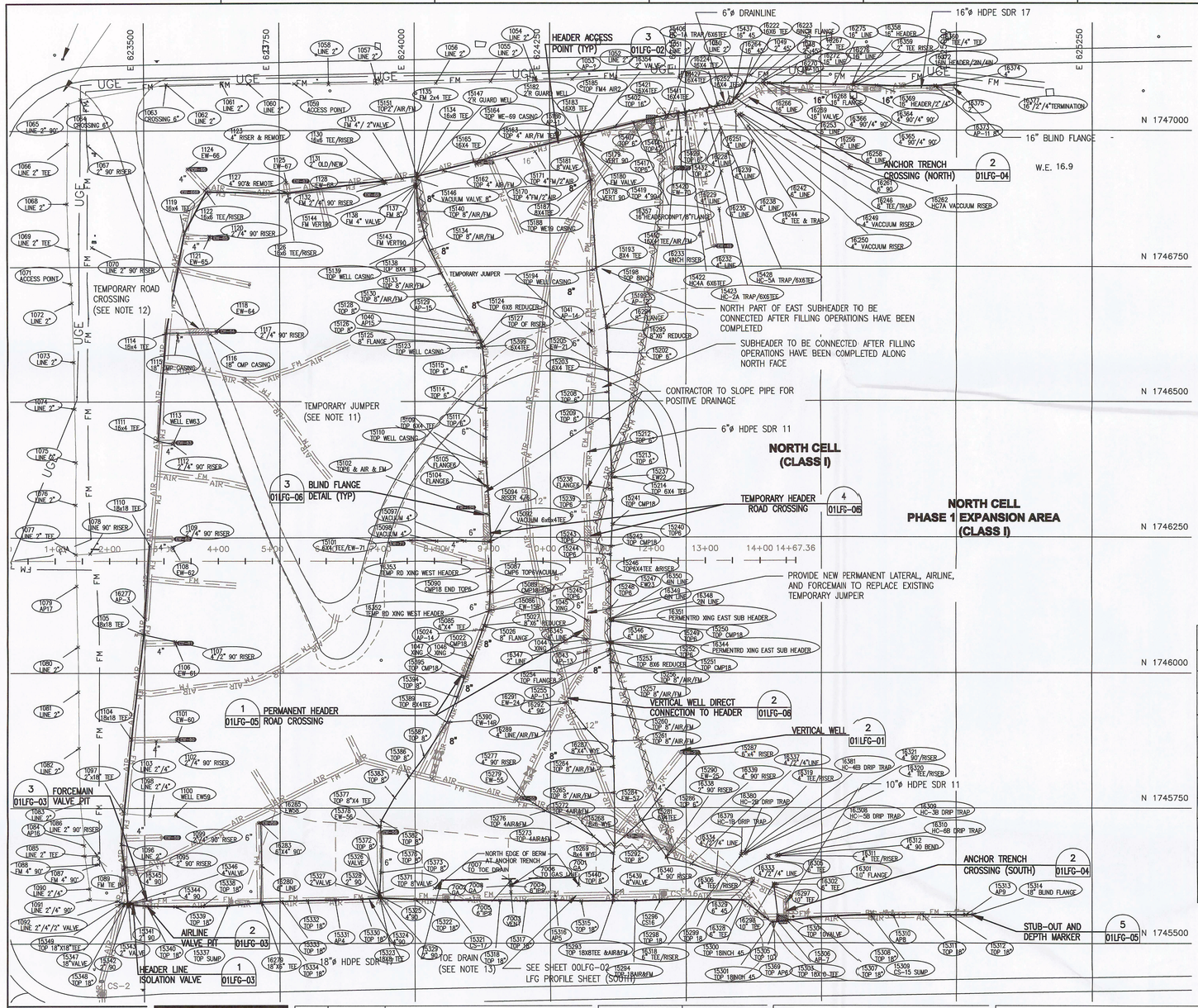


N

SCALE IN FEET

100 50 0 100 200

LEGEND

- LIMITS OF LINER
- LIMITS OF CONSTRUCTION
- 1080 — EXISTING CONTOURS (MAJOR)
- EXISTING CONTOURS (MINOR)
- LFG PIPE TO BE ABANDONED
- LFG PIPE ABANDONED IN PLACE
- NEW HDPE SDR 17 LFG HEADER (SIZE VARIES)
- HP — DENOTES HIGH POINT IN HEADER
- NEW HDPE SDR 11 LATERAL PIPE (SIZE VARIES)
- EXISTING LFG HEADER PIPE (SIZE VARIES)
- EXISTING LFG LATERAL PIPE (SIZE VARIES)
- EXISTING LFG HORIZONTAL PIPE (SIZE VARIES)
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND LEACHATE FORCEMAIN
- LCR–1 EXISTING LEACHATE CLEANOUT RISER
- HC–7B EXISTING HORIZONTAL LFG WELLHEAD
- EW–1 EXISTING LFG WELL
- LCRS EXISTING LEACHATE RISER SUMP
- CS–2 EXISTING CONDENSATE SUMP
- EXISTING HEADER ISOLATION VALVE
- ISOLATION VALVE
- CS–2 CONDENSATE SUMP
- EW–1 LFG WELL
- EW–24 CONNECTION TO EXISTING VERTICAL WELLS
- EW–16AR UPSLOPE WELLHEAD
- AP–2 ACCESS POINTS
- 30.64 / 20 SURVEY MONUMENTS
- CP–3 CONNECTION POINTS TO EXISTING LFG SYSTEM

NOTES:

1. AERIAL TOPOGRAPHY WAS TAKEN FROM AERIAL SURVEY PERFORMED BY AERIAL CARTOGRAPHICS OF AMERICA ON MAY 7, 2011.
2. LIMITS OF LINER OBTAINED FROM THE TOMOKA LANDFILL LINER AS–BUILT DRAWING BY MAPTECH, INC. ON OCTOBER 4, 2005 AND FROM THE CLASS I CELL FILL SEQUENCING PLAN DRAWING PREPARED BY SCS ENGINEERS AND SUBMITTED TO FDEP ON AUGUST 14, 2009.
3. UTILITY INFORMATION OBTAINED FROM THE SPECIFIC PURPOSE SURVEY GAS LINE AS–BUILTS TOMOKA FARMS ROAD LANDFILL PREPARED BY SLIGER & ASSOCIATES, INC. ON MARCH 1, 2010.
4. CONTRACTOR TO PERFORM PRE CONSTRUCTION SURVEY AS SPECIFIED IN THE SPECIFICATIONS.
5. EXISTING EDGE OF LINER LOCATION ALONG THE NORTH SLOPE IS APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING LINER EDGE PRIOR TO CONSTRUCTION.
6. EXISTING CLEANOUT LOCATIONS AND UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR IS RESPONSIBLE FOR FIELD LOCATING CLEANOUTS AND UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
7. REBAR SPACED EVERY 50' O.C. ALTERNATING SIDES.
8. CONTRACTOR SHALL PROVIDE ADDITIONAL SUBHEADER TO ALLOW FOR EXPANSION.
9. 6" SUBHEADER BETWEEN ACCESS POINTS AP–12 AND AP–13, AP–14 AND AP–15 SHALL BE EXPOSED UNTIL FILLING OPERATIONS ON TOP DECK HAVE BEEN COMPLETED.
10. ALL ABANDONED LATERAL LINES TO BE CUT AND CAPPED. SEE DETAIL 5 ON SHEET 01LFG–06.
11. CONTRACTOR TO PROVIDE A TEMPORARY JUMPER AND UP SLOPE WELLHEAD UNTIL FILLING OPERATIONS HAVE BEEN COMPLETED.
12. CONNECTION OF WELL EW–64 SHALL BE MOVED TO CONNECT TO NEW HEADER LOCATION IN PHASE III B.
13. **CONTRACTOR TO CONNECT LANDFILL GAS COLLECTION SYSTEM FROM NEWLY INSTALLED HEADER LINE TO HIGH POINTS OF TOE DRAIN. LATERAL SHALL BE SLOPED TO HEADER AWAY FROM TOE DRAIN A MINIMUM OF 3% OUTSIDE OF WASTE. WELLHEAD SHALL CONSIST OF 2" BALL VALVE AND SAMPLE PORTS ON EITHER SIDE. LATERALS SHALL BE SAME SIZE DIAMETER AS TOE DRAIN. CONNECTION TO HEADER SHALL BE WITH BRANCH SADDLE.**
14. **DRAIN LINE TO LCR –8 TO BE CUT AND CAPPED AT LCR –8.**

PHASE III A CONSTRUCTION TABLE

ITEM DESCRIPTION	UNIT	QUANTITY
VERTICAL LFG WELLHEAD	EA	21
ACCESS POINT	EA	14
CONDENSATE SUMP	EA	5
2"ø HDPE SDR 9 AIRLINE	LF	5,992
4"ø HDPE SDR 9 CONDENSATE FORCEMAIN	LF	5,848
4"ø HDPE SDR 11 LATERAL	LF	1,147
6"ø HDPE SDR 11 LATERAL	LF	1,416
8"ø HDPE SDR 11 SUB–HEADER	LF	1,264
10"ø HDPE SDR 11 SUB–HEADER	LF	35
16"ø HDPE SDR 17 HEADER	LF	595
18"ø HDPE SDR 17 HEADER	LF	1,596

CLIFFORD G. KOENIG LICENSE No. 64078 STATE OF FLORIDA PROFESSIONAL ENGINEER

HDR

HDR Engineering, Inc.
200 W Forsyth St
Jacksonville, FL 32202
FLORIDA CA 00004215

ISSUE	DATE	DESCRIPTION
1	09/11	DRAFT

PROJECT MANAGER	C. LEBRON, P.E.
DESIGNED BY	M. AUSTIN
DESIGNED BY	
DESIGNED BY	
DRAWN BY	M. AUSTIN
CHECKED BY	
PROJECT NUMBER	0000000000170244

Volusia County FLORIDA

CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

PHASE III - PART A
LFG SYSTEM EXPANSION

0 1" 2"

FILENAME	00LFG–01.dwg
SCALE	AS SHOWN

SHEET **00LFG-01**

RECEIVED SEP 19 2012 SJRWMD Central District

K:\CONST\Tomoka andfill\VerticalCell2ase3\2012-1-11\Vab.ill\A5900 PC–01.dwg, 1 of 2, 6/12/2012 8:50:43 AM, JMC to PC–pdf, 3:1

POINT NO.	DESCRIPTION	NORTHING	EASTING	ELEVATION	GROUND ELEV.
1040	AP-15	1746628.2376	624111.0705	136.09	X
1041	AP-14	1746630.9372	624326.4010	135.38	X
1042	AP-14	1746079.8544	624123.6905	135.29	X
1043	AP-13	1746039.8911	624315.9466	135.73	X
1044	XING	1746061.1877	624316.5989	135.55	X
1045	XING	1746096.6376	624317.6391	136.37	X
1046	XING	1746026.0906	624104.0238	134.96	X
1047	XING	1745993.0500	624091.2898	129.95	X
1048	2" 45° BEND	1747092.8318	624642.9107	27.46	31.45
1049	2" 45° BEND	1747101.4380	624620.4036	26.24	31.10
1050	2" LINE	1747100.4222	624584.5139	25.87	30.09
1051	2" LINE	1747097.2056	624488.8075	26.03	30.37
1052	2" LINE	1747095.8324	624372.0440	26.11	29.99
1053	ACCESS POINT	1747093.9647	624291.1874	25.84	30.30
1054	2" LINE	1747092.4538	624225.0844	25.63	30.19
1055	2" LINE	1747089.8033	624140.8365	25.49	30.08
1056	2" LINE	1747086.9149	624039.9627	25.63	29.76
1057	2" LINE	1747086.3081	623930.4965	25.89	29.51
1058	2" LINE	1747084.7924	623841.7176	25.87	29.70
1059	ACCESS POINT	1747085.8909	623777.4421	26.45	30.04
1060	2" LINE	1747086.3625	623692.9485	26.54	X
1061	2" LINE	1747086.7206	623643.4268	27.39	30.58
1062	2" LINE	1747084.8923	623541.5228	28.80	31.46
1063	6" CROSSING	1747084.8307	623541.6560	28.79	31.46
1064	6" CROSSING	1747057.6326	623383.6773	23.91	30.82
1065	2" 90° BEND	1747049.3437	623360.7693	27.25	X
1066	2" TEE	1746975.5594	623359.2616	24.74	27.52
1067	2" 90° RISER	1746972.6128	623397.5919	26.74	X
1068	2" LINE	1746865.5541	623358.1584	24.28	26.88
1069	2" TEE	1746782.3755	623360.8244	24.62	27.33
1070	2" 90° RISER	1746785.7617	623403.9615	26.92	X
1071	ACCESS POINT	1746718.2229	623365.6749	24.68	27.66
1072	2" LINE	1746683.3856	623366.8652	24.49	27.36
1073	2" LINE	1746573.0811	623370.1827	24.92	27.86
1074	2" LINE	1746486.9572	623371.6328	24.47	27.75
1075	2" LINE	1746388.1081	623374.2938	25.26	27.88
1076	2" LINE	1746310.2052	623373.7307	25.62	28.13
1077	2" TEE	1746218.7831	623374.0407	126.44	28.70
1078	90° RISER	1746220.6299	623400.0185	27.40	X
1079	AP-17	1746160.1631	623374.9163	25.11	28.72
1080	2" LINE	1746048.4328	623377.7155	25.60	28.57
1081	2" LINE	1745965.0115	623378.5932	26.74	29.15
1082	2" LINE	1745861.5038	623379.6089	26.15	X
1083	2" LINE	1745759.5525	623382.5666	25.72	28.64
1084	AP-16	1745680.9905	623389.2380	27.28	29.58
1085	LINE 2" TEE	1745661.5747	623390.4559	27.22	29.47
1086	2" 90° RISER	1745663.333	623412.7164	27.50	X
1087	FM 4" 90°	1745645.8817	623415.0125	28.01	X
1088	FM 4" 90°	1745646.0948	623415.4673	31.80	X
1089	FM TIE IN	1745656.1545	623415.8867	23.69	X
1090	LINE 2"/4"	1745600.9810	623399.2625	26.64	29.50
1091	LINE 2"/4" 90° BEND	1745581.4171	623399.9130	25.89	29.69
1092	LINE 2"/4"/2" VALVE	1745578.3581	623452.0153	26.28	29.20
1093	18"x18" TEE	1745574.3706	623456.8201	19.66	X
1094	18" VALVE	1745573.3670	623463.5039	28.07	X
1095	2" 90° RISER	1745640.5917	623463.0688	37.01	31.54
1096	2" LINE	1745683.1262	623457.2264	30.08	32.33
1097	2"x18" TEE	1745740.6109	623462.6168	31.93	X
1098	2"/4" LINE	1745735.9133	623510.5708	43.46	47.01
1099	2"/4" 90° RISER	1745736.3561	623557.5759	56.18	58.29
1100	EW-59	1745739.2370	623558.3440	62.93	58.29
1101	EW-60	1745878.0167	623560.1340	65.42	60.77
1102	2"/4" 90° RISER	1745875.1917	623559.3384	57.23	60.77
1103	LINE 2"/4"	1745874.5002	623521.7423	45.97	49.13
1104	18"x18" TEE	1745877.1907	623475.7177	33.28	37.54
1105	18"x18" TEE	1746070.9187	623498.2294	38.08	43.23
1106	EW-61	1746055.1926	623556.6987	65.70	62.14
1107	4"/2" 90° RISER	1746058.2687	623556.7702	58.35	62.14
1108	EW-62	1746229.8642	623552.7487	65.91	61.99
1109	2"/4" 90° RISER	1746232.7551	623551.4740	58.74	61.99
1110	18"x18" TEE	1746235.6346	623509.5775	44.35	48.54
1111	16"x4" TEE	1746427.5540	623525.0070	49.49	53.00
1112	2"/4" 90° RISER	1746421.7353	623551.7146	58.46	61.44
1113	EW-63	1746423.5334	623553.5981	66.29	61.43
1114	16"x4" TEE	1746626.7963	623539.7417	54.40	58.74
1115	18" CMP CASING	1746625.5978	623562.0344	61.52	67.05
1116	18" CMP CASING	1746625.3066	623621.2205	72.54	76.76
1117	2"/4" 90° RISER	1746629.1084	623633.0058	74.33	78.18
1118	EW-64	1746631.6584	623632.8600	81.68	78.18
1119	16"x4" TEE	1746811.2922	623574.4142	61.94	66.00
1120	2"/4" 90° RISER	1746805.9453	623620.2117	73.54	76.49
1121	EW-65	1746803.9547	623620.7375	81.85	76.49
1122	16"x6" TEE /RISER	1746887.3263	623614.9069	74.73	70.87
1123	4" RISER & REMOTE	1746890.3089	623612.0274	73.79	69.65
1124	EW-66	1746929.5765	623580.7679	59.01	61.11
1125	EW-67	1746904.5276	623762.6455	65.00	69.18
1126	16"x6" TEE /RISER	1746884.2903	623765.0659	70.51	75.05
1127	4" 90° BEND & REMOTE	1746886.0559	623762.7705	70.01	75.05
1128	EW-68	1746904.6993	623945.1798	67.15	70.60
1130	16"x6" TEE /RISER	1746907.5222	623944.3777	63.41	70.60
1131	2" OLD/NEW	1746907.1759	623944.3305	67.81	70.60
1132	FM 2"/4" 90° RISER	1746902.9999	623947.1684	68.21	70.98
1133	FM 4"/2" VALVE	1746911.2890	623977.3040	65.63	68.54
1134	16"x8" TEE	1746915.8564	624004.1541	60.70	67.50
1135	FM 2"x4" TEE	1746917.4481	624004.1138	61.98	67.56
1136	8" VALVE	1746910.9007	624004.5541	63.25	X
1137	FM 8"	1746899.7603	624003.1075	59.84	71.04
1138	FM 4" VALVE	1746899.7178	624003.2541	59.62	71.04
7001	GA	1745606.5449	624302.0470	25.80	X
7002	GA	1745601.6979	624036.0893	26.30	X

POINT NO.	DESCRIPTION	NORTHING	EASTING	ELEVATION	GROUND ELEV.
7003	VENT	1745594.4088	624177.2169	34.24	X
7004	6"IPS	1745605.9025	624176.8575	27.56	X
7005	6"IPS	1745614.4579	624176.2358	23.05	X
7006	TO GAS LINE	1745608.3457	624176.7938	28.75	X
7007	TO TOE DRAIN	1745615.6853	624176.1744	24.19	X
7008	GA	1745606.3532	624177.7650	25.70	X
15022	18" CMP	1746029.2413	624106.2043	147.09	142.48
15024	AP-14	1746079.6160	624124.1161	142.62	144.09
15026	8" FLANGE	1746086.3086	624126.9828	143.22	144.55
15027	8"x6" REDUCER	1746087.5436	624127.3699	143.01	144.55
15085	6"X4" TEE	1746114.1452	624136.2214	144.35	145.85
15086	EW-15R	1746115.0411	624138.5547	150.31	145.85
15087	6" CMP TOP 6" VACUUM	1746147.0363	624138.0241	146.01	147.45
15089	18" CMP TOP	1746147.0853	624137.9098	147.08	147.45
15090	18" CMP END TOP 6"	1746187.3487	624139.6712	147.35	149.61
15092	6" VACUUM 6"x4" TEE	1746242.6522	624140.1034	148.41	149.73
15094	4"/6" RISER	1746242.3298	624136.9243	148.27	150.11
15097	4" VACUUM	1746243.3326	624091.7346	145.71	148.28
15098	4" VACUUM	1746243.3378	624040.0325	141.60	144.50
15101	6"x4" TEE & WE-71	1746244.9945	623992.3769	133.05	136.25
15102	TOP 6"/AIR/FM	1746291.0715	624136.1783	149.00	150.46
15104	6" FLANGE	1746343.1300	624134.5280	149.74	150.66
15105	6" FLANGE	1746343.5352	624134.7103	149.86	150.66
15109	TOP 6"x4" TEE	1746386.9382	624131.3267	148.31	149.27
15110	TOP WELL CASING	1746387.1742	624126.3874	151.45	148.10
15111	TOP 6"	1746432.4184	624131.0306	147.73	148.54
15114	TOP 6"	1746485.6449	624131.0345	146.79	147.79
15115	TOP 6"	1746545.6104	624131.3947	145.62	146.89
15123	TOP WELL CASING	1746599.8142	624119.7761	148.24	144.75
15124	TOP 6"x8" REDUCER	1746607.2755	624123.3407	143.30	145.25
15125	8" FLANGE	1746608.0201	624123.1577	143.47	145.25
15126	TOP 8"	1746613.4351	624122.6259	143.34	145.42
15127	6"x4" TEE TOP OF RISER	1746600.9329	624123.7340	149.57	145.07
15128	TOP 8"	1746641.3740	624108.1462	140.52	144.11
15129	AP-15	1746649.1187	624103.6976	139.22	143.50
15130	TOP 8"/AIR/FM	1746695.0388	624072.6163	127.47	131.98
15133	TOP 8"/AIR/FM	1746737.7151	624049.7646	114.35	119.37
15134	TOP 8"/AIR/FM	1746780.3584	624029.1399	104.24	106.70
15138	TOP 8"X4" TEE	1746804.5502	624019.3849	99.67	103.58
15139	TOP WELL CASING	1746802.7592	624017.8325	106.50	103.99
15140	TOP 8"/AIR/FM	1746851.7744	624007.5252	85.07	88.79
15143	FM VERT 90° BEND	1746897.9334	624003.5820	75.10	X
15144	FM VERT 90° BEND	1746901.2130	624003.4046	74.86	X
15145	FM VALVE	1746899.5833	624003.6438	75.36	X
15146	VACUUM VALVE 8"	1746910.2977	624004.2765	63.05	X
15147	2'R GUARD WELL	1746910.9838	624004.2712	62.67	X
15148	16"X8" TEE	1746914.6047	624004.1261	60.27	X
15151	2" AIR & FM	1746917.3668	624003.7714	61.69	X
15162	TOP 4" AIR & FM	1746925.6801	624053.2728	63.73	66.79
15163	TOP 4" AIR & FM TEES	1746937.9695	624115.1102	62.15	66.73
15164	WE-69 TOP CASING	1746939.0605	624113.9399	70.62	66.15
15165	16"X4" TEE	1746942.1628	624109.9717	58.65	65.54
15170	TOP 4"FM/2"AIR	1746947.9308	624170.6973	61.53	64.27
15171	TOP 4"FM/2"AIR	1746960.9132	624222.7015	57.23	60.93
15178	VERT 90°	1746973.4294	624309.3383	59.04	56.86
15179	VERT 90°	1746976.0942	624308.9296	58.98	53.59
15180	FM VALVE	1746974.5834	624309.0798	59.39	X
15181	8" VALVE	1746984.7241	624307.6224	45.85	X
15182	2'R GUARD WELL	1746985.1995	624307.6800	45.60	X
15183	16"X8" TEE	1746989.9694	624308.0359	42.31	49.50
15185	TOP 4"FM/2"AIR	1746987.0095	624304.8646	45.54	50.19
15186	AP-1	1746988.55761	624299.7665	43.98	50.79
15187	8"X4" TEE	1746909.1978	624325.0762	70.62	74.00
15188	TOP WE-19 CASING	1746909.0137	624327.6203	79.53	74.04
15193	8"X4" TEE	1746747.1101	624335.2181	111.47	115.63
15194	TOP WELL CASING	1746743.7986	624331.0879	119.38	116.13
15198	TOP 8"	1746657.9507	624350.617	136.26	138.81
15199	AP-12	1746639.9128	624354.0185	140.79	142.38
15202	TOP 6"	1746591.7083	624355.6975	143.52	142.86
15203	6"x4" TEE	1746558.0129	624356.2665	144.54	143.92
15205	EW-21	1746558.4587	624358.4005	147.33	143.03
15208	TOP 6"	1746516.9637	624356.6312	145.50	145.01
15209	TOP 6"	1746467.0495	624358.9709	146.48	146.03
15212	TOP 6"	1746417.0547	624361.1368	147.06	146.41
15213	TOP 6"	1746367.1340	624363.0796	147.66	147.10
15214	TOP 6"x4" TEE	1746360.0186	624362.7201	147.81	147.23
15237	EW-22	1746360.4963	624366.9957	144.85	X
15238	6" FLANGE	1746338.7023	624363.0068	148.71	147.81
15239	TOP 6"	1746317.7745	624364.0872	148.18	147.62
15240	TOP 6"	1746273.3181	624363.6403	147.62	149.55
15241	TOP CMP 18"	1746273.1784	624363.6332	148.49	147.37
15242	TOP CMP 18"	1746232.9632	624361.8182	148.19	146.80
15243	TOP 6"	1746233.0434	624361.8845	147.23	X
15244	TOP 6"	1746218.4377	624360.9124	147.07	146.51
15245	TOP 6"	1746168.6417	624360.2103	146.70	146.02
15246	TOP 6"x4" TEE/RISER	1746171.9067	624360.1375	146.77	146.06
15247	EW-23	1746171.6097	624364.0678	144.61	X
15248	TOP 6"	1746118.6091	624359.8651	145.50	144.95
15249	TOP 6"	1746095.5551	624360.3244	145.10	144.87
15250	TOP CMP 18"	1746095.5568	624360.1630	146.07	144.87
15251	TOP CMP 18"	1746054.9450	624360.3198	144.68	X
15252	TOP 6"	1746054.9235	624360.1498	143.77	143.78
15253	TOP 8"x6" REDUCER	1746042.9425	624359.9409	143.09	143.23
15254	TOP 8" FLANGE	1746041.9769	624359.9489	143.09	143.23
15255	AP-13	1746034.0739	624360.2065	141.95	143.02
15256	TOP 8" AIR/FM	1746019.6149	624360.8553	139.34	142.24
15257	TOP 8" AIR/FM	1745971.0704	624361.7559	128.22	131.84
15260	TOP 8" AIR/FM	1745922.1304	624364.2275	113.16	117.64
15261	TOP 8" AIR/FM	1745874.1545	624364.9670	101.93	104.68
15264	TOP 8" AIR/FM	1745826.3100	624366.4533	88.42	91.80

POINT NO.	DESCRIPTION	NORTHING	EASTING	ELEVATION	GROUND ELEV.
15265	TOP 8" AIR/FM	1745778.3812	624367.1123	72.11	75.33
15268	8"x6" WYE	1745680.9443	624368.3272	47.38	50.67
15269	8"x4" WYE	1745665.6206	624366.4725	43.10	46.44
15272	TOP 4" AIR/FM	1745696.9129	624329.0774	52.44	54.99
15273	TOP 4" AIR/FM	1745722.3495	624285.5166	58.82	61.60
15276	TOP 4" AIR/FM	1745744.8306	624241.0098	64.17	66.69
15277	4" 90° BEND/RISER	1745767.0967	624206.0206	70.09	72.29
15279	EW-55	1745766.1332	624203.3024	71.69	71.76
15281	6"x4"TEE	1745726.1898	624417.3099	59.66	62.65
15284	EW-57	1745728.9365	624415.3293	63.24	63.27
15286	TOP 6"	1745784.6973	624463.8357	75.36	78.54
15287	6"x4" RISER	1745849.2152	624521.1820	96.20	99.60
15290	EW-25	1745852.3375	624520.5115	100.31	100.18
15292	TOP 8"	1745634.1463	624365.3202	33.98	37.79
15293	TOP 18"x 8" TEE	1745578.1072	624365.7783	25.66	30.28
15294	TOP 18" PVC	1745578.0143	624406.8798	24.64	31.21
15296	CS-16 (18"PVC E-W INV.=22.03)	1745579.7676	624453.0261	SUMP 22.03	30.16
15298	TOP 18" PVC	1745580.8136	624493.4927	23.27	30.54
15299	TOP 18" PVC	1745580.6591	624543.2882	24.79	31.05
15300	TOP 18" 45° BEND	1745579.0278	624605.6357	26.77	31.67
15301	TOP 18" 45° BEND	1745538.4408	624656.6375	28.27	29.94
15303	TOP 18"x10" TEE	1745539.4000	624669.1711	27.54	29.82
15306	AP-7	1745541.4138	624686.5162	33.82	29.49
15307	TOP OF 18" PVC	1745545.8640	624727.1087	25.94	29.83
15308	TOP OF 18" PVC	1745549.5469	624777.9607	24.71	29.49
15309	CS-15 (18"PVC E-W INV.=21.83)	1745552.4326	624839.5912	31.14	29.30
15310	AP-8	1745551.5571	624881.9877	23.03	29.47
15311	TOP OF 18" PVC	1745552.5315	624936.9421	24.35	29.14
15312	TOP OF 18" PVC	1745551.9849	624985.9860	25.61	28.91
15313	AP-9	1745551.7440	625017.1126	26.53	28.95
15314	18" BLIND FLANGE	1745552.6885	625030.2155	26.96	28.64
15315	TOP 18" PVC	1745577.6872	624306.8256	27.09	30.89
15316	AP-5	1745579.2642	624259.5648	34.83	30.87
15317	TOP 18" PVC	1745578.1777	624205.8697	26.76	30.72
15318	TOP 18" PVC	1745578.6378	624157.1204	24.91	30.92
15321	CS-17 (18"PVC E-W INV.=22.13)	1745579.7427	624058.2979	SUMP 22.09	30.60
15322	TOP 18" PVC	1745581.0268	624000.2592	24.17	30.67
15323	18"x8" TEE	1745583.5576	623935.2521	26.48	30.81
15324	4" 90° BEND	1745585.8643	623933.9502	32.37	X
15325	4" 90° BEND	1745588.2755	623933.7853	32.17	X
15326	VALVE	1745586.8886	623933.9769	32.64	X
15327	2" VALVE	1745586.5621	623935.3880	32.63	X
15328	2" 90° BEND	1745587.5502	623935.0990	32.41	X
15329	2" 90° BEND	1745585.6484	623935.5495	32.45	X
15330	TOP 18" PVC	1745581.2366	623901.6394	27.25	31.57
15331	AP-4	1745579.8318	623852.5310	27.61	31.28
15332	TOP 18" PVC	1745578.7205	623801.3197	27.39	31.67
15333	TOP 18" PVC	1745577.4669	623752.9467	21.01	31.04
15334	TOP 18" PVC	1745575.8301	623715.5017	24.51	30.84
15335	TOP 18" INV	1745570.0120	623655.7326	22.65	X
15336	TOP 18" INV	1745569.8679	623652.6966	22.61	X
15337	CS-18 (18"PVC E-W INV.=22.63)	1745569.7841	623654.2121	SUMP 22.58	30.04
15338	TOP 18" PVC	1745568.3892	623606.5931	23.73	30.49
15339	TOP 18" PVC	1745567.9003	623556.4905	24.86	30.21
15340	TOP 18" PVC	1745569.0491	623504.7346	26.06	30.58
15341	2" 90° BEND	1745571.3706	623471.7881	32.35	X
15342	2" 90° BEND	1745571.4684	623469.7190	32.19	X
15343	2" VALVE	1745571.4565	623470.7231	32.50	X
15344	4" 90° BEND	1745573.2965	623472.3692	32.63	X
15345	4" 90° BEND	1745573.3161	623469.7168	32.52	X
15346	4" VALVE	1745573.5233	623471.5264	32.84	X
15347	18" VALVE	1745573.1870	623463.7067	28.13	X
15348	TOP 18" PVC	1745573.1653	623464.7250	27.18	X
15349	18"x18" TEE	1745574.5432	623457.3683	27.56	X
15367	18" INV	1745552.2784	624838.2850	21.84	X
15368	18" INV	1745552.5141	624841.1958	21.83	X
15369	AP-6	1745538.7671	624659.9254	28.11	29.94
15370	TOP AP-5	1745579.2878	624260.2427	28.41	X
15371	TOP 8" VALVE	1745591.7719	623934.5563	28.20	X
15372	TOP 8"	1745591.0460	623934.4157	27.47	X
15373	TOP 8"	1745630.5042	623936.7877	36.46	38.97
15376	TOP 8"	1745677.7506	623937.9748	47.39	51.14
15377	TOP 8"x4" TEE	1745714.9755	623936.4355	57.04	60.96
15378	EW-56	1745715.0643	623933.5811	60.63	60.89
15382	TOP 8"	1745726.6197	623937.9435	59.14	63.17
15383	TOP 8"	1745769.4876	623962.2477	67.01	70.24
15386	TOP 8"	1745806.7007	623988.4544	78.99	81.99
15387	TOP 8"	1745845.4728	624017.0390	92.48	91.34
15389	TOP 8"x4" TEE	1745908.6926	624058.9480	115.05	112.18
15390	EW-14R	1745908.8413	624062.3183	111.41	111.89
15394	TOP 8"	1745955.0000	624078.1475	121.70	125.67
15395	TOP 18" CMP	1745990.5558	624090.7209	132.49	136.58
15399	6"x4" TEE	1746601.4635	624124.3912	143.39	145.07
15400	AP-12	1746639.1972	624353.7700	140.82	X
15402	TOP 16"	1747005.7497	624369.8716	41.52	45.43
15406	HC-1A TRAP/6"x6"TEE	1747023.6387	624466.5396	37.34	41.97
15407	TOP 6"	1747005.1389	624458.9010	41.29	46.83
15410	16"x4" TEE/AIR/FM	1747032.1358	624486.5701	33.94	39.61
15411	16"x4" TEE	1747033.9055	624500.5768	33.48	39.33
15414	TOP 4"	1746984.8552	624492.0279	49.23	52.25
15417	TOP 6"	1746972.8966	624481.1332	50.02	55.86
15419	TOP 4" 90° BEND	1746931.9660	624492.1521	63.35	66.78
15420	EW-70	1746931.9170	624494.8812	65.28	X
15421	16"x4" TEE	1747028.0985	624465.3184	34.13	40.56
15422	HC-4A 6"x6" TEE	1747031.3065	624499.9720	35.75	40.24
15423	HC-2A TRAP/6"x6" TEE	1747037.4503	624538.8596	35.26	40.28
15427	16"x4" TEE	1747042.3710	624545.9026	32.01	38.16
15428	HC-5A TRAP/6"x6" TEE	1747037.8325	624551.6518	34.30	37.89
15429	TOP 6"	1747000.3877	624537.2586	43.04	47.63
15432	TOP 6"	1747003.9604	624565.5539	42.10	45.76

POINT NO.	DESCRIPTION	NORTHING	EASTING	ELEVATION	GROUND ELEV.
15433	TOP 6"	1746960.1770	624579.3431	53.47	58.60
15436	16"x4" TEE	1747048.5313	624582.8107	30.70	35.15
15437	16" 45° BEND	1747051.0150	624586.8554	30.65	32.57
15439	8" VALVE	1745586.9833	624365.8348	27.39	X
15440	TOP 8"	1745586.0681	624365.7365	26.69	X
15441	PT VCL-20	1745436.5944	623213.6238	30.72	X
16217	LINER REPAIR	1747054.8275	624591.9632	25.79	X
16218	LINER REPAIR	1747052.8939	624596.1608	25.85	X
16219	LINER REPAIR	1747047.7408	624592.1188	25.64	X
16221	LINER REPAIR	1747049.9480	624589.5541	25.97	X
16222	16"x6" TEE	1747060.2864	624592.123	29.58	X
16223	6" FLANGE	1747058.5397	624594.8715	29.86	X
16224	16"x4" TEE	1747046.2763	624559.8955	31.51	37.05
16228	4" LINE	1746996.3732	624566.1188	44.49	48.21
16229	4" LINE	1746925.1216	624566.8355	63.90	67.60
16232	4" LINE	1746855.5811	624562.2540	83.77	88.63
16233	4" RISER	1746788.0785	624557.2298	103.06	105.88
16235	6" LINE	1746960.2411	624579.1109	53.28	58.34
16238	6" LINE	1746964.2273	624626.1609	52.84	56.16
16239	6" LINE	1746980.1911	624623.5737	45.68	51.35
16242	6" LINE	1747007.3293	624615.8349	41.77	45.20
16244	6" TEE/TRAP	1747027.7816	624596.7407	38.16	40.30
16246	6" TEE/TRAP	1747030.7059	624603.5031	37.80	39.49
16249	4" VACUUM RISER	1747029.1293	624600.6739	38.66	X
16250	4" VACUUM RISER	1747028.6010	624599.4123	38.61	39.83
16251	4" LINE	1747035.9437	624592.9946	36.59	X
16252	16"x4" TEE	1747049.0559	624582.1966	32.63	35.15
16253	6" LINE	1747044.6519	624613.7385	32.52	35.43
16256	6" LINE	1747008.3492	624677.6089	39.13	41.96
16258	6" LINE	1746969.8632	624740.8308	46.47	50.12
16261	6" 90° BEND	1746930.3105	624803.7432	54.36	57.12
16262	HC-7A VACUUM RISER	1746934.3701	624803.6492	60.59	56.17
16264	16" 45° BEND	1747087.3178	624610.3106	28.10	30.25
16266	16" LINE	1747087.2075	624642.3718	26.80	X
16267	2" TEE	1747090.9961	624644.9060	25.56	31.45
16268	16" FLANGE	1747087.0276	624652.4797	26.60	X
16269	16" VALVE	1747087.0533	624654.1064	27.34	X
16270	AP-10	1747087.1380	624679.5529	25.94	30.90
16272	16" LINE	1747086.7804	624726.1666	32.46	31.15
16275	16" LINE	1747084.7199	624775.2010	31.10	30.56
16276	16" LINE	1747084.3326	624808.9660	22.19	28.75
16277	AP-3	1746098.7915	623501.6527	40.10	X
16279	18"x6" TEE	1745574.9682	623714.8419	24.61	30.84
16280	6" LINE	1745643.0206	623715.8188	36.45	39.78
16283	6"x4" 90° BEND	1745723.1024	623713.6084	56.48	60.08
16285	EW-58	1745722.1850	623710.1064	63.55	60.01
16287	8"X4" WYE	1745843.7563	624366.0614	93.72	X
16289	4" LINE W/AIR/FM	1745896.8208	624316.1909	106.31	109.78
16291	EW-24	1745945.8579	624281.3814	128.04	124.20
16292	4" 90° BEND	1745944.4549	624278.4317	120.01	123.51
16294	8" FLANGE	1746637.3759	624354.1738	140.90	142.52
16295	8"X6" REDUCER	1746636.5609	624354.2913	141.04	142.52
16297	10" TEE	1745603.9962	624661.5353	29.59	34.26
16298	10" TEE	1745607.3841	624660.9027	30.01	35.23
16301	10" FLANGE	1745609.7180	624660.5579	30.33	35.65
16302	6" TEE	1745607.7497	624664.1679	30.86	35.47
16305	6" TEE	1745654.8433	624652.1399	42.37	45.06
16306	4" TEE/RISER	1745657.0162	624650.7697	42.77	45.74
16308	WELL HC-5B DRIP TRAP	1745660.7040	624650.8298	39.64	47.14
16309	HC-3B DRIP TRAP	1745662.0497	624665.7217	40.83	47.94
16310	HC-6B DRIP TRAP	1745663.0189	624669.2451	41.27	48.09
16311	4" TEE/RISER	1745660.1051	624666.9560	44.03	47.30
16312	4" 90° BEND	1745660.5731	624669.4314	43.72	47.08
16318	6" TEE/RISER	1745660.8713	624601.4230	42.84	X
16319	4" TEE/RISER	1745661.2612	624600.7427	42.81	45.41
16320	4" TEE/RISER	1745664.2040	624608.1227	43.53	46.24
16321	4" 90° RISER	1745665.4314	624610.1968	43.95	46.72
16328	6" TEE	1745611.8652	624623.1929	30.68	36.07
16329	6" 45° BEND	1745614.8798	624624.1503	32.14	36.57
16333	4" LINE/2" LINE/4" LINE	1745615.3114	624605.5593	30.95	36.26
16334	4" LINE/2" LINE/4" LINE	1745629.0797	624555.9873	32.97	37.17
16337	4" LINE/2" LINE/4" LINE	1745645.3554	624509.8136	36.10	39.81
16338	2" 90° RISER	1745660.1165	624463.7986	38.79	43.25
16339	4" 90° RISER	1745658.6822	624464.0764	39.76	42.83
16340	4" 90° RISER	1745657.6142	624463.9619	39.83	42.89
16345	4" LINE	1746056.5872	624359.4968	142.11	144.30
16346	6" LINE	1746056.6291	624359.9817	142.20	144.30
16347	2" LINE	1746056.6604	624360.3624	142.16	X
16348	2" LINE	1746099.0587	624360.8369	143.30	X
16349	6" LINE	1746098.9138	624360.4305	143.55	X
16350	4" LINE	1746098.8561	624359.9709	143.50	X
16352	TEMP RD XING WEST HEADER	1746150.4768	624138.4667	144.53	X
16353	TEMP RD XING WEST HEADER	1746192.1463	624139.9499	145.40	X
16354	2" VALVE	1746977.7821	624311.3343	57.33	53.64
16357	16"HEADERCONPT/8"FLANGE	1747014.6564	624403.5993	35.63	42.22
16358	16" HEADER	1747084.4453	624811.0061	20.53	X
16359	2" TEE RISER	1747086.2519	624813.0460	20.42	28.76
16360	4" TEE/4" TEE	1747082.4643	624812.4169	20.45	28.81
16364	4" 90° BEND/4" 90° BEND	1747072.7564	624809.1511	30.05	29.50
16365	4" 90° BEND/4" 90° BEND	1747060.7616	624808.7516	30.55	29.80
16366	4" 90° BEND/4" 90° BEND	1747060.3039	624808.7630	32.47	29.80
16369	16IN HEADER/2"/4"	1747082.8947	624852.3131	21.78	29.04
16372	16IN HEADER/2"/4"	1747081.4758	624900.1551	23.09	28.95
16373	AP-11 8"	1747080.8265	624961.1578	24.67	29.60
16374	4"	1747081.2873	624960.8176	24.82	29.60
16375	2"	1747082.7112	624960.7656	24.77	29.60
16377	16"/2"/4" TERMINATION	1747083.3129	624998.0212	26.09	28.83
16379	HC-1B DRIP TRAP	1745664.6888	624601.9045	32.84	46.14
16380	HC-2B DRIP TRAP	1745667.9821	624607.7491	35.66	47.28
16381	HC-4B DRIP TRAP	1745667.9348	624610.7089	37.39	47.44

N

SCALE IN FEET

100 50 0 100 200

LEGEND

- LIMITS OF LINER
- LIMITS OF CONSTRUCTION
- 1080 — EXISTING CONTOURS (MAJOR)
- EXISTING CONTOURS (MINOR)
- LFG PIPE TO BE ABANDONED
- LFG PIPE ABANDONED IN PLACE
- NEW HDPE SDR 17 LFG HEADER (SIZE VARIES)
- HP — DENOTES HIGH POINT IN HEADER
- NEW HDPE SDR 11 LATERAL PIPE (SIZE VARIES)
- EXISTING LFG HEADER PIPE (SIZE VARIES)
- EXISTING LFG LATERAL PIPE (SIZE VARIES)
- EXISTING LFG HORIZONTAL PIPE (SIZE VARIES)
- EXISTING UNDERGROUND ELECTRIC
- EXISTING UNDERGROUND LEACHATE FORCEMAIN
- LCR-1 — EXISTING LEACHATE CLEANOUT RISER
- HC-7B — EXISTING HORIZONTAL LFG WELLHEAD
- EW-1 — EXISTING LFG WELL
- LCRS — EXISTING LEACHATE RISER SUMP
- CS-2 — EXISTING CONDENSATE SUMP
- EXISTING HEADER ISOLATION VALVE
- ISOLATION VALVE
- CS-2 — CONDENSATE SUMP
- EW-1 — LFG WELL
- EW-24 — CONNECTION TO EXISTING VERTICAL WELLS
- EW-16AR — UPSLOPE WELLHEAD
- AP-2 — ACCESS POINTS
- 30.64 20 — SURVEY MONUMENTS
- CP-3 — CONNECTION POINTS TO EXISTING LFG SYSTEM

CLIFFORD G. KOENIG
LICENSE
No. 64078
STATE OF FLORIDA
PROFESSIONAL ENGINEER

HDR
HDR Engineering, Inc.
200 W Forsyth St
Jacksonville, FL 32202
FLORIDA CA #00004213

ISSUE	DATE	DESCRIPTION
1	09/11	DRAFT

PROJECT MANAGER	C. LEBRON, P.E.
DESIGNED BY	M. AUSTIN
DESIGNED BY	
DESIGNED BY	
DRAWN BY	M. AUSTIN
CHECKED BY	
PROJECT NUMBER	0000000000170244

Volusia County
FLORIDA

CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA
NOT FOR CONSTRUCTION

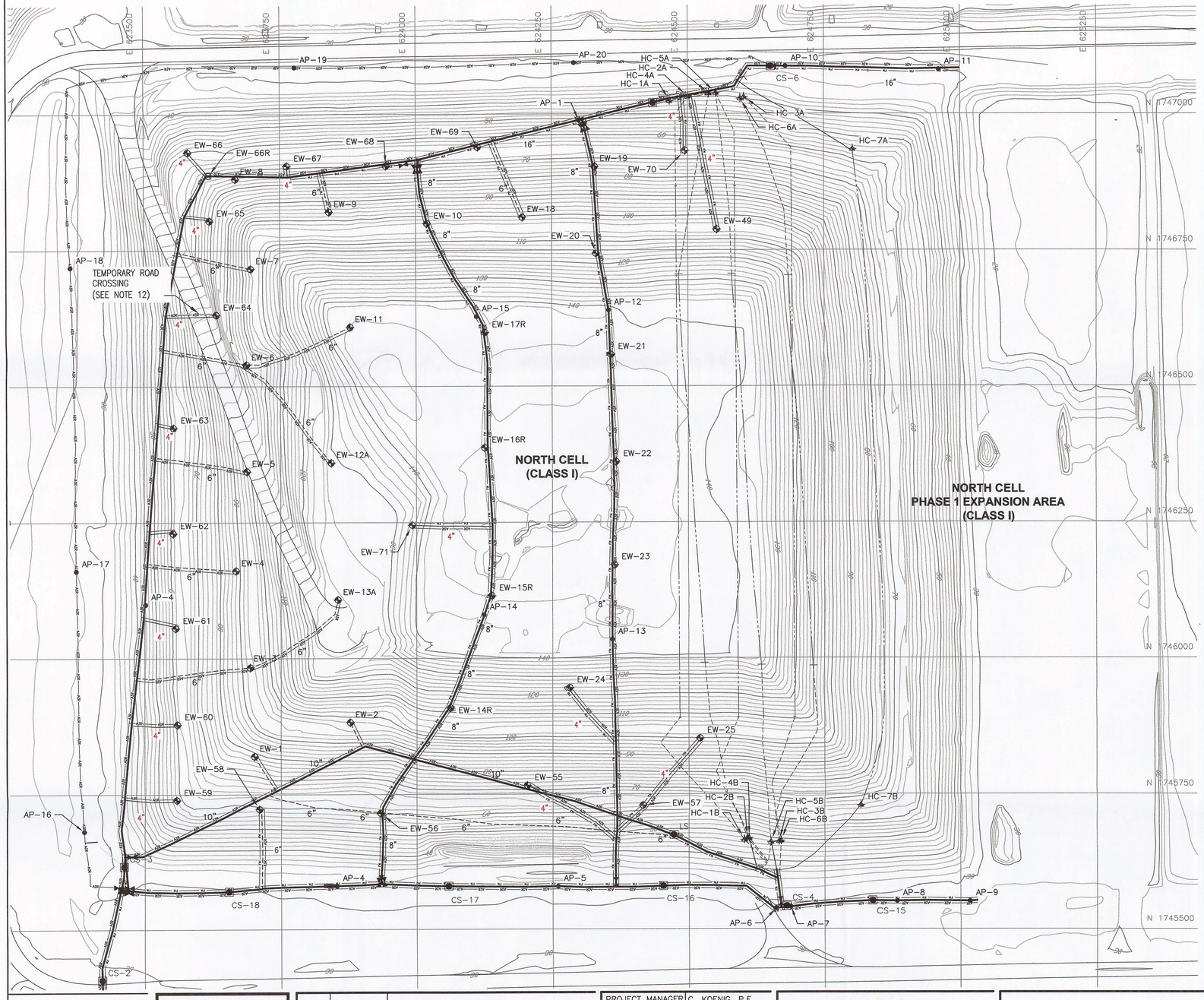
PHASE III - PART A
LFG SYSTEM EXPANSION

0 1" 2"

FILENAME	00LFG-01.dwg
SCALE	AS SHOWN

SHEET
00LFG-01-1

K:\CONST\Tomoka andfill\NorthCellCasPipes-DR12-1-11\Asbuilt\AS900 FC-01.dwg, 2 of 2, 6/12/2012 6:51:33 AM, DWG To PDF.pc3, 3-1



N

SCALE IN FEET

100 50 0 100 200

LEGEND

- 140 — EXISTING CONTOURS (MAJOR)
- EXISTING CONTOURS (MINOR)
- HDPE SDR 17 LFG HEADER (SIZE VARIES)
- HDPE SDR 11 LATERAL PIPE (SIZE VARIES)
- UGE — UNDERGROUND ELECTRIC
- L — L — UNDERGROUND LEACHATE FORCEMAIN
- HC-7B — HORIZONTAL LFG WELLHEAD
- ISOLATION VALVE
- CS-2 — CONDENSATE SUMP
- EW-1 — LFG WELL
- EW-16AR — UPSLOPE WELLHEAD
- AP-2 — ACCESS POINTS

CLIFFORD G. KOENIG LICENSE No. 64078 STATE OF FLORIDA PROFESSIONAL ENGINEER

NOTES:

1. AERIAL TOPOGRAPHY WAS TAKEN FROM AERIAL SURVEY PERFORMED BY AERIAL CARTOGRAPHICS OF AMERICA ON APRIL 27, 2012.
2. LIMITS OF LINER OBTAINED FROM THE TOMOKA LANDFILL LINER AS-BUILT DRAWING BY MAPTECH, INC. ON OCTOBER 4, 2005 AND FROM THE CLASS I CELL FILL SEQUENCING PLAN DRAWING PREPARED BY SCS ENGINEERS AND SUBMITTED TO FDEP ON AUGUST 14, 2009.
3. UTILITY INFORMATION OBTAINED FROM THE SPECIFIC PURPOSE SURVEY GAS LINE AS-BUILTS TOMOKA FARMS ROAD LANDFILL PREPARED BY SLIGER & ASSOCIATES, INC. ON MARCH 1, 2010.

HDR

HDR Engineering, Inc.
200 W Forsyth St
Jacksonville, FL 32202
FLORIDA CA #00004213

ISSUE	DATE	DESCRIPTION

PROJECT MANAGER	C. KOENIG, P.E.
DESIGNED BY	M. AUSTIN
DESIGNED BY	
DESIGNED BY	
DRAWN BY	M. AUSTIN
CHECKED BY	C. LEBRON, P.E.
PROJECT NUMBER	0000000000170244

Volusia County FLORIDA

CLASS I ACTIVE AREA
TOMOKA FARMS ROAD LANDFILL
VOLUSIA COUNTY, FLORIDA

PHASE III - PART A
RECORD DRAWING LFG SYSTEM

0 1" 2"

FILENAME	00LFG-01-2.dwg
SCALE	AS SHOWN

SHEET 00LFG-01-2