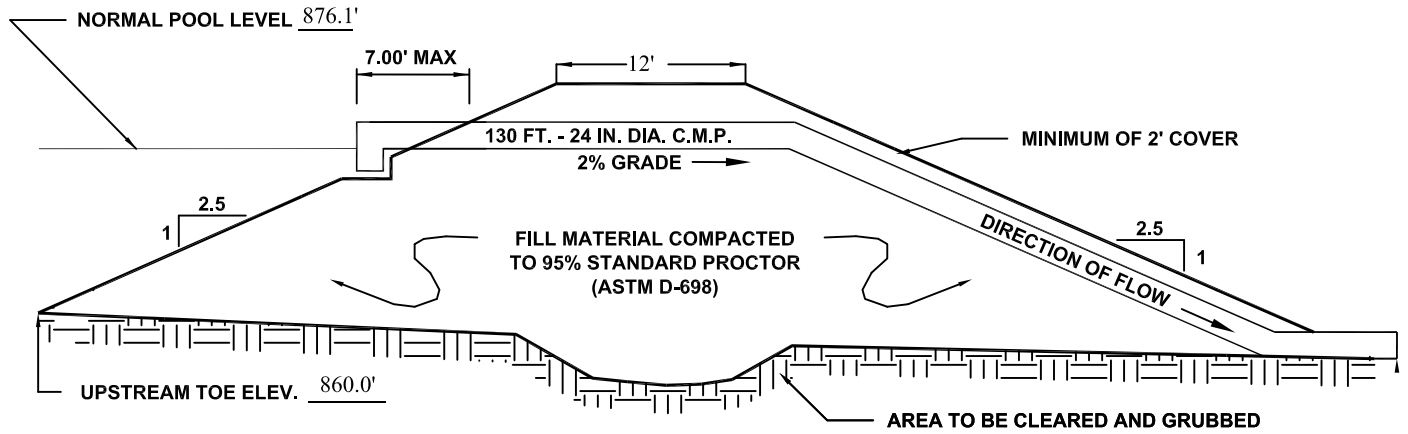
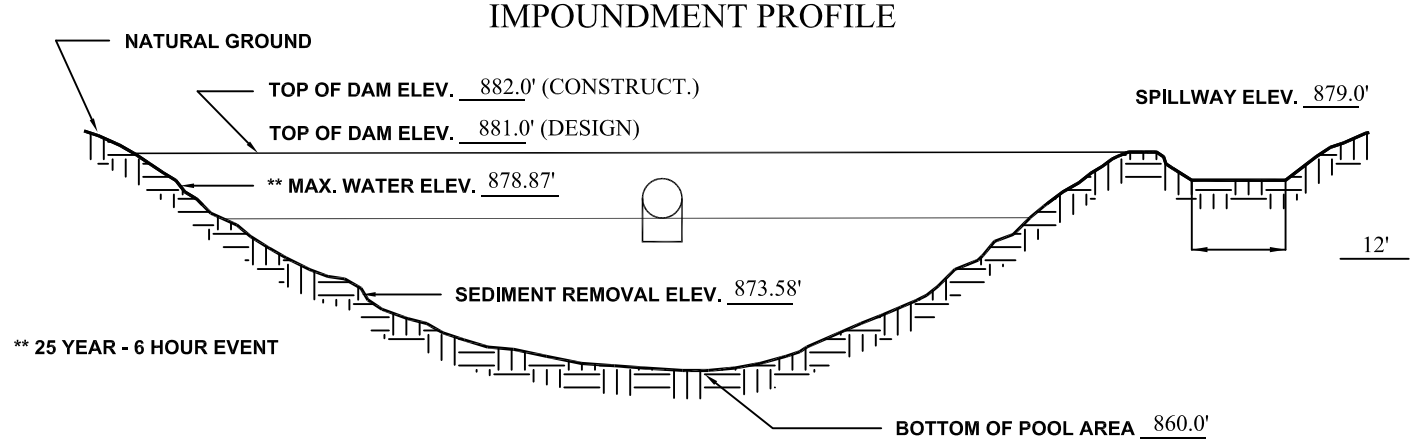
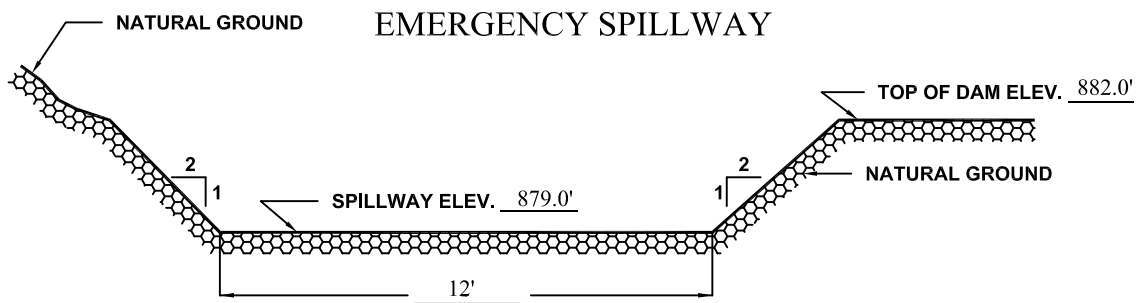
EMBANKMENT CROSS-SECTION



IMPOUNDMENT PROFILE



EMERGENCY SPILLWAY



EMERGENCY SPILLWAY TO BE GRASS LINED

MAXIMUM SPILLWAY GRADIENT 2.0 % (CONTROL SECTION)
MAXIMUM SPILLWAY GRADIENT 5.0 % (TAIL DITCH SECTION)
MINIMUM SPILLWAY GRADIENT 2.0 % (TAIL DITCH SECTION)

COMPANY: BIRMINGHAM COAL & COKE CO., INC.

MINE NAME: KNIGHT MINE

PERMIT #: P-3970

BASIN I.D. #: BASIN 027

KEY BASIN PARAMETERS

DRAINAGE AREA	ACRES	13.0	
DISTURBED AREA	ACRES	12.5	
SEDIMENT STORAGE	AC.FT.	1.25	
DETENTION STORAGE	AC.FT.	0.71	
PERMANENT POOL CAPACITY	AC.FT.	1.96	
* TOTAL BASIN STORAGE CAPACITY	AC.FT.	2.74	* 10 YEAR - 24 HOUR EVENT
** PEAK INFLOW	C.F.S.	37.17	** 25 YEAR - 6 HOUR EVENT
** PEAK OUTFLOW	C.F.S.	16.70	** 25 YEAR - 6 HOUR EVENT

STORAGE COMPUTATION

Elevation (feet)	Area (acres)	Avg. Area (acres)	Interval (feet)	Storage (ac - ft)	Acc. Storage (ac - ft)
860.0	0.003				0.000
		0.024	5.0	0.120	
865.0	0.045				0.120
		0.096	5.0	0.480	
870.0	0.148				0.600
		0.217	5.0	1.085	
875.0	0.287				1.685
		0.388	5.0	1.940	
880.0	0.489				3.625

BIRMINGHAM COAL & COKE, INC
KNIGHT MINE, P-3970
BASIN 027

SCALE:	DATE:	DRAWN BY:	APPROVED BY:
NTS	5/11/2015	J.R.W.	J.R.W.