APPENDIX B

AEP – Great Bend IGCC Facility

Plot Plans

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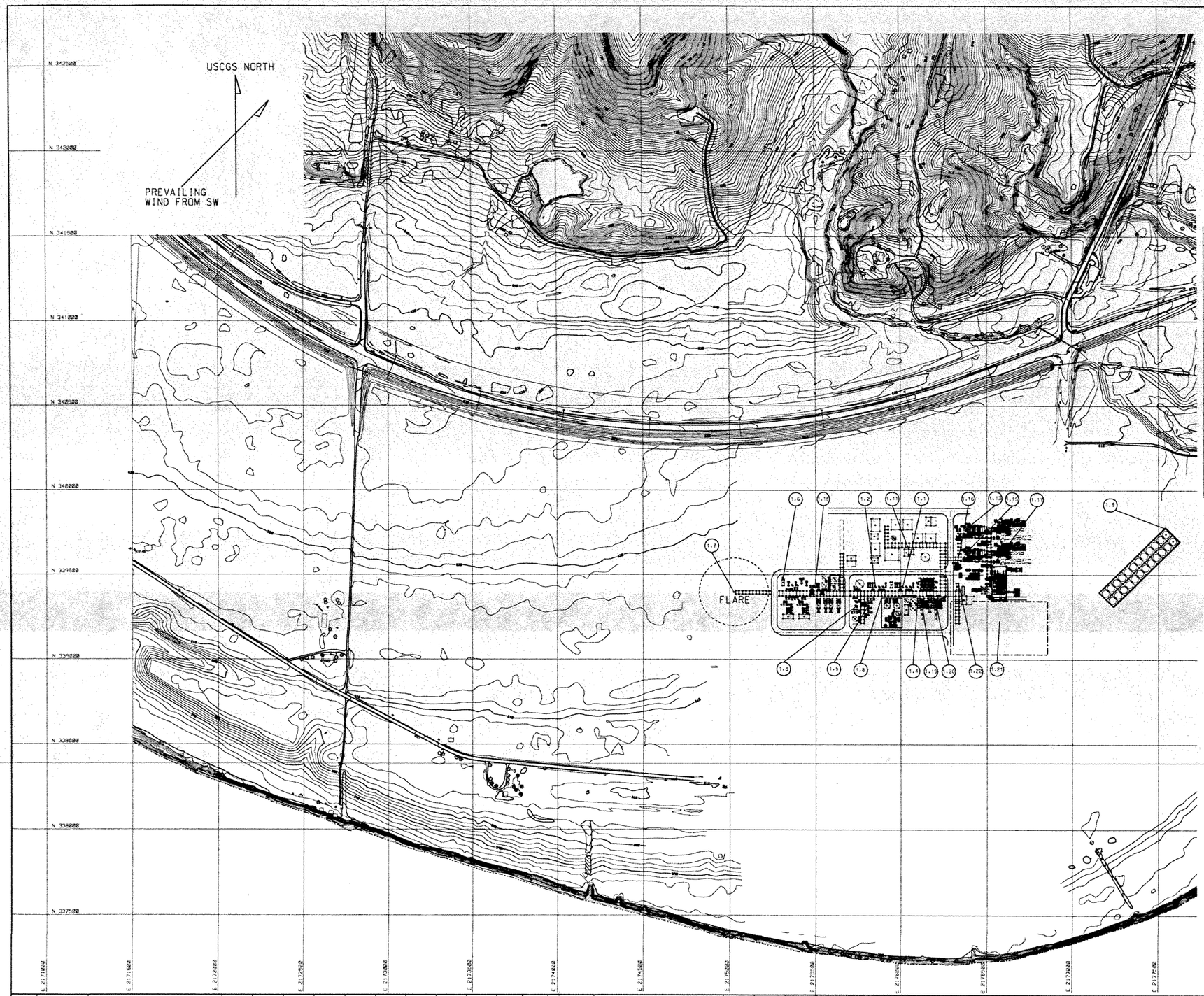


NOTES:

1. COORDINATE GRID AND BACKGROUND DATA BASED ON HENDERSON AERIAL SURVEY INC. DRAWING GREAT BEND NAD83/NAVD88 OHIO SOUTH 3/14/05
2. PREVAILING WIND DIRECTION BASED ON GAVIN PLANT PLUME OBSERVATIONS APRIL 1, 2002 TO OCTOBER 31, 2002
3. EQUIPMENT, BUILDINGS, OR STRUCTURES LISTED IN TABLE BELOW ARE IDENTIFIED AS FOLLOWS: (1.1) UNIT ITEM

UNIT	ITEM	DESCRIPTION	HAPS	OD-FT	L-FT	W-FT	H-FT	COORD DESCRIP	NAD COORD = E	NAD COORD = N	UTM COORD = E	UTM COORD = N
1	1	AGR ABSRB COL (10-MV-101)	N	13			140	C-LINE COLUMN	E 2176010	N 339429	E 1421291.414	N 1413937.092
1	2	AGR STRP COL (10-MV-201)	N	13			140	C-LINE COLUMN	E 2175852	N 339429	E 1421132.219	N 1413937.092
1	3	AGR STRP COL (10-MV-001)	N	13			140	C-LINE COLUMN	E 2175741	N 339316	E 1421019.103	N 1413825.366
1	4	GASIFIER STRUCTURE	N		140	55	280	NW CORNER OF STRUCT	E 2176096	N 339362	E 1421374.784	N 1413865.860
1	5	LTC AMMONIA STRP (07-MV-012)	N	10			80	C-LINE COLUMN	E 2175811	N 339319	E 1421088.841	N 1413827.369
1	6	THERM OXIDZR GAS STACK	Y	4.0			198	C-LINE STACK	E 2175310	N 339481	E 1420591.238	N 1413998.370
1	7	FLARE	Y	3.5			200	C-LINE STACK	E 2175024	N 339397	E 1420303.843	N 1413918.557
1	8	COAL GRND/ SLURRY BLDG	N		176	120	105	NW CORNER OF BLDG	E 2175887	N 339365	E 1421166.036	N 1413872.216
1	9	COOLING TOWER	N		540	114	61	NW CORNER OF BASIN	E 2177539	N 339777	E 1422823.993	N 1413256.830
1	10	COOLING TOWER FAN DECK	N				45					
1	11	ASU COLD BOX COL	N		35	35	175	NW CORNER OF STRUCT	E 2176044	N 339652	E 1421327.559	N 1413156.589
1	12	HRSG TRAIN 1 TO DRUM C-LINE	N				100	GRADE TO C-LINE DRUM				
1	13	HRSG TR 1 STACK	Y	18.6			175	C-LINE STACK	E 2176375	N 339770	E 1421660.400	N 1413269.067
1	14	HRSG TRAIN 2 TO DRUM C-LINE	N				100	GRADE TO C-LINE DRUM				
1	15	HRSG TR 2 STACK	Y	18.6			175	C-LINE STACK	E 2176375	N 339630	E 1421658.087	N 1413129.130
1	16	AUX BOILER STACK	Y	6			75	C-LINE STACK	E 2176325	N 339558	E 1421606.919	N 1413057.988
1	17	STG BLDG	N		200	80	90	NW CORNER OF BLDG	E 2176526	N 339552	E 1421807.730	N 1413049.670
1	18	GREY WATER STRP COL (16-MV-018)	N	8			100	C-LINE COLUMN	E 2175494	N 339322	E 1420773.742	N 1412943.049
1	19	GASIFIER VENT (ATM) TRAIN 1	Y	2			290	C-LINE GASIFIER	E 2176121	N 339336	E 1421399.383	N 1413839.759
1	20	GASIFIER VENT (ATM) TRAIN 2	Y	2			290	C-LINE GASIFIER	E 2176200	N 339336	E 1421478.307	N 1413838.153
1	21	FIREWATER PUMP STACK	Y	0.33			12	C-LINE STACK	E 2175574	N 339229	E 1421849.913	N 1413725.420
1	22	EMER. DIESEL GENERATOR EXHAUST	Y	1.16			14	C-LINE STACK	E 2176333	N 339451	E 1421613.324	N 1413950.807

0 100 200 300 400 500 750 1000
GRAPHIC SCALE IN FEET

FINAL LOCATIONS SUBJECT TO CHANGE DURING FEED

NO.	DATE	REVISION	BY	CHK'D	EGS	AREA ENGR	PEM	APPR	CLIENT
00G	03/09/06	UPDATED MODEL/CHART	REC		WCK	AOG	MNH	JB	
00H	03/13/06	UPDATED EQUIP. DIMEN.	REC		WCK	AOG	MNH	JB	
00J	03/31/06	THERM OXIDZR STACK HEIGHT INCREASE	REC	LH	WCK	AOG	MNH	JB	
00K	5/30/06	REVISED CHART INFO.	REC	MH	WCK	AOG	MNH	JB	
00E	1/26/06	REVISED CHART INFO.	REC		WCK	AOG	MNH	JB	
00F	2/23/06	REVISED CHART INFO.	REC		WCK	AOG	MNH	JB	

JOB NUMBER 25200-100

IGCC Alliance

AMERICAN ELECTRIC POWER
AEP IGCC PROJECT

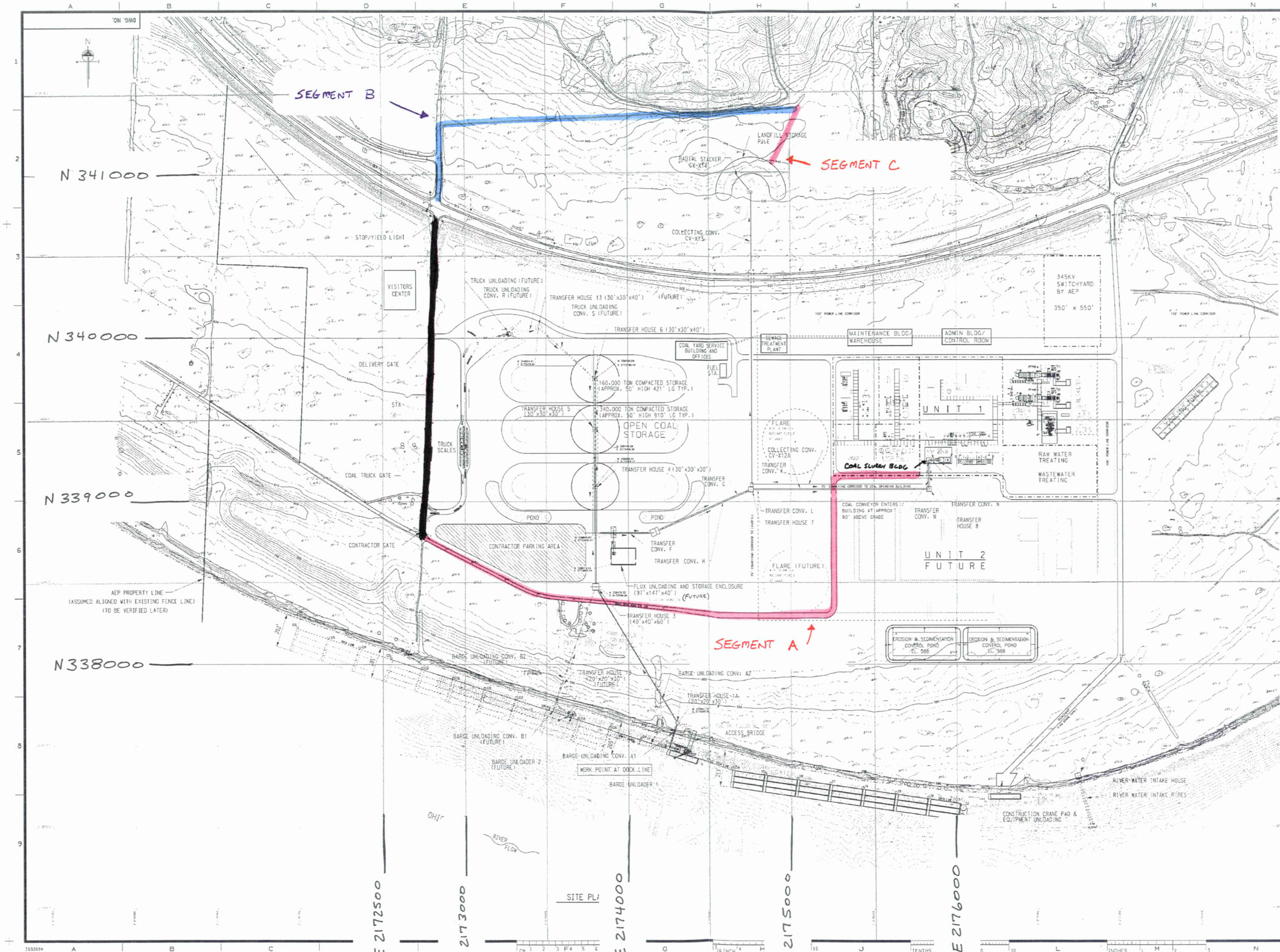
AEP GREAT BEND SITE
SITE PLAN - AIR EMISSIONS
TWO 629MW CONFIGURATION

22x34 SCALE: 1"= 300'
11x17 SCALE: 1"= 600'

DRAWING NO. H1-2000-00001

REV. 00K

O:\Great Bend\H1_2000_00001.dgn 05/30/2006 03:44:20 PM



GENERAL NOTES

- DO NOT SCALE THIS DRAWING
- WORK THIS DRAWING WITH SK071205B & SK071205C.

DATE	NO.	DESCRIPTION	APPD.
8/15/05	C	UPDATED AS PER GE/BECHTEL STD. PLANT ARRANGEMENT	
7/22/05	B	ADDED CONSTRUCTION CRANE PAD & RIVER WATER INTAKE PER JLB	
7/15/05	A	ISSUED FOR PRELIMINARY PERMIT CALCULATIONS	

REVISIONS

si/stru/igcc generation/great_bend/sk071205A.dgn

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PROPOSED GREAT BEND OHIO
IGCC FACILITY
-PRELIMINARY-

E-CRANE BARGE UNLOADER AND CELL LOCATION PLAN

DWG. NO. SK071205A-C

SCALE: 1"=200'
CIVIL ENGINEERING
ORIGINAL SIGNED BY:
DR: K.Hinthorne
CH:
ENGR:
PROJ ENGR: SJT
DATE: 7/15/05
APPROVED BY:

AEP AMERICAN ELECTRIC POWER
AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215

\Great Bend\SK071205A.dgn 2/20/2006 9:06:19 AM

DWG. NO. I-30500-XX

N 343500
N 343000
N 342500
N 342000
N 341500
E 2176500
E 2176000
E 2175500
E 2175000
E 2174500
E 2174000

RELOCATED STREAM TYPE L CHANNEL
PCC-1
CULVERT NO. 1
PDC-1
RELOCATED STREAM BEGIN TYPE M CHANNEL
RISER STRUCTURE BARREL INV. ELEV. 644.0
BARREL OUTLET ELEV. 642.0
EMERGENCY SPILLWAY CONTROL SECTION ELEV. 646.5
EMERGENCY SPILLWAY OUTLET SECTION
RISER STRUCTURE BARREL INV. ELEV. 640.0
BARREL OUTLET ELEV. 632.0
FOR TYPICAL LANDFILL BENCH AND SLOPES SEE TYPICAL LANDFILL CROSS SECTION DETAIL 1/5F
TYPICAL FRONT TOE BERM SEE DETAIL 2/7B
SEDIMENT COLLECTION POND (CELL 1)
SEDIMENT COLLECTION POND (CELL 2)
CULVERT NO. 3
LEACHATE STORAGE POND
PDC-4, TYPE D CHANNEL
TYPICAL CAP SYSTEM SEE DETAIL 6/7A
PCC-1 (TYP) SEE DETAIL 3/7F
PDC-1
TYPICAL PERIMETER BERM SEE DETAIL 3/7B
PDC-3, BEGIN TYPE A CHANNEL
PDC-2, BEGIN TYPE A CHANNEL
TYPE C CHANNEL
PCC-2, BEGIN TYPE G CHANNEL
CULVERT N
SEGMENT C
CULVERT NO. 5 SEE DETAIL (TYP) 6/7F
CULVERT NO. 2
PDC-3, BEGIN TYPE C CHANNEL
ACCESS ROAD SEE DETAIL 2/7I
HAUL ROAD SEE DETAIL 1/7I
APPROXIMATE END OF ASPHALT PAVING
TYPE A CHANNEL
SEGMENT D
SEGMENT E
PDC-2
PCC-3, TYPE B CHANNEL
WASTE CONVEYOR UNLOADING/STACKING AREA
LANDFILL HAUL ROAD SEE DETAIL 3/7I
PCC-2, BEGIN TYPE H CHANNEL
PDC-2, BEGIN TYPE C CHANNEL
HORIZONTAL LIMIT OF VEGETATIVE SOIL COVER
PCC-2, BEGIN TYPE G CHANNEL
PCC-2, BEGIN TYPE H CHANNEL
PDC-2, BEGIN TYPE B CHANNEL
PCC-1, TYPE J CHANNEL
PDC-1, TYPE E CHANNEL

MAP REFERENCES
AERIAL MAPPING PROVIDED BY HENDERSON AERIAL SURVEYS, INC. MARCH 14, 2005.

HORIZONTAL DATUM IS THE NORTH AMERICAN DATUM OF 1983 (NAD 1983), OHIO SOUTH ZONE.
THE VERTICAL DATUM IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

SCALE 1"=100'
100' 0 100' 200'

LEGEND

EXISTING

- SPOT ELEVATION
- 2' CONTOUR
- 10' CONTOUR
- DEPRESSION CONTOUR
- STREAM
- STRUCTURE AND/OR BUILDING
- FENCE
- POLE
- IMPROVED ROAD
- UNIMPROVED ROAD
- TRAILS
- PROPERTY LINE AND/OR RIGHT OF WAY BOUNDARY
- GAS PIPELINE
- TELEPHONE CABLE
- OIL AND/OR GAS WELL

PROPOSED

- PROPOSED 2' CONTOUR
- PROPOSED 10' CONTOUR
- LIMIT OF VEGETATIVE SOIL COVER
- PERMANENT COLLECTION CHANNEL (PCC)
- PERMANENT DIVERSION CHANNEL (PDC)
- PROPOSED HAUL ROAD
- PROPOSED ACCESS ROAD
- OUTLET PROTECTION
- DETAIL IDENTIFICATION NUMBER AND LOCATION / DRAWING NUMBER ON WHICH DETAIL IS DRAWN

NOTES:
1. FOR CHANNEL SCHEDULE, CULVERT SCHEDULE AND OUTLET PROTECTION SCHEDULE SEE SHEET 7F.
2. FOR SEDIMENT COLLECTION POND DETAILS SEE SHEET 7G.
3. FOR LEACHATE STORAGE POND DETAILS SHEET 7D.
4. FOR TYPICAL LANDFILL CROSS SECTION SEE DETAIL 1/5F
5. FOR LANDFILL CROSS SECTIONS SEE SHEETS 5F AND 5G.
6. FOR CAP SYSTEM DETAILS SEE SHEET 7A AND 7B.

GRADING SHOWN ON THIS SHEET

- 30" VEGETATIVE SOIL COVER
- 24" RECOMPACTED SOIL BARRIER
- VARIES - LANDFILLED WASTE
- 12" LCS PROTECTIVE COVER
- 12" LEACHATE COLLECTION SYSTEM
- COMPOSITE LINER SYSTEM
- 12" ENGINEERED SUBBASE
- VARIES - PREPARED SUBGRADE

DATE	NO.	DESCRIPTION	APPD.
	A	ISSUED FOR PERMIT	

REVISIONS

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COLUMBUS SOUTHERN POWER COMPANY

IGCC EAST PLANT

MEIGS CO. (GREAT BEND), OHIO

GREAT BEND LANDFILL

FINAL CAP CONTOURS AND SURFACE WATER CONTROL STRUCTURES

DWG. NO. I-30500-XX-A

O. E. P. A. DRAWING NO. 4G

gai consultants
PITTSBURGH OFFICE 385 EAST WATERFRONT DRIVE, HOMESTEAD, PA 15120-5005

DRAWN ____ APPROVED ____
CHECKED ____ DATE ____
TASK NO. ____
PROJECT NO./DASH NO. 2005-299-40
DRAWING NO. E-M010
SCALE 1" = 100' SHT. NO. ____ OF ____ REV

SCALE: CIVIL ENGINEERING DIVISION
DRN. CHK. ENGR. PROJ. ENGR. DATE
APPROVED BY

AEP AMERICAN ELECTRIC POWER
1 RIVERSIDE PLAZA COLUMBUS, OH 43215

SYSTEM DATE: 4/20/2008
SYSTEM TIME: 10:23:56 AM
IGS1092