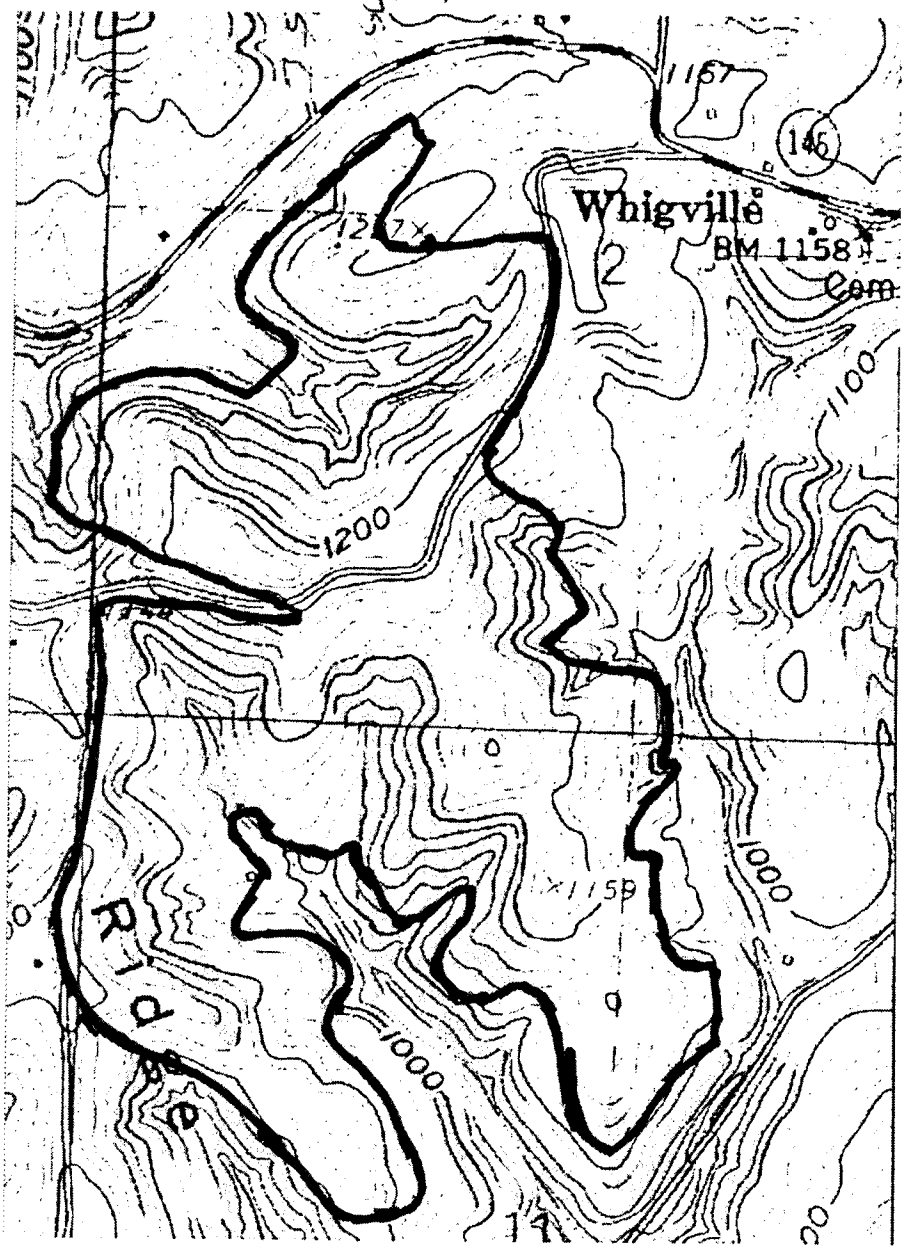
The following document is not readable via Optical Character Recognition. For more information or if you require the document to be read aloud please call: 304-399-5353

LRH-2009-988 East Fork Duck Creek

Exhibit 1 Project Location



B&N Coal, Inc.
Whigville IV Surface Coal Mine
Sections 2, 3 and 11 Marion Township
Noble County, Ohio

Sarahsville USGS 7 ½ Minute Quadrangle Map
Scale= 1:18056

Project Boundary

Exhibit 2. LRH-2009-988-East Fork Duck Creek Proposed discharges of fill material into waters of the United States

Stream ID	Flow Regime	Stream Station	Mine Through	Permanent Dam for Pond	Temporary Dam for Pond	Haul Road Temporary Culvert	Rock Channel Protection
1	I	33+65 to 34+30					65
	I	34+30 to 35+50			120		
	I	35+50 to 38+90					
	I	38+90 to 39+90					100
	I	39+90 to 41+10				120	
	I	41+10 to 41+66	56				
	E	41+66 to 43+84	218				
5	E	7+85 to 11+49	364				
6	E	0+00 to 1+96	196				
7	E	0+00 to 0+72	72				
21	I	0+00 to 0+60	60				
10	I	3+85 to 4+85					100
	I	4+85 to 6+05			120		
	I	6+05 to 9+00					
	I	9+00 to 9+50					50
	I	9+50 to 10+07				57	
	E	10+07 to 10+70				63	
	E	10+70 to 15+50	480				
11	E	1+25 to 2+64	139				
	E	0+00 to 1+25					
12	I	0+00 to 0+50					50
	I	0+50 to 1+70				120	
	I	1+70 to 4+39	269				
	E	4+39 to 6+37	198				
13	E	0+00 to 2+65	265				
14	I	0+00 to 0+32	32				
	E	0+32 to 1+87	155				
15	E	0+00 to 1+47	147				

E-Ephemeral, I-Intermittent

Exhibit 2. LRH-2009-988-East Fork Duck Creek Proposed discharges of fill material into waters of the United States

Stream ID	Flow Regime	Stream Station	Mine Through	Permanent Dam for Pond	Temporary Dam for Pond	Haul Road Temporary Culvert	Rock Channel Protection
16	I	0+00 to 0+75				75	
	I	0+75 to 1+80	105				
	E	1+80 to 6+17	437				
17	I	0+00 to 0+90					90
	I	0+90 to 1+50			60		
17	E	1+50 to 1+84		34			
	E	1+84 to 1+99					
C17C	I	9+30 to 9+40	10				
C18	I	9+40 to 12+41	301				
18	E	0+50 to 4+71	421				
	E	0+00 to 0+50					
C19	I	4+75 to 5+80	105				
19	E	0+00 to 3+04	304				
C20	I	4+00 to 5+40	140				
20	E	0+60 to 1+75	115				
22	E	0+00 to 0+50					50
	E	0+50 to 1+50	100				
23	I	5+70 to 6+70					100
	I	6+70 to 7+90			120		
	I	7+90 to 11+70					
	I	11+70 to 14+00					230
	I	14+00 to 15+00				100	
	I	15+00 to 18+43	343				
	E	18+43 to 23+94	551				
26	I	0+00 to 1+25					
	I	1+25 to 2+25					100
	I	2+25 to 3+50				125	
	I	3+50 to 5+86	236				

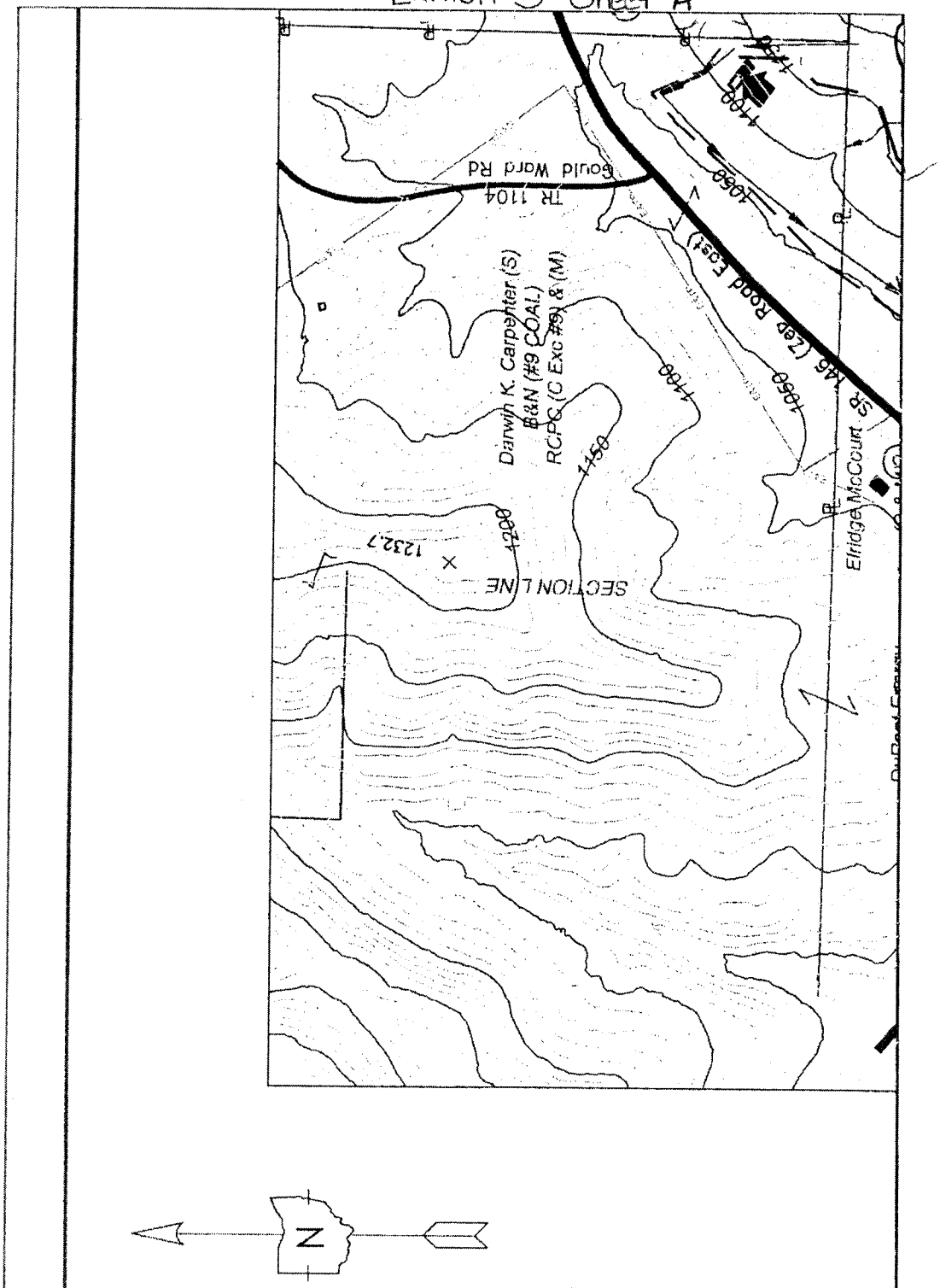
E-Ephemeral, I-Intermittent

Exhibit 2. LRH-2009-988-East Fork Duck Creek Proposed discharges of fill material into waters of the United States

Stream ID	Flow Regime	Stream Station	Mine Through	Permanent Dam for Pond	Temporary Dam for Pond	Haul Road Temporary Culvert	Rock Channel Protection
26	E	5+86 to 7+64	178				
27	I	0+00 to 1+00					
	I	1+50 to 2+6	56				
28	E	0+00 to 0+53	53				
29	E	0+00 to 2+36	236				
33	E	2+50 to 3+52	102				
36	I	0+00 to 1+60	160				
	E	1+60 to 3+64	204				
37	I	0+00 to 0+35	35				
38	I	0+00 to 0+40					
	I	2+50 to 3+00					50
	I	3+00 to 3+50				50	
	I	3+50 to 6+7	257				
	E	6+07 to 6+91	84				
39	I	0+50 to 1+29	79				
40	I	7+00 to 9+46	246				
40A	I	0+00 to 1+00	100				
42	E	1+50 to 2+36	86				
		Total Linear Feet	7695	34	420	710	985

E-Ephemeral, I-Intermittent

Exhibit 3 Sheet A

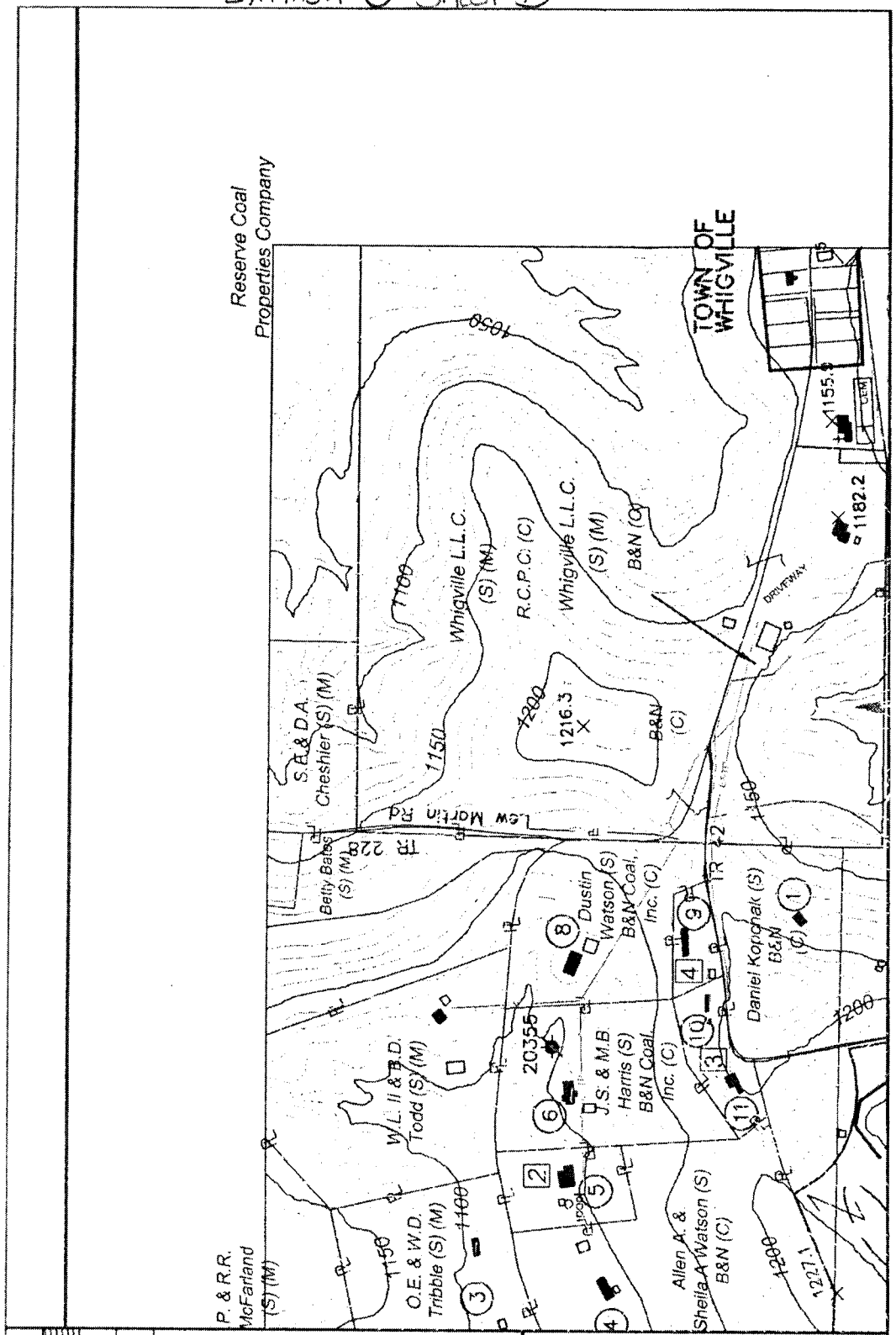


A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kleski Environmental Services
P.O. Box 812 Racine, OH 45771
Phone: (740) 949-2240

Exhibit 3 Sheet B

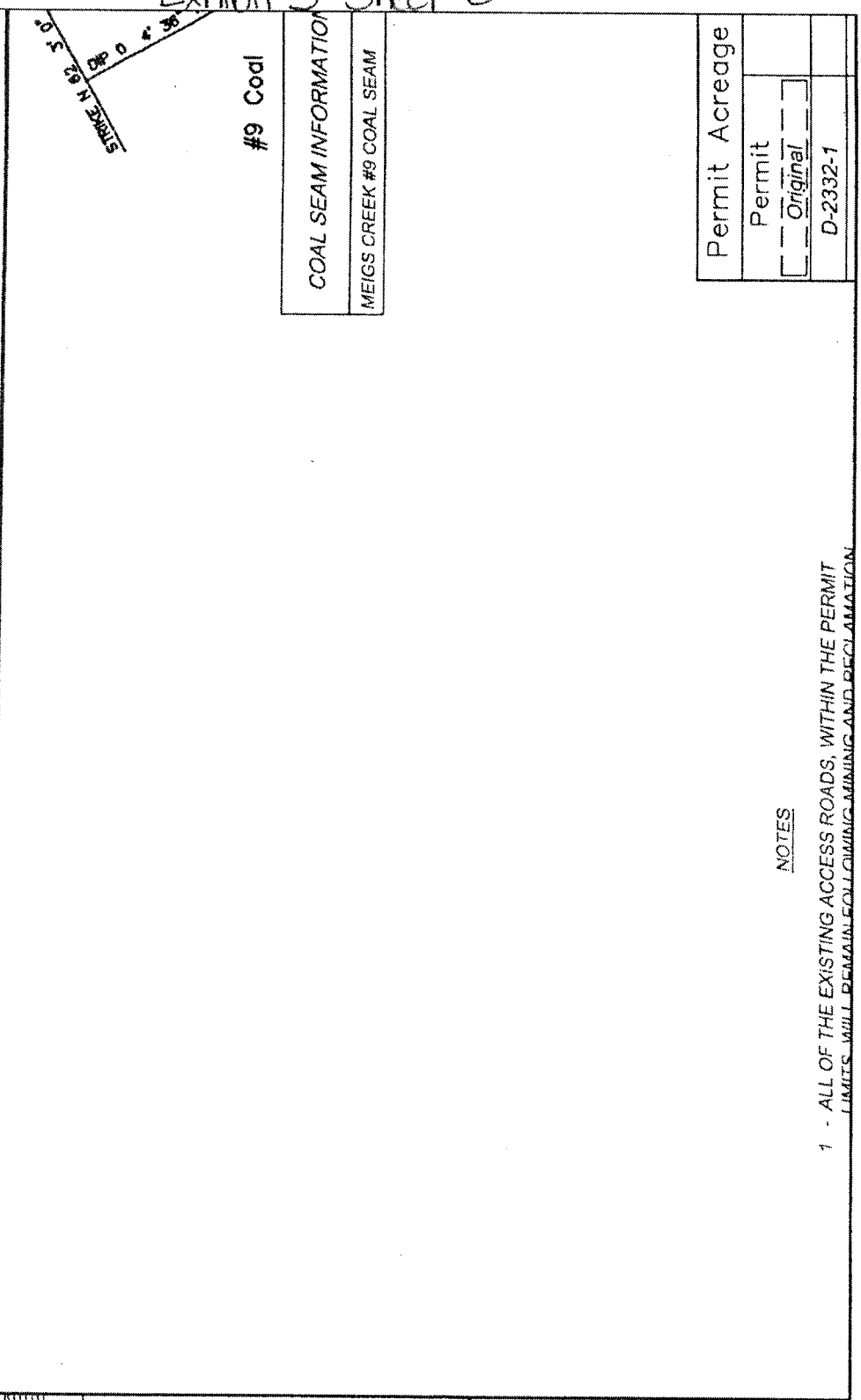


A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kleski Environmental Services
P.O. Box 812 Racine, OH 45771
Phone: (740) 949-2240

Exhibit 3 Sheet C

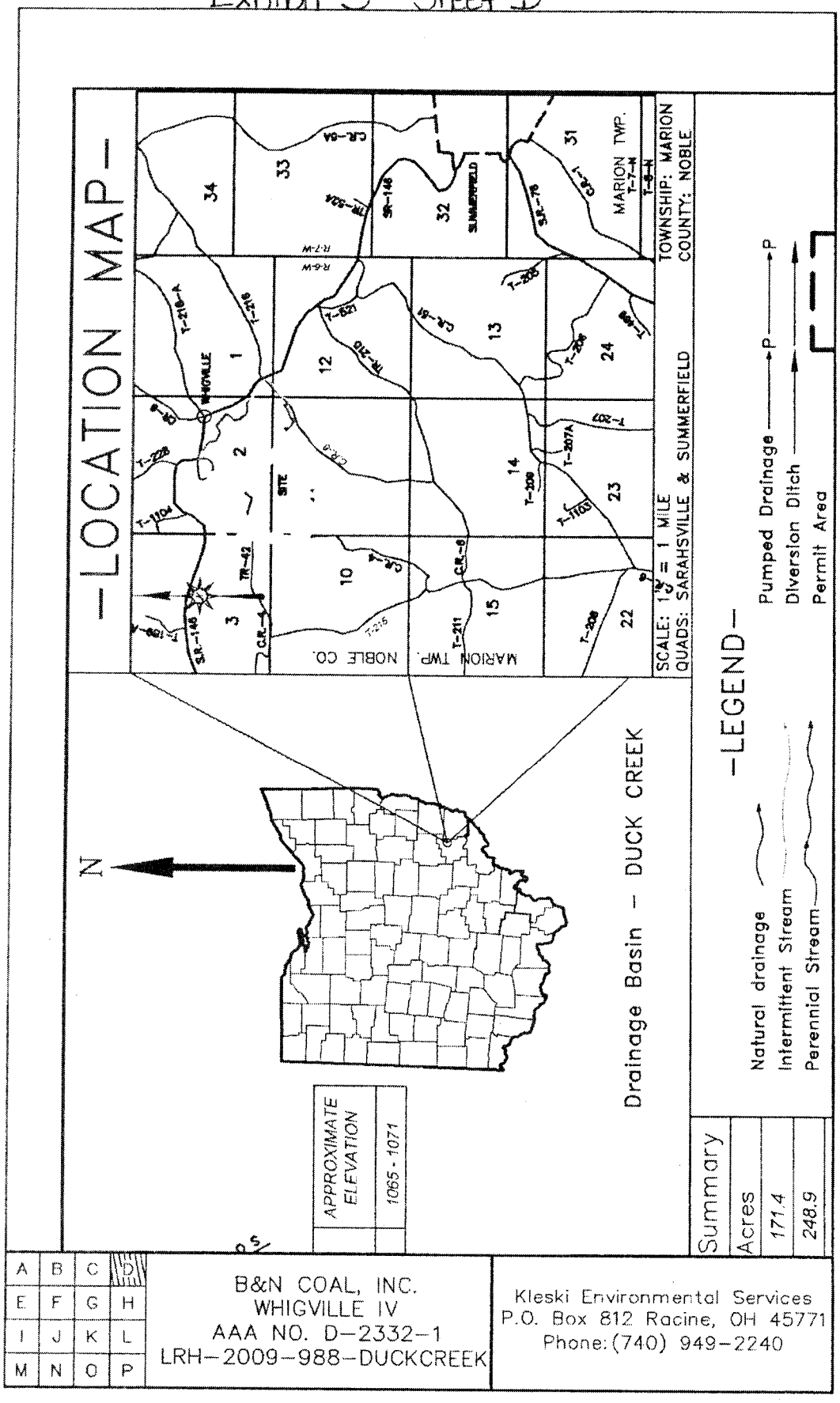


A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kleski Environmental Services
P.O. Box 812 Racine, OH 45771
Phone: (740) 949-2240

Exhibit 3 Sheet D



A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kleski Environmental Services
P.O. Box 812 Racine, OH 45771
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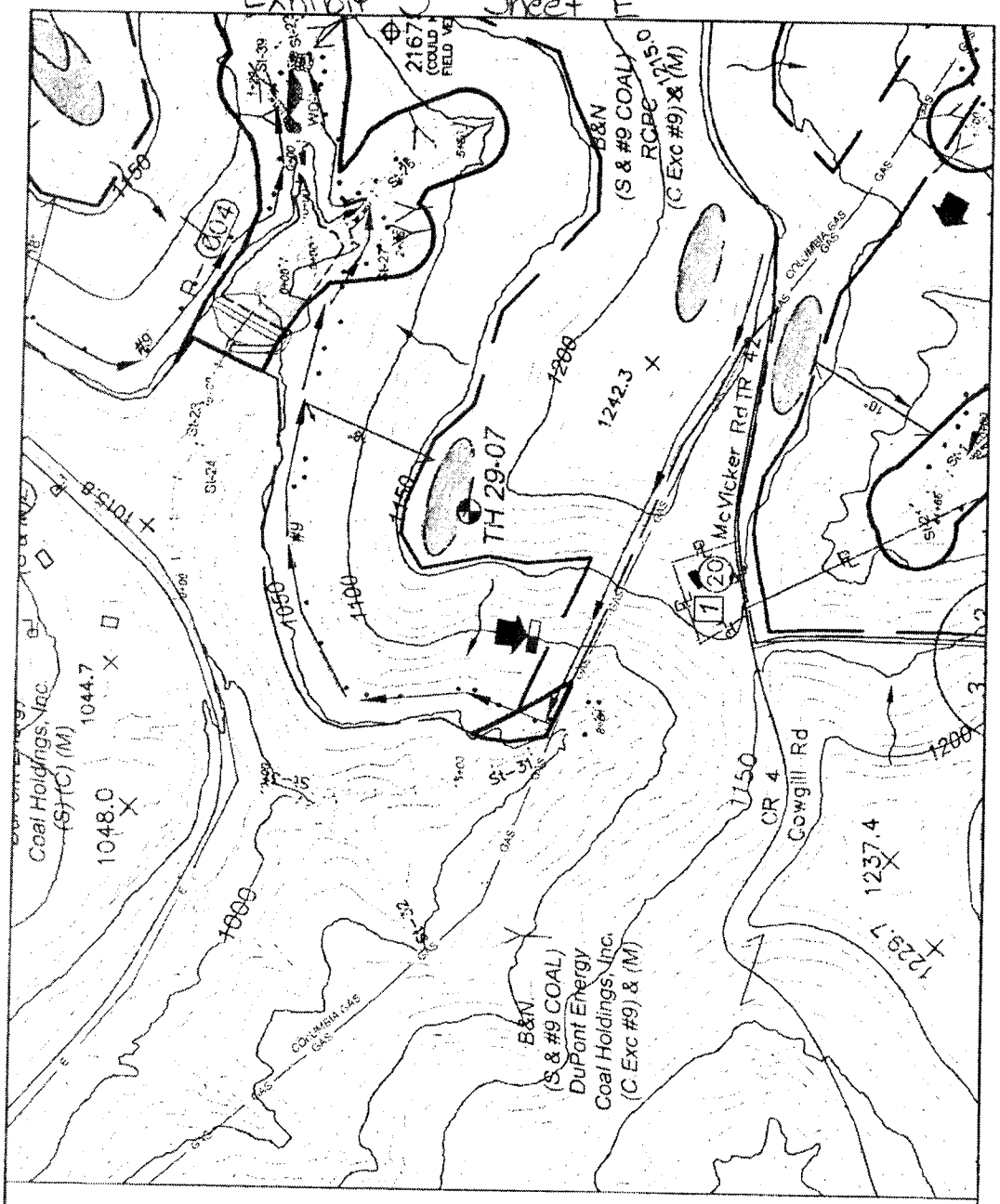
Exhibit 3 Sheet F



A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kleski Environmental Services
P.O. Box 812 Racine, OH 45771
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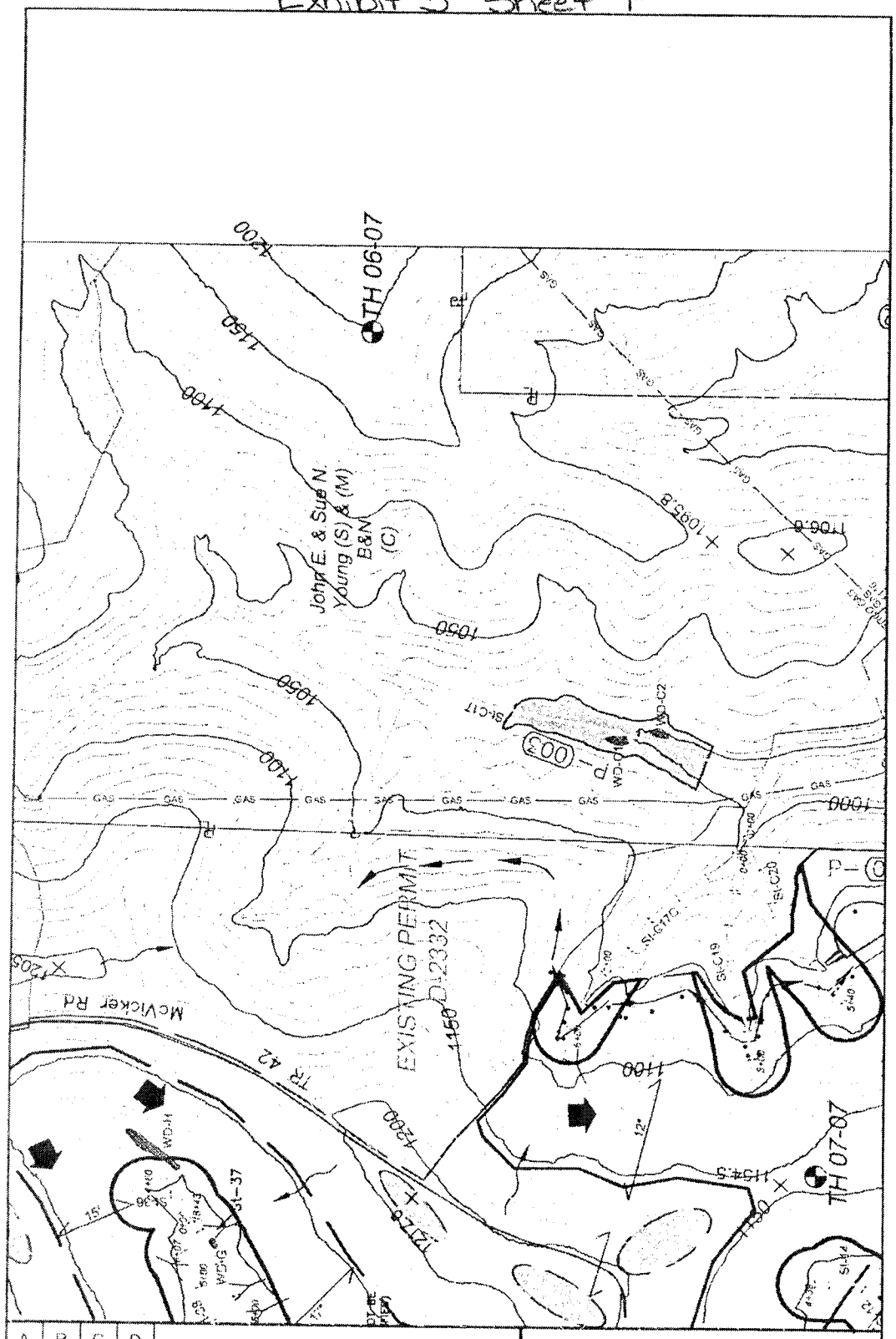
Exhibit 3 Sheet F



A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kleski Environmental Services
P.O. Box 812 Racine, OH 45771
Phone: (740) 949-2240

AS ACCESS ROADS.

2 - THE FINAL HIGHWALL WILL BE NO CLOSER THAN 50' OF THE TRAVELED PORTION OF NOBLE COUNTY ROAD #4 (COWGILL ROAD).

LANDOWNERS

1 - JOSHUA ZWISLER (S & M)
2 - MALLORY WATSON (S), B&N Coal, Inc. (C)
3 - K. SAILING (S), B&N Coal, Inc. (C)
4 - R.F. Jr. & K. WHETSTONE (S), B&N Coal, Inc. (C)

M.O.G. - Marion Oil & Gas
O.F.G. - Ohio Fuel Gas Co.
B&N - B & N Coal, Inc.
RCPC - Reserve Coal Properties Company
CCC - Consolidation Coal Co.
CNX - CNX Marine Terminals, Inc.

Existing Permit Total	
D-2332-1 Application Acreag	
#9 Strip Coal:	
Existing Permit Area	
Total Adjacent Area Permit	
New Permit Total	

PRE MINING LAND USE

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kleski Environmental Services
P.O. Box 812 Racine, OH 45771
Phone: (740) 949-2240

Exhibit 3 Sheet 6

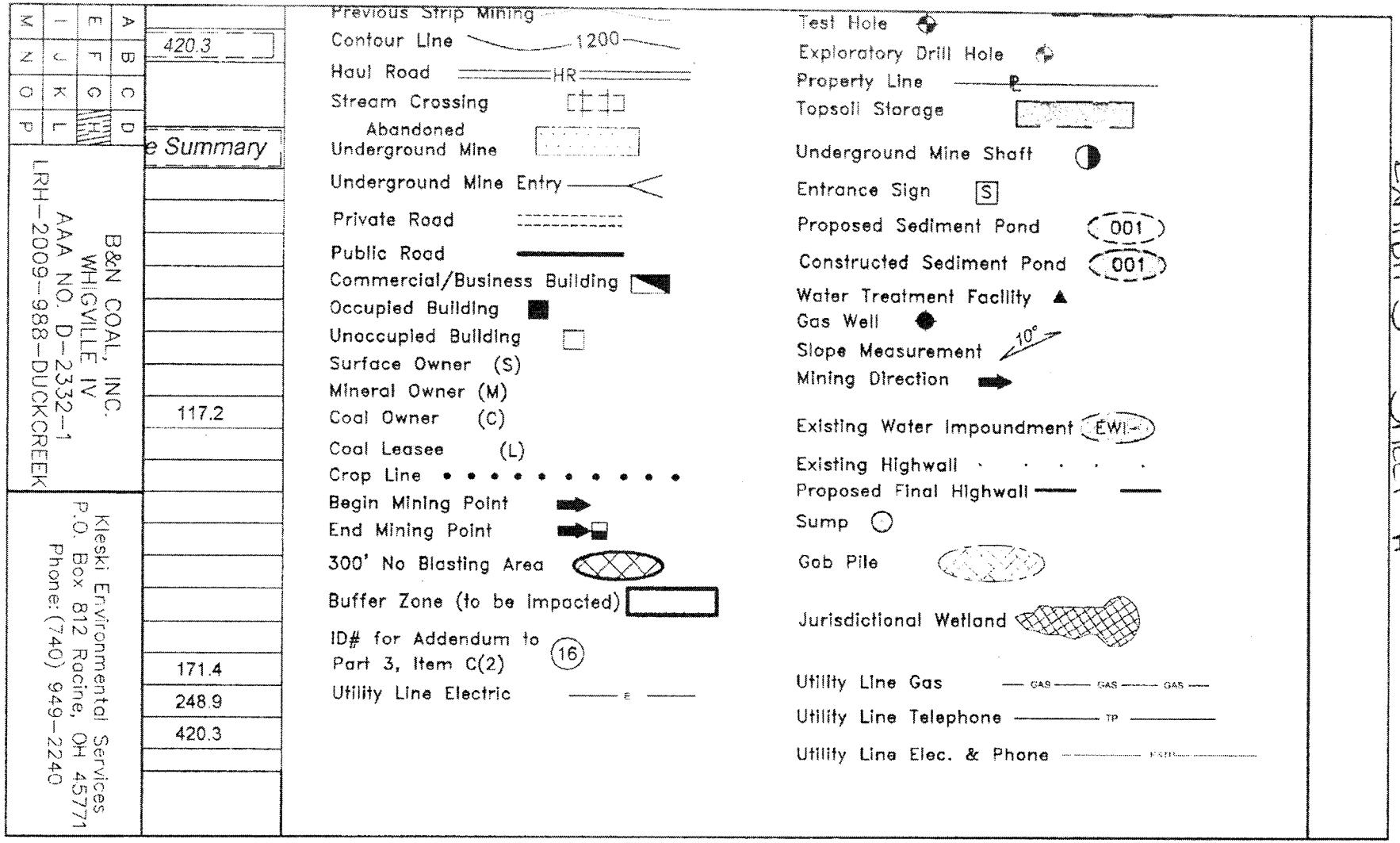
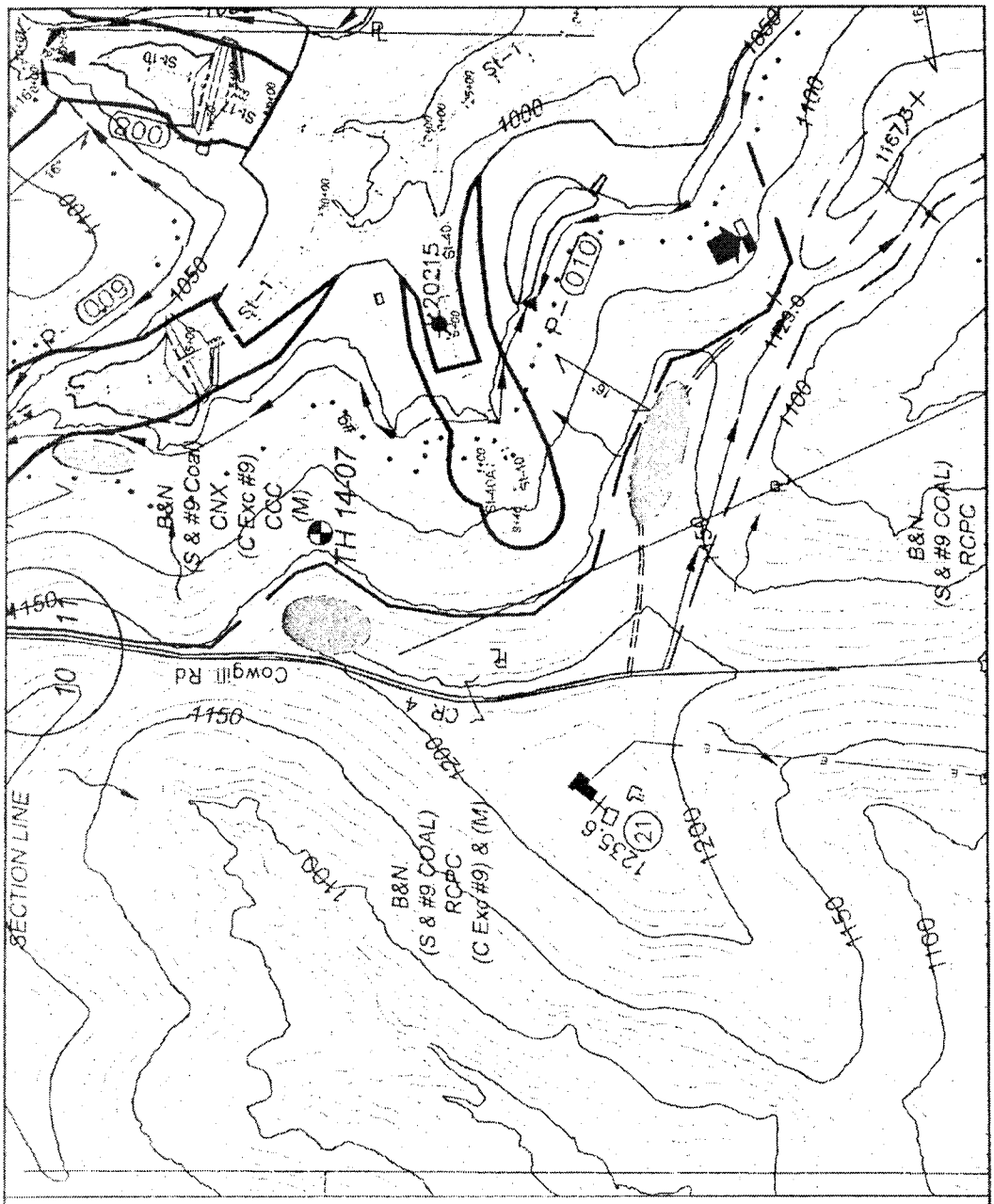


Exhibit 3 Sheet H

Exhibit 3 Sheet I

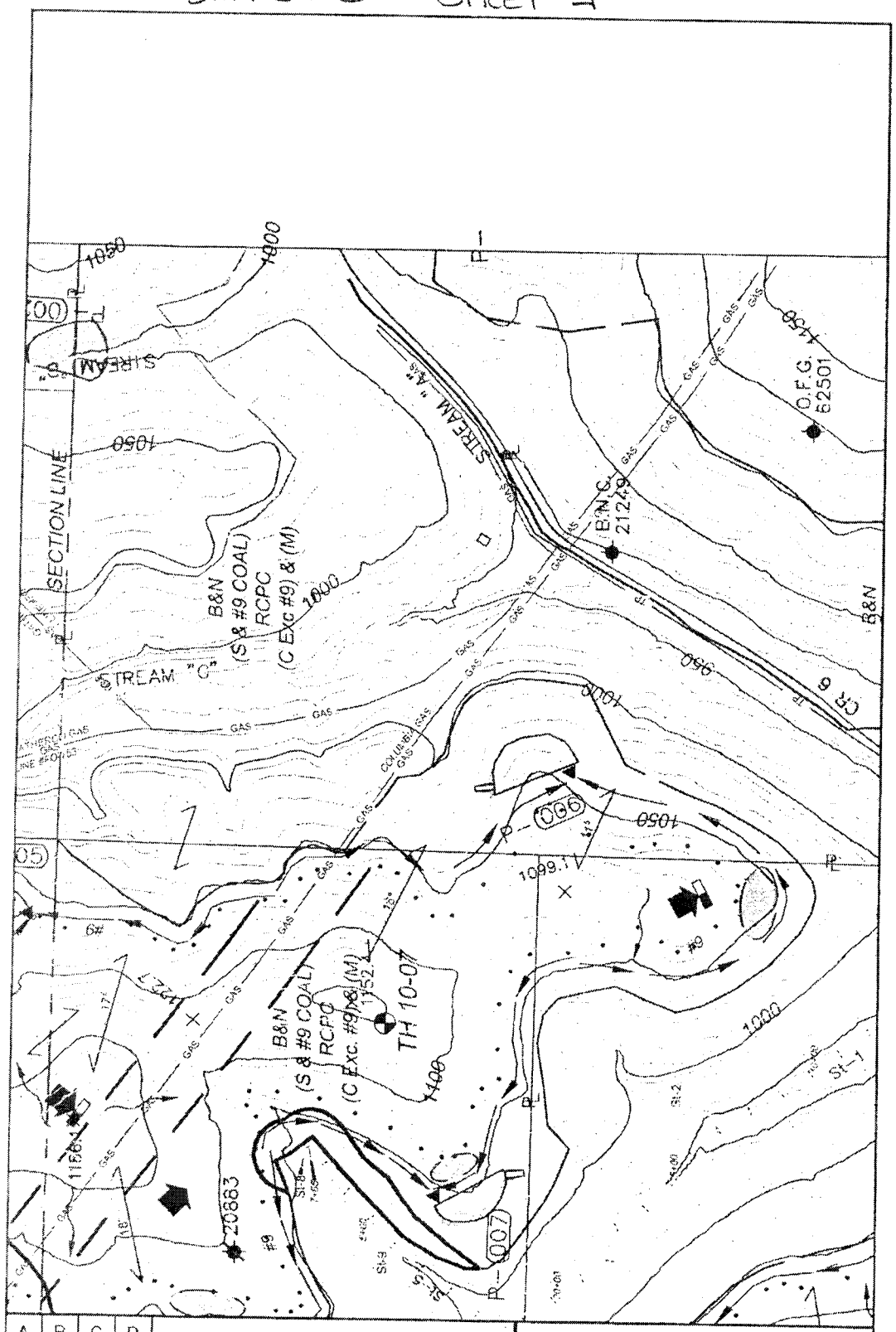


A	B	C	D
E	F	G	H
	J	K	L
M	N	O	P

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kleski Environmental Services
P.O. Box 812 Racine, OH 45771
Phone: (740) 949-2240

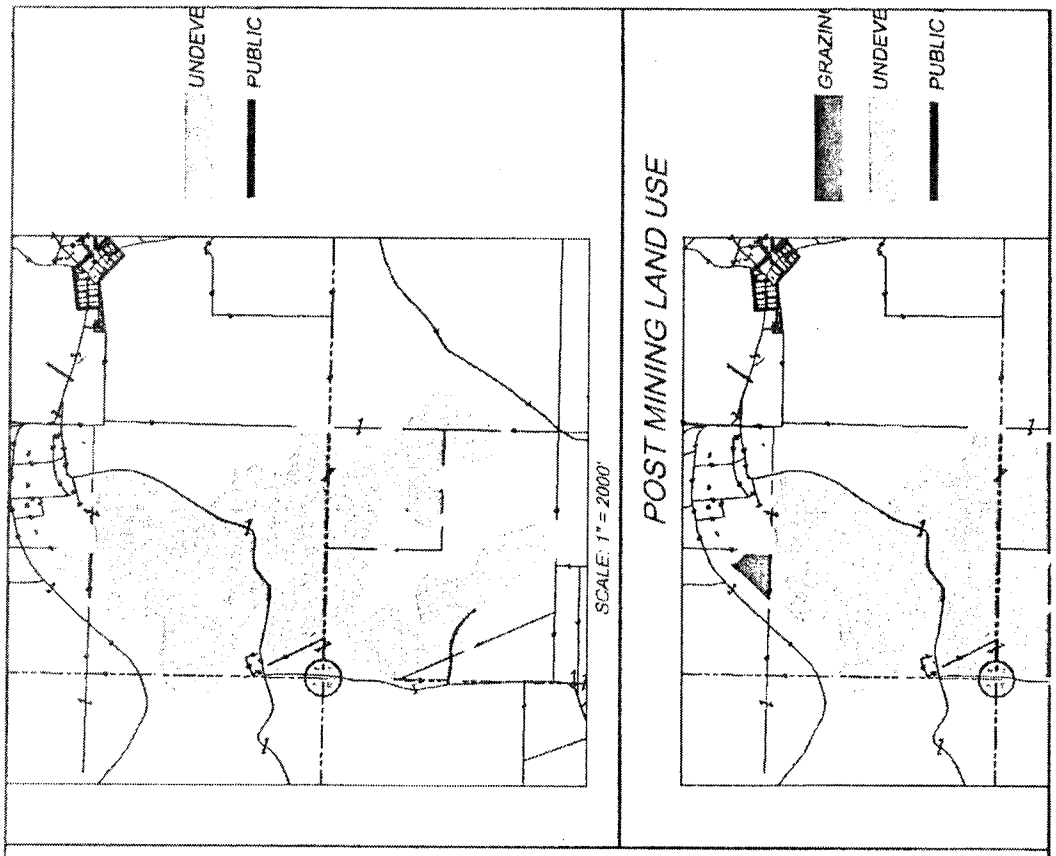
Exhibit 3 Sheet I



B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kleski Environmental Services
P.O. Box 812 Racine, OH 45771
Phone: (740) 949-2240

Exhibit 3 Sheet K



A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kleski Environmental Services
P.O. Box 812 Racine, OH 45771
Phone: (740) 949-2240

Exhibit 3 Sheet L

I, the undersigned do hereby certify that this map is correct and shows to the best of my knowledge and belief, all of the information required by Chapter 1513 of the Revised Code and Rules adopted thereunder.

PROFESSIONAL SURVEYOR

PROFESSIONAL ENGINEER

Acknowledged before me a Notary Public, this _____ day of _____ 20__

LOPED = 248.0 AC.

OAD = 0.9 AC.

LAND = 4.4 AC.

LOPED = 243.6 AC.

OAD = 0.9 AC.

A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

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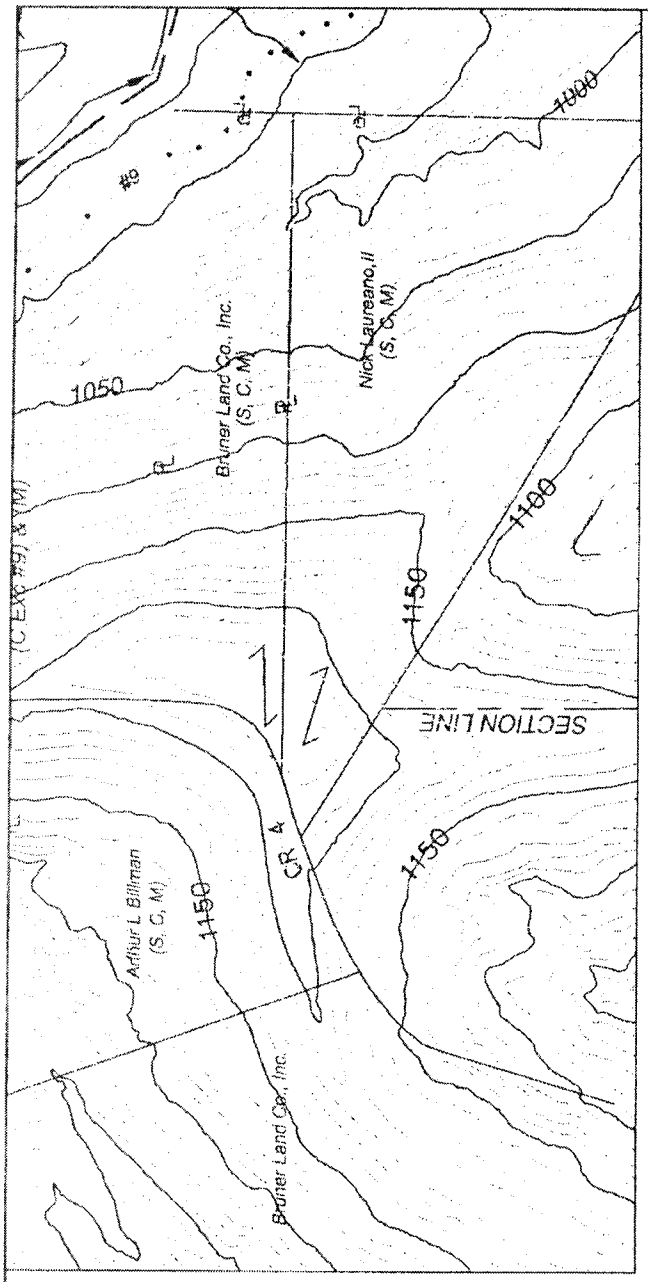
Exhibit 3 Sheet M

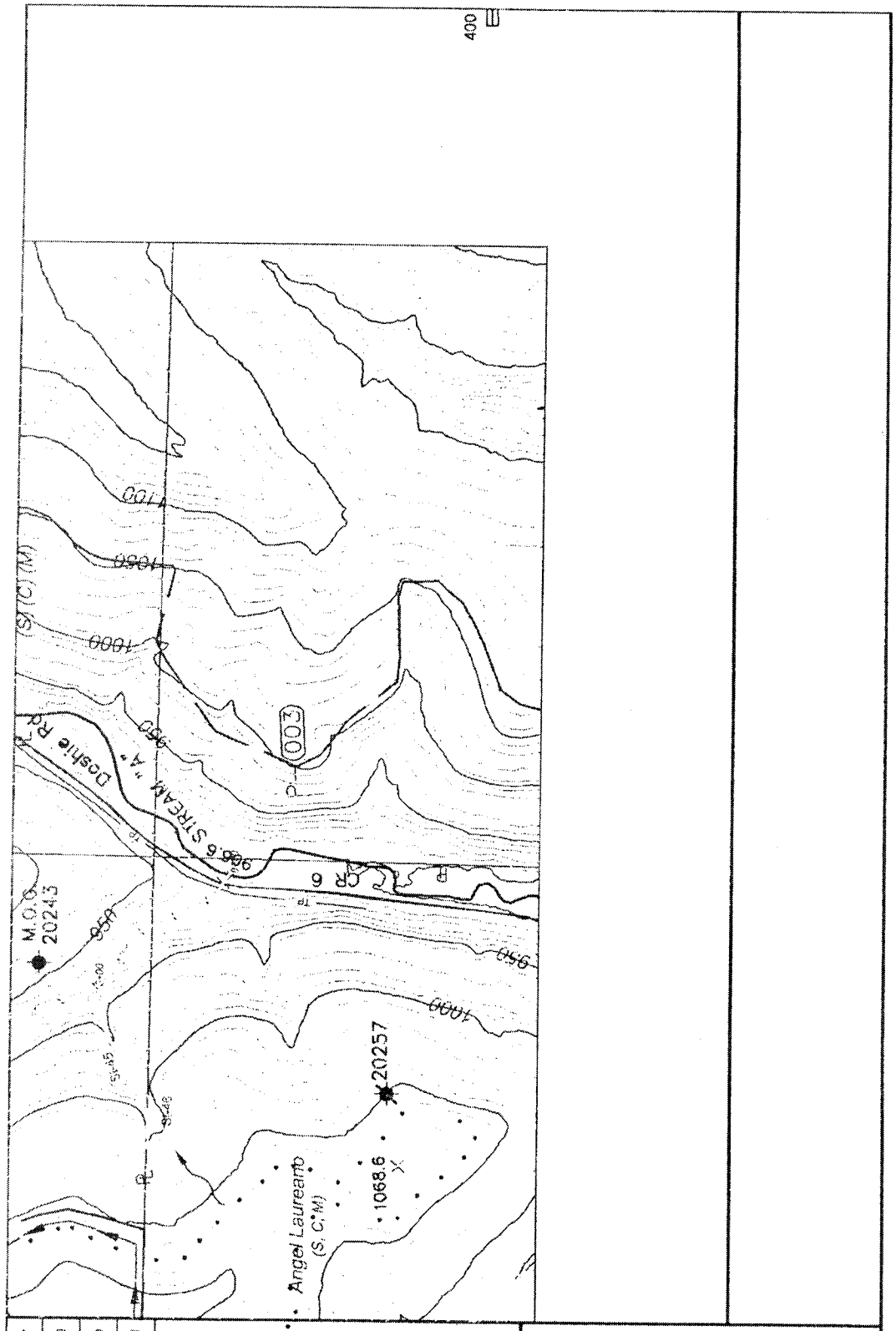


A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kleski Environmental Services
P.O. Box 812 Racine, OH 45771
Phone: (740) 949-2240

Exhibit 3 Sheet N

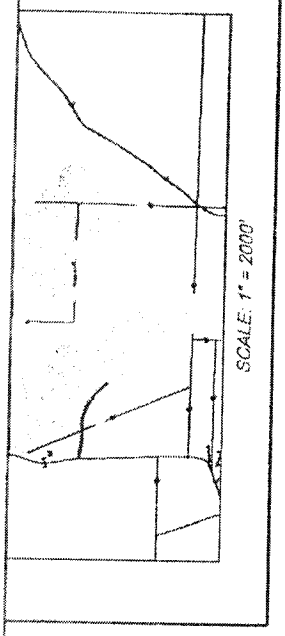


A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kleski Environmental Services
P.O. Box 812 Racine, OH 45771
Phone: (740) 949-2240

Exhibit 3 Sheet 0



The topography on this map was generated from data acquired from the appropriate State/County Office. This LIDAR data was collected in March/A The property lines were compiled from county tax deeds and/or leases; and have not been field ver survey. All measurements, acreages and depictio this map are approximations that meet the require of ORC Chapter 1513. They do not, nor are they to meet the standards of a legal land survey.

BUCKEYE MINERAL SERVICES, INC
CONSULTING
EST. 1980
MINE MAPPING
MINE

SCALE: 1" = 400'
0 400 800
FEET

A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kieski Environmental Services
P.O. Box 812 Racine, OH 45771
Phone: (740) 949-2240

Exhibit 3 Sheet 2

M	I	E	A
N	J	F	B
O	K	G	C
	L	H	D

B&N COAL, INC.
WHIGVILLE IV
AAA NO. D-2332-1
LRH-2009-988-DUCKCREEK

Kleski Environmental Services
P.O. Box 812 Racine, OH 45771
Phone: (740) 949-2240

UNDERGROUND UTILITIES

TWO WORKING DAYS
BEFORE YOU DIG
ALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

IDAR
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maps,
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ns on
ments
ntended

Call Before
You Dig!
1-800-925-0988
Oil and Gas
Producers
Underground
Protection Service
(OGPUPS)

ADJACENT AREA APPLICATION MAP

PERMIT No. D-2332-1

for

B & N COAL, INC.
DEXTER CITY, OHIO

Prepared by:
BUCKEYE MINERAL SERVICES, INC.
P.O. Box 546, 834 COOKSON AVE.
NEW PHILADELPHIA, OHIO 44663-0546
PHONE: 330.339.2100
FAX: 330.339.2278

STATE PLANE COORDINATE SYSTEM: NAD83 OHIO NORTH

SECTIONS: 2, 3, 10 & 11 (T-7N)(R-8W) TWP: MARION

COUNTY: NOBLE STATE: OHIO

JOB NAME	APPLICATION No.	SCALE	CONTOUR INTERVAL	DATE PREPARED	DATE REVISED
WHIGVILLE 4	D-2332-1	1"=400'	10'	6/28/12	

Exhibit 4 Sheet 1

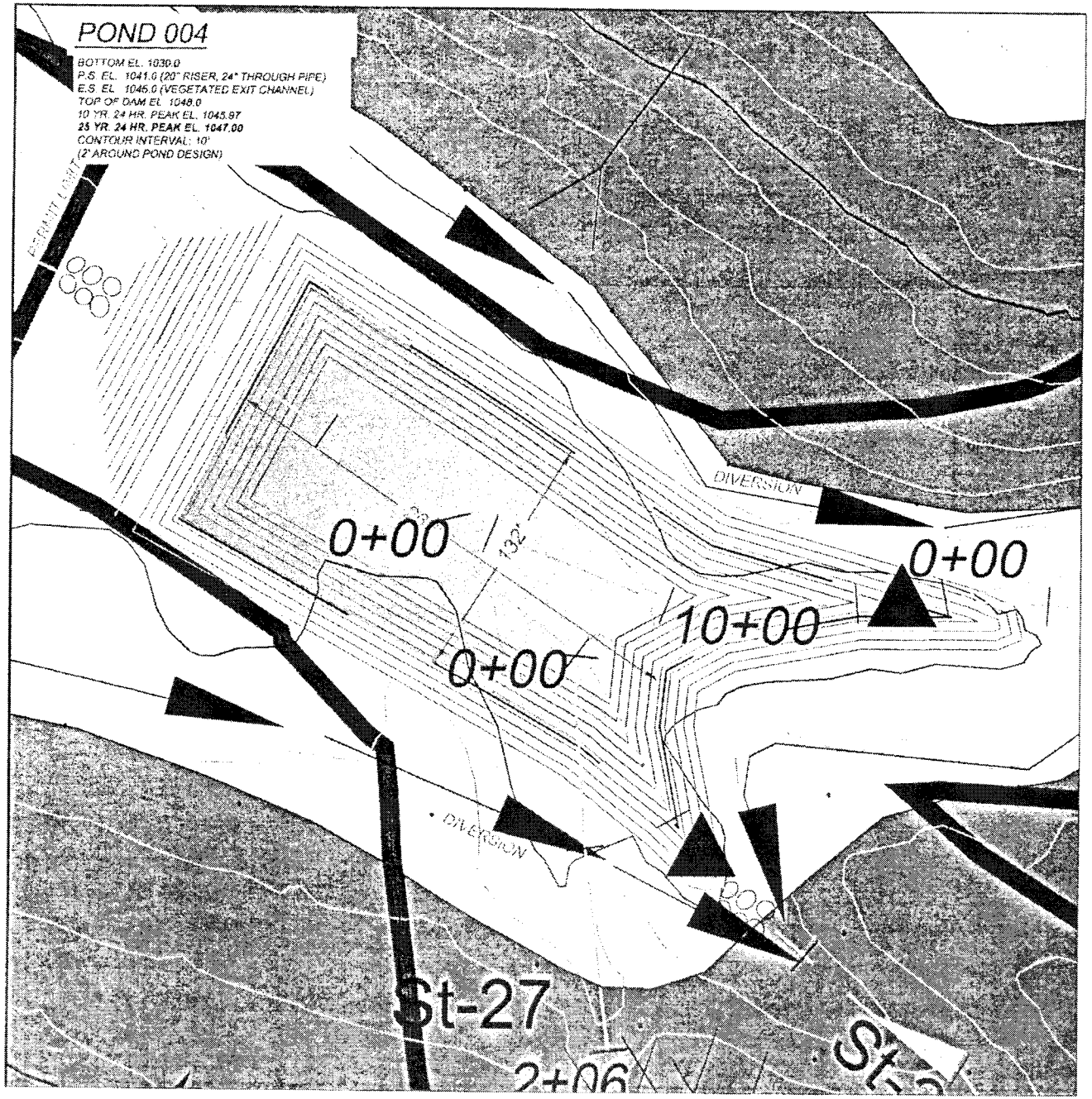

Exhibit 4 Sheet 2

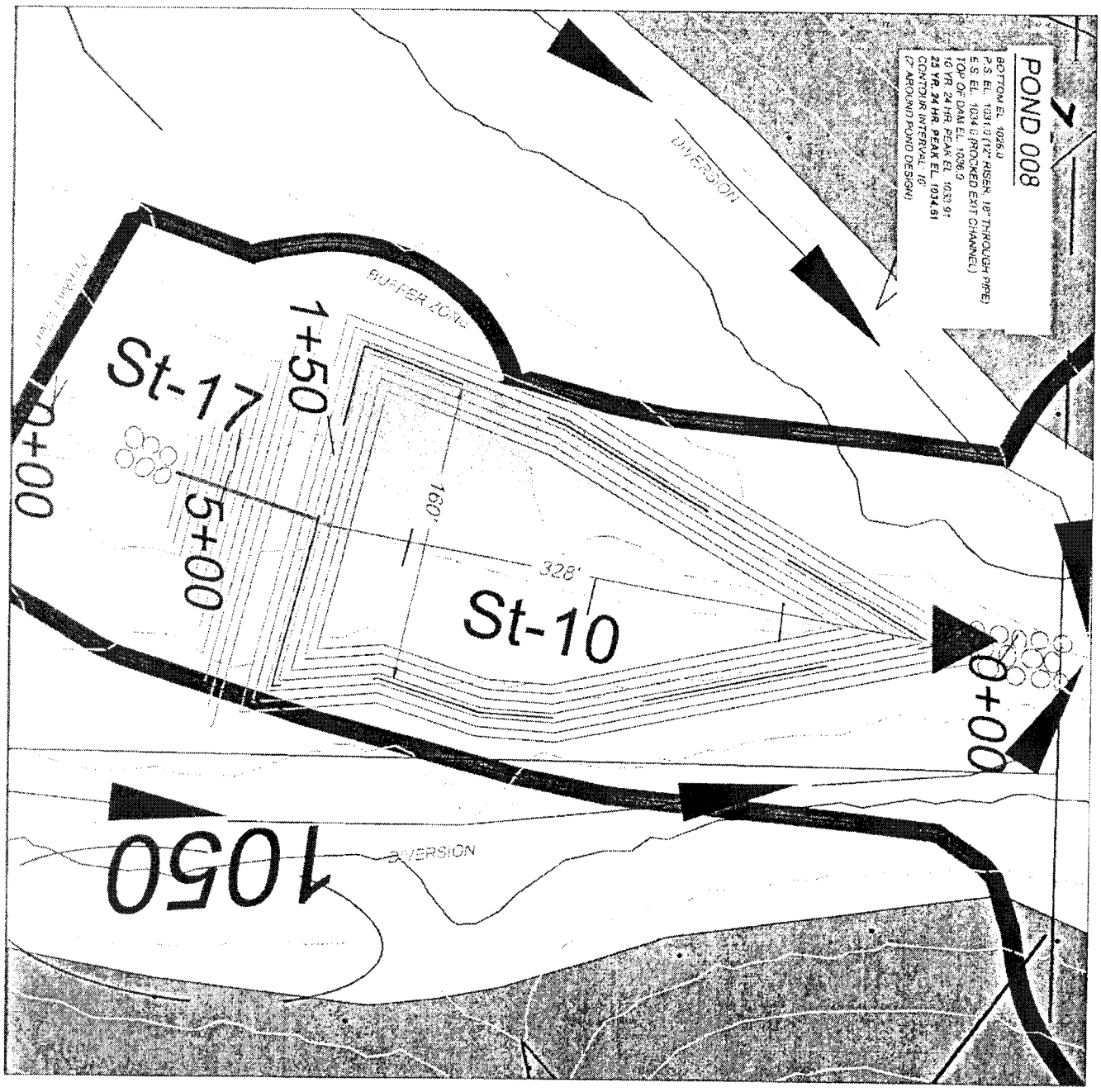

Exhibit 4 Sheet 3

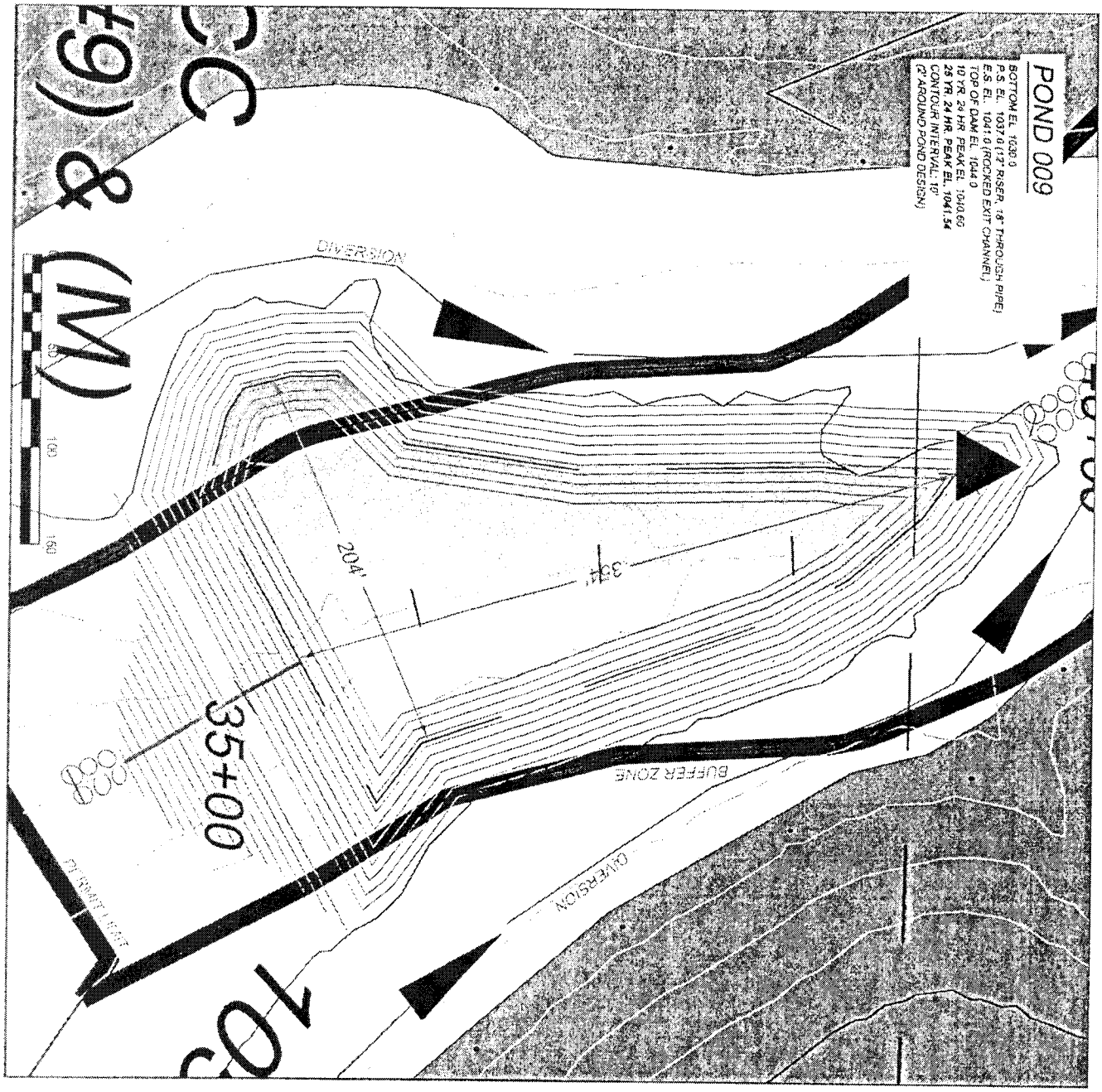

Exhibit 5

LRH-2009-988-East Fork Duck Creek

ID	Flow Duration	Stream Impacts													Stream Mitigation										
		Dam (PP)			Rock Protection (PP)			Temp Haul Road (TP)			Mining/Reclam (PP)			Total Impacts (ft)	Dam (PP)			Rock Protection (PP)			Temp Haul Road (TP)			Mining/Reclam (PP)			Total Mitigation (ft)
		Begin Station	End Station	Impacts (ft)	Begin Station	End Station	Impacts (ft)	Begin Station	End Station	Impacts (ft)	Begin Station	End Station	Impacts (ft)		Begin Station	End Station	Mitigation (ft)	Begin Station	End Station	Mitigation (ft)	Begin Station	End Station	Mitigation (ft)	Begin Station	End Station	Mitigation (ft)	
St-01	E			0			0			0	4166	4384	218	218			0			0			0	4166	4384	218	218
St-01	I			0	3365	3430	65			0			0	65			0	3365	3430	65			0			0	65
St-01	I	3430	3550	120	3890	3990	100	3990	4110	120	4110	4166	56	396	3430	3550	120	3890	3990	100	3990	4110	120	4110	4166	56	396
St-05	E			0			0			0	785	1149	364	364			0			0			0	785	1149	364	364
St-06	E			0			0			0	0	196	196	196			0			0			0	0	196	196	196
St-07	E			0			0			0	0	72	72	72			0			0			0	0	72	72	72
St-10	E			0			0	1007	1070	63	1070	1550	480	543			0			0	1007	1070	63	1070	1550	480	543
St-10	I			0	385	485	100			0			0	100			0	385	485	100			0			0	100
St-10	I	485	605	120	900	950	50	950	1007	57			0	227	485	605	120	900	950	50	950	1007	57			0	227
St-11	E			0			0			0	125	264	139	139			0			0			0	125	264	139	139
St-12	E			0			0			0	439	637	198	198			0			0			0	439	637	198	198
St-12	I			0	0	50	50	50	170	120	170	439	269	439			0	0	50	50	50	170	120	170	439	269	439
St-13	E			0			0			0	0	265	265	265			0			0			0	0	265	265	265
St-14	E			0			0			0	32	187	155	155			0			0			0	32	187	155	155
St-14	I			0			0			0	0	32	32	32			0			0			0	0	32	32	32
St-15	E			0			0			0	0	147	147	147			0			0			0	0	147	147	147
St-16	E			0			0			0	180	617	437	437			0			0			0	180	617	437	437
St-16	I			0			0	0	75	75	75	180	105	180			0			0	0	75	75	75	180	105	180
St-17	E	150	184	34			0			0			0	34	150	184	34			0			0			0	34
St-17	I	90	150	60	0	90	90			0			0	150	90	150	60	0	90	90			0			0	150
St-18	E			0			0			0	50	471	421	421			0			0			0	50	471	421	421
St-19	E			0			0			0	0	304	304	304			0			0			0	0	304	304	304
St-21	E			0			0			0	60	175	115	115			0			0			0	60	175	115	115
St-21	I			0			0			0	0	60	60	60			0			0			0	0	60	60	60
St-22	E			0	0	50	50			0	50	150	100	150			0	0	50	50			0	50	150	100	150
St-23	E			0			0			0	1843	2394	551	551			0			0			0	1843	2394	551	551
St-23	I			0	570	670	100			0			0	100			0	570	670	100			0			0	100
St-23	I	670	790	120	1170	1400	230	1400	1500	100	1500	1843	343	793	670	790	120	1170	1400	230	1400	1500	100	1500	1843	343	793
St-26	E			0			0			0	586	764	178	178			0			0			0	586	764	178	178
St-26	I			0	125	225	100	225	350	125	350	586	236	461			0	125	225	100	225	350	125	350	586	236	461
St-27	I			0			0			0	150	206	56	56			0			0			0	150	206	56	56
St-28	E			0			0			0	0	53	53	53			0			0			0	0	53	53	53
St-29	E			0			0			0	0	236	236	236			0			0			0	0	236	236	236
St-33	E			0			0			0	250	352	102	102			0			0			0	250	352	102	102
St-36	E			0			0			0	160	364	204	204			0			0			0	160	364	204	204
St-36	I			0			0			0	0	160	160	160			0			0			0	0	160	160	160
St-37	I			0			0			0	0	35	35	35			0			0			0	0	35	35	35
St-38	E			0			0			0	607	691	84	84			0			0			0	607	691	84	84
St-38	I			0	250	300	50	300	350	50	350	607	257	357			0	250	300	50	300	350	50	350	607	257	357
St-39	I			0			0			0	50	129	79	79			0			0			0	50	129	79	79
St-40	I			0			0			0	700	946	246	246			0			0			0	700	946	246	246
St-40A	I			0			0			0	0	100	100	100			0			0			0	0	100	100	100
St-42	E			0			0			0	150	236	86	86			0			0			0	150	236	86	86
St-C17C	I			0			0			0	930	940	10	10			0			0			0	930	940	10	10
St-C18	I			0			0			0	940	1241	301	301			0			0			0	940	1241	301	301
St-C19	I			0			0			0	475	580	105	105			0			0			0	475	580	105	105
St-C20	I			0			0			0	400	540	140	140			0			0			0	400	540	140	140
G Total				454			985			710			7,695	9,844			454			985			710			7,695	9,844

Table 5-8 Stream Identification and Stream Stations Identified for Impacts and Stream Identification and Stream Stations Identified for Mitigation