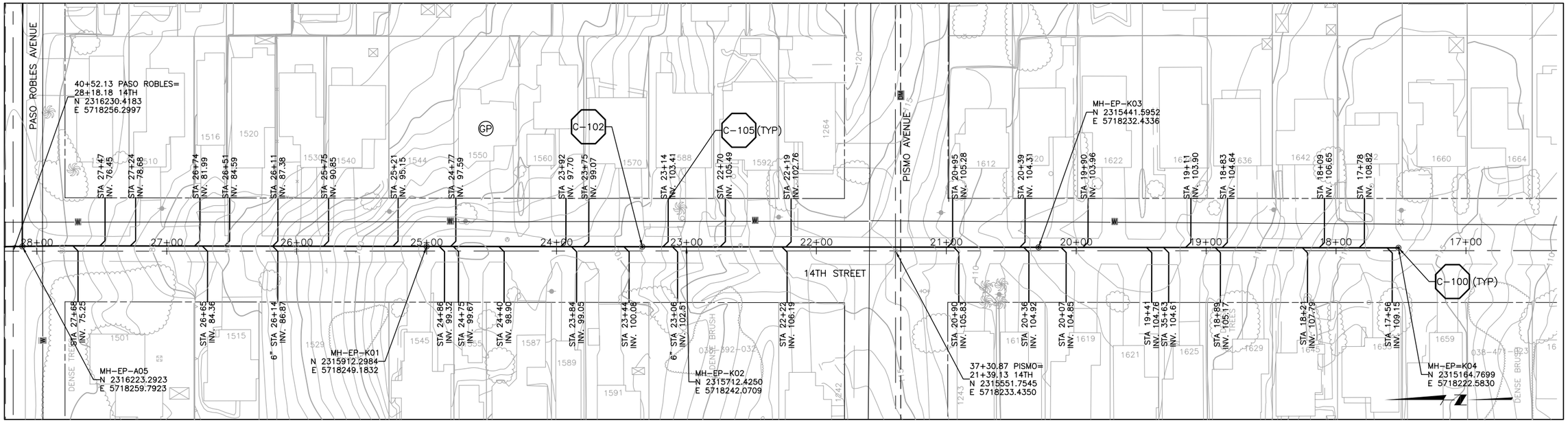
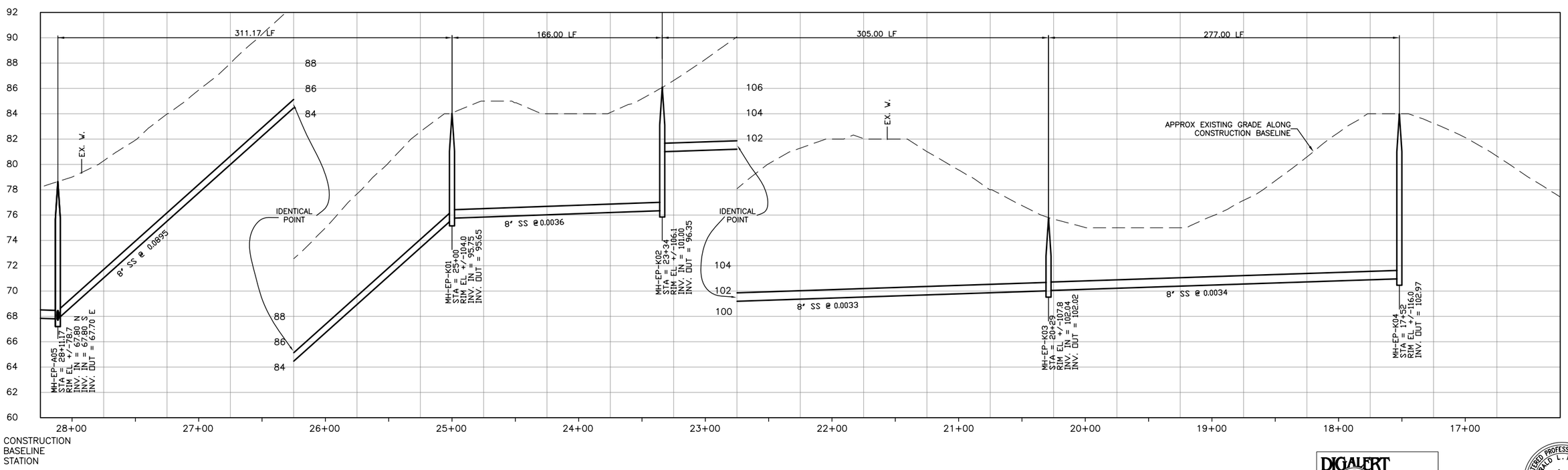
SEE SHEET A-PP-159
FOR CONTINUATION



PLAN ON 14TH STREET



PROFILE ON 14TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MICHEL C 36895 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
14TH STREET
STA 17+52 TO STA 28+11.17

SHEET A-PP-174

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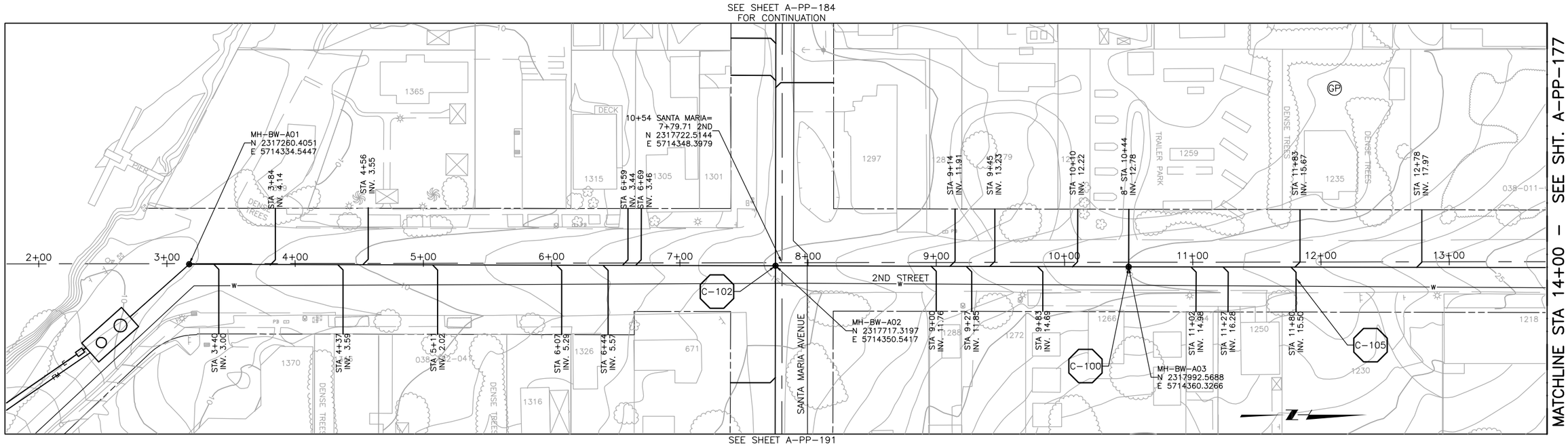
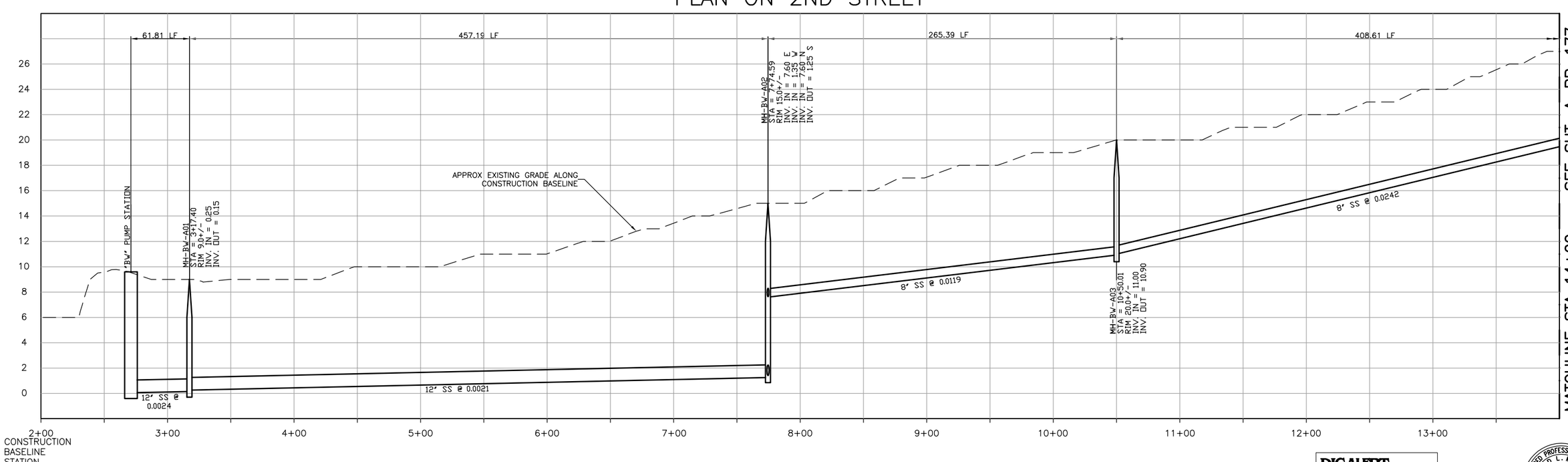


PLAN ON 2ND STREET



PROFILE ON 2ND STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
2ND STREET
STA 2+63.71 TO STA 14+00

SHEET
A-PP-175

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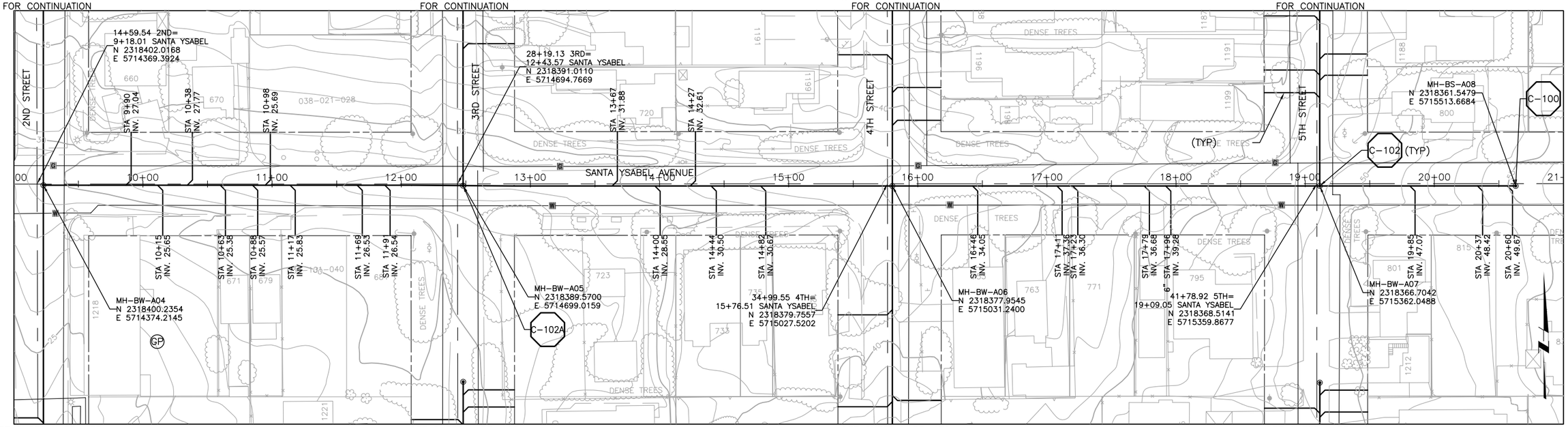
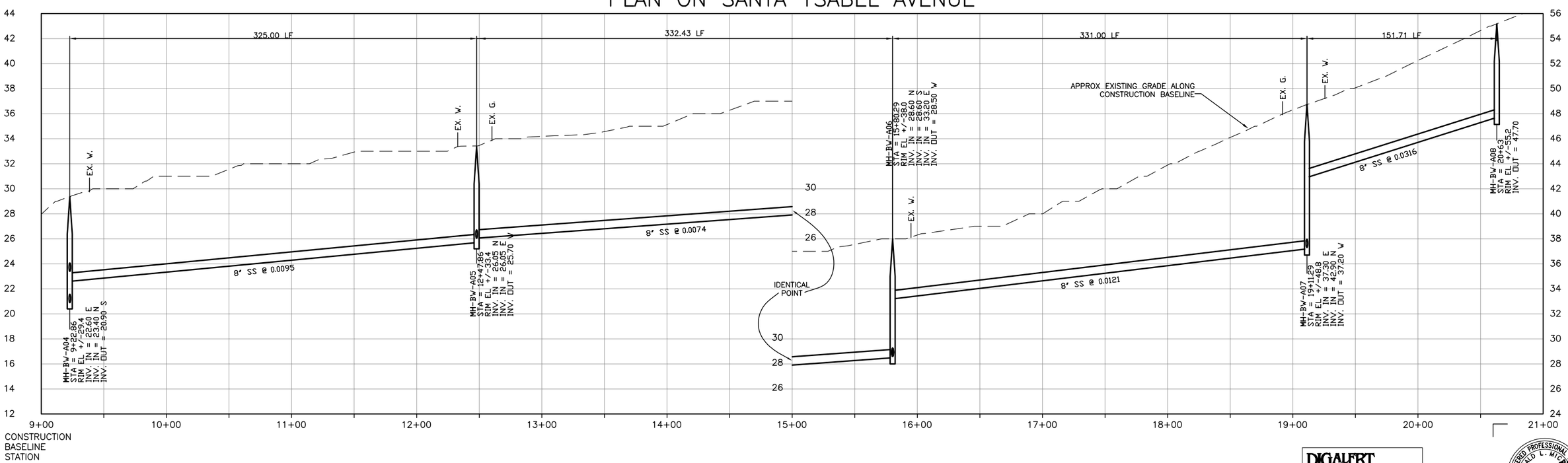


PLAN ON SANTA YSABEL AVENUE



PROFILE ON SANTA YSABEL AVENUE

DIGALERT
DIAL TOLL FREE 1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL C 66895 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA YSABEL
STA 9+22.86 TO STA 20+63

SHEET A-PP-176

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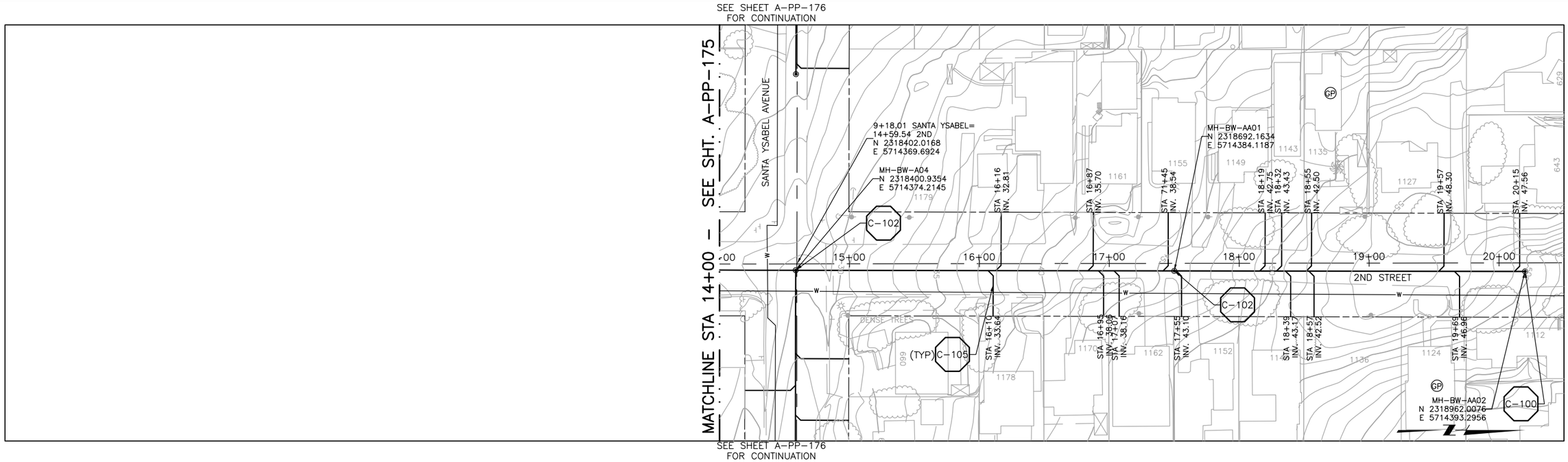
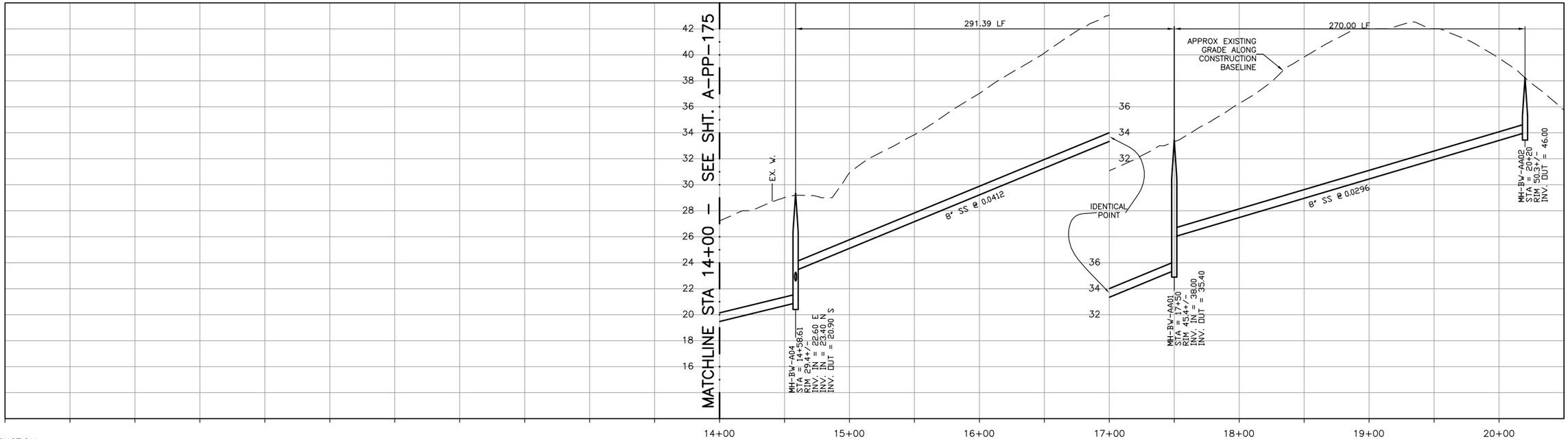


PLAN ON 2ND STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 2ND STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
2ND STREET
STA 14+00 TO STA 20+20

SHEET
A-PP-177

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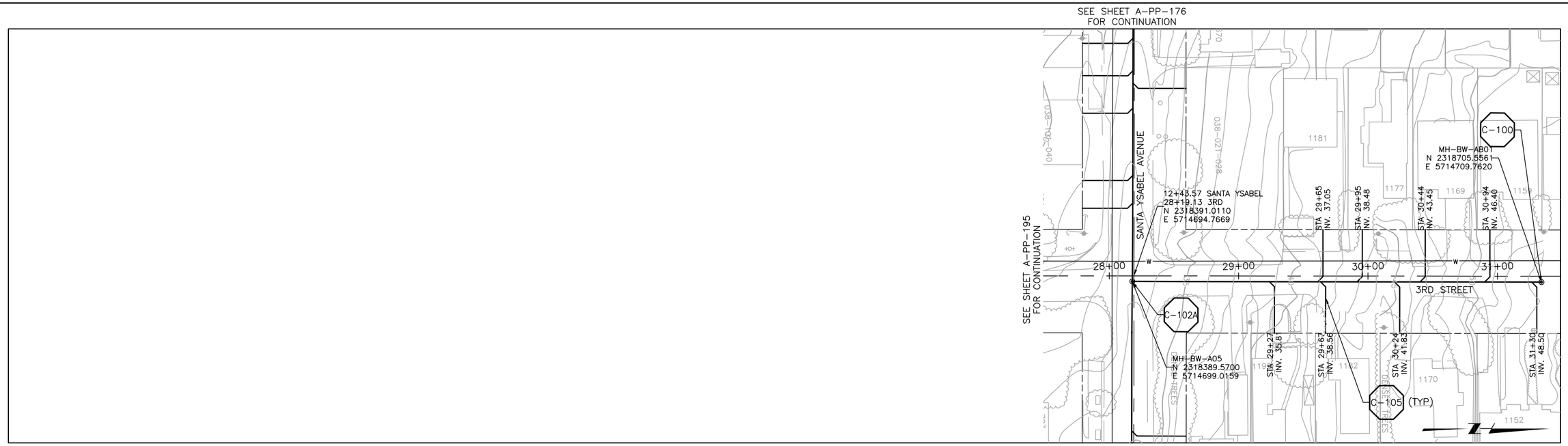
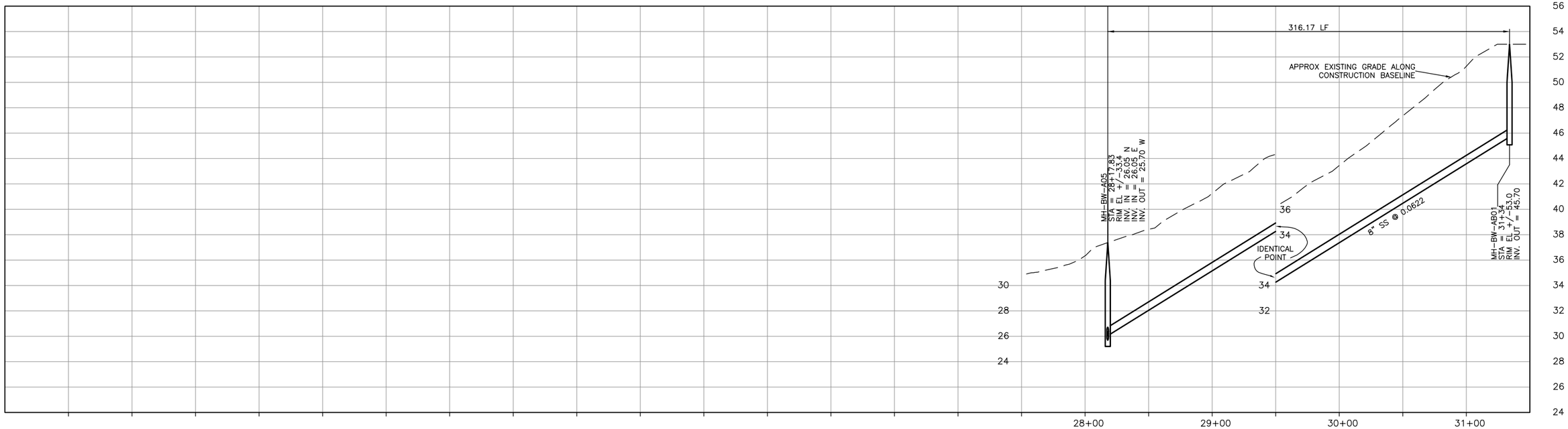


PLAN ON 3RD STREET



PROFILE ON 3RD STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

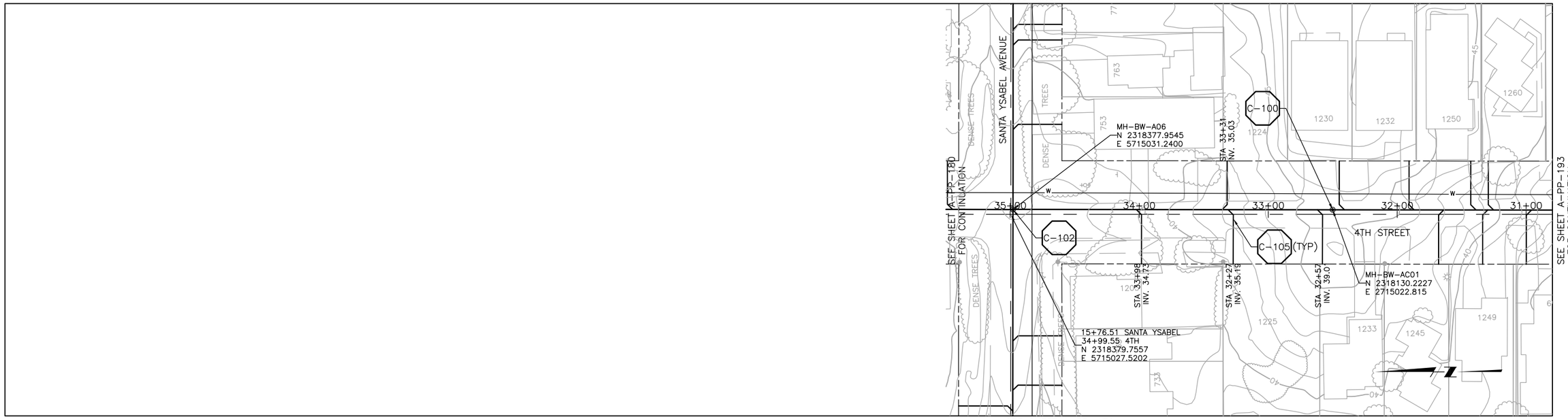
MWH
Walnut Creek, California

RRM DESIGN GROUP

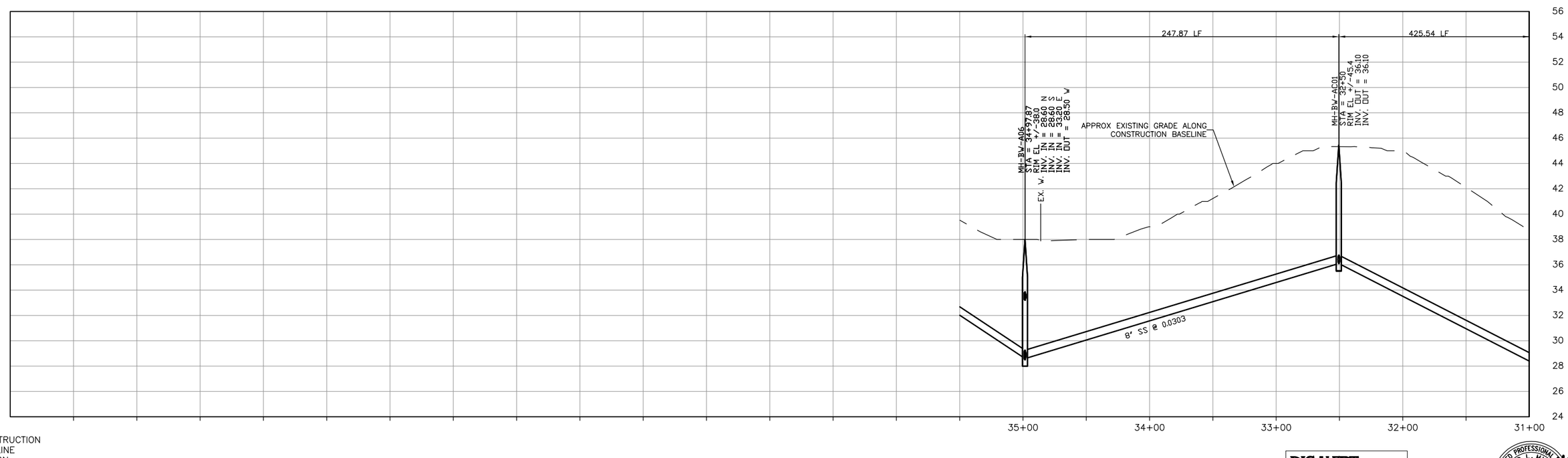
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
3RD STREET
STA 28+17.83 TO STA 31+34

SHEET
A-PP-178

L:\Los_osos\Collect_Sys\A\civ\A-PP-178.dwg, Condocs, Feb 05, 2004 6:41pm, KRTurnier



PLAN ON 4TH STREET



PROFILE ON 4TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
4TH STREET
STA 31+00 TO STA 34+97.87

SHEET
A-PP-179

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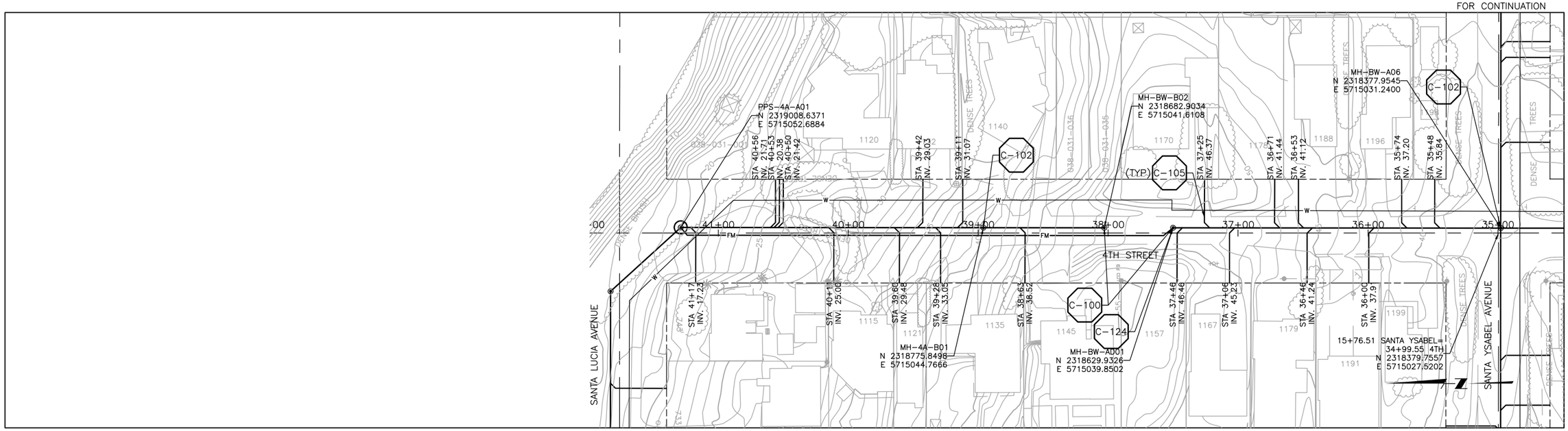
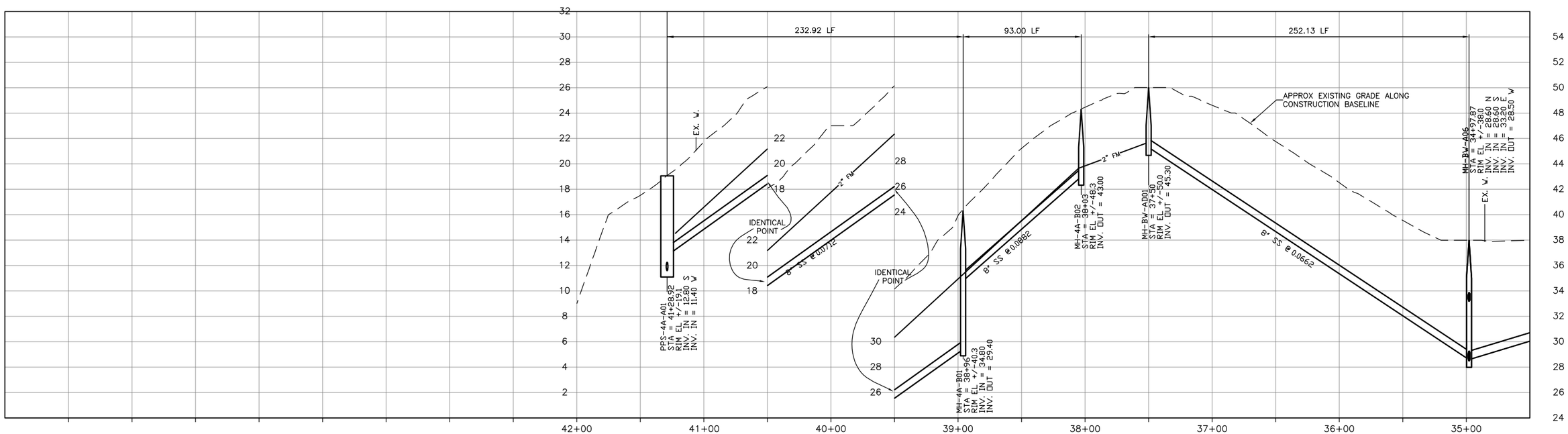


PLAN ON 4TH STREET



PROFILE ON 4TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

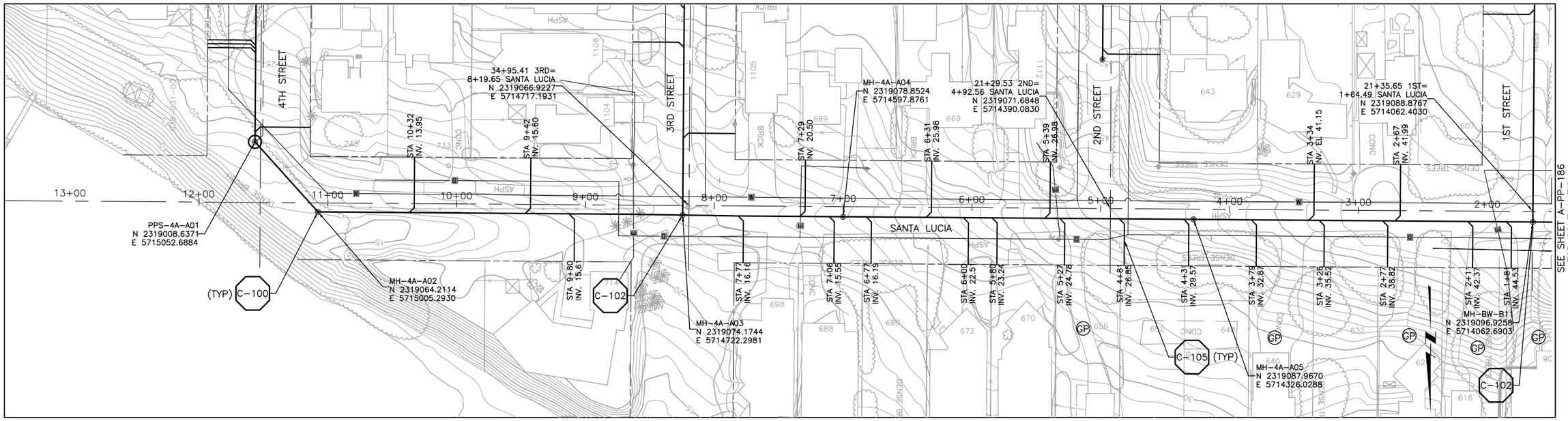
MWH Walnut Creek, California

RRM DESIGN GROUP

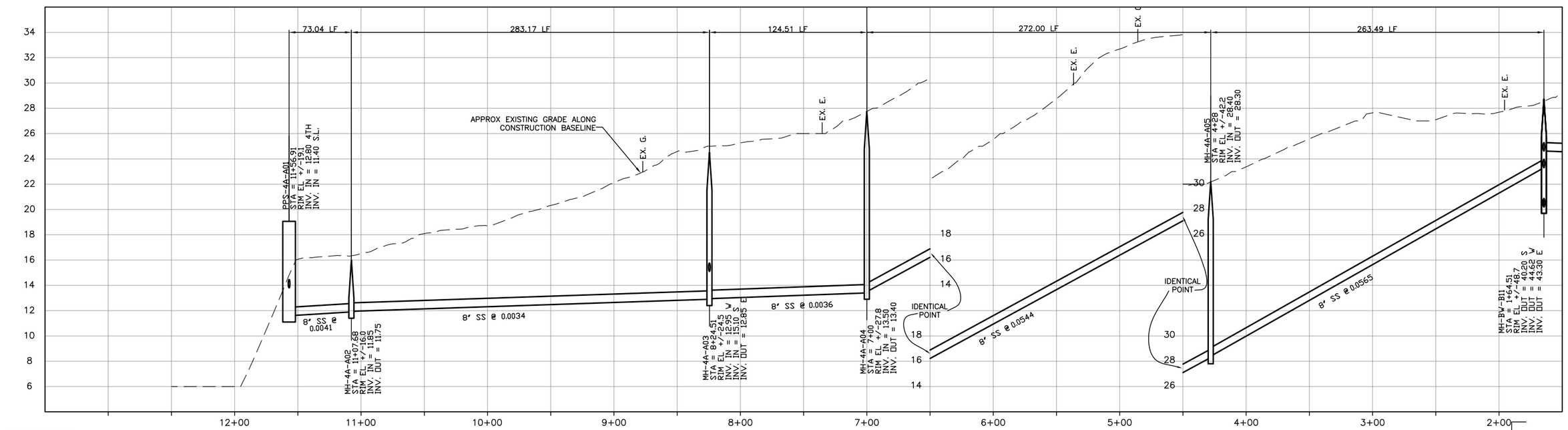
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
4TH STREET
STA 34+97.87 TO STA 41+28.92

SHEET A-PP-180

L:\Los_osos\Collect_Sys\A\civ\A-PP-180.dwg, Candocs, Feb 05, 2004 6:43pm, KRTurnier



PLAN ON SANTA LUCIA AVENUE



PROFILE ON SANTA LUCIA AVENUE

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MICHEL C 6895 CIVIL STATE OF CALIFORNIA 6/30/04

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: HORI: 1" = 40' VERT: 1"=4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

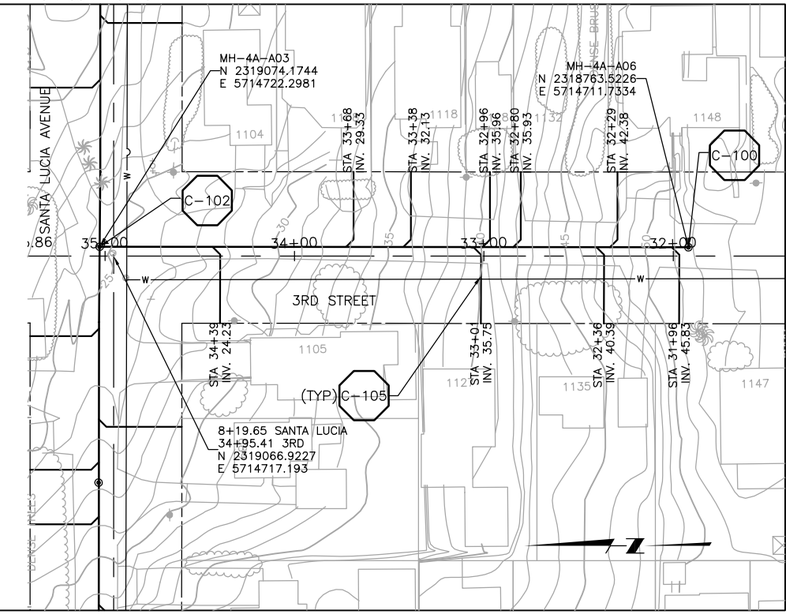
RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA LUCIA AVENUE
STA 1+64.51 TO STA 11+56.91

SHEET A-PP-181

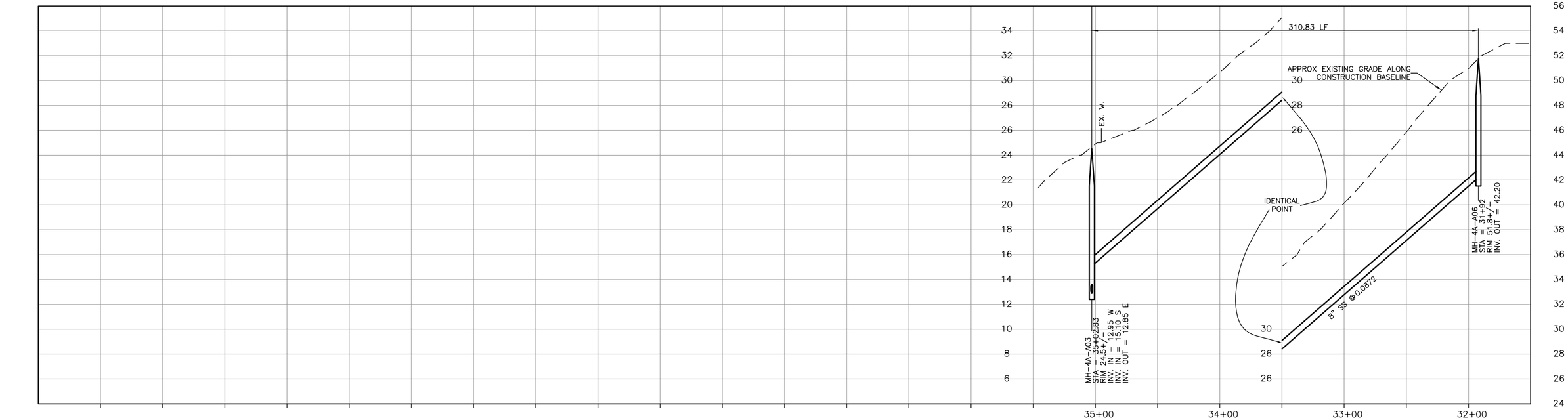
L:\los_osos\Collect_Sys\A\civ\A-PP-181.dwg, Cordocs, Feb 05, 2004 6:37pm, DKHickman

SEE SHEET A-PP-181
FOR CONTINUATION



SEE SHEET A-PP-181
FOR CONTINUATION

PLAN ON 3RD STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 3RD STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

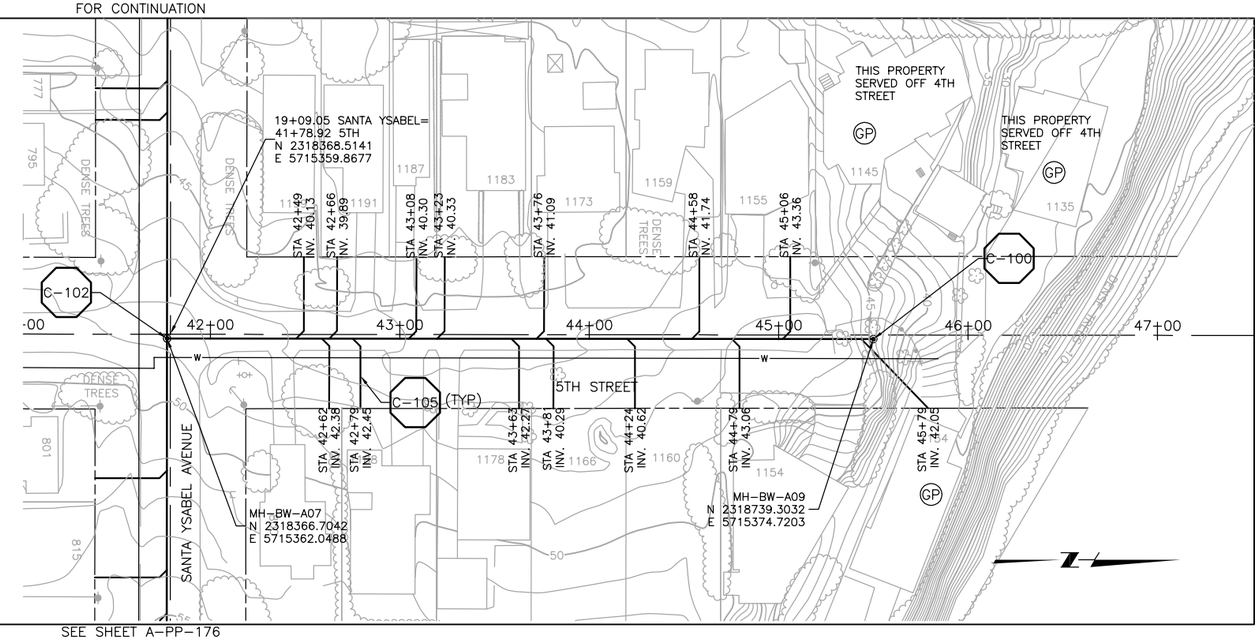
RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
3RD STREET
STA 31+92 TO STA 35+02.83

SHEET
A-PP-182

L:\Los_osos\Collect_Sys\A\civ\A-PP-182.dwg, Cardocs, Feb 05, 2004 6:45pm, KRTumler

SEE SHEET A-PP-176
FOR CONTINUATION



SEE SHEET A-PP-176
FOR CONTINUATION

PLAN ON 5TH STREET

CONSTRUCTION
BASELINE
STATION

PROFILE ON 5TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
5TH STREET
STA 41+77.19 TO STA 45+50

SHEET
A-PP-183

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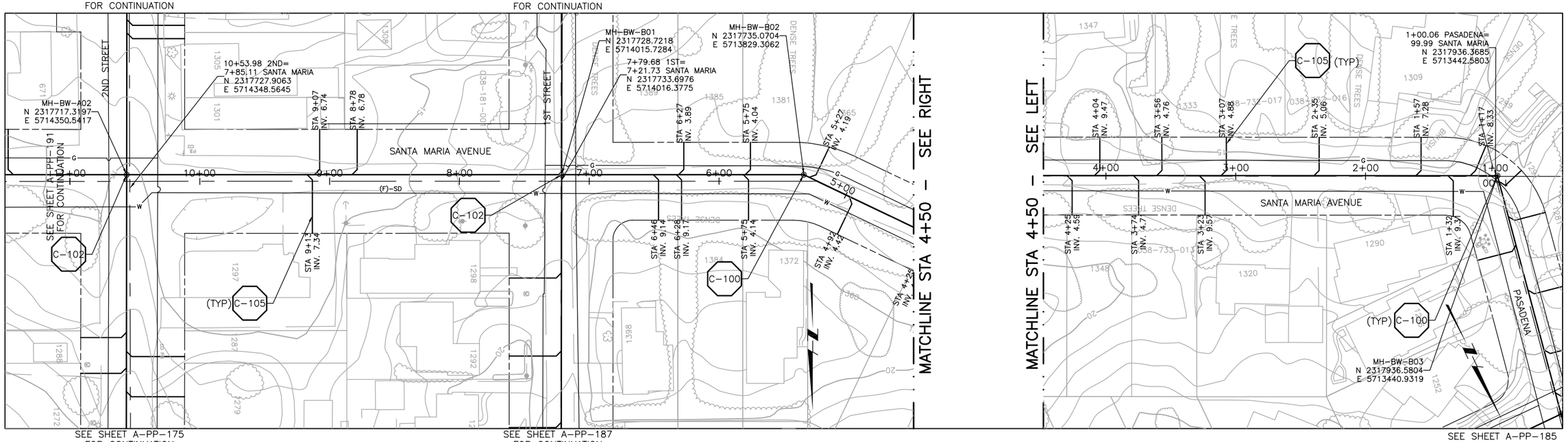
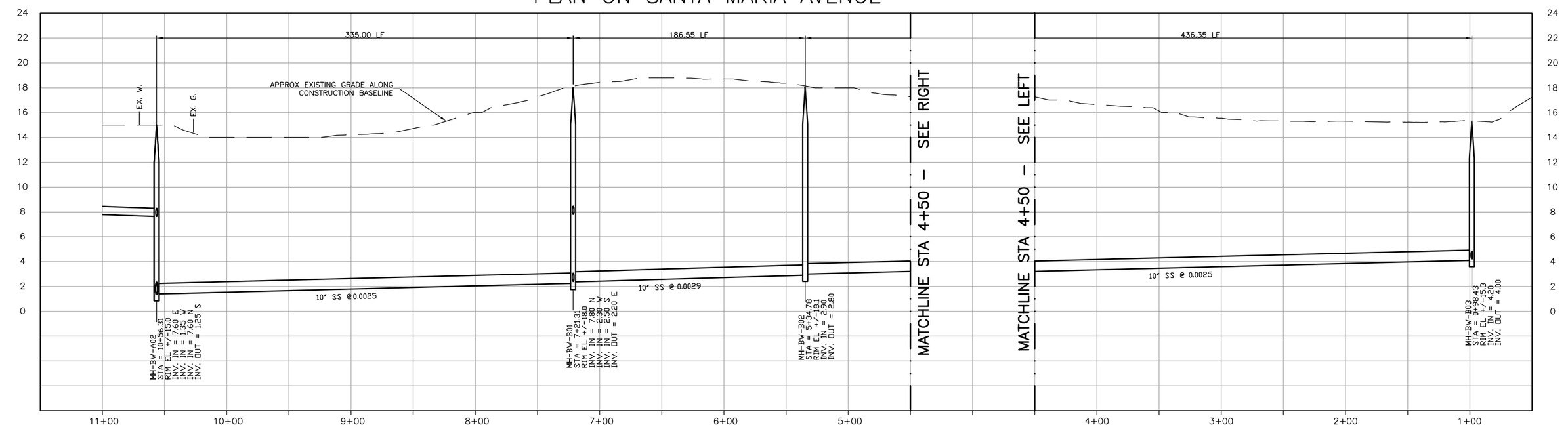


PLAN ON SANTA MARIA AVENUE



PROFILE ON SANTA MARIA AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' / 1" = 4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA MARIA AVENUE
STA 0+98.43 TO STA 10+56.31

SHEET A-PP-184

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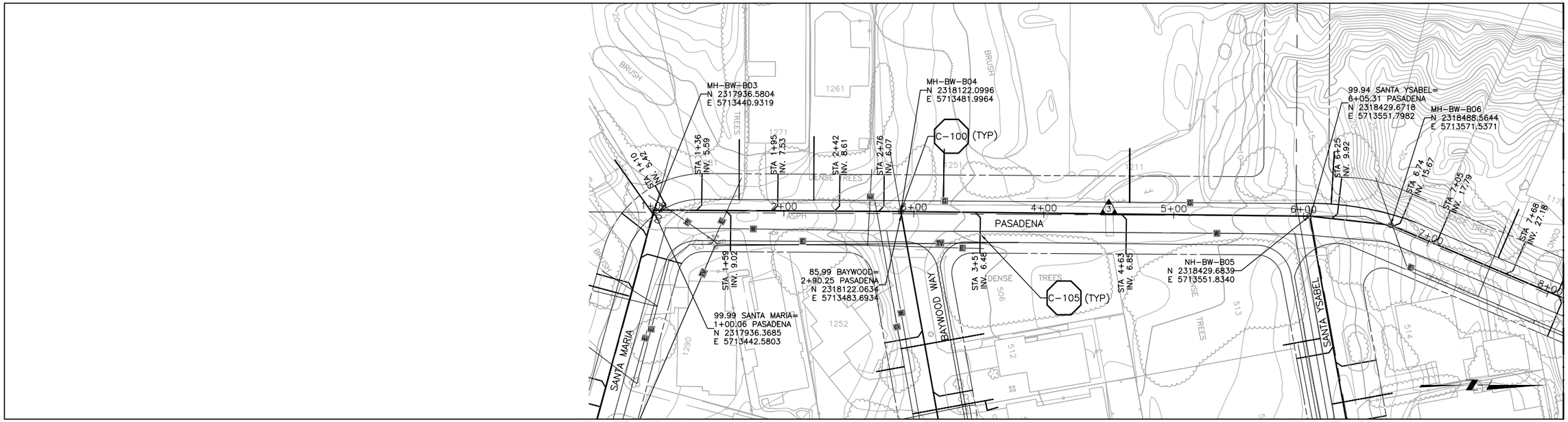


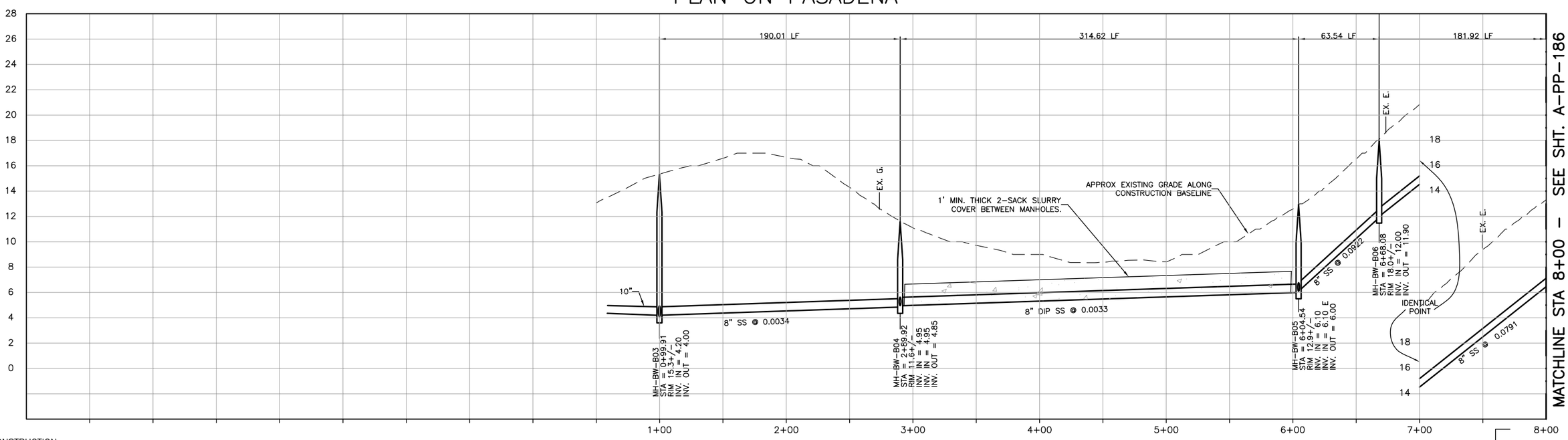
SEE SHEET A-PP-184 FOR CONTINUATION

SEE SHEET A-PP-189 FOR CONTINUATION

SEE SHEET A-PP-190 FOR CONTINUATION

MATCHLINE STA 8+00 – SEE SHT. A-PP-186

PLAN ON PASADENA



CONSTRUCTION BASELINE STATION

MATCHLINE STA 8+00 – SEE SHT. A-PP-186

PROFILE ON PASADENA

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MCCAFFREY C 46895 CIVIL STATE OF CALIFORNIA
EXP. 6/30/04
DATE: 2-16-2004

L:\los_osos\Collect_Sys\A\civ\A-PP-185.dwg, Condocs, Feb 05, 2004 6:27pm, DKHickman

REV	DATE	BY	DESCRIPTION

SCALE
HORI: 1" = 40'
VERT: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

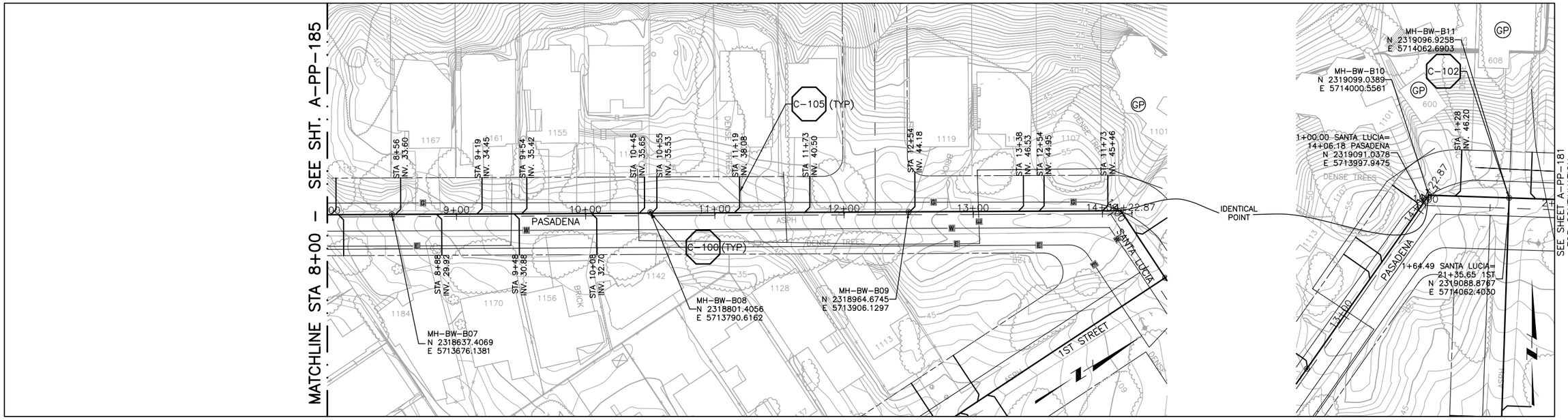
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
PASADENA
STA 00+99.91TO STA 8+00

SHEET
A-PP-185



DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MICHEL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
HORI: 1" = 40'
VERT: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
PASADENA 8+00 TO 14+14.23
SANTA LUCIA 1+02.34 TO 1+64.51

SHEET
A-PP-186

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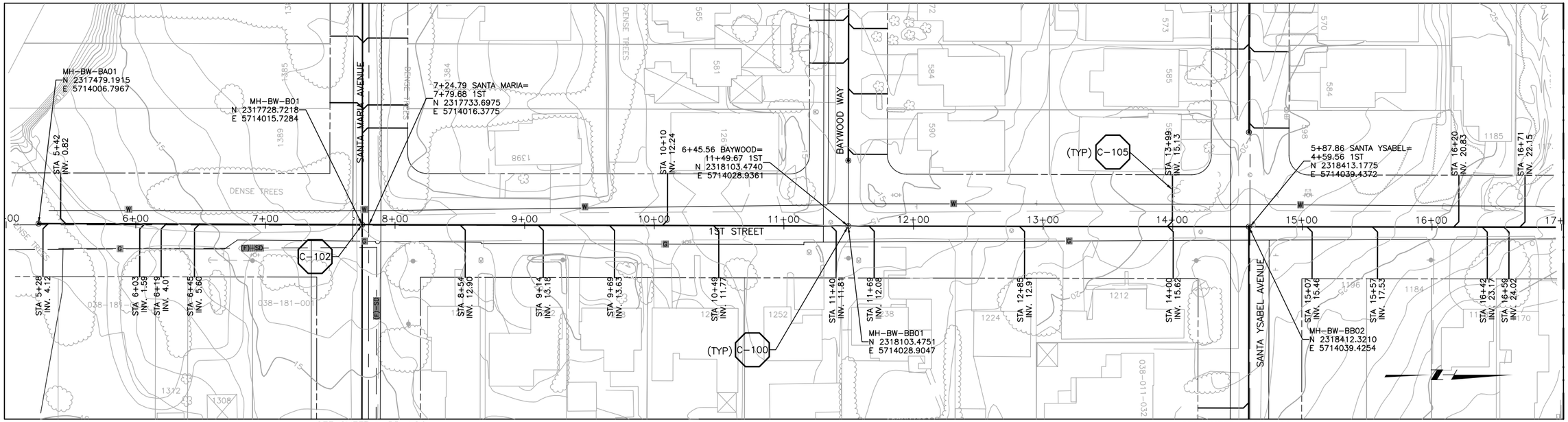
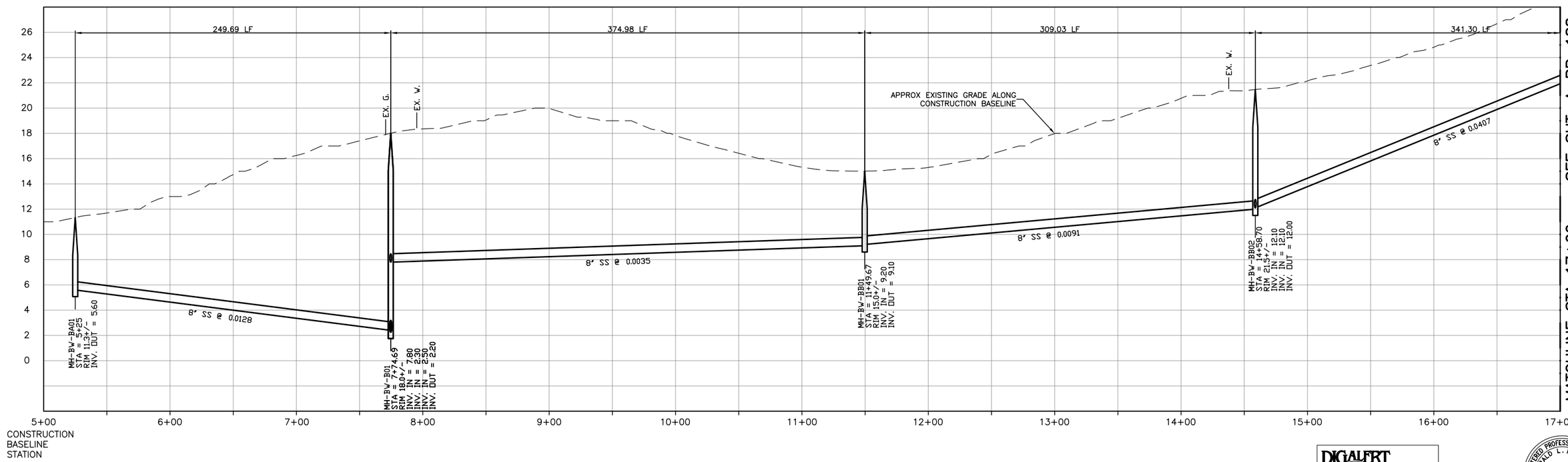


PLAN ON 1ST STREET



PROFILE ON 1ST STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
1ST STREET
STA 5+25 TO STA 17+00

SHEET
A-PP-187

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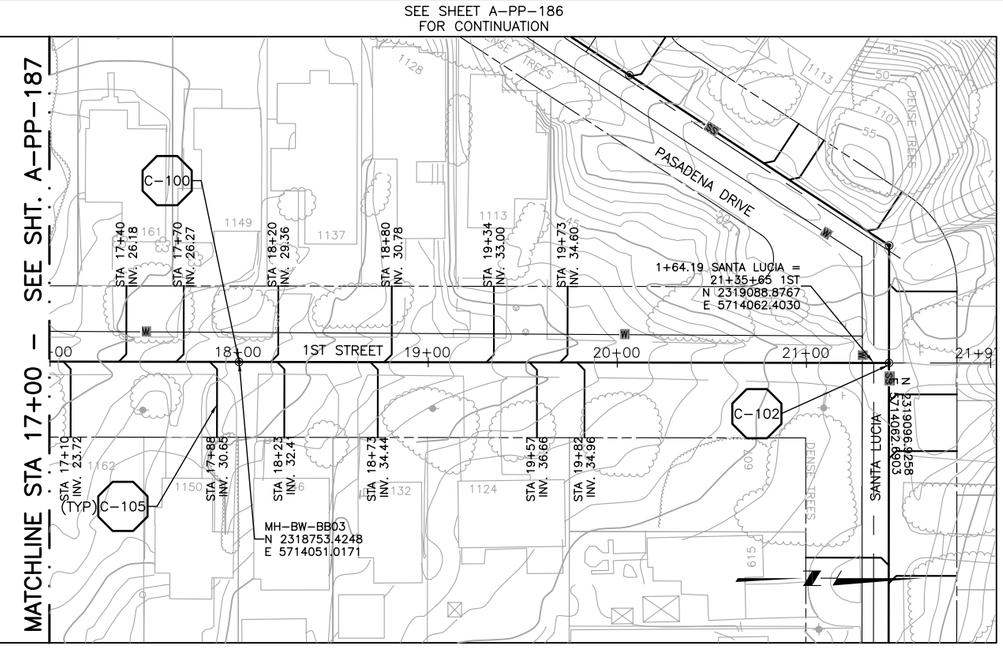
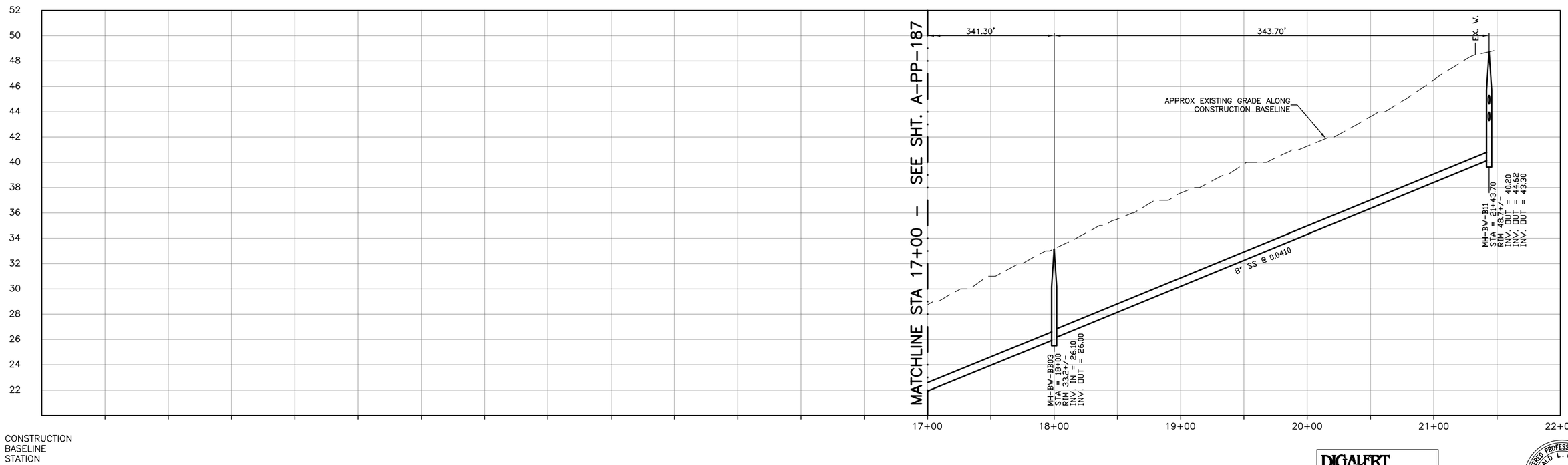


PLAN ON 1ST STREET



PROFILE ON 1ST STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

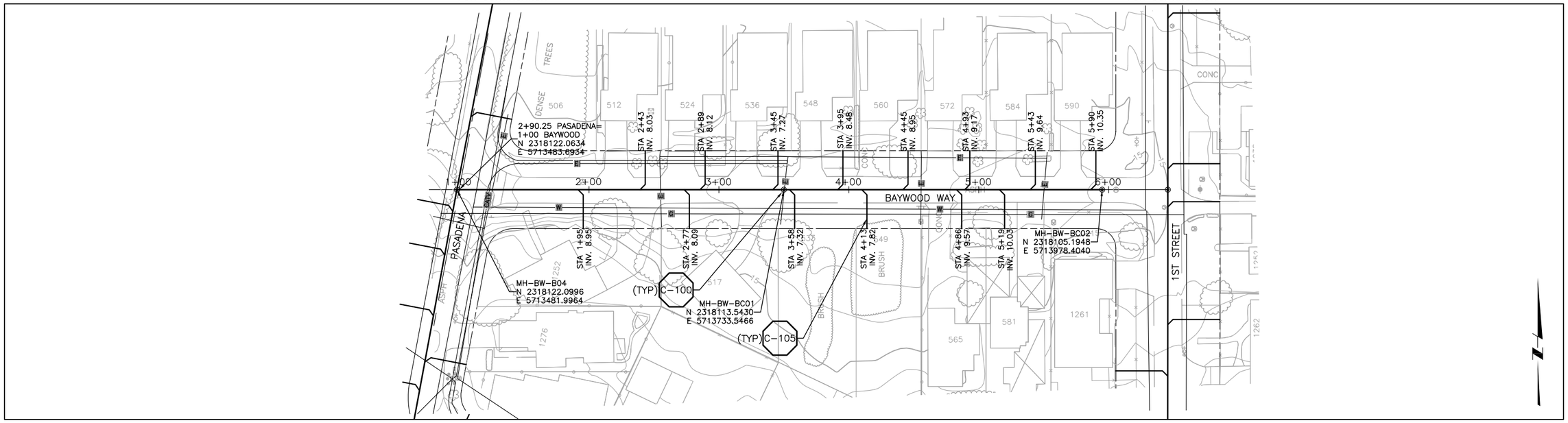
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
1ST STREET
STA 17+00 TO STA 21+43.70

SHEET
A-PP-188

L:\los_osos\Collect_Sys\A\Civ\A-PP-188.dwg, Condocs, Feb 05, 2004 6:01pm, DKHickman

SEE SHEET A-PP-185
FOR CONTINUATION

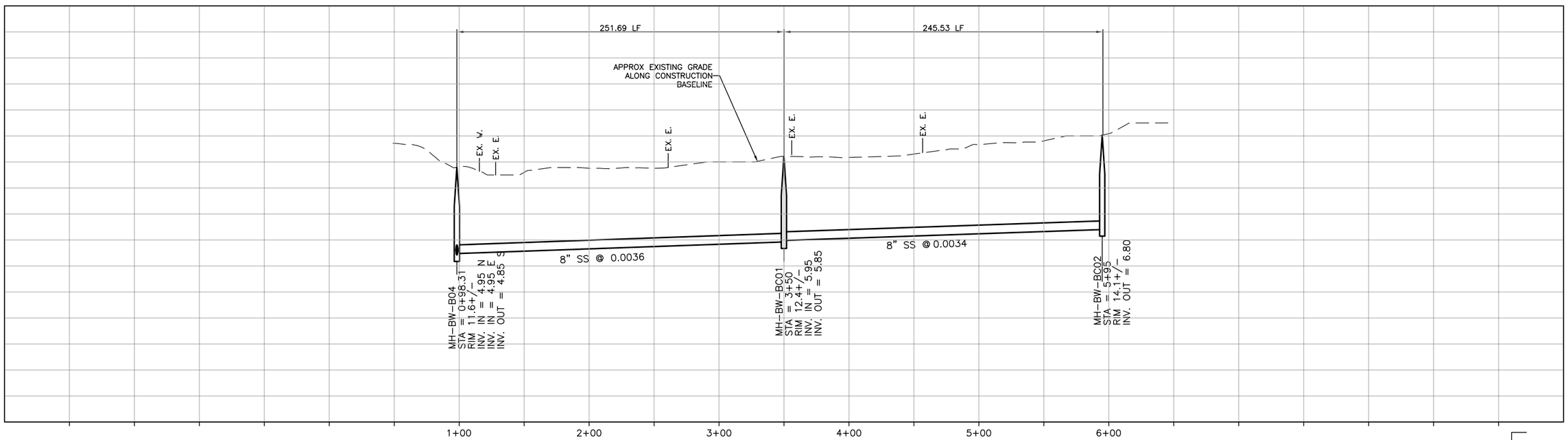
SEE SHEET A-PP-187
FOR CONTINUATION



SEE SHEET A-PP-185
FOR CONTINUATION

SEE SHEET A-PP-187
FOR CONTINUATION

PLAN ON BAYWOOD



CONSTRUCTION
BASELINE
STATION

PROFILE ON BAYWOOD

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 36895
CIVIL
STATE OF CALIFORNIA
6/30/04

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
HORI: 1" = 40'
VERT: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
BAYWOOD WAY
STA 0+98.31 TO STA 5+95

SHEET
A-PP-189

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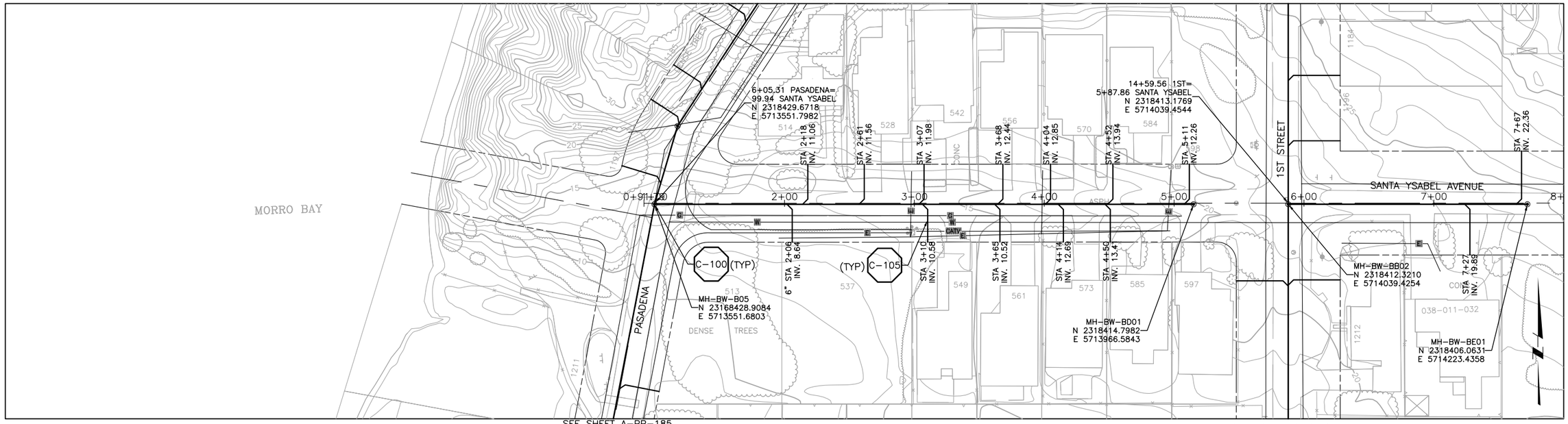
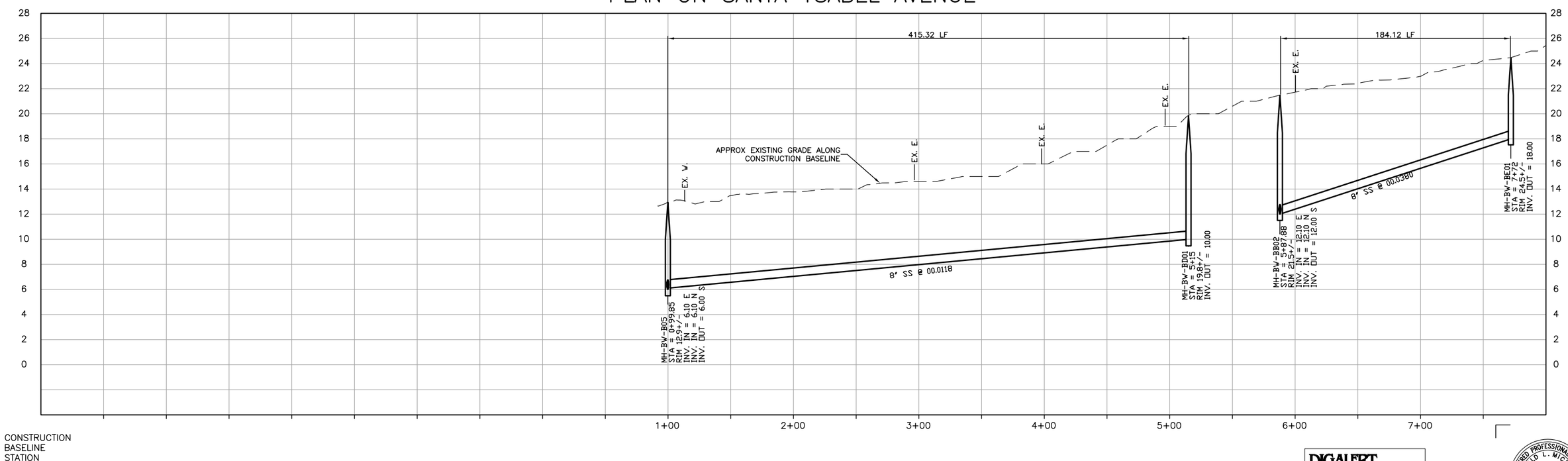


PLAN ON SANTA YSABEL AVENUE



PROFILE ON SANTA YSABEL AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MCCLELLAND CIVIL STATE OF CALIFORNIA
DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
HORI: 1" = 40'
VERT: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA YSABEL AVENUE
STA 0+99.85 TO STA 7+72

SHEET
A-PP-190

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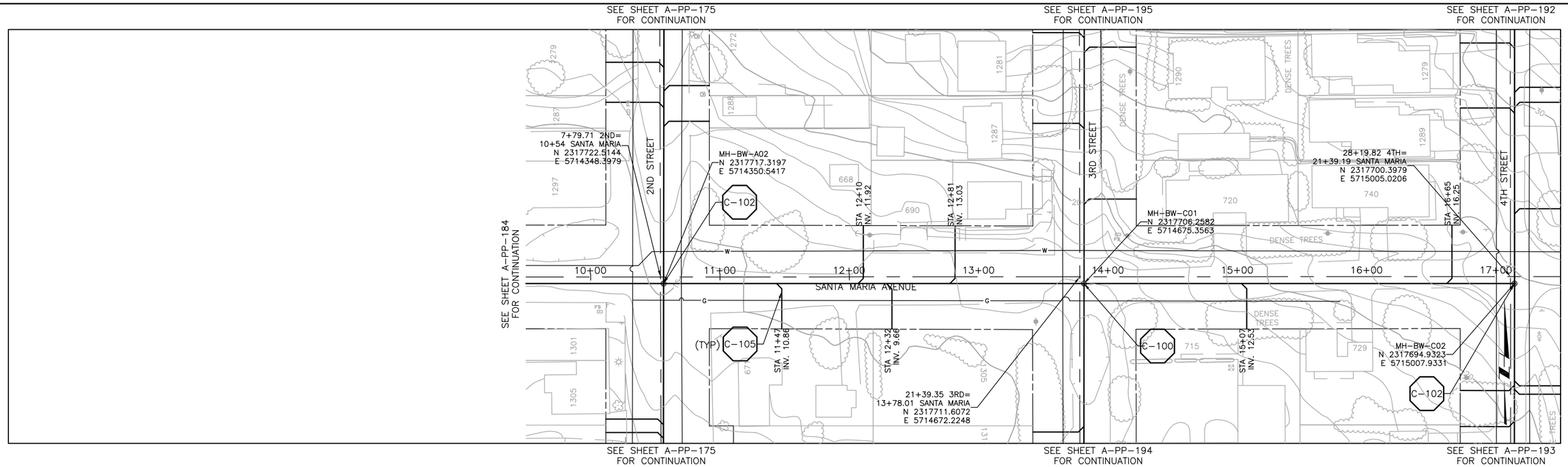
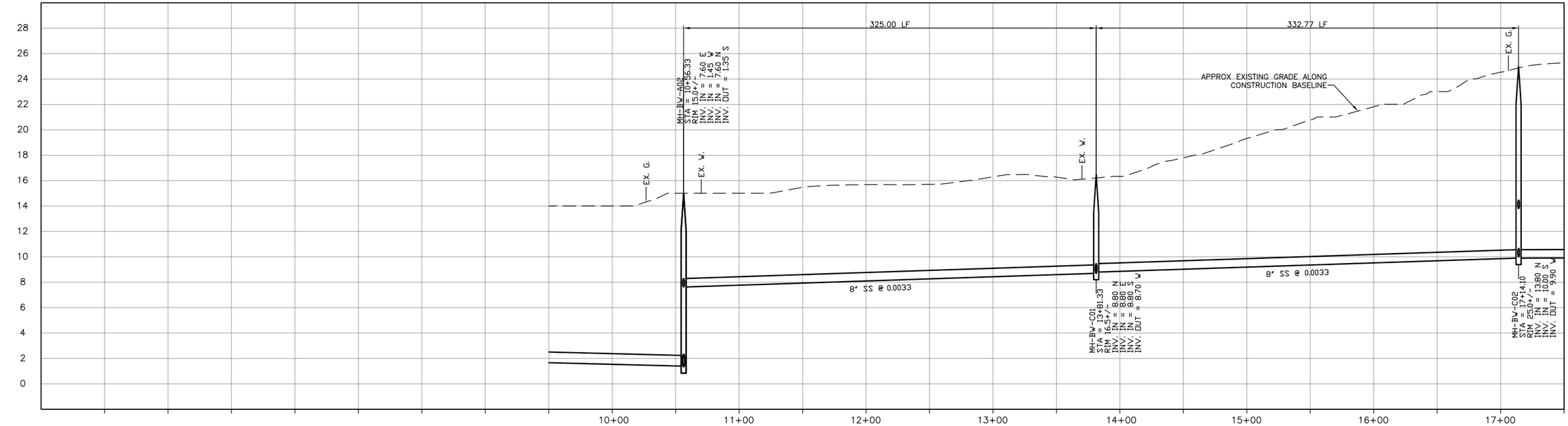


PLAN ON SANTA MARIA AVENUE



CONSTRUCTION BASELINE STATION

PROFILE ON SANTA MARIA AVENUE

DIGALERT
DIAL TOLL FREE 1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MICHEL No. 46895 Exp. 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 40' 1" = 4'

WARNING: 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA MARIA AVENUE
STA 10+56.33 TO STA 17+14.10

SHEET A-PP-191

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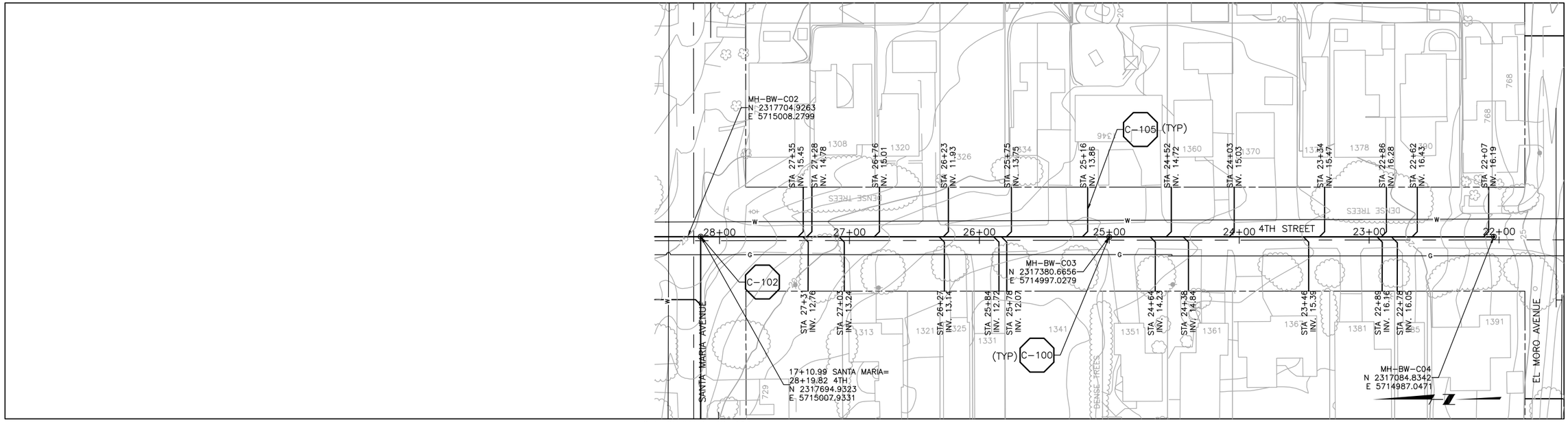
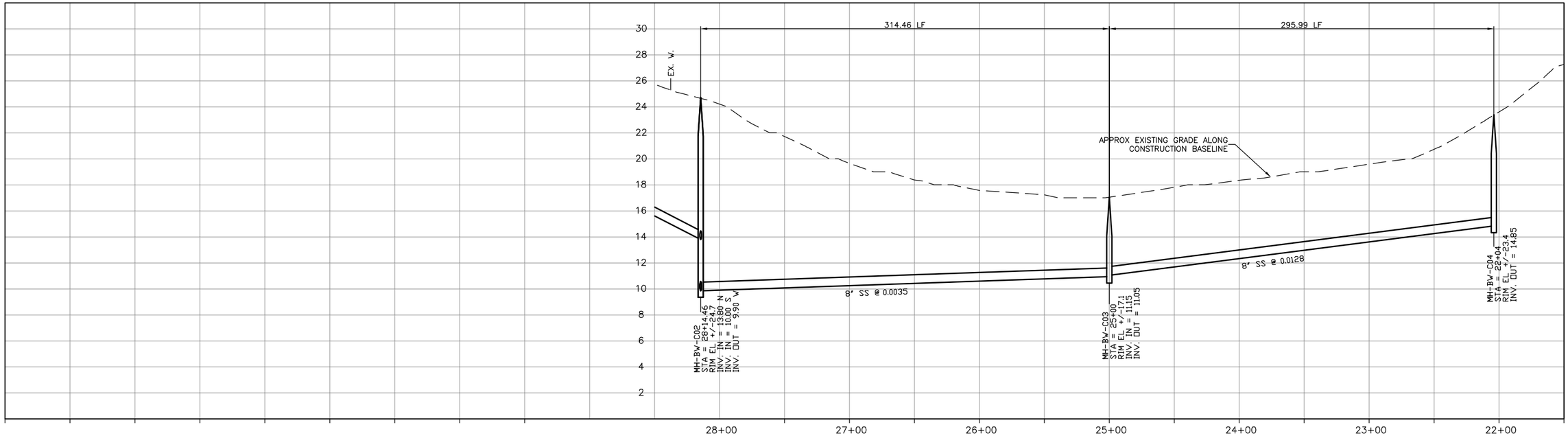


SEE SHEET A-PP-191
FOR CONTINUATION

PLAN ON 4TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 4TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

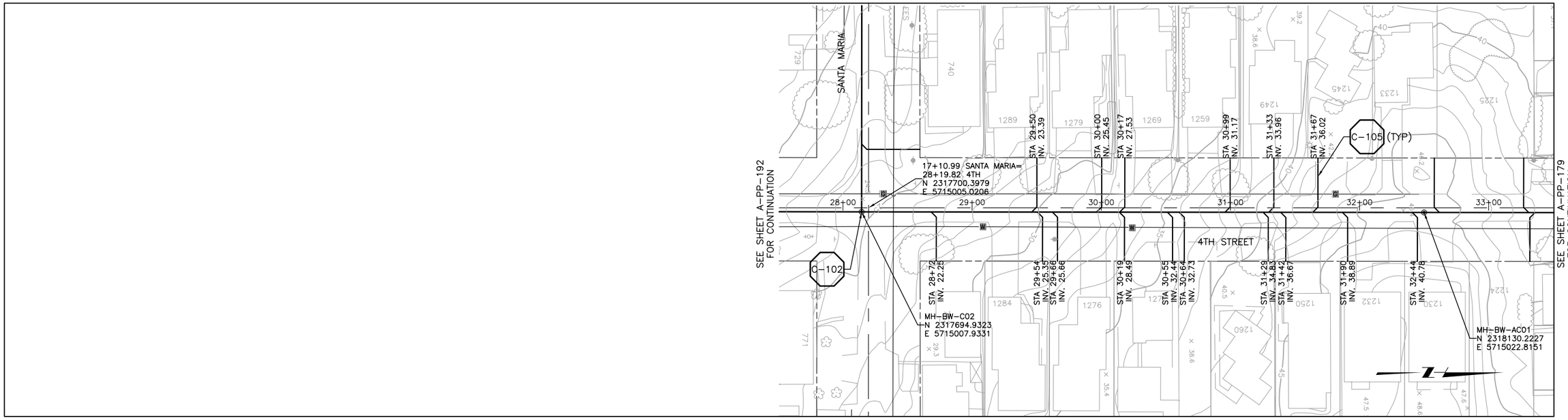
RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
4TH STREET
STA 22+04 TO 28+14.46

SHEET
A-PP-192

L:\los_osos\Collect_Sys\A\civ\A-PP-192.dwg, Condocs, Feb 05, 2004 7:29pm, HWHamilton

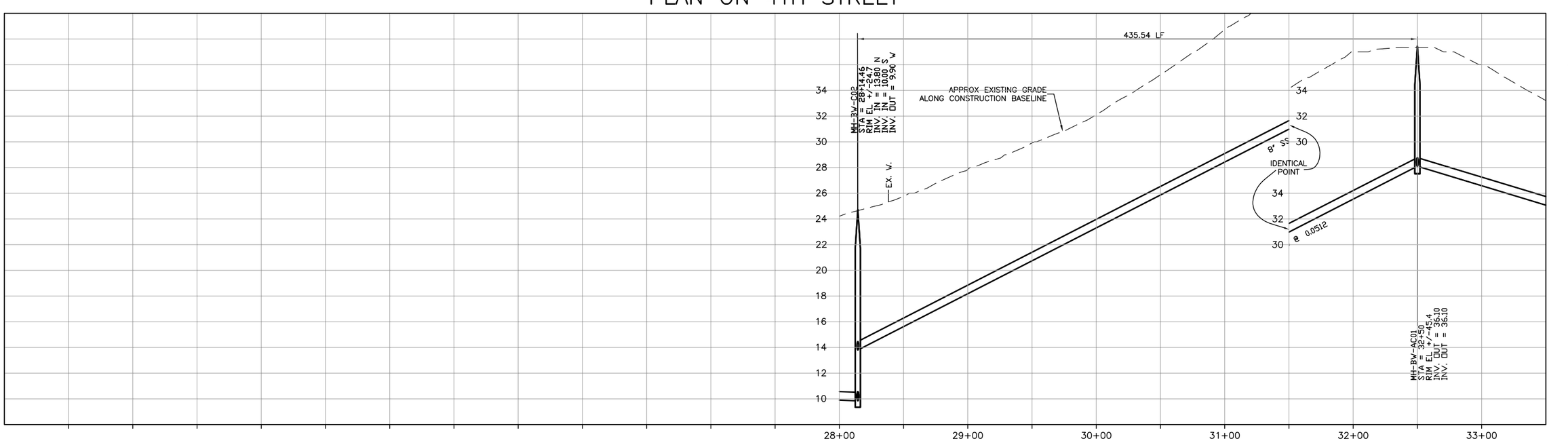
SEE SHEET A-PP-191
FOR CONTINUATION



SEE SHEET A-PP-192
FOR CONTINUATION

SEE SHEET A-PP-179
FOR CONTINUATION

PLAN ON 4TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 4TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

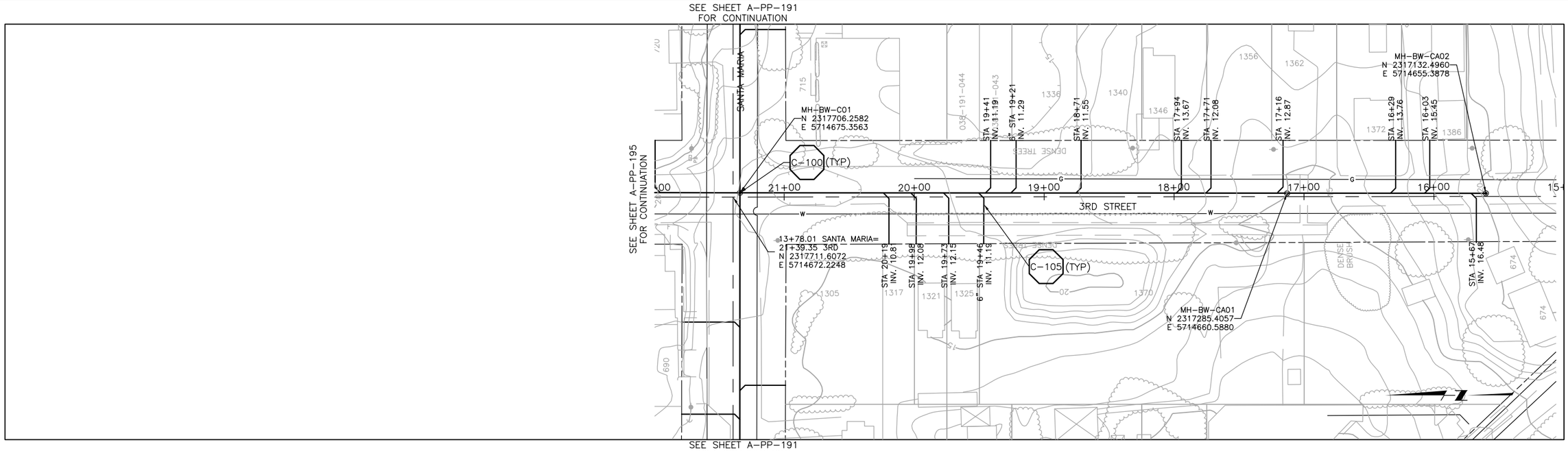
MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
4TH STREET
STA 28+14.46 TO STA 32+50

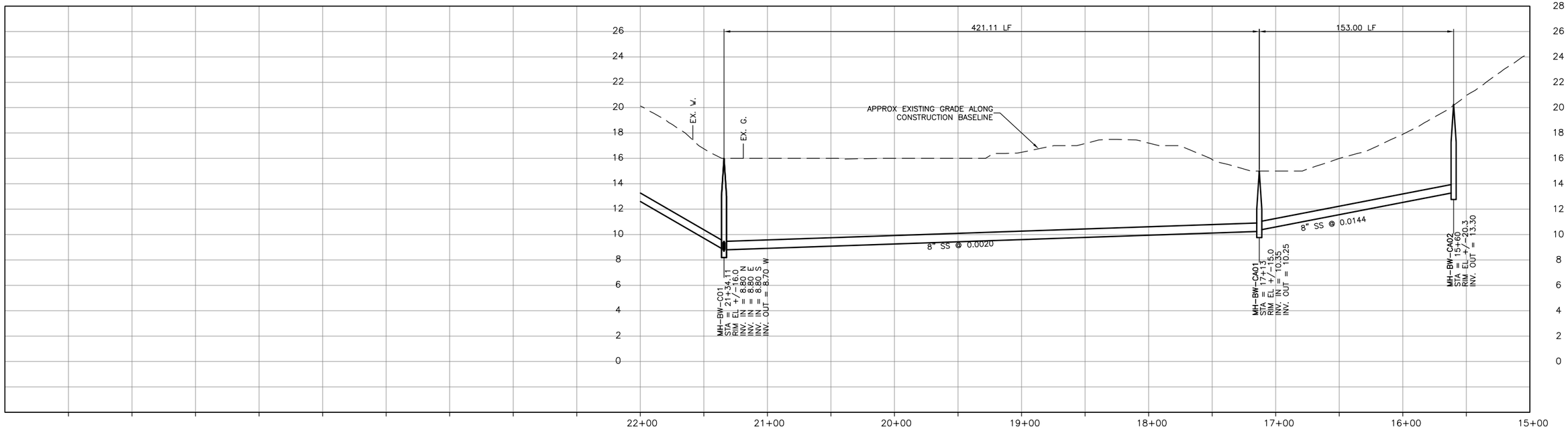
SHEET
A-PP-193

L:\los_osos\Collect_Sys\A\civ\A-PP-193.dwg, Condocs, Feb 05, 2004 6:31pm, DKHickman



SEE SHEET A-PP-191
FOR CONTINUATION

PLAN ON 3RD STREET



PROFILE ON 3RD STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MITCHELL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
3RD STREET
STA 15+60 TO STA 21+34.11

SHEET
A-PP-194

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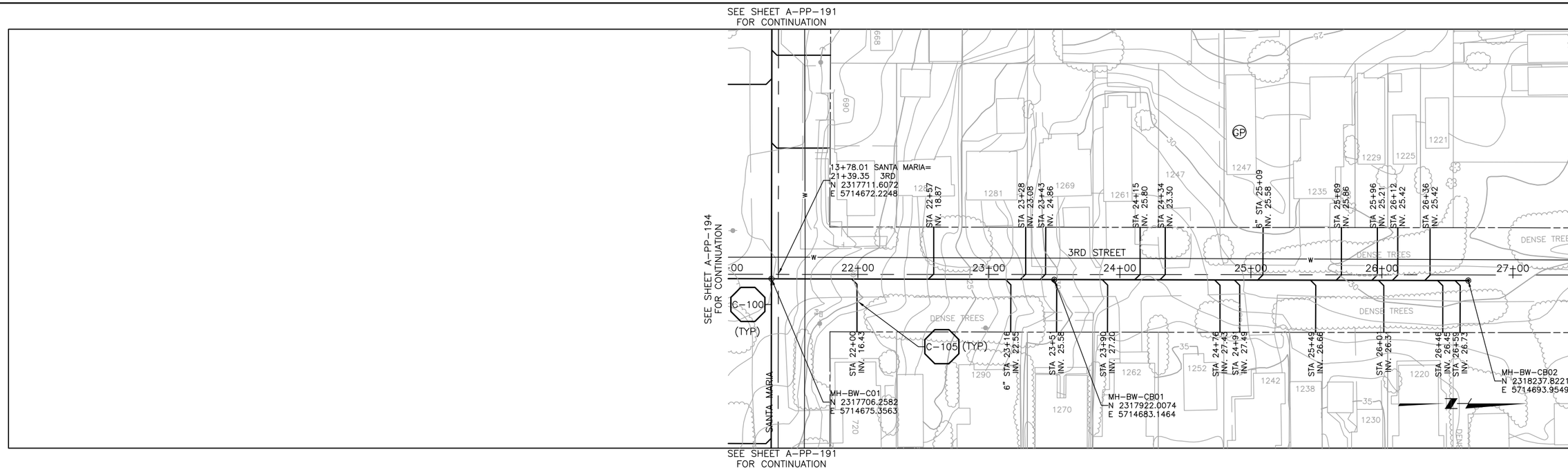
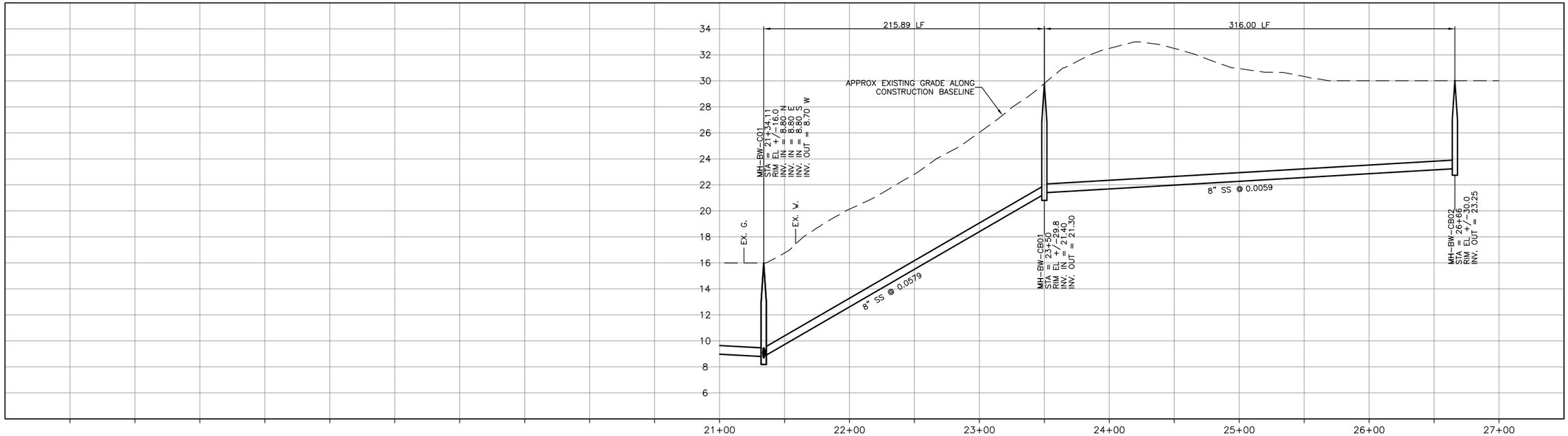


PLAN ON 3RD STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 3RD STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
3RD STREET
STA 21+34.11 TO STA 26+66

SHEET
A-PP-195

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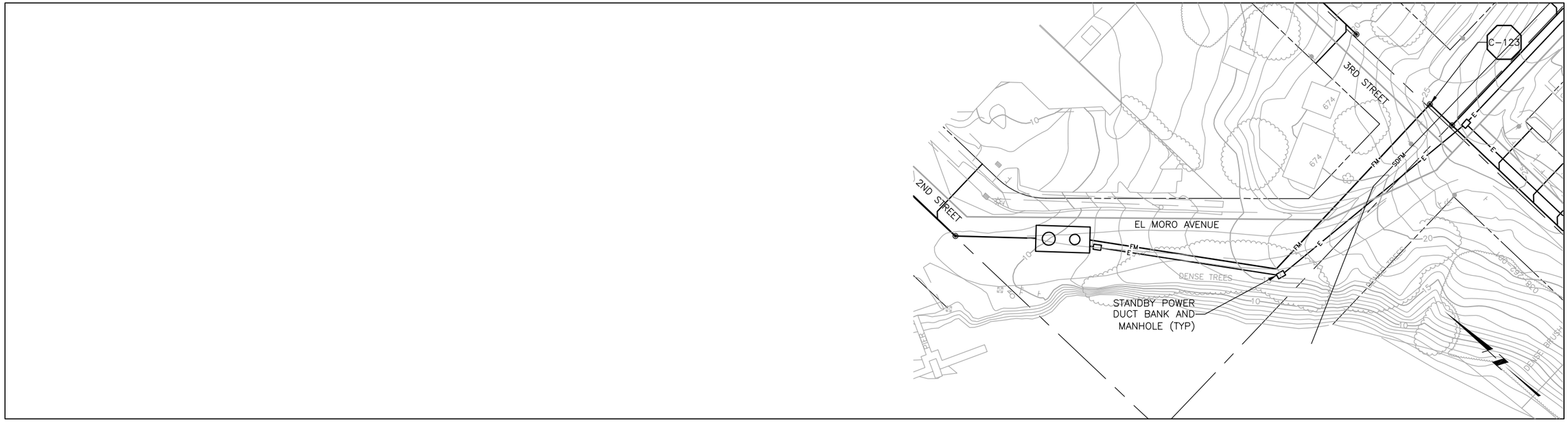
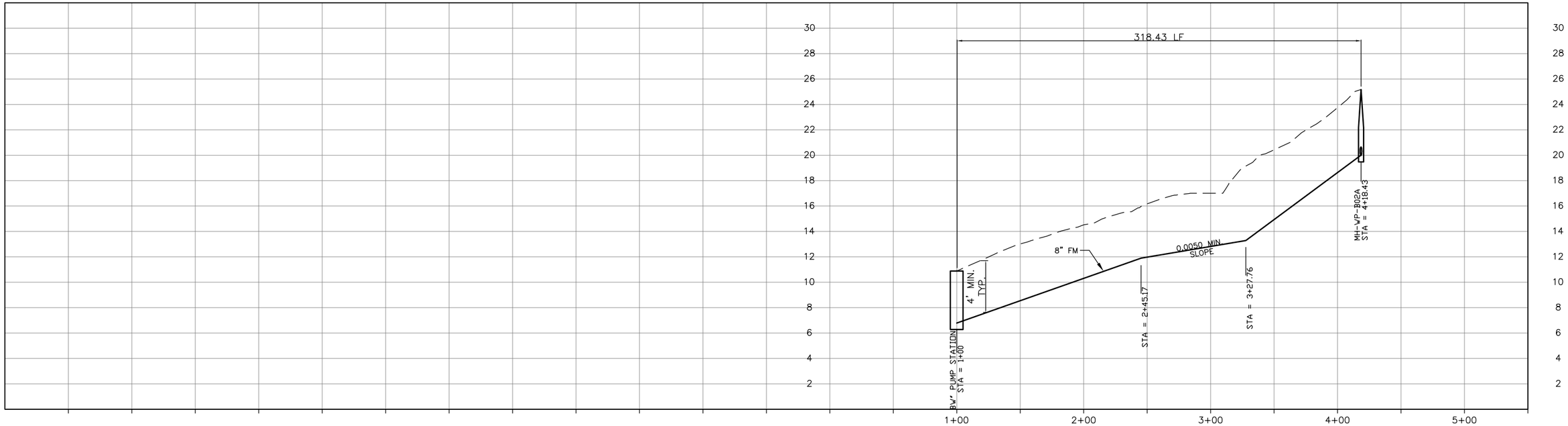


FM PLAN ON EL MORO AVENUE



CONSTRUCTION
BASELINE
STATION

FM PROFILE ON EL MORO AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MIGLIORE
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

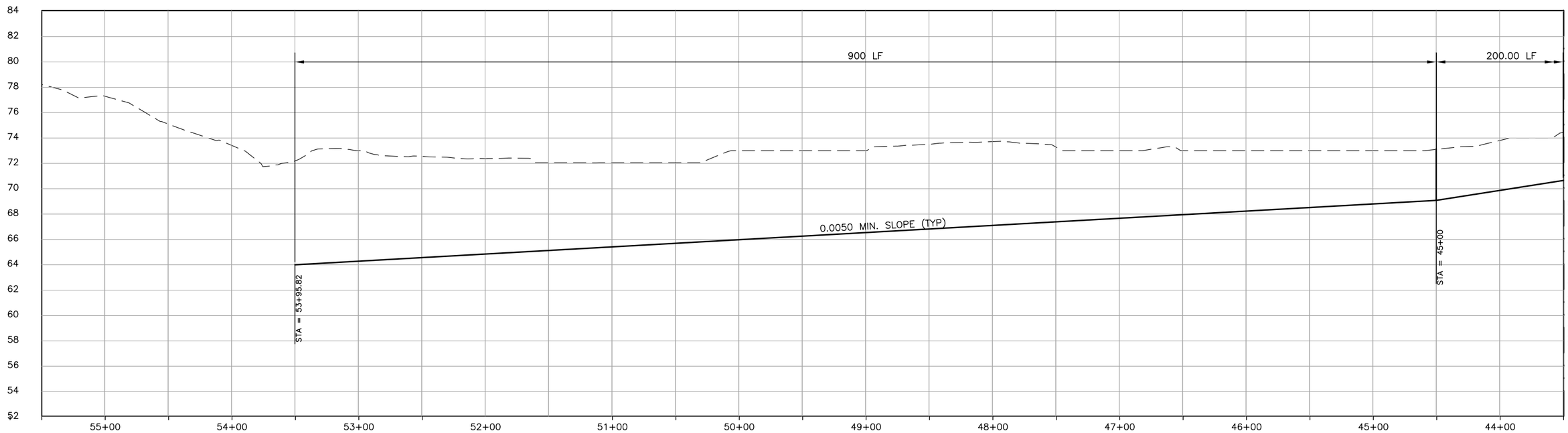
MWH
Walnut Creek, California

RRM DESIGN GROUP

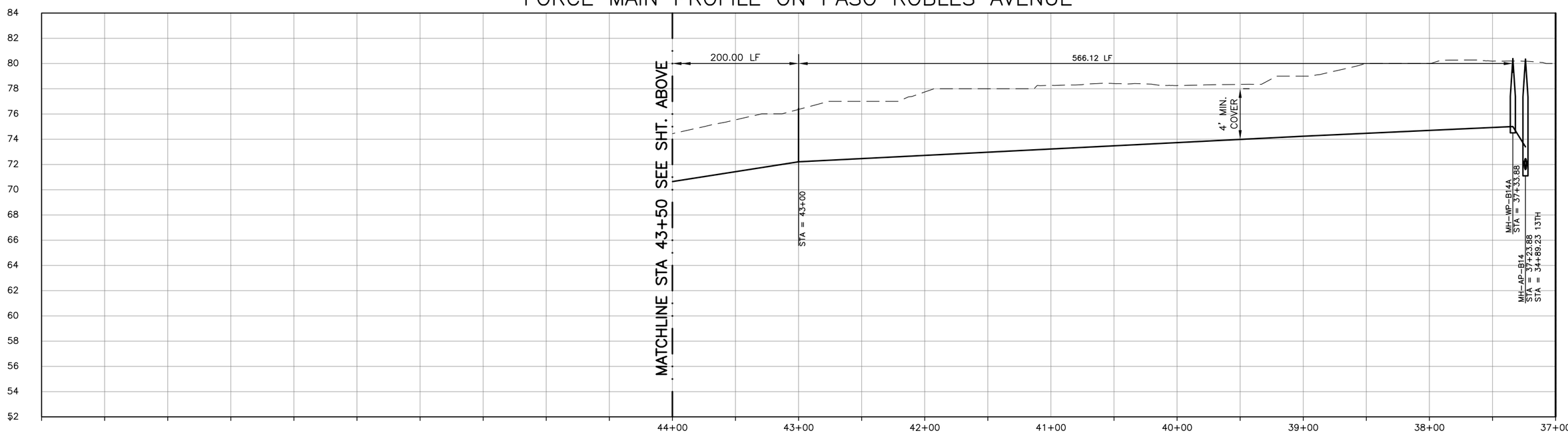
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
EL MORO AVENUE FM
STA 1+00 TO 4+18.43

SHEET
A-PP-196

L:\Los_osos\Collect_Sys\A\ca\A-PP-196.dwg, Condocs, Feb 05, 2004 7:25pm, HWHamilton



FORCE MAIN PROFILE ON PASO ROBLES AVENUE



CONSTRUCTION BASELINE STATION

FORCE MAIN PROFILE ON PASO ROBLES AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER GERALD L. MITCHELL C 6895 6/30/04 CIVIL STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 — 2-16-2004 (LICENSE NO. / DATE)
STEVE J. HYLAND — C23892 — 2-16-2004 (LICENSE NO. / DATE)

LOS OSOS COMMUNITY SERVICES DISTRICT

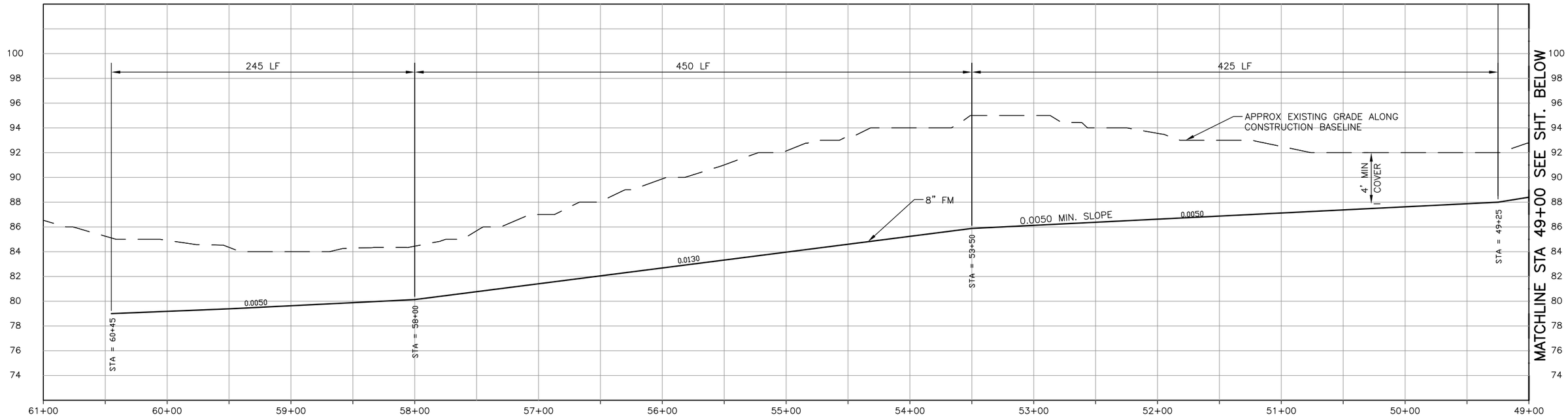
MWH Walnut Creek, California

RRM DESIGN GROUP

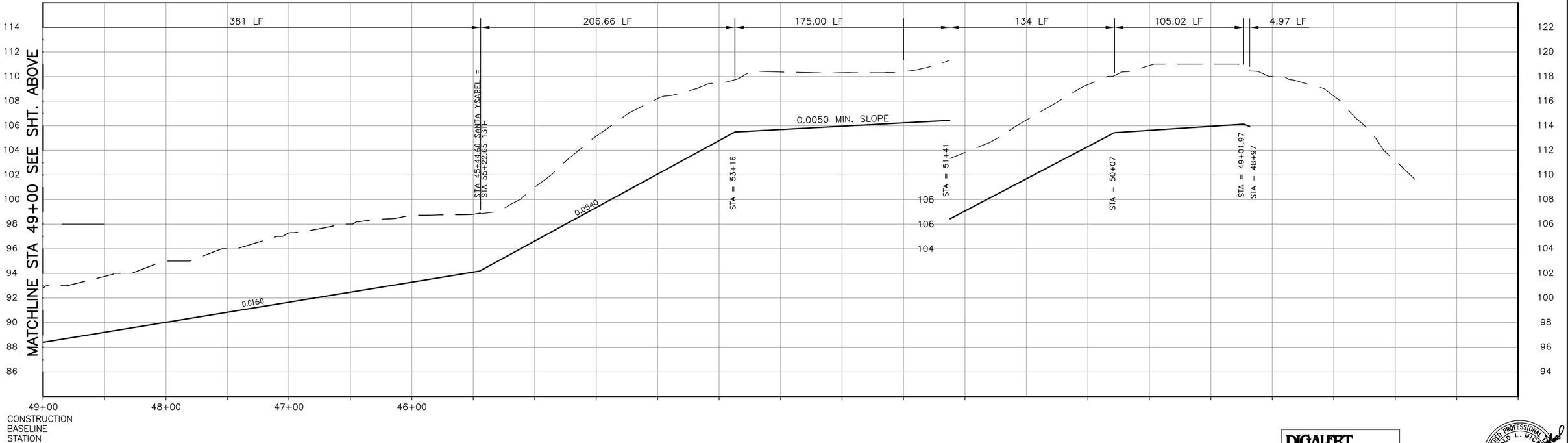
LOS OSOS WASTEWATER PROJECT
FORCE MAIN PROFILE
PASO ROBLES AVENUE
STA 37+34 TO STA 54+00

SHEET
A-PP-197

L:\los_osos\Collect_Sys\A\civ\A-PP-197.dwg, Cordocs, Feb 05, 2004 7:47pm, DKHickman



FORCE MAIN PROFILE ON SANTA YSABEL AVENUE



FORCE MAIN PROFILE ON SANTA YSABEL AVENUE & 13TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
GERALD L. MICHAEL
No. 46895
Exp. 6/30/04
CIVIL
STATE OF CALIFORNIA

DATE: 2-16-2004

REV	DATE	BY	DESCRIPTION

SCALE
1" = 40'
1" = 4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KRT
DRAWN DKH
CHECKED GLM

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

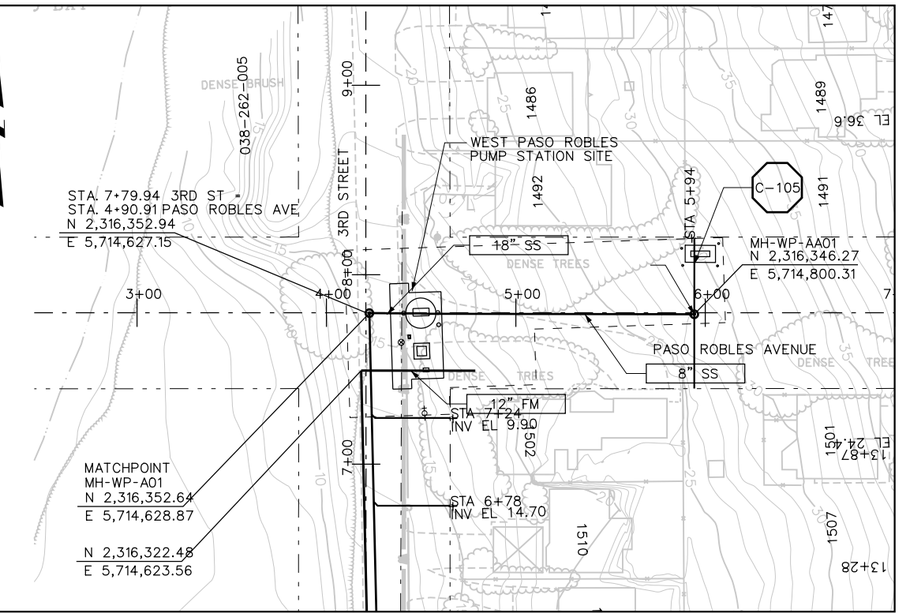
RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT
FORCE MAIN PROFILE
SANTA YSABEL AVENUE
& 13TH STREETH

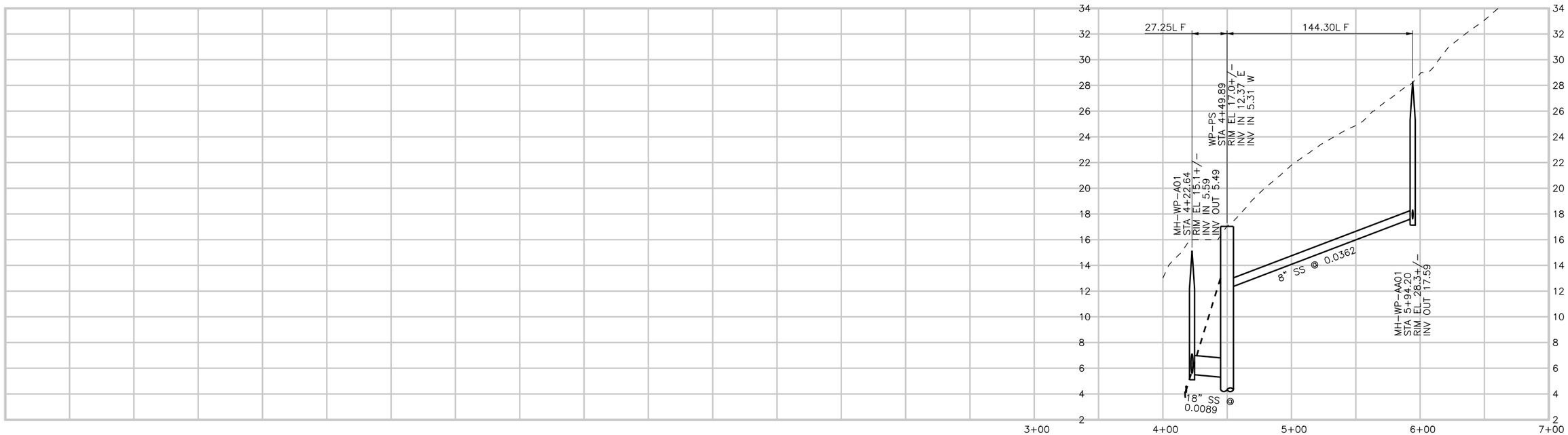
SHEET
A-PP-198

L:\los_osos\Collect_Sys\A\civ\A-PP-198.dwg, Condocs, Feb 05, 2004 8:03pm, HWHamilton

SEE SHEET A-PP-100 FOR CONTINUATION



SEE SHEET D-PP-101 FOR CONTINUATION



PROFILE ON PASO ROBLES

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58311
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

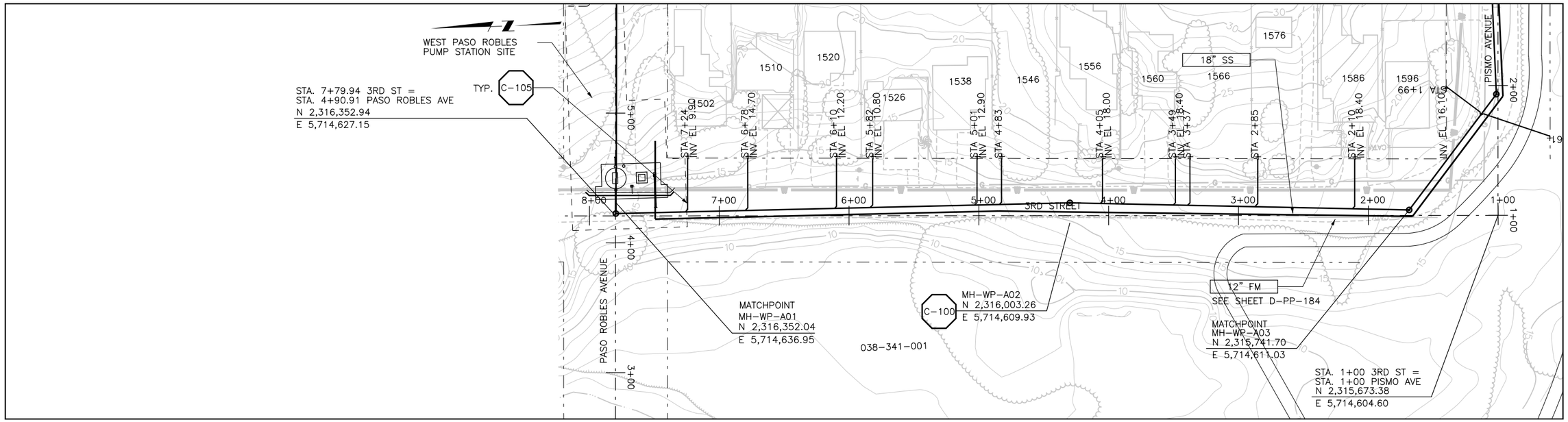
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
PASO ROBLES AVE.
STA. 4+22.64 TO STA. 5+94.20

SHEET
D-PP-100

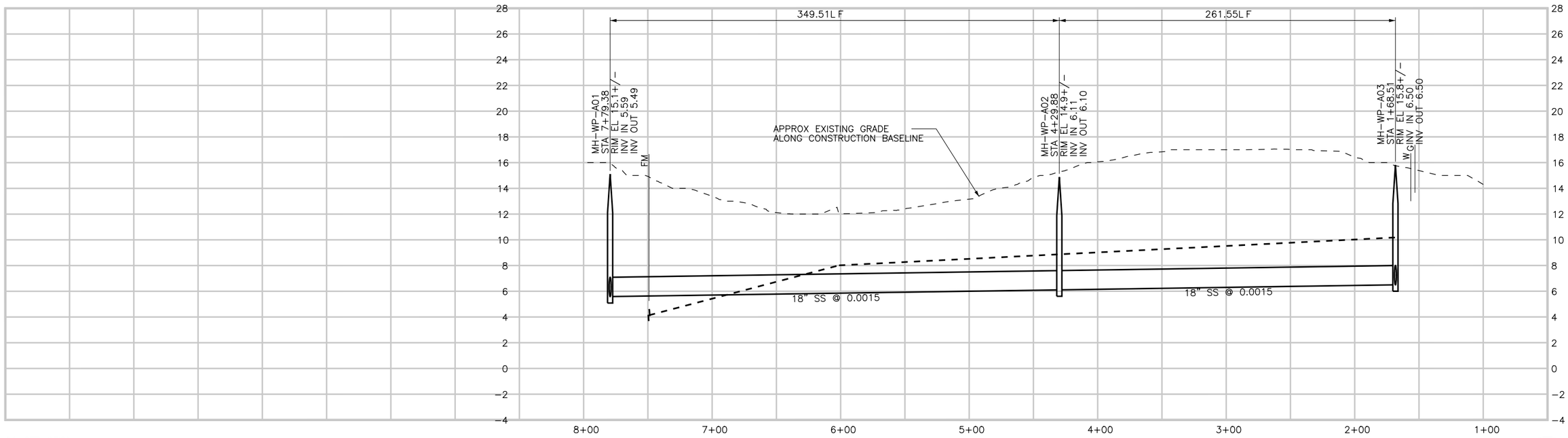
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\D-PP-100.dgn Plot Date: 06-FEB-2004 09:50

SEE SHEET D-PP-100 FOR CONTINUATION

SEE SHEET D-PP-102 FOR CONTINUATION



PLAN ON 3RD STREET



PROFILE ON 3RD STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
CLYDE C. WONG
No. C-58434
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

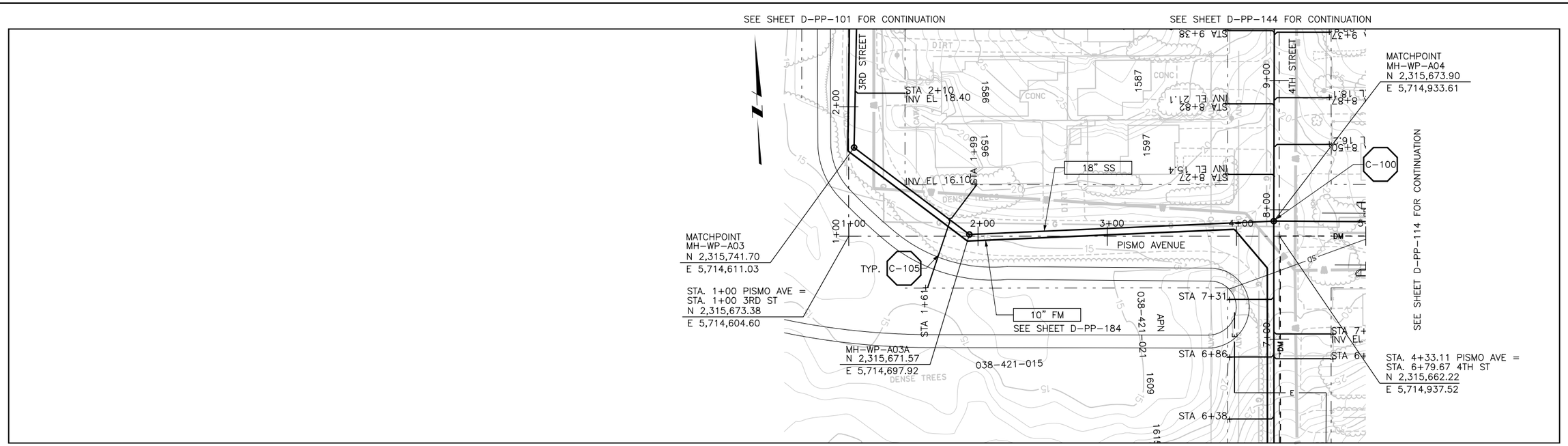
LOS OSOS
COMMUNITY SERVICES DISTRICT

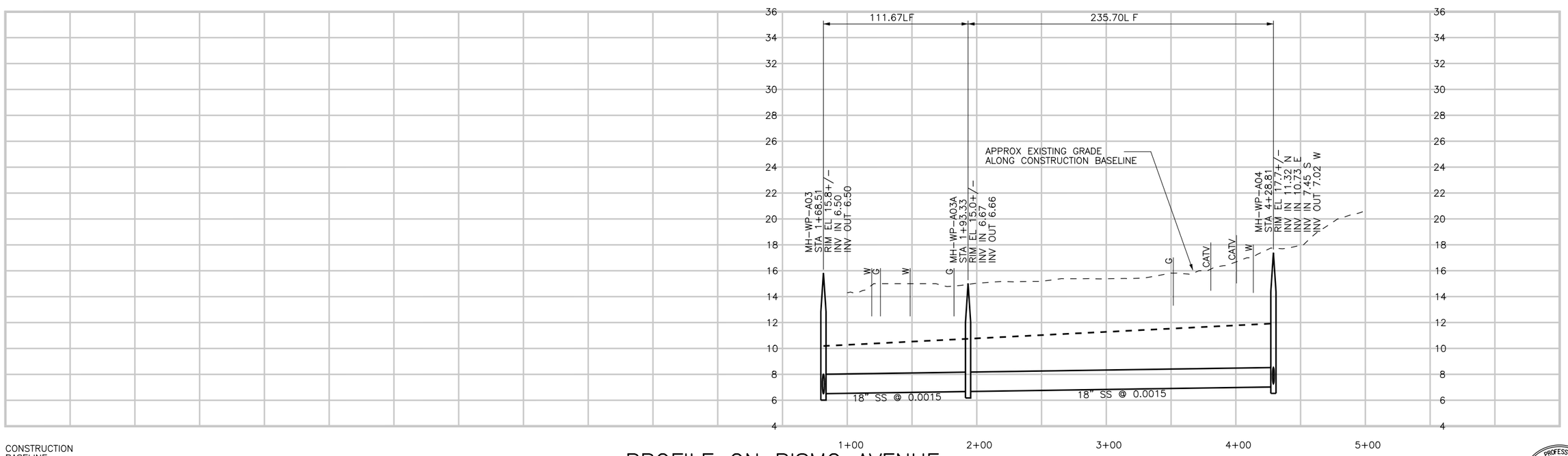
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
3RD STREET
STA. 7+29.86 TO STA. 0+94.04

SHEET
D-PP-101

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-101.dgn Plot Date: 06-FEB-2004 09:51





PROFILE ON PISMO AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

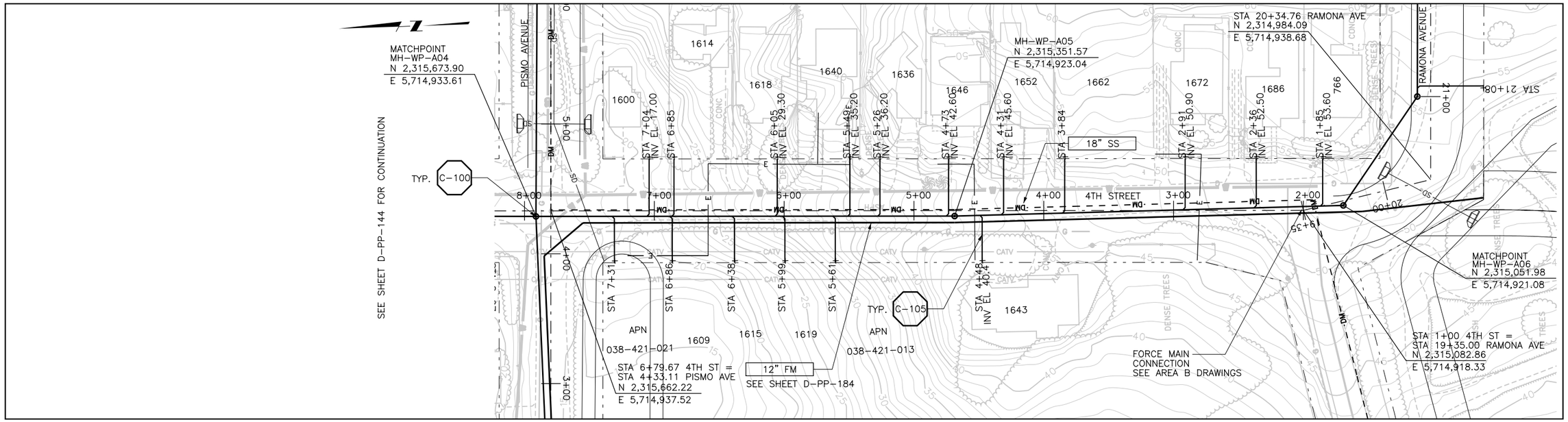
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
PISMO AVE.
STA. 1+09.34 TO 4+38.99

SHEET
D-PP-102

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-102.dgn Plot Date: 05-FEB-2004 17:00

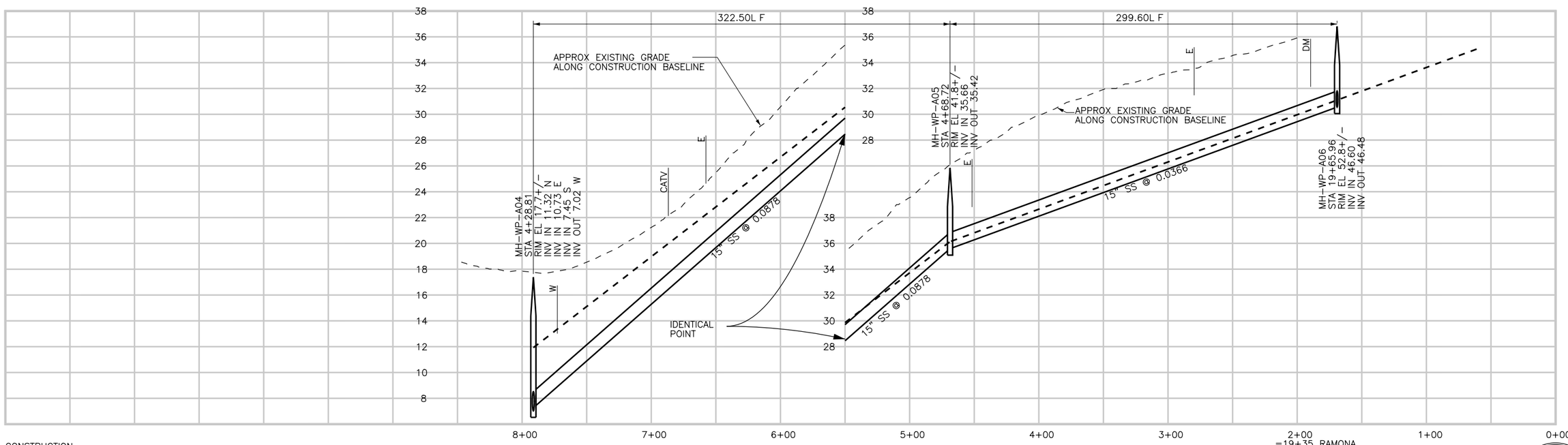
SEE SHEET D-PP-114 FOR CONTINUATION

SEE SHEET D-PP-104 FOR CONTINUATION



SEE SHEET D-PP-102 FOR CONTINUATION

PLAN ON 4TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 4TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
4TH STREET
STA. 6+73.69 TO -0+04.37

SHEET
D-PP-103

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-103.dgn
Plot Date: 05-FEB-2004 17:00

REV	DATE	BY	DESCRIPTION

SCALE: 1"=300'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED R BUI

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVEN J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

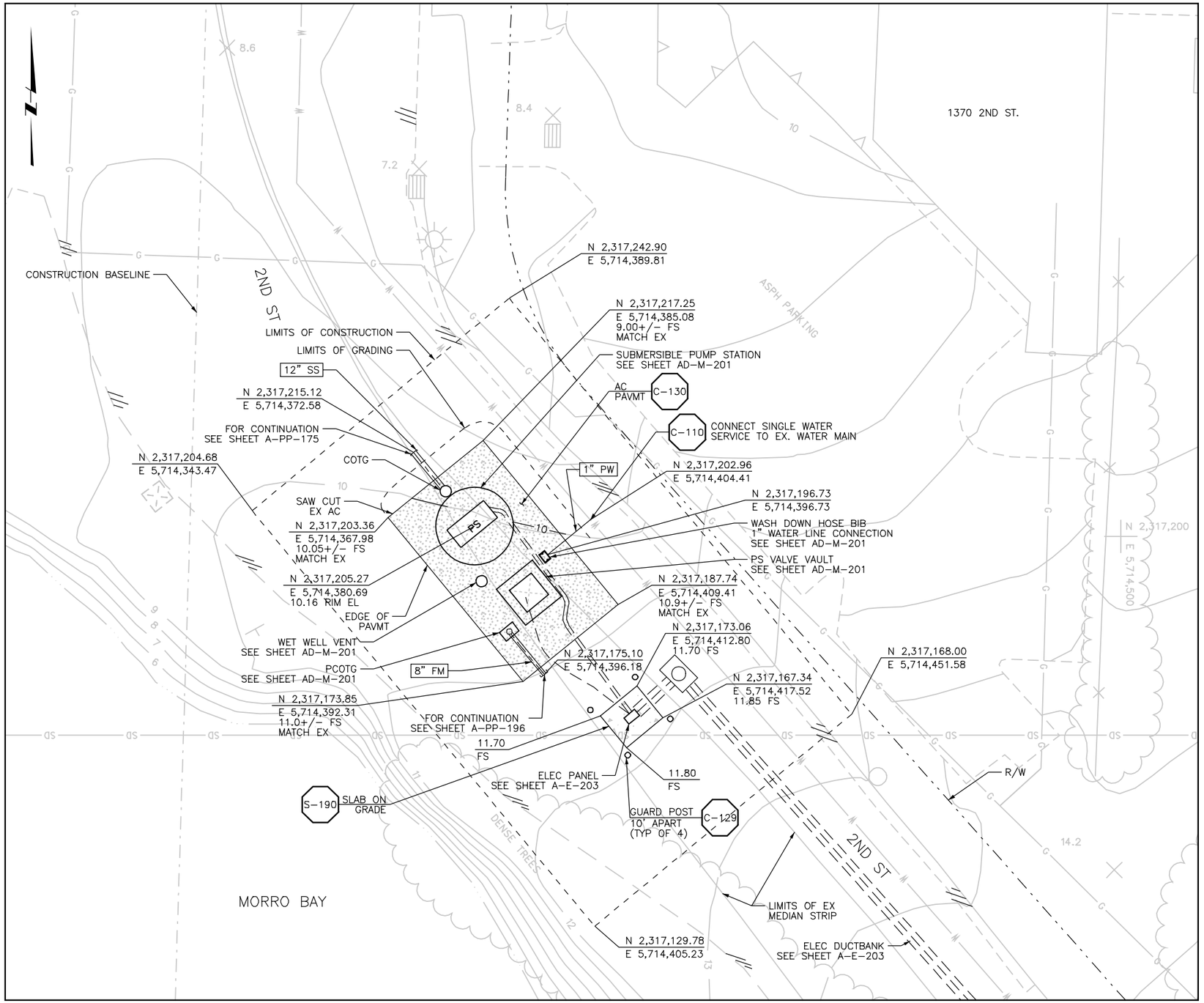
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

CIVIL
AREA A KEY PLAN

SHEET A-C-200

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\A-C-200.dgn Plot Date: 09-FEB-2004 12:38



BAYWOOD PS SITE PLAN

NOTES:

1. LIDS AND VAULTS TO BE TRAFFIC RATED FOR H-20 LOADING
2. COORDINATE ELECTRICAL DUCTBANK DEPTH AND LOCATION BEFORE INSTALLATION OF PROCESS PIPING. SEE SHEET A-E-203.

REGISTERED PROFESSIONAL ENGINEER
No. C 48027
Exp. 12-31-05
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE 1"=10'

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED J GANTNEY

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

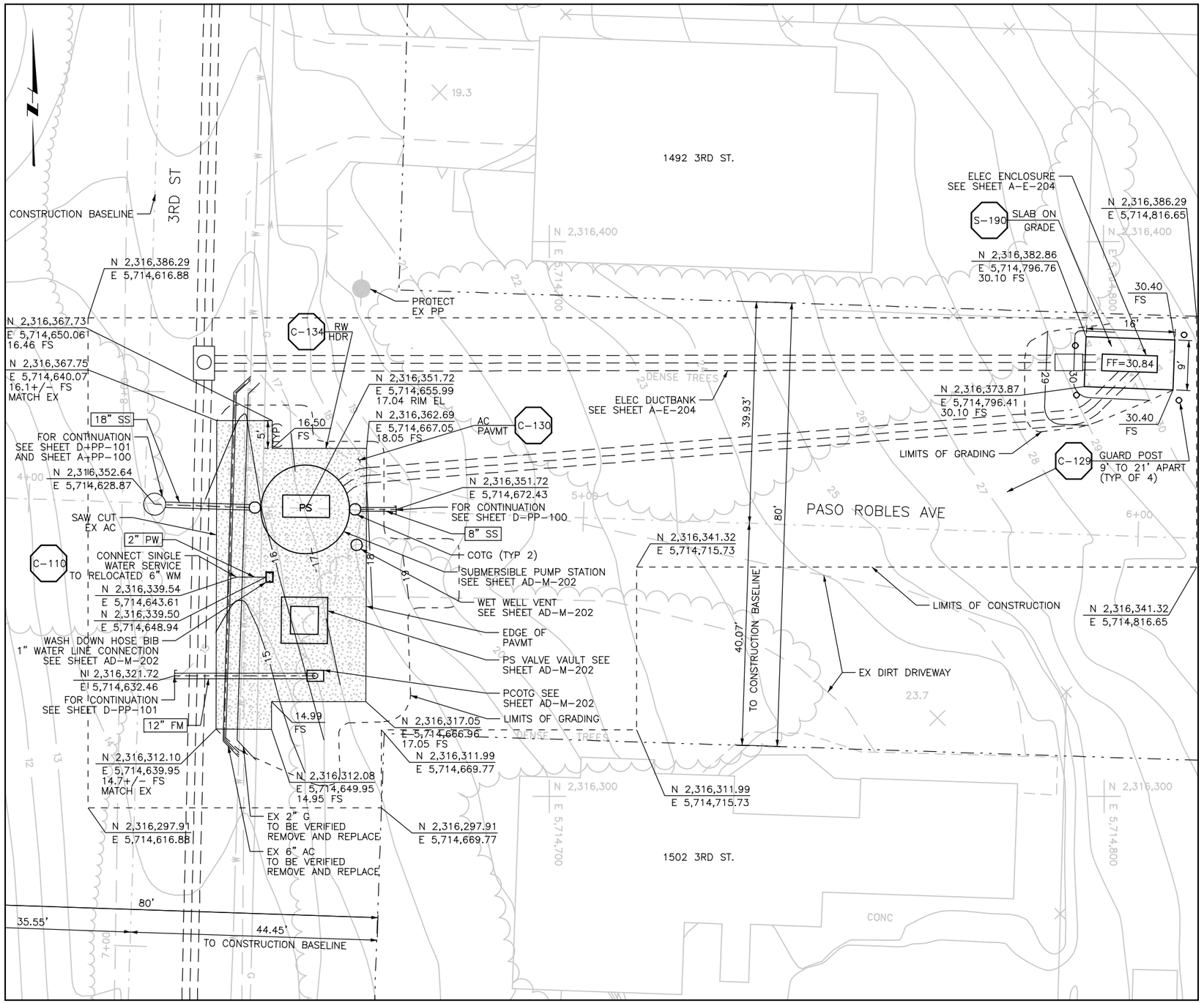
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

CIVIL
BAYWOOD PS SITE PLAN

SHEET A-C-201

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\A-C-201.dgn Plot Date: 09-FEB-2004 12:39



WEST PASO PS SITE PLAN

NOTES:

1. REMOVE AND REPLACE EX 6" AC W SECTION WITH 6" PVC CLASS 200, ENCASED.
2. REMOVE AND REPLACE EX 2" G SECTION WITH 2" G AS SHOWN.
3. PROVIDE RESTRAIN JOINTS/THRUST BLOCKS FOR 6" PVC
4. LIDS AND VAULTS TO BE TRAFFIC RATED FOR H-20 LOADING.
5. NOTIFY HOME OWNER AT 1502 3RD ST. OF DRIVEWAY/STREET CLOSURE DUE TO CONSTRUCTION.
6. COORDINATE ELECTRICAL DUCTBANK DEPTH AND LOCATION BEFORE INSTALLATION OF PROCESS PIPING. SEE SHEET A-E-204.

REGISTERED PROFESSIONAL ENGINEER
LINDA L. TRIPP
No. C 48027
Exp. 12-31-05
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=10'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED L WONG

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2/16/2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2/16/2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 — AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

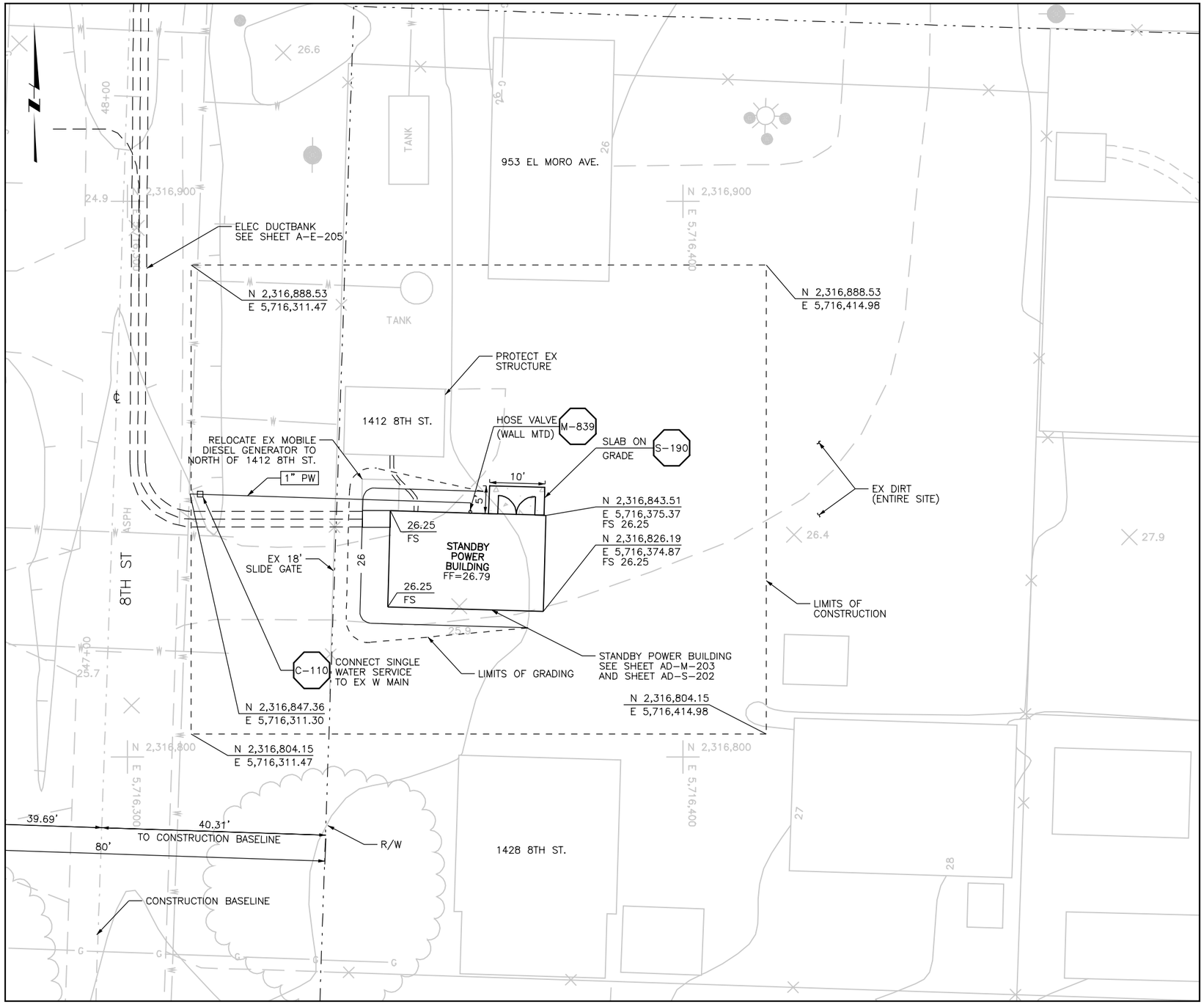
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
CIVIL
WEST PASO PS SITE PLAN

SHEET A-C-202

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\A-C-202.dgn Plot Date: 09-FEB-2004 12:40



BAYWOOD/WEST PASO STANDBY POWER SITE PLAN

NOTES:

1. COORDINATE ELECTRICAL DUCTBANK DEPTH AND LOCATION BEFORE INSTALLATION OF PROCESS PIPING. SEE SHEET A-E-205.

REGISTERED PROFESSIONAL ENGINEER
No. C 48027
Exp. 12-31-05
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE 1"=10'

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED R BUI

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

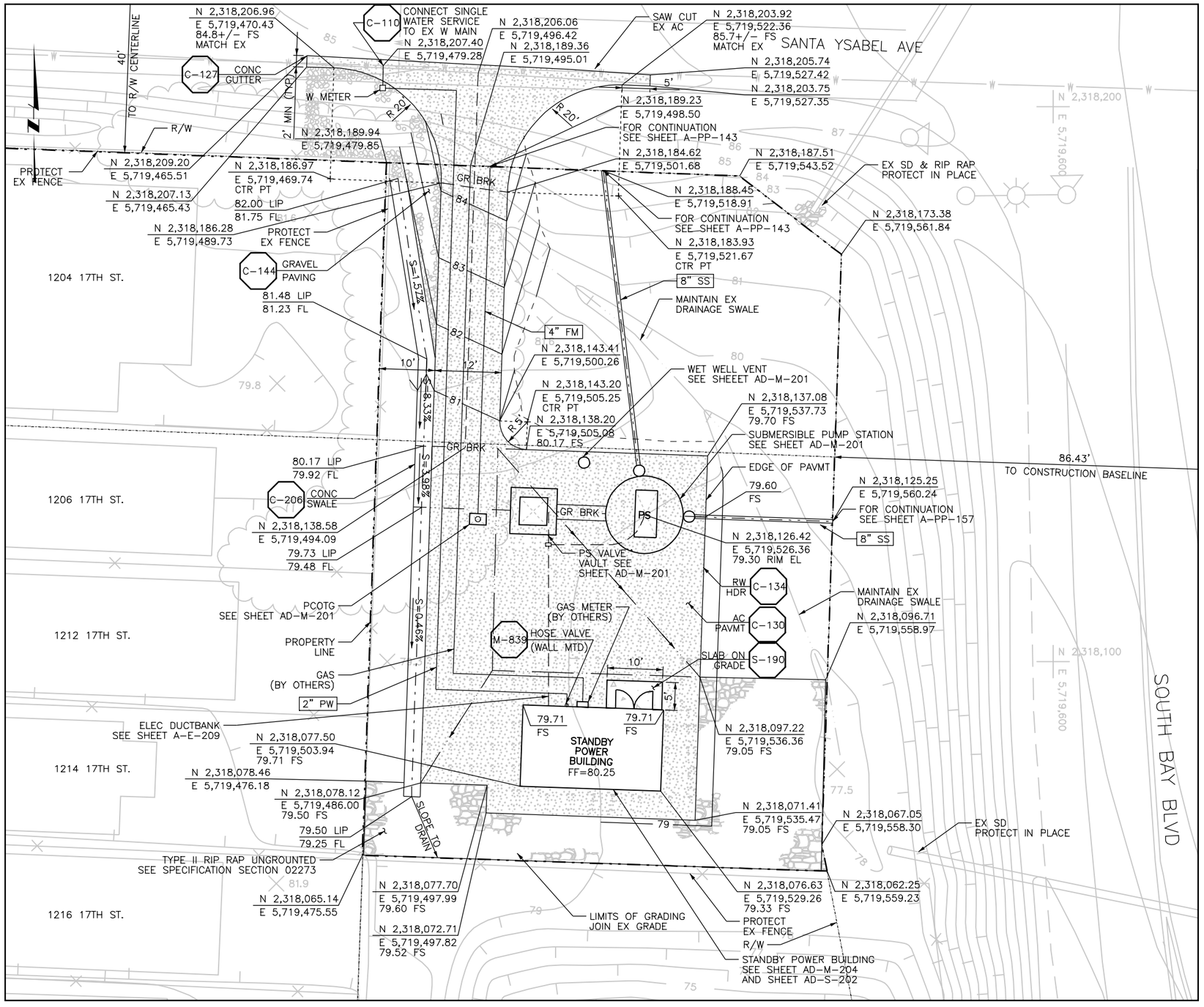
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
CIVIL
BAYWOOD/WEST PASO STANDBY POWER SITE PLAN

SHEET A-C-203

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\A-C-203.dgn Plot Date: 09-FEB-2004 12:40



EAST YSABEL PS SITE PLAN

NOTES:

1. LIDS AND VAULTS TO BE TRAFFIC RATED FOR H-20 LOADING
2. COORDINATE ELECTRICAL DUCTBANK DEPTH AND LOCATION BEFORE INSTALLATION OF PROCESS PIPING. SEE SHEET A-E-209.
3. CONTRACTOR SHALL COORDINATE AND SCHEDULE GAS LINE CONNECTION AND INSTALLATION WITH PACIFIC GAS AND ELECTRIC.

REGISTERED PROFESSIONAL ENGINEER JOHN A. BERGEN No. 48027 Exp. 12-31-05 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=10'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED R BUI

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

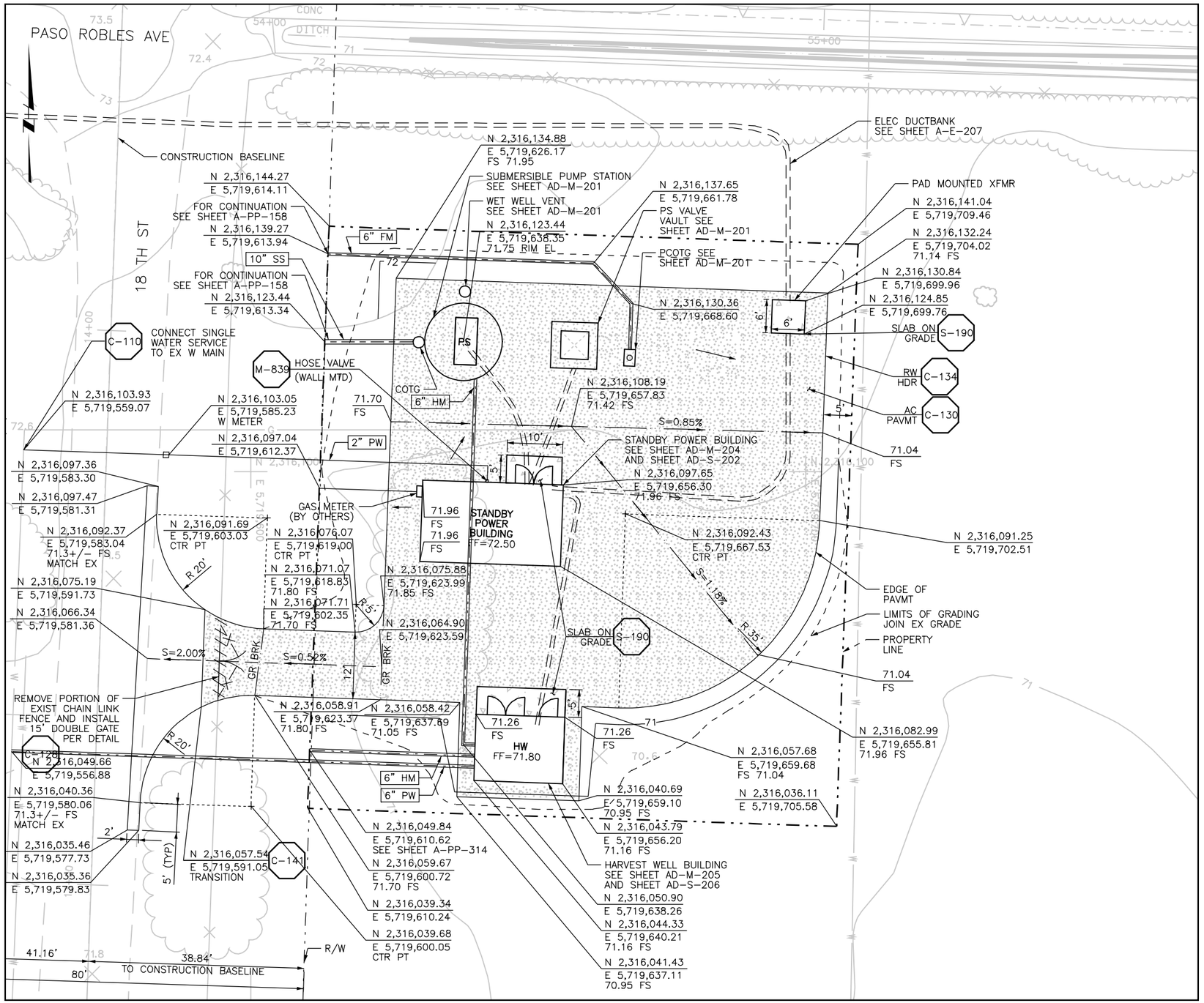
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
CIVIL
EAST YSABEL PS & STANDBY POWER SITE PLAN

SHEET A-C-204

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\A-C-204.dgn Plot Date: 09-FEB-2004 12:41



EAST PASO PS SITE PLAN

NOTES:

1. LIDS AND VAULTS TO BE TRAFFIC RATED FOR H-20 LOADING
2. COORDINATE ELECTRICAL DUCTBANK DEPTH AND LOCATION BEFORE INSTALLATION OF PROCESS PIPING. SEE SHEET A-E-207.
3. CONTRACTOR SHALL COORDINATE AND SCHEDULE GAS LINE CONNECTION AND INSTALLATION WITH PACIFIC GAS AND ELECTRIC.

REGISTERED PROFESSIONAL ENGINEER — LINDA J. TRIPP — No. C 48027 — Exp. 12-31-05 — CIVIL — STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=10'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED R BUI

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

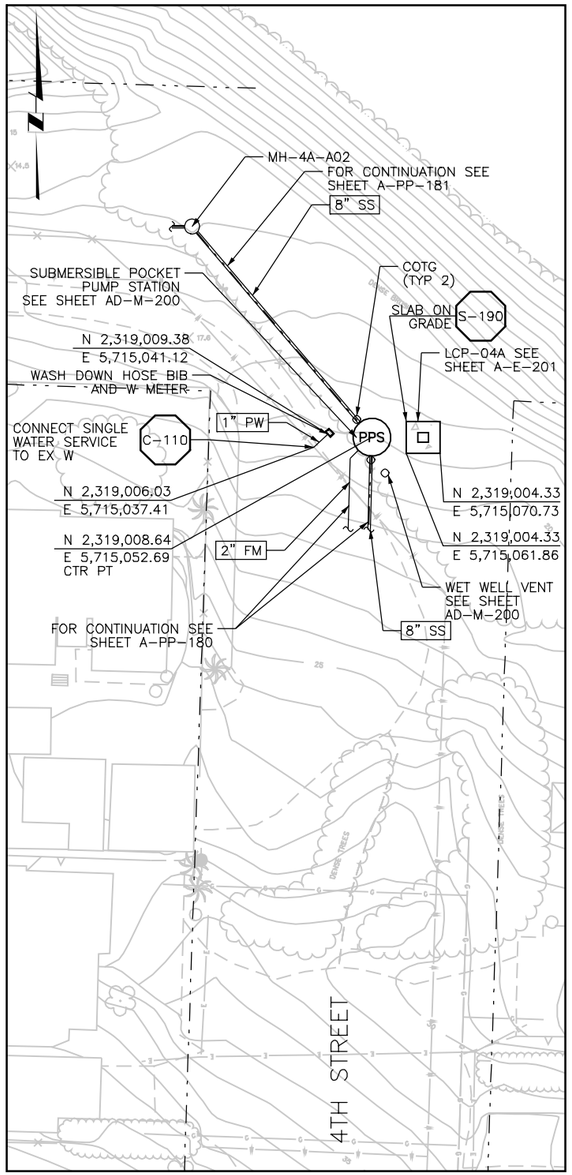
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
CIVIL
EAST PASO PS & STANDBY POWER SITE PLAN

SHEET A-C-205

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\A-C-205.dgn Plot Date: 09-FEB-2004 12:42



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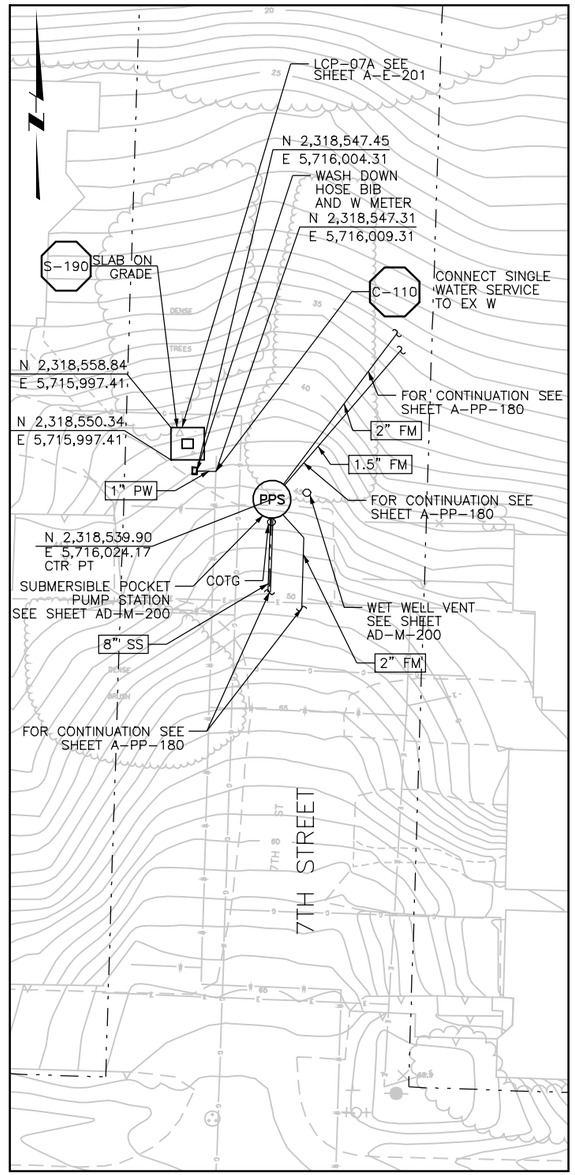
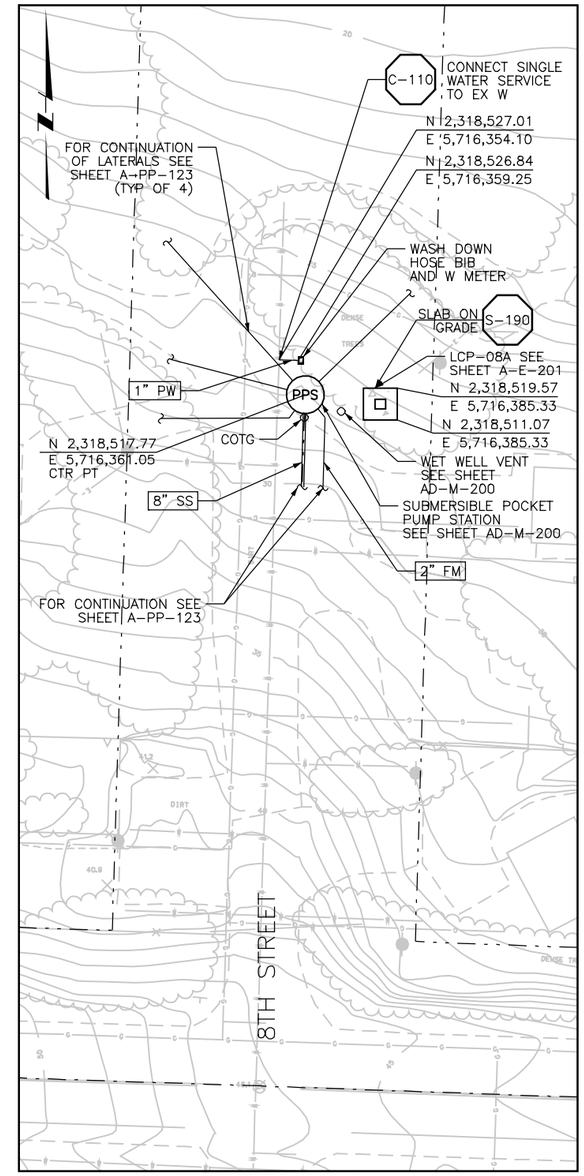


PPS-07A



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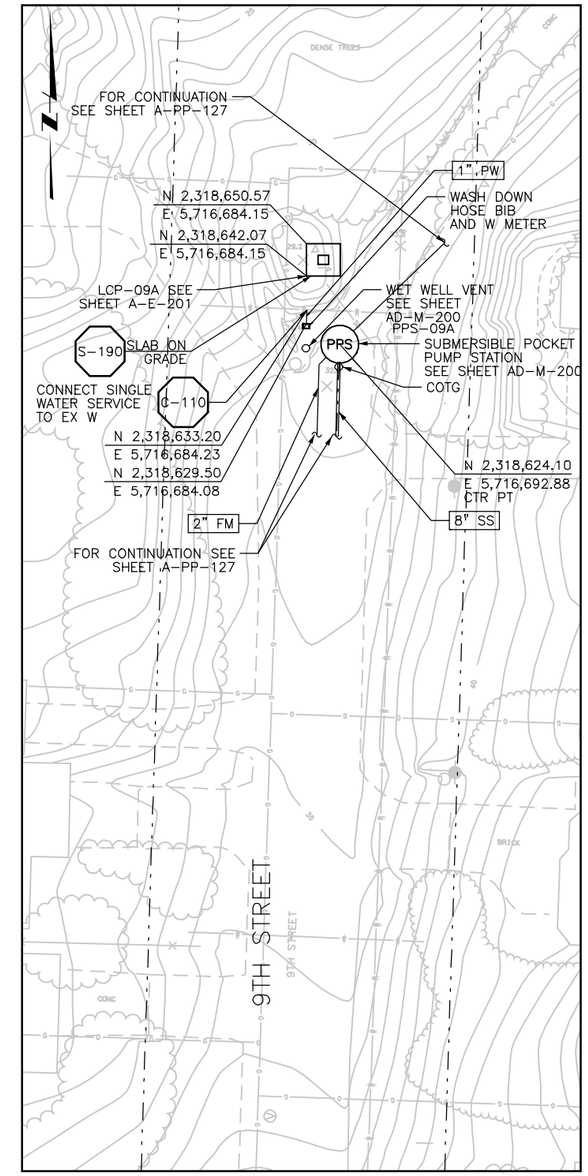


PPS-09A

NOTES:

1. SEE SHEET A-E-202 FOR ELECTRICAL WORK.
2. LIDS AND VAULTS TO BE TRAFFIC RATED FOR H-20 LOADING.
3. COORDINATE ELECTRICAL DUCTBANK DEPTH AND LOCATION BEFORE INSTALLATION OF PROCESS PIPING.

REGISTERED PROFESSIONAL ENGINEER — STEVEN J. TRIPP — No. 48027 — Exp. 12-31-05 — CIVIL — STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=20'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED S HYLAND

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVEN J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

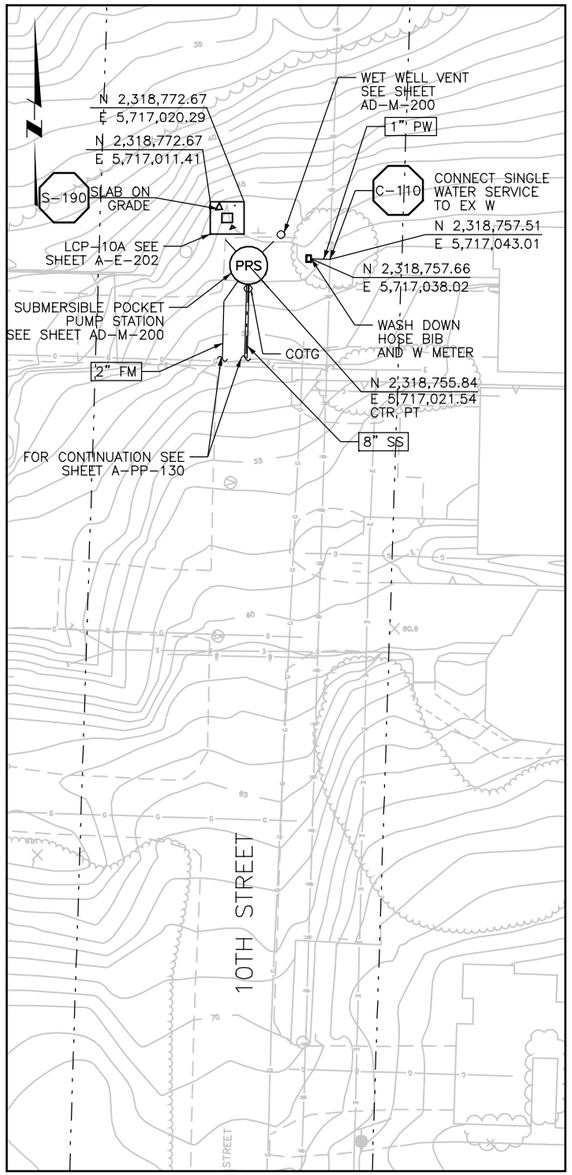
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
CIVIL
PPS 04A, 07A, 08A, 09A SITE PLANS

SHEET A-C-206

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\A-C-206.dgn Plot Date: 09-FEB-2004 13:46



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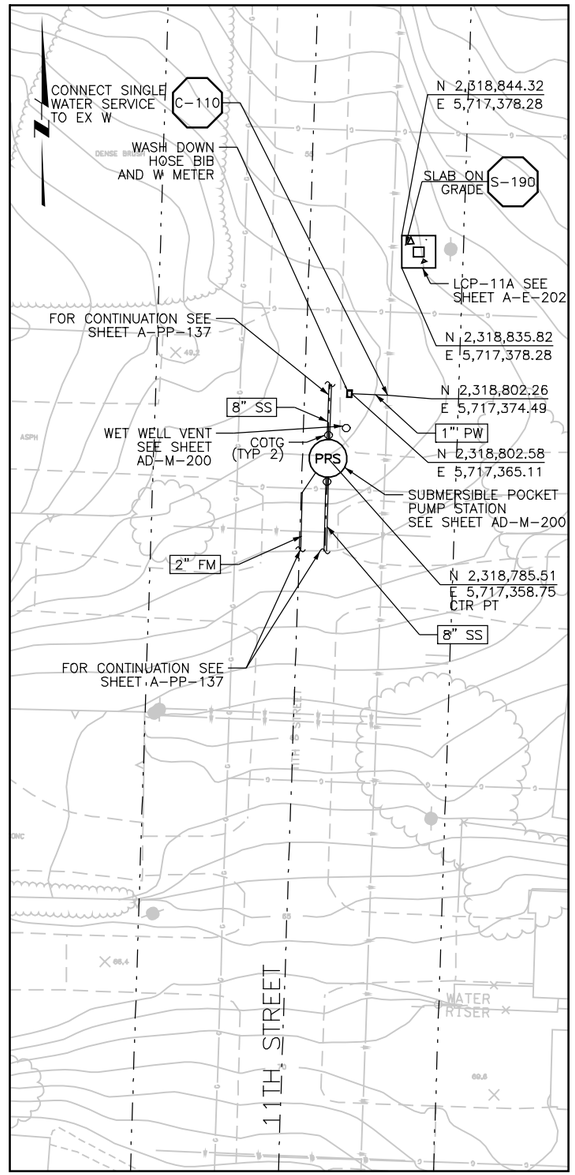

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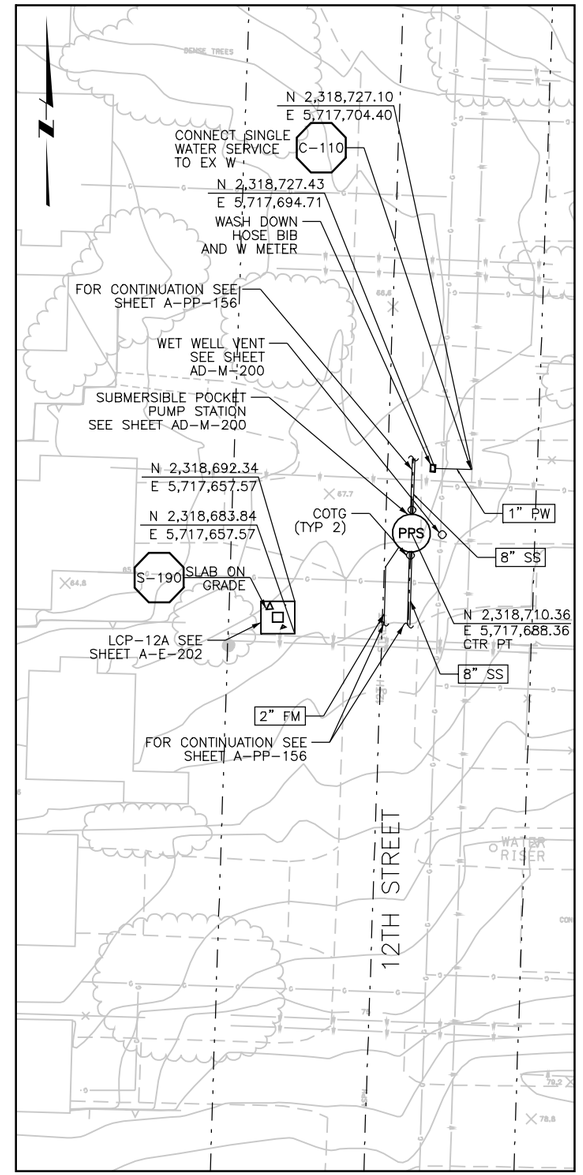

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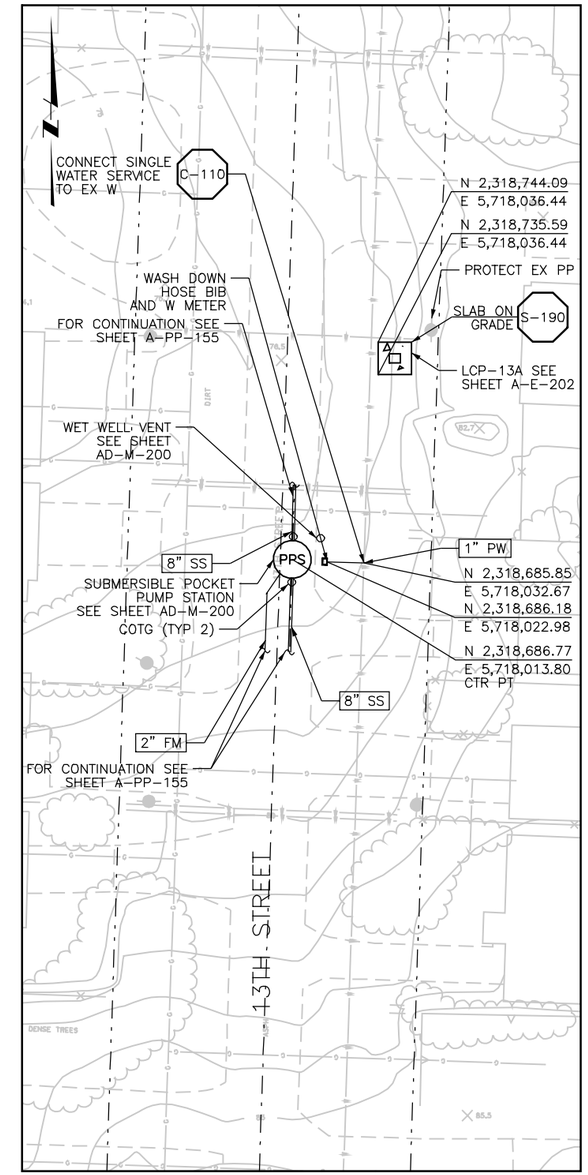


PPS-13A

NOTES:

1. SEE SHEET A-E-202 FOR ELECTRICAL WORK.
2. LIDS AND VAULTS TO BE TRAFFIC RATED FOR H-20 LOADING.
3. COORDINATE ELECTRICAL DUCTBANK DEPTH AND LOCATION BEFORE INSTALLATION OF PROCESS PIPING.

REGISTERED PROFESSIONAL ENGINEER — No. 48027 — Exp. 12-31-05 — CIVIL — STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=20'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED S HYLAND

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

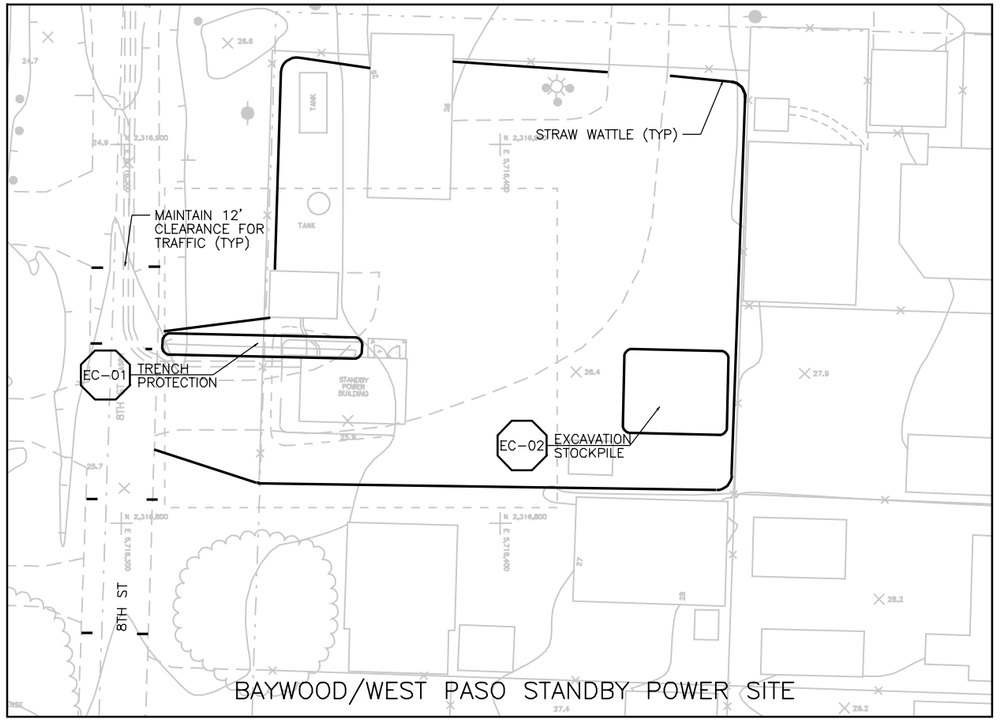
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

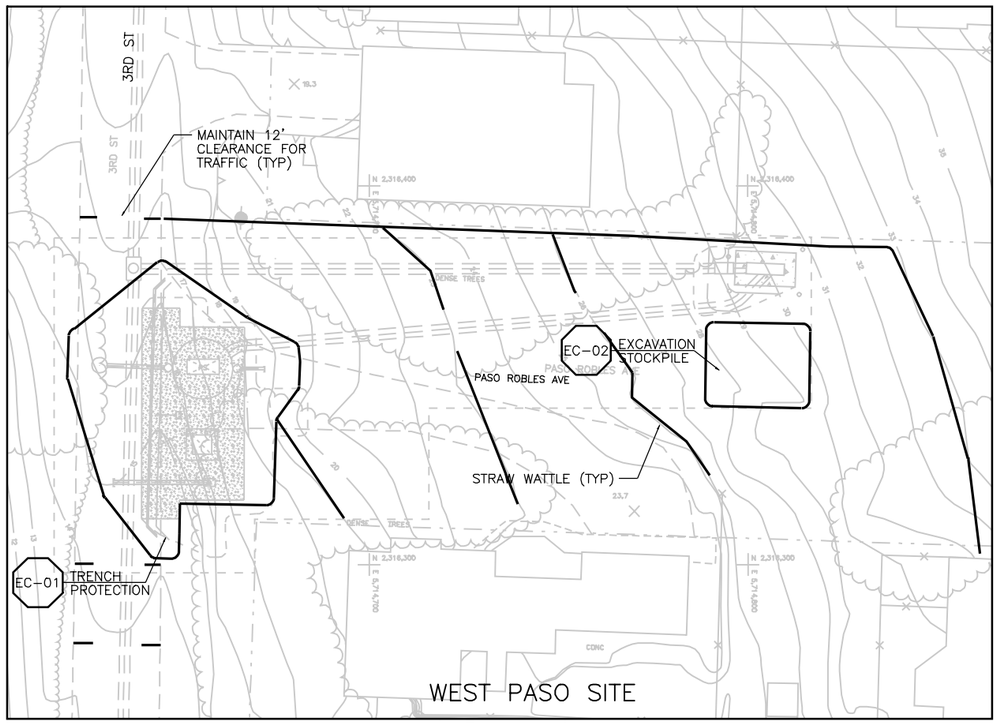
LOS OSOS WASTEWATER PROJECT
CIVIL
PPS 10A, 11A, 12A, 13A SITE PLANS

SHEET A-C-207

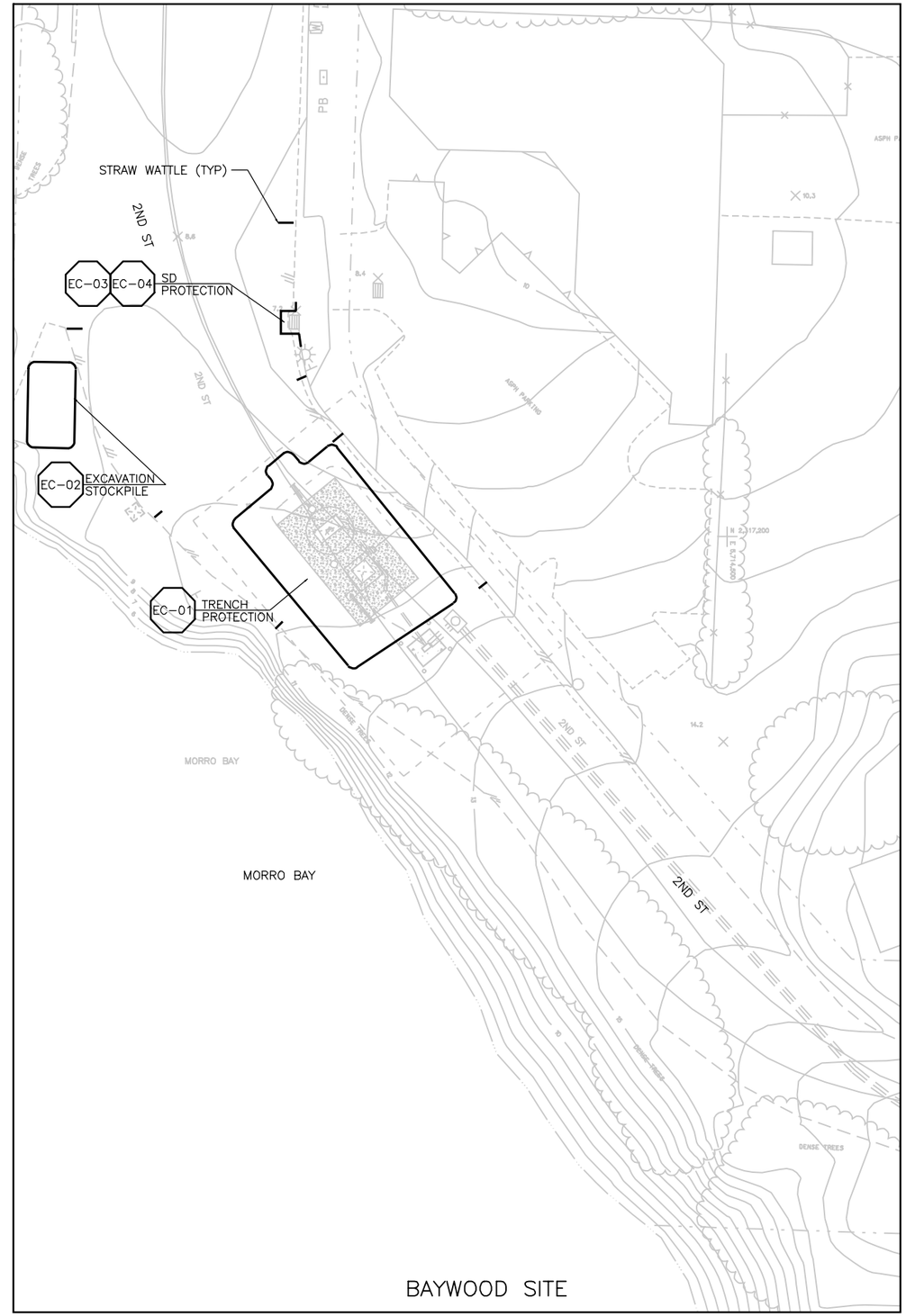
Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\A-C-207.dgn Plot Date: 09-FEB-2004 13:47



BAYWOOD/WEST PASO STANDBY POWER SITE



WEST PASO SITE



BAYWOOD SITE

EROSION CONTROL NOTES:

1. DURING CONSTRUCTION THE CONTRACTOR MUST DIRECT ALL RUNOFF TO NON ERODIBLE LOCATIONS
2. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSSARY MATERIALS SHALL BE AVAILABLE AND STOCKPILLED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
3. THE CONTRACTOR SHALL CONTROL TEMPORARY EROSION CONTROL MEASURES AS SHOWN ON THIS PLAN AND/OR AS DIRECTED BY THE ENGINEER TO CONTROL DRAINAGE WHICH HAS BEEN AFFECTED BY GRADING AND/OR TRENCHING OPERATIONS.
4. ALL PERMANENT SLOPES AND DISTURBED AREAS SHALL BE PLANTED FOR EROSION CONTROL WITH APPROVED PERENNIAL VEGETATION WHICH SHALL BE DENSE AND GROWING PRIOR TO FINAL ACCEPTANCE (SEE THE HYDROSEEDING SPECIFICATION).
5. ALL PROTECTIVE DEVICES TO BE INSTALLED SHALL BE IN PLACE AT THE END OF EACH WORK DAY WHEN THE FIVE-DAY RAIN PROBABILITY EXCEEDS 40 PERCENT.
6. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS AND SEDIMENTATION BASIN AND THE BASIN PUMPED DRY.
7. THE CONTRACTOR MAY BE REQUIRED TO INSTALL AND/OR CONSTRUCT ADDITIONAL DRAINAGE STRUCTURES AS NECESSARY TO PREVENT OR CONTROL EROSION.
8. THE CONTRACTOR IS RESPONSABLE FOR CLEANING ANY EROSION OR DEBRIS SPILLING ONTO A PUBLIC STREET.
9. NO CUT OR FILL SLOPES SHALL BE STEEPER THAN 2' HORIZONTAL TO 1' VERTICAL.
10. ALL STRAW WATTLES TO BE INSTALLED PARALLEL TO GRADING CONTOURS.
11. ALSO SEE SEC. 01570 STORM WATER POLLUTION PREVENTION PLAN.

REGISTERED PROFESSIONAL ENGINEER
No. C 48027
Exp. 12-31-05
CIVIL
STATE OF CALIFORNIA

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\A-C-208.dgn Plot Date: 09-FEB-2004 12:45

REV	DATE	BY	DESCRIPTION

SCALE 1"=20'

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED S HYLAND

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

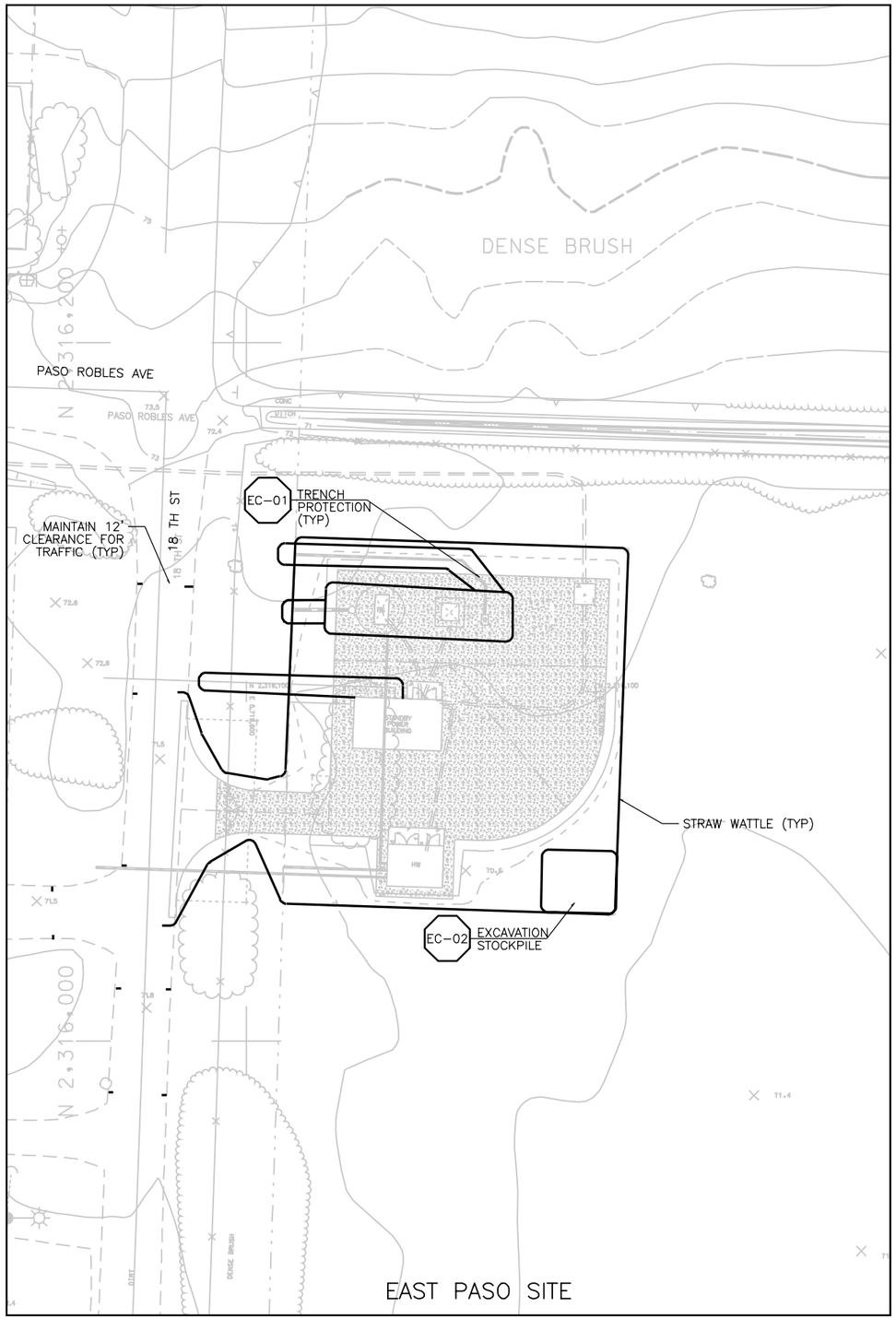
DIGALERT
DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

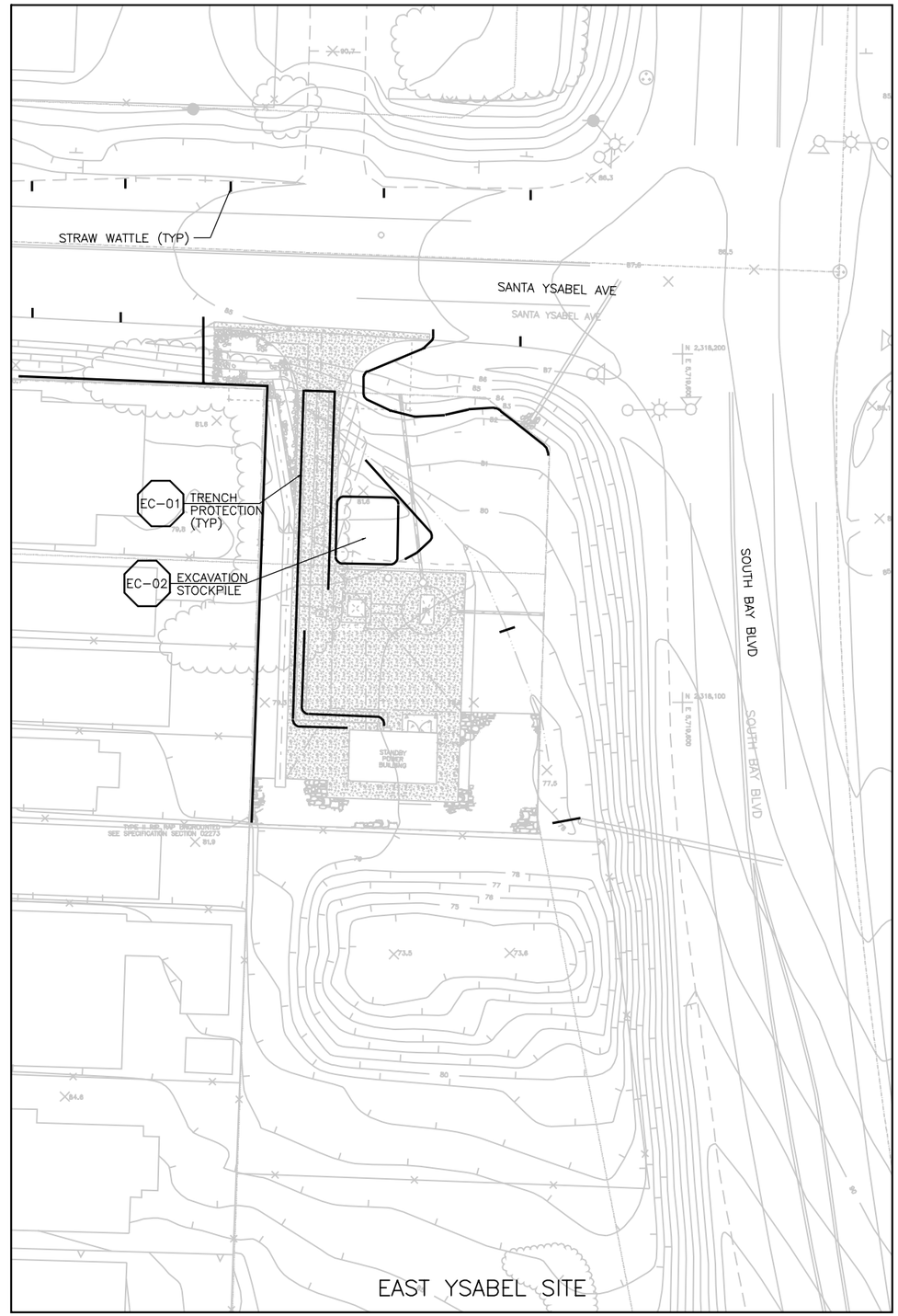
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
CIVIL
EROSION CONTROL PLAN – 1

SHEET A-C-208



EAST PASO SITE



EAST YSABEL SITE

EROSION CONTROL NOTES:

1. DURING CONSTRUCTION THE CONTRACTOR MUST DIRECT ALL RUNOFF TO NON ERODIBLE LOCATIONS
2. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSSARY MATERIALS SHALL BE AVAILABLE AND STOCKPILLED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
3. THE CONTRACTOR SHALL CONTROL TEMPORARY EROSION CONTROL MEASURES AS SHOWN ON THIS PLAN AND/OR AS DIRECTED BY THE ENGINEER TO CONTROL DRAINAGE WHICH HAS BEEN AFFECTED BY GRADING AND/OR TRENCHING OPERATIONS.
4. ALL PERMANENT SLOPES AND DISTURBED AREAS SHALL BE PLANTED FOR EROSION CONTROL WITH APPROVED PERENNIAL VEGETATION WHICH SHALL BE DENSE AND GROWING PRIOR TO FINAL ACCEPTANCE (SEE THE HYDROSEEDING SPECIFICATION).
5. ALL PROTECTIVE DEVICES TO BE INSTALLED SHALL BE IN PLACE AT THE END OF EACH WORK DAY WHEN THE FIVE-DAY RAIN PROBABILITY EXCEEDS 40 PERCENT.
6. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS AND SEDIMENTATION BASIN AND THE BASIN PUMPED DRY.
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8. THE CONTRACTOR IS RESPONSABLE FOR CLEANING ANY EROSION OR DEBRIS SPILLING ONTO A PUBLIC STREET.
9. NO CUT OR FILL SLOPES SHALL BE STEEPER THAN 2' HORIZONTAL TO 1' VERTICAL.
10. ALL STRAW WATTLES TO BE INSTALLED PARALLEL TO GRADING CONTOURS.
11. ALSO SEE SEC. 01570 STORM WATER POLLUTION PREVENTION PLAN.

REGISTERED PROFESSIONAL ENGINEER
No. C 48027
Exp. 12-31-05
CIVIL
STATE OF CALIFORNIA

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\A-C-209.dgn Plot Date: 09-FEB-2004 12:46

REV	DATE	BY	DESCRIPTION

SCALE 1"=20'

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED S HYLAND

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

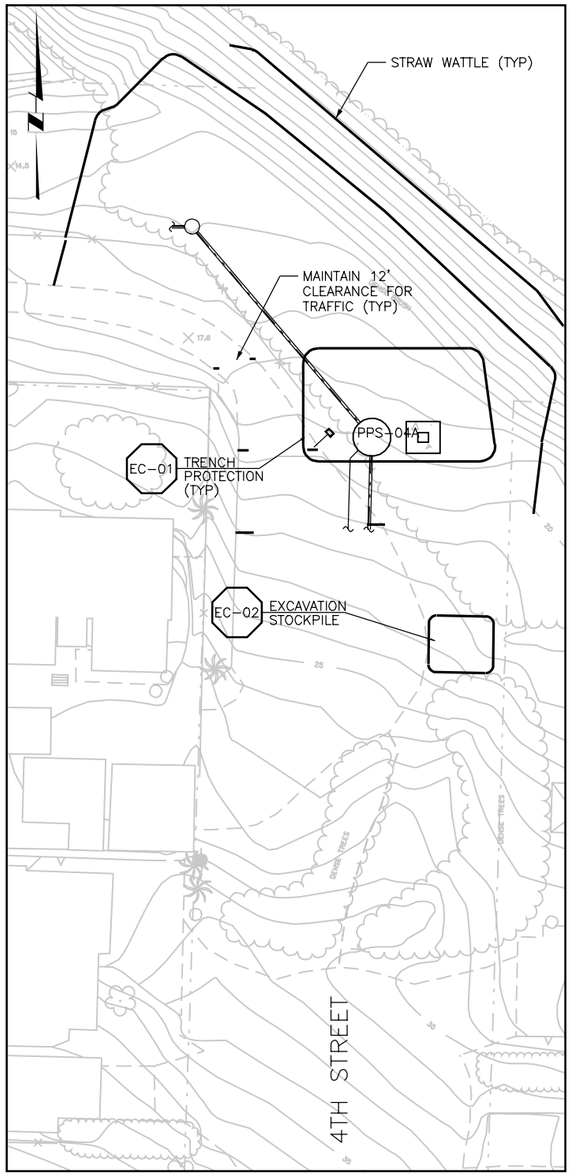
DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
CIVIL
EROSION CONTROL PLAN – 2

SHEET A-C-209



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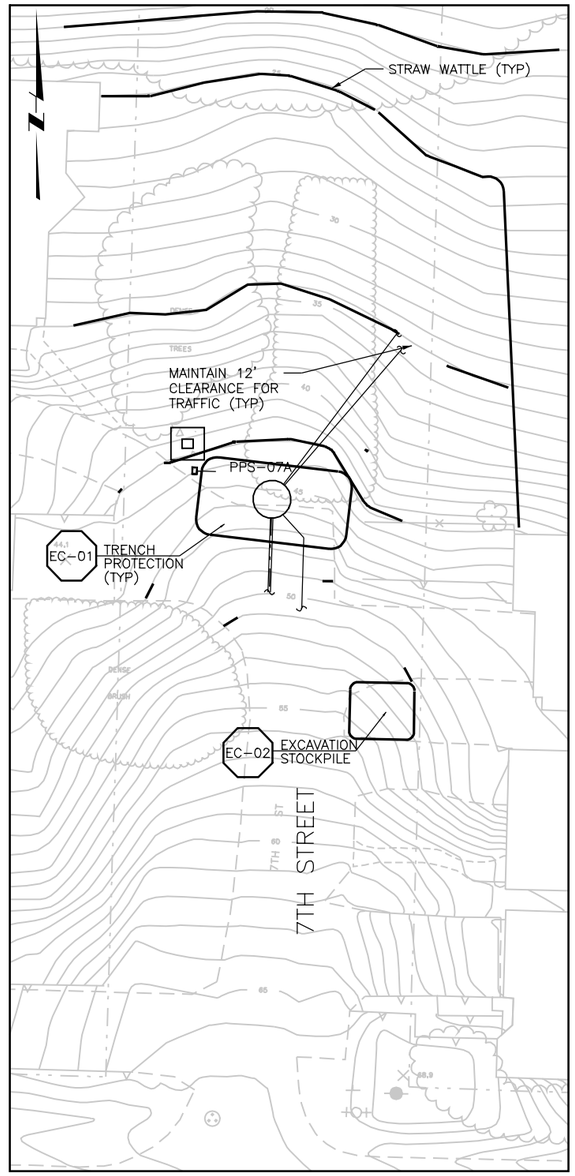

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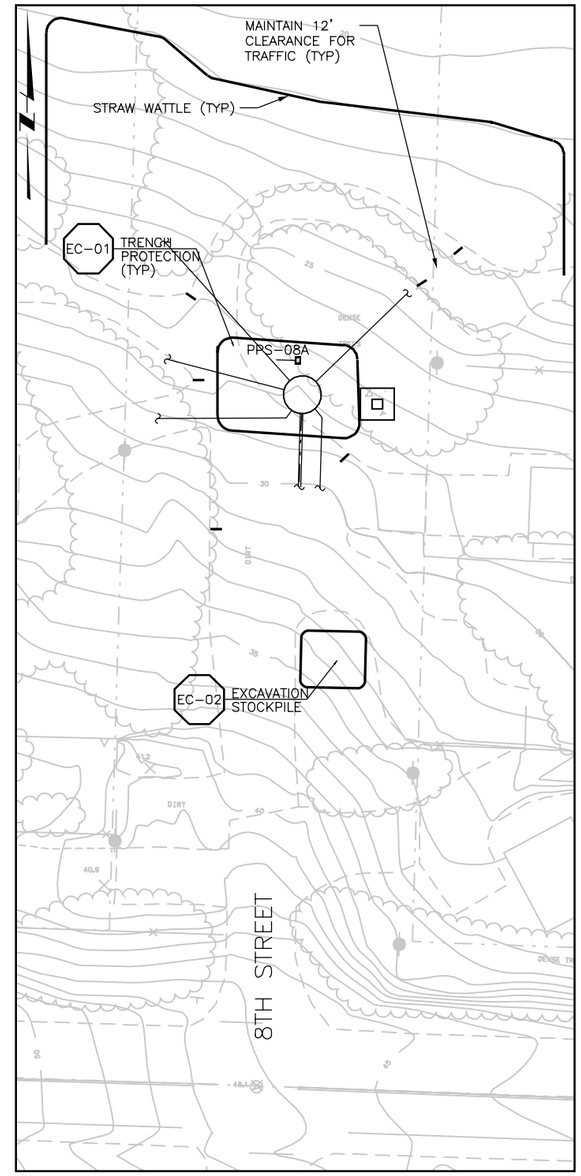

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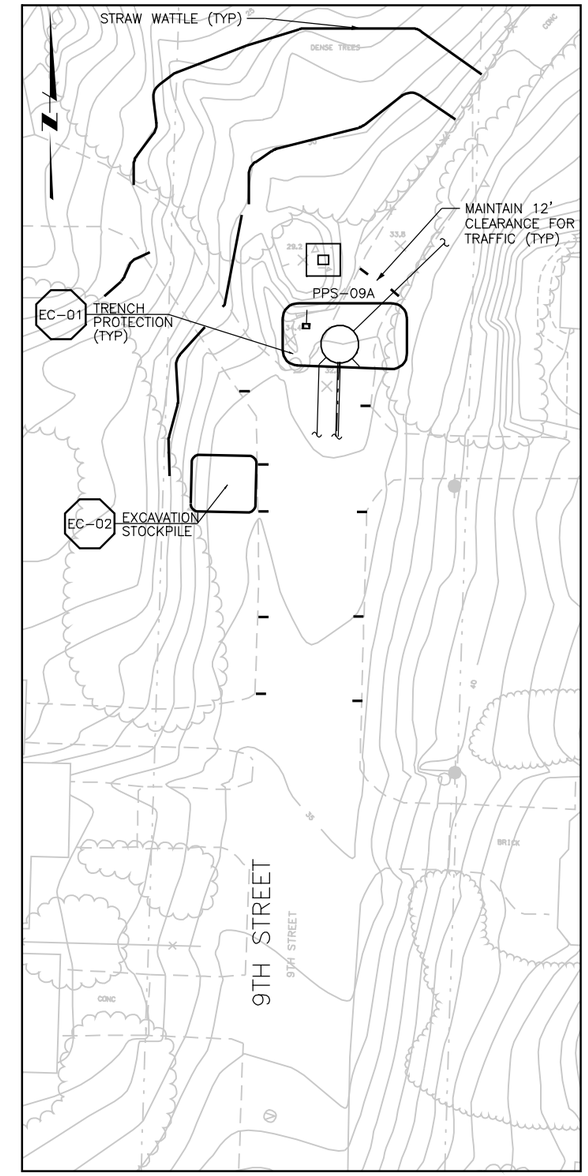


PPS-09A

EROSION CONTROL NOTES:

1. DURING CONSTRUCTION THE CONTRACTOR MUST DIRECT ALL RUNOFF TO NON ERODIBLE LOCATIONS
2. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSSARY MATERIALS SHALL BE AVAILABLE AND STOCKPILLED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
3. THE CONTRACTOR SHALL CONTROL TEMPORARY EROSION CONTROL MEASURES AS SHOWN ON THIS PLAN AND/OR AS DIRECTED BY THE ENGINEER TO CONTROL DRAINAGE WHICH HAS BEEN AFFECTED BY GRADING AND/OR TRENCHING OPERATIONS.
4. ALL PERMANENT SLOPES AND DISTURBED AREAS SHALL BE PLANTED FOR EROSION CONTROL WITH APPROVED PERENNIAL VEGETATION WHICH SHALL BE DENSE AND GROWING PRIOR TO FINAL ACCEPTANCE (SEE THE HYDROSEEDING SPECIFICATION).
5. ALL PROTECTIVE DEVICES TO BE INSTALLED SHALL BE IN PLACE AT THE END OF EACH WORK DAY WHEN THE FIVE-DAY RAIN PROBABILITY EXCEEDS 40 PERCENT.
6. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS AND SEDIMENTATION BASIN AND THE BASIN PUMPED DRY.
7. THE CONTRACTOR MAY BE REQUIRED TO INSTALL AND/OR CONSTRUCT ADDITIONAL DRAINAGE STRUCTURES AS NECESSARY TO PREVENT OR CONTROL EROSION.
8. THE CONTRACTOR IS RESPONSABLE FOR CLEANING ANY EROSION OR DEBRIS SPILLING ONTO A PUBLIC STREET.
9. NO CUT OR FILL SLOPES SHALL BE STEEPER THAN 2' HORIZONTAL TO 1' VERTICAL.
10. ALL STRAW WATTLES TO BE INSTALLED PARALLEL TO GRADING CONTOURS.
11. ALSO SEE SEC. 01570 STORM WATER POLLUTION PREVENTION PLAN.

REGISTERED PROFESSIONAL ENGINEER — JOHN A. BERGEN — No. 48027 — Exp. 12-31-05 — CIVIL — STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=20'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED S HYLAND

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

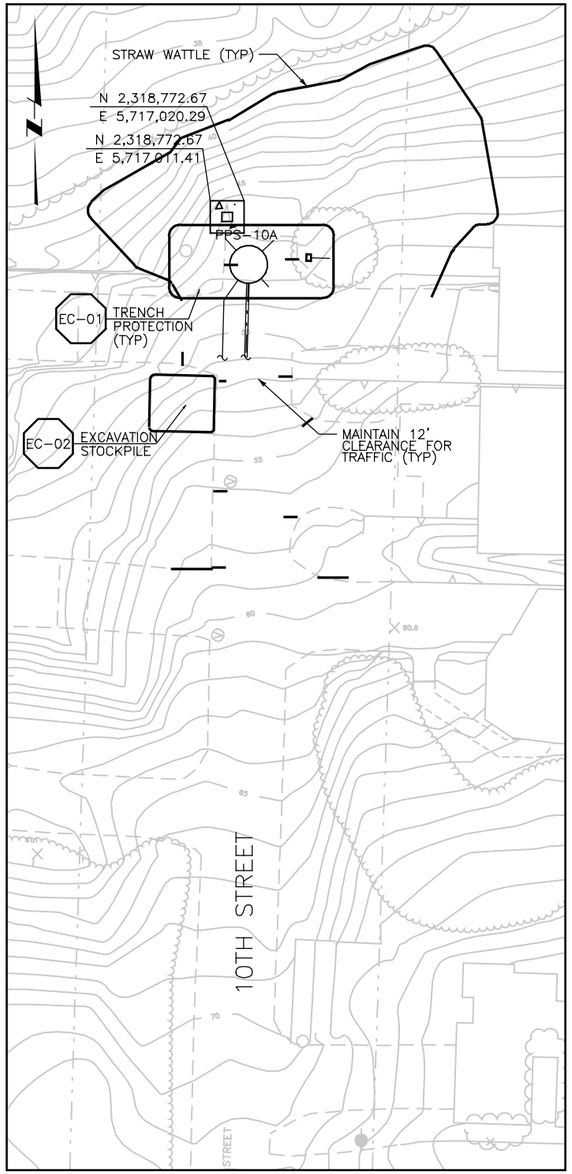
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

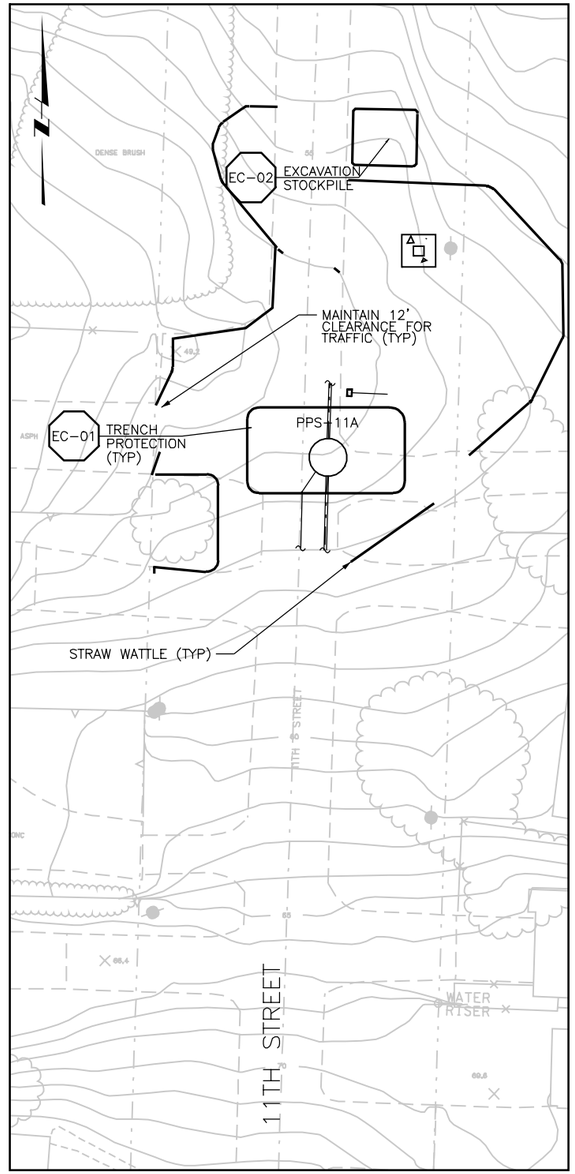
CIVIL
EROSION CONTROL PLAN – 3

SHEET A-C-210

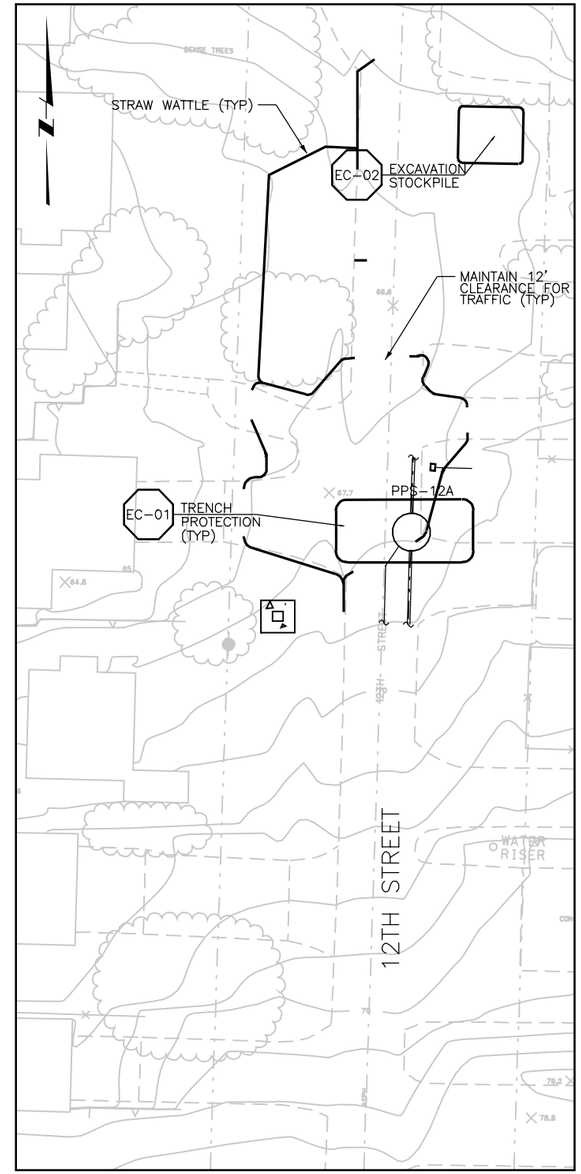
Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\A-C-210.dgn Plot Date: 09-FEB-2004 12:48



PPS-10A



PPS-11A



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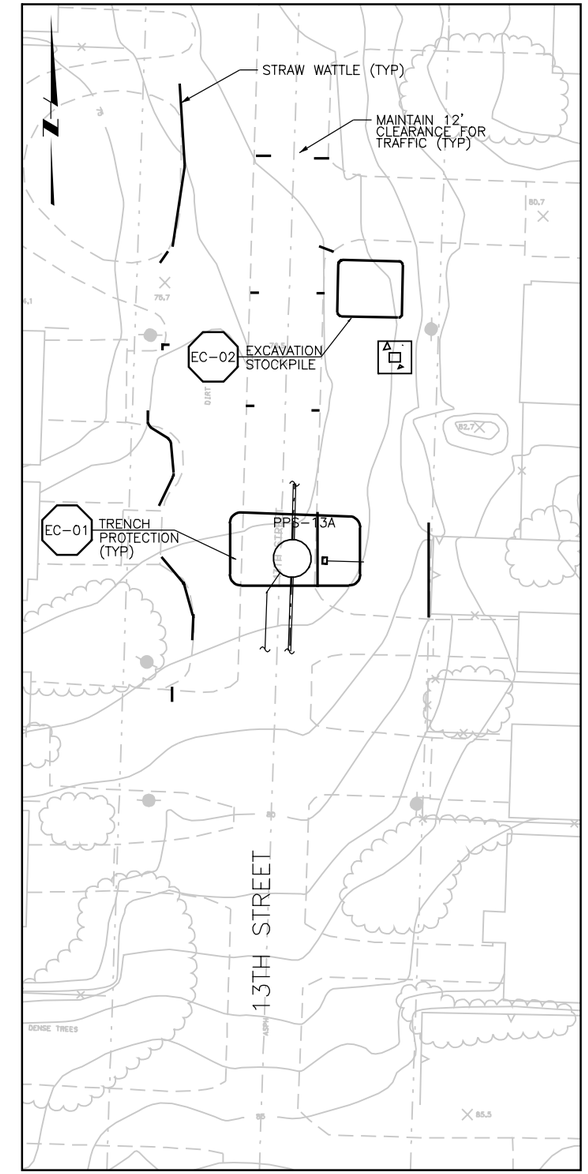


PPS-13A

EROSION CONTROL NOTES:

1. DURING CONSTRUCTION THE CONTRACTOR MUST DIRECT ALL RUNOFF TO NON ERODIBLE LOCATIONS
2. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE AND STOCKPILLED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
3. THE CONTRACTOR SHALL CONTROL TEMPORARY EROSION CONTROL MEASURES AS SHOWN ON THIS PLAN AND/OR AS DIRECTED BY THE ENGINEER TO CONTROL DRAINAGE WHICH HAS BEEN AFFECTED BY GRADING AND/OR TRENCHING OPERATIONS.
4. ALL PERMANENT SLOPES AND DISTURBED AREAS SHALL BE PLANTED FOR EROSION CONTROL WITH APPROVED PERENNIAL VEGETATION WHICH SHALL BE DENSE AND GROWING PRIOR TO FINAL ACCEPTANCE (SEE THE HYDROSEEDING SPECIFICATION).
5. ALL PROTECTIVE DEVICES TO BE INSTALLED SHALL BE IN PLACE AT THE END OF EACH WORK DAY WHEN THE FIVE-DAY RAIN PROBABILITY EXCEEDS 40 PERCENT.
6. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS AND SEDIMENTATION BASIN AND THE BASIN PUMPED DRY.
7. THE CONTRACTOR MAY BE REQUIRED TO INSTALL AND/OR CONSTRUCT ADDITIONAL DRAINAGE STRUCTURES AS NECESSARY TO PREVENT OR CONTROL EROSION.
8. THE CONTRACTOR IS RESPONSABLE FOR CLEANING ANY EROSION OR DEBRIS SPILLING ONTO A PUBLIC STREET.
9. NO CUT OR FILL SLOPES SHALL BE STEEPER THAN 2' HORIZONTAL TO 1' VERTICAL.
10. ALL STRAW WATTLES TO BE INSTALLED PARALLEL TO GRADING CONTOURS.
11. ALSO SEE SEC. 01570 STORM WATER POLLUTION PREVENTION PLAN.

REGISTERED PROFESSIONAL ENGINEER STEVEN J. HYLAND No. C 48027 Exp. 12-31-05 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=20'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED S HYLAND

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

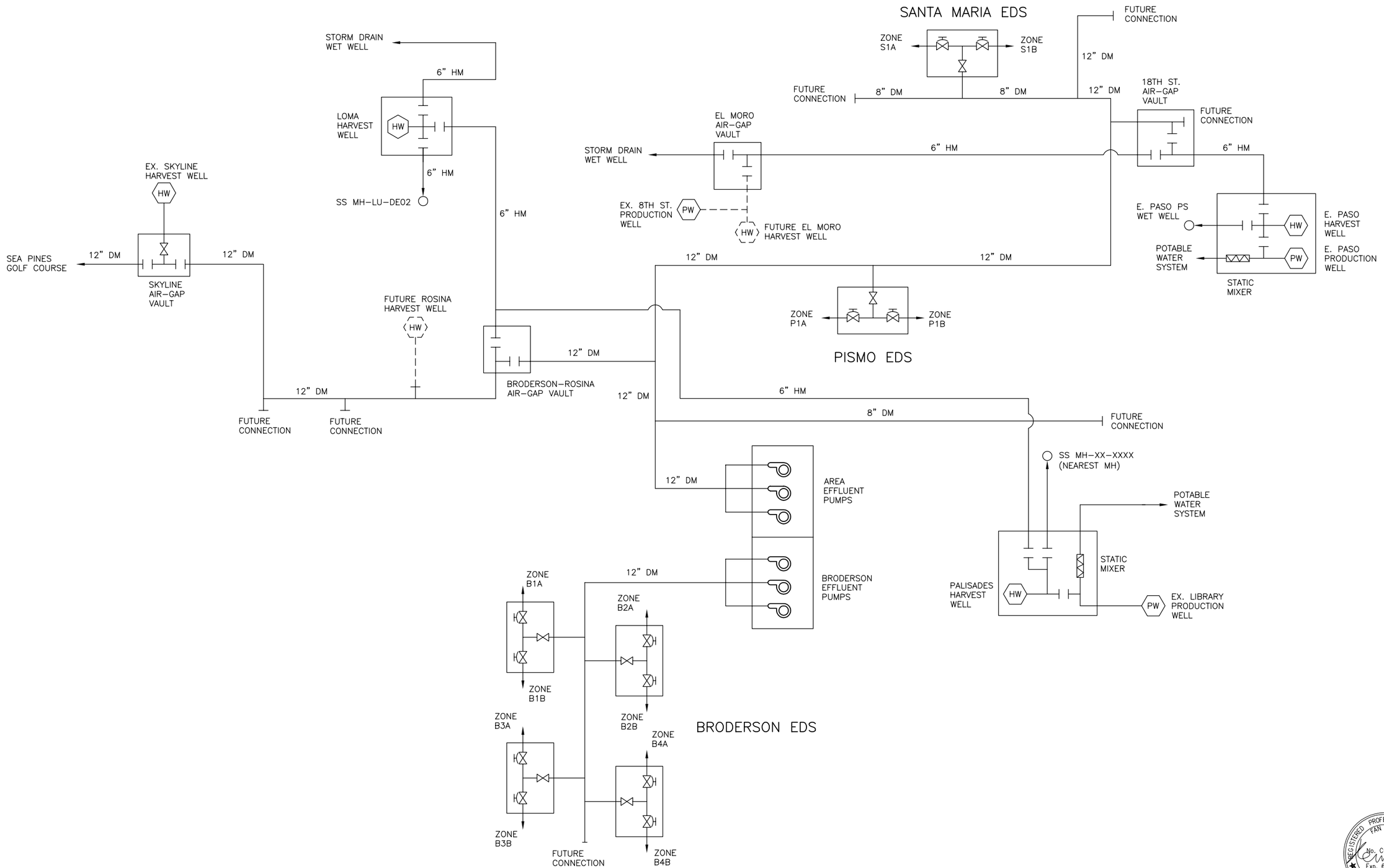
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
CIVIL
EROSION CONTROL PLAN – 4

SHEET A-C-211

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\A-C-211.dgn Plot Date: 09-FEB-2004 12:49



REGISTERED PROFESSIONAL ENGINEER
FAN KAT
No. C-60027
Exp. 6-30-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NTS

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED SJH

SUBMITTED BY
JOHN A. BERGEN — C31069 — 2-16-2004 (LICENSE NO. / DATE)
STEVEN J. HYLAND — C23892 — 2-16-2004 (LICENSE NO. / DATE)

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

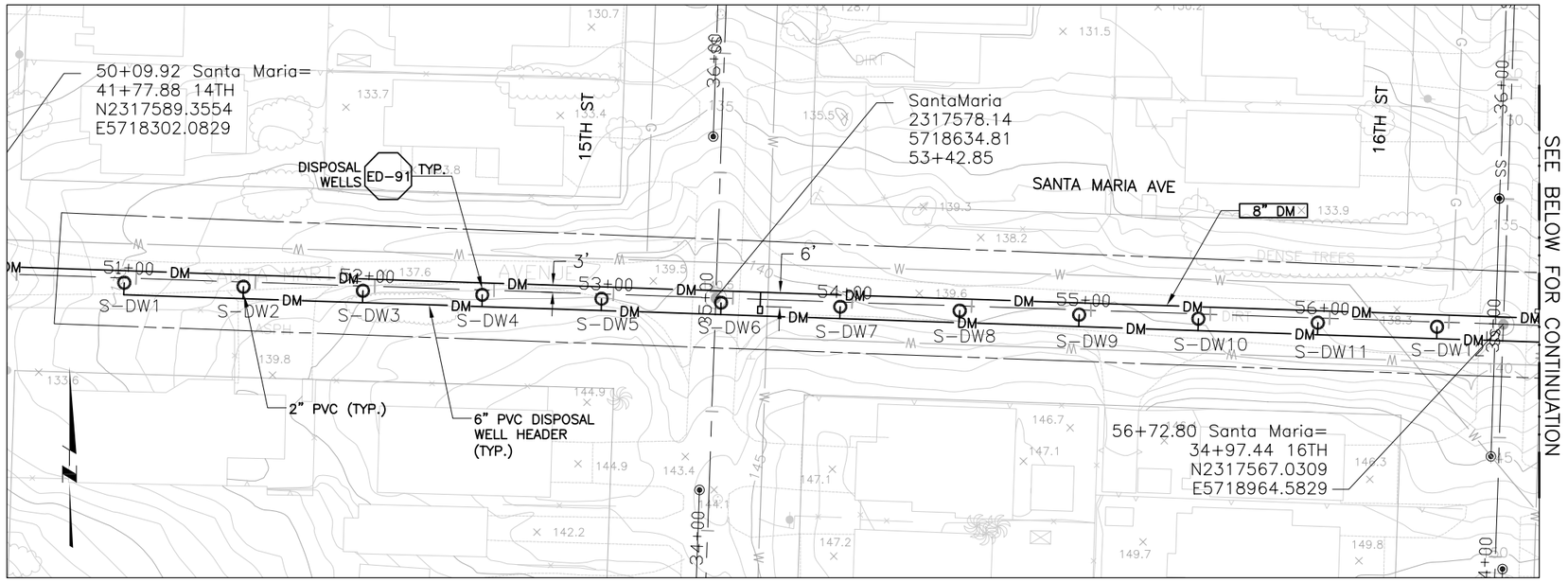
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

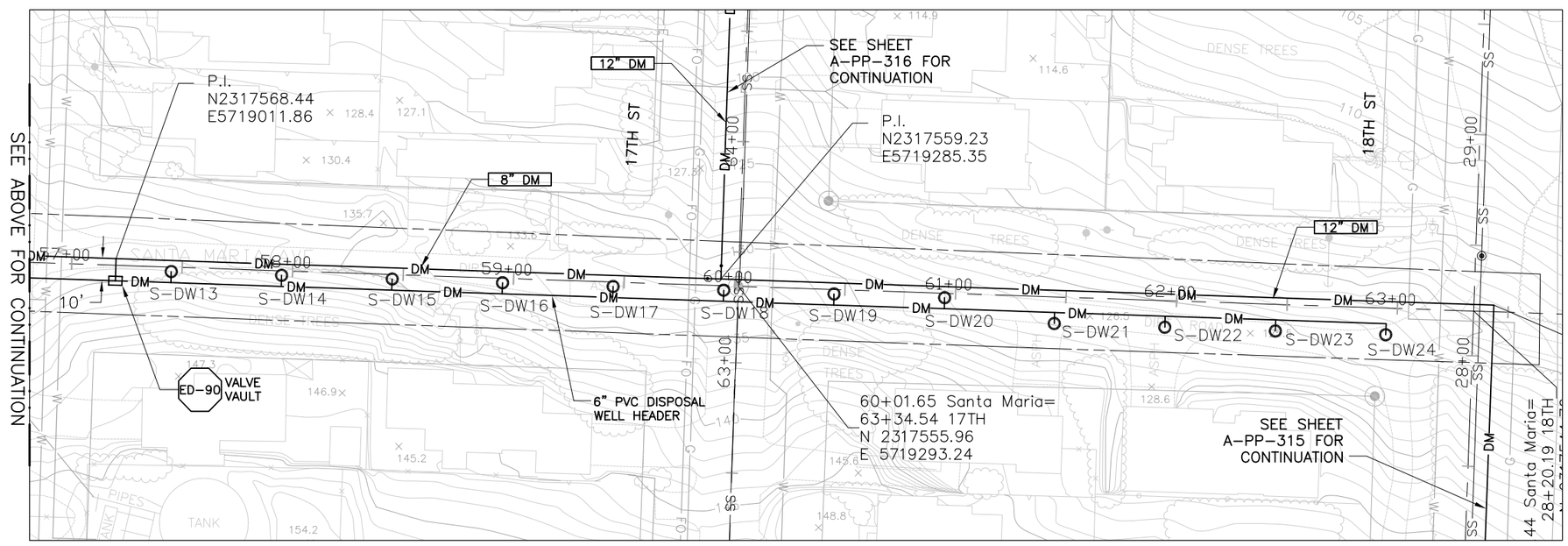
EFFLUENT DISPOSAL SYSTEM
EDS SCHEMATIC DIAGRAM

SHEET ED-C-334

XREF: los_ed_bdr
FILE: N:\Projects\los_osos\Collect_Sys\ED\civ\ed-c-334.dwg USER: kxkoi Feb 09, 2004 4:56pm Job No: 1481166



SANTA MARIA EDS DISPOSAL WELL LOCATIONS			
DISPOSAL WELL NAME	NORTHING	EASTING	EX SURFACE ELEVATION
S-DW1	2317584.48	5718387.14	135.16
S-DW2	2317582.8	5718437.11	137.37
S-DW3	2317581.11	5718487.08	138.59
S-DW4	2317579.43	5718537.05	139.47
S-DW5	2317577.75	5718587.02	140.14
S-DW6	2317576.06	5718636.99	140.56
S-DW7	2317574.38	5718686.97	140.45
S-DW8	2317572.7	5718736.94	139.7
S-DW9	2317571.01	5718786.91	140.39
S-DW10	2317569.33	5718836.88	139.86
S-DW11	2317567.65	5718886.85	139.01
S-DW12	2317565.96	5718936.82	138.36
S-DW13	2317562.6	5719036.77	139
S-DW14	2317560.92	5719086.74	136.99
S-DW15	2317559.23	5719136.71	134.99
S-DW16	2317557.55	5719186.68	133.77
S-DW17	2317555.87	5719236.65	132.4
S-DW18	2317554.18	5719286.63	132.12
S-DW19	2317552.5	5719336.6	130.58
S-DW20	2317550.82	5719386.57	128.07
S-DW21	2317539.14	5719436.2	126.94
S-DW22	2317537.46	5719486.18	126.39
S-DW23	2317535.77	5719536.15	125.28
S-DW24	2317534.09	5719586.12	123.69



SANTA MARIA EDS SITE PLAN

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60027 Exp. 6-30-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

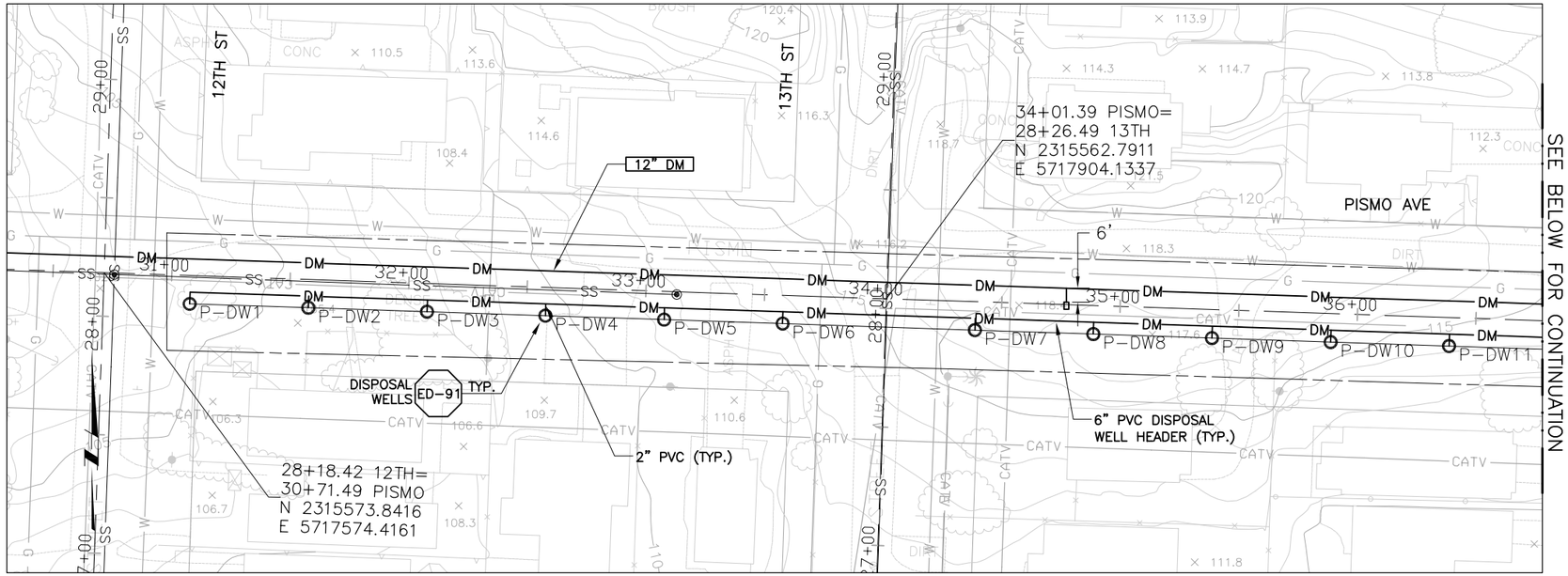
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

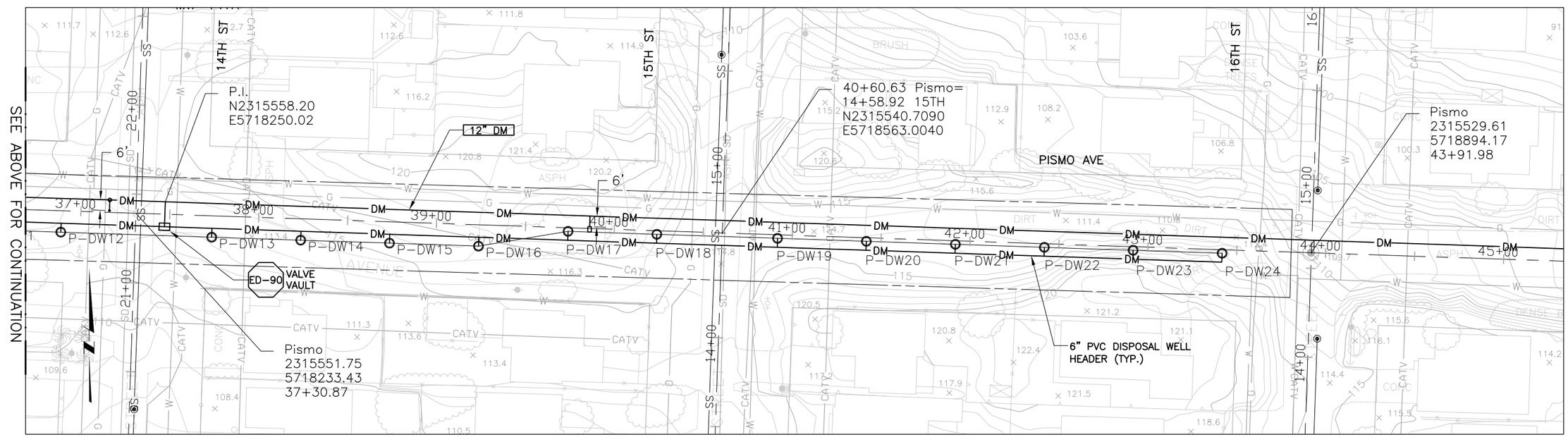
LOS OSOS WASTEWATER PROJECT
EFFLUENT DISPOSAL SYSTEM
EDS SITE PLAN – SANTA MARIA

SHEET ED-C-335

XREF: los_ed_bdr c-ed-drn c-ed-bs x-feat-aerl x-feat-row x-feat-topo c-ed-ss bn-feat-cnbl bn-util-ss cn-feat-cnbl cN-UTIL-SS an-feat-cnbl an-util-ss dn-util-ss c-ed-util c-ed-pp cX-UTIL-all cX-UTIL-all x-sup-topo dX-util-all Morro and Corr Easement
FILE: N:\Projects\los_osos\Collect_Sys\ED\civ\ed-c-335.dwg USER: kakai Feb 09, 2004 3:02pm Job No: 1481166



PISMO EDS DISPOSAL WELL LOCATIONS			
DISPOSAL WELL NAME	NORTHING	EASTING	EX SURFACE ELEVATION
P-DW1	5717610.55	2315560.62	103.66
P-DW2	5717660.52	2315558.96	105.49
P-DW3	5717710.49	2315557.29	107.18
P-DW4	5717760.46	2315555.62	109.66
P-DW5	5717810.44	2315553.96	111.38
P-DW6	5717860.41	2315552.29	113.12
P-DW7	5717941.41	2315549.53	117.31
P-DW8	5717991.38	2315547.86	117.57
P-DW9	5718041.35	2315546.19	117.51
P-DW10	5718091.32	2315544.51	116.04
P-DW11	5718141.29	2315542.84	114.23
P-DW12	5718191.27	2315541.16	113.62
P-DW13	5718276.09	2315538.32	113.12
P-DW14	5718326.07	2315536.64	113.84
P-DW15	5718376.04	2315534.97	116.11
P-DW16	5718426.01	2315533.29	117.03
P-DW17	5718476.32	2315541.61	118.46
P-DW18	5718526.29	2315539.94	116.29
P-DW19	5718594.08	2315537.67	114.81
P-DW20	5718644.05	2315535.99	114.00
P-DW21	5718694.02	2315534.32	112.89
P-DW22	5718744.00	2315532.64	112.20
P-DW23	5718793.97	2315530.97	115.43
P-DW24	5718843.94	2315529.29	114.08



PISMO EDS SITE PLAN

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60027 CIVIL Exp. 6-30-04 STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

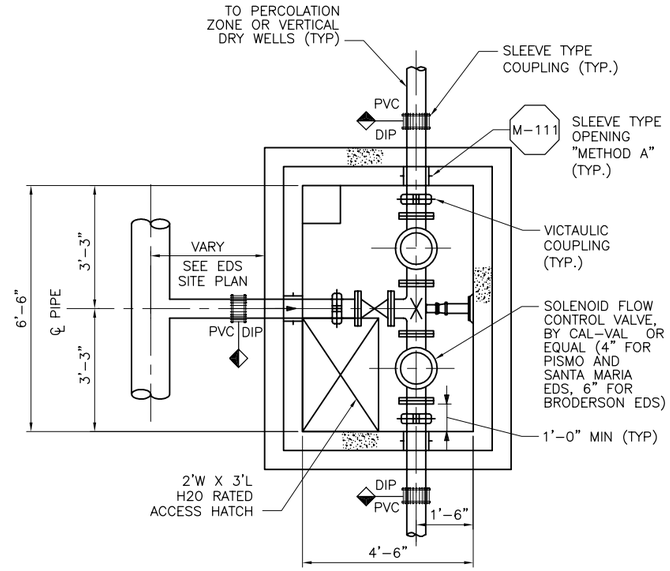
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

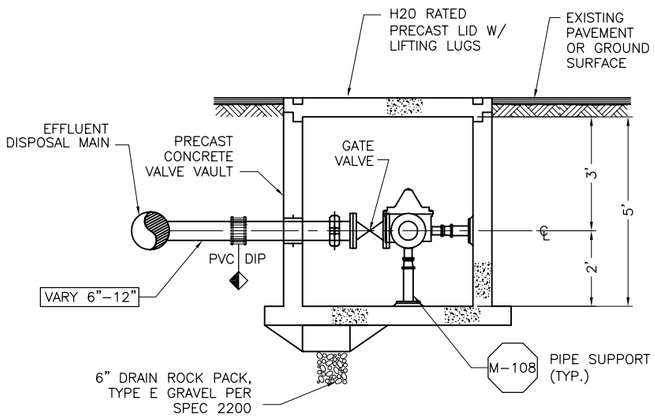
LOS OSOS WASTEWATER PROJECT
EFFLUENT DISPOSAL SYSTEM
EDS SITE PLAN – PISMO

SHEET ED–C–336

XREF: los_ed_bdr c-ed-drn c-ed-bs x-feat-aerl x-feat-row x-feat-topo c-ed-util c-ed-pp cX-UTIL-all aX-UTIL-all c-ed-ss bn-util-ss dn-feat-cnbl dX-util-all x-sup-topo Morro and Corr Easement
FILE: N:\Projects\los_osos\Collect_Sys\ED\civ\ed-c-336.dwg USER: kxkoi Feb 09, 2004 3:03pm Job No: 1481166



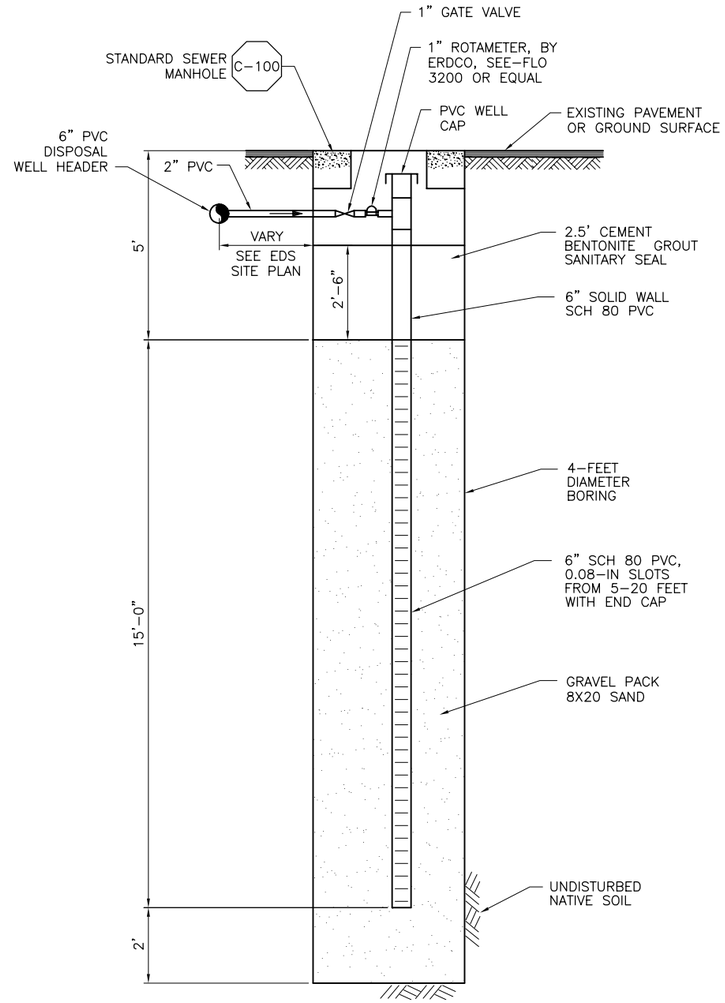
PLAN



SECTION

EDS VALVE VAULT — ED-90

N.T.S.



DISPOSAL WELL — ED-91

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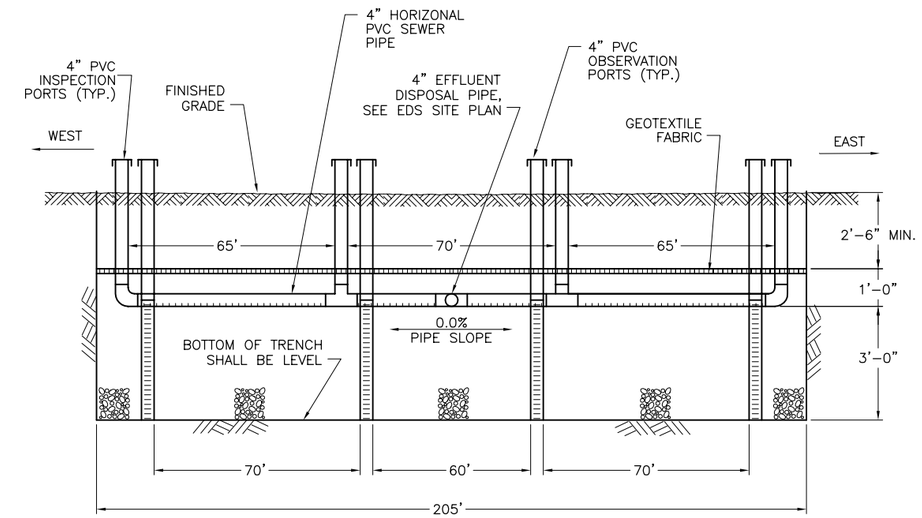
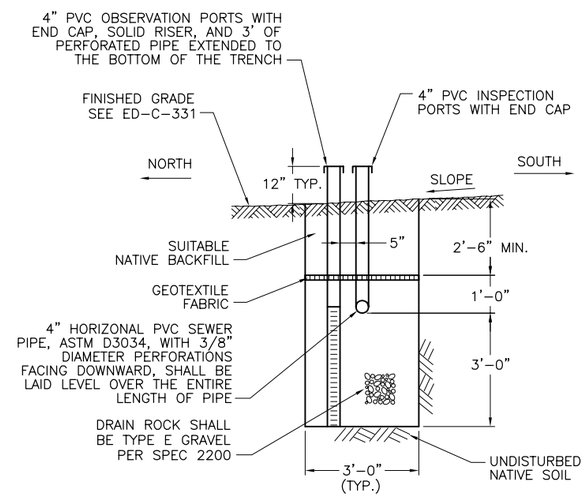


PERCOLATION TRENCH LONGITUDINAL SECTION B

N.T.S. ED-C-330



PERCOLATION TRENCH CROSS SECTION A

N.T.S. ED-C-330

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60027 Exp. 6-30-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: AS SHOWN

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

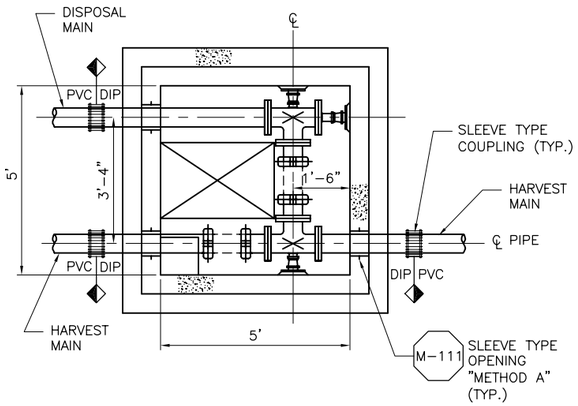
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

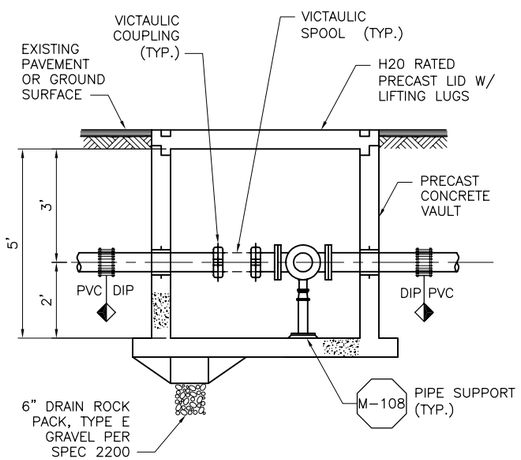
EFFLUENT DISPOSAL SYSTEM
EDS SECTIONS AND DETAILS 1

SHEET ED-C-337

XREF: los_ed_bdr
FILE: N:\Projects\los_osos\Collect_Sys\ED\civ\ed-c-337.dwg USER: kxkai Feb 09, 2004 3:03pm Job No: 1481166

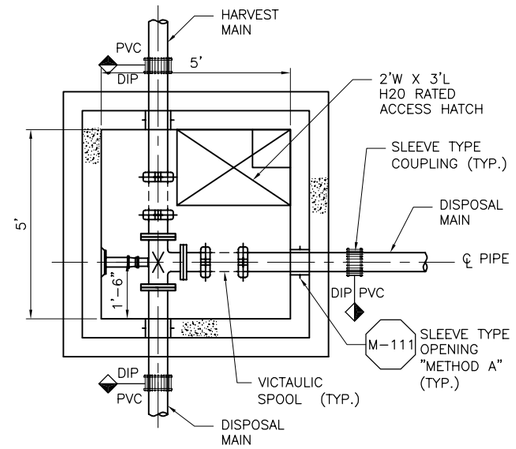


PLAN

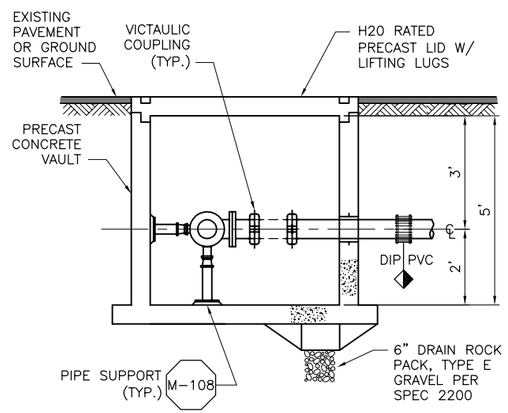


SECTION

18TH ST. AIR-GAP VAULT ED-92
N.T.S.

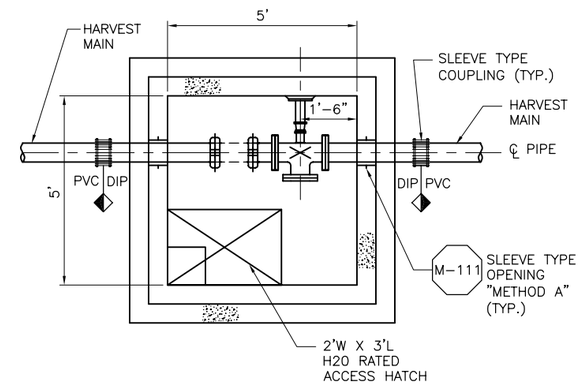


PLAN

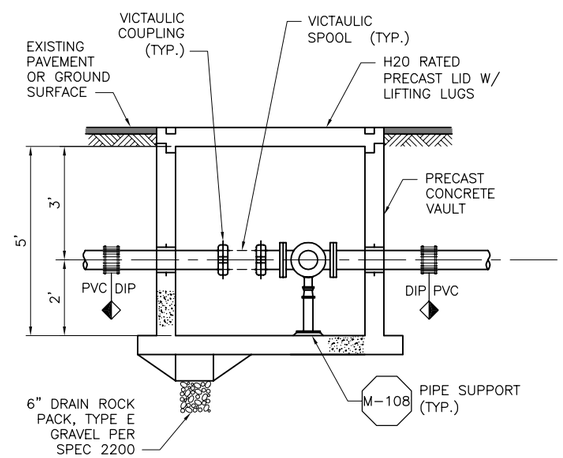


SECTION

BRODERSON-ROSINA AIR-GAP VAULT ED-93
N.T.S.

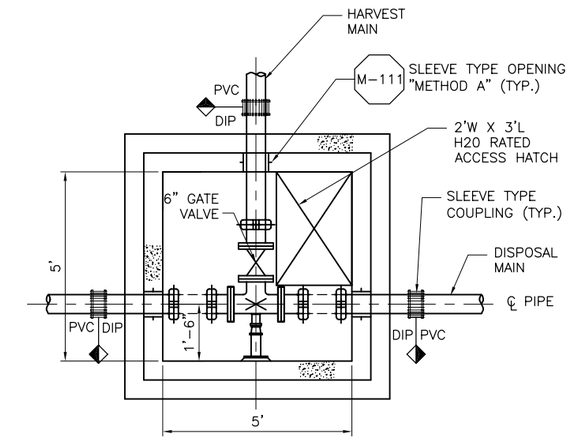


PLAN



SECTION

EL MORO AIR-GAP VAULT ED-94
N.T.S.



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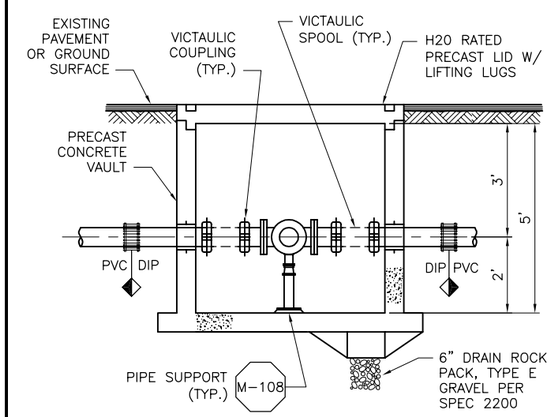


SECTION

SKYLINE AIR-GAP VAULT ED-95
N.T.S.

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60027 Exp. 6-30-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

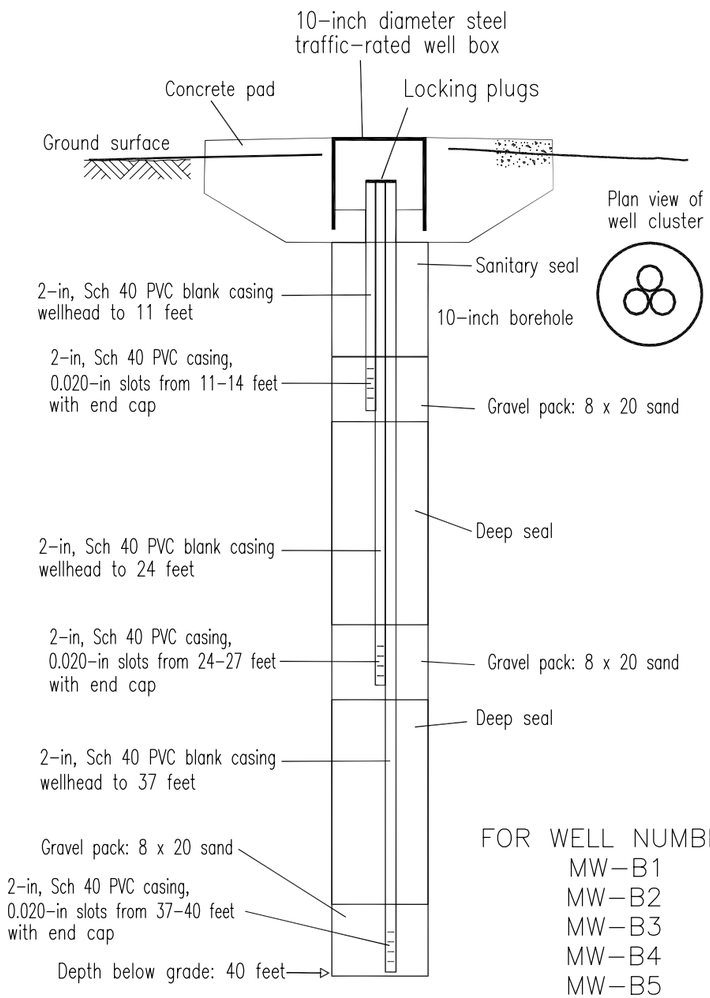
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
EFFLUENT DISPOSAL SYSTEM
EDS SECTIONS AND DETAILS 2

SHEET ED-C-338

XREF: los_ed_bdr
FILE: N:\Projects\los_osos\Collect_Sys\ED\civ\ed-c-338.dwg USER: kxkai Feb 09, 2004 3:03pm Job No: 1481166

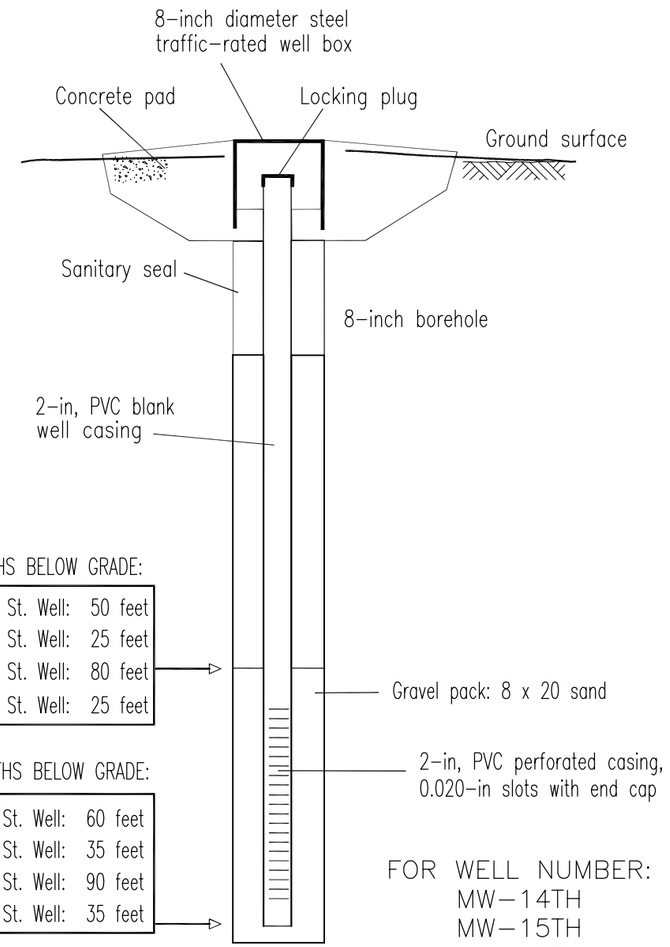


FOR WELL NUMBER:
MW-B1
MW-B2
MW-B3
MW-B4
MW-B5

Cleath & Associates

NOTE: FOR LOCATION OF THESE WELLS SEE SHEET AD-G-007 OR BC-G-007

WEST SIDE MONITORING WELLS
N.T.S.
ED-96



DEPTHS BELOW GRADE:

14th St. Well:	50 feet
15th St. Well:	25 feet
16th St. Well:	80 feet
17th St. Well:	25 feet

DEPTHS BELOW GRADE:

14th St. Well:	60 feet
15th St. Well:	35 feet
16th St. Well:	90 feet
17th St. Well:	35 feet

FOR WELL NUMBER:
MW-14TH
MW-15TH
MW-16TH
MW-17TH
MW-18TH

Cleath & Associates

NOTE: FOR LOCATION OF THESE WELLS SEE SHEET AD-G-007 OR BC-G-007

EAST SIDE MONITORING WELLS
N.T.S.
ED-97

REGISTERED PROFESSIONAL ENGINEER
FAN KAT
No. C-60027
Exp. 6-30-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: AS SHOWN

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

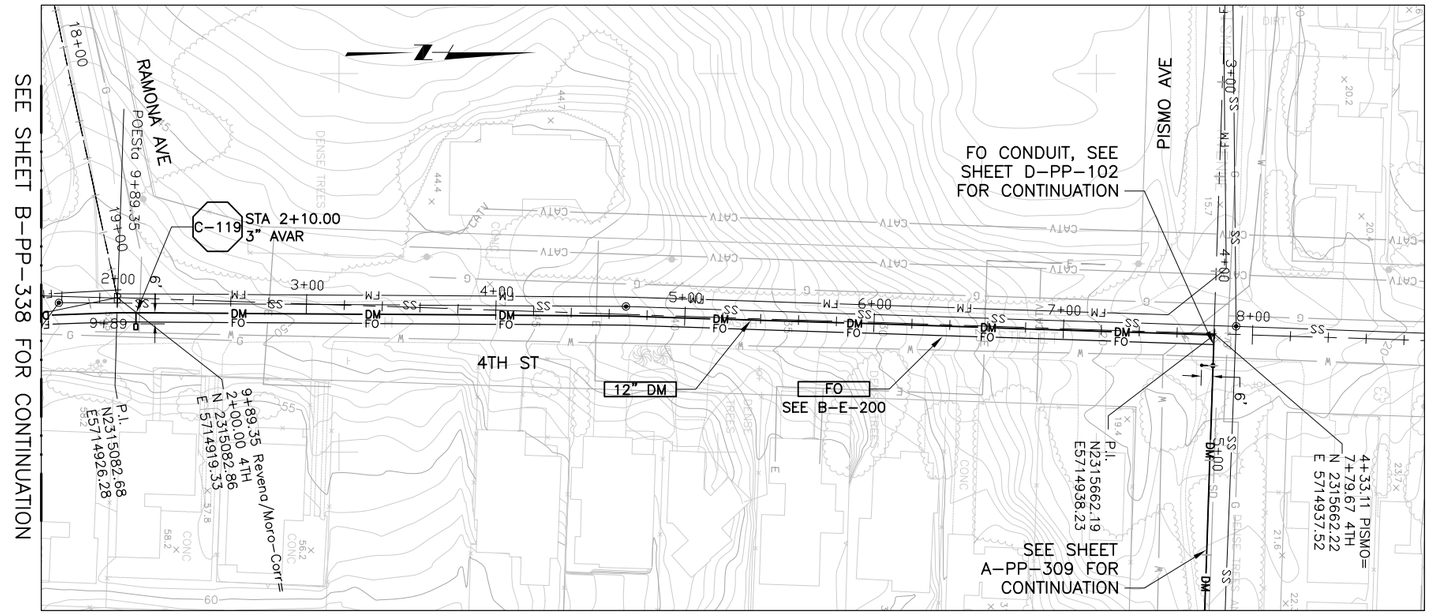
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

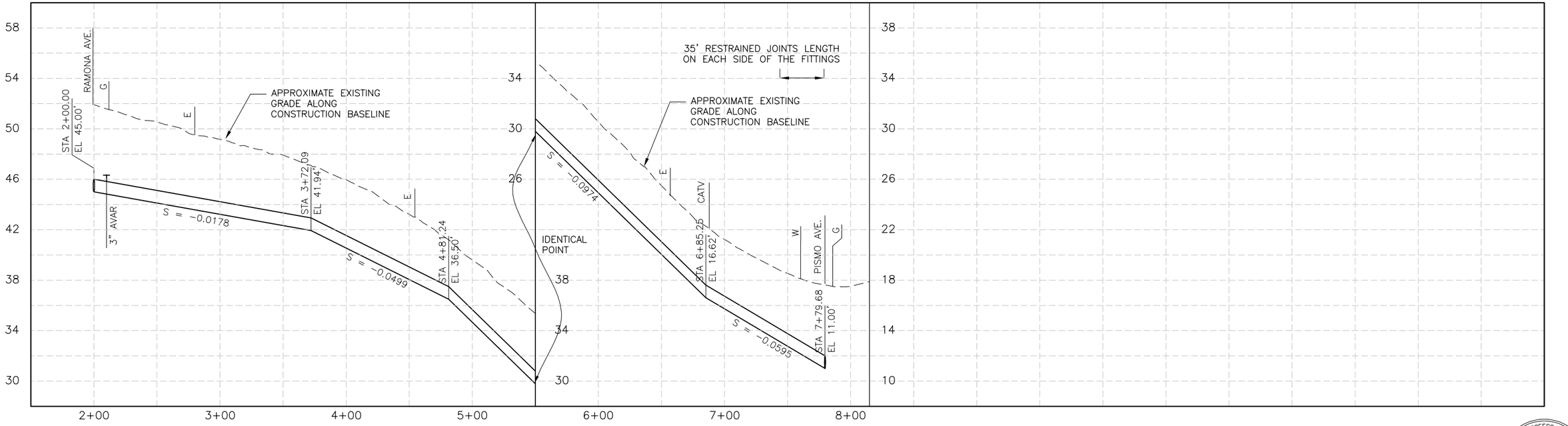
LOS OSOS WASTEWATER PROJECT
EFFLUENT DISPOSAL SYSTEM
EDS SECTIONS AND DETAILS 3

SHEET
ED-C-339

XREF: los_ed_bdr
FILE: N:\Projects\los_osos\Collect_Sys\ED\civ\ed-c-339.dwg USER: kakai Feb 09, 2004 2:51pm Job No: 1481166



PLAN ON 4TH ST



PROFILE ON 4TH ST

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60024 Exp. 6-30-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE
STEVEN J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

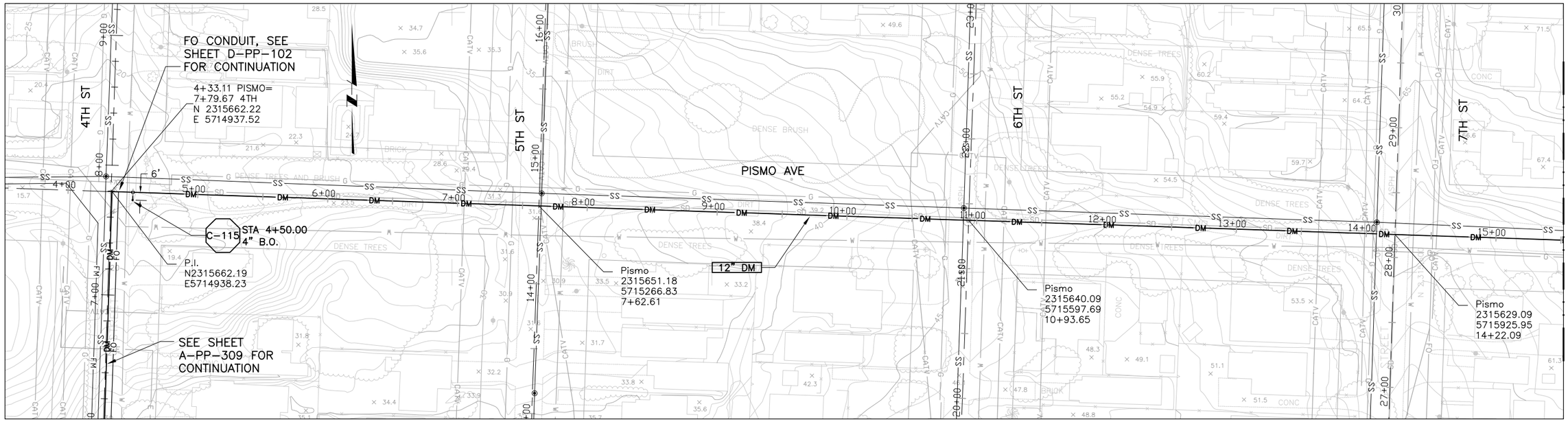
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

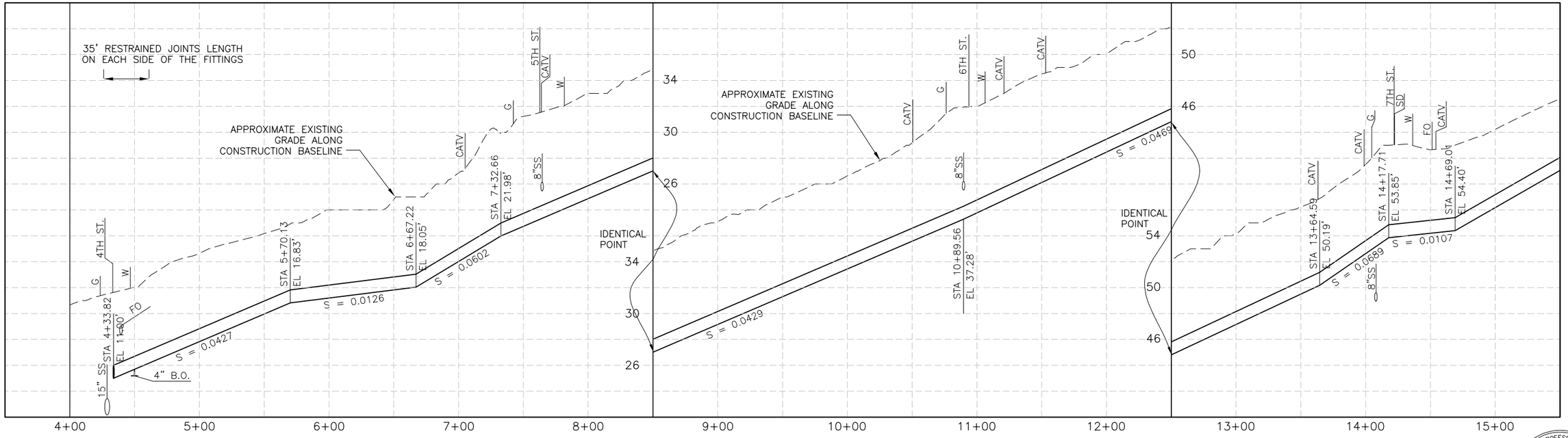
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE – EDS
4TH ST
STA 2+00 TO STA 8+00

SHEET A-PP-308

XREF: los_ed_bdr c-ed-dm c-ed-bs x-feat-aerl x-feat-row x-feat-topo c-ed-util c-ed-pp cX-UTIL-all aX-UTIL-all c-ed-ss bn-util-ss an-feat-cnbl an-util-ss dn-util-ss cN-UTIL-SS cn-feat-cnbl bn-feat-cnbl dX-util-all x-sup-topo Morro and Corr Easement
FILE: N:\Projects\los_osos\Collect_Sys\ED\civ\a-pp-308.dwg USER: kxkai Feb 09, 2004 2:49pm Job No: 1481166



PLAN ON PISMO AVE



PROFILE ON PISMO AVE

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60024 Exp. 6-30-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

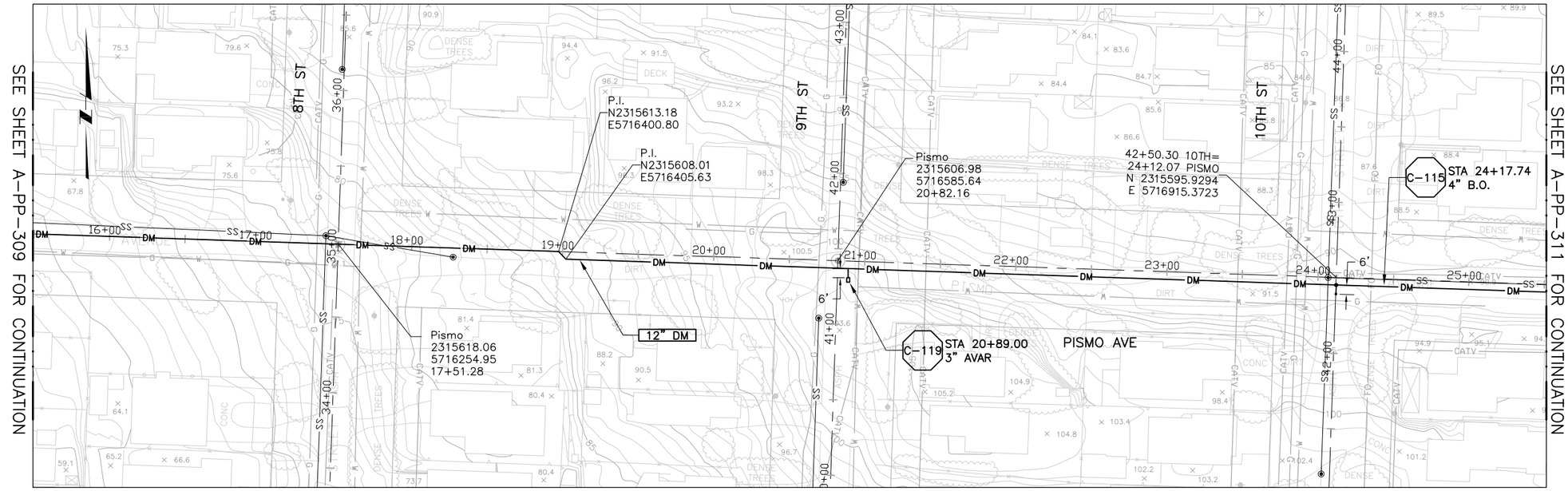
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

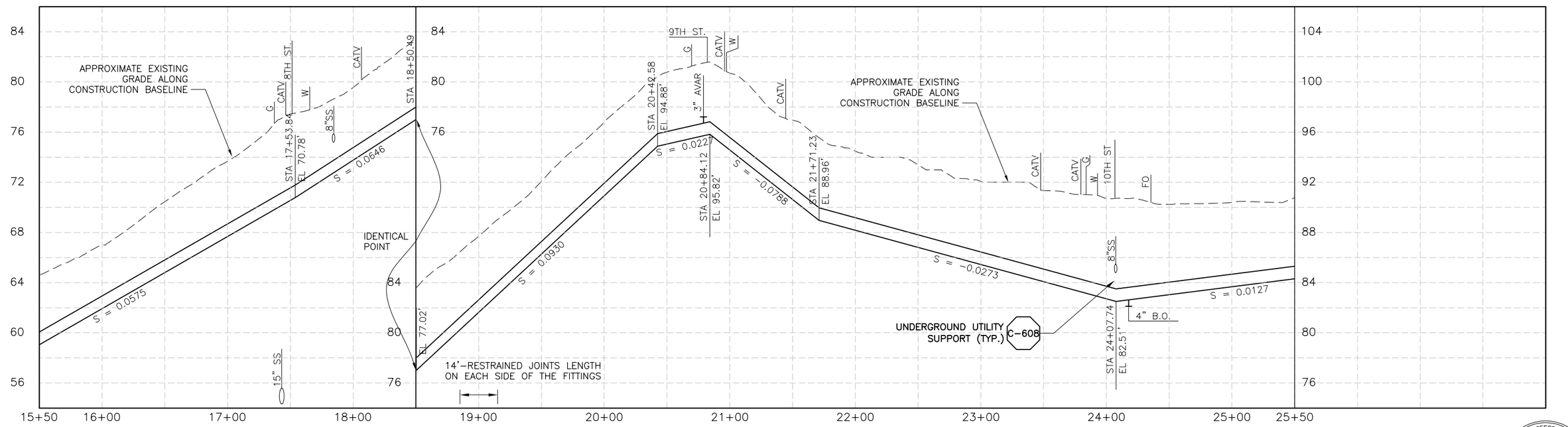
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE – EDS
PISMO AVE
STA 4+00 TO STA 15+50

SHEET A-PP-309

XREF: los_ed_bdr c-ed-dtn c-ed-bs x-feat-cerl x-feat-row x-feat-topo c-ed-util c-ed-pp cX-UTIL-all aX-UTIL-all c-ed-ss bn-util-ss an-feat-cnbl an-util-ss dn-util-ss cN-UTIL-SS cn-feat-cnbl bn-feat-cnbl dX-util-all x-sup-topo Morro and Corr Easement
FILE: N:\Projects\los_osos\Collect_Sys\ED\cir\p-pp-309.dwg USER: kxkai Feb 09, 2004 3:48pm Job No: 1481166



PLAN ON PISMO AVE



PROFILE ON PISMO AVE

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60024 Exp. 6-30-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE – EDS
PISMO AVENUE
STA 15+50 TO STA 25+50

SHEET A-PP-310

XREF: los_ed_bdr c-ed-dtn c-ed-bs x-feat-aerl x-feat-row x-feat-topo c-ed-util c-ed-pp cX-UTIL-all aX-UTIL-all c-ed-ss bn-util-ss an-feat-cnbl an-util-ss dn-util-ss cN-UTIL-SS cn-feat-cnbl bn-feat-cnbl dX-util-all x-sup-topo Morro and Corr Easement
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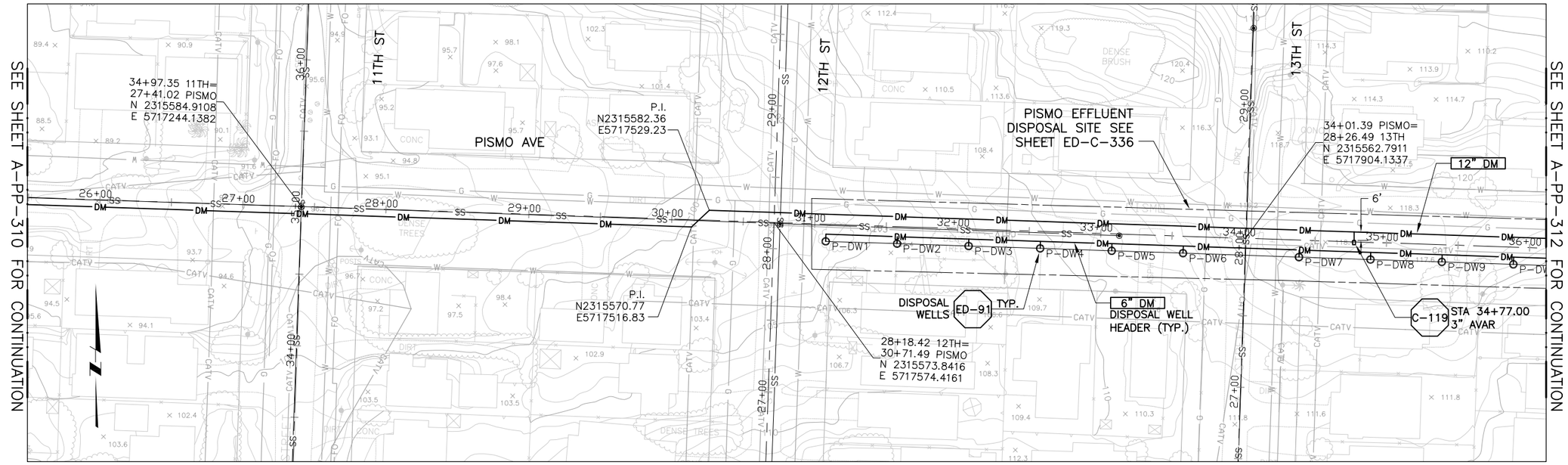
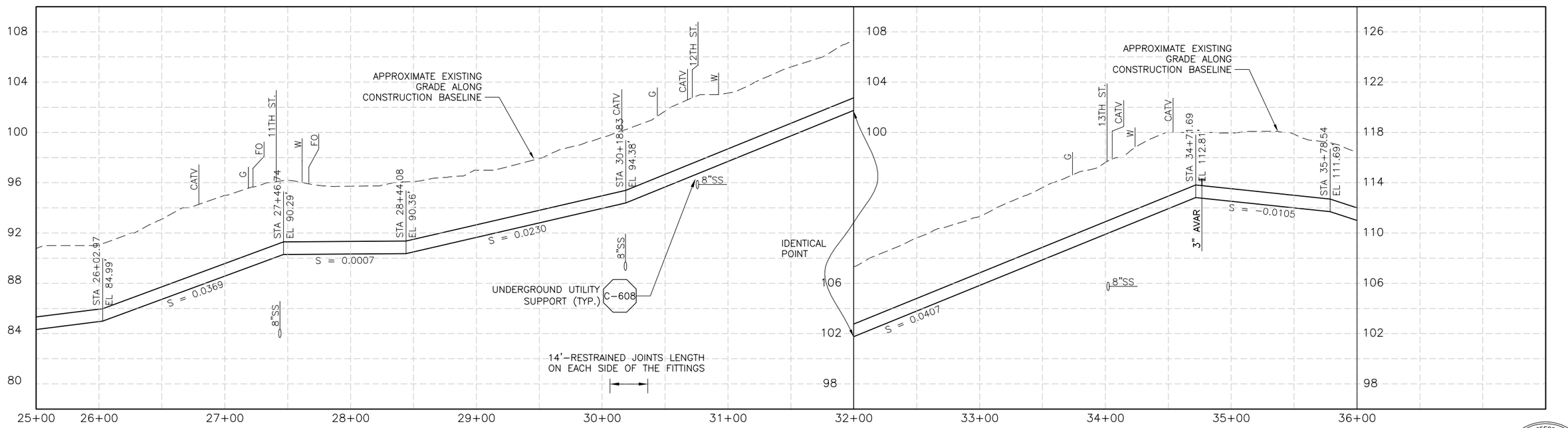


PLAN ON PISMO AVE



PROFILE ON PISMO AVE

REGISTERED PROFESSIONAL ENGINEER
FAN KAI
No. C-60024
Exp. 6-30-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
1"=40' HORIZ
1"=4' VERT

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE – EDS
PISMO AVENUE
STA 25+50 TO STA 36+00

SHEET
A-PP-311

XREF: los_ed_bdr c-ed-dm c-ed-bs x-feat-aerl x-feat-row x-feat-topo c-ed-util c-ed-pp cX-UTIL-all aX-UTIL-all c-ed-ss bn-util-ss an-feat-cnbl an-util-ss dn-util-ss cN-UTIL-SS cn-feat-cnbl bn-feat-cnbl dX-util-all x-sup-topo Morro and Corr Easement
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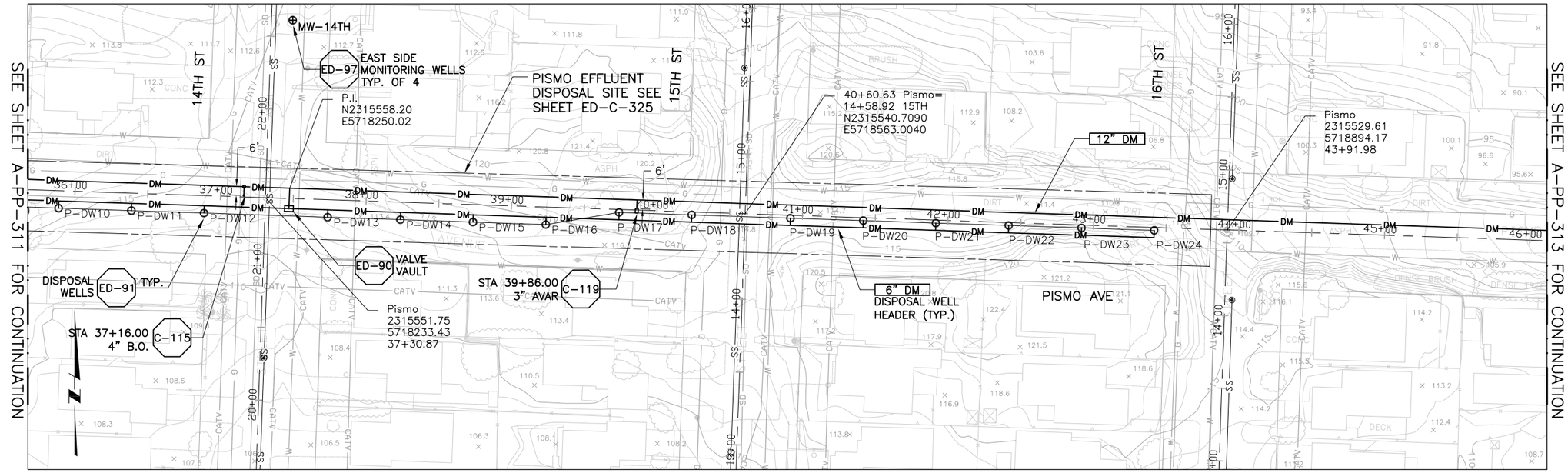
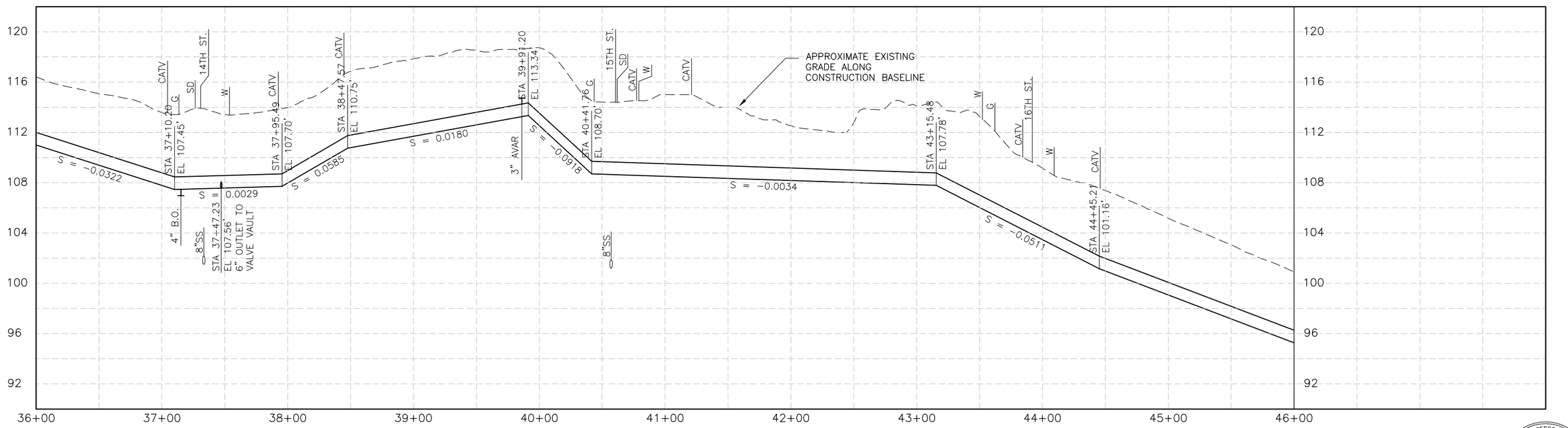


PLAN ON PISMO AVE



PROFILE ON PISMO AVE

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60024 Exp. 6-30-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE – EDS
PISMO AVENUE
STA 36+00 TO STA 46+00

SHEET A-PP-312

XREF: los_ed_bdr c-ed-dm c-ed-bs x-feat-cerl x-feat-row x-feat-topo c-ed-util c-ed-pp cX-UTIL-all aX-UTIL-all c-ed-ss bn-util-ss an-feat-cnbl an-util-ss dn-util-ss cN-UTIL-SS cn-feat-cnbl bn-feat-cnbl dX-util-all x-sup-topo Morro and Corr Easement
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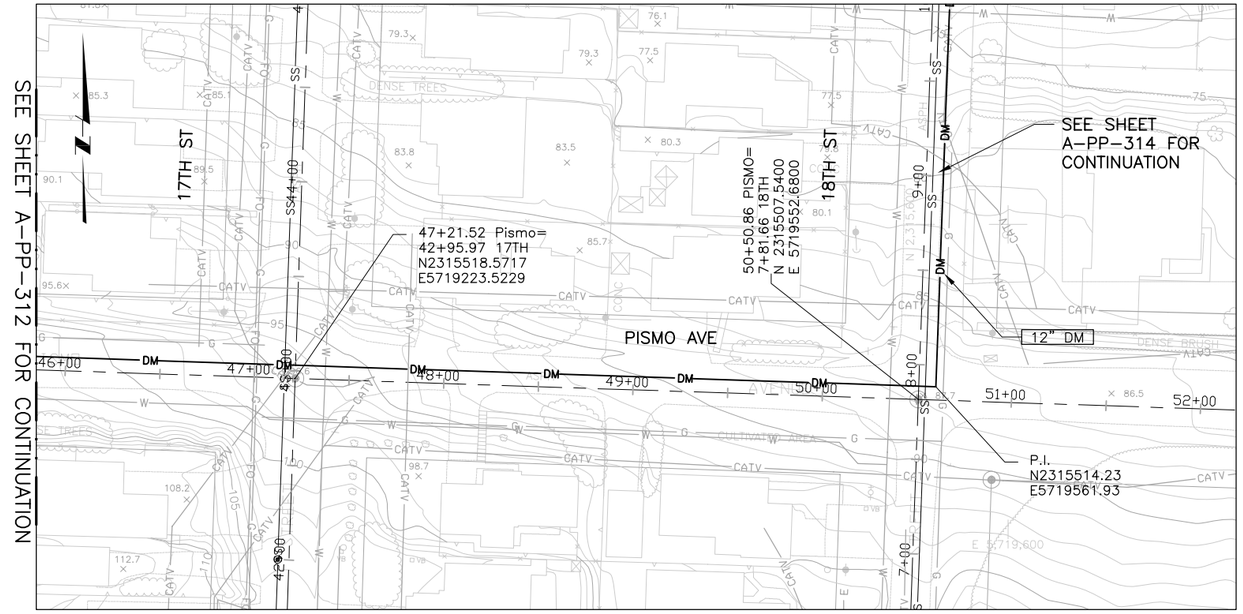
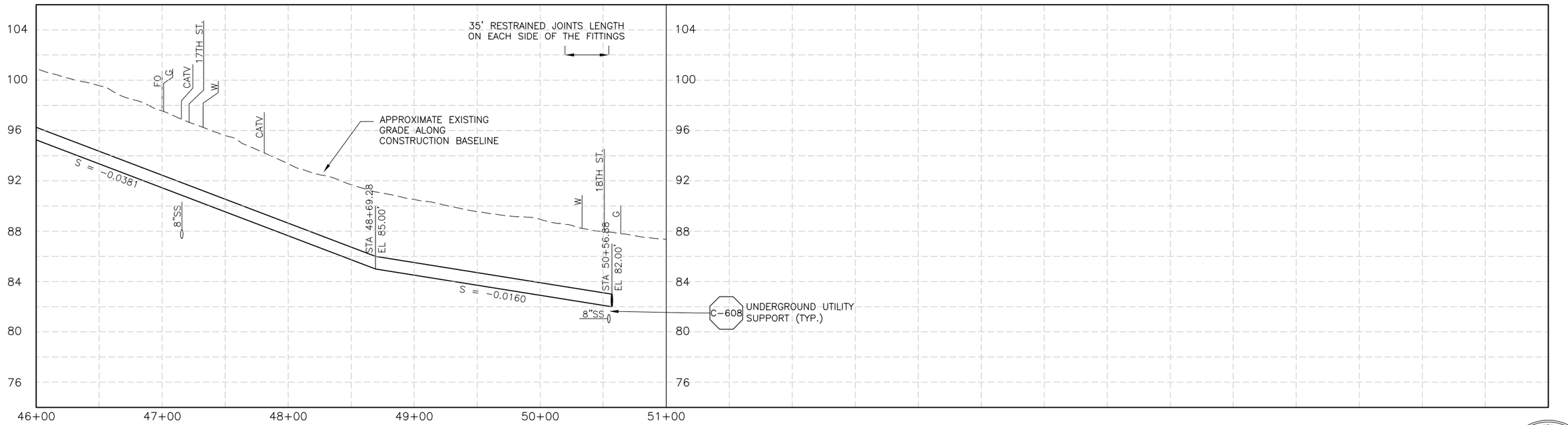


PLAN ON PISMO AVE



PROFILE ON PISMO AVE

REGISTERED PROFESSIONAL ENGINEER
FAN KAI
No. C-60023
Exp. 6-30-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE – EDS
PISMO AVENUE
STA 46+00 TO STA 51+00

SHEET A-PP-313

XREF: los_ed_bdr c-ed-dm c-ed-bs x-feat-deri x-feat-row x-feat-topo c-ed-ss bn-feat-cnbl bn-util-ss cn-feat-cnbl cN-UTIL-SS on-feat-cnbl on-util-ss dn-util-ss c-ed-util c-ed-pp cX-UTIL-all oX-UTIL-all dX-util-all x-sup-topo Morro and Corr Easement
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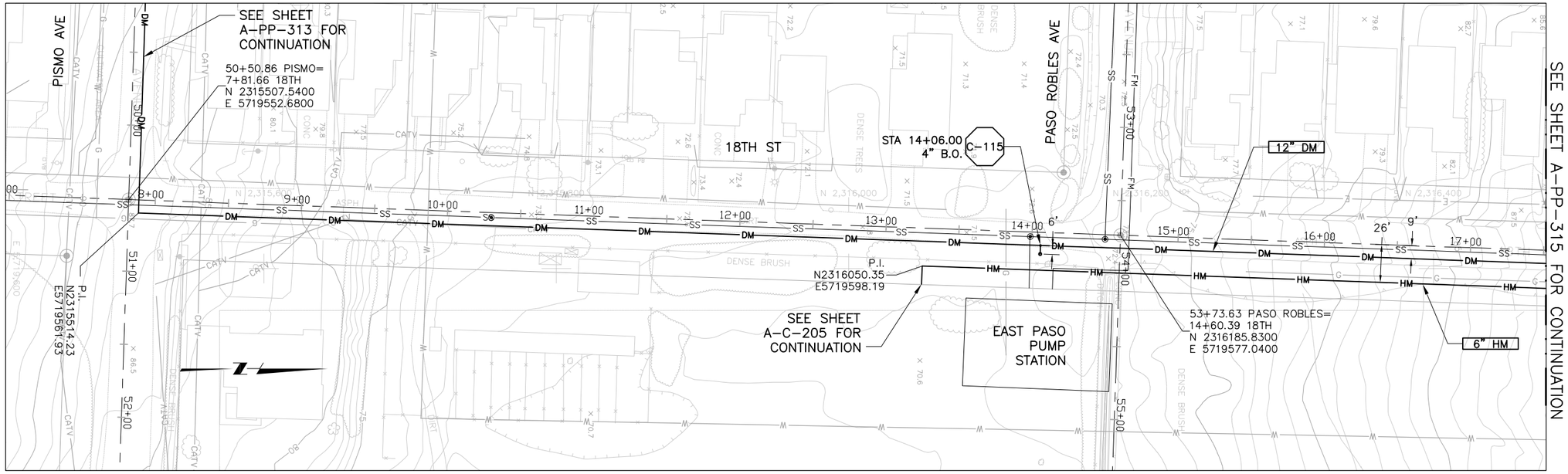
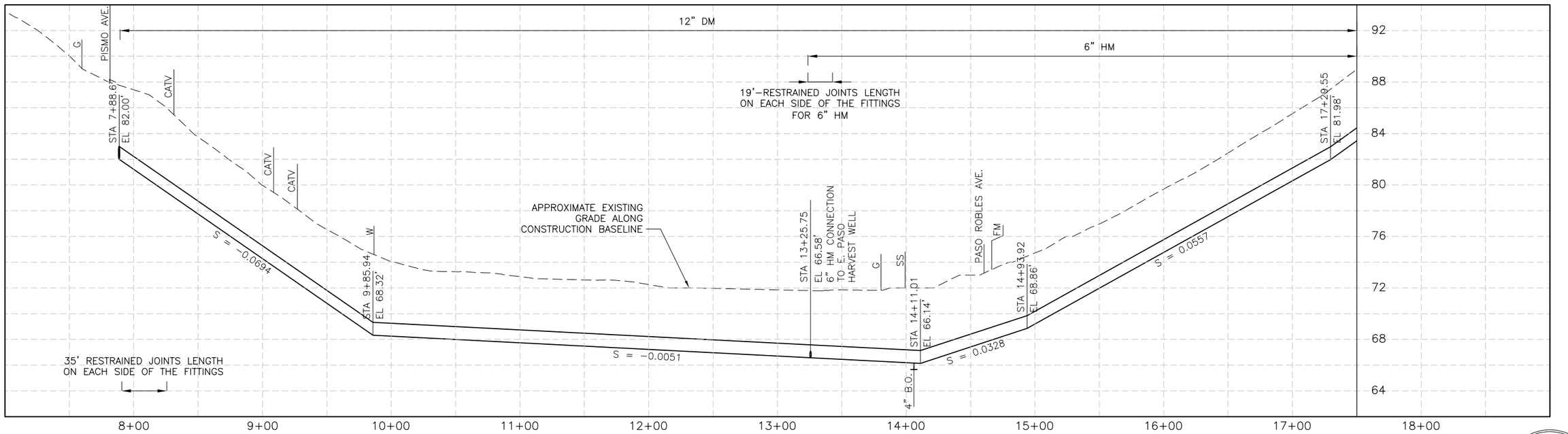


PLAN ON 18TH ST



PROFILE ON 18TH ST

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60023 Exp. 6-30-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

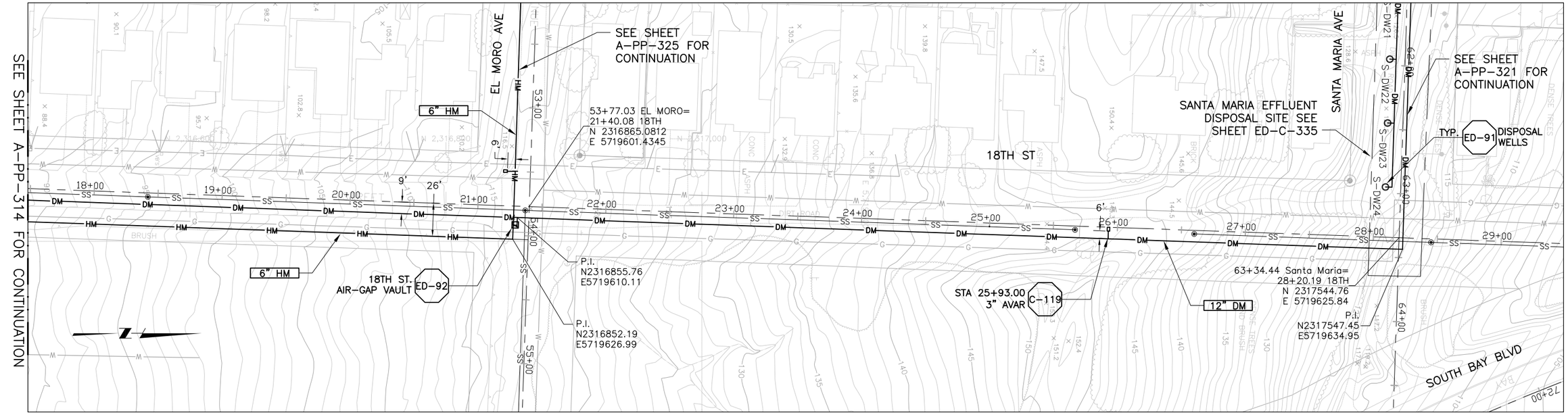
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

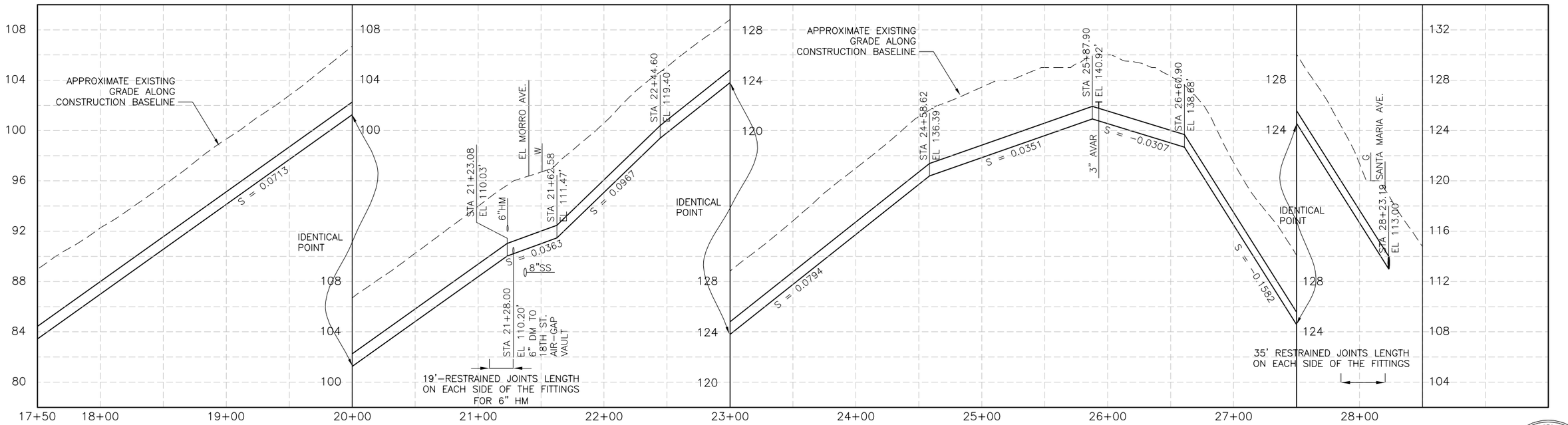
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE – EDS
18TH STREET
STA 7+50 TO STA 17+50

SHEET A-PP-314

XREF: los_ed_bdr c-ed-dm c-ed-bs x-feat-aeri x-feat-row x-feat-topo c-ed-ss bn-feat-cnbl bn-util-ss cn-feat-cnbl cN-UTIL-SS on-feat-cnbl on-util-ss dn-util-ss c-ed-util c-ed-pp cX-UTIL-all cX-UTIL-all dX-util-all x-sup-topo Morro and Corr Easement
FILE: N:\Projects\los_osos\Collect_Sys\ED\civ\a-pp-314.dwg USER: kxkai Feb 09, 2004 3:48pm Job No: 1481166



PLAN ON 18TH ST



PROFILE ON 18TH ST

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60023 Exp. 6-30-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE – EDS
18TH STREET
STA 17+50 TO STA 29+00

SHEET A-PP-315

XREF: los_ed_bdr c-ed-dm c-ed-bs x-feat-oeri x-feat-row x-feat-topo c-ed-ss bn-feat-cnbl bn-util-ss cn-feat-cnbl cN-UTIL-SS an-feat-cnbl an-util-ss dn-util-ss c-ed-util c-ed-pp cX-UTIL-all oX-UTIL-all dX-util-all x-sup-topo Morro and Corr Easement
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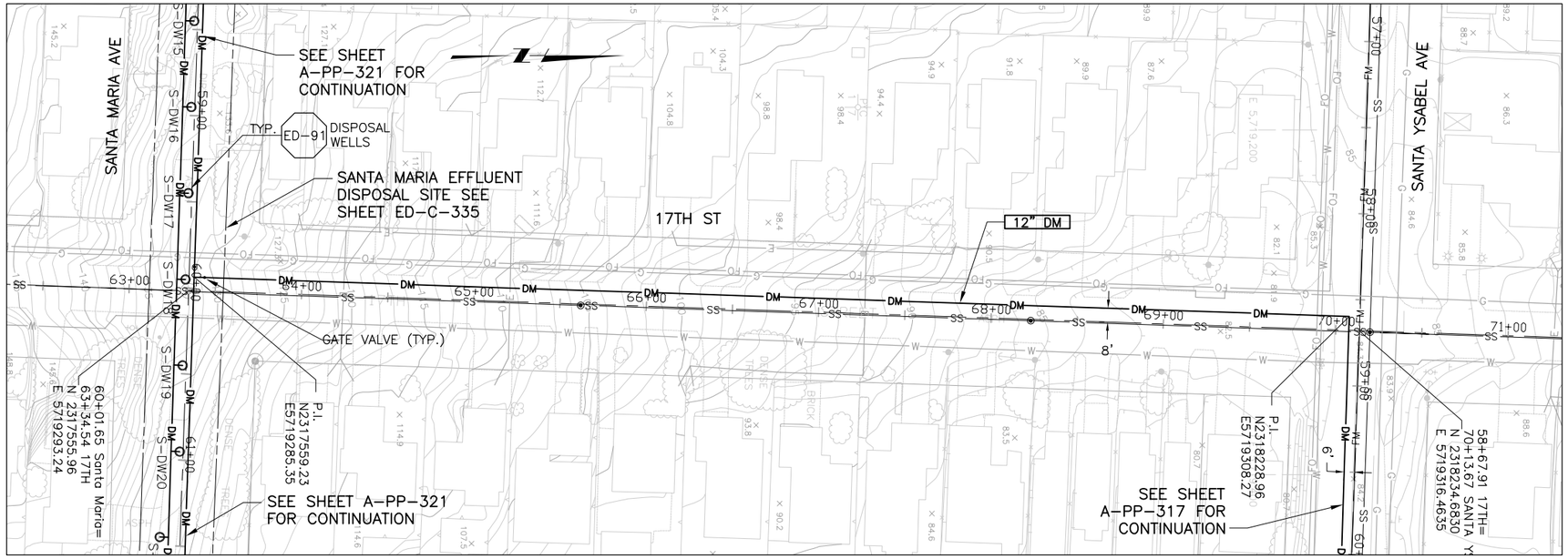
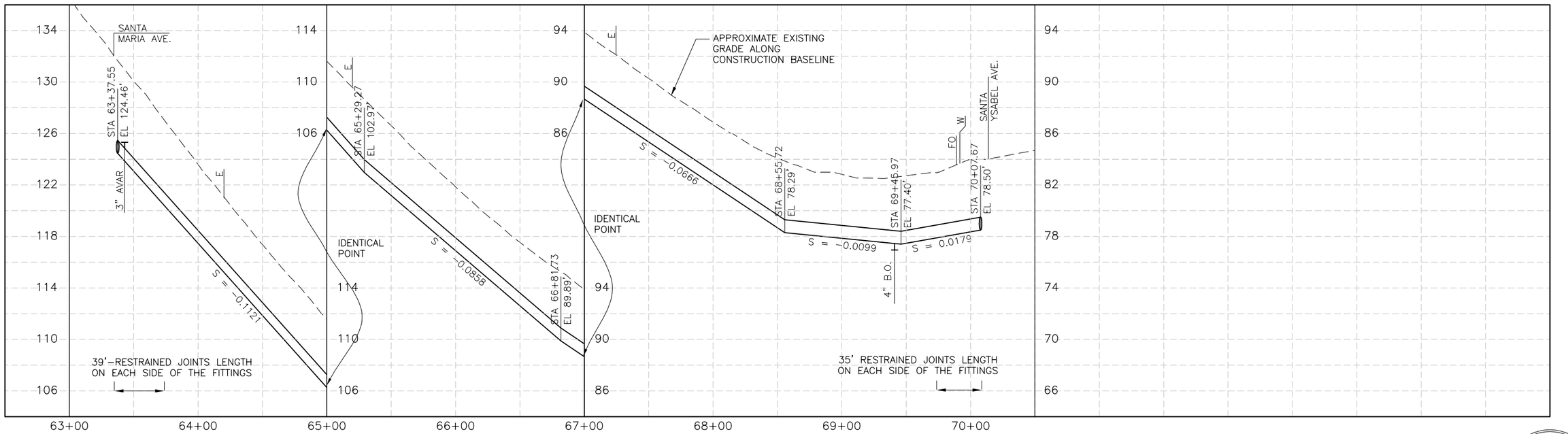


PLAN ON 17TH ST



PROFILE ON 17TH ST

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60023 Exp. 6-30-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE – EDS
17TH STREET
STA 63+00 TO STA 71+00

SHEET A-PP-316

XREF: los_ed_bdr c-ed-dm c-ed-bs x-feat-oeri x-feat-row x-feat-topo c-ed-ss bn-feat-cnbl bn-util-ss cn-feat-cnbl cN-UTIL-SS an-feat-cnbl an-util-ss dn-util-ss c-ed-util c-ed-pd cX-UTIL-all cX-UTIL-all x-sup-topo dX-util-all Morro and Corr Easement
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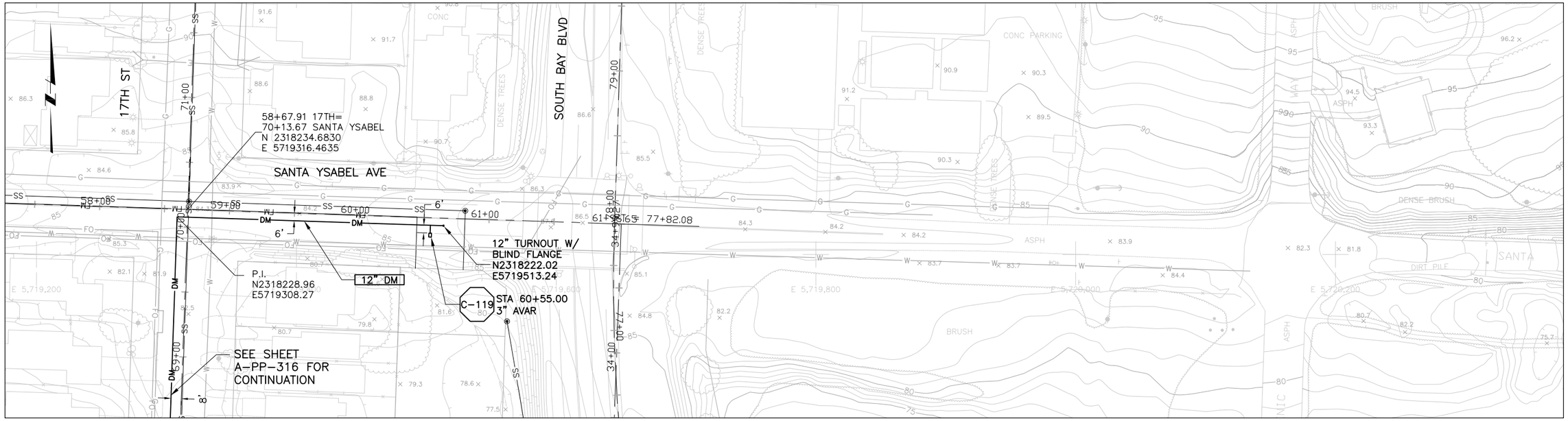


PLAN ON SANTA YSABEL AVE

PROFILE ON SANTA YSABEL AVE

REGISTERED PROFESSIONAL ENGINEER
FAN KAI
No. C-60023
Exp. 6-30-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

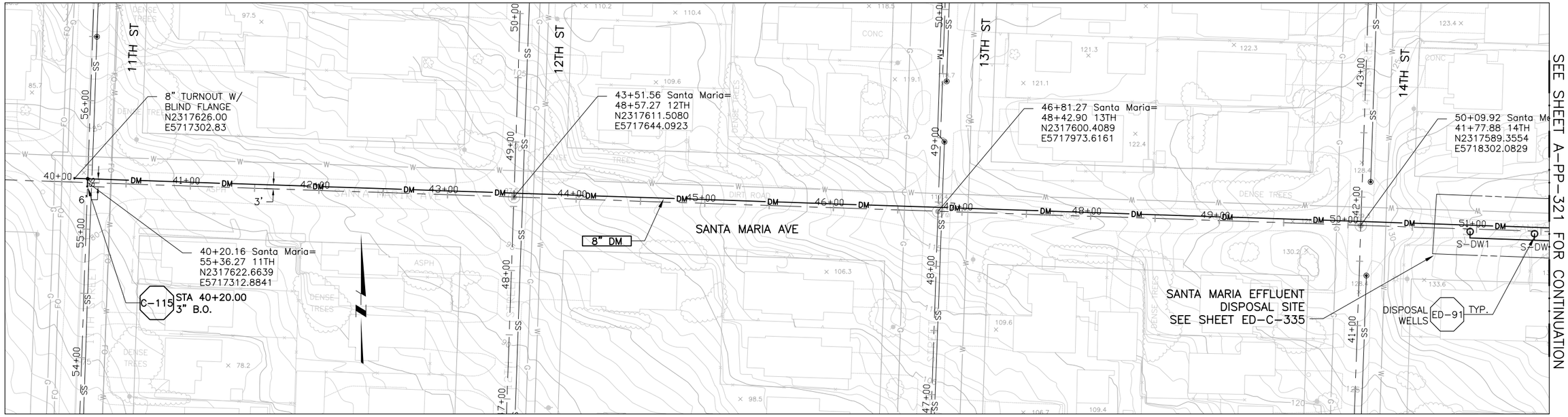
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

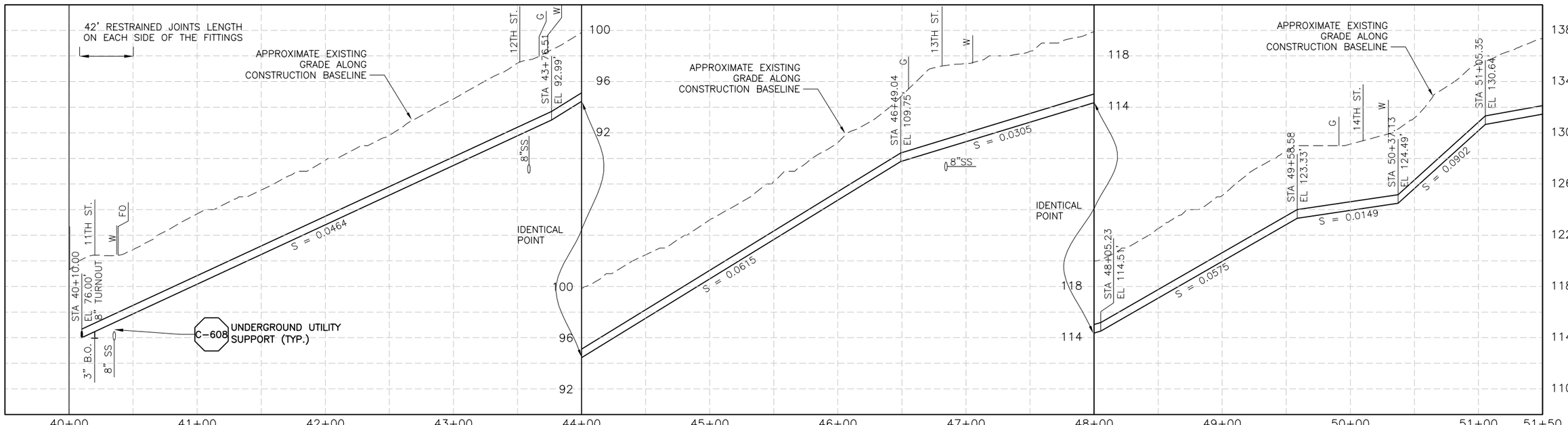
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE – EDS
SANTA YSABEL AVENUE
STA 58+00 TO STA 61+00

SHEET A-PP-317

XREF: los_ed_bdr c-ed-dm c-ed-bs x-feat-deri x-feat-row x-feat-topo c-ed-ss bn-feat-cnbl bn-util-ss cn-feat-cnbl cN-UTIL-SS on-feat-cnbl on-util-ss dn-util-ss c-ed-util c-ed-pp cX-UTIL-all oX-UTIL-all x-sup-topo dX-util-all Morro and Corr Easement
FILE: N:\Projects\los_osos\Collect_Sys\ED\civ\a-pp-317.dwg USER: kxkai Feb 09, 2004 2:46pm Job No: 1481166



PLAN ON SANTA MARIA AVE



PROFILE ON SANTA MARIA AVE

REGISTERED PROFESSIONAL ENGINEER
FAN KAI
No. C-60023
Exp. 6-30-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE – EDS
SANTA MARIA AVENUE
STA 40+00 TO STA 51+50

SHEET A-PP-320

XREF: los_ed_bdr c-ed-dm c-ed-bs x-feat-deri x-feat-row x-feat-topo c-ed-ss bn-feat-cnbl bn-util-ss cn-feat-cnbl cN-UTIL-SS an-feat-cnbl an-util-ss dn-util-ss c-ed-util c-ed-pp cX-UTIL-all cX-UTIL-all x-sup-topo dX-util-all Morro and Corr Easement
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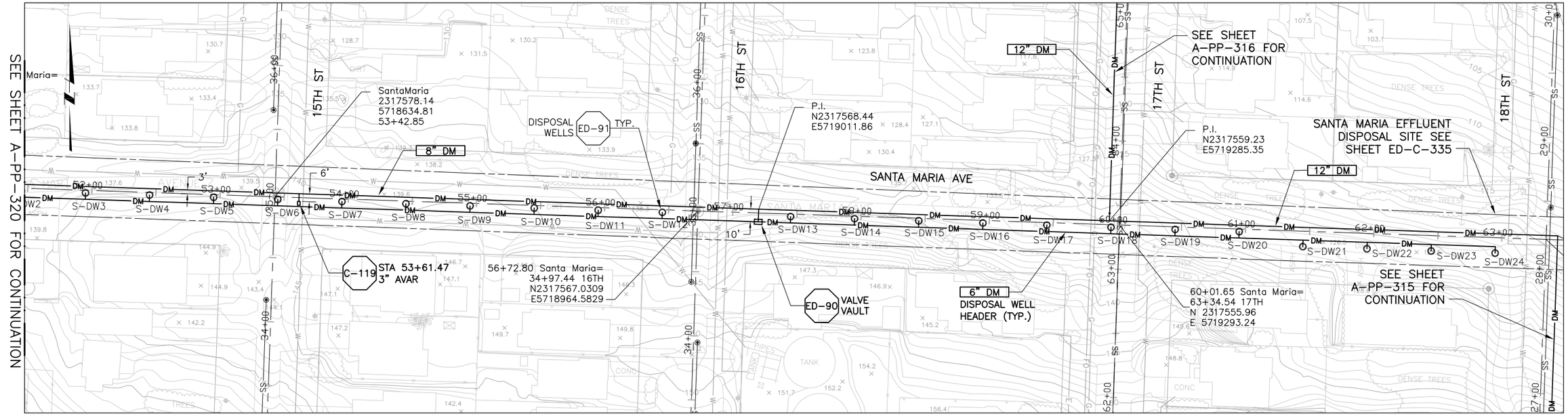
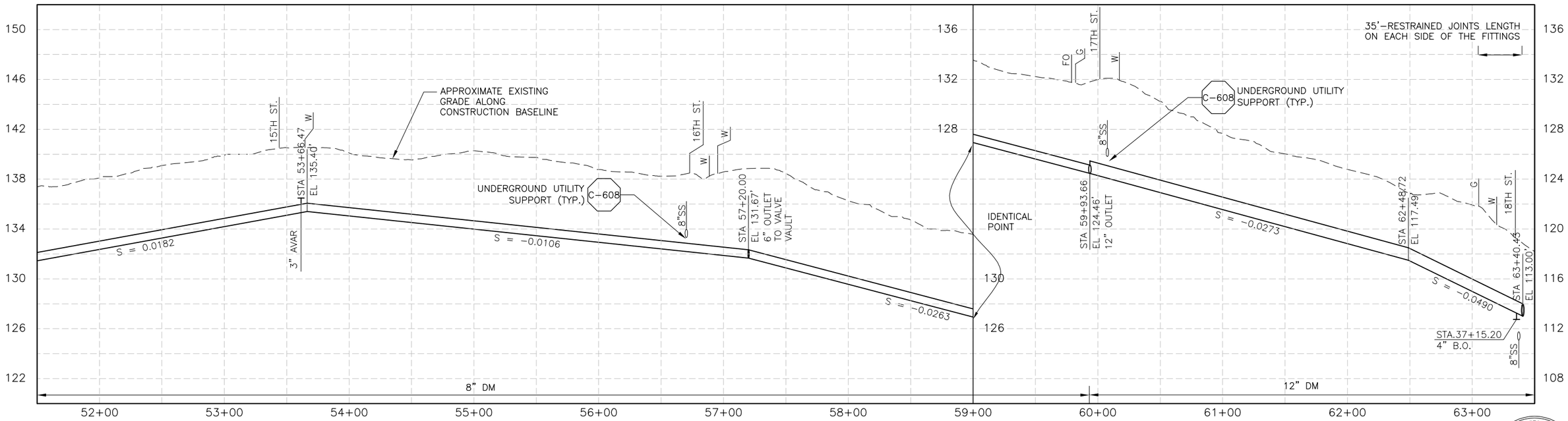


PLAN ON SANTA MARIA AVE



PROFILE ON SANTA MARIA AVE

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60023 Exp. 6-30-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

PLAN AND PROFILE – EDS
SANTA MARIA AVENUE
STA 51+50 TO STA 63+50

SHEET A-PP-321

XREF: los_ed_bdr c-ed-dm c-ed-bs x-feat-oeri x-feat-row x-feat-topo c-ed-ss bn-feat-cnbl bn-util-ss cn-feat-cnbl cN-UTIL-SS an-feat-cnbl an-util-ss dn-util-ss c-ed-util c-ed-pp cX-UTIL-all cX-UTIL-all x-sup-topo dX-util-all Morro and Corr Easement
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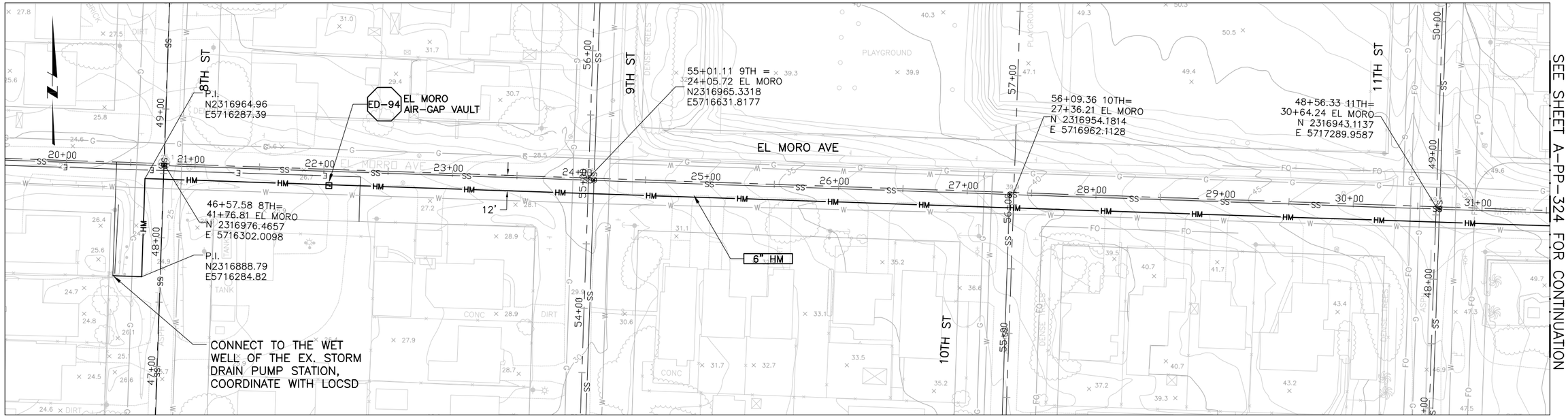
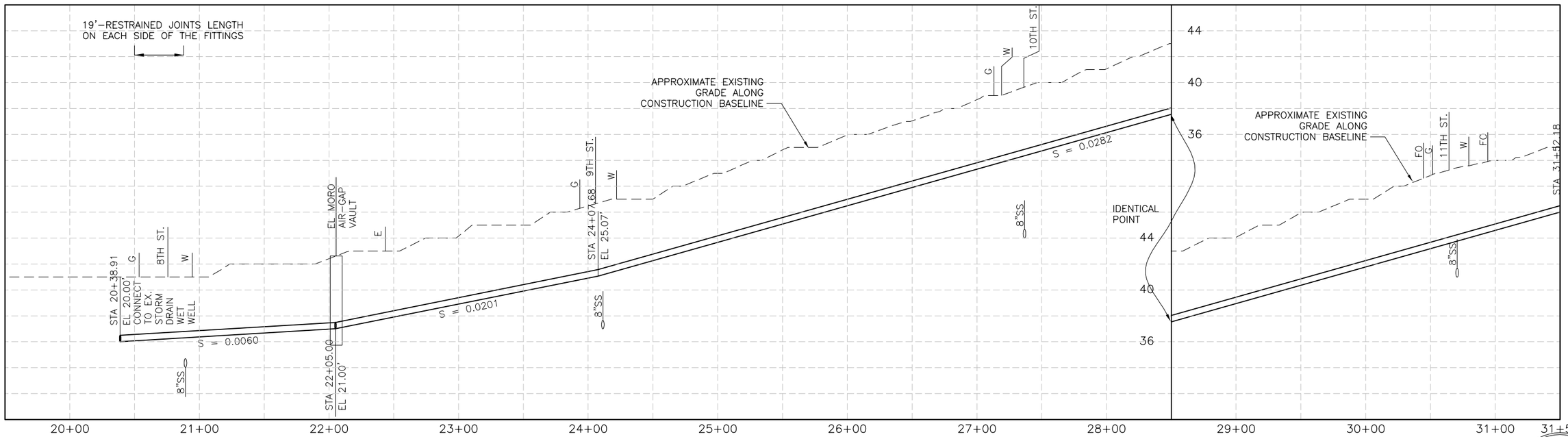


SEE SHEET A-PP-324 FOR CONTINUATION

PLAN ON EL MORO AVE



PROFILE ON EL MORO AVE

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60023 Exp. 6-30-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE – EDS
EL MORO AVENUE
STA 20+00 TO STA 31+50

SHEET A-PP-323

XREF: los_ed_bdr c-ed-dm c-ed-bs x-feat-ceri x-feat-row x-feat-topo c-ed-ss bn-feat-cnbl bn-util-ss cn-feat-cnbl cN-UTIL-SS an-feat-cnbl an-util-ss dn-util-ss c-ed-util c-ed-pp cX-UTIL-all cX-UTIL-all x-sup-topo dX-util-all Morro and Corr Easement
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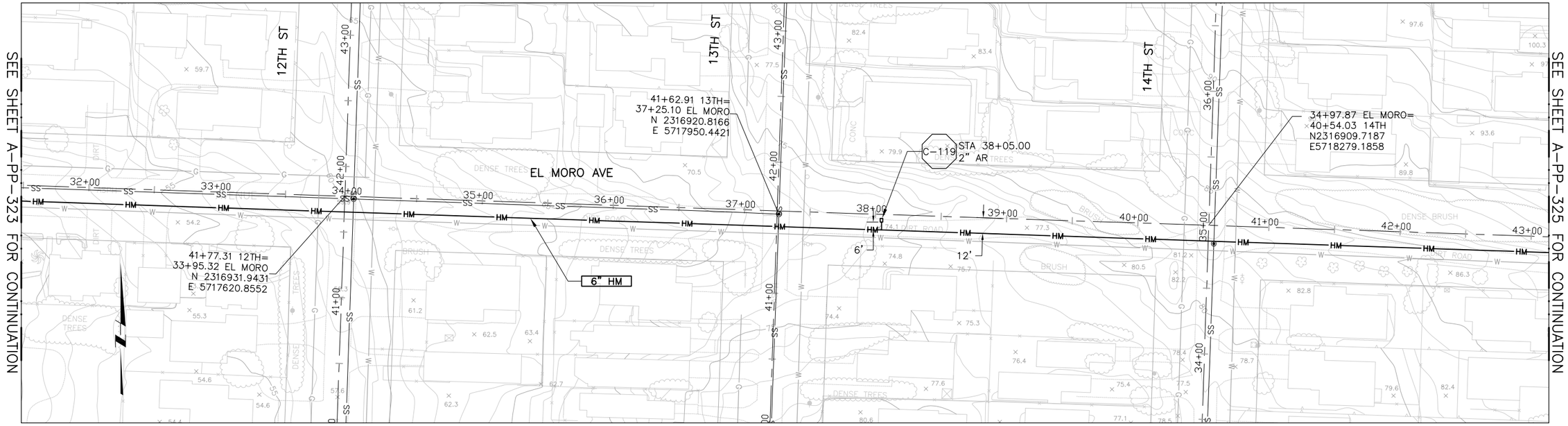
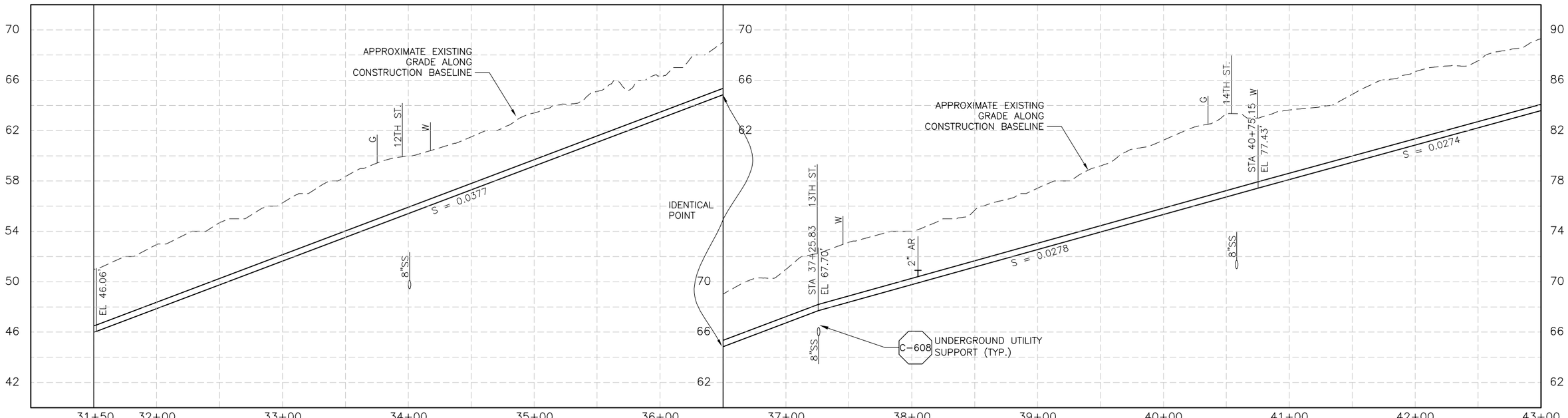


PLAN ON EL MORO AVE



PROFILE ON EL MORO AVE

REGISTERED PROFESSIONAL ENGINEER FAN KAI No. C-60023 Exp. 6-30-04 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

PLAN AND PROFILE – EDS
EL MORO AVENUE
STA 32+50 TO STA 43+00

SHEET A-PP-324

XREF: los_ed_bdr c-ed-dm c-ed-bs x-feat-cerl x-feat-row x-feat-topo c-ed-ss bn-feat-cnbl bn-util-ss cn-feat-cnbl cN-UTIL-SS an-feat-cnbl an-util-ss dn-util-ss c-ed-util c-ed-pp cX-UTIL-all oX-UTIL-all x-sup-topo dX-util-all Morro and Corr Easement
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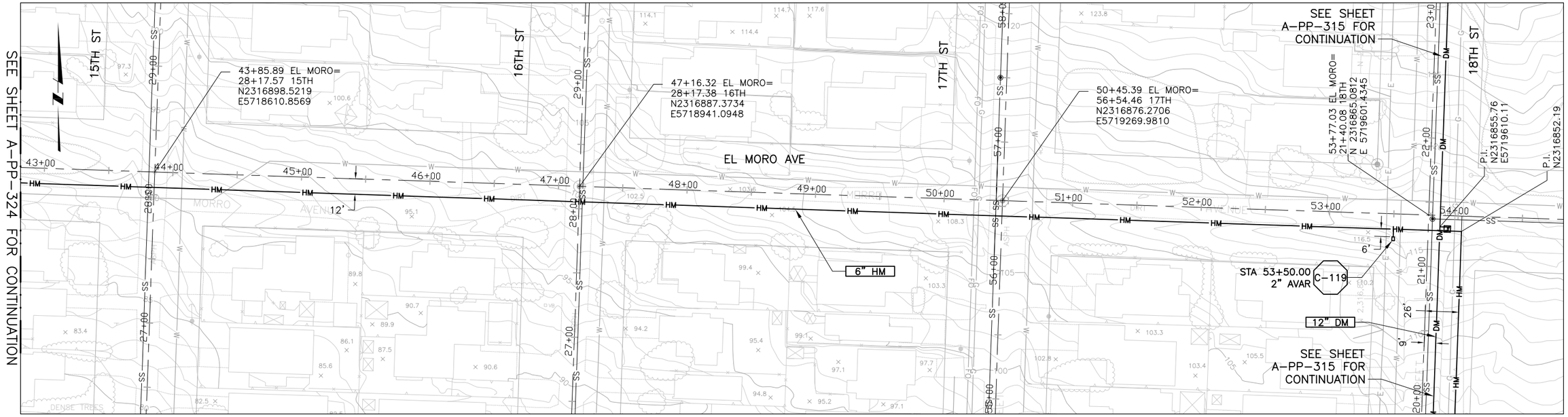
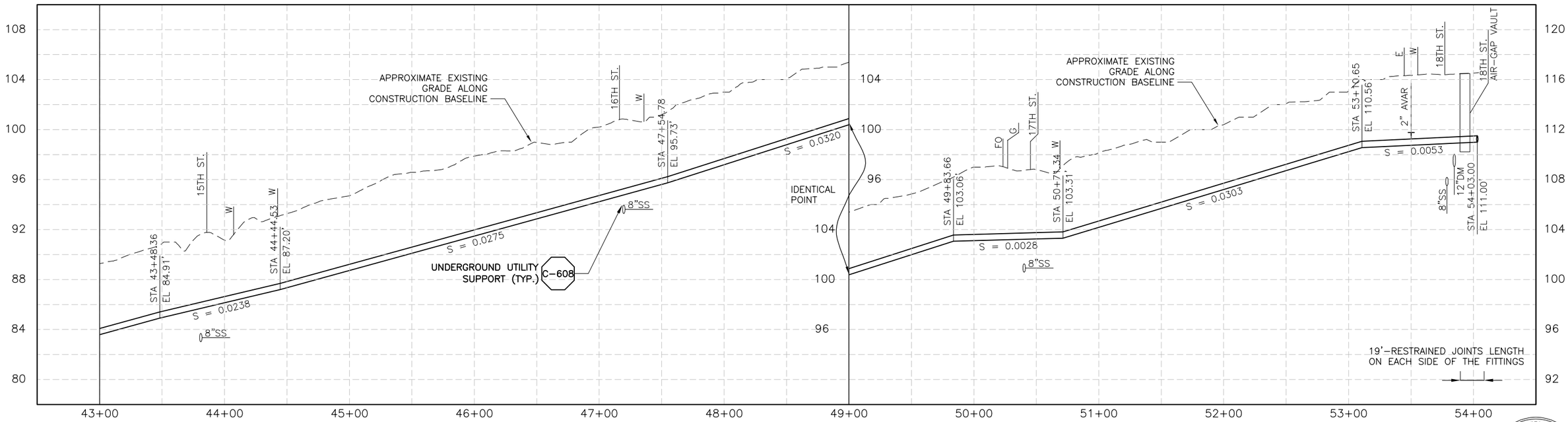


PLAN ON EL MORO AVE



PROFILE ON EL MORO AVE

REGISTERED PROFESSIONAL ENGINEER
FAN KAI
No. C-60023
Exp. 6-30-04
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=40' HORIZ; 1"=4' VERT

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED KFK
DRAWN KFK
CHECKED LZT

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

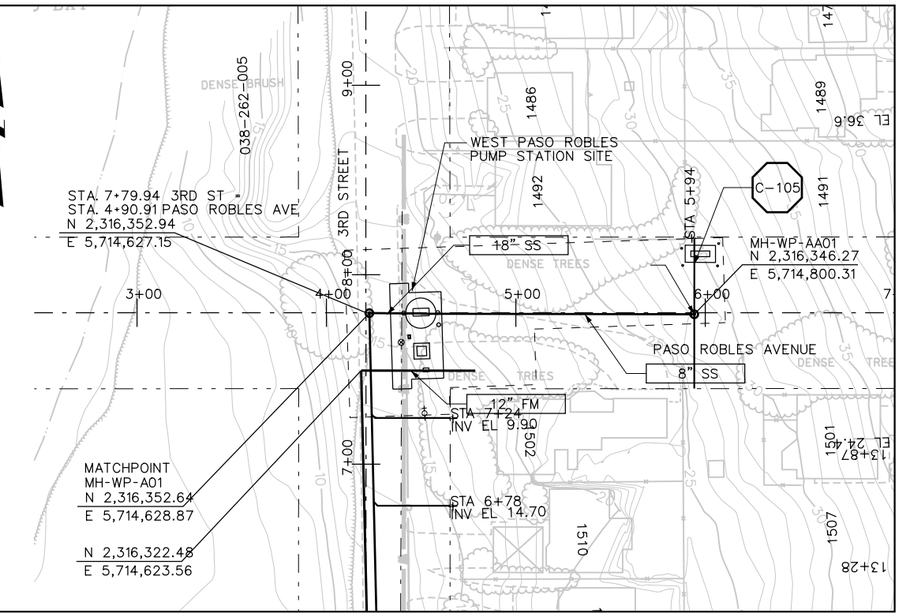
LOS OSOS WASTEWATER PROJECT

PLAN AND PROFILE – EDS
EL MORO AVENUE
STA 43+00 TO STA 54+00

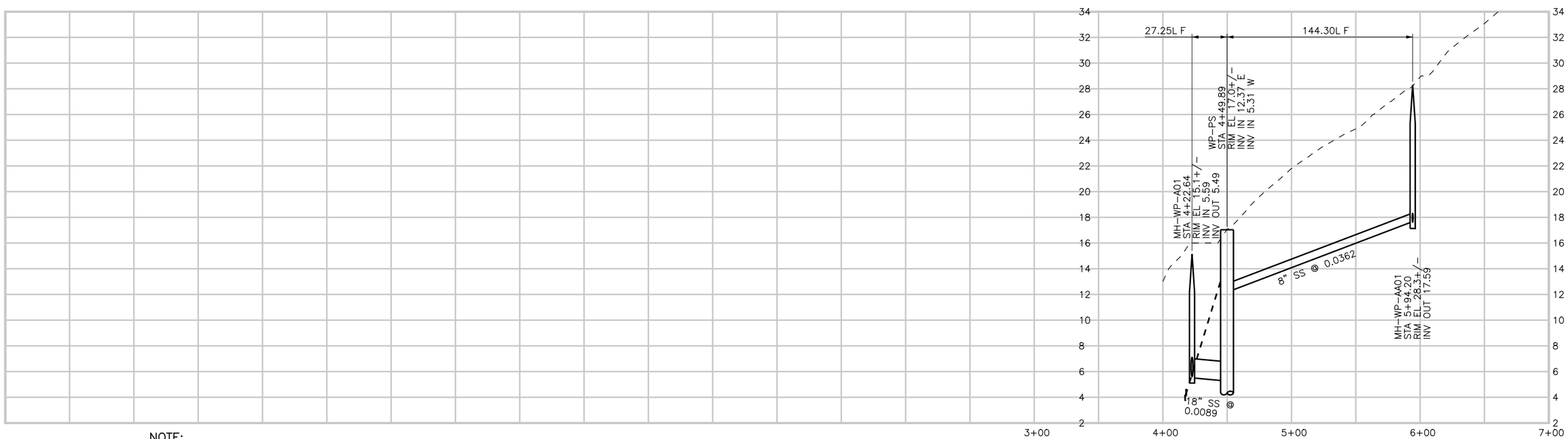
SHEET A-PP-325

XREF: los_ed_bdr c-ed-dm c-ed-bs x-feat-ceri x-feat-row x-feat-topo c-ed-ss bn-feat-cnbl bn-util-ss cn-feat-cnbl cN-UTIL-SS an-feat-cnbl an-util-ss dn-util-ss c-ed-util c-ed-pp cX-UTIL-all cX-UTIL-all x-sup-topo dX-util-all Morro and Corr Easement
FILE: N:\Projects\los_osos\Collect_Sys\ED\civ\a-pp-325.dwg USER: kxkai Feb 09, 2004 2:42pm Job No: 1481166

SEE SHEET A-PP-100 FOR CONTINUATION



SEE SHEET D-PP-101 FOR CONTINUATION



CONSTRUCTION
BASELINE
STATION

NOTE:

THIS DRAWING DEPICTS CONSTRUCTION WORK FOR PHASE I (AREA A) OF THE COLLECTION SYSTEM WORK. IT IS SHOWN HERE FOR REFERENCE ONLY.

PROFILE ON PASO ROBLES

DIGALERT — DIAL TOLL FREE 1-800-642-2444 — AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER — LESLIE C. WONG — No. C-58311 — Exp. 6-30-06 — CIVIL — STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: H: 1"=40' V: 1"=4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

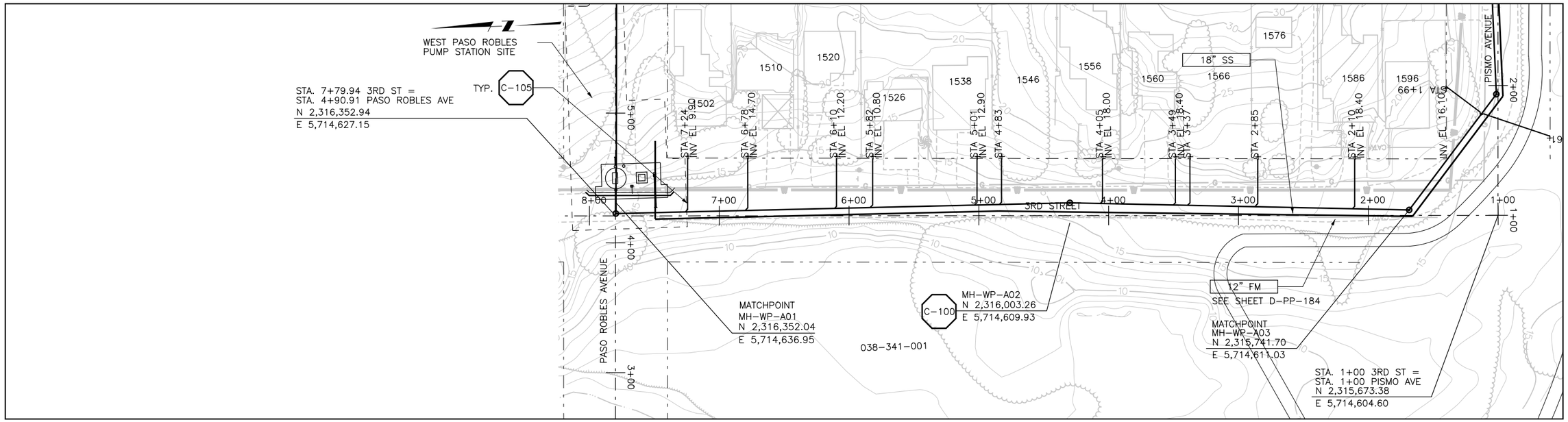
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
PASO ROBLES AVE.
STA. 4+22.64 TO STA. 5+94.20

SHEET D-PP-100

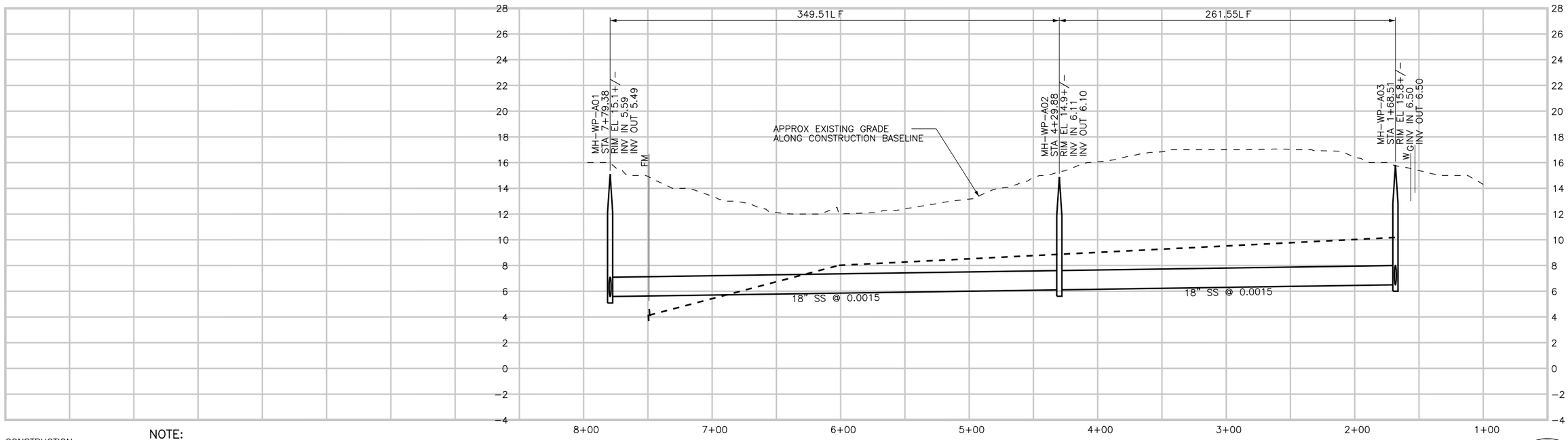
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\D-PP-100.dgn Plot Date: 06-FEB-2004 15:03

SEE SHEET D-PP-100 FOR CONTINUATION

SEE SHEET D-PP-102 FOR CONTINUATION



PLAN ON 3RD STREET



CONSTRUCTION
BASELINE
STATION

NOTE:

THIS DRAWING DEPICTS CONSTRUCTION WORK FOR PHASE I (AREA A) OF THE COLLECTION SYSTEM WORK. IT IS SHOWN HERE FOR REFERENCE ONLY.

PROFILE ON 3RD STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

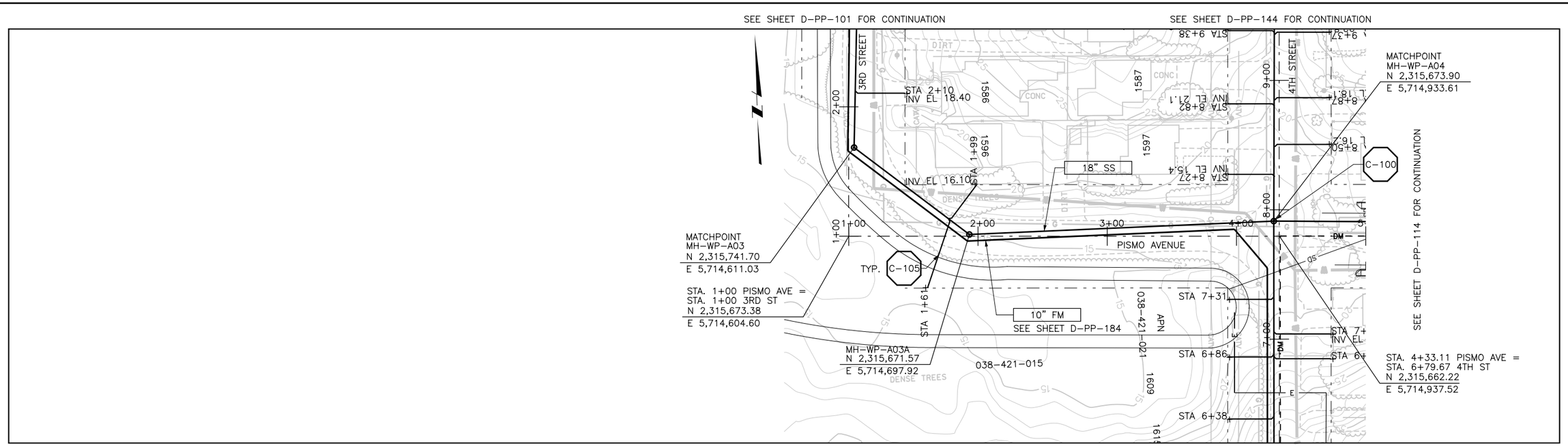
LOS OSOS
COMMUNITY SERVICES DISTRICT

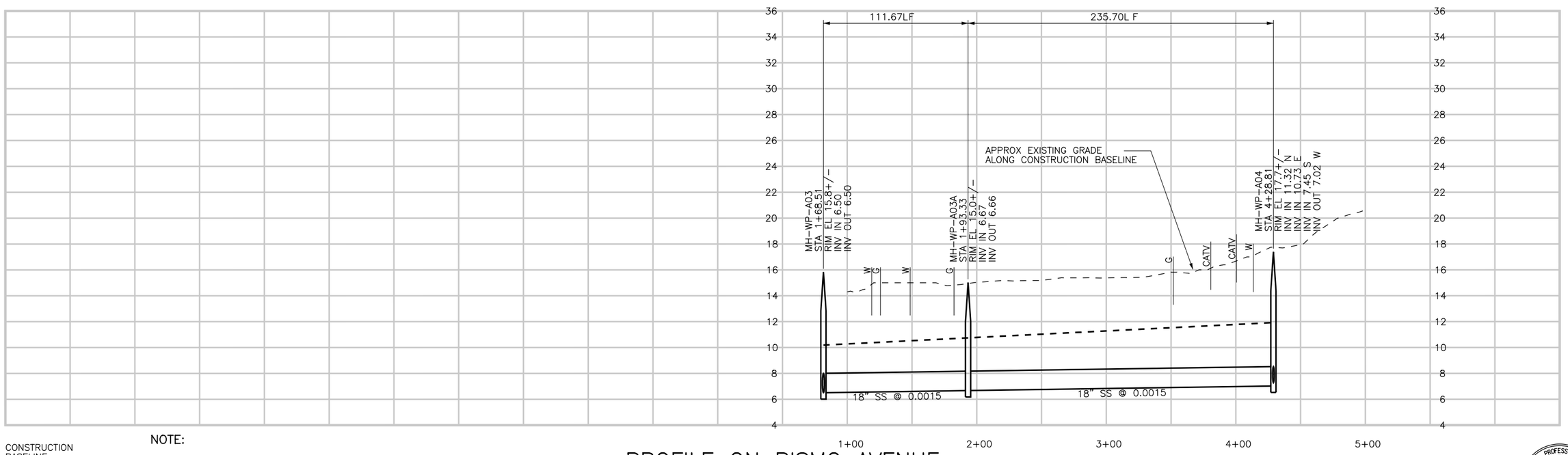
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
3RD STREET
STA. 7+29.86 TO STA. 0+94.04

SHEET
D-PP-101

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-101.dgn
Plot Date: 06-FEB-2004 15:03





CONSTRUCTION BASELINE STATION

NOTE:

THIS DRAWING DEPICTS CONSTRUCTION WORK FOR PHASE I (AREA A) OF THE COLLECTION SYSTEM WORK. IT IS SHOWN HERE FOR REFERENCE ONLY.

PROFILE ON PISMO AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

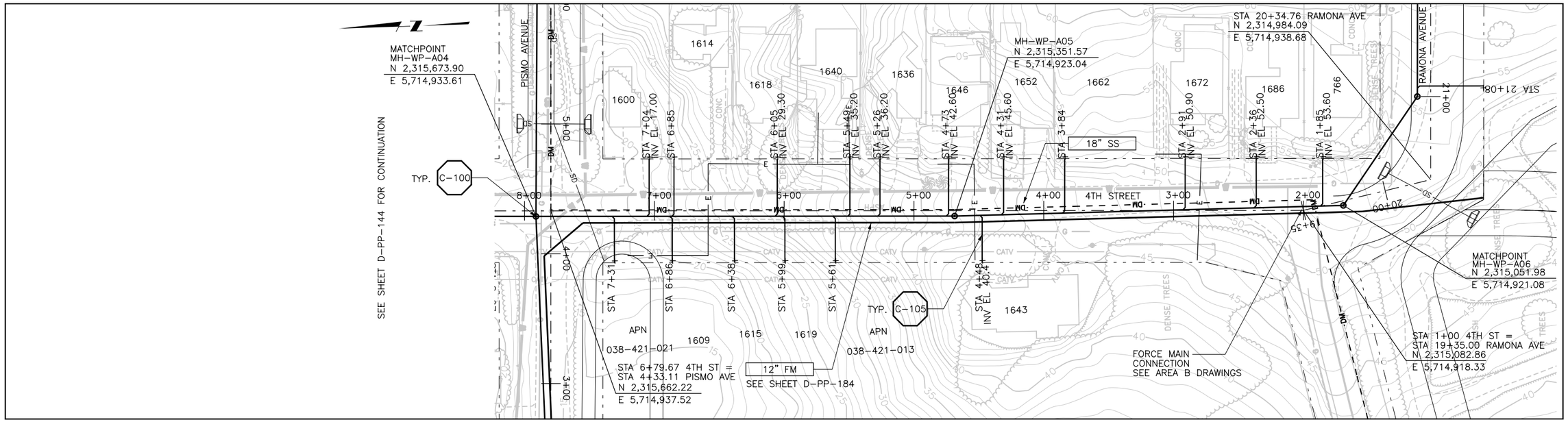
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
PISMO AVE.
STA. 1+09.34 TO 4+38.99

SHEET
D-PP-102

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-102.dgn
Plot Date: 06-FEB-2004 15:04

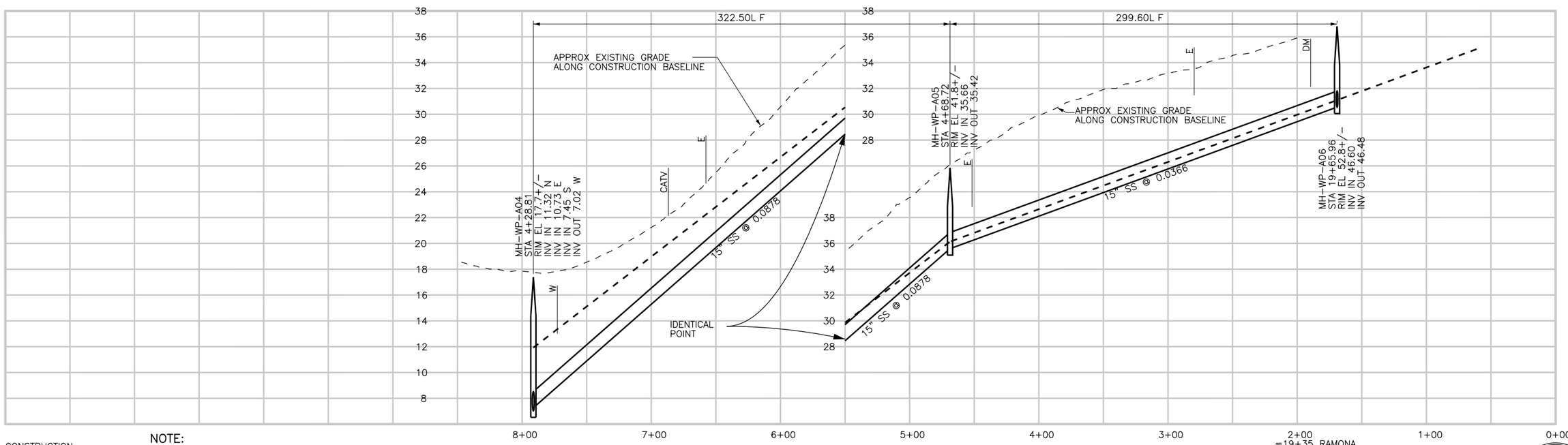
SEE SHEET D-PP-114 FOR CONTINUATION

SEE SHEET D-PP-104 FOR CONTINUATION



SEE SHEET D-PP-102 FOR CONTINUATION

PLAN ON 4TH STREET



CONSTRUCTION
BASELINE
STATION

NOTE:

THIS DRAWING DEPICTS CONSTRUCTION WORK FOR PHASE I (AREA A) OF THE COLLECTION SYSTEM WORK. IT IS SHOWN HERE FOR REFERENCE ONLY.

PROFILE ON 4TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

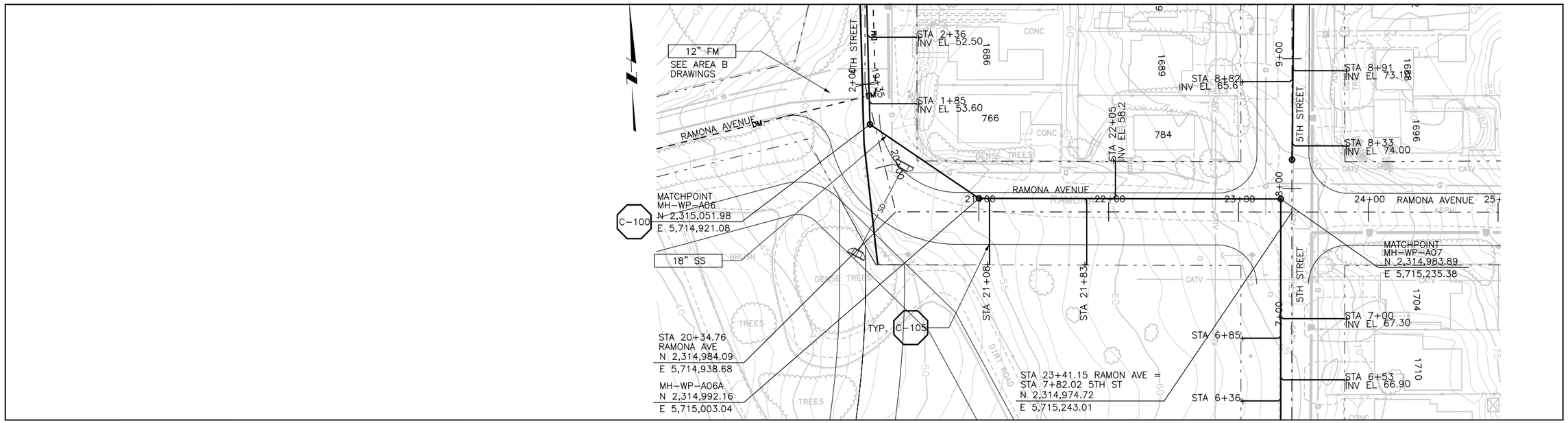
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
4TH STREET
STA. 6+73.69 TO -0+04.37

SHEET
D-PP-103

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-103.dgn
Plot Date: 06-FEB-2004 15:05

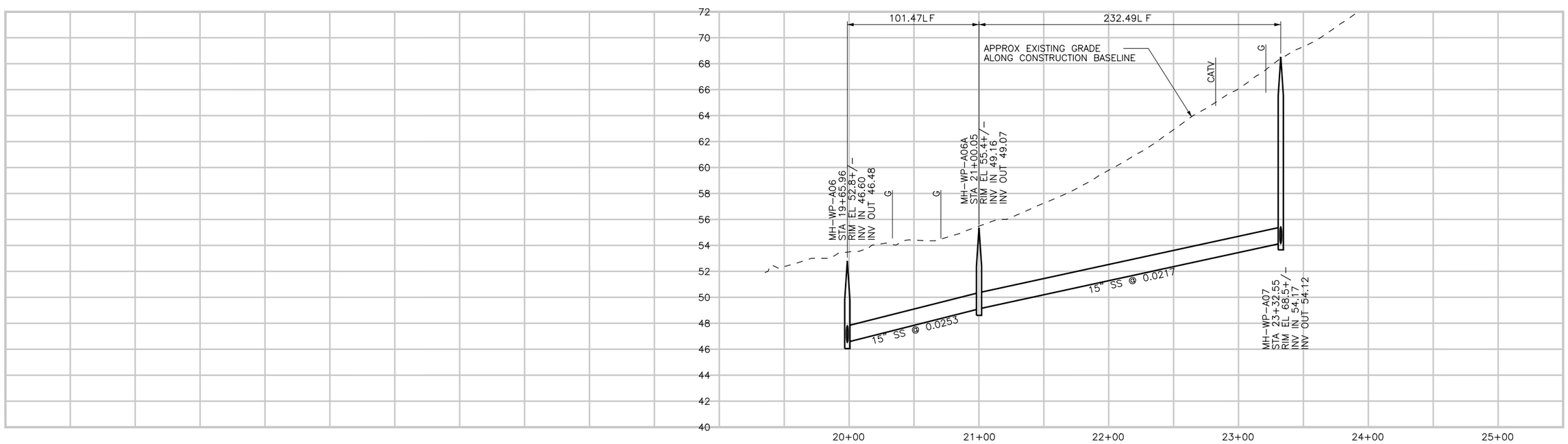
SEE SHEET D-PP-103 FOR CONTINUATION

SEE SHEET D-PP-146 FOR CONTINUATION



SEE SHEET D-PP-105 FOR CONTINUATION

PLAN ON RAMONA AVENUE



CONSTRUCTION
BASELINE
STATION

PROFILE ON RAMONA AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

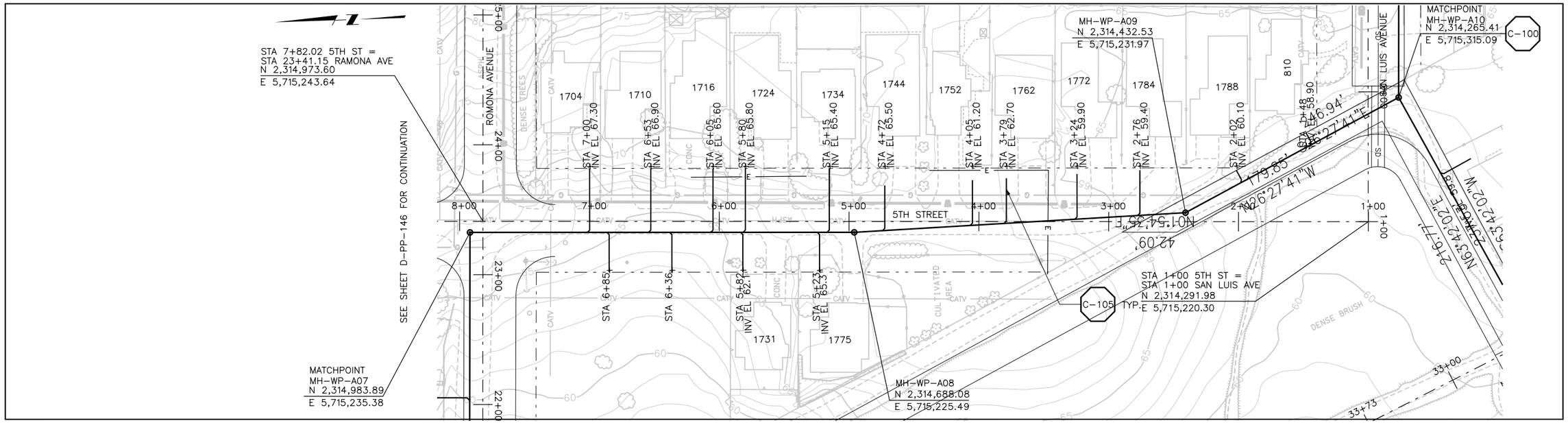
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

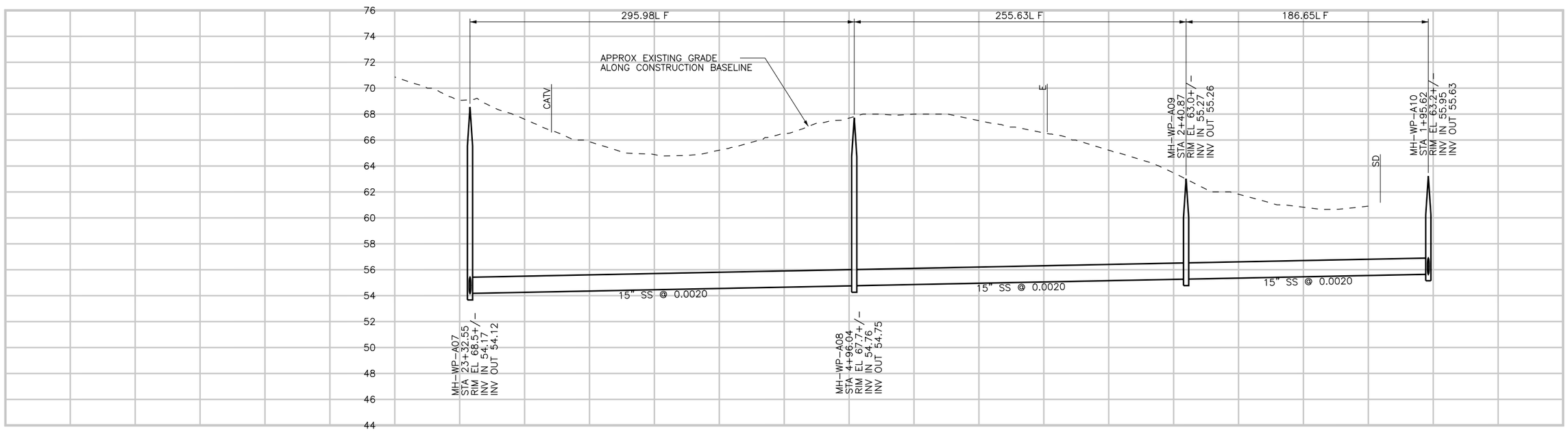
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
RAMONA AVE.
STA. 20+36.01 TO 23+47.53

SHEET
D-PP-104

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-104.dgn
Plot Date: 05-FEB-2004 17:01



PLAN ON 5TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 5TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
STEVE C. WONG
No. C-58934
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE
JOHN A. BERGER — C31069 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

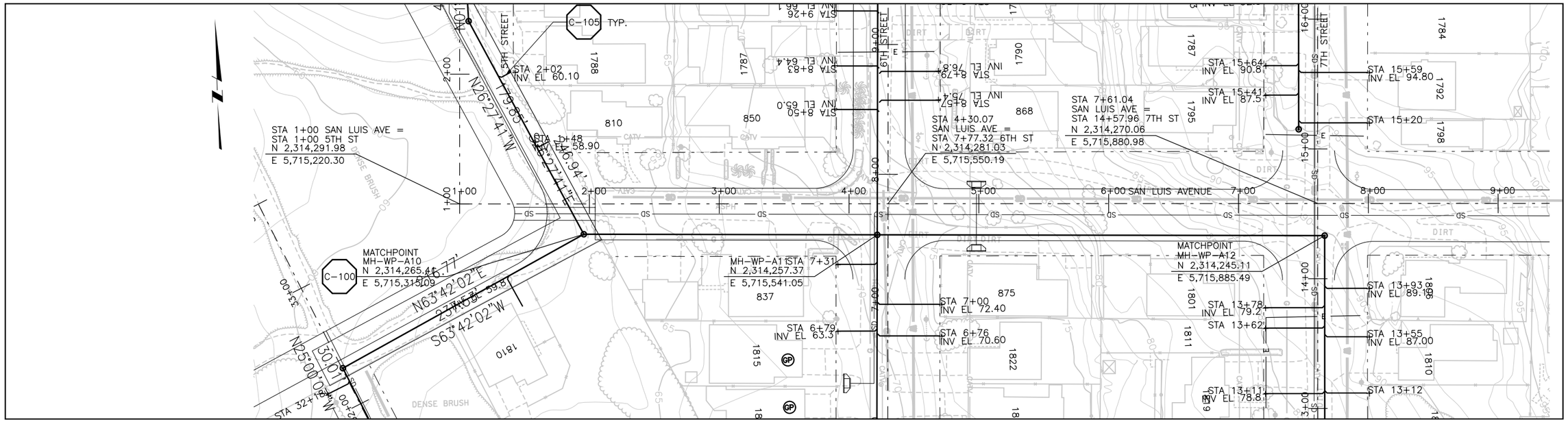
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
5TH STREET
STA. 7+76.02 TO 0+94.24

SHEET
D-PP-105

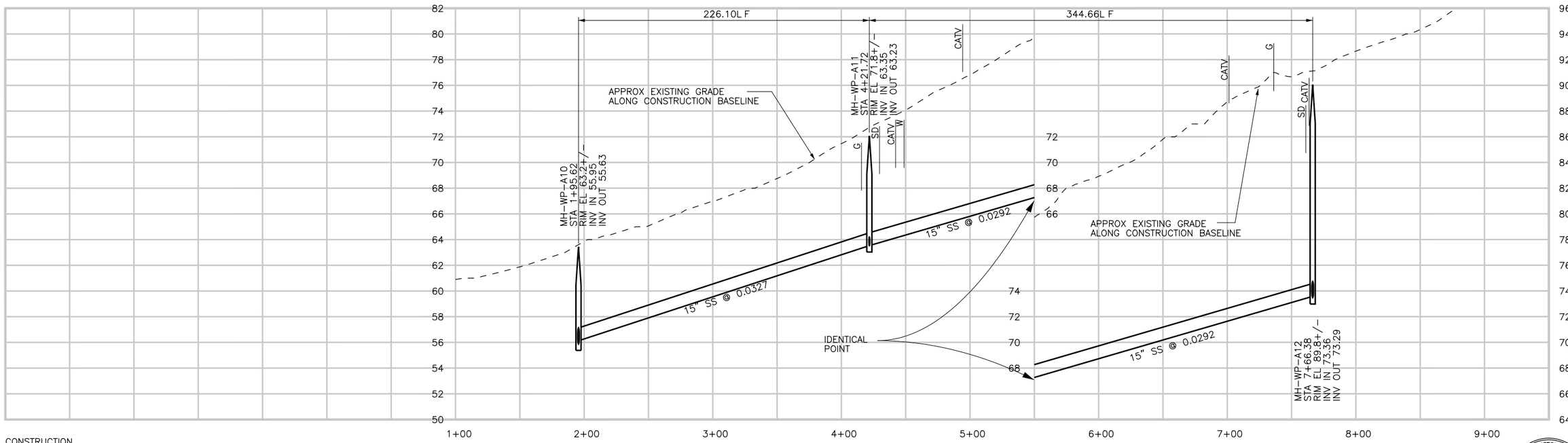
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-105.dgn Plot Date: 05-FEB-2004 17:02

SEE SHEET D-PP-105 FOR CONTINUATION
SEE SHEET D-PP-121 FOR CONTINUATION
SEE SHEET D-PP-151 FOR CONTINUATION



SEE SHEET D-PP-140 FOR CONTINUATION
SEE SHEET D-PP-122 FOR CONTINUATION
SEE SHEET D-PP-107 FOR CONTINUATION

PLAN ON SAN LUIS AVENUE



PROFILE ON SAN LUIS AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Berger — JOHN A. BERGER — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

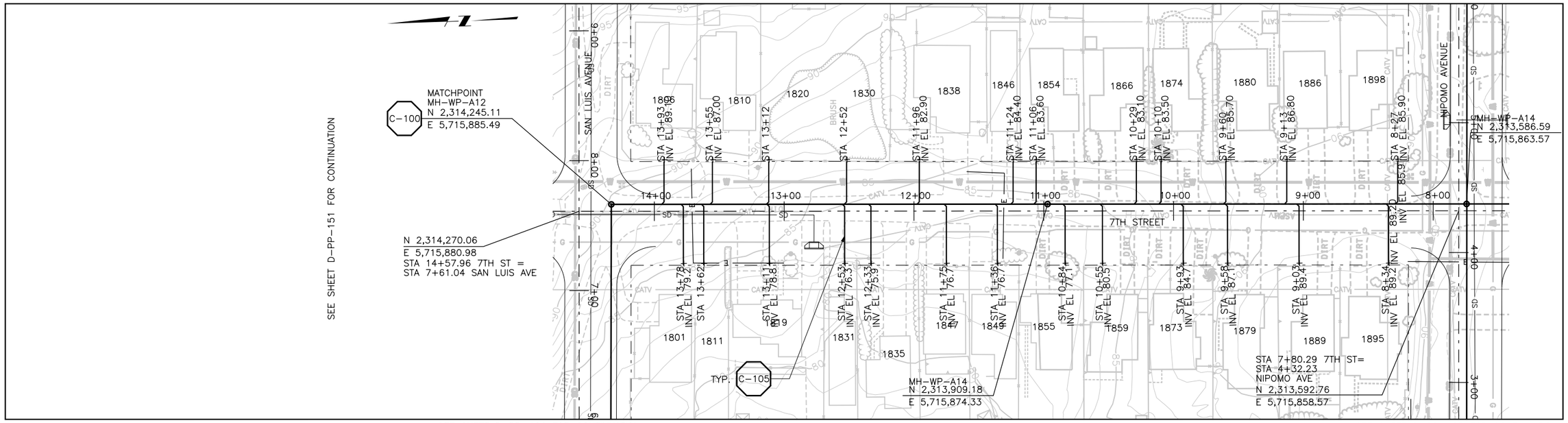
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SAN LUIS AVE.
STA. 1+86.12 TO 7+66.42

SHEET
D-PP-106

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-106.dgn Plot Date: 05-FEB-2004 17:02

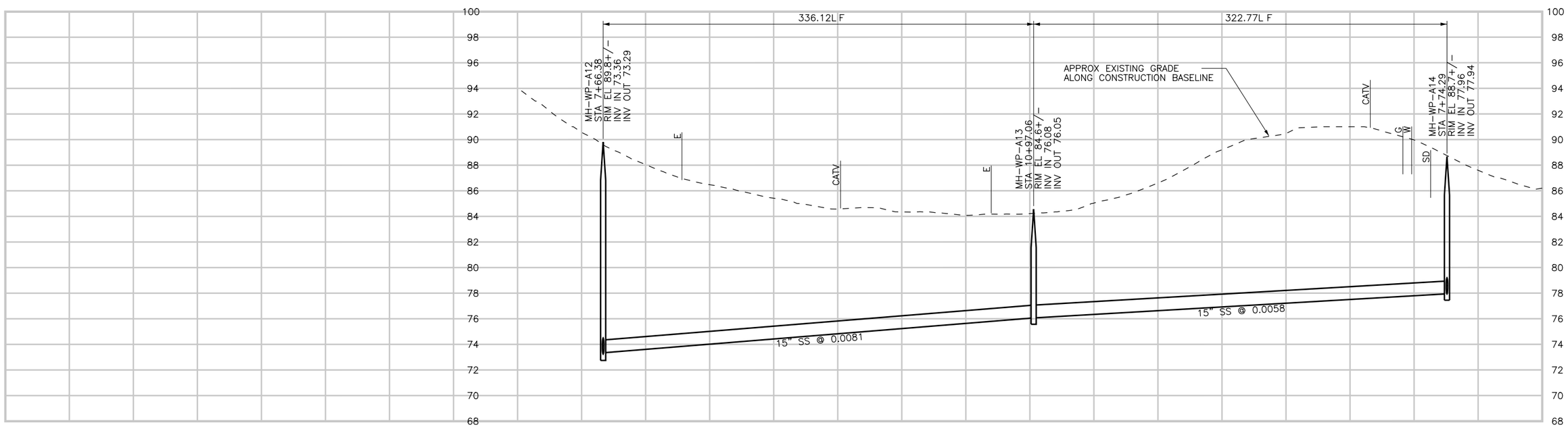
SEE SHEET D-PP-108 FOR CONTINUATION



SEE SHEET D-PP-106 FOR CONTINUATION

SEE SHEET D-PP-123 FOR CONTINUATION

PLAN ON 7TH STREET



PROFILE ON 7TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

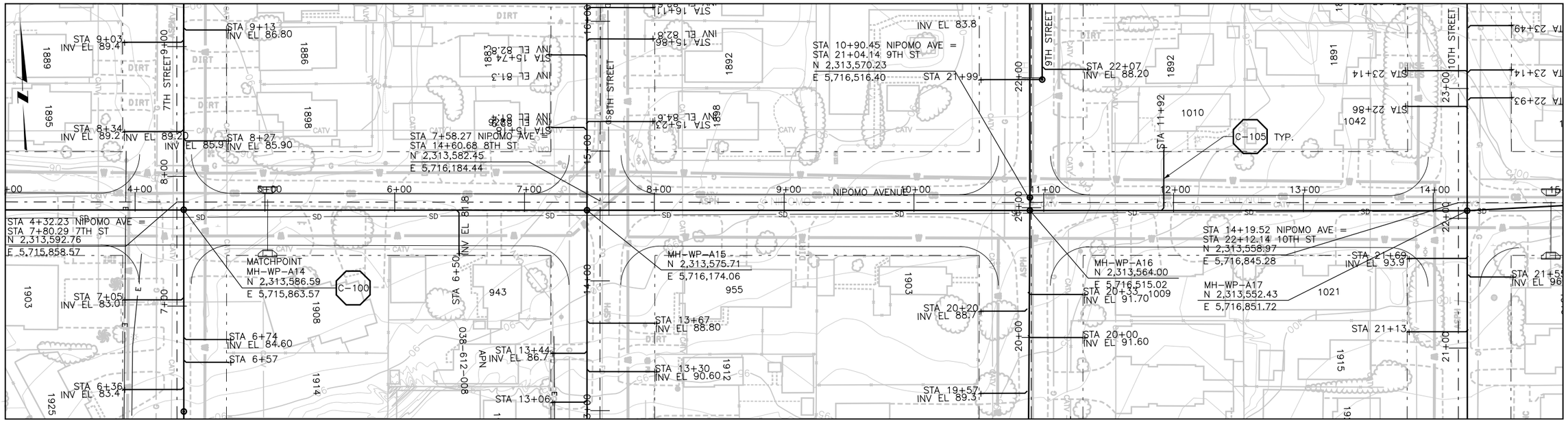
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
7TH STREET
STA. 14+52.06 TO 7+74.29

SHEET
D-PP-107

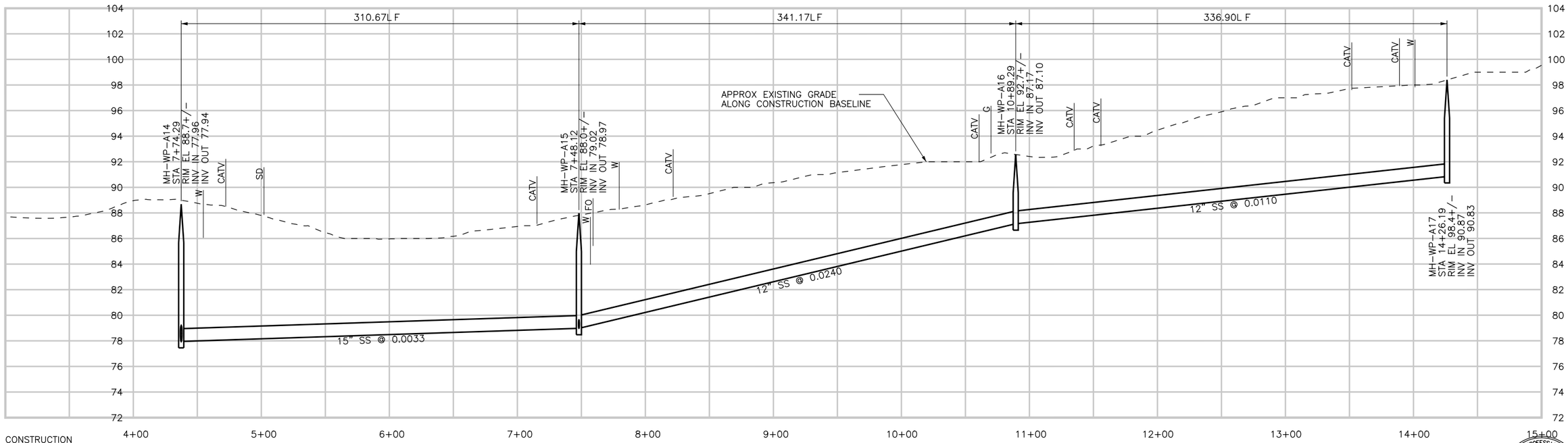
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-107.dgn
Plot Date: 05-FEB-2004 17:03

SEE SHEET D-PP-107 FOR CONTINUATION
SEE SHEET D-PP-125 FOR CONTINUATION
SEE SHEET D-PP-129 FOR CONTINUATION
SEE SHEET D-PP-133 FOR CONTINUATION
SEE SHEET D-PP-123 FOR CONTINUATION
SEE SHEET D-PP-109 FOR CONTINUATION



SEE SHEET D-PP-124 FOR CONTINUATION
SEE SHEET D-PP-126 FOR CONTINUATION
SEE SHEET D-PP-132 FOR CONTINUATION
SEE SHEET D-PP-134 FOR CONTINUATION

PLAN ON NIPOMO AVENUE



PROFILE ON NIPOMO AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

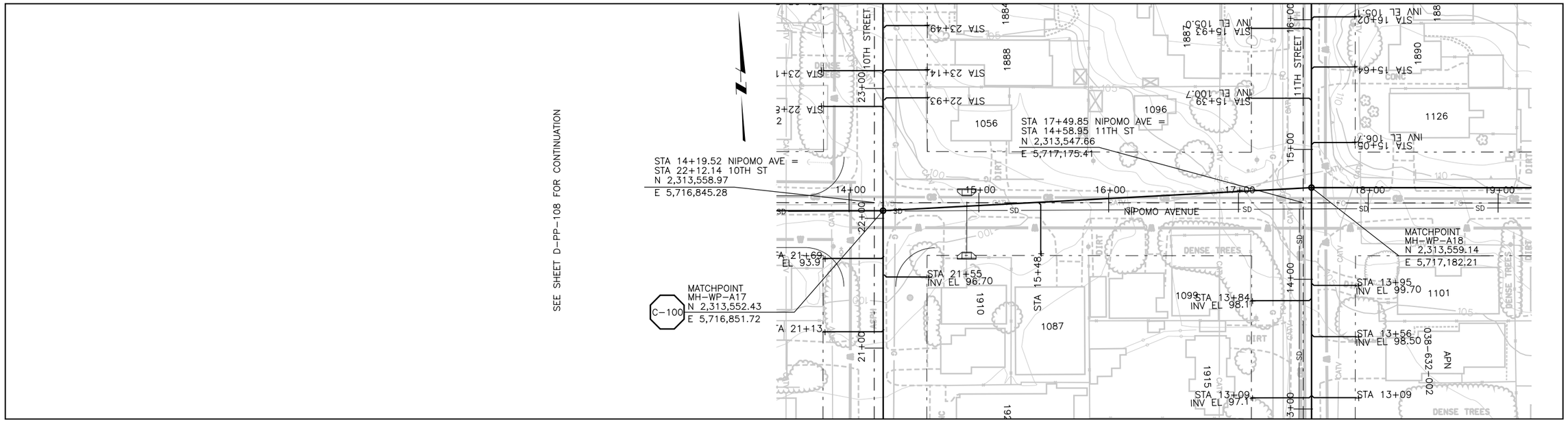
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

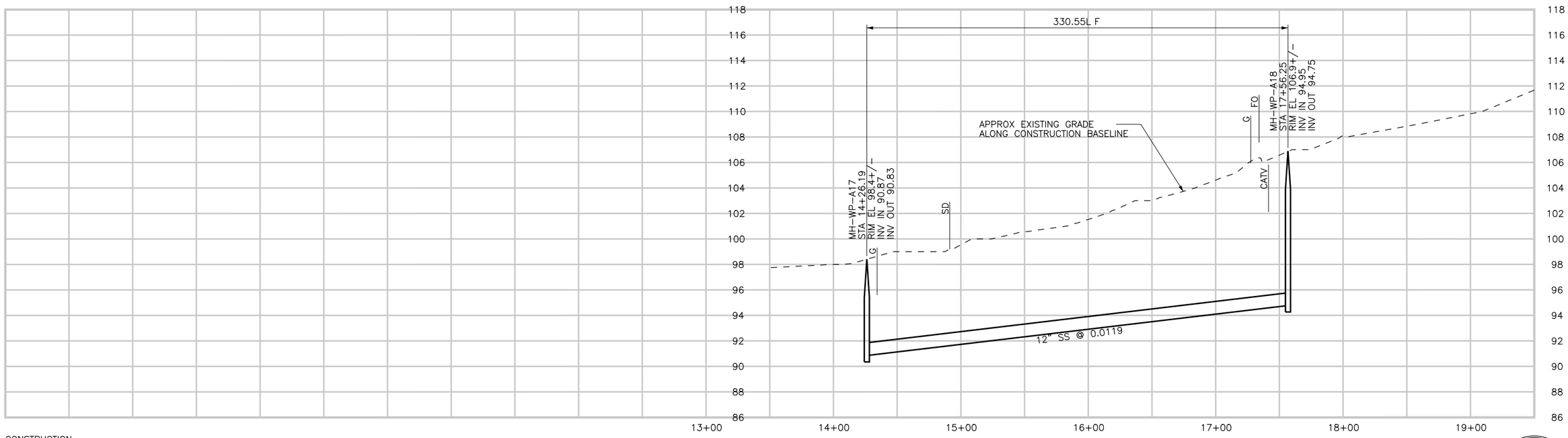
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
NIPOMO AVE.
STA. 4+37.45 TO 14+26.19

SHEET
D-PP-108

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-108.dgn
Plot Date: 05-FEB-2004 17:04



PLAN ON NIPOMO AVENUE



CONSTRUCTION
BASELINE
STATION

PROFILE ON NIPOMO AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

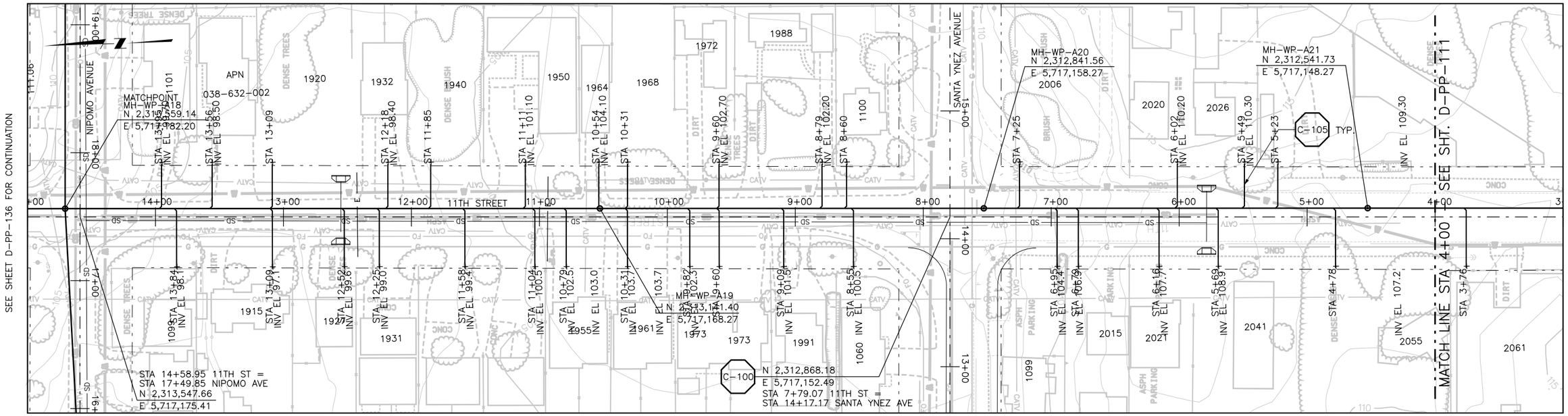
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
NIPOMO AVE
STA. 14+26.19 TO 17+56.25

SHEET
D-PP-109

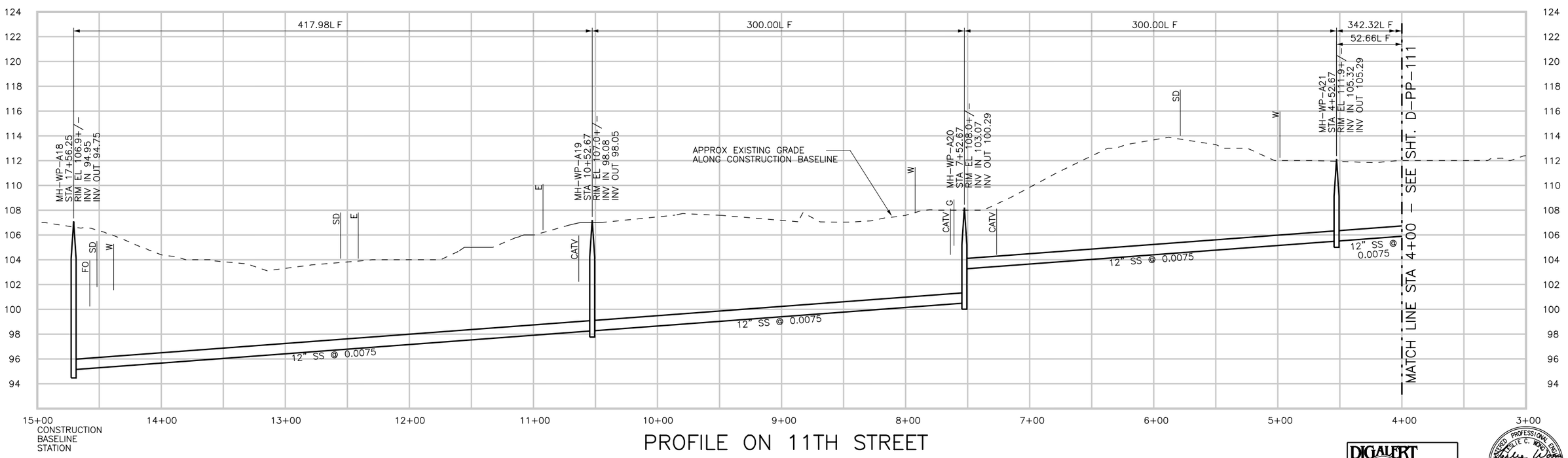
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-109.dgn
Plot Date: 05-FEB-2004 17:04

SEE SHEET D-PP-137 FOR CONTINUATION



SEE SHEET D-PP-109 FOR CONTINUATION

PLAN ON 11TH STREET



PROFILE ON 11TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
STEVE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

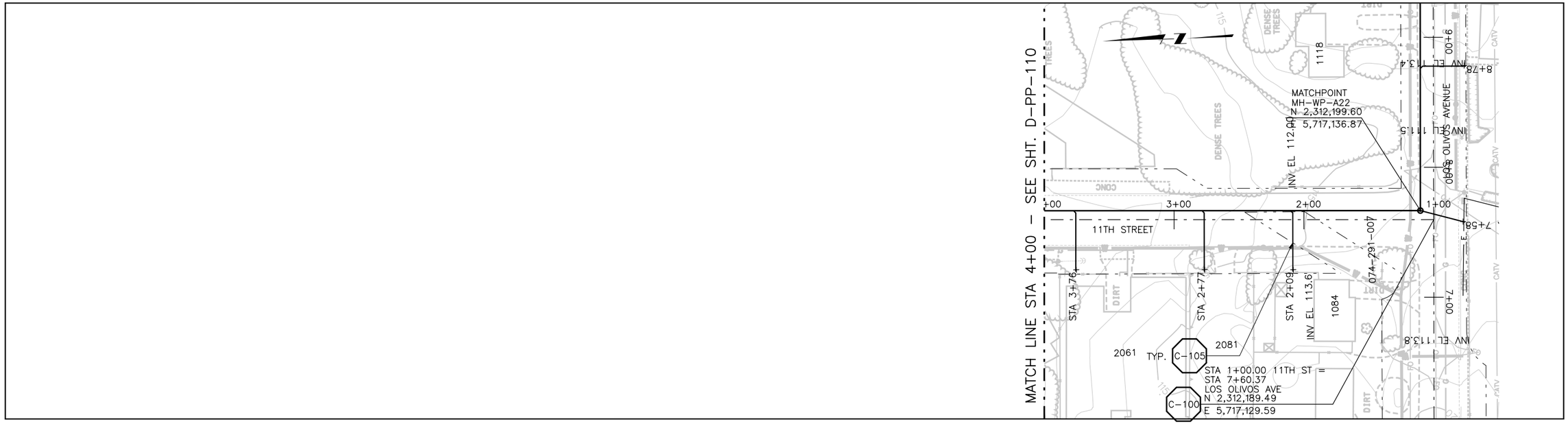
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
11TH STREET
STA. 14+52.67 TO 4+52.67

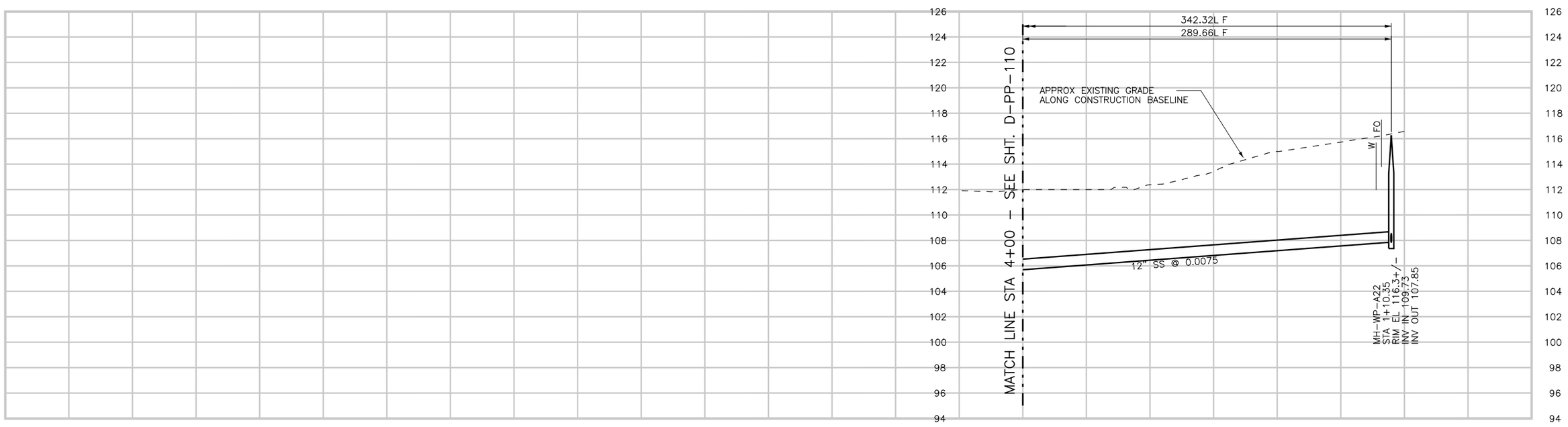
SHEET
D-PP-110

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-110.dgn Plot Date: 05-FEB-2004 17:05

SEE SHEET D-PP-112 FOR CONTINUATION



PLAN ON 11TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 11TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

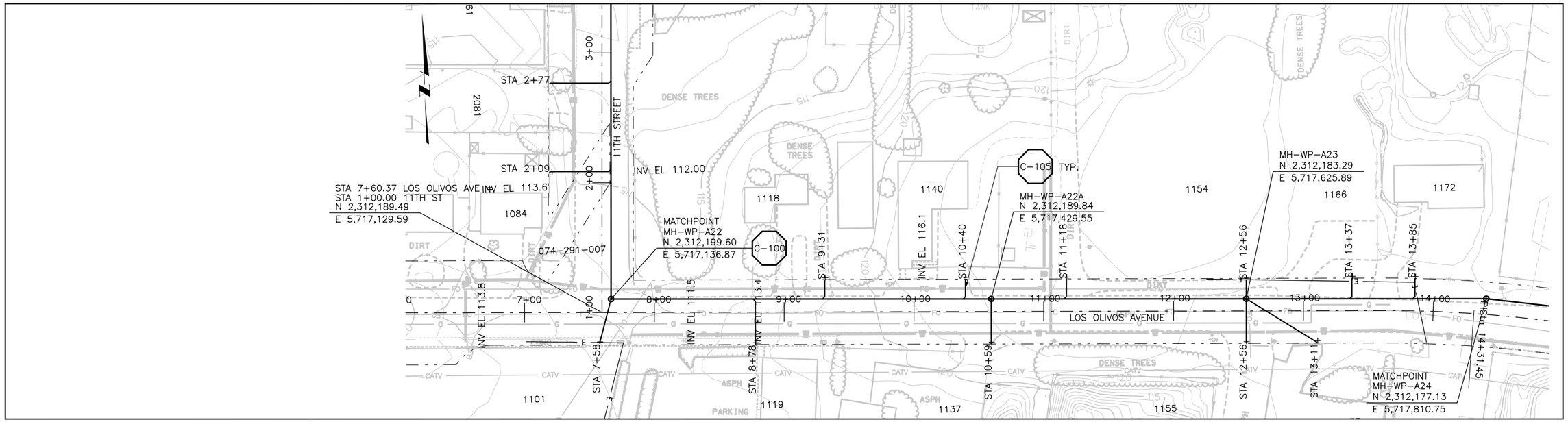
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
11TH STREET
STA. 4+52.67 TO 1+00.35

SHEET
D-PP-111

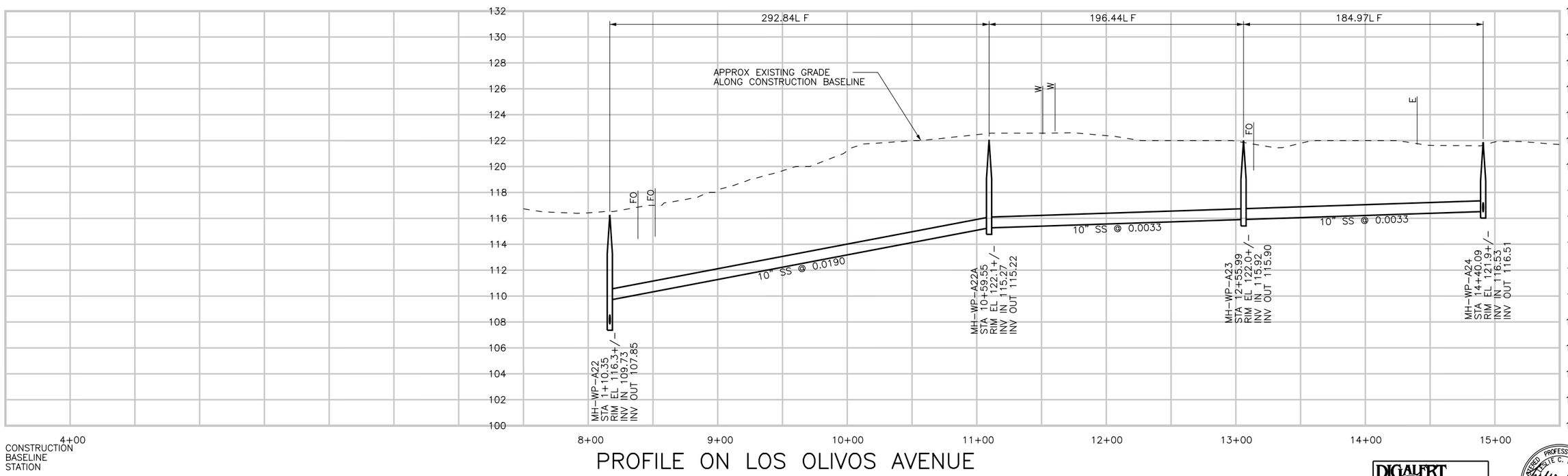
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-111.dgn
Plot Date: 05-FEB-2004 17:06

SEE SHEET D-PP-111 FOR CONTINUATION



SEE SHEET D-PP-113 FOR CONTINUATION

PLAN ON LOS OLIVOS AVENUE



PROFILE ON LOS OLIVOS AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JOHN A. BERGEN
No. C-31069
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

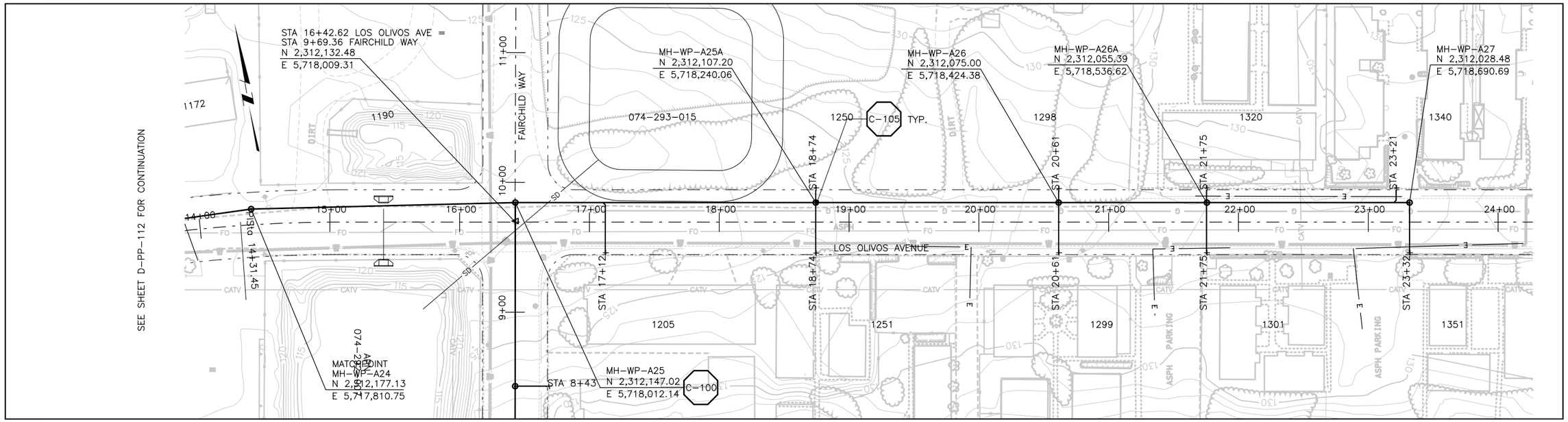
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
LOS OLIVOS AVE.
STA. 7+66.68 TO 14+39.46

SHEET
D-PP-112

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-112.dgn Plot Date: 05-FEB-2004 17:06

SEE SHEET D-PP-176 FOR CONTINUATION

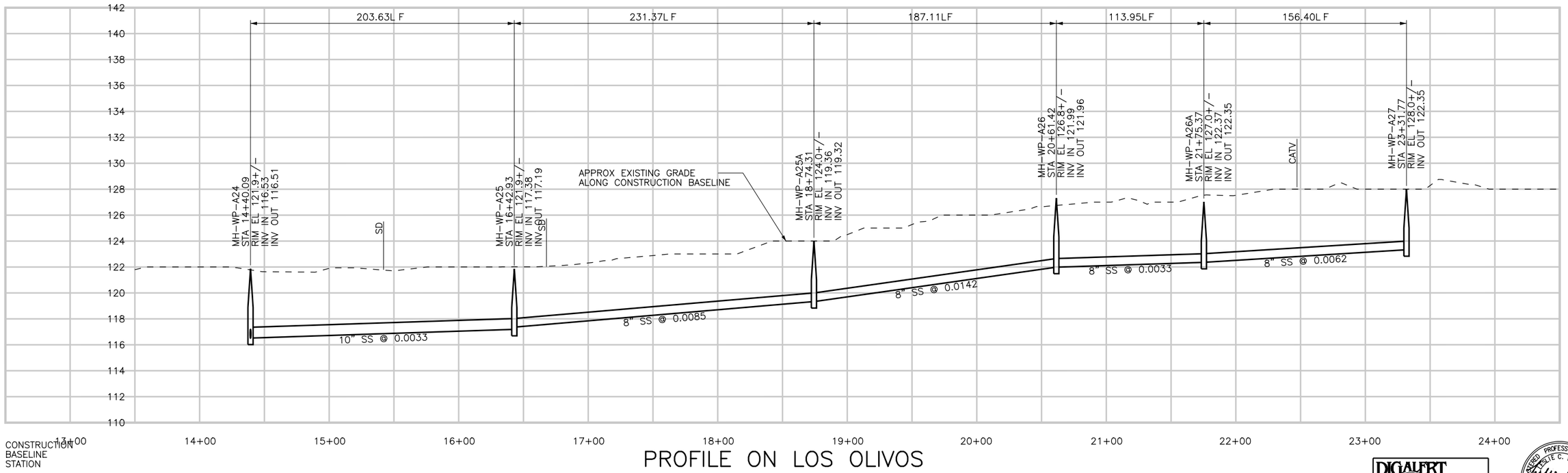


SEE SHEET D-PP-112 FOR CONTINUATION

SEE SHEET D-PP-183 FOR CONTINUATION

SEE SHEET D-PP-139 FOR CONTINUATION

PLAN ON LOS OLIVOS



PROFILE ON LOS OLIVOS

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JULIE C. WONG
No. C-58934
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

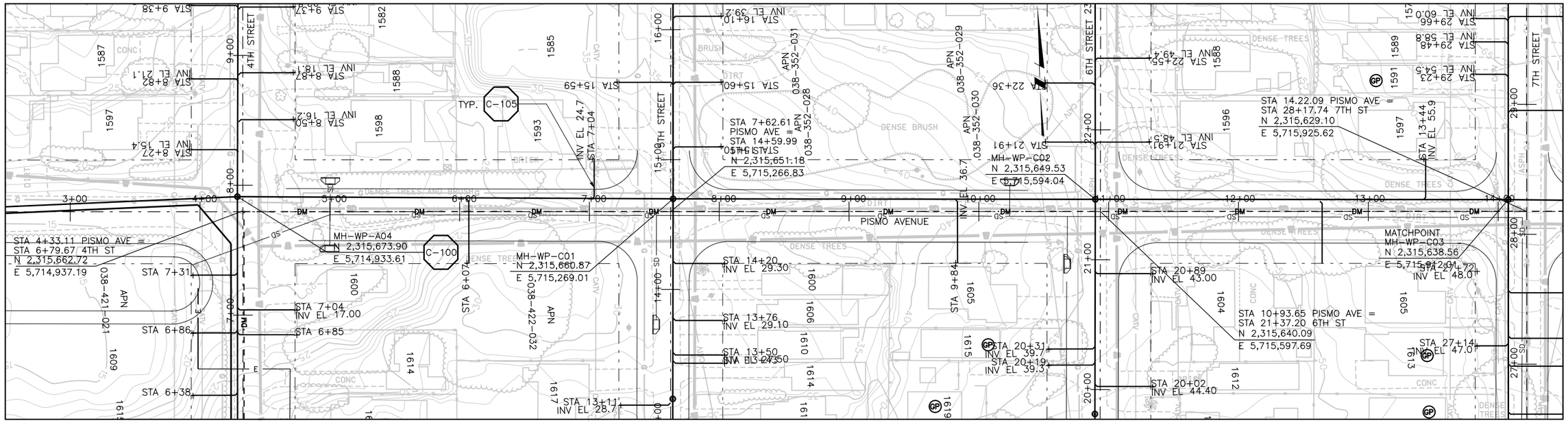
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
LOS OLIVOS AVE.
STA. 14+39.46 TO 24+17.62

SHEET
D-PP-113

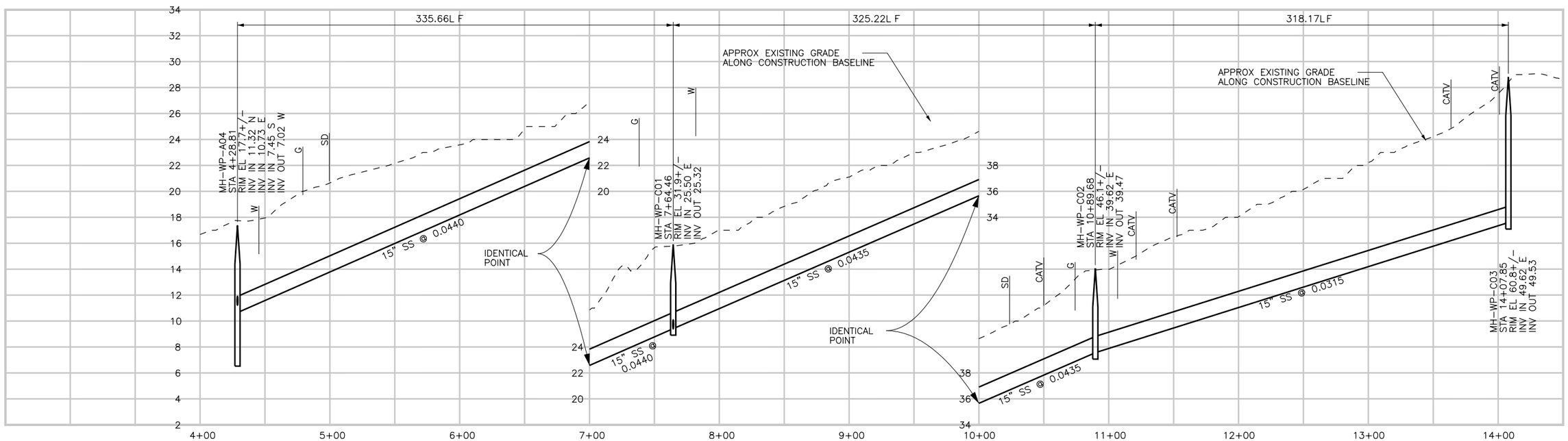
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-113.dgn Plot Date: 05-FEB-2004 17:07

SEE SHEET D-PP-144 FOR CONTINUATION
SEE SHEET D-PP-145 FOR CONTINUATION
SEE SHEET D-PP-147 FOR CONTINUATION
SEE SHEET D-PP-149 FOR CONTINUATION
SEE SHEET D-PP-102 FOR CONTINUATION



SEE SHEET D-PP-103 FOR CONTINUATION
SEE SHEET D-PP-146 FOR CONTINUATION
SEE SHEET D-PP-148 FOR CONTINUATION
SEE SHEET D-PP-150 FOR CONTINUATION
SEE SHEET D-PP-115 FOR CONTINUATION

PLAN ON PISMO AVENUE



PROFILE ON PISMO AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Berger — JOHN A. BERGER — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

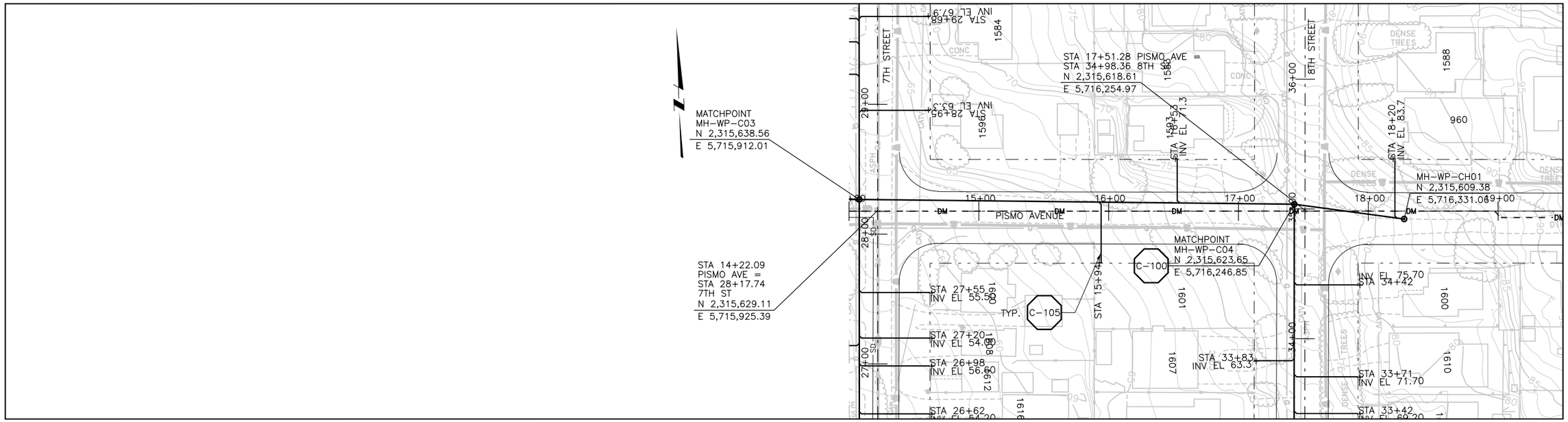
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
PISMO AVE.
STA. 4+38.99 TO 14+27.82

SHEET
D-PP-114

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-114.dgn Plot Date: 05-FEB-2004 17:08

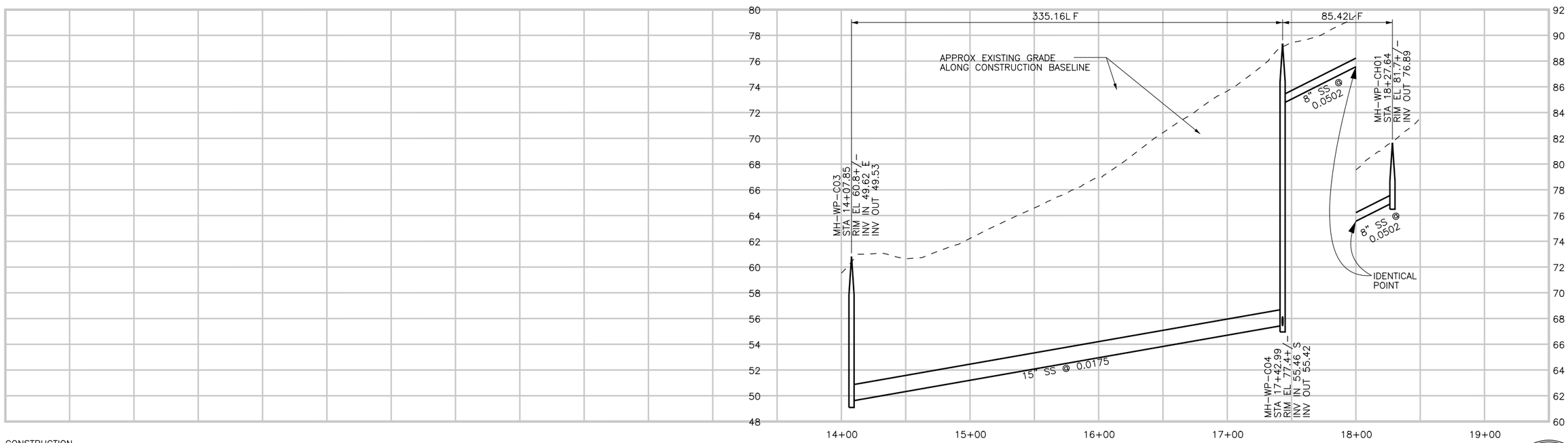
SEE SHEET D-PP-149 FOR CONTINUATION



SEE SHEET D-PP-150 FOR CONTINUATION

SEE SHEET D-PP-116 FOR CONTINUATION

PLAN ON PISMO AVE



PROFILE ON PISMO AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
CLYDE C. WONG
No. C-58434
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

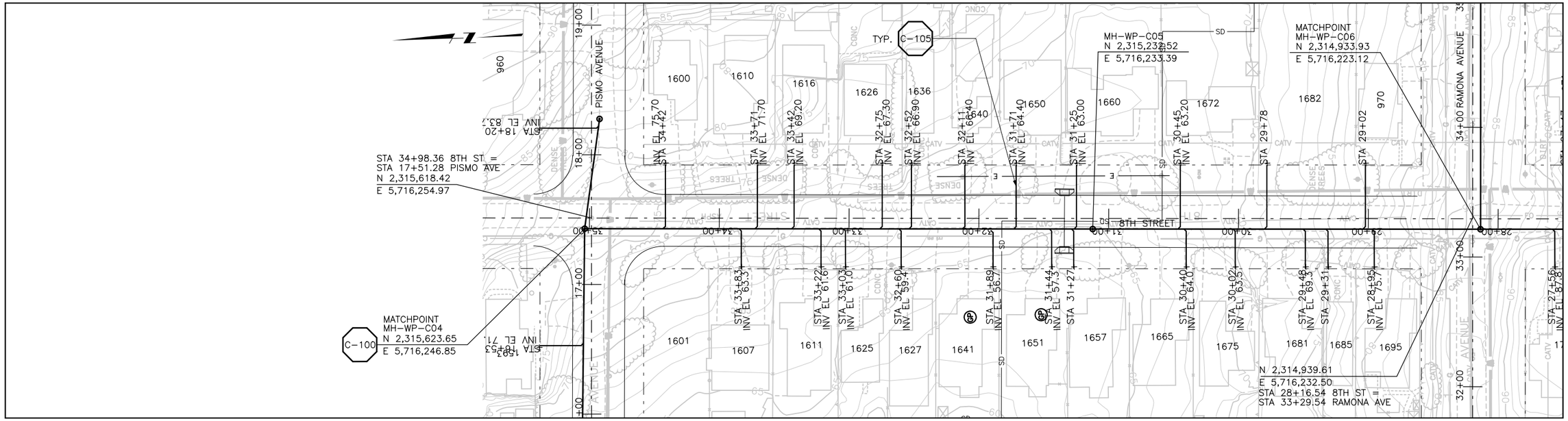
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
PISMO AVE. STA.
STA. 14+27.82 TO 17+57.46

SHEET
D-PP-115

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-115.dgn Plot Date: 05-FEB-2004 17:08

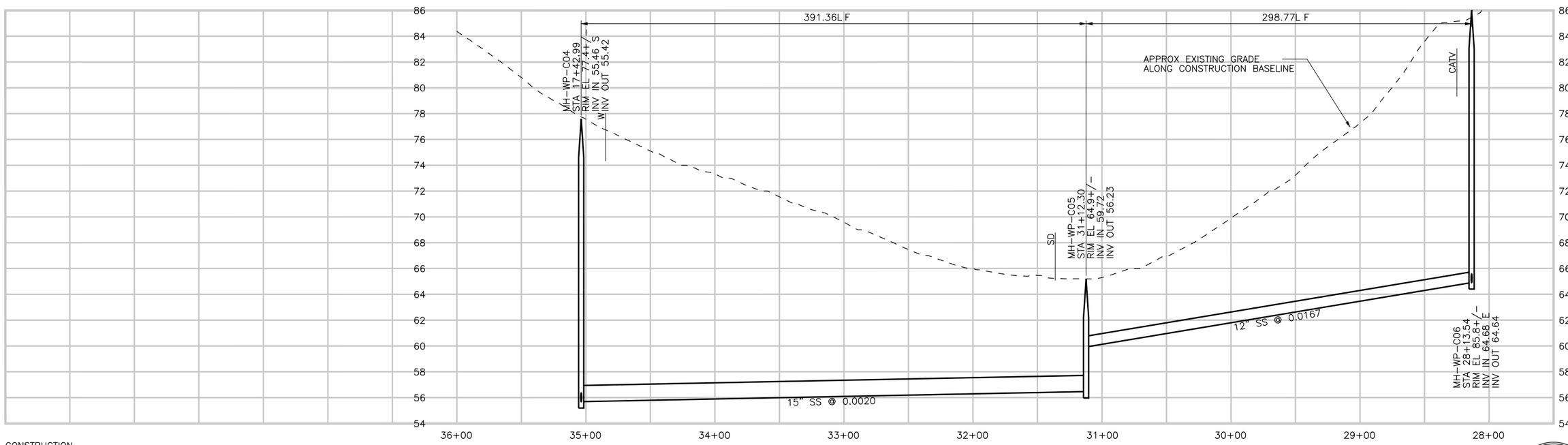
SEE SHEET D-PP-117 FOR CONTINUATION



SEE SHEET D-PP-115 FOR CONTINUATION

SEE SHEET D-PP-152 FOR CONTINUATION

PLAN ON 8TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 8TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

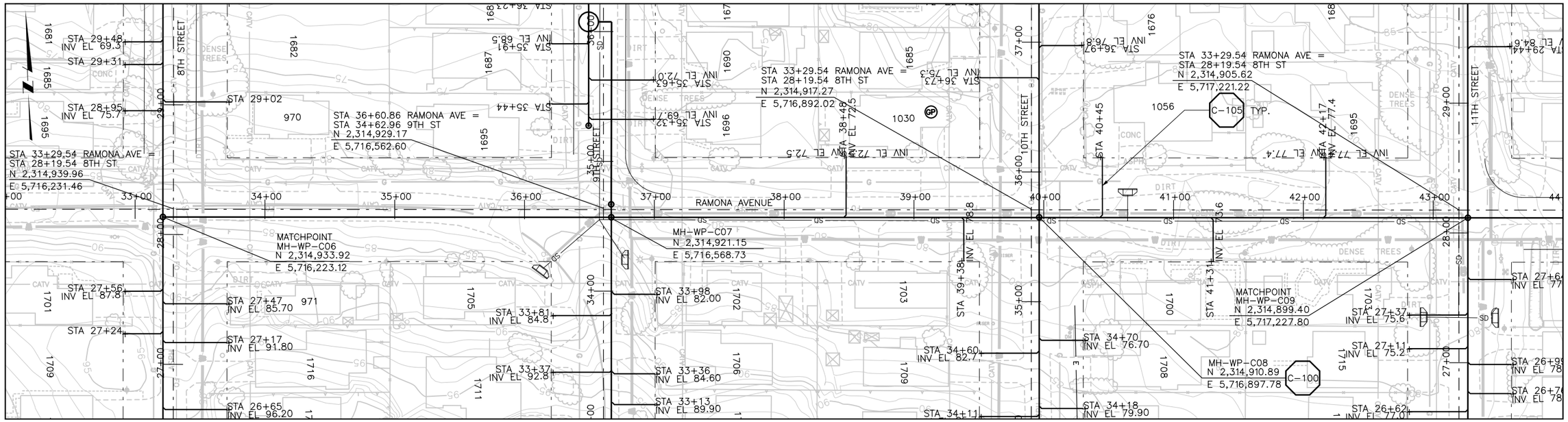
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
8TH STREET
STA. 34+92.31 TO 28+13.54

SHEET
D-PP-116

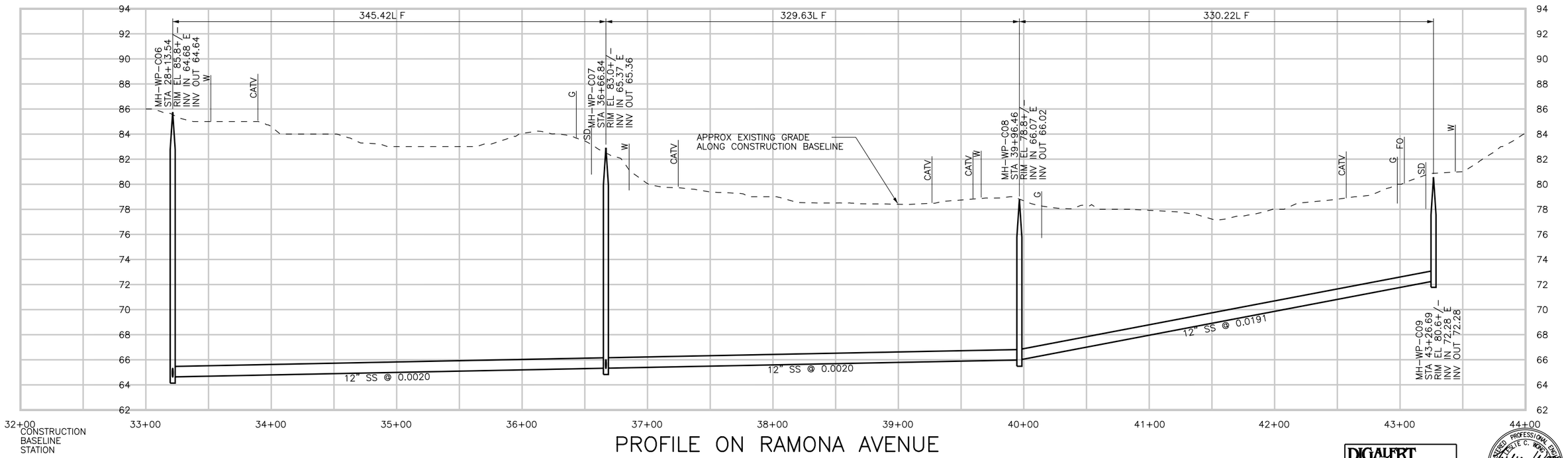
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-116.dgn Plot Date: 05-FEB-2004 17:09

SEE SHEET D-PP-116 FOR CONTINUATION
SEE SHEET D-PP-153 FOR CONTINUATION
SEE SHEET D-PP-155 FOR CONTINUATION
SEE SHEET D-PP-157 FOR CONTINUATION



SEE SHEET D-PP-118 FOR CONTINUATION
SEE SHEET D-PP-152 FOR CONTINUATION
SEE SHEET D-PP-154 FOR CONTINUATION
SEE SHEET D-PP-156 FOR CONTINUATION
SEE SHEET D-PP-158 FOR CONTINUATION

PLAN ON RAMONA AVENUE



PROFILE ON RAMONA AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

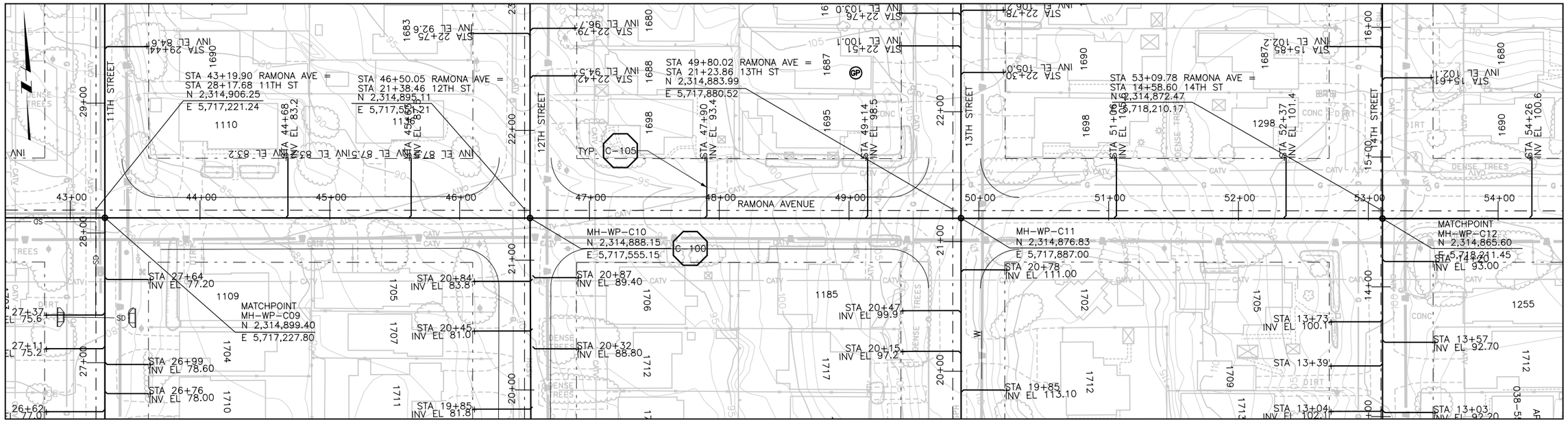
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
RAMONA AVE.
STA. 33+35.91 TO 43+26.69

SHEET
D-PP-117

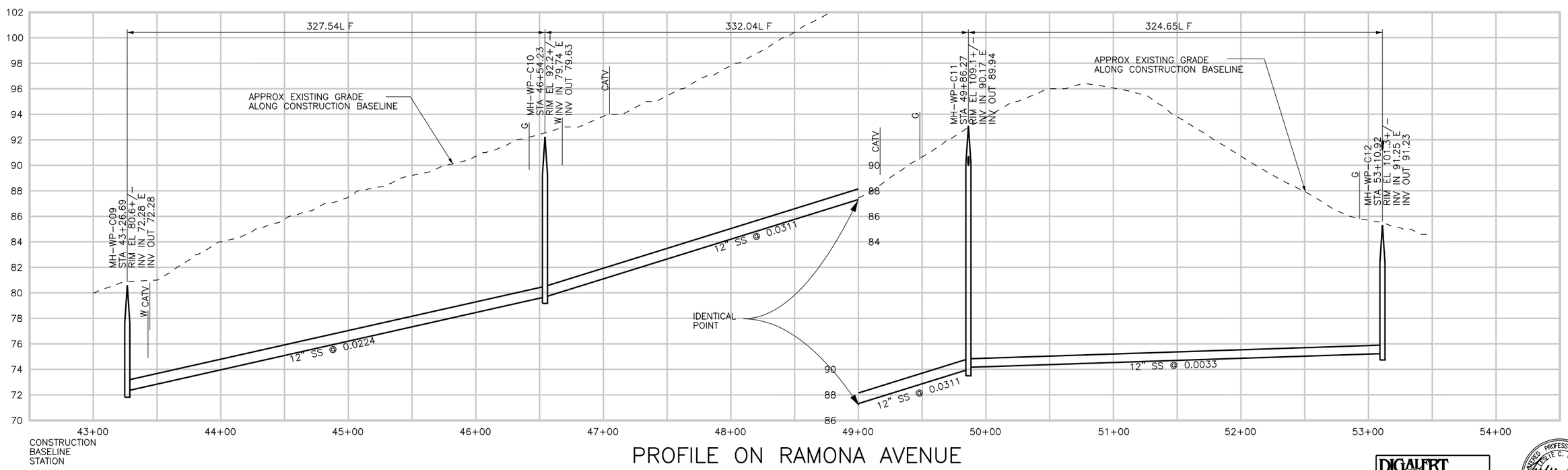
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-117.dgn
Plot Date: 05-FEB-2004 17:10

SEE SHEET D-PP-157 FOR CONTINUATION
SEE SHEET D-PP-160 FOR CONTINUATION
SEE SHEET D-PP-162 FOR CONTINUATION
SEE SHEET D-PP-164 FOR CONTINUATION
SEE SHEET D-PP-117 FOR CONTINUATION
SEE SHEET D-PP-119 FOR CONTINUATION



SEE SHEET D-PP-158 FOR CONTINUATION
SEE SHEET D-PP-161 FOR CONTINUATION
SEE SHEET D-PP-163 FOR CONTINUATION
SEE SHEET D-PP-165 FOR CONTINUATION

PLAN ON RAMONA AVENUE



PROFILE ON RAMONA AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
CLYDE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

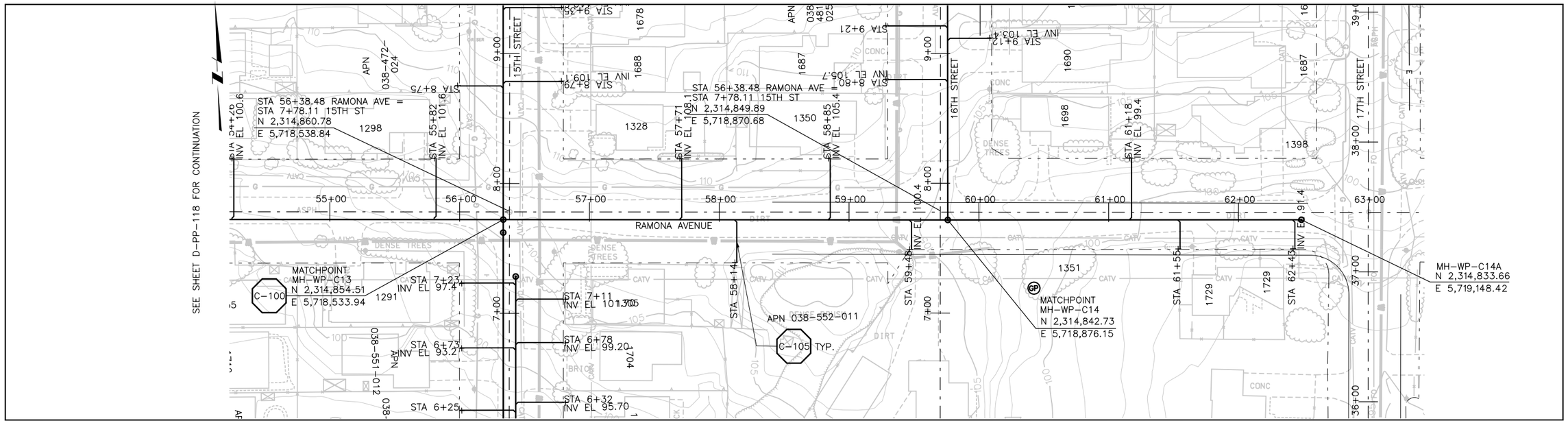
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
RAMONA AVE.
STA. 43+26.69 TO 53+15.92

SHEET
D-PP-118

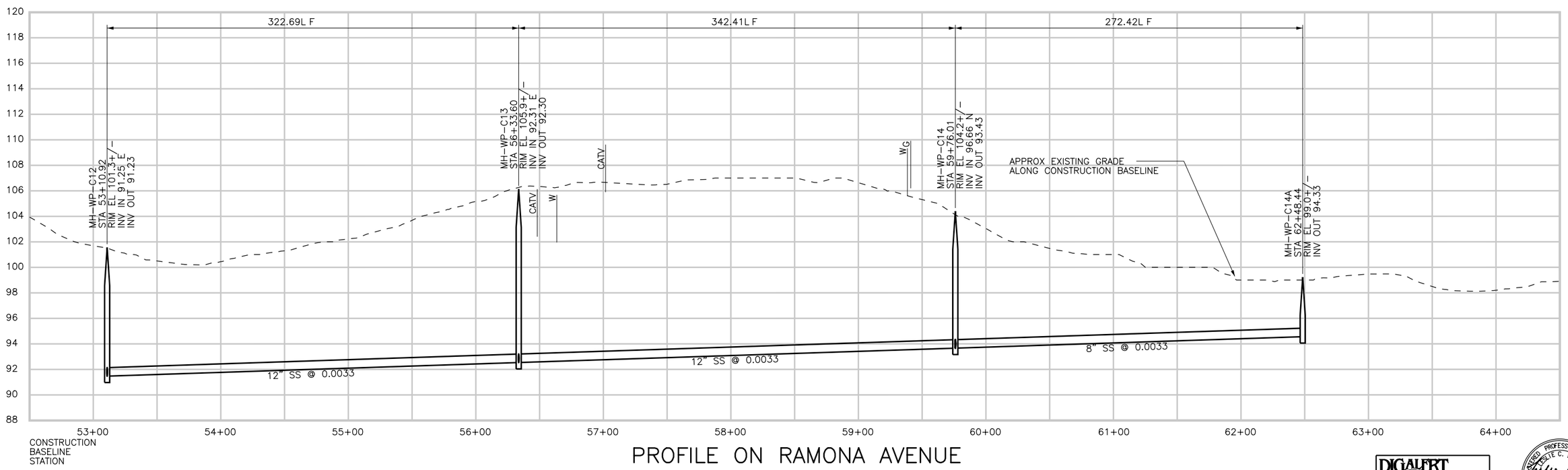
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-118.dgn Plot Date: 05-FEB-2004 17:10

SEE SHEET D-PP-167 FOR CONTINUATION
SEE SHEET D-PP-120 FOR CONTINUATION
SEE SHEET D-PP-118 FOR CONTINUATION



SEE SHEET D-PP-168 FOR CONTINUATION

PLAN ON RAMONA AVENUE



PROFILE ON RAMONA AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
CLYDE C. WONG
No. C-58434
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

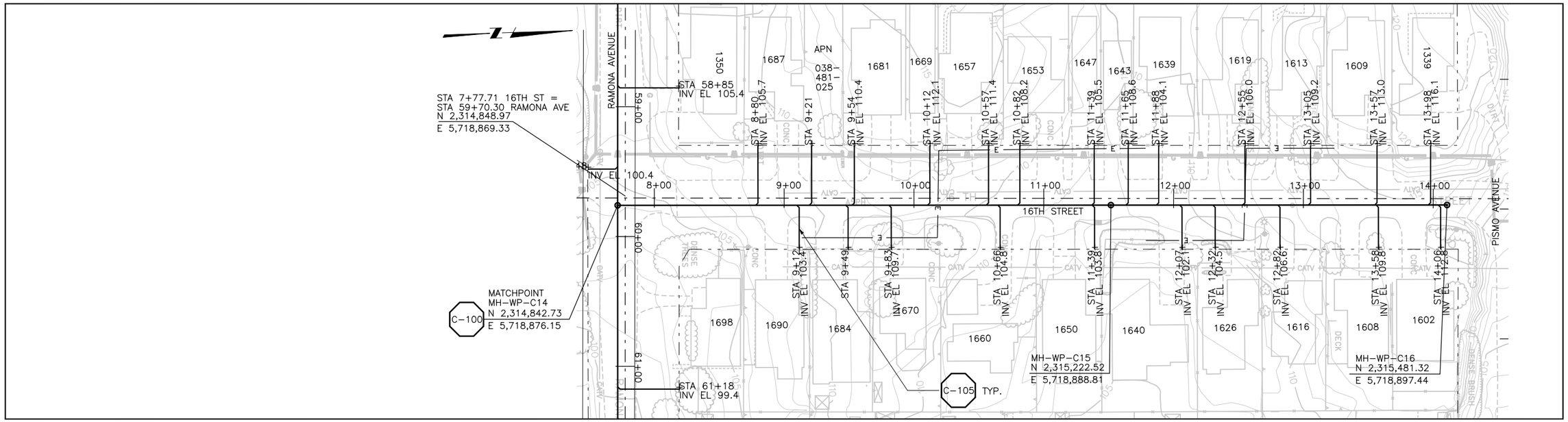
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
RAMONA AVE.
STA. 53+15.92 TO 59+76.01

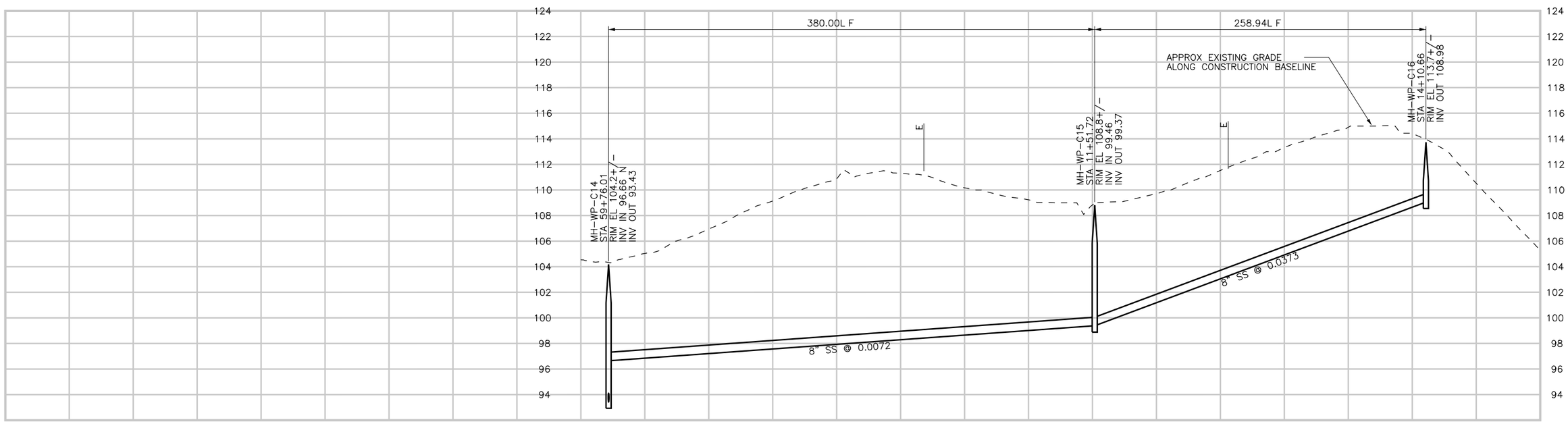
SHEET
D-PP-119

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-119.dgn Plot Date: 05-FEB-2004 17:11

SEE SHEET D-PP-119 FOR CONTINUATION



PLAN ON 16TH STREET



PROFILE ON 16TH STREET

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER LESLIE C. WONG No. C-58311 Exp. 6-30-06 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: H: 1"=40' V: 1"=4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVEN J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

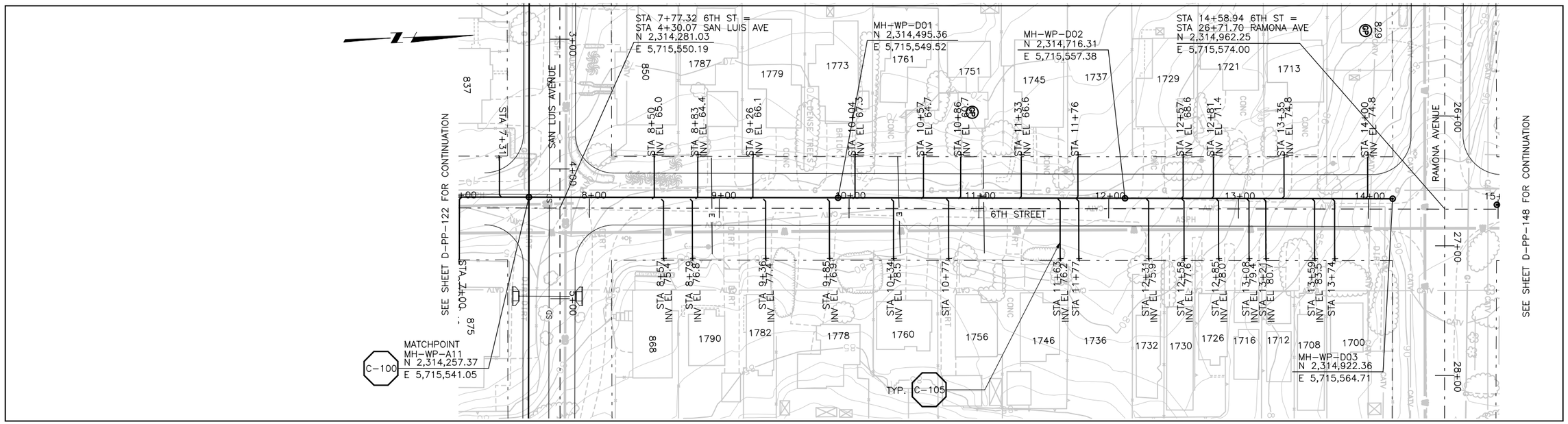
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
16TH STREET
STA. 7+71.72 TO 14+19.32

SHEET D-PP-120

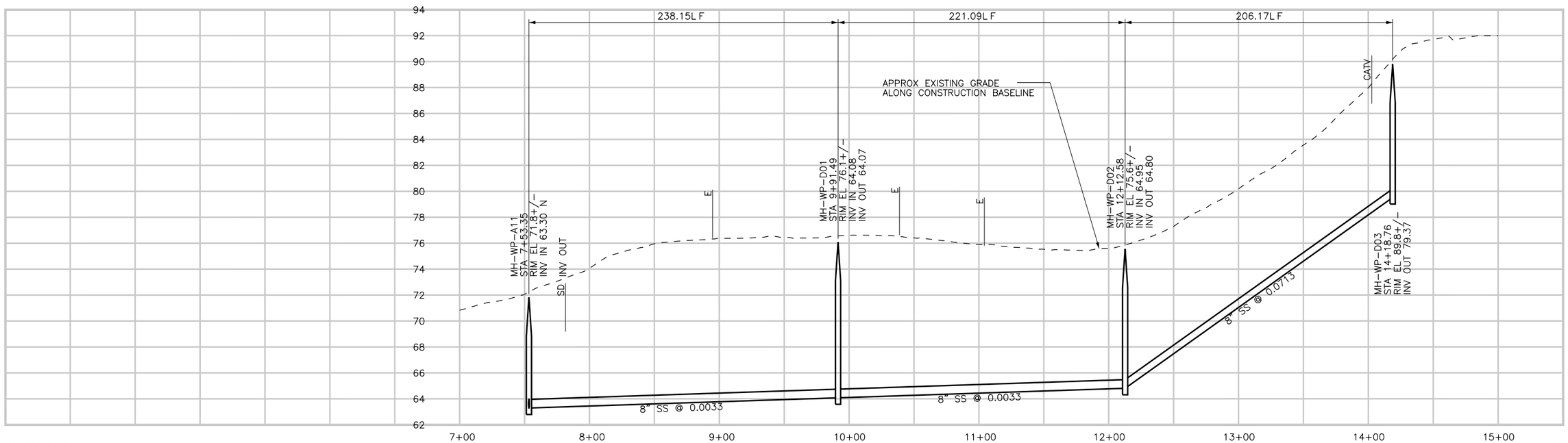
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-120.dgn Plot Date: 05-FEB-2004 17:11

SEE SHEET D-PP-105 FOR CONTINUATION



SEE SHEET D-PP-106 FOR CONTINUATION

PLAN ON 6TH STREET



PROFILE ON 6TH STREET

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER JOHN A. BERGEN No. C-31069 Exp. 6-30-06 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: H: 1"=40' V: 1"=4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

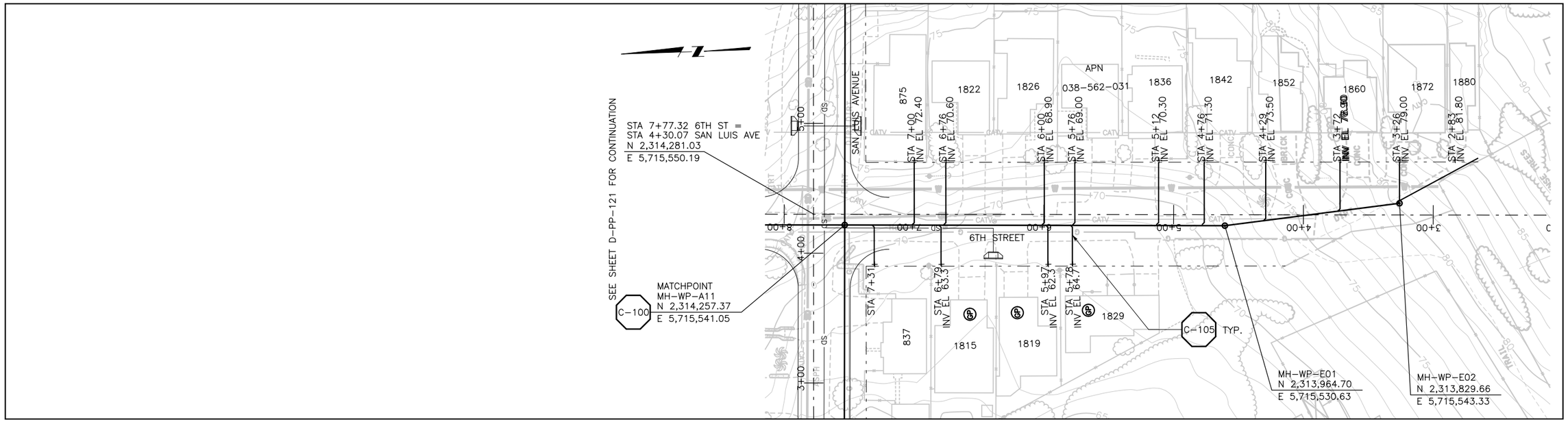
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
6TH STREET
STA. 7+71.48 TO 14+18.75

SHEET D-PP-121

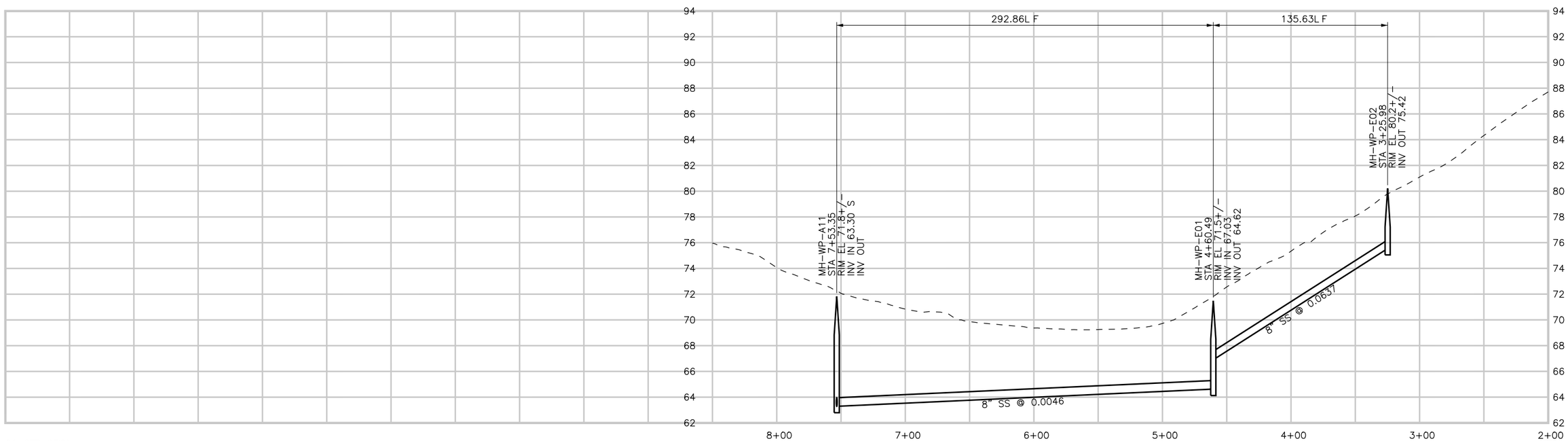
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-121.dgn Plot Date: 05-FEB-2004 17:12

SEE SHEET D-PP-106 FOR CONTINUATION



SEE SHEET D-PP-106 FOR CONTINUATION

PLAN ON 6TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 6TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

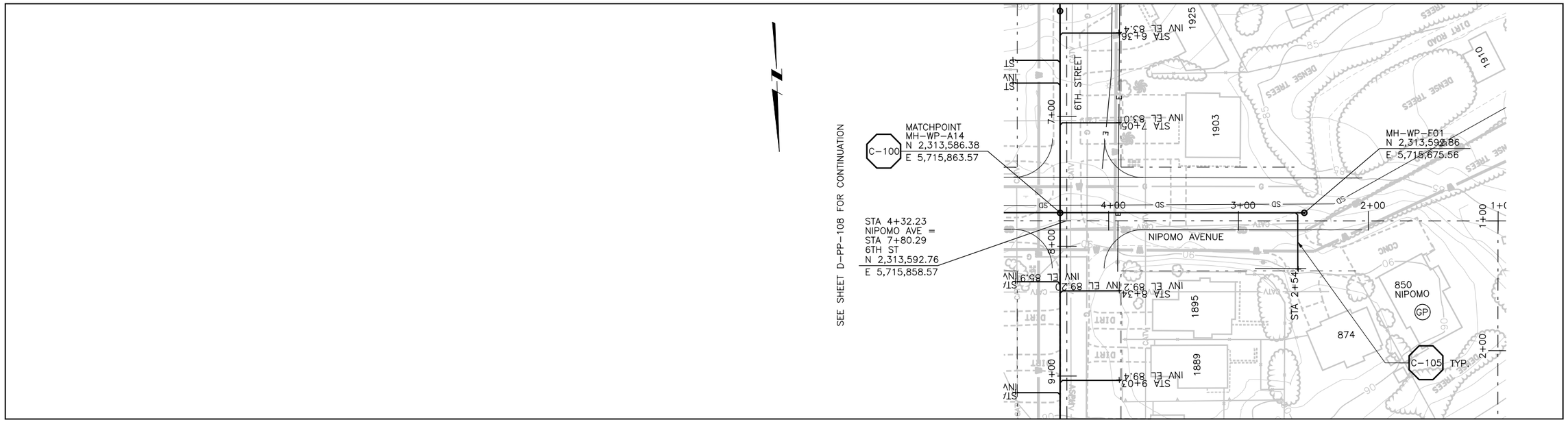
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
6TH STREET
STA. 7+71.48 TO 2+64.91

SHEET
D-PP-122

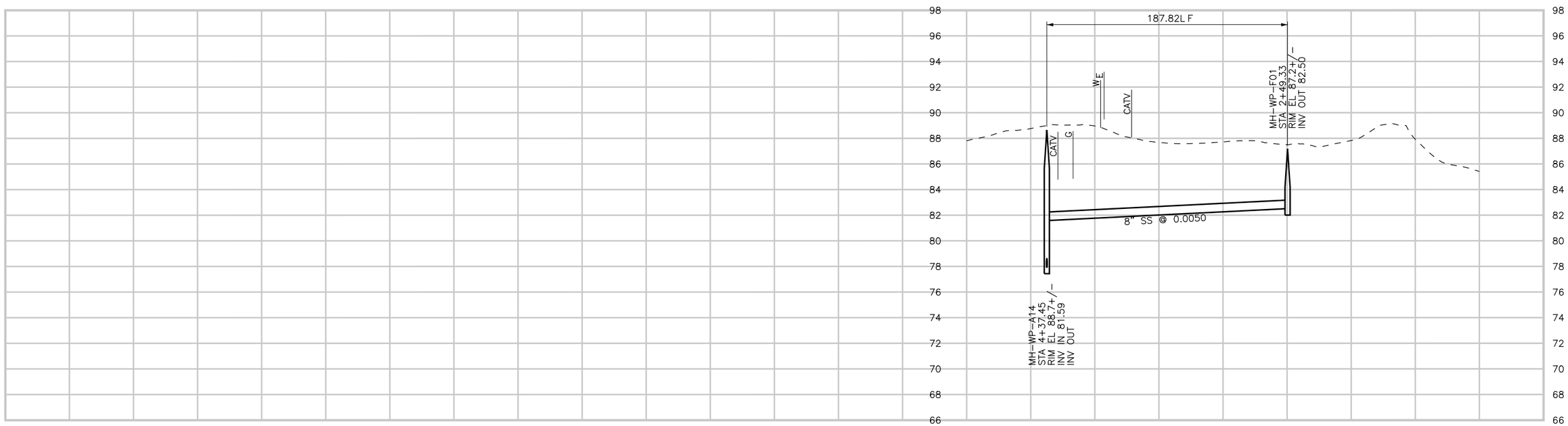
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-122.dgn Plot Date: 05-FEB-2004 17:13

SEE SHEET D-PP-124 FOR CONTINUATION



SEE SHEET D-PP-107 FOR CONTINUATION

PLAN ON NIPOMO AVENUE



PROFILE ON NIPOMO AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. C-58434
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

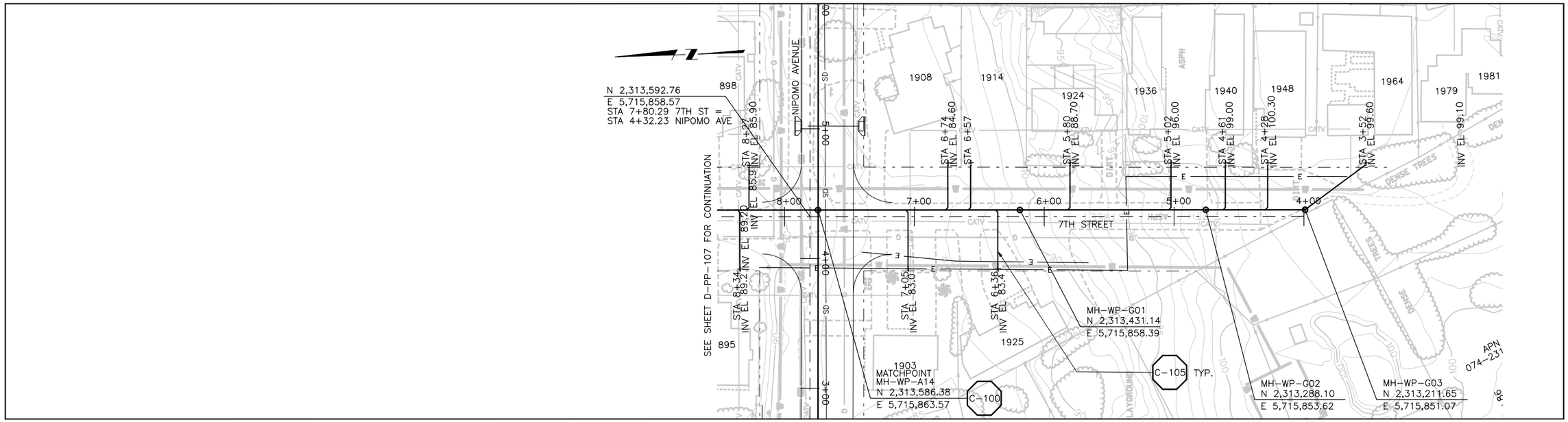
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
NIPOMO AVE.
STA. 4+37.45 TO 2+20.06

SHEET
D-PP-123

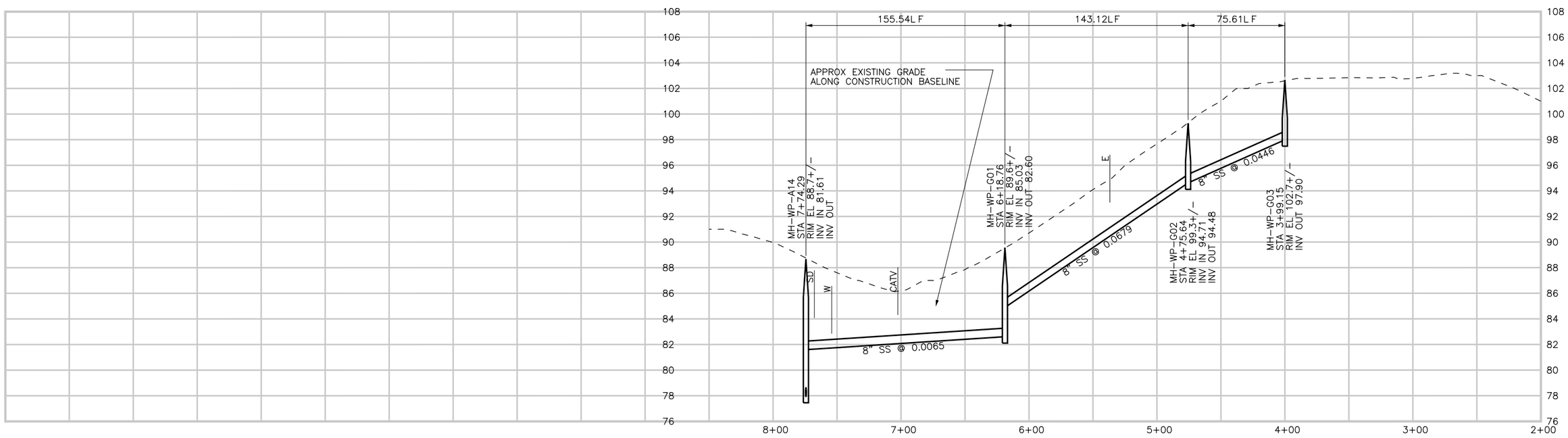
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-123.dgn Plot Date: 05-FEB-2004 17:13

SEE SHEET D-PP-108 FOR CONTINUATION



SEE SHEET D-PP-123 FOR CONTINUATION

PLAN ON 7TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 7TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
CLYDE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

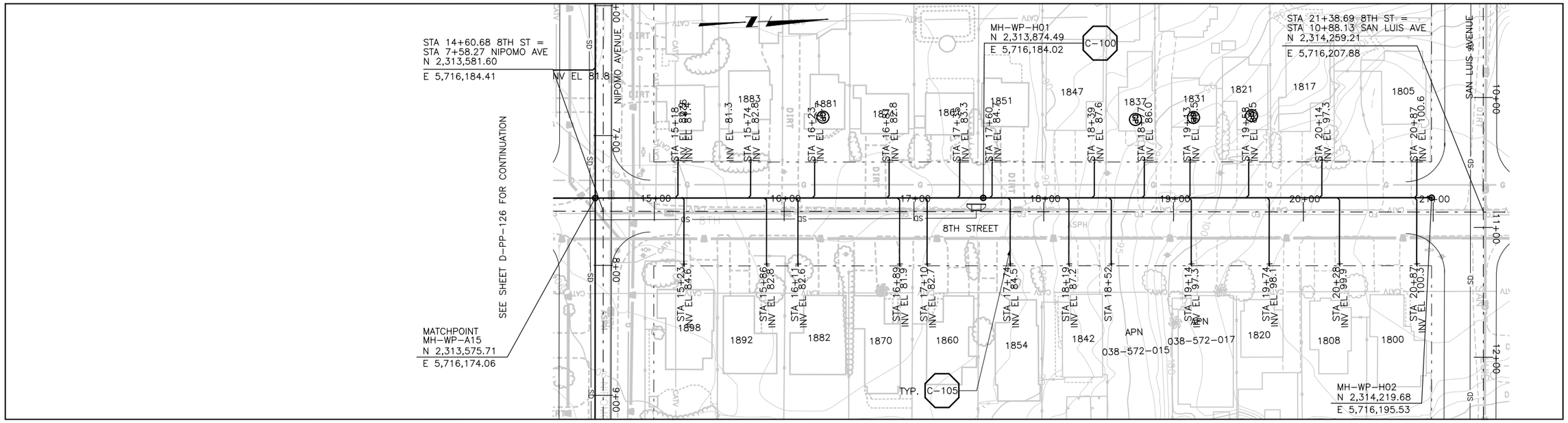
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
7TH STREET
STA. 7+74.29 TO 3+04.21

SHEET
D-PP-124

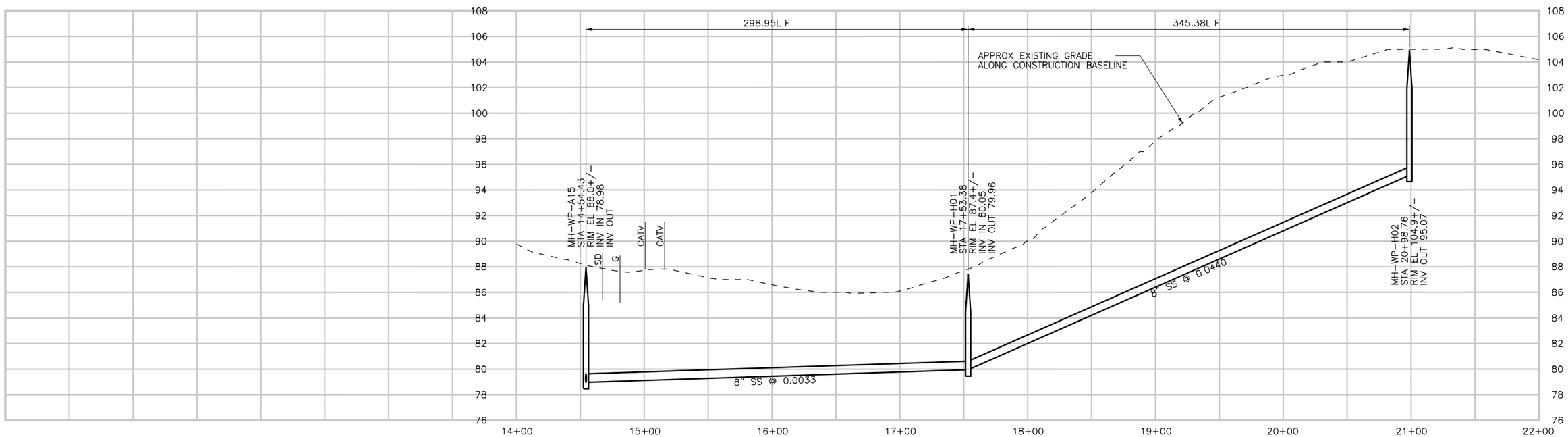
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-124.dgn Plot Date: 05-FEB-2004 17:14

SEE SHEET D-PP-108 FOR CONTINUATION



SEE SHEET D-PP-108 FOR CONTINUATION

PLAN ON 8TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 8TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

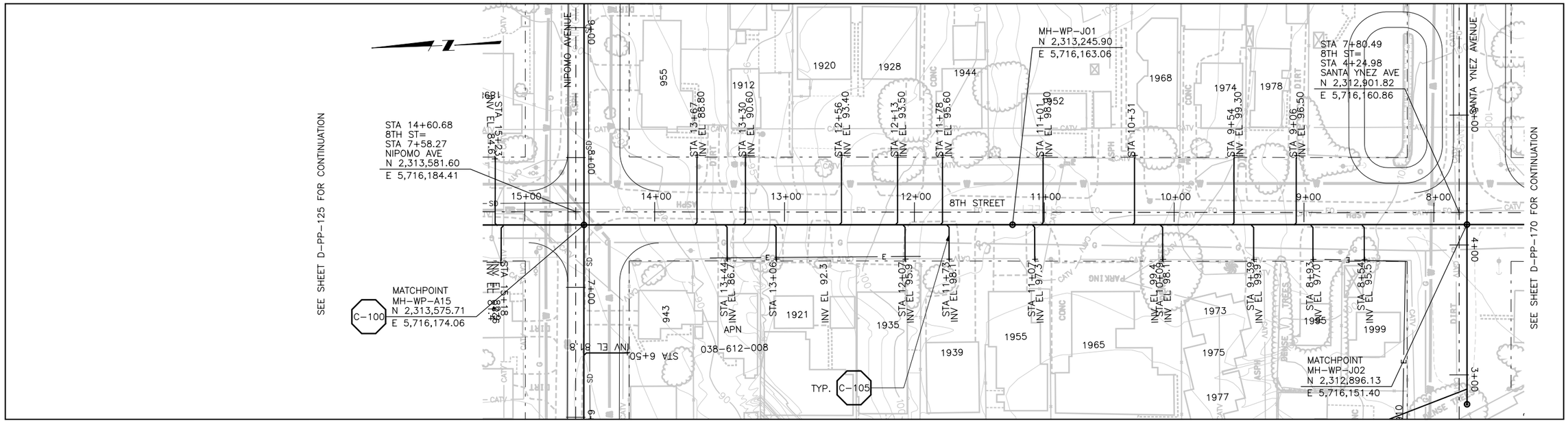
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
8TH STREET
STA. 14+54.62 TO 20+98.78

SHEET
D-PP-125

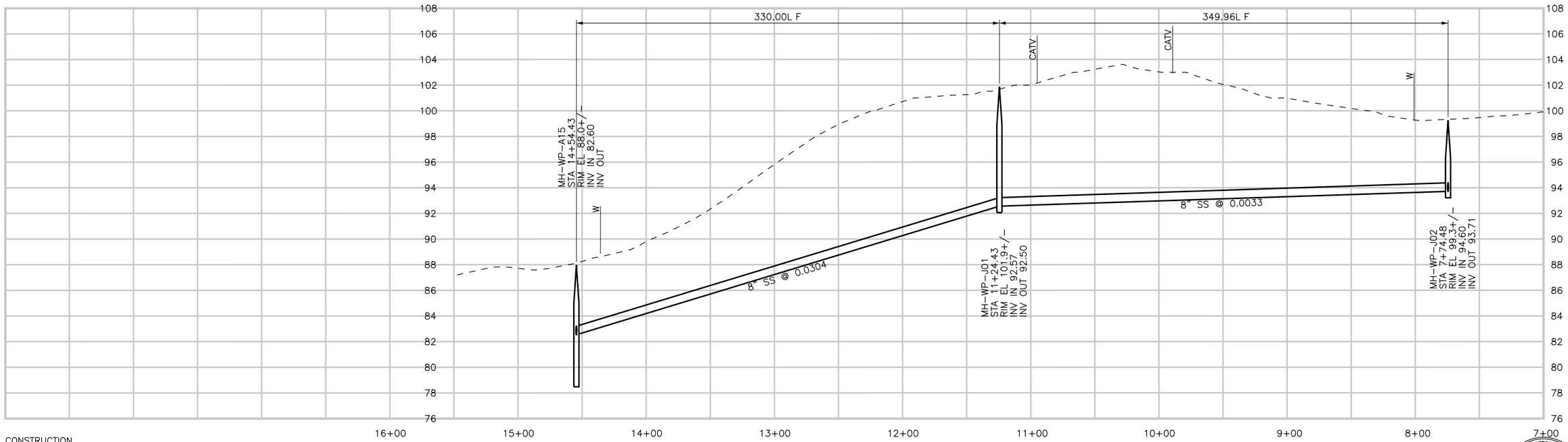
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-125.dgn
Plot Date: 05-FEB-2004 17:15

SEE SHEET D-PP-108 FOR CONTINUATION
SEE SHEET D-PP-127 FOR CONTINUATION



SEE SHEET D-PP-108 FOR CONTINUATION
SEE SHEET D-PP-169 FOR CONTINUATION

PLAN ON 8TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 8TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
CLIFFORD C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

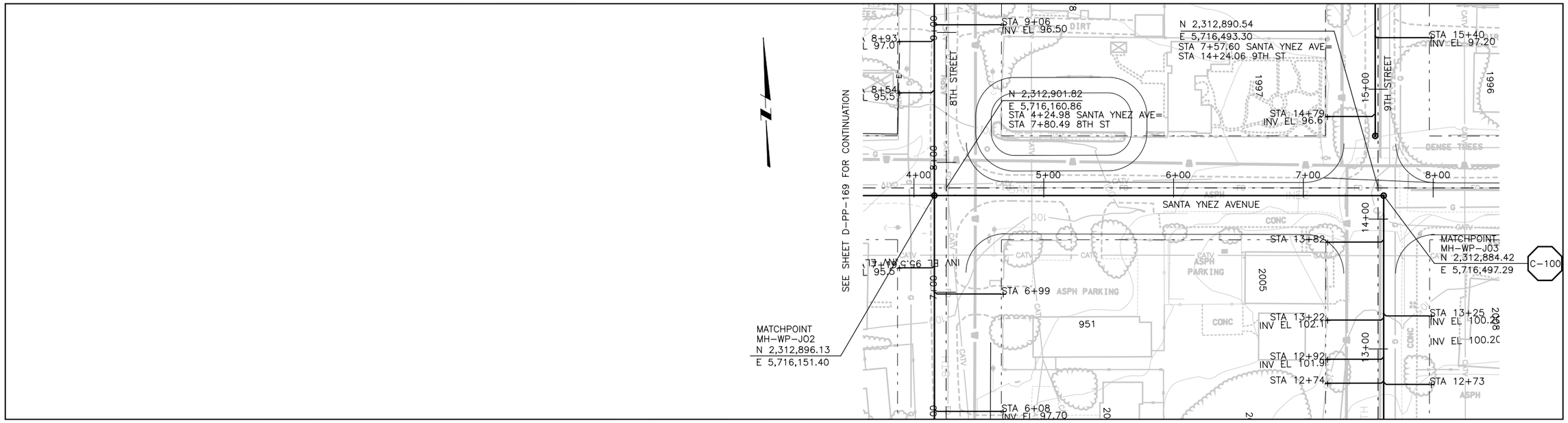
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
8TH STREET
STA. 14+54.62 TO 7+74.50

SHEET
D-PP-126

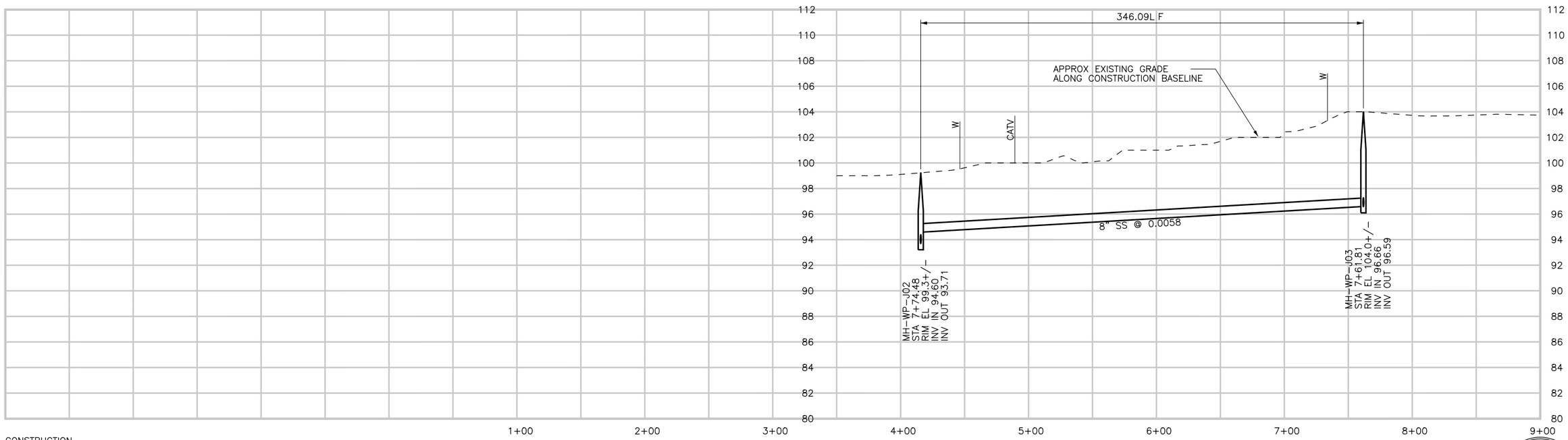
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-126.dgn
Plot Date: 05-FEB-2004 17:15

SEE SHEET D-PP-126 FOR CONTINUATION
SEE SHEET D-PP-132 FOR CONTINUATION



SEE SHEET D-PP-170 FOR CONTINUATION
SEE SHEET D-PP-128 FOR CONTINUATION

PLAN ON SANTA YNEZ AVENUE



PROFILE ON SANTA YNEZ AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Berger — JOHN A. BERGER — C31069 LICENSE NO. — 2-16-2004 DATE

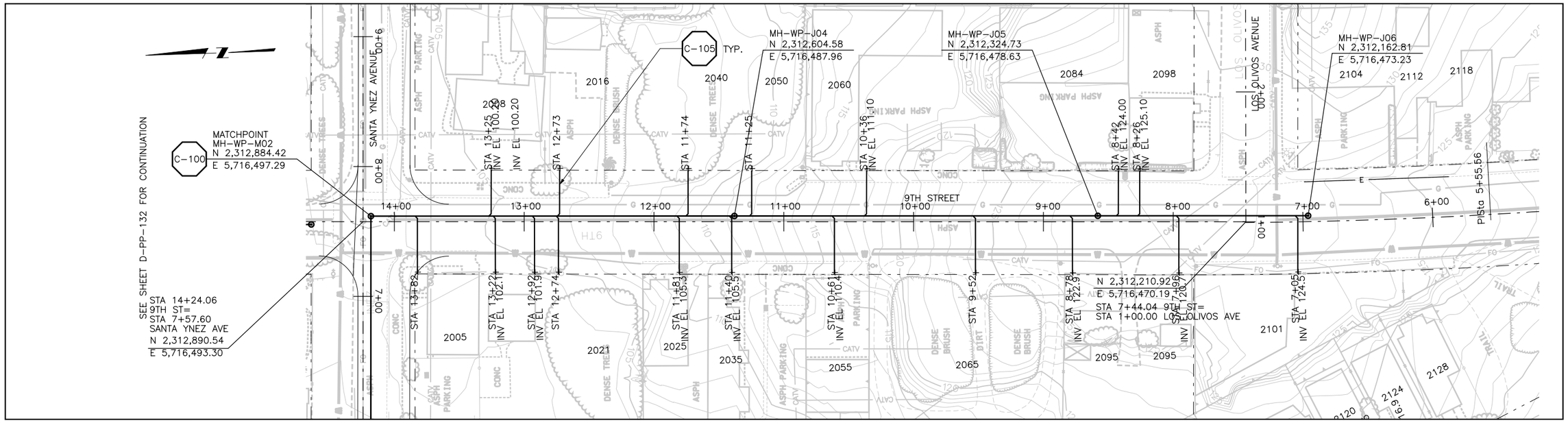
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA YNEZ AVE.
STA. 4+31.28 TO 7+61.81

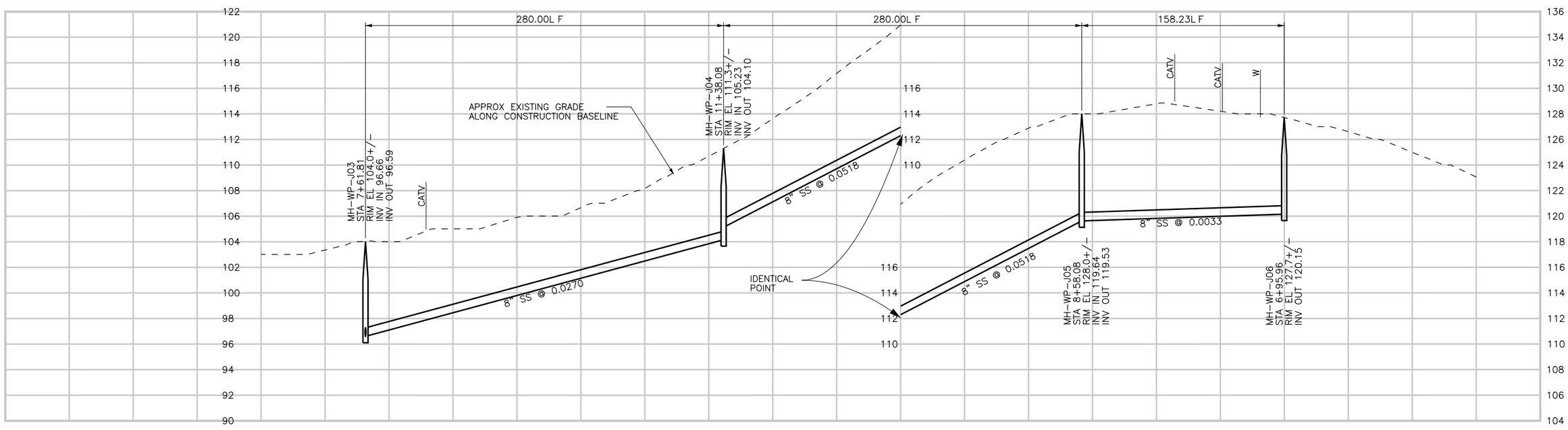
SHEET
D-PP-127

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-127.dgn Plot Date: 05-FEB-2004 17:16



SEE SHEET D-PP-127 FOR CONTINUATION

PLAN ON 9TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 9TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

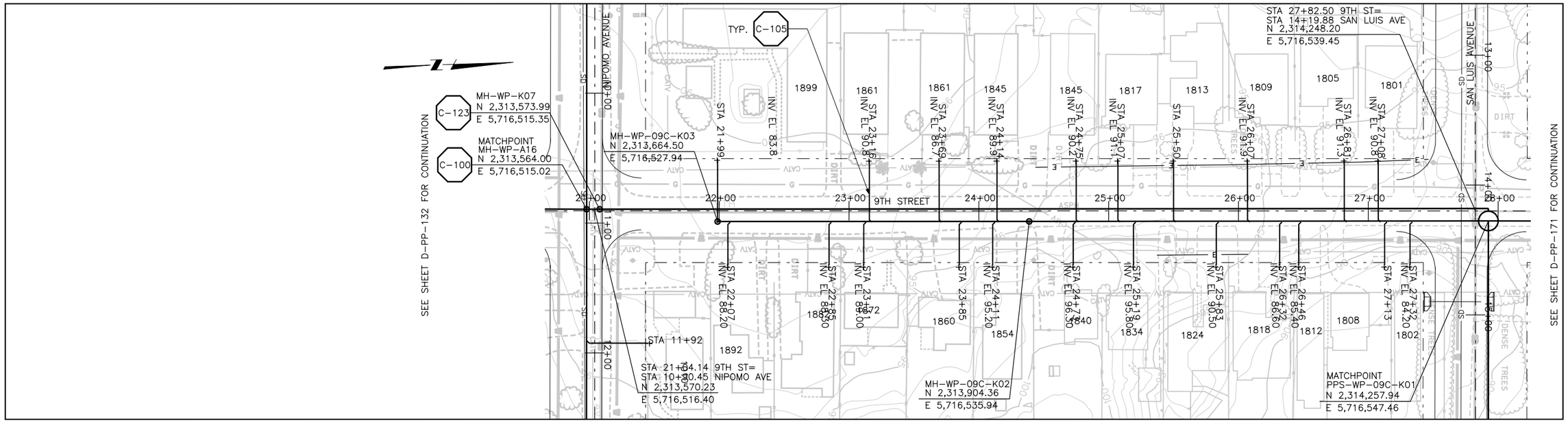
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
9TH STREET
STA. 14+18.08 TO 5+77.85

SHEET
D-PP-128

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-128.dgn
Plot Date: 05-FEB-2004 17:17

SEE SHEET D-PP-108 FOR CONTINUATION



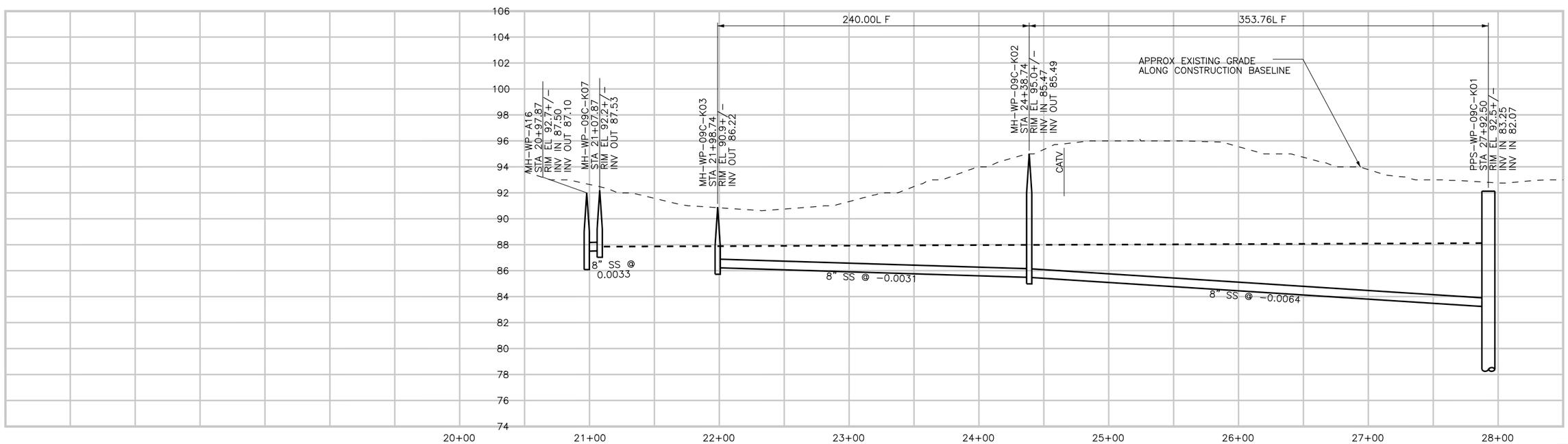
SEE SHEET D-PP-108 FOR CONTINUATION

SEE SHEET D-PP-130 FOR CONTINUATION

SEE SHEET D-PP-132 FOR CONTINUATION

SEE SHEET D-PP-171 FOR CONTINUATION

PLAN ON 9TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 9TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

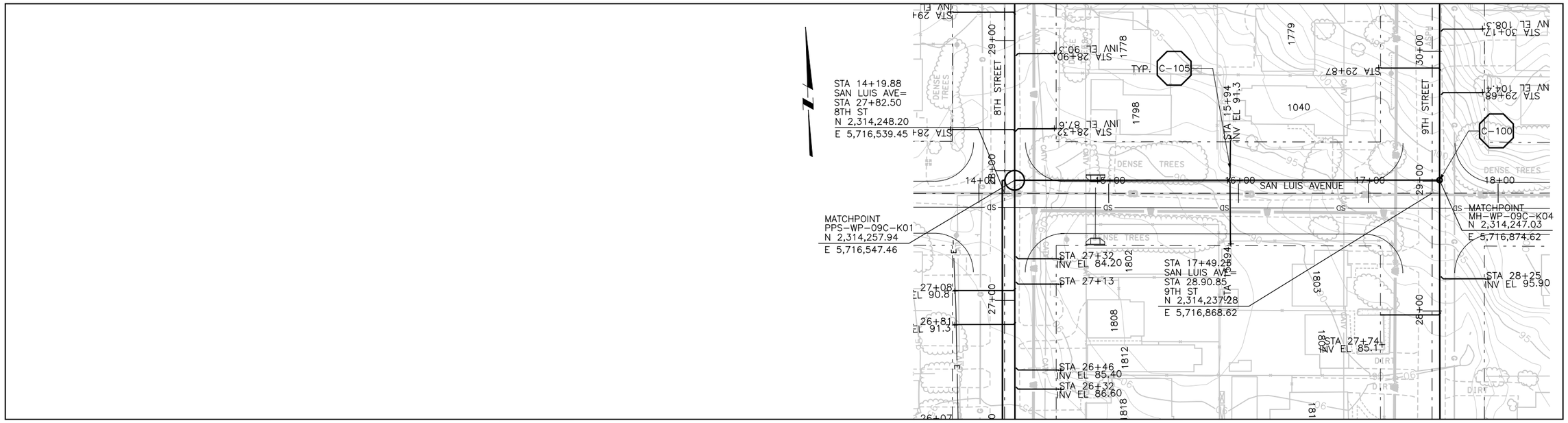
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
9TH STREET
STA. 20+98.74 TO 27+76.51

SHEET
D-PP-129

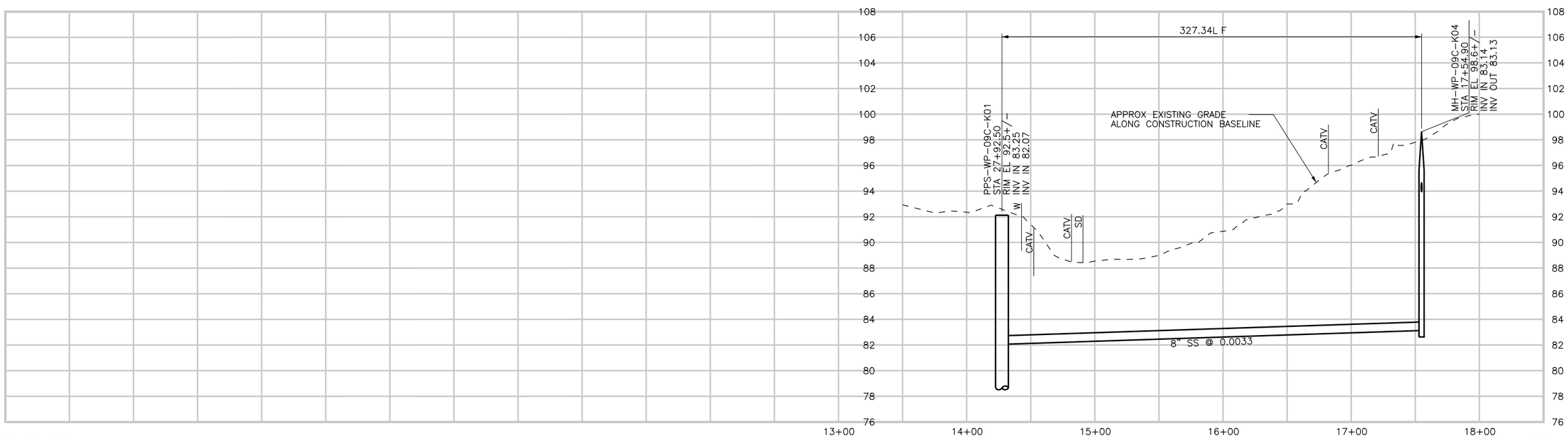
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-129.dgn
Plot Date: 09-FEB-2004 11:47

SEE SHEET D-PP-171 FOR CONTINUATION
SEE SHEET D-PP-172 FOR CONTINUATION



SEE SHEET D-PP-129 FOR CONTINUATION
SEE SHEET D-PP-131 FOR CONTINUATION

PLAN ON SAN LUIS AVENUE



PROFILE ON SAN LUIS AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. C-58434
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE

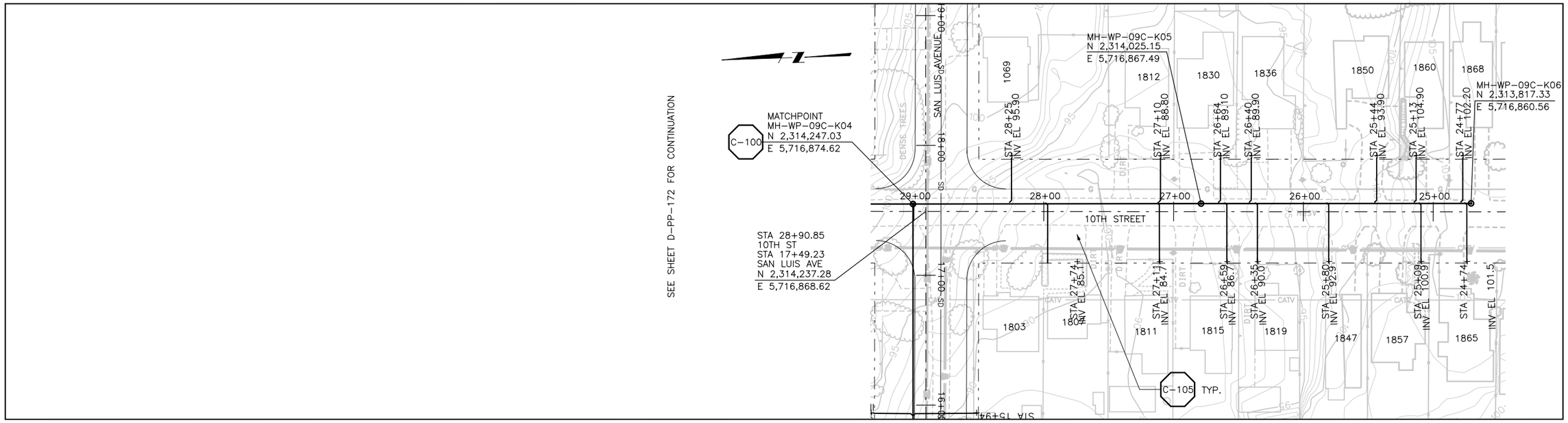
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

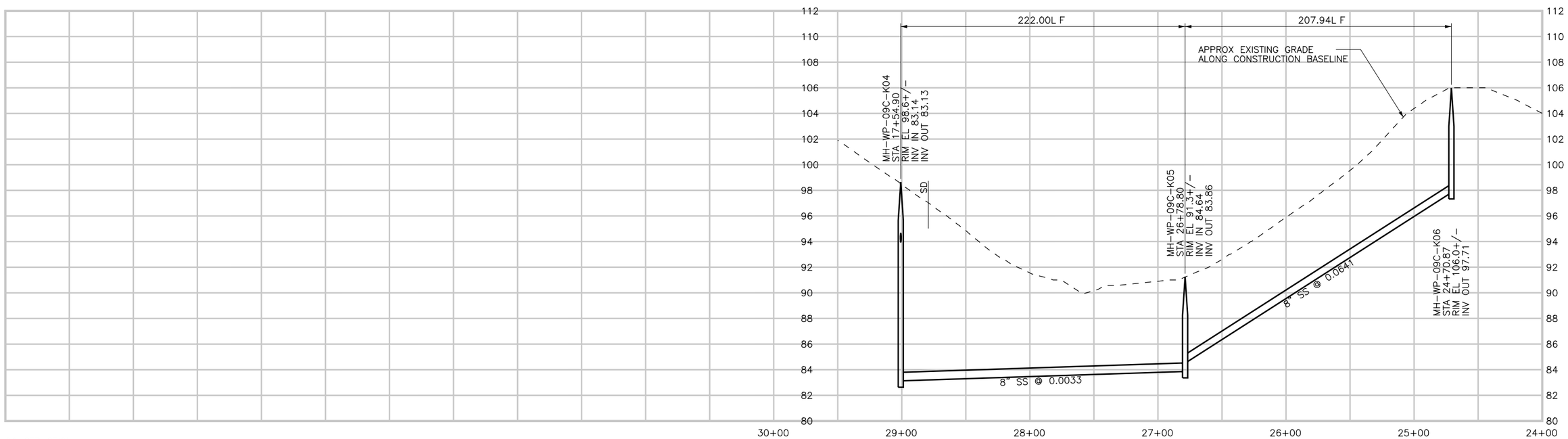
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SAN LUIS AVE.
STA. 14+26.29 TO 17+55.16

SHEET
D-PP-130

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-130.dgn Plot Date: 05-FEB-2004 17:18



PLAN ON 10TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 10TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

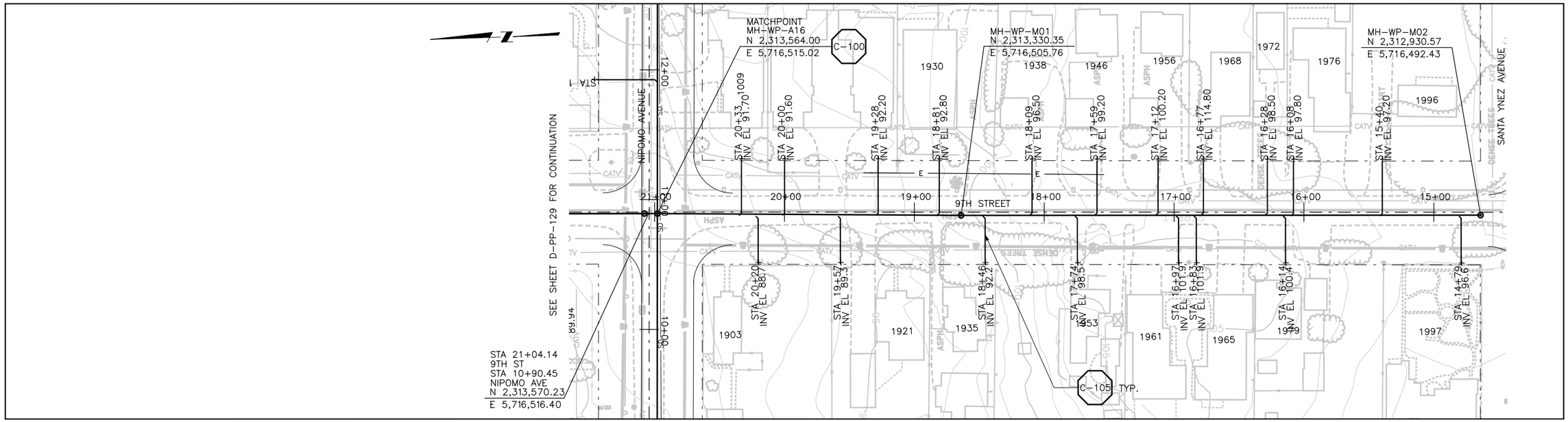
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
10TH STREET
STA. 28+84.80 TO 24+70.87

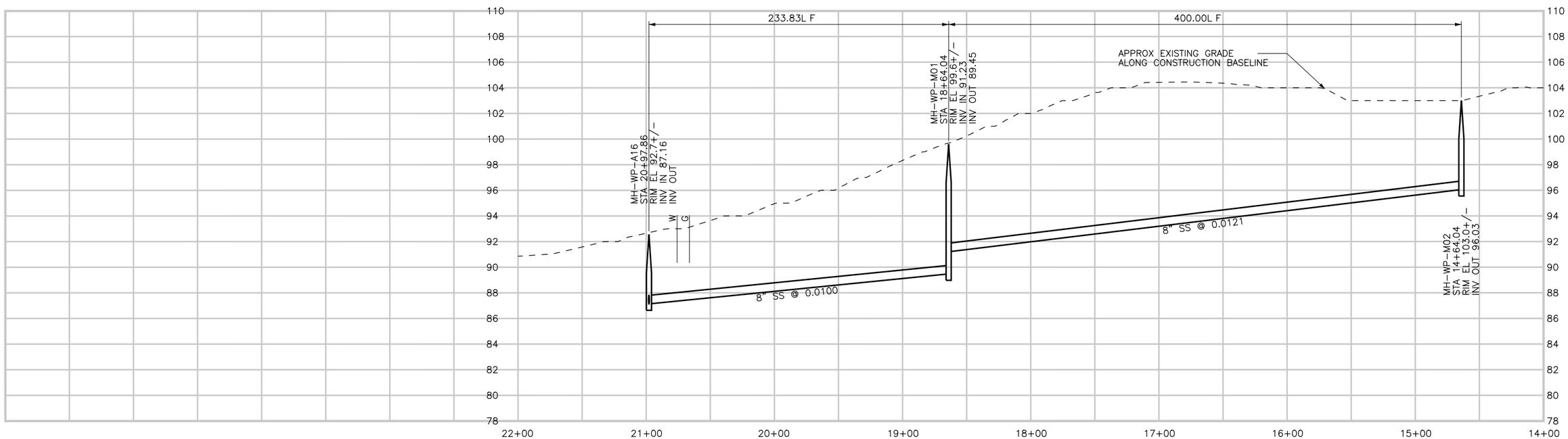
SHEET
D-PP-131

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-131.dgn
Plot Date: 05-FEB-2004 17:19

SEE SHEET D-PP-108 FOR CONTINUATION



PLAN ON 9TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 9TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

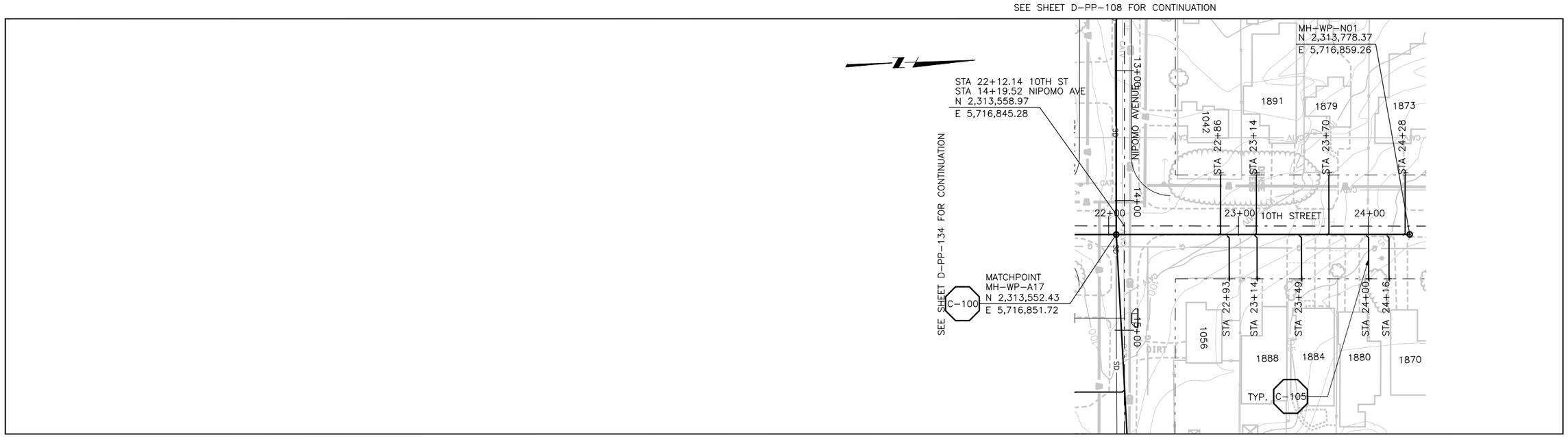
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

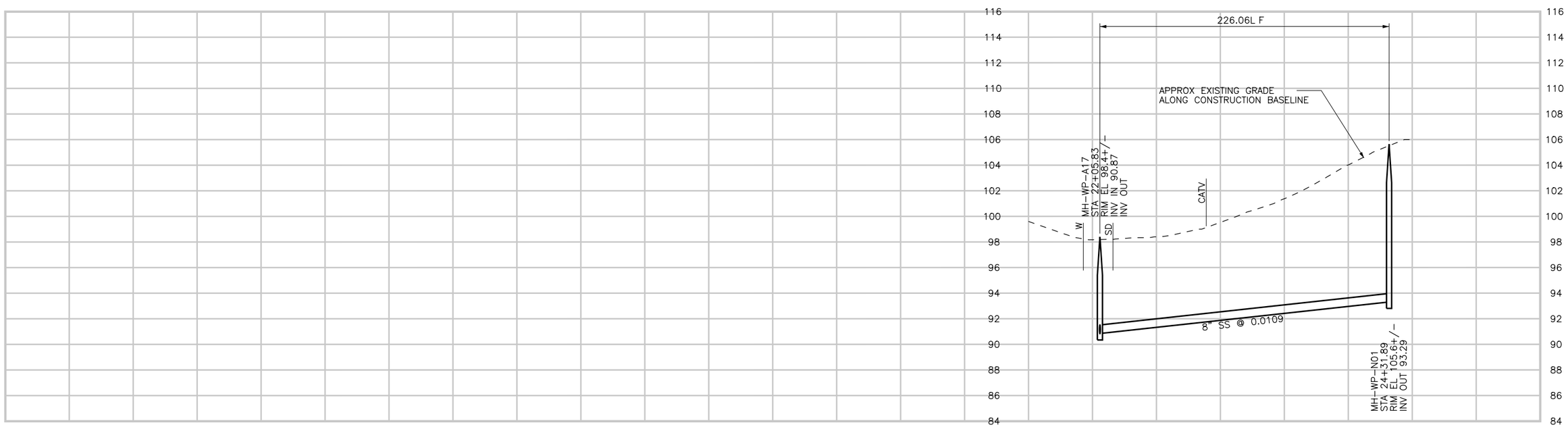
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
9TH STREET
STA. 20+98.74 TO 14+64.04

SHEET
D-PP-132

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-132.dgn
Plot Date: 05-FEB-2004 17:19



PLAN ON 10TH STREET



PROFILE ON 10TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-34311
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

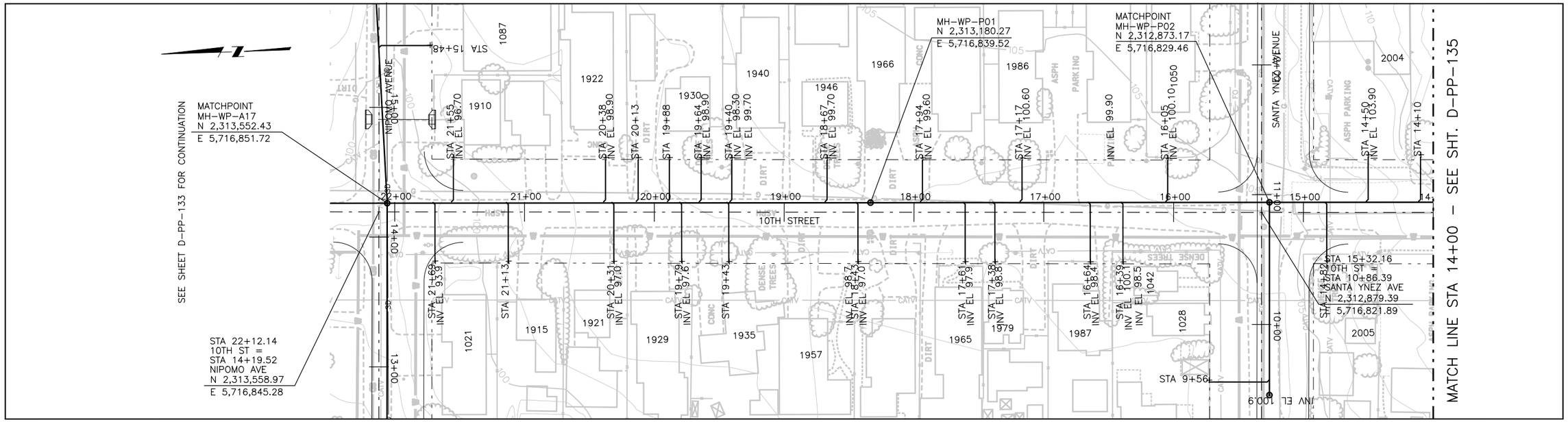
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
10TH STREET
STA. 22+05.83 TO 24+31.89

SHEET
D-PP-133

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-133.dgn Plot Date: 05-FEB-2004 17:20

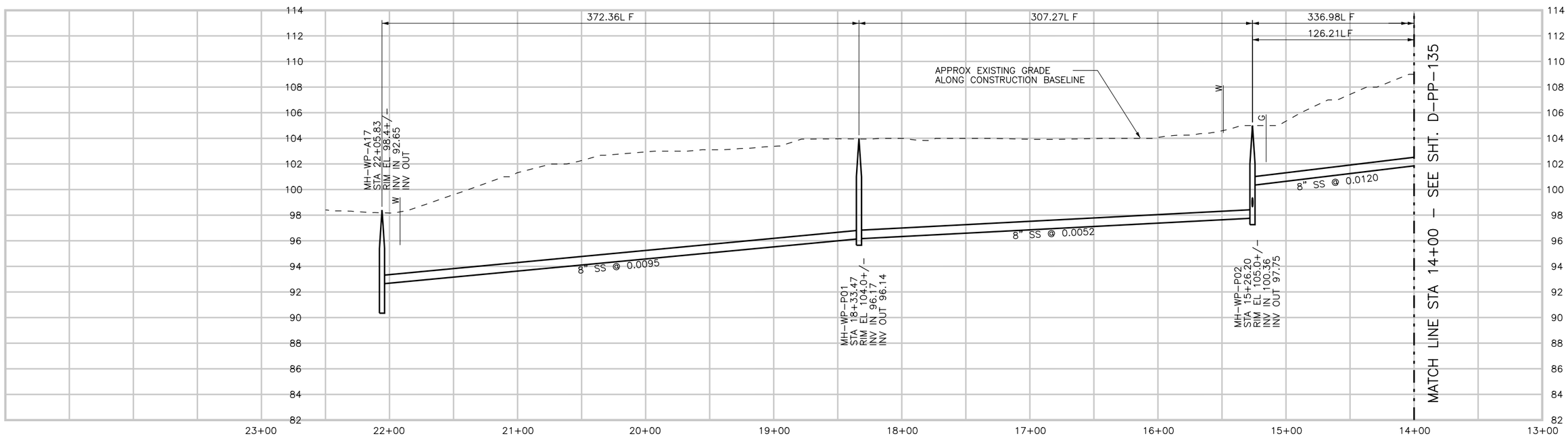
SEE SHEET D-PP-109 FOR CONTINUATION



SEE SHEET D-PP-108 FOR CONTINUATION

SEE SHEET D-PP-134A FOR CONTINUATION

PLAN ON 10TH STREET



PROFILE ON 10TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-34311
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE

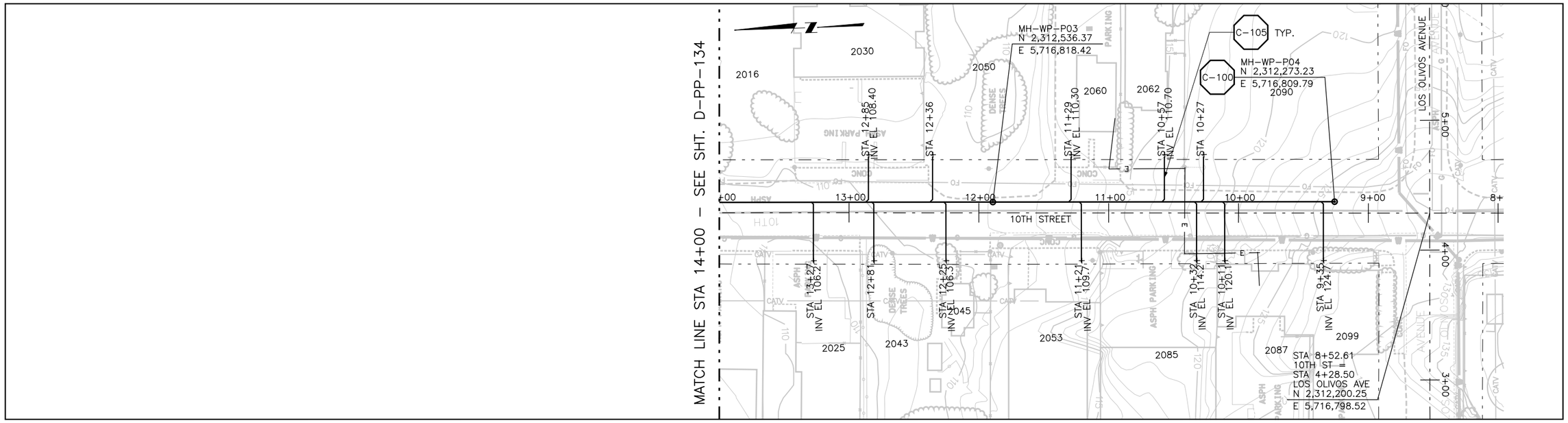
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

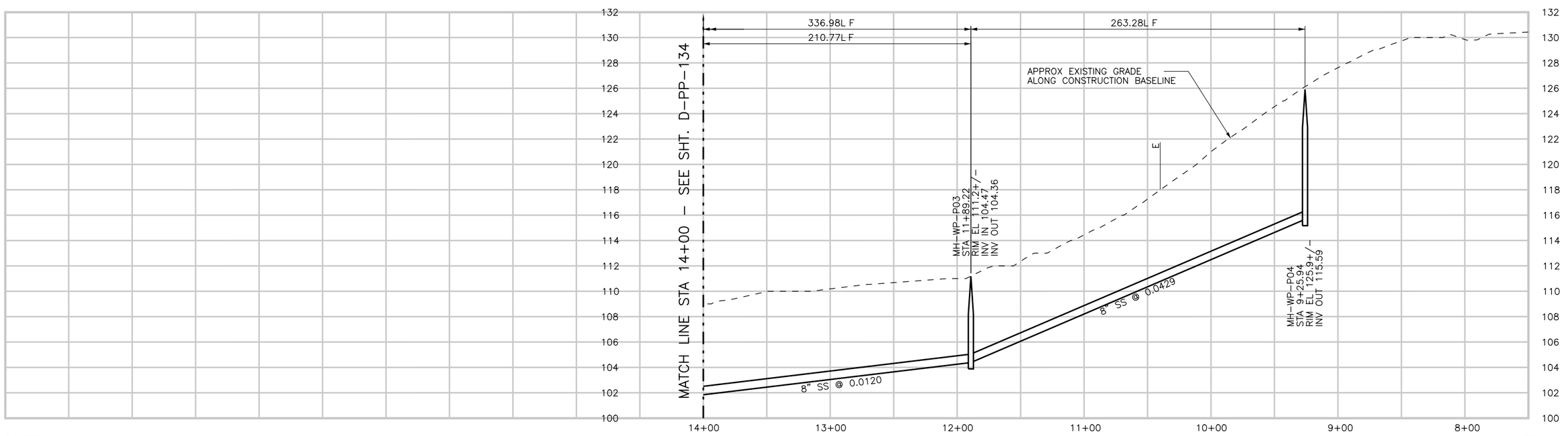
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
10TH STREET
STA. 22+05.83 TO 15+26.20

SHEET
D-PP-134

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-134.dgn Plot Date: 05-FEB-2004 17:21



PLAN ON 10TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 10TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

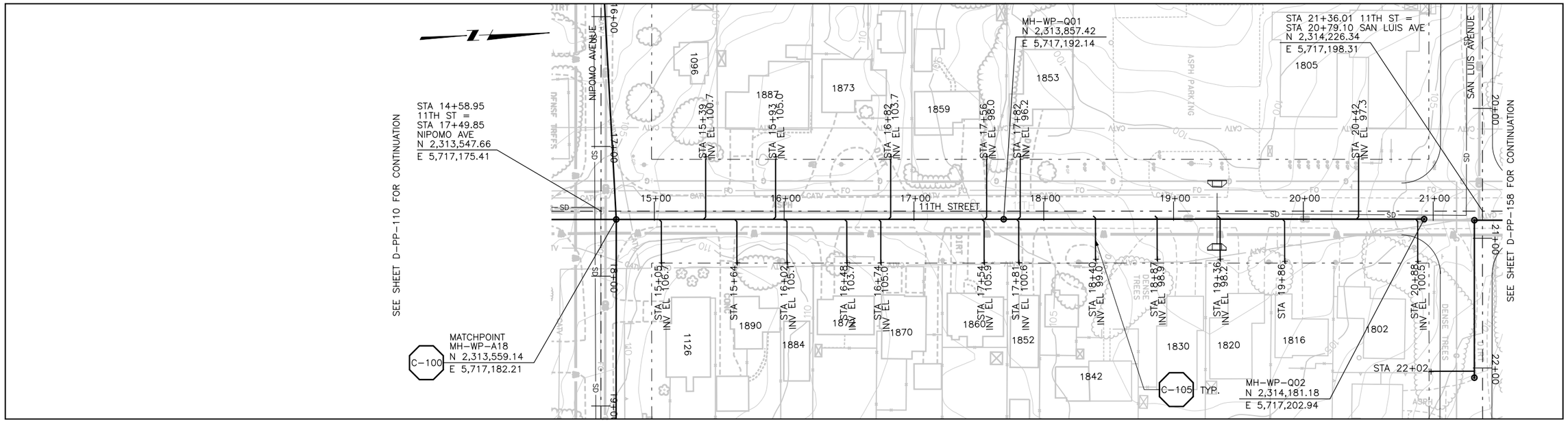
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
10TH STREET
STA. 15+26.20 TO 8+53.22

SHEET
D-PP-135

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-135.dgn
Plot Date: 05-FEB-2004 17:21

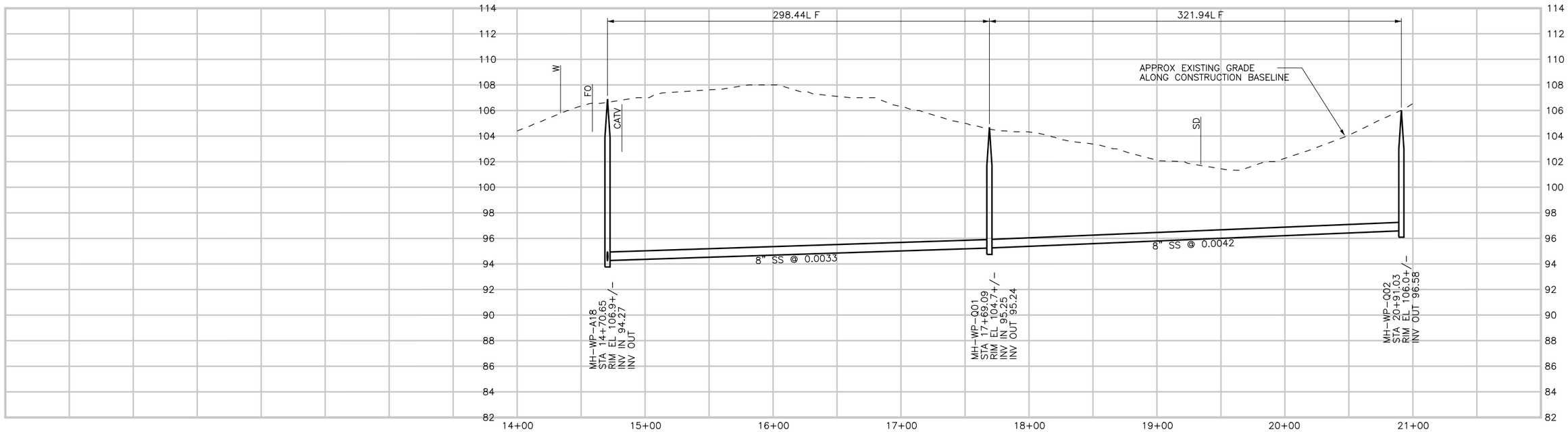
SEE SHEET D-PP-109 FOR CONTINUATION



SEE SHEET D-PP-137 FOR CONTINUATION

SEE SHEET D-PP-159 FOR CONTINUATION

PLAN ON 11TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 11TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

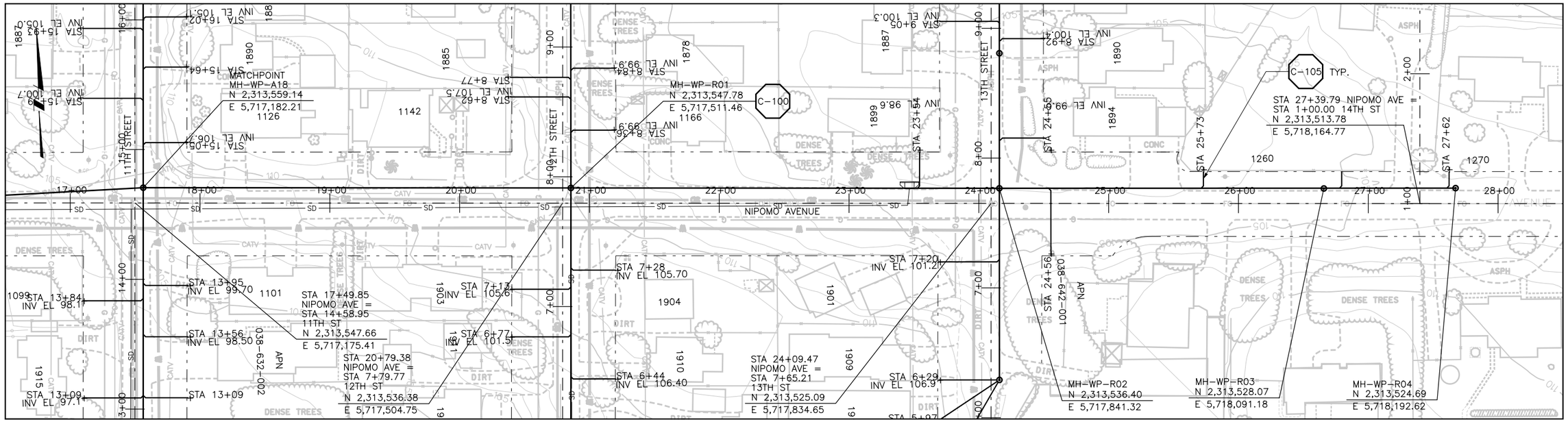
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
11TH STREET
STA. 14+52.67 TO 20+58.81

SHEET
D-PP-136

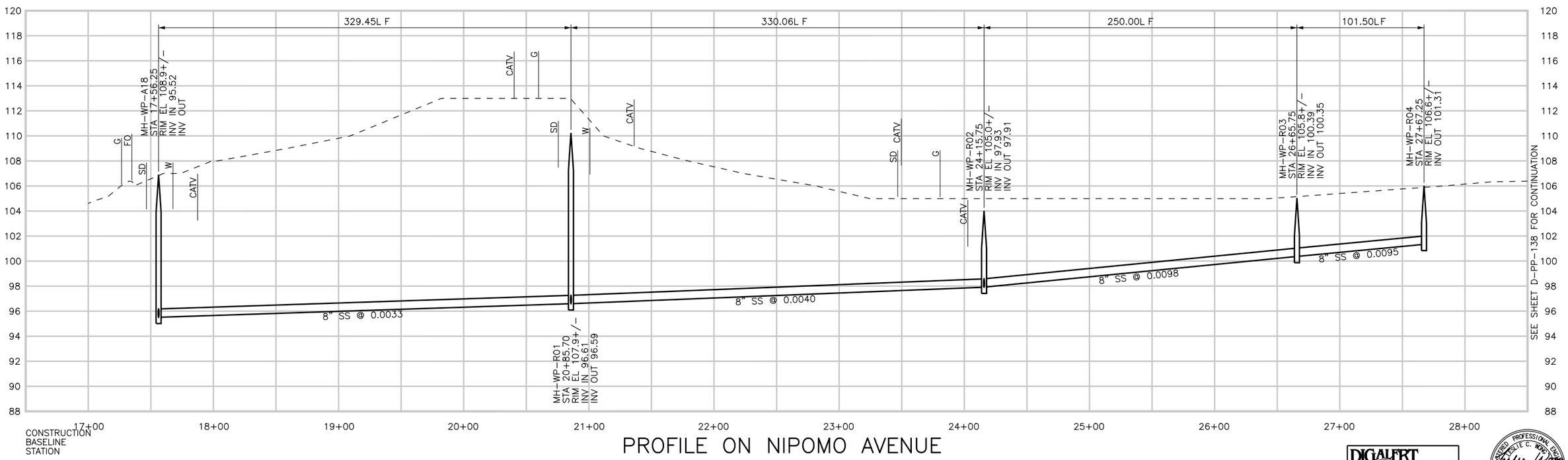
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-136.dgn Plot Date: 05-FEB-2004 17:22

SEE SHEET D-PP-136 FOR CONTINUATION
SEE SHEET D-PP-173 FOR CONTINUATION
SEE SHEET D-PP-177 FOR CONTINUATION
SEE SHEET D-PP-109 FOR CONTINUATION



SEE SHEET D-PP-110 FOR CONTINUATION
SEE SHEET D-PP-174 FOR CONTINUATION
SEE SHEET D-PP-178 FOR CONTINUATION

PLAN ON NIPOMO AVENUE



PROFILE ON NIPOMO AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
STEVE C. WONG
No. C-58434
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

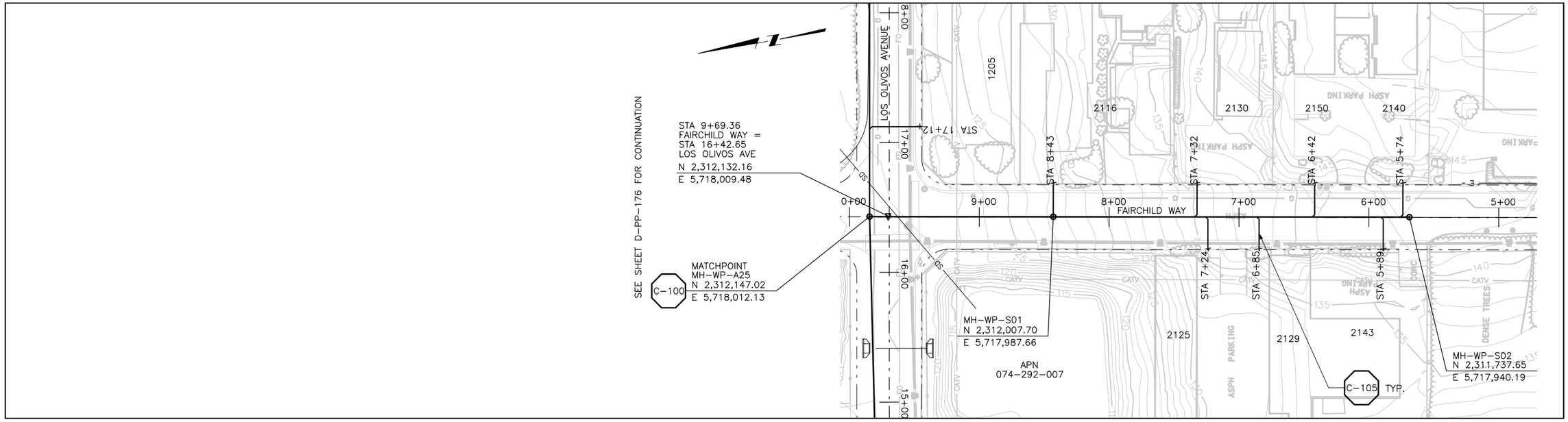
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
NIPOMO AVE.
STA. 17+56.25 TO 26+65.76

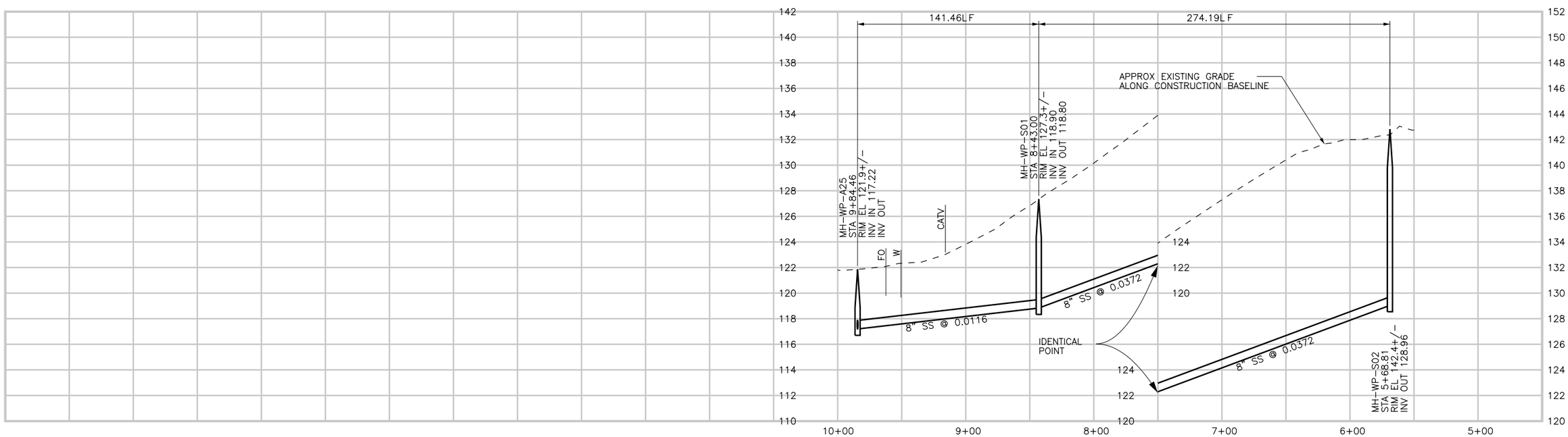
SHEET
D-PP-137

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-137.dgn Plot Date: 05-FEB-2004 17:23

SEE SHEET D-PP-113 FOR CONTINUATION



PLAN ON FAIRCHILD WAY



PROFILE ON FAIRCHILD WAY

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

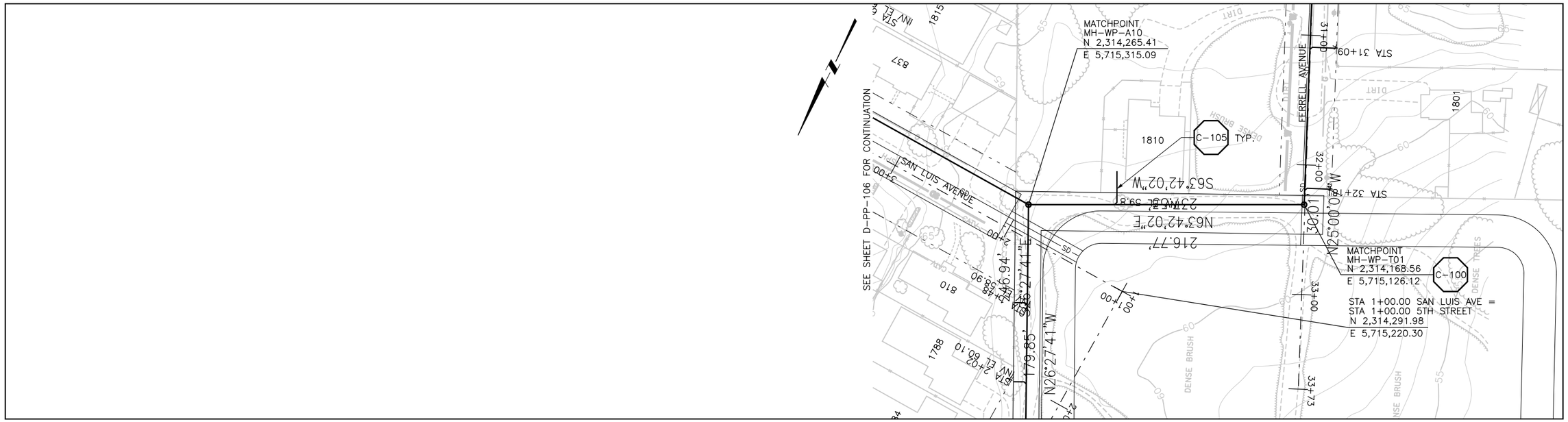
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
FAIRCHILD WAY
STA. 9+69.36 TO 5+60.33

SHEET
D-PP-139

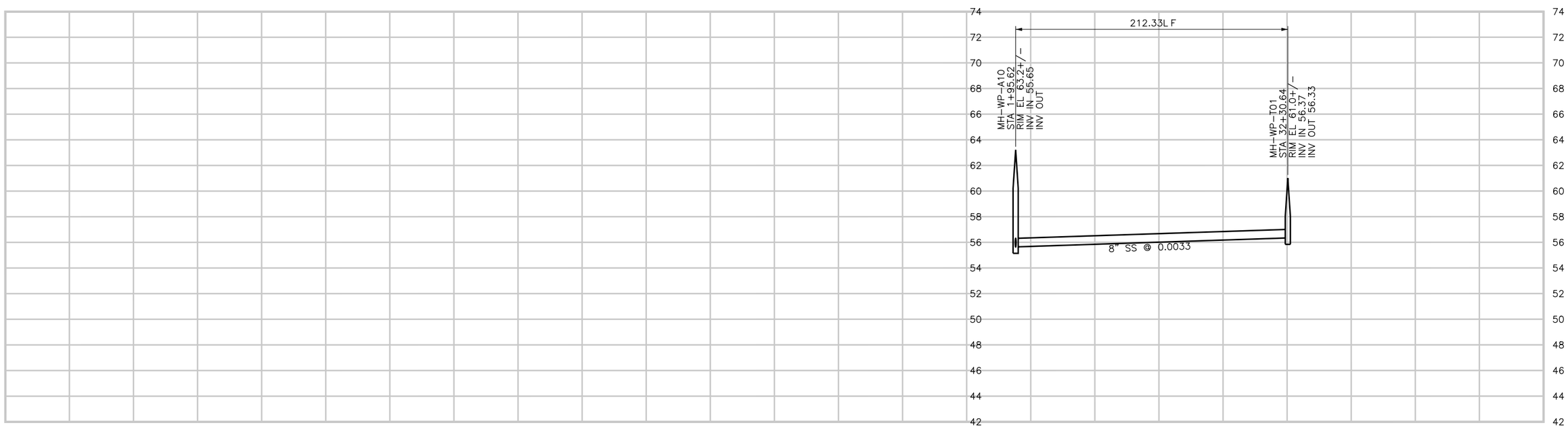
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-139.dgn Plot Date: 05-FEB-2004 17:23

SEE SHEET D-PP-141 FOR CONTINUATION



SEE SHEET D-PP-105 FOR CONTINUATION

PLAN ON FERRELL AVENUE



CONSTRUCTION
BASELINE
STATION

PROFILE ON FERRELL AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58311
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

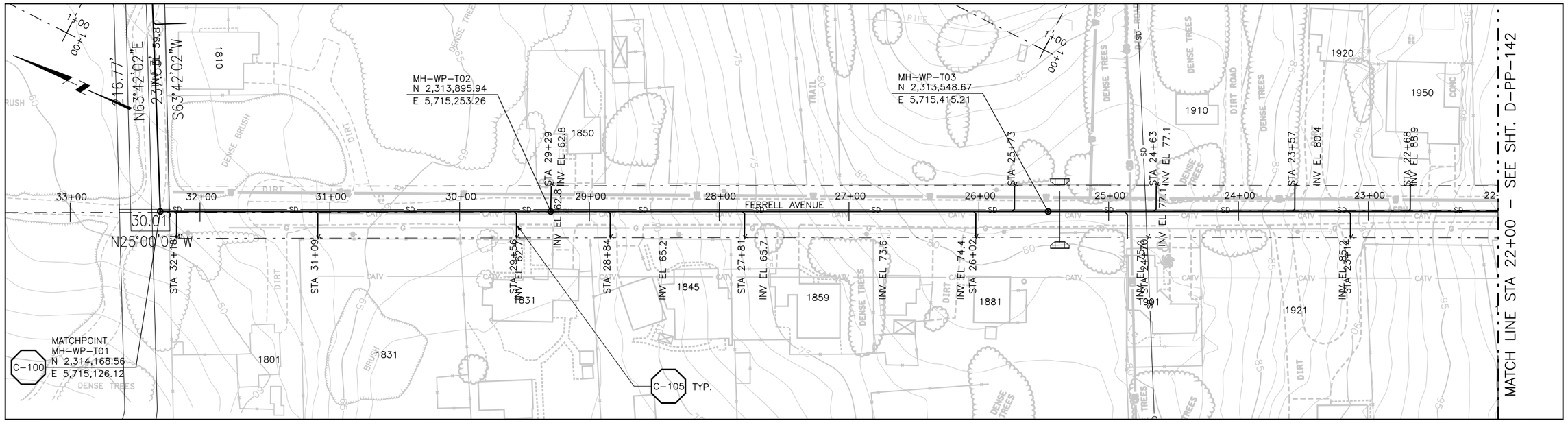
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
FERRELL AVE.
STA. 34+62.48 TO 32+50.65

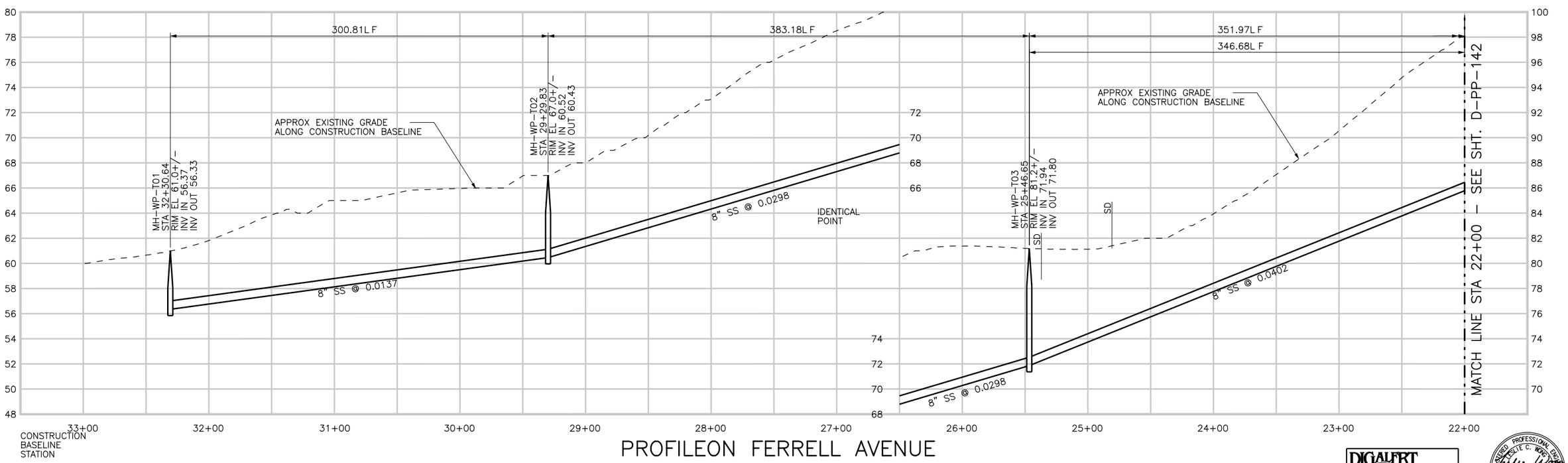
SHEET
D-PP-140

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-140.dgn Plot Date: 05-FEB-2004 17:24

SEE SHEET D-PP-140 FOR CONTINUATION



PLAN ON FERRELL AVENUE



PROFILEON FERRELL AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

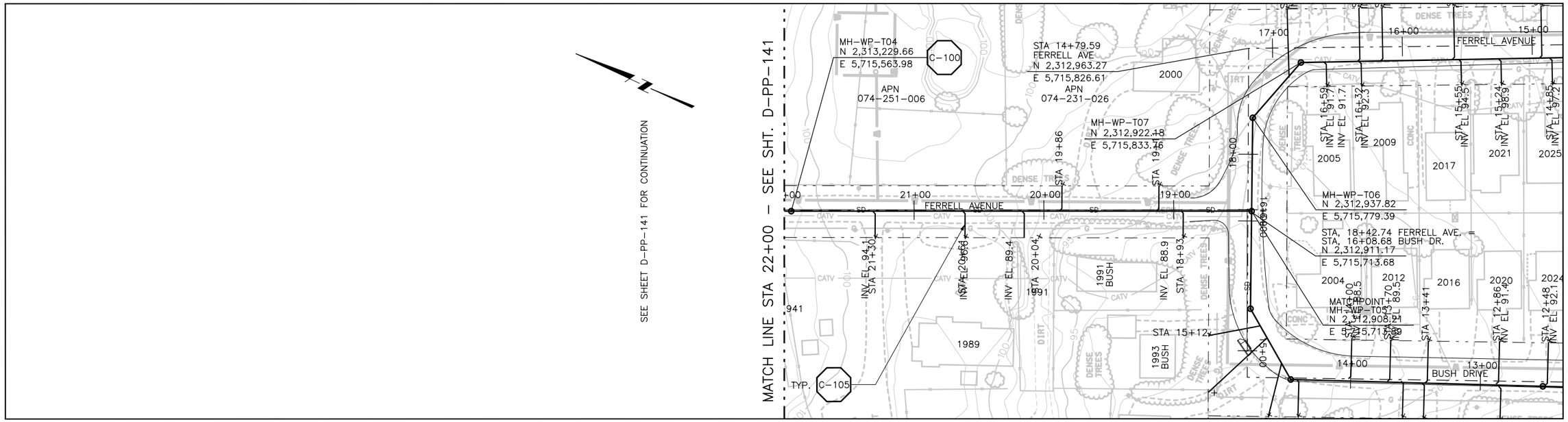
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

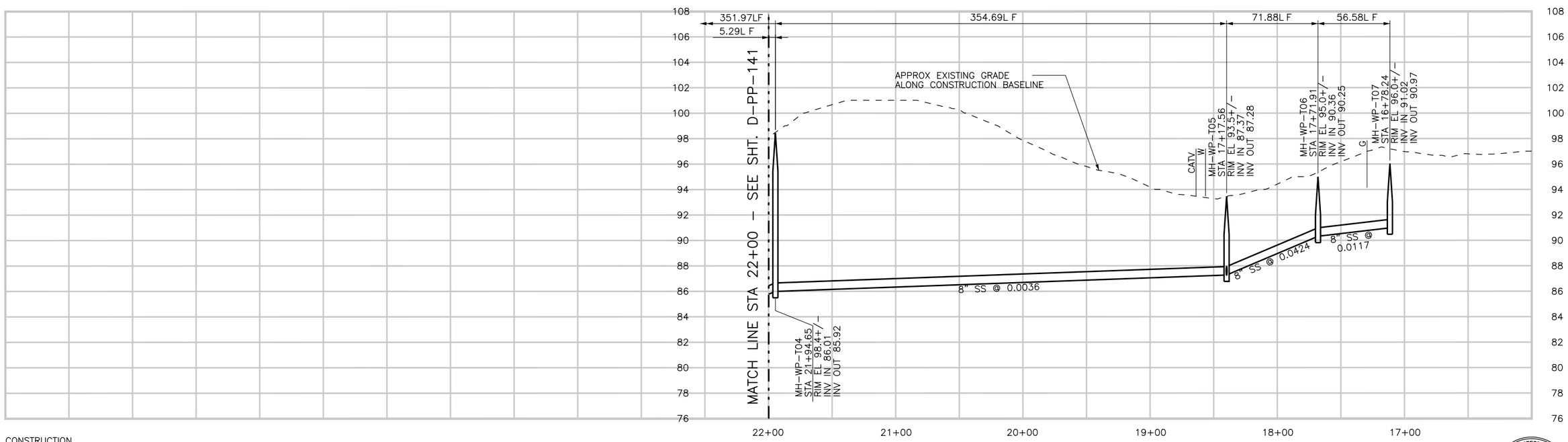
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
FERRELL AVE.
STA. 32+50.65 TO 25+46.65

SHEET
D-PP-141

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-141.dgn
Plot Date: 05-FEB-2004 17:25



PLAN ON FERRELL AVENUE



PROFILE ON FERRELL AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
No. C-58314
Exp. 6-30-06
CIVIL

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 — 2-16-2004
JOHN A. BERGEN — C31069 — 2-16-2004
LICENSE NO. / DATE

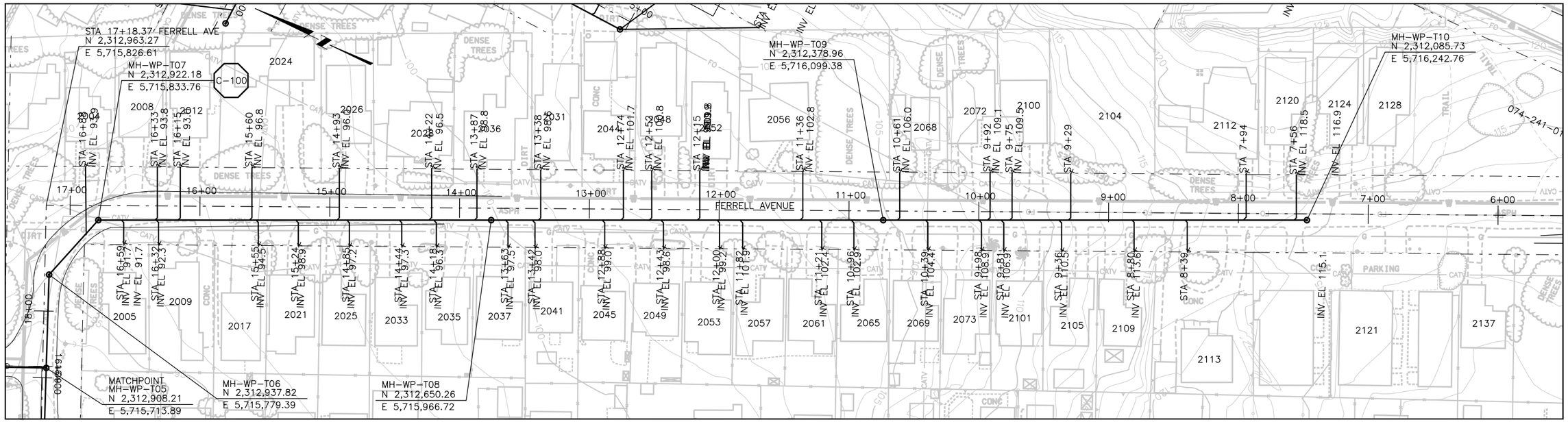
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

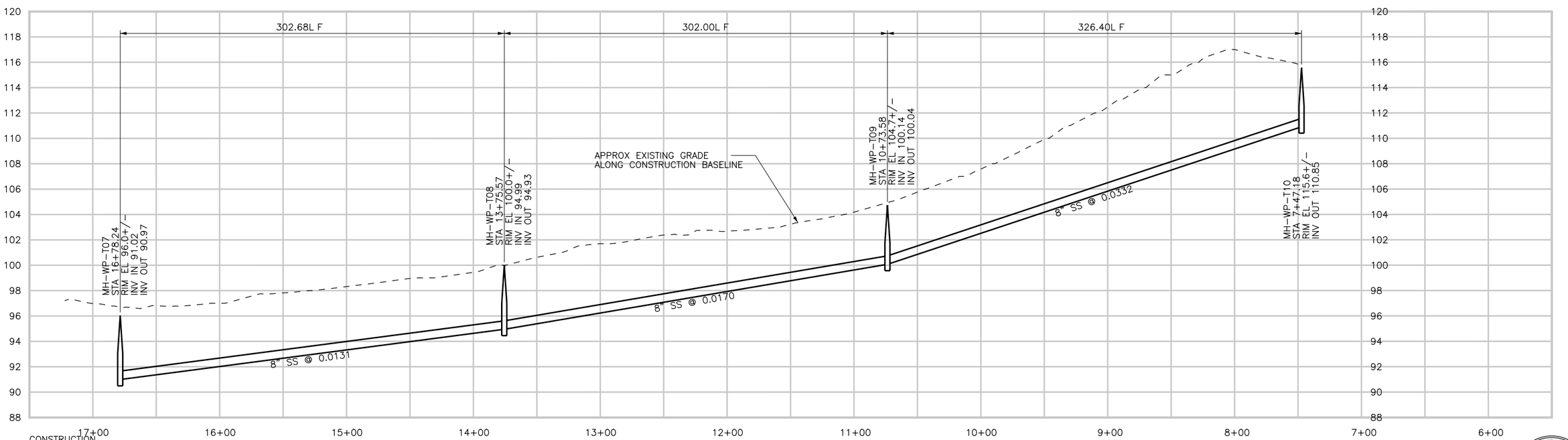
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
FERRELL AVE.
STA. 25+46.65 TO 16+78.28

SHEET
D-PP-142

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-142.dgn Plot Date: 05-FEB-2004 17:25



PLAN ON FERRELL AVENUE



PROFILE ON FERRELL AVENUE

NOTE: CONSTRUCTION BASELINE STATION AT
N 2,312,911.17, E 5,715,713.68
STA 18+42.74 FERRELL AVE = STA 16+08.68
BUSH DR

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JULIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

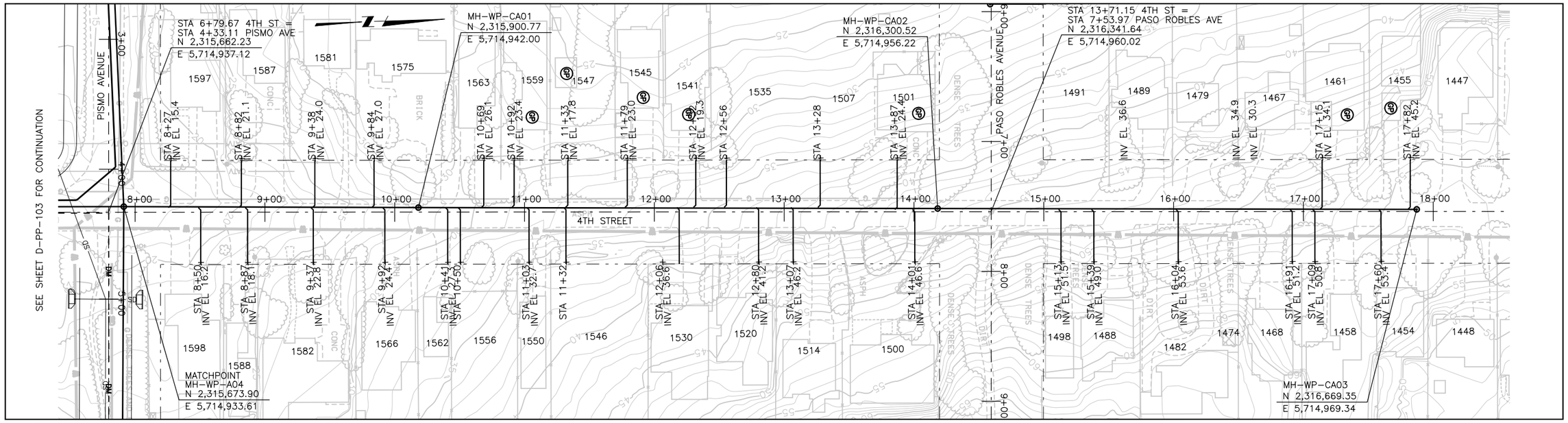
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
FERRELL AVE.
STA. 16+78.28 TO 7+71.62

SHEET
D-PP-143

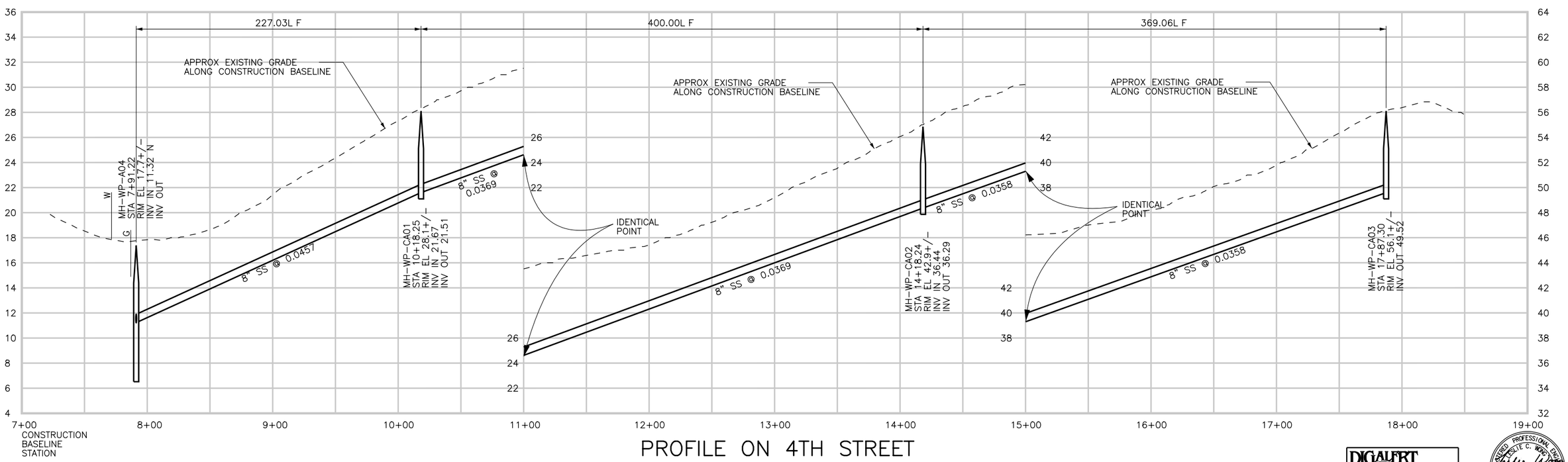
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-143.dgn Plot Date: 05-FEB-2004 17:26

SEE SHEET D-PP-102 FOR CONTINUATION



SEE SHEET D-PP-114 FOR CONTINUATION

PLAN ON 4TH STREET



PROFILE ON 4TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

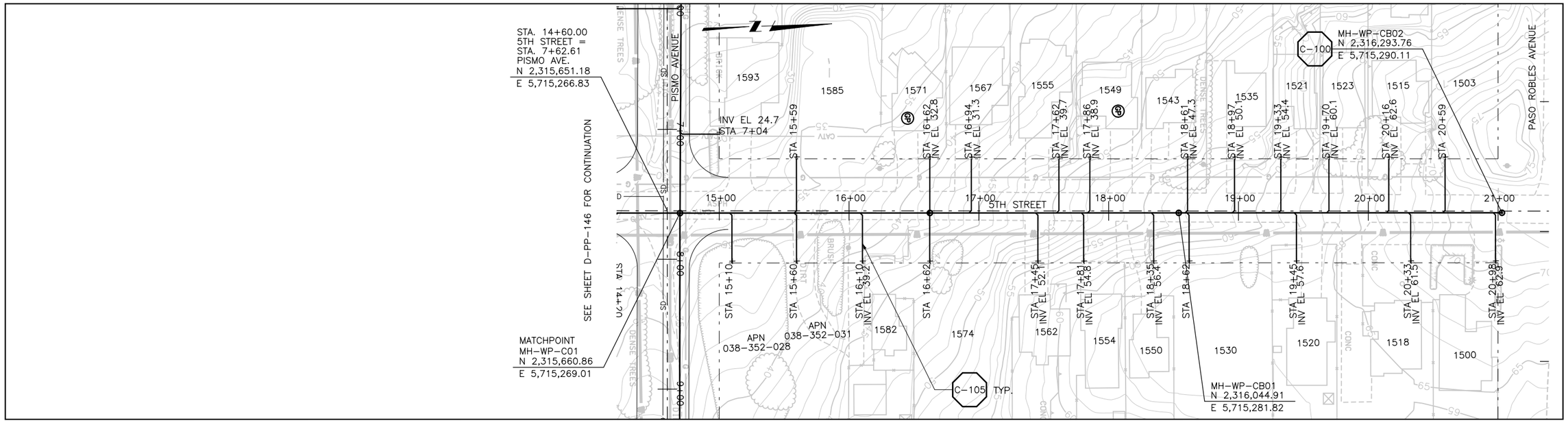
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
4TH STREET
STA. 6+73.69 TO 17+18.22

SHEET
D-PP-144

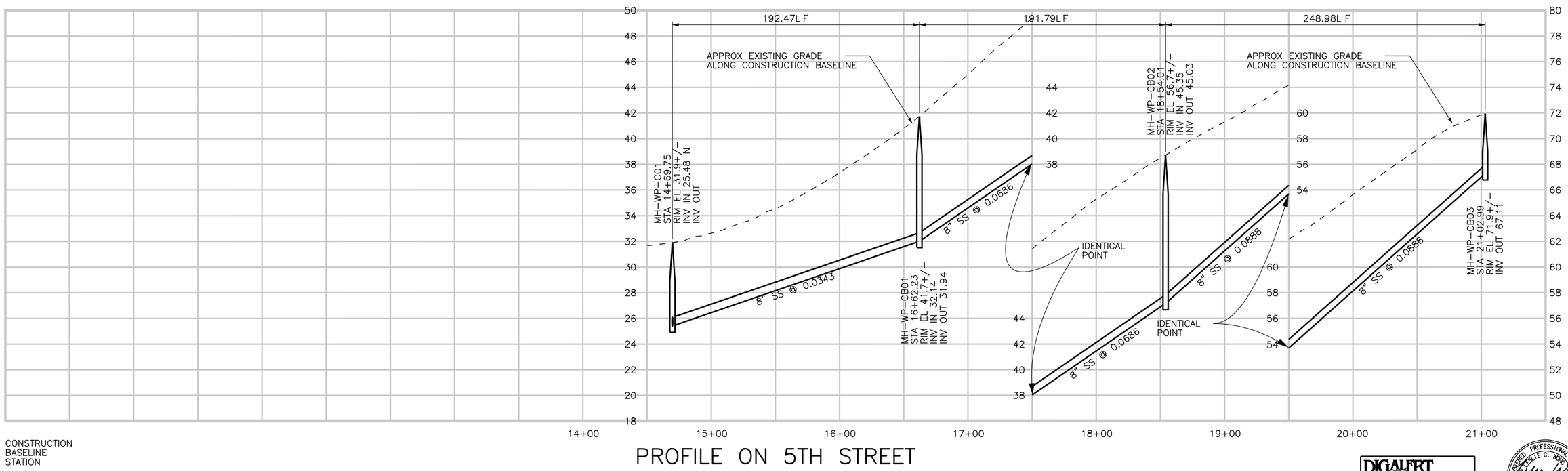
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-144.dgn
Plot Date: 05-FEB-2004 17:27

SEE SHEET D-PP-114 FOR CONTINUATION



SEE SHEET D-PP-115 FOR CONTINUATION

PLAN ON 5TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 5TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

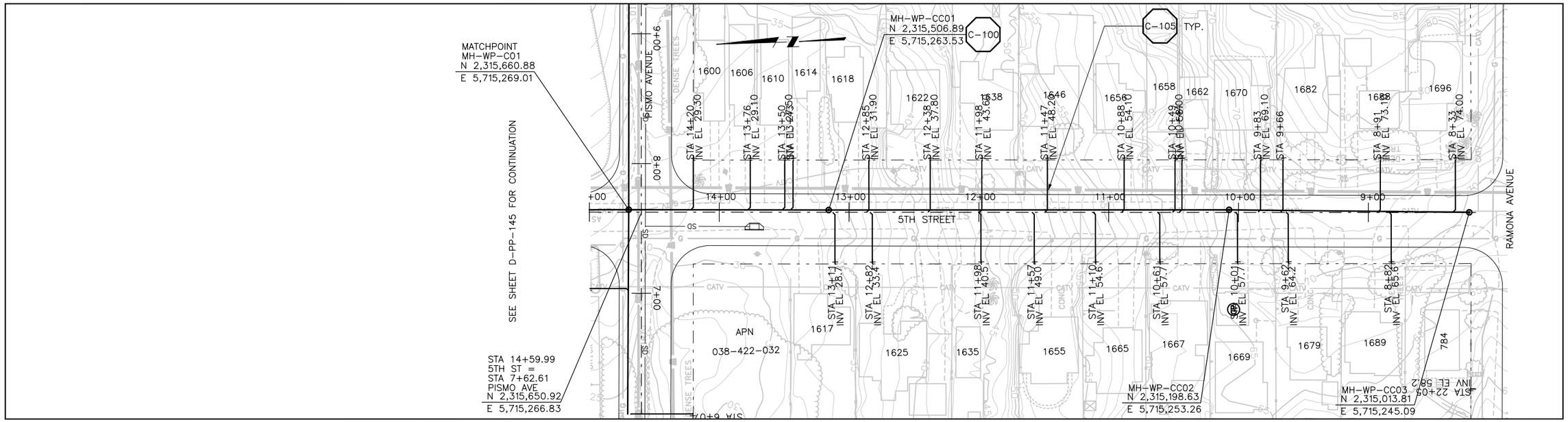
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
5TH STREET
STA. 14+54.00 TO 20+78.36

SHEET
D-PP-145

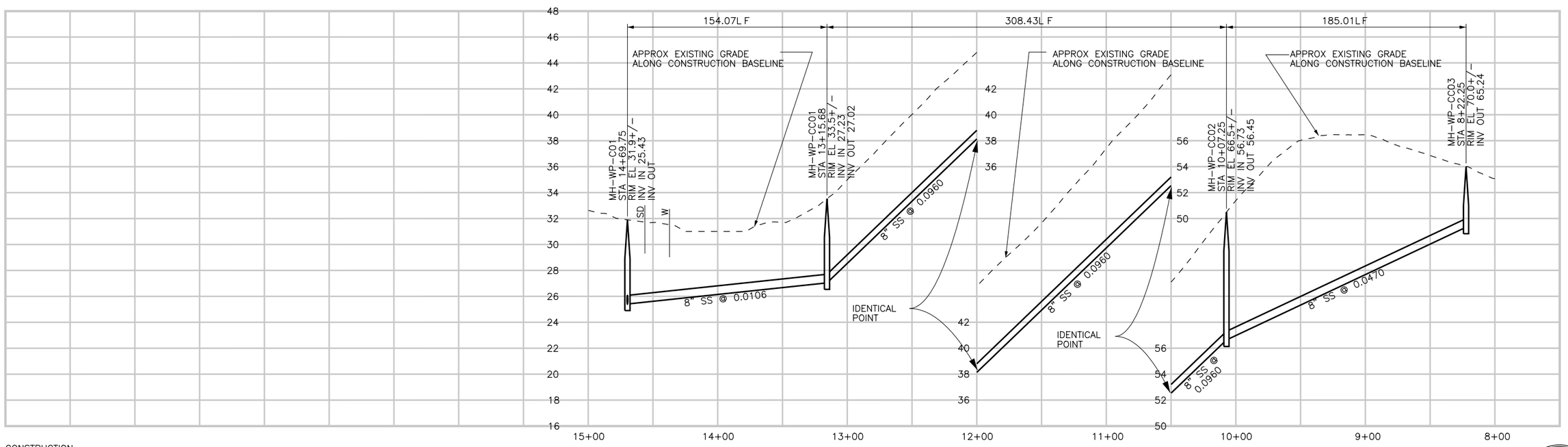
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-145.dgn
Plot Date: 05-FEB-2004 17:27

SEE SHEET D-PP-115 FOR CONTINUATION



SEE SHEET D-PP-114 FOR CONTINUATION

PLAN ON 5TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 5TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

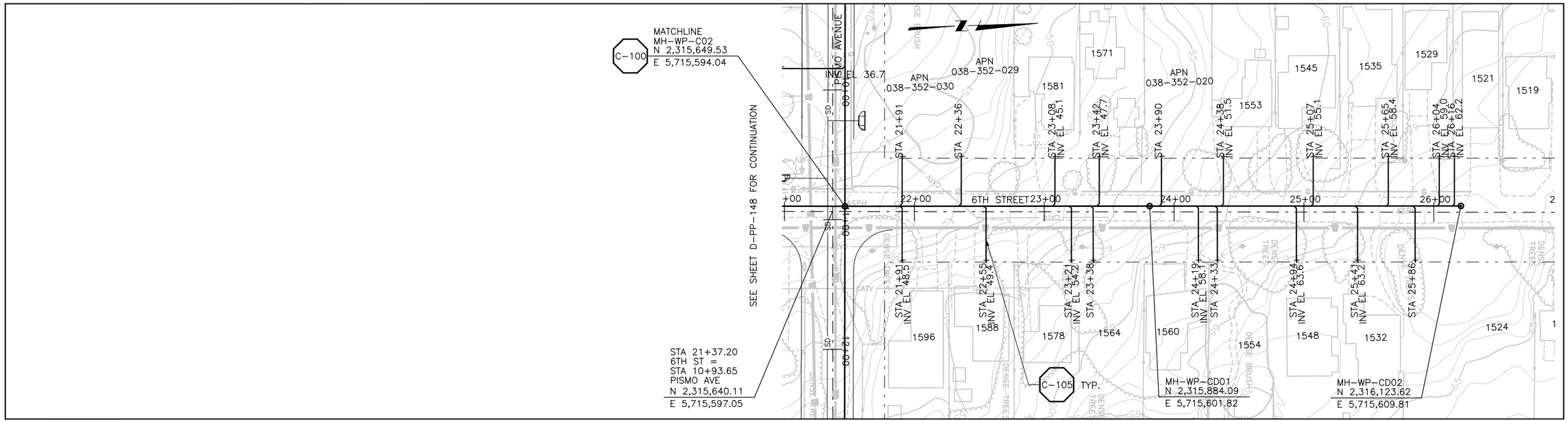
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
5TH STREET
STA. 14+54.00 TO 8+22.24

SHEET
D-PP-146

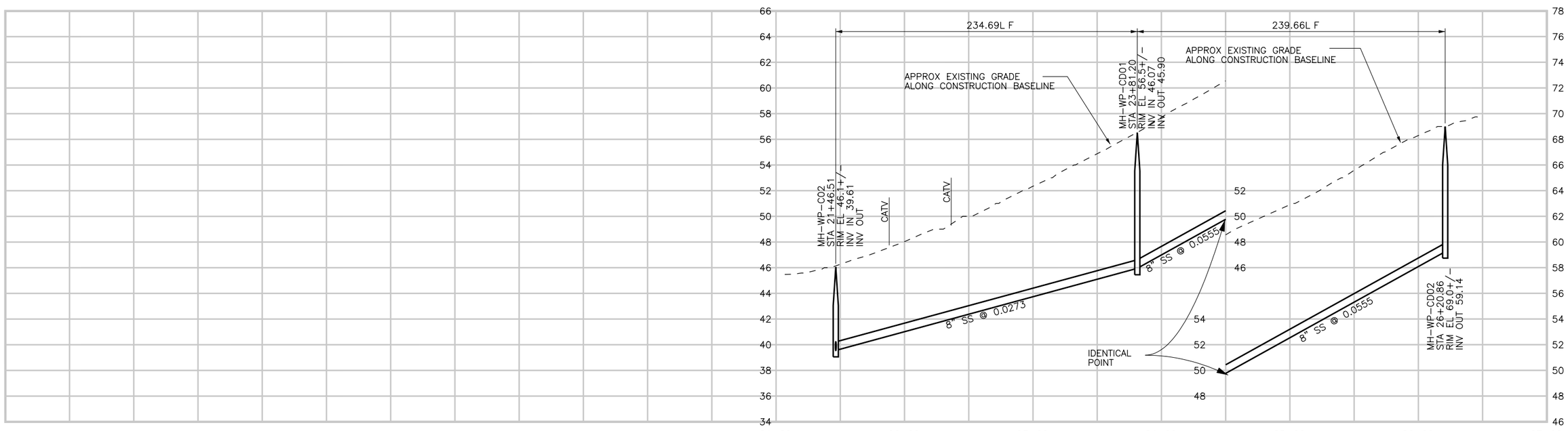
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-146.dgn
Plot Date: 05-FEB-2004 17:28

SEE SHEET D-PP-115 FOR CONTINUATION



SEE SHEET D-PP-115 FOR CONTINUATION

PLAN ON 6TH STREET



PROFILE ON 6TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
CLYDE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

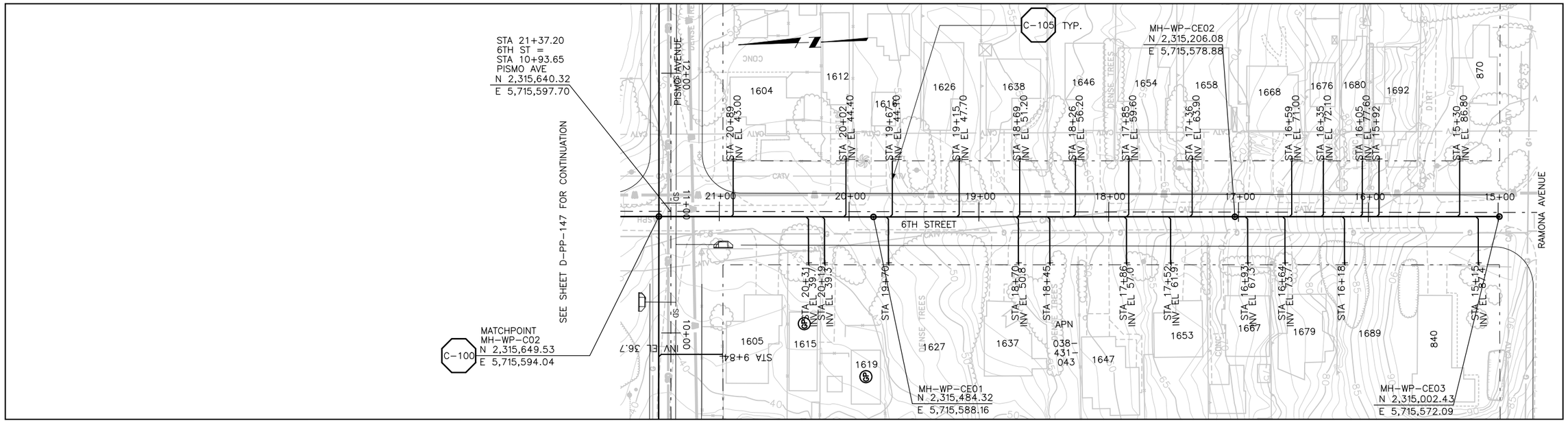
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
6TH STREET
STA. 21+31.19 TO 26+37.46

SHEET
D-PP-147

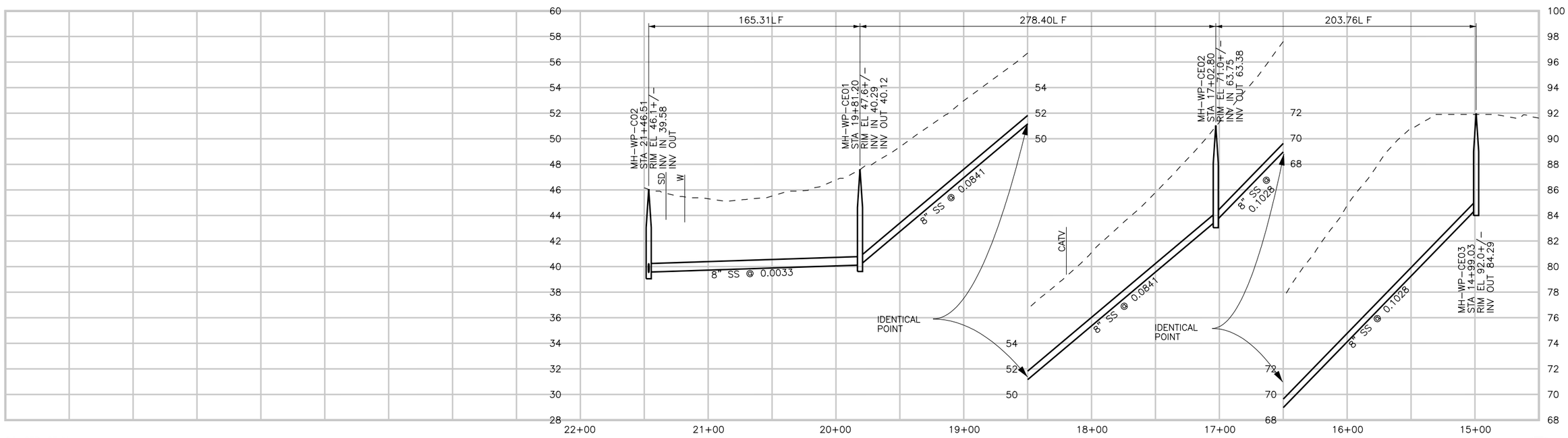
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-147.dgn Plot Date: 05-FEB-2004 17:29

SEE SHEET D-PP-115 FOR CONTINUATION



SEE SHEET D-PP-115 FOR CONTINUATION

PLAN ON 6TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 6TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

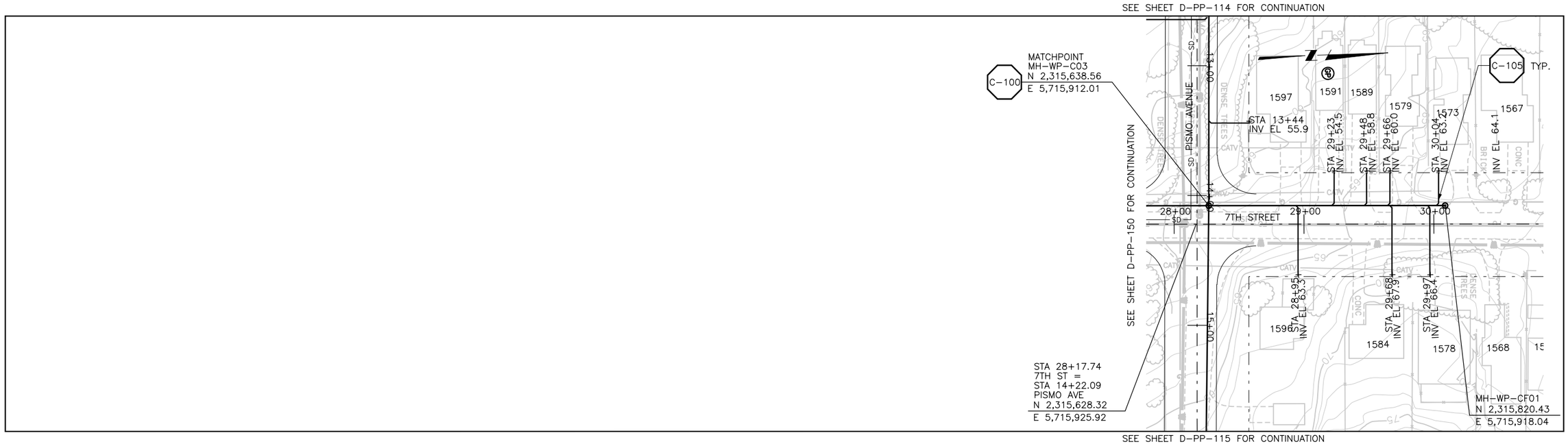
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

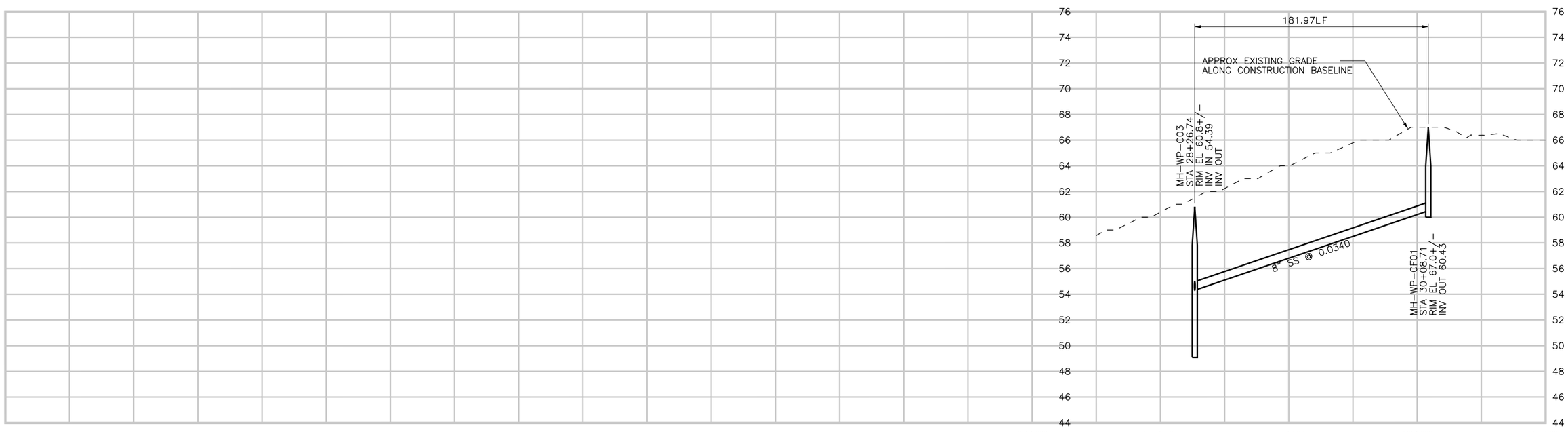
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
6TH STREET
STA. 21+31.19 TO 14+99.03

SHEET
D-PP-148

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-148.dgn
Plot Date: 05-FEB-2004 17:29



PLAN ON 7TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 7TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

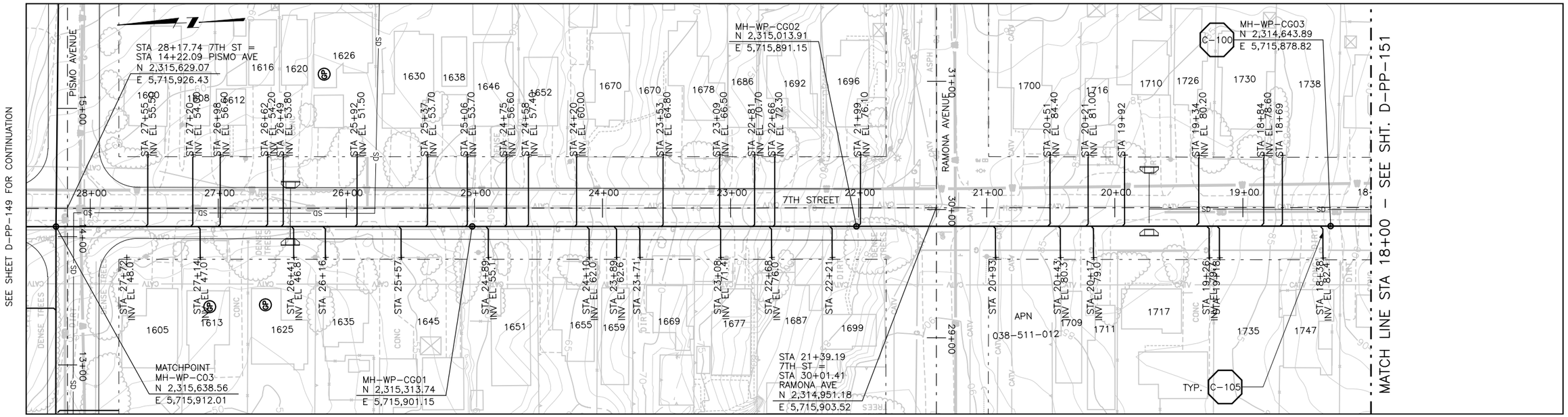
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
7TH STREET
STA. 28+11.69 TO 30+46.65

SHEET
D-PP-149

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-149.dgn
Plot Date: 05-FEB-2004 17:30

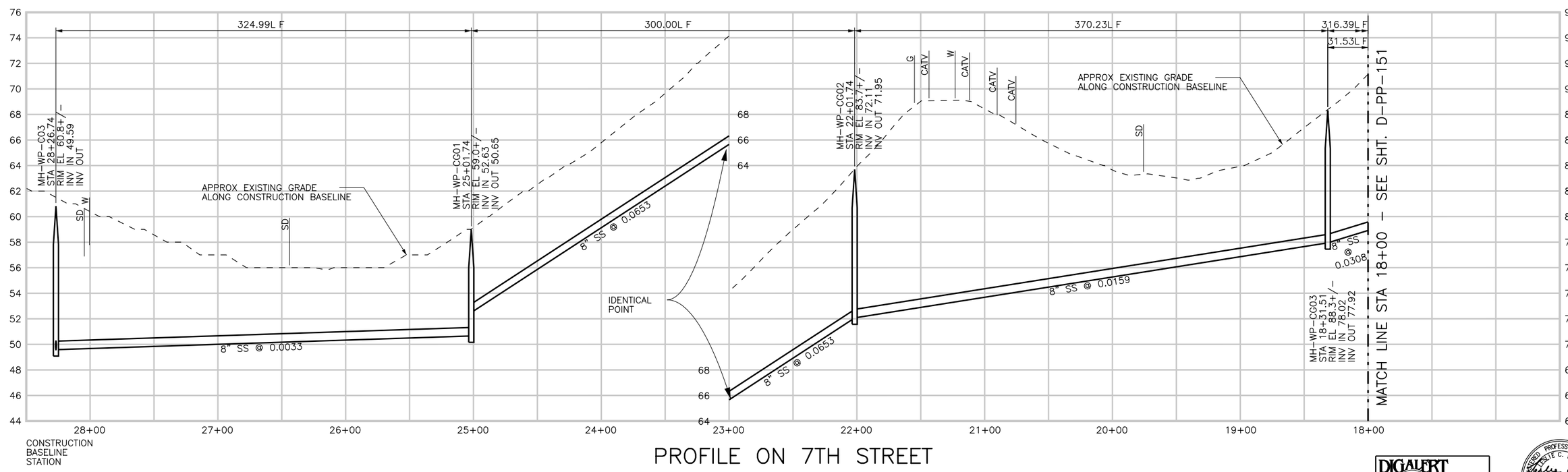
SEE SHEET D-PP-115 FOR CONTINUATION

SEE SHEET D-PP-149 FOR CONTINUATION



SEE SHEET D-PP-115 FOR CONTINUATION

PLAN ON 7TH STREET



PROFILE ON 7TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

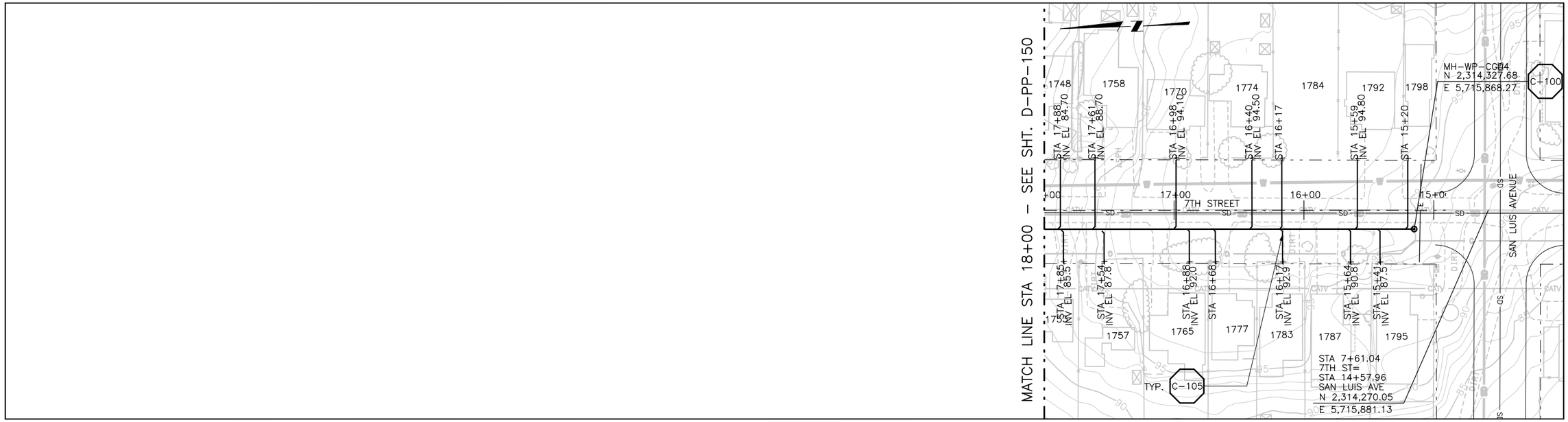
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
7TH STREET
STA. 28+11.69 TO 18+31.46

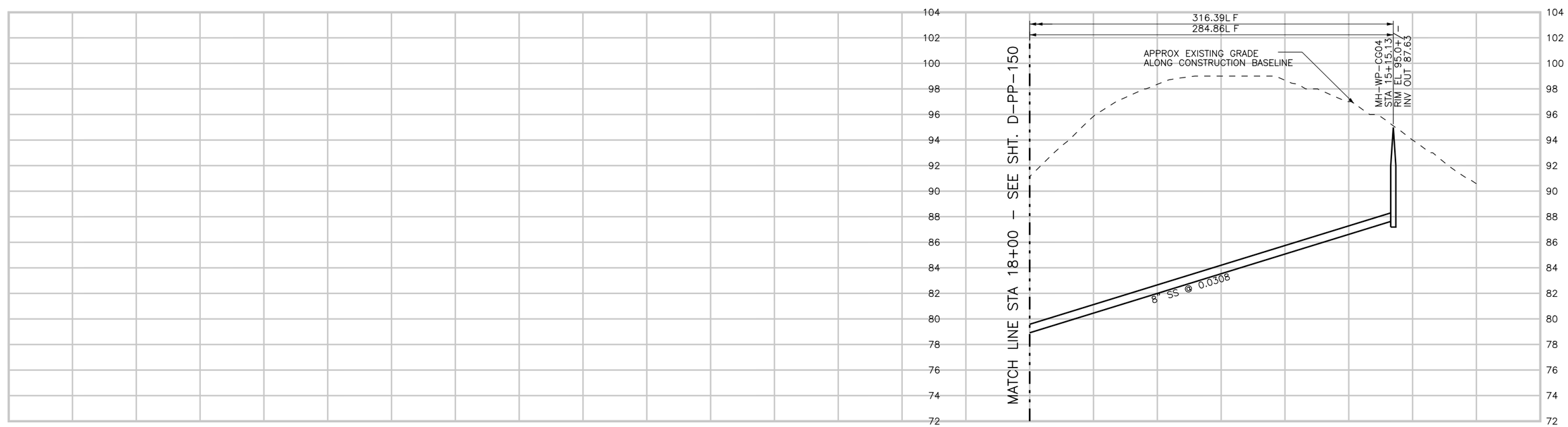
SHEET
D-PP-150

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-150.dgn
Plot Date: 05-FEB-2004 17:31



SEE SHEET D-PP-106 FOR CONTINUATION

PLAN ON 7TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 7TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

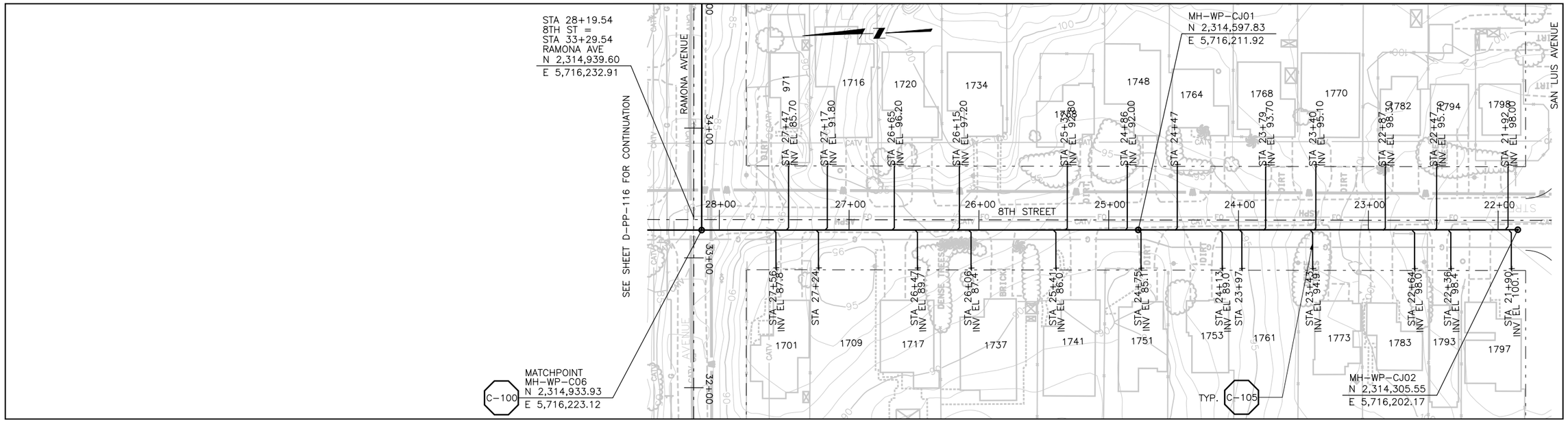
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
7TH STREET
STA. 18+31.46 TO 14+97.15

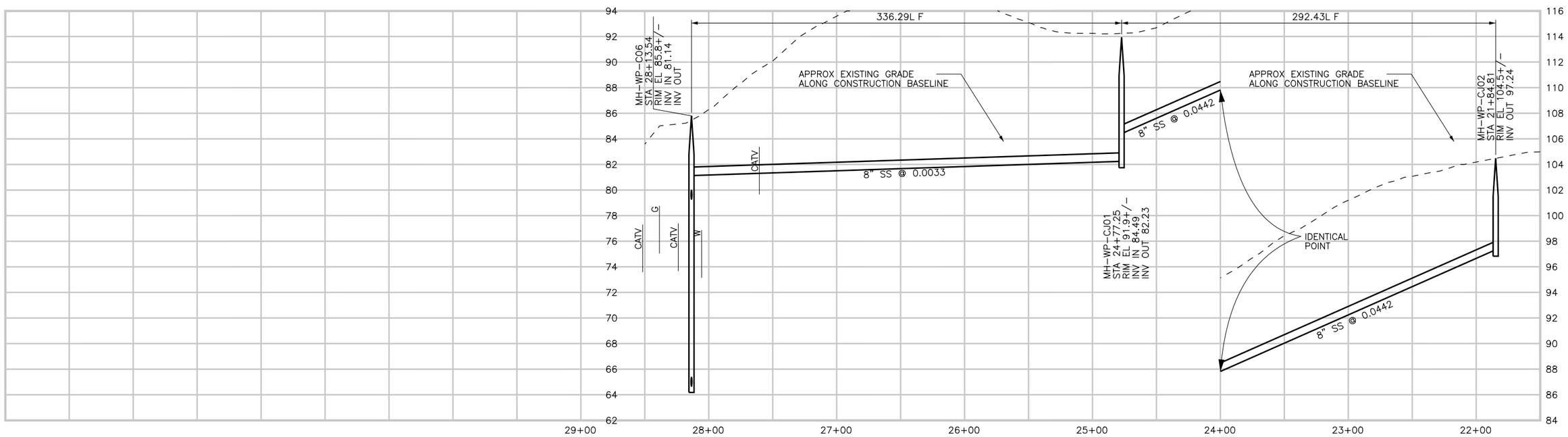
SHEET
D-PP-151

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-151.dgn
Plot Date: 05-FEB-2004 17:31

SEE SHEET D-PP-117 FOR CONTINUATION



PLAN ON 8TH STREET



PROFILE ON 8TH STREET

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER LESLIE C. WONG No. C-58314 Exp. 6-30-06 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: H: 1"=40' V: 1"=4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVEN J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

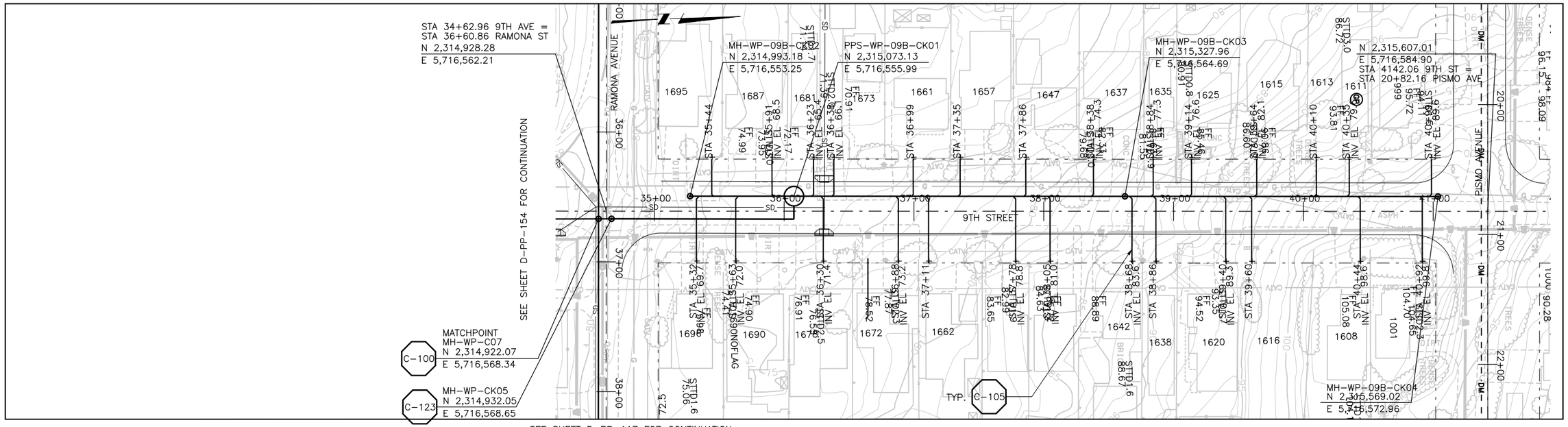
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
8TH STREET
STA. 28+13.54 TO 21+77.84

SHEET D-PP-152

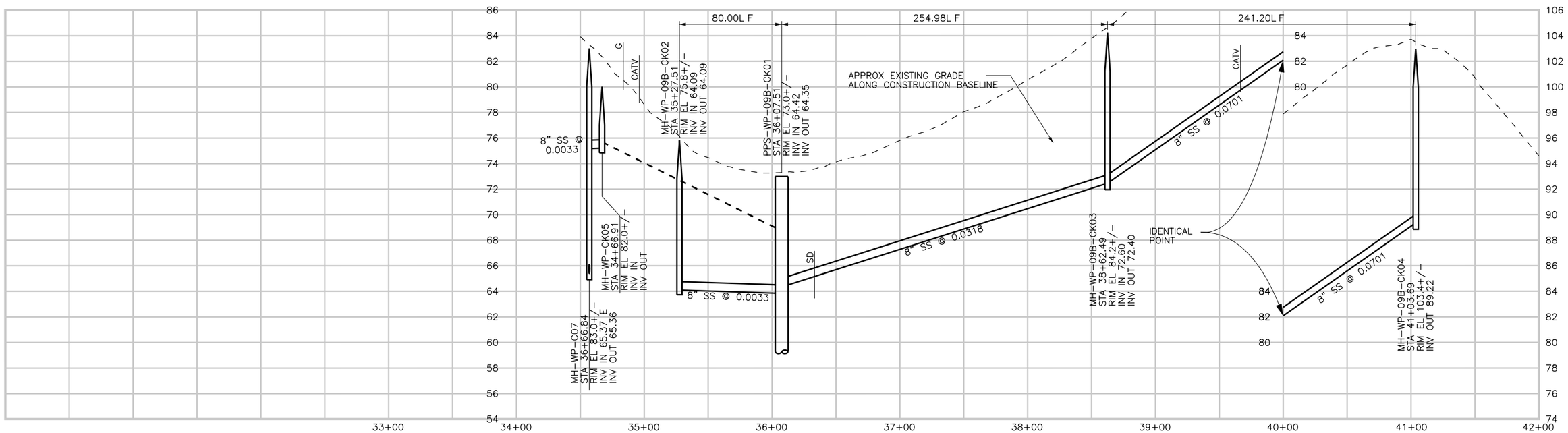
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-152.dgn Plot Date: 05-FEB-2004 17:32

SEE SHEET D-PP-117 FOR CONTINUATION



SEE SHEET D-PP-117 FOR CONTINUATION

PLAN ON 9TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 9TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

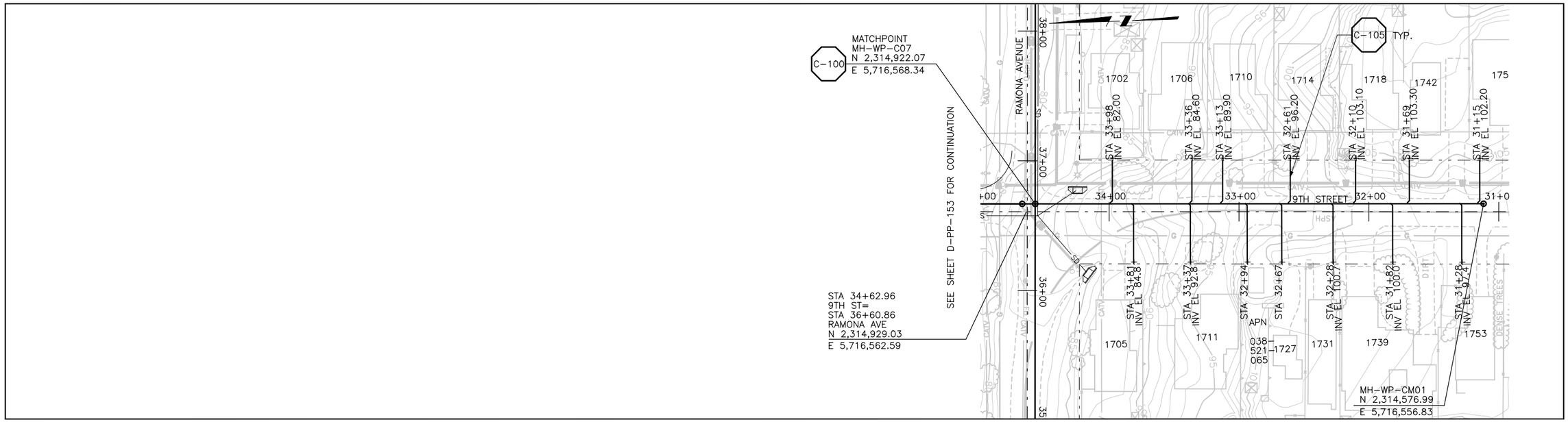
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
9TH STREET
STA. 34+56.96 TO 41+42.06

SHEET
D-PP-153

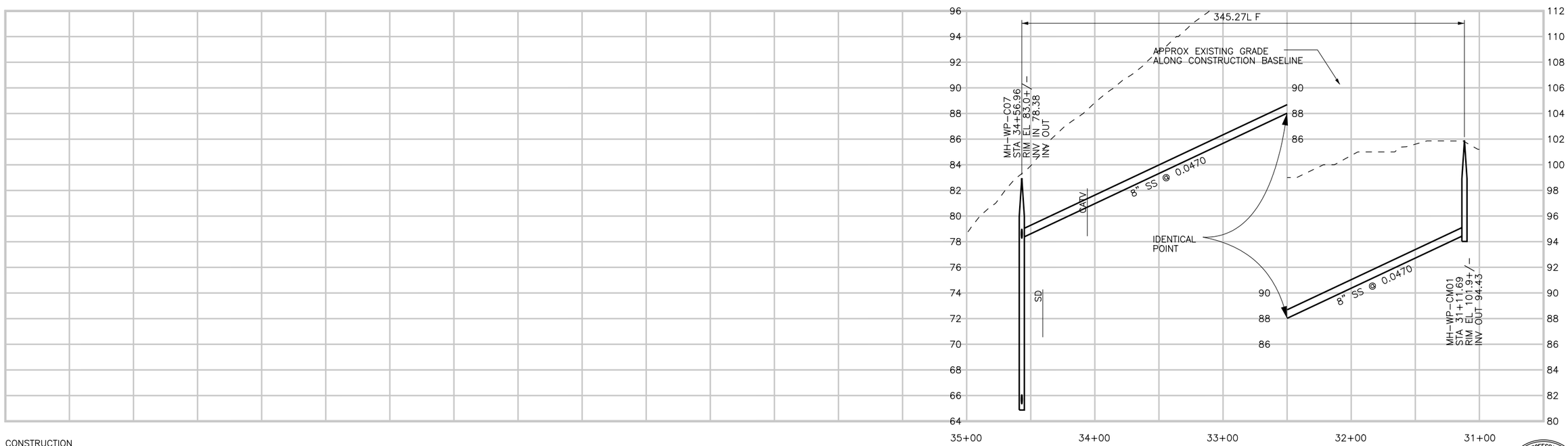
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-153.dgn
Plot Date: 09-FEB-2004 11:47

SEE SHEET D-PP-117 FOR CONTINUATION



SEE SHEET D-PP-117 FOR CONTINUATION

PLAN ON 9TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 9TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

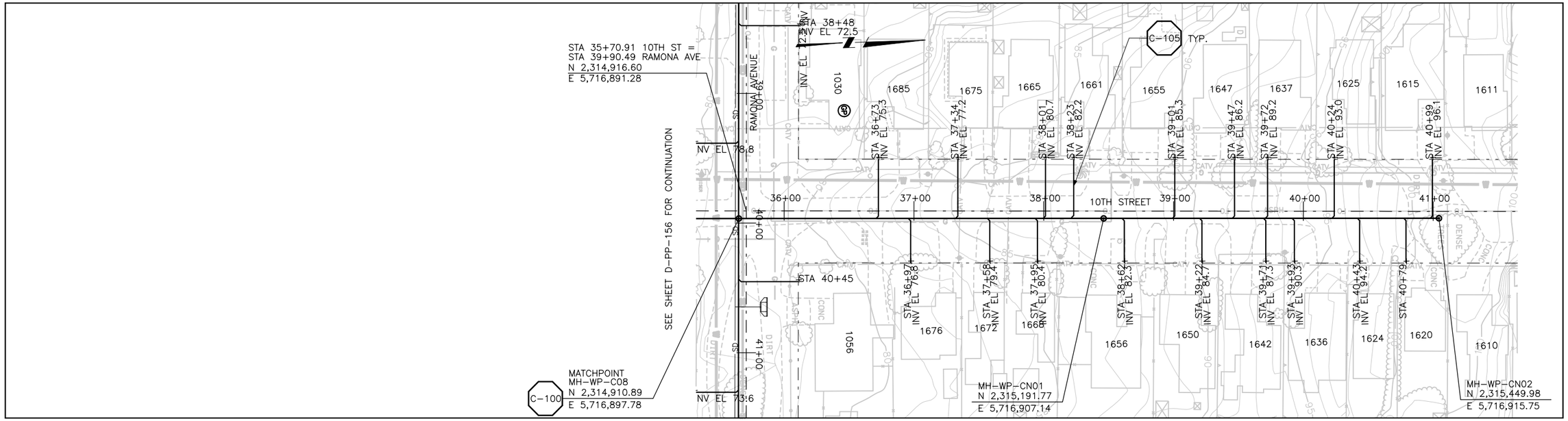
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
9TH STREET
STA. 34+56.96 TO 31+11.69

SHEET
D-PP-154

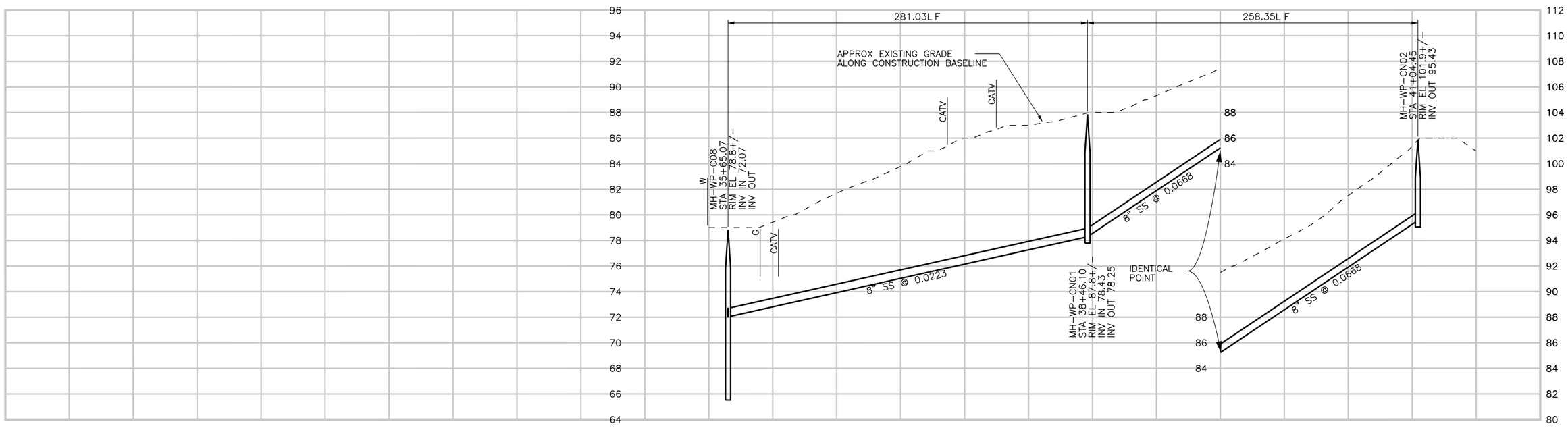
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-154.dgn Plot Date: 05-FEB-2004 17:33

SEE SHEET D-PP-117 FOR CONTINUATION



SEE SHEET D-PP-117 FOR CONTINUATION

PLAN ON 10TH STREET



PROFILE ON 10TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

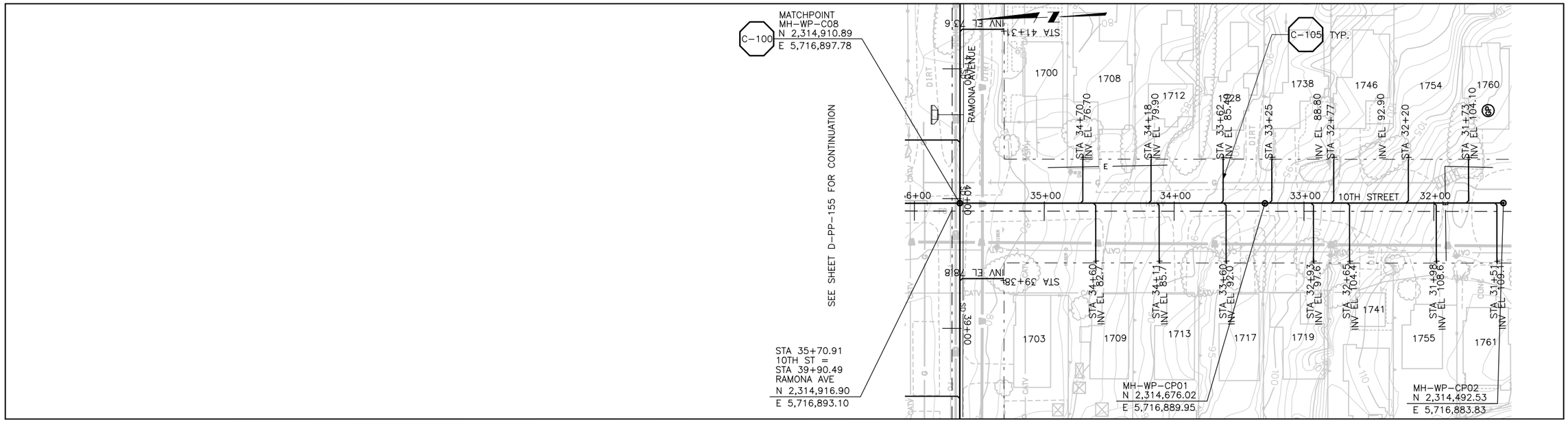
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
10TH STREET
STA. 35+65.07 TO 41+12.79

SHEET
D-PP-155

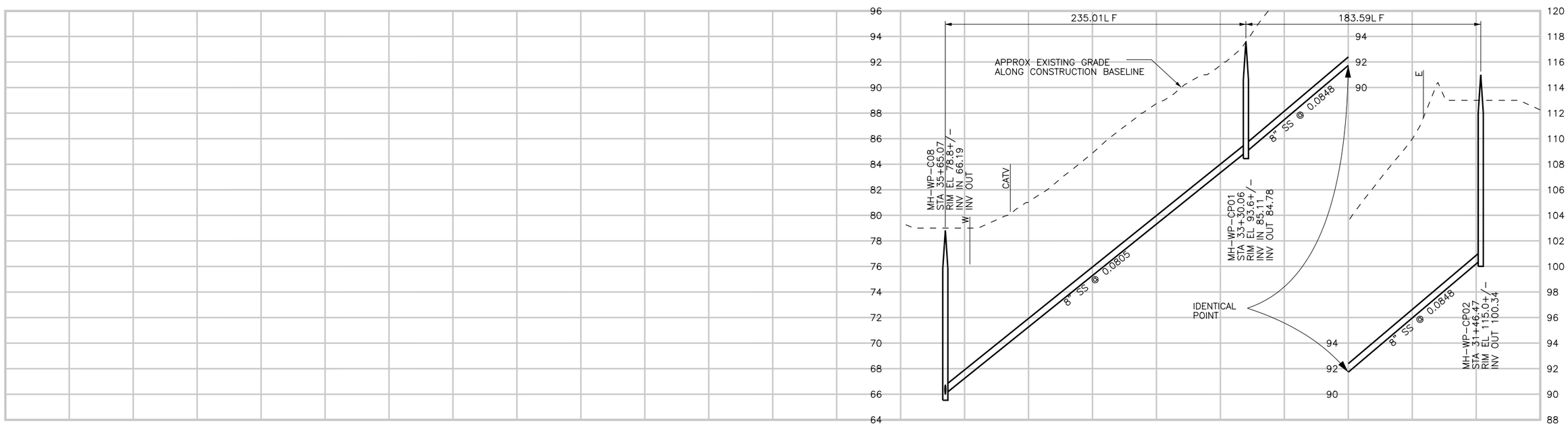
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-155.dgn Plot Date: 05-FEB-2004 17:34

SEE SHEET D-PP-117 FOR CONTINUATION



SEE SHEET D-PP-117 FOR CONTINUATION

PLAN ON 10TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 10TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

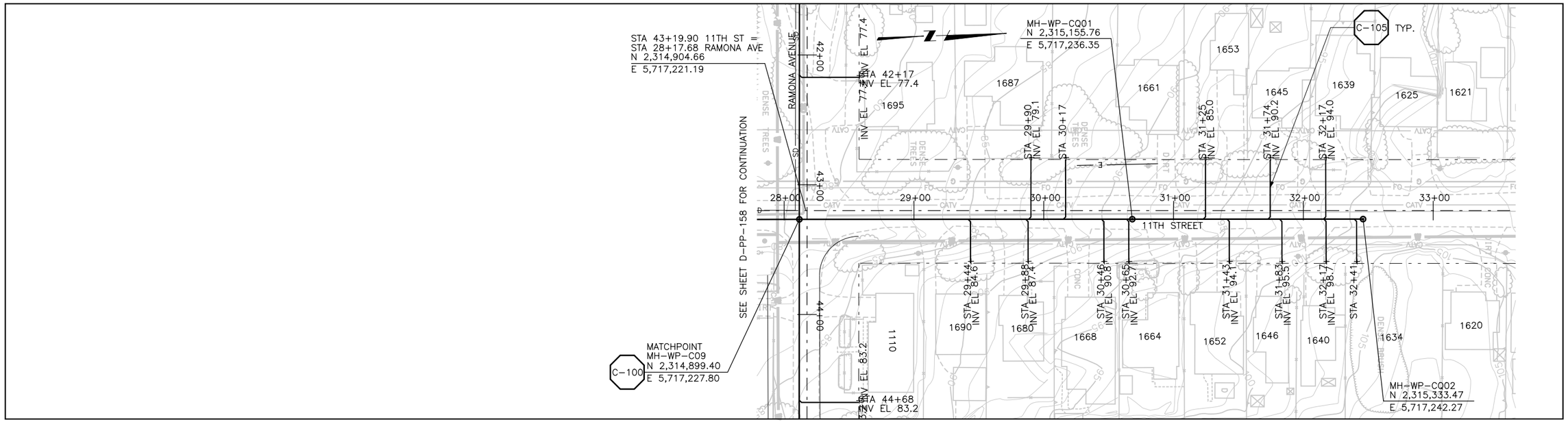
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
10TH STREET
STA. 35+65.07 TO 31+52.34

SHEET
D-PP-156

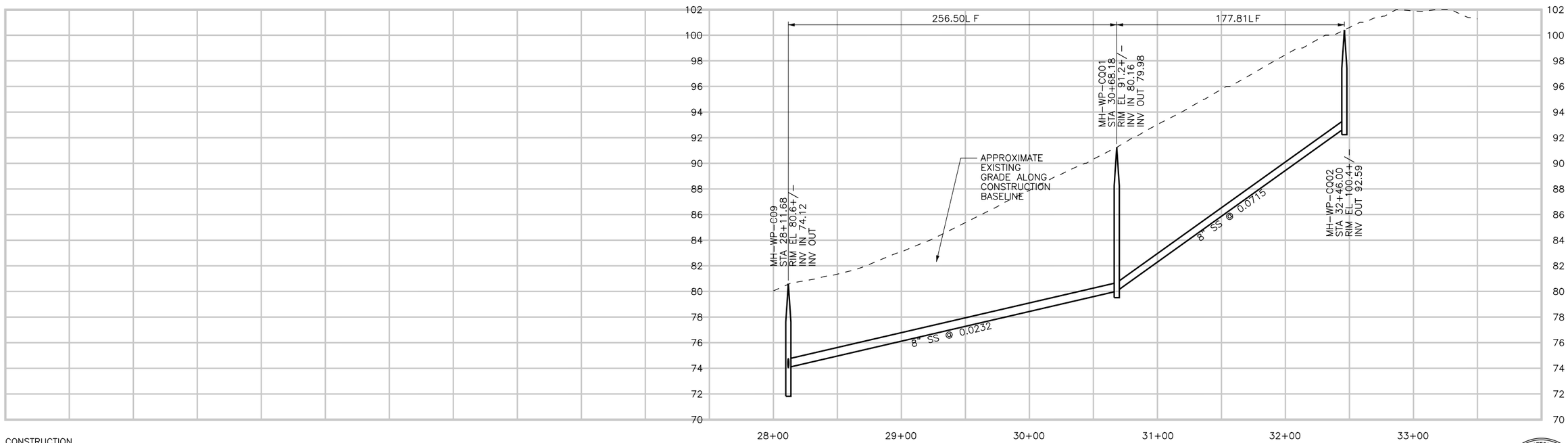
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-156.dgn Plot Date: 05-FEB-2004 17:35

SEE SHEET D-PP-117 FOR CONTINUATION



SEE SHEET D-PP-118 FOR CONTINUATION

PLAN ON 11TH STREET



PROFILE ON 11TH STREET

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER LESLIE C. WONG No. C-58314 Exp. 6-30-06 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: H: 1"=40' V: 1"=4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVEN J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

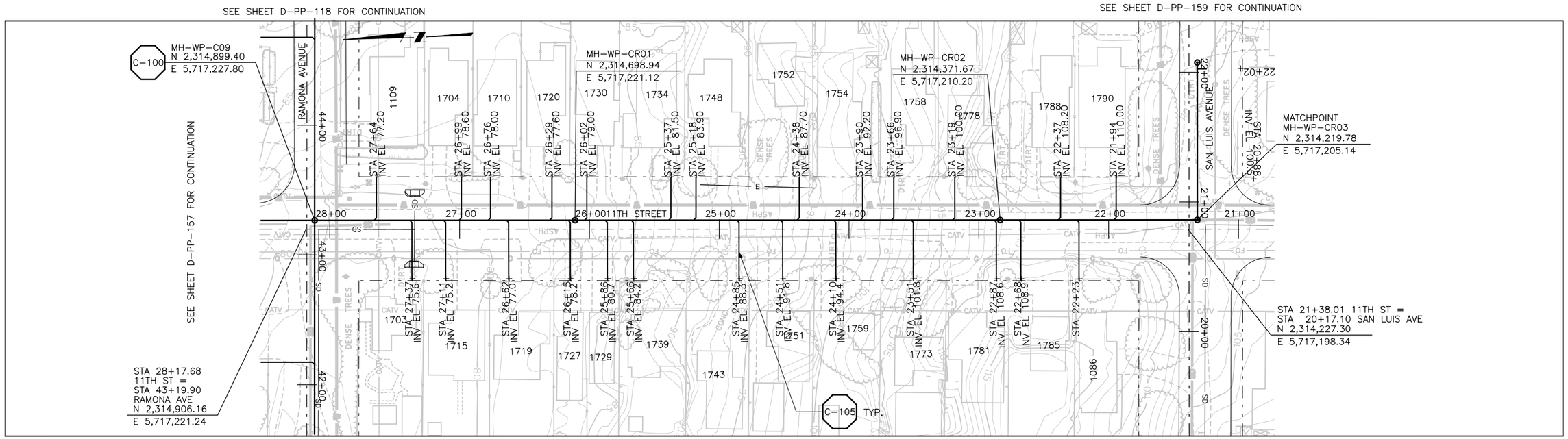
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

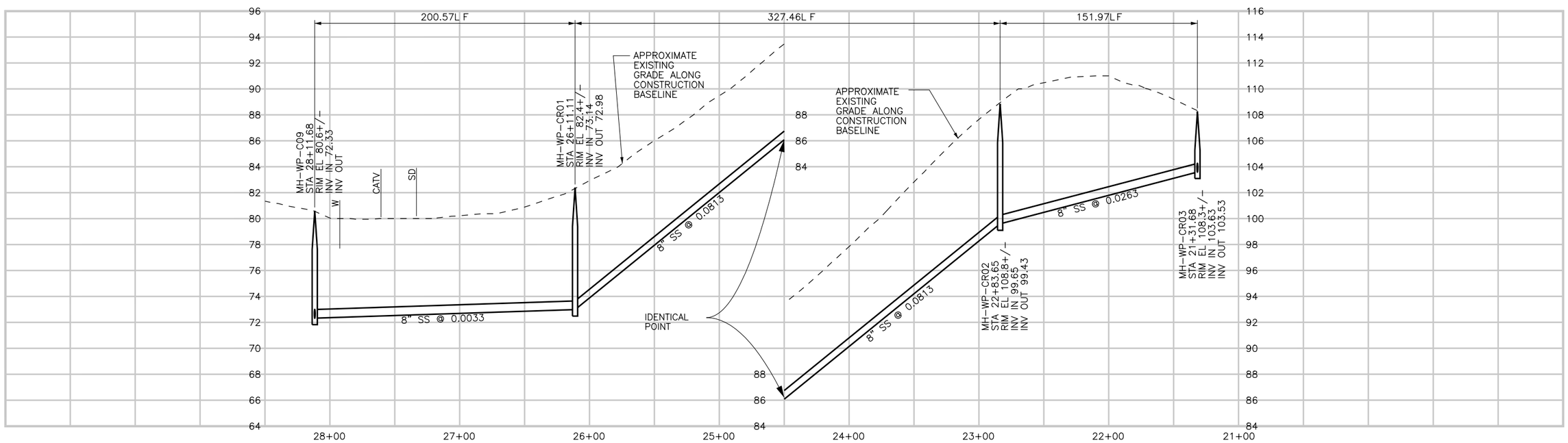
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
11TH STREET
STA. 28+11.68 TO 33+20.36

SHEET D-PP-157

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-157.dgn Plot Date: 05-FEB-2004 17:35



PLAN ON 11TH STREET



PROFILE ON 11TH STREET

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER LESLIE C. WONG No. C-58311 Exp. 6-30-06 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: H: 1"=40' V: 1"=4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

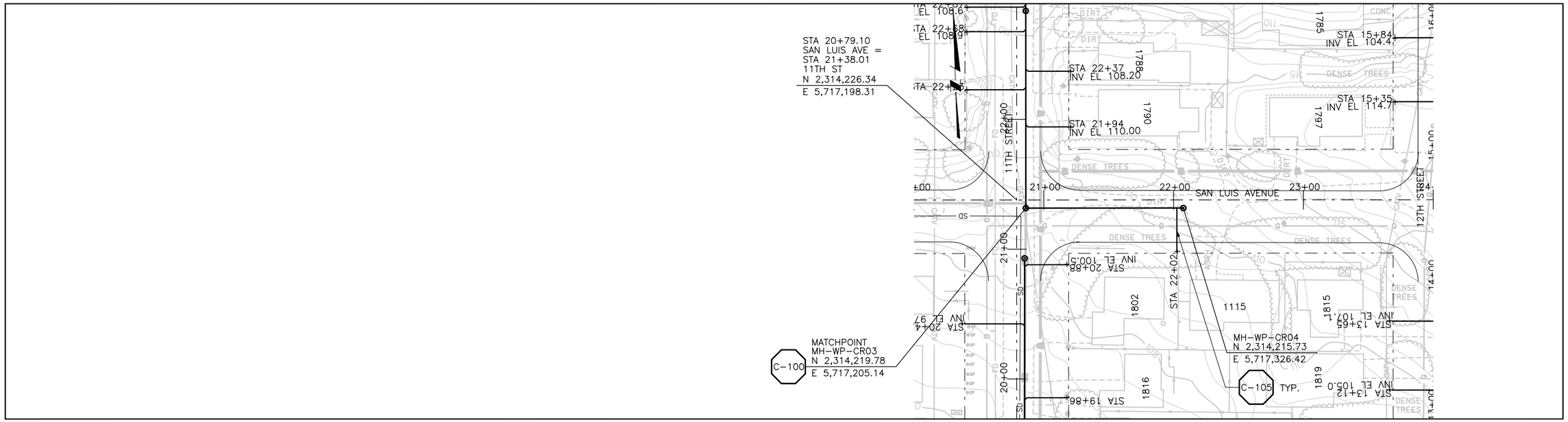
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
11TH STREET
STA. 28+11.68 TO 21+31.68

SHEET D-PP-158

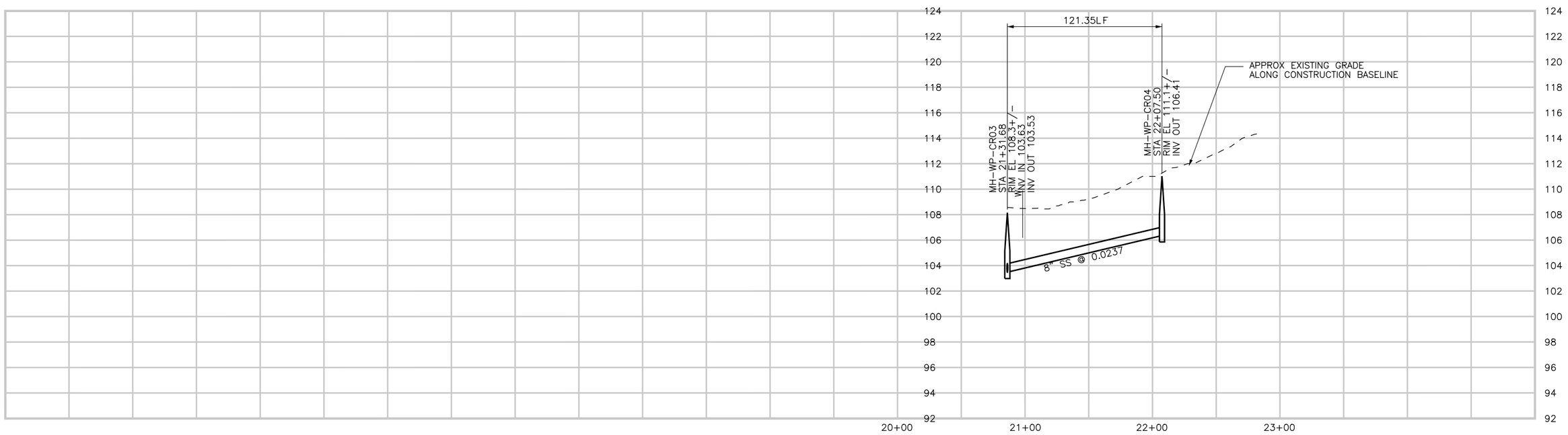
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-158.dgn Plot Date: 05-FEB-2004 17:36

SEE SHEET D-PP-158 FOR CONTINUATION



SEE SHEET D-PP-136 FOR CONTINUATION

PLAN ON SAN LUIS AVENUE



CONSTRUCTION
BASELINE
STATION

PROFILE ON SAN LUIS AVENUE

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER JOHN A. BERGEN No. C 31069 Exp. 6-30-06 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

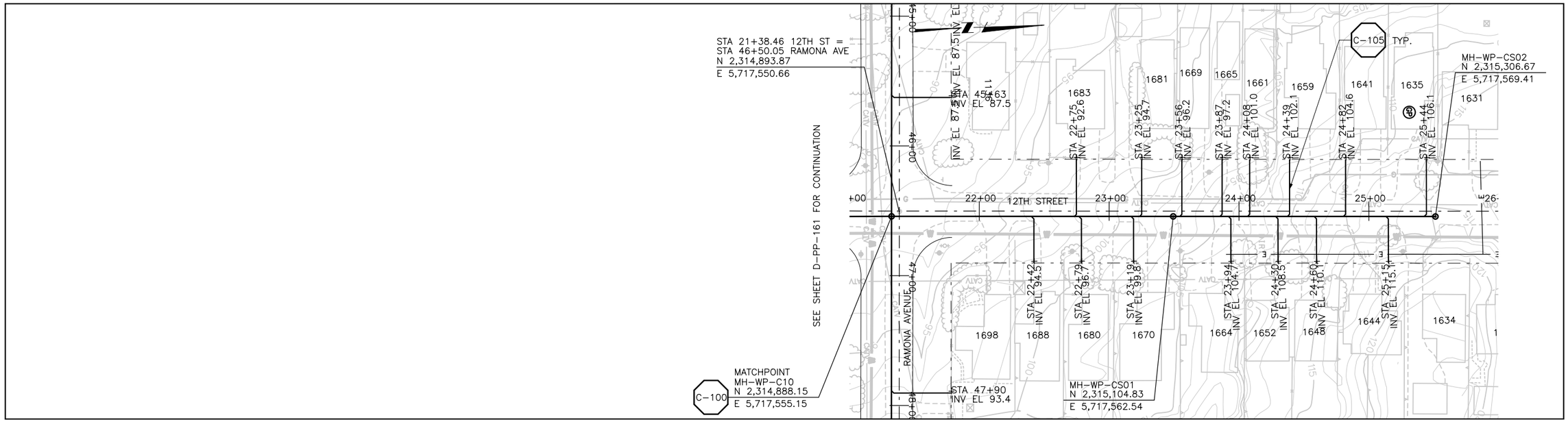
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SAN LUIS AVE.
STA. 20+86.14 TO 22+62.41

SHEET
D-PP-159

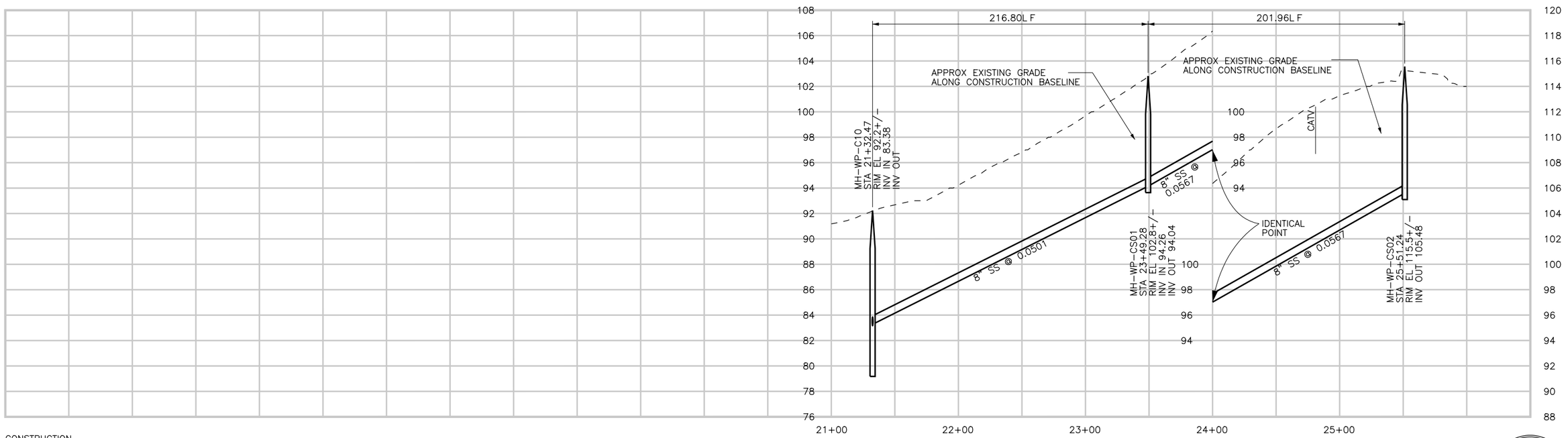
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-159.dgn Plot Date: 05-FEB-2004 17:37

SEE SHEET D-PP-118 FOR CONTINUATION



SEE SHEET D-PP-118 FOR CONTINUATION

PLAN ON 12TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 11TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

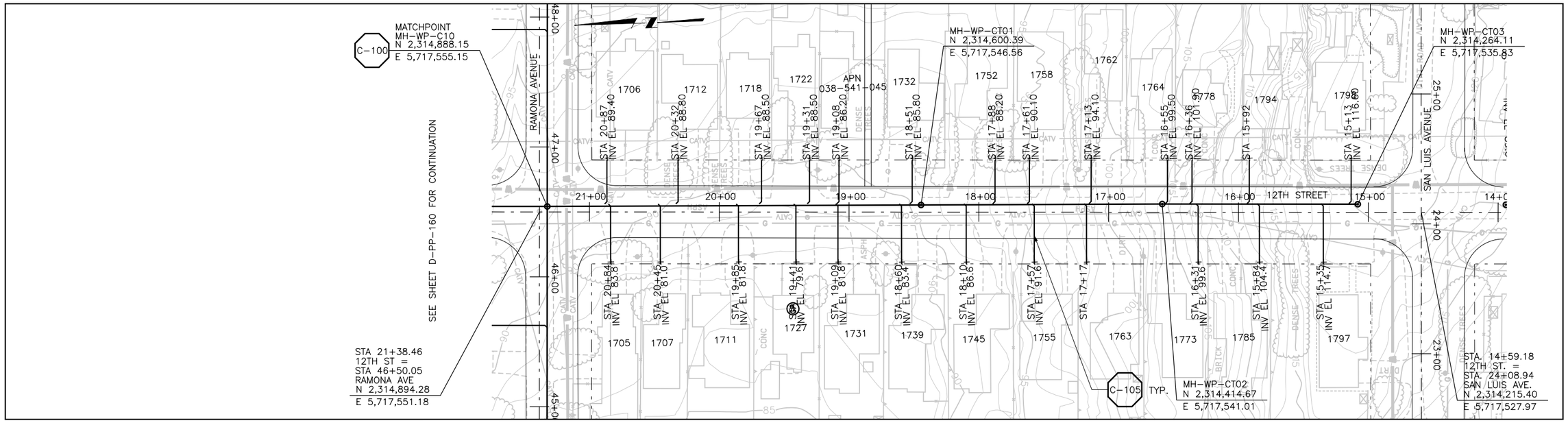
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
12TH STREET
STA. 21+32.47 TO 25+51.23

SHEET
D-PP-160

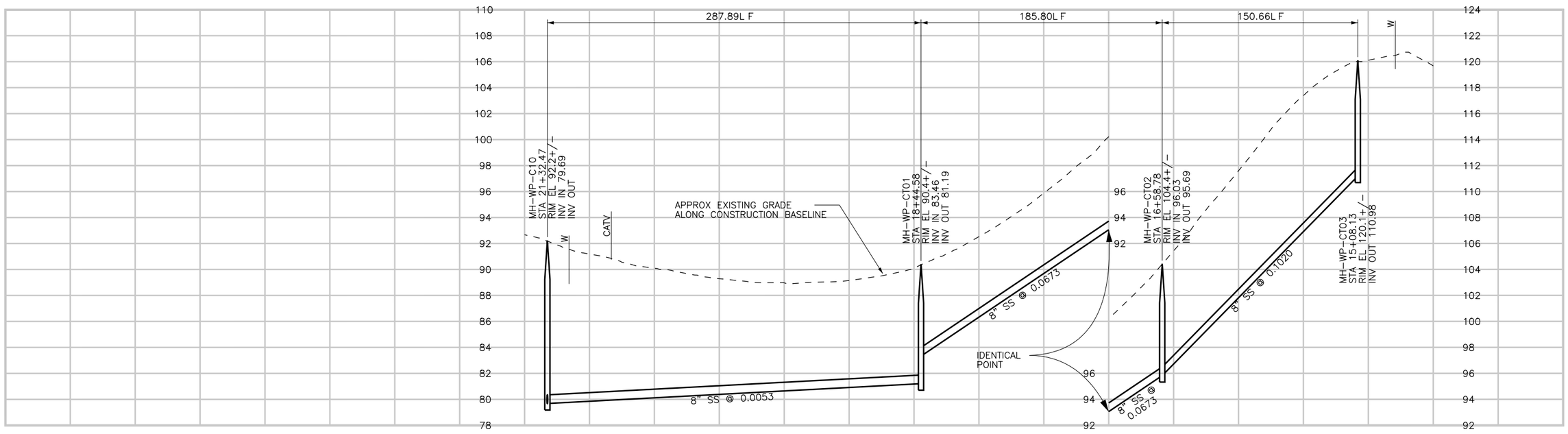
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-160.dgn Plot Date: 05-FEB-2004 17:37

SEE SHEET D-PP-118 FOR CONTINUATION



SEE SHEET D-PP-118 FOR CONTINUATION

PLAN ON 12TH STREET



PROFILE ON 12TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. C-58434
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

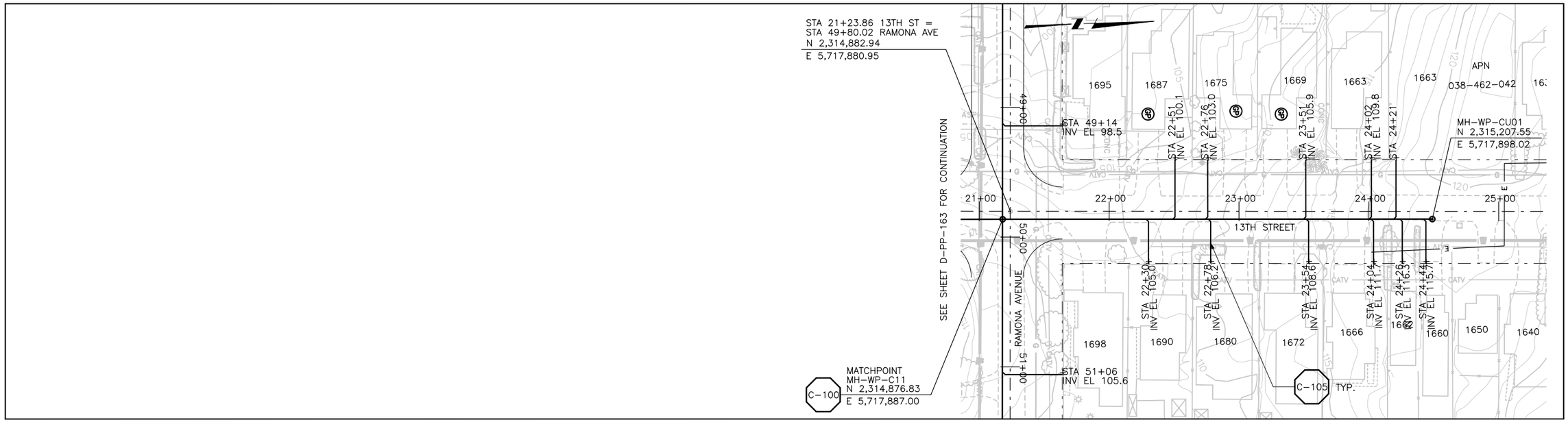
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
12TH STREET
STA. 21+32.47 TO 14+52.67

SHEET
D-PP-161

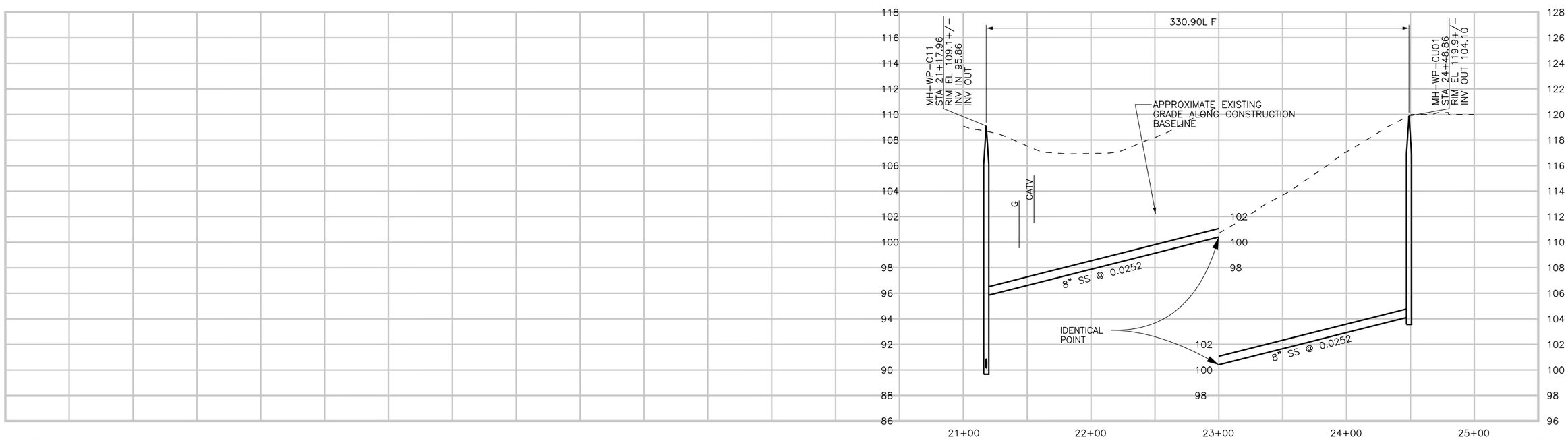
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-161.dgn Plot Date: 05-FEB-2004 17:38

SEE SHEET D-PP-118 FOR CONTINUATION



SEE SHEET D-PP-118 FOR CONTINUATION

PLAN ON 13TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 13TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

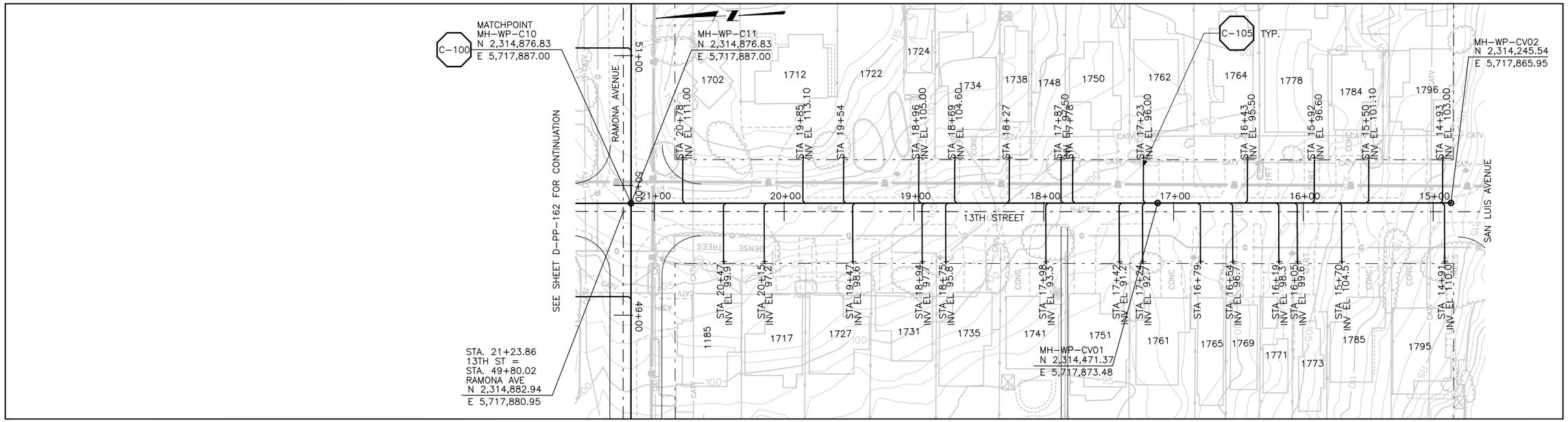
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
13TH STREET
STA. 21+17.88 TO 24+73.77

SHEET
D-PP-162

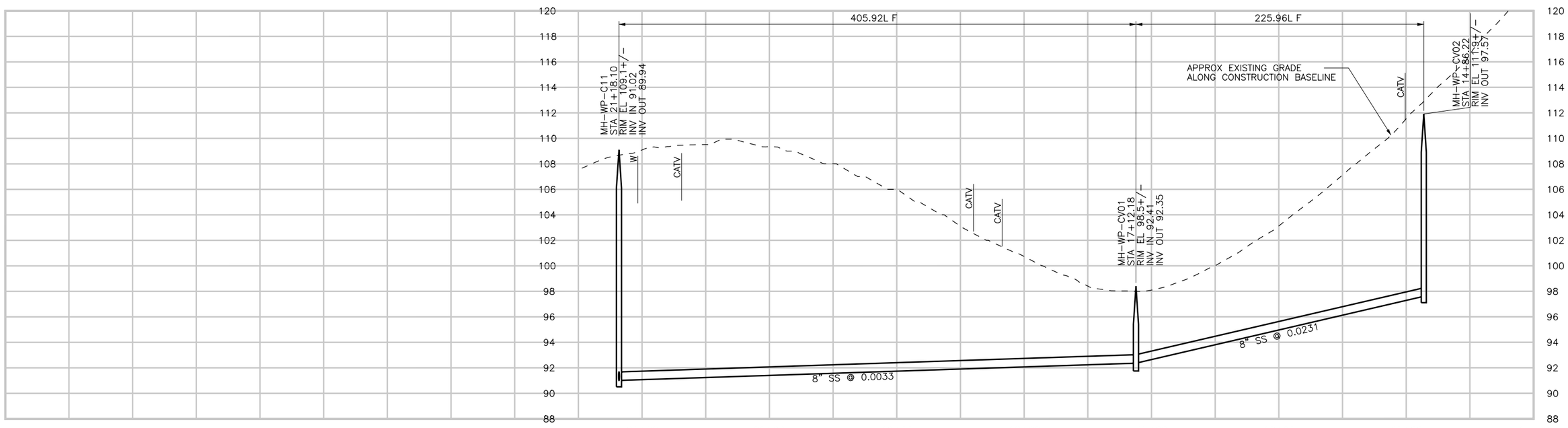
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-162.dgn
Plot Date: 05-FEB-2004 17:39

SEE SHEET D-PP-118 FOR CONTINUATION



SEE SHEET D-PP-118 FOR CONTINUATION

PLAN ON 13TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 13TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

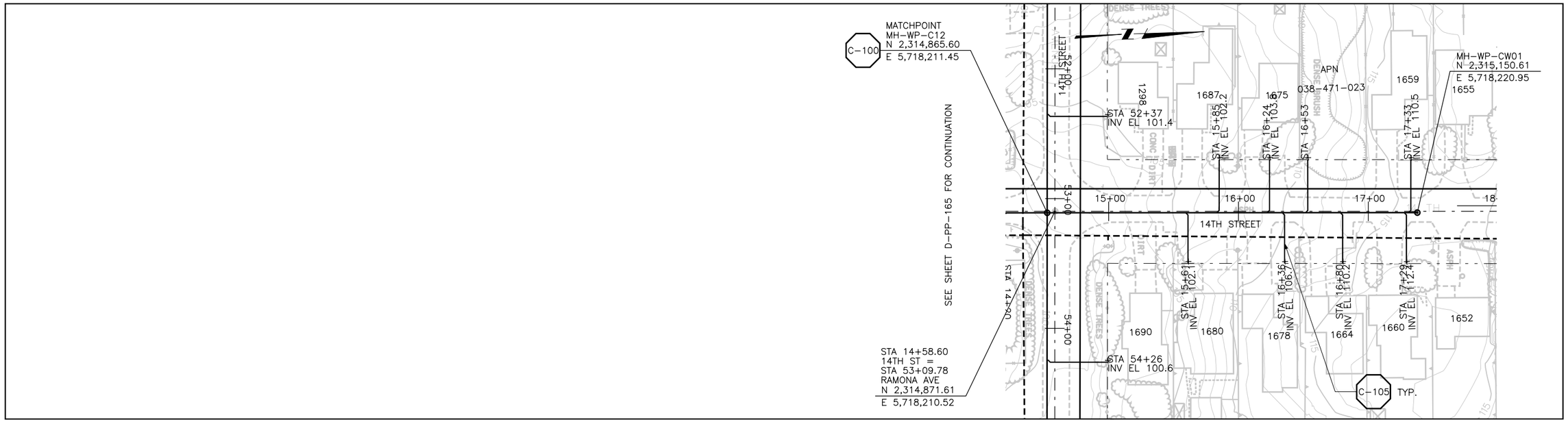
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
13TH STREET
STA 21+17.96 TO 14+80.82

SHEET
D-PP-163

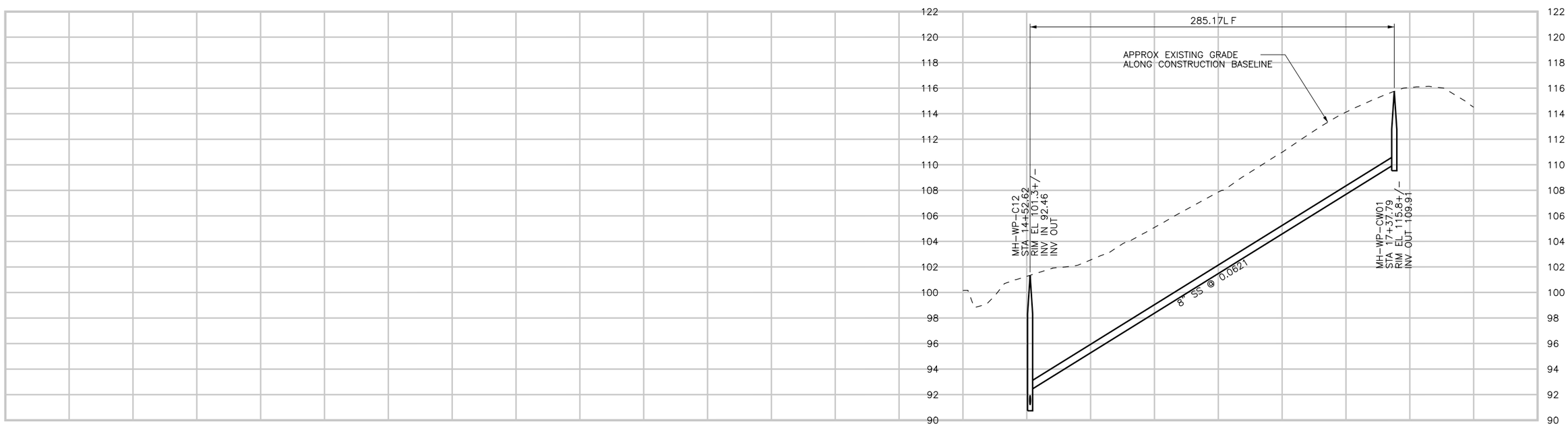
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-163.dgn
Plot Date: 09-FEB-2004 11:48

SEE SHEET D-PP-118 FOR CONTINUATION



SEE SHEET D-PP-118 FOR CONTINUATION

PLAN ON 14TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 14TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Berger — JOHN A. BERGER — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

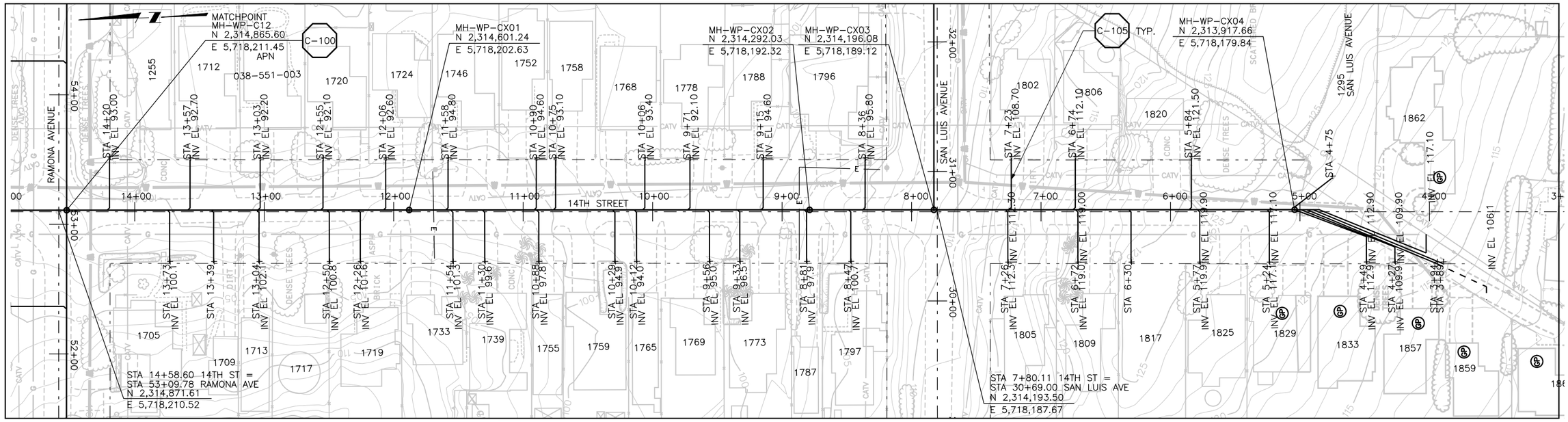
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
14TH STREET
STA. 14+52.61 TO 17+52.19

SHEET
D-PP-164

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-164.dgn Plot Date: 05-FEB-2004 17:40

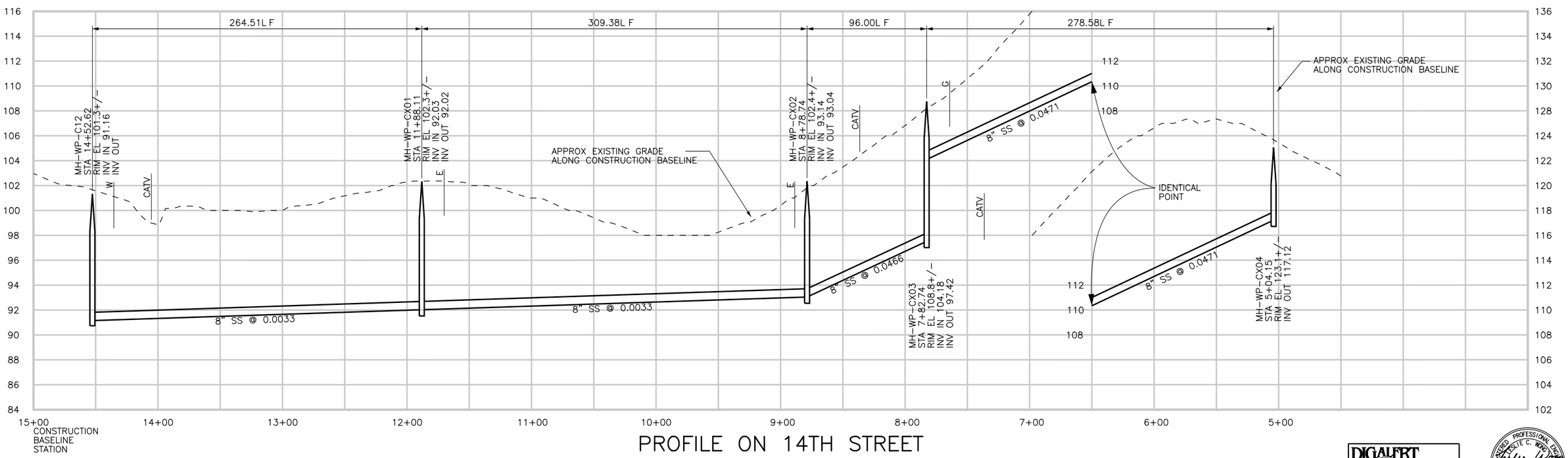
SEE SHEET D-PP-118 FOR CONTINUATION

SEE SHEET D-PP-164 FOR CONTINUATION



SEE SHEET D-PP-118 FOR CONTINUATION

PLAN ON 14TH STREET



PROFILE ON 14TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

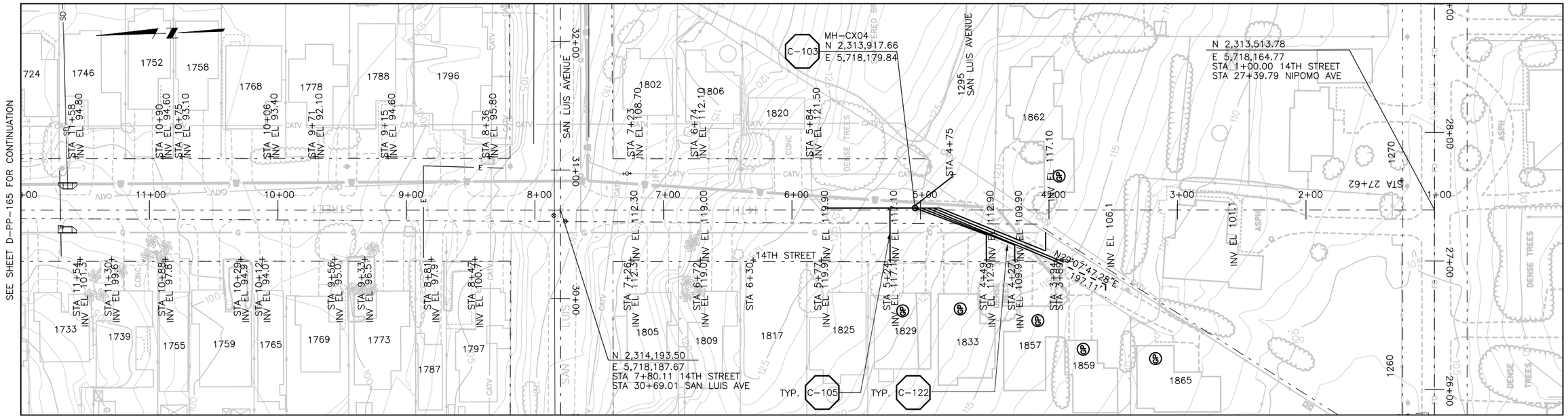
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

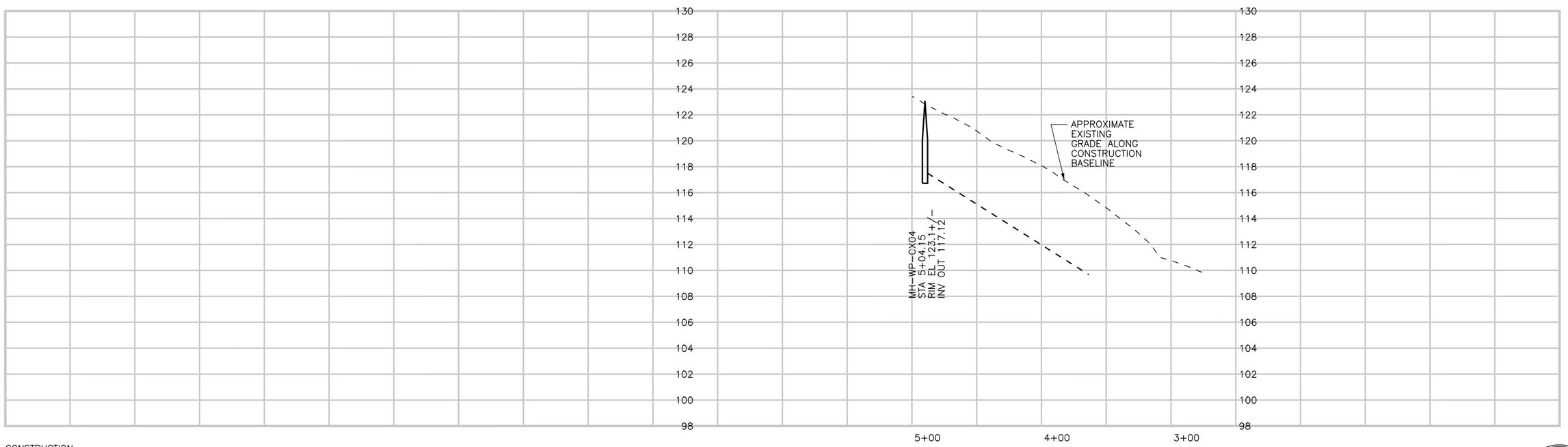
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
14TH STREET
STA. 14+52.61 TO 5+04.14

SHEET
D-PP-165

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-165.dgn
Plot Date: 05-FEB-2004 17:41



PLAN ON 14TH STREET



CONSTRUCTION BASELINE STATION

PROFILE ON 14TH STREET

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER LESLIE C. WONG No. C-58314 Exp. 6-30-06 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE H: 1"=40' V: 1"=4'

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

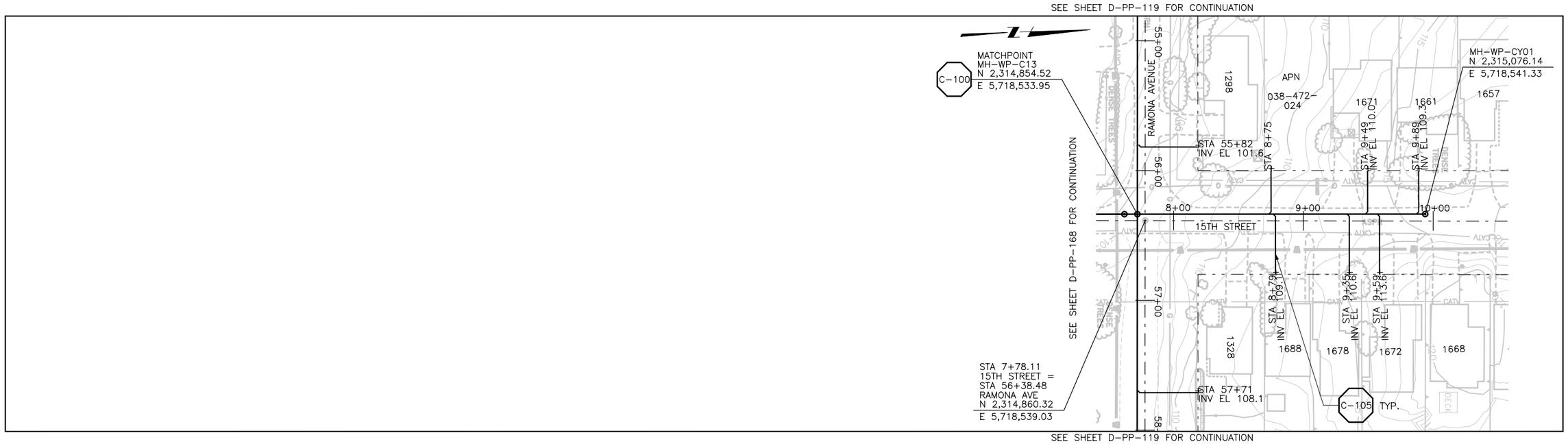
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
14TH STREET
STA. 5+04.14 TO 4+62.67

SHEET D-PP-166

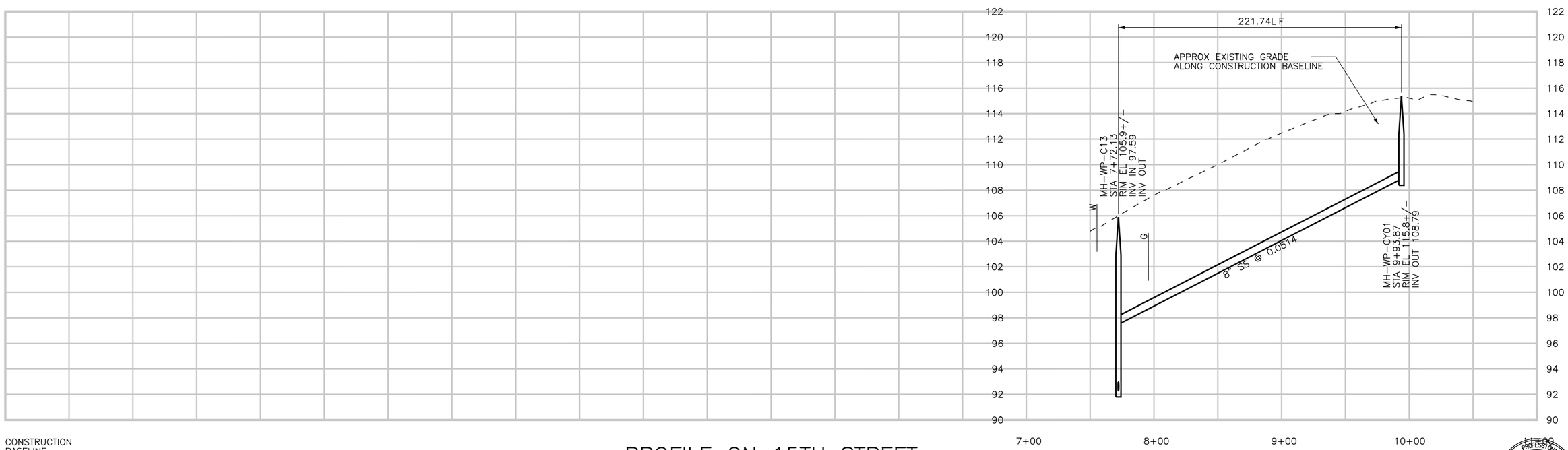
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-166.dgn Plot Date: 09-FEB-2004 12:11

SEE SHEET D-PP-119 FOR CONTINUATION



SEE SHEET D-PP-119 FOR CONTINUATION

PLAN ON 15TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 15TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

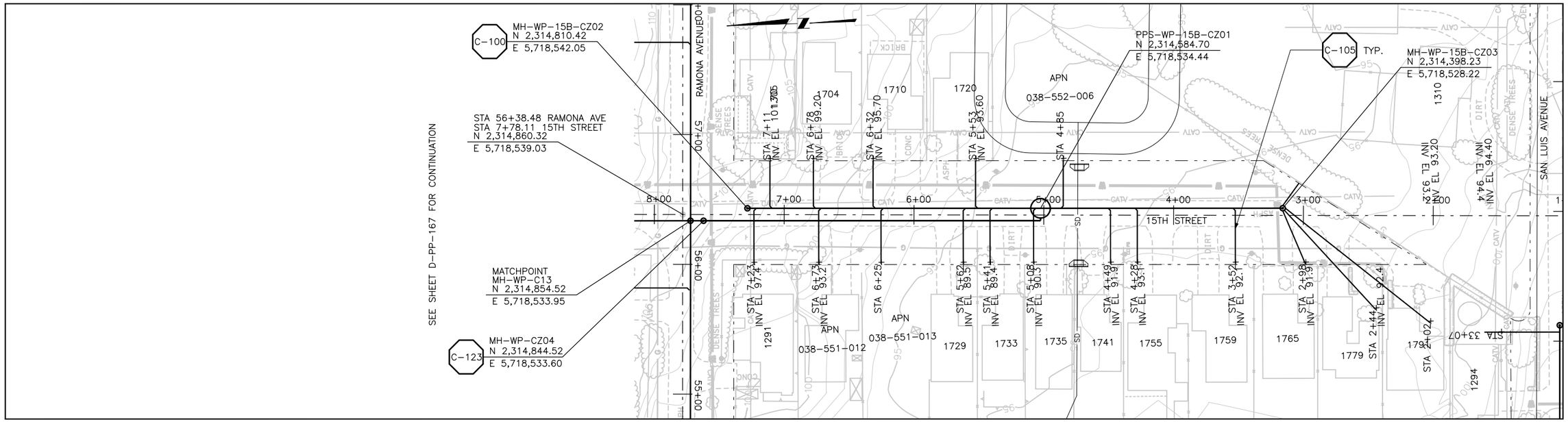
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
15TH STREET
STA. 7+72.13 TO 10+17.02

SHEET
D-PP-167

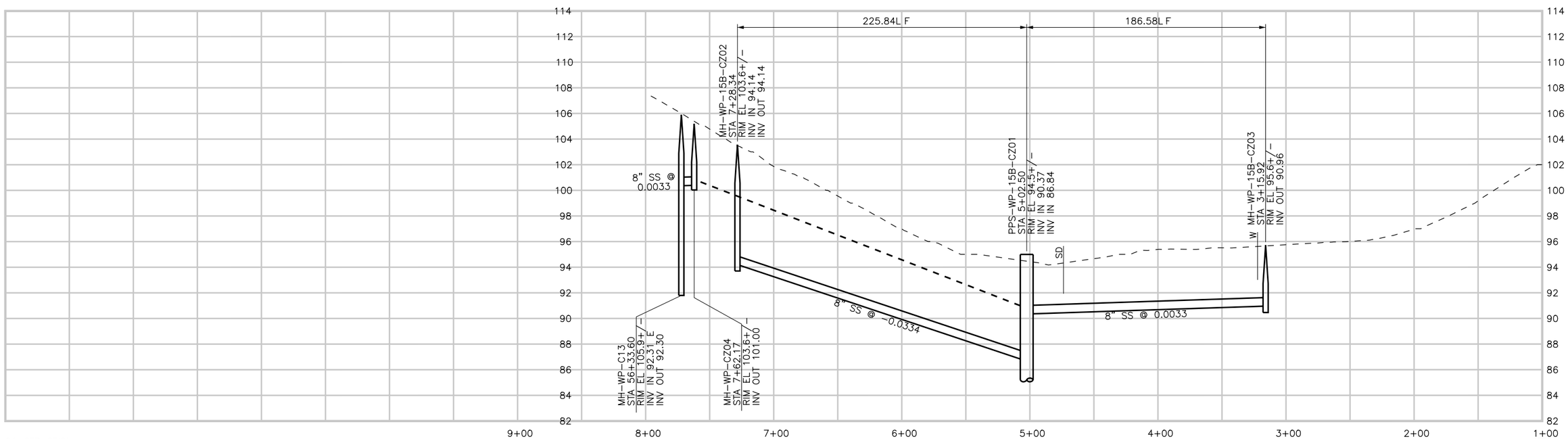
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-167.dgn Plot Date: 05-FEB-2004 17:42

SEE SHEET D-PP-119 FOR CONTINUATION



SEE SHEET D-PP-119 FOR CONTINUATION

PLAN ON 15TH STREET



PROFILE ON 15TH STREET

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER LESLIE C. WONG No. C 38314 Exp. 6-30-06 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: H: 1"=40' V: 1"=4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

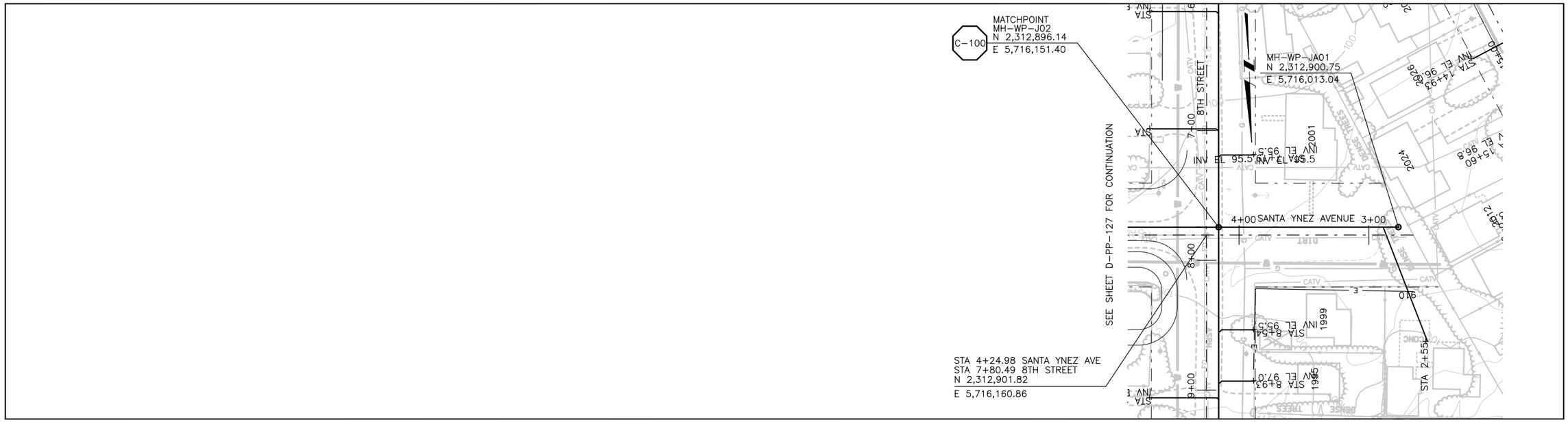
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
15TH STREET
STA. 7+72.13 TO 1+48.72

SHEET D-PP-168

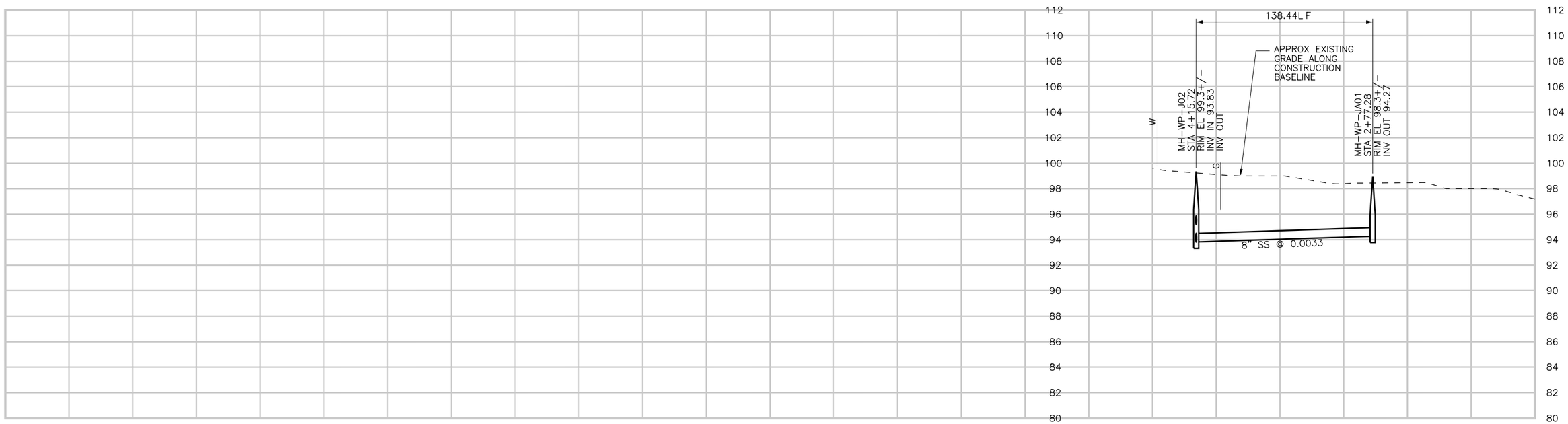
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-168.dgn Plot Date: 09-FEB-2004 11:49

SEE SHEET D-PP-170 FOR CONTINUATION



SEE SHEET D-PP-126 FOR CONTINUATION

PLAN ON SANTA YNEZ AVENUE



CONSTRUCTION BASELINE STATION

PROFILE ON SANTA YNEZ AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

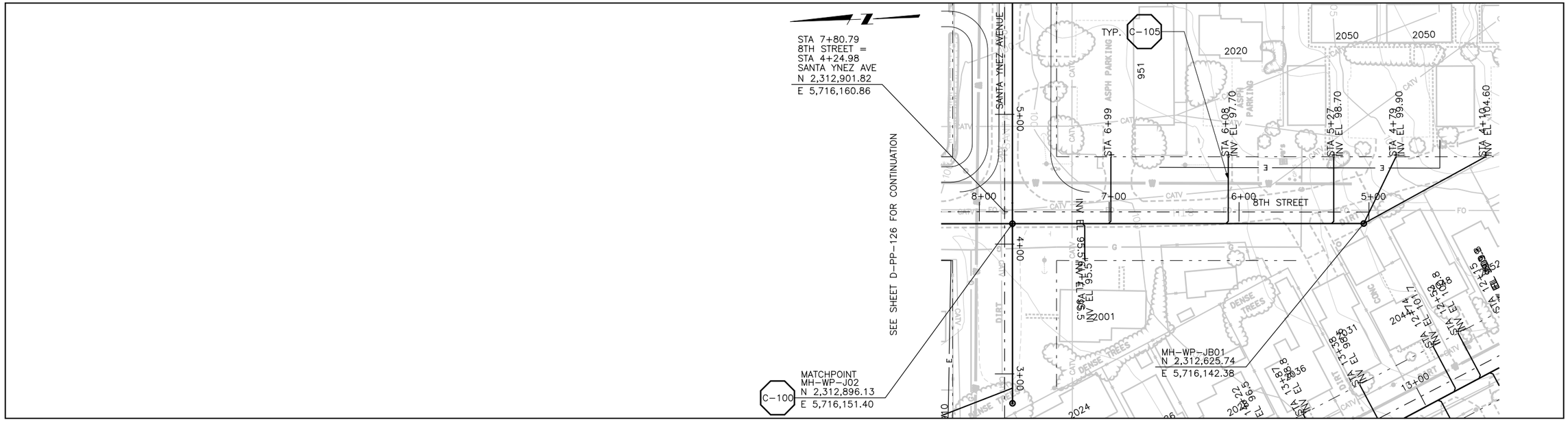
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA YNEZ AVE.
STA. 4+31.28 TO 2+14.91

SHEET
D-PP-169

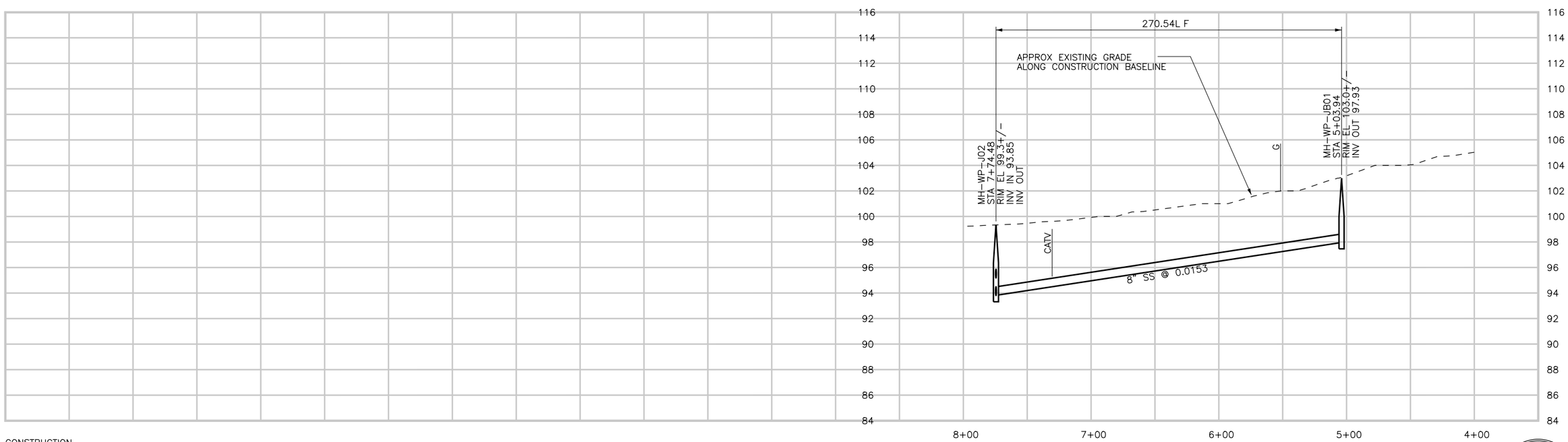
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-169.dgn
Plot Date: 05-FEB-2004 17:43

SEE SHEET D-PP-127 FOR CONTINUATION



SEE SHEET D-PP-169 FOR CONTINUATION

PLAN ON 8TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 8TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

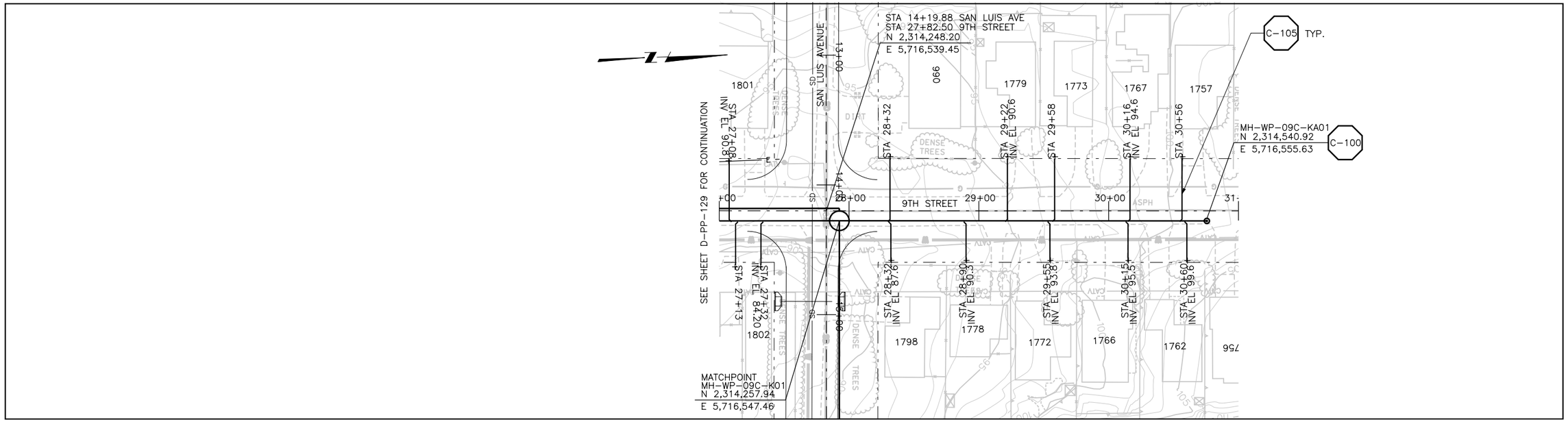
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
8TH STREET
STA. 7+74.50 TO 4+57.45

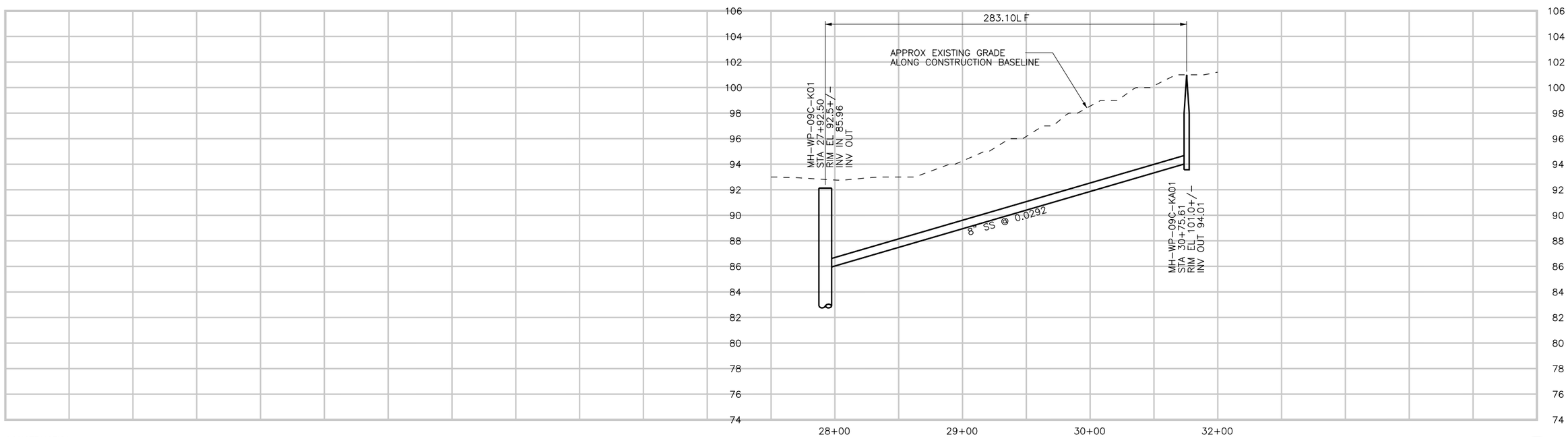
SHEET
D-PP-170

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-170.dgn
Plot Date: 05-FEB-2004 17:44



SEE SHEET D-PP-130 FOR CONTINUATION

PLAN ON 9TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 9TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

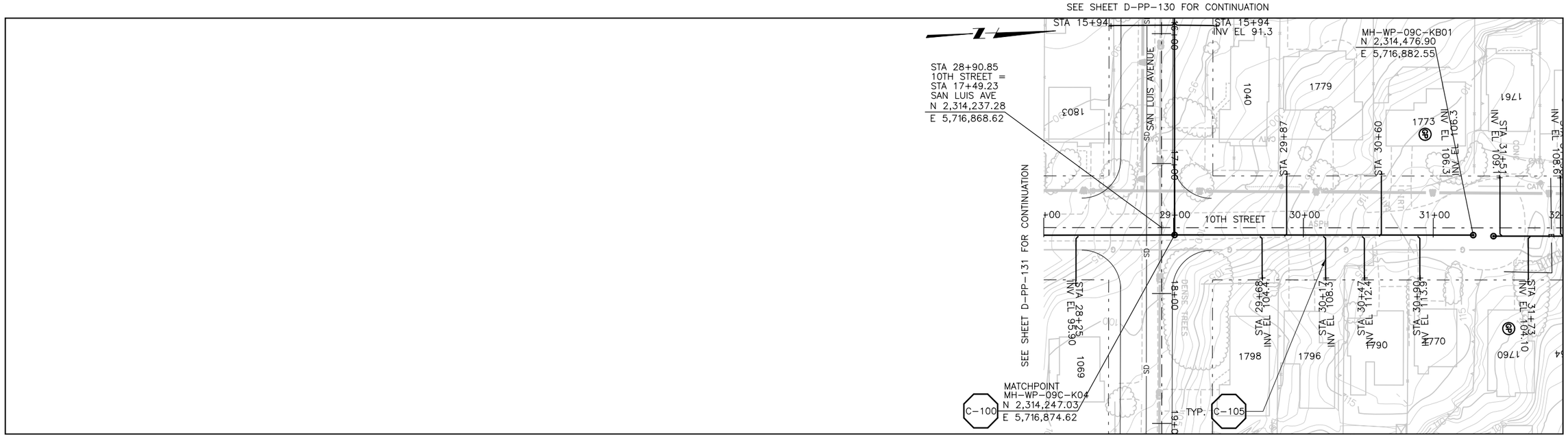
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

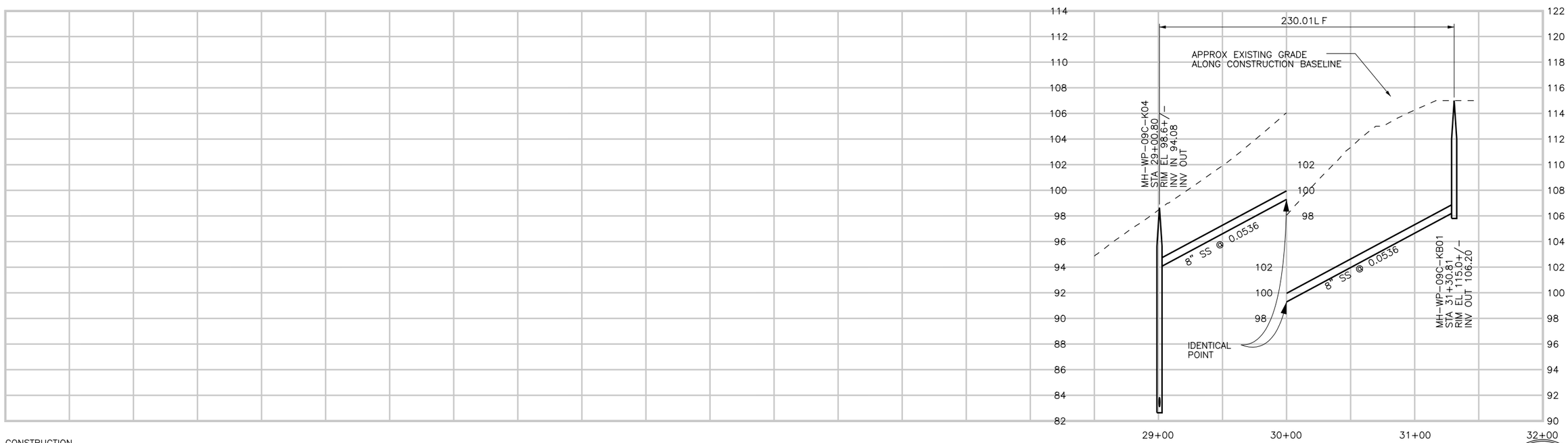
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
9TH STREET
STA. 27+76.51 TO 30+75.80

SHEET
D-PP-171

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-171.dgn
Plot Date: 05-FEB-2004 17:45



PLAN ON 10TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 10TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

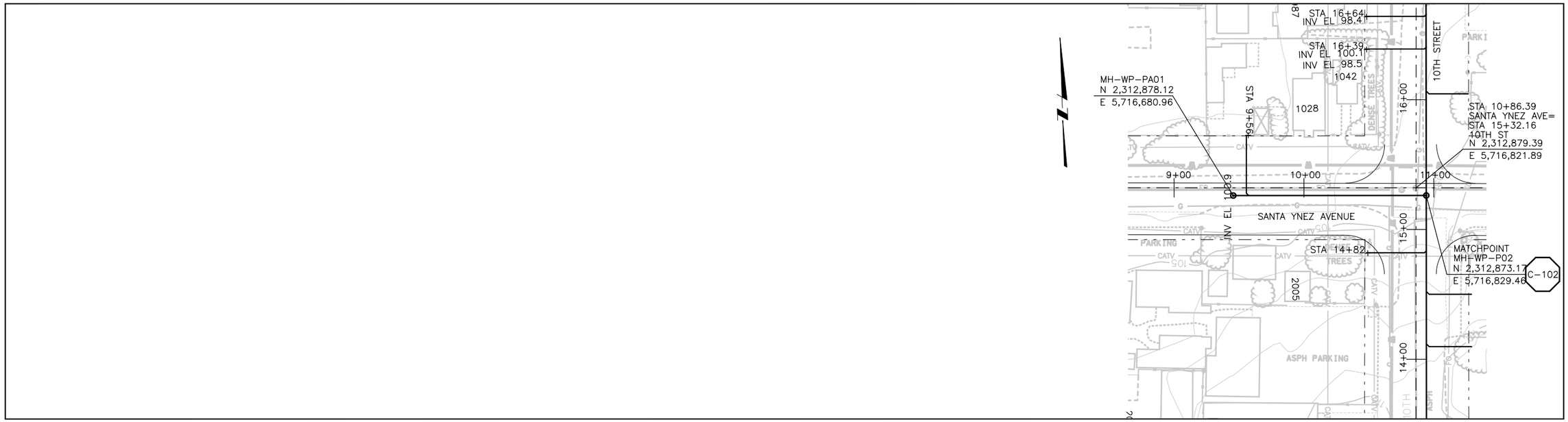
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
10TH STREET
STA. 28+84.80 TO 31+30.81

SHEET
D-PP-172

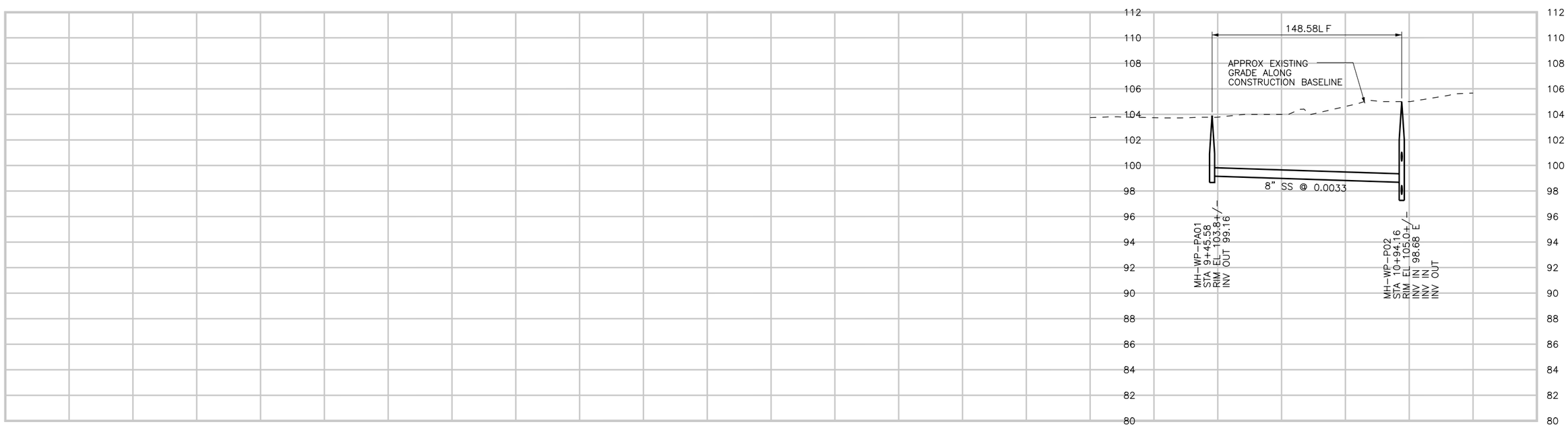
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-172.dgn
Plot Date: 05-FEB-2004 17:45

SEE SHEET D-PP-134 FOR CONTINUATION



SEE SHEET D-PP-135 FOR CONTINUATION

PLAN ON SANTA YNEZ AVENUE



CONSTRUCTION
BASELINE
STATION

PROFILE ON SANTA YNEZ AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
JULIE C. WONG
No. C-58434
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Berger — JOHN A. BERGER — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

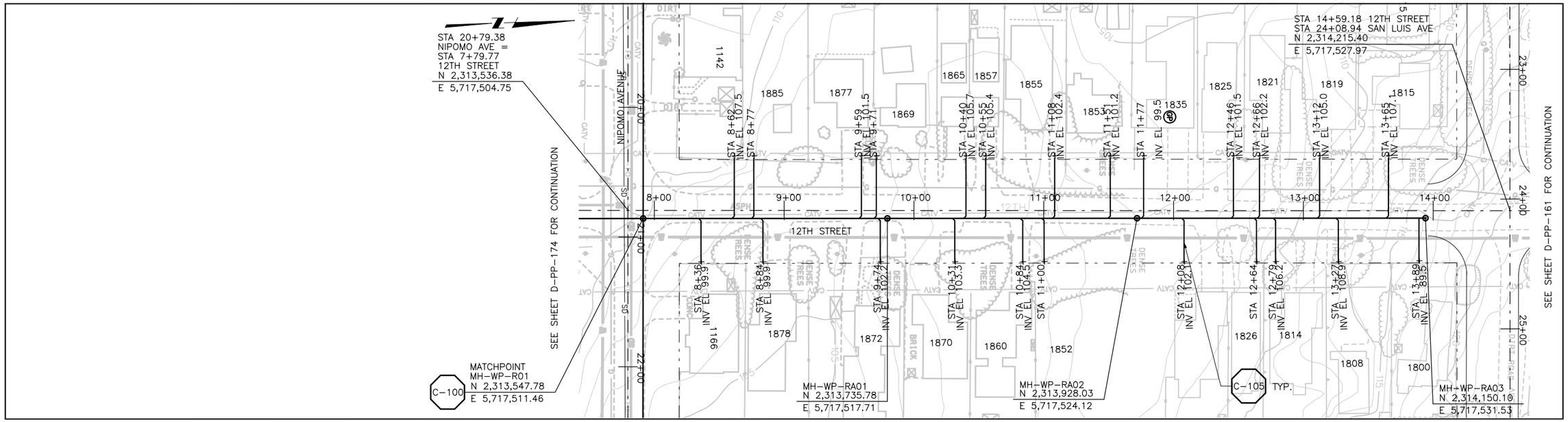
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA YNEZ AVE
STA. 9+45.58 TO 10+94.16

SHEET
D-PP-172A

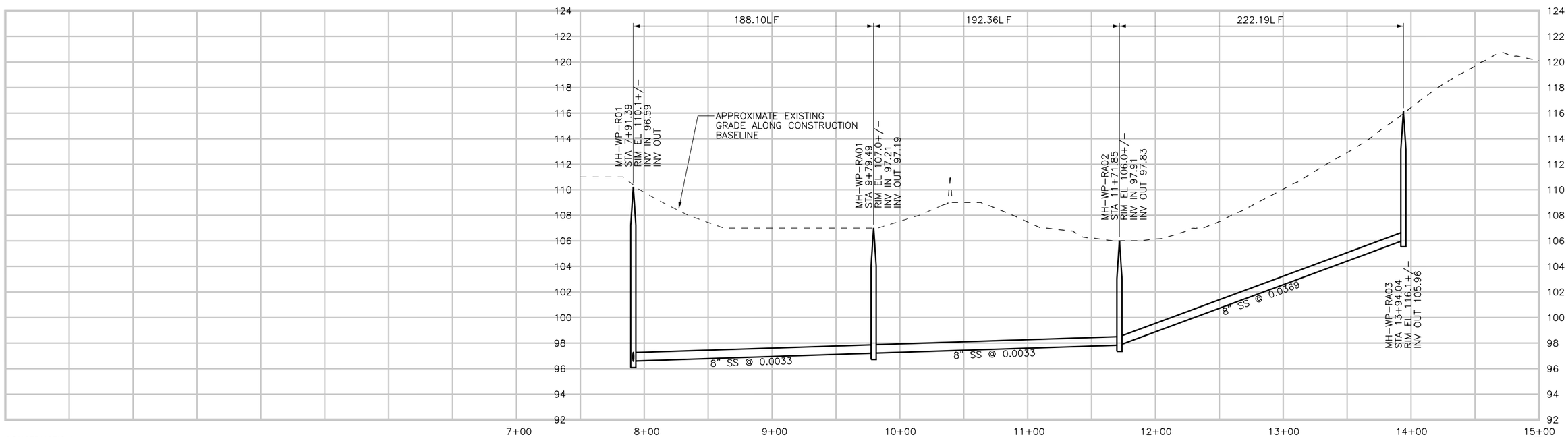
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-172A.dgn Plot Date: 05-FEB-2004 17:46

SEE SHEET D-PP-137 FOR CONTINUATION



SEE SHEET D-PP-137 FOR CONTINUATION

PLAN ON 12TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 12TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

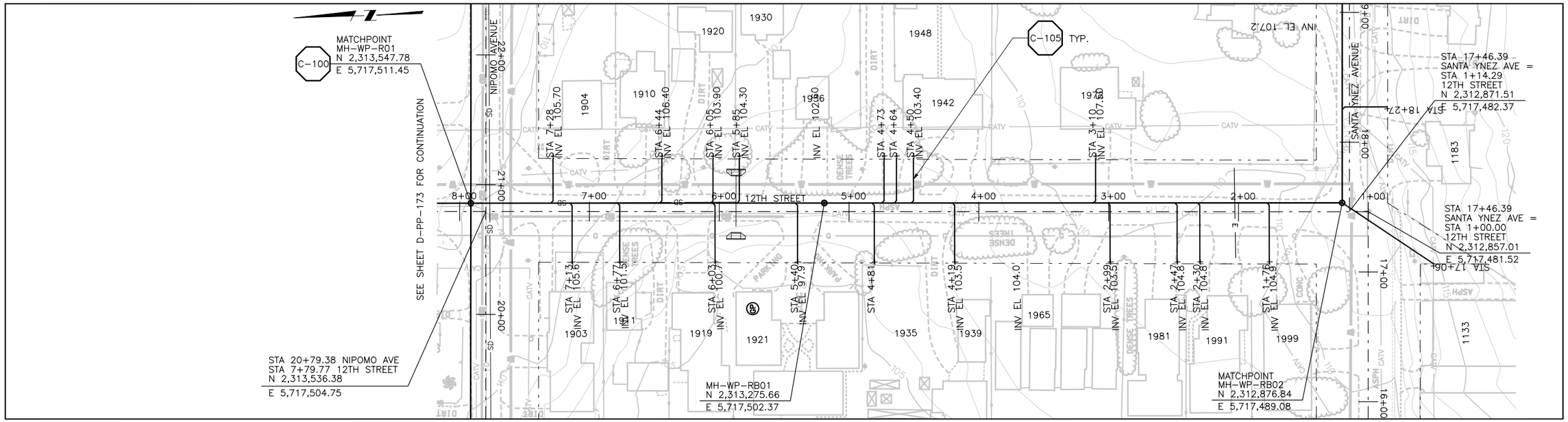
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
12TH STREET
STA. 7+73.39 TO 13+77.95

SHEET
D-PP-173.

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-173.dgn Plot Date: 05-FEB-2004 17:47

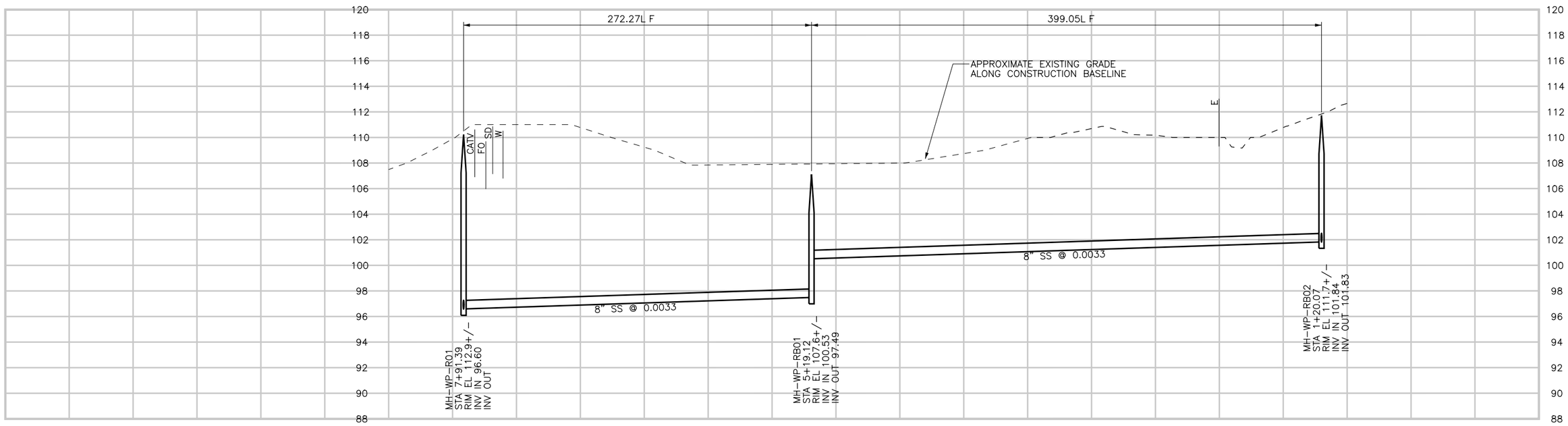
SEE SHEET D-PP-137 FOR CONTINUATION

SEE SHEET D-PP-175 FOR CONTINUATION



SEE SHEET D-PP-137 FOR CONTINUATION

PLAN ON 12TH STREET



CONSTRUCTION
BASELINE
STATION

PROFILE ON 12TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

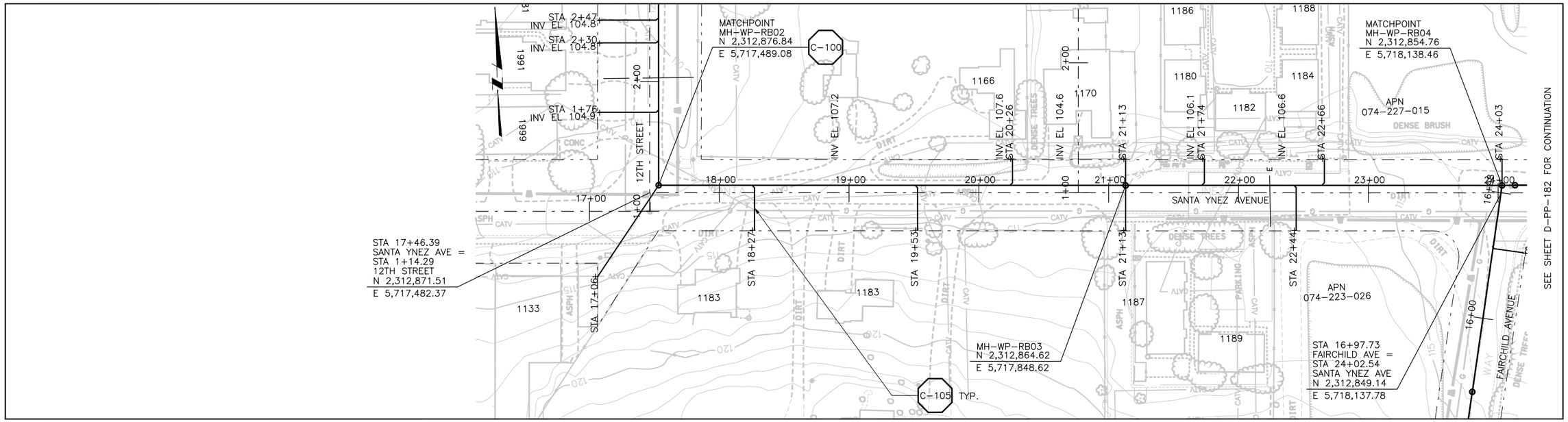
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
12TH STREET
STA. 7+73.39 TO 1+20.07

SHEET
D-PP-174

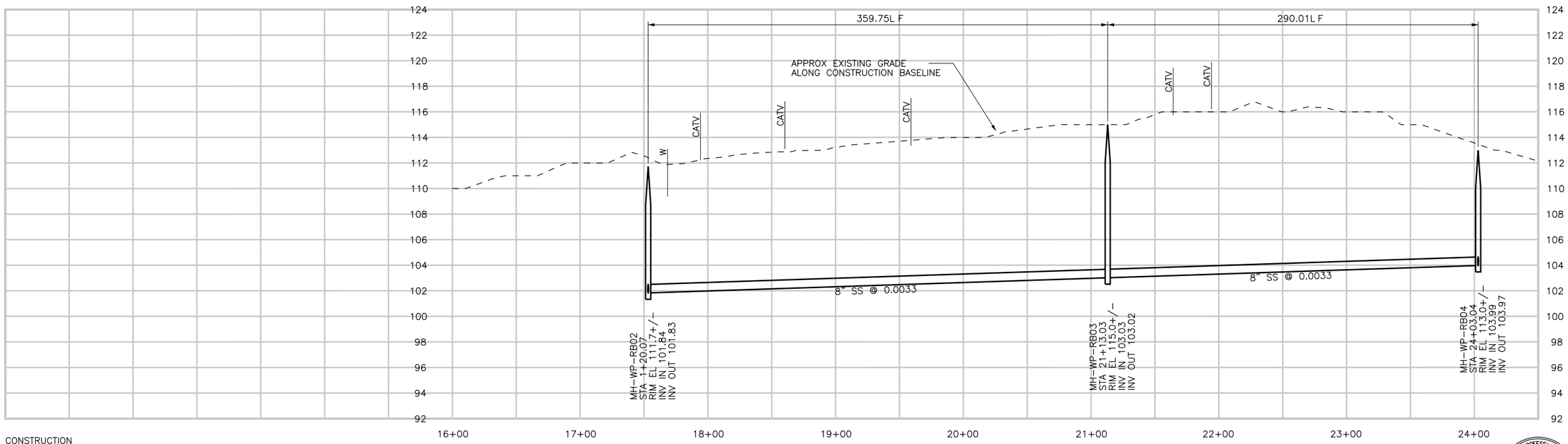
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-174.dgn
Plot Date: 05-FEB-2004 17:47

SEE SHEET D-PP-174 FOR CONTINUATION



SEE SHEET D-PP-176 FOR CONTINUATION

PLAN ON SANTA YNEZ AVENUE



PROFILE ON SANTA YNEZ AVENUE

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER LESLIE C. WONG No. C-58311 Exp. 6-30-06 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: H: 1"=40' V: 1"=4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVEN J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS COMMUNITY SERVICES DISTRICT

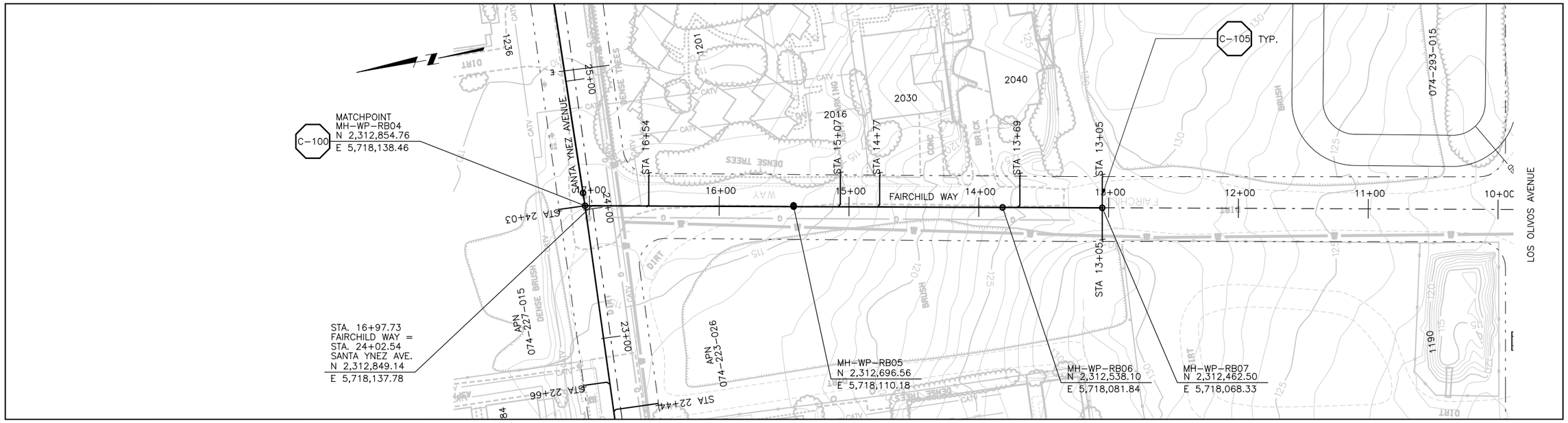
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA YNEZ AVE.
STA. 17+52.51 TO 24+03.54

SHEET D-PP-175

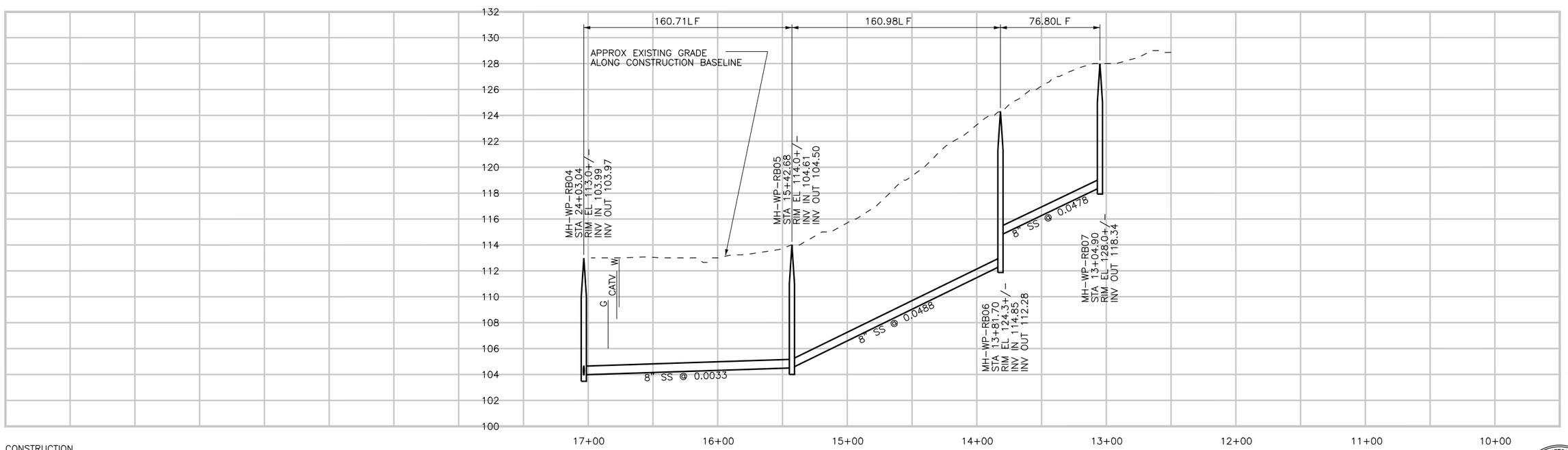
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-175.dgn Plot Date: 05-FEB-2004 17:48

SEE SHEET D-PP-182 FOR CONTINUATION



SEE SHEET D-PP-175 FOR CONTINUATION

PLAN ON FAIRCHILD WAY



CONSTRUCTION
BASELINE
STATION

PROFILE ON FAIRCHILD WAY

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

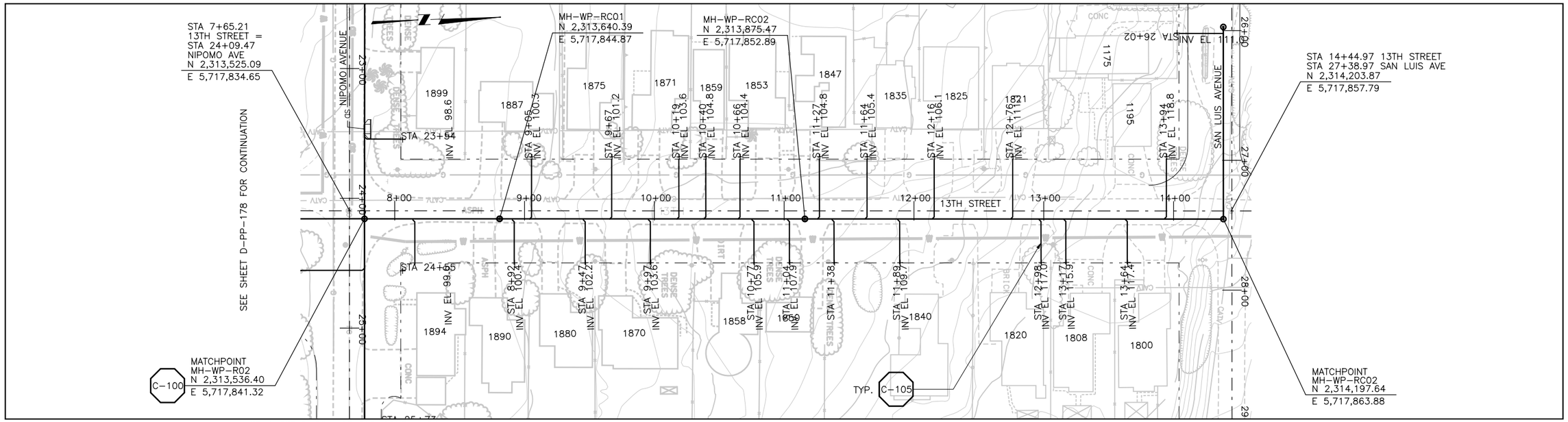
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

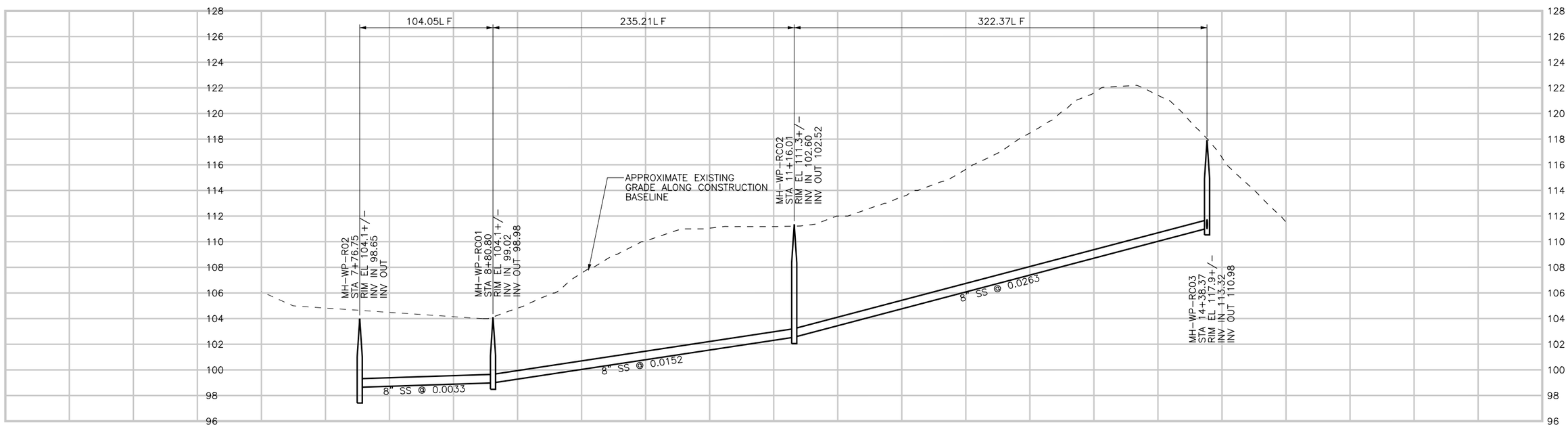
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
FAIRCHILD WAY
STA. 17+03.39 TO 10+03.03

SHEET
D-PP-176

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-176.dgn
Plot Date: 05-FEB-2004 17:49



PLAN ON 13TH STREET



PROFILE ON 13TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

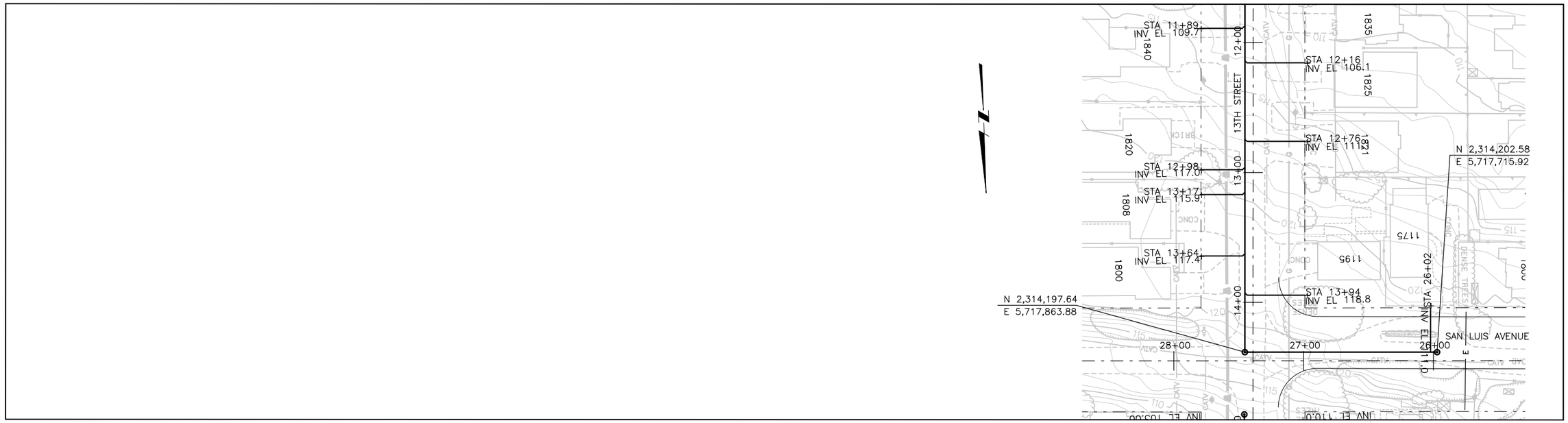
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
13TH STREET
STA. 7+58.75 TO 14+38.27

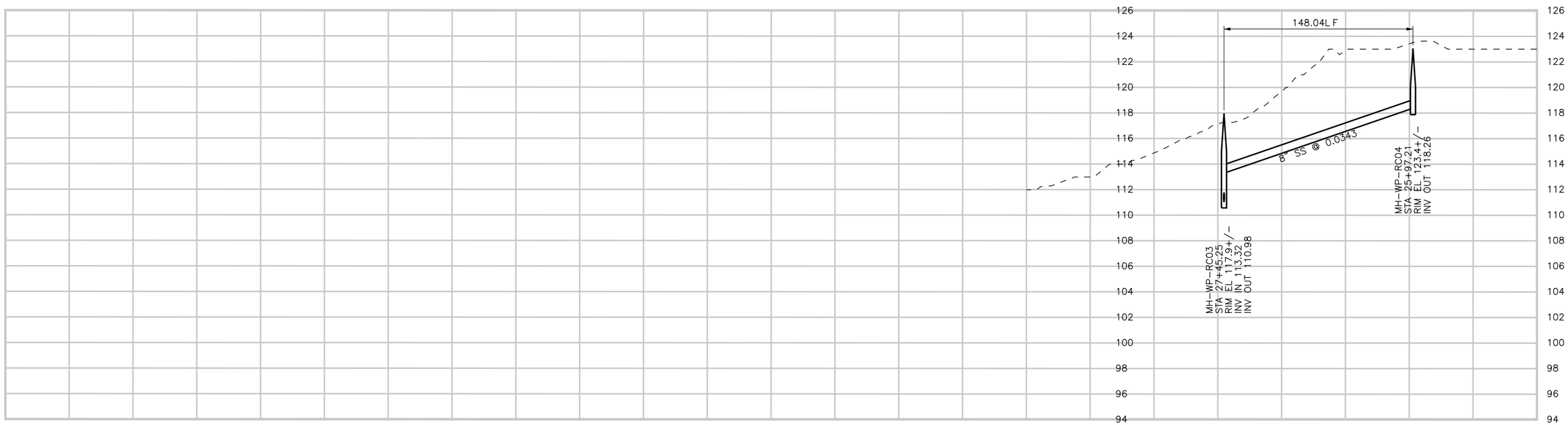
SHEET
D-PP-177

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-177.dgn
Plot Date: 05-FEB-2004 17:49

SEE SHEET D-PP-177 FOR CONTINUATION



PLAN ON SAN LUIS AVENUE



CONSTRUCTION
BASELINE
STATION

PROFILE ON SAN LUIS AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE
John A. Bergen
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

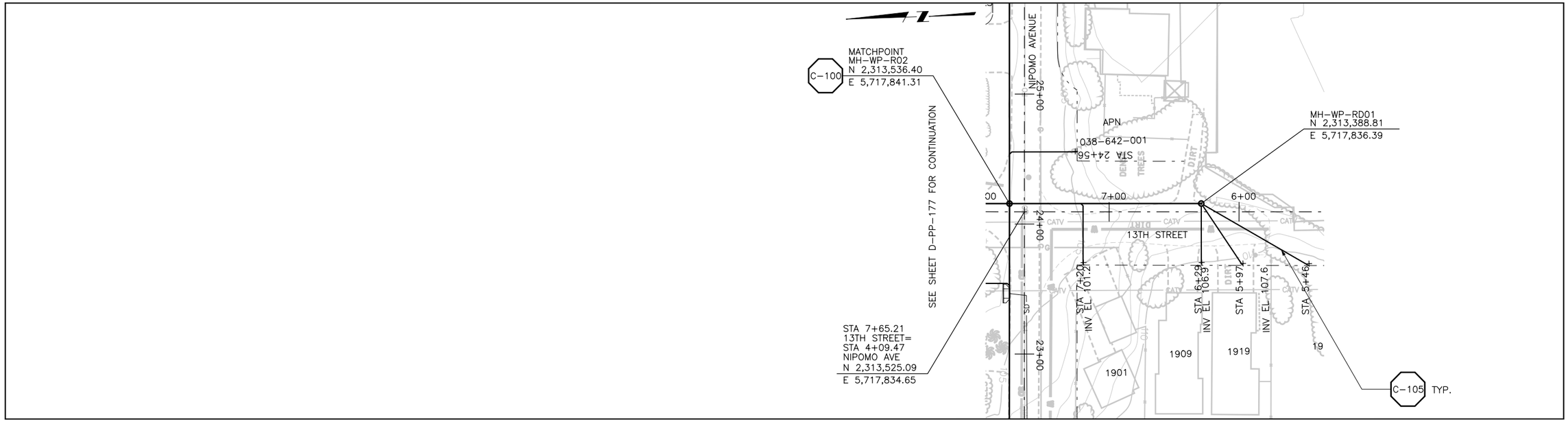
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SAN LUIS AVE
STA. TO 25+97.21

SHEET
D-PP-177A

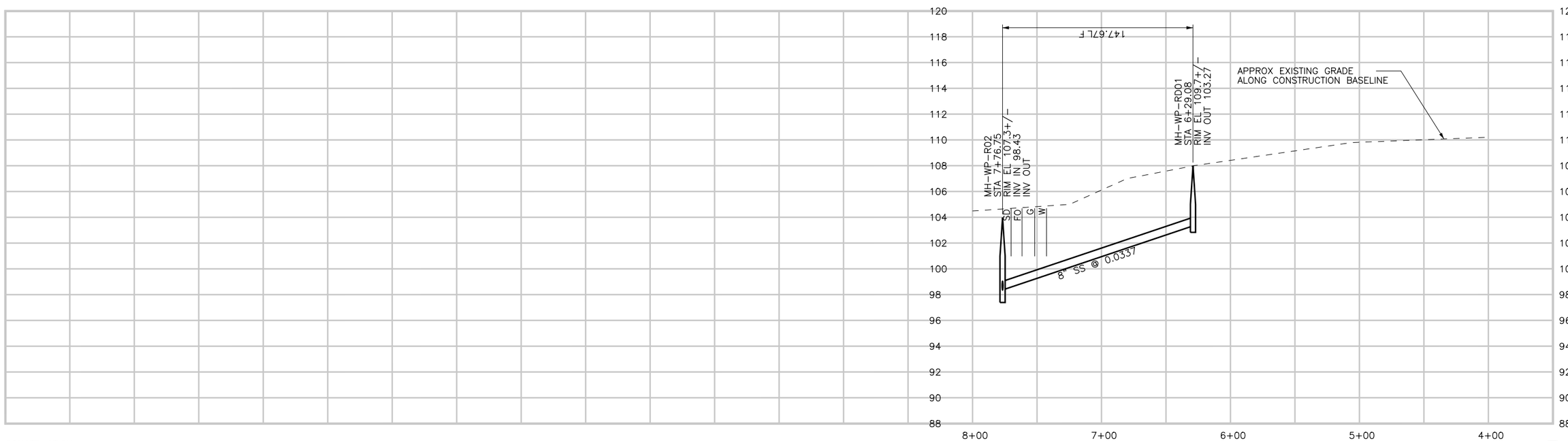
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-177A.dgn Plot Date: 09-FEB-2004 12:00

SEE SHEET D-PP-137 FOR CONTINUATION



SEE SHEET D-PP-137 FOR CONTINUATION

PLAN ON 13TH STREET



PROFILE ON 13TH STREET

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
CLYDE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVE J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

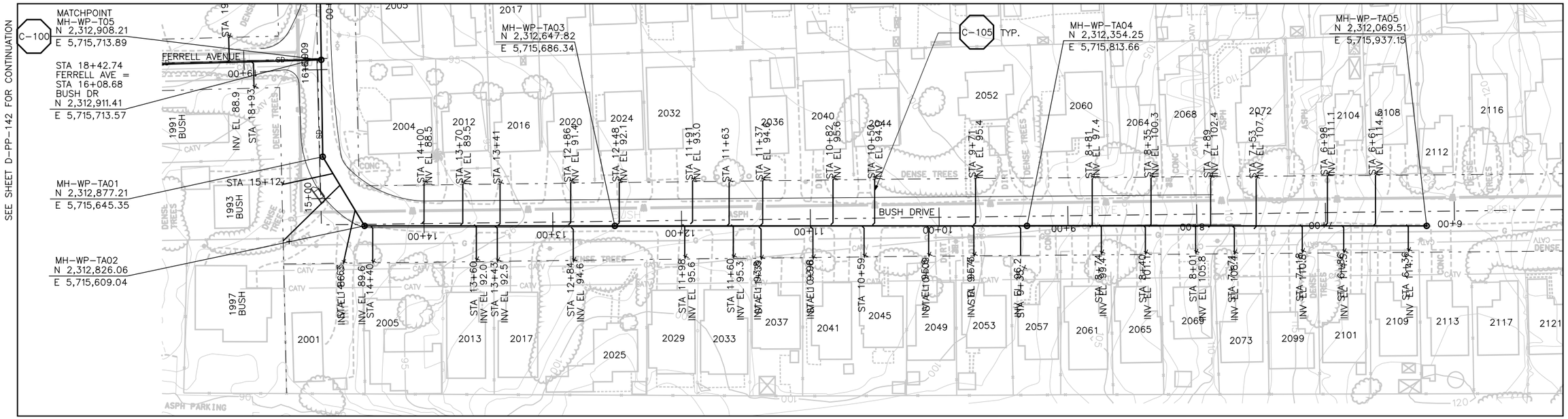
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
13TH STREET
STA. 7+58.75 TO 5+54.63

SHEET
D-PP-178

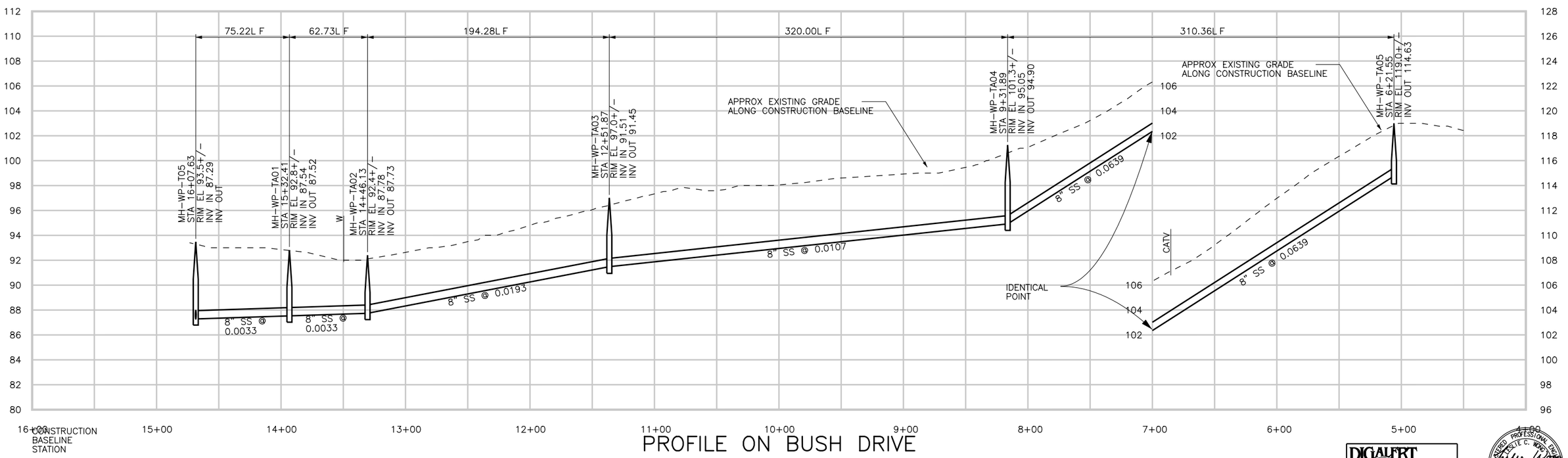
Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-178.dgn Plot Date: 05-FEB-2004 17:51

SEE SHEET D-PP-143 FOR CONTINUATION

SEE SHEET D-PP-142 FOR CONTINUATION



PLAN ON BUSH DRIVE



PROFILE ON BUSH DRIVE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

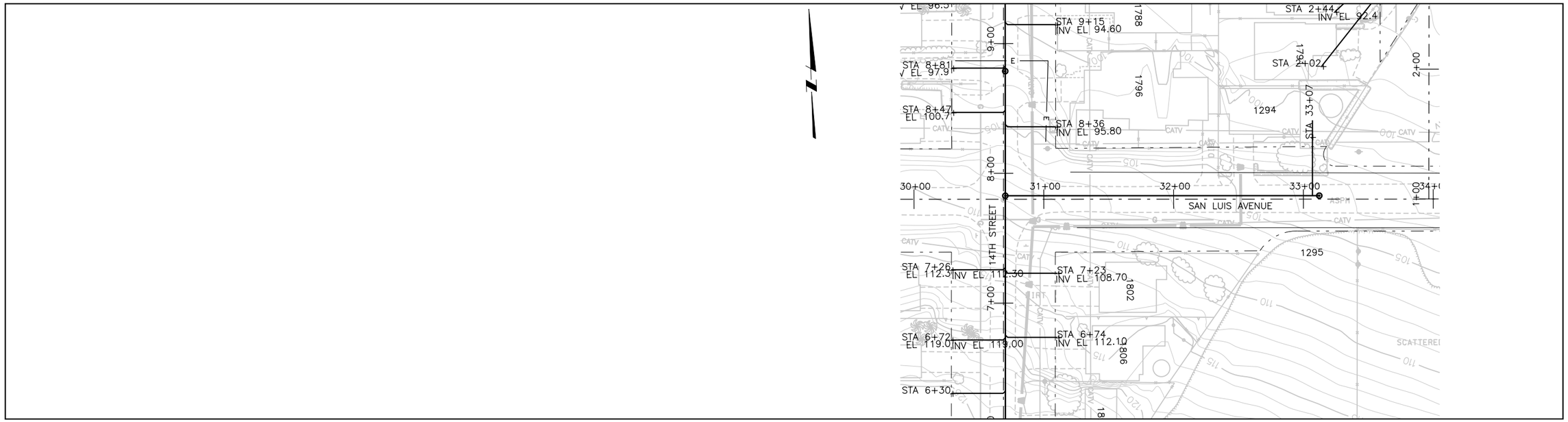
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
BUSH DRIVE
STA. 16+07.63 TO 6+21.17

SHEET
D-PP-179

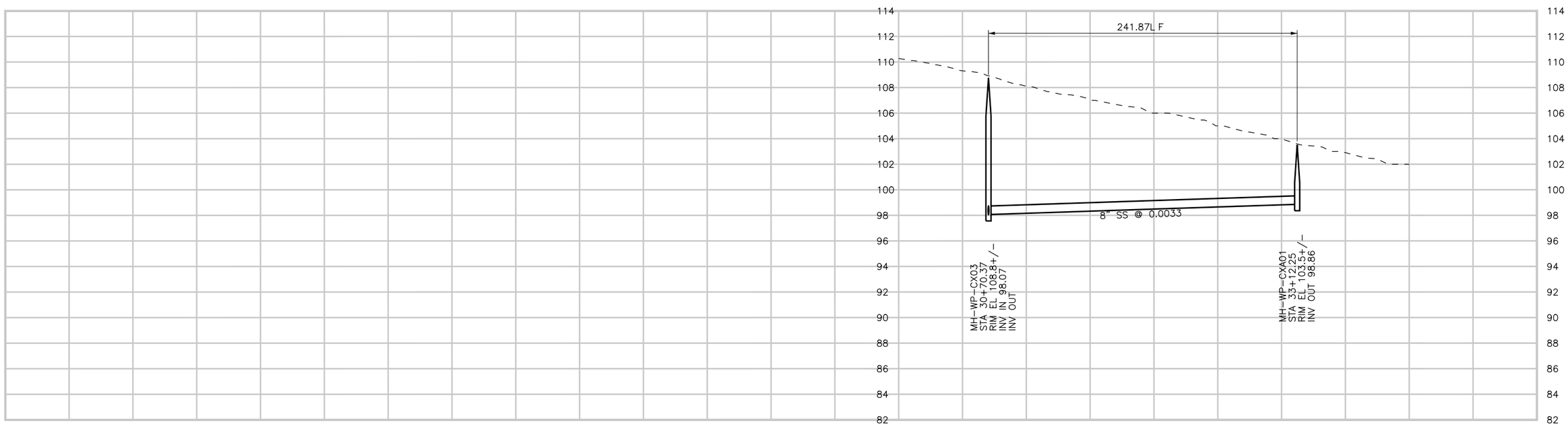
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-179.dgn
Plot Date: 05-FEB-2004 17:51

SEE SHEET D-PP-165 FOR CONTINUATION



SEE SHEET D-PP-166 FOR CONTINUATION

PLAN ON SAN LUIS AVENUE



CONSTRUCTION
BASELINE
STATION

PROFILE ON SAN LUIS AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58311
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVEN J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

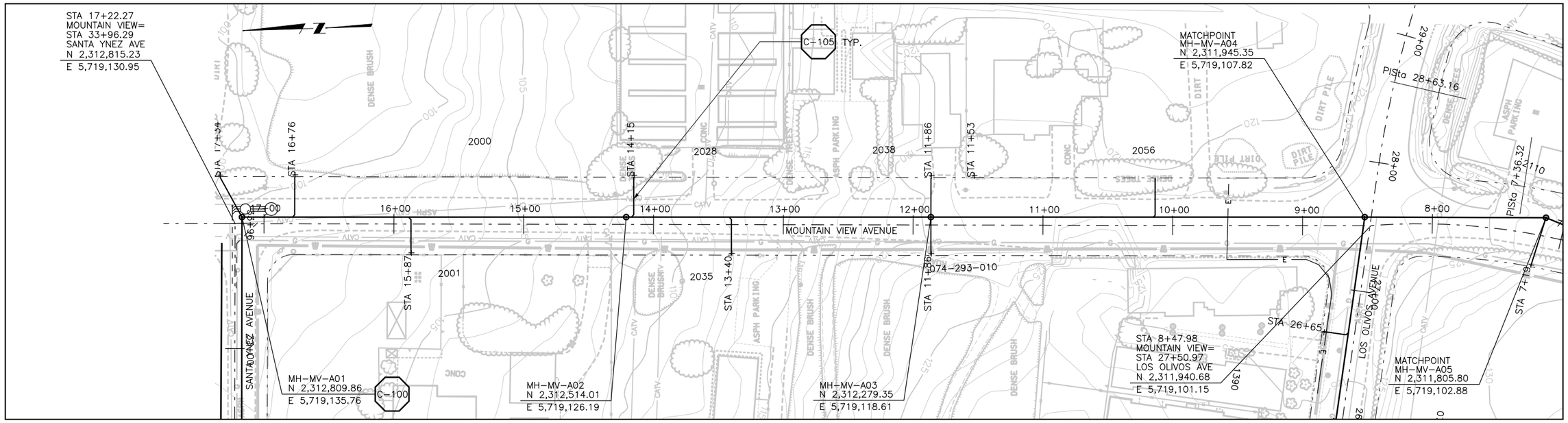
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

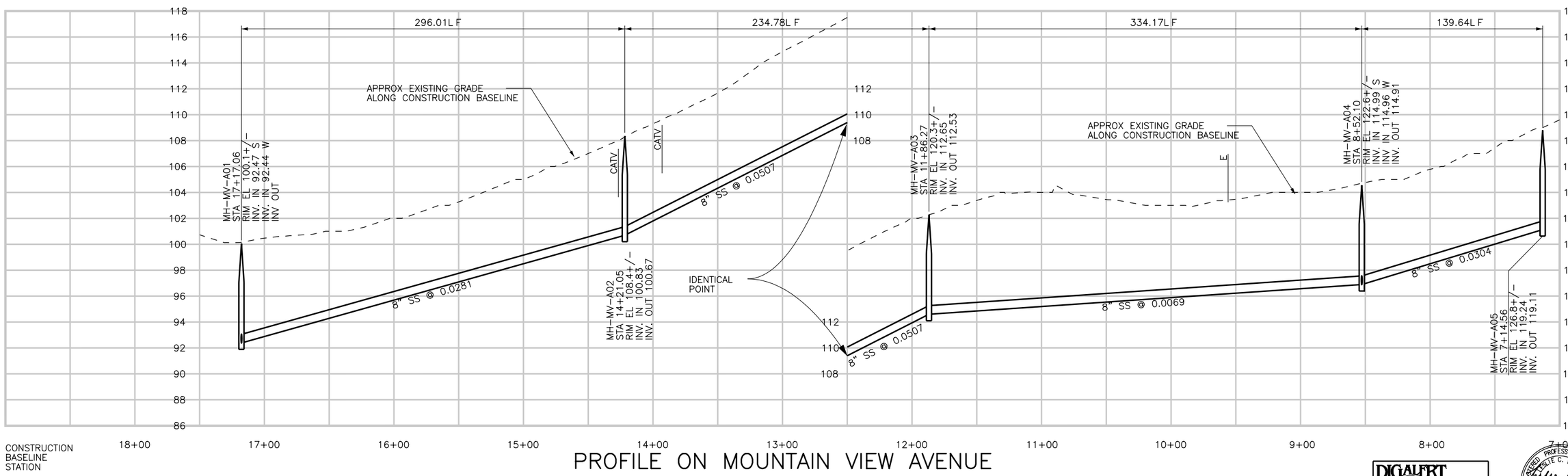
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SAN LUIS AVE
STA. 30+70.37 TO 33+12.25

SHEET
D-PP-179A

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-179A.dgn Plot Date: 05-FEB-2004 17:52



PLAN ON MOUNTAIN VIEW AVENUE



PROFILE ON MOUNTAIN VIEW AVENUE

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER STEVE C. WONG No. C-58314 Exp. 6-30-06 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: H: 1"=40' V: 1"=4'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Berger — JOHN A. BERGER — C31069 LICENSE NO. — 2-16-2004 DATE

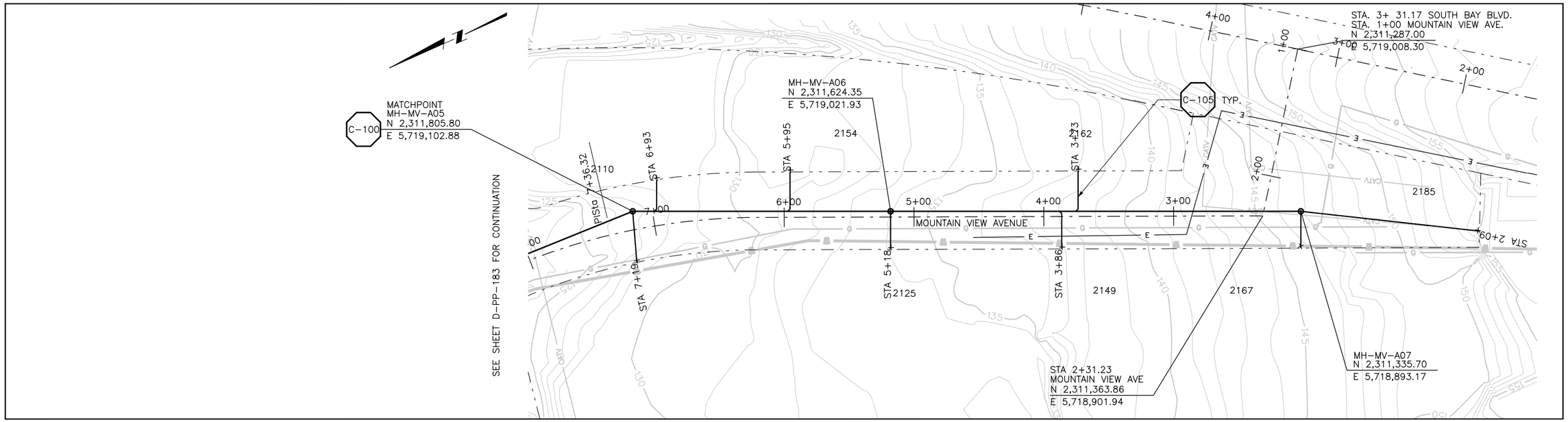
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

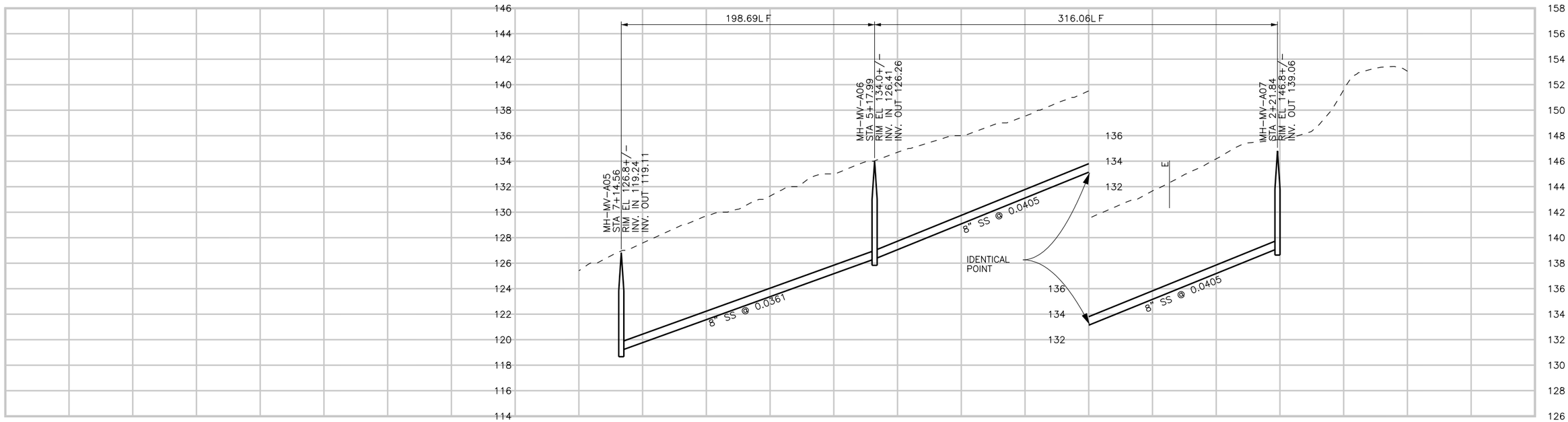
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
MOUNTAIN VIEW AVE.
STA. 17+09.08 TO 8+46.57

SHEET D-PP-180

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-180.dgn Plot Date: 05-FEB-2004 17:53



PLAN ON MOUNTAIN VIEW AVENUE



CONSTRUCTION
BASELINE
STATION

PROFILE ON MOUNTAIN VIEW AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

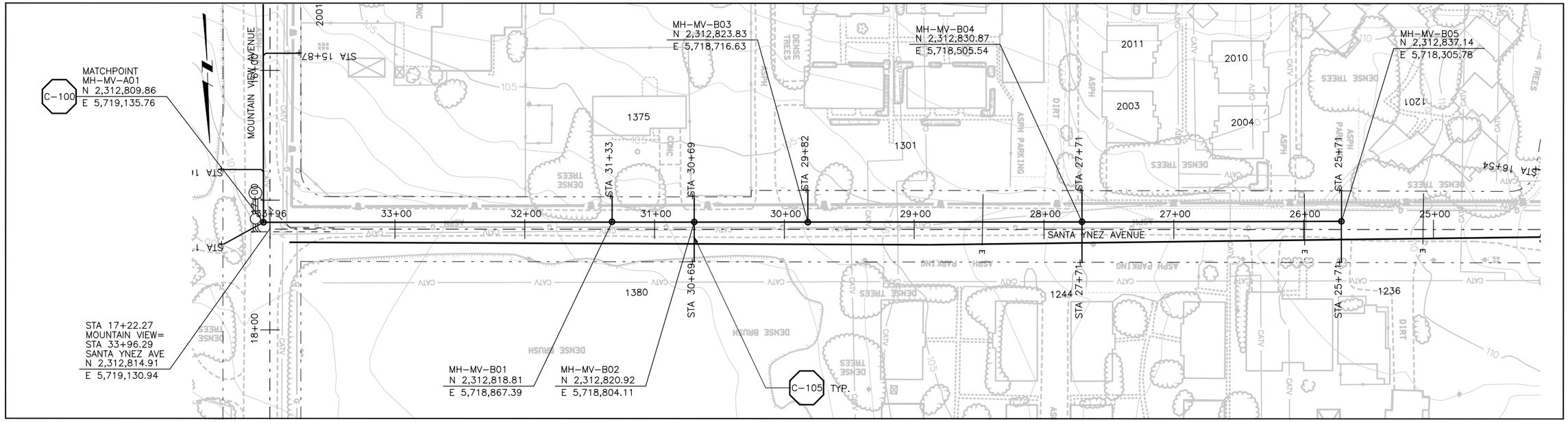
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
MOUNTAIN VIEW AVE.
STA. 8+49.15 TO 1+96.07

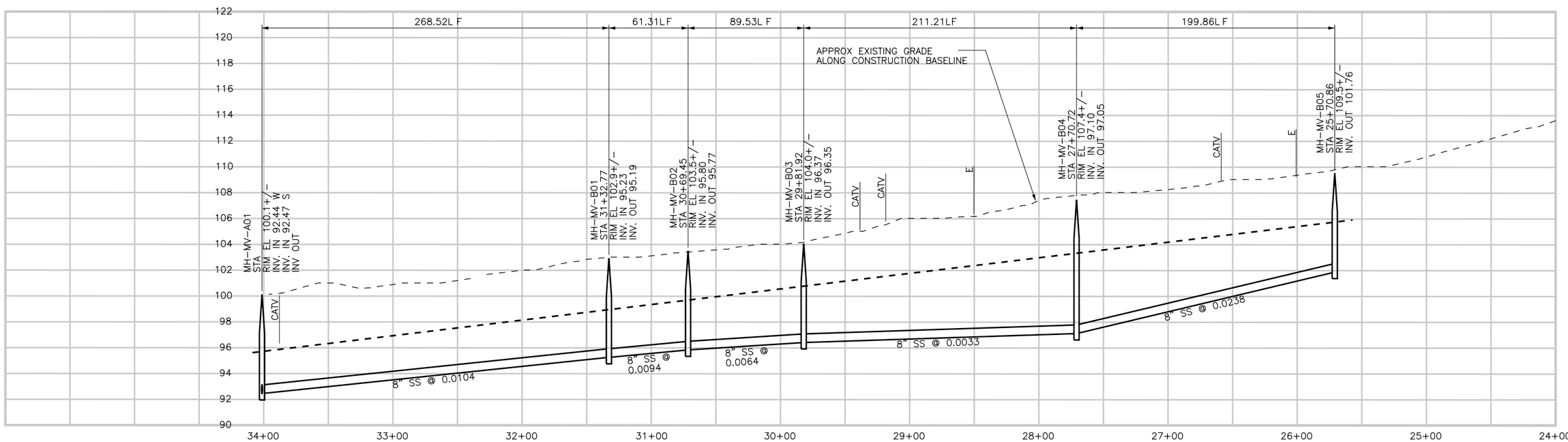
SHEET
D-PP-181

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-181.dgn
Plot Date: 05-FEB-2004 17:53

SEE SHEET D-PP-180 FOR CONTINUATION



PLAN ON SANTA YNEZ AVENUE



CONSTRUCTION
BASELINE
STATION

PROFILE ON SANTA YNEZ AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
STEVEN J. HYLAND — C23892 — LICENSE NO. — 2-16-2004 — DATE
JOHN A. BERGEN — C31069 — LICENSE NO. — 2-16-2004 — DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

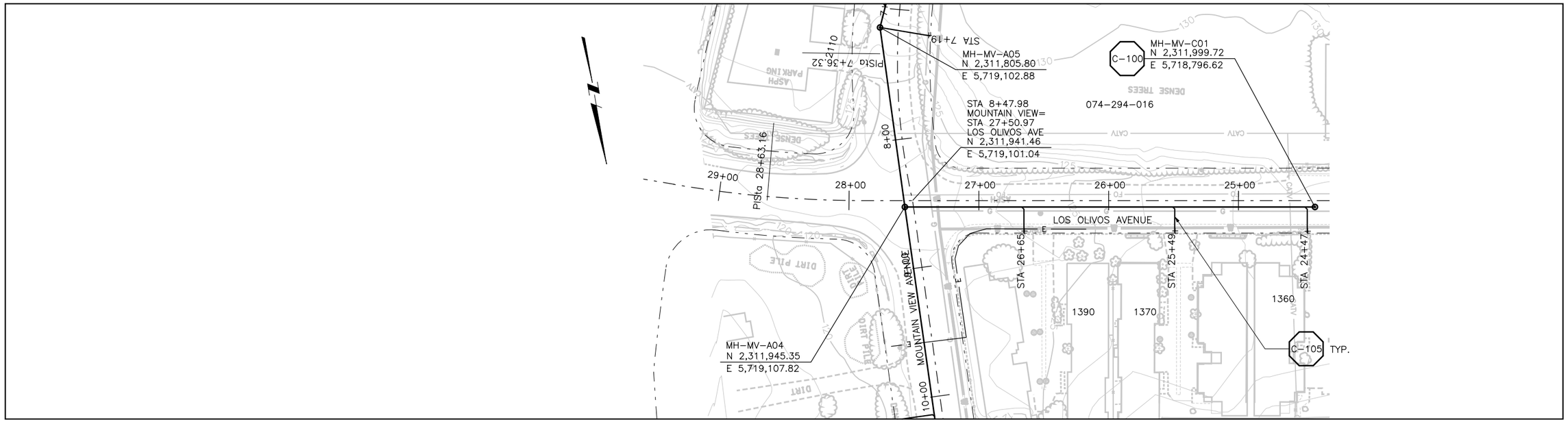
MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
SANTA YNEZ AVE.
STA. 34+01.29 TO 24+35.67

SHEET
D-PP-182

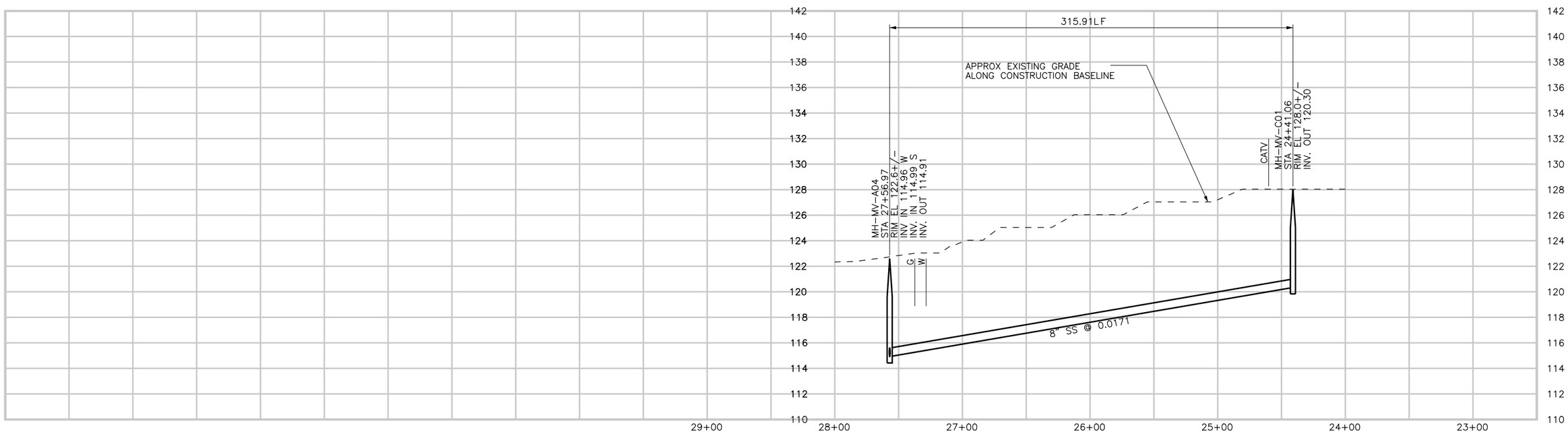
Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-182.dgn
Plot Date: 09-FEB-2004 11:49

SEE SHEET D-PP-181 FOR CONTINUATION



SEE SHEET D-PP-180 FOR CONTINUATION

PLAN ON LOS OLIVOS AVENUE



CONSTRUCTION
BASELINE
STATION

PROFILE ON LOS OLIVOS AVENUE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

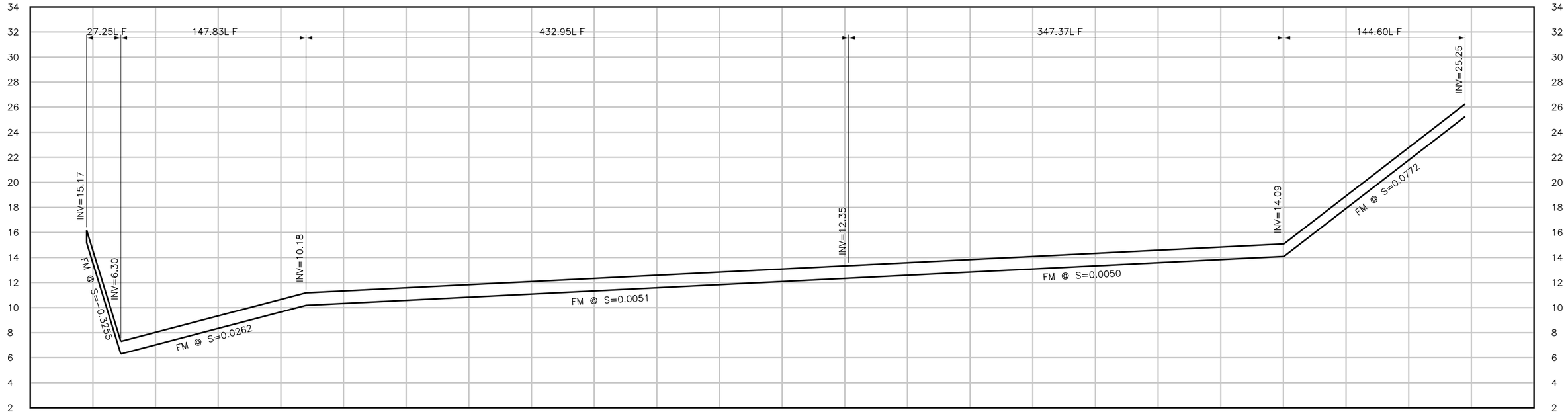
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

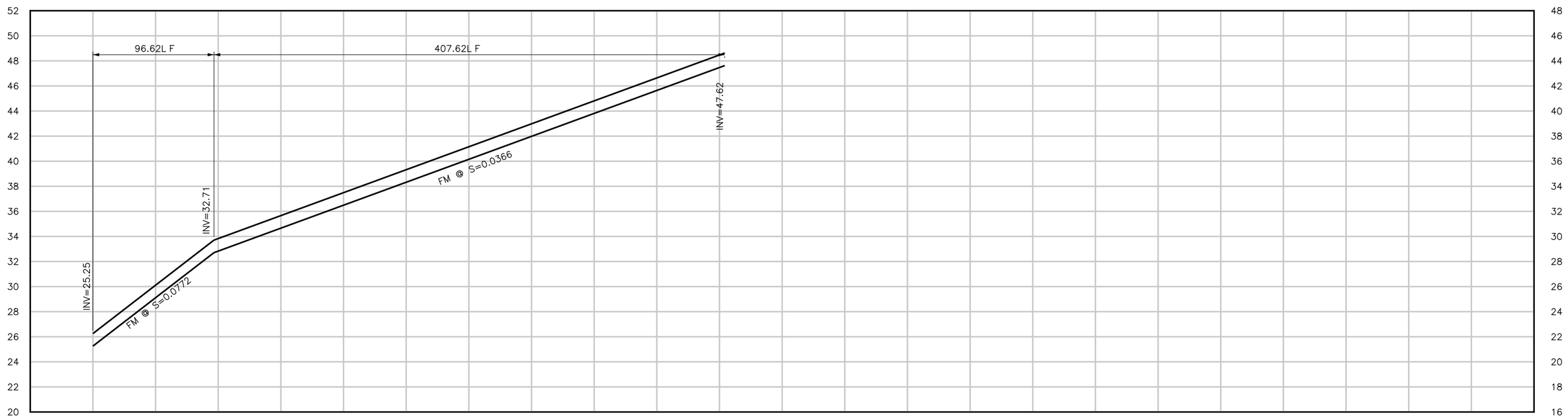
LOS OSOS WASTEWATER PROJECT
PLAN AND PROFILE
LOS OLIVOS AVE.
STA. 27+57.68 TO 24+41.08

SHEET
D-PP-183

Job No: 1481166
File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-183.dgn
Plot Date: 05-FEB-2004 17:54



PROFILE – WEST PASO PUMP STATION FORCE MAIN



CONSTRUCTION
BASELINE
STATION

PROFILE – WEST PASO PUMP STATION FORCE MAIN

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
CIVIL

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland — STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen — JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

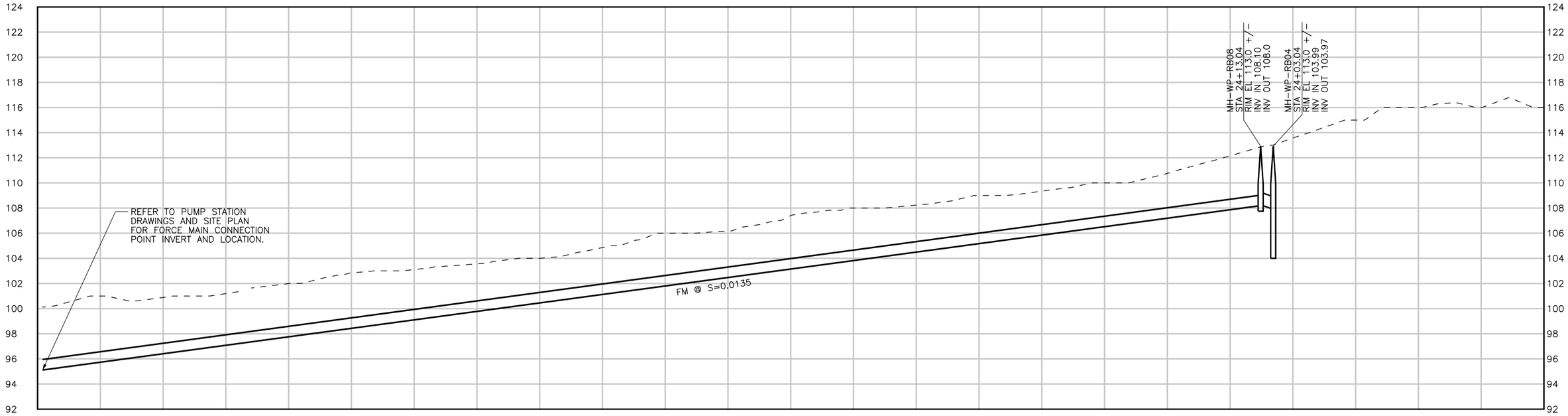
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

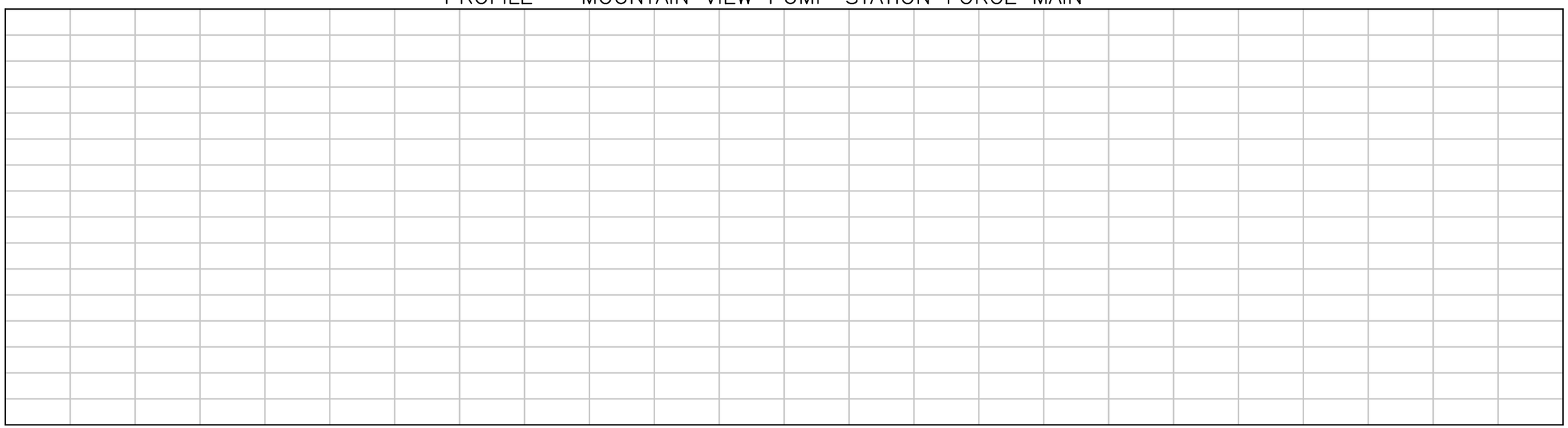
LOS OSOS WASTEWATER PROJECT
PROFILE
WEST PASO ROBLES PUMP STATION
FORCE MAIN

SHEET
D-PP-184

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-184.dgn Plot Date: 09-FEB-2004 12:11



PROFILE – MOUNTAIN VIEW PUMP STATION FORCE MAIN



CONSTRUCTION
BASELINE
STATION

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
LESLIE C. WONG
No. C-58314
Exp. 6-30-06
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE
H: 1"=40'
V: 1"=4'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED LCW
DRAWN LCW
CHECKED JRP

SUBMITTED BY
Steven J. Hyland
STEVE J. HYLAND — C23892 LICENSE NO. — 2-16-2004 DATE
John A. Bergen
JOHN A. BERGEN — C31069 LICENSE NO. — 2-16-2004 DATE

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
PROFILE
MOUNTAIN VIEW PUMP STATION
FORCE MAIN

SHEET
D-PP-185

Job No: 1481166 File: P:\Projects\los_osos\Collect_Sys\D\civ\d-pp-185.dgn Plot Date: 09-FEB-2004 11:50

Plot Date: 09-FEB-2004 16:46

File: N:\Projects\los_osos\Collect_Sys\PS\civ\D-C-200.dgn

Job No: 1481166

REV	DATE	BY	DESCRIPTION

SCALE 1"=300'

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED R BUI

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

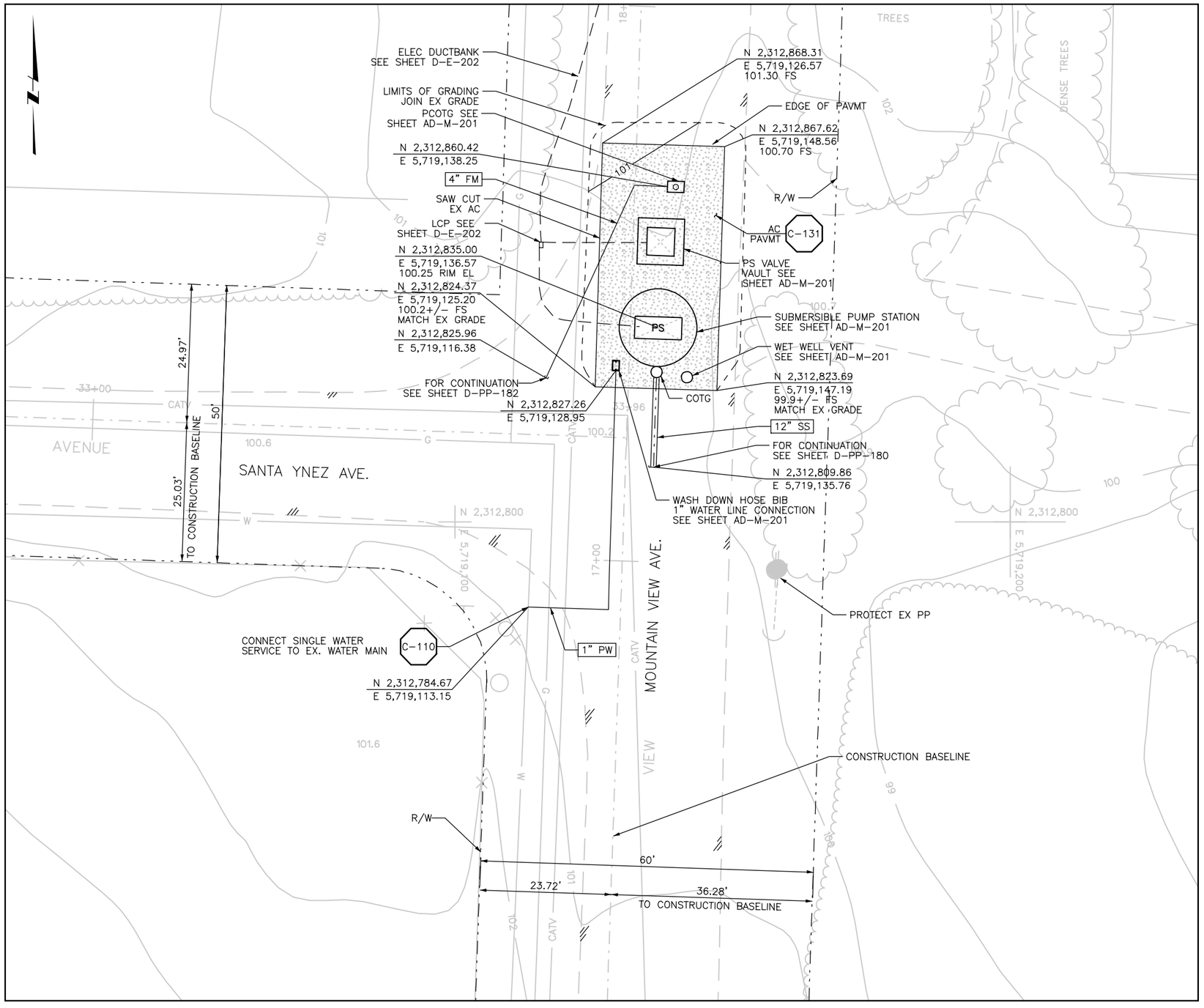
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

CIVIL
AREA D KEY PLAN

SHEET D-C-200

REGISTERED PROFESSIONAL ENGINEER STEVEN J. TRIPP No. C 48027 Exp. 12-31-03 CIVIL STATE OF CALIFORNIA



MOUNTAIN VIEW PS SITE

NOTES:

1. LIDS AND VAULTS TO BE TRAFFIC RATED FOR H-20 LOADING
2. COORDINATE ELECTRICAL DUCTBANK DEPTH AND LOCATION BEFORE INSTALLATION OF PROCESS PIPING. SEE SHEET D-E-202.

REGISTERED PROFESSIONAL ENGINEER
LINDA L. TRUE
No. C 48027
Exp. 12-31-05
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=10'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED R BUI

SUBMITTED BY
JOHN A. BERGEN — LICENSE NO. C31069 — DATE 2/16/2004
STEVE J. HYLAND — LICENSE NO. C23892 — DATE 2/16/2004

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

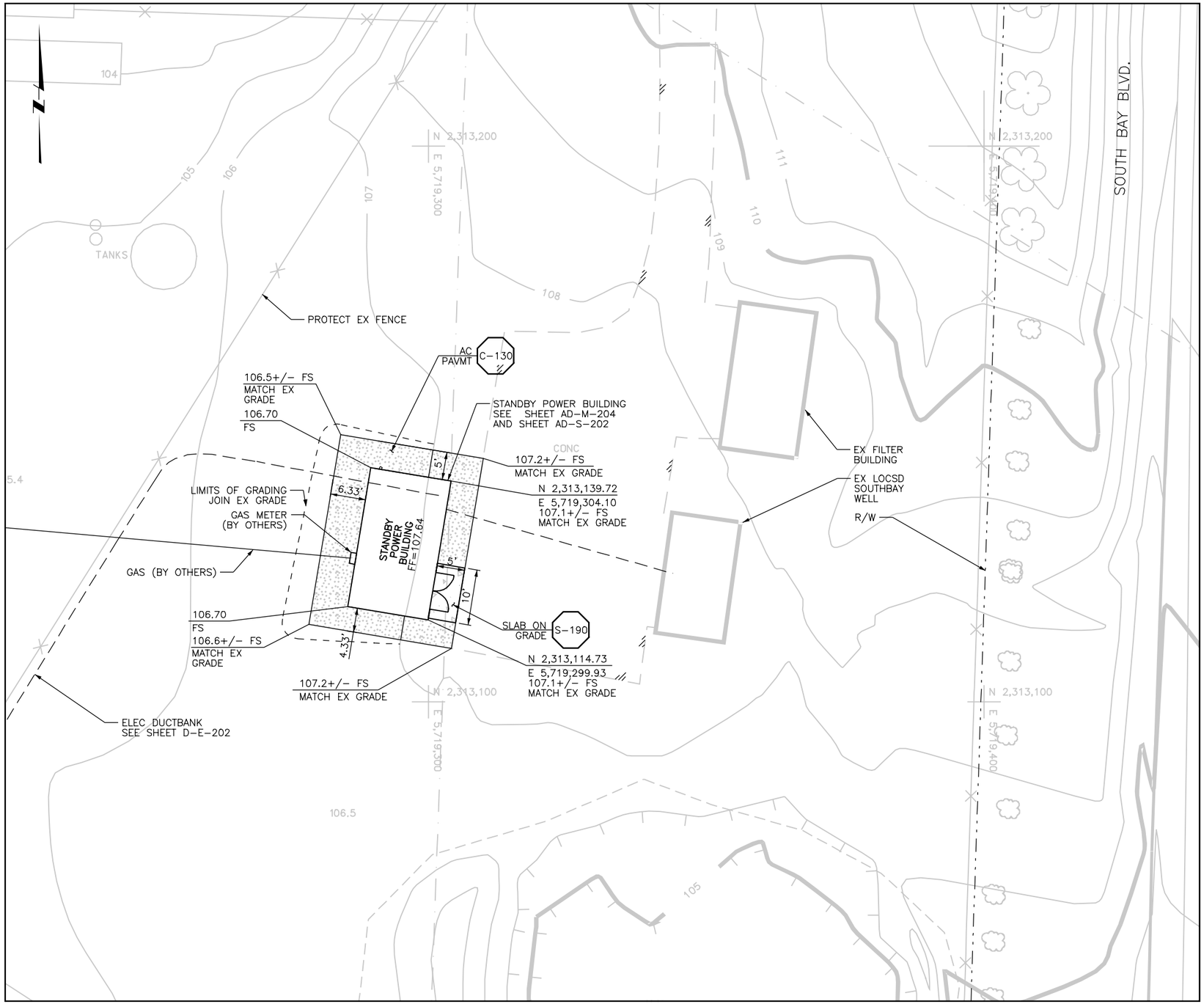
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
CIVIL
MOUNTAIN VIEW PS SITE PLAN

SHEET D-C-201

Plot Date: 09-FEB-2004 16:46
File: N:\Projects\los_osos\Collect_Sys\PS\civ\D-C-201.dgn
Job No: 1481166



MOUNTAIN VIEW STANDBY POWER SITE

NOTES:

1. COORDINATE ELECTRICAL DUCTBANK DEPTH AND LOCATION BEFORE INSTALLATION OF PROCESS PIPING. SEE SHEET D-E-202.
2. CONTRACTOR SHALL COORDINATE AND SCHEDULE GAS LINE CONNECTION AND INSTALLATION WITH PACIFIC GAS AND ELECTRIC.

REGISTERED PROFESSIONAL ENGINEER
JOHN A. BERGEN
No. C 80027
Exp. 12-31-03
CIVIL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE 1"=10'

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED R BUI

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
CIVIL
MOUNTAIN VIEW STANDBY POWER SITE PLAN

SHEET
D-C-202

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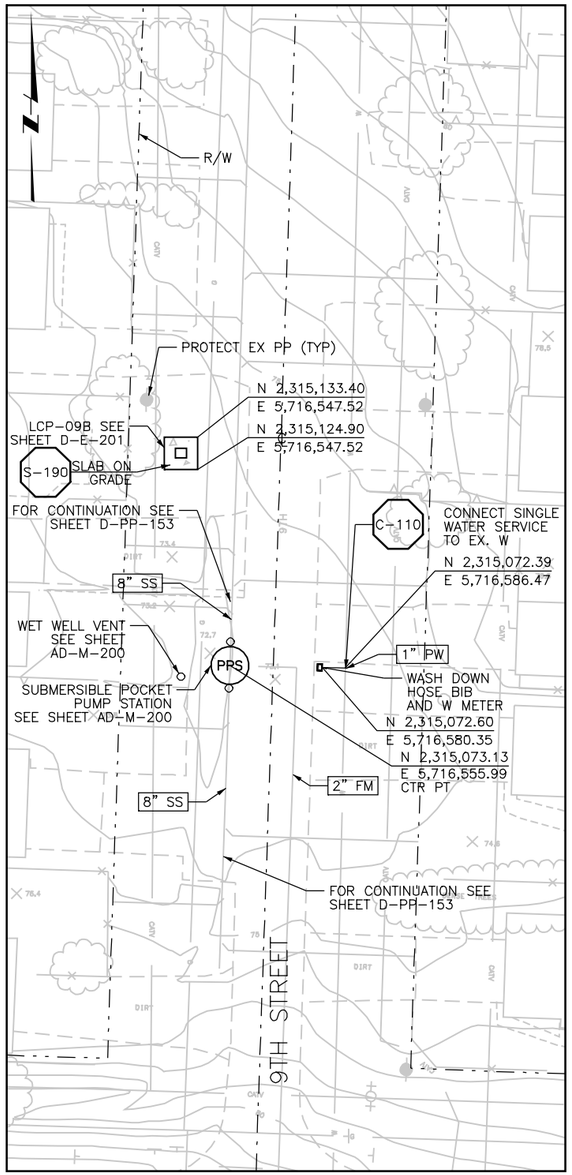
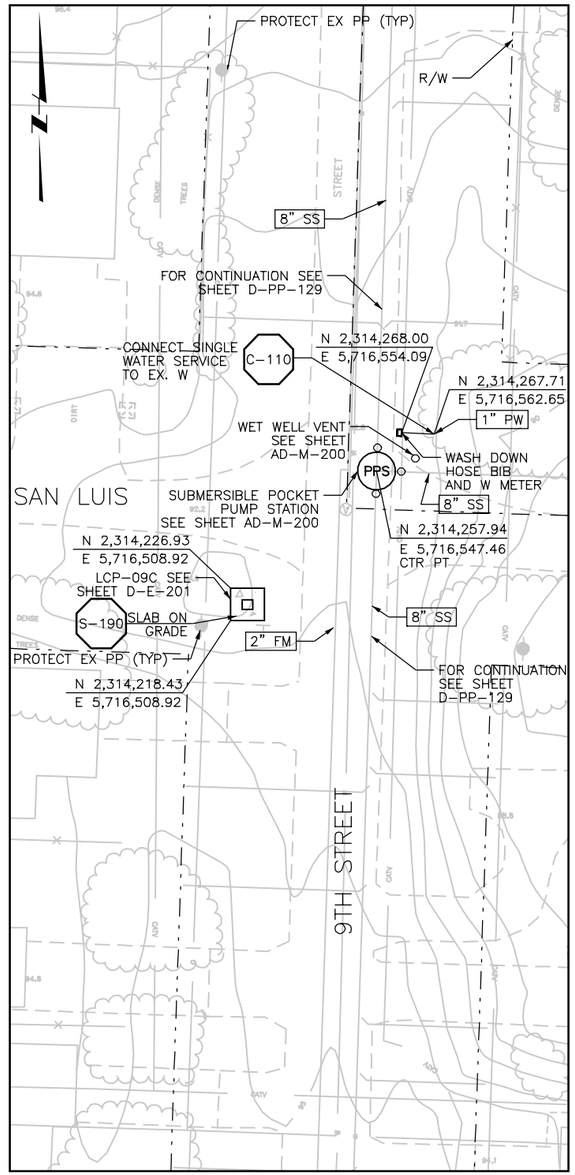


PPS-09B



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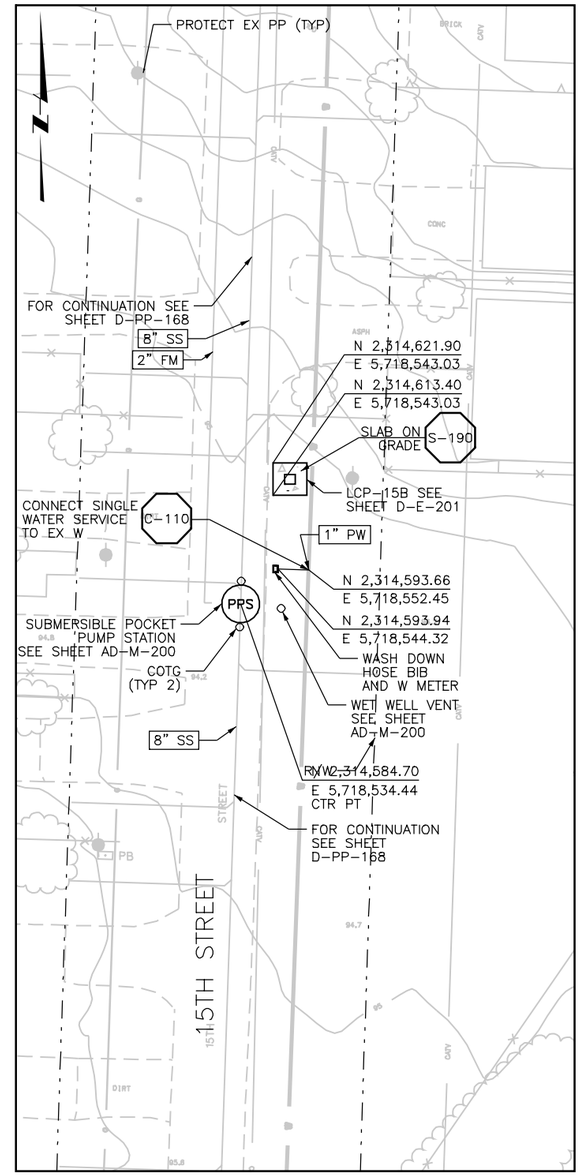

PPS-15B

NOTES:

1. SEE SHEET D-E-201 FOR ELECTRICAL WORK.
2. LIDS AND VAULTS TO BE TRAFFIC RATED FOR H-20 LOADING.
3. COORDINATE ELECTRICAL DUCTBANK DEPTH AND LOCATION BEFORE INSTALLATION OF PROCESS PIPING.

REGISTERED PROFESSIONAL ENGINEER — No. C 48027 — Exp. 12-31-05 — CIVIL — STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=20'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED S HYLAND

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

CIVIL
PPS 09B, 09C, 15B SITE PLANS

SHEET D-C-203

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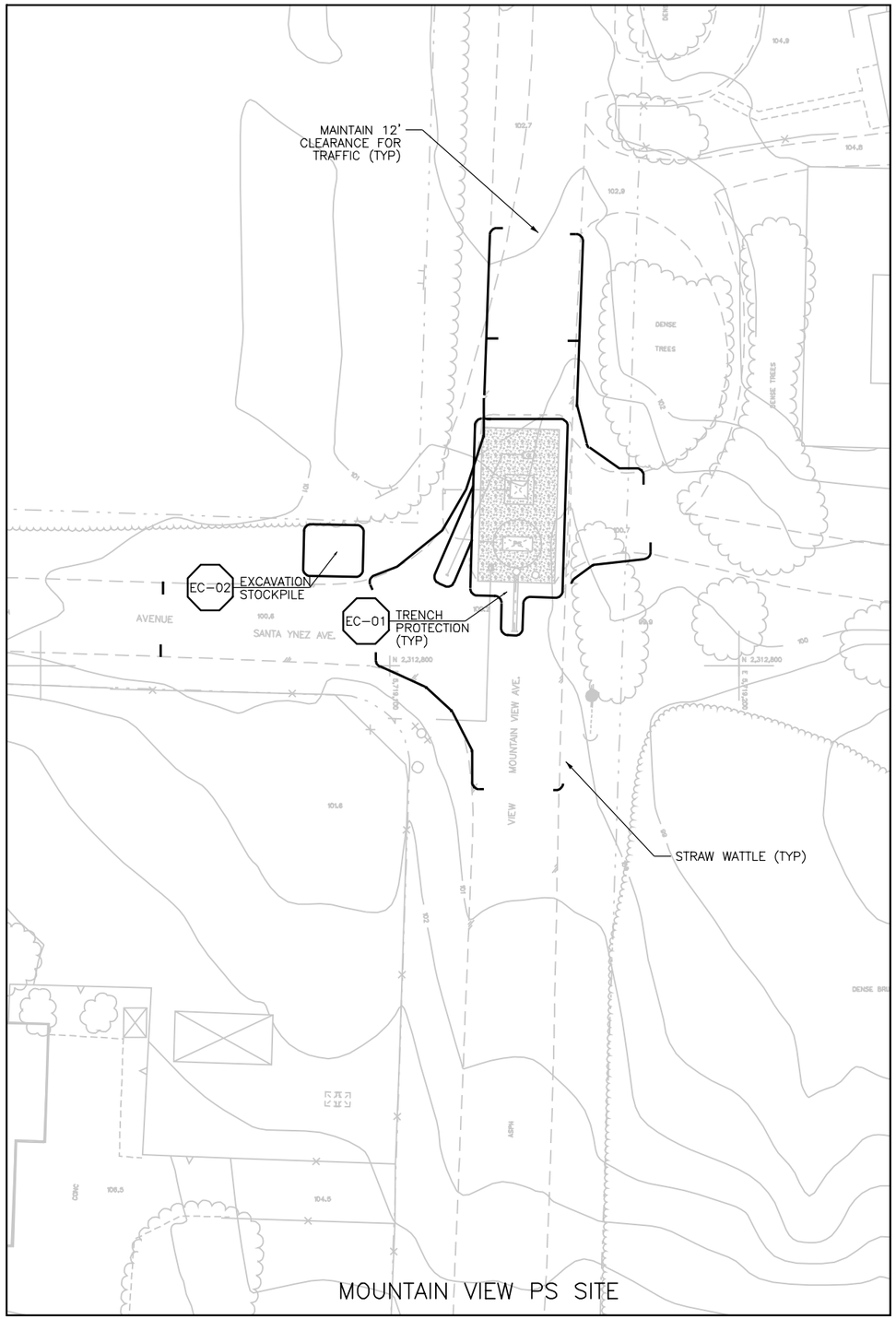
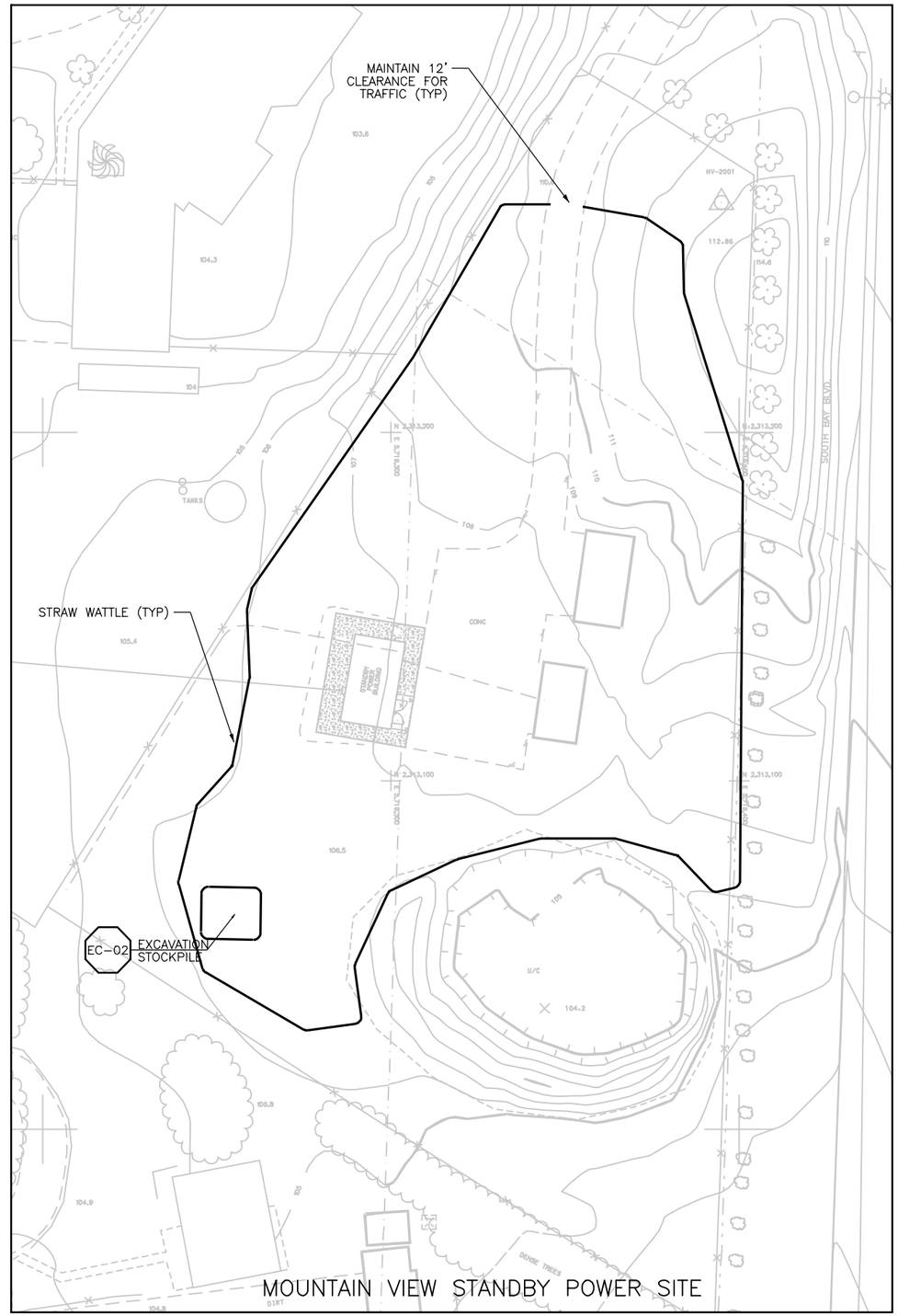


MOUNTAIN VIEW PS SITE



MOUNTAIN VIEW STANDBY POWER SITE

EROSION CONTROL NOTES:

1. DURING CONSTRUCTION THE CONTRACTOR MUST DIRECT ALL RUNOFF TO NON ERODIBLE LOCATIONS
2. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSSARY MATERIALS SHALL BE AVAILABLE AND STOCKPILLED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
3. THE CONTRACTOR SHALL CONTROL TEMPORARY EROSION CONTROL MEASURES AS SHOWN ON THIS PLAN AND/OR AS DIRECTED BY THE ENGINEER TO CONTROL DRAINAGE WHICH HAS BEEN AFFECTED BY GRADING AND/OR TRENCHING OPERATIONS.
4. ALL PERMANENT SLOPES AND DISTURBED AREAS SHALL BE PLANTED FOR EROSION CONTROL WITH APPROVED PERENNIAL VEGETATION WHICH SHALL BE DENSE AND GROWING PRIOR TO FINAL ACCEPTANCE (SEE THE HYDROSEEDING SPECIFICATION).
5. ALL PROTECTIVE DEVICES TO BE INSTALLED SHALL BE IN PLACE AT THE END OF EACH WORK DAY WHEN THE FIVE-DAY RAIN PROBABILITY EXCEEDS 40 PERCENT.
6. AFTER A RAINSTORM, ALL SILT AND DEBRIS SHALL BE REMOVED FROM CHECK BERMS AND SEDIMENTATION BASIN AND THE BASIN PUMPED DRY.
7. THE CONTRACTOR MAY BE REQUIRED TO INSTALL AND/OR CONSTRUCT ADDITIONAL DRAINAGE STRUCTURES AS NECESSARY TO PREVENT OR CONTROL EROSION.
8. THE CONTRACTOR IS RESPONSABLE FOR CLEANING ANY EROSION OR DEBRIS SPILLING ONTO A PUBLIC STREET.
9. NO CUT OR FILL SLOPES SHALL BE STEEPER THAN 2' HORIZONTAL TO 1' VERTICAL.
10. ALL STRAW WATTLES TO BE INSTALLED PARALLEL TO GRADING CONTOURS.
11. ALSO SEE SEC. 01570 STORM WATER POLLUTION PREVENTION PLAN.

REGISTERED PROFESSIONAL ENGINEER
No. C 48027
Exp. 12-31-05
CIVIL
STATE OF CALIFORNIA

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\D-C-204.dgn Plot Date: 09-FEB-2004 16:49

REV	DATE	BY	DESCRIPTION

SCALE 1"=20'

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DESIGNED M. RACKOW
DRAWN M. RACKOW
CHECKED S HYLAND

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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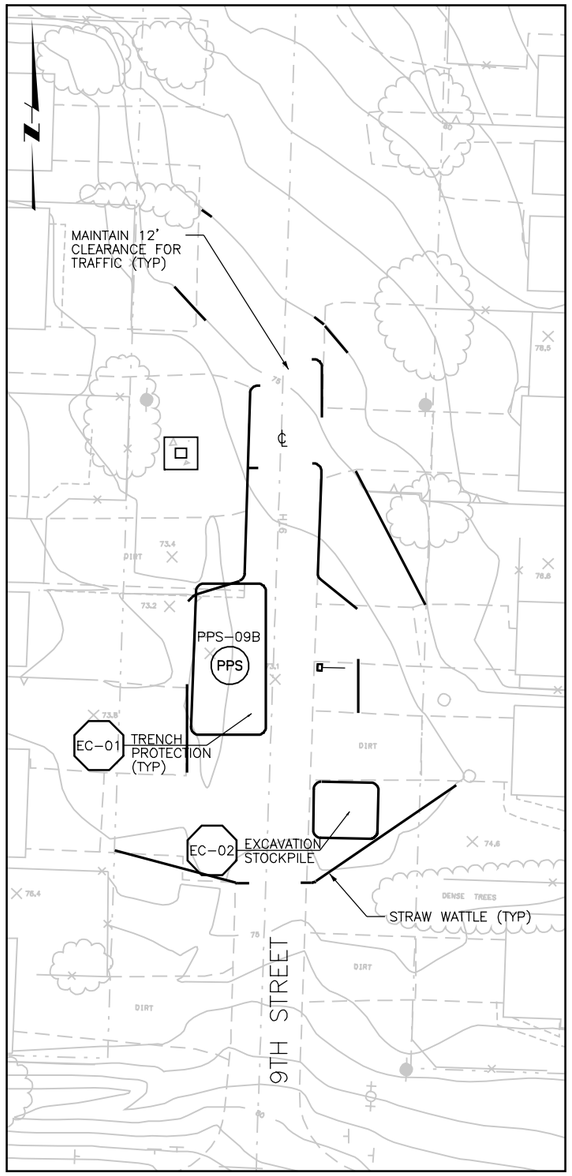
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
CIVIL
EROSION CONTROL PLAN – 1

SHEET D-C-204



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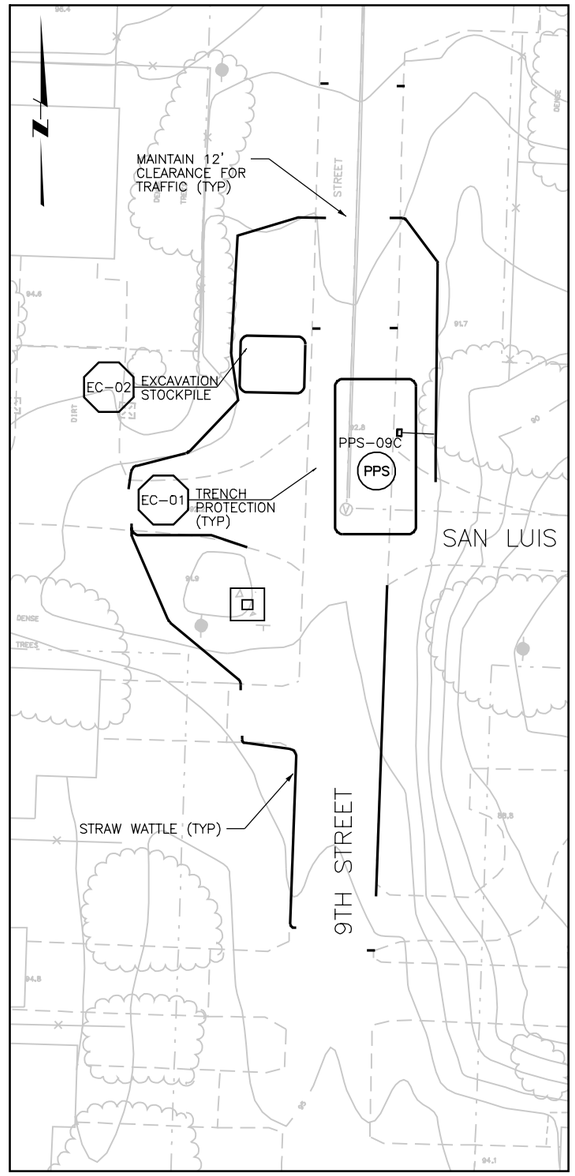

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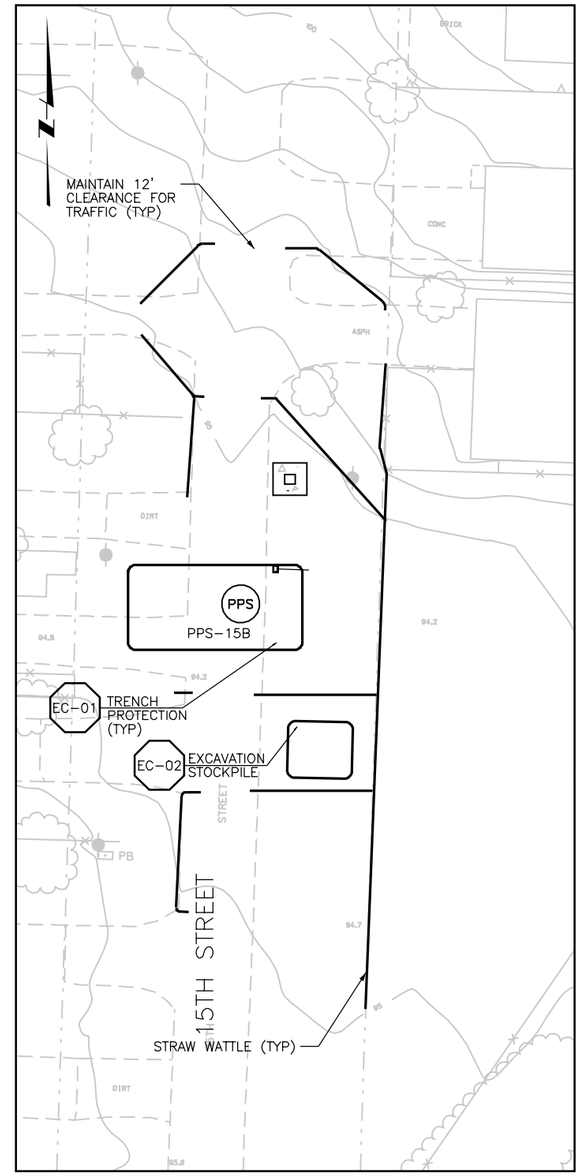

PPS-15B

EROSION CONTROL NOTES:

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2. A STANDBY CREW FOR EMERGENCY WORK SHALL BE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSSARY MATERIALS SHALL BE AVAILABLE AND STOCKPILLED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
3. THE CONTRACTOR SHALL CONTROL TEMPORARY EROSION CONTROL MEASURES AS SHOWN ON THIS PLAN AND/OR AS DIRECTED BY THE ENGINEER TO CONTROL DRAINAGE WHICH HAS BEEN AFFECTED BY GRADING AND/OR TRENCHING OPERATIONS.
4. ALL PERMANENT SLOPES AND DISTURBED AREAS SHALL BE PLANTED FOR EROSION CONTROL WITH APPROVED PERENNIAL VEGETATION WHICH SHALL BE DENSE AND GROWING PRIOR TO FINAL ACCEPTANCE (SEE THE HYDROSEEDING SPECIFICATION).
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10. ALL STRAW WATTLES TO BE INSTALLED PARALLEL TO GRADING CONTOURS.
11. ALSO SEE SEC. 01570 STORM WATER POLLUTION PREVENTION PLAN.

REGISTERED PROFESSIONAL ENGINEER No. C 48027 Exp. 12-31-05 CIVIL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE 1"=20'

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DESIGNED M RACKOW
DRAWN M RACKOW
CHECKED S HYLAND

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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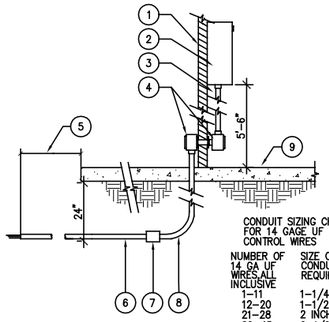
LOS OSOS WASTEWATER PROJECT
CIVIL
EROSION CONTROL PLAN – 2

SHEET D-C-205

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\civ\D-C-205.dgn Plot Date: 09-FEB-2004 16:50



CONDUIT SIZING CHART FOR 14 GAGE UF CONTROL WIRES

NUMBER OF 14 GA UF WIRES, ALL INCLUSIVE	SIZE OF CONDUIT REQUIRED
1–11	1–1/4 INCH
12–20	1–1/2 INCH
21–28	2 INCH
29–45	2–1/2 INCH
46–60	3 INCH

LEGEND:

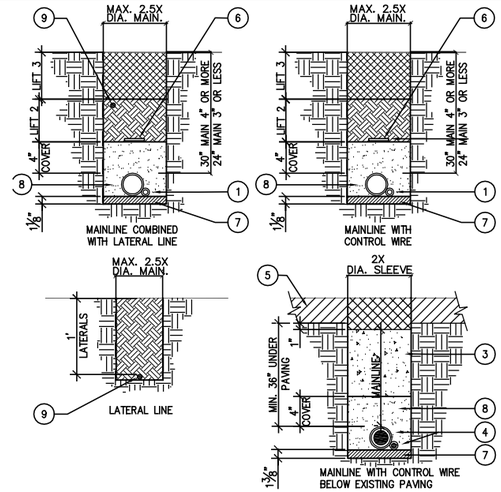
1. EXTERIOR WALL OF BUILDING
2. CONTROLLER, PER IRRIGATION LEGEND. INSTALL PER MFG. INSTRUCTIONS.
3. 24V CONTROL WIRES IN RIGID STEEL CONDUIT, TYPICAL.
4. PAIRED METAL THREADED WEATHER PROOF CONDUITS CONNECTED THROUGH WALL WITH RIGID STEEL CONDUIT. SEAL AROUND CONDUIT INSIDE AND OUTSIDE WITH AN APPROVED SILICONE SEALANT.
5. 24" MIN. BEYOND FACE OF BLDG. OR EDGE OF PAVING.
6. SCH. 40 PVC CONDUIT
7. TxS PVC ADAPTER
8. PVC COATED GALV. LONG SWEEP ELL
9. FINISH FLOOR OF BLDG.

NOTES:

1. CONDUIT DIAMETER SHALL BE PER SIZING CHART ABOVE. ENLARGE HOLE IN THE BOTTOM OF THE IRRIGATION CONTROLLER AS NECESSARY TO ACCOMODATE A LINE SIZED BUSHING. 120V POWER SOURCE SHALL BE AS SHOWN ON THE LANDSCAPE OR ELECTRICAL PLANS.

K WALL MOUNT CONTROLLER

NTS



LEGEND:

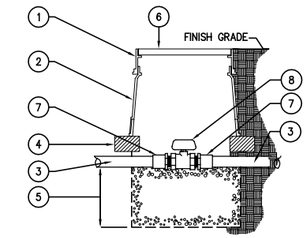
1. POSITION CONTROL WIRES IN LOWER LEFT OR RIGHT HAND QUADRANT OF MAINLINE.
2. TAPE WIRE AT 10' INTERVALS; DO NOT SECURE TO MAINLINE.
3. MATCH TYPE AND GRADE OF EXISTING PAVING TO SACK SLURRY BACKFILL
4. MAINLINE AND CONTROL WIRES, EACH IN SCH. 40 P.V.C. SLEEVE
5. EXISTING PAVING
6. TRACER TAPE
7. SAND BED
8. SAND COVER
9. LATERAL LINE

NOTES:

1. PIPE BEDDING AND BACKFILL SHALL BE WATER JETTED TO ACHIEVE PROPER DENSIFICATION.
2. PIPE AND CONTROL WIRE CROSSING VECHICULAR ROADWAY SHALL BE SLEEVED AS INDICATED ABOVE.
3. IRRIGATION SLEEVE: TWO PIPE SIZES LARGER THAN WATER PIPE SIZE.

G TRENCHING DETAIL

NTS

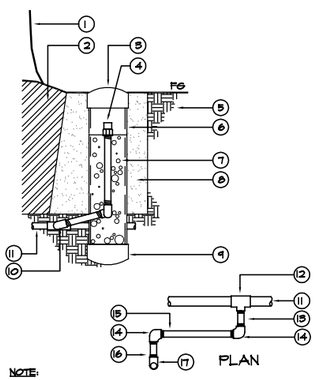


LEGEND:

1. 3-1/2" EXTENSION FOR 12" METER BOX.
2. 12" METER BOX.
3. PVC PRESSURE MAINLINE PIPE – 1-1/2" OR LESS USE SCHEDULE 40, 2" OR GREATER USE CLASS 315. SEE PLAN FOR SIZES.
4. COMMON BRICK, ONE AT EACH CORNER FOR SUPPORT.
5. 12" DEEP, 3/4" "FLOAT ROCK" UNDER VALVE.
6. COVER WITH PENT LOCK. SET FLUSH WITH FINISH GRADE.
7. SCHEDULE 40 PVC MALE ADAPTER.
8. PVC BALL VALVE, SEE PLAN FOR SIZE AND TYPE.

C BALL VALVE

NTS



LEGEND:

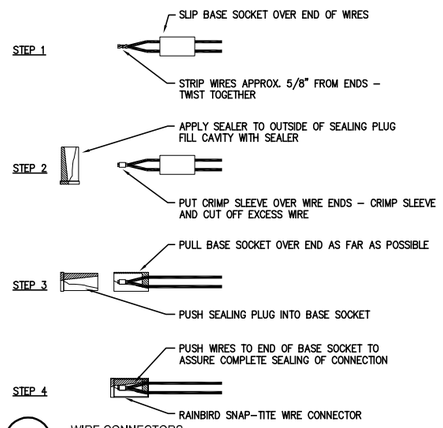
1. TREE TRUNK
2. ROOTBALL
3. 6" P.V.C. DRAIN LINE CAP AT FINISH GRADE
4. BUBBLER NOZZLE (ABOVE ROCK) ON RISER
5. SITE SOIL
6. 6" PERFORATED P.V.C. DRAINLINE PIPE SEALED INSIDE SOIL SEPARATOR FABRIC
7. 1/2"–3/4" WASHED, CRUSHED ROCK
8. TREE BACKFILL, SEE PLANTING DETAILS
9. 6" P.V.C. DRAINLINE CAP AT BOTTOM OF PIPE
10. SWING JOINT, SEE PLAN BELOW
11. LATERAL LINE
12. SCH. 40 P.V.C TEE SxSxT
13. 3/4" DIA. x 3" SCH. 80 P.V.C THREADED NIPPLE
14. SCH. 80 P.V.C. ELL
15. 3/4" DIA. SCH. 80 PVC NIPPLE, 12" LONG
16. 3/4" DIA. x 3" SCH. 80 PVC NIPPLE
17. TREE BUBBLER

NOTE:

1. USE PIPE TEFLON TAPE ON ALL PIPE THREADS. TIGHTEN THEADS UNTIL MODERATELY SNUG (DO NOT OVERTIGHTEN).

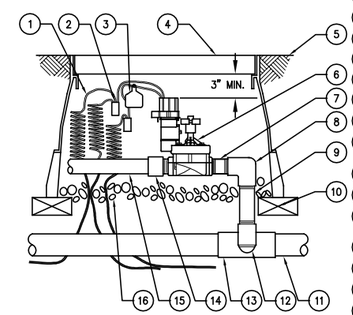
J DEEP ROOT TREE BUBBLER

NTS



F WIRE CONNECTORS

NTS

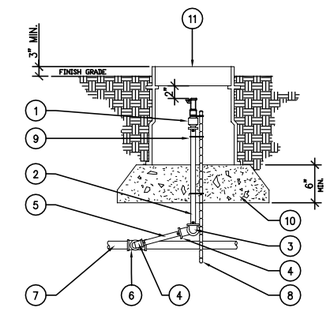


LEGEND

1. 30-INCH LINEAR LENGTH OF WIRE, COILED
2. WATER PROOF CONNECTION (1 OF 2)
3. ID TAG
4. VALVE BOX WITH COVER: 12" SIZE
5. FINISH GRADE/TOP OF MULCH
6. PVC REMOTE CONTROL VALVE
7. PVC SCH 80 NIPPLE (CLOSE)
8. PVC SCH 40 ELL
9. PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
10. BRICK (1 OF 4)
11. PVC MAINLINE PIPE
12. SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 40 ELL
13. PVC SCH 40 TEE OR ELL
14. PVC SCH 40 MALE ADAPTER
15. PVC LATERAL PIPE
16. 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

E PRESSURE REGULATING REMOTE CONTROL VALVE

NTS



LEGEND

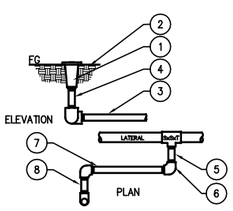
1. QUICK COUPLER VALVE
2. SCHEDULE 80 NIPPLE.
3. SCH. 40 PVC 90 ELL.
4. MARLEX 90 STREET ELL (2) PLACES.
5. SCHEDULE 80 NIPPLE 6" LONG.
6. PRESSURE SUPPLY LINE FITTING.
7. PRESSURE SUPPLY LINE.
8. #4 REBAR STAKE 24" LONG
9. STAINLESS STEEL SCREW CLAMP MIN. (3) PLACES.
10. 3/4" WASHED CRUSHED AGGREGATE BASE.
11. VALVE BOX W/ LOCKING COVER
12. COMPACT SOIL @ BOX TO 90% REL COMP.

NOTE:

1. PLACE AGGREGATE PRIOR TO INSTALLATION OF VALVE BOX.

B QUICK COUPLER

NTS



LEGEND:

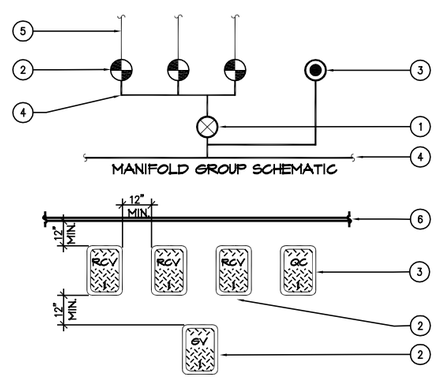
1. POP-UP SPRAY HEAD
2. COMPACT SOIL @ EA. HEAD TO 90% REL. COMP.
3. 3" SCH. 80 PVC NIPPLE
4. SWING JOINT, SEE PLAN BELOW
5. 1/2" DIA. x 3" SCH. 80 P.V.C. THREADED NIPPLE
6. 1/2" THREADED SCH 40 ELL, 3 PLACES REQUIRED
7. 1/2" DIA. x 12" SCH. 80 PVC NIPPLE
8. 1/2" DIA. x 3" SCH. 80 PVC NIPPLE

NOTES:

1. PLACE ALL HEADS 1/4" ABOVE FINISH GRADE AT INITIAL INSTALLATION. SET HEADS 3" AWAY FROM WALKS, CURBS, OR MOW STRIPS.
2. ALL PIPE THREADS ON SWING JOINT SHALL BE COATED WITH RECTORSEAL T PLUS 2 TEFLON PIPE COMPOUND OR APPROVED EQUAL BEFORE ASSEMBLY.

H POP-UP SPRAY HEAD

NTS



LEGEND:

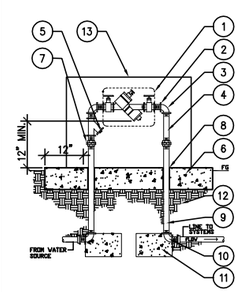
1. BALL VALVE, LINE SIZED, TYPICAL, SEE DETAIL.
2. REMOTE CONTROL VALVE, LINE SIZED, TYPICAL, SEE DETAIL.
3. QUICK COUPLER, LINE TO QUICK COUPLER SHOULD BE 1 1/2", TYPICAL, SEE DETAIL.
4. MAIN LINE, SIZE OF MAIN LINE SHALL EQUAL VALVE SIZE, TYPICAL.
5. LATERAL LINE, SIZE OF LATERAL LINE SHALL EQUAL VALVE SIZE, TYPICAL.
6. EDGE OF WALK, CURB, WALL ETC.

NOTES:

1. ALL VALVES SHALL BE RUN OFF A MANIFOLD GROUP SIMILAR TO THAT SHOWN IN ABOVE SHEMATIC.
2. ALL BOXES SHALL BE SQUARE TO ONE ANOTHER, AND TO EDGES OF ADJACENT FIXED OBJECTS.
3. ALL VALVE BOXES SHALL BE SET FLUSH TO FINISH GRADE.
4. WHERE 2 VALVES ARE TO OPERATED SIMULTANEOUSLY, SIZE MAIN LINES WITHIN MANIFOLD GROUP TO 3", UNLESS LARGER SIZE IS REQUIRED FOR VALVE OPERATION.

D VALVE BOX LAYOUT

NTS



LEGEND

1. BACKFLOW PREVENTOR ASSEMBLY
2. BRASS NIPPLE – TYPICAL 3) PLACES
3. BRASS 90° ELL – TYPICAL (2) PLACES
4. BRASS NIPPLE
5. BRASS WYE STRAINER WITH 20 MESH STAINLESS STEEL SCREEN.
6. 12" THICK x 12" WIDE CONCRETE PAD (LENGTH VARIES PER MANUFACTURER) SLOPE TO DRAIN AT MINIMUM 2%.
7. BRASS UNION–TYP. (2) PLACES
8. SLEEVE THRU CONCRETE, 2 PLACES
9. BRASS NIPPLE – TYPICAL. (2) PLACES
10. BRASS 90 ELL – TYPICAL (2) PLACES
11. 1/3 CU YD CONCRETE THRUST BLOCKS – TYPICAL (2) PLACES
12. 90% COMPACTION REQUIRED
13. BACKFLOW PREVENTOR METAL ENCLOSURE PER CITY STANDARDS

NOTES:

1. EQUIPMENT TO BE INSTALLED AT A MINIMUM OF 24" FROM ANY STRUCTURES OR HARDSCAPING.
2. ALL ABOVE GROUND ASSEMBLY SHALL RECEIVE (2) COATS OR RED PRIMER AND (1) COAT EXTERIOR ENAMEL – COLOR AS SELECTED BY LANDSCAPE ARCHITECT.
3. WHEN UNIT IS NEXT TO A STRUCTURE (ie. WALL, BUILDING, ETC.) MOUNT TEST COCKS ON OPEN OR NON-STRUCTURE SIDE.

A BACKFLOW PREVENTOR ASSEMBLY WITH ENCLOSURE

NTS

LICENSED LANDSCAPE ARCHITECT
ANTHONY KEITH NO. 2823
10/31/04
Date
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: VARIES

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED TK/CD
DRAWN C. DUFOUR
CHECKED T.KEITH

SUBMITTED BY
C31069 LICENSE NO. 2/16/2004 DATE
C23892 LICENSE NO. 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP — Creating Environmental Profit Strategies — 3765 South Higuera Street, Suite 102 • San Luis Obispo, California 93401 • Phone 805/543-1361 • Fax 805/543-0397 • mail@rrmdesign.com

LOS OSOS WASTEWATER PROJECT
LANDSCAPING
IRRIGATION DETAILS

SHEET AD–GL–200

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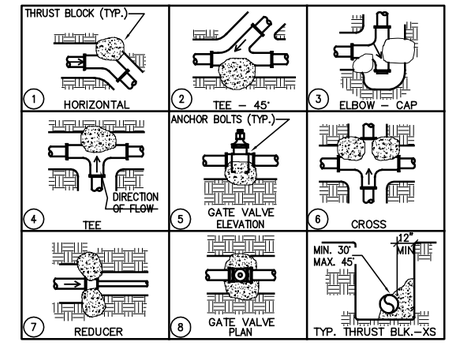
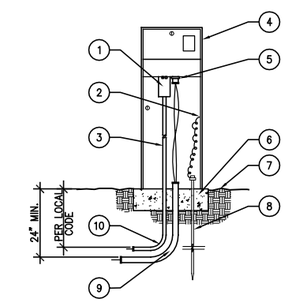


NOTES:
1. PLASTIC PIPE SHALL BE INSTALLED ACCORDING TO THESE DETAILS UNLESS OTHERWISE NOTED OR DETAILED.
2. THE PORTLAND CEMENT CONCRETE USED FOR THRUST BLOCKS SHALL BE MIN. 470–B–2000D CONC.
3. ALL ANCHOR RODS SHALL BE GALVANIZED STEEL MIN. 1/2" INCH IN DIAMETER.
4. SIZE OF THRUST BLK.: 4" PIPE = 4 CU. FT. CONC., 6" PIPE = 6 CU. FT., 8" PIPE = 8 CU. FT.
5. WRAP ALL EPOXY COATED FITTINGS WITH SIX MIL PLASTIC BEFORE POURING THRUST BLOCKS.
6. POOR SOIL CONDITIONS : USE THRUST BLOCKS FOR 3" PIPE AT SIZE SHOWN FOR 4" PIPE.
7. ALL THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED SOIL.

B THRUST BLOCK
NTS



NOTE: ALL WIRING TO BE INSTALLED AS PER LOCAL CODE

LEGEND
1. 120V POWER AND GROUND CONNECTION DISCONNECT SWITCH, SURGE PROTECTOR, & CONVENIENCE OUTLET
2. CONNECT TO PROTECTIVE GROUNDING CIRCUIT
3. 3/4" PVC CONDUIT FOR ELECTRICAL SERVICE
4. CONTROLLER & ENCLOSURE
5. CONTROL & COMMON WIRE CONNECTIONS, OR PROVIDE TERMINATING STRIP, IN PEDESTAL
6. 6" THICK CONC. BASE PER MANUFACTURER'S RECOMMENDATION
7. FINISH GRADE CONC. SLAB
8. 3/4"x 8' LONG COPPER CLAD GROUND ROD W/ #6 BARE COPPER WIRE CONNECTED TO ROD BY ACORN–CLAMP
9. (2) 3" 90° SWEEP ELL FOR IRRIGATION CONTROL WIRES
10. 90° PVC SWEEP ELL

A PEDESTAL MOUNTED CONTROLLER
NTS

LICENSED LANDSCAPE ARCHITECT
ANTHONY KEITH NO. 3673
10/31/04
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: VARIES

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED TK/CD
DRAWN C. DUFOUR
CHECKED T.KEITH

SUBMITTED BY
C31069 LICENSE NO. 2/16/2004 DATE
C23892 LICENSE NO. 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT LANDSCAPING
IRRIGATION DETAILS

SHEET AD–GL–201

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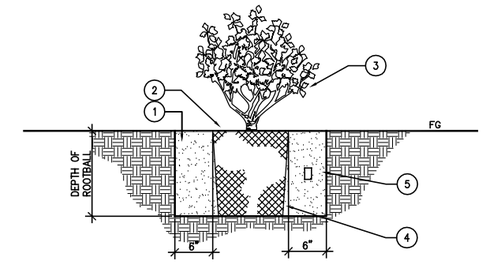
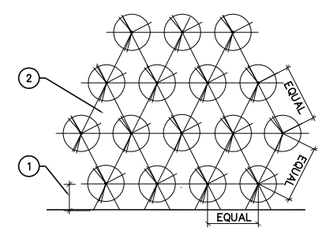


LEGEND:

1. PLANTING HOLES. 1, 5, AND 15 GALLON SHRUBS SHALL BE 6" WIDER THAN WIDTH OF CONTAINER AND THE SAME DEPTH. SET ROOT BALL ON NATURAL UNDISTURBED GRADE. BACKFILL WITH AMENDED SOIL.
2. TOP OF ROOT BALL SHALL BE SET FLUSH TO FINISH GRADE
3. SHRUB
4. CONTAINER ROOT BALL
5. FERTILIZER PACK, QUANTITY PER SPECIFICATIONS.

B SHRUB PLANTING

SCALE: 1"=1'-0"

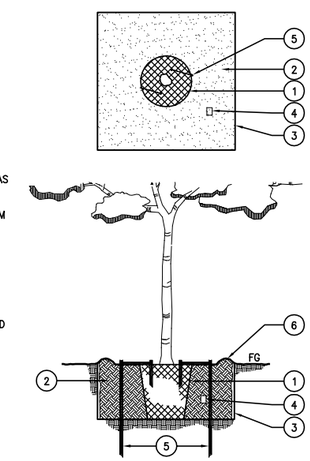


LEGEND:

1. 1/2 SPACING FROM EDGE OF WALK, BACK OF CURB, OR BUILDING FACE
2. GROUND COVER SHALL BE TRIANGULAR SPACED PER O.C. SPACING ON PLANTING LEGEND AND/OR PLANTING PLAN

C TRIANGULAR GROUNDCOVER PLANTING

SCALE: 1"=1'-0"



LEGEND:

1. TREE ROOTBALL
2. BACKFILL MIX, TAMP FIRMLY
3. PLANT PIT SHALL BE TWICE THE WIDTH OF THE TREE ROOTBALL, AS INDICATED. SET ROOTBALL ON NATURAL GRADE AT BOTTOM OF PIT, PLUMB TO GRADE AT BOTTOM OF PIT, AMENDED SOIL.
4. FERTILIZER PACK
5. 'TREE STAPLE' SYSTEM, TWO (2) PER TREE. INSTALL PER MANUFACTURER'S INSTRUCTIONS
6. PROVIDE CIRCULAR BASIN AROUND PLANT PIT, 3" HEIGHT MINIMUM

A TREE PLANTING

SCALE: 1/2"=1'-0"

LICENSED LANDSCAPE ARCHITECT
ANTHONY KEITH NO. 3673
10/31/04
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: VARIES

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED TK/BMO
DRAWN B.OSBORN
CHECKED T.KEITH

SUBMITTED BY
C31069 LICENSE NO. 2/16/2004 DATE
C23892 LICENSE NO. 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP

LOS OSOS WASTEWATER PROJECT LANDSCAPING
PLANTING DETAILS

SHEET AD-GL-202

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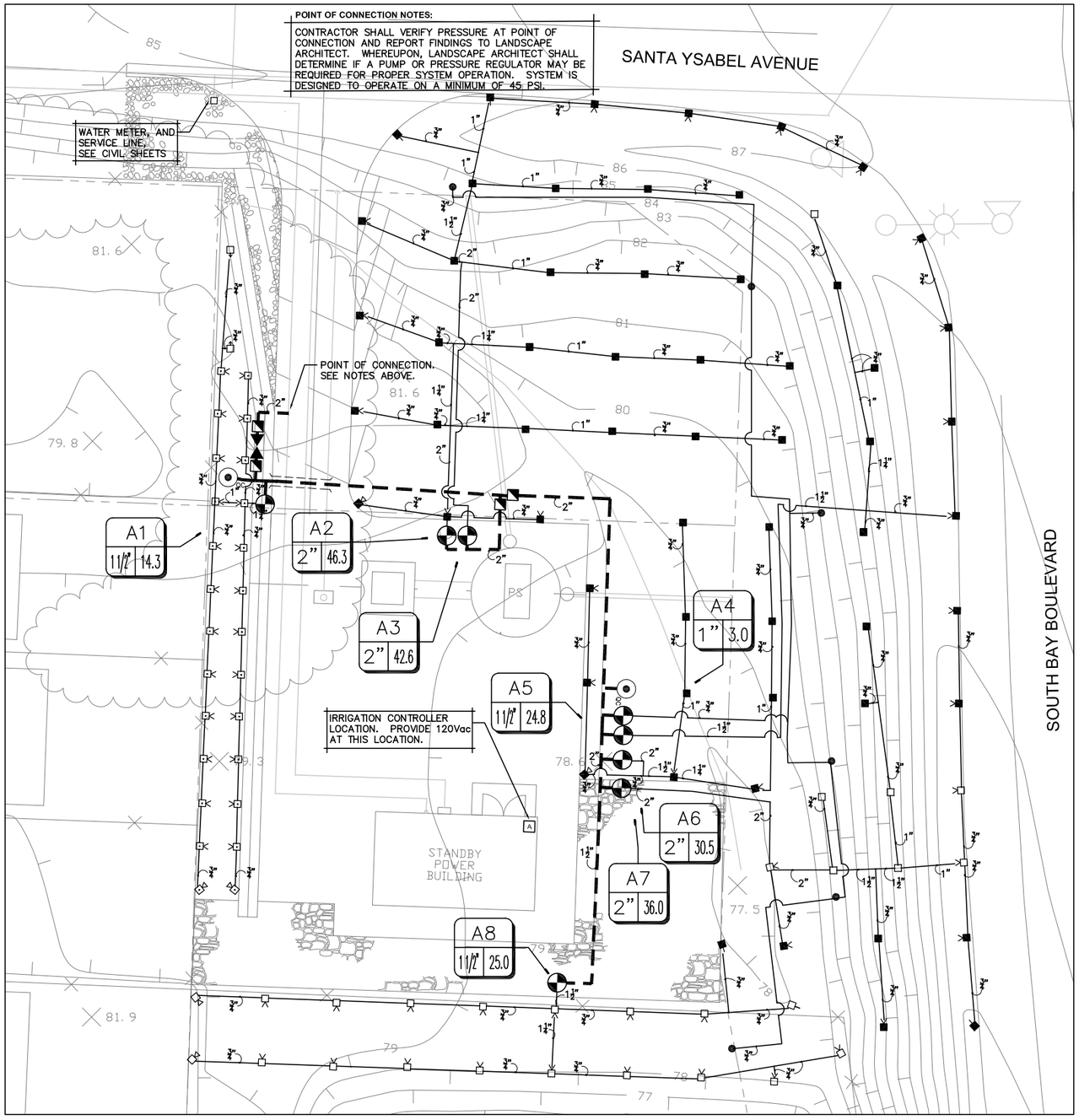

EAST YSABEL PUMP STATION

north

SCALE: 1" = 10'

IRRIGATION LEGEND

SYMBOL	MANUF.	MODEL NO.	DESCRIPTION	NOZZLE	RAD.	G.P.M.	P.S.I.	REMARKS/ DETAIL
SPRAYS								
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15F	15'	3.7	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15H	15'	1.85	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15Q	15'	.92	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15 VAN	15'	VARIES	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12F	12'	2.6	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12H	12'	1.3	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12Q	12'	.65	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12 VAN	12'	VARIES	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	8H	8'	.52	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	8Q	8'	.26	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	8 VAN	8'	VARIES	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15-EST	4'x15'	0.61	30	SEE DETAIL H, SHEET AD-GL-200
BUBBLERS								
	RAINBIRD	RWS-B-G	TREE ROOT BUBBLER	1402	N/A	0.5	30	SEE DETAIL J, SHEET AD-GL-200
VALVES								
	RAINBIRD	PEB SERIES (INCLUDE PRS DIAL)	PRESSURE REGULATED R.C. VALVE					SEE DETAIL D & E, SHEET AD-GL-200
	RAINBIRD	44 LRC	1" QUICK COUPLING VALVE					SEE DETAIL B, SHEET AD-GL-200
	KBI	BTU SERIES	TRUE UNION BALL VALVE					SEE DETAIL C, SHEET AD-GL-200
BACKFLOW DEVICE								
	FEBCO	825YA	1 1/4" BACKFLOW PREVENTOR					SEE DETAIL A, SHEET AD-GL-200
MAIN LINE/ LATERALS & SLEEVES								
	SEE SPECS	SEE SPECS	SCH. 40 PVC MAIN LINE.					SEE PLAN FOR SIZING. SEE DETAIL G, SHEET AD-GL-200
	SEE SPECS	SEE SPECS	SCH 40 PVC SLEEVE					TWO TIMES THE SIZE THE PIPE DIAMETER, SEE DETAIL G, SHEET AD-GL-200
CONTROLLERS								
A	RAINBIRD	ESP-12-RK-LS	12 STA. WALL MOUNT SATELLITE CONTROLLER					SEE DETAIL K, SHEET AD-GL-200

IRRIGATION NOTES

1. SEE SPECIAL & STANDARD SPECIFICATIONS FOR INSTRUCTIONS, APPLICATION, PROCEDURES AND OTHER INFORMATION ON THE INSTALLATION OF THE IRRIGATION SYSTEM.
2. IRRIGATION PLAN IS DIAGRAMATIC. FINAL LOCATION OF PIPING WILL BE DETERMINED AT THE TIME OF INSTALLATION. MAINLINE AND LATERALS SHALL BE PLACED IN THE SAME TRENCH WHEN POSSIBLE. ALL Q.C. VALVES ARE TO BE LOCATED 12" FROM SIDEWALKS, CURBS, ASPHALT & CONCRETE SURFACES.
3. ALL EQUIPMENT REQUIRED BUT NOT SPECIFIED ON THE DRAWING, TO COMPLETE THE WORK, SHALL BE PROVIDED BY THE IRRIGATION CONTRACTOR.
4. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND/OR SPECIFICATIONS.
5. TRENCH BACKFILL MATERIAL SHALL BE FREE OF ROCKS, GLASS, AND OTHER EXTRANEOUS MATERIALS. BACKFILL WILL BE COMPACTED TO 90% MAXIMUM DRY DENSITY.
6. IRRIGATION DESIGN IS BASED ON A MINIMUM 45 PSI STATIC WATER PRESSURE BEFORE BACKFLOW DEVICE. IF WATER PRESSURE IS LESS, CONTRACTOR IS TO CALL THE LANDSCAPE ARCHITECT BEFORE COMMENCING WITH THE WORK.
7. ALL VALVE CONTROL WIRE SHALL BE AWG 14 TYPE UF, 600 VOLT TEST, DIRECT BURIAL.
8. CONTROLLER POWER WIRE SHALL BE 120 VOLT WIRE AND PLACED IN 3/4" CONDUIT. POWER TO BE FROM ELECTRICAL PANEL. 120 VOLT SERVICE AND HOOK-UP TO THE CONTROLLER SHALL BE COMPLETED BY A LICENSED ELECTRICAL CONTRACTOR. THIS COST IS TO BE A PART OF THE LANDSCAPE CONTRACTOR'S BID.
9. CONNECT ALL DIRECT BURIAL WIRES USING 3M'S "DBY-DIRECT BURIAL SPLICE KIT"
10. CONTRACTOR SHALL PULL THREE (3) EXTRA WIRES AT EACH BANK OF REMOTE CONTROL VALVES OR MANIFOLD .
11. CONTRACTOR SHALL PROVIDE #10 COMMON WIRE TO ALL REMOTE CONTROL VALVES.
12. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS AND SITE CONDITIONS PRIOR TO BEGINNING WORK. SHOULD CONFLICTING INFORMATION BE FOUND ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH THE WORK IN QUESTION.
13. DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY AT NO EXPENSE TO THE OWNER.
14. CONTRACTOR SHALL COORDINATE POWER TO CONTROLLERS AND DEDICATE ONE (1) 20 AMP BREAKER FOR EACH CONTROLLER. THE AUTHORIZED REPRESENTATIVE SHALL REVIEW CONTROLLER LOCATIONS PRIOR TO INSTALLATION.
15. CONTRACTOR SHALL SLEEVE UNDER PAVING PER PLANS AND SPECIFICATIONS.
16. SPLICING OF 24 VOLT WIRES WILL NOT BE PERMITTED EXCEPT IN VALVE BOXES. LEAVE A 24" COIL OF EXCESS WIRE AT EACH SPLICE. LABEL ALL WIRES W/ WATERPROOF MARKERS AT ALL SPLICES AND VALVE MANIFOLDS.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL MATERIAL APPEARING ON PLAN.
18. ALL EXISTING UTILITIES, WATER LINES AND FIRE HYDRANTS SHALL REMAIN CONNECTED AND IN FULL CONTINUOUS OPERATION DURING AND FOLLOWING ALL CONTRACT WORK EXCEPT AS SHOWN ON THIS SHEET.

LICENSED LANDSCAPE ARCHITECT
ANTHONY KEITH NO. 3872
10/31/04
DATE
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=10'-0"

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED TK/CD
DRAWN C. DUFOUR
CHECKED T.KEITH

SUBMITTED BY
C31069 LICENSE NO. 2/16/2004 DATE
C23892 LICENSE NO. 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

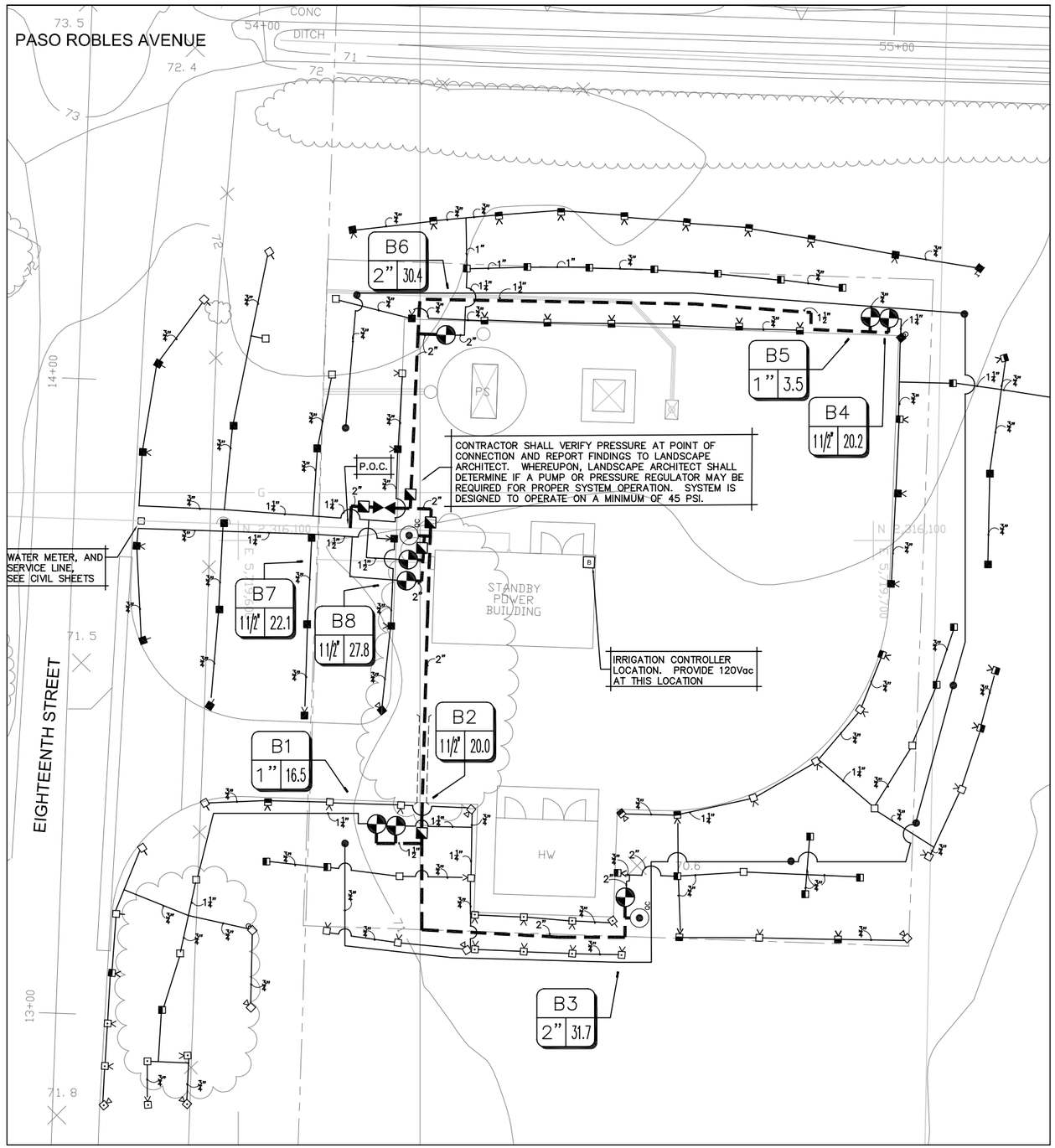
MWH Walnut Creek, California

RRM DESIGN GROUP
Consulting Environmental Planners & Designers
3765 South Higuera Street, Suite 102 • San Luis Obispo, California 93401
Phone 805/543-1794 • Fax 805/543-5809 • email@rrmdesign.com
An Employee Owned Corporation • Offices in San Luis Obispo, Mt. Shasta, Ft. Collins and Denver, Colorado • Serving the West

LOS OSOS WASTEWATER PROJECT
LANDSCAPING
EAST YSABEL PUMP STATION
IRRIGATION PLAN

SHEET A-L-200

N:\2002\10020308 Los Osos WWT\Planning\product\Pump Stations\autocad\100%submittal\irrigation\100203089P_ps.dwg, A-L-200, Feb 06, 2004 4:27pm, DBDufour



IRRIGATION LEGEND

SYMBOL	MANUF.	MODEL NO.	DESCRIPTION	NOZZLE	RAD.	G.P.M.	P.S.I.	REMARKS/ DETAIL
SPRAYS								
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15F	15'	3.7	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15TQ	15'	2.78	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15TT	15'	2.48	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15H	15'	1.85	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15T	15'	1.23	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15Q	15'	.92	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15 VAN	15'	VARIES	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12F	12'	2.6	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12TQ	12'	1.95	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12TT	12'	1.74	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12H	12'	1.3	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12T	12'	.87	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12Q	12'	.65	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12 VAN	12'	VARIES	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	10 F	10'	1.58	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	10 H	10'	.79	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	10T	10'	.53	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	10Q	10'	.39	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	10 VAN	10'	VARIES	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	8F	8'	1.05	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	8H	8'	.52	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	8T	8'	.35	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	8Q	8'	.26	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	8 VAN	8'	VARIES	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15-SST	4'x30'	1.21	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15-EST	4'x15'	0.61	30	SEE DETAIL H, SHEET AD-GL-200
BUBBLERS								
	RAINBIRD	RWS-B-G	TREE ROOT BUBBLER	1402	N/A	0.5	30	SEE DETAIL J, SHEET AD-GL-200
VALVES								
	RAINBIRD	PEB SERIES (INCLUDE PRS DIAL)	PRESSURE REGULATED R.C. VALVE					SEE DETAIL D & E, SHEET AD-GL-200
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BACKFLOW DEVICE								
	FEBCO	825YA	1 1/4" BACKFLOW PREVENTOR					SEE DETAIL A, SHEET AD-GL-200
MAIN LINE/ LATERALS & SLEEVES								
	SEE SPECS	SEE SPECS	SCH. 40 PVC MAIN LINE.					SEE PLAN FOR SIZING. SEE DETAIL G, SHEET AD-GL-200
	SEE SPECS	SEE SPECS	SCH 40 PVC SLEEVE					TWO TIMES THE SIZE THE PIPE DIAMETER, SEE DETAIL G, SHEET AD-GL-200
CONTROLLERS								
B	RAINBIRD	ESP-12-RK-LS	12 STA. WALL MOUNT SATELLITE CONTROLLER					SEE DETAIL K, SHEET AD-GL-200

IRRIGATION NOTES

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5. TRENCH BACKFILL MATERIAL SHALL BE FREE OF ROCKS, GLASS, AND OTHER EXTRANEOUS MATERIALS. BACKFILL WILL BE COMPACTED TO 90% MAXIMUM DRY DENSITY.
6. IRRIGATION DESIGN IS BASED ON A MINIMUM 45 PSI STATIC WATER PRESSURE BEFORE BACKFLOW DEVICE. IF WATER PRESSURE IS LESS, CONTRACTOR IS TO CALL THE LANDSCAPE ARCHITECT BEFORE COMMENCING WITH THE WORK.
7. ALL VALVE CONTROL WIRE SHALL BE AWG 14 TYPE UF, 600 VOLT TEST, DIRECT BURIAL.
8. CONTROLLER POWER WIRE SHALL BE 120 VOLT WIRE AND PLACED IN 3/4" CONDUIT, POWER TO BE FROM ELECTRICAL PANEL. 120 VOLT SERVICE AND HOOK-UP TO THE CONTROLLER SHALL BE COMPLETED BY A LICENSED ELECTRICAL CONTRACTOR. THIS COST IS TO BE A PART OF THE LANDSCAPE CONTRACTOR'S BID.
9. CONNECT ALL DIRECT BURIAL WIRES USING 3M'S "DBY-DIRECT BURIAL SPLICE KIT"
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14. CONTRACTOR SHALL COORDINATE POWER TO CONTROLLERS AND DEDICATE ONE (1) 20 AMP BREAKER FOR EACH CONTROLLER. THE AUTHORIZED REPRESENTATIVE SHALL REVIEW CONTROLLER LOCATIONS PRIOR TO INSTALLATION.
15. CONTRACTOR SHALL SLEEVE UNDER PAVING PER PLANS AND SPECIFICATIONS.
16. SPLICING OF 24 VOLT WIRES WILL NOT BE PERMITTED EXCEPT IN VALVE BOXES. LEAVE A 24" COIL OF EXCESS WIRE AT EACH SPLICE. LABEL ALL WIRES W/ WATERPROOF MARKERS AT ALL SPLICES AND VALVE MANIFOLDS.
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LICENSED LANDSCAPE ARCHITECT
ANTHONY KEITH NO. 3823
10/31/04
Date
STATE OF CALIFORNIA

EAST PASO PUMP STATION & HARVEST WELL

north

SCALE: 1" = 10'

REV	DATE	BY	DESCRIPTION

SCALE 1"=10'-0"

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED TK/CD
DRAWN C. DUFOUR
CHECKED T.KEITH

SUBMITTED BY
C31069 LICENSE NO. 2/16/2004 DATE
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LOS OSOS COMMUNITY SERVICES DISTRICT

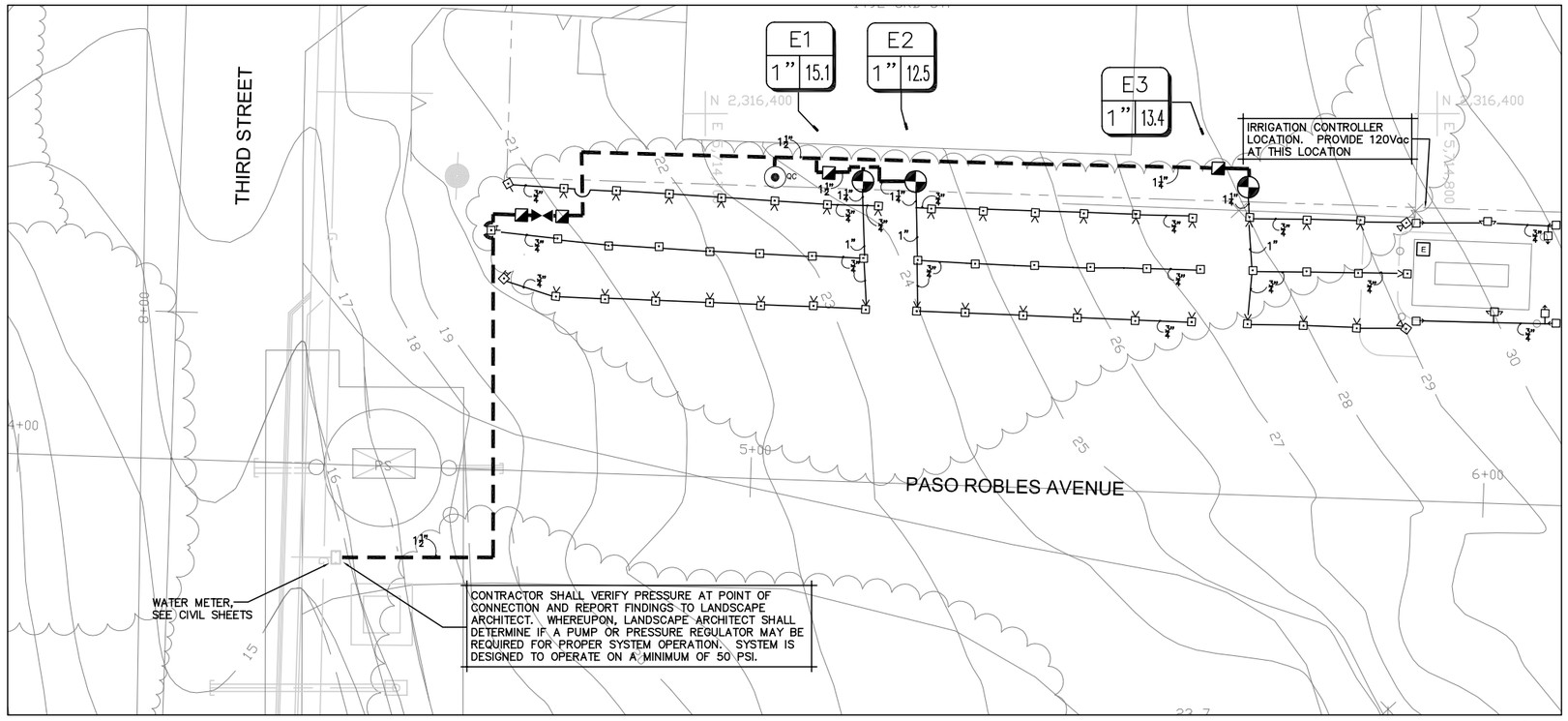
MWH Walnut Creek, California

RRM DESIGN GROUP Creating Environmental Profit Group

LOS OSOS WASTEWATER PROJECT LANDSCAPING
EAST PASO PS & HW SITE IRRIGATION PLAN

SHEET A-L-201

N:\2002\1002008 Los Osos WWTP\Planning\product\Pump Stations\autocad\100%submittal\irrigation\1002008P_ps.dwg, A-L-201, Feb 06, 2004 4:26pm, CBDufour



north

SCALE: 1" = 10'

WEST PASO PUMP STATION

IRRIGATION NOTES

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3. ALL EQUIPMENT REQUIRED BUT NOT SPECIFIED ON THE DRAWING, TO COMPLETE THE WORK, SHALL BE PROVIDED BY THE IRRIGATION CONTRACTOR.
4. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND/OR SPECIFICATIONS.
5. TRENCH BACKFILL MATERIAL SHALL BE FREE OF ROCKS, GLASS, AND OTHER EXTRANEOUS MATERIALS. BACKFILL WILL BE COMPACTED TO 90% MAXIMUM DRY DENSITY.
6. IRRIGATION DESIGN IS BASED ON A MINIMUM 50 PSI STATIC WATER PRESSURE BEFORE BACKFLOW DEVICE. IF WATER PRESSURE IS LESS, CONTRACTOR IS TO CALL THE LANDSCAPE ARCHITECT BEFORE COMMENCING WITH THE WORK.
7. ALL VALVE CONTROL WIRE SHALL BE AWG 14 TYPE UF, 600 VOLT TEST, DIRECT BURIAL.
8. CONTROLLER POWER WIRE SHALL BE 120 VOLT WIRE AND PLACED IN 3/4" CONDUIT. POWER TO BE FROM ELECTRICAL PANEL. 120 VOLT SERVICE AND HOOK-UP TO THE CONTROLLER SHALL BE COMPLETED BY A LICENSED ELECTRICAL CONTRACTOR. THIS COST IS TO BE A PART OF THE LANDSCAPE CONTRACTOR'S BID.
9. CONNECT ALL DIRECT BURIAL WIRES USING 3M'S "DBY-DIRECT BURIAL SPLICE KIT"
10. CONTRACTOR SHALL PULL THREE (3) EXTRA WIRES AT EACH BANK OF REMOTE CONTROL VALVES OR MANIFOLD .
11. CONTRACTOR SHALL PROVIDE #10 COMMON WIRE TO ALL REMOTE CONTROL VALVES.
12. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS AND SITE CONDITIONS PRIOR TO BEGINNING WORK. SHOULD CONFLICTING INFORMATION BE FOUND ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH THE WORK IN QUESTION.
13. DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY AT NO EXPENSE TO THE OWNER.
14. CONTRACTOR SHALL COORDINATE POWER TO CONTROLLERS AND DEDICATE ONE (1) 20 AMP BREAKER FOR EACH CONTROLLER. THE AUTHORIZED REPRESENTATIVE SHALL REVIEW CONTROLLER LOCATIONS PRIOR TO INSTALLATION.
15. CONTRACTOR SHALL SLEEVE UNDER PAVING PER PLANS AND SPECIFICATIONS.
16. SPLICING OF 24 VOLT WIRES WILL NOT BE PERMITTED EXCEPT IN VALVE BOXES. LEAVE A 24" COIL OF EXCESS WIRE AT EACH SPLICE. LABEL ALL WIRES W/ WATERPROOF MARKERS AT ALL SPLICES AND VALVE MANIFOLDS.
17. CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL MATERIAL APPEARING ON PLAN.
18. ALL EXISTING UTILITIES, WATER LINES AND FIRE HYDRANTS SHALL REMAIN CONNECTED AND IN FULL CONTINUOUS OPERATION DURING AND FOLLOWING ALL CONTRACT WORK EXCEPT AS SHOWN ON THIS SHEET.

IRRIGATION LEGEND

SYMBOL	MANUF.	MODEL NO.	DESCRIPTION	NOZZLE	RAD.	G.P.M.	P.S.I.	REMARKS/ DETAIL
SPRAYS								
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15F	15'	3.7	30	SEE DETAIL H, SHEET AD-GL-200
15	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15TQ	15'	2.78	30	SEE DETAIL H, SHEET AD-GL-200
TT	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15TT	15'	2.48	30	SEE DETAIL H, SHEET AD-GL-200
H	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15H	15'	1.85	30	SEE DETAIL H, SHEET AD-GL-200
T	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15T	15'	1.23	30	SEE DETAIL H, SHEET AD-GL-200
Q	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15Q	15'	.92	30	SEE DETAIL H, SHEET AD-GL-200
–	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15 VAN	15'	VARIES	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12F	12'	2.6	30	SEE DETAIL H, SHEET AD-GL-200
15	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12TQ	12'	1.95	30	SEE DETAIL H, SHEET AD-GL-200
TT	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12TT	12'	1.74	30	SEE DETAIL H, SHEET AD-GL-200
H	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12H	12'	1.3	30	SEE DETAIL H, SHEET AD-GL-200
T	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12T	12'	.87	30	SEE DETAIL H, SHEET AD-GL-200
Q	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12Q	12'	.65	30	SEE DETAIL H, SHEET AD-GL-200
–	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	12 VAN	12'	VARIES	30	SEE DETAIL H, SHEET AD-GL-200
F	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	10 F	10'	1.58	30	SEE DETAIL H, SHEET AD-GL-200
H	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	10 H	10'	.79	30	SEE DETAIL H, SHEET AD-GL-200
T	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	10T	10'	.53	30	SEE DETAIL H, SHEET AD-GL-200
Q	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	10Q	10'	.39	30	SEE DETAIL H, SHEET AD-GL-200
–	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	10 VAN	10'	VARIES	30	SEE DETAIL H, SHEET AD-GL-200

IRRIGATION LEGEND

SYMBOL	MANUF.	MODEL NO.	DESCRIPTION	NOZZLE	RAD.	G.P.M.	P.S.I.	REMARKS/ DETAIL
SPRAYS								
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	8F	8'	1.05	30	SEE DETAIL H, SHEET AD-GL-200
H	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	8H	8'	.52	30	SEE DETAIL H, SHEET AD-GL-200
T	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	8T	8'	.35	30	SEE DETAIL H, SHEET AD-GL-200
Q	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	8Q	8'	.26	30	SEE DETAIL H, SHEET AD-GL-200
–	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	8 VAN	8'	VARIES	30	SEE DETAIL H, SHEET AD-GL-200
4'	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15-SST	4'x30'	1.21	30	SEE DETAIL H, SHEET AD-GL-200
	RAINBIRD	1806-SAM	6" POP-UP SPRAY HEAD	15-EST	4'x15'	0.61	30	SEE DETAIL H, SHEET AD-GL-200
BUBBLERS								
	RAINBIRD	RWS-B-G	TREE ROOT BUBBLER	1402	N/A	0.5	30	SEE DETAIL J, SHEET AD-GL-200
VALVES								
	RAINBIRD	PEB SERIES (INCLUDE PRS DIAL)	PRESSURE REGULATED R.C. VALVE					SEE DETAIL D & E, SHEET AD-GL-200
QC	RAINBIRD	44 LRC	1" QUICK COUPLING VALVE					SEE DETAIL B, SHEET AD-GL-200
	KBI	BTU SERIES	TRUE UNION BALL VALVE					SEE DETAIL C, SHEET AD-GL-200
BACKFLOW DEVICE								
	FEBCO	825YA	1" BACKFLOW PREVENTOR					SEE DETAIL A, SHEET AD-GL-200
MAIN LINE/ LATERALS & SLEEVES								
	SEE SPECS	SEE SPECS	SCH. 40 PVC MAIN LINE.					SEE PLAN FOR SIZING. SEE DETAIL G, SHEET AD-GL-200
	SEE SPECS	SEE SPECS	SCH 40 PVC SLEEVE					TWO TIMES THE SIZE THE PIPE DIAMETER, SEE DETAIL G, SHEET AD-GL-200
CONTROLLERS								
E	RAINBIRD	ESP-12-RK-LS	12 STA, PED. MOUNT SATELLITE CONTROLLER					SEE DETAIL A, SHEET A-GL-201

LICENSED LANDSCAPE ARCHITECT
ANTHONY KEITH NO. 3823
10/31/04
Date
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE 1"=10'-0"

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED TK/CD
DRAWN C. DUFOUR
CHECKED T.KEITH

SUBMITTED BY
C31069 2/16/2004 LICENSE NO. DATE
C23892 2/16/2004 LICENSE NO. DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP Creating Environmental Profit Group 3765 South Higuera Street, Suite 102 • San Luis Obispo, California 93401 Phone: 805/542-9740 • Fax: 805/546-0286 • www.rrmdesign.com

LOS OSOS WASTEWATER PROJECT
LANDSCAPING
WEST PASO PUMP STATION
IRRIGATION PLAN

SHEET A-L-202

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PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	REMARKS
TREES					
	QUERCUS AGRIFOLIA	QUERCUS AGRIFOLIA	24" BOX	8	SEE DETAIL A, SHEET AD-GL-202
SHRUBS					
	CEANOTHUS CUNEATUS	BUCKBRUSH	5 GAL.	28	SEE DETAIL B, SHEET AD-GL-202
	HETEROMELES ARBUTIFOLIA	TOYON	15 GAL.	7	SEE DETAIL B, SHEET AD-GL-202
	MIMULUS AURANTIACUS	STICKY MONKEY FLOWER	1 GAL.	7	SEE DETAIL B, SHEET AD-GL-202
	RHAMNUS CALIFORNICA	CALIFORNIA COFFEEBERRY	15 GAL.	16	SEE DETAIL B, SHEET AD-GL-202
	RHAMNUS CROCEA	REDBERRY	15 GAL.	16	SEE DETAIL B, SHEET AD-GL-202
	RIBES SPECIOSUM	FUSCHIA-FLOWERED GOOSEBERRY	5 GAL.	75	SEE DETAIL B, SHEET AD-GL-202
	ROSA CALIFORNICA	CALIFORNIA WILD ROSE	1 GAL.	113	SEE DETAIL B, SHEET AD-GL-202
	SALVIA MELLIFERA	BLACK SAGE	1 GAL.	20	SEE DETAIL B, SHEET AD-GL-202
	SALVIA LEUCOPHYLLA	PURPLE SAGE	1 GAL.	27	SEE DETAIL B, SHEET AD-GL-202
GROUND COVER					
	ARTEMESIA CALIFORNICA 'CANYON GREY'	TRAILING SAGEBRUSH	1 GAL.	47	4' O.C., SEE DETAIL C, SHEET AD-GL-202
	BACCHARIS PILULARIS 'PIGEON POINT'	DWARF COYOTE BUSH	1 GAL.	25	6' O.C., SEE DETAIL C, SHEET AD-GL-202
	SALVIA MELLIFERA 'REPENS'	CREEPING BLACK SAGE	1 GAL.	64	6' O.C., SEE DETAIL C, SHEET AD-GL-202

PLANTING NOTES

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2. PLANT LOCATIONS SHOWN ON THE PLANS ARE DIAGRAMATIC. CONTRACTOR SHALL LOCATE ALL PLANT MATERIAL UNDER THE DIRECTION OF THE CITY ENGINEER OR AUTHORIZED REPRESENTATIVE PRIOR TO PLANTING HOLE EXCAVATION.
3. THE CITY ENGINEER OR AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO MAKE SUBSTITUTIONS, ADDITIONS, AND DELETIONS TO THE PLANTING LAYOUT AS WORK PROGRESSES.
4. ALL GROUNDCOVER SHALL BE TRIANGULARLY SPACED UNLESS OTHERWISE NOTED.
5. CONTRACTOR SHALL INSTALL A 3" LAYER OF 'STRINGY CEDAR BARK' MULCH IN ALL PLANTING AREAS A MIN. 12" BEYOND EXTENT OF ALL PLANTS

north

SCALE: 1" = 10'

LICENSED LANDSCAPE ARCHITECT
ANTHONY KEITH NO. 3823
10/31/04
Date
STATE OF CALIFORNIA

EAST YSABEL PUMP STATION

REV	DATE	BY	DESCRIPTION

SCALE 1"=10'-0"

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED TK/BMO
DRAWN B.OSBORN
CHECKED T.KEITH

SUBMITTED BY
C31069 LICENSE NO. 2/16/2004 DATE
C23892 LICENSE NO. 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

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3765 South Higuera Street, Suite 102 San Luis Obispo, California 93401
Phone: 805/543-1794 • Fax: 805/543-3235 • www.rrmdesigngroup.com
In partnership, working as one with Lenn Waite, Inc. Waite, Inc. & Lenn Waite, Inc. Waite, Inc.

LOS OSOS WASTEWATER PROJECT
LANDSCAPING
EAST YSABEL PUMP STATION
PLANTING PLAN

SHEET A-L-203

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PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	REMARKS
TREES					
	QUERCUS AGRIFOLIA	QUERCUS AGRIFOLIA	24" BOX	7	SEE DETAIL A, SHEET AD-GL-202
SHRUBS					
	ARTEMESIA CALIFORNICA	CALIFORNIA SAGEBRUSH	1 GAL.	11	SEE DETAIL B, SHEET AD-GL-202
	CEANOTHUS CUNEATUS	BUCKBRUSH	5 GAL.	31	SEE DETAIL B, SHEET AD-GL-202
	HETEROMELES ARBUTIFOLIA	TOYON	15 GAL.	16	SEE DETAIL B, SHEET AD-GL-202
	LUPINUS CHAMISSONIS	COASTAL SILVER LUPINE	1 GAL.	5	SEE DETAIL B, SHEET AD-GL-202
	MIMULUS AURANTIACUS	STICKY MONKEY FLOWER	1 GAL.	6	SEE DETAIL B, SHEET AD-GL-202
	PRUNUS ILICIFOLIA	HOLLY LEAFED CHERRY	15 GAL.	3	SEE DETAIL B, SHEET AD-GL-202
	RHAMNUS CALIFORNICA	CALIFORNIA COFFEEBERRY	15 GAL.	11	SEE DETAIL B, SHEET AD-GL-202
	RHAMNUS CROCEA	REDBERRY	15 GAL.	17	SEE DETAIL B, SHEET AD-GL-202
	RIBES SPECIOSUM	FUSCHIA-FLOWERED GOOSEBERRY	5 GAL.	51	SEE DETAIL B, SHEET AD-GL-202
	SALVIA MELLIFERA	BLACK SAGE	1 GAL.	9	SEE DETAIL B, SHEET AD-GL-202
GROUND COVER					
	BACCHARIS PILULARIS 'PIGEON POINT'	DWARF COYOTE BUSH	1 GAL.	34	6' O.C., SEE DETAIL C, SHEET AD-GL-202
	ERIGONIUM PARVIFOLIUM	CLIFF BUCKWHEAT	1 GAL.	449	24" O.C., SEE DETAIL C, SHEET AD-GL-202

PLANTING NOTES

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3. THE CITY ENGINEER OR AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO MAKE SUBSTITUTIONS, ADDITIONS, AND DELETIONS TO THE PLANTING LAYOUT AS WORK PROGRESSES.
4. ALL GROUNDCOVER SHALL BE TRIANGULARLY SPACED UNLESS OTHERWISE NOTED.
5. CONTRACTOR SHALL INSTALL A 3" LAYER OF 'STRINGY CEDAR BARK' MULCH IN ALL PLANTING AREAS A MIN. 12" BEYOND EXTENT OF ALL PLANTS

EAST PASO PUMP STATION & HARVEST WELL

north

SCALE: 1" = 10'

LICENSED LANDSCAPE ARCHITECT
ANTHONY KEITH NO. 3673
10/31/04
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE 1"=10'-0"

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED TK/BMO
DRAWN B.OSBORN
CHECKED T.KEITH

SUBMITTED BY
C31069 LICENSE NO. 2/16/2004 DATE
Steven J. Hyland C23892 LICENSE NO. 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

RRM DESIGN GROUP Creating Environments People Enjoy

LOS OSOS WASTEWATER PROJECT LANDSCAPING
EAST PASO PS & HW SITE PLANTING PLAN

SHEET A-L-204

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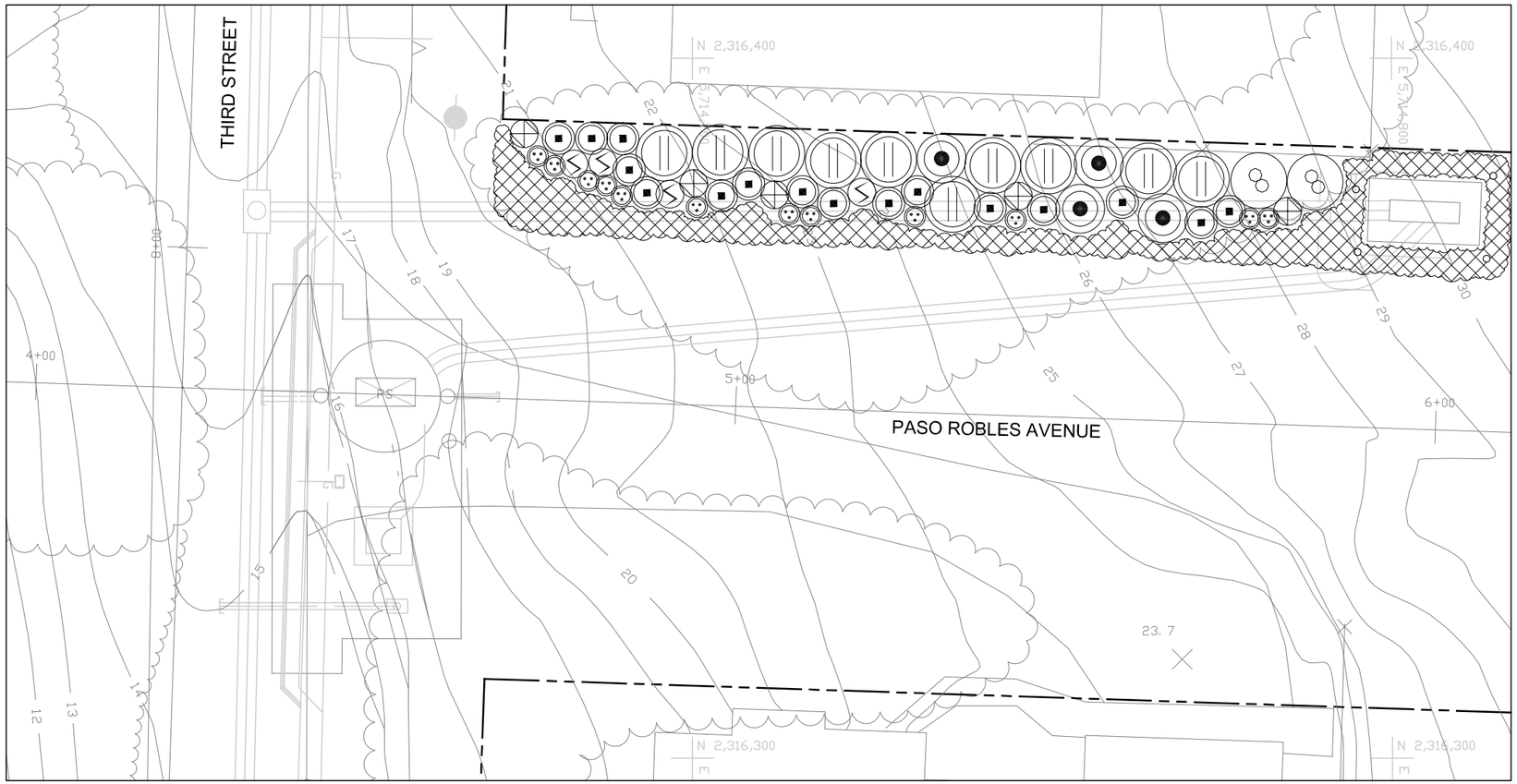

WEST PASO PUMP STATION

SCALE: 1" = 10'

PLANT LEGEND

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	REMARKS
SHRUBS					
	CEANOTHUS CUNEATUS	BUCKBRUSH	5 GAL.	10	SEE DETAIL B, SHEET AD-GL-202
	LUPINUS CHAMISSONIS	COASTAL SILVER LUPINE	1 GAL.	4	SEE DETAIL B, SHEET AD-GL-202
	MIMULUS AURANTIACUS	STICKY MONKEY FLOWER	1 GAL.	5	SEE DETAIL B, SHEET A-GL-202
	PENSTEMON SPECTIBILIS	SHOWY PENSTEMON	1 GAL.	12	SEE DETAIL B, SHEET AD-GL-202
	RHAMNUS CALIFORNICA	CALIFORNIA COFFEEBERRY	15 GAL.	2	SEE DETAIL B, SHEET AD-GL-202
	RHAMNUS CROCEA	REDBERRY	15 GAL.	4	SEE DETAIL B, SHEET AD-GL-202
	SALVIA MELLIFERA	BLACK SAGE	1 GAL.	16	SEE DETAIL B, SHEET AD-GL-202
GROUND COVER					
	ERIGONIUM PARVIFOLIUM	CLIFF BUCKWHEAT	1 GAL.	224	24" O.C., SEE DETAIL C, SHEET AD-GL-202

PLANTING NOTES

1. PLANT LIST IS FOR CONVENIENCE OF CONTRACTOR ONLY. IN CASE OF DISCREPANCIES BETWEEN THE PLANS AND THE LIST, PLANS SHALL PREVAIL.
2. PLANT LOCATIONS SHOWN ON THE PLANS ARE DIAGRAMATIC. CONTRACTOR SHALL LOCATE ALL PLANT MATERIAL UNDER THE DIRECTION OF THE CITY ENGINEER OR AUTHORIZED REPRESENTATIVE PRIOR TO PLANTING HOLE EXCAVATION.
3. THE CITY ENGINEER OR AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO MAKE SUBSTITUTIONS, ADDITIONS, AND DELETIONS TO THE PLANTING LAYOUT AS WORK PROGRESSES.
4. ALL GROUNDCOVER SHALL BE TRIANGULARLY SPACED UNLESS OTHERWISE NOTED.
5. CONTRACTOR SHALL INSTALL A 3" LAYER OF 'STRINGY CEDAR BARK' MULCH IN ALL PLANTING AREAS A MIN. 12" BEYOND EXTENT OF ALL PLANTS

LICENSED LANDSCAPE ARCHITECT
ANTHONY KEITH NO. 3873
10/31/04
2-6-04
Date
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 1"=10'-0"

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED TK/BMO
DRAWN B.OSBORN
CHECKED T.KEITH

SUBMITTED BY
C31069 LICENSE NO. 2/16/2004 DATE
C23892 LICENSE NO. 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

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LOS OSOS WASTEWATER PROJECT LANDSCAPING
WEST PASO PUMP STATION PLANTING PLAN

SHEET A-L-205

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GENERAL NOTES

GENERAL

THESE NOTES ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE SPECIFICALLY INDICATED OTHERWISE.

STRUCTURAL DIMENSIONS CONTROLLED BY OR RELATED TO MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE COORDINATED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. BOLT SIZES, TYPES, AND PATTERNS SHALL BE VERIFIED WITH THE MANUFACTURER. ALL BOLT PATTERNS SHALL BE TEMPLATED TO INSURE ACCURACY OF PLACEMENT.

MECHANICAL AND ELECTRICAL EQUIPMENT SUPPORTS, ANCHORAGES, OPENINGS, RECESSES AND REVEALS NOT SHOWN ON THE STRUCTURAL DRAWINGS BUT REQUIRED BY OTHER CONTRACT DRAWINGS, SHALL BE PROVIDED FOR PRIOR TO PLACING CONCRETE.

STRUCTURAL DRAWINGS SHALL BE USED IN COORDINATION WITH MECHANICAL, ELECTRICAL, ARCHITECTURAL, CIVIL DRAWINGS AND SHOP DRAWINGS PROVIDED BY MANUFACTURES OF EQUIPMENT.

STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON THE COMPLETED STRUCTURES. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED BY BRACING AND BALANCING WHEREVER EXCESSIVE CONSTRUCTION LOADS MAY OCCUR. OVERSTRESSING OF ANY STRUCTURAL ELEMENT IS PROHIBITED.

UNLESS OTHERWISE SHOWN, ON ALL STRUCTURAL DRAWINGS THE FINISH GRADE AROUND STRUCTURES IS SHOWN THUS ////, INDICATING EITHER GROUND SURFACE, TOP OF CONCRETE SLAB OR AC PAVEMENT. FOR DETAILS OF FINISH SURFACES SEE CIVIL AND ARCHITECTURAL DRAWINGS.

STRUCTURAL

DESIGN IN ACCORDANCE WITH THE 2001 EDITION OF THE UNIFORM BUILDING CODE, EXCEPT WHERE OTHER APPLICABLE CODES OR THE FOLLOWING NOTES ARE MORE RESTRICTIVE.

LOADINGS:

- FOUNDATION --- 2000+1/3rd INCREASE FOR WIND AND SEISMIC
- ROOF ---------- 35 PSF
- WIND ---------- 80 MPH, EXPC
- SEISMIC -------- ZONE= 4, Na= 1.3, Nv= 1.6, Ca= 0.44Na, Cv= 0.64Nv, SOILTYPE= Sd

LOCATION OF ALL CONSTRUCTION JOINTS SHALL BE AS SHOWN ON THE DRAWINGS OR APPROVED BY THE ENGINEER. ALL CONSTRUCTION JOINTS LOCATED ON THE DRAWINGS OR REQUIRED FOR CONSTRUCTION, BUT NOT SHOWN ON THE DRAWINGS, SHALL HAVE A 6" FLATSTRIP WATERSTOP, IF IN MEMBERS IN CONTACT WITH WATER. IN ADDITION, JOINTS IN ALL SLABS COVERED WITH WATER, SHALL HAVE BOTH A 6" FLATSTRIP WATERSTOP AND A SEALANT GROOVE.

STRUCTURAL STEEL

STEEL CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS AND STANDARDS AS CONTAINED IN THE LATEST EDITION OF THE AISC STEEL CONSTRUCTION MANUAL.

ALL STRUCTURAL SHAPES, BARS, PLATES AND SHEETS SHALL BE OF STEEL MEETING ASTM A-36 SPECIFICATIONS.

ALL WELDING SHALL BE BY THE SHIELDED ARC METHOD AND SHALL CONFORM TO AWS CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION. QUALIFICATIONS OF WELDERS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS FOR STANDARD QUALIFICATION PROCEDURE OF THE AWS.

CONCRETE (EXCEPT PRECAST CONCRETE)

UNLESS OTHERWISE NOTED OR SPECIFIED, ALL STRUCTURAL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI IN 28 DAYS.

REINFORCEMENT STEEL SHALL BE DEFORMED BARS CONFORMING IN QUALITY TO THE REQUIREMENTS OF ASTM A-615, "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", GRADE 60

COLUMN SPIRALS SHALL CONFORM TO ASTM A-82, "SPECIFICATION FOR COLD-DRAWN STEEL WIRE FOR CONCRETE REINFORCEMENT".

ALL DETAILING, FABRICATION AND PLACING OF REINFORCING BARS, UNLESS OTHERWISE INDICATED, SHALL BE IN ACCORDANCE WITH ACI-315, "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", LATEST EDITION.

TOLERANCES IN PLACING REINFORCEMENT SHALL BE:

- $\pm$ 3/8 INCH FOR MEMBERS WITH D </= 8 INCHES
- $\pm$ 1/2 INCH FOR MEMBERS WITH D > 8 INCHES

ALL CONSTRUCTION JOINTS, SHALL BE ROUGH AND THOROUGHLY CLEANED FOR BOND.

DOWELS, PIPE, WATERSTOPS AND OTHER INSTALLED MATERIALS AND ACCESSORIES SHALL BE HELD SECURELY IN POSITION WHILE CONCRETE IS BEING PLACED.

UNLESS OTHERWISE INDICATED, ASIDE FROM NORMAL ACCESSORIES USED TO HOLD REINFORCING BARS FIRMLY IN POSITION, THE FOLLOWING SHALL BE ADDED:

A) IN SLABS #5 RISER BARS AT 36 INCHES OC MAXIMUM TO SUPPORT TOP REINFORCING BARS.

B) IN WALLS WITH 2 CURTAINS #3 U OR Z SHAPE SPACERS AT 6 FEET OC EACH WAY.

VERTICAL REINFORCEMENT FOR CONCRETE OR MASONRY SHALL BE SPLICED WITH DOWEL BARS OF THE SAME SIZE AND SPACING FROM THE FOUNDATION USING A STANDARD SPLICE LENGTH UNLESS INDICATED OTHERWISE.

SEALANT SHALL BE PLACED AT THE TOP OF ALL JOINTS RECEIVING EXPANSION JOINT FILLER. SEALANT DEPTH SHALL BE THE JOINT FILL THICKNESS OR 59/64", WHICHEVER IS LESS.

ALL GROUT SHALL BE NON-SHRINK GROUT, UNLESS INDICATED OTHERWISE.

METAL CLIPS OR SUPPORTS SHALL NOT BE PLACED IN CONTACT WITH THE FORMS OR THE SUBGRADE. CONCRETE BLOCKS (OR DOBIES) SUPPORTING BARS ON SUBGRADE SHALL BE IN SUFFICIENT NUMBERS TO SUPPORT THE BARS WITHOUT SETTLEMENT, BUT IN NO CASE SHALL SUCH SUPPORT BE CONTINUOUS.

DOWELS SHALL BE WIRED OR OTHERWISE HELD IN POSITION. THEY SHALL NOT BE SHOVED INTO FRESHLY PLACED CONCRETE.

UNLESS OTHERWISE INDICATED ON THE DRAWINGS, LAPS OF REINFORCEMENT SHALL BE AS SHOWN ON DETAIL S-143.

LOCATE TWO 3/4 INCH GALVANIZED RICHMOND ROCKET INSERTS, HOHMANN & BARNARD OR EQUAL, STRADDLING CENTERLINE OF EQUIPMENT OVER ALL PUMPS, METERS OR OTHER MECHANICAL UNITS OF MORE THAN 100 LBS,FOR INSERTING LIFTING EYES IF NOT OTHERWISE INDICATED.

REINFORCING BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH AND PIPE, PIPE FLANGE OR METAL PARTS EMBEDDED IN CONCRETE, A MINIMUM OF 2 INCHES CLEARANCE SHALL BE PROVIDED AT ALL TIMES.

ALL ITEMS EMBEDDED IN CONCRETE SHALL BE SPACED ON CENTER AT LEAST 4 TIMES THEIR OUTSIDE DIMENSION. THE OUTSIDE DIMENSION SHALL NOT EXCEED ONE THIRD OF THE MEMBER THICKNESS

UNLESS OTHERWISE SHOWN ON THE DRAWINGS CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS:

- FOR CONCRETE PLACED AGAINST EARTH ---------------- 3"
- FOR SURFACES IN CONTACT WITH WATER OR WEATHER AND FORMED SURFACES IN CONTACT WITH EARTH -------- 2"
- FOR CONCRETE NOT EXPOSED TO WEATHER, OR IN CONTACT WITH WATER OR EARTH ---------------- 1 1/2"

UNLESS OTHERWISE NOTED, WALLS AND SLABS SHOWN WITH A SINGLE LAYER OF REINFORCEMENT SHALL HAVE THAT REINFORCEMENT CENTERED

SLABS WITH SLOPING SURFACES SHALL HAVE THE INDICATED SLAB THICKNESS MAINTAINED AS THE MINIMUM. SLAB BOTTOMS MAY EITHER SLOPE WITH THE TOP SURFACE OR BE LEVEL. REINFORCING IN SLABS WITH SLOPING SURFACES SHALL BE PLACED AT THE REQUIRED CLEARANCE FROM THE SLAB SURFACES.

TESTING HYDRAULIC STRUCTURES

WHEN FILLING THE STRUCTURES WITH WATER FOR THE TEST REQUIRED IN THE SPECIFICATIONS, ALL VARIOUS BASINS LOCATED IN THE SAME STRUCTURE SHALL BE FILLED SIMULTANEOUSLY AT THE SAME RATE IN ORDER TO KEEP THE SAME LEVEL IN EACH BASIN.

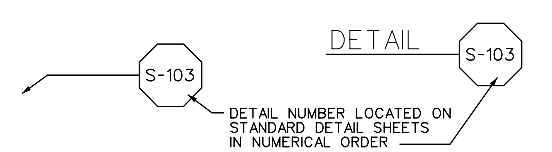
STRUCTURAL STANDARD DETAILS

DETAILS ON SHEETS NUMBERED GS-* ARE PART OF MONTGOMERY WATSON'S STRUCTURAL STANDARD DETAILS.

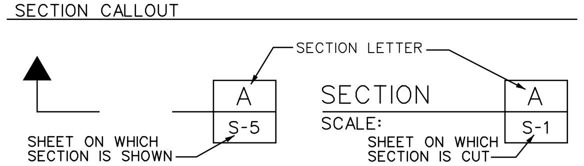
THESE DETAILS ARE TO BE USED WHEN REFERRED TO OR WHEN NO OTHER MORE RESTRICTIVE OR DIFFERENT DETAILS ARE SHOWN ON THE DRAWINGS.

DETAILS NOT PERTAINING TO THE PROJECT ARE MARKED THUS

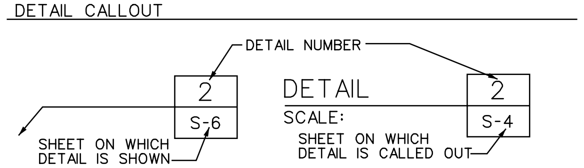
STRUCTURAL STANDARD DETAIL CALLOUT



SECTION CALLOUT



DETAIL CALLOUT



MASONRY

CONCRETE BLOCK MASONRY SHALL BE MEDIUM, HOLLOW UNITS CONFORMING TO ASTM C 90. TYPE 1 SIZE OF UNITS, COLOR AND TEXTURE SHALL BE PER THE SPECIFICATIONS.

GROUT ALL CELLS OF CONCRETE BLOCK MASONRY UNLESS OTHERWISE NOTED ON DRAWINGS.

BAR LAPS SHALL BE 48 BAR DIAMETERS UNLESS OTHERWISE NOTED.

MORTAR SHALL BE IN ACCORDANCE WITH TABLE 21-A OF UBC TYPE S, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 1800 PSI.

GROUT SHALL BE IN ACCORDANCE WITH PARAGRAPH 2103(S) OF THE UBC AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.

UNLESS OTHERWISE SPECIFIED, SPECIAL INSPECTION SHALL BE PROVIDED FOR ALL MASONRY WORK.

THE COMBINED MASONRY ASSEMBLAGE COMPRESSIVE STRENGTH AT 28 DAYS SHALL BE A MINIMUM OF f'm = 1500 PSI.

REINFORCEMENT SHALL BE TIED OR OTHERWISE SECURED IN POSITION PRIOR TO GROUTING.

ALL HORIZONTAL AND VERTICAL REINFORCEMENT SHALL BE CONTINUOUS OVER THE FULL EXTENT OF THE WALL WITH STANDARD SPLICES LOCATED AS NEEDED. WHERE IT IS NECESSARY TO INTERRUPT AN INDIVIDUAL BAR, AN EQUAL SIZED BAR SHALL BE LOCATED AS CLOSE AS POSSIBLE AND SHALL EXTEND A MINIMUM OF ONE SPLICE LENGTH BEYOND EACH SIDE OF THE INTERRUPTION.

ROOFS

THE CONTRACTOR SHALL COORDINATE THE LOCATION AND SIZES OF ROOF OPENINGS WITH THE MECHANICAL, HVAC AND ARCHITECTURAL DRAWINGS. STANDARD DETAIL S-606 AND S-607 SHALL BE USED AT ALL OPENINGS. ROOF BEAMS AND GIRDERS SHALL NOT BE RELOCATED WITHOUT APPROVAL BY THE ENGINEER.

UNLESS INDICATED OTHERWISE, SEE THE DRAWINGS FOR THE NAILING REQUIREMENTS FOR PLYWOOD DECKING.

SPECIAL INSPECTION

THE FOLLOWING REQUIRE SPECIAL INSPECTION:

- CONCRETE AND REINFORCING PLACEMENT
- SHOP WELDING (IF NOT DONE IN A UBC 306f APPROVED SHOP)
- FIELD WELDING
- WELDING OF REBAR SPLICES
- WELDING OF METAL DECK
- WELDING OF METAL STUD AND JOIST FRAMING
- HIGH STRENGTH BOLTED CONNECTIONS
- MASONRY CONSTRUCTION
- INSTALLATION OF ADHESIVE ANCHORS

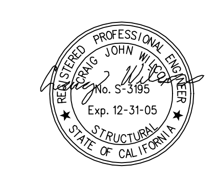
PRECAST CONCRETE

THE SUPPLIER OF THE PRECAST SHALL DESIGN AND PROVIDE DRAWINGS AND CALCULATIONS STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA AND SUBMITTED TO THE ENGINEER FOR REVIEW. THE DESIGN SHALL BE PER THE SPECIFICATIONS

THE SUPPLIER SHALL COORDINATE WITH THE CONTRACTOR FOR THE SIZE AND LOCATION OF ALL ROOF PENETRATIONS PRIOR TO FABRICATION.

SUGGESTED CAISSON CONSTRUCTION SEQUENCE

1. PLACE THE PRECAST CONCRETE CAISSON.
2. EXCAVATE THE IN-SITU SOILS FROM THE CENTER OF LIFT STATION IN A CAREFUL CONTROLLED MANNER TO ALLOW UNIFORM VERTICAL DISPLACEMENT OF THE NEW LIFT STATION TO THE DESIRED ELEVATION.
3. CLEANOUT THE KEYS AND BASE OF THE EXCAVATION AND PLACE THE SEAL SLAB REINFORCING STEEL IN THE EXCAVATION.
4. TREMIE PUMP THE 4000 PSI SEAL SLAB MIX CONCRETE INTO PLACE.
5. MAINTAIN THE FULL WET CONDITION WITHIN THE LIFT STATION UNTIL THE SEAL SLAB ACHIEVES 4000 PSI.
6. UPON ACHIEVING 4000 PSI CYLINDER BREAK RESULTS FOR THE SEAL SLAB PUMP OUT WATER FROM THE LIFT STATION. CLEAN OUT KEYS AND THREADED INSERTS AND PLACE BOTTOM SLAB REINFORCING STEEL AND CONCRETE.
7. CLEAN OUT KEYS AND THREADED INSERTS AND PLACE BOTTOM SLAB REINFORCING STEEL AND CONCRETE.
8. INSTALL TOP AND ROOF REINFORCING STEEL AND CAST-IN-PLACE CONCRETE.
9. COMPLETE CONSTRUCTION.



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REV	DATE	BY	DESCRIPTION

SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED MWH
DRAWN MWH
CHECKED C.WILCOX

SUBMITTED BY

JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE

STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 — AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

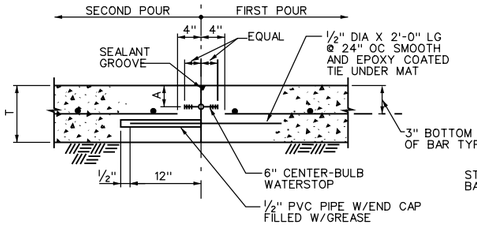
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

STRUCTURAL GENERAL NOTES

SHEET AD-GS-200

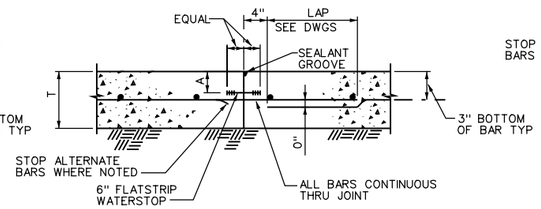


SINGLE MAT REINF - SLEEVE - TYPE JOINT

(TYP CONSTRUCTION JOINT UNLESS OTHERWISE NOTED)

WITH WATERSTOP AND SEALANT GROOVE — S-110

NO WATERSTOP OR SEALANT GROOVE — S-111

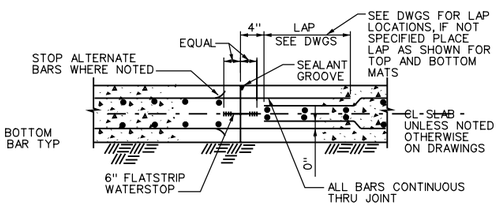


SINGLE MAT REINF - CONTINUOUS THRU JOINT

(ONLY WHEN SPECIFIED ON DRAWINGS)

WITH WATERSTOP AND SEALANT GROOVE — S-112

NO WATERSTOP OR SEALANT GROOVE — S-113



DOUBLE MAT REINF

WITH WATERSTOP AND SEALANT GROOVE — S-114

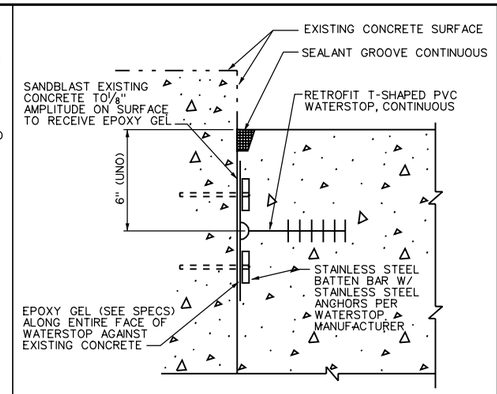
NO WATERSTOP OR SEALANT GROOVE — S-115

T	A
6"	2"
7"	2½"
8"	2½"

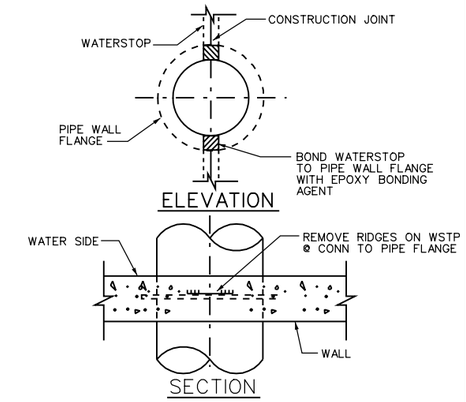
NOTES:

1. IN ALL CONSTRUCTION JOINTS WITH WATERSTOPS, APPLY 2 COATS OF BOND BREAKER TO FACE OF JOINT, AVOID COATING WATERSTOP (AND SEALANT GROOVE WHERE USED).
2. WATERSTOPS AND SEALANT GROOVES TO BE PROVIDED IN ALL WATER RETAINING SLABS, SEE DRAWINGS, FOR OTHER LOCATIONS WHERE THEY MAY BE REQUIRED.
3. STAGGER SPLICES UNLESS NOTED OTHERWISE.

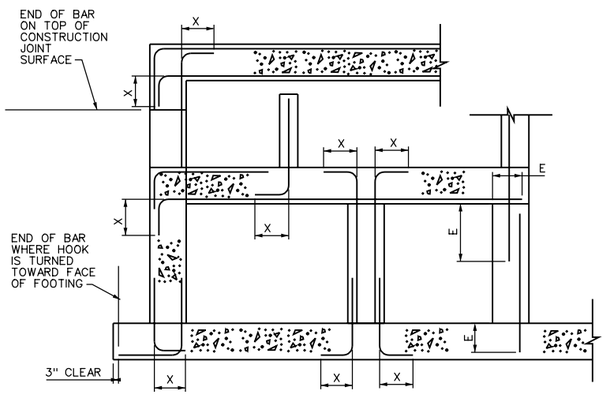
SLAB-ON-GRADE CONSTRUCTION JOINTS — REV 080999



WATERSTOP AT EXISTING SURFACE — REV 120699 — S-130



CONSTRUCTION JOINT DETAILS AT PIPE OPENINGS — REV 042399 — S-133



SECTION

LENGTH (INCHES)			
BAR SIZE	HOOK X	LAP	EMBEDMENT E
•3	6"	18"	12"
•4	8"	18"	14"
•5	10"	23"	18"
•6	12"	28"	22"
•7	14"	33"	25"
•8	16"	SEE TABLE BELOW	SEE TABLE BELOW
•9	19"		
•10	22"		
•11	24"		

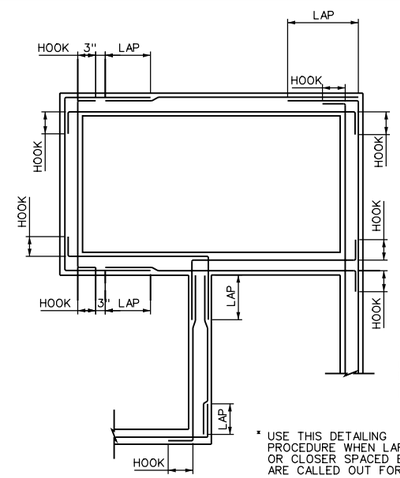
LENGTH (INCHES)						
REBAR SIZE	FOR 1" TO < 2" CONCRETE COVER		FOR 2" TO < 3" CONCRETE COVER		FOR 3" AND LARGER CONCRETE COVER	
	REBAR SPACING (CENTER TO CENTER)		REBAR SPACING (CENTER TO CENTER)		REBAR SPACING (CENTER TO CENTER)	
	< 8"	≥ 8"	< 8"	≥ 8"	< 8"	≥ 8"
LAP						
•8	62"	62"	37"	37"	37"	37"
•9	99"	79"	69"	55"	49"	42"
•10	125"	100"	88"	70"	63"	50"
•11	154"	123"	108"	86"	77"	62"
EMBEDMENT E						
•8	48"	48"	29"	29"	29"	29"
•9	77"	61"	54"	43"	38"	33"
•10	97"	77"	68"	54"	49"	39"
•11	119"	95"	84"	67"	60"	48"

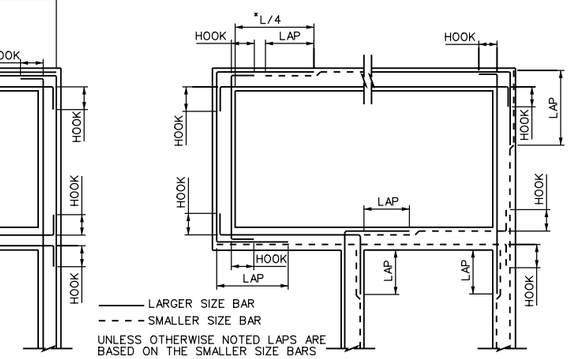
NOTES:

1. USE LAP LENGTHS AS DETERMINED FROM THESE TABLES UNLESS SHOWN OTHERWISE
2. THE TABLES SHOWN ARE FOR f'c=4000psi AND fy=60,000psi
3. MULTIPLY THE LAP AND E SHOWN IN THESE TABLES BY 1.3 FOR WALL HORIZONTAL REBARS AND SLAB BARS WITH 12" OR MORE FRESH CONCRETE UNDERNEATH
4. MULTIPLY THE LAP AND E SHOWN IN THESE TABLES BY 1.5 FOR EPOXY COATED REINFORCING
5. MULTIPLY THE LAP AND E SHOWN IN THESE TABLES BY 1.7 FOR EPOXY COATED REBARS THAT ARE WALL HORIZONTALS OR SLAB BARS WITH 12" OR MORE FRESH CONCRETE UNDERNEATH
6. WHEN BARS OF DIFFERENT SIZES ARE LAP SPLICED, LAP LENGTH SHALL BE THE LARGER OF:

   EMBEDMENT LENGTH OF LARGER BAR
   LAP LENGTH OF SMALLER BAR
7. UNLESS NOTED OTHERWISE USE REBAR COUPLERS FOR SPLICES OF •11 AND LARGER BARS
8. ALL DOWEL BARS SHALL EXTEND AN EMBEDMENT LENGTH E INTO ANOTHER MEMBER OR ACROSS A CONSTRUCTION JOINT UNLESS SHOWN TO SPLICE WITH OTHER BARS OR TO EXTEND TO THE FAR FACE OF THE MEMBER AND END WITH A STANDARD HOOK

STANDARD 90° BAR HOOKS, EMBEDMENT LENGTHS AND LAP LENGTHS UNLESS OTHERWISE NOTED ON DRAWINGS — REV 082699 — S-143





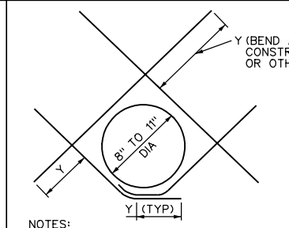
——— LARGER SIZE BAR
- - - - SMALLER SIZE BAR

UNLESS OTHERWISE NOTED LAPS ARE BASED ON THE SMALLER SIZE BARS

L = CLEAR SPAN

* USE THIS DETAILING PROCEDURE WHEN LARGER OR CLOSER SPACED BARS ARE CALLED OUT FOR CORNERS

HORIZONTAL REINFORCEMENT AT WALL INTERSECTIONS — REV 051899 — S-141

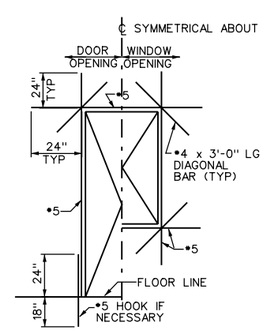


BAR SIZE	Y GRADE 60
•4	15"
•5	21"
•6	24"
•7	27"
•8	36"
•9	42"

NOTES:

1. CUT NORMAL REINFORCEMENT 2" CLEAR OF OPENING
2. DIAGONAL BARS TO BE PLACED:
   A) AT CENTERLINE OF WALL OR SLAB WHERE ONE LAYER OF REINFORCEMENT IS PROVIDED
   B) AT EACH FACE OF WALL OR SLAB WHERE TWO LAYERS OF REINFORCEMENT ARE PROVIDED
3. UNLESS OTHERWISE NOTED, SIZE OF DIAGONAL BARS SHALL BE THE SIZE OF THE LARGEST NORMAL REINFORCING BAR CUT
4. THIS DETAIL TO BE USED ONLY WHEN CALLED FOR ON THE DRAWINGS OR WHEN NO OTHER DETAIL IS SPECIFIED

DIAGONAL REINFORCEMENT AT CIRCULAR OPENINGS (8" - 11" DIA) — REV 080599 — S-142



ELEVATION

NOTES:

1. CUT NORMAL REINFORCING AT OPENING
2. FOR WALLS WITH TWO LAYERS OF REINFORCING PROVIDE 1 BAR EACH FACE
3. FOR WALLS WITH ONE LAYER OF REINFORCING PROVIDE 1 BAR ON WALL CENTERLINE
4. BAR LENGTHS FOR GRADE 60

TYPICAL REINFORCEMENT AROUND RECTANGULAR WALL OPENING — REV 081899 — S-147

REGISTERED PROFESSIONAL ENGINEER — CRAIG JOHN WILCOX — No. S-3193 — Exp. 12-31-05 — STRUCTURAL — STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED MWH
DRAWN MWH
CHECKED C.WILCOX

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

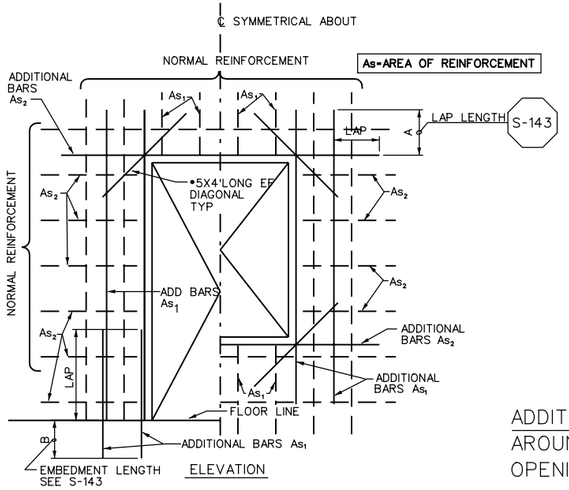
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

STRUCTURAL STANDARD STRUCTURAL DETAILS-1

SHEET AD-GS-201

Plot Date: 09-FEB-2004 15:01 File: N:\Projects\los_osos\Collect_Sys\PS\str\AD-GS-201.dgn Job No: 1481166



NOTES:

1. CUT NORMAL REINFORCEMENT AT OPENING:

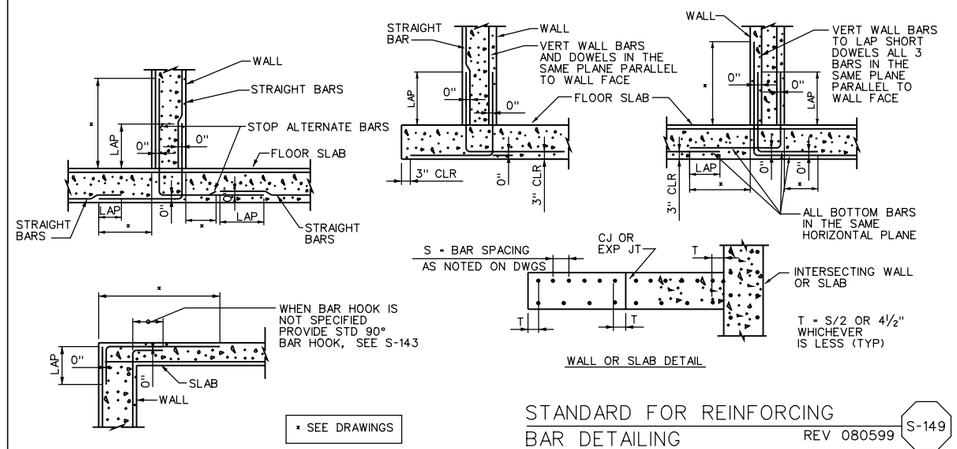
   As_1 AND As_2 = ½ AREA OF CUT BARS TO BE ADDED ON EACH SIDE OF OPENING @ EA FACE 2-•5 MIN.
2. ADDITIONAL BARS As_1 AND As_2 TO BE PLACED:

   A) AT CENTERLINE OF WALLS OR SLABS WHERE ONE LAYER OF REINFORCEMENT IS PROVIDED

   B) AT EACH FACE OF WALLS OR SLABS WHERE TWO LAYERS OF REINFORCEMENT ARE PROVIDED
3. INCREASE SIZE OF ADDITIONAL BARS AS NEEDED TO FIT WITHIN A DISTANCE OF 2 X WALL/SLAB THICKNESS FROM OPENING. PROVIDE 2" MIN CLEAR BETWEEN BARS
4. THIS DETAIL TO BE USED ONLY WHEN NO OTHER DETAIL IS INDICATED ON THE DRAWINGS
5. WHERE A SLAB OR INTERSECTING WALL CONNECTS WITHIN ONE WALL THICKNESS OF THE OPENINGS, ADDITIONAL BARS ON THAT SIDE MAY BE OMITTED

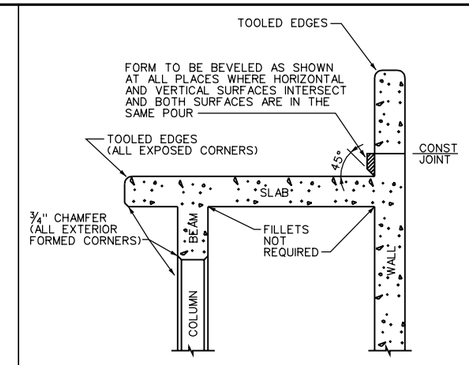
ADDITIONAL REINFORCEMENT AROUND RECTANGULAR OPENINGS

REV 080599 — S-148



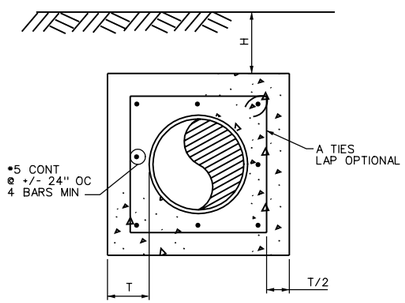
STANDARD FOR REINFORCING BAR DETAILING

REV 080599 — S-149



FORMING DETAILS

REV 052499 — S-152

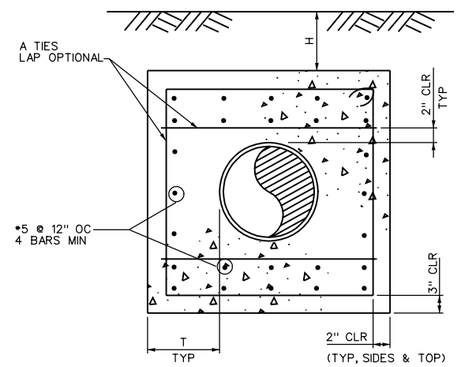


T= 6" OR 8" ENCASEMENT

COVER H	PIPE DIAMETER 8" - 32" A	8" - 32" T	36" A	36" T	42" - 48" A	42" - 48" T	54" - 60" A	54" - 60" T	66"-72" A	66"-72" T
2'	•4@12"	6"	•4@9"	6"	•4@9"	8"	•5@10"	8"	•4@9"	12"
3'			•4@12"		•4@12"		•4@9"		•5@10"	8"
4'									•5@12"	
5'									•5@12"	
6'									•5@12"	
7'									•5@10"	
8'									•5@10"	
9'							•4@9"		•5@10"	
10'							•5@12"		•6@12"	
12'							•5@10"		•6@12"	
14'					•4@12"		•5@10"		•6@10"	8"
16'					•4@9"		•5@10"		•4@9"	12"
18'					•4@9"		•6@12"	8"	•5@12"	12"
20'	•4@12"	6"	•4@12"	6"	•4@9"	8"	•4@9"	12"	•5@12"	12"

NOTES:

1. PIPE ENCASEMENT DESIGNED FOR TRENCH CONDITION
2. WHERE ENCASEMENT PASSES UNDER SPREAD FOOTING OR MAT FOUNDATION, USE H=20' UNO
3. ALL ENCASEMENTS UNDER STRUCTURES SHALL BE SEPARATED FROM THE STRUCTURE FOUNDATIONS BY BACKFILL OR 2 LAYERS OF 40• FELT UNO
4. WHEN ENCASEMENTS TERMINATE @ STRUCTURE, ENCASEMENT REINFORCING SHALL BE DOWELED INTO THE STRUCTURE



T= 12" ENCASEMENT

ENCASEMENT DETAIL

TRENCH CONDITION

REV 083099 — S-172

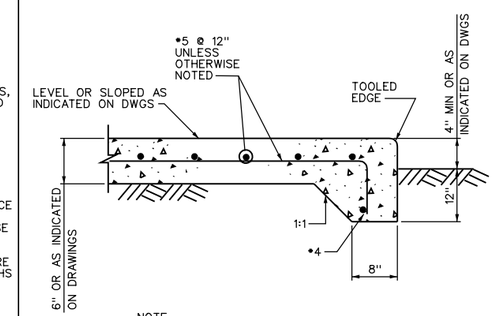
ANCHOR BOLT DIAMETER (inches)	MINIMUM EMBEDMENT TOP OF COLUMNS	MINIMUM EMBEDMENT OTHER APPLICATIONS
¼	5	3
⅜	5	3
½	6	4
⅝	6	4.5
¾	7	5
⅞	8	6
1	9	7
1⅛	10	8
1¼	11	9

NOTES

1. USE ONLY HEADED ANCHORS, J-BOLTS ARE NOT ALLOWED
2. THIS DETAIL APPLIES TO BOTH CONCRETE AND MASONRY
3. IN MASONRY PROVIDE A 1" ANNULAR SPACE IN BLOCK SHELL AROUND ANCHOR. GROUT TO SURFACE
4. FOR ADHESIVE ANCHORS USE THE TOP OF COLUMN EMBEDMENTS UNLESS THE MANUFACTURER'S LITERATURE CALLS OUT LONGER LENGTHS

TYPICAL ANCHOR BOLT EMBEDMENT

REV 083099 — S-175

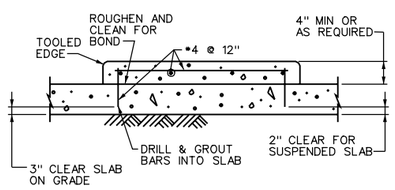


NOTE

USE 2 MATS OF •5 @ 12" EW EF FOR SLABS 10" AND THICKER

SLAB ON GRADE

REV 081899 — S-190

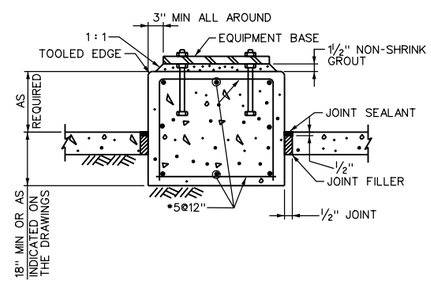


HOUSEKEEPING PAD

REV 080699 — S-191

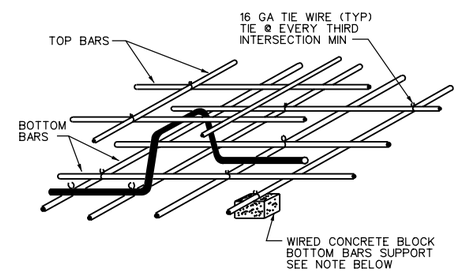
NOTE:

WHERE NO DIMENSION IS INDICATED ON THE DRAWINGS, BASE DEPTH SHALL BE SET SO THAT THE BASE WEIGHS AT LEAST TWICE THE WEIGHT OF THE EQUIPMENT SUPPORTED



EQUIPMENT BASE ON GRADE WITH SEPARATING JOINT

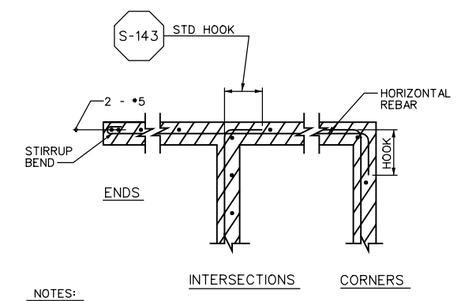
REV 080999 — S-193



NOTE:
METAL BAR SUPPORTS, IF USED IN SLABS NOT ON GROUND, SHALL NOT MAKE CONTACT WITH FORMS

REINFORCEMENT SUPPORT

REV 060199 — S-204



NOTES:

1. DEEP CUT BOND BEAM BLOCKS SHALL BE USED WHERE HORIZONTAL REINFORCING STEEL IS EMBEDDED, AND ABOVE ALL OPENINGS.
2. H-BLOCK BOND BEAMS MAY BE USED AT LOCATIONS OTHER THAN OPENINGS.

TYPICAL 8" & 10" BLOCK WALL SECTIONS

REV 092299 — S-401

REGISTERED PROFESSIONAL ENGINEER CRAIG JOHN WILCOX No. S-3165 Exp. 12-31-05 STRUCTURAL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE

WARNING 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED MWH
DRAWN MWH
CHECKED C.WILCOX

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

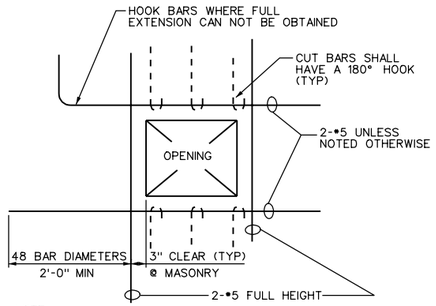
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
STRUCTURAL
STANDARD STRUCTURAL DETAILS -2

SHEET AD-GS-202

Plot Date: 09-FEB-2004 15:02
File: N:\Projects\los_osos\Collect_Sys\PS\str\AD-GS-202.dgn
Job No: 1481166

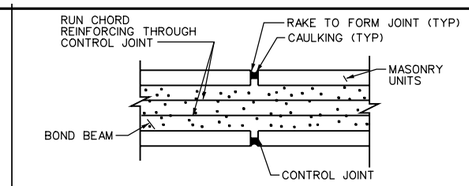


NOTE:

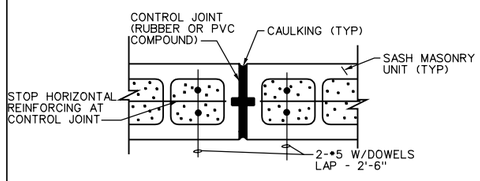
REINFORCING SHOWN IS IN ADDITION TO NORMAL REINFORCING AND SHALL BE PLACED WITH EACH LAYER OF BARS PROVIDED

TYPICAL REINFORCEMENT AT MASONRY WALL OPENING

REV 092299 — S-410



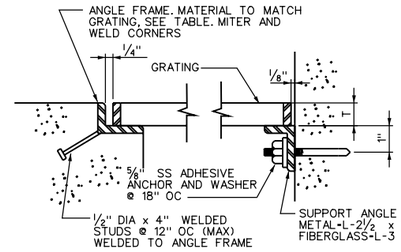
CONTROL JOINT AT BOND BEAM



CONTROL JOINT AT WALL

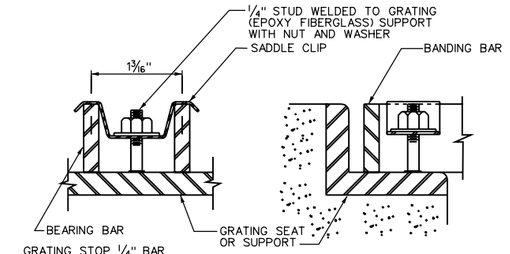
MASONRY CONTROL JOINTS

REV 061599 — S-430



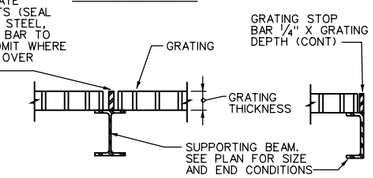
GRATING FRAME TABLE SIZED TO MATCH GRATING (FOR FIBERGLASS USE CONTINUOUS PULTRUDED FIBERGLASS SEAT & ANCHOR)				
GRATING DEPTH T	FRAME ANGLE (STEEL)		GRATING DEPTH T	FRAME ANGLE
1"	1 3/4 x 1 1/4 x 1/4 (1 1/4X 1 1/4X 1/4)		2"	*2 1/2 x 2 1/2 x 1/2
1 1/4"	2 x 1 1/2 x 1/4 (1 1/2X 1 1/2X 1/4)		2 1/4"	2 1/2 x 2 1/2 x 1/4
1 1/2"	1 3/4 x 1 3/4 x 1/4		2 1/2"	3 x 3 x 1/2
1 3/4"	2 x 2 x 1/4			

* OR USE 2 1/2 x 2 1/2 x 1/4 W/1/4" SHIM PLATE WELDED TO BOTTOM



GRATING CLIP DETAIL

GRATING STOP 1/4" BAR WELD TO SUPPORT BEAM AT ALL INTERMEDIATE AND END SUPPORTS (SEAL WELD GALVANIZED STEEL, BOND FIBERGLASS BAR TO SUPPORT BEAM). OMIT WHERE GRATING IS CONT OVER SUPPORT BEAM.



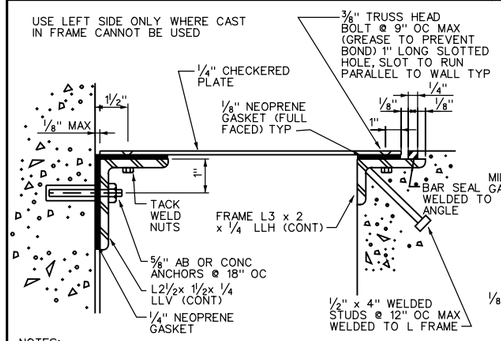
GRATING STOP DETAIL

NOTES:

1. UNLESS INDICATED OTHERWISE, ALL GRATING SHALL BE ALUMINUM
2. GRATING DEPTH TO BE DETERMINED BY MANUFACTURER AND APPROVED BY ENGINEER (UNO)
3. ALL ENDS AND OPENINGS SHALL BE BANDED
4. WEIGHT OF GRATING SECTION SHALL NOT EXCEED 80 LBS
5. METAL BEARING BARS SHALL BE DEPTH T x 3/16" @ 1 3/16" OC CROSS BARS SHALL BE @ 4" OC
6. PROVIDE A MINIMUM OF 4 CLIPS PER GRATING PANEL, APPROX 4" FROM PANEL CORNERS. MAXIMUM CLIP SPACING AT 36" OC
7. MATERIALS:
   a. ALUMINUM GRATING - USE ALUMINUM ANGLE SUPPORTS AND STAINLESS STEEL BOLTS AND CLIPS
   b. GALVANIZED STEEL GRATING - USE STEEL ANGLE SUPPORTS, BOLTS AND CLIPS. GALVANIZE AFTER FABRICATION
   c. STAINLESS STEEL GRATING - USE STAINLESS STEEL ANGLE SUPPORTS, BOLTS AND CLIPS
   d. FIBERGLASS GRATING - USE FIBERGLASS FOR ALL COMPONENTS EXCEPT DRILLED ANCHORS: ALL CUT EDGES SHALL BE SEALED WITH RESIN: BONDING: USE EPOXY ADHESIVE BONDING AGENT

GRATING

REV 081999 — S-501



NOTES:

1. CHECKERED PLATE COVERS SHALL BE ALUMINUM UNLESS INDICATED OTHERWISE
2. ALUM CHK'D PLATE -- ALUM FRAME AND STUDS, AND SS ANCHORS AND FASTENERS INSTEAD OF TACK WELDING SS NUTS, USE BACKER PLATE 1/4 X 1 1/2 X 3/8 AND DRILL AND TAP
3. STEEL CHK'D PLATE -- STEEL FRAME AND ANCHORS, SEAL ALL WELDS (GALV AFTER FABRICATION)
4. SS CHK'D PLATE -- SS FRAME AND ANCHORS
5. MAX WEIGHT OF PLATES = 80 LBS

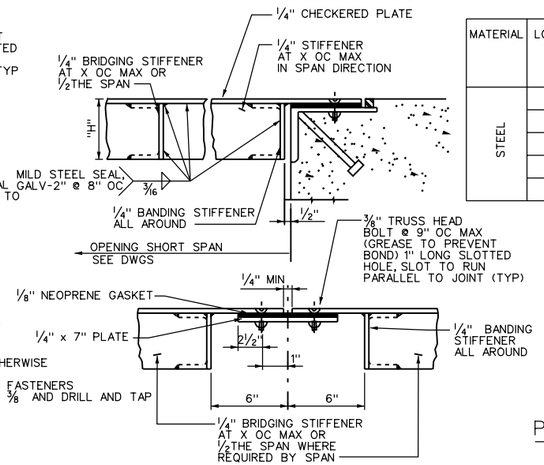


PLATE JOINT DETAIL

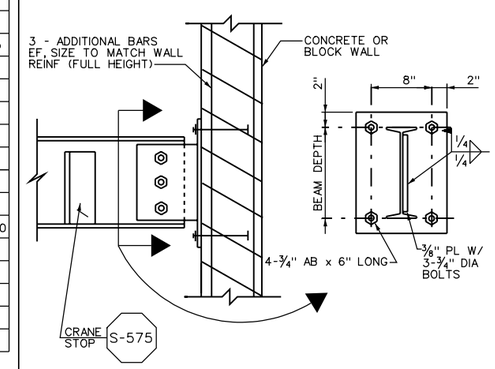
MATERIAL	LOADING (psf)	X MAX (in)	MAXIMUM SPAN OF OPENING (ft)						
			STIFFENER SIZE 1/4" X H						
			2"	3"	4"	5"	C6X8.2	C7X9.8	C8X11.5
STEEL	100	40	4.5	6	7	8.5	12	14	15.5
	150	35	4	5	6	7.5	11.5	13	14.5
	200	30	3.5	4.5	5.5	7	11	12.5	14
	250	30	3	4	5	6	10.5	12	13
	300	30	3	4	4.5	5.5	10	11.5	12.5

MATERIAL	X MAX (in)	MAXIMUM SPAN OF OPENING (ft)				
		STIFFENER SIZE 1/4" X H				
		2"	3"	C4X2.331	C5X3.089	C6X4.030
ALUMINUM	25	4.5	5.5	6	7	8
	25	3.5	4.5	5.5	6.5	7.5
	20	3.5	4.5	5.5	6.5	7
	20	3	4	5	6	7
	20	3	3.5	5.0	5.5	6.5

NOTE: "X" = MAXIMUM SPAN OF UNSTIFFENED PLATE COVER

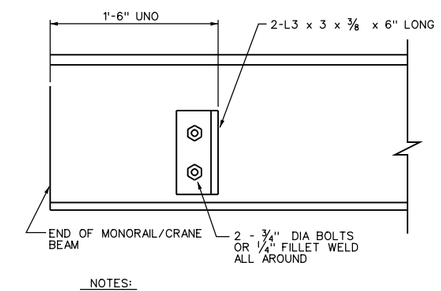
PLATE COVERED OPENING

REV 081999 — S-502



MONORAIL BEAM SUPPORT AT END WALL

REV 082699 — S-572

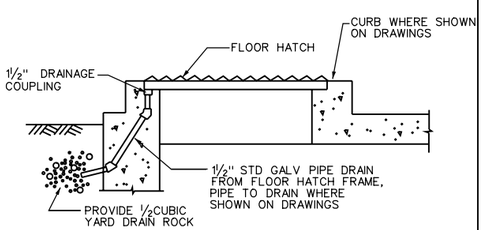


NOTES:

1. FOR 8" BEAMS USE A 4" LONG L AND WELD TO BEAM.
2. LOCATE STOP TO MATCH TROLLEY BUMPER LOCATION.

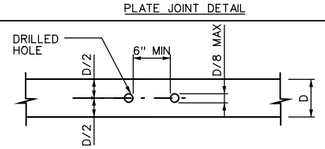
TROLLEY STOP DETAIL

REV 083099 — S-575



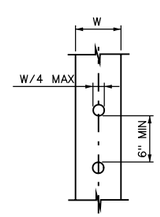
ACCESS HATCH DETAIL

REV 081899 — S-591

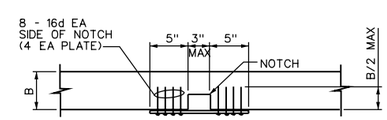


NOTCHING OF JOISTS, RAFTERS & BEAMS IS NOT ALLOWED

JOIST, RAFTER & BEAM

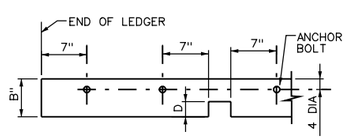


WOOD STUD



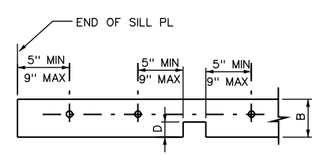
WHERE NOTCH IS GREATER THAN 1" PROVIDE 12 GA STRAP WITH WIDTH SAME AS DOUBLE TOP PL

DOUBLE TOP PLATE



WHERE DEPTH OF NOTCH D IS GREATER THAN B/5 PROVIDE ANCHOR BOLT EACH SIDE OF NOTCH AS SHOWN

LEDGER

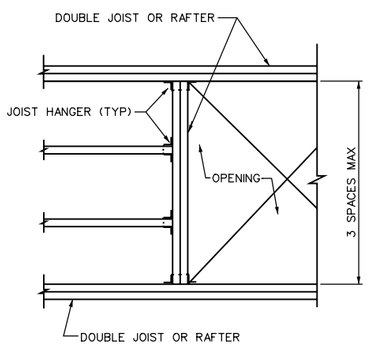


WHERE DEPTH OF NOTCH D IS GREATER THAN B/5 PROVIDE ANCHOR BOLT EACH SIDE OF NOTCH AS PER END REQUIREMENT

SILL PLATE

WOOD FRAMING: HOLES AND NOTCHING

REV 081899 — S-603



OPENING IN HORIZONTAL WOOD FRAMING

REV 081899 — S-606

REGISTERED PROFESSIONAL ENGINEER — CRAIG JOHN WILCOX — No. S-3395 — Exp. 12-31-05 — STRUCTURAL — STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED MWH
DRAWN MWH
CHECKED C.WILCOX

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

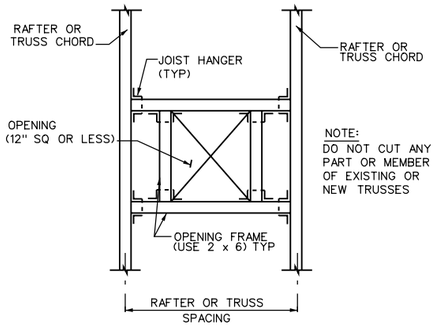
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
STRUCTRUAL
STANDARD STRUCTURAL DETAILS-3

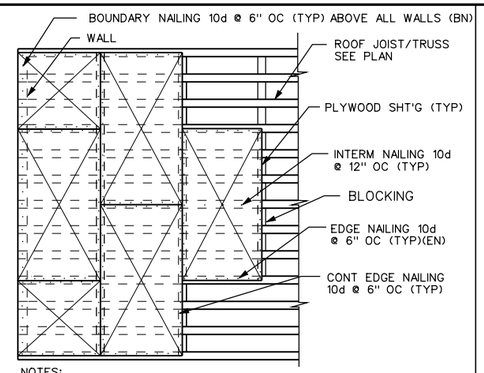
SHEET AD-GS-203

Plot Date: 09-FEB-2004 15:02
File: N:\Projects\los_osos\Collect_Sys\PS\str\AD-GS-203.dgn
Job No: 1481166



ROOF OPENING FRAMING — S-607

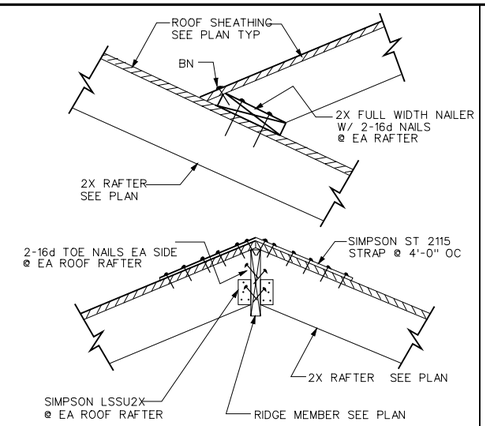
REV 081899



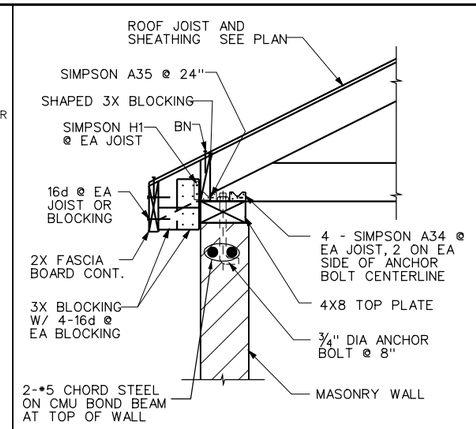
NOTES:

1. EDGE OF PLYWOOD ROOF OPENINGS SHALL BE BOUNDRY NAILED.
2. EACH PLYWOOD SHEET SHALL SPAN THREE BEARINGS MIN.
3. ALL EDGES OF PLYWOOD SHEET SHALL BE BLOCKED.

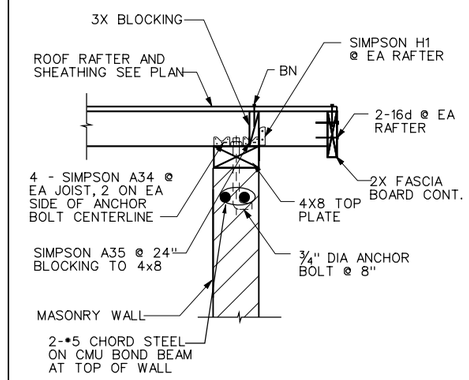
TYPICAL ROOF DIAPHRAGM — S-901



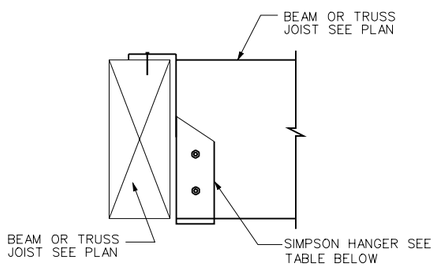
ROOF VALLEY AND RIDGE DETAIL — S-902



JOIST TO WALL CONNECTION — S-903

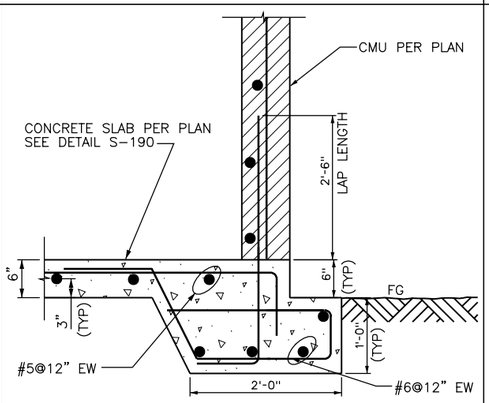


RAFTER TO WALL CONNECTION — S-904

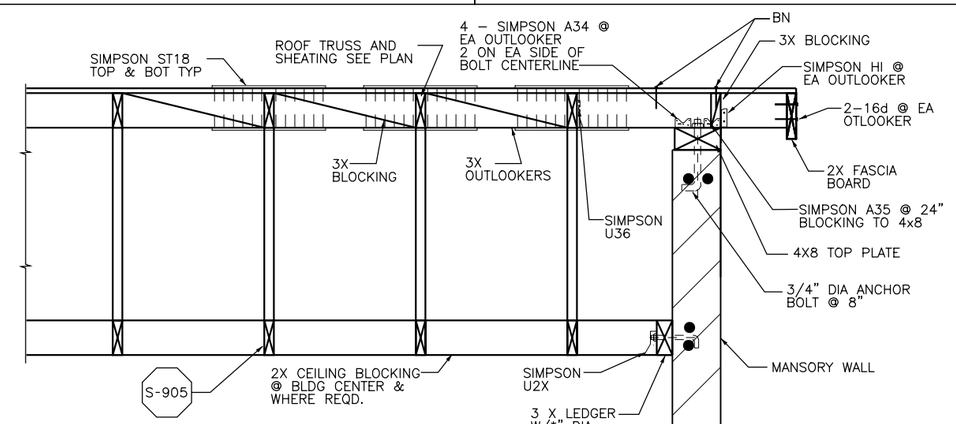


MEMBER SIZE	HANGER	MEMBER SIZE	HANGER
2X	U2X	3 1/8" LAM	HU/12
4X	HUTF	5 1/8" LAM	HU/13.5
6X	HUTF	3X	U3X

JOIST OR BEAM TO BEAM CONNECTION DETAIL — S-905



FOUNDATION DETAIL — S-906



S-905

DETAIL — S-907

REGISTERED PROFESSIONAL ENGINEER — JOHN W. BERGEN — No. S-3195 — Exp. 12-31-05 — STRUCTURAL — STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED MWH
DRAWN MWH
CHECKED C.WILCOX

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

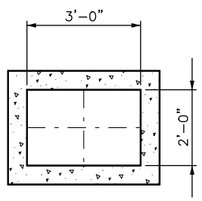
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
STRUCTURAL
STANDARD STRUCTURAL DETAILS -4

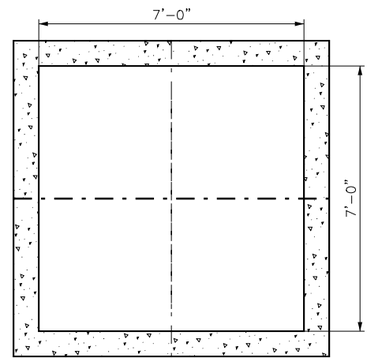
SHEET AD-GS-204

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\str\AD-GS-204.dgn Plot Date: 09-FEB-2004 15:02



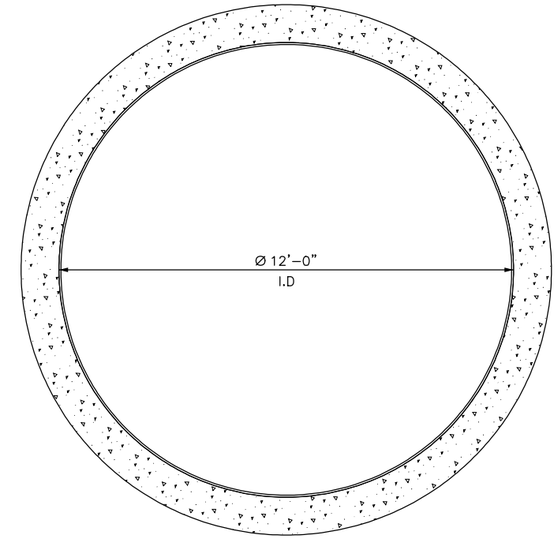
PRECAST CLEANOUT VAULT FOUNDATION PLAN

SCALE 1/2"= 1'-0"



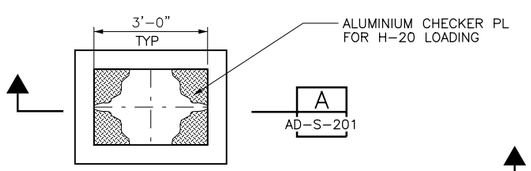
PRECAST VALVE VAULT FOUNDATION PLAN

SCALE 1/2"= 1'-0"



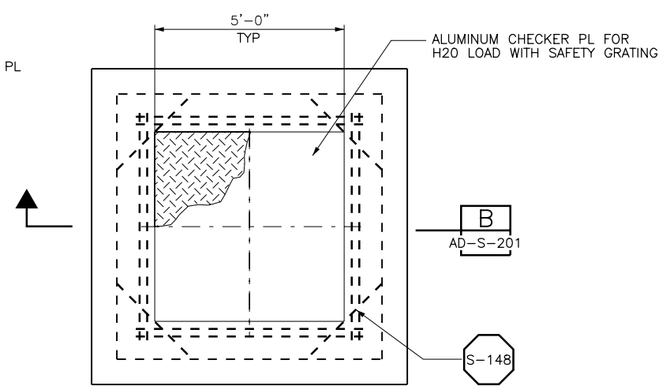
FOUNDATION PLAN

SCALE 1/2"= 1'-0"



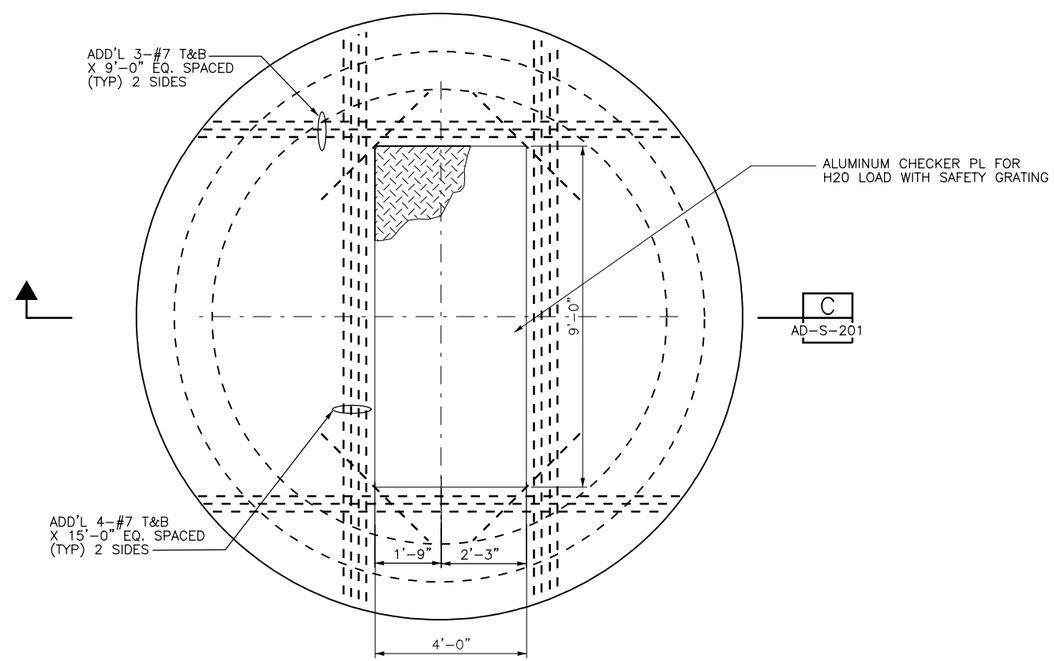
PRECAST CLEANOUT VAULT TOP PLAN

SCALE 1/2"= 1'-0"



PRECAST VALVE VAULT TOP PLAN

SCALE 1/2"= 1'-0"



TOP PLAN

SCALE 1/2"= 1'-0"

REGISTERED PROFESSIONAL ENGINEER
CRAIG JOHN WILCOX
No. S-3195
Exp. 12-31-05
STRUCTURAL
STATE OF CALIFORNIA

Plot Date: 09-FEB-2004 15:57

File: N:\Projects\los_osos\Collect_Sys\PS\str\AD-S-200.dgn

Job No: 1481166

REV	DATE	BY	DESCRIPTION

SCALE: AS SHOWN

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED S.BATRA
DRAWN S.BATRA
CHECKED C.WILCOX

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

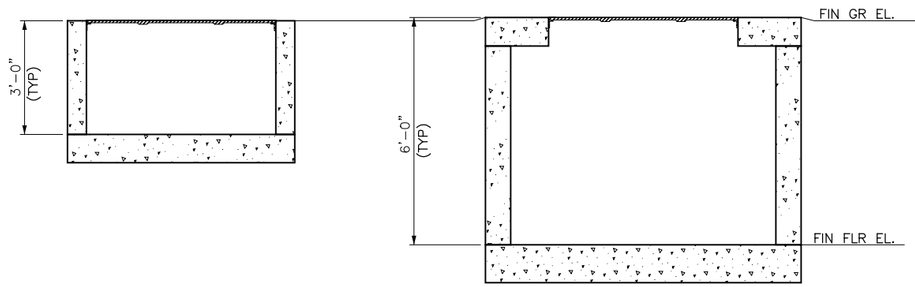
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

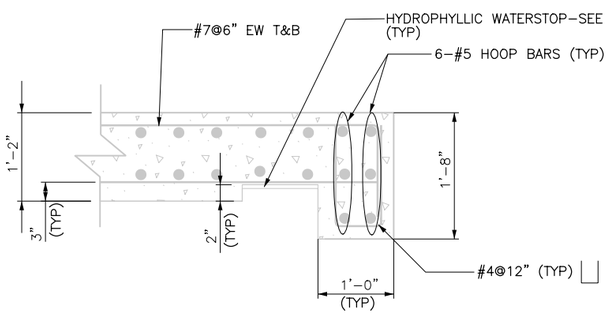
STRUCTURAL
SUBMERSIBLE PUMP STATIONS & VALVE VAULTS– FOUNDATION AND TOP PLAN

SHEET AD-S-200

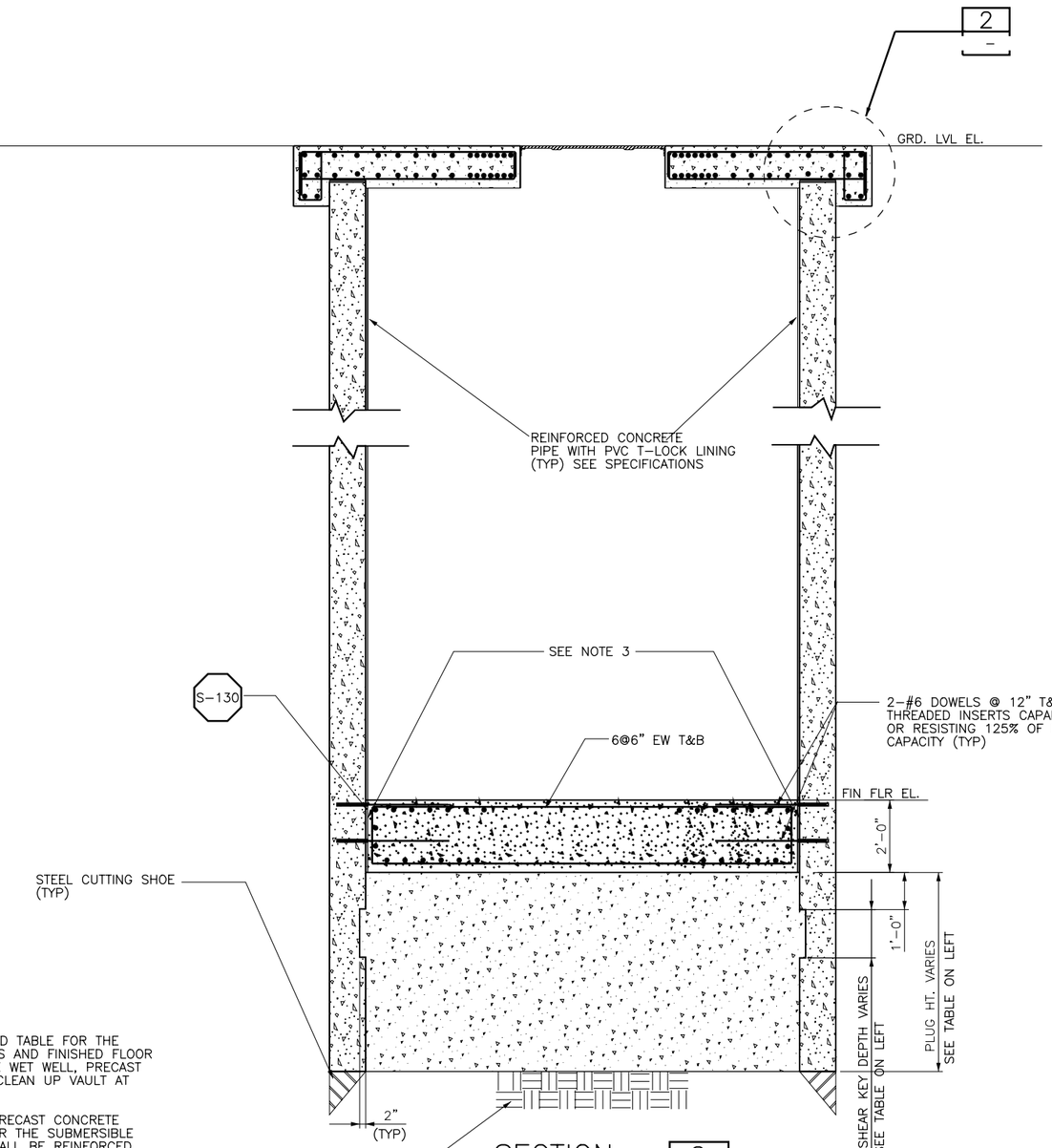


SECTION A
SCALE1/2"=1'
AD-S-200

SECTION B
SCALE1/2"=1'
AD-S-200



DETAIL 2
SCALE 1"=1'



SECTION C
SCALE1/2"=1'
AD-S-200

PUMPS	TRIPLEX	DUPLEX			
SITE LOCATION	WEST PASO	BAYWOOD	EAST YSABEL	EAST PASO	MOUNTAIN VIEW
SUBMERSIBLE PS GRD ELE.	17.15'	10.16'	79.3'	71.75'	100.2'
SUBMERSIBLE PS FIN FLR ELE.	4.15'	-5.44'	64.8'	55.75'	86.7'
MIN. SHEAR KEY DEPTH	1'-2"	1'-4"	1'-3"	1'-4"	1'-3"
MIN. PLUG DEPTH	7'-0"	8'-6"	8'-0"	8'-6"	7'-6"
VALVE VAULT FIN GR ELE.	16.00'	10.43'	80.05'	71.55'	100.63'
CLEANOUT VAULT FIN GR ELE.	16.22'	10.63'	80.0'	71.47'	94.2'

NOTES:

1. REFER THE ATTACHED TABLE FOR THE GROUND ELEVATIONS AND FINISHED FLOOR ELEVATIONS OF THE WET WELL, PRECAST VALVE VAULT AND CLEAN UP VAULT AT VARIOUS SITES.
2. 12' INTERNAL DIA PRECAST CONCRETE SECTIONS USED FOR THE SUBMERSIBLE PUMP STATIONS SHALL BE REINFORCED CONCRETE PIPE PER ASTM C-76, CLASS III. REINFORCEMT SHALL BE CIRCULAR. JOINTS SHALL BE STEEL FLUSH BELL WITH O-RING GASKET, CONFORMING TO ASTM C-361.
3. HYDROPHILLIC WATERSTOP-ADEKA ULTRASEAL P-201 CONTINUOUS 1/4" BEAD TO BE CURED PRIOR TO CONCRETE TOP PLACEMENT. PLACE AT FLOOR/WALL CENTERLINE.

REGISTERED PROFESSIONAL ENGINEER
CRAIG JOHN WILCOX
No. S-3195
Exp. 12-31-05
STRUCTURAL
STATE OF CALIFORNIA

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\str\AD-S-201.dgn Plot Date: 09-FEB-2004 15:03

REV	DATE	BY	DESCRIPTION

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DRAWN S.BATRA
CHECKED C.WILCOX

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
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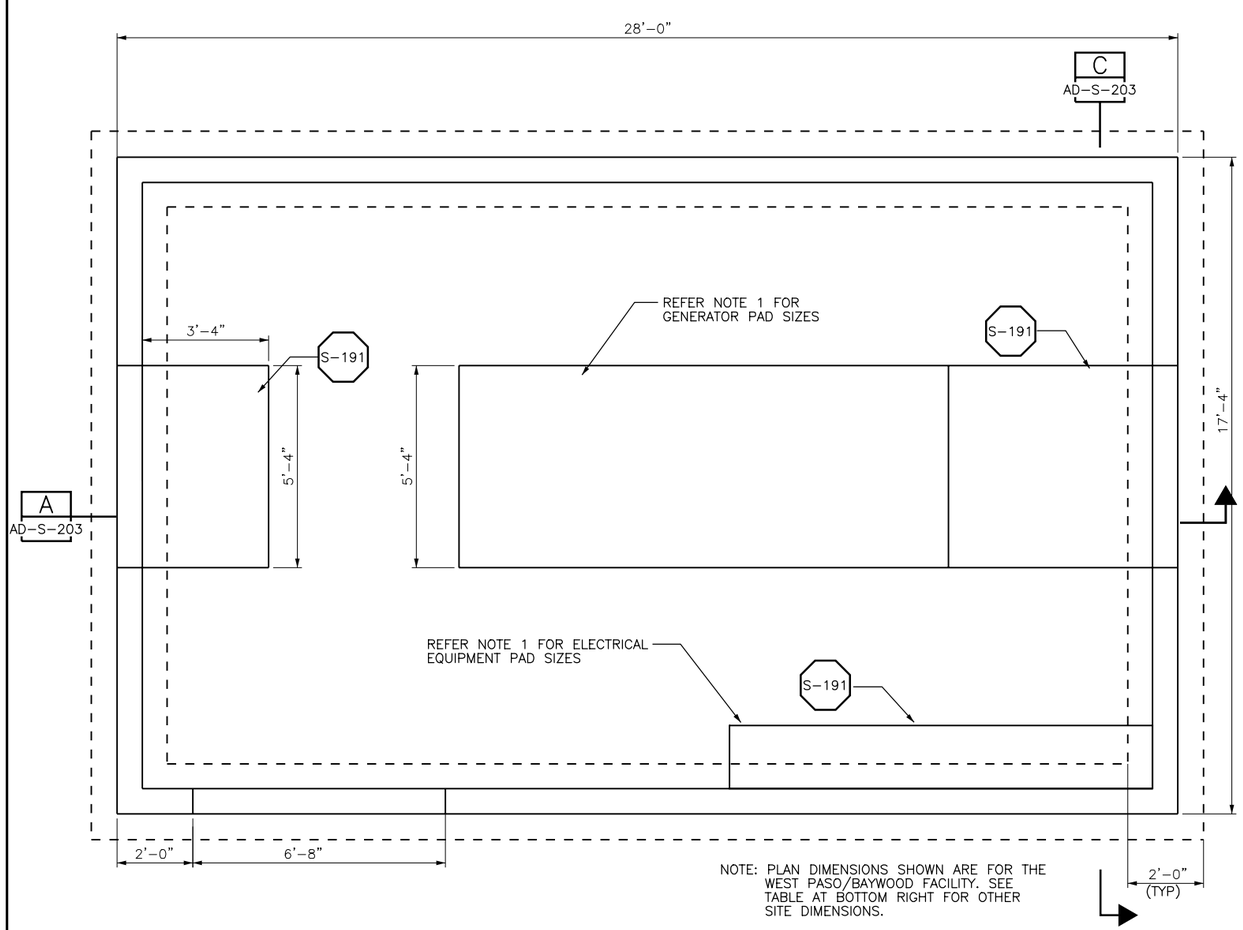
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
STRUCTURAL
SUBMERSIBLE PUMP STATIONS & VALVE VAULTS- SECTION AND DETAILS

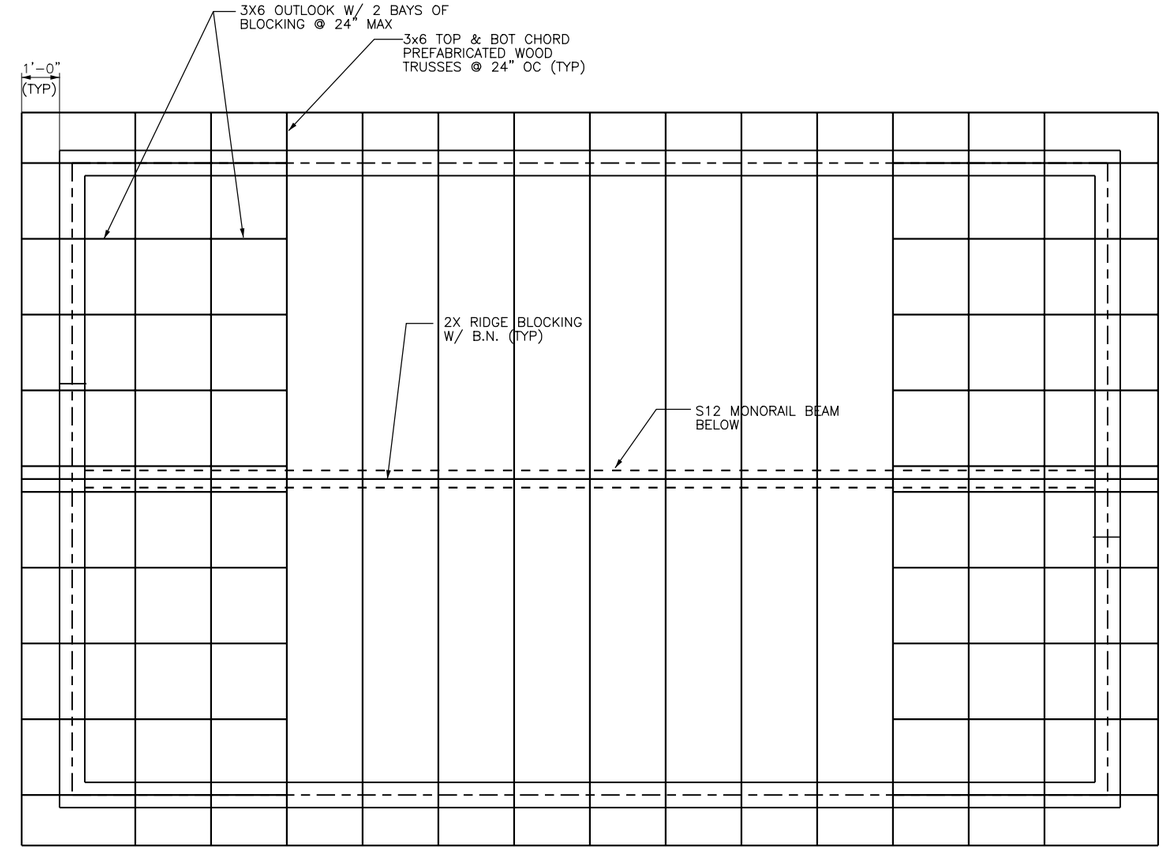
SHEET AD-S-201



NOTE: PLAN DIMENSIONS SHOWN ARE FOR THE WEST PASO/BAYWOOD FACILITY. SEE TABLE AT BOTTOM RIGHT FOR OTHER SITE DIMENSIONS.

FOUNDATION PLAN

SCALE: 1/2"=1'-0"



ROOF PLAN

SCALE: 1/2"=1'-0"

NOTES:

1. CONTRACTOR SHALL VERIFY ALL THE SIZES LOCATIONS AND DETAILS OF EQUIPMENT, LOUVERED VENTS, DOORS PUMP AND TANK PADS. SEE MECH AND ELECTRICAL DRAWINGS.
2. FINISH GRADE AROUND THE BUILDING PERIMETER SHALL BE SLOPED AWAY FROM THE BUILDING LINE.
3. WOOD FRAMING :
   A. FOR FRAMING AROUND OPENINGS IN WOOD ROOF SEE DETAIL S-606 AND S-607.
   B. NAILNG SHALL BE PER UBC 97 TABLE 23-11-B-1 UNLESS INDICATED OTHERWISE.
   C. PLYWOOD FOR ROOFS SHALL BE 5/8" CD-X (INDEX 24/16) W/ EXPOSURE "C" SIDE UP & EXP. 1 GLUE, BLOCKED ON ALL SIDES, NAILED W/ 10d COMMON NAILS,
      4" OC BN
      6" OC EN
      12" OC FIELD, SEE S-901
   E. METAL FRAMING DEVICES SHOWN ON THE DWGS CAN BE REPLACED W/ EQUIVALENT DESIGNED DEVICES SUBJECT TO THE APPROVAL OF THE ENGINEER.
4. WOOD TRUSS NOTES:
   A. TRUSS MANUFACTURER'S ENGINEER SHALL DESIGN ALL TRUSS CONNECTIONS. TRUSS SHOWN IS ONLY REPRESENTATIVE.
   B. TRUSS SHALL BE DOUGLAS FIR AND DESIGNED BY THE MFR FOR THE FOLLOWING LOADS:

DEAD LOAD

TOP CHORD------26 PSF
BOTTOM CHORD----28 PSF
ACTUAL TRUSS WEIGHT
VENTILATION/ MECHANICAL UNITS ON THE ROOF IF REQD AS PER MECH'L-(CONTRACTOR IS TO PROVIDE THIS LOADING TO TRUSS ENGINEER)

LIVE LOAD

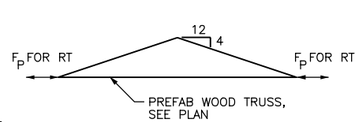
20 PSF BASIC

WIND LOAD

80 MPH WIND LOAD EXPOSURE C (PER UBC 97).

WIND PERPENDICULAR TO RIDGE

LEEWARD ROOF = 14 PSF (OUTWARD)
WINDWARD ROOF = 6 PSF (INWARD)
WIND PARALLEL TO ROOF = 18 PSF (UPWARD)



C. TOP CHORD (TC) AXIAL LOAD MAY BE EITHER COMPRESSION OR TENSION. FOR SEISMIC LOADS IN TOP CHORD A 1/3RD INCREASE IN ALLOWABLE STRESSES MAY BE USED.

TRUSS	(TC) AXIAL LOAD F_P
RT-1	1.5 K

D. WALL TIE LOAD ACTS AT BASE OF SHOE AT WALL BEARING LOCATIONS. TRUSS DESIGN SHALL ACCOUNT FOR ADDED MOMENT DUE TO ECCENTRICITY FROM WALL TIE LOADS.

E. BOTTOM CHORD SHALL BE DESIGNED FOR A 250 LB CONCENTRATED LOAD AT ANY LOCATION BETWEEN PANEL POINTS. SEE MECHANICAL DRAWINGS.

F. LOADS GIVEN ARE FOR ALLOWABLE STRESS DESIGN UNO

STANDBY POWER FACILITY	BUILDING DIMENSIONS
LUPINE	25'-4" X 14'-8"
WEST PASO/BAYWOOD	28' X 17'-4"
EAST YSABEL	25'-4" X 14'-8"
EAST PASO	25'-4" X 14'-8"
MOUNTAIN VIEW	25'-4" X 14'-8"
SUNNY OAKS	21'-8" X 14'-8"

REGISTERED PROFESSIONAL ENGINEER
CRAIG JOHN WILCOX
No. S-3195
Exp. 12-31-05
STRUCTURAL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: AS SHOWN

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED S.BATRA
DRAWN S.BATRA
CHECKED C.WILCOX

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

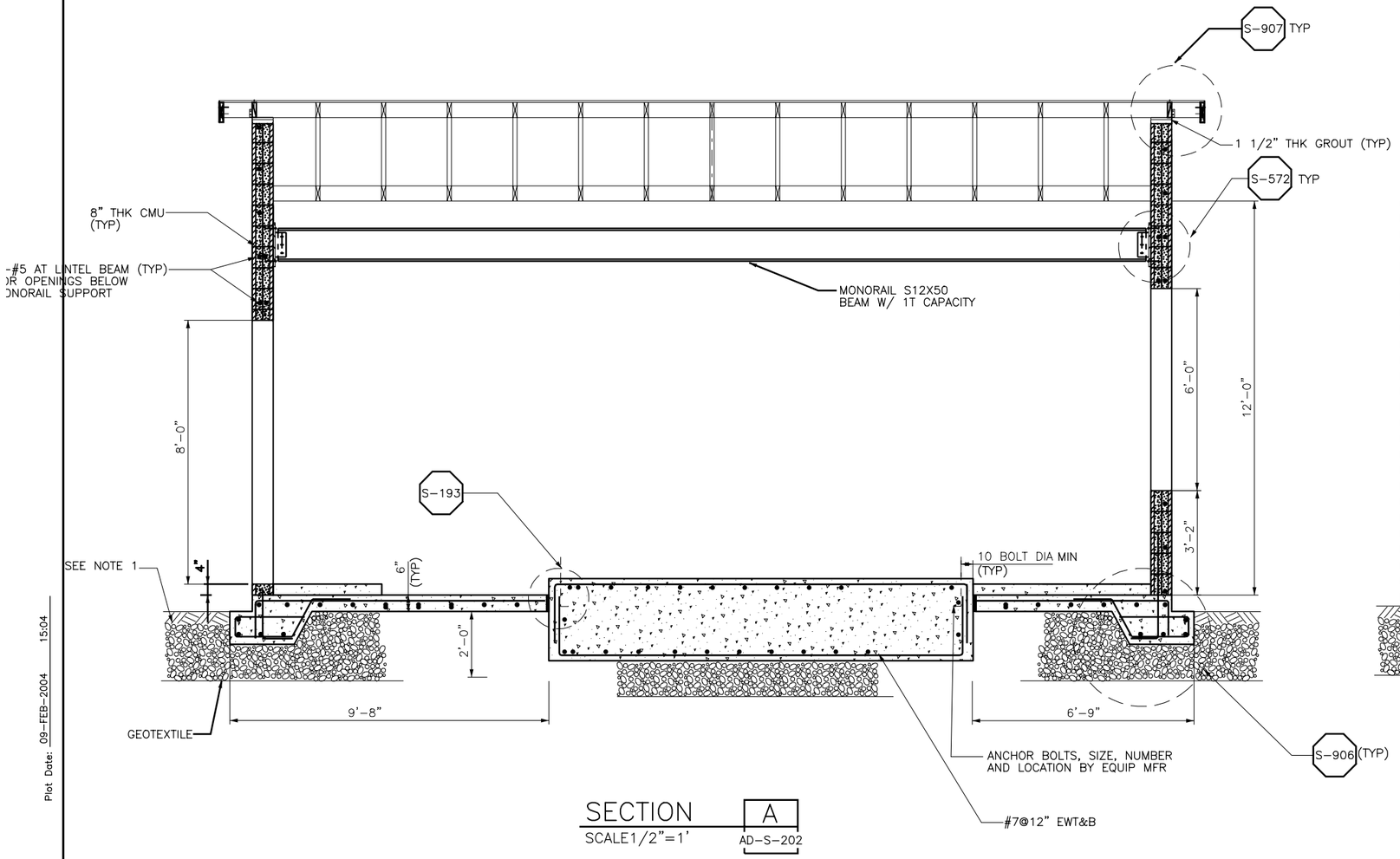
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

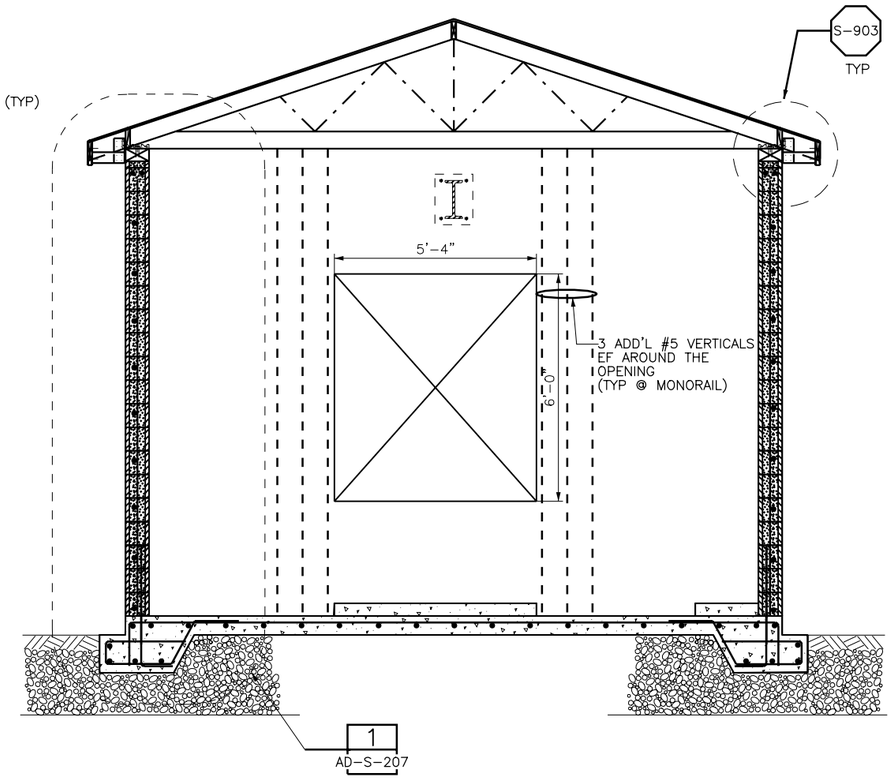
LOS OSOS WASTEWATER PROJECT
STRUCTURAL
STANDBY POWER BUILDING
FOUNDATION AND ROOF PLAN

SHEET AD-S-202

Plot Date: 09-FEB-2004 15:03
File: N:\Projects\los_osos\Collect_Sys\PS\str\AD-S-202.dgn
Job No: 1481166



SECTION A
SCALE1/2"=1'
AD-S-202



SECTION C
SCALE1/2"=1'
AD-S-202

NOTE:

1. 1' - 95 % COMPACTED GRANULAR FILL BELOW FOOTING TO EXTEND 5' BEYOND THE EXTERIOR WALL ON ALL SIDES OF BUILDING . PROVIDE GEOTEXTILE BELOW THE GRANULAR FILL. REFER SPECIFICATION

REGISTERED PROFESSIONAL ENGINEER
CRAIG JOHN WILCOX
No. S-3185
Exp. 12-31-05
STRUCTURAL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: AS SHOWN

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

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DRAWN S.BATRA
CHECKED C.WILCOX

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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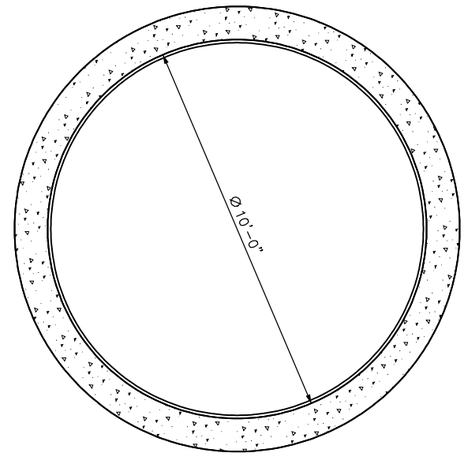
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
STRUCTURAL
STANDBY POWER BUILDING
SECTION AND DETAILS

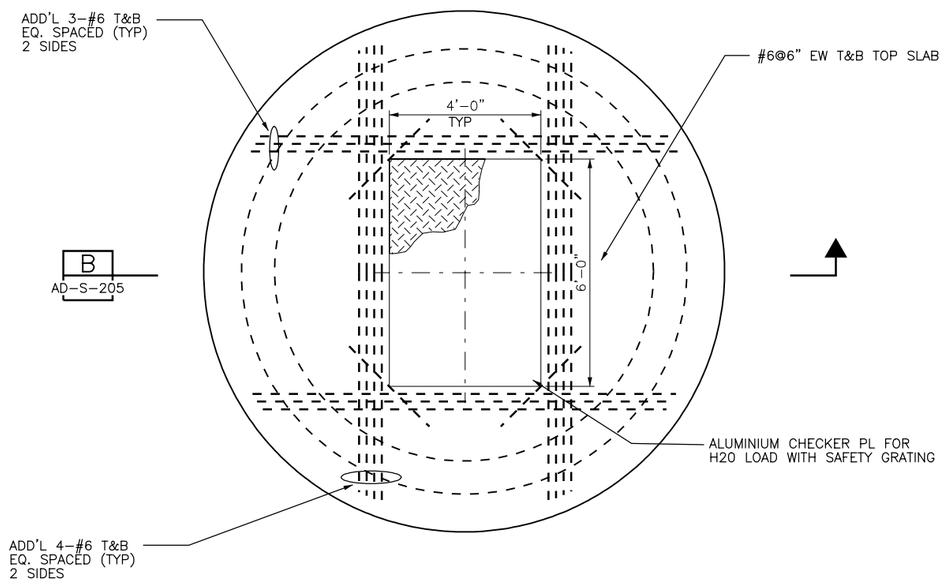
SHEET AD-S-203

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\str\AD-S-203.dgn Plot Date: 09-FEB-2004 15:04



FOUNDATION PLAN

SCALE: 1/2"=1'-0"



TOP PLAN

SCALE: 1/2"=1'-0"

REGISTERED PROFESSIONAL ENGINEER
JOHN WILCOX
No. S-3195
Exp. 12-31-05
STRUCTURAL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: AS SHOWN

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

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DRAWN S.BATRA
CHECKED C.WILCOX

SUBMITTED BY
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STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

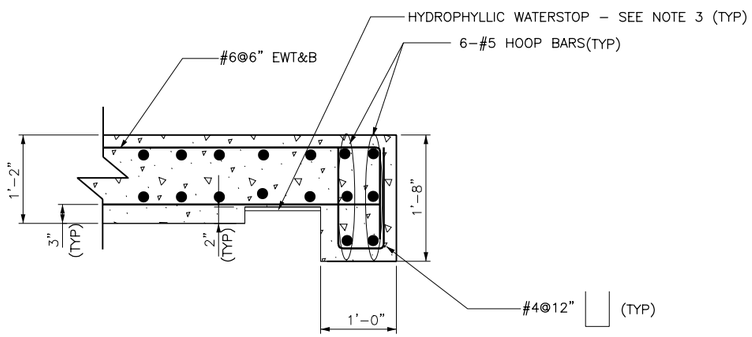
LOS OSOS WASTEWATER PROJECT
STRUCTURAL
POCKET PUMP STATION
FOUNDATION AND ROOF PLAN

SHEET AD-S-204

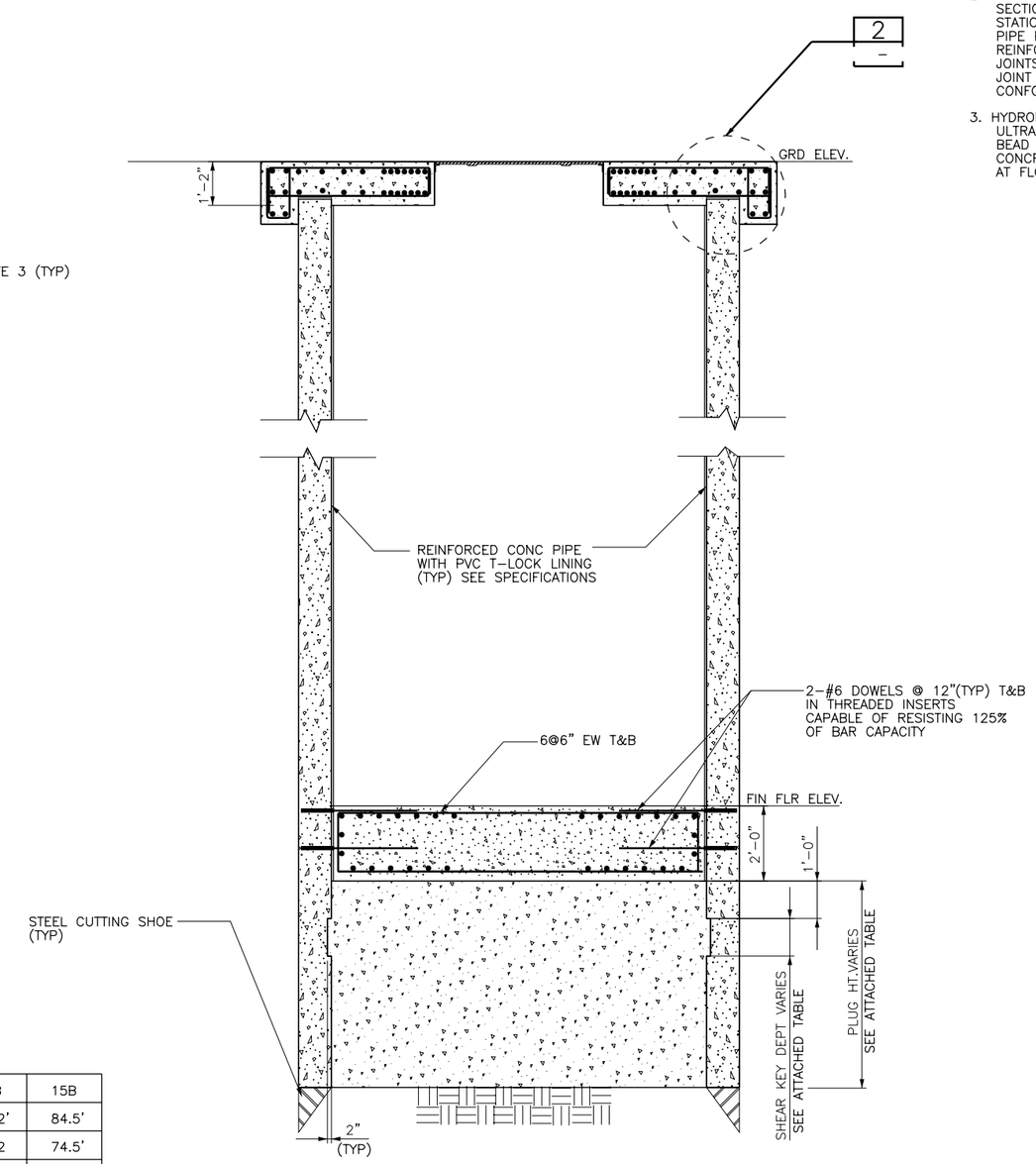
Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\str\AD-S-204.dgn Plot Date: 09-FEB-2004 15:04

NOTES:

1. REFER TO THE ATTACHED TABLE FOR THE GROUND ELEVATIONS AND FINISHED FLOOR ELEVATIONS OF THE POCKET PUMP STATION AND THE PRECAST VALVE VAULT
2. 10' INTERNAL DIA PRECAST CONCRETE SECTIONS USED FOR THE POCKET PUMP STATION SHALL BE REINFORCED CONCRETE PIPE PER ASTM C-76, CLASS III . REINFORCEMENT SHALL BE CIRCULAR. JOINTS SHALL BE STEEL FLUSH BELL JOINT WITH O-RING GASKET, CONFORMING TO ASTM C-361.
3. HYDROPHYLLIC WATERSTOP - ADEKA ULTRASEAL P-201, CONTINUOUS 1/4" BEAD TO BE CURED PRIOR TO CONCRETE TOP PLACEMENT (PLACE AT FLOOR/WALL CENTERLINE.



DETAIL 2
SCALE 1"=1'



SECTION B
SCALE1/2"=1'
AD-S-204

SITE LOCATION →	04A	07A	08A	09A	09B	09C	10A	11A	12A	13A	13B	15B
POCKET PS GRD ELE.	8.1'	19.6'	13.7'	19.0'	62.4'	82.7'	32.6'	44.1'	58.0'	67.4'	87.2'	84.5'
POCKET PS FIN FLR ELE.	2.9'	9.6'	2.7'	5.0'	51.4'	72.7'	19.6'	35.1'	48.0'	57.4'	76.2	74.5'
MIN SHEAR KEY DEPTH	0'-10"	1'-0"	1'-2"	1'-3"	1'-2"	1'-0"	1'-3"	1'-0"	1'-0"	1'-0"	1'-2"	1'-0"
MIN PLUG DEPT	3'-6"	5'-6"	6'-0"	7'-0"	6'-0"	5'-6"	7'-0"	5'-6"	5'-6"	5'-6"	6'-0"	5'-6"

REGISTERED PROFESSIONAL ENGINEER JOHN W. WILCOX No. S-3195 Exp. 12-31-05 STRUCTURAL STATE OF CALIFORNIA

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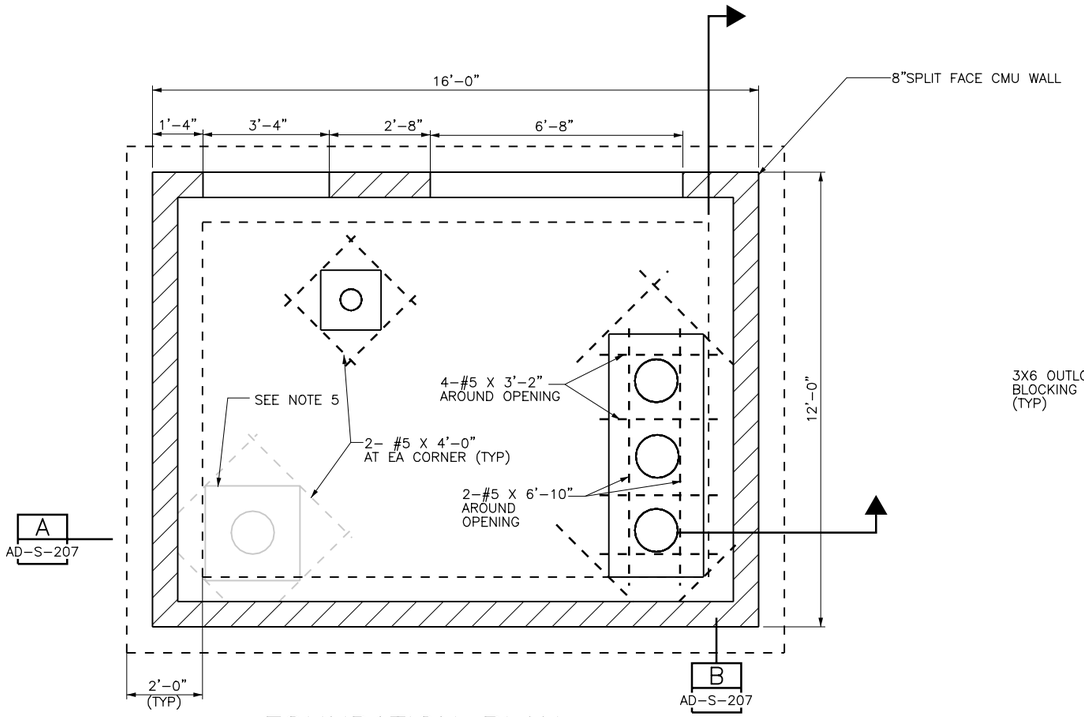
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
STRUCTURAL
POCKET PUMP STATION
SECTION AND DETAILS

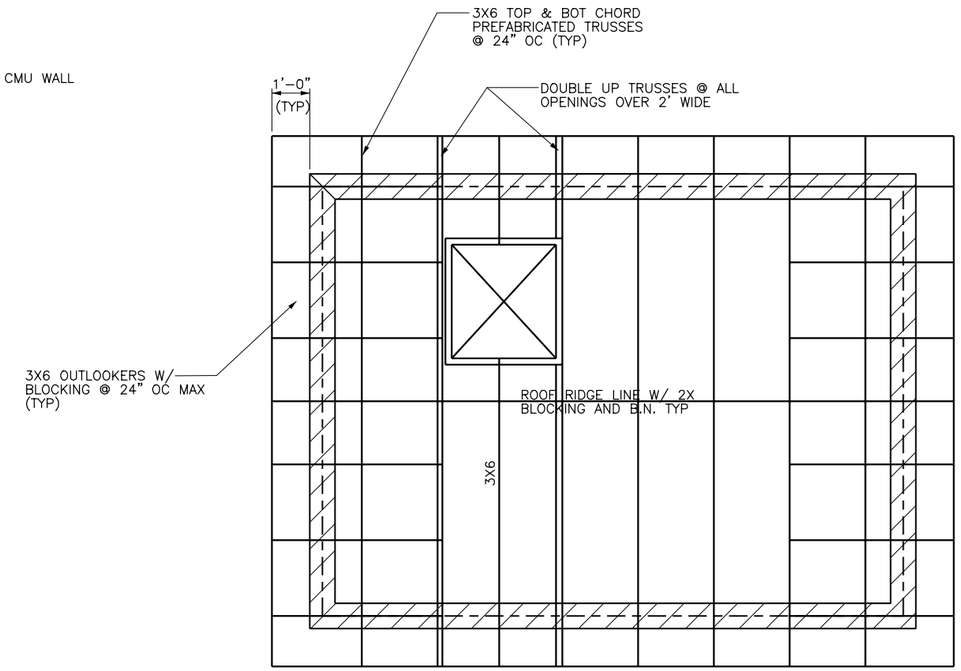
SHEET AD-S-205

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\str\AD-S-205.dgn Plot Date: 09-FEB-2004 15:05



FOUNDATION PLAN

SCALE: 1/2"= 1'-0"



ROOF PLAN

SCALE: 1/2"= 1'-0"

NOTES:

1. CONTRACTOR SHALL VERIFY ALL THE SIZE LOCATION AND DETAIL OF EQUIPMENT, VENTS, DOORS, PUMP AND TANK PADS. SEE MECH AND ELECTRICAL DRAWINGS.

2. FINISH GRADE AROUND THE BUILDING PERIMETER SHALL BE SLOPED AWAY FROM THE BUILDING LINE.

3. WOOD FRAMING :

   A. FOR FRAMING AROUND OPENINGS IN WOOD ROOF SEE DETAIL S-606 AND S-607.

   B. NAILILNG SHALL BE PER UBC 97 ABLE 23-11-B-1 UNLESS INDICATED OTHERWISE.

   C. PLYWOOD FOR ROOFS SHALL BE 5/8" CD-X (INDEX 24/16) W/ EXPOSURE "C" SIDE UP & EXP.
   1 GLUE, BLOCKED ON ALL SIDES, NAILED W/ 10d COMMON NAILS,
   4" OC @ BN
   6" OC @ EN
   12" OC FIELD, SEE S-901/GS-3.

   E. METAL FRAMING DEVICES SHOWN ON THE DWGS CAN BE REPLACED W/ EQUIVALENT DESIGNED DEVICES SUBJECT TO THE APPROVAL OF THE ENGINEER.

4. WOOD TRUSS NOTES:

   A. TRUSS MANUFACTURER'S ENGINEER SHALL DESIGN ALL TRUSS CONNECTIONS. TRUSS SHOWN IS ONLY REPRESENTATIVE.

   B. TRUSS SHALL BE DOUGLAS FIR AND DESIGNED BY THE MFR FOR THE FOLLOWING LOADS:

   DEAD LOAD

   TOP CHORD------26 PSF
   BOTTOM CHORD-----28 PSF
   ACTUAL TRUSS WEIGHT
   VENTILATION/ MECHANICAL UNITS ON THE ROOF IF REQD AS PER MECH'L.- (CONTRACTOR IS TO PROVIDE THIS LOADING TO TRUSS ENGINEER)

   LIVE LOAD

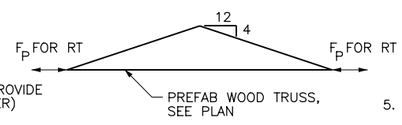
   20 PSF BASIC

   WIND LOAD

   80 MPH WIND LOAD EXPOSURE C (PER UBC 97).

   WIND PERPENDICULAR TO RIDGE

   LEEWARD ROOF = 14 PSF (OUTWARD)
   WINDWARD ROOF = 6 PSF (INWARD)
   WIND PARALLEL TO ROOF = 18 PSF (UPWARD)



   C. TOP CHORD (TC) AXIAL LOAD MAY BE EITHER COMPRESSION OR TENSION. IT DENOTES SEISMIC LOADS IN TOP CHORD, THUS 1/3RD INCREASE MAY BE USED.

TRUSS	(TC) AXIAL LOAD F_P
RT-1	1.5 K

   D. WALL TIE LOAD ACTS AT BASE OF SHOE AT WALL BEARING LOCATIONS. TRUSS DESIGN SHALL ACCOUNT FOR ADDED MOMENT DUE TO ECCENTRICITY FROM WALL TIE LOADS.

   E. BOTTOM CHORD SHALL BE DESIGNED FOR A 250 LBS CONCENTRATED LOAD AT ANY LOCATION BETWEEN PANEL POINTS. SEE MECHANICAL DRAWINGS.

   F. LOADS GIVEN ARE FOR ALLOWABLE STRESS DESIGN U.N.O

5. REFER MECH DWGS FOR ALTERNATE LOCATIONS OF HARVEST WELLS AT DIFFERENT SITES.

REGISTERED PROFESSIONAL ENGINEER CRAIG JOHN WILCOX No. S-3185 Exp. 12-31-05 STRUCTURAL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

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SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
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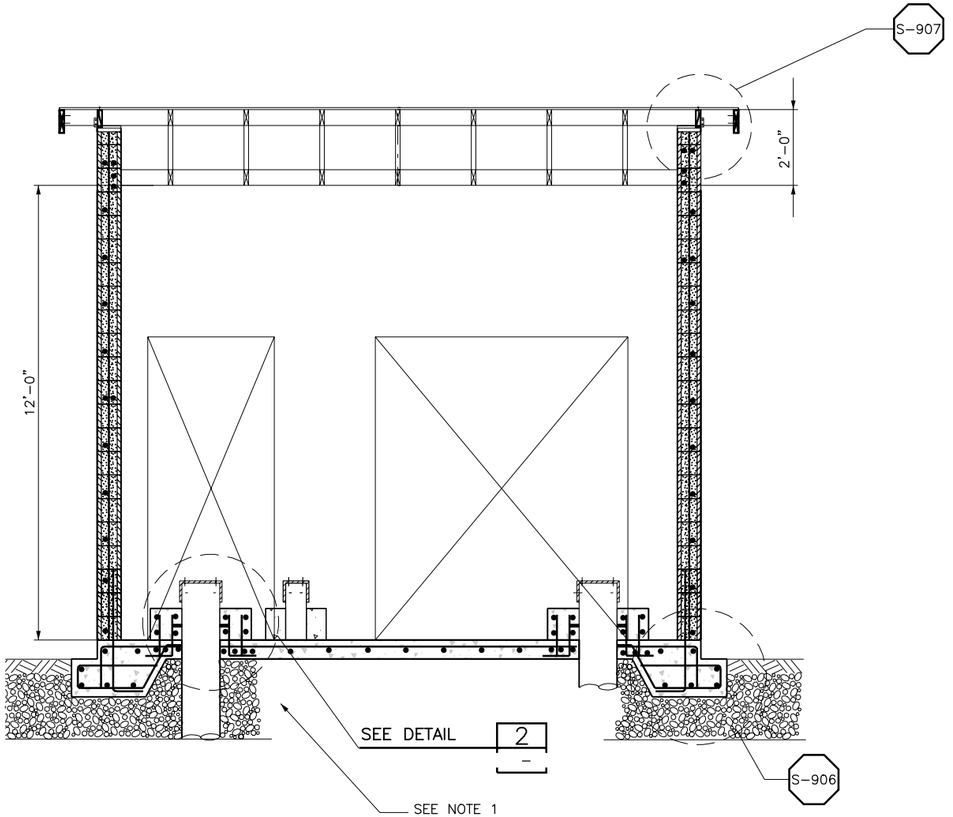
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

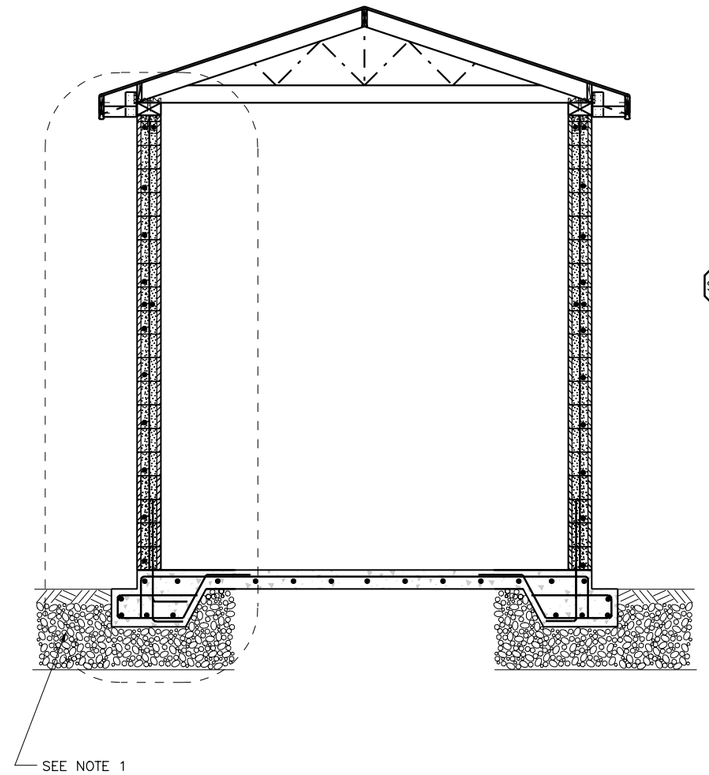
LOS OSOS WASTEWATER PROJECT
STRUCTURAL
HARVEST WELL BUILDING
FOUNDATION AND ROOF PLAN

SHEET AD-S-206

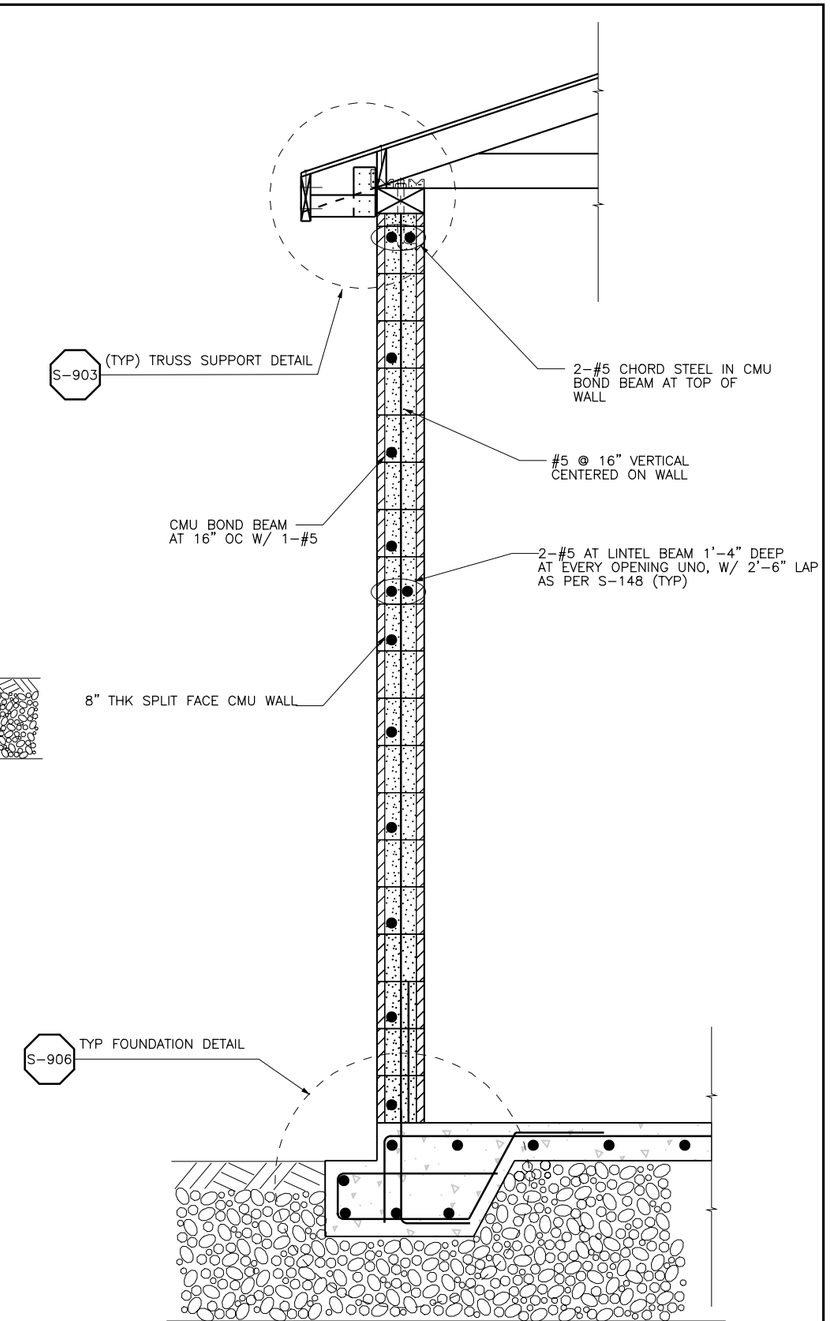
Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\str\AD-S-206.dgn Plot Date: 09-FEB-2004 15:05



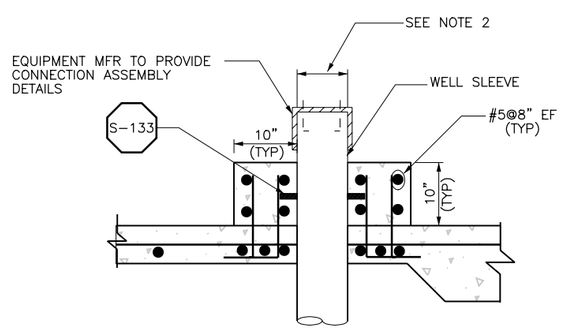
SECTION A
SCALE: 1/2"=1'-0" AD-S-206



SECTION B
SCALE: 1/2"=1'-0" AD-S-206



DETAIL 1
SCALE: 1"=1'-0"



DETAIL 2
SCALE: 1"=1'-0"

NOTE:

1. 1' – 95 % COMPACTED GRANULAR FILL BELOW FOOTING TO EXTEND 5' BEYOND THE EXTERIOR WALL ON ALL SIDES OF BUILDING. PROVIDE GEOTEXTILE PRIOR TO PLACING THE GRANULAR FILL. REFER SPECIFICATIONS.
2. COORDINATE DIMENSION WITH MFR'S SHOP DWGS PRIOR TO ANY FABRICATION AND/OR CONSTRUCTION.

REGISTERED PROFESSIONAL ENGINEER JOHN W. BERGEN No. S-3195 Exp. 12-31-05 STRUCTURAL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: AS SHOWN

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DRAWN S.BATRA
CHECKED C.WILCOX

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
STRUCTURAL
HARVEST WELL BUILDING
SECTION AND DETAILS

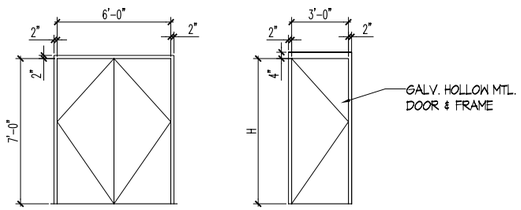
SHEET AD-S-207

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\str\AD-S-207.dgn Plot Date: 09-FEB-2004 15:06

GENERAL NOTES

A. All dimensions are to the face of framing unless otherwise noted.
B. Contractor to provide sheathing on the interior side of all walls where structural sheathing occurs, to provide a continuous and flush wall surface for the entire wall.
C. All door thresholds to be level from jamb to jamb.
D. All door jambs on hinge side to be 6" from corner of wall unless otherwise noted.
E. Refer to Plumbing Plans for further information.
F. Refer to Civil Plans for further information on adjacent site improvements.
G. Refer to Structural Plans for further information and coordination.
H. Refer to Mechanical Plans for further information on equipment locations and penetrations.

DOOR TYPES



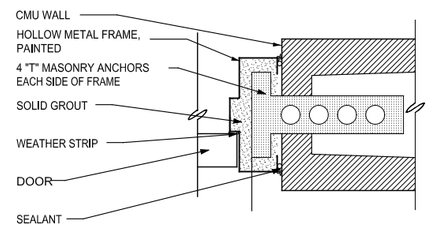
A
HOLLOW METAL

B
HOLLOW METAL

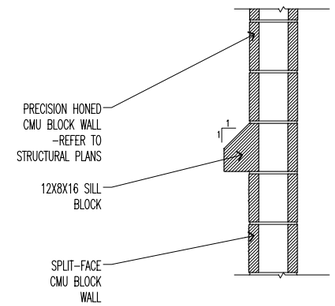
DOOR SCHEDULE

DOOR NO.	DOOR TYPE	RATING	FRAME TYPE	SIZE (WxH)	HDWR GROUP	NOTES
STANDBY POWER BUILDINGS						
P1	A	–	MTL.	(2)3'–0"X8'–0"	HD_GR	–
HARVEST WELLS						
H1	A	–	MTL.	(2)3'–0"X8'–0"	HD_GR	–
H2	B	–	MTL.	3'–0"X8'–0"	HD_GR	–

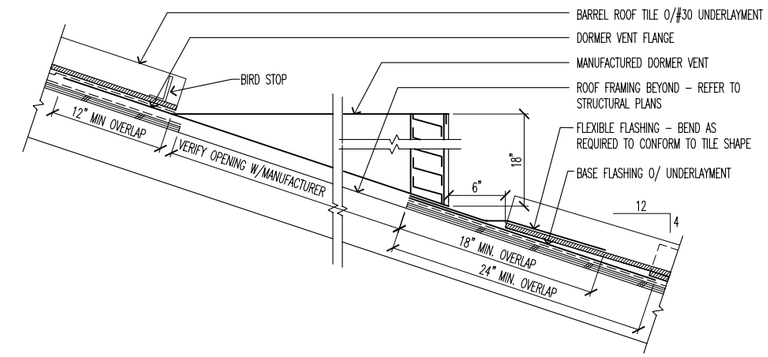
NOTES:
(1) VERIFY ROUGH OPENING SIZE WITH DOOR MANUFACTURER SPEC. PRIOR TO CONSTRUCTION
(2) DOOR SIZE REFERS TO FINISH OPENING. CONTRACTOR TO VERIFY ACTUAL DOOR SIZE TO FIT FINISH OPENING PRIOR TO FABRICATION OF DOOR & FINISH OPENING



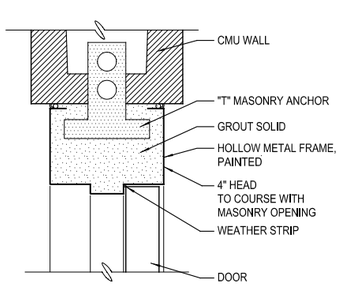
EXTERIOR HOLLOW METAL DOOR – JAMB | 3" | 3



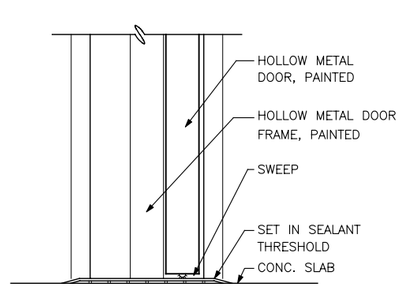
BLOCK DETAIL | 1" | 2



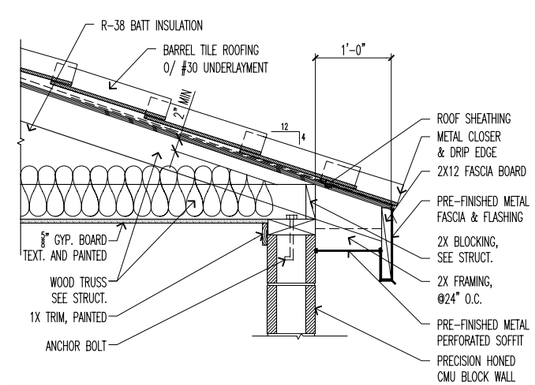
ROOF VENT | 1 1/2" | 1



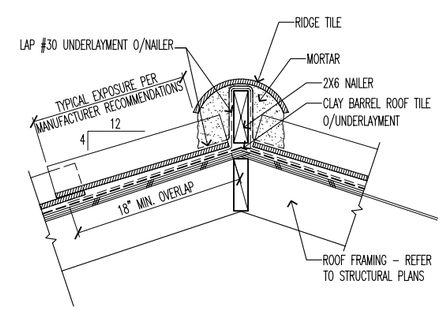
EXTERIOR HOLLOW METAL DOOR – HEAD | 3" | 7



EXTERIOR HOLLOW METAL DOOR | 3" | 6



EAVE DETAIL | 1" | 5



NOTE: FASTEN TILES PER MANUFACTURER RECOMMENDATIONS

RIDGE FLASHING DETAIL | 1 1/2" | 4

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REV	DATE	BY	DESCRIPTION

SCALE: AS LABELED

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DRAWN Ryan Brockett
CHECKED Kyle Harris

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
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LOS OSOS WASTEWATER PROJECT
ARCHITECTURAL
STANDARD ARCHITECTURAL DETAILS

SHEET AD–GA–200 OF

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DIMENSION TABLE

STANDBY POWER FACILITY	BUILDING DIMENSIONS
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EAST YSABEL	24'-8" X 14'-8"
EAST PASO	25'-4" X 14'-8"
MOUNTAIN VIEW	25'-4" X 14'-8"
SUNNY OAKS	24'-8" X 14'-8"

SYMBOLS AND LEGENDS

5 / A-8.0 — DETAIL NUMBER / SHEET NUMBER

5 / A-6.1 — SECTION NUMBER / SHEET NUMBER

ROOF VENT 07120 — ITEM DESCRIPTION / SPEC SECTION(S)

GENERAL NOTES

1 Applicable Codes and Standards:

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Part 2 2001 California Building Code, Title C.C.R.
(1997 Uniform Building Code Volumes 1-3 of the International Conference of Building Officials, with California Amendments)
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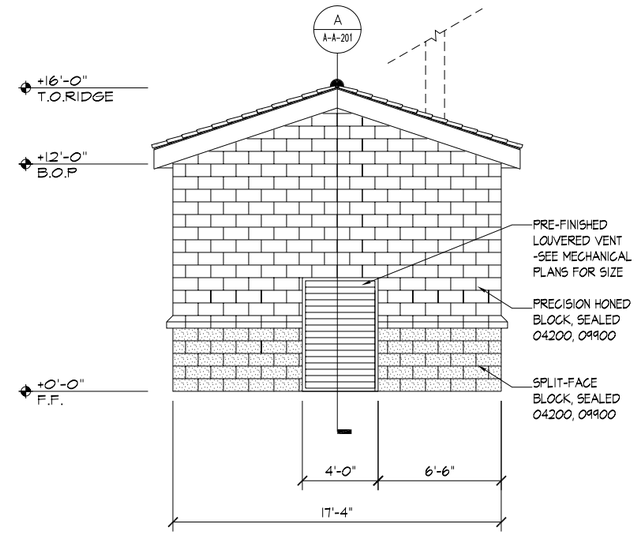
3 Omissions made in these drawings and specifications or the mis-description of the work which is manifestly necessary to carry out the intent of the drawings and specifications, or which is customarily performed shall not relieve the Contractor from performing such omitted or described details of the work as if fully and completely set forth and described in the drawings and specifications.

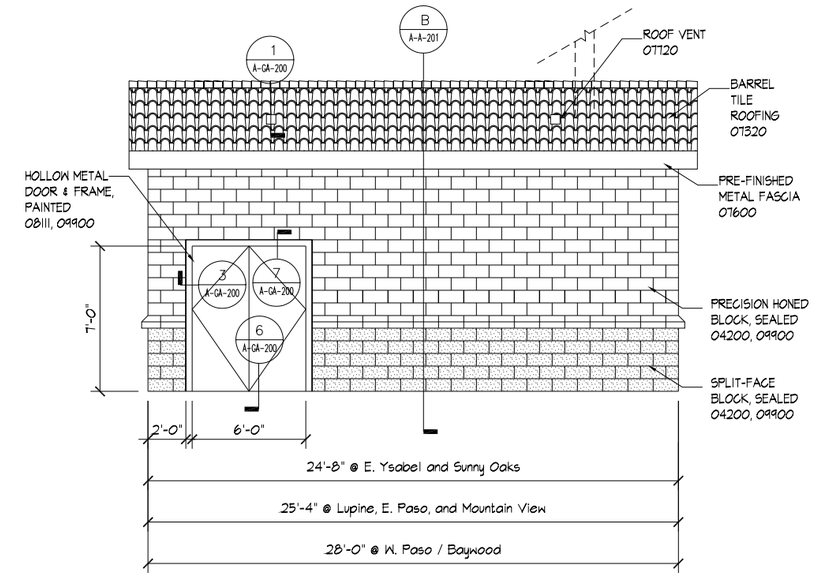
4 Dimensions shown shall take precedence over drawing scale or proportion. Larger scale drawings shall take precedence over smaller scale drawings.

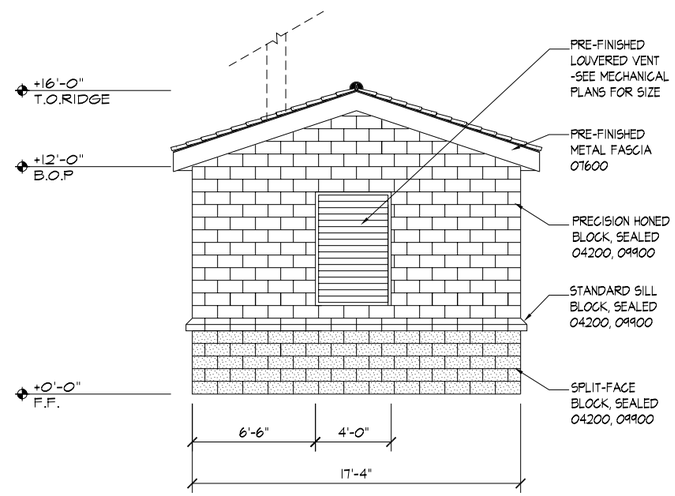
5 In the event of the unforeseen encounter of materials suspected to be of an archaeological or paleontological nature, all grading and excavation shall cease in the immediate area and the appropriate authorities are to be notified by the Contractor. The find shall be left untouched until an evaluation by a qualified Archaeologist or Paleontologist is made.

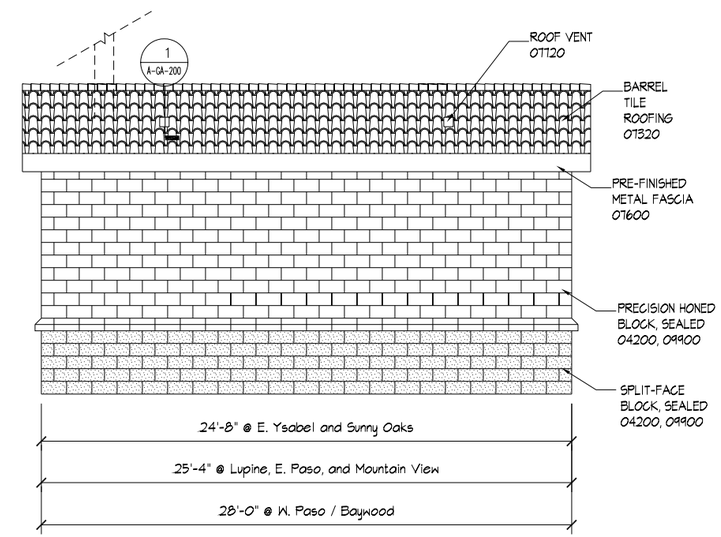
6 Contractor is to be responsible for being familiar with these documents including all contract requirements.

7 Grading plans, drainage improvements, road and access requirements and environmental health considerations shall comply with all local ordinances.









ELEVATIONS

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REV	DATE	BY	DESCRIPTION

SCALE: 1/4" = 1'-0"

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DRAWN Ryan Brockett
CHECKED Kyle Harris

SUBMITTED BY
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STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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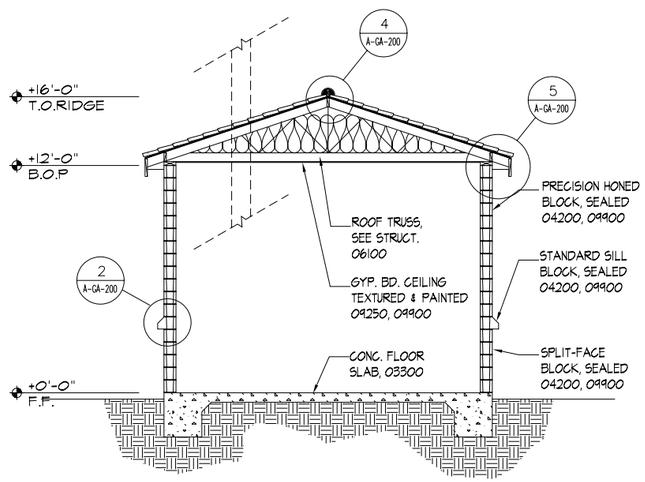
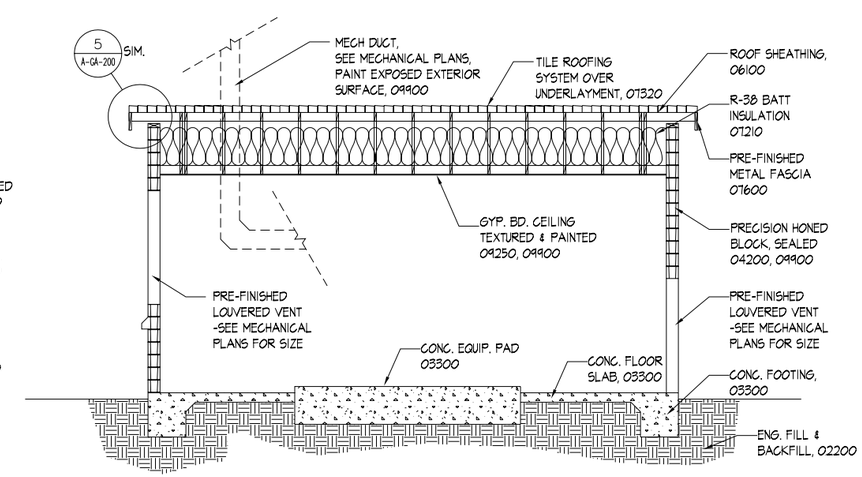
ARCHITECTURAL
STANDBY POWER BUILDINGS
ELEVATIONS

SHEET A-A-200 OF



SECTION A



SECTION B

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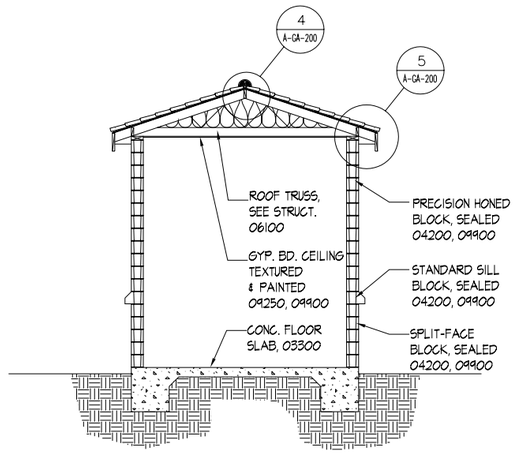
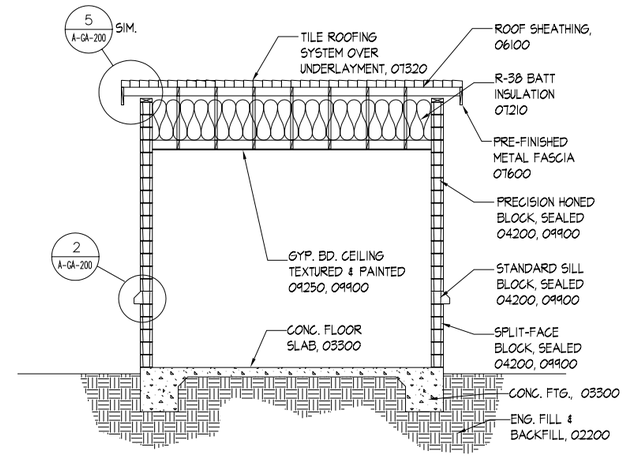
SECTIONS

SHEET
A-A-201
OF



SECTION A



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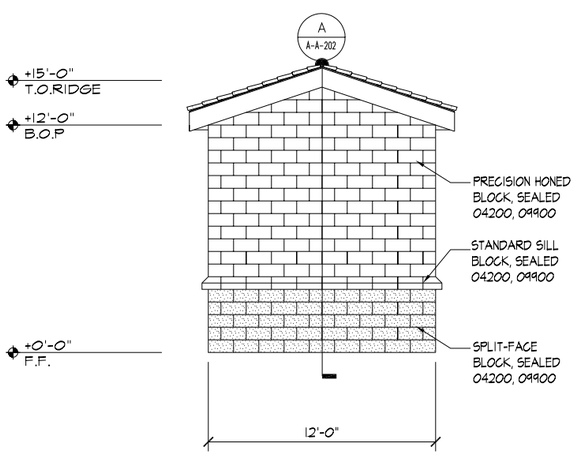

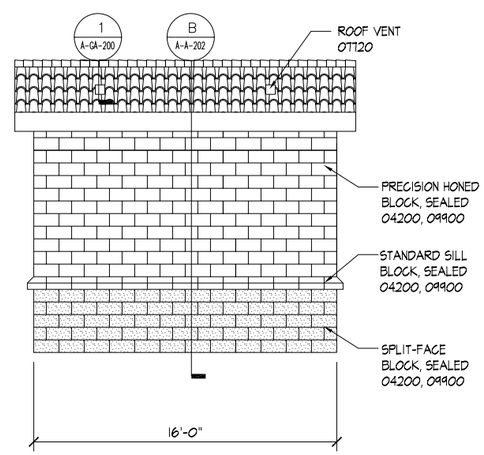

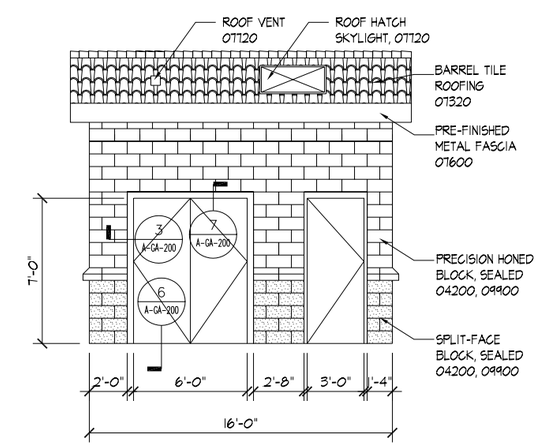

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LOS OSOS WASTEWATER PROJECT
ARCHITECTURAL
HARVEST WELLS
ELEVATIONS AND SECTIONS

SHEET A-A-202 OF

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SYMBOLS AND LEGENDS

5 / A-8.0 — DETAIL NUMBER / SHEET NUMBER

5 / A-6.1 — SECTION NUMBER / SHEET NUMBER

ROOF VENT 07120 — ITEM DESCRIPTION / SPEC SECTION(S)

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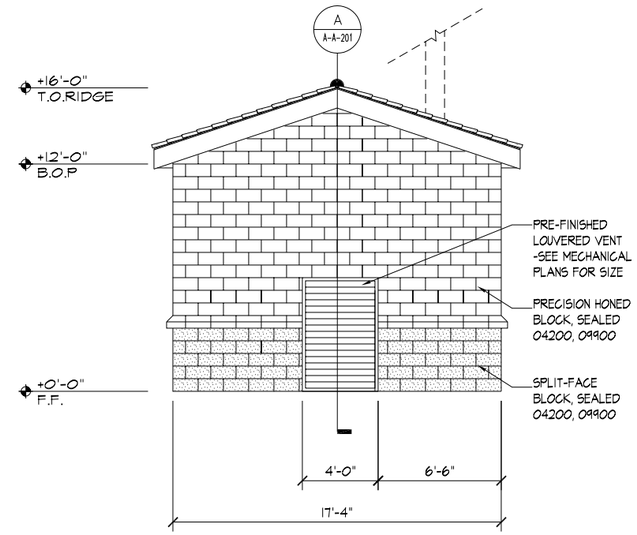

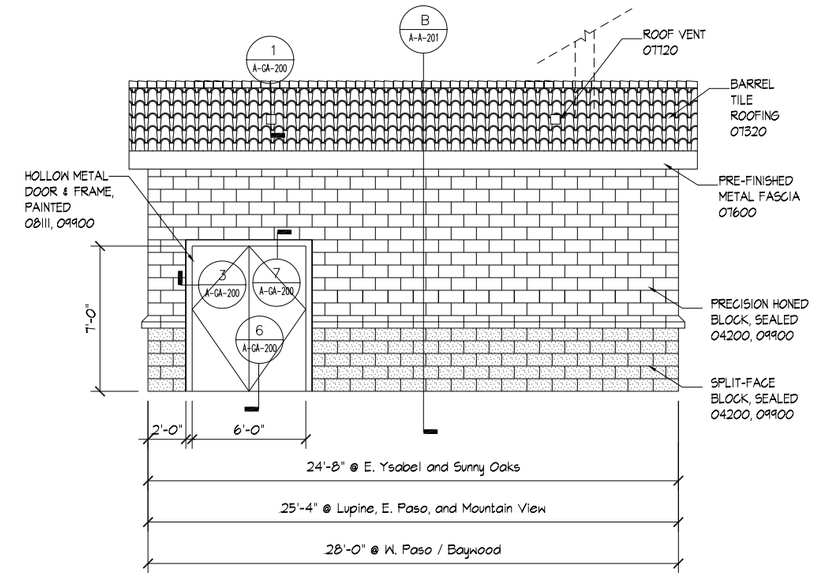

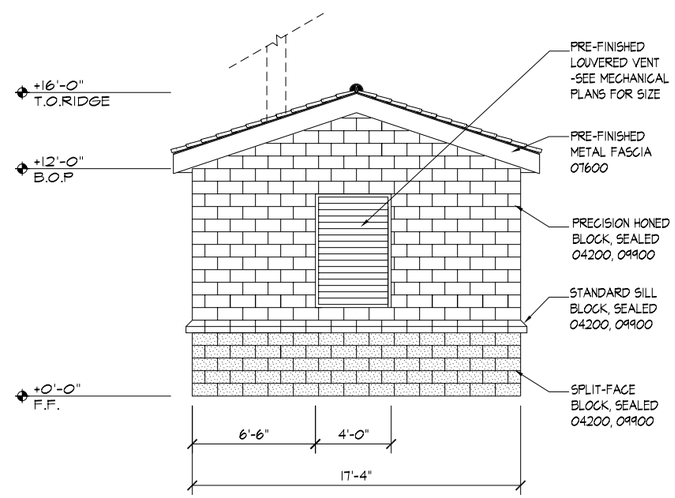

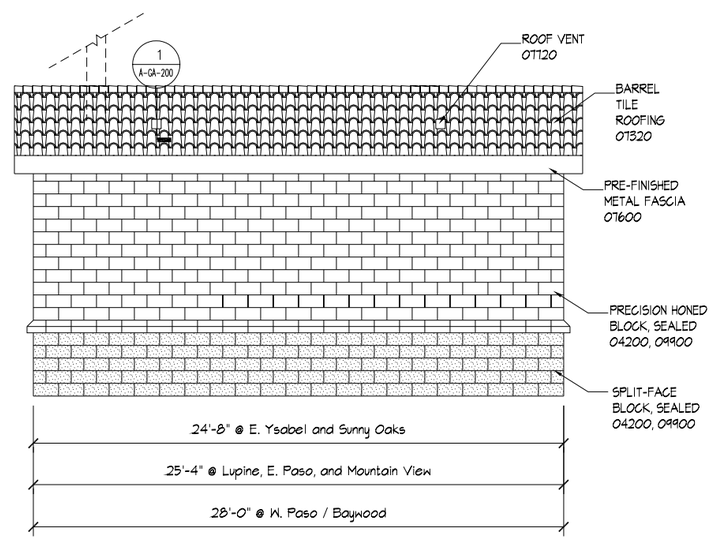

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REV	DATE	BY	DESCRIPTION

SCALE: 1/4" = 1'-0"

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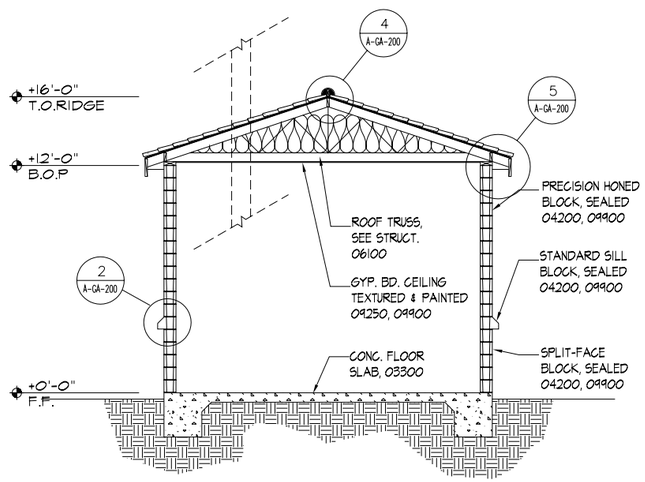
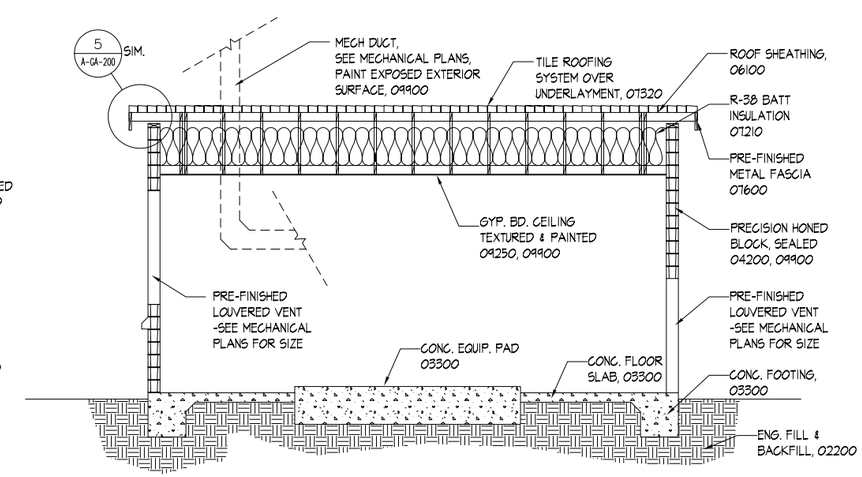
LOS OSOS WASTEWATER PROJECT
ARCHITECTURAL
STANDBY POWER BUILDINGS
ELEVATIONS

SHEET D-A-200 OF



SECTION A



SECTION B

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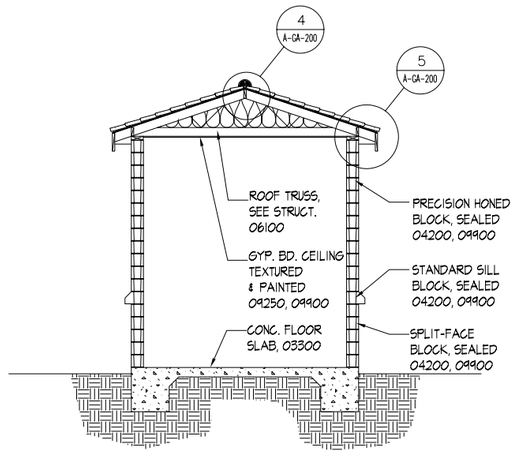
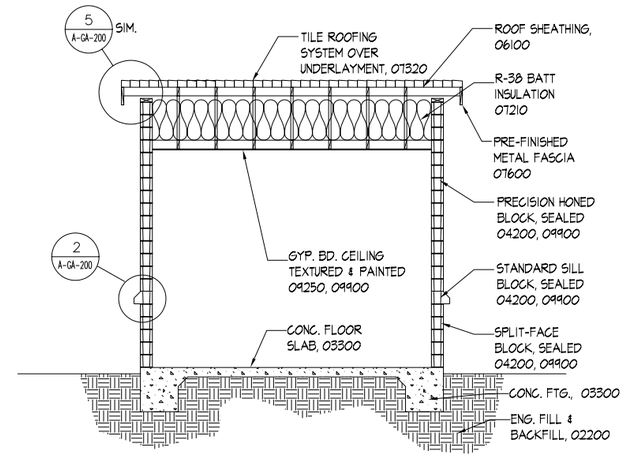
LOS OSOS WASTEWATER PROJECT
ARCHITECTURAL
STANDBY POWER BUILDINGS
SECTIONS

SHEET D-A-201 OF



SECTION A



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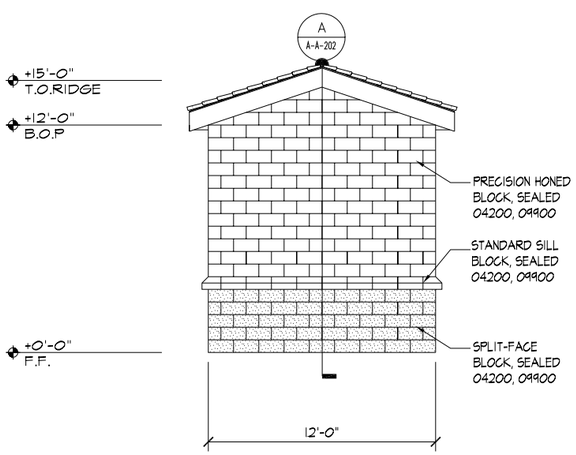
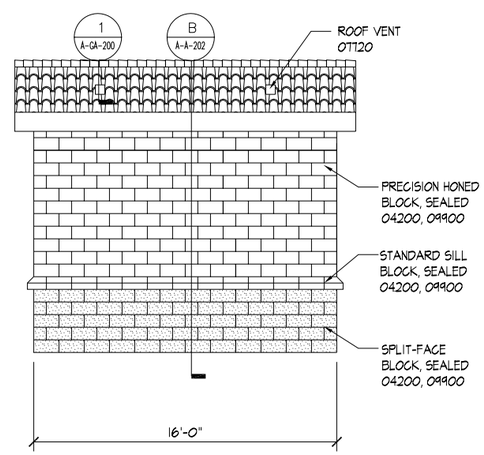
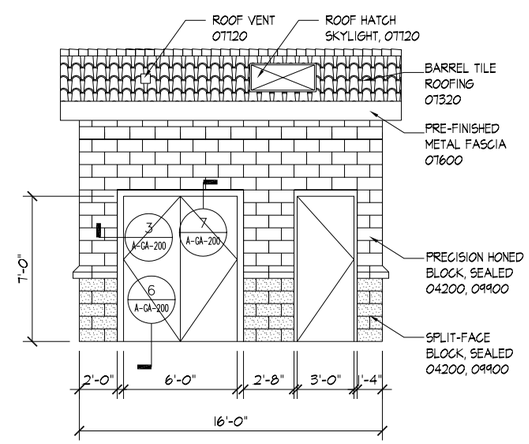






ELEVATIONS

Licensed Architect
Kyle L. Harris
License #C-29272
Expires 7/05
State of California

REV	DATE	BY	DESCRIPTION

SCALE: 1/4" = 1'-0"

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED Kyle Harris
DRAWN Ryan Brockett
CHECKED Kyle Harris

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

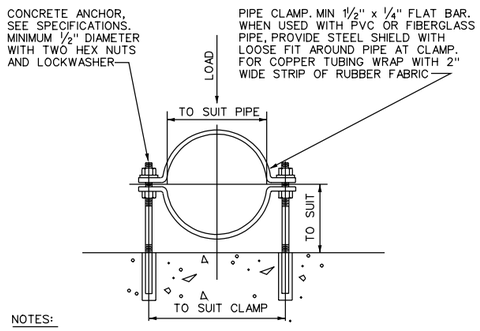
MWH Walnut Creek, California

RRM DESIGN GROUP — Creating Environmental Physical Design — 3765 South Higuera Street, Suite 102 • San Luis Obispo, California 93401 — Phone: 805/543-1794 • Fax: 805/543-467 • www.rrmdesign.com — © Copyright, Institute Of 1984 • any Rhine, 100 2000, 01 1997 • all rights, contact author 2001

LOS OSOS WASTEWATER PROJECT
ARCHITECTURAL
HARVEST WELLS
ELEVATIONS AND SECTIONS

SHEET D-A-202 OF

N:\2002\1002008 Los Osos WWTF\Arch\Product\CAD files\PumpStations\100%.dwg, ELEVATIONS D -HW, Feb 06, 2004 10:19am, SAMartin

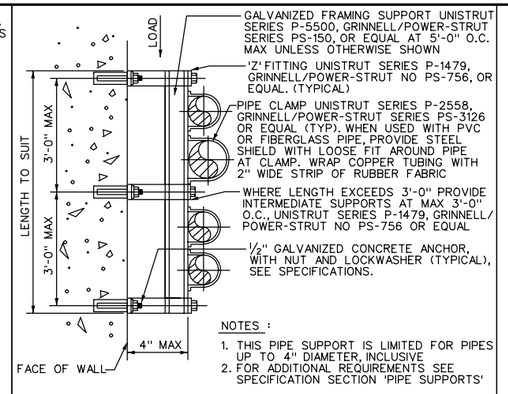


NOTES:

1. GALVANIZE ALL PARTS AFTER FABRICATION. WHERE SUBMERGED, PIPE CLAMP, NUTS, LOCKWASHERS, ANCHORS AND SHIELDS TO BE TYPE 316 STAINLESS STEEL
2. THIS PIPE CLAMP IS LIMITED TO PIPES UP TO 4" DIAMETER INCLUSIVE
3. FOR ADDITIONAL REQUIREMENTS SEE SPECIFICATIONS SECTION 'PIPE SUPPORTS'

PIPE CLAMP

(FOR PIPE 4" DIAMETER AND SMALLER) REV 042202 M-101

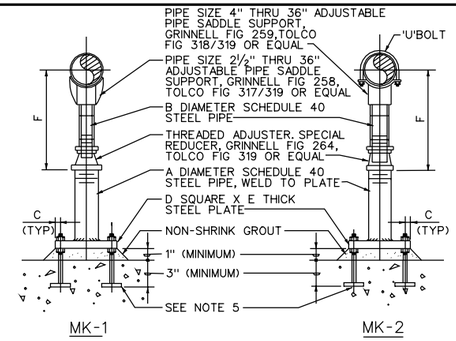


NOTES :

1. THIS PIPE SUPPORT IS LIMITED FOR PIPES UP TO 4" DIAMETER, INCLUSIVE
2. FOR ADDITIONAL REQUIREMENTS SEE SPECIFICATION SECTION 'PIPE SUPPORTS'

EXTENDED PIPE SUPPORT

(FOR PIPE 4" DIAMETER AND SMALLER) REV 042202 M-103



NOTES:

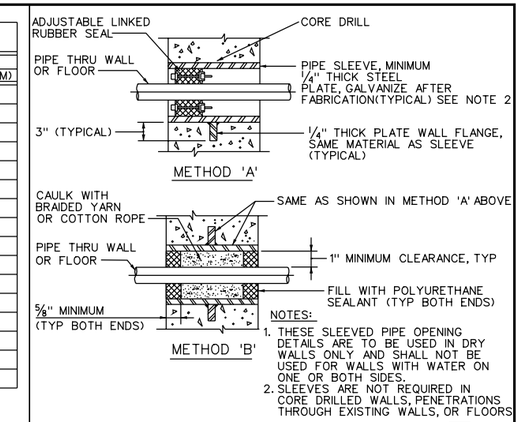
1. FOR ADDITIONAL REQUIREMENTS SEE SPEC SECTION 'PIPE SUPPORTS'.
2. GALVANIZE ALL PARTS AFTER FABRICATION.
3. WHERE PIPE SUPPORT OCCURS ON GRADE REFER TO STRUCTURAL DRAWINGS FOR DETAILS.
4. THIS PIPE SUPPORT IS LIMITED TO PIPE FROM 2½" DIAMETER TO 36" DIAMETER INCLUSIVE.
5. GALVANIZED ANCHOR BOLT OR CONCRETE ANCHOR WITH TWO NUTS AND ONE LOCKWASHER. PROVIDE BAR 4 X ½ X 4" WELDED TO BOLT. (TYP OF 4) SEE SPECIFICATIONS.

DIMENSIONS IN INCHES							
NOMINAL PIPE SIZE	A	B	C	D	E	F (APPROX) (MINIMUM)	F (APPROX) (MAXIMUM)
2½	2	1½	1	6	⅜	7	11½
3	2	1½	1	6	⅜	7 5/16	11 13/16
3½	2	1 1/2	1	6	⅜	7 9/16	12 1/16
4	3	*2½/3	1⅛	7½	½	10¼	14¾
6	3	*2½/3	1⅛	7½	½	11 9/16	16 1/16
8	3	*2½/3	1⅛	7½	½	13 9/16	18 1/16
10	3	*2½/3	1⅛	7½	½	14⅝	19⅛
12	3	*2½/3	1⅛	7½	½	15⅝	20⅛
14	4	3	1¼	9	⅝	18⅞	23⅜
16	4	3	1¼	9	⅝	19⅞	24⅜
18	6	4	1½	11	¾	22¼	26¾
20	6	4	1½	11	¾	23¼	27¾
24	6	4	1½	11	¾	26½	31
30	6	4	1½	11	¾	29⅝	34⅛
32	6	4	1½	11	¾	30⅝	35⅛
36	6	4	1½	11	¾	32⅝	37⅛

* SEE MANUFACTURER

ADJUSTABLE PIPE SUPPORT WITH OR WITHOUT 'U' BOLT

(FOR PIPE 36" DIAMETER AND SMALLER) REV 011402 M-108

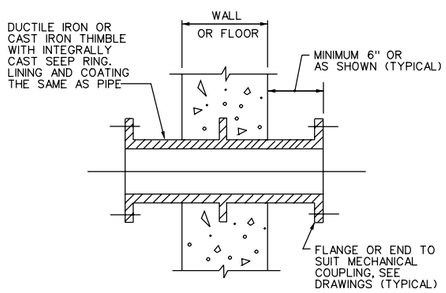


NOTES:

1. THESE SLEEVED PIPE OPENING DETAILS ARE TO BE USED IN DRY WALLS ONLY AND SHALL NOT BE USED FOR WALLS WITH WATER ON ONE OR BOTH SIDES.
2. SLEEVES ARE NOT REQUIRED IN CORE DRILLED WALLS, PENETRATIONS THROUGH EXISTING WALLS, OR FLOORS

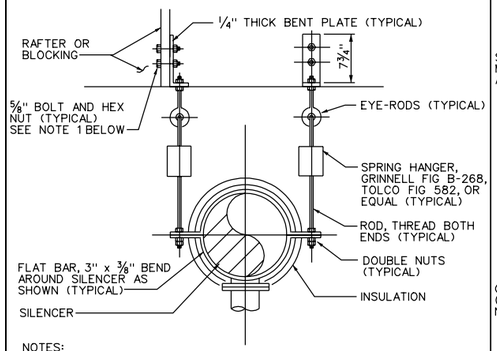
SLEEVED PIPE OPENING

M-111



FLANGED OR GROOVED DUCTILE IRON OR CAST IRON PIPE THIMBLE

REV 061101 M-116

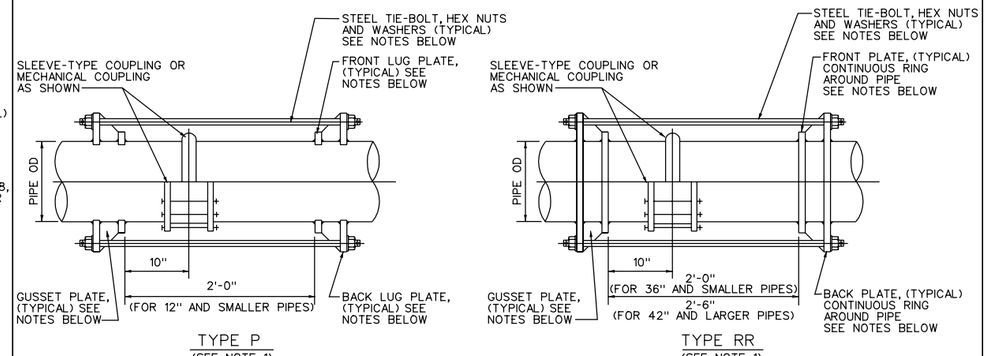


NOTES:

1. EXPANSION TYPE BOLTS ARE NOT ALLOWED
2. FOR ADDITIONAL REQUIREMENTS SEE SPECIFICATION 'PIPE SUPPORTS'

SILENCER SUPPORT

REV 061401 M-149

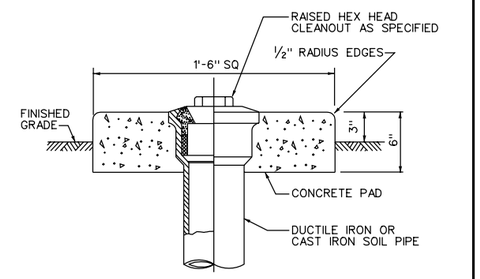


NOTES:

1. SEE AWWA MANUAL M-11 FOR HARNESS SET SIZE, TYPE AND DESIGN REQUIREMENTS.
2. WHERE BURIED TIE-BOLTS, HEX NUTS AND WASHERS SHALL BE TYPE 316 STAINLESS STEEL.

HARNESSED JOINT

REV 042502 M-156

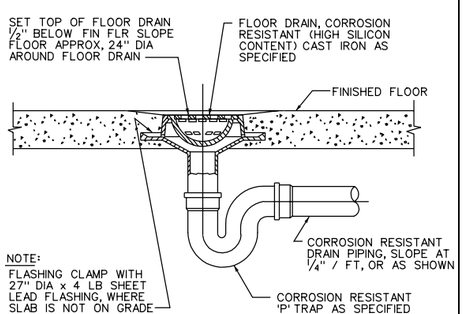


NOTE:

IN TRAFFIC AREAS PROVIDE FLUSH FINISH WITH 10" ID CAST IRON COVER AND FRAME AS SPECIFIED.

CLEANOUT TO GRADE

REV 011602 M-306



NOTE:

FLASHING CLAMP WITH 27" DIA x 4 LB SHEET LEAD FLASHING, WHERE SLAB IS NOT ON GRADE

CORROSION RESISTANT FLOOR DRAIN

REV 061101 M-310

REGISTERED PROFESSIONAL ENGINEER JACK OSBORN No. M3171 Exp. 12-31-05 MECHANICAL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NTS

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED J. OSBORN
DRAWN B. STOLL
CHECKED R. GONZALEZ

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
MECHANICAL
STANDARD DETAILS – 1

SHEET AD–GM–200

Plot Date: 09-FEB-2004 17:14
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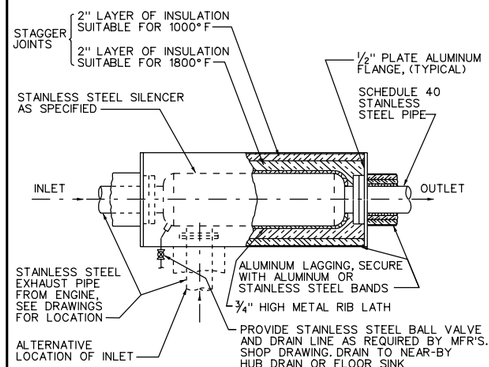
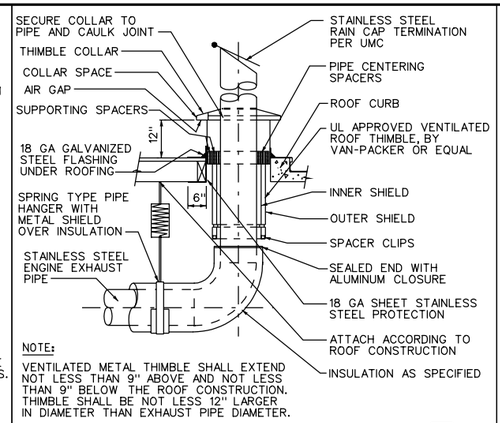
Job No: 1481166



ENGINE SILENCER ASSEMBLY

REV 061401 M-401

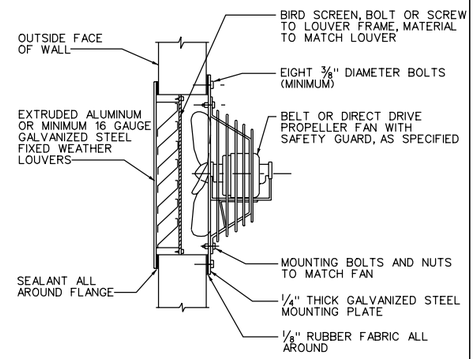


NOTE:

VENTILATED METAL THIMBLE SHALL EXTEND NOT LESS THAN 9" ABOVE AND NOT LESS THAN 9" BELOW THE ROOF CONSTRUCTION. THIMBLE SHALL BE NOT LESS 12" LARGER IN DIAMETER THAN EXHAUST PIPE DIAMETER.

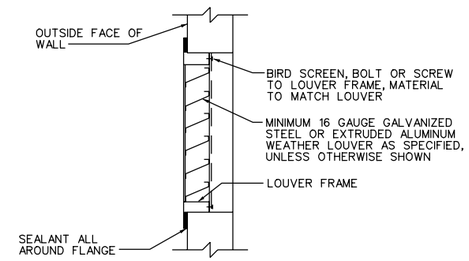
ENGINE EXHAUST THROUGH ROOF

REV 061401 M-414



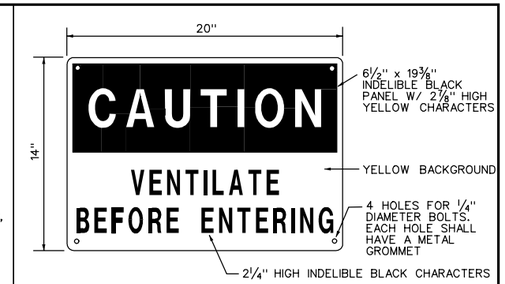
FAN WITH FIXED LOUVER

REV 061101 M-505



FIXED WEATHER LOUVER

REV 061101 M-507

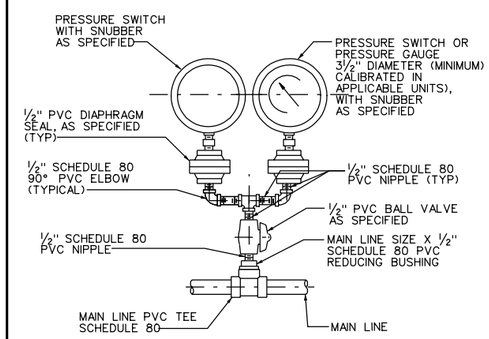


NOTES:

1. WARNING SIGN TO BE ABLE TO BEND TO A 9" RADIUS.
2. MATERIAL TO BE 0.060" THICK BUTYRATE OR EQUAL.
3. SIGN TO BE ATTACHED IN CONSPICUOUS LOCATION AT ENTRY OF STRUCTURE.

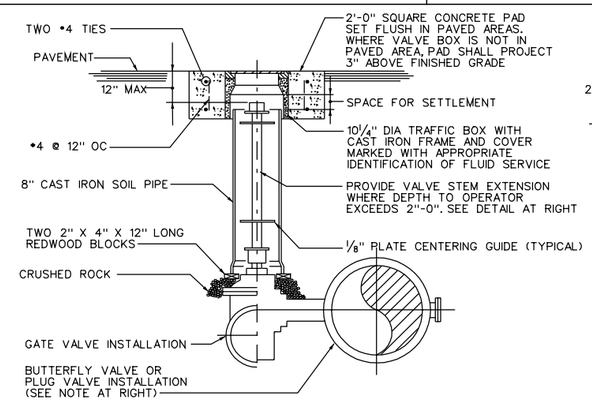
VENTILATION WARNING SIGN

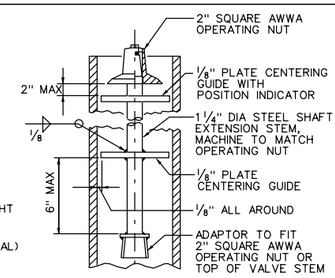
REV 062801 M-509



PRESSURE GAUGE OR PRESSURE SWITCH WITH PVC DIAPHRAGM SEAL ON PVC PIPE

REV 061801 M-618





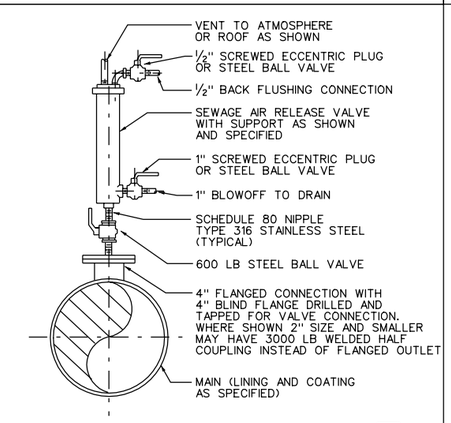
VALVE STEM EXTENSION

NOTE :

FOR LUBRICATED PLUG VALVE, EXTEND LUBRICATION LINE TO GRADE PER MANUFACTURERS INSTRUCTIONS

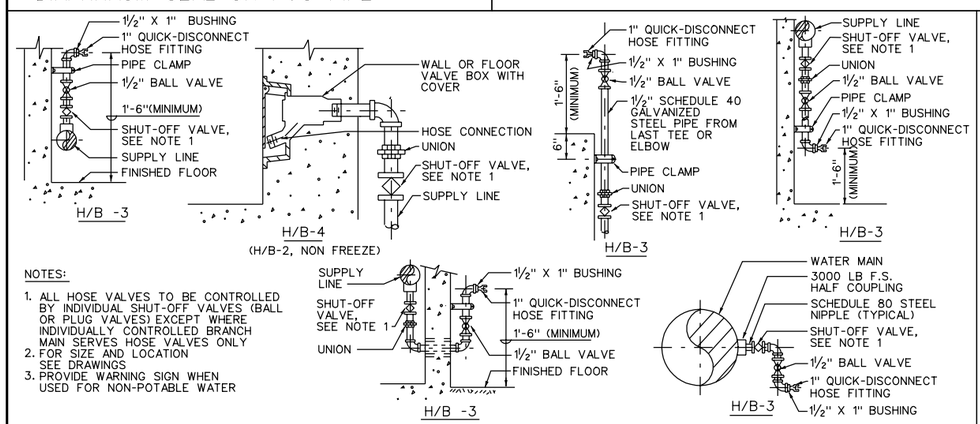
BURIED VALVE

REV 061801 M-803



SEWAGE AIR RELEASE VALVE

REV 061101 M-806

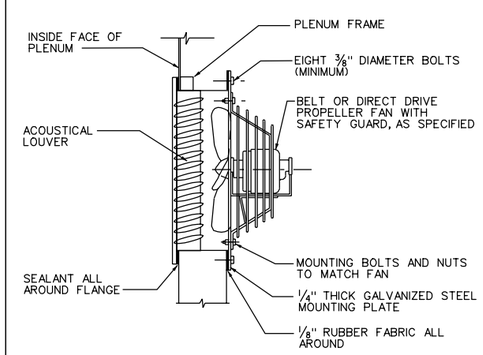


NOTES:

1. ALL HOSE VALVES TO BE CONTROLLED BY INDIVIDUAL SHUT-OFF VALVES (BALL OR PLUG VALVES) EXCEPT WHERE INDIVIDUALLY CONTROLLED BRANCH MAIN SERVES HOSE VALVES ONLY
2. FOR SIZE AND LOCATION SEE DRAWINGS
3. PROVIDE WARNING SIGN WHEN USED FOR NON-POTABLE WATER

HOSE VALVES WITH QUICK-DISCONNECT

REV 062001 M-839



FAN WITH ACOUSTICAL LOUVER

M-906

REGISTERED PROFESSIONAL ENGINEER JACK OSBORN M 17171 Exp. 12-31-05 MECHANICAL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NTS

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED J. OSBORN
DRAWN B. STOLL
CHECKED R. GONZALEZ

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2/16/2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2/16/2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

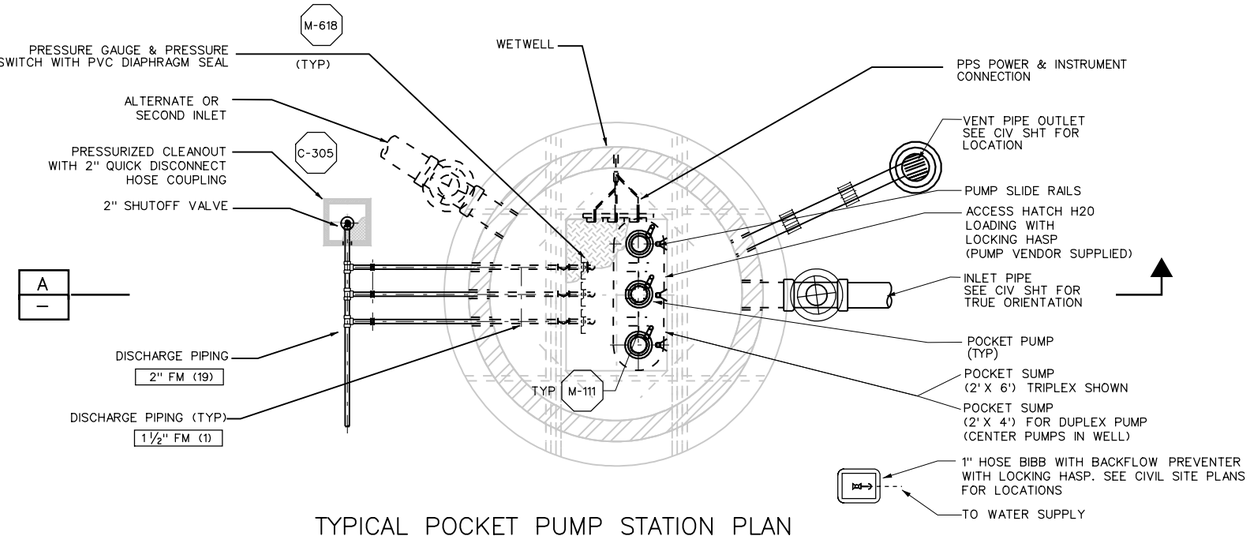
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

MECHANICAL STANDARD DETAILS – 2

SHEET AD–GM–201

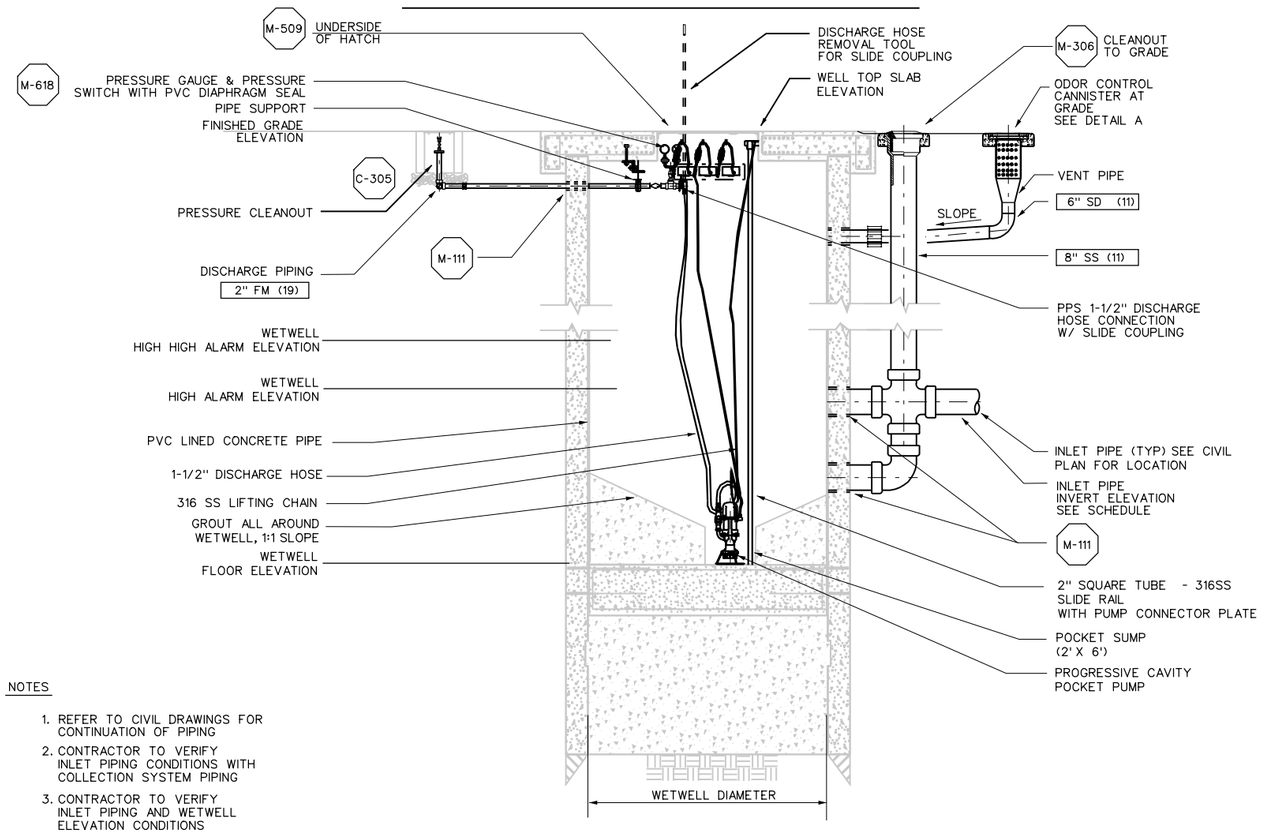
Plot Date: 09-FEB-2004 17:14
File: N:\Projects\los_osos\Collect_Sys\PS\mec\AD-GM-201.dgn
Job No: 1481166



TYPICAL POCKET PUMP STATION PLAN

POCKET PUMP STATION SCHEDULE (a)											
DESCRIPTION	04A	07A	08A	09A	09B	09C	10A	11A	12A	13A	15B
AREA	A	A	A	A	D	D	A	A	A	A	D
NUMBER OF PUMPS	3	2	2	2	3	2	2	2	2	2	2
DESIGN FLOW EACH PUMP (GPM)	12.25	7	10	12.5	17	16.5	17.5	14	15.75	13.5	13
DESIGN TDH (FT)	47	40	56	59	8	44	57	50	33	20	11
PUMP HP (HP)	1	1	1	1	1	1	1	1	1	1	1
TOP WETWELL SLAB ELEVATION	19.1	29.6	28	33	73	92.5	47.7	53.1	68	77.4	94.5
WETWELL FLOOR ELEVATION	8.1	19.6	17	19	62	82.5	15.1	44.1	58	67.4	84.5
WETWELL DEPTH (FT)	11	10	11	14	11	10	13	9	10	10	10
WETWELL DIAMETER (FT)	10	10	10	10	10	10	10	10	10	10	10
INLET PIPING SIZE (IN)	8	8	8	8	8	8	8	8	8	8	8
NUMBER OF INLETS	2	1	1	1	2	3	1	2	2	2	2
INLET PIPING INVERT ELEVATION	11.6 13.8	24	19.2	17.2	67.25 66.91	84.8 84.8 84.8	38.4	44 42.5	60 60	71 71	96.6 89.8
DISCHARGE PIPING SIZE (IN)	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
FORCE MAIN SIZE (IN)	2	2	2	2	2	2	2	2	2	2	2
FORCE MAIN CENTERLINE ELEVATION	16.9	27.4	25.8	30.8	70.8	90.3	45.5	50.9	65.8	75.2	92.3
HIGH HIGH ALARM ELEVATION	10	9	10	13	10	9	12	8	9	9	9
HIGH ALARM ELEVATION	7	7	11	9	7	7	9	6	7	7	7

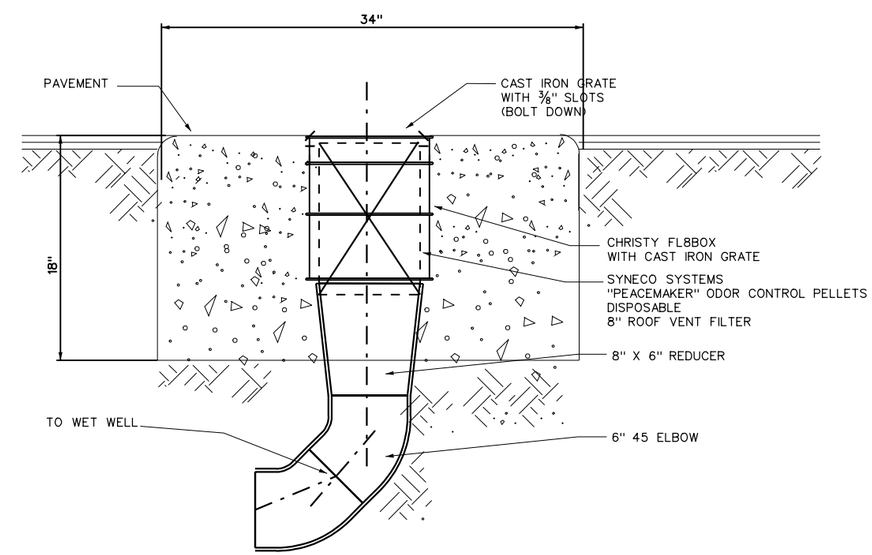
(a) SEE SHEETS A-C-206, A-C-207 AND D-C-203 FOR POCKET PUMP STATION SITE PLANS.



NOTES

1. REFER TO CIVIL DRAWINGS FOR CONTINUATION OF PIPING
2. CONTRACTOR TO VERIFY INLET PIPING CONDITIONS WITH COLLECTION SYSTEM PIPING
3. CONTRACTOR TO VERIFY INLET PIPING AND WETWELL ELEVATION CONDITIONS

SECTION A
POCKET PUMP STATION –



ODOR CONTROL A
CANNISTER DETAIL –

REGISTERED PROFESSIONAL ENGINEER JACK OSBORN M-18171 Exp. 12-31-05 MECHANICAL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE 3/8 = 1'-0"

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED J. OSBORN
DRAWN J. OSBORN
CHECKED R. GONZALEZ

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
MECHANICAL
POCKET PUMP STATIONS
PLAN & SECTION

SHEET AD-M-200

Plot Date: 09-FEB-2004 17:14
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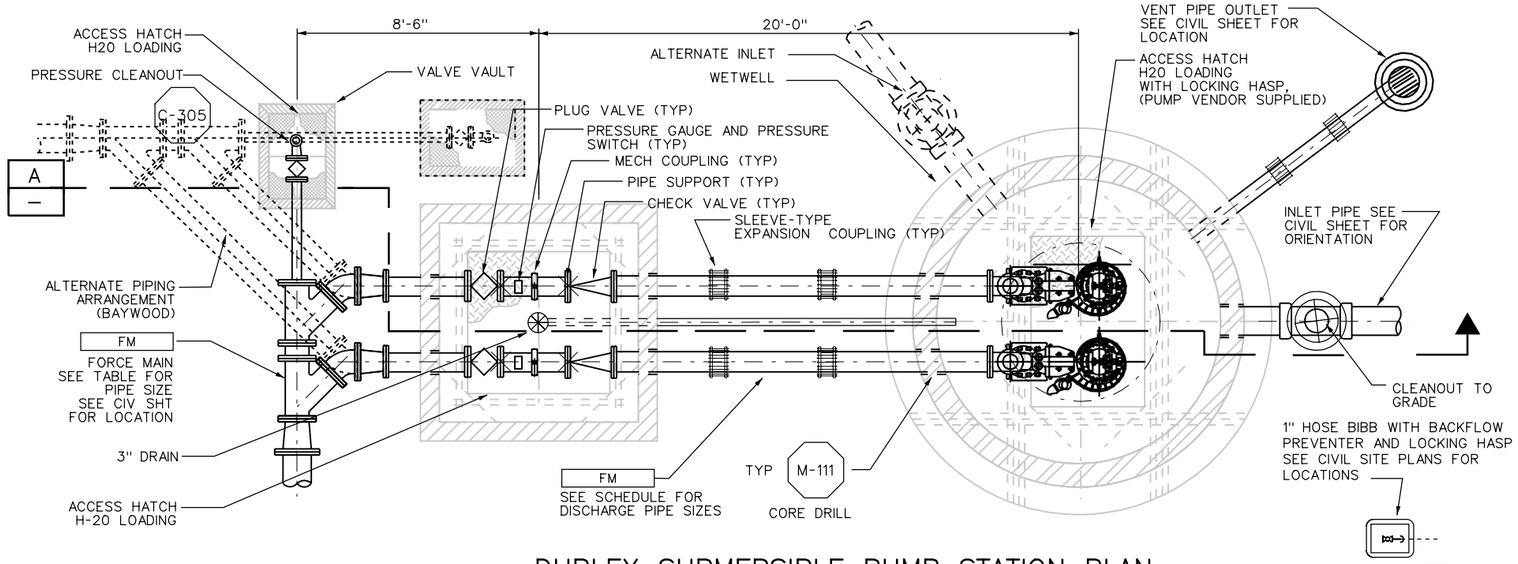
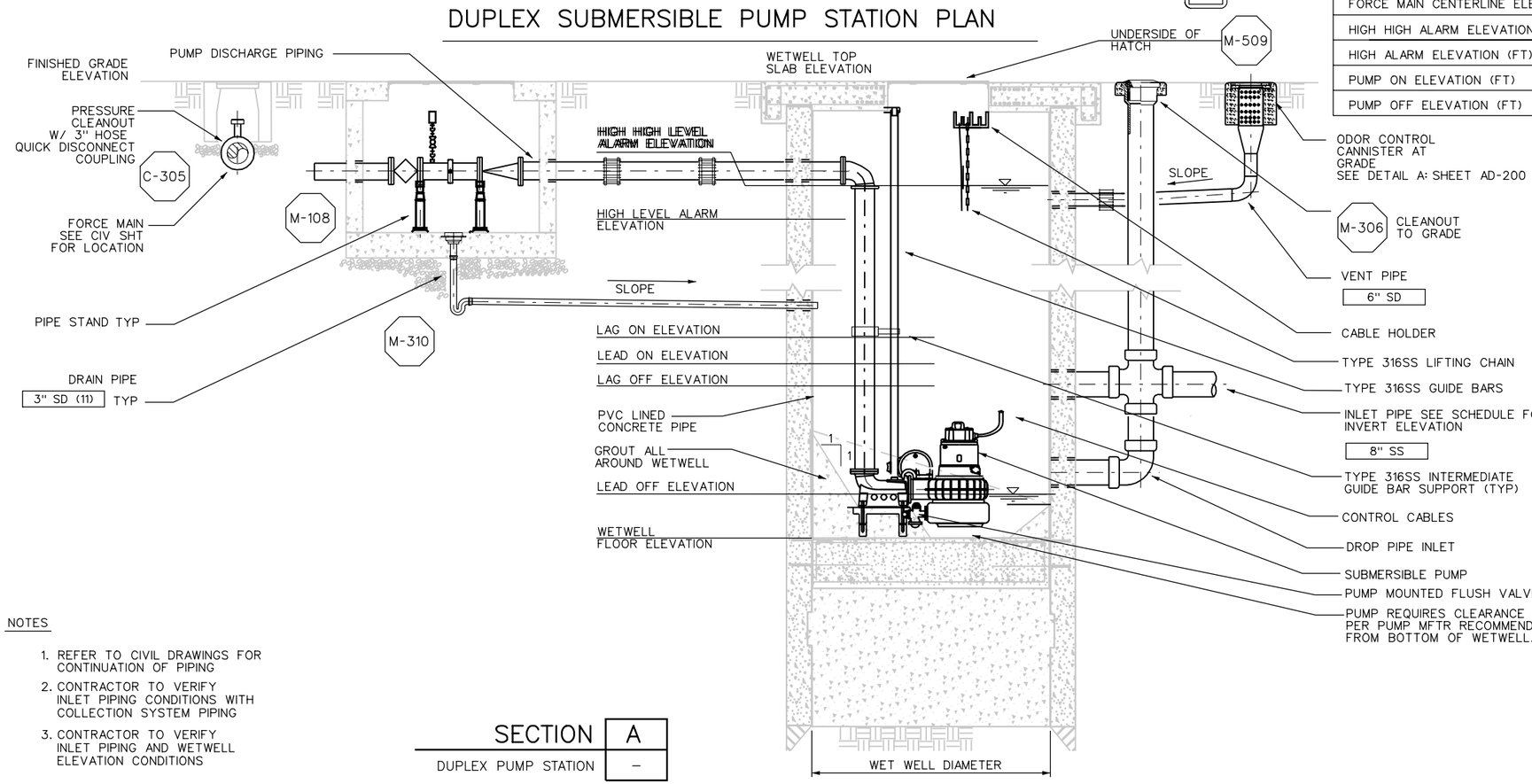
Job No: 1481166



DUPLEX SUBMERSIBLE PUMP STATION PLAN

DUPLEX PUMP STATION SCHEDULE				
DESCRIPTION	BAYWOOD	EAST YSABEL	EAST PASO	MOUNTAIN VIEW
AREA	A	A	A	D
PUMP NO.	BW-P-01 & 02	EY-P-01 & 02	EP-P-01 & 02	MV-P-01 & 02
NUMBER OF PUMPS	2	2	2	2
DESIGN FLOW EACH PUMP (GPM)	310	170	330	130
DESIGN TDH (FT)	20	117	39	44
PUMP HP (HP)	5	10	7.5	5
TOP WETWELL SLAB ELEVATION (FT)	10.16	79.3	71.5	100.20
WETWELL FLOOR ELEVATION (FT)	-5.60	64.8	63.3	86.70
WETWELL DEPTH (FT)	15.6	14.5	16	13.5
WETWELL DIAMETER (FT)	10	10	10	10
INLET PIPING SIZE (IN)	12	8	8	10
NUMBER OF INLETS	1	1	1	1
INLET PIPING INVERT ELEVATION (FT)	0.60	73	60.5	93.71
DISCHARGE PIPING SIZE (IN)	4	4	4	4
FORCE MAIN SIZE (IN)	6	4	6	4
FORCE MAIN CENTERLINE ELEVATION (FT)	6.6	75.8	68	96.75
HIGH HIGH ALARM ELEVATION (FT)	11	11	11	11
HIGH ALARM ELEVATION (FT)	7	7	7	7
PUMP ON ELEVATION (FT)	2	2	2	2
PUMP OFF ELEVATION (FT)	1	1	1	1



NOTES

1. REFER TO CIVIL DRAWINGS FOR CONTINUATION OF PIPING
2. CONTRACTOR TO VERIFY INLET PIPING CONDITIONS WITH COLLECTION SYSTEM PIPING
3. CONTRACTOR TO VERIFY INLET PIPING AND WETWELL ELEVATION CONDITIONS

SECTION A
DUPLEX PUMP STATION –

REGISTERED PROFESSIONAL ENGINEER JACK OSBORN Exp. 12-31-05 MECHANICAL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE 3/8" = 1'-0"

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED J. OSBORN
DRAWN J. OSBORN
CHECKED R. GONZALEZ

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

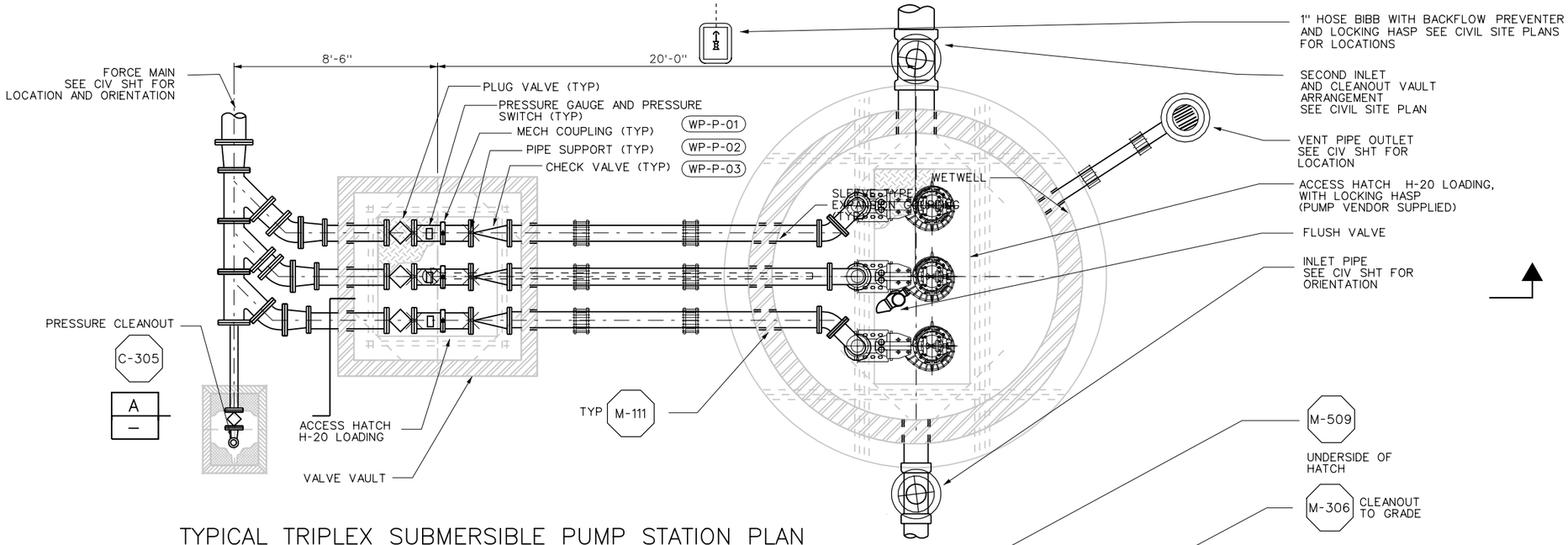
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
MECHANICAL
SUBMERSIBLE PUMP STATIONS
DUPLEX LAYOUT – PLAN & SECTION

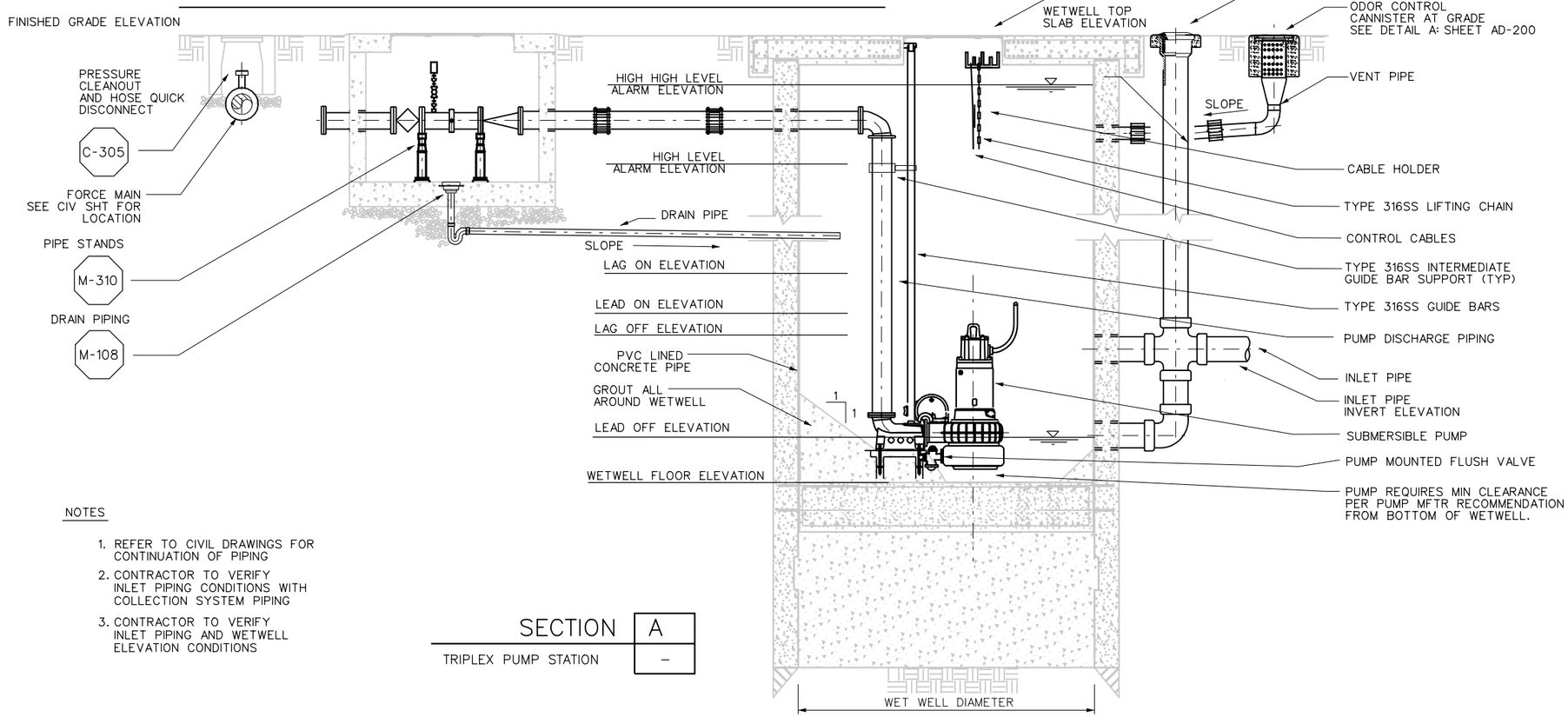
SHEET AD-M-201

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\mec\AD-M-201.dgn Plot Date: 09-FEB-2004 17:15



TYPICAL TRIPLEX SUBMERSIBLE PUMP STATION PLAN

TRIPLEX PUMP STATION SCHEDULE	
DESCRIPTION	WEST PASO
AREA	A
PUMP NO.	WP-P-01, 02 & 03
NUMBER OF PUMPS	3
DESIGN FLOW EACH PUMP (GPM)	950
DESIGN TDH (FT)	157.0
PUMP HP (HP)	60
TOP WETWELL SLAB ELEVATION (FT)	17.04
WETWELL FLOOR ELEVATION (FT)	4.04
WETWELL DEPTH (FT)	13.00
WETWELL DIAMETER (FT)	12.00
INLET PIPING SIZE (IN)	18
NUMBER OF INLETS	1
INLET PIPING INVERT ELEVATION (FT)	7.80
DISCHARGE PIPING SIZE (IN)	8
FORCE MAIN SIZE (IN)	12
FORCE MAIN CENTERLINE ELEVATION (FT)	13.5
HIGH HIGH ALARM HEIGHT (FT)	11
HIGH ALARM HEIGHT (FT)	7



NOTES

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2. CONTRACTOR TO VERIFY INLET PIPING CONDITIONS WITH COLLECTION SYSTEM PIPING
3. CONTRACTOR TO VERIFY INLET PIPING AND WETWELL ELEVATION CONDITIONS

SECTION A
TRIPLEX PUMP STATION –

REGISTERED PROFESSIONAL ENGINEER
JACK OSBORN
No. M31171
Exp. 12-31-05
MECHANICAL
STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE 3/8" = 1'-0"

WARNING 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED J. OSBORN
DRAWN J. OSBORN
CHECKED R. GONZALEZ

SUBMITTED BY
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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

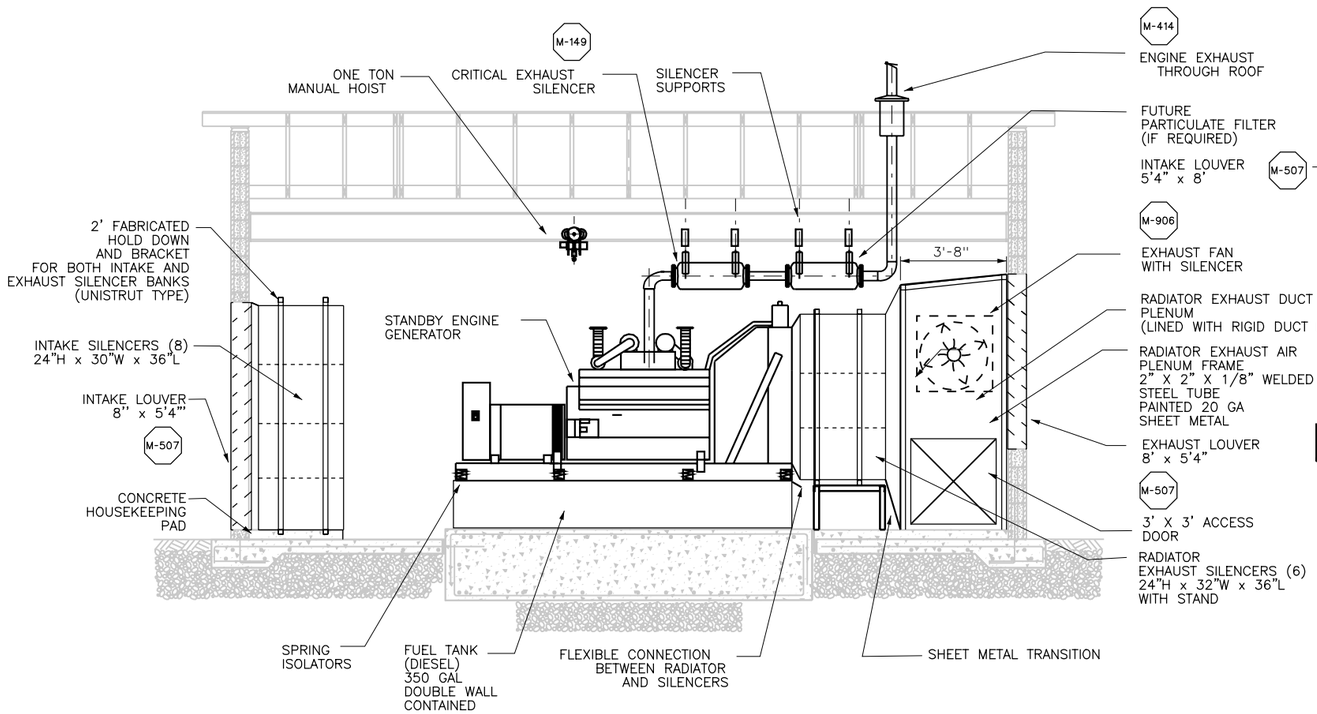
LOS OSOS WASTEWATER PROJECT
MECHANICAL
SUBMERSIBLE PUMP STATIONS
TRIPLEX LAYOUT – PLAN & SECTION

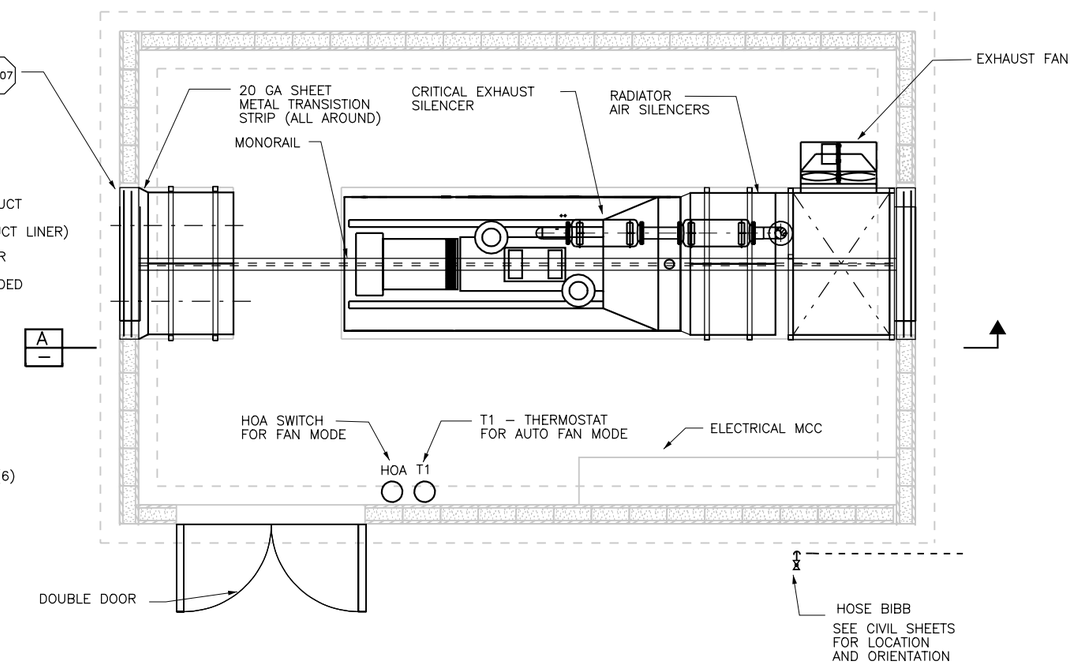
SHEET AD-M-202

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\mec\AD-M-202.dgn Plot Date: 09-FEB-2004 17:15

STANDBY POWER FACILITY	GENERATOR	FUEL TYPE	FUEL TANK (GAL)
WEST PASO/BAYWOOD	300 KW	DIESEL	350

ACOUSTICAL SILENCERS	DIMENSION (WXH) (IN)	LENGTH (IN)	PRESS DROP (IN WG)	OCTAVE BAND INSERTION LOSS AT 1000 FPM							
				1	2	3	4	5	6	7	8
INTAKE	36 X 24	36	.034	5	7	17	27	35	32	20	13
EXHAUST	24 X 24	36	.094	5	7	17	27	35	32	20	13





SECTION A
STANDBY ENGINE GENERATOR

PLAN VIEW

NOTES

1. IN AUTOMATIC MODE, EXHAUST FAN WILL TURN ON WHEN TEMPERATURE IS ABOVE 80 F AND TURN OFF WHEN TEMPERATURE IS BELOW 60 F

REGISTERED PROFESSIONAL ENGINEER JACK OSBORN No. M31171 Exp. 12-31-05 MECHANICAL STATE OF CALIFORNIA

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\mec\AD-M-203.dgn Plot Date: 09-FEB-2004 17:15

REV	DATE	BY	DESCRIPTION

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CHECKED R. GONZALEZ

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LOS OSOS COMMUNITY SERVICES DISTRICT

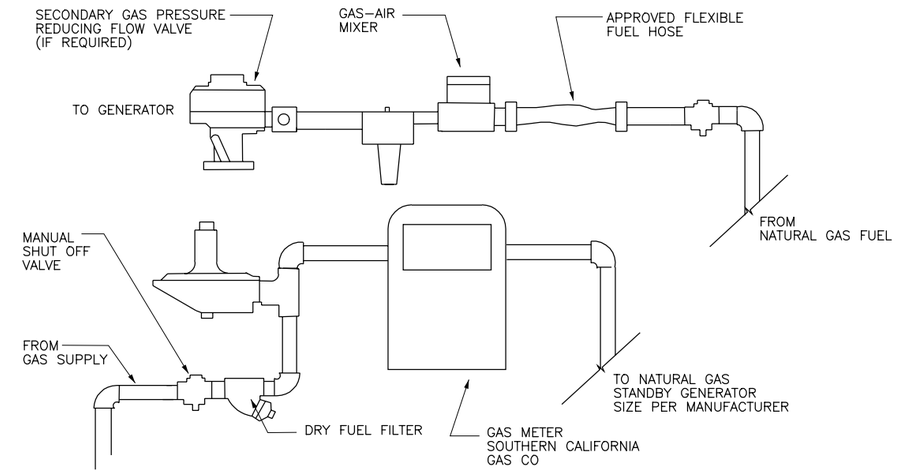
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
MECHANICAL
STANDBY POWER BUILDING
PLAN & SECTION
DIESEL ENGINE

SHEET AD-M-203

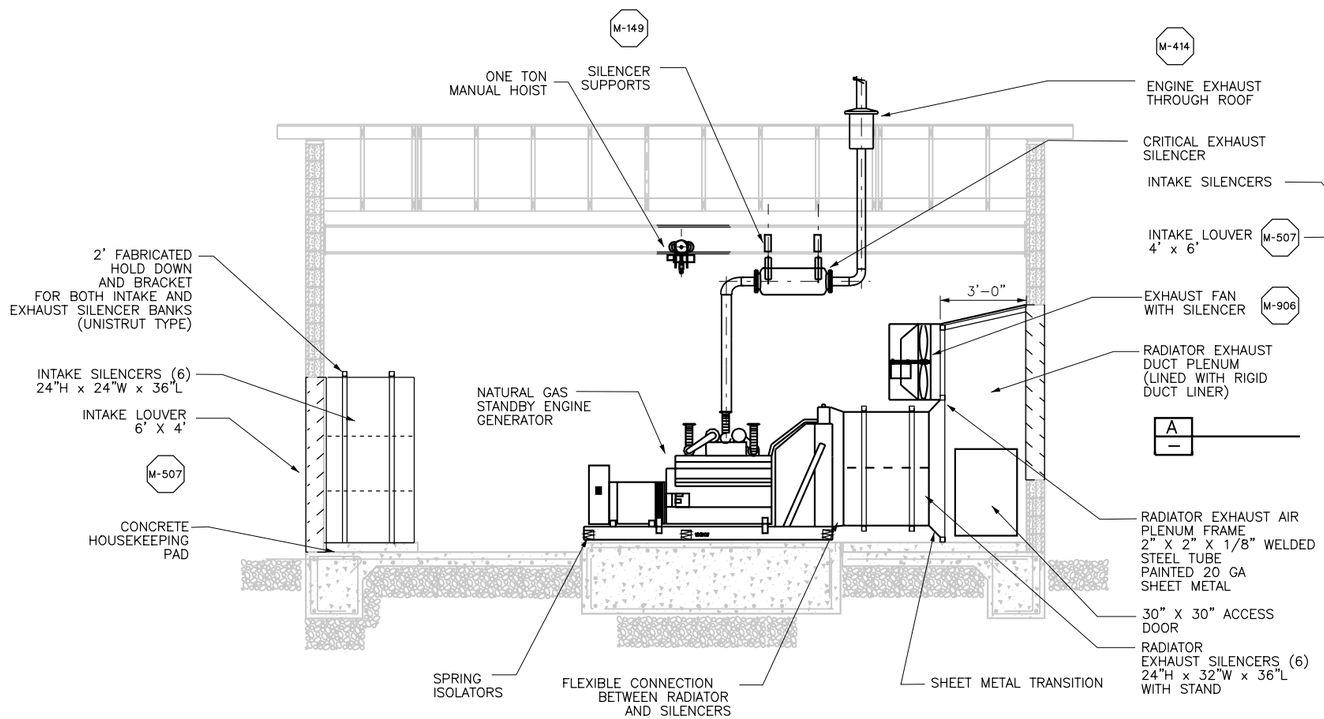
ACOUSTICAL SILENCERS	DIMENSION (WXH) (IN)	LENGTH (IN)	PRESS DROP (IN WG)	OCTAVE BAND INSERTION LOSS AT 1000 FPM							
				1	2	3	4	5	6	7	8
INTAKE	36 X 24	36	.034	5	7	17	27	35	32	20	13
EXHAUST	24 X 24	36	.094	5	7	17	27	35	32	20	13

STANDBY POWER FACILITY	GENERATOR	FUEL TYPE
EAST YSABEL	30 KW	NATURAL GAS
EAST PASO	100 KW	NATURAL GAS
MOUNTAIN VIEW	40 KW	NATURAL GAS



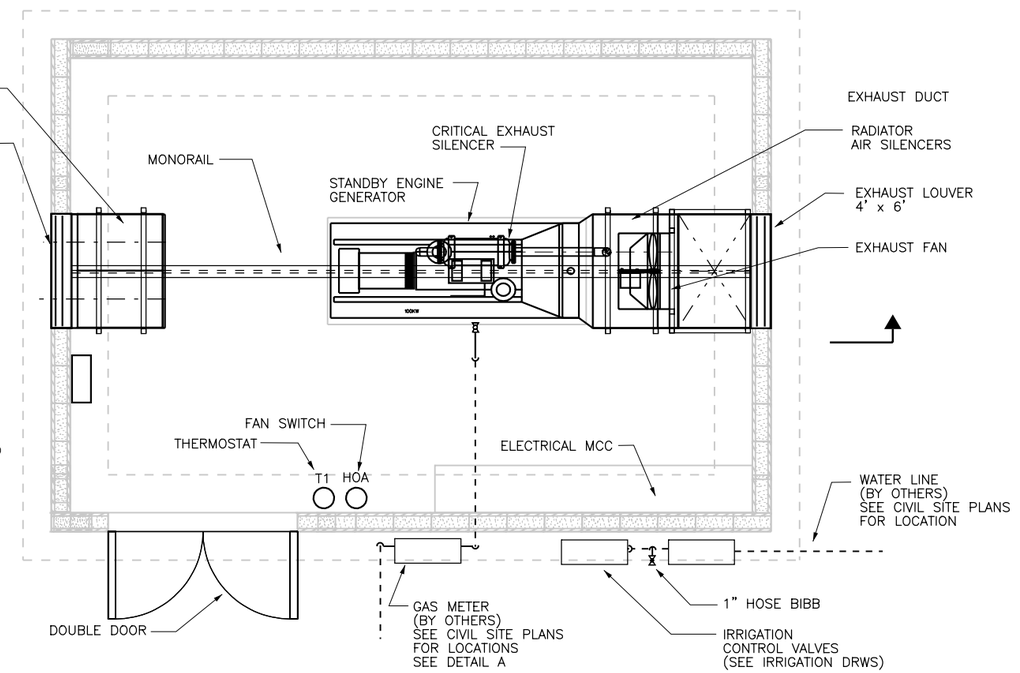
TYPICAL NATURAL GAS PIPING — A

N.T.S.



SECTION — A

STANDBY ENGINE GENERATOR



PLAN VIEW

NOTES

1. IN AUTOMATIC MODE, EXHAUST FAN WILL TURN ON WHEN TEMPERATURE IS ABOVE 80 F AND TURN OFF WHEN TEMPERATURE IS BELOW 60 F

REGISTERED PROFESSIONAL ENGINEER JACK OSBORN No. M31171 Exp. 12-31-05 MECHANICAL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: 3/8" = 1'–0"

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED J. OSBORN
DRAWN J. OSBORN
CHECKED R. GONZALEZ

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
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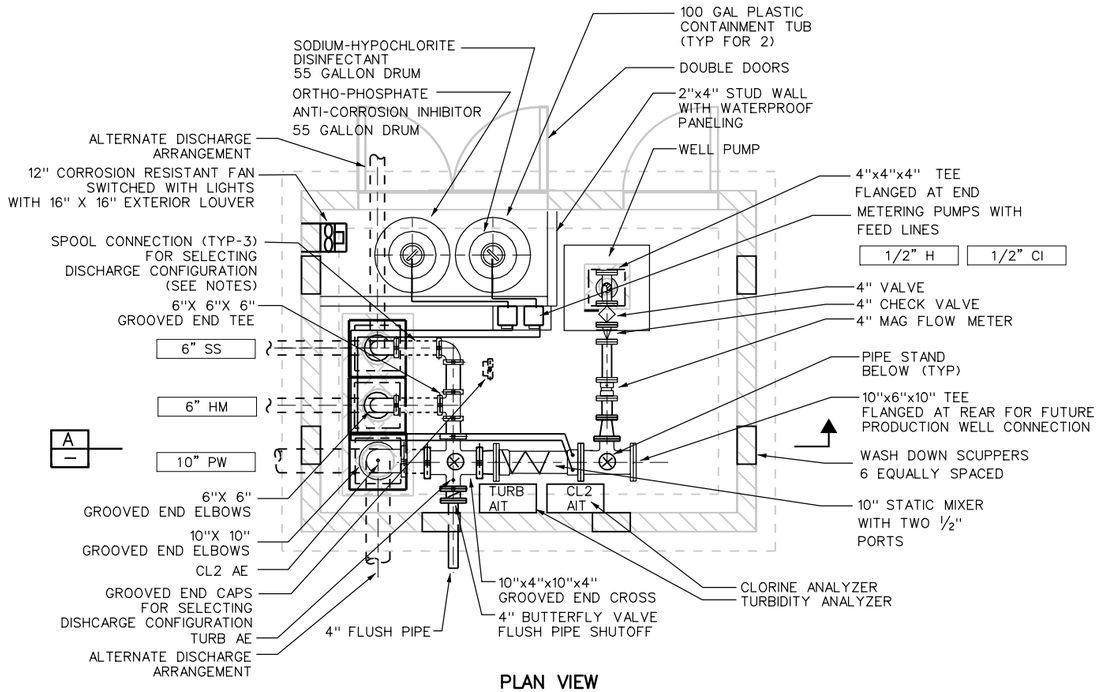
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
MECHANICAL
STANDBY POWER BUILDING
PLAN & SECTION
NATURAL GAS ENGINE

SHEET AD–M–204

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\mec\AD-M-204.dgn Plot Date: 09-FEB-2004 17:16

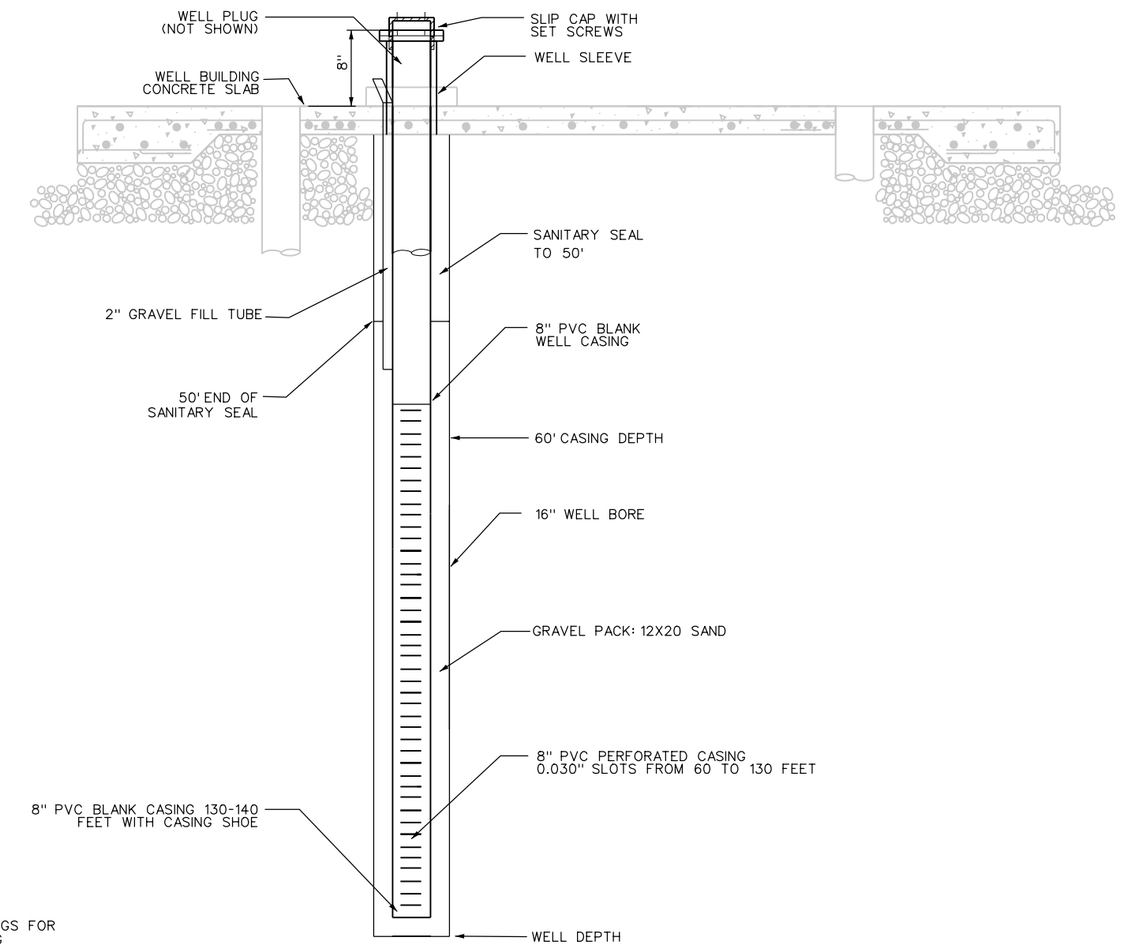


PLAN VIEW

SUBMERSIBLE WELL WITH SKYLIGHT ABOVE

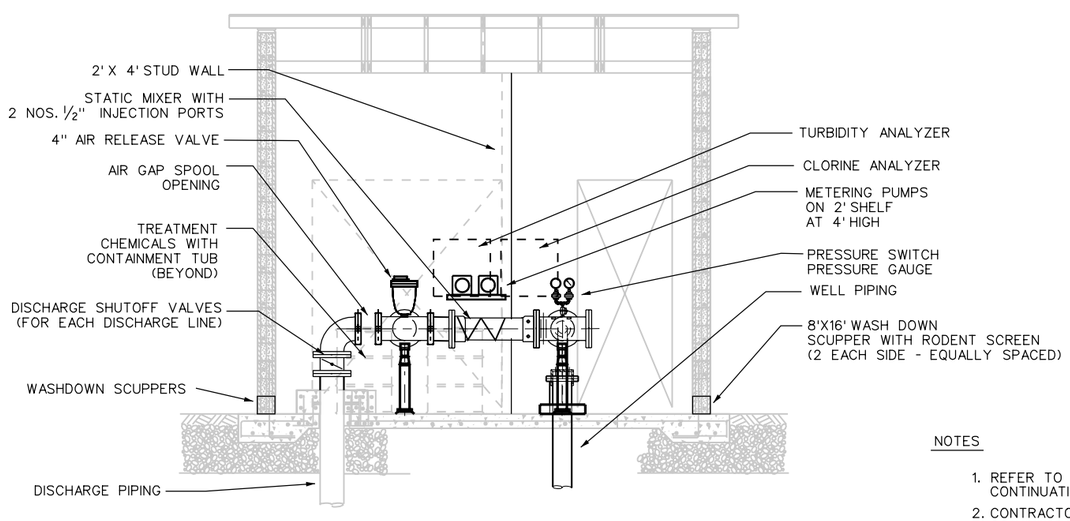
4"X4"X4" TEE WITH BLIND FLANGED REAR CONNECTION

HARVEST WELL SCHEDULE	
DESCRIPTION	EAST PASO
WELL TYPE	HARVEST
NUMBER OF PUMPS	1
DESIGN FLOW EACH PUMP (GPM)	87
PUMP TDH (FT)	160
PUMP HP (HP)	5.0
TOTAL WELL DEPTH (FT)	140



WELL SECTION

NTS



SECTION A

NOTES

1. REFER TO CIVIL DRAWINGS FOR CONTINUATION OF PIPING
2. CONTRACTOR TO SUPPLY ALL GROVED END SPOOLS AND CAPS TO ACCOMIDIATE DISCHARGE ARRANGEMENTS
3. CONTRACTOR TO COORDINATE PIPING CONNECTIONS WITH EFFLUENT DISPOSAL SYSTEM AND COLLECTION SYSTEM PIPING

REGISTERED PROFESSIONAL ENGINEER JACK OSBORN No. M31171 Exp. 12-31-05 MECHANICAL STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE

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DRAWN J. OSBORN
CHECKED R. GONZALEZ

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

MECHANICAL HARVEST WELLS PLAN & SECTION

SHEET AD-M-205

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\mec\AD-M-205.dgn Plot Date: 09-FEB-2004 17:16

ELECTRICAL SYMBOLS

PLAN

- EXPOSED OR CONCEALED CONDUIT
- CONDUIT RUN UNDERGROUND OR IN CONCRETE
- CONDUIT RUN – CHANGE IN ELEVATION
- CONDUIT TURNING UP
- CONDUIT TURNING DOWN
- CONDUITS GROUPED TOGETHER BUT SHOWN AS A SINGLE LINE FOR CLARITY
- FROM FLOOR ABOVE TO FLOOR BELOW
- CONDUIT CAPPED, OR SEALED
- HOMERUN TO EQUIPMENT INDICATED (1" CONDUIT, 3 #10, 1 #10 GND UNLESS OTHERWISE INDICATED)
- RACEWAY BOX
  * – BOX TYPE
  MH---- MANHOLE
  HH---- HANDHOLE
  PB---- PULLBOX
- J — JUNCTION BOX OR FITTING
- X — CONDUIT X – CONDUIT NUMBER (SEE CONDUIT SCHEDULE FOR DETAILS)
- X–#a — INCANDESCENT, HPS OR MH FIXTURE
  X – LIGHTING PANEL DESIGNATION
  # – CIRCUIT NUMBER, a – SWITCH DESIGNATION
- UNSWITCHED FIXTURE (NIGHT LIGHT)
- WALL MOUNTED FIXTURE
- POLE, BRACKET, ARM AND STREETLIGHT
- FLUORESCENT LIGHTING FIXTURE
- FLUORESCENT LIGHT FIXTURE, UNSWITCHED
- EMERGENCY LIGHT FIXTURE, BATTERY OPERATED
- EXIT LIGHT, SHOWN WITH TWO ILLUMINATED SIDES, ARROWS INDICATE DIRECTION OF EXIT
- A / # — A – FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE FOR DETAILS)
  # INDICATES APPROX. MOUNTING HEIGHT ABOVE FINISHED FLOOR.
  CLG INDICATES CEILING MOUNT
- $*X–#a — LIGHT SWITCH
  X – LIGHITING PANEL DESIGNATION
  # – CIRCUIT DESIGNATION
  a – SWITCH DESIGNATION
  * – SWITCH TYPE
  3----- 3 WAY
  4----- 4 WAY
  D----- DIMMER
  M----- MANUAL MOTOR STARTER

- X–#* — 120V DUPLEX RECEPTACLE, NEMA CONFIGURATION 5–20R (WALL MOUNT)
  X – LIGHTING PANEL DESIGNATION
  # – CIRCUIT DESIGNATION
  * –TYPE
  WP---- WEATHERPROOF
  XP---- EXPLOSION PROOF
  GFCI-- GROUND FAULT CIRCUIT INTERRUPTER
- 120V DUPLEX RECEPTACLE, NEMA CONFIGURATION 5–20R (FLOOR MOUNT)
- * — SINGLE SPECIAL PURPOSE RECEPTACLE 240V 1 PHASE, ASTRISK INDICATES AMPERAGE
- * — WELDING RECEPTACLE ASTRISK INDICATES AMPERAGE
- * — SPECIAL PURPOSE RECEPTACLE 480 VAC, ASTRISK INDICATES AMPERAGE
- FLOOR TYPE TELEPHONE OUTLET
- WALL TYPE TELEPHONE SYSTEM OUTLET
- WALL TYPE COMPUTER OUTLET
- LIGHTING PANEL
- POWER PANEL
- DISCONNECT SWITCH
- M — MOTOR
- T — THERMOSTAT
- HORN
- GROUND ROD AND GROUND WELL
- GROUND ROD 3/4 " x 10' – 0" (UNLESS OTHERWISE NOTED)
- GROUND CONNECTION BOLTED TYPE
- GROUND CONNECTION – EXOTHERMIC TYPE
- BARE COPPER GROUND TO GROUND WIRE IN SLAB, OR UNDERGROUND GROUND GRID, SIZE AS NOTED

- F — ALARM HORN WITH STROBE
- A F — AMPLIFIER/LOUDSPEAKER
- * — DETECTOR, * INDICATES TYPE
  SD---- SMOKE DETECTOR
  HD---- HEAT DETECTOR
  CD---- COMBINATION DETECTOR
- FA — FIRE ALARM PULL STATION
- F — SEPARATE OR ACCESSORY STROBE LIGHT
- F — FIRE BELL WITH STROBE LIGHT
- FS — FIRE SUPRESSION SWITCH
- ER — END–OF–LINE TERMINATOR
- I* — INTERCOM SPEAKER
  * INDICATES TYPE, REFER TO SPECIFICATIONS
- I* — INTERCOM SPEAKER WITH STROBE LIGHT
  * INDICATES TYPE, REFER TO SPECIFICATIONS
- I — INTERCOM WALL JACK
- HS I — INTERCOM HANDSET, WALL MOUNTED
- VC* — VIDEO CAMERA
  * INDICATES TYPE
  F----- FIXED
  PTZ--- PAN–TILT–ZOOM
- * — SECURITY ACCESS DEVICE, * INDICATES TYPE
  CR---- CARD READER
  KS---- KEY SWITCH
  PS---- DIGITAL KEYPAD

SINGLE LINE DIAGRAM

- MEDIUM VOLTAGE VACUUM DRAW–OUT STARTER
- 52 — MEDIUM VOLTAGE DRAWOUT BREAKER
- * (#) — ANSI RELAY DEVICE
  * INDICATES ANSI DEVICE
  (#) INDICATES QUANTITY
  25------ SYNCHRONISM CHECK RELAY
  27------ UNDERVOLTAGE
  27/47--- UNDERVOLTAGE, PHASE SEQUENCE, UNBALANCED VOLTAGE
  32------ DIRECTIONAL POWER RELAY
  41------ FIELD CONTACTOR
  43------ SELECTOR SWITCH
  49------ HIGH OIL TEMPERATURE
  50/51--- INSTANTANEOUS AND TIME OVERCURRENT
  50/51N-- INSTANTANEOUS AND TIME RESIDUALLY CONNECTED GROUND OVERCURRENT
  51G----- GROUND FAULT
  60------ VOLTAGE BALANCE
  62------ TIME DELAY
  63------ SUDDEN PRESSURE
  67------ AC DIRECTIONAL CURRENT RELAY
  71L----- LOW OIL LEVEL
  81------ FREQUENCY RELAY
  83------ CONTROL POWER TRANSFORMER
  86------ LOCKOUT
  87TL---- TRANSFORMER DIFFERENTIAL
  87M----- MOTOR DIFFERENTIAL

THERMAL MAGNETIC

- 100/20 — FRAME (AMPS); TRIP (AMPS)
- 100/20 — LOW VOLTAGE DRAWOUT CIRCUIT BREAKER

MCP

- 150/MCP — CONTINUOUS AMPS; TRIP SETTING BASED ON MOTOR HORSEPOWER
- 40/MCP — COMBINATION NEMA RATED STARTER WITH MCP DISCONNECT AND CONTROL POWER TRANSFORMER
  ROMAN NUMERIAL – NEMA SIZE
  * – STARTER TYPE
  NO SUBSCRIPT ---- FULL VOLTAGE NON–REVERSING
  RVAT ---------- REDUCED VOLTAGE AUTO TRANSFORMER
  FVR ---------- FULL VOLTAGE REVERSING
  2S2W ---------- TWO SPEED TWO WINDING
  2S1W ---------- TWO SPEED ONE WINDING
- * VFD — VARIABLE FREQUENCY DRIVE
  * INDICATES AMPERE RATING
- * RVSS — REDUCED VOLTAGE SOLID STATE STARTER
  * INDICATES AMPERE RATING
- * * — PACKAGED EQUIPMENT
  * INDICATES KW, KVA OR HP RATING AS INDICATED
- K — KEY INTERLOCK
- GENERATOR, RATINGS AS INDICATED
- MANUAL OR AUTOMATIC TRANSFER SWITCH RATINGS AS INDICATED

- * — METERING DEVICE
  * INDICATES METER TYPE
  WHM ------- WATT HOUR METER
  WM -------- WATT METER
  AM -------- AMMETER
  VM -------- VOLTMETER
  PFM ------- POWER FACTOR METER
- AS — AMMETER SWITCH
- VS — VOLTMETER SWITCH
- 480/120 (3) — POTENTIAL TRANSFORMER, RATIO AND NUMBER OF PT'S AS NOTED
- 100/5 (3) — CURRENT TRANSFORMER, RATIO AND NUMBER OF CT'S AS NOTED
- 5A — FUSE, SIZED AS NOTED
- 5* — MOTOR, HORSEPOWER AS NOTED
  * INDICATES FULL LOAD AMPS
- TRANSFORMER WITH GROUNDED SECONDARY, KVA SIZE & VOLTAGE RATIO AS INDICATED
- FUSED CONTROL POWER TRANSFORMER
- MOV — ELECTRICAL MOTOR OPERATED VALVE, WITH INTEGRAL REVERSING STARTER
- 30A — DISCONNECT SWITCH, SIZE AS NOTED
- 30/30 — FUSED DISCONNECT SWITCH, SIZED AS NOTED
- CAPACITOR
- TVSS — TRANSIENT VOLTAGE SURGE SUPRESSOR
- SSM — SOLID STATE METERING DEVICE
- SSMP — SOLID STATE MOTOR PROTECTIVE DEVICE
- LIGHTNING ARRESTOR AND SURGE CAPACITOR
- CROSSING OF CONDUCTORS–NOT CONNECTED
- CONDUCTORS CONNECTED

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
STANDARD ELECTRICAL SYMBOLS – 1

SHEET AD–GE–000

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\AD-GE-000.dgn Plot Date: 08-FEB-2004 11:00

ELECTRICAL SYMBOLS

SCHEMATIC DIAGRAM

CONTROL RELAY OR COIL
* INDICATES DEVICE
CR ---- CONTROL RELAY
TD ---- TIME DELAY RELAY (TIMING RANGE AS INDICATED)
M ---- MOTOR STARTER
PC ---- PHOTOCLELL

NORMALLY OPEN CONTACT

NORMALLY CLOSED CONTACT

TIMED CONTACTS – CONTACT ACTION DELAYED AFTER COIL IS:

ENERGIZED

NORMALLY OPEN WITH TIME DELAY CLOSING

NORMALLY CLOSED WITH TIME DELAY OPENING

DE–ENERGIZED

NORMALLY OPEN WITH INSTANT CLOSING AND TIME DELAY OPENING

NORMALLY CLOSED WITH INSTANT OPENING AND TIME DELAY CLOSING

NORMALLY OPEN PUSHBUTTON

NORMALLY CLOSED PUSHBUTTON,

NO/NC MAINTAINED PUSHBUTTON

THREE–POSITION SELECTOR SWITCH.
H---- HAND
M---- MANUAL
R---- REMOTE
L---- LOCAL
A---- AUTOMATIC
O---- OFF

TWO–POSITION SELECTOR SWITCH:

THREE POSITION SPRING RETURN–TO–CENTER MOMENTARY CONTACT SWITCH

SINGLE POLE TOGGLE SWITCH

VACUUM OR PRESSURE SWITCH, CLOSE ON RISING PRESSURE

VACUUM OR PRESSURE SWITCH, OPEN ON RISING PRESSURE

FLOAT LEVEL SWITCH, CLOSE ON RISING LEVEL

FLOAT LEVEL SWITCH, OPEN ON RISING LEVEL

NORMALLY OPEN

NORMALLY CLOSED

NORMALLY OPEN HELD CLOSED

NORMALLY CLOSED HELD OPEN

MAINTAINED POSITION

TEMPERATURE SWITCH, CLOSE ON RISING TEMPERATURE

TEMPERATURE SWITCH, OPEN ON RISING TEMPERATURE

FLOW SWITCH, CLOSE ON INCREASING FLOW

FLOW SWITCH, OPEN ON INCREASING FLOW

TORQUE SWITCH OPENS ON INCREASING TORQUE

LOCATION LEGEND
ALL DEVICES ARE LOCATED IN THE MOTOR CONTROLLER UNLESS INDICATED OTHERWISE

1 FIELD
2 LCS
3 LCP
4 MCC
5 PLC

DI — DIGITAL INPUT TO PLC/RTU/DCS

DIGITAL OUTPUT FROM PLC/RTU/DCS NORMALLY OPEN

DIGITAL OUTPUT FROM PLC/RTU/DCS NORMALLY CLOSED

AI — ANALOG INPUT TO PLC/RTU/DCS 4–20 mA UNLESS OTHER OTHERWISE NOTED

AO — ANALOG OUTPUT FROM PLC/RTU/DCS 4–20 mA UNLESS OTHER OTHERWISE NOTED

SV — SOLENOID VALVE

PILOT LIGHT
* INDICATES LENS COLOR
R---- RED
G---- GREEN
A---- AMBER
W---- WHITE

PILOT LIGHT PUSH–TO–TEST SEE ABOVE FOR LENS COLORS

HORN

ETM — ELAPSED TIME METER

HEATER

GROUND CONNECTION

CROSSING OF CONDUCTORS–NOT CONNECTED

CONDUCTORS CONNECTED

FUSE

VOLTAGE SURGE SUPPRESSOR

LIGHTING FIXTURE SCHEDULE

TYPE	LAMPS NO/WATTS	VOLTS	DESCRIPTION
A	2 /32	120	4' FLUORESCENT FIXTURE ENCLOSED AND GASKETED FIBER GLASS HOUSING, ACRYLIC LENS STEEL CHANNEL, ANIODIZED ALUMINUM REFLECTOR. ELECTRONIC BALLAST. HOLPHANE ES CATALOG NUMBER ES-S-4-A-NNN-N-4-1-1.
B	LED	120	EXIT SIGN WITH 20 GAUGE COLD ROLLED STEEL. WHITE POWDER COAT FINISH. SIGN CONSUMES 4.1 WATTS WITH BATTERY BACKUP. RUUD EXS SERIES CATALOG NUMBER EXSB1R
C	1/175	120	METAL HALIDE CEILING MOUNTED FIXTURE. CORROSION RESISTANT FIBERGLASS REINFORCED POLYESTER ENCLOSURE REFLECTOR AND GUARD. APPLETON LPAH1710-MT-G OR EQUAL.
D	1/70	120	WALL MOUNTED FIXTURE. DIE-CAST ALUMINUM HOUSING WITH BROZNE FINISH. HPS LAMP, SPECULAR ANODIZED ALUMINUM REFELECTOR. LISTED FOR WET LOCATIONS. RUUD SE SERIES CATALOG NUMBER SE4507-1-P
E	18	120	EMERGENCY FIXTURE, TWO 12 VOLT 50 WATT HALOGEN LAMPS. LEAD CALCUIM BATTERIES WITH SOLID STATE CHARGER, TIME DELAY, BROWNOUT PROTECTION AND TEST SWITCH, NEMA RATED CORROSION AND IMPACT RESISTANT FIBERGLASS HOUSING. HOLOPHANE DESOTO CATALOG NUMBER DM5-C-50-T-2-WL

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No.E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
STANDARD ELECTRICAL SYMBOLS – 2 & LIGHTING FIXTURE SCHEDULE

SHEET AD–GE–001

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\AD-GE-001.dgn Plot Date: 08-FEB-2004 11:01

ABBREVIATIONS

A	AMPERE, AUTOMATIC
AC	ALTERNATING CURRENT
AF	CIRCUIT BREAKER FRAME SIZE
AM	AMMETER
ANN	ANNUNCIATOR
AS	ADJUSTABLE SPEED
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AWG	AMERICAN WIRE GAUGE
BATT	BATTERY
BC	BARE COPPER
BKR	BREAKER
C	CONDUIT, CLOSED
CAP	CAPACITOR
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CLF	CURRENT LIMITING FUSE
COM	COMMON
COMP	COMPARTMENT
CP	CONTROL PANEL
CPT	CONTROL POWER TRANSFORMER
CR	CONTROL RELAY, CARD READER
CT	CURRENT TRANSFORMER
DCS	DISTRIBUTED CONTROL SYSTEM
DISC	DISCONNECT
DISTR	DISTRIBUTION
DPDP	DOUBLE POLE DOUBLE THROW
DPST	DOUBLE POLE SINGLE THROW
E	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE
ETM	ELAPSED TIME METER
F	FREQUENCY, FUSE, FIXED
FDR	FEEDER
FLA	FULL LOAD AMPS
FLUOR	FLUORESCENT
FM	FREQUENCY METER
FO	FIBER OPTIC
FVR	FULL VOLTAGE REVERSING
FVNR	FULL VOLTAGE NON-REVERSING
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
H	HAND
HD	HEAT DETECTOR
HH	HAND HOLE
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HPS	HIGH PRESSURE SODIUM
HS	HAND SWITCH
HZ	HERTZ
IMC	INTERMEDIATE METALLIC CONDUIT
INCAND	INCANDESCENT
IND	INDICATION
INST	INSTANTANEOUS
I/O	INPUT/OUTPUT
Isc	SHORT CIRCUIT CURRENT, AMPS
ISO	ISOLATION
J	JUNCTION BOX
KA	THOUSAND AMPERES
KAIC	THOUSAND AMP INTERRUPTING CURRENT
KCMIL	THOUSAND CIRCULAR MILS
KVA	KILOVOLT AMPERE
L	LOCAL
LCP	LOCAL CONTROL PANEL
LCS	LOCAL CONTROL STATION
LOC	LOCAL
LOR	LOCAL-OFF-REMOTE
LOS	STOP LOCKOUT PUSHBUTTON
LP	LIGHTING PANEL
LRA	LOCKED ROTOR AMPS
LS	LEVEL SWITCH
LTG	LIGHTING
LTS	LIGHTS
M	MOTOR CONTACTOR COIL
mA	MILLIAMPERE
MCP	MOTOR CIRCUIT PROTECTOR
MLO	MAIN LUGS ONLY
MOV	MOTOR OPERATED VALVE
MS	MANUAL MOTOR STARTER
MTS	MANUAL TRANSFER SWITCH
NEUT	NEUTRAL
NP	NAMEPLATE
O	OPEN, OFF
OL	OVERLOAD
PA	PUBLIC ADDRESS
PB	PUSHBUTTON, PULLBOX
PC	PHOTOCELL
PCM	PROCESS CONTROL MODULE
PF	POWER FACTOR
PFM	POWER FACTOR METER
PH	PHASE
PL	PILOT LIGHT
PNBLD	PANELBOARD
PP	POWER PANELBOARD
POS	POSITION
POT	POTENTIOMETER
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PTZ	PAN-TILT-ZOOM
PWR	POWER
R	REMOTE
RECPT	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
RMS	ROOT MEAN SQUARE
RTU	REMOTE TERMINAL UNIT
RVSS	REDUCED VOLTAGE SOLID STATE
SEL SW	SELECTOR SWITCH
SEQ	SEQUENCE
SHLD	SHIELDED
SIG	SIGNAL
SP	SPARE
SPDT	SINGLE POLE DOUBLE THROW
SSM	SOLID STATE METER
SSMP	SOLID STATE MOTOR PROTECTOR
SP HTR	SPACE HEATER
SPST	SINGLE POLE SINGLE THROW
ST, SH	SHUNT TRIP
STR	STARTER
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TACH	TACHOMETER
TB	TERMINAL BOX
TERM	TERMINAL
TM	REPEAT CYCLE TIMER
TD	TIME DELAY RELAY
TS	TEMPERATURE SWITCH
UPS	UNINTERRUPTABLE POWER SUPPLY
UON	UNLESS OTHERWISE NOTED, SHOWN, INDICATED OR DESCRIBED
V	VOLTAGE, VOLTS
VA	VOLT AMPERE
VAR	VOLT AMPERE REACTIVE
VFD	VARIABLE FREQUENCY DRIVE
VM	VOLTMETER
VP	VAPOR PROOF
W	WATTS, WIRE
WM	WATT METER
WP	WEATHERPROOF
XFMR	TRANSFORMER
XMTR	TRANSMITTER
XP	EXPLOSION PROOF

GENERAL NOTES

1. ALL RACEWAYS AND EQUIPMENT SHALL BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND APPLICABLE LOCAL CODES.
2. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF TERMINAL BOXES AND CONDUIT ENTRANCES OF ALL EQUIPMENT AGAINST APPROVED SHOP DRAWINGS BEFORE STUBBING UP CONDUITS.
3. REFER TO SPECIFICATION SECTION 16110 FOR REQUIREMENTS RELATED TO FLEXIBLE CONDUIT INSTALLATION
4. CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT OR STRUCTURAL CONDITIONS. EXPOSED CONDUIT SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO BEAMS AND WALLS. REFER TO SPECIFICATION 16110.
5. CONDUIT STUB-UPS SHALL NOT BE MORE THEN 6" FROM THE CENTER LINE OF TERMINAL BOXES.
6. IN THE EVENT OF INTERFERENCE BETWEEN ELECTRICAL EQUIPMENT SHOWN ON THE DRAWINGS AND OTHER EQUIPMENT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING AND THE ENGINEER SHALL APPROVE PROPOSED CHANGES BEFORE THEY ARE MADE.
7. ALL SURFACE MOUNTED PANELS AND PANELBOARDS ON THE INTERIOR OF EXTERIOR WALLS ABOVE GRADE OR IN OTHER LOCATIONS CONSIDERED DAMP OR WET SHALL BE MOUNTED SO AS TO MAINTAIN A 1/4 " (MINIMUM) AIR SPACE BETWEEN THE ENCLOSURE AND THE WALL.
8. LOCATION OF PULLBOXES ARE APPROXIMATE. THE CONTRACTOR SHALL COORDINATE EXACT LOCATION OF PULLBOXES WITH MECHANICAL PIPING AND SHALL BE 6" (MINIMUM) AWAY FROM MECHANICAL PIPING FLOW LINES.
9. ONLY MAJOR PULLBOXES ARE SHOWN. THE CONTRACTOR SHALL PROVIDE ADDITIONAL PULLBOXES WHERE REQUIRED TO MAKE A WORKABLE INSTALLATION.
10. THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE DETAILS WHETHER OR NOT THEY ARE REFERENCED ON THE DRAWINGS.
11. ALL CONDUIT RUNS CROSSING EXPANSION JOINTS SHALL HAVE EXPANSION OR EXPANSION AND DEFLECTION TYPE FITTINGS. FOR LOCATIONS OF EXPANSION JOINTS, REFER TO THE STRUCTURAL DRAWINGS.
12. LIGHTING FIXTURES SHALL BE MOUNTED ACCORDING TO THE MOUNTING HEIGHT GIVEN ON THE DRAWINGS, WITH THE DISTANCE BEING MEASURED FROM THE BOTTOM OF THE FIXTURE TO THE FINISHED FLOOR. THE APPROPRIATE MOUNTING BRACKETS AND HARDWARE SHALL BE SUPPLIED.
13. ALL PANELBOARDS SHALL BE MOUNTED SO THAT THE DISTANCE FROM THE TOP CIRCUIT BREAKER OPERATING HANDLE TO THE FINISHED FLOOR SHALL NOT EXCEED 6'-7".
14. THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUIT REPRESENT A SUGGESTED ARRANGEMENT BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS ACCEPTABLE TO THE ENGINEER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND/OR SPECIFICATIONS.
15. CONNECTIONS BETWEEN RIGID CONDUIT AND MOTOR TERMINAL BOXES OR SIMILAR EQUIPMENT SUBJECT TO VIBRATION SHALL BE FLEXIBLE LIQUID-TIGHT CONDUIT.
16. CONDUITS SHALL BE TERMINATED SO AS TO PERMIT NEAT CONNECTION TO MOTORS AND OTHER EQUIPMENT.
17. CONDUITS FOR FUTURE EQUIPMENT OR EXTENSION SHALL BE TERMINATED AS SHOWN IN DETAIL OR AS SPECIFIED.
18. MCC AND SWITCHGEAR COMPARTMENT DESIGNATIONS SHALL BE AS INDICATED BELOW:

    BLANK/SPACE: CONTAINS NECESSARY BUS AND HARDWARE FOR FUTURE ADDITION OF BREAKERS OR STARTERS.

    SPARE: CONTAINS A COMPLETE INSTALLED BREAKER OR STARTER AVAILABLE FOR FUTURE USE.
19. ALL MOTOR STARTER CONTROL POWER TRANSFORMERS SHALL BE SIZED TO PROVIDE SUFFICIENT VOLT-AMPERE CAPACITY FOR OPERATING ALL LOCAL AND REMOTE ELECTRICAL DEVICES ASSOCIATED WITH CONTROL OF THE MOTOR IN ADDITION TO THE STARTER COIL.
20. MOTOR CONTROL CENTERS AND ALL FREE STANDING PANELS SHALL BE SET ON CONCRETE HOUSEKEEPING PADS WITH LEVELING CHANNELS EMBEDDED IN THE PAD.
21. ALL RECEPTACLES IN OUTDOOR AND ANTICIPATED WET AREAS SHALL BE GROUND FAULT CIRCUIT INTERRPUTER RECEPTACLES WITH WEATHERPROOF COVERS.
22. ELECTRICAL CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING THE PROJECT TO VERIFY THE SCOPE OF WORK WITH FIELD CONDITIONS. PARTICULAR ATTENTION SHOULD BE GIVEN TO NEW CONDUIT RUNS IN EXISTING BUILDING.
23. EQUIPMENT LOCKOUTS SHALL BE IN STRICT ACCORDANCE WITH OWNER'S REQUIREMENTS.
24. CONTRACTOR SHALL COORDINATE ALL UTILITY WORK. CONTRACTOR SHALL OBTAIN PG&E APPROVAL FOR ALL WORK AND EQUIPMENT PRIOR TO COMMENCING OR PURCHASING. CONTRACTOR SHALL FURNISH INSTALL AND CONNECT ALL SUBSTRUCTURES, CONDUITS, PULL ROPES, POLES AND CONCRETE PADS NECESSARY TO INSTALL PG&E EQUIPMENT. PG&E SHALL PULL AND TERMINATE NECESSARY CONDUCTORS.

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

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DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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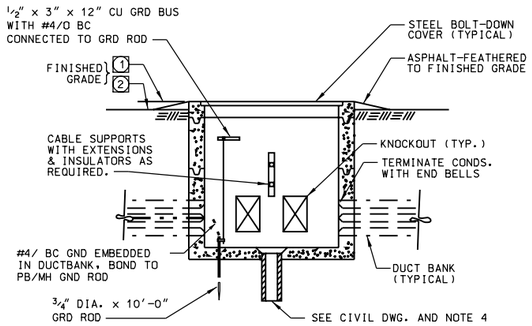
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
STANDARD ELECTRICAL ABBREVIATIONS & GENERAL NOTES

SHEET AD-GE-002

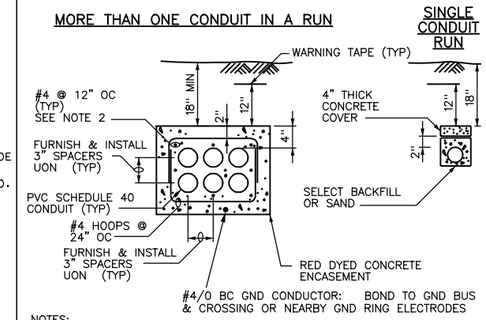
Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\AD-GE-002.dgn Plot Date: 08-FEB-2004 11:01



NOTES:

1. AT PAVED AREAS
2. UNPAVED AREAS.
3. PULL BOX INSTALLATION TO BE WATERTIGHT AFTER CONDUITS HAVE BEEN INSTALLED BY USING RAYCHEM RAYFLATE DUCT SEALING SYSTEM RDSS OR EQUAL.
4. FOR MANHOLE/PULL BOX NOT SHOWN WITH DRAINAGE PIPING ON CIVIL DRAWINGS, PROVIDE A MINIMUM OF 5FT OF 4" PD TO A 5FT CUBED TYPE DRAIN ROCK WITH FILTER FABRIC AROUND.

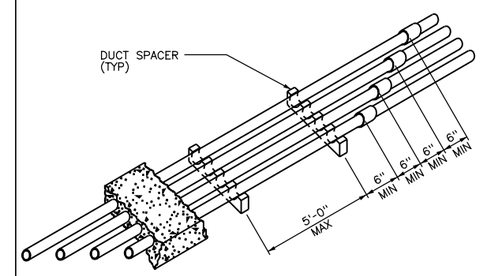
TYPICAL PULLBOX/MANHOLE — E-102



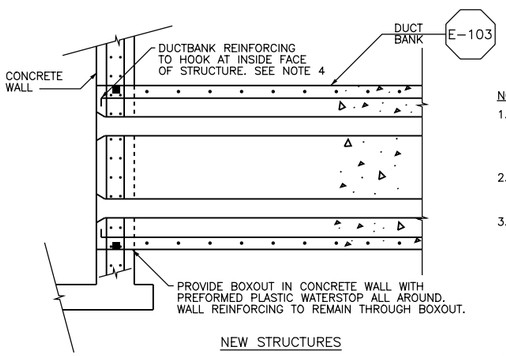
NOTES:

1. REFER TO DRAWINGS FOR ACTUAL CONDUIT SIZE AND NUMBER.
2. AT INTERSECTIONS WITH STRUCTURES HOOK #4'S INTO THE FOOTING OR WALL (TYP)

TYPICAL DUCTBANK
ENCASEMENT/REINFORCEMENT — REV 030730 — E-103



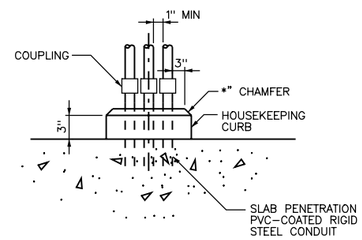
TYPICAL DUCTBANK
JOINT/SUPPORT SPACING — REV 042999 — E-108



NOTES:

1. NO DUCTBANKS OR CONDUIT SHALL PENETRATE THROUGH ANY WALL FOOTINGS OR GRADE BEAMS WHEN ENTERING OR LEAVING STRUCTURES.
2. ALL DUCTBANKS SHALL BE DOWELED INTO STRUCTURES USING THE DETAILS SHOWN ON THIS SHEET.
3. WHERE DUCTBANKS PASS BENEATH FOOTINGS OF EXISTING BUILDING, THE FOOTING SHALL BE UNDERPINNED OR OTHERWISE PROTECTED FROM SETTLEMENT OR OTHER DAMAGE. OVER EXCAVATION BENEATH FOOTINGS DURING DUCTBANK INSTALLATION SHALL BE REPLACED WITH LEAN CONCRETE. LEAN CONCRETE SHALL BE SEPARATED FROM THE DUCTBANK CONCRETE WITH 3/4 " EXPANSION JOINT FILLER.
4. IN SEISMIC ZONES 0, 1 AND 2, DUCTBANK REINFORCING CAN BE DRILLED AND GROUTED PER THE "EXISTING STRUCTURES" DETAIL.

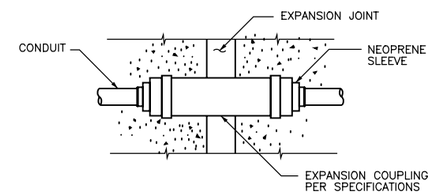
DUCTBANK TIE IN
REV 010901 — E-109



NOTE:

HOUSEKEEPING CURB REQUIRED AT ALL INTERIOR WALL LOCATIONS FOR SINGLE AND MULTIPLE RISERS.

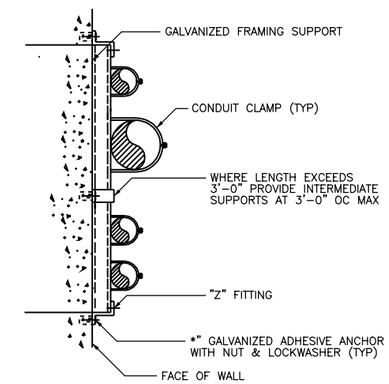
CONCRETE HOUSEKEEPING CURB
NON-HAZARDOUS LOCATIONS — REV 063099 — E-203



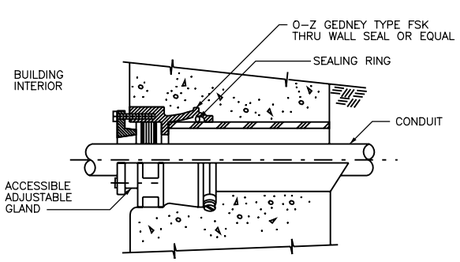
NOTE:

PROVIDE EXTERNAL BONDING JUMPER WITH METALLIC CONDUIT AND WHEN COUPLING HAS NO INTERNAL JUMPER.

EXPANSION COUPLING
REV 042999 — E-204



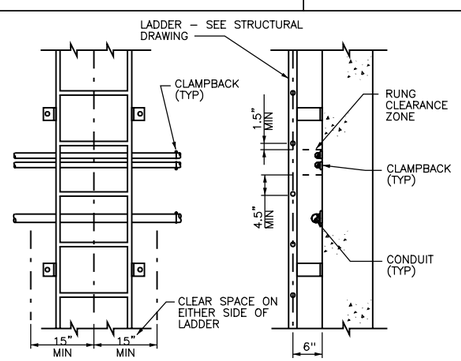
CONDUIT SUPPORT
FLUSH MOUNT — REV 042599 — E-212



NOTE:

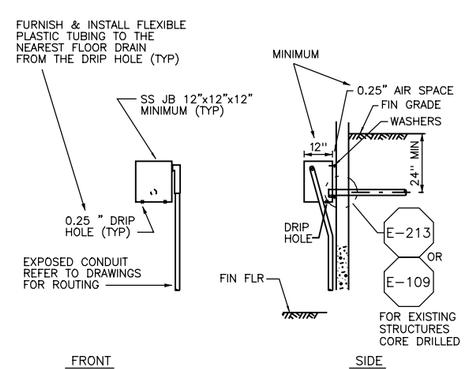
USE WATERTIGHT CONDUIT SEAL WHERE CONDUIT PENTRATIONS OF EXTERIOR WALLS ARE BELOW GRADE.

WATERTIGHT CONDUIT SEAL
BELOW GRADE EXTERIOR WALLS — REV 042599 — E-213



NOTE:
0.50" CLAMPBACK - DAMP OR BELOW GRADE
0.25" CLAMPBACK - DRY AND ABOVE GRADE

MINIMUM LADDER CLEARANCES
REV 072301 — E-220



CONDUIT ENTRANCE PULLBOX
REV 030725 — E-226
REQUIRED FOR BELOW GRADE CONDUIT WALL ENTRY

REGISTERED PROFESSIONAL ENGINEER — CHARLES M. REYNOLDS — No. E011791 — Exp. 9-30-04 — ELECTRICAL — STATE OF CALIFORNIA
05 FEB 2004

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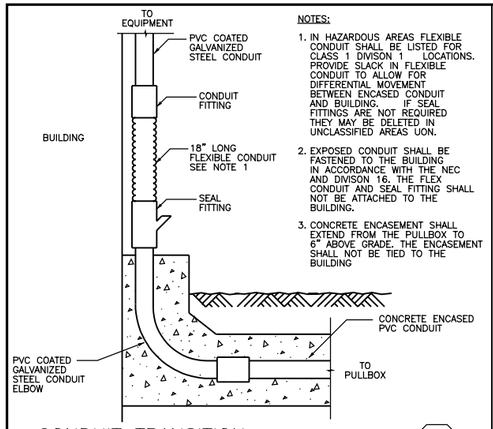
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
STANDARD ELECTRICAL DETAILS - 1

SHEET AD-GE-003

Plot Date: 08-FEB-2004 11:01
File: N:\Projects\los_osos\Collect_Sys\PS\ele\AD-GE-003.dgn
Job No: 1481166

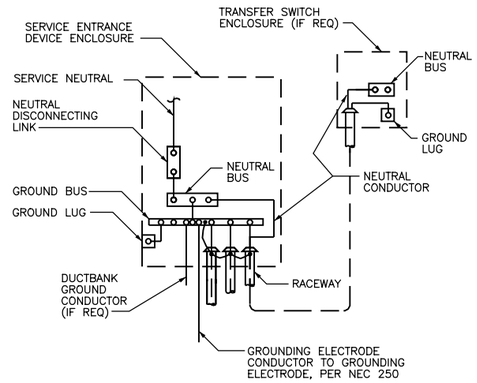


NOTES:

1. IN HAZARDOUS AREAS FLEXIBLE CONDUIT SHALL BE LISTED FOR CLASS 1 DIVISON 1 LOCATIONS. PROVIDE SLACK IN FLEXIBLE CONDUIT TO ALLOW FOR DIFFERENTIAL MOVEMENT BETWEEN ENCASED CONDUIT AND BUILDING. IF SEAL FITTINGS ARE NOT REQUIRED THEY MAY BE DELETED IN UNCLASSIFIED AREAS UON.
2. EXPOSED CONDUIT SHALL BE FASTENED TO THE BUILDING IN ACCORDANCE WITH THE NEC AND DIVISON 16. THE FLEX CONDUIT AND SEAL FITTING SHALL NOT BE ATTACHED TO THE BUILDING.
3. CONCRETE ENCASEMENT SHALL EXTEND FROM THE PULLBOX TO 6" ABOVE GRADE. THE ENCASEMENT SHALL NOT BE TIED TO THE BUILDING

CONDUIT TRANSITION

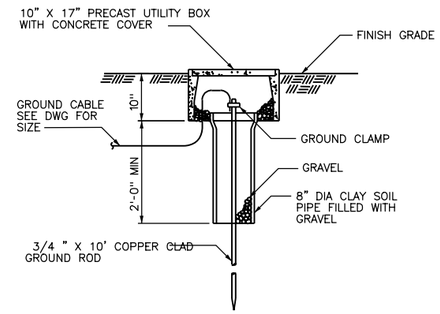
REV 072301 — E-230



SERVICE GROUNDING

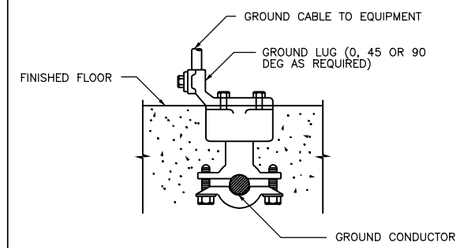
NON-SEPARATELY DERIVED SOURCE

REV 061799 — E-300



GROUND ROD AND WELL

REV 041099 — E-303

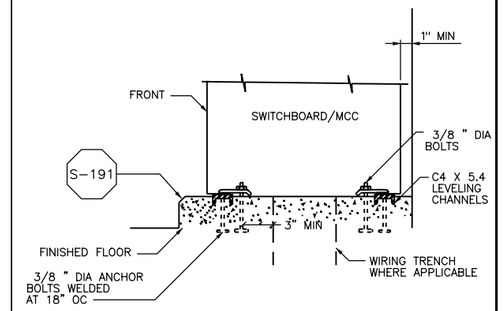


NOTE:

ALL BOLTS SHALL BE INSERTED IN BOLT HOLES BEFORE THE INSERT IS EMBEDDED.

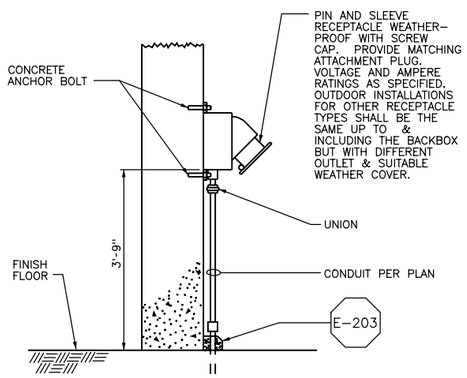
GROUNDING INSERT

REV 050199 — E-308



SWITCHBOARD/MCC MOUNTING

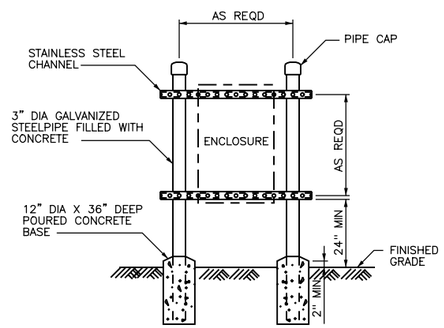
REV 072301 — E-400



RECEPTACLE INSTALLATION

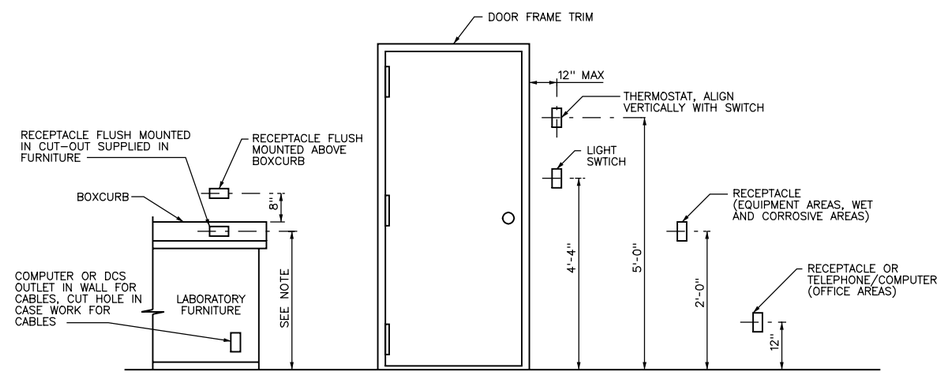
NON-HAZARDOUS LOCATIONS

REV 030725 — E-419



ENCLOSURE MOUNTING STAND

REV 041399 — E-420

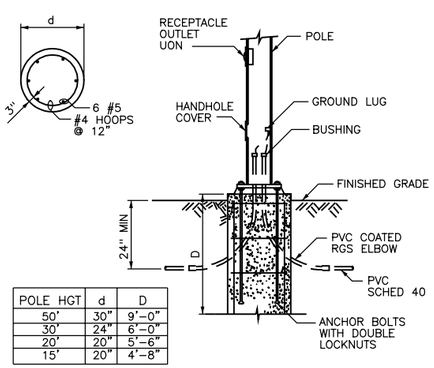


NOTE:

CONTRACTOR SHALL DETERMINE OUTLET BOX MOUNTING HEIGHT TO SUIT LABORATORY EQUIPMENT FURNISHED FOR INSTALLATION

OUTLET BOX MOUNTING

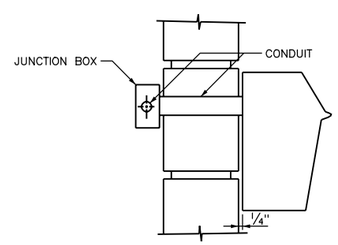
REV 072301 — E-450



POLE HGT	d	D
50'	30"	9'-0"
30'	24"	6'-0"
20'	20"	5'-6"
15'	20"	4'-8"

POLE FOUNDATION

REV 072301 — E-600



NOTES:

PROVIDE GASKET BETWEEN FIXTURE AND CONDUIT. INSTALLATION SHALL BE WATERTIGHT.

WALL MOUNT FIXTURE

EXTERIOR WALL

REV 050199 — E-605

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA

05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

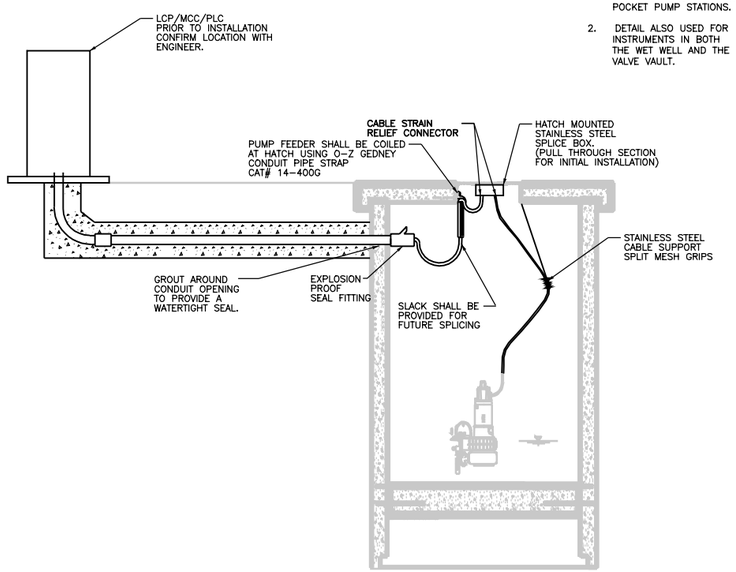
LOS OSOS WASTEWATER PROJECT

ELECTRICAL
STANDARD ELECTRICAL DETAILS – 2

SHEET AD-GE-004

Plot Date: 08-FEB-2004 11:02
File: N:\Projects\los_osos\Collect_Sys\PS\ele\AD-GE-004.dgn
Job No: 1481166

1. DETAIL IS TYPICAL FOR PUMP STATIONS AND FOR POCKET PUMP STATIONS.
2. DETAIL ALSO USED FOR INSTRUMENTS IN BOTH THE WET WELL AND THE VALVE VAULT.



WET WELL DETAIL
TRANSITION FROM HAZARDOUS TO NON-HAZARDOUS LOCATIONS

E-650

MINI POWER CENTER SCHEDULE (TYP)

120/240 VOLTS — 1 PH
70 A MAIN BREAKER — 3 W, 125 A
PANELBOARD: MPC — LOCATION: TYPICAL
FEED: BOTTOM — MOUNTING: SURFACE

LOAD DESCRIPTION	KVA PH A	KVA PH B	LTG	REC	MIS	CIR	BKR		BKR	CIR	MIS	REC	LTG	KVA PH A	KVA PH B	LOAD DESCRIPTION
LIGHTING	0.512		X			1	20		20	2		X		0.720		RECEPTACLE
LIGHTING		0.512	X			3	20		20	4	X				1.5	EXHAUST FAN SYSTEM
PLC	1.0				X	5	20		20	6		X		0.180		IRRIGATION CONTROLLER
LIT		0.5			X	7	20		20	8					1.92	BATTERY CHARGER
SPARE						9	20		20	10						SPARE
SPARE						11	20		20	12						SPARE
WATER HEATER	1.92					13	20		20	14						SPARE
		1.92				15	2P		2P	16						
SPARE						17	20		20	18						SPARE
						19	2P		2P	20						
	3.432	2.932				TOTAL			TOTAL					0.900	3.42	
	PHASE LOAD								TOTAL LOAD							
	4.332	6.352							10.684 KVA							

SEE NOTE 1.

MINI POWER CENTER SCHEDULE (WEST PASO PS)

120/240 VOLTS — 1 PH
70 A MAIN BREAKER — 3 W, 125 A
PANELBOARD: MPC — LOCATION: WEST PASO PS
FEED: BOTTOM — MOUNTING: SURFACE

LOAD DESCRIPTION	KVA PH A	KVA PH B	LTG	REC	MIS	CIR	BKR		BKR	CIR	MIS	REC	LTG	KVA PH A	KVA PH B	LOAD DESCRIPTION
LIGHTING	0.128		X			1	20		20	2		X		0.180		RECEPTACLE
EXHAUST FAN SYSTEM		1.738			X	3	20		20	4	X				1.738	EXHAUST FAN SYSTEM
EXHAUST FAN SYSTEM	1.738				X	5	20		20	6	X			1.738		EXHAUST FAN SYSTEM
EXHAUST FAN SYSTEM		1.738			X	7	20		20	8	X				1.738	EXHAUST FAN SYSTEM
PLC	1.0				X	9	20		20	10		X		0.180		IRRIGATION CONTROLLER
LIT		0.5			X	11	20		20	12					1.0	SPACE HEATER ENCLOSURE
SPACE HEATER VFD	1.0					13	20		20	14						SPARE
SPARE						15	20		20	16						SPARE
SPARE						17	20		20	18						SPARE
						19	2P		2P	20						
	3.866	3.976				TOTAL			TOTAL					2.098	4.476	
	PHASE LOAD								TOTAL LOAD							
	5.964	8.452							14.42 KVA							

NOTES:

1. EAST PASO HARVEST WELL SHALL HAVE ALL 120V EQUIPMENT POWERED FROM THE EAST PASO MPC LOCATED IN THE STANDBY POWER FACILITY. BREAKERS MUST BE ALLOCATED FOR THIS LOAD.
2. THE PANEL SCHEDULES ARE SHOWING TYPICAL LOADS FOR DIFFERENT LOCATIONS. IF A UNIT REQUIRING 120V IS NOT SHOWN ON THESE PANELS USE A SPARE BREAKER. 3/4"C; (2)#12 & 1#12 GND MIN CONDUIT & WIRE SHALL BE USED TO CONNECT THE DEVICE. IF A DEVICE IS SHOWN THAT IS NOT NEEDED MAKE THE DESIGNATED BREAKER SPARE.

REGISTERED PROFESSIONAL ENGINEER — CHARLES M. REYNOLDS — No. E011791 — Exp. 9-30-04 — ELECTRICAL — STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: NONE
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CHECKED K. A. CREAGER

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL STANDARD DETAIL AND PANEL SCHEDULES

SHEET AD-GE-005

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\AD-GE-005.dgn Plot Date: 08-FEB-2004 11:02

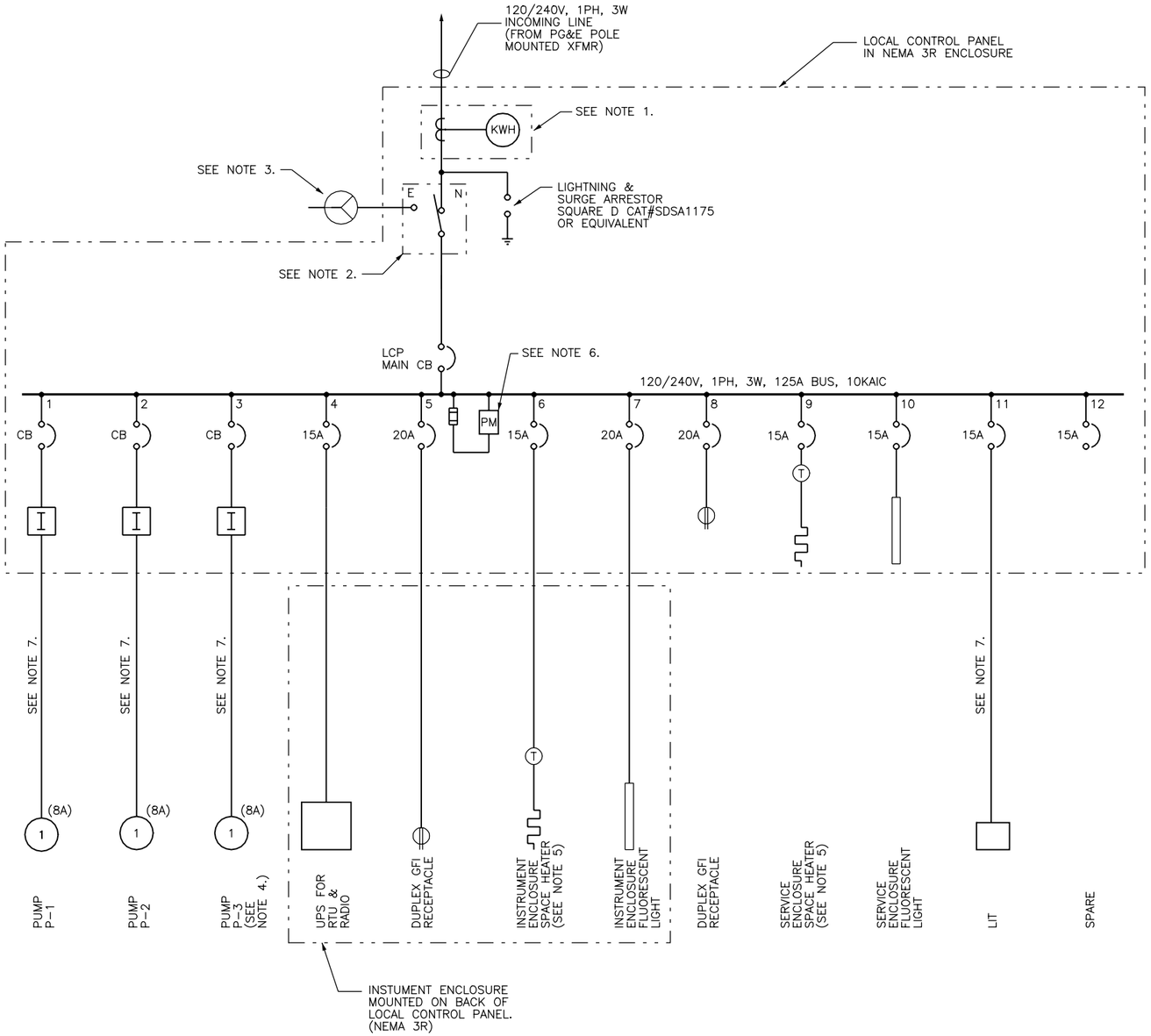
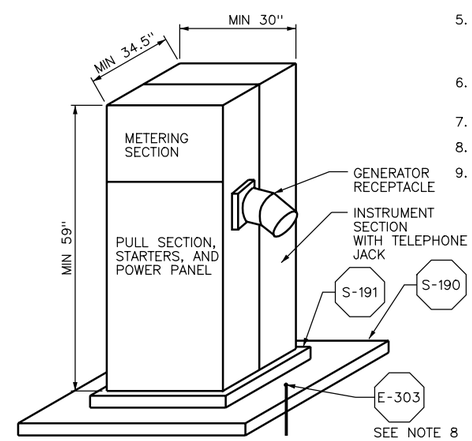


TABLE 1
POCKET PUMP STATIONS
LOCAL CONTROL PANEL SINGLE LINE DIAGRAM

LOCAL CONTROL PANEL (ELEC)	PUMP NUMBERS	PUMP STATIONS NAMES	AREA	PUMP MOTOR HP	CB	LCP MAIN CB	MOTOR FEEDER FROM LCP	RTU
LCP-4A	4A-P-1, 2, 3	04A	A	1	15A/2P	100A	1"C, 2#10 & 1#10 GND	RTU 4A
LCP-7A	7A-P-1, 2	07A	A	1	15A/2P	100A	1"C, 2#10 & 1#10 GND	RTU 7A
LCP-8A	8A-P-1, 2	08A	A	1	15A/2P	100A	1"C, 2#10 & 1#10 GND	RTU 8A
LCP-9A	9A-P-1, 2	09A	A	1	15A/2P	100A	1"C, 2#10 & 1#10 GND	RTU 9A
LCP-10A	10A-P-1, 2	10A	A	1	15A/2P	100A	1"C, 2#10 & 1#10 GND	RTU 10A
LCP-11A	11A-P-1, 2	11A	A	1	15A/2P	100A	1"C, 2#10 & 1#10 GND	RTU 11A
LCP-12A	12A-P-1, 2	12A	A	1	15A/2P	100A	1"C, 2#10 & 1#10 GND	RTU 12A
LCP-13A	13A-P-1, 2	13A	A	1	15A/2P	100A	1"C, 2#10 & 1#10 GND	RTU 13A
LCP-9B	9B-P-1, 2, 3	9B	D	1	15A/2P	100A	1"C, 2#10 & 1#10 GND	RTU 9B
LCP-9C	9C-P-1, 2	9C	D	1	15A/2P	100A	1"C, 2#10 & 1#10 GND	RTU 9C
LCP-13B	13B-P-1, 2	13B	D	1	15A/2P	100A	1"C, 2#10 & 1#10 GND	RTU 13B
LCP-15B	15B-P-1, 2	15B	D	1	15A/2P	100A	1"C, 2#10 & 1#10 GND	RTU 15B

NOTES:

1. METERING DEVICE MOUNTED IN ENCLOSURE, COMPLETE WITH METER, METER SOCKET , AND TEST BY-PASS SWITCHES SHALL BE IN COMPLIANCE WITH PG&E.
2. THE CONTRACTOR SHALL PROVIDE A DOUBLE THROW 2 POLE, 100A, 240V HEAVY DUTY MANUAL TRANSFER SWITCH IN THE ENCLOSURE.
3. 100A, 4 POLE, 600V, HEAVY DUTY WEATHERPROOF RECEPTACLE SHALL BE PROVIDED AND INSTALLED ON THE EXTERIOR OF THE ENCLOSURE. RECEPTACLE SHALL BE APPLETON STYLE 2 REVERSE SERVICE CAT. NO. ADJA1034-200-RS WITH BACK BOX, ANGLE ADAPTER, SPRING COVER, AND MATCHING PLUGS,
4. FOR POCKET PUMP STATIONS WITH 2 PUMP CONFIGURATION, PUMP P-3 WILL BE A SPARE STARTER.
5. THERMOSTAT SHALL BE SET TO OPEN AT 60 DEGREES FAHRENHEIT. SPACE HEATER SHALL BE RATED FOR 500 WATTS AT 240V, RUN AT 125 WATTS AT 120 VOLTS TO PREVENT CONDENSATION INSIDE.
6. PM — SINGLE PHASE UNDER VOLTAGE RELAY. DIVERSIFIED ELECTRONICS CATALOG NUMBER UOA-240-ALA OR EQUAL
7. SEE SHEET A-E-201, A-E-202 & D-E-201 FOR DUCTBANK ROUTING.
8. ACCESSIBLE GROUND ROD FOR GENERATOR
9. INSTRUMENTATION SECTION SHALL CONTAIN RTU UNIT, MODEM AND TELEPHONE JACK FOR COMMUNICATION TO SCADA SYSTEM. SEE INSTRUMENTATION DRAWINGS.



PPS LOCAL CONTROL PANEL ELEVATION

PPS LCP LOADS				
			FLA (PRESENT)	
ITEM	KVA	HP	CONNECTED	DEMAND
PUMP 1		1	8	5.6
PUMP 2		1	8	5.6
PUMP 3 (IF USED)		1	8	5.6
PLC	1		9	6.3
MISC	0.5		30	21
		TOTALS	63	44.1

REGISTERED PROFESSIONAL ENGINEER
CHARLES M. REYNOLDS
No. E017791
Exp. 9-30-04
ELECTRICAL
STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE

WARNING
0 1/2 1
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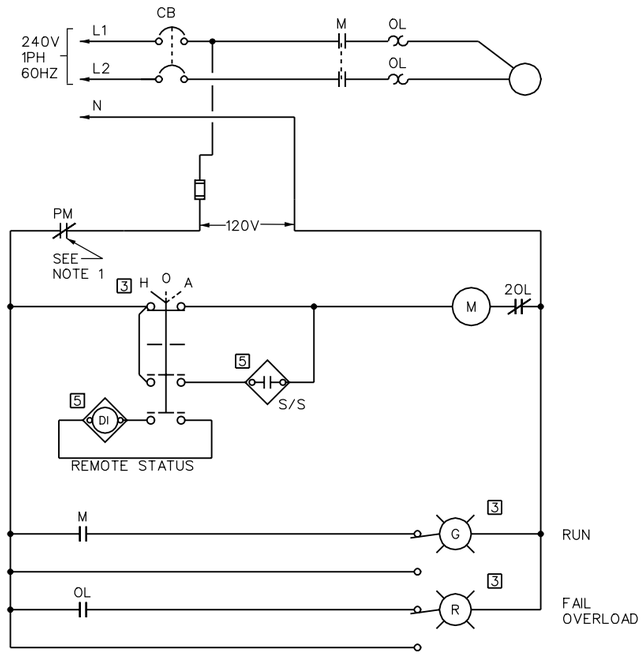
LOS OSOS COMMUNITY SERVICES DISTRICT

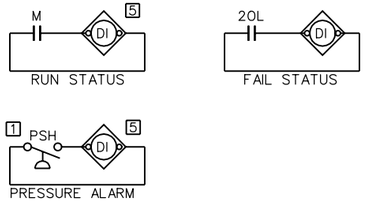
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
POCKET PUMP STATIONS
TYPICAL SINGLE LINE DIAGAM

SHEET
AD-E-200

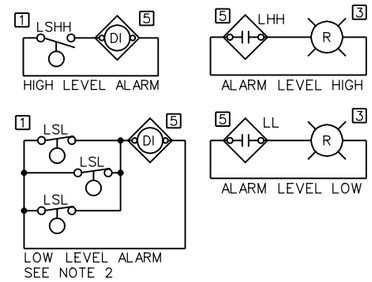
Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\AD-E-200.dgn Plot Date: 08-FEB-2004 11:03





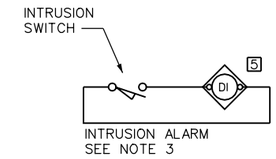
POCKET PUMP STATIONS

(TYP FOR EACH PUMP)



POCKET PUMP STATIONS

(TYP FOR EACH WET WELL)



INTRUSION ALARM SYSTEM

NOTES:

1. EACH POCKET PUMP STATION SHALL CONTAIN A SINGLE PHASE MONITOR. A NORMALLY CLOSED CONTACT SHALL BE CONNECTED TO EACH PUMP MOTOR CONTROLLER.
2. LOW LEVEL SWITCHES ARE LOCATED ON EACH POCKET PUMP. FOR DUPLEX POCKET PUMP STATIONS THE 3RD LSL SHOWN SHALL BE DISREGARDED.
3. A INTRUSION ALARM SHALL BE INSTALLED AT THE WET WELL AND LCP DOORS FOR EACH POCKET PUMP STATION. IF MORE THAN ONE SWITCH IS LOCATED IN AN AREA COMBINE INTRUSION SWITCHES IN PARALLEL FOR ONE INPUT TO PLC.

LOCATION LEGEND:

1. FIELD
2. LCS
3. LCP
4. MCC
5. PLC

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA

05 FEB 2004

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SCALE: NO SCALE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

ELECTRICAL
POCKET PUMP STATIONS
TYPICAL CONTROL DIAGRAM

SHEET AD-E-201

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\AD-E-201.dgn Plot Date: 08-FEB-2004 11:03

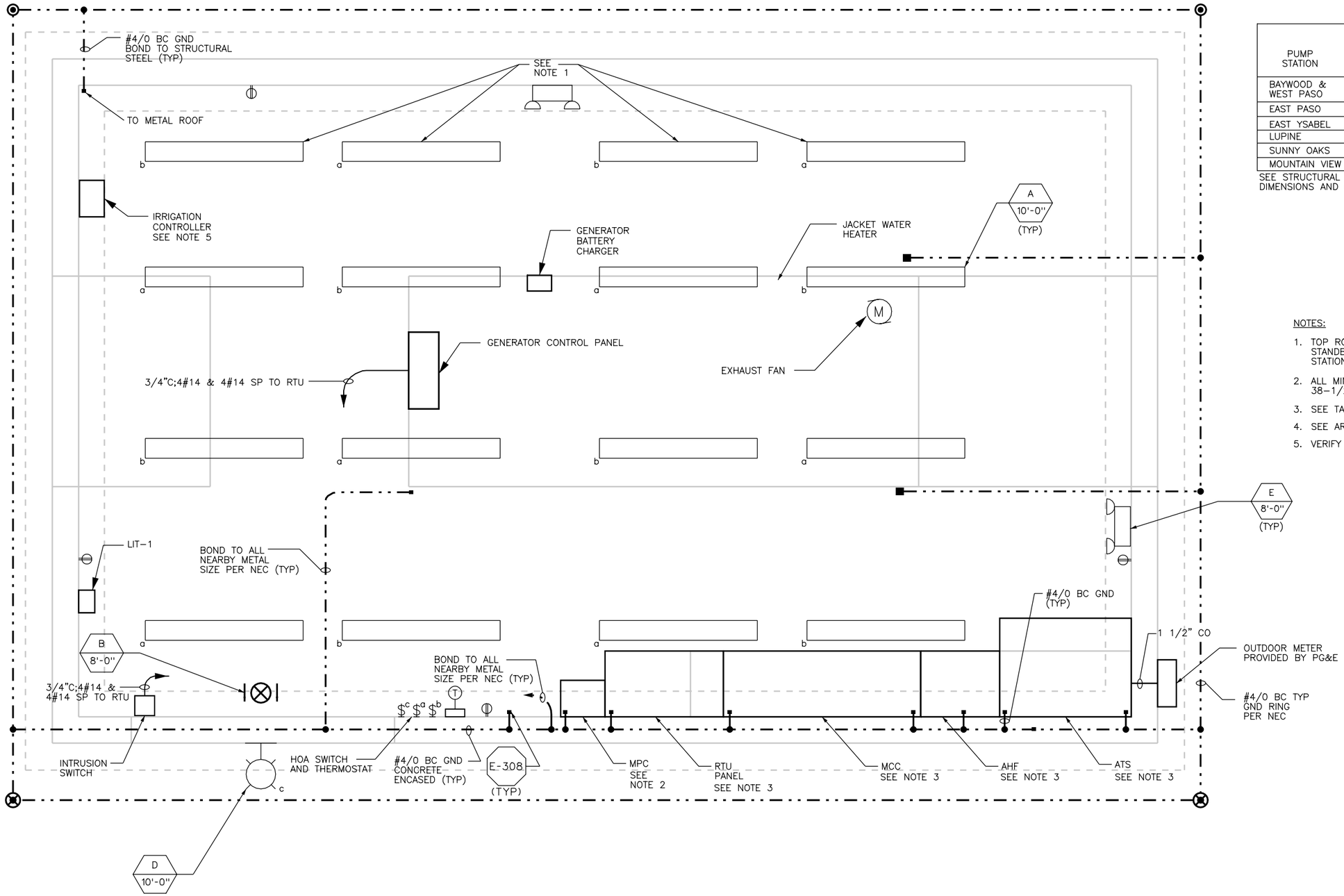

TABLE 2

STANDBY POWER FACILITIES

PUMP STATION	MCC DIMENSIONS (H,W,D)	ATS DIMENSIONS (H,W,D)	ACTIVE HARMONIC FILTER DIMENSIONS (H,W,D)	RTU UNIT DIMENSIONS (H,W,D)
BAYWOOD & WEST PASO	90",60",20"	90",46",30"	86",24",20"	36",36",20"
EAST PASO	90",60",20"	90",48",20"		36",36",20"
EAST YSABEL	90",40",20"	90",40",20"		36",36",20"
LUPINE	90",60",20"	90",48",20"	49",16",14"	36",36",20"
SUNNY OAKS	90",40",20"	90",40",20"		36",36",20"
MOUNTAIN VIEW	90",40",20"	90",40",20"		36",36",20"

SEE STRUCTURAL DRAWINGS FOR BUILDING DIMENSIONS AND GENERATOR LOCATIONS

NOTES:

1. TOP ROW OF LIGHTS ONLY EXIST IN WEST PASO/BAYWOOD STANDBY POWER STATION. ALL OTHER STANDBY POWER STATIONS WILL HAVE 3 ROWS OF 4 FLUORESCENT LIGHTS.
2. ALL MINI POWER CENTERS (MPC) WILL BE 38-1/2"H,13-1/2"W,11-7/8"D
3. SEE TABLE 2 FOR EQUIPMENT DIMENSIONS
4. SEE AREA SINGLE LINE FOR CONDUIT AND CABLE SIZES.
5. VERIFY LOCATION OF CONTROLLER WITH IRRIGATION DWGS.

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No.E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: 3/4" = 1' 0"

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

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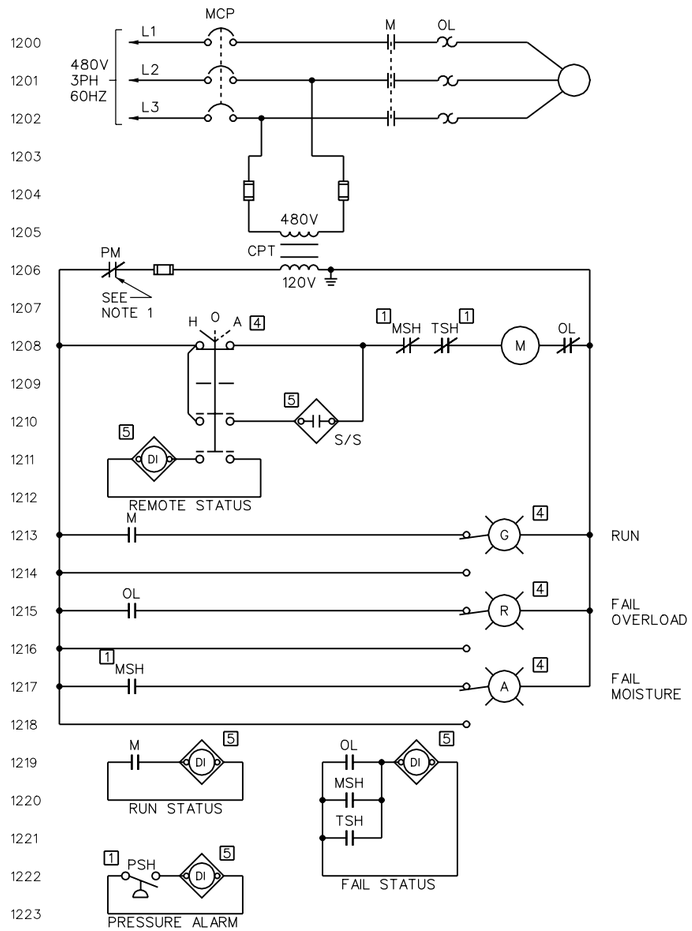
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
STANDBY POWER BUILDING – TYPICAL
ELECTRICAL POWER, LIGHTING & GROUNDING PLAN

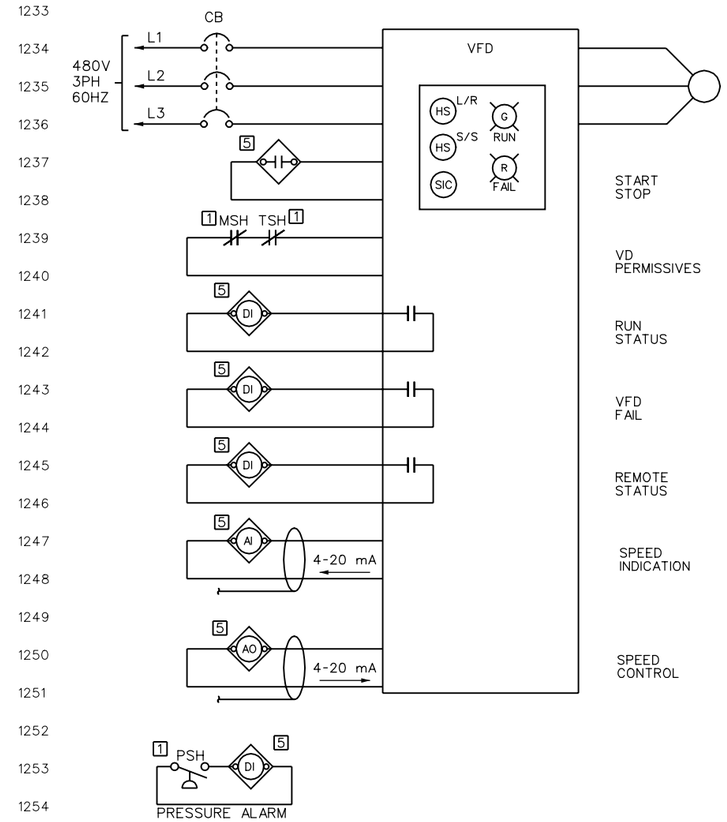
SHEET AD-E-202

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\AD-E-202.dgn Plot Date: 08-FEB-2004 11:03



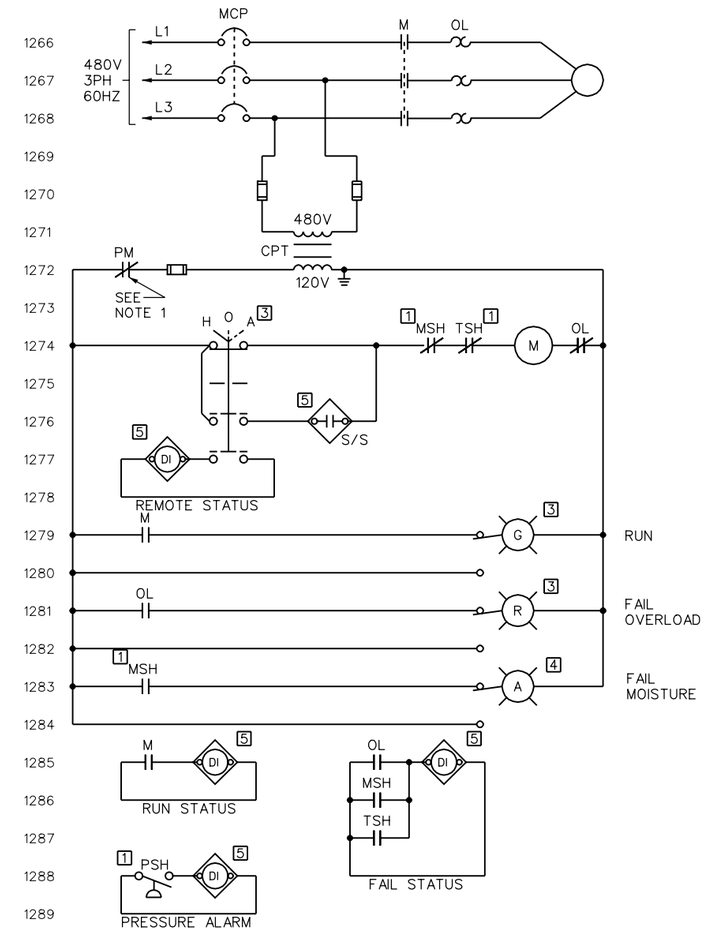
SUBMERSIBLE PUMP STATIONS

BAYWOOD, EAST PASO, EAST YSABEL & SUNNY OAKS PS



SUBMERSIBLE PUMP STATIONS

LUPINE PS AND WEST PASO PS



SUBMERSIBLE PUMP STATIONS

MOUTAIN VIEW PS

NOTES:

1. EACH SUBMERSIBLE PUMP STATION SHALL CONTAIN A THREE PHASE MONITOR. A NORMALLY CLOSED CONTACT SHALL BE PLACED IN EVERY PUMP MOTOR CONTROLLER.

LOCATION LEGEND

1 FIELD
2 LCS
3 LCP
4 MCC
5 PLC

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA

05 FEB 2004

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LOS OSOS COMMUNITY SERVICES DISTRICT

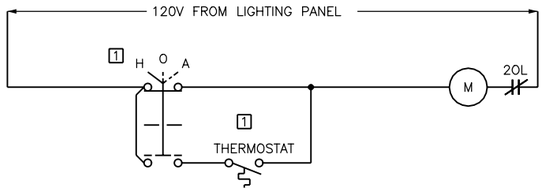
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

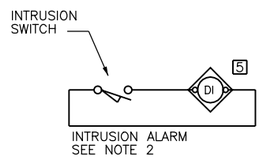
ELECTRICAL
PS & STANDBY POWER
TYPICAL CONTROL DIAGRAM – 1

SHEET AD–E–203

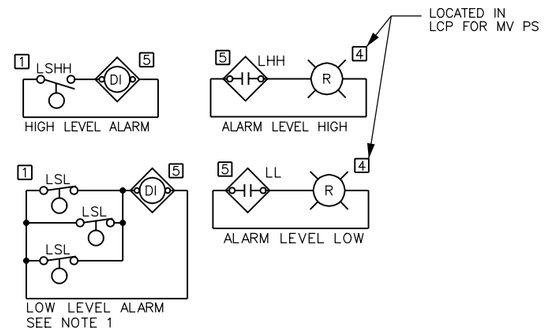
Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\AD-E-203.dgn Plot Date: 08-FEB-2004 11:04



STANDBY POWER BLDG EXHAUST FAN



INTRUSION ALARM SYSTEM



SUBMERSIBLE PUMP STATIONS

(TYP FOR EACH WET WELL)

1. LOW LEVEL SWITCHES ARE LOCATED ON EACH SUBMERSIBLE PUMP. FOR DUPLEX SUBMERSIBLE PUMP STATIONS THE 3RD LSL SHOWN SHALL BE DISREGARDED.

2. A INTRUSION ALARM SHALL BE INSTALLED AT THE WET WELL, VALVE VAULT, LCP DOOR AND STANDBY POWER FACILTITY DOOR FOR EACH SUBMERSIBLE PUMP STATION. IF MORE THAN ONE SWITCH EXISTS AN AREA COMBINE SWITCHES IN PARALLEL FOR ONE INPUT BACK TO PLC.

LOCATION LEGEND

1 FIELD
2 LCS
3 LCP
4 MCC
5 PLC

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA
05 FEB 2004

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LOS OSOS WASTEWATER PROJECT
ELECTRICAL
PS & STANDBY POWER
TYPICAL CONTROL DIAGRAM – 2

SHEET AD–E–204

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\AD-E-204.dgn Plot Date: 08-FEB-2004 11:04

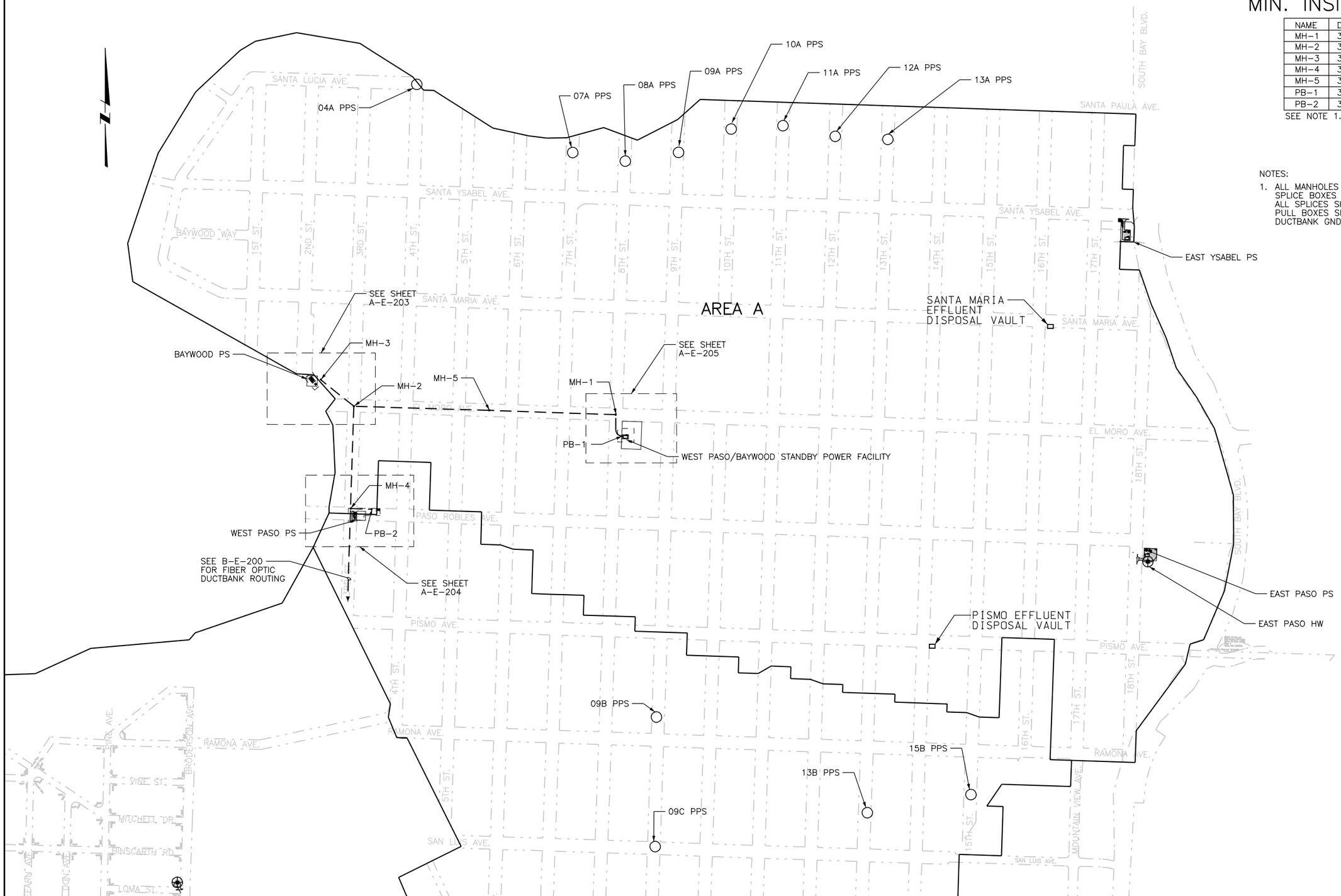
MANHOLE & PULL BOX MIN. INSIDE DIMENSIONS

NAME	DIMENSIONS (L,W,D)
MH-1	3'0" X 5'0" X 7'0"
MH-2	3'0" X 5'0" X 7'0"
MH-3	3'0" X 5'0" X 7'0"
MH-4	3'0" X 5'0" X 7'0"
MH-5	3'0" X 5'0" X 6'0"
PB-1	3'0" X 5'0" X 4'6"
PB-2	3'0" X 5'0" X 4'6"

SEE NOTE 1.

NOTES:

1. ALL MANHOLES AND PULL BOXES WILL BE USED AS SPLICE BOXES AND BE RATED FOR FULL SUBMERGENCE. ALL SPLICES SHALL BE WATERTIGHT. MAN HOLES AND PULL BOXES SHALL CONTAIN GROUNDING RODS WHERE DUCTBANK GND SHALL BE TERMINATED



REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA

05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: 1' = 300'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2/16/2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2/16/2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

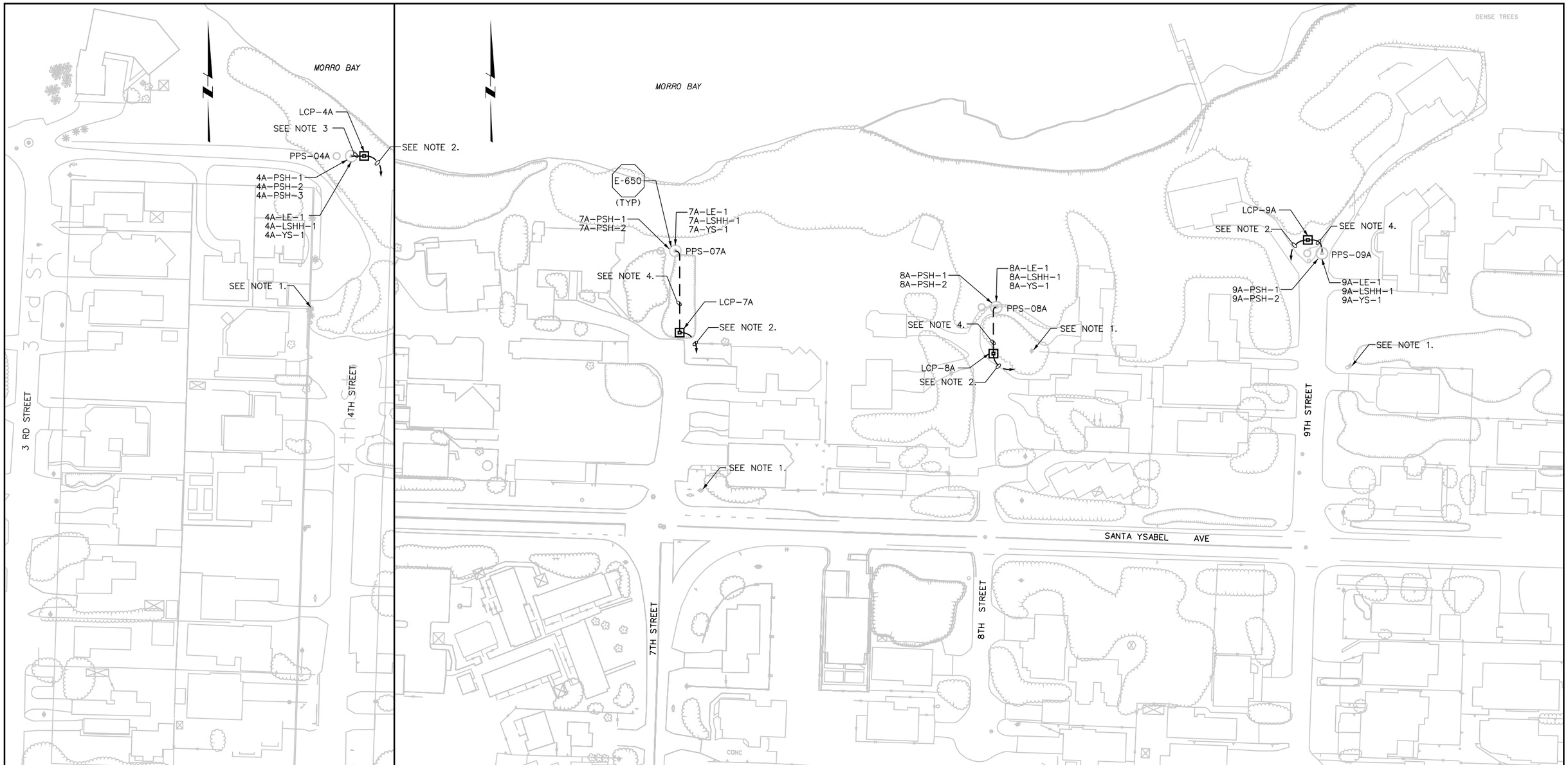
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

ELECTRICAL GENERAL AREA PLAN AREA A

SHEET A-E-200

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-200.dgn Plot Date: 08-FEB-2004 11:05



NOTES:

1. APPROXIMATE PG&E POWER FEED LOCATION
2. CONTRACTOR SHALL PROVIDE 3"CO FROM PG&E PROVIDED POLE MOUNTED XFMR TO LCP. CONTRACTOR MUST RECIEVE APPROVAL FROM PG&E PRIOR TO CONSTRUCTION. PG&E SHALL PROVIDE CONDUCTOR. FURNISH AND INSTALL CONDUIT PER PG&E REQUIREMENTS.
3. POWER/CONTROL DUCTBANK SHALL INCLUDE [1"C; (2)#10 & (1) #10 GND], [1"C; (10)#14, (6)#14 SP & (1)#12 GND] AND (3)[2"CO; FEEDER SHALL BE PROVIDED BY PUMP VENDOR].
   SIGNAL DUCTBANK SHALL INCLUDE [1"C; CABLE PROVIDED BY MANUFACTURER]
   CONTACTOR SHALL MAINTAIN 12" SEPARATION BETWEEN DUCTBANKS.
4. POWER/CONTROL DUCTBANK SHALL INCLUDE [1"C; (2)#10 & (1) #10 GND], [1"C; (8)#14, (4)#14 SP & (1)#12 GND] AND (2)[2"CO; FEEDER SHALL BE PROVIDED BY PUMP VENDOR].
   SIGNAL DUCTBANK SHALL INCLUDE [1"C; CABLE PROVIDED BY MANUFACTURER]
   CONTRACTOR SHALL MAINTAIN 12" SEPARATION BETWEEN DUCTBANKS.

REGISTERED PROFESSIONAL ENGINEER
CHARLES M. REYNOLDS
No. E011791
Exp. 9-30-04
ELECTRICAL
STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 50'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

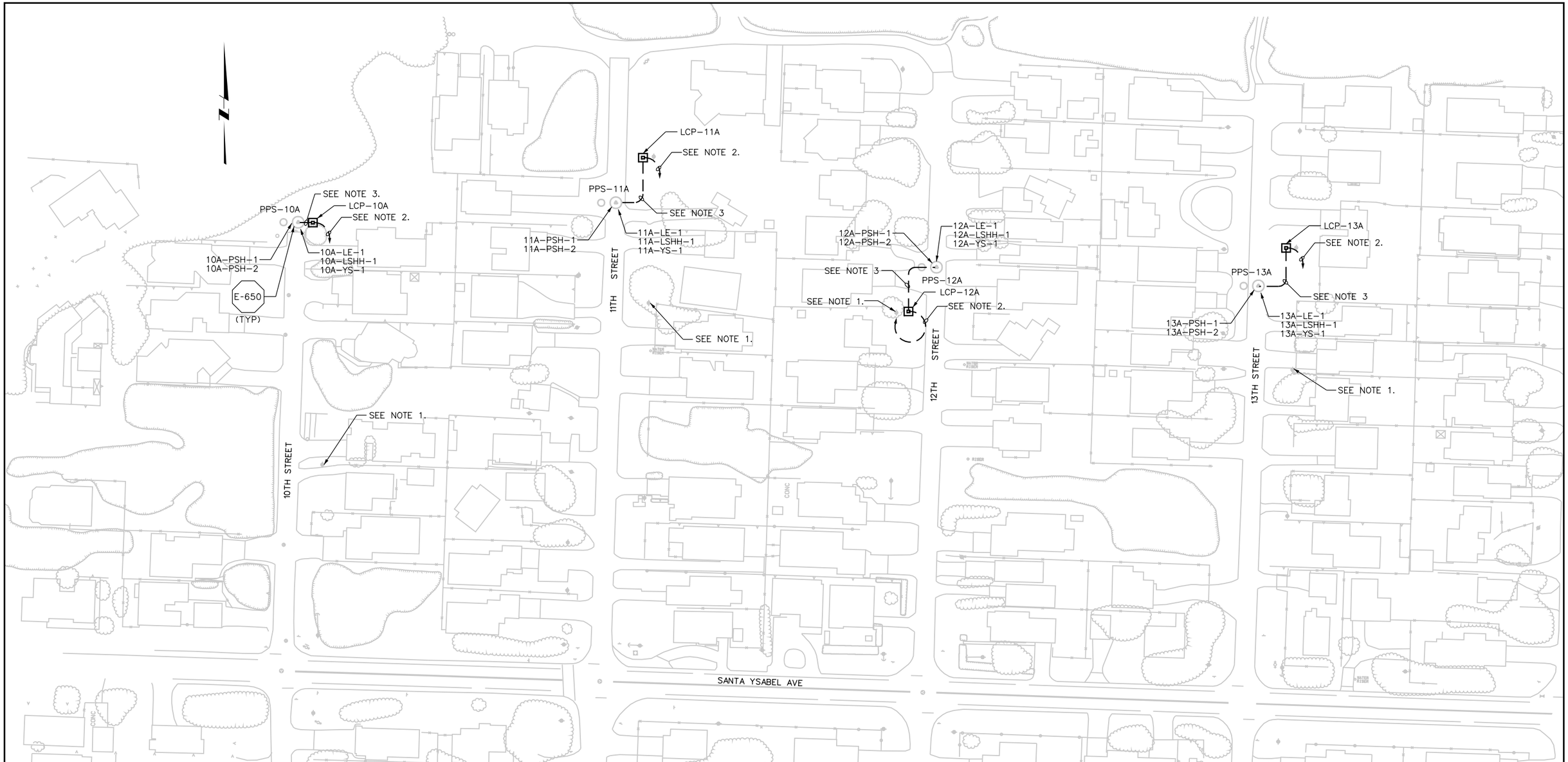
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

ELECTRICAL
POCKET PUMP STATIONS 04A, 07A, 08A & 09A ELECTRICL SITE PLAN

SHEET A-E-201

Plot Date: 08-FEB-2004 11:05
File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-201.dgn
Job No: 1481166



NOTES:

1. APPROXIMATE PG&E POWER FEED LOCATION
2. CONTRACTOR SHALL PROVIDE 3"CO FROM PG&E PROVIDED POLE MOUNTED XFMR TO LCP. CONTRACTOR MUST RECIEVE APPROVAL FROM PG&E PRIOR TO CONSTRUCTION. PG&E SHALL PROVIDE CONDUCTOR. FURNISH AND INSTALL CONDUIT PER PG&E REQUIREMENTS.
3. POWER/CONTROL DUCTBANK SHALL INCLUDE [1"C; (2)#10 & (1) #10 GND], [1"C; (8)#14, (4)#14 SP & (1)#12 GND] AND (2)[2"CO; FEEDER SHALL BE PROVIDED BY PUMP VENDOR].
   SIGNAL DUCTBANK SHALL INCLUDE [1"C; CABLE PROVIDED BY MANUFACTURER]
   CONTRACTOR SHALL MAINTAIN 12" SEPARATION BETWEN DUCTBANKS.

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 50'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

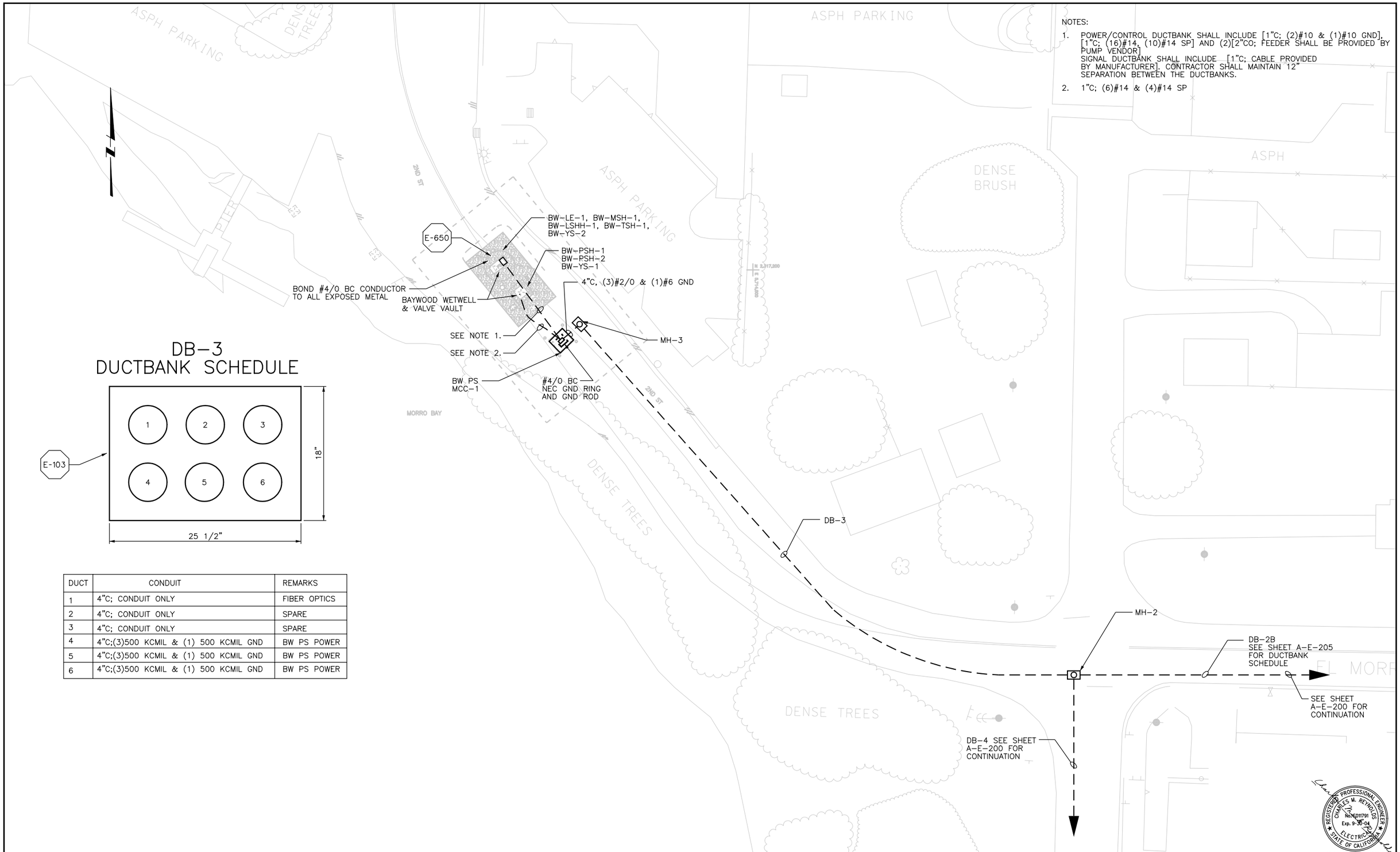
ELECTRICAL
POCKET PUMP STATIONS 10A, 11A, 12A & 13A ELECTRICAL SITE PLAN

SHEET A-E-202

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-202.dgn Plot Date: 08-FEB-2004 11:06

NOTES:

1. POWER/CONTROL DUCTBANK SHALL INCLUDE [1"C; (2)#10 & (1)#10 GND], [1"C; (16)#14, (10)#14 SP] AND (2)[2"CO; FEEDER SHALL BE PROVIDED BY PUMP VENDOR]
   SIGNAL DUCTBANK SHALL INCLUDE [1"C; CABLE PROVIDED BY MANUFACTURER]. CONTRACTOR SHALL MAINTAIN 12" SEPARATION BETWEEN THE DUCTBANKS.
2. 1"C; (6)#14 & (4)#14 SP



DB-3
DUCTBANK SCHEDULE

DUCT	CONDUIT	REMARKS
1	4"C; CONDUIT ONLY	FIBER OPTICS
2	4"C; CONDUIT ONLY	SPARE
3	4"C; CONDUIT ONLY	SPARE
4	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	BW PS POWER
5	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	BW PS POWER
6	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	BW PS POWER

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E017791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA

05 FEB 2004

Plot Date: 08-FEB-2004 11:06

File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-203.dgn

Job No: 1481166

REV	DATE	BY	DESCRIPTION

SCALE 1' = 20'

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVEN J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

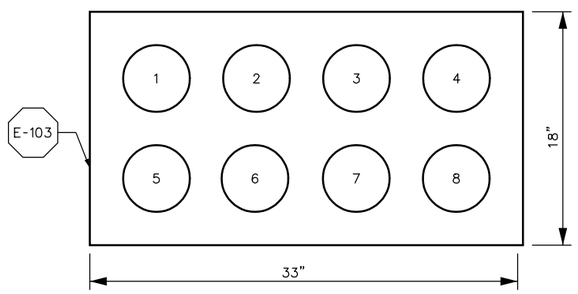
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
BAYWOOD SUBMERSIBLE PUMP STATION SITE
ELECTRICAL POWER, LIGHTING & GROUNDING PLAN

SHEET A-E-203

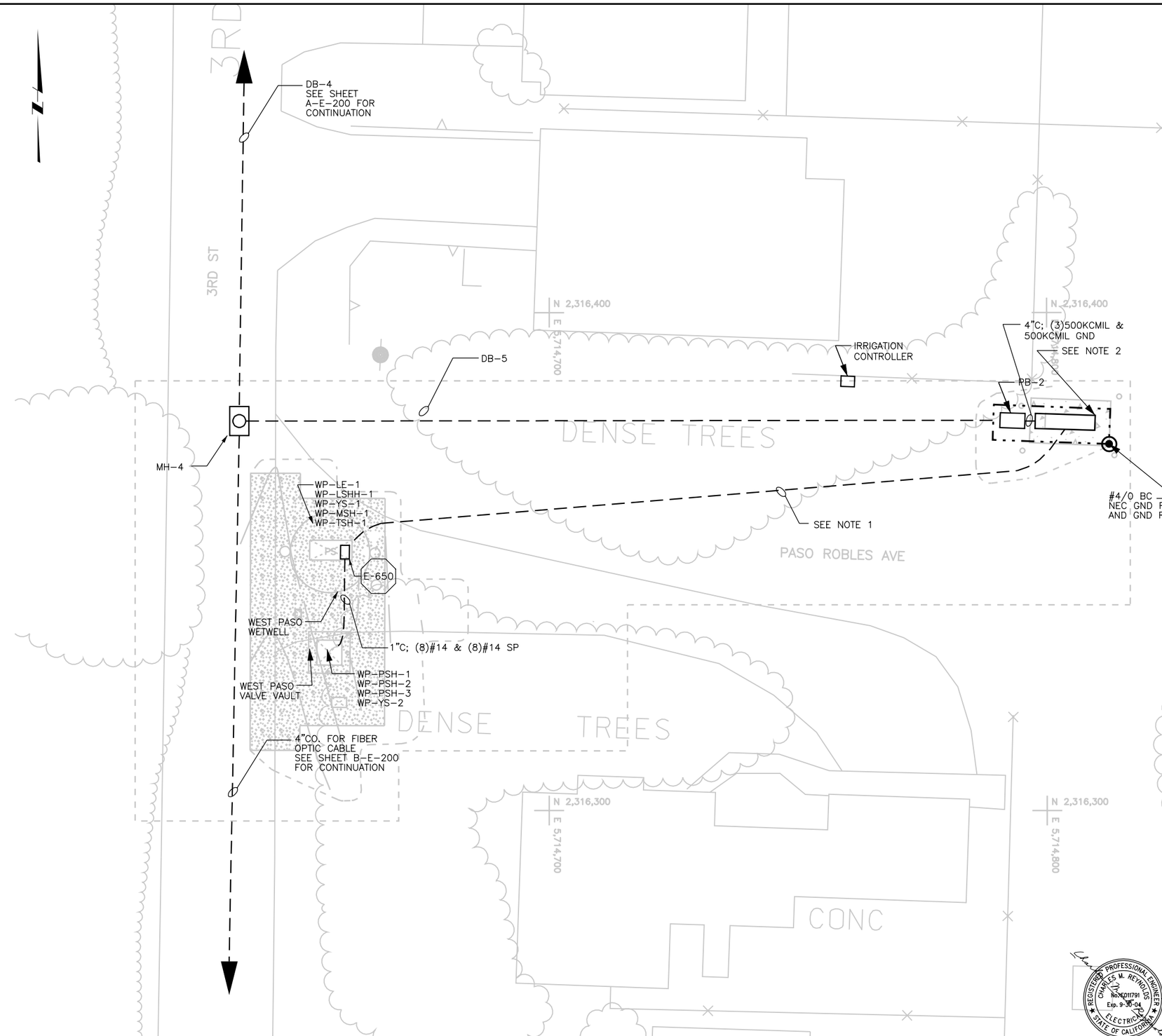
DB–4 & DB–5 DUCTBANK SCHEDULE



DUCT	CONDUIT	REMARKS
1	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	WP PS POWER
2	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	WP PS POWER
3	4"C; CONDUIT ONLY	FIBER OPTICS
4	4"C; CONDUIT ONLY	SPARE
5	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	WP PS POWER
6	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	WP PS POWER
7	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	WP PS POWER
8	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	WP PS POWER

NOTES:

1. POWER/CONTROL DUCTBANK SHALL INCLUDE [1"C; (2)#10 & (1)#10 GND], [1"C; (16)#14 & (8)#14 SP] AND (3)[2"CO; FEEDER SHALL BE PROVIDED BY PUMP VENDOR]
   SIGNAL DUCTBANK SHALL INCLUDE [1"C; CABLE PROVIDED BY MANUFACTURER]
   CONTRACTOR SHALL MAINTAIN 12" SEPARATION BETWEEN DUCTBANKS.
2. NEMA 3R NON–WALKIN ENCLOSURE SHALL BE 76"Hx120"Wx36"D. ENCLOSURE SHALL CONTAIN (3)60HP VFDS, DP–1, MPC–1 AND A PLC PANEL(36"Hx36"Wx14"D). SEE SHEET A–E–206



REGISTERED PROFESSIONAL ENGINEER
CHARLES M. REYNOLDS
No. E011791
Exp. 9-30-04
ELECTRICAL
STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: 3/32" = 1'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2/16/2004 — DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2/16/2004 — DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

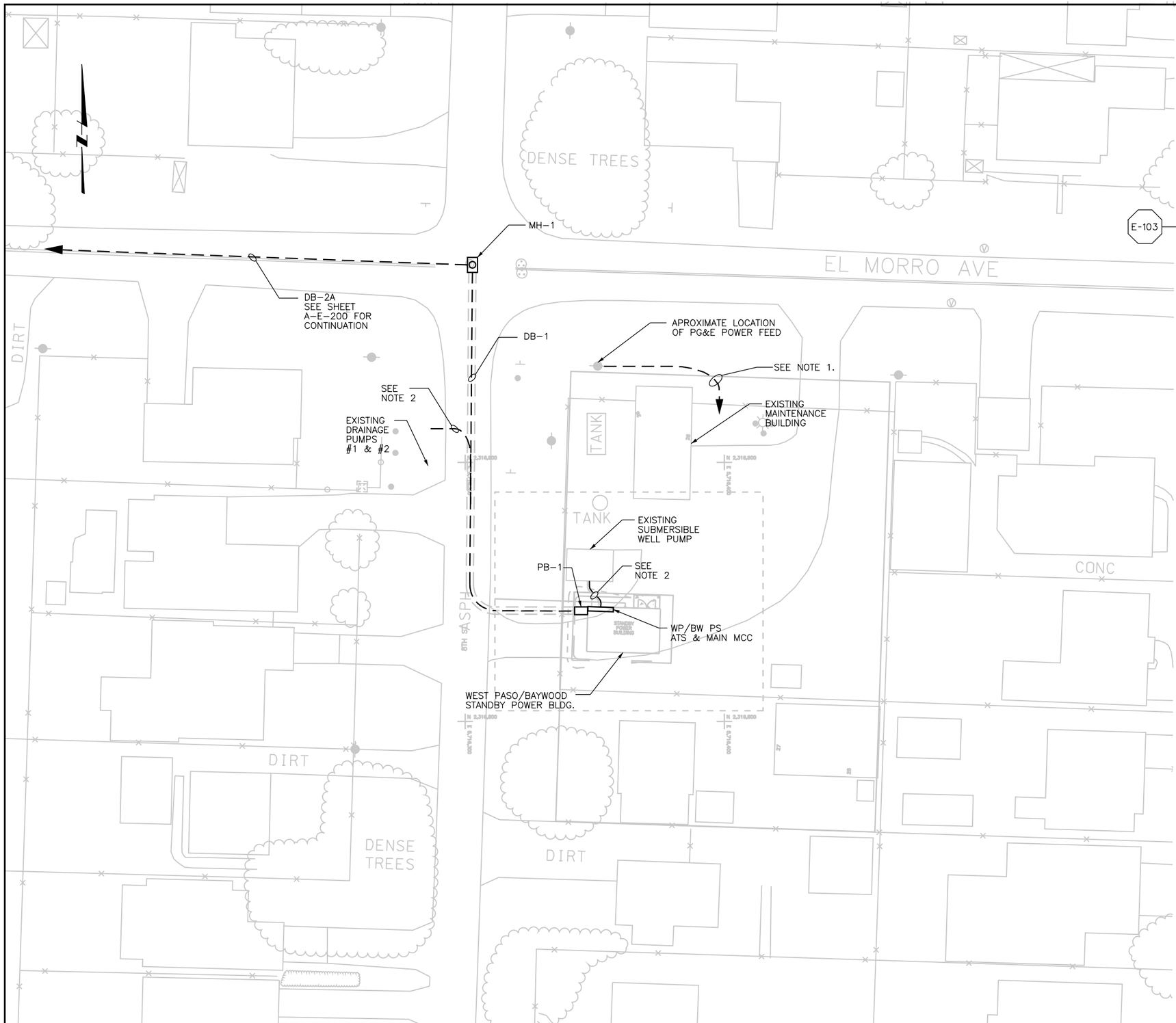
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

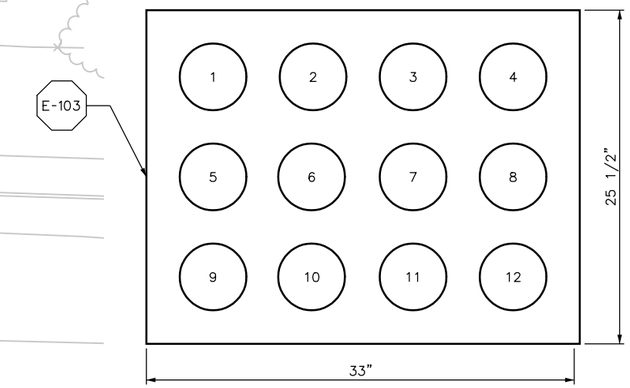
LOS OSOS WASTEWATER PROJECT
ELECTRICAL
WEST PASO SUBMERSIBLE PUMP STATION SITE – ELECTRICAL POWER, LIGHTING & GROUNDING PLAN

SHEET A–E–204

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-204.dgn Plot Date: 08-FEB-2004 11:07



DB-1, DB-2A & DB-2B DUCTBANK SCHEDULE



DUCT	CONDUIT	REMARKS
1	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	BW PS POWER
2	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	BW PS POWER
3	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	BW PS POWER
4	4"C; CONDUIT ONLY	FIBER OPTICS
5	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	WP PS POWER
6	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	WP PS POWER
7	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	WP PS POWER
8	4"C; CONDUIT ONLY	SPARE
9	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	WP PS POWER
10	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	WP PS POWER
11	4"C;(3)500 KCMIL & (1) 500 KCMIL GND	WP PS POWER
12	4"C; CONDUIT ONLY	SPARE

NOTES:

1. CONTRACTOR SHALL PROVIDE 4"C FROM PG&E POLE TO MAIN SERVICE ENTRANCE. PG&E SHALL PROVIDE CONDUCTOR. CONTRACTOR MUST RECEIVE PG&E APPROVAL PRIOR TO CONSTRUCTION. FURNISH AND INSTALL CONDUIT PER PG&E RECOMMENDATIONS.
2. SEE SHEET A-E-206 FOR CONDUIT AND CABLE SIZE.

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA

05 FEB 2004

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-205.dgn Plot Date: 08-FEB-2004 11:07

REV	DATE	BY	DESCRIPTION

SCALE 1" = 20'

WARNING 0 1/2 1 IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

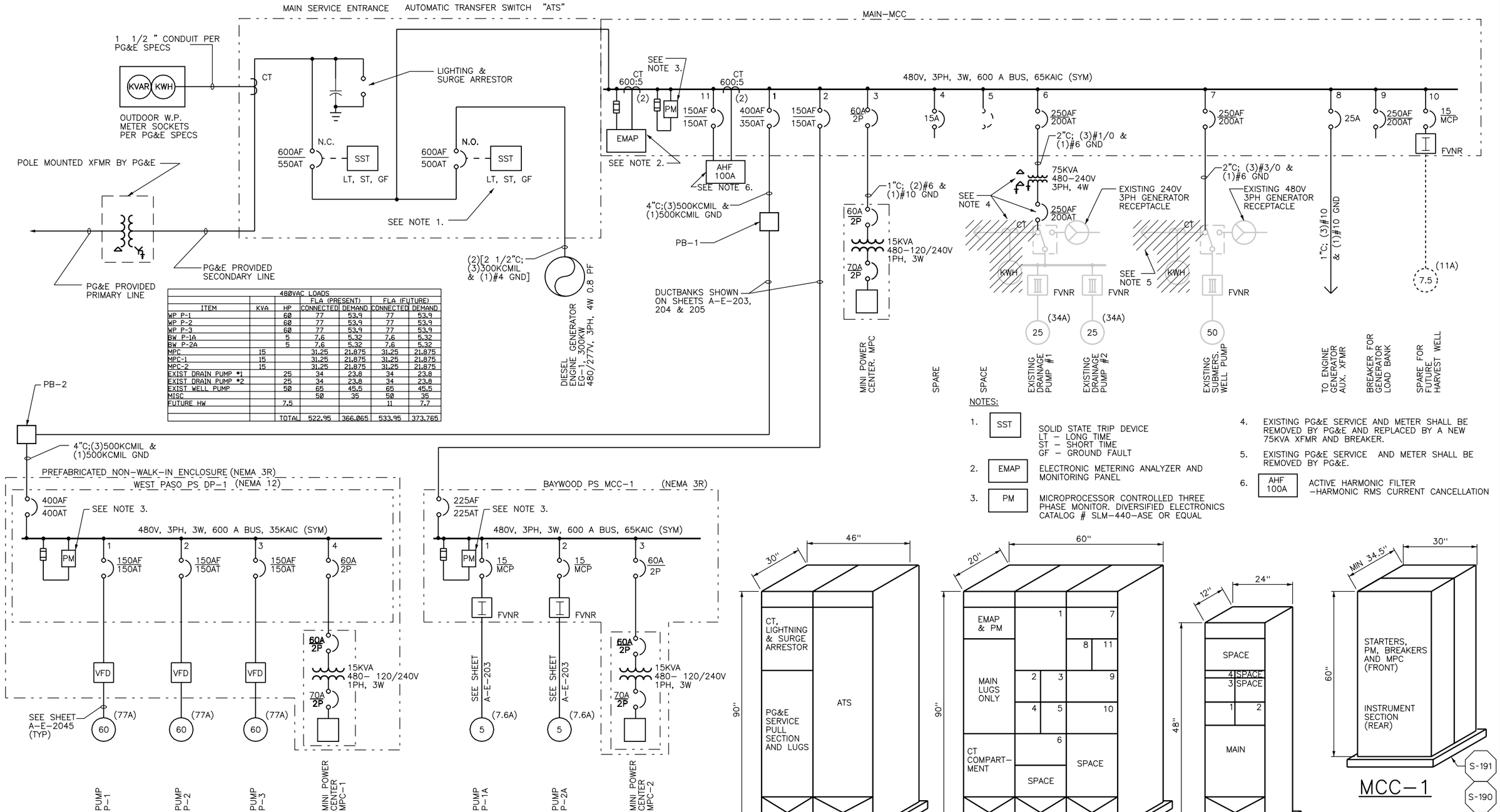
DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
POWER, LIGHTING & GROUNDING PLAN
WEST PASO/BAYWOOD STANDBY
POWER FACILITY

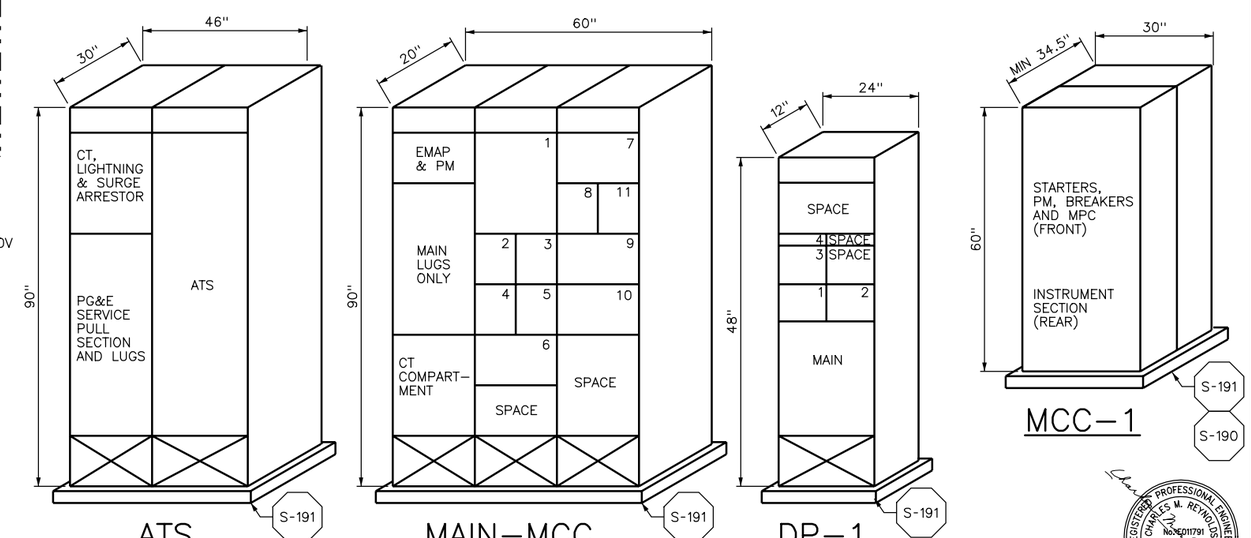
SHEET A-E-205



			480VAC LOADS			
			FLA (PRESENT)		FLA (FUTURE)	
ITEM	KVA	HP	CONNECTED	DEMAND	CONNECTED	DEMAND
WP P-1		60	77	53.9	77	53.9
WP P-2		60	77	53.9	77	53.9
WP P-3		60	77	53.9	77	53.9
BW P-1A		5	7.6	5.32	7.6	5.32
BW P-2A		5	7.6	5.32	7.6	5.32
MPC	15		31.25	21.875	31.25	21.875
MPC-1	15		31.25	21.875	31.25	21.875
MPC-2	15		31.25	21.875	31.25	21.875
EXIST DRAIN PUMP #1		25	34	23.8	34	23.8
EXIST DRAIN PUMP #2		25	34	23.8	34	23.8
EXIST WELL PUMP		50	65	45.5	65	45.5
MISC			50	35	50	35
FUTURE HW		7.5			11	7.7
		TOTAL	522.95	366.065	533.95	373.765

NOTES:

1. SST — SOLID STATE TRIP DEVICE
   LT – LONG TIME
   ST – SHORT TIME
   GF – GROUND FAULT
2. EMAP — ELECTRONIC METERING ANALYZER AND MONITORING PANEL
3. PM — MICROPROCESSOR CONTROLLED THREE PHASE MONITOR. DIVERSIFIED ELECTRONICS CATALOG # SLM-440-ASE OR EQUAL
4. EXISTING PG&E SERVICE AND METER SHALL BE REMOVED BY PG&E AND REPLACED BY A NEW 75KVA XFMR AND BREAKER.
5. EXISTING PG&E SERVICE AND METER SHALL BE REMOVED BY PG&E.
6. AHF 100A — ACTIVE HARMONIC FILTER –HARMONIC RMS CURRENT CANCELLATION



REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA

05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 — LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 — LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

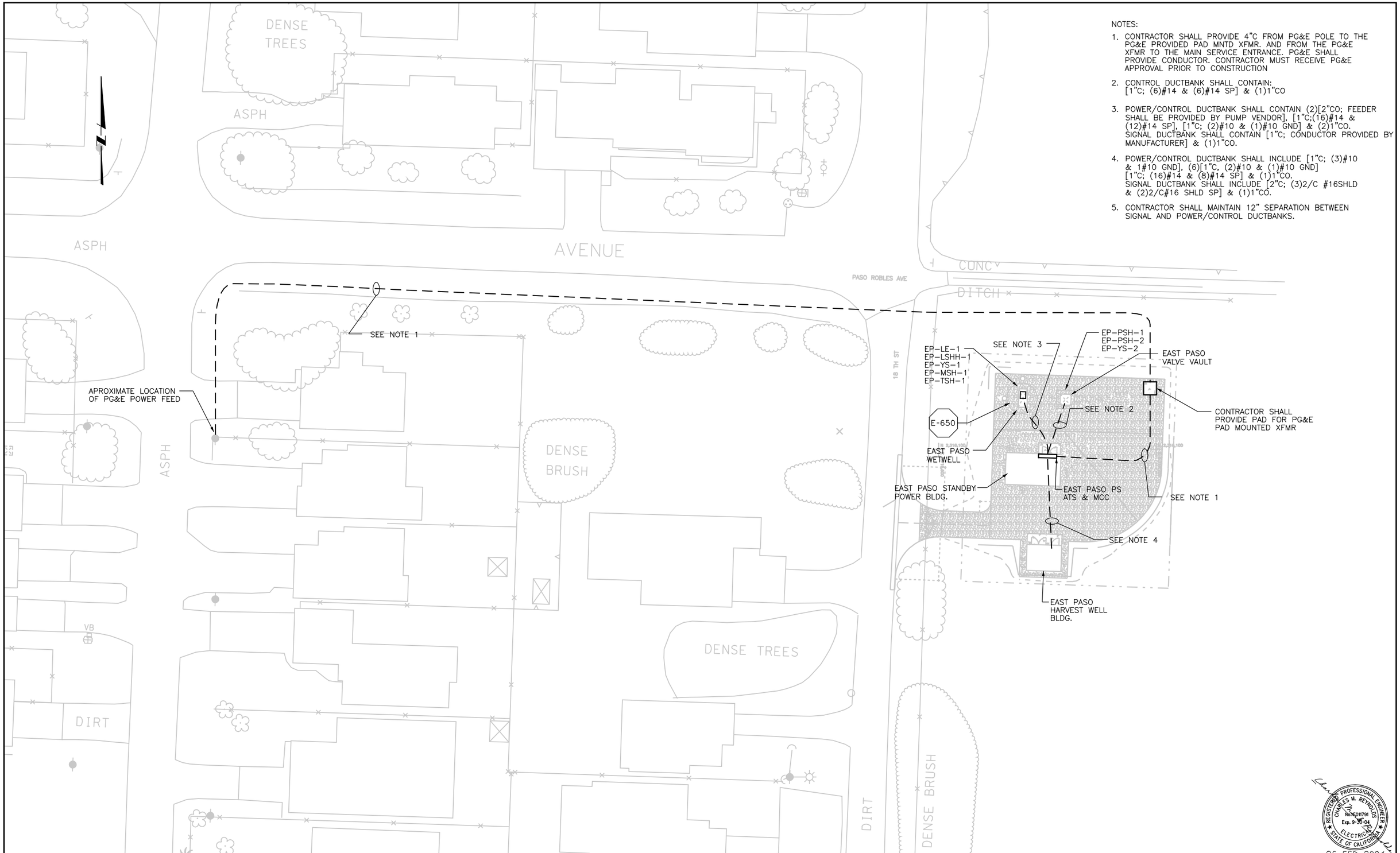
LOS OSOS WASTEWATER PROJECT
ELECTRICAL
WEST PASO/BAYWOOD PS & STANDBY POWER
SINGLE LINE

SHEET A-E-206

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-206.dgn Plot Date: 08-FEB-2004 11:08

NOTES:

1. CONTRACTOR SHALL PROVIDE 4"C FROM PG&E POLE TO THE PG&E PROVIDED PAD MNTD XFMR. AND FROM THE PG&E XFMR TO THE MAIN SERVICE ENTRANCE. PG&E SHALL PROVIDE CONDUCTOR. CONTRACTOR MUST RECEIVE PG&E APPROVAL PRIOR TO CONSTRUCTION
2. CONTROL DUCTBANK SHALL CONTAIN: [1"C; (6)#14 & (6)#14 SP] & (1)1"CO
3. POWER/CONTROL DUCTBANK SHALL CONTAIN (2)[2"CO; FEEDER SHALL BE PROVIDED BY PUMP VENDOR], [1"C;(16)#14 & (12)#14 SP], [1"C; (2)#10 & (1)#10 GND] & (2)1"CO. SIGNAL DUCTBANK SHALL CONTAIN [1"C; CONDUCTOR PROVIDED BY MANUFACTURER] & (1)1"CO.
4. POWER/CONTROL DUCTBANK SHALL INCLUDE [1"C; (3)#10 & 1#10 GND], (6)[1"C, (2)#10 & (1)#10 GND] [1"C; (16)#14 & (8)#14 SP] & (1)1"CO. SIGNAL DUCTBANK SHALL INCLUDE [2"C; (3)2/C #16SHLD & (2)2/C#16 SHLD SP] & (1)1"CO.
5. CONTRACTOR SHALL MAINTAIN 12" SEPARATION BETWEEN SIGNAL AND POWER/CONTROL DUCTBANKS.



REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E017791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA

05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 20'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

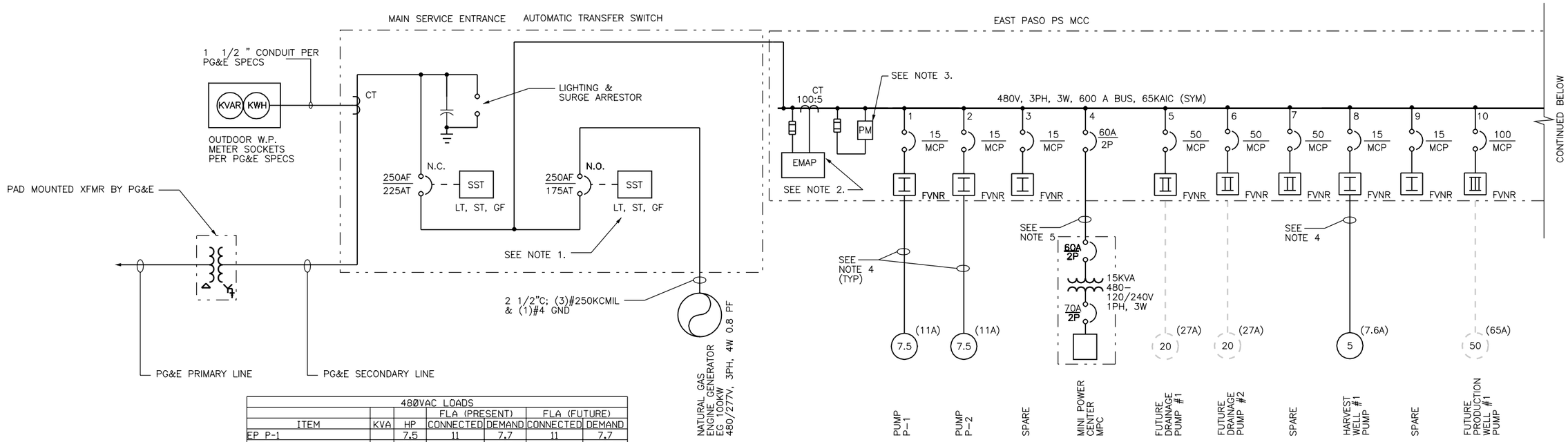
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

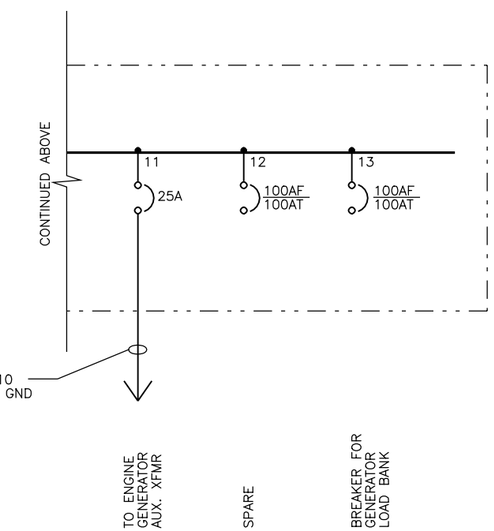
LOS OSOS WASTEWATER PROJECT
ELECTRICAL
EAST PASO SUBMERSIBLE PUMP STATION SITE – ELECTRICAL POWER, LIGHTING & GROUNDING PLAN

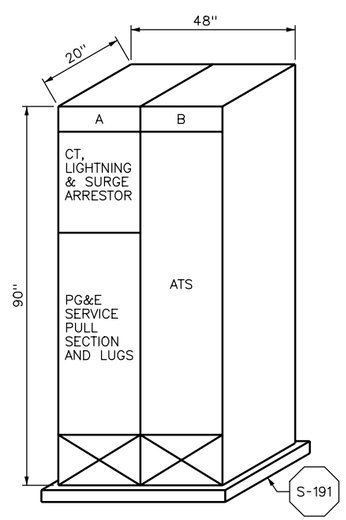
SHEET A-E-207

Plot Date: 08-FEB-2004 11:08
File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-207.dgn
Job No: 1481166

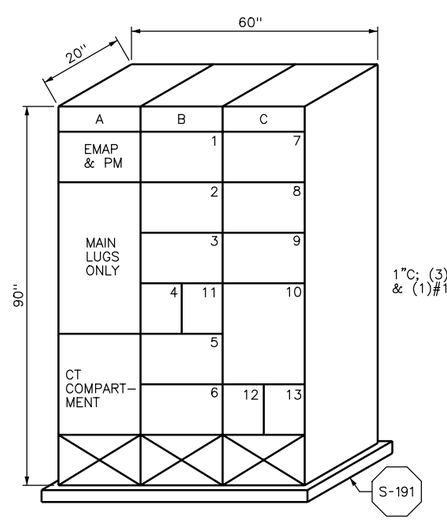


480VAC LOADS						
			FLA (PRESENT)		FLA (FUTURE)	
ITEM	KVA	HP	CONNECTED	DEMAND	CONNECTED	DEMAND
EP P-1		7.5	11	7.7	11	7.7
EP P-2		7.5	11	7.7	11	7.7
EP HARV WELL		5	7.6	5.32	7.6	
MPC	15		31.25	21.875	31.25	21.875
FUTURE PROD WELL		50	0	0	65	45.5
FUTURE DRAIN PUMP #1		20	0	0	27	18.9
FUTURE DRAIN PUMP #2		20	0	0	27	18.9
MISC			50	35	50	35
		TOTAL	110.85	77.595	229.85	155.575





ATS



MCC

NOTES:

1. SST — SOLID STATE TRIP DEVICE
   LT – LONG TIME
   ST – SHORT TIME
   GF – GROUND FAULT
2. EMAP — ELECTRONIC METERING ANALYZER AND MONITORING PANEL
3. PM — MICROPROCESSOR CONTROLLED THREE PHASE MONITOR
4. SEE SHEET A-E-207 FOR CONDUIT AND WIRE SIZE
5. 1"C; (2)#6 & (1)#10 GND

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE

WARNING 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

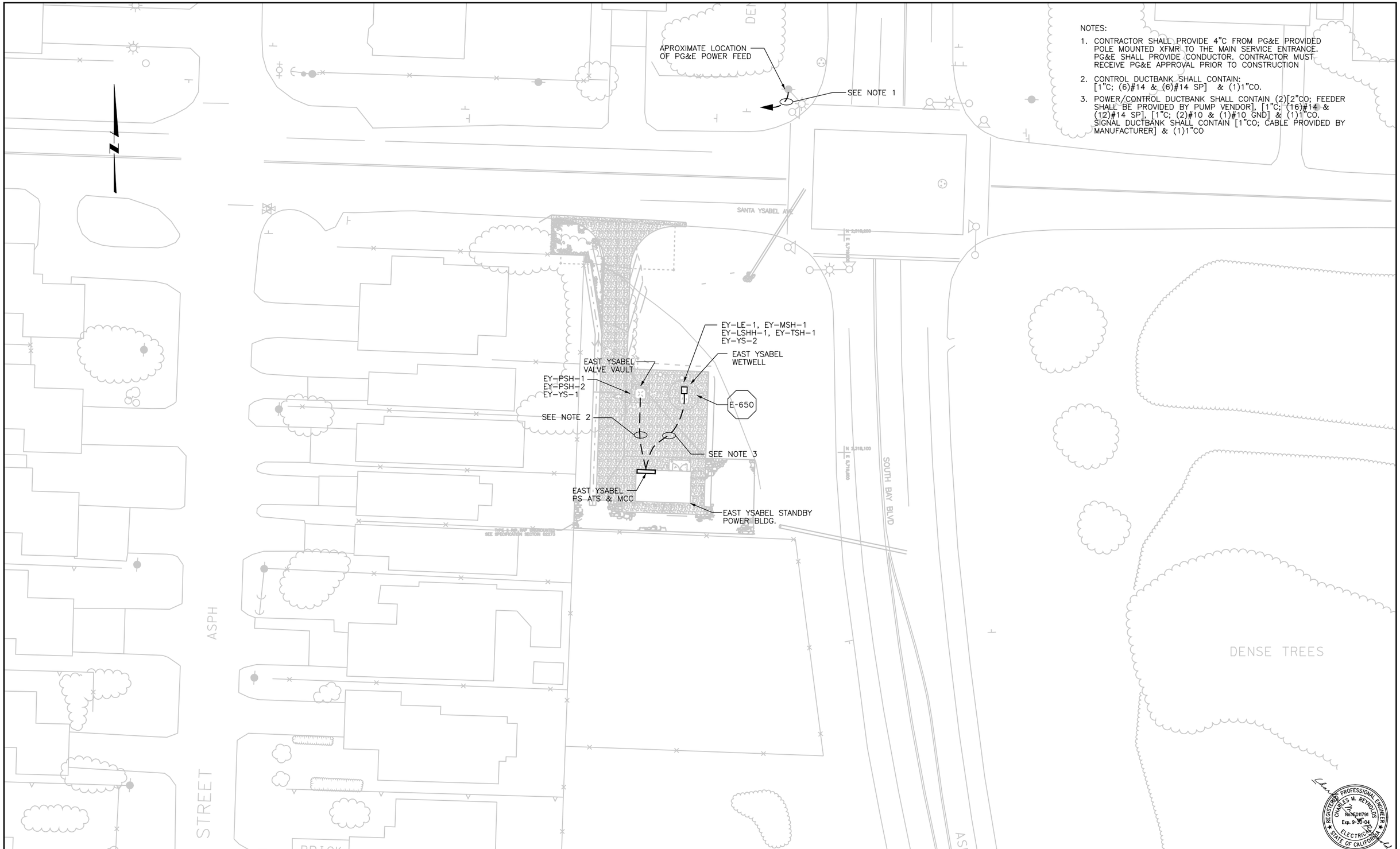
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
EAST PASO PS & STANDBY POWER
SINGLE LINE

SHEET A-E-208

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-208.dgn Plot Date: 08-FEB-2004 11:09



NOTES:

1. CONTRACTOR SHALL PROVIDE 4"C FROM PG&E PROVIDED POLE MOUNTED XFMR TO THE MAIN SERVICE ENTRANCE. PG&E SHALL PROVIDE CONDUCTOR. CONTRACTOR MUST RECEIVE PG&E APPROVAL PRIOR TO CONSTRUCTION
2. CONTROL DUCTBANK SHALL CONTAIN: [1"C; (6)#14 & (6)#14 SP] & (1)1"CO.
3. POWER/CONTROL DUCTBANK SHALL CONTAIN (2)[2"CO; FEEDER SHALL BE PROVIDED BY PUMP VENDOR], [1"C; (16)#14 & (12)#14 SP], [1"C; (2)#10 & (1)#10 GND] & (1)1"CO. SIGNAL DUCTBANK SHALL CONTAIN [1"CO; CABLE PROVIDED BY MANUFACTURER] & (1)1"CO

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No.E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA

05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 20'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

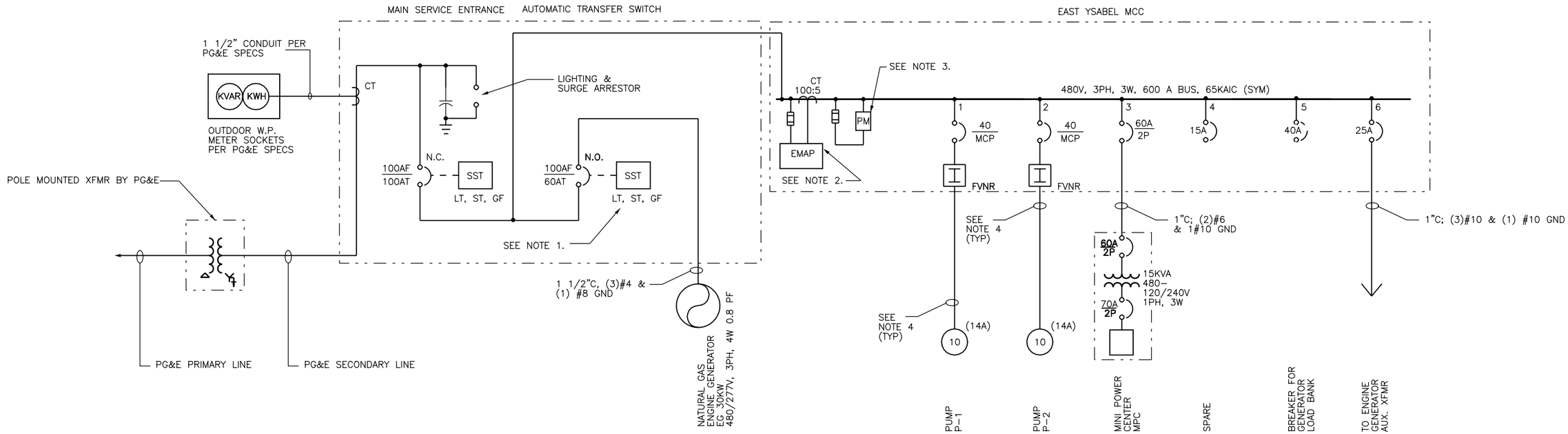
LOS OSOS COMMUNITY SERVICES DISTRICT

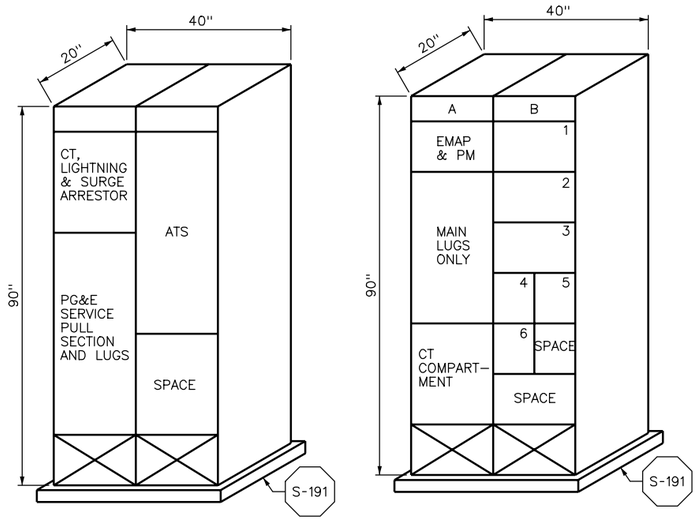
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
EAST YSABEL SUBMERSIBLE PUMP STATION SITE – ELECTRICAL POWER, LIGHTING, & GROUNDING PLAN

SHEET A-E-209

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-209.dgn Plot Date: 08-FEB-2004 11:09





ATS

MCC

480VAC LOADS						
			FLA (PRESENT)		FLA (FUTURE)	
ITEM	KVA	HP	CONNECTED	DEMAND	CONNECTED	DEMAND
EY P-1		10	14	9.8	14	9.8
EY P-2		10	14	9.8	14	9.8
MPC	15		31.25	21.875	31.25	21.875
MISC			50	35	50	35
		TOTALS	109.25	76.475	109.25	76.475

NOTES:

1. SST — SOLID STATE TRIP DEVICE
   LT – LONG TIME
   ST – SHORT TIME
   GF – GROUND FAULT
2. EMAP — ELECTRONIC METERING ANALYZER AND MONITORING PANEL
3. PM — MICROPROCESSOR CONTROLLED THREE PHASE MONITOR
4. SEE SHEET A-E-209 FOR CONDUIT AND WIRE SIZE

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. M011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE

WARNING 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

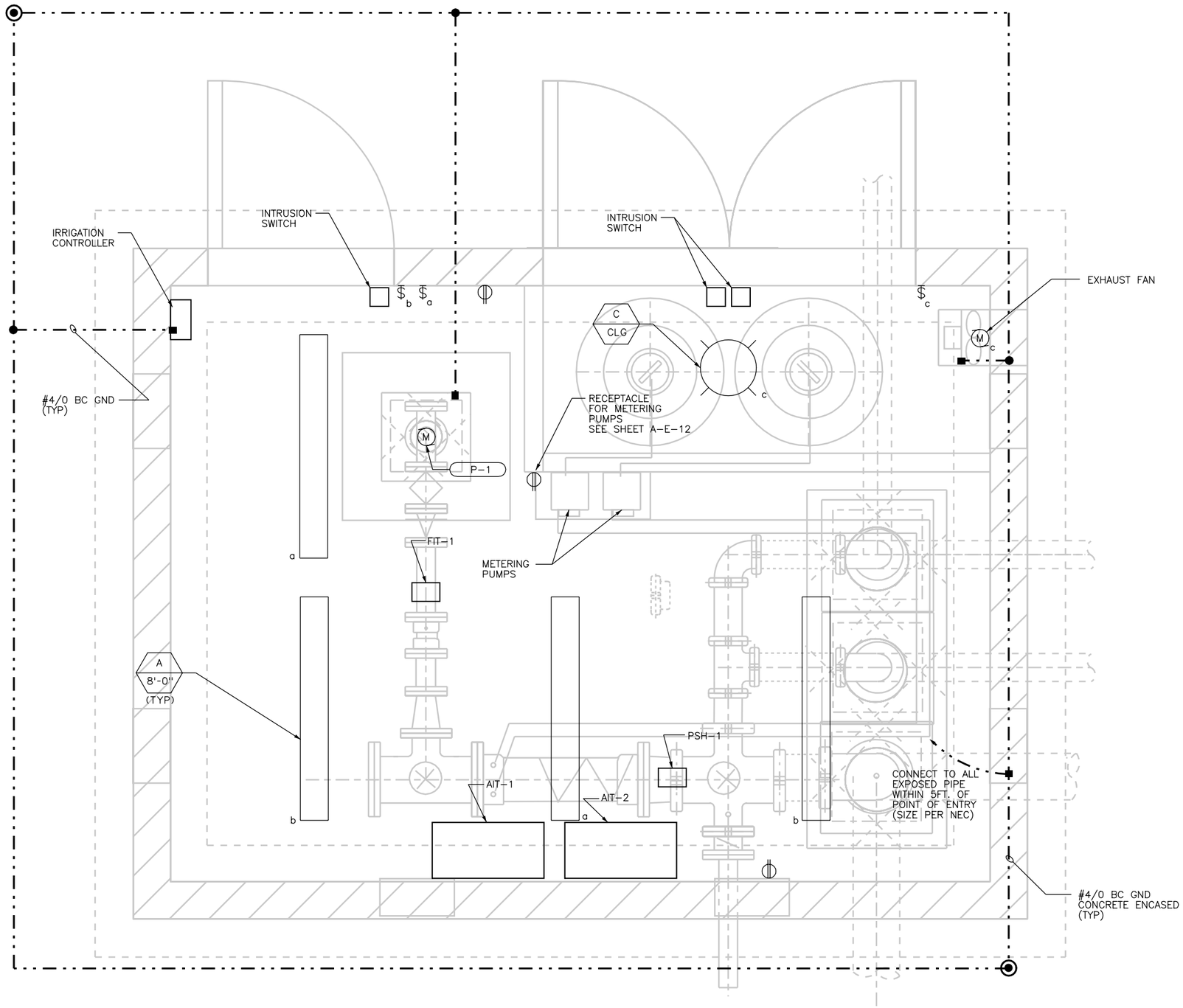
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
EAST YSABEL PS & STANDBY POWER
SINGLE LINE

SHEET A-E-210

Plot Date: 08-FEB-2004 11:10
File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-210.dgn
Job No: 1481166



NOTES:

1. VERIFY LOCATION OF CONTROLLER WITH IRRIGATION DRAWINGS
2. PUMP IS POWERED FROM MCC-EP LOCATED IN THE EAST PASO STANDBY POWER FACILITY. SEE SHEET A-E-207 AND A-E-208.
3. THE EXHAUST FAN, LIGHTS AND RECEPTALES AITS AND FITS SHALL BE 120V AND POWERED FROM THE MPC LOCATED IN THE EAST PASO STANDBY POWER FACILITY. PROVIDE MIN 1"C;[(2)#10 & (1)#10 GND] FOR EACH AND WIRE COMPLETE. SEE SHEET A-E-207 FOR DUCTBANK DETAILS.
4. CONTRACTOR SHALL PROVIDE 1"C, 2#14 2#14 SP FROM PSH AND EACH INTRUSION ALARM TO THE PLC LOCATED IN THE EAST PASO STANDBY POWER FACILITY. CONTRACTOR SHALL PROVIDE 2"C; (3)2/C #16 SHLD FROM AIT-1, AIT-2 & FIT-1 TO PLC PANEL LOCATED IN THE EAST PASO STANDBY POWER FACILTY. SEE SHEET A-E-207 FOR DUCTBANK DETAILS.

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA

05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: 1' = 1' 0"

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVEN J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

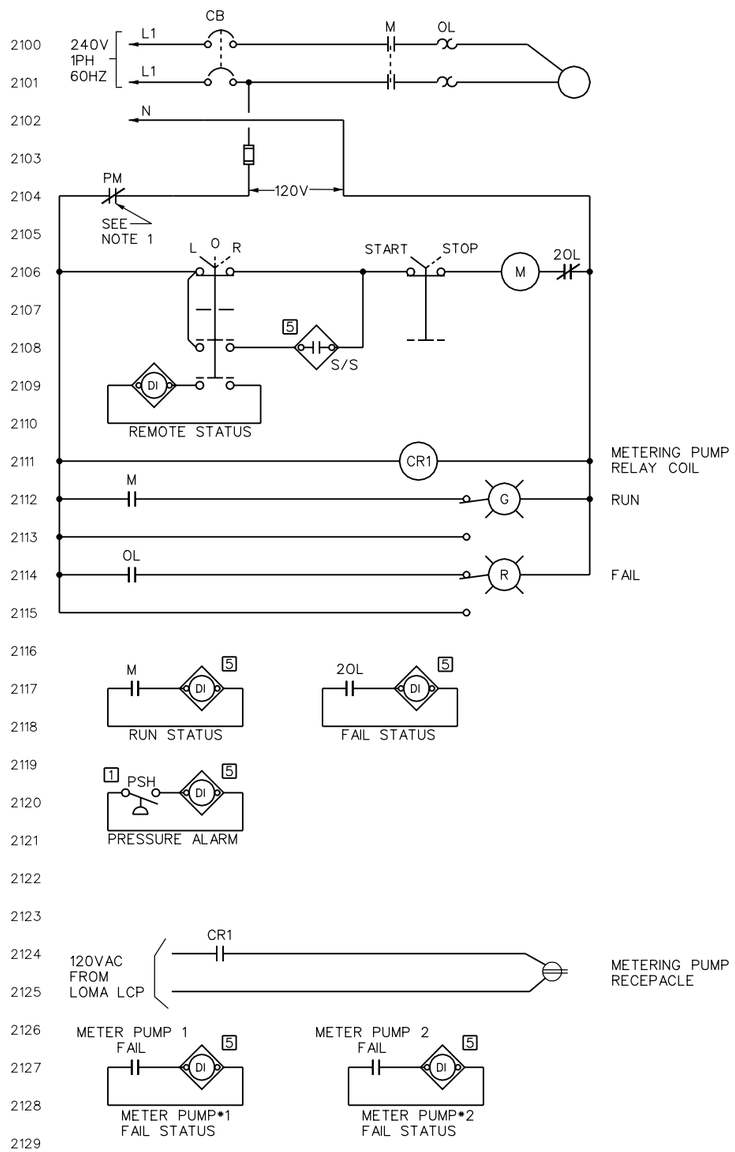
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

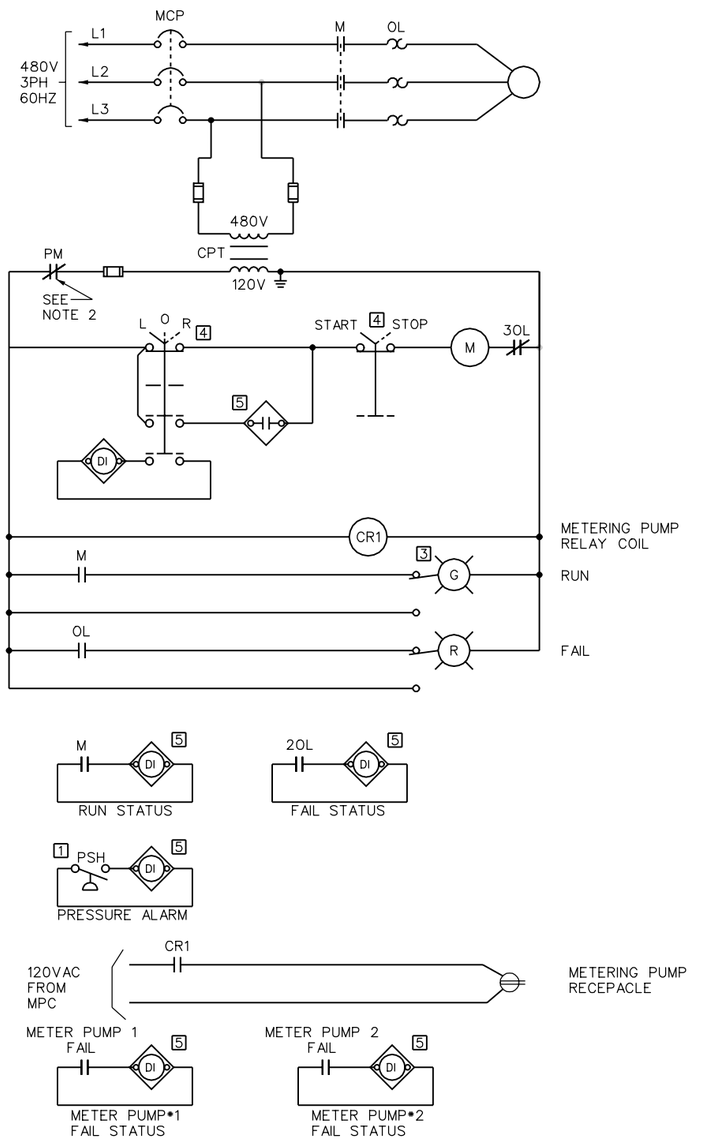
LOS OSOS WASTEWATER PROJECT
ELECTRICAL
EAST PASO HARVEST WELL BUILDING
ELECTRICAL POWER, LIGHTING & GROUNDING PLAN

SHEET A-E-211

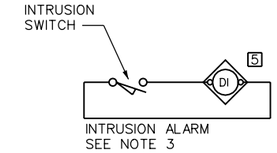
Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\a-e-211.dgn Plot Date: 08-FEB-2004 11:11



LOMA HARVEST WELL PUMP



EAST PASO & PALISADE HARVEST WELL PUMP



INTRUSION ALARM SYSTEM

NOTES:

1. LOMA HARVEST WELL SHALL CONTAIN A SINGLE PHASE MONITOR. A NORMALLY CLOSED CONTACT SHALL BE PLACED IN EVERY PUMP MOTOR CONTROLLER.
2. HARVEST WELLS PALISADES & EAST PASO SHALL CONTAIN A THREE PHASE MONITOR. A NORMALLY CLOSED CONTACT SHALL BE PLACED IN EVERY PUMP MOTOR CONTROLLER.
3. A INTRUSION ALARM SHALL BE INSTALLED AT EACH HARVEST WELL ENTRANCE AND SERVICE PEDESTAL DOOR. IF MORE THAN ONE INTRUSION ALARM EXISTS CONTRACTOR SHALL CONNECT SWITCHES IN PARALLEL FOR ONLY ONE INPUT TO THE PLC.

1 FIELD
2 LCS
3 LCP
4 MCC
5 PLC

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
HARVEST WELL BUILDING
CONTROL DIAGRAM

SHEET A-E-212

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-212.dgn Plot Date: 08-FEB-2004 11:11

NOTES:

1. CONTRACTOR SHALL PROVIDE 3"CO FROM PG&E PROVIDED POLE MOUNTED XFMR TO SERVICE PEDESTAL. CONTRACTOR MUST RECIEVE APPROVAL FROM PG&E PRIOR TO CONSTRUCTION. PG&E SHALL PROVIDE CONDUCTOR.

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 20'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

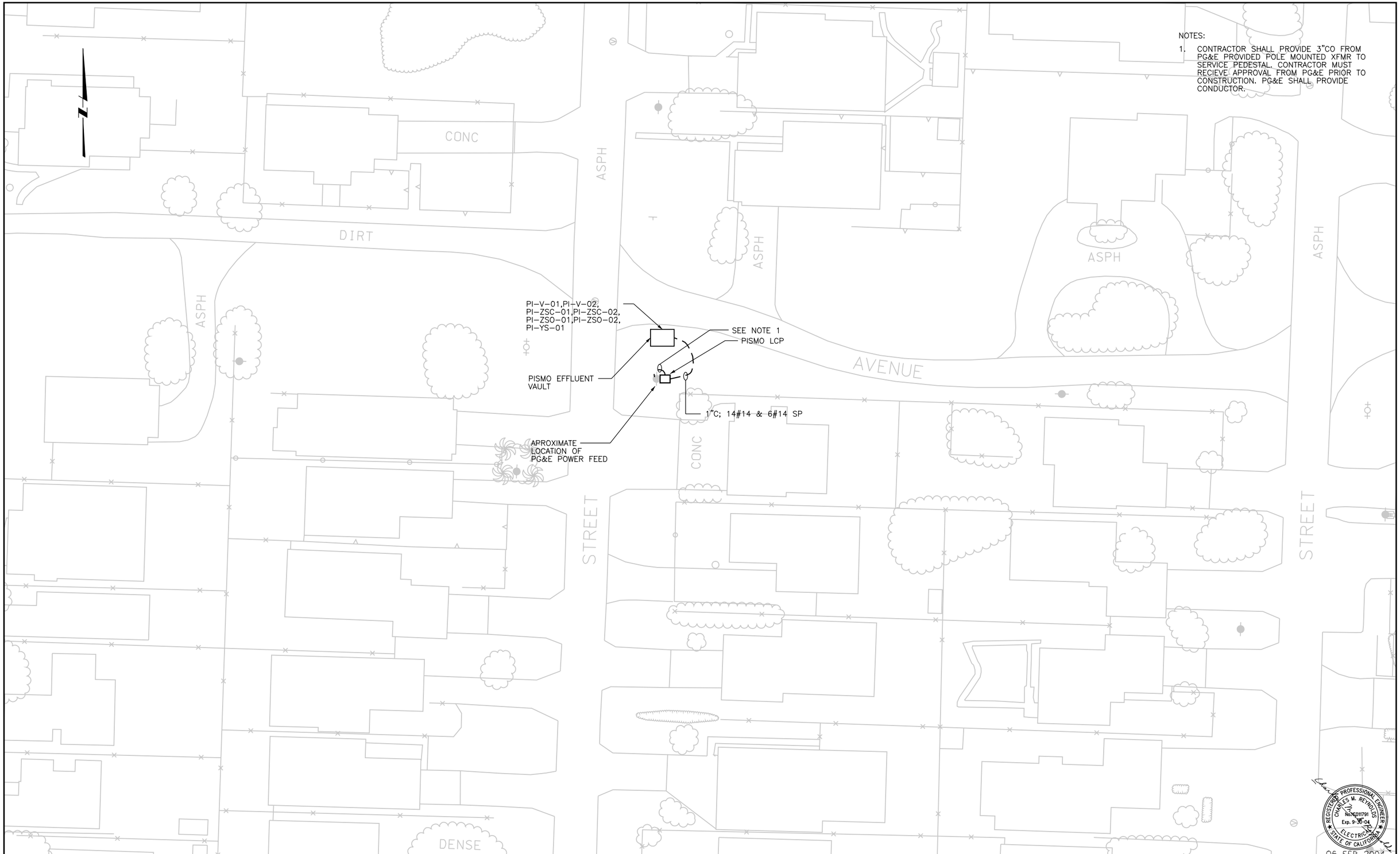
ELECTRICAL
SANTA MARIA EFFLUENT DISPOSAL VAULT
ELECTRICAL SITE PLAN

SHEET A-E-300

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-300.dgn Plot Date: 08-FEB-2004 11:12

NOTES:

1. CONTRACTOR SHALL PROVIDE 3"CO FROM PG&E PROVIDED POLE MOUNTED XFMR TO SERVICE PEDESTAL. CONTRACTOR MUST RECIEVE APPROVAL FROM PG&E PRIOR TO CONSTRUCTION. PG&E SHALL PROVIDE CONDUCTOR.



REV	DATE	BY	DESCRIPTION

SCALE: 1" = 20'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

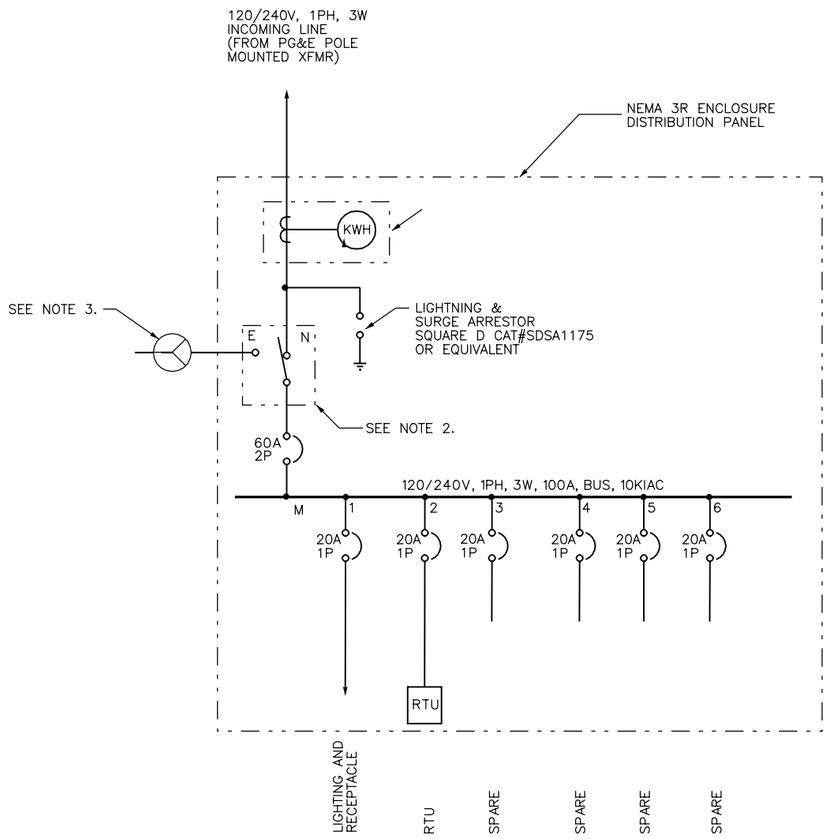
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
PISMO EFFLUENT DISPOSAL VAULT
ELECTRICAL SITE PLAN

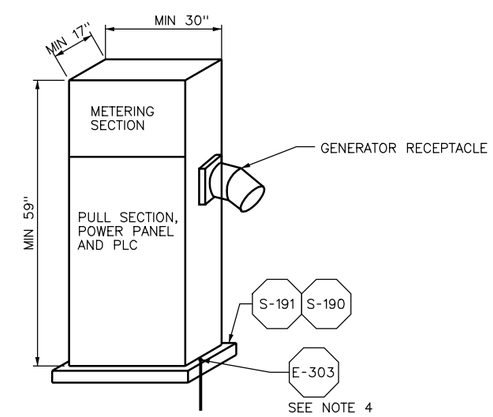
SHEET A-E-301

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-301.dgn Plot Date: 08-FEB-2004 11:12



TYPICAL EFFLUENT DISPOSAL AND RECLAIM WATER SINGLE LINE DIAGRAM

EFFLUENT DISPOSAL	ENCLOSURE	RTU	AREA
SANTA MARIA	SM–LCP	RTU–23	A
PISMO	PI–LCP	RTU–24	A
BRODERSON	BR–LCP	RTU–25	C



EFFLUENT DISPOSAL VAULT LCP ELEVATION

NOTES:

1. METERING DEVICE MOUNTED IN ENCLOSURE, COMPLETE WITH METER, METER SOCKET, AND TEST BY–PASS SWITCHES SHALL BE IN COMPLIANCE WITH PG&E.
2. THE CONTRACTOR SHALL PROVIDE A DOUBLE THROW 2 POLE, 100A, 240V HEAVY DUTY MANUAL TRANSFER SWITCH IN A NEMA 4X ENCLOSURE ADJACENT TO THE LCP.
3. 100A, 4 POLE, 600V, HEAVY DUTY WEATHERPROOF RECEPTACLE SHALL BE PROVIDED AND INSTALLED ON THE EXTERIOR OF THE LCP ENCLOSURE. RECEPTACLE SHALL BE APPLETON STYLE 2 REVERSE SERVICE CAT. NO. ADJA1034–200–RS WITH BACK BOX, ANGLE ADAPTER, SPRING COVER, AND MATCHING PLUGS.
4. ACCESSIBLE GROUND ROD FOR GENERATOR
5. LCP SHALL CONTAIN MODEM AND TELEPHONE JACK FOR PISMO AND SANTA MARIA EFFLUENT SITES, BRODERSON SHALL HAVE A RADIO TRANSMITTER. SEE INSTRUMENTATION DRAWINGS FOR DETAILS.

REGISTERED PROFESSIONAL ENGINEER
CHARLES M. REYNOLDS
No. E011791
Exp. 9-30-04
ELECTRICAL
STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT
DIAL TOLL FREE
1-800-642-2444
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

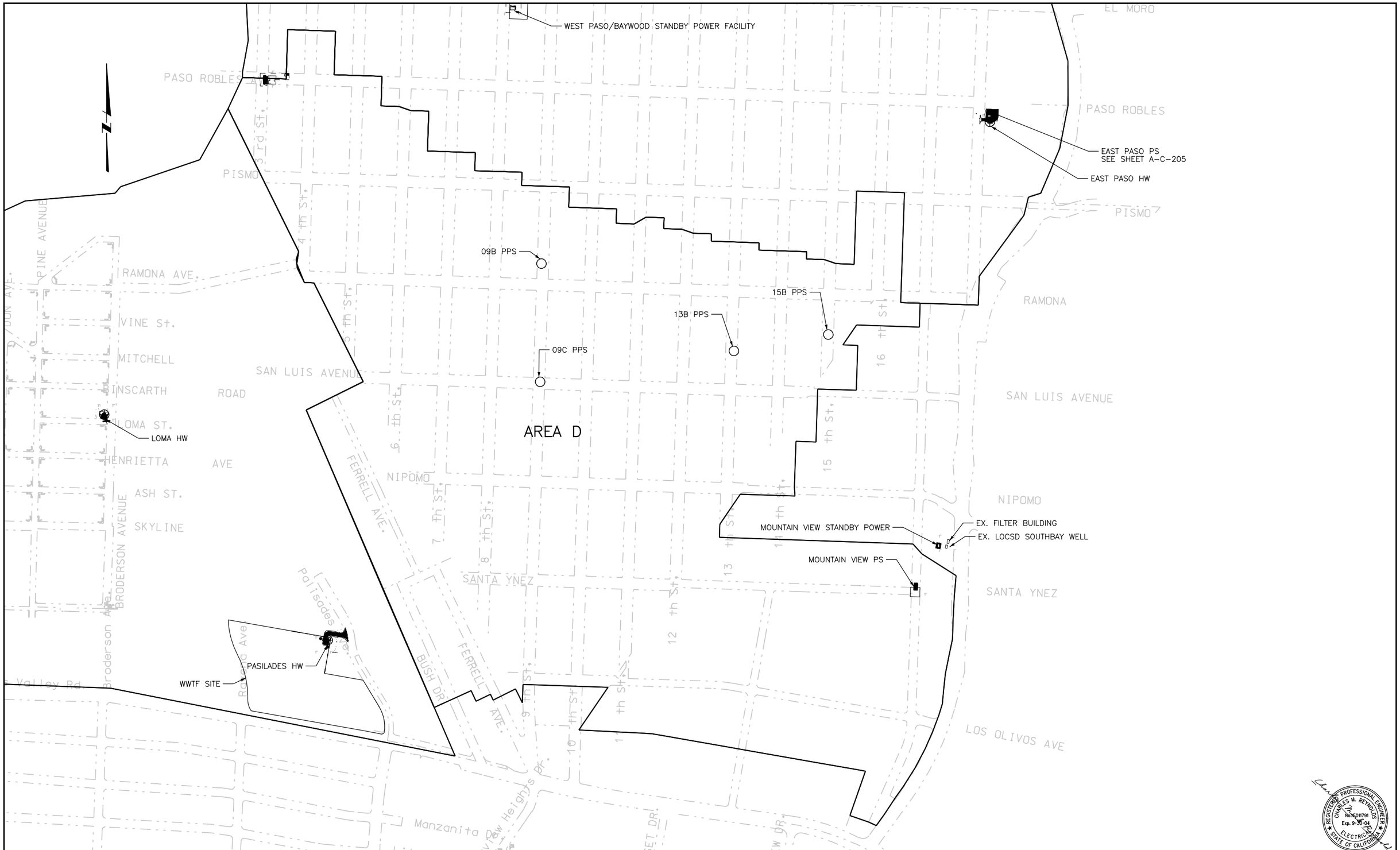
LOS OSOS
COMMUNITY SERVICES DISTRICT

MWH
Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
EFFLUENT DISPOSAL VAULT
TYPICAL SINGLE LINE

SHEET
A–E–302

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\A-E-302.dgn Plot Date: 08-FEB-2004 11:13



REV	DATE	BY	DESCRIPTION

SCALE: 1" = 300'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

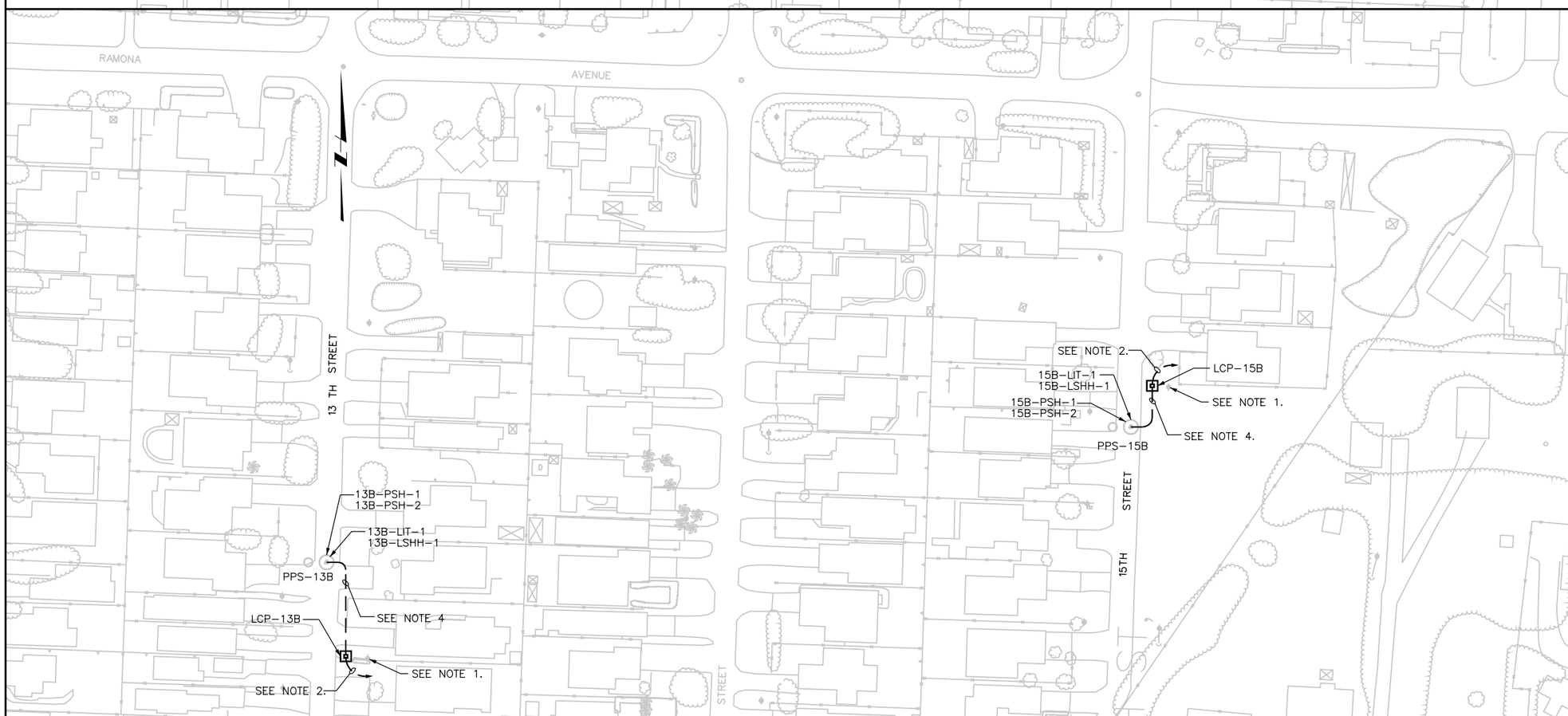
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

ELECTRICAL
GENERAL AREA PLAN
AREA A

SHEET D-E-200

Job No: 1481166 File: \\uswck1s02\nwdd\projects\los_osos\collect_sys\PS\ele\D-E-200.dgn Plot Date: 08-FEB-2004 11:32



NOTES:

1. APPROXIMATE PG&E POWER FEED LOCATION
2. CONTRACTOR SHALL PROVIDE 3"CO FROM PG&E PROVIDED POLE MOUNTED XFMR TO SERVICE PEDESTAL. CONTRACTOR MUST RECIEVE APPROVAL FROM PG&E PRIOR TO CONSTRUCTION. PG&E SHALL PROVIDE CONDUCTOR. FURNISH AND INSTALL CONDUIT PER PG&E SPECIFICATIONS.
3. POWER/CONTROL DUCTBANK SHALL INCLUDE [1"C; (2)#10 & (1) #10 GND], [1"C; (24)#14, (12)#14 SP & (1)#12 GND] AND (3)[2"CO; FEEDER SHALL BE PROVIDED BY PUMP VENDOR].
   SIGNAL DUCTBANK SHALL INCLUDE [1"C; (1)2/C #16 SHLD & (1)2/C #16 SHLD]
   CONTACTOR SHALL MAINTAIN 12" SEPARATION BETWEEN DUCTBANKS.
4. POWER/CONTROL DUCTBANK SHALL INCLUDE [1"C; (2)#10 & (1) #10 GND], [1"C; (18)#14, (10)#14 SP & (1)#12 GND] AND (2)[2"CO; FEEDER SHALL BE PROVIDED BY PUMP VENDOR].
   SIGNAL DUCTBANK SHALL INCLUDE [1"C; (1)2/C #16 SHLD & (1)2/C #16 SHLD]
   CONTRACTOR SHALL MAINTAIN 12" SEPARATION BETWEEN DUCTBANKS.

REGISTERED PROFESSIONAL ENGINEER
CHARLES M. REYNOLDS
No. E011791
Exp. 9-30-04
ELECTRICAL
STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: 1" = 50'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

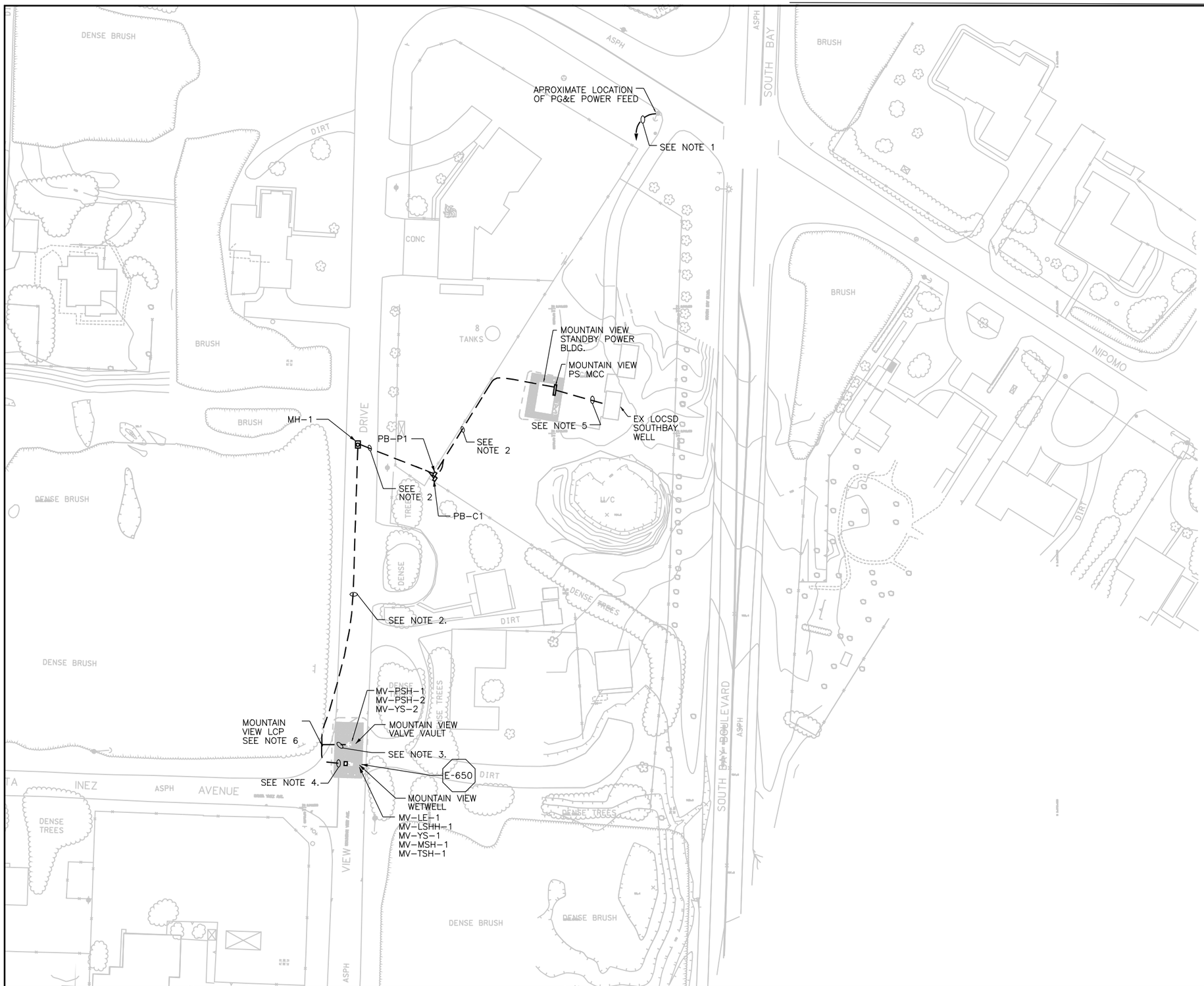
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
POCKET PUMP STATIONS
09B, 09C, 13B & 15B
ELECTRICAL SITE PLAN

SHEET D-E-201

Plot Date: 08-FEB-2004 11:14
File: N:\Projects\los_osos\Collect_Sys\PS\ele\D-E-201.dgn
Job No: 1481166



NOTES:

1. CONTRACTOR SHALL PROVIDE 4"C FROM PG&E PROVIDED POLE MOUNTED XFMR TO THE MAIN SERVICE ENTRANCE. PG&E SHALL PROVIDE CONDUCTOR PER PG&E SPECIFICATIONS. CONTRACTOR MUST RECEIVE PG&E APPROVAL PRIOR TO CONSTRUCTION
2. POWER/CONTROL DUCTBANK SHALL CONTAIN (2)[1"C'(3)#10, (1)#10 GND, 2#14 & 2#14 SP], [1"C; (2)#10 & (1)#10 GND], (1)[1"C;9#14 & 6#14 SP] AND (1)1 1/2"C; 16#14 & 10#14 SP] SIGNAL DUCTBANK SHALL CONTAIN [1"C; (1)2/C #16 SHLD & (1)2/C #16 SHLD SP]
   CONTACTOR SHALL MAINTAIN 12" SEPARATION BETWEEN DUCTBANKS
3. CONTROL DUCTBANK SHALL CONTAIN: 1"C; (6)#14 & (6)#14 SP
4. POWER/CONTROL DUCTBANK SHALL CONTAIN (2)[2"CO; FEEDER SHALL BE PROVIDED BY PUMP VENDOR] AND [1"C; (16)#14 & (12)#14SP] SIGNAL DUCTBANK SHALL CONTAIN [1"CO;CABLEPROVIDED BY MANUFACTURER]
5. 1"C; (3)#8 & (1)#10 GND
6. CONTRACTOR SHALL PROVIDE 2'X2'X2' BELOW GRADE PULL BOX. PULL BOX SHALL BE USED FOR CONTROL & POWER CABLES ONLY.

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No.E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: 1' = 40'

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

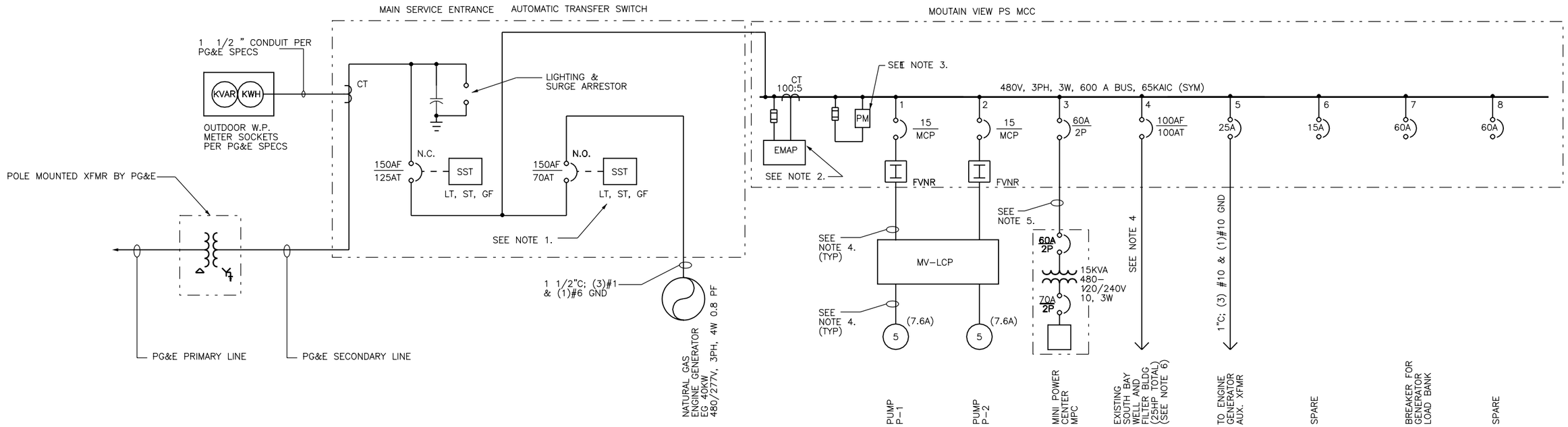
LOS OSOS COMMUNITY SERVICES DISTRICT

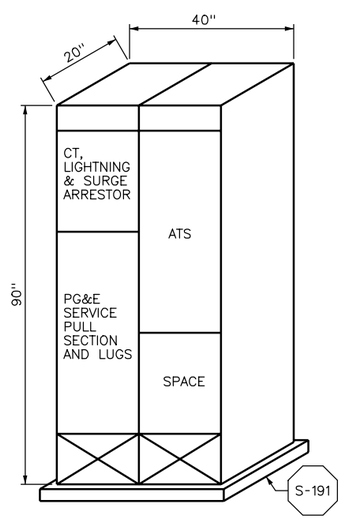
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
MOUNTAIN VIEW SUBMERSIBLE PUMP STATION SITE – ELECTRICAL POWER, LIGHTING & GROUNDING PLAN

SHEET D-E-202

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\D-E-202.dgn Plot Date: 08-FEB-2004 11:15





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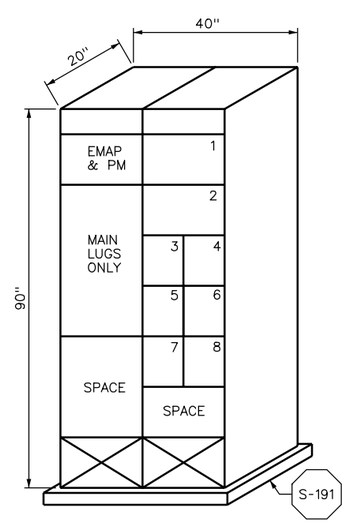


MCC

480VAC LOADS						
			FLA (PRESENT)		FLA (FUTURE)	
ITEM	KVA	HP	CONNECTED	DEMAND	CONNECTED	DEMAND
MV P-1		5	7.6	5.32	7.6	5.32
MV P-2		5	7.6	5.32	7.6	5.32
EXIST WELL		25	40	28	40	28
MPC	15		31.25	21.875	31.25	21.875
MISC			30	21	30	21
		TOTAL	116.45	81.515	116.45	81.515

NOTES:

1. SST — SOLID STATE TRIP DEVICE
   LT – LONG TIME
   ST – SHORT TIME
   GF – GROUND FAULT
2. EMAP — ELECTRONIC METERING ANALYZER AND MONITORING PANEL
3. PM — MICROPROCESSOR CONTROLLED THREE PHASE MONITOR
4. SEE SHEET D-E-202 FOR CONDUIT AND WIRE SIZES
5. 1"C; (2)#6 & (1) #10 GND
6. PG&E SHALL REMOVE EXISTING SERVICE AND METER. CONTRACTOR SHALL INSTALL NEW CONDUIT AND WIRE FEEDING FILTER BUILDING AND SOUTHBAY WELL FROM NEW MOUNTAIN VIEW MCC.

REGISTERED PROFESSIONAL ENGINEER CHARLES M. REYNOLDS No. E011791 Exp. 9-30-04 ELECTRICAL STATE OF CALIFORNIA
05 FEB 2004

REV	DATE	BY	DESCRIPTION

SCALE: NO SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED A. P. SORLEY
DRAWN A. P. SORLEY
CHECKED K. A. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
ELECTRICAL
MOUNTAIN VIEW PS & STANDBY POWER
SINGLE LINE

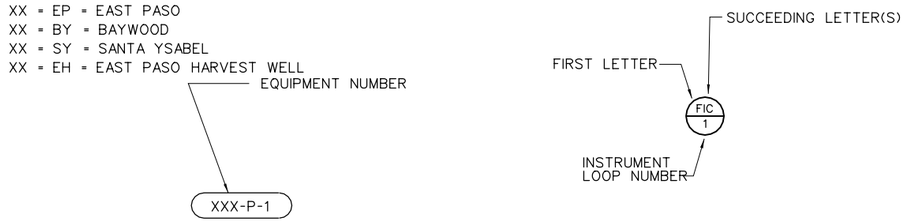
SHEET D-E-203

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ele\D-E-203.dgn Plot Date: 08-FEB-2004 11:15

INSTRUMENTATION SYMBOLS

LIT	INSTRUMENT OR OTHER COMPONENT TO BE MOUNTED IN THE FIELD
TSL	INSTRUMENT OR OTHER COMPONENT TO BE MOUNTED INSIDE MAIN CONTROL BOARD (LCB) OR OTHER PANEL AS MARKED
FIC	INSTRUMENT OR OTHER COMPONENT TO BE MOUNTED ON LCB FRONT PANEL OR OTHER PANEL AS MARKED
PIR PSH	SINGLE INSTRUMENT OR OTHER COMPONENT HAVING MULTIPLE FUNCTIONS
	INSTRUMENT OR OTHER COMPONENT TO BE FURNISHED AND INSTALLED BY OTHERS IN THE FUTURE
TIC	INSTRUMENT OR OTHER COMPONENT TO BE MOUNTED ON FRONT OF LOCAL CONTROL PANEL (LCP)
FSL	INSTRUMENT OR OTHER COMPONENT TO BE MOUNTED INSIDE LOCAL CONTROL PANEL (LCP)
> <	HIGH/LOW SELECTOR
√	RELATED DEVICE PERFORMS LINEARIZING OR SQUARE ROOT FUNCTION
X Σ ÷	RELATED DEVICE PERFORMS MULTIPLYING, SUMMATION, OR DIVISION FUNCTION
1	GENERALIZED FOR COMPLEX INTERLOCK LOGIC-SEE SCHEMATICS OR SPECIFICATIIONS
// //	PNEUMATIC PRESSURE (P) SIGNAL
(3)	INDICATES QUANTITY OF SIGNALS (THREE)
— — —	ELECTRIC SIGNAL
	HYDRAULIC LINE
	MAIN PROCESS PIPING
	SONIC SIGNAL
	CAPILLIARY TUBING (FILLED SYSTEM)
E.S. 24VDC	POWER SUPPLY AS NOTED (24VDC; ETC)
A.S.	AIR SUPPLY (20 PSIG-EXCEPT AS NOTED)
	PRIMARY ELECTRICAL SUPPLY FOR INSTR (120V/60HZ UNLESS OTHERWISE NOTED
*	INDICATES VENDOR PACKAGE
	CABLE(MULTICONDUCTER OR COAXIAL) FURNISHED WITH EQUIPMENT
(E)	EXISTING ITEM
(F)	FUTURE ITEM
(R)	EXISTING ITEM TO BE RELOCATED

XX = WP = WEST PASO
XX = EP = EAST PASO
XX = BY = BAYWOOD
XX = SY = SANTA YSABEL
XX = EH = EAST PASO HARVEST WELL



MECHANICAL EQUIPMENT CALLOUT

INSTRUMENT TAG NUMBER

SUPERVISORY CONTROL, ALARM, & DATA AQUISITION SYMBOLS

	INDICATOR/CONTROLLER/RECORDER OR ALARM NORMALLY ACCESSIBLE TO OPERATOR FROM MMI.
	INTERNAL FUNCTION NOT NORMALLY ACCESSIBLE TO OPERATOR
— - — -	DATA LINK
1	GENERALIZED FOR COMPLEX INTERLOCK LOGIC PERFORMED IN SOFTWARE. SEE SCHEMATICS OR SPECIFICATIONS FOR DETAILS.

MISCELLANEOUS ABBREVIATIONS

AM	AUTO/MANUAL	NOR/BU	NORMAL/BACKUP
A. S.	AIR SUPPLY FROM SERVICE AIR SYSTEM	N.C.	NORMALLY CLOSED
ATM	ATMOSPHERE	N.O.	NORMALLY OPEN
CB	CIRCUIT BREAKER	OC	OPEN/CLOSE
DEV	DEVIATION	OL	OVERLOAD
F.C.	FAIL CLOSED	OLH	OFF/LOW/HIGH
F.O.	FAIL OPEN	OSC	OPEN/STOP/CLOSE
FR	FORWARD/REVERSE	PCT	PERCENT
HA	HAND/AUTOMATIC	PLC	PROGRAMMABLE CONTROLLER
H/L	HOST/LOCAL	POT.	POTENTIONMETER
HOA	HAND/OFF/AUTOMATIC	RDY	READY
HOR	HAND/OFF/REMOTE	REM	REMOTE
HYD	HYDRAULIC	RIO	REMOTE INPUT / OUTPUT
ID	INCREASE/DECREASE	RSL	RAISE/STOP/LOWER
IOE	INTERNAL/OFF/EXTERNAL	RTU	REMOTE TERMINAL UNIT
KO	TIMER/OFF	SCD	STREAMING CURRENT DETECTOR
I/P	CURRENT TO PNEUMATIC	SD	SHUTDOWN
LCB	LOCAL CONTROL BOARD	SEL	SELECT
LCP	LOCAL CONTROL PANEL	S/M	STROKES/MINUTE
LOR	LOCAL/OFF/REMOTE	SOF	SLOW/OFF/FAST
LOS	LOCK/OUT/STOP	SP	SET POINT
LR	LOCAL/REMOTE	S/S	START/STOP
MCB	MAIN CONTROL BOARD	TOP	TEST/OFF/PLC
MCC	MOTOR CONTROL CENTER	TSP	TWISTED SHIELDED PAIR
MMI	MAN-MACHINE INTERFACE	VFD	VARIABLE FREQUENCY DRIVE

INSTRUMENT IDENTIFICATION TAG LETTERS

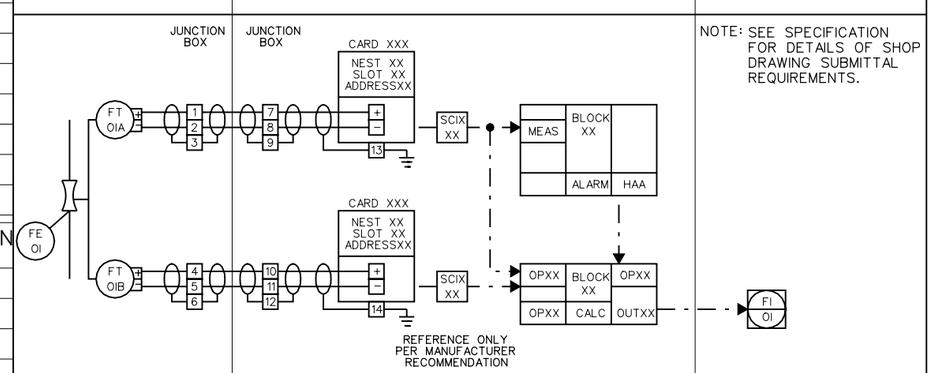
LETTER	FIRST LETTER: MEASURED OR INITIATING VARIABLE	FIRST LETTER: MODIFIER	SUCCEEDING LETTERS: READOUT OR PASSIVE FUNCTION	SUCCEEDING LETTERS: OUTPUT FUNCTION	SUCCEEDING LETTERS: MODIFIER
A	ANALYSIS		ALARM		
B	BURNER FLAME		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C	CONDUCTIVITY (ELECTRICAL)			CONTROLLER	CLOSED
D	DENSITY	DIFFERENTIAL			
E	VOLTAGE (EMF)		PRIMARY ELEMENT		
F	FLOW	RATIO			
G	GAGING (DIMENSIONAL)		GLASS		
H	HAND (MANUALLY INITIATED)				HIGH
I	CURRENT (ELEC)		INDICATE		
J	POWER	SCAN			
K	TIME OR TIME SCHEDULE			CONTROL STA.	
L	LEVEL		LIGHT(PILOT)		LOW
M	MOISTURE OR HUMIDITY				MIDDLE OR INTERMEDIATE
N	TORQUE		ISOLATOR		
O	USER'S CHOICE		ORIFICE		OPEN
P	PRESSURE OR PNEUMATIC		POINT		
Q	QUANTITY	INTEGRATE TOTALIZE			
R	RADIOACTIVITY		RECORD OR PRINT		
S	SPEED / FREQUENCY			SWITCH	
T	TEMPERATURE			TRANSMITTER	
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V	VISCOSITY			VALVE DAMPER OR LOUVER	
W	WEIGHT OR FORCE		WELL		
X	UNCLASSIFIED		UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y	EVENT, STATE OR PRESENCE			RELAY OR COMPUTE	
Z	POSITION				

Cl	CHLORINE RESIDUAL	O_3	OZONE
HC	HYDROCARBON	D.O.	DISSOLVED OXYGEN
pH	HYDROGEN ION CONCENTRATION	SCU	STREAMING CURRENT UNIT
Tu	TURBIDITY		
SS	SUSPENDED SOLIDS		
O_2	OXYGEN CONCENTRATION		
SCD	STREAMING CURRENT DETECTOR		

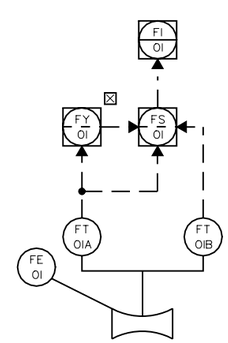
SAMPLE LOOP DIAGRAM - MINIMUM REQUIRED

DISPLAY BLOCK CONFIGURATION (PER MANUFACTURER STD.)		
INSTRUMENT TAG NO.	FI-01	
TYPE	IND	
AREA GROUP-LOOP (AGL)		
LABEL NO. 1	SECOND	
LABEL NO. 2	FLOW	
LABEL NO. 3	(HIGH)	
(PER MANUFACTURER STD.)		

CONTROL BLOCK CONFIGURATION (PER MANUFACTURER STD.)		
BLOCK	B-XX	B-XX
NAME	ALARM	CALC
TRACK		
(PER MANUFACTURER STD.)		



NOTE: SEE SPECIFICATION FOR DETAILS OF SHOP DRAWING SUBMITTAL REQUIREMENTS.



P & ID PRESENTATION

NOTES

1. ADDITIONAL INSTRUMENTATION AND CONTROL SYMBOLS MAY BE USED AS REQUIRED. SYMBOLS AND NOMENCLATURE ARE BASED ON ISA STANDARD S 5.1.
2. SEE ASSOCIATED ELECTRICAL AND MECHANICAL SYMBOL SHEETS FOR ADDITIONAL SYMBOLS AND ABBREVIATIONS.
3. FOR DETAILS OF METER COUPLING AND OTHER MECHANICAL EQUIPMENT (e.g. VALVES, PUMPS, ETC.) SEE MECHANICAL DRAWINGS AND SPECIFICATIONS.
4. SYSTEM INTEGRATOR TO MEET THE PARTICULAR CHARACTERISTICS (e.g. VOLTAGE AND CURRENT REQUIREMENTS) OF COMPONENTS IN EACH LOOP OR SYSTEM.
5. ALL FIELD SWITCHES FOR ELECTRIC MOTOR OPERATION WILL BE SUPPLIED UNDER THE ELECTRICAL SPECIFICATIONS. EXCEPTIONS ARE WHEN SWITCHES ARE MOUNTED ON PANELS OR PART OF VENDOR PACKAGES. ALL ELECTRIC ACTUATORS ON VALVES, SLUICE GATES, ETC. ARE SUPPLIED WITH THE EQUIPMENT BY THE EQUIPMENT SUPPLIERS.

REGISTERED PROFESSIONAL ENGINEER DAVID WILCOXSON NO. 65 7823 Exp. 9-30-06 CONTROL SYSTEMS STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED D. WILCOXSON
DRAWN D. WILCOXSON
CHECKED K. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

INSTRUMENTATION SYMBOLS AND ABBREVIATIONS – 1

SHEET AD-GI-200

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ins\AD-GI-200.dgn Plot Date: 06-FEB-2004 15:58 $$Time$$

PUMP AND COMPRESSOR SYMBOLS

- CENTRIFUGAL PUMP
- CENTRIFUGAL WET PIT PUMP OR TURBINE PUMP
- CHEMICAL FEED PUMP
- FEED GRINDER
- GEAR PUMP OR BLOWER (POSITIVE DISPLACEMENT)
- PISTON PUMP
- VERTICAL TURBINE PUMP
- PROGRESSIVE CAVITY PUMP
- SUBMERSIBLE SUMP PUMP
- COMPRESSOR (CENTRIFUGAL) OR TURBINE MOTOR
- COMPRESSOR (PISTON)
- EJECTOR
- BLOWER
- AERATOR
- FEED PUMP

MISCELLANEOUS SYMBOLS

- BLIND FLANGE
- AIR GAP
- DRAIN
- INLINE MIXER
- PULSATION DAMPENER
- HORN
- UNION
- SLIDE GATE
- FLEXIBLE CONNECTION
- 24"-SE PIPE CALL-OUT
- STRAINER
- BACKFLOW PREVENTER
- RUPTURE DISK
- MIXER
- ELECTRIC MOTOR
- RADIO ANTENNA
- DEMISTER
- AIR FILTER
- WATER LEVEL
- CONCENTRIC REDUCER
- QUICK DISCONNECT
- THREADED CAP
- EJECTOR

PRIMARY ELEMENT SYMBOLS

- FE VENTURI FLOWMETER
- FE ORIFICE FLOWMETER
- FIT FE M MAGNETIC FLOWMETER
- FE PROPELLER FLOWMETER
- FE PITOT TUBE
- FE SONIC FLOWMETER
- FE VORTEX FLOWMETER
- FI VARIABLE AREA FLOW INDICATOR (ROTAMETER) OPTIONAL THROTTLE VALVE
- FE PARSHALL FLUME
- LE SONIC LEVEL SENSOR
- LS TIPPING FLOAT LEVEL SWITCH
- LS INDUCTIVE RELAY LEVEL SWITCH
- LS INVERTED COLUMN LEVEL SWITCH
- LE B BUBBLER
- LS SUSPENSION CABLE LEVEL SWITCH
- PT PRESSURE TRANSMITTER WITH DIAPHRAM SEAL
- TE TEMPERATURE ELEMENT WITH WELL
- LIT SUSPENDED SENSOR LEVEL TRANSMITTER
- WT HYDRALIC WEIGHT TRANSMITTER
- ANNULAR SEAL

VALVE SYMBOLS

- BUTTERFLY
- SILENT CHECK
- SWING CHECK
- BALL CHECK
- PLUG VALVE
- BALL VALVE
- GATE
- GLOBE
- DIAPHRAGM
- NEEDLE
- AIR RELEASE OR AIR/VACUUM VALVE
- PSV PRESSURE RELIEF OR SAFETY
- PCV PRESSURE REGULATOR
- 3-WAY
- WEIGHT BALANCED VALVE
- ANGLE VALVE
- DAMPER

VALVE ACTUATORS

- S SOLENOID
- ROTARY MOTOR
- DIAPHRAGM
- TY DIAPHRAGM WITH ATTACHED ELECTRO-PNEUMATIC CONVERTER
- DUAL CHAMBER HYDRAULIC OR PNEUMATIC CYLINDER

REGISTERED PROFESSIONAL ENGINEER DAVID WILCOXSON NO. 66-7213 Exp. 9-30-06 CONTROL SYSTEMS STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE

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DESIGNED D. WILCOXSON
DRAWN D. WILCOXSON
CHECKED K. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

INSTRUMENTATION SYMBOLS AND ABBREVIATIONS – 2

SHEET AD-GI-201

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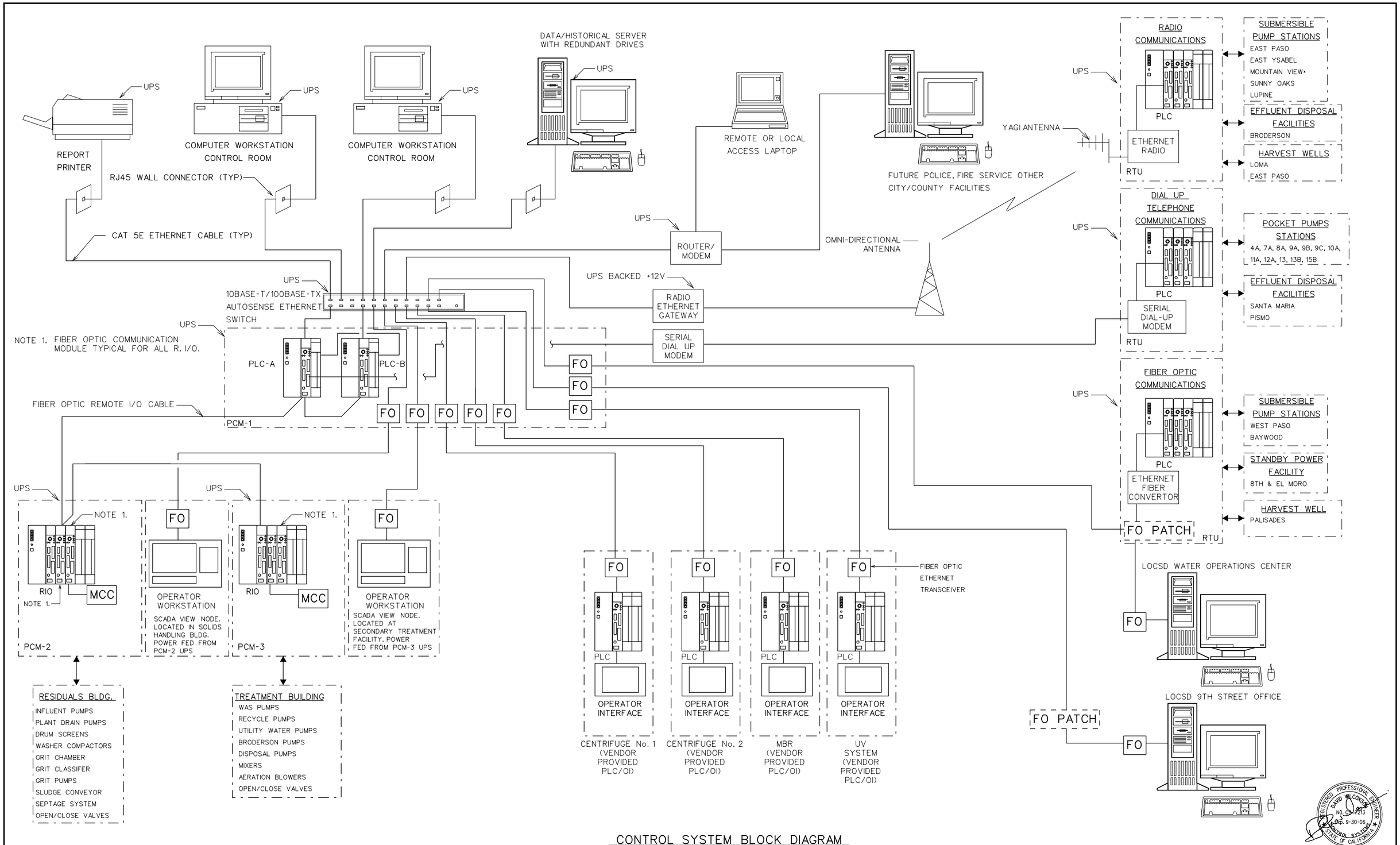

CONTROL SYSTEM BLOCK DIAGRAM

REV	DATE	BY	DESCRIPTION

SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED D. WILCOXSON
DRAWN D. WILCOXSON
CHECKED K. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

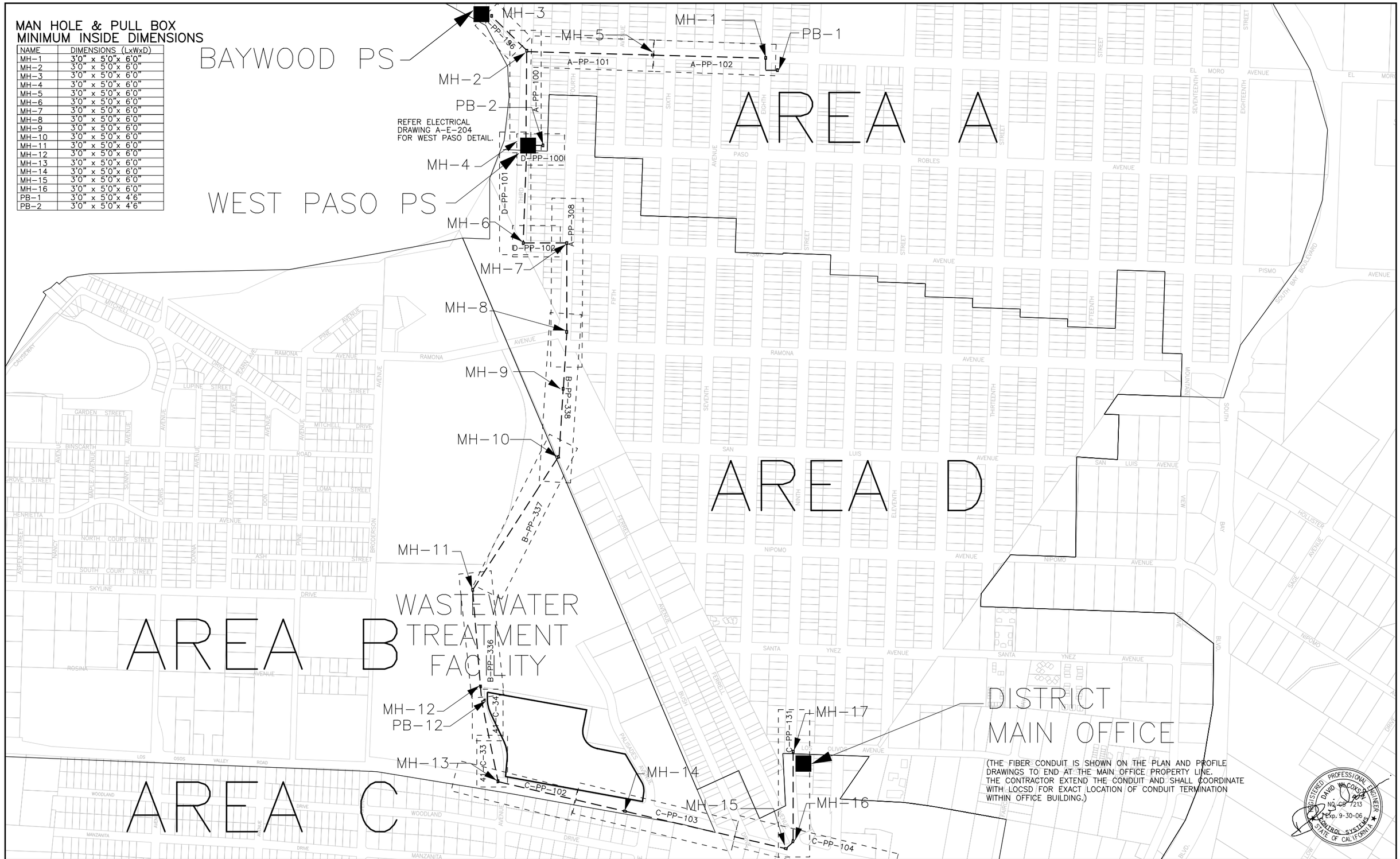
INSTRUMENTATION SCADA SYSTEM ARCHITECTURE

SHEET AD-GI-202

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ins\AD-GI-202.dgn Plot Date: 06-FEB-2004 15:5$$time$$

MAN HOLE & PULL BOX MINIMUM INSIDE DIMENSIONS

NAME	DIMENSIONS (LxWxD)
MH-1	3'0" x 5'0"x 6'0"
MH-2	3'0" x 5'0"x 6'0"
MH-3	3'0" x 5'0"x 6'0"
MH-4	3'0" x 5'0"x 6'0"
MH-5	3'0" x 5'0"x 6'0"
MH-6	3'0" x 5'0"x 6'0"
MH-7	3'0" x 5'0"x 6'0"
MH-8	3'0" x 5'0"x 6'0"
MH-9	3'0" x 5'0"x 6'0"
MH-10	3'0" x 5'0"x 6'0"
MH-11	3'0" x 5'0"x 6'0"
MH-12	3'0" x 5'0"x 6'0"
MH-13	3'0" x 5'0"x 6'0"
MH-14	3'0" x 5'0"x 6'0"
MH-15	3'0" x 5'0"x 6'0"
MH-16	3'0" x 5'0"x 6'0"
PB-1	3'0" x 5'0"x 4'6"
PB-2	3'0" x 5'0"x 4'6"



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LOS OSOS COMMUNITY SERVICES DISTRICT

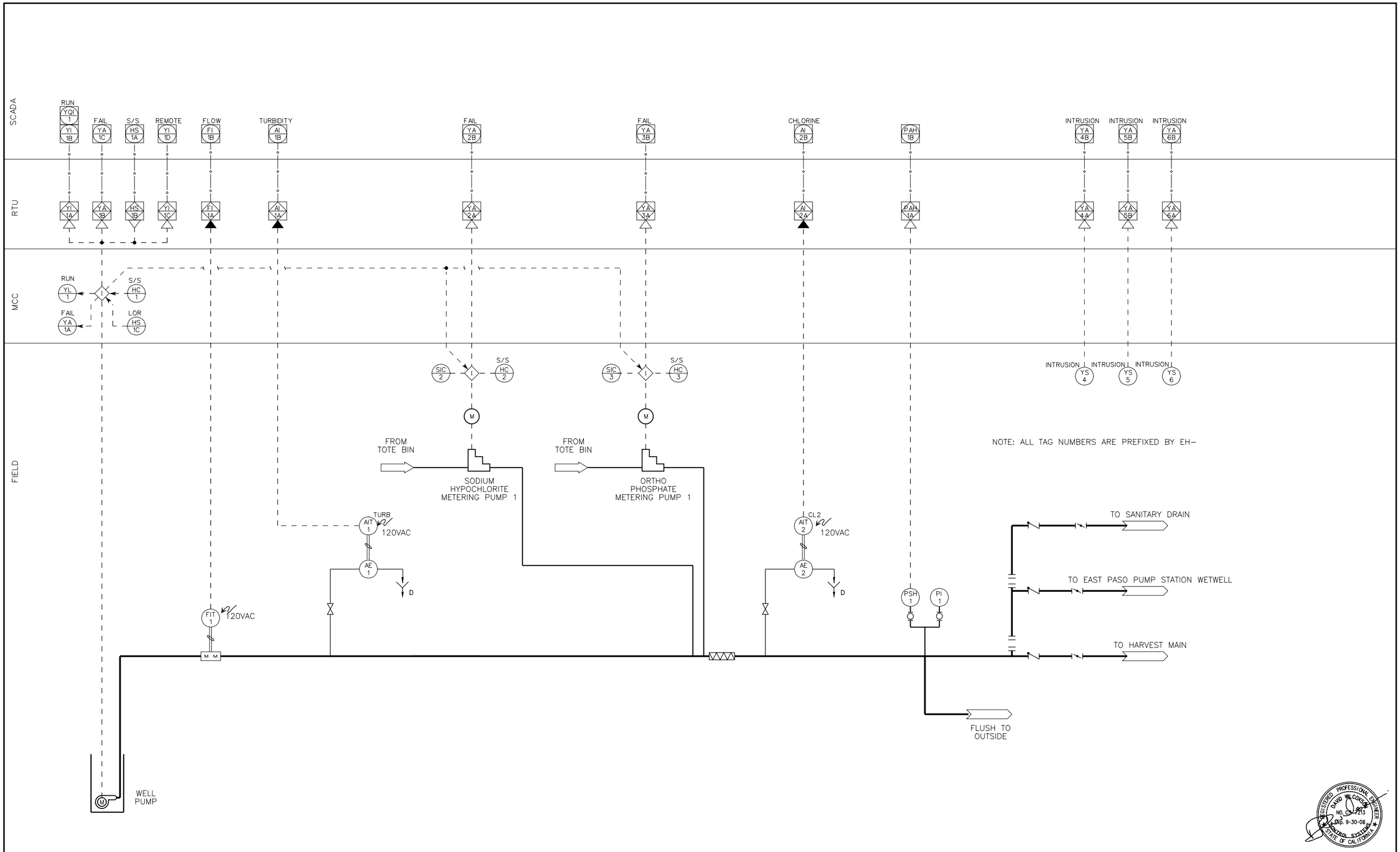
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

INSTRUMENTATION
FIBER OPTIC CONDUIT PLAN

SHEET
AD-GI-203

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ins\AD-GI-203.dgn Plot Date: 06-FEB-2004 15:5$$$time$$



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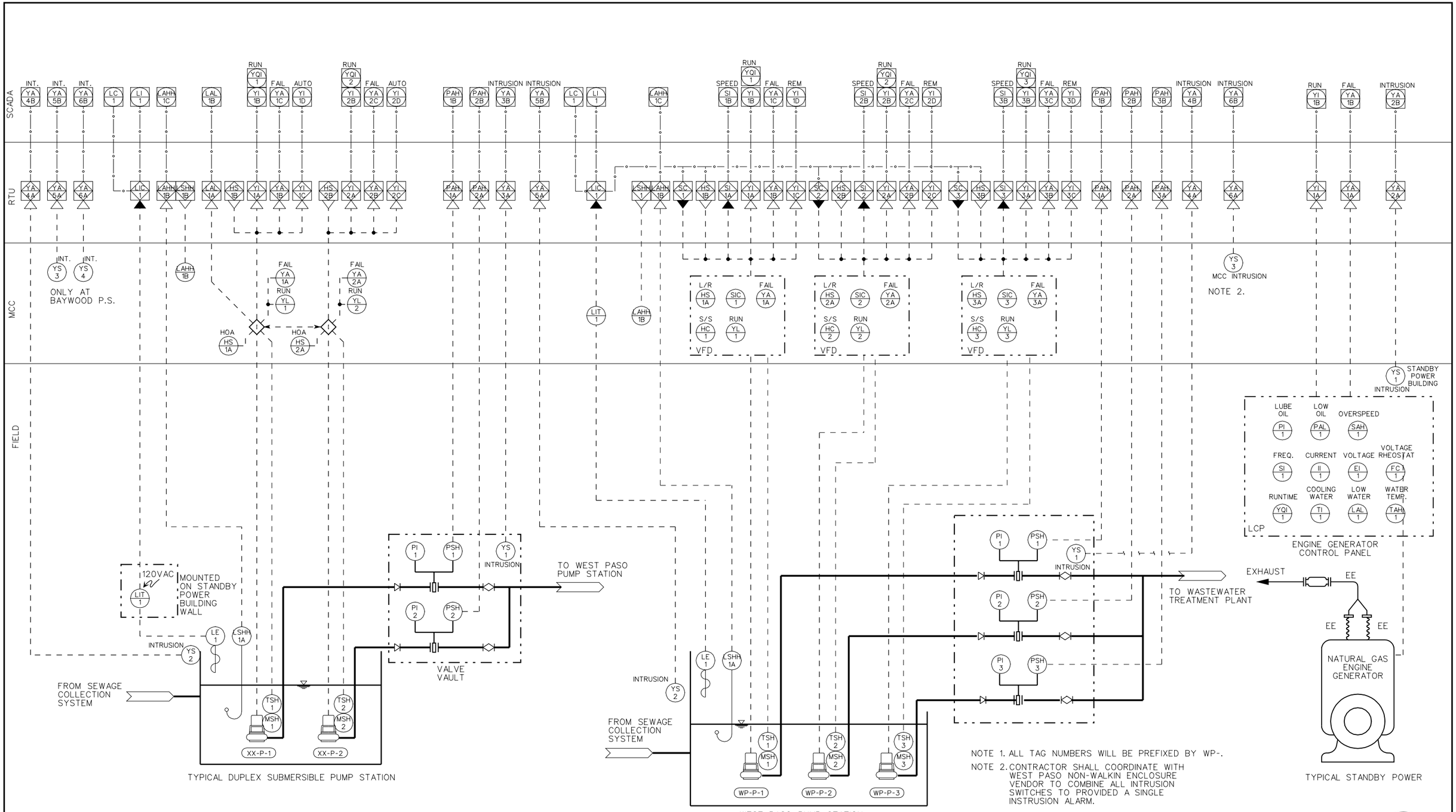
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

INSTRUMENTATION
EAST PASO HARVEST WELL P & ID

SHEET A-I-200



NOTE 1. ALL TAG NUMBERS WILL BE PREFIXED BY WP-.

NOTE 2. CONTRACTOR SHALL COORDINATE WITH WEST PASO NON-WALKIN ENCLOSURE VENDOR TO COMBINE ALL INTRUSION SWITCHES TO PROVIDED A SINGLE INSTRUSION ALARM.

REGISTERED PROFESSIONAL ENGINEER DAVID WILCOXSON NO. CS 7213 EXP. 9-30-06 CONTROL SYSTEMS STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

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DRAWN D. WILCOXSON
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LOS OSOS COMMUNITY SERVICES DISTRICT

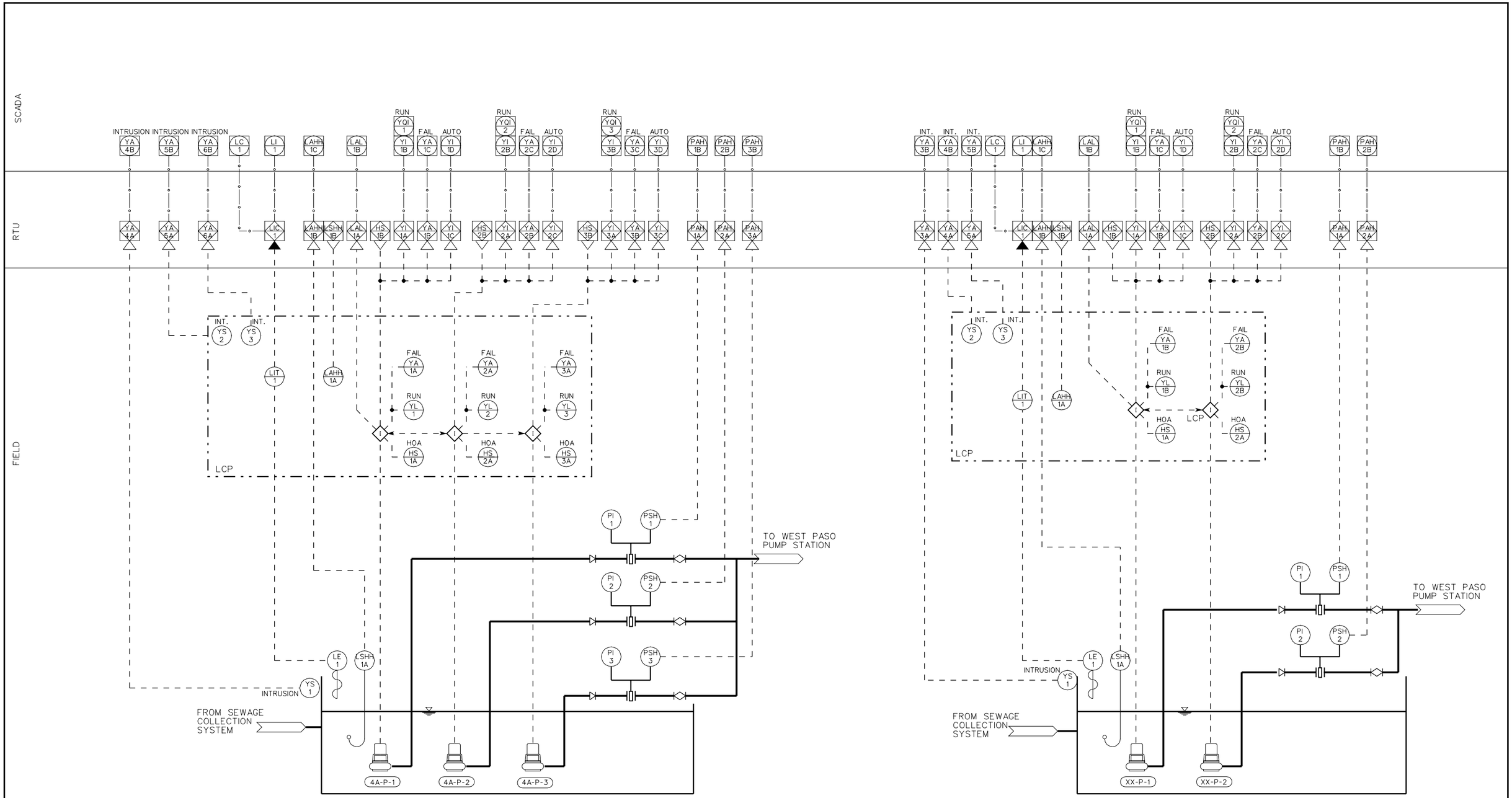
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

INSTRUMENTATION PUMP STATIONS TYPICAL

SHEET A-I-201

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ins\A-I-201.dgn Plot Date: 06-FEB-2004 15:55 $$time$$



4A POCKET PUMP STATION

TYPICAL TWO PUMP POCKET PUMP STATIONS

REGISTERED PROFESSIONAL ENGINEER DAVID WILCOXSON NO. CS 7213 Exp. 9-30-06 CONTROL SYSTEMS STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NONE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

INSTRUMENTATION PUMP STATIONS TYPICAL

SHEET A-I-202

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ins\A-I-202.dgn Plot Date: 06-FEB-2004 15:5$$time$$

Submersible Pump Station with Constant Speed

AREA	PUMP STATION	LOCATION	NO. OF PUMPS	PUMP NO.	RTU/LCP NO.	FIELD									PLC			
						YS (INTRUSION)	LE/LIT	LSHH	HS (HOA)	YL (RUN)	YA (FAIL)	LAHH	PI	PSH	LIC	LAHH	YI (RUN)	YA (FAIL)
A	Baywood (BW)	2nd St.	2	BW-P-1 & 2	14	BW-YS-1, 2, 3 & 4	BW-LE/LIT-1	BW-LSHH-1A	BW-HS-1A & 2A	BW-YL-1 & 2	BW-YA-1A & 2A	BW-LAHH-1A &2A	BW-PI-1 & 2	BW-PSH-1 & 2	BW-LIC-1	BW-LAHH-1B	BW-YI-1A & 2A	BW-YA-1B & 2B
A	East Paso (EP)	18th St. & Paso Robles	2	EP-P-1 & 2	15	EP-YS-1, 2, 3 & 4	EP-LE/LIT-1	EP-LSHH-1A	EP-HS-1A & 2A	EP-YL-1 & 2	EP-YA-1A & 2A	EP-LAHH-1A &2A	EP-PI-1 & 2	EP-PSH-1 & 2	EP-LIC-1	EP-LAHH-1B	EP-YI-1A & 2A	EP-YA-1B & 2B
A	East Ysabel (EY)	Santa Ysabel & South Bay Blvd	2	EY-P-1 & 2	16	EY-YS-1, 2, 3 & 4	EY-LE/LIT-1	EY-LSHH-1A	EY-HS-1A & 2A	EY-YL-1 & 2	EY-YA-1A & 2A	EY-LAHH-1A &2A	EY-PI-1 & 2	EY-PSH-1 & 2	EY-LIC-1	EY-LAHH-1B	EY-YI-1A & 2A	EY-YA-1B & 2B

PLC (CONTINUED)						SCADA									
LSHH	HS (S/S)	YI (AUTO)	LAL	PAH	YA (INTRUSION)	LC	LI	LAL	LAHH	PAH	YI (RUN)	YI (AUTO)	YQI	YA (FAIL)	YA (INTRUSION)
BW-LSHH-1B	BW-HS-1B & 2B	BW-YI-1C & 2C	BW-LAL-1A	BW-PAH-1A & 2A	BW-YA-3A, 4A, 5A & 6A	BW-LC-1	BW-LI-1	BW-LAL-1B	BW-LAHH-1C	BW-PAH-1B & 2B	BW-YI-1B & 2B	BW-YI-1D & 2D	BW-YQI-1 & 2	BW-YA-1C & 2C	BW-YA-3B, 4B, 5B & 6B
EP-LSHH-1B	EP-HS-1B & 2B	EP-YI-1C & 2C	EP-LAL-1A	EP-PAH-1A & 2A	EP-YA-3A, 4A, 5A & 6A	EP-LC-1	EP-LI-1	EP-LAL-1B	EP-LAHH-1C	EP-PAH-1B & 2B	EP-YI-1B & 2B	EP-YI-1D & 2D	EP-YQI-1 & 2	EP-YA-1C & 2C	EP-YA-3B, 4B, 5B & 6B
EY-LSHH-1B	EY-HS-1B & 2B	EY-YI-1C & 2C	EY-LAL-1A	EY-PAH-1A & 2A	EY-YA-3A, 4A, 5A & 6A	EY-LC-1	EY-LI-1	EY-LAL-1B	EY-LAHH-1C	EY-PAH-1B & 2B	EY-YI-1B & 2B	EY-YI-1D & 2D	EY-YQI-1 & 2	EY-YA-1C & 2C	EY-YA-3B, 4B, 5B & 6B

Pocket Pump Station

AREA	PUMP STATION	LOCATION	NO. OF PUMPS	PUMP NO.	RTU LCP NO.	FIELD									PLC			
						YS (INTRUSION)	LE/LIT	LSHH	HS (HOA)	YL (RUN)	YA (FAIL)	LAHH	PI	PSH	LIC	LAHH	YI (RUN)	YA (FAIL)
A	4A	North End of 4th St.	3	4A-P-1, 2, & 3	1	4A-YS-1, 2 & 3	4A-LE/LIT-1	4A-LSHH-1A	4A-HS-1A, 2A, & 3A	4A-YL-1, 2, & 3	4A-YA-1A, 2A, & 3A	4A-LAHH-1A	4A-PI-1, 2, &3	4A-PSH-1, 2, &3	4A-LIC-1	4A-LAHH-1B	4A-YI-1A, 2A, & 3A	4A-YA-1B, 2B, & 3B
A	7A	North End of 7th St.	2	7A-P-1 &2	2	7A-YS-1, 2 & 3	7A-LE/LIT-1	7A-LSHH-1A	7A-HS-1A & 2A	7A-YL-1 & 2	7A-YA-1A & 2A	7A-LAHH-1A	7A-PI-1 & 2	7A-PSH-1 & 2	7A-LIC-1	7A-LAHH-1B	7A-YI-1A & 2A	7A-YA-1B & 2B
A	8A	North End of 8th St.	2	8A-P-1 & 2	3	8A-YS-1, 2 & 3	8A-LE/LIT-1	8A-LSHH-1A	8A-HS-1A & 2A	8A-YL-1 & 2	8A-YA-1A & 2A	8A-LAHH-1A	8A-PI-1 & 2	8A-PSH-1 & 2	8A-LIC-1	8A-LAHH-1B	8A-YI-1A & 2A	8A-YA-1B & 2B
A	9A	North End of 9th St.	2	9A-P-1 & 2	4	9A-YS-1, 2 & 3	9A-LE/LIT-1	9A-LSHH-1A	9A-HS-1A & 2A	9A-YL-1 & 2	9A-YA-1A & 2A	9A-LAHH-1A	9A-PI-1 & 2	9A-PSH-1 & 2	9A-LIC-1	9A-LAHH-1B	9A-YI-1A & 2A	9A-YA-1B & 2B
A	10A	North End of 10th St.	2	10A-P-1 & 2	7	10A-YS-1, 2 & 3	10A-LE/LIT-1	10A-LSHH-1A	10A-HS-1A & 2A	10A-YL-1 & 2	10A-YA-1A & 2A	10A-LAHH-1A	10A-PI-1 & 2	10A-PSH-1 & 2	10A-LIC-1	10A-LAHH-1B	10A-YI-1A & 2A	10A-YA-1B & 2B
A	11A	North End of 11th St.	2	11A-P-1 & 2	8	11A-YS-1, 2 & 3	11A-LE/LIT-1	11A-LSHH-1A	11A-HS-1A & 2A	11A-YL-1 & 2	11A-YA-1A & 2A	11A-LAHH-1A	11A-PI-1 & 2	11A-PSH-1 & 2	11A-LIC-1	11A-LAHH-1B	11A-YI-1A & 2A	11A-YA-1B & 2B
A	12A	North End of 12th St.	2	12A-P-1 & 2	9	12A-YS-1, 2 & 3	12A-LE/LIT-1	12A-LSHH-1A	12A-HS-1A & 2A	12A-YL-1 & 2	12A-YA-1A & 2A	12A-LAHH-1A	12A-PI-1 & 2	12A-PSH-1 & 2	12A-LIC-1	12A-LAHH-1B	12A-YI-1A & 2A	12A-YA-1B & 2B
A	13A	North End of 13th St.	2	13A-P-1 & 2	10	13A-YS-1, 2 & 3	13A-LE/LIT-1	13A-LSHH-1A	13A-HS-1A & 2A	13A-YL-1 & 2	13A-YA-1A & 2A	13A-LAHH-1A	13A-PI-1 & 2	13A-PSH-1 & 2	13A-LIC-1	13A-LAHH-1B	13A-YI-1A & 2A	13A-YA-1B & 2B

PLC (CONTINUED)						SCADA									
LSHH	HS (START/STOP)	YI (AUTO)	LAL	PAH	YA (INTRUSION)	LC	LI	LAL	LAHH	PAH	YI (RUN)	YI (AUTO)	YQI	YA (FAIL)	YA (INTRUSION)
4A-LSHH-1B	4A-HS-1B, 2B & 3B	4A-YI-1C, 2C, & 3C	4A-LAL-1A	4A-PAH-1A, 2A, & 3A	4A-YA-4A, 5A & 6A	4A-LC-1	4A-LI-1	4A-LAL-1B	4A-LAHH-1C	4A-PAH-1B, 2B, & 3B	4A-YI-1B, 2B, & 3B	4A-YI-1D, 2D, & 3D	4A-YQI-1, 2, &3	4A-YA-1C, 2C, & 3C	4A-YA-4B, 5B & 6B
7A-LSHH-1B	7A-HS-1B & 2B	7A-YI-1C & 2C	7A-LAL-1A	7A-PAH-1A & 2A	7A-YA-3A, 4A & 5A	7A-LC-1	7A-LI-1	7A-LAL-1B	7A-LAHH-1C	7A-PAH-1B & 2B	7A-YI-1B & 2B	7A-YI-1D & 2D	7A-YQI-1 & 2	7A-YA-1C & 2C	7A-YA-3B, 4B & 5B
8A-LSHH-1B	8A-HS-1B & 2B	8A-YI-1C & 2C	8A-LAL-1A	8A-PAH-1A & 2A	8A-YA-3A, 4A & 5A	8A-LC-1	8A-LI-1	8A-LAL-1B	8A-LAHH-1C	8A-PAH-1B & 2B	8A-YI-1B & 2B	8A-YI-1D & 2D	8A-YQI-1 & 2	8A-YA-1C & 2C	8A-YA-3B, 4B & 5B
9A-LSHH-1B	9A-HS-1B & 2B	9A-YI-1C & 2C	9A-LAL-1A	9A-PAH-1A & 2A	9A-YA-3A, 4A & 5A	9A-LC-1	9A-LI-1	9A-LAL-1B	9A-LAHH-1C	9A-PAH-1B & 2B	9A-YI-1B & 2B	9A-YI-1D & 2D	9A-YQI-1 & 2	9A-YA-1C & 2C	9A-YA-3B, 4B & 5B
10A-LSHH-1B	10A-HS-1B & 2B	10A-YI-1C & 2C	10A-LAL-1A	10A-PAH-1A & 2A	10A-YA-3A, 4A & 5A	10A-LC-1	10A-LI-1	10A-LAL-1B	10A-LAHH-1C	10A-PAH-1B & 2B	10A-YI-1B & 2B	10A-YI-1D & 2D	10A-YQI-1 & 2	10A-YA-1C & 2C	10A-YA-3B, 4B & 5B
11A-LSHH-1B	11A-HS-1B & 2B	11A-YI-1C & 2C	11A-LAL-1A	11A-PAH-1A & 2A	11A-YA-3A, 4A & 5A	11A-LC-1	11A-LI-1	11A-LAL-1B	11A-LAHH-1C	11A-PAH-1B & 2B	11A-YI-1B & 2B	11A-YI-1D & 2D	11A-YQI-1 & 2	11A-YA-1C & 2C	11A-YA-3B, 4B & 5B
12A-LSHH-1B	12A-HS-1B & 2B	12A-YI-1C & 2C	12A-LAL-1A	12A-PAH-1A & 2A	12A-YA-3A, 4A & 5A	12A-LC-1	12A-LI-1	12A-LAL-1B	12A-LAHH-1C	12A-PAH-1B & 2B	12A-YI-1B & 2B	12A-YI-1D & 2D	12A-YQI-1 & 2	12A-YA-1C & 2C	12A-YA-3B, 4B & 5B
13A-LSHH-1B	13A-HS-1B & 2B	13A-YI-1C & 2C	13A-LAL-1A	13A-PAH-1A & 2A	13A-YA-3A, 4A & 5A	13A-LC-1	13A-LI-1	13A-LAL-1B	13A-LAHH-1C	13A-PAH-1B & 2B	13A-YI-1B & 2B	13A-YI-1D & 2D	13A-YQI-1 & 2	13A-YA-1C & 2C	13A-YA-3B, 4B & 5B

Standby Power

AREA	ENGINE GENERATOR	LOCATION	GEN. NO.	RTU/LCP NO.	FIELD											PLC		SCADA	
					YQI	TI	LAL	TAH	SI	II	EI	FC	PI	PAL	SAH	YI	YA	YI	YA
A	East Paso (EPG)	18th St. & Paso Robles	EPG-GEN-1	15	EPG-YQI-1	EPG-TI-1	EPG-LAL-1	EPG-TAH-1	EPG-SI-1	EPG-II-1	EPG-EI-1	EPG-FC-1	EPG-PI-1	EPG-PAL-1	EPG-SAH-1	EPG-YI-1A	EPG-YA-1A	EPG-YI-1B	EPG-YA-1B
A	East Ysabel (EYG)	Santa Ysabel & South Bay Blvd	EYG-GEN-1	16	EYG-YQI-1	EYG-TI-1	EYG-LAL-1	EYG-TAH-1	EYG-SI-1	EYG-II-1	EYG-EI-1	EYG-FC-1	EYG-PI-1	EYG-PAL-1	EYG-SAH-1	EYG-YI-1A	EYG-YA-1A	EYG-YI-1B	EYG-YA-1B
A	West Paso/Baywood (EWB)	8th St. & ElMorro Ave	EWB-GEN-1	22	EWB-YQI-1	EWB-TI-1	EWB-LAL-1	EWB-TAH-1	EWB-SI-1	EWB-II-1	EWB-EI-1	EWB-FC-1	EWB-PI-1	EWB-PAL-1	EWB-SAH-1	EWB-YI-1A	EWB-YA-1A	EWB-YI-1B	EWB-YA-1B

REGISTERED PROFESSIONAL ENGINEER DAVID WILCOXSON No. 7213 Exp. 9-30-06 CONTROL SYSTEMS STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED D. WILCOXSON
DRAWN D. WILCOXSON
CHECKED K. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT — DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG — UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

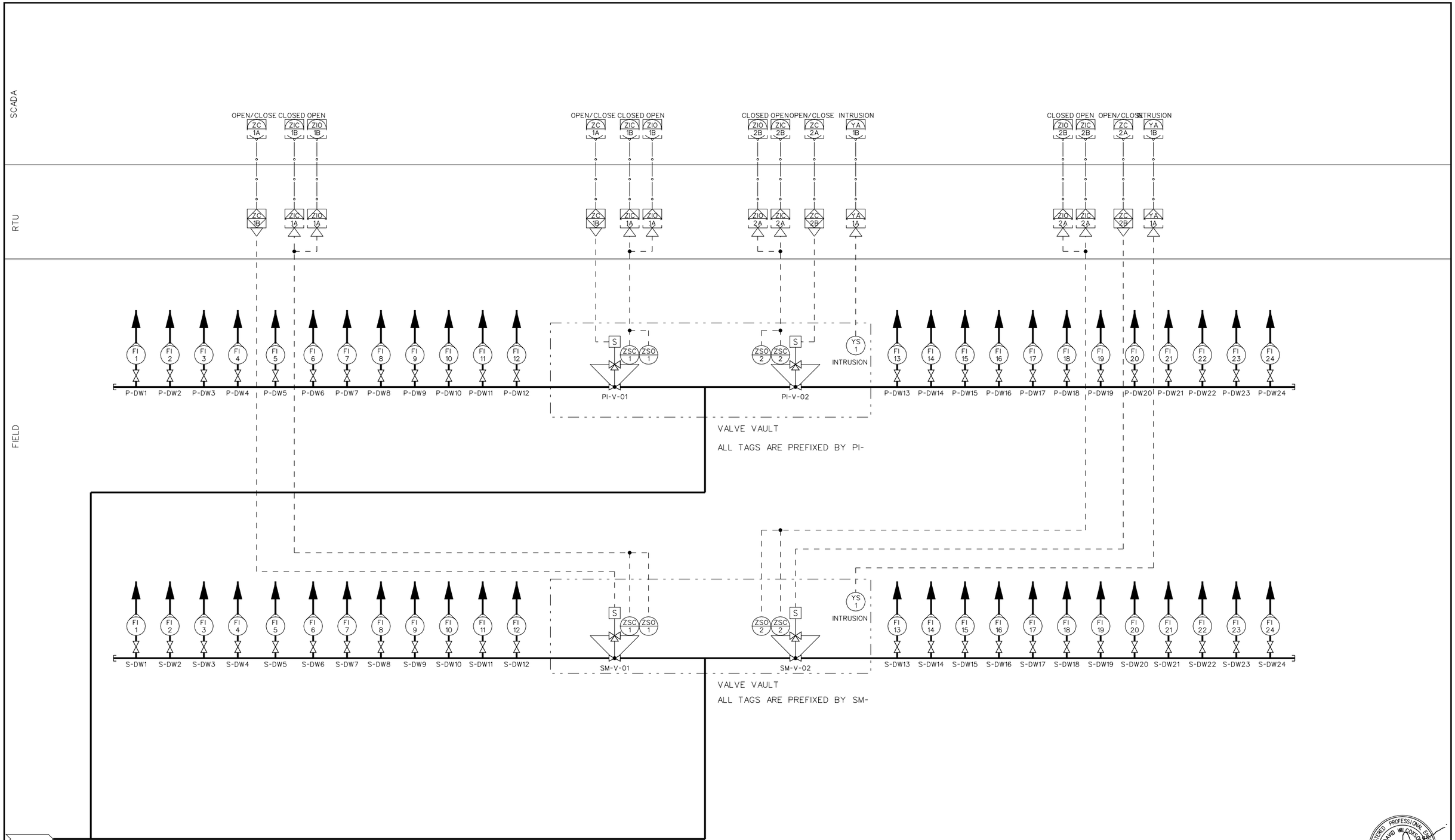
MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

INSTRUMENTATION
AREA A INSTRUMENT SCHEDULES

SHEET A-I-203

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ins\A-I-203.dgn Plot Date: 06-FEB-2004 15:5$$time$$



REGISTERED PROFESSIONAL ENGINEER
DAVID WILCOXSON
NO. CS 1213
Exp. 9-30-06
CONTROL SYSTEMS
STATE OF CALIFORNIA

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ins\A-I-204.dgn Plot Date: 06-FEB-2004 15:55:$$time$$

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED D. WILCOXSON
DRAWN D. WILCOXSON
CHECKED K. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
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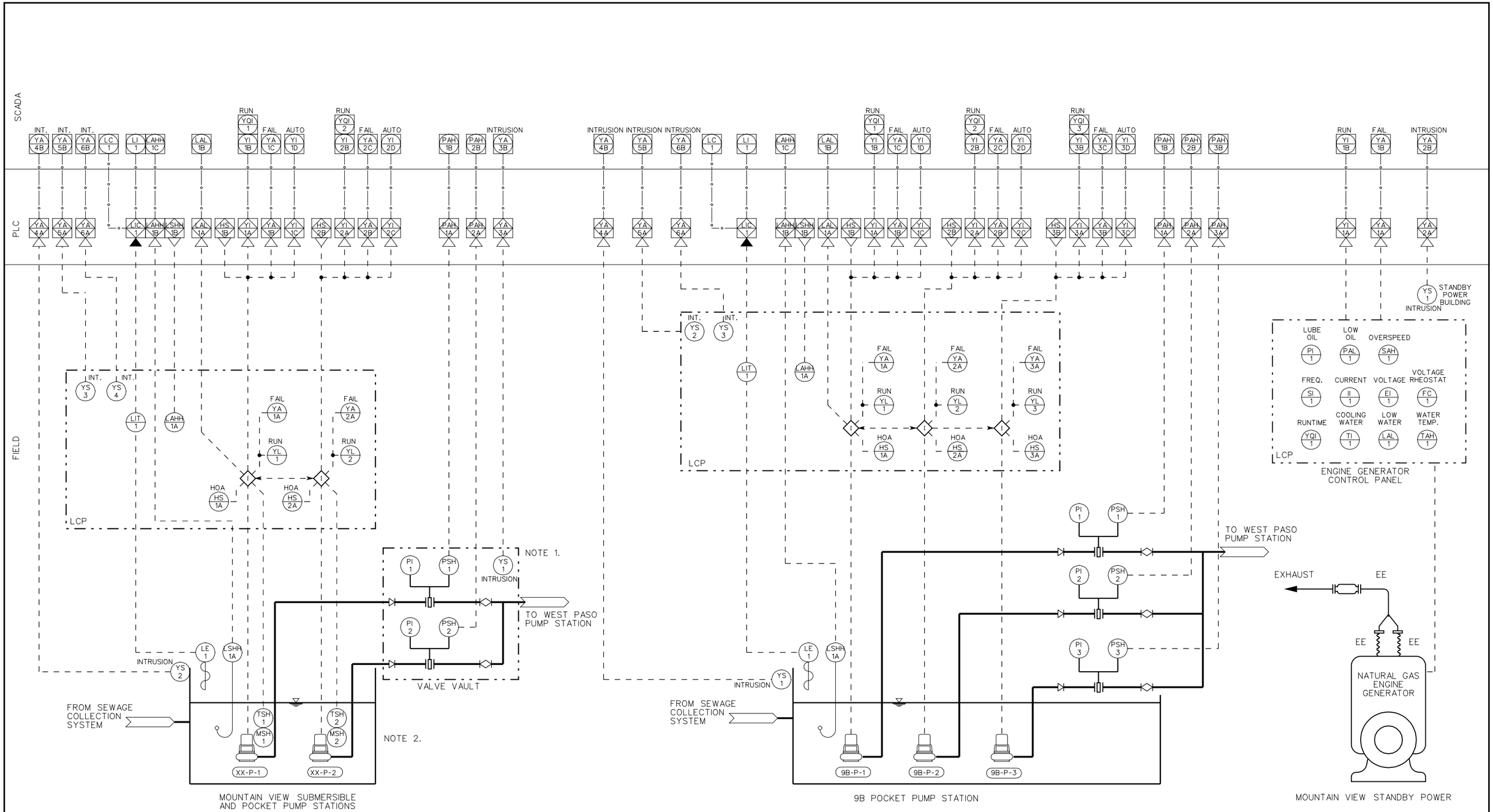
LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT
INSTRUMENTATION
PISMO AND SANTA MARIA
EFFLUENT DISPOSAL SITES P & ID

SHEET A-I-204



NOTE 1. ALL OF THE POCKET PUMP STATIONS DO NOT HAVE A SEPARATE VALVE VAULT AND ASSOCIATED INTRUSION SWITCH.

NOTE 2. ALL OF THE POCKET PUMP STATIONS DO NOT HAVE A TEMPERATURE AND MOISTURE DETECTION SWITCH.

REGISTERED PROFESSIONAL ENGINEER DAVID WILCOXSON NO. C31069 EXP. 9-30-06 REGISTERED SYSTEMS STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE: NONE

WARNING: 0 1/2 1 — IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED D. WILCOXSON
DRAWN D. WILCOXSON
CHECKED K. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

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LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

INSTRUMENTATION
AREA D PUMP STATIONS TYPICAL

SHEET D-I-200

Job No: 1481166 File: N:\Projects\los_osos\Collect_Sys\PS\ins\D-I-200.dgn Plot Date: 06-FEB-2004 16:0$$time$$

Submersible Pump Station with Constant Speed

AREA	PUMP STATION	LOCATION	NO. OF PUMPS	PUMP NO.	RTU/LCP NO.	FIELD									PLC				
						LE/LIT	LSHH	HS (HOA)	YL (RUN)	YA (FAIL)	LAHH	PI	PSH	YS (INTRUSION)	LIC	LAHH	LAL	YI(RUN)	YA
D	Mountain View (MV)	Santa Ynez Ave & Mountain View Dr	2	MV-P-1 & 2	17	MV-LE/LIT-1	MV-LSHH-1	MV-HS-1 & 2	MV-YL-1 & 2	MV-YA-1A & 2A	MV-LAHH-1A	MV-PI-1 & 2	MV-PSH-1 & 2	MV-YS-1, 2, 3 & 4	MV-LIC-1	MV-LAHH-1B	MV-LAL-1A	MV-YI-1A & 2A	MV-YA-1B & 2B

PLC (CONTINUED)					SCADA									
YI(AUTO)	HS (S/S)	LSHH	PAH	YA (INTRUSION)	LC	LI	LAHH	YI(RUN)	YQI	YA	YI(AUTO)	LAL	PAH	YA (INTRUSION)
MV-YI-1C & 2C	MV-HS-1B & 2B	MV-LSHH-1B	MV-PAH-1A & 2A	MV-YA-3A, 4A, 5A & 6A	MV-LC-1	MV-LI-1	MV-LAHH-1C	MV-YI-1B & 2B	MV-YQI-1 & 2	MV-YA-1C & 2C	MV-YI-1D & 2D	MV-LAL-1B	MV-PAH-1B & 2B	MV-YA-3B, 4B, 5B & 6B

Pocket Pump Station

AREA	PUMP STATION	LOCATION	NO. OF PUMPS	PUMP NO.	RTU LCP NO.	FIELD									PLC				
						LE/LIT	LSHH	HS (HOA)	YL (RUN)	YA (FAIL)	LAHH	PI	PSH	YS (INTRUSION)	LIC	LAHH	LAL	YI(RUN)	YA (FAIL)
D	9B	Near Intersection of 9th & Ramona St	3	9B-P-1, 2, & 3	5	9B-LE/LIT-1	9B-LSHH-1A	9B-HS-1A, 2A, & 3A	9B-YL-1, 2, & 3	9B-YA-1A, 2A, & 3A	9B-LAHH-1A	9B-PI-1, 2, &3	9B-PSH-1, 2, &3	9B-YS-1, 2 & 3	9B-LIC-1	9B-LAHH-1B	9B-LAL-1A	9B-YL-1A, 2A, & 3A	9B-YA-1B, 2B, & 3B
D	9C	Intersection of 9th &San Luis Ave	2	9C-P-1 & 2	6	9C-LE/LIT-1	9C-LSHH-1A	9C-HS-1A & 2A	9C-YL-1 & 2	9C-YA-1A & 2A	9C-LAHH-1A	9C-PI-1 & 2	9C-PSH-1 & 2	9C-YS-1, 2 & 3	9C-LIC-1	9C-LAHH-1B	9C-LAL-1A	9C-YL-1A & 2A	9C-YA-1B & 2B
D	13B	Near Intersection of 13th &San Luis Ave	2	13B-P-1 & 2	11	13B-LE/LIT-1	13B-LSHH-1A	13B-HS-1A & 2A	13B-YL-1 & 2	13B-YA-1A & 2A	13B-LAHH-1A	13B-PI-1 & 2	13B-PSH-1 & 2	13B-YS-1, 2 & 3	13B-LIC-1	13B-LAHH-1B	13B-LAL-1A	13B-YL-1A & 2A	13B-YA-1B & 2B
D	15B	Near Intersection of 15th & Ramona St	2	15B-P-1 & 2	12	15B-LE/LIT-1	15B-LSHH-1A	15B-HS-1A & 2A	15B-YL-1 & 2	15B-YA-1A & 2A	15B-LAHH-1A	15B-PI-1 & 2	15B-PSH-1 & 2	15B-YS-1, 2 & 3	15B-LIC-1	15B-LAHH-1B	15B-LAL-1A	15B-YL-1A & 2A	15B-YA-1B & 2B

PLC (CONTINUED)					SCADA									
YI(AUTO)	HS (S/S)	LSHH	PAH	YA (INTRUSION)	LC	LI	LAHH	LAL	YI(RUN)	YQI	YA	YI(AUTO)	PAH	YA (INTRUSION)
9B-YI-1C, 2C, & 3C	9B-HS-1B, 2B, & 3B	9B-LSHH-1B	9B-PAH-1A, 2A & 3A	9B-YA-4A, 5A & 6A	9B-LC-1	9B-LI-1	9B-LAHH-1C	9B-LAL-1B	9B-YI-1B, 2B, & 3B	9B-YQI-1, 2, & 3	9B-YA-1C, 2C, & 3C	9B-YI-1D, 2D, & 3D	9B-PAH-1B, 2B, & 3B	9B-YA-4B, 5B, & 6B
9C-YI-1C & 2C	9C-HS-1B & 2B	9C-LSHH-1B	9C-PAH-1A & 2A	9C-YA-3A, 4A & 5A	9C-LC-1	9C-LI-1	9C-LAHH-1C	9C-LAL-1B	9C-YI-1B & 2B	9C-YQI-1 & 2	9C-YA-1C & 2C	9C-YI-1D & 2D	9C-PAH-1B & 2B	9C-YA-3B, 4B & 5B
13B-YI-1C & 2C	13B-HS-1B & 2B	13B-LSHH-1B	13B-PAH-1A & 2A	13B-YA-3A, 4A & 5A	13B-LC-1	13B-LI-1	13B-LAHH-1C	13B-LAL-1B	13B-YI-1B & 2B	13B-YQI-1 & 2	13B-YA-1C & 2C	13B-YI-1D & 2D	13B-PAH-1B & 2B	13B-YA-3B, 4B & 5B
15B-YI-1C & 2C	15B-HS-1B & 2B	15B-LSHH-1B	15B-PAH-1A & 2A	15B-YA-3A, 4A & 5A	15B-LC-1	15B-LI-1	15B-LAHH-1C	15B-LAL-1B	15B-YI-1B & 2B	15B-YQI-1 & 2	15B-YA-1C & 2C	15B-YI-1D & 2D	15B-PAH-1B & 2B	15B-YA-3B, 4B & 5B

REGISTERED PROFESSIONAL ENGINEER DAVID WILCOXSON NO. C-57213 EXP. 9-30-06 CONTROL SYSTEMS STATE OF CALIFORNIA

REV	DATE	BY	DESCRIPTION

SCALE

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED D. WILCOXSON
DRAWN D. WILCOXSON
CHECKED K. CREAGER

SUBMITTED BY
JOHN A. BERGEN — C31069 LICENSE NO. — 2/16/2004 DATE
STEVE J. HYLAND — C23892 LICENSE NO. — 2/16/2004 DATE

DIGALERT DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS COMMUNITY SERVICES DISTRICT

MWH Walnut Creek, California

LOS OSOS WASTEWATER PROJECT

INSTRUMENTATION
AREA D INSTRUMENT SCHEDULE

SHEET
D-I-201

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