

# HRSDS SEWAGE DETENTION FACILITY JSP19-10

## **HRSDS SEWAGE DETENTION FACILITY JSP 19-10**

Public hearing at the request of Oakland County Water Resources Commission and City of Novi for Planning Commission's approval of Preliminary Site Plan, Wetland Permit, Woodland Permit and Stormwater Management Plan. The subject property is currently zoned I-1, Light Industrial and is located in Section 35, east of Novi Road and south of Nine Mile Road, in the City's Rotary Park. The applicant is proposing to construct an underground sewage detention facility, associated pump house and emergency back-up generator. The project would also include improvement of the non-motorized trail.

## **Required Action**

Approval/Denial of the Preliminary Site Plan, Wetland Permit, Woodland Permit and Stormwater Management Plan.

REVIEW	RESULT	DATE	COMMENTS
Planning	Approval recommended	4-30-19	<ul> <li>Approval of generator location in the front yard</li> <li>Items to be addressed on the electronic stamping submittal</li> </ul>
Engineering	NA		Plans developed with City engineering staff input
Landscaping	NA		Plans developed with City Landscape     Architect input
Wetland	Approval recommended	4-30-19	<ul> <li>Wetland permit required</li> <li>Authorization to encroach into 25 foot Natural Features Buffer</li> <li>Items to be addressed on revised Final Site Plan</li> </ul>
Woodland	Approval recommended	4-30-19	<ul> <li>Woodland permit required</li> <li>Items to be addressed on revised Final Site Plan</li> </ul>
Traffic	NA		
Façade	Approval recommended	4-28-19	Full compliance with façade ordinance
Fire	Approval recommended	4-12-19	Meets Fire Dept. standards

## **Motion sheet**

## Approval - Preliminary Site Plan

In the matter of HRSDS Sewage Detention Facility, JSP 19-10, motion to **approve** the <u>Preliminary Site Plan</u> based on and subject to the following:

- a. Planning Commission waiver for the location of the generator in the front yard, as the applicant has demonstrated that it is not feasible to locate the generator in another location, and landscape screening is proposed, which is hereby granted;
- b. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- c. (additional conditions here if any).

(This motion is made because the plan is otherwise in compliance with Article 3, Article 4 and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)

## -AND-

## **Approval - Wetland Permit**

In the matter of HRSDS Sewage Detention Facility, JSP 19-10, motion to **approve** the Wetland Permit based on and subject to the following:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. (additional conditions here if any)

(This motion is made because the plan is otherwise in compliance with Chapter 12, Article V of the Code of Ordinances and all other applicable provisions of the Ordinance.)

## -AND-

## Approval - Woodland Permit

In the matter of HRSDS Sewage Detention Facility, JSP 19-10, motion to **approve** the <u>Woodland Permit</u> based on and subject to the following:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. (additional conditions here if any)

(This motion is made because the plan is otherwise in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

## - AND -

## Approval – Stormwater Management Plan

In the matter of HRSDS Sewage Detention Facility, JSP 19-10, motion to **approve** the Stormwater Management Plan, based on and subject to:

- a. The findings of compliance with Ordinance standards in the staff and consultant review letters, and the conditions and items listed in those letters being addressed on the Final Site Plan; and
- b. (additional conditions here if any).

(This motion is made because it otherwise in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

- OR -

## Denial - Preliminary Site Plan

In the matter of HRSDS Sewage Detention Facility, JSP 19-10, motion to **deny** the <u>Preliminary Site Plan</u>...(because the plan is not in compliance with Article 3, Article 4 and Article 5 of the Zoning Ordinance and all other applicable provisions of the Ordinance.)

-AND-

## **Denial- Wetland Permit**

In the matter of HRSDS Sewage Detention Facility, JSP 19-10, motion to **deny** the <u>Wetland Permit</u>... (because the plan is not in compliance with Chapter 12, Article V of the Code of Ordinances and all other applicable provisions of the Ordinance.)

-AND-

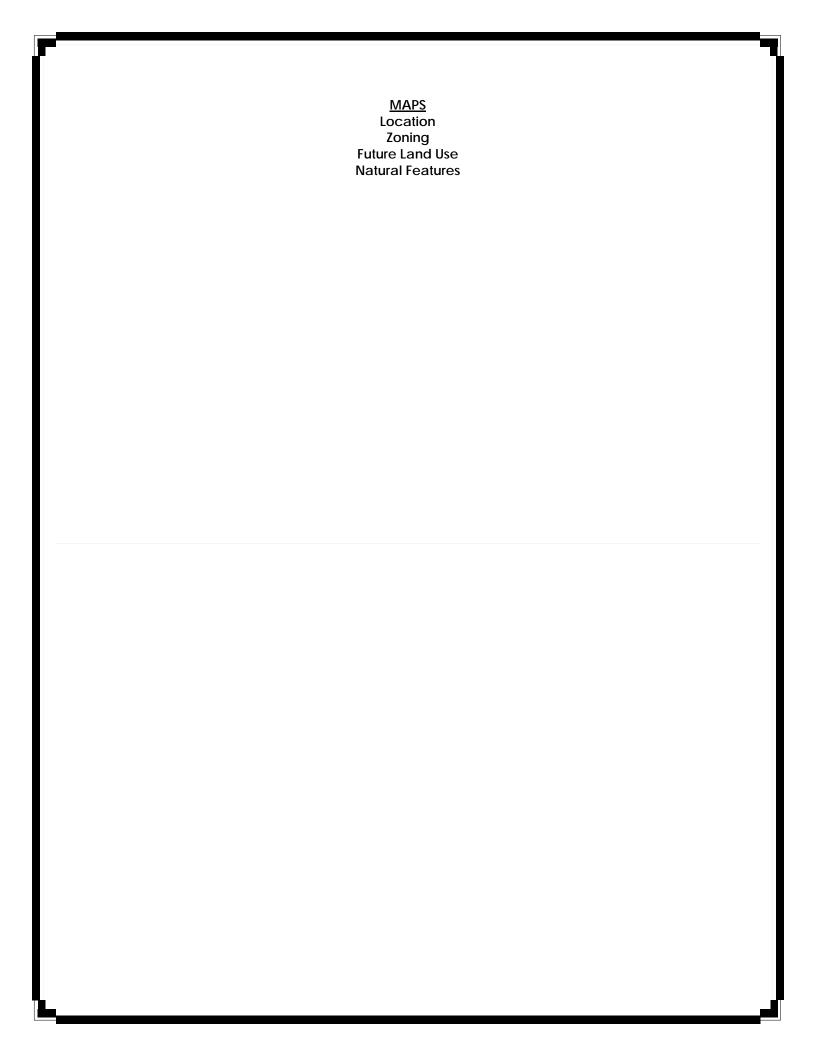
## **Denial- Woodland Permit**

In the matter of HRSDS Sewage Detention Facility, JSP 19-10, motion to **deny** the <u>Woodland Permit</u>... (because the plan is not in compliance with Chapter 37 of the Code of Ordinances and all other applicable provisions of the Ordinance.)

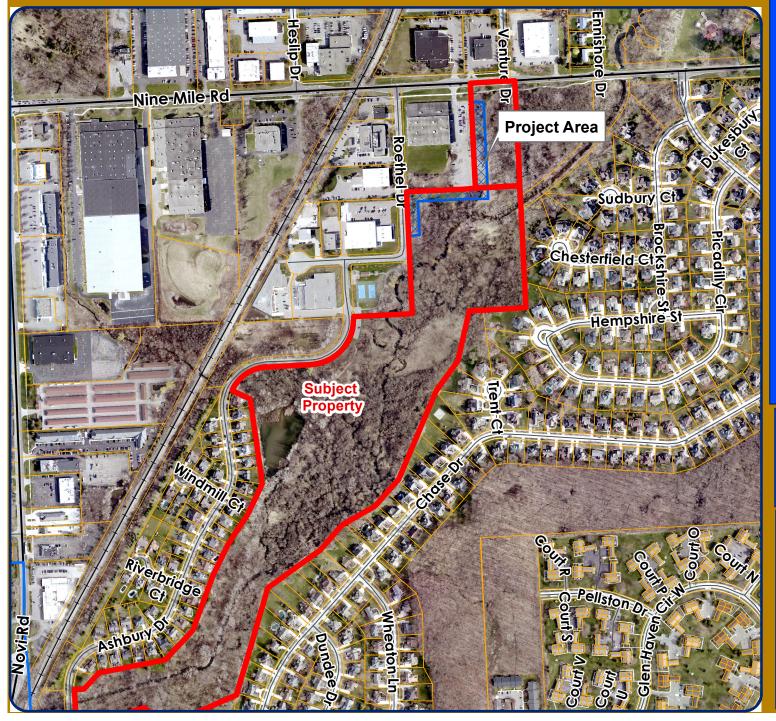
-AND-

## <u>Denial - Stormwater Management Plan</u>

In the matter of HRSDS Sewage Detention Facility, JSP 19-10, motion to **deny** the <u>Stormwater Management Plan</u>...(because the plan is not in compliance with Chapter 11 of the Code of Ordinances and all other applicable provisions of the Ordinance.)



# **HRSDS SEWAGE FACILITY: JSP19-10 LOCATION**





**LEGEND** 



Subject Property



## **City of Novi**

Dept. of Community Development City Hall / Civic Center 45175 W Ten Mile Rd Novi, MI 48375 cityofnovi.org

Map Author: Lindsay Bell Date: 5/2/19 Project: HRSDS FACILITY JSP19-10 Version #: 1

0 120 240

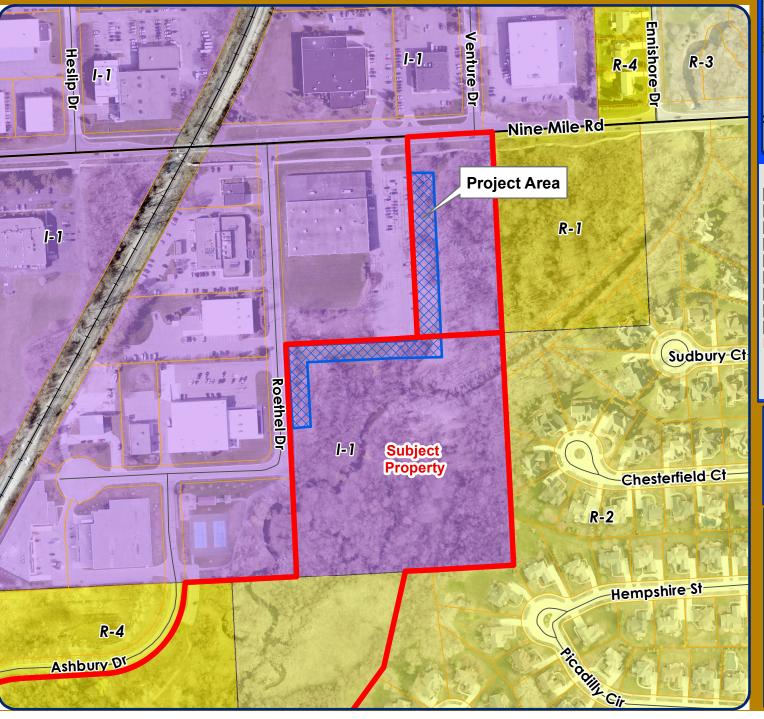


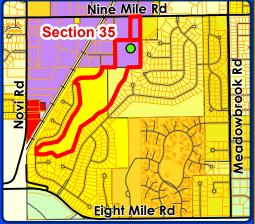
1 inch = 557 feet

#### MAP INTERPRETATION NOTICE

of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

# HRSDS SEWAGE FACILITY: JSP19-10 ZONING





### **LEGEND**

R-A: Residential Acreage

R-1: One-Family Residential District

R-2: One-Family Residential

R-3: One-Family Residential District

R-4: One-Family Residential District

RM-1: Low-Density Multiple Family

B-3: General Business District

I-1: Light Industrial District

P-1: Vehicular Parking District

Subject Property



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Map Author: Lindsay Bell Date: 5/2/19 Project: HRSDS FACILITY JSP19-10 Version #: 1

0 65 130 260 390



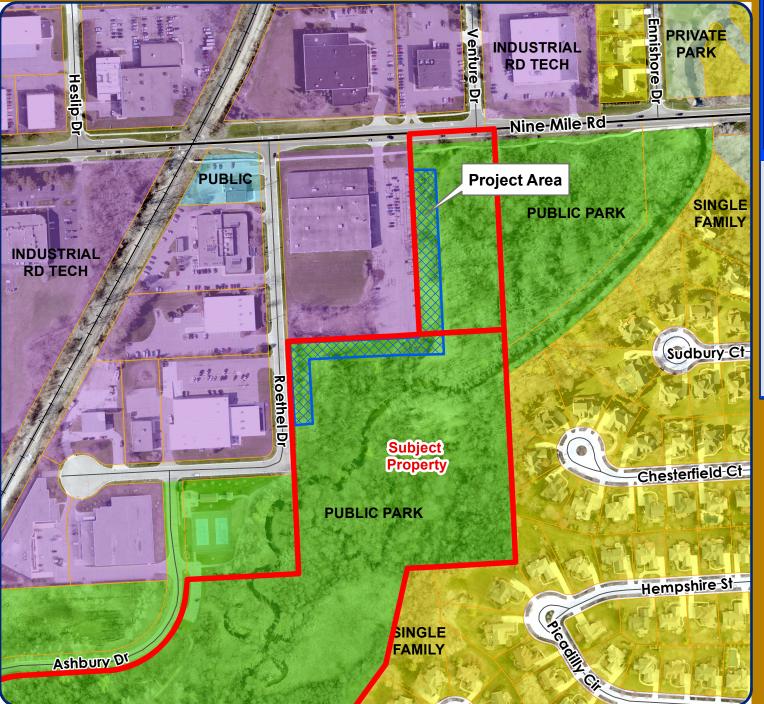
1 inch = 292 feet

#### MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.

## **HRSDS SEWAGE FACILITY: JSP19-10**

**FUTURE LAND USE** 





## **LEGEND**

Single Family

Multiple Family

Industrial Research Development Technology

Local Commercial

Public

Public Park

Private Park

Cemetery

Subject Property



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# **HRSDS SEWAGE FACILITY: JSP19-10**

**NATURAL FEATURES** 





## LEGEND



WETLANDS



WOODLANDS





# **City of Novi**

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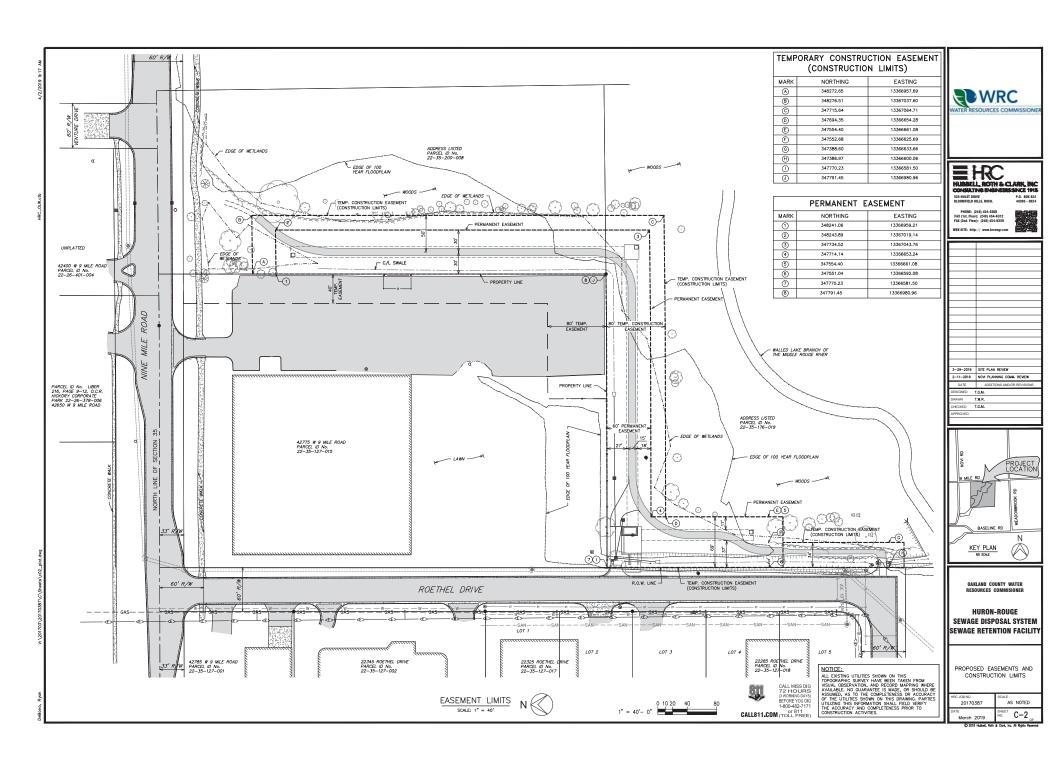
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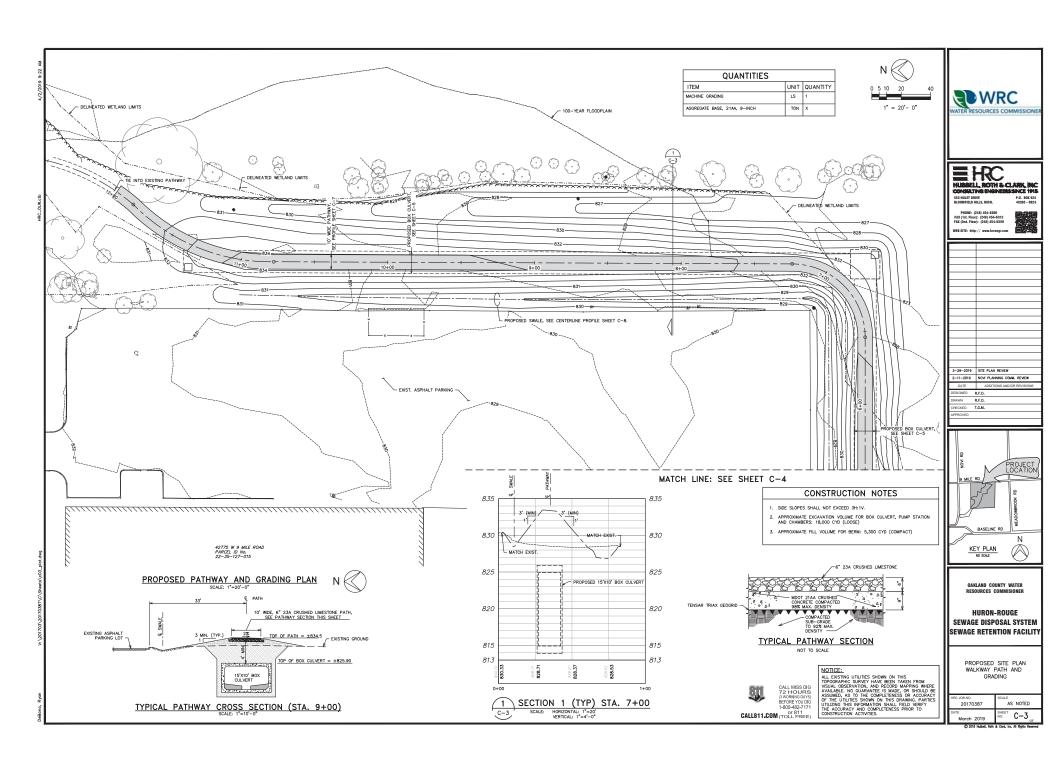


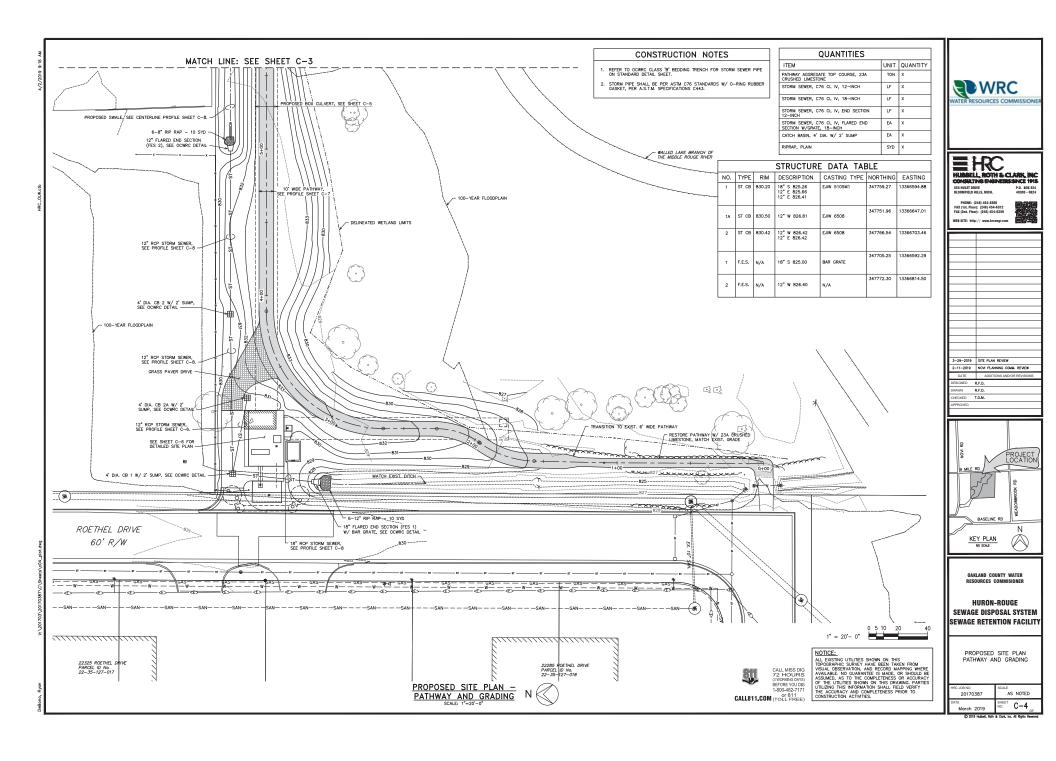
#### MAP INTERPRETATION NOTICE

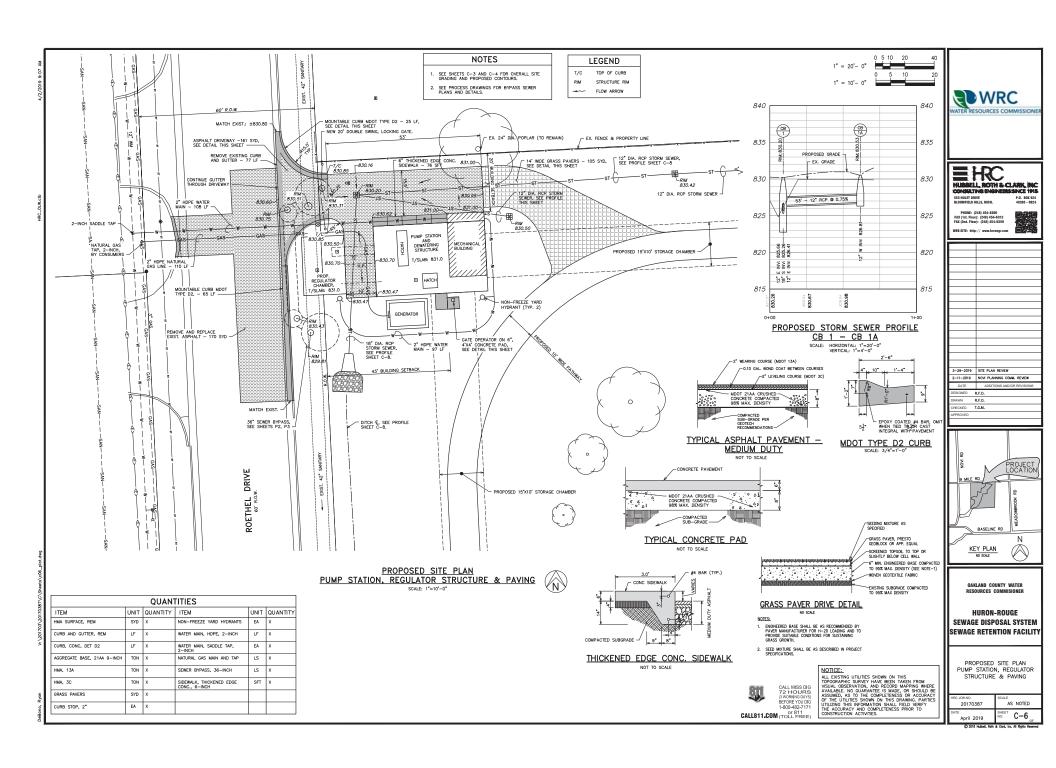
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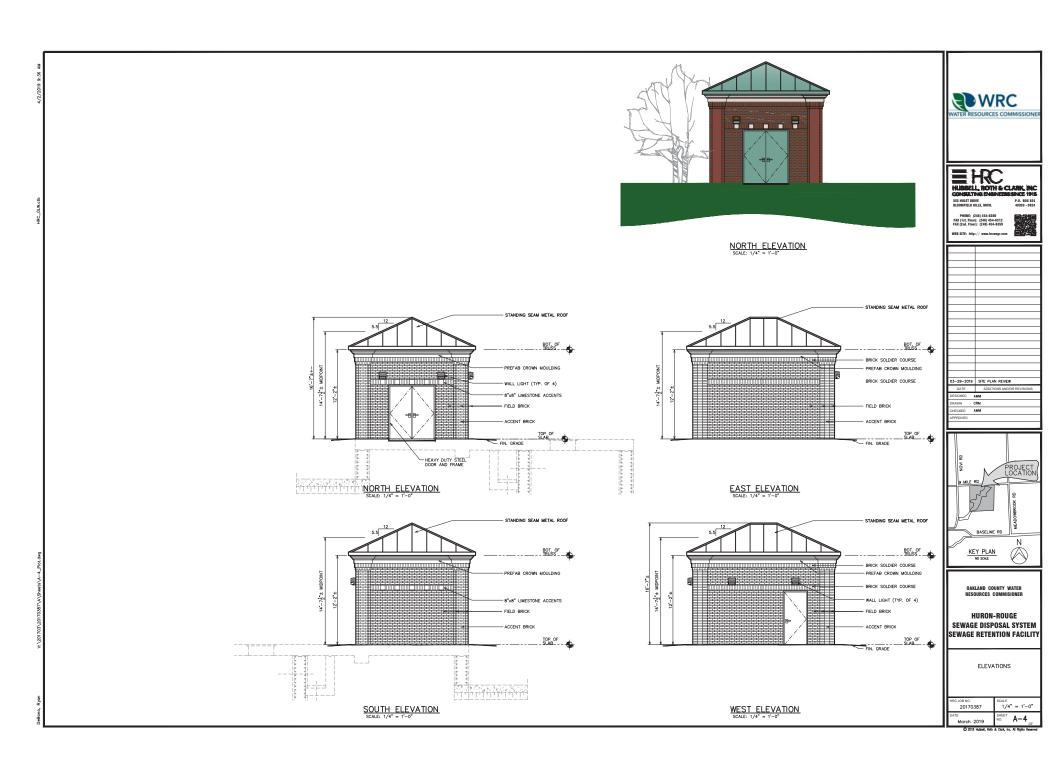
SITE PLAN (Full plan set available for viewing at the Community Development Department.)		

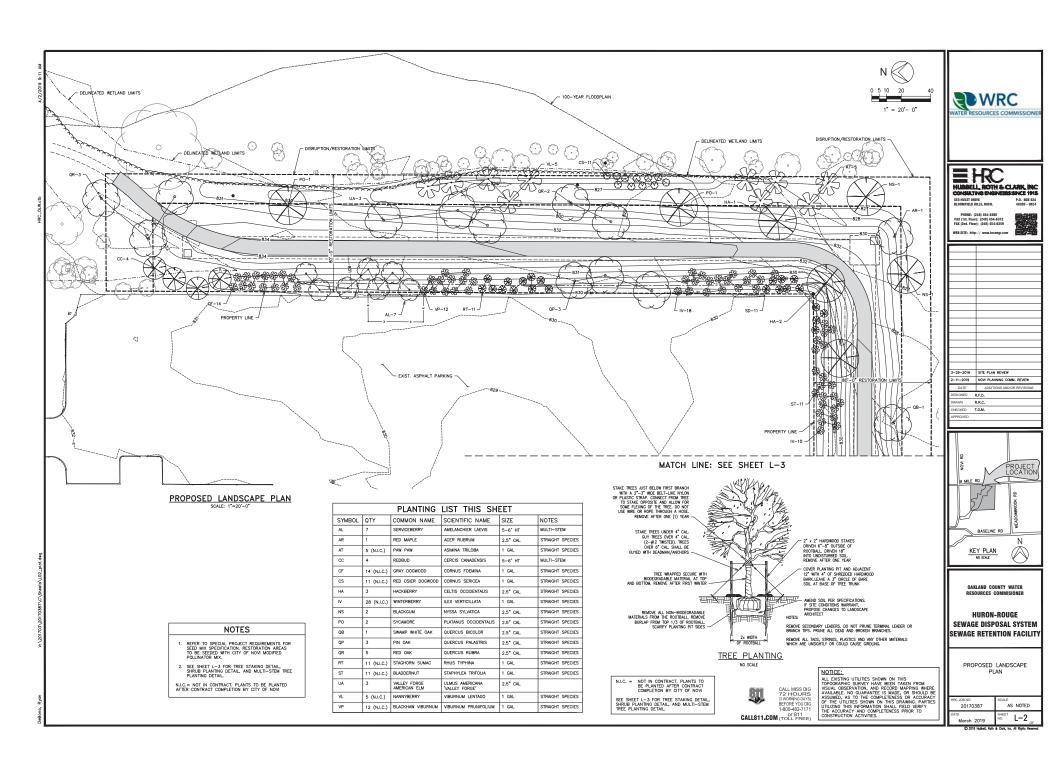


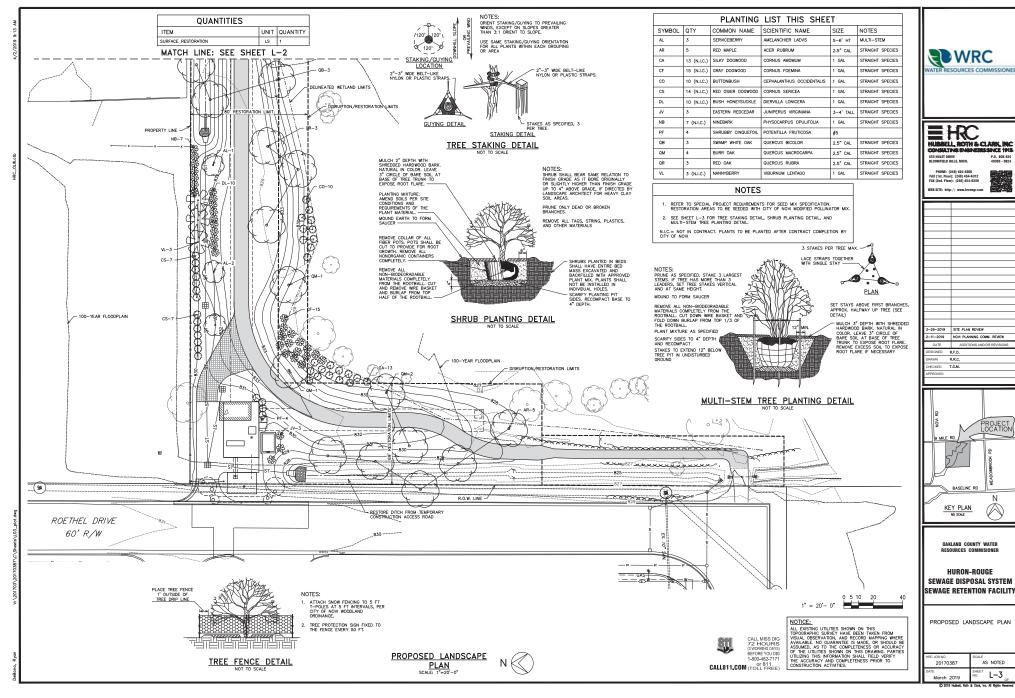






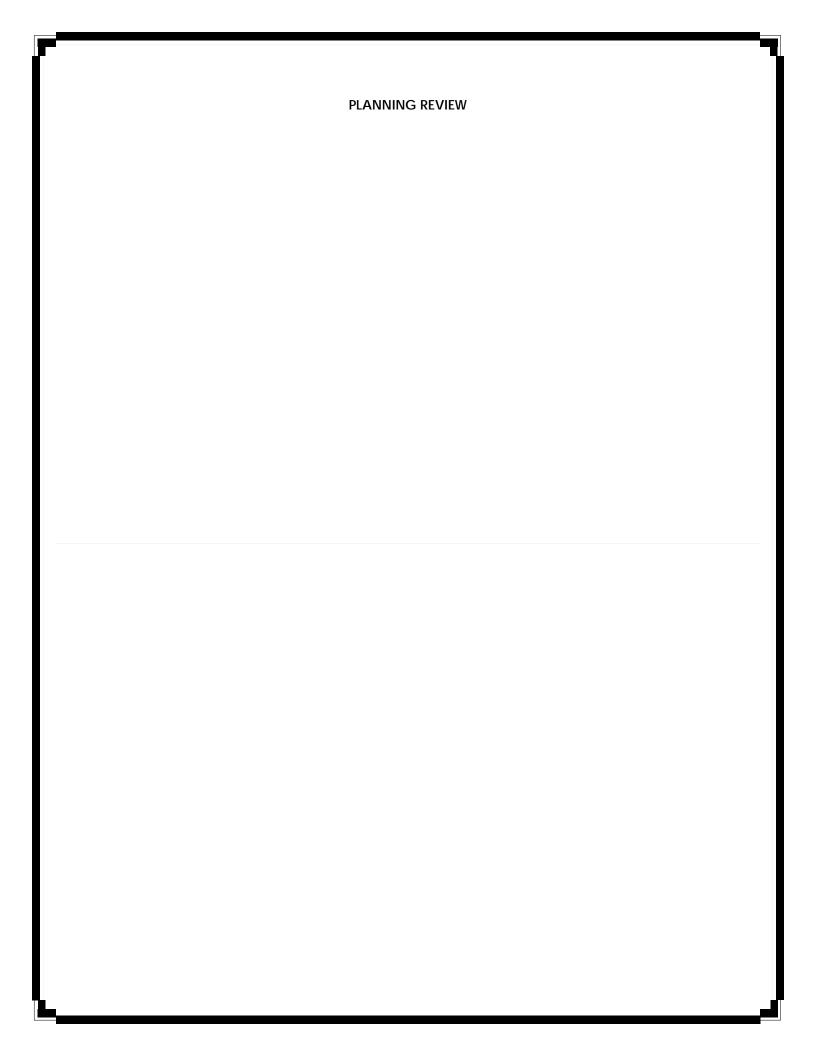














## PLAN REVIEW CENTER REPORT

April 30, 2019

## **Planning Review**

HRSDS Sewage Facility JSP 19-10

## **PETITIONER**

Oakland County Water Resources Commissionand City of Novi

## **REVIEW TYPE**

Preliminary/Final Site Plan

## PROPERTY CHARACTERISTICS

Site Location: Section 35; South of Nine Mile and East of Novi Road

• Site School District: Novi Community School District

Site Zoning:
 I-1 Light Industrial District

Adjoining Zoning: West: I-1 Light Industrial District

East: R-1 and R-2 One Family Residential

North: I-1 Light Industrial District South: R-2 One Family Residential

Site Use(s): City Park

Adjoining Uses: West: Industrial buildings; East: Single Family subdivision; North:

Industrial building; South: Single Family subdivision

• Site Size: 52.2 acres (Project area: approximately 2 acres)

Building Size: 292.5 sq. ft.Plan Date: March 29, 2019

## **PROJECT SUMMARY**

The purpose of the Huron Rouge Sewage Disposal System (HRSDS) Sewage Retention Facility is to addresses the periodic contract exceedances of the City's sanitary sewer flow rate. Over the past few years the City has exceeded the maximum flow rate allowed multiple times. This happens during rain events when rain water infiltrates into the sewer system and increases the flow within the sewers. Exceedance of this flow maximum is a violation of the City's sewer service contract, and in 2016 resulted in the denial of new permit requests for expansion of the sewer system, essentially putting a moratorium on new development. At that time the City was required to develop a plan to address the flow rate exceedances. This project is the result of that process. Based on the plan presented involving the design and construction of the HRSDS Sewage Retention Facility, new permits were again allowed to be approved.

The City's sanitary sewer system is comprised of three districts – the HRSDS District, the Walled Lake District, and the Commerce District. The Walled Lake and Commerce Districts are at north end of City and will not contribute flow to the retention facility. The retention facility will control flows from only the HRSDS District, which encompasses 85% of the City's sanitary flow. The City's sanitary sewer contract for the HRSDS District is with Oakland County (who in turn has a contract with Wayne County for the conveyance and treatment of Novi's sewage). Since Oakland County is the entity named in the contract, they are managing the design and construction of the retention facility, with City staff involved throughout the process.

The facility will consist of approximately 1,000 feet of box culvert pipe (10' x 15'), which is capable of storing one million gallons. This volume of storage was based on the future sanitary needs of the City, taking into account planned and potential future development. The facility will be equipped with a flushing system to help eliminate any odors, although the applicant states that odors are not expected to be an issue.

This retention facility will act similarly to a storm water detention basin, where it will temporarily detain a calculated volume and release it at a reduced flow rate. The main difference between this facility and the typical storm water basin is that flow will be pumped into the storage facility.

The current schedule for the project anticipates construction beginning in November, and completion in approximately one year. The facility will be operated and maintained by Oakland County personnel; however, Novi's Water and Sewer Division will also be monitoring the system operations.

## **RECOMMENDATION**

Approval of the **Preliminary and Final Site Plan is recommended**. The plan mostly conforms to the requirements of the Zoning Ordinance, with any deviations noted below. **Planning Commission approval of the Preliminary Site Plan and Storm Water Management Plan is required**.

## **ORDINANCE REQUIREMENTS**

This project was reviewed for conformance with the Zoning Ordinance with respect to Article 3 (Zoning Districts), Article 4 (Use Standards), Article 5 (Site Standards), and any other applicable provisions of the Zoning Ordinance. Please see the attached charts for information pertaining to ordinance requirements. Items in **bold** below must be addressed and incorporated as part of the Final Site Plan submittal.

- 1. Accessory Structures (Sec. 4.19): "Accessory structures...shall be located in the rear yard and shall meet the setback requirements of an accessory building." "Accessory buildings shall not be erected in any required front yard or in any required exterior side yard." The site plan shows the emergency generator to be located 20 feet from the front lot line, which is within the required front yard. Since this is a City project, Planning Commission approval of this deviation is required.
- 2. <u>Planning Commission Findings for Permitted Uses (Sec. 3.14.3):</u> The lighting, noise, vibration, odor and other possible impacts are in compliance with standards and intent of this article and performance standards of Section 5.14. The applicant shall provide validation in a response letter to the Planning Commission addressing the relevant performance standards shown below as related to the proposed use and facilities:
  - Odor: "Offensive, noxious, or foul odors shall not be allowed to escape into the atmosphere in concentrations that are offensive, that produce a public nuisance or create a hazard to adjoining property..."
  - <u>Vibration:</u> "Machines or operations which cause vibration shall be permitted in Industrial districts, but no operation shall cause a displacement exceeding .003 of one inch as measured from the property line."
  - Noise Disturbances: Noise disturbances are not to exceed 55 decibels during night time hours and 60 decibels during day time hours in residential districts, In a non-residential district the limits are 70 decibels during night time hours and 75 decibels during day time hours. The generator proposed is specified as "Sound attenuated and rated to provide 70 dBA at 23 feet average sound level, as measured in a free field environment." The location of the generator is greater than 23 feet from the

closest non-residential property line, so the noise level will not exceed 70 dBA. A distance of 130 feet would be needed to achieve 55 dBA. The nearest residential property is over 600 feet from the proposed generator location, with a calculated decibel level of approximately 42 dBA at that distance.

#### **Other Reviews**

- <u>Engineering Review:</u> Engineering review was not performed because the City's engineers were involved with developing the site plan in conformance with City ordinances.
- <u>Landscape Review:</u> The Landscaping Plan was developed by the City's Landscape Architect in conformance with the requirements of the Zoning Ordinance.
- Wetland Review: Approval of the Preliminary Site Plan is recommended. However a revised Final Site Plan is required to address remaining comments. See letter for further details.
- Woodland Review: Approval of the Preliminary Site Plan is recommended. However a revised Final Site Plan is required to address remaining comments. See letter for further details.
- <u>Façade Review</u>: The pump house building is in full conformance with the façade ordinance requirements. Approval is recommended.
- <u>Fire Review:</u> Approval is recommended.

## **NEXT STEP: PLANNING COMMISSION**

All reviewers are recommending approval of the Preliminary Site Plan. Refer to letters for more details. This item has been scheduled for public hearing before the **Planning Commission on May 8, 2019**. Please provide via email the following **by noon on May 3, 2019**:

- 1. Original Site Plan submittal in PDF format (maximum of 10MB). **NO CHANGES MADE.**
- 2. A response letter addressing ALL the comments from ALL the review letters and a request for waivers as you see fit.

## **REVISED FINAL SITE PLAN SUBMITTAL**

Woodland and Wetland reviews are not recommending approval of the Final Site Plan due to required revisions. Refer to letters for more details. Please submit the following for reconsideration:

- 1. A site plan revision application
- 2. Two printed copies of revised site plans addressing all unresolved comments.
- 3. Response letter addressing all comments and refer to sheet numbers where the change is reflected.

## **ELECTRONIC STAMPING SET SUBMITTAL AND RESPONSE LETTER**

After receiving Preliminary/Final Site Plan approval, plans addressing the comments in all of the staff and consultant review letters should be submitted electronically for informal review and approval prior to printing Stamping Sets. A letter from either the applicant or the applicant's representative addressing comments in this and other review letters and associated charts is to be submitted with the electronic stamping set. This letter should address all comments in ALL letters and ALL charts and refer to sheet numbers where the change is reflected.

## STAMPING SET APPROVAL

Stamping sets are still required for this project. After having received all of the review comments from City staff the applicant should make the appropriate changes on the plans and submit <u>9 size</u> <u>24" x 36" copies with original signature and original seals on the cover sheet (subsequent pages</u>

<u>may use electronic seal with signature</u>), to the Community Development Department for final Stamping Set approval.

If required, drafts for all legal documents with a legal transmittal are to be submitted along with stamping sets.

### **SIGNAGE**

Exterior Signage is not regulated by the Planning Division or Planning Commission. Sign permit applications that relate to construction of a new building or an addition to an existing building may submitted, reviewed, and approved as part of a site plan application. Proposed signs shall be shown on the preliminary site plan. Alternatively, an applicant may choose to submit a sign application to the Building Official for administrative review. Following preliminary site plan approval, any application to amend a sign permit or for a new or additional sign shall be submitted to the Building Official. Please contact the Ordinance Division 248.735.5678 for information regarding sign permits.

## PRE-CONSTRUCTION MEETING

Prior to the start of any work on the site, Pre-Construction (Pre-Con) meetings must be held with the applicant's contractor and the City's consulting engineer. Pre-Con meetings are generally held after Stamping Sets have been issued and prior to the start of any work on the site. There are a variety of requirements, fees, and permits that must be issued before a Pre-Con can be scheduled. If you have questions regarding the checklist or the Pre-Con itself, please contact Sarah Marchioni [248.347.0430 or smarchioni@cityofnovi.org] in the Community Development Department.

### CHAPTER 26.5

Chapter 26.5 of the City of Novi Code of Ordinances generally requires all projects be completed within two years of the issuance of any starting permit. Please contact Sarah Marchioni at 248-347-0430 for additional information on starting permits. The applicant should review and be aware of the requirements of Chapter 26.5 before starting construction.

If the applicant has any questions concerning the above review or the process in general, do not hesitate to contact me at 248.347.0484 or <a href="mailto:lbell@cityofnovi.org">lbell@cityofnovi.org</a>.

Lindsay Bell - Planner

Kindsmy Bell



## PLANNING REVIEW CHART

Review Date: April 30, 2019

**Review Type:** Pre-Application Site Plan

**Project Name:** HRSDS Sewage Retention Facility, JSP19-10

**Location:** South of 9 Mile, East of Roethel Drive

Plan Date: February 2019

**Prepared by:** Lindsay Bell, Planner

E-mail: <a href="mailto:lbell@cityofnovi.org">lbell@cityofnovi.org</a> Phone: 248.347.0484

**Bold** To be addressed with the next submittal

<u>Underline</u> To be addressed with final site plan submittal

**Bold and Underline** Requires Planning Commission and/or City Council Approval

Italics To be noted

Item	Required Code	Proposed	Meets Code	Comments
Zoning and Use Re	quirements			
Master Plan (adopted August 25, 2010)	Public Park	Public utility uses and pedestrian path	Yes	
Area Study	N/A		NA	
Zoning (Effective December 25, 2013)	I-1: Light Industrial District	No Change	Yes	
Uses Permitted (Sec 3.1.18.C)		Essential Services - permitted	Yes	
Height, bulk, densi	ty and area limitations (Sec 3.1.1	8)		
Frontage on a Public Street. (Sec. 5.12)	Frontage on a Public Street is required	Frontage on Roethel	Yes	
Access to Major Thoroughfare (Sec. 5.13)	Vehicular access shall be provided only to an existing or planned major thoroughfare or freeway service drive OR access driveway on other street type is not across street from existing or planned single-family uses	Access to 9 Mile via Roethel	Yes	
Minimum Zoning Lot Size for each Unit in Ac (Sec 3.6.2.D)	Except where otherwise provided in this Ordinance, the minimum lot area and width, and the maximum percent of lot coverage shall	48.61 acres	NA	
Minimum Zoning Lot Size for each Unit: Width in	be determined on the basis of off-street parking, loading, greenbelt screening, yard setback or usable open		NA	

Item	Required Code	Proposed	Meets Code	Comments
Feet	space			
Open Space Area				
Maximum % of Lot Area Covered (By All Buildings)	(Sec 3.6.2.D)		NA	
Building Height (Sec. 3.1.18.D)	25 feet when adjacent to residential uses	14′ 7″	Yes	
Building Setbacks				
	T	42 ft	Voc	
Front (west)	40 ft. 20 ft.	43 ft. 23 ft.	Yes	-
Side (north)			Yes	4
Side (south)	20 ft. 20 ft.	exceeds exceeds	Yes Yes	+
Rear (east)	2011. Sec 3.1.18.D)& Refer to applicabl			
	· · · · · · · · · · · · · · · · · · ·	E 110163 III 366 3.0.		No parking proposed
Front (west) Side (north)	40 ft. (See 3.6.2.E) 10 ft.		Yes Yes	No parking proposed - access drive would be
				used to park
Side (south)	10 ft.		Yes	maintenance vehicles
Rear (east)	10 ft.		Yes	when required
Note To District Sta	ndards (Sec 3.6.2)			1 2 3 4 2 2
Exterior Side Yard Abutting a Street (Sec 3.6.2.C) Off-Street Parking in Front Yard (Sec 3.6.2.E)	All exterior side yards abutting a street shall be provided with a setback equal to front yard.  Off-street parking is allowed in front yard if:  - the site is a minimum 2 acre site,  - does not extend into the minimum required front yard setback of the district,  - cannot occupy more than 50% of the area between min. front yard setback & bldg. setback,  - must be screened by brick wall or landscaped berm 2.5 ft tall	No parking proposed	NA NA	
Off-Street Parking in Side and Rear Yards (Sec 3.6.2.F)	- lighting compatible with surrounding neighborhood  Off-street parking is allowed in side and rear yards if the site does not abut residential. If it does, additional conditions apply:  i. shall not occupy more than 50% of side yard area abutting residential	No parking proposed	NA	

	T		1	
Item	Required Code	Proposed	Meets Code	Comments
	ii. parking setback no less than 100 ft from res district			
Setback from Residential District - Building (Sec 3.6.2.H)	I-1 and I-2 districts, five (5) feet of horizontal setback for each foot of building height, or one- hundred (100) feet, whichever is greater.		Yes	
Wetland/ Watercourse Setback (Sec 3.6.2.M)	A setback of 25 ft. from wetlands and from high watermark course shall be maintained		No	See ECT review regarding wetland impacts
Additional Height (Sec 3.6.2.0)	Additional heights for selected building is allowed based on conditions listed in Sec 3.6.2.0	Applicant not requesting	NA	
Parking setback screening (Sec 3.6.2.P)	Required parking setback area shall be landscaped per Sec 5.5.3.	Parking not proposed	NA	
Modification of parking setback requirements (Sec 3.6.2.Q)	The Planning Commission may modify parking setback requirements based on conditions listed in Sec 3.6.2.Q		NA	
Parking and Loadin	ng Requirements			
Number of Parking Spaces (Sec.5.2.12.E)	Public facilities/maintenance	Parking not required for this use	NA	
Parking Space Dimensions and Maneuvering Lanes (Sec. 5.3.2)	<ul> <li>90° Parking: 9 ft. x 19 ft.</li> <li>24 ft. two way drives</li> <li>9 ft. x 17 ft. parking spaces allowed along 7 ft. wide interior sidewalks as long as detail indicates a 4" curb at these locations and along landscaping</li> </ul>		NA	
Parking stall located adjacent to a parking lot entrance(public or private)	Shall not be located closer than twenty-five (25) feet from the street right-of-way (ROW) line, street easement or sidewalk, whichever is closer		NA	

Item	Required Code	Proposed	Meets Code	Comments
(Sec. 5.3.13)				
End Islands (Sec. 5.3.12)	<ul> <li>End Islands with landscaping and raised curbs are required at the end of all parking bays that abut traffic circulation aisles.</li> <li>The end islands shall generally be at least 8 feet wide, have an outside radius of 15 feet, and be constructed 3' shorter than the adjacent parking stall as illustrated in the Zoning Ordinance</li> </ul>		NA	
Barrier Free Spaces Barrier Free Code			NA	
Barrier Free Space Dimensions Barrier Free Code	<ul> <li>8' wide with an 8' wide access aisle for van accessible spaces</li> <li>8' wide with a 5' wide access aisle for regular accessible spaces</li> </ul>		NA	
Barrier Free Signs Barrier Free Code	One sign for each accessible parking space.		NA	
Minimum number of Bicycle Parking (Sec. 5.16.1)	Essential services do not require bike parking		NA	
Bicycle Parking General requirements (Sec. 5.16)	<ul> <li>No farther than 120 ft. from the entrance being served</li> <li>When 4 or more spaces are required for a building with multiple entrances, the spaces shall be provided in multiple locations</li> <li>Spaces to be paved and the bike rack shall be inverted "U" design</li> <li>Shall be accessible via 6 ft. paved access from street</li> </ul>		NA	
Bicycle Parking Lot layout (Sec 5.16.6)	Parking space width: 6 ft. One tier width: 10 ft. Two tier width: 16 ft. Maneuvering lane width: 4 ft. Parking space depth: 2 ft. single, 2 ½ ft. double		NA	

Itom	Paguirod Codo	Droposed	Macta	Commonts
Item	Required Code	Proposed	Meets Code	Comments
Loading Spaces (Sec. 5.4.3)	Loading area in the rear yard, unless abutting residential or interior side yard if adjacent to I, EXPO or EXO district		NA	
Accessory Structur		T	1	
Dumpster (Sec 4.19.2.F)	<ul> <li>Located in rear yard</li> <li>Attached to the building or no closer than 10 ft. from building if not attached</li> <li>Not located in parking setback</li> <li>If no setback, then it cannot be any closer than 10 ft, from property line.</li> <li>Away from Barrier free Spaces</li> </ul>	No dumpster proposed	NA	
Dumpster Enclosure (Sec. 21-145. (c)	<ul> <li>Screened from public view</li> <li>A wall or fence 1 ft. higher than height of refuse bin</li> <li>And no less than 5 ft. on three sides</li> <li>Posts or bumpers to protect the screening</li> <li>Hard surface pad</li> <li>Screening Materials: Masonry, wood or evergreen shrubbery</li> </ul>		NA	
Roof top equipment and wall mounted utility equipment (Sec. 4.19.2.E.ii)	All roof top equipment must be screened and all wall mounted utility equipment must be enclosed and integrated into the design and color of the building	No roof top equipment proposed	NA	
Roof top appurtenances screening	Roof top appurtenances shall be screened in accordance with applicable facade regulations, and shall not be visible from any street, road or adjacent property.		NA	
Transformer/ Generator	Provide location of any proposed transformers/ generators etc.	Emergency Generator proposed in the front yard area	No	Zoning Ordinance does not permit generators in the front yard – Planning Commission approval of location is required
	d Conditions (Sec 3.14)	Nat Dana	LNIA	
Outdoor Storage of above ground storage tanks (Sec. 3.14.1.B.ii)	Outdoor placement of above-ground storage tanks of not more than 600 capacity per tank and accessory to an otherwise	Not Proposed	NA	

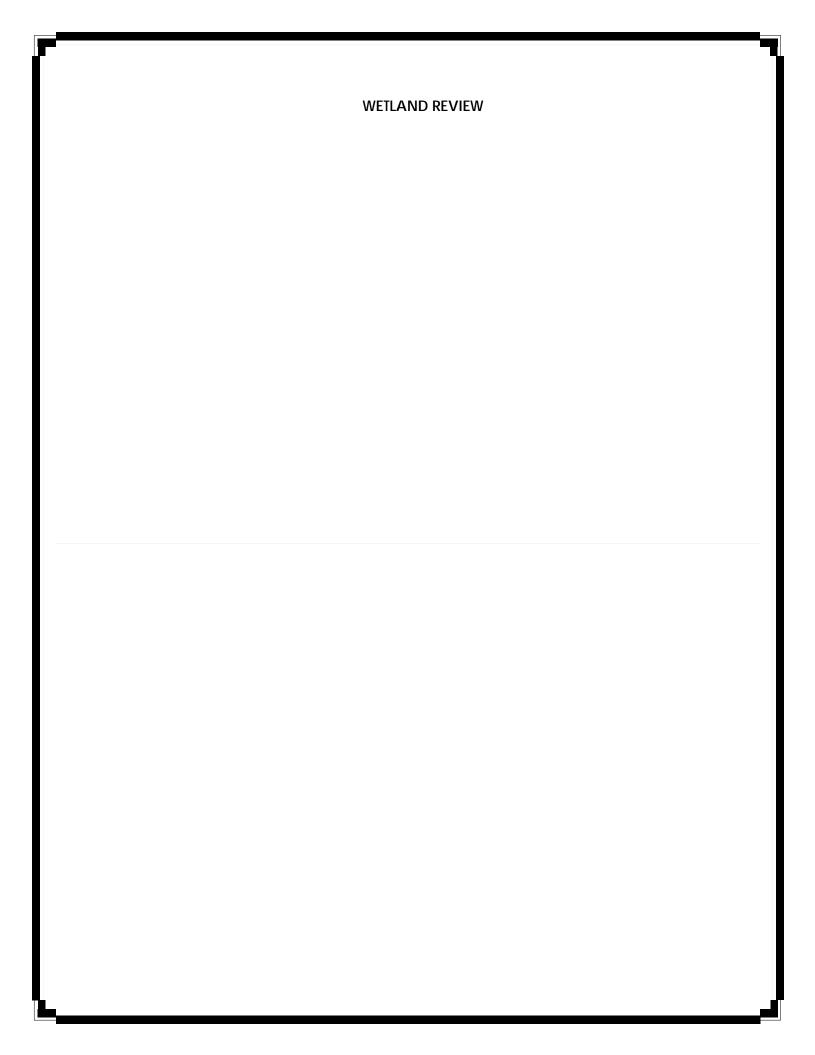
Itom	Doguirod Code	Dronocad	Maata	Commonts
Item	Required Code	Proposed	Meets Code	Comments
	permitted use. Additional		Jour	
	conditions apply.			
	113			
Outdoor Storage		Not Proposed	NA	
of recreational				
equipment				
(Sec. 3.14.1.B.iii)				
Other	Unless otherwise provided,		NA	
(Sec 3.14.2)	dealing directly with			
	consumer at retail, is prohibited.			
Adjacent to	Where a permitted use abuts	Not adjacent to	NA	
Freeway ROW	a freeway right-of way,	freeway ROW	IVA	
(Sec 3.14.4)	special conditions listed in	inceway NOV		
(000 011 111)	section 3.14.4 apply			
Planning Commiss	ion findings for permitted uses (Se	ec 3.14.3)		
Protecting	The scale, size, building		Yes	See Planning letter for
current and	design, façade materials,			further comment
future residential	landscaping and activity of			
uses from	the use is such that current			
adverse impact	and future residential uses will			
Sec 3.14.3.A	be protected from adverse			
Law as tarrest to sale	impacts.			A dal mata ta mian
Long term truck	No long term delivery truck			Add note to plan
parking Sec 3.14.3.B	parking on site			
Performance	The lighting, noise, vibration,		Yes	See Planning letter for
standards	odor and other possible		100	further comment
Sec 3.14.3.C	impacts are in compliance			
	with standards and intent of			
	the article and performance			
	standards of Section 5.14			
Storage and/use	The storage and/or use of any		Yes	Provide note on the plans
of material	volatile, flammable or other			verifying conformance
Sec 3.14.3.D	materials shall be fully			
	identified in application and			
	shall comply with any city			
	ordinances regarding toxic or hazardous materials.			
	Hazaiuous Hatellals.			
Hazardous	Compliance of City's		NA	
material	hazardous materials checklist			
checklist				
Sec 3.14.3.E				
Sidewalks and Pat	1			
ARTICLE XI. OFF-	- In the case of new streets	Park pathway/trail	Yes	10 foot wide crushed
ROAD NON-	and roadways to be	system		limestone path will be
MOTORIZED FACILITIES	constructed as part of the	improvements		provided to replace
Sec. 11-256.	project, a sidewalk shall be provided on both sides of	proposed		existing dirt path
JEC. 11-200.	Provided off potitisides of		<u> </u>	

Item	Required Code	Proposed	Meets Code	Comments
Requirement. (c) & Sub. Ord. Sec. 4.05,	the proposed street or roadway.  - Sidewalks along arterials and collectors shall be 6 feet or 8 feet wide as designated by the "Bicycle and Pedestrian Plan," but not along industrial service streets per Subdivision Ordinance.  - Whereas sidewalks along local streets and private roadways shall be five (5) feet wide.	Existing sidewalk on 9 Mile Road	Yes	
Pedestrian Connectivity	<ul> <li>Whether the traffic circulation features within the site and parking areas are designed to assure safety and convenience of both vehicular and pedestrian traffic both within the site and in relation to access streets</li> <li>Building exits must be connected to sidewalk system or parking lot.</li> </ul>	10' pathway proposed	Yes	
Lighting and Photo	metric Plan (Sec. 5.7)	<u> </u>		
Intent (Sec. 5.7.1)	Establish appropriate minimum levels, prevent unnecessary glare, reduce spillover onto adjacent properties & reduce unnecessary transmission of light into the night sky	Only building exterior wall mount lighting proposed – only operated when needed by WRC personnel performing maintenance in the evening	Yes	
(Sec. 5.7.A.i)	Site plan showing location of all existing & proposed buildings, landscaping, streets, drives, parking areas & exterior lighting fixtures		NA	
Standard Notes (Sec. 5.7.3.B)	<ul> <li>Electrical service to light fixtures shall be placed underground</li> <li>Flashing light shall not be permitted</li> <li>Only necessary lighting for security purposes &amp; limited operations shall be permitted after a site's hours</li> </ul>		No	Provide these notes on the plan

Item	Required Code	Proposed	Meets Code	Comments
	of operation			
Other Requiremen	ts			
Design and Construction Standards Manual	Land description, Sidwell number (metes and bounds for acreage parcel, lot number(s), Liber, and page for subdivisions).	Provided Sheet SE- 2	Yes	Include Legal Description on the cover sheet
General layout and dimension of proposed physical improvements	Location of all existing and proposed buildings, proposed building heights, building layouts, (floor area in square feet), location of proposed parking and parking layout, streets and drives, and indicate square footage of pavement area (indicate public or private).		Yes	
Economic Impact Information	<ul> <li>Total cost of the proposed building &amp; site improvements</li> <li>Number of anticipated jobs created (during construction &amp; after building is occupied, if known).</li> </ul>		NA	
Development and Street Names	Development and street names must be approved by the Street Naming Committee before Preliminary Site Plan approval	Name approval for business not required	NA	Contact Hannah Smith at 248-347-0475 to schedule a meeting with the Committee
Development/ Business Sign	Signage if proposed requires a permit. Can be considered during site plan review process or independently.	None shown	Yes	For sign permit information contact Maureen Underhill 248-735-5602.

## NOTES:

- 1. This table is a working summary chart and not intended to substitute for any Ordinance or City of Novi requirements or standards.
- 2. The section of the applicable ordinance or standard is indicated in parenthesis. Please refer to those sections in Article 3, 4, and 5 of the zoning ordinance for further details.
- 3. Please include a written response to any points requiring clarification or for any corresponding site plan modifications to the City of Novi Planning Department with future submittals.





ECT Project No. 190264-0100 April 30, 2019

Ms. Barbara McBeth, AICP City Planner Community Development Department City of Novi 45175 W. Ten Mile Road Novi, Michigan 48375

Re: HRSDS Sewage Detention Facility (JSP19-0010)

Wetland Review of the Preliminary & Final Site Plan (PSP19-0059)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the combined Preliminary & Final Site Plan for the proposed HRSDS Sewage Retention Facility project located south of Nine Mile Road and east of Novi Road in Section 35. This included a review of the Site Plan package prepared by Hubbell, Roth & Clark, Inc. dated March 29, 2019 (Plan). The proposed project includes the construction of a 15-foot by 10-foot box culvert generally located beneath an existing 6-foot wide pathway. The Plan also includes the restoration of the pathway with 23A crushed limestone, creation of a swale adjacent to the pathway and some associated storm sewer to manage the storm water runoff from the pathway. ECT also reviewed the Joint Permit Application submittal package for the project prepared by the applicant's engineer (HRC). The Plan was reviewed for conformance with the City of Novi Wetland and Watercourse Protection Ordinance and the natural features setback provisions in the Zoning Ordinance.

ECT currently recommends approval of the Preliminary Site Plan for wetlands. However, the Applicant shall address the items noted in the *Wetland Comments* Section of this letter prior to receiving wetland approval of the Final Site Plan. ECT suggests that the applicant address these comments in a Revised Final Site Plan.

The following wetland related items are required for this project:

Item	Required/Not Applicable
Wetland Permit (specify Non-Minor or Minor)	Required (Non-Minor)
Wetland Mitigation	Not Required
Wetland Buffer Authorization	Required
EGLE (formerly MDEQ) Permit	Required
Wetland Conservation Easement	Not Required

Based on our review of the Plan, Novi aerial photos, Novi GIS, and the City of Novi Official Wetlands and Woodlands Maps (see Figure 1); it appears as if this proposed project site contains areas mapped as City-Regulated Wetlands/Watercourses and City-Regulated Woodlands. The site appears to contain and appears to be directly adjacent to wetland areas that are regulated by the City of Novi as well as the Michigan Department of Environment, Great Lakes, and Energy (formerly MDEQ).

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FAX (734) 769-3164 HRSDS Sewage Detention Facility (JSP19-0010) Wetland Review of the Preliminary & Final Site Plan (PSP19-0059) April 30, 2019 Page 2 of 10

## Wetlands/Watercourse Evaluation

ECT conducted a wetland evaluation for the proposed site on April 28, 2019. ECT's in-office review of available materials included the City of Novi Regulated Wetland and Watercourse map (see Figure 1), USGS topographic quadrangle map, NRCS soils map, and USFWS National Wetland Inventory map. Based on our review of this information the overall proposed project parcel contains areas mapped as City-Regulated Wetlands/Watercourses. The site appears to contain wetland/watercourse areas that are regulated by the City of Novi as well as the Michigan Department of Environment, Great Lakes, and Energy (EGLE).

The focus of the site inspection was to review site conditions in order to determine whether City-regulated wetlands are found on-site. The Plan does not appear to note who completed the wetland delineation or when the delineation was completed. The applicant should include this information on the Plan. In addition, if a wetland delineation report has been completed for the site, this should be submitted to the City of Novi Community Development Department as well as to ECT for review. Pink wetland boundary flagging was in place in some wetland boundary locations at the time of this site inspection; but was missing from others (see Site Photos). ECT reviewed the flagging and, in general, agrees that the wetland boundaries were accurately flagged in the field.

The Walled Lake Branch of the Middle Rouge River is located to the south and east of the proposed project area. Several areas of delineated wetland are indicated on the Plan. Some of these wetland areas are indicated on the City of Novi's Regulated Wetland Map (see Figure 1). It should be noted that the 25-foot natural features setback should be indicated on the Plan around the watercourse as well as all delineated wetlands.

## Wetlands/Watercourses & Proposed Impacts

ECT's in-office review of available materials included the City of Novi Regulated Wetland and Watercourse map, USGS topographic quadrangle map, NRCS soils map, USFWS National Wetland Inventory map, and historical aerial photographs. The City of Novi Regulated Wetland and Watercourse Map (see Figure 1) indicates that wetlands areas are located on the southern portion of the project. The Plan includes delineated wetland boundaries.

The Plan proposes four (4) general areas of proposed wetland impacts for the construction of the box culvert and trail restoration work. The impact areas have not been quantified on the Plan. The impact areas are located on the north and south ends of the proposed work as well as along the east/west oriented portion of the box culvert installation. The impact areas are for the installation of the box culvert as well as the associated grading required for the culvert installation. The proposed wetland impacts shall be indicated and quantified on subsequent site plans.

The Joint Permit Application package indicates the following wetland impact areas:

- Impact Location Area of impact of approximately 0.04-acre where a portion of a sewage retention box culvert will be installed within the wetland (near the southern section of the construction limits). This includes approximately 80 cubic yards of excavation for the culvert, restoration back to existing grade, and a net fill of 58 cubic yards for the proposed berm and walking path.
- Impact Location B Area of impact of approximately 0.138-acre. This area includes installation of approximately 118 lineal feet of 15'x10' box culvert and a junction chamber. This results in a total cut of 1,540 cubic yards, restoration back to existing grade, and an additional net fill of 640 cubic yards for a berm and walking path.



HRSDS Sewage Detention Facility (JSP19-0010) Wetland Review of the Preliminary & Final Site Plan (PSP19-0059) April 30, 2019 Page 3 of 10

- Impact Location C Area of impact of approximately 0.015-acre. This includes approximately 14 lineal feet of 15'x10' box culvert installation, resulting in a wetland cut of 93 cubic yards. The area will be restored back to existing grade and a net fill of 22 cubic yards will be added for construction of the berm and walking path.
- Impact Location D Area of impact of approximately 0.036-acre. This includes approximately 55 lineal feet of 18" diameter storm sewer installation and portions of a sanitary junction chamber, resulting in a wetland cut of 253 cubic yards. The area will be restored back to existing grade and the ditch will be enclosed with approximately 189 cubic yards of fill
- The total wetland impact is approximately 909 cubic yards of fill in 0.23-acre of wetland.

The 25-foot wetland buffer boundaries have also not been indicated on the Plan. These shall be indicated on subsequent site plans. Impacts (both permanent and temporary) shall also be indicated on the Plan for both the wetlands as well as the 25-foot wetland setback areas.

## City of Novi Wetland/Watercourse Ordinance Requirements

The City of Novi Wetland and Watercourse Protection Ordinance (City of Novi Code of Ordinances, Part II, Chapter 12, Article V.; Division 2.) describes the regulatory criteria for wetlands and review standards for wetland permit applications. The City of Novi regulates wetlands that are: (1) contiguous to a lake, pond, river or stream, as defined in Administrative Rule 281.921; (2) two (2) acres in size or greater; or (3) less than two (2) acres in size, but deemed essential to the preservation of the natural resources of the city under the criteria set forth in subsection 12-174(b). Wetlands deemed regulated by the City of Novi require the approval of a use permit for any proposed impacts to the wetland.

The wetland essentiality criteria as described in the Wetland and Watercourse Protection Ordinance are included below.

All noncontiguous wetland areas of less than two (2) acres which appear on the wetlands inventory map, or which are otherwise identified during a field inspection by the city, shall be analyzed for the purpose of determining whether such areas are essential to the preservation of the natural resources of the city.... In making the determination, the city shall find that one (1) or more of the following exist at the particular site:

- (1) The site supports state or federal endangered or threatened plants, fish or wildlife appearing on a list specified in Section 36505 of the Natural Resources Environmental Protection Act (Act 451 of 1994) [previously section 6 of the endangered species act of 1974, Act No. 203 of the Public Acts of 1974, being section 229.226 of the Michigan Compiled Laws].
- (2) The site represents what is identified as a locally rare or unique ecosystem.
- (3) The site supports plants or animals of an identified local importance.
- (4) The site provides groundwater recharge documented by a public agency.
- (5) The site provides flood and storm control by the hydrologic absorption and storage capacity of the wetland.
- (6) The site provides wildlife habitat by providing breeding, nesting or feeding grounds or cover for forms of wildlife, waterfowl, including migratory waterfowl, and rare, threatened or endangered wildlife species.
- (7) The site provides protection of subsurface water resources and provision of valuable watersheds and recharging groundwater supplies.
- (8) The site provides pollution treatment by serving as a biological and chemical oxidation basin.



HRSDS Sewage Detention Facility (JSP19-0010) Wetland Review of the Preliminary & Final Site Plan (PSP19-0059) April 30, 2019 Page 4 of 10

- (9) The site provides erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter.
- (10) The site provides sources of nutrients in water food cycles and nursery grounds and sanctuaries for fish.

After determining that a wetland less than two (2) acres in size is essential to the preservation of the natural resources of the city, the wetland use permit application shall be reviewed according to the standards in subsection 12-174(a).

## Wetland Regulation and Required Permits

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) generally regulates wetlands that are within 500 feet of a waterbody, regulated stream or are part of wetland system greater than 5 acres in size. It is our understanding that the EGLE will have jurisdiction over the existing wetland areas surrounding this project site as they appear to be part of a wetland system that is greater than 5-acres in size and appear to be within 500 feet of the Walled Lake Branch of the Middle Rouge River. It is the applicant's responsibility to contact EGLE in order to confirm the regulatory authority with respect to any on-site wetland or watercourse areas and the need for any permits based on the proposed Plan.

In 1979, the Michigan legislature passed the Geomare-Anderson Wetlands Protection Act, 1979 PA 203, which is now Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The EGLE has adopted administrative rules which provide clarification and guidance on interpreting Part 303.

In accordance with Part 303, wetlands are regulated if they are any of the following:

- A. Connected to one of the Great Lakes or Lake St. Clair.
- B. Located within 1,000 feet of one of the Great Lakes or Lake St. Clair.
- C. Connected to an inland lake, pond, river, or stream.
- D. Located within 500 feet of an inland lake, pond, river or stream.
- E. Not connected to one of the Great Lakes or Lake St. Clair, or an inland lake, pond, stream, or river, but are more than 5 acres in size.
- F. Not connected to one of the Great Lakes or Lake St. Clair, or an inland lake, pond, stream, or river, and less than 5 acres in size, but the DEQ has determined that these wetlands are essential to the preservation of the state's natural resources and has notified the property owner.

The law requires that persons planning to conduct certain activities in regulated wetlands apply for and receive a permit from the state before beginning the activity. A permit is required from the state for the following:

- Deposit or permit the placing of fill material in a wetland.
- Dredge, remove, or permit the removal of soil or minerals from a wetland.
- Construct, operate, or maintain any use or development in a wetland.
- Drain surface water from a wetland.

Any proposed use of on-site wetlands (if applicable) will require a permit from EGLE, a City of Novi Wetland and Watercourse Permit as well as an Authorization to Encroach the 25-Foot Natural Features Setback for any proposed impacts to the 25-foot wetland/watercourse buffers. The Plan currently appears to propose impacts to wetlands as well as to 25-foot natural features setback buffers.



HRSDS Sewage Detention Facility (JSP19-0010) Wetland Review of the Preliminary & Final Site Plan (PSP19-0059) April 30, 2019 Page 5 of 10

The applicant is urged to minimize impacts to all wetlands and 25-foot wetland setback areas to the greatest extent practicable. The City regulates wetland and watercourse buffers/setbacks. Article 24, Schedule of Regulations, of the Zoning Ordinance states that:

"There shall be maintained in all districts a wetland and watercourse setback, as provided herein, unless and to the extent, it is determined to be in the public interest not to maintain such a setback. The intent of this provision is to require a minimum setback from wetlands and watercourses".

The plans shall clearly indicate the area (square feet or acres) of all wetland and 25-foot wetland setback impacts (both permanent and temporary, if applicable) and the volume (cubic yards) of all proposed direct impacts to wetlands, if applicable. The 25-foot wetland and watercourse (i.e., the 25-foot setback from the Walled Lake Branch of the Middle Rouge River) setbacks shall be shown on the Plan.

It should be noted that ECT has reviewed a copy of the Joint Permit Application prepared for the necessary wetland and floodplain permits from the Michigan Department of Environment, Great Lakes, and Energy (EGLE, formerly MDEQ). This permit application notes that the proposed impacts to existing wetlands total 0.32-acre and 909 cubic yards of fill.

## Wetland Mitigation

EGLE (formerly MDEQ) generally requires mitigation for impacts greater than one-third (0.33) acre and the City requires mitigation for impacts greater than one-quarter (0.25) acre. While the Plan does not appear to quantify wetland impacts, as noted above, the Joint Permit Application for the EGLE (formerly MDEQ permit) indicates 0.23-acre of wetland impact. As such, the Plan as currently proposed does not require compensatory wetland mitigation.

## Wetland Comments

ECT recommends that the Applicant address the items noted below in a Revised Final Site Plan submittal:

- 1. The current Plan includes but does not specifically indicate/quantify impacts to wetlands and wetland buffers. The applicant shall indicate, quantify and label all proposed impacts to these natural features on subsequent plan submittals. The area (square feet or acres) of wetland impacts shall be indicated on the Plan in addition to the proposed volumes of these impacts. The area (square feet or acres) of all impacts (both permanent and temporary) to the 25-wetland and watercourse setbacks shall be indicated on the Plan.
- 2. In addition to wetlands, the City regulates wetland and watercourse buffers/setbacks. Article 24, Schedule of Regulations, of the Zoning Ordinance states that:

"There shall be maintained in all districts a wetland and watercourse setback, as provided herein, unless and to the extent, it is determined to be in the public interest not to maintain such a setback. The intent of this provision is to require a minimum setback from wetlands and watercourses".

It appears as though a MDEQ Wetland Permit and a City of Novi (Non-Minor) Wetland Use Permit would be required for any proposed impacts to on-site wetlands, if applicable. A City of Novi Authorization to Encroach the 25-Foot Natural Features Sethack would be required for any proposed impacts to on-site 25-foot wetland or watercourse buffers.



HRSDS Sewage Detention Facility (JSP19-0010) Wetland Review of the Preliminary & Final Site Plan (PSP19-0059) April 30, 2019 Page 6 of 10

- 3. The Plan shall indicate who delineated the existing wetland and/or watercourse boundaries (to be done by a professional wetland consultant) and when this delineation was completed. In addition, if a wetland delineation report has been completed for the site, this should be submitted to the City of Novi Community Development Department as well as to ECT for review.
- 4. It should be noted that it is the Applicant's responsibility to confirm the need for a Permit from EGLE for any proposed wetland impacts. Final determination as to the regulatory status of any on-site wetlands shall be made by EGLE. The Applicant should provide a copy of the approved EGLE (formerly MDEQ) Wetland Use Permit to the City (and our office) upon issuance. A City of Novi Wetland Permit cannot be issued prior to receiving this information.
- 5. The Plan should address how any temporary impacts to wetland/watercourse buffers shall be restored, if applicable. Specifically, a proposed native seed mix should be provided on the Plan for restoration of these wetland/watercourse buffer areas. Sod or common grass seed will not be authorized in these areas.

## **Wetland Conclusion**

The project site appears to contain wetlands that are regulated by both the City of Novi and EGLE. Any proposed impacts to on-site wetlands will require a permit from EGLE, a City of Novi Wetland and Watercourse Use Permit, and an Authorization to Encroach the 25-Foot Natural Features Setback for any proposed impacts to the 25-foot wetland buffers. The Plan currently appears to propose impacts to both wetlands and 25-foot wetland buffers.

## **Recommendation**

ECT currently recommends approval of the Preliminary Site Plan for wetlands. However, the Applicant shall address the items noted in the *Wetland Comments* Section of this letter prior to receiving wetland approval of the Final Site Plan. ECT suggests that the applicant address these comments in a Revised Final Site Plan.

If you have any questions regarding the contents of this letter, please contact us.

Sincerely,

ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Peter Hill, P.E.

Senior Associate Engineer

the Hill

cc: Lindsay Bell, City of Novi Planner Sri Komaragiri, City of Novi Planner

Rick Meader, City of Novi Landscape Architect Hannah Smith, City of Novi Planning Assistant

Attachments: Figure 1. City of Novi Regulated Wetland & Woodland Map

Site Photos



# Site Photos



Photo 1. Looking south at existing equalization culvert near Roethel Drive (ECT, April 28, 2019).



**Photo 2**. Looking north from southern extents of proposed project with Roethel Drive on the left of the photo (ECT, April 28, 2019).





**Photo 3**. Looking east along east/west portion of the project. Existing detention basin is on the left (north) side and existing wetland area is to the right (south) side (ECT, April 28, 2019).



**Photo 4**. Looking south from near northern extents of project (south of Nine Mile Road). Existing wetland areas are located east and west of the existing City trail (Rotary Park Trail) (ECT, April 28, 2019).



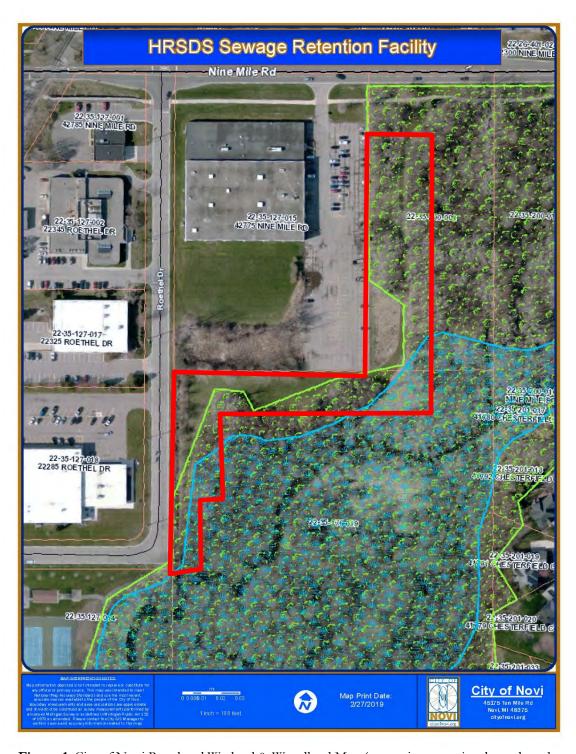


**Photo 5**. Looking south near northern extents of project. Existing wetland area is located to the west (right) of the existing Rotary Park Trail (ECT, April 28, 2019).



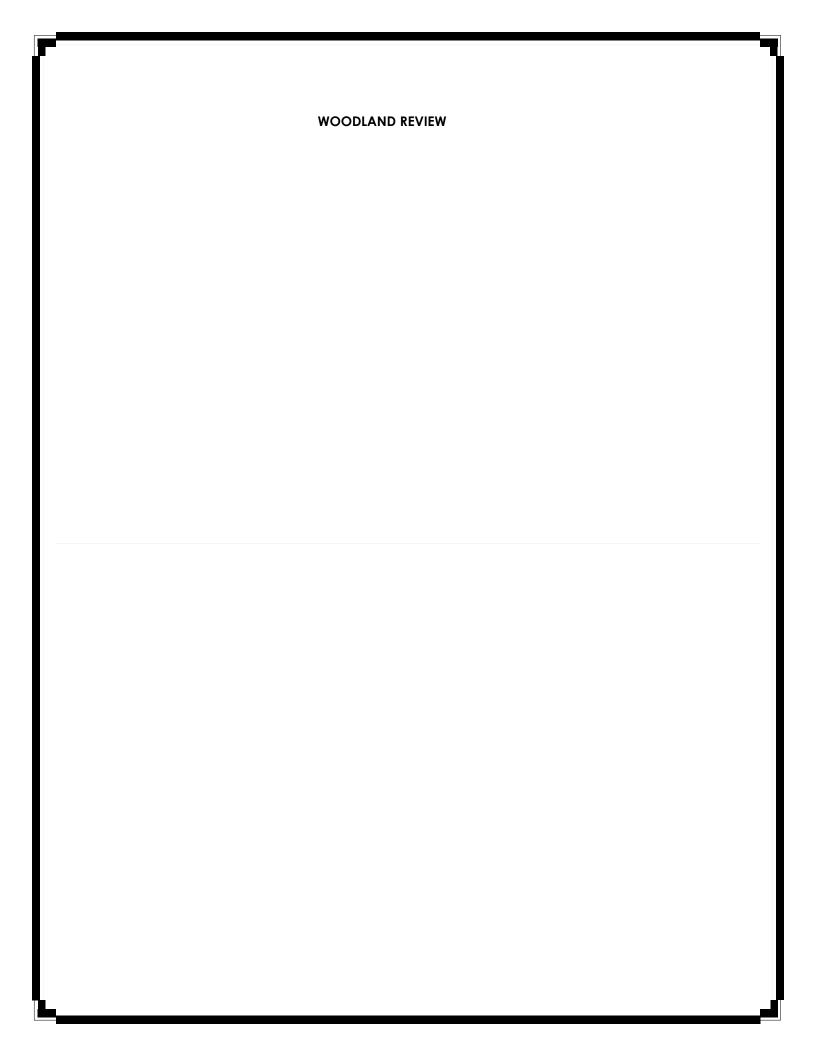
Photo 6. Looking south along northern section of the project extents (ECT, April 28, 2019).





**Figure 1**. City of Novi Regulated Wetland & Woodland Map (approximate project boundary shown in red). Regulated Woodland areas are shown in green and Regulated Wetland areas are shown in blue.







April 30, 2019 ECT No. 190264-0200

Ms. Barbara McBeth, AICP City Planner Community Development Department City of Novi 45175 West Ten Mile Road Novi, MI 48375

Re: HRSDS Sewage Detention Facility (JSP19-0010)

Woodland Review of the Preliminary & Final Site Plan (PSP19-0059)

Dear Ms. McBeth:

Environmental Consulting & Technology, Inc. (ECT) has reviewed the combined Preliminary & Final Site Plan for the proposed HRSDS Sewage Retention Facility project located south of Nine Mile Road and east of Novi Road in Section 35. This included a review of the Site Plan package prepared by Hubbell, Roth & Clark, Inc. (HRC) dated March 29, 2019 (Plan). The proposed project includes the construction of a 15-foot by 10-foot box culvert generally located beneath an existing 6-foot wide pathway. The Plan also includes the restoration of the pathway with 23A crushed limestone, creation of a swale adjacent to the pathway and some associated storm sewer to manage the storm water runoff from the pathway. The Plan was reviewed for conformance with the City of Novi Woodland Protection Ordinance Chapter 37.

ECT currently recommends approval of the Preliminary Site Plan for woodlands. However, the Applicant shall address the items noted in the *Woodland Comments* Section of this letter prior to receiving woodland approval of the Final Site Plan. ECT suggests that the applicant address these comments in a Revised Final Site Plan.

The following woodland related items are required for this project:

Item	Required/Not Required/Not Applicable			
Woodland Permit	Required			
Woodland Fence	Required			
Woodland Conservation Easement	Not Required			

Based on our review of the Plan, Novi aerial photos, Novi GIS, and the City of Novi Official Wetlands and Woodlands Maps (see Figure 1); it appears as if this proposed project site contains areas mapped as City-Regulated Wetlands/Watercourses and City-Regulated Woodlands. The Plan includes impacts to City-Regulated Woodlands and includes an Existing Tree Identification and Removal Plan (Sheet L-1).

The purpose of the Woodlands Protection Ordinance is to:

1) Provide for the protection, preservation, replacement, proper maintenance and use of trees and woodlands located in the city in order to minimize disturbance to them and to prevent damage from erosion and siltation, a loss of wildlife and vegetation, and/or from the destruction of the natural habitat. In this regard, it is the

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intent of this chapter to protect the integrity of woodland areas as a whole, in recognition that woodlands serve as part of an ecosystem, and to place priority on the preservation of woodlands, trees, similar woody vegetation, and related natural resources over development when there are no location alternatives;

- 2) Protect the woodlands, including trees and other forms of vegetation, of the city for their economic support of local property values when allowed to remain uncleared and/or unharvested and for their natural beauty, wilderness character of geological, ecological, or historical significance; and
- 3) Provide for the paramount public concern for these natural resources in the interest of health, safety and general welfare of the residents of the city.

What follows is a summary of our review of the woodland information provided on the Plan.

#### Woodland Evaluation

ECT has reviewed the City of Novi Official Woodlands Map and completed an onsite Woodland Evaluation on April 28, 2019. ECT's in-office review of available materials included the City of Novi Regulated Woodland map and other available mapping. The subject property includes area that is indicated as City-regulated woodland on the official City of Novi Regulated Wetland and Watercourse Map (see Figure 1). The areas designated as City Regulated Woodlands are located along portions of this entire linear project (see Site Photos).

As noted above, the site does contain City of Novi Regulated Woodlands. A good portion of the proposed limits of disturbance are located within area mapped as City-regulated woodland. As noted, the current Plan includes an Existing Tree Identification and Removal Plan (Sheet L-1) that graphically indicates which trees are to be removed. A Tree Survey (Sheet L-2) includes a table of tree tag numbers, common names, and diameters. Sheet L-1 does indicate how many Woodland Replacement Credits are required for each tree proposed for removal. In general, the on-site trees consist of box elder (Acer negundo), poplar/cottonwood (Populus deltoides), silver maple (Acer saccharinum), black locust (Robinia pseudoacacia), and American elm (Ulmus Americana).

In terms of habitat quality and diversity of tree species, the overall subject site consists of trees in fair to good condition. In terms of a scenic asset, wildlife habitat, windblock, noise buffer or other environmental asset, the forested areas located on the subject site appear to be considered to be of fair to good quality. The proposed Plan does include proposed tree removals as indicated below.

#### <u>Proposed Woodland Impacts and Replacements</u>

A review of the Plan indicates the following:

• Total Trees Surveyed: 134

• Total Trees Removed: 47 (35% of total surveyed)

It should be noted that of the 47 trees proposed for removal, six (6) of these are smaller than the City's 8-inch diameter-at-breast-height (DBH) requirement for regulation, and ten (10) are dead. As such a total of thirty-one (31) regulated trees are proposed for removal per the Plan. The Plan notes that a total of 46 trees are to be removed, however there appear to be 47 trees proposed for removal in the tree table.



HRSDS Sewage Detention Facility (JSP19-0010) Woodland Review of the Preliminary & Final Site Plan (PSP19-0059) April 30, 2019 Page 3 of 7

The Existing Tree Identification and Removal Plan (Sheet L-1) indicates that a total of 59 Woodland Replacement Tree Credits (i.e., W.R.C.) are required for the proposed tree removals. It is however not clear from the Proposed Landscape Plan (Sheets L-2 and L-3) which of the proposed plants are meant to satisfy the Woodland Replacement Credit requirement. The Planting List includes both trees and shrubs. The Plan should clearly indicate the locations, sizes, species and quantities of all woodland replacement trees to be planted on-site. The applicant should review and revise the Plan in order to better indicate how the on-site Woodland Replacement requirements will be met.

It continues to be recommended that the applicant provide a table that specifically describes the species and quantities of proposed Woodland Replacement trees and shrubs and the Woodland Replacement Credits being sought for each species of tree or shrub. It should also be noted that all deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and count at a 1-to-1 replacement ratio. All coniferous replacement trees (if applicable) shall be 6-feet in height (minimum) and provide 1.5 trees-to-1 replacement credit replacement ratio (i.e., each coniferous tree planted provides for 0.67 credits). And acceptable shrub species shall be 30-inches in height and provide 6 shrubs-to-1 replacement credit replacement ratio. All proposed Woodland Replacement tree material shall meet the species requirements in the *Woodland Tree Replacement Chart* (attached).

#### **Woodland Comments**

ECT recommends that the Applicant address the items noted below in a Revised Final Site Plan submittal:

- 1. A Woodland Permit from the City of Novi would be required for proposed impacts to any trees 8-inch diameter-at-breast-height (DBH) or greater and located within an area designated as City Regulated Woodland, or any tree 36-inches DBH regardless of location on the site. Such trees shall be relocated or replaced by the permit grantee. All deciduous replacement trees shall be two and one-half (2 ½) inches caliper or greater and count at a 1-to-1 replacement ratio and all coniferous replacement trees shall be six (6) feet in height (minimum) and count at a 1.5-to-1 replacement ratio. All shrubs shall be 30 inches in height (minimum) and count at a 6-to-1 replacement ratio.
- 2. The Plan notes that a total of 46 trees are to be removed, however there appear to be 47 trees proposed for removal in the tree table. Please review and revise as necessary.
- 3. It is not clear from the *Proposed Landscape Plan* (Sheets L-2 and L-3) which of the proposed plants are meant to satisfy the Woodland Replacement Credit requirement. The *Planting List* includes both trees and shrubs. The Plan should clearly indicate the locations, sizes, species and quantities of all woodland replacement trees to be planted on-site. The applicant should review and revise the Plan in order to better indicate how the on-site Woodland Replacement requirements will be met.
- 4. The applicant should provide a table that specifically describes the species and quantities of proposed Woodland Replacement trees and shrubs and the Woodland Replacement Credits being sought for each species of tree or shrub.
- 5. All Woodland Replacement trees and shrubs shall be species that are listed on the City's *Woodland Tree Replacement Chart* (attached). Recommended species are Swamp White Oak, Flowering



HRSDS Sewage Detention Facility (JSP19-0010) Woodland Review of the Preliminary & Final Site Plan (PSP19-0059) April 30, 2019 Page 4 of 7

Dogwood, Musclewood, American Bladdernut, Buttonbush, Gray Dogwood, Hazelnut, other native shrubs.

- 6. Please clearly indicate and label proposed tree protection fencing on Sheets C-3 and L-1, L-2 and L-3.
- 7. The Plan indicated the 'Disruption/Restoration' limits on the Landscape Plan. The Plan currently notes that a 'City of Novi Modified Pollinator Mix' will be used. Please provide seed mix details on the Plan. In addition, the area to receive the seed mix should be clear on the Plan. Please consider hatching the area to be seeded on the Plan. Woodland replacement credits can be taken for at least some of the native seeding (1 Woodland Replacement Credit for 70 square yards of native-seeded area).

#### Woodland Recommendation

ECT currently recommends approval of the Preliminary Site Plan for woodlands. However, the Applicant shall address the items noted in the *Woodland Comments* Section of this letter prior to receiving woodland approval of the Final Site Plan. ECT suggests that the applicant address these comments in a Revised Final Site Plan.

If you have any questions regarding the contents of this letter, please contact us.

Respectfully submitted,

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ENVIRONMENTAL CONSULTING & TECHNOLOGY, INC.

Pete Hill, P.E.

Senior Associate Engineer

cc: Lindsay Bell, City of Novi Planner Sri Komaragiri, City of Novi Planner Rick Meader, City of Novi Landscape Architect

Hannah Smith, City of Novi Planning Assistant

Attachments: Figure 1 – City of Novi Regulated Wetland & Woodland Map

Woodland Tree Replacement Chart

Site Photos



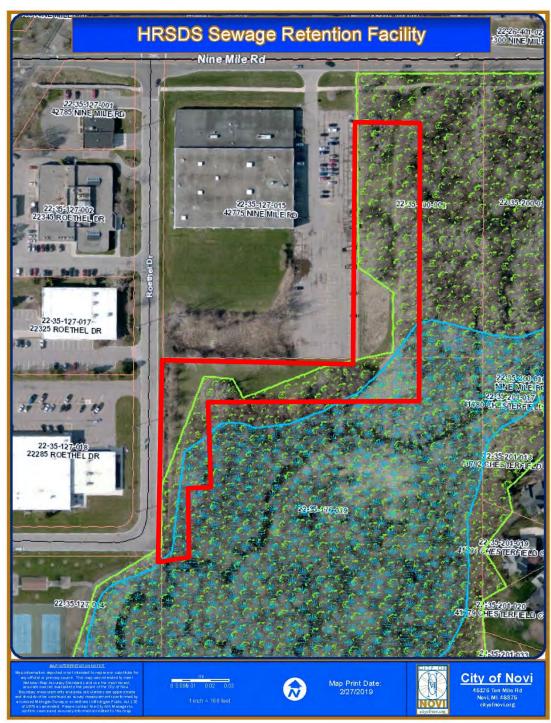


Figure 1. City of Novi Regulated Wetland & Woodland Map (approximate project boundary shown in red). Regulated Woodland areas are shown in green and Regulated Wetland areas are shown in blue.



HRSDS Sewage Detention Facility (JSP19-0010) Woodland Review of the Preliminary & Final Site Plan (PSP19-0059) April 30, 2019 Page 6 of 7

### **Woodland Tree Replacement Chart**

(from Chapter 37 Woodlands Protection)
(All canopy trees to be 2.5" cal or larger, evergreens as listed)

Common Name	Botanical Name		
Black Maple	Acer nigrum		
Striped Maple	Acer pennsylvanicum		
Red Maple	Acer rubrum		
Sugar Maple	Acer saccharum		
Mountain Maple			
Ohio Buckeye	Acer spicatum		
Downy Serviceberry	Aesculus glabra Amelanchier arborea		
Smooth Shadbush	Amelanchier arborea Amelanchier laevis		
Yellow Birch	Betula alleghaniensis		
Paper Birch	Betula papyrifera		
American Hornbeam			
Bitternut Hickory	Carpinus caroliniana		
· · · · · · · · · · · · · · · · · · ·	Carya cordiformis		
Pignut Hickory	Carya glabra		
Shagbark Hickory	Carya ovata		
Northern Hackberry	Celtis occidentalis		
Eastern Redbud	Cercis canadensis		
Pagoda Dogwood	Cornus alternifolia		
Flowering Dogwood	Cornus florida		
American Beech	Fagus grandifolia		
Thornless Honeylocust	Gleditsia triacanthos inermis		
Kentucky Coffeetree	Gymnocladus diocus		
Walnut	Juglans nigra or Juglans cinerea		
Eastern Larch	Larix laricina		
Tuliptree	Liriodendron tulipfera		
Tupelo	Nyssa sylvatica		
American Hophornbeam	Ostrya virginiana		
White Spruce_(1.5:1 ratio) (6' ht.)	Picea glauca		
Black Spruce_(1.5:1 ratio) (6' ht.)	Picea mariana		
Red Pine_(1.5:1 ration) (6' ht.)	Pinus resinosa		
White Pine_(1.5:1 ratio) (6' ht.)	Pinus strobus		
American Sycamore	Platanus occidentalis		
Black Cherry	Prunus serotina		
White Oak	Quercus alba		
Swamp White Oak	Quercus bicolor		
Scarlet Oak	Quercus coccinea		
Shingle Oak	Quercus imbricaria		
Burr Oak	Quercus macrocarpa		
Chinkapin Oak	Quercus muehlenbergii		
Red Oak	Quercus rubra		
Black Oak	Quercus velutina		
American Basswood	Tilia americana		



### Site Photos

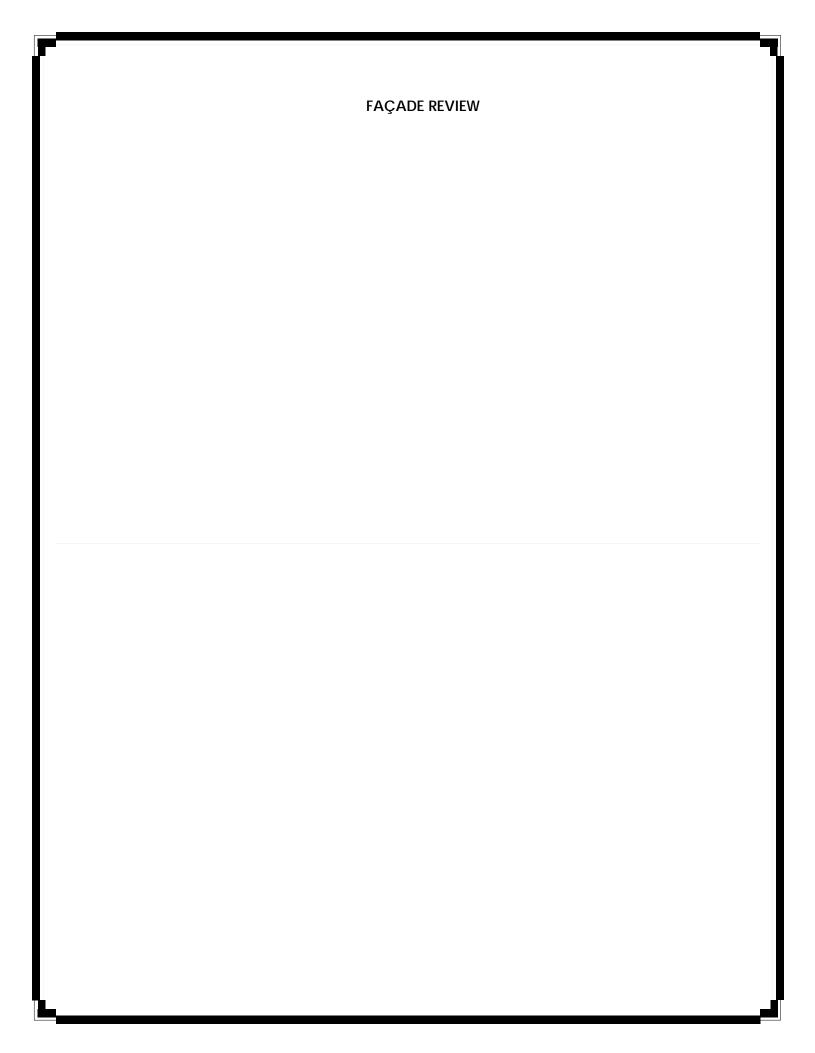


**Photo 1**. Looking south at southern extents of project area. Roethel Drive is located to the right (west) and City Regulated Woodlands, and the Walled Lake Branch of the Middle Rouge River is located, are located to the left (east) (ECT, August 15, 2018).



**Photo 2**. Looking north towards Nine Mile Road. Areas designated as Regulated Woodlands are located both east and west of the existing Rotary Park Trail (ECT, August 15, 2018).









April 28, 2019

Façade Review Status Summary: Full Compliance

City of Novi Planning Department 45175 W. 10 Mile Rd. Novi, MI 48375-3024

Re: Facade Review - HRSDS Sewage Disposal Facility, Mechanical Building

JSP19-10, Façade Region: 3, Zoning District: I-1

Dear Ms. McBeth;

The following is the Facade Review for the above referenced project based on the drawings prepared by Hubble Roth and Clark Engineers, dated 3/29/19. The percentages of materials proposed for each façade are as shown on the table below. The maximum percentages allowed by the <u>Schedule Regulating Façade Materials</u> (AKA Façade Chart) of Ordinance Section 5.15 are shown in the right hand column. Materials in non-compliance with the Façade Chart, if any, are highlighted in bold. All buildings are located in Façade region 1.

	North	South	East	West	Ordinance Maximum
Brick	75%	75%	75%	75%	100%
Standing Seam Metal Roof	20%	20%	20%	20%	75%
Trim	5%	5%	5%	5%	15%

**Recommendation** - This project is located in Zoning District I-1, is located greater than 500' from a major thoroughfare and therefore falls in Facade Region 3. As shown above all facades are in full compliance with the Façade Ordinance. A Section 9 Waiver is not required for this project.

## **Notes to the Applicant:**

- 1. The façade Ordinance requires that roof top equipment be screened from view from all vantage points both on and off site using approved materials.
- 2. Façade Ordinance requires inspection(s) for all projects. Materials displayed on the approved sample board will be compared to materials delivered to the site. It is the applicant's responsibility to request the inspection of each façade material at the appropriate time. Inspections may be requested using the Novi Building Department's Online Inspection Portal with the following link. Please click on "Click here to Request an Inspection" under "Contractors", then click "Façade".

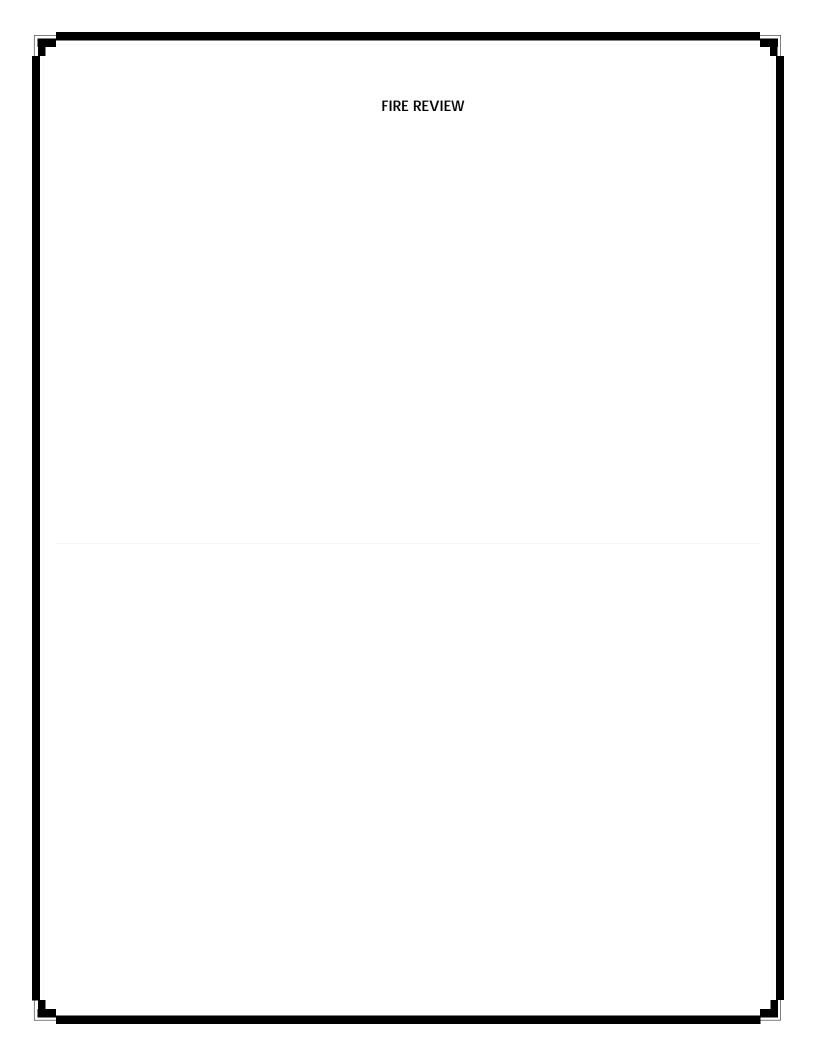
http://www.cityofnovi.org/Services/CommDev/OnlineInspectionPortal.asp.

If you have any questions regarding this project please do not hesitate to call.

Sincerely,

DRN & Associates, Architects PC

Douglas R. Necci, AIA





April 12, 2019

CITY COUNCIL

Mayor Bob Gatt

**Mayor Pro Tem** Dave Staudt

Andrew Mutch

Laura Marie Casey

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**City Manager** Peter E. Auger

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Jeffery R. Johnson

**Assistant Chief of Police** 

Erick W. Zinser

**Assistant Chief of Police** Scott R. Baetens

TO: Barbara McBeth- City Planner Sri Ravali Komaragiri- Plan Review Center

Lindsay Bell-Plan Review Center Hannah Smith-Planning Assistant

RE: HRSDS Sewage Retention Facility

**PSP# 19-0059** PSP# 19-0034

**Project Description:** 

Build a pump station/sewage retention facility off Roethel south of Nine

Mile Rd.

Comments:

 All fire hydrants MUST in installed and operational prior to any building construction begins.

Recommendation:

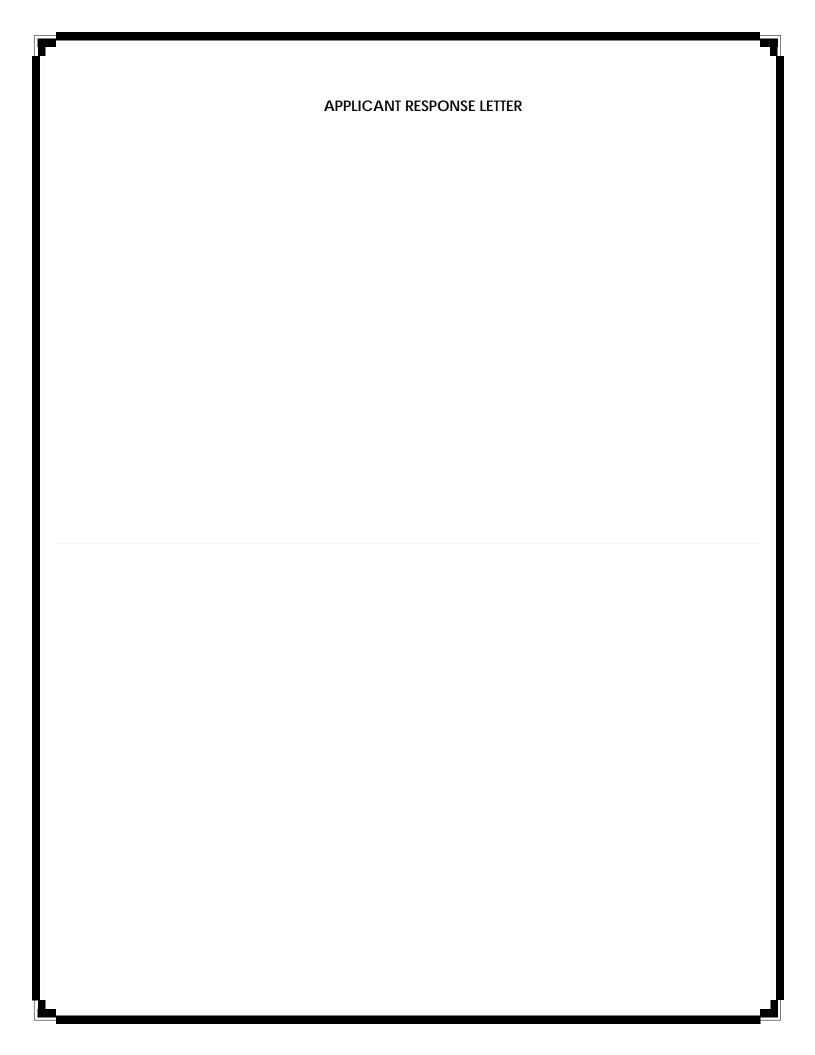
MEETS FIRE DEPARTMENT STANDARDS

Sincerely,

Kevin S. Pierce-Fire Marshal City of Novi – Fire Dept.

cc: file

Novi Public Safety Administration 45125 Ten Mile Road Novi, Michigan 48375 248.348.7100 248.347.0590 fax





May 2, 2019

Ms. Lindsay Bell, Planner City of Novi 45175 Ten Mile Road Novi, MI 48375

Re: Applicant Response Letter

**JSP19-10 HRSDS Sewage Retention Facility** 

Dear Ms. Bell:

Thank you for the review comments in the City's April 30, 2019 Plan Review Center Report. The Oakland County Water Resources Commissioner's Office (WRC) is constructing this project at the request of the City of Novi. While the facility will be owned and operated by WRC, it is for the exclusive benefit of the city's sanitary sewer customers. The project will address the limited contractual capacity downstream in Wayne County's Rouge Valley Sewage Disposal System. The proposed sewer retention facility will store flows during storm events to prevent contract exceedances and will facilitate continued growth and economic development within the City of Novi.

WRC has reviewed the Plan Review Center report and will address all of the comments provided therein as part of the final site plan submittal. The report notes that a deviation for accessory structures and several findings for permitted uses are needed from Planning Commission. We are providing additional information their consideration below followed by a response to each of the comments in the report.

#### Request for a Deviation from Section 4.19 Accessory Structures

A generator is not specifically called out in the Zoning Ordinance as an accessory structure but is regulated as such per the Plan Review Center Report. WRC is requesting a deviation from Section 4.19 to locate the generator within the front yard setback of the site. The proposed location of the generator is necessary for several reasons:

- The proposed mechanical building must be located over the proposed storage chambers to facilitate the pumping and flushing operations that are essential to the design of the facility. This fixes the location of the storage chambers and the mechanical building.
- The proposed generator cannot be located above the proposed storage chamber due to conflicts with underground electrical and natural gas piping. Therefore, the generator cannot be placed directly south or east of the proposed mechanical building.
- The access drive to the north is required to access the mechanical building and underground chambers, thus eliminating placement of the generator on the north side of the building.



- The proposed location is the only remaining location on the site that minimizes the use of City parkland and reduces the footprint of the site.
- The generator will be screened with vegetation as shown on the landscape plan.

This site is unique because of its non-traditional function. Great care was taken to minimize the amount of City parkland needed to construct the facility while meeting site plan requirements. WRC respectfully requests that the Planning Commission grant a deviation from Section 4.19 of the Zoning Ordinance to allow the generator as an accessory structure in the front yard setback for this site.

### Request for Planning Commission Findings for Permitted Uses (Section 3.14.3)

The Plan Review Center report requested additional information to demonstrate conformance with the standards and intent of Section 3.14.3 and relevant performance standards of Section 5.14

## A. Residential Impacts

The site is proposed in an industrial district adjacent to City parkland to minimize residential impacts. The nearest residential home is more than 600 feet away. The brick façade will be similar to City owned utility structures and the City has designed a landscape plan that meets ordinance requirements.

#### B. Trucks

There will be no truck delivery service on the site. There will be occasional site visits of short duration made by WRC staff and contractors with equipment of various sizes depending on the reason for the visit.

#### C. Relevant Performance Standards (Section 5.14)

#### Odor

The proposed storage facility functions only during a large storm event and will fill approximately once every two years. A flushing system is included as part of the design to clean the chambers after each use and will minimize potential odors. The flushing can occur multiple times to fully clean the facility. The odor from the site would be minimal, if existent, similar to one of the City's sewage lift stations (which are sometime located adjacent to residential homes).

### **Vibration**

The only piece of equipment on this project that could generate vibration would be the natural gas generator. This equipment will be mounted on its own foundation and will have vibration isolators to address this concern. The generator will be similar generators that have been installed by the City at sewage lift stations, often within residential areas. The generator will only run when tested once a month, or if there is a power outage while the facility is in use once every two or so years.

### Noise Disturbances

The generator would be the only equipment item on this project that will generate noise. As stated in the description provided, the generator will have a sound attenuated housing rated to provide 70 dBA at 23 feet average sound level as measured in a free field environment. This meets the requirements for the industrial zoning districts. The nearest residential property is over 600 feet from the proposed generator location, with a calculated decibel level of approximately 42 dBA at that distance, which meets the residential standard. As stated above, the generator will be similar generators that have been installed by the City at sewage lift stations, often within a residential area. The generator will only run when tested once a month, or when there is a power outage while the facility is in use once every two or so years.

#### D. Hazardous Materials

There will be no hazardous or flammable materials stored on this site. A note will be added to the plan to verify conformance.

WRC respectfully requests that the Planning Commission find that the site plan demonstrates conformance with the standards and intent of Section 3.14.3 and relevant performance standards of Section 5.14

### **Detailed Response to Plan Review Center Report**

### **Planning Review Summary Chart**

- Section 3.14.3.A—addressed above.
- Section 3.14.3.B—addressed above.
- Section 3.14.3.C—addressed above.
- Section 3.14.3.D—addressed above.
- Section 5.7.3.B—The standard notes from this section will be included on the Final Site Plan submittal.
- Legal Description—The legal description will be included on the cover sheet in the Final Site Plan Submittal.

#### **Wetland Review Letter**

- 1. The final site plan will indicate and quantify impacts to wetlands and wetland buffers.
- 2. A wetland permit Part 303 has been submitted to the Michigan Department of Environment, Great Lakes and Energy. In addition, a City of Novi Wetland Permit will be submitted as requested.
- 3. The plans will be revised to state the name of the wetland professional, Derek Stratelak, that determined the wetland boundaries in the field and when the survey was complete.
- 4. A copy of the MDEGLE Part 303 Permit will be forwarded when it is obtained.
- 5. Temporary wetland impacts and seed mix will be addressed on the final site plan submittal.

#### **Woodland Review Letter**

1. A woodland permit will be submitted to the City for review.

- 2. The discrepancy in the tree removal count will be addressed on the final site plan submittal.
- 3. The final site plan submittal will indicate which trees are used to address the Woodland replacement requirements.
- 4. The final site plan will clearly call out the proposed woodland replacement tree species and quantities. This will also address which are being used for woodland replacement credits.
- 5. The landscape plan was prepared in close coordination with the City's Landscape Architect. WRC will work with him to make any modifications necessary prior to final site plan submittal.
- 6. Tree protection fencing will be clearly labeled on the final site plan submittal
- 7. The modified pollinator seed mix and areas where it will be placed will be called out on the final site plan.

#### **Façade Review Letter**

- 1. The requirements for roof top equipment are duly noted and will be addressed at the time of final site plan as applicable.
- 2. Inspections will be requested through the portal as required.

#### **Fire Department Review Letter**

• There are no fire hydrants currently proposed as part of this project. An existing fire hydrant exists on Roethel Drive should it be needed.

Again, I want to thank the staff and consultants for their review and assistance with the site plan process. WRC is excited about this project to serve the sanitary sewer customers and promote continued growth and economic development within the City of Novi.

I look forward to meeting with the Planning Commission on May 8. If you have any questions or require any additional information in the meantime, please contact me at (248) 452-9846.

Sincerely,

Brian Coburn, P.E. Chief Engineer

**Sewer System Operations** 

cc: Mr. Ben Croy, P.E., Water & Sewer Senior Manager, City of Novi Mr. Tom Maxwell, P.E., Senior Associate, Hubbell, Roth & Clark, Inc.