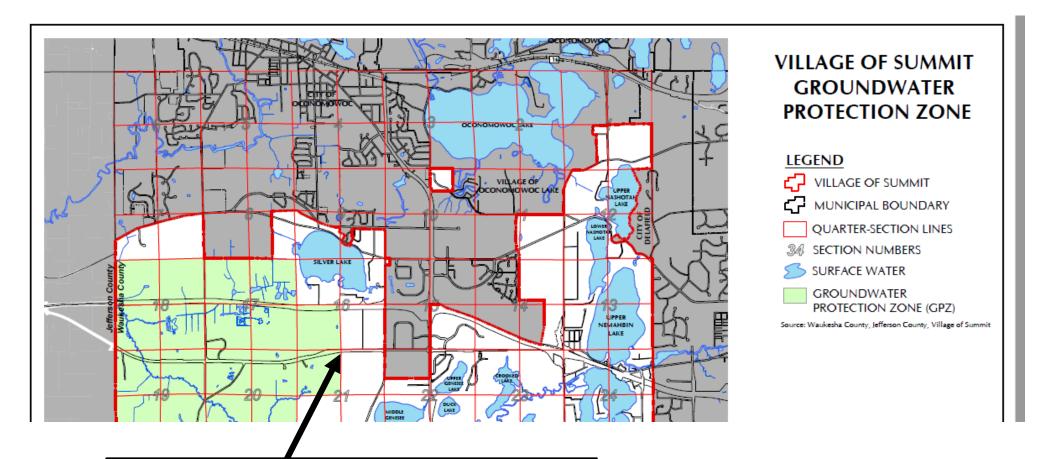
### Location of Groundwater Protection Zone based on master plan map



Based on this map from the master plan, the Groundwater Protection Zone extends to a point east of the point where County DR veers slightly south.

## Boundary of Diamond Entertainment proposed stadium project

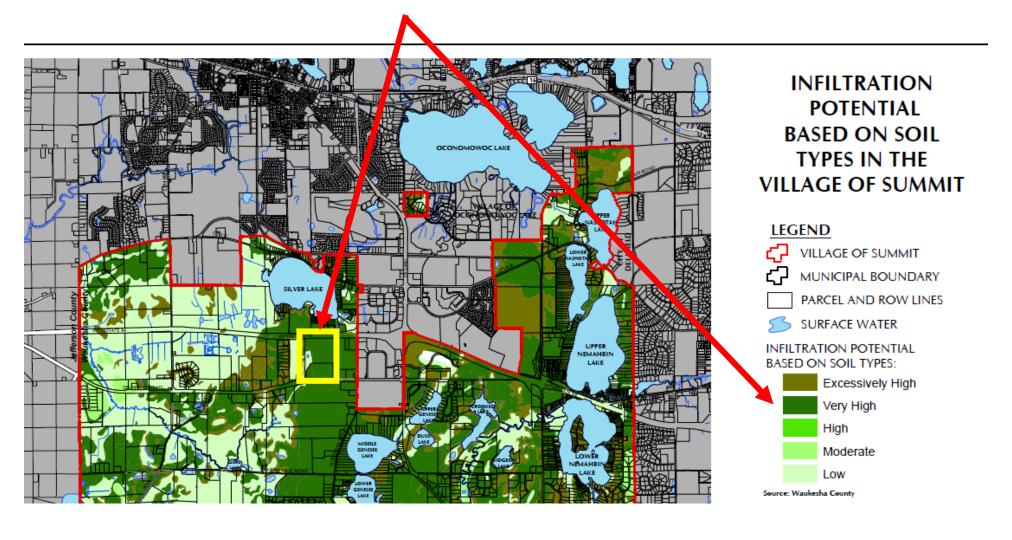


The GPZ map in the master plan shows the Groundwater Protection Zone extending to a point east of the point where County DR veers slightly south

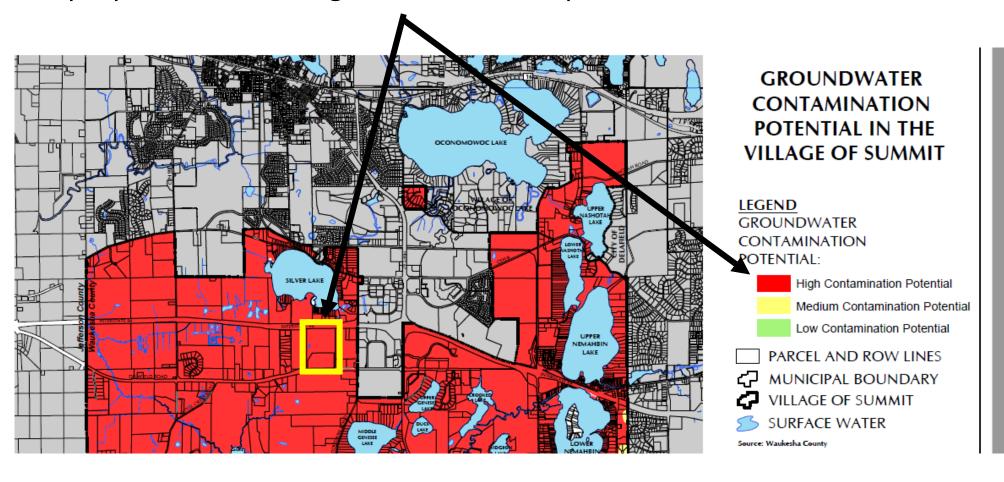
The area bounded by the white triangle represents the portion of the Diamond Entertainment property that extends into the Groundwater Protection Zone

The boundary of the Diamond Entertainment project extends to a point west of the point where County DR veers slightly south

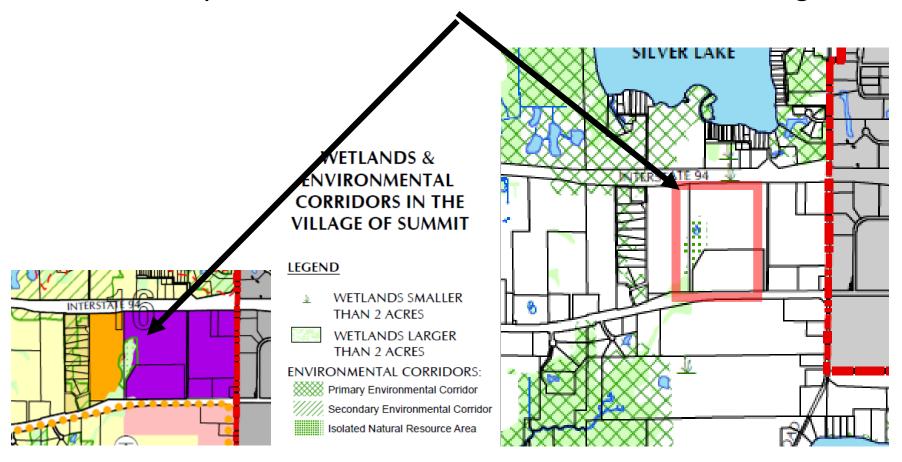
## The soil in the proposed site has very high infiltration potential



# The proposed site has high contamination potential



The site overlays an Isolated Natural Resource Area and designated Wetlands



h. Environmental Corridor - Areas identified by the Southeastern Wisconsin Regional Plan Commission. In the Summit Plan, these areas are designated as a buffer around significant natural or environmental characteristics such as shorelines, wetlands, prairies, or woods and are targeted for preservation. These are shown as overlay districts since they do not follow property lines or right-of-way boundaries.

Master Plan Pg 39 & 40 (doc pg 91 & 92)

#### E.3. Groundwater Resources

The groundwater resources within Summit are its most precious natural resource, providing most of the potable water needs for eastern Waukesha County. The incorporation of Summit should ensure protection to this most vital resource. The layer of Maquoketa Shale underlying the eastern portions of the Southeastern Wisconsin region is missing in this area. This means that the Village is located in the recharge area of the deep sandstone aquifer underlying Waukesha County and the Southeastern Wisconsin region. This aquifer is an important source of high quality municipal and industrial water supply within the region. This aquifer is highly susceptible to contamination in its recharge area by infiltration of pollutants, and this factor must be an important consideration in any development planning effort. Summit has the statutory authority to enact and enforce ordinances to preserve and protect these vital wetlands resources.

The majority of the Village is located in an area of generally shallow depths to the groundwater table, between 10 to 30 feet. The groundwater reservoir provided by the glacial till deposits and the underlying Platteville, Decorah, and Galena limestone bedrock formations is the source of supply for the on-site wells used in the area as a source of potable water. These wells are also susceptible to pollution from the infiltration of surface water and from on-site sewage treatment and disposal systems.

The Village has significant areas designated as having a high potential for groundwater contamination, as shown on the map Page 42. Compared to the deep aquifer, the shallow aquifers are more susceptible to pollution from the surface because they are nearer to the source in terms of both distance and time, thus minimizing the potential for dilution, filtration, and other natural processes that tend to reduce the potential detrimental effects of pollutants

### Pg 45 Doc Pg 97

In parts of the western third of the County, there is no confining impermeable layer of rock between the glacial drift and the sandstone aquifer. This is cause for concern in planning for the future development of that area. Urban development adversely affects both the quantity and quality of recharge water, especially where the aquifer is overlaid by outwash, end moraine, or other highly permeable glacial material. An increase in the area of impervious surfaces such as pavement affects the recharge of the sandstone aquifer by diverting larger amounts of precipitation into surface drainage courses as runoff, rather than allowing it to percolate into the ground.

The Village of Summit figures significantly in a recent SEWRPC Planning Report Number 52, titled "A Regional Water Supply Plan for Southeastern Wisconsin". The entire report is available at SEWRPC.org/watersupplystudy/chapters.asp.

One of the principal findings of the study states as follows:

"A groundwater recharge area protection component would preserve areas classified as having a high or very high recharge largely through implementation of the adopted year 2035 regional land use plan. The plan recommends preservation of the environmental corridors, isolated natural area, prime and other agricultural areas that benefit groundwater recharge by allowing precipitation to infiltrate or soak into the ground. About 74 percent of the highly rated and very highly rated recharge areas are thus expected to be preserved. Careful design of new development and stormwater management practices should increase this amount."

The rural, largely undeveloped areas of the Village fall into the above described condition. The area is comprised almost exclusively of wetlands, agricultural lands and undeveloped open spaces.