



Planning and Economic Development
Sara Roediger, AICP, Director

From: Sara Roediger, AICP
Date: 6/6/2017
Re: Innovation Hills (former Riverbend Park) Phase 1 (City File #17-015)
Preliminary/Final Site Plan - Planning Review #1

The applicant, the City of Rochester Hills Parks & Forestry Department, is proposing to start development of the park as recommended in the approved Riverbend Park Strategic Framework Plan. The submitted plan include recommendations from various elements in the plan as the following:

1. Development of the water feature area, consisting of an upper and lower pond and sundial mound overlook.
2. Installation of associated amenities including benches, gazebo shelter, solar powered charging station and bike racks.
3. Refinement to the parking lot and bioswale.
4. Expansion of the trail system surrounding the ponds (including glow in the dark pavers in select locations), as well as around the senior play area and children's play area/sensory garden.

The project was reviewed for conformance with the City of Rochester Hills Zoning Ordinance. Improvements in outdoor recreation facilities and parks can be reviewed administratively in accordance with *Section 138-2.200*, however because of the significance of the park and the required tree permit, staff wanted to bring this to the Planning Commission as an update and to solicit input.

1. **Zoning and Use** (*Section 138-4.300*). The site is zoned R-2 One Family Residential District which permits municipal buildings and uses as permitted uses. Refer to the table below for the zoning and existing and future land use designations for the subject site and surrounding parcels.

	Zoning	Existing Land Use	Future Land Use
Subject Site	R-2 One Family Residential	Innovation Hills Park	Park/ Public Open Space & Residential 3
North	R-2 One Family Residential	Christian Hills Subdivision	Residential 2
South	R-2 One Family Residential/ Consent Judgment	Vacant/Landfill	Regional Employment Center
East	R-2 One Family Residential	Heritage Oaks Subdivision	Residential 2 & 3, Private Recreation/Open Space
West	R-2 One Family Residential/ Consent Judgment	Pheasant Ring & Clinton River Valley Subdivisions, Vacant/Landfill	Residential 2 & 3, Private Recreation/Open Space

2. **Site Layout** (*Section 138-5.100-101*). Refer to the table below as it relates to the area, setback, and building requirements of the R-2 district for this project.

Requirement	Proposed	Staff Comments
Min. Lot Area 15,000 sq. ft.	110+ ac.	In compliance
Min. Lot Width 100 ft.	1,460+ ft.	In compliance
Max. Height 2 stories/35 ft.	Not applicable	In compliance
Min. Front Setback 40 ft.	Not applicable	In compliance
Min. Side Setback 15 ft./30 ft.	Not applicable	In compliance

Requirement	Proposed	Staff Comments
Min. Rear Setback 35 ft.	Not applicable	In compliance
Max. Lot Coverage 25%	0%	In compliance

3. **Exterior Lighting** (Section 138-10.200-204). Changes to the exterior lighting are not indicated on the plans. If new lighting is proposed, a photometric plan showing the location and intensity of exterior lighting is required.
4. **Waste Removal** (Section 138-10.311). Eight trash/recycling bins and three dog waste stations are proposed throughout the developed area.
5. **Signs**. (Section 138-8.603). Internal wayfinding signage is proposed throughout the developed area and is exempt from the sign ordinance. Any signage facing Hamlin Rd. requires a sign permit from the Building Department.
6. **Parking** (Section 138-11.100-308). Refer to the table below as it relates to the parking requirements of this project.

Requirement	Proposed	Staff Comments
Min. # Parking Spaces Municipal use: 1 space per employee	46 spaces (phase I & II)	As a park use, there are no ordinance requirements on # of spaces
Max. # Parking Spaces 125% of Min.		
Min. Barrier Free Spaces 2 BF spaces 11 ft. in width w/ 5 ft. aisle for 26-50 parking spaces	4 BF spaces (2 each in phase I & II), dimensions to be provided	Dimensioned plans must be provided to the Building Dept. before a permit can be issued
Min. Parking Space Dimensions 10 ft. x 18 ft. w/ 12 ft. one-way aisle	Information to be provided	
Min. Parking Front Setback (Hamlin) 40 ft.	59+ ft.	In compliance
Min. Parking Side Setback (east/west) 10 ft./10 ft.	1,000+ ft./100+ ft.	In compliance

7. **Natural Features**. In addition to the comments below, refer to the review letters from the Engineering and Forestry Departments that may pertain to natural features protection.
 - a. **Tree Removal** (Section 126 Natural Resources, Article III Tree Conservation). The site is subject to the city's tree conservation ordinance, and so any healthy tree greater than 6" in caliper that will be removed must be replaced with one tree credit. Trees that are dead or in poor condition need not be replaced. The removal of any regulated tree requires the approval of a tree removal permit and associated tree replacement credits, in the form of additional plantings as regulated in the Tree Conservation Ordinance or a payment of \$205.50 per credit into the City's tree fund.
 - b. **Wetlands** (Section 126 Natural Resources, Article IV Wetland and Watercourse Protection). The affected area does not contain any regulated wetlands.
 - c. **Natural Features Setback** (Section 138-9 Chapter 1). The affected area does not contain any required natural features setbacks.
 - d. **Steep Slopes** (Section 138-9 Chapter 2). The affected area does not contain any regulated steep slopes.
8. **Landscaping** (Section 132-12.100-308). Refer to the table below as it relates to the landscape requirements for this project.

Requirement	Proposed	Staff Comments
Right of Way (Hamlin Rd.: 1,460 ft.) 1 deciduous per 35 ft. + 1 ornamental per 60 ft. = 42 deciduous + 24 ornamental	Extensive existing vegetation 328 deciduous & ornamental 115 evergreen 600 shrubs	The combination of the existing & proposed vegetation exceeds the intent of the landscaping requirements
Parking Lot: Interior 5% of parking lot + 1 deciduous per 150 sq. ft. landscape area		
Stormwater 1.5 deciduous + 1 evergreen + 4 shrubs per 100 ft. pond perimeter		



BUILDING DEPARTMENT
Scott Cope

From: Craig McEwen, Building Inspector/Plan Reviewer *CPM*
To: Sara Roediger, Planning Department
Date: May 27, 2017
Re: Innovation Hills – Review #1
Sidwell: 15-29-101-020
City File: 17-005

The site plan review for the above reference project was based on the following drawings and information submitted:

Innovation Hills Project drawings prepared by Nunez Design date April 21, 2017

Approval recommended based on the following items being addressed on the next submittal or on the permit documents:

1. Accessible parking spaces shall be a Universal Barrier Free design to allow van access in any accessible parking space per the City Ordinance Section 138-11.300. Universal barrier free spaces shall be 11 feet in width with a 5 foot access aisle.
 - a. Van accessible parking spaces that are angled shall have the access aisle located on the passenger side of the parking space per ANSI A117.1-2009 Section 502.4.1.
 - b. Accessible parking spaces shall have a maximum slope of 1:48 in any direction and meet the provisions of A117.1, Section 502.5. Please provide spot elevations at all proposed new accessible parking space to confirm these requirements are being met.
2. Please clearly indicate the accessible route from the accessible parking space to pathways. I was unable to determine if the pavement and walks were flush or if any curb ramps were provided.
3. Protective guard rails shall be provided along either side of the walking surfaces that are to be located more than 30 inches measured vertically to the grade below at any point within 36 inches horizontally of the walking surface. See MBC-2015 Section 1015.
 - a. Guards shall be not less than 42 inches height and have openings that will not allow passage of a sphere 4 inches in diameter. See MBC-2015 Sections 1015.3 and 1015.4.

If there are any questions, please call the Building Department at 248-656-4615. Office hours are 8 a.m. to 4:30 p.m. Monday through Friday.



DPS/Engineering
Allan E. Schneck, P.E., Director

SRB

From: Jason Boughton, AC, Engineering Utilities Coordinator
To: Sara Roediger, Director of Planning
Date: June 9, 2017
Re: Innovation Hills, City File #17-015, Section #29
Site Plan Review #1

Engineering Services has reviewed the site plan received by the Department of Public Services on May 19, 2017, for the above referenced project. Engineering Services **does not** recommend site plan approval due to the following comments:

General

1. The city file number #17-015 needs to be added in the lower right hand corner of all plan sheets.
2. Maintain 10 foot of horizontal separation between all utilities, existing and proposed.

Sanitary Sewer

1. Is the proposed future restroom is going to be connected to the sanitary sewer system? Revise as necessary.

Storm Sewer

1. Provide soil borings located near the proposed ponds to determine if the existing ground water table will be effected with the proposed depth.
2. Verify the two proposed ponds meet the engineering design standards for wet ponds. (See attached).
3. Revise the overflow structures material to be either corrugated metal pipe or concrete.
4. Provide a storm sewer outlet for the neighboring parcels to the west (Sidwells #15-29-101-022 & 023). Contact Rachel Smith with Professional Engineering Associates to coordinate the storm sewer outlet.

The applicant needs to submit a Land Improvement Permit (LIP) application with engineer's estimate, fee and construction plans to get the construction plan review process started.

JB/jf

Attachment: Wet Pond Engineering Design Standards

c: Allan E. Schneck, P.E., Director; DPS
Tracey Balint, P.E., Public Utilities Engineer; DPS
Paul Shumejko, P.E., PTOE, Transportation Engineer; DPS
Keith Depp, Staff Engineer; DPS

Paul Davis, P.E. City Engineer/Deputy Director; DPS
Sheryl Molsaac, Office Coordinator; DPS
Jenny McGuckin, Engineering Aide; DPS

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- N. Storm sewers serving as an outlet for stormwater ponds/basins shall be designed in accordance with the standard requirements for other storm sewers in the design.

Wet Ponds

A. Facility Sizing

1. The volume of permanent pool shall equal twice the water quality volume.

B. Pond Configuration

1. The wet basin shall be configured as a two-stage facility with a sediment forebay and a main pool.
2. The pond should be wedge-shaped, narrowest at the inlet and widest at the outlet.
3. The outlet should be located at the opposite and farthest end of the pond from the inlet.
4. The minimum length to width ratio shall be 3:1 where feasible. If it is not feasible to construct a pond with such dimensions, baffles or islands should be used to achieve the flow path length.

C. Depth

1. The depth of the pond should be variable, with the average depth between three (3) and six (6) feet.
2. The deep section of the pool should have a minimum depth of three feet (3'). This prevents resuspension of sediments by wind turbulence.
3. The maximum depth of the permanent pool shall be ten feet (10'). Ponds deeper than this depth may be subject to stratification and promote anoxic conditions at the pond bottom, releasing sediment-bound pollutants into the water column.

D. Pond Side Slopes/Benches

1. Interior side slopes of wet ponds should not exceed 1:6 (V:H), unless unfeasible, steeper slopes are permissible under the following conditions: Side slopes steeper than 1:6 (V:H) require two safety benches. One should start at the design surface water elevation (25 year). The other should extend from the wet pool elevation and slope inward to a maximum depth of 18 inches (also considered an aquatic bench). Both benches should be a maximum of 6 % slope and a minimum width of 5'. The aquatic bench should be landscaped with appropriate native plantings. Slopes below the safety/aquatic benches shall not be steeper than 1:3 (V:H). Chain link fence may be substituted for the safety bench located above the design surface elevation, which eliminates the need for the aquatic bench. Fences shall be a minimum of 6 feet high vinyl clad chain link with a locking access gate, 8 feet wide. Alternate types of fencing may be permitted, for aesthetic purposes, subject to approval by the Engineering Division.