CITY OF PEWAUKEE

2016 Capital Improvement Project Request Form

Department: **Public Works**

Project Name: **Emerald Acres Flooding Mitigation**

PROJECT COSTS / REVENUES

COSTS

Year	Amount 1	Source 1	Amount 2	Source 2	Amount 3	Source 3	Amount 4	Source 4	Total
2014									$ -
2015									$ -
2016	$ 100,000	Storm Water Utility							$ 100,000
2017	$ 1,741,364	Storm Water Utility							$ 1,741,364
2018									$ -

REVENUES

Year	Amount 1	Source 1	Amount 2	Source 2	Amount 3	Source 3	Amount 4	Source 4	Total
2014									$ -
2015									$ -
2016									$ -
2017									$ -
2018									$ -

PROJECT IMPACTS

Impact on the Community:

The Emerald Acres condos are located on the south side of Green Road opposite (approximately) Wagner Park. The rains of 2008, 2009 and 2010 resulted in the flooding of Green Road at this point, and the flooding of the Emerald Acres condominium buildings. The combination of the Green Road street reconstruction with its much larger box culvert to carry the water under the road, and the Emerald Acres Flood Mitigation project are intended to significantly reduce the flooding impacts to this area and the condo buildings.

Visibility in the Community:

The flooding of the Emerald Acres condos has a low visibility; the flooding of Green Road is much more visible.

Impact of Not Approving:

Failure to approve the Emerald Acres Flood Mitigation project will result in the continued flooding in this region, particularly during the higher intensity rainfalls, such as the 100-year rain event which occurred in 2008, 2009 and 2010.

Regulatory: This project is driven by local conditions and policies--there is no regulatory aspect affecting any decision.

Operations: The project would have little effect on operations, excepting the assumed reduction in phone calls after the flooding events.

Project Category: Public Works Infrastructure maintenance (road/drainage).

Dept. Sharing: Streets Division & Storm Water Utility.

Project Criticality: Highly critical for the property owners within the Emerald Acres development and the maintenance of Green

Cost Code:

New / Used: New

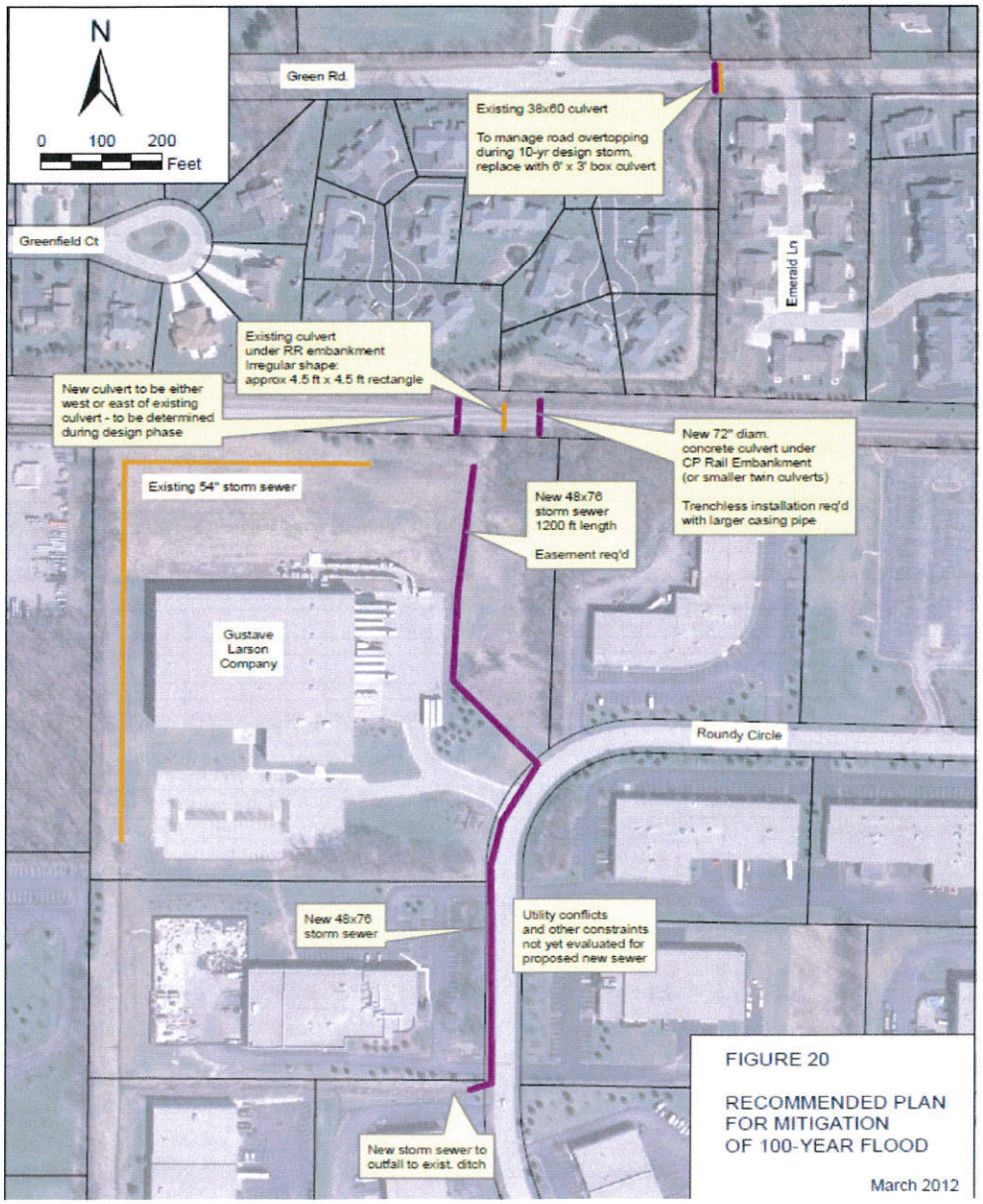
Expected Life: 100 yrs. For the drainage pipes and culverts

Department Ranking: High

CITY OF PEWAUKEE

2016 Capital Improvement Project Request Form

Department:	**Public Works**
Project Name:	**Emerald Acres Flood Mitigation**
Advocate:	**Jeffrey Weigel, PWD**
2016	**$100,000**

Project Description:

The Emerald Acres condominium development is on the south side of Green Road opposite (approximately) Wagner Park. During the intense rains of 2008, 2009 and 2010 the Green Road was flooded with water coming out of Wagner Park (primarily from the Five Fields subdivisions) and Emerald Lane was flooded. Emerald Acres condo owners reported flood waters in the basements. The City engineering consultant (AECOM) performed a study of the region and determined that the 1902 culvert under the CP rail was insufficient in size to keep the upstream properties from flooding. Subsequent analysis proved that two additional culverts are required, as one additional culvert could not meet the structural limitations of the railroad. The 2013 City Storm Water Utility budget had $900,000 approved for the project, and was based on 1-new pipe crossing under the tracks. The additional $521,000 requested in the 2014 Storm Budget is a result of the need for second pipe. In 2014 the railroad informed us that we could not use their 1902 crossing for flood control unless we were to take ownership of that aged structure, and the Common Council upon careful consideration authorized the design of a third culvert under the tracks increasing the project cost request again. A large storm sewer pipe is required to carry the water from the tracks to the open ditches to the south to complete the project, and that storm sewer pipe is part of the project estimate from 2013.Work in 2015 consisted in seeking input from DNR on any permits that would be required, and we found that a permit would be required but special in nature since the existing large storm sewer pipe downstream constructed in the early 1990's also needed a permit but was not permitted. Our task in 2016 is to prepare an alternatives analysis and apply for the permit. 2017 construction costs are at this time carryovers from previous forms and would need to be updated.