Figures

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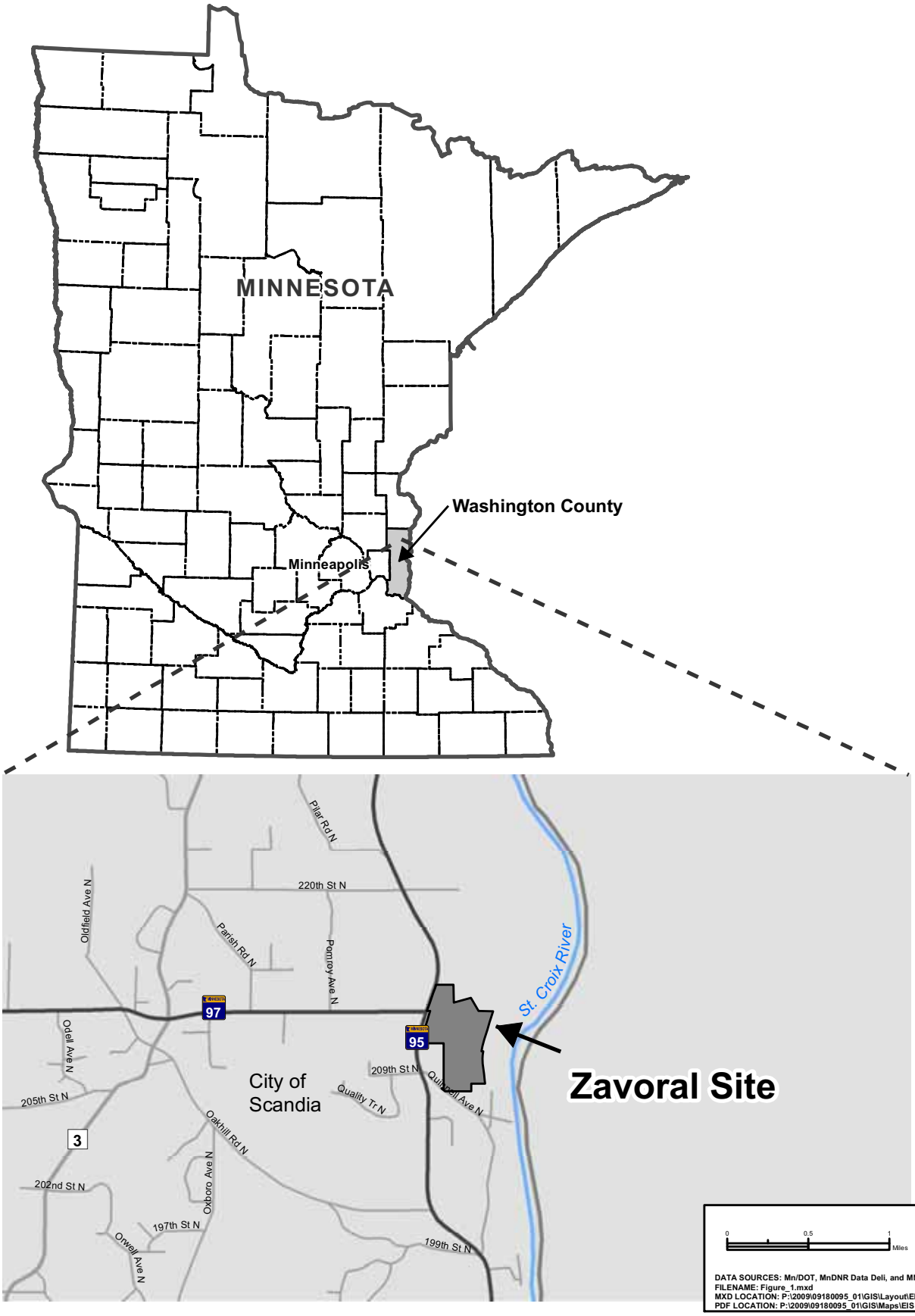

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FIGURE 1
PROJECT LOCATION MAP

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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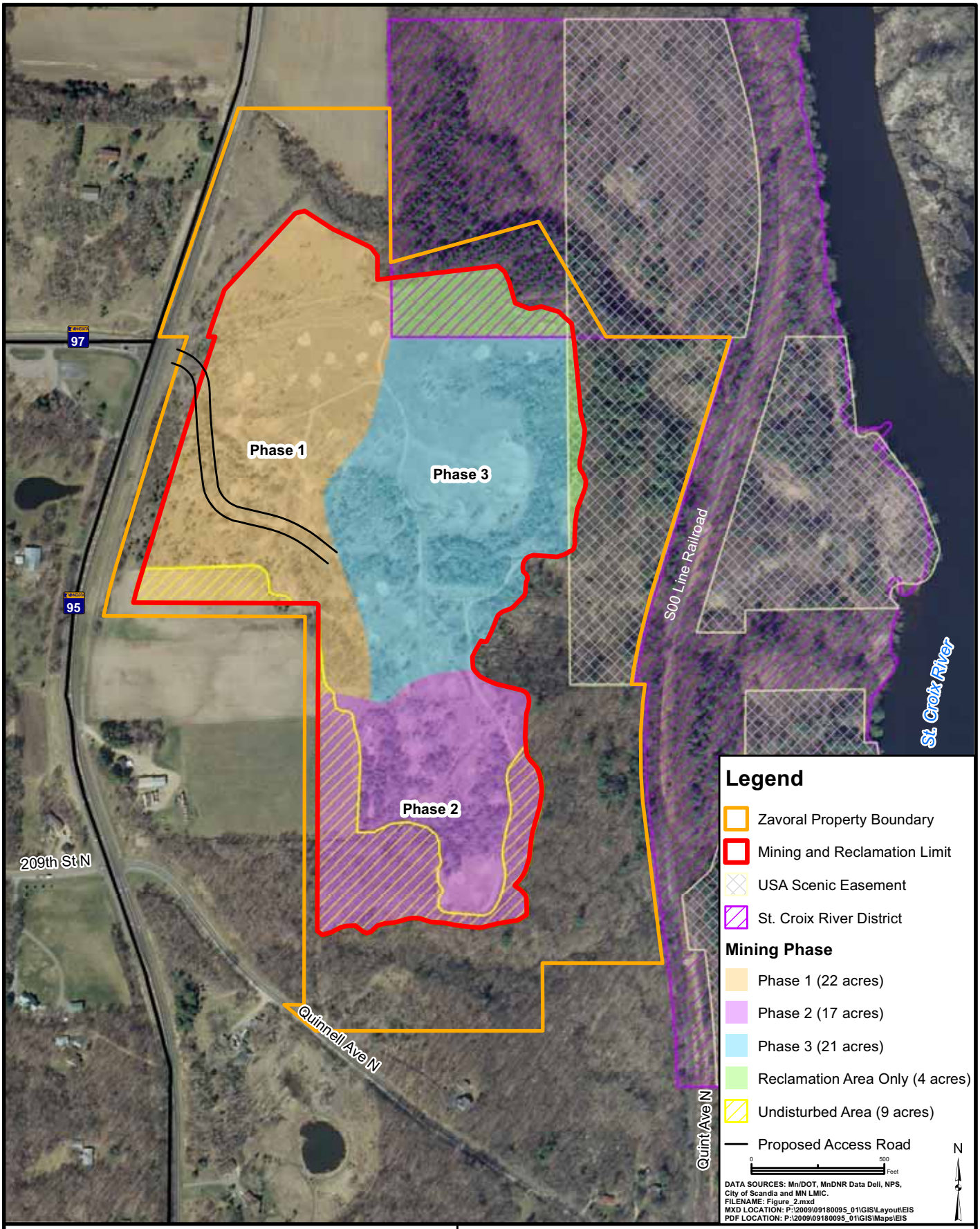

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Prepared For:

SCANDIA MINNESOTA

FIGURE 2
ZAVORAL SITE AND VICINITY MAP

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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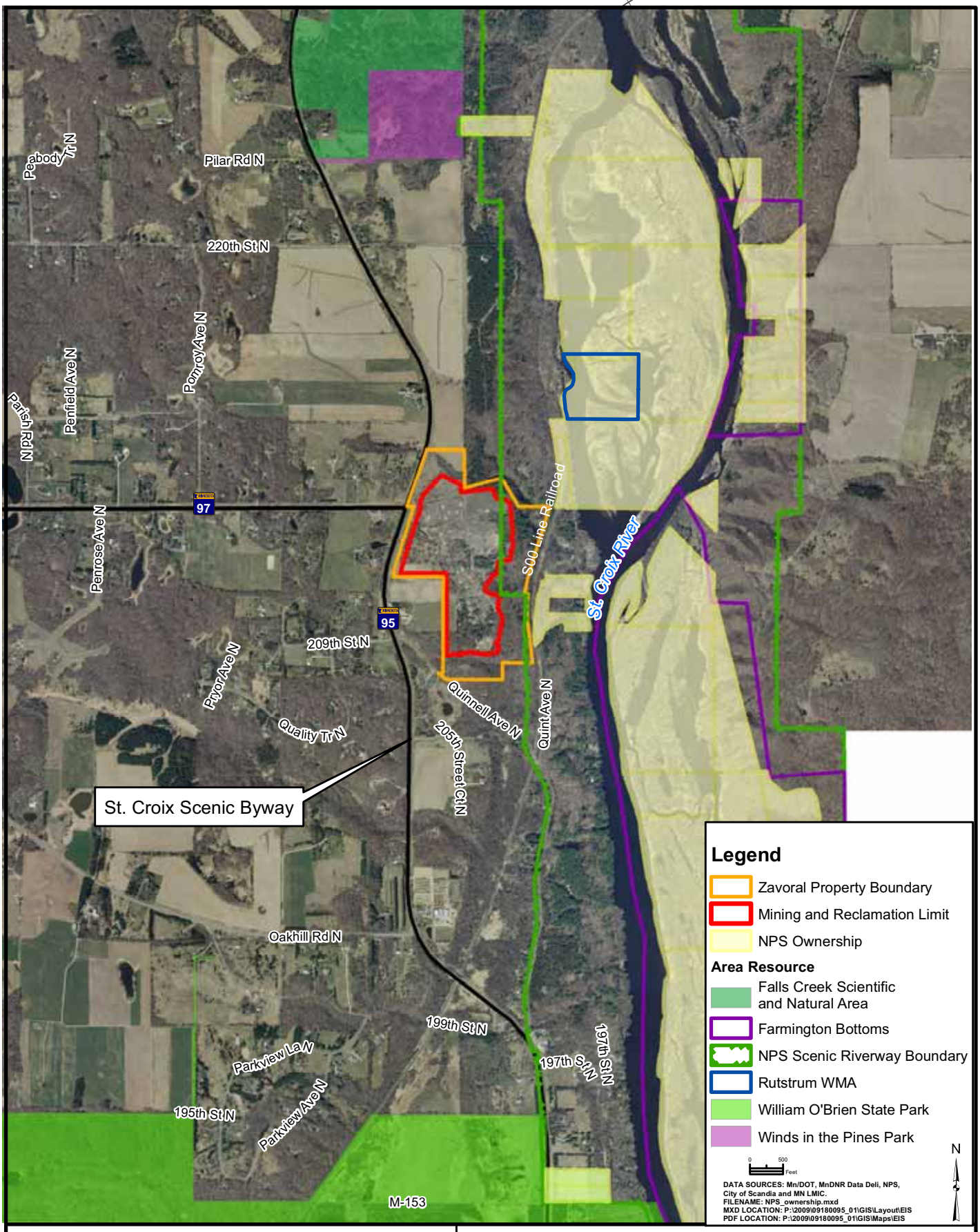

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Prepared For:

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FIGURE 3
ZAVORAL SITE AND AREA RESOURCES

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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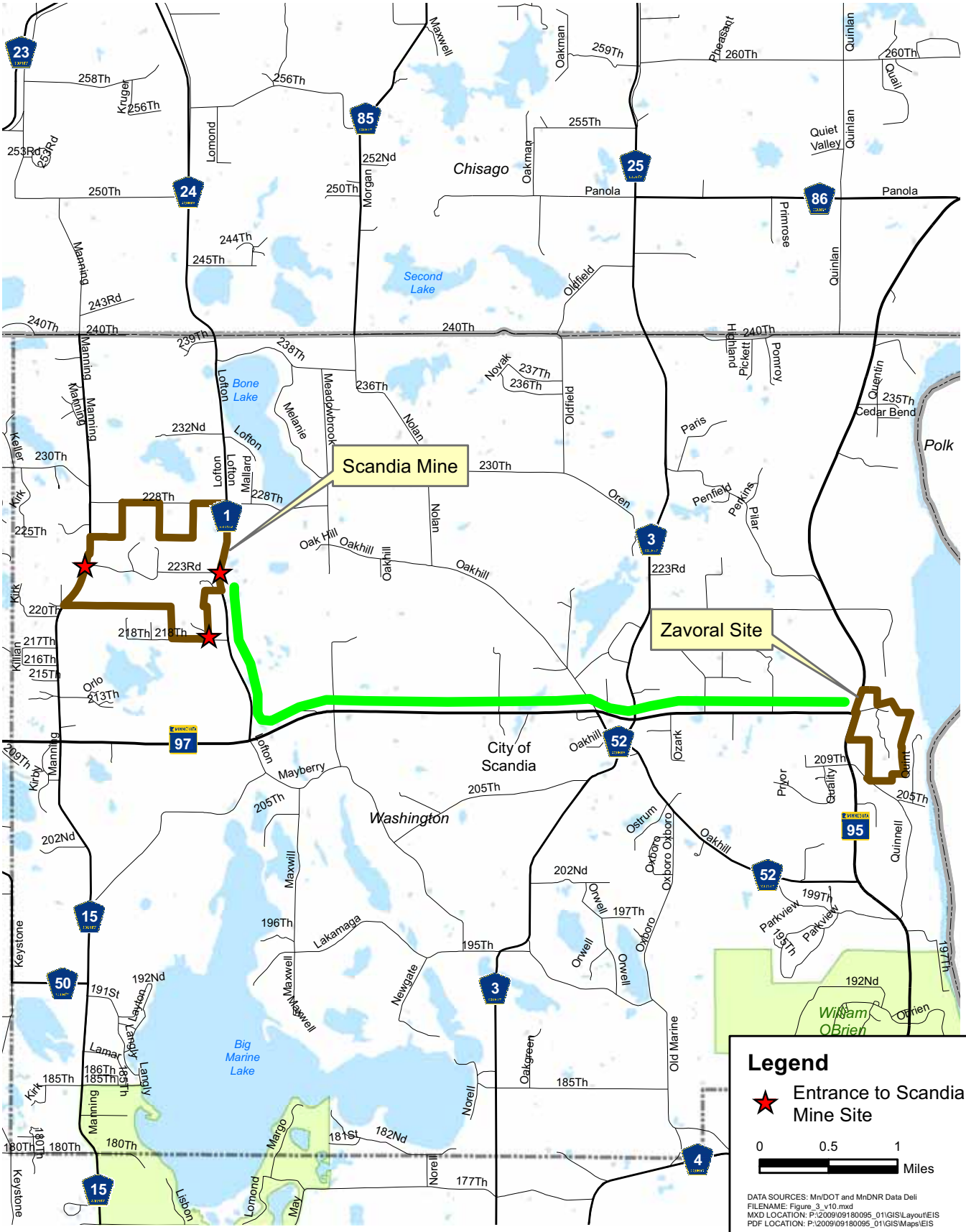

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FIGURE 4
PROPOSED CLASS C ADD-ROCK HAUL ROUTE

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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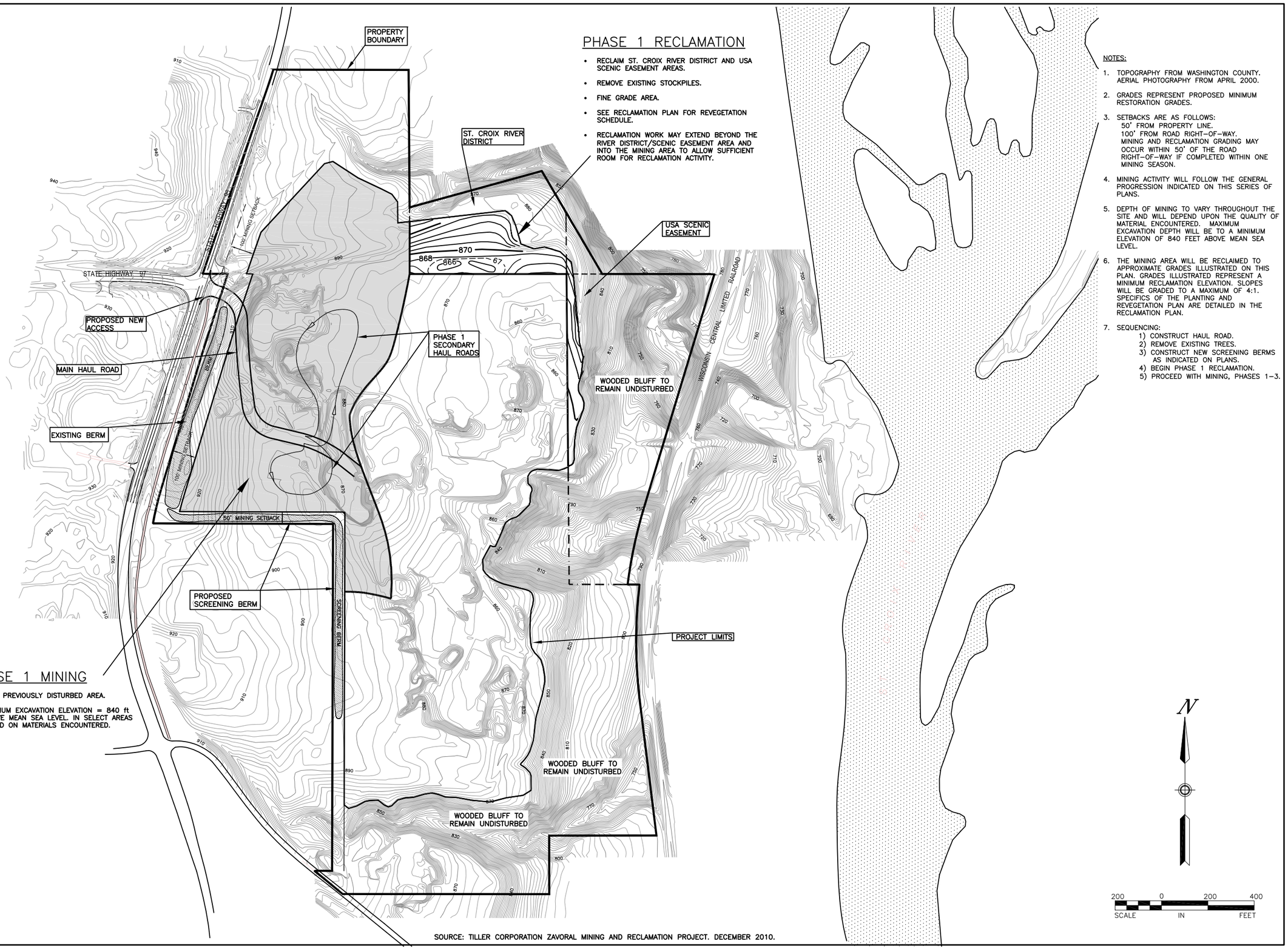

PHASE 1 RECLAMATION

- RECLAIM ST. CROIX RIVER DISTRICT AND USA SCENIC EASEMENT AREAS.
- REMOVE EXISTING STOCKPILES.
- FINE GRADE AREA.
- SEE RECLAMATION PLAN FOR REVEGETATION SCHEDULE.
- RECLAMATION WORK MAY EXTEND BEYOND THE RIVER DISTRICT/SCENIC EASEMENT AREA AND INTO THE MINING AREA TO ALLOW SUFFICIENT ROOM FOR RECLAMATION ACTIVITY.

PHASE 1 MINING

- MINE PREVIOUSLY DISTURBED AREA.
- MINIMUM EXCAVATION ELEVATION = 840 ft ABOVE MEAN SEA LEVEL. IN SELECT AREAS BASED ON MATERIALS ENCOUNTERED.

NOTES:

1. TOPOGRAPHY FROM WASHINGTON COUNTY. AERIAL PHOTOGRAPHY FROM APRIL 2000.
2. GRADES REPRESENT PROPOSED MINIMUM RESTORATION GRADES.
3. SETBACKS ARE AS FOLLOWS:
   50' FROM PROPERTY LINE.
   100' FROM ROAD RIGHT-OF-WAY.
   MINING AND RECLAMATION GRADING MAY OCCUR WITHIN 50' OF THE ROAD RIGHT-OF-WAY IF COMPLETED WITHIN ONE MINING SEASON.
4. MINING ACTIVITY WILL FOLLOW THE GENERAL PROGRESSION INDICATED ON THIS SERIES OF PLANS.
5. DEPTH OF MINING TO VARY THROUGHOUT THE SITE AND WILL DEPEND UPON THE QUALITY OF MATERIAL ENCOUNTERED. MAXIMUM EXCAVATION DEPTH WILL BE TO A MINIMUM ELEVATION OF 840 FEET ABOVE MEAN SEA LEVEL.
6. THE MINING AREA WILL BE RECLAIMED TO APPROXIMATE GRADES ILLUSTRATED ON THIS PLAN. GRADES ILLUSTRATED REPRESENT A MINIMUM RECLAMATION ELEVATION. SLOPES WILL BE GRADED TO A MAXIMUM OF 4:1. SPECIFICS OF THE PLANTING AND REVEGETATION PLAN ARE DETAILED IN THE RECLAMATION PLAN.
7. SEQUENCING:
   1) CONSTRUCT HAUL ROAD.
   2) REMOVE EXISTING TREES.
   3) CONSTRUCT NEW SCREENING BERMS AS INDICATED ON PLANS.
   4) BEGIN PHASE 1 RECLAMATION.
   5) PROCEED WITH MINING, PHASES 1-3.

SOURCE: TILLER CORPORATION ZAVORAL MINING AND RECLAMATION PROJECT. DECEMBER 2010.

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FIGURE 5
MINING AND RECLAMATION PLAN - PHASE 1

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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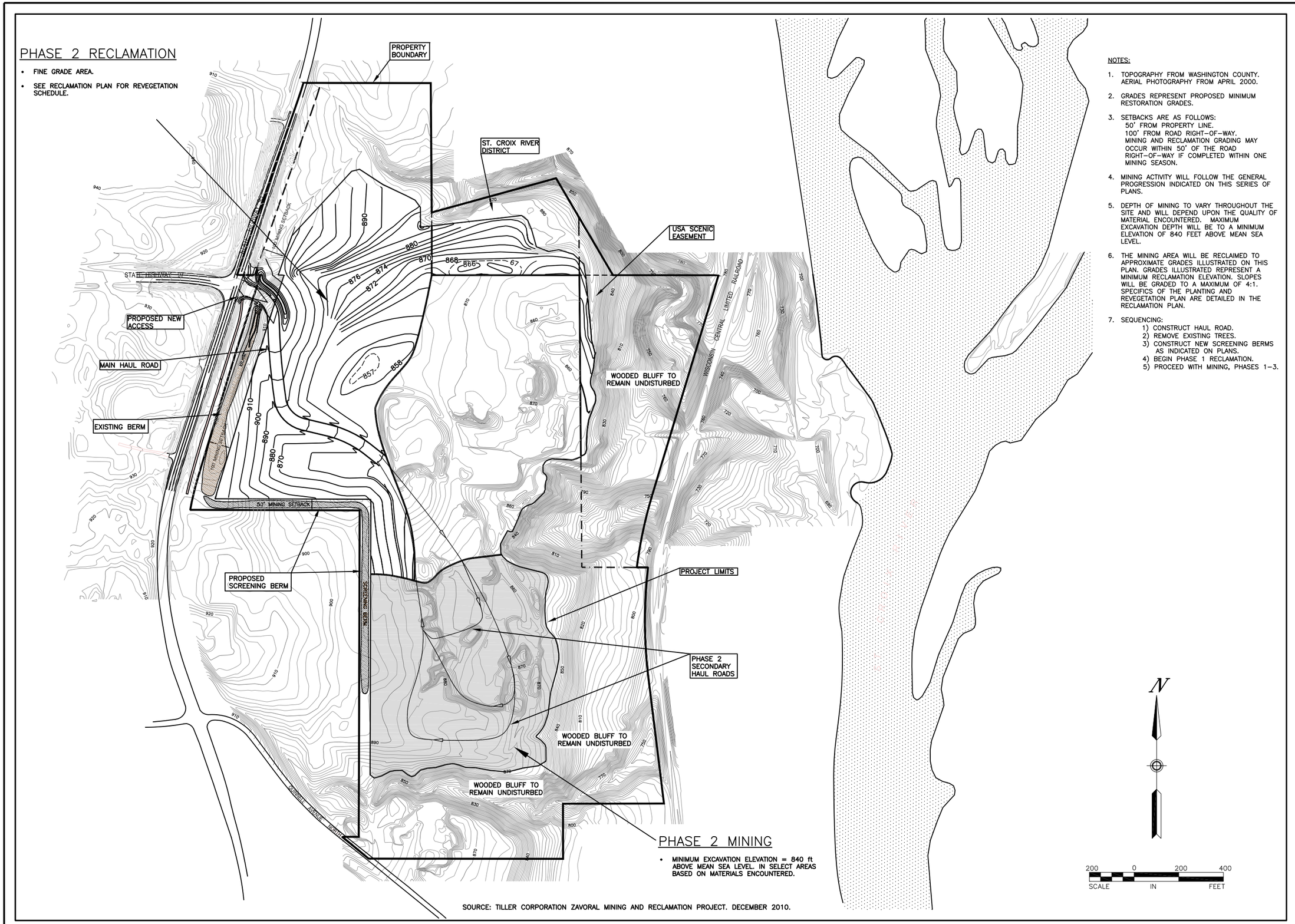

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   3) CONSTRUCT NEW SCREENING BERMS AS INDICATED ON PLANS.
   4) BEGIN PHASE 1 RECLAMATION.
   5) PROCEED WITH MINING, PHASES 1-3.

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FIGURE 6
MINING AND RECLAMATION PLAN - PHASE 2

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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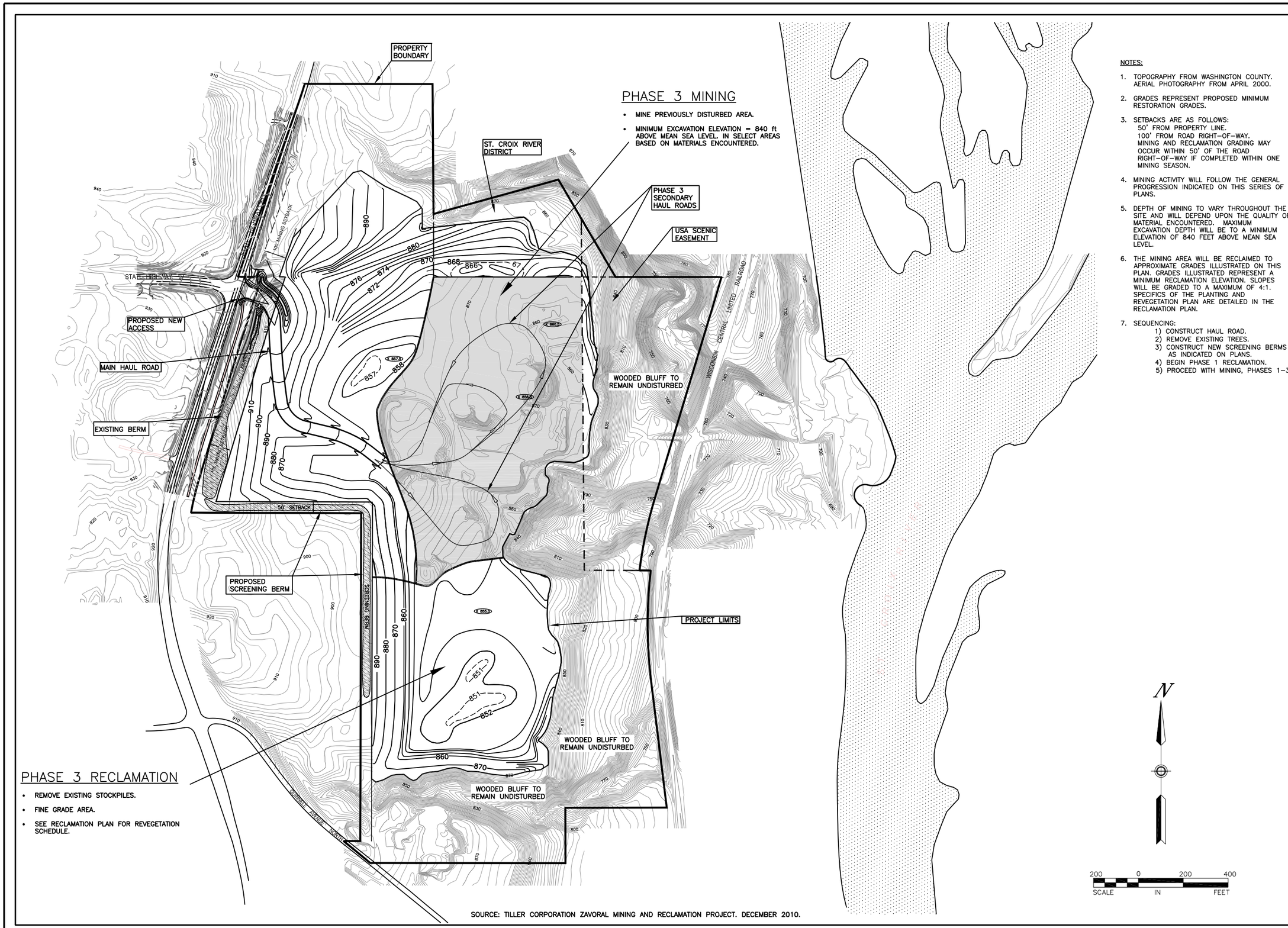

PHASE 3 MINING

- MINE PREVIOUSLY DISTURBED AREA.
- MINIMUM EXCAVATION ELEVATION = 840 ft ABOVE MEAN SEA LEVEL. IN SELECT AREAS BASED ON MATERIALS ENCOUNTERED.

PHASE 3 RECLAMATION

- REMOVE EXISTING STOCKPILES.
- FINE GRADE AREA.
- SEE RECLAMATION PLAN FOR REVEGETATION SCHEDULE.

SOURCE: TILLER CORPORATION ZAVORAL MINING AND RECLAMATION PROJECT. DECEMBER 2010.

NOTES:

1. TOPOGRAPHY FROM WASHINGTON COUNTY. AERIAL PHOTOGRAPHY FROM APRIL 2000.
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   2) REMOVE EXISTING TREES.
   3) CONSTRUCT NEW SCREENING BERMS AS INDICATED ON PLANS.
   4) BEGIN PHASE 1 RECLAMATION.
   5) PROCEED WITH MINING, PHASES 1-3.

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FIGURE 7
MINING AND RECLAMATION PLAN - PHASE 3

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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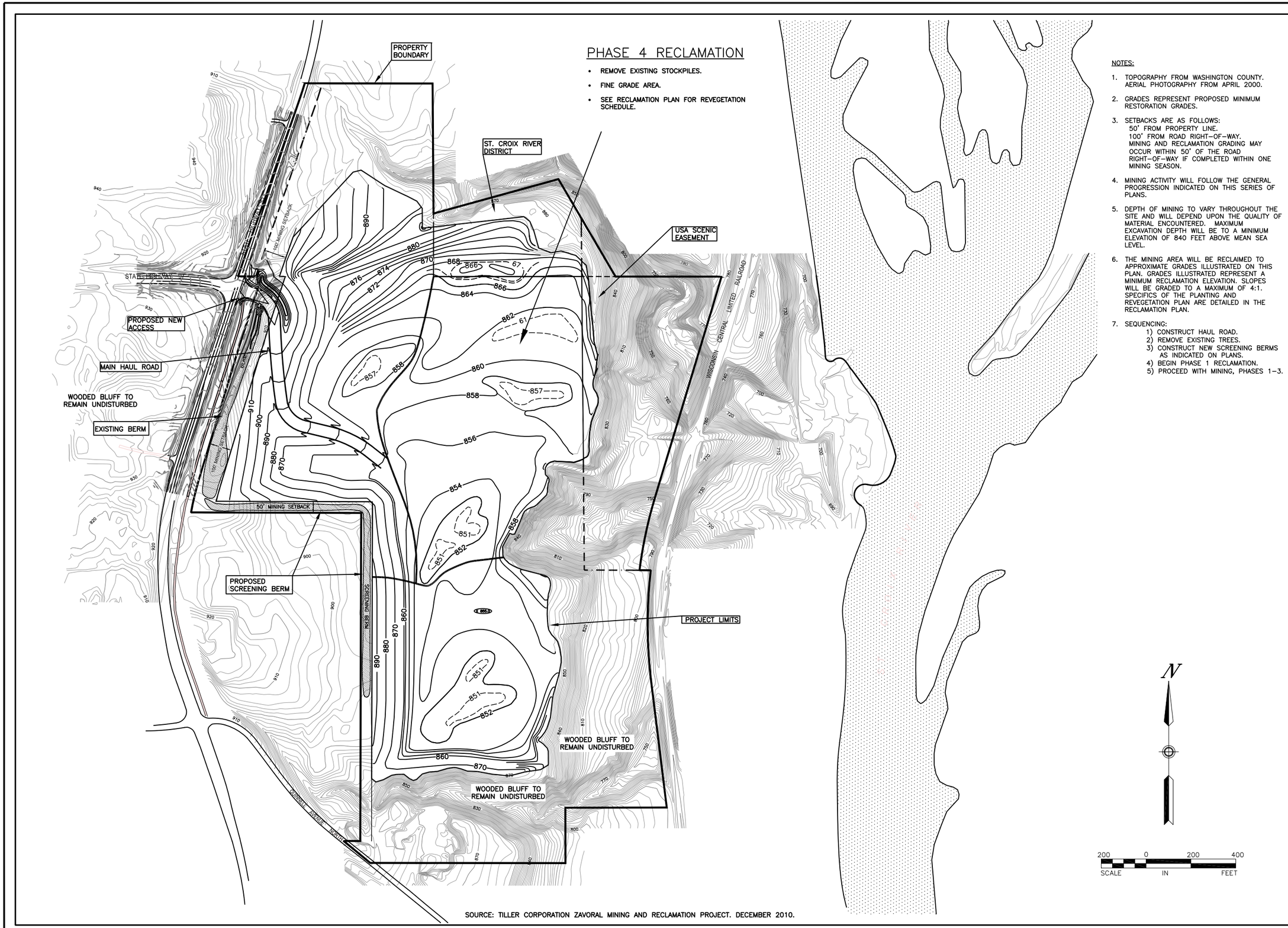

SOURCE: TILLER CORPORATION ZAVORAL MINING AND RECLAMATION PROJECT. DECEMBER 2010.

NOTES:

1. TOPOGRAPHY FROM WASHINGTON COUNTY. AERIAL PHOTOGRAPHY FROM APRIL 2000.
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   3) CONSTRUCT NEW SCREENING BERMS AS INDICATED ON PLANS.
   4) BEGIN PHASE 1 RECLAMATION.
   5) PROCEED WITH MINING, PHASES 1-3.

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FIGURE 8
MINING AND RECLAMATION PLAN - PHASE 4

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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SOURCE: TILLER CORPORATION ZAVORAL MINING AND RECLAMATION PROJECT. DECEMBER 2010.

NOTES:

1. TOPOGRAPHY FROM WASHINGTON COUNTY. AERIAL PHOTOGRAPHY FROM APRIL 2000.
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7. SCREENING BERMS MAY BE REMOVED AS PART OF FINAL RECLAMATION ACTIVITY.

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FIGURE 9
MINING AND RECLAMATION PLAN - RECLAMATION GRADES

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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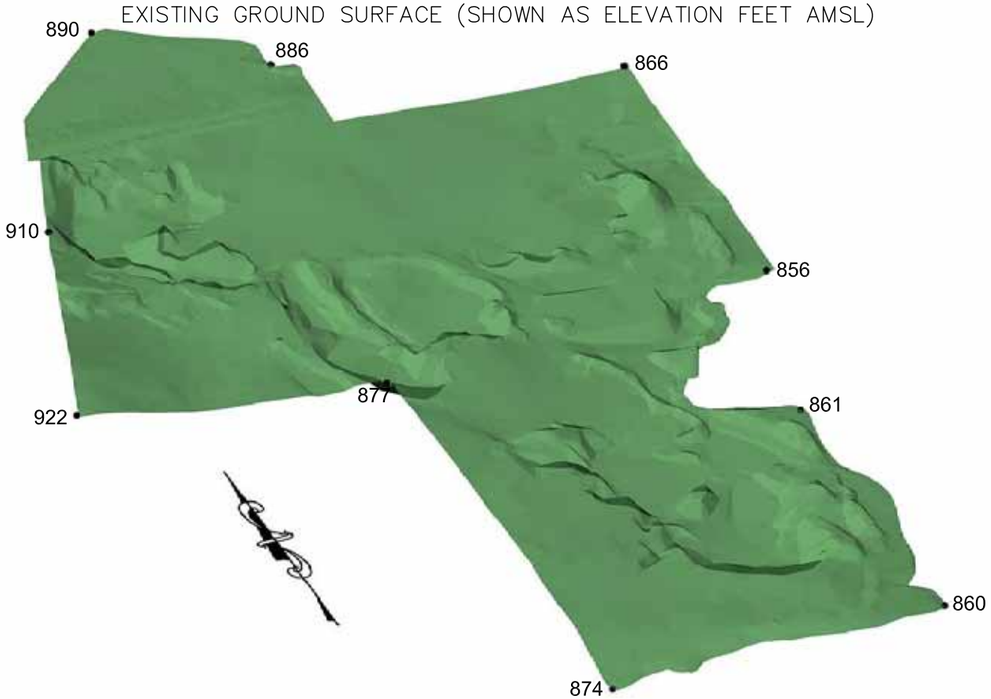
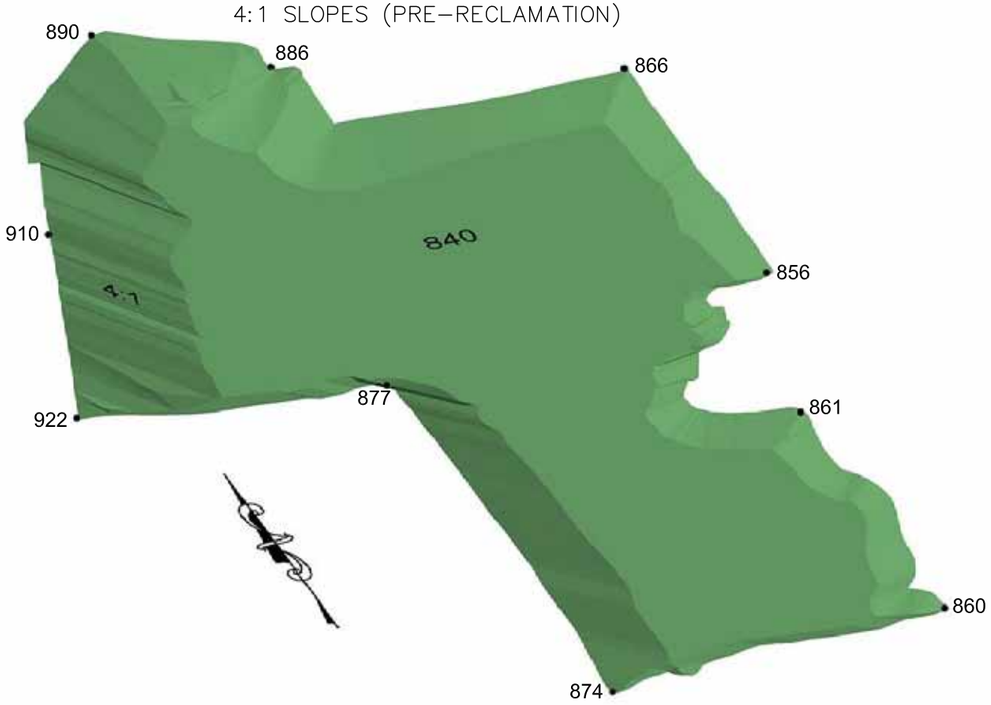
EXISTING GROUND SURFACE (SHOWN AS ELEVATION FEET AMSL)



PROPOSED MINING SURFACE MAXIMUM DEPTH 840 FEET AMSL WITH 4:1 SLOPES (PRE-RECLAMATION)



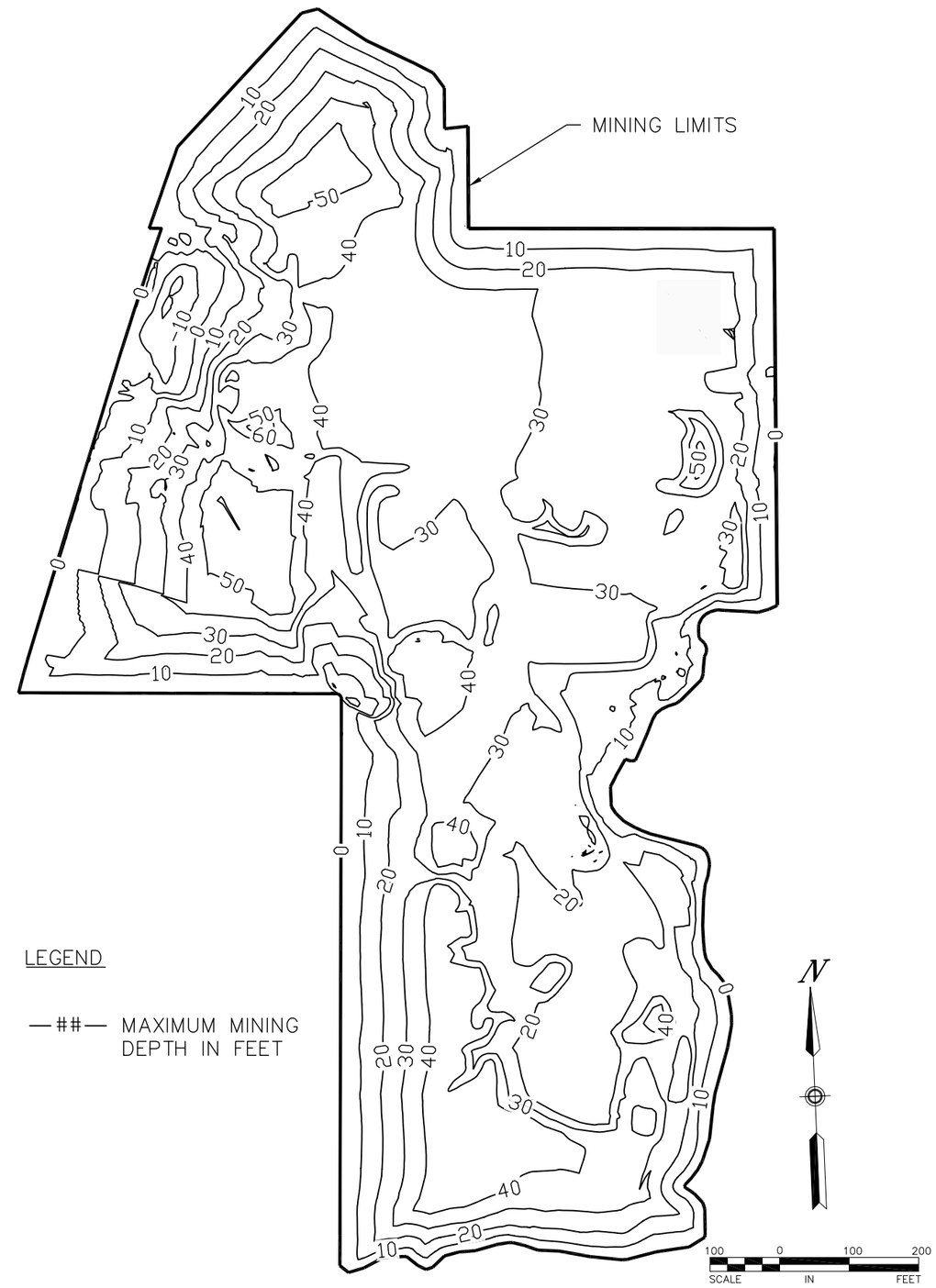


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FIGURE 10
MAXIMUM MINING DEPTH

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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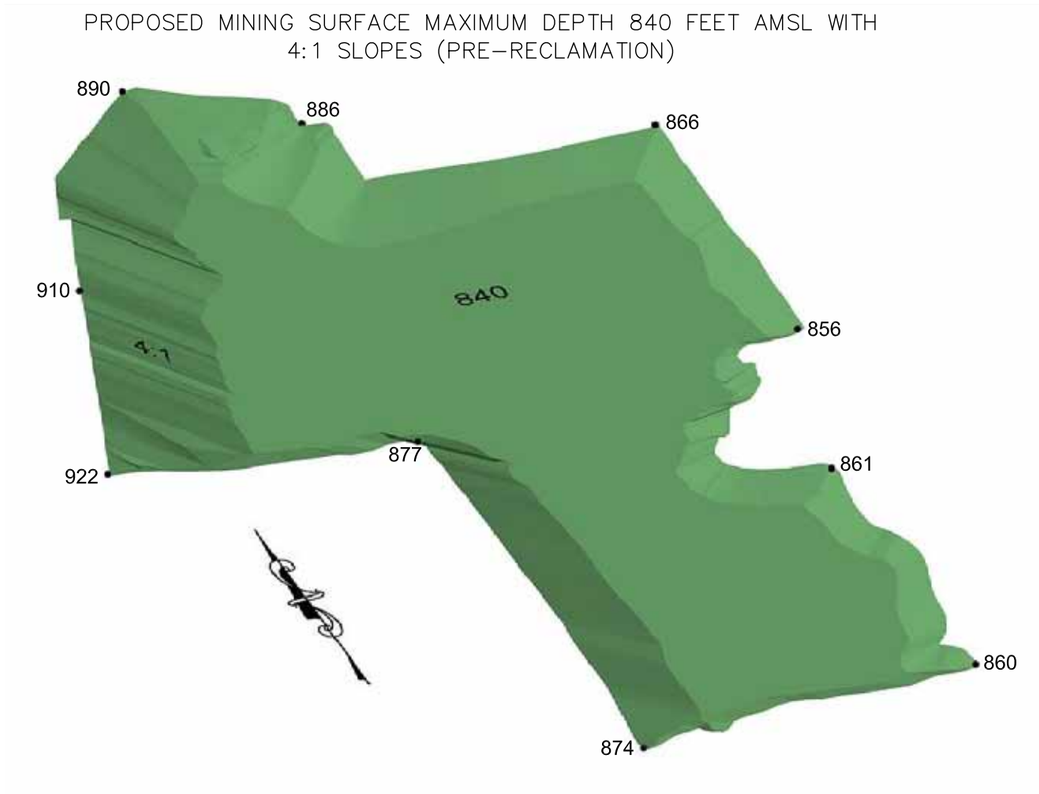

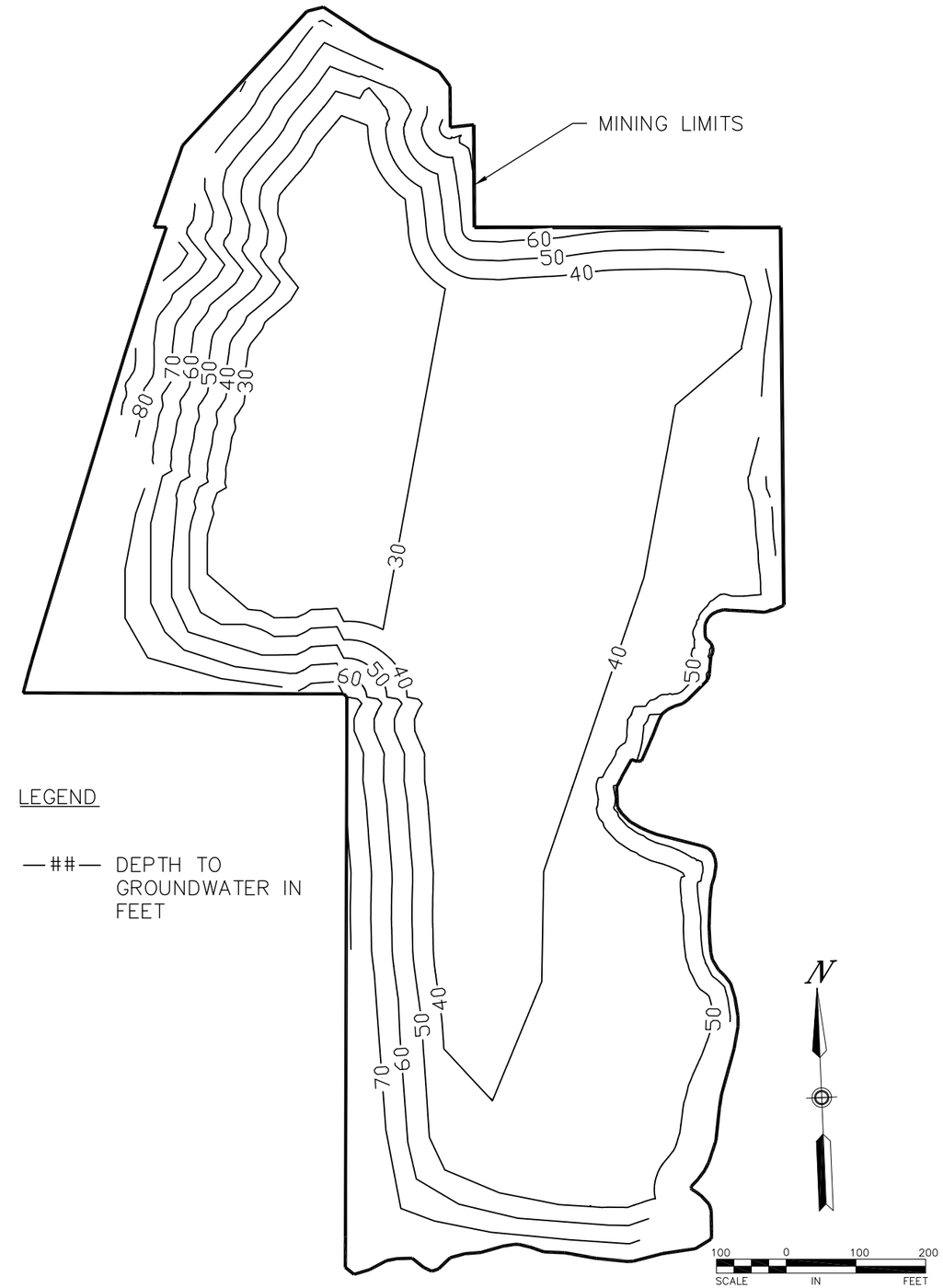

LEGEND

—##— DEPTH TO GROUNDWATER IN FEET

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FIGURE 11
DEPTH TO GROUNDWATER FROM
MAXIMUM DEPTH OF MINING SURFACE

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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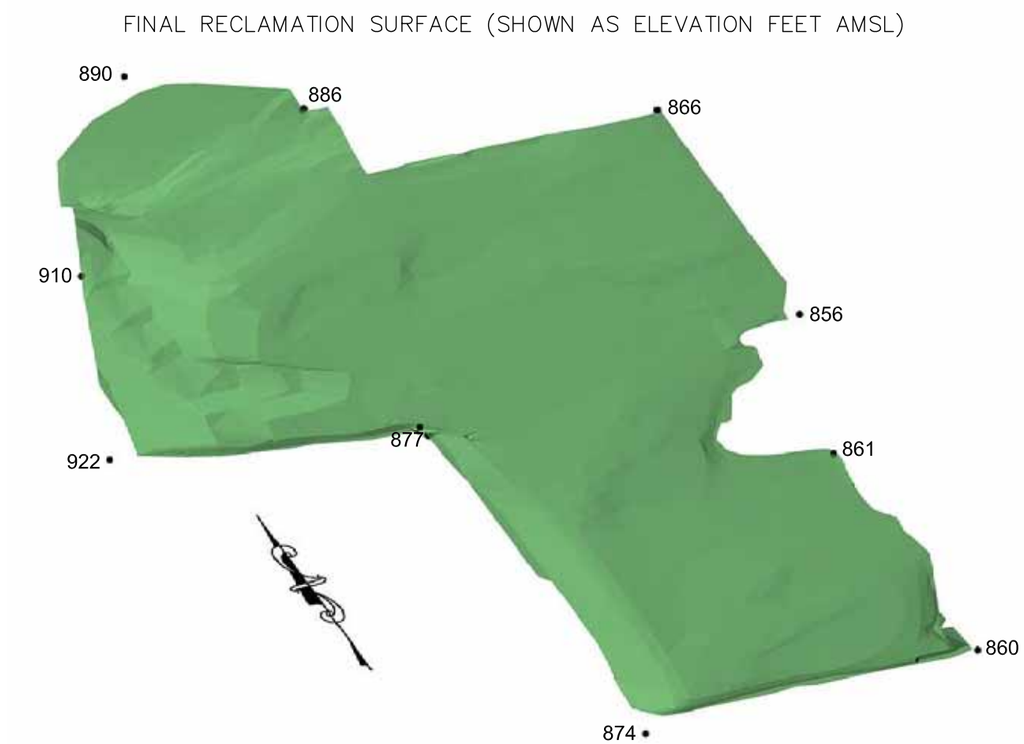

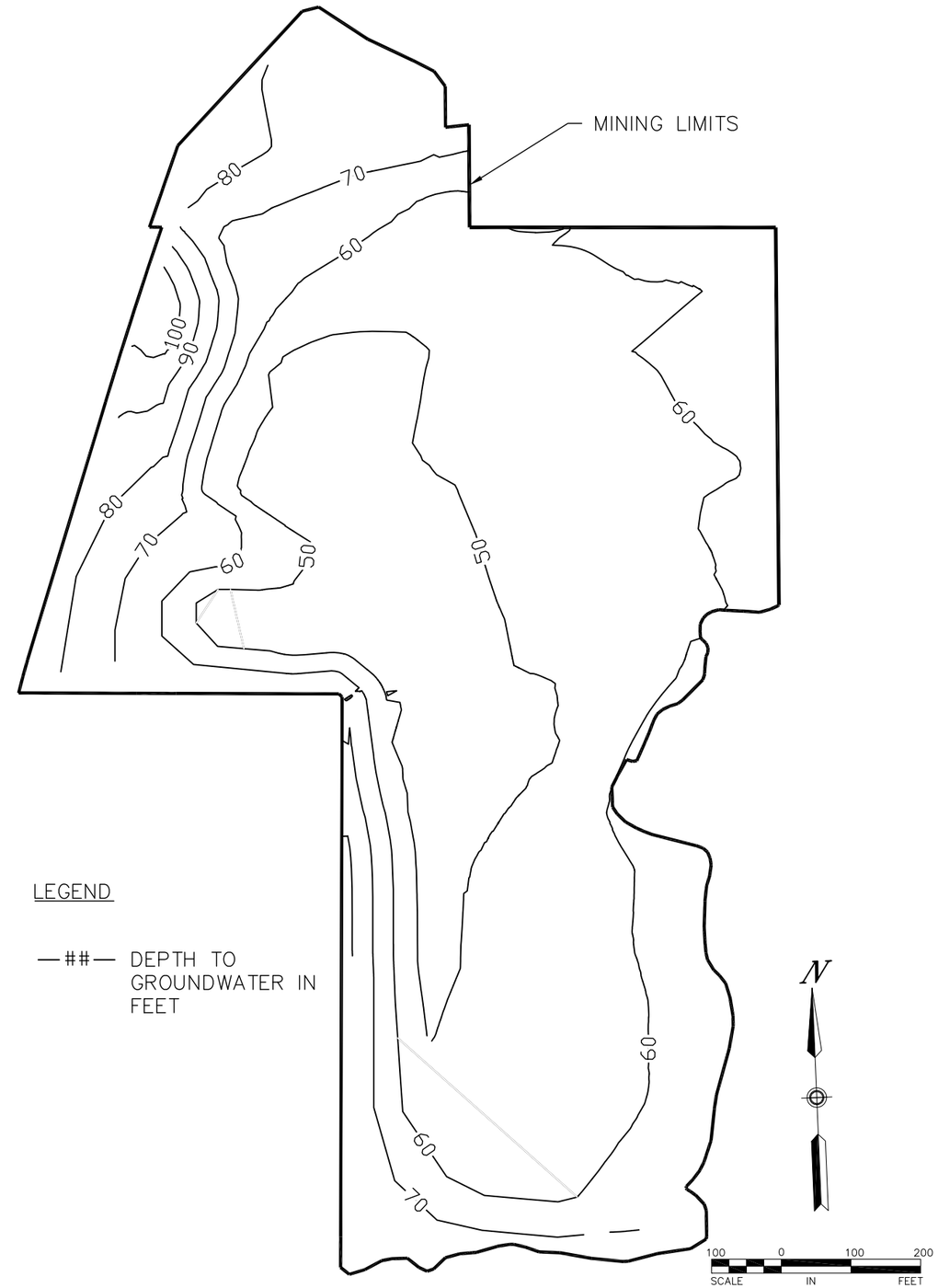

LEGEND

—##— DEPTH TO GROUNDWATER IN FEET

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FIGURE 12
DEPTH TO GROUNDWATER FROM GROUND SURFACE - POST - RECLAMATION

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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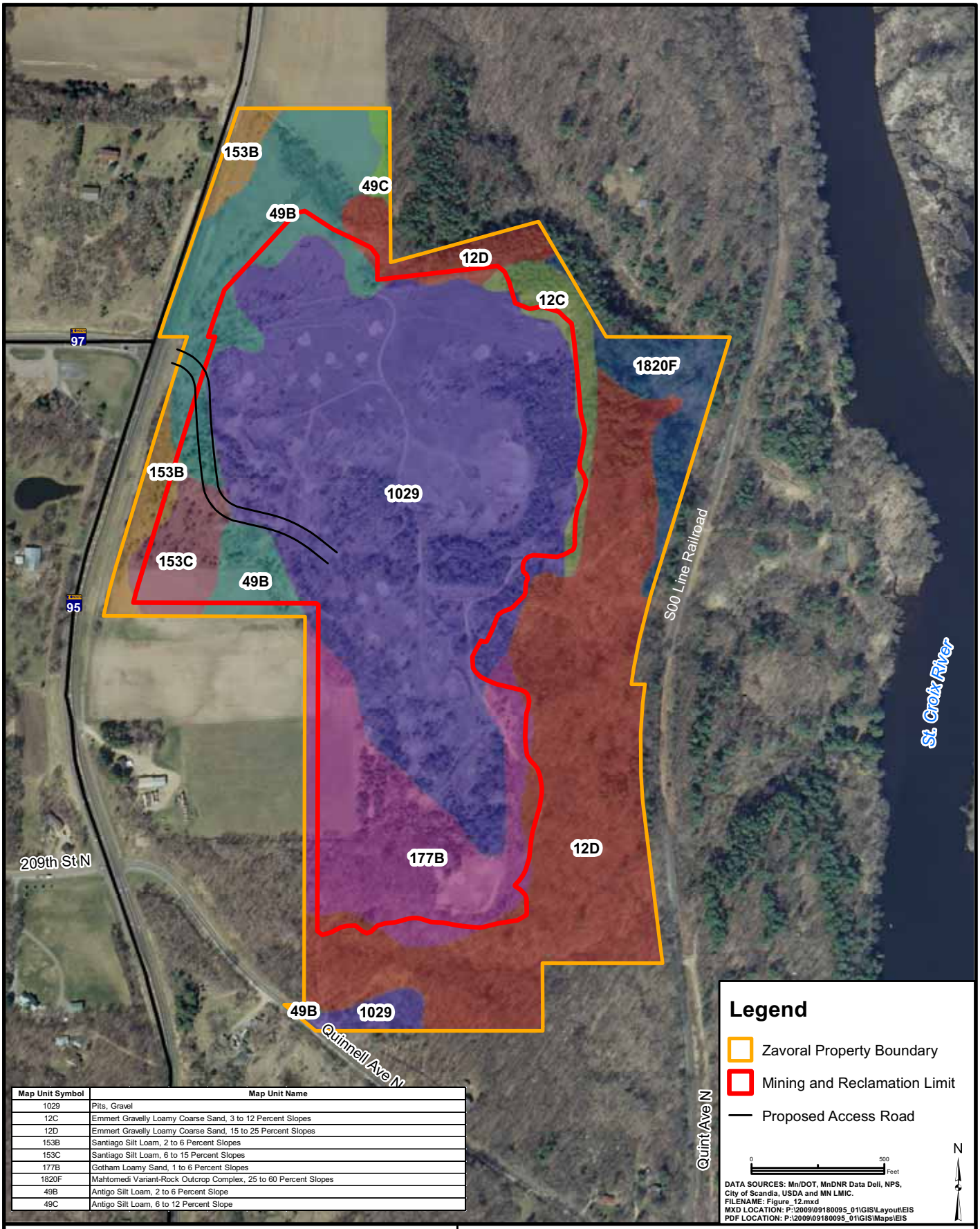

Map Unit Symbol	Map Unit Name
1029	Pits, Gravel
12C	Emmert Gravelly Loamy Coarse Sand, 3 to 12 Percent Slopes
12D	Emmert Gravelly Loamy Coarse Sand, 15 to 25 Percent Slopes
153B	Santiago Silt Loam, 2 to 6 Percent Slopes
153C	Santiago Silt Loam, 6 to 15 Percent Slopes
177B	Gotham Loamy Sand, 1 to 6 Percent Slopes
1820F	Mahtomedi Variant-Rock Outcrop Complex, 25 to 60 Percent Slopes
49B	Antigo Silt Loam, 2 to 6 Percent Slope
49C	Antigo Silt Loam, 6 to 12 Percent Slope

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FIGURE 14
ZAVORAL SITE SOIL MAP

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

FEB. 2012

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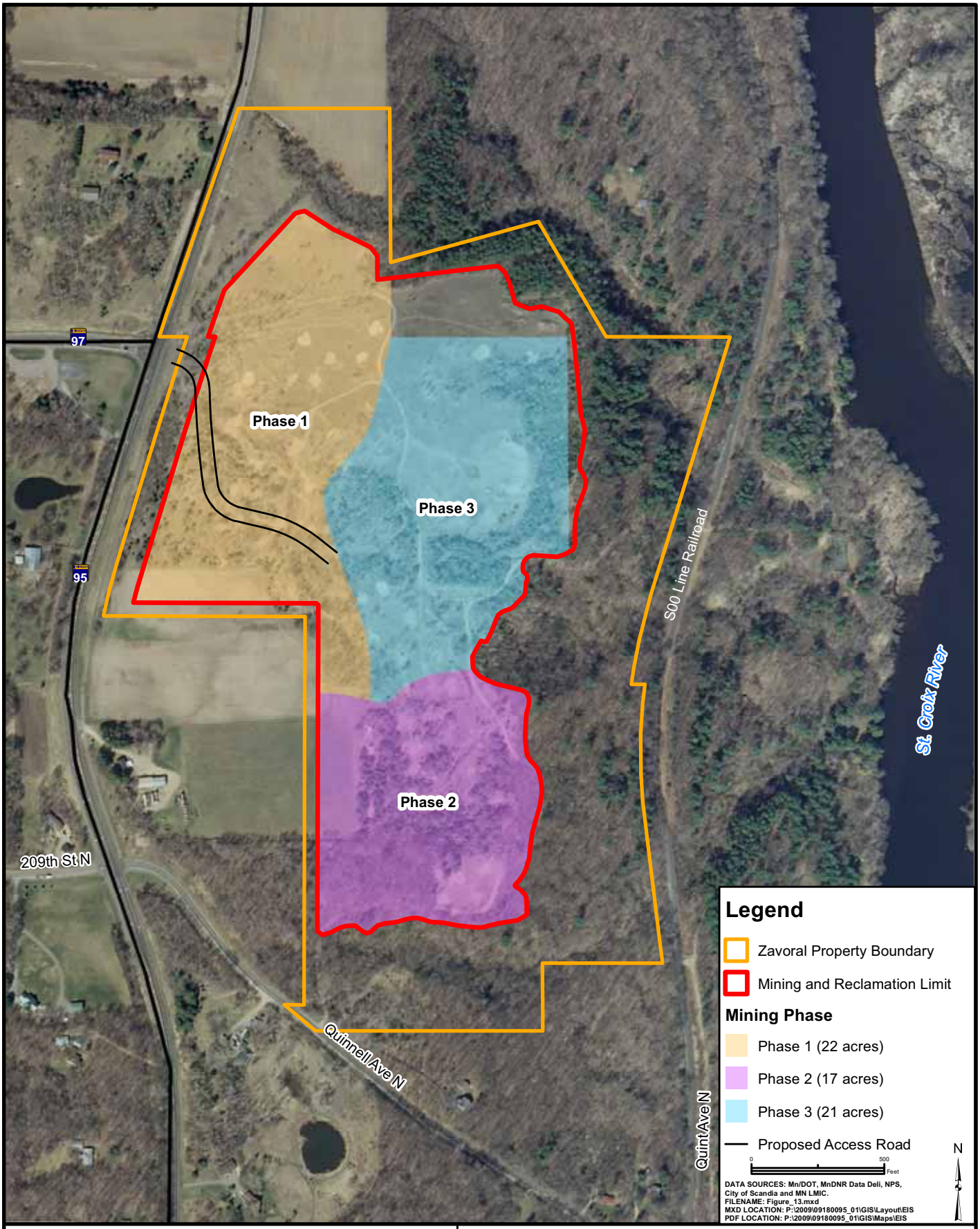

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FIGURE 15
MINING PHASES MAP

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

FEB. 2012

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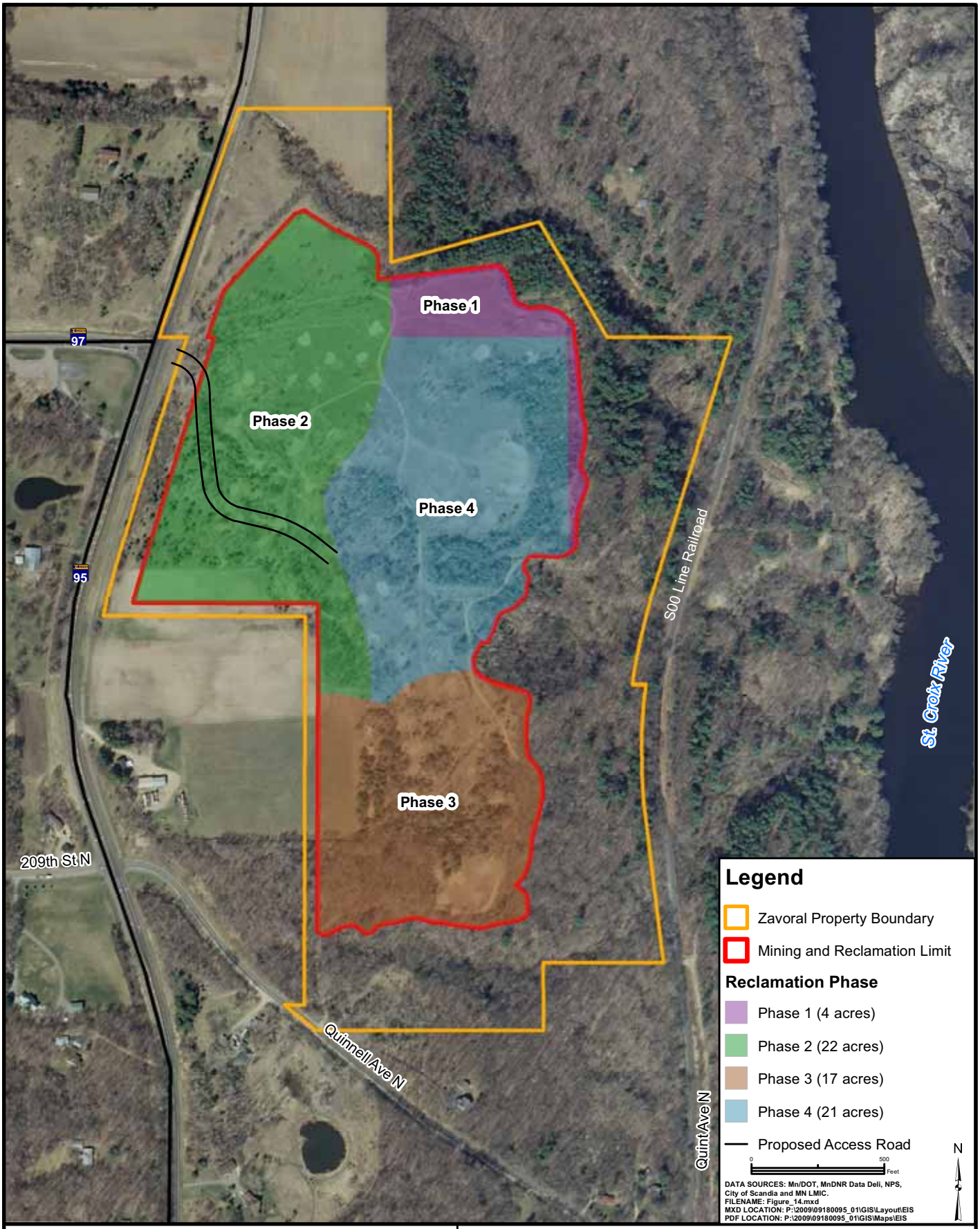

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FIGURE 16
RECLAMATION PHASES MAP

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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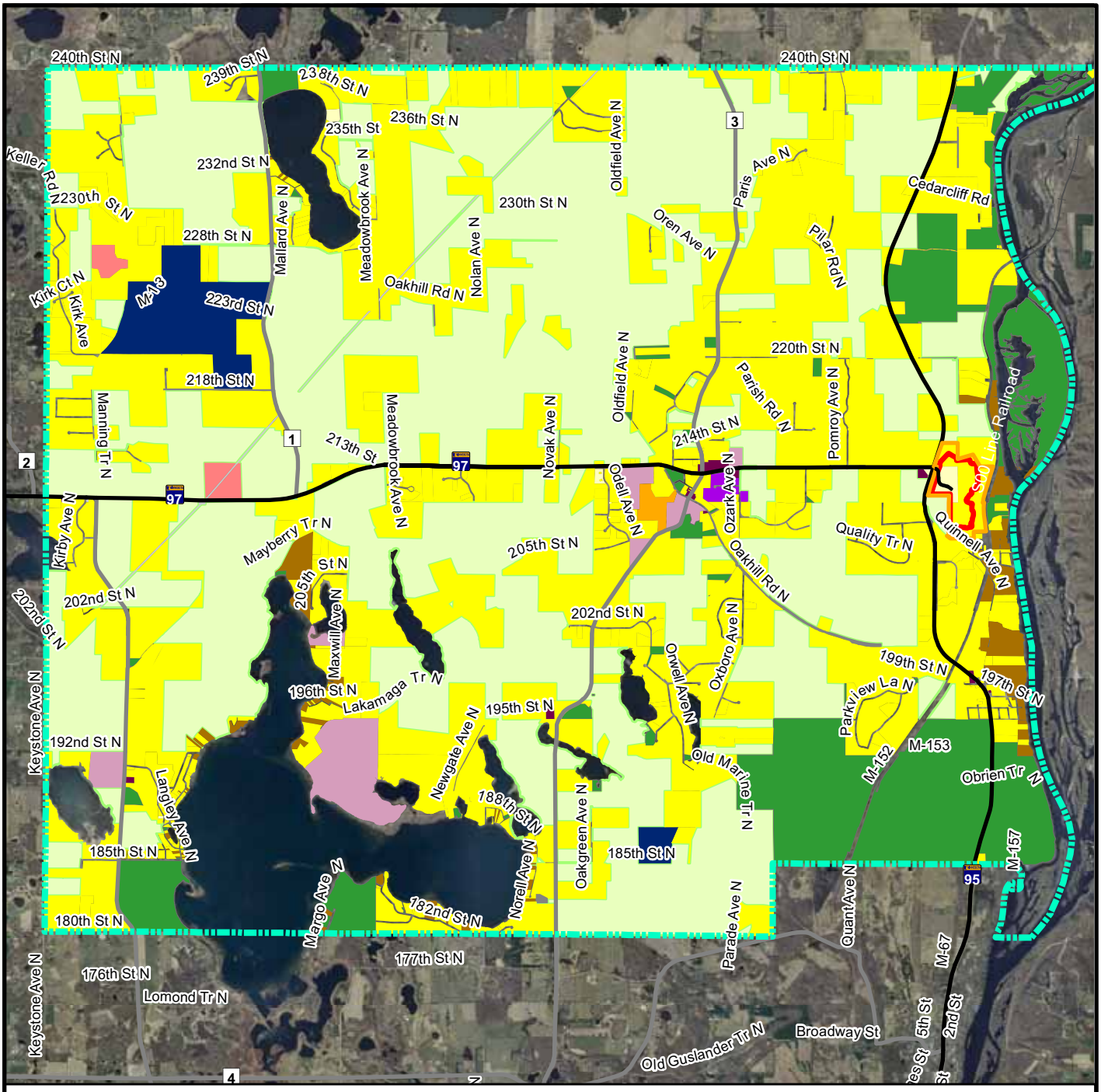

Legend

- Zavoral Property Boundary
- Mining and Reclamation Limit

2007 Land Use by Parcel

- Agriculture
- Single Family Residential
- Multi-Family Residential
- Seasonal
- Commercial
- Commercial Recreation
- Industrial
- Institutional and Civic
- Parks & Open Space
- Extractive
- Road
- Utility
- Other
- City of Scandia Boundary
- Proposed Access Road

0 1 Miles

N

DATA SOURCES: Mn/DOT, MnDNR Data Deli, TKDA, and MN LMIC.
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PDF LOCATION: P:\2009\09180095_01\GIS\Maps\EIS

Prepared By:

AECOM

Prepared For:

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FIGURE 17
2007 LAND USE MAP SHOWING PROJECT LOCATION

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

FEB. 2012

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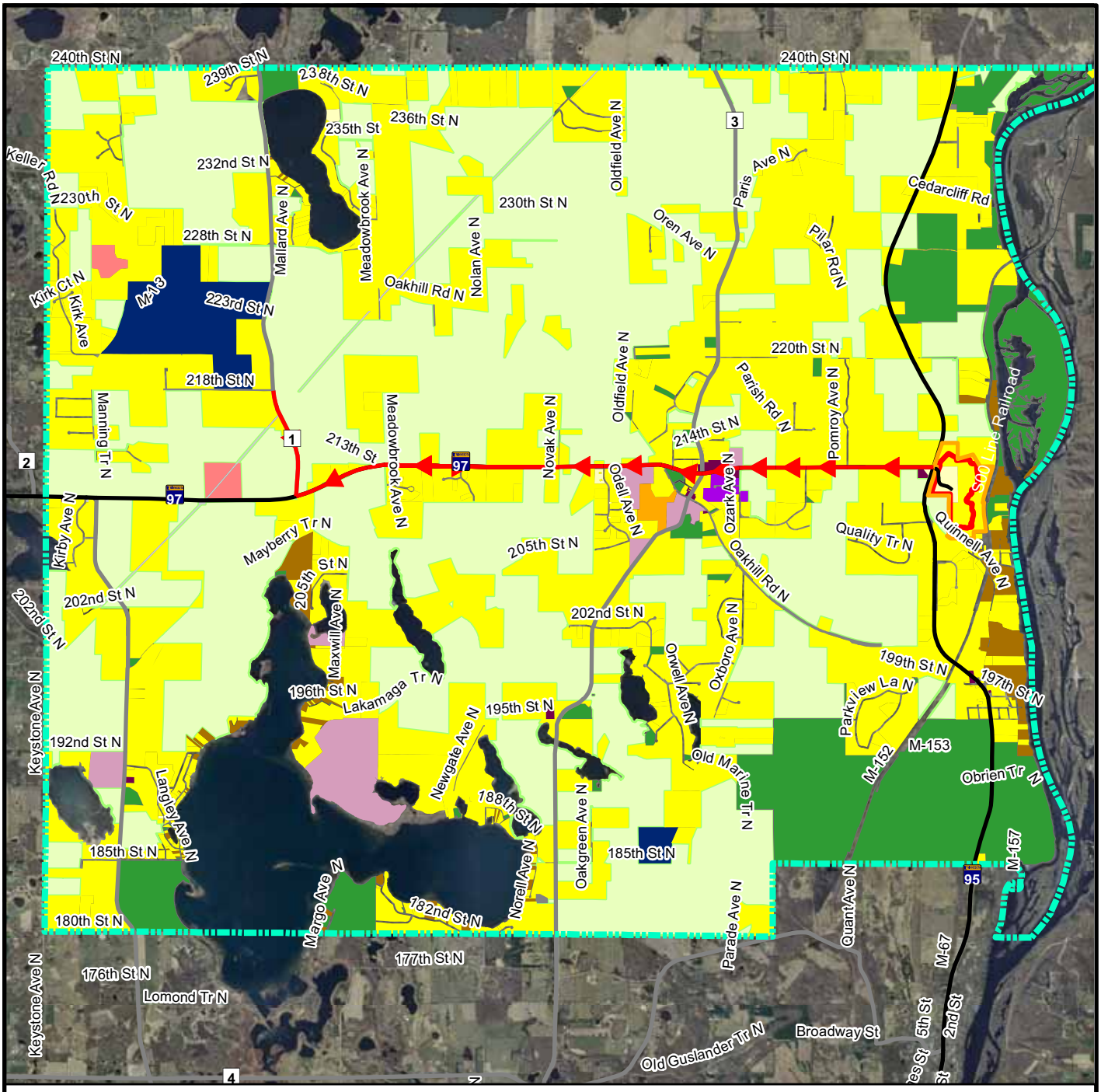

Legend

- Zavoral Property Boundary
- Mining and Reclamation Limit
- Proposed Haul Route

2007 Land Use by Parcel

- Agriculture
- Single Family Residential
- Multi-Family Residential
- Seasonal
- Commercial
- Commercial Recreation
- Industrial
- Institutional and Civic
- Parks & Open Space
- Extractive
- Road
- Utility
- Other
- City of Scandia Boundary
- Proposed Access Road

0 1 Miles

N

DATA SOURCES: Mn/DOT, MnDNR Data Deli, TKDA, and MN LMIC.
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Prepared By:

AECOM

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FIGURE 18
2007 LAND USE MAP ALONG HAUL ROUTE

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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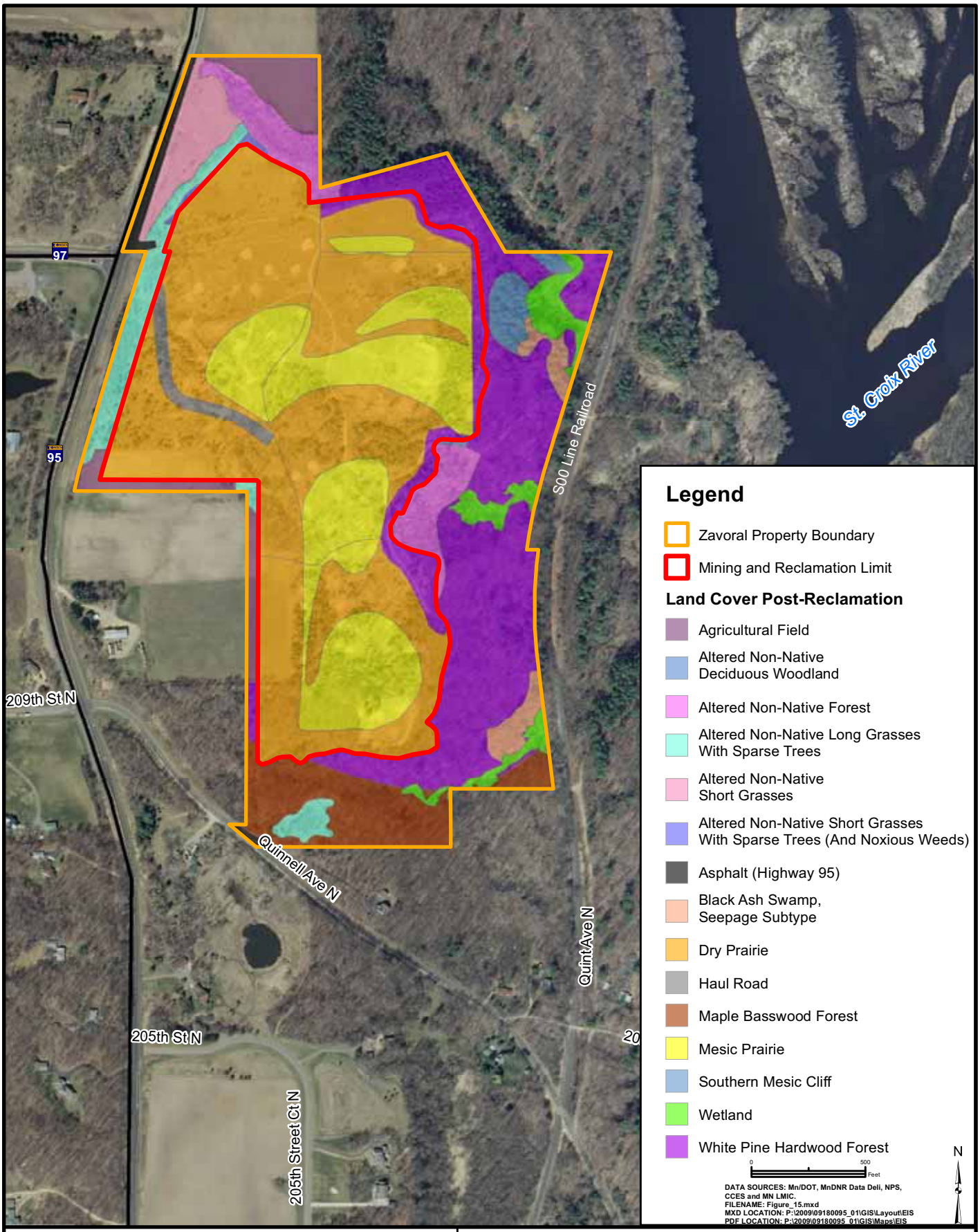

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AECOM

Prepared For:

SCANDIA MINNESOTA

FIGURE 19
POST-RECLAMATION LAND COVER MAP

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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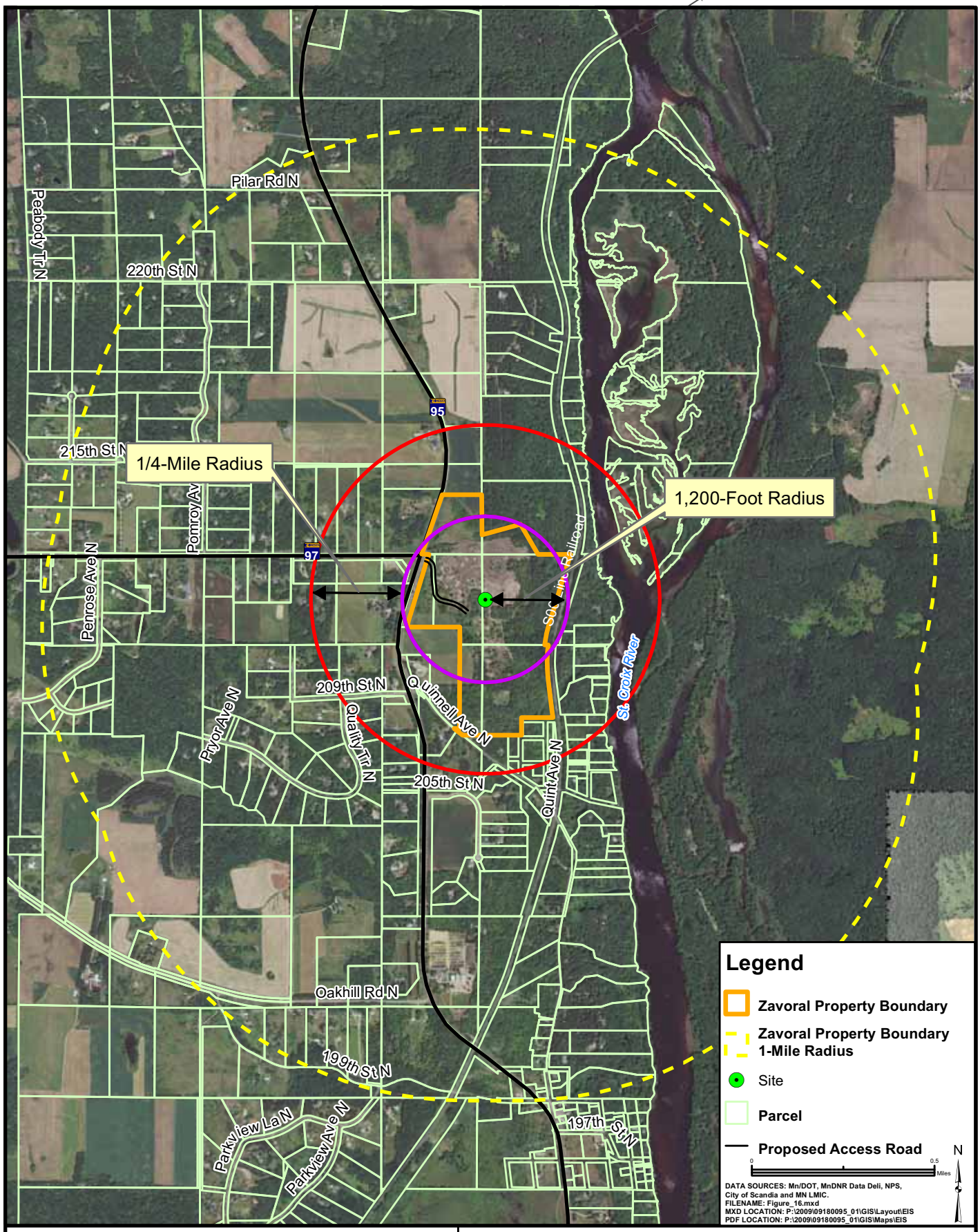

Prepared By:

AECOM

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SCANDIA MINNESOTA

FIGURE 20
PARCEL MAP

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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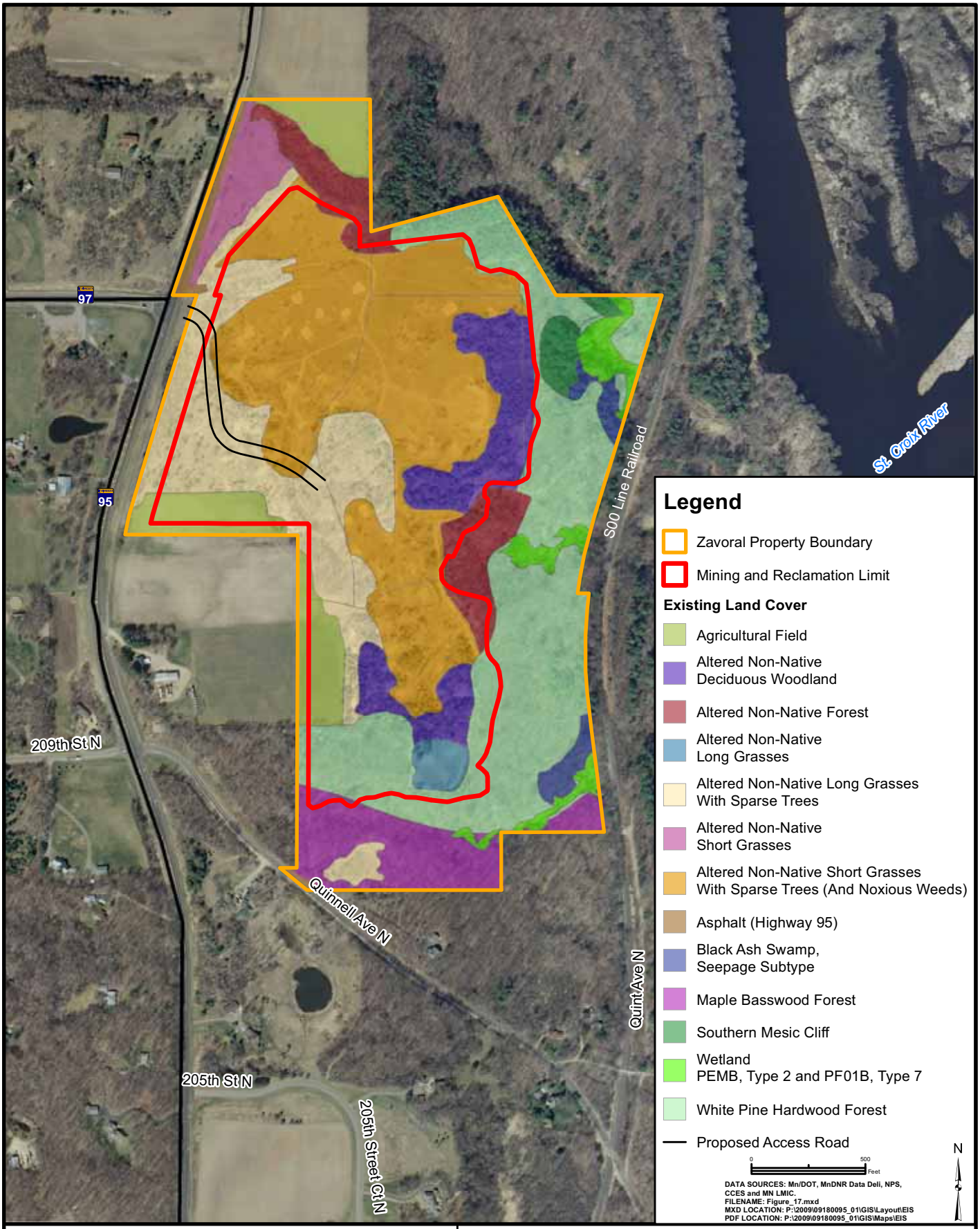

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FIGURE 21
EXISTING LAND COVER MAP

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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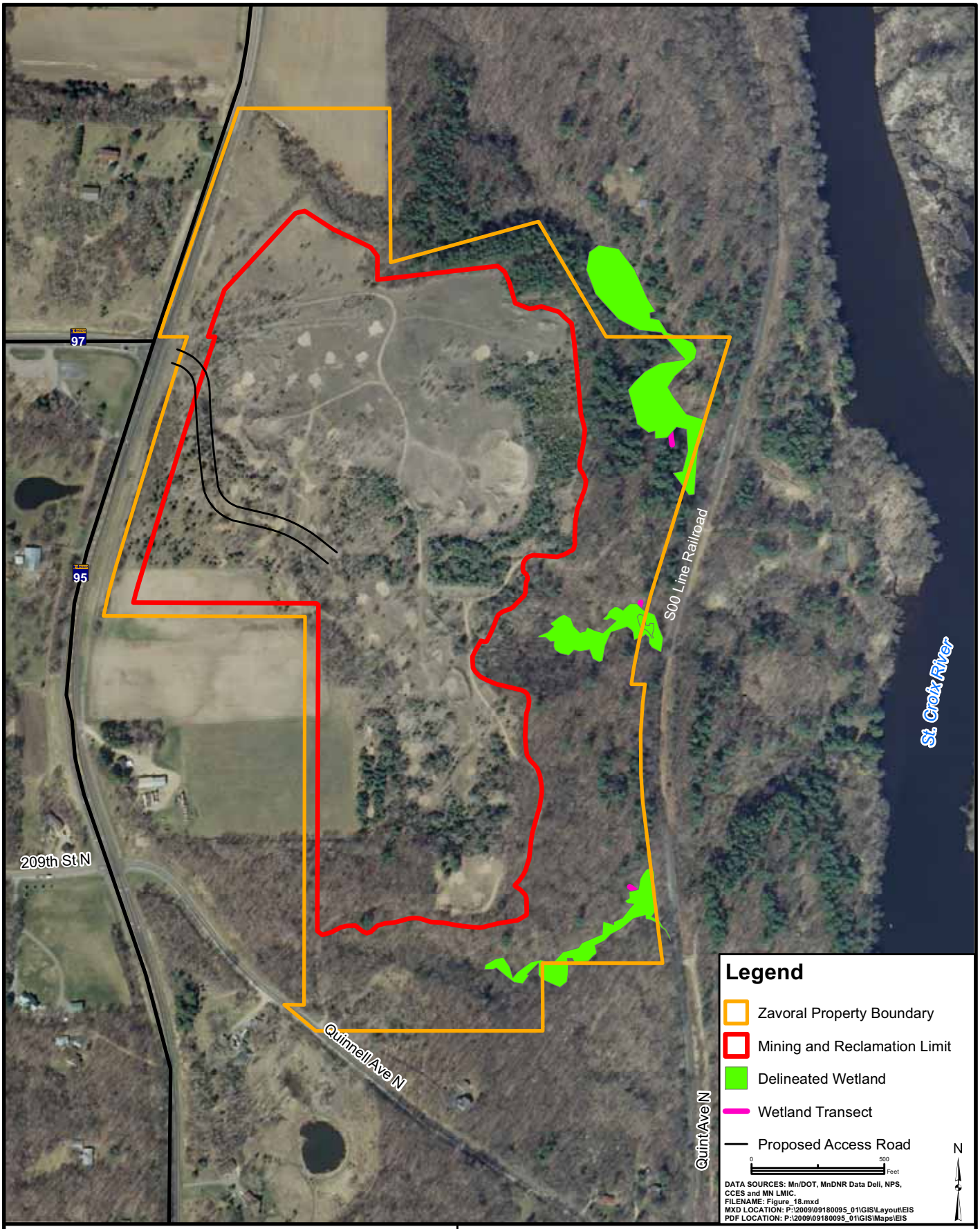

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FIGURE 22
DELINEATED WETLAND MAP

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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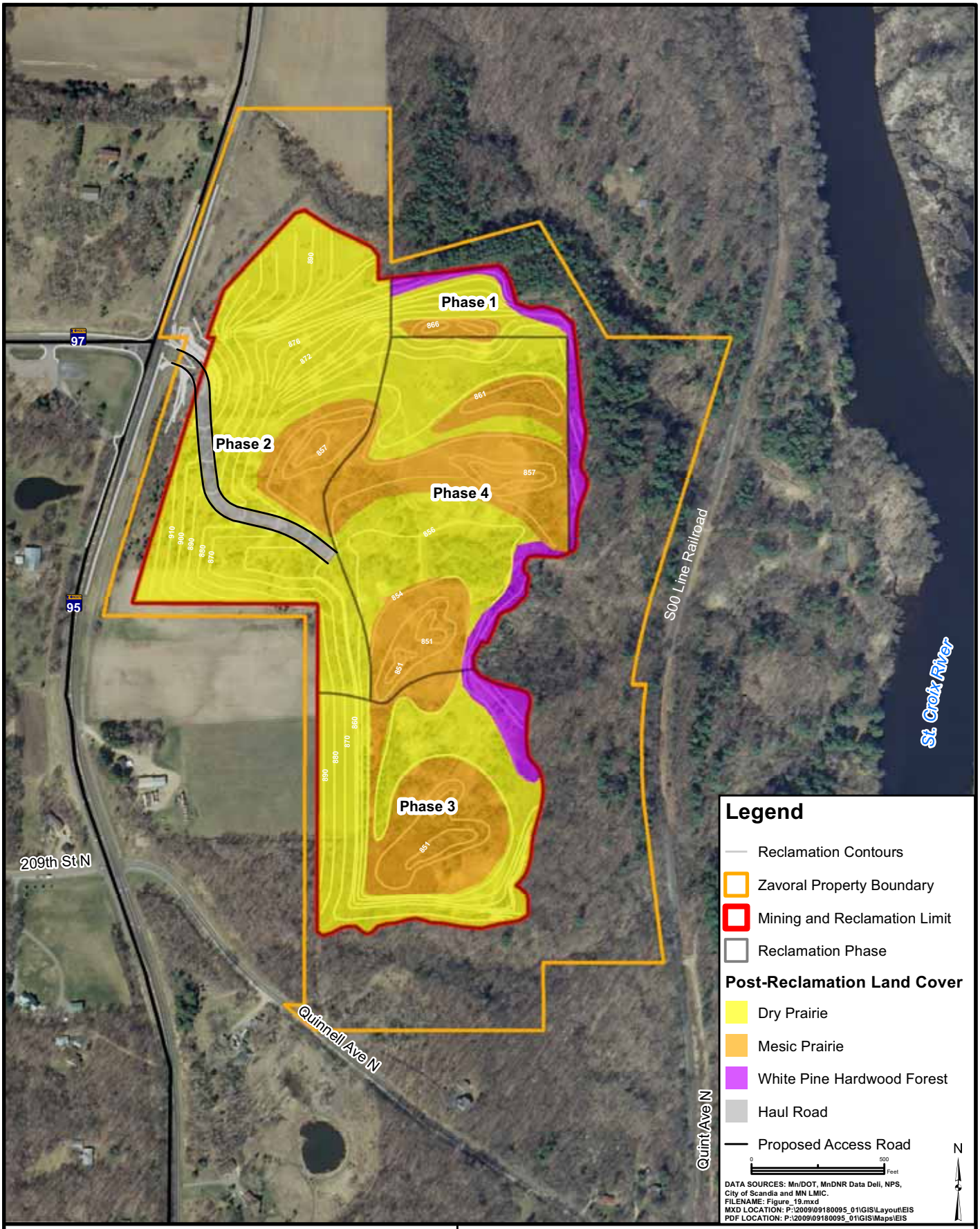

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FIGURE 23
TILLER'S PROPOSED
POST-RECLAMATION LAND COVER

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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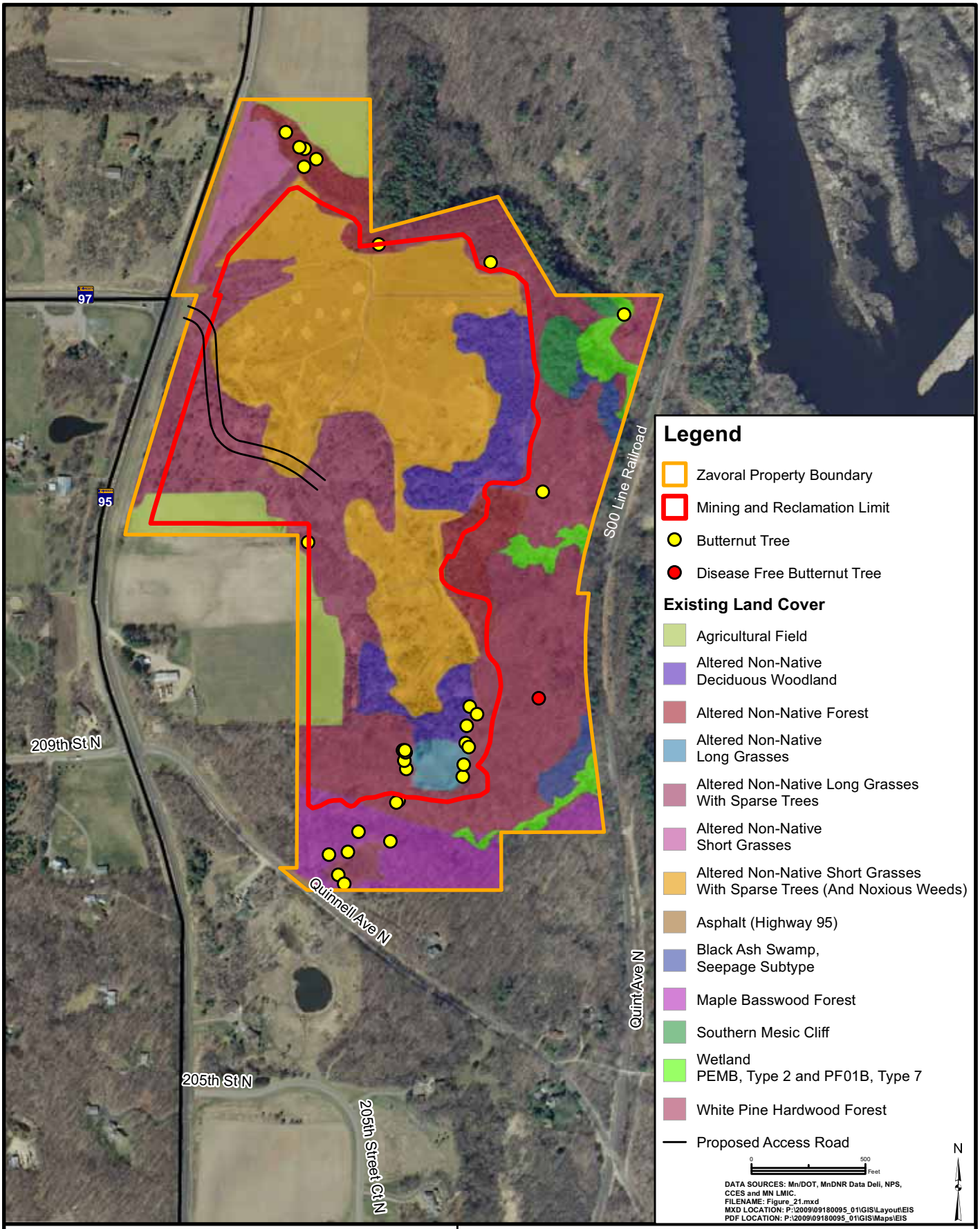

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FIGURE 24
BUTTERNUT TREE LOCATION MAP

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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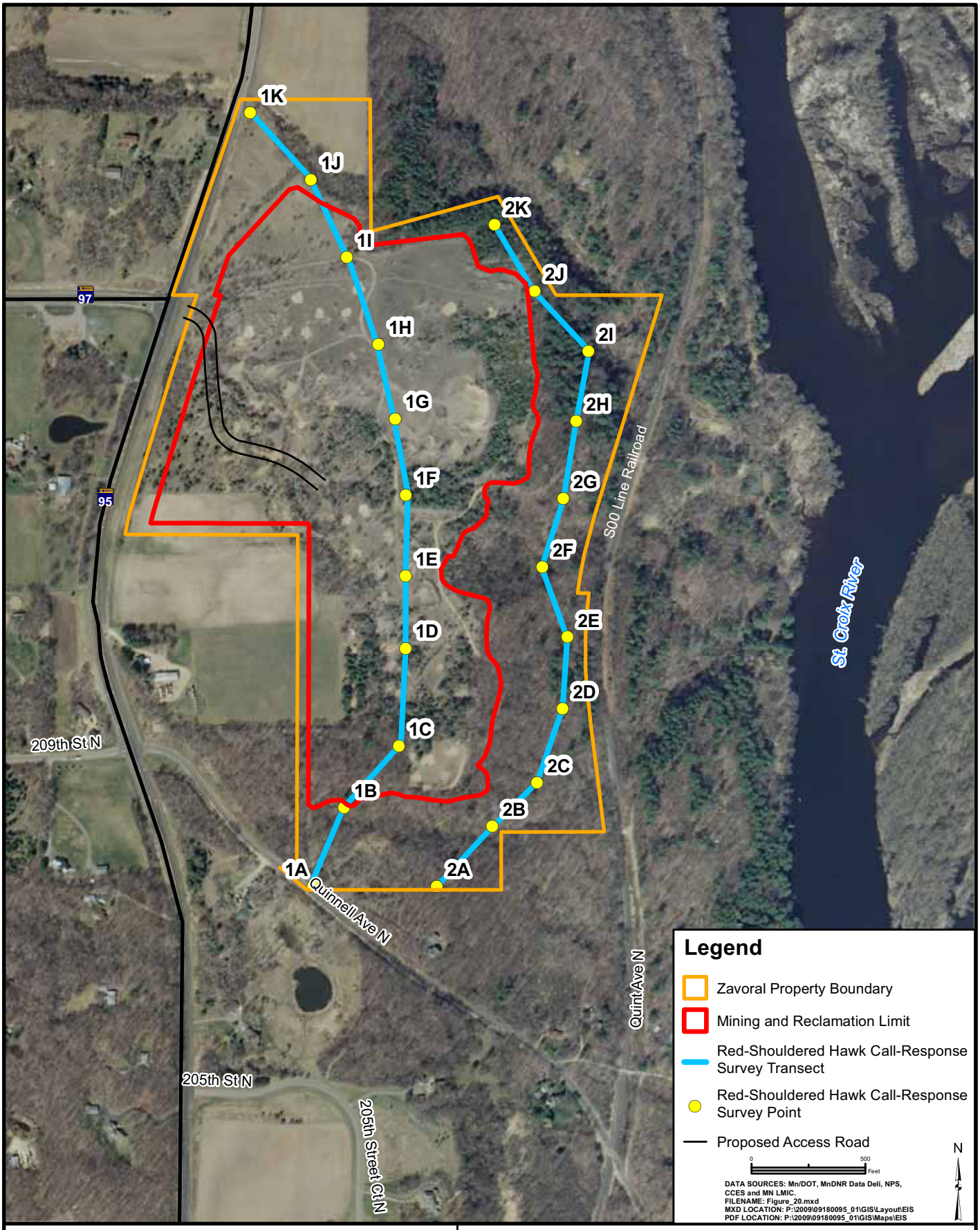

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FIGURE 25
RED-SHOULDERED HAWK SURVEY MAP

ZAVORAL MINING AND RECLAMATION PROJECT
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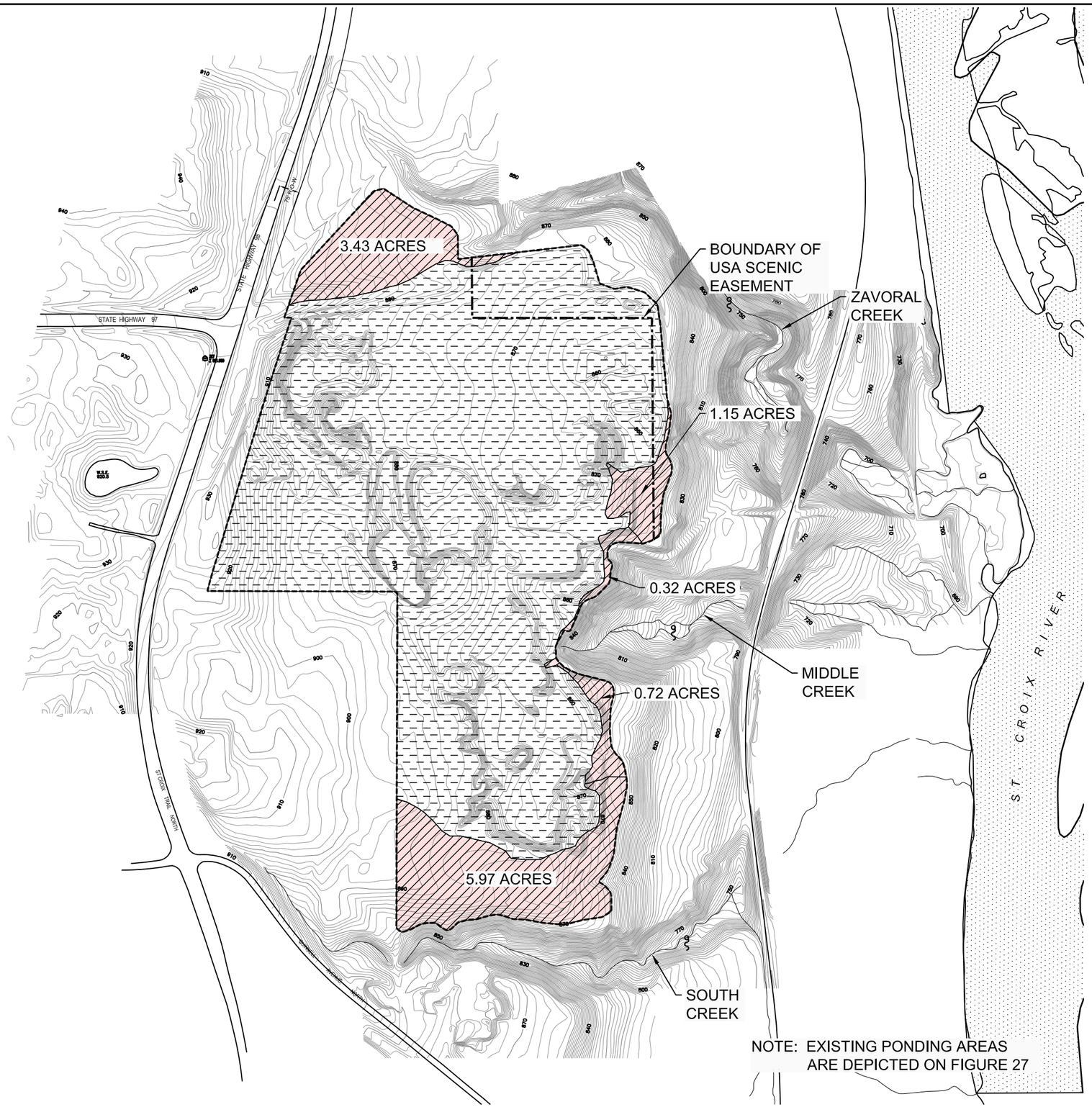

LEGEND

- MINING AND RESTORATION AREA BOUNDARY
- WATERSHED AREA DRAINING OFF-SITE
- WATERSHED AREA INTERNALLY DRAINED (RUNOFF TRAPPED IN ON-SITE DEPRESSIONS)
- APPROXIMATE LOCATION OF SPRING

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FIGURE 26
EXISTING SITE WATERSHED BOUNDARIES

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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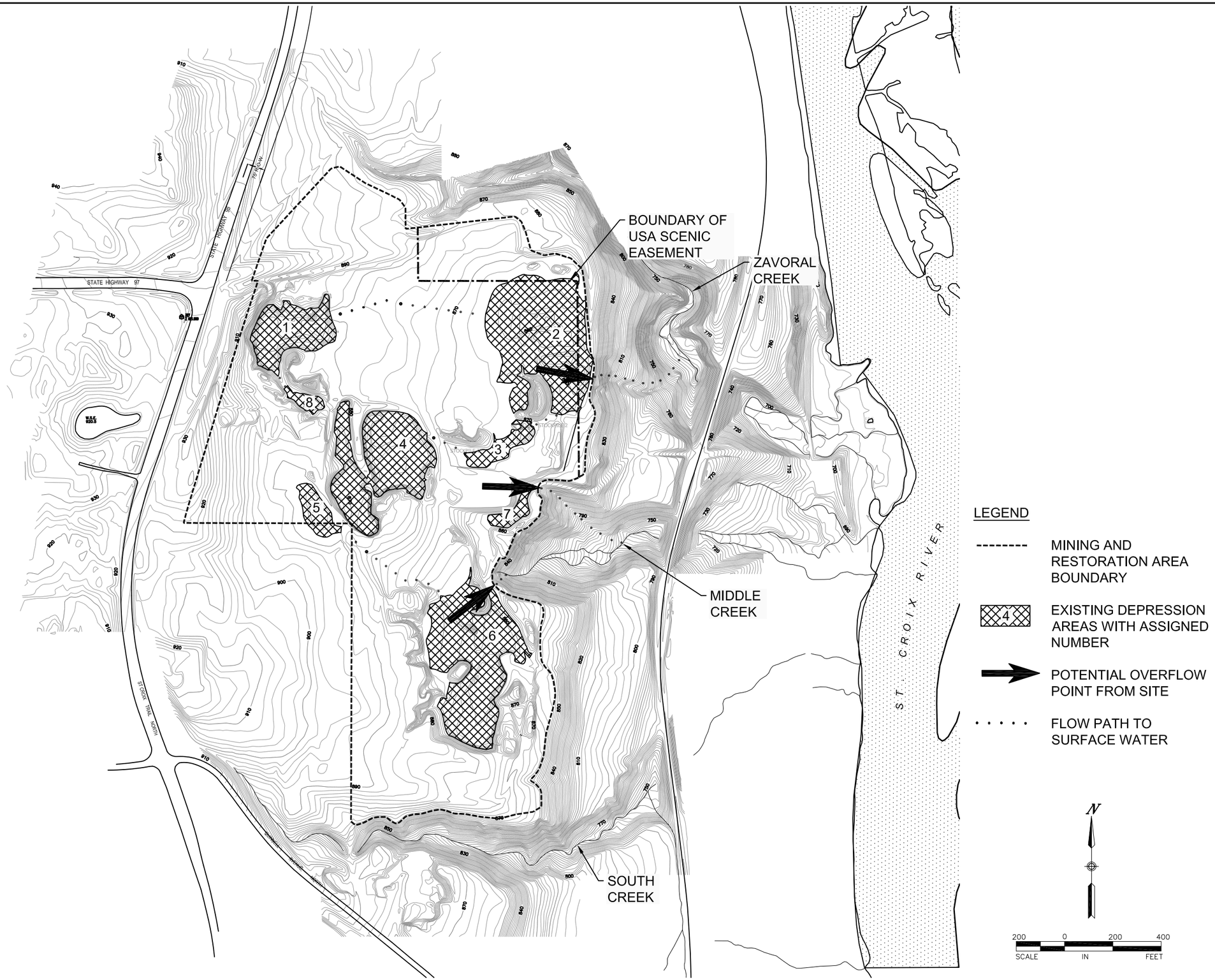

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FIGURE 27
EXISTING SITE INTERNAL DEPRESSIONS

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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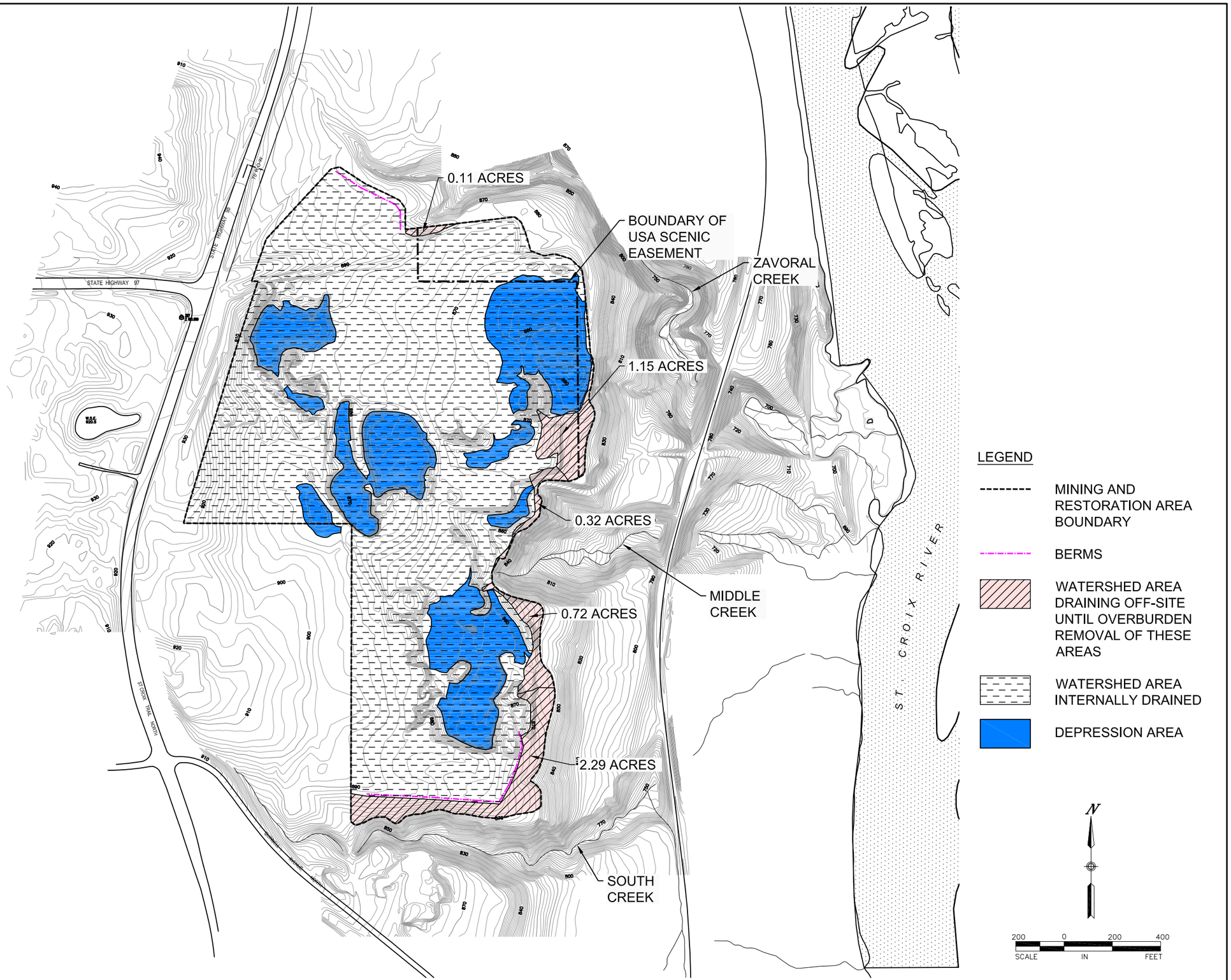

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FIGURE 28
SITE WATERSHED BOUNDARIES

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FIGURE 29
SITE WATERSHED BOUNDARIES
(POST-RECLAMATION)

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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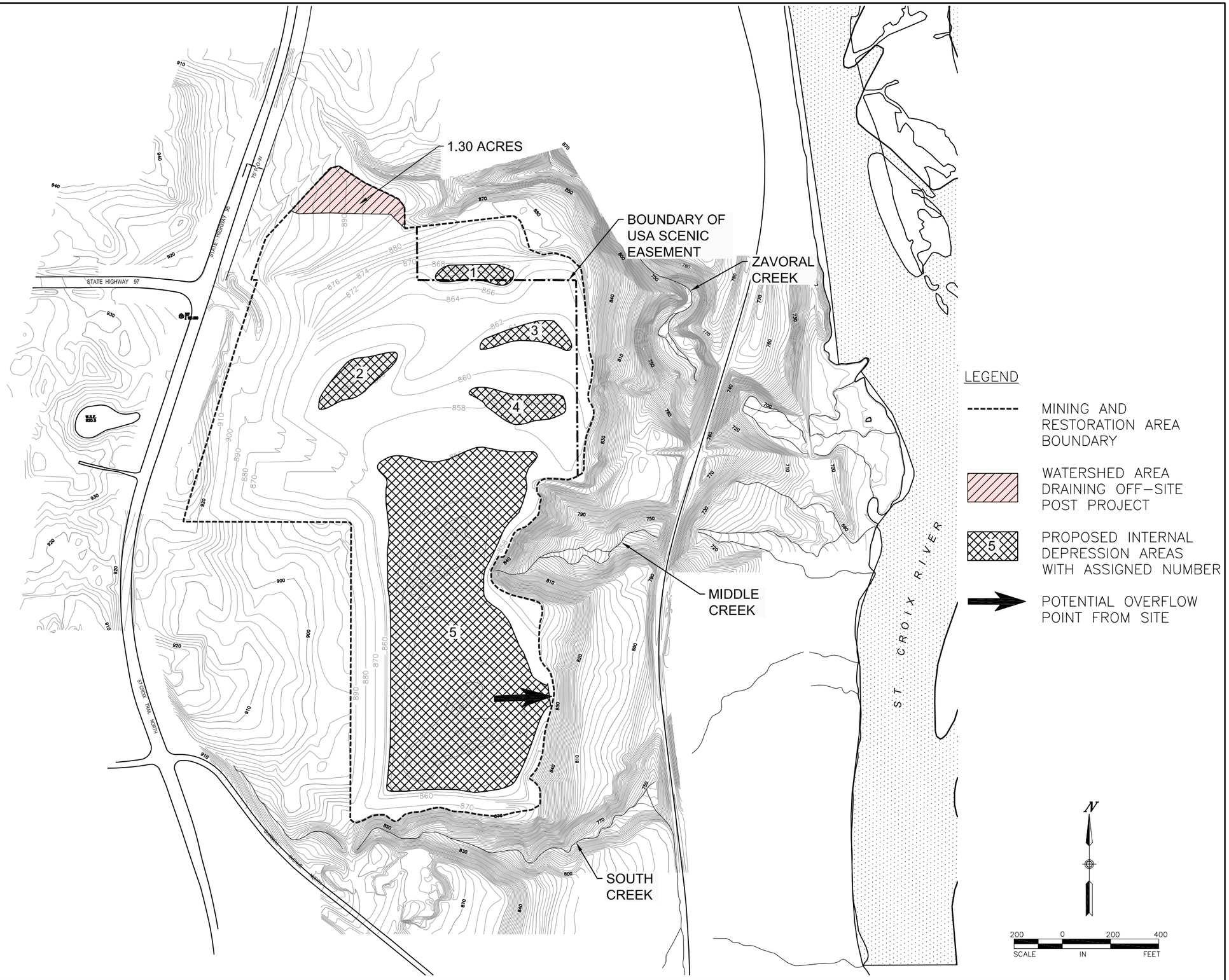

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FIGURE 30
SITE INTERNAL DEPRESSION AREAS
(POST-RECLAMATION)

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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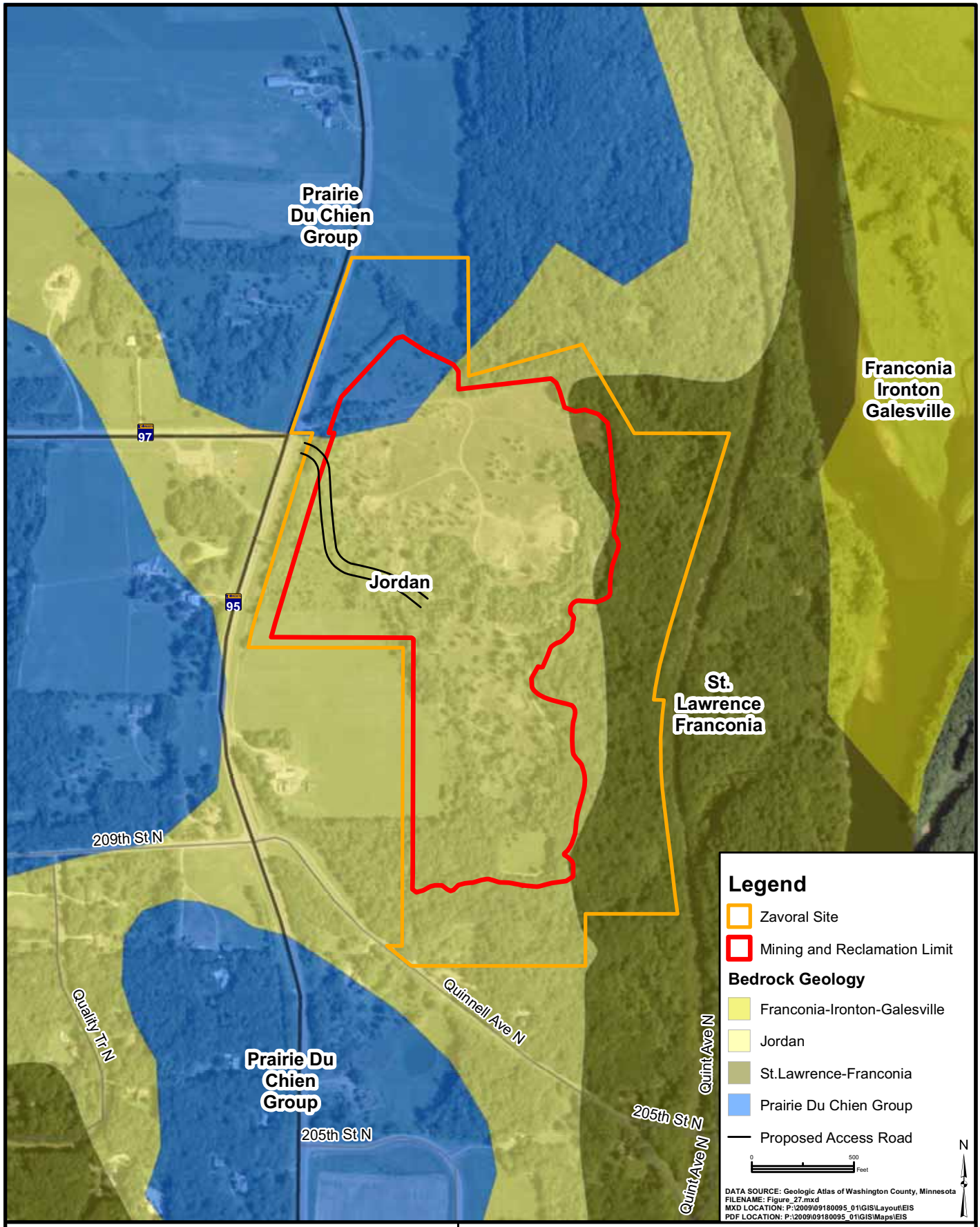

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FIGURE 31
BEDROCK GEOLOGY MAP

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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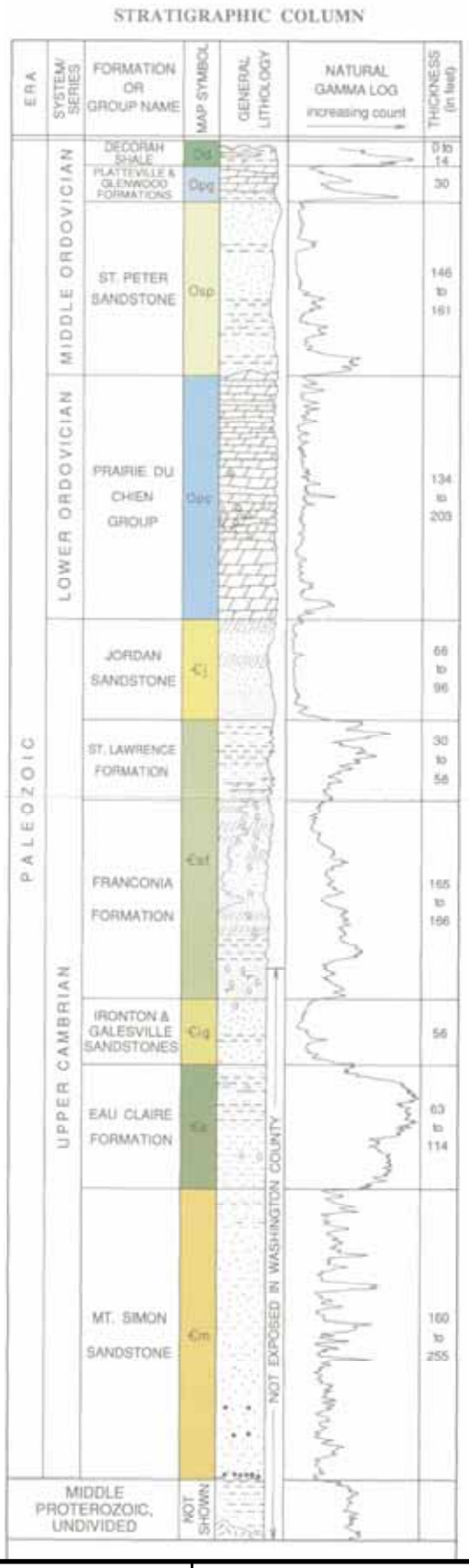

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FIGURE 32
REGIONAL STRATIGRAPHIC COLUMN

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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DATA SOURCE: AECOM
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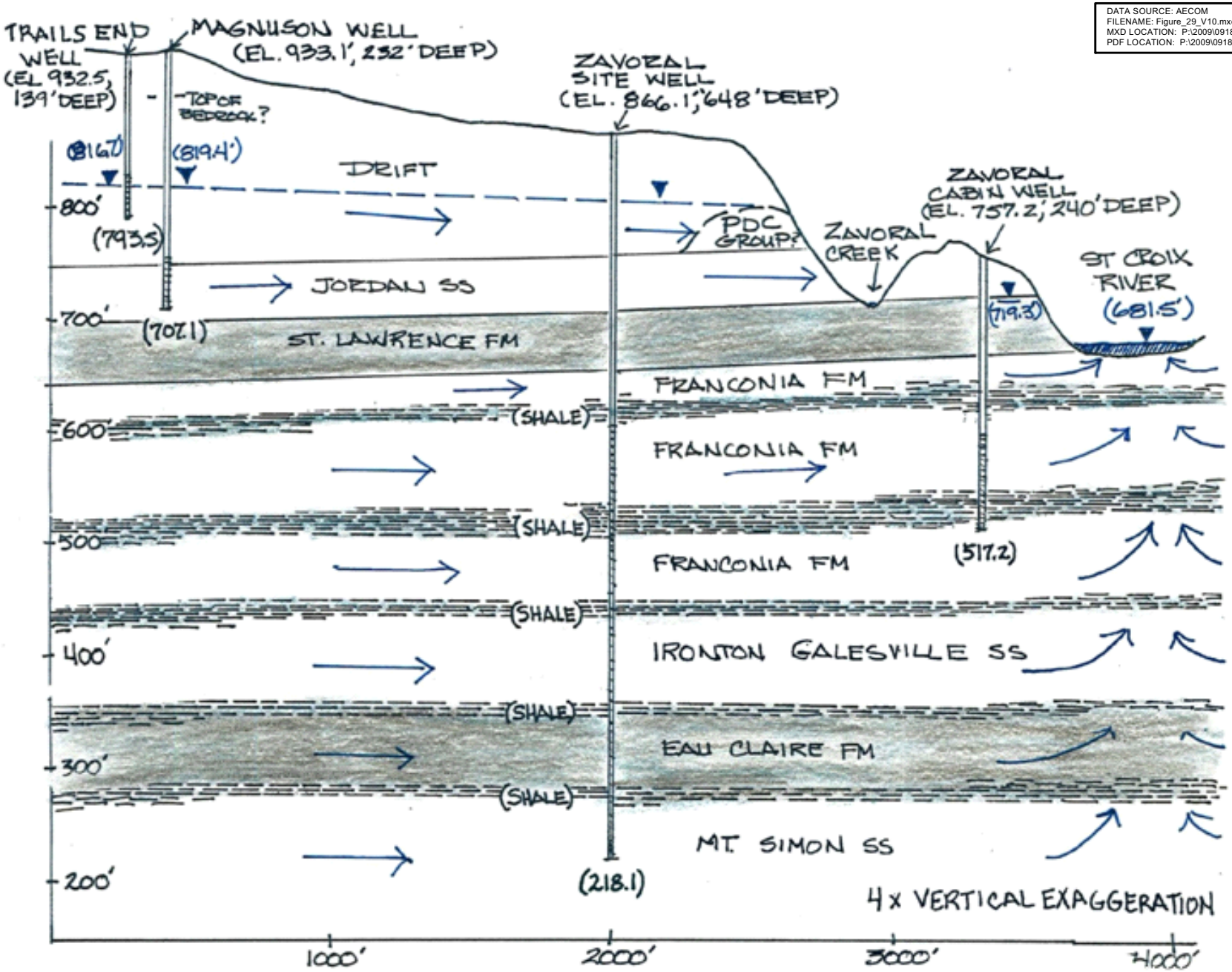

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ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

FIGURE 33
AREA SCHEMATIC CROSS-SECTION

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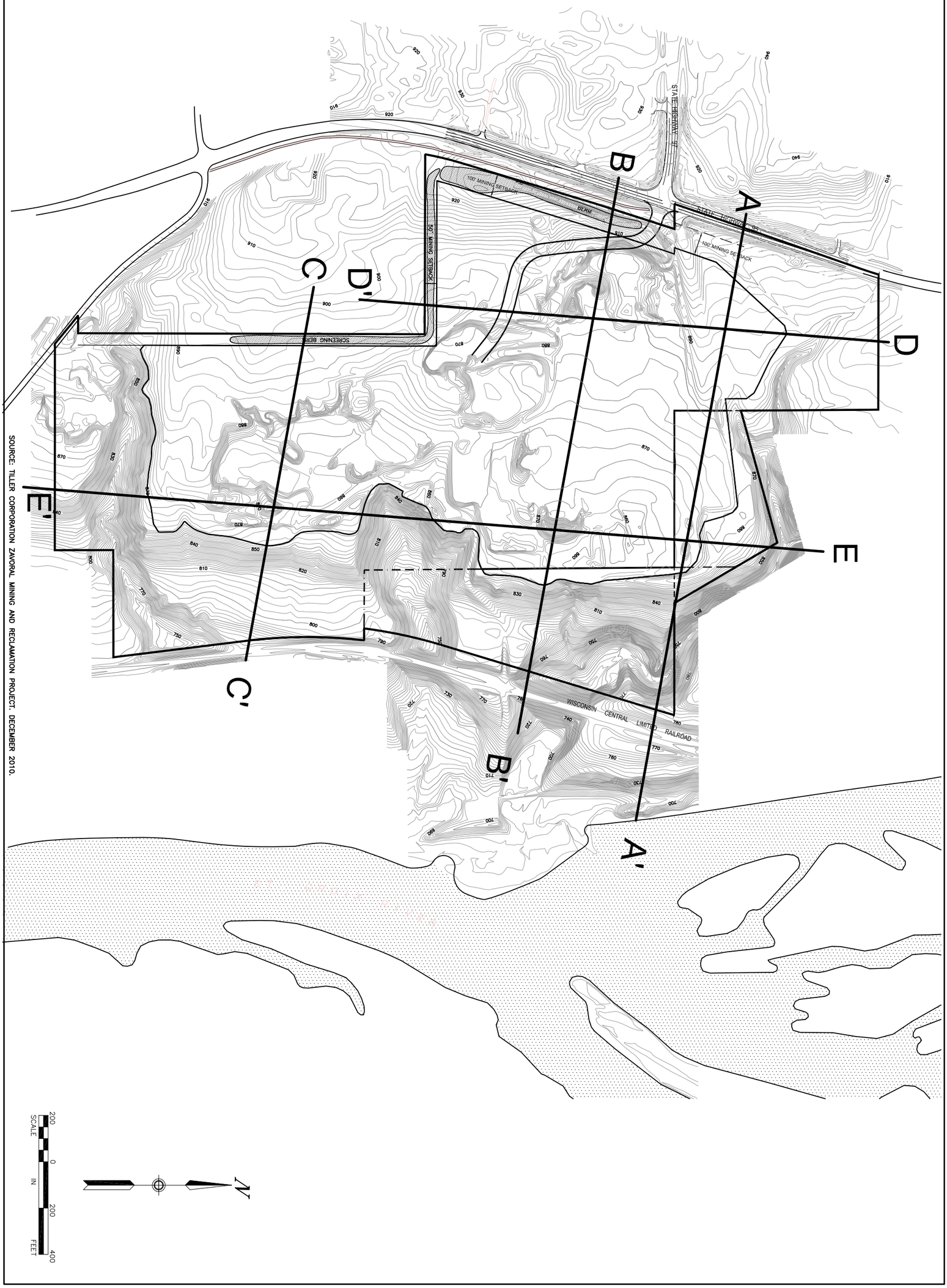

SOURCE: TILLER CORPORATION ZAVORAL MINING AND RECLAMATION PROJECT: DECEMBER 2010.

FIGURE 34
GEOLOGIC CROSS-SECTION LOCATION DIAGRAM

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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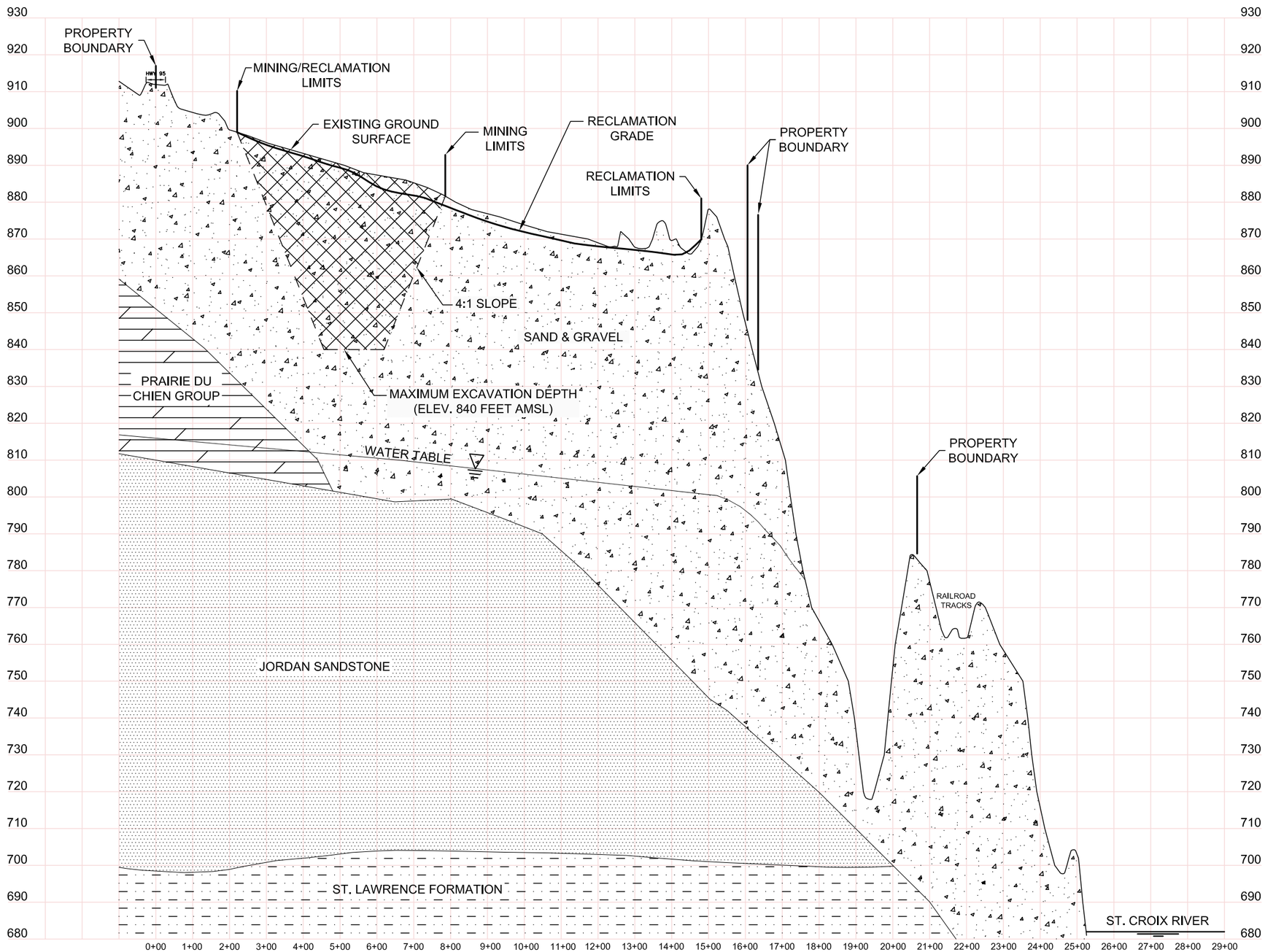
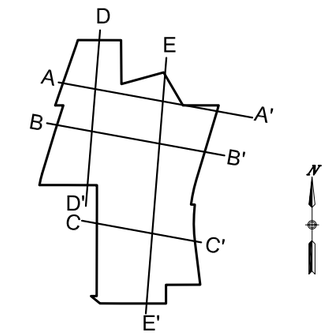


CROSS-SECTION A-A'



SECTION LOCATION MAP

HORIZONTAL SCALE: 1" = 300 FT
VERTICAL SCALE: 1" = 30 FT
VERTICAL EXAGGERATION: 10X

SOURCE: ADAPTED FROM TILLER CORPORATION CROSS-SECTION FIGURES

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FIGURE 35
GEOLOGIC CROSS-SECTION A-A' SHOWING PROJECT FEATURES

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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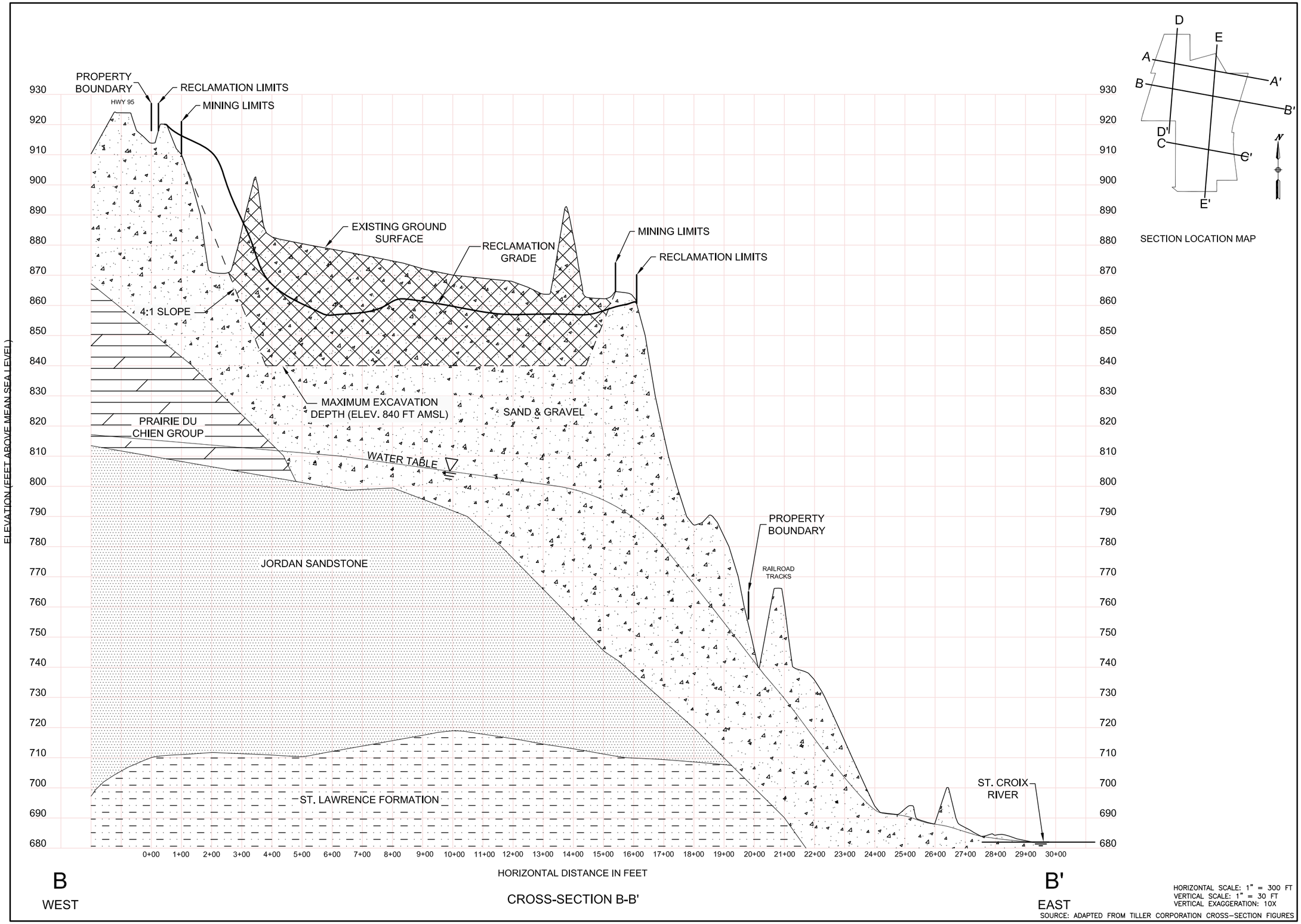

HORIZONTAL SCALE: 1" = 300 FT
VERTICAL SCALE: 1" = 30 FT
VERTICAL EXAGGERATION: 10X

SOURCE: ADAPTED FROM TILLER CORPORATION CROSS-SECTION FIGURES

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FIGURE 36
GEOLOGIC CROSS-SECTION B-B' SHOWING PROJECT FEATURES

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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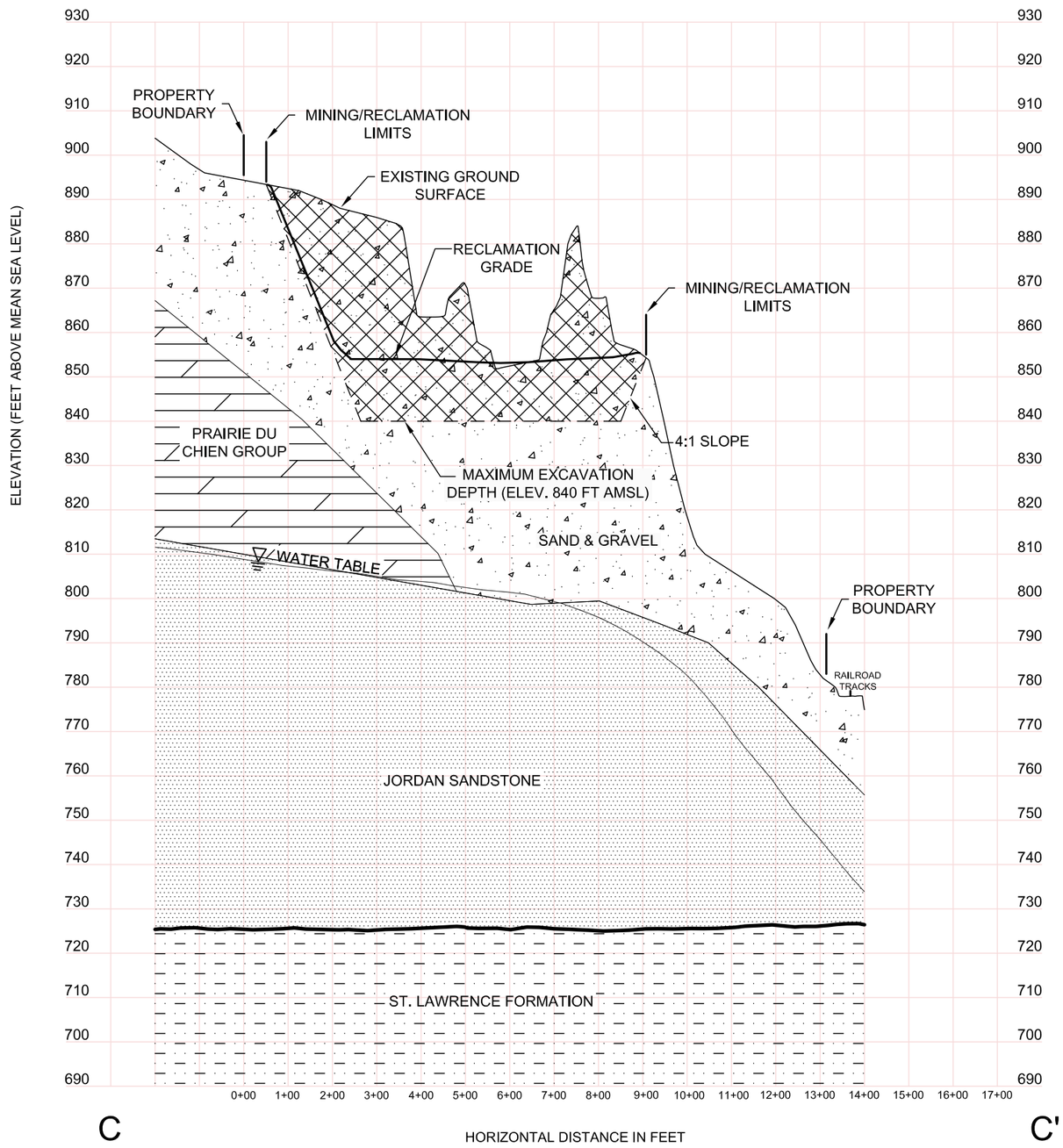
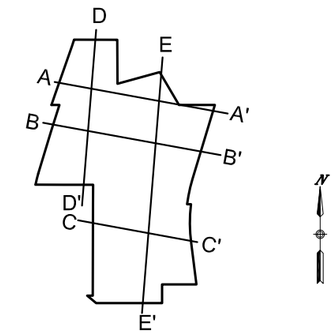
P:\2009\09180095_01\CAD\Figures\EIS FIGURES 10-12-2011\C6 - Cross-section B-B' (Rev).dwg; 1/31/2012 11:57:36 AM; MUELLERLEILE, KEVIN; HP K80 BW.ctb



CROSS-SECTION C-C'



SECTION LOCATION MAP

HORIZONTAL SCALE: 1" = 300 FT
VERTICAL SCALE: 1" = 30 FT
VERTICAL EXAGGERATION: 10X
SOURCE: ADAPTED FROM TILLER CORPORATION CROSS-SECTION FIGURES

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FIGURE 37
GEOLOGIC CROSS-SECTION C-C' SHOWING PROJECT FEATURES

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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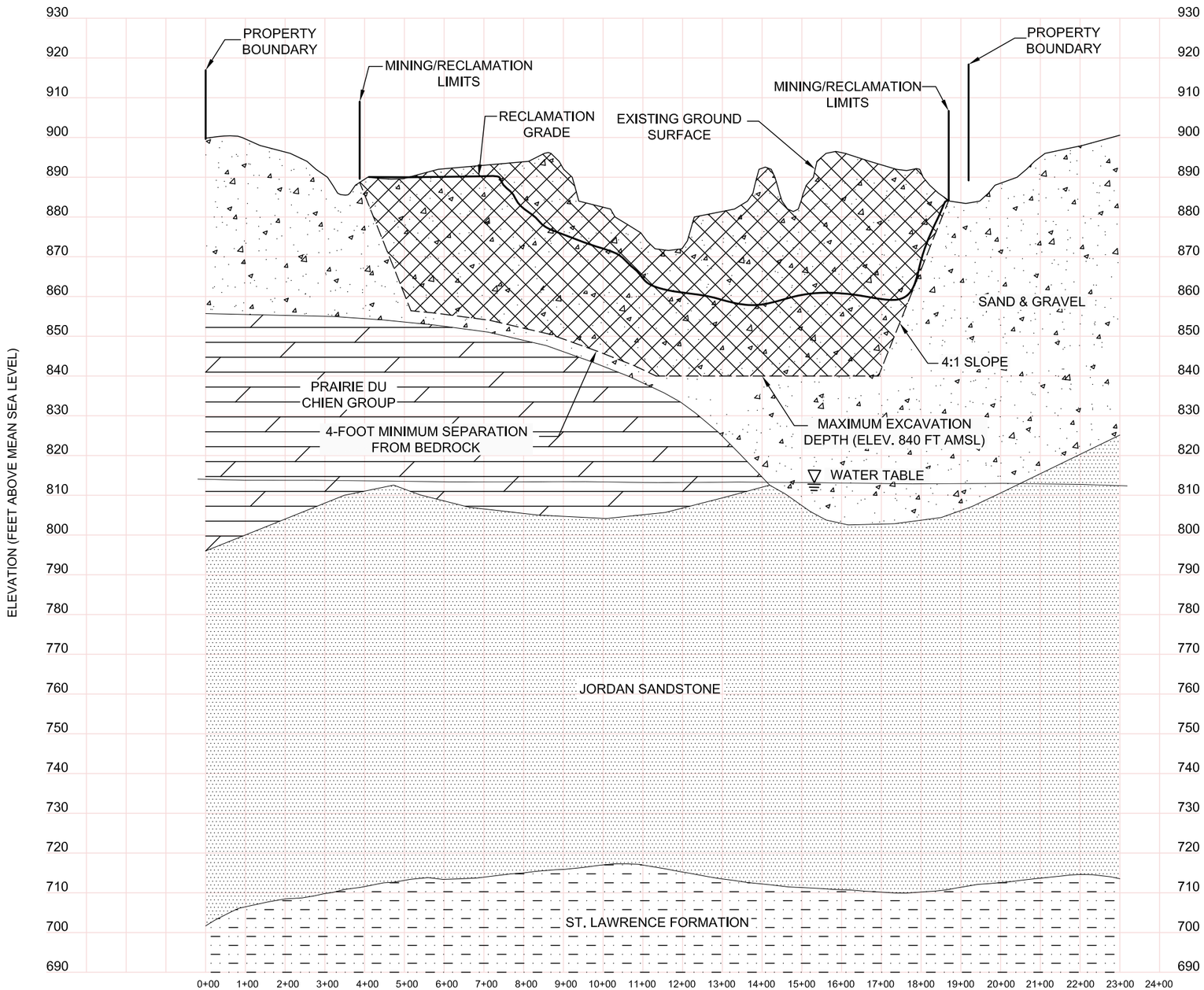
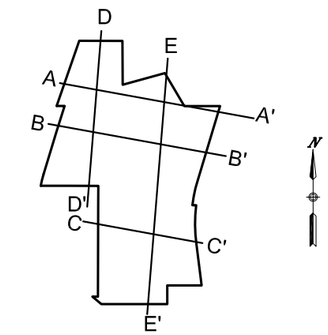
P:\2009\09180095_01\CAD\Figures\EIS FIGURES 10-12-2011\C7 - Cross-section C-C' (Rev).dwg; 1/31/2012 11:59:31 AM; MUELLERLEILE, KEVIN; HP K80 BW.ctb



CROSS-SECTION D-D'



SECTION LOCATION MAP

HORIZONTAL SCALE: 1" = 300 FT
VERTICAL SCALE: 1" = 30 FT
VERTICAL EXAGGERATION: 10X
SOURCE: ADAPTED FROM TILLER CORPORATION CROSS-SECTION FIGURES

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FIGURE 38
GEOLOGIC CROSS-SECTION D-D' SHOWING PROJECT FEATURES

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SCANDIA, MINNESOTA

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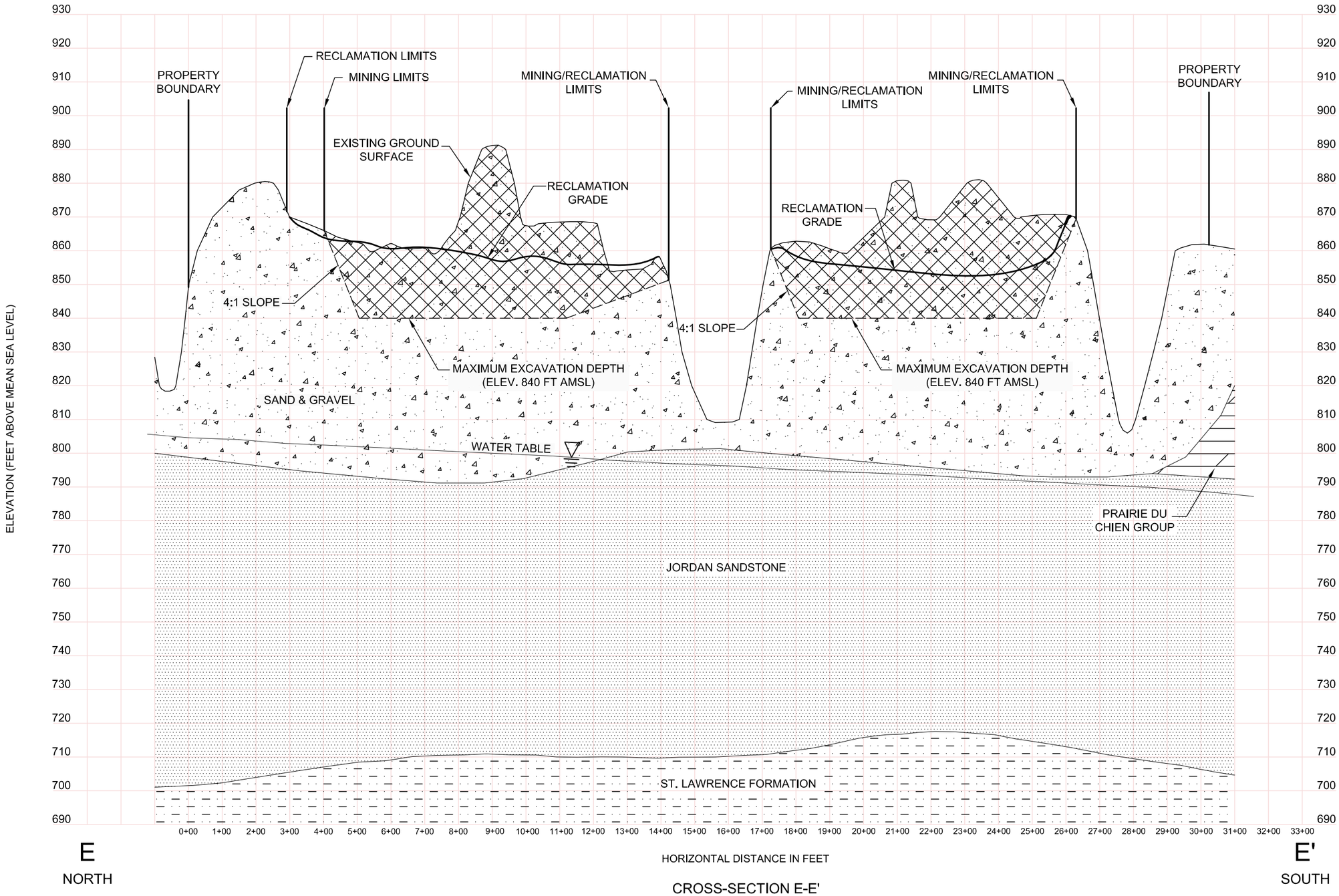

CROSS-SECTION E-E'

*SEE CROSS-SECTION LOCATION MAP ON FIGURE 34

HORIZONTAL SCALE: 1" = 300 FT
VERTICAL SCALE: 1" = 30 FT
VERTICAL EXAGGERATION: 10X
SOURCE: ADAPTED FROM TILLER CORPORATION CROSS-SECTION FIGURES

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FIGURE 39
GEOLOGIC CROSS-SECTION E-E' SHOWING PROJECT FEATURES

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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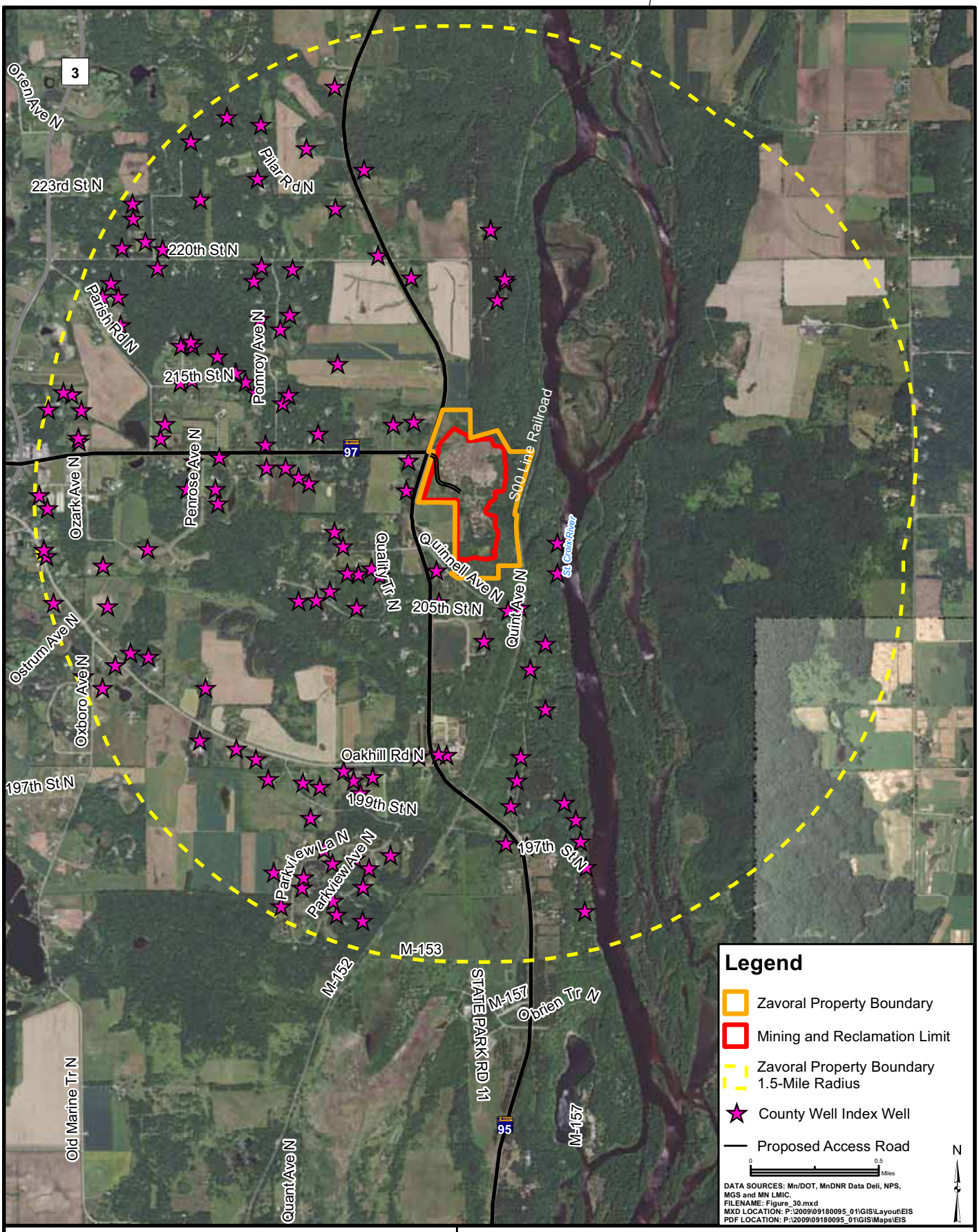

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FIGURE 40
RECORDED WELLS WITHIN 1.5-MILE RADIUS

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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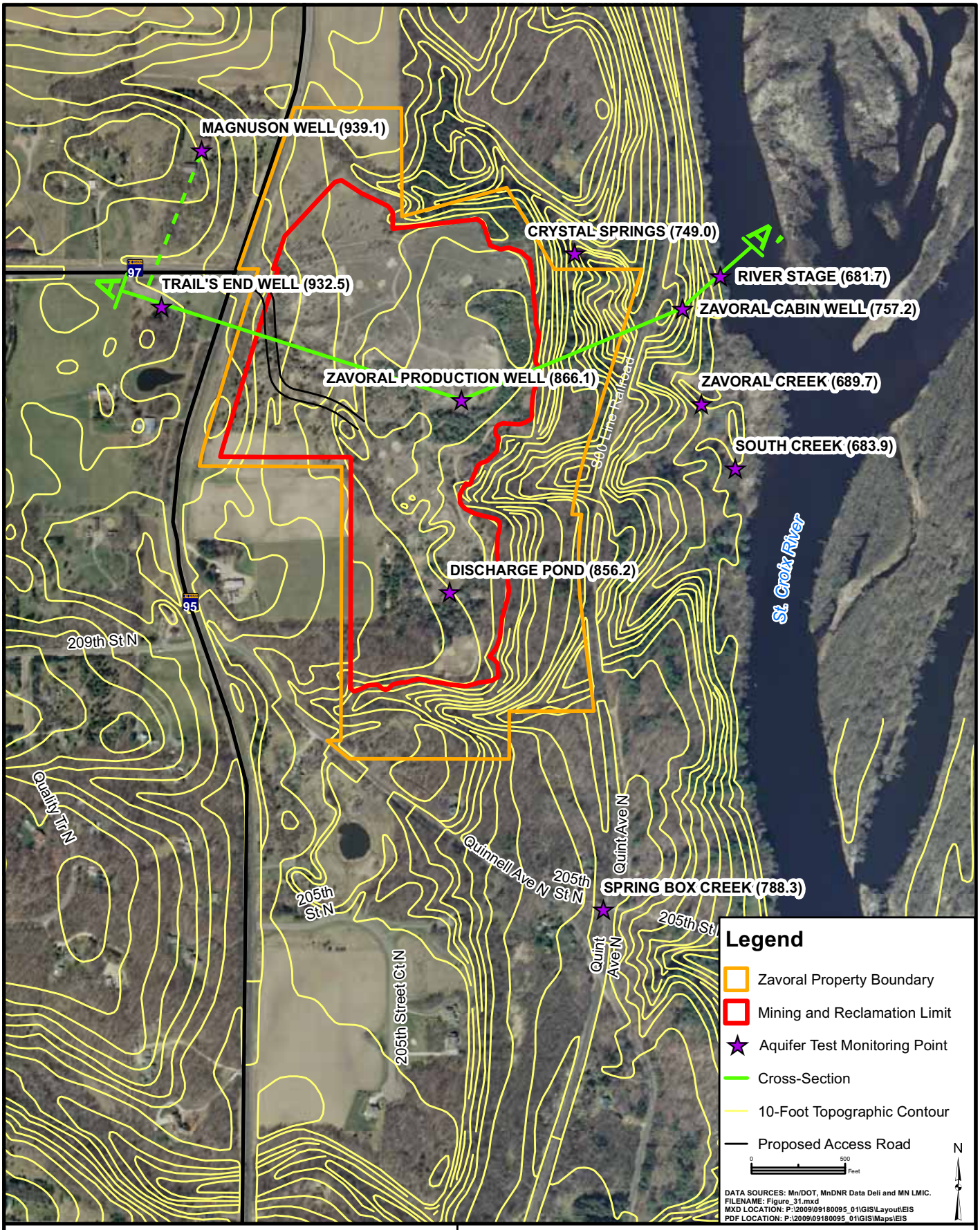

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FIGURE 41
AQUIFER TEST MONITORING NETWORK

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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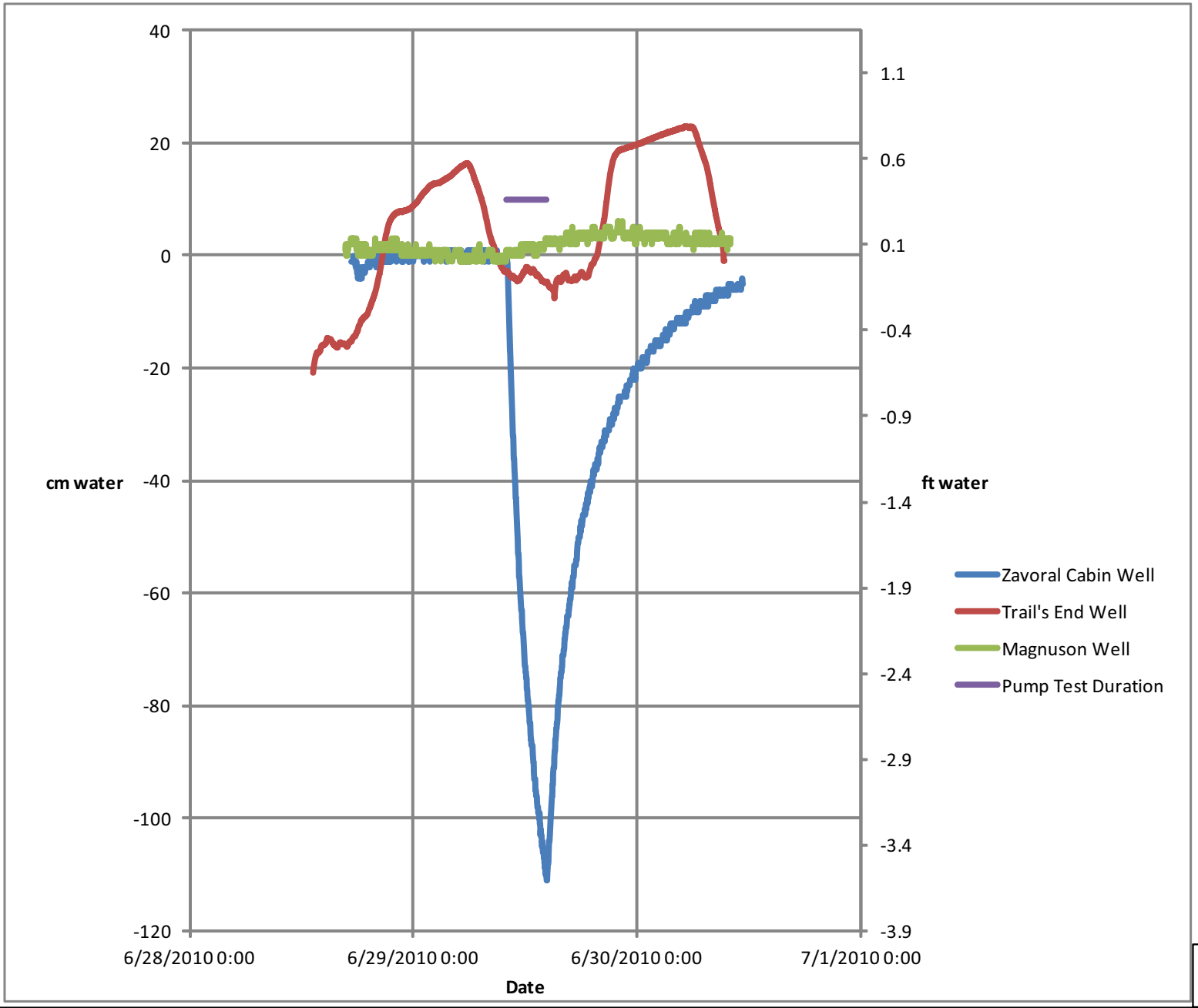

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SCANDIA, MINNESOTA

FIGURE 42
HYDROGRAPH OF ALL MONITORING WELLS

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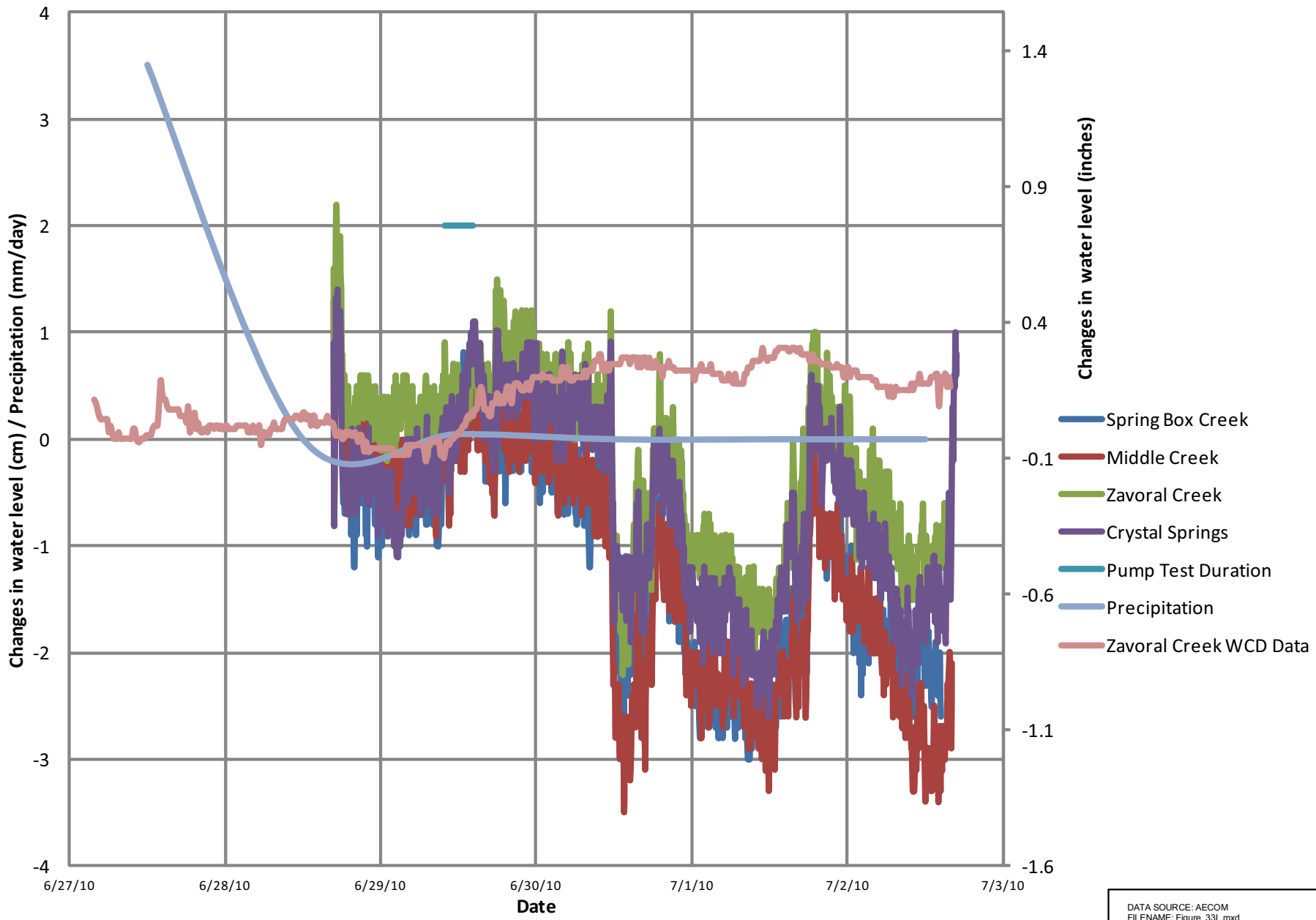

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SCANDIA, MINNESOTA

FIGURE 43
WATER LEVEL CHANGES AT ALL SURFACE WATER POINTS

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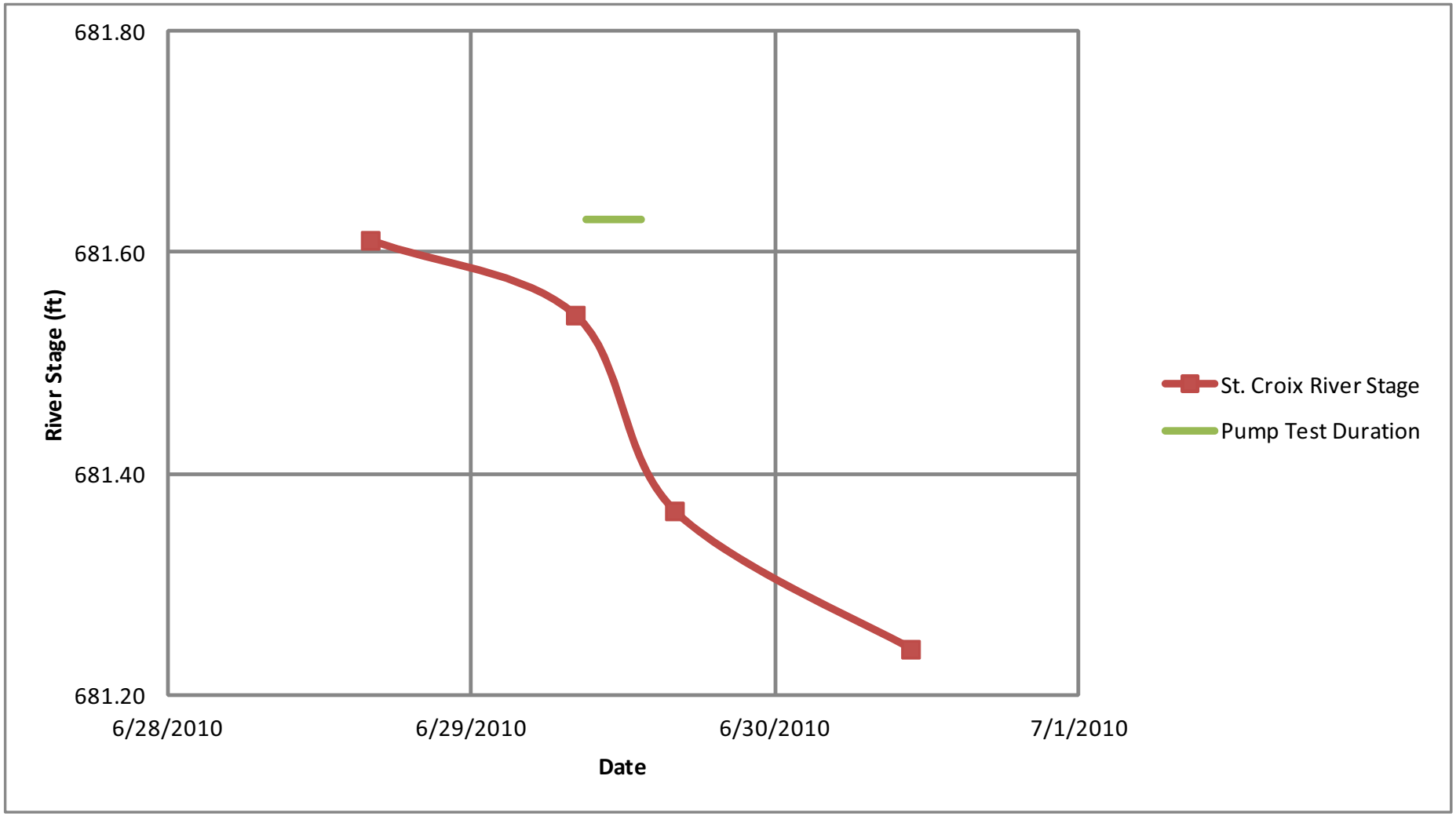

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SCANDIA, MINNESOTA

FIGURE 44
ST. CROIX RIVER STAGE
NEAR ZAVORAL CABIN

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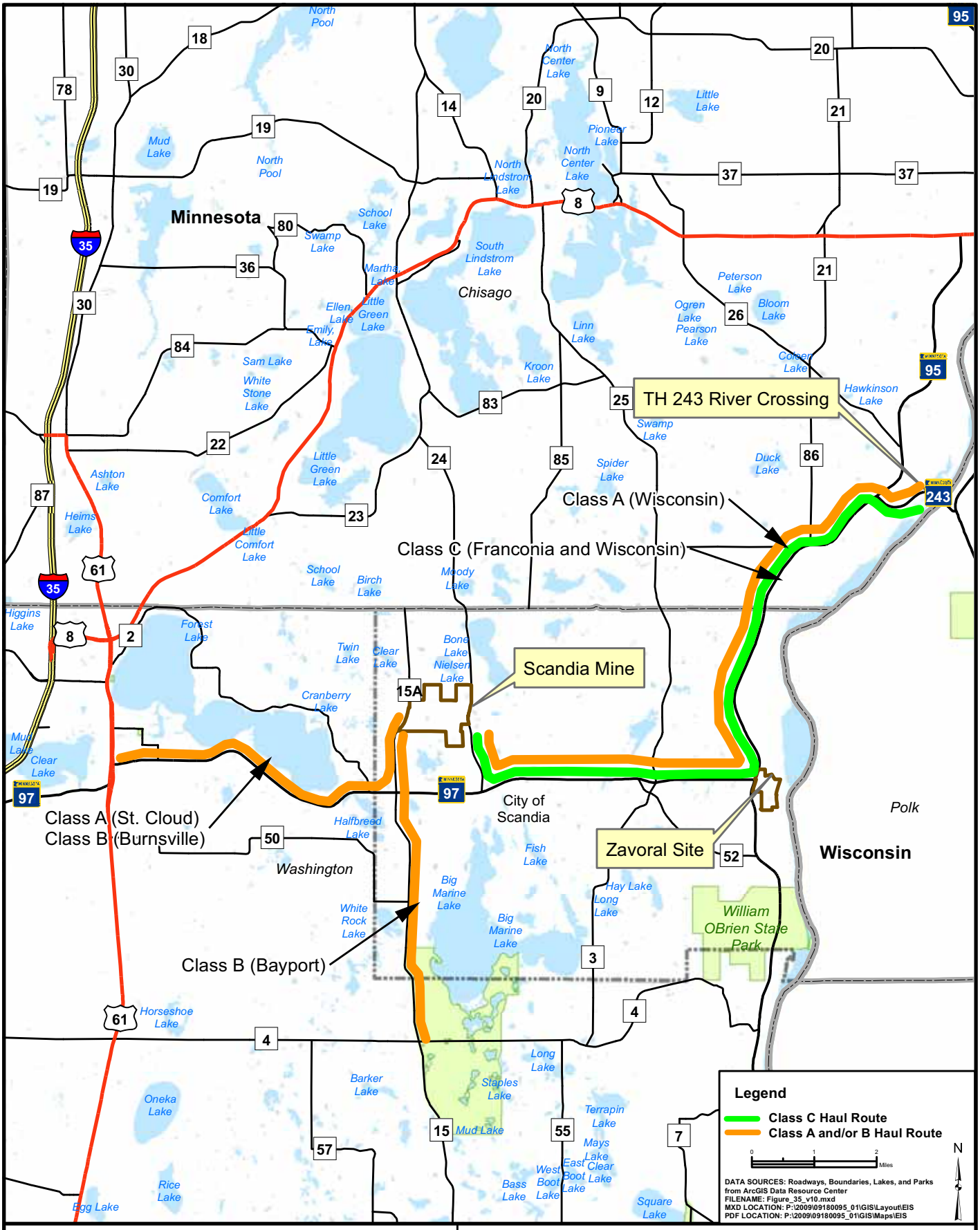

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FIGURE 45
CURRENT ADD-ROCK HAUL ROUTES TO SCANDIA MINE

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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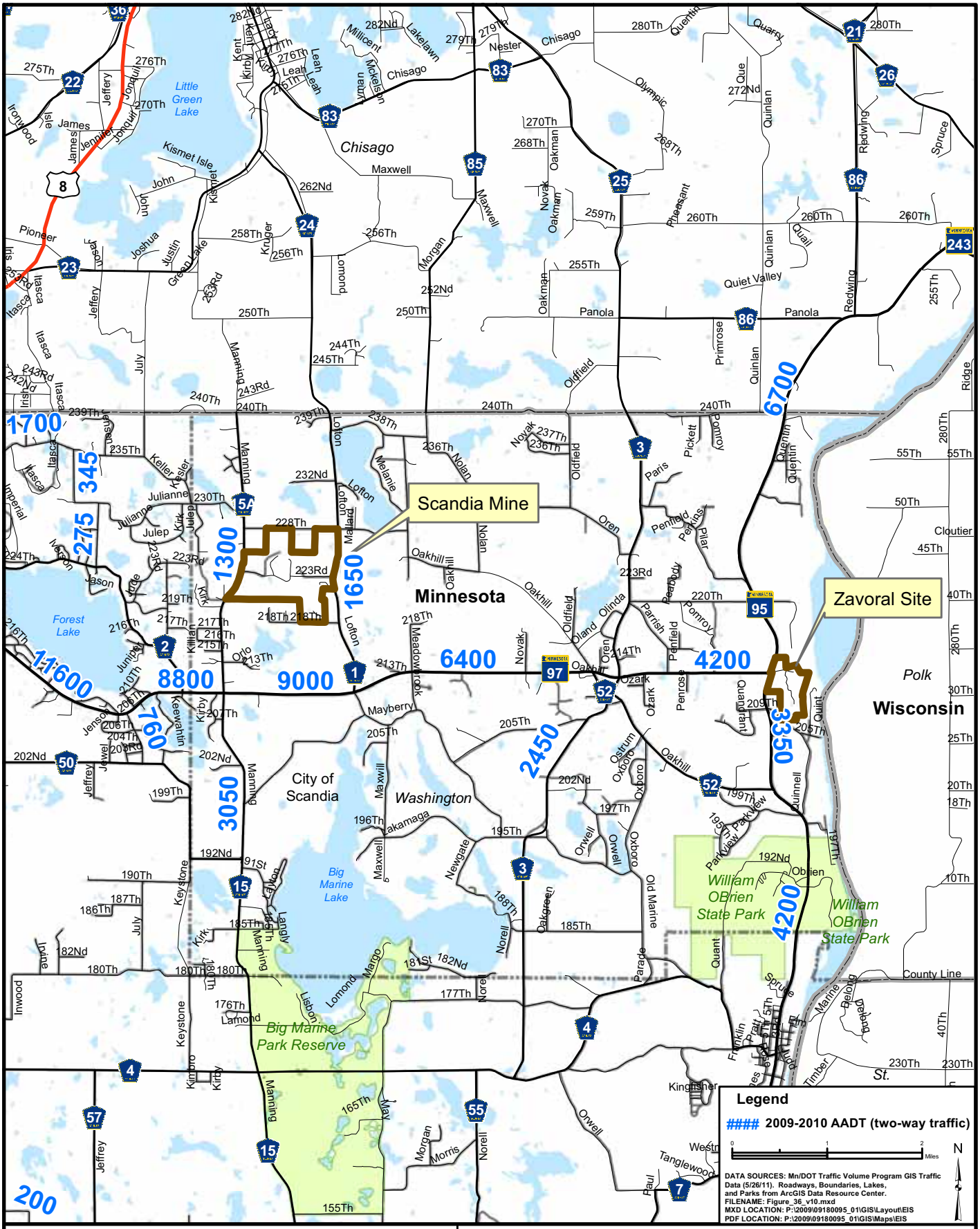

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FIGURE 46
AVERAGE DAILY TRAFFIC VOLUMES

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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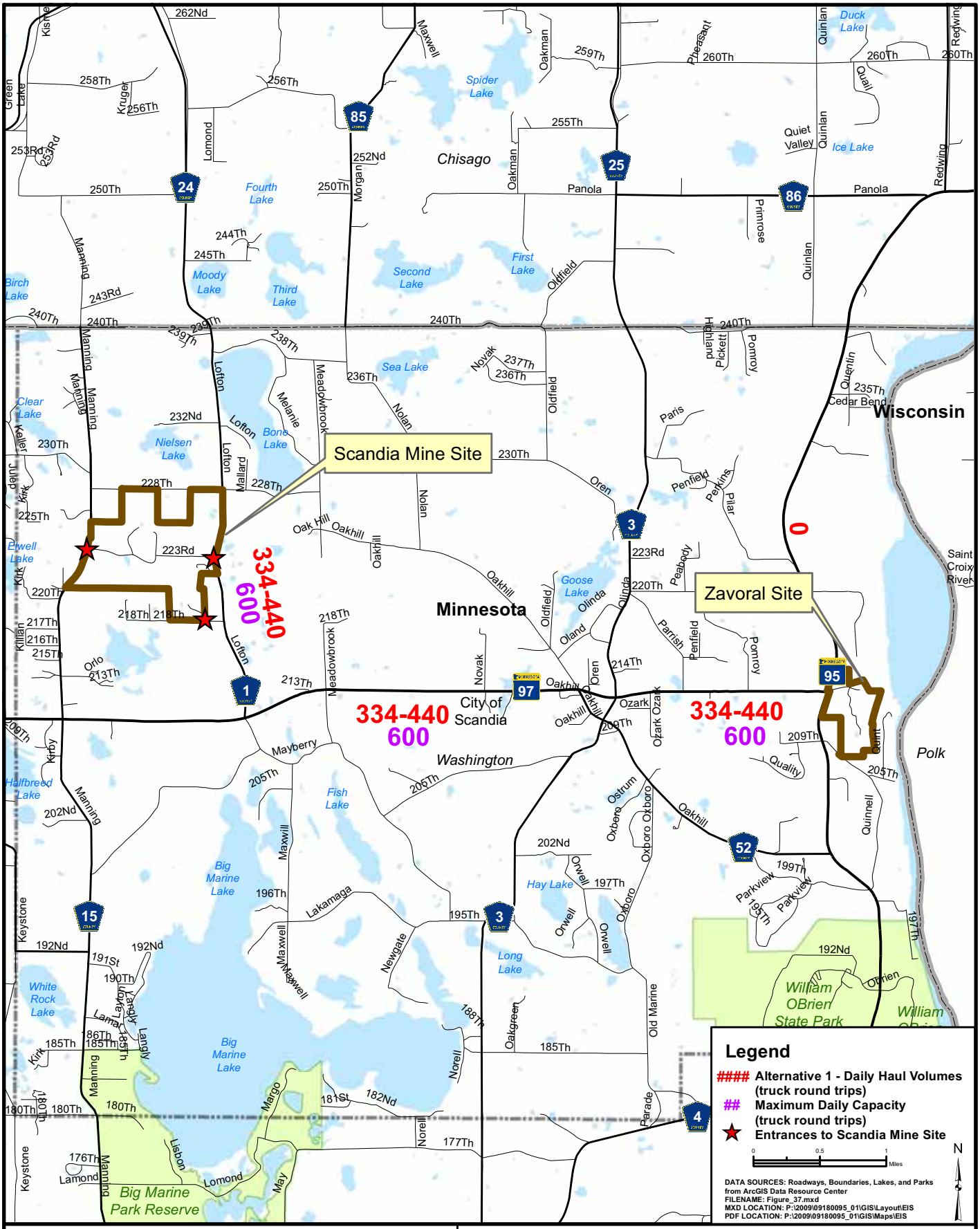

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FIGURE 47
CLASS C ADD-ROCK HAUL TRUCK VOLUMES
ALTERNATIVE 1

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

FEB. 2012

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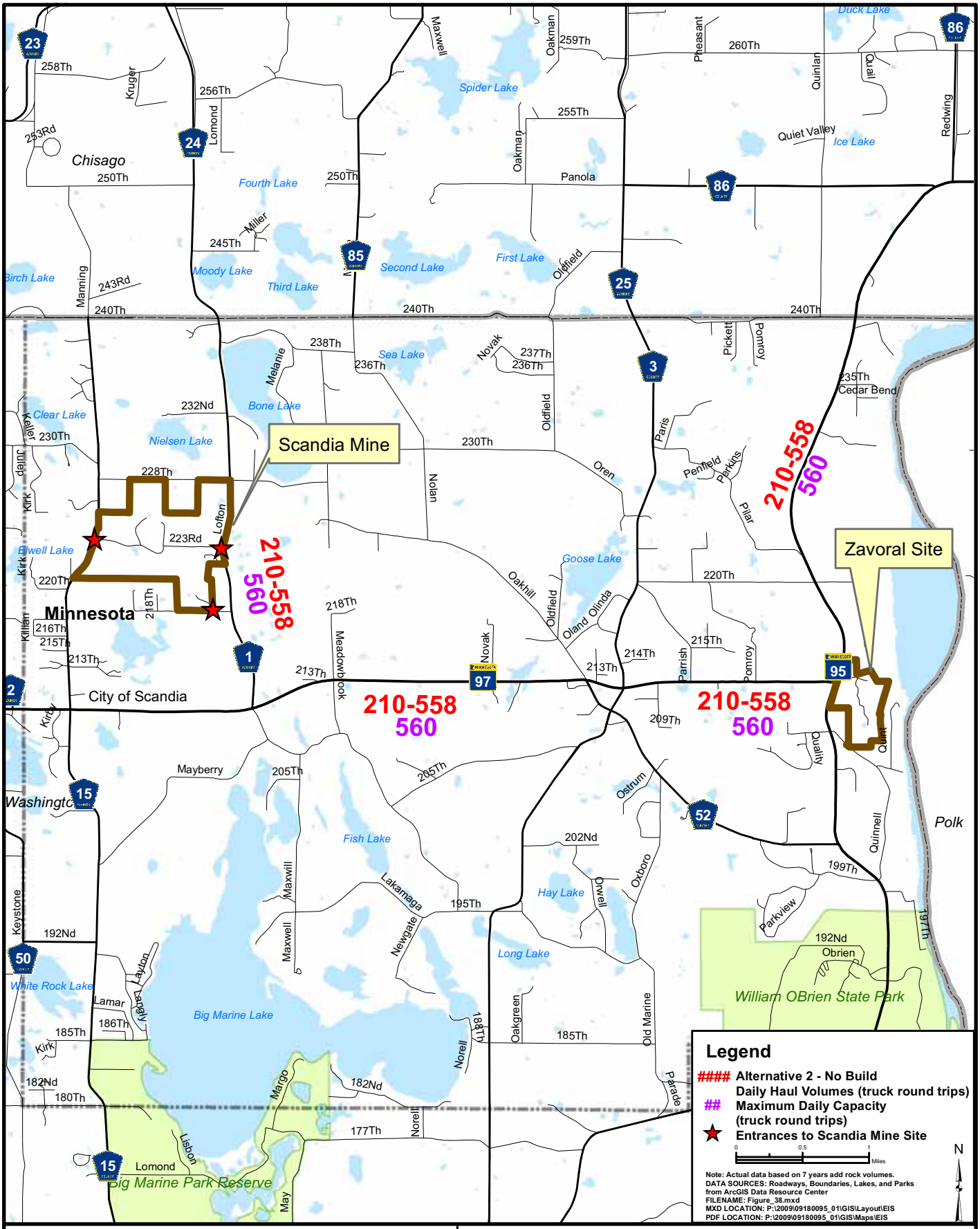

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FIGURE 48
CLASS C ADD-ROCK HAUL TRUCK VOLUMES
ALTERNATIVE 2

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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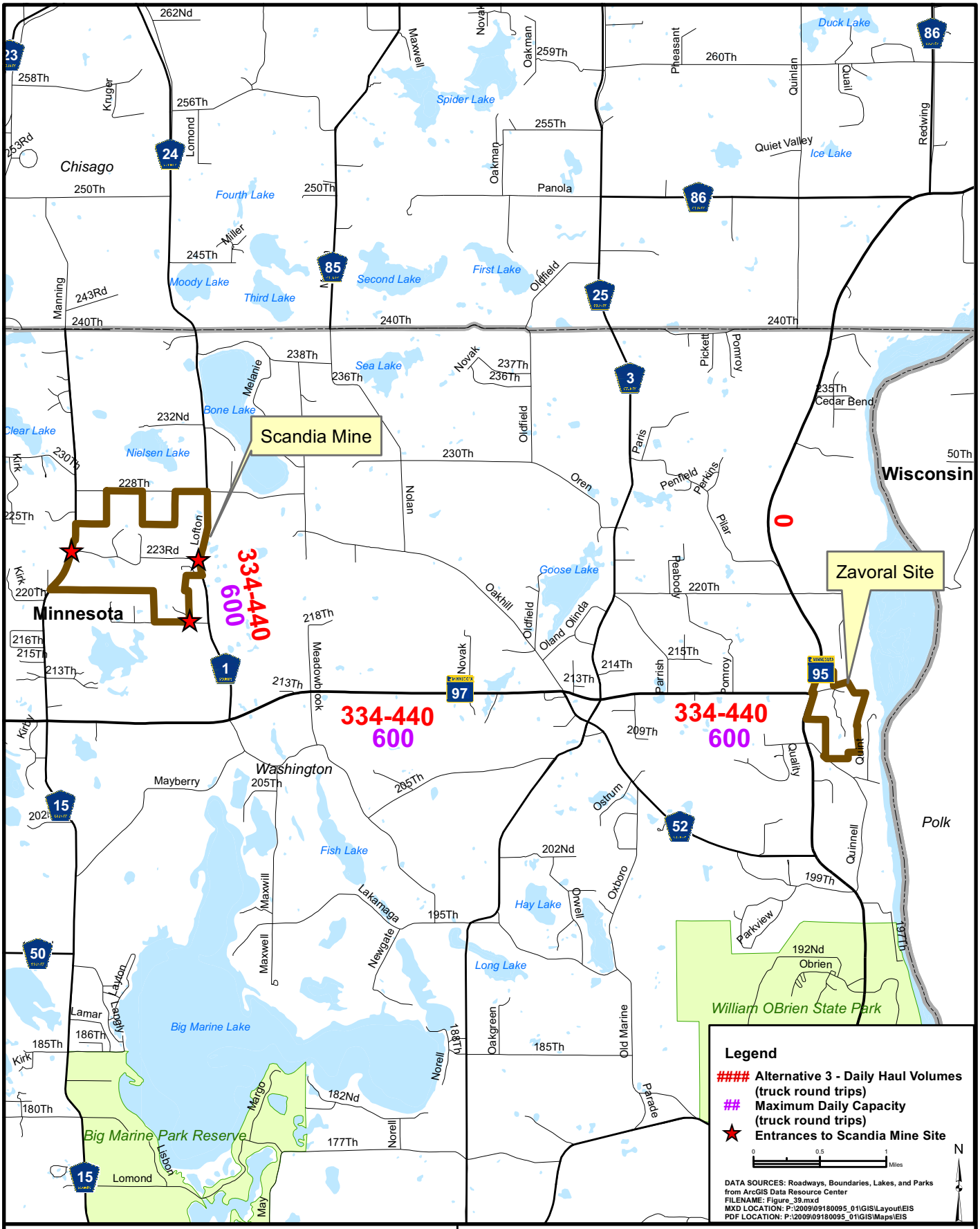

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FIGURE 49
CLASS C ADD-ROCK HAUL TRUCK VOLUMES
ALTERNATIVE 3

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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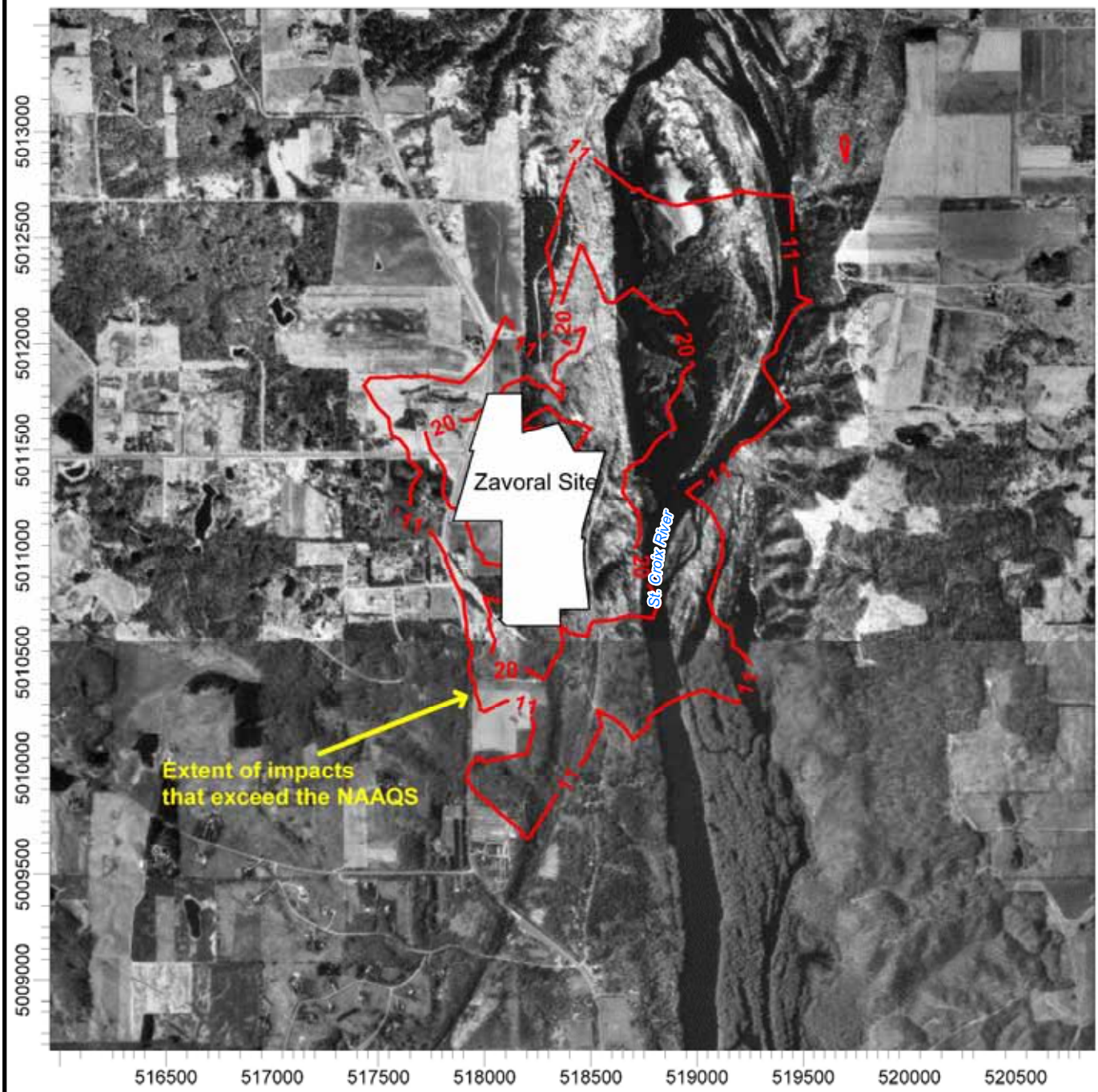

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FIGURE 50
PHASE 1 $PM_{2.5}$ 24-HOUR NAAQS MODELING RESULTS

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

FEB. 2012

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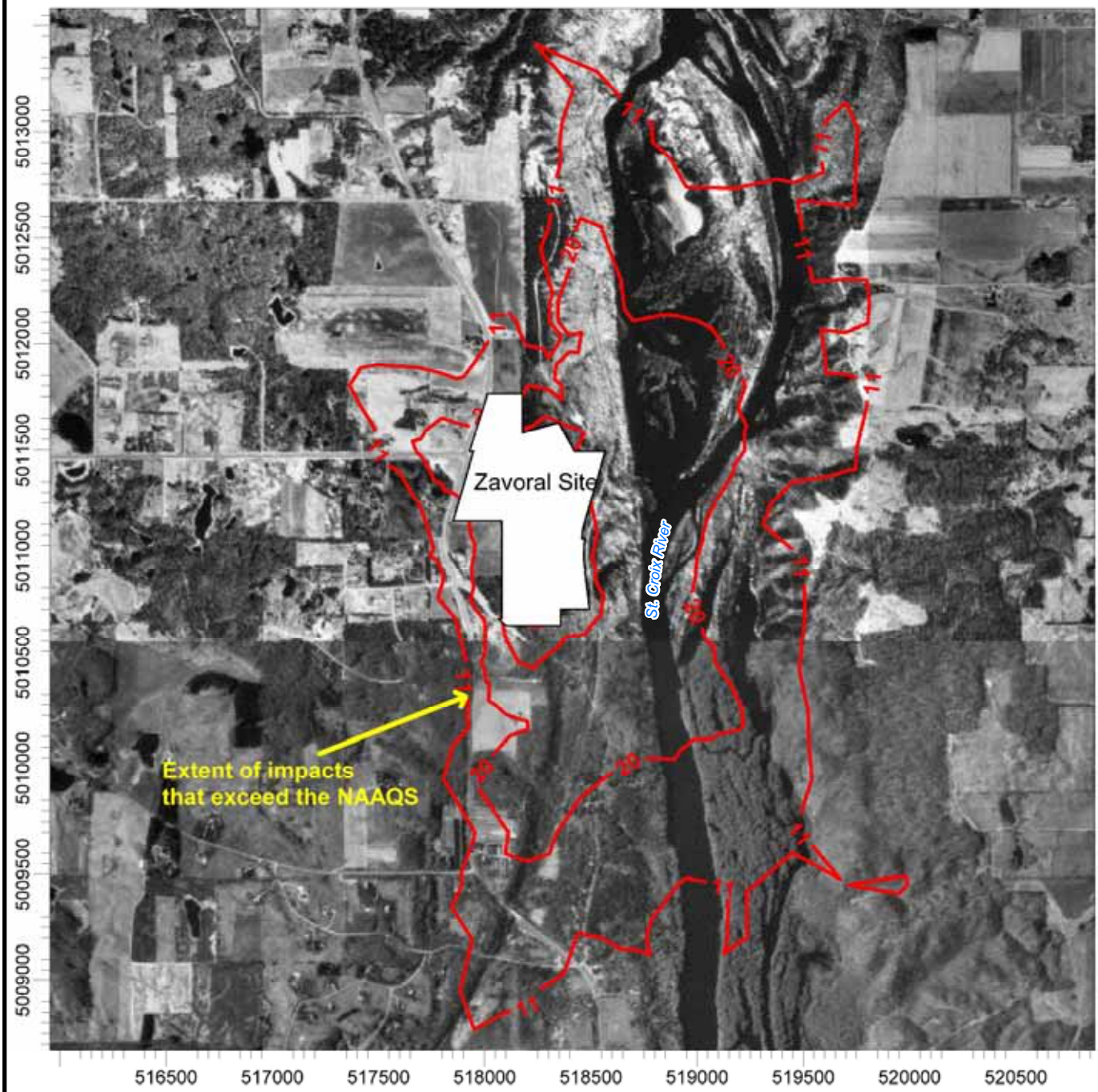

SCALE: 1:30,000

0 1 km

DATA SOURCES: AECOM.
FILENAME: Figure_41.mxd
MXD LOCATION: P:\2009\09180095_01\GIS\Layout\EIS
PDF LOCATION: P:\2009\09180095_01\GIS\Maps\EIS

N

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FIGURE 51
PHASE 2 $PM_{2.5}$ 24-HOUR NAAQS MODELING RESULTS

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

FEB. 2012

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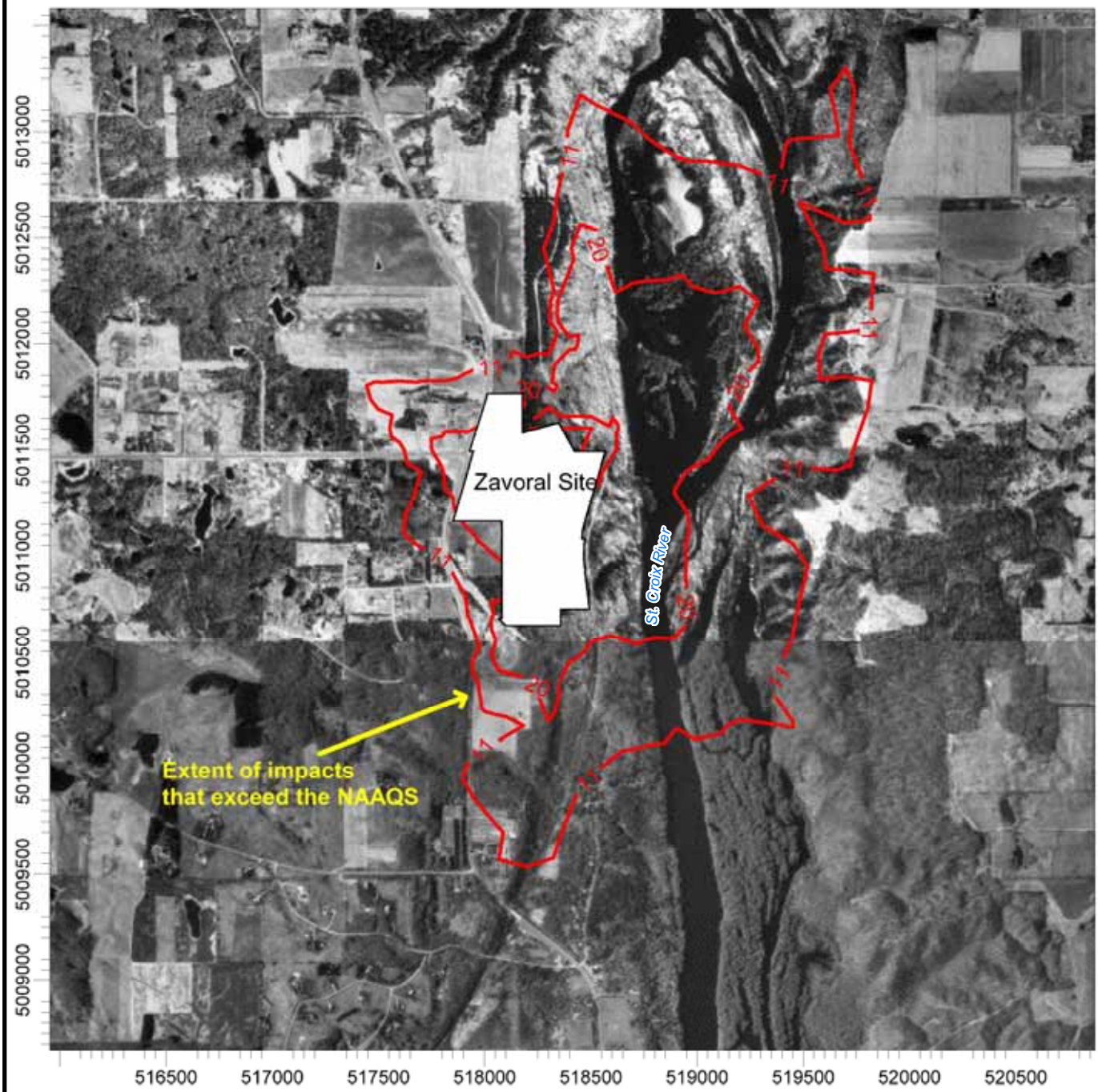

SCALE: 1:30,000

0 1 km

DATA SOURCES: AECOM.
FILENAME: Figure_42.mxd
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PDF LOCATION: P:\2009\09180095_01\GIS\Maps\EIS

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FIGURE 52
PHASE 3 $PM_{2.5}$ 24-HOUR NAAQS MODELING RESULTS

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

FEB. 2012

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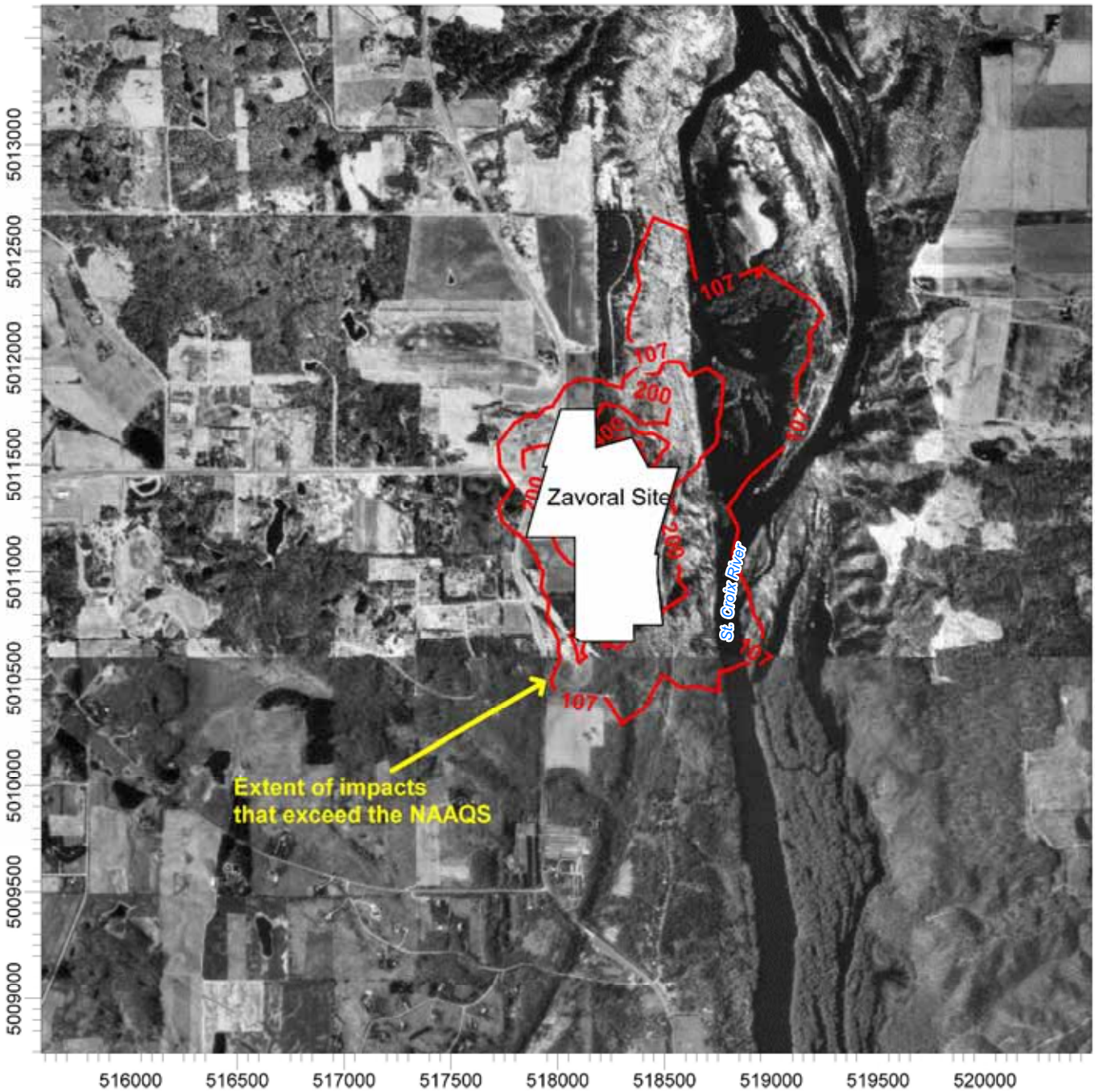

SCALE: 1:30,000

0 1 km

DATA SOURCES: AECOM.
FILENAME: Figure_43.mxd
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PDF LOCATION: P:\2009\09180095_01\GIS\Maps\EIS

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FIGURE 53
PHASE 1 PM_{10} 24-HOUR NAAQS MODELING RESULTS

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

FEB. 2012

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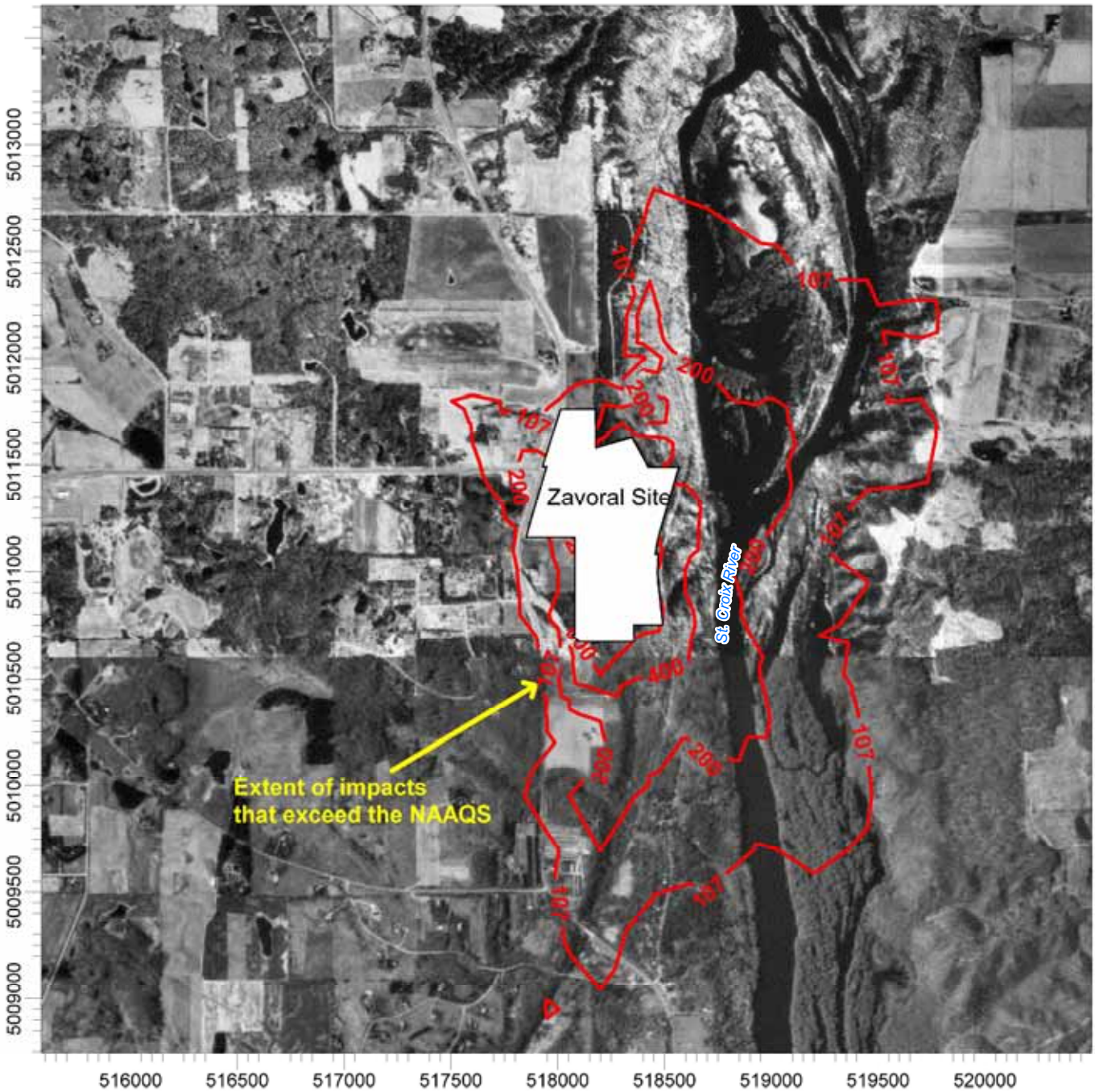

SCALE: 1:30,000

0 1 km

DATA SOURCES: AECOM.
FILENAME: Figure_44.mxd
MXD LOCATION: P:\2009\09180095_01\GIS\Layout\EIS
PDF LOCATION: P:\2009\09180095_01\GIS\Maps\EIS

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FIGURE 54
PHASE 2 PM_{10} 24-HOUR NAAQS MODELING RESULTS

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

FEB. 2012

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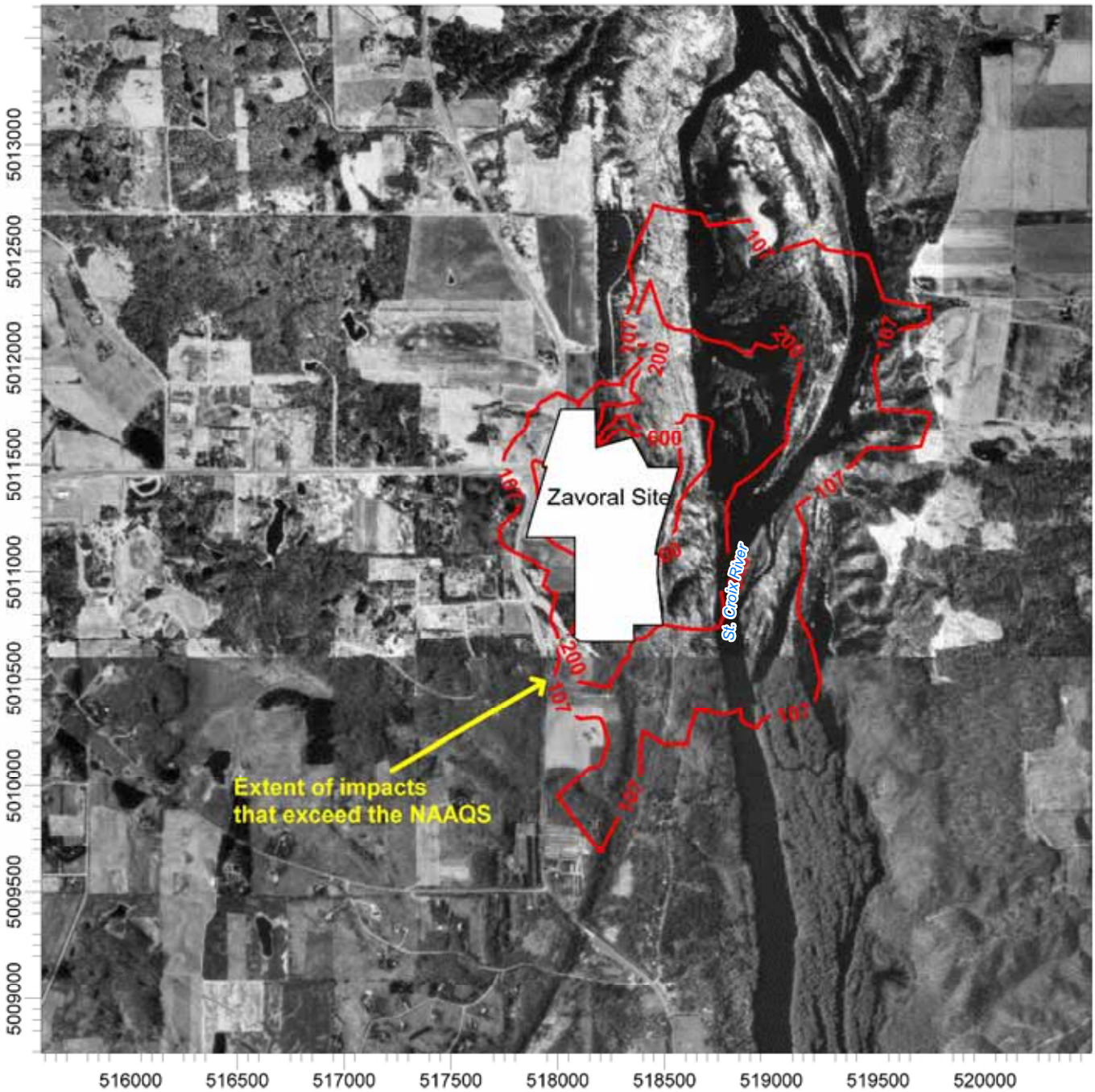

SCALE: 1:30,000

0 1 km

DATA SOURCES: AECOM.
FILENAME: Figure_45.mxd
MXD LOCATION: P:\2009\09180095_01\GIS\Layout\EIS
PDF LOCATION: P:\2009\09180095_01\GIS\Maps\EIS

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FIGURE 55
PHASE 3 PM_{10} 24-HOUR NAAQS MODELING RESULTS

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

FEB. 2012

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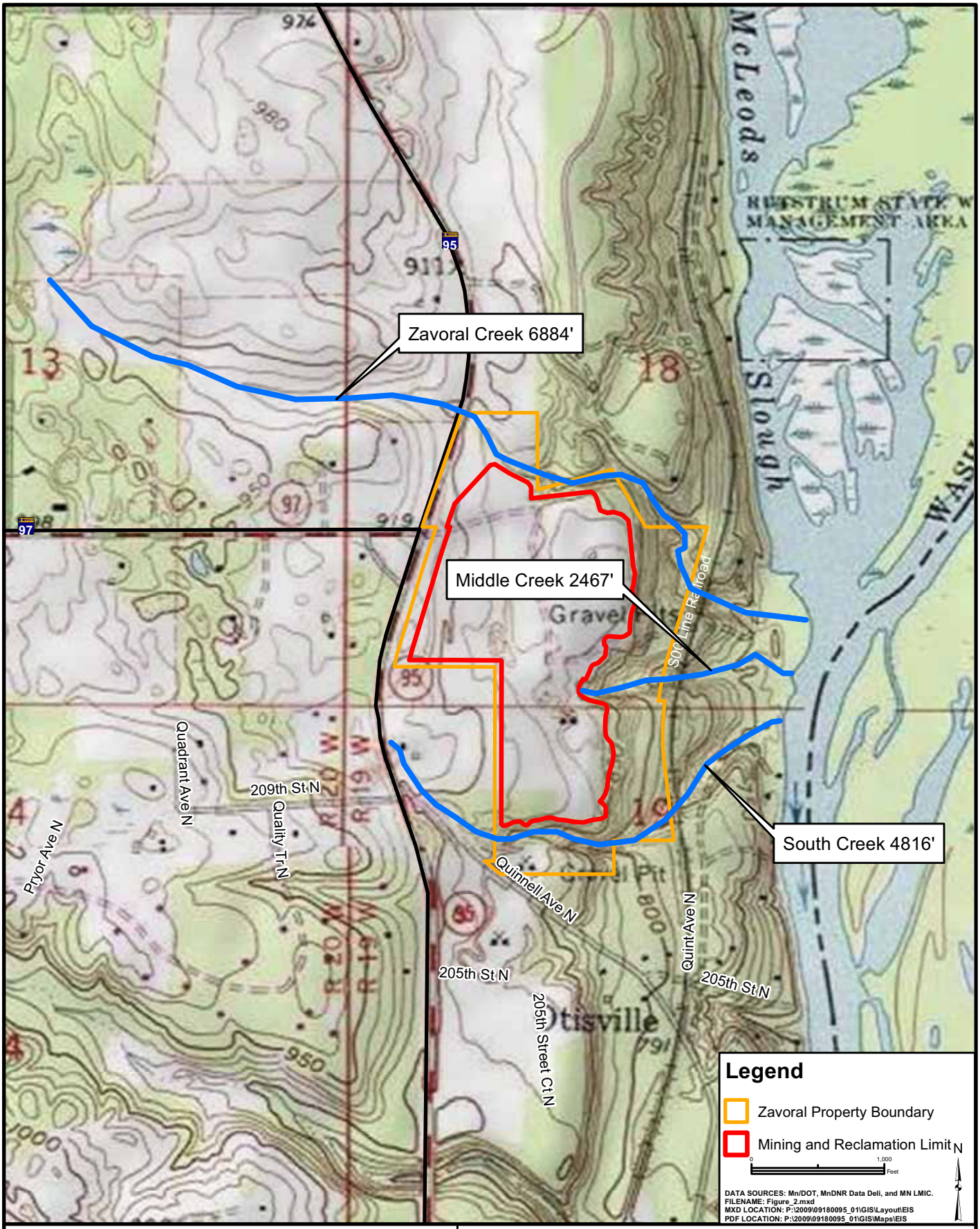

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FIGURE 56
AREA STREAMS, LOCATION, AND LENGTH

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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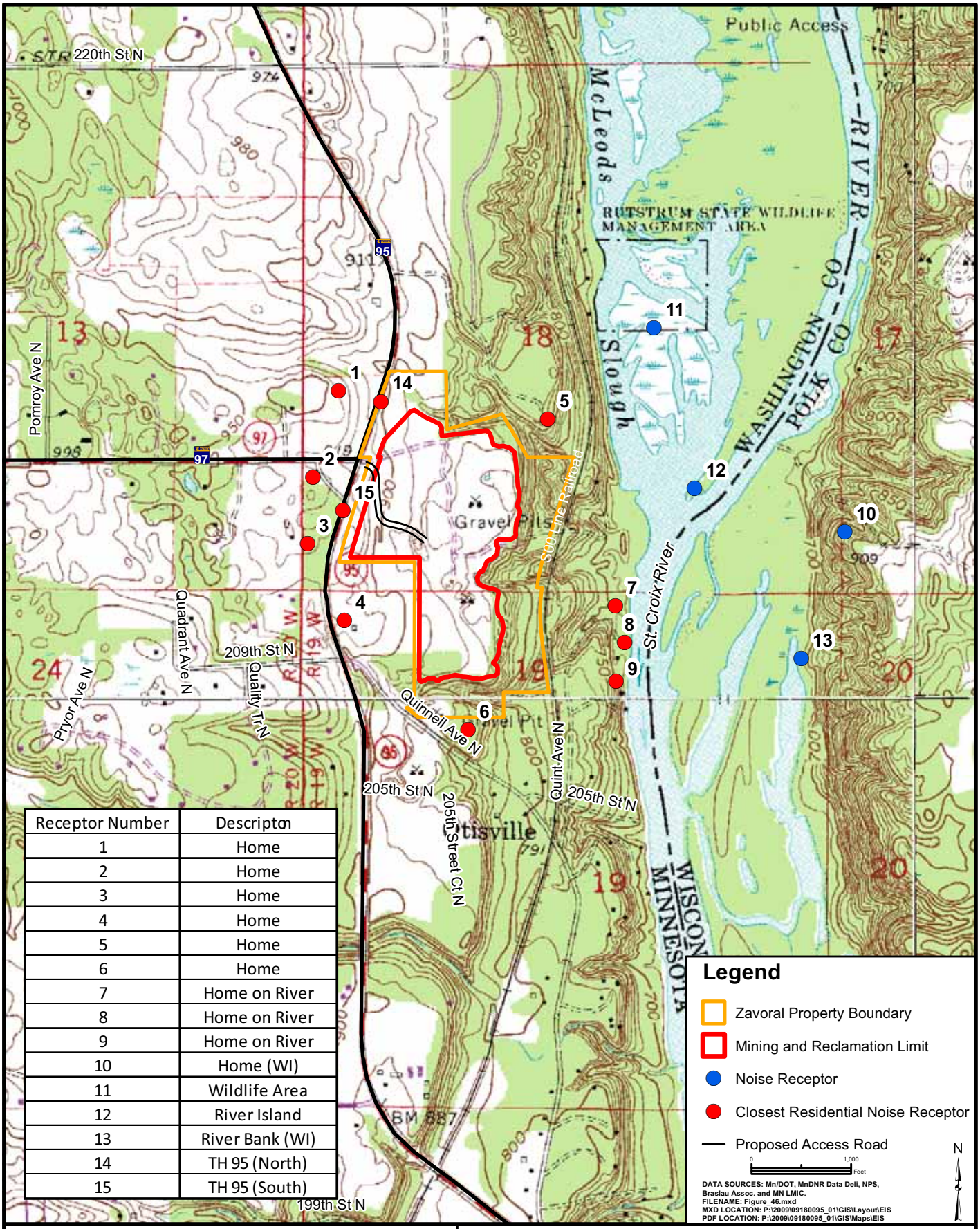

Receptor Number	Description
1	Home
2	Home
3	Home
4	Home
5	Home
6	Home
7	Home on River
8	Home on River
9	Home on River
10	Home (WI)
11	Wildlife Area
12	River Island
13	River Bank (WI)
14	TH 95 (North)
15	TH 95 (South)

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FIGURE 57
NOISE RECEPTOR SITES AND TOPOGRAPHY

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SCANDIA, MINNESOTA

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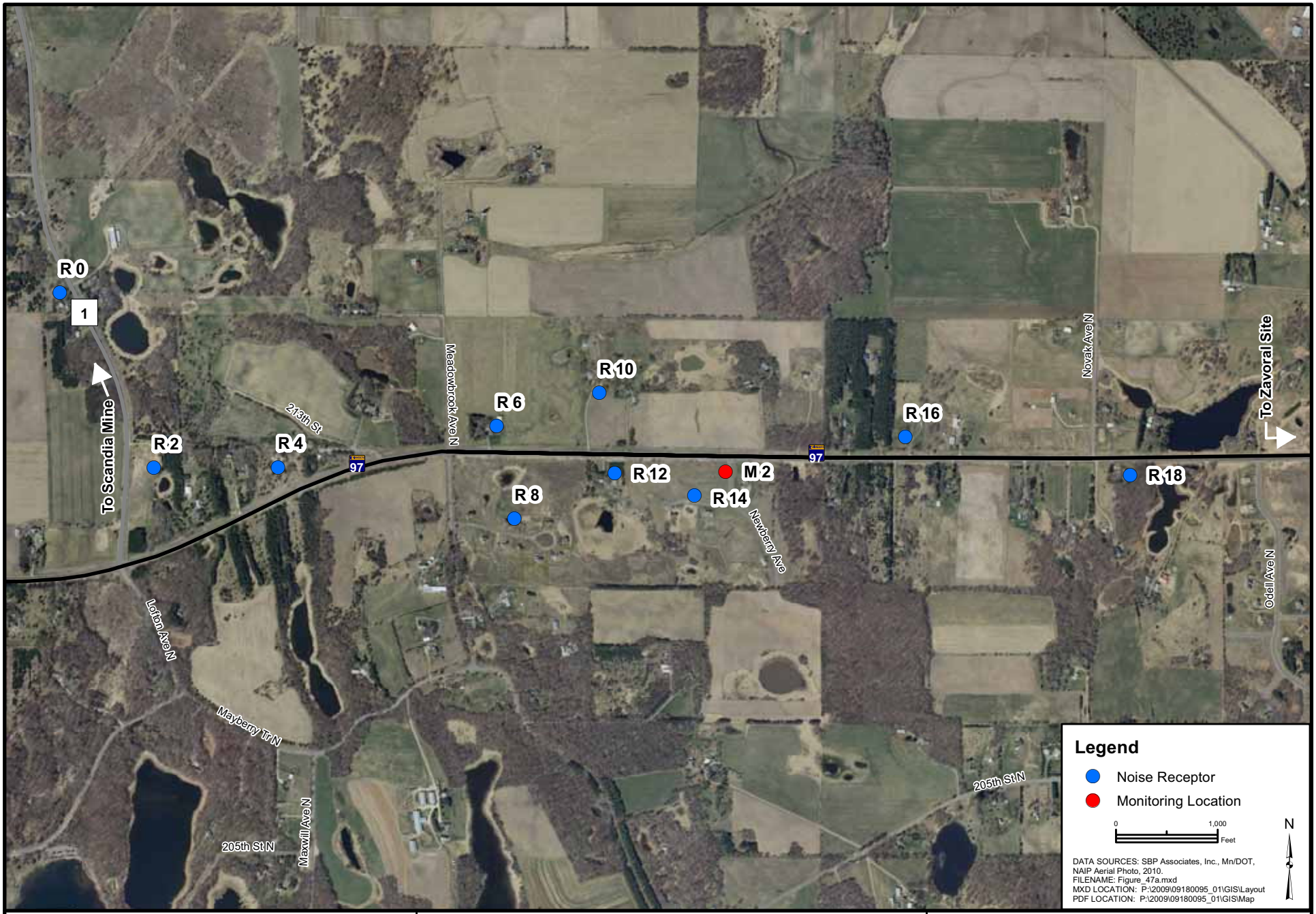

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FIGURE 58a
NOISE RECEPTOR SITES
ALONG HAUL ROUTE

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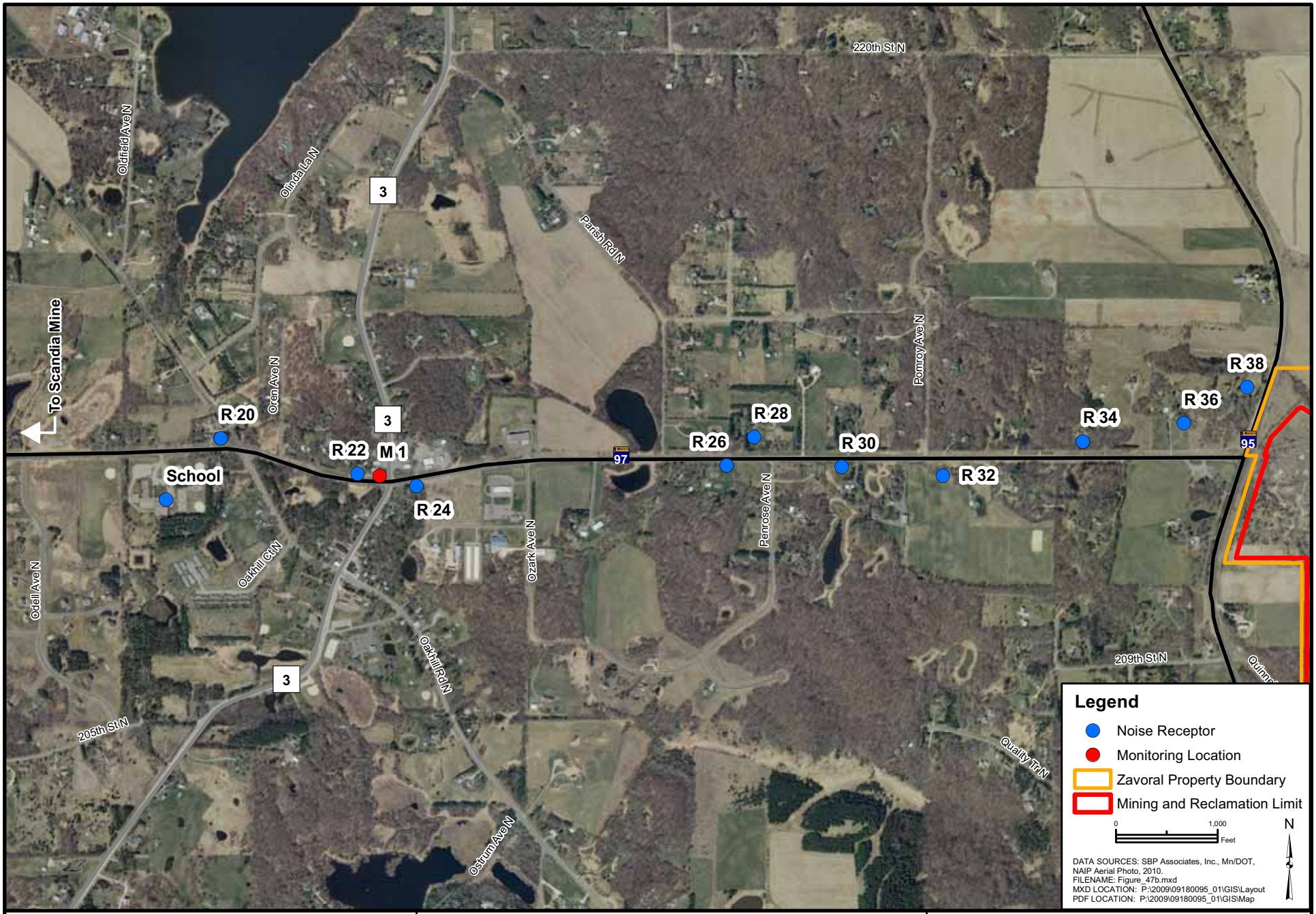

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FIGURE 58b
NOISE RECEPTOR SITES
ALONG HAUL ROUTE

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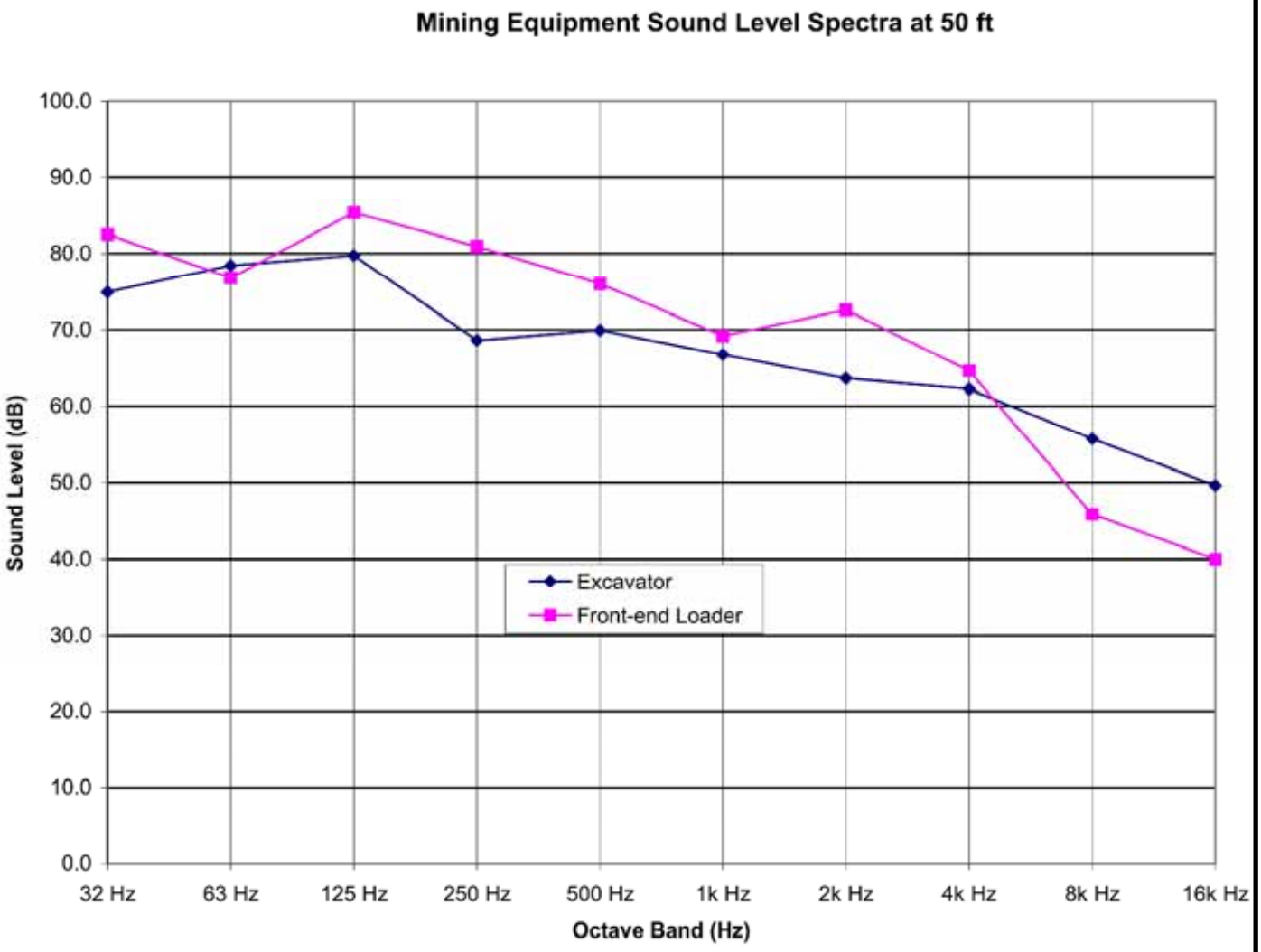

DATA SOURCES: David Braslau Associates, Inc.
FILENAME: Figure_48.mxd
MXD LOCATION: P:\2009\09180095_01\GIS\Layout\EIS
PDF LOCATION: P:\2009\09180095_01\GIS\Maps\EIS

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FIGURE 59
MODELED SOUND LEVEL SPECTRA FOR EXCAVATOR AND FRONT-END LOADER

ZAVORAL MINING AND RECLAMATION PROJECT
SCANDIA, MINNESOTA

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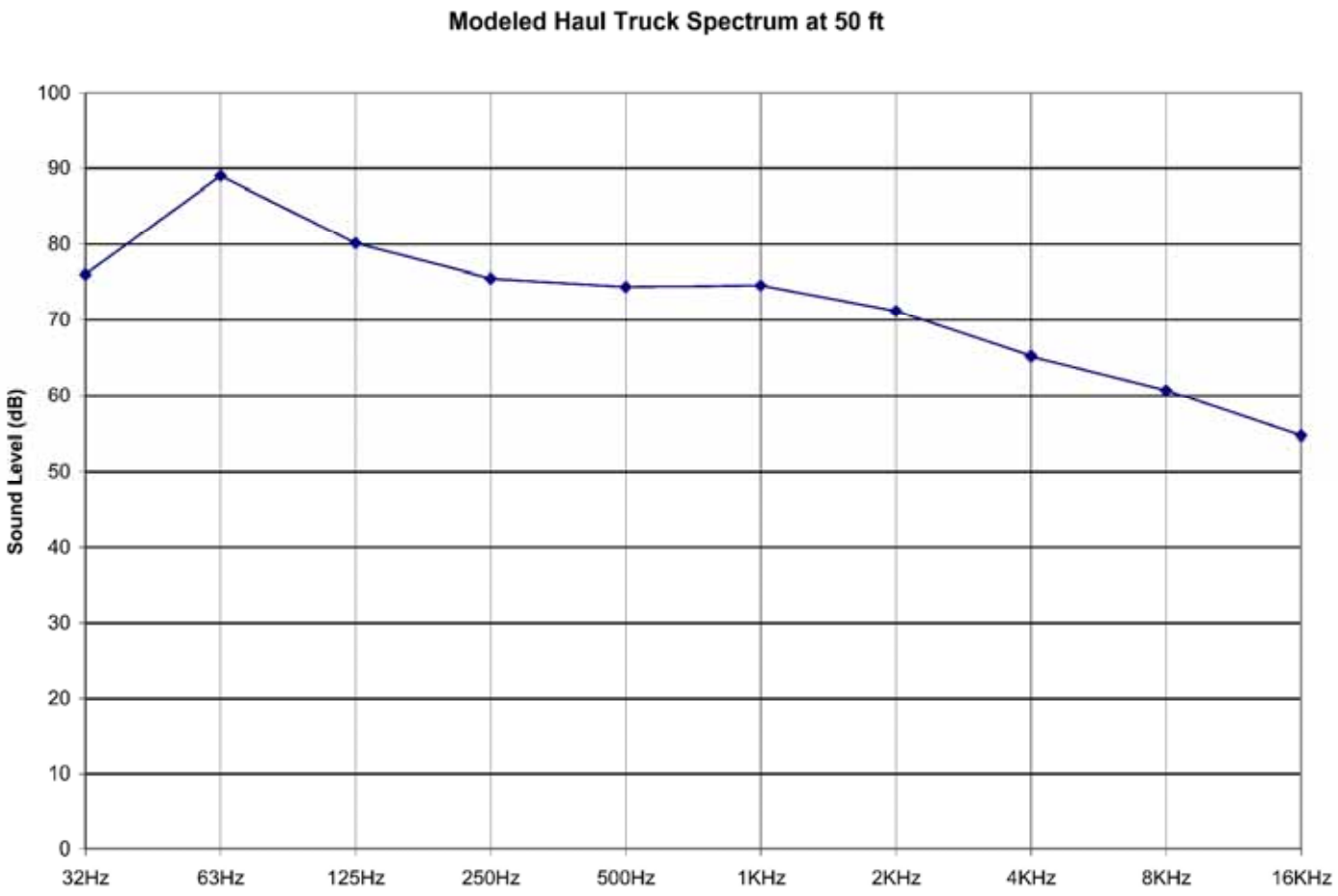

DATA SOURCES: David Braslau Associates, Inc.
FILENAME: Figure_49.mxd
MXD LOCATION: P:\2009\09180095_01\GIS\Layout\EIS
PDF LOCATION: P:\2009\09180095_01\GIS\Maps\EIS

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FIGURE 60
MODELED HAUL TRUCK SOUND LEVEL SPECTRUM AT 50 FEET AND 15 MPH

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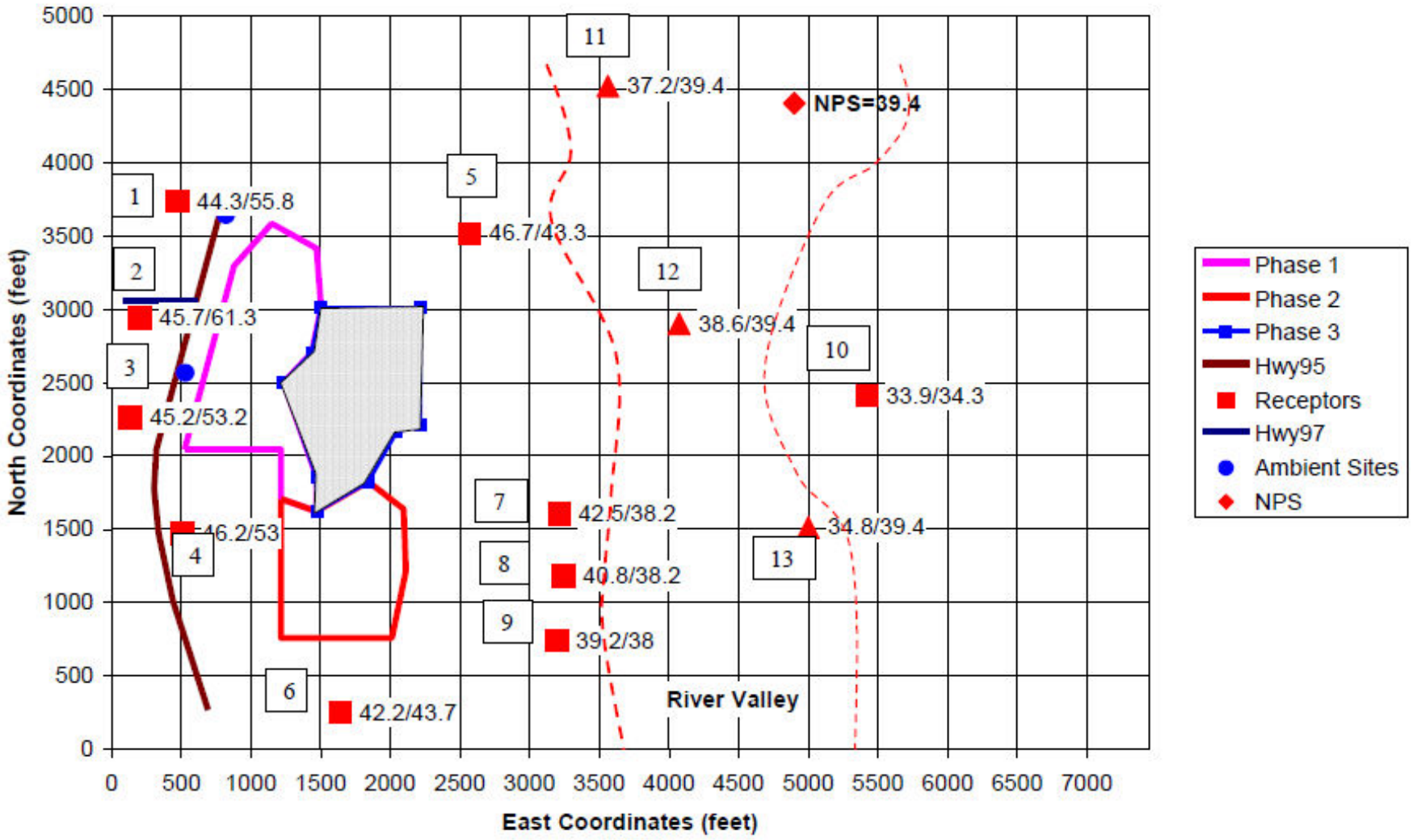

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FIGURE 61
MAXIMUM COMBINDED ACTIVITY L_{50} LEVELS COMPARED WITH AMBIENT LEVELS - PHASE 3

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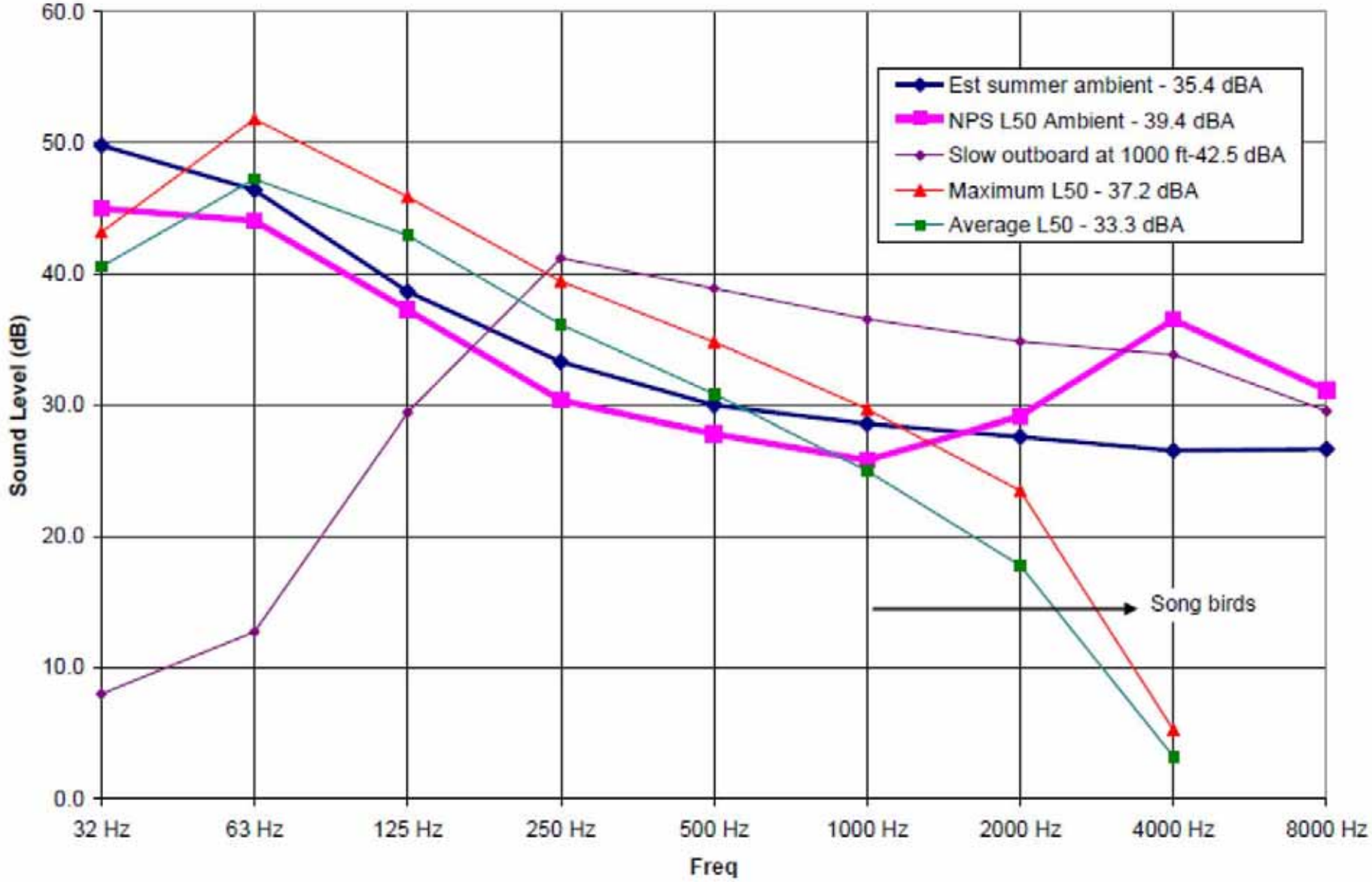

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FIGURE 62
ESTIMATED COMBINED ACTIVITY LEVEL AT RECEPTOR 11 - PHASE 3 AND NPS AMBIENT LEVELS

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FIGURE 63
PLAN VIEW OF PHASE 2
MINING AND RECLAMATION

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Figure 64. Existing Condition. Key Viewpoint 1 is on a bike trail located north of Quinnell Avenue North between TH 95 and the proposed Project. It overlooks an agricultural field adjacent to the proposed Project.

DATA SOURCE: Tiller Corporation
FILENAME: Figure 51.mxd
MXD LOCATION: P:\2009\09180095_01\GIS\Layout
PDF LOCATION: P:\2009\09180095_01\GIS\Map

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FIGURE 64
KEY VIEWPOINT 1 -
EXISTING CONDITIONS

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Figure 65. Simulation: Proposed berms between Key Viewpoint 1 and the tree stands would screen visible activities during leaf-off conditions, including site preparation work, excavation, loading, hauling, grading, and removal of stockpiles, on the western side of the project area.

DATA SOURCE: Tiller Corporation
FILENAME: Figure 52.mxd
MXD LOCATION: P:\2009\09180095_01\GIS\Layout
PDF LOCATION: P:\2009\09180095_01\GIS\Map

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FIGURE 65
KEY VIEWPOINT 1 -
SIMULATED CONDITIONS

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Figure 66. Existing Condition: Key Viewpoint 2 is on eastbound TH 97, approximately ½ mile west of the proposed Project. The trees screen most of the proposed Project area during leaf-off conditions.

DATA SOURCE: Tiller Corporation
FILENAME: Figure 53.mxd
MXD LOCATION: P:\2009\09180095_01\GIS\Layout
PDF LOCATION: P:\2009\09180095_01\GIS\Map

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FIGURE 66
KEY VIEWPOINT 2 -
EXISTING CONDITIONS

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Figure 67. Simulation: The proposed Project access entrance as seen from Key Viewpoint 2 would be within the line of sight for motorists traveling eastbound on TH 97. The berm screens views of the site interior, although some operations activities may be partially visible, such as the truck shown partially blocked by the berm in the right side of the sumulation.

DATA SOURCE: Tiller Corporation
FILENAME: Figure 53.mxd
MXD LOCATION: P:\2009\09180095_01\GIS\Layout
PDF LOCATION: P:\2009\09180095_01\GIS\Map

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FIGURE 67
KEY VIEWPOINT 2 -
SIMULATED CONDITIONS

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Figure 68. Existing Condition: The view from Key Viewpoint 3 is to the south-southeast from TH 95, located ¼ mile north of the proposed Project.

DATA SOURCE: Tiller Corporation
FILENAME: Figure 55.mxd
MXD LOCATION: P:\2009\09180095_01\GIS\Layout
PDF LOCATION: P:\2009\09180095_01\GIS\Map

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FIGURE 68
KEY VIEWPOINT 3 -
EXISTING CONDITIONS

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Figure 69. Simulation: Visibility of Phase 1 Mining and Phase 2 Reclamation from Key Viewpoint 3 during leaf-off conditions will be limited due to screening from trees, a vegetated berm, and lowering of interior elevation.

DATA SOURCE: Tiller Corporation
FILENAME: Figure 56.mxd
MXD LOCATION: P:\2009\09180095_01\GIS\Layout
PDF LOCATION: P:\2009\09180095_01\GIS\Map

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FIGURE 69
KEY VIEWPOINT 3 -
SIMULATED CONDITIONS

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