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**PRELIMINARY  
STORMWATER POLLUTION  
PREVENTION PLAN**  
for  
**CONSTRUCTION ACTIVITIES**  
at

**The West End**  
246 – 260 Lakefront Boulevard  
City of Buffalo, Erie County, New York

Prepared by

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## **Section 1 - Location & Description**

This project consists of the development of 246-260 Lakefront Boulevard, located within the Waterfront Village at Erie Basin Marina, Buffalo, New York. Proposed is a mix of townhouses and condominium buildings, which will consist of one four bedroom townhouse, six two bedroom townhouses, and four six unit condominium buildings. The four bedroom townhouse will have a three car garage, each of the two bedroom townhouses will have two car garages, and each of the condominium buildings will have twelve spaces provided within underground parking. The site is approximately 2.43+/- acres and is zoned D-R, Residential Campus.

## **Section 2 - Storm Sewer Service**

The proposed site will include a new system of stormwater catch basins connected by a network of underground HDPE pipe. Roof Leaders from the proposed buildings will be tied into the storm pipe system. The stormwater management system will collect surface runoff generated and will discharge into an existing Buffalo Sewer Authority controlled storm sewer which crosses the site and discharges directly into Lake Erie. Construction of this project will result in an increase in impervious area.

NYSDEC Requirements:

NYSDEC SPDES requirements dictate that if greater than 1.0 acre of soil disturbance is proposed during construction of the project that the General Permit for Stormwater Discharges from Construction Activity Permit No. GP-0-15-002 will apply. The NYSDEC defines disturbance as exposure of the subsoil of any subbase area that is currently stone or gravel. The New York State Stormwater Management Design Manual (January, 2015) has been used to design the proposed stormwater management system.

The project includes the redevelopment of previously developed parcels that were part of the Waterfront Village at Erie Basin Marina allowing it to fall under the Redevelopment Activity guidelines found in Chapter 9 of the NYSDEC Storm Water Design Manual. This chapter outlines alternative approaches for addressing stormwater management including requirements for Water Quantity control sizing and Water Quality treatment objectives. The project does involve lands that were part of a brownfield cleanup project, therefore infiltration type stormwater management practices will be limited as the NYSDEC classifies this as a hotspot.

Water Quantity:

Although the redevelopment activities proposed will disturb over 1.0 acre, the proposed stormwater system will tie directly into the BSA storm sewer crossing the site

which discharges directly into Niagara River/Lake Erie which are both considered 5<sup>th</sup> order or higher. This eliminates the need to provide Channel Protection Storage Volume (CPV), Overbank Flood Control (Qp), and Extreme Flood Control (Qf).

#### Water Quality:

The NYSDEC requires Water Quality treatment prior to discharge. Water Quality treatment will be provided by implementing the use of alternative SMPs to treat 75% of the water quality volume from the disturbed, impervious area as well as any additional runoff from tributary areas that are not within the disturbed, impervious area. Proposed will be the installation of a proprietary practice, a manufactured treatment system, designed to treat a minimum of 3,467 cubic feet, which is 75% of the calculated total water quality volume, 4,623 cf, for the site.

The site is within the City of Buffalo, which is regulated by the Buffalo Sewer Authority, the MS4. All requirements set forth by the BSA regarding stormwater discharges will be met.

### **Section 3 - Erosion Control Summary**

#### Daily Site Maintenance

Daily site mainenance practices to be preformed by Owner/Contractor include:

- At the beginning and end of each day of construction, the contractor shall walk the site to determine the presence of any extraneous material (litter) and to review all stormwater outfall locations. All debris shall be picked up and disposed of in an appropriate manner.
- Construction chemicals shall be stored in an area that is away from any temporary or permanent stormwater drainage facilities and in an area that is elevated above ground surface, so that surface water runoff does not deteriorate the associated container/bag. All containers shall be adequately sealed at the end of each workday or at the end of use. Large fuel tank(s), if required, shall be located within a secondary containment vessel, size equal to or greater than the capacity of the fuel tank used.
- Construction debris shall be stockpiled in one particular area within the site that is located away from any permanent or temporary storm drainage facility. All construction debris shall be removed from the site and disposed of in an appropriate manner. Locate trash receptacle on high ground so as not to allow stormwater runoff to collect within the bin(s). The material/equipment storage shall be monitored on a daily basis for any identified chemical (oil, grease, etc.) spills.

### Stabilization Practices

Stabilization practices for this site include:

- A. Land clearing activities shall be done only in areas where earthwork will be performed and shall progress as earthwork is needed.
- B. Use of stabilization fabric for all slopes having a slope greater than 1V:3H.
- C. Permanent seeding and planting of all unpaved areas using the hydromulching grass seeding technique.
- D. Mulching exposed areas.
- E. Vegetation preservation.
- F. Frequent watering to minimize wind erosion during construction.

### Structural Practices

Structural practices for this site include:

- A. Inlet protection using a method detailed in the Construction Documents
- B. Perimeter protection using temporary silt fence
- C. Temporary rock check dams
- D. Stabilized Construction Entrance
- E. Temporary stone wash off areas
- F. Storm sewer, curb/gutter
- G. Sediment traps and basins (sized for a minimum of 1800 CF/acre of drainage area)

### Sequence of Major Activities

The Contractor will be responsible for implementing the following erosion control and storm water management control measures. The Contractor may designate these tasks to certain subcontractors as he sees fit, but the ultimate responsibility for implementing these controls and ensuring their proper functioning remains with the Contractor. The order of activities will be as follows:

- A. Construct temporary construction exits at locations shown on the Demolition & Erosion Control plan sheet.
- B. Install perimeter silt fences in the locations shown on the Demolition and Erosion Control plan sheet.
- C. Clear & grub site.
- D. Commence site grading.
- E. Disturbed areas of the site where construction activity has ceased for more than 14 days shall be temporarily seeded and watered.

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- F. Finalize pavement subgrade preparation.
- G. Construct all curb/gutter, drainage inlets, storm sewer pipes and storm sewer manholes, as shown on the plans. Install temporary inlet protection at the locations of all new inlets.
- H. Remove inlet protection around inlets and manholes no more than 48 hours prior to placing stabilized base course.
- I. Install base material as required for pavement.
- J. Carry out final grading and seeding and planting.
- K. Clean storm system following construction.
- L. Remove silt fencing only after all paving is complete and exposed surfaces are stabilized.
- M. Remove temporary construction exits only prior to pavement construction in these areas.

Maintenance of Storm Related Items

Maintenance and inspection procedures are as follows:

- Inspect catch basins, yard drains, storm manholes, treatment structures, storm piping and stormwater pond for debris and accumulation of sediment.
- Remove and properly dispose of any collected debris and sediment in accordance with applicable state, federal and local regulations.
- Flush piping with water if necessary to remove accumulated sediment.
- Clean treatment structures per manufacturer's recommendations.
- Check all stone outfall structures for erosion and re-stone if necessary to prevent further erosion.
- Inspect grassed/landscaped areas for un-vegetated areas or areas with less than 80% healthy stand of grass and reseed and mulch as necessary.
- Maintain all lawn areas by regular mowing, including the grassed slopes of the stormwater pond and any grass swales. Any eroded areas shall be regarded, seeded and mulched immediately.
- Clean streets at a regular interval to minimize the amount of sediment being conveyed to the storm water system.