Figure 1. General Location Map.

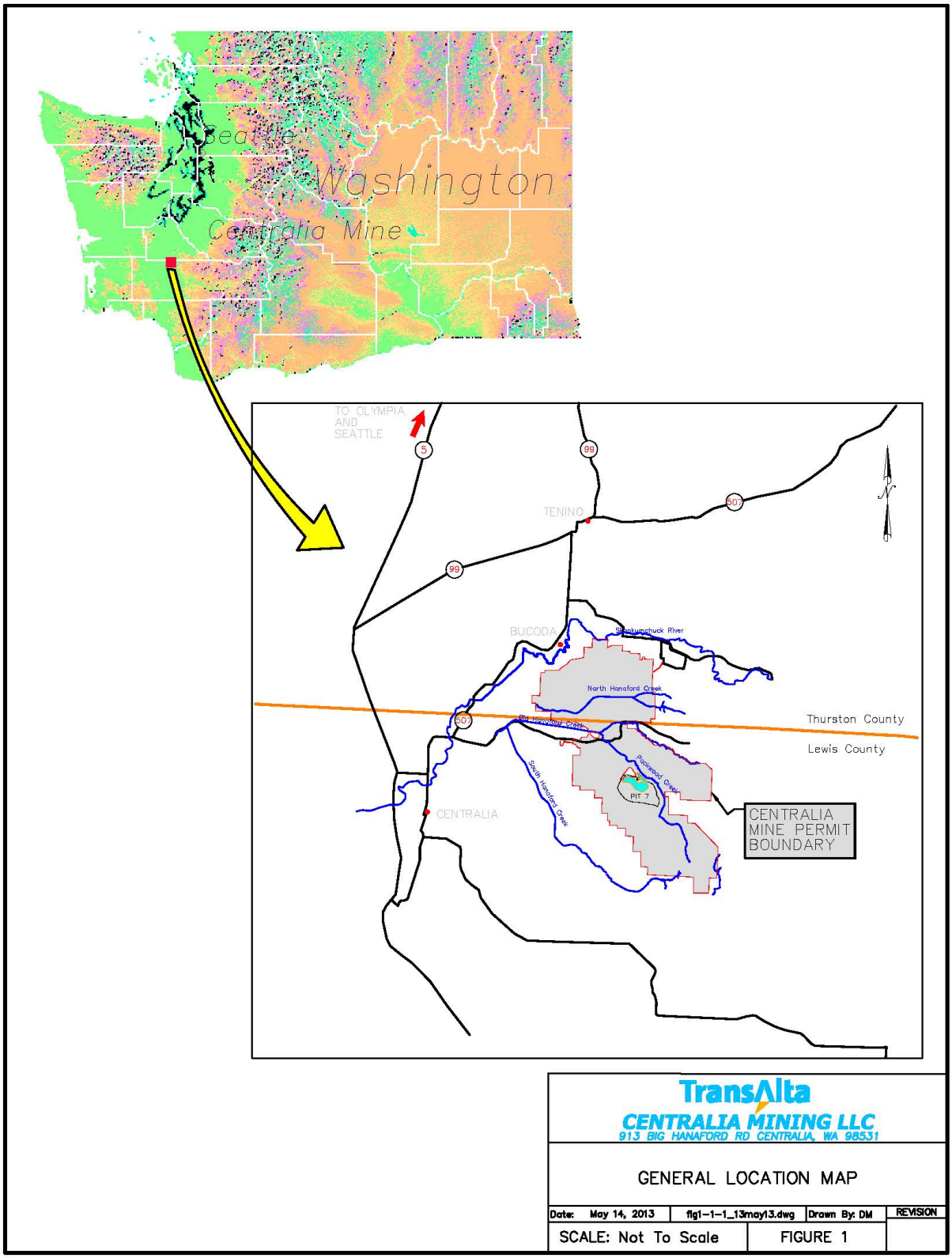


Figure 2. Pit 7 Reclamation Plan, Post-Mine Topography.

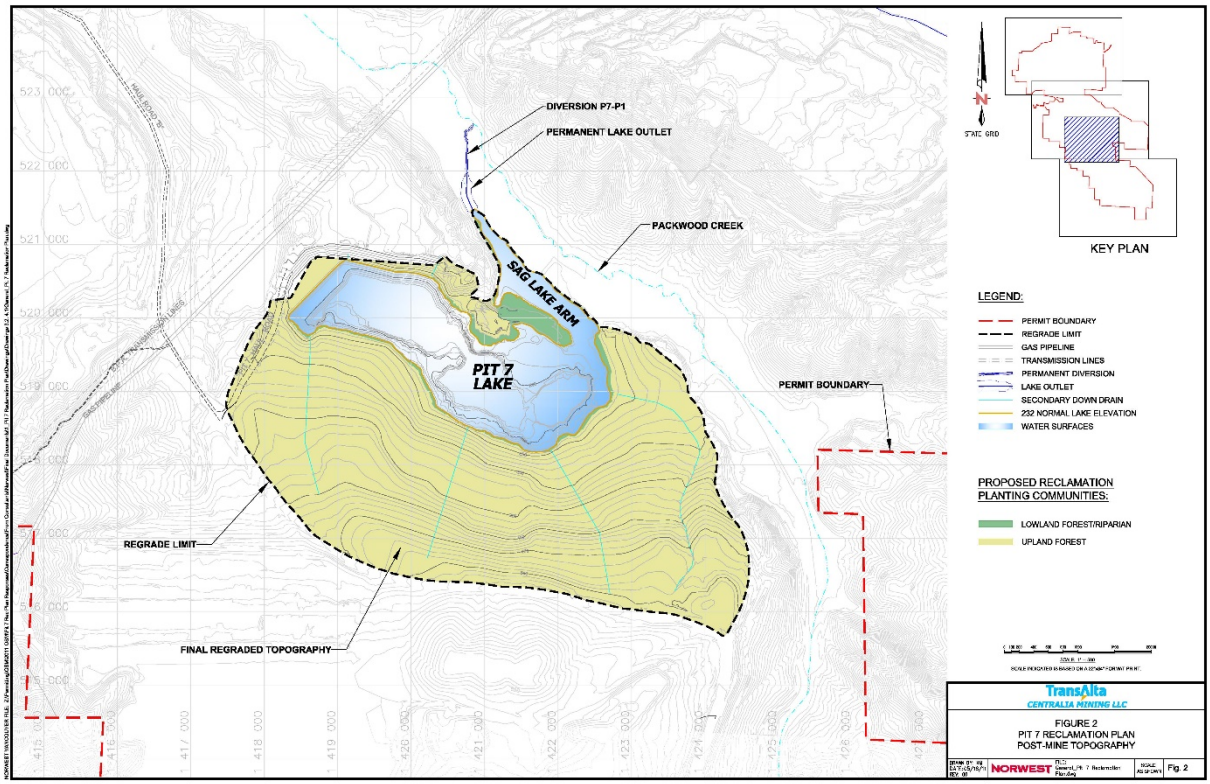

DIVERSION P7-P1
PERMANENT LAKE OUTLET
PACKWOOD CREEK
SAG LAKE ARM
PIT 7 LAKE
PERMIT BOUNDARY
REGRADE LIMIT
FINAL REGRADED TOPOGRAPHY
HAUL ROAD 'B'
GAS PIPELINE
KEY PLAN
LEGEND:
PERMIT BOUNDARY
REGRADE LIMIT
GAS PIPELINE
TRANSMISSION LINES
PERMANENT DIVERSION
LAKE OUTLET
SECONDARY DOWN DRAIN
232 NORMAL LAKE ELEVATION
WATER SURFACES
PROPOSED RECLAMATION PLANTING COMMUNITIES:
LOWLAND FOREST/RIPARIAN
UPLAND FOREST
TransAlta
CENTRALIA MINING LLC
FIGURE 2
PIT 7 RECLAMATION PLAN
POST-MINE TOPOGRAPHY
NORWEST
Fig. 2

Figure 3. Pit 7 Sediment and Drainage Control.

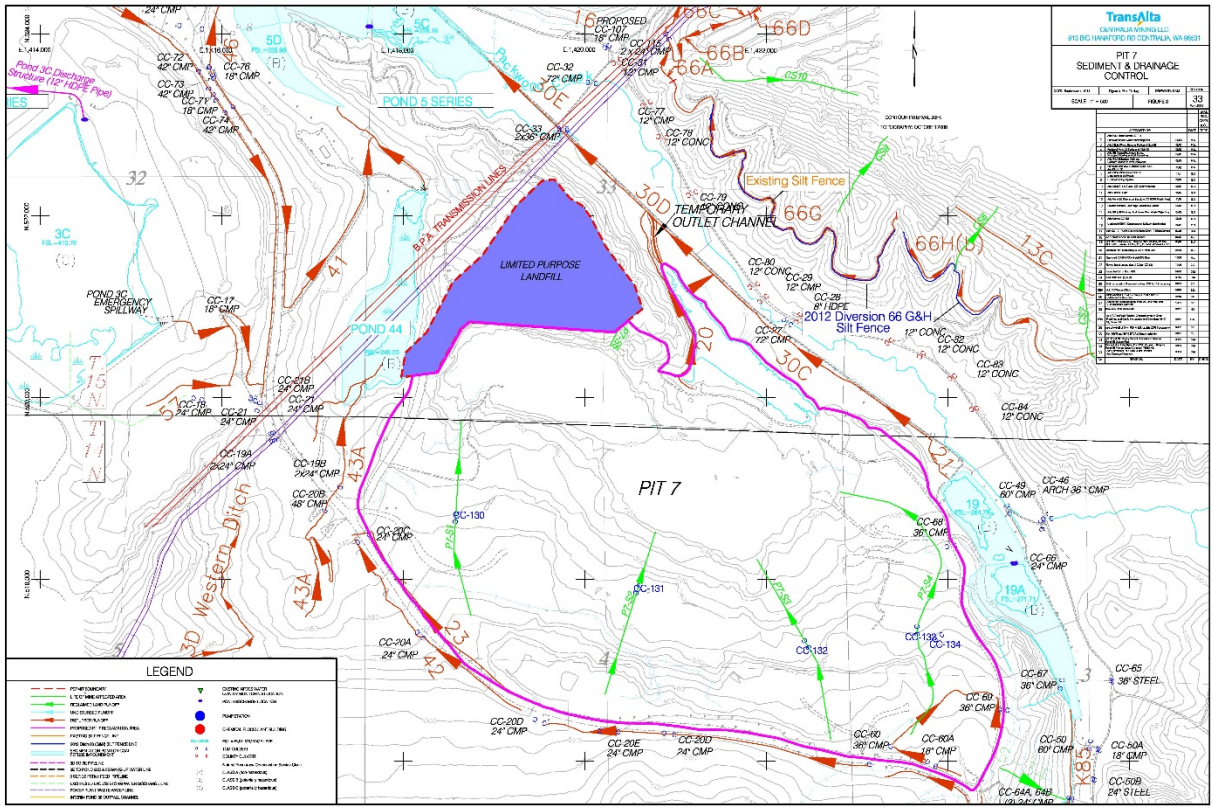

TransAlta
CENTRALIA MINING LLC
913 BIG HANFORD RD CENTRALIA, WA 98531
PIT 7
SEDIMENT & DRAINAGE
CONTROL
33
LEGEND
PIT 7
LIMITED PURPOSE
LANDFILL
TEMPORARY
OUTLET CHANNEL
Existing Silt Fence
2012 Diversion 66 G&H
Silt Fence
POND 5 SERIES
POND 44
POND 3C
EMERGENCY
SPILLWAY
Pond 3C Discharge
Structure (12" HDPE Pipe)
B.P.A. TRANSMISSION LINES
Western Ditch
PROPOSED
CC-107
18" CMP
CC-115
2 x 24" CMP
CC-31
12" CMP
CC-32
72" CMP
CC-33
2x36" CMP
CC-77
12" CMP
CC-78
12" CONC
CC-79
CC-80
12" CONC
CC-29
12" CMP
CC-28
8" HDPE
CC-27
72" CMP
CC-82
12" CONC
CC-83
12" CONC
CC-84
12" CONC
CC-72
42" CMP
CC-76
18" CMP
CC-73
42" CMP
CC-71
18" CMP
CC-74
42" CMP
CC-17
18" CMP
CC-18
24" CMP
CC-21
24" CMP
CC-21B
24" CMP
CC-21
24" CMP
CC-19A
2x24" CMP
CC-19B
2x24" CMP
CC-20B
48" CMP
CC-20C
24" CMP
CC-20A
24" CMP
CC-20D
24" CMP
CC-20E
24" CMP
CC-20D
24" CMP
CC-60
36" CMP
CC-60A
18" CMP
CC-50
60" CMP
CC-50A
18" CMP
CC-50B
24" STEEL
CC-64A, 64B
CC-67
36" CMP
CC-65
36" STEEL
CC-68
36" CMP
CC-66
24" CMP
CC-49
60" CMP
CC-46
ARCH 36" CMP
CC-130
CC-131
CC-132
CC-133
CC-134
66A
66B
66C
66D
66G
66H(B)
30D
30C
30E
41
43A
42
23
21
19
19A
13C
5D
5C
3C
3D
K85
32
33
20
16
4
3

Figure 4. Pit 7 Interim Outlet Plan and Detail.

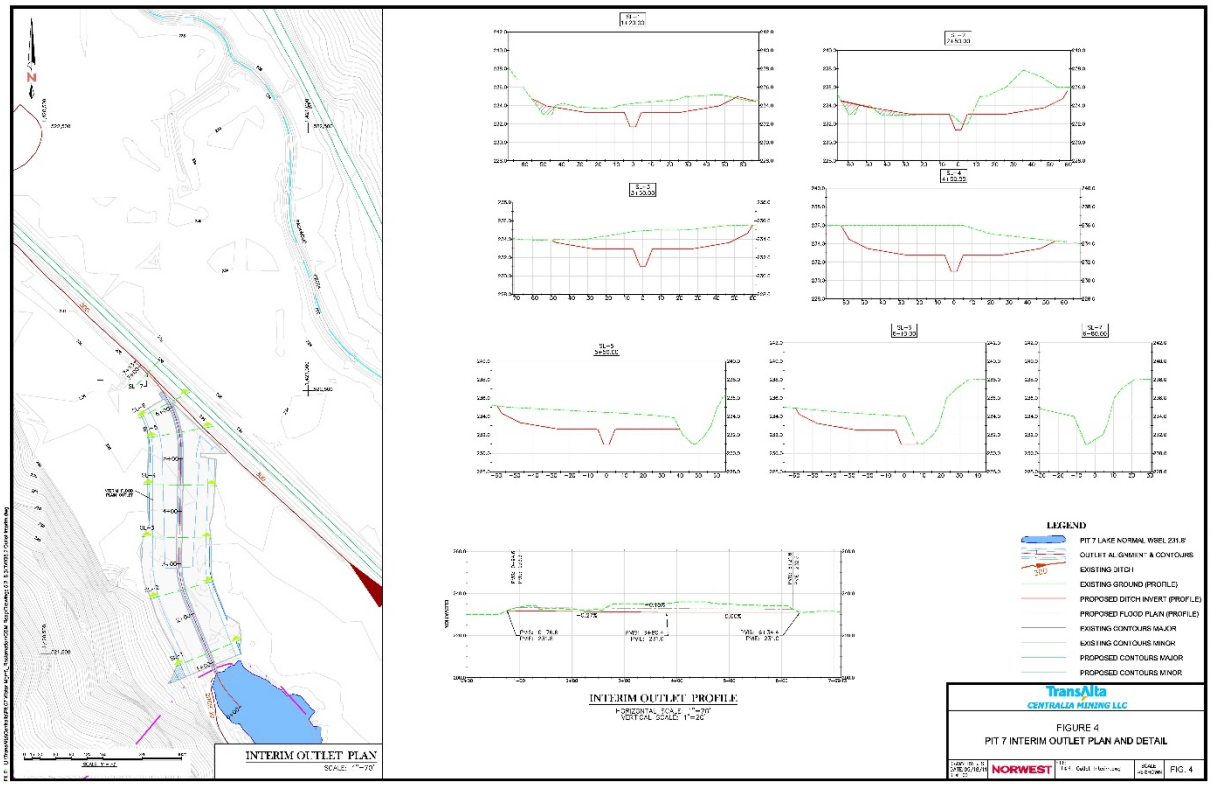

INTERIM OUTLET PLAN
SCALE: 1"=70'
INTERIM OUTLET PROFILE
HORIZONTAL SCALE: 1"=70'
VERTICAL SCALE: 1"=20'
LEGEND
PIT 7 LAKE NORMAL WSEL 231.8'
OUTLET ALIGNMENT & CONTOURS
EXISTING DITCH
EXISTING GROUND (PROFILE)
PROPOSED DITCH INVERT (PROFILE)
PROPOSED FLOOD PLAIN (PROFILE)
EXISTING CONTOURS MAJOR
EXISTING CONTOURS MINOR
PROPOSED CONTOURS MAJOR
PROPOSED CONTOURS MINOR
TransAlta
CENTRALIA MINING LLC
FIGURE 4
PIT 7 INTERIM OUTLET PLAN AND DETAIL
NORWEST
FIG. 4

Figure 5. Backfilling and Grading Schedule.

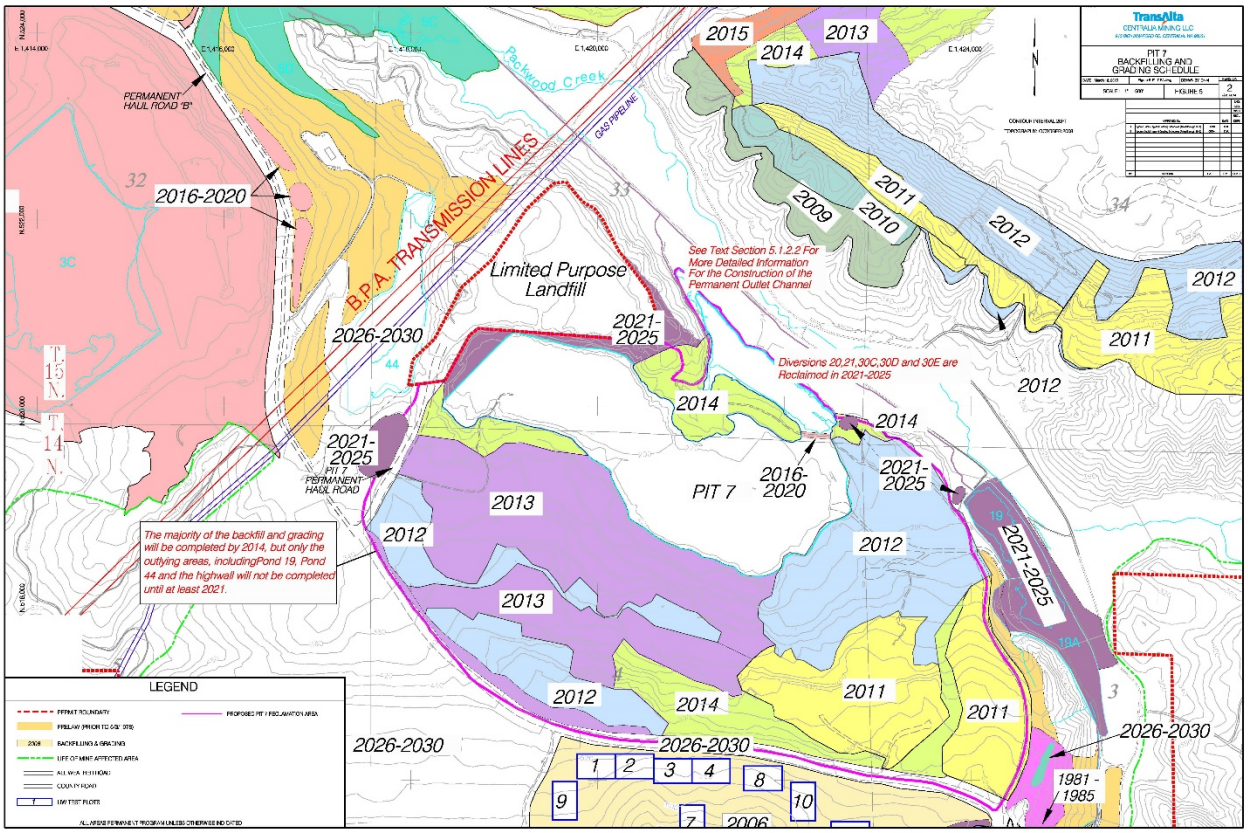
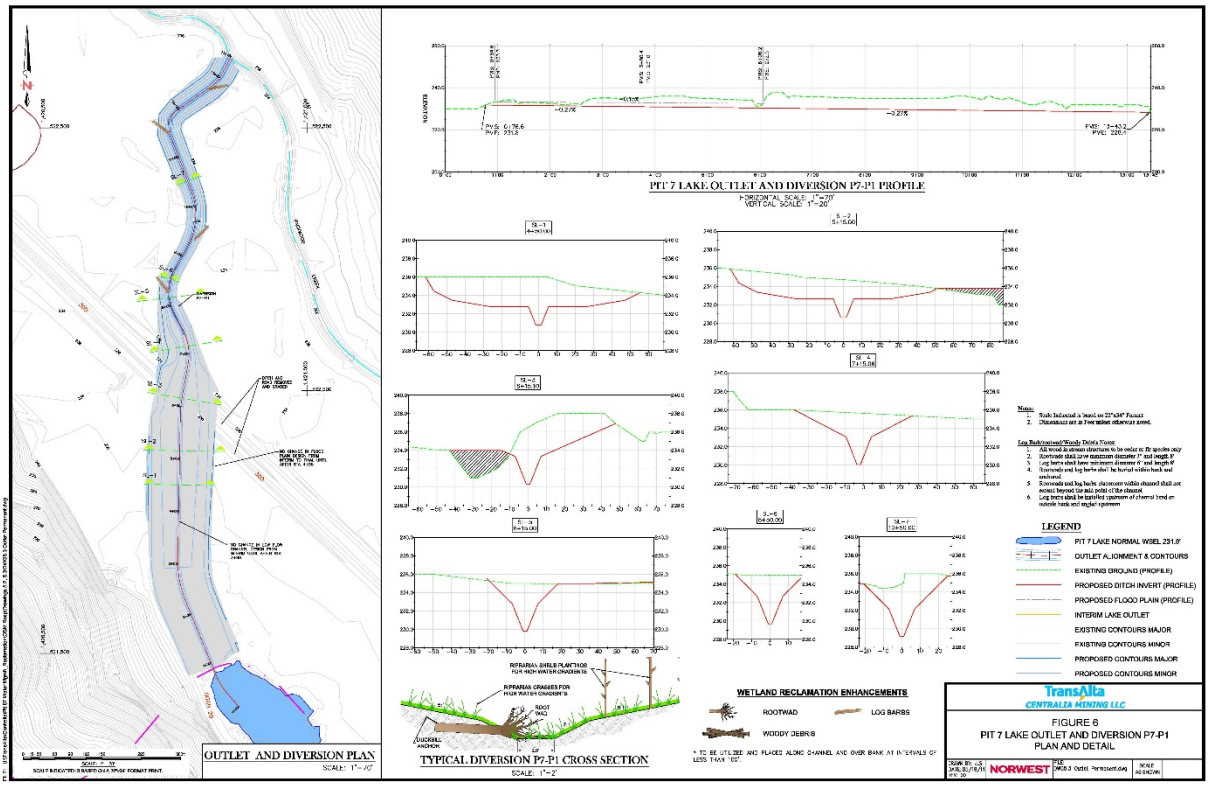

TransAlta
CENTRALIA MINING LLC
PIT 7
BACKFILLING AND
GRADING SCHEDULE
FIGURE 5
2
PERMANENT
HAUL ROAD "B"
Packwood Creek
GAS PIPELINE
B.P.A. TRANSMISSION LINES
2016-2020
2015
2014
2013
2009
2010
2011
2012
Limited Purpose
Landfill
See Text Section 5.1.2.2 For
More Detailed Information
For the Construction of the
Permanent Outlet Channel
2026-2030
2021-
2025
Diversions 20,21,30C,30D and 30E are
Reclaimed in 2021-2025
2014
2021-
2025
PIT 7
PERMANENT
HAUL ROAD
2016-
2020
PIT 7
2013
2012
2021-2025
The majority of the backfill and grading
will be completed by 2014, but only the
outlying areas, includingPond 19, Pond
44 and the highwall will not be completed
until at least 2021.
2013
2012
2014
2011
2011
2026-2030
2026-2030
2026-2030
1981 -
1985
1
2
3
4
8
9
10
7
2006
LEGEND
PERMIT BOUNDARY
PROPOSED PIT 7 RECLAMATION AREA
BACKFILLING & GRADING
LIFE OF MINE AFFECTED AREA
COUNTY ROAD
ALL AREAS PERMANENT PROGRAM UNLESS OTHERWISE INDICATED

Figure 6. Pit 7 Lake Outlet and Diversion P7-P1 Plan and Detail.



OUTLET AND DIVERSION PLAN
SCALE: 1"=70'
PIT 7 LAKE OUTLET AND DIVERSION P7-P1 PROFILE
HORIZONTAL SCALE: 1"=70'
VERTICAL SCALE: 1"=20'
TYPICAL DIVERSION P7-P1 CROSS SECTION
SCALE: 1"=2'
WETLAND RECLAMATION ENHANCEMENTS
ROOTWAD
LOG BARBS
WOODY DEBRIS
LEGEND
PIT 7 LAKE NORMAL WSEL 231.8'
OUTLET ALIGNMENT & CONTOURS
EXISTING GROUND (PROFILE)
PROPOSED DITCH INVERT (PROFILE)
PROPOSED FLOOD PLAIN (PROFILE)
INTERIM LAKE OUTLET
EXISTING CONTOURS MAJOR
EXISTING CONTOURS MINOR
PROPOSED CONTOURS MAJOR
PROPOSED CONTOURS MINOR
TransAlta
CENTRALIA MINING LLC
FIGURE 6
PIT 7 LAKE OUTLET AND DIVERSION P7-P1
PLAN AND DETAIL
NORWEST

Figure 7. Jurisdictional Boundaries & Pre-Mine Topography.

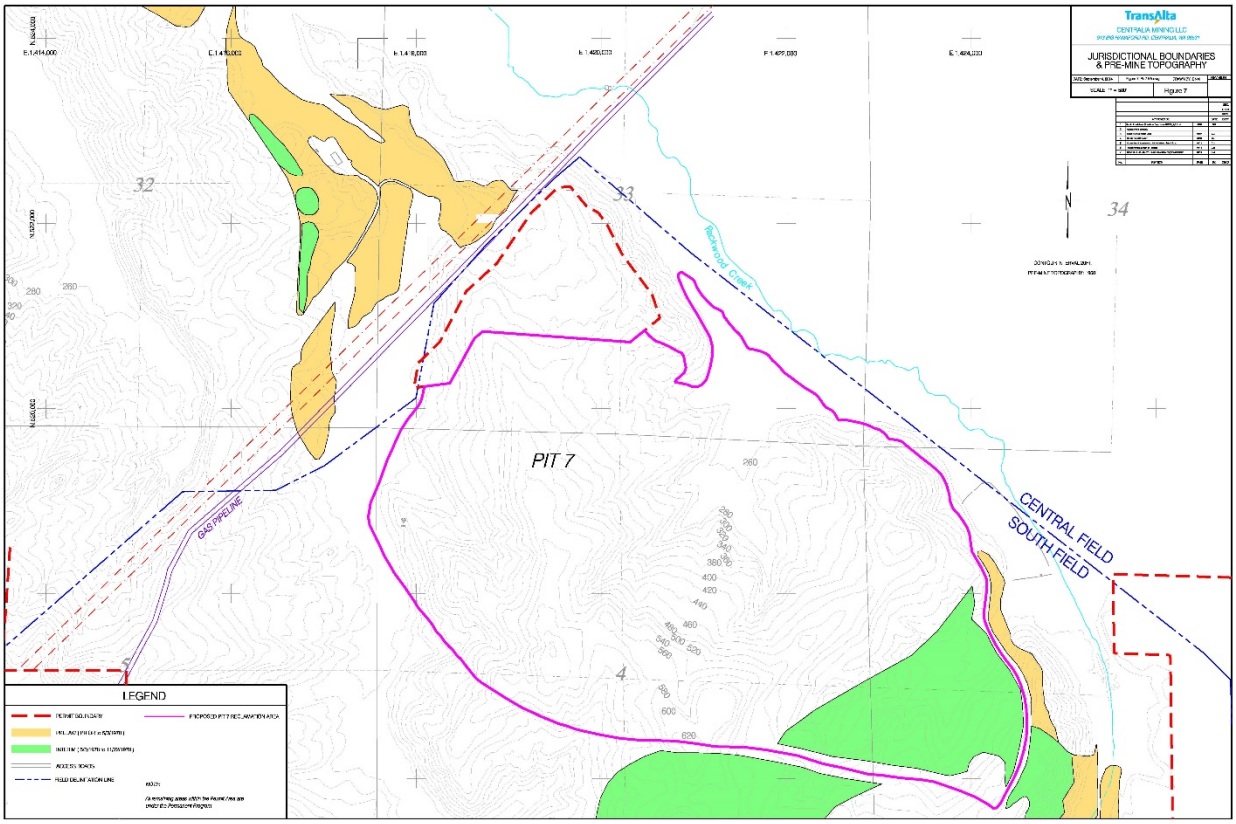

TransAlta
CENTRALIA MINING LLC
JURISDICTIONAL BOUNDARIES
& PRE-MINE TOPOGRAPHY
Figure 7
32
33
34
4
Rockwood Creek
PIT 7
GAS PIPELINE
CENTRAL FIELD
SOUTH FIELD
LEGEND

Figure 8. Pit 7 Soils (shows the distribution of soils within the Pit 7 area at the time the initial permit was issued).

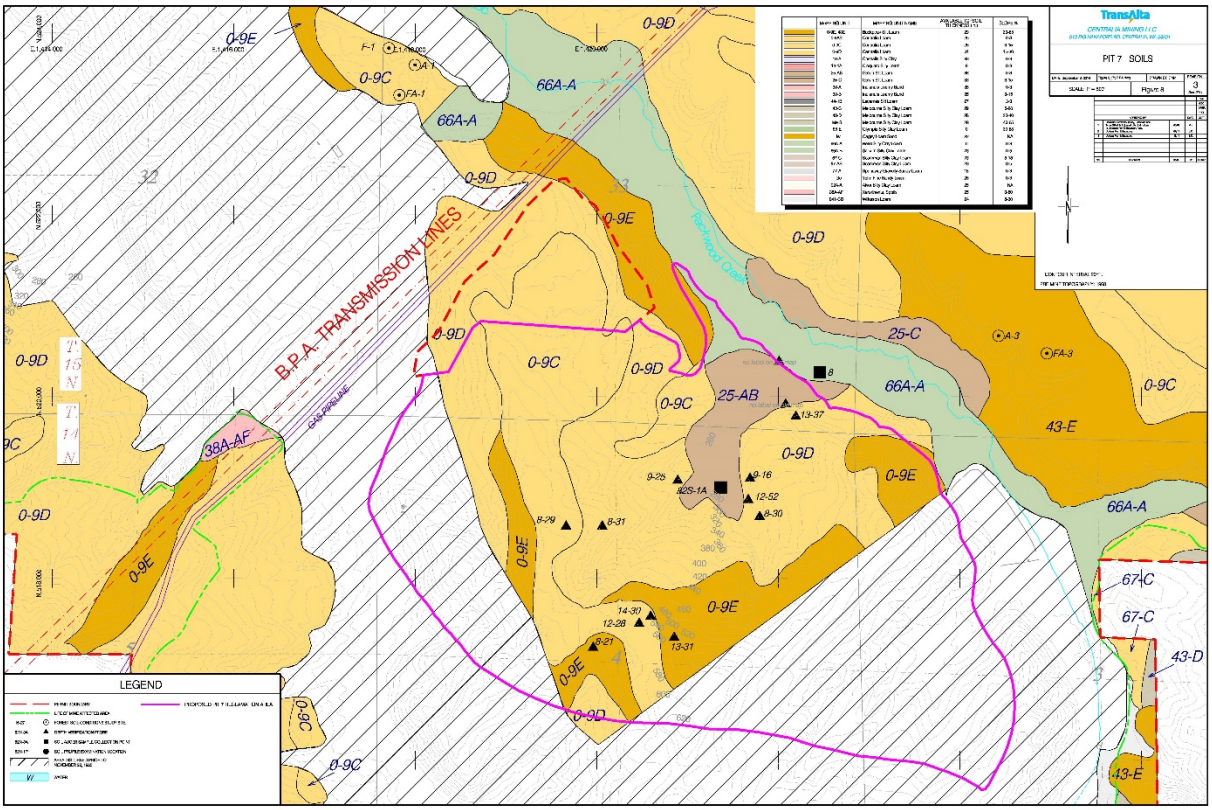


Figure 9. Pit 7 Topsoil Handling Plan.

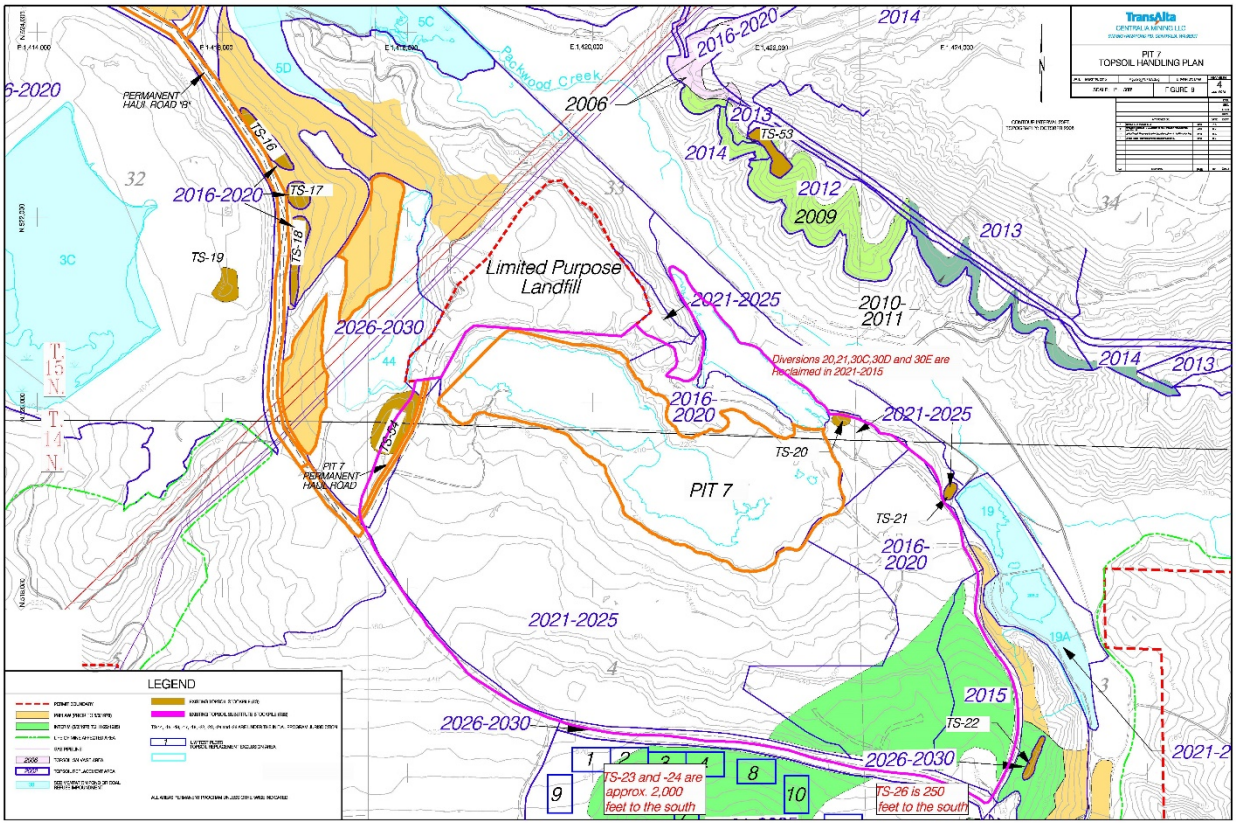


Figure 10. Pit 7 Pre-Mine Land Use.

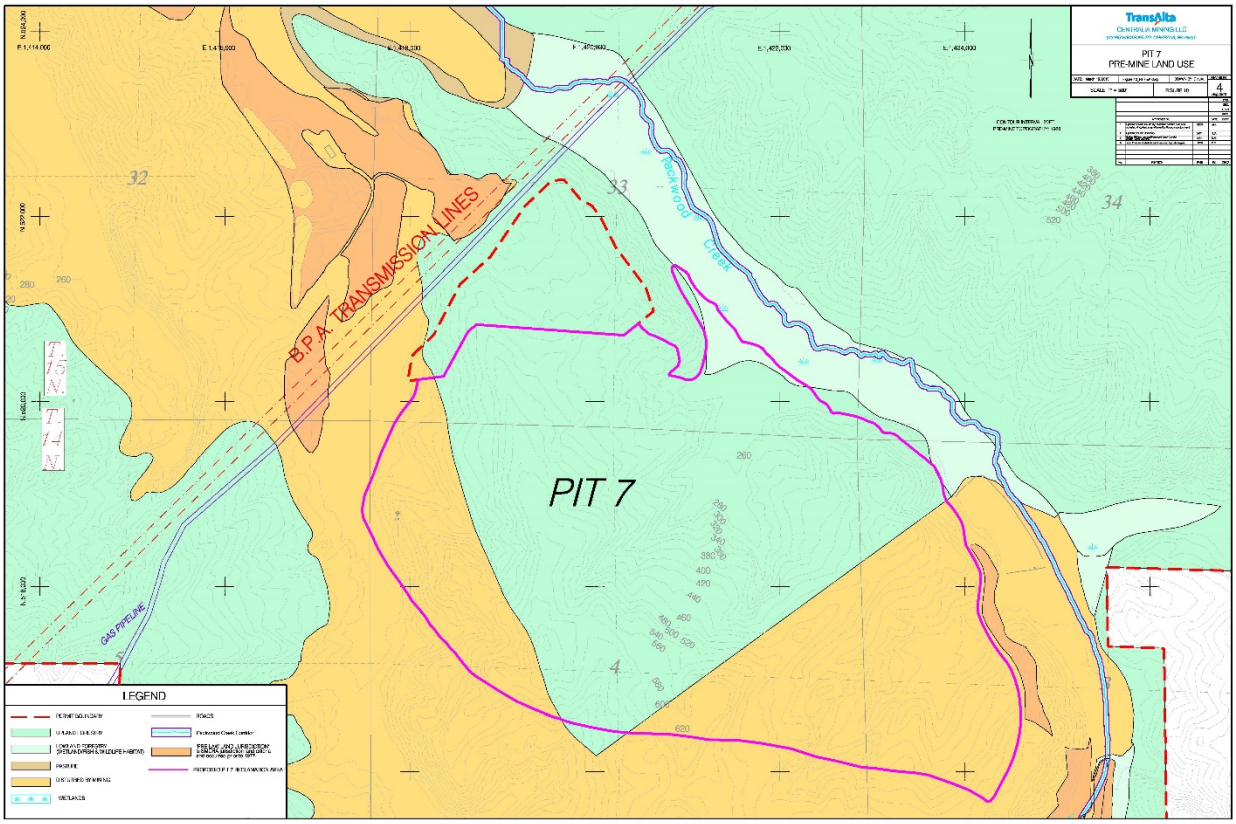

TransAlta
CENTRALIA MINING LLC
PIT 7
PRE-MINE LAND USE
PIT 7
B.P.A. TRANSMISSION LINES
Packwood Creek
GAS PIPELINE
T. 15 N.
T. 14 N.
32
33
34
4
LEGEND

Figure 11. Approved Pit 7 Post-Mine Topography and Land Use.

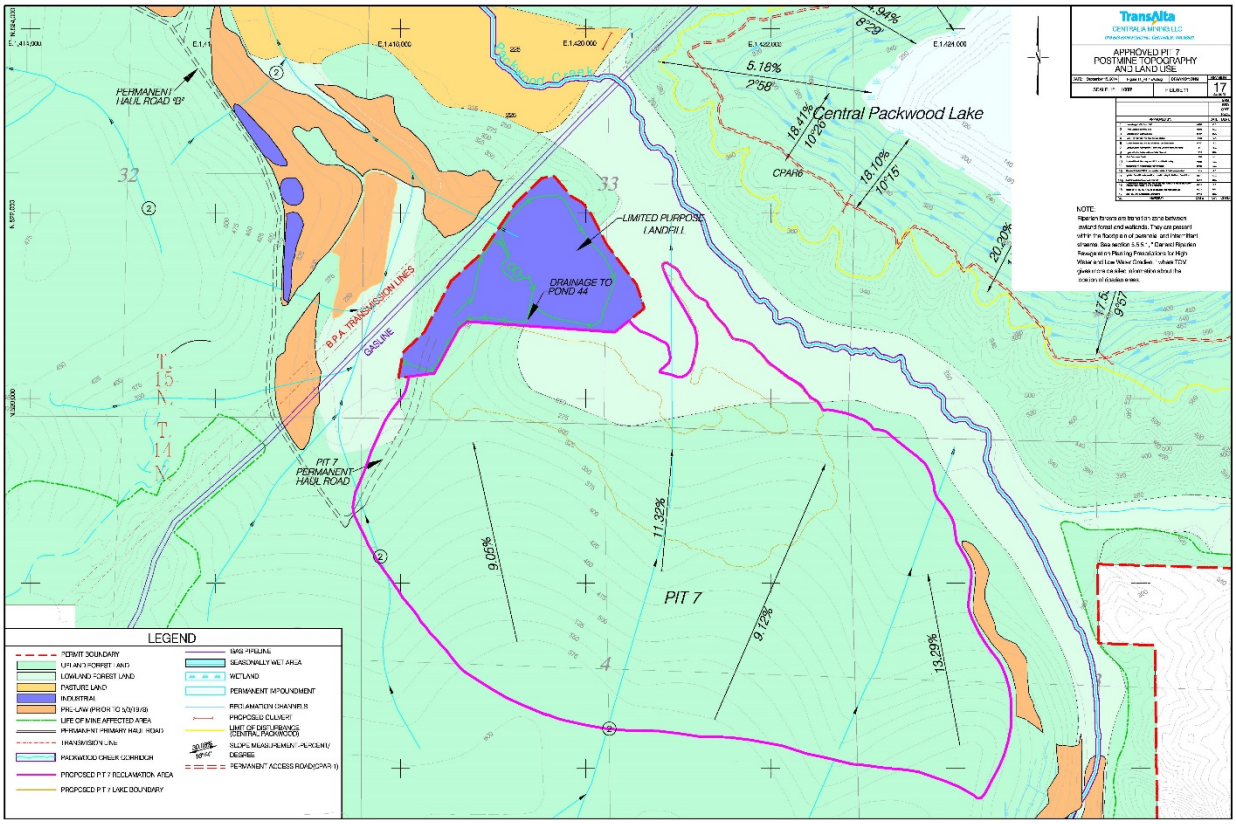

TransAlta
CENTRALIA MINING LLC
APPROVED PIT 7
POSTMINE TOPOGRAPHY
AND LAND USE
17
NOTE:
Riparian forests are transition zone between upland forest and wetlands. They are present within the floodplain of perennial and intermittent streams. See section 5.5.5.1, "Derived Riparian Reserve and Floating Precautions for High Water and Low Water Bodies," where TDV gives more detailed information about the location of disclosed areas.
Central Packwood Lake
PERMANENT HAUL ROAD "B"
LIMITED PURPOSE LANDFILL
DRAINAGE TO POND 44
B.P.A. TRANSMISSION LINES
GASLINE
PIT 7 PERMANENT HAUL ROAD
PIT 7
CPAR6
5.18%
2°58'
18.41%
10°26'
18.10%
10°15'
20.20%
9.05%
11.32%
9.12%
13.29%
32
33
4
T. 15 N.
T. 14 N.
LEGEND
PERMIT BOUNDARY
UPLAND FOREST LAND
LOWLAND FOREST LAND
PASTURE LAND
INDUSTRIAL
PRE-LAW (PRIOR TO 5/3/1978)
LIFE OF MINE AFFECTED AREA
PERMANENT PRIMARY HAUL ROAD
TRANSMISSION LINE
PACKWOOD CREEK CORRIDOR
PROPOSED PIT 7 RECLAMATION AREA
PROPOSED PIT 7 LAKE BOUNDARY
BASE PIPELINE
SEASONALLY WET AREA
WETLAND
PERMANENT IMPOUNDMENT
RECLAMATION CHANNELS
PROPOSED CULVERT
LIMIT OF DISTURBANCE (CENTRAL PACKWOOD)
SLOPE MEASUREMENT - PERCENT/DEGREE
PERMANENT ACCESS ROAD(CPAR 1)

Figure 12. Pit 7 Vegetation.

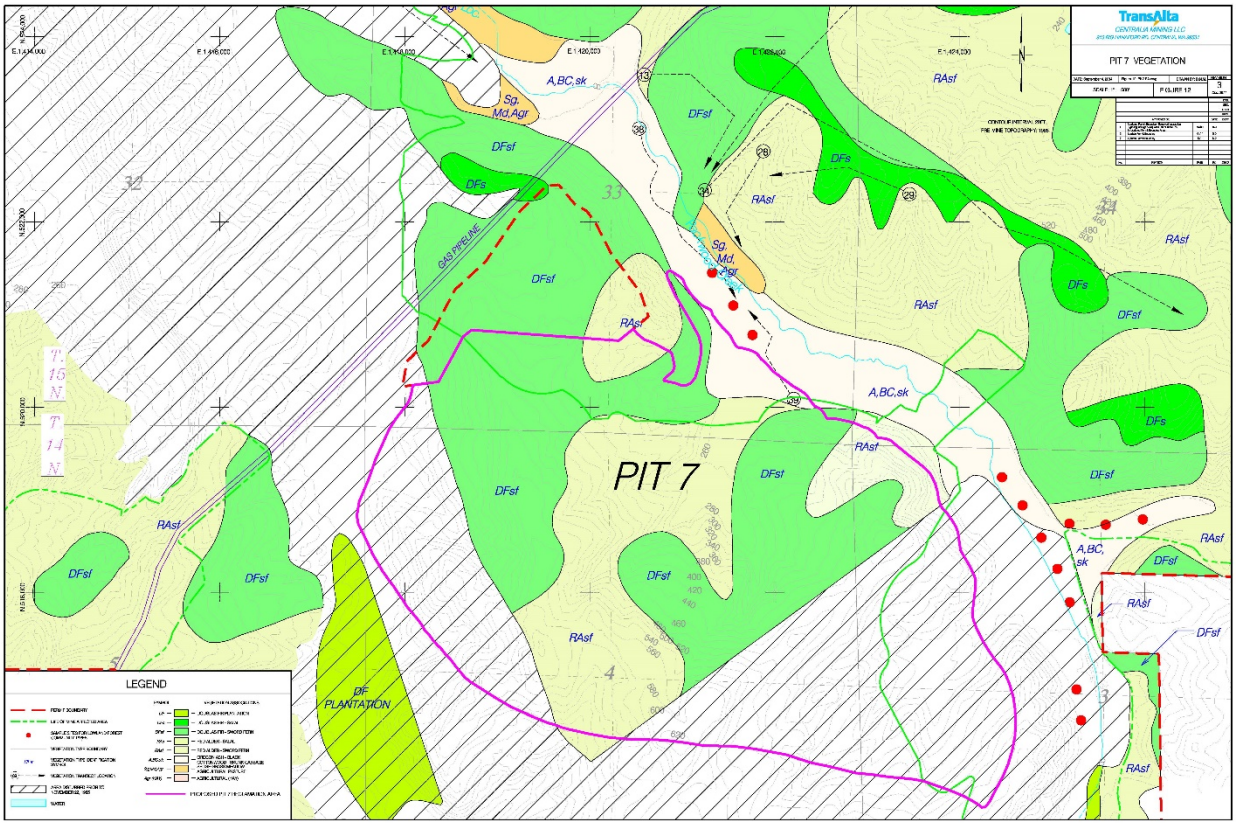


Figure 13. Pit 7 Post-Mine Channel Classification.

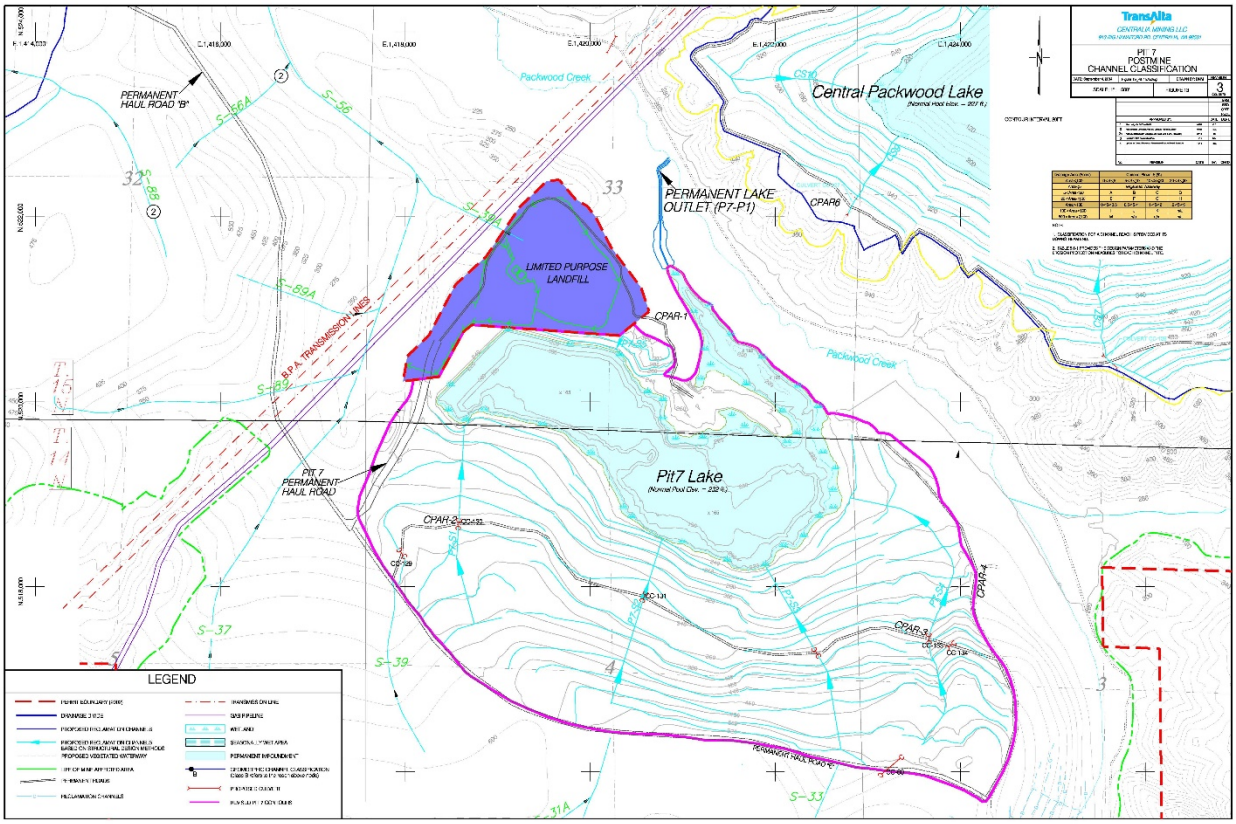
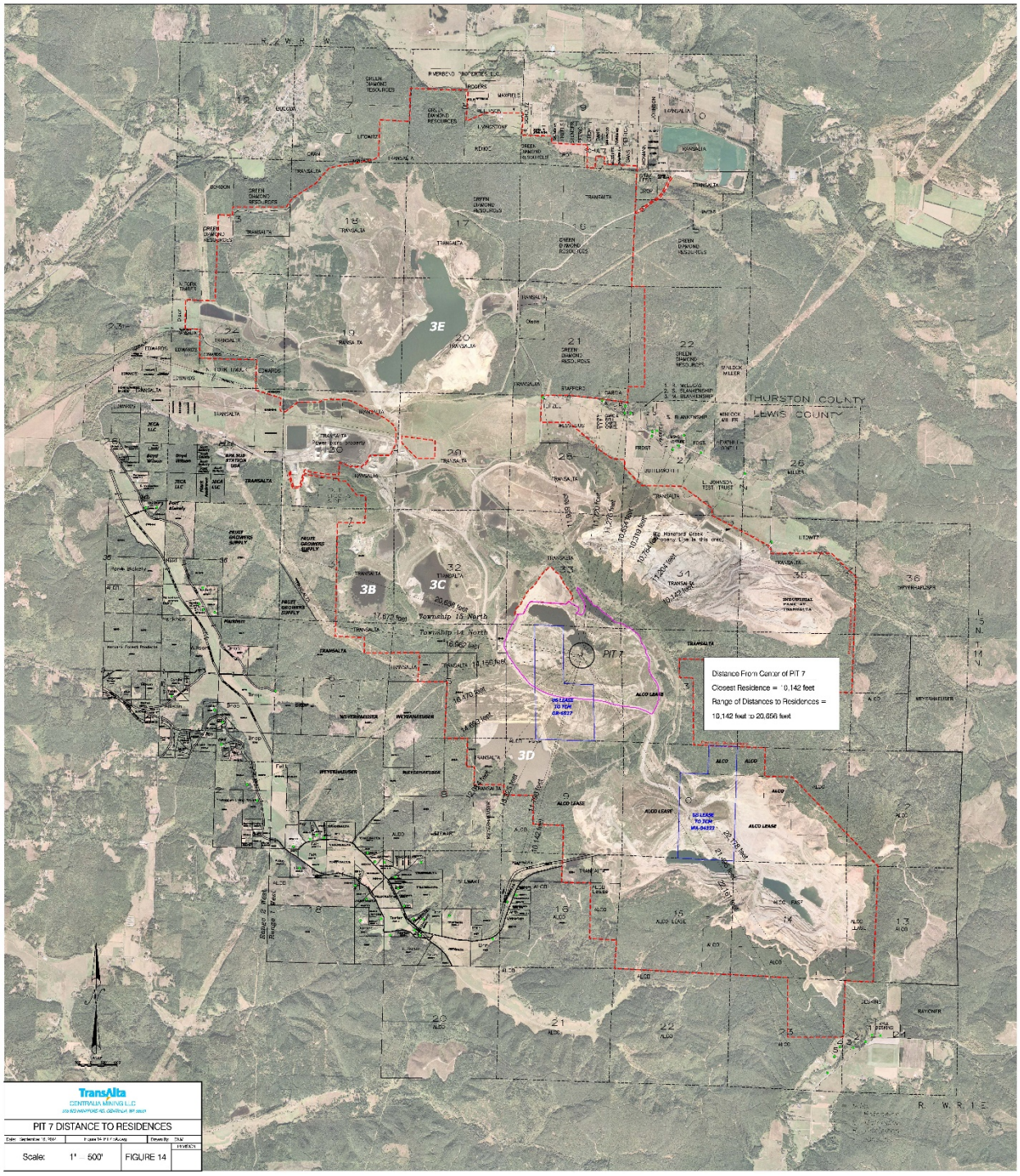
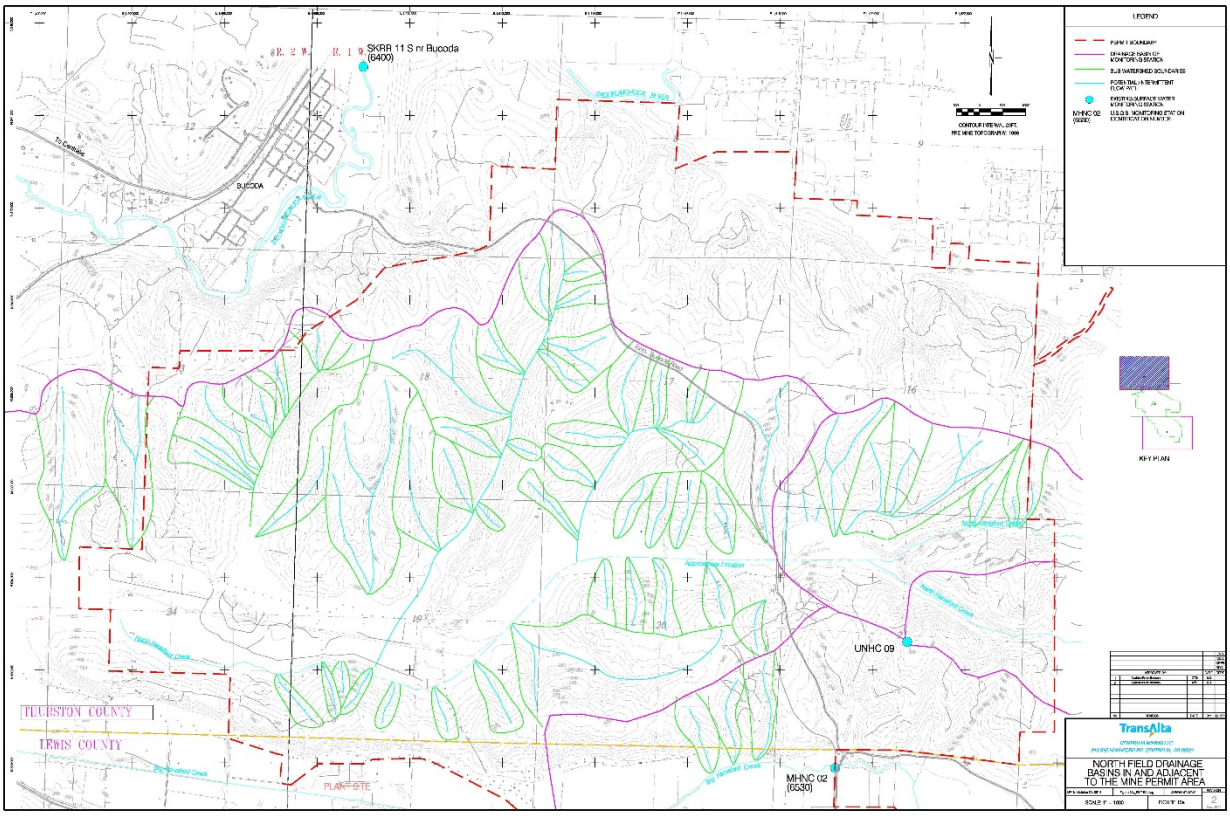

TransAlta
CENTRALIA MINING LLC
PIT 7
POSTMINE
CHANNEL CLASSIFICATION
Central Packwood Lake
PERMANENT LAKE OUTLET (P7-P1)
LIMITED PURPOSE LANDFILL
Pit7 Lake
PERMANENT HAUL ROAD 'B'
PIT 7 PERMANENT HAUL ROAD
Packwood Creek
B.P.A. TRANSMISSION LINES
CPAR-1
CPAR-2
CPAR-3
CPAR-4
CPAR6
LEGEND

Figure 14. Pit 7 Distances to Residences.



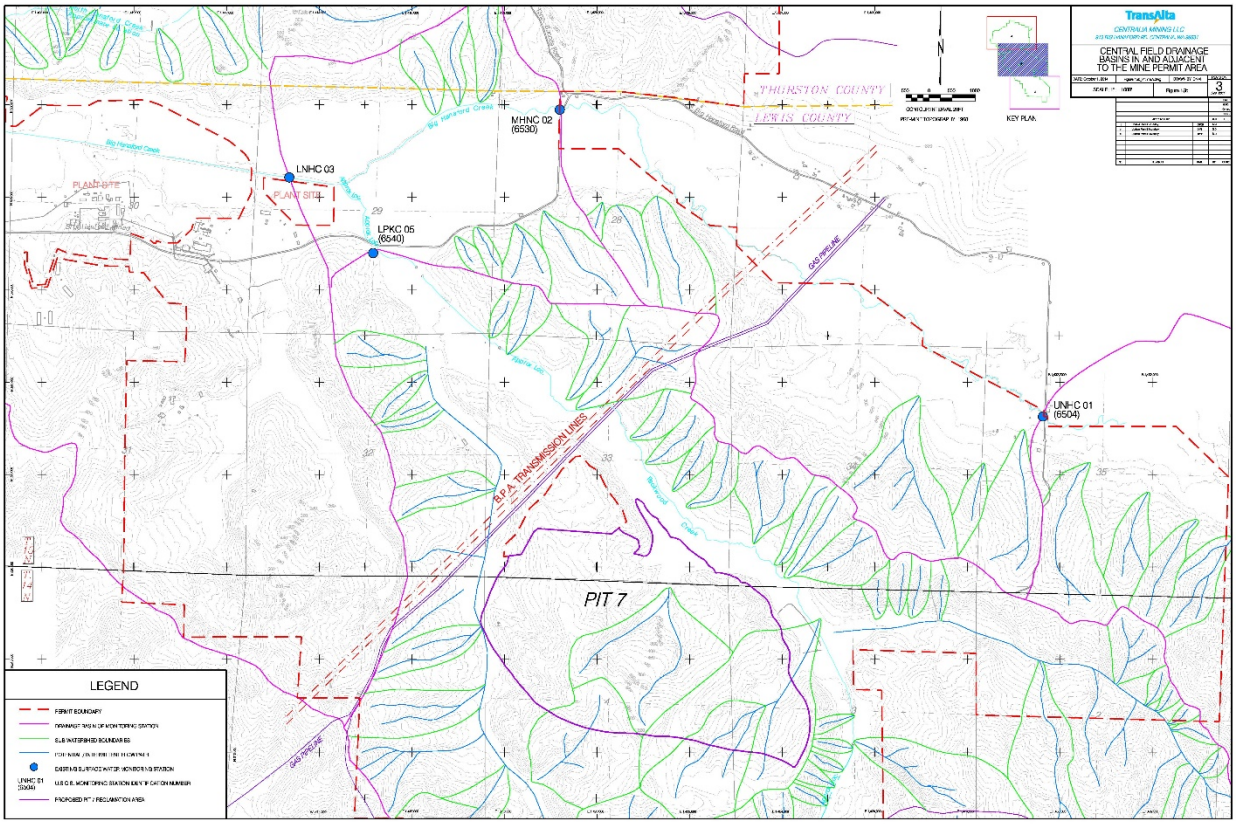
THURSTON COUNTY
LEWIS COUNTY
3E
3B
3C
3D
PIT 7
Township 15 North
Township 14 North
Distance From Center of PIT 7
Closest Residence = 10,142 feet
Range of Distances to Residences =
10,142 feet to 20,656 feet
TransAlta
CENTRALIA MINING L.L.C.
PIT 7 DISTANCE TO RESIDENCES
Scale: 1" = 500'
FIGURE 14

Figure 15a. North Field Drainage Basins In and Adjacent to the Mine Permit Area.



LEGEND
SKRR 11 S nr Bucoda
(6400)
BUCODA
UNHC 09
MHNC 02
(6530)
THURSTON COUNTY
LEWIS COUNTY
KEY PLAN
TransAlta
NORTH FIELD DRAINAGE
BASINS IN AND ADJACENT
TO THE MINE PERMIT AREA

Figure 15b. Central Field Drainage Basins In and Adjacent to the Mine Permit Area.


TransAlta
CENTRAL FIELD DRAINAGE BASINS IN AND ADJACENT TO THE MINE PERMIT AREA
KEY PLAN
THURSTON COUNTY
LEWIS COUNTY
MHNC 02
(6530)
LNHC 03
LPKC 05
(6540)
UNHC 01
(6504)
PLANT SITE
PIT 7
B.P.A. TRANSMISSION LINES
GAS PIPELINE
LEGEND
PERMIT BOUNDARY
DRAINAGE BASIN OF MONITORING STATION
SUB WATERSHED BOUNDARIES
EXISTING SURFACE WATER MONITORING STATION
U.S.G.S. MONITORING STATION IDENTIFICATION NUMBER
PROPOSED PIT 7 RECLAMATION AREA

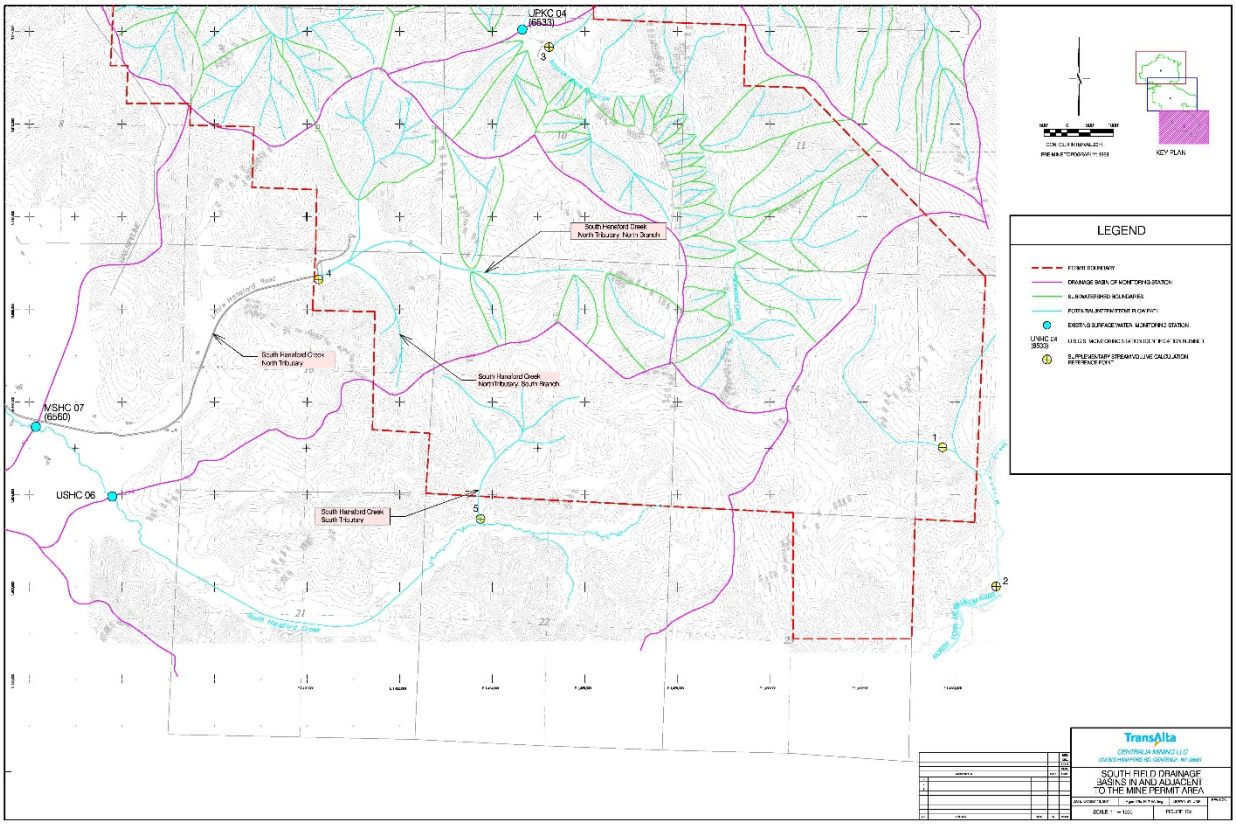



Figure 15c. South Field Drainage Basins In and Adjacent to the Mine Permit Area.