AGENDA
PLANNING COMMISSION SPECIAL MEETING
CITY OF FARMINGTON HILLS
MARCH 20, 2025 @ 6:00 P.M.
FARMINGTON HILLS CITY HALL – COMMUNITY ROOM
31555 W. ELEVEN MILE ROAD, FARMINGTON HILLS, MICHIGAN 48336
www.fhgov.com
(248) 871-2540

1. **Call Meeting to Order**
2. **Roll Call**
3. **Approval of Agenda**
4. **Special Meeting**
   A. **DISCUSSION OF DRAFT ZONING TEXT AMENDMENT 5, 2024, TO INTRODUCE DESIGN STANDARDS AND REVISE PLANNED UNIT DEVELOPMENT PROVISIONS**
5. **Public Comment**
6. **Commissioner Comments**
7. **Adjournment**

Respectfully Submitted,

Kristen Aspinall, Planning Commission Secretary

Staff Contact:

Erik Perdonik, AICP
City Planner
Planning and Community Development Department
(248) 871-2540
eperdonik@fhgov.com

NOTE: Anyone planning to attend the meeting who has need of special assistance under the Americans with Disabilities Act (ADA) is asked to contact the City Clerk's Office at (248) 871-2410 at least two (2) business days prior to the meeting, wherein arrangements/accommodations will be made. Thank you.

MEMORANDUM

TO: Farmington Hills Planning Commission

FROM: Joe Tangari, AICP, Jill Bahm, AICP, Julia Upfal, AICP

RE: Post-Master Plan Amendments: Design Standards

DATE: 2/13/2025

When crafting zoning regulations, it is important for communities to be practical about the costs that will be incurred by developers while understanding the important role that regulations play in protecting existing investments within the community. With design standards, it is especially important to strike this careful balance, achieving high-quality development without creating burdensome hurdles to invest in the City. Ultimately, by establishing consistent and predictable expectations for design, these regulations will help attract additional investment and high-quality development. This memorandum includes an overview of various design standards the Planning Commission may wish to incorporate, including:

1. Building Materials
2. Fenestration
3. Architectural Scale and Breaks
4. Roof design
5. Entrance features

In addition to consideration of the various standards the PC may wish to include, this memo describes the intent of design standards and outlines different options for gradually bringing existing buildings into conformance with them.

Purpose and Intent

A purpose statement will provide clear objectives for design standards to direct applicants, staff, and public bodies. In circumstances where the approving body is granted the discretion to consider waivers or flexibility, alignment with this intent will be foundational to decision making. A draft purpose statement is provided below.

The purpose of these design standards is to promote complementary use of design elements and achieve visually appealing and functionally efficient development that is compatible with surrounding land uses. Specifically, these standards are intended to:

1. Enhance aesthetic quality.
2. Promote the use of building materials that are durable and resilient.
3. Support economic development.
4. Maintain a harmonious relationship between adjacent land uses.
5. Encourage pedestrian-friendly design elements.

These standards serve as a framework for new developments that strengthen and enhance the city's overall character, while allowing for creativity and innovation in design.

Considerations:

1. Does this purpose/intent statement align with the City's goals for design standards?
2. Is there anything that should be added to the purpose/intent statement?
3. Is there anything that should be removed from the purpose/intent statement?

Applicability

All new construction should comply with any design standards in the ordinance. However, when there are nonconforming design elements on existing buildings, the Ordinance should provide guidance on the updates that are required when a site plan is submitted.

The draft language below emphasizes that there may be no expansion, extension or enlargement of any nonconforming design element. The language further requires that a front facing façade is brought into conformance with the design standards when a building expansion or change in use reaches a certain development threshold.

Applicability.

1. All new construction shall comply with the design standards in this Section.
2. For building expansions, additions, and changes in use, the following shall apply
    a. When a building expansion or change of use results in an increase of 50% or more in terms of total gross floor area or indoor seating capacity, all façades that are visible from a public right-of-way shall comply with the design standards in this Section.
    b. When a building expansion or change proposes to increase the total gross floor area or indoor seating capacity by less than 50%, only new or modified design elements are required to be compliant with this chapter.

Exceptions.

1. The following exceptions from this section shall apply:
    a. Single and two-family dwellings are not required to comply with the design standards of this section.
    b. In the LI-1 Zoning District, only properties with frontage on a major thoroughfare are required to comply with the design standards of this section.

Considerations:

1. Should design elements be brought into conformance when a development threshold is reached or should only new construction be required to comply?
    a. Should this apply to all façades or only façades visible from a public ROW?
2. Are the proposed development thresholds appropriate to trigger compliance?

3. If design elements are brought into conformance, should fenestration and/ or roof pitch be excluded?
4. Are any other exceptions needed?

Building Materials

Standards for building materials are often separated into two categories, distinguishing between primary and accent materials. Primary materials are acceptable for the entire building, while accent materials should be limited in overall use. Accent materials often add contrast, texture, or architectural interest, but may not have the durability or visual appeal for large areas.

Building Materials

1. The following may be permitted as primary materials on any building façade. At least 60% of facades, excluding windows and doors, shall be comprised of primary building materials.

Permitted Primary Materials
Brick, cut stone, field stone, manufactured stone, or decorative CMU block
Timber or dimensional wood or engineered equivalent
Fiber cement siding or panels.

2. The following may be permitted as accent materials on any building façade.

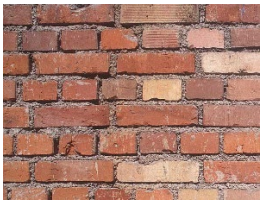
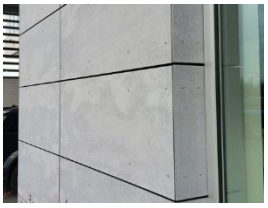
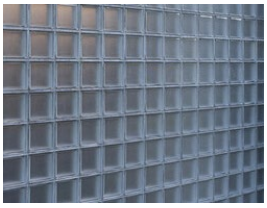
Permitted Accent Materials
Glass block
Metal and metal paneling
Decorative masonry veneer
Polymer plastic (e.g. Fypon, Azek)
Stucco
Plain or painted CMU block
Exterior Insulation and Finishing Systems (EFIS) [1]
[1] Exterior Insulation and Finishing Systems may only be permitted when located at least 6 ft above grade.

3. All building materials and colors shall be clearly labeled on the proposed building elevations.
4. Samples of building materials may be requested by the Zoning Administrator or approving body.
5. Engineered building materials should match the appearance and durability of natural building materials.
6. Prohibited materials. The following materials shall be prohibited: vinyl, mirrored glass, scorched block, except when permitted under Article 34-5.5.
7. A waiver from the required building materials in this section may be granted when the Planning Commission finds one of the following:
    a. The waiver will achieve a specific architectural objective or purpose
    b. The proposed building materials are compatible with surrounding development

Considerations

1. Are there any accent materials you would like to see permitted as primary building materials?
2. Are there any building materials that are not listed, but should be?
3. Should all façades comply with the building material requirements or only façades visible from a public right-of-way?

Examples of the building materials described in the draft language are illustrated below.

Brick 	Stone 	Plain or painted CMU Block 	EFIS 
Decorative CMU Block 	Timber or Dimensional Wood 	Vinyl 	Mirrored Glass 
Fiber Cement Siding 	Glass block 	Polymer Plastic 	Stucco 
Metal 	Decorative Masonry Veneer 		

Fenestration

Fenestration requirements regulate the placement of windows, doors, and other openings in building façades. These types of standards help to support design that is pedestrian friendly and encourages engagement between the public and private realm. In addition, fenestration helps to promote safety by placing "eyes on the street," helping to deter crime and providing a greater sense of security and visibility.

The following draft language for fenestration may be considered by the Planning Commission.

Fenestration.

1. Fenestration shall be provided in accordance with the table below:

Fenestration requirements by Façade Orientation		
Façade Orientation	**Minimum Ground Floor Fenestration**	**Minimum Upper Floor Fenestration**
Facing a Major Thoroughfare	60%	35%
Facing a Public ROW that is not a Major Thoroughfare	50%	20%
Facing a Parking Lot	50%	20%
All other façades	20%	20%

2. Multiple-family dwellings, places of worship, hospitals, public schools, and public utility buildings shall only be required to comply with the upper floor fenestration requirements described above; ground floor fenestration may be discretionary for these uses.
3. Upper floor windows shall be vertical in proportion.
4. Accordion, roll-up, or folding doors and sliding windows may be permitted for ground floor uses to provide indoor-outdoor service, providing adequate sidewalk clearance is provided.
5. Doorways and window surrounds shall be articulated by sills, lintels, pilasters or mullions through a change in plane of at least two inches.
6. A waiver from the fenestration requirements in this section may be granted when the Planning Commission finds one of the following:
    a. The waiver will achieve a specific architectural objective or purpose
    b. The proposed building materials are compatible with surrounding development
    c. Compliance with the standard will result in a practical difficulty

Considerations:

1. It is difficult to limit design requirements by use because it creates nonconforming elements if there is a use-change. However, for some uses, privacy concerns are important to the functionality of the space. Are there other uses which should be included as exceptions?

2. Are fenestration requirements necessary for façades that are not facing a public ROW? Are fenestration requirements necessary for façades that are facing a parking lot?
3. Are the proposed proportions overly burdensome or permissive?

Architectural Scale and Breaks

Architectural scale provides visual interest to buildings, ensuring greater aesthetic compatibility with surrounding development, preventing structures from appearing out of place or overwhelming. In addition, these standards help to guide developers towards designs that integrate well with the surrounding urban fabric, while allowing for creativity and innovation in design.

The Planning Commission may wish to consider the following language for architectural scaling and breaks:

Architectural Scaling

1. There are to be no blank or unarticulated façades. All façades visible from a public right-of-way must provide windows and architectural scaling elements (such as vertical pilasters, columns, or other architectural elements) to break up the scale of the building. Distance between breaks shall be consistent with the scale and rhythm of adjacent buildings.
2. Building façades shall include no less than two of the following elements:
    a. Building color change.
    b. Building material or texture change.
    c. Projections or recesses extending along at least 20% of the façade.
    d. Recessed entranceways or projecting vestibules.
3. A horizontal expression line, such as a molding or reveal, shall define the transition between the ground floor and upper stories. If a one-story building is proposed, the horizontal expression line is not required. However, wainscoating is encouraged.

Considerations:

1. Some communities only require architectural scaling for blank façades of a certain size (ie façades 100 feet or greater).

Roof Design

Roof design plays an important role in both the aesthetic and functional aspects of buildings. Rooflines contribute significantly to the City's overall architectural identity and regulations help maintain consistency and quality. In addition, these regulations can help to guide the use of rooftop amenities such as terraces, mechanical equipment, or solar installations, ensuring that they are safe and well-integrated with surrounding developments.

The Planning Commission may wish to consider the following language for roof design:

Roofs

1. Roofs shall meet the following standards:

a. Flat roofs. Parapets concealing flat roofs and rooftop equipment such as HVAC units from public view are required. Parapets shall not exceed one-third of the height of the supporting wall at any point.
b. Pitched roofs. Pitched roofs shall have an average slope between 1:4 and 1:1. The Planning Commission may grant a waiver from the required average slope upon a finding that it achieves a specific architectural purpose.

2. Rooftop patios and terraces may be permitted on structures three stories or greater and are prohibited in the rear 35% of lot depth to protect the privacy of neighboring properties.

Considerations:

1. Are rooftop patios appropriate in Farmington Hills? Should they be permitted on buildings of less or greater height than 3 stories?

Entrance Features

Entrance features are the primary connection between the public and private realm, often serving as the focal point of a building. Clear articulation helps to ensure that these features are easily identified, making buildings welcoming and easy to access. The planning commission may wish to consider the following standards for entrance features:

1. Building entrances shall be clearly defined and visually prominent. This may be achieved through the use of architectural elements such as recesses, canopies, lintels, pediments, pilasters, columns, awnings, overhangs, or other distinguishing features. Any such element shall be architecturally compatible with the style, materials, and colors of the building.
2. A pathway to the entrance shall be provided as described in Section 5.19.
3. The primary entrance shall be located along the front side of the building with a pedestrian pathway connecting the primary entrance to the adjacent sidewalk.
4. Entrances shall be well-lit with decorative or functional lighting that enhances visibility and security. Entrance lighting must comply with Section 5.16 Exterior Lighting.
5. Entrance features shall be proportional to the building façade.
6. When practical, service entrances that are not articulated or clearly defined shall be obscured from view of a public right-of-way.
7. Entryway features, such as planters, benches, or other pedestrian-friendly amenities, are encouraged.

Additional Considerations:

1. Some communities require a certain number of entrances for façades more than 100 feet. While this may create arbitrary/ unnecessary entrances, it helps to break up the building and promote walkability.
2. Some ordinances require building with façades more than 100 feet to have architectural emphasis around the building entrance, such as roof elements, changes in materials, or other architectural detailing.

AGENDA
PLANNING COMMISSION PUBLIC HEARING/REGULAR MEETING
CITY OF FARMINGTON HILLS
MARCH 20, 2025 @ 7:30 P.M.
FARMINGTON HILLS CITY HALL – CITY COUNCIL CHAMBER
31555 W. ELEVEN MILE ROAD, FARMINGTON HILLS, MICHIGAN 48336
Cable TV: Spectrum – Channel 203; AT&T – Channel 99
YouTube Channel: https://www.youtube.com/user/FHChannel8
www.fhgov.com (248) 871-2540

1. **Call Meeting to Order**
2. **Roll Call**
3. **Approval of Agenda**
4. **Public Hearing**

A. SPECIAL APPROVAL 51-2-2025

LOCATION:	29150 Farmington Road
PARCEL I.D.:	22-23-10-101-002
PROPOSAL:	Temporary staging area for construction equipment and material within RA-2 One Family Residential District
ACTION REQUESTED:	Special approval
APPLICANT:	Bidigare Contractors/Jordon Bidigare
OWNER:	Cedar of Farmington Road, LLC

B. ONE-FAMILY CLUSTER OPTION QUALIFICATION 1, 2025

LOCATION:	28000 Nine Mile Road
PARCEL I.D.:	22-23-25-401-001
PROPOSAL:	Qualification of one (1) parcel for construction of site-built, one-family attached dwelling units within RA-1 One Family Residential District
ACTION REQUESTED:	Qualification of One-Family Cluster Option
APPLICANT:	Eureka Building Co.
OWNER:	Lutheran Child and Family Service of Michigan, Inc.

C. 2025/2026 THROUGH 2030/2031 CAPITAL IMPROVEMENTS PLAN
ACTION REQUESTED: Adoption of plan

5. Regular Meeting

A. SITE PLAN 63-12-2024

LOCATION:	34650 Eight Mile Road
PARCEL I.D.:	22-23-33-376-040
PROPOSAL:	Renovation of vehicle wash within B-3 General Business District
ACTION REQUESTED:	Site plan approval
APPLICANT:	Krieger Klatt Architects
OWNER:	MCW Farmington Hills, LLC

B. SITE PLAN 65-12-2024 (PLANNED UNIT DEVELOPMENT 4, 2021)

LOCATION:	32905 Northwestern Highway
PARCEL I.D.:	22-23-02-102-014
PROPOSAL:	Construction of multiple-family dwellings within B-3 General Business, RA-4 One Family Residential, and P-1 Vehicular Parking Districts
ACTION REQUESTED:	Site plan approval
APPLICANT:	Tom Herbst
OWNER:	Farmington Hills Lofts, LLC

C. ZONING TEXT AMENDMENT 3, 2024

CHAPTER OF CODE:	34, Zoning Ordinance
PROPOSED AMENDMENT:	Amend Zoning Ordinance to add new definitions and add, remove, and revise several OS-4 Office Research District, use standards, and off-street parking requirements
ACTION REQUESTED:	Set for public hearing
SECTIONS:	34-2.2, 34-3.1.22, 34-3.5.2, 34-3.9, 34-4.61, and 34-5.2

D. ZONING TEXT AMENDMENT 4, 2024

CHAPTER OF CODE:	34, Zoning Ordinance
PROPOSED AMENDMENT:	Amend Zoning Ordinance to revise definition of restaurant, drive-in; add definition of commercial outdoor recreation space; and delete reference to automobile service center and replace with automobile repair
ACTION REQUESTED:	Set for public hearing
SECTIONS:	34-2.2 and 34-3.1.24

E. HISTORIC DISTRICT COMMISSION 2024 ANNUAL REPORT

ACTION REQUESTED: Acceptance of report

F. PLANNING COMMISSION 2024 ANNUAL REPORT

ACTION REQUESTED: Adoption of report

G. ELECTION OF OFFICERS

6. Approval of Minutes December 19, 2024, Regular Meeting; January 16, 2025, and Special meeting January 25, 2025, Regular Meeting

7. Public Comment
8. Commissioner/Staff Comments
9. Adjournment

Respectfully Submitted,

Kristen Aspinall, Planning Commission Secretary

Staff Contact:

Erik Perdonik, AICP
City Planner
Planning and Community Development Department
(248) 871-2540
eperdonik@fhgov.com

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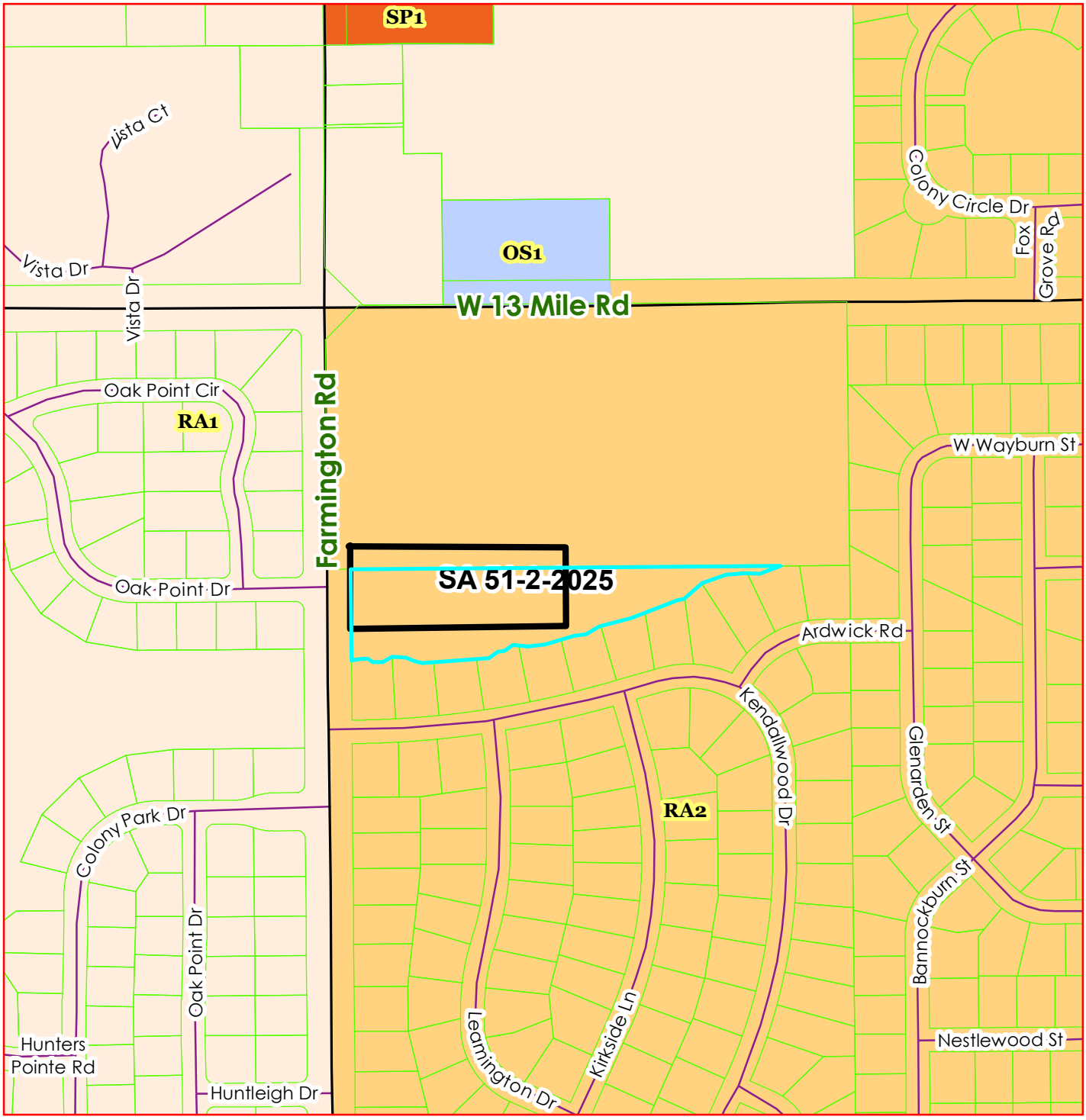
SA 51-2-2025, 29150 Farmington Rd.
10-101-002, RA-2
Temporary construction staging area



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FEET

Tax parcel
Minor roads

Zoning Districts

Zoning Districts

OS-1 Office Service District
RA-1 One Family Residential District
RA-2 One Family Residential District
SP-1 Special Purpose District

SOURCE: City of Farmington Hills, 2024
Oakland County GIS, 2024

FARMINGTON HILLS Michigan

SA 51-2-2025, 29150 Farmington Rd.
10-101-002, RA-2
Temporary construction staging area

Planning Division

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FEET

SOURCE: City of Farmington Hills, 2024
Oakland County GIS, 2024

FARMINGTON HILLS Michigan

Tax parcel
Minor roads

February 26, 2025

Farmington Hills Planning Commission
31555 W 11 Mile Rd
Farmington Hills, MI 48336

Site Plan Review

Case:	51-2-2025
Site:	29150 Farmington Rd (Parcel 22-23-10-101-002)
Applicant:	Bidigare Contractors
Plan Date:	2/10/2025
Zoning:	RA-2 Single Family

Dear Planning Commissioners:

We have completed a review of the application for site plan and special land use approval above and a summary of our findings is below. Items in **bold** require specific action by the Applicant. Items in *italics* can be addressed administratively.

SUMMARY OF FINDINGS

Project Summary

The applicant is proposing a temporary construction staging area for the replacement of water main in Kendallwood Sub #2 and #4. Kendallwood is immediately south of the proposed staging site. The application specifies that the time frame for the batch plant will be 7 months, beginning April 1, 2025. The proposed layout appears to make use of previously cleared and developed portions of the lot, though this should be confirmed. Hours of operation are not listed in the application.

Summary of Issues

1. **Verification of hours/days of operation and anticipated employee count.**
2. **Provide setback distances; confirm no tree removal/disturbance of undeveloped land.**

Existing Conditions

1. **Zoning.** The parcel is zoned RA-2 Single Family.
2. **Existing site.** The site is 3.73 acres and developed with a long-defunct tennis club (cluster housing was approved for the site several years ago but appears never to have been built).
3. **Adjacent properties.**

Direction	Zoning	Land Use
North	RA-2	Regional detention basin
East	RA-2	Single-family
South	RA-2	Single-family
West	RA-1	Single-family

4. **Site configuration and access.** The site is accessible from Farmington Road.

Site Plan & Use:

1. **Dimensional Standards (RA-2 district).** **Setbacks are not provided on the plan—general areas of the site are shown for various purposes.**

Standard	Required	Proposed
Front setback	35 ft	?
Rear Setback	35 ft	?
Side Setback (south)	8/12 ft	?
Side Setback (north)	8/12 ft	?
Building height	30 ft	No structures appear to be proposed

2. **Parking.** **The application does not note an anticipated count of employees or identify a place for them to park**.
3. **Overall Circulation.** Circulation through the site is via the existing driveway.
4. **Lighting (Section 34-5.16).** No lighting is proposed.

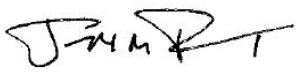
5. **Landscaping and trees.** The trees on site are not proposed to be affected by the project. No landscaping is being proposed.
6. **Nature of equipment.** It is not clear what equipment will be kept on the site or how it will be secured.

Special Approval

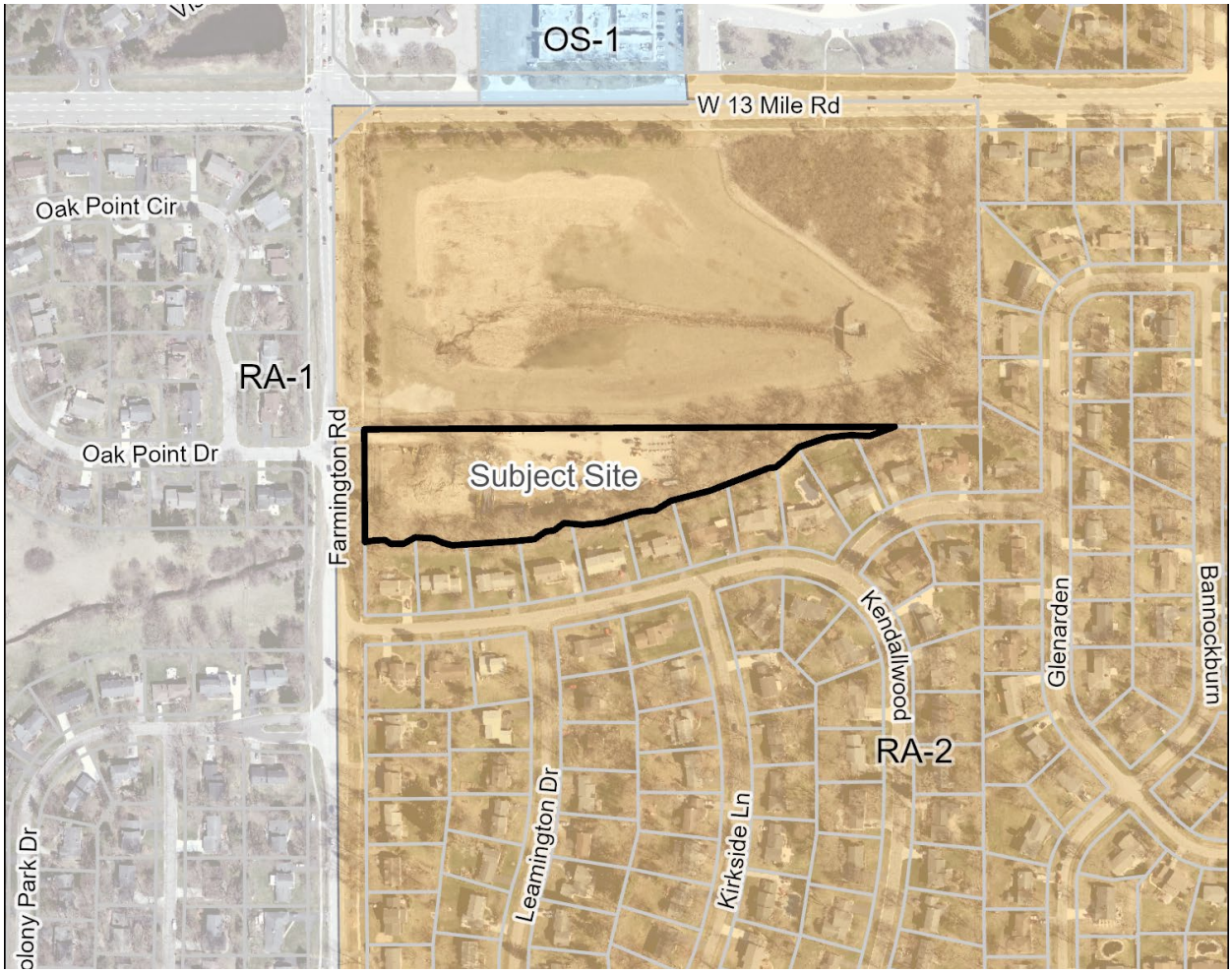
1. Conditions: In the RA-2 district, temporary construction staging uses are not specifically permitted; they are, however, permitted as a special land use under Section 4.20.4.C, subject to the following:
    C. Temporary construction uses not accessory to existing uses. Temporary construction uses and structures not directly accessory to any existing use of the zoning lot, but necessary for the use or improvement of some other property or properties within the City for a permitted purpose.
        i. The planning commission shall examine the proposed use and determine that the petitioner has adequately explored alternative locations and that the location proposed is the most reasonable.
        ii. The planning commission shall examine the location of structures on the site and determine that they are the most appropriate, may require reasonable temporary screening of the activity proposed, may suggest the location of vehicular access to the site and make other recommendations which will assist in the protection of nearby uses during the time the construction use is in operation.
        iii. All setbacks, land coverage, off-street parking, lighting and other requirements for protecting the public health, safety, peace, morals, comfort, convenience and general welfare of the inhabitants of the city shall be determined by the planning commission as being appropriate to the site and surrounding area.
        iv. The act of granting approval of a use not otherwise permitted in a district shall in no way be construed as a change in the basic uses permitted in the district nor on the property wherein the use is permitted.
        v. The granting of permission for the use shall be made in writing stipulating all conditions as to length of time, nature of developed permitted and arrangements for removing the use at the termination of the period of time granted.

We are available to answer questions.

Respectfully,
Giffels Webster



Joe Tangari, AICP
Principal Planner


OS-1
W 13 Mile Rd
Oak Point Cir
RA-1
Oak Point Dr
Farmington Rd
Subject Site
Kendallwood
Glenarden
Bannockburn
RA-2
Leamington Dr
Kirkside Ln
olony Park Dr

DEPARTMENT OF PUBLIC SERVICES
JACOB RUSHLOW P.E. DIRECTOR

INTEROFFICE CORRESPONDENCE

DATE: February 21, 2025

TO: Eric Perdonik, City Planner

FROM: James Cubera, City Engineer

SUBJECT: Special Approval 51-2-202564-12-2024
Bidigare Construction
29150 Farmington Road
22-23-10-101-002

This office has performed a preliminary review of the above referenced Special Approval plan submitted to the Planning Department on February 11, 2025. We have no objection to the approval. Our preliminary comments are as follows:

1. Dust control and soil erosion control must meet City standards. A soil erosion control permit with the appropriate fees, bonds and deposits will be required along with an approved soil erosion control plan. Street sweeping of the roads between the construction site and the staging area will also be required as determined by the City Engineering Division.

2. Any noise or traffic issues must be addressed as per the requirements of the City Engineering Division.

FIRE

FARMINGTON HILLS

INTEROFFICE CORRESPONDENCE

Date: February 18, 2025

To: Planning Commission

From: Jason Baloga, Fire Marshal

Subject: SA 51-2-2025 (29150 Farmington Road)

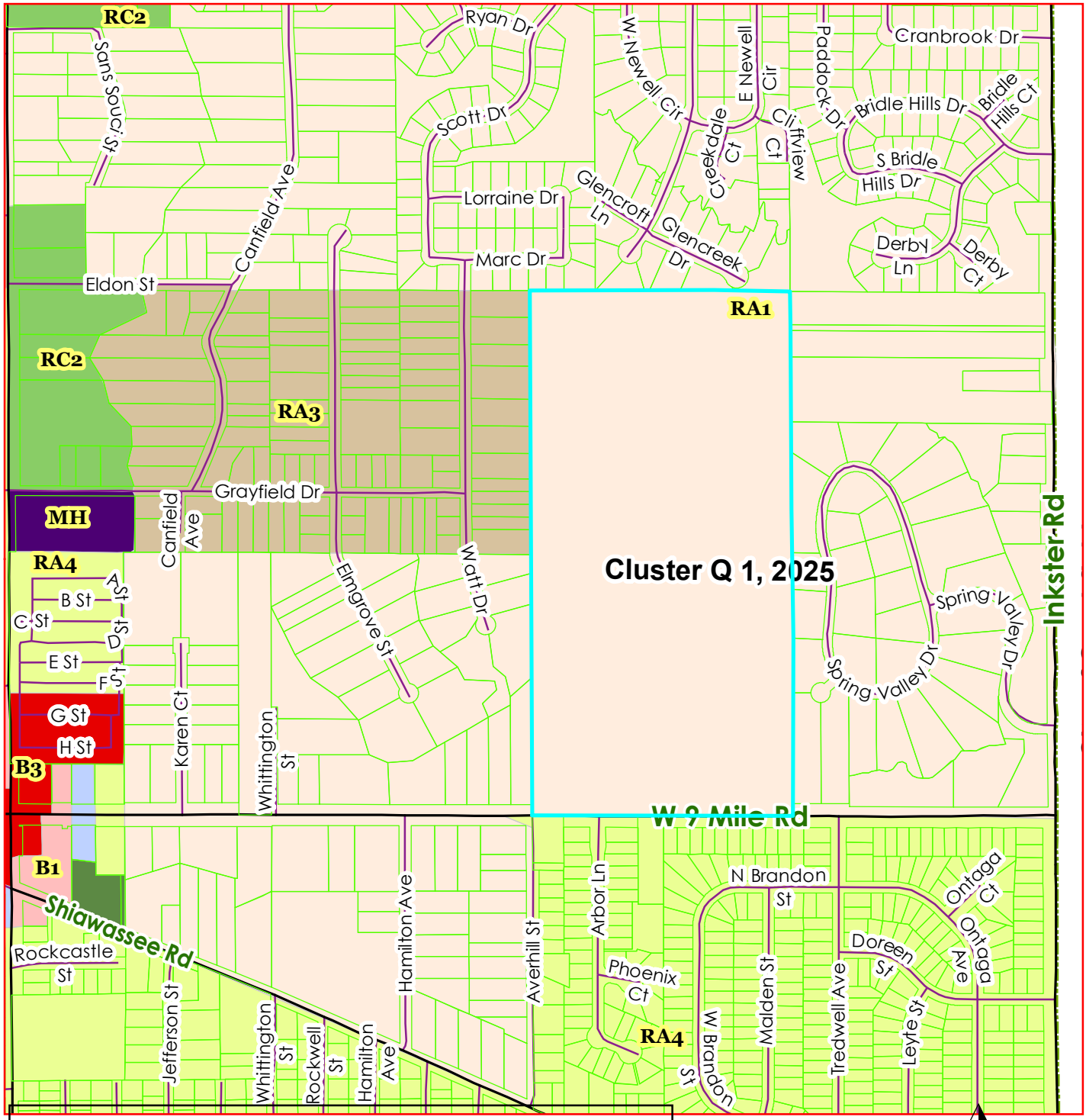
The Fire Department has no objection to approval.

Jason Baloga, Fire Marshal

JB/al


TRUCK DELIVERY ROUTE
PIPE ASSEMBLY AREA
STAGING AREA FOR WATER MAIN FITTINGS AND MATERIALS
PROPOSED STAGING AREA FOR DIRT/STONE & EQUIPMENT
13 Mile Rd
Farmington Rd
Oak Point Cir
Oak Point Dr
Vista
Vista Ct
Kendallwood Dr
Ardwick
Minnow Pond Drain
W Wayburn St
Sprucewood St
Glenarden St
Bannockburn St
Fox Grove Rd
Colony Cir Dr
Canterbury Commons
Metro Detroit Christian Church
Red Dot Tactical
TC3 Food Pantry
Kristy Dunnigan THRESHOLD Real Estate

Cluster Qualifacation 1, 2025
28000 Nine Mile, 25-401-001, RA-1
Proposed Cluster preserves existing natural features and serves as a transitional housing between lower density single family housing an main roadway.



- Tax parcel
- Minor roads

Zoning Districts

Zoning Districts

- B-1 Local Business District
- B-3 General Business District
- MH Mobile Home District
- OS-1 Office Service District
- RA-1 One Family Residential District
- RA-3 One Family Residential District
- RA-4 One Family Residential District
- RC-2 Multiple Family Residential
- RC-3 Multiple Family Residential

N

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FEET

SOURCE: City of Farmington Hills, 2024
Oakland County GIS, 2024

FARMINGTON HILLS Michigan

Cluster Qualifacation 1, 2025
28000 Nine Mile, 25-401-001, RA-1
Proposed Cluster preserves existing natural features and serves as a transitional housing between lower density single family housing an main roadway.

N

0 390
FEET

Planning Division

SOURCE: City of Farmington Hills, 2024
Oakland County GIS, 2024

FARMINGTON HILLS Michigan

Tax parcel
Minor roads

February 26, 2025

Farmington Hills Planning Commission
31555 W 11 Mile Rd
Farmington Hills, MI 48336

Preliminary Cluster Qualification

Case:	Cluster Qualification 1, 2025
Site:	28000 Nine Mile Road; 79.81 acres
Applicant:	Forest at Riverwalk Development
Application Date:	12/20/2024
Zoning:	RA-1 Single Family

We have completed a review of the application for cluster qualification referenced above and a summary of our findings is below. Items in **bold** require specific action by the Applicant.

SUMMARY OF FINDINGS

Existing Conditions

1. **Zoning.** The parcel is zoned RA-1 Single Family Residential.
2. **Existing site.** The site is 79.61 acres and is developed with the Wellspring Lutheran Services campus, which consists of one- and two-story buildings and athletic facilities, with trails. The campus provides care to children in the foster system with special needs. Much of the campus is wooded, and the Rouge River runs through the southern portion.
3. **Adjacent properties.**

Direction	Zoning	Land Use
North	RA1	Single family homes
East	RA1	Single family homes
South	RA4	Single family homes
West	RA1/RA3	Single family homes

4. **Site configuration and access.** The site is accessible from Nine Mile Road.

Cluster Qualification:

Under Section 34-3.17 One Family Cluster Option, the Planning Commission may make a determination that the site qualifies for a One Family Cluster based on the following criteria and procedures.

2. Conditions for qualification:
   A. Qualification for the cluster option shall be based on two (2) findings by the planning commission with final density dependent upon whether or not the site qualifies under both findings:
      i. First, the planning commission shall find that the parcel will qualify for the cluster development option as defined in Section 34-3.17.2.B.i-viii. Development would be at the single family densities permitted in subsection 34-3.17.3.A. This finding must be made in all cases.
      Section 34-3.17.2.B.i-viii is addressed below. Section 34-3.17.3.A permits 1.8 units per acre for a One Family Cluster in the RA-1 district under this item.
      ii. Second, the planning commission may additionally find that the parcel is located in a transition area or is impacted by nonresidential uses or traffic on major or secondary thoroughfares or other similar conditions. If the planning commission makes such a finding, it may permit an increase in density up to the maximum densities established in subsection 34-3.17.3.B.
      Subsection 34-3.17.3.B. permits up to 3.1 units per acre in the RA-1 district under this item. The parcel is surrounded by single family development.

The applicant has shared basic plans showing the subdivision of the land for a cluster development. Under standard i. above, 42 units are available on 16.3 acres. Standard ii. would permit up to 63 units. The plans show 38 units. As noted above, the site contains extensive woodland and wetland; some lots impact wetlands; EGLE permits and off-site mitigation may be required. The planning commission may wish to postpone a determination on qualification until EGLE review can be completed if this is the case.

Section 34-3.17.2.B.i-viii. "The planning commission may approve the clustering or attaching of buildings on parcels of land under single ownership and control which, in the opinion of the planning commission, have characteristics that would make sound physical development under the normal subdivision approach impractical because of parcel size, shape or dimension or because the site is located in a transitional use area or the site has natural characteristics which are worth preserving or which make platting difficult. In approving a parcel for cluster development, the planning commission shall find at least one of the following conditions to exist:"

i. The parcel to be developed has frontage on a major or secondary thoroughfare and is generally parallel to such thoroughfare and is of shallow depth as measured from the thoroughfare.
ii. The parcel has frontage on a major or secondary thoroughfare and is of a narrow width, as measured along the thoroughfare, which makes platting difficult.
iii. The parcel is shaped in such a way that the angles formed by its boundaries make a subdivision difficult to achieve and the parcel has frontage on a major or secondary thoroughfare.
iv. A substantial portion of the parcel's perimeter is bordered by a major thoroughfare which would result in a substantial proportion of the lots of the development abutting the major thoroughfare.
v. A substantial portion of the parcel's perimeter is bordered by land that is located in other than an RA district or is developed for a use other than single-family homes.
vi. The parcel contains a floodplain or poor soil conditions which result in a substantial portion of the total area of the parcel being unbuildable.
vii. The parcel contains natural land forms which are so arranged that the change of elevation within the site includes slopes in excess of ten (10) percent between these elevations. These elevation changes and slopes shall appear as the typical feature of the site rather than the exceptional or infrequent features of the site. The topography is such that achieving road grades of less than that permitted by the city would be impossible unless the site were mass graded. The providing of one-family clusters will, in the opinion of the planning commission, allow a greater preservation of the natural setting.
viii. The parcel contains natural assets which would be preserved through the use of cluster development. Such assets may include natural stands of large trees, land which serves as a natural habitat for wildlife, unusual topographic features or other natural assets which should be preserved.

We have bolded the items of this subsection that may apply to this parcel; determinations on vi. and viii. must be based on written documentation and plan illustrations. The Planning Commission must find that at least one of these conditions exists in order to qualify the property for the One Family Cluster Option. This property is crossed by a branch of the Rouge River, and the proposed development is entirely south of the river. Note that preliminary qualification is not a guarantee of approval of the cluster site plan.

Conceptual Plan:

1. **Summary of Concept Plan.** A concept plan showing 52 attached units (4 units per building) was submitted with the application; this number of units nets out to 0.67 units per acre over the full acreage of the site. Qualification under option B above would not be necessary to permit this number of units. The plan shows two connections to Nine Mile Road, along with the preservation of

an existing bridge that leads across the river to the facilities in the site's interior. Wetlands on the site are mostly avoided by development, though a portion of Wetland C is placed in a culvert on the western side of the site, and the detention pond in the site's southeast corner encroaches into a small portion of existing wetland. Conceptual plans show 13 buildings with four ranch units with attached two-car garages each. Full review of a cluster site plan will occur during the next stage of the approval. The plans identify two common areas, though there are no pedestrian walkways or sidewalks shown on the plans.

2. **Master Plan.** The property is designated Flex Residential on the Future Land Use Map. It is also identified as the Boys & Girls Republic Special Residential Planning Area. Flex Residential is described in the Master Plan as follows:

   "The Flex Residential category is intended to acknowledge the challenging nature of redevelopment on the designated land and allow for a variety of approaches to future residential projects. Such approaches may include clustering of detached or attached units, constructing units in a townhome, rowhouse, or cottage court format, duplexes, triplexes, or quadplexes in either side-by-side or stacked arrangements, with a height of one to three stories. In all cases, density beyond that permitted in the current zoning district should be tied to the provision of preserved open space, and especially natural buffers to adjacent, established neighborhoods."

   The Master Plan makes the following specific recommendations for this site:

   "Given the size of the site and quality of its natural features, future redevelopment should be concentrated as much as possible in the previously cleared portions of the site. Additional height may be permissible near the center of the site if existing woodland is preserved at the site's perimeter. In addition to residential uses, large-scale outdoor recreation uses could be considered for this site, though these too should be well-buffered from adjacent neighborhoods and designed to minimize further reduction of the site's natural features. Consideration may also be given to providing access for adjacent neighborhoods to any shared open space provided in a redevelopment plan. There is potential for some land to be acquired for use as a public park."

   By and large, proposed development does occur in areas of previous development. However, it does appear that proposed development would mark an increase in the overall level and intensity of development in these areas.

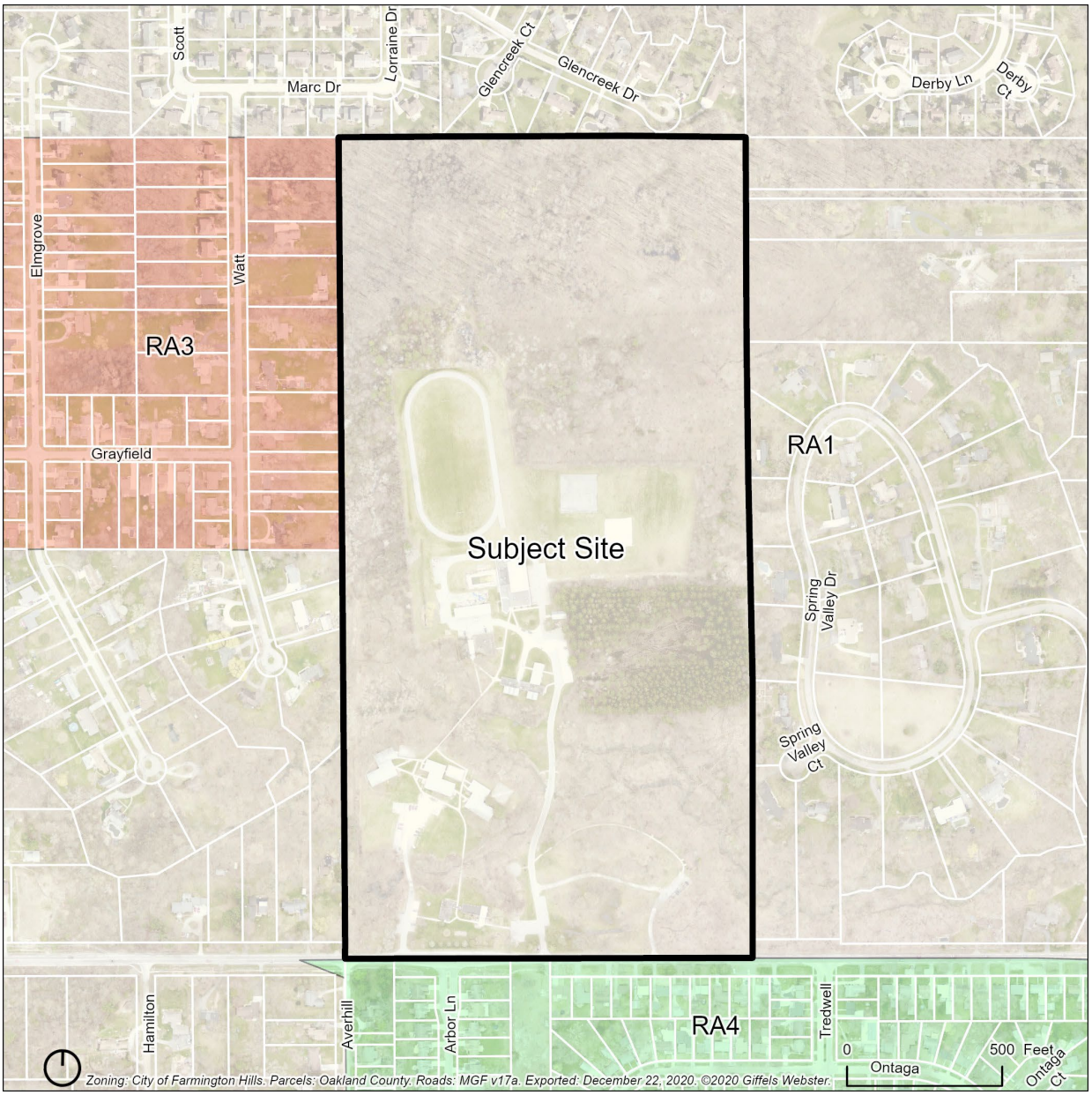
3. **Residential Densities Map.** The residential densities map designates this land as Flex Residential with low-medium density to the north, east, and west, and medium density to the south.
4. **Tree Inventory.** The plans were submitted with a tree inventory that was included as part of a PUD submission for this site in 2021. For final submission, this inventory should be updated to note which trees would be removed under this scope of work (the inventory tables do not mark trees for preservation or removal, and do not identify landmark trees, all of which is required information for a tree removal plan).

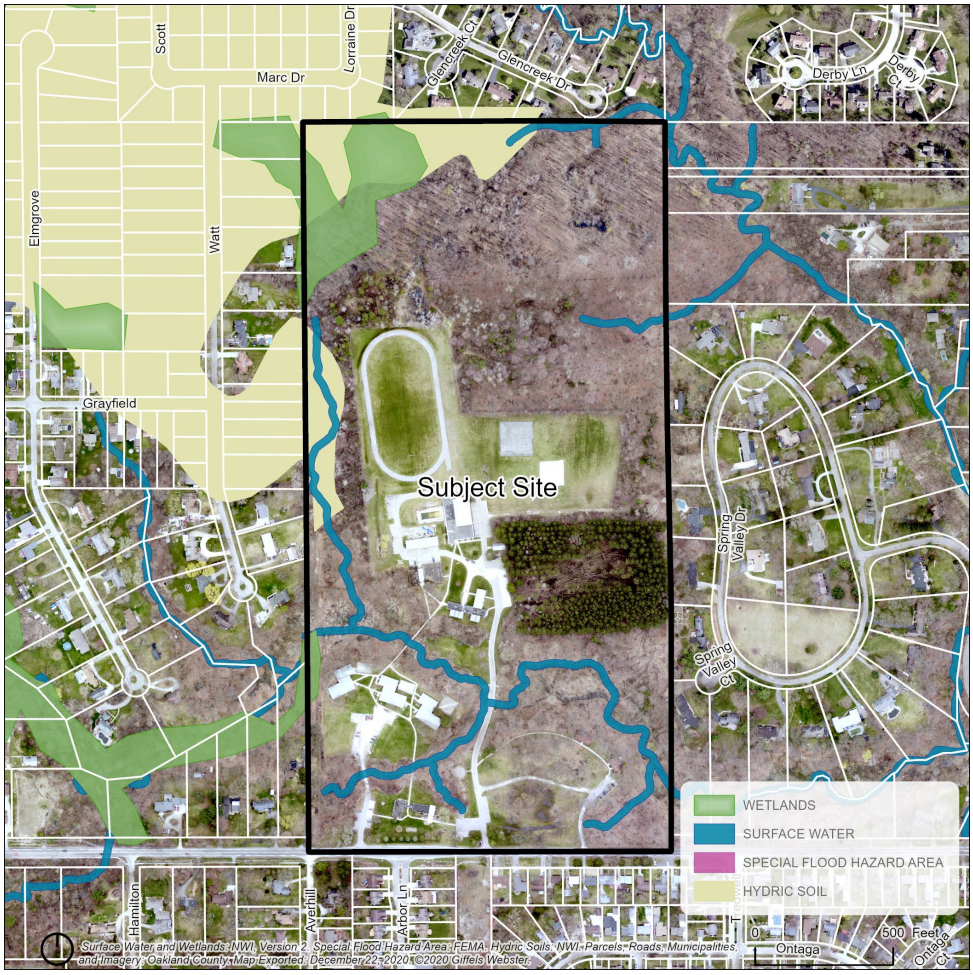
We are available to answer questions.

Respectfully,
Giffels Webster

Joe Tangari, AICP
Principal Planner

Zoning




Scott
Marc Dr
Lorraine Dr
Glencreek Ct
Glencreek Dr
Derby Ln
Derby Ct
Elmgrove
Watt
Grayfield
Subject Site
Spring Valley Dr
Spring Valley Ct
WETLANDS
SURFACE WATER
SPECIAL FLOOD HAZARD AREA
HYDRIC SOIL
Hamilton
Averhill
Arbor Ln
Tuscarora
Ontaga
Ontaga Ct
0
500 Feet
Surface Water and Wetlands: NWI, Version 2. Special Flood Hazard Area: FEMA. Hydric Soils: NWI. Parcels. Roads. Municipalities, and Imagery: Oakland County. Map Exported: December 22, 2020. ©2020 Giffels Webster.

FARMINGTON HILLS Michigan

DEPARTMENT OF PUBLIC SERVICES
JACOB RUSHLOW, P.E., DIRECTOR

INTEROFFICE CORRESPONDENCE

DATE: February 19, 2025

TO: Erik Perdonik, City Planner

FROM: James Cubera, City Engineer

SUBJECT: Cluster Qualification 1-2025
Eureka Innovation aka Boys Republic
28000 Nine Mile Road
PJ# 25-25-68, Sidwell 22-23-25-401-001

This office has performed a preliminary review of the above referenced qualification plan submitted to the Planning Department on February 7, 2025. Our preliminary comments are as follows:

1. The concept plan identifies a schematic of a development for that portion of the parent 80-acre parcel south of the Main Ravines Drain. This site was previously known as the Boys Republic property. Little information is provided that addresses the future of that portion of the property north of the Drain. The plan needs to conceptually identify how the north portion will be developed. It must show a revised layout that includes two 27' wide road extensions to be extended to service the property north of the creek which appears to be left undeveloped at this time. Without proper planning, the north portion of the property may be subject to being an orphaned development with a burden of future major infrastructure costs and it may also be locked out from a more cohesive development with the proposed development south of the river as it will be subject to the layout of the proposed development south of the river. This may not best service the portion of the property to the north. This needs to be addressed.

2. A 12" water main exists along the south side of Nine Mile Road across the frontage of this site. There is also an onsite 6" and 8" public watermain. The onsite watermain must be abandoned and proper easement vacation procedures must be followed thru with. This needs to be addressed prior to any construction permits being issued.

   The proponent will be obligated to provide two watermain extensions from the south side of 9 Mile Road. One of the lines must be a 12" watermain and it must be extended to the north property line in the vicinity of the east end of Glencreek Drive. A second 12" stub must be extended to the east property line in the vicinity of the southwest property corner of 27550 Spring Valley Drive and a third 12" line which must be a connection must be provided to the west along the north property line of 22900 Watt Drive connecting into

the 12" watermain at that particular lot's northwest property corner. This will necessitate an easement acquisition.

South of the river the two circle roads must have a looped watermain between them. A detailed design must be provided for our review

3. A public sewer exists along the west property line. It varies in diameter between 15" and 18". In addition, a 10" sanitary sewer exists along the majority of the Nine Mile Road frontage on the north side of the road. It is available for service. A detailed design must be provided for review to show how the area south of the river will be serviced. The proponent will also be obligated to extend a minimum size 8" sewer with gravity basement service to the southwest corner of 23705 Inkster Road. It is unclear if the existing sewer lines onsite needs to be abandoned. This needs to be addressed.

4. A 5' wide sidewalk must be provided along the entire Nine Mile Road frontage. It shall be placed such that the north walk line is one foot south of the ultimate 60' ROW.

5. The site plan proposes two curb cuts to Nine Mile Road and shows a layout of a proposed development south of the river. This must be re-designed such that the curb cut locations are confirmed to be at an appropriate and acceptable location and that the roads extending from them do extend across the river at the north end to provide the property north of the river two points of access to City major roads. A concept plan of where they will cross the river needs to be identified.

   The location of where the two proposed curb cuts will tie into Nine Mile must be analyzed to find the best and safest fit. Things like the Nine Mile Road site distance, how these locations will fit with the curb cut on the south side of Nine Mile Road and the effect on the residential properties on the south side of Nine Mile Road including the potential to shine head lights into houses must be addressed. A detailed traffic study must be provided for review addressing the above. It must also address the necessary accel/ decel and passing lanes and their geometrics and whether lane extensions and transitions and center left turn lanes are needed.

   It is suggested that the proponent contact the City's Traffic Engineer, Mark Saksewski to discuss these concerns as well as what other traffic issues need to be addressed.

   Along with the above, note that the City uses an outside traffic consultant to review these traffic studies and a fee deposit of $2,500 will be necessary to initiate a traffic review prior to it being reviewed. If additional monies are then necessary, they will be requested and if a surplus exists, at the end it will be refunded.

   With the initial phase of this development both 27' wide crossings of the Main Ravines Drain which will service the property north of the river must be built.

6. With respect to the onsite roads the two proposed circle roads must be looped together and they must be designed to current public road standards.

7. Several retaining walls are proposed onsite. This is not appropriate. They need to be removed and the site design graded to eliminate them. In areas where this is not feasible, their structural design must be provided for review. This issue will necessitate a separate structural review fee which will be determined at the time of construction submittal.

8. Stormwater detention, discharge restriction and stormwater quality improvements are required. This site plan proposes to use two detention ponds for the development south of the river. No storm restriction or storm water quality requirements are identified. Detailed designs must be provided for review. These must meet City standards.

   Previously, the City adopted the WRC stormwater standards. These relatively new requirements may impact the stormwater quality systems proposed as well as the detention/restriction system in general. When a more detailed plan is provided, we will ask our Environmental Engineer, Tyler Sonoga to comment. For now, any general questions on the concept can be directed to him at 248-871-2533.

9. The site has a significant amount of wetlands and floodplain. It needs to be clearly defined. Any involvement with it will require an EGLE permit thru the state.

10. The existing ROW appears to be an implied 33' ROW. It is suggested that the ultimate 60' of ROW be dedicated at this time.

11. We recognize that the submitted concept plan is vague as it is a concept with little detail and it only includes that portion of the property south of the river. When resubmitted, all of our comments need to be properly addressed. With that in mind, we reserve the right to provide additional comment in the future.

12. We have previously met with a proponent of this site. They may have been different developers than the current one. It is suggested that the proponent and their engineer meet with the City Engineering staff to discuss this site in further detail. This can be done virtually or in person.

FIRE
FARMINGTON HILLS

INTEROFFICE CORRESPONDENCE

DATE: February 18, 2025

TO: Planning Commission

FROM: Jason Baloga, Fire Marshal

SUBJECT: Cluster Qualification 1-2025
(28000 Nine Mile)

The plans submitted do not contain enough detail for the Fire Department to provide a review. Please ensure the site is designed in accordance with the following Fire Department Site Plan and Design Standards outlined in Chapter 12 Section 12-11 of the City Ordinance:

1. 12-11 (1) *Site access*:
   - Sites must be designed to accommodate fire apparatus with a fifty-foot turning radius.
   - When appropriate, large sites, or sites which contain high-life hazard occupancies, may require more than one (1) point of access. The location of any additional access shall be coordinated with the Planning Department and Engineering Division.
     - It appears that the North end of this parcel does not have a secondary access incorporated in the design.
   - Fire lanes shall be marked and strictly enforced.

2. 12-11 (2) *Hydrants:*
   - The plans do not provide details for this requirement.

3. 12-11 (4) *Alternate protection*:
   - Please discuss this provision with the Fire Marshal. Proposing residential sprinklers may alleviate developmental challenges with this site.

Jason Baloga, Fire Marshal

JB/al

EUREKA
INNOVATION
DEVELOPMENT

WellSpring Hills

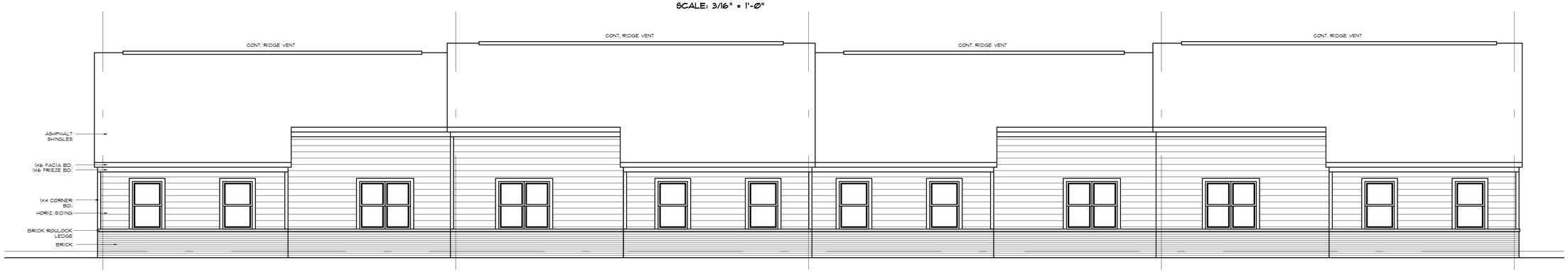
A Community in the heart of Farmington Hills

Concept Plans

Presentations are
communication tools.

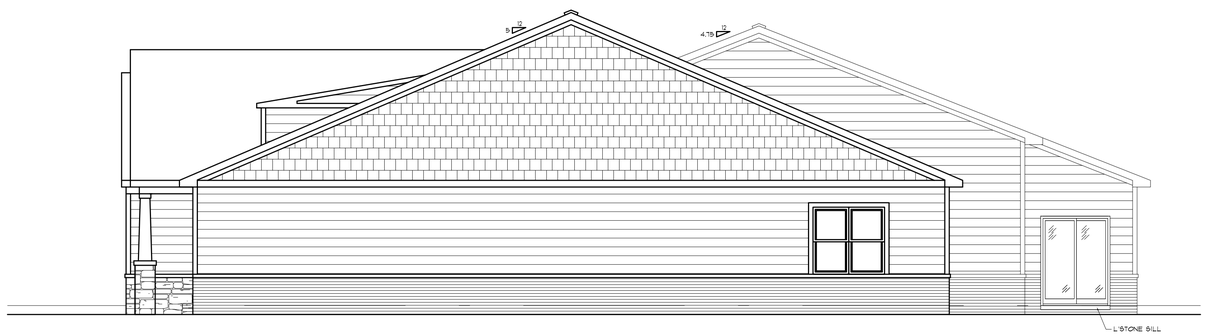
4-UNIT
FRONT ELEVATION

SCALE: 3/16" = 1'-0"



4-UNIT
REAR ELEVATION

SCALE: 3/16" = 1'-0"



4-UNIT
LEFT/RIGHT ELEVATION

SCALE: 3/16" = 1'-0"

PROJECT

SUBJECT
EXTERIOR ELEVATIONS

ARKO DESIGN ASSOCIATES
2298 YASMIN DRIVE - COMMERCE TWP - MI - 48382
PH. (248) 802-8409

ISSUED:
DESIGN 03-06-24

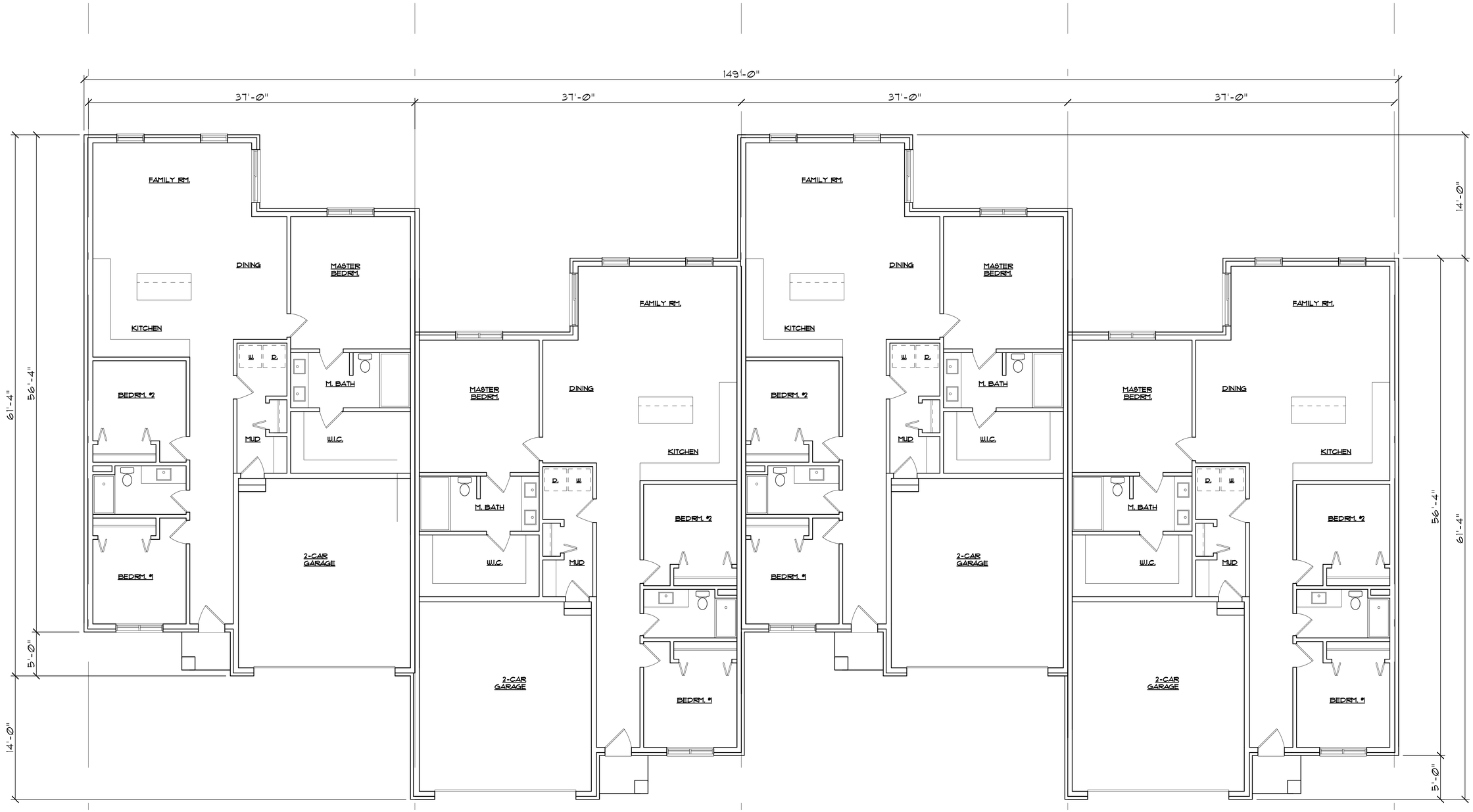
DRAWN	AK
CHECKED	AK
APPROVED	AK
BIDS	
CONSTR	

DO NOT SCALE PRINTS - USE FIGURED DIMENSIONS ONLY

JOB NO. 24-20

SHEET A.3

RANCH CONDOS



1,569 SF/UNIT

FLOOR PLAN - 4-UNIT

SCALE: 3/16" = 1'-0"

PROJECT

SUBJECT
FLOOR PLAN

ARKO DESIGN ASSOCIATES
2298 YASMIN DRIVE - COMMERCE TWP. - MI - 48382
PH. (248) 802-8409

ISSUED:
DESIGN
05-05-24

DRAWN	AK
CHECKED	AK
APPROVED	AK
BIDS	
CONSTR	

DO NOT SCALE PRINTS - USE FIGURED DIMENSIONS ONLY

JOB NO.
24-20

SHEET
A.2

RANCH CONDOS

4-UNIT
FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

PROJECT

SUBJECT
FOUNDATION PLAN

ARKO DESIGN ASSOCIATES
2298 YASMIN DRIVE - COMMERCE TWP. - MI - 48382
PH. (248) 802-5409

ISSUED:
DESIGN
08-05-24

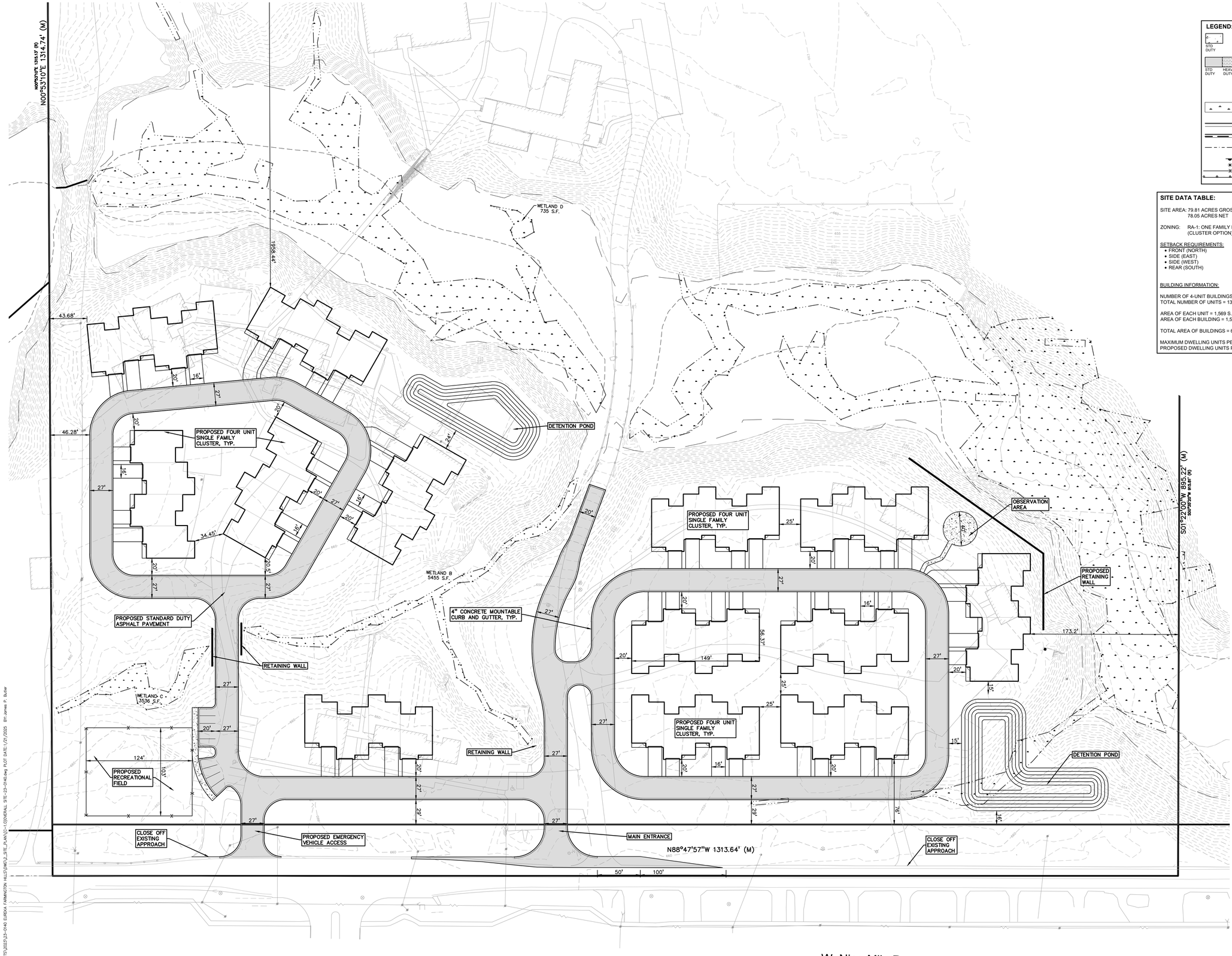
DRAWN	AK
CHECKED	AK
APPROVED	AK
BIDS	
CONSTR	

DO NOT SCALE PRINTS - USE FIGURED DIMENSIONS ONLY

JOB NO.
24-20

SHEET
A.1

RANCH CONDOS



LEGEND:

- CONCRETE PAVEMENT (STD DUTY)
- ASPHALT PAVEMENT (STD DUTY, HEAVY DUTY, DEEP STRENGTH)
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE
- FENCE
- GUARD RAIL

SITE DATA TABLE:

SITE AREA: 79.81 ACRES GROSS
78.05 ACRES NET

ZONING: RA-1: ONE FAMILY RESIDENTIAL DISTRICT
(CLUSTER OPTION)

SETBACK REQUIREMENTS:	REQUIRED:	PROPOSED:
• FRONT (NORTH)	40'	76'
• SIDE (EAST)	10'	173.20'
• SIDE (WEST)	10'	43.68'
• REAR (SOUTH)	35'	1,958.44'

BUILDING INFORMATION:

NUMBER OF 4-UNIT BUILDINGS = 13
TOTAL NUMBER OF UNITS = 13 X 4 = 52 UNITS

AREA OF EACH UNIT = 1,569 S.F.
AREA OF EACH BUILDING = 1,569 X 4 = 6,276 S.F.

TOTAL AREA OF BUILDINGS = 6,276 X 13 = 81,588 S.F.

MAXIMUM DWELLING UNITS PER ACRE = 1.8 UNITS PER ACRE
PROPOSED DWELLING UNITS PER ACRE = 52 / 78.05 = 0.67 UNITS PER ACRE

PEA GROUP
t: 844.813.2949
www.peagroup.com

NORTH

0 25 50 100
SCALE: 1" = 50'

Know what's below. Call before you dig. 811

CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE AND NOT NECESSARILY ACCURATE OR ALL INCLUSIVE. PRIOR TO THE COMMENCEMENT OF ANY EXCAVATION AS TO THE COMPLETENESS OR ACCURACY THEREOF, THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT
EUREKA INNOVATION DEVELOPMENT
5960 LIVERNOIS AVE
TROY, MI

PROJECT TITLE
EUREKA FARMINGTON HILLS
NINE MILE RD
FARMINGTON HILLS, MI

REVISIONS

REVISED LAYOUT	12/20/2024

ORIGINAL ISSUE DATE:
NOVEMBER 5, 2024

DRAWING TITLE
OVERALL SITE PLAN

PEA JOB NO.	23-0140
P.M.	JPB
DN.	LGD
DES.	LGD

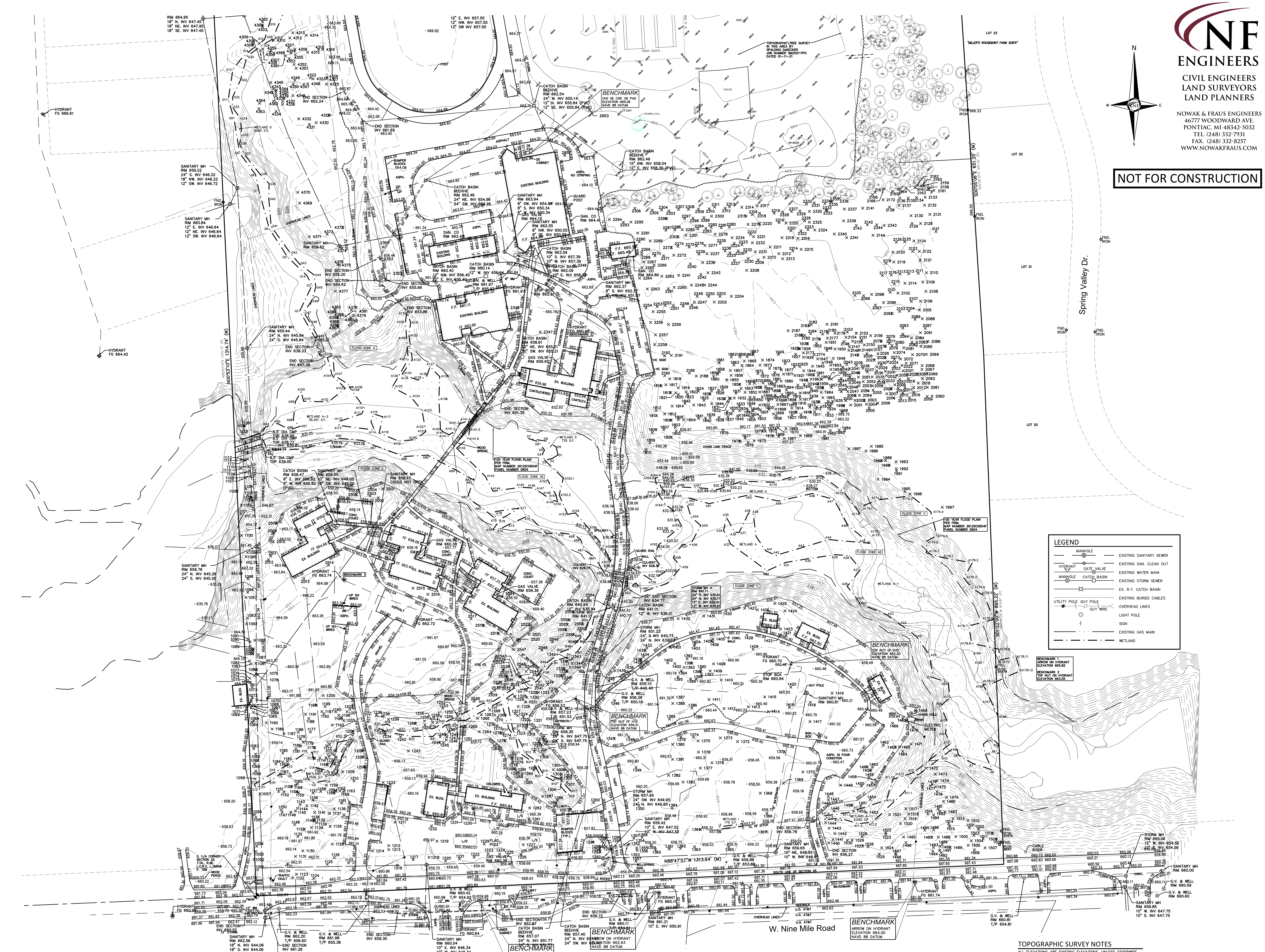
DRAWING NUMBER:
C-1.0

NOT FOR CONSTRUCTION

S:\PROJECTS\2023\23-0140 EUREKA FARMINGTON HILLS\DWG\2_SITE_PLAN\C-1.0\OVERALL SITE-23-0140.dwg PLOT DATE:1/21/2025 BY:James P. Butler

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS
NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

NOT FOR CONSTRUCTION



FLOOD HAZARD NOTE

The Property described on this survey lies within a Special Flood Hazard Area as defined by the Federal Emergency Management Agency; the property lies within Zone(s) AE & X of the Flood Insurance Rate Map identified as Map No. 26125C0654F, bearing an effective date of 09-29-2006.

SNOW NOTE

SURVEY COMPLETED UNDER EXTREME SNOW CONDITIONS, AND EXACT LOCATION OF PAVEMENT, CURBS, AND SURFACE STRUCTURES CANNOT BE GUARANTEED.

TOPOGRAPHIC SURVEY NOTES

ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.

UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.

THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER.

FUSCO, SHAFFER & PAPPAS, INC.
ARCHITECTS AND PLANNERS
550 E. NINE MILE ROAD
FERNDALE, MICHIGAN 48220
PHONE 248.543.4100 FAX 248.543.4141

STATE OF MICHIGAN
KEVIN CHRISTOPHER NAVAROLI
License No. 4001053503
LICENSED PROFESSIONAL SURVEYOR

WELLSPRING
PROPOSED MIXED - USE P.U.D.
FARMINGTON HILLS, MICHIGAN

08.06.2021 P.U.D. SUBMISSION
DATE ISSUE

KEY PLAN

FSP PROJECT NO. DEL18.101

DRAWING TITLE

Boundary / Topographic / Tree Survey

DRAWING NUMBER

C.001

NOT FOR CONSTRUCTION

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVE.
PONTIAC, MI 48342-5032
TEL. (248) 332-7931
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

FUSCO, SHAFFER & PAPPAS, INC.
ARCHITECTS AND PLANNERS
550 E. NINE MILE ROAD
FERNDALE, MICHIGAN 48220
PHONE 248.543.4100 FAX 248.543.4141

KEVIN CHRISTOPHER NAVAROLI
License No. 4001053503
STATE OF MICHIGAN
REGISTERED PROFESSIONAL ENGINEER

WELLSPRING

PROPOSED MIXED - USE P.U.D.

FARMINGTON HILLS, MICHIGAN

DATE	ISSUE
08.06.2021	P.U.D. SUBMISSION

KEY PLAN

FSP PROJECT NO. DEL18.101

DRAWING TITLE

Boundary / Topographic / Tree Survey

DRAWING NUMBER

C.002

Tag	Scientific Name	Common Name	Diameter
1051	Juglans nigra	Black walnut	7.0
1052	Quercus rubra	Red oak	46.9
1053	Acer negundo	Boxelder	11.0
1054	Sassafras albidum	Sassafras	10.8
1055	Sassafras albidum	Sassafras	15.4
1056	Acer saccharum	Sugar maple	19.4
1057	Acer negundo	Boxelder	10.3
1058	Quercus alba	White oak	8.3
1059	Ulmus americana	American elm	12.8
1060	Acer saccharum	Sugar maple	12.7
1061	Quercus alba	White oak	34.2
1062	Quercus alba	White oak	33.5
1063	Prunus serotina	Black cherry	7.1
1064	Acer saccharum	Sugar maple	21.4
1065	Ostrya virginiana	Hop horn beam	6.0
1066	Acer saccharum	Sugar maple	17.1
1067	Acer negundo	Boxelder	11.2
1068	Prunus serotina	Black cherry	12.3
1069	Prunus serotina	Black cherry	6.2
1070	Picea abies	Norway spruce	6.9
1071	Prunus serotina	Black cherry	15.8
1072	Prunus serotina	Black cherry	22.0
1073	Prunus serotina	Black cherry	16.8
1074	Prunus serotina	Black cherry	12.7
1075	Ulmus americana	American elm	16.7
1076	Quercus alba	White oak	9.3
1077	Quercus rubra	Red oak	17.5
1078	Pinus sylvestris	Scots pine	10.1
1079	Quercus rubra	Red oak	13.0
1080	Pinus sylvestris	Scots pine	6.5
1081	Pinus sylvestris	Scots pine	7.6
1082	Quercus rubra	Red oak	16.4
1083	Salix amygdaloides	Peach leaf willow	6.2
1084	Quercus rubra	Red oak	16.4
1085	Acer saccharum	Sugar maple	10.5
1086	Quercus rubra	Red oak	16.6
1087	Pinus sylvestris	Scots pine	9.6
1088	Pinus sylvestris	Scots pine	10.0
1089	Quercus rubra	Red oak	17.2
1090	Quercus rubra	Red oak	26.0
1091	Pinus sylvestris	Scots pine	10.1
1092	Sassafras albidum	Sassafras	13.1
1093	Prunus serotina	Black cherry	11.2
1094	Sassafras albidum	Sassafras	7.9
1095	Carya glabra	Pignut hickory	16.8
1096	Acer rubrum	Red maple	23.2
1097	Tilia americana	Basswood	10.9
1098	Pyrus communis	Common pear	7.3
1099	Tilia americana	Basswood	14.6
1100	Acer rubrum	Red maple	8.2
1101	Ostrya virginiana	Hop horn beam	7.0
1102	Ostrya virginiana	Hop horn beam	8.7
1103	Populus deltoides	Cottonwood	15.3
1104	Ulmus americana	American elm	7.5
1105	Acer saccharum	Sugar maple	10.7
1106	Ulmus americana	American elm	8.1
1107	Populus deltoides	Cottonwood	23.4
1108	Acer saccharum	Sugar maple	12.0
1109	Acer saccharum	Sugar maple	6.4
1110	Acer saccharum	Sugar maple	11.1
1111	Populus deltoides	Cottonwood	15.8
1112	Populus deltoides	Cottonwood	22.3
1113	Acer saccharum	Sugar maple	9.0
1114	Ulmus americana	American elm	10.6
1115	Populus deltoides	Cottonwood	14.0
1116	Tilia americana	Basswood	6.5
1117	Acer saccharum	Sugar maple	6.3
1118	Ulmus americana	American elm	9.7
1119	Acer saccharum	Sugar maple	8.6
1120	Acer saccharum	Sugar maple	10.7
1121	Robinia pseudoacacia	Black locust	6.2
1122	Quercus rubra	Red oak	20.3
1123	Acer saccharum	Sugar maple	10.8
1124	Juglans nigra	Black walnut	31.0
1125	Juglans nigra	Black walnut	18.6
1126	Acer negundo	Boxelder	7.7
1127	Malus sylvestris	Crab-apple	6.4
1128	Juglans nigra	Black walnut	21.5
1129	Robinia pseudoacacia	Black locust	29.0
1130	Juglans nigra	Black walnut	14.0
1131	Juglans nigra	Black walnut	7.0
1132	Carya ovata	Shagbark hickory	10.3
1133	Sassafras albidum	Sassafras	11.4
1134	Robinia pseudoacacia	Black locust	6.8
1135	Robinia pseudoacacia	Black locust	7.0
1136	Juglans nigra	Black walnut	15.7
1137	Robinia pseudoacacia	Black locust	9.0
1138	Robinia pseudoacacia	Black locust	9.4
1139	Robinia pseudoacacia	Black locust	9.5
1140	Quercus rubra	Red oak	8.2
1141	Acer rubrum	Red maple	8.9
1143	Sassafras albidum	Sassafras	10.5
1144	Juglans nigra	Black walnut	12.6
1145	Carya cordiformis	Bitternut hickory	12.1
1146	Sassafras albidum	Sassafras	12.2
1147	Sassafras albidum	Sassafras	9.4
1148	Sassafras albidum	Sassafras	14.3
1149	Carya cordiformis	Bitternut hickory	6.4
1150	Sassafras albidum	Sassafras	8.0
1151	Quercus rubra	Red oak	47.1
1152	Prunus serotina	Black cherry	23.4
1153	Quercus rubra	Red oak	15.8
1154	Carya glabra	Pignut hickory	24.5
1155	Carya cordiformis	Bitternut hickory	10.7
1156	Sassafras albidum	Sassafras	10.8
1157	Prunus serotina	Black cherry	22.6
1158	Sassafras albidum	Sassafras	28.0
1159	Sassafras albidum	Sassafras	7.2
1160	Sassafras albidum	Sassafras	11.7
1161	Robinia pseudoacacia	Black locust	13.4
1162	Sassafras albidum	Sassafras	8.7
1163	Sassafras albidum	Sassafras	8.7
1164	Sassafras albidum	Sassafras	6.8
1165	Quercus rubra	Red oak	34.8
1166	Quercus rubra	Red oak	18.6
1167	Ulmus americana	American elm	11.7
1168	Acer rubrum	Red maple	8.3
1169	Quercus alba	White oak	7.6
1170	Acer rubrum	Red maple	9.4
1171	Carya cordiformis	Bitternut hickory	8.5
1172	Quercus alba	White oak	49.5
1173	Acer saccharum	Sugar maple	8.7
1174	Acer saccharum	Sugar maple	6.6
1175	Quercus alba	White oak	19.3
1176	Acer saccharum	Sugar maple	7.6
1177	Carya cordiformis	Bitternut hickory	22.3
1178	Quercus rubra	Red oak	38.4
1179	Quercus alba	White oak	25.2
1180	Quercus rubra	Red oak	32.9
1181	Acer saccharum	Sugar maple	7.5
1182	Quercus rubra	Red oak	18.0
1183	Quercus rubra	Red oak	12.7
1184	Quercus rubra	Red oak	25.8
1185	Acer rubrum	Red maple	19.6
1186	Prunus serotina	Black cherry	21.6
1187	Acer saccharum	Sugar maple	13.4
1188	Carya cordiformis	Bitternut hickory	9.7
1189	Ulmus americana	American elm	8.7
1190	Tilia americana	Basswood	10.3
1191	Tilia americana	Basswood	13.3
1192	Prunus serotina	Black cherry	16.8
1193	Fagus grandifolia	American beech	8.2
1194	Prunus serotina	Black cherry	7.1
1195	Prunus serotina	Black cherry	11.2
1196	Prunus serotina	Black cherry	6.9
1197	Acer saccharum	Sugar maple	14.7
1198	Quercus rubra	Red oak	31.5
1199	Prunus serotina	Black cherry	6.2
1200	Tilia americana	Basswood	10.1
1201	Sassafras albidum	Sassafras	27.8
1202	Ulmus americana	American elm	6.0
1203	Prunus serotina	Black cherry	8.2
1204	Ulmus americana	American elm	9.6
1205	Quercus alba	White oak	32.1
1206	Ulmus americana	American elm	6.0
1207	Ulmus americana	American elm	8.4
1208	Acer rubrum	Red maple	6.6
1209	Quercus rubra	Red oak	38.8
1210	Quercus alba	White oak	19.3
1211	Crateagus sp.	Hawthorn cultivar	14.1
1212	Picea alba	White spruce	8.3
1213	Picea abies	Norway spruce	13.7
1214	Malus pumila	Common apple	9.0
1215	Malus pumila	Common apple	7.0
1216	Acer negundo	Boxelder	11.3
1217	Picea pungens	Blue spruce	15.4
1218	Picea pungens	Blue spruce	12.6
1219	Acer saccharum	Sugar maple	17.7
1220	Picea pungens	Blue spruce	11.8
1221	Picea pungens	Blue spruce	11.7
1222	Picea pungens	Blue spruce	12.6
1223	Picea pungens	Blue spruce	12.1
1224	Pyrus communis	Common pear	11.1
1225	Picea alba	White spruce	9.7
1226	Picea alba	White spruce	13.6
1227	Cornus alternifolia	Alternate-Leaf Dogwood	6.3
1228	Cornus alternifolia	Alternate-Leaf Dogwood	8.0
1229	Malus pumila	Common apple	11.5
1230	Cornus sp.	Dogwood cultivar	8.3
1231	Prunus pendula	Wheeping cherry	6.5
1232	Picea pungens	Blue spruce	11.2
1233	Acer negundo	Boxelder	10.6
1234	Carya cordiformis	Bitternut hickory	15.0
1235	Quercus alba	White oak	18.2
1236	Robinia pseudoacacia	Black locust	14.6
1237	Ulmus americana	American elm	6.1
1238	Tilia americana	Basswood	15.1
1239	Acer saccharum	Sugar maple	6.2
1240	Quercus alba	White oak	19.8
1242	Acer saccharum	Sugar maple	10.2
1243	Quercus rubra	Red oak	9.6
1244	Acer rubrum	Red maple	9.0
1244	Quercus alba	White oak	22.3
1245	Acer saccharum	Sugar maple	9.2
1246	Acer saccharum	Sugar maple	10.4
1247	Acer rubrum	Red maple	6.1
1248	Acer saccharum	Sugar maple	6.6
1249	Acer rubrum	Red maple	6.9
1250	Acer saccharum	Sugar maple	7.5
1251	Populus deltoides	Cottonwood	24.5
1252	Carya ovata	Shagbark hickory	16.6
1253	Ulmus americana	American elm	8.9
1254	Acer saccharum	Sugar maple	7.8
1255	Quercus alba	White oak	14.5
1256	Quercus alba	White oak	31.4
1257	Acer saccharum	Sugar maple	6.4
1258	Acer saccharum	Sugar maple	7.3
1259	Quercus alba	White oak	22.2
1260	Acer rubrum	Red maple	9.1
1261	Carya ovata	Shagbark hickory	29.3
1262	Acer saccharum	Sugar maple	22.9
1263	Acer saccharum	Sugar maple	23.5
1264	Acer saccharum	Sugar maple	13.8
1265	Acer saccharum	Sugar maple	9.7
1266	Acer saccharum	Sugar maple	12.2
1267	Quercus alba	White oak	42.0
1268	Acer saccharum	Sugar maple	6.0
1269	Acer saccharum	Sugar maple	7.2
1270	Acer saccharum	Sugar maple	6.1
1271	Carya ovata	Shagbark hickory	8.1
1272	Ulmus americana	American elm	8.0
1273	Acer rubrum	Red maple	12.8
1274	Carya ovata	Shagbark hickory	12.0
1275	Prunus serotina	Black cherry	12.7
1276	Acer rubrum	Red maple	13.5
1277	Acer rubrum	Red maple	11.8
1278	Ulmus americana	American elm	16.1
1279	Acer saccharum	Sugar maple	9.2
1280	Acer saccharum	Sugar maple	11.4
1281	Prunus serotina	Black cherry	29.0
1282	Ulmus americana	American elm	10.1
1283	Quercus alba	White oak	11.1
1284	Quercus alba	White oak	12.7
1285	Acer saccharum	Sugar maple	14.1
1286	Acer negundo	Boxelder	8.9
1287	Quercus alba	White oak	10.8
1288	Rhamnus cathartica	Common buckthorn	8.0
1289	Populus deltoides	Cottonwood	20.3
1290	Quercus alba	White oak	44.1
1291	Picea alba	White spruce	9.0
1292	Pinus strobus	White pine	11.3
1293	Juniperus virginiana	Eastern red cedar	13.2
1294	Juniperus virginiana	Eastern red cedar	8.4
1295	Juniperus virginiana	Eastern red cedar	6.0
1296	Juniperus virginiana	Eastern red cedar	7.0
1297	Juniperus virginiana	Eastern red cedar	6.6
1298	Juniperus virginiana	Eastern red cedar	8.5
1299	Malus pumila	Common apple	11.6
1300	Picea pungens	Blue spruce	9.2
1301	Acer saccharum	Sugar maple	9.0
1302	Pyrus communis	Common pear	11.4
1303	Fagus grandifolia	American beech	12.8
1304	Prunus serotina	Black cherry	10.1
1305	Ulmus americana	American elm	8.2
1306	Ulmus americana	American elm	11.7
1307	Ulmus americana	American elm	7.2
1308	Pyrus communis	Common pear	8.0
1309	Quercus rubra	Red oak	15.0
1310	Quercus alba	White oak	28.0
1311	Quercus alba	White oak	11.9
1312	Acer rubrum	Red maple	7.0
1313	Acer rubrum	Red maple	12.8
1314	Prunus serotina	Black cherry	21.0
1315	Acer rubrum	Red maple	7.0
1316	Ulmus americana	American elm	6.5
1317	Ulmus americana	American elm	7.5
1318	Acer saccharum	Sugar maple	18.0
1319	Acer saccharum	Sugar maple	9.0
1320	Acer saccharum	Sugar maple	10.2
1321	Acer saccharum	Sugar maple	9.8
1322	Acer saccharum	Sugar maple	6.0
1323	Acer rubrum	Red maple	10.3
1324	Acer saccharum	Sugar maple	14.8
1325	Acer saccharum	Sugar maple	7.4
1326	Acer saccharum	Sugar maple	6.8
1327	Prunus serotina	Black cherry	6.0
1328	Acer saccharum	Sugar maple	6.1
1329	Prunus serotina	Black cherry	7.2
1330	Prunus serotina	Black cherry	8.2
1331	Acer saccharum	Sugar maple	8.6
1332	Acer saccharum	Sugar maple	7.5
1333	Acer saccharum	Sugar maple	13.4
1334	Acer saccharum	Sugar maple	22.0
1335	Ulmus americana	American elm	6.1
1336	Acer negundo	Boxelder	6.4
1337	Ulmus americana	American elm	7.4
1338	Acer rubrum	Red maple	7.2
1339	Quercus alba	White oak	13.7
1340	Acer saccharum	Sugar maple	9.0
1341	Acer saccharum	Sugar maple	10.8
1342	Acer saccharum	Sugar maple	7.3
1343	Quercus alba	White oak	11.7
1344	Quercus alba	White oak	10.8
1345	Picea pungens	Blue spruce	19.3
1346	Picea pungens	Blue spruce	22.1
1347	Acer saccharum	Sugar maple	23.6
1348	Acer saccharum	Sugar maple	21.4
1349	Acer saccharum	Sugar maple	23.1
1350	Picea pungens	Blue spruce	10.9
1351	Malus pumila	Common apple	12.2
1352	Juniperus virginiana	Eastern red cedar	9.1
1353	Juniperus virginiana	Eastern red cedar	7.7
1354	Juniperus virginiana	Eastern red cedar	10.2
1355	Juniperus virginiana	Eastern red cedar	6.5
1356	Juniperus virginiana	Eastern red cedar	15.0
1357	Acer rubrum	Red maple	8.7
1358	Malus pumila	Common apple	10.4
1359	Picea pungens	Blue spruce	15.2
1360	Picea pungens	Blue spruce	12.3
1361	Juniperus virginiana	Eastern red cedar	15.1
1362	Juniperus virginiana	Eastern red cedar	10.1
1363	Ulmus americana	American elm	30.1
1364	Acer rubrum	Red maple	6.0
1364	Carya ovata	Shagbark hickory	32.2
1365	Quercus velutina	Black oak	42.7
1366	Carya ovata	Shagbark hickory	25.9
1367	Prunus serotina	Black cherry	18.1
1368	Acer saccharum	Sugar maple	10.2
1369	Acer rubrum	Red maple	24.1
1370	Acer saccharum	Sugar maple	14.3
1371	Acer saccharum	Sugar maple	33.2
1372	Acer saccharum	Sugar maple	33.3
1373	Prunus serotina	Black cherry	11.2
1374	Prunus serotina	Black cherry	10.5
1377	Acer saccharum	Sugar maple	28.0
1378	Prunus serotina	Black cherry	10.6
1378	Rhamnus cathartica	Common buckthorn	11.3
1379	Acer saccharum	Sugar maple	24.9
1379	Prunus serotina	Black cherry	16.9
1380	Prunus serotina	Black cherry	13.3
1381	Acer saccharum	Sugar maple	29.6
1382	Quercus velutina	Black oak	31.6
1383	Acer saccharum	Sugar maple	15.3
1384	Carya ovata	Shagbark hickory	28.6
1385	Prunus serotina	Black cherry	22.5
1386	Acer saccharum	Sugar maple	26.8
1387	Acer saccharum	Sugar maple	35.4
1388	Prunus serotina	Black cherry	12.0
1389	Acer saccharum	Sugar maple	26.6
1390	Quercus rubra	Red oak	15.4
1391	Quercus alba	White oak	14.4
1392	Quercus rubra	Red oak	11.9
1393	Prunus serotina	Black cherry	6.8
1394	Quercus rubra	Red oak	11.6
1395	Prunus serotina	Black cherry	11.9
1396	Prunus serotina	Black cherry	11.9
1397	Prunus serotina	Black cherry	6.1
1398	Acer saccharum	Sugar maple	27.7
1399	Prunus serotina	Black cherry	14.1
1400	Prunus serotina	Black cherry	15.4
1401	Prunus serotina	Black cherry	13.8
1402	Prunus serotina	Black cherry	11.2
1403	Prunus serotina	Black cherry	19.8
1404	Acer saccharum	Sugar maple	6.5
1405	Prunus serotina	Black cherry	22.7
1406	Quercus rubra	Red oak	8.2
1407	Acer saccharum	Sugar maple	6.7
1408	Quercus alba	White oak	12.6
1409	Quercus velutina	Black oak	19.2
1410	Acer saccharum	Sugar maple	25.7
1411	Prunus serotina	Black cherry	7.3

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WELLSPRING
PROPOSED MIXED - USE P.U.D.

FARMINGTON HILLS, MICHIGAN

08.04.2021 DATE
P.U.D. SUBMISSION ISSUE

KEY PLAN

FSP PROJECT NO. DEL18.101

DRAWING TITLE

Tree List 1

DRAWING NUMBER

C.003

1412	Prunus serotina	Black cherry	12.9
1413	Acer saccharum	Sugar maple	24.5
1414	Acer saccharum	Sugar maple	27.4
1415	Acer saccharum	Sugar maple	28.6
1416	Acer rubrum	Red maple	27.2
1417	Acer saccharum	Sugar maple	35.4
1418	Acer saccharum	Sugar maple	26.8
1419	Acer saccharum	Sugar maple	23.5
1420	Acer saccharum	Sugar maple	26.6
1421	Quercus rubra	Red oak	28.5
1422	Quercus velutina	Black oak	34.8
1423	Pinus resinosa	Red pine	9.7
1424	Quercus velutina	Black oak	43.0
1425	Quercus alba	White oak	45.3
1426	Quercus alba	White oak	44.3
1427	Quercus alba	White oak	44.3
1428	Quercus velutina	Black oak	34.7
1429	Acer saccharum	Sugar maple	30.7
1430	Quercus alba	White oak	36.9
1431	Quercus rubra	Red oak	8.5
1432	Quercus alba	White oak	45.9
1433	Quercus alba	White oak	31.4
1434	Prunus serotina	Black cherry	27.4
1435	Quercus rubra	Red oak	8.2
1436	Quercus alba	White oak	14.4
1437	Crateagus sp.	Hawthorn cultivar	6.4
1438	Prunus serotina	Black cherry	23.8
1439	Prunus serotina	Black cherry	20.7
1440	Quercus alba	White oak	53.1
1441	Acer saccharum	Sugar maple	7.7
1442	Quercus alba	White oak	45.7
1443	Quercus rubra	Red oak	7.9
1444	Prunus serotina	Black cherry	7.8
1445	Prunus serotina	Black cherry	17.8
1446	Quercus rubra	Red oak	10.8
1447	Prunus serotina	Black cherry	8.5
1448	Quercus rubra	Red oak	16.7
1449	Acer saccharum	Sugar maple	24.3
1450	Quercus alba	White oak	46.1
1451	Acer saccharum	Sugar maple	7.0
1452	Quercus alba	White oak	30.7
1453	Quercus rubra	Red oak	32.5
1454	Quercus rubra	Red oak	8.7
1455	Quercus alba	White oak	32.3
1456	Quercus alba	White oak	26.5
1457	Prunus serotina	Black cherry	8.8
1458	Quercus alba	White oak	26.5
1459	Prunus serotina	Black cherry	8.5
1460	Quercus alba	White oak	16.7
1461	Prunus serotina	Black cherry	12.3
1462	Quercus alba	White oak	27.4
1463	Quercus alba	White oak	33.8
1464	Quercus alba	White oak	27.5
1465	Celtis occidentalis	Hackberry	9.8
1466	Carya ovata	Shagbark hickory	20.4
1467	Cornus sp.	Dogwood cultivar	6.4
1468	Quercus alba	White oak	37.7
1469	Acer saccharum	Sugar maple	6.1
1470	Ulmus americana	American elm	11.9
1471	Ulmus americana	American elm	13.1
1472	Fagus grandifolia	American beech	24.9
1473	Acer rubrum	Red maple	7.6
1474	Quercus rubra	Red oak	24.7
1475	Quercus rubra	Red oak	12.6
1476	Quercus rubra	Red oak	18.2
1477	Ulmus americana	American elm	11.8
1478	Quercus rubra	Red oak	21.6
1479	Quercus rubra	Red oak	16.4
1480	Quercus rubra	Red oak	16.6
1481	Quercus rubra	Red oak	19.9
1482	Quercus rubra	Red oak	12.7
1483	Quercus rubra	Red oak	17.2
1484	Quercus rubra	Red oak	20.3
1485	Quercus rubra	Red oak	17.9
1486	Quercus rubra	Red oak	8.4
1487	Quercus rubra	Red oak	8.7
1488	Quercus rubra	Red oak	7.0
1489	Quercus rubra	Red oak	21.2
1490	Quercus rubra	Red oak	9.3
1491	Quercus rubra	Red oak	12.2
1492	Quercus rubra	Red oak	15.2
1493	Quercus rubra	Red oak	9.0
1494	Ulmus americana	American elm	26.0
1495	Quercus rubra	Red oak	20.5
1496	Quercus rubra	Red oak	8.2
1497	Acer saccharum	Sugar maple	9.1
1498	Quercus alba	White oak	27.3
1499	Quercus rubra	Red oak	7.2
1500	Ulmus americana	American elm	14.0
1501	Quercus alba	White oak	40.6
1502	Acer saccharum	Sugar maple	10.9
1503	Quercus rubra	Red oak	7.3
1504	Acer saccharum	Sugar maple	6.3
1505	Acer rubrum	Red maple	41.1
1506	Acer saccharum	Sugar maple	12.7
1507	Acer saccharum	Sugar maple	10.7
1508	Quercus alba	White oak	37.0
1509	Acer saccharum	Sugar maple	10.0
1510	Acer saccharum	Sugar maple	7.9
1511	Acer saccharum	Sugar maple	6.2
1512	Fagus grandifolia	American beech	9.9
1513	Quercus rubra	Red oak	6.7
1514	Quercus rubra	Red oak	10.7
1515	Quercus rubra	Red oak	7.4
1516	Quercus rubra	Red oak	27.0
1517	Acer rubrum	Red maple	11.4
1518	Prunus serotina	Black cherry	9.0
1519	Ulmus americana	American elm	15.4
1520	Prunus serotina	Black cherry	18.7
1521	Ulmus americana	American elm	10.1
1522	Acer saccharum	Sugar maple	6.5
1523	Prunus serotina	Black cherry	13.8
1524	Ostrya virginiana	Hop horn beam	8.6
1525	Ulmus americana	American elm	10.4
1526	Acer saccharum	Sugar maple	6.3
1527	Acer saccharum	Sugar maple	7.6
1528	Ulmus americana	American elm	19.6
1529	Quercus rubra	Red oak	22.0
1530	Quercus rubra	Red oak	16.3
1531	Prunus serotina	Black cherry	13.7
1532	Carya ovata	Shagbark hickory	6.4
1533	Quercus velutina	Black oak	23.3
1534	Acer rubrum	Red maple	7.1
1535	Prunus serotina	Black cherry	10.2
1536	Quercus rubra	Red oak	11.9
1537	Quercus rubra	Red oak	7.7
1538	Quercus rubra	Red oak	21.0
1539	Quercus rubra	Red oak	20.2
1540	Quercus rubra	Red oak	21.4
1541	Ulmus americana	American elm	17.0
1542	Acer rubrum	Red maple	7.5
1543	Acer rubrum	Red maple	7.8
1544	Acer rubrum	Red maple	6.6
1545	Acer rubrum	Red maple	9.7
1546	Ulmus americana	American elm	13.9
1547	Acer rubrum	Red maple	8.1
1548	Fagus grandifolia	American beech	18.8
1549	Quercus rubra	Red oak	25.3
1550	Tilia americana	Basswood	8.5
1551	Fagus grandifolia	American beech	9.8
1552	Acer rubrum	Red maple	37.1
1553	Sassafras albidum	Sassafras	16.5
1554	Quercus rubra	Red oak	11.0
1555	Quercus rubra	Red oak	8.5
1556	Quercus rubra	Red oak	17.7
1557	Quercus rubra	Red oak	8.4
1558	Quercus rubra	Red oak	19.7
1559	Quercus rubra	Red oak	9.9
1560	Acer rubrum	Red maple	6.4
1561	Acer rubrum	Red maple	9.1
1562	Acer rubrum	Red maple	11.0
1563	Acer rubrum	Red maple	8.9
1564	Quercus rubra	Red oak	13.2
1565	Acer rubrum	Red maple	5.5
1566	Acer rubrum	Red maple	10.2
1567	Acer rubrum	Red maple	6.0
1568	Acer rubrum	Red maple	10.1
1569	Acer rubrum	Red maple	6.6
1570	Acer rubrum	Red maple	6.5
1571	Acer rubrum	Red maple	10.0
1572	Acer rubrum	Red maple	9.1
1573	Acer rubrum	Red maple	12.5
1574	Acer rubrum	Red maple	17.1
1575	Acer rubrum	Red maple	7.8
1576	Acer rubrum	Red maple	7.1
1577	Acer rubrum	Red maple	7.2
1578	Tilia americana	Basswood	12.6
1579	Quercus rubra	Red oak	21.9
1580	Acer rubrum	Red maple	11.0
1581	Tilia americana	Basswood	9.9
1582	Quercus rubra	Red oak	14.0
1583	Prunus serotina	Black cherry	16.9
1584	Quercus rubra	Red oak	17.6
1585	Acer rubrum	Red maple	7.8
1586	Quercus rubra	Red oak	16.7
1587	Quercus velutina	Black oak	16.7
1588	Quercus velutina	Black oak	15.3
1589	Acer rubrum	Red maple	8.1
1590	Acer rubrum	Red maple	9.3
1591	Acer rubrum	Red maple	9.7
1592	Sassafras albidum	Sassafras	20.4
1593	Quercus rubra	Red oak	8.1
1594	Quercus rubra	Red oak	9.6
1595	Quercus rubra	Red oak	13.5
1596	Tilia americana	Basswood	7.3
1597	Quercus velutina	Black oak	20.4
1598	Quercus rubra	Red oak	14.8
1599	Quercus rubra	Red oak	13.9
1600	Carya cordiformis	Bitternut hickory	8.4
1601	Acer rubrum	Red maple	8.1
1602	Acer rubrum	Red maple	10.1
1603	Quercus rubra	Red oak	57.2
1604	Ostrya virginiana	Hop horn beam	7.1
1605	Acer rubrum	Red maple	7.5
1606	Quercus rubra	Red oak	13.4
1607	Acer saccharum	Sugar maple	6.4
1608	Tilia americana	Basswood	6.7
1609	Quercus rubra	Red oak	14.9
1610	Quercus rubra	Red oak	9.9
1611	Quercus rubra	Red oak	18.3
1612	Acer rubrum	Red maple	9.1
1613	Quercus velutina	Black oak	16.6
1614	Quercus rubra	Red oak	11.4
1615	Acer rubrum	Red maple	13.0
1616	Acer rubrum	Red maple	12.0
1617	Tilia americana	Basswood	13.0
1618	Acer rubrum	Red maple	6.8
1619	Quercus rubra	Red oak	9.6
1620	Populus deltoides	Cottonwood	12.1
1621	Acer rubrum	Red maple	6.4
1622	Quercus rubra	Red oak	8.4
1623	Quercus rubra	Red oak	20.1
1624	Quercus rubra	Red oak	10.5
1625	Quercus rubra	Red oak	15.8
1626	Quercus rubra	Red oak	7.8
1627	Acer rubrum	Red maple	11.6
1628	Quercus rubra	Red oak	15.3
1629	Quercus rubra	Red oak	13.6
1630	Acer rubrum	Red maple	7.5
1631	Quercus velutina	Black oak	16.4
1632	Quercus velutina	Black oak	16.7
1633	Quercus velutina	Black oak	21.1
1634	Quercus rubra	Red oak	13.0
1636	Tilia americana	Basswood	7.8
1637	Quercus rubra	Red oak	17.9
1638	Quercus rubra	Red oak	18.5
1639	Acer rubrum	Red maple	8.7
1640	Acer rubrum	Red maple	6.9
1641	Acer rubrum	Red maple	12.1
1642	Acer rubrum	Red maple	6.9
1643	Acer rubrum	Red maple	16.4
1644	Acer rubrum	Red maple	8.0
1645	Acer rubrum	Red maple	9.2
1646	Acer rubrum	Red maple	8.0
1647	Acer rubrum	Red maple	15.2
1648	Acer rubrum	Red maple	8.5
1649	Acer rubrum	Red maple	10.5
1650	Acer rubrum	Red maple	13.4
1651	Acer rubrum	Red maple	12.4
1652	Picea abies	Norway spruce	14.3
1653	Acer rubrum	Red maple	6.4
1654	Acer rubrum	Red maple	8.9
1655	Acer rubrum	Red maple	6.7
1656	Acer rubrum	Red maple	10.4
1657	Acer rubrum	Red maple	6.7
1658	Acer rubrum	Red maple	9.2
1659	Acer rubrum	Red maple	11.8
1660	Acer rubrum	Red maple	10.2
1661	Acer rubrum	Red maple	6.2
1662	Acer rubrum	Red maple	8.3
1663	Acer rubrum	Red maple	8.7
1664	Acer rubrum	Red maple	14.5
1665	Ulmus americana	American elm	9.8
1666	Acer rubrum	Red maple	11.4
1667	Populus deltoides	Cottonwood	19.6
1668	Picea abies	Norway spruce	9.6
1669	Ulmus americana	American elm	7.7
1670	Populus deltoides	Cottonwood	11.5
1671	Populus deltoides	Cottonwood	11.6
1672	Acer saccharum	Sugar maple	6.1
1673	Populus deltoides	Cottonwood	17.8
1674	Acer rubrum	Red maple	9.1
1675	Acer rubrum	Red maple	6.8
1676	Acer rubrum	Red maple	15.0
1677	Acer rubrum	Red maple	8.6
1678	Quercus rubra	Red oak	29.3
1679	Acer saccharum	Sugar maple	7.8
1680	Acer rubrum	Red maple	13.8
1681	Prunus serotina	Black cherry	13.2
1682	Prunus serotina	Black cherry	9.7
1683	Fagus grandifolia	American beech	9.2
1684	Quercus alba	White oak	13.8
1685	Prunus serotina	Black cherry	13.3
1686	Quercus rubra	Red oak	13.8
1687	Quercus rubra	Red oak	22.1
1688	Quercus rubra	Red oak	6.8
1689	Tilia americana	Basswood	17.2
1690	Quercus rubra	Red oak	7.2
1691	Tilia americana	Basswood	11.5
1692	Acer saccharum	Sugar maple	11.2
1693	Tilia americana	Basswood	10.3
1694	Acer saccharum	Sugar maple	11.0
1695	Quercus alba	White oak	6.9
1696	Acer saccharum	Sugar maple	11.0
1697	Ostrya virginiana	Hop horn beam	6.9
1698	Prunus serotina	Black cherry	20.4
1699	Quercus rubra	Red oak	10.0
1700	Carya ovata	Shagbark hickory	6.9
1701	Acer rubrum	Red maple	9.4
1702	Acer rubrum	Red maple	8.3
1703	Acer rubrum	Red maple	15.6
1704	Acer rubrum	Red maple	7.8
1705	Acer rubrum	Red maple	9.8
1706	Quercus velutina	Black oak	17.1
1707	Acer rubrum	Red maple	7.4
1708	Acer rubrum	Red maple	7.7
1709	Quercus rubra	Red oak	27.7
1710	Acer rubrum	Red maple	7.3
1711	Quercus rubra	Red oak	15.4
1712	Quercus rubra	Red oak	22.1
1713	Tilia americana	Basswood	7.5
1714	Tilia americana	Basswood	12.1
1715	Prunus serotina	Black cherry	6.3
1715	Ulmus americana	American elm	7.4
1717	Quercus rubra	Red oak	6.9
1718	Quercus rubra	Red oak	15.5
1719	Acer rubrum	Red maple	8.3
1720	Prunus serotina	Black cherry	6.9
1721	Prunus serotina	Black cherry	9.2
1722	Prunus serotina	Black cherry	10.5
1723	Ulmus americana	American elm	10.3
1724	Acer rubrum	Red maple	15.7
1725	Acer rubrum	Red maple	8.8
1726	Acer rubrum	Red maple	8.6
1727	Prunus serotina	Black cherry	6.0
1728	Acer rubrum	Red maple	6.1
1729	Acer rubrum	Red maple	6.5
1730	Acer rubrum	Red maple	12.4
1731	Tilia americana	Basswood	7.8
1732	Acer rubrum	Red maple	6.6
1733	Acer rubrum	Red maple	12.7
1734	Acer rubrum	Red maple	7.1
1735	Acer rubrum	Red maple	12.3
1736	Prunus serotina	Black cherry	19.1
1737	Acer rubrum	Red maple	16.0
1738	Carya ovata	Shagbark hickory	6.0
1739	Quercus rubra	Red oak	6.7
1740	Quercus rubra	Red oak	20.6
1741	Acer saccharum	Sugar maple	9.2
1742	Quercus rubra	Red oak	14.0
1743	Quercus rubra	Red oak	25.0
1744	Quercus rubra	Red oak	16.4
1745	Prunus serotina	Black cherry	22.2
1746	Acer saccharum	Sugar maple	13.0
1747	Prunus serotina	Black cherry	13.9
1748	Prunus serotina	Black cherry	17.0
1749	Quercus rubra	Red oak	13.4
1750	Acer saccharum	Sugar maple	8.3
1801	Acer rubrum	Red maple	9.0
1802	Quercus velutina	Black oak	21.7
1803	Quercus velutina	Black oak	9.0
1804	Picea abies	Norway spruce	19.7
1805	Picea abies	Norway spruce	12.2
1806	Picea abies	Norway spruce	19.2
1807	Quercus velutina	Black oak	9.5
1808	Quercus velutina	Black oak	19.7
1809	Populus tremuloides	Quaking Aspen	7.3
1810	Populus tremuloides	Quaking Aspen	8.2
1811	Quercus velutina	Black oak	7.9
1812	Quercus rubra	Red oak	12.1
1813	Acer saccharum	Sugar maple	9.0
1814	Picea abies	Norway spruce	19.8
1815	Picea abies	Norway spruce	14.4
1816	Ulmus americana	American elm	8.7
1817	Ulmus americana	American elm	8.9
1818	Picea abies	Norway spruce	10.9
1819	Picea abies	Norway spruce	14.6
1820	Malus pumila	Common apple	6.5
1821	Picea abies	Norway spruce	16.2
1822	Picea abies	Norway spruce	13.5
1823	Ulmus americana	American elm	6.5
1824	Prunus serotina	Black cherry	17.3
1825	Picea abies	Norway spruce	16.0
1826	Acer saccharum	Sugar maple	6.2
1827	Picea abies	Norway spruce	14.5
1828	Picea abies	Norway spruce	11.9
1829	Picea abies	Norway spruce	18.6
1830	Picea abies	Norway spruce	11.8
1831	Picea abies	Norway spruce	12.8
1832	Picea abies	Norway spruce	10.6
1833	Picea abies	Norway spruce	10.9
1834	Picea abies	Norway spruce	11.3

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WELLSPRING

PROPOSED MIXED - USE P.U.D.

FARMINGTON HILLS, MICHIGAN

08.09.2021 DATE

P.U.D. SUBMISSION ISSUE

KEY PLAN

FSP PROJECT NO. DEL18.101

DRAWING TITLE

Tree List 2

DRAWING NUMBER

C.004

1835	Picea abies	Norway spruce	11.9
1836	Picea abies	Norway spruce	13.2
1837	Picea abies	Norway spruce	13.7
1838	Picea abies	Norway spruce	20.3
1839	Picea abies	Norway spruce	22.5
1840	Picea abies	Norway spruce	17.6
1841	Picea abies	Norway spruce	21.5
1842	Morus alba	White mulberry	6.6
1844	Picea abies	Norway spruce	19.2
1845	Picea abies	Norway spruce	18.6
1845	Picea abies	Norway spruce	16.5
1846	Picea abies	Norway spruce	26.5
1847	Picea abies	Norway spruce	12.4
1848	Picea abies	Norway spruce	16.0
1849	Picea abies	Norway spruce	14.2
1850	Picea abies	Norway spruce	10.8
1851	Picea abies	Norway spruce	13.0
1852	Picea abies	Norway spruce	14.1
1853	Picea abies	Norway spruce	10.5
1854	Picea abies	Norway spruce	10.2
1855	Picea abies	Norway spruce	11.6
1856	Picea abies	Norway spruce	13.4
1857	Picea abies	Norway spruce	11.0
1858	Picea abies	Norway spruce	12.2
1859	Picea abies	Norway spruce	17.6
1860	Picea abies	Norway spruce	10.5
1861	Picea abies	Norway spruce	20.2
1862	Picea abies	Norway spruce	14.8
1863	Picea abies	Norway spruce	11.0
1864	Prunus serotina	Black cherry	11.8
1865	Picea abies	Norway spruce	9.5
1866	Picea abies	Norway spruce	16.5
1867	Acer saccharum	Sugar maple	7.5
1868	Picea abies	Norway spruce	13.5
1869	Picea abies	Norway spruce	20.9
1870	Picea abies	Norway spruce	16.2
1871	Picea abies	Norway spruce	18.2
1872	Picea abies	Norway spruce	14.4
1873	Picea abies	Norway spruce	10.3
1874	Picea abies	Norway spruce	20.2
1875	Picea abies	Norway spruce	17.7
1876	Picea abies	Norway spruce	18.5
1877	Picea abies	Norway spruce	14.0
1878	Picea abies	Norway spruce	14.1
1879	Picea abies	Norway spruce	15.2
1880	Picea abies	Norway spruce	13.4
1881	Picea abies	Norway spruce	9.5
1882	Picea abies	Norway spruce	12.5
1883	Picea abies	Norway spruce	13.3
1884	Picea abies	Norway spruce	11.8
1885	Picea abies	Norway spruce	12.7
1886	Picea abies	Norway spruce	11.7
1887	Acer saccharum	Sugar maple	6.6
1888	Picea abies	Norway spruce	16.8
1889	Picea abies	Norway spruce	13.9
1890	Picea abies	Norway spruce	16.4
1891	Picea abies	Norway spruce	10.1
1892	Picea abies	Norway spruce	9.5
1893	Picea abies	Norway spruce	9.8
1894	Picea abies	Norway spruce	12.9
1895	Picea abies	Norway spruce	10.2
1896	Picea abies	Norway spruce	10.4
1897	Picea abies	Norway spruce	17.8
1898	Picea abies	Norway spruce	11.0
1899	Picea abies	Norway spruce	11.4
1900	Picea abies	Norway spruce	20.0
1901	Picea abies	Norway spruce	15.9
1902	Picea abies	Norway spruce	15.0
1903	Picea abies	Norway spruce	18.7
1904	Picea abies	Norway spruce	15.8
1905	Picea abies	Norway spruce	21.5
1906	Picea abies	Norway spruce	21.8
1907	Picea abies	Norway spruce	18.5
1908	Picea abies	Norway spruce	20.8
1909	Picea abies	Norway spruce	23.3
1910	Picea abies	Norway spruce	20.2
1911	Picea abies	Norway spruce	22.3
1912	Picea abies	Norway spruce	8.5
1913	Picea abies	Norway spruce	15.1
1914	Picea abies	Norway spruce	16.3
1915	Picea abies	Norway spruce	16.3
1916	Picea abies	Norway spruce	12.7
1917	Picea abies	Norway spruce	13.1
1918	Picea abies	Norway spruce	17.1
1919	Picea abies	Norway spruce	12.0
1920	Picea abies	Norway spruce	19.6
1921	Picea abies	Norway spruce	10.8
1922	Picea abies	Norway spruce	12.0
1923	Picea abies	Norway spruce	20.8
1924	Picea abies	Norway spruce	10.1
1925	Picea abies	Norway spruce	13.8
1926	Picea abies	Norway spruce	17.9
1927	Picea abies	Norway spruce	18.3
1928	Picea abies	Norway spruce	19.9
1929	Picea abies	Norway spruce	18.0
1930	Picea abies	Norway spruce	17.0
1931	Picea abies	Norway spruce	16.5
1932	Picea abies	Norway spruce	16.2
1933	Picea abies	Norway spruce	23.4
1934	Picea abies	Norway spruce	11.5
1935	Picea abies	Norway spruce	16.0
1936	Picea abies	Norway spruce	11.2
1936	Picea abies	Norway spruce	11.2
1938	Picea abies	Norway spruce	14.8
1939	Picea abies	Norway spruce	15.7
1940	Picea abies	Norway spruce	15.7
1941	Picea abies	Norway spruce	11.7
1942	Picea abies	Norway spruce	10.6
1943	Picea abies	Norway spruce	11.7
1944	Picea abies	Norway spruce	11.7
1945	Picea abies	Norway spruce	18.9
1946	Picea abies	Norway spruce	17.0
1947	Picea abies	Norway spruce	16.8
1948	Picea abies	Norway spruce	16.0
1949	Picea abies	Norway spruce	16.4
1950	Picea abies	Norway spruce	17.6
1951	Picea abies	Norway spruce	11.3
1952	Acer rubrum	Red maple	10.5
1953	Picea abies	Norway spruce	11.3
1954	Picea abies	Norway spruce	13.2
1955	Picea abies	Norway spruce	16.8
1956	Picea abies	Norway spruce	10.5
1957	Picea abies	Norway spruce	14.7
1958	Picea abies	Norway spruce	13.4
1959	Picea abies	Norway spruce	16.7
1960	Picea abies	Norway spruce	12.6
1961	Picea abies	Norway spruce	17.6
1962	Picea abies	Norway spruce	13.4
1963	Picea abies	Norway spruce	12.4
1964	Picea abies	Norway spruce	10.1
1965	Picea abies	Norway spruce	13.3
1966	Acer saccharum	Sugar maple	16.6
1967	Quercus rubra	Red oak	7.9
1968	Prunus serotina	Black cherry	16.3
1968	Prunus serotina	Black cherry	16.3
1969	Quercus rubra	Red oak	9.5
1970	Prunus serotina	Black cherry	24.0
1971	Prunus serotina	Black cherry	20.1
1972	Quercus velutina	Black oak	9.8
1973	Quercus velutina	Black oak	17.4
1974	Quercus alba	White oak	11.7
1975	Prunus serotina	Black cherry	12.2
1977	Prunus serotina	Black cherry	10.0
1978	Carya cordiformis	Bitternut hickory	7.1
1979	Acer rubrum	Red maple	11.1
1980	Acer rubrum	Red maple	13.2
1981	Picea abies	Norway spruce	24.5
1982	Acer rubrum	Red maple	7.1
1983	Acer rubrum	Red maple	15.4
1984	Acer saccharum	Sugar maple	13.7
1985	Quercus rubra	Red oak	27.1
1986	Acer saccharum	Sugar maple	14.0
1987	Quercus rubra	Red oak	30.5
1988	Quercus rubra	Red oak	21.5
1989	Acer saccharum	Sugar maple	6.5
1990	Quercus rubra	Red oak	21.0
1991	Quercus rubra	Red oak	15.0
1992	Quercus rubra	Red oak	18.6
1993	Acer saccharum	Sugar maple	9.4
1994	Acer rubrum	Red maple	31.4
1995	Acer rubrum	Red maple	32.1
1996	Carya ovata	Shagbark hickory	7.0
1997	Quercus alba	White oak	32.7
1998	Picea abies	Norway spruce	24.3
1999	Picea abies	Norway spruce	16.6
2000	Picea abies	Norway spruce	10.9
2001	Picea abies	Norway spruce	9.8
2002	Picea abies	Norway spruce	14.0
2003	Picea abies	Norway spruce	15.3
2004	Picea abies	Norway spruce	12.3
2005	Picea abies	Norway spruce	20.0
2006	Picea abies	Norway spruce	15.8
2007	Picea abies	Norway spruce	12.8
2008	Picea abies	Norway spruce	13.1
2009	Picea abies	Norway spruce	9.8
2010	Picea abies	Norway spruce	11.0
2011	Picea abies	Norway spruce	13.2
2012	Picea abies	Norway spruce	17.6
2013	Pinus resinosa	Red pine	23.4
2014	Picea abies	Norway spruce	18.1
2015	Picea abies	Norway spruce	21.2
2016	Picea abies	Norway spruce	15.5
2017	Picea abies	Norway spruce	12.2
2018	Picea abies	Norway spruce	13.7
2019	Picea abies	Norway spruce	18.8
2020	Picea abies	Norway spruce	19.8
2021	Picea abies	Norway spruce	13.2
2022	Picea abies	Norway spruce	14.5
2023	Picea abies	Norway spruce	14.5
2024	Picea abies	Norway spruce	12.2
2025	Picea abies	Norway spruce	16.3
2026	Picea abies	Norway spruce	11.3
2027	Picea abies	Norway spruce	12.3
2028	Picea abies	Norway spruce	13.5
2029	Picea abies	Norway spruce	13.1
2030	Picea abies	Norway spruce	11.1
2031	Picea abies	Norway spruce	12.7
2032	Picea abies	Norway spruce	10.5
2033	Picea abies	Norway spruce	15.5
2034	Picea abies	Norway spruce	17.4
2035	Picea abies	Norway spruce	16.8
2036	Picea abies	Norway spruce	12.9
2037	Picea abies	Norway spruce	9.5
2038	Picea abies	Norway spruce	17.8
2039	Picea abies	Norway spruce	13.4
2040	Picea abies	Norway spruce	12.8
2041	Picea abies	Norway spruce	14.7
2042	Picea abies	Norway spruce	12.4
2043	Picea abies	Norway spruce	14.9
2044	Picea abies	Norway spruce	16.4
2045	Picea abies	Norway spruce	12.7
2046	Picea abies	Norway spruce	19.3
2047	Picea abies	Norway spruce	10.7
2048	Picea abies	Norway spruce	9.1
2049	Picea abies	Norway spruce	9.3
2050	Picea abies	Norway spruce	14.3
2051	Picea abies	Norway spruce	9.9
2052	Picea abies	Norway spruce	13.2
2053	Picea abies	Norway spruce	12.3
2054	Picea abies	Norway spruce	15.6
2055	Picea abies	Norway spruce	11.9
2056	Picea abies	Norway spruce	9.6
2057	Picea abies	Norway spruce	14.7
2058	Picea abies	Norway spruce	20.1
2059	Picea abies	Norway spruce	28.3
2060	Picea abies	Norway spruce	17.5
2061	Picea abies	Norway spruce	18.2
2062	Picea abies	Norway spruce	14.3
2063	Picea abies	Norway spruce	10.8
2064	Picea abies	Norway spruce	10.2
2065	Picea abies	Norway spruce	17.5
2066	Picea abies	Norway spruce	14.6
2067	Picea abies	Norway spruce	11.6
2068	Picea abies	Norway spruce	14.5
2069	Picea abies	Norway spruce	18.9
2070	Picea abies	Norway spruce	22.1
2071	Picea abies	Norway spruce	10.3
2072	Picea abies	Norway spruce	12.0
2073	Picea abies	Norway spruce	11.7
2074	Picea abies	Norway spruce	16.3
2075	Picea abies	Norway spruce	13.1
2076	Picea abies	Norway spruce	16.4
2077	Picea abies	Norway spruce	12.8
2078	Picea abies	Norway spruce	10.8
2079	Picea abies	Norway spruce	15.8
2080	Picea abies	Norway spruce	9.4
2081	Picea abies	Norway spruce	17.5
2082	Picea abies	Norway spruce	12.9
2083	Picea abies	Norway spruce	11.9
2084	Picea abies	Norway spruce	18.3
2085	Picea abies	Norway spruce	15.0
2086	Picea abies	Norway spruce	12.1
2086	Picea abies	Norway spruce	10.7
2086	Picea abies	Norway spruce	10.5
2087	Picea abies	Norway spruce	21.7
2087	Picea abies	Norway spruce	19.3
2087	Picea abies	Norway spruce	17.1
2088	Picea abies	Norway spruce	16.2
2089	Picea abies	Norway spruce	13.4
2090	Picea abies	Norway spruce	16.0
2091	Picea abies	Norway spruce	14.4
2092	Picea abies	Norway spruce	14.1
2093	Picea abies	Norway spruce	19.6
2094	Picea abies	Norway spruce	9.1
2095	Picea abies	Norway spruce	21.7
2096	Picea abies	Norway spruce	17.8
2097	Picea abies	Norway spruce	17.8
2098	Picea abies	Norway spruce	16.9
2099	Picea abies	Norway spruce	18.9
2100	Picea abies	Norway spruce	19.7
2101	Picea abies	Norway spruce	18.1
2102	Picea abies	Norway spruce	18.3
2103	Picea abies	Norway spruce	16.0
2104	Picea abies	Norway spruce	18.5
2105	Picea abies	Norway spruce	21.8
2106	Picea abies	Norway spruce	13.5
2107	Picea abies	Norway spruce	20.0
2108	Picea abies	Norway spruce	19.2
2109	Picea abies	Norway spruce	22.1
2110	Picea abies	Norway spruce	13.6
2111	Picea abies	Norway spruce	20.4
2112	Picea abies	Norway spruce	19.6
2113	Picea abies	Norway spruce	18.1
2114	Picea abies	Norway spruce	18.1
2115	Picea abies	Norway spruce	16.2
2116	Picea abies	Norway spruce	22.0
2117	Picea abies	Norway spruce	18.2
2118	Picea abies	Norway spruce	20.0
2119	Picea abies	Norway spruce	22.1
2120	Picea abies	Norway spruce	21.0
2121	Picea abies	Norway spruce	19.7
2122	Picea abies	Norway spruce	16.6
2123	Picea abies	Norway spruce	22.5
2124	Picea abies	Norway spruce	17.1
2125	Picea abies	Norway spruce	16.4
2126	Picea abies	Norway spruce	19.2
2127	Picea abies	Norway spruce	20.7
2127	Picea abies	Norway spruce	19.0
2128	Picea abies	Norway spruce	18.1
2129	Picea abies	Norway spruce	24.2
2131	Picea abies	Norway spruce	21.5
2132	Picea abies	Norway spruce	19.5
2133	Picea abies	Norway spruce	14.8
2134	Picea abies	Norway spruce	16.1
2135	Picea abies	Norway spruce	21.4
2136	Picea abies	Norway spruce	25.5
2137	Picea abies	Norway spruce	22.1
2138	Picea abies	Norway spruce	17.1
2139	Picea abies	Norway spruce	19.1
2140	Picea abies	Norway spruce	23.3
2141	Picea abies	Norway spruce	21.6
2142	Picea abies	Norway spruce	20.6
2143	Prunus serotina	Black cherry	13.1
2144	Picea abies	Norway spruce	19.4
2145	Picea abies	Norway spruce	19.5
2146	Picea abies	Norway spruce	18.1
2147	Picea abies	Norway spruce	14.9
2148	Picea abies	Norway spruce	19.5
2149	Picea abies	Norway spruce	9.7
2150	Picea abies	Norway spruce	13.3
2151	Picea abies	Norway spruce	13.7
2152	Picea abies	Norway spruce	21.8
2153	Picea abies	Norway spruce	17.1
2154	Picea abies	Norway spruce	13.9
2155	Picea abies	Norway spruce	14.0
2156	Picea abies	Norway spruce	14.4
2157	Picea abies	Norway spruce	17.7
2158	Prunus serotina	Black cherry	21.1
2159	Prunus serotina	Black cherry	6.6
2160	Quercus rubra	Red oak	9.4
2161	Ulmus americana	American elm	8.4
2162	Quercus rubra	Red oak	16.8
2163	Prunus serotina	Black cherry	6.3
2164	Quercus rubra	Red oak	7.2
2165	Prunus serotina	Black cherry	25.8
2166	Acer saccharum	Sugar maple	9.1
2167	Prunus serotina	Black cherry	15.4
2168	Acer saccharum	Sugar maple	6.4
2169	Picea alba	White spruce	22.2
2170	Picea alba	White spruce	19.7
2171	Picea alba	White spruce	18.0
2172	Picea alba	White spruce	21.7
2173	Picea alba	White spruce	9.7
2174	Picea alba	White spruce	16.3
2175	Picea alba	White spruce	16.8
2176	Picea alba	White spruce	6.7
2177	Picea alba	White spruce	11.1
2178	Picea alba	White spruce	14.4
2179	Picea alba	White spruce	14.3
2180	Picea alba	White spruce	15.3
2181	Picea alba	White spruce	16.0
2182	Picea alba	White spruce	15.1
2183	Picea alba	White spruce	18.0
2184	Picea alba	White spruce	16.5
2185	Picea alba	White spruce	12.2
2186	Picea alba	White spruce	19.1
2187	Picea alba	White spruce	16.3
2188	Prunus serotina	Black cherry	20.4
2189	Acer rubrum	Red maple	9.5
2190	Ulmus americana	American elm	6.9
2191	Picea alba	White spruce	20.9
2192	Malus pumila	Common apple	7.3
2193	Acer saccharum	Sugar maple	6.7
2194	Picea alba	White spruce	14.8
2195	Acer saccharum	Sugar maple	7.3
2196	Acer saccharum	Sugar maple	7.8
2197	Acer saccharum	Sugar maple	8.0
2198	Picea alba	White spruce	15.7
2199	Acer saccharum	Sugar maple	7.5
2200	Picea alba	White spruce	13.5
2201	Picea alba	White spruce	17.9
2202	Picea alba	White spruce	17.7

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WELLSPRING

PROPOSED MIXED - USE P.U.D.

FARMINGTON HILLS, MICHIGAN

08.09.2021 DATE

P.U.D. SUBMISSION ISSUE

KEY PLAN

FSP PROJECT NO. DEL18.101

DRAWING TITLE

Tree List 3

DRAWING NUMBER

C.005

2203	Picea abies	Norway spruce	17.6
2204	Picea alba	White spruce	20.0
2206	Picea alba	White spruce	21.8
2207	Picea alba	White spruce	20.3
2207	Picea alba	White spruce	14.6
2208	Picea alba	White spruce	17.3
2209	Picea alba	White spruce	20.1
2210	Picea alba	White spruce	22.0
2211	Picea abies	Norway spruce	26.0
2212	Picea alba	White spruce	16.0
2213	Picea abies	Norway spruce	15.6
2214	Picea abies	Norway spruce	15.7
2215	Picea abies	Norway spruce	20.7
2216	Picea abies	Norway spruce	20.2
2217	Picea abies	Norway spruce	11.5
2218	Populus deltoides	Cottonwood	30.0
2219	Picea abies	Norway spruce	23.8
2220	Picea abies	Norway spruce	20.6
2221	Picea abies	Norway spruce	14.1
2222	Picea abies	Norway spruce	16.2
2223	Picea abies	Norway spruce	14.8
2224	Picea abies	Norway spruce	21.8
2225	Picea abies	Norway spruce	17.7
2226	Picea abies	Norway spruce	19.0
2227	Picea abies	Norway spruce	21.2
2228	Picea abies	Norway spruce	28.0
2229	Picea abies	Norway spruce	18.3
2230	Picea abies	Norway spruce	23.3
2231	Picea abies	Norway spruce	31.4
2232	Prunus serotina	Black cherry	10.4
2233	Picea abies	Norway spruce	16.2
2234	Picea abies	Norway spruce	20.8
2235	Picea abies	Norway spruce	14.6
2236	Picea abies	Norway spruce	17.4
2237	Picea abies	Norway spruce	23.7
2238	Picea abies	Norway spruce	16.6
2239	Picea abies	Norway spruce	18.1
2240	Picea abies	Norway spruce	19.3
2241	Picea abies	Norway spruce	21.5
2242	Picea abies	Norway spruce	16.3
2243	Picea abies	Norway spruce	19.8
2244	Picea abies	Norway spruce	17.9
2245	Picea abies	Norway spruce	18.5
2246	Picea abies	Norway spruce	13.8
2247	Picea abies	Norway spruce	20.1
2248	Picea abies	Norway spruce	21.4
2249	Picea abies	Norway spruce	21.2
2250	Picea abies	Norway spruce	20.5
2251	Picea abies	Norway spruce	16.2
2252	Picea abies	Norway spruce	19.2
2253	Picea abies	Norway spruce	26.8
2254	Ulmus americana	American elm	10.9
2255	Ulmus americana	American elm	8.5
2256	Ulmus americana	American elm	6.0
2257	Picea abies	Norway spruce	32.7
2258	Ulmus americana	American elm	7.9
2259	Picea abies	Norway spruce	26.0
2260	Picea abies	Norway spruce	15.8
2261	Picea abies	Norway spruce	25.0
2262	Picea abies	Norway spruce	21.4
2263	Picea abies	Norway spruce	28.8
2264	Picea abies	Norway spruce	25.5
2265	Acer negundo	Boxelder	14.7
2266	Picea abies	Norway spruce	22.8
2267	Ulmus americana	American elm	7.6
2268	Ulmus americana	American elm	8.3
2269	Ulmus americana	American elm	6.5
2270	Picea abies	Norway spruce	21.6
2271	Picea abies	Norway spruce	24.1
2272	Picea abies	Norway spruce	13.5
2273	Picea abies	Norway spruce	17.5
2274	Picea abies	Norway spruce	19.5
2275	Picea abies	Norway spruce	16.0
2276	Picea abies	Norway spruce	15.6
2277	Picea abies	Norway spruce	17.3
2278	Picea abies	Norway spruce	17.6
2279	Picea abies	Norway spruce	18.8
2280	Picea abies	Norway spruce	18.3
2281	Picea abies	Norway spruce	16.0
2282	Picea abies	Norway spruce	18.4
2283	Picea abies	Norway spruce	20.5
2284	Picea abies	Norway spruce	15.3
2285	Picea abies	Norway spruce	14.2
2286	Picea abies	Norway spruce	10.2
2287	Picea abies	Norway spruce	11.7
2288	Picea abies	Norway spruce	19.9
2289	Picea abies	Norway spruce	24.0
2290	Picea abies	Norway spruce	19.5
2291	Picea abies	Norway spruce	26.3
2292	Picea abies	Norway spruce	18.2
2293	Picea abies	Norway spruce	29.0
2294	Picea abies	Norway spruce	19.7
2295	Picea abies	Norway spruce	23.7
2296	Picea abies	Norway spruce	16.7
2297	Picea abies	Norway spruce	17.1
2298	Picea abies	Norway spruce	18.1
2299	Picea abies	Norway spruce	12.1
2300	Picea abies	Norway spruce	19.2
2301	Picea abies	Norway spruce	14.8
2302	Picea abies	Norway spruce	15.7
2303	Picea abies	Norway spruce	24.1
2304	Picea abies	Norway spruce	18.8
2305	Picea abies	Norway spruce	23.8
2306	Picea abies	Norway spruce	24.4
2307	Picea abies	Norway spruce	20.0
2308	Picea abies	Norway spruce	21.7
2309	Picea abies	Norway spruce	18.7
2310	Picea abies	Norway spruce	22.0
2311	Picea abies	Norway spruce	19.4
2312	Picea abies	Norway spruce	13.9
2313	Picea abies	Norway spruce	23.4
2314	Picea abies	Norway spruce	16.8
2315	Picea abies	Norway spruce	23.6
2316	Picea abies	Norway spruce	18.5
2317	Quercus rubra	Red oak	7.8
2318	Picea abies	Norway spruce	15.3
2319	Picea abies	Norway spruce	18.3
2320	Picea abies	Norway spruce	17.8
2321	Picea abies	Norway spruce	13.2
2322	Picea abies	Norway spruce	21.8
2323	Picea abies	Norway spruce	24.0
2324	Picea abies	Norway spruce	13.0
2325	Picea abies	Norway spruce	21.6
2326	Picea abies	Norway spruce	18.4
2327	Picea abies	Norway spruce	23.0
2328	Picea abies	Norway spruce	14.7
2329	Picea abies	Norway spruce	16.6
2330	Picea abies	Norway spruce	18.9
2331	Picea abies	Norway spruce	21.0
2332	Picea abies	Norway spruce	19.1
2333	Picea abies	Norway spruce	20.8
2334	Picea abies	Norway spruce	21.8
2335	Picea abies	Norway spruce	19.0
2336	Picea abies	Norway spruce	27.8
2337	Picea abies	Norway spruce	23.0
2338	Picea abies	Norway spruce	19.1
2339	Picea abies	Norway spruce	21.0
2340	Picea abies	Norway spruce	17.7
2341	Prunus serotina	Black cherry	8.6
2341	Prunus serotina	Black cherry	7.2
2343	Picea abies	Norway spruce	25.0
2344	Picea abies	Norway spruce	18.4
2345	Pinus resinosa	Red pine	19.1
2346	Picea abies	Norway spruce	15.0
2347	Acer saccharum	Sugar maple	8.6
2348	Picea abies	Norway spruce	10.5
2349	Acer saccharum	Sugar maple	9.3
2350	Acer platanoides	Norway maple	23.4
2351	Quercus alba	White oak	23.1
2352	Salix matsudana	Corkscrew willow	15.5
2353	Salix matsudana	Corkscrew willow	21.2
2354	Salix matsudana	Corkscrew willow	6.2
2355	Salix matsudana	Corkscrew willow	19.2
2356	Prunus serotina	Black cherry	9.8
2357	Ulmus americana	American elm	7.1
2358	Prunus serotina	Black cherry	9.2
2359	Acer rubrum	Red maple	11.0
2360	Prunus serotina	Black cherry	10.5
2361	Acer rubrum	Red maple	10.4
2362	Acer rubrum	Red maple	8.2
2363	Prunus serotina	Black cherry	11.8
2364	Prunus serotina	Black cherry	8.6
2365	Prunus serotina	Black cherry	15.0
2366	Acer rubrum	Red maple	13.5
2367	Acer rubrum	Red maple	7.2
2368	Ulmus americana	American elm	6.4
2369	Acer rubrum	Red maple	8.5
2370	Prunus serotina	Black cherry	6.5
2371	Ulmus americana	American elm	14.0
2372	Acer rubrum	Red maple	9.7
2373	Acer rubrum	Red maple	12.3
2374	Acer rubrum	Red maple	16.2
2374	Acer rubrum	Red maple	9.5
2375	Malus pumila	Common apple	6.2
2375	Ulmus americana	American elm	9.6
2376	Acer rubrum	Red maple	9.9
2377	Acer saccharum	Sugar maple	9.0
2378	Acer rubrum	Red maple	7.3
2379	Acer rubrum	Red maple	9.8
2380	Ulmus americana	American elm	15.7
2381	Acer rubrum	Red maple	10.3
2382	Ulmus americana	American elm	10.7
2383	Acer rubrum	Red maple	8.5
2386	Prunus serotina	Black cherry	6.6
2387	Ulmus americana	American elm	6.7
2388	Prunus serotina	Black cherry	7.2
2389	Tilia americana	Basswood	9.0
2390	Acer rubrum	Red maple	6.1
2391	Tilia americana	Basswood	6.4
2392	Acer rubrum	Red maple	11.9
2393	Populus deltoides	Cottonwood	28.4
2394	Ulmus americana	American elm	12.3
2395	Tilia americana	Basswood	6.2
2396	Tilia americana	Basswood	6.0
2397	Tilia americana	Basswood	10.4
2398	Tilia americana	Basswood	6.5
2399	Malus pumila	Common apple	6.8
2400	Quercus rubra	Red oak	10.4
2401	Prunus serotina	Black cherry	7.2
2402	Prunus serotina	Black cherry	11.1
2403	Malus pumila	Common apple	6.7
2404	Acer rubrum	Red maple	11.8
2405	Acer rubrum	Red maple	14.6
2406	Acer rubrum	Red maple	7.1
2407	Picea abies	Norway spruce	13.1
2408	Acer rubrum	Red maple	6.6
2409	Acer saccharum	Sugar maple	9.6
2410	Acer saccharum	Sugar maple	10.2
2411	Acer rubrum	Red maple	8.0
2412	Acer rubrum	Red maple	6.2
2413	Prunus serotina	Black cherry	7.0
2414	Acer rubrum	Red maple	7.0
2415	Acer rubrum	Red maple	9.7
2416	Picea abies	Norway spruce	13.8
2417	Malus pumila	Common apple	6.0
2418	Picea abies	Norway spruce	11.6
2419	Acer rubrum	Red maple	8.8
2420	Acer rubrum	Red maple	6.1
2421	Malus pumila	Common apple	8.8
2422	Prunus serotina	Black cherry	6.9
2423	Prunus serotina	Black cherry	7.0
2424	Acer rubrum	Red maple	7.8
2425	Acer rubrum	Red maple	7.4
2426	Acer rubrum	Red maple	13.0
2427	Acer rubrum	Red maple	21.1
2428	Prunus serotina	Black cherry	9.0
2429	Acer rubrum	Red maple	8.5
2430	Malus pumila	Common apple	11.2
2431	Prunus serotina	Black cherry	7.8
2432	Prunus serotina	Black cherry	6.2
2433	Prunus serotina	Black cherry	10.5
2434	Acer rubrum	Red maple	9.5
2435	Prunus serotina	Black cherry	9.5
2436	Acer rubrum	Red maple	10.2
2437	Prunus serotina	Black cherry	10.7
2438	Acer rubrum	Red maple	8.3
2439	Prunus serotina	Black cherry	10.1
2440	Prunus serotina	Black cherry	11.4
2441	Prunus serotina	Black cherry	6.8
2442	Acer rubrum	Red maple	14.7
2443	Acer saccharinum	Silver maple	6.4
2444	Acer rubrum	Red maple	16.7
2445	Populus deltoides	Cottonwood	19.6
2446	Ulmus americana	American elm	6.3
2447	Prunus serotina	Black cherry	15.6
2448	Acer rubrum	Red maple	19.7
2449	Prunus serotina	Black cherry	10.2
2450	Malus pumila	Common apple	9.5
2451	Acer rubrum	Red maple	8.5
2452	Tilia americana	Basswood	16.0
2453	Acer rubrum	Red maple	8.0
2454	Acer rubrum	Red maple	6.0
2455	Quercus rubra	Red oak	22.8
2456	Tilia americana	Basswood	16.4
2457	Quercus rubra	Red oak	17.1
2458	Quercus rubra	Red oak	37.8
2459	Prunus serotina	Black cherry	11.2
2460	Prunus serotina	Black cherry	10.8
2461	Prunus serotina	Black cherry	10.2
2462	Tilia americana	Basswood	13.9
2463	Acer rubrum	Red maple	6.0
2464	Quercus rubra	Red oak	13.0
2465	Tilia americana	Basswood	9.6
2466	Acer rubrum	Red maple	12.1
2467	Quercus rubra	Red oak	14.5
2468	Quercus rubra	Red oak	11.3
2469	Acer saccharum	Sugar maple	11.0
2470	Populus deltoides	Cottonwood	22.8
2471	Quercus rubra	Red oak	15.8
2472	Quercus rubra	Red oak	16.7
2473	Tilia americana	Basswood	7.9
2474	Quercus rubra	Red oak	15.2
2475	Quercus rubra	Red oak	15.2
2476	Quercus rubra	Red oak	15.3
2477	Acer rubrum	Red maple	18.4
2478	Acer rubrum	Red maple	10.0
2479	Acer rubrum	Red maple	8.7
2480	Acer rubrum	Red maple	11.4
2481	Acer rubrum	Red maple	10.2
2482	Acer rubrum	Red maple	7.6
2483	Ulmus americana	American elm	6.3
2484	Acer rubrum	Red maple	9.2
2485	Acer rubrum	Red maple	6.9
2486	Quercus rubra	Red oak	17.8
2487	Acer rubrum	Red maple	11.6
2488	Acer rubrum	Red maple	8.7
2489	Quercus rubra	Red oak	14.1
2490	Quercus rubra	Red oak	12.5
2491	Acer rubrum	Red maple	6.3
2492	Ulmus americana	American elm	7.8
2493	Quercus rubra	Red oak	21.7
2494	Acer rubrum	Red maple	8.1
2495	Populus deltoides	Cottonwood	18.1
2496	Acer rubrum	Red maple	8.2
2497	Acer rubrum	Red maple	6.3
2498	Quercus rubra	Red oak	15.0
2499	Acer rubrum	Red maple	10.2
2500	Prunus serotina	Black cherry	19.7
2501	Tag not used		
2502	Quercus alba	White oak	32.9
2503	Quercus alba	White oak	31.8
2504	Quercus alba	White oak	42.2
2505	Quercus alba	White oak	34.3
2506	Ostrya virginiana	Hop horn beam	9.0
2507	Quercus rubra	Red oak	53.4
2508	Quercus alba	White oak	43.5
2509	Quercus alba	White oak	40.2
2510	Acer saccharum	Sugar maple	9.1
2511	Tilia americana	Basswood	9.1
2512	Tilia americana	Basswood	7.5
2513	Robinia pseudoacacia	Black locust	29.6
2514	Robinia pseudoacacia	Black locust	18.1
2515	Robinia pseudoacacia	Black locust	22.1
2516	Robinia pseudoacacia	Black locust	15.8
2517	Juglans nigra	Black walnut	15.4
2518	Juglans nigra	Black walnut	27.5
2519	Juglans nigra	Black walnut	18.5
2520	Juglans nigra	Black walnut	18.6
2521	Acer platanoides	Norway maple	14.4
2522	Picea abies	Norway spruce	11.1
2523	Picea abies	Norway spruce	25.6
2524	Pinus nigra	Austrian pine	22.7
2525	Quercus rubra	Red oak	10.5
2526	Carya cordiformis	Bitternut hickory	13.5
2527	Quercus rubra	Red oak	19.3
2528	Ulmus americana	American elm	6.6
2529	Acer saccharum	Sugar maple	7.7
2530	Acer rubrum	Red maple	8.0
2531	Quercus alba	White oak	10.3
2532	Acer saccharum	Sugar maple	7.7
2533	Quercus alba	White oak	13.1
2534	Acer saccharum	Sugar maple	8.5
2535	Acer rubrum	Red maple	6.5
2536	Acer saccharum	Sugar maple	10.3
2537	Carya ovata	Shagbark hickory	13.0
2538	Carya ovata	Shagbark hickory	9.1
2539	Tilia americana	Basswood	13.9
2540	Acer saccharum	Sugar maple	7.7
2541	Acer saccharum	Sugar maple	8.8
2542	Acer saccharum	Sugar maple	7.4
2543	Prunus serotina	Black cherry	7.4
2544	Acer saccharum	Sugar maple	10.6
2545	Acer platanoides	Norway maple	8.9
2546	Acer platanoides	Norway maple	8.0
2547	Juglans nigra	Black walnut	8.2
2548	Acer saccharum	Sugar maple	8.2
2549	Acer saccharum	Sugar maple	6.7
2550	Ulmus americana	American elm	6.7
2551	Acer saccharum	Sugar maple	8.3
2552	Acer saccharum	Sugar maple	7.6
2553	Quercus rubra	Red oak	14.8
2554	Acer saccharum	Sugar maple	17.0
2554	Prunus serotina	Black cherry	11.1
2555	Prunus serotina	Black cherry	10.6
2556	Prunus serotina	Black cherry	8.7
2557	Prunus serotina	Black cherry	8.5
2558	Prunus serotina	Black cherry	12.3
2559	Acer rubrum	Red maple	10.4
2560	Acer rubrum	Red maple	8.8
2561	Acer rubrum	Red maple	9.0
2562	Acer rubrum	Red maple	6.3
2563	Acer rubrum	Red maple	7.1
2564	Acer rubrum	Red maple	20.7
2565	Acer rubrum	Red maple	10.7
2566	Acer rubrum	Red maple	7.5
2567	Acer rubrum	Red maple	13.0
2568	Acer rubrum	Red maple	14.6
2569	Acer rubrum	Red maple	13.0
2570	Acer rubrum	Red maple	14.1
2571	Prunus serotina	Black cherry	8.0
2572	Prunus serotina	Black cherry	10.8

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WELLSPRING

PROPOSED MIXED - USE P.U.D.

FARMINGTON HILLS, MICHIGAN

08.09.2021 DATE

P.U.D. SUBMISSION ISSUE

KEY PLAN

FSP PROJECT NO. DEL18.101

DRAWING TITLE

Tree List 4

DRAWING NUMBER

C.006

2573	Malus pumila	Common apple	6.7
2574	Acer rubrum	Red maple	11.4
2575	Prunus serotina	Black cherry	7.2
2576	Acer saccharum	Sugar maple	7.8
2577	Carya ovata	Shagbark hickory	6.9
2578	Tilia americana	Basswood	6.2
2579	Quercus velutina	Black oak	7.5
2580	Acer rubrum	Red maple	6.0
2581	Quercus alba	White oak	6.2
2582	Acer rubrum	Red maple	12.0
2583	Quercus rubra	Red oak	9.0
2584	Acer rubrum	Red maple	26.2
2585	Ulmus americana	American elm	6.9
2586	Populus tremuloides	Quaking Aspen	13.5
2587	Acer rubrum	Red maple	6.3
2588	Acer rubrum	Red maple	11.1
2589	Populus tremuloides	Quaking Aspen	9.0
2590	Populus tremuloides	Quaking Aspen	10.8
2591	Malus pumila	Common apple	11.9
2592	Populus tremuloides	Quaking Aspen	10.5
2593	Acer rubrum	Red maple	6.5
2594	Acer rubrum	Red maple	7.5
2595	Ulmus americana	American elm	7.6
2596	Populus tremuloides	Quaking Aspen	13.7
2597	Quercus rubra	Red oak	6.0
2598	Acer rubrum	Red maple	10.2
2599	Acer rubrum	Red maple	17.0
2600	Prunus serotina	Black cherry	6.0
2601	Quercus rubra	Red oak	8.7
2602	Prunus serotina	Black cherry	8.0
2603	Acer rubrum	Red maple	14.5
2604	Acer rubrum	Red maple	10.0
2605	Populus tremuloides	Quaking Aspen	18.4
2606	Acer rubrum	Red maple	16.6
2607	Quercus velutina	Black oak	6.3
2608	Acer rubrum	Red maple	6.9
2609	Populus tremuloides	Quaking Aspen	10.8
2610	Populus tremuloides	Quaking Aspen	7.0
2611	Populus tremuloides	Quaking Aspen	9.3
2612	Quercus rubra	Red oak	12.8
2613	Acer saccharum	Sugar maple	11.3
2614	Quercus rubra	Red oak	9.7
2615	Quercus rubra	Red oak	9.2
2616	Prunus serotina	Black cherry	14.7
2617	Ulmus americana	American elm	8.7
2618	Juglans nigra	Black walnut	15.7
2619	Malus pumila	Common apple	11.9
2620	Ulmus americana	American elm	9.8
2621	Acer rubrum	Red maple	6.3
2622	Prunus serotina	Black cherry	6.8
2623	Acer saccharum	Sugar maple	10.0
2624	Quercus rubra	Red oak	14.1
2625	Quercus velutina	Black oak	19.6
2626	Quercus velutina	Black oak	18.3
2627	Juglans nigra	Black walnut	9.5
2628	Quercus rubra	Red oak	20.8
2629	Quercus velutina	Black oak	13.6
2630	Malus pumila	Common apple	8.3
2631	Acer rubrum	Red maple	10.0
2633	Picea alba	White spruce	7.8
2634	Acer rubrum	Red maple	9.1
2635	Malus pumila	Common apple	8.2
2636	Malus pumila	Common apple	7.0
2637	Acer rubrum	Red maple	7.2
2638	Malus pumila	Common apple	6.4
2639	Acer rubrum	Red maple	12.3
2640	Acer rubrum	Red maple	12.9
2641	Acer rubrum	Red maple	7.0
2642	Acer rubrum	Red maple	15.3
2643	Acer rubrum	Red maple	9.0
2644	Acer rubrum	Red maple	10.0
2645	Acer rubrum	Red maple	13.9
2646	Acer rubrum	Red maple	12.7
2647	Acer rubrum	Red maple	11.0
2648	Acer saccharum	Sugar maple	8.6
2649	Acer saccharum	Sugar maple	8.2
2650	Acer saccharum	Sugar maple	6.7
2651	Acer saccharum	Sugar maple	9.8
2652	Acer saccharum	Sugar maple	8.1
2653	Acer saccharum	Sugar maple	10.4
2654	Acer saccharum	Sugar maple	7.2
2655	Acer saccharum	Sugar maple	6.9
2656	Acer saccharum	Sugar maple	6.0
2657	Acer saccharum	Sugar maple	8.2
2658	Prunus serotina	Black cherry	10.4
2659	Acer saccharum	Sugar maple	7.8
2660	Acer rubrum	Red maple	11.5
2661	Acer rubrum	Red maple	13.8
2662	Acer saccharum	Sugar maple	7.2
2663	Acer saccharum	Sugar maple	6.0
2664	Acer saccharum	Sugar maple	8.7
2665	Acer saccharum	Sugar maple	8.7
2666	Acer saccharum	Sugar maple	6.0
2667	Acer saccharum	Sugar maple	7.6
2668	Populus deltoides	Cottonwood	11.8
2669	Populus deltoides	Cottonwood	21.0
2670	Quercus rubra	Red oak	17.3
2671	Acer rubrum	Red maple	10.8
2672	Acer rubrum	Red maple	17.6
2673	Acer rubrum	Red maple	11.7
2674	Acer rubrum	Red maple	13.1
2675	Acer saccharum	Sugar maple	7.7
2676	Acer rubrum	Red maple	27.2
2677	Ulmus americana	American elm	7.5
2678	Acer saccharum	Sugar maple	13.7
2679	Ulmus americana	American elm	15.0
2680	Carya ovata	Shagbark hickory	6.1
2681	Ulmus americana	American elm	6.1
2682	Acer rubrum	Red maple	9.6
2683	Acer rubrum	Red maple	11.3
2684	Ulmus americana	American elm	9.6
2685	Malus pumila	Common apple	9.6
2686	Acer saccharum	Sugar maple	9.8
2687	Acer rubrum	Red maple	10.1
2688	Acer rubrum	Red maple	7.7
2689	Acer rubrum	Red maple	17.0
2690	Prunus serotina	Black cherry	10.5
2691	Acer rubrum	Red maple	8.8
2692	Acer rubrum	Red maple	9.5
2693	Acer rubrum	Red maple	10.6
2694	Quercus rubra	Red oak	17.4
2695	Acer rubrum	Red maple	7.6
2696	Acer saccharum	Sugar maple	9.1
2697	Acer rubrum	Red maple	9.2
2698	Populus deltoides	Cottonwood	17.5
2699	Ulmus americana	American elm	8.2
2700	Acer saccharum	Sugar maple	6.4
2701	Acer saccharum	Sugar maple	9.6
2702	Acer saccharum	Sugar maple	7.7
2703	Acer saccharum	Sugar maple	7.1
2704	Acer saccharum	Sugar maple	14.6
2705	Ulmus americana	American elm	26.4
2706	Tilia americana	Basswood	12.6
2707	Quercus velutina	Black oak	24.3
2708	Acer rubrum	Red maple	12.3
2709	Tilia americana	Basswood	10.7
2710	Tilia americana	Basswood	16.7
2711	Acer rubrum	Red maple	9.2
2712	Acer rubrum	Red maple	12.6
2713	Tilia americana	Basswood	12.5
2714	Quercus rubra	Red oak	24.7
2715	Acer rubrum	Red maple	7.9
2716	Acer saccharum	Sugar maple	9.9
2717	Tilia americana	Basswood	7.4
2718	Acer rubrum	Red maple	12.4
2719	Acer saccharum	Sugar maple	7.4
2720	Acer saccharum	Sugar maple	10.0
2721	Acer saccharum	Sugar maple	8.0
2722	Acer saccharum	Sugar maple	6.6
2723	Acer saccharum	Sugar maple	6.3
2724	Acer saccharum	Sugar maple	6.3
2725	Acer saccharum	Sugar maple	6.9
2726	Acer saccharum	Sugar maple	6.0
2727	Acer saccharum	Sugar maple	9.0
2728	Acer saccharum	Sugar maple	6.2
2729	Quercus rubra	Red oak	16.9
2730	Tilia americana	Basswood	17.1
2731	Acer rubrum	Red maple	24.3
2732	Tilia americana	Basswood	10.8
2733	Acer saccharum	Sugar maple	10.6
2734	Tilia americana	Basswood	15.3
2735	Acer saccharum	Sugar maple	23.1
2736	Tilia americana	Basswood	14.8
2737	Acer rubrum	Red maple	10.1
2738	Tilia americana	Basswood	19.0
2739	Tilia americana	Basswood	8.8
2740	Acer rubrum	Red maple	15.3
2741	Tilia americana	Basswood	7.2
2742	Tilia americana	Basswood	13.7
2743	Ulmus americana	American elm	8.7
2744	Prunus serotina	Black cherry	6.5
2745	Quercus velutina	Black oak	13.4
2746	Prunus serotina	Black cherry	6.7
2747	Tilia americana	Basswood	23.5
2748	Tilia americana	Basswood	10.8
2749	Ulmus americana	American elm	6.0
2750	Ulmus americana	American elm	6.0
2751	Prunus serotina	Black cherry	7.4
2752	Ulmus americana	American elm	6.4
2753	Ulmus americana	American elm	9.0
2754	Ulmus americana	American elm	19.1
2755	Tilia americana	Basswood	11.4
2756	Acer rubrum	Red maple	6.4
2757	Acer rubrum	Red maple	8.3
2758	Acer rubrum	Red maple	8.9
2759	Quercus rubra	Red oak	12.0
2760	Acer rubrum	Red maple	14.5
2761	Acer rubrum	Red maple	16.2
2762	Quercus velutina	Black oak	17.7
2763	Acer rubrum	Red maple	13.5
2764	Quercus velutina	Black oak	47.2
2765	Tilia americana	Basswood	9.1
2766	Acer saccharum	Sugar maple	7.4
2767	Carya ovata	Shagbark hickory	21.2
2768	Carya ovata	Shagbark hickory	8.3
2769	Acer rubrum	Red maple	7.1
2770	Acer saccharum	Sugar maple	7.4
2771	Acer saccharum	Sugar maple	7.4
2772	Acer rubrum	Red maple	7.2
2773	Carya ovata	Shagbark hickory	21.7
2774	Acer saccharum	Sugar maple	10.7
2775	Tilia americana	Basswood	8.5
2776	Tilia americana	Basswood	7.3
2777	Acer saccharum	Sugar maple	7.0
2778	Acer rubrum	Red maple	14.6
2779	Tilia americana	Basswood	12.1
2780	Acer rubrum	Red maple	11.3
2781	Acer rubrum	Red maple	10.7
2782	Ulmus americana	American elm	8.4
2783	Tilia americana	Basswood	12.8
2784	Tilia americana	Basswood	17.6
2785	Prunus serotina	Black cherry	6.0
2786	Tilia americana	Basswood	13.8
2787	Tilia americana	Basswood	14.3
2788	Acer rubrum	Red maple	8.2
2789	Acer rubrum	Red maple	16.7
2790	Quercus rubra	Red oak	14.2
2791	Acer rubrum	Red maple	8.5
2792	Acer rubrum	Red maple	8.4
2793	Malus pumila	Common apple	9.0
2794	Acer rubrum	Red maple	6.2
2795	Quercus rubra	Red oak	11.8
2796	Tilia americana	Basswood	9.0
2797	Quercus rubra	Red oak	11.4
2798	Acer rubrum	Red maple	14.0
2799	Malus pumila	Common apple	9.5
2800	Quercus rubra	Red oak	12.9
2801	Populus tremuloides	Quaking Aspen	7.6
2802	Populus tremuloides	Quaking Aspen	12.1
2803	Populus tremuloides	Quaking Aspen	12.9
2804	Acer negundo	Boxelder	9.1
2805	Populus tremuloides	Quaking Aspen	12.7
2806	Populus deltoides	Cottonwood	19.1
2807	Populus tremuloides	Quaking Aspen	7.2
2808	Acer rubrum	Red maple	6.4
2809	Acer rubrum	Red maple	8.2
2810	Populus tremuloides	Quaking Aspen	8.0
2811	Populus tremuloides	Quaking Aspen	9.0
2812	Populus tremuloides	Quaking Aspen	8.4
2813	Carya ovata	Shagbark hickory	6.5
2814	Acer rubrum	Red maple	9.9
2815	Prunus serotina	Black cherry	10.1
2816	Acer rubrum	Red maple	6.4
2817	Acer rubrum	Red maple	7.3
2818	Acer rubrum	Red maple	7.3
2819	Acer rubrum	Red maple	6.7
2820	Acer rubrum	Red maple	13.3
2821	Quercus rubra	Red oak	12.1
2822	Quercus rubra	Red oak	7.8
2823	Quercus rubra	Red oak	10.9
2824	Quercus rubra	Red oak	19.5
2825	Acer rubrum	Red maple	10.9
2826	Acer rubrum	Red maple	9.7
2827	Acer rubrum	Red maple	8.2
2828	Acer rubrum	Red maple	12.2
2829	Acer rubrum	Red maple	9.7
2830	Sassafras albidum	Sassafras	11.0
2831	Quercus rubra	Red oak	17.2
2832	Fagus grandifolia	American beech	8.3
2833	Fagus grandifolia	American beech	6.7
2834	Acer rubrum	Red maple	6.8
2835	Quercus rubra	Red oak	19.0
2836	Quercus rubra	Red oak	18.2
2837	Fagus grandifolia	American beech	7.2
2838	Quercus rubra	Red oak	18.2
2839	Fagus grandifolia	American beech	6.4
2840	Quercus rubra	Red oak	20.7
2841	Quercus rubra	Red oak	8.6
2842	Quercus rubra	Red oak	14.5
2843	Fagus grandifolia	American beech	7.0
2844	Quercus rubra	Red oak	18.2
2845	Quercus rubra	Red oak	13.1
2846	Quercus rubra	Red oak	14.8
2847	Quercus rubra	Red oak	8.1
2848	Quercus rubra	Red oak	15.1
2849	Carya ovata	Shagbark hickory	6.4
2850	Quercus rubra	Red oak	24.5
2851	Acer rubrum	Red maple	9.2
2852	Fagus grandifolia	American beech	6.5
2853	Acer rubrum	Red maple	11.0
2854	Fagus grandifolia	American beech	7.4
2855	Acer rubrum	Red maple	8.9
2856	Quercus rubra	Red oak	7.6
2857	Acer rubrum	Red maple	9.5
2858	Quercus rubra	Red oak	11.1
2859	Carya ovata	Shagbark hickory	24.5
2860	Quercus rubra	Red oak	9.7
2861	Fagus grandifolia	American beech	9.8
2862	Quercus rubra	Red oak	15.5
2863	Quercus rubra	Red oak	17.5
2864	Quercus rubra	Red oak	14.5
2865	Quercus rubra	Red oak	13.8
2866	Quercus rubra	Red oak	16.0
2867	Quercus rubra	Red oak	12.7
2868	Quercus rubra	Red oak	14.8
2869	Quercus rubra	Red oak	18.5
2870	Quercus rubra	Red oak	18.3
2871	Prunus serotina	Black cherry	9.6
2872	Quercus rubra	Red oak	10.5
2873	Carya ovata	Shagbark hickory	9.4
2874	Quercus rubra	Red oak	21.7
2875	Quercus rubra	Red oak	52.3
2876	Quercus rubra	Red oak	12.2
2877	Quercus rubra	Red oak	7.7
2878	Quercus rubra	Red oak	15.9
2879	Quercus rubra	Red oak	26.5
2880	Quercus rubra	Red oak	6.8
2881	Acer rubrum	Red maple	6.4
2882	Quercus rubra	Red oak	7.9
2883	Quercus rubra	Red oak	10.3
2884	Quercus rubra	Red oak	7.3
2885	Prunus serotina	Black cherry	6.1
2886	Prunus serotina	Black cherry	7.6
2887	Quercus rubra	Red oak	11.1
2888	Quercus rubra	Red oak	14.2
2889	Quercus rubra	Red oak	7.6
2890	Quercus rubra	Red oak	11.3
2891	Quercus rubra	Red oak	12.2
2892	Quercus rubra	Red oak	10.1
2893	Prunus pendula	Wheeping cherry	12.5
2894	Quercus rubra	Red oak	16.0
2895	Quercus rubra	Red oak	9.5
2896	Quercus rubra	Red oak	7.1
2897	Quercus rubra	Red oak	8.9
2898	Quercus rubra	Red oak	11.2
2899	Quercus rubra	Red oak	8.9
2900	Acer rubrum	Red maple	16.2
2901	Quercus rubra	Red oak	13.2
2902	Quercus rubra	Red oak	24.1
2903	Quercus rubra	Red oak	13.8
2904	Quercus alba	White oak	9.6
2905	Quercus rubra	Red oak	6.5
2906	Prunus serotina	Black cherry	6.9
2907	Quercus rubra	Red oak	6.1
2908	Quercus rubra	Red oak	14.1
2909	Acer saccharum	Sugar maple	9.0
2910	Quercus rubra	Red oak	11.0
2911	Acer saccharum	Sugar maple	6.7
2912	Acer saccharum	Sugar maple	6.5
2913	Acer rubrum	Red maple	6.6
2914	Acer rubrum	Red maple	13.7
2915	Fagus grandifolia	American beech	8.2
2916	Quercus rubra	Red oak	6.2
2917	Fagus grandifolia	American beech	6.8
2918	Acer rubrum	Red maple	9.9
2919	Fagus grandifolia	American beech	7.1
2920	Fagus grandifolia	American beech	9.8
2921	Fagus grandifolia	American beech	6.8
2922	Fagus grandifolia	American beech	10.6
2923	Fagus grandifolia	American beech	9.7
2924	Fagus grandifolia	American beech	8.0
2925	Fagus grandifolia	American beech	6.1
2926	Fagus grandifolia	American beech	11.8
2927	Fagus grandifolia	American beech	7.0
2928	Fagus grandifolia	American beech	13.8
2929	Carya ovata	Shagbark hickory	26.0
2930	Acer rubrum	Red maple	7.9
2931	Acer rubrum	Red maple	8.6
2932	Tilia americana	Basswood	22.0
2933	Quercus rubra	Red oak	12.6
2934	Quercus rubra	Red oak	7.1
2935	Quercus rubra	Red oak	14.3
2936	Acer saccharum	Sugar maple	7.2
2937	Acer rubrum	Red maple	6.0
2938	Fagus grandifolia	American beech	8.2
2939	Acer rubrum	Red maple	16.1
2940	Acer rubrum	Red maple	7.0
2941	Populus deltoides	Cottonwood	12.4
2942	Acer rubrum	Red maple	7.3
2943	Populus deltoides	Cottonwood	10.4
2944	Populus deltoides	Cottonwood	10.9
2945	Quercus alba	White oak	6.5

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WELLSPRING

PROPOSED MIXED - USE P.U.D.

FARMINGTON HILLS, MICHIGAN

08.09.2021 DATE

P.U.D. SUBMISSION ISSUE

KEY PLAN

FSP PROJECT NO. DEL18.101

DRAWING TITLE

Tree List 5

DRAWING NUMBER

C.007

2946	Populus deltoides	Cottonwood	20.3
2947	Malus pumila	Common apple	8.0
2948	Carya ovata	Shagbark hickory	9.3
2949	Acer rubrum	Red maple	6.9
2950	Acer rubrum	Red maple	6.3
2951	Acer rubrum	Red maple	9.4
2952	Malus sylvestris	Crab-apple	12.3
2953	Pinus nigra	Austrian pine	7.5
2954	Carya ovata	Shagbark hickory	9.7
2955	Pyrus communis	Common pear	16.2
2956	Ulmus americana	American elm	13.4
2957	Acer rubrum	Red maple	8.6
2958	Acer rubrum	Red maple	7.3
2959	Pinus nigra	Austrian pine	7.6
2960	Pinus sylvestris	Scots pine	8.6
2961	Quercus velutina	Black oak	17.5
2962	Carya ovata	Shagbark hickory	7.5
2963	Carya ovata	Shagbark hickory	10.3
2964	Ulmus americana	American elm	6.6
2965	Quercus alba	White oak	8.5
2966	Quercus alba	White oak	10.7
2967	Carya ovata	Shagbark hickory	8.3
2968	Pinus resinosa	Red pine	7.7
2969	Tilia americana	Basswood	6.0
2970	Pinus resinosa	Red pine	8.2
2971	Pinus resinosa	Red pine	7.4
2972	Pinus resinosa	Red pine	8.7
2973	Pinus resinosa	Red pine	13.6
2974	Pinus resinosa	Red pine	13.9
2975	Pinus resinosa	Red pine	18.4
2976	Pinus resinosa	Red pine	16.2
2977	Populus deltoides	Cottonwood	14.5
2978	Pinus resinosa	Red pine	9.1
2979	Pinus resinosa	Red pine	14.7
2980	Quercus alba	White oak	9.8
2981	Carya ovata	Shagbark hickory	7.4
2982	Carya ovata	Shagbark hickory	8.2
2983	Carya ovata	Shagbark hickory	11.3
2984	Carya ovata	Shagbark hickory	10.5
2985	Carya ovata	Shagbark hickory	6.5
2986	Ulmus americana	American elm	8.0
2987	Pinus resinosa	Red pine	7.1
2988	Pinus resinosa	Red pine	6.1
2989	Pinus resinosa	Red pine	16.7
2990	Pinus resinosa	Red pine	12.0
2991	Acer rubrum	Red maple	7.1
2992	Pinus strobus	White pine	9.7
2993	Populus deltoides	Cottonwood	15.0
2994	Acer rubrum	Red maple	9.0
2995	Acer rubrum	Red maple	13.4
2996	Acer rubrum	Red maple	12.5
2997	Quercus rubra	Red oak	13.6
2998	Acer rubrum	Red maple	15.4
2999	Ulmus americana	American elm	6.8
3000	Carya ovata	Shagbark hickory	7.6
3001	Quercus rubra	Red oak	11.5
3002	Quercus velutina	Black oak	22.0
3003	Quercus velutina	Black oak	16.7
3004	Acer saccharum	Sugar maple	7.9
3005	Tilia americana	Basswood	20.7
3006	Tilia americana	Basswood	15.2
3007	Quercus rubra	Red oak	10.8
3008	Quercus velutina	Black oak	23.5
3009	Populus deltoides	Cottonwood	19.5
3010	Prunus serotina	Black cherry	7.3
3011	Prunus serotina	Black cherry	8.1
3012	Acer rubrum	Red maple	10.2
3013	Quercus rubra	Red oak	8.6
3014	Acer rubrum	Red maple	7.6
3015	Malus pumila	Common apple	6.0
3016	Acer rubrum	Red maple	6.6
3017	Prunus serotina	Black cherry	8.9
3018	Acer rubrum	Red maple	8.4
3019	Acer rubrum	Red maple	6.2
3020	Acer rubrum	Red maple	9.7
3021	Malus pumila	Common apple	9.4
3022	Tilia americana	Basswood	13.0
3023	Prunus serotina	Black cherry	6.7
3024	Acer rubrum	Red maple	13.4
3025	Picea abies	Norway spruce	12.0
3026	Prunus serotina	Black cherry	8.2
3027	Prunus serotina	Black cherry	7.3
3028	Prunus serotina	Black cherry	6.0
3029	Acer rubrum	Red maple	13.4
3030	Acer rubrum	Red maple	8.1
3031	Acer rubrum	Red maple	6.8
3032	Populus deltoides	Cottonwood	17.6
3033	Acer rubrum	Red maple	7.3
3034	Tilia americana	Basswood	11.9
3035	Acer rubrum	Red maple	7.1
3036	Acer rubrum	Red maple	9.5
3037	Acer rubrum	Red maple	11.5
3038	Acer rubrum	Red maple	12.1
3039	Quercus rubra	Red oak	11.3
3040	Acer rubrum	Red maple	8.2
3041	Populus tremuloides	Quaking Aspen	7.2
3042	Populus tremuloides	Quaking Aspen	11.5
3043	Acer rubrum	Red maple	6.1
3044	Populus tremuloides	Quaking Aspen	6.6
3045	Populus tremuloides	Quaking Aspen	17.1
3046	Acer rubrum	Red maple	7.0
3047	Populus tremuloides	Quaking Aspen	12.4
3048	Populus tremuloides	Quaking Aspen	12.4
3049	Ulmus americana	American elm	8.0
3050	Populus tremuloides	Quaking Aspen	12.8
3051	Quercus rubra	Red oak	18.7
3052	Acer saccharum	Sugar maple	12.2
3053	Quercus rubra	Red oak	13.7
3054	Quercus rubra	Red oak	9.3
3055	Ulmus americana	American elm	10.3
3056	Acer rubrum	Red maple	10.6
3057	Acer rubrum	Red maple	12.3
3058	Acer rubrum	Red maple	8.5
3059	Quercus rubra	Red oak	11.7
3060	Quercus velutina	Black oak	14.0
3061	Acer rubrum	Red maple	11.7
3062	Quercus velutina	Black oak	12.6
3063	Quercus velutina	Black oak	8.2
3064	Acer rubrum	Red maple	6.4
3065	Acer rubrum	Red maple	7.7
3066	Acer rubrum	Red maple	6.3
3067	Acer rubrum	Red maple	6.0
3068	Acer rubrum	Red maple	6.0
3069	Acer rubrum	Red maple	7.3
3070	Acer rubrum	Red maple	7.6
3071	Acer rubrum	Red maple	12.4
3072	Quercus rubra	Red oak	15.0
3073	Acer rubrum	Red maple	9.9
3074	Acer rubrum	Red maple	8.2
3075	Acer rubrum	Red maple	6.8
3076	Acer rubrum	Red maple	6.2
3077	Acer saccharum	Sugar maple	11.4
3078	Prunus serotina	Black cherry	9.5
3079	Acer rubrum	Red maple	9.8
3080	Acer rubrum	Red maple	7.8
3081	Carya ovata	Shagbark hickory	9.1
3082	Ulmus americana	American elm	11.8
3083	Malus pumila	Common apple	7.0
3084	Malus pumila	Common apple	6.7
3085	Picea abies	Norway spruce	13.4
3086	Acer rubrum	Red maple	7.2
3087	Acer rubrum	Red maple	8.6
3088	Acer rubrum	Red maple	6.5
3089	Prunus serotina	Black cherry	6.7
3090	Acer rubrum	Red maple	9.0
3091	Prunus serotina	Black cherry	9.7
3092	Prunus serotina	Black cherry	7.4
3093	Prunus serotina	Black cherry	9.8
3094	Populus deltoides	Cottonwood	15.4
3095	Tilia americana	Basswood	11.3
3096	Populus deltoides	Cottonwood	23.7
3097	Populus deltoides	Cottonwood	15.6
3098	Populus deltoides	Cottonwood	25.3
3099	Populus deltoides	Cottonwood	8.3
3100	Ulmus americana	American elm	8.2
3101	Acer rubrum	Red maple	10.9
3102	Pinus resinosa	Red pine	12.0
3103	Quercus alba	White oak	13.7
3104	Carya ovata	Shagbark hickory	7.2
3104	Ulmus americana	American elm	7.3
3106	Carya ovata	Shagbark hickory	6.7
3107	Carya ovata	Shagbark hickory	9.8
3108	Quercus alba	White oak	8.1
3109	Quercus alba	White oak	9.8
3110	Quercus alba	White oak	12.1
3111	Quercus alba	White oak	12.3
3112	Carya ovata	Shagbark hickory	7.2
3113	Acer rubrum	Red maple	7.8
3114	Acer rubrum	Red maple	9.9
3115	Quercus alba	White oak	9.7
3116	Ulmus americana	American elm	10.1
3117	Ulmus americana	American elm	6.7
3118	Ulmus americana	American elm	7.1
3119	Acer rubrum	Red maple	6.2
3120	Carya ovata	Shagbark hickory	8.0
3121	Quercus alba	White oak	8.5
3122	Carya ovata	Shagbark hickory	7.8
3123	Carya ovata	Shagbark hickory	7.4
3124	Quercus velutina	Black oak	6.2
3125	Carya ovata	Shagbark hickory	6.1
3126	Carya ovata	Shagbark hickory	6.4
3127	Pinus resinosa	Red pine	7.7
3128	Pinus resinosa	Red pine	10.4
3129	Pinus resinosa	Red pine	6.9
3130	Pinus resinosa	Red pine	7.6
3131	Pinus resinosa	Red pine	10.7
3132	Populus deltoides	Cottonwood	8.0
3133	Populus deltoides	Cottonwood	7.7
3134	Populus deltoides	Cottonwood	6.8
3135	Populus deltoides	Cottonwood	15.5
3136	Pinus resinosa	Red pine	9.7
3137	Pinus resinosa	Red pine	8.5
3138	Populus deltoides	Cottonwood	10.1
3139	Populus deltoides	Cottonwood	8.6
3140	Populus deltoides	Cottonwood	9.1
3141	Pinus resinosa	Red pine	14.1
3142	Populus deltoides	Cottonwood	9.2
3143	Quercus velutina	Black oak	8.0
3144	Populus deltoides	Cottonwood	14.6
3145	Populus deltoides	Cottonwood	8.2
3146	Pinus resinosa	Red pine	8.2
3147	Pinus resinosa	Red pine	7.8
3148	Pinus resinosa	Red pine	21.2
3149	Acer rubrum	Red maple	7.1
3150	Quercus alba	White oak	7.8
3151	Pinus resinosa	Red pine	12.1
3152	Pinus resinosa	Red pine	7.2
3153	Pinus resinosa	Red pine	9.3
3154	Pinus resinosa	Red pine	6.5
3155	Pinus resinosa	Red pine	8.1
3156	Populus deltoides	Cottonwood	12.8
3157	Pinus resinosa	Red pine	6.1
3158	Pinus resinosa	Red pine	6.8
3159	Acer rubrum	Red maple	6.7
3160	Acer rubrum	Red maple	9.7
3161	Pinus resinosa	Red pine	10.3
3162	Pinus resinosa	Red pine	6.8
3163	Populus deltoides	Cottonwood	12.3
3164	Populus deltoides	Cottonwood	14.4
3165	Acer rubrum	Red maple	6.3
3166	Populus deltoides	Cottonwood	19.4
3167	Populus deltoides	Cottonwood	15.8
3168	Populus deltoides	Cottonwood	13.5
3169	Populus deltoides	Cottonwood	13.5
3170	Populus deltoides	Cottonwood	14.0
3171	Populus deltoides	Cottonwood	9.4
3172	Salix amygdaloides	Peach leaf willow	18.0
3173	Populus deltoides	Cottonwood	13.3
3174	Populus deltoides	Cottonwood	10.5
3175	Populus deltoides	Cottonwood	6.5
3176	Salix amygdaloides	Peach leaf willow	10.0
3177	Populus deltoides	Cottonwood	15.4
3178	Populus deltoides	Cottonwood	12.0
3179	Populus deltoides	Cottonwood	11.7
3180	Populus deltoides	Cottonwood	6.8
3181	Populus deltoides	Cottonwood	9.6
3182	Populus deltoides	Cottonwood	14.2
3183	Populus deltoides	Cottonwood	14.1
3184	Salix amygdaloides	Peach leaf willow	8.7
3185	Salix amygdaloides	Peach leaf willow	10.7
3186	Salix amygdaloides	Peach leaf willow	12.0
3187	Populus deltoides	Cottonwood	7.5
3188	Populus deltoides	Cottonwood	7.2
3189	Populus deltoides	Cottonwood	8.7
3190	Populus deltoides	Cottonwood	6.9
3191	Populus deltoides	Cottonwood	11.6
3192	Populus deltoides	Cottonwood	8.6
3193	Salix amygdaloides	Peach leaf willow	8.0
3194	Populus deltoides	Cottonwood	15.6
3195	Pinus resinosa	Red pine	10.0
3196	Pinus resinosa	Red pine	8.5
3197	Pinus resinosa	Red pine	9.7
3198	Pinus resinosa	Red pine	10.3
3199	Pinus resinosa	Red pine	6.5
3200	Pinus resinosa	Red pine	6.9
3201	Pinus resinosa	Red pine	6.5
3202	Pinus resinosa	Red pine	17.6
3203	Pinus resinosa	Red pine	10.6
3204	Populus deltoides	Cottonwood	17.2
3205	Quercus alba	White oak	9.6
3206	Ulmus americana	American elm	7.6
3207	Acer rubrum	Red maple	6.0
3208	Pinus resinosa	Red pine	6.4
3209	Pinus resinosa	Red pine	6.3
3210	Pinus resinosa	Red pine	7.7
3211	Pinus resinosa	Red pine	11.4
3212	Populus deltoides	Cottonwood	7.6
3213	Pinus sylvestris	Scots pine	22.1
3213	Salix amygdaloides	Peach leaf willow	9.8
3214	Pinus sylvestris	Scots pine	12.2
3215	Pinus sylvestris	Scots pine	10.5
3216	Pinus sylvestris	Scots pine	8.7
3217	Quercus rubra	Red oak	6.1
3218	Pinus sylvestris	Scots pine	6.3
3220	Ulmus americana	American elm	10.5
3221	Populus deltoides	Cottonwood	16.0
3222	Pinus sylvestris	Scots pine	7.2
3223	Acer rubrum	Red maple	7.2
3224	Pinus sylvestris	Scots pine	14.4
3225	Pinus sylvestris	Scots pine	7.1
3226	Pinus sylvestris	Scots pine	8.5
3227	Pinus sylvestris	Scots pine	10.8
3228	Picea pungens	Blue spruce	6.8
3229	Salix amygdaloides	Peach leaf willow	10.7
3230	Pinus sylvestris	Scots pine	7.6
3231	Pinus sylvestris	Scots pine	12.0
3232	Acer rubrum	Red maple	6.0
3233	Pinus sylvestris	Scots pine	9.8
3234	Pinus sylvestris	Scots pine	6.3
3235	Pinus sylvestris	Scots pine	6.1
3236	Pinus sylvestris	Scots pine	6.6
3237	Quercus rubra	Red oak	6.4
3238	Pinus sylvestris	Scots pine	11.8
3239	Populus deltoides	Cottonwood	16.5
3240	Quercus velutina	Black oak	6.4
3241	Populus deltoides	Cottonwood	9.2
3242	Populus deltoides	Cottonwood	8.5
3243	Acer rubrum	Red maple	6.7
3244	Populus deltoides	Cottonwood	9.7
3245	Pinus strobus	White pine	20.7
3246	Malus sylvestris	Crab-apple	7.4
3247	Acer rubrum	Red maple	10.0
3248	Populus deltoides	Cottonwood	12.7
3249	Ulmus americana	American elm	11.4
3250	Pinus sylvestris	Scots pine	12.2
3251	Acer rubrum	Red maple	10.7
3252	Pinus resinosa	Red pine	10.2
3253	Pinus resinosa	Red pine	6.7
3254	Malus pumila	Common apple	7.9
3255	Pinus sylvestris	Scots pine	8.7
3256	Pinus resinosa	Red pine	7.1
3257	Ulmus americana	American elm	8.6
3258	Pinus sylvestris	Scots pine	6.5
3259	Pinus resinosa	Red pine	16.6
3260	Ulmus americana	American elm	6.0
3261	Pinus resinosa	Red pine	6.2
3262	Pinus sylvestris	Scots pine	7.2
3263	Pinus sylvestris	Scots pine	12.5
3264	Pinus resinosa	Red pine	7.1
3265	Pinus sylvestris	Scots pine	10.1
3266	Pinus resinosa	Red pine	9.3
3267	Acer rubrum	Red maple	6.8
3268	Acer rubrum	Red maple	6.3
3269	Acer saccharum	Sugar maple	7.8
3270	Pinus sylvestris	Scots pine	9.4
3271	Acer rubrum	Red maple	7.3
3272	Pinus resinosa	Red pine	8.9
3273	Pinus sylvestris	Scots pine	12.5
3274	Acer rubrum	Red maple	7.5
3275	Acer rubrum	Red maple	7.6
3276	Acer rubrum	Red maple	9.4
3277	Acer rubrum	Red maple	6.3
3278	Acer rubrum	Red maple	8.0
3278	Acer rubrum	Red maple	11.5
3279	Prunus serotina	Black cherry	11.5
3281	Acer rubrum	Red maple	8.5
3282	Ulmus americana	American elm	6.8
3283	Quercus alba	White oak	6.9
3284	Acer rubrum	Red maple	8.1
3285	Prunus serotina	Black cherry	10.4
3286	Acer rubrum	Red maple	6.3
3287	Acer rubrum	Red maple	12.0
3288	Malus pumila	Common apple	7.5
3289	Quercus alba	White oak	11.2
3290	Quercus velutina	Black oak	8.0
3291	Prunus serotina	Black cherry	7.1
3292	Acer rubrum	Red maple	8.8
3293	Malus pumila	Common apple	6.7
3294	Populus deltoides	Cottonwood	10.9
3295	Quercus rubra	Red oak	6.0
3296	Quercus rubra	Red oak	6.2
3297	Quercus alba	White oak	10.3
3298	Prunus serotina	Black cherry	9.3
3299	Populus deltoides	Cottonwood	26.5
3300	Populus deltoides	Cottonwood	17.1
4301	Prunus serotina	Black cherry	9.1
4302	Quercus alba	White oak	6.2
4303	Quercus alba	White oak	9.9
4304	Quercus alba	White oak	12.2
4305	Populus deltoides	Cottonwood	23.7
4306	Populus deltoides	Cottonwood	17.0
4307	Ulmus americana	American elm	6.8
4308	Populus deltoides	Cottonwood	20.4
4309	Populus deltoides	Cottonwood	15.5
4310	Pinus strobus	White pine	11.9
4311	Ulmus americana	American elm	14.5
4312	Acer rubrum	Red maple	9.4
4313	Acer rubrum	Red maple	11.3
4314	Prunus serotina	Black cherry	10.3
4315	Acer rubrum	Red maple	10.7
4316	Tag not used		
4317	Tag not used		

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WELLSPRING

PROPOSED MIXED - USE P.U.D.

FARMINGTON HILLS, MICHIGAN

08.09.2021 DATE

P.U.D. SUBMISSION ISSUE

KEY PLAN

FSP PROJECT NO. DEL18.101

DRAWING TITLE

Tree List 6

DRAWING NUMBER

C.008

4318	Quercus rubra	Red oak	9.8
4319	Malus pumila	Common apple	7.2
4320	Prunus serotina	Black cherry	9.1
4321	Prunus serotina	Black cherry	6.7
4322	Acer rubrum	Red maple	8.3
4323	Acer rubrum	Red maple	6.4
4324	Malus pumila	Common apple	6.3
4325	Prunus serotina	Black cherry	8.1
4326	Ulmus americana	American elm	14.2
4327	Ulmus americana	American elm	6.0
4328	Acer rubrum	Red maple	13.5
4329	Malus pumila	Common apple	6.9
4330	Acer rubrum	Red maple	7.6
4331	Acer rubrum	Red maple	7.6
4332	Ulmus americana	American elm	6.5
4333	Populus tremuloides	Quaking Aspen	14.9
4334	Acer saccharum	Sugar maple	14.0
4335	Populus deltoides	Cottonwood	8.8
4336	Populus deltoides	Cottonwood	21.4
4337	Populus deltoides	Cottonwood	10.2
4338	Acer saccharinum	Silver maple	10.4
4339	Populus deltoides	Cottonwood	13.5
4340	Populus deltoides	Cottonwood	14.5
4341	Populus deltoides	Cottonwood	11.4
4342	Populus deltoides	Cottonwood	7.9
4343	Populus deltoides	Cottonwood	14.2
4344	Populus deltoides	Cottonwood	6.5
4345	Populus deltoides	Cottonwood	17.5
4346	Prunus serotina	Black cherry	12.7
4347	Acer rubrum	Red maple	6.8
4348	Malus pumila	Common apple	9.3
4349	Rhamnus cathartica	Common buckthorn	6.7
4350	Rhamnus cathartica	Common buckthorn	7.1
4351	Prunus serotina	Black cherry	13.1
4352	Prunus serotina	Black cherry	10.3
4353	Ulmus americana	American elm	6.5
4354	Ulmus americana	American elm	6.3
4355	Prunus serotina	Black cherry	7.5
4356	Acer rubrum	Red maple	12.1
4357	Acer rubrum	Red maple	8.4
4358	Acer saccharinum	Silver maple	13.7
4359	Acer saccharinum	Silver maple	9.1
4360	Populus deltoides	Cottonwood	18.6
4361	Cornus sp.	Dogwood cultivar	6.0
4362	Ulmus americana	American elm	8.1
4363	Acer rubrum	Red maple	13.1
4364	Acer saccharinum	Silver maple	20.8
4365	Acer saccharinum	Silver maple	21.5
4366	Malus pumila	Common apple	6.5
4367	Acer rubrum	Red maple	9.0
4368	Ulmus americana	American elm	7.7
4369	Malus pumila	Common apple	7.7
4370	Prunus serotina	Black cherry	8.4
4371	Acer rubrum	Red maple	9.0
4372	Prunus serotina	Black cherry	18.7
4373	Acer saccharum	Sugar maple	13.6
4374	Populus deltoides	Cottonwood	14.7
4375	Malus pumila	Common apple	8.6
4376	Acer saccharum	Sugar maple	7.7
4377	Acer saccharum	Sugar maple	8.0
4378	Acer rubrum	Red maple	14.9
4379	Tilia americana	Basswood	15.5

4380	Quercus alba	White oak	9.4
4381	Quercus rubra	Red oak	15.3
4382	Quercus rubra	Red oak	12.4
4383	Carya ovata	Shagbark hickory	10.0
4384	Quercus alba	White oak	6.9
4385	Quercus rubra	Red oak	19.0
4386	Quercus rubra	Red oak	12.9
4387	Quercus rubra	Red oak	17.7
4388	Quercus rubra	Red oak	16.6
4389	Acer rubrum	Red maple	8.5
4390	Quercus alba	White oak	17.1
4391	Ulmus americana	American elm	10.2
4392	Ulmus americana	American elm	6.0
4393	Prunus serotina	Black cherry	8.9
4394	Pinus strobus	White pine	15.8
4395	Populus deltoides	Cottonwood	17.9
4396	Populus deltoides	Cottonwood	38.0
4397	Ulmus americana	American elm	10.3
4398	Acer rubrum	Red maple	17.2
4399	Carya ovata	Shagbark hickory	13.7
4400	Quercus rubra	Red oak	9.8
4401	Quercus alba	White oak	6.0
4402	Quercus alba	White oak	11.4
4403	Tilia americana	Basswood	11.4
4404	Tilia americana	Basswood	7.4
4405	Tilia americana	Basswood	6.4
4406	Quercus rubra	Red oak	17.6
4407	Tilia americana	Basswood	10.3
4408	Quercus rubra	Red oak	6.3
4501	Quercus alba	White oak	32.5

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WELLSPRING
PROPOSED MIXED - USE P.U.D.
FARMINGTON HILLS, MICHIGAN

08.09.2021 P.U.D. SUBMISSION
DATE ISSUE

KEY PLAN

FSP PROJECT NO. DEL18.101

DRAWING TITLE

Tree List 7

DRAWING NUMBER

C.009

2025/2026 – 2030/2031 CAPITAL IMPROVEMENTS PLAN

ADOPTION:

I move that the City of Farmington Hills Capital Improvements Plan for 2025/2026 – 2030/2031 BE ADOPTED [*as presented OR with the following changes:]* and FORWARDED to City Council.

Capital Improvements Plan

2025/2026 – 2030/2031

Eleven Mile Road repaving at Power Road

CAPITAL IMPROVEMENTS PLAN
2025/2026 – 2030/2031

Farmington Hills City Council
Theresa Rich, Mayor
Bill Dwyer, Mayor Pro Tem
Jon Aldred
Jackie Boleware
Michael Bridges
Randy Bruce
Valerie Knol

Farmington Hills Planning Commission
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Thomas Skrobola, Director of Finance/Treasurer
Charmaine Kettler-Schmult, Director of Planning and Community Development

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Planning and Public Services Secretary's

Capital Improvements Plan Schedule:
Planning Commission Study Session January 23, 2025
Planning Commission Public Hearing February 27, 2025

Table of Contents

CAPITAL IMPROVEMENTS PLAN

2025-2026–2030-2031

INTRODUCTION/LEGAL AUTHORITY

The Capital Improvements Plan (CIP) is an essential planning tool for the development of the social, physical, and economic wellbeing of the City of Farmington Hills. This plan is the first step in an organized effort to strengthen the quality of public facilities and services. This provides a framework for the realization of community goals and objectives as envisioned in the City's Master Plan for Future Land Use as adopted by the Planning Commission and City Council.

In a practical sense, the CIP process allows the City to identify, prioritize and implement capital projects over multiple years. Public improvements originating from the CIP process have served to improve the quality of life for all Farmington Hills residents. As the community matures, policy makers will look to the CIP for answers in addressing public needs. This year's plan continues in that tradition.

Legal authority for capital improvement planning is found in state law. Specifically, Act 33 of the Public Acts of 2008, the Michigan Planning Enabling Act provides:

"To further the desirable future development of the local unit of government under the master plan, a planning commission, after adoption of the master plan, shall annually prepare a capital improvements program of public structures and improvements, unless the planning commission is exempted from this requirement by charter or otherwise. If the planning commission is exempted, the legislative body either shall prepare and adopt a capital improvements program, separate from or as a part of the annual budget, or shall delegate the preparation of the capital improvements program to the chief elected official or a non-elected administrative official, subject to final approval by the legislative body. The capital improvements program shall show those public structures and improvements, in the general order of their priority, that in the commission's judgment will be needed or desirable and can be undertaken within the ensuing six-year period. The capital improvements program shall be based upon the requirements of the local unit of government for all types of public structures and improvements. Consequently, each agency or department of the local unit of government with authority for public structures or improvements shall upon request furnish the planning commission with lists, plans and estimates of time and cost of those public structures and improvements."

Moreover, the City Charter, Sections 3.07 and 6.08, indicates that the City Manager shall have the responsibility of submitting a Capital Improvements Plan to the City Council.

CIP GOAL

To plan for and guide needed capital improvements and expenditures in a fiscally sound manner and to ensure that these improvements are consistent with the goals and policies of the City of Farmington Hills and the expectations of its residents.

DEFINITION: BUDGET VS. PLAN

The Capital Improvements Plan identifies all major capital projects with cost estimates anticipated in both capital and future operating costs over a six-year period. The program is intended to serve existing and anticipated development in the City. All CIP projects are listed on a priority basis and reflected by fiscal year within the plan. The plan also includes an indication for providing the financial means for implementing the projects.

The representations contained in this plan reflect input from the City's administration as adopted by Planning Commission. The actual budgets, however, for the designated years are determined annually by the City Council in accordance with the City Charter and State law. The Council may add, delete, or otherwise change priorities as they deem necessary within the annual budget review and approval process.

Each year as a capital budget is implemented, the next five-year cycle is reevaluated, and an additional year is added to comprise a six-year plan. Capital improvements beyond the sixth year are occasionally identified in the future column for tracking purposes.

CAPITAL IMPROVEMENTS PLANNING - AN OVERVIEW

Capital improvements' planning involves, to varying degrees, the following steps:

- **Inventory** - an assessment and compilation of existing and future project needs.
- **Financial Analysis** - an analysis of all existing and potential fiscal resources.
- **Determining Priorities** - the task of comparing needs and desired projects against financial resources and other criteria.
- **Establishing Goals and Objectives -** Asking the Questions: What do we want to accomplish? How can we get there? And how do we pay for it?
- **Develop a Schedule** - look at a logical sequence, relating needs with financial resources.
- **Gain Approval** - from appropriate local officials, other funding or cooperating agencies and, most importantly, residents of the community.
- **Implement the Plan** - incorporate the first year of the capital plan into the next operating budget.
- **Review and Update** - each year review and update both the capital budget and six-year plan.

One of the more difficult tasks in developing a capital improvements plan is the establishment of priorities, i.e., selecting one project over another when financial resources are limited. The criteria used in establishing priorities include:

- Protecting life and property
- Maintaining public health and safety
- Maintaining public property
- Replacing obsolete facilities
- Providing public convenience and comfort
- Providing effective and efficient public services

- Reducing operating costs
- Enhancing recreational value
- Enhancing economic value
- Improving social, cultural, and aesthetic value
- Making prudent use of limited financial resources

PLANNING COMMISSION PRIORITIES 2025/2026

As a reviewing body the Planning Commission established the following priorities for the CIP 2025/2026 – 2030/ 2031.

- There is a strong desire to prioritize walkability, specifically to prioritize clear sidewalks in the winter.

- The Planning Commission is supportive of the inter-community Nine Mile Road non-motorized pathway project.

- Enclosed bus shelters especially the bus stops are heavily used.

- Planning Commission recognizes and supports utility investments including Gas, Electric, and Fiberoptics to replace and upgrade infrastructure within Farmington Hills.

ADVANTAGES OF CAPITAL IMPROVEMENTS PLANNING

The Capital Improvements Plan provides numerous advantages. The following programming advantages are considered the most important:

- Planning calls attention to the unmet needs of the City and stimulates corrective action. Residents can provide public input and critical review of the City's long-range plans.

- Planning for future needs ensures that projects will benefit the entire community. Residents can see what they are getting for their tax dollars.

- Planning can help bring about a better balance to project funding among public agencies and departments.

- Planning can eliminate the possibility of duplication of effort involving time and money between various local public agencies and improve project scheduling.

- Planning enables the community to effectively take advantage of anticipated and unanticipated State and Federal grants.

- Planning can provide decision makers with sound justification for needed improvements based on the comprehensiveness of the process.

- Planning future needs allows the community to stabilize tax rates over a period of years by anticipating funding requirements.

- Planning provides the required lead-time for designing and engineering improvements in advance of actual needs.

ONGOING COSTS

Many capital improvements require ongoing operational and/or maintenance costs. The City's 1995 Management Audit identified the need for operational impact statements in the Capital Improvements Plan. Those statements are contained within the CIP tables of capital improvements. While referenced in the CIP, individual departments would assume these costs in their operating budgets.

CIP SCHEDULE

The following schedule serves as a guide for development, review and approval of the Capital Improvements Plan.

- In accordance with Section 6.08 of the City Charter, the City Manager shall submit to the Council a five-year projection in such detail as the Council may require and outline major capital expenditures or projects that are planned for the City.

- In November/December of each year the City Council may provide its input to the City Manager relative to capital needs, priorities, projects, and changes that it would like to see evaluated or reevaluated in preparation for the updating of the City's Capital Improvements Plan.

- Act 33 of the Public Acts of 2008 provides that the City Planning Commission shall annually prepare a six-year plan of public structures and improvements.

- In February of each year, the City Manager and Planning Commission shall jointly review the past year's capital budget and six-year projection of capital improvements. At this time preparation of an updated Capital Improvements Plan is initiated for the ensuing six-year period.

- Subsequently of each year, the Planning Commission shall hold a public hearing to review the Capital Improvement Plan and gather public input prior to adoption of the plan.

- By the first meeting in April, the City Manager and Planning Commission shall submit to the City Council a Capital Improvements Plan. This may take the form of a single plan, joint plan, or separate plans, depending on the degree of consensus as to projects, priorities, and methods of financing.

- The City Council will consider the recommended Capital Improvements Plan as transmitted by the Planning Commission and City Manager and approve a capital improvement fund budget along with the general City operating budget no later than its first meeting in June.

CIP CRITERIA

The CIP is a planning tool and not a promise of funding. Significant capital projects are identified with cost estimates and prioritized. Lesser capital expenditures for such things as municipal vehicles and pavement repair are anticipated in the City’s general budget.

The following criteria are used to include a capital project or expenditure within the CIP:

- The project must impact the City-at-large or address a major need within the City in some specific way.

- The project represents a public facility.
- The project represents a physical improvement.
- The project requires the expenditure of at least $25,000. Some CIP projects under $25,000 may be included if they are part of a larger network or system of improvements.

From year to year, CIP projects are subject to change in response to community needs and available funding. Cost estimates for projects contained herein are based on current dollars, adjusted for inflation in the out years.

FINANCING OVERVIEW

Government, like private industry, must generate adequate revenues to fund operations, capital improvements, and debt retirement. Revenues available to local government are fees, user charges, and state and federal revenue sharing including grants and taxation.

Capital improvements can be financed through internal financing, such as pay as you go or debt financing. The two approaches are explained below.

Internal Financing

Under this approach, capital projects are financed from monies dedicated specifically for capital improvements. Annual tax levies and fund balances can be used to implement capital projects. Funding may be derived from:

- Approved City Budget.
- Dedicated millage above the Charter limit approved by the voters.
- Existing capital improvement funds.
- Energy and Environmental Sustainability Fund
    - This revolving fund has been created to provide a source of funding specifically targeted towards energy and environmental projects that fall outside of normal capital replacement, maintenance, or other related programs. This fund was originally capitalized through grant funding and utility rebates and is sustained through collecting a portion of the energy savings realized through the City's energy efficiency efforts.

Tax Increment Financing (TIF)

For projects located in the Grand River Corridor Improvement Authority (CIA), tax increment revenues can be used to fund projects outlined in the City Council approved CIA Development Plan or to support related debt financing.

Debt Financing

The following debt financing instruments are available:

Limited Tax General Obligation (LTGO) Bonds. The City, without voter approval, may pledge revenues from its remaining charter millage plus existing fund balance to provide for principal and interest payments on bonds issued. If, in the future, the unused charter millage and fund balance prove insufficient to meet debt service requirements, then the City's operating budget would be required to meet the debt service payments.

Unlimited Tax General Obligation (UTGO) Bonds.
With voter approval, the City can issue bonds, which pledge the City's unlimited taxing power to meet any debt service requirements of the bond issue.

Special Assessment Bonds. Bonds issued in anticipation of the payment of special assessments may be an obligation of a special assessment district, or districts, or may be both an obligation of a special assessment district, or districts, and a general obligation of the City.

Voter Approved Earmarked Millage. Voter approved millage can be utilized partially for projects on a pay-as-you-go basis. The remaining dedicated millage can be pledged to meet debt service payments on projects funded through debt issues.

Lease Purchase Agreements. This method involves a contractual agreement with a private developer/investor who finances the project and leases it back to the local unit of government until the debt is fully retired, at which time ownership reverts to the City.

Capital Lease/Installment Loans. Most used for vehicles and equipment, like a lease purchase agreement, per Act 99, this method allows for a three-party agreement between the City, the vendor/contractor and financial/lending institution.

IMPACT OF LEGISLATION ON TAXING AUTHORITY

Property tax revenue is derived from tax rate and State Equalized Value (SEV) of all taxable properties in the City. An increase in combined SEV can be due to either actual new construction or inflation on existing real estate. During periods of inflation on real estate, communities were able to generate increased tax revenues while keeping tax rates stable. "Automatic" increases in revenues generated from taxes precipitated a constitutional amendment in 1978.

The Headlee Amendment was approved by the State's electorate in 1978 as a constitutional amendment to limit the automatic increase in tax revenue caused by ever-increasing property values. This limitation allows tax revenue to increase only as high as the Consumer Price Index (CPI) plus the value of new construction. This limitation applies to the current Farmington Hills authorized charter millage limit of 10 mills. Otherwise stated, if property values increase more than the CPI, the tax rate must be rolled back so the resulting revenue does not exceed the increase in CPI. Debt existing prior to the passage of this constitutional amendment and voter approved debt issued since the legislation is exempt from this limitation.

In 1994, the State electorate approved a state constitutional amendment commonly known as “Proposal A.” This amendment limited increases in the taxable value of existing real property on a per parcel basis to the lesser of 5% or the CPI. Once existing property was transferred or sold, property values for tax purposes could be raised to 50% of fair market value. This effectively limited increases in tax revenue for municipalities to the CPI, if it was less than 5%, and new construction values.

ACCOMPLISHMENTS

The following list identifies projects either completed or initiated this past year.

Public Facilities

Each year the database created from the City-wide facilities condition assessment is used to evaluate assets at each of the City owned buildings. An analysis is performed by City staff to prioritize facility needs based upon asset usage, age, condition, predicted useful life and estimated replacement value. Projects completed as a part of this evaluation process included:

- Police Station Automatic Transfer Switch Replacement
- HVAC Upgrades at Fire Station #5 and the Ice Arena
- Brick Paver Patio Replacement at the Longacre House
- Fire Alarm Replacement at Fire Stations #3 and #4 and DPW
- Roof Replacement at Fire Station #1
- Installation of a new fuel island at the City Hall Campus along with the replacement of the west parking lot. The fueling system includes a new above-ground tank and dispensers and storm water treatment upgrades.
- Installation of Citygate signage and landscaping along the Orchard Lake Road exit ramps from the I-696 expressway.
- Installation of landscaping, fencing, and foundation for future signage/sculpture within the Orchard Lake Road roundabout, south of 14 Mile Road.
- Concept plan for the installation of fencing and automated gates around the Police Station parking lot, new fueling system and west parking lot.

Police

- The Police Department's property contains emergency infrastructure and equipment critical to providing continuous emergency services. Open access to this area exposes this equipment and infrastructure to sabotage or vandalism, which would render these items and the department ineffective. In addition, the critical areas are currently prohibited for public access by signage only, for security and safety purposes. Access control improvements would be designed to decrease accessibility to these sensitive areas and improve employee safety and infrastructure security. The department is currently participating in a feasibility study to determine how best to design and implement this project.
- The police department purchased, equipped, staffed, and trained two additional canine teams.
- The department fully implemented the AXON "Officer Safety Package" which includes a secure digital evidence retention system, video redaction software, body worn camera system, in-car camera system, and new Tasers.
- The women's locker room was expanded to accommodate an increasing diverse work force.

- The police department purchased 115 rifle rated ballistic vests, enough to outfit all sworn staff.

Technology

- The City continues to implement Windows 11 upgrades which requires replacement of PC's.

- Successfully implemented and went live with select modules of the Human Resource Information System (HRIS) solution. Ongoing implementation continues with the other Human Resource Information System Solution to cover the entire "life cycle" of each employee in the City:
    - Recruitment
    - Applicant tracking
    - Selection
    - On-boarding
    - Training and development
    - Performance reviews
    - Employee profile management

- Implementation continues with a new Time & Attendance System Solution to include all general employees' units as well as advanced scheduling for Police, Fire and Public Works.

- Replaced the City's outdated Enterprise Resource and Planning software (General Ledger, Accounts Payable, Payroll, Human Resources, Purchasing, etc.) with a new software package that also includes enhanced functionality to replace current outmoded and manual processes, including:
    - Budgeting and Fiscal Planning
    - Financial Reporting
    - Business Intelligence/Analytics
    - Performance Management
    - Project Management

- Installed a 6'5" digital Smart Sign at the front of The Hawk along 12 Mile Road and a Smart Light head at the corner of 11 Mile Road and Orchard Lake. Additionally, began installing six (6) Smart Lighting/Poles at Longacre House.

- The multi-year Unified Communications & Networking project continued with projects as listed below:
    - The City replaced all analog CCTV recorders throughout City facilities and a portion of the analog cameras with new IP cameras.

- Implemented a penetration test (PEN test) to test our ability to combat a cyber-attack and evaluate security.

- Conduct annual vulnerability scan and penetration test on the network.

- Updated City Hall conference rooms with latest technology to enhance presentations and enable seamless video conferencing.

Parks and Recreation

- Completed Parks and Recreation Master Plan
- Engaged a consultant to assess Special Services Department
- Engaged a consultant for applying for grants for Special Services projects
- Purchased ¾ ton 4 x 4 pickup truck with snowplow for Parks Maintenance.
- Purchased GMC Canyon 4 x 4 truck for Parks Maintenance.
- Purchased landscape enclosed trailer for Parks Maintenance.
- Purchased Utility 60” zero turn mower for Parks Maintenance
- Purchased utility tractor for Parks Maintenance
- Purchased soccer goals for Parks Maintenance
- Replaced pieces of playground structure in Heritage Park
- Replaced roof at Spicer House in Heritage Park
- Repaired exterior concrete porch at Longacre House
- Replaced parking lot poles and lights at Longacre House
- Purchased two John Deere TX Turf Gators for Farmington Hills Golf Club
- Purchased turbine pull behind blower for Farmington Hills Golf Club
- Purchased core collector for aerification at Farmington Hills Golf Club
- Replaced double barrier entrance gate at Farmington Hills Golf Club
- Purchased John Deere triplex mowers (2) for Farmington Hills Golf Club
- Purchased driving range ball dispenser door upgrade for Farmington Hills Golf Club
- Resurfaced several holes of cart path on the front nine at Farmington Hills Golf Club
- Purchased new fleet of E-Z-Go lithium battery electric golf carts at Farmington Hills Golf Club
- Repaired damaged netting panels at Farmington Hills Golf Club Driving Range
- Replaced failed air compressor for dry fire sprinkler system at Farmington Hills Golf Clubhouse
- Refurbished lobby men’s and women’s restrooms at Farmington Hills Ice Arena
- Repaired various concrete areas at Farmington Hills Ice Arena

- Installed hot water heaters (2) at Farmington Hills Ice Arena
- Installed new rolling steel doors (2) in Zamboni room at Farmington Hills Ice Arena
- Installed new natural gas compressor for Zamboni fueling at at Farmington Hills Ice Arena
- Replaced dehumidifier motors (2) at Farmington Hills Ice Arena
- Purchased goal frame sets (2) at Farmington Hills Ice Arena
- Refurbished Vilter Ammonia Compressor #1 at Farmington Hills Ice Arena
- Installed new aluminum fence at Founders Park South baseball entrance
- Replaced grease trap in kitchen at Costick Center
- Replaced heat booster pump for the pool at Costick Center
- Replaced pump motor for the pool at Costick Center
- Installed CO2 tank for pool at Costick Center
- Installed new ADA compliant sliding doors and awning for 'B' entrance at Costick Center
- Repaired chiller at Costick Center
- Purchased two room dividers for Costick Center through an Oakland County Grant via the Senior Division
- Installed digital sign at The Hawk
- Refinished and striped gym floor at The Hawk
- Performed an assessment of Room 214 Kitchen for refurbishment at The Hawk
- Installed audio upgrades for Hawk Mainstage Theatre at The Hawk
- Installed bronze plaque and lighting at Hawk Tree Sculpture outside Hawk Theatre entrance
- Installed golf simulators (2) at The Hawk
- Installed Hobart dishwasher for the kitchen at The Hawk
- Installed 16 new cameras at The Hawk
- Purchased ADA compliant equipment for Fitness Center at The Hawk through an Oakland County Grant via the Senior Division
- Resurfaced and re-lined gymnasium floor at The Hawk through an Oakland County Grant via the Senior Division
- Replaced carpet in Room 348 Conference Center at The Hawk

- Purchased shade structure for pickleball and tennis courts at The Hawk
- Purchased windscreens for pickleball courts at The Hawk
- Purchased Motorola two-way radios (10) at The Hawk
- Installed ADA compliant swing door operators at The Hawk Theatre exterior entrance
- Installed ADA compliant water cooler with bottle filler on 2nd floor of The Hawk Theatre
- Performed a study for replacing The Hawk Air Handling Units serving the Youth Game Rooms (AHU-9), the Hawk Theatre (AHU-10), and Harrison Hall (AHU-17)

Equipment, Fire

- One Fire Engine is in production with delivery expected Spring of 2025.
- Ballistic Protection received.
- Fire Department took delivery of Utility Vehicle.

Equipment, DPW

- Replace 10-yard Dump Truck.

  Replace Rubber Tire Excavator

Fleet & Motor Pool Vehicles

- Replaced two DPW and one Engineering heavy-duty pick-up trucks with snowplows.
- Replaced three fleet vehicles.

Drainage

- Construction of a 28'-foot by 6'-foot single span box culvert for the Minnow Pond Drain crossing of Biddestone Lane.
- Constructed lateral storm sewer in Farmington Freeway Industrial Park. – Phase 3
- Constructed lateral storm sewer on Shady Ridge Drive.
- Constructed lateral storm sewer in Woodcreek Hills Subdivision.
- Constructed Harwich Drive outfall storm sewer.
- Constructed two culvert crossings on Edgehill Avenue with one being a 19"x30" elliptical culvert and the other a 34" x 53" elliptical culvert.
- Constructed lateral storm sewer in Heritage Hills Subdivision (construction Phase 4).

- Constructed lateral storm sewer in Farm Meadows/Camelot Court Subdivision – Phase 1.
- Construction of lateral storm sewer and crossings on Halsted Road (8 Mile to 9 Mile Road).

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- Construction of one (1) single span box culvert (17-foot x 7-foot, on Danvers Drive) and two (2) concrete culverts (72 inch) on Harwich Dr. in the Woodcreek Subdivision and a 17-foot x 9-foot box culvert and a 12-foot x 10-foot box culvert on Danvers Ct to follow in the next year.

Sanitary Sewer

- Completed annual lining, replacement, and repair program for existing sanitary sewer throughout the City.

Water main

- Replaced water main throughout the Kendallwood Subdivision #2 and #4.

Sidewalks

- Installed sidewalks, ADA upgrades and crossings to improve access to the M-5 pedestrian overpass. Sidewalk installations on Freedom extended from Maple to the existing sidewalk east of the M-5 pedestrian overpass. Sidewalk on Folsom extends from Power Road to the existing sidewalk east of the M-5 pedestrian overpass.

Transportation

- Reconstructed North Industrial Drive.
- Reconstructed Sinacola Industrial Court.
- Reconstructed Halsted Road from Eight Mile to just south of Nine Mile Road.
- 2024 Local Road Reconstruction Projects.
    - Woodcreek Hills Subdivision
    - Farm Meadows – Camelot Court Sub – Phase 1
    - Heritage Hills and Wedgewood Commons (Phase 4 of 4)
    - Quaker Valley Farms Subdivision
    - LakeHills Drive
    - Trestain Ave
- 2024 Local Road Capital Preventative Maintenance Projects (Mill and Overlay and Rehab Program)
    - Larson Lane
    - Ramble Hills Drive, Lyncroft Drive, Harlan Drive and Northpointe Drive
    - Firwood Ave (Orchard Lake Road to Gladstone)
    - Glastone (Bond to Firwood)
    - Green Acres (Bond to Firwood)
- 2024 Local Road Gravel to Pave Conversion
    - Muer Cove Drive
- Designed 2025 Local Road Reconstruction projects.

- Designed 2025 Local Road Gravel Conversion to Hard Surface Pavement project.
- Design for traffic signal modernization and upgrades at the intersections of Halsted Road/13 Mile Road, Halsted Road/11 Mile Road and Farmington Road/13 Mile Road.

Table Totals for all Project Expenditures put forward by the various Departments

Ref. No.	Public Facilities	TOTAL COST	CITY COST	MAINT. COST	PROJECTED FUNDING & SOURCE							
						2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	FUTURE
1	City Wide Facilities Improvements	6,000,000	6,000,000	NC	100% City	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	
2	Barrier Free (ADA) Improvements	150,000	150,000	NC	100% City	25,000	25,000	25,000	25,000	25,000	25,000	
3	Electric Vehicle (EV) Charging Stations	450,000	450,000	NC	100% City	75,000	75,000	75,000	75,000	75,000	75,000	
4	Fire Station Improvements	150,000	150,000	NC	100% City	50,000	50,000	50,000				
5	City Wide 150KW Generator on Trailer	250,000	250,000	NC	100% City	250,000						
6	Courthouse Parking Lot	600,000	600,000	NC	100% City		600,000					
7	DPW Natural Gas Generator	810,000	810,000	NC	100% City	810,000						
8	Fire Station #4 Parking Lot Replacement	1,000,000	1,000,000	NC	100% City	1,000,000						
9	Police Station Parking Lot Access Management	1,800,000	1,800,000	NC	100% City	1,800,000						
10	Northwestern Highway Landscaping	200,000	200,000	NC	100% City	200,000						
11	City Hall Parking Lot Brick Paver Replacement	500,000	500,000	NC	100% City	500,000						
	Total Public Facilities	**11,910,000**	**11,910,000**	**NC**	**CF = CITY FUNDS**	**5,710,000**	**1,750,000**	**1,150,000**	**1,100,000**	**1,100,000**	**1,100,000**	

Ref. No.	Police Programs and Equipment	TOTAL COST	CITY COST	MANT. COST	PROJECTED FUNDING & SOURCE							
						2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	FUTURE
1	Laptop Computers / Technology Upgrade	100,000	100,000	NC	100% City	61,000	0	0	0	0	0	0
2	Work Stations /Office Furniture	173,000	173,000	NC	100% City	173,000	0	0	0	0	0	0
3	Mobile Command Post Vehicle	550,000	550,000	NC	100% City	550,000	0	0	0	0	0	0
	Total Police Programs and Equipment	**784,000**	**784,000**	**NC**	**CF = CITY FUNDS**	**784,000**						

Ref. No.	Technology and Communications	TOTAL COST	CITY COST	MANT. COST	PROJECTED FUNDING & SOURCE							
						2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	FUTURE
1	City-Wide Technology	2,500,000	2,500,000	60,000 AC	100% City	400,000	350,000	350,000	350,000	350,000	350,000	350,000
2a.	Unified Communications & Smart Cities Projects, Video Surveillance Equipme	1,500,000	1,500,000	40,000 AC	100% City	250,000	250,000	250,000	250,000	250,000	250,000	
2b.	Unified Communications & Smart Cities Projects	2,100,000	2,100,000	40,000 AC	100% City	350,000	350,000	350,000	350,000	350,000	350,000	
3a.	ERP/Financial Software, Core EPR	850,000	850,000	100,000 AC	100% City	350,000	100,000	100,000	100,000	100,000	100,000	
3b.	ERP/Financial Software, Financial Reporting	700,000	700,000	100,000 AC	100% City	100,000	100,000	100,000	100,000	100,000	100,000	100,000
4	Enhanced Security Access at the HAWK	100,000	100,000	17,000 AC	100% City	100,000						
	Total Technology and Communications	**7,750,000**	**7,750,000**	**357,000**	**CF = CITY FUNDS**	**1,550,000**	**1,150,000**	**1,150,000**	**1,150,000**	**1,150,000**	**1,150,000**	**450,000**

Ref. No.	Parks & Recreation	TOTAL COST	CITY COST	MAINT. COST	PROJECTED FUNDING & SOURCE							
						2025/26	2026/27	2027/28	28/29	2029/30	2030/31	FUTURE
1a.	The Hawk, 1st & 2nd floors	9,000,000	9,000,000	315,000 AC	100% City	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	
1b.	The Hawk, 3rd floor	7,000,000	7,000,000	NC	100% City	1,167,000	1,167,000	1,167,000	1,167,000	1,167,000	1,165,000	
2a.	2025/2026 Parks, Vehicles, Equipment	448,000	448,000	NC	100% City	448,000						
2b.	2025/2026 Infrastructure, Parks, Golf, Ice Arena all 100% City (Splash Pad improvement 70% City/30% Grant)	1,675,000	1,675,000	NC	100% City	1,675,000						
3a.	2026/2027 Parks, Vehicles, Equipment	404,000	404,000	NC	100% City		404,000					
3b.	2026/2027 Infrastructure, Parks, Golf, Ice Arena	635,000	635,000	NC	100% City		635,000					
4b.	2027/2028 Parks, Vehicles, Equipment	480,000	480,000	NC	100% City			480,000				
4a.	2027/2028 Infrastructure, Parks, Golf, Ice Arena	430,000	430,000	NC	100% City			430,000				
5a.	2028/2029 Parks, Vehicles, Equipment	401,000	401,000	NC	100% City				401,000			
5b.	2028/2029 Infrastructure, Parks, Golf, Ice Arena	455,000	455,000	NC	100% City				455,000			
6a.	2029/2030 Parks, Vehicles, Equipment	1,162,000	1,162,000	NC	100% City					1,162,000		
6b.	2029/2030 Infrastructure, Parks, Golf, Ice Arena	520,000	520,000	NC	100% City					520,000		
7a.	2030/2031 Parks, Vehicles, Equipment	250,000	250,000	NC	100% City						250,000	
7b.	2030/2031 Infrastructure, Parks, Golf, Ice Arena	485,000	485,000	NC	100% City						485,000	
8	Acquisition of Park Land	1,500,000	1,500,000	NC	100% City	250,000	250,000	250,000	250,000	250,000	250,000	
9	Costick Center/Senior Center	20,000,000	20,000,000	155,000 AC	100% City	3,340,000	3,340,000	3,340,000	3,340,000	3,340,000	3,300,000	
	Total Parks & Recreation	**44,845,000**	**44,845,000**	**470,000 AC**	**CF = CITY FUNDS**	**8,380,000**	**7,296,000**	**7,167,000**	**7,113,000**	**7,939,000**	**6,950,000**	

Ref. No.	Equipment / Fire Equipment	TOTAL COST	CITY COST	MANT. COST	PROJECTED FUNDING & SOURCE							
						2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	FUTURE
1	2025/2026 Fire Equipment and Apparatus	1,000,000	1,000,000	NC	100% City	1,000,000	0	0	0	0	0	
2	2026/2027 Fire Equipment and Apparatus	1,185,000	1,185,000	NC	100% City	0	1,185,000	0	0	0	0	
3	2027/2028 Fire Equipment and Apparatus	1,435,000	1,435,000	NC	100% City	0	0	1,435,000	0	0	0	
4	2028/2029 Fire Equipment and Apparatus	1,600,000	1,600,000	NC	100% City		0	0	1,600,000	0	0	
5	2029/2030 Fire Equipment and Apparatus	1,560,000	1,560,000	NC	100% City		0	0	0	1,560,000	0	
	Total Fire Equipment	**6,780,000**	**6,780,000**	**NC**	**CF = CITY FUNDS**	**1,000,000**	**1,185,000**	**1,435,000**	**1,600,000**	**1,560,000**	**0**	

Ref No.	Equipment / DPW Equipment & Fleet	TOTAL COST	CITY COST	MANT. COST	PROJECTED FUNDING & SOURCE							
						2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	FUTURE
1	2025/2026 DWE Equipment	1,060,000	1,060,000	NC	100% City	1,060,000						
2	2026/2027 DPW Equipment	1,410,000	1,410,000	NC	100% City		1,410,000					
3	2027/2028 DPW Equipment	1,150,000	1,150,000	NC	100% City			1,150,000				
4	2028/2029 DPW Equipment	1,320,000	1,320,000	NC	100% City				1,320,000			
5	2029/2030 DPW Equipment	1,440,000	1,440,000	NC	100% City					1,440,000		
6	2030/2031 DPW Equipment	1,200,000	1,200,000	NC	100% City						1,200,000	
	Total DPW Equipment & Fleet	**7,580,000**	**7,580,000**	**NC**	**CF = CITY FUNDS**	**1,060,000**	**1,410,000**	**1,150,000**	**1,320,000**	**1,440,000**	**1,200,000**	**0**

Ref. No.	Equipment / Fleet Motor Pool Vehicles	TOTAL COST	CITY COST	MANT. COST	PROJECTED FUNDING & SOURCE							
						2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	FUTURE
1	2025/2026 Fleet & Motor Pool Vehicles	300,000	300,000	NC	100% City	300,000						
2	2026/2027 Fleet & Motor Pool Vehicles	315,000	315,000	NC	100% City		315,000					
3	2027/2028 Fleet & Motor Pool Vehicles	260,000	260,000	NC	100% City			260,000				
4	2028/2029 Fleet & Motor Pool Vehicles	345,000	345,000	NC	100% City				345,000			
5	2029/2030 Fleet & Motor Pool Vehicles	360,000	360,000	NC	100% City					360,000		
6	2030/2031 Fleet & Motor Pool Vehicles	375,000	375,000	NC	100% City						375,000	
	Total DPW Equipment & Fleet	**1,955,000**	**1,955,000**	**NC**	**CF = CITY FUNDS**	**300,000**	**315,000**	**260,000**	**345,000**	**360,000**	**375,000**	0

Ref. No.	Drainage	TOTAL COST	CITY COST	MANT. COST	PROJECTED FUNDING & SOURCE							
						2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	FUTURE
1	Storm Water NPDES Permit Program	450,000	450,000	NC	100% City	75,000	75,000	75,000	75,000	75,000	75,000	
2	Miscellaneous Storm Sewer Repair, Maintenance and Improvement Program	3,000,000	3,000,000	NC	100% City	500,000	500,000	500,000	500,000	500,000	500,000	
3	City Owned Storm Water Basin Maintenance	150,000	150,000	NC	100% City	25,000	25,000	25,000	25,000	25,000	25,000	
4	Nine Mile Road Storm Sewer, Walsingham Drive to Farmington Road	1,380,000	1,380,000	NC	100% City				1,380,000			
5	Richland Gardens Subdivision Storm Sewer	4,900,000	4,900,000	NC	100% City	1,225,000	1,225,000	1,225,000	1,225,000			
6	Caddell Drain Culverts, Nine Mile Road at Drake Road	4,550,000	2,725,000	NC	60% City, 40% O		2,725,000					
7	Folsom Road Storm Sewer, Nine Mile Road to Orchard Lake Road	380,000	380,000	NC	100% City		380,000					
8	Biddestone Lane Storm Sewer	650,000	650,000	NC	100% City		650,000					
9	Harwich Drive Drainage Improvement	145,000	145,000	NC	100% City	145,000						
10	Caddell Drain Improvements - Phase II	1,400,000	840,000	NC	60% City, 40% O			840,000				
11	Rockshire Street Culvert Rehabilitation/Replacement	1,070,000	1,070,000	NC	100% City			1,070,000				
12	Rockshire Street, Edgemoor Street, and Bramwell Street Storm Sewer	430,000	430,000	NC	100% City			430,000				
13	Drake Road Storm Sewer, Nine Mile Road to north of M-5	410,000	410,000	NC	100% City				410,000			
14	Franklin Fairway Storm Sewer	105,000	105,000	NC	100% City				105,000			
15	Farmington Hills Subdivision Main Ravines Cross Culverts Replacement	105,000	105,000	NC	100% City				105,000			
16	Hearthstone Road Culvert Rehabilitation/Replacement	1,330,000	1,330,000	NC	100% City				1,330,000			
17	Tuck Road Bridge Rehabilitation, south of Folsom Road	3,240,000	3,240,000	NC	100% City				3,240,000			
18	Metroview Drive Storm Sewer, Eight Mile Road to Green Hill Road	535,000	535,000	NC	100% City				535,000			
19	Halsted Road, Eight Mile Road to Nine Mile Road	510,000	510,000	NC	100% City	510,000						
20	Camelot Court/Farmington Meadows Storm Sewer	1,070,000	1,070,000	NC	100% City	535,000	535,000					
21	Farmington Road, Thirteen Mile Road to Fourteen Mile Road	510,000	510,000	NC	100% City					510,000		
22	Tuck Road Storm Sewer, Folsom Road to Eight Mile Road	460,000	460,000	NC	100% City					460,000		
23	Shiawassee Road Storm Sewer, Middlebelt Road to Inkster Road	765,000	765,000	NC	100% City					765,000		
24	Grand River Avenue at Haynes - MDOT Storm Sewer	2,000,000	1,000,000	NC	50% City, 50% O	1,000,000						
25	Goldsmith Street Culvert Replacements	295,000	295,000	NC	100% City						295,000	
26	Nine Mile Crossing of the Main Ravines	430,000	430,000	NC	100% City						430,000	
27	Wellington Culvert Rehabilitation	1,400,00	1,400,00	NC	100% City						1,400,000	
28	Medwid Culvert Replacement	100,000	100,000	NC	100% City	100,000						
29	North Industrial Drive Storm Sewer	200,000	200,000	NC	100% City	200,000						
30	Sinacola Industrial Court	200,000	200,000	NC	100% City	200,000						
31	Scottsdale Road Storm Sewer	200,000	200,000	NC	100% City		200,000					
32	Sinacola Woods Subdivision Storm Sewer	200,000	200,000	NC	100% City			200,000				
33	Colony Park Subdivision Storm Sewer	200,000	200,000	NC	100% City			200,000				
34	Ridgewood Street Storm Sewer	200,000	200,000	NC	100% City		200,000					
35	Barbizon Estates Subdivision Storm Sewer	200,000	200,000	NC	100% City			200,000				
36	Greencastle Road Storm Sewer	200,000	200,000	NC	100% City					200,000		
37	Farmington and Forestbrook Culvert	3,950,000	3,950,000	NC	100% City						3,950,000	
38	North Bell Creek Drainage Improvement	3,000,000	3,000,000	NC	100% City						3,000,000	
39	Rhonswood and Fendt Storm Sewer	200,000	200,000	NC	100% City					200,000		
	Total Drainage	**39,120,000**	**35,735,000**	**NC**	**O = Other**	**4,515,000**	**6,515,000**	**4,765,000**	**8,930,000**	**2,735,000**	**9,675,000**	

Ref. No.	Sanitary Sewers	TOTAL COST	CITY COST	MANT. COST	PROJECTED FUNDING & SOURCE							
						2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	FUTURE
1	Annual Renewal Program (through WRC)	35,356,800	-	NC	100% SF	2,900,000	3,150,000	3,400,000	3,400,000	3,400,000	TBD	16,250,000
2	Collection System Improvement + Site/Facility Improvement Total (thru WRC)	3,449,321	-	NC	100% SF	485,000	160,000	215,000	35,000	86,000		981,000
3	Low Pressure Gravity Sanitary Sewer System	750,000	750,000	NC	100% PB						750,000	
	Total Sanitary Sewers	**39,556,121**	**750,000**	**NC**	**SF = SEWER FUNDS**	**3,385,000**	**3,310,000**	**3,615,000**	**3,435,000**	**3,486,000**	**750,000**	**17,231,000**

Ref. No.	Water Mains	TOTAL COST	CITY COST	MANT. COST	PROJECTED FUNDING & SOURCE							
						2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	FUTURE
1	Capital Improvement Long-Range Plan (through WRC)	1,723,000	-	NC	100% WRC	205,000	91,000	73,000	138,000	262,000	195000	759,000
2	Kendallwood Subdivision No. 3 Water Main	6,720,000	6,720,000	NC	100% City	6,720,000	0	0	0	0	0	
3	Westbrook Manor Subdivision No. 1 and Westbrooke Plaza Water Main Replac	7,910,000	7,910,000	NC	100% City	0	7,910,000	0	0	0	0	
4	Westbrooke Manor Subdivision No. 2 No. 3 No. 4 Water Main Replacement	7,525,000	7,525,000	NC	100% City	0	0	7,525,000	0	0	0	
5	Shiawasse Road Water Main, Middlebelt Road to Inkster Road	2,060,000	2,060,000	NC	100% City	0	0	2,060,000	0	0	0	
6	Old Homestead Subdivision Water Main Replacement	6,065,000	6,065,000	NC	100% City	0	0	0	6,065,000		0	
7	Section 36 Water Main Replacement	3,670,000	3,670,000	NC	100% City					3,670,000	0	
8	M-5 Cross: Folsom/Freedom/9 Mile	865,000	865,000	NC	100% City					0	865,000	
	Total Water Mains	**36,538,000**	**34,815,000**	**NC**	**WRC = Water Resources**	**6,925,000**	**8,001,000**	**9,658,000**	**6,203,000**	**3,932,000**	**1,060,000**	**759,000**

Ref. No.	Sidewalks	TOTAL COST	CITY COST	MAINT. COST	PROJECTED FUNDING & SOURCE							
						2025/2026	2026/27	2027/28	2028/29	2029/30	2030/31	FUTURE
1	Sidewalk replacement along major roads including brick paver repair/replace	600,000	600,000	NC	100% City	100,000	100,000	100,000	100,000	100,000	100,000	
2	Nine Mile Road, south side, Drake Road to Farmington Road	595,000	595,000	NC	100% City	0				595,000		
3	Thirteen Mile at Pebble Creek Crossing Pedestrian Bridge Rehabiitation	25,000	25,000	NC	100% City	0		25,000				
4	Ten Mile Road from 30265 to 30701 Ten Mile Road	290,000	290,000	NC	100% City		290,000					
5	Farmington Road, east side, Glenmuer Street to Fourteen Mile Road	420,000	420,000	NC	100% City		420,000					
6	Scottsdale north, to south of Fourteen Mile Road	60,000	60,000	NC	100% City	60,000						
7	Halsted Road, Eight Mile Road to Nine Mile Road	170,000	170,000	NC	100% City	170,000						
8	Neighborhood Sidewalk Replacement Program SAD	30,000	30,000	NC	100% SAD	0	30,000					
9	Ten Mile Road from S. Duncan to Creekside Drive	185,000	185,000	NC	100% City	0		185,000				
10	Eleven Mile Road, north side, Old Homestead to Drake Road	380,000	380,000	NC	100% City	0		380,000				
11	Southside Shiawassee Road, Middlebelt Road to Inkster Road	610,000	610,000	NC	100% City	0			610,000			
12	Pathway Improvements, Rock Ridge Lane to Oak Crest Drive	120,000	120,000	NC	100% City	0				120,000		
13	Inkster Road, west side, Hystone Dr. to the north end of the I-696 overpass (south property line of 27777 Inkster Road)	600,000	600,000	NC	100% City						600,000	
	Total Sidewalks	**4,085,000**	**4,085,000**	**NC**	**SAD = Special Assement**	**330,000**	**840,000**	**690,000**	**710,000**	**815,000**	**700,000**	

Ref. No.	Transportation / Major Roads	TOTAL COST	CITY COST	MAINT. COST	PROJECTED FUNDING & SOURCE							
						2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	FUTURE
1	Tri-Party (TBD)	2,070,000	690,000	NC	33% OC	115,000	115,000	115,000	115,000	115,000	115,000	
2	Major Road Capital Preventative Maintenance Projects	6,000,000	6,000,000	NC	100% City	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	
3	Industrial/Commercial Rd Rehabilitation	6,600,000	6,600,000	NC	100% City	1,300,000	1,000,000	1,600,000	2,700,000			
4	Signal Modernization	1,350,000	1,350,000	NC	100% City		450,000		450,000		450,000	
5	Nine Mile Road, Walsingham Drive to Farmington Road	11,250,000	11,250,000	NC	100% City					11,250,000		
6	Halsted Road, Twelve Mile Road to Fourteen Mile Road	3,250,000	1,150,000	NC	65% FG	1,150,000						
7	Folsom Road, Nine Mile Road to Orchard Lake Road	4,000,000	4,000,000	NC	100% City	4,000,000						
8	Farmington Road, Thirteen Mile Road to Fourteen Mile Road	6,300,000	4,500,000	NC	30% FG		4,500,000					
9	Farmington Road, Ten Mile Road to Twelve Mile Road	4,500,000	2,550,000	NC	45% FG		2,550,000					
10	Drake Road, Nine Mile Road to M-5	1,800,000	1,800,000	NC	100% City					1,800,000		
11	Metroview Drive, Eight Mile Road to Green Hill Road	1,800,000	1,800,000	NC	100% City						1,800,000	
12	Shiawassee Road, Inkster Road to Middlebelt Road	7,500,000	7,500,000	NC	100% City				7,500,000			
13	Folsom Road/Tuck Road, Orchard Lake Road to Eight Mile Road	5,150,000	5,150,000	NC	100% City						5,150,000	
14	Thirteen Mile, Orchard Lake Road to Middlebelt Road	2,000,000	1,000,000	NC	50% FG 50% City				1,000,000			
	Total Transportation	**63,570,000**	**55,340,000**	**NC**	**OC = Oak Co., ROOC =Rd**	**7,565,000**	**9,615,000**	**2,715,000**	**11,765,000**	**14,165,000**	**8,515,000**	

Ref. No.	Transportation / Local Roads	TOTAL COST	CITY COST	MANT. COST	PROJECTED FUNDING & SOURCE							
						2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	FUTURE
1	Gravel to Pave Conversion (Local Roads)	6,000,000	6,000,000	NC	100% City	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	
2	Local Road Capital Preventative Maintenance Projects	30,000,000	30,000,000	NC	100% City	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	
3 to 15	*Local Road Reconstruction (see below items) 3-15*											
3	Coventry (Scottsdale Rd.)	1,000,000	1,000,000	NC	100% City	1,000,000						
4	Richland Gardens Area Project	20,000,000	20,000,000	NC	100% City	5,000,000	5,000,000	5,000,000	5,000,000			
5	Barbizon Estates	4,000,000	4,000,000	NC	100% City			4,000,000				
6	Farmington Hills Subdivision, (Broadview Dr., Dohany Dr.)	2,700,000	2,700,000	NC	100% City			2,700,000				
7	Franklin Fairways	1,750,000	1,750,000	NC	100% City			1,750,000				
8	Camelot Courts / Farm Meadows Subdivision	7,000,000	7,000,000	NC	100% City	7,000,000						
9	Greencastle Subdivision	5,150,000	5,150,000	NC	100% City				5,150,000			
10	Hunters Pointe Colony	1,000,000	1,000,000	NC	100% City						1,000,000	
11	Farmington Hills Hunt Club	9,800,000	9,800,000	NC	100% City					4,900,000	4,900,000	
12	Pinebrook Estates (Elmhurst)	1,300,000	1,300,000	NC	100% City	1,300,000						
13	Ridgewood Drive	2,750,000	2,750,000	NC	100% City		2,750,000					
14	Supervisor's Plat Fendt Farms and Supervisor's Plat #12 (Rhonswood, Fendt)	3,500,000	3,500,000	NC	100% City						3,500,000	
15	Colony Park Subdivision	8,500,000	8,500,000	NC	100% City					4,250,000	4,250,000	
	Total Local Roads	**104,450,000**	**104,450,000**	**NC**	**M = ROAD MILLAGE**	**20,300,000**	**13,750,000**	**19,450,000**	**16,150,000**	**15,150,000**	**19,650,000**	

PUBLIC FACILITIES

Adequate building space is required to both maintain the City's existing services and to provide for critical new services. This portion of the CIP addresses the need for buildings and improvements in the following areas: Fire, Police, DPW, Special Services and City Hall. All involve improvements to existing facilities, the construction of new facilities and the purchase and maintenance of equipment, in an attempt to maintain and improve the current level of service.

PROPOSED PUBLIC FACILITY PROJECTS

1. City-Wide Facilities Improvements

To better plan for capital expenditures, a comprehensive facility's condition assessment was completed at 32 City buildings. Accruent was hired to objectively evaluate each building's assets based upon usage, age, condition, predicted useful life and estimated replacement value. This information was entered into a database which was used to analyze and report any major repairs, upgrades and replacements which are anticipated to occur within the next 5 years. A committee made of up of City staff members from multiple departments reviewed the detailed report and helped create a list of specific requirements used to prioritize the list of projects. The prioritization was based up on several factors such as Facility Condition Index (FCI), type of system, reason for repair/replacement, impact on occupants, and contributions to water and energy savings. Based upon the prioritization, the following projects are proposed for FY 2024/2025.

- Fire Alarm Replacement/Upgrade at Varied Locations
- Roof Repair/Replacement at Fire Station #3 and Spicer Stables
- HVAC Replacement at Varied Locations
- Design of Future Facility Projects

2. Barrier Free (ADA) Improvements

The City conducted a survey of architectural barriers in its buildings, facilities, and parks in the spring and summer of 2008. The survey identified physical barriers in City buildings, facilities, and parks built prior to 1992 based on Michigan Barrier Free Design standards. Recognizing that the City has limited funds and cannot immediately make all buildings, facilities, and parks fully accessible, the City has prioritized barriers based on the level of impact on a person's ability to access City facilities and/or programs.

3. Electric Vehicle (EV) Charging Stations

Installation of electric vehicle (EV) charging stations at multiple City facilities.

4. Fire Station Improvements

The following Fire Station Improvements needs are currently being evaluated and prioritized:

- Female locker room facilities need expansion and refurbishment due to an increased number of female firefighters.
- Apparatus Bay Floors are peeling, the non-slip finish has worn off causing potential hazards.
- Station 5 Bay roof is nearing end of life (see facilities report)
- Replacement SCBA fill station is needed for a failed unit.
- Locations to store reserve vehicles is being evaluated.

Fire Department was awarded a State funded grant in the amount of $3,000,000 for the redesign and construction of Fire Headquarters to add an Emergency Operations Center (EOC). Fire Department is requesting $250,000 to be used as a construction contingency for the EOC project, building improvement and funding for new OSHA requirements.

5. City Wide 150KW Generator on Trailer

Local Planning Team recommends the purchase of 150KW Generator on Trailer that can be used as a primary backup for the new fueling station and can be moved to other City properties as needed.

6. Courthouse Parking Lot

Reconstruction/rehabilitation of the courthouse parking lots.

7. DPW Natural Gas Generator

The existing diesel generator at the DPW has exceeded its device life and requires replacement. This generator powers the majority of the DPW, including the fuel island which services all City emergency vehicles in the event of a power failure.

8. Fire Station #4 Parking Lot Replacement

Reconstruction/rehabilitation of the concrete parking lot at Fire Station #4.

9. Police Station Parking Lot Access Management

Installation of fencing and automated gates around the Police Station parking lot.

10. Northwestern Highway Landscaping

Installation of perennial beds within the landscaped islands along Northwestern Highway.

11. City Hall Parking Lot Brick Paver Replacement

Replacement of the existing permeable brick pavers within multiple parking lots adjacent to the City Hall building.

POLICE

PROPOSED POLICE PROGRAMS AND EQUIPMENT

1. **Laptop Computers / Technology Upgrade**

The department currently utilizes CJIS compliant laptop computers for investigators working in the field. These investigators include task force officers, school liaison officers, and motor officers. Our current stock of computers and tablets are unable to efficiently run he Windows 11 operating system which is now required to access all CLEMIS websites and applications. The department seeks to replace 15 Dell laptop computers and 2 Dell tables, through the current city contracted supplier. The estimated total cost for this project is estimated to be $61,000.

2. **Workstations / Office Furniture**

The Farmington Hills Police Department's Patrol and Investigative Bureau office areas are old and out of date. The furniture in the executive offices is from 1987 when the police department was constructed. The cubicles and office furniture in the other areas were last replaced in 1997. All the furniture is dated and worn. The current design lacks space for officers that were added to the Directed Patrol Unit and Traffic Safety Section. As a result, officers are spread out from their team reducing effective collaboration. Additionally, the furniture was designed for a time when reports were completed by hand or typewriter. The cubicles are not designed for the power demand created by modern technology and as a result, circuit breakers often trip. This results in unsaved work being lost and could harm the computers. The areas require additional secure storage areas to protect personally identifying information, safeguard police equipment, increase compliance with our accreditation and CJIS requirements, improve organization, and workflow. It is proposed that all office furniture in the Patrol and Investigative Bureau's be replaced. The estimated total for this project is $173,000.

3. **Mobile Command Post**

The Police Department's current Mobile Command Post Vehicle has been in service for 24-years and needs replacement. Mechanical and operational system failures have made the existing unit unfit for roadway travel. The Mobile Command Post Vehicle's technology has become outdated, and the current implementation of the Incident Command System requires more space for personnel than the existing vehicle can provide. A new Mobile Command Post Vehicle would offer mechanical reliability, updated technologies, and more space for personnel when Incident Command is utilized, increasing the effectiveness and versatility of the Mobile Command Post Vehicle. The estimated total for this project is $450,000.

TECHNOLOGY

Adequate building space is required to both maintain the City's existing services and to provide for critical new services. This portion of the CIP addresses the need for buildings and improvements in the following areas: Fire, Special Services, and City Hall. All involve improvements to existing facilities, the construction of new facilities and the purchase and maintenance of equipment, in an attempt to maintain and improve the current level of service.

PROPOSED TECHNOLOGY PROJECTS

1. **City-Wide Technology**

   Information Technology provides technical support and maintenance of information systems, telecommunications systems, and Geographic Information Systems (GIS). Various enterprise-wide software applications have been installed including land file, geographical information systems, recreation registration, financial management, document imaging and the creation of a city website and employee intranet.

   During Fiscal Year 2025/2026 the following projects are proposed

   - Personal Computer & Notebook replacements for 300+ end users to accommodate Windows 11 continues.
   - Continued Implementation of Virtual Desktop & VPN functionality for various departments.
   - Infrastructure and software enhancements to support various departmental initiatives.
   - Continued upgrades to the network security infrastructure.
   - Implement communication system software and video for new EOC at Fire Department headquarters.

2. **Unified Communications & Smart Cites Projects**

   Unified communications (UC) are a framework for integrating various asynchronous and real-time communication tools, with the goal of enhancing business communication, collaboration and productivity. Unified communications do not represent a singular technology; rather, it describes an interconnected system of enterprise communication devices and applications that can be used in concert. To better address all of the City's needs appropriate systems will be planned & implemented as part of an integrated program.

   A Smart City is a technologically modern area that uses different types of electronic methods, voice activation methods and sensors to collect specific data. Information gained from that data are used to manage assets, resources, and services efficiently; in return, that data is used to improve the operations across the City. The smart city concept integrates information and communication technology (ICT), and various physical devices connected to the IoT (Internet of things) network to optimize the efficiency of City operations and services and connect to citizens.

   During Fiscal Year 2025/2026 the following projects are proposed

a. Video Surveillance Equipment

The City of Farmington Hills faces the challenge of reassuring residents, visitors, and employees that safety on City property is a priority. This is accomplished by preventing and minimizing potential threats. These include vandalism, burglary, and all other forms of crime. Security in common areas like parks and City buildings has become of vital importance and video surveillance is a critical tool needed to secure City sites. As completed systems are designed to work in conjunction with other solutions on a unified platform. To successfully implement this program capital investment of $250,000 is requested for fiscal year 2024/2025 and $250,000 per year is requested for, 2025/2026, 2026/2027, 2027/2028, 2028/2029 & 2029/2030.

b. Smart Cities Projects

Ongoing projects will include collecting data from devices, buildings and assets that will then be processed and analyzed to monitor and manage traffic and transportation systems, utilities, water supply networks, waste, crime detection, information systems and other community service. To successfully implement this program capital investment $350,000 is requested for fiscal year 2025/2026 and $350,000 per year is requested for, 2025/26, 2026/27 2027/28, 2028/2029, 2029/2030 & 2030/2031.

3. <u>ERP/Financial Software</u>

a. Initiated the ~~i~~mplementation of the new Core ERP system in February 2024 with a successful go-live in April 2025. ~~(~~GL, Budgeting, PR, AP, HR, Purchasing, and Capital Assets Solution, with an upfront cost of $700k, and $100k annual maintenance.

b. A new Financial Reporting, Performance Management, and Transparency software like OpenGov, Questica, Socrata. ($100k annual lease)

4. <u>Enhanced Security Access at the Hawk</u>

a. Install 22 card readers to secure “employee only” offices.
b. Install 3 card readers on the 3rd floor to provide secure access for Fire Department personnel displaced during Fire Department Headquarters construction.

PARKS & RECREATION

The Parks and Recreation section of the CIP has been developed by extracting the action plan from the City's 2019 & 2024 Parks and Recreation Master Plans as well as adding the funding available in the Parks Millage approved by the voters in August 2018.

The Parks and Recreation Master Plan is required to be prepared in accordance with the Michigan Department of Natural Resources' guidelines. This plan includes a comprehensive review of existing recreation services and facilities, an assessment of city-wide recreation opportunities and deficiencies, and identification of long-term recreation goals.

The City has a current contract with Sports Facilities Companies (SFC) to analyze the existing performance of, and provide recommendations for, the optimization of the Special Services Department. SFC will develop and provide implementation support for a strategic plan forward, with specific focus on the Costick Actives Center and The Hawk.

PROPOSED PARKS AND RECREATION PROJECTS

1. **The HAWK Updates - $16,000,000 (over 6 years)**

   The Accruent Study performed for this facility indicated over $16,000,000 in repairs/replacements over the next six (6) years with almost **(1b.)** $7,000,000 of those requirements on the 3rd floor. FHSS Staff have identified just under $7,000,000 in priority improvements. Renovation of the athletics facilities and third floor for recreational use, community partnerships, general programs, and special event use. Plan includes 145,000 square ft. third floor amenities with revenue return from partnerships. Also includes upgrades to remaining HVAC and renovation of the artificial turf practice fields and outbuildings which require updates to utilize without hazard.

   HAWK priority items as identified in the Accruent Study **($1,540,000)**
   - Replace Air Handling Unit serving Activity Room A, B, and C (AHU-9) ($100,000)
   - Replace Air Handling Unit serving the Theatre (AHU-10) ($100,000)
   - Replace Air Handling Unit serving Harrison Hall (AHU-17) ($100,000)
   - Replace roof over 2D/3D Art ($440,000)
   - Replace Rooftop Unit serving 3rd floor NE corner (RTU-1) ($100,000)
   - Replace Rooftop Unit serving 3rd floor NW corner (RTU-2) ($100,000)
   - Replace Rooftop Unit serving 3rd floor incubator (RTU-3) ($100,000)
   - Replace Rooftop Unit serving 3rd floor incubator (RTU-4) ($100,000)
   - Replace Rooftop Unit serving 3rd floor media center (RTU-5) ($100,000)
   - Replace Rooftop Unit serving 3rd floor room 349 offices (RTU-6) ($100,000)

- Replace Rooftop Unit serving 3rd floor SW corner (RTU-7) ($100,000)
- Replace Rooftop Unit serving 3rd floor SE corner (RTU-8) ($100,000)

- Additional HAWK items not in Accruent Study **($445,000)**
  - Boiler Room pressure booster replacement ($65,000)
  - Stadium complex (4 buildings) roofs ($200,000)
  - 2.5 floor skylight repairs ($90,000)
  - 3rd floor Tables and chairs ($40,000)
  - 1st floor Room 127/128 Control Booth/Recording Studio ($50,000)

2. <u>2025/2026 Vehicles, Equipment and Infrastructure ($2,123,000)</u>

<u>Vehicles and Equipment ($448,000)</u>

- Parks **<u>($273,000)</u>**
  - Truck (2), ¾ Ton 4WD Pickup w/Plow ($115,000).
  - Mower, Utility 60" ZTR ($16,000).
  - ABI Force Groomer ($60,000).
  - Utility Cart for Park Maintenance ($30,000)
  - GMC Terrain for park rangers ($40,000).
  - Robotic Painter lease ($12,000)

- Golf **<u>($175,000)</u>**
  - Mower, Wide Area ($100,000).
  - Mower, Bank and Surround ($75,000)

<u>Infrastructure ($1,675,000)</u>

Parks **<u>($700,000)</u>**
- Heritage Park Adaptive Playground and Splash Pad
  Note: seeking $500,000 Grant from LWCF. +$700,000 = $1,200,000

Parks **<u>($250,000)</u>**
- Canopy, Tent 20x40 (2) ($10,000)
- Asphalt trail path resurfacing ($100,000)
- Heritage Park multiple small bridge repairs ($15,000)
- Spicer house repairs ($75,000)
- Founders Sports Baseball Fencing ($50,000)

- Golf **<u>($565,000)</u>**
  - Asphalt cart path resurfacing, back nine ($400,000)
  - Irrigation new pump system ($150,000)
  - Driving range mats ($15,000)

- Costick Center **<u>($10,000)</u>**
  - Gym floor resealing ($10,000)

- Ice Arena **<u>($150,000)</u>**
  - Rubber Flooring ($150,000)

3. <u>2026/2027 Vehicles, Equipment and Infrastructure ($1,039,000)</u>

<u>Vehicles and Equipment ($404,000)</u>

Parks **<u>($149,000)</u>**

- Truck, Canyon (1) ($40,000)
- Walk Behind 48" ($12,000)
- Cart, Utility ($30,000)
- Truck, ¾ Ton 4WD Pickup w/Plow ($50,000)
- Flatbed trailer 20' ($17,000)

Golf **($255,000)**

- Mower, Fairway (2) ($150,000)
- Mower, Rough Trim (2) ($65,000)
- Utility Cart (2) ($30,000)
- Sod Cutter ($10,000)

Infrastructure ($635,000)

Parks **($315,000)**

- Trail updates at Heritage Park ($50,000)
- Trail updates at Woodland Hills ($10,000)
- Longacre House Renovations ($125,000)
- Disc Golf Course tee pads ($10,000)
- Riley Skate Park concrete repairs ($20,000)
- Founders Sports Baseball Dugouts ($100,000)

Golf **($150,000)**

- Driving Range Netting ($150,000)

Ice Arena **($170,000)**

- Rubber Flooring ($150,000)
- Compressor rebuild ($20,000)

4. 2027/2028 Vehicles, Equipment and Infrastructure ($910,000)

Vehicles and Equipment ($480,000)

- Parks **($300,000)**
  - Truck, Canyon ($40,000)
  - Truck, ¾ Ton 4WD Pickup w/Plow ($60,000).
  - Mower ($17,000).
  - Mower ($70,000).
  - Mini excavator ($90,000)
  - Canopy, Tent 20x40 (2) ($11,000)
  - Robotic painter lease ($12,000)

- Golf **($180,000)**
  - HD Utility Vehicle with Vicon spreader ($50,000).
  - Greens aerifier ($80,000)
  - Mini skid ($50,000)

Infrastructure ($430,000)

- Parks **($280,000)**
  - Site Security and Life Safety in Parks- ($40,000)
  - Trails and Wayfinding ($40,000).
  - Playground Equipment ($125,000).
  - Signage ($40,000)
  - Master Plan per Department of Natural Resources ($35,000)

- Golf **($150,000)**
    - Irrigation satellite upgrades ($150,000).

5. 2028/2029 Vehicles, Equipment and Infrastructure ($856,000)

Vehicles and Equipment ($401,000)

- Parks **($169,000)**
    - Truck, ¾ Ton 4WD Pickup w/Plow ($50,000).
    - Mower, Utility 60" ZTR ($17,000).
    - Tractor, Utility 35-60 HP ($70,000).
    - Robotic painter lease ($12,000)
    - Attachments ($20,000)

- Golf **($232,000)**
    - Mowers (2), triplex ($90,000)
    - Utility Vehicle (UTV) with cab for Turf Maintenance ($32,000).
    - Sprayer ($90,000)
    - Range Cart Picker ($20,000)

Infrastructure ($455,000)

- Parks **($285,000)**
    - Trail and Wayfinding Signs ($40,000)
    - Longacre Wall Repair ($100,000)
    - Playground Equipment ($25,000)
    - Site Security and Life Safety in Parks- ($40,000)
    - Roof Replacements ($50,0000)
    - Concrete replacement ($30,000)

- Golf **($150,000)**
    - Driving range improvements ($150,000)

- Ice Arena **($20,000)**
    - Compressor rebuild ($20,000)

6. 2029/2030 Vehicles, Equipment and Infrastructure ($1,682,000)

Vehicles and Equipment ($1,162,000

- Parks **($212,000)**
    - Truck, ¾ Ton 4WD Pickup w/Plow ($60,000).
    - Mower, Walk Behind (2) ($25,000).
    - Tractor, Utility ($75,000).
    - Truck, Canyon (1) ($40,000)
    - Robotic painter lease ($12,000)

- Golf **($950,000)**
    - Bunker rake ($300,000)
    - Golf Cart Fleet with Lithium Batteries ($450,000)
    - Golf Cart Fleet GPS add-on feature ($200,000).

Infrastructure ($520,000)

- Parks **($320,000)**
    - Trail and Wayfinding Signs ($40,000)

- Playground Equipment ($25,000)
- Riley Skate Park Repairs ($75,000)
- Founders Park Baseball Field Dugout Covers ($120,000)
- Founders Park restroom improvements ($60,000)

- Ice Arena **($200,000)**
  - Board door panels ($100,000)
  - Entryway ADA sliding door replacements ($100,000)

7. **2030/2031 Vehicles, Equipment and Infrastructure ($735,000)**

Vehicles and Equipment ($250,000)

- Parks **($120,000)**
  - Truck, ¾ Ton 4WD Pickup w/Plow ($60,000).
  - Mower, Utility 60" ZTR ($18,000).
  - Carts, Utility (2) ($30,000)
  - Robotic painter lease ($12,000)

- Golf **($130,000)**
  - Mower, Bank and Surround ($75,000)
  - Greens roller ($25,000)
  - Carts, Utility (2) ($30,000)

Infrastructure ($485,000)

- Parks **($315,000)**
  - Asphalt trail path resurfacing ($150,000)
  - Playground Equipment improvements ($125,000)
  - Trail bridge improvements ($40,000)

- Golf **($150,000)**
  - Tee box improvements ($150,000)

- Ice Arena **($20,000)**
  - Compressor rebuild ($20,000)

8. **Acquisition of Park Land $1,500,000**

Various parcels of land could be purchased for parks and/or recreation opportunities, particularly in the northwest and southeast quadrants of the City.

9. **Costick Center/Senior Center $20,000,000**

Future renovation/replacement of Costick Center to create Adults 50 & Better focused facility. The Accruent Study performed for this facility indicated over $20,000,000 in repairs/replacements over the next five (5) years. FHSS Staff and consultants have identified over $10,000,000 in priority improvements.

EQUIPMENT

FIRE DEPARTMENT EQUIPMENT PURCHASES

The Fire Department utilizes a combination of full-time and call-back personnel to provide Advanced Life Support (ALS), rescue and fire suppression services out of five fire stations located strategically throughout the City.

The DPW maintenance staff continues to provide vital input on the replacement of our fleet vehicles based on their experience and maintenance records. This advice is reflected in the schedule given below for the replacement of those vehicles listed by year.

The fire department rotates its vehicles based on use. Acquisition of new apparatus is assigned to a station based on usage and consultation with DPW. The older vehicle is rotated to one of the other stations. This has proven very beneficial to extend vehicle life.

PROPOSED FIRE APPARATUS PURCHASES

1. **2025/2026 Fire Equipment and Apparatus**
   - Purchase replacement Squad ($435,000).
   - Purchase one (1) utility vehicle to replace fleet vehicle ($75,000).
   - Mobile Computers and equipment ($170,000).
   - Construction Contingency, Building Improvements, and OSHA Requirements ($250,000).
   - Fire Engine Refurbishment ($70,000)

2. **2026/2027 Fire Equipment and Apparatus**
   - Replacement Battalion Chief Vehicle ($125,000).
   - Purchase two replacement Squads ($890,000)
   - Purchase one (1) utility vehicle to replace fleet vehicle ($80,000).
   - Refurbish/Replace Fire Station Extractors ($90,000)

3. **2027/2028 Fire Equipment and Apparatus**
   - Purchase one (1) utility vehicle to replace fleet vehicle ($85,000).
   - Purchase Replacement Engine ($1,250,000)
   - Purchase SCBA fill Station ($100,000)

4. **2028/2029 Fire Equipment and Apparatus**
   - Purchase replacement Squad ($500,000).
   - Purchase SCBA Fill Station ($100,000).
   - Fire Stations 1 & 2 Updates to Include Female Locker Rooms ($1,000,000)

5. **2029/2030 Fire Equipment and Apparatus**

- Purchase Replacement Squad ($500,000)
- Purchase one (1) Utility vehicle to replace fleet vehicle ($85,000)
- Purchase SCBA Fill Station ($125,000)
- Fire Stations 4 Updates to Include Female Locker Rooms ($850,000)

DIVISION OF PUBLIC WORKS (DPW) EQUIPMENT PURCHASES

At the end of the service life of heavy equipment there is a specific salvage value and a cost of replacement for that piece of equipment. Because of the expense of major equipment purchases for the DPW, a continuous provision must be made from year to year to replace worn out and unserviceable equipment. The items contained in this plan have an individual value of a minimum of $25,000. This does not include any equipment purchases that are part of the normal operating budget.

PROPOSED DPW EQUIPMENT PURCHASES

1. **2025/2026 Equipment $1,060,000**
   - 10-Yard Dump Truck – Replacement ($420,000)
   - Refurbish Existing Equipment ($50,000)
   - 5-Yard Dump Truck – Replacement ($320,000)
   - Roadside Mowing Tractor-New Mowing Arm Only ($60,000)
   - 3-Yard Truck- Replacement ($210,000)

2. **2026/2027 Equipment $1,410,000**
   - Two10-Yard Dump Truck – Replacement ($890,000)
   - Refurbish Existing Equipment ($100,000)
   - Sign Installation Truck – Replacement ($370,000)
   - Portable Sewer Camera System – Replacement ($50,000)

3. **2027/2028 Equipment $1,150,000**
   - Refurbish Existing Equipment ($50,000)
   - Mechanical Street Sweeper – Replacement ($450,000)
   - Sewer Vacuum Truck – Replacement ($650,000)

4. **2028/2029 Equipment $1,320,000**
   - 10-Yard Dump Truck – Replacement ($480,000)
   - Refurbish Existing Equipment – ($50,000)
   - 5-Yard Dump Truck – Replacement ($380,000)
   - 3-Yard Truck- Replacement ($240,000)
   - Forestry Chipper – Replacement ($70,000)
   - Forklift – Replacement ($100,000)

5. **2029/2030 Equipment $1,440,000**
   - Refurbish existing Equipment ($50,000)
   - Rubber Tire Excavator – Replacement ($700,000)
   - Cold Patch Trailer - Replacement ($90,000)
   - Rubber Tire Front Loader – Replacement ($600,000)

6. **2030/2031 Equipment $1,200,000**
   - Refurbish existing Equipment ($50,000)
   - Rubber Tire Backhoe -Replacement ($550,000)
   - Road Grader – Replacement ($600,000)

FLEET & MOTOR POOL VEHICLES

The City maintains a vehicle fleet of over seventy-five (75) vehicles for use for cleanup snow plowing, construction and building inspections, everyday travels around the City and for travel to training, and meetings outside of the City. These vehicles are critical to the daily operations of the City. Some of these are assigned directly to departments and personnel, identified as Fleet Vehicles, and others from the Motor Pool for use by all staff not having an assigned fleet vehicle. This section of the CIP addresses the replacement of those vehicles based on the maintenance records and down time. The vehicles represented in this category do not include Fire Department, Police Department, and the Parks Division vehicles nor the heavy equipment and dump trucks in the Division of Public Works.

PROPOSED FLEET & MOTOR POOL VEHICLE PURCHASES

1 **2025-2026 Vehicles $300,000**

- 3-Fleet and Pool Vehicles – Replacement ($120,000)
- 3 Pickup Trucks and Plows – Pub Services, Road Maintenance & Engineering. (Total $180,000)

2. **2026/2027 Vehicles $315,000**

- 3-Fleet and Pool Vehicles – Replacement ($125,000)
- 3 Pickup Trucks and Plows – Pub Services, Road Maintenance & Engineering. (Total $190,000)

3 **2027/2028 Vehicles $260,000**

- 3-Fleet and Pool Vehicles – Replacement ($130,000)
- 3 Pickup Trucks and Plows – Pub Services, Road Maintenance & Engineering. (Total $130,000)

4. **2028/2029 Vehicles $345,000**

- 3-Fleet and Pool Vehicles – Replacement ($135,000)
- 3 Pickup Trucks and Plows – Pub Services, Road Maintenance & Engineering. (Total $210,000)

5. **2029/2030 Vehicles $360,000**

- 3-Fleet and Pool Vehicles – Replacement ($140,000)
- 3 Pickup Trucks and Plows – Public Services, Road Maintenance & Engineering.
  (Total $220,000)

6. **2030/2031Vehicles $375,000**

- 3-Fleet and Pool Vehicles – Replacement ($145,000)
  3 Pickup Trucks and Plows – Public Services, Road Maintenance & Engineering) (Total $230,000)

DRAINAGE

In June of 1980, the City Council, commissioned the preparation of a Master Storm Drainage Plan. The plan treated the storm water as a resource rather than a liability. Utilization of existing open drainage systems and use of detention basins along major streams were considered. The plan suggested the design and use of pipes and streams that were much smaller and less expensive than those designed to just "pass through" as much storm water as was generated. The plan proposed to manage existing flows from streams thereby ensuring that the City's development would not cause flooding in downstream communities.

In October of 1981, a significant storm caused flooding throughout the City. Many inadequacies of the City's storm drainage system were revealed. The storm reinforced the importance of City Council's decision to develop a Master Storm Drainage Plan.

The City Council formally approved the Master Storm Drainage Plan in December of 1986. Many of the projects contained herein are consistent with that plan. Since the plan depends on detention basins for a number of the proposed improvements, acquiring the land as soon as possible is imperative. Without these detention sites many of the proposed improvements would be impossible and would require selection of next best, and more expensive options.

The projects contained herein reflect improvements to major and minor drainage courses outlined in the Master Storm Drainage Plan and are supplemented by storm water quality considerations required under the City's National Pollutant Discharge Elimination System (NPDES) storm water permit. As the City's rapid growth nears its end, emphasis is redirected from responding to new development to maintaining or improving the aging systems that are now in place. This involves actively participating in repairs and improvements of minor drainage courses that traverse both public and private property. In this way, a functional drainage system is ensured for all areas of the City. Priority criteria are:

- Integrating water quantity issues with water quality issues.
- Immediate flood peak reduction to solve the most significant flooding concerns.
- Integration with other improvements including water main, sanitary sewer, paving, and building construction.
- Ensuring the continued development and redevelopment of the City.
- Encouragement of riparian stewardship and maintenance.

Development of a Drainage Program

Prioritization of drainage improvements tends to be cyclical when viewed with other capital needs. This is since most systems in the City function well during periods of normal rainfall. Usually, years pass between significant rain events. The result is to minimize required improvements during normal weather, especially considering the high cost associated with many of the individual drainage projects. However, when a major rain event occurs the community demands accelerated improvements, and the cycle begins again. The major rainstorms of 1981, 1989, 1993, 1997, 1998 and 2014 are evidence of this fact.

In order to safeguard against these significant rain events, a consistent, uniform, and aggressive program is necessary. This allows much of the major capital expense and effort to be distributed over the years. This ensures continued improvement, thereby saving millions of dollars in flood damage in the future and promoting an improved quality of life.

Maintenance

Calls for maintenance have increased over the years. Many of the City's subdivisions have open spaces and retention systems that need repair or improvement. Without ongoing inspection and maintenance, failures will occur. Once initiated, these maintenance programs will generate several projects for which capital funding will be required. The City will also consider, when appropriate, the possible mitigation of wetlands within the overall drainage system.

Asset Management

With the passage of the local road millage in 2018 and the accompanying changes to the Special Assessment District (SAD) policy, there has been an increase in the amount of drain related capital improvements. Each road project is evaluated during the design phase to determine if the existing underground storm drain infrastructure is sufficient or in need of repair and/or replacement. This integrated approach to asset management ensures that infrastructure is addressed in a cohesive manner at the most cost-effective time in the project lifecycle.

Federal Requirements

The City is required to install various improvements in accordance with the U. S. Clean Water Act. This Act requires the issuance of a National Pollutant Discharge Elimination System (NPDES) permit commonly called an MS4 Permit, for all communities over 10,000 in population. Farmington Hills has the required permit issued by the Michigan Department of Environment, Great Lakes, and Energy – EGLE (formerly MDEQ). The City continues to explore approaches that would establish the best management practices. This includes community outreach and education about Federal storm water requirements, and an illicit discharge detection and elimination program. The City is working with EGLE, Oakland County, Wayne County, and the Alliance of Rouge Communities to implement a program that is most beneficial to Farmington Hills and other communities in the Rouge River Watershed. Part of the program is a document called a Storm Water Management Plan (SWMP). This document is required under the City's NPDES permit and outlines specific improvements that must be done to meet Federal requirements.

In addition, Farmington Hills has an obligation to conduct an IDEP (Illicit Discharge and Elimination Program), which is an ongoing effort to prevent and eliminate illegal outlets into the City's drainage systems.

The City is also obligated to employ best management practices for good housekeeping techniques for public infrastructure. These practices include catch basin cleaning, street sweeping, detention pond basin maintenance, etc. Key to cooperation and watershed planning is the City's participation in the Alliance of Rouge Communities, a cooperative venture ensuring that all 40 communities and three counties contained in the Rouge River watershed continue to work together. All projects contained herein are consistent with the City's Federal permit.

PROPOSED DRAINAGE PROJECTS

1. Storm Water NPDES Permit Program

An NPDES permit was obtained from the EGLE. As a requirement of the permit, a watershed management plan is needed. A major component of this plan is the Storm Water Management Plan. The SWMP requires that certain projects and procedures be adopted that will ultimately lead to a cleaner Rouge River in accordance with the Federal Clean Water Act. Projects may include erosion controls in the open watercourses in Farmington Hills and siltation basins to remove suspended sediment from storm water.

Under the current NPDES storm water permit, the City has a continuous requirement to identify and remove illegal discharges into City owned drainage systems. This includes sanitary system corrections, drainage system sampling and monitoring, education programs, pollution investigative efforts, etc., that are related to the City owned drainage system.

2. Miscellaneous Storm Sewer Repair, Maintenance and Improvement Program

- Construction and improvements of storage facilities, pipe and culvert enclosures and channel improvements throughout most of the drainage districts in the City. It also includes projects that are necessitated from inspection programs.

- Ninety percent of the City's drainage system is in open channels. Most of these major drainage courses have not been cleaned since their original construction. This program represents a continuous program for maintenance of these drainage courses.

- Emergency replacement and repair of major culverts in the public right-of-way.

- Throughout this City many subdivisions are being considered for local road reconstruction. In addition, several of the areas where the roads are not candidates for local reconstruction have storm sewers in need of rehabilitation. The storm sewer system in these areas as determined by the DPS will be televised and inspected. If deemed necessary an appropriate cleaning, repair, replacement, lining and rehabilitation program will be implemented at the time of, or prior to the road reconstruction.

- The Oakland County Water Resources Commission (WRC) has jurisdiction of several drains in the City that have been legally established under the Michigan Drain Code. The Drain Code provides a means of apportionment and assessment based on tributary area and runoff from these districts. Periodically, WRC will advise of maintenance needs and corresponding assessments, which the City is responsible for.

3. City Owned Storm Water Basin Maintenance

The City owns nine storm water detention and retention basins. These basins are required to be maintained in accordance with the Federal Clean Water Act to control urban pollutants and peak flow. This project provides improvement for all nine City owned basins. The improvements include select vegetation removal, sedimentation removal, and inlet/outlet pipe maintenance. In conjunction with the Capital Improvement Plan, the project is intended to provide annual maintenance and upkeep.

4. **Nine Mile Road Storm Sewer, Walsingham Drive to Farmington Road**
This project provides lateral storm sewers for Nine Mile Road, from Walsingham Dr. to Farmington Road as well as rehabilitation of the existing storm sewer system.

5. **Richland Gardens Subdivision Storm Sewer**
This project provides lateral storm sewers for Richland Gardens Subdivision as well as rehabilitation of the existing storm sewer system.

6. **Caddell Drain, Nine Mile Road at Drake Road**
Replacement of the 4 elliptical culverts that cross underneath the intersection of Nine Mile Road south of Drake Road. These culverts are nearing the end of their useful life. This project will be coordinated by the Oakland County Water Resources Commission through the Michigan Drain Code.

7. **Folsom Road Storm Sewer, Nine Mile Road to Orchard Lake Road**
This project provides lateral storm sewers for Folsom Road, Nine Mile Road to Orchard Lake Road as well as rehabilitation of the existing storm sewer system.

8. **Biddestone Lane Storm Sewer**
This project provides lateral storm sewer and an outfall storm sewer for this area.

9. **Harwich Drive Drainage Improvement**
Currently storm water runoff from Harwich Drive travels across a residential side yard. The project would include the installation of a storm sewer from the right-of-way down to the Pebble Creek to minimize erosion.

10. **Caddell Drain Improvements - Phase II**
Phase II of the Caddell Drain Improvements includes improvements to the southern portions of the water course. This project will be coordinated by the Oakland County Water Resources Commission through the Michigan Drain Code.

11. **Rockshire Street Culvert Rehabilitation/Replacement**
This project provides for a replacement of the large Main Ravines Drain crossing on Rockshire Street, allowing for a wider roadway.

12. **Rockshire Street, Edgemoor Street, and Bramwell Street Storm Sewer**
This project provides for a lateral storm sewer and an outfall storm sewer for this area.

13. **Drake Road Storm Sewer, Nine Mile Road to north of M-5**
This project provides lateral storm sewers for Nine Mile Road to north of M-5 Storm Sewer as well as rehabilitation of the existing storm sewer system.

14. **Franklin Fairway Storm Sewer**
This project provides lateral storm sewers for Franklin Fairway Drive as well as rehabilitation of the existing storm system.

15. **Farmington Hils Subdivision Main Ravines Cross Culverts Replacement**
This project involves replacement of the existing 36” cross culvert of a tributary of the Main Ravines Drain and the installation of an additional cross culvert to carry cross through drainage. It also includes improving several of the main cross culverts and a lateral storm sewer to improve drainage.

16. **Hearthstone Road Culvert Rehabilitation/Replacement**
The Hearthstone culvert is under Hearthstone Road in the Kendallwood Subdivision west of Bonnet Hill Road. It is a 68" by 85" elliptical corrugated metal pipe culvert and is in the Minnow Pond drainage district. It needs to be rehabilitated and possibly replaced.

17. **Tuck Road Bridge Rehabilitation, south of Folsom Road**
Rehabilitate the existing 24-foot-wide by 7.5-foot-high bridge crossing of the Upper Rouge River.

18. **Metroview Drive Storm Sewer, Eight Mile Road to Green Hill Road**
This project provides lateral storm sewers for Metroview Dr, Eight Mile Road to Green Hill Road as well as rehabilitation of the existing storm sewer system.

19. **Halsted Road, Eight Mile Road to Nine Mile Road**
This project provides lateral storm sewers for Halsted Road (between Eight Mile Road and Nine Mile Road), as well as rehabilitation of the existing storm sewer system.

20. **Camelot Court/Farmington Meadows Storm Sewer**
This project provides lateral storm sewers for Camelot Ct./Farmington Meadows as well as rehabilitation of the existing storm sewer system.

21. **Farmington Road, Thirteen Mile Road to Fourteen Mile Road**
This project provides lateral storm sewers for Farmington Road (between Thirteen Mile Road and Fourteen Mile Road), as well as rehabilitation of the existing storm sewer system.

22. **Tuck Road Storm Sewer, Folsom Road to Eight Mile Road**
This project provides lateral storm sewers for Tuck Road from Folsom Road to Eight Mile Road as well as rehabilitation of the existing storm sewer system.

23. **Shiawassee Road Storm Sewer, Middlebelt Road to Inkster Road**
This project provides lateral storm sewers for Shiawassee Road, Middlebelt Road to Inkster Road as well as rehabilitation of the existing storm sewer system.

24. **Grand River Avenue at Haynes – MDOT Storm Sewer**
This project provides lateral storm sewers for Grand River (between Cora Ave and Tuck Road), as well as rehabilitation of the existing storm sewer system.

25. **Goldsmith Street Culvert Replacements**
This project provides replacement of the three large culvert crossings on Goldsmith.

26. **Nine Mile Crossing of the Main Ravines Drain**
This project provides lateral storm sewers for the main ravines crossing at Nine Mile Road, just east of Middlebelt.

27. **Wellington Culvert Rehabilitation**
The existing culvert on Wellington Court between Eastbrook and Westbrook Court is in need of repair after a routine maintenance check discovered delamination, erosion and multiple cracks.

28. **Medwid Culvert Replacement**
The existing culvert on Medwid Drive, between Westcott Crescent Circle and Aspen Park Circle needs replacement.

29. North Industrial Drive Storm Sewer

This project provides lateral storm sewers for North Industrial Drive, as well as rehabilitation of the existing storm sewer system.

30. Sinacola Industrial Court

This project provides lateral storm sewers for Sinacola Industrial Court, as well as rehabilitation of the existing storm sewer system.

31. Scottsdale Road Storm Sewer

This project provides lateral storm sewers for Scottsdale Road, as well as rehabilitation of the existing storm sewer system.

32. Sinacola Woods Subdivision Storm Sewer

This project provides lateral storm sewers for the Sinacola Woods subdivision, as well as rehabilitation of the existing storm sewer system.

33. Colony Park Subdivision Storm Sewer

This project provides lateral storm sewers for the Colony Park Subdivision, as well as rehabilitation of the existing storm sewer system.

34. Ridgewood Street Storm Sewer

This project provides lateral storm sewers for Ridgewood Street, as well as rehabilitation of the existing storm sewer system.

35. Barbizon Estates Subdivision Storm Sewer

This project provides lateral storm sewers for the Barbizon Estates Subdivision, as well as rehabilitation of the existing storm sewer system.

36. Greencastle Road Storm Sewer

This project provides lateral storm sewers for Greencastle Road, as well as rehabilitation of the existing storm sewer system.

37. Farmington and Forestbrook Culvert

Two culvert crossings consisting of corrugated metal pipe barrels were assessed. Significant deterioration was noted for both crossings and rehabilitation will be required.

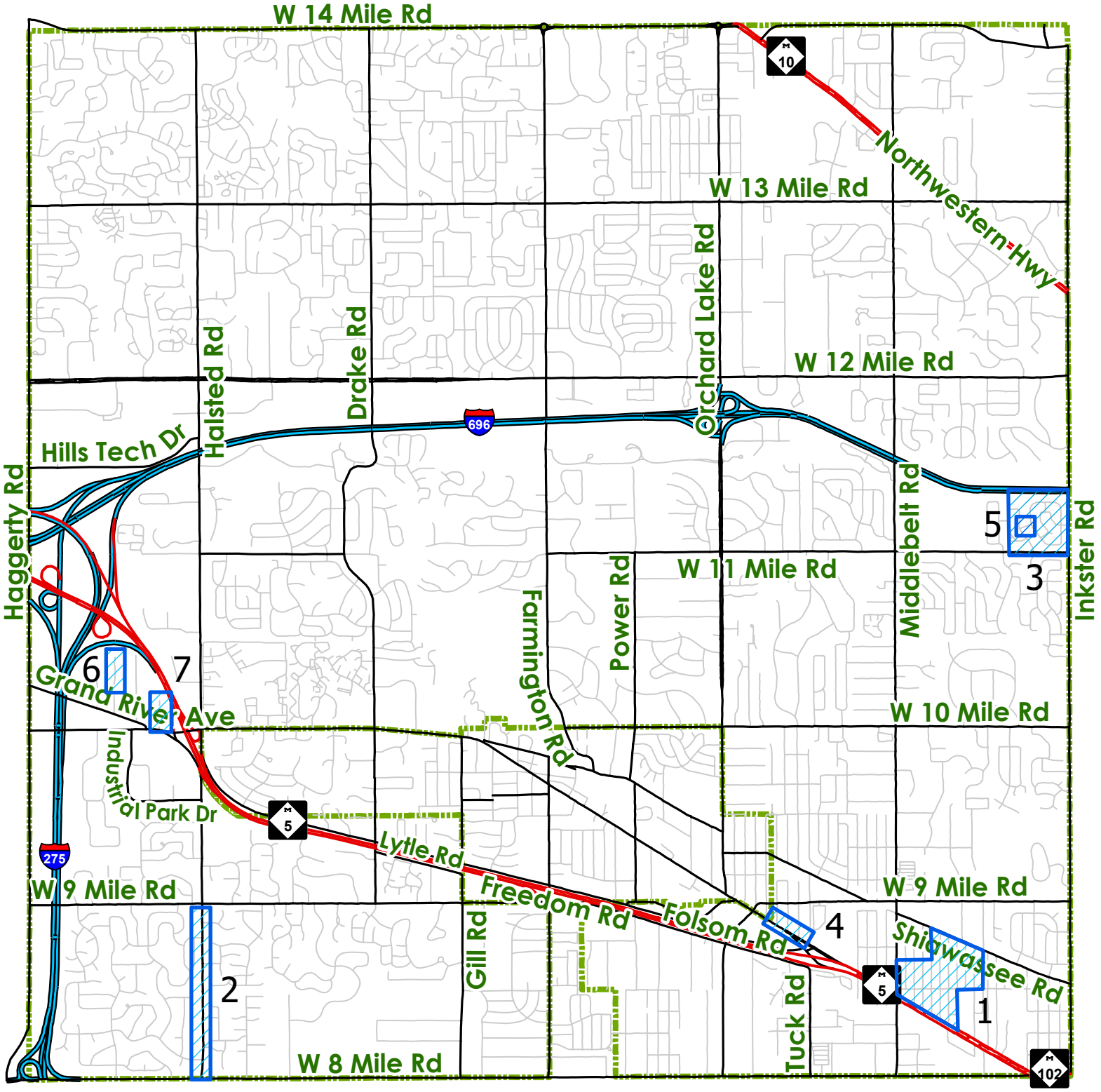
38. North Bell Creek Drainage Improvement

This project provides drainage improvements for North Bell Creek, from Lundy Drive to 8 Mile.

39. Rhonswood and Fendt Storm Sewer

This project provides lateral storm sewers for Rhonswood and Fendt, as well as rehabilitation of the existing storm sewer system.

2025/2026 Drainage Projects



1. Richland Gardens Subdivision Storm Sewer
2. Halsted Road, Eight Mile Road to Nine Mile Road
3. Camelot Court/Farmington Meadows Storm Sewer
4. Grand River Avenue at Haynes - MDOT Storm Sewer
5. Medwid Culvert Replacement
6. North Industrial Drive Storm Sewer
7. Sinacola Industrial Court

Note: This map is a planning document and is subject to change. The priority level of a project may move up or down based on funding.

SOURCE: City of Farmington Hills GIS, 2020
Oakland County GIS, 2020

SANITARY SEWERS

The major goal of the capital expenditures in this area is to provide adequate trunkline capability to serve both existing and future development. All truck lines have been installed with the completion of the Ten Mile Rouge sewer in 1980. However, some areas of the City still do not have connecting sewer segments which are needed to provide access to public sanitary sewer. These segments are usually funded by a development or the City at large. The construction of the localized laterals is generally provided by the Charter provision requiring local benefiting properties to pay the associated cost (special assessment process). This results in the establishment of a special assessment district. In the future, federal watershed requirements may mandate accelerated programs for local sanitary sewer construction. A portion of these anticipated costs may be financed by various sanitary sewer funds.

An exception to the special assessment financing is a payback that may be necessitated because of a paving, resurfacing or widening project where integrated asset management policy would recommend that the sanitary sewer lateral should be installed first. In these instances, a payback would be established in accordance with City ordinance to recover the cost at a future date when connections are made.

Any remaining work that would be done on sanitary sewers involves the rehabilitation of existing sewers with City sewer funds. Since this does not provide new service, there would be no application of the Charter provision. This type of work was begun in 1990 with the Evergreen Farmington Sewage Disposal System improvements where sewers were replaced, and relief lines constructed.

In 2017, the City was awarded a Stormwater, Asset Management, and Wastewater (SAW) grant through the Michigan Department of Environment, Great Lakes, and Energy –EGLE (formerly the MDEQ) for the purposes of evaluating and inspecting sanitary sewer infrastructure, developing an asset management plan, assessing asset criticality and risk assessment; and providing life cycle cost analysis. The results of the SAW grant project will also provide a long-term capital improvement plan for the City's sanitary sewer system infrastructure.

In addition, the City is currently under an Administrative Consent Order (ACO), from the EGLE that may require additional improvements to be made in the future restricting the amount of outflow from the City of Farmington Hills into the sewer system.

PROPOSED SANITARY SEWER PROJECTS

1. Annual Renewal Program

The City completed a wastewater asset management plan (AMP) in 2020 to identify investment needs and develop a long-range capital improvement program for the City's wastewater system. By starting an annual renewal program, the City will be able to systematically address sanitary sewer assets by performing proactive maintenance and completing rehabilitation/replacement of the assets on an annual basis using best practices.

2. Collection System Improvement plus Site/Facility Improvement Total (through WRC)

Annual replacement and upgrade of equipment at the pump stations.

3. Low Pressure Gravity Sanitary Sewer System

Provide public sanitary sewer via a low-pressure gravity sewer system. This may be appropriate for areas where traditional gravity sewer is not feasible. Location to be determined.

WATERMAINS

With the completion of the Northwest Water Pressure District transmission lines in 1976, potable water supply capability has been provided throughout the City. Although some minor transmission lines are still required in some areas, they now have the option of installing local services through the establishment of payback agreements and special assessment districts.

A significant portion of the City's water main infrastructure was built in the 1960s and is nearing the end of its useful life. A challenge exists in these older areas of the City due to the water mains requiring frequent and expensive maintenance due to main breaks. Repairs require digging up and replacing worn out facilities. The City has in place a replacement program for just this challenge. Projects are evaluated using an integrated asset management approach and includes a review of break history, risk, and criticality. As with other maintenance activities, this work does not require financing through a special assessment district. Funding is provided through the City's water fund.

The City worked with the Oakland County Water Resources Commissioner's Office (WRC) and determined that a storage facility is appropriate for the City of Farmington Hills. Construction is complete and the tank has been operational since June 2014. The master water main model has been systematically updated to include this facility and the plan has been revised to include necessary projects on a prioritized basis.

PROPOSED WATER MAIN PROJECTS

1. **Capital Improvement Long-Range Plan (through WRC)**

   Annual replacement and/or rehabilitation of the water systems fire hydrants and gate valves, as well as replacement/upgrade of meters at the pressure regulating vaults (PRV's).

2. **Kendallwood Subdivision No. 3 Water Main Replacement**

   This is in the residential neighborhood east of Farmington Road and north of Twelve Mile Road. It is an area of older pipe built in the 1950s with frequent water main breaks. The existing 6" and 8" water main would be replaced with 8" water main and existing 12" water main would be replaced with 12" water main to improve system reliability and meet current design standards.

3. **Westbrook Subdivision, Wesbrooke Manor Subdivision No. 1, and Westbrooke Plaza Water Main Replacement**

   This is in the residential neighborhood west of Orchard Lake Road and south of Thirteen Mile Road. It is an area of older pipe built in the 1950's with frequent water main breaks. The existing 6", 8", and 12" water main would be replaced with 8" and 12" water main to improve system reliability and meet current design standards.

   In addition, the commercial area is located on the south side of Thirteen Mile Road, between Orchard Lake Road and Lorikay Street. It is an area of older pipe built in the 1950's and when a break occurs, it affects multiple commercial properties. The existing 6"

would be replaced, and possibly relocated, with an 8” (8” is the smallest size that can be installed under current standards) to improve system reliability and meet current design standards.

3. Westbrook ManorSubdivision No. 2, No. 3, No. 4 Water Main Replacement

This is in the residential neighborhood east of Farmington Road and south of Thirteen Mile Road. It is an area of older pipe built in the 1950’s with frequent water main breaks. The existing 6” and 8” water main would be replaced with 8” water main and the existing 12” water main would be replaced with 12” water main to improve system reliability and meet current design standards.

4. Shiawassee Road Water Main, Middlebelt Road to Inkster Road

This project would include the replacement of existing 8” water main on Shiawassee Road between Middlebelt Road and Inkster Road.

5. Old Homestead Subdivision Water Main Replacement

This is in the residential neighborhood west of Drake Road and north of Eleven Mile Road. It is an area of older pipe built in the 1960’s with frequent water main breaks. The existing 6”, 8” and 12” water main would be replaced with 8” and 12” water main to improve system reliability and meet current design standards.

6. Section 36 Water Main Replacement

This project would include replacement of water main along Rensselaer, Ontaga, Eight Mile and Pearl Street. It is an area with older pipe built in the 1950’s with frequent water main breaks. The existing 8” water main would be replaced to improve system reliability and meet current design standards.

7. M-5 Crossing: Folsom/Freedom/ Nine Mile

This project would include installation of new 8” or 12” water main in the area of Folsom/ 9 Mile/ Freedom. This would loop the water main from the south side of Folsom Road to the north side of Freedom Road at 9 Mile Road and would provide additional fire flow

2025/2026 Water Main Projects

1. Kendallwood Subdivision No. 3 Water Main Replacement

Note: This map is a planning document and is subject to change. The priority level of a project may move up or down based on funding.

SOURCE: City of Farmington Hills GIS, 2020
Oakland County GIS, 2020

SIDEWALKS

The need to provide safe pedestrian travel along major traffic corridors has long been a priority of the City Council. Certain corridors generate considerable pedestrian traffic. Shopping centers, schools, recreation areas, and other major developments generate pedestrian traffic. To promote safe pedestrian travel, the City must identify those areas in need of sidewalks or extensions to existing pedestrian networks. The School Board has also indicated their support for sidewalks at various school locations. It remains Farmington Hills policy, however, to treat walkways across school frontages as a requirement of the school district.

Sidewalk aesthetics is also considered. The City has many designated Historic District sites located on major roads. The use of brick pavers is encouraged to enhance and highlight the historic character of these sites.

In recent years, with Federal Aid funded road improvements the City has been able to include and install large sections of sidewalk on select major thoroughfares with our pavement projects. Developers have also installed sidewalks as a requirement of development. In both cases, sidewalk "gaps" have resulted. The City is then faced with filling in these gaps. These sidewalk projects can provide the City with the opportunity to connect larger pedestrian networks, existing developments with one another and other traffic generators at relatively low cost. Annually, pedestrian traffic generators and sidewalk gaps are identified and continue to be a priority and are included in this plan.

In 2013, sidewalks included in the CIP have been evaluated using assigned point values based on several variables. In 2024, the revised Master Plan included a Non-Motorized Plan that updates the priorities used to plan for non-motorized transportation. The Master Plan references the following high need priorities:

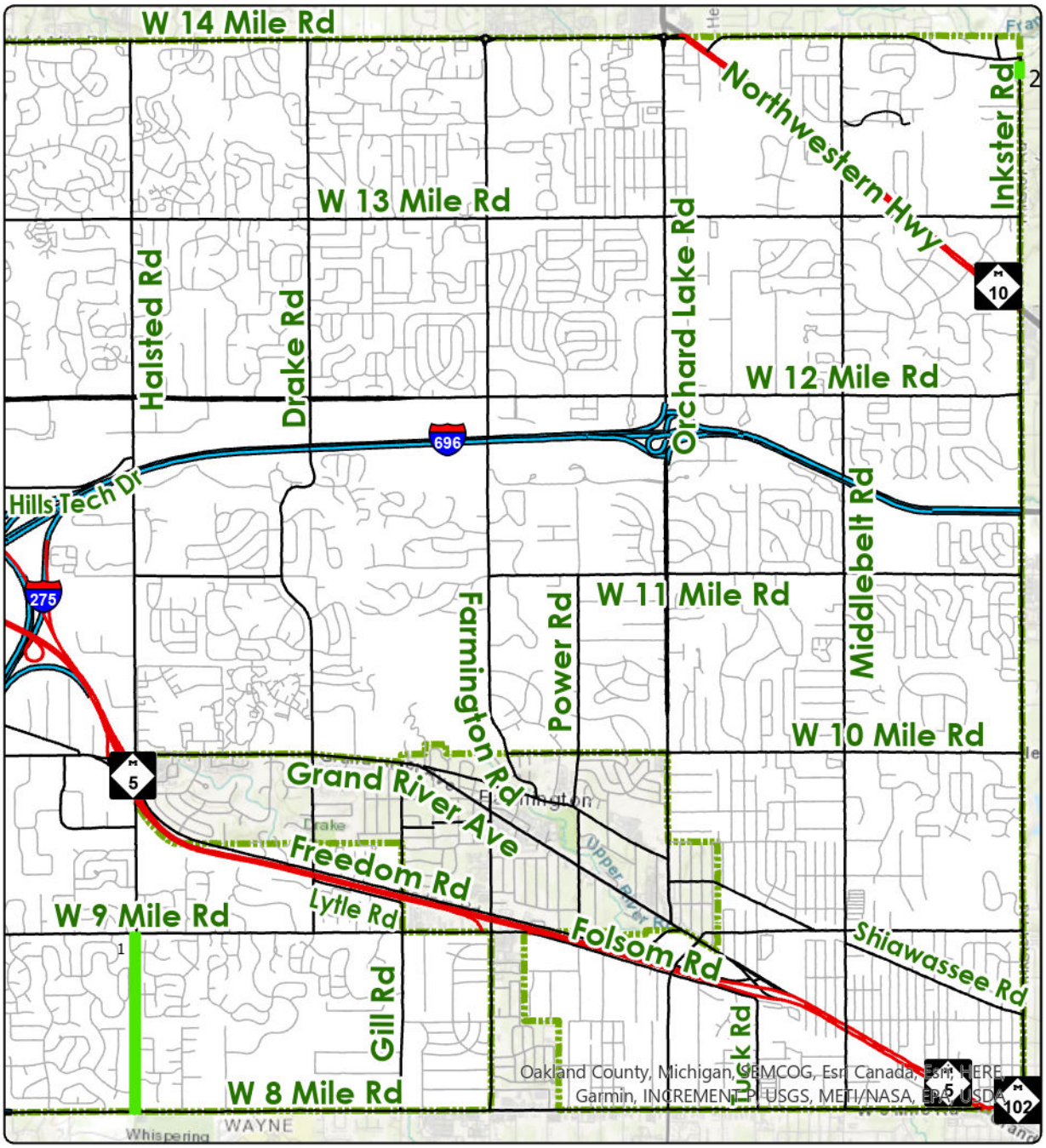
- Safety for children walking or biking to school
- Crossing safety at major intersections
- Increasing mobility options near underserved neighborhoods
- Look for inter Community opportunities to improve cross town connections (North to South and East to West)
- Continue to work with neighboring communities to develop the design and implementation plans for the Nine Mile Road Corridor non-motorized pathways.

The City is currently transitioning to incorporate priorities laid out in the 2024 Master Plan. Additional targeted projects will be added each year reflecting priority improvements identified in the Master Plan.

A high priority of the Grand River Corridor Improvement Authority is to better integrate the Rouge River into economic development projects along the corridor and to develop a shared-use pathway along the river that better connects corridor users. The conceptual vision for the pathway is a 6 – 8 feet wide path that traverses approximately 10,000 lineal feet of river frontage with markers placed every ¼ mile and an interpretive kiosk at each end of the trail.

The following Bike Path System Map identifies all existing sidewalk infrastructure and includes a proposed bike path system for the City.
See the following table for proposed sidewalk/ pathway projects including locations and funding schedule.

2025/2026 Sidewalk Projects



Note: This map is a planning document and is subject to change. The priority level of a project may move up or down based on funding.

1. **Halsted, 8 Mile Road to 9 Mile Road**
2. **Scottsdale North, to South of 14 Mile Road**

FARMINGTON HILLS Michigan

Legend
- City Project

SOURCE: City of Farmington Hills GIS, 2020
Oakland County GIS, 2020

TRANSPORTATION

Major thoroughfares can be improved by providing greater capacity and efficiency. This is accomplished by improving intersections and roadway sections. Intersections are improved by the installation of through and turning lanes, curbs and realignments. Many of the major two-lane and three-lane thoroughfares are over capacity, creating lengthy backups of traffic especially at peak hours. These roadway sections are considered for expansion in order to minimize congestion and improve turning movements. In addition, major road repair is an essential component of a well-managed transportation system. Major road repairs usually involve base reconstruction and resurfacing.

Local roads also require attention. Recent paving and resurfacing programs have done much to reduce maintenance costs and improve the local road system. The success of these programs is in large part due to the CIP process and residents' support of financing local road improvements through special assessment districts. Once paved, local roads require on-going scheduled maintenance to ensure their longevity.

The gas and weight tax, commonly referred to as Act 51 road funds, is the primary source of revenue collected by the State. Those funds have not been able to keep pace with the demands for improvement to an aging road system. Costs for labor, material, and equipment to improve roads have increased. Budget constraints at the State and County levels have shifted a disproportionate financial burden on municipalities and as a result, a road millage was put on the ballot and approved by the residents of Farmington Hills during the November 2014 Election. This funding is essential to maintain and improve the quality of the City road network.

Major Roads

The Department of Public Services has developed a list of major road and intersection improvements that are recommended to satisfy the needs of the motoring public in Farmington Hills. The City has also identified safety improvements that must be completed to satisfy issues of poor alignment, varying roadway widths, and non-continuous pavements.

The list of major road projects was prepared using data received from various sources. The data includes projects previously planned but not constructed, resident input, pavement evaluation (PASER Rating) asset management principles, traffic counts along major roads, plans by the Road Commission for Oakland County, and ongoing plans for major road and freeway improvements which are still under consideration. In general, the projects outlined in this year's CIP provide the following benefits to the community:

- Assure that roadways provide improved efficiency and safety for motorists.
- Assure that intersections minimize traffic congestion and allow for smooth handling of turning movements.
- Minimize lengthy backups of traffic especially during the peak hours of the day.

- Make traveling more convenient and safer by providing paved roadways in place of gravel roadways.
- Maintain the natural features when possible while improving the roadways.
- Integrate Road Commission for Oakland County plans with City plans to have a coordinated and efficient street system.
- Correct intersection alignment for improved traffic flow and possible reduction in traffic accidents.
- Reduce the environmental impact of dust and noise pollution.
- Reduce road maintenance cost.
- Use best practices and asset management principles to increase the life of existing pavements and improve the condition of the network as a whole.
- Improve access to freeways by examining the effectiveness of the interchanges.
- Coordinate road improvements with the City's Master Plan for Future Land Use.

Local Roads

Historically, the residents have initiated local road improvements. Many miles of local roads have been reconstructed through the special assessment district process. The success of this approach was dependent upon the residents initiating a paving project in accordance with City Charter. Typically, the City participated with up to 20% of the paving cost (per City Charter).

Based on the local road millage that was approved in November of 2018, funds will now be available for reconstruction as well as additional preventative maintenance and pavement preservation treatments. Approval of the local road millage eliminates the need for the special assessment process and allows the roads to be assessed and programmed for treatments in a cost-effective manner at the appropriate point in its life cycle.

PROPOSED TRANSPORTATION PROJECTS - MAJOR ROAD

1. **Tri-Party TBD ($690,000)**

   The Tri-Party program provides one-third funding from each of the following: City, Road Commission for Oakland County and Oakland County Board of Commissioners. Tri-party funding has recently been increased from ± $150,000/year to ± $300,000/year. This funding is sometimes allowed to accrue over several years to help fund a larger project. Requirements are that the work be on a County road. Most recently the City utilized existing funds for part of the City's contribution to the Orchard Lake Road project from 13 Mile Road to 14 Mile Road. Future participation in Tri-Party projects may include Haggerty drainage improvements near 10 Mile Road and the City's cost share for the rehabilitation of Orchard Lake Road between I-696 and 13 Mile Road as well as along the 12 Mile Road corridor

2. **Major Road Capital Preventative Maintenance Projects ($6,000,000)**

   These projects are intended to provide a asphalt overlay or full depth concrete slab and joint repair on a major roadway to cost effectively extend its useful life. It may include a milling off the surface for asphalt roads and some base repair. The following roads are candidate projects in the upcoming years.

   - Hills Tech Drive
   - Independence Street, Middlebelt Road to Ontaga,
   - Drake Road, Eleven Mile Road to Twelve Mile Road,
   - Gill/Lytle, Drake Road to Nine Mile Road,
   - Halsted, Ten Mile Road to M-5 Ramp,

3. **Industrial/Commercial Road Rehabilitation ($6,600,000)**

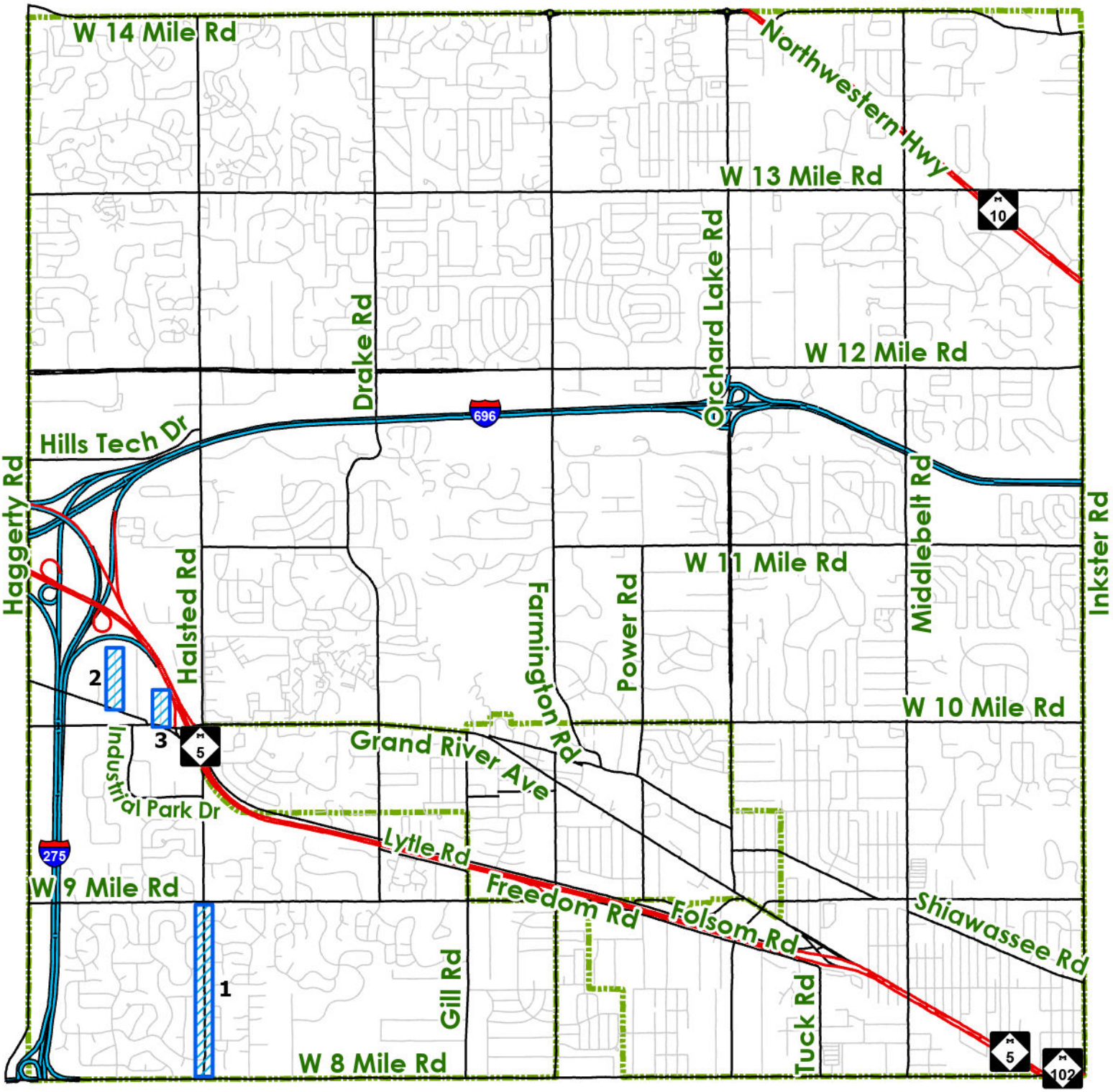
   Industrial roads are prioritized based on the PASER ratings system to determine a cost-effective strategy for rehabilitation or reconstruction. These prioritized ratings are reviewed and updated every two years.

   - 2025/2026, Hallwood/Hallwood Court, ($1,300,000)
   - 2026/2027, Farmington Grand River Industrial Park/Crestview Court, ($1,000,000)
   - 2027/2028, Orchards Corporation Center/Stansbury, ($1,600,000)
   - 2028/2029, Farmington Research & Industrial Center Sub No 1/Indoplex, ($2,700,000)

4. **Signal Modernization (See Transportation / Major Road Spread Sheet,($1,350,000)**

   Modernization of the Heritage Park traffic signal on Farmington Road between Ten Mile Road and Eleven Mile Road. This project includes construction of new box spans, pedestrian signal upgrades, upgrades for ADA compliance, and installation of new controllers and electrical components. The City has sole ownership of 39 traffic signals and shared ownership of 43 additional traffic signals. The City annually reviews the traffic signal network to identify cost-effective strategies to modernize and upgrade the existing infrastructure and improve safety.

2025/2026 Major Road Projects



1. Halsted Road - 8 Mile to 9 Mile
2. North Industrial Drive
3. Sinacola Court

Note: This map is a planning document and is subject to change. The priority level of a project may move up or down based on funding.

*Projects are referencing CIP Tables.

SOURCE: City of Farmington Hills GIS, 2024
Oakland County GIS, 2024

4. **5-14. Major Road Reconstruction, (See Major Road Spreadsheet)**

Major roads are PASER rated and prioritized for reconstruction and rehabilitation in the five-year Capital Plan. These prioritized ratings are reviewed on a regular basis. The updated list of Major Road considerations is on a 5-year projection.

PROPOSED TRANSPORTATION PROJECTS – LOCAL ROADS

1. Gravel to Pave Conversion (Local Roads)

The City currently has approximately 20 miles of local gravel roads. As part of the recently approved road millage there will be funds programmed annually to fund a project to convert an existing local gravel roadway to pavement. These projects will be initiated through a petitioning effort by the residents of the roadway in question.

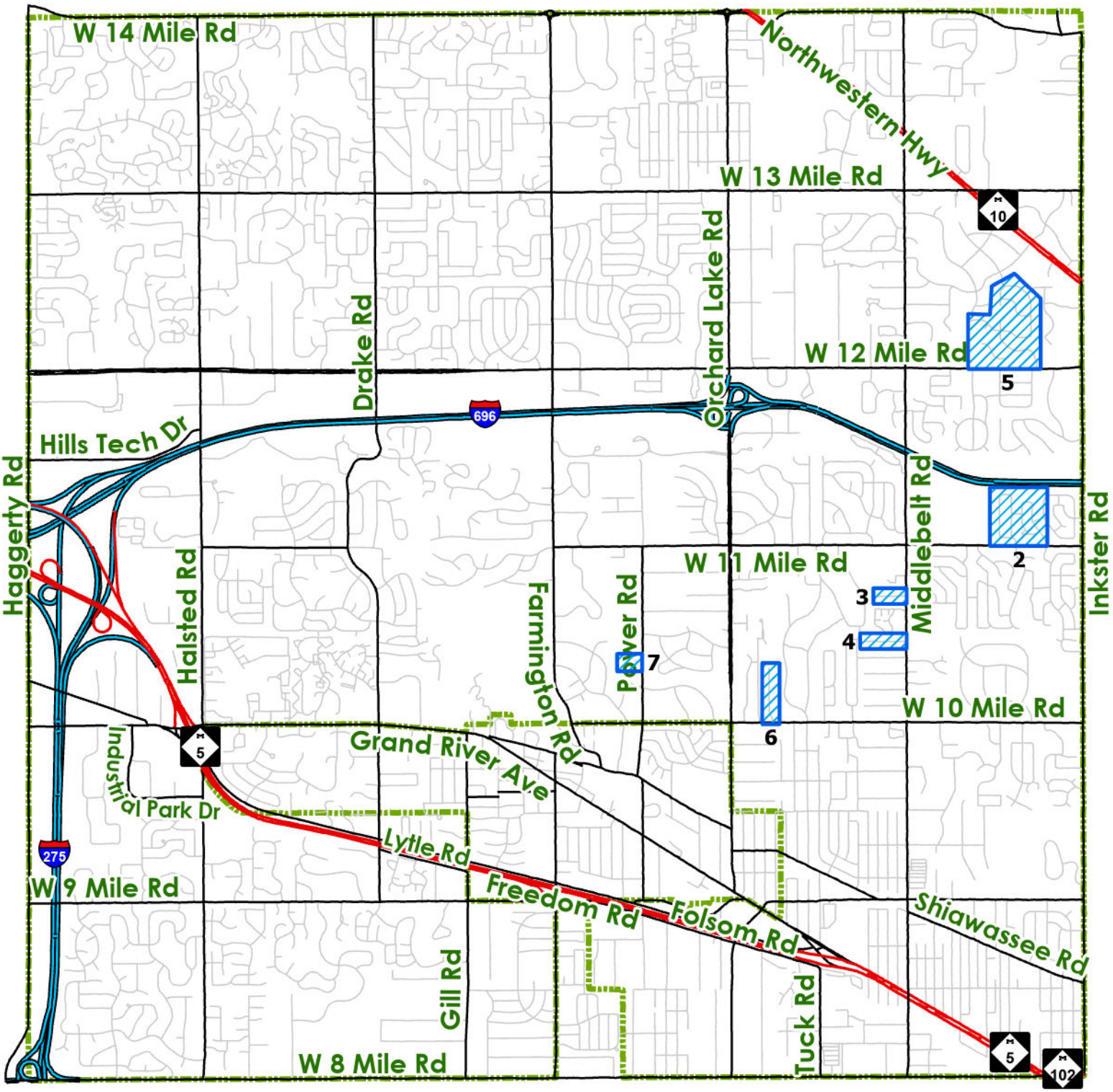
2. Local Road Capital Preventative Maintenance Projects

These projects are intended to provide a nonstructural, thin overlay on a local roadway to cost effectively extend its useful life. It may include a milling off the surface and some base repair.

3.-16. Local Road Reconstruction, (See Local Road spreadsheet)

Local road systems are PASER rated and prioritized for reconstruction and rehabilitation in the five-year Capital Plan. These prioritized ratings are reviewed on a regular basis. The updated list of Local Road considerations is on a 5-year projection. In 2018 the residents of Farmington Hills approved a local road millage that replaces the Special Assessment process and funds reconstruction of local roadway.

2025/2026 Local Road Projects



1. Local Road Capital Preventative Maintenance Projects - To Be Determined
2. Farm Meadows/Camelot Courts Subdivisions - Phase 1
3. Country Corner (Gramercy Ct.)
4. Edgehill Avenue
5. Woodcreek Hills Subdivision
6. Pinebrook Estates (Elmhurst Ave.)
7. Shady Ridge Drive Gravel Conversion

Note: This map is a planning document and is subject to change. The priority level of a project may move up or down based on funding.

*Projects are referencing CIP Tables.

SOURCE: City of Farmington Hills GIS, 2023
Oakland County GIS, 2023

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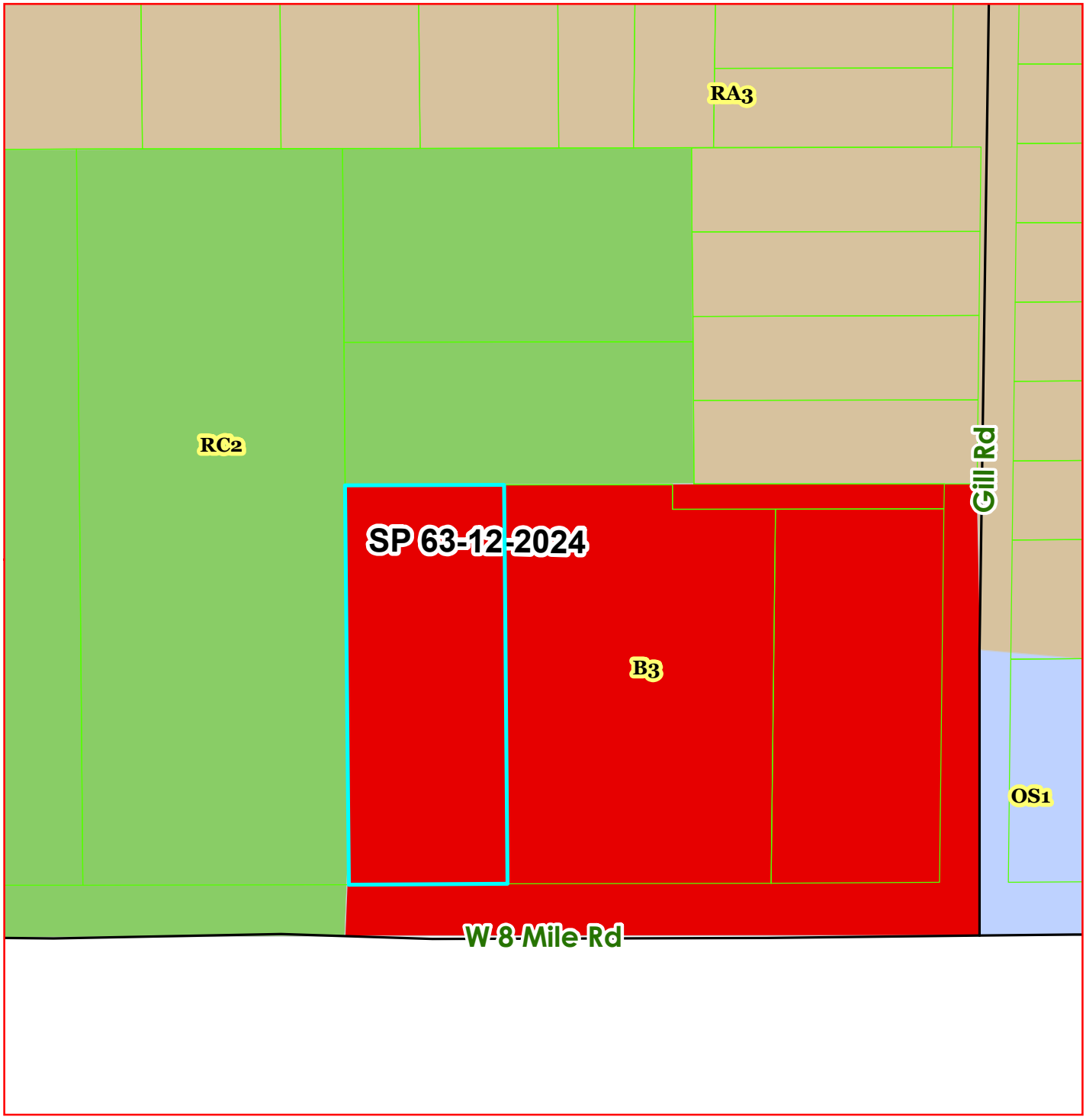
SP 63-12-2024 B-3
34650 Eight Mile, 33-376-040,
Renovation of vehicle wash



Tax parcel

Zoning Districts

RA-3 One Family Residential District

RC-2 Multiple Family Residential

Zoning Districts

B-3 General Business District

OS-1 Office Service District

N

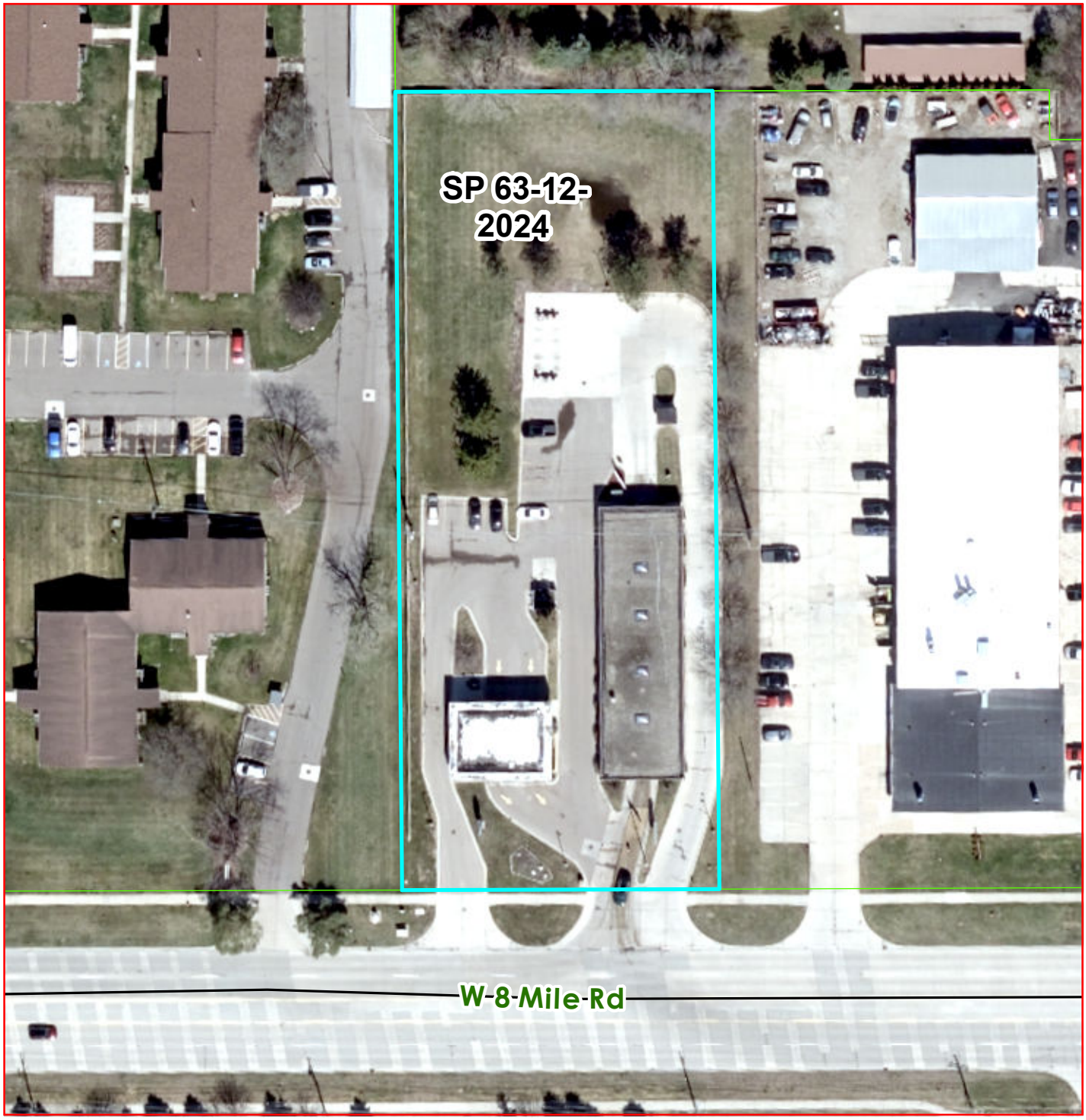
0 150

FEET

SOURCE: City of Farmington Hills, 2024
Oakland County GIS, 2024

FARMINGTON HILLS Michigan

SP 63-12-2024 B-3
34650 Eight Mile, 33-376-040,
Renovation of vehicle wash



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FEET

SOURCE: City of Farmington Hills, 2024
Oakland County GIS, 2024

FARMINGTON HILLS Michigan

☐ Tax parcel

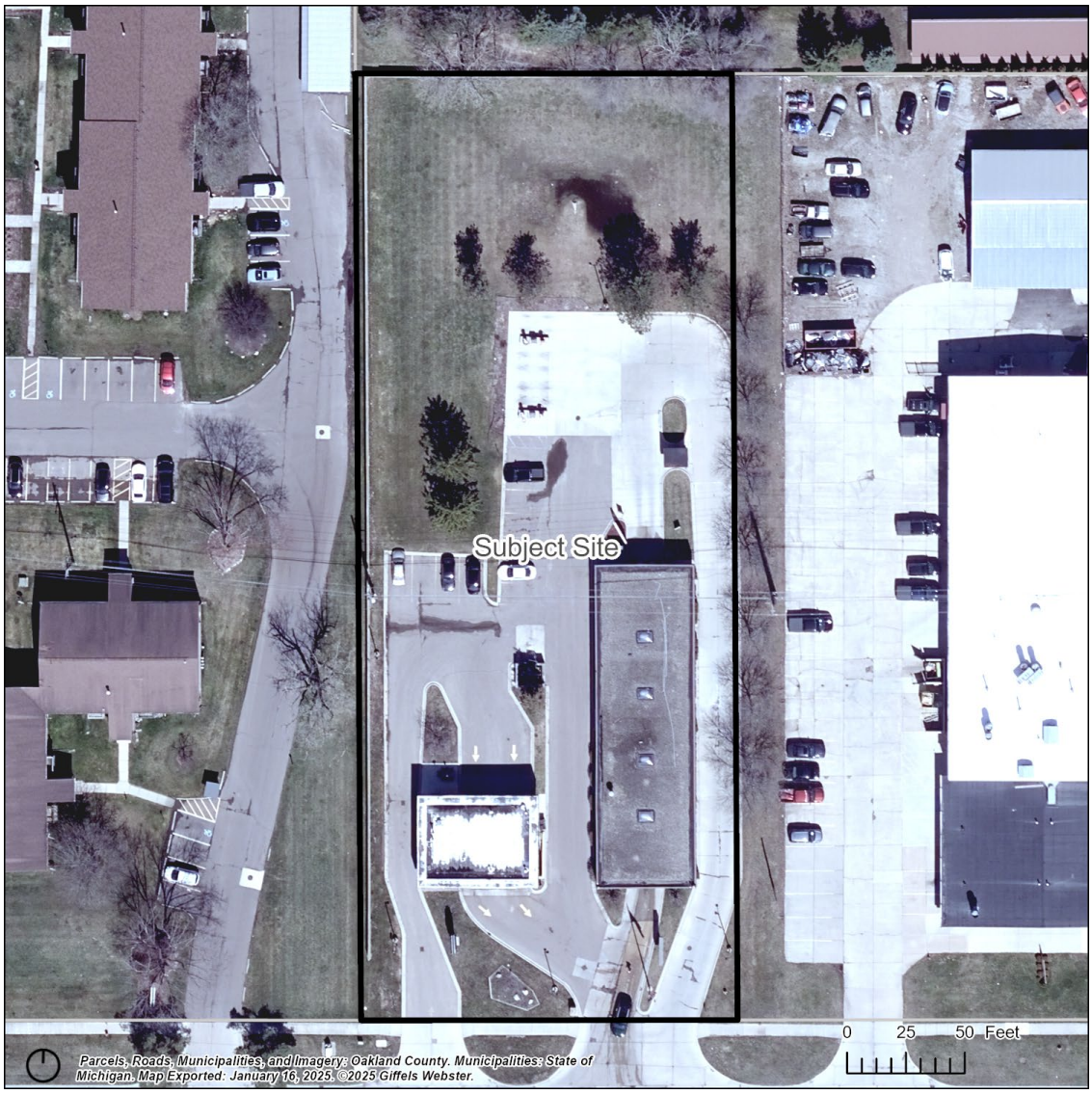
January 16, 2025

Farmington Hills Planning Commission
31555 W 11 Mile Rd
Farmington Hills, MI 48336

Site Plan Review

Case:	SP63-12-24
Site:	34650 W 8 Mile Rd (22-23-33-376-040)
Applicant:	Krieger Klatt Architects
Plan Date:	December 18, 2024
Zoning:	B-3 General Business

We have completed a review of the application for site plan approval and a summary of our findings is below. Items in **bold** require specific action. Items in *italics* can be addressed administratively.



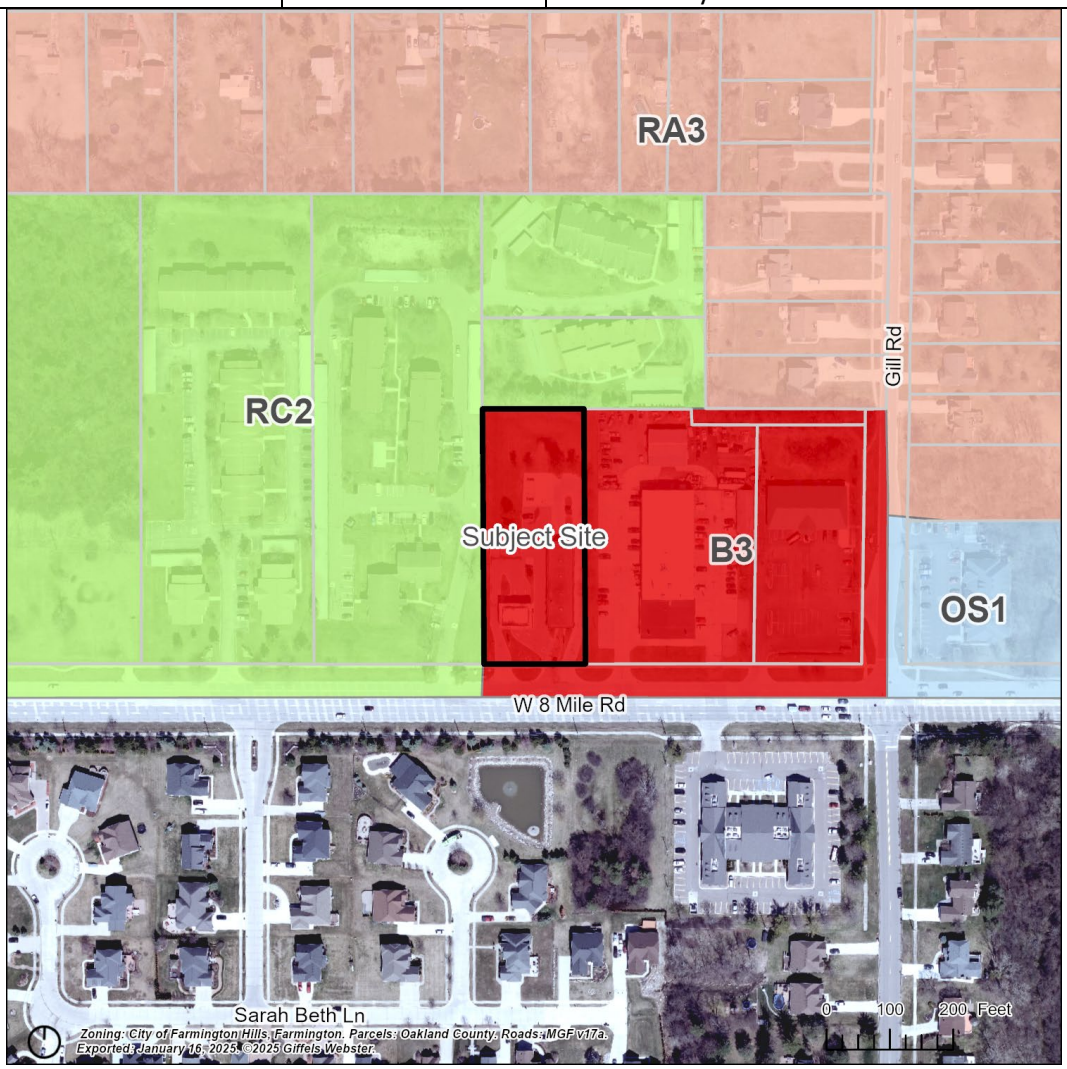
SUMMARY OF FINDINGS

Summary of Proposal. The applicant proposes to renovate an existing car wash.

Existing Conditions

1. **Zoning.** The site is 1.48 acres and zoned B-3.
2. **Existing site.** The site is currently developed with a car wash and a quick oil change establishment.
3. **Adjacent properties.**

Direction	Zoning	Land Use
North	RC-2	Multi-Family
South (Livonia)	R-4	Subdivision detention pond
East	B-3	Collision shop
West	RC-2	Multi-Family



4. **Existing site configuration and access.** The site is currently accessed directly from Eight Mile Road via two driveways—one is an entrance primarily for the oil change business, while the other is bifurcated with an entrance for the car wash and a joint exit for the oil change business and the car wash.

Site Plan & Use:

1. **Use.** A car wash is permitted as a special land use in the B-3 district, subject to PC approval and the standards of Section 4.40 (see below).
2. **Proposed site configuration and access.** The plans maintain the existing access to Eight Mile Road, and make several changes in the site's interior to better channelize vehicles waiting for the wash tunnel. The two existing vacuum units are removed and replaced with seven new units, each serving an individual vacuum space—the older units each had two vacuums serving the spaces on either side.
3. **Dimensional Standards (B-3 district).** Setbacks are all existing and not proposed to change. See footnotes after the table for remarks on compliance issues.

Item	Required	Proposed/Comments
Standards of Sec. 34-3.1.25.E		
Min. lot size	None specified	1.48 Acres
Min. lot width	None specified	160 ft
Front Setback (south)	25 ft	59.64 ft
Rear Setback (north)	20 ft	159+ ft
Side Setback (east)	10 ft	22.97 ft
Side Setback (west)	10 ft	24.36 ft (setback to oil change)
Building Height	50 feet	22.5 ft
Front Yard Open Space	50%	Approx. 52%
Other dimensional standards		
Yard landscaping (34-3.5.2.A)	For all uses except one-family detached residential units, landscaping of all yards abutting a street shall be provided	See landscaping comments below.
Minimum parking setback (34-3.5.2.J)	10 feet	Compliant
Loading space (34-3.5.2.N)	10 feet of loading space per front foot of building = 260 sq ft	*Applicant shall describe location of required loading*
Rooftop equipment (34-3.5.2.U.)	Rooftop equipment shall be screened in accordance with Section 34-5.17.	*Screened by existing parapet; new parapet will continue to screen*
Landscape area abutting street or freeway (34-3.5.2.V.)	A landscaped area not less than ten (10) feet deep	Compliant

4. **B-3 Required Conditions (34-3.11)**
   a. **All Uses shall also be subject to the conditions of sections 34-3.22 on marginal access drives, provided however, that: (See review of marginal access drive below).**
      i. The edge of the marginal access drive shall be located 10 feet from the future street ROW.
      ii. The front yard setback shall be a minimum of 60 feet from the future right-of-way.
      iii. The front yard open space may be reduced to twenty-five percent of the required 60 foot setback area.

This area does not have a marginal access drive; the use to the west is residential. The PC may consider whether a marginal access drive to the east is warranted; such a drive would require significant redesign of the subject site; the neighboring site does not have a ready connection point.

b. All uses permitted shall require review and approval of the site plan by the PC.

5. **Marginal Access Drive. (34-3.22).** The applicant provides a marginal access drive between this site and the neighboring sites to the south, east, and north. *See note above in item 4.*

6. **Pedestrian Access. (34-3.24).** **Pedestrian access is not provided**.

7. **Use Standards for Vehicle Washes (34-4.40).**

Required	Proposed/Comments
The minimum lot area for vehicle washes shall be fifteen-thousand (15,000) square feet	compliant
All buildings, vehicular stacking space, vacuuming or other outside use area, except employee parking, shall be located no closer than one-hundred (100) feet from a residentially-zoned and/or -used property unless such property is separated from the vehicle wash use by a major or secondary thoroughfare	**Vacuums approx. 75 ft from RC-2**; stacking and building compliant
Vehicular access drives shall be located no closer than two-hundred (200) feet from the intersection of any two (2) streets	compliant
One traffic lane shall be provided as means of exiting the vehicle wash queue without having to enter the vehicle wash building	Exit point provided
All buildings shall be oriented such that bay doors and/or open bays face away from any public roads and/or residentially-zoned and/or -used property unless screened from such roads and/or property by a building	Not compliant; existing door faces Eight Mile Road. This is an existing nonconformity of the building
Vacuuming and/or drying areas may be located outside the building but only within a rear yard	compliant
All vehicles required to wait for access to the vehicle wash shall be provided space outside of any public right-of-way	compliant
All washing facilities shall be within a completely enclosed building	compliant

8. **Off Street Parking Requirements (34-5.2)**

Requirement	Calculations	Provided
Auto wash (automatic)- One for each employee	3 employees	3 spaces
Barrier-Free Spaces	1 space (van accessible)	1 space
Stacking	3 vehicles in advance of the washing bay and 2 vehicles beyond the washing bay for drying	Compliant

Other drive -through standards	Drive-through lanes located adjacent to a street shall be buffered by a minimum 10 foot wide landscaped planting adjacent to the right-of-way as specified in 34-5.14.	See landscaping standards below.
	Drive-through lanes shall have a minimum centerline turning radius of twenty-five (25) feet.	compliant
	Drive-through lanes shall be striped, marked, or otherwise distinctively delineated	compliant

9. **Off-street parking dimensions (34-5.3.3.A & B.).**

Item	Required	Proposed/Comments
Maneuvering lane width	20 ft.	24’
Parking space width	9 ft.	9 ft
	Note: vacuum spaces proposed at 12’ width	
Parking space length	20 ft. for minimum required (May include a maximum two-foot unobstructed vehicle overhang area at the front of the parking space.) 17 ft. for additional parking (May include a maximum one-foot unobstructed vehicle overhang area at the front of the parking space)	19 ft with overhang
Screening	The off-street parking lot shall be provided with screening as required by Section 34-5.15	See landscaping comments below
Dead-End Aisles	Dead-end off-street parking aisles are discouraged, especially in connection with business uses. Such aisles should be no more than eight (8) spaces deep and should, in any case, be used only when there is no reasonable alternative. If more than eight (8) spaces deep, the layout shall provide a means for vehicles to turn around if all spaces are occupied.	Including the vacuum spaces, the aisle includes more than 8 spaces. However, two-way access is provided to allow a means for turning around.

10. **Off-Street Loading (34-5.4).** 10 SF of required loading per each foot of building frontage (37’). **The applicant shall identify the required 370 square feet of loading space on the site.**

11. **Acceleration-Deceleration-Passing Lanes (34-5.6.2.)** Driveways providing ingress and egress to all three-lane paved major or secondary thoroughfares shall be provided with paved acceleration and

deceleration lanes. If in the opinion of the director of public services no useful purpose would be served or if unusual difficulty would be encountered by reason of grade changes, intersections, bridges, or other land restrictions, the director may waive or modify the requirements of this section. *We defer to engineering to address this issue.*

12. **Site Landscaping (34-5.14).** Landscaping and screening is generally compliant—new trees are concentrated between the residential property line and the vacuum spaces, with a mix of new and existing evergreens and canopy trees.

Item	**Required**			**Proposed/Comments**
Minimum distance from the property line (34-5.14.C.ii)	4 ft from the property line for trees and large shrubs			Compliant
Minimum parking lot island area	Minimum of 180 square feet; 3 feet minimum radius at the trunk of the tree			N/A
Cost estimate	Not required			--
Minimum size and spacing requirements at planting (34-5.14.F)	**Size**	**Center to center distance (max)**		
	(Height/width)	**groupings**	**rows**	
• Evergreen Trees	8 ft. height	20 ft.	12 ft.	N/A
• Narrow Evergreen Trees	5 ft. height	10 ft.	5 ft.	N/A
• Large Shrubs	30 in. height	10 ft.	5 ft.	N/A
• Small Shrubs	24 in. width	4 ft.	4 ft.	N/A
• Large Deciduous	3 in. caliper	30 ft.	-	Compliant
• Small deciduous trees	2 in. caliper	15 ft.	-	Compliant
• Hedge shrubs	24 in. height	3 ft.	3 ft.	N/A
Canopy Trees	Shall be large deciduous. PC may permit large evergreens			14 large deciduous trees provided
Minimum number of parking lot trees (34-5.14.4.C)	1 per every 2,800 square feet of paved surface area: 26,700 SF of Pavement = 10 trees			10 existing
Parking lot screening from public thoroughfare (34-5.14.5)	A planted hedge of small shrubs, or A masonry wall or berm of 2 feet high			No hedge is provided; however, parking is located in the rear.
Wall or Berm (34-5.15)	Required when adjacent residential			6-foot concrete wall provided along residential property line.
Tree replacement (34-5.18)	1 required			1 existing tree removed; 1 replacement provided

13. **Lighting (Section 34-5.16).**

i. **Operation hours (34-5.16.3.B.v.).** *The following notes must be added to or addressed on the plan; it is unclear from the existing plans whether these standards are met.*

- Exterior lighting shall not operate during daylight hours.
- Building façade and landscape lighting shall be turned off between midnight or one hour after close of business, whichever is later, and 6:00am or opening, whichever is earlier.
- All other exterior lighting shall be reduced to no greater than 70% of maximum from midnight or one hour after close of business, whichever is later, and 6:00am or opening, whichever is earlier.
- Use of occupancy sensors to turn off or reduce lighting within 15 minutes of zero occupancy is recommended.

a. Illumination Levels. The fixtures appear to meet cutoff requirements.

Item	Required	Proposed/Comments
Maximum height (34-5.16.3.A.)	30 feet maximum	20 ft.
Building Lighting (34-5.16.3.A. iii.)	Relevant building elevation drawings showing all fixtures and the portions of the walls to be illuminated	Building mounted fixtures not proposed
Average to minimum illumination ratio (34-5.16.3.C)	4:1	1.9/3:1
Maximum illumination at the property line	0.3 fc	**Not compliant on eastern property line**
Illumination Levels-Hardscape areas (e.g., parking areas, sidewalks)	2.5 lumens per sq ft of hardscape area	Unclear from information provided
Illumination Levels Building Entrances – within 20 ft of door	2,000 lumens per door	Appears to be no doorway lighting; man doors not accessed by public

14. **Pedestrian Connection (Sec. 34-5.19).** **A pedestrian connection to the Eight Mile sidewalk is not provided.**

We are available to answer questions.

Respectfully,
Giffels Webster

Joe Tangari, AICP
Principal Planner

Julia Upfal, AICP
Senior Planner

DEPARTMENT OF PUBLIC SERVICES
JACOB RUSHLOW, P.E., DIRECTOR

INTEROFFICE CORRESPONDENCE

DATE: January 24, 2025

TO: Eric Perdonik, Planning Department

FROM: James Cubera, City Engineer

SUBJECT: Zax Car Wash Addition
PJ # 33-25-56
34650 Eight Mile Road
22-23-33-376-040

This office has performed a preliminary review of the above referenced revised site plan submitted to the Planning Department on December 18, 2024 and received by the Engineering Division on January 2, 2025. Our preliminary comments are as follows:

1. An 8" watermain exists along the north side of 8 Mile Road across the frontage of this site. In addition, an 8" water main exists along the east side of this property from Eight Mile Rd up to the building frontage and then running westward near the building frontage acting as what appears to be a hydrant line. The Eight Mile line is available for additional service if needed.

2. An 18" County Sanitary Sewer Interceptor exists along the north side of 8 Mile Road across the frontage of this site. It appears to have a lead extending to the existing building. This existing sewer lead must be televised in advance of construction review and any deficiencies or infiltration/inflow issues will need to be corrected.

3. A public sidewalk currently exists along the Eight Mile Road frontage. Therefore, no additional sidewalk requirements will be in effect.

4. Although a bypass lane for the car wash is provided such that a vehicle may exit without entering the car wash tunnel, there is a significant stacking length of vehicles without the ability to leave the line.

5. The plan currently identifies three existing curb cuts to service this site. The layout seems confusing and non-standard. The proponent needs to consider consolidating for one inbound and one outbound access reworking the onsite layout and limiting their width. A traffic analysis needs to be provided confirming how this can be accomplished.

6. Storm water detention and discharge restriction appears to be provided for this site as a detention pond is identified at the north end of the property. As part of this new development, the proponent must as-built the detention and discharge system in its entirety and confirm that it is operational and meets the original design volume and discharge restriction that was provided when originally built. If it does not, the proponent will be obligated to bring it in to conformance. Additionally, storm water quality improvements must be provided in accordance with the City's standards and it should be noted that the City recently adopted the WRC storm water standards and these must be followed for this site and the site must also meet these requirements.

7. Attached are comments from our Environmental Engineer, Tyler Sonoga. The proponent needs to address these items. Any questions regarding these comments should be referred to Tyler at 248-871-2533.

8. The plans identify a 120' right of way on Eight Mile Road. No additional ROW is necessary in order to conform with the City's master right of way plan.

9. It is suggested that the proponent and their engineer meet with the City Engineering staff in person or virtually to discuss this site in further detail.

FIRE
FARMINGTON HILLS

INTEROFFICE CORRESPONDENCE

DATE: January 8, 2025

TO: Planning Commission

FROM: Jason Baloga, Fire Marshal

SUBJECT: Revised Site Plan 63-12-2024 (34650 Eight Mile)

The Fire Department has no objection to approval of this site contingent upon compliance with the following:

The pre-existing site does not meet Chapter 12 Section 12-11. Of the City Ordinance-Fire department site plan review and design standards. Please set up a meeting with the Fire and Engineering Departments to discuss what site improvements can occur related to Section 12-11:

1. Site must be designed to accommodate fire apparatus with a fifty-foot turning radius; access roads do not appear wide enough to allow Fire Department access.

2. Minimum clearance between finished roadway surface and any overhead obstruction shall be 13'16".

3. Paved access for Fire Department apparatus shall be provided on at least 2 sides of all buildings or 50% of the perimeter.

4. Site does not appear to meet Section 12-11(2) *hydrant*; site appears to be lacking hydrant coverage.

5. Section 12-11(4) *Alternate protection*; in some cases, an owner or lessee may find it impractical to comply with the minimum site plan review and design standards. Proponent shall discuss Alternate protection with the Fire and Engineering Departments.

Jason Baloga, Fire Marshal

JB/al

31455 West Eleven Mile Road • Farmington Hills MI 48336
Administration • 248.871.2800 Phone 248.871.2801 Fax Fire Prevention • 248.871.2820 Phone

Zax Car Wash - Farmington Hills

Exterior Remodel
34650 W 8 Mile Rd
Farmington Hills, Mi 48335

Owner

Ammori Equity Partners
199 Pierce St.
Birmingham, MI 48009
P. 248.940.5940

Architect

Krieger | Klatt Architects Inc.
400 E. Lincoln Ave. Ste. A
Royal Oak, MI 48067
P.248.414.9270
F.248.414.9275

Civil Engineer:

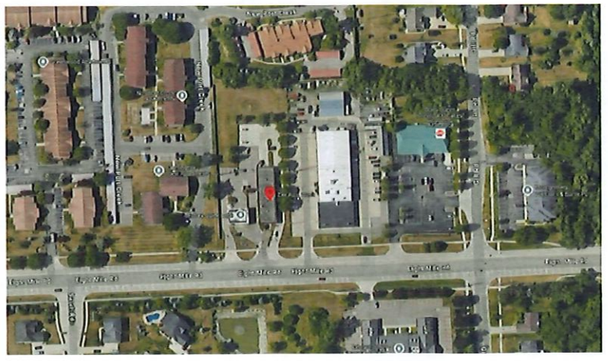
Atwell LLC
2 Towne Square #700,
Southfield, MI 48076
P. 586 786

Building Code Notes:

All work is to comply with 2015 **Michigan** Rehabilitation Code, 2021 **Michigan** Mechanical Code, 2021 **Michigan** Electrical Code, 2021 **Michigan** Plumbing Code

Exterior Rendering

North
Location Map
NTS



North
Aerial Map
NTS

Sheet Index	
Sheet Number	Sheet Name
General	
G.001	Cover Sheet
Civil	
ALTA	Surveyor Certificate
1 of 1	Boundary and Topographic Survey
C01	Cover
C02	Demolition Plan
C03	Layout Plan
C04	Preliminary Utility, Grading, & Stormwater Plan
1	Photometric Layout
L-1	Landscape Plan
L-2	Landscape Details
Architectural	
A.100	Existing Floor Plan
A.101	First Floor Plan
A.200	Exterior Elevations
A.201	Exterior Elevations
R.300	Exterior Renderings

REV SP 63. 12. 2024
Received
FEB 19 2025
City of Farmington Hills
Planning Dept.

KRIEGER KLATT ARCHITECTS
400 E. Lincoln Ave. | Royal Oak, MI 48067
P: 248.414.9270 F: 248.414.9275
www.kriegerklatt.com

Client:
Ammori Equity Partners
199 Pierce St. Birmingham MI 48009

Project:
Zax Auto Wash - Farmington Hills
34650 W. 8 Mile Rd
Farmington Hills, MI 48335

Issued	Description	By
2024/12/18	SPA Submittal	
2024/02/2025	Rev Per Comments	

PRELIMINARY NOT FOR CONSTRUCTION

Seal:

Note:
Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field.

North Arrow:

Sheet Title:
Cover Sheet

Project Number:
24-079

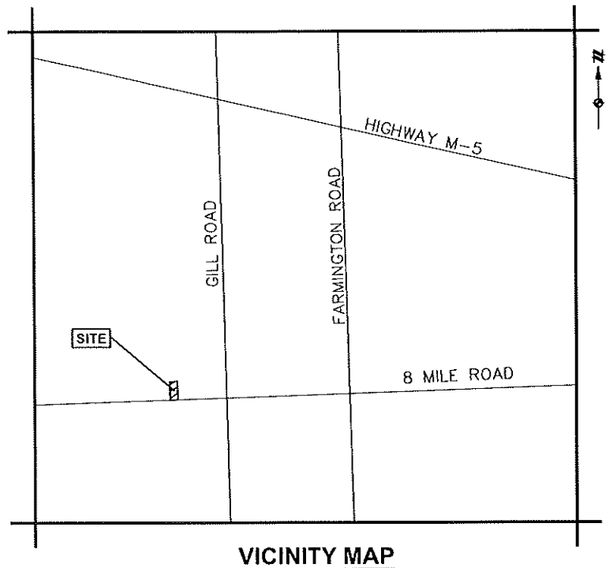
Scale:

Sheet Number:
G.001

ZAX AUTO WASH

34560 W. 8 MILE ROAD
FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN
PARCEL ID: 22-23-33-376-040

SITE PLANS



VICINITY MAP
NOT TO SCALE

DEVELOPMENT TEAM

OWNER/DEVELOPER
MCW FARMINGTON HILLS, LLC
199 PIERCE STREET BIRMINGHAM MI 48009
CONTACT: BRENDAN AMMORI
PHONE - (248) 940-5940

CIVIL ENGINEER
ATWELL, LLC.
12745 23 MILE ROAD
SHELBY TWP., MI 48315
CONTACT: JAMIE ANTONIEWICZ
JANTONIEWICZ@ATWELL.COM
PHONE: 586.786.9800

WATER & SEWER
FARMINGTON HILLS DEPARTMENT OF PUBLIC SERVICES
31555 ELEVEN MILE ROAD
FARMINGTON HILLS, MI 48336
PHONE: 248.871.2530

RIGHT OF WAY
ROAD COMMISSION FOR OAKLAND COUNTY
31001 LAHSER ROAD
BEVERLY HILLS, MI 48025
DCSMAIL@RCOC.ORG
PHONE: 877.858.4804

ELECTRIC
DTE ENERGY
ONE ENERGY PLAZA
DETROIT, MI 48226
PHONE: 800.477.4747

ARCHITECT
KRIEGER KLATT ARCHITECTS, INC.
2120 E. 11 MILE ROAD
ROYAL OAK, MI 48067
CONTACT: JEFF KLATT
JEFF@KRIEGERKLATT.COM
PHONE: 248-414-9270

MUNICIPALITY/PLANNER
CITY OF FARMINGTON HILLS
31555 W. ELEVEN MILE ROAD
FARMINGTON HILLS, MI 48336-1103
PHONE: 248.871.2400

STORMWATER
CITY OF FARMINGTON HILLS
31555 W. ELEVEN MILE ROAD
FARMINGTON HILLS, MI 48336-1103
PHONE: 248.871.2560

SOIL EROSION
OAKLAND COUNTY WRC
1200 N. TELEGRAPH ROAD
PONTIAC, MI 48341
SOILEROSION@OAKGOV.COM
PHONE: 248.858.2054

GAS
CONSUMERS ENERGY
ONE ENERGY PLAZA
JACKSON, MI 49201-2276
PHONE: 800.477.5050

LEGAL DESCRIPTION

EXHIBIT "A" DESCRIPTION PER ALTA COMMITMENT FOR TITLE INSURANCE ISSUED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, COMMITMENT NO.: 2-706547, EFFECTIVE DATE: NOVEMBER 22, 2023:

PART OF THE SOUTHWEST 1/4 OF SECTION 33, TOWN 1 NORTH, RANGE 9 EAST, FARMINGTON HILL, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS: BEGINNING AT A POINT LOCATED EAST ALONG THE SOUTH SECTION LINE 1904.12 FEET AND NORTH 00 DEGREES 17 MINUTES 30 SECONDS WEST 60.00 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 33; THENCE NORTH 00 DEGREES 17 MINUTES 30 SECONDS WEST 401.95 FEET; THENCE EAST 160.00 FEET; THENCE SOUTH 00 DEGREES 17 MINUTES 30 SECONDS EAST 401.95 FEET; THENCE WEST ALONG THE NORTH LINE OF EIGHT MILE ROAD 160.00 FEET TO THE POINT OF BEGINNING.

PROJECT NARRATIVE

THE SITE IS AN EXISTING AUTOWASH THAT WILL BE RENOVATED WITH UPDATED PAY STATIONS, CENTRAL VACUUM SYSTEM, AND BUILDING UPDATES. A VARIANCE WILL BE REQUESTED AS SITE CONSTRAINTS LIMIT THE AMOUNT OF VEHICLE STACKING THAT IS POSSIBLE TO ACCOMMODATE WITHIN REASON.

FLOODPLAIN NOTE

PER THE PROVIDED SURVEY DOCUMENT:
FLOOD NOTE: BASED ON MAPS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) AVAILABLE ONLINE AT WWW.MSC.FEMA.GOV, AND BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE "X" ON FLOOD INSURANCE RATE MAP NUMBER 26125C0634F, WHICH BEARS AN EFFECTIVE DATE OF 09/29/2006 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. BY REVIEWING FLOOD MAPS PROVIDED BY THE NATIONAL FLOOD INSURANCE PROGRAM WE HAVE LEARNED THIS COMMUNITY DOES PARTICIPATE IN THE PROGRAM.

SHEET INDEX

NOT TO BE USED AS CONSTRUCTION DRAWINGS

811 Know what's below. Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

ATWELL
866.850.4200 www.atwell-group.com
12745 23 MILE ROAD | SUITE 200
SHELBY TOWNSHIP, MI 48315
(586) 726-9800

FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

ZAX CAR WASH
ZAX – FARMINGTON HILLS SITE PLANS
COVER

DATE
DECEMBER 6, 2024

REVISIONS/SUBMITTALS
-02/14/2025
-REV PER COMMENTS

DRAWN BY: RPF
CHECKED BY: JA
PROJECT MANAGER: JA
JOB #: 24003983.06

C01

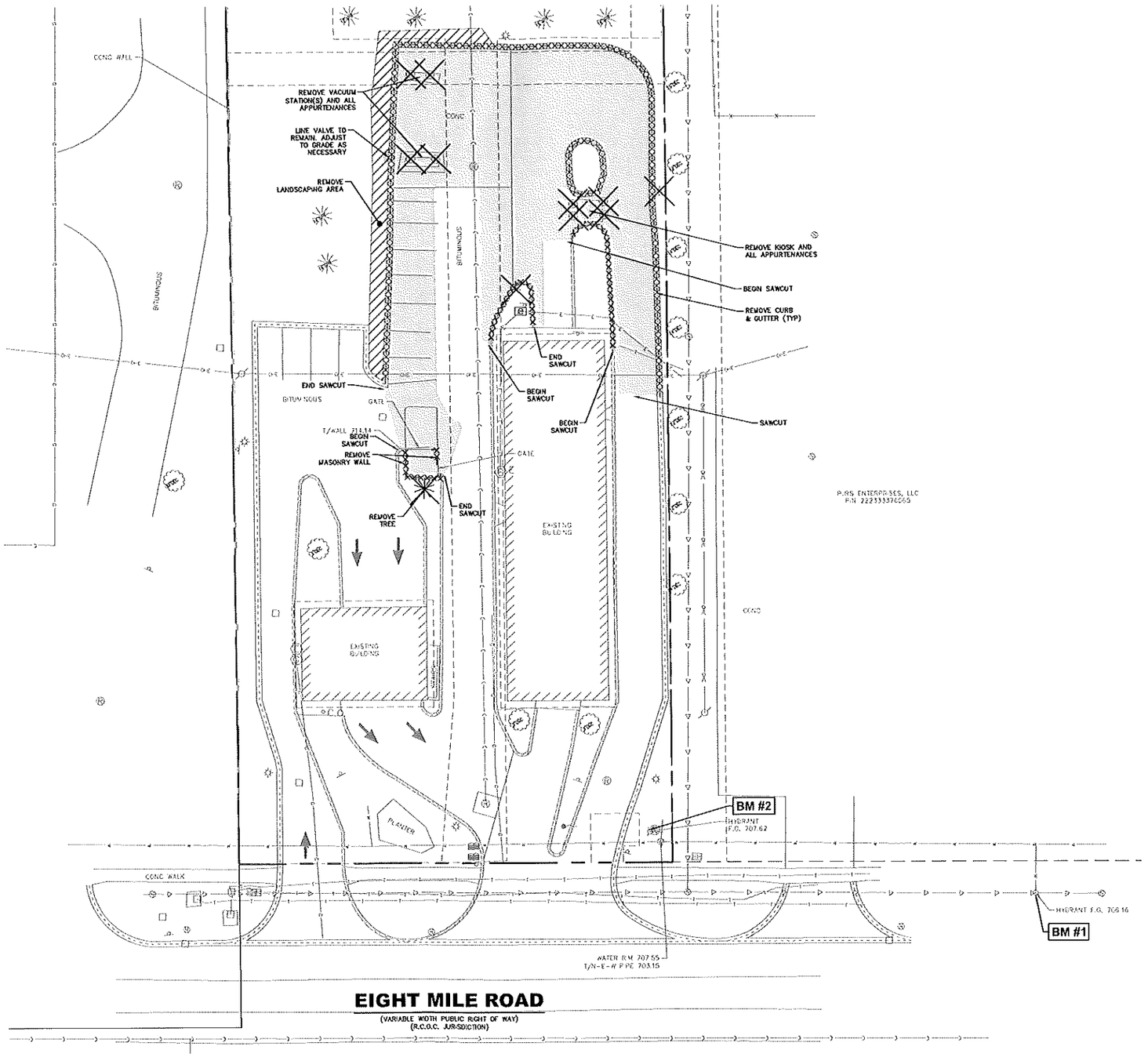
CAD FILE: K:\24003983.06\CIVIL\PLAN SETS\SITE-PRELIMINARY\24003983.06-C01-C

LEGEND

- PROPERTY LINE
- STORM SEWER
- SANITARY SEWER
- WATERMAIN
- UNDERGROUND DATA/TELE
- GAS
- BUILDING TO BE REMOVED
- ASPHALT TO BE REMOVED
- LANDSCAPING TO BE REMOVED
- CONCRETE TO BE REMOVED
- ITEM(S) TO BE REMOVED

NOTES

1. ANY ITEM NOT INDICATED AS BEING REMOVED SHALL REMAIN.
2. FOR ADDITIONAL INFORMATION REFERENCE THE STANDARD NOTES SHEET, STANDARD DETAILS SHEET(S), AND ANY MUNICIPALITY AND/OR JURISDICTIONAL DETAILS ATTACHED TO THIS PLAN SET.
3. CONTRACTOR SHALL CALL "MISS DIG" AT LEAST THREE (3) WORKING DAYS PRIOR TO CONSTRUCTION/DEMOLITION.
4. CONTRACTOR SHALL COORDINATE ALL UTILITY REMOVAL AND ABANDONMENT ACTIVITIES WITH LOCAL GOVERNING AGENCY OR UTILITY COMPANY PRIOR TO STARTING DEMOLITION TO INSURE COMPLIANCE WITH GOVERNING AGENCY AND UTILITY COMPANY REMOVAL AND ABANDONMENT STANDARDS.
5. CONTRACTOR RESPONSIBLE FOR COORDINATING UTILITY TERMINATIONS & OBTAINING DEMOLITION PERMIT FROM THE CITY OF WYOMING PRIOR TO BEGINNING CONSTRUCTION.



EIGHT MILE ROAD

(VARIABLE WIDTH PUBLIC RIGHT OF WAY)
(R.C.O.C. JURISDICTION)

SITE BENCHMARKS

BENCHMARK #1
ARROW ON FIRE HYDRANT LOCATED IN THE NORTH RIGHT OF WAY OF EIGHT MILE ROAD 130'± EAST OF EAST PROPERTY LINE
ELEVATION: 708.25 (NAVD88)

BENCHMARK #2
ARROW ON FIRE HYDRANT LOCATED IN THE NORTH RIGHT OF WAY OF EIGHT MILE ROAD AT SOUTHEAST CORNER OF PROPERTY
ELEVATION: 710.01 (NAVD88)

NOT TO BE USED AS CONSTRUCTION DRAWINGS

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ATWELL
856.850.4200 www.atwell-group.com
12745 23 MILE ROAD | SUITE 200
SHELBY TOWNSHIP, MI 48315
(586) 726-8800

FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

ZAX CAR WASH
ZAX – FARMINGTON HILLS
SITE PLANS
DEMOLITION PLAN

DATE
DECEMBER 6, 2024

REVISIONS/SUBMITTALS

SCALE: 1"=20'

DRAWN BY: RPF
CHECKED BY: JA
PROJECT MANAGER: JA
JOB #: 24003983.06

C02

CAD FILE K:\24003983.06\prj\PLAN SETS\SITE-PRELIMINARY\24003983.06-C02-D

LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY
- STANDARD DUTY ASPHALT
- CONCRETE
- EXISTING OVERHEAD LINE(S)
- PAINTED STOP BAR W/ STOP SIGN
- EXISTING / PROPOSED SIGN
- R SIDEWALK RAMP
- (20) PARKING ROW COUNT
- ACCESSIBLE PARKING SPACE
- EXISTING UTILITY POLE
- PROPOSED LIGHT POLE

NOTES

1. REFERENCE THE STANDARD NOTES SHEET FOR ADDITIONAL INFORMATION.
2. FOR ALL APPLICABLE CONSTRUCTION DETAILS REFERENCE THE STANDARD DETAILS SHEET(S) AND ANY MUNICIPAL/JURISDICTIONAL DETAILS ATTACHED TO THIS PLAN SET.
3. REFERENCE THE ALTA/ACSM LAND TITLE SURVEY FOR ADDITIONAL EXISTING FEATURES AND PROPERTY BOUNDARY INFORMATION.
4. ALL DIMENSIONS ARE TO EDGE OF BUILDING, FACE OF CURB, OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
5. REFERENCE ARCHITECTURAL / FOUNDATION PLANS FOR BUILDING DIMENSIONS.
6. ALL RADII ARE 5' UNLESS OTHERWISE NOTED.
7. LIGHT POLE LOCATIONS ARE SHOW FOR REFERENCE ONLY. VERIFY WITH LIGHTING VENDOR.
8. ALL ITEMS NOT IDENTIFIED AS "EXISTING" SHALL BE PROPOSED.
9. THE LOADING AREA WILL HAVE LIMITED USE AND WILL NOT BE A REGULAR IMPEDIMENT TO VEHICLE CIRCULATION. DELIVERIES AVERAGE ONE (1) PER MONTH OVER A TWELVE (12) MONTH PERIOD FOR THE CAR WASH OPERATIONS AND ARE PERIODIC FOR THE OIL CHANGE OPERATIONS.

SITE DATA

PROPOSED PARCEL SUMMARY

PARCEL ID#	GROSS LOT AREA	ZONING
22-23-33-376-040	±1.15 ACRES	B-3

PRE-DEVELOPED IMPERVIOUS AREA: 34,140 SF (68.2%)
POST-DEVELOPED IMPERVIOUS AREA: 34,174 SF (68.2%)
PERCENT INCREASE IN IMPERVIOUS AREA: +0.1%

BUILDING DATA

EXISTING FLOOR AREA	4,869 SQ.FT.
PROPOSED FLOOR AREA	4,360 SQ.FT.

EMPLOYEE PARKING DATA

PROPOSED	REQUIRED	FORMULA
3 SPACES	3 SPACES	1 SPACE PER EMPLOYEE (2-3 EMPLOYEES/SHIFT)

VACUUM & DRYING DATA

PROPOSED	REQUIRED	FORMULA
6 SPACES*	1 SPACE	1 SPACE PER 5 STALLS

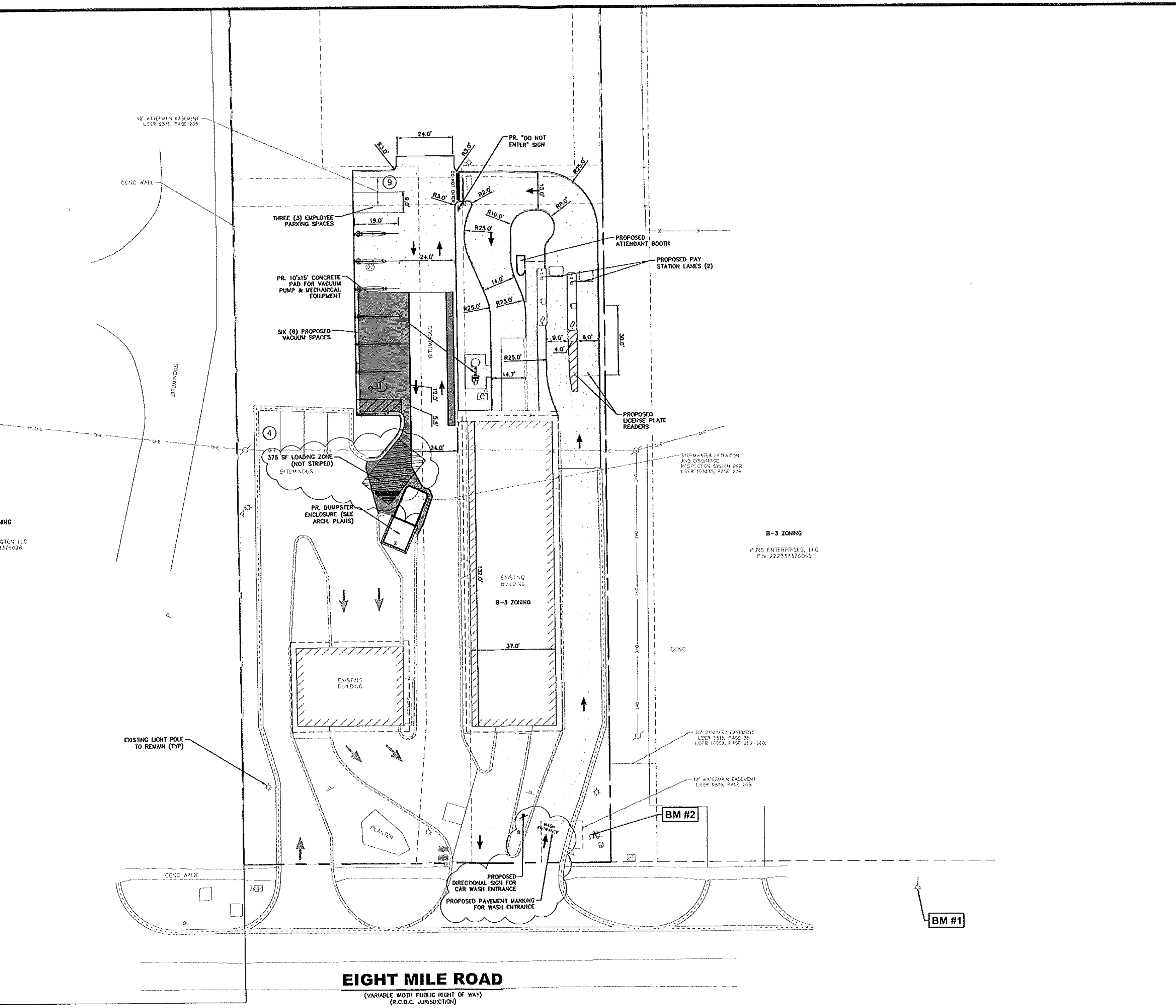
CAR WASH STACKING DATA

PROPOSED	REQUIRED	FORMULA
15 SPACES**	33 SPACES**	5 SPACES PER 20 FEET OF CAR WASH LENGTH

ACCESSIBLE PARKING DATA

	PROPOSED	REQUIRED	FORMULA
TOTAL	1 SPACE*	1 SPACE	1-25 TOTAL SPACES PROVIDED

*ACCESSIBLE VACUUM SPACE IS INTENDED TO SERVE AS ACCESSIBLE SPACE
**VARIANCE REQUESTED TO ACCOMMODATE INSUFFICIENT VEHICLE STACKING



SITE BENCHMARKS

BENCHMARK #1
ARROW ON FIRE HYDRANT LOCATED IN THE NORTH RIGHT OF WAY OF EIGHT MILE ROAD 130'± EAST OF EAST PROPERTY LINE
ELEVATION: 708.25 (NAVD88)

BENCHMARK #2
ARROW ON FIRE HYDRANT LOCATED IN THE NORTH RIGHT OF WAY OF EIGHT MILE ROAD AT SOUTHEAST CORNER OF PROPERTY
ELEVATION: 710.01 (NAVD88)

NOT TO BE USED AS CONSTRUCTION DRAWINGS

811 Know what's below. Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

ATWELL
866.850.4200 www.atwell-group.com
12745 23 MILE ROAD | SUITE 200
SHELBY TOWNSHIP, MI 48315
(586) 786-2800

FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

ZAX CAR WASH
ZAX - FARMINGTON HILLS
SITE PLANS
LAYOUT PLAN

DATE: DECEMBER 6, 2024
REVISIONS/SUBMITTALS
-02/14/2025
-REV PER COMMENTS

SCALE: 1"=20'
DRAWN BY: RPF
CHECKED BY: JA
PROJECT MANAGER: JA
JOB #: 24003983.06

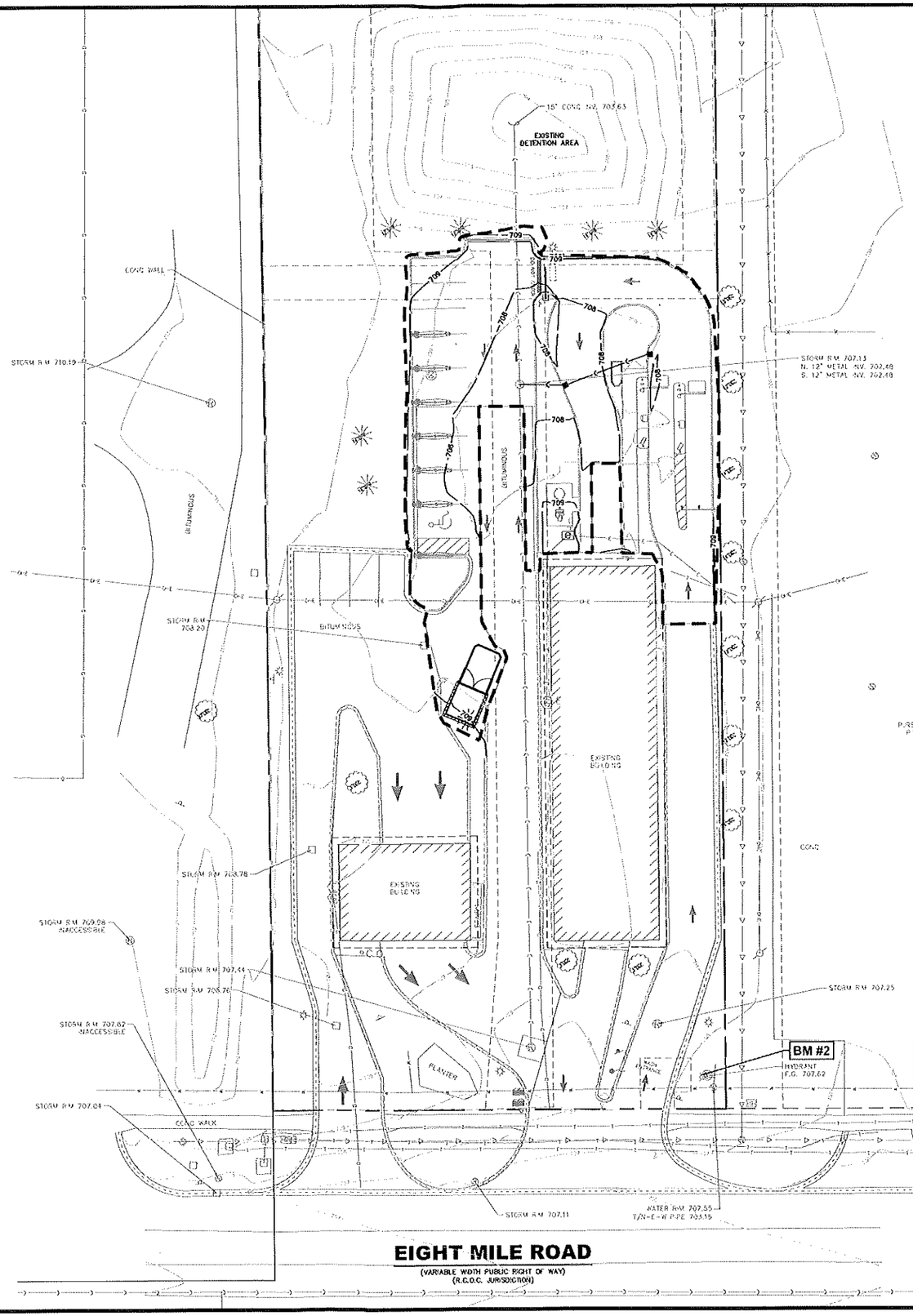
C03

LEGEND

PROPERTY LINE	
EXISTING CONTOUR	
PROPOSED CONTOUR	
PROPOSED RIDGE LINE	
PROPOSED SWALE	
LIMITS OF DISTURBANCE	
x900.00EX	EXISTING SPOT GRADE
x900.00	PROPOSED TOP OF PAVEMENT/FINISH GRADE ELEVATION
T / B	TOP / BOTTOM ELEVATION
x900.00M	MATCH EXISTING GRADE
	DRAINAGE ARROW
	PROPOSED MANHOLE / CATCH BASIN
	PROPOSED VALVE / HYDRANT

NOTES

1. FOR ADDITIONAL INFORMATION REFERENCE THE STANDARD NOTES SHEET, STANDARD DETAILS SHEET(S), AND ANY MUNICIPALITY AND/OR JURISDICTIONAL DETAILS ATTACHED TO THIS PLAN SET.
2. ALL ELEVATIONS SHOWN ARE TOP OF PAVEMENT/FINISH GRADE UNLESS OTHERWISE NOTED.
3. WITHIN 48 HOURS OF PLACEMENT, ALL ACCESSIBLE PARKING AREAS AND ASSOCIATED SIDEWALKS AND RAMPS MUST BE SURVEYED BY A LICENSED SURVEYOR AND PROVIDED TO OWNER/ENGINEER. ANY NONCOMPLIANT AREAS SHALL BE REWORKED AND RESURVEYED UNTIL THEY ARE COMPLIANT WITH THE CONSTRUCTION PLAN.
4. HYDRANT = BASE FLANGE
   VALVE/MANHOLE/CLEANOUT = RIM
   CATCH BASIN/INLET = RIM/FLOW LINE



SITE BENCHMARKS

BENCHMARK #1
ARROW ON FIRE HYDRANT LOCATED IN THE NORTH RIGHT OF WAY OF EIGHT MILE ROAD 130'± EAST OF EAST PROPERTY LINE
ELEVATION: 708.25 (NAVD88)

BENCHMARK #2
ARROW ON FIRE HYDRANT LOCATED IN THE NORTH RIGHT OF WAY OF EIGHT MILE ROAD AT SOUTHEAST CORNER OF PROPERTY
ELEVATION: 710.01 (NAVD88)

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SHELBY TOWNSHIP, MI 48315
(586) 786-8800

FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

ZAX CAR WASH
ZAX – FARMINGTON HILLS
SITE PLANS
PRELIMINARY UTILITY, GRADING, & STORMWATER PLAN

DATE: DECEMBER 6, 2024

REVISIONS/SUBMITTALS
-

SCALE: 1"=20'

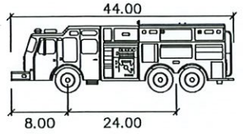
DRAWN BY: RPF
CHECKED BY: JA
PROJECT MANAGER: JA
JOB #: 24003983.06

C04

CAD FILE: N:\24003983.06\DWG\PLAN SETS\SITE-PRELIMINARY\24003983.06-SDM-C

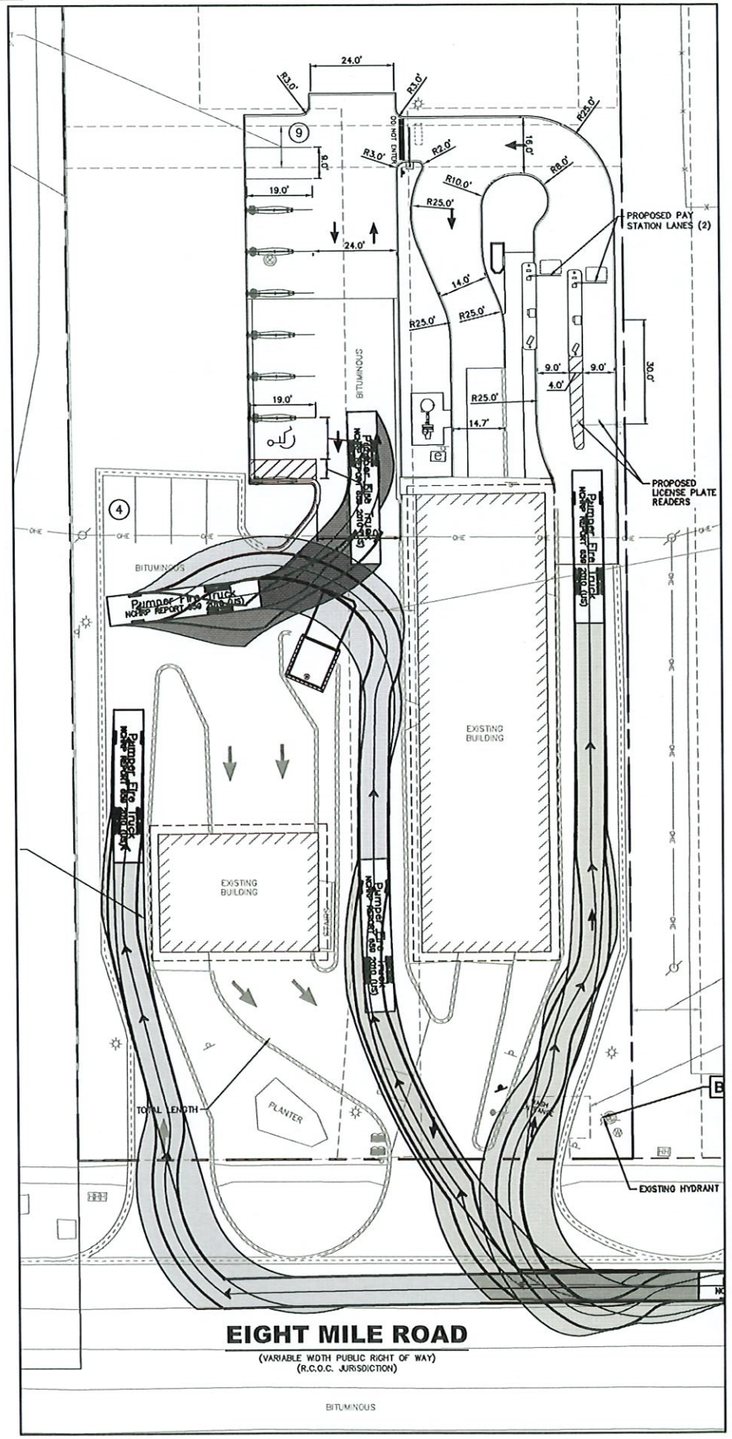
LEGEND

- PROPERTY LINE
- RIGHT-OF-WAY
- STANDARD DUTY ASPHALT
- CONCRETE
- EXISTING OVERHEAD LINE(S)
- PAINTED STOP BAR W/ STOP SIGN
- EXISTING / PROPOSED SIGN
- R — SIDEWALK RAMP
- 20 — PARKING ROW COUNT
- ACCESSIBLE PARKING SPACE
- EXISTING UTILITY POLE
- PROPOSED LIGHT POLE



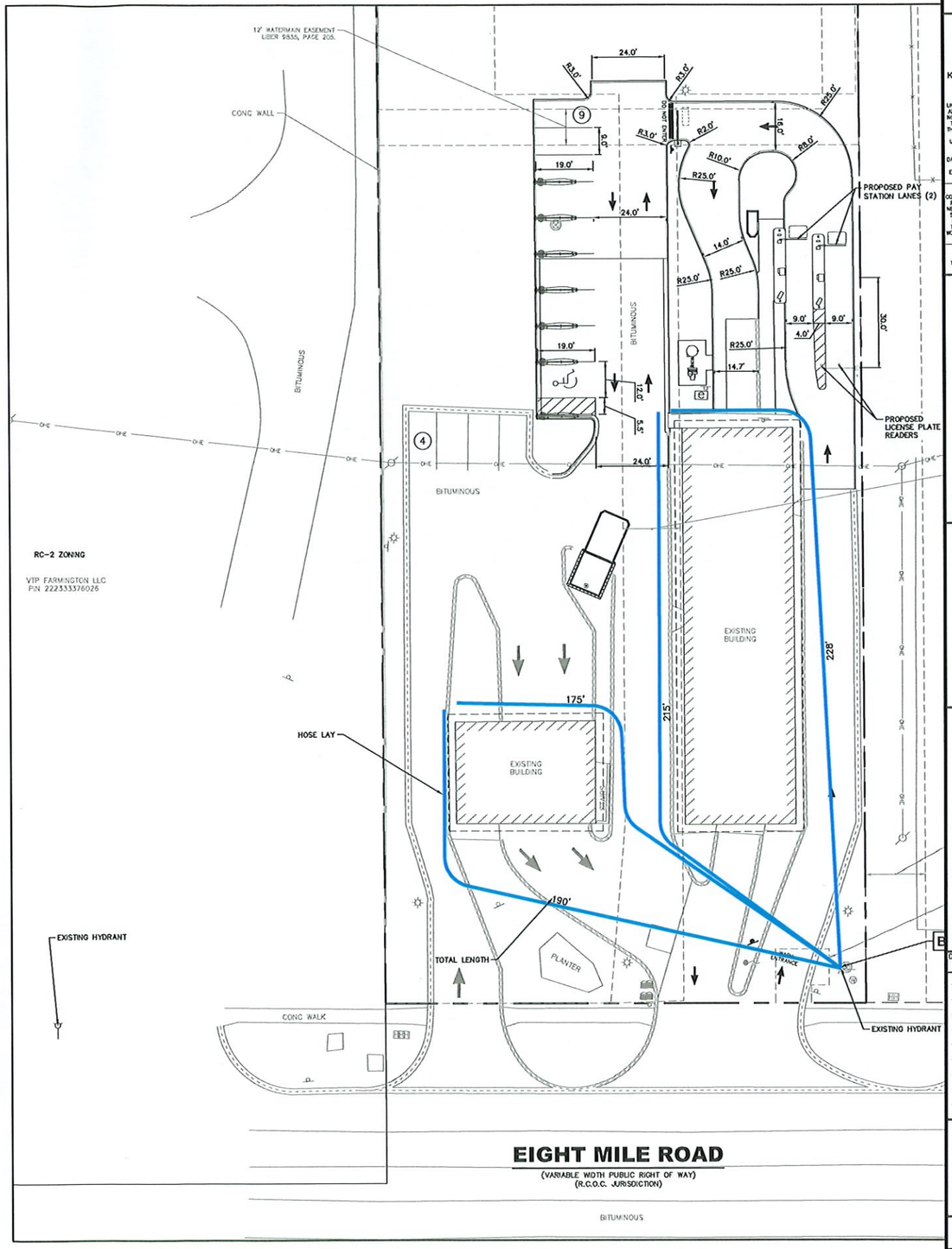
Pumper Fire Truck

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 37.8



FIRE APPARATUS ACCESS

1" = 20'



HOSE LAY

1" = 20'

SITE BENCHMARKS

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(586) 726-9800

FARMINGTON HILLS

OAKLAND COUNTY, MICHIGAN

ZAX CAR WASH

ZAX – FARMINGTON HILLS
SITE PLANS

FIRE EQUIPMENT ACCESS AND HOSE LAY

DATE
DECEMBER 6, 2024

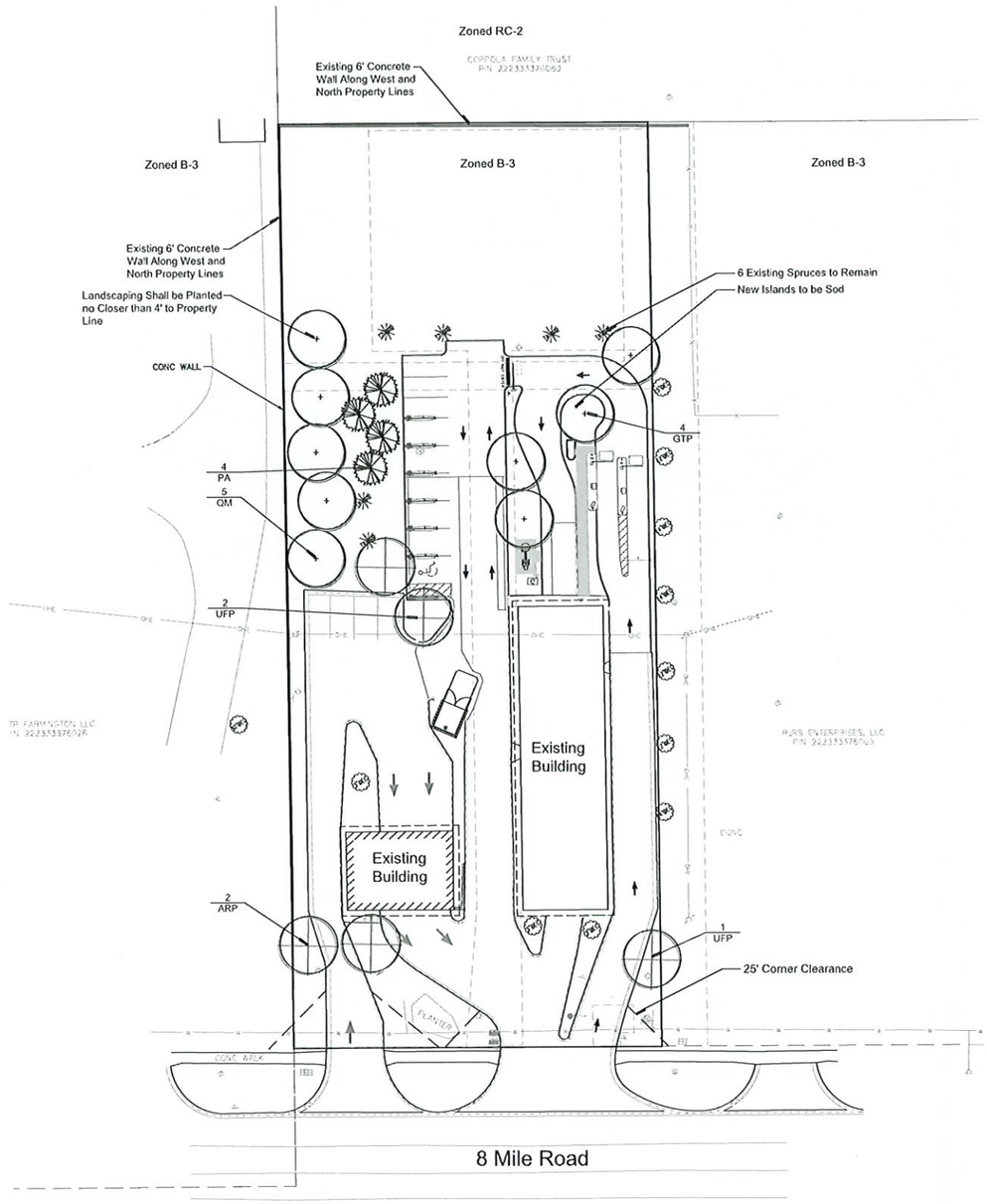
REVISIONS/SUBMITTALS
-02/14/2025
-REV PER COMMENTS

0 10 20
SCALE: 1"=20'

DRAWN BY: RPF
CHECKED BY: JA
PROJECT MANAGER: JA
JOB #: 24003983.06

C05

CAD FILE: K:\24003983.06\DWG\PLAN SETS\SITE-PRELIMINARY\24003983.06-C05-FD



Landscape Summary

Parking Lot Landscaping

Paved Area	26,700 s.f.
Trees Required	9.5 Trees (26,700 / 2,800)
Trees Provided	10 Trees (1 Existing)

Plant List

sym.	qty.	botanical name	common name	caliper	spacing	root	height
Parking Lot Landscaping							
ARP	2	Acer rubrum 'Red Pointe'	Red Pointe Maple	3.0"	as shown	B&B	
GTP	4	Gleditsia triacanthos var. inermis	Honey Locust	3.0"	as shown	B&B	
UFP	3	Ulmus 'Frontier'	Frontier Elm	3.0"	as shown	B&B	
	9	Trees Provided					

sym.	qty.	botanical name	common name	caliper	spacing	root	height
General Landscaping							
QM	5	Quercus macrocarpa	Bur Oak	3.0"	as shown	B&B	
PA	4	Picea abies	Norway Spruce		as shown	B&B	8'

ALLENDESIGN
LAND PLANNING / LANDSCAPE ARCHITECTURE
557 Carpenter
Northville, Michigan 48167
e. jca@wideopenwest.com
t. 248.467.4668

Seal:

Title:

Landscape Plan

Project:

Zax Autowash
Farmington Hills, Michigan

Prepared for:

Atwell, LLC
12745 23 Mile, Suite 200
Shelby Township, Michigan 48315

Revision:	Issued:
Review	December 2, 2024
Revised	December 18, 2024

Job Number:

24-079

Drawn By:	Checked By:
jca	jca

0' 15' 30'

NORTH
1"=30'

Know what's below. Call before you dig.

Sheet No.

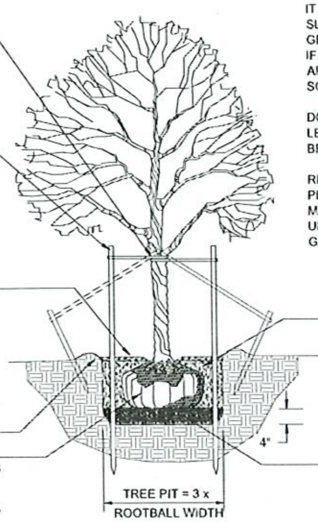
L-1

NOTE:
GUY DECIDUOUS TREES ABOVE 3"CAL.. STAKE DECIDUOUS TREES BELOW 3" CAL.

NOTE:
TREE SHALL BEAR SAME RELATION TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 6" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.

DO NOT PRUNE TERMINAL LEADER. PRUNE ONLY DEAD OR BROKEN BRANCHES.

REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS THAT ARE UNSIGHTLY OR COULD CAUSE GIRDLING.



DECIDUOUS TREE PLANTING DETAIL

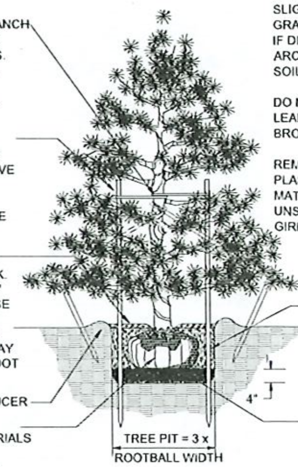
Not to scale

NOTE:
GUY EVERGREEN TREES ABOVE 12' HEIGHT. STAKE EVERGREEN TREE BELOW 12' HEIGHT.

NOTE:
TREE SHALL BEAR SAME RELATION TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 6" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.

DO NOT PRUNE TERMINAL LEADER. PRUNE ONLY DEAD OR BROKEN BRANCHES.

REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS THAT ARE UNSIGHTLY OR COULD CAUSE GIRDLING.



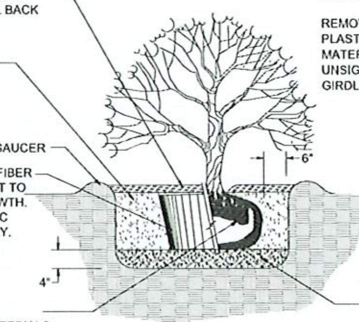
EVERGREEN TREE PLANTING DETAIL

Not to scale

NOTE:
TREE SHALL BEAR SAME RELATION TO FINISH GRADE AS IT BORE ORIGINALLY OR SLIGHTLY HIGHER THAN FINISH GRADE UP TO 4" ABOVE GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT FOR HEAVY CLAY SOIL AREAS.

PRUNE ONLY DEAD OR BROKEN BRANCHES.

REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS THAT ARE UNSIGHTLY OR COULD CAUSE GIRDLING.

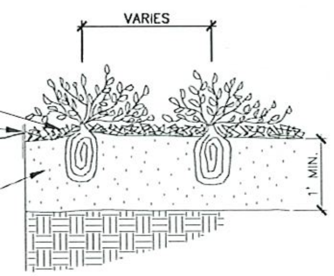


SHRUB PLANTING DETAIL

NOT TO SCALE

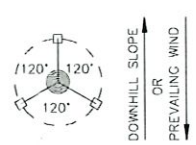
LANDSCAPE NOTES

1. All plants shall be north Midwest American region grown, No. 1 grade plant materials, and shall be true to name, free from physical damage and wind burn.
2. Plants shall be full, well-branched, and in healthy vigorous growing condition.
3. Plants shall be watered before and after planting is complete.
4. All trees must be staked, fertilized and mulched and shall be guaranteed to exhibit a normal growth cycle for at least two (2) full years following Township approval.
5. All material shall conform to the guidelines established in the most recent edition of the American Standard for Nursery Stock.
6. Provide clean backfill soil, using material stockpiled on site. Soil shall be screened and free of any debris, foreign material, and stone.
7. "Agriform" tabs or similar slow-release fertilizer shall be added to the planting pits before being backfilled.
8. Amended planting mix shall consist of 1/3 screened topsoil, 1/3 sand and 1/3 peat, mixed well and spread to the depth as indicated in planting details.
9. All plantings shall be mulched per planting details located on this sheet.
10. The Landscape Contractor shall be responsible for all work shown on the landscape drawings and specifications.
11. No substitutions or changes of location, or plant types shall be made without the approval of the Landscape Architect.
12. The Landscape Architect shall be notified in writing of any discrepancies between the plans and field conditions prior to installation.
13. The Landscape Contractor shall be responsible for maintaining all plant material in a vertical condition throughout the guaranteed period.
14. The Landscape Architect shall have the right, at any stage of the installation, to reject any work or material that does not meet the requirements of the plans and specifications, if requested by owner.
15. Contractor shall be responsible for checking plant quantities to ensure quantities on drawings and plant list are the same. In the event of a discrepancy, the quantities on the plans shall prevail.
16. The Landscape Contractor shall seed and mulch or sod (as indicated on plans) all areas disturbed during construction, throughout the contract limits.
17. A pre-emergent weed control agent, "Preen" or equal, shall be applied uniformly on top of all mulching in all planting beds.
18. Sod shall be two year old "Baron/Cheriadelphi" Kentucky Blue Grass grown in a sod nursery on loam soil.
19. All Proposed Landscaping to be Provided Water with an Automatic Underground Irrigation System.



PERENNIAL PLANTING DETAIL

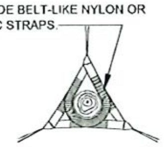
Not to scale



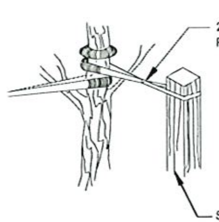
STAKING/GUYING LOCATION

NOTE:
ORIENT STAKING/GUYING TO PREVAILING WINDS, EXCEPT ON SLOPES GREATER THAN 3:1 ORIENT TO SLOPE.

USE SAME STAKING/GUYING ORIENTATION FOR ALL PLANTS WITHIN EACH GROUPING OR AREA



GUYING DETAIL



STAKING DETAIL

TREE STAKING DETAIL

Not to scale

ALLENDESIGN
LAND PLANNING / LANDSCAPE ARCHITECTURE
557 Carpenter
Northville, Michigan 48167
e. jca@wideopenwest.com
t. 248.467.4668

Seal:

Title:
Landscape Details

Project:
Zax Autowash
Farmington Hills, Michigan

Prepared for:
Atwell, LLC
12745 23 Mile Road, Suite 200
Shelby Township, Michigan 48315

Revision:	Issued:
Review	December 2, 2024

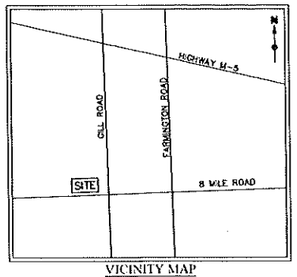
Job Number:
24-079

Drawn By:	Checked By:
jca	jca

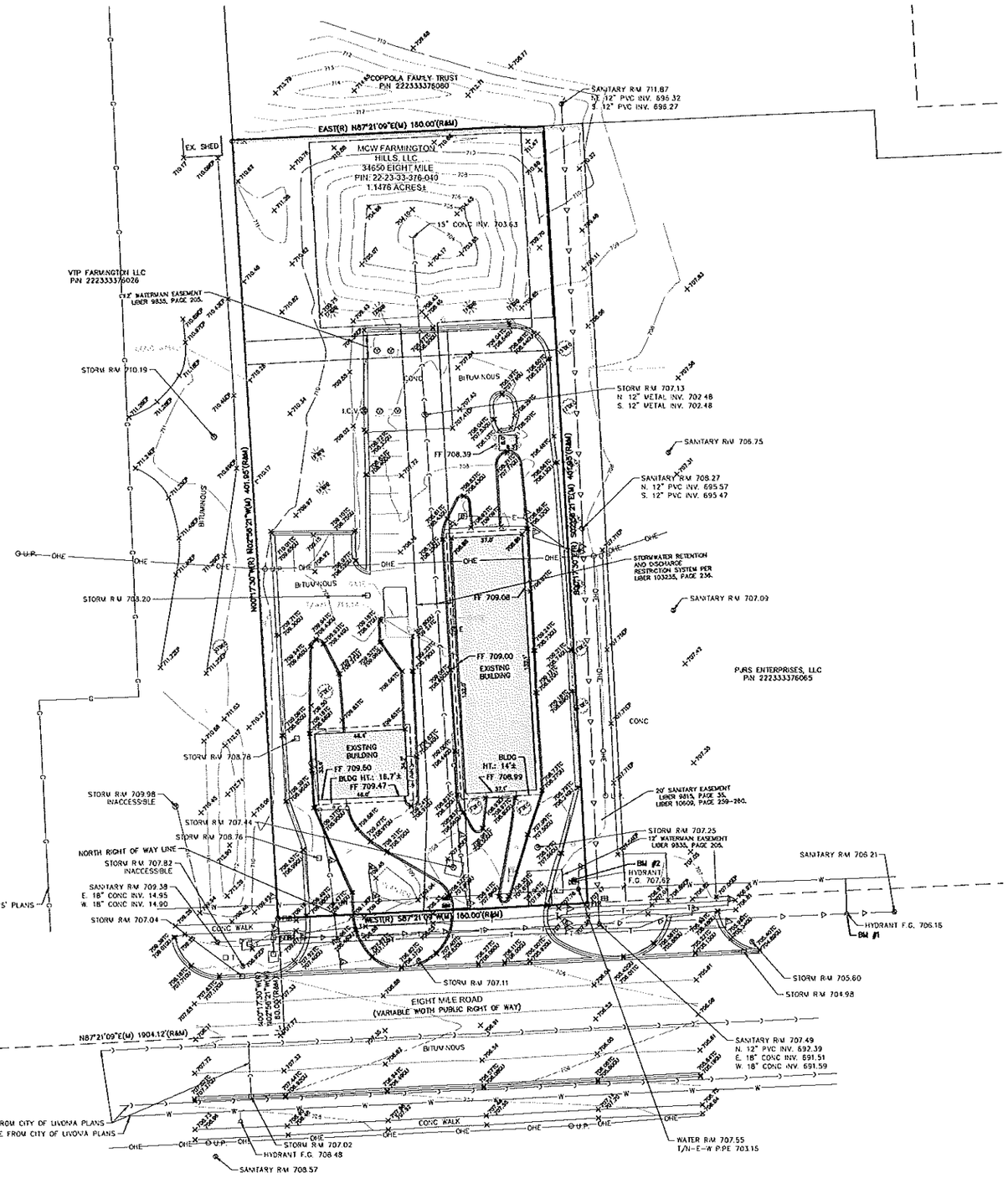
Know what's below. Call before you dig.

Sheet No.
L-2

BOUNDARY & TOPOGRAPHIC SURVEY



VICINITY MAP
NOT TO SCALE



SITE BENCHMARKS:

BM #1: ARROW ON FIRE HYDRANT LOCATED IN THE NORTH RIGHT OF WAY OF EIGHT MILE ROAD 130'± EAST OF EAST PROPERTY LINE
ELEVATION: 708.25 (NAVD88)

BM #2: ARROW ON FIRE HYDRANT LOCATED IN THE NORTH RIGHT OF WAY OF EIGHT MILE ROAD AT SOUTHEAST CORNER OF PROPERTY
ELEVATION: 710.01 (NAVD88)

EXHIBIT "A" DESCRIPTION PER ALTA COMMITMENT FOR TITLE INSURANCE ISSUED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, COMMITMENT NO.: 2--706547, EFFECTIVE DATE: NOVEMBER 22, 2023:

PART OF THE SOUTHWEST 1/4 OF SECTION 33, TOWN 1 NORTH, RANGE 9 EAST, FARMINGTON HILL, OAKLAND COUNTY, MICHIGAN, DESCRIBED AS: BEGINNING AT A POINT LOCATED EAST ALONG THE SOUTH SECTION LINE 1904.12 FEET AND NORTH 00 DEGREES 17 MINUTES 30 SECONDS WEST 60.00 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 33; THENCE NORTH 00 DEGREES 17 MINUTES 30 SECONDS WEST 401.95 FEET; THENCE EAST 160.00 FEET; THENCE SOUTH 00 DEGREES 17 MINUTES 30 SECONDS EAST 401.95 FEET; THENCE WEST ALONG THE NORTH LINE OF EIGHT MILE ROAD 160.00 FEET TO THE POINT OF BEGINNING.

LEGEND

◆	SECTION CORNER
×F	FOUND PK NAIL
○FOR	FOUND CAPPED IRON ROD
⊕F	FOUND MONUMENT
⊕U.P.	EXISTING UTILITY POLE
□O	EXISTING MANHOLE/CATCH BASIN
▫	EXISTING SIGN
☉	EXISTING TREE
☼	EXISTING LIGHT POLE
▣	EXISTING ELECTRIC TRANSFORMER
⊀	EXISTING GUY ANCHOR
▦	EXISTING UTILITY MANHOLE
Ⓥ	EXISTING CAR VACUUM
⊙	EXISTING BOLLARD
□ CATV	EXISTING CABLE RISER
)	EXISTING CULVERT
Ⓔ	EXISTING ELECTRIC METER
⊢	EXISTING FIRE HYDRANT
□ E	EXISTING ELECTRIC RISER
*C.O.	EXISTING CLEAN OUT
Ⓖ	EXISTING GAS VALVE
Ⓖ	EXISTING GAS METER
▲▲▲	UNDERGROUND GAS MARKER
▲▲▲	UNDERGROUND ELECTRIC MARKER
⚐	EXISTING FLAG POLE
× 550.25	EXISTING GROUND ELEVATION
× 550.25C	EXISTING CURB ELEVATION
× 550.25G	EXISTING GUTTER ELEVATION
× 550.25P	EXISTING PAVEMENT ELEVATION
(P)	PLATTED
(M)	MEASURED
———	BOUNDARY LINE
— — —	BOUNDARY ADJACENT LINE
— — —	SECTION LINE
———	EASEMENT LINE
G G	UNDERGROUND GAS LINE
> > >	UNDERGROUND STORM LINE
D D	UNDERGROUND SANITARY LINE
W	UNDERGROUND WATER LINE
FO	UNDERGROUND FIBER OPTIC LINE
TV TV	UNDERGROUND CABLE LINE
E E	UNDERGROUND ELECTRIC LINE
OHE OHE	OVERHEAD UTILITY LINE
X X	EXISTING FENCE
	EXISTING CURB AND GUTTER
950	EXISTING GROUND CONTOUR
	EXISTING BUILDING

NOTES:

1. BEARINGS ARE BASED ON MICHIGAN STATE PLANE COORDINATES NAD83 (2011), SOUTH ZONE, GROUND DISTANCES, INTERNATIONAL FEET. MEASURED BEARINGS DIFFER FROM RECORD TITLE BEARINGS. VERTICAL DATUM IS BASED ON NAVD88.
2. THE SITE SHOWN HEREON IS LOCATED WITHIN ZONE X (AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN) ACCORDING TO MAP NUMBER 26125C0634F OF THE FLOOD INSURANCE RATE MAP, EFFECTIVE DATE SEPTEMBER 29, 2006.
3. WATER MAIN, STORM SEWER, SANITARY SEWER AND FRANCHISE UTILITY STRUCTURES HAVE BEEN FIELD LOCATED WHERE VISIBLE. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED.

I HEREBY CERTIFY THAT I HAVE SURVEYED AND MAPPED THE LAND ABOVE PLATTED AND/OR DESCRIBED ON NOVEMBER 7, 2024, AND THAT THE RATIO OF CLOSURE ON THE UNADJUSTED FIELD OBSERVATIONS OF SUCH SURVEY WAS NO GREATER THAN 1/5000.

JOSHUA J. BARRY
PROFESSIONAL SURVEYOR NO. 4001071256
JBARRY@ATWELL.COM
TWO TOWNE SQUARE, SUITE 700
SOUTHFIELD, MICHIGAN 48076
248.447.2000

DATE

811 Know what's below. Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR UTILITY REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

ATWELL
866.850.4200 www.atwell-group.com
TWO TOWNE SQUARE, SUITE 700
SOUTHFIELD, MICHIGAN 48076
248.447.2000

SECTION 33
TOWN 1 NORTH, RANGE 9 EAST
CITY OF FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

CLIENT
AMMORI EQUITY PARTNERS

BOUNDARY & TOPOGRAPHIC SURVEY

LOCATED IN

DATE
11/11/2024

REVISIONS

SCALE 0 15 30
1" = 30 FEET

DR.	JEP
CH.	JB
P.M.	J. BARRY
BOOK	NA
JOB	24003983.06
SHEET NO.	1 OF 1

CAD FILE: WS-01 24003983.06 TP-01.DWG

TITLE COMMITMENT INFORMATION

THE PROPERTY HEREON DESCRIBED IS THE SAME AS THE PERTINENT PROPERTY AS DESCRIBED IN OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, COMMITMENT FILE NO.: 2-706547, WITH AN EFFECTIVE DATE OF NOVEMBER 22, 2023 AT 8:00 A.M.

TITLE COMMITMENT INFORMATION

THE PROPERTY HEREON DESCRIBED IS THE SAME AS THE PERTINENT PROPERTY AS DESCRIBED IN OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, COMMITMENT FILE NO.: 2-706547

Part of the Southwest 1/4 of Section 33, Town 1 North, Range 9 East, Farmington Hills, Oakland County, Michigan, described as: Beginning at a point located East along the South Section line 1904.12 feet and North 00 degrees 17 minutes 30 seconds West 60.00 feet from the Southwest corner of said Section 33; thence North 00 degrees 17 minutes 30 seconds West 401.95 feet; thence East 160.00 feet; thence South 00 degrees 17 minutes 30 seconds East 401.95 feet; thence West along the North line of Eight Mile Road 160.00 feet to the point of beginning.

NOTES CORRESPONDING TO SCHEDULE B

(10) Pole Line Permit to The Detroit Edison Company as set forth in instrument recorded in Liber 3906, Page 199
LOCATION UNKNOWN, DOCUMENT IS ILLEGIBLE

(11) Terms, conditions and provisions which are recited in Quit Claim Deed for a 20 foot easement for sanitary sewer recorded in Liber 9815, Page 35.
LOCATED AS SHOWN

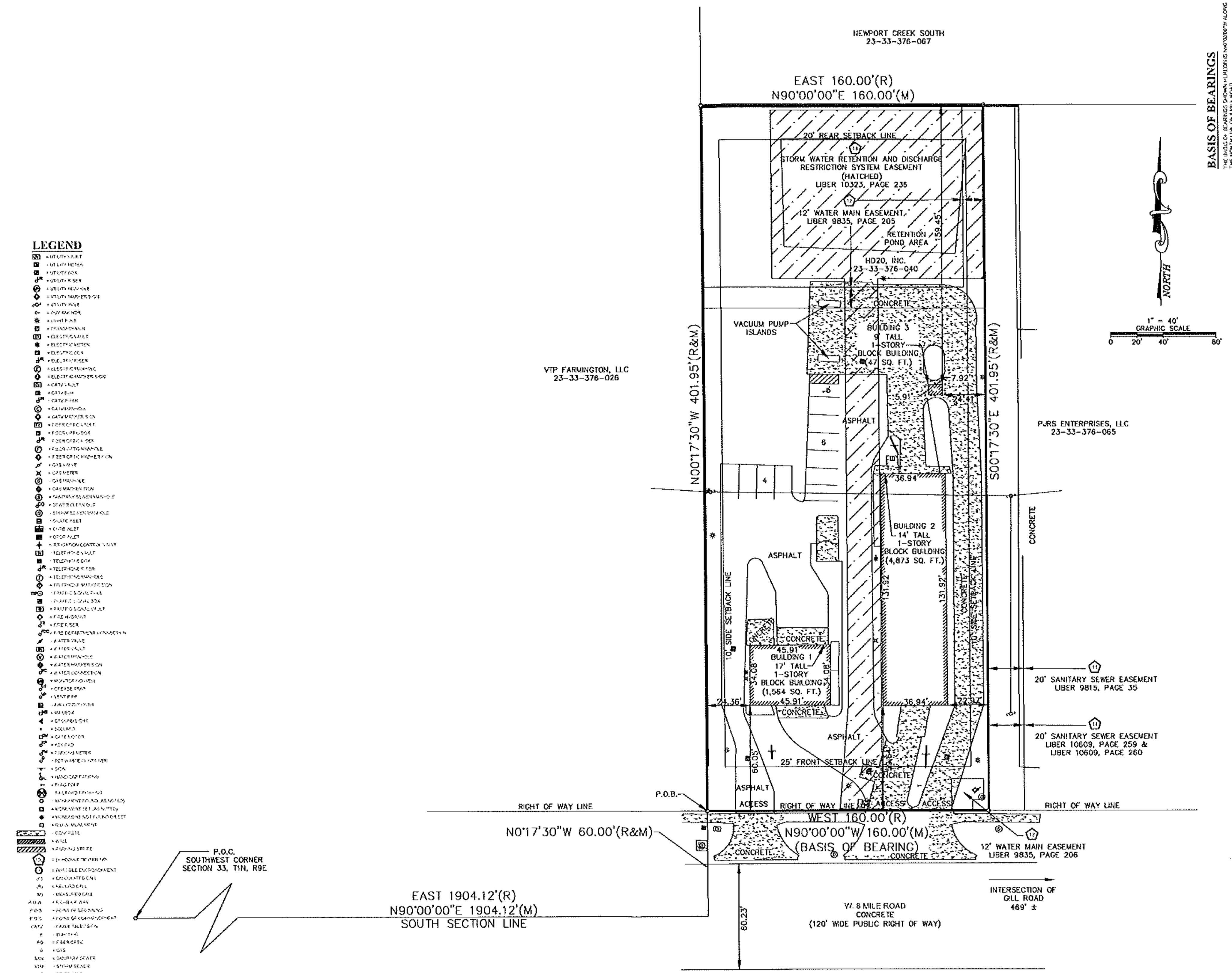
(12) Easement for water main as set forth in instrument recorded in Liber 9835, Page 205 and in Liber 9835, Page 206
LOCATED AS SHOWN

(13) Terms, conditions and provisions which are recited in Agreement for Storm Water Retention and Discharge Restriction System recorded in Liber 10323, Page 236
LOCATED AS SHOWN

(14) Easement for sanitary sewer as set forth in instrument recorded in Liber 10609, Page 259 and in Liber 10609, Page 260
LOCATED AS SHOWN

FLOOD INFORMATION

FLOOD NOTE: BASED ON MAPS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) AVAILABLE ONLINE AT WWW.MSC.FEMA.GOV, AND BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE "X" ON FLOOD INSURANCE RATE MAP NUMBER 26125C0634F, WHICH BEARS AN EFFECTIVE DATE OF 9/29/2006 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. BY REVIEWING FLOOD MAPS PROVIDED BY THE NATIONAL FLOOD INSURANCE PROGRAM WE HAVE LEARNED THIS COMMUNITY DOES PARTICIPATE IN THE PROGRAM.

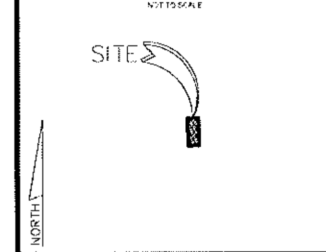


BASIS OF BEARINGS

THE BASIS OF BEARINGS SHOWN HEREON IS N90°00'00"W ALONG THE NORTH LINE OF 8 MILE ROAD

VICINITY MAP

NOT TO SCALE



SHEET 1 OF 1

BBG NO.
0523106914

LAND AREA
64,311.17 SQUARE FEET
1.48 ACRES

PARKING
REGULAR = 10
HANDICAP = 1
TOTAL = 11

STATEMENT OF ENCROACHMENTS

THERE APPEARED TO BE NO ENCROACHMENTS AT THE TIME OF THE SURVEY

GENERAL NOTES

1. NO UNDERGROUND UTILITIES ARE SHOWN ON THIS SURVEY. ONLY ABOVE GROUND VISIBLE EVIDENCE OF UTILITIES ARE SHOWN.
2. ALL STATEMENTS WITHIN THE CERTIFICATION, AND OTHER REFERENCES LOCATED ELSEWHERE HEREON, RELATED TO: UTILITIES, IMPROVEMENTS, STRUCTURES, BUILDINGS, PARTYWALLS, PARKING, EASEMENTS, SERVITUDES, AND ENCROACHMENTS ARE BASED SOLELY ON ABOVE GROUND VISIBLE EVIDENCE, UNLESS ANOTHER SOURCE OF INFORMATION IS SPECIFICALLY REFERENCED HEREON.
3. THIS SURVEY MEETS OR EXCEEDS THE SURVEY STANDARDS/STANDARDS OF CARE AS SET FORTH IN SECTION 3 OF THE 2021 ALTA/NSPS SURVEY REQUIREMENTS.
4. THE SUBJECT PROPERTY HAS DIRECT PHYSICAL ACCESS TO W. 8 MILE ROAD, A DEDICATED PUBLIC STREET OR HIGHWAY.
5. THERE IS NO VISIBLE EVIDENCE OF CEMETERIES ON THE SUBJECT PROPERTY.
6. THERE IS NO OBSERVABLE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WITHIN RECENT MONTHS.
7. THE PARCEL CONTAINED IN THE LEGAL DESCRIPTION ARE CONTIGUOUS WITHOUT ANY GAPS, GORES OR OVERLAPS.
8. BUILDING AREAS SHOWN HEREON ARE FOR THE FOOTPRINT OF THE BUILDING ONLY.
9. NO APPARENT CHANGES IN STREET RIGHT OF WAY LINES EITHER COMPLETED OR PROPOSED, AND AVAILABLE FROM THE CONTROLLING JURISDICTION. NO OBSERVABLE EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.

ALTA/NSPS LAND AND TITLE SURVEY
CAR WASH PORTFOLIO

34650 W. 8 MILE ROAD

OAKLAND COUNTY — FARMINGTON HILLS, MICHIGAN

ZONING DATA

ZONING ITEM	REQUIRED	PARKING REQUIREMENTS
ZONING DESIGNATION	B-3, General Business	Auto wash (automatic). One
MINIMUM LOT AREA (SQ. FT.)	No minimum requirement	(1) for each employee
MINIMUM OPEN SPACE	Front Yard: 50%	Front Yard: 50%
MAX BUILDING HEIGHT	50 feet and 3 stories	50 feet and 3 stories
BUILDING SETBACKS		
FRONT	25 feet	
SIDE	10 feet	
	From Residential 20 feet	
REAR	20 feet	
NOTES: Legal Conforming		CONTACT: Rosetta Taylor
		REPORT DATE: October 3, 2023
		REPORT #: 0523106936

BUILDING HEIGHT

BUILDING 1: 17' ±
BUILDING 2: 14' ±
BUILDING 3: 9' ±

BUILDING AREA

BUILDING 1: 1,564 SQ. FT.
BUILDING 2: 4,873 SQ. FT.
BUILDING 3: 47 SQ. FT.

SURVEYED BY:

Global Land Solutions — Solutions that work for you. Corporate Office: 5730 N. Chardon Rd., Lakeview, Michigan (989) 352-6200 — Serving The Great Lakes Region: MICHIGAN • OHIO • INDIANA • WISCONSIN

SURVEYOR CERTIFICATE

To: MCW FARMINGTON HILLS, LLC, HD20, Inc., a Michigan corporation, Old Republic National Title Insurance Company and BBG Assessments, LLC

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 6(a), 6(b), 7(a), 7(b)(1), 7(c), 8, 9, 13, 14, 16, 17, 20 of Table A thereof. The fieldwork was completed on October 4, 2023.

Date of Plat or Map: October 19, 2023

JAY M. SCHWANDT, PS 3D
STATE OF MICHIGAN
LICENSE NO.: 47974

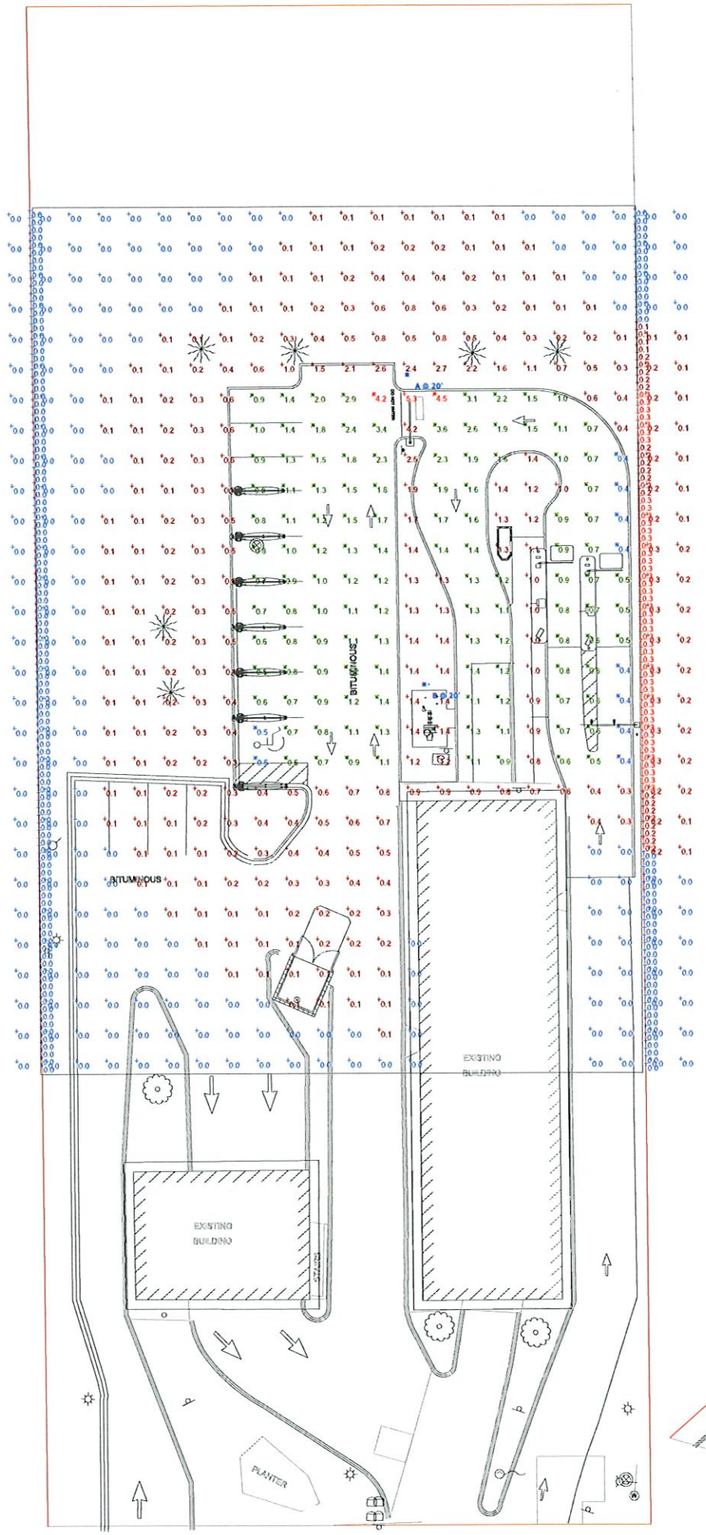
DATE	REVISION HISTORY
10-19-2023	FIRST DRAFT
10-23-2023	COMMENTS
11/21/2023	COMMENTS
12/13/2023	COMMENTS
12-18-2023	REVISED TITLE

JOB NUMBER: 23331A
SCALE: 1" = 30'
DRAWN BY: CLS
APPROVED BY: JMS

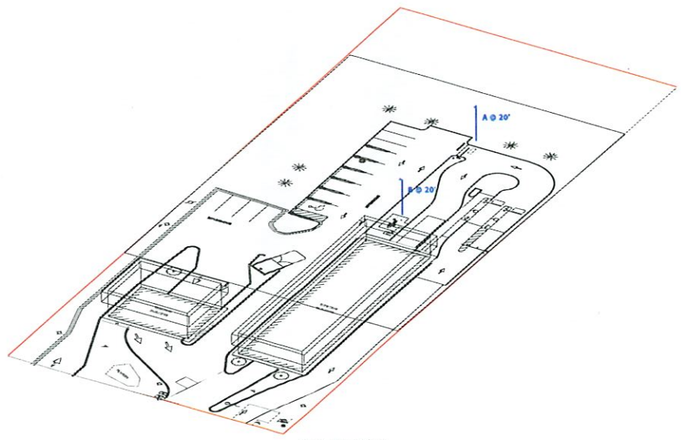
PREPARED FOR:

C:\CAD Borders\BBG LOGO.jpg

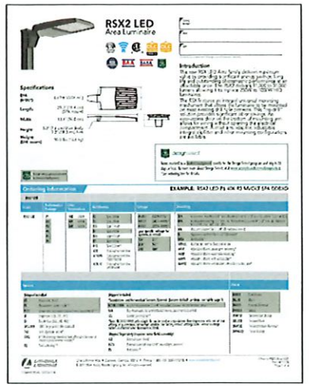
BBG ASSESSMENTS, LLC
8300 DOUGLAS AVENUE,
SUITE 600
DALLAS, TEXAS 75225
877.524.1187



Plan View
Scale - 1" = 20ft



South East View



Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Boundary	+	0.1 fc	0.3 fc	0.0 fc	N/A	N/A
Overall	+	0.5 fc	5.3 fc	0.0 fc	N/A	N/A
Parking/Vacuums	X	1.2 fc	4.2 fc	0.5 fc	8.4:1	2.4:1
Pay Lane	X	1.1 fc	4.5 fc	0.4 fc	11.3:1	2.8:1

Schedule

Symbol	Label	QTY	Manufacturer	Catalog	Description	Lamp Output	LLF	Input Power	Mounting Height
□	A	1	Lithonia Lighting	RSX2 LED P1 40K R4	RSX Area Fixture Size 2 P1 Lumen Package 4000K CCT Type R4 Distribution	11135	0.9	72.06	20'
□	B	1	Lithonia Lighting	RSX2 LED P1 40K R5	RSX Area Fixture Size 2 P1 Lumen Package 4000K CCT Type R5 Distribution	11284	0.9	72.06	20'

Note
- Exterior lighting shall not operate during daylight hours.
- Building façade and landscape lighting shall be turned off between midnight or one hour after close of business, whichever is later, and 6:00am or opening, whichever is earlier.
- All other exterior lighting shall be reduced to no greater than 70% of maximum from midnight or one hour after close of business, whichever is later, and 6:00am or opening, whichever is earlier.
- Use of occupancy sensors to turn off or reduce lighting within 15 minutes of zero occupancy is recommended.

General Note
1. SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
2. SEE LUMINAIRE SCHEDULE FOR LIGHT LOSS FACTOR.
3. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' - 0"

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIRMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT CONTROLS@GASSERBUSH.COM OR 734-266-6705.

Alternates Note
THE USE OF FIXTURE ALTERNATES MUST BE RESUBMITTED TO THE CITY FOR APPROVAL.

Ordering Note
FOR INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

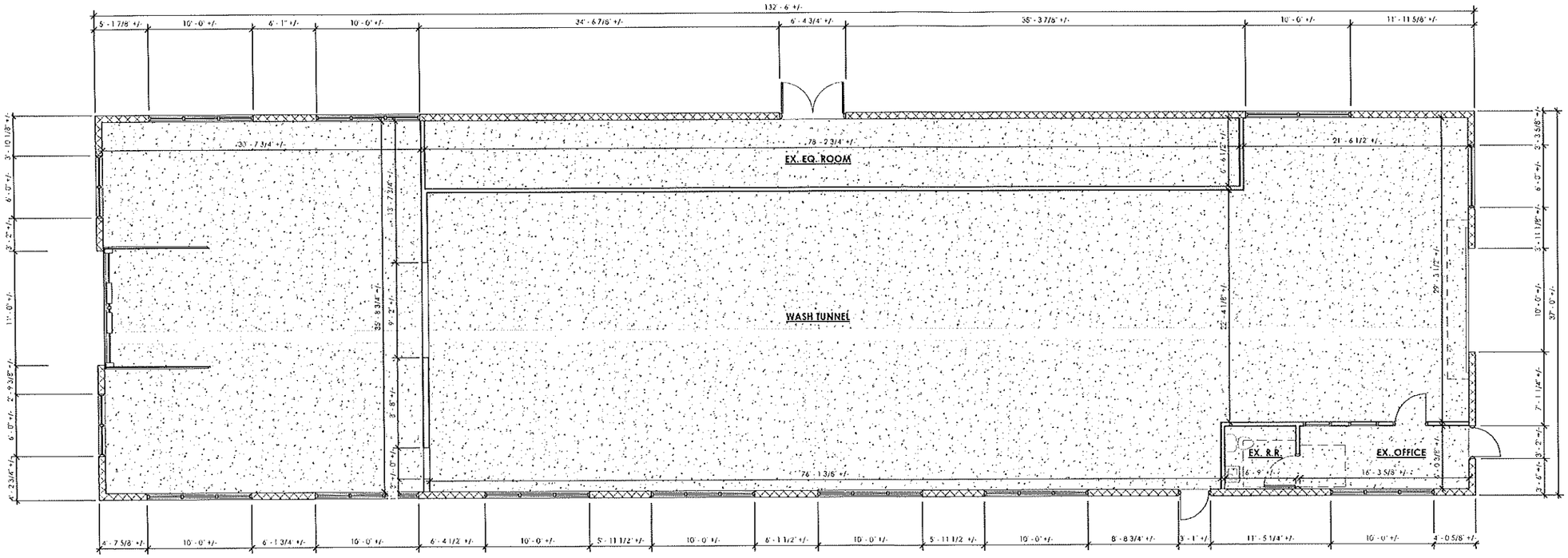
Drawing Note
THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

Mounting Height Note
MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.

GBA

ZAX AUTO WASH - FARMINGTON
PHOTOMETRIC LAYOUT
GASSER BUSH ASSOCIATES
WWW.GASSERBUSH.COM

Designer
KS
Date
2/18/2025
Scale
Not to Scale
Drawing No.
#24-37377_V2



Existing First Floor Plan

3/16" = 1'-0"

KRIEGER KLATT
ARCHITECTS

400 E. Lincoln Ave. | Royal Oak, MI 48067
P: 248.414.9270 F: 248.414.9275
www.kriegerklatt.com

Client:

Ammori Equity Partners
30200 Telegraph Rd. Suite 205
Bingham Farms, MI 48025

Project:

Zox Auto Wash - Farmington Hills
34650 W. 8 Mile Rd
Farmington Hills, MI 48335

Issued	Description	By
2024/12/18	SPA Submittal	
2024/02/2025	Rev Per Comments	

PRELIMINARY NOT FOR CONSTRUCTION

Seal:

Note:
Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field.

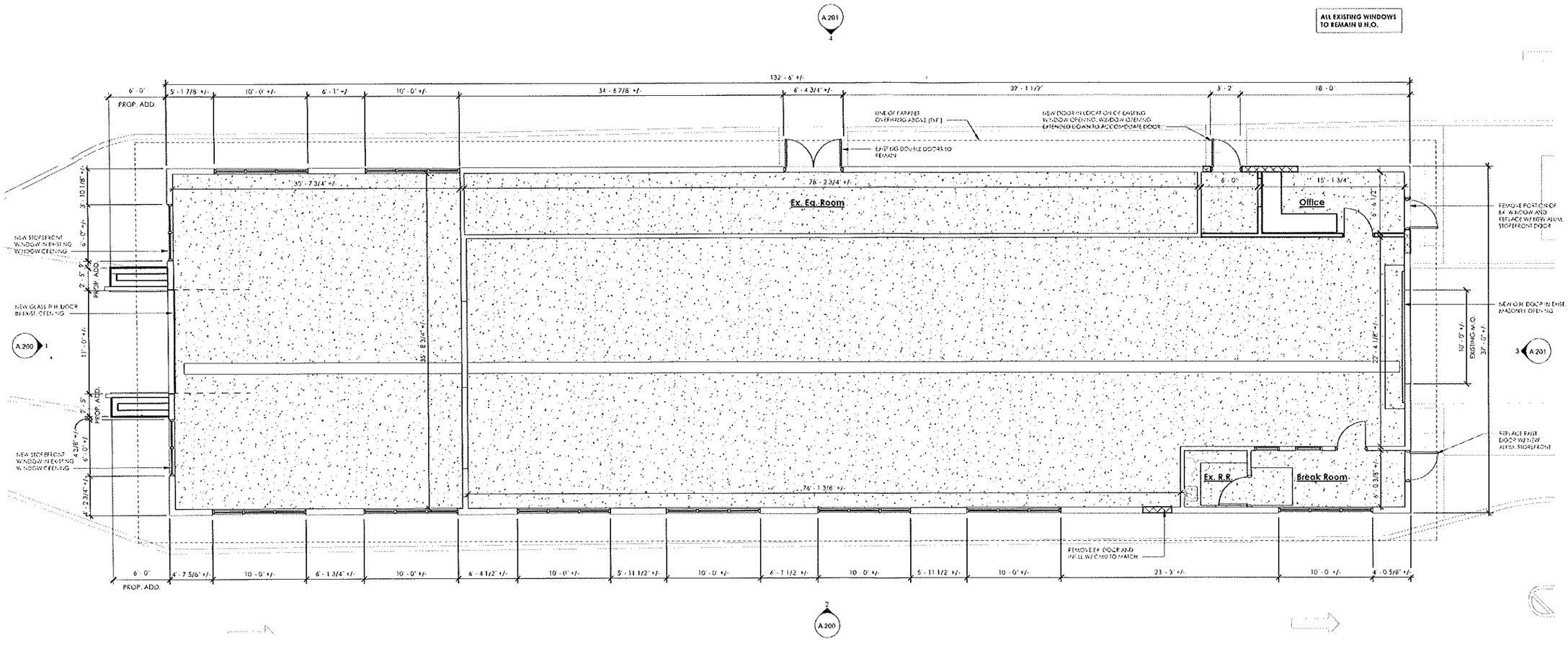
North Arrow:

Sheet Title:
Existing Floor Plan

Project Number:
24-079

Scale:
3/16" = 1'-0"

Sheet Number:
A.100



First Floor Plan

3/16" = 1'-0"

KRIEGER KLATT ARCHITECTS

400 E. Lincoln Ave. | Royal Oak, MI 48067
P: 248.414.9270 F: 248.414.9275
www.kriegerklatt.com

Client:

Ammori Equity Partners
30000 Telegraph Rd. Suite 205
Bingham Farms, MI 48025

Project:

Zax Auto Wash - Farmington Hills
34650 W. 8 Mile Rd
Farmington Hills, MI 48335

Issued	Description	By
2024/12/18	SPA Submittal	
2024/02/2025	Rev Per Comments	

PRELIMINARY NOT FOR CONSTRUCTION

Seal:

Note:

Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field.

North Arrow:

Sheet Title:

First Floor Plan

Project Number:

24-079

Scale:

3/16" = 1'-0"

Sheet Number:

A.101

1 / A.101 Front (South) Elevation
3/16" = 1'-0"

2 / A.101 Side (East) Elevation
3/16" = 1'-0"

EIFS Wall Panel "**M1**"
Manufacturer: Sto Corp
System: Stolit
Color: Pantone 2905

EIFS Wall Panel "**M2**"
Manufacturer: Sto Corp
System: Stolit
Color: Pantone 1375

EIFS Wall Panel "**M3**"
Manufacturer: Sto Corp
System: Stolit
Color: Burnt Ash - 32 11403

Existing Smooth 8x16 CMU Block, Painted "**M4**"
Color: Light Grey - warm

Dark Grey Metal Panel "**M5**"
Manufacturer: Vesta Siding
System: Plank Panel
Color: 414 Ironstone

Light Grey Metal Panel "**M6**"
Manufacturer: Vesta Siding
System: Plank Panel
Color: 462 Silver Lining

Blue Metal Panel "**M7**"
Make: Alpolic
System: Dry Extrusion
Color: Custom "Zax Light Blue"

PRELIMINARY NOT FOR CONSTRUCTION

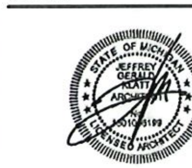
KRIEGER KLATT
ARCHITECTS
400 E. Lincoln Ave. | Royal Oak, MI 48067
P: 248.414.9270 F: 248.414.9275
www.kriegerklatt.com

Client:
Ammori Equity Partners
199 Pierce St. Birmingham MI 48009

Project:
Zax Auto Wash - Farmington Hills
34650 W. 8 Mile Rd
Farmington Hills, Mi 48335

Issued	Description	By
2024/12/18	SPA Submittal	
2024/02/2025	Rev Per Comments	

Seal:



Note:
Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field.

North Arrow:

Sheet Title:
Exterior Elevations

Project Number:
24-079

Scale:
3/16" = 1'-0"

Sheet Number:
A.200

Front Exterior View

Rear Exterior View

Side Exterior View

Corner Exterior View

KRIEGER KLATT ARCHITECTS
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Client:
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199 Pierce St. Birmingham MI 48009

Project:
Zax Auto Wash - Farmington Hills
34650 W. 8 Mile Rd
Farmington Hills, MI 48335

Issued	Description	By
2024/12/18	SPA Submittal	
2024/02/2025	Rev Per Comments	

PRELIMINARY NOT FOR CONSTRUCTION

Seal:

Note:
Do not scale drawings. Use calculated dimensions only. Verify existing conditions in field.

North Arrow:

Sheet Title:
Exterior Renderings

Project Number:
24-079

Scale:

Sheet Number:
R.300

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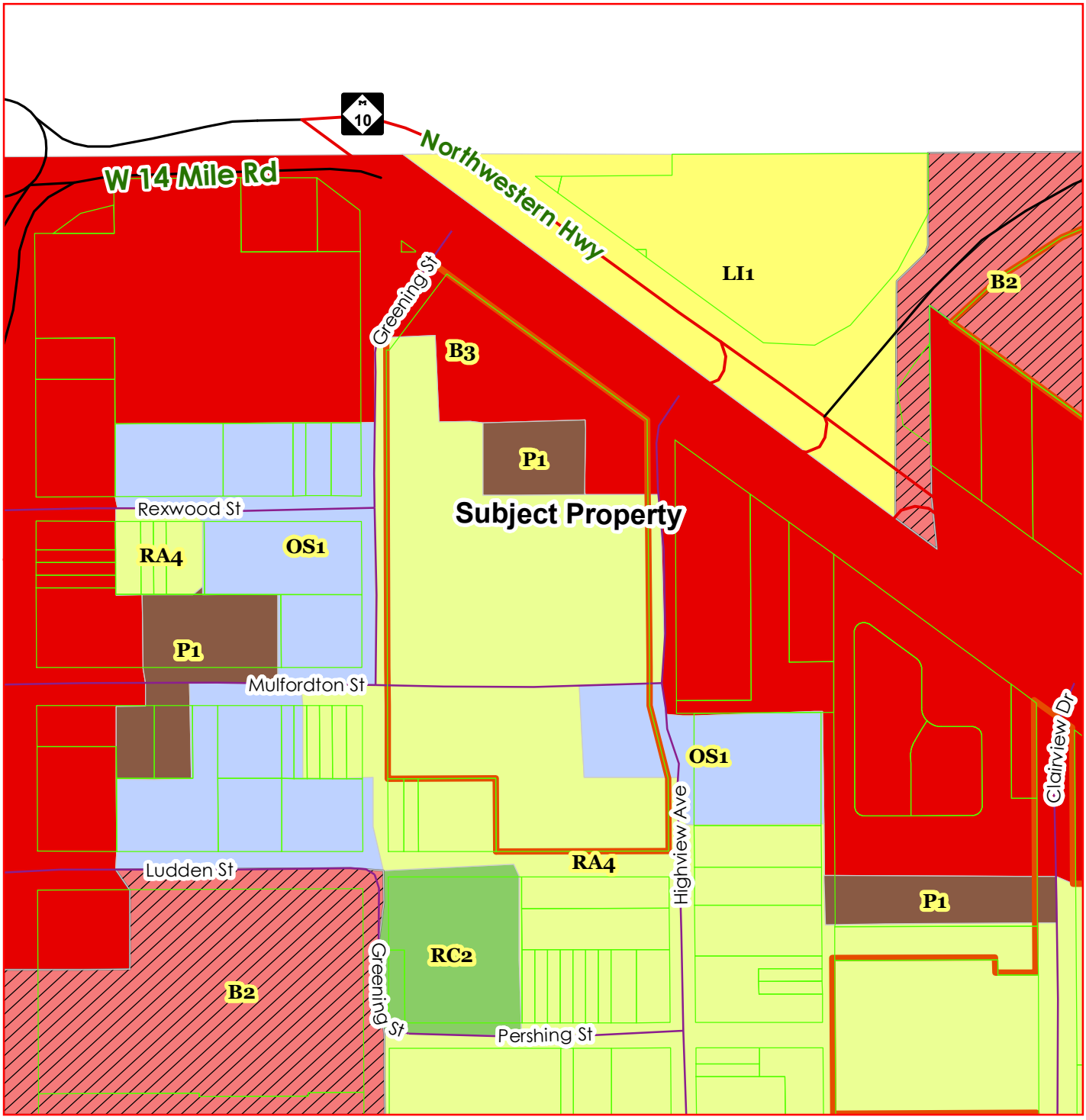
SP 65-12-2024 (PUD 4, 2021)
32905 Northwestern Hwy. (B-3, RA-4, P-1)
Construction of multiple-family dwellings



- Tax parcel
- Minor roads
- Planned Unit Developments

Zoning Districts

Zoning Districts

- B-2 Community Business District
- B-3 General Business District
- LI-1 Light Industrial District
- OS-1 Office Service District
- P-1 Vehicular Parking District
- RA-4 One Family Residential District
- RC-2 Multiple Family Residential

N

0 240

FEET

SOURCE: City of Farmington Hills, 2024
Oakland County GIS, 2024

FARMINGTON HILLS Michigan

SP 65-12-2024 (PUD 4, 2021)
32905 Northwestern Hwy. (B-3, RA-4, P-1)
Construction of multiple-family dwellings

N

0 150

FEET

Planning Division

- Tax parcel
- Minor roads
- Planned Unit Developments

SOURCE: City of Farmington Hills, 2024
Oakland County GIS, 2024

FARMINGTON HILLS Michigan

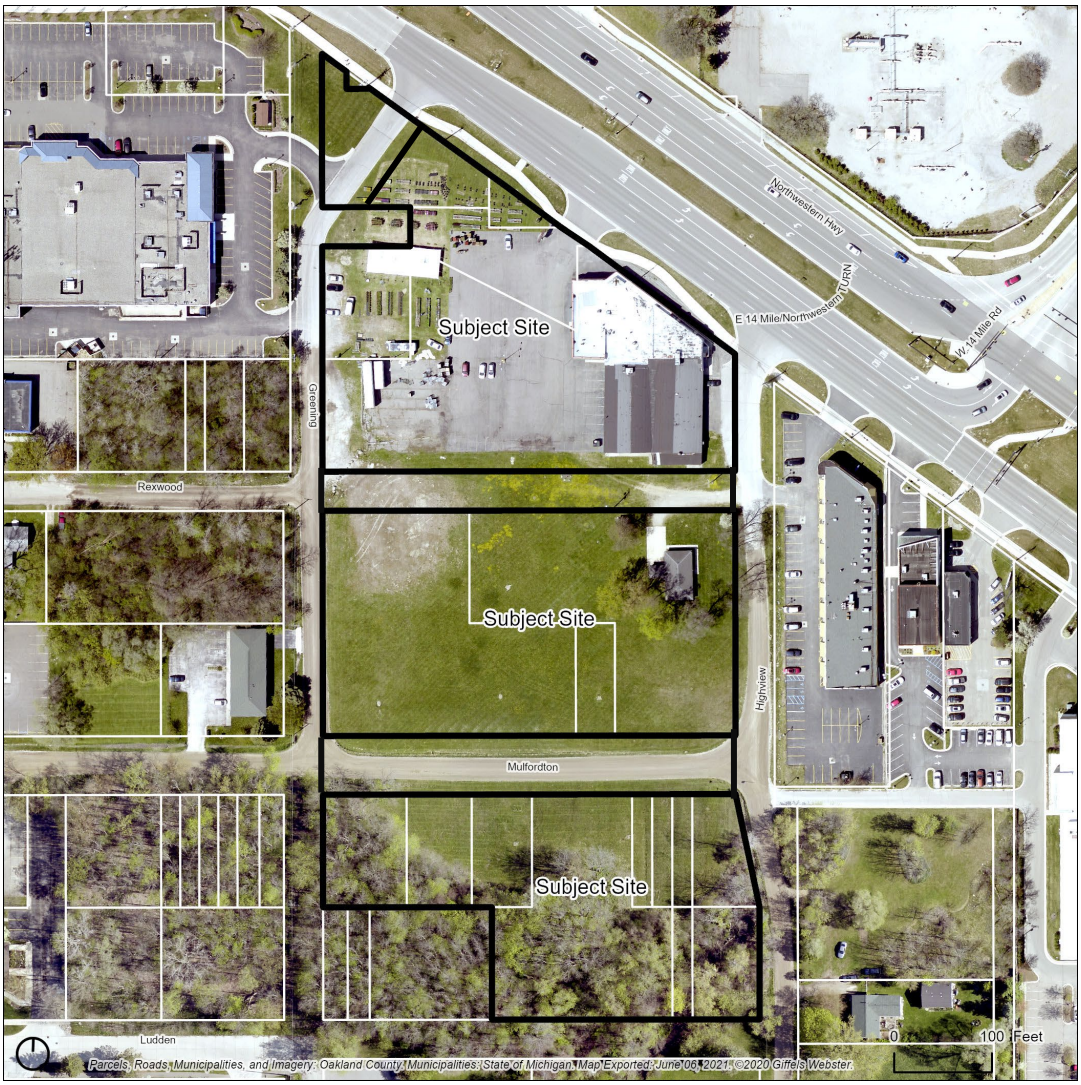
January 22, 2025

Farmington Hills Planning Commission
31555 W 11 Mile Rd
Farmington Hills, MI 48336

Final Site Plan

Case:	65-12-2024 (with PUD 4, 2021)
Site:	32905 Northwestern Highway and others
Applicant:	Farmington Hills Lofts, LLC/Tom Herbst
Application Date:	1/2/2025
Zoning:	PUD over B-3 General Business/RA-4 One Family /OS-1 Office/P-1 Parking

We have completed a review of the application for final site plan approval referenced above and a summary of our findings is below. Items in **bold** require specific action by the Applicant. Items in *italics* can be addressed administratively.



SUMMARY OF FINDINGS

Existing Conditions

1. **Zoning.** The site is an approved PUD with a mix of B-3 General Business/RA-4 One Family (8,500 sq ft)/OS-1 Office Service/P-1 Parking in the underlying zoning. The PUD has received final approval from City Council, and the necessary vacations of right-of-way on Fordson, Rexwood, and Mulfordton Streets has occurred.
2. **Existing site.** The site is a total of 7.238 acres. The northern end of the site is occupied by two commercial buildings and a house; the rest of the site is vacant.
3. **Adjacent Properties.**

Direction	Zoning	Land Use
North	LI-1	Gas facility
East	B-3/OS-1/RA-4	Commercial/vacant/single family
South	RA-4	Vacant/single family/assisted living
West	B-3/OS-1/RA-4	Commercial/office/vacant

4. **Site configuration and access.** The site is proposed to be accessed from Greening Street and Highview Avenue; driveways directly to Northwestern Highway will be closed.

Site Plan:

1. **Summary of Proposed Use.** The PUD was approved for a mix of housing. When PUD approval was obtained, it did not include final site plan approval. The plan is now back before the planning commission for final site plan approval. The applicant is proposing to construct two apartment buildings with 250 units in a northern building with a parking deck and 66 units in a smaller southern building. This review verifies the plan's compliance with the approved PUD, as well as other standards of the Zoning Ordinance. All items that deviate from underlying zoning must be reflected in the final development agreement for the PUD.
2. **Density.** The total site is 7.238 acres, or approximately 315,000 square feet. Density is determined by the number of rooms. To determine the number of rooms, the following standard (Section 34-3.5.2.F.) is applied:
    - One-bedroom unit: 2 rooms
    - Two-bedroom unit: 3 rooms
    - Three-bedroom unit: 4 rooms

    The applicant proposes 316 units (155 one-bedrooms, 135 two-bedrooms, 26 three-bedrooms) with a total of 819 rooms, based on the standard above (*the applicant supplies an incorrect total of 503 rooms; this is the number of actual bedrooms, which is different from the ordinance's density standard*). The use, unit count, and unit mix are consistent with those approved under PUD 4, 2021.
3. **Parking (34-5.2).** The concept plan unit count, based on the number of rooms per unit, requires 645 parking spaces. The concept plan notes 533 spaces, many of which are in a parking structure; some are also in tuck-under garages in the southern building. The total of 533 parking spaces is consistent with PUD 4,2021.
4. **Off-street parking dimensions (34-5.3.3.A & B.).**

Item	Required	Proposed/Comments
Maneuvering lane width	20 ft.	24’
Parking space width	9 ft.	9 ft
Parking space length	20 ft. for minimum required (May include a maximum two-foot unobstructed vehicle overhang area at the front of the parking space.) 17 ft. for additional parking (May include a maximum one-foot unobstructed vehicle overhang area at the front of the parking space)	18 ft with 2-foot overhang
Screening	The off-street parking lot shall be provided with screening as required by Section 34-5.15	See landscaping comments below
Dead-End Aisles	Dead-end off-street parking aisles are discouraged, especially in connection with business uses. Such aisles should be no more than eight (8) spaces deep and should, in any case, be used only when there is no reasonable alternative. If more than eight (8) spaces deep, the layout shall provide a means for vehicles to turn around if all spaces are occupied.	This is not a business use. Both serve surface and garage spaces. Two-way access is provided to allow a means for turning around.

5. **Dimensional Standards.** The table below compares the dimensional standards of the underlying districts and the approved PUD to the submitted plans. Bold text indicates the controlling standard.

Standard	Approved PUD	B-3 Requirement	OS-1 Requirement	RA-4 Requirement	Provided
Min lot size	--	--	--	8,500 sq ft	7+ acres
Min lot width	--	--	--	60 ft	204.7 feet
Lot coverage	--	--	--	35%	43%
Front setback	--	**25 ft**	40 ft	25 ft	30 ft
Rear setback	**25 feet**	20 ft	20 ft	35 ft	25 ft
Side setback	--	10 ft	10 ft	5 ft/15 ft total	--
Residential setback	--	20 ft	20 ft	**--**	25 ft
Side street setback	**10 feet permitted east** **13 feet permitted west**	25 ft	25 ft	--	13 ft/10 ft*
Building height	**52 feet**	Max. 50 ft/3 stories	34 ft/stories	25 ft	52 ft/40 ft

Front yard open space		**50%**	50%	--	100%

* *At the time of the original PUD approval, this setback was 20 feet; the PUD agreement must reflect the 10 ft setback in order for site plan approval to be valid under the PUD*.

6. **Landscaping (34-5.19).**

Item	**Required**			**Proposed/Comments**
Minimum distance from the property line (34-5.14.C.ii)	4 ft from the property line for trees and large shrubs			Compliant
Minimum parking lot island area	Minimum of 180 square feet; 3 feet minimum radius at the trunk of the tree			Compliant
Cost estimate	Not required			--
Minimum size and spacing requirements at planting (34-5.14.F)	**Size**	**Center to center distance (max)**		
	(Height/width)	**groupings**	**rows**	
• Evergreen Trees	8 ft. height	20 ft.	12 ft.	Compliant
• Narrow Evergreen Trees	5 ft. height	10 ft.	5 ft.	N/A
• Large Shrubs	30 in. height	10 ft.	5 ft.	N/A
• Small Shrubs	24 in. width	4 ft.	4 ft.	N/A
• Large Deciduous	3 in. caliper	30 ft.	-	Compliant
• Small deciduous trees	2 in. caliper	15 ft.	-	N/A
• Hedge shrubs	24 in. height	3 ft.	3 ft.	N/A
Canopy Trees	Shall be large deciduous. PC may permit large evergreens			Compliant
Minimum number of parking lot trees (34-5.14.4.C)	1 per every 2,800 square feet of paved surface area: 35,192 SF of Pavement = 13 trees			13 trees
Parking lot screening from public thoroughfare (34-5.14.5)	A planted hedge of small shrubs, or A masonry wall or berm of 2 feet high			No hedge is provided; however, parking is located in the rear.
Wall or Berm (34-5.15)	Required when adjacent residential			6-foot concrete wall provided along residential property line.

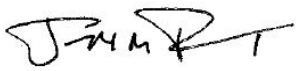
7. **Tree Removal (34-5.18).** **The tree inventory indicates that 109 non-landmark, regulated trees will be removed, but the replacement calculation indicates only 49. It appears that the proposed quantity of replacement trees falls short of the full requirement. As this was not requested as a deviation from ordinance standards in the PUD, the applicant will have to place the trees or pay into the tree fund for the difference.**

Removed	Required Replacements	Provided
Regulated Trees: 109 removed	109	See total below
Landmark Trees: 7 with total dbh of 165.5 inches	165.5 x 0.25 = 41.4 inches 41.4/3 = 14 3-inch caliper trees	See total below
Total:	123	65

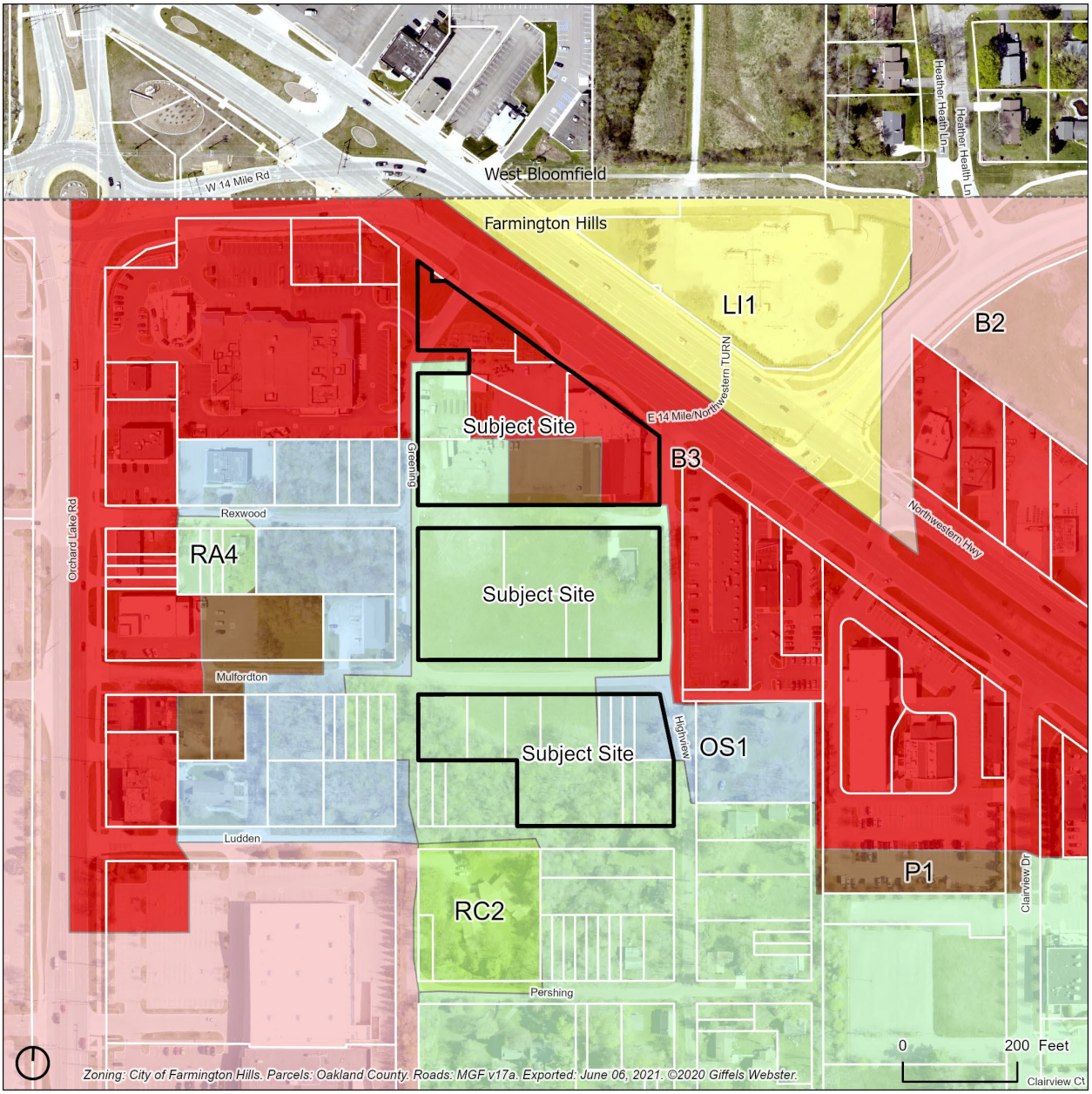
8. **Lighting (34-5.16).** **The photometric plan provided by the applicant addresses only the southern portion of the site. Mounting heights are not provided, and light levels at the property line are not clear from the data presented. Is exterior lighting proposed for the rest of the site? An updated photometric plan including the required notes from Section 5.16 and more clearly illustrating compliance with that section is needed**.
9. **Dumpster Enclosure.** **The site plan lacks a detail of the dumpster enclosure for the southern building**.
10. **Vehicle Circulation & Access.** Circulation is provided by driveways from Greening and Highview; one driveway from Highview directly serves the parking deck, while the other serves the surface lot for the southern building.
11. **Mechanical Equipment.** Rooftop mechanical equipment does not appear to be an element of either building. *Ground-mounted mechanical equipment must be screened in accordance with Section 34-5.1.4.D.*
12. **Pedestrian Access & Connections (3.24, 5.19)**. Sidewalks are provided along Northwestern Highway and Greening Street, but **not down Highview Avenue or Ludden Street**. At the time of final PUD approval, no exception from the sidewalk requirement was requested.
13. **Floor Plans and Elevations.** The final PUD submittal in 2021 included basic floor plans and building elevations, both of which are required elements of site plan submittal. **These should be re-submitted at this time, with revisions, if applicable.**

We are available to answer questions.

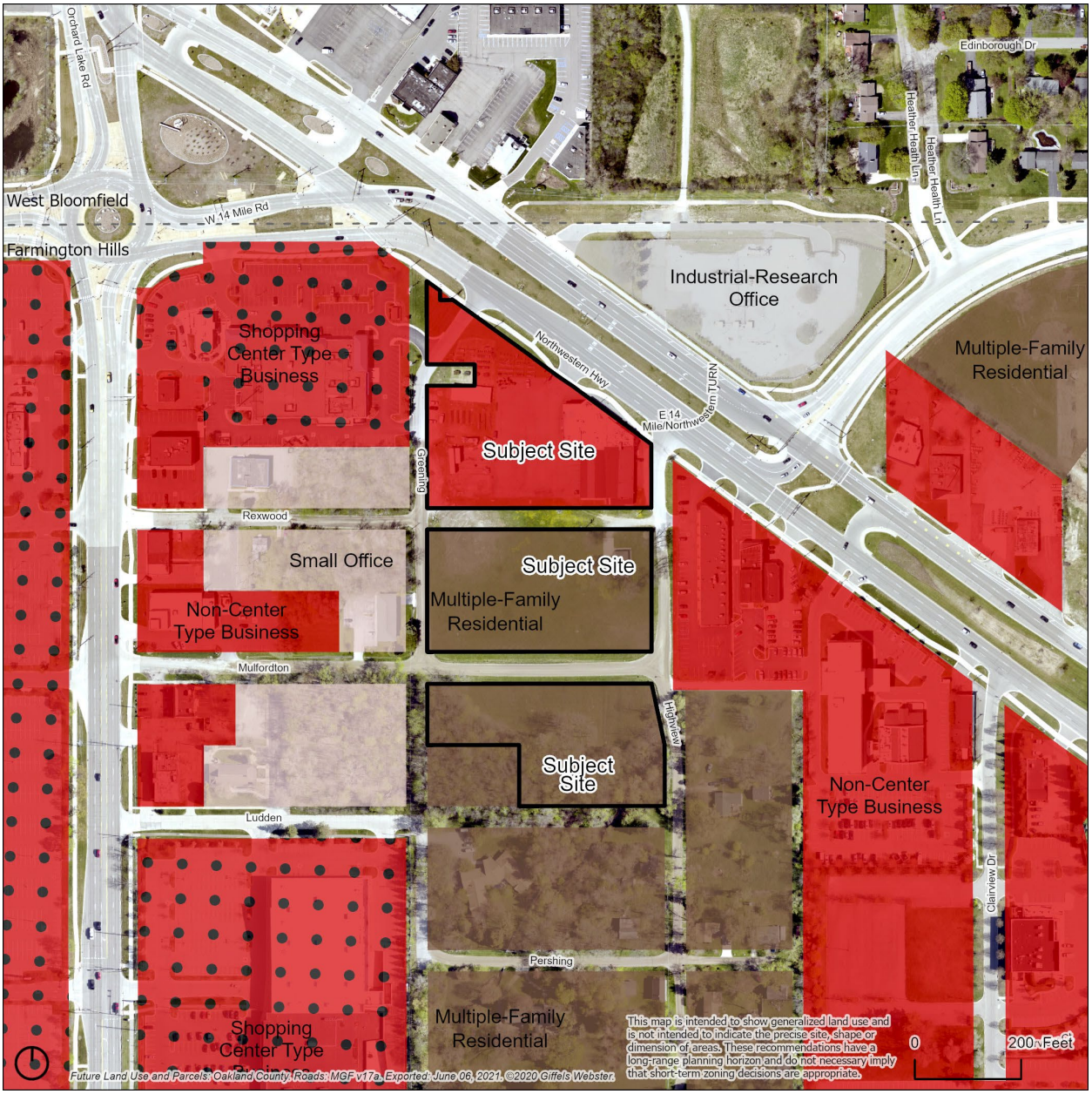
Respectfully,
Giffels Webster



Joe Tangari, AICP
Principal Planner

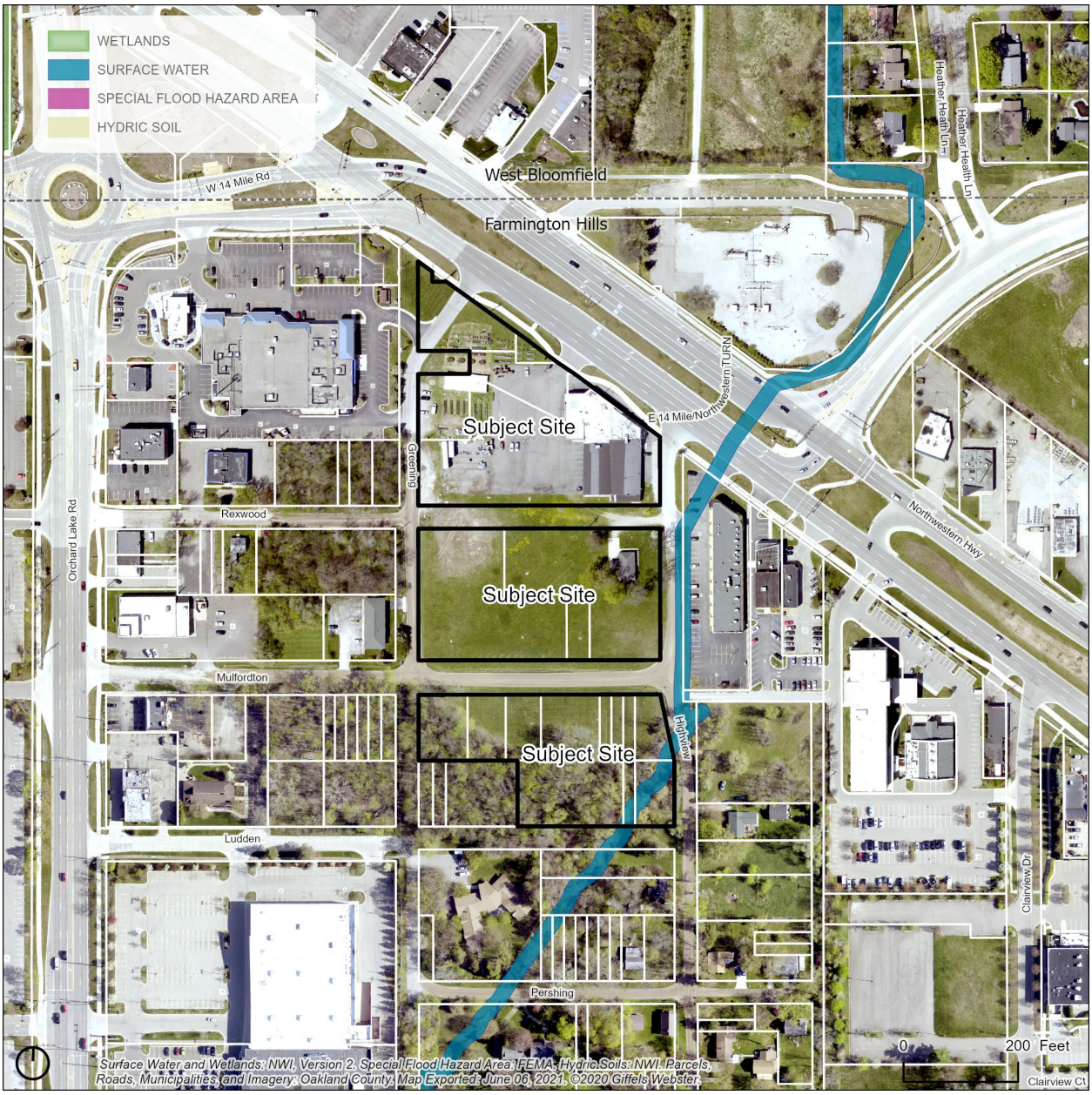


Current zoning



Master Plan designations for this area.


West Bloomfield
Farmington Hills
W 14 Mile Rd
E 14 Mile/Northwestern TURN
Northwestern Hwy
Heather Heath Ln
Heather Heath Ln
Subject Site
Subject Site
Subject Site
Greening
Rexwood
Orchard Lake Rd
Mulfordton
Highview
Ludden
Pershing
Clairview Dr
Clairview Ct
0
200 Feet
Parcels, Roads, Municipalities, and Imagery: Oakland County, Municipalities: State of Michigan, Map Exported: June 06, 2021. ©2020 Giffels Webster.


WETLANDS
SURFACE WATER
SPECIAL FLOOD HAZARD AREA
HYDRIC SOIL
W 14 Mile Rd
West Bloomfield
Farmington Hills
Heather Heath Ln
Heather Heath Ln
E 14 Mile/Northwestern TURN
Subject Site
Greening
Rexwood
Orchard Lake Rd
Northwestern Hwy
Subject Site
Mulfordton
Highview
Subject Site
Ludden
Clairview Dr
Pershing
0
200 Feet
Clairview Ct
Surface Water and Wetlands: NWI, Version 2. Special Flood Hazard Area: FEMA. Hydric Soils: NWI. Parcels, Roads, Municipalities, and Imagery: Oakland County. Map Exported: June 06, 2021. ©2020 Giffels Webster.

DEPARTMENT OF PUBLIC SERVICES
JACOB RUSHLOW, P.E., DIRECTOR

INTEROFFICE CORRESPONDENCE

DATE: January 27, 2025

TO: Eric Perdonik, Planning Department

FROM: James Cubera, City Engineer

SUBJECT: The Emerson Site Plan
SP# 65-12-2024 53-07-2024 PJ#: 02-21-67
South of Northwestern HWY between Greening and Highview

This office has performed a preliminary review of the above referenced revised site plan submitted to the Planning Department on January 2, 2025 and received by the Engineering Division on January 3, 2025. Our preliminary comments are as follows:

1. The plan appears to be a layout of PUD #4-2021 isolated strictly to the onsite portion of the project.

2. There are many detailed infrastructure improvements required of this site. Our comments remain predominantly as per our memo dated November 1, 2021 and updated November 15, 2021 and with our environmental comments dated October 21, 2021.

3. Additionally along with the above, the Exhibit C of the PUD agreement as well as the PUD document with Engineering comments takes precedent.

FIRE

FARMINGTON HILLS

INTEROFFICE CORRESPONDENCE

Date: January 22, 2025

To: Planning Commission

From: Jason Baloga, Fire Marshal

Subject: Site Plan 65-12-2024/PUD 4-2001 (The Emerson)

Based on the submitted plans, it appears that this site does not meet the following site plan requirements:

1. Site access Chapter 12 Section 12-11(1)a; generally dead-end drives longer than one-hundred (100) feet shall not be allowed. Emergency Access and 50" turning radius shall be verified and approved by the Engineering Department.

2. Hydrant coverage Chapter 12 Section 12-11(2); the current plans do not appear to meet the ordinance spacing requirements.

3. Sites must be designed to accommodate fire apparatus with a 50' turning radius. The 50' shall be measured to the centerline of the roadway.

With this consideration the Fire Department cannot provide adequate service as it relates to Life Safety. Once the above requirements have been met, the Fire Department will have no objection to recommending approval based on the following conditions:

1. Provide additional details for the 23 "Tuck Under" parking spaces. Increased sprinkler density in this area and attic suppression may be required.

2. No parking fire lane signs shall be posted and strictly enforced.

3. Emergency Responder Radio coverage shall be required if it is determined that signal strength is not adequate.

4. The minimum clearance between the finished roadway and any overhead obstruction shall be 13'6".

5. The location of service disconnect/emergency disconnect for EV chargers shall be coordinated with the Fire Department and identified on the Preplan. Also, a Knox shunt trip shall be required for parking garage and tuck under spaces.

6. Any proposed open flam decorative devices shall be pre-approved by the Building and Fire Department.

7. If a fire pump is required, a diesel pump or on-site generator shall be provided; DTE is not considered a reliable power source.

8. Proponent shall consider a generator or other means of backup power to increase resilience as it relates to emergency preparedness during severe weather.

9. Egress from courtyards shall be maintained according to International Fire Code and Michigan Building Code requirements.

10. The Fire Department Connection (FDC) shall be a 5" Storz connection with a 30° downturn; the FDC location shall be approved by the Fire Department. Please contact the Fire Marshal for approval of the location.

11. The building shall be properly maintained and in accordance with Fire Prevention Code requirements.

Jason Baloga, Fire Marshal

JB/al

THE EMERSON

A PLANNED UNIT DEVELOPMENT

THE CITY OF FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN

SITE PLAN

VICINITY MAP
NOT TO SCALE

DEVELOPMENT TEAM

DEVELOPER / APPLICANT

FARMINGTON LOFTS, LLC.
353 NORTH OLD WOOODWARD
BIRMINGHAM, MI 48009
CONTACT: MATT SHIFFMAN
PHONE: (248) 430-8888
EMAIL: MSHIFFMAN@ALDENDEVLOPMENT.COM

CIVIL ENGINEER

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PHONE: (248) 447-2000
EMAIL: JROTH@ATWELL.COM

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ALLEN DESIGN
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PHONE: (248) 467-4668
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SURVEYOR

ATWELL, LLC
TWO TOWNE SQUARE, SUITE 700
SOUTHFIELD, MICHIGAN 48076
CONTACT: JUSTIN CECIL
PHONE: (248) 447-2000
EMAIL: JCECIL@ATWELL.COM

ARCHITECT

HUMPHREYS & PARTNERS ARCHITECTS
5339 ALPHA ROAD SUITE 300
DALLAS, TX 75240
CONTACT: RYAN MCLEAN
PHONE: (972) 701-9636
EMAIL: RYAN.MCLEAN@HUMPHREYS.COM

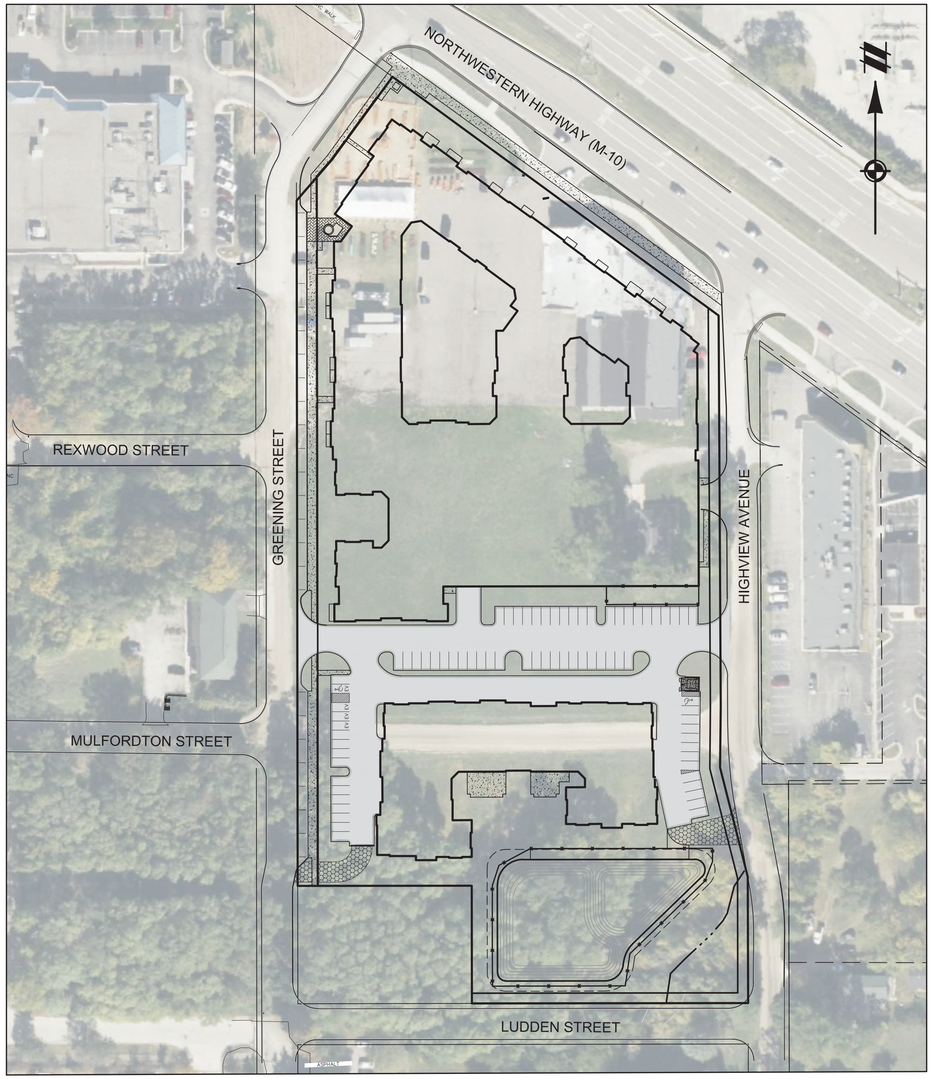
PROJECT NARRATIVE

THE EMERSON IS A PLANNED UNIT DEVELOPMENT THAT RECEIVED PUD APPROVAL ON 2/12/2024.

THE DEVELOPMENT INCLUDES 316 RESIDENTIAL UNITS AND 533 PARKING SPACES. THE RESIDENTIAL UNITS ARE SPLIT BETWEEN A FOUR-STORY BUILDING FRONTING NORTHWESTERN HIGHWAY AND A THREE-STORY BUILDING SITUATED AT THE REAR OF THE SITE. THE DEVELOPMENT WILL OFFER STRUCTURED PARKING, TUCK UNDER GARAGES, AND SUPPLEMENTAL SURFACE PARKING INCLUDING PARALLEL SPACES ALONG GREENING STREET.

THE RESIDENTS OF THE EMERSON WILL HAVE ACCESS TO OVER 6,500 SQUARE FEET OF INTERIOR AMENITIES, ALONG WITH EXTERIOR COURTYARDS FEATURING GATHERING AREAS, A SWIMMING POOL, YARD GAMES, OUTDOOR CULINARY SUITES, FIRE FEATURES AND OTHER OUTDOOR AMENITIES.

THE SITE IS PROPOSED TO BE SERVICED BY PUBLIC WATER AND SEWER AND STORMWATER MANAGEMENT WILL BE ACCOMMODATED WITH A DETENTION POND THAT MEETS ALL CITY AND COUNTY STANDARDS.



OVERALL DEVELOPMENT MAP

SHEET INDEX

LEGAL DESCRIPTION:

DESCRIPTION OF A 7.238 ACRE PARCEL OF LAND BEING A PART OF FARMINGTON HEIGHTS SUBDIVISION, AS RECORDED IN LIBER 26, PAGE 32 OF PLATS, OAKLAND COUNTY RECORDS, ALSO BEING A PART OF SUPERVISOR'S SUBDIVISION NO. 7, AS RECORDED IN LIBER 53, PAGE 15 OF PLATS, OAKLAND COUNTY RECORDS, LOCATED IN THE NORTHWEST 1/4 OF SECTION 2, TOWN 1 NORTH, RANGE 9 EAST, CITY OF FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN:

ALL OF LOTS 1 THROUGH 20, INCLUSIVE, AND PART OF LOTS 21 THROUGH 32, INCLUSIVE, OF BLOCK L, AND ALL OF LOTS 1 THROUGH 40, INCLUSIVE, OF BLOCK M, AND ALL OF LOTS 9 THROUGH 42, INCLUSIVE, OF BLOCK N, AND THAT PORTION OF FORD2 AVENUE (40 FEET WIDE), REXWOOD STREET (PLATTED AS ROOSEVELT AVENUE) (40 FEET WIDE), AND MULFORDTON STREET (PLATTED AS MAIN BOULEVARD) (60 FEET WIDE) OF FARMINGTON HEIGHTS SUBDIVISION, AS RECORDED IN LIBER 26, PAGE 32 OF PLATS, OAKLAND COUNTY RECORDS, AND ALL OF LOTS 132 THROUGH 144, INCLUSIVE, AND PART OF LOTS 145 THROUGH 148, INCLUSIVE, AND THAT PART OF FORD AVENUE (40 FEET WIDE), OF SUPERVISOR'S SUBDIVISION NO. 7, AS RECORDED IN LIBER 53, PAGE 15 OF PLATS, OAKLAND COUNTY RECORDS, LOCATED IN THE NORTHWEST 1/4 OF SECTION 2, TOWN 1 NORTH, RANGE 9 EAST, CITY OF FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN, ALL BEING MORE PARTICULARLY DESCRIBED AS: **BEGINNING** AT THE NORTHWEST CORNER OF LOT 22, BLOCK N OF SAID FARMINGTON HEIGHTS SUBDIVISION; THENCE N02°49'10"W (RECORDED AS N89°57'00"W AND N00°03'00"E) 554.25 FEET ALONG THE EAST RIGHT OF WAY LINE OF GREENING STREET (PLATTED AS PLEASANT AVENUE) (40 FEET WIDE); THENCE N87°16'32"E (RECORDED AS N88°34'30"W AND N89°57'W) 5.12 FEET ALONG THE SOUTH RIGHT OF WAY LINE OF FORD AVENUE (40 FEET WIDE); THENCE N33°29'08"E (RECORDED AS N33°28'34"E) 149.88 FEET; THENCE S56°30'52"E (RECORDED AS S56°31'26"E AND S52°20'00"E) 394.44 FEET ALONG THE SOUTH RIGHT OF WAY LINE OF NORTHWESTERN HIGHWAY (M-10) (204 FEET WIDE); THENCE S03°02'40"E (RECORDED AS S01°13'30"E AND N00°10'30"W AND N01°13'30"E) 381.48 FEET ALONG THE WEST RIGHT OF WAY LINE OF HIGHVIEW AVENUE (40 FEET WIDE); THENCE S02°07'21"E 60.00 FEET; THENCE S16°57'46"E 110.10 FEET (PLATTED AS 110.55 FEET) ALONG THE WEST RIGHT OF WAY LINE OF SAID HIGHVIEW AVENUE; THENCE S02°53'07"E (PLATTED AS S00°10'30"E) 123.24 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID HIGHVIEW AVENUE; THENCE S87°10'50"W (PLATTED AS N89°57'W) 269.54 FEET ALONG THE NORTH RIGHT OF WAY LINE OF LUDDEN STREET (PLATTED AS LINCOLN AVENUE) (40 FEET WIDE); THENCE N02°49'10"W 115.00 FEET ALONG THE WEST LINE OF LOT 9 OF BLOCK N OF SAID FARMINGTON HEIGHTS SUBDIVISION; THENCE S87°10'50"W 170.00 FEET ALONG THE SOUTH LINE OF LOTS 22 THROUGH 29, INCLUSIVE, OF BLOCK N OF SAID FARMINGTON HEIGHTS SUBDIVISION; THENCE N02°49'10"W (PLATTED AS N00°03'E) 115.00 FEET ALONG THE EAST RIGHT OF WAY LINE OF SAID GREENING STREET TO THE PLACE OF BEGINNING, CONTAINING 7.238 ACRES OF LAND, MORE OR LESS, BEING SUBJECT TO EASEMENTS, CONDITIONS, RESTRICTIONS AND EXCEPTIONS OF RECORD, IF ANY.

STATE OF MICHIGAN
AMMAR KALASHO
ENGINEER
No. 58902
LICENSED PROFESSIONAL ENGINEER

NOT FOR CONSTRUCTION

811
Know what's **below.**
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THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

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TWO TOWNE SQUARE, SUITE 700
SOUTHFIELD, MI 48076
248.447.2000

SECTION 2
TOWN 1 NORTH, RANGE 9 EAST
CITY OF FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

FARMINGTON LOFTS, LLC.
THE EMERSON
SITE PLAN
COVER SHEET

DATE
JAN. 2, 2025

REVISIONS

DRAWN BY: MM
CHECKED BY: AK
P.M.: J. ROTH
JOB #: 19002962
FILE CODE: –
SHEET NO. 1

CAD FILE: 19002962FSP-01-CV.DWG

K:\19002962\DWG\PLAN SETS\SITE-FINAL\19002962FSP-01-CV.DWG 12/20/2024 10:59 AM MATTHEW MYERS

LEGEND

	PROPERTY LINE
588	EX. 1' CONTOUR
590	EX. 5' CONTOUR
	EX. R.O.W. LINE
	CENTERLINE OF ROAD
	EXISTING CURB AND GUTTER
	EASEMENT
G G	EX. CENTERLINE OF DITCH
G G	EX. GAS
C C C	EX. STORM SEWER
○ □ (	EX. MANHOLE/CATCH BASIN/END SECTION
W	EX. WATER MAIN
	EX. HYDRANT
	EX. GATE VALVE & WELL
	EX. SANITARY SEWER
	EX. SANITARY SEWER MANHOLE
P.O.B.	PLACE OF BEGINNING
oU.P.	EX. UTILITY POLE
OHE OHE	EX. OVERHEAD LINE
	PR. REMOVAL
	EX. SIGN
	EX. LIGHT POLE
T	EX. TELEPHONE RISER
CATV	EX. CABLE RISER
	EX. TREE
	EX. TREE REMOVAL
	EXISTING WETLAND
	EXISTING BUILDING
	PR. BUILDING AND PAVEMENT REMOVAL

NOTE:
1. FORDSON, REXWOOD AND MULFORDTON ROAD VACATION WERE APPROVED OCTOBER 14TH, 2024
2. THE LOTS WILL BE COMBINED WHICH IS A REQUIRMENT PRIOR TO FINAL SITE PLAN APPROVAL.

SITE BENCHMARKS:

BM #1: SET RAILROAD SPIKE IN UTILITY POLE ON WEST SIDE OF GREENING STREET
ELEVATION: 872.22 (NAVD88)

BM #2: ARROW ON FIRE HYDRANT IN SOUTHERLY RIGHT OF WAY OF NORTHWESTERN HIGHWAY
ELEVATION: 874.56 (NAVD88)

BM #3: ARROW ON FIRE HYDRANT IN NORTHERLY RIGHT OF WAY OF REXWOOD STREET
ELEVATION: 871.05 (NAVD88)

BM #4: SET PK NAIL IN UTILITY POLE AT NORTHWEST INTERSECTION OF GREENING STREET AND MULFORDTON STREET
ELEVATION: 865.59 (NAVD88)

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TWO TOWNE SQUARE, SUITE 700
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SECTION 2
TOWN 1 NORTH, RANGE 9 EAST
CITY OF FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

FARMINGTON LOFTS, LLC.

THE EMERSON
SITE PLAN
EXISTING CONDITIONS AND DEMOLITION PLAN

DATE
JAN. 2, 2025

REVISIONS

SCALE: 1" = 50 FEET

DRAWN BY: MM
CHECKED BY: AK
P.M.: J. ROTH
JOB #: 19002962
FILE CODE: –
SHEET NO. 2

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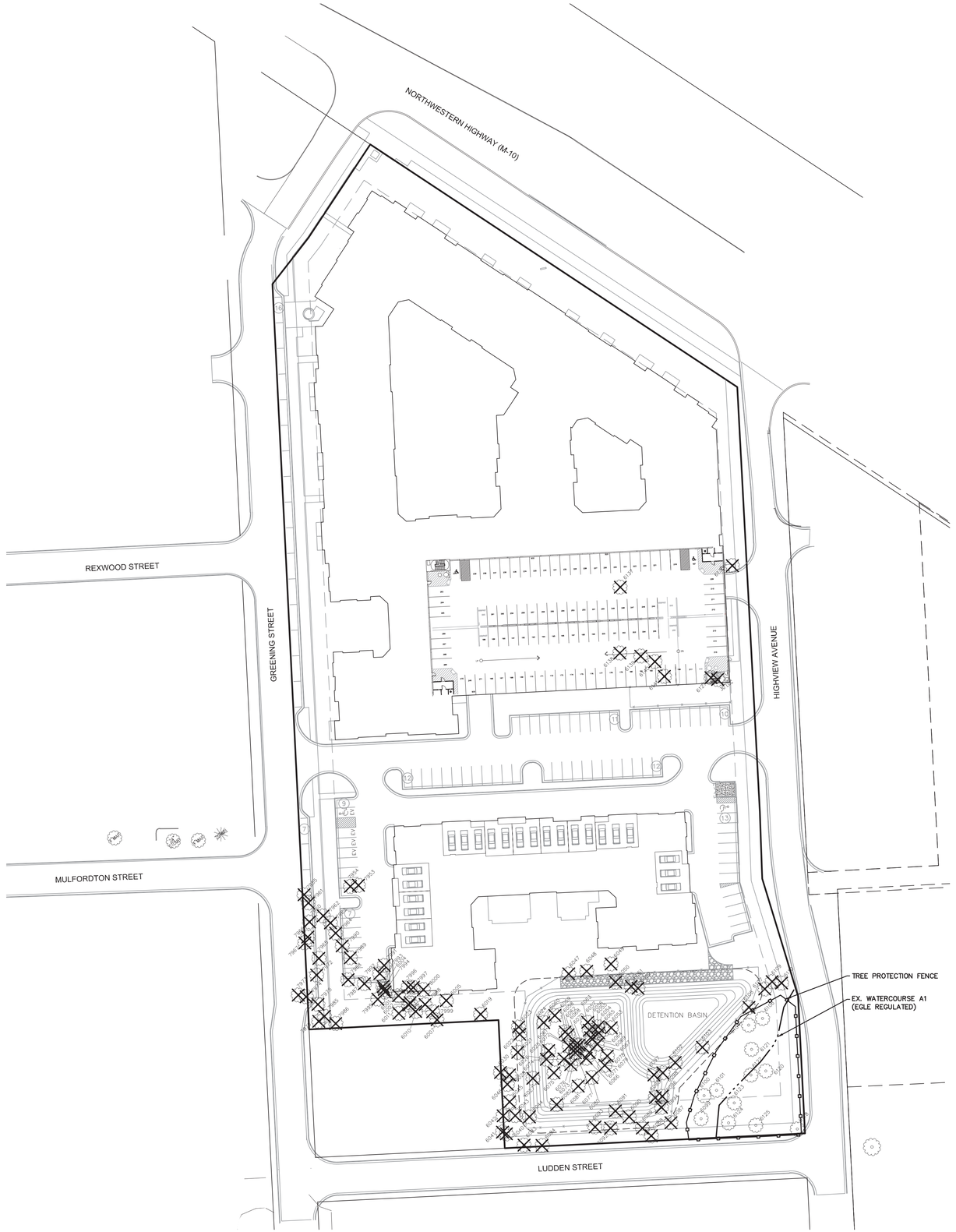


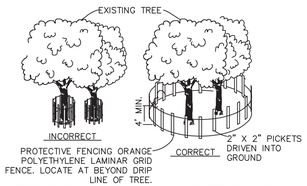
LEGEND

- EXISTING TREE W/ TAG
- EXISTING TREE TO BE REMOVED
- TREE PROTECTION FENCE (SEE DETAIL BELOW)

NOTE:
LOCATION OF TREE PROTECTION FENCE AS SHOWN IS APPROXIMATE. EXACT LOCATION OF TREE PROTECTION FENCE SHALL BE DETERMINED ON-SITE BASED ON ACTUAL SITE CONDITIONS..

TREE REMOVAL/REPLACEMENT CALCULATION	
LANDMARK TREES REMOVED	7 trees
NON-LANDMARK TREES REMOVED	49 trees
TOTAL NUMBER OF TREES REMOVED	56 trees
DBH OF LANDMARK TREES REMOVED & REPLACED (inches)	187 inches
DBH OF LANDMARK TREES REQUIRED TO BE REPLACED (@25% of DBH)	47 inches
REPLACEMENT TREES REQUIRED PER LANDMARK REMOVAL (3"/TREE)	16 trees
REPLACEMENT TREES REQUIRED PER NON-LANDMARK REMOVAL	**49 trees**
TOTAL NUMBER OF REPLACEMENT TREES REQUIRED PER ORDINANCE	**65 trees**

REFER TO LANDSCAPE PLAN SHEET L-2 PLANT LIST FOR PROVIDED TREE INFORMATION



BARRIER TO BE INSTALLED AT DRIP LINE OF TREE BRANCHES.
USE HIGHLY VISIBLE "HAZARD" FENCE IN VIBRANT COLOR (YELLOW OR ORANGE).

TREE PROTECTION / SNOW FENCE
NOT TO SCALE

NOTES:

1. TREE PROTECTION BARRIERS MUST BE PLACED AROUND TREES TO BE RETAINED WITHIN AN AREA WHERE LAND ALTERATION AND CONSTRUCTION ACTIVITIES WILL OCCUR. TREES TO REMAIN SHALL BE INDICATED ON THE PLANS.
2. TREE PROTECTION BARRIER MUST REMAIN IN PLACE UNTIL GRADING AND CONSTRUCTION ACTIVITY IS COMPLETE OR UNTIL COMMENCEMENT OF FINISH GRADING AND SODDING.
3. BARRIERS SHALL BE PLACED AROUND TREES AT THE DRIPLINE EXCEPT WHERE LAND ALTERATION OR CONSTRUCTION ACTIVITIES ARE APPROVED WITHIN THE DRIPLINE.
4. THE DRIPLINE OF A TREE IS THE IMAGINARY VERTICAL LINE THAT EXTENDS DOWNWARD FROM THE OUTERMOST TIPS OF THE TREE'S BRANCHES TO THE GROUND.
5. AREAS SURROUNDED BY THE TREE PROTECTION BARRIERS SHALL BE PROTECTED FROM VEGETATION REMOVAL, PLACEMENT OF SOIL, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND.
6. ALL TREE ROOTS WITHIN AREA TO BE GRADED AND ORIGINATING FROM A PROTECTED TREE SHALL BE SEVERED CLEANLY AT THE LIMITS OF THE PROTECTED AREA.
7. ALL TREE PRUNING AND TRIMMING ON ANY TREE TO BE RETAINED SHALL BE PERFORMED BY AN ARBORIST CERTIFIED BY THE AMERICAN SOCIETY OF ARBORICULTURE (ASA).
8. 2'x2' TREE PROTECTION SIGNS SPACED A MINIMUM OF ON SIGN EVERY 300' SHALL CONTAIN THE WORDING "TREE PROTECTION ZONE – KEEP OUT".
9. TREES TO BE REMOVED MUST BE MARKED IN THE FIELD WITH RED PAINT OR FLAGS AND INSPECTED BY THE PLANNING OFFICE PRIOR TO ANY TREES BEING REMOVED.
10. TREE PERMIT MUST BE OBTAINED FROM THE PLANNING OFFICE PRIOR TO ANY TREES BEING REMOVED.

STATE OF MICHIGAN
JOSHUA JOHN BARRY
PROFESSIONAL SURVEYOR
No. 4001071256
LICENSED PROFESSIONAL SURVEYOR

JOSHUA BARRY
LAND SURVEYOR:
4001071256

DON BERRNIGER
ARBORIST: MI-4078A

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OAKLAND COUNTY, MICHIGAN

FARMINGTON LOFTS, LLC.

THE EMERSON
SITE PLAN
SUPERIMPOSED TREE REMOVAL PLAN

DATE
JAN. 2, 2025

REVISIONS

0 25 50
SCALE: 1" = 50 FEET

DRAWN BY: MM
CHECKED BY: AK
P.M.: J. ROTH
JOB #: 19002962
FILE CODE: –
SHEET NO. 3

K:\19002962\DWG\PLAN SETS\SITE-FINAL\19002962PSP-03-TR.DWG 12/30/2024 10:56 AM MATTHEW MYERS

JOSHUA BARRY
LAND SURVEYOR:
4001071256

DON BERRNIGER
ARBORIST: MI–4078A

Northwestern Highway Development - Atwell Project #19002962

Tree Tag #	Data Code	Scientific Name	Common Name	DBH (inches)	Condition	Comments	Trunk Condition	Growth Rate	Tree Structure	Insects/Disease	Crown Development	Life Expectancy	Total Score	Likely Exempt	Landmark Tree	Invasive Species	To Be Removed
6001	ROPS	*Robinia pseudoacacia*	Black Locust	7.5	Good	2T: 5	5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
6002	ROPS	*Robinia pseudoacacia*	Black Locust	7.5	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
6003	ROPS	*Robinia pseudoacacia*	Black Locust	6	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
6004	ROPS	*Robinia pseudoacacia*	Black Locust	6	Good	2T: 3	5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
6005	ROPS	*Robinia pseudoacacia*	Black Locust	12.5	Good	Vines	5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
6007	ACNE	*Acer negundo*	Box Elder Maple	12.5	Poor		1 - extensive decay & hollow	2	1 - two or more major limbs dead	1 - two or more pests present	2	1 - <5 years	8	Yes			Yes
6009	ULAM	*Ulmus americana*	American Elm	8	Good		5 - sound & solid	5 - >6-inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	4	4	26				Yes
6010	ACNE	*Acer negundo*	Box Elder Maple	9	Good		5 - sound & solid	5 - >6-inch twig elongation	4	5 - no pests present	4	4	27				Yes
6011	ROPS	*Robinia pseudoacacia*	Black Locust	14	Good		5 - sound & solid	5 - >6-inch twig elongation	4	5 - no pests present	5 - full & balanced	5 - >30 years	29				Yes
6019	PRSE	*Prunus serotina*	Black Cherry	12.5	Good	Vines	3 - sections of bark missing	2	2	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	18				Yes
6021	ACNE	*Acer negundo*	Box Elder Maple	12	Good	3T: 7, 6	4	4	4	5 - no pests present	4	4	25				Yes
6022	ACNE	*Acer negundo*	Box Elder Maple	9.5	Good		4	4	2	5 - no pests present	2	3 - 15-20 years	20				Yes
6023	ACNE	*Acer negundo*	Box Elder Maple	11.5	Good	2T: 7.5	4	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	21				Yes
6024	JUNI	*Juglans nigra*	Black Walnut	15	Good	2T: 7.5	4	4	5 - sound	5 - no pests present	4	4	26				Yes
6025	ACNE	*Acer negundo*	Box Elder Maple	7.5	Good	Vines	4	4	5 - sound	5 - no pests present	4	4	26				Yes
6026	ROPS	*Robinia pseudoacacia*	Black Locust	11	Good		4	4	5 - sound	5 - no pests present	4	4	26				Yes
6027	ROPS	*Robinia pseudoacacia*	Black Locust	8	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
6028	ACNE	*Acer negundo*	Box Elder Maple	14	Good		4	5 - >6-inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	4	4	25				Yes
6030	ROPS	*Robinia pseudoacacia*	Black Locust	8	Good		4	5 - >6-inch twig elongation	4	5 - no pests present	4	4	26				Yes
6040	ROPS	*Robinia pseudoacacia*	Black Locust	10	Good		5 - sound & solid	5 - >6-inch twig elongation	4	5 - no pests present	5 - full & balanced	5 - >30 years	29				Yes
6041	ROPS	*Robinia pseudoacacia*	Black Locust	8.5	Good		5 - sound & solid	5 - >6-inch twig elongation	4	5 - no pests present	5 - full & balanced	5 - >30 years	29				Yes
6042	ROPS	*Robinia pseudoacacia*	Black Locust	7.5	Excellent		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
6043	PRSE	*Prunus serotina*	Black Cherry	8	Fair		3	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	3 - one pest present	3 - full, but unbalanced	3 - 15-20 years	18				Yes
6044	ROPS	*Robinia pseudoacacia*	Black Locust	8	Excellent		4	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	29				Yes
6045	ROPS	*Robinia pseudoacacia*	Black Locust	9.5	Good		4	5 - >6-inch twig elongation	4	5 - no pests present	5 - full & balanced	5 - >30 years	28				Yes
6046	ROPS	*Robinia pseudoacacia*	Black Locust	9	Good		5 - sound & solid	5 - >6-inch twig elongation	4	5 - no pests present	5 - full & balanced	5 - >30 years	29				Yes
6047	JUNI	*Juglans nigra*	Black Walnut	13	Excellent		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
6048	ACNE	*Acer negundo*	Box Elder Maple	15	Fair	2T: 9	3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes
6049	JUNI	*Juglans nigra*	Black Walnut	17	Good		4	3 - 2-6 inch twig elongation	4	3 - one pest present	4	4	22				Yes
6050	ROPS	*Robinia pseudoacacia*	Black Locust	8.5	Good		4	3 - 2-6 inch twig elongation	4	3 - one pest present	4	4	22				Yes
6051	ROPS	*Robinia pseudoacacia*	Black Locust	12	Good		4	4	4	3 - one pest present	4	4	23				Yes
6052	ROPS	*Robinia pseudoacacia*	Black Locust	13	Good		4	4	3 - one major or several minor limbs dead	3 - one pest present	4	4	22				Yes
6053	ROPS	*Robinia pseudoacacia*	Black Locust	16	Good		4	4	4	3 - one pest present	4	4	23				Yes
6054	ROPS	*Robinia pseudoacacia*	Black Locust	15.5	Good		4	4	4	3 - one pest present	4	4	23				Yes
6055	ROPS	*Robinia pseudoacacia*	Black Locust	15	Good		4	4	4	3 - one pest present	4	4	23				Yes
6056	ROPS	*Robinia pseudoacacia*	Black Locust	13.5	Good		4	4	4	3 - one pest present	4	4	23				Yes
6057	ACNE	*Acer negundo*	Box Elder Maple	6.5	Good		4	4	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	22				Yes
6058	ROPS	*Robinia pseudoacacia*	Black Locust	14	Good		4	4	4	5 - no pests present	4	3 - 15-20 years	24				Yes
6059	ROPS	*Robinia pseudoacacia*	Black Locust	16	Fair	2T: 8	3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes
6060	ACNE	*Acer negundo*	Box Elder Maple	6.5	Fair		3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes
6061	ROPS	*Robinia pseudoacacia*	Black Locust	20	Fair		3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes
6062	ROPS	*Robinia pseudoacacia*	Black Locust	6.5	Good		4	3 - 2-6 inch twig elongation	4	5 - no pests present	4	4	24				Yes
6063	ROPS	*Robinia pseudoacacia*	Black Locust	6.5	Good		4	4	4	5 - no pests present	4	4	25				Yes
6064	ROPS	*Robinia pseudoacacia*	Black Locust	6.5	Good		4	4	4	5 - no pests present	4	4	25				Yes
6065	ROPS	*Robinia pseudoacacia*	Black Locust	11.5	Good		4	4	4	5 - no pests present	4	4	25				Yes
6066	ROPS	*Robinia pseudoacacia*	Black Locust	12	Good		4	4	4	5 - no pests present	4	4	25				Yes
6067	ROPS	*Robinia pseudoacacia*	Black Locust	13	Good		4	4	4	5 - no pests present	4	4	25				Yes
6068	ROPS	*Robinia pseudoacacia*	Black Locust	10	Good		4	4	4	5 - no pests present	4	4	25				Yes
6069	ROPS	*Robinia pseudoacacia*	Black Locust	9.5	Good		4	4	4	5 - no pests present	4	4	25				Yes
6070	ACNE	*Acer negundo*	Box Elder Maple	8.5	Good		4	4	4	5 - no pests present	4	4	25				Yes
6071	ULPU	*Ulmus pumila*	Siberian Elm	10.5	Good		4	4	4	5 - no pests present	4	4	25				Yes
6072	ROPS	*Robinia pseudoacacia*	Black Locust	9	Good		4	4	4	5 - no pests present	4	4	25				Yes
6073	ROPS	*Robinia pseudoacacia*	Black Locust	8.5	Good		4	4	4	5 - no pests present	4	4	25				Yes
6074	ACNE	*Acer negundo*	Box Elder Maple	6	Good		4	4	4	5 - no pests present	4	4	25				Yes
6075	ROPS	*Robinia pseudoacacia*	Black Locust	12	Good		4	4	4	5 - no pests present	4	4	25				Yes
6076	ACNE	*Acer negundo*	Box Elder Maple	9	Good		4	3 - 2-6 inch twig elongation	4	5 - no pests present	4	4	24				Yes
6077	ROPS	*Robinia pseudoacacia*	Black Locust	13	Good		4	4	4	5 - no pests present	4	4	25				Yes
6078	ACNE	*Acer negundo*	Box Elder Maple	13	Good		3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes
6079	ROPS	*Robinia pseudoacacia*	Black Locust	21	Good		4	4	4	5 - no pests present	4	4	25				Yes
6080	ROPS	*Robinia pseudoacacia*	Black Locust	13.5	Good	2T: 11.5	4	4	4	5 - no pests present	4	4	25				Yes
6081	ACNE	*Acer negundo*	Box Elder Maple	9.5	Good		3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes
6082	ACNE	*Acer negundo*	Box Elder Maple	15	Fair		3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes
6083	ACNE	*Acer negundo*	Box Elder Maple	12	Fair		3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes
6084	ACNE	*Acer negundo*	Box Elder Maple	8.5	Poor		3 - sections of bark missing	2	3 - one major or several minor limbs dead	3 - one pest present	2	2	15	Yes			Yes
6087	MOAL	*Morus alba*	White Mulberry	10.5	Fair		3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes
6088	ACNE	*Acer negundo*	Box Elder Maple	6	Fair		3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	2	3 - 15-20 years	19				Yes
6089	ACNE	*Acer negundo*	Box Elder Maple	16	Fair	Vines	3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes

NOT FOR CONSTRUCTION

ATWELL
866.850.4200 www.atwell-group.com
TWO TOWNE SQUARE, SUITE 700
SOUTHFIELD, MI 48076
248.447.2000

SECTION 2
TOWN 1 NORTH, RANGE 9 EAST
CITY OF FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

FARMINGTON LOFTS, LLC.
THE EMERSON
SITE PLAN
TREE LIST

DATE
JAN. 2, 2025

REVISIONS

NA NA NA
N/A

DRAWN BY: MM
CHECKED BY: AK
P.M.: J. ROTH
JOB #: 19002962
FILE CODE: –
SHEET NO. 4

STATE OF MICHIGAN
JOSHUA JOHN BARRY
PROFESSIONAL SURVEYOR
No. 4001071256
LICENSED PROFESSIONAL SURVEYOR

JOSHUA BARRY
LAND SURVEYOR:
4001071256

DON BERRNIGER
ARBORIST: MI--4078A

Northwestern Highway Development - Atwell Project #19002962

Tree Tag #	Data Code	Scientific Name	Common Name	DBH (inches)	Condition	Comments	Trunk Condition	Growth Rate	Tree Structure	Insects/Disease	Crown Development	Life Expectancy	Total Score	Likely Exempt	Landmark Tree	Invasive Species	To Be Removed
6090	ACNE	*Acer negundo*	Box Elder Maple	12	Fair	Vines	3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes
6091	ACNE	*Acer negundo*	Box Elder Maple	23	Fair	Vines	3 - sections of bark missing	2	2	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	18		Yes		Yes
6092	ACNE	*Acer negundo*	Box Elder Maple	14	Poor	Vines	1 - extensive decay & hollow	1 - <2-inch twig elongation	1 - two or more major limbs dead	3 - one pest present	1 - unbalanced & lacking a full crown	1 - <5 years	10	Yes			Yes
6093	ACNE	*Acer negundo*	Box Elder Maple	9	Fair	2T: 7	3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes
6094	JUNI	*Juglans nigra*	Black Walnut	11	Excellent		5 - sound & solid	3 - 2-6 inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	28				Yes
6095	ACNE	*Acer negundo*	Box Elder Maple	9	Good		4	4	4	3 - one pest present	4	4	23				Yes
6096	ACNE	*Acer negundo*	Box Elder Maple	15	Good		4	4	4	5 - no pests present	4	4	25				Yes
6097	ACNE	*Acer negundo*	Box Elder Maple	12	Good		4	4	4	5 - no pests present	4	4	25				Yes
6098	ACNE	*Acer negundo*	Box Elder Maple	17	Good	2T: 11; vines	4	4	4	5 - no pests present	4	4	25				No
6099	ACSA	*Acer saccharum*	Sugar Maple	10.5	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				No
6100	ACNE	*Acer negundo*	Box Elder Maple	8	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				No
6101	ACNE	*Acer negundo*	Box Elder Maple	8.5	Good		4	4	4	5 - no pests present	4	4	25				Yes
6102	ACNE	*Acer negundo*	Box Elder Maple	8.5	Fair	2T: 7	3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes
6103	ACNE	*Acer negundo*	Box Elder Maple	10.5	Fair		3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	20				Yes
6104	ACNE	*Acer negundo*	Box Elder Maple	17	Fair	2T: 6.5	4	4	4	5 - no pests present	4	4	25				Yes
6105	MOAL	*Morus alba*	White Mulberry	6	Good		4	4	4	5 - no pests present	4	4	25				Yes
6106	JUNI	*Juglans nigra*	Black Walnut	6	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
6107	JUNI	*Juglans nigra*	Black Walnut	6.5	Good		3 - sections of bark missing	3 - 2-6 inch twig elongation	5 - sound	5 - no pests present	4	5 - >30 years	25				Yes
6109	JUNI	*Juglans nigra*	Black Walnut	17	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
6110	ACSA	*Acer saccharum*	Sugar Maple	6	Good	Vines	4	4	4	5 - no pests present	4	5 - >30 years	26				Yes
6118	ACSAN	*Acer saccharinum*	Silver Maple	12	Good	3T: 9, 7.5	5 - sound & solid	4	4	3 - one pest present	4	4	24				No
6120	SANI	*Salix nigra*	Black Willow	32	Fair		3 - sections of bark missing	3 - 2-6 inch twig elongation	3 - one major or several minor limbs dead	3 - one pest present	3 - full, but unbalanced	3 - 15-20 years	18		Yes		No
6121	SANI	*Salix nigra*	Black Willow	30	Poor		1 - extensive decay & hollow	1 - <2-inch twig elongation	1 - two or more major limbs dead	3 - one pest present	1 - unbalanced & lacking a full crown	1 - <5 years	8	Yes	Yes		No
6122	SANI	*Salix nigra*	Black Willow	45.5	Poor		2	2	1 - two or more major limbs dead	3 - one pest present	2	2	12	Yes	Yes		No
6123	SANI	*Salix nigra*	Black Willow	8	Poor		1 - extensive decay & hollow	1 - <2-inch twig elongation	1 - two or more major limbs dead	1 - two or more pests present	1 - unbalanced & lacking a full crown	1 - <5 years	6	Yes			No
6124	SANI	*Salix nigra*	Black Willow	52	Fair		2	3 - 2-6 inch twig elongation	2	3 - one pest present	2	3 - 15-20 years	15	Yes	Yes		No
6125	ACNE	*Acer negundo*	Box Elder Maple	17	Fair	6T: 8.5, 4.5, 4.5, 4, 4	3 - sections of bark missing	4	3 - one major or several minor limbs dead	3 - one pest present	2	2	17				No
6127	ROPS	*Robinia pseudoacacia*	Black Locust	27.5	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30		Yes		Yes
6136	PYSPP	*Pyrus spp*	Pear	16	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
6137	ACSAN	*Acer saccharinum*	Silver Maple	17	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
6138	ACSAN	*Acer saccharinum*	Silver Maple	19	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30		Yes		Yes
6139	ACSAN	*Acer saccharinum*	Silver Maple	19.5	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30		Yes		Yes
6140	ACSAN	*Acer saccharinum*	Silver Maple	12.5	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
6141	ACSAN	*Acer saccharinum*	Silver Maple	13	Good	2T: 14	5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
7953	ROPS	*Robinia pseudoacacia*	Black Locust	24.5	Good		4	5 - >6-inch twig elongation	5 - sound	5 - no pests present	3 - full, but unbalanced	4	26		Yes		Yes
7954	ROPS	*Robinia pseudoacacia*	Black Locust	16	Good	2 trunks (2T): 5 inches	4	5 - >6-inch twig elongation	5 - sound	5 - no pests present	3 - full, but unbalanced	4	26				Yes
7955	ROPS	*Robinia pseudoacacia*	Black Locust	16	Good	Vines	4	4	3 - one major or several minor limbs dead	5 - no pests present	3 - full, but unbalanced	3 - 15-20 years	22				Yes
7960	ROPS	*Robinia pseudoacacia*	Black Locust	17	Good		4	4	4	5 - no pests present	3 - full, but unbalanced	4	24				Yes
7961	ROPS	*Robinia pseudoacacia*	Black Locust	18.5	Good		5 - sound & solid	4	4	5 - no pests present	4	4	26				Yes
7962	ROPS	*Robinia pseudoacacia*	Black Locust	14	Good	Vines	4	4	4	5 - no pests present	4	3 - 15-20 years	24				Yes
7963	ROPS	*Robinia pseudoacacia*	Black Locust	23	Good		3 - sections of bark missing	4	4	5 - no pests present	4	3 - 15-20 years	23				Yes
7964	ROPS	*Robinia pseudoacacia*	Black Locust	11	Good		4	4	4	5 - no pests present	4	4	25				Yes
7965	ROPS	*Robinia pseudoacacia*	Black Locust	26	Good		4	4	4	5 - no pests present	4	4	25		Yes		Yes
7966	ROPS	*Robinia pseudoacacia*	Black Locust	8	Good		4	4	4	5 - no pests present	4	5 - >30 years	26				Yes
7967	ACNE	*Acer negundo*	Box Elder Maple	9	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
7972	ROPS	*Robinia pseudoacacia*	Black Locust	19	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	4	4	28				Yes
7973	ACNE	*Acer negundo*	Box Elder Maple	16	Good		5 - sound & solid	5 - >6-inch twig elongation	4	5 - no pests present	3 - full, but unbalanced	4	26				Yes
7974	ROPS	*Robinia pseudoacacia*	Black Locust	21	Good		2	5 - >6-inch twig elongation	3 - one major or several minor limbs dead	5 - no pests present	4	3 - 15-20 years	22				Yes
7975	ACNE	*Acer negundo*	Box Elder Maple	7.5	Good		5 - sound & solid	5 - >6-inch twig elongation	4	5 - no pests present	5 - full & balanced	5 - >30 years	29				Yes
7976	ROPS	*Robinia pseudoacacia*	Black Locust	10	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
7985	ROPS	*Robinia pseudoacacia*	Black Locust	11	Good		5 - sound & solid	5 - >6-inch twig elongation	4	5 - no pests present	5 - full & balanced	5 - >30 years	29				Yes
7986	ROPS	*Robinia pseudoacacia*	Black Locust	11	Good		5 - sound & solid	5 - >6-inch twig elongation	4	5 - no pests present	4	5 - >30 years	28				Yes
7987	ROPS	*Robinia pseudoacacia*	Black Locust	17	Good	3T: 18, 9	4	5 - >6-inch twig elongation	4	5 - no pests present	4	4	26				Yes
7988	ROPS	*Robinia pseudoacacia*	Black Locust	12	Good	3T: 10, 8	4	4	4	5 - no pests present	4	4	25				Yes
7989	ROPS	*Robinia pseudoacacia*	Black Locust	26	Good		5 - sound & solid	5 - >6-inch twig elongation	4	5 - no pests present	4	5 - >30 years	28		Yes		Yes
7990	ROPS	*Robinia pseudoacacia*	Black Locust	22	Good	2T: 14	4	4	4	5 - no pests present	4	4	25				Yes
7991	ACNE	*Acer negundo*	Box Elder Maple	6.5	Good	2T: 6	4	4	4	5 - no pests present	4	4	25				Yes
7992	ROPS	*Robinia pseudoacacia*	Black Locust	7.5	Good		4	4	4	5 - no pests present	4	4	25				Yes
7993	ROPS	*Robinia pseudoacacia*	Black Locust	7	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
7994	ROPS	*Robinia pseudoacacia*	Black Locust	6	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
7995	ROPS	*Robinia pseudoacacia*	Black Locust	8	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
7996	ROPS	*Robinia pseudoacacia*	Black Locust	7	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
7997	ROPS	*Robinia pseudoacacia*	Black Locust	7	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
7998	ROPS	*Robinia pseudoacacia*	Black Locust	10	Good		5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
7999	ROPS	*Robinia pseudoacacia*	Black Locust	10	Good	2T: 5	5 - sound & solid	5 - >6-inch twig elongation	5 - sound	5 - no pests present	5 - full & balanced	5 - >30 years	30				Yes
8000	ROPS	*Robinia pseudoacacia*	Black Locust	13.5	Good	2T: 5	5 - sound & solid	5 - >6-inch twig elongation	4	5 - no pests present	5 - full & balanced	5 - >30 years	29				Yes

NOT FOR CONSTRUCTION

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SECTION 2
TOWN 1 NORTH, RANGE 9 EAST
CITY OF FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

FARMINGTON LOFTS, LLC.
THE EMERSON
SITE PLAN
TREE LIST

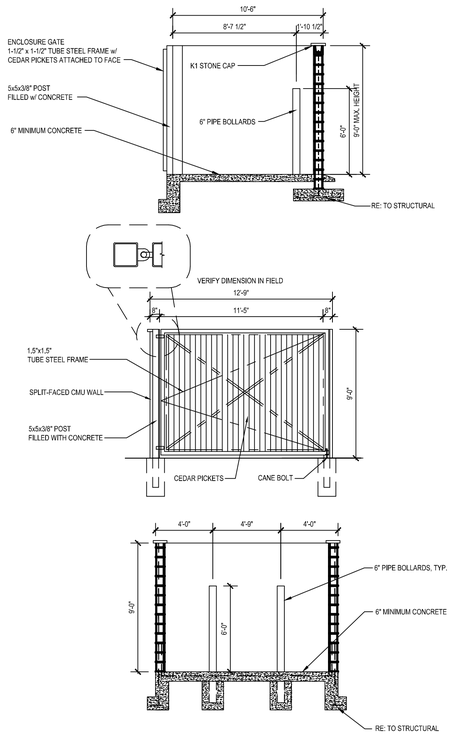
DATE
JAN. 2, 2025

REVISIONS

NA NA NA
N/A

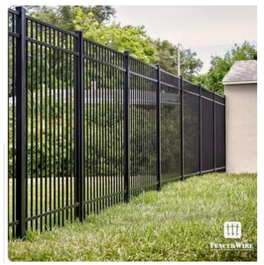
DRAWN BY: MM
CHECKED BY: AK
P.M.: J. ROTH
JOB #: 19002962
FILE CODE: --
SHEET NO. 5

K:\19002962\DWG\PLAN SETS\SITE-FINAL\19002962SP-02-EC.DWG 12/30/2024 10:57 AM MATTHEW MYERS



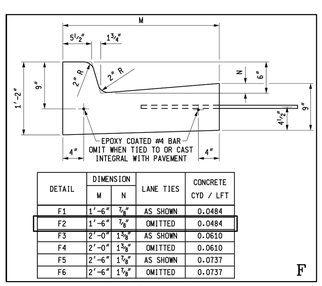
DUMPSTER DETAILS

NO SCALE



FENCE IMAGE DETAIL

1. DETENTION BASIN FENCE SHALL BE 6' IN HEIGHT.
2. MINIMUM CLEAR GATE WIDTH SHALL BE 8'.
3. FENCE GENERAL CONSTRUCTION DETAILS WILL BE PROVIDED IN THE ENGINEERING PLANS.
4. SHOP DRAWINGS SHALL BE PROVIDED BY THE FENCE SUPPLIER / MANUFACTURER.

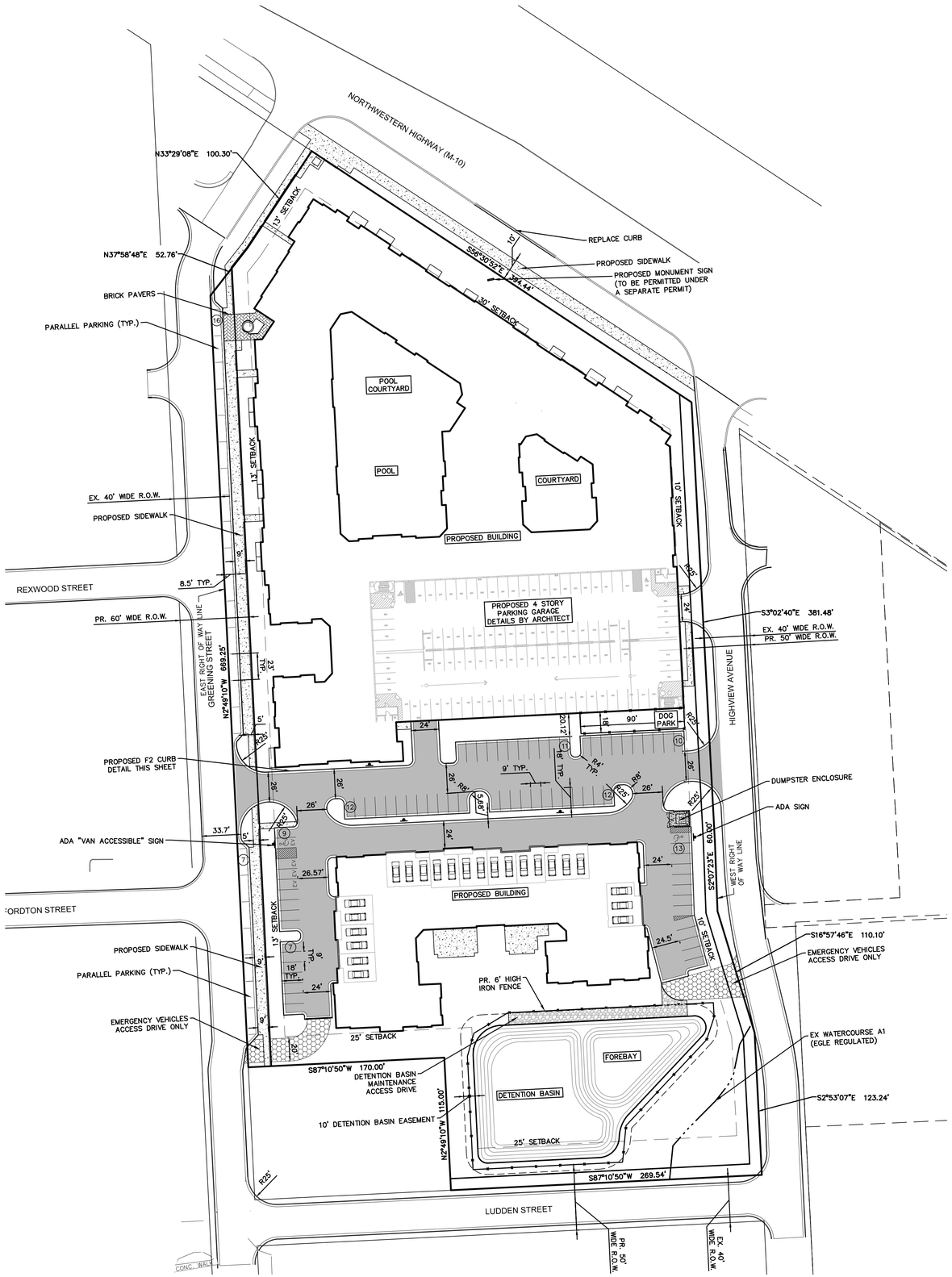


DETAIL	DIMENSION M	DIMENSION N	LANE TIES	CONCRETE CYD / LFT
F1	1'-6"	7/8"	AS SHOWN	0.0484
F2	1'-6"	7/8"	OMITTED	0.0484
F3	2'-0"	1 3/8"	AS SHOWN	0.0610
F4	2'-0"	1 3/8"	OMITTED	0.0610
F5	2'-6"	1 7/8"	AS SHOWN	0.0737
F6	2'-6"	1 7/8"	OMITTED	0.0737

F

CURB DETAIL

NO SCALE



LEGEND

- COMBINED PARCEL BOUNDARY
- EXISTING ROW
- PROPOSED ROW
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- PROPOSED BUILDING
- PROPOSED BUILDING SETBACK
- PROPOSED FENCE
- PROPOSED ASPHALT
- PROPOSED ASPHALT IN R.O.W.
- PROPOSED CONCRETE
- PROPOSED DECORATIVE BRICK PAVING
- EXISTING WETLAND
- PROPOSED PAVERS
- PROPOSED GRAVEL
- NO PARKING – FIRE LANE SIGN

SITE DATA

PARCEL DATA:

PARCEL SIZE (GROSS):	7.24 acres
GREENING STREET ROW:	0.45 acres
NORTHWESTERN HWY ROW:	0.06 acres
HIGHVIEW AVENUE	0.16 acres
LUDDEN STREET	0.06 acres
PARCEL SIZE (NET):	6.51 acres
EXISTING	B-3, RA-4, OS-1 & P-1
PROPOSED	PLANNED UNIT DEVELOPMENT

PROPOSED SITE SETBACKS:

NORTH SIDE TO NORTHWESTERN HWY:	30'
EAST SIDE TO HIGHVIEW STREET:	10'
GREENING STREET:	13'
SOUTH SIDE:	25'

BUILDING INFORMATION:

- NORTH BUILDING (4 STORY WRAP)

BUILDING HEIGHT:	52' (TOWER AT ENTRY: 62')
PROPOSED UNITS:	124 - 1 BEDROOM UNITS
	103 - 2 BEDROOM UNITS
	23 - 3 BEDROOM UNITS
	250 UNITS (399 TOTAL BEDROOMS)
GROSS FLOOR AREA:	LEVEL 1: 70,000 SF
	LEVEL 2: 71,000 SF
	LEVEL 3: 71,000 SF
	LEVEL 4: 71,000 SF
	TOTAL: 283,000 SF

- SOUTH BUILDING (3 STORY WRAP)

BUILDING HEIGHT:	40'
PROPOSED UNITS:	31 - 1 BEDROOM UNITS
	32 - 2 BEDROOM UNITS
	3 - 3 BEDROOM UNITS
	66 UNITS (104 TOTAL BEDROOMS)
GROSS FLOOR AREA:	LEVEL 1: 19,000 SF
	LEVEL 2: 27,500 SF
	LEVEL 3: 27,500 SF
	TOTAL: 74,000 SF

OVERALL TOTAL UNITS: 316 UNITS (503 TOTAL BEDROOMS)

OVERALL LOT COVERAGE:

- NORTH BUILDING (4 STORY WRAP) & PARKING GARAGE:	107,157 SQ. FT.
- SOUTH BUILDING (3 STORY WRAP)	28,314 SQ. FT.
	TOTAL LOT COVERAGE: 47%

PARKING:

REQUIRED SPACES:	533
PROVIDED SPACES:	413 PARKING GARAGE SPACES
	74 SURFACE PARKING SPACES
	23 PARALLEL PARKING SPACES
	23 TUCK UNDER PARKING SPACES (ALL ADA COMPLIANT)
TOTAL PROVIDED SPACES	533 TOTAL SPACES PROVIDED

ADA PARKING:
INCLUDED IN THE TOTAL SPACES PROVIDED
9 - PARKING GARAGE ADA SPACES (INCLUDING 2 VAN ACCESSIBLE)
2- SURFACE PARKING ADA SPACES (INCLUDING 1 VAN ACCESSIBLE)
23 TUCK UNDER SPACES

ELECTRIC VEHICLE PARKING
12 - EV PARKING SPACES IN GARAGE
4 - EV PARKING SPACES ON SURFACE LOT

SITE NOTES

1. ALL DIMENSIONS ARE TO BACK OF CURB, BUILDING WALL, OR TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
2. ALL DESIGN, WORK, AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF FARMINGTON HILLS STANDARDS AND SPECIFICATIONS.
3. ALL DRIVEWAYS, DRAIN TILE, CULVERTS AND OTHER FACILITIES REMOVED, DESTROYED, DAMAGED OR OTHERWISE DISTURBED BY THE WORK SHALL BE REPLACED AND/OR RESTORED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR.
4. PROPOSED DRIVEWAYS AND PARKING SHALL BE ASPHALT PAVED.
5. FUTURE OFF-SITE ENGINEERING APPROVALS WILL BE REQUIRED AS PART OF THE APPROVED PUD AGREEMENT.

FIRE DEPARTMENT NOTES:

1. "NO PARKING – FIRE LANE" SIGNS TO BE INSTALLED TO ALLOW FOR A MINIMUM 20' FIRE LANE THROUGHOUT THE SITE.
2. A SNOW AND ICE CONTROL/ROAD MAINTENANCE PROGRAM SHALL BE IN PLACE SO THAT THE ROADS AREA AVAILABLE FOR EMERGENCY RESPONSE.
3. THERE SHALL BE NO ACCESS CONTROL DEVICE AT THE ENTRANCE.

NOT FOR CONSTRUCTION

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TOWN 1 NORTH, RANGE 9 EAST
CITY OF FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

FARMINGTON LOFTS, LLC.

THE EMERSON
SITE PLAN
LAYOUT PLAN

DATE
JAN. 2, 2025

REVISIONS

SCALE: 1" = 50 FEET

DRAWN BY: MM
CHECKED BY: AK
P.M.: J. ROTH
JOB #: 19002962
FILE CODE: –
SHEET NO. 6

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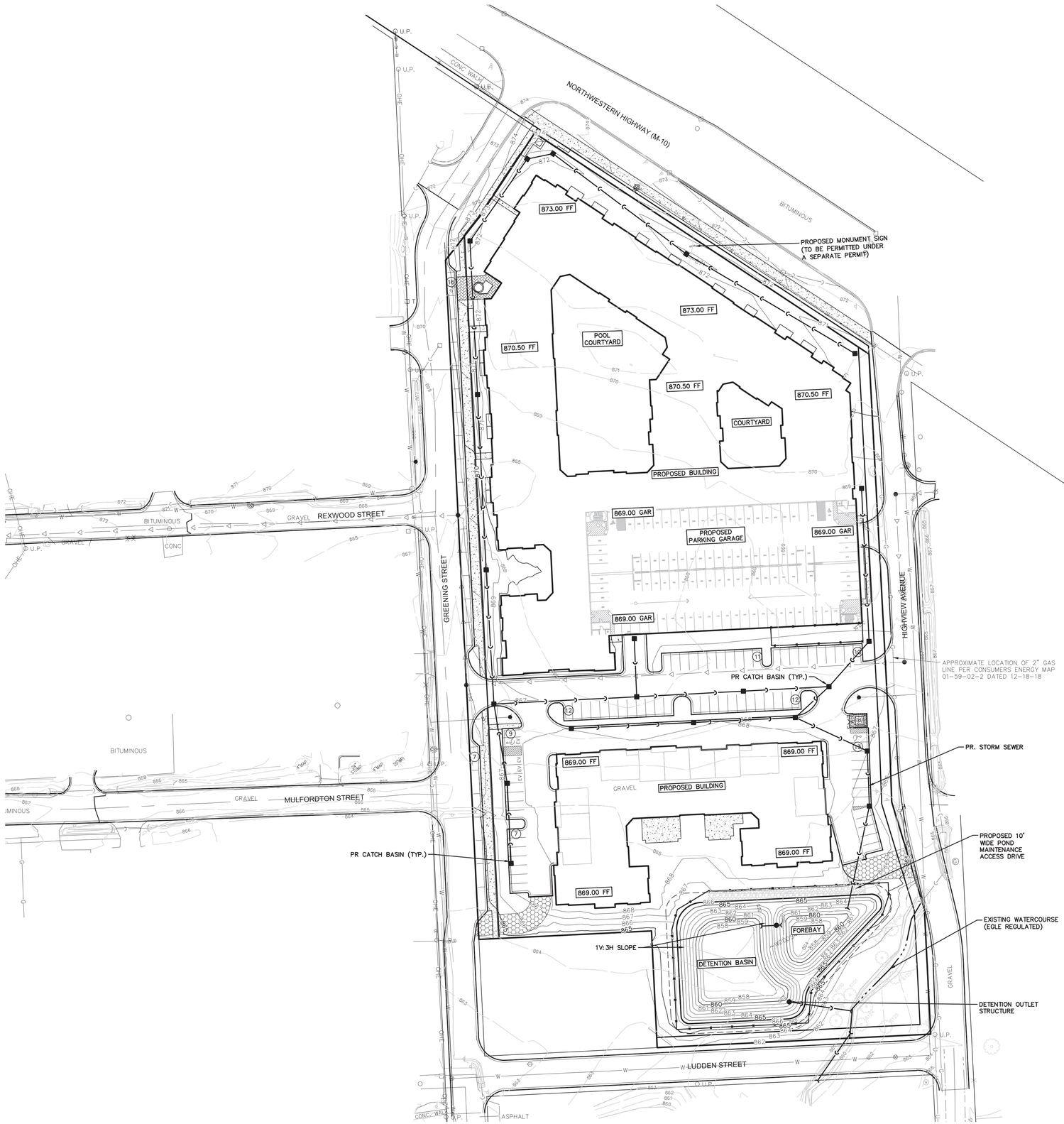

LEGEND

PROPOSED 1' CONTOUR
PROPOSED 5' CONTOUR
EXISTING 1' CONTOUR
EXISTING 5' CONTOUR
PROPERTY LINE
CENTERLINE OF SWALE
EXISTING GAS
PROPOSED R.O.W. LINE
EXISTING CURB AND GUTTER
PROPOSED MOUNTABLE CURB AND GUTTER
PROPOSED STRAIGHT CURB AND GUTTER
EXISTING MANHOLE / CATCH BASIN
PROPOSED MANHOLE / CATCH BASIN
EXISTING HYDRANT
PROPOSED HYDRANT
EXISTING GATE VALVE & WELL
PROPOSED GATE VALVE & WELL
EXISTING WATER MAIN MANHOLE
PROPOSED SANITARY SEWER MANHOLE
EXISTING SANITARY SEWER MANHOLE

GRADING NOTES

1. ALL DESIGN, WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT CITY OF FARMINGTON HILLS STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE SPECIFIED.
2. NECESSARY PERMITS AND LICENSES SHALL BE OBTAINED AND THE CONTRACTOR SHALL HAVE APPROVAL OF GOVERNING AGENCIES HAVING JURISDICTION OVER THE SITE, INCLUDING ALL TESTING AND CLOSE OUT REQUIREMENTS, PRIOR TO THE START OF CONSTRUCTION.
3. THE CONTRACTOR SHALL CAUSE NOTICE TO BE GIVEN TO MISS DIG, THE CITY OF FARMINGTON HILLS ENGINEERING DEPARTMENT, AND TO THE OWNERS OF THE UTILITY FACILITIES SHOWN ON THE PLAN. SAID NOTICES SHALL BE GIVEN AT LEAST TWO (2) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
4. GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON-SITE AND AFFECTED R.O.W. PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO GRADING START.
5. SITE GRADING SHALL NOT PROCEED UNTIL THE APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED.
6. CONTRACTOR TO ENSURE AND FIELD VERIFY 1:12 (V:H) MAX. LONGITUDINAL SLOPE IS INSTALLED FOR ALL ADA RAMPS WITH A MAX. 2% CROSS SLOPE INSTALLED ALONG ALL ADA WALKWAYS AND ACROSS CURB DROPS. CONTRACTOR TO ENSURE ALL MICHIGAN BARRIER FREE WALKWAYS ARE MARKED, STRIPED AND SIGNED AND ALL CLEARANCES ARE IN ACCORDANCE WITH CURRENT MICHIGAN STANDARDS.
7. ALL SPOT GRADES ARE TOP OF PAVEMENT (FINAL GRADE IN VEGETATED AREAS) UNLESS OTHERWISE NOTED.
8. THE TOP OF THE CURB, WHEN CONSTRUCTED OR REPAIRED, SHALL BE MARKED TO INDICATE LOCATION OF WATER SERVICES (W), WATER MAINS (M), AND SANITARY SEWER SERVICES (S).
9. PROPOSED ELEVATIONS FOR STRUCTURES ARE: HYDRANT = BASE FLANGE, VALVE/MANHOLE/CLEANOUT = RIM, CATCH BASIN/INLET = FLOW LINE.
10. STRUCTURE TOPS SHALL BE BUILT OR SUBSEQUENTLY ADJUSTED TO MEET SURFACE GRADES ESTABLISHED FOR THE PROJECT, MAXIMUM 0.3' RELIEF ACROSS SANITARY MANHOLES.
11. ALL DISTURBED AREAS BEHIND THE CURB WITHIN PUBLIC ROAD RIGHTS-OF-WAY SHALL BE RESTORED IN ACCORDANCE WITH CITY STANDARDS.

DRAINAGE NARRATIVE:

THE STORM WATER RUNOFF GENERATED FROM THE PROPOSED REDEVELOPMENT OF THE SITE WILL BE COLLECTED IN A PROPOSED STORM SEWER SYSTEM AND ROUTED TO A PROPOSED DETENTION BASIN LOCATED ON THE SOUTH END OF THE SITE. THIS BASIN WILL DETAIN THE STORM WATER AND DISCHARGE TO THE ADJACENT WATERCOURSE AT A RESTRICTED RATE. THE WATERCOURSE CURRENTLY RECEIVES THE MAJORITY OF THE EXISTING UN-DETAINED RUNOFF FROM THE SITE. THE DETENTION BASIN WILL BE DESIGNED TO MEET ALL LOCAL STORM WATER MANAGEMENT CRITERIA.

NOT FOR CONSTRUCTION

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CITY OF FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

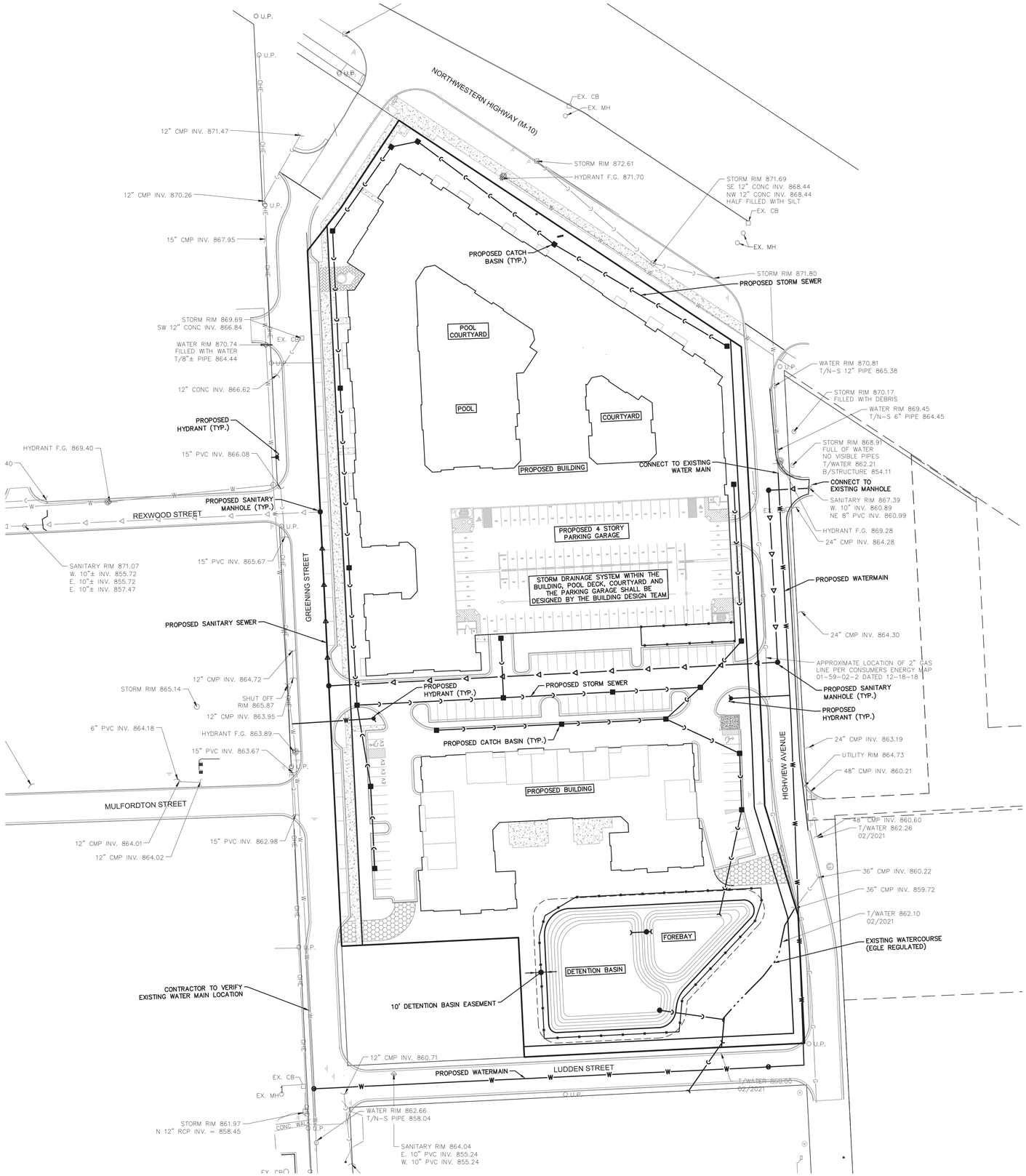
FARMINGTON LOFTS, LLC.
THE EMERSON
SITE PLAN
GRADING PLAN

DATE
JAN. 2, 2025

REVISIONS

SCALE: 1" = 50 FEET

DRAWN BY:	MM
CHECKED BY:	AK
P.M.:	J. ROTH
JOB #:	19002962
FILE CODE:	–
SHEET NO.	7



LEGEND

- PROPERTY LINE
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EX MANHOLE/CATCH BASIN/END SECTION
- PR MANHOLE/CATCH BASIN/END SECTION
- EXISTING WATER MAIN
- PROPOSED WATER MAIN
- EXISTING HYDRANT
- PROPOSED HYDRANT
- EXISTING GATE VALVE & WELL
- PROPOSED GATE VALVE & WELL
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- EXISTING SANITARY SEWER MANHOLE
- PROPOSED SANITARY SEWER MANHOLE

THE EMERSON
SANITARY SEWER BASIS OF DESIGN

PROJECT NUMBER: 19002962
PROJECT LOCATION: FARMINGTON HILLS, OAKLAND COUNTY, MICHIGAN
DATE: October 14, 2021

OVERALL DEVELOPMENT Usage	Unit Factors	Unit	REU	POPULATION	AVERAGE FLOW (MGD)	AVERAGE FLOW (CFS)	PEAK FLOW (CFS)
Multi Family Lofts - North	0.6 per unit	250	150	420	0.042	0.065	0.257
Multi Family Lofts - South	0.6 per unit	66	40	111	0.011	0.017	0.068
			190	**531**	**0.053**	**0.082**	**0.325**

ASSUMPTIONS:

Population = 2.8 people per REU
Average Useage = 100 gallons per person per day
Peaking Factor = $\frac{18+\sqrt{population/thousands}}{4+\sqrt{population/thousands}}=$

PEAK FACTOR (Overall): 3.96

ESTIMATED MAXIMUM PEAK FLOW (Overall): 0.33 CFS

CAPACITY ANALYSIS:

Overall Site - Capacity of a	**10**	**pipe @**	**0.28%**	**=**	**1.162 CFS**	**> 0.33**

UTILITY NARRATIVE:

SANITARY SEWER
THE SITE CONTAINS AN EXISTING 10" SANITARY SEWER THAT RUNS ALONG REXWOOD ST. THE PORTION OF THE SEWER BETWEEN GREENING ST AND HIGHVIEW AVE WILL BE REMOVED AND A NEW SEWER ALIGNMENT WILL BE INSTALLED TO ROUTE THROUGH THE SITE BETWEEN THE TWO PROPOSED BUILDINGS. THE PROPOSED BUILDINGS WILL BE CONNECTED TO THIS NEW SEWER LINE.

WATER MAIN
THE SITE CONTAINS AND EXISTING 8" WATER MAIN THAT RUNS ALONG REXWOOD ST. THE PORTION OF THE WATER MAIN BETWEEN GREENING ST AND HIGHVIEW AVE WILL BE REMOVED AND A NEW WATER MAIN ALIGNMENT WILL BE INSTALLED TO ROUTE THROUGH THE SITE BETWEEN THE TWO PROPOSED BUILDINGS. THE PROPOSED BUILDINGS WILL BE SERVICED FROM THIS NEW WATER MAIN. ADDITIONALLY, WITH THE EXTENSION OF GREENING ST FROM MULFORDTON ST TO LUDDEN ST, THE WATER MAIN WILL ALSO BE EXTENDED AND CONNECTED TO THE EXISTING WATER MAIN ON LUDDEN ST.

SITE DEVELOPMENT NOTES
1. MAINTAIN A MINIMUM 10'-0" HORIZONTAL AND 18" VERTICAL SEPARATION BETWEEN SANITARY, WATER, AND STORM UTILITY LINES. MEASUREMENTS SHALL BE TAKEN FROM THE NEAREST EDGE OF THE UTILITY IN QUESTION. MAINTAIN A MINIMUM 6" VERTICAL AND 5'-0" HORIZONTAL SEPARATION FOR FRANCHISE UTILITIES.
2. DIMENSIONS SHOWN ARE TO THE CENTERLINE OF PIPE, STRUCTURE, OR FITTING.
3. PROPOSED ELEVATIONS FOR STRUCTURES ARE: HYDRANT = BASE FLANGE, VALVE/MANHOLE/CLEANOUT = RIM, CATCH BASIN/INLET = FLOW LINE.
4. ALL STRUCTURES AND UTILITY PIPES WITHIN ROAD PAVEMENT OR WITHIN A 1:1 INFLUENCE OF EXISTING/PROPOSED PAVEMENT SHALL MEET THE REQUIREMENTS FOR HEAVY DUTY (H20) TRAFFIC LOADING AND BE INSTALLED AND BACKFILLED ACCORDINGLY. CONTRACTOR TO VERIFY HEAVY DUTY LOADING (H20) FOR ALL EXISTING STRUCTURES TO REMAIN WITHIN THE INFLUENCE OF THE PROPOSED PAVEMENT. EXISTING/PROPOSED ITEMS NOT MEETING THIS REQUIREMENT WILL BE SUBJECT TO ADDITIONAL RECONSTRUCTION/RECONDITIONING AS NECESSARY.
5. CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR DETERMINING DEFLECTION ANGLES AND LOCATION OF ALL VERTICAL BENDS IN THE WATER MAIN IN ACCORDANCE WITH CITY OF FARMINGTON HILLS AND OAKLAND COUNTY WRC STANDARDS FOR WATER MAIN CONSTRUCTION. ANY QUESTIONS OR CONFLICTS WITH OTHER UTILITIES IN THE CONSTRUCTION PLANS MUST BE PROVIDED TO THE DESIGN ENGINEER IN WRITING PRIOR TO THE START OF CONSTRUCTION.
6. WHERE UTILITIES CROSS, PROVIDE POROUS BACKFILL TAMPED IN 12" LAYERS TO THE TOP OF THE HIGHER UTILITY. A MINIMUM 6" SAND CUSHION SHALL BE PROVIDED BETWEEN UTILITIES.

SITE UTILITY NOTES
1. ALL ON-SITE WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT SPECIFICATIONS AND STANDARD DETAILS OF THE CITY OF FARMINGTON HILLS, UNLESS OTHERWISE SPECIFIED.
2. DEPTH AND LOCATION OF SITE AND RIGHT-OF-WAY UTILITIES SHALL BE VERIFIED BY GENERAL CONTRACTOR AND/OR THE PROPER UTILITY COMPANY PROVIDING SERVICE.

WATER MAIN NOTES
1. WATER MAINS SHALL BE CLASS 54 DUCTILE IRON PIPE.
2. THRUST BLOCKING SHALL BE INSTALLED PER OCWRC REQUIREMENTS.
3. ALL WATER MAINS AND SERVICES SHALL HAVE A MINIMUM OF 5'-6" OF GROUND COVER.
4. NO HYDRANT SHALL BE LOCATED WITHIN FIVE (5) FEET OF ANY CURB RETURN, DRIVEWAY, UTILITY POLE, STREETLIGHT, OR ANY OTHER OBSTRUCTION.
5. CONNECTION TO EXISTING WATER MAIN(S) IS NOT ALLOWED UNTIL COMPLETION OF SUCCESSFUL BACTERIAL & PRESSURE TESTS AND APPROVALS HAVE BEEN GRANTED BY ALL AUTHORIZING AGENCIES & THE CITY OF FARMINGTON HILLS.
6. ALL VALVES OVER 2" MUST BE PLACED INSIDE A GATE WELL.
7. A 10-FOOT SEPARATION MUST BE MAINTAINED BETWEEN SANITARY AND WATER MAINS.
8. 6" HYDRANT LINE MAX LENGTH SHALL BE 20', IF GREATER THAN 20', USE 8" HYDRANT LINE AND REDUCE BEFORE HYDRANT.

SANITARY SEWER NOTES
1. ALL 6" SERVICE LEADS SHALL BE 23.5 ABS PIPE LAID AT A MINIMUM GRADE OF 1/8" PER FOOT (1.04%).
2. ALL SANITARY SEWERS SHALL HAVE A MINIMUM OF 4'-6" OF GROUND COVER.
3. DIFFERENTIAL OF EXCAVATION AROUND EXISTING MANHOLES SHALL NOT EXCEED SIX (6) FEET.
4. TEMPORARY TESTING SUMPS IN PROPOSED SANITARY STRUCTURES SHALL BE REMOVED/FILLED UPON TESTING APPROVAL OF THE PROPOSED SANITARY SEWER SYSTEM AND APPROVALS HAVE BEEN GRANTED BY ALL AUTHORIZING AGENCIES & THE CITY OF FARMINGTON HILLS.

STORM SEWER NOTES
1. ALL STORM SEWER PIPES 12" DIAMETER AND LARGER SHALL BE CLASS IV REINFORCED CONCRETE MEETING THE REQUIREMENTS OF ASTM C76 STANDARDS.
2. JOINTS SHALL BE MODIFIED GROOVED TONGUE WITH RUBBER GASKET FOR PIPE SIZES 24" AND SMALLER.
3. EDGE DRAIN SHALL BE INSTALLED AT ALL INLETS/CATCH BASINS PER CITY STANDARDS.
4. REMOVABLE BAR SCREENS SHALL BE PLACED ON ALL STORM SEWERS WHICH OUTLET INTO AN OPEN DITCH.
5. THE CONTRACTOR SHALL CONTACT THE CITY OF FARMINGTON HILLS ENGINEERING DEPARTMENT 48 HOURS PRIOR TO TAPPING EXISTING 12" STORM SEWERS.
6. ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST CONCRETE.
7. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING REQUIREMENTS AND BE INSTALLED ACCORDINGLY.

FRANCHISE UTILITIES
1. ELECTRICAL, GAS, TELEPHONE & CABLE SERVICES, ROUTINGS, REQUIRED MATERIALS, CONNECTIONS, & STUB LOCATIONS TO BE COORDINATED BY THE CONTRACTOR WITH THE INDIVIDUAL UTILITY PROVIDER(S).

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SECTION 2
TOWN 1 NORTH, RANGE 9 EAST
CITY OF FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

FARMINGTON LOFTS, LLC.
THE EMERSON
SITE PLAN
UTILITY PLAN

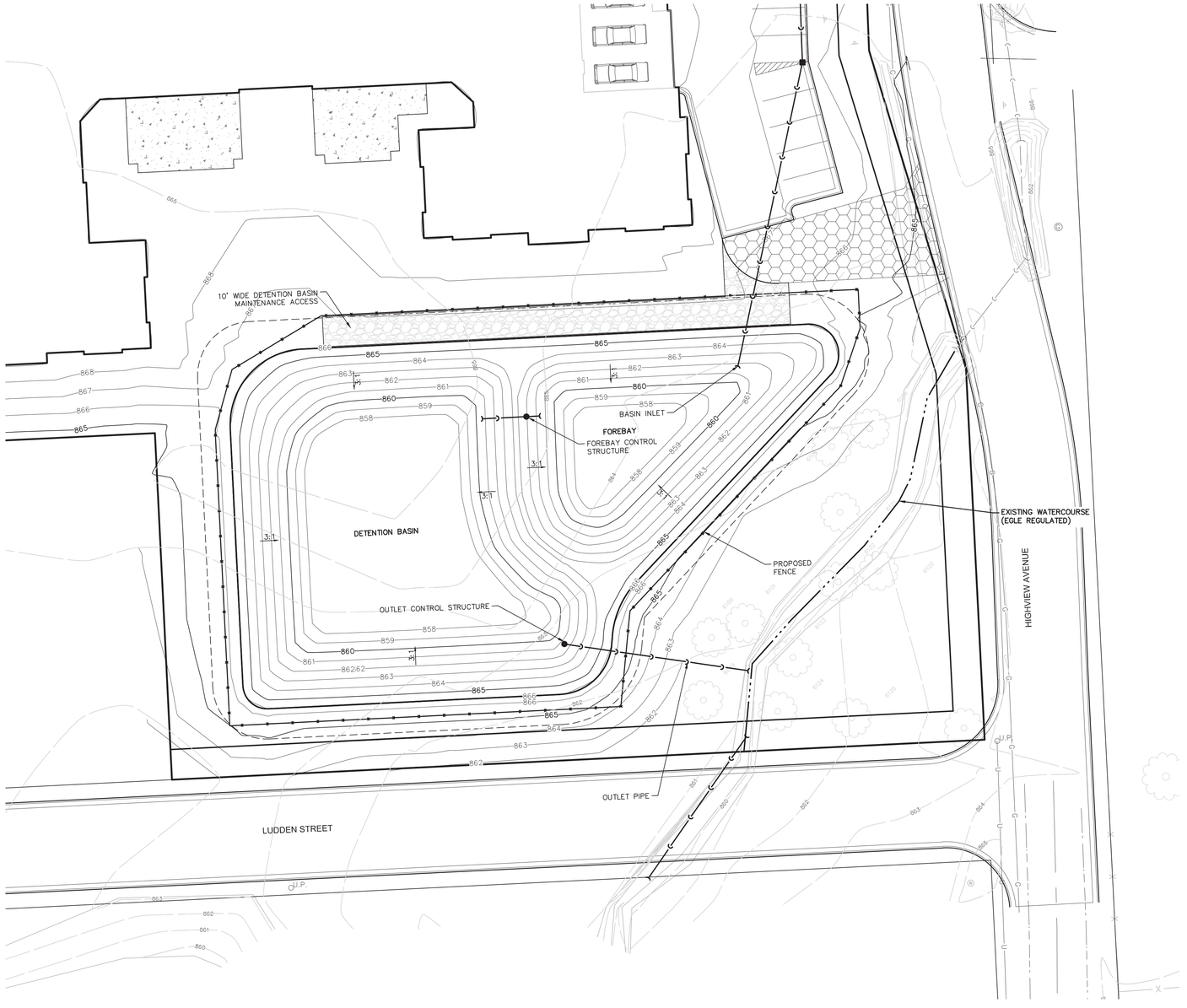
DATE
JAN. 2, 2025

REVISIONS

0 25 50
SCALE: 1" = 50 FEET

DRAWN BY: MM
CHECKED BY: AK
P.M.: J. ROTH
JOB #: 19002962
FILE CODE: –
SHEET NO. 8

K:\19002962\DWG\PLAN SETS\SITE-FINAL\19002962PSP-06-UDWG 12/22/2024 12:33 PM MATTHEW MYERS



LEGEND

- PROPOSED 1' CONTOUR
- PROPOSED 5' CONTOUR
- EXISTING 1' CONTOUR
- EXISTING 5' CONTOUR
- PROPERTY LINE
- CENTERLINE OF SWALE
- PROPOSED R.O.W. LINE
- EXISTING MANHOLE / CATCH BASIN
- PROPOSED MANHOLE / CATCH BASIN
- EXISTING HYDRANT
- PROPOSED HYDRANT
- EXISTING GATE VALVE & WELL
- PROPOSED GATE VALVE & WELL
- EXISTING WATER MAIN MANHOLE
- PROPOSED SANITARY SEWER MANHOLE
- EXISTING SANITARY SEWER MANHOLE

No.	Area (SF)	C	CxA
Impervious	200,145	0.95	190,138
OFFSITE	0	0.25	0
Water	17,424	1	17,424
Pervious	97,805	0.25	24,451
	7.24	Total CxA:	232,013
		Overall C=	**0.74**
	Use C=		**0.74**

DETENTION BASIN CLACULATIONS

Design Basis:
Oakland County Water Resources Commission Design Standards

Detention Area sizing

	Contibuting Area	=	7.24 AC
	Runoff Coefficient C	=	0.74
1)	**Channel Protection Volume (For CPVC)**		
	V_{CP-R} = 4,719 x C x A	=	25,283 cft
	Channel Protection Volume Provided:		
	V_{CP-P}= Infiltration Rate x Area x Time	=	0 cf
2)	**Channel Protection Rate Control- Extended Detention Volume (CPRC)**		
	V_{ED} = 6,897x C x A	=	36,951 cft
3)	**Variable Allowable Release Rate**		
	Q_{VRR} = 1.1055 - 0.206ln(A)	=	0.70 cfs/acre
4)	**Allowable 100-year post-development peak flow rate (cfs)**	=	5.05 cfs
	$Q_{100P} = Q_{VRR}$ x A		
5)	**100-year Peak Rainfall Intensity (inches/hour)**		
	Tc	=	20 min
	I_{100} = 83.3 / (Tc+9.17)$^{0.81}$	=	5.42 in/hr
6)	**100-year Peak Inflow rate**		
	$Q_{100(C)} = C$ x I_{100} x A	=	29.04 cfs
7)	**Storage Curve Factor for the 100-year detention volume**		
	R = 0.206-0.15*ln (Q_{100P} / $Q_{100(C)}$)	=	0.47
8)	Total 100-year runoff volume		
	V_{100R} = 18,895 x C x A V_{100R}	=	101,232 cf
9)	**100-year Detention Basin Volume Required**		
	$V_{100D} = (V_{100R} \times R) - V_{CP-P}$	=	**47,413** cft Vcp=0
	CHECK: $V_{100D} > V_{ED}$		PASS
10)	Sediment Forebay Volume		
	15% of the WQ Volume		
	V_F = 545 x C x A	=	**2,920** cft

Determination of Storage Provided in Basin

Elev.	Area	Avg. Area	Depth	Volume	
866.0	18,300			67,550	
		17,350	1.0		**Freeboard =** **865.90** ft
865.0	16,400			50,200	
		15,400	1.0		**100-year elev. =** **864.90** ft
864.0	14,400			34,800	
		13,450	1.0		**ED Vol elev =** **864.200** ft
863.0	12,500			21,350	
		11,575	1.0		
862.0	10,650			9,775	
		9,775	1.0		
861.0	8,900			0	

Determination of Storage Provided in Forebay
Southern Forebay

Elev.	Area	Avg. Area	Depth	Volume	
865.0	5,000			11,250	
		4,600	1.0		
864.0	4,200			6,650	
		3,750	1.0		**FOREBAY VOL. ELEV.**
863.0	3,300			2,900	**863.10 ft**
		2,900	1.0		
862.0	2,500			0	

10-Yr Storm Calculations

I_{10} = 50.12 / (Tc+9.17)$^{.681}$	=	0.94 cfs/acre imperv.
Tc	=	15 minutes
I100	=	3.80 in/hr
Q10	=	20 cfs
R = 0.206-0.15*ln (Q_{100P} / $Q_{100(C)}$)	=	0.47
V10R= 3.32/12x43560xAxC	=	**64,568** cf
V10D= V10R x R	=	**30,241** cf

Storage Elevations

ED Volume Elevation	=	**864.20** feet
10-Year Volume Elevation	=	**863.70** feet
100-Year Volume Elevation	=	**864.90** feet
Required 1' Freeboard Elevation	=	**865.90** feet
Actual Freeboard Elevation	=	**866.00** feet

Check Overflow Outlet Pipe (Under Head)

Size of pipe			18 in
Area (a)=			1.77 sf
Pipe Invert=			**861.00** ft
Springline=			861.75 ft
Overflow Elev=			**865.41** ft
Head (h)			5.08 ft
Qcapacity=0.62*a*sqrt(2gh)			19.80 cfs
Qexpected (from above)			15.09 cfs
Qcapacity >	Qexpected	OK	

NOT FOR CONSTRUCTION

811 Know what's **below.** **Call** before you dig.

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SECTION 2
TOWN 1 NORTH, RANGE 9 EAST
CITY OF FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

FARMINGTON LOFTS, LLC.

THE EMERSON
SITE PLAN
DETENTION PLAN

DATE
JAN. 2, 2025

REVISIONS

0 10 20
SCALE: 1" = 20 FEET

DRAWN BY: MM
CHECKED BY: AK
P.M.: J. ROTH
JOB #: 19002962
FILE CODE: –
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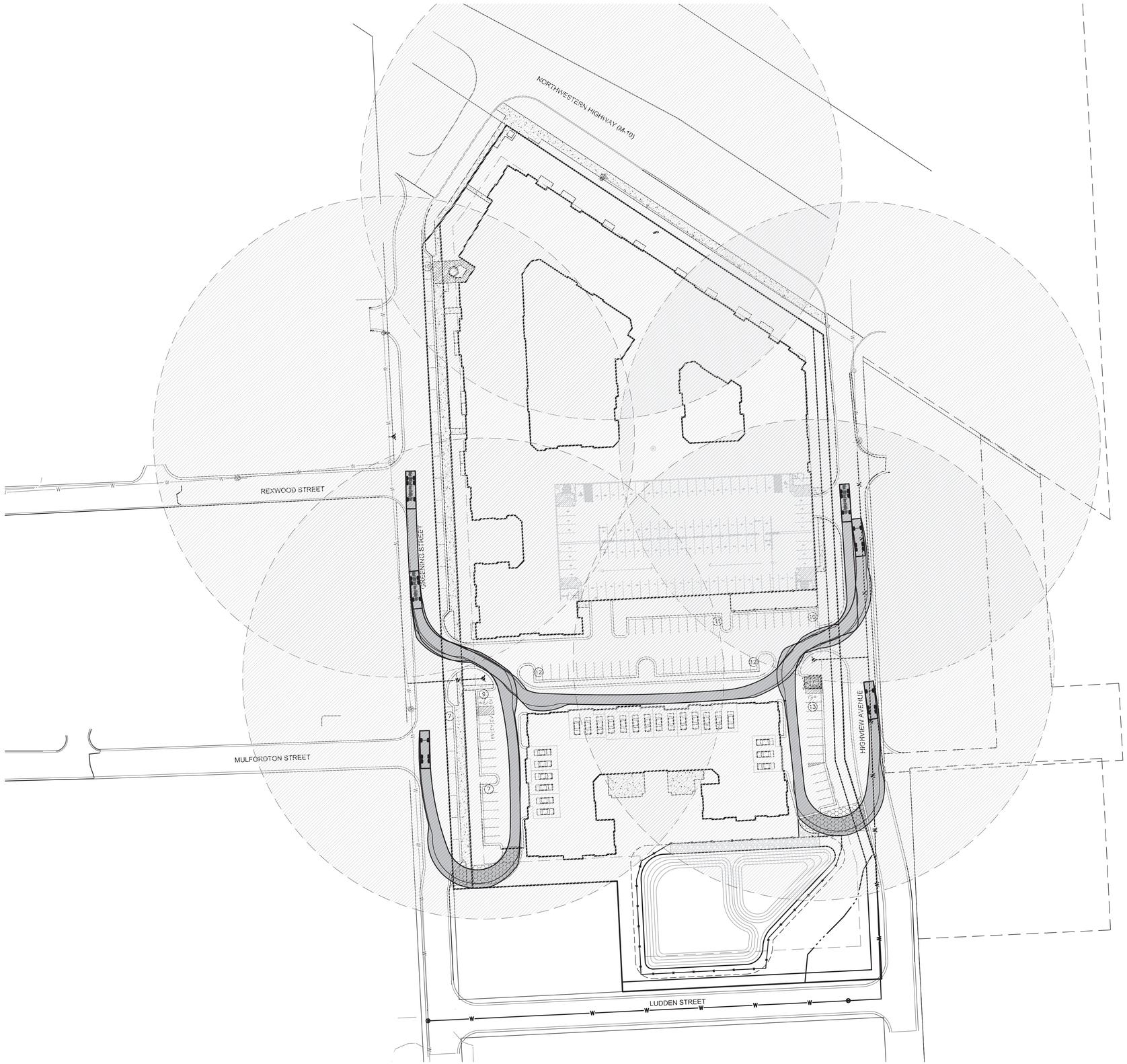
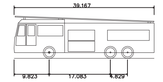


LEGEND

- PROPOSED WATER MAIN
- EXISTING WATER MAIN
- 250' RADIUS HYDRANT COVERAGE (TYP.)
- PROPOSED HYDRANT



FIRE TRUCK TEMPLATE	
Overall Length	39.167ft
Overall Width	10.000ft
Overall Body Height	11.631ft
Min Body Ground Clearance	1.612ft
Track Width	9.583ft
Lock-to-lock time	4.0os
Wall to Wall Turning Radius	50.033ft

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SECTION 2
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CITY OF FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

FARMINGTON LOFTS, LLC.

THE EMERSON
SITE PLAN
FIRE PROTECTION PLAN

DATE
JAN. 2, 2025

REVISIONS

SCALE: 1" = 50 FEET

DRAWN BY: MM
CHECKED BY: AK
P.M.: J. ROTH
JOB #: 19002962
FILE CODE: –
SHEET NO. 10

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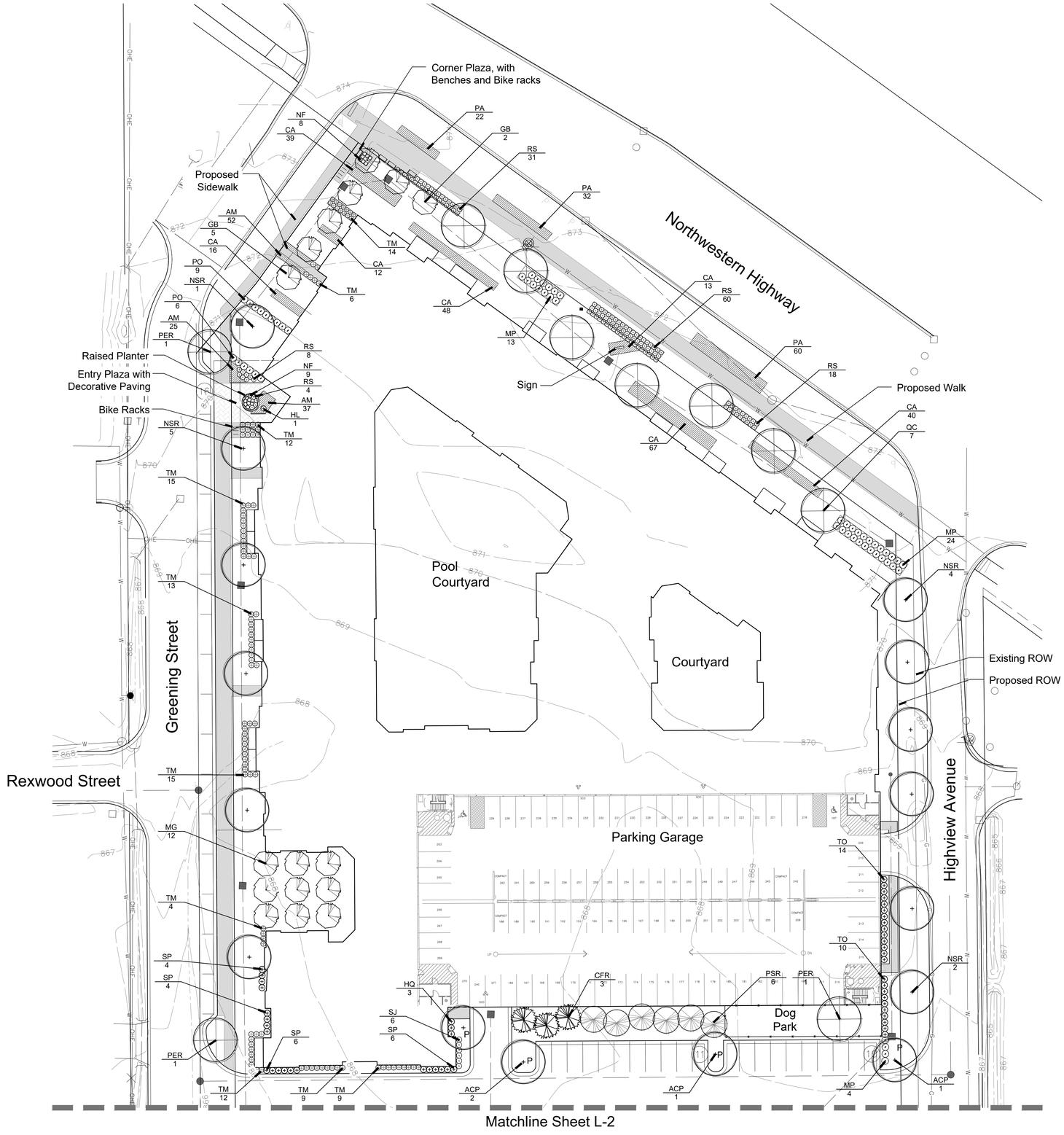


Landscape Summary - This Sheet

Parking Lot Landscaping

"P"	Paved Area	10,236 s.f.
	Trees Required	3.6 Trees (10,087 / 2,800)
	Trees Provided	4 Trees

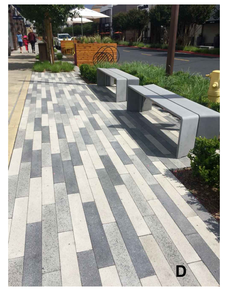
Legend - See Sheet L-2 for Plant Schedule

- Deciduous Trees
- Evergreen Trees
- Ornamental Tree
- Shrubs
- Perennial / Annual Beds

Precedent Images

Paving

A - Large Format Concrete Pavers
B - Granite Pavers
C - Permeable Pavers
D - Plank Pavers



Site Furnishings

The Concord Collection - Landscape Forms

ALLENDESIGN
LAND PLANNING / LANDSCAPE ARCHITECTURE
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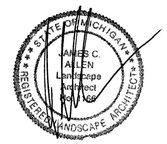
Northville, Michigan 48167
e. jca@wideopenwest.com
t. 248.467.4668

Seal:



Title:

Landscape Plan

Project:

The Emerson
Farmington Hills, Michigan

Prepared for:

Alden Development Group
369 Old Woodward
Birmingham, Michigan 48009

Revision:	Issued:
Submission	October 15, 2021
Revised	January 12, 2024
Review	October 16, 2024
Submission	October 31, 2024
Revised	December 20, 2024

Job Number:

21-069

Drawn By:	Checked By:
jca	jca

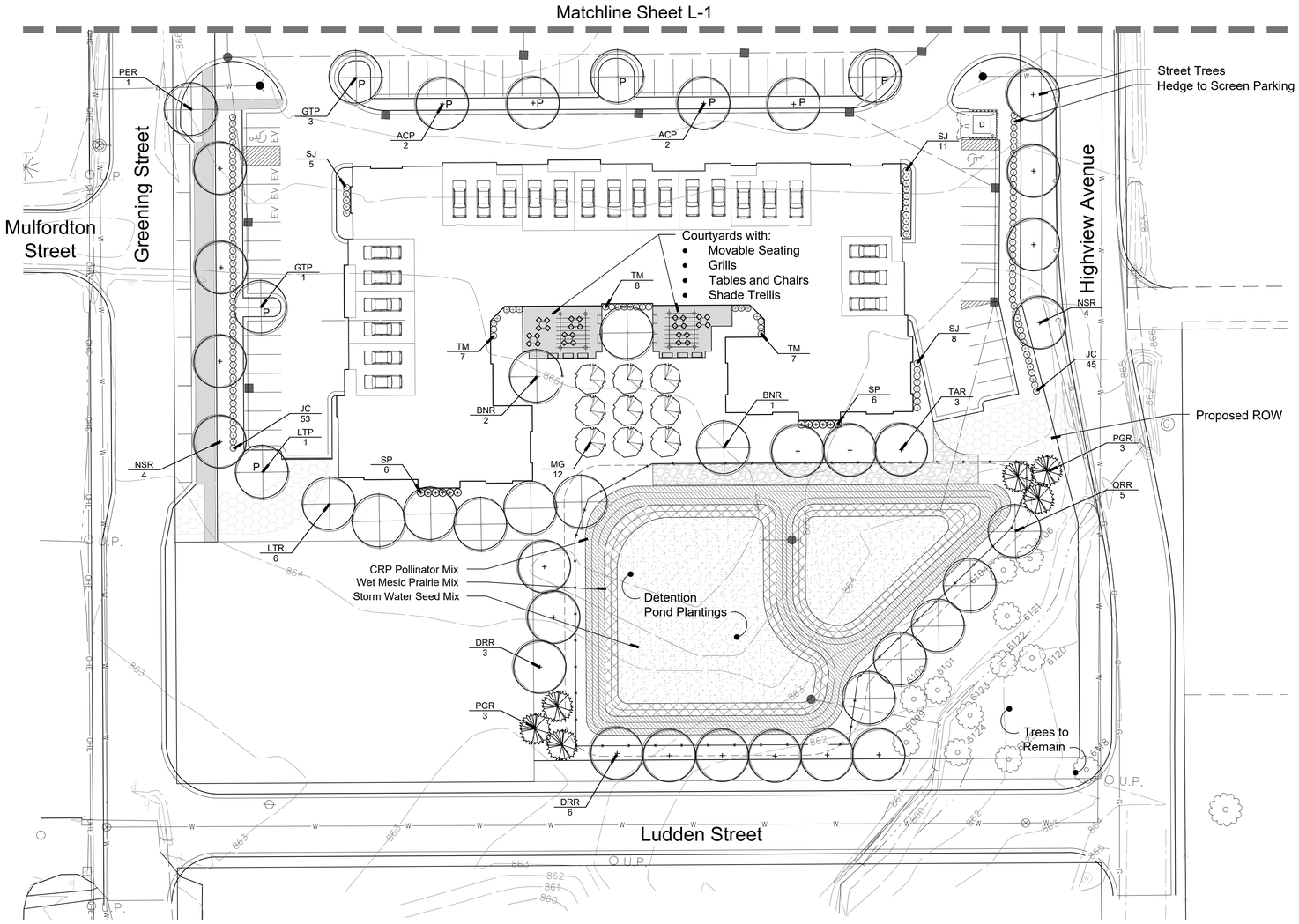
0' 15' 30'

NORTH
1"=30'

Sheet No.

L-1

Know what's below. Call before you dig.



Landscape Summary - This Sheet

Parking Lot Landscaping "P"

Paved Area	24,956 s.f.
Trees Required	8.9 Trees (24,956 / 2,800)
Trees Provided	9 Trees

Tree Removal / Replacement - See Civil Drawings Sheet 3

Trees Required	65
Trees Provided	65

Plant List

qty.	sym.	botanical name	common name	caliper	spacing	root	height
Woodland Replacement							
3	BNR	*Betula nigra 'Heritage'*	Heritage River Birch	14'-16' ht.	as shown	B&B	Minimum 3 stems
3	CFR	*Abies concolor*	Concolor Fir	8' ht.	as shown	B&B	Unsheared, branched to ground
9	DRR	*Metasequoia g. 'Gold Rush'*	Gold Rush Dawn Redwood	3.0" cal.	as shown	B&B	Single straight trunk
6	LTR	*Liriodendron tulipifera*	Tulip Tree	3.0" cal.	as shown	B&B	Single straight trunk
20	NSR	*Nyssa sylvatica 'David Odom'*	Afterburner Tupelo	3.0" cal.	as shown	B&B	Single straight trunk
4	PER	*Platanus x. acerifolia 'Exclamation'*	Exclamation London Plane Tree	3.0" cal.	as shown	B&B	Single straight trunk
6	PGR	*Picea glauca var. densata*	Black Hills Spruce	8' ht.	as shown	B&B	Unsheared, branched to ground
6	PSR	*Pinus strobus*	Eastern White Pine	8' ht.	as shown	B&B	Unsheared, branched to ground
5	QRR	*Quercus rubra*	Red Oak	3.0" cal.	as shown	B&B	Single straight trunk
3	TAR	*Tilia americana 'Redmond'*	Redmond American Basswood	3.0" cal.	as shown	B&B	Single straight trunk
65	Trees Provided						
Parking Lot Trees							
8	ACP	*Acer campestre 'Streetside'*	Streetside Maple	2.5" cal.	as shown	B&B	Single straight trunk
4	GTP	*Gleditsia t. 'Sunburst'*	Sunburst Honeylocust	2.5" cal.	as shown	B&B	Single straight trunk
1	LTP	*Liriodendron tulipifera*	Tulip Tree	2.5" cal.	as shown	B&B	Single straight trunk
13	Trees Provided						
General Plantings							
7	GB	*Ginkgo biloba 'Blagon'*	Gold Spire Ginkgo (Male Only)	2.5" cal.	as shown	B&B	Single straight trunk
24	MG	*Magnolia stellata*	Star Magnolia	2.0" cal.	as shown	B&B	Minimum 3 stems
7	QC	*Quercus coccinea*	Scarlet Oak	2.5" cal.	as shown	B&B	Single straight trunk
Shrubs							
1	HL	*Hydrangea p. 'Little Lime'*	Little Lime Hydrangea	36" ht.	as shown	cont.	Well rooted
3	HQ	*Hydrangea q. 'Pee Wee'*	Pee Wee Oakleaf Hydrangea	36" ht.	as shown	cont.	Well rooted
98	JC	*Juniperus c. 'Pfitzeriana Compacta'*	Compact Pfitzer Juniper	30" ht.	as shown	cont.	Well rooted
41	MP	*Myrica pennsylvanica*	Northern Bayberry	30" ht.	as shown	cont.	Well rooted
15	PO	*Physocarpus o. 'Summer Wine'*	Summer Wine Ninebark	36" ht.	as shown	cont.	Well rooted
30	SJ	*Spirea japonica 'Neon Flash'*	Neon Flash Spirea	#5	as shown	cont.	Well rooted
32	SP	*Syringa p. 'Miss Kim'*	Miss Kim Dwarf Korean Lilac	#5	as shown	cont.	Well rooted
131	TM	*Taxus x m. 'Densiformis'*	Dense Yew	18"	as shown	B&B	Trim to Hedge
24	TO	*Thuja o. 'Nigra'*	Dark Green American Arborvitae	8' ht.	as shown	B&B	Trim to Hedge
Perennials							
114	AM	*Allium 'Millenium'*	Millenium Ornamental Onion	#1	as shown	cont.	Well rooted
231	CA	*Calamagrostis a. 'Karl Foerster'*	Karl Foerster Feather Reed Grass	#2	as shown	cont.	Well rooted
17	NF	*Nepeta x f. 'Walker's Low'*	Walker's Low Catmint	#1	as shown	cont.	Well rooted
114	PA	*Pennisetum a. 'Redhead'*	Redhead Dwarf Fountain Grass	#2	as shown	cont.	Well rooted
121	RS	*Perovskia a. 'Blue Jean Baby'*	Blue Jean Baby Russian Sage	#1	as shown	cont.	Well rooted

Detention Pond Seed Mixes

CRP Pollinator Mix

Native Connections
3815 N Westnedge Ave, Kalamazoo, MI 49004
(P) 269.459.6900
info@nativeconnections.net
www.nativeconnections.net

This bare-bones prairie mix is our most economical grass and wildflower mix and meets NRCS specifications for several pollinator and wildlife habitat conservation programs in Michigan. The selected wildflowers will bloom throughout the growing season and provide diverse food and habitat resources for pollinator insects and other wildlife. CRP programs do not specify nurse crop, but it can be added.

Total Seeding Rate: 6.02 lbs per acre
4 lbs grasses • 2.02 lbs forbs
37 native seeds per sq ft

Call, email or visit our website for pricing.

Grasses		PLS Oz/acre	Seeds/sq ft
Andropogon gerardii	Big Bluestem	10.00	2.30
Elymus canadensis	Canada Wild Rye	14.00	1.67
Schizachyrium scoparium	Little Bluestem	24.00	4.26
Sorghastrum nutans	Indian Grass	16.00	6.46
	Total Grasses	64.00	16.64
Forbs		**PLS Oz/acre**	**Seeds/sq ft**
Achillea millefolium	Yarrow	1.45	5.93
Asclepias syriaca	Common Milkweed	1.75	0.16
Asclepias tuberosa	Butterfly Milkweed	0.75	0.07
Aster novae-angliae	New England Aster	0.25	0.38
Cassia fasciculata (Chamaecrista f.)	Partridge Pea	4.75	0.29
Coreopsis lanceolata	Lance-leaved Tickseed	5.00	1.24
Dalea purpurea (Petalostemum p.)	Purple Prairie Clover	3.50	0.44
Helianthus maximiliani	Maximilian Sunflower	4.75	0.72
Helianthus helianthoides	False sunflower	4.00	0.58
Monarda fistulosa	Wild Bergamot	0.25	0.40
Ratibida pinnata	Yellow Coneflower	3.00	2.97
Rudbeckia hirta	Black-eyed Susan	2.80	5.91
Solidago rigida	Stiff Goldenrod	0.25	0.24
Zizia aurea	Golden Alexander	0.50	0.13
	Total Forbs	32.55	20.55
Temporary Grass Cover		**Oz/acre**	**Seeds/sq ft**
Lolium multiflorum	Annual Ryegrass	0.00	0.00
Avena sativa	Seed Oats	0.00	0.00
	Total Temp Grasses	0.00	0.00

5,788 s.f. Total Area
6.02 lbs. per Acre Application Rate
0.8 lbs. of Mix Required
Place on 3" Topsoil and Cover with Biodegradable Seed Mat

Wet-Mesic Prairie Mix

Native Connections
3815 N Westnedge Ave, Kalamazoo, MI 49004
(P) 269.459.6900
info@nativeconnections.net
www.nativeconnections.net

This mix is patterned after natural prairie communities with mesic to wet soils and full sun. Species in this mix can tolerate a wide range of conditions including seasonal saturation as well as dry periods during the summer months. Not intended for long-term flooding or fully saturated areas, this mix will also do well in most stormwater detention basins or can be planted just upslope from wetland areas.

Total Seeding Rate: 32.34 lbs per acre
4.75 lbs grasses • 2.59 lbs forbs • 25 lbs nurse crop
66 native seeds per sq ft

Call, email or visit our website for pricing.

Grasses		PLS Oz/acre	Seeds/sq ft
Andropogon gerardii	Big Bluestem	20.00	4.59
Carex bebbii	Bebb's oval sedge	0.50	0.39
Carex vulpinoidea	Fox Sedge	2.50	5.74
Elymus virginicus	Virginia Wild Rye	24.00	2.31
Panicum virgatum	Switchgrass	9.90	3.18
Scirpus cyperinus	Wool Grass	0.10	3.90
Sorghastrum nutans	Indian Grass	20.00	5.51
Spartina pectinata	Prairie Cordgrass	1.00	0.15
	Total Grasses	78.00	21.19
Forbs		**PLS Oz/acre**	**Seeds/sq ft**
Achillemeria alternifolia (Verbesina a.)	Wingstem	0.60	0.12
Allium cernuum	Nodding Wild Onion	1.50	0.26
Anaetnia atropurpurea	Angelica	1.00	0.12
Asclepias incarnata	Swamp Milkweed	1.50	0.17
Aster novae-angliae	New England Aster	0.50	0.76
Cassia hebecarpa	Wild Senna	5.50	0.18
Coreopsis tripteris	Tall Coreopsis	1.50	0.13
Desmodium canadense	Showy Tick Trefoil	0.50	0.09
Helianthus grosseserratus	Sweet Joe Pye Weed	0.50	0.48
Helenium autumnale	Sneezeweed	0.50	1.49
Heliopsis helianthoides	False sunflower	8.00	1.16
Heracleum maximum (H. lanatum)	Cow Parsnip	1.20	0.07
Hypericum pyramidatum	Great St John's Wort	1.50	6.54
Liatris aspicata	Marsh Blazingstar	1.00	0.25
Lobelia siphilitica	Great Blue Lobelia	0.50	5.74
Monarda fistulosa	Wild Bergamot	1.50	2.41
Penstemon digitalis	Foxglove Beardtongue	2.50	7.46
Physostegia virginiana	Obedient Plant	0.50	0.13
Pycnanthemum virginianum	Mountain mint	0.20	1.01
Ratibida pinnata	Yellow Coneflower	1.50	1.03
Rudbeckia hirta	Black-eyed Susan	3.50	7.39
Rudbeckia triloba	Brown-eyed Susan	2.50	5.95
Scrophularia lanceolata	Early Figwort	0.50	0.55
Silphium terebinthinaceum	Prairie Dock	1.00	0.12
Solidago rigida	Riddell's Goldenrod	0.50	1.07
Verbena hastata	Blue Vervain	1.00	2.13
Zizia aurea	Golden Alexander	1.00	0.25
	Total Forbs	41.50	44.72
Temporary Grass Cover		**Oz/acre**	**Seeds/sq ft**
Avena sativa	Seed Oats	480.00	7.35
	Total Temp Grasses	480.00	7.35

3,665 s.f. Total Area
32.34 lbs. per Acre Application Rate
2.7 lbs. of Mix Required
Place on 3" Topsoil and Cover with Biodegradable Seed Mat

Stormwater Mix

Native Connections
3815 N Westnedge Ave, Kalamazoo, MI 49004
(P) 269.459.6900
info@nativeconnections.net
www.nativeconnections.net

An economical mix specifically designed to withstand the low water quality and highly variable conditions associated with stormwater features. Approximately half of the species are salt tolerant and most species will do well in mesic to wet hydrology with others filling in the wettest and driest ends of the spectrum. The high native seed count and heavy annual nurse crop in this mix ensure full and aggressive establishment in a wide range of site conditions.

Total Seeding Rate: 34.2 lbs per acre
2.61 lbs grasses • 1.59 lbs forbs • 30 lbs nurse crop
105 native seeds per sq ft

Call, email or visit our website for pricing.

Grasses, Sedges & Rushes		PLS Oz/acre	Seeds/sq ft
Andropogon gerardii	Big Bluestem	4.00	0.92
Carex bebbii	Bebb's oval sedge	2.00	1.56
Carex vulpinoidea	Fox Sedge	2.50	5.74
Eleocharis palustris	Great Spike Rush	1.00	1.17
Elymus virginicus	Virginia Wild Rye	18.00	1.74
Juncus effusus	Soft Rush	0.50	11.48
Juncus tenuis	Path Rush	0.50	11.48
Juncus torreyi	Torrey's Rush	0.25	9.18
Panicum virgatum	Switchgrass	7.00	2.23
Scirpus pungens (S. americanus)	Three Square Rush	1.00	2.87
Scirpus validus (S. tabernaemontani)	Softstem Bulrush	1.00	0.71
Sorghastrum nutans	Indian Grass	4.00	1.10
	Total Grasses	41.75	60.39
Forbs		**PLS Oz/acre**	**Seeds/sq ft**
Alisma subcordatum	Common Water Plantain	2.00	2.73
Asclepias incarnata	Swamp Milkweed	1.00	0.11
Aster novae-angliae	New England Aster	0.25	0.38
Aster umbellatus (Doellingeria u.)	Flat-topped Aster	0.25	0.38
Bidens cernua	Nodding Bur Marigold	1.00	0.48
Echinacea purpurea	Purple Coneflower	4.00	0.61
Helenium autumnale	Sneezeweed	0.75	2.24
Liatris spicata	Marsh Blazingstar	1.25	0.32
Lycopus americatus	Water Horehound	0.50	1.49
Mimulus ringens	Monkey Flower	0.50	1.49
Monarda fistulosa	Wild Bergamot	0.60	0.80
Oenothera biennis	Common Evening Primrose	1.00	2.07
Penthorum sedoides	Ditch Stonecrop	0.50	14.92
Physostegia virginiana	Obedient Plant	0.50	0.13
Polygonum pensylvanicum (Persicaria p.)	Pennsylvania Smartweed	2.75	0.92
Rudbeckia hirta	Black-eyed Susan	4.00	8.45
Verbena hastata	Blue Vervain	2.50	5.34
Zizia aurea	Golden Alexander	2.50	0.63
	Total Forbs	25.50	65.12
Temporary Grass Cover		**Oz/acre**	**Seeds/sq ft**
Lolium multiflorum	Annual Ryegrass	56.00	17.36
Avena sativa	Seed Oats	184.00	4.22
	Total Temp Grasses	240.00	21.58

9,079 s.f. Total Area
34.2 lbs. per Acre Application Rate
7.1 lbs. of Mix Required
Place on 3" Topsoil and Cover with Biodegradable Seed Mat

ALLENDESIGN
LAND PLANNING / LANDSCAPE ARCHITECTURE
557 Carpenter
Northville, Michigan 48167
e. jca@wideopenwest.com
t. 248.467.4668

Seal:

Title:

Landscape Plan

Project:

The Emerson
Farmington Hills, Michigan

Prepared for:

Alden Development Group
369 Old Woodward
Birmingham, Michigan 48009

Revision:	Issued:
Submission	October 15, 2021
Revised	January 12, 2024
Review	October 16, 2024
Submission	October 31, 2024
Revised	December 20, 2024

Job Number:

21-069

Drawn By:	Checked By:
jca	jca

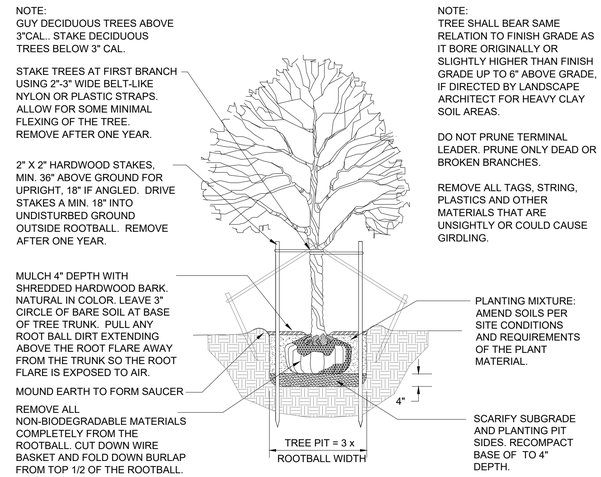
0' 15' 30'

NORTH
1"=30'

Know what's below. Call before you dig.

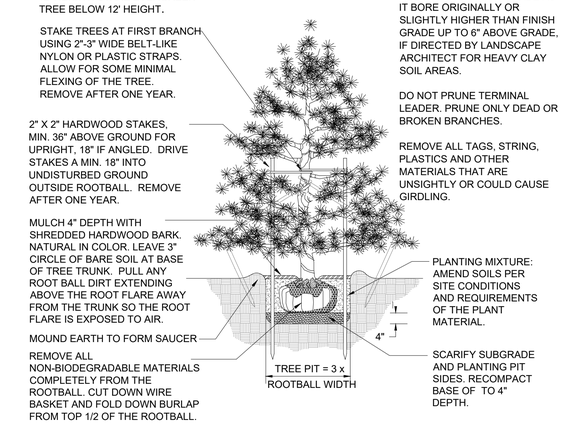
Sheet No.

L-2



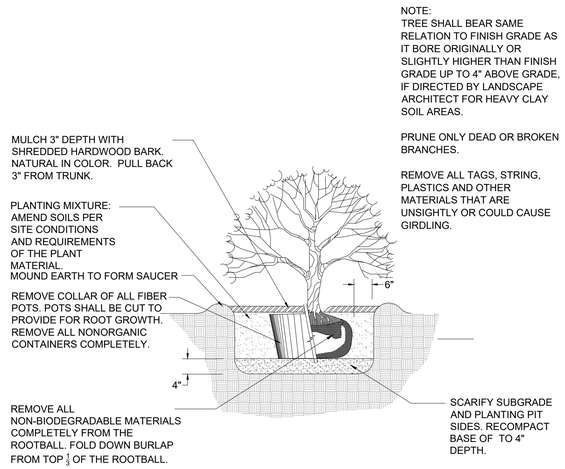
DECIDUOUS TREE PLANTING DETAIL

Not to scale



EVERGREEN TREE PLANTING DETAIL

Not to scale

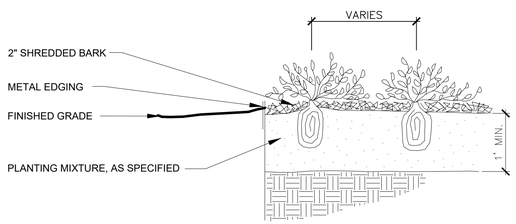


SHRUB PLANTING DETAIL

NOT TO SCALE

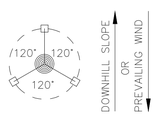
LANDSCAPE NOTES

1. All plants shall be north Midwest American region grown, No. 1 grade plant materials, and shall be true to name, free from physical damage and wind burn.
2. Plants shall be full, well-branched, and in healthy vigorous growing condition.
3. Plants shall be watered before and after planting is complete.
4. All trees must be staked, fertilized and mulched and shall be guaranteed to exhibit a normal growth cycle for at least two (2) full years following Township approval.
5. All material shall conform to the guidelines established in the most recent edition of the American Standard for Nursery Stock.
6. Provide clean backfill soil, using material stockpiled on site. Soil shall be screened and free of any debris, foreign material, and stone.
7. "Agriform" tabs or similar slow-release fertilizer shall be added to the planting pits before being backfilled.
8. Amended planting mix shall consist of 1/3 screened topsoil, 1/3 sand and 1/3 peat, mixed well and spread to the depth as indicated in planting details.
9. All plantings shall be mulched per planting details located on this sheet.
10. The Landscape Contractor shall be responsible for all work shown on the landscape drawings and specifications.
11. No substitutions or changes of location, or plant types shall be made without the approval of the Landscape Architect.
12. The Landscape Architect shall be notified in writing of any discrepancies between the plans and field conditions prior to installation.
13. The Landscape Contractor shall be responsible for maintaining all plant material in a vertical condition throughout the guaranteed period.
14. The Landscape Architect shall have the right, at any stage of the installation, to reject any work or material that does not meet the requirements of the plans and specifications, if requested by owner.
15. Contractor shall be responsible for checking plant quantities to ensure quantities on drawings and plant list are the same. In the event of a discrepancy, the quantities on the plans shall prevail.
16. The Landscape Contractor shall seed and mulch or sod (as indicated on plans) all areas disturbed during construction, throughout the contract limits.
17. A pre-emergent weed control agent, "Preen" or equal, shall be applied uniformly on top of all mulching in all planting beds.
18. Sod shall be two year old "Baron/Cheriadelphi" Kentucky Blue Grass grown in a sod nursery on loam soil.



PERENNIAL PLANTING DETAIL

Not to scale

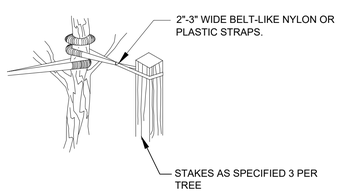


NOTE:
ORIENT STAKING/GUYING TO PREVAILING WINDS, EXCEPT ON SLOPES GREATER THAN 3:1 ORIENT TO SLOPE.

USE SAME STAKING/GUYING ORIENTATION FOR ALL PLANTS WITHIN EACH GROUPING OR AREA

STAKING/GUYING LOCATION

GUYING DETAIL



STAKING DETAIL

TREE STAKING DETAIL

Not to scale

ALLENDESIGN
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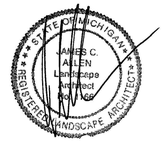

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Job Number:

21-069

Drawn By:	Checked By:
jca	jca

Know what's below. Call before you dig.

Sheet No.

L-3

ZONING TEXT AMENDMENT 4, 2024

SET FOR PUBLIC HEARING:

I move that draft Zoning Text Amendment 4, 2024, BE SET FOR PUBLIC HEARING for the Planning Commission's next available regular meeting agenda.

[List any recommended revisions:]

ORDINANCE NO. C-_____-2025

CITY OF FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

AN ORDINANCE TO AMEND THE FARMINGTON HILLS CODE OF ORDINANCES, CHAPTER 34, "ZONING," ARTICLE 2, "DEFINITIONS," SECTION 34-2.2, "DEFINITIONS," TO AMEND THE DEFINITION OF RESTAURANT, DRIVE IN, AND ADD THE DEFINITION OF COMMERCIAL OUTDOOR RECREATION SPACE; AND ARTICLE 3, "ZONING DISTRICTS," SECTION 34-3.1.24, "B-2 COMMUNITY BUSINESS DISTRICT," TO DELETE REFERENCE TO AUTOMOBILE SERVICE CENTER AND REPLACE WITH AUTOMOBILE REPAIR.

THE CITY OF FARMINGTON HILLS ORDAINS:

Section 1 of Ordinance. Ordinance Amendment.

The Farmington Hills City Code, Chapter 34, "Zoning," Article 3, "Zoning Districts," Section 34-2.2, "Definitions," is amended as follows:

34-2.2 DEFINITIONS

Restaurant, drive-in means a restaurant at which any patrons are served from a drive-~~by~~through window ~~or~~ while within a motor vehicle or where food is served and consumed within ~~the~~ a motor vehicle on the premises.

Commercial outdoor recreation space means [land utilized for athletic or sporting activities, pastimes, games or similar activities or diversions not owned or operated by a public entity.]

Section 2 of Ordinance. Ordinance Amendment.

The Farmington Hills City Code, Chapter 34, "Zoning," Article 3, "Zoning Districts," Section 34-3.1.24, "B-2 Community Business District," is amended to read as follows:

34-3.1.24 B-2 COMMUNITY BUSINESS DISTRICT

A. INTENT

The B-2 community business districts are designed to cater to the needs of a larger consumer population than is served by the B-1 districts and so are generally characterized by an integrated or planned cluster of establishments served by a common parking area and generating large volumes of vehicular and pedestrian traffic.

B. PRINCIPAL PERMITTED USES

The following uses are permitted subject to the required conditions in Section 34-3.10:

i. Retail businesses § 34-4.29

ii. Personal service establishments which perform services on the premises
iii. Laundry, drycleaning establishments, or pickup stations, dealing directly with the consumer § 34-4.25
iv. Office buildings for any of the following occupations: executive, administrative, professional, accounting, writing, clerical, stenographic, drafting, sales
v. Medical office including clinics
vi. Banks, credit unions, savings and loan associations and similar uses with drive-in facilities as an accessory use only
vii. Post office and similar governmental office buildings, serving persons living in the adjacent residential area
viii. Nursery schools, day nurseries, and day care centers
ix. Fabrication, repair, and processing of goods § 34-4.29
x. Fast food or carryout restaurant § 34-4.27
xi. Veterinary hospital or clinic § 34-4.26
xii. Automobile ~~service center~~repair § 34-4.31
xiii. Open-air business § 34-4.30
xiv. Outdoor space for seating areas accessory to a restaurant § 34-4.32
xv. Cellular tower& and cellular antennae § 34-4.24
xvi. Sit down restaurants
xvii. Theaters, assembly halls, concert halls or similar places of assembly § 34-4.44
xviii. Churches
xix. Business schools and colleges or private schools operated for profit
xx. Other uses similar to the above uses
xxi. Indoor Recreation Facilities not exceeding 3,300 square feet in gross leasable area § 4-4.19
xxii. Accessory structures and uses customarily incident to any principal permitted use

C. SPECIAL APPROVAL USES

The following uses are permitted subject to the required conditions in Section 34-3.10:

i. Indoor Recreation Facilities not exceeding 3,300 square feet in gross leasable area § 34-4.19
ii. Establishments with coin-operated amusement devices §34-4.33

D. ACCESSORY USES

i. Electric vehicle infrastructure § 34-4.55

Section 3 of Ordinance. Repealer.

All ordinances, parts of ordinances, or sections of the City Code in conflict with this ordinance are repealed only to the extent necessary to give this ordinance full force and effect, and the Farmington Hills Ordinance Code shall remain in full force and effect, amended only as specified above.

Section 4 of Ordinance. Savings.

The amendments of the Farmington Hills Code of Ordinances set forth in this ordinance do not affect or impair any act done, offense committed, or right accruing, accrued, or acquired or liability, penalty, forfeiture or punishment, pending or incurred prior to the amendments of the Farmington Hills Code of Ordinances set forth in this ordinance.

Section 5 of Ordinance. Severability.

If any section, clause or provision of this ordinance shall be declared to be unconstitutional, void, illegal or ineffective by any court of competent jurisdiction, the validity of the ordinance as a whole, or in part, shall not be affected other than the part invalidated, and such section, clause or provision declared to be unconstitutional, void or illegal shall thereby cease to be a part of this Ordinance, but the remainder of this ordinance shall stand and be in full force and effect.

Section 6 of Ordinance. Effective Date.

The provisions of this ordinance are ordered to take effect twenty-one (21) days after enactment.

Section 7 of Ordinance. Date and Publication.

This ordinance is declared to have been enacted by the City Council of the City of Farmington Hills at a meeting called and held on the ____ day of _____, 2025, and ordered to be given publication in the manner prescribed by law.

Ayes:
Nays:
Abstentions:
Absent:

STATE OF MICHIGAN)
) ss.
COUNTY OF OAKLAND)

I, the undersigned, the qualified and acting City Clerk of the City of Farmington Hills, Oakland County, Michigan, do certify that the foregoing is a true and complete copy of the Ordinance adopted by the City Council of the City of Farmington Hills at a meeting held on the _____ day of _____, 2025, the original of which is on file in my office.

_____
CARLY LINDAHL, City Clerk
City of Farmington Hills

ORDINANCE NO. C-_____-2025

CITY OF FARMINGTON HILLS
OAKLAND COUNTY, MICHIGAN

AN ORDINANCE TO AMEND THE FARMINGTON HILLS CODE OF ORDINANCES, CHAPTER 34, "ZONING," ARTICLE 2, "DEFINITIONS," SECTION 34-2.2, "DEFINITIONS," TO AMEND THE DEFINITION OF RESTAURANT, DRIVE IN, AND ADD THE DEFINITION OF COMMERCIAL OUTDOOR RECREATION SPACE; AND ARTICLE 3, "ZONING DISTRICTS," SECTION 34-3.1.24, "B-2 COMMUNITY BUSINESS DISTRICT," TO DELETE REFERENCE TO AUTOMOBILE SERVICE CENTER AND REPLACE WITH AUTOMOBILE REPAIR.

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xi. Veterinary hospital or clinic § 34-4.26
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D. ACCESSORY USES

i. Electric vehicle infrastructure § 34-4.55

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Section 7 of Ordinance. Date and Publication.

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Ayes:
Nays:
Abstentions:
Absent:

STATE OF MICHIGAN)
) ss.
COUNTY OF OAKLAND)

I, the undersigned, the qualified and acting City Clerk of the City of Farmington Hills, Oakland County, Michigan, do certify that the foregoing is a true and complete copy of the Ordinance adopted by the City Council of the City of Farmington Hills at a meeting held on the _____ day of _____, 2025, the original of which is on file in my office.

_____
CARLY LINDAHL, City Clerk
City of Farmington Hills

2024 HISTORIC DISTRICT COMMISSION ANNUAL REPORT

ACCEPTANCE:

I move that the 2024 Historic District Commission Annual Report BE ACCEPTED.

CITY OF FARMINGTON HILLS HISTORIC DISTRICT COMMISSION
2024 ANNUAL REPORT

The City of Farmington Hills Historic District Commission is charged with preserving historic districts within the City that reflect elements of the architectural, cultural, economic, political, or social history of the community. This seven (7)-member commission is comprised of City residents working diligently over the past year to further this goal. This report summarizes the Commission's activities in 2024.

2024 Commission Membership

Marleen Tulas, Chair
Ken Klemmer, Vice Chair
Alec Thomson, Recording Secretary
James Paulson
John Trafelet
Steve Olson
Emily Howard

City Staff Liaison: Kris Canty, Staff Planner
City Council Liaison: Valerie Knol, Councilperson

2024 Historic District Commission Goals, Objectives, and Initiatives

- ☐ Continue to update the "Blue Book," the City's official guide to its Historic Districts, for accuracy and comprehensiveness.
- ☐ Continue collaboration between the Historic District Commission and City's Department of Public Works in implementing the cemetery preservation plan, including additional monument cleaning, and resetting.
- ☐ Spicer House Preservation Plan
- ☐ Host a Preservation Workshop open to the public.
- ☐ Identify properties within city for possible inclusion in Historic District
- ☐ Assist with the development of the Sarah Fisher Site.

2025 Historic District Commission Goals, Objectives, and Initiatives

- ☐ Assist with the development of the Sarah Fisher Site.
- ☐ Host Educational and Social Gatherings open to the public.
- ☐ Identify properties within city for possible inclusion in Historic District
- ☐ Continue collaboration between the Historic District Commission and City's Department of Public Works in implementing the cemetery preservation plan, including additional monument cleaning, and resetting.
- ☐ Continued assistance with ongoing restoration and repair of the Spicer House exterior.

Historic District Commission Meetings

In 2024, the Historic District Commission held ten (10) regular meetings; meetings in July and October were cancelled due to lack of business.

Review of Work Within Historic Districts

Certificates of Appropriateness are granted for a project which meets the United States Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, as set forth in Tile 36 of the Code of Federal Regulations, Part 67, as amended.

Certificates of Appropriateness

In 2024, seven (7) Certificates of Appropriateness were issued for work within the following districts:

Historic District Site No. 514 – The James F. Cain House – 26135 HOLLY HILL DRIVE

Site Overview

A four-square design with Colonial Revival details, this small "estate" house with sidewalks to other early models was located prominently in Pasadena Park subdivision. This house is typical of a 1925 luxury design. Economic conditions of the Great Depression halted the development of the subdivision until after World War II so no more models like this were constructed.

James F. Cain, the builder and developer of Pasadena Park lived here with his wife Genevieve and three children for about ten years. Hollywood Drive became Holly Hill when Pasadena Park was reorganized. Other unusual features are the basement, which was constructed of brick, and the Pewabic tile in the upstairs bathroom.

Certificate of Appropriateness 24-1

The Historic District Commission issued a Certification of Appropriateness for replacing the existing broken garage door with a 16'x6.5' Standard White garage door.

Historic District Site No. 301 – The Lawrence Simmons House– 33742 TWELVE MILE ROAD

Site Overview

This outstanding example of Gothic Revival architecture was built of split Michigan stone in 1861.

Lawrence Simmons was one of the three sons of Joshua Simmons III, a pioneer settler of Livonia. Joshua Simmons purchased the land and built homes for each of his three sons.

This house was built by Sergius P. Lyon, a "gifted" Farmington craftsman. Lyon had many talents, including carpentry and stove manufacturing. As a carpenter he constructed caskets, and thus became Farmington's first undertaker. He was also a founder of Farmington's Universalist Church. Additions were made to the house by succeeding owners. The Baldwin Coonleys added to the house, including a chimney which dates to 1887.

Lawrence Simmons lived in the house until 1872 when he moved on to Northville. The house, farm and land were purchased as a country estate by R.K. Floyd of Kendall Oil. Kendallwood Subdivision gets its name from Floyd's company.

The house is listed on the Michigan State Registry of Historical Places.

Certificate of Appropriateness 24-2

The Historic District Commission issued a Certification of Appropriateness for installing 321 feet of a six (6)-foot tan vinyl privacy fence. Removing the existing wood fence in same location.

Historic District Site No. 17 – The Lone Ranger House – 24105 LOCUST STREET

Site Overview

Built in 1860 by Orville Botsford of the pioneer Farmington Botsford family, this house has Greek Revival features.

The building is over a three-part basement: a Michigan cellar with cut stone walls on the east-end of the house, a log crawl space foundation is in the center and a cement block basement c. 1930 is on the west-end of the building.

Orville Botsford was 39 when he built this home on one of his properties. There he was a dairy farmer and raised horses. He had been in the business as the Botsfords were involved in community activities and businesses.

Orville had two wives; Mary Ann Eddy, who died shortly after the birth of their son in 1845 and Sophia Gage, with whom he had three children after they were married in 1849.

Earl Graser, the original radio Lone Ranger, lived in the house in the 1930's and did extensive remodeling. He was killed in an automobile accident in 1941 and Bruce Beemer replaced him on the radio, in the role of the Lone Ranger.

This house is near the border of the City of Farmington yet is very country-like on its one and one-quarter acres. The house is in Farmington Hills and the front yard is in Farmington.

Certificate of Appropriateness 24-3

The Historic District Commission issued a Certification of Appropriateness for installing sixteen (16) new historically appropriate windows on the second story.

Historic District Site No. 508 – The Spicer House – 24711 FARMINGTON ROAD

Site Overview

The long low English Country House was designed to blend in with the landscape by talented architect Marcus Burrowes. The house was built in 1926 for attorney David Gray and his wife, Martha. It originally stood on twelve acres of land. The house was designed with two wings; the outdoors was visible from all rooms. This design was not only beautiful, but practical, because of the cross ventilation.

David Gray died before the house was occupied and Martha Gray moved to California before the house was ever lived in. When Eleanor Goodenough married John Spicer in 1935, Mrs. Gray gave the home and property to the newlyweds. Eleanor was the daughter of Luman Goodenough, a dear friend of the Grays. Additional acres were purchased for the farm which Eleanor Spicer ran until her death in 1982. At that time the property included 200 acres and Mrs. Spicer liked to refer to it as the only unspoiled place in Farmington Hills.

The land is now Heritage Park with this jewel of a house as its heart. The Spicer House serves as the Park's Visitor Center, with the wings modernized to serve as classrooms and meeting areas. The four historic rooms: the hall, living room with cathedral ceiling, library and dining room, serve for gatherings and displays.

Certificate of Appropriateness 24-4

The Historic District Commission issued a Certification of Appropriateness for replacing the gutters to complete the Spicer House roofing project.

Historic District Site No. 507 – The Sarah Fisher Home – 27400 TWELVE MILE ROAD

Site Overview

Egyptian influence used in public building of the 1920's is seen in the original administration office and early buildings of the children's home. Fine brickwork, slate roof, limestone framing on door and windows, and carving over the entrance are used on this structure built in July, 1929.

The entrance gates at Twelve Mile and Inkster Roads are outstanding, and were restored in 1990.

HDC Engagement

The HDC has been actively advocating for the preservation of the 'At Risk' property for some 20+ years – from a comprehensive survey of the property buildings, identifying those of greatest significance, meeting with neighbors and numerous developers. The HDC wishes to express its appreciation for the City leadership and Staff support for the these 'long view' efforts.

Certificate of Appropriateness 24-5

The Historic District Commission issued a Certification of Appropriateness to amend the approved Notice to Proceed for the Sarah Fisher Property. The first amendment provided for removal of all buildings except the Chapel. The amendment seeks to slightly modify the design of the building.

Condition of Approval of the Certificate of Appropriateness calls for the conceptual illustration of the chapel and chapel gardens with the suggestion that consideration be given for reuse of the chapel windows and understanding that this commission will see fully rendered drawings at a future date. The gate, entrance wall, and historic marker will be preserved.

Historic District Site No. 504 – The Kirby White House – 24200 FARMINGTON ROAD

Site Overview

Kirby and Alice White and their five children moved into this Federalist Revival House in 1928. Kirby White was general manager, vice-president, and director of the Ferry-Morse Seed Company, which by the 1930's was the largest seed company in the United States.

The estate home was built for the Whites on five acres along Farmington Road and was designed by Marcus Burrowes who was a prominent architect in Detroit and Michigan. He designed public buildings for cities and houses for wealthy clients.

The Kirby White House has some unique architectural features. "Windy Hill", as it was known, was built in the federalist style. The house is supported by steel beams, unusual for houses dating from the 1920's. The Federalist Revival style features many gables, arches and bays.

Kirby White died in June 1933 and the family moved from their country estate to Birmingham, Michigan. A series of owners for the lovely estate were executives of Ford Motor Company. The Presbyterian Church purchased the property and house in 1956. The needs of the church for religious purposes caused the house to be moved a mile south on Farmington Road in 1993.

It has been adapted to its new location and carefully maintained.

Certificate of Appropriateness 24-6

The Historic District Commission issued a Certification of Appropriateness for installing 15 new shutters around the house to restore the original appearance of the house.

Historic District Site No. 8 – The Clarenceville Blacksmith House – 21024 ONTAGA STREET

Site Overview

Built as a home on Heise Street in Clarenceville around 1840, this house was the home of William Heise, a blacksmith. The house was owned next by another blacksmith, Otis Jensen.

The house has been moved twice, once to a little strip of land in the middle of Grand River Avenue when the street was first widened in the 1930's, and next to its location on Ontaga Street in 1946 when Grand River was widened once more.

Certificate of Appropriateness 24-1A

The Historic District Commission issued a Certification of Appropriateness for removing and replacing existing shingles on roof. Partial roof replacement.

Selected Historic District Commission Activities in 2024

Cemetery Master Plan Implementation

Our multi-year campaign to restore & preserve the city-owned Utley and West Cemeteries saw considerable progress in 2024. Projects included cleaning and releveling markers as well as 'excavating' fallen markers.

Documentation of the West Cemetery was undertaken by a class from Schoolcraft College led by HDC Commissioner Dr. Alexander Thomson. Utilizing a Survey 123 software program modified by FH City GSI Specialist Matt Malone, the students spent their weekends capturing photos and text of tombstones on their cell phones. Ultimately the data is to be posted online for historic and genealogical research.

On-going damage to markers from poor lawn maintenance practices is very evident and has been documented and reported to the DPW. The goal is to develop through the DPW a turf maintenance protocol – specific to the historic cemeteries - that is gentle and causes zero-damage. Starting in 2024 the turf was maintained by DPW staff using push mowers on a monthly schedule (in agreement with HDC thinking).

Preservation of broken markers in the West Cemetery was initiated by one of the few qualified contractors in SE Michigan. Utilizing museum-grade stone epoxy, markers were repaired in Late Spring and Fall sessions. The additional City funding to contract for these repairs is greatly appreciated. Much of the repair work is to correct improper and unauthorized repairs undertaken decades ago.

In concert with the City Video Services Department a video has been developed and posted to YouTube documenting the efforts over the past 5+ years.

Work is progressing in the West Cemetery we will redirect our efforts to the Utley Cemetery in 2025.

Spicer House Roof Replacement

The Historic District Commission worked closely with the City's Department of Special Services to find an appropriate solution for replacement of the Spicer House's aged cedar shake roof.

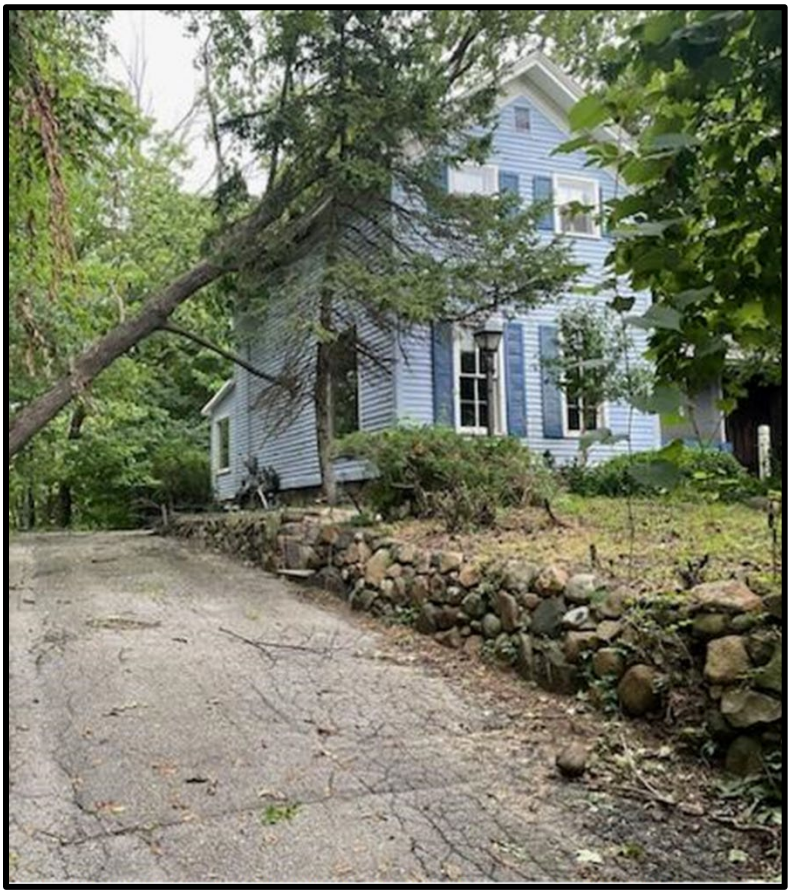
A subcommittee of the Commission assessed the condition of the roof and explored various options from repair to complete replacement.

Ultimately, a compromise was found in which the roof was replaced with synthetic shakes, but the distinctive copper gutters were reused to maintain the distinct character of the roof to the extent possible.

During a meeting at the Spicer House, the Commission tested shingle and cap colors on the roof. The commission concluded that the city utilize Brava synthetic shake shingles in the color of "Aspen" and ridge caps to be a mix of "Aged Mission" and "Autumn".

The roof project was completed in the Fall of 2024.

Nehemiah Hoyt House



The Historic District Commission seeks to restore the residential structure after a tree fell onto the roof causing internal and external damage to the house. The house has suffered a lack of basic by previous maintenance by previous owners, approaching abandonment, with ownership becoming unclear between HUD and the previous owners.

An inspection of the house, by City Staff in concert with an HDC sub committed, found that the structure of the mid 19th c home remained fundamentally sound despite the lack of maintenance and damage sustained.

A court order was issued to fix the follow on-site:

1. Tree Removal / Tree Trimming
2. House Roof Replacement
3. Gutter Replacement
4. Demo both Front and Rear decks
5. Demo pergola and lattice
6. Demo wood fencing and gates
7. Demo gazebo, deck platform, and stairway
8. Repair exterior siding
9. Board-up the rear French doors
10. Garage roof Replacement
11. Install handrail at steps from driveway to front of house

The HDC appreciates the extraordinary efforts of City Staff in pursuing the legal remedies necessary to intervene on behalf of the Nehemiah Hoyt house.

Howard Legacy Historical Event

Commissioner Emily Howard put together the Howard Legacy Event that included a Remembrance Ceremony, Pumpkins and Storytelling, and a Grand Cemetery Tour at the Farmington West Cemetery

2024 PLANNING COMMISSION ANNUAL REPORT

ADOPTION:

I move that the draft 2024 Planning Commission Annual Report BE ADOPTED *[as presented OR with the following changes:]* and FORWARDED to City Council.

2024 Planning Commission Annual Report

FARMINGTON HILLS

Prepared with assistance from

giffels webster

February 2025

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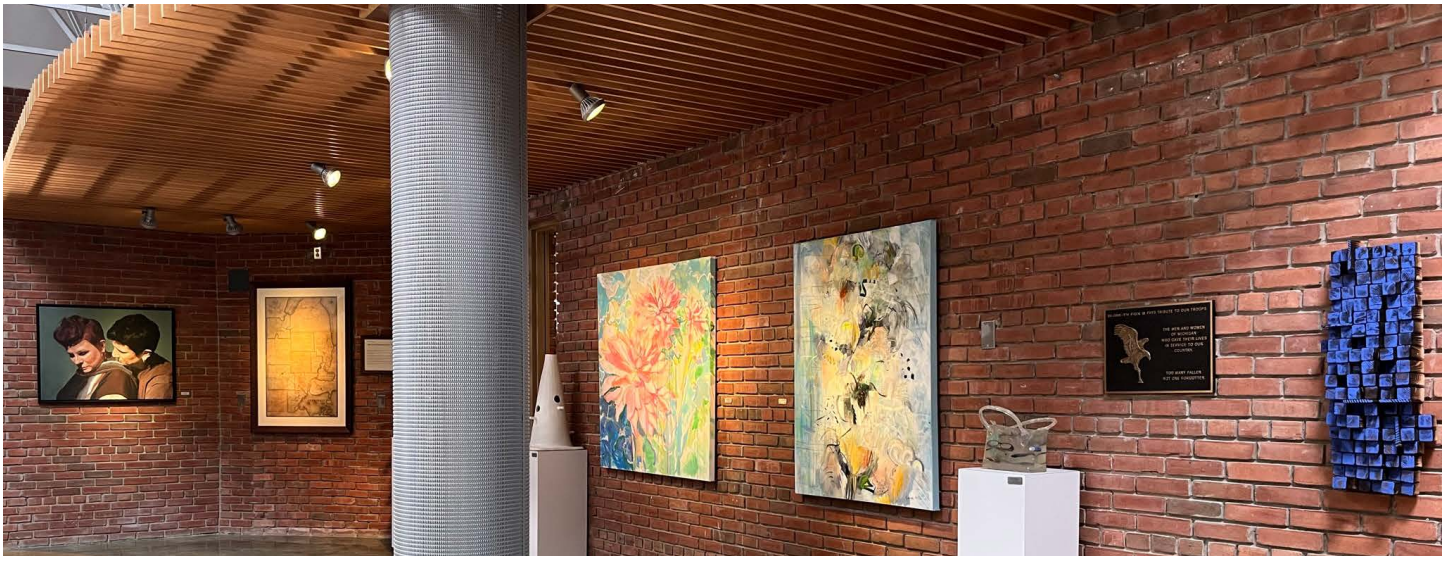


Introduction

The Michigan Planning Enabling Act (P.A. 33 of 2008, as amended) requires the Planning Commission to prepare, file, and present an annual written report to the City Council. This document is intended to meet the state requirement as well as provide an overview of 2024 accomplishments.

The Farmington Hills Planning Commission is comprised of nine members, some of whom have been on the Planning Commission for many years. These members come from a variety of professional backgrounds. The varied perspectives and knowledge of the members make for a well-rounded Commission that conducts fair and thoughtful deliberations.

The Planning Commission held a total of 20 meetings in 2024. Preliminary hearings are held the second Thursday of the month, public hearings are held on the third Thursday of the month, and study sessions are generally held on the first Thursday of the month at the discretion of the Commission members.

Mission Statement

To promote public health, safety, and general welfare, to encourage the use of resources in accordance with their character and adaptability; to avoid the overcrowding of land by buildings or people, to lessen congestion on roads and streets, to facilitate provision for a system of transportation, sewage disposal, safe and water supply recreation, and other public improvements. The Planning Commission is responsible for making and adopting a basic plan as a guide for development, including a determination of the extent of probable future needs.

2024 Planning Commission Members

Table 1. 2024 Planning Commission Members

Name	Role	Assumed Office	Last Appointment	Term Expiration
John Trafelet	Chair	07/22/2019	01/25/2024	02/01/2027
Marisa Varga	Vice Chair	03/08/2021	01/23/2023	02/01/2026
Kristen Aspinall	Secretary	03/28/2022	01/23/2023	02/01/2026
Barry Brickner		07/25/2016	01/25/2024	02/01/2027
Dale Countegan		02/13/2017	01/23/2023	02/01/2026
Danielle Ware		04/25/2022	02/01/2025	02/01/2028
Joseph Mantey		03/15/2004	02/01/2025	02/01/2028
Steven Stimson		04/08/2013	01/25/2024	02/01/2027
Taranji Grant		03/21/2022	02/01/2025	02/01/2028

2024 City Staff

Table 2. 2024 Planning & Community Development Department Staff

Name	Title
Charmaine Kettler-Schmult	Director
Erik Perdonik	City Planner
Kris Canty	Staff Planner
Jeri LaBelle	Planning Secretary

In 2024 Giffels Webster continued its relationship working with Farmington Hills to provide planning and zoning services. The team of consultants has been available to answer technical planning and zoning related calls and emails, advise on ordinance amendments, review site plans, and assist with special projects as needed. Giffels Webster prepared memoranda and reports for the Planning Commission and City Council, as needed. Consultants from Giffels Webster attended all Planning Commission meetings and were available to attend other City meetings as requested. The team is directed by Jill Bahm, AICP, a partner at Giffels Webster, who is supported by Joe Tangari, AICP, Principal Planner and Julia Upfal, AICP, Senior Planner and the GIS team, led by Ariana Toth.

2024 Major Initiatives

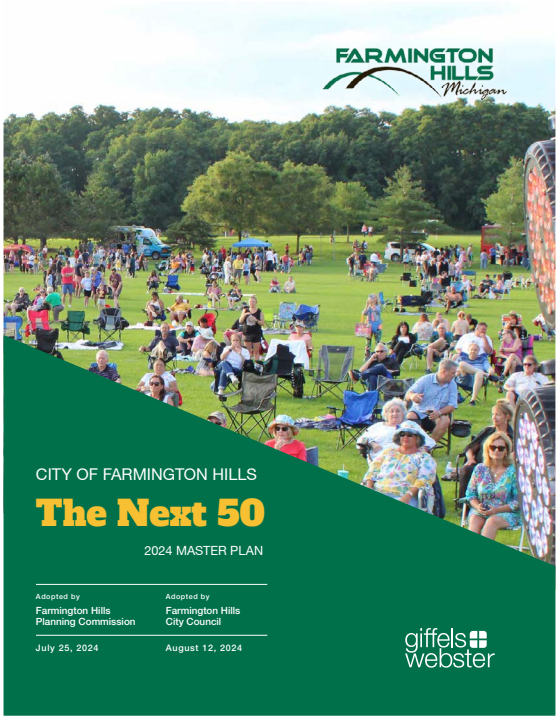
A New Master Plan for the City

Farmington Hills turned 50 years old in 2023, and in 2022, the City embarked on the development of its first Master Plan since 2009. As we consider what the next 50 years of our City might look like, we've invested a great deal of time and effort into assessing where the City stands today and the progress it has made since the last master plan.

In 2022, this effort included analysis of the City's changing demographics, economics, and housing, a market study, surveys, online outreach, a series of publicly accessible Planning Commission study sessions, an October 2022 open house, and the first in a series of focus groups with members of the development community.

In 2023, the Planning Commission continued discussion of the draft, additional focus groups were held, and an open house to present the concepts and ideas developed for the plan was held at the HAWK in October. The draft plan has been in development since this open house.

In 2024, four study sessions were held that focused on the final elements and review needed for the master plan. This consisted of a stuidy session regarding development in the City's identified special planning areas, reviewing public input, and reviewing the layout and content of the master plan itself. The Planning Commission passed a motion to ask City Council to authorize the distribution of the Master Plan April 18, 2024. City Council authorized its distribution May 6, 2024, and the plan was adopted July 25, 2024.



2024/2025 – 2029/2030 Capital Improvements Plan

Act 33 of the Public Acts of 2008, the Michigan Planning Enabling Act, provides that the Planning Commission annually prepare a Capital Improvements Plan. Further, Sections 3.07 and 6.08 of the City Charter require the submission of a Capital Improvements Plan to City Council. The Planning Commission held a study session on January 23, 2024, to prepare this document for public review and adopted the plan after holding a public hearing at their February 27, 2024 meeting.

Zoning Text Amendments

ZTA 1, 2024

An ordinance to amend the Farmington Hills Code of Ordinances, chapter 34, "Zoning," article 5.0, "Site Standards," section 5.5, "Signs," to include a new subsection 3.A.ix.h addressing the area of electronic display areas. Approved by PC 4-18-2024, approved by City Council 6-24-2024.

ZTA 2, 2024

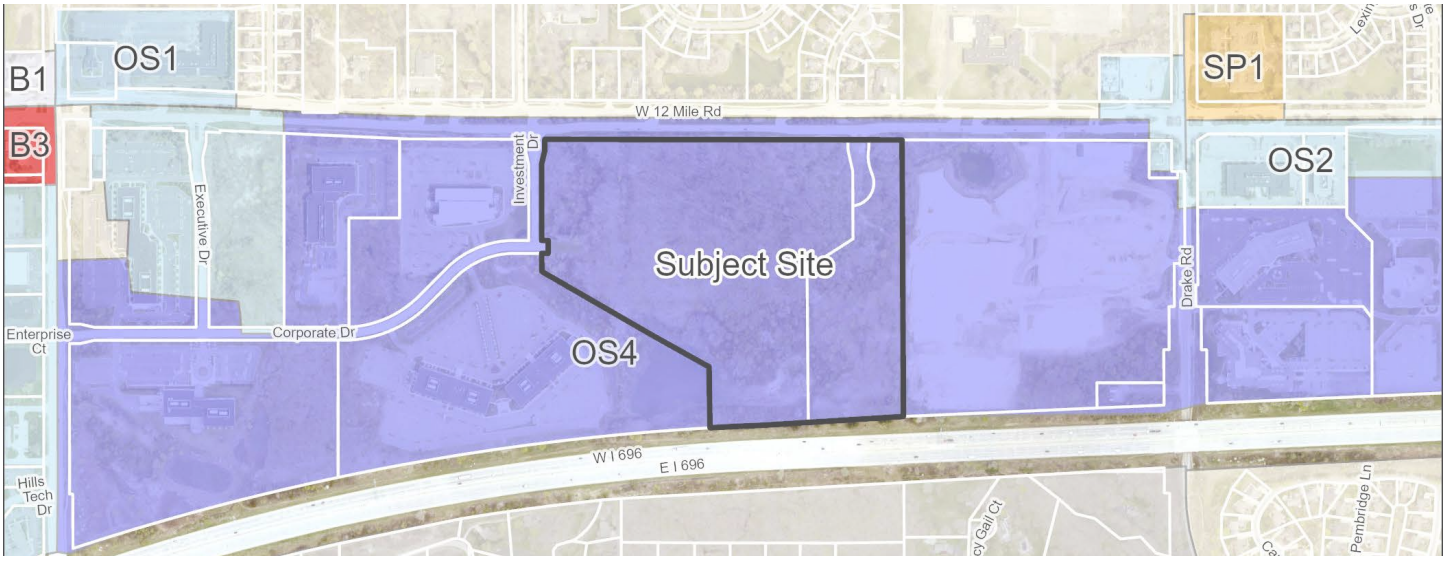
An ordinance to amend the Farmington Hills Code of Ordinances, Chapter 34, "Zoning," to reclassify various principal permitted and special approval uses within the B-3, General Business District, and LI-1, Light Industrial District, and to add and remove various use standards. Approved by PC on October 17, 2024, approved by City Council December 9, 2024.

ZTA 3, 2024

An ordinance to amend the Farmington Hills Code of Ordinances, chapter 34, "Zoning," to diversify the uses permitted in the ODS-4 district and to permit additional development options and height in the same district. This amendment set also studied the reduction of parking requirements and additional tools for the planning commission to waive some parking during site plan review. Discussion ongoing into 2025.

ZTA 4, 2024

Ordinance to amend the Farmington Hills Code of Ordinances, Chapter 34, Zoning , Article 2, Definitions Section 34-2.2 etc., to further clarify permissions and definitions around auto-oriented uses. Started in 2024 and ongoing to 2025.



2024 Planning Commission Activity

Planning Commission Meetings

Table 3. Planning Commission Meetings, 2018 to 2024

Year	Number of Meetings
2018	14
2019	15
2020	13
2021	19
2022	17
2023	22
2024	20

Figure 1. Planning Commission Meetings, 2018-2024

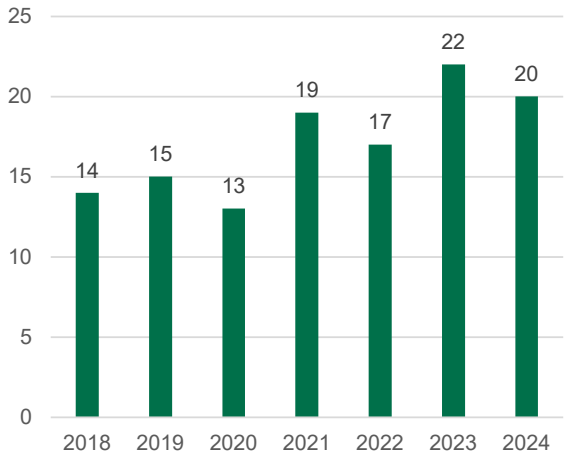
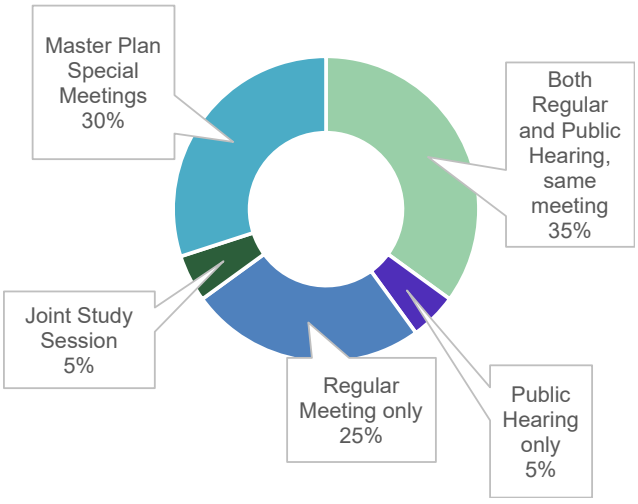


Table 4. Planning Commission Meetings by Type, 2024

Type of Meeting	Number of Meetings
Both Regular and Public Hearing, same meeting	7
Public Hearing only	1
Regular Meeting only	5
Joint Study Session	1
Master Plan Special Meetings	6
Total	**20**

Figure 2. Planning Commission Meetings by Type, 2024



Site and Special Approval Plans

Table 5. Site and Special Approval Plans, 2024

Item	Parcel ID	Description	Approved / Denied	Proponent
SP 51-1-2024	26-482-001	29820 Nine Mile, Indoor car sales	Incomplete/ postponed prior to PC	Jamza Jamal
SA 52-3-2024	02-126-130	32680 Northwestern Hwy. B-3, temp concrete Batch Plant	PC approved 4-18-2024	Steve Gregor Florence Cement
SP 53-7-2024	36-306-011	28975 Grand River Ave., car dealer, no site changes. Use only	PC approved 10-17-2024	Rawad Haddad
SP 54-7-2024, PUD 1, 2024	11-477-109, 013, 014	27815 & 28025 Middlebelt Rd., Fuel Station, restaurant with carry out & drive thru	PC approved 11-21-2024 (Rec to CC)	Kareem Amr, SkilkenGold Real Estate
SP 55-8-2024	26-226-003,008, 009	29707 Ten Mile Rd. addition to existing Place of Worship. Tawheed Center	PC approved 11-21-2024	Hisham Turk
SP 56-8-2024 (PUD 2, 2024)	11-201-001, 002, 004, 005, 006, 020 & 021	South side of 13 mile, west of Middlebelt. Multiple-family dwellings RA-1	PC approved 11-21-2024, (Rec to CC)	Steve Schafer
SP 58-9-2024	23-351-005	29510 Orchard Lake, new Canopy Gas Station	Incomplete/ Postponed prior to PC	Fadi Naserdean
SP 59 9-2024	21-351-032	24300 Drake, Carwash on existing lot in B-3	PC approved 12-19-2024	Todd Gesund (Jim Butler)
SP 60-10-2024 (PUD 5, 1993)	17-201-013	South side of Twelve Mile Rd., east of Investment Dr. in OS-4	PC approved 11-21-2024	Cunningham Limp, Nick Devlin
SP 61-11-2024	35-431-017, 016	29455 & 29403 Grand River Ave.	PC approved 12-19-24	SkilkenGold
SP 62-12-2024	26-486-014	29450 Nine Mile Addition to existing fuel station	Incomplete/ postponed prior to PC	Riham Sarout
SP 63-12-2024	33-376-040	34650 Eight Mile Rd., Car wash renovation	Continuing in 2025	Krieger Klatt Architects
SA 64-12-2024	21-351-031	35080 Grand River, Consumers Energy storage yard	Withdrawn	Consumers Energy
SP 65-12-2024 (PUD 4, 2021)	23-02-106-001	Emerson, South side of Northwestern Hwy, apartment building	Continuing in 2025	Alden Development, Tom Herbst

Table 6. Site Plan and Special Approval Plans, 2020 to 2024

Year	Number of Site and Special Approval Plans
2020	14
2021	19
2022	13
2023	10
2024	14

Figure 3. Site and Special Approval Plans, 2018 to 2024

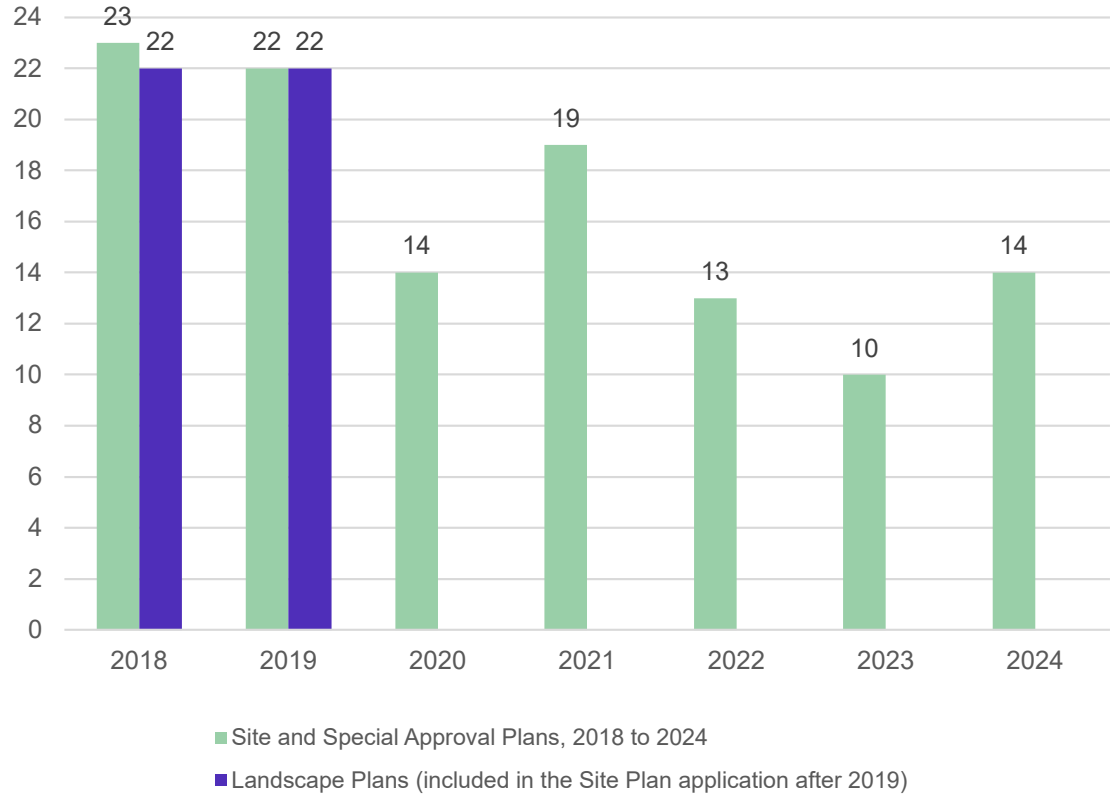


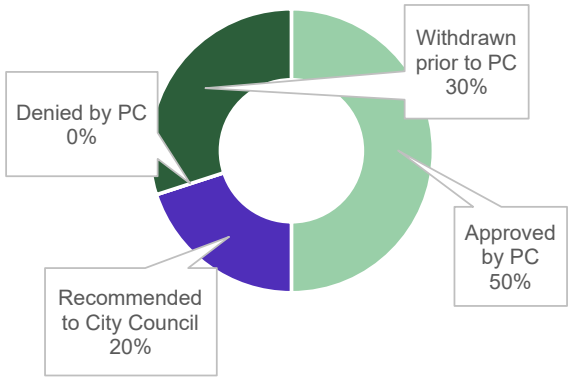
Table 7. Site Plans by Decision Type, 2024

Decision	Number
Approved by PC	5
Recommended to City Council	2
Denied by PC	0
Withdrawn prior to PC or incomplete	3
Total	**10**

Table 8. Special Approval Plans by Decision Type, 2024

Decision	Number
Approved by PC	1
Withdrawn prior to PC	1
Total	**2**

Figure 4. Site and Special Approval Plans by Decision Type, 2024



Lot Splits, Rezonings, and Zoning Text Amendments

Table 9. Lot Splits, 2024

Lot Split #	Parcel ID	Description	Petitioner	PC Approval Date	Assessing Approval
LS 1, 2024 Rec'd	33-202-043	Split one parcel into 2. 34037 W. Nine Mile Rd.	Eraldo Leda	PC approved 4-18-2024	
LS 2, 2024	36-329-030	Split one into 2, 21308 Waldron	Mansoor Habib	5-16-24, approved by PC subject to variance	
LS 3, 2024 Rec'd 7-11-24	30-127-033	Split one into 2, 24000 Research Dr.	Mark Bolitho JCA	PC approved 8-15-2024	
LS 4, 2024 Rec'd 9-19-2024	35-402-056 & 057	Split 2 parcels into 3 parcels	Terry Sever	PC approved 10-17-2024	
LS 5, 2024 Rec'd 10-18-24	17-201-014	Split Twelve Mile Parcel near Investment Dr into 2	Anthony G. Antone	PC approved 11-21-2024	

Table 10. Rezoning Requests, 2024

Request #	Location	Parcel ID	From / To	Proponent
ZR 1-1-2024 Rec'd, (4-22-2024 CC Denied)	31118 Orchard Lake Rd., 31130 Orchard Lake	02-103-025	P-1 to B-3	Mannik & Smith Group, LLC App incomplete
ZR 3-3-2024 Rec'd 3-18-24 (5-16-2024 PC approved)	22595 Middlebelt, N. of Astor	26-480-046	P-1 to RA-4	Rane Jappaya
ZR 4-3-2024 Rec'd 3-18-24 (6-20-2024 Withdrawn)	27815 Middlebelt Rd.	11-477-109, 014 &013	RC-2 to B-3	SkilkenGold Real Estate Dev. Kareem Amr

Table 11. Zoning Text Amendments, 2024

Zoning Text Amendment #	Results	Proposed Amendment
ZTA 1, 2024	PC approved 4-18-2024 City Council approved 6-24-2024	An ordinance to amend the farmington hills code of ordinances, chapter 34, "zoning," article 5.0, "site standards," section 5.5, "signs," to include a new subsection 3.a.ix.h addressing the area of electronic display areas.
ZTA 2, 2024	PC approved 10-17-2024 City Council approved 12-09-2024	Amend Zoning Ordinance to reclassify various principal permitted and special approval uses within the B-3, General Business District, and LI-1, Light Industrial District, and to add and remove various use standards.
ZTA 3, 2024	Continuing in 2025	OS -4 Parking Standards, Sec. 34-3.9.
ZTA 4, 2024	Continuing in 2025	34-2.2 and 34-3.1.24 Amend Zoning Ordinance to revise definition of restaurant, drive-in; add definition of commercial outdoor recreation space; and delete reference to automobile service center and replace with automobile repair.

Figure 5. Lot Splits, Rezonings, and Zoning Text Amendments, 2017 to 2024

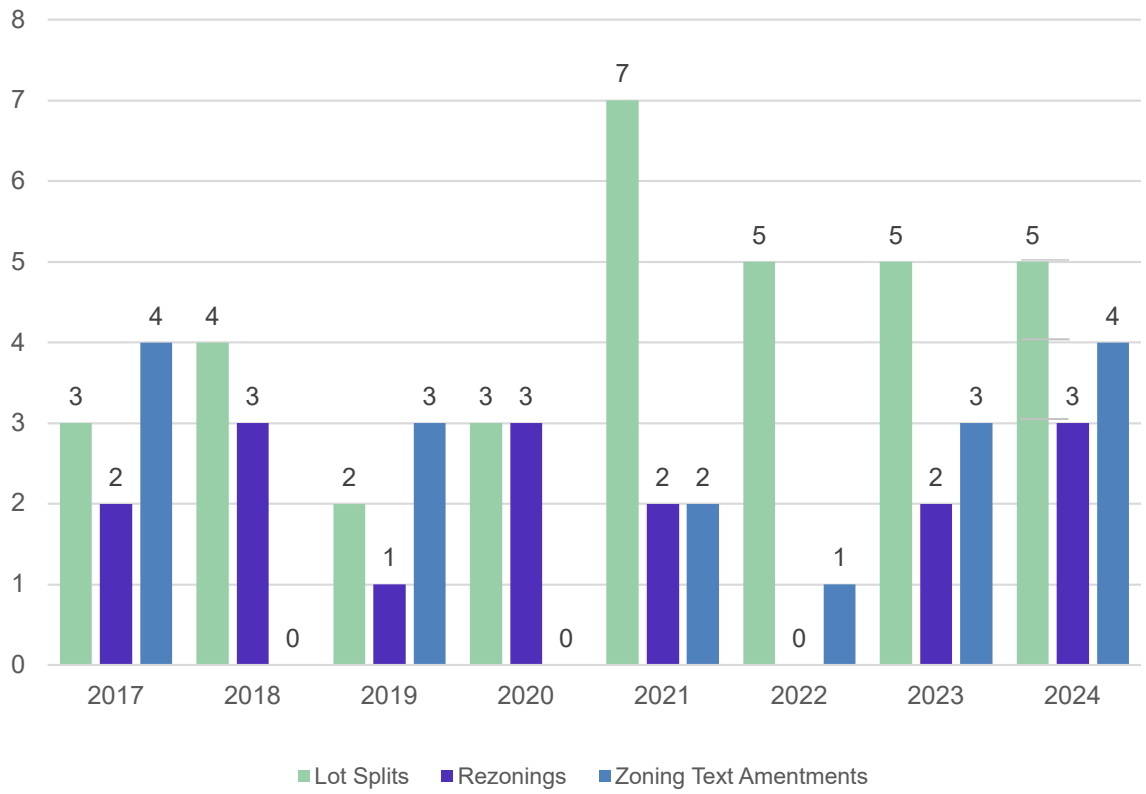


Table 12. Lot Splits, Rezonings, and Zoning Text Amendments, 2017 to 2024

Year	Lot Splits	Zoning Text Amendments	Rezonings
2017	3	2	4
2018	4	0	3
2019	2	3	1
2020	3	0	3
2021	7	2	2
2022	5	1	0
2023	2	3	2
2024	5	4	3

Table 13. Lot Splits by Decision Type, 2024

Decision	Number
Approved by PC	5
Denied by PC	0
Total	**5**

Table 14. Rezoning Requests by Decision Type, 2024

Decision	Number
Approved by PC	1
Denied by PC	1
Withdrawn prior to PC	1
Total	**3**

Table 15. Zoning Text Amendments by Decision Type, 2024

Decision	Number
Approved by PC	2
Denied by PC	0
Total	**2**

Planned Unit Development (PUD) Plans and Qualifications

Table 16. Planned Unit Development Plans, 2024

PUD Plan #	Section	Description	Zoning	Approved / Denied	Proponent
Amend PUD 1, 2021, inc. SP 54-2-2021	15-201-270	31525 Twelve Mile, Conversion of hotel building into independent living facility in ES	ES	PC Approved 5-17-2024. Revised Agreement approved by CC	Farmington Hills Real Estate, LLC
PUD 1, 2024, SP 54-7-2024	11-477-109, 013, 014	27815 & 28025 Middlebelt Rd. Fuel Station, restaurant with carry-out & drive thru	RC-2	PC Recommended to CC 11-21-2024	Kareem Amr, Skilken-Gold Real Estate
PUD-2-2024 Received 8-19-2024	(11-201-020, 021, 002 & 001) (11-201-004, 005, 006)	South side of Thirteen Mile, .04 miles from Middlebelt. The Tabernacle for Detroit Baptist Mannor and Mulberry Park MOBI Investment	RA-1	PC Recommended to CC 11-21-2024	Steven Schafer
Amend PUD 1-2015	22-23-36-404-010	28050 Grand River, Botsford/Corwell signs	SP	PC Recommended to CC on 11-21-2024	Signworks of MI, Inc.
Amend PUD 2-2021, including SP 59-5-2022	12-476-008	27400 Twelve Mile, replace skilled nursing with one-family detached dwelling	RA-1B	Approved by PC 12-19-2024	Robertson Brothers

Table 17. Planned Unit Development Options or Qualifications, 2024

PUD Plan #	Section	Description	Zoning	Approved / Denied	Proponent
PUD Q 1, 2024 Rec'd 2-20-24	11-201-004, 005, 006	29915, 29905 & 29845 Thirteen Mile	RA-1	Qualified by PC 4-18-2024	Steven Schafer
PUD Q 2, 2024 Rec'd 5-21-24	11-477-013, 014 & 109	27815 & 28025 Middlebelt	RC-2	Qualified by PC 6-20-2024	SkilkenGold Estate Development
PUD Q 3, 2024	12-376-035	29150 Twelve Mile	RA-1A	Qualified by PC 10-17-2024	Schafer Development

Table 18. Planned Unit Development Plans and Qualifications, 2017 to 2024

Year	PUD Plans	PUD Qualifications
2017	2	3
2018	5	2
2019	1	0
2020	1	4
2021	7	2
2022	4	0
2023	4	2
2024	5	3

Figure 6. Planned Unit Development Plans and Qualifications Presented to the Planning Commission, 2017 to 2024

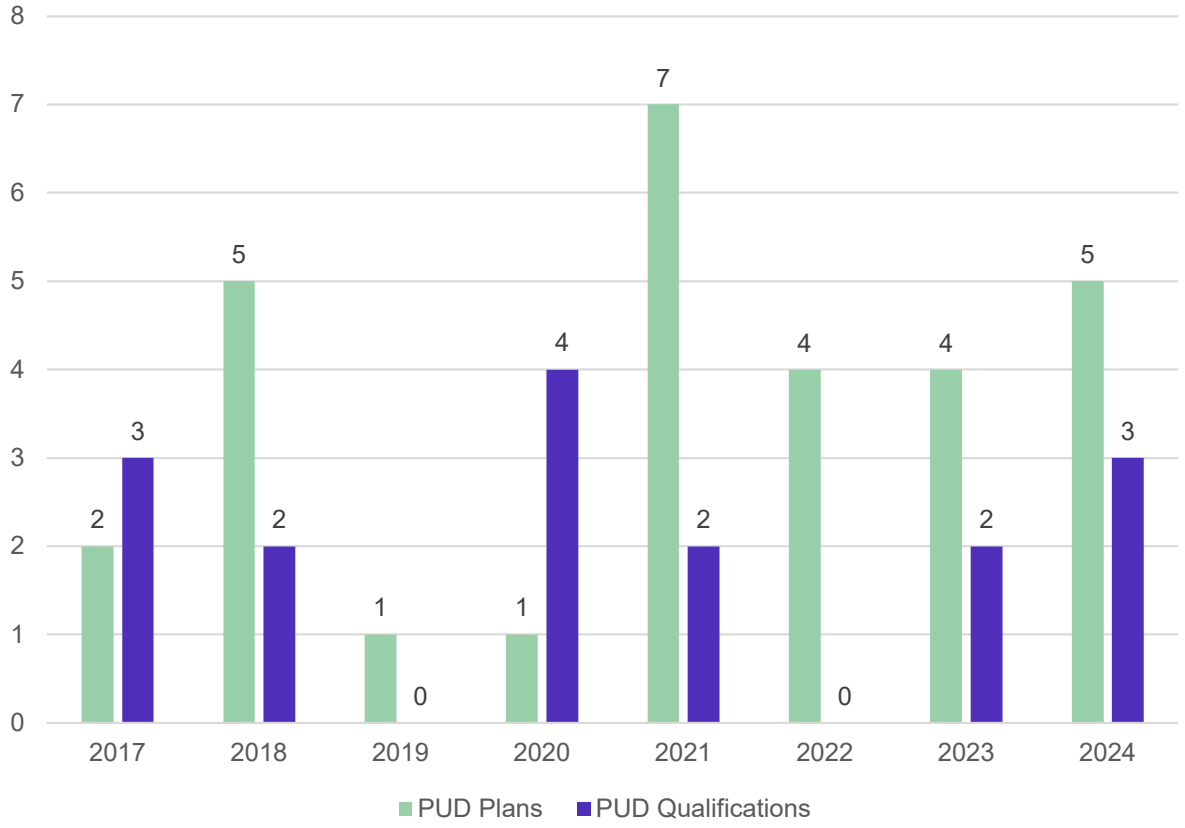
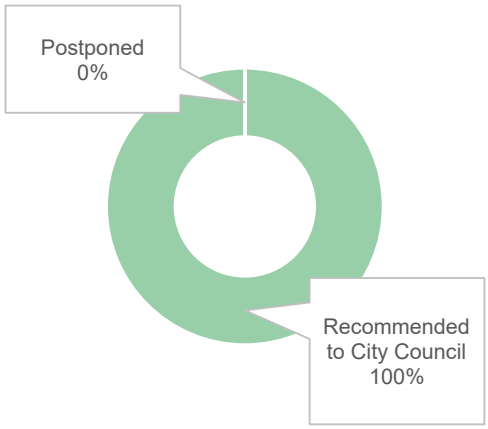


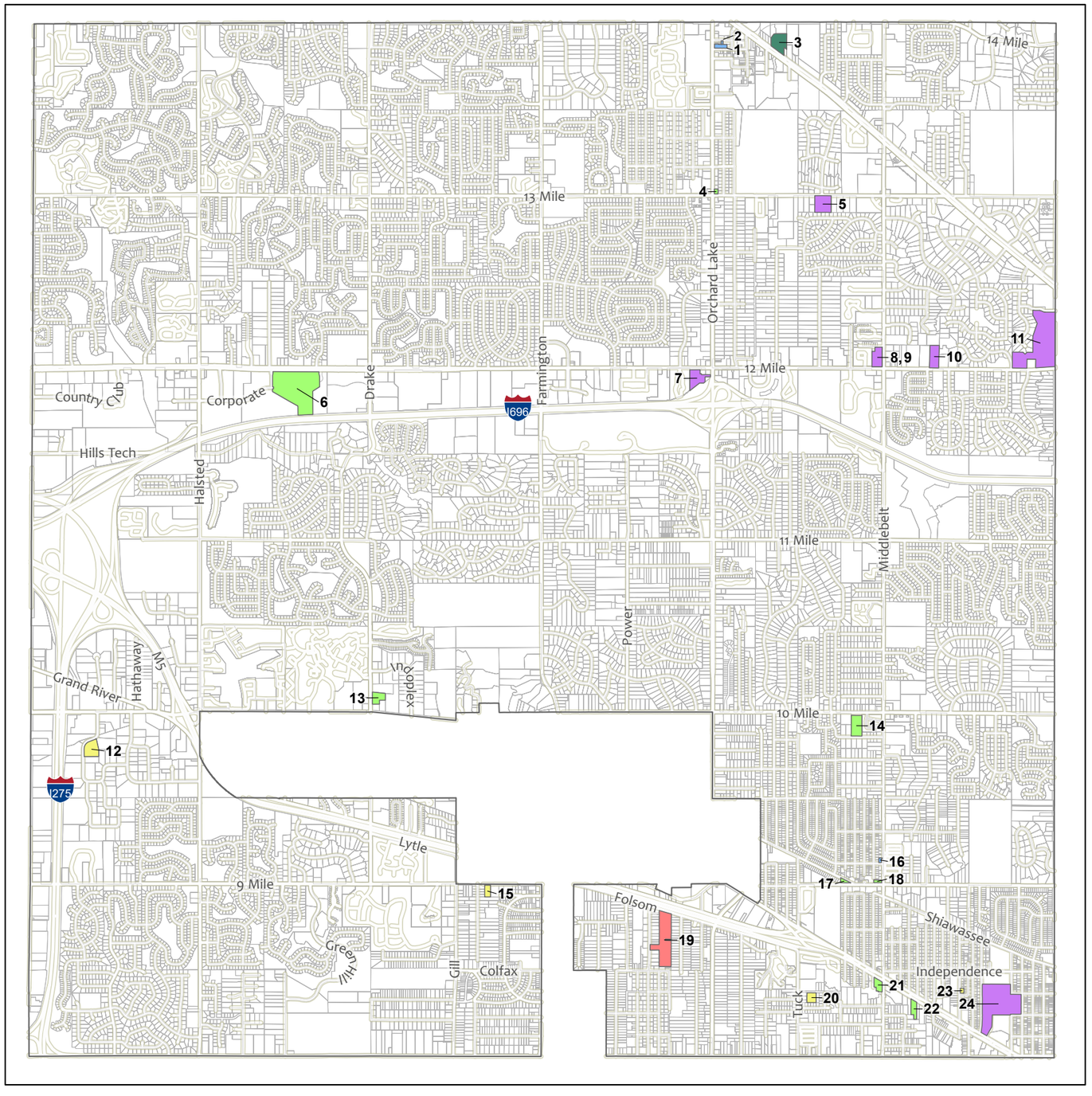
Table 19. Planned Unit Development Plans, 2024

Decision	Number
Recommended to City Council	5
Postponed	0
Total	**5**

Figure 7. Planned Unit Development Plans, 2024



Map 1. Map of Development Reviews in Farmington Hills, 2024



	Name	Type	CaseNo
19	The Forest at Riverwalk	Cluster Development	CU 1, 2023
12	JCA LLC Split	Lot Split	Lot Split 3, 2024
20	Kentfield Lot Split	Lot Split	LS 4, 2024
23	Mansoor Habib Lot Split	Lot Split	Lot Split 2, 2024
15	Nine Mile Lot Split	Lot Split	Lot Split 1, 2024
24	Corwell Signs - PUD Amendment	Planned Unit Development	PUD 1, 2015
7	Manor Senior Living - PUD Amendment	Planned Unit Development	PUD 1, 2021
11	Sarah Fisher - PUD Amendment	Planned Unit Development	PUD 2, 2021
9	Sheetz PUD	Planned Unit Development	PUD 1, 2024
5	Tabernacle/Mulberry Park	Planned Unit Development	PUD 2, 2024
10	Yousif Property Townhomes	Planned Unit Development	PUD 3, 2024
16	Middlebelt & Astor Rezoning Request	Rezoning	ZR 3-3-2024
2	Rezoning	Rezoning	ZR 2-1-2024
8	Rezoning	Rezoning	ZR 4-3-2024
1	Rezoning Review	Rezoning	ZR-1-1-2024
6	Day Care	Site Plan Review	60-10-2024
22	Haddad Car Dealership	Site Plan Review	53-7-2024
17	Indoor Used Car Sales	Site Plan Review	SP 51-1-2024
13	Jax Car Wash	Site Plan Review	SP59-9-2024
4	Naserdeen Gas Station Renovation	Site Plan Review	58-9-2024
18	Sarout Gas Station Addition	Site Plan Review	62-12-2024
21	Sheetz No. 2	Site Plan Review	
14	Tawheed Center Addition	Site Plan Review	55-8-2024
3	Heritage Hills & Westlake Batch Plant	Special Land Use	52-3-2024

giffels webster

2024
Development Reviews
City of Farmington Hills

0 0.25 0.5 1 Mile

CITY OF FARMINGTON HILLS
PLANNING COMMISSION MEETING
31555 W ELEVEN MILE ROAD
FARMINGTON HILLS, MICHIGAN
DECEMBER 19, 2024, 7:30 P.M.

CALL MEETING TO ORDER

The Planning Commission Regular Meeting was called to order by Chair Trafelet at 7:30 p.m.

ROLL CALL

Commissioners present:	Countegan, Grant, Mantey, Varga, Stimson, Trafelet, Ware (arrived 7:37pm)
Commissioners Absent:	Aspinall, Brickner
Others Present:	Staff Planner Canty, Planning Consultant Tangari (Giffels Webster), Engineering Division Representatives Devers and Emerson, City Attorney Schultz

APPROVAL OF THE AGENDA

MOTION by Stimson, support by Grant, to approve the agenda as published.
Motion passed unanimously by voice vote.

PUBLIC HEARING

A. AMEND PLANNED UNIT DEVELOPMENT (PUD) PLAN 2, 2021 INCLUDING REVISED SITE PLAN 59-5-2022

LOCATION:	27400 Twelve Mile Road
PARCEL I.D.:	22-23-12-476-008
PROPOSAL:	Construction of site-built one-family detached dwelling units within RA-1B One Family Residential District
ACTION REQUESTED:	Recommendation to City Council
APPLICANT:	Robertson Brothers Homes
OWNER:	Evangelical Homes of Michigan

Chair Trafelet introduced this request to amend PUD 2, 2021, including revised site plan 59-5-2022, 24700 Twelve Mile Road, Villas at Pebble Creek. The requested action is a recommendation to City Council.

Applicant Presentation

Utilizing a PowerPoint presentation and referencing the materials in tonight's packet, Tim Loughrin, Robertson Brothers Homes, made the following points:

- Robertson Brothers Homes had acquired the development rights for the entire Sarah Fisher site. The updated proposal submitted this evening focuses on creating a community of 75 age-targeted detached single-story ranch condominiums, eliminating the previously approved skilled nursing facility component. Some homes will have the option of being a Cape Cod style, with a second story bedroom.

- The historical significance of the site will be maintained. Robertson Brothers Homes has received approval from the Historic District Commission for a revised Certificate of Appropriateness, which includes preserving key historic features of the site and repurposing the chapel into a community space for residents. As part of the agreement with the HDC, some materials from the existing buildings will be integrated into the site, and the gates and the wall at the corner will be retained.
- Additionally, there will be four individual single-family lots along 12 Mile Road.
- The development of the approximately 36-acre site will include common areas as shown on the submitted schematics that will be maintained by the homeowner's association. This senior-targeted development will not have a pool or play area.
- The main entrance will be as shown at the center of the development on Inkster Road. Robertson Brothers Homes continued to advocate for a boulevard at this entrance, which will provide an approach that frames the chapel building and surrounding park area. A secondary entrance will be to the north, also on Inkster. There will no connection to Cheswick Road.

Screening

- Additional screening was being provided along Inkster Road. However, existing landscaping eliminates the need for additional buffering along the western boundary of the development. Mr. Loughrin had walked the area with representatives from the adjacent neighborhood, who agreed that there was a mature existing buffer along the western property that needed no improvement. The HOA was more concerned with the trees that were dead or dying along Cheswick, a public road which acts as a private entrance to the neighborhood. Robertson Brothers Homes had agreed to plant ten 12-foot evergreen trees along Cheswick.
- Robertson Brothers Homes was donating property along 12 Mile Road for the new city sewer lift station, to be constructed in 2025.

Need for this housing type

- Mr. Loughrin emphasized the value of the housing product now being offered, which was in great demand in Farmington Hills, and in the southeastern Michigan area generally. The development will be a walkable community with sidewalks and paths, with about 40% open space, and will provide a good transition from Inkster to the established neighborhoods to the west.
- SEMCOG (Southeast Michigan Council of Governments) data suggests that Farmington Hills needs 100 housing units of this type per year. Targeted senior buyers will be downsizing, and by their nature will have less impact on utilities and traffic than traditional single family residential homes.
- The ranch homes will be between 1800sf and 2000sf, with the option of a finished basement and of upstairs cape cod bedrooms. Homes that include the upstairs bedrooms will be about 2100sf.
- The homeowners association will maintain the property and the community gathering area around the chapel, as well as the chapel building itself. The HOA will also maintain the landscaping, roofs, and siding throughout the development. Siding will be Hardee siding and other building materials will include brick and stone.

Response to engineering and fire department review comments

Mr. Loughrin made the following points in response to engineering and fire department review comments:

- Robertson Brothers Homes was no longer proposing a CRD (Community Redevelopment District grant) as that had been proposed to support the previously approved nursing home facility. They will be submitting for Brownfield funds to help with the demolition.
- It was not economically feasible to provide a gravity sewer to the new lift station for the four single-family lots along Twelve Mile Road. They were instead requesting to provide a low pressure connection to the new lift station.
- Robertson Brothers Homes was asking that they not be required to provide a manhole at the Herndonwood intersection. This was part of the plan when the PUD included the skilled nursing facility, and the requirement did not seem appropriate to the development as now proposed.
- Again, they would like to keep the boulevard entrance but would remove it if so required.
- They will resolve issues regarding the emergency connection to the proposed driveway servicing the pump station on 12 Mile Road.
- The 50' turning radius for fire apparatus will be provided.
- The stub road to units 71-75 and unit 70 will be shortened, and Unit 71 will have a longer driveway.
- Unit 68 will have more of a landscaping buffer to the neighbors. Unit 68 will be a premium lot.
- Placing a shared service drive in front of the four units on 12 Mile Road would take up the entire front yard of those homes. Robertson Brothers Homes is proposing a T-turnaround for those units. If allowed by the Road Commission, each of the four units will have its own curb cut to 12 Mile Road.
- Robertson Brothers Homes proposed less storm infrastructure and manholes because this site no longer included the nursing home facility.
- Robertson Brothers Homes proposed not having rear catch basins and storm lines for units 71 through 75 because storm water would go directly into the adjacent detention pond without the addition of catch basins.

Discussion

- In response to comments, City Attorney Schultz explained that the Planning Commission could weigh in on the entrance boulevard as that was a site plan issue, but that the other points made regarding the engineering and fire department review items could only be addressed by those departments, and those issues would be addressed as the amended PUD Agreement is formalized.
- In response to questions, Mr. Loughrin said that Robertson Brothers Homes would most likely build the four single-family units, but they also had the option to sell them as custom lots. They had not marketed anything in the project yet.
- Commissioner Grant noted there was a development between Inkster and Northwestern that was also named *The Villas at Pebble Creek*. Mr. Loughrin said he would follow up relative to this information.
- In response to questions, Mr. Loughrin added that the development would use municipal waste removal and private snow removal.

- Commissioner Stimson noted that relative to the four lots on 12 Mile, he was opposed to a single curb cut with the front of the homes then being connected by a common driveway, thereby increasing the pavement in those front yards.

Consultant comments

Referencing the November 13, 2024 Giffels Webster memorandum, Planning Consultant Tangari highlighted the following points:

- As already stated by the applicant, the proposed PUD amendment would eliminate the approved 100-bed skilled nursing facility, and the development will now become 75 detached ranch homes targeted at seniors and four single-family lots along 12 Mile Road. The chapel that was to be preserved in the approved PUD plan will still be preserved and will be part of a common park area in the center of the development.
- This is a major amendment to the PUD, and the Planning Commission must set a public hearing on the amendment and make a recommendation to City Council. The public hearing is tonight.
- The net density of the full site by unit is 2.7 dwelling units per acre.
- The four split lots on 12 Mile Road meet the minimum size requirement but do not meet the minimum lot width requirement of the district. The proposed lot size is 31,080 square feet; the requirement is 26,000 square feet. The proposed lot width is 111 feet; the requirement is 140 feet. The lot width requires relief from ordinance standards.
- The applicant proposes 75 detached single-family ranch units in the 17.15-acre residential use area of the plan. The underlying RA-1B district requires minimum lot size of 26,000 square feet, or 1.675 units per acre. Proposed density is 4.4 units/acre within the portion of the site devoted to the ranch units. While this exceeds the underlying permitted density and requires relief from ordinance standards, the first approved version of this plan included 94 units in a 14-acre area (6.7 units/acre), and the most recently approved version had 51 units over 14 acres (3.6 units/acre).
- The dimensional standards of the district were met by the condominium development portion of the plan with the exception of the setback to Cheswick, which was 30 feet where 50 feet was required.
- The request to not add additional landscape buffer to the western property line would require relief from the ordinance.
- The proposal includes a sidewalk on only one side of the road through most of the development. The north end doesn't have any sidewalks.
- In summary, this proposal seeks relief from ordinance standards as follows:
  a. Permit detached single-family at requested density of 75 units.
  b. Permit reduced exterior side setback along Cheswick (30 feet).
  c. Permit no installation of western buffer plantings.
  d. 111-foot lot width for splits where 140 feet is required.
- The Planning Commission should weigh in on the boulevard entrance issue.

Public Comment

Chair Trafelet opened the meeting to public comment.

Scott Griffin, representing the Hickory Oaks Subdivision, said that they had met with the Robertson Brothers Homes representative a number of times and they had an agreement with

the developer regarding landscaping. They agreed with the plan. Mr. Griffin thanked the Planning Commission for taking the time to get the development to where it was.

As no other public indicated they wished to speak, Chair Trafelet closed the public hearing and brought the matter back to the Planning Commission for discussion and/or a motion.

Discussion

- In response to a suggestion that there be a separate PUD amendment for the four single-family lots, Mr. Loughrin said that another amendment for the four lots was not worth the cost, work and time. Robertson Brothers Homes thought it was important that the lots were included in the proposed amendment, and they believed the four lots were appropriate.
- Regarding the boulevard entrance off Inkster, there seemed to be general consensus among the Commissioners to support the boulevard.
- Commissioner Stimson suggested reducing the number of single family homes on 12 Mile to three, which would be more harmonious to other homes in the area, would be consistent with the goals of the Historic District, and would not require a variance.

  Mr. Loughrin said that the lots met the minimum area, and that a 111-foot width was actually a very wide lot. Reducing the number of lots would increase the burden on the remaining three to cover the costs of the infrastructure there.

- Commissioner Mantey asked staff to consider whether they would like to suggest to City Council to shrink the back of the four lots, in order to increase the amount of land preservation there.
- Commissioner Countegan spoke to some of the history of this site, and the City's many attempts to encourage development there. He supported the four lots as being part of the current PUD.

After discussion and amendment, the following motion was offered:

MOTION by Varga, support by Countegan, to RECOMMEND TO CITY COUNCIL that the application to amend Planned Unit Development Plan 2, 2021, including Revised Site Plan 59-5-2022, dated October 17, 2024, and November 4, 2024, respectively, submitted by Robertson Brothers Homes, BE APPROVED, because the plans are consistent with the goals, objectives, and policies of the Master Plan and applicable provisions of the Planned Unit Development Option in Section 34-3.20 of the Zoning Ordinance, SUBJECT TO:

- **Modifications of Zoning Ordinance requirements as indicated on the proposed plan.**
- **Modifications of Zoning Ordinance requirements as identified in Giffels Webster's November 13, 2024, review.**
- **All outstanding issues identified in Giffels Webster's November 13, 2024, review shall be addressed to the reasonable satisfaction of the City Planner.**
- **All outstanding issues identified in the City Engineer's November 12, 2024, interoffice correspondence shall be addressed to the reasonable satisfaction of the City Engineer.**
- **All outstanding issues identified in the Fire Marshal's November 11, 2024, interoffice correspondence shall be addressed to the reasonable satisfaction of the Fire Marshal.**

Additionally, the Planning Commission recommends approval of:

- **A longer driveway to Lot 71, as described by the applicant this evening.**
- **The boulevard as shown at the main entrance off of Inkster Road.**
- **Sidewalks on one side of the interior road, as shown.**

Motion passed unanimously by voice vote.

REGULAR MEETING

A. SITE PLAN 59-9-2024

LOCATION:	24300 Drake Road
PARCEL I.D.:	22-23-21-351-032
PROPOSAL:	Construction of vehicle wash within B-3 General Business District
ACTION REQUESTED:	Site plan approval
APPLICANTS:	BMW Kar Wash, LLC (Todd Gesund)
OWNERS:	Boxoffice Theaters, LLC

Applicant presentation

Jim Butler, PEA Group, 1849 Pond Run, Auburn Hills, was present on behalf of this application for site plan approval. Steve Russo, traffic engineer, Collier's Engineering & Design, 20700 Civic Center Drive, Southfield, was also present.

Mr. Butler explained that at the October 17, 2024 Planning Commission meeting the applicant had asked for the application to be postponed and had since made revisions to the site plan, including:

- Added an access drive onto Drake in the area directly across from the shopping center so that the drives aligned.
- Added a two way drive on the north side of the property connecting the site to the future development to the east, and added a two way drive to the north that would service the Enterprise site.
- A traffic study had been completed and submitted but had not yet been reviewed.

Regarding the traffic study, Mr. Russo provided the following overview:

- Traffic counts were collected at the existing Busch's driveway on the west side of Drake Road; the right-in, right out drive by AutoZone; the existing McDonald's drive on Grand River; and the signalized intersection of Grand River and Drake Road.
- The one movement at the intersection of Grand River and Drake Road that didn't operate as well as desired was the southbound left turn movement from Drake Road onto Grand River. Providing some signal timing adjustments could mitigate the impact of the new development traffic and improve the movement at the intersection to an acceptable level.
- Traffic exiting out of the development driveway would operate acceptably.
- Analysis showed that maximum queuing on site relating to the car wash operation would be entirely contained on site and would not spill out onto Drake Road.
- Traffic exiting the car wash tunnel would be directed to Drake Road or drivers could continue to either AutoZone or McDonald's, to use the exit there.

- Grand River is an MDOT (Michigan Department of Transportation) roadway; ultimately any improvements will go through MDOT.

Consultant Comments

Referencing the December 9, 2024 Giffels Webster memorandum, Planning Consultant Tangari highlighted the following information:

Summary of issues for Planning Commission consideration:

- The applicant proposes to construct a new 6,140sf automated car wash facility, with 17 vacuum spaces with frontage along Drake Road between Grand River Avenue and Indoplex Circle. The plans involve maintaining the existing curb cut along Drake, with additional marginal access to the site from access drives connecting to the businesses to the south and east. A stub street connecting to the north is also proposed.
- Most revisions to the plan revolve around the circulation on the site and the connections to Drake Road. Dead end off-street parking aisles are discouraged. Such parking aisles with more than 8 spaces are required to have sufficient space for vehicles to turn around. Two-way access provides a means for vehicles to turn around. The Planning Commission shall review this parking configuration and confirm whether it meets this requirement.
- A hedge is only provided along the northern half of the Drake Road frontage. The site includes existing trees along the road frontage which has a partial screening effect but may not adequately mitigate the impact as effectively as a knee wall or hedge. Planning Commission should review and confirm. There was a hedge along the northern half of the Drake Road frontage, but not the southern half.
- There was a portion of the site that was not being developed at present and pending future development the hedge might be left off that portion of the site.

Summary of Issues for Administrative review:

- Easement agreements were needed.
- A loading space was needed. The aisle to the south of the building could be used for loading during off-peak or closed hours.
- Egress stacking spaces beyond the washing bay should be added to the plan.
- The bypass and drive-through/pay lane exceed the required average to minimum illumination ratio.
- Building mounted entrance fixtures exceed 2,000 lumens per door.

In response to the City Planner's comments, Mr. Butler added the following:

- The applicant was willing to extend the hedge to the southern half of the Drake Road frontage as part of this development.
- The vacuum spaces in the dead-end aisle were 12 feet wide, leaving room to maneuver in and out.
- Loading activity mainly consisted of chemicals delivered by a small van. There were four employee parking spaces. The space on the far left could be expanded and marked for loading; the site plan would still meet parking requirements.

MOTION by Grant, support by Stimson, that Site Plan 59-9-2024, dated September 18, 2024, submitted by BWM Kar Wash, LLC (Todd Gesund), BE APPROVED, because it appears to meet all applicable requirements of the Zoning Chapter, SUBJECT TO the following conditions:

- **All outstanding issues identified in Giffels Webster's December 11, 2024, review shall be addressed to the reasonable satisfaction of the City Planner;**
- **All outstanding issues identified in the City Engineer's December 4, 2024, interoffice correspondence shall be addressed to the reasonable satisfaction of the City Engineer; and**
- **All outstanding issues identified in the Fire Marshal's December 4, 2024, interoffice correspondence shall be addressed to the reasonable satisfaction of the Fire Marshal.**

Motion passed unanimously by voice vote.

B. SITE PLAN 61-11-2024

LOCATION:	29403 and 29455 Grand River Avenue
PARCEL I.D.:	22-23-35-431-016 and -017
PROPOSAL:	Construction of gasoline service center within B-3 General Business District
ACTION REQUESTED:	Site plan approval
APPLICANT:	Skilken Gold Development
OWNER:	Shakir Alkhafaji

Consultant Comments

Referencing the December 10, 2024 Giffels Webster memorandum, Planning Consultant Tangari gave the background and review for this request for site plan approval.

Summary of Proposal:

The applicant proposes to demolish an existing commercial building and construct a new fueling station with 6 pumps/12 fueling positions, with the front of the building oriented toward Middlebelt. The 6,132sf proposed Sheetz store will include a convenience store and restaurant. No drive-through service is included as a part of this proposal.

Summary of Issues for Planning Commission consideration:

- Canopy trees are required throughout the paved area but were only provided along the perimeter of the parking lot. The Planning Commission shall consider whether this arrangement is sufficient to meet this requirement.

Regarding Ordinance compliance:

- Loading space shall be identified on the plans (970sf required)
- The dumpster enclosure must be relocated to an interior side or rear yard location. The ordinance also requires it to be located as far as practicable from adjacent residential. The height of the bins within the enclosure shall be provided. Enclosure height must be 1 foot above the dumpster height.
- The freestanding monument sign on Grand River Avenue appears to be within the driveway clearance triangle.

A list of items for administrative review was provided on p. 2 of the Giffels Webster review letter.

Existing conditions:

The site is 1.9 acres and zoned B-3.

The site is currently developed with a 2,257sf vacant automotive service facility (oil changes). Pavement from a previous use is also present.

Planning Consultant Tangari reviewed the proposal against ordinance standards. The following issues need to be addressed:

- Precise front setback distances to the building and canopy should be added to the plans. The applicant should correctly note setbacks on the plans for the west and south property lines.
- The applicant should confirm that the standard relative to parking of motor vehicles or the storage of trailers, campers or other such conveyances on the gasoline service station property shall be prohibited, except for those necessary to the operation of a gasoline service station.
- As already noted, the dumpster is located in the front yard and should be moved. The height information of all bins within the dumpster enclosure was not provided.
- The applicant needs to correct discrepancies on the plan, as outlined on p. 6 of the Planner's review.
- Signage needs to meet ordinance standards in terms of area, height, and corner clearance.
- Landscaping is broadly compliant, but some locational and spacing issues must be resolved. The Eastern Redbud on the southeastern portion of the site does not meet the minimum distance from the property line. Additionally, the row of 8 nyssa sylvatica along Middlebelt Road north of the driveway appears to show the trunks in the sidewalk. Other locational and spacing issues exist as outlined in the review letter.
- The site plan includes a screening wall and brick knee wall, referencing sheet A100 for details. However, only knee wall details are provided. Screening wall details are also required.
- There are outstanding lighting issues that must be resolved, listed on p. 8 of the review letter.

Applicant Presentation

David Bruckelmeyer, Sheetz, 39300 West 12 Mile Road, Farmington Hills, was present on behalf of this application for site plan approval. John Ackerman, Kimley Horn, 3000 Town Square, Southfield, and Pat Lennon, Honigman Law Firm, Bloomfield Hills, were also present.

Mr. Bruckelmeyer provided the following information:

- The new building will have four-sided, full brick architecture with planters added for aesthetic appeal.
- There was no possible location to place the dumpster that fit zoning ordinance requirements. The applicant acknowledged that a variance from the Zoning Board of Appeals will be required.

In response to questions, Mr. Bruckelmeyer added the following information:

- There would be no drive-through at this location.
- The loading area would be east of the canopy along Middlebelt.
- Turning radiuses were designed to accommodate the applicant's largest trucks which would enter via Middlebelt and exit via Grand River Avenue.

- An old heating oil underground storage tank, and an associated underground storage tank would be removed from the site. There would be other remedial efforts, and the entire corner would be razed and completely leveled, assuming soil contamination.
- The store would be seven square feet smaller than Sheetz' typical prototype.
- This redevelopment project represented a minimum $9 million investment.

Mr. Ackerman explained that shifting the building to accommodate the dumpster setback requirements would pose circulation problems. He noted the number of utility lines (overhead power lines, gas lines, storm lines) that run through this property.

After extensive discussion regarding possible solutions that might allow for correct placement of the dumpster without requiring a variance, Mr. Lennon asked the Planning Commission to approve the site plan contingent on either the applicant receiving a variance or providing a compliant plan.

MOTION by Stimson, support by Grant, that Site Plan 61-11-2024, dated November 13, 2024, submitted by Skilken Gold Development, BE APPROVED, because it appears to meet all applicable requirements of the Zoning Chapter, SUBJECT TO the following conditions:

- **All outstanding issues identified in Giffels Webster's December 10, 2024, review shall be addressed to the reasonable satisfaction of the City Planner.**
- **All outstanding issues identified in the City Engineer's December 5, 2024, interoffice correspondence shall be addressed to the reasonable satisfaction of the City Engineer.**
- **All outstanding issues identified in the Fire Marshal's December 4, 2024, interoffice correspondence shall be addressed to the reasonable satisfaction of the Fire Marshal.**
- **This approval is contingent on the Zoning Board of Appeals granting a variance for the dumpster location, or a minor amendment be approved to the plan which can accommodate the dumpster without requiring ZBA approval, subject to staff review.**

Motion passed unanimously by voice vote.

APPROVAL OF MINUTES Approval of November 21, 2024 Regular Meeting

MOTION by Countegan, support by Varga, to approve the November 21, 2024 Regular Planning Commission meeting minutes with the following amendment:

- **Page 18 to read, ". . . key considerations *offered by Commissioner Countegan* included:"**

Motion passed unanimously by voice vote.

PUBLIC COMMENT

Betz King, 29580 Belfast, said that the proposed Sheetz gas station at Grand River and Middlebelt was extremely close to the Rouge River, and raised three points of concern:

1. **Flood Risk and Spill Concerns**
   Ms. King highlighted the high risk of spills at gas stations, particularly during storm events. The Rouge River watershed is prone to flooding, which can carry petroleum products and other contaminants far beyond the spill site. These pollutants could enter residential basements and

yards in flood-prone neighborhoods, posing long-term health risks to residents. Furthermore, remediation of petroleum contamination is costly, often not fully covered by insurance, leaving homeowners with significant financial burdens.

2. **Water Quality and Pollution Risk**
   The Rouge River already faces challenges with water quality, including high chloride levels from road salts and chronic pollution. Ms. King expressed concern that spills and stormwater runoff from the gas station could worsen these issues, introducing petroleum products and other toxic substances into the ecosystem.
3. **Habitat for Sensitive and Endangered Species**
   The Rouge River serves as a critical habitat for sensitive species, including the state-endangered redside dace, a unique minnow that leaps from the water to feed on insects. Recent evidence shows successful reproduction of this species in the area. Ms. King warned that chemical runoff from the gas station could degrade this habitat, harming these fragile populations and reducing biodiversity.

Ms. King urged the City to prioritize its role as a steward of the Rouge River and to protect this vital resource. She recommended collaborating with Friends of the Rouge to ensure the safety of both the river and the residents. She also noted that other potential sites for the gas station do not pose the same environmental risks.

COMMISSIONER/STAFF COMMENTS

In response to public comment, Commissioner Mantey suggested a discussion should be held regarding moving public comment to the beginning of the meeting.

In response to public comment, Commissioner Countegan observed that the result of the remediation of older underground storage tanks usually resulted in a net positive for the community. Ms. King's comments will be part of the record of tonight's meeting.

January 2025 meetings will be January 16 – regular meeting, and January 23 – CIP.

ADJOURNMENT

Chair Trafelet adjourned the meeting at 9:46 pm.

Respectfully submitted,
Kristen Aspinall,
Planning Commission Secretary

/cem

CITY OF FARMINGTON HILLS
PLANNING COMMISSION SPECIAL MEETING
31555 W ELEVEN MILE ROAD
FARMINGTON HILLS, MICHIGAN
JANUARY 16, 2025, 6:00 P.M.

CALL MEETING TO ORDER

The Planning Commission Special Meeting was called to order by Chair Trafelet at 6:05 p.m.

ROLL CALL

Commissioners present: Aspinall, Brickner, Countegan, Grant, Mantey, Varga, Stimson, Trafelet, Varga (arr. 6:11pm), Ware (arr. 6:13pm)

Commissioners Absent: None

Others Present: City Planner Perdonik, Staff Planner Canty, Planning Consultants Tangari and Upfal (Giffels Webster), City Attorney Schultz, Economic Development Director Brockway

Economic Development Director Brockway called the Commission's attention to the launch and purpose of the online Community Survey examining 12 Mile and Orchard Lake Corridors. The City is seeking feedback from community members, business and property owners, and visitors, regarding their experience in these business corridors. The survey, part of the market study aimed at boosting the City's economic growth, is available on the City's website. Director Brockway encouraged everyone to take the survey and also to encourage everyone within their circle of influence to participate. When complete, the survey and the market study will help inform the City relative to zoning changes on the corridors.

Chair Trafelet reported that he had been attending Economic Development Corporation meetings where Director Brockway reports on economic development in the City, and he passed around Director Brockway's latest report on her activities.

APPROVAL OF THE AGENDA

MOTION by Grant, support by Stimson, to approve the agenda as published.
Motion passed unanimously by voice vote.

SPECIAL MEETING

A. ZONING TEXT AMENDMENT 4, 2024

CHAPTER OF CODE: 34, Zoning Ordinance
PROPOSED AMENDMENT: Amend Zoning Ordinance to revise definition of restaurant, drive-in; add definition of commercial outdoor recreation

	space; and delete reference to automobile service center and replace with automobile repair
ACTION REQUESTED:	Set for public hearing
SECTIONS:	34-2.2 and 34-3.1.24

City Planner Perdonik and City Attorney Schultz provided an overview of the proposed text amendment, which will strengthen and clarify definitions related to recent zoning ordinance changes. The amendment ensures consistency in applying regulations and avoids disputes over terminology:

- **Definition of Commercial Outdoor Recreation Space**: Previously undefined, despite being listed as a permitted use in certain districts. The amendment aligns it with the existing definition for indoor recreation spaces.
- **Terminology Update – Drive-in vs. Drive-through Restaurant**: The ordinance has historically used the term "drive-in restaurant," which is outdated. The amendment replaces it with "drive-through restaurant".
- **Standardizing Automobile Repair Terminology**:
  - The phrase "automobile service center" was previously used but never defined.
  - The amendment eliminates this term and replaces it with the defined term "automobile repair".
  - This change also removes the outdated reference to auto repair shops being permitted in B-3 districts, which is no longer applicable.

The amendment will be scheduled for a public hearing.

B. DISCUSS DRAFT ZONING TEXT AMENDMENT 3, 2024, TO REVISE VARIOUS OS-4 DISTRICT AND PARKING PROVISIONS

City Planner Perdonik explained that the proposed zoning text amendment is a high-priority initiative identified by both City Council and the Planning Commission. The amendment primarily affects the 12 Mile corridor, which is largely zoned OS-4, with some minor variations within PUDs. This allows the Commission to recommend changes to the OS-4 district that would primarily apply only to this corridor. The goal is to facilitate restaurant and entertainment growth, office-to-residential conversions, and increased density by modifying existing zoning regulations.

- The amendment allows for greater flexibility in land use, enabling new developments to better align with the city's long-term planning goals.
- It seeks to optimize underutilized parking areas**,** increase height and density in certain areas, and support a mix of uses to encourage development.

City Planner Perdonik and Planning Consultants Tangari and Upfal led the following discussion.

DRAFT OS-4 Amendments

- The text amendment allowed greater building heights near I-696.
  - Properties south of 12 Mile are generally over 1,000 feet deep, with varying topography.
  - The amendment proposes allowing increased building height for developments near the freeway where the ground elevation is below 850 feet**,** as shown in the provided maps.
- New Definitions Introduced
  - **Artisan Manufacturing:** Small-scale businesses producing artisan goods or specialty foods for direct consumer sales (e.g., leather, glass, wood, textiles, ceramics).

    The Planning Commission discussed adding stone and metal production, with clarification that blacksmithing and similar small-scale metalwork would be included, but heavy manufacturing would not**.**
  - **Live-Work Units:** Mixed-use spaces allowing residents to live above their business, supporting artisan manufacturing, retail, personal services, childcare, and office use.
- Revised Intent of OS-4 Office Research District
  - The amendment expands the district's purpose beyond office buildings**,** incorporating mixed-use developments with residential and commercial components.
  - The amended ordinance encourages walkability, public spaces, and public art to enhance the district's appeal and support the tax base**.**
- Permitted Uses Expanded
  - The amendment allows attached single-family and multi-family residential uses, including office-to-residential conversions to adapt to market demand.
  - The amendment includes live-work units**,** along with select commercial uses from the B districts.
  - Hours of manufacturing operations and stand-alone parking structures were also included as considerations.
  - The terminology regarding office use such as "stenography office" and "clerical services" is outdated. A broader definition of "professional office" was proposed to encompass various modern business activities, such as podcast studios and creative workspaces**.**
  - Banks, credit unions, and savings & loans with drive-throughs would be permitted as a special land use. A financial institution located within a "professional office" space without a drive-through would be permitted as a matter of right.
- Reduced setbacks aim to bring buildings closer to the street, improving urban design and pedestrian accessibility:
  - 12 Mile setback reduced from 50 feet to 30 feet**.**
  - Thoroughfare setbacks reduced to 15 feet**.**
  - Local street setbacks set at 0 to 10 feet**,** encouraging street-facing storefronts.
- Building height adjustments included:
  - Base height increased from 50 to 65 feet**.**
  - Additional height allowances in key areas:
    - 80 feet permitted within 400 feet of I-696 and for properties where the ground elevation is below 850 feet**.**

- 20’ height bonuses (up to a maximum of 100 feet) available if developers dedicate 15% of the lot to public space, such as a park or plaza**.**

Discussion:
Discussion focused on how these changes might impact residential neighborhoods. While developers and investors are actively seeking opportunities for increased height and density to make projects financially viable, there is a balance between increased density and maintaining a community-friendly atmosphere. While 100-foot buildings could attract large-scale investments, some commissioners questioned whether such heights were necessary to achieve successful mixed-use development. Current zoning allows for 100-foot buildings near I-275, and no developments have taken advantage of this. However, allowing for 100-foot buildings allows for future opportunity.

Regarding architectural standards and materials
The concern was raised that developers sometimes showed renderings with high quality materials, but when the development was finished, those high quality materials had given way to cheaper materials, particularly in multi-family projects. It was also important to maintain high architectural standards for parking structures, which are often visually unappealing. Electric vehicle requirements should be incorporated into parking structure standards to accommodate future demand.

City Planner Perdonik said that a text amendment addressing architectural standards will be brought to the Planning Commission soon.

Other considerations
- While bus stops fall under SMART’s jurisdiction, the City should incorporate discussion of bus stop infrastructure into planning efforts.
- Commissioners discussed the role of public art in planning efforts.
- One bicycle space per 15 parking spots in large parking structures seemed excessive.

DRAFT Parking Standard Amendments
The proposed amendments to the parking ordinance addressed four key areas:
1. Reducing parking requirements for multifamily and office uses to better reflect actual demand and simplify enforcement:
   - The proposal removes tiered parking requirements for medical and professional offices in favor of a single standard of one space per 300 square feet.
   - Chiropractic offices would no longer be categorized separately from medical offices.
   - Multifamily parking requirements would shift from a bedroom-based calculation to a dwelling unit per acre standard, aligning with industry norms.
   - New standards differentiate between units with and without garages, setting requirements at two spaces per unit with a garage and 1.5 spaces per unit without an individual garage or driveway.

2. Establishing parking maximums to prevent excessive parking areas and encourage better site utilization.
    - The proposal caps parking at 120 percent of the minimum requirement, with any excess requiring Planning Commission approval based on documented demand.
    - Excess parking approvals would be handled through site plan review rather than a special approval process.
3. Providing flexibility in parking regulations to accommodate unique site conditions and administrative approvals where appropriate.
    - The amendment introduces flexibility for parking reductions based on site conditions and documented need.
    - Shared parking provisions and deferred parking, or land banked parking, remain available options but still require designated land to remain undeveloped for potential future parking. Deferred parking can limit development opportunities, as property owners must leave space available indefinitely.
    - A new "Deviations from Required Parking" section introduces demand-based, proximity-based, and shared parking adjustments.
        - **Demand-based parking adjustments** – Applicants can demonstrate lower parking needs through a study, referencing the Institute of Transportation Engineers (ITE) parking manual, the ULI Shared Parking Guide, or independent research. Considerations include foot traffic, transit availability, and unique operational needs.
        - **Proximity-based reductions** – Applicants can demonstrate that their property is located in the GR-1 District (automatic reduction of 50%), near car-sharing or carpool spaces, bicycle parking, or is close to a multi-use trail (is walkable). Commissioner Mantey suggested explicitly recognizing proximity to institutions like OCC and Michigan School of Psychology as a basis for parking reductions.
        - **Cross-jurisdictional parking agreements** – Commissioners debated whether parking spaces outside Farmington Hills could be counted toward requirements. City Attorney Schultz indicated that voluntary agreements between property owners could provide a solution, though cross-jurisdictional requirements would need legal review.
4. Bicycle Parking Standards and Incentives
    - Developments providing additional bicycle parking beyond the minimum requirement would be eligible for parking reductions.
    - A standard reduction allows one vehicle parking space for every four additional non-required bicycle spaces, with a greater reduction for covered bicycle parking.
    - Commissioner Mantey supported incorporating artistic bicycle racks into the standards and ensuring flexibility in design. Planning Consultant Upfal clarified that the ordinance allows for alternative bicycle rack designs as long as they meet the functional requirements of an inverted U-rack.

Discussion

There will be increasing need for covered parking in multifamily developments due to EV use. New multifamily projects could be required to install conduit for future EV charging, ensuring readiness without requiring immediate installation. The City already follows this practice at some municipal sites.

Next Steps

- City Planner Perdonik stated that the next step involves making revisions based on the study session discussion and bringing the text amendment back in ordinance form.
- Commissioner Countegan questioned how much revision should occur before sending the proposal to a public hearing. He suggested that rather than refining the language extensively among the Commission, it would be more efficient to receive public feedback earlier in the process.
- City Attorney Schultz explained that typically, the proposed changes would return for one more meeting before being formatted as an ordinance for a public hearing.
- Economic Development Director Brockway noted that responses from the market study survey could provide additional insights into how the public might react to the proposed changes.

Commissioners generally agreed that the main policy changes—introducing mixed-use development in the 12 Mile corridor, reducing parking requirements, and allowing greater building height—were clear. Commissioner Countegan stressed that specific details, such as a proposed 100-foot height limit, should be reviewed with public input as soon as possible.

PUBLIC COMMENT

None

COMMISSIONER/STAFF COMMENTS

None

ADJOURNMENT

MOTION by Ware, support by Stimson, to adjourn the meeting.
Motion passed by voice vote.

The meeting was adjourned at 7:57pm

Respectfully submitted,
Kristen Aspinall,
Planning Commission Secretary

/cem

MINUTES
CITY OF FARMINGTON HILLS
PLANNING COMMISSION REGULAR MEETING
31555 W ELEVEN MILE ROAD
FARMINGTON HILLS, MICHIGAN
JANUARY 25, 2025, 6:00 P.M.

CALL MEETING TO ORDER

Chair Trafelet called the meeting to order at 6:00 p.m.

ROLL CALL

Commissioners Present: Aspinall (left 7:19pm), Brickner, Countegan, Grant, Mantey, Stimson, Trafelet, Varga, Ware

Commissioners Absent: None

Others Present: Staff Planner Canty; Central Services Director Aranowski, IT Manager Lee; Acting Police Chief Piggot; Fire Chief Unruh, Deputy Fire Chief Olszewski; Special Services Director Schnackel, Special Services Deputy Director Farmer; Public Services Director Rushlow, DPW Superintendent Schueller; Secretary to the Planning and Community Development Director LaBelle

APPROVAL OF AGENDA

MOTION by Grant, support by Brickner, to approve the agenda as published.
Motion passed unanimously by voice vote.

REGULAR MEETING:

A. CAPITAL IMPROVEMENTS PLAN (CIP) 2025/2026 THROUGH 2030 – 2031

ACTION REQUESTED: Set for Public Hearing

The Capital Improvements Plan (CIP) is a strategic planning tool for the City's capital needs over a 5 year period. The CIP is not a budget but rather is a comprehensive document that includes the major programs and projects the various departments would like to accomplish over the next five years. The CIP is updated annually and is provided to City Council to use as a guide during the budget process.

Department Directors reviewed the capital improvement accomplishments of the 2024/2025 year and laid out their desired capital projects for 2025/2026. A complete detail of the

information is provided in the Capital Improvements Plan 2025/2026 - 2030/2031, which after approval will be available at the City Manager's Office.

The following minutes provide a short summary of 2025/2026 requests by department.

POLICE DEPARTMENT

Acting Police Chief Piggott was present on behalf of the Police Department, and he reviewed in detail the accomplishments of the 2024/2025 year as listed in the CIP document.

2025/2026 requests include:

1. Laptop computers/technology upgrade: $61,000.
   Department utilizes CJIS (Criminal Justice Information System) complaint laptop computers for investigators working the field. The current computers and tablets are unable to run the Windows 11 operating system which is now required to access all CLEMIS websites and applications. Department seeks to replace 15 Dell laptop computers and 2 Dell tablets.
2. Workstations/Office Furniture: $173,000
   The Department's offices are outdated, with furniture dating back to 1987 and 1997. The design no longer accommodates the added officers or modern technology, leading to power issues and reduced collaboration. The spaces also lack secure storage for sensitive information. The proposal is to replace all office furniture.
3. Mobile Command Post: $550,000.
   Mobile Command Post has been in service for 25 and needs replacement due to mechanical failures and outdated technology. DPW has assessed as not being roadworthy.

Discussion:

In response to questions, Acting Police Chief Piggott provided the following information:

- The Department is the 10th largest municipal police department in the state.
- Statistics regarding pedestrian and bicycle accidents can be provided.
- New data analyst position has been created and an experienced analyst has been hired.
- Women's locker room expansion (currently ongoing) should be complete within the next month or so.
- The Department does not have an electric vehicle.

FIRE DEPARTMENT

Fire Chief Unruh and Deputy Fire Chief Olszewski were present on behalf of the Fire Department. Chief Unruh reviewed in detail the accomplishments of the 2024/2025 year as listed in the CIP document:

- A new fire engine, costing just over $1 million, is in production, with delivery expected in late spring or early summer.
- An electric fire truck is not considered viable due to its high cost of $3.8 million.
- The Department has received a utility vehicle and ballistic protection equipment.
- Fire Department was awarded a State funded grant in the amount of $3,000,000 for the

redesign and construction of Fire Headquarters to add an Emergency Operations Center (EOC). This project is in the bidding phase, with construction expected to begin in late spring or early summer.
- The Department plans to move its headquarters to a temporary location (12-months) at The Hawk in the meantime.

2025/2026 Fire Equipment and Apparatus requests include:
- $435,000 ambulance to replace an old unit. Build time is 23 months.
- $75,000 utility vehicle replacement; the Department replaces one per year.
- $170,000 for mobile computers and equipment
- $250,000 construction contingency, building improvements, and OSHA requirements.
- $70,000 fire engine refurbishment.

Discussion:
- 2024 was the Department's busiest year, with 12,899 runs. The Department is the second busiest in Oakland County.
- Each fire station has an ambulance and a fire truck. Ladder trucks are located at the Nine Mile and Drake (#4) and the Middlebelt (#2) stations. The ladder trucks are frequently used for mutual aid runs.
- The Department has 35 part-time and 73 full-time fire fighters. The Department is currently working with a consultant in order to provide clarity regarding the future vision for the Department, including what will be needed in terms of future staffing.

TECHNOLOGY

Director of Central Services Aranowski, and IT Manager Lee were present on behalf of the Central Services Department. Director Aranowski reviewed in detail the accomplishments of the 2024/2025 year as listed in the CIP document.

2025/2026 Capital project requests include:
1. City-wide technology:
   - Personal Computer & Notebook replacements for 300+ end users to accommodate Windows 11 continues.
   - Continued Implementation of Virtual Desktop & VPN functionality for various departments.
   - Infrastructure and software enhancements to support various departmental initiatives.
   - Continued upgrades to the network security infrastructure.
   - Implement communication system software and video for new EOC at Fire Department headquarters
2. Unified Communications and Smart Cities Projects
   - Video surveillance equipment: $250,000 per year for years 2024/2025 through 2029/2030.

- Smart Cities Projects: $350,000 per year from 2025/2026 through 2030/2031.

3. ERP/Financial Software,
   - Initiated in February 2024. $100,000 annual maintenance
   - New financial reporting, performance management and transparency software will require $100,000 annual lease.
4. Enhanced security access at the Hawk, including 22 card readers to secure "employee only" offices, and 3 card readers on the third floor to provide secure access for temporary Fire Department headquarters.

Discussion:

- The Police Department's FLOCK security system (license plate reading and other tools) is completely separate from Central Services.
- Director Aranowski answered questions and clarified information about the 2025/2026 requests.

Side Bar Discussion

Commissioner Mantey advocated for including information regarding the SIFI fiber optic system being laid throughout the City. Even though this was being done at no cost to the City and therefore was not in the CIP as a future project to be funded by the City, the CIP should mention this effort as a capital improvement for the residents.

PARKS AND RECREATION

Director of Special Services Schnackel and Deputy Director Farmer were present on behalf of the Parks and Recreation division. Director Schnackel reviewed in detail accomplishments of the 2024/2025 year as listed in the CIP document.

2025/2026 and beyond requests include:

1. The HAWK updates - $16,000,000 over 6 years (see page 29 of the CIP document) .
2. 2025/2026 vehicles, equipment, and infrastructure - $2,123,000 (see page 30 of the CIP document), with further amounts and projects listed out to 2030/2031.
3. Acquisition of Park Land - $1,500,000
4. Costick Center/Senior Center - $20,000,000

Discussion:

- Commission Mantey encouraged Public Services to use EV vehicles when possible.
- It was noted the old Boys & Girls Republic property at 28000 W. 9 Mile Road was still vacant and for sale. This property would make a great public park.
- The recording studio at The Hawk, as well as the repurposed classrooms, could include such activities as podcast studios, and music lessons such as piano lessons.
- Discussion focused on the cost of repairs for the Costick Center, and the options for moving forward with that building or a completely new building.
- Commissioner Varga asked that competitive swim meet facilities be part of the future

planning.
- Director Schnackel and Deputy Director Farmer responded to questions about current programs and projects in the Department.

Sidebar discussion:
The Commission discussed the county-owned detention pond at 13 Mile and Farmington Roads, which right now is not maintained and is an eyesore. Perhaps the area outside the fence could be used as a small recreation area with benches, for instance. A gauge could be used to measure the water that is in the basin over a period of time. In any event, the perimeter of the area needs to be landscaped and maintained.

PUBLIC SERVICES
Public Services Director Rushlow and DPW Superintendent Schueller were present on behalf of the Public Services Department. Director Rushlow reviewed in detail accomplishments of the 2024/2025 year as listed in the CIP document.

2025/2026 proposed projects included:
Public Facilities
- DPW emergency power generator, $810,000
- Fire Station #4 Parking Lot replacement $1M
- Access management around PD parking lot, fuel station, west parking lot, $1.8M
- City Hall parking lot permeable pavers replacements $500,000

Drainage
- Grand River Ave and Haynes – MDOT, $1M
- Storm sewer replacements in conjunction with road construction projects, $2.5M

Sanitary Sewer
- CIPP lining program, $2M (completed by WRC)
- Lift station improvements, $500,000 (completed by WRC)

Water Main
- Kendallwood Subdivision #3 water main replacement, $7M

Sidewalks
- Scottsdale North to 14 Mile Road, $60,000
- Sidewalk installations in conjunction with road construction projects, $300,000

Major Roads
- Halsted Road (12 Mile to 14 Mile), $1.2M
- Folsom Road (9 Mile to Orchard Lake Road), $4M
- Hallwood/Hallwod Court Industrial, $1.3M

Local Roads
- Farm Meadows/Camelot Courts Subdivisions, Phase 1, $7M
- Richland Gardens, Phase 1, $5M
- Shady Ridge Drive Gravel Road Conversion, $1M

- Pinebrook Estates (Elmhurst Avenue), $1.3M
- Coventry (Scottsdale Road), $1M
- Local road rehabilitation project candidates, $5M

Discussion:

- Commissioners discussed the Citygate signate/landscaping at Orchard Lake Road and I-696, which was in last year's CIP, and which was moving forward.
- Commissioners discussed some of the history of the City relative to the infrastructure that has been installed, including the detention area at 13 Mile and Farmington Road, which was discussed earlier.

Regarding non-motorized pathways:

- Commissioner Mantey suggested that the section on Sidewalks (p. 53) decrease emphasis on the 2013 "point system" for sidewalk repair and installation and instead include language more aligned with the Master Plan regarding non-motorized pathways and sidewalks. The Master Plan is trying to create areas for people to gather, including areas where it may be possible to install the 10-foot sidewalks that qualify for federal funding.
- Regarding the Commission's past emphasis on sidewalk snow removal equipment, the consensus was not to include this as a line item this year, but to add language in the narrative about how important clear sidewalks are to a walkable community. The goal remains to target the 12 Mile and Orchard Lake area, and Grand River (particularly near any bus stops) for sidewalk snow removal. As stated in last year's CIP, people should not have to walk in the street when it snows – this was the opposite of walkability and accessibility.
- It was suggested that property owners be responsible for clearing their sidewalks, as was required in some nearby cities and townships.
- Commissioners discussed the Nine Mile Corridor effort, which seeks to bolster recreational opportunities and placemaking along the corridor and which includes multiple jurisdictions, including Farmington Hills, Farmington, Hazel Park, Ferndale, Southfield, and Oak Park. The group will be seeking state and federal funds for this project, which will include a non-motorized pathway connecting the various municipalities.
- The CIP should state in its narrative the importance of adding covered structures to bus stops.

Edits, additions, and housekeeping items in the CIP included:

- As mentioned earlier, the SIFI fiber optics project could be acknowledged in the CIP as an important improvement project in the City.
- The CIP summary sheet on page 13 could be misleading to the public, who might thing the totals represent a budget, or actual amounts spent, when the totals only represent estimates of what projects that are offered by the various departments will cost. The CIP is not a budget and all projects in the CIP will not be approved by City Council. It was suggested this summary be removed.
- The excel sheets (projects tables) need to be clearly titled.

After discussion and amendment, the following motion was offered:

MOTION by Countegan, support by Varga, to set the Capital Improvements Plan 2025/2026 through 2030/2031 for Public Hearing for the Planning Commission's next available meeting agenda, with the following amendments:

- **Remove chart on page 13**
- **Title the excel sheets**
- **In the section on sidewalks (p. 53) decrease emphasis or remove entirely the reference to the 2013 "point system" and instead include language more aligned with the Master Plan language regarding non-motorized pathways and sidewalks.**

And

Add a narrative section entitled "*Planning Commission Priorities*", to include:

1. **The importance to a walkable city of clearing sidewalks in the winter, similar to the language discussed during the 2023 CIP review*and emphasizing 12 Mile Road and Grand River, but without putting snow equipment in as a line item.**
2. **The Planning Commission is supportive of the greater inter-community Nine Mile Corridor project, which includes a connector non-motorized pathway among several communities.**
3. **Prioritize enclosed bus shelters, especially at those bus stops that are most heavily used.**
4. **Reference the SIFI fiber optics project as the biggest infrastructure project going on in the City, emphasizing that the project is ongoing, authorized by City Council, will result in the City being more competitive, and that this $72M project is occurring at no cost to the City.**

Motion passed by voice vote.

*January 2023 MOTION:
MOTION by Grant, support by Varga, that based on community feedback during the ongoing Master Plan update process that there is a strong public desire to prioritize walkability, specifically during winter months, the Planning Commission recommends that:

- A line item of $75,000 be allocated during the first year for sidewalk snow clearing and salting equipment, to be used along major roads, e.g., Grand River and 12 Mile Road, and
- That a paragraph be included in the CIP narrative noting this item has been added by the Planning Commission as a result of public input during the Master Plan update process.

PUBLIC COMMENT:
None

COMMISSIONER'S COMMENTS:
None

ADJOURNMENT:

MOTION by Brickner, support by Varga, to adjourn the meeting at 9:26 pm.

Motion carried unanimously by voice vote.

Respectfully submitted,
Kristen Aspinall
Planning Commission Secretary

/cem