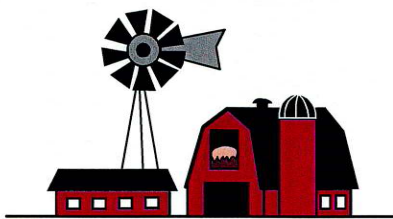


# **TOWNSHIP COOPERATIVE PLANNING ASSOCIATION**

**4111 11<sup>th</sup> Avenue SW Room 10  
Rochester, MN 55902**

**Phone: (507) 529-0774  
Fax: (507) 281-6821**



**Roger Ihrke, Administrator  
David Meir, Administrator  
Barbara Literski, Adm. Asst.  
roger@tcpamn.org  
david@tcpamn.org**

**-- TCPA --**

**Date:** October 13, 2014

**To:** Cascade Township Planning Commission  
Cascade Town Board  
Wilmar Investments LLC  
Milestone Materials

## **Meeting:**

The Cascade Planning Commission will hold a public hearing at the Cascade Town Hall, 2025 75<sup>th</sup> Street NE, Rochester, MN on Tuesday, October 21, 2014 after 7:00 PM regarding:

## **Application:**

An application to rezone approximately 140 acres from A-3 Agricultural District to Agricultural Resource Commercial District – Aggregate Extraction and Reuse by Wilmar Investments LLC. Milestone Materials is acting as an agent for Wilmar Investments LLC. The proposed use is located within the Suburban Subdivision Area of the Olmsted County Land Use Plan. The application indicates a desire to expand their present quarry operation from its location directly to the south.

## **Partial Legal Description:**

The majority of the SE ¼ of Section 11, T107N, R14W, Olmsted County, MN. Located just north of 55<sup>th</sup> Street NE.

## **Applicant & Owners:**

Wilmar Investments LLC, 2505 Lenox Ct. SW, Rochester, MN 55902

## **Agents:**

Milestone Materials, Division of Mathy Construction Company, 920 10<sup>th</sup> Ave North, Onalaska, WI 54650

## **Present Zoning and Requested Zoning:**

A-3 (Agricultural District)-Requested zoning change to Agricultural Resource Protection District – Aggregate Extraction and Reuse

## **Submittal Reviewers List:**

Rochester-Olmsted County Planning  
Rochester Public Works  
Minnesota Department of Transportation  
Rochester Fire Department

Oronoco Township  
Farmington Township  
Rochester Public Utilities  
MN Energy

①

Olmsted County Public Works  
Olmsted Soil and Water  
GGG Engineering  
Minnesota Pollution Control Agency  
Peoples Cooperative Services

Olmsted County Assessor  
Haverhill Township  
Qwest  
Olmsted County Health Department  
MN Dept of Natural Resources

At the time of this transmittal none of the reviewers have responded. Responses will be provided to the Commission members via email as we receive them.

**Enclosures:**

1. Land Use Plan Map
2. 4 pages of material from the Minnesota Department of Natural Resources Aggregate Resources Map

(Applicants Submittals have already been distributed to the commission members.)

**Background:**

Rochester Sand and Gravel owned and operated, a pit and asphalt plant in this area since the 1950's. About 1998 the owners of Rochester Sand and Gravel; Wilmar Investments LLC, sold the operation along with the track of land that is the site of the asphalt plant and the plant itself, to Mathy Construction a division of Milestone Materials. Along with the sale, Mathy received the rights to mine the sand and gravel from the property owned by Wilmar Investments in Sections 11 and 14 of Cascade Township. As a part of the negotiations, Wilmar Investments LLC provided Mathy with a letter from Rochester/Olmsted County Planning assuring them the ability to continue to mine in the area. (See letter, last page of applicant's submittal).

In April 2011 Mathy Construction applied to the Minnesota Department of Natural Resources for an Environmental Review in order to expand their operation onto the parcels proposed in this application. During the process Mathy began discussions with Olmsted County and Cascade Township as to the requirements it would need to complete in addition to the environmental review. Olmsted County determined that it no longer had jurisdiction and that it would be up to Cascade Township to determine how to move forward. After discussion with legal counsel, it was determined that Mathy would need to go through the process of today's zoning regulations and receive the appropriate approvals prior to beginning operations. Mathy, although they disagreed, has decided to move forward by applying for the zone change and if approved understands that a conditional or interim use permit will also be required.

**Environmental Assessment:**

The 1973 Minnesota Environmental Policy Act, administered statewide through the Environmental Quality Board, is the basis for the present Environmental Review Program of the State of Minnesota. Different types of environmental reviews are used to identify early the potential impacts of a project and provide time for the decision makers to require that mitigative measures are incorporated into the project design before local permits are granted.

The first level of environmental review is known as an Environmental Assessment Worksheet or "EAW". The specific content, environmental scope, and procedures for an EAW are specified in Minnesota Rules. The rules mandate what type of projects must go through the EAW process and who will act as the responsible unit of

government to determine if additional environmental review is necessary in the form of a much more detailed Environmental Impact Statement or "EIS".

In this instance the Minnesota Department of Natural Resources was determined to be the responsible local unit of government because of the large amount of water usage with the proposed quarry operation. The environmental review met the threshold of a mandatory environmental review in two respects; 1.) For the amount of water used and; 2.) Since the mining operation was over 40 acres in size. The Department of Natural Resources prepared the EAW, handled the comments and made the determination. The EAW and the DNR's conclusion are located on the web page listed below.

[http://www.dnr.state.mn.us/input/environmentalreview/milestone\\_materials/index.html](http://www.dnr.state.mn.us/input/environmentalreview/milestone_materials/index.html)

### **Zoning Request Review:**

The property is presently zoned Agricultural District (A-3), this application requesting a change to Ag/Resource Commercial District – Aggregate Extraction and Reuse.

We look to The Olmsted County General Land Use Plan for guidance in determining land use plan changes. The Olmsted County Future Land Use Map shows this area to be within the "Suburban Development" area of the plan with "Urban Service Area" to the south and "Suburban Development" area to the north, east and west of the property.

The Land Use Plan defines Suburban Development areas as follows;

### **Suburban Development Area**

Suburban development areas consist of large-lot residential development and very low density cluster-style residential development. New commercial and industrial uses are compatible with this designation only where suitable sites are mapped in the detailed Land Use Plan maps. The long-term predominant use of these areas is intended to be very low-density residential development (3.5 acres per lot average density) relying for the indefinite future on on-site sewage treatment and private water supplies. However, short-term temporary uses may include crop production, animal husbandry not involving new feedlots, forest management, other agricultural uses, and sand and gravel operations.

The Land Use Plan goes on to say . . .

## **Chapter 7 - Major Policy Issues**

### **3. Resource Conservation:**

Land development ordinances should promote conserving resources, including soil, water, energy, and geologic resources.

- **Geologic Resources:**

Geologic resources, including sand, gravel, and rock, dictate the location of extraction facilities. Where feasible, sites with excellent geologic resources should be preserved for such uses. Where such sites are in the path of development, development phasing should provide for resource extraction prior to development. The operations and site plans of such facilities should address the control of water pollution sources, noise and dust, storage and disposal of waste, impact on surrounding lands, and

impact on surface and groundwater. Ordinances regulating sand and gravel pits and rock quarries should require reclamation plans that address restoration and future use of the site.

- **Groundwater Protection:**

The water quality and the sustainable yield of aquifers used or potentially usable for drinking water supply should be protected. They are currently at risk from a number of sources, including but not limited to spills, wells that provide a conduit for contamination of aquifers, and nutrients and long-lasting chemicals applied to the land surface. The following strategies should be pursued to prevent groundwater pollution:

- encouraging best management practices for urban, suburban, and resource uses;
- providing for recharge of aquifers with water that can meet drinking water standards at the point where it enters lower aquifers;
- addressing areas with failing on-site treatment systems through programs to replace failing systems or by extending public sewer and water to serve such areas;
- acquiring conservation easements and other easements in areas critical to maintaining groundwater quality, such as Decorah Edge and Till Edge wetlands and related features;
- preserving or restoring habitats with deep-rooted vegetation (such as forests and native grasslands) in areas of focused recharge or high risk of groundwater contamination, such as areas around sinkholes and in wetlands and “losing” segments of streams associated with focused recharge of lower aquifers; and
- designating and managing wellhead protection areas

## **Chapter 6 - Resource Protection Area Policies**

Locational Criteria for Resource Protection Areas:

Areas are more likely to be included in the Resource Protection Area if they have the following characteristics:

### **2. Aggregate Resource:**

The Minnesota Department of Natural Resources has released draft maps of important bedrock and sand and gravel aggregate resources in Olmsted County. Because aggregate resources are rare, have high transportation costs, and are an important resource for construction, sites with high aggregate resource potential are more likely to be included in the Resource Protection Area.

(Refer to enclosed maps.)

## **Cascade Township Zoning Ordinance**

### **Section 8.09 Agricultural/Resource Commercial District – Aggregate Extraction and Reuse:**

The purpose of this district is to provide for certain uses within the Resource Protection Area of the Olmsted County Land Use Plan that are land intensive, generate low traffic volumes, entail low levels of sewage

generation, and that do not normally require urban services. The application of this district will be considered in areas having proximity to major highways where access or traffic generated by the site will not adversely impact the safety or operation of a federal or state highway or intersections on the County State Aid System. Uses located within this district should support agricultural and resource uses, prevent destruction or disruption of significant habitats, and avoid conflicts with agricultural and residential uses, and should be uses that by their nature require large amounts of open space, or that require a remote rural setting. These uses should not require additional public investment in infrastructure as a result of establishment of the use.

**Soils:**

According to the Soil Survey of Olmsted County Minnesota the parcel consists of the following soil types:

11C Sogn loam, typically the surface layer is very dark greyish brown loam about 8 inches thick. Below is a layer of broken limestone fragments about 4 inches thick. The underlying material is hard limestone.

27B Dickenson sandy loam, typically the surface layer is very dark brown sandy loam about 10 inches thick. The subsoil is dark brown and dark yellowish brown sandy loam about 25 inches thick. The underlying material to a depth of about 60 inches is yellowish brown sand. In places the surface layer is loamy sand.

216B Lamont sandy loam, typically the surface layer is very dark grayish brown sandy loam about 8 inches thick. The subsoil is yellowish brown. It is 12 inches of snay lam and loam over 7 inches of loamy sand. The next layer, to the depth of about 60 inches, is yellowish brown find sand. Below is yellowish brown sand.

283B Plainfield loamy sand, typically the surface layer is very dark brown loamy sand about 4 inches thick. The subsurface layer is dark grayish brown loamy sand about 6 inches thick. The subsoil is dark brown sand about 11 inches thick. The underlying material to a depth of 65 inches is brown sand.

283E Plainfield sand, typically the surface layer is dark brown sand about 8 inches thick. The subsoil is dark yellowish brown sand about 28 inches. The underlying material to a depth of 60 inches is yellowish brown, lose sand. In places, especially on the upper foot slopes bedrock or residuum of bedrock is as shallow as 60 inches.

299A Rockton loam, typically the surface layer is a very dark brown loam about 9 inches thick. The subsurface layer is very dark grayish brown loam about 6 inches thick. The subsoil is about 21 inches thick. The upper 15 inches is dark brown loam, and the lower 6 inches is dark brown loam or clay. The underlying material is hard limestone, in places the surface layer is silt loam or sandy loam. In some areas the underlying material is soft sandstone.

465 Kalmarville silt loam typically the surface soil is about 43 inches thick. It is very dark gray silt loam that has many strata of dark gray silt loam and fine sandy loam. The underlying material to the depth of 60 inches is a dark grey sand. In some areas it has strata of silt loam or channery or flaggy material.

472C Channahon loam typically the surface layer is very dark grayish brown loam about 8 inches thick. The subsoil is dark yellowish brown loam about 8 inches thick. The underlying material is hard bedrock. In places the upper part of the bedrock is soft. In some areas the content of the rock fragments and flagstones is as much as 35 percent in the upper part of the soil. In other areas the surface layer is sandy loam.

1029 Denotes areas which have previously been mined.

1812B Terril loam, sandy substratum, typically the surface soil is black, very dark brown, and very dark grayish brown loam about 31 inches thick. The subsoil is dark brown loam about 14 inches thick. The underlying material to a depth of 60 inches is loose coarse sand, in places it is stratified.

**Access:**

Presently access to this area is either from the southern portion of the applicant's operation which lies south of 55<sup>th</sup> Street NE or from 55<sup>th</sup> St. NE. Today 55<sup>th</sup> Street NE is not a through street because of a lack of a bridge over the Zumbro River. Olmsted County is in the process of taking over 55<sup>th</sup> Street NE, constructing a bridge and making it a through street. The upgrade to 55<sup>th</sup> Street NE will split the applicant's southern operation from the area being proposed to be rezoned. According to the applicant they are working with Olmsted County Public Works on access to both the southern and northern portions of their property. This could include a culvert to allow for conveying materials from the proposed northern operation to the location of the asphalt plant on the southern property.

**Staff Analysis:**

Findings

Section 4.00 H Amendment Findings (ordinance is in regular text, staff finding in italics)

1. The proposal is consistent with the policies of the General Land Use Plan;

*A request for review as to the consistency with the Olmsted County Land Use Plan has been made to the Rochester-Olmsted County Planning Staff. No comments from Rochester-Olmsted County Planning Staff addressed the General Land Use Plan were received.*

*Staff has reviewed the application as to consistency with the Plan and finds that:*

- Geologic Resources:

Geologic resources, including sand, gravel, and rock, dictate the location of extraction facilities. Where feasible, sites with excellent geologic resources should be preserved for such uses. Where such sites are in the path of development, development phasing should provide for resource extraction prior to development. The operations and site plans of such facilities should address the control of water pollution sources, noise and dust, storage and disposal of waste, impact on surrounding lands, and impact on surface and groundwater. Ordinances regulating sand and gravel pits and rock quarries should require reclamation plans that address restoration and future use of the site.

*This would seem to indicate that development in this area should not happen until the materials have been removed. In 2009 the Minnesota Department of Natural Resources did an analysis of aggregate resources in Olmsted County. This area is mapped as having both a high and moderate potential for crushed stone resources.*

2. The amendment is in the public interest;

6

*The mining area is close to an existing asphalt plant operation. Asphalt is used on many of our roadways which are owned and maintained by the public. Keeping the transportation costs low by mining the resources near the plant makes sense.*

*Additionally crushed rock is used for both a base and in the creation of cement for roadways. Mining this area prior to development would best serve the public.*

*The location of sand and gravel resources has been predetermined. We can only recognize where they are located and plan accordingly. We need these resources, and since the public is the main user of such resources, we need to assure the resources remain available by keeping development away from the resource until used.*

3. The proposed development is timely based on surrounding land uses, proximity to development and the availability and adequacy of infrastructure;

*Olmsted County is in the process of taking over 55<sup>th</sup> Street NE and upgrading it. The County Plan shows accesses to the area for heavy trucks, assuming mining will continue in this area. Even if the roadway were not being upgraded, the materials are relatively close to the present asphalt plant. Access to the present plant has been well established to the south and has provided materials for most of the roads in Olmsted County in recent years.*

*Development has occurred on many of the parcels on all sides of this area, but to the north and west they are separated by the Zumbro River. To the east is a mobile home park. Mitigation measures will be required.*

4. The proposal permits land uses within the proposed district that are appropriate on the property and compatible with adjacent uses and the neighborhood.

*Other residential parcel owners in the area should be considered with respect to how they may be affected by this zone and proposed use change. Industrial uses can create high volumes of noise, dust and smell. If the zone change is approved these issues should be addressed in the conditions of the conditional or interim use permit to mitigate them. A conditional or interim use permit is required before the use would be allowed.*

*Many of the homes on the parcels to the north and west of this property are higher in elevation than this property. Site mitigation – including dust and noise - may be hard to mitigate.*

5. The proposal does not result in spot zoning;

*Because of the existing mining to the south, expanding the operation would make sense. A hot asphalt plant is already located in the area and one of today's criteria for locating a hot asphalt plant is that it be located near the materials it uses. It make sense to mine the area prior to allowing for further development.*

6. The proposal is consistent with a GDP for the area, if one exists.

*No GDP exists for the area at this time.*

**Staff Recommendation:**

Because this area is surrounded by development, this request is difficult. The applicant should be encouraged to remove the resource as soon as possible and not haul material into the present asphalt plant from other locations until this resource is depleted.

The applicant has indicated that once the land is zoned Agricultural Resource/Commercial, they would likely apply for a Conditional Use Permit. Conditions to mitigate the impacts will need to be put in place during the CUP process if the zone change is approved. Additionally, the Commission should consider the findings from the EAW when developing conditions within the conditional use permit

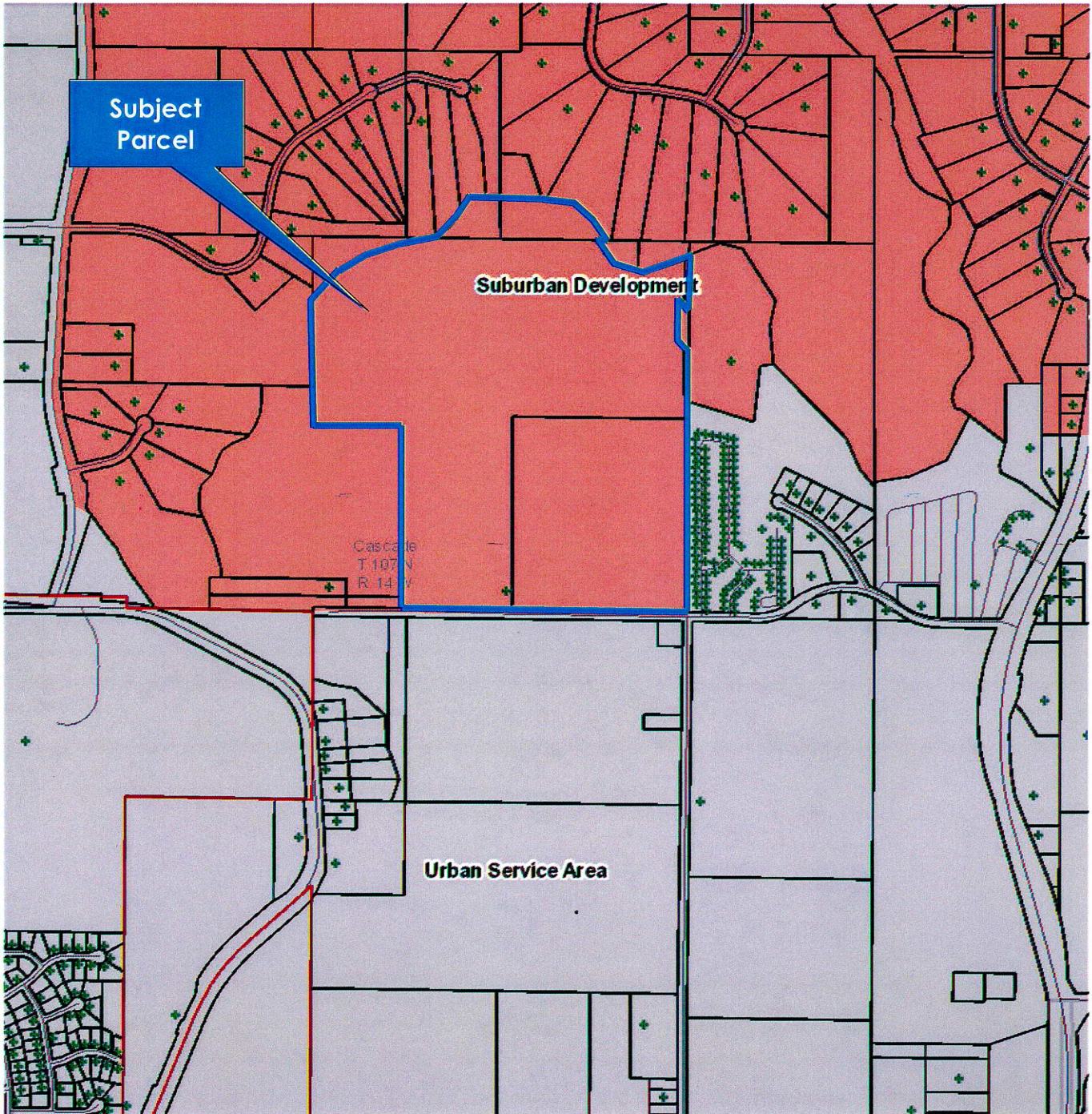
When reviewing the request for the zone change the Rochester/Olmsted County Planning Department did not object to the change.

The Planning Commission should be aware that as of this date an access permit has not been issued by Olmsted County Public Works for the use change and will be required prior to establishing any access to the new roadway.

Staff has reviewed this request in accordance with the applicable standards and provisions as included in this report. Based upon staff review and analysis included above, staff recommends approval.



# CASCADE LAND USE PLAN



TCPA  
4111 11th Avenue SW  
Rochester, MN 55902  
www.tcpamn.org  
507-529-0774



## *Classification of Crushed Stone Potential*

The Crushed Stone Potential matrix in Table 1 lists the eleven bedrock units, in stratigraphic order, found at or near the land surface in Olmsted County, as well as the characteristics used to determine the crushed stone potential of the bedrock units. The crushed stone potential of a bedrock unit is a function of the quality of the bedrock as a crushed stone source, the probability that the bedrock will be found within a map unit, and the overburden thickness. The quality of the bedrock refers to the ability of a bedrock unit to meet specifications for use as an aggregate source while the depth to bedrock is a measure of the accessibility of the bedrock for quarrying. This classification system also considers the probability assigned to a map unit, which is an estimate of the certainty that a designated bedrock unit will be found within the map unit. For example, a lower probability (greater uncertainty) rating can result in a high quality bedrock unit, with less than 15 feet of overburden, being assigned a moderate potential value if there is limited depth to bedrock data or if there is significant variability in the depth to bedrock within the map unit. In Olmsted County the Oneota, Shakopee, and Stewartville Formations are durable dolostone units that do not contain significant amounts of poor quality rock such as shale or sandstone. The Oneota and Shakopee Formations are primarily found near the surface in the northern half of the county while the Stewartville Formation is at or near the surface in the southern one third of Olmsted County. While the Oneota, Shakopee, and Stewartville Formations are the most desirable crushed stone sources in Olmsted County, their crushed stone potential decreases as the overburden thickness increases.

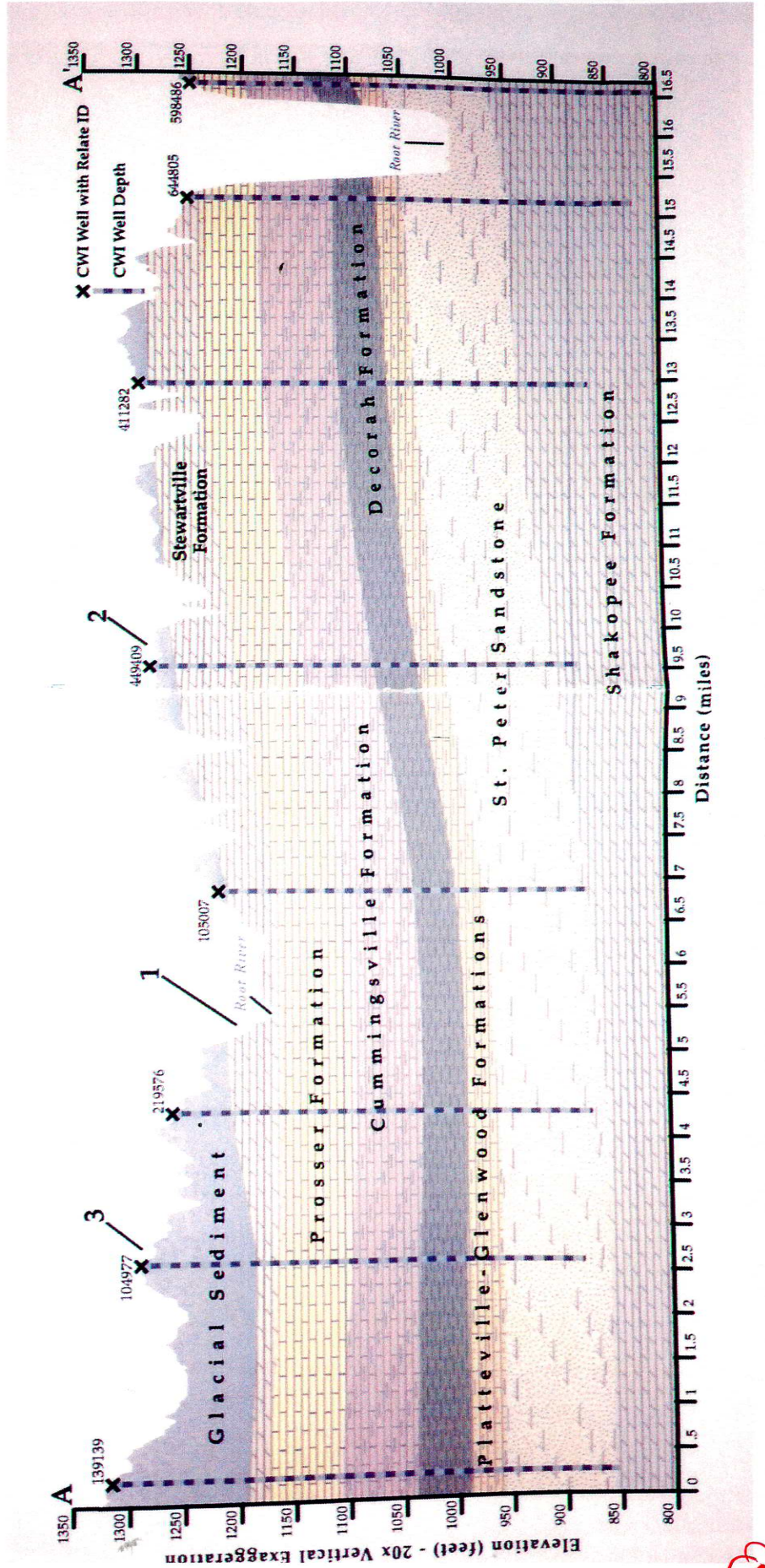
The only other bedrock unit that can be considered a significant crushed stone source is the Prosser Formation limestone where it is buried by less than 15 feet of overburden. The Prosser Formation contains thin layers of silt or sand and is not as durable as the dolostone of the Oneota, Shakopee, and Stewartville Formations. Consequently, the Prosser Formation in Olmsted County is considered to be a moderately desirable crushed stone resource. The remaining bedrock units in Olmsted County lack the quality to serve as a crushed stone source, regardless of the overburden thickness.

# Classification Matrix of Crushed Stone Potential

Formation	Description	Quality	Probability	Overburden Thickness (ft.)	Crushed Stone Potential
Dubuque	Shaly Limestone	Low	Moderately low to moderately high	0 - 15	Low
				15 - 30	Limited
Stewartville	Dolostone	High	Low to high	0 - 15	High
				15 - 30	Moderate
				30 - 50	Low
				> 50	Limited
Prosser	Limestone	Moderate	Low to moderate	0 - 15	Moderate
				15 - 30	Low
				> 30	Limited
Cummingsville	Shaly Limestone	Low	Moderately low to moderately high	0 - 15	Low
				15 - 30	Limited
	Shale	Very low	Moderately high	0 - 15	Limited
				15 - 30	Low
Platteville	Limestone	Moderately low	Low to moderate	0 - 15	Limited
				15 - 30	Limited
				> 30	Limited
Glenwood	Shale	Very low	Moderate	0 - 15	Limited
				15 - 30	Limited
				> 30	Limited
St. Peter	Sandstone	Very low	Moderate	0 - 15	Limited
				15 - 30	Limited
				> 30	Limited
Shakopee	Dolostone	High	Moderately low to high	0 - 15	High
				15 - 30	Moderate
				30 - 50	Low
				> 50	Limited
Oneota	Dolostone	High	Moderate to very high	0 - 15	High
				15 - 30	Moderate
				30 - 50	Low
				> 50	Limited
Jordan	Sandstone	Very low	Low	0 - 50+	Limited



# Bedrock Geology Cross-Section



Handwritten mark: *AB*

# Aggregate Resources—Crushed Stone Potential

