

Permit Application Review

Permit No. 2019-01
Received complete: March 14, 2019

Applicant: Kristina Smitten; Pentagon North, LLC.
Consultant: Pat Sveum; Pierce Pini and Associates
Project: Exterior Improvements – Pentagon Park North
Location: 4510-4660 West 77th Street: Edina
Rule(s): 3,4,5,11 and 12
Reviewer: BCO

General Background & Comments

The site located along West 77th Street has several office buildings that form the Pentagon Park complex with surface parking used commonly by the tenants of the buildings. These buildings were constructed in the 1960's and developed by Raunhorst Corporation

The project consists of removing and replacing existing parking stalls in front of building entrances to comply with ADA accessible parking requirements. Additional islands for traffic and parking control are to be constructed throughout the parking lot areas. The plaza area between the 4540 and 4620 buildings will be updated. A boardwalk is to be added in front of the buildings at 4550 and 4530.

The project site information is:

- Total Site Area: 27.1 acres
- Existing Total Site Impervious Area: 929,146 square feet (21.3 acres)
- Proposed Site Impervious Area: 920,603 square feet
- Reduction in Site Impervious Area: 8,543 square feet
- 0.9% reduction in the percentage of site impervious area
- Disturbed and reconstructed impervious area: 52,583 square feet
- 5.6% of the on-site impervious area will be disturbed and replaced
- Total disturbed area: 85,958 square feet

The Nine Mile Creek Watershed District's Rule for Redevelopment, Rule 4.2.3, states, if a proposed activity will disturb more than 50% of the existing impervious surface on a parcel or will increase the imperviousness of the parcel by more than 50%, storm water management

will apply to the entire project parcel. Otherwise, the storm water requirements will apply only to the disturbed areas and additional impervious area on the parcel. Since there is a reduction in the site impervious area and 5.6% of the impervious area will be disturbed and replaced, storm water management is required for the disturbed area of 84,958 square feet that includes 52,583 square feet of disturbed and reconstructed impervious area.

The District's requirements for both storm water management and erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and 5000 square feet or more surface area disturbed, Rules 4.2.1a and b and 5.2.1a and b.

Water quality management will be provided within two underground sand filter vault systems to be located in the parking lot northwest of the 4660 building and to the east of the 4570 building. The applicant, through the project agent, has requested that the NMCWD find, based on both poor on-site soils and high groundwater conditions that volume retention to the standard in 4.3.1a of the rules is not practicable or feasible. The geotechnical information submitted, Braun 2007, indicates the underlying on site soil are organic (PT-peat and OH-organic clay) with groundwater ranging between 3 to 5 feet below ground surface. This type of soil with high groundwater conditions are typically not conducive for volume retention through infiltration and typically precludes retention to the standard in District Rule 4.3.1b. Soils (including organic material) with an infiltration rate of 0.06 inches/hour require a significantly large area for compliance with the District's volume retention requirements. The engineer finds that the site qualifies as a Restricted Site (Rule 4.3.2) as defined in the District's Revised Rules, approved April 10, 2018. In addition with the site being approximately 80% impervious under existing conditions other alternatives such as reuse are also not practicable or feasible for volume retention. We are in agreement with the assessment that conditions inherent to the site precludes providing retention to the standard in paragraph 4.3.1a. Rate control, provided with the reduction of the on-site impervious area, and water quality management complying with the requirements of section 4.3.1b and c of the revised rules is still required.

The northern limits of the property abuts the former Fred Richards golf course. The City of Edina, as part of their development planning of "The Fred", has determined the wetland boundaries and wetland types on the City property. There are two wetlands, #6 and #10 as shown on the attached figure, that have been identified as medium value wetlands that are located along the northern limits of the Pentagon property. The requirements of the District's buffer rule, 3.4, requires a minimum 20 foot and 40 foot average buffer to be provided for a medium value wetland. The wetland boundary of Wetland 10 extends onto Pentagon North property and is within approximately 5 feet of the back-of-curb of the northern parking lot. The boundary of wetland #6 and the required 20 foot buffer is totally on City property The 40 foot buffer extends on-to Pentagon Park property but is not affected or impeded by existing conditions. Because of the existing site constraints, existing surface parking, a variance for compliance with Rule 3.4 is being requested for compliance with providing the both the 20 foot minimum and 40 foot average buffer for Wetland #10. For both wetland, the area between the wetland and the limits of the existing parking lot is currently natural and heavily vegetated. The buffer requirements for Wetland #6 are met.

Silt fence, filter logs, inlet protection and a rock construction entrances are to be installed to provide erosion control.

Exhibits

1. Permit Application dated January 17, 2019.
2. Preliminary Plans dated February 8, 2019 prepared by Pierce Pini and Associates.
3. Storm Water Management Technical Memo and calculations dated February 8, 2019 and revised March 7 and 14, 2019, prepared by Pierce Pini and Associates.
4. Geotechnical Report dated July 12, 2007 prepared by Braun Intertec.
5. E-mail correspondence dated January 30, 2019 summarizing 3 items that needed to be addressed/submitted for the application to be complete. E-mail correspondence dated February 7, 2019 discussing the wetland buffer requirements for the off-site wetlands within the City property north of the Pentagon North property and requirements for the applicant.

The project submittal is complete.

3.0 Wetland Management

There are two wetlands, #6 and #10 as shown on the attached figure, that have been identified as medium value wetlands that are located along the northern limits of the Pentagon property, primarily within City property. The requirements of the District's buffer rule, 3.4, requires a minimum 20 foot and 40 foot average buffer to be provided for a medium value wetland. The wetland boundary of Wetland 10 extends onto Pentagon North property and is within approximately 5 feet of the back-of-curb of the northern parking lot. The portion of the 40 foot average buffer required on the Pentagon North property would be 29,000 square feet. Because of the limits of the existing parking lot, a buffer area of 13,300 square feet is to be provided, a shortfall of 15,700 square feet requiring a variance. The 20 and 40 foot buffer required for Wetland #6 is provided. For both wetlands, the adjacent areas of the property where buffer is required will not be disturbed by the proposed work and the area between the wetland and the limits of the existing parking lot is currently in a natural condition and heavily vegetated. The maintenance declaration for the permit will require that the buffer area be managed in a naturalized condition to encourage growth of native vegetation and eliminate invasive species.

4.0 Stormwater Management

As previously stated, the geotechnical information provided indicates that the on-site underlying soils are organic (Peat and Organic clay) with groundwater conditions ranging from 3 to 5 feet beneath the ground surface. Neither of these conditions provide a suitable condition for volume retention through infiltration. In addition with the site being approximately 80% impervious under existing conditions other alternatives such as reuse are also not practicable or feasible for volume retention. The Nine Mile Creek Watershed District engineer concurs that these conditions inherent to the site preclude retention to the standard in paragraph 4.3.1a. or 4.3.2. The rate control requirement is being complied with the reduction in the on-site impervious area on the project site. Water quality, as discussed in the following paragraph, is to be provided within two sand filtration vaults located in the northwest corner of the site and in the east central portion of the site.

The District's water quality criterion requires a 60% annual removal efficiency for phosphorus and 90% annual removal efficiency for total suspended solids. The results of a P8 model submitted indicates that water quality filtration vault #1 will provide an annual removal

efficiency of 90.2% for total suspended solids (930 lbs.) and an annual removal efficiency of 60.1% for total phosphorus (2.0 lbs.). Vault #2 will provide an annual removal efficiency of 91.4% for total suspended solids (273 lbs.) and an annual removal efficiency of 62.6% for total phosphorus (0.6 lbs.). Rule 4.3.1c is met.

Rule 4.3.3c states, all new and reconstructed buildings must be constructed such that the low floor is at least two feet above the 100-year high water elevation or one foot above the emergency overflow of a constructed facility.

Building West 77 th Street	Finished Floor Elevation	100-year flood elevation	Difference - feet
4570	826.4	Vault #1: 824.2	2.4
4660	824.9	Vault #2: 818.7	6.2
4640	825.0	Vault #2: 818.7	6.3

The entryway for 4570 is actually on the opposite side of the building from the vault location. Rule 4.3.3 is met.

District Rule 4.3.3 states that all new and reconstructed buildings must be constructed such that no opening where surface water can enter the structure is less than two feet above the 100-year high water elevation of an adjacent facility or waterbody. The finished floor elevations shown in the above table are also the low openings of the structures. This requirement of paragraph 4.3.3 is met.

In accordance with Rule 4.3.4, a post-project chloride management plan must be provided that will, 1) designate an individual authorized to implement the chloride-use plan and 2) designate a MPCA certified salt applicator engaged in the implementation of the chloride-use plan for the site.

5.0 Erosion and Sediment Control

The submitted erosion and sediment control plan includes silt fence at the limits of construction, sediment control logs, inlet protection and rock construction entrances at the entryway onto the site. The project contact is Pat Sveum, Pierce Pini and Associated.

10.0 Variances and Exceptions

A variance request for compliance with Rule 3.4.1b (attached) has been prepared by Pierce Pini and Associates on behalf of the applicant to address Rules 10.1-10.4. The variance request is for compliance with the required wetland buffer requirements from the wetland boundary of the riparian Wetland #10. The location of the existing parking lot does not allow for compliance with the 20 foot minimum or the 40 foot average buffer requirement. This existing condition will not change as a result of the project. The alternative to not approving the variance would be to request the applicant remove a portion of the existing parking lot for compliance with the District's buffer requirements. This has not been done in the past nor is the engineer recommending this be required of the applicant.

11.0 Fees

Fees for the project are:

Rules 2.0-6.0 \$1,500

12.0 Financial Assurances

Financial Assurances for the project are:

Rule 4.0: Chloride Management: \$5000

Rule 5: Silt fence: 12,100 L.F. x \$2.50/L.F. = \$30,000

Sediment logs: 6,000 L.F. x \$5/L.F. = \$30,000

Inlet Protection: 19 x \$100/each = \$1900

Site restoration: 2.1 acres x \$2500/ acre = \$5,250 \$67,150

Contingency and Administration \$28,950

Findings

The proposed project includes the information necessary, plan sheets and erosion control plan, for review.

1. Rules 4 and 5 are met.

Recommendation

Approval, contingent upon:

1. General Conditions
2. Financial Assurance in the amount of \$101,100 - \$96,100 for erosion control and site restoration and \$5,000 for compliance with the chloride management requirements.
3. Submission of documentation that a drainage easement over the stormwater-management facility has been submitted to Edina (4.5.4i), if such easement is required by the city.
4. A receipt showing recordation of a maintenance declaration for the on-site storm water management facility and wetland buffer. A draft of the declaration must be approved by the District prior to recordation.

By accepting the permit, when issued, the applicant agrees to the following stipulations:

1. Per Rule 4.5.6, an as-built drawing of the storm water facilities for the water quality filtration vaults conforming to the design specifications as approved by the District must be submitted.
2. Submission of a plan for post-project management of Chloride use on the site. The plan must include 1) the designation of an individual authorized to implement the chloride use plan and 2) the designation of a Minnesota Pollution Control Agency certified salt applicator engaged in the implementation of the chloride-use plan for the site. The release of the \$5,000 of the financial assurance required for the chloride-management plan requires that chloride-management plan has been provided and approved by the District's Administrator.
3. For the release of the \$96,100 financial assurance required in Recommendation #2, Rule 12.4.1a requires demonstration and confirmation that the site has been vegetated and

stabilized to prevent erosion and sedimentation per subsection 5.3.3 and that erosion and sediment controls have been removed.

Board Action

It was moved by Manager _____, seconded by Manager _____ to approve permit application No. 2019-01 with the conditions recommended by staff.

Permit #: 2019-01
Project Name: Pentagon North Exterior Improvements; 4510 – 4660 West 77th Street: Edina
Approval Date: March 20, 2019

General Provisions

1. All temporary erosion control measures shown on the erosion and sedimentation control plans must be installed prior to commencement of surface or vegetation alteration and be maintained until completion of construction and vegetation is established as determined by NMCWD.

If silt fence is used, the bottom flap must be buried and the maximum allowable spacing between posts is 4-foot on center. All posts must be either 2-inch x 2-inch pine, hardwood, or steel fence posts. If hay bales are used, all bales must be staked in place and reinforced on the downstream side with snow fence.

2. All areas altered because of construction must be restored with seed and disced mulch, sod, wood fiber blanket, or be hard surfaced within two weeks after completion of land alteration and no later than the end of the permit period.
3. Upon final stabilization, the permit applicant is responsible for the removal of all erosion control measures installed throughout the project site.
4. At the entryway onto the site, a rock filter dike being a minimum of two feet in height and having maximum side slopes of 4:1 must be constructed. This rock filter dike will enable construction traffic to enter the site and also provide an erosion control facility.
5. If dewatering is required and sump pumps are used, all pumped water must be discharged through an erosion control facility prior to leaving the construction site. Proper energy dissipation must be provided at the outlet of the pump system.
6. The NMCWD must be notified a minimum of 48 hours prior to commencement of construction.
7. The NMCWD, its officers, employees and agents review, comment upon, and approve plans and specifications prepared by permit applicants and their consultants for the limited administrative purpose of determining whether there is reasonable assurance that the proposed project will comply with the regulations and criteria of the NMCWD. The determination of the NMCWD that issuance of this permit is appropriate was made in reliance on the information provided by the applicant.
8. The grant of this permit shall not in any way relieve the permittee, its engineer, or other professional consultants of responsibility, nor shall it make the NMCWD responsible for the technical adequacy of the engineer's or consultant's work. The grant of this permit shall not relieve the permittee from complying with all conditions and requirements of the permit which shall be retained by the permittee with the permit.
9. The issue of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
10. This permit is permissive only. No liability shall be imposed upon the NMCWD or any of its officers, agents or employees, officially or personally, on account of the granting of this permit or on account of any damage to any person or property resulting from any act or omission of the permittee or any of its agents, employees, or contractors.

11. In all cases where the doing by the permittee of anything authorized by this permit shall involve the taking, using, or damaging of any property, rights or interests of any other person or persons, or of any publicly-owned lands or improvements or interests, the permittee, before proceeding therewith, shall obtain the written consent of all persons, agencies, or authorities concerned, and shall acquire all necessary property, rights, and interest.
12. The permit is transferable only with the approval of the NMCWD (see NMCWD Rule 1.0). The permittee shall make no changes, without written permission previously obtained from the NMCWD, in the dimensions, capacity, or location of any items of work authorized by this permit.
13. The permittee shall grant access to the site at all reasonable times during and after construction to authorized representatives of the NMCWD for inspection of the work authorized by this permit.
14. This permit may be terminated by the NMCWD at any time deemed necessary in the interest of public health and welfare, or for violation of any of the provisions of this permit.
15. Construction work authorized under this permit shall be completed on or before date specified above. The permittee may, in writing, request that the NMCWD extend the time to complete the project in accordance with NMCWD Rule 1.0.



Permit No.2019-01

Is hereby issued to Kristina Smitten, Pentagon North LLC., subject to the conditions specified in the attached form:

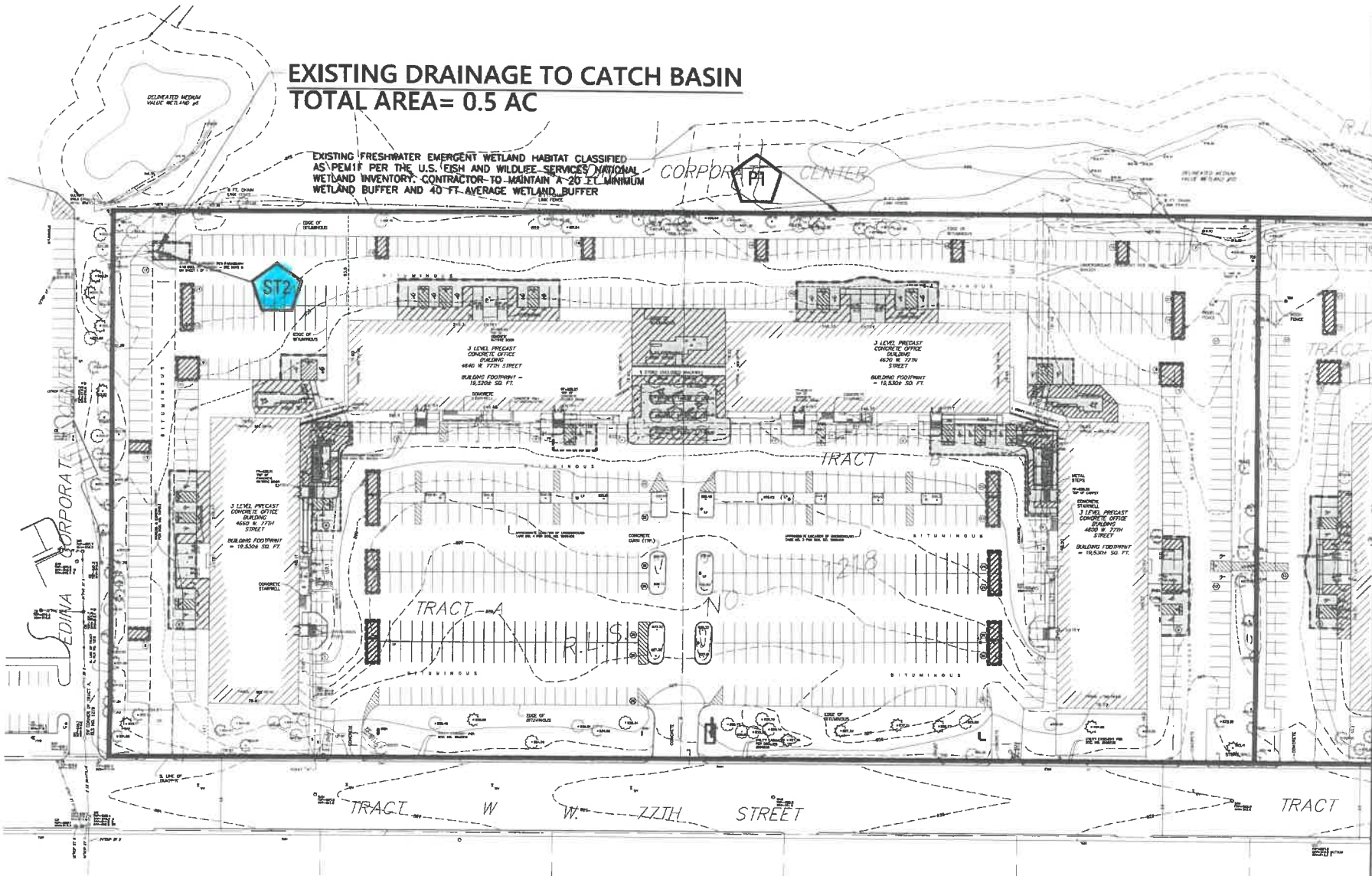
For the exterior improvement to the existing buildings located at 4510 - 4660 West 77th Street in Edina.

Jodi Peterson, Chair
Nine Mile Creek Watershed District

This permit expires on: April 1, 2020

**EXISTING DRAINAGE TO CATCH BASIN
TOTAL AREA= 0.5 AC**

EXISTING FRESHWATER EMERGENT WETLAND HABITAT CLASSIFIED AS P/EM1F PER THE U.S. FISH AND WILDLIFE SERVICES NATIONAL WETLAND INVENTORY. CONTRACTOR TO MAINTAIN A 20 FT. MINIMUM WETLAND BUFFER AND 40 FT. AVERAGE WETLAND BUFFER

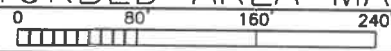


PENTAGON NORTH DRAINAGE EXHIBIT
PROJECT #18-042
W 77TH ST. EDINA MN



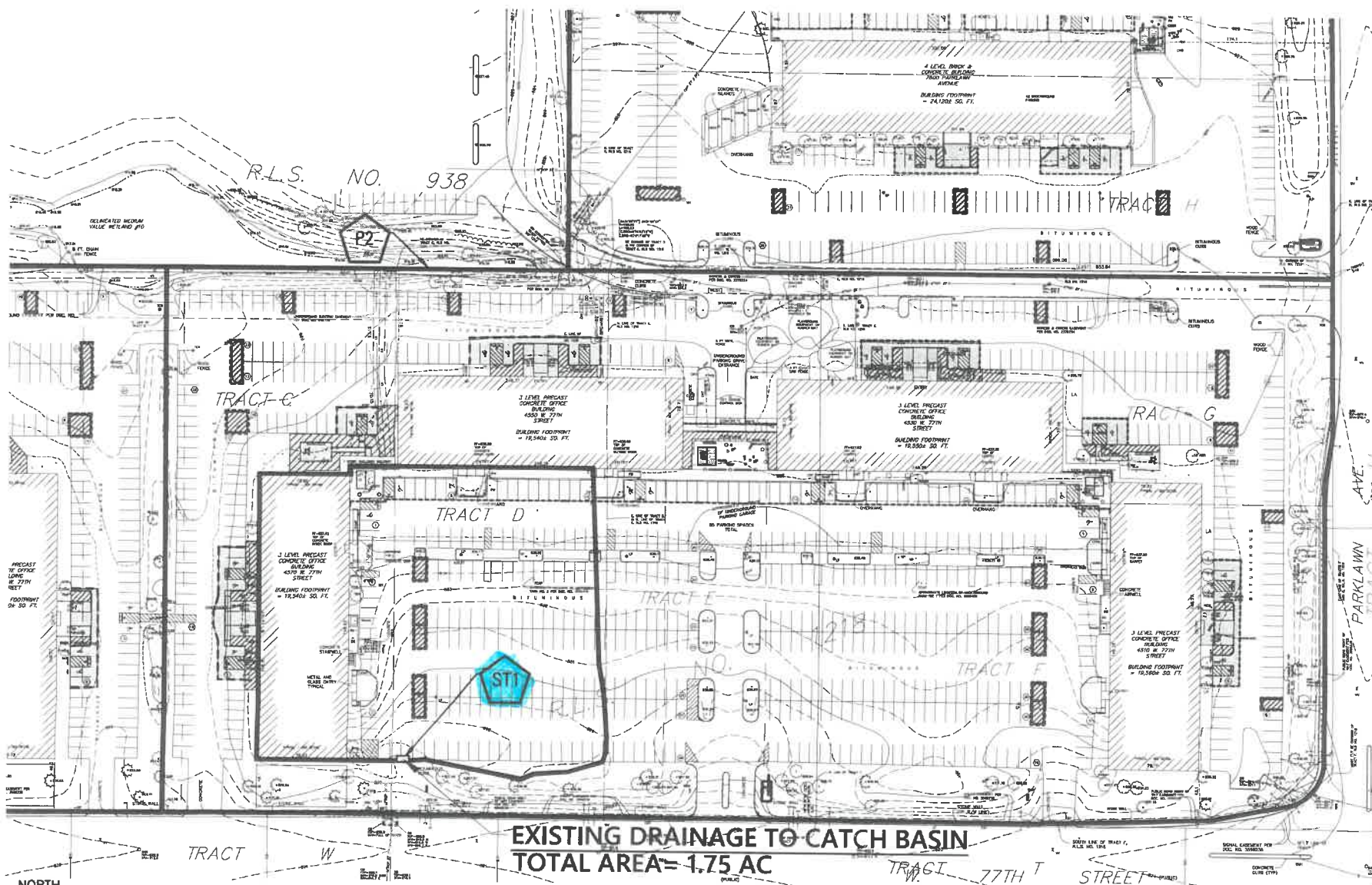
3
C

DISTURBED AREA MAP (WEST QUAD 4600'S)



1"=80'

PIERCE PINI &
ASSOCIATES
9298 CENTRAL AVENUE NE
SUITE 512
BLAINE, MN 55434
TEL 763.337.1311
FAX 763.337.1394

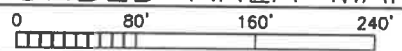


PENTAGON NORTH DRAINAGE EXHIBIT
PROJECT #18-042
W 77TH ST. EDINA MN



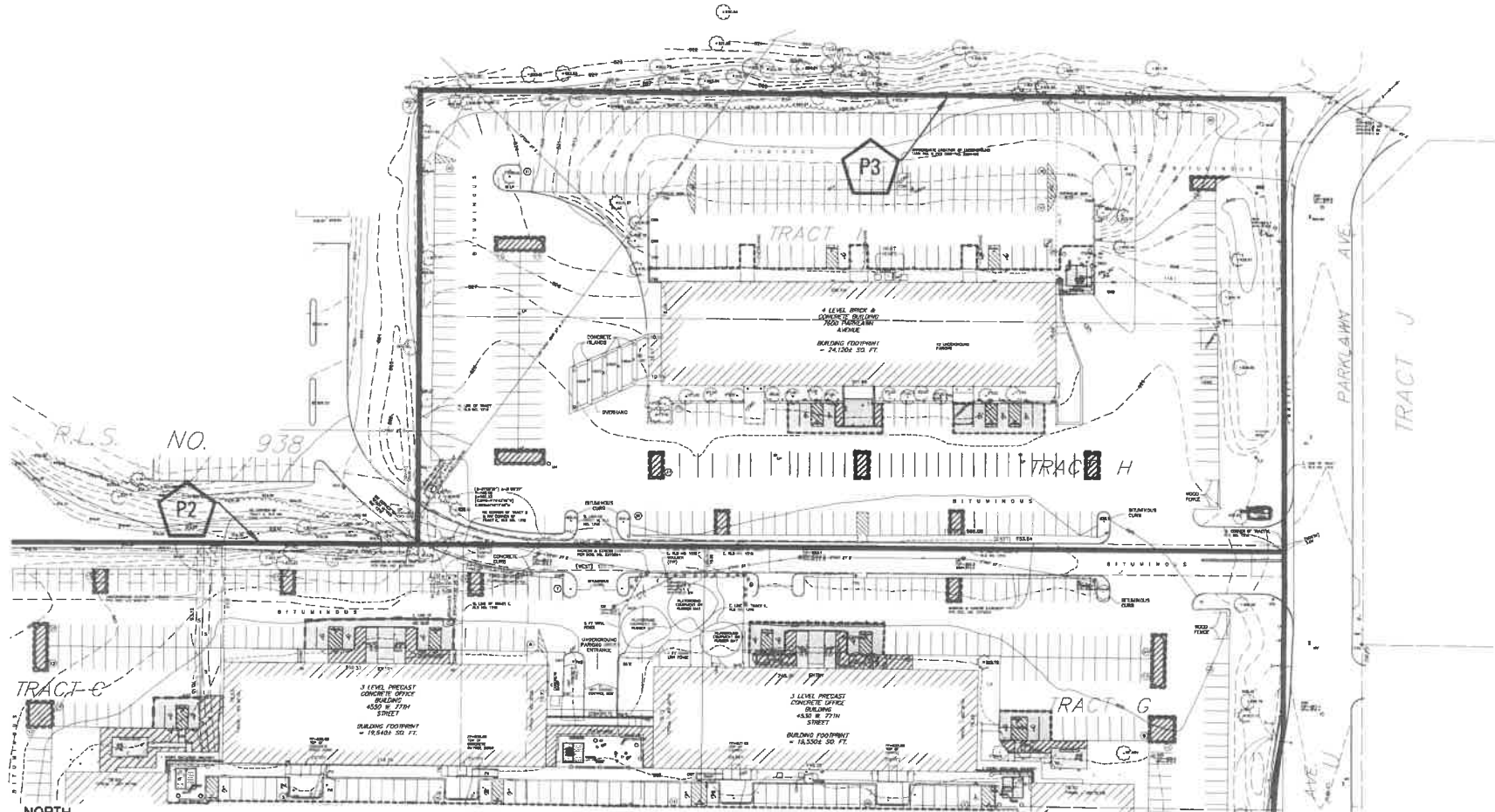
3
B

DISTURBED AREA MAP (EAST QUAD 4500'S)



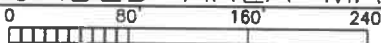
1" = 80'

PENTAGON NORTH DRAINAGE EXHIBIT
PROJECT #18-042
W 77TH ST. EDINA MN



3
D

DISTURBED AREA MAP (7600 PARKLAWN AVE)



1"=80'

- 2. Water Quality Requirement** – A MIDS model was developed for the project. The model results indicate an annual TSS load of 691.6 lbs for the site. The Kraken Filtration Vault has a combined annual TSS removal of 666.7 lbs. This results in an annual TSS removal of 96.4%. The model indicates a combined annual Total Phosphorus load of 3.807 lbs. The Kraken Filtration Vault has a combined annual TP removal of 2.566 lbs. This results in an annual TP removal of 67.4%. These numbers are based on empirical data provided by the Kraken Filter System manufacturers (Bio Clean/Forterra Company). A conditional approval letter and financial assurance will be provided to the Watershed to ensure that the manufacturer will complete a yearlong performance test to demonstrate that the system meets the Watershed's treatment requirements.
- 3. 100-Year high water level (HWL) and 48 hr Drawdown Time** – The HWL for the 100-year storm event for the East Quad Kraken Filtration Vault is 834.44 feet. The HWL for the 100-year storm event for the West Quad Kraken Filtration Vault is 820.48 feet. Both systems drawdown within 48 hours.

Sediment and Erosion Control

Silt fence, catchbasin inserts and bio-logs will be placed within the site and along the perimeter of the disturbed construction area prior to construction to prevent sediment displacement from the site into the city street and storm sewer. A rock construction entrance will be established and site street sweeping performed throughout construction to address tracking from the site. Soils stockpiles will be covered when not used for more than 48 hours or temporarily seeded to prevent windblown sediment from transporting off-site.

Permanent erosion control will consist of sod and pavement. Slopes and swales will be stabilized with a heavy-duty erosion control mat designed for the intended area.

A Storm Water Pollution Prevention Plan has been prepared and will be implemented for the project.

Wetland Delineation Buffer Responses

The Board of Managers may consider requests for variances from strict compliance with the requirements of a District rule. To grant a variance, the Board of Managers must find, based on demonstration by the applicant:

1. That because of unique conditions inherent to the subject property, which do not apply generally to other land or structures in the district, undue hardship on the applicant, not mere inconvenience, will result from strict application of the rule;
Response: The existing parking lot has been in place before the 2008 watershed district rules about wetland buffer variance. The wetland is also within an existing golf course and is separated from our property by an existing vegetated barrier. Since the parking lot was already in the buffer zone before the rules were made we feel that this existing unique condition meets the requirements for a variance with respects to the property that

Pentagon Park Renovation
Stormwater Narrative
PPA Project #18-042

fall within said buffer zone. For the reasons stated above we feel that requiring a wetland buffer for this property in this instance is not practicable and/or feasible.

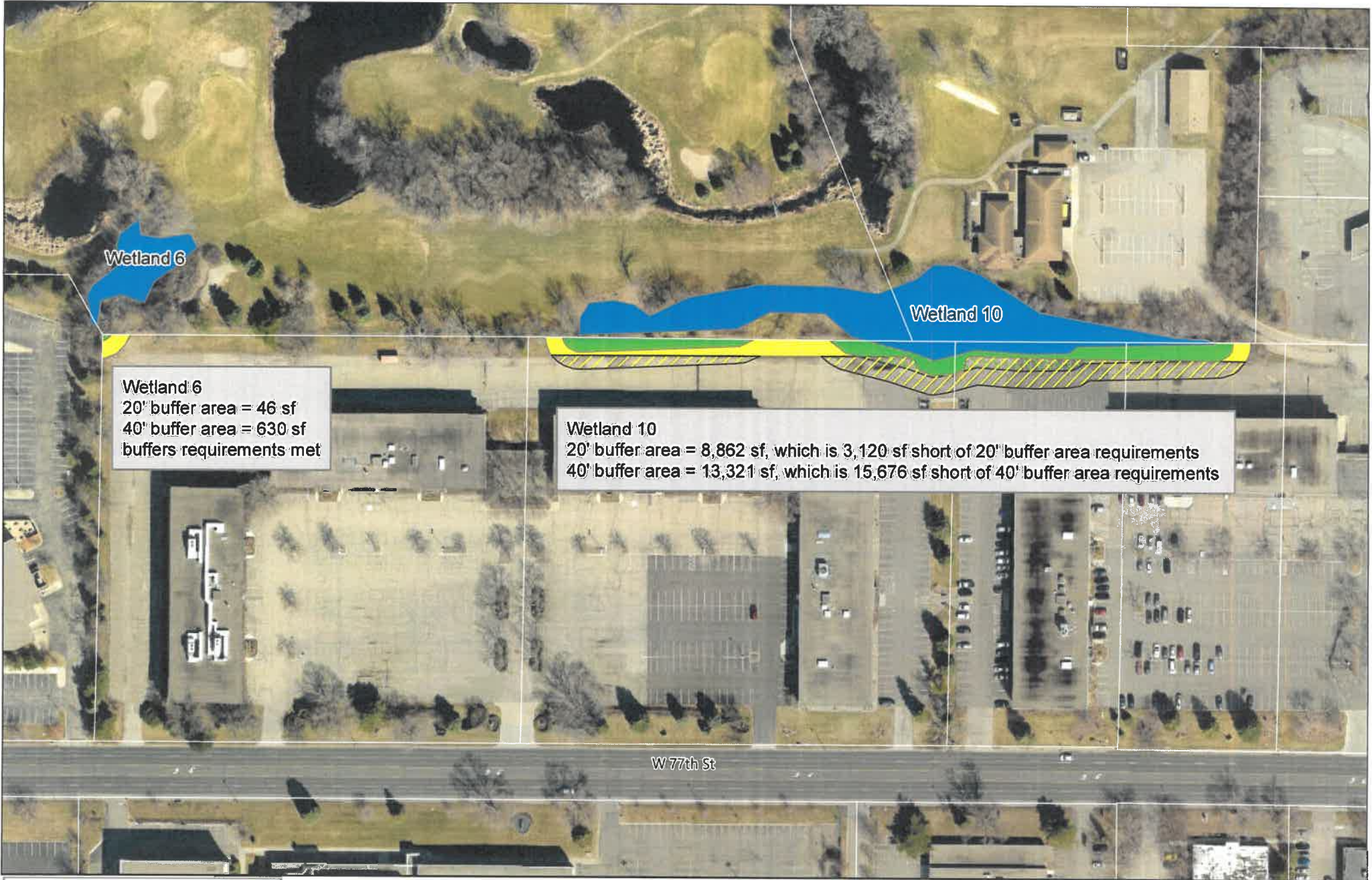
2. That the hardship was not created by the landowner, the landowner's agent or representative, or a contractor, and is unique to the property. Economic hardship alone may not serve as grounds for issuing a variance if any reasonable use of the property existing under the terms of the District rules;

Response: As noted above the property that falls within the wetland and the wetland itself are existing conditions that were developed before the watershed districts 2008 rules regarding buffer zones. This unique circumstance was not created by the property owner and has existed prior to the watershed district's buffer rules. Due to this unique circumstance of this property, requiring the property to meet today's watershed district buffer rules is not practicable and or feasible without causing undue hardship onto the property owner.

3. That the activity for which the variance is sought will not materially adversely affect water resources, flood levels, drainage or the general welfare in the District; and
Response: The existing property stormwater discharges to the wetland currently. The improvements to the property will not impend the existing property drainage but actually reduce the runoff rate to the wetland due to the removal of some areas of existing bituminous pavement and replacing those areas with previous vegetation.

4. That there is no feasible and prudent alternative to the proposed activity requiring a variance.

Response: Due to the area of the property that falls within the buffer zone to meet the buffer requirements nearly 70 parking stalls and parts of the drive aisle for the parking lots would need to be removed to meet the watershed district buffer rules. Due to the amount of disturbance this would cause there would be no feasible way to replace the lost parking stalls and have access to parking stalls outside the buffer zone without access to the drive aisle. For these reasons we feel there is no practical or feasible way to meet the watershed districts buffer rules for the proposed activity for this property.



Wetland 6






Wetland 10

Wetland 6
 20' buffer area = 46 sf
 40' buffer area = 630 sf
 buffers requirements met


Wetland 10
 20' buffer area = 8,862 sf, which is 3,120 sf short of 20' buffer area requirements
 40' buffer area = 13,321 sf, which is 15,676 sf short of 40' buffer area requirements

W 77th St

Parcel Boundaries

-  20 ft buffer not met
-  40 ft buffer not met
-  Potential 20 ft buffer within parcel
-  Potential 40 ft buffer within parcel
-  Wetland

N 2015 Aerial Imagery



0 75 150 300
 Feet

Potential Wetland Buffers
 Pentagon Park, Edina