## Municipal Separate Storm Sewer System (MS4) Best Management Practice (BMP) along Park Terrace and the Greenbelt

## What is the purpose of this project?

Generally speaking, the purpose is to manage and improve the water quality of our stormwater runoff. For years, the water runoff from that area has run through and ponded in that wooded area between the Greenbelt trail and Park Terrace. Additionally, in times of excessive rains (approximately more than 1 ¼" per hour), the water ran down the hill through the wooded area causing erosion and across the trail of the greenbelt adding to the downstream flooding the area of the Paxtang Commons (adjacent to City Line Diner). This project will detain the runoff, allow it to infiltrate into the groundwater, provide control of the amount going to the stream and allow sediment to drop out in the basin, improving water quality.

By law, there are requirements of action and responsibility by the local municipality, set forth from the Federal and State Government, under the category of Municipal Separate Storm Sewer System (MS4). Best Management Projects such as the project on Park Terrace are an approved approach to improve current conditions of the runoff quality and provide some control of the quantity. With the rising cost to meet these requirements, most municipalities have already established a Sewer/Stormwater Authority Board and charge a quarterly or annual fee to their residents to meet the MS4 permit requirements. To date, our Borough has been able to maintain the management of these requirements without adding an additional fee to the residents. To meet the MS4 permit requirements, there are a few other items/areas which will most likely be reviewed or improved in Paxtang over the next 6 years that will assist in decreasing the impact of erosion and flooding, and any sediment issues.

In regards to long range planning, we have discussed the current BMP project in several council meetings over the past three years, prepared and received a DEP grant for the project, and advertised the project. We have already applied for and received approval of grant funding (approx. 85% funded by DEP grants) for a second project, to assist in the reduction of unfiltered water forcefully flowing into the stream. The water basin allows for the water to naturally filter, and to delay the reduced discharge on its' path immediately to the stream allowing a little less flooding in the Paxtang Commons Area (next to the greenbelt entrance

behind City Line Diner), in addition to several houses on Brisban Street which experience flooding in the basements on heavy rain days.

What if a child is walking unsupervised to school and chose to go down through the Greenbelt, would they be safe at the BMP? There is no reason for concern. The water is the same collection as it was before but there are no trees in the area which means it is more visible. The increased visibility should make it safer and it should not flood over the greenbelt trail. Please note: The project is not quite complete, due to rain day interruptions in the construction, it is currently in the final stages of construction.

When it is complete (tentatively mid-June), the ponded water level will be even lower and have an overflow pipe in the BMP. It will have a drain which will slow down the water flow from a heavy rain. Over the two days following a heavy rain, the water will slowly and naturally filter itself and drain through the levels of ground materials filtering the runoff in the process while an underground pipe also carries it under the trail into the creek. Additionally, the Borough will add delineator posts along Park Terrace above the project and a fence for unfamiliar motorists to see the area beyond the curb in the dark. The water will be less deep/visually, as the overflow feature is completed and with a little time, will allow the grass to grow. In addition, the following year after we know the project is functioning properly, bird houses, shrubs, trees and plants will be added to the area for the visual appeal.