

# MEMORANDUM



**TO:** MEMBERS OF THE PLANNING COMMISSION  
**FROM:** DAN COMMER, AICP – PLANNER  
**SUBJECT:** 21111 MEADOWBROOD ROAD WOODLAND PERMIT  
**DATE:** OCTOBER 22, 2024

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The applicant, Barina Opong-Owusu, is seeking a Woodland Use Permit, PWD24-0024, for 21 regulated woodland trees that were impacted in the process of building a single-family home located at 21111 Meadowbrook Road. The site is located west of Meadowbrook Road, and north of Eight Mile Road in Section 35 of the city.

The City's Woodland Consultant reviewed the request and prepared a review letter dated July 22, 2024. Based on the plans provided, and a post-inspection review conducted by the City's Landscape Architect, the applicant is requesting relief from the standards of Section 37-9 (b) that prohibits work within the critical-root-zone of any tree, including placement of soil or construction material in those areas. Inspections revealed encroachment on the critical-root-zone of 21 regulated woodland trees within an area mapped as city-regulated woodland. Replacement calculations require 31 replacement credits. The City's Landscape Architect created a spreadsheet, which is attached, that provides a detailed count and explanation of the required replacements.

The applicant is asking for a delay in the implementation of the standards of Woodland Section 37-9 which calls for immediate woodland replacement or payment into the tree fund for trees that were negatively impacted by the encroachments into the critical root zones of the woodland trees. The City's Woodland consultant and Landscape Architect are unable to predict the severity of the impact on trees immediately, but their best judgment indicates that the impacts to the remaining woodland trees were severe. This type of encroachment to the root zone is likely to negatively impact the health of the trees, and it sometimes takes years for the trees to show signs of damage.

Previously, the applicant suggested that it was his desire to place a financial guarantee with the City for the impacted trees until the impacts could truly be determined, instead of paying into the tree fund or replacing the trees immediately. The applicant's proposed solution is for the City to release 75% of the existing bond and hold 25% until a subsequent inspection is conducted in 2 years. The ordinance does not currently allow that change.

Per the City of Novi's Woodland Ordinance, where a proposed activity (i.e., home construction) does not otherwise require site plan or plat approval, the granting or denying of the (woodland) use permit shall be the responsibility of the Planning Commission. The applicant shall obtain approval of the Plan from the Planning Commission prior to issuance of any permits. The Planning Commission is asked to hold the public hearing and either approve or deny the requested woodland permit.

**SUGGESTED MOTION:**

**Approval (Applicant Requested)**

To approve a Woodland Use Permit, PWD24-0024, for 21 regulated woodland trees that were impacted in the process of building a single-family home located at 21111 Meadowbrook Road, subject to the payment of all associated fees and bonds as required by the City's ordinances.

**– OR –**

**Denial**

To deny a Woodland Use Permit, PWD24-0024, for 21 regulated woodland trees that were impacted in the process of building a single-family home located at 21111 Meadowbrook Road, subject to the payment of all associated fees and bonds as required by the City's ordinances.

**MAPS**

**Location**

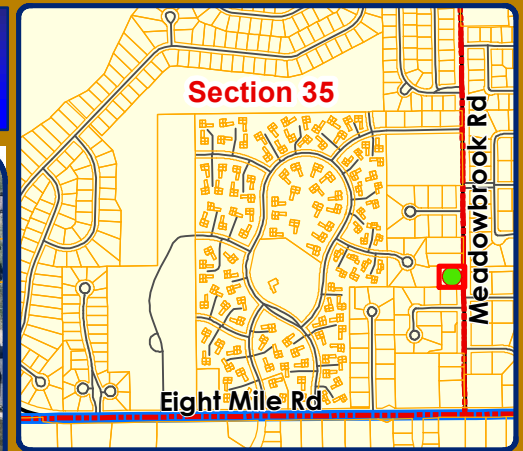
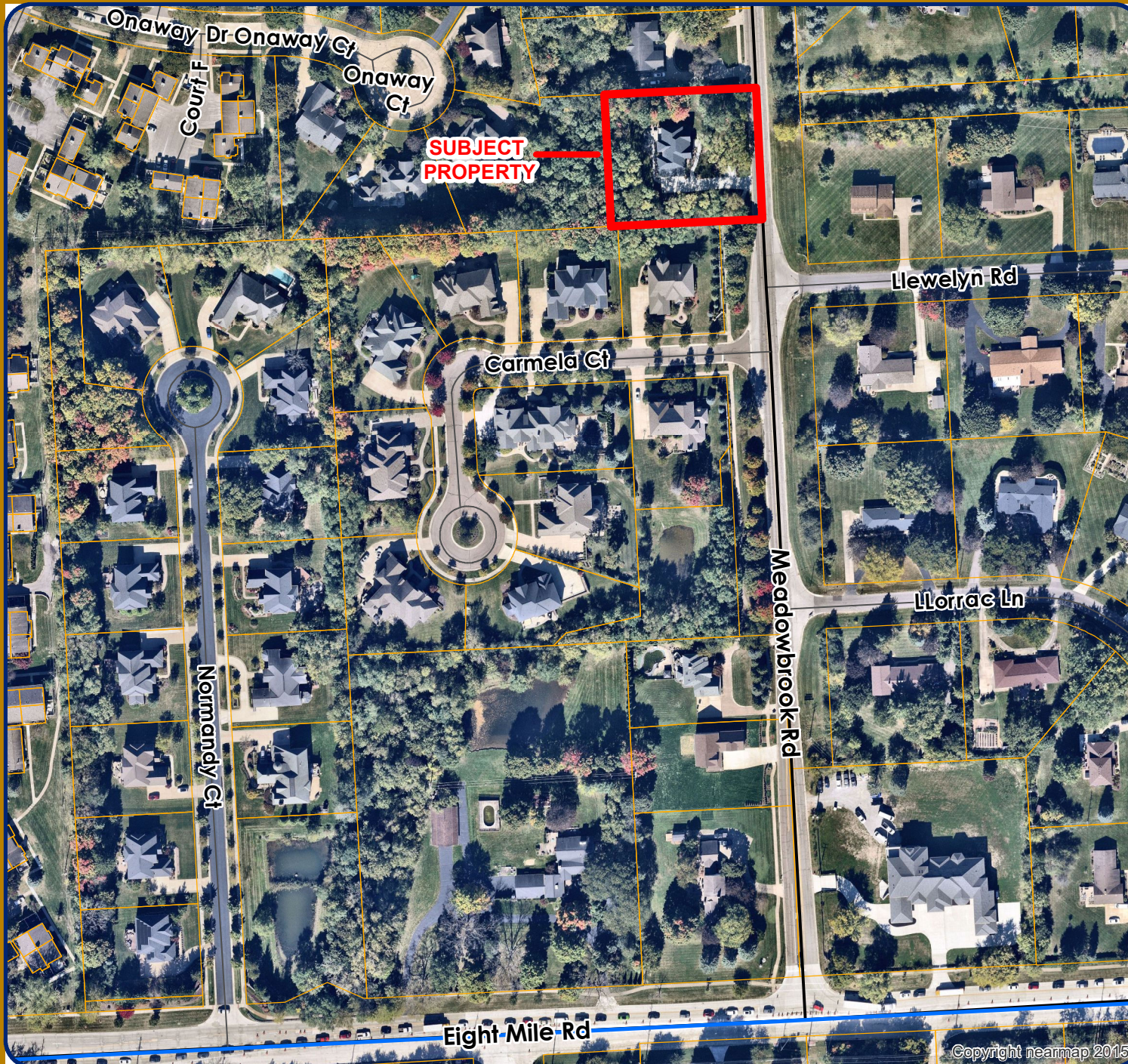
**Zoning**

**Future Land Use**

**Natural Features**

# 21111 MEADOWBROOK ROAD WOODLAND PERMIT

## LOCATION



## Legend

 Subject Area



## City of Novi

Dept. of Community Development  
City Hall / Civic Center  
45175 W Ten Mile Rd  
Novi, MI 48375  
[cityofnovi.org](http://cityofnovi.org)

Map Author: Dan Commer  
Date: 10/18/24  
Project: 21111 Meadowbrook Road Woodland Permit  
Version #: 1

0 40 80 160 240 Feet  
1 inch = 201 feet

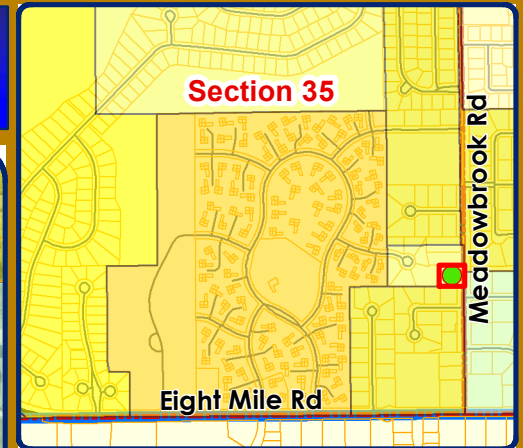
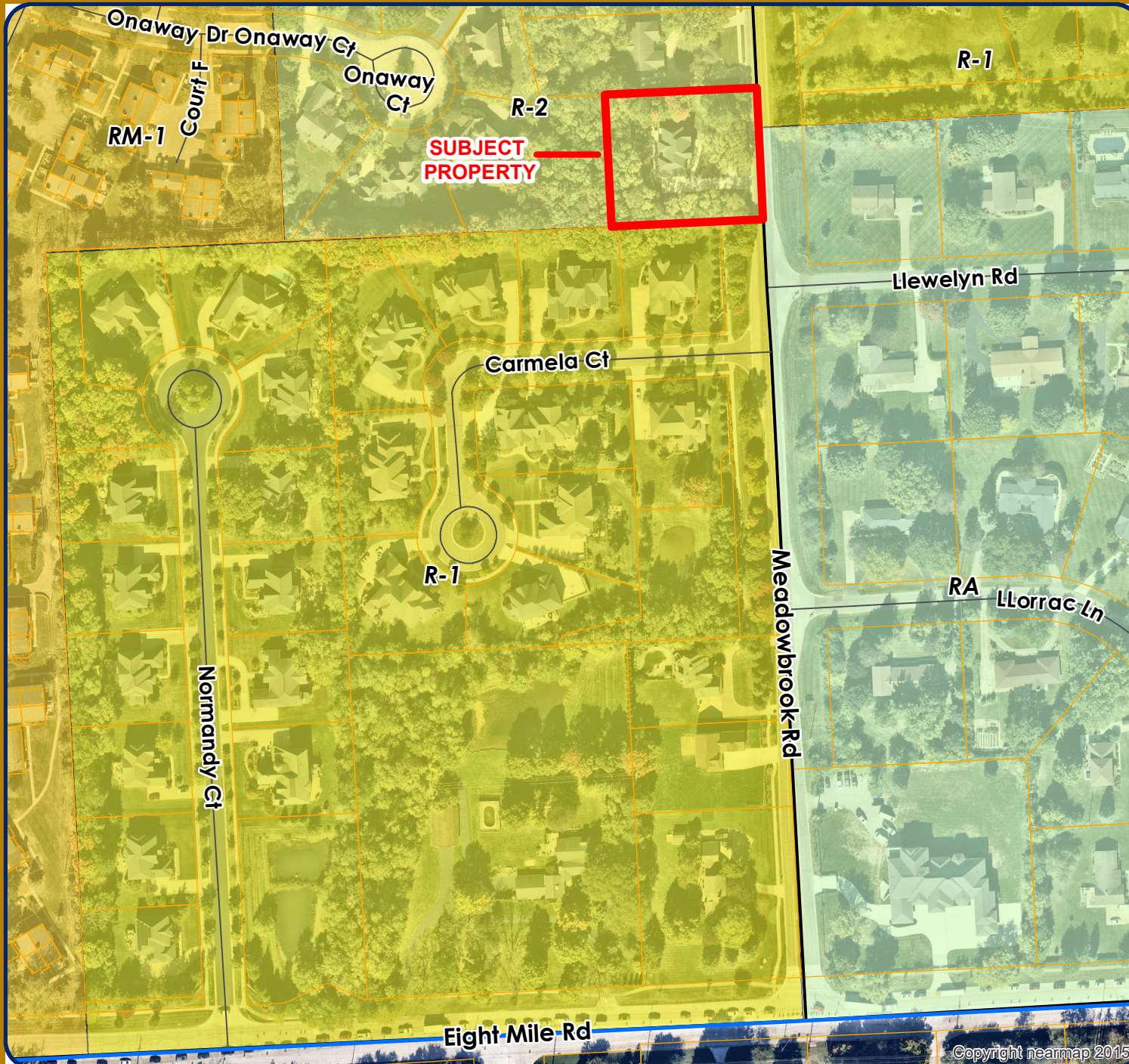


### MAP INTERPRETATION NOTICE

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# 21111 MEADOWBROOK ROAD WOODLAND PERMIT ZONING



## Legend

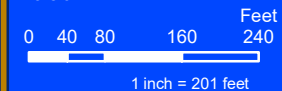
- R-A: Residential Acreage
- R-1: One-Family Residential District
- R-2: One-Family Residential District
- R-3: One-Family Residential District
- R-4: One-Family Residential District
- RM-1: Low-Density Multiple Family
-  Subject Area



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Map Author: Dan Commer  
Date: 10/18/24  
Project: 21111 Meadowbrook Road Woodland Permit  
Version #: 1

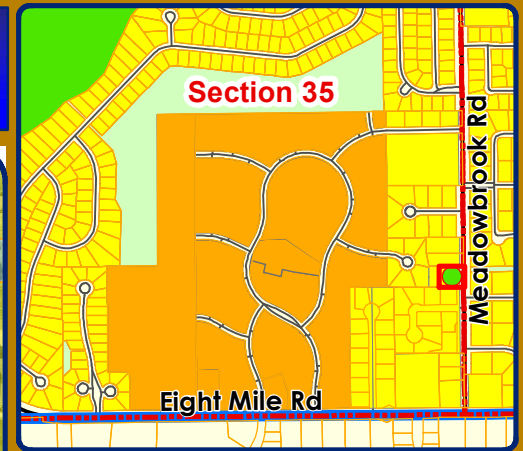


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# 21111 MEADOWBROOK ROAD WOODLAND PERMIT

## FUTURE LAND USE



### Legend

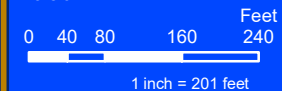
- Single Family
- Multiple-Family Residential
- Public Park
- Private Park
- Subject Area



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Date: 10/18/24  
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Version #: 1



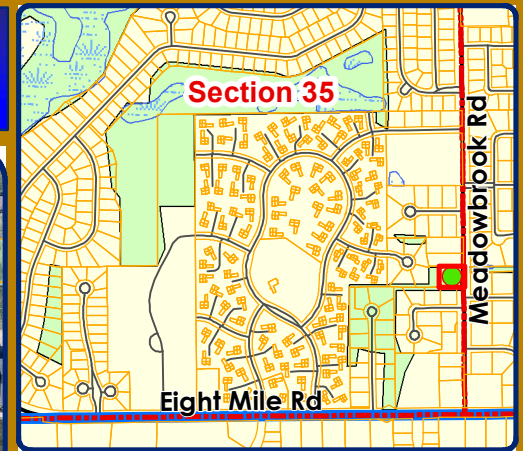
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# 21111 MEADOWBROOK ROAD WOODLAND PERMIT

## NATURAL FEATURES



### Legend

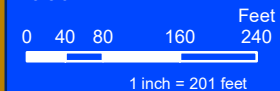
-  WETLANDS
-  WOODLANDS
-  Subject Area



### City of Novi

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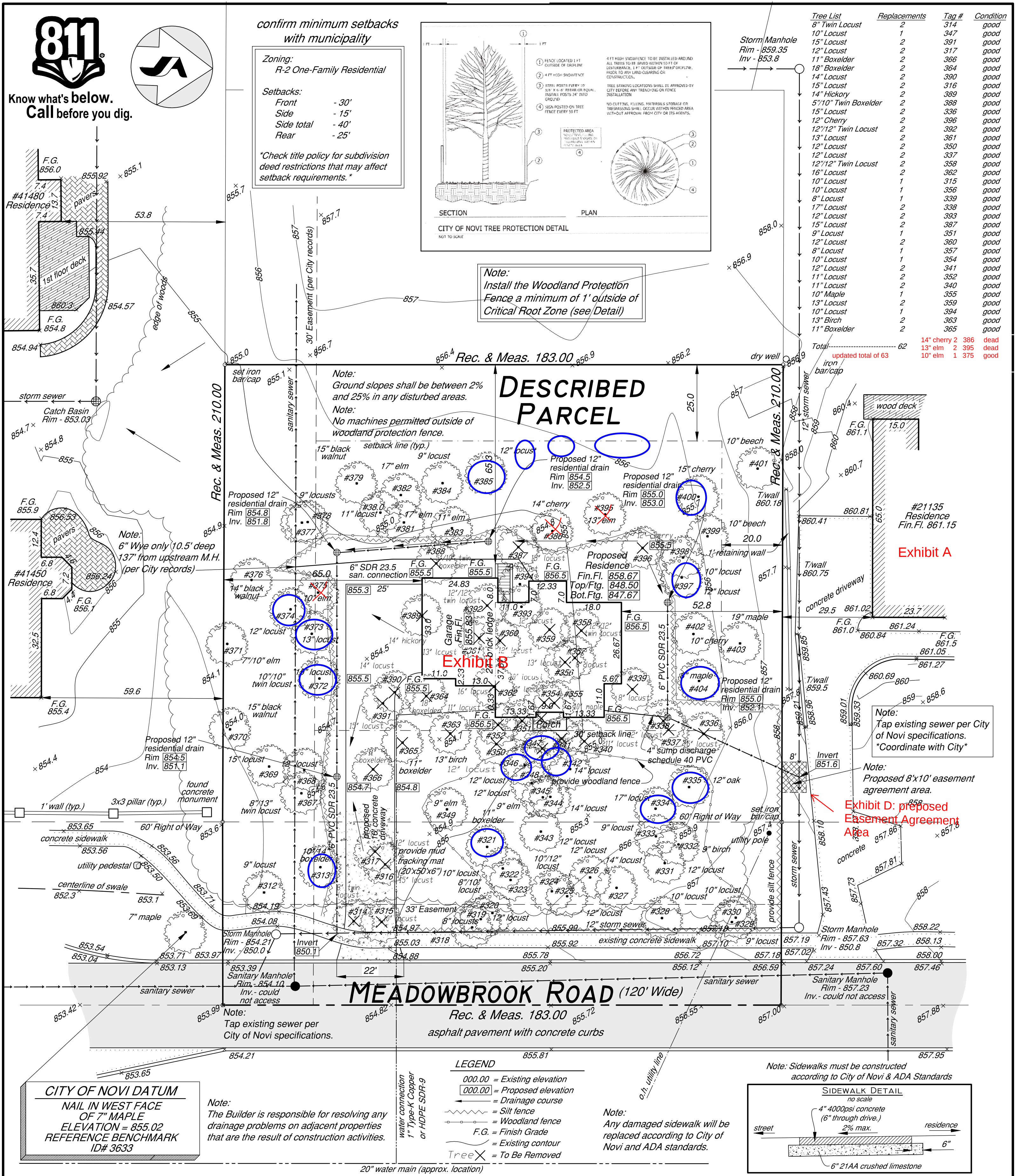


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## PLOT PLAN



## LANDSCAPE REVIEW

21111 Meadowbrook

| ORIGINAL REPLACEMENTS |            |             |                          |               |              | ADDITIONAL REPLACEMENTS       |                |              |                   |
|-----------------------|------------|-------------|--------------------------|---------------|--------------|-------------------------------|----------------|--------------|-------------------|
| Tree #                | Size (dbh) | Description | Replacements<br>required | Original List |              | Allowed                       | Encroachment - |              | Notes             |
|                       |            |             |                          |               |              | removal per<br>Keith Salowich | 11/30          |              |                   |
| 313                   | 24         | boxelder    | 3                        |               |              |                               | x              | 3            | 10"/14" twin      |
| 314                   | 16         | locust      | 2                        | x             | 2            |                               |                |              | 8" twin           |
| 315                   | 10         | locust      | 1                        | x             | 1            |                               |                |              |                   |
| 316                   | 15         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 317                   | 12         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 321                   | 11         | boxelder    | 1                        |               |              |                               | x              | 1            |                   |
| 334                   | 17         | locust      | 2                        |               |              |                               | x              | 2            |                   |
| 335                   | 12         | oak         | 2                        |               |              |                               | x              | 2            |                   |
| 336                   | 15         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 337                   | 12         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 338                   | 17         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 339                   | 8          | locust      | 1                        | x             | 1            |                               |                |              |                   |
| 340                   | 11         | locust      | 1                        | x             | 1            |                               |                |              |                   |
| 341                   | 12         | locust      | 2                        | x             | 2            |                               |                |              | Not removed, okay |
| 342                   | 14         | locust      | 2                        |               |              |                               | x              | 2            |                   |
| 346                   | 12         | locust      | 2                        |               |              |                               | x              | 2            |                   |
| 347                   | 10         | locust      | 1                        | x             | 1            |                               |                |              |                   |
| 348                   | 12         | locust      | 2                        |               |              | x                             | x              |              |                   |
| 349                   | 9          | elm         | 1                        |               |              |                               | x              | 1            |                   |
| 350                   | 12         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 351                   | 9          | locust      | 1                        | x             | 1            |                               |                |              |                   |
| 352                   | 11         | locust      | 1                        | x             | 1            |                               |                |              |                   |
| 354                   | 10         | locust      | 1                        | x             | 1            |                               |                |              |                   |
| 355                   | 10         | maple       | 1                        | x             | 1            |                               |                |              |                   |
| 356                   | 10         | locust      | 1                        | x             | 1            |                               |                |              |                   |
| 357                   | 8          | locust      | 1                        | x             | 1            |                               |                |              |                   |
| 358                   | 24         | locust      | 3                        | x             | 3            |                               |                |              | 12"/12" twin      |
| 359                   | 13         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 360                   | 12         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 361                   | 13         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 362                   | 16         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 363                   | 13         | birch       | 2                        | x             | 2            |                               |                |              |                   |
| 364                   | 18         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 365                   | 11         | boxelder    | 1                        | x             | 1            |                               |                |              |                   |
| 366                   | 11         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 372                   | 15         | locust      | 2                        |               |              |                               | x              | 2            |                   |
| 373                   | 13         | locust      | 2                        |               |              |                               | x              | 2            |                   |
| 374                   | 12         | locust      | 2                        |               |              |                               | x              | 2            |                   |
| 375                   | 10         | elm         | 1                        |               |              |                               | x              | 1            |                   |
| 381                   | 17         | elm         | 2                        |               |              | x                             |                |              |                   |
| 383                   | 11         | elm         | 1                        |               |              | x                             | x              |              |                   |
| 385                   | 12         | locust      | 2                        |               |              |                               | x              | 2            |                   |
| 386                   | 14         | cherry      | 2                        |               |              |                               | x              | 2            |                   |
| 387                   | 15         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 388                   | 15         | boxelder    | 2                        | x             | 2            |                               |                |              | 5"/10" twin       |
| 389                   | 14         | hickory     | 2                        | x             | 2            |                               |                |              |                   |
| 390                   | 14         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 391                   | 15         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 392                   | 24         | locust      | 3                        | x             | 3            |                               |                |              | 12"/12" twin      |
| 393                   | 12         | locust      | 2                        | x             | 2            |                               |                |              |                   |
| 394                   | 10         | locust      | 1                        | x             | 1            |                               |                |              |                   |
| 396                   | 12         | cherry      | 2                        | x             | 2            |                               |                |              |                   |
| 397                   | 12         | locust      | 2                        |               |              |                               | x              | 2            |                   |
| 404                   | 8          | maple       | 1                        |               |              |                               | x              | 1            |                   |
| New #1                | 10         | locust      | 1                        |               |              |                               | x              | 1            |                   |
| New #2                | 10         | locust      | 1                        |               |              |                               | x              | 1            |                   |
| New #3                | 8          | locust      | 1                        |               |              |                               | x              | 1            |                   |
| New #4                | 8          | maple       | 1                        |               |              |                               | x              | 1            |                   |
| TOTAL                 |            |             |                          |               | 62           |                               |                | 31           |                   |
|                       |            |             |                          |               | \$ 24,800.00 |                               |                | \$ 12,400.00 |                   |

## WOODLAND REVIEW



July 22, 2024

Nina Schaffrath  
Account Clerk – Community Development  
City of Novi  
45175 Ten Mile Road  
Novi, MI 48375

*Submitted electronically to [nschaffrath@cityofnovi.org](mailto:nschaffrath@cityofnovi.org)*

Re: 21111 Meadowbrook Road – Woodland Review (PBR22-0569)

Dear Nina,

Merjent, Inc. (Merjent) has conducted a post-inspection review of the single-family residential plot plan for 21111 Meadowbrook Road (site; dated 1/19/2023 and February 14, 2023) prepared by Jekabson and Associates, P.C. Merjent reviewed the plan for conformance with the City of Novi's (City) Woodland Protection Ordinance, Chapter 37. The site (parcel 50-22-35-400-071) contains City-regulated woodlands (Figure 1). The applicant removed trees prior to Merjent's site visit on July 12, 2024. Merjent conducted an additional review at the request of the City and the applicant for conformance with Section 37-9 of the City's Woodland Protection Ordinance. In conducting this review, Merjent reviewed additional correspondence between the City's Landscape Architect, Rick Meader, and the applicant as well as previous reviews conducted by the Davey Resource Group (DRG). DRG conducted three reviews prior to recommending approval of the plot plan on February 17, 2023.

### **Woodlands**

Merjent understands that the City's Landscape Architect conducted an on-site inspection of the approved tree removal on April 10, 2023. Photographs were provided to Merjent that showed multiple trees containing fill (soil) stockpiled and construction equipment stored and working within the critical root zone. These trees were identified in the plot plan as being protected (not impacted) from proposed construction activities. Section 37-2 of the ordinance defines a critical root zone as a circular area around a tree with a radius measured to the tree's longest dripline radius plus one foot. As stated in Section 37-9, impacts to critical root zones, or areas where critical root zones cannot be protected, should be considered as tree replacements and paid to into the City of Novi Tree Fund.

Pursuant to Section 37-9 (b), Merjent's professional opinion is the City Landscape Architect conducted an accurate review based on the conditions on-site during the construction. Section 37-9 (b) states that it shall be unlawful for any person to conduct any activity within the critical root zone of any tree including placement of soil or construction machinery (among others). Although no active leaf growth was present during the April 2023 review, it could still be determined the actively alive and dead trees during the inspection.

The following comments summarize Merjent's on-site review:

1. Merjent met with the land owner, Barima Opong-Owusu, to review the noted additional encroachment areas throughout the property.

- 
2. Trees on the south side of the property, for example Trees 313, 372, and 373, were found to have their northern critical root zones within the newly constructed driveway. Photos provided show the trees dripline being located directly above the newly constructed driveway.
  3. Trees on the north, west, and east side of property were shown to be free of soil stockpiling and construction equipment now that construction has ceased.
  4. Multiple tree diameter at breast height (DBH) measurements were collected and compared to the previous tree survey.

While Merjent understands that Section 37-9 (c) states that a determination shall be made as to trees which can reasonably be expected to survive the permitted activity, Merjent concurs with the City Landscape Architect's assessment. Merjent reviewed the International Society of Arboriculture's *A Review of the Effects of Soil Compaction and Amelioration Treatments on Landscape Trees* by Susan Day and Nina Bassuk (1994) and Michigan State University Extension's 2016 guidance on *Protect[ing] Tree Roots from Soil Compaction*. Because impacts to critical root zones can be hard to measure visually, above-ground, typically a conservative approach is taken when estimating critical root zone impacts. Additionally, impacts to critical root zones may not present themselves visually in tree growth and can only be measured using more advanced instruments not typically used in construction reviews. In Bassuk and Day's 1994 Article, they state that areas that are landscaped near new residential construction were typically found to be compacted to a soil bulk density that typically restricts root growth for many woody species.

During Merjent's on-site review, it was found that the remaining black locust (*Robinia pseudoacacia*) trees not associated with the driveway construction appeared to be growing normally. However, tree uptake of water (impacted by compaction), root growth, and overall oxygen availability to the tree cannot be measured visually. This may not directly kill a tree, but it may result in overall reduced efficiency of sequestering carbon dioxide into woody growth, among other primary functions of trees. Merjent understands the conservative approach to considering the impacts that these additional construction impacts may have had on the trees noted for encroachment.

Should you have any questions or concerns with this review, please contact me via email at [jason.demoss@merjent.com](mailto:jason.demoss@merjent.com) or via phone at (619) 944-3835.

Sincerely,

**Merjent, Inc.**



Jason DeMoss, PWS  
Environmental Consultant

Enclosures:

Figure 1 – City of Novi Woodlands Map  
Attachment A – Site Visit Photos

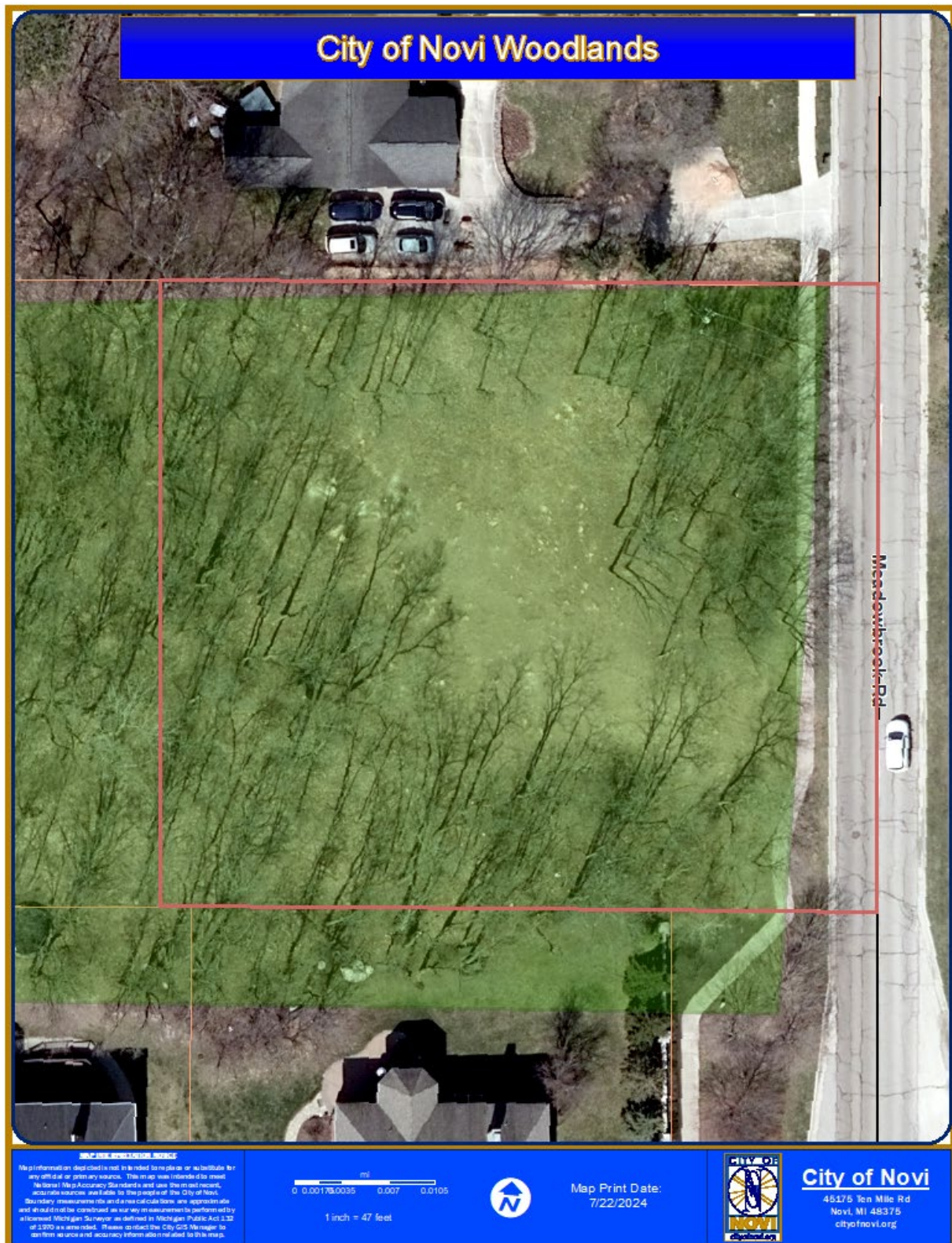
CC:

Barb McBeth, City of Novi, [bmcbeth@cityofnovi.org](mailto:bmcbeth@cityofnovi.org)  
Rick Meader, City of Novi, [rmeader@cityofnovi.org](mailto:rmeader@cityofnovi.org)



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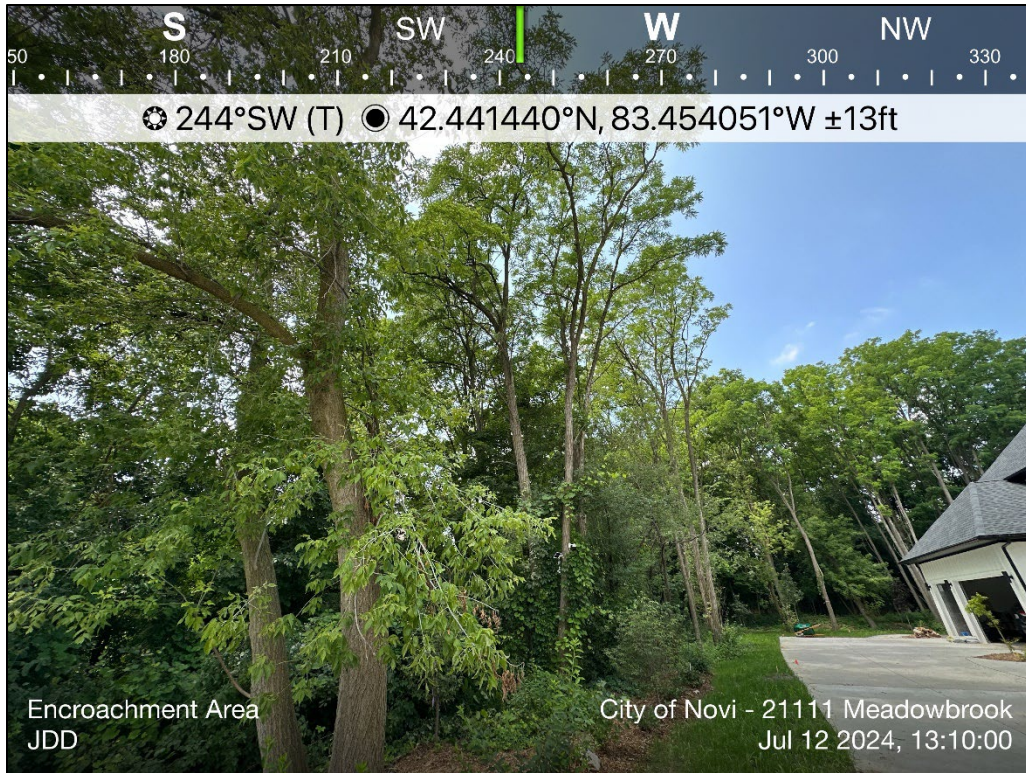
Robb Roos, Merjent, [robb.roos@merjent.com](mailto:robb.roos@merjent.com)  
Charles Boulard, City of Novi, [cboulard@cityofnovi.org](mailto:cboulard@cityofnovi.org)



**Figure 1. City of Novi Regulated Woodlands Map**  
Approximate site boundary is shown in Red.  
Approximate Regulated Woodland areas are shown in Green.

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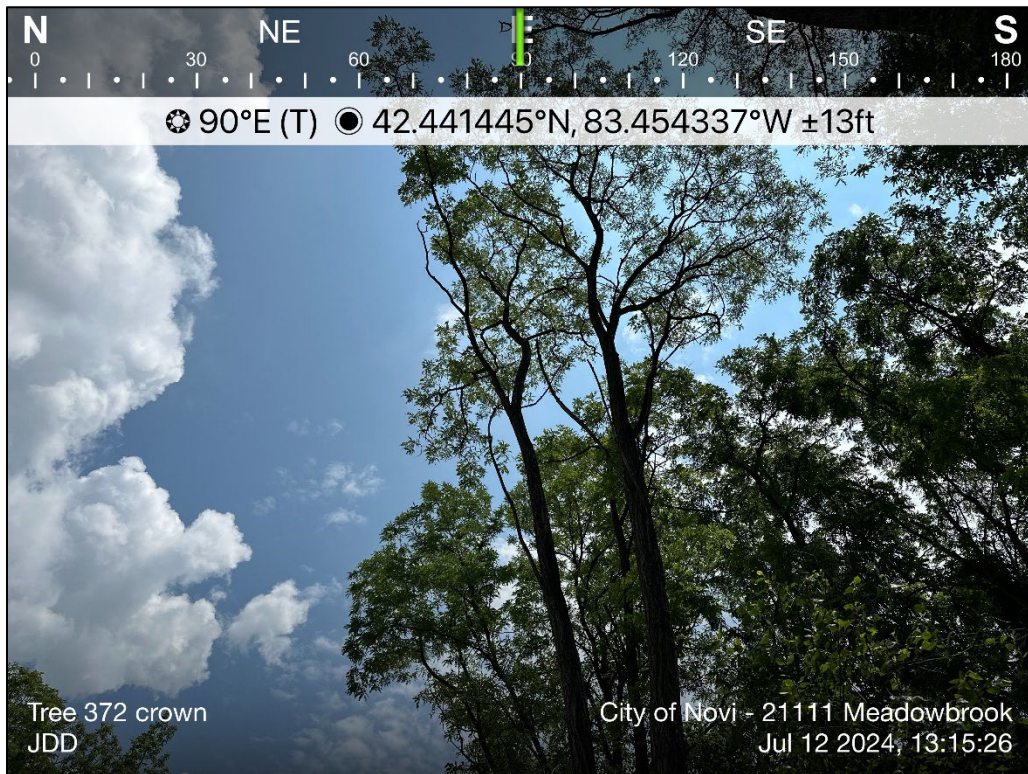
**Attachment A**  
**Site Visit Photos**



Southern driveway encroachment area. The dripline of the black locust trees can be seen almost directly above the constructed driveway.



Tree 313 with a measured DBH of ~14.55 inches.



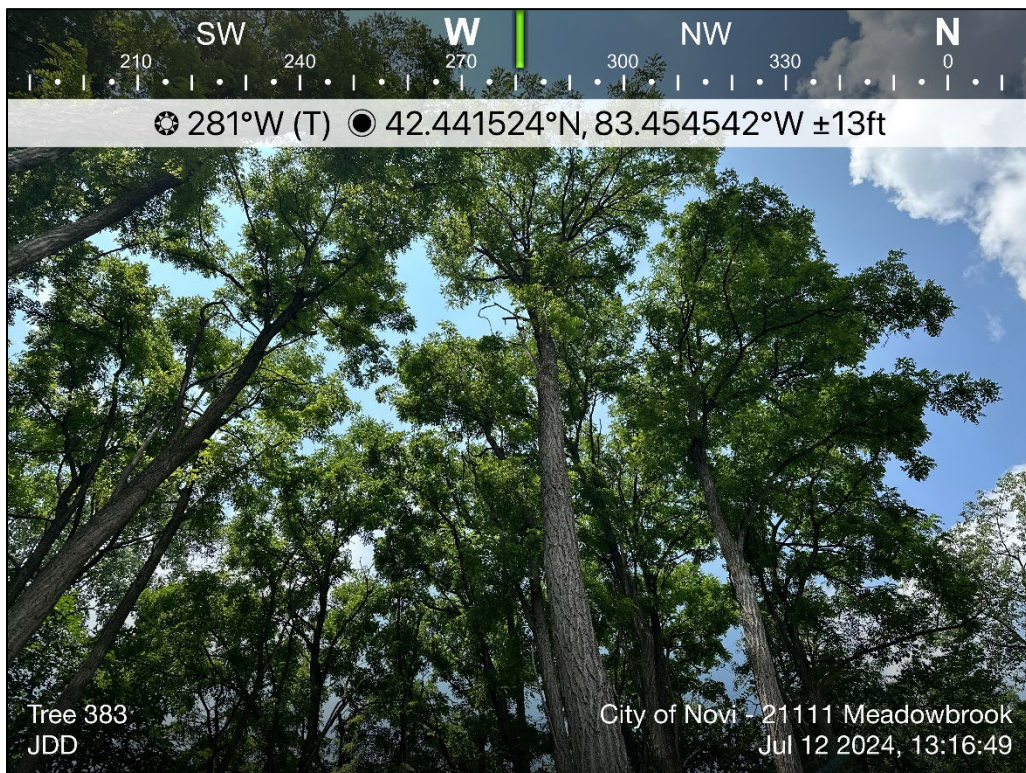
Overview of the crown of Tree 372.



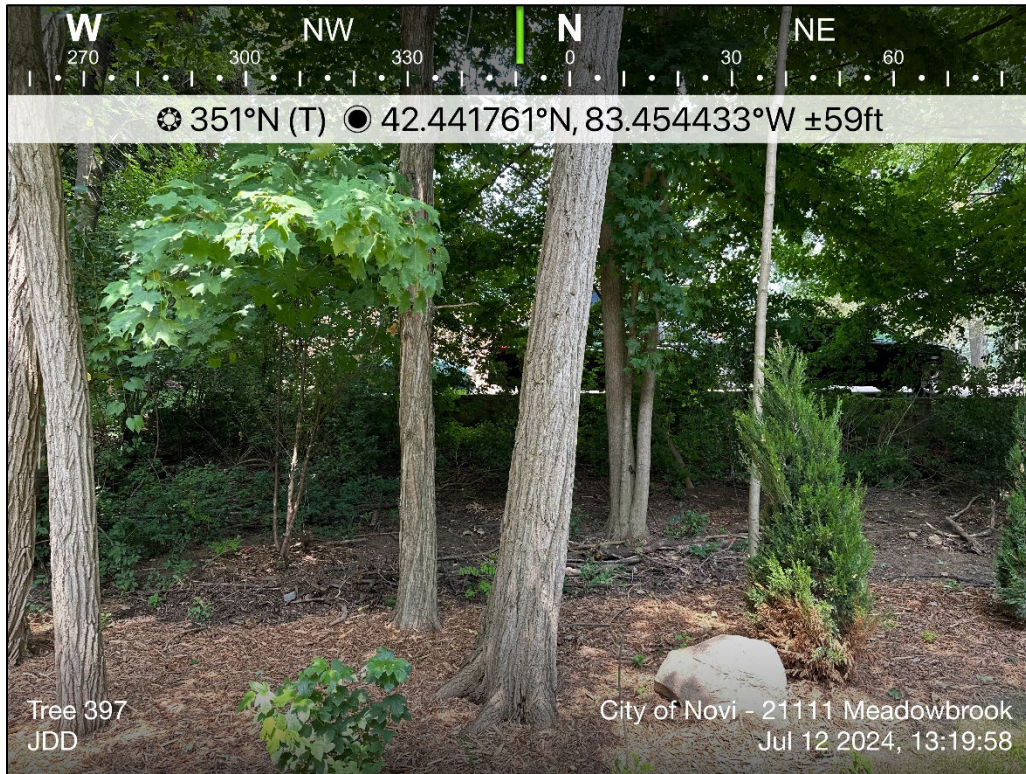
Tree 372 with a measured DBH of ~17.65 inches.



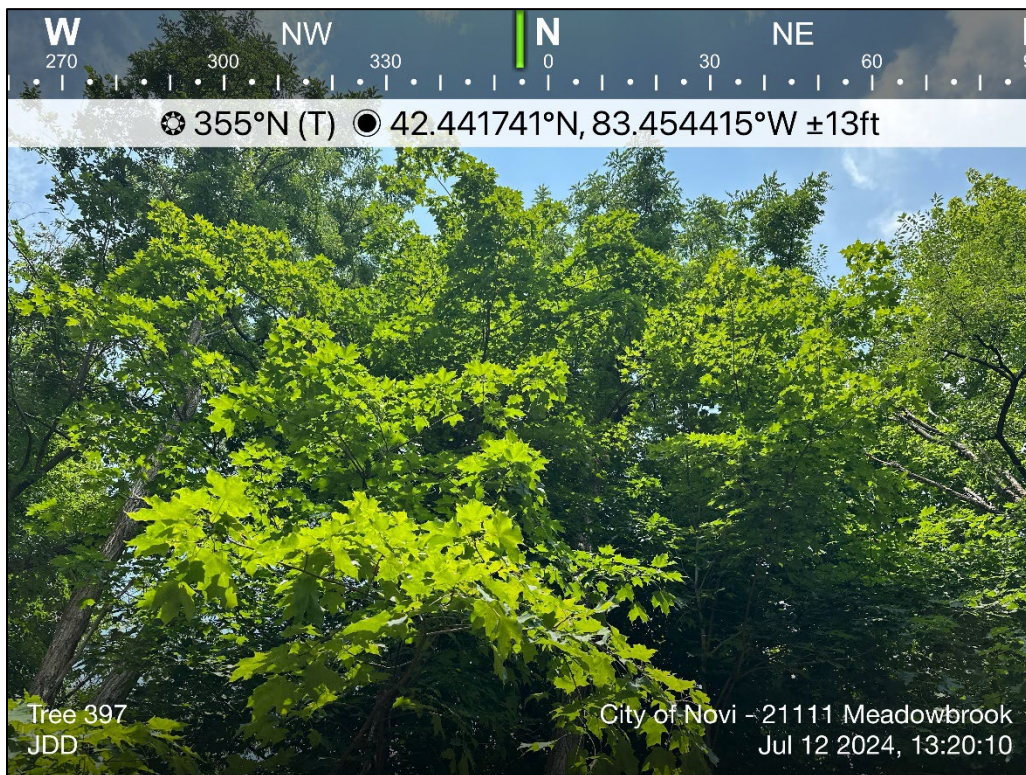
Western encroachment area showing Tree 383 with no machinery/soil present.



Crown of Tree 383.



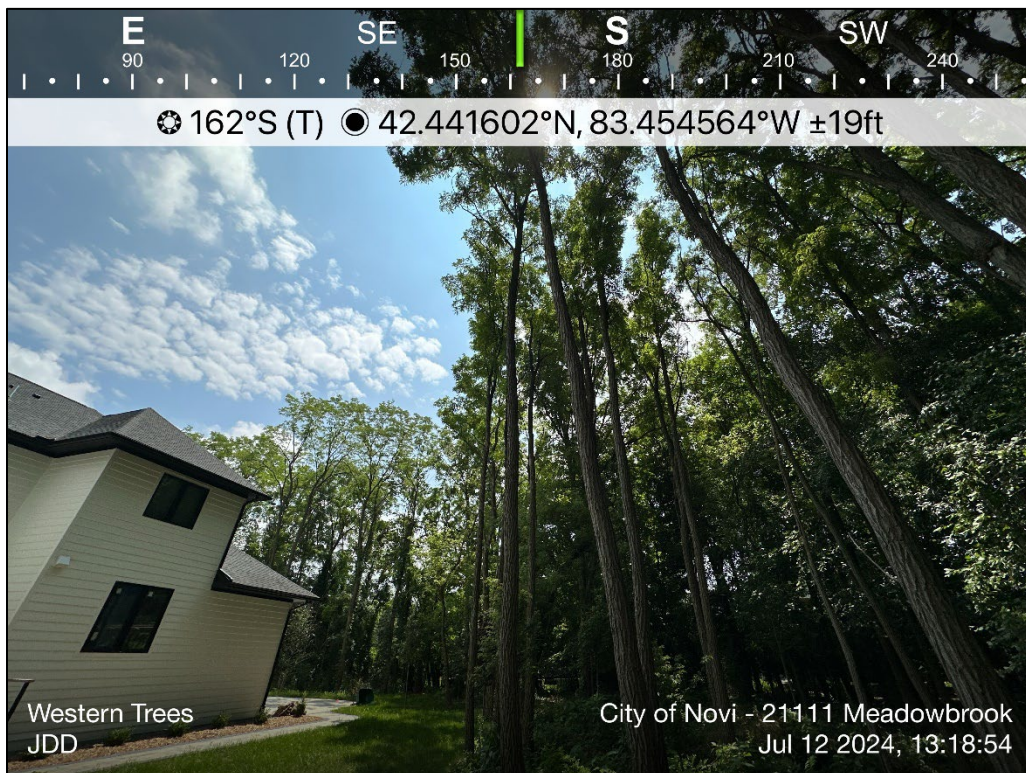
Overview of Tree 397.



Overview of the crown of Tree 397.



Overview of Tree 397 with a measured DBH of ~13.6 inches.



General overview of the western trees of the property.