

**ARLINGTON TOWNSHIP  
VAN BUREN COUNTY, MICHIGAN**

**MINING AND MINERAL EXTRACTION,  
SPECIAL LAND USE, AND LICENSING**

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**ARLINGTON TOWNSHIP  
VAN BUREN COUNTY, MICHIGAN  
ORDINANCE NO. 2024\_\_-\_\_**

**ADOPTED \_\_\_\_\_**

**MINING AND MINERAL EXTRACTION,  
SPECIAL LAND USE, AND LICENSING**

**SECTION 1. FINDINGS.** Arlington Township finds:

A. Sand, gravel, and other earthen deposits within the Township's boundaries are non-renewable natural resources which are necessary and beneficial to the welfare of the Township and its residents.

B. Mineral extraction operations can negatively affect the health, safety, and welfare of Township residents unless such operations are adequately regulated.

C. Mineral extraction operations can pollute the environment, damage water supplies, cause noise nuisances, dust nuisances and health problems, damage roads, and create other conditions that are deleterious to the Township and its residents.

D. The Township has authority to regulate mineral extraction operations to protect public health, safety, and welfare pursuant to Public Act No. 246 of 1945, MCL 41.181, and other Michigan statutes.

1. **Special Land Use Requirement and Standard.** Mineral extraction in the Township may be conducted only based on the issuance of a Special Use Permit, unless excepted under Section 2. This Ordinance provides the procedure and standards for review and approval of applications seeking permission to conduct the Special Land Use of extracting natural resources, sand, gravel and earthen deposits in Arlington Township in accordance with MCL 125.3205(3), *et seq.*, enacted by Act 113, PA 2011 ("Act 113").

2. **License Requirement and Provisional Request for a Special Use Permit.** No person shall engage in the business of mineral extraction from any property in the Township without first obtaining a mining and mineral extraction license issued by the Township based on the provisions of this Ordinance. No mining and mineral extraction license shall issue unless an applicant secures a Special Use permit for mineral extraction.

3. **Fee for Removal.** Every party extracting sand, gravel, or other earthen material shall pay to the Township \$0.25 per ton of material removed from the property. Payments shall be made quarterly, with the first payment due on or before

March 31 of each calendar year during which mining occurs. The amount to be paid per ton may be amended at any time by resolution.

**SECTION 2. EXCEPTIONS.** This Ordinance shall not apply to the following:

A. Operations that involve the removal of 1000 cubic yards or less of material per year determined by documentation that is acceptable to the Township.

B. Usual and customary excavation associated with the construction of structures or septic tanks/fields under a permit from the Township, County, or other governmental unit or agency with jurisdiction.

C. The usual and customary cutting and filling in a site in preparation for a development approved by the Township in accordance with all Township ordinances and regulations. The removal of materials under this section shall be detailed in the site plan for the development. This exemption shall not permit the removal of more than 1000 cubic yards of material from the site.

D. Usual and customary excavation of land in the public right-of-way, when associated with a public utility or public facility improvement.

**SECTION 3. DEFINITIONS.**

The following words, terms, and phrases, when used in this chapter, shall have the meanings described in this section, except where the context clearly indicates a different meaning:

A. **Aquifer.** An aquifer is a body of porous rock or sediment saturated with groundwater. Many different types of sediments and rocks can form aquifers, including gravel, sandstone, conglomerates, and fractured limestone. There are several types of aquifers:

1. **Unconfined Aquifer:** An aquifer which is not overlain by any confining impervious or semi-impervious layer but has a confining layer at its bottom.
2. **Confined Aquifer:** A type of aquifer overlain as well as underlain by impervious or semi-impervious confining layers.
3. **Perched Aquifer:** An aquifer occurring when permeable material is saturated above an impervious or relatively impervious layer of limited area in the form of a lens and is located above a main aquifer.

B. **De-watering.** The act of using a well, pump, or other mechanism to remove water from a surface or subsurface area as a part of a

construction project, mining operation, or any other operation involving the surface or subsurface pumping removal of water.

- C. **Dry Extraction.** The removal of earthen materials from an area which is situated above the water table and for which dewatering is not used.
- D. **Earthen Deposits.** For the purpose of this Ordinance, an earthen deposit consists of any naturally occurring material at the Earth's surface and subsurface which includes topsoil, peat, clay, sand, gravel, or bedrock.
- E. **Extraction.** The removal, mining, quarrying, excavation, or processing of sand, gravel, soil, minerals or any earthen material from any site in the Township.
- F. **Ground Water.** Water below the land surface in a zone of saturation.
- G. **Ground Water Monitoring.** The collection of hydrogeologic data and representative water samples in order to measure the characteristics of a saturated zone.
- H. **Groundwater Supply or Production Well.** well-intended for the extraction of groundwater for human use. Design criteria must consider extraction capacity, and water quality.
- I. **Ground Water Recharge.** The processes involved in the addition of water to a zone of saturation.
- J. **Ground Water Recharge Area.** Any area on the ground where ground water recharge occurs.
- K. **Hydrogeological Assessment.** A systematic study of geology, hydrogeology, geochemistry, contamination, and impact of mining activities at a site. The purpose of such an assessment is to develop a clear conceptual model of the hydrogeology and the potential risks to human health, and ecology. The content of the hydrogeological assessment report shall include an introduction, site overview, methodology and results, information on the geology and hydrogeology, including aquifers, location of monitoring wells, conceptual hydrogeological model, groundwater contamination assessment, conclusions and recommendations, and references and appendices. Any such assessment or report to be used in the connection with this Ordinance shall be prepared by a licensed or certified hydrogeologist, geoengineer, or geologist.
- L. **Interflow.** The lateral movement of water in the unsaturated zone during and immediately after a precipitation event.

- M. **Michigan Zoning Enabling Act (MZEA).** The Michigan Zoning Enabling Act, Act 110 of 2006 as amended.
- N. **Mining and Mineral Extraction License.** A license granted by Arlington Township authorizing a Licensee to extract earthen materials from land located in the Township pursuant to the terms of this Ordinance and to the conditions set forth at the time of the granting of the license.
- O. **Monitoring Well.** Also, “test” or:” observation” well. A well-constructed with the sole purpose of obtaining information about groundwater. This includes water levels and sample collection for chemical analysis. Other uses, such as observation wells for pumping tests may also apply. If multiple water bearing zones are encountered, multiple monitoring wells may be needed to properly evaluate the hydrogeological conditions.
- P. **Operations.** A process or action that is part of the mineral extraction process and includes the extraction, storing, processing or transportation of mined materials, as well as related activity necessary to facilitate mining, such as preparation for mining, maintenance, and restoration.
- Q. **Overburden.** Earthen materials situated below the layer of topsoil and above the materials to be extracted from the site.
- R. **Part 91.** Soil erosion and sedimentation control requirements of the Environmental Protection Act, MCL 324.9101 *et seq.*, and/or Natural Resources and Environmental Protection Act of 1994 PA 451 as amended, Part 91 Soil Erosion and Sedimentation Control.
- S. **Processing.** The washing, sorting, crushing, aggregating, grinding, blending, mixing, conveying, or cutting of extracted material from the extraction site.
- T. **Reclamation.** Plans and activities which are intended to restore property on which mining activity occurred, eliminate unsafe and hazardous conditions, and to render a site compatible with future land use.
- U. **Sediment Basin.** A naturally occurring or constructed depression used for the sole purpose of capturing sediment during and after an earth change activity. This can be one or more basins to trap sediment and water quality contaminants in the runoff.
- V. **Site.** The entire real property or properties for which an extraction permit and/or special use permit is issued, whether or not extraction is to occur on the entire real property or properties.

- W. **Surface Runoff.** Water that does not infiltrate and then flows across the ground surface.
- X. **Water Table.** The surface between the zone of saturation and the zone of aeration; that surface of a body of unconfined groundwater at which the pressure is equal to that of the atmosphere. The surface of the zone of saturation of a perched aquifer is a Perched Water Table.
- Y. **Wetland:** Areas defined as wetlands by Michigan statutes, and Township and County ordinances, as well as federal statutes.
- Z. **Zone of Saturation.** The area below ground where all of the interconnected openings in a geological medium are filled with water, where water fills all spaces between sediments and will flow freely into a well.

## **SECTION 4. SPECIAL LAND USE.**

### **4.1 General Intent.**

This section of the Ordinance is intended to provide the procedure and standards for review and approval of applications seeking permission to conduct the special land use of extracting natural resources in Arlington Township in accordance with MCL 125.3205(3), *et seq.*, enacted by Act 113, PA 2011 ("Act 113"). Approval of an application shall be based on an applicant's proof that the proposed extraction operation is based upon "necessity" and that the proposed extraction will not create "very serious consequences" in the Township or elsewhere as that term is used in Act 113. Therefore, the special land use standards in this Section shall apply rather than the usual standards in this Zoning Ordinance for the review of special land use applications.

In conformance with Act 113, the application and approval process under this Section shall be divided into two parts. First, the applicant must demonstrate to the Township the type, grade, and amount of material to be extracted from the applicant's property and the need for, value of, and public interest in, the material. An applicant has the burden of showing that there are valuable natural resources located on the relevant property and that there is a need for the natural resources by the person or in the market served by the person. For natural resources to be needed, the resources must be requisite, desirable, or useful and there must be a lack of them such that a supply is required. The intended meaning of "Need" is informed by *MCL 125.3205(3)*, meaning that by extracting them a person "can receive revenue and reasonably expect to operate at a profit."

Second, the applicant must next demonstrate that the extraction of the requested natural resource shall not result in "very serious consequences" to the Township or elsewhere, The Planning Commission shall then make findings and a

recommendation to the Township Board. The Township Board shall make the final special land use determination. The Township and the applicant shall have the right to question witnesses who provide information to the Planning Commission. Third parties may request permission to present evidence to the Planning Commission on this issue. The Planning Commission shall have the sole discretion to allow third parties to present evidence.

#### **4.2 Findings by Township Board as a Foundation for this Ordinance Section.**

The Township Board recognizes that the exercise of zoning authority under MCL 125.3201(1) and (3) is an empowerment of the Board to plan and zone for a broad range of purposes. These provisions reveal the comprehensive nature of the MZEA. It defines the fundamental structure of a zoning ordinance by requiring a zoning plan to consider the interests of the entire community and to ensure that a broad range of land uses is permitted within that community. These provisions empower a township to plan for and regulate a broad array of land uses, taking into consideration the full range of planning concerns that affect the public health, safety, priorities and welfare of the community.

#### **4.3 Materials Required for an Applicant to Demonstrate the Need for, and Public Interest in, The Natural Resources Proposed to be Extracted.**

A. The application form for the Need analysis for the preliminary hearing and review shall be approved by resolution of the Township Board and shall require the applicant to provide sufficient information for use by the Township in reviewing the request.

B. An application for special land use preliminary review for the proposed operation, shall include:

1. A Use Plan, reflecting the intended location and use of the property which is the subject of the application.
2. A plan showing the location of all proposed haul routes.
3. A description of each type of natural resource proposed to be mined.
4. A description of entities needing the natural resources from the property within the foreseeable future, including names and how the resources will be used, such as building construction, road building, etc.
5. A description of the names and locations of all properties and operations which exist within 35 miles, and which have been



approved or are subject to an application for approval, for the extraction of any of the natural resources proposed to be extracted on the property.

6. Calculations and facts leading to a conclusion on the extent of Need which is not being met, and could not be met, from the existing sources for each type of natural resource proposed to be extracted on the property. This calculation must apply past experience and take into account that new properties and operations will likely be approved in the foreseeable future on other properties within the applicant's market/service area.
7. For purposes of this preliminary administrative review process, the Planning Commission shall conduct a hearing on the application. Prior to the hearing, the Planning Commission shall review the application and supporting documentation and report any deficiencies to the applicant within a reasonable time. The hearing shall not be noticed until the applicant has cured the deficiencies found to exist in the application.

#### **4.4 Determination of Whether the Applicant Can Demonstrate that Proposed Extraction of Natural Resources Would Result in Very Serious Consequences.**

A. The Township Planning Commission shall determine whether the Applicant has proven that the proposed extraction of natural resources would result in "no very serious consequences" using the *Silva* standards, as articulated in Act 113, MCL125.3205(5) (a)-(f). These standards are intended to assist the Township in reviewing an application under the Act 113 and shall guide decision making on the ultimate decision on whether the applicant has proven that "no very serious consequences" would result from the applicant's proposed extractive use and haul route. The weight and relevance of each of these standards shall then be determined by the Township Board, in its discretion, taking into consideration the extent of Need and public interest in the specific natural resources on applicant's property, as well as all other relevant facts and circumstances.

1. Existing Land Uses
  - a. The relationship and impact of applicant's proposed use and associated activities with and upon existing land uses anticipated to be impacted, particularly those properties in the vicinity of the property and along the haul route(s).
  - b. The impact upon the public health, safety and welfare from the proposed use, including haul route(s), considering,

among other things, the proposed design, location, layout and operation in relation to existing land uses.

2. Property Values

- a. The impact of applicant's proposed use and associated activities on property values in the vicinity of the property and along the proposed haul route(s) serving the property.
- b. The effect on the general demand for and value of properties in the Township anticipated to be caused by the proposed use, including use of the haul route(s).
- c. The impacts considered in this subsection b may taking into consideration: the number and type of vehicles proposed; machines and equipment to be used in the operation; location and height of buildings, equipment, stockpile or structures; location, nature and height of walls, berms, fences and landscaping; and all other aspects of the proposed use.

3. Pedestrian and Traffic Safety Study

- a. The impact of the proposed use and associated activities on pedestrian and traffic safety in the vicinity of the property and along the proposed haul route(s) serving the property.
- b. The average and maximum number of loaded trucks per day anticipated to leave the proposed operation during the operating season.
- c. Consistency with and authorization of the proposed use and haul route(s) under state, county, and/or local regulations that have been established for roadways, including regulations applicable to the use of roads for proposed haul route(s).
- d. The impact of the proposed use, including haul route(s), on vehicular (motorized and non-motorized and pedestrian traffic, particularly in relation to hazards reasonably expected in the district(s) impacted, taking into consideration the number, size, weight, noise, and fumes of vehicles, vehicular control, braking, and vehicular movements in relation to routes of traffic flow, proximity and relationship to intersections, adequacy of sight distances, location and driveways and other means of access, off-street parking and provisions for pedestrian traffic.

Consideration shall be given to the interaction of heavy vehicles used for the use with children, the elderly and the handicapped.

- e. Whether the proposed use and associated activities would result in a hazard to children attending schools or other activities within the Township.
- f. Overall, the impact of the proposed use, including haul route(s), on children, older persons, and handicapped persons, with consideration to be given to the extent to which such persons shall be required to forego or alter their activities.

4. Identifiable Health, Safety, and Welfare Interests

- a. The impact of applicant's proposed use and associated activities on identifiable health, safety, and welfare interests in the Township.
- b. The impact of the proposed use, including haul route(s), upon surrounding property in terms of noise, dust, fumes, smoke, air, water, odor, light, and/or vibration. In determining whether a proposed use amounts to a very serious consequence, the standards for the stated impacts contained within the Township's regulatory ordinance, as the same may be amended, will be considered, along with any one or a combination of components proposed for the use that have unique qualities relating to these impacts (such as crusher noise and vibration).
- c. The extent of impact of the proposed use, including haul route(s), on economic development and on the character and features that defines the community, or on development in other units of government that will be impacted by the use, including haul route(s).
- d. The impacts of the proposed use on the planning, functioning and spirit of the community, factoring into such consideration whether the proposed use would be likely to render the applicable regulations in the zoning ordinance on other properties in the area unreasonable. This review shall analyze whether the heavy industrial nature of the proposed use would undermine reciprocity of advantage by creating impacts and character that would raise a reasonable question whether residential zoning restrictions on area

property would represent arbitrary limitations on the use and enjoyment of such area property.

- e. The operation of the proposed use, including the haul route(s), shall be evaluated in light of the proposed location and height of buildings or structures and location, nature and height of stockpiles, walls, berms, fences and landscaping, and all other proposed aspects of the overall use, including whether such improvements would interfere with or discourage the appropriate development and use of adjacent land and buildings.
- f. The extent to which the proposed use, including haul route(s), would be likely to cause limitations on the use and enjoyment of other property in the vicinity (zoning district or districts, as impacted) in which it is to be located and along the haul route(s), and the extent to which the proposed use would likely be detrimental to existing and/or other permitted land uses and future redevelopment in the manner specified in the Master Plan.
- g. The extent to which the proposed use, including haul route(s), would likely be detrimental to the development of new land uses in the zoning districts impacted.
- h. The burden from the proposed use, including haul route(s), on the capacity of public services, infrastructure, or facilities.
- i. The burden of the proposed use, including haul route(s), on retail uses, arts and culture, equestrian activities, non-motorized vehicle travel or recreation, school use, parks, playgrounds, residential uses, and the likely creation of physical vulnerability or degradation of any uses and resources, including the creation of the Need for added public or private expenditures for maintenance of buildings, structures, and infrastructure.
- j. The extent to which the proposed use, including haul route(s), would cause diesel fumes, dust, truck noise or physical/mental health issues, including along the haul route(s).
- k. The nature and extent of impact from the proposed use, including haul route(s), in relation to environmental resources in the Township, including air, ground water,

surface water, soils, and wetlands. In determining impacts, the cumulative effect upon all environmental resources shall be evaluated. The location of monitoring wells to determine the location and flow of unconfined, confined, and perched aquifers as well as static water levels and water tables.

- I. The nature and extent of impact from the proposed use requiring the removal of surface soil (overburden) from areas tested for contamination or know to have been the site of activities that could lead to contamination. Such soils and runoff from such soils must be contained as specified by this Ordinance.
  
- m. A detailed plan for the control and monitoring of fugitive dust at the property lines of the site, specifically for PM<sub>0.5</sub>, PM<sub>2.5</sub> and PM<sub>4.0</sub>. as per EPA standards.
  
- n. A hydrogeological analysis, prepared by a Professional Engineer registered with the State of Michigan or Certified Professional Geologist (American Institute of Professional Geologists) both engineer and geologist must have experience in hydrogeological studies, shall be provided for all projects. The analysis shall demonstrate that the proposed operation will have no impact to existing private water supply wells within the influence of the site dewatering or water use operations. The hydrogeological report shall include but not be limited to the following:
  - i. Production-well, monitoring-well, or ground supply-well test pumping data at the site and analytical computations used to assess potential dewatering impacts.
  
  - ii. Monitoring wells and computer modeling shall be used to determine the probable drawdown of the proposed dewatering if appropriate. The hydrogeological report shall determine the direction and rate of flow of groundwater, the upgradient and down-gradient water quality, aquifer characteristics (when soil dewatering is planned), extent of dewatering influence, and impact of excavation activity on surrounding water supply wells, wetlands and other surface water features. Monitoring wells shall be installed according to the requirements of the hydrogeological analysis and Michigan Department of Environment, Great Lakes and Energy (EGLE) with

locations of monitoring and production wells shall be approved by the Township.

- iii. Well logs of existing wells within 2000 feet of the site boundaries.
- iv. A written statement of the impact the proposed operation will have on private wells shall be provided, as well as a plan for mitigating measures in the event that existing wells are impacted by the dewatering operations and the excavation in general.
- v. Groundwater testing of each monitoring well shall be performed by an independent operator approved by the Township prior to commencing extraction operations to establish background water quality levels, static water tables, flow of water tables and other characteristics. An annual test of each well shall be performed by an independent operator approved by the Township and results shall be provided to the Township within 30 days of the anniversary of permit issuance. At a minimum, the ground water shall be tested for the following: Benzene, Ethylene, Xylene, Toluene (BETX), and Polynuclear Aromatic Hydrocarbons (PNA) as well as arsenic, lead, cadmium, copper and other potential contaminants used in agricultural operations.
- vi. A description of the discharge rate and discharge location(s) of the dewatering operation, including an assessment of the potential for flooding in the area and downstream from the point of the discharge as permitted and approved by EGLE.
- vii. In the event that no dewatering is proposed, the applicant shall, however, provide sufficient data to establish the direction of groundwater movement in the area. Monitoring wells shall be installed, constructed and located according to the requirements of EGLE and be approved by the Township Engineer.

5. Overall Public Interest in the Proposed Extraction

- a. The overall public interest in the extraction of the specific natural resources on the property both in absolute terms

and in relative terms in relation to the Need for resources and the adverse consequences likely to occur.

- b. Public interest in the proposed use, as measured against any inconsistencies with the interests of the public as are proposed to be protected in Master Plan for the area to be impacted by the use and haul route(s).
- c. Public interest in the proposed extraction, as measured against any inconsistencies regarding physical, historic, and economic interests in relation to the use and haul route(s).
- d. Public interest in the proposed extraction, as measured against any likely creation of valid environmental concerns, including without limitation impairment, pollution and/or destruction of the air, water, natural resources and/or public trust therein.
- e. Public interest in the proposed extraction, as measured against public costs likely to be caused by the proposed use, including haul route(s), considering alternative supplies of natural resources.

B. Application for Special Land Use Permit and Mineral Extraction Licenses

- 1. The application for a Special Use Permit shall include all of the information previously identified in this Ordinance, and shall also include the following:
  - a. The name, address and other contact information for the owner as well as the operator of the proposed site, along with a boundary survey of the property proposed to be mined, sealed by a registered land surveyor or engineer, and a general description of the materials, methods, and techniques that will be utilized for the mining operations.
  - b. A site plan, as per Section 5.03 of The Arlington Township Zoning Ordinance. With the following additions and exceptions:
    - i. Detailed drawing of all land, including structures and wells within 2,000 feet of the site including contours, showing the location of the perimeter of the site, buildings, equipment, processing area, parking for equipment, area for truck stacking and loading,

stockpiles, roads, berms, perimeter fencing, or other features necessary to the mining operations.

- ii. The site plan shall also include an aerial photograph showing the property in substantially the condition as on the date of the application, enlarged to a scale of one-inch equals 200 feet, from original photograph flown at a negative scale no smaller than one-inch equals 660 feet.
- iii. A setback of the mining area from the nearest public road right-of-way or adjoining property line of not less than 250 feet.
- iv. All of the following minimum setbacks of machinery, equipment and buildings, and equipment used for screening, crushing and washing:
  - (a) Not less than 300 feet from the nearest public road right of way.
  - (b) Not less than 200 feet from the nearest adjoining non-residential property line, and 400 feet from the nearest residential property line.
  - (c) Not less than 500 feet from the nearest residential dwelling on adjacent property as of the date of submittal of the plan for extraction.
- v. A setback of 150 feet from the perimeter of the site to internal roads, and 300 feet from the perimeter of the site to all stockpiles.
- vi. Existing site improvements including buildings, drives, wells, and drain fields.
- vii. Extent of future mining areas and depth thereof; by contour intervals of 2 feet.
- viii. Location and description of structures and stationery and/or portable equipment to be located on the site during mining operations.



- ix. Location and description of soil types including testing for soil contamination from agricultural or other prior land use.
  - x. Tree areas, wetlands, other natural features and features of cultural and historical value or interest to be preserved.
  - xi. Location and types of materials for visually screening the site.
  - xii. Location and dimensions of driveways.
  - xiii. Lane widening on public roads at intersections with driveways.
  - xiv. Locations of monitoring wells for monitoring water quality, identification of static water tables, perched water tables and flow. Locations of production wells and detailed locations of processing and decontamination sites for processed water.
  - xv. Location of stockpiles, sedimentation basins, slime (fines) pits and infiltration.
  - xvi. Location of borings, depth, and analysis (processed type and grade of resources) of core samples.
- c. A description of all proposed haul routes to be used to transport natural resources from the mining area to all freeways or state trunk line highways proposed to transport natural resources to destinations, other than for local deliveries. All extraction operations shall be located near an all-season primary road, and best efforts shall be made to minimize the increase in truck traffic through areas developed primarily for residential purposes. In this regard trucks used to transfer the natural resources shall follow a route that poses the least interference with other traffic, minimizes traffic through residential areas, and uses public streets constructed for high volumes of heavy truck traffic. Truck traffic shall comply with any truck route ordinances and all Road Commission regulations.
- i. The maximum number of trucks leaving the extraction property on any one day shall be certified by the applicant in the application.

- d. Description and location of berms or other equivalent screening and buffering of the active mining area shall be established along the boundary lines of the premises where such lines abut a public highway, abut privately owned property which is improved for residential or commercial purposes, and at such places as are necessary to screen or buffer processing equipment from the view and impact of a person standing at ground level on any parcel of land improved for residential purposes located adjacent to or which fronts on any of the roads forming the boundaries of the mining site. When constructed along public highways, the berm shall be of a sufficient height to screen processing equipment from the view of the general public using the highway.
- e. Description and location of berms using contaminated surface soils or overburden. Such berms will be built to a height of 8', minimum top width of the supporting ridge of 4' and slopes of 3:1. The berm shall be covered with an erosion control blanket and planted in appropriate vegetation. Pooling, puddling, or ponding of runoff shall be contained and not allowed to enter the pit or exit the property. For engineering standard drawings and details see: NRCS Engineering Field Manual NRCS eDirectives - National Engineering Manual (usda.gov); Michigan | Field Office Technical Guide | NRCS - USDA; USDA National; resources Conservation Service: Title 210 national engineering Handbook (210-650-H) 2nd Ed., Amend. 1, Jan 2022, USDA; National Resources Conservation Service, Engineering Field Tools (EFT) | Natural Resources Conservation Service (usda.gov).
- f. For non-contaminated soils the structural requirements will be the same as above, but with runoff diversion engineered as approved by the Township.
- g. A description of processing activities shall be provided, including, but not be limited to, washing, screening, transporting, crushing, and blending of stone, sand, gravel, and other materials. In describing the wash plant, the design, and other specifications, including depth and water transportation facilities, and the amount, depth and source of water to be utilized in processing, and the anticipated means and location of disbursement of such water following use.

- h. A general description and location of each type of natural resources deposits proposed to be extracted.
- i. The sequence of mining, including proposed phasing, if applicable.
- j. Surface overburden removal and storage plans.
- k. A description of the minimum and maximum depth from grade level from which each type of natural resource will be excavated, with each location and depth shown on the site plan referenced above. The depth of excavation shall not be lower than ten feet above the annual water table.
- l. Well log data for private and agricultural wells within 5,260 feet of the site.
- m. A plan for the post-mining reclamation of the property, including:
  - i. A detailed plan for reclamation, including:
    - (a) A general plan shown on an aerial photograph.
    - (b) A reclamation contour map.
    - (c) A description of reclamation methods and materials proposed for renewal of topsoil and replanting, including a proposed sequence of reclamation, indicating the time sequence within which each area to be mined will be reclaimed as mining operations progress.
  - ii. The general plan for reclamation shall be presented on a series of drawings showing the conditions before commencing operations and showing the alterations to be made. The drawings shall have the same scale as the vertical aerial photograph (required in the application under Section **site plan**, showing the acreage for each item shown:
    - (a) Each phase of reclamation, reflecting the sequence of each phase in relation to all others.

- (b) Location and boundaries of all permanent and semipermanent wetland water areas.
- (c) Distances of all reclamation areas and water areas from property boundaries.
- (d) A restoration contour map shall be prepared to the same base as site plan required above to indicate the grade and slopes to which excavated areas shall be reclaimed, and a general indication of the distance of such reclaimed areas from the property boundaries. Such grade and slope designations shall be included with respect to areas proposed to be beneath the surface of permanent water areas. Side slopes around the active extraction-area perimeter shall have a grade not exceeding one (1) vertical foot per three (3) horizontal feet. The banks adjacent to any submerged areas shall have a grade not exceeding one (1) vertical foot per five (5) horizontal feet, out to a depth of five (5) feet.
- (e) A description of the methods and materials proposed for reclamation shall include topsoiling and the amount and type of plantings.
- (f) Reclamation shall be implemented in a manner that prevents washout and erosion, using appropriate grading, turf, vegetation, soil, overburden, shrubs, and trees, as necessary, and performed in accordance with the approved reclamation plan. Topsoil shall not be removed from the site unless authorized in the permit.

C. Decision on Special Land Use Application

1. A decision on the special land use application shall be made based on the Act 113 standards, above.
2. An approval, with or without conditions, shall be deemed to incorporate the site plan and associated specifications in the record approved by the Planning Commission, including the materials submitted in accordance with paragraph 4, above (as

modified in the approval), and all representations made by the applicant in the review proceedings.

3. The decision shall include a statement of reasons why the applicant has been approved, or why it has failed to satisfy its burden of proof based on the standard of "no very serious consequences."

#### D. Review Process at the Planning Commission

1. The Planning Commission shall conduct a public hearing on the application to determine whether the applicant can and does satisfy the applicant's burden of proof that "no very serious consequences" shall result from applicant's use of the property and haul route(s) based on the Act 113 standards above. The hearing shall follow the same procedure used to determine whether the applicant has established Need.
2. After the public hearing has been closed, either at the same meeting at which the public hearing was completed, or at a later meeting held within a reasonable time, the Planning Commission shall, based on the evidence presented, adopt findings and recommendations on whether the applicant has made a sufficient showing on whether there would be "no very serious consequences" as a result of the proposed use, including haul route(s), applying the Act 113 standards, above, as interpreted in accordance with applicable principles and law. Township representatives may assist the Planning Commission with the articulation of such findings and recommendations.

#### E. Review Process at the Township Board

1. The Township Board shall, taking into consideration the evidence from the public hearing, the Planning Commission's recommendation, and any additional evidence presented to the Township Board, act on the application for special land use approval.
2. The Board's action may consist of approval, approval with conditions, or denial, and the Board shall state the reasons for its decision, which shall be based on the evidence in the record.
3. An approval shall also state in detail the specifications of the approval.

4. The approval of a special land use under this section shall expire one year from the date of the minutes in which the Township Board approval is granted.

## **SECTION 5. EFFECT OF APPROVAL; MINERAL EXTRACTION LICENSE.**

A. Approval of a special land use under Section 4.4(B) shall be included in the application for a mineral extraction license for construction and operation of the use.

B. The approval of a mineral extraction license under this Section 4.5 shall expire following a period of one year from the date of the minutes in which the approval is granted, unless:

1. The period for securing the license, permits and commencing bona fide construction is extended by the Township Board for good cause within the effective period.

2. Approved bona fide development for the approved operation pursuant to building and other required permits and license issued by the Township under this Section and the Township's Mineral Extraction Ordinance, commences within such one-year period and proceeds diligently and in good faith as required by ordinance to completion.

3. If bona fide development has not commenced within the permissible period of time calculated under sub-paragraph 2 above, the special land use shall be void and of no effect.

C. The applicant for a mineral extraction license shall provide:

1. An irrevocable bank letter of credit in satisfactory form, in an amount sufficient to guarantee restoration of the site. In fixing the amount of such letter of credit, the Township shall take into account the size and scope of the proposed excavation, probable cost of rehabilitating the premises upon default of the operator, recommendation of the Township Engineer, estimated expenses to compel operator to comply by court decree, and such other factors and conditions as might be relevant in determining the sum reasonable in the light of all facts and circumstances surrounding each application.

2. A proposed liability insurance policy of not less than \$5,000,000 per incident for all liability claims arising out of the site.

3. An application fee, in an amount established by resolution of the Township Board, shall be provided at the time of the application submittal.

4. The first annual license fee, in an amount established by resolution of the Township Board, shall be provided at the time of application submittal and, if

approved, subsequently by January 31st of each calendar year. The fee shall be held in escrow pending decision on granting the application.

**5.1 Compliance by Licensee.** Continuation of the Mineral Extraction License requires that all persons or firms engaged in the activity of mineral extraction comply with the following conditions:

A. Operate only with a license issued under this Ordinance. Make payment to the Township Clerk by the end of January Each Calendar Year, of the annual permit fee established by resolution of the Township Board, to be held in escrow pending satisfactory results of the Township's annual inspection.

B. Operate only in compliance with the terms and limits of the license and approved application.

C. Operate only between the hours of 8 a.m. and 6 p.m., Monday through Friday, and 8 a.m. and 2 p.m. on Saturday. No operations shall be permitted on Sundays or legal holidays.

D. Other than as specified in the application, license, and special use permit, no processing of any nature, shall be conducted at any time on site.

E. Remain in compliance with all setback and stockpiles shall not exceed a height of 35 feet.

F. There shall be no excavation unless there is adequate lateral support for adjoining land as determined by the Township Engineer.

G. Stockpiles of cleared overburden and surface soils in berms or stockpiled to be used for the reclamation shall be seeded or otherwise maintained to avoid erosion or runoff as specified in these Ordinances.

H. Grading shall be maintained so that a drainage nuisance is not caused on adjacent property, nor will such drainage enter the excavation site.

I. Operations shall be conducted so the noise from the site when measured outside its legal boundaries does not exceed 70 decibels ("a" scale) for a period longer than a minute.

J. Operations shall be conducted to control fugitive dust and silica from the site; the perimeter of the site shall be monitored for dust (particulate matter) according to this Ordinance and maintained within EPA air quality standards. The composition of dust control brines or solutions shall be approved by EGLE and the Township.

K. The operation shall be conducted so it will not cause any contamination or change in the quality of ground or surface water outside the site. The quality of ground

water shall be monitored by adequate monitoring wells as determined by the Township. Excavation shall be to a depth no greater than ten feet above the water table.

L. There shall be no excavation within 500 feet of any stream, waterway or wetland unless approved in writing by EGLE and shall be consistent with the findings and recommendations of the required Hydrogeological Report.

M. There shall be not more than one entrance way from a public road.

N. Each entranceway shall be located not less than 500 feet from an intersection of two or more public roads.

O. The entire site shall be designed, constructed, and treated and maintained so that any dust does not blow onto neighboring properties.

1. Fencing.

- a. All mining sites shall be fenced prior to the commencement of extractive operations and prior to the placement on the site of machinery or buildings.
- b. The fence shall surround the borders of the subject property; provided, however, for good cause shown in relation to the protection of public safety in view of the operations conducted, the Township Board may, in its discretion, modify the precise location of fencing.
- c. The minimum specifications for the fencing shall be as follows:
  - i. A six-foot high farm-type fence of #9-gauge top wire, #12-gauge bottom wire, #14-gauge stays and intermediate wires and spacing of six inches vertically by 12 inches horizontally;
  - ii. All stays shall be of #14-gauge wire; and
  - iii. Support posts shall be spaced on 16-foot centers, or less.

P. Perimeter of mining site to be posted with warning signs.

1. The perimeter of any mining site shall be conspicuously and adequately posted with signs sufficient to indicate the danger of trespassing in the area. In no event shall such signs be more than 200 feet apart, and the same shall be constructed of a weather



resistant rigid and sturdy material and shall be maintained and replaced as needed.

2. Where extraction operations result in a body of water, the owner or operator shall place appropriate "Keep-Out-Danger" signs around the site.

Q. All portions of the site not currently being mined (without mining activity for ninety days) shall be graded so that slopes are not steeper than one (1) foot vertical for each two (2) feet horizontal and shall be adequately covered with erosion control blankets and planted to prevent erosion.

R. All fuels, chemicals, and other hazardous materials to be contained on site shall be noted in the application, including material, quality, use, and method of primary and secondary containment. All containment structures or devices shall be designed and operated to prevent groundwater pollution. The applicant shall also provide a written spill response plan, if a hazardous materials spill occurs on site. Said plan shall indicate how all contaminated material will be collected and disposed. Such plans shall be approved, and permits obtained from the appropriate local, state or Federal authorities.

S. Only equipment or vehicles owned or leased by the operator or owner shall be stored on the site overnight.

T. Adequately treat against dust and improve and maintain the public roads, bridges and culverts directly servicing the site as necessitated by the truck traffic over the haul route to or from the site, to Van Buren County Road Commission standards. Any roads used for the purpose of ingress and egress to said excavation site which are located within three hundred (300) feet of occupied residences shall be kept *dust* free by hard topping with cement, bituminous substance or chemical treatment.

U. Maintain a record or copy of the load ticket for each truck departing with extracted minerals from the site. These records must include driver and truck/trailer identification, date, time, and load; and must be made available to the Township upon demand for inspection and copying.

V. Potable water supply and sanitary sewage disposal systems shall be approved for the site by the County Health Department.

**5.2 Suspension/Revocation.** No mining operation shall operate in violation of the terms of this Ordinance when that violation threatens the health, safety, and/or welfare of the Township, or its residents, or property located in the Township. When the Township Supervisor determines that a violation of this Ordinance threatens the health, safety, and/or welfare of the Township or its residents or property located in the Township, the Supervisor may temporarily suspend active work at a site licensed under this Ordinance for up to 30 days. A licensee has the right to a public hearing before the

Township Board to contest the suspension. A licensee may request an expedited hearing to contest the suspension by requesting such a hearing in writing, describing in detail why the decision is incorrect. A license issued under this Ordinance may be revoked after written notice of the basis for revocation is served on the licensee and a hearing is conducted at which the licensee may appear and present evidence, where the Township finds that conditions exist which indicate the licensee is operating in violation of the terms of its license, or this Ordinance, or in a manner adversely affecting the health, safety, or welfare of the residents of the Township.

### **5.3 Appeal.**

Any applicant or affected property owner may appeal a decision of the Township Board.

A. An appeal shall be decided by the Township Board after adequate notice and a public hearing.

B. Based on facts presented at an appeal, the Township Board may make findings redetermining compliance with Section A.5 of this Ordinance and remand the application to the Mineral License Board for granting of the license or other final disposition of license, extend time limits of this Ordinance, and restore a revoked license.

### **5.4 Performance Bond.**

A. Form and condition. The mining operation shall not start until the licensee has posted with the Township clerk a performance bond in an amount determined by the Township Board, following recommendation of its experts, to be reasonably necessary to ensure reclamation. The bond shall be in the form of a corporate surety bond issued by a company licensed for such purposes in the state. The conditions of such bond shall be that, if the licensee has satisfactorily reclaimed the property being the subject of the permit in a timely manner, in accordance with the licensure permit, performance bonds shall be returned to the licensee; otherwise, the Township shall have a right to use the cash or proceeds of the irrevocable letter of credit to the extent necessary to reclaim the property and to cover the cost of enforcing and bringing about compliance with this chapter, including reasonable attorney's fees, and the corporate surety bond shall serve to guarantee payment for all such reclamation and enforcement and compliance requirements, as aforementioned. Further:

1. The cash or irrevocable letter of credit shall remain with the Township until the parcel or parcels have been reclaimed, and all equipment, machinery, materials, buildings, and other commercial improvements removed as required by this Ordinance, and/or by the permit; and

2. In the establishment of the amount of the performance bond, the Township Board shall take into account the size and scope of the proposed operation, the current and projected costs of reclamation in the event of default by the operator at such time as it is likely to be most costly, and other such conditions and factors as might be relevant in determining a sum reasonable in light of all the facts and circumstances. The Township Board, in considering any application to renew the permit, may, in its discretion, increase or decrease the amount of the performance bond, based upon increased costs, new information, or partial reclamation.

B. Cash in lieu of letter of credit. In the event that the applicant chooses to post cash in lieu of an irrevocable letter of credit, as provided in subsection (a) of this section, such cash may be deposited in an interest-bearing account in control of the Township at a bank or savings and loan institution satisfactory to the Township; provided, that all sums on deposit shall be readily accessible to Township in the event of Need or default. Such interest shall accrue for the benefit of applicant or be paid over to applicant.

### **5.5 Insurance Requirements.**

Insurance shall be a precondition to commencement of operations, and maintenance in full force and effect of insurance shall be a precondition to the right to continue operations. The applicant shall provide binders for personal injury and property damage insurance for the project to be carried by an insurance company licensed to do business in the state during all times during which any reclamation is left to be done, and during all times any machinery and/or equipment remains on the site, or any structures, equipment or improvements to be removed remain on the site. This insurance shall be carried in amounts as currently established or as hereafter adopted by resolution of the Township Board from time to time. This insurance shall cover injury or damage occurring upon the site of the operation, as well as upon injuries occurring upon adjoining property as the result of conditions or activities conducted upon the subject property.

### **5.6 Violations.**

A. Penalties. Any person, partnership, firm, association, or corporation found to be in violation of this Ordinance shall be responsible for a civil infraction for which the court may impose a civil fine of not less than \$500.00 nor no more than \$10,000 per day of violation. Each day that a violation remains shall constitute a separate violation of this Ordinance. Any person, firm or corporation found in violation of this Ordinance shall also be responsible for any cost incurred by the Township to enforce this Ordinance, including in part court costs, attorneys' fees, expert expenses, and consultant fees, as well as the cost of all personal injury, property damage, emergency response, and restoration work caused by the violation.

B. Separate offense. The owner of record or tenant of any building, structure, Premises, or part thereof, and any architect, builder, contractor, agent, or person who commits, participates in, assists in, or maintains such violation may each be found guilty of a separate offense. The imposition of any penalty shall not exempt the violator from compliance with the provisions of this Ordinance. A separate offense shall be deemed committed upon each day during or when a violation occurs or continues.

C. Additional Remedies. The Township may institute injunction, mandamus, abatement or other appropriate proceedings to prevent, enjoin, abate, or remove any unlawful structure, alteration, maintenance or use. The rights and remedies provided in this Ordinance are cumulative and are in addition to all other remedies provided by law.

D. Designation. An official designated by the Township Board shall be responsible for investigating violations of Ordinance, distributing notices of violations, and other related administrative functions.

1. Notwithstanding any provisions to the contrary, after a written violation notice from a Township officer, employee or agent with authority, that work on any property within the Township should be stopped because it is being done in violation of a provision of these ordinances, a stop work order may be issued immediately when there is an imminent danger to persons, property or the environment from the violation. In other situations, a stop work order may be issued if the property owner or such owner's agent does not appear at the Township as specified in the notice and show or demonstrate good cause why it should not be issued. The notice shall allow at least one (1) full Township business day for the appearance. If a stop work order is issued, such work shall be immediately stopped. The stop work order shall be in writing and shall be given to the owner of the property involved, the owner's agent, or to the person doing the work and posted upon the property in a manner which will be in plain view of any person doing work upon the property. The stop work order shall state the scope of the stop work order and state the conditions under which work may be resumed.

Any person who shall perform any work on or about the property after having been served with a stop work order or otherwise having notice of the stop work order, except such work as that person is directed by the Township to perform to remove a violation or unsafe condition, shall be responsible for a civil infraction for which the court may impose a civil fine of not less than \$500.00 nor no more than \$10,000 per day of violation. Each day that a violation remains shall constitute a separate violation of this Ordinance. Any person, firm or corporation found in violation of this Ordinance shall also be responsible for any cost incurred by the Township to enforce this Ordinance, including court costs and attorneys' fees, as well as the cost of any and all personal injury, property damage, emergency response and restoration work caused

by such violation. Each act of violation and every day upon which such violation shall occur shall constitute a separate offense.

**5.7 Effective Date.**

A. This Ordinance shall take effect 30 days after the date of publication of the notice of adoption. Beginning with that date all persons or forms wishing to commence mineral extraction operations must comply with the Ordinance.

B. Owners and operators of all extraction operations existing prior to the effective date of this Ordinance must apply for the required license within 90 days of the effective date and must be in compliance with all provisions of this Ordinance within 180 days of the effective date of this Ordinance.

**5.8 Severability.** If any portion of this Ordinance is found, for any reason, to be invalid, the remainder of the Ordinance shall remain in effect.

**5.9 Relationship to Other Laws.** Whenever regulations or restrictions imposed by this Ordinance are either more or less restrictive than regulators or restrictions imposed by this or any other governmental authority through legislation, rule or regulation, the regulations, rules, or restrictions which are more restrictive, or which impose higher standards or requirements shall govern. However, wherever there is a conflict in determining which is the more restrictive or imposes the higher standard, the standards of this regulatory ordinance shall govern. Regardless of any other provision of this Ordinance, no land shall be used, and no structure erected or maintained in violation of any state or federal control or environmental protection law or regulation.

**CERTIFICATION**

I further certify that trustee \_\_\_\_\_ moved for adoption of said Ordinance No. \_\_\_\_\_, and that trustee, \_\_\_\_\_ seconded said motion.

I further certify that the following members voted for adoption of said Ordinance: \_\_\_\_\_ and that the following members voted against such Ordinance: \_\_\_\_\_.

I further certify that said Ordinance No. \_\_\_\_\_ has been recorded in the Ordinance Book of the Township of Arlington and that such recording has been authenticated by the signatures of the Township President and Township Clerk.

\_\_\_\_\_

I do hereby certify that a synopsis of this Ordinance No. \_\_\_\_\_, in accordance with statutory requirements was published on \_\_\_\_\_, in the \_\_\_\_\_, a copy of which is attached hereto.

\_\_\_\_\_  
Georgette Peterson  
Arlington Township Clerk