



### Legend

- Permit Boundary - 350.1 acres
- Surface Site Boundary - 110.1 acres
- Underground Mining Boundary - 256.6 acres
- 1000' Perimeter
- Property Ownership (key to table and module 5)
- Property Line
- Municipal Boundary
- Utility (overhead)
  - E-Electric (West Penn Power)
  - T-Telephone (Marionette/Scenery Hill Telephone Co.)
  - U-Utility (underground)
    - G-Gas (As Noted)
    - W-Water (Southwestern Pennsylvania Water Authority)
- Buildings (occupied/unoccupied)
- Existing Gas Well
- Variance Area - Surface Mining Allowed
- Restricted - No Surface Mining Without a Variance
- Wetland - Delineated, Flagged and Surveyed
- Wetland - Visually Identified and Mapped
- Structures Contour Line - Bottom of Benwood Limestone
- Inferred Structure Contour Line - Bottom of Benwood Limestone
- Existing Highways (buried)
- Bottom of Benwood Limestone Cropline
- Formation Contact Line - Top of Benwood Limestone
- Waynesburg Coal Cropline
- Waynesburg A Coal Cropline
- Deep Mine Area and Portal
- Previously Surface Mined Areas
- Existing Culverts
- Proposed Culverts
  - RCP - Reinforced Concrete Pipe
  - CPC - Corrugated Plastic Pipe
  - CMP - Corrugated Metal Pipe
  - SP-Steel Pipe
- Cemetery
- Proposed Final Highway
- Existing Highway
- Reclaimed Highway (4/2021)
- The Benwood Limestone mine floor will not go below elevation 820' in this area
- Geologic Cross Section
- Sedimentation Pond
- Collection Ditch - Grass Lined
- Collection Ditch - Rock Lined
- Diversion Ditch
- Perennial Stream
- Intermittent Stream
- Ephemeral Stream
- Relocated / Reconstructed UNT "E"
- Existing Pond / Impoundment
- Test Hole
- Overburden Analysis Test Hole
- Water Sampling Point (Monitoring)
- Private Water Supply
- Strike and Dip
- Monitoring Well - N/A
- NPDES Point
- Flow Measuring Station - Flow Measurement Only
- Indicates dwelling is served by public water
- No underground mining if less than 100 feet of cover
- 150' Gas Well Barrier - No Mining Until Pillar Permit is Approved
- Module 14 Cross-sections
- Proposed Working Contour Lines (10' Interval)
- Haul Road
- Tennille Creek 150' Underground Mining Barrier (please refer to Module 15.6 for additional clarification)
- Phase Boundary
- Phase Designation
- Overhead Utility Pole

Drill Hole	Surface Elevation	Overburden	Strata Thickness	Strata Name	Bottom Elevation	Static Water Level
DH-1-OB	1145.1'	60'	12"	Wbg	1079.1'	---
DH-2-OB	1120.8'	41'	36"	Wbg	1079.8'	1077.8'
DH-3-OB	1137.7'	50'	72"	Wbg	1065.7'	1089.7'
DH-4-OB	1152.66'	69'	36"	Wbg	1083.66'	1084.66'
DH-5-OB	1138.14'	53'	48"	Wbg	1085.14'	1088.14'

\* Location shown on Exhibit 6.1  
 TS - Top Split; BS - Bottom Split; Wbg A - Waynesburg "A" Seam; Wbg - Waynesburg Rider; LWbg - Lower Waynesburg; BOV - Bottom of Void

Dip 1.6%  
 Dip 1.2%  
 Dip 1.2%  
 Dip 1.6%

- #### Property Owners
1. John Kosky Contracting Inc.
  2. Clyde Holding, Inc.
  3. John Kosky Contracting Inc.
  4. John Kosky Contracting Inc.
  5. John Alan & Stacy A. Kosky
  6. Kathleen Marinich & Dan B. Derber
  7. Cathy H. & John P. Losozky
  8. Dolores Thompson & Leslie A. Hutchins, Jr.
  9. Edgar C. Sweeney, Jr. & Carol Heger
  10. Raymond R. & Tammy M. Schmitt
  11. Frank & Mary Jane Elwy
  12. Travis D. & Shannon R. Rhodes
  13. William & Dana Miskley
  14. Wilford A. & Phyllis Buel
  15. John L. Jr. & Kim Ondrick
  16. Paul A. & Deanne Hein
  17. Robert E. & Patricia L. Klefer
  18. David K. & Robert G. Sloan
  19. Brian L. Lancaster
  20. Virginia A. Crawford Rev. Trust
  21. Christopher J. & Brittany N. Coffield
  22. Christopher J. & Brittany N. Coffield
  23. East Bethlehem Church
  24. Kenneth & Cathleen Harasty
  25. Michael J. & Sylvia A. Burke
  26. Alyssa M. Ford
  27. David A. Webeck & James C. Webeck
  28. Joshua A. Zachwinski
  29. James C. & Marilu Webeck
  30. Robert J. Sweeney
  31. Robert J. & Maria L. Sweeney
  32. Southwestern PA Water Authority
  33. James E. Simpson
  34. William L. Beck
  35. Buckingham Cemetery Assn
  36. Mark A. Yoke
  37. John Alan & Stacy A. Kosky
  38. John Alan & Stacy A. Kosky
  39. Frank G. & Margaret J. Startare & Joseph J. Startare
  40. Joseph J. & Nema M. Startare
  41. Jason White
  42. Freddie D. Ervin
  43. Deborah J. & Joseph C. Shriner
  44. Deborah J. & Joseph C. Shriner
  45. Robin L. Doman & Susan G. Gundlach
  46. Joseph A. & Shirley A. Koski
  47. Harold & Kathleen Rice
  48. Harold & Kathleen Rice
  49. Margaret A. Furnan & Katherine M. Kasula
  50. Margaret A. Furnan & Katherine M. Kasula
  51. Bethanne L. Morgan
  52. Carbon Farms LTD Partnership
  53. David A. Smerecznik
  54. Joanna L. Dragan

#### Flow Monitoring Chart

Sample Point	Surface Elevation	Description
A	901.4'	Spring - Monthly Flow Only
B	891.9'	Unnamed Tributary "E" downstream above welland - Monthly Flow Only
C	908'	Unnamed Tributary "E" downstream of confluence with Eastern Branch - Monthly Flow Only
D	914.3'	Unnamed Tributary "E" Eastern Branch downstream - Monthly Flow Only
E	962'	Unnamed Tributary "E" Western Branch downstream from pond sample point 17 at confluence with flow measuring point - Monthly Flow Only
F	968'	Unnamed Tributary "E" Eastern Branch downstream of sample point 5 and upstream of flow measuring point D - Monthly Flow Only
G	937.9'	Unnamed Tributary "E" Eastern Branch downstream of sample point 5 and upstream of flow measuring point G - Monthly Flow Only
H	995.8'	pond - Monthly Flow Only
I	1037.84'	pond - Monthly Flow Only
J	1062.13'	Iron slimes sump zone - Monthly Flow Only

#### Mine Summary Chart

Key	Operator	Permit No.	Mine Name	Status	Coal Seams
I	Neiswonger Construction, Inc.	63100401	Maggie Lynn Quarry	Active	Benwood Limestone
II	Neiswonger Construction, Inc.	63110101	Bugger #1	Completed	Wbg
III	PA Coal Reclamation, Inc.	63813210	Hawkins	Active	Coal Refuse Reprocessing
IV	Twight Industries, Division of U.S. Natural Resources, Inc.	32475343	LOS	Completed	Wbg
V	Boyle Land & Fuel Co.	6380106	Fitzwater	Completed	Wbg
VI	Boyle Land & Fuel Co.	63823036	Huffman	Completed	Wbg
VII	Narick Contracting Co., Inc.	32756390	Fitzwater	Completed	Wbg
VIII	BCNR Mining Corp.	63743703	Clyde Mine-Black Dog Hollow	Abandoned	Coal Refuse Disposal
IX	Westmont Coal Company, Inc.	6376144	Deemston	Completed	Wbg
X	TRAM Resources, Inc.	32475343	Fargo	Abandoned	Wbg
XI	B.L.F. Corp.	32676346	Busha	Completed	Wbg
XII	Dragan & Son	32876342	Belle No. 11	Completed	Wbg
XIII	MonValley Steel Company, Inc.	63891301	Clyde	Completed	Pittsburgh
XIV	Unknown	Unknown	County Jail	Abandoned	Wbg

Location shown on Exhibit 6.1  
 The Clyde underground mine underlies the entire permit boundary and the 1000' perimeter around it.

100-YEAR FLOOD PLAIN LIMIT FROM FEMA'S FLOOD INSURANCE RATE MAPS #42125C045E & #42125C070E  
 100-YEAR FLOOD PLAIN (ELEVATION 823.5) AFTER CONSTRUCTION OF SEDIMENTATION POND P-1

#### Water Monitoring Chart

Sample Point	Surface Elevation	Description
1	815'	Ten Mile Creek - intermediate point
2	1064'	Small underground mine discharge and headwaters of eastern branch Unnamed Tributary "E" to Ten Mile Creek - downstream
3	1085'	Headwaters of Unnamed Tributary "D" eastern branch
4	1122'	Unnamed Tributary "D" - upstream
5	1009'	Unnamed Tributary "D" to Ten Mile Creek - intermediate point
6	884'	Unnamed Tributary "E" to Ten Mile Creek - downstream & Monthly Flow
7	817.1'	Welland discharge
8	820.6'	Spring which occurs from the local flow system near the base of the Benwood Limestone
9	817.4'	Spring which occurs from the local flow system within the Benwood Limestone
10	808.6'	Unnamed Tributary "D" to Ten Mile Creek - downstream
11	804'	Unnamed Tributary "G" to Ten Mile Creek - downstream
12	820'	Unnamed Tributary "G" to Ten Mile Creek - downstream
13	820'	Ten Mile Creek - upstream
14	1169.9'	Headwaters of Unnamed Tributary "A" to Black Dog Hollow - upstream
15	1131.4'	Headwaters of Unnamed Tributary "B" to Black Dog Hollow
16	948.8'	Unnamed Tributary "G" to Ten Mile Creek - intermediate point
17	812'	Spring which occurs from the local flow system within the Benwood Limestone
18	907.1'	Unnamed Tributary to Unnamed Tributary "G" - downstream
19	1044'	Unnamed Tributary "G" - upstream
20	1142'	Headwaters of Unnamed Tributary "A" to Black Dog Hollow
21	1060'	Unnamed Tributary "A" to Black Dog Hollow - downstream
22	1055.5'	Unnamed Tributary "B" to Black Dog Hollow - downstream
23	819.4'	Spring which occurs from the local flow system within the Benwood Limestone
24	805'	Ten Mile Creek - downstream
25	830'	Hawkins Permit subsurface F point
26	980'	Unnamed Tributary "E" Western Branch to Ten Mile Creek - upstream & Monthly Flow
27	1088.8'	Upgradient Monitoring Well - SWL only
28	1024.9'	Intermediate Monitoring Well - SWL only
29	1024.9'	Downgradient Monitoring Well - Static Water Level only
30	870'	Pittsburgh Mine #22 Monitoring Well - Static Water Level only
31	001	Sedimentation Pond P-1
32	002	Sedimentation Pond P-2

#### Mining Forecast

Drill Hole	Surface Elevation	Overburden	Strata Thickness	Strata Name	Bottom Elevation	Static Water Level
BH-1	915.67'	32.9'	0.5'	Benwood Limestone	882.77'	862.87'
BH-2	931.75'	51.2'	0.5'	Sewickley coal	880.55'	845.95'
BH-3	939.75'	58.9'	44.8'	Benwood Limestone	880.85'	845.75'
DH-1	922.68'	83'	3'	Sewickley coal	839.68'	900'
DH-2	920.76'	85'	1.5'	Benwood Limestone	834.26'	901'
DH-3	911.56'	25'	48"	Benwood Limestone	838.56'	901'
DH-4	925.08'	27'	31"	Benwood Limestone	845.08'	904'
DH-5	934.06'	82'	1'	Sewickley coal	842.06'	923'
DH-6	871.5'	33'	52"	Benwood Limestone	849.08'	845'
JLF-50	820'	112.3'	5"	Pittsburgh Rider (3)	708.11'	---
Thompson Shaft (Location shown on Exhibit 6.1)	979'	205'	51"	Pittsburgh Rider (2)	707.3'	---
3523 (Location shown on Exhibit 6.1)	1223'	25'	60"	Benwood Limestone	930'	---
		290'	38"	Sewickley	930'	---
		385'	48"	Pittsburgh	834'	745'
H-BH-1*	902'	185'	MV	Pittsburgh B.O.V.	717'	745'
H-BH-2*	846.2'	136'	MV	Pittsburgh B.O.V.	710.2'	746.2'
H-BH-3*	814.1'	98.1'	MV	Pittsburgh B.O.V.	716'	743'
H-BH-4*	816.7'	104.7'	MV	Pittsburgh B.O.V.	712'	743'
Hole #1	875.4'	25'	25'	Benwood Limestone	825.4'	Dry
Hole #2	872.6'	25'	2'	Benwood Limestone	845.6'	84.5'
B-1	1023.8'	156.9'	41.7'	Monoy Adams	826.4'	887.4'
B-2	1016.1'	203.2'	45.4'	Sewickley coal	812.5'	887.4'
		219.2'	21.2'	Benwood Limestone	805.1'	881.5 (10/25/19)

TS - Top Split; BS - Bottom Split; Wbg A - Waynesburg "A" Seam; Wbg - Waynesburg Rider; LWbg - Lower Waynesburg; BOV - Bottom of Void  
 \* Boreholes remain open to monitor static water levels

Scale 1" = 200'

NEISWONGER CONSTRUCTION, INC.  
 17592 Route 322, Strattanville, PA 16258  
 Phone: (814) 764-3455

Maggie Lynn Underground Mine  
 Permit No. 63192001  
 Exhibit 15.2: Mine Development Map

Washington County

Prepared By: GEOTECH ENGINEERING, INC.  
 ENGINEERS SURVEYORS G.E.O.M.S.

#### Drill Hole

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		219.2'	21.2'	Benwood Limestone	805.1'	881.5 (10/25/19)

Notes:  
 1. \* Infection Wells to be permitted by PA Coal Refuse Act.  
 2. This map is prepared by Neiswonger Construction, Inc. (N.C.I.) based on data received from the PA Coal Refuse Act. The location of roads, buildings, surface water features and other cultural data were obtained from the Elsworth & Maher, PA 7.2 USGS Quadrangle maps and implemented in the map as shown and established by field work and established by field work and established by field work.  
 3. All overburden and test hole elevations and locations shown on this map are based on available data and do not constitute a warranty of accuracy. The property lines and other cultural data were obtained from the Elsworth & Maher, PA 7.2 USGS Quadrangle maps and implemented in the map as shown and established by field work and established by field work.  
 4. The location and test hole elevations and locations shown on this map are based on available data and do not constitute a warranty of accuracy. The property lines and other cultural data were obtained from the Elsworth & Maher, PA 7.2 USGS Quadrangle maps and implemented in the map as shown and established by field work and established by field work.  
 5. This map is prepared by Neiswonger Construction, Inc. (N.C.I.) based on data received from the PA Coal Refuse Act. The location of roads, buildings, surface water features and other cultural data were obtained from the Elsworth & Maher, PA 7.2 USGS Quadrangle maps and implemented in the map as shown and established by field work and established by field work.  
 6. All units are in feet.  
 7. Cut slopes shall not exceed 2:1 unless in compacted rock.  
 8. Fill slopes shall not exceed 2:1.  
 9. There are no geologic faults noted within the permit area.  
 10. There are no areas designated "Unstable for Mining".  
 11. There are no known public parks or historic places.  
 12. There are no known landslide prone areas.  
 13. There are no known utility lines.  
 14. See Exhibit 6 for full surface site design.  
 15. Processing waste may be placed in inactive sections of the Maggie Lynn deep mine in accordance with Module 15.10.

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