

PARKS & RECREATION COMMISSION AGENDA

Wednesday - December 10, 2014 -- 5:00 p.m.

### MEETING LOCATION: Central Hillside Center 12 E 4<sup>th</sup> St



- I. Call Meeting to Order
- II. Roll Call
- III. Approval of November 5 minutes
- IV. Presentations
  - a. Equestrian trail issues at Magney/Snively Jim Filby Williams (action requested)
  - b. Equestrian trail issues at Mission Creek Jim Filby Williams (action requested)
  - c. Storm Water Treatment by Trout Streams Greg Stoewer (action requested)
- V. Commission Committees meeting schedules will be posted here in the future
  - Parks and Facilities meeting date: Wednesday, December 3 at noon at Parks office <u>Chair - Joel Braun</u> – Jon Welles, Ed Hall, Michael Schraepfer, John Schmidt [Dale Sellner]
    - Tennis court inventory and condition report
  - b. Administrative (E-Board) meeting date: Friday, December 19 at noon at Parks office <u>Chair – Ed Hall</u> – Eric Viken, Tom Albright, [Kathy Bergen]
  - c. Trails and Bikeways meeting date: TBA <u>Chair – Tom Albright</u> - Eric Viken, Andy Holak, Tiersa Dodge [Judy Gibbs]
  - d. Recreation Programming (youth and adult) meeting date: Tuesday, December 16 at noon at Parks office
    <u>Chair - Jon Welles</u> – Andy Holak, Erik Torch, Amanda Crosby [Pamela Page]
    Task Force to work on 2015 Chester Concert schedule
- VI. Commissioner & Liaison Reports
- VII. New Business
  - a. Nominating Committee needed annual election of officers at January meeting
  - b. 2015 meeting dates and locations
  - c. Annual Meeting Committee needed
  - d. Central Hillside Park Mini-Master Plan
- VIII. Old Business a. Vandalism issues and Park Rangers
- IX. Division Manager's Reporta. Update 2015 Parks Fund Budget
- X. Public Comment
- XI. Adjournment
- XII. Next meeting Wednesday, January 14 at 5 pm at Central Hillside Center

<u>E-Board Meetings</u> Fridays 12 noon - City Hall December 19

### City of Duluth



DEPARTMENT OF PUBLIC WORKS/UTILITIES Engineering Division 411 W. 1<sup>st</sup> St. Room 211 • Duluth MN 55802 (218) 730-5200 Fax: (218) 730-5907

November 18, 2014

To:	Parks and Recreation Commission
From:	Greg Stoewer, City of Duluth Project Engineer
Subject:	Storm Water Treatment along Grand Avenue

The attachments are exhibits for proposed storm water treatment easements along Grand Avenue. Minnesota Department of Transportation (MnDOT) is repaving Grand Avenue in 2015/2016. Additions of sidewalks and pedestrian curb ramps result in MPCA-required storm water treatment. Proposed Pond 1 and Pond 2 are in park land, near trout streams.

Pond 1 would be located between Knowlton Creek and 85<sup>th</sup> Avenue West, next to an existing utility corridor (Minnesota Power overhead lines and Cloquet-Lake Superior water main). Most of Pond 1 would be in Park land dedicated in the Nortons Fairmont Park Division, adjacent to the Spirit Mountain Recreation Area.

Pond 2 would be located west of Kingsbury Creek, between Grand Avenue and BNSF Railroad. This is part of Fairmont Park.

If this is acceptable to the Commission, suggested resolution to consider is:

Whereas Grand Avenue is having expanded sidewalks, resulting in MPCArequired storm water treatment, and;

Whereas proposed storm water treatment Ponds 1 and 2 are in park land.

Therefore the Parks and Recreation Commission recommends granting temporary construction easement for MnDOT and permanent storm sewer easement for City of Duluth according to Exhibit A, Pond 1- Storm Water Treatment.

Therefore the Parks and Recreation Commission recommends granting temporary construction easement for MnDOT and permanent storm sewer easement for City of Duluth according to Exhibit A, Pond 2- Storm Water Treatment.



21 West Superior Street, Suite 500 Duluth, Minnesota 55802 218 727-8446 Fax 218 727-8456 www.LHBcorp.com

10/08/2014

TH 23 (Grand Ave) State Project 6910-89

#### **Drainage Summary**

The proposed project is a mill and overlay of TH 23 (Grand Ave) from Idaho St to I-35 in a two year construction schedule (2015/2016). The project will improve pedestrian access and safety along Grand Ave. Due to added sidewalks and other features, the project will create a total of 3.71 acres of new impervious surface, requiring treatment of stormwater. The disconnected nature of the new impervious surface in the form of new walks and drives/entrances, makes it unfeasible to treat at the individual locations, therefore treatment ponds (Pond 1 and Pond 2) have been located in watersheds of special waters (trout streams) and runoff from existing impervious surfaces will be treated. In addition, the city has received a grant to construct a storm pond (Pond 3) to treat the existing parking lot for the Lake Superior Zoo. All ponds are designed to treat the first 1" of runoff from the impervious with high flows being bypassed to existing or proposed storm sewer. All ponds are designed as biofiltration ponds to maintain cool water required by trout streams.

#### **Pond 1-Knowlton Creek**

The pond near Knowlton Creek will be located near Sta. 373+00 on the left side of Grand Ave. The pond will receive runoff from Grand Ave as will as the residential neighborhood between 85<sup>th</sup> Ave W and 83<sup>rd</sup> Ave W. The total drainage area to the pond is approximately 5.6 Ac of which approximately 2.1 Ac is existing impervious.

Runoff to be treated will be directed to the pond using a manhole constructed over the existing storm sewer. The manhole will direct small runoff events to the pond, while allowing large runoff events to bypass the pond down the existing storm sewer.

The stormwater will be pretreated in a forebay before discharging to the main filter pond. The bottom of the pond is comprised of engineered soils to allow for a fast drawdown time that will treat the stormwater before entering a below grade, perforated 48" HDPE draintile system. The 48" HDPE draintile system will discharge through a 6" outlet near the crown of the pipe, which will allow the stormwater to either infiltration or cool before being discharged to Knowlton Creek. State Project 6910-89 Page 2 10/08/2013

#### **Pond 2-Kingsbury Creek**

The pond near Kingsbury Creek will be located near sta. 410+00 on the right side of Grand Ave. The pond will receive runoff from Grand Ave and residential areas from between 75<sup>th</sup> Ave W and 78<sup>th</sup> Ave W. The total drainage area to the pond is approximately 15.5 Ac of which approximately 5.89 Ac is existing impervious.

The existing runoff from this area runs in a storm sewer system in a 21" RCP on the north side of the road discharging in the culvert at Kingsbury Creek. The project will replace the culvert for Kingsbury Creek with a bridge which will require the discharge of the system in a different location. Runoff will be conveyed into Pond 2 by reconstructing an existing manhole to divert low flows to the pond, while bypassing the higher flows in the existing 21" storm sewer. The new outlet for the 21" storm sewer will be constructed discharging near the outlet for the pond directly to Kingsbury Creek.

Pond 2 will pretreat the runoff in a forebay before entering the main treatment cell. The treatment cell is designed to perform the same as Pond 1, with engineered filter media in the bottom of the pond and a below grade, perforated 48" HDPE draintile system to hold, cool, and possibly infiltrate the stormwater before discharging to Kingsbury Creek. The pond will discharge through a 6" pipe installed into the 48" draintile near the crown of the pipe.

#### Pond 3-72<sup>nd</sup> Ave W

Pond 3 will be constructed using funds obtained through a Great Lakes Shoreline Cities Green Infrastructure Grant, to be used for the construction of stormwater treatment for the runoff from the existing Lake Superior Zoo parking lot. The pond will also treat the runoff from 72<sup>nd</sup> Ave W. The total drainage area will be approximately 2.4 Ac of which approximately 1.4 Ac is impervious.

Discharge from the parking lot drains via overland flow to the south and east. The runoff will be conveyed to Pond 3 in storm sewer being constructed for the 72<sup>nd</sup> Ave W reconstruction. As with the other ponds low flow events will be treated in the pond and high flow events will be bypassed to the proposed storm sewer system.

Pond 3 will be pretreated in a pretreatment vault chamber, which will remove large sediment and floatable debris. The pond is divided into three smaller cascading cells that are being designed to have an enhanced landscaped aesthetic and environmental features. The cells are designed to filter the stormwater with engineered soils. The pond will have 4" draintile to allow the pond to drawdown and provide some degree of thermal mitigation. Pond 3 will discharge into the existing storm sewer for TH 23, which ultimately discharges to Kingsbury Creek.

State Project 6910-89 Page 3 10/08/2013

If you have any questions or need additional information, please contact LHB at your convenience.

LHB,

Nata & Ano

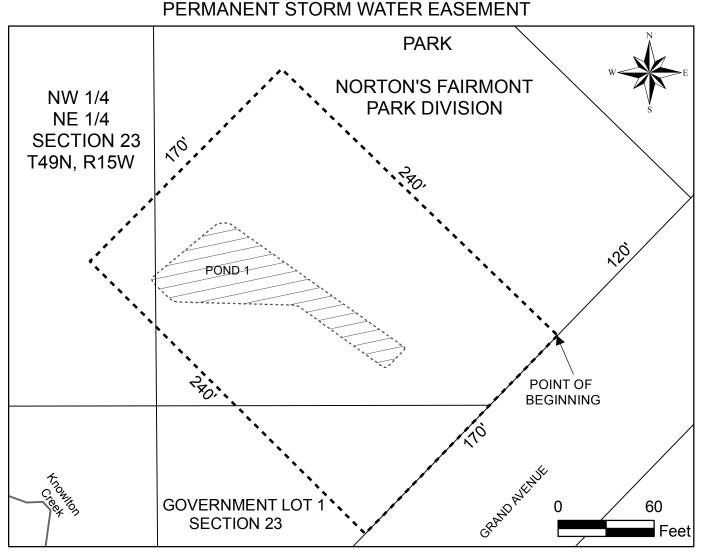
Nathan J. Bruno, P.E. Civil Project Engineer (218) 279-2466 nathan.bruno@lhbcorp.com

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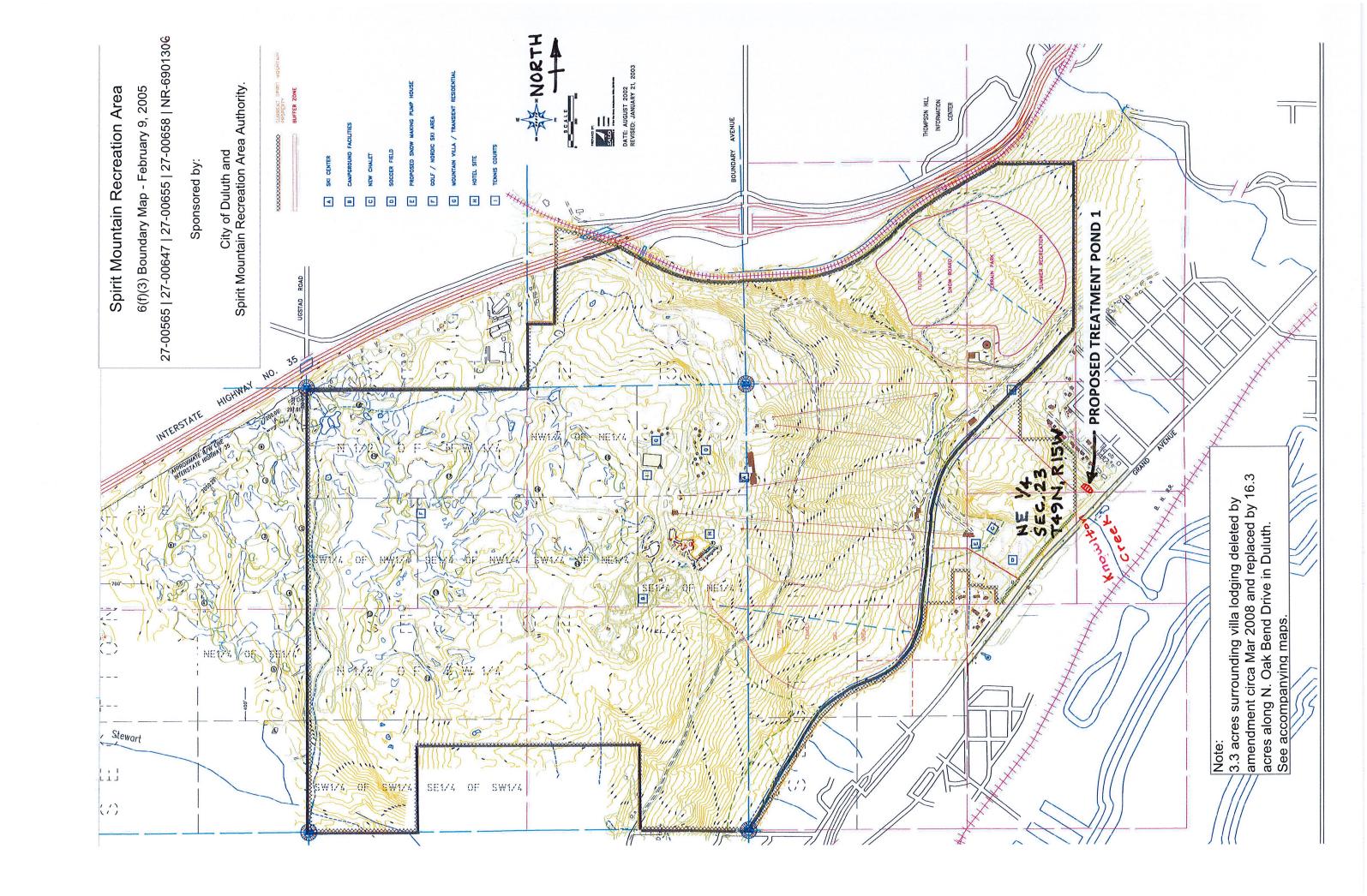
# EXHIBIT A

# POND 1 - STORM WATER TREATMENT

## **TEMPORARY CONSTRUCTION EASEMENT THROUGH DECEMBER 1, 2016**



That part of Park in Nortons Fairmont Park Division, according to the recorded plat thereof, and that part of Northwest Quarter of Northeast Quarter of Section 23, Township 49 North, Range 15 West, and that part of Government Lot 1 of said Section 23, commencing at the intersection of the northeast line of said Park and the northwest line of Grand Avenue; thence southwest 120.00 feet along said line of Grand Avenue to the Point of Beginning; thence northwest deflecting right 90 degrees 0 minutes 0 seconds 240.00 feet; thence southwest deflecting left 90 degrees 0 minutes 0 seconds 170.00 feet; thence southeast deflecting left 90 degrees 0 minutes 170.00 feet to said northwest line of Grand Avenue; thence northeast 170.00 feet along said northwest line of Grand Avenue to Point of Beginning.

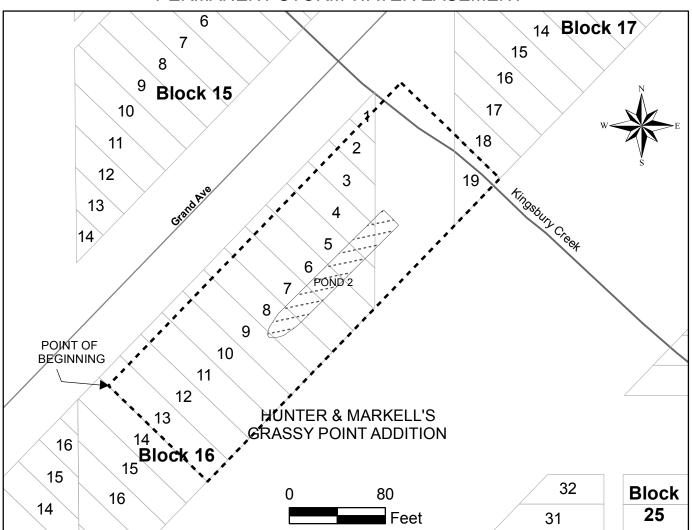




# EXHIBIT A

## POND 2 - STORM WATER TREATMENT

### **TEMPORARY CONSTRUCTION EASEMENT THROUGH DECEMBER 1, 2016**



PERMANENT STORM WATER EASEMENT

That part of Blocks 16 and 17, Hunter & Markells Grassy Point Addition, according to the recorded plat thereof, beginning at the intersection of the southeast line of Grand Avenue and the northwesterly extension of the southwest line of Lot 13, Block 16; thence northeast along said line of Grand Avenue to the intersection with the northwesterly extension of the northeast line of Lot 19, Block 17; thence southeast along said northeast line of Lot 19 and its extension to the east corner of lot 19; thence southwest along the southeast lines of Block 16 and 17 and its extension to the south corner of said Lot 13; thence northwest along said southwest line of Lot 13 to Point of Beginning.

