

**CITY OF SCANDIA, MINNESOTA**  
**PC RESOLUTION NO. 01-07-13-01 A**

**APPROVING A CONDITIONAL USE PERMIT FOR THE ZAVORAL MINE AND  
RECLAMATION PROJECT**

**WHEREAS**, Tiller Corporation (“Applicant”) has applied for a Conditional Use Permit (CUP) to operate the Zavoral Mine and Reclamation Project (“Project”) on a property owned by James Zavoral, located east of the intersection of State Trunk Highway 97 and State Trunk Highway 95 (“Site”); and

**WHEREAS**, the Property is located in Washington County, Minnesota and legally described in Attachment A; and

**WHEREAS**, the Applicant submitted an application for a CUP for the Project to the City on November 25, 2008, including the required Environmental Assessment Worksheet (EAW); and

**WHEREAS**, the Site proposed for the Project is located within the Agriculture (AG) Zoning District in the City’s 2020 Comprehensive Plan and related Development Code, and those were the adopted Comprehensive Plan and regulations at the time of the application; and

**WHEREAS**, the City reviewed the EAW for the project and the City Council approved the Findings of Fact and Record of Decision for the EAW for the Project on March 3, 2009 that concluded that an Environmental Impact Statement (EIS) was needed to determine the project’s potential for significant environmental impacts; and

**WHEREAS**, the City Council approved a Scoping Decision Document for the EIS on April 21, 2009, hired a consultant to complete the EIS, and established a Project Advisory Committee for the EIS in December, 2009; and

**WHEREAS**, the Applicant revised the project to eliminate all aggregate processing activities at the Site, and based on the revised Project, the City conducted a formal Scope Amendment Process and approved a Revised Scoping Decision Document for the Project in January 2010; and

**WHEREAS**, the City and its consultant completed the Zavoral Mine and Reclamation Project EIS to meet the requirements of Minnesota Rules 4410, and the EIS concluded that if the mitigation recommendations included in the EIS were implemented that the Project will not have significant environmental impacts; and

**WHEREAS**, the City Council approved the Findings of Fact and Record of Decision that found that the Zavoral Mine and Reclamation Project EIS was adequate to serve as the environmental review for the Project because it met the criteria set forth in Minnesota Rules

4410.2800 and the requirements of Minnesota Statutes Chapter 116D on September 25, 2012;  
and

**WHEREAS**, the Applicant submitted a revised application for the Conditional Use Permit for the Project on October 9, 2012 and the City determined that it was complete for review on October 23, 2012; and

**WHEREAS**, the Planning Commission held a public hearing on the Project on December 4 and December 12, 2012; and

**WHEREAS**, the Planning Commission recommends that the Project be implemented as described for Alternative 3 in the Zavoral Mine and Reclamation Project EIS; and

**WHEREAS**, Planning Commission's findings related to the request for approval of the Conditional Use Permit include the following:

1. The Project meets the Criteria for approval of a CUP included in the City's Mining Ordinance No. 103:
  - The property size meets the ordinance requirement.
  - The Project meets the standards for approval of a conditional use permit included in Chapter One of the Development Code.
  - The Project is consistent with the goals and policies of the City's 2020 Comprehensive Plan.
  - The application complied with all rules of the Minnesota Environmental Quality Board Environmental Review Program, and completed the required environmental review to comply with State Statutes and Rules.
2. When the mitigation recommendations included in the Zavoral Mine and Reclamation Project EIS and the conditions included in the CUP are implemented, the project will meet the Provisions and Performance Standards included in Ordinance No. 103:
  - The Project meets the requirements for protection of groundwater, includes the required Groundwater Quality Protection Plan, and monitoring.
  - The Project will obtain the required permits for air quality, noise, water quality, rare species and roadway access.
  - The Project includes the required surface water protection plan that addresses ongoing monitoring, accident response and remediation, and will obtain the required surface water management and erosion control permits from the MPCA and Carnelian-Marine-St. Croix Watershed District.
  - The Project includes the required Dust Control Plan that when implemented, will meet MPCA requirements for dust control.
  - If all mitigation and monitoring requirements are implemented, the Project will meet the MPCA standards for noise.
  - The Project adequately addresses the required operating conditions identified in Ordinance No. 103.
3. The Project's Reclamation Plan exceeds the requirements of Ordinance No. 103.

4. The conditional use is in compliance with and will not have a negative effect upon the City's 2020 Comprehensive Plan, including the public facilities plan and capital improvement plan.
5. The establishment, maintenance and operation of the conditional use will promote and enhance the general public welfare and will not be detrimental to or endanger the public health, safety, morals or comfort.
  - When the required mitigation and monitoring are implemented, the traffic generated by the Project will be controlled to prevent congestion, hazards and excessive traffic through residential areas.
  - When the required mitigation and monitoring are implemented, the Project will meet the MPCA standards for hazardous materials, noise, air and water pollution.
  - The Project will have an economic benefit to the community and the Twin Cities region, because it will provide a resource that is critical to the maintenance and development of infrastructure, buildings and other products that are needed by Scandia and Twin Cities residents.
6. The conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted and will not substantially diminish or impair property values or scenic views.
  - When the required mitigation and conditions are implemented, the Project will meet the ordinance and regulatory requirements for traffic control, environmental hazards, noise, air, surface and ground water management, and will not significantly affect the use and enjoyment of properties in the vicinity.
  - There is no available factual evidence that the implementation of the Project will substantially diminish or impair property values.
  - When the required mitigation is implemented, the Project will not diminish or impair scenic views.
7. The establishment of the conditional use will not impede the normal and orderly development and improvement of surrounding property for uses permitted in the district.
  - Uses permitted in the zoning district include agricultural uses, low-density residential, parks, recreation and open space. With the implementation of the required mitigation and conditions, the establishment of the Project will not impede the orderly development and improvement of surrounding property for those uses.
8. Adequate public facilities and services are available or can be reasonably provided to accommodate the use which is proposed.
9. The conditional use will conform to the applicable regulations of the Agriculture district, and all other applicable standards of the Development Code if the mitigation recommendations of the EIS and conditions of the CUP are implemented.
10. The conditional use complies with the general and specific performance standards of the development code.

**NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE PLANNING COMMISSION OF THE CITY OF SCANDIA, WASHINGTON COUNTY, MINNESOTA,** that it should and hereby does recommend that the City Council approve the Applicant's request for a Conditional Use Permit for the Zavoral Mine and Reclamation Project

located on the Site east of the intersection of State Trunk Highways 95 and 97, with the following conditions:

1. The Conditional Use Permit is granted only for the Project identified in the plans and application submitted to the City on November 14, 2008, and revised and resubmitted on October 9, 2012.
2. The applicant shall comply at all time with the City's ordinances and all applicable rules and regulations of Federal, State, County and local agencies, including the Carnelian-Marine-St. Croix Watershed District, and shall maintain existing permits granted by those agencies for all operations at the site.
3. The maximum depth of mining shall be 840 feet above mean sea level (amsl). The EIS indicates that the separation between the maximum depth of mining and existing ground water level shall be 25 feet or more. The City or its consultant shall monitor ground water levels as specified in the AOP, and if the separation between the maximum depth of mining and ground water level is less than 25 feet, the consultant shall report this information to the City Council. The City shall report ground water levels on the site on a quarterly basis to the Minnesota Department of Natural Resources.
4. No mining for silica sand ("frac sand mining") shall be permitted during this Project.
5. No dewatering shall be permitted.
6. Daily pumping from the Zavoral Site Well shall not exceed 10,000 gallons at a maximum pumping rate of 1,200 gallons per minute. Annual pumping shall not exceed 1 million gallons.
7. The applicant shall keep records of when the Zavoral Site Well is pumped, and provide the records to the City, WCD, Washington County Department of Public Health and Minnesota Department of Natural Resources for groundwater monitoring activities. The records shall document both the daily use and total annual pumped volume from the Zavoral Site Well.
8. The applicant shall revise the *Groundwater Quality Protection Plan (GWPP)* (October 2012) to address the corrections and issues identified in the Leggette, Brashears, and Graham Inc. (LBG) letter to the City dated November 15, 2012. The applicant shall revise the locations of the proposed borings and monitoring wells as requested by LBG.
9. The applicant shall install groundwater observation wells or piezometers on the mine site in locations approved by the City. The applicant shall coordinate the number and locations of the observation wells and/or piezometers and frequency of monitoring in consultation with the City and its consultants.
10. The City's consulting hydrogeologist shall make scheduled site visits to download groundwater monitoring data and collect manual measurements. The hydrogeologist shall evaluate the data and report the results to the City at least annually with the AOP application, or more frequently if the consultant identifies issues or problems during the monitoring activity.

11. The City shall review and evaluate the GWPP on an annual basis or more frequently if a significant change in the groundwater conditions occurs. The applicant shall modify the GWPP as needed to address identified concerns.
12. If diesel fuel is stored at the site, the applicant shall sample and analyze groundwater for diesel range organics. If gasoline is stored at the site, gasoline range organics and benzene shall be added to the analyte list.
13. The applicant shall meet Federal, State and City requirements for storage of fuels on the site.
14. Equipment fueling for the Project shall be conducted in a designated area over a hard-surfaced fueling pad.
15. The applicant shall provide spill cleanup equipment on-site.
16. The applicant shall obtain the required agency permits for stormwater management, and provide to the City copies of the permits approved by the Carnelian-Marine-St. Croix Watershed District (CMSCWD) and the Minnesota Pollution Control Agency.
17. The applicant shall obtain the required Air Emissions Permit from the Minnesota Pollution Control Agency, and provide a copy of the approved permit to the City.
18. The applicant shall obtain an Endangered Species Take Permit before removing any Butternut (*Juglans cinerea*) trees identified on the site, if the Minnesota Department of Natural Resources (DNR) reclassified Butternut trees from a Special Concern to Endangered species.
19. The applicant shall comply with the “Summary of Recommendations for Avoiding and Minimizing Impacts to Blanding’s Turtles Populations” included in Appendix C of the Zavoral Mine and Reclamation Project EIS. Tiller Corporation shall provide the City or its consultant with its Blanding’s Turtle Standard Operating Procedures guidelines for review and comment. The City or its consultant will conduct annual site visits to verify compliance.
20. The applicant will inspect all trees for raptor nests prior to tree clearing. Trees with active nests may not be cleared while the nest is actively used.
21. The applicant shall implement the Best Management Practices (BMP’s) included in the Storm Water Pollution Prevention Plan (SWPPP) (July, 24, 2012), Surface Water Plan (October 2012), and CMSCWD permit to protect surface waters and manage erosion and sedimentation.
22. The applicant shall construct the proposed berm on the south end of the Site as close to the mining and reclamation limits as possible to reduce off-site peak flow rates.
23. The applicant shall minimize the amount of unnecessary equipment on the Site and reduce soil tracking by off-site by vehicles.
24. The applicant shall monitor all on-site construction equipment for leaks and complete regular preventive equipment maintenance. Fueling and maintenance of vehicles shall occur within the area of active mining and no “topping off” of vehicle fuel tanks is allowed.
25. Any above-ground storage tank (AST) at the Site shall be located more than 500 feet from surface waters.

26. The applicant shall notify the Minnesota Pollution Control Agency of all AST's within 30 days of installation by submitting an AST Notification Form.
27. The City or its consultant shall monitor the potential impacts of mining activities on the water resources at the site. The monitoring locations, protocols, and methodology shall be specified in the AOP. The City shall submit all status reports and ground and surface water monitoring reports to the CMSCWD and the Minnesota DNR.
28. The City or its consultant shall monitor the WCD monitoring point installed for the EIS pump test that gathers baseline data in Zavoral Creek for the lifetime of the project. Monitoring shall include water quality and quantity parameters.
29. The City or its consultant shall install a monitoring station downstream of Crystal Springs in order to isolate potential effects due to mining from other effects to due unrelated activities within the watershed. The City or its consultant will analyze the data to determine the effect, if any, to the springs due to the Zavoral Mine operation, and identify any negative impact.
30. The City or its consultant shall complete an annual field review of the wetland boundaries of wetlands within the project area, including black ash seepage swamps (Wetlands A, B, and C as shown in the CCES wetland delineation report dated January 14, 2011), to determine if the mining activities have any impact on the wetlands. The review shall occur within the growing season as defined by the U.S. Army Corps of Engineers Wetland Delineation Manual (North Central and Northeast Regional Supplement), and shall be coordinated with the applicant and when active mining operations are occurring.
31. The applicant shall obtain the required Minnesota Department of Transportation (Mn/DOT) Access permit (TP 1721) for the Project.
32. The applicant shall construct the new driveway access directly across from TH 97 as required by Mn/DOT for safe access.
33. The applicant shall construct a new north-bound right-turn lane as required by Mn/DOT (letter to the City of Scandia, January 22, 2009). The design of the right-turn lane shall be consistent with the design of the existing left-turn lane.
34. The City or its consultant shall complete traffic monitoring of the Project. The traffic monitoring protocol and requirements shall be identified in the AOP.
35. The City shall request that Mn/DOT complete speed studies in the following locations: 1) on TH 95 north and south of TH 97; on TH 97 near the Scandia Elementary School; and on TH 97 near the intersection with County Road 91 (Lofton Avenue).
36. The applicant shall record and report the numbers of trucks hauling Class C add-rock from the Zavoral Mine site and the number and source location of trucks hauling add-rock to the Scandia Mine to the City quarterly to ensure that additional truck traffic would not result from hauling from the Zavoral Site at peak demand concurrently with other sites. The applicant shall submit annual truck number and source reports with the Annual Operating Permit application.

37. Traffic generated by the Project shall not exceed the maximum levels analyzed in the EIS for the selected alternative (Alternatives 1 or 3--600 round trips per day; Subalternative 3A--736 round trips per day).
38. All truck traffic generated by the project shall utilize TH 97, TH 95, CR 15 (Manning Avenue) and CR 1 (Lofton Avenue). No truck traffic shall be permitted on local streets. Trucks shall not back onto roadways.
39. The applicant shall install truck warning signs that comply with the Minnesota Manual on Uniform Traffic Control Devices (MMUTCD) on State Scenic Byway TH 95 to advise drivers of trucks crossing TH 97 in and out of the Zavoral Site and on TH 97 at County Road 91 to advise drivers of trucks turning onto TH 97.
40. The applicant shall provide parking for all employees and visitors within the site. Circulation and parking shall minimize internal and external traffic conflicts.
41. If the applicant has knowledge of a crash or traffic violation occurs involving a truck hauling for Tiller, Tiller shall contact the City to report the incident immediately. The applicant shall report actions it will take to respond to the incident.
42. The applicant shall construct the fence included in the Project plans prior to beginning mining operations, and shall maintain the fence until reclamation is complete.
43. The hours of operation and hauling shall be conducted only between 7 a.m. and 7 p.m., Monday through Friday, excluding Federal holidays, during daylight hours, or one hour before sunrise and one hour after sunset during seasons when daylight is not available between 7 a.m. and 7 p.m., unless the City authorizes other hours or days of operation.
44. The applicant shall coordinate any proposed berm removals associated with Project completion with the City.
45. The applicant shall implement the Dust Control Plan (dated 10/8/12 and updated by 3/1/13), including all activities proposed during stripping, grading and active mining operations.
46. The applicant shall utilize non-chloride agriculturally derived organic polymers or naturally-occurring polymers on internal haul roads to control dust. The applicant shall review the coverage of the material on a regular basis, and reapply the polymers if they are no longer effective.
47. The applicant shall water unpaved haul roads on the site, including milled portions, at least twice daily, unless recent precipitation is keeping these roads wet; and more frequently as needed during hot, dry conditions.
48. The applicant shall wash hauling and loading equipment on a regular basis.
49. The applicant shall complete sweeping activities using vacuum-assisted sweeping equipment or similar equipment that ensures that sweeping operations do not generate visible airborne emissions.
50. The applicant shall perform employee exposure monitoring or similar onsite testing at the site at least once per season and submit the results of the testing (with employee personal

information redacted) to the City for review. Monitoring shall be specific for respirable dust and respirable silica, shall include mining, loading and hauling personnel and shall represent worst-case exposure conditions.

51. The City and its consultants shall perform periodic on-site review and monitoring of dust control activities to assure compliance with this permit. The monitoring locations, protocols and methodology shall be specified in the AOP.
52. The Dust Control Plan and air monitoring procedures shall be reviewed and updated as necessary on at least an annual basis with the AOP application.
53. The applicant shall implement the berms and screens proposed in the site plan.
54. Trucks shall not idle on the site and approach area for more than 30 minutes.
55. The City and its consultant shall complete noise monitoring at the Project site. The monitoring locations, protocols and methodology shall be specified in the AOP.
56. The applicant and owner shall cooperate with the City and allow access to the site as necessary to conduct noise monitoring.
57. If the noise levels at the Project exceed State Standards for any of the testing, the applicant will identify and take corrective actions to bring the noise levels into compliance. The City may order additional testing to confirm that the Project is in compliance.
58. The applicant shall require that all Tiller-owned equipment on the site use broadband alarms and haul trucks shall utilize a circular traffic pattern or other traffic pattern to the extent feasible that minimizes the need for haul trucks to back up on the site.
59. The applicant shall ensure that on-site Tiller-owned equipment is properly muffled and shall inspect mufflers on the on-site equipment on at least a weekly basis and document inspections.
60. The applicant shall ensure that the mining plan will minimize any time when the noise from the on-site equipment and haul trucks are operating without noise mitigation from berms and/or the mine face.
61. The applicant shall complete the clearing of previously-unmined areas during the winter to minimize noise impacts.
62. The applicant shall recycle debris created by clearing, grubbing and excavation, or dispose of stumps, trees and debris in another manner approved by the City.
63. The applicant shall maintain the mine site and equipment in an orderly condition. Weeds shall be controlled in planted and reclaimed areas. Existing trees, berms and topsoil along existing public rights-of-way shall be preserved, maintained and supplemented as proposed in the Site Plan and Reclamation Plan.
64. The applicant shall provide and maintain portable sanitary facilities to serve the site and shall meet all applicable standards and regulations for wastewater disposal.
65. The applicant shall dispose of any waste generated from the mining operation, including waste from vehicles or equipment maintenance, in accordance with Federal, State and City requirements.

66. The applicant shall meet Federal, State and Local requirements for storage of fuels on the site.
67. The applicant shall fund improvements to the existing pedestrian/bicycle trail along State Scenic Byway Trunk Highway 95 in the mine area, and maintain connections to existing trails.
68. If the proposed trail on TH 97 is developed while the Zavoral Mine is operational, the applicant shall fund signage for the trail crossing on TH 95.
69. Within 60 days of the approval of the CUP, the applicant shall prepare and provide to the City an updated reclamation plan (revising the Reclamation Plan dated October 9, 2012), which includes performance standards identified in the conditions that follow for approval by the City. Reclamation on the site shall be implemented in accordance with the updated reclamation plan.
70. Reclamation shall proceed concurrently and proportionally to mining operations. Progress on reclamation shall be demonstrated in each AOP application.
71. The applicant shall use clean, non-contaminated fill material and topsoil for all reclamation. The applicant shall use sandy subsoil available at the site with added organic soil amendments for reclamation topsoil. The applicant shall successfully establish permanent native vegetation in reclaimed areas as per the schedule, extents and methods as provided in the Zavoral Reclamation Plan and Zavoral Reclamation Plan Topsoil and Prairie Establishment Memorandum (October 3, 2011) by CCES.
72. Reclamation success shall be defined as follows:
  - 90% areal coverage of vegetation for each reclaimed area, within 3 years post seed installation;
  - Non-native and invasive plant species (as defined and listed by the Minnesota DNR) and potentially-aggressive native plant species (*Rhus* spp. And *Juniperus virginiana*) shall account for no more than 20% cover of the reclaimed areas;
  - The reclaimed areas shall contain at least 50% of the species for both grasses and forbs contained in the specified seed mixes at the end of the 5<sup>th</sup> growing season, post seed installation;
73. Vegetation establishment and monitoring shall continue for a period of 5 years after completion of the Zavoral Mine Project, in its entirety.
74. The City shall monitor the transplantation of trees to ensure a survival rate of at least 80% for all transplanted trees. The Applicant shall provide the City with the quantity, location, species and proposed maintenance plan for all trees transplanted as part of the reclamation. Survival rates of less than 80% will require replacement of the dead trees by the applicant. Replacement tree species will be selected in consultation with the City and its consultant and approved by the City.
75. The applicant shall submit annual reclamation monitoring reports to the city, on or before November 1, that describe the reclamation activities that occurred in the specified year, and the status of all reclaimed areas. The applicant shall provide detailed information such as

percent coverage of vegetation, species composition, etc., pertaining to compliance with the performance standards, as provided above. If the reclaimed areas do not meet the performance standards, the applicant shall include corrective action plans in the reclamation monitoring report.

76. If the City determines that a reclaimed area has not met the vegetative performance standards listed above, the city shall order corrective action(s) including, but not limited to, reseeded, overseeding, spot seeding, or other actions so that the reclamation meets the criteria for success. The specific corrective actions may be dependent on site conditions. The city will determine the appropriate actions in consultation with its consultants, the applicant, and other experts, as necessary.
77. The City and its consultants shall complete monitoring of reclamation activities on the site on behalf of the City. Monitoring locations, protocols and methodologies shall be specified in the AOP.
78. The applicant shall provide funds to conduct all reclamation monitoring on the site.
79. Final reclamation shall include removal of any equipment and backfilling and seeding the operations area.
80. Approval of the reclamation plan shall not constitute an approval by the City of Scandia of an ultimate use for the site. Ultimate use shall be determined based on the Scandia Comprehensive Plan and ordinances in effect at the time the mining is complete and applications for development of the site may be submitted.
81. The applicant shall maintain existing woodlands and screening outside the mine area limits.
82. The applicant shall establish a maximum stockpile height of 880 feet above mean sea level. Stockpiles shall not be located on the west side of the site.
83. All lighting on the site shall be hooded or controlled and meet the requirements of the City's Development code. Lighting shall be limited to the hours of mine operation. Lighting shall be arranged to deflect light away from any adjoining residential property or from public streets.
84. The applicant shall obtain the required sign permits for all signs proposed at the site.
85. The applicant shall pay all costs associated with site monitoring activities identified in this permit and the AOP including, but not limited to monitoring of traffic, air quality, noise, ground water and surface water, and the costs of equipment, installation, site visits, data collection, data analysis, reporting, maintaining compliance and all other costs associated with all of the monitoring activities identified in these conditions.
86. The applicant shall cooperate with the City and provide access to the site as needed to conduct the monitoring activities required by this permit.

87. The applicant shall provide a final, corrected copy of the Application materials and plan sheets to the City within 60 days of approval of the CUP.
88. The applicant and owner shall enter into a Developer Agreement with the City. The developer agreement shall specify that the project will be implemented to comply with Alternative #3 in the EIS. The Agreement shall specify that all Project activities shall be completed within 3-5 years from the authorized Project start date, identified in the AOP, including site preparation, clearing, aggregate mining and transporting of mined materials. Reclamation activities and monitoring shall continue after completion of the mining activities, as specified in this permit.
89. The Agreement shall include a financial guarantee acceptable to the City to assure compliance with the reclamation plan, and provide for an escrow that the City will use to pay for monitoring and reporting activities.
90. The applicant must apply for and obtain an Annual Operating Permit from the City.
91. The applicant shall, within 60 days of the date of this resolution, provide to the City an Irrevocable Letter of Credit or other security satisfactory to the City in the amount of \$\_\_\_\_\_ to guarantee the completion of the reclamation plan and the performance of its obligations set forth by this permit. The City may require the amount of this security to be adjusted in future years based on inflationary increases in construction and monitoring costs, or upon re-evaluation of the needs for reclamation, as a condition of approval of an Annual Operating Permit. Future reductions in this security shall be made as provided by the ordinance. The City may allow reductions in portions of the Letter of Credit or other security for completed and approved reclamation on a five-year basis.
92. The applicant shall pay all fees and escrows related to this application.

Adopted by the Scandia Planning Commission this 7th day of January, 2013.

---

Christine Maefsky, Chair

ATTEST:

---

Kristina Handt, Administrator/Clerk