

Permit Application Review

Permit No. 2019-85 Modified
Received complete: February 25, 2020

Applicant: Dave Young; United Properties
Consultant: David Knaeble; Civil Site Group
Project: Cherrywood Pointe – Phases 1 and 2
Location: 5501 and 5601 American Boulevard West: Bloomington
Rule(s): 4,5,11 and 12
Reviewer: BCO

General Background & Comments

The Cherrywood Pointe redevelopment is proposed on a 7.2 acre site is located at the intersection of Normandale Lake Boulevard and American Boulevard West in Bloomington. The site is currently vacant however was the location of the former corporate headquarters of Jostens – two one story buildings and surface parking (approximately 3.7 acres of impervious area) occupied the site. The buildings and parking have been removed and no interim use has been legally or practically established. Under the NMCWD definition of “existing conditions” the proposed land disturbing activities are analyzed against the previously developed site conditions: i.e. against the previously established developed use and condition of the parcel.

The applicant proposes to undertake the redevelopment of the site in two phases. Phase 1 will involve the construction of a 118 unit, 4-story, senior living apartment building on the eastern parcel and grading of the entire site along with the installation of the infrastructure for the eastern portion of the site. Phase 2 will be the construction of a 137 unit, 5-story, senior apartment building on the western portion of the site. Phase 1 construction, earlier submitted, reviewed and approved by the District, began in the fall of 2019 with Phase 2 construction planned for the spring of 2020. The proposal now submitted is to modify the existing permit to include the Phase 2 construction activities and to request a modification in the proposed management of stormwater based on the additional geotechnical testing information collected for the site. The site is to remain as two separate platted lots. Under the redevelopment (4.2.3) of the Stormwater Management Rule, “[a]ctivity subject to rule on a parcel or adjacent parcels under common or related ownership be considered in the aggregate, and the requirements applicable to the activity under this rule will be determined with respect to all development that has occurred on the site or on adjacent sites under common or related ownership.” Further, the common scheme of development provision (4.2.5) requires the changes to impervious surface and resulting runoff within the site be considered in aggregate with the currently

proposed work. Therefore, both Phases of the work will be analyzed for purposes of compliance with the NMCWD stormwater requirements.

The utilities for the site have been sized to accommodate the anticipated future additional redevelopment of the entire site.

The total project site information is:

- Total Site Area: 314,984 square feet (7.23 acres)
- Existing Total Site Impervious Area: 161,516 square feet
- Proposed Site Impervious Area: 195,421 square feet
- Impervious Area Exempt as a linear project (R-O-W Construction): 9,483 square feet
- Increase in Site Impervious Area: 33,905 square feet
- 21.0% increase in the percentage of the total site impervious area
- Total disturbed area: 337,567 square feet (7.75 acres – includes areas disturbed within R-O-W)

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 the entire site is to be disturbed, storm water management is required for the disturbed area of 337,567 square feet that includes 195,421 square feet of new 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.

For storm water management, four underground storm water management facilities (UGSWMF) and a surface basin are to be constructed on the site.

The earlier Braun Intertec geotechnical report submitted has been supplemented with a February 13, 2020 report providing specific testing for infiltration capacity on the site. Dual-ring infiltrometer tests were taken at two locations where stormwater management is proposed to measure the infiltration capacity of the on-site soils. The testing results indicated an infiltration rate ranging from 0.11 inches/hour to a conservative 0.32 inches/hour. The lower of the two rates was recommended by Braun. An infiltration rate of 0.11 inches/hour would result, in the District's engineer's opinion and answers to questions from the MPCA MIDS calculator flow chart, the site classified as a Restricted Site under District Rule 4.3.2. The applicant has requested that the retention volume on the site be reduced from 1.1-inches of runoff to 0.55 inches of runoff from the regulated impervious area in addition to providing rate control and water quality management complying with the requirements of Section 4.3.1b and c of the revised District rules.

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

Exhibits

1. Permit Application dated July 12, 2019.
2. Preliminary plans submitted July 17th, July 24th August 7th and signed plans dated September 26, 2019 and February 24, 2020 prepared by Civil Site Group.
3. Storm Water Management Plan and calculations dated July 17, 2019 and revised July 29th, August 7th, August 29th, September 17, 2019, February 11, 2020 and February 24, 2020 prepared by Civil Site Group.
4. Geotechnical Report dated June 25, 2015 prepared by Braun Intertec. A supplemental report dated February 13, 2020 prepared by Braun Intertec.
5. E-mail correspondence from the NMCWD engineer, dated July 29th and August 12, 2019, advising the applicant of additional information needed for completing the review. This included preliminary comments on the several project revisions that were submitted prior to the final submittal on September 17th.

4.0 Stormwater Management

Stormwater management, volume retention, rate control and water quality management will be provided within four underground systems and a surface basin located between the proposed building and Normandale Lake Boulevard, on the eastern portion of the site. The 2, 10 and 100-year frequency discharges for existing and proposed conditions are as follows:

Frequency	Existing Discharge to American Blvd. - North c.f.s.	Proposed Discharge to American Blvd. - North c.f.s.
2 year	7.1	<1.0
10 year	13.6	1.3
100 year	29.6	13.5

Frequency	Existing Discharge to American Blvd. - East c.f.s.	Proposed Discharge to American Blvd. - East c.f.s.
2 year	6.8	<1.0
10 year	13.5	1.2
100 year	30.4	8.0

Frequency	Existing Discharge to Normandale Lake Blvd. c.f.s.	Proposed Discharge to Normandale Lake Blvd. c.f.s.
2 year	<1.0	<1.0
10 year	<1.0	<1.0
100 year	1.3	<1.0

Frequency	Existing Discharge to the South c.f.s.	Proposed Discharge to the South c.f.s.
2 year	<1.0	<1.0
10 year	1.1	<1.0
100 year	2.8	2.3

Rule 4.3.1b is met.

The applicant has submitted information in support of a finding that the site qualifies as restricted under subsection 4.3.2 of the NMCWD rules. Given the subsurface conditions and the testing by Braun, as summarized above, the NMCWD engineer concurs that infiltration would require a significant portion of the lot to comply with the requirements of section 4.3.1a of the District rules and the site qualifies as restricted. Under 4.3.2a, an infiltration volume of 8,957 cubic feet would be required from the 195,421 square feet of new site impervious area using a runoff of 0.55-inches from the impervious area (Rule 4.3.2a). The geotechnical report through on-site testing (dual-ring infiltrometer testing) has determined an infiltration rate of 0.11 inches/hour for volume retention through infiltration. An area of 20,283 square feet is required for volume retention using this infiltration rate. The combined site BMP's for the site will provide a retention volume of 9,517 cubic feet (8,957 cubic feet required) and an area of 21,834 square feet (20,283 square feet required) at a depth of 0.44 feet; the maximum allowable depth of inundation for the 8,957 cubic feet of volume retention to be drawn down within 48 hours using an infiltration rate of 0.11 inches/hour.

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 MIDS calculator for the total site indicates the combined systems will provide an annual removal efficiency of 92% for total suspended solids (1,575 lbs.) and an annual removal efficiency of 81% for total phosphorus (7.67 lbs.). Rule 4.3.1c is met.

District Rule 4.3.3 states that all new and reconstructed buildings must be constructed such that the low floor elevation and low opening where surface water can enter the structure is not less than two feet above the 100-year high water elevation of an adjacent facility or waterbody. The finished floor elevation of the proposed buildings is 830.15 M.S.L. and the underground garage floor elevation is 819.48 M.S.L. The following table shows the relationship between the building low floor elevation and the flood elevations of the BMP's:

BMP	100-year H.W. Elevation (M.S.L.)	Low Floor Elevation 819.4 M.S.L.	Distance between the building and BMP (feet)
UGSWMF 1A	826.6	819.5	45
UGSWMF 1B	825.0	819.5	11
UGSWMF 1B2	825.4	819.5	17
UGSWMF 2A	821.5	819.5	43
Basin	820.8	819.5	98

In accordance with section 4.3.3 of the District rules, all structures riparian to inundation areas of constructed or natural stormwater management facilities must be located and elevations must be set according to Appendix 4A, "Low-Floor Elevation Assessment" of the District Rules Referring to Plot 5 of Appendix 4A, with a depth to groundwater of 9.5 feet (the difference between the proposed garage floor elevation of 819.48 M.S.L. and groundwater elevation of 810 M.S.L., the minimum required distance between the structure and a BMP is less than 10 feet. The proposed distances are greater than required by Plot 5 of Appendix 4a.

Rule 4.3.3 also requires that a two foot separation be provided between the flood elevation of a BMP and the low opening of a structure. The following table shows a comparison of these elevations:

BMP	100-year H.W. Elevation (M.S.L.)	Low Opening Elevation M.S.L.	Separation (feet)	Low Opening Description
UGSWMF 1A	826.6	830.2	3.6	Building floor elevation
UGSWMF 1B	825.0	830.2	5.2	Building floor elevation
UGSWMF 1B2	825.4	830.2	4.8	Building floor elevation
UGSWMF 2A	821.5	826.2	4.7	High pt. in driveway to underground garage
Basin	820.8	826.2	5.4	High pt. in driveway to underground garage

The requirements of Rule 4.3.3 as met.

The geotechnical report indicates that groundwater was encountered approximately at elevation 810 M.S.L. The following table shows the relationship between the proposed BMP's and groundwater.

BMP	Bottom Elevation of BMP (M.S.L.)	Groundwater Elevation 810 M.S.L.	Separation (feet)
UGSWMF 1A	816.6	810	6.6
UGSWMF 1B	817.8	810	7.8
UGSWMF 1B2	823.0	810	13.0
UGSWMF 2A	815.5	810	5.5
Basin	819	810	9.0

A minimum separation of 3 feet is required between the bottom of an infiltration facility and groundwater. Rule 4.5.4d (i) is met.

Rule 4.3.1a (i) requires the pretreatment of storm water upstream of an infiltration facility. A sump manhole with a SAFL baffle is to be constructed in the storm sewer system tributary to the underground treatment facilities and the storm water basin.

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 an 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, inlet protection and rock construction entrances at the entryway onto the site. The project contact is David Knaeble, Civil Site Group.

11.0 Fees

Fees for the project are:

Rules 2.0-6.0 \$2,000

On April 18, 2018, the Nine Mile Creek Watershed District (NMCWD) Board adopted an updated permit fee schedule, Resolution 18-03. The fee deposits for submittal of a NMCWD permit application is pursuant to Minnesota Statute 103D.345 and NMCWD rule (Schedule A, found at: <http://www.ninemilecreek.org/wp-content/uploads/Permit-Fee-Schedule-A-update-2018-.pdf>) which allows the District to charge a fee to cover actual costs related to permitting, including site inspections, analysis of the proposed activity, services of the consultants, and compliance assurance.

The adopted fee schedule includes a provision to recover excess cost from a particular permit to cover the District's incurred costs. As stated in the permit fee schedule, for properties ranging in size from 5 to 9.99 acres (which applies to Permit #2019-85 Modified), the District will seek reimbursement for incurred costs over \$3,500.

As part of the original permit application, the District received a permit fee of \$2,000.

As discussed with the permit applicant when the permit modification process was outlined (revised project plans and storm water management plan required to be reviewed for compliance with District rules), the recovery of District costs incurred would be required prior to the modified permit being issued.

12.0 Financial Assurances

Financial Assurances for the total project are:

Rule 4.0 Volume Retention: 20,283 sq. ft. x \$12/sq. ft. = \$243,396	\$243,396
Chloride Management:	\$5,000
Rule 5: Silt fence: 3,100 L.F. x \$2.50/L.F. = \$7,750	
Inlet Protection: 42 x \$100/each = \$4,200	
Site restoration: 7.75 acres x \$2500/ acre = \$19,375	\$31,325

Contingency and Administration

\$117,179

Findings

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

1. Rules 4 and 5 are met.

Recommendation

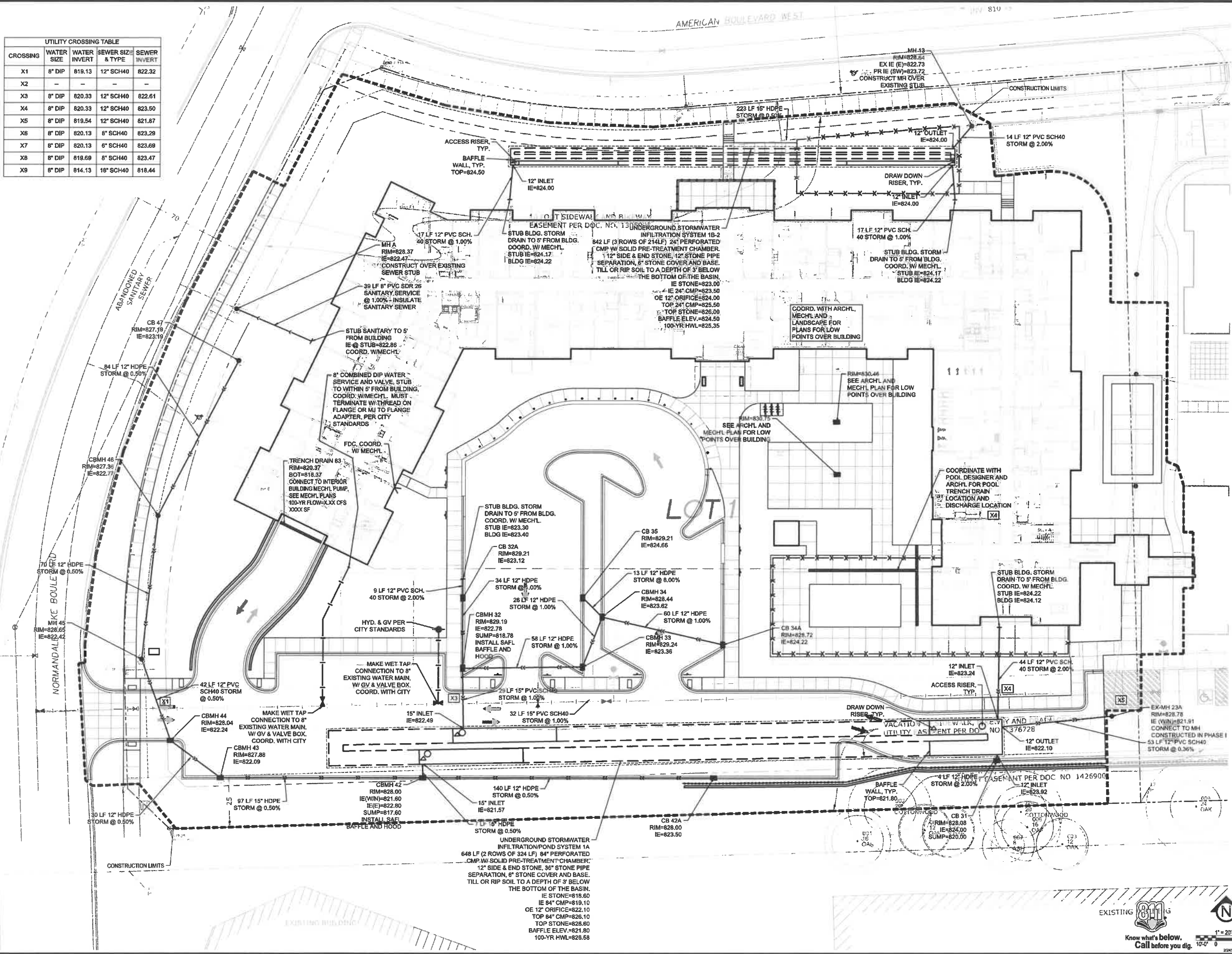
Approval, contingent upon:

1. General Conditions
2. Financial Assurance in the amount of \$396,900 - \$391,900 for stormwater management, erosion control and site restoration and \$5,000 for compliance with the chloride management requirements.
3. Submission of documentation that drainage easements over the stormwater-management facilities have been submitted to Bloomington (4.5.4i), if such easement are required by the city.
4. Given that the impervious surface to be constructed within the phase 2, western portion of the development, while the majority of the proposed stormwater management facilities are located on the eastern parcel (Phase 1), and that the parcels are to remain legally separate, the applicant must submit documentation that drainage, use and maintenance rights have been dedicated. A receipt showing recordation of the necessary rights must be submitted after approval of the documentation by the NMCWD administrator.
5. A receipt showing recordation of a maintenance declaration for the on-site storm water management facilities. 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, including stage volume relationships in tabular format for both the underground system and storm water basin, 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 \$391,900 financial assurance required in Recommendation #2, Rule 12.4.1b requires demonstration and confirmation that the storm water management facilities have been constructed or installed and are functioning as designed and permitted. Verification, through daily observation logs and photographs, must be provided showing the storm water facilities used for volume retention have drawn down within 48 hours from the completion of two 1-inch (approximate) separate rainfall events.

CROSSING	WATER SIZE	WATER INVERT	SEWER SIZE & TYPE	SEWER INVERT
X1	8" DIP	819.13	12" SCH40	822.32
X2	-	-	-	-
X3	8" DIP	820.33	12" SCH40	822.61
X4	8" DIP	820.33	12" SCH40	823.50
X5	8" DIP	819.54	12" SCH40	821.87
X6	8" DIP	820.13	8" SCH40	823.28
X7	8" DIP	820.13	6" SCH40	823.68
X8	8" DIP	818.69	8" SCH40	823.47
X9	8" DIP	814.13	18" SCH40	818.44



**THE POINTE BLOOMINGTON
- PHASE 2**

PROJECT
5601 & 5501 AMERICAN BOULEVARD WEST, BLOOMINGTON, MN, 55437

UNITED PROPERTIES, LLC
3600 AMERICAN BOULEVARD WEST, SUITE 750, BLOOMINGTON, MN 55431

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

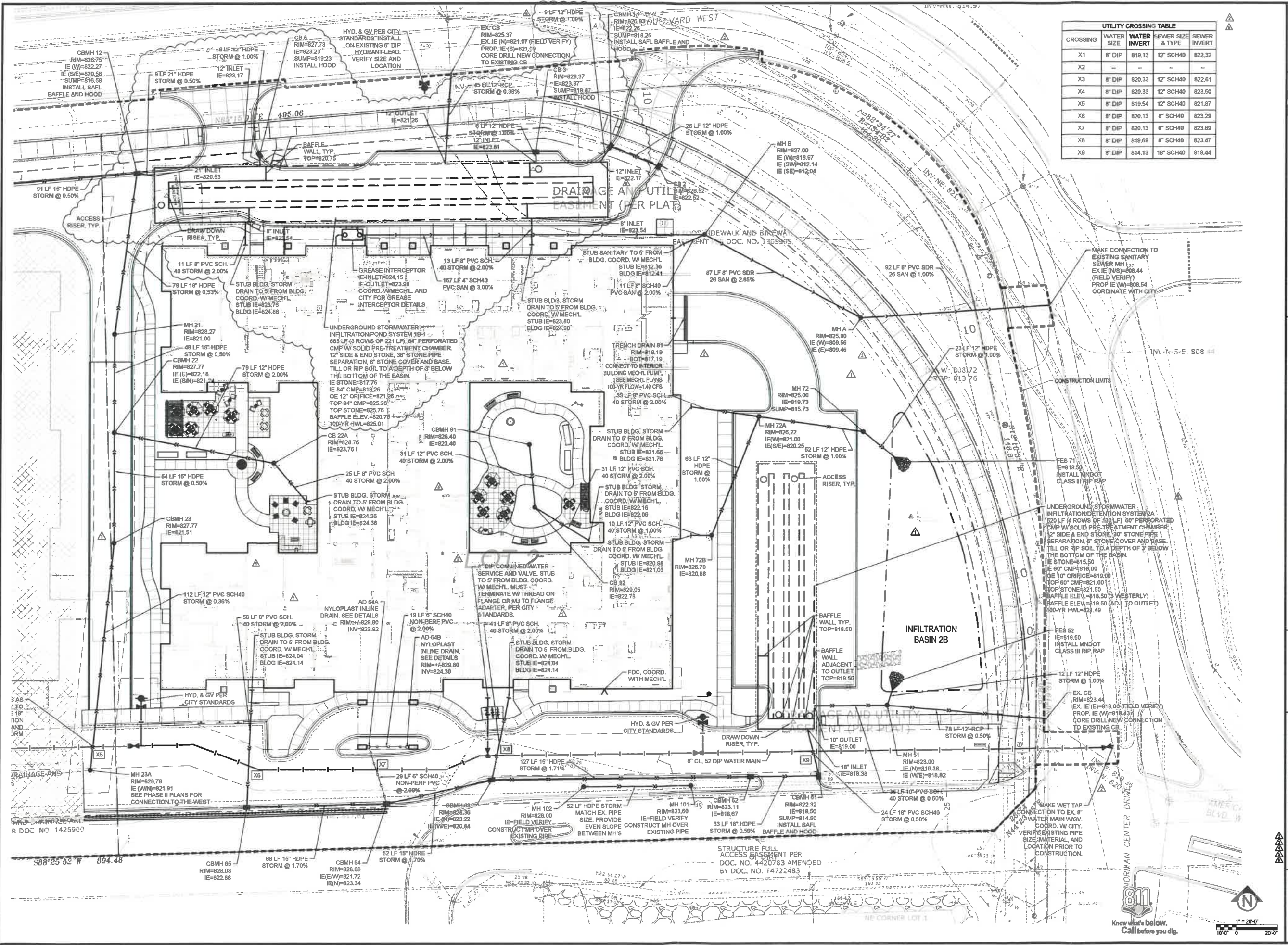
Matthew R. Pavak
DATE 02/24/20 LICENSE NO. 44263

ISSUE/SUBMITTAL SUMMARY	DATE	DESCRIPTION
1509191	02/24/20	CITY SUBMITTAL
1509193	02/24/20	CITY RESUBMITTAL
1509195	02/24/20	CITY RESUBMITTAL
1509197	02/24/20	WATERMESH SUBMITTAL

DRAWN BY: [Signature] REVIEWED BY: DK
PROJECT NUMBER: 17157.01

REVISION SUMMARY

DATE	DESCRIPTION
8/28/19	ADDENDUM #1



UTILITY CROSSING TABLE				
CROSSING	WATER SIZE	WATER INVERT	SEWER SIZE & TYPE	SEWER INVERT
X1	8" DIP	818.13	12" SCH40	822.32
X2	-	-	-	-
X3	8" DIP	820.33	12" SCH40	822.61
X4	8" DIP	820.33	12" SCH40	823.50
X5	8" DIP	819.54	12" SCH40	821.87
X6	8" DIP	820.13	8" SCH40	823.29
X7	8" DIP	820.13	8" SCH40	823.69
X8	8" DIP	816.69	8" SCH40	823.47
X9	8" DIP	814.13	18" SCH40	818.44

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**CHERRYWOOD POINTE
 BLOOMINGTON - SENIOR ASSISTED**
 5601 & 5501 AMERICAN BOULEVARD WEST, BLOOMINGTON, MN, 55437
UNITED PROPERTIES, LLC
 3600 AMERICAN BOULEVARD WEST, SUITE 750, BLOOMINGTON, MN 55431

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Matthew R. Pavak
 DATE 08/25/19 LICENSE NO. 44263

ISSUE/SUBMITTAL SUMMARY	
DATE	DESCRIPTION
8/20/19	CITY SUBMITTAL
11/21/19	CITY SUBMITTAL
11/21/19	CITY RESUBMITTAL
12/28/19	CITY RESUBMITTAL
7/17/20	WATERSHED SUBMITTAL
7/24/20	CITY SUBMITTAL
08/07/20	BUILDING PERMIT SUBMITTAL
9/17/20	WATERSHED RESUBMITTAL
09/25/20	CITY RESUBMITTAL

REVISION SUMMARY	
DATE	DESCRIPTION
10/1/19	REV. WATER SERVICE LOCATION
10/31/19	AS1 #1
11/18/19	AS1 #2
1/7/20	AS1 #4
2/11/20	WATERSHED RESUBMITTAL
3/26/20	PRELIM. UTILITY REV.
	PROJECT NUMBER: 1717

UTILITY PLAN - EAST

C4.2

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