



# **CITY COUNCIL**

## **REGULAR MEETING**

### **AGENDA**

**FEBRUARY 14, 2022**

**CONVENING AT 7:30 P.M.**

**Submitted By  
The City Manager**

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***NOTICE: Persons with disabilities needing accommodations for effective participation in this meeting should contact the City Clerk at (248) 524-3316 or via e-mail at [clerk@troymi.gov](mailto:clerk@troymi.gov) at least two working days in advance of the meeting. An attempt will be made to make reasonable accommodations.***

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500 West Big Beaver  
Troy, MI 48084  
troymi.gov

The Honorable Mayor and City Council Members

City of Troy  
500 West Big Beaver  
Troy, MI 48084

Dear Mayor and City Council Members:

In this packet, you will find the agenda for the City Council meeting. To help facilitate an informed discussion, the packet provides you with agenda items and additional details. The packet also contains recommended courses of action for your consideration and seeks to aid you in adopting sound policy decisions for the City of Troy.

This comprehensive agenda has been put together through the collaborative efforts of management and staff members. We have made all attempts to obtain accurate supporting information. It is the result of many meetings and much deliberation, and I would like to thank the staff for their efforts.

If you need any further information, staff is always available to provide more information and answer questions that may arise. You can contact me at [CityManager@troymi.gov](mailto:CityManager@troymi.gov) or 248.524.3330 with questions.

Respectfully,

Mark F. Miller,  
City Manager




## Chapter 14A – Elected and Appointed Persons’ Ethics Ordinance Section 14.3 Annual Training and Acknowledgement

We, the undersigned Members of Troy City Council, have reviewed *Chapter 14A – Elected and Appointed Persons’ Ethics Ordinance*, understand its contents, and agree to be bound by its provisions.

Signed this 8<sup>th</sup> day of November, 2021.

  
\_\_\_\_\_  
Mayor Ethan Baker

  
\_\_\_\_\_  
Council Member Edna Abraham

  
\_\_\_\_\_  
Council Member Theresa Brooks

  
\_\_\_\_\_  
Council Member Rebecca Chamberlain-Creanga

  
\_\_\_\_\_  
Mayor Pro Tem Ann Erickson Gault

  
\_\_\_\_\_  
Council Member David Hamilton

  
\_\_\_\_\_  
Council Member Ellen Hodorek





# CITY COUNCIL AGENDA

February 14, 2022 – 7:30 PM

City Council Chambers

500 W. Big Beaver Rd.

Troy, MI 48084

(248) 524-3316

View the Meeting Live at: [www.troymi.gov/webcast](http://www.troymi.gov/webcast)

or on Local Access Cable Channels

(WOW – Ch 10, Comcast – Ch 17, AT&T – Ch 99)

**INVOCATION: Rev. Ginger Luke from Beacon Unitarian Universalist Congregation 1**

**PLEDGE OF ALLEGIANCE: Cub Scout Pack 1705, Webelow/Arrow of Light Den from Hill Elementary School 1**

**A. CALL TO ORDER: 1**

**B. ROLL CALL: 1**

**C. CERTIFICATES OF RECOGNITION AND SPECIAL PRESENTATIONS: 1**

C-1 Proclamation to Max and Sophia Pollak for Organizing Holiday Food Drives to Feed the Needy (*Presented by: Mayor Ethan Baker*) 1

C-2 Update on Recent Oakland County Grant Received by Stage Nature Center and Troy Nature Society (*Presented by: Dave Lambert and Stage Nature Center Executive Director Carla Reeb*) 1

C-3 Proclamation to Celebrate Black History Month – February 2022 (*Presented by: Mayor Ethan Baker*) 2

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D-1 No Carryover Items 2

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**INVOCATION:** Rev. Ginger Luke from Beacon Unitarian Universalist Congregation

**PLEDGE OF ALLEGIANCE:** Cub Scout Pack 1705, Webelow/Arrow of Light Den from Hill Elementary School

**A. CALL TO ORDER:**

**B. ROLL CALL:**

- a) Mayor Ethan Baker
- Edna Abraham
- Theresa Brooks
- Rebecca A. Chamberlain-Creanga
- Ann Erickson Gault
- David Hamilton
- Ellen Hodorek

Excuse Absent Council Members:

Suggested Resolution

Resolution #2022-02-

Moved by

Seconded by

RESOLVED, That Troy City Council hereby **EXCUSES** the absence of \_\_\_\_\_ at the Regular City Council Meeting of February 14, 2022, due to \_\_\_\_\_.

Yes:

No:

**C. CERTIFICATES OF RECOGNITION AND SPECIAL PRESENTATIONS:**

**C-1** Proclamation to Max and Sophia Pollak for Organizing Holiday Food Drives to Feed the Needy (*Presented by: Mayor Ethan Baker*)

**C-2** Update on Recent Oakland County Grant Received by Stage Nature Center and Troy Nature Society (*Presented by: Dave Lambert and Stage Nature Center Executive Director Carla Reeb*)

**Vote on Resolution to Waive the Rules of Procedure for the City Council, Rule #8 Proclamations and Congratulatory Certificates**

Suggested Resolution

Resolution #2022-02-

Moved by

Seconded by

RESOLVED, That Troy City Council hereby **WAIVES** the Rules of Procedure for the City Council Rule #8 *Proclamations and Congratulatory Certificates* to approve and present a Proclamation to Celebrate Black History Month – February 2022 in the City of Troy on February 14, 2022.

Yes:

No:

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**C-3 Proclamation to Celebrate Black History Month – February 2022 (*Presented by: Mayor Ethan Baker*)**

**D. CARRYOVER ITEMS:**

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**D-1 No Carryover Items**

**E. PUBLIC HEARINGS:**

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**E-1 Preliminary Site Plan Review (File Number SP 2021-0020) – Proposed Adler Cove (One Family Residential Cluster), South Side of Long Lake, East of John R, Currently Zoned R-1C (One Family Residential) Zoning District (*Introduced by: Brent Savidant, Community Development Director*)**

Suggested Resolution

Resolution #2022-02-

Moved by

Seconded by

WHEREAS, The City is in receipt of a proposed preliminary site plan application for Adler Cove, a 20-unit detached single family condominium One Family Cluster development; and,

WHEREAS, The base density under the R-1C (One-Family Residential) District as determined by the submission of a parallel plan is 16 units; and,

WHEREAS, In exchange for 4 additional units above the base density established by the parallel plan, the applicant is providing 38% open space, for a total of 20 units; and,

WHEREAS, The cluster development better protects the site's natural resources than if the site were not developed as a cluster; and,

WHEREAS, The cluster development better protects the adjacent properties than if the site were not developed as a cluster; and,

WHEREAS, The cluster development is compatible with adjacent properties; and,

WHEREAS, The site can be adequately served with municipal water and sewer; and,

WHEREAS, The proposed cluster development was recommended for approval by the Planning Commission by an 8-0 vote;



THEREFORE, BE IT RESOLVED, That Troy City Council hereby **APPROVES** the proposed Adler Cove Site Condominium, 20-units/lots, located south side of Long Lake, east of John R, Section 13, currently zoned R-1C (One Family Residential) District, including providing regulatory flexibility for setbacks as per Section 10.04.E.5, as recommended by the Planning Commission.

Yes:

No:

## **F. PUBLIC COMMENT FOR ITEMS ON THE AGENDA FROM TROY RESIDENTS AND BUSINESSES:**

### **In accordance with the Rules of Procedure for the City Council:**

Any person not a member of the City Council may address the Council with recognition of the Chair, after clearly stating the nature of his/her inquiry or comment. **NOTE TO THE PUBLIC:** *City Council requests that if you do have a question or concern, to bring it to the attention of the appropriate department(s) whenever possible. If you feel that the matter has not been resolved satisfactorily, you are encouraged to bring it to the attention of the City Manager, and if still not resolved satisfactorily, to the Mayor and Council.*

- Petitioners of items that are included in the pre-printed agenda booklet shall be given a fifteen (15) minute presentation time that may be extended with the majority consent of City Council.
- Any member of the public, not a petitioner of an item, shall be allowed to speak for up to three (3) minutes to address any Public Hearing item.
- Any member of the public, not a petitioner of an item, does not have the right to engage in discussion or debate with City Council during the Public Comment portions of the meeting.
- All members of the public who wish to address the Council at a meeting shall be allowed to speak only if they have signed up to speak within thirty minutes before or within fifteen minutes after the meeting's start time. Signing up to speak requires each speaker provide his or her name. If the speaker is addressing an item(s) that appears on the pre-printed agenda, then the speaker shall also identify each such agenda item number(s) to be addressed.
- City Council may waive the requirements of this section by a consensus of the City Council.
- Agenda items that are related to topics where there is significant public input anticipated should initiate the scheduling of a special meeting for that specific purpose.

Prior to Public Comment, the Mayor may provide a verbal notification of the rules of decorum for City Council meetings or refer to the pre-printed agenda booklet, which will include the following language, as approved by City Council:

Please direct your comments to the City Council as a whole rather than to any individual. Please do not use expletives or make derogatory or disparaging comments about any individual or group. If you do, there may be immediate consequences, including being muted and having your comments omitted from any re-broadcast of the meeting. Please abide by these rules in order to minimize the possibility of disrupting the meeting.

**G. CITY COUNCIL/CITY ADMINISTRATION RESPONSE/REPLY TO PUBLIC COMMENT FOR ITEMS ON THE AGENDA FROM TROY RESIDENTS AND BUSINESSES:**

**H. POSTPONED ITEMS:**

**H-1** No Postponed Items

**I. REGULAR BUSINESS:**

**I-1** Board and Committee Appointments: a) Mayoral Appointments – None; b) City Council Appointments – Election Commission

a) Mayoral Appointments: None

b) City Council Appointments:

Suggested Resolution

Resolution #2022-02-

Moved by

Seconded by

RESOLVED, That Troy City Council hereby **APPOINTS** the following nominated person(s) to serve on the Boards and Committees as indicated:

**Election Commission**

Appointed by Council

2 Regular Members and 1 Charter Member

1 Year Term

**Nominations to the Election Commission:**

**Term Expires: 1/31/2023**

**Stephen Sadlier**

**Democrat**

Term currently held by: Stephen Sadlier

**Term Expires: 1/31/2023**

**Ray Watts**

**Republican**

Term currently held by: Ray Watts

Yes:

No:

**I-2** Board and Committee Nominations: a) Mayoral Nominations – Downtown Development Authority, Global Troy Advisory Committee, Local Development Finance Authority, Planning Commission; b) City Council Nominations – Employees' Retirement System Board of Trustees/Retiree Health Care Benefits Plan and Trust, Historic District Commission, Liquor Advisory Committee, Southeast Michigan Council of Governments (SEMCOG), Traffic Committee

a) **Mayoral Nominations:**Suggested Resolution

Resolution #2022-02-

Moved by

Seconded by

RESOLVED, That the Mayor of the City of Troy hereby **FORWARDS** the following nominated person(s) to serve on the Boards and Committees as indicated to the next Regular City Council Meeting for action:

**Downtown Development Authority**

Appointed by Mayor

13 Regular Members

4 Year Term

**Current Members:**

Last Name	First Name	App Res Expire	Appointment Expire	Notes 1	Notes 2
Baker	Ethan		11/13/2023	At Large	City Council exp. 11/13/23
Blair	Timothy	6/17/2017	9/30/2023	In District	
Keisling	Laurence	9/11/2022	9/30/2024	At Large	
Kiriluk	Alan	9/29/2022	9/30/2024	In District	
Knollenberg	Martin	6/28/2021	9/30/2023	In District	
Koza	Kenny	9/18/2019	9/30/2025	In District	
MacLeish	Daniel	6/28/2023	9/30/2025	In District	
Reschke	Ernest	10/4/2020	9/30/2022	At Large	
Schroeder	Douglas	9/10/2020	9/30/2022	At Large	
Stone	David	3/11/2023	9/30/2023	In District	
Tomcsik-Husak	Tara	9/22/2022	3/30/2024	In District	
Vacancy			9/30/2022	At Large	Ward Randol Jr. resigned 2/1/21
Vacancy			9/30/2024	In District	Cheryl Bush resigned 9/22/21

**Nominations to the Downtown Development Authority:**
**Unexpired Term Expiring:**  
**9/30/2022**

Term currently held by: Vacancy–W. Randol Jr. resigned 2/1/21

**Unexpired Term Expiring:**  
**9/30/2024**

Term currently held by: Vacancy-Cheryl Bush resigned 9/22/21

**Interested Applicants:**

Last Name	First Name	App Resume Expire	Notes 1	Notes 2
Beyer	Joseph	10/26/2022	In District	
Forster	Jeffrey	3/23/2023	At Large	Personnel Bd exp 4/30/24
Goetz	John	3/4/2023	At Large	
Kornacki	Rosemary	12/14/2022	At Large	Brownfield Redev Auth exp 4/30/23
McGerty	Ryan	2/25/2022	At Large	
Patel	Hitesh	3/23/2023	At Large	
Schick	Michael	12/22/2022	At Large	
Sekhri	Suneel	11/5/2023	At Large	
Sekhri	Arun	9/24/2022	At Large	
Vassallo	Joseph	3/4/2023	At Large	Brownfield Redev Auth exp 4/30/24

**Global Troy Advisory Committee**

Appointed by Mayor  
12 Regular Members  
3 Year Term

**Current Members:**

Last Name	First Name	App Res Expire	Appointment Expire	Notes 1
Baker	Ethan			Council Member
Bica-Grodsky	Lisa	9/23/2022	10/30/2023	
Burrus	MiVida	7/15/2018	10/30/2022	
Chezick	Edward		10/30/2022	
Fakhoury	Awni	4/28/2018	10/30/2024	Requests Reappointment
Liu	Allison	10/1/2022	7/31/2022	Student
Mohideen	Syeda	8/24/2020	10/30/2024	Requests Reappointment
Natcheva	Daniela	11/8/2021	10/30/2022	
Noguez-Ortiz	Carolina	12/19/2019	10/30/2022	Brownfield Redev Auth exp 4/30/23
Sekhri	Suneel	12/20/2021	10/30/2024	
Swaminathan	Sharanya		7/31/2022	Student
Vacancy			10/30/2023	Rebecca Chamberlain-Creanga resigned 2/26/20
Vacancy			10/30/2023	Cathleen Francois requested No Reappointment

Zhou	Yudong	10/23/2021	10/30/2022	
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**Nominations to the Global Troy Advisory Authority:****Unexpired Term Expiring:  
10/30/2023**

Term currently held by: Vacancy–Rebecca Chamberlain-  
Creanga resigned 2/26/20

**Term Expires: 10/30/2023**

Term currently held by: Vacancy – Cathleen Francois - No  
Reappointment

**Interested Applicants:**

Last Name	First Name	App Resume Expire	Notes 1
Cicchini	Philippe	4/13/2023	
Faiz	Iqbal	12/4/2022	
MacDonell	Sharon	4/13/2023	
Marrero-Laureano	Alexander	10/26/2022	
McGee	Timothy	3/2/2023	
Patel	Hitesh	2/2/2023	
Rahman	Mahfuzur	9/24/2022	
Swaminathan	Abiramasundari	3/6/2022	
Sweidan	Rami	3/2/2023	

**Local Development Finance Authority (LDFA)**

Appointed by Mayor  
5 Regular Members  
Staggered 4 Year Term

**Current Members:**

Last Name	First Name	App Res Expire	Appointment Expire	Notes 1	Notes 2
Baker	Ethan		11/13/2023	Alternate; City Council	City Council exp. 11/13/23; DDA; GTAC, LDFA
Beltramini	Robin	7/17/2021	6/30/2022	Resident Member	Charter Rev Comm exp 4/30/22
Hodorek	Ellen		City Council Term	Alternate; City Council	City Council exp 11/10/2025
Starks	Louis			Oakland County Designee	

Bachert	Sandra		6/30/2023	Resident Member	Paul V. Hoef resigned 4/27/21
Vacancy			6/30/2024	Resident Member	David Shield's term exp 6/30/16 - No Reappointment
Vacancy			6/30/2024	Resident Member	John Sharp's unexpired term
Vacancy			6/30/2023	Resident Member	Nickolas Vitale resigned 7/17/21

**Nominations to the Local Development Finance Authority (LDFA):****Unexpired Term Expiring:  
6/30/2023****Resident Member**

Term currently held by: Vacant – N. Vitale resigned 7/17/21

**Unexpired Term Expiring:  
6/30/2024****Resident Member**

Term currently held by: Vacant– D. Shields–No Reappointment

**Unexpired Term Expiring:  
6/30/2024****Resident Member**

Term currently held by: Vacant – J. Sharp resigned 11/1/19

**Interested Applicants:**

Last Name	First Name	App Resume Expire	Notes 1
Rahman	Mahfuzur	9/24/2022	
Schick	Michael	12/22/2022	
Sweidan	Rami	4/28/2022	Brownfield Redev Auth exp 4/30/23
Vassallo	Joseph	3/4/2023	Brownfield Redev Auth exp 4/30/24

**Planning Commission**

Appointed by Mayor  
9 Regular Members  
3 Year Term

**Current Members:**

Last Name	First Name	App Res Expire	Appointment Expire	Notes 1
Faison	Carlton	10/5/2022	12/31/2023	
Hutson	Michael	9/30/2023	12/31/2024	Sust. Design Rev. Comm-Ad-Hoc
Krent	Thomas	10/18/2021	12/31/2022	
Lambert	Dave	9/30/2023	12/31/2024	
Malalahalli	Jayalakshmi	11/20/2021	12/31/2023	

Perakis	Marianna	12/16/2021	12/31/2022	
Rahman	Sadek	10/23/2021	12/31/2022	
Rauch	Gerald	12/4/2021	12/31/2023	Resigned 1/17/2022
Tagle	John	9/30/2023	12/31/2024	

**Nominations to the Planning Commission:****Term Expires: 12/31/2023**

Term currently held by: Gerald (Jerry) Rauch

**Interested Applicants:**

Last Name	First Name	App Resume Expire	Notes 1
Abdullah	Nehar	2/3/2023	
Aggarwal	Deepti	6/10/2023	Student - Graduates 2023
Anderson	David	9/18/2022	
Bertelsen	David	3/2/2022	
Goetz	John	3/4/2023	
Kenkre	Mahendra	12/2/2022	
Kornacki	Rosemary	12/14/2022	Brownfield Redev Auth exp 4/30/2023
Liu	Allison	10/1/2022	Student - Graduates 2022
Premo	John	1/2/2022	
Rose	Justin Paul	11/5/2023	
Sahu	Akshitha	9/28/2022	Student - Graduates 2023
Schick	Michael	12/22/2022	
Sekhri	Arun	9/24/2022	
Shah	Aanya	11/30/2023	Student - Graduates 2024

Yes:

No:

**b) City Council Nominations:****Suggested Resolution**

Resolution #2022-02-

Moved by

Seconded by

RESOLVED, That Troy City Council hereby **FORWARDS** the following nominated person(s) to serve on the Boards and Committees as indicated to the next Regular City Council Meeting for action:

**Employees Retirement System Board of Trustees / Retiree Health Care Benefits Plan and Trust**

Appointed by Council  
7 Regular Members and 2 Ordinance Member  
3 Year Term

**Current Members:**

Last Name	First Name	App Res Expire	Appointment Expire	Notes 1	Notes 3
Bovensiep	Kurt		12/31/2024	DC-Employee Rep.-Elected	
Brooks	Theresa		Council Term	City Council Member	
Calice	Mark	8/29/2020	12/31/2021	Council Appointed Citizen	NO Reappointment
Dungjen	Peter		12/31/2023	DB Employee Rep.-Elected	
Gordon II	Thomas	9/17/2015	12/31/2022	DB Employee Rep.-Elected	
Maleszyk	Robert			Chapter 10 (DC)	
Miller	Mark			Chapter 10 (DC)	
Owczarzak	Mark	11/14/2021	12/31/2022	City of Troy Retiree (DB)	

**Nominations to the Employees Retirement System Board of Trustees / Retiree Health Care Benefits Plan and Trust:**

**Term Expires: 12/31/2024**

Term currently held by: Mark Calice

**Interested Applicants:**

Last Name	First Name	App Resume Expire	Notes 1
Baughman	Deborah	4/28/2022	
Faiz	Iqbal	12/4/2022	
Jennings	Janet	8/12/2022	

**Historic District Commission**

Appointed by Council  
7 Regular Members  
3 Year Term

**Current Members:**



Last Name	First Name	App Res Expire	Appointment Expire	Notes 1	Notes 3
Adams	John Howard	3/8/2023	5/15/2024		
Chambers	Barbara	12/5/2021	3/1/2023	HC Recommendation	
Chanda	Hirak	3/22/2023	5/15/2024		
Dicker	Susanne Forbes	8/15/2022	3/1/2023		
McGee	Timothy S	3/23/2020	5/15/2024		
Petrulis	Al	12/16/2021	3/1/2023	ACAB exp 9/30/2024; Traffic Comm. exp 1/31/2023; HDC exp 3/1/2023	
Voigt	W. Kent	11/18/2023	3/1/2022	HC Recommendation	Requests Reappointment

**Nominations to the Historic District Commission:****Term Expires: 3/1/2025**

Term currently held by: W. Kent Voigt

**Interested Applicants:**

Last Name	First Name	App Resume Expire	Notes 1
Cicchini	Philippe	4/13/2023	
Jennings	Janet	8/12/2022	
MacDonell	Sharon	4/13/2023	

**Liquor Advisory Committee**

Appointed by Council

7 Regular Members

3 Year Term

**Current Members:**

Last Name	First Name	App Res Expire	Appointment Expire	Notes 2	Notes 3
Ashland	David	12/14/2022	1/31/2024		
Comiskey	Ann	2/5/2020	1/31/2024		
Ehlert	Max	1/8/2023	1/31/2024		
Giorgi	Lynn				
Gorcyca	David	12/4/2021	1/31/2023		
Haight	David	7/17/2022	1/31/2022	Personnel Bd. exp 4/30/2023	

Jones	Kelly	12/11/2021	1/31/2023		
Kaltsounis	Andrew	1/14/2021	1/31/2022		

**Nominations to the Liquor Advisory Committee:****Term Expires: 1/31/2025**

Term currently held by: David Haight

**Term Expires: 1/31/2025**

Term currently held by: Andrew Kaltsounis

**Interested Applicants:**

Last Name	First Name	App Resume Expire	Notes 1
Gunn	Mark	3/4/2023	

**Southeastern Michigan Council of Governments (SEMCOG)**

Appointed by Council

1 Regular Member and 1 Alternate Members

Appointed Every Odd-Year Election

**Nominations to the Southeastern Michigan Council of Governments (SEMCOG):****Term Expires: 11/13/2023****Alternate**

Term currently held by: Glenn Lapin

**Traffic Committee**

Appointed by Council

7 Regular Members

3 Year Term

**Current Members:**

Last Name	First Name	App Res Expire	Appointment Expire	Notes 1	Notes 3
Huotari	William		Ex-Officio Member		
Kilmer	Richard	1/9/2019	1/31/2023		
Koralewski	Tyler	11/12/2023	7/31/2022	Student	
Nastasi	Frank		Ex-Officio Member		
Nurak	Cindy	1/16/2021	1/31/2022		Requests Reappointment
Petrulis	Al	12/16/2021	1/31/2023		
Riesterer	R. Chuck		Ex-Officio Member		

Sivaraman	Sunil	12/22/2020	1/31/2022		Requests Reappointment
Swaminathan	Abi	3/6/2022	1/31/2024		
Wilsher	Cynthia	1/18/2020	1/31/2024		
Ziegenfelder	Peter	12/4/2021	1/31/2023		

**Nominations to the Traffic Committee:****Term Expires: 1/31/2025**

Term currently held by: Cindy Nurak

**Term Expires: 1/31/2025**

Term currently held by: Sunil Sivaraman

**Interested Applicants:**

Last Name	First Name	App Resume Expire	Notes 1
Abdullah	Nehar	2/3/2023	
Aggarwal	Deepti	6/10/2023	Student – Graduates 2023
Chanda	Hirak	12/30/2022	Hist. Dist. Comm. exp 5/15/2024
Gill	Jasper	1/10/2024	
MacDonell	Sharon	4/13/2023	
Rose	Justin	11/5/2023	
Sahu	Akshitha	9/28/2022	Student - Graduates 2023
Shah	Aanya	11/30/2023	Student - Graduates 2024

Yes:

No:

**I-3 No Closed Session Requested****I-4 Contract Extension – Concrete Slab Replacement (*Introduced by: Kurt Bovensiep, Public Works Director*)**Suggested Resolution

Resolution #2022-02-

Moved by

Seconded by

RESOLVED, That in the best interest of the City, Troy City Council hereby **AWARDS** a one (1) year contract extension to *DiLisio Construction Inc., of Clinton Township, MI*, that will include a 3% increase to its bid totals as detailed in the bid tabulation from the contract approved by City Council in 2019 (Resolution #2019-06-062); a copy of which shall be **ATTACHED** to the original Minutes of this meeting.

BE IT FINALLY RESOLVED, That the award is **CONTINGENT** upon the contractor's submission of properly executed bid documents including insurance certificates, and all other specified requirements.

Yes:

No:

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**I-5 Bid Waiver – Additional Election Equipment for New Voting Precincts (*Introduced by: Aileen Dickson, City Clerk*)**

Suggested Resolution

Resolution #2022-02-

Moved by

Seconded by

WHEREAS, The City Clerk's Office will be proposing amendments to the City of Troy Precinct Map at the Regular City Council Meeting of February 28, 2022; and,

WHEREAS, The amendments to the Precinct Map include the addition of 6 new voting precincts and 2 new polling locations. These new voting precincts will need to be equipped with the appropriate voting machines and supplies in order to be operational by the next election, which is August 2, 2022. Due to concerns with supply chain demands and delays in delivery times, City Management is requesting the approval of this purchase at the February 14, 2022 Regular City Council Meeting; and,

WHEREAS, In 2017, Troy City Council authorized the purchase of a new voting system from *Hart Intercivic, Inc. of Austin, TX*, after this vendor was chosen by the Oakland County Clerk as the supplier of the voting systems for all of Oakland County. Troy City Council also authorized additional election equipment purchases from *Hart Intercivic, Inc.* in 2019 and 2020;

THEREFORE, BE IT RESOLVED, That Troy City Council **DEEMS** it is in the best interest of the City to **WAIVE** the competitive bid process, and **AUTHORIZES** the City of Troy to **AWARD** a contract to *Hart Intercivic, Inc. of Austin TX*, for the purchase of six (6) additional Verity Scan devices for an estimated cost of \$33,000, and three (3) additional Verity Touch Writer devices for an estimated cost of \$13,500, the total cost for all equipment being \$46,500, which includes a 5-year warranty. Funds budgeted in the City Clerk-Elections-Capital Fund.

BE IT FINALLY RESOLVED, That Troy City Council hereby **APPROVES** the purchase of annual service and maintenance for years six through ten for the six (6) Verity Scan devices and three (3) Verity Touch Writer devices for a total cost of \$24,645, as detailed in Quote #9585 which is attached. Funds will be budgeted in the City Clerk-Elections budget in future years.

Yes:

No:

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**I-6 2022 City Council Meeting Schedule (*Introduced by: Robert J. Bruner, Assistant City Manager*)**

Suggested Resolution

Resolution #2022-02-  
Moved by  
Seconded by

RESOLVED, That Troy City Council **SCHEDULES** a Special Meeting for a Neighborhood Node Walk & Talk at the Troy Community Center at 4:00 PM on:

Wednesday, March 9, 2022  
Thursday, March 10, 2022  
Wednesday, March 16, 2022

BE IT FURTHER RESOLVED, That Troy City Council **SCHEDULES** a Special Meeting for the 2022 City of Troy Advance at the Troy Community Center at 8:00 AM on:

Saturday, November 19, 2022  
Saturday, December 3, 2022  
Saturday, December 10, 2022

BE IT FURTHER RESOLVED, That Troy City Council **MAY RESCHEDULE** and/or **SCHEDULE** additional Special Meetings in accordance with the City Charter and Michigan Open Meetings Act.

Yes:  
No:

## **J. CONSENT AGENDA:**

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### **J-1a Approval of “J” Items NOT Removed for Discussion**

Suggested Resolution  
Resolution #2022-02-  
Moved by  
Seconded by

RESOLVED, That Troy City Council hereby **APPROVES** all items on the Consent Agenda as presented with the exception of Item(s) \_\_\_\_\_, which shall be **CONSIDERED** after Consent Agenda (J) items, as printed.

Yes:  
No:

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### **J-1b Address of “J” Items Removed for Discussion by City Council**

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### **J-2 Approval of City Council Minutes**

Suggested Resolution  
Resolution #2022-02-

RESOLVED, That Troy City Council hereby **APPROVES** the following Minutes as submitted:

- a) City Council Minutes-Draft – January 24, 2022

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**J-3 Proposed City of Troy Proclamations: None Submitted**

Suggested Resolution  
Resolution #2022-02-

- a) Service Commendation for Economic Development Specialist Glenn Lapin

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**J-4 Standard Purchasing Resolutions:**

- a) **Standard Purchasing Resolution 2: Award to Low Bidder Meeting Specifications – sUAS/Drone with Camera – Police Department**

Suggested Resolution  
Resolution #2022-02-

RESOLVED, That Troy City Council hereby **AWARDS** a contract to the low bidder meeting specifications *NOAR Technologies of Clawson, MI*, for the purchase of a DJI Matrice 300 RTK with Zenmuse H20T camera for an estimated total cost of \$27,240.30 at the unit prices contained in the bid tabulation opened January 20, 2022, a copy of which shall be **ATTACHED** to the original Minutes of this meeting.

BE IT FURTHER RESOLVED, That the award is **CONTINGENT** upon contractor's submission of properly executed contract documents, including insurance certificates and all other specified requirements.

- b) **Standard Purchasing Resolution 2: Sole Bidder Meeting Specifications – Vehicle Graphic Materials**

Suggested Resolution  
Resolution #2022-02-

RESOLVED, That Troy City Council hereby **AWARDS** a two (2) year contract to provide and/or install Vehicle Graphic Materials with an option to renew for two (2) additional years to the sole bidder; *Majik Graphics, Inc. of Clinton Township, MI*, for an estimated total of \$44,999.00 not to exceed budgetary limitations at unit prices contained in the bid tabulation opened January 20, 2022, a copy of which shall be **ATTACHED** to the original Minutes of this meeting; contract to expire December 31, 2025.

BE IT FURTHER RESOLVED, That the award is **CONTINGENT** upon the contractor's submission of properly executed bid documents, including insurance certificates and all other specified requirements.

- c) **Standard Purchasing Resolution 2: Award to Low Bidder Meeting Specifications - Fire Hose and Ground Ladder Testing**

Suggested Resolution  
Resolution #2022-02-

RESOLVED, That Troy City Council hereby **AWARDS** a two (2) year contract with an option to renew for one (1) additional year to the low bidder meeting specifications, *Fire Catt, LLC of Troy, MI*, to provide annual fire hose and ground ladder testing services for an estimated total cost of \$17,600 in year 2022 and \$21,695 in year 2023 at the unit prices contained in the bid tabulation opened January 27, 2022, a copy of which shall be **ATTACHED** to the original Minutes of this meeting; contract to expire December 31, 2024.

BE IT FURTHER RESOLVED, That the award is **CONTINGENT** upon the contractor's submission of properly executed bid and proposal documents, including insurance certificates and all other specified requirements.

**d) Standard Purchasing Resolution 5: Approval to Expend Budgeted Funds – Wagon Shop Repair Design and Construction Documents**

Suggested Resolution  
Resolution #2022-02-

RESOLVED, That Troy City Council hereby **APPROVES** expending budgeted capital funds to *OHM Advisors of Livonia, MI*, for the Wagon Shop Repair Design and Construction Documents for a total estimated cost of \$17,000 not to exceed budgetary limitations.

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**J-5 Cost Participation Agreement for Road Work on Livernois, Long Lake to South Boulevard**

Suggested Resolution  
Resolution #2022-02-

RESOLVED, That Troy City Council hereby **APPROVES** the Cost Participation Agreement between the City of Troy and the Board of County Road Commissioners for Oakland County for Road Work on Livernois Road, Long Lake Road to South Boulevard at an estimated cost to the City of Troy of \$91,667, and the Mayor and City Clerk are **AUTHORIZED TO EXECUTE** the agreement; a copy of which shall be **ATTACHED** to the original Minutes of this meeting.

RESOLVED, That funds for Troy's share of the work are included in the proposed 2023 Major Roads Fund, Account # 401.447.479.7989.15.105.6.

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**J-6 Request for Acceptance of Two Permanent Easements from GFA Development, Inc., Sidwell #88-20-25-351-072 and -073**

Suggested Resolution  
Resolution #2022-02-

RESOLVED, That Troy City Council hereby **ACCEPTS** two permanent easements for storm sewers and surface drainage from GFA Development, Inc., owner of the properties having Sidwell #88-20-25-351-072 and -073.

BE IT FURTHER RESOLVED, That the City Clerk is hereby **DIRECTED** to **RECORD** the permanent easements with Oakland County Register of Deeds, copies of which shall be **ATTACHED** to the original Minutes of this meeting.

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**J-7 Request for Acceptance of a Permanent Easement from Meelad and Mirvat Hannawa, Sidwell #88-20-25-351-074****Suggested Resolution**  
**Resolution #2022-02-**

RESOLVED, That Troy City Council hereby **ACCEPTS** a permanent easement for storm sewers and surface drainage from Meelad and Mirvat Hannawa, owners of the property having Sidwell #88-20-25-351-074.

BE IT FURTHER RESOLVED, That the City Clerk is hereby **DIRECTED** to **RECORD** the permanent easement with Oakland County Register of Deeds, a copy of which shall be **ATTACHED** to the original Minutes of this meeting.

**K. MEMORANDUMS AND FUTURE COUNCIL AGENDA ITEMS:**

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**K-1 Announcement of Public Hearings: None Submitted**

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**K-2 Memorandums (Items submitted to City Council that may require consideration at some future point in time): None Submitted****L. PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA FROM TROY RESIDENTS AND BUSINESSES:****M. CITY COUNCIL/CITY ADMINISTRATION RESPONSE/REPLY TO PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA FROM TROY RESIDENTS AND BUSINESSES:****N. COUNCIL REFERRALS:**

Items Advanced to the City Manager by the Mayor and City Council Members for Placement on the Agenda

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**N-1 No Council Referrals****O. REPORTS:**

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**O-1 Minutes – Boards and Committees:**

- a) Planning Commission-Final – January 11, 2022
- b) Planning Commission-Final – January 25, 2022

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**O-2 Department Reports:**

- a) Federal Funding for Rochester Road, Barclay to Trinway
- b) Verizon Small Cell Updates
- c) Interim Financial Report – 2<sup>nd</sup> Quarter For The Three Months Ended December 31, 2021
- d) Fiscal Year 2022-2023 Budget Proposals



**O-3 Letters of Appreciation: None Submitted**

- a) To DPW Staff from Paul Tennies Regarding Watermain Repairs
- b) To Assessing Staff from Troy Resident Forwarded by Mayor Baker

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**O-4 Proposed Proclamations/Resolutions from Other Organizations: None Submitted**

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**O-5 Notice of Hearing for the Electric Customers of DTE Electric Company Case No. U-20836**

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**P. COUNCIL COMMENTS:**

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**P-1 No Council Comments**

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**Q. PUBLIC COMMENT FOR ITEMS ON OR NOT ON THE AGENDA FROM MEMBERS OF THE PUBLIC OUTSIDE OF TROY (NOT RESIDENTS OF TROY AND NOT FROM TROY BUSINESSES):**

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**R. CLOSED SESSION**

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**R-1 No Closed Session**

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**S. ADJOURNMENT:**

Respectfully submitted,



Mark F. Miller  
City Manager

**2022 SCHEDULED SPECIAL CITY COUNCIL MEETINGS:**

February 28, 2022 ..... City Council Rules of Procedure  
March 23, 2022 ..... Personnel Evaluations  
April 4, 2022 ..... Special Budget Study Meeting  
April 6, 2022 ..... Special Budget Study Meeting

**2022 SCHEDULED REGULAR CITY COUNCIL MEETINGS:**

February 28, 2022 ..... Regular Meeting  
March 14, 2022 ..... Regular Meeting  
March 21, 2022 ..... Regular Meeting  
April 11, 2022 ..... Regular Meeting  
April 25, 2022 ..... Regular Meeting  
May 9, 2022 ..... Regular Meeting  
May 23, 2022 ..... Regular Meeting  
June 13, 2022 ..... Regular Meeting  
June 27, 2022 ..... Regular Meeting  
July 11, 2022 ..... Regular Meeting  
July 25, 2022 ..... Regular Meeting  
August 15, 2022 ..... Regular Meeting  
August 22, 2022 ..... Regular Meeting  
September 12, 2022 ..... Regular Meeting  
September 19, 2022 ..... Regular Meeting  
October 3, 2022 ..... Regular Meeting  
October 24, 2022 ..... Regular Meeting  
November 14, 2022 ..... Regular Meeting  
November 21, 2022 ..... Regular Meeting  
December 5, 2022 ..... Regular Meeting  
December 12, 2022 ..... Regular Meeting

**PROCLAMATION CELEBRATING  
MAX AND SOPHIA POLLAK  
FOR ORGANIZING HOLIDAY FOOD DRIVES TO FEED THE NEEDY**

**WHEREAS**, Troy residents **Max** (8 years old) and **Sophia Pollak** (10 years old) are third and fifth graders at Hamilton Elementary School and they were truly in the Christmas spirit in 2020 and 2021; and

**WHEREAS**, In 2020, **Max and Sophia** when traveling throughout the Metro Detroit area saw people on the side of the road that did not have food and were homeless, and they wanted to find a way to help them; and

**WHEREAS**, **Max and Sophia** had the idea to start collecting food for the homeless so they started by making flyers and distributing them throughout their neighborhood in December 2020. **Mom Aimee and Dad Todd** agreed to have their home serve as the drop-off location with a collection box on their front porch. In 2020 the brother and sister team collected 2000 pounds of food that they donated to Neighborhood House in Rochester; and

**WHEREAS**, From December 11, 2021 through January 7, 2022, **Max and Sophia** again spread the word with flyers that they distributed in and around their Long Lake and Coolidge neighborhood about their holiday collection for the homeless. They asked for non-perishable food items, baby food, formula, and diapers. They were even spotlighted on FOX 2 TV which greatly helped their collection efforts; and

**WHEREAS**, This year's collection, 1,672 pounds of food, was donated to Saint Vincent de Paul Food Bank in Detroit;

**NOW, THEREFORE, BE IT RESOLVED**, That the Mayor and City Council of the City of Troy hereby applaud and sincerely thank **Max and Sophia Pollak** for organizing a 2020 and a 2021 holiday food drive to help those in need; and

**BE IT FURTHER RESOLVED**, That the Mayor and City Council of the City of Troy invite all residents to recognize and celebrate the generosity and dedication of **Max and Sophia Pollak**, true heroes in our Troy community.

**Presented this 14<sup>th</sup> Day of February 2022**

**PROCLAMATION TO CELEBRATE  
BLACK HISTORY MONTH  
FEBRUARY 2022**

**WHEREAS**, Each February, National Black History Month serves as both a celebration and a powerful reminder that Black history is American history, Black culture is American culture, and Black stories are essential to the ongoing story of America — our faults, our struggles, our progress, and our aspirations. Shining a light on Black history today is as important to understanding ourselves and growing stronger as a Nation as it has ever been; and

**WHEREAS**, That is why it is essential that we take time to celebrate the immeasurable contributions of Black Americans, honor the legacies and achievements of generations past, reckon with centuries of injustice, and confront those injustices that still fester today; and

**WHEREAS**, Our Nation was founded on an idea: that everyone is created equal and deserves to be treated with equal dignity throughout our lives. It is a promise we have never fully lived up to but one that we have never, ever walked away from. The long shadows of slavery, Jim Crow, and redlining — and the blight of systemic racism that still diminishes our Nation today — hold America back from reaching our full promise and potential; and

**WHEREAS**, By facing those tragedies openly and honestly and working together as one people to deliver on America's promise of equity and dignity for all, we become a stronger Nation — a more perfect version of ourselves; and

**WHEREAS**, Across the generations, countless Black Americans have demonstrated profound moral courage and resilience to help shape our Nation for the better. Today, Black Americans lead industries and movements for change, serve our communities and our Nation at every level, and advance every field across the board, including arts and sciences, business and law, health and education, and many more. In the face of wounds and obstacles older than our Nation itself, Black Americans can be seen in every part of our society today, strengthening and uplifting all of America; and

**WHEREAS**, As we celebrate National Black History Month, let us all recommit ourselves to reach for that founding promise. Let us continue to fight for the equity, opportunity, and dignity to which every Black American is due in equal measure. Let us carry forward the work to build an America that is, in the beautiful words of the poet Amanda Gorman, "Bruised, but whole — benevolent, but bold, fierce, and free;" and

**WHEREAS**, We appreciate and honor the countless achievements of Black Americans and continue the efforts to ensure our community is a welcoming and inclusive place that provides just and equal opportunities for all;

**NOW, THEREFORE, BE IT RESOLVED**, that the Mayor and City Council of the City of Troy hereby proclaim the **Month of February 2022 as National Black History Month**. This observance affords a special opportunity to become more knowledgeable about Black heritage, and to honor Black citizens who have contributed to the City of Troy, State of Michigan, and the United States' economic, cultural, spiritual, and political development: and

**BE IT FURTHER RESOLVED**, That we invite all Troy residents to recognize and celebrate the vital role Black Americans have played in our Nation's history, as well as their outstanding achievements today and into the future. We applaud our own Troy residents and business owners and celebrate their contributions to our community and beyond.

**Presented this 14<sup>th</sup> day of February 2022.**



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

E-01

## CITY COUNCIL AGENDA ITEM

Date: January 26, 2022

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
R. Brent Savidant, Community Development Director

Subject: PUBLIC HEARING – PRELIMINARY SITE PLAN REVIEW (File Number SP2021-0020) – Proposed Adler Cove (One Family Residential Cluster), South side of Long Lake, East of John R (Parcels 88-20-13-100-012, 88-20-13-100-014 and 88-20-13-100-025), Currently Zoned R-1C (One Family Residential) Zoning District

The petitioner Mondrian Properties submitted the above referenced Preliminary Site Plan application for a 20-unit One Family Residential Cluster on a 10-acre parcel. The development proposes to preserve 38% of dedicated open space. Housing option types which range in size from a 1,900 square foot ranch with second floor option to a 2,900 square foot colonial.

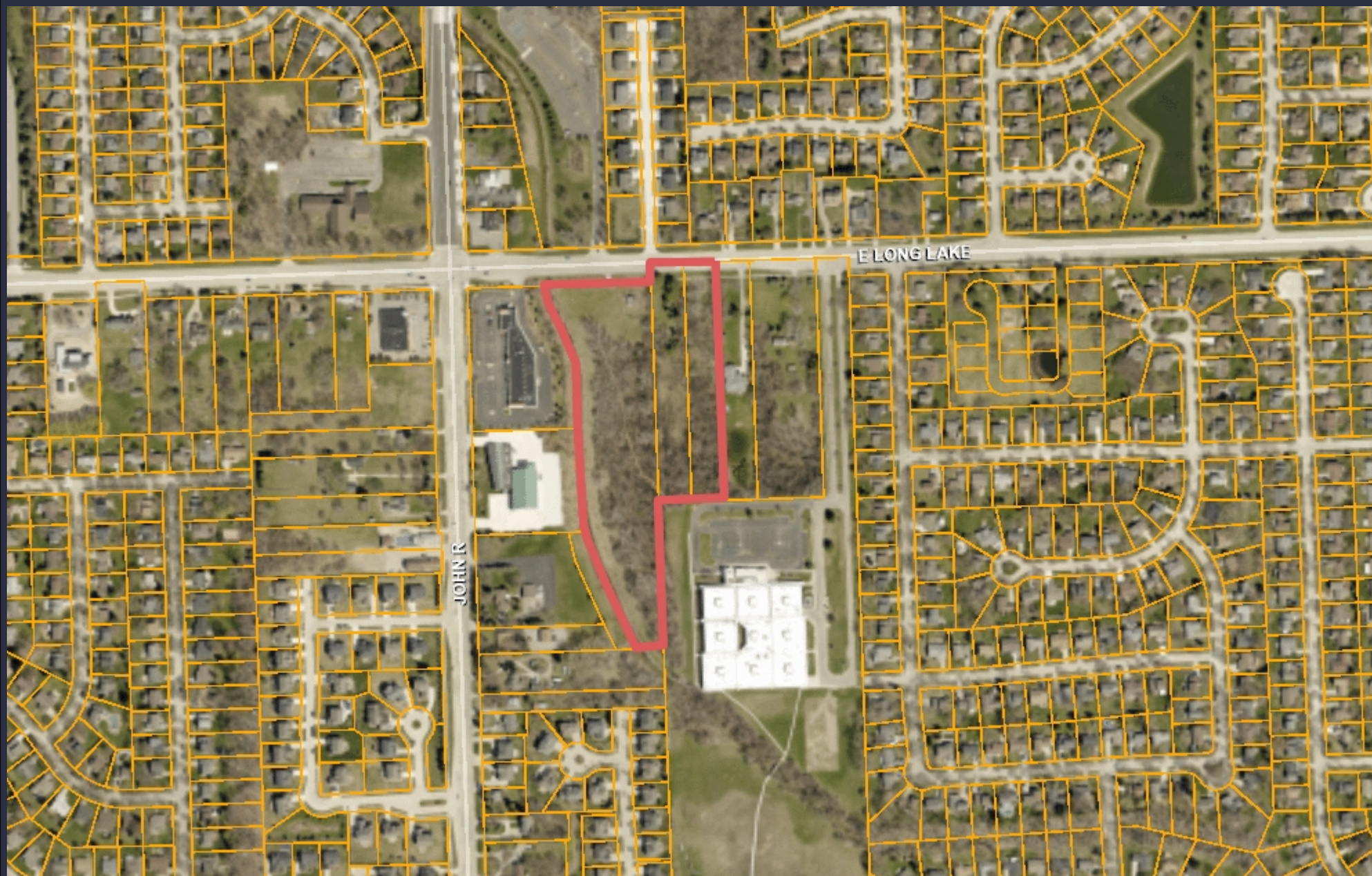
City Council has the authority to approve these types of developments following a recommendation by the Planning Commission. The Planning Commission held a public hearing on this item on December 14, 2021 and recommended approval of this item by a vote of 8-0.

A City Council public hearing has been scheduled for February 14, 2022.

### Attachments:

1. Maps
2. Minutes from December 14, 2021 Planning Commission Regular meeting (excerpt)
3. Agenda item from December 14, 2021 Planning Commission Regular meeting.
4. Public comment.



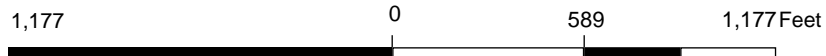
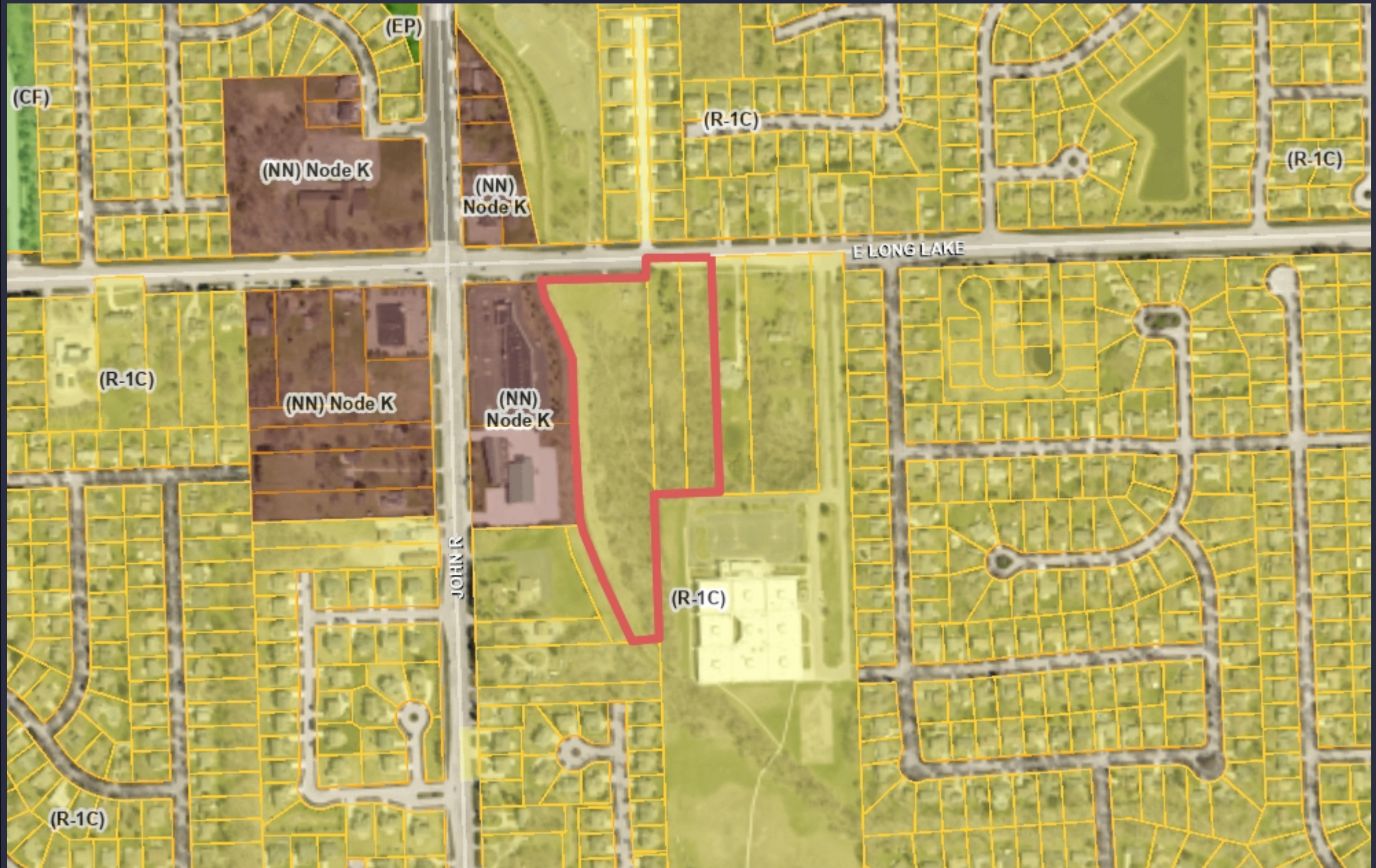


1,177 0 589 1,177 Feet



Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.





Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.

**PRELIMINARY SITE PLAN REVIEW**

5. PUBLIC HEARING - PRELIMINARY SITE PLAN REVIEW (File Number SP2021-0020) – Proposed Adler Cove (One Family Residential Cluster), South side of Long Lake, East of John R (Parcels 88-20-13-100-012, 88-20-13-100-014 and 88-20-13-100-025), Currently Zoned R-1C (One Family Residential) Zoning District

Mr. Carlisle reviewed the Preliminary Site Plan application for the proposed Adler Cove cluster development option. He reported the applicant is seeking five additional units above the parallel plan density and proposes to provide 38% of the total site as open space. Mr. Carlisle addressed the wetlands, floodplain and tree preservation. He reported the applicant received confirmation from FEMA that the application is reflective of the current conditions of the floodplain and there would be no development within the floodplain. Mr. Carlisle addressed access to the site, lot sizes, housing types, Open Space requirements and Cluster standards.

Mr. Carlisle addressed the applicant's request for relief of the required perimeter setbacks for the proposed decks on units 14 through 18. He gave an explanation clarifying that due to the additional buffer required in a cluster option, the decks are further away from the northern property line with a cluster layout than a conventional layout and displayed graphics for a visual view. As well, Mr. Carlisle displayed graphics showing the layout of the development with a conventional application versus a cluster development option.

Mr. Carlisle said the Planning Commission shall determine if requirements are met to qualify for a cluster development option, if the required standards have been met and if the additional number of units is commensurate with open space being preserved. He cited considerations for Planning Commission this evening are the applicant's request to seek relief on the encroachment of the decks and to indicate building materials. Mr. Carlisle said the Planning Commission could postpone the item to make further refinements to the application or forward with a recommendation to City Council for their consideration.

There was discussion on:

- Applicant's request for relief of setback requirements for decks.
  - Action by Zoning Board of Appeals (ZBA) not required.
  - Cluster provision allows Planning Commission to make recommendation to City Council on request for relief.
  - Differences in setback requirements; conventional development versus cluster option.
  - If encroachment permitted, approval could be conditioned that applicant use permeable paving surface for less impact on absorption of rainwater.
  - Previously approved cluster development (Park View on Beach) as relates to individual homeowners going before ZBA to seek relief of setback requirements to construct decks.



- Collar of open space on periphery of property; as relates to width, vegetation, screening of adjacent properties.
- Planning Consultant recited section of Zoning Ordinance that allows consideration of setback requirements within open space.
- Open space accessibility to homes.
- In theory, applicant can build within floodplain and wetlands, with fill and grade and permission by FEMA.

Ms. Dufrane assured Board members that approval of relief of setback requirements for the proposed decks on units 14 through 18 can be accomplished legally through the cluster application; the request does not have to go through ZBA.

Present were Planner Jim Eppink of J. Eppink Partners Inc., property owner Joseph Maniaci of Mondrian Properties and Civil Engineer John Thompson of Professional Engineering Associates.

Mr. Eppink reviewed the property location and project description. He addressed the wetlands, floodplain, existing Gibson drain and updated maps from FEMA. He noted the western edge of the parcels favor the open space. Mr. Eppink addressed differences of the development if the parcels were planned conventionally or with a cluster option. He indicated that 16 units could be constructed under the conventional plan, not 15 as noted in the Planning Consultant report.

Mr. Eppink addressed the applicant's history in preserving open space by utilizing the cluster option for developments in Troy. He addressed housing types, the request of relief of setback requirements for the proposed decks and the values of a cluster development.

There was discussion on:

- Site amenities; existing trails, no plans to add or enhance trails.
- Home variety; no prescribed number of styles, any style can be built on any lot, 2<sup>nd</sup> floor loft and 1<sup>st</sup> floor master bedroom options available for ranches.
- Detention basin; naturally landscaped, properly engineered.
- Price range of homes.
- Consideration to designate in Zoning Ordinance requirements on housing types, specify percentage of each style.
- Intent of cluster option.
- Adjacent home east of development; cluster option provides screening with existing vegetation and undergrowth that conventional plan does not.
- Sustainable elements of housing.
- Building materials; brick, hardie board siding, more information from applicant prior to City Council consideration.
- Open space under homeowners' ownership; passive/recreational, use by middle school for exploration, safety, maintenance.
- Tree preservation as relates to conventional or cluster development.

- Walkability of site; sidewalks within development and along Long Lake, existing trails and pocket parks.

Mr. Maniaci said there is no specific price range of homes at this time. He said prices would be driven by the market at the time construction commences and he would build all ranch style homes should that be what home buyers desire.

Mr. Maniaci said the application before the Board this evening proposes to construct decks and seek relief of any setback requirements to alleviate any potential issues in the future. He explained when the Parkview on Beach cluster development application came before the Board, he did not have the foresight to include the construction of decks on each unit. Mr. Maniaci said years passed and homeowners wanted to construct decks on their homes. He said the homeowners were required to seek relief of the setback requirements from the ZBA, ZBA denied their requests and a lawsuit followed.

#### PUBLIC HEARING OPENED

- David and Lynn Irwin, 2180 E. Long Lake, Troy; voiced concerns with the proximity of the development to their home, pedestrian traffic, water runoff, liability of retention pond and loss of privacy.
- Renee Sarcina, 4735 Stoddard Drive, Troy; stated opposition, read a letter she sent to the Planning Commission and City Council dated December 12; comments related to green space and wildlife preservation, residents desire for no more residential development, potential flooding and water runoff. Ms. Sarcina specifically addressed transparency by the City and its posted sign “Open Space Preservation Development” on the subject site. She said the sign led her to believe development on the site was a continuation of trails and paths and she followed through with a phone call to the phone number posted on the sign. Ms. Sarcina suggested public hearings not be time-limited and offer residents a question-and-answer format.
- Pietro Sarcina, 4735 Stoddard Drive, Troy; said residents do not want more residential development, suggested City revise the Master Plan to reflect what residents want, voiced concerns with additional traffic, asked if there would be deceleration and acceleration lanes. He said existing trees on the subject site are in good condition.
- Mykola Murskyj, 5115 Saffron, Troy; shared childhood memories of playing in open space that now is residential developments, applauded cluster option development, addressed presentation of application as relates to only two options to develop property, responsibility of public servants to applicants and residents.

#### PUBLIC HEARING CLOSED

Mr. Savidant informed the audience that stormwater management is reviewed by the Engineering department during the final site plan approval process and there

are Zoning Ordinance regulations in place to assure there is no negative impact of water runoff on neighboring properties.

Mr. Savidant responded to comments about the posted signs on proposed developments and the contact number provided for further information. He said the phone number is the general Planning Department number and all voicemail messages are automatically converted to email messages to staff should a department staff member not be available to answer the call. Mr. Savidant assured that 100% of phone calls are returned to callers who leave messages.

Mr. Savidant reviewed what State law requires for public hearing notices and additional steps the City takes to inform residents of proposed developments. He said the language on the signs posted for proposed cluster developments has been crafted over the years to incorporate language suggested by a former member of City Council. Mr. Savidant said the City administration strives for transparency, responds to phone calls and email messages and provides any information it has on file upon request. He said he directs residents to the appropriate department for answers should he not know an answer. Mr. Savidant suggested implementing a QR code on posted signs might be advantageous to those with a smartphone.

Mr. Savidant replied to some comments made during the public hearing. He advised the family with the pond that there would be no liability on their part because of trespassing laws. He reported the City engineering department upon its initial review of the application made no recommendation for deceleration/acceleration lanes. He noted the applicant would be required to install deceleration/acceleration lanes should Engineering deem warranted during its final site plan review.

Mr. Lambert admitted he was the one who suggested language on the signs posted for cluster developments and acknowledged the language should be clarified so that it is understood cluster development is a residential project. Mr. Lambert addressed Planning Commission's limitations to meet requirements of the Zoning Ordinance in its consideration of a traditional site plan or cluster option development.

Mr. Carlisle said it would be beneficial if Planning Commission addressed the building materials in its recommendation to City Council.

Comments from across the Board were shared with the audience on transparency and engagement and participation on the part of the residents.

**Resolution # PC-2021-12-076**

Moved by: Hutson  
Support by: Rauch

**RESOLVED**, The Planning Commission hereby recommends to the City Council that the proposed Adler Cove Site Condominium (One Family Residential Cluster), 20 units/lots, South side of Long Lake, East of John R (Parcels 88-20-13-100-012, 88-20-13-100-014 and 88-20-13-100-025), Section 13, approximately 10 acres in size, Currently Zoned R-1C (One Family Residential) District, be **approved** for the following reasons:

1. The cluster development better protects the sites natural resources than if the site were not developed as a cluster.
2. The cluster development better protects the adjacent properties than if the site were not developed as a cluster.
3. The cluster development is compatible with adjacent properties.
4. The site can be adequately served with municipal water and sewer.
5. The cluster development preserves 38% open space, to remain open space in perpetuity.

Discussion on the motion on the floor.

Ms. Dufrane asked that the recommendation address the applicant's request for relief of setback requirements on the decks.

There was discussion on:

- Whether the motion specifically should reflect the relief of setback requirements or if the request of relief is inclusive of the site plan application.
- Whether the motion should specifically identify the number of homes affected by the setback requirements or should there be a blanket relief for all units.

Moved by: Hutson

Support by: Rauch

To **AMEND** my Resolution specifically approving the intrusion of the projected four decks on lots as approved.

Vote on the motion on the floor as amended.

Yes: All present (8)

Absent: Tagle

**MOTION CARRIED**

DATE: December 10, 2021

TO: Planning Commission

FROM: R. Brent Savidant, Community Development Director

SUBJECT: PUBLIC HEARING – PRELIMINARY SITE PLAN REVIEW (File Number SP2021-0020) – Proposed Adler Cove (One Family Residential Cluster), South side of Long Lake, East of John R (Parcels 88-20-13-100-012, 88-20-13-100-014 and 88-20-13-100-025), Currently Zoned R-1C (One Family Residential) Zoning District

The petitioner Mondrian Properties submitted the above referenced Preliminary Site Plan application for a 20-unit One Family Residential Cluster. The development proposes to preserve 38% open space on the 10-acre parcel. The Planning Commission is responsible for providing a recommendation to City Council for this item.

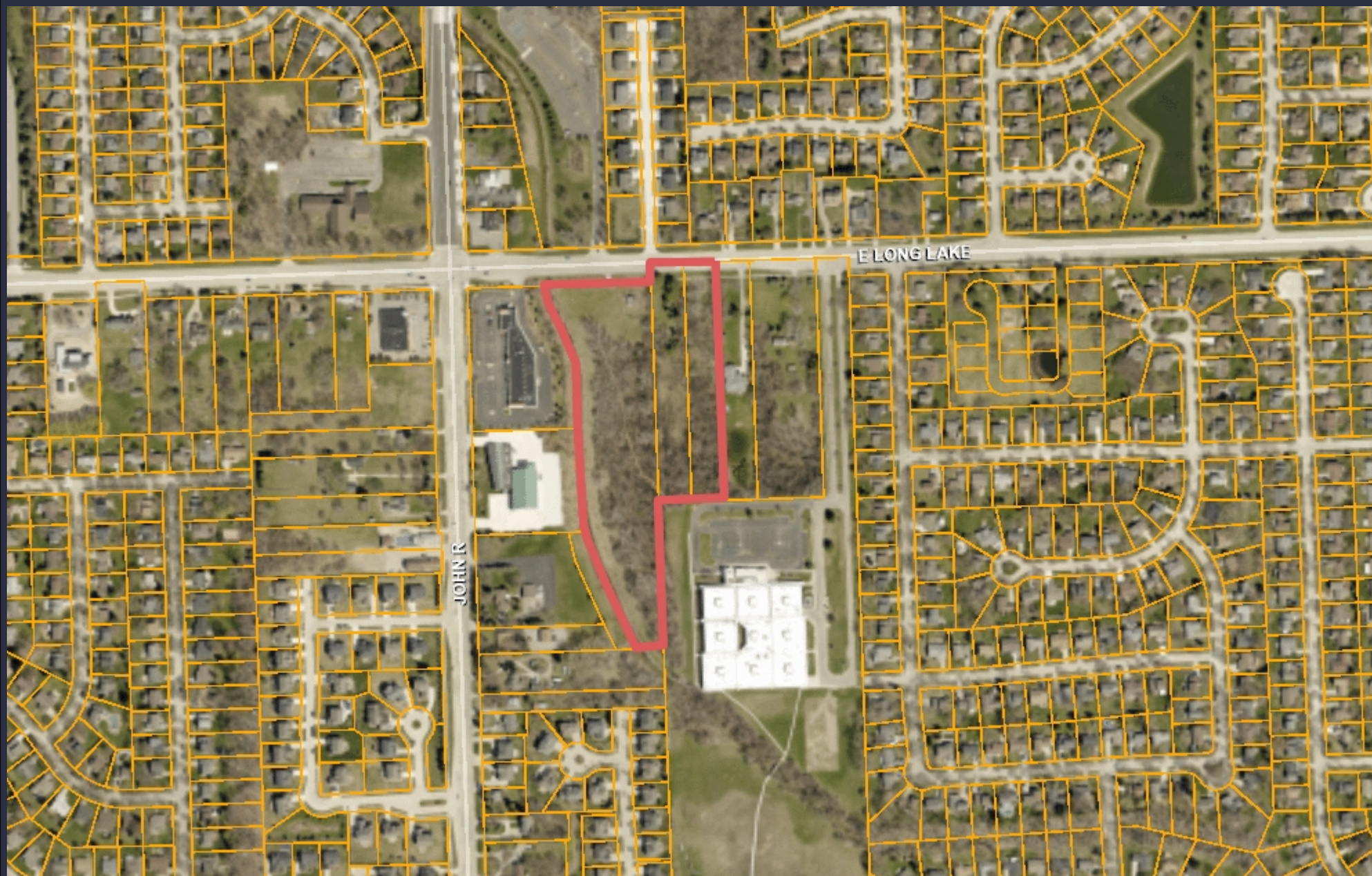
The attached report prepared by Carlisle/Wortman Associates, Inc. (CWA), the City's Planning Consultant, summarizes the project. CWA prepared the report with input from various City departments including Planning, Engineering, Public Works and Fire. City Management supports the findings of fact contained in the report and the recommendations included therein.

Attachments:

1. Maps
2. Report prepared by Carlisle/Wortman Associates, Inc.
3. Anticipated Traffic Impacts, prepared by OHM, dated November 15, 2021
4. Preliminary Site Plan Application
5. Public comment

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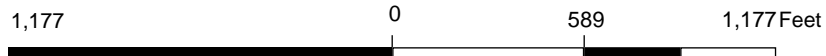
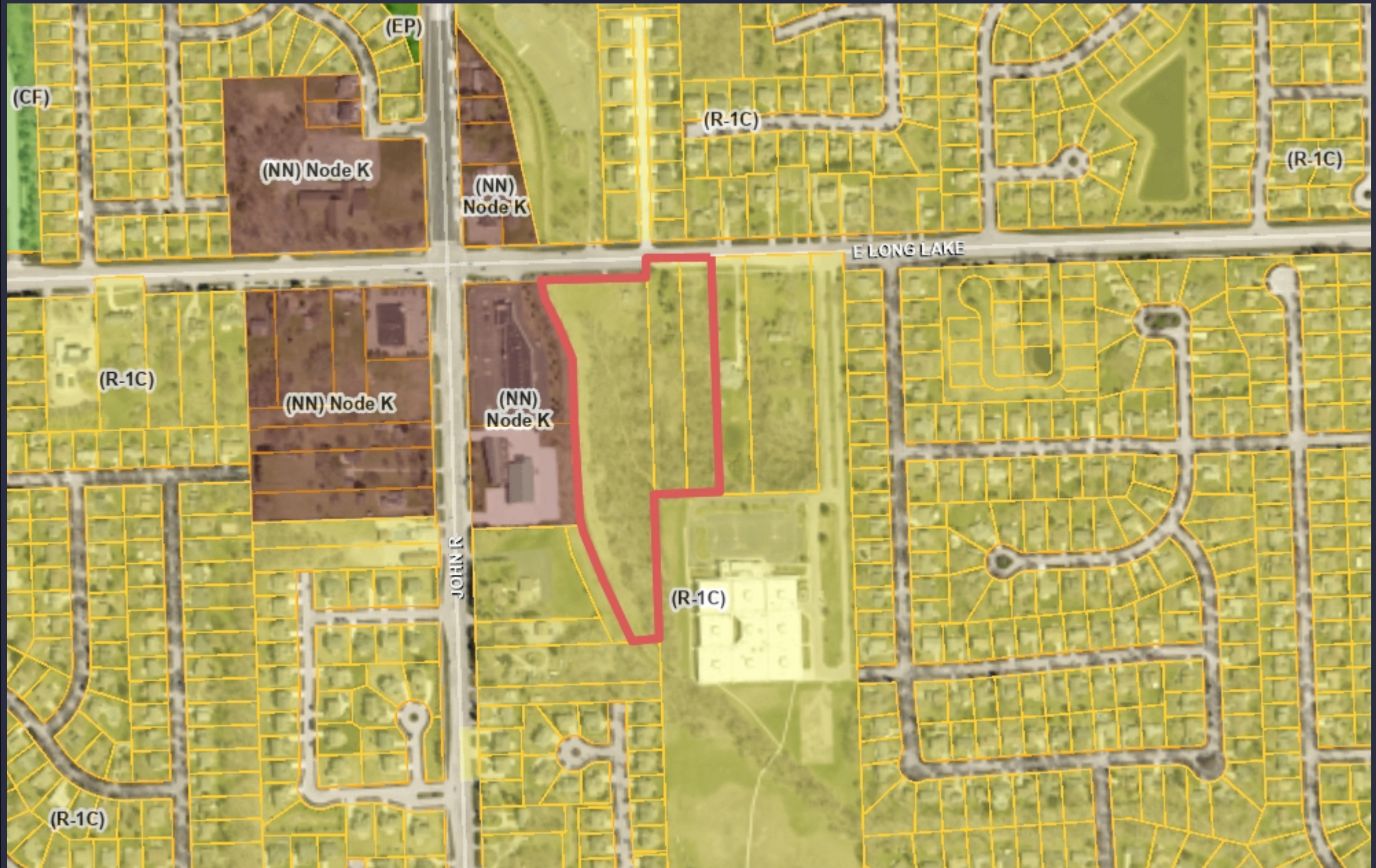


1,177 0 589 1,177 Feet



Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.





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**Carlisle | Wortman**  
ASSOCIATES, INC.

117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: November 2, 2021  
November 30, 2021

## **Preliminary Site Condominium Cluster Review For City of Troy, Michigan**

<b>Project Name:</b>	Alder Cove
<b>Plan Date:</b>	September 20, 2021
<b>Location:</b>	South of E. Long Lake, east of John R.
<b>Zoning:</b>	R-1C, One-family Residential District
<b>Action Requested:</b>	Preliminary Site Condominium Cluster Approval
<b>Required Information:</b>	Deficiencies noted.

### **PROJECT AND SITE DESCRIPTION**

We are in receipt of a preliminary site plan application for a twenty (20) unit detached single-family condominium cluster development. The twenty (20) new lots will be accessed from a new private road that is located off E. Long Lake Road. The site is three parcels and is a total of 10.0 acres. The site is vacant but encumbered with floodplain and tree cover. The applicant has not identified any wetlands on site.

The property is surrounded by R-1C on the north, east, south, and boarded by neighborhood node to the west. The applicant proposes a cluster development. The base density base under the R-1C, One-Family Residential as determined by the submission of a parallel plan is fifteen (15) units. The applicant is seeking five (5) additional units above the parallel plan density by doing a cluster, providing 38% of the total site as open space.

The applicant is proposing three housing option types which range in size from a 1,900 sq/ft ranch with second floor option to a 2,900 sq/ft colonial.

**Figure 1. - Location and Aerial Image of Subject Site**



Size of Subject Property:

The parcel is 10.0 acres

Proposed Uses of Subject Parcel:

Twenty (20) detached single family condominium cluster development.

Current Use of Subject Property:

The subject property is currently vacant

Current Zoning:

The property is currently zoned R-1C, One-family Residential District.

Surrounding Property Details:

Direction	Zoning	Use
North	R-1C, One-family Residential District	Single-family homes
South	R-1C, One-family Residential District	Single-family homes / Larson Middle School
East	R-1C, One-family Residential District	Single-family home / Larson Middle School
West	NN, Neighborhood Node	Commercial / Fire Station

**NATURAL FEATURES**

**Topography:** A topographic survey has been provided on sheet C-1.0. The central and northern portion of the site is relatively flat, but there is significant grade change around the southern portion of the site in the floodplain.

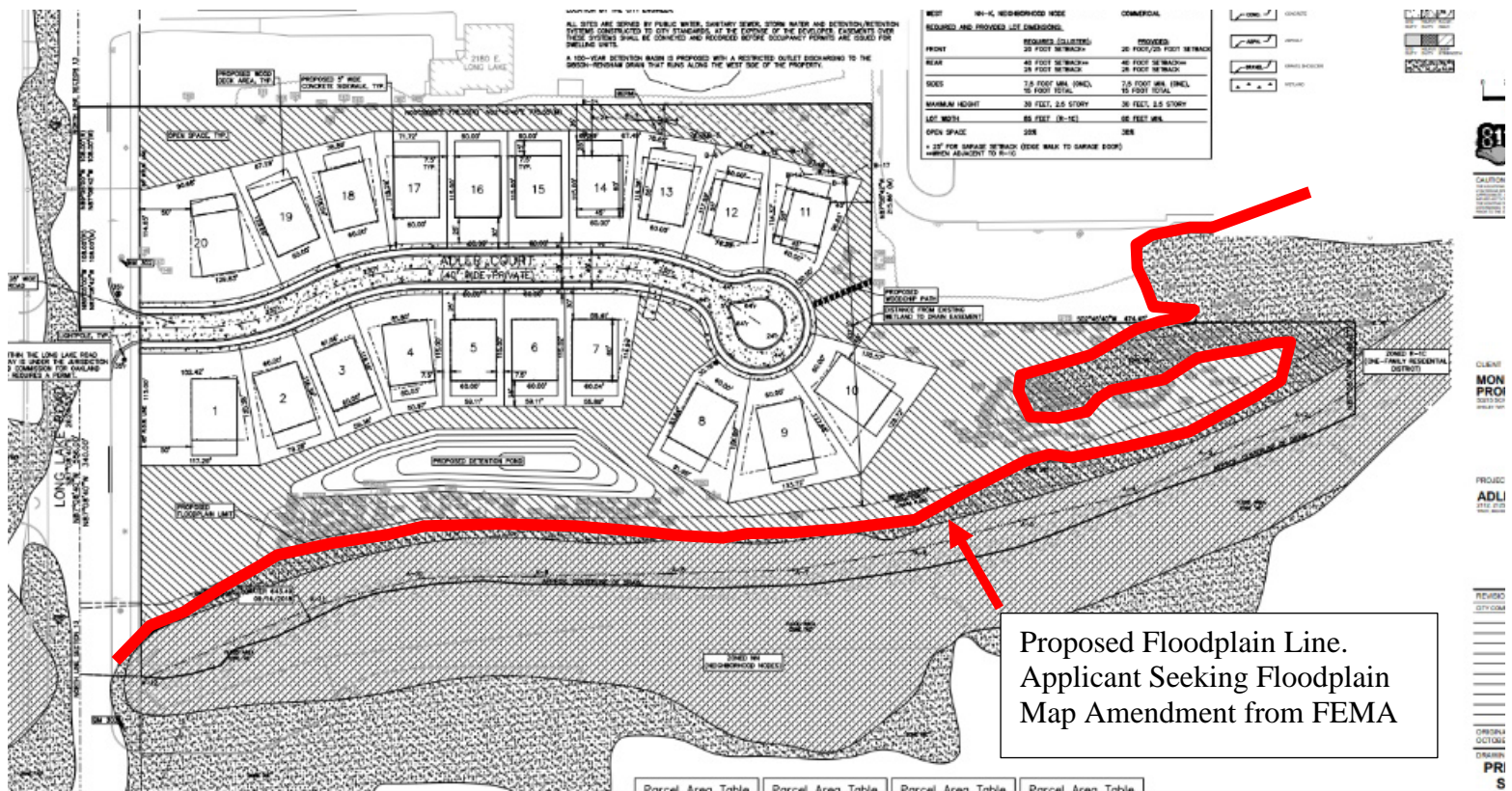
**Wetlands:** The wetland delineation report found one wetland and one watercourse likely regulated by the Michigan Department of Environment, Great Lakes & Energy (EGLE). The southern portion of the site is bounded by the Gibson Drain, which meets the states definition of a stream.

Wetland B is a scrub/shrub wetland approximately 0.2 acres in size located in the southeast corner of the site. The delineation report finds that in the wetland expert's opinion, Wetland B is regulated by the EGLE under Part 303 because it is within 500 feet of the Gibson Drain, which meets the definition of a regulated stream under Part 301. However, final determination is made by EGLE.

The applicant appears to preserve most of the wetland but does appear to require some grading within areas at the exterior of the wetland. The applicant should confirm impact upon wetland.

**Floodplain:** The submitted topography survey shows the existing conditions of the onsite floodplain. The applicant is proposing to modify the site based on a submitted letter to the FEMA for a Letter of Map Revision (LOMR) to adjust the floodplain limits. According to the applicant, when the Road Commission of Oakland County (RCOC) did improvements expanded the bridge and raised the road on Livernois, they did not submit for a LOMR for these improvements. The applicant notes that their submittal reflects the current conditions of the floodplain based on RCOC's improvements. The applicant is waiting on confirmation of a LOMR from FEMA.





### Woodlands:

A tree survey has been provided to inventory the natural features that exist onsite. The survey identified a total of approximately 450 trees on site. Many of the trees are either in poor condition, invasive, or not of high quality. There is an especially high number of Cottonwoods. The applicant has identified a total of 6 landmark trees and 27 woodland trees, preserving 2 and 9, respectively. Full replacement and preservation details are shown in **Table 2**.

**Table 2. – Woodland Protection Ordinance**

Replacement Details		
Protected Tree	Inches Removed	Replacement Required
Landmark	82 inches	82 inches
Woodland	149 inches	75 inches
Preservation/Mitigation	Inches Preserved	Credit
Landmark	36 inches	72 inches
Woodland	62 inches	124 inches
<b>Total</b>	<b>0 inches required for replacement.</b> The number of inches preserved and credited exceed the mitigation required.	

**Items to be addressed:** Confirm impact upon onsite wetland.

## SITE ARRANGEMENT

The proposed one-family cluster development consists of twenty (20) units. All twenty (20) new lots will be accessed from a new private road off Long Lake Road. The proposed lots range between 6,900 sq. ft. and 13,697 sq. ft.

The applicant has submitted a parallel plan to establish a base density and portray the visual difference between traditional site design versus a cluster development. The cluster option is offered as an alternative to traditional residential development. The cluster option is intended to:

1. Encourage the use of property in accordance with its natural character.
2. Assure the permanent preservation of open space and other natural features.
3. Provide recreational facilities and/or open space within a reasonable distance of all residents of the Cluster development.
4. Allow innovation and greater flexibility in the design of residential developments.
5. Facilitate the construction and maintenance of streets, utilities, and public services in a more economical and efficient manner.
6. Ensure compatibility of design and use between neighboring property.
7. Encourage a less sprawling form of development, thus preserving open space as undeveloped land.
8. Allow for design innovation to provide flexibility for land development where the normal development approach would otherwise be unnecessarily restrictive or contrary to other City goals

***Items to be addressed:*** Planning Commission shall determine if requirements are met to qualify for cluster development options and if the additional number of units is commensurate with open space being preserved.

## AREA, WIDTH, HEIGHT, SETBACKS and REGULATORY FLEXIBILITY

The intent of the cluster development provisions is to relax the typical R-1C district bulk requirements in order to encourage a less sprawling form of development that preserves open space and natural resources. As set forth in 10.04.E the applicant is able to seek specific departures from the dimensional requirements of the Zoning Ordinance for yards and perimeter setback as a part of the approval process.

**Table 1. – Bulk Requirements**

	Required/Allowed	Provided	Compliance
<b>Density</b>	Overall density shall not exceed the number of residential cluster units as developed under a conventional site condominium, unless a density bonus has been granted by City Council.	Base Density = 15 units + Cluster bonus (38% bonus) = 20 units are allowed  The applicant is seeking 20 units.	Complies. 20 units are permitted with City Council approval.
<b>Perimeter Setback</b>	Equal to the rear yard setback requirement for the underlying zoning district of the property directly adjacent to each border = 40 feet perimeter setback	Decks for Units 11, 13-18 encroach anywhere from 2 feet into 15-feet into the required perimeter setback	Decks on units 14-18 encroach into perimeter setback
<b>Lot Size</b>	10,500 sq. ft.	Range in size from 6,900 sq. ft. and 13,697 sq. ft.	Complies with approval of Cluster by City Council
<b>Front Setback (building)</b>	20 feet	25 feet	Complies
<b>Rear Setback (building)</b>	25-feet setback	25-feet minimum 10-feet with deck	Building envelopes comply. Decks encroach 15-feet into required rear yard. Applicant seeking relief to have minimum rear yard less than 25-feet due to deck.
<b>Side Setback (building)</b>	7.5-feet setback	7.5-feet minimum	Complies
<b>Open Space Requirements: Minimum Percentage</b>	20%	Proposing to preserve 3.8 acres of the 10.0 acres, or 38%, for open space.	Complies. Applicant must submit open space preservation covenant.

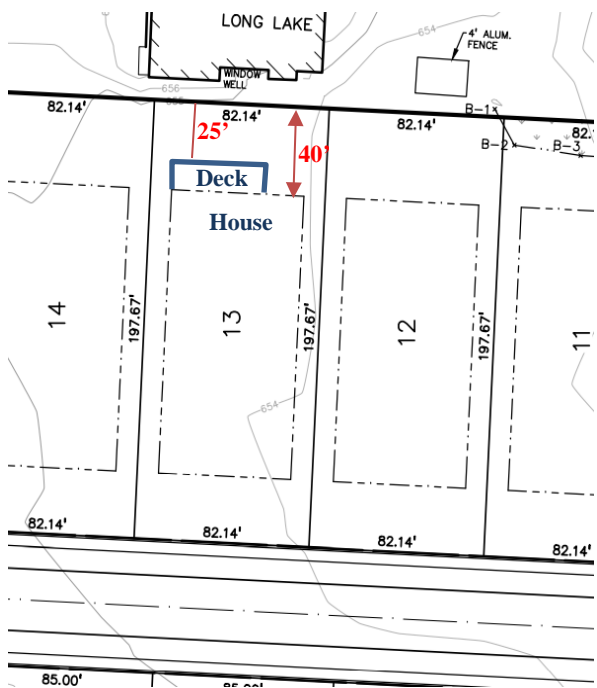
The applicant is showing decks on the rear of all properties. As set forth in Section 7.08.B:

An open, unenclosed, and uncovered porch, raised deck, or patio structure may project into a required rear yard for a distance not to exceed fifteen (15) feet, subject further to the requirement that the distance remaining between the encroaching facility and the rear lot line shall in no instance be less than twenty-five (25) feet. Porch, deck, patio, or terrace facilities encroaching into required front or rear yards shall not include fixed

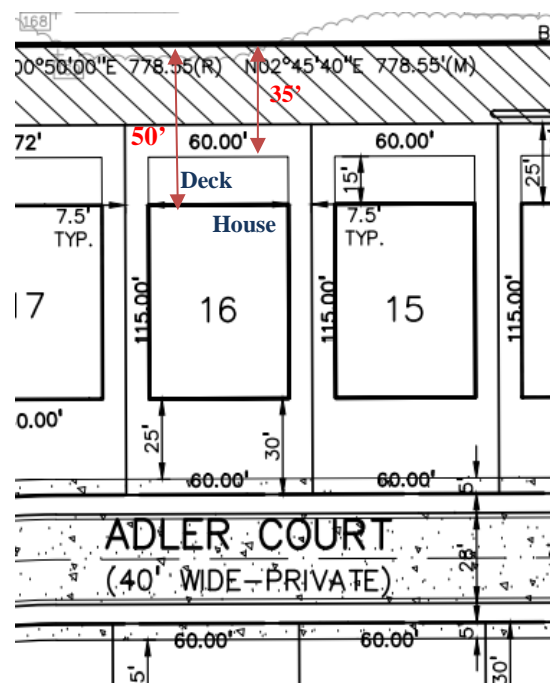
*canopies, gazebos or permanent enclosures, and shall be at a grade no higher than that of the first or main floor of the building to which they are attached.*

The decks extend 15-feet from home and encroach 15-feet into the required 25-foot rear yard. Please note that provision 7.08.B was drafted for a conventional R 1 through R-5 lot that requires a 40-foot setback. Hence for a typical R-lot, the 40-foot rear yard requirement would allow a 15-foot deck and still maintain at least a 25-foot rear yard setback. However, due to the required additional perimeter setback required by the cluster provisions, the decks are further away from the northern property line via cluster than conventional layout. See graphic below:

Setbacks for non-cluster (underlying R-3 zoning) as compared to cluster development



Conventional R-3 layout, with decks 25-feet and house 40-feet from northern property line,



Proposed cluster layout with decks 35-feet and house 50-feet from northern property line

The City Council, based upon a recommendation from the Planning Commission, may waive the rear lot and perimeter setback provisions provided that the applicant has demonstrated innovative and creative site and building designs and solutions, which would otherwise be unfeasible or unlikely to be achieved absent this provision. The Planning Commission should consider the purpose and intent of the Cluster Development option in considering the setback deviations.

**Items to be addressed:** Consider the deck encroachment into rear setback and perimeter buffer



## OPEN SPACE REQUIREMENTS

A requirement of the Cluster Option is to provide at least one (1) of the following open space benefits:

- a. **Significant Natural Features.** Preservation of significant natural features contained on the site, as long as it is in the best interest of the City to preserve the natural features that might be negatively impacted by conventional residential development. The determination of whether the site has significant natural features shall be made by the City Council, after review of a Natural Features Analysis, prepared by the applicant, that inventories these features; or
- b. **Recreation Facilities.** If the site lacks significant natural features, it can qualify with the provision of usable recreation facilities to which all residents of the development shall have reasonable access. Such recreation facilities include areas such as a neighborhood park, passive recreational facilities, soccer fields, ball fields, bike paths, or similar facilities that provide a feature of community-wide significance and enhance residential development. Recreational facilities that are less pervious than natural landscape shall not comprise more than fifty (50) percent of the open space. The determination of whether the site has significant natural features shall be made by the City Council after review of a Site Analysis Plan, prepared by the applicant, that inventories these features; or
- c. **Preservation of Common Open Space or Creation of Natural Features.** If the site lacks significant natural features, a proposed development may also qualify if the development will preserve common open space or create significant natural features such as wetlands. The determination of whether the site has significant natural features shall be made by the City Council after review of a Site Analysis Plan, prepared by the applicant, which inventories these features.

The site is 10 acres, and the applicant is proposing to reserve 3.8 acres for common open space, or 38% of the total site. Open space is provided along the floodplain, area in southernmost portion of the site, and within an open space collar around the northern, western, and southern property line. The open space collar ranges from 10-feet in depth along the southeastern portion of the site to 25-feet along the eastern property line and well over 100 feet along the western property line. As part of the review, the Planning Commission is to consider and make a recommendation to City Council if the layout and open space plan meets the intent and standards of the Cluster provision and has the applicant creatively designed the site to either preserve significant natural resources (trees, wetland, and floodplain) or provide quality open space.

### **Guarantee of Open Space and Tree Preservation:**

The applicant shall provide documentation to guarantee that all open space portions of the development will be preserved and maintained as approved and that all commitments for such preservation and maintenance are binding on successors and future owners of the subject property. All such documents shall be subject to approval by the City Attorney. No structures (pools, sheds) or equipment (play structures, etc.) are permitted within the dedicated open space area.

***Items to be addressed:*** Planning Commission is to consider and make a recommendation to City Council if the layout and open space plan, and/or natural features meet the intent of the Cluster provision and has the applicant creatively designed the site to either preserve significant natural resources (trees) or provide quality open space.

### **SITE ACCESS AND CIRCULATION**

#### Vehicular

Access to the site will be from a single location off Long Lake Road. The development will be served by an internal twenty-eight (28) foot wide private road, located inside of a forty (40) foot roadway easement.

#### Pedestrian

The applicant proposes a five (5) foot wide concrete sidewalk along the perimeter of the private road. The internal sidewalk will connect to existing sidewalk on Long Lake Road.

***Items to be Addressed:*** City Engineer to review site access and circulation.

### **STORMWATER**

Stormwater will be managed by a detention system.

***Items to be Addressed:*** None.

### **LANDSCAPING**

One-Family Cluster development landscaping requirements are regulated by Section 13.02.F.2.

***Table 2. – Landscaping Requirements***

Frontage	Required	Provided	Compliance
Proposed Private Rd.	One (1) deciduous tree for every 50 lineal feet. $1,262/50 = 25.24$ trees = 26 trees	26 trees	Complies

Long Lake Road 120-foot ROW (section 13.02 F.2.c)	One (1) large evergreen tree per ten (10) lineal feet. 558 lf./10 lf = 56 evergreen trees	56 proposed	Complies
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**Items to be Addressed:** None.

## ELEVATIONS AND FLOOR PLANS

The applicant has submitted a three housing options ranging from 1,900 to 2,900 sq/ft. The first is a ranch style house, with a second-floor option. The other options are colonials.

Materials were not indicted

**Items to be Addressed:** Indicate materials.

## CLUSTER STANDARDS

As set forth in section 10.04.I, the applicant shall demonstrate that through the use of the Cluster option, the development will accomplish a sufficient number of the following objectives, as are reasonably applicable to the site, providing:

- a. Long-term protection and preservation of natural resources, natural features, and open space of a significant quantity and/or quality in need of protection or preservation, and which would otherwise be unfeasible or unlikely to be achieved absent these regulations.
- b. Innovative and creative site design through flexibility in the siting of dwellings and other development features that would otherwise be unfeasible or unlikely to be achieved absent these regulations.
- c. Appropriate buffer and/or land use transitions between the Cluster development and surrounding properties.
- d. A compatible mixture of open space, landscaped areas, and/or pedestrian amenities.
- e. Sustainable design features and techniques, such as green building, stormwater management best practices, and low impact design, which will promote and encourage energy conservation and sustainable development.
- f. A means for owning common open space and for protecting it from development in perpetuity.
- g. Any density bonus is commensurate with the benefit offered to achieve such bonus.
- h. The cluster development shall be adequately served by essential public facilities and services, such as: streets, pedestrian or bicycle facilities, police and fire protection, drainage systems, refuse disposal, water and sewage facilities, and schools. Such services shall be provided and accommodated without an unreasonable public burden.
- i. The architectural form, scale, and massing shall ensure buildings are in proportion and complementary to those of adjacent properties and the selected building materials are of high, durable quality. The garage shall not be the dominant feature of a residential building.

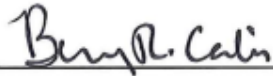
## RECOMMENDATIONS

Planning Commission shall determine if requirements are met to qualify for cluster development option, if the required standards have been met, and if the additional number of units is commensurate with open space being preserved.

Items to consider include:

- Applicant is seeking following relief:
  - Decks encroaching 15-foot into the required 25-foot rear yard
  - Decks for units 14-18 encroach into the 40-foot perimeter setback
- Indicate materials

The Planning Commission may request that either the applicant address aforementioned items or make a recommendation for City Council consideration.



CARLISLE/WORTMAN ASSOC., INC.  
Benjamin R. Carlisle, LEED AP, AICP

# memorandum



**Date:** November 15, 2021

**To:** Bill Huotari, PE

**From:** Sara Merrill, PE, PTOE

**Re:** Adler Cove – Cluster Development  
Anticipated Traffic Impacts

The purpose of this memorandum is to provide an overview of anticipated traffic impacts resulting from Adler Cove, a proposed site condominium development consisting of 20 detached single-family homes. The development is located on the south side of Long Lake Road, east of John R Road. Access to the development is proposed via a private road, located directly across from Forest View Drive. In the immediate vicinity of the site, Long Lake Road is a 5-lane roadway, with two through lanes in each direction and a two-way center turn lane.

The Institute of Transportation Engineers (ITE) Trip Generation Manual, 10<sup>th</sup> Edition, provides trip generation rates for numerous land uses, based on thousands of studies throughout the United States and Canada. This data can then be used to estimate the number of vehicle trips generated by a development. For residential housing, traffic impacts are usually most noticeable during the peak hour of adjacent street traffic – that is, during morning and evening “rush hour”, when traffic on the roads is most congested. In most areas, the morning (AM) peak is a one hour period that occurs between 7 am – 9 am, and the evening (PM) peak is a one hour period usually between 4 pm – 6 pm.

The table below provides the calculated number of trips generated for the proposed Adler Cove development, based on the ITE Trip Generation Manual for Single-Family Detached Housing (ITE Land Use Code #210).

Number of Dwelling Units	Number of Site-Generated Trips								
	AM Peak Hour			PM Peak Hour			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
20 Units	5	14	19	14	8	22	119	119	238

During the morning (AM) peak hour, the proposed Adler Cove development is expected to generate 19 new trips: 5 inbound (entering the site), and 14 outbound (exiting the site). During the evening (PM) peak hour, the proposed site is expected to generate 22 new vehicle trips: 14 inbound (entering the site) trips, and 8 outbound (exiting the site). This pattern coincides with residents typically leaving in the morning for work, and returning home in the evening.

The traffic generated by the proposed development is minimal, adding fewer than two dozen vehicle trips during the peak (“busiest”) hour. The traffic impact of this site on the adjacent road network is negligible and would be imperceptible to the majority of road users.

As a point of comparison, traffic counts taken in 2018 (prior to the pandemic and I-75 construction) on Long Lake Road (between John R Road and Dequindre Road) indicate this segment carries approximately 22,000 vehicles per day, and over 2,100 vehicles during the PM peak hour. Traffic volumes in the area are generally close to but have not fully returned to pre-pandemic levels.



Amongst typical weekdays, traffic volumes during the peak hours alone often vary by 10%+ from one day to the next. These day-to-day fluctuations result in peak hour traffic volumes that vary by upwards of several hundred vehicles. The proposed Adler Cove subdivision is expected to generate less than 25 new vehicle trips during the peak hour.

With the presence of the Larson Middle School nearby, this immediate area experiences a brief spike in traffic volumes around the arrival and dismissal bell times for the nearby Larson Middle School. This concentrated traffic pattern is typical for schools, and often results in some congestion and backups at the beginning and end of the school day. The arrival time for the school overlaps the a.m. commuter peak, while the school dismissal usually occurs prior to the p.m. commuter peak. During these school transition times, there would be fewer gaps in traffic, resulting in increased delay for vehicles exiting the Adler Cove development to Long Lake Road.

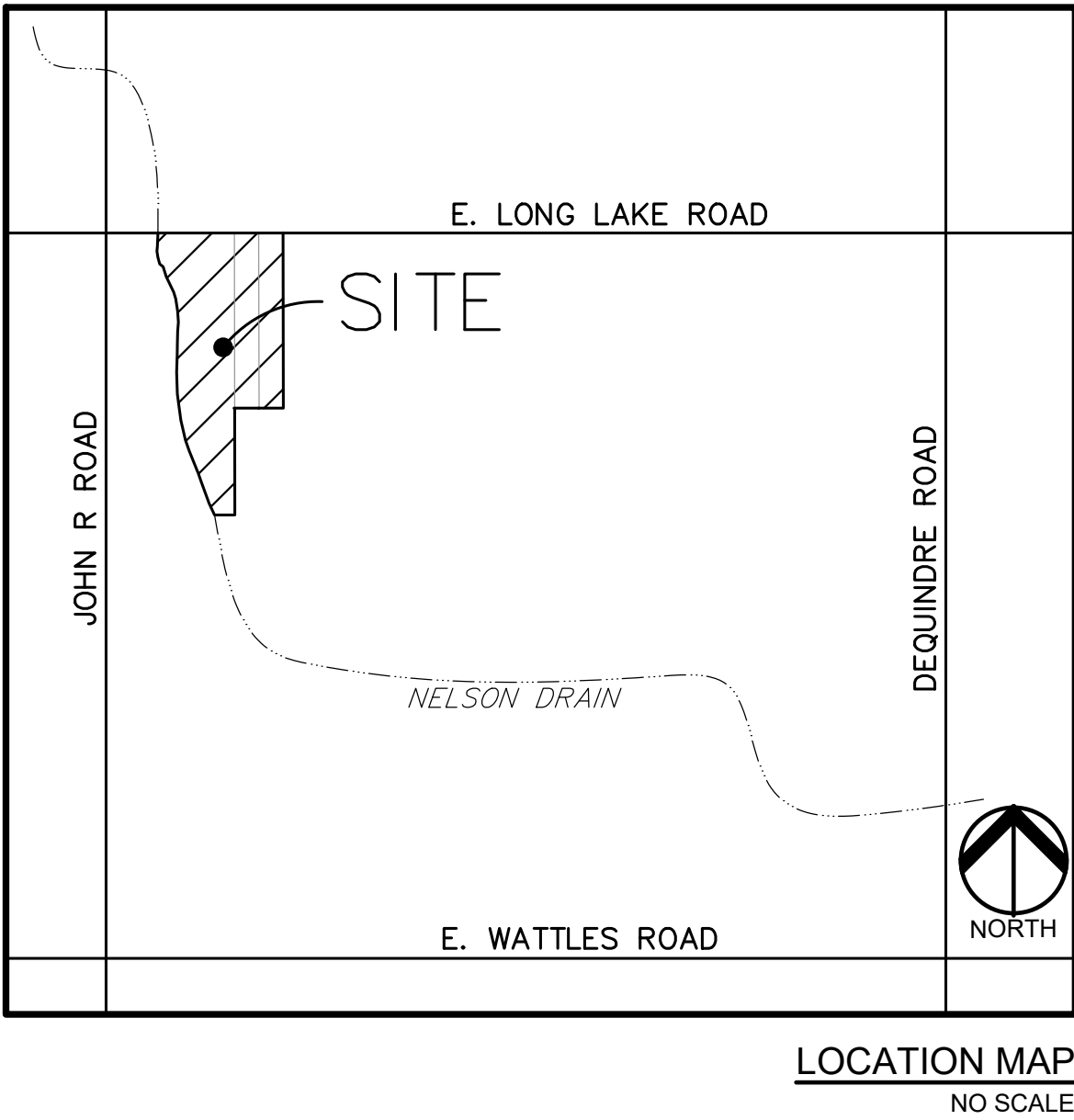
PRELIMINARY SITE PLANS

ADLER COVE

2112, 2125 & 2152 E. LONG LAKE

TROY, OAKLAND COUNTY, MICHIGAN

PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL



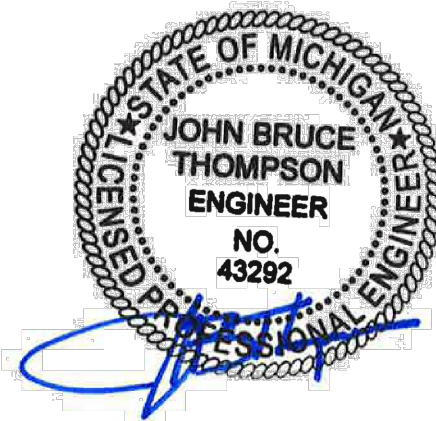
INDEX OF DRAWINGS	
NUMBER	TITLE
	COVER SHEET
P-1.0	TOPOGRAPHIC SURVEY
P-2.0	PRELIMINARY SITE PLAN
P-2.1	PARALLEL SITE PLAN
P-3.0	PRELIMINARY GRADING PLAN
P-4.0	PRELIMINARY UTILITY PLAN
L-1.0	PRELIMINARY LANDSCAPE PLAN
T-1.0	TREE PRESERVATION PLAN
T-1.1	TREE PRESERVATION LIST
T-1.2	TREE PRESERVATION LIST

DESIGN TEAM

OWNER/APPLICANT/DEVELOPER	CIVIL ENGINEER
MONDRIAN PROPERTIES 50215 SCHOENHERR SHELBY TWP., MI 48315 CONTACT: JOSEPH MANIACI PHONE: (586) 726-7350 EMAIL: JMANIACI@MONDRIANPROPERTIES.COM	PEA GROUP 2430 ROCHESTER COURT, STE. 100 TROY, MI 48063-1872 CONTACT: JOHN B. THOMPSON, PE PHONE: 844.813.2949 EMAIL: JTHOMPSON@PEAGROUP.COM
LAND PLANNER	LANDSCAPE ARCHITECT
J EPPINK PARTNERS, INC. 9336 SASHABAW ROAD CLARKSTON, MI 48348 CONTACT: JIM EPPINK PHONE: (248) 922-0789 EMAIL: JIM@JEPPINK.COM	PEA GROUP 45 W. GRAND RIVER AVE., STE. 501 DETROIT, MI 48226 CONTACT: KIMBERLY DIETZEL, RLA PHONE: 844.813.2949 EMAIL: KDIEZTEL@PEAGROUP.COM

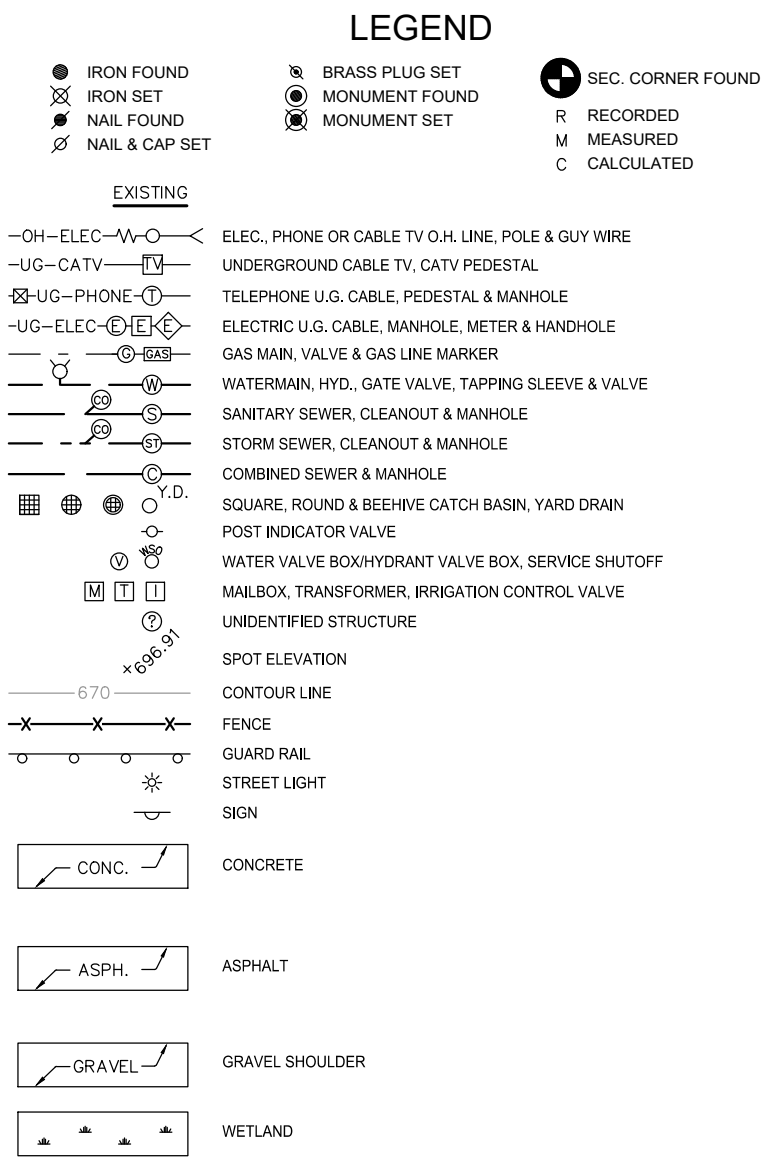


REVISIONS	
DESCRIPTION	DATE
ORIGINAL ISSUE DATE	10/19/2021
CITY COMMENTS	11/9/2021





# P-1.0





REVISIONS	
CITY COMMENTS	11-9-21

ORIGINAL ISSUE DATE:  
OCTOBER 19, 2021










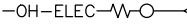
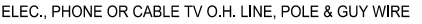




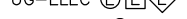
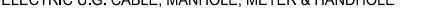




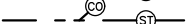








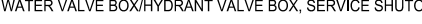
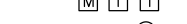

























DRAWING TITLE  
**PRELIMINARY  
SITE PLAN**

PEA JOB NO.	2016-266
P.M.	JBT
DN.	TMK
DES.	TMK
DRAWING NUMBER:	

NOT FOR CONSTRUCTION

P-2.0

#### LEGEND

	IRON FOUND		BRASS PLUG SET		SEC. CORNER FOUND
	MONUMENT FOUND		MONUMENT FOUND		
	NAIL & CAP SET				RECORDED
					MEASURED
					CALCULATED
<b>EXISTING</b>				<b>PROPOSED</b>	
	OH-ELEC-W-O		ELEC. PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE		
	UG-CATV		UNDERGROUND CABLE TV, CATV PEDESTAL		
	UG-PHONE		TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE		
	UG-ELEC-CH		ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE		
	W		GAS MAIN, VALVE & GAS LINE MARKER		
	W		WATERMAIN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE		
	W		SANITARY SEWER, CLEANOUT & MANHOLE		
	W		STORM SEWER, CLEANOUT & MANHOLE		
	W		COMBINED SEWER & MANHOLE		
	W		SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN		
	W		POST INDICATOR VALVE		
	W		WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF		
	W		MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE		
	W		UNIDENTIFIED STRUCTURE		
	SPOT ELEVATION		SPOT ELEVATION		
	CONTOUR LINE		CONTOUR LINE		
	FENCE		FENCE		
	GUARD RAIL		GUARD RAIL		
	STREET LIGHT		STREET LIGHT		
	SIGN		SIGN		
	CONC.		CONCRETE		
	ASPH.		ASPHALT		
	GRAVEL		GRAVEL SHOULDER		
	WETLAND		WETLAND		

#### SITE DATA:

LOCATION OF PROJECT:  
SOUTH SIDE OF LONG LAKE ROAD, EAST OF JOHN R

SIZE OF PROPERTY: 10.0 ACRES

AREA DEVELOPED: 4.73 AC (47.3%)  
TOTAL UNDEVELOPED AREA: 5.27 AC (52.7%)

PROPOSED USE OF PROPERTY: TWENTY (20) DETACHED, SINGLE FAMILY HOMES

CURRENT ZONING: R-1C, ONE-FAMILY RESIDENTIAL DISTRICT

PROPOSED: R-1C, ONE-FAMILY RESIDENTIAL DISTRICT, CLUSTER OPTION

#### CLUSTER OPTION CALCULATION:

- BASE NUMBER OF UNITS - PARALLEL PLAN = 16 UNITS
- 20% DENSITY BONUS PER 10.04H.1 = 3 UNITS
- EXTRA 10% OPEN SPACE PER 10.04H.1 = 1 UNITS  
(OPEN SPACE PROVIDED = 3.80 ACRES, 38.0%)
- OPEN SPACE INCLUDES UTILITY EASEMENTS
- TOTAL UNITS ALLOWED = 20 UNITS
- TOTAL UNITS PROVIDED = 20 UNITS

#### SURROUNDING PROPERTY DETAILS:

DIRECTION	ZONING	USE
NORTH	R-1C, ONE-FAMILY RESIDENTIAL DISTRICT	SINGLE-FAMILY HOMES
SOUTH	R-1C, ONE-FAMILY RESIDENTIAL DISTRICT	SINGLE-FAMILY HOMES
EAST	R-1C, ONE-FAMILY RESIDENTIAL DISTRICT	SINGLE-FAMILY HOMES
WEST	NN-K, NEIGHBORHOOD NODES	COMMERCIAL

#### REQUIRED AND PROVIDED LOT DIMENSIONS:

	REQUIRED (CLUSTER):	PROVIDED:
FRONT	20 FOOT SETBACK*	20 FOOT/25 FOOT SETBACK
REAR	40 FOOT SETBACK** 25 FOOT SETBACK	40 FOOT SETBACK** 25 FOOT SETBACK
SIDES	7.5 FOOT MIN. (ONE), 15 FOOT TOTAL	7.5 FOOT MIN. (ONE), 15 FOOT TOTAL
MAXIMUM HEIGHT	30 FEET, 2.5 STORY	30 FEET, 2.5 STORY
LOT WIDTH	85 FEET (R-1C)	60 FEET MIN.
OPEN SPACE	20%	38%

- \* 25' FOR GARAGE SETBACK (EDGE WALK TO GARAGE DOOR)
- \*\* WHEN ADJACENT TO R-1C

#### PROJECT AND SITE DESCRIPTION:

PROPOSED CONSTRUCTION OF A 20-LOT SINGLE FAMILY DETACHED SITE CONDOMINIUM PROJECT ON THE SOUTH SIDE OF LONG LAKE ROAD, EAST OF JOHN R ROAD. ACCESS TO ALL UNITS WILL BE VIA CONNECTION TO LONG LAKE ROAD. THE PROPOSED RESIDENTIAL USE IS PERMITTED BY-RIGHT IN THE R-1C DISTRICT. THE SITE IS CURRENTLY HEAVILY WOODED.

#### SITE ARRANGEMENT:

THE PROPOSED SITE CONDOMINIUM CONSISTS OF 20 LOTS (20 LOTS ALLOWED) WITH MINIMUM LOT SIZE OF 6,900 SQUARE FEET. THE AVERAGE LOT SIZE IS 8,399 SQUARE FEET. ALL UNITS FRONT ON A NEW PRIVATE STREET. THE PROPOSED LOTS ARE REGULAR IN SHAPE, ALLOW FOR ADEQUATE SETBACKS, AND PERMIT SUFFICIENT SPACE FOR THE HOMES AND INGRESS AND EGRESS FOR EACH UNIT ACCORDING TO THE CLUSTER OPTION. A MINIMUM OF 30% OPEN SPACE HAS BEEN PROVIDED.

#### NATURAL RESOURCES:

THE SITE CURRENTLY HAS SIGNIFICANT TREE COVER.

#### FLOODPLAIN:

THE PROPERTY IS LOCATED WITHIN THE FLOOD HAZARD AREA INDICATED BY FLOOD INSURANCE RATE MAP (FIRM) NO. 26125C00553G DATED: JANUARY 16, 2009.

#### ACCESS AND CIRCULATION:

VEHICULAR ACCESS AND CIRCULATION:  
VEHICULAR ACCESS TO ALL UNITS WILL BE VIA A NEW STREET LOCATED OFF LONG LAKE ROAD. THE NEW ROADWAY WILL HAVE A FORTY (40) FOOT WIDE PRIVATE ROAD EASEMENT.

#### PEDESTRIAN ACCESS AND CIRCULATION:

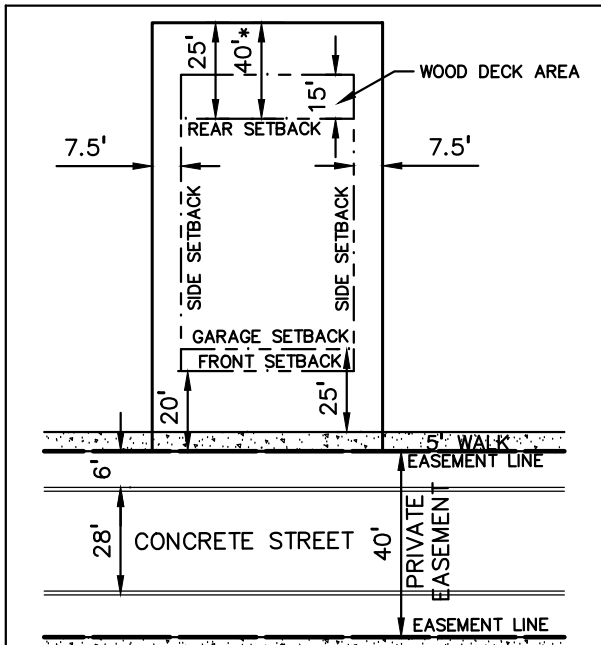
A 5-FOOT WIDE SIDEWALK IS PROVIDED AT BOTH SIDES OF THE NEW ROADWAY.

#### UTILITIES:

UTILITIES ARE PLACED WITHIN STREET RIGHT-OF-WAY, OR WITHIN EASEMENTS APPROVED AS TO SIZE AND LOCATION BY THE CITY ENGINEER.

ALL SITES ARE SERVED BY PUBLIC WATER, SANITARY SEWER, STORM WATER AND DETENTION/RETENTION SYSTEMS CONSTRUCTED TO CITY STANDARDS, AT THE EXPENSE OF THE DEVELOPER. EASEMENTS OVER THESE SYSTEMS SHALL BE CONVEYED AND RECORDED BEFORE OCCUPANCY PERMITS ARE ISSUED FOR DWELLING UNITS.

A 100-YEAR DETENTION BASIN IS PROPOSED WITH A RESTRICTED OUTLET DISCHARGING TO THE GIBSON-RENSHAW DRAIN THAT RUNS ALONG THE WEST SIDE OF THE PROPERTY.

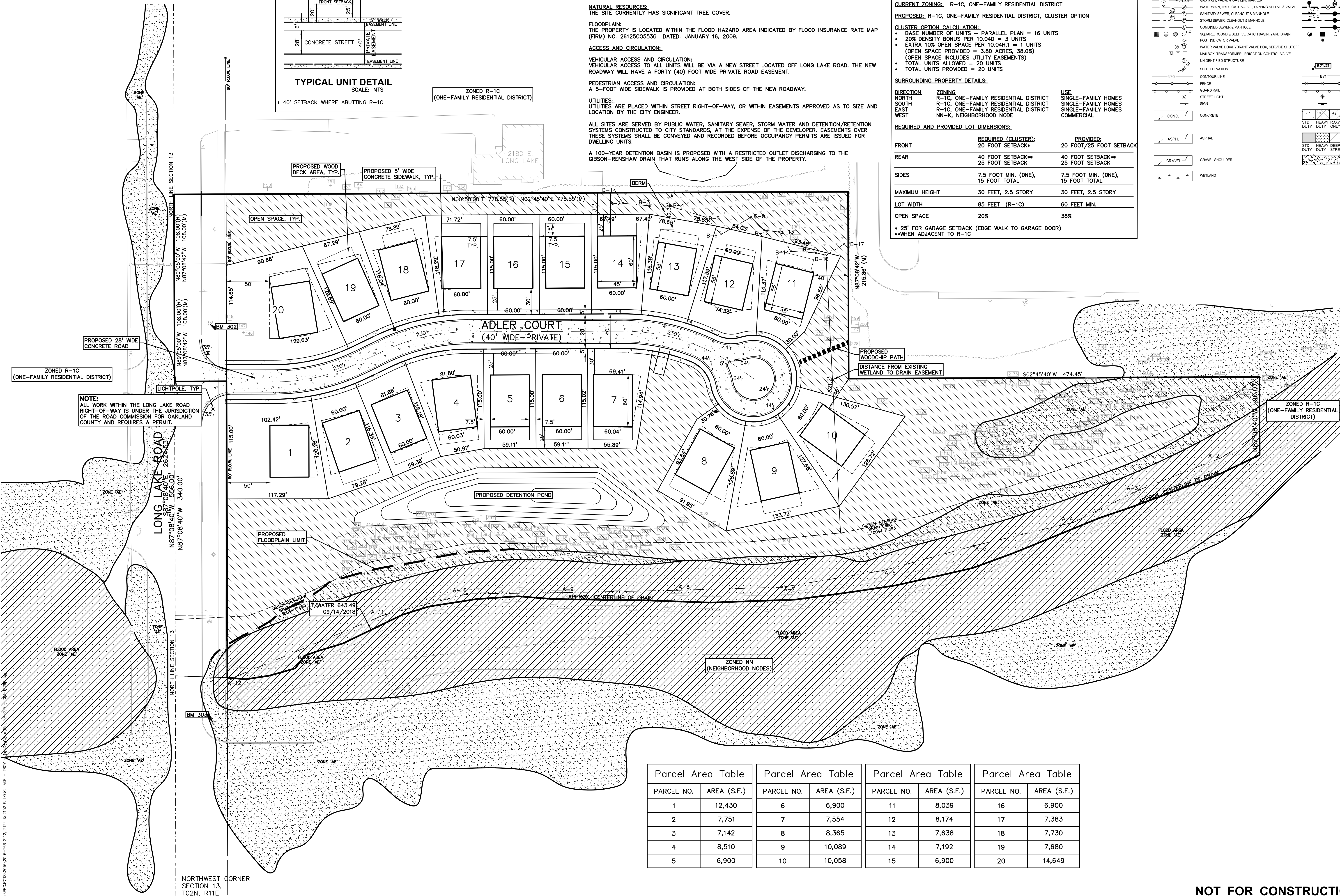


TYPICAL UNIT DETAIL

SCALE: NTS

\* 40' SETBACK WHERE ABUTTING R-1C

ZONED R-1C  
(ONE-FAMILY RESIDENTIAL DISTRICT)



Parcel Area Table		Parcel Area Table		Parcel Area Table		Parcel Area Table	
PARCEL NO.	AREA (S.F.)	PARCEL NO.	AREA (S.F.)	PARCEL NO.	AREA (S.F.)	PARCEL NO.	AREA (S.F.)
1	12,430	6	6,900	11	8,039	16	6,900
2	7,751	7	7,554	12	8,174	17	7,383
3	7,142	8	8,365	13	7,638	18	7,730
4	8,510	9	10,089	14	7,192	19	7,680
5	6,900	10	10,058	15	6,900	20	14,649

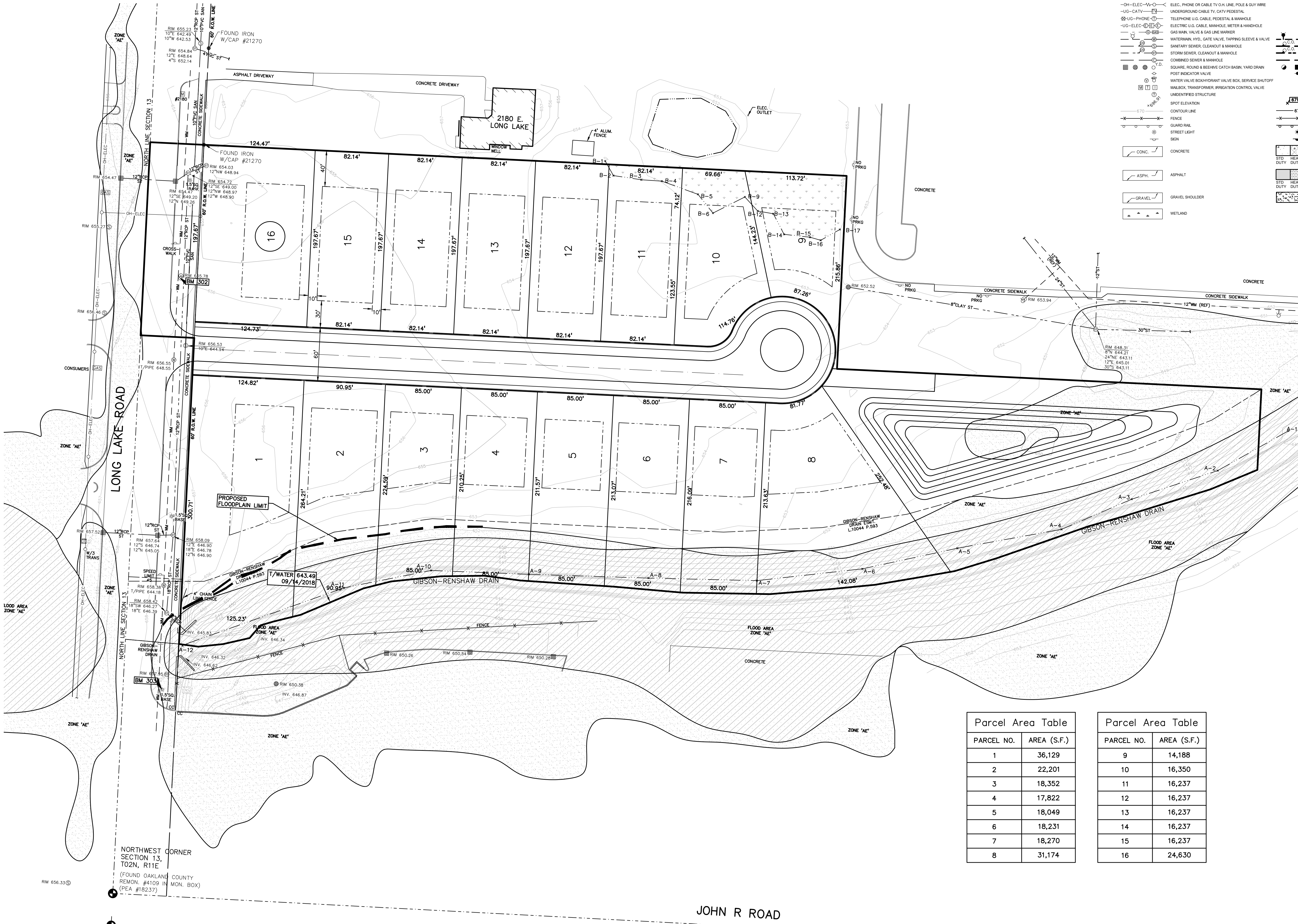


LEGEND

● IRON FOUND	⊗ BRASS PLUG SET	⊙ SEC. CORNER FOUND
⊗ IRON SET	⊙ MONUMENT FOUND	R RECORDED
⊗ NAIL FOUND	⊗ MONUMENT SET	M MEASURED
⊗ NAIL & CAP SET		C CALCULATED

EXISTING	PROPOSED
—OH-ELEC—W—ELEC, PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE	—ELEC, PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
—UG-CATV—ELEC, PHONE OR CABLE TV U.G. CABLE, PEDESTAL & MANHOLE	—ELEC, PHONE OR CABLE TV U.G. CABLE, PEDESTAL & MANHOLE
—UG-PHONE—ELEC, PHONE OR CABLE TV U.G. CABLE, PEDESTAL & MANHOLE	—ELEC, PHONE OR CABLE TV U.G. CABLE, PEDESTAL & MANHOLE
—UG-ELEC—ELEC, PHONE OR CABLE TV U.G. CABLE, PEDESTAL & MANHOLE	—ELEC, PHONE OR CABLE TV U.G. CABLE, PEDESTAL & MANHOLE
—GAS VALVE & GAS LINE W/VALVE	—GAS VALVE & GAS LINE W/VALVE
—WATERMANN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE	—WATERMANN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE
—SANITARY SEWER, CLEANOUT & MANHOLE	—SANITARY SEWER, CLEANOUT & MANHOLE
—STORM SEWER, CLEANOUT & MANHOLE	—STORM SEWER, CLEANOUT & MANHOLE
—COMBINED SEWER & MANHOLE	—COMBINED SEWER & MANHOLE
—SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN	—SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
—POST INDICATOR VALVE	—POST INDICATOR VALVE
—WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF	—WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
—MARB. TRANSFORMER, IRRIGATION CONTROL VALVE	—MARB. TRANSFORMER, IRRIGATION CONTROL VALVE
—UNIDENTIFIED STRUCTURE	—UNIDENTIFIED STRUCTURE
—SPOT ELEVATION	—SPOT ELEVATION
—CONTOUR LINE	—CONTOUR LINE
—FENCE	—FENCE
—GUARD RAIL	—GUARD RAIL
—STREET LIGHT	—STREET LIGHT
—SIGN	—SIGN
—CONC.	—CONC.
—ASPH.	—ASPH.
—GRAVEL	—GRAVEL
—WETLAND	—WETLAND



Parcel Area Table	
PARCEL NO.	AREA (S.F.)
1	36,129
2	22,201
3	18,352
4	17,822
5	18,049
6	18,231
7	18,270
8	31,174

Parcel Area Table	
PARCEL NO.	AREA (S.F.)
9	14,188
10	16,350
11	16,237
12	16,237
13	16,237
14	16,237
15	16,237
16	24,630



**FLOODPLAIN:**  
(Per Flood Insurance Rate Map Number 26125C0553G, dated January 16, 2009)

BY GRAPHICAL PLOTTING, THE SITE LIES WITHIN:

**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**  
The 1% annual chance flood (100 year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE AE - Base Flood Elevations determined.

**FLOODWAY AREAS IN ZONE AE**

The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

**SYMBOLS: GRADING**

**PROPOSED SPOT ELEVATION:**  
TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.

**PROPOSED CONTOUR LINE**

**ABBREVIATIONS:**

T/C = TOP OF CURB  
G = GUTTER GRADE  
T/P = TOP OF PAVEMENT  
T/S = TOP OF SIDEWALK  
T/W = TOP OF WALL  
B/W = BOTTOM OF WALL  
F.G. = FINISH GRADE  
RIM = RIM ELEVATION

**LEGEND**

IRON FOUND  
IRON SET  
NAIL FOUND  
NAIL & CAP SET

BRASS PLUG SET  
MONUMENT FOUND  
MONUMENT SET

SEC. CORNER FOUND  
RECORDED  
MEASURED  
CALCULATED

EXISTING  
OH-ELEC  
UG-CATV  
UG-PHONE  
UG-ELEC  
GAS MAIN  
WATERMAIN  
SANITARY SEWER  
STORM SEWER  
COMBINED SEWER  
POST INDICATOR VALVE  
WATER VALVE BOX  
MARB. TRANSFORMER  
UNIDENTIFIED STRUCTURE  
SPOT ELEVATION  
CONTOUR LINE  
FENCE  
GUARD RAIL  
STREET LIGHT  
SIGN  
CONC.  
ASPH.  
GRAVEL  
WETLAND

PROPOSED  
ELEC. OR CABLE TV O.H. LINE, POLE & GUY WIRE  
UNDERGROUND CABLE TV, CATV PEDESTAL  
TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE  
ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE  
GAS MAIN VALVE & GAS LINE WARMER  
WATERMAIN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE  
SANITARY SEWER, CLEANOUT & MANHOLE  
STORM SEWER, CLEANOUT & MANHOLE  
COMBINED SEWER & MANHOLE  
SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN  
POST INDICATOR VALVE  
WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF  
MARB. TRANSFORMER, IRRIGATION CONTROL VALVE  
UNIDENTIFIED STRUCTURE  
SPOT ELEVATION  
CONTOUR LINE  
FENCE  
GUARD RAIL  
STREET LIGHT  
SIGN  
CONC.  
ASPH.  
GRAVEL  
WETLAND

**PEA GROUP**  
t. 844.813.2949  
www.peagroup.com



0 25 50 100  
SCALE: 1" = 50'

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

**CAUTION!!**  
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED 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  
**MONDRIAN PROPERTIES**  
50215 SCHOENHERR  
SHELBY TWP., MICHIGAN

PROJECT TITLE  
**ADLER COVE**  
2112, 2125 & 2152 E. LONG LAKE  
TROY, MICHIGAN

REVISIONS  
CITY COMMENTS 11-9-21

ORIGINAL ISSUE DATE:  
OCTOBER 19, 2021  
DRAWING TITLE  
**PRELIMINARY GRADING PLAN**

PEA JOB NO. 2016-266  
P.M. JBT  
DN. TMK  
DES. TMK  
DRAWING NUMBER:

NOT FOR CONSTRUCTION

P-3.0









CLIENT

**MONDRIAN  
PROPERTIES**

50215 SCHOENHERR  
SHELBY TWP., MICHIGAN

[illegible]

DRAWING TITLE

**PRELIMINARY  
LANDSCAPE  
PLAN**






**LANDSCAPE CALCULATIONS:**  
PER CITY OF TROY ZONING ORDINANCE; R-1C

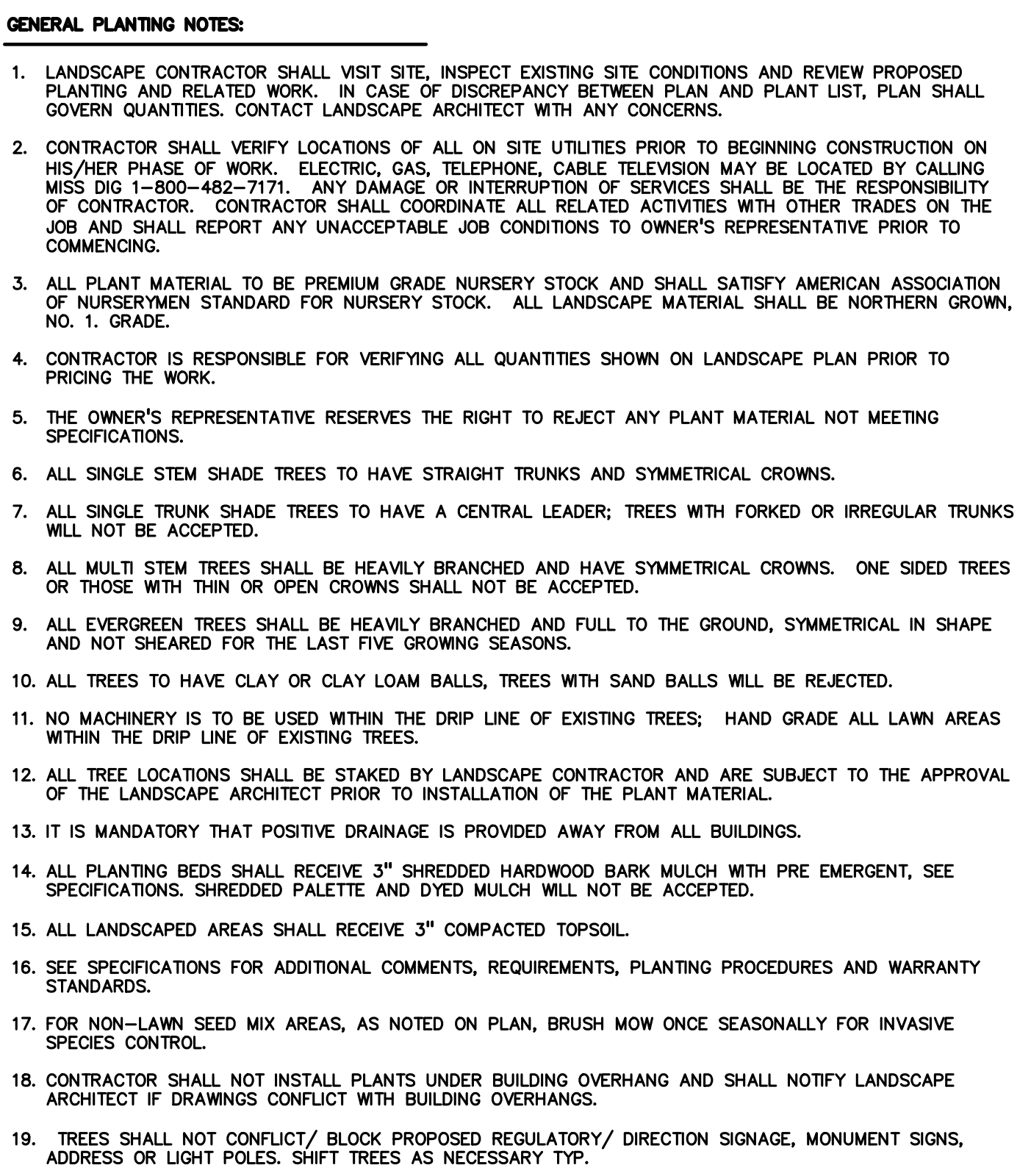
**INTERNAL PUBLIC ROADS STREET TREES**  
REQUIRED: 1 TREE / 50 LF (BOTH SIDES RD.) 1,262 LF / 50 LF = 26 TREES  
PROVIDED: 26 TREES  
NOTE: TREES SHALL BE PLACED AT A MINIMUM OF 5' AWAY FROM UTILITY LEADS.

**GREENBELT TREES**  
REQUIRED: 1 LARGE EVG TREE / 10 LF OF STREET FRONTAGE. 558' OF RIGHT OF WAY / 10 = 56 DEC TREES  
REQUIRED.  
PROVIDED: 56 EVG TREES PROVIDED  
NOTE: TREES SHALL BE PLANTED 5' AWAY FROM UTILITIES.

**LANDMARK AND WOODLAND TREE REPLACEMENT**  
REQUIRED: WOODLAND TREES REPLACE AT 50% DBH AND LANDMARK AT 100% . 0" REQUIRED FOR REPLACEMENT.  
SEE SHEET T-1.0 FOR CALCS.

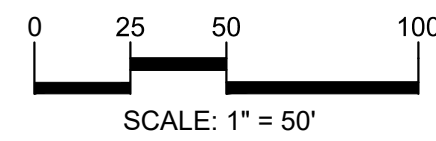
**KEY:**

	= GREENBELT TREES
	= STREET TREES
	= NON-IRRIGATED SEED LAWN
	= STORMWATER SEED MIX
	= EXISTING TREES TO REMAIN WITH TREE PROTECTION FENCE



L-1.0





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CLIENT  
**MONDRIAN PROPERTIES**  
50215 SCHOENHERR  
SHELBY TWP., MICHIGAN

PROJECT TITLE  
**ADLER COVE**  
2112, 2125 & 2152 E. LONG LAKE  
TROY, MICHIGAN

REVISIONS	
CITY COMMENTS	11-9-21

ORIGINAL ISSUE DATE:  
OCTOBER 19, 2021

DRAWING TITLE  
**TREE  
PRESERVATION  
PLAN**

PEA JOB NO.	2016-266
P.M.	JBT
DN.	TMK
DES.	TMK

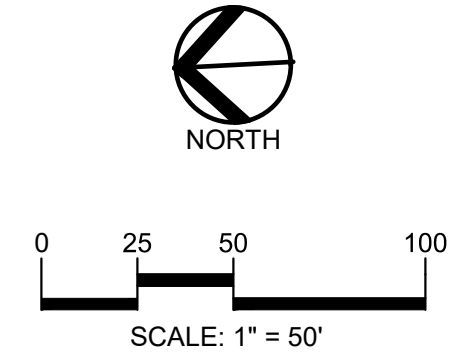
DRAWING NUMBER:

NOT FOR CONSTRUCTION

T-1.0







CAUTION!!  
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CLIENT  
**MONDRIPAN PROPERTIES**  
50215 SCHOENHERR  
SHELBY TWP., MICHIGAN

PROJECT TITLE  
**ADLER COVE**  
2112, 2125 & 2152 E. LONG LAKE  
TROY, MICHIGAN

REVISIONS  
CITY COMMENTS 11-9-21

ORIGINAL ISSUE DATE:  
OCTOBER 19, 2021

DRAWING TITLE

**TREE  
PRESERVATION  
LIST**

PEA JOB NO. 2016-266  
P.M. JBT  
D.N. TMK  
DES. TMK  
DRAWING NUMBER:

NOT FOR CONSTRUCTION

T-1.1

TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
101	WP	20	(Eastern) White Pine	Pinus strobus	Fair		LANDMARK	R	Y	-
102	EE	15	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
103	EE	23	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	R	Y	-
104	EE	25	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	R	Y	-
105	EE	8	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	R	Y	-
106	EE	8	Siberian Elm	Ulmus pumila	Very Poor	x1	INVASIVE	R	Y	-
107	BX	15	Box elder	Acer negundo	Very Poor		INVASIVE	R	Y	-
108	EE	11	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	R	Y	-
109	EE	10	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	R	Y	-
110	EE	10	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	R	Y	-
111	EE	16	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	R	Y	-
112	BX	20	Box elder	Acer negundo	Fair		INVASIVE	R	Y	-
113	RP	11	Red Pine	Pinus resinosa	Very Poor		WOODLAND	R	Y	-
114	BX	7	Box elder	Acer negundo	Very Poor		INVASIVE	R	Y	-
115	BX	10	Box elder	Acer negundo	Poor		INVASIVE	R	Y	-
116	BX	18	Box elder	Acer negundo	Very Poor		INVASIVE	R	Y	-
117	WP	20	(Eastern) White Pine	Pinus strobus	Fair		LANDMARK	R	Y	REPLACE
118	BX	21	Box elder	Acer negundo	Poor		INVASIVE	R	Y	-
119	BP	8	Bradford Pear	Pyrus calleryana	Fair		WOODLAND	R	Y	REPLACE
120	WS	12	White Spruce	Picea glauca	Poor		WOODLAND	R	Y	-
121	AS	19	Quaking Aspen	Populus tremuloides	Very Poor		INVASIVE	R	Y	-
122	EE	19	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	R	Y	-
123	EE	16	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
124	WS	11	White Spruce	Picea glauca	Very Poor		WOODLAND	R	Y	-
125	BS	13	Blue Spruce	Picea pungens	Very Poor		WOODLAND	R	Y	-
126	EE	17	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
127	MR	17	Red Mulberry	Morus rubra	Poor		INVASIVE	R	Y	-
128	CT	20	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
129	EE	11	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
130	E	8	American Elm	Ulmus americana	Poor		INVASIVE	R	Y	-
131	BX	8	Box elder	Acer negundo	Poor		INVASIVE	R	Y	-
132	EE	19	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
133	BX	10	Box elder	Acer negundo	Very Poor		INVASIVE	R	Y	-
134	EE	33	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	R	Y	-
135	BS	16	Blue Spruce	Picea pungens	Very Poor		WOODLAND	R	Y	-
136	BS	17	Blue Spruce	Picea pungens	Very Poor		WOODLAND	R	Y	-
137	BS	16	Blue Spruce	Picea pungens	Very Poor		WOODLAND	R	Y	-
138	AP	16	Domestic Apple	Malus sylvestris	Poor		LANDMARK	R	Y	-
139	BS	14	Blue Spruce	Picea pungens	Poor		WOODLAND	R	Y	-
140	WC	8	White Cedar	Thuja occidentalis	Poor	x2	WOODLAND	R	Y	-
141	BS	19	Blue Spruce	Picea pungens	Very Poor		LANDMARK	R	Y	-
142	BS	13	Blue Spruce	Picea pungens	Very Poor		WOODLAND	R	Y	-
143	WP	24	(Eastern) White Pine	Pinus strobus	Fair		LANDMARK	R	Y	REPLACE
144	WS	16	White Spruce	Picea glauca	Poor		WOODLAND	R	Y	-
145	BW	9	Black Walnut	Juglans nigra	Fair		WOODLAND	R	Y	REPLACE
146	WC	15	White Cedar	Thuja occidentalis	Fair		LANDMARK	S	Y	-
147	WP	21	(Eastern) White Pine	Pinus strobus	Fair		LANDMARK	S	Y	-
148	BF	11	Balsam Fir	Abies balsamea	Fair		WOODLAND	S	Y	-
149	AP	19	Domestic Apple	Malus sylvestris	Poor		LANDMARK	R	Y	-
150	EE	35	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	N	-
151	EE	25	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	N	-
152	SM	52	Silver Maple	Acer saccharinum	Good		INVASIVE	S	Y	-
153	EE	17	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	N	-
154	BX	40	Box elder	Acer negundo	Poor		INVASIVE	S	N	-
155	PW	19	White Poplar	Populus alba	Fair		INVASIVE	R	Y	-
156	PW	15	White Poplar	Populus alba	Poor		INVASIVE	R	Y	-
157	PW	38	White Poplar	Populus alba	Fair		INVASIVE	R	Y	-
158	E	19	American Elm	Ulmus americana	Very Poor		INVASIVE	R	Y	-
159	SM	42	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	Y	-
160	BW	18	Black Walnut	Juglans nigra	Good		LANDMARK	S	Y	REPLACE
161	EE	24	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	S	Y	-
162	EE	19	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	S	Y	-
163	MR	8	Red Mulberry	Morus rubra	Poor		INVASIVE	S	N	-
164	BX	6	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
165	NS	9	Norway Spruce	Picea Abies	Poor		WOODLAND	S	N	-
166	EE	14	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	Y	-
167	BX	24	Box elder	Acer negundo	Poor		INVASIVE	S	N	-
168	MR	13	Red Mulberry	Morus rubra	Poor	x3	INVASIVE	S	N	-
169	EE	15	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	N	-
170	EE	15	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
171	EE	16	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	R	Y	-
172	EE	21	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
173	EE	24	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
174	EE	32	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
175	EE	24	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
176	EE	24	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
177	EE	13	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
178	BW	8	Black Walnut	Juglans nigra	Fair		WOODLAND	R	Y	REPLACE
179	MR	20	Red Mulberry	Morus rubra	Fair		INVASIVE	R	Y	-
180	BW	8	Black Walnut	Juglans nigra	Fair		WOODLAND	R	Y	REPLACE
181	GA	8	Green Ash	Fraxinus pennsylvanica	Fair		INVASIVE	R	Y	-
182	GA	10	Green Ash	Fraxinus pennsylvanica	Very Poor		INVASIVE	R	Y	-
183	GA	6	Green Ash	Fraxinus pennsylvanica	Poor		INVASIVE	R	Y	-
184	GA	8	Green Ash	Fraxinus pennsylvanica	Poor		INVASIVE	R	Y	-
185	CT	22	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y	-
186	SM	12	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	Y	-
187	E	12	American Elm	Ulmus americana	Fair		INVASIVE	R	Y	-
188	E	6	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
189	SM	7	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
190	GA	9	Green Ash	Fraxinus pennsylvanica	Fair		INVASIVE	S	Y	-
191	CT	25	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
192	CT	23	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
193	CT	24	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
194	GA	8	Green Ash	Fraxinus pennsylvanica	Very Poor		INVASIVE	S	Y	-
195	GA	6	Green Ash	Fraxinus pennsylvanica	Fair		INVASIVE	S	Y	-
196	EE	14	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	Y	-
197	EE	9	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	S	N	-
198			NO TAG 198				#N/A	S	Y	#N/A
199	EE	12	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	S	N	-
200	EE	17	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	S	N	-
JUMP IN SEQUENCE							#N/A	S	Y	#N/A
225	EE	13	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	S	Y	-
227	EE	11	Siberian Elm	Ulmus pumila	Dead		INVASIVE	S	Y	-
228	EE	12	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	N	-
229	EE	11	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
230	EE	6	Siberian Elm	Ulmus pumila	Poor		INVASIVE	S	Y	-
231	EE	12	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-

TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
232	EE	12	Siberian Elm	Ulmus pumila	Very Poor		INVASIVE	R	Y	-
233	SM	18	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	Y	-
234	EE	9	Siberian Elm	Ulmus pumila	Poor	x1	INVASIVE	R	Y	-
235	EE	6	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
236	CT	32	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
237	E	6	American Elm	Ulmus americana	Poor		INVASIVE	R	Y	-
238	RM	9	Red Maple	Acer rubrum	Fair		WOODLAND	R	Y	REPLACE
239	EE	12	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
240	EE	6	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
241	EE	9	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
242	EE	6	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
243	EE	6	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
244	EE	9	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
245	BE	12	Box elder	Acer negundo	Fair		INVASIVE	R	Y	-
246	SWO	6	Swamp White Oak	Quercus bicolor	Good		WOODLAND	R	Y	REPLACE
247	SM	15	Silver Maple	Acer saccharinum	Good	x2	INVASIVE	R	Y	-
248	E	14	American Elm	Ulmus americana	Fair		INVASIVE	R	Y	-
249	PB	10	Paper Birch	Betula papyrifera	Fair		WOODLAND	R	Y	REPLACE
250	BC	6	Wild Black Cherry	Prunus serotina	Very Poor		WOODLAND	R	Y	-
251	PB	8	Paper Birch	Betula papyrifera	Very Poor	x3	WOODLAND	R	Y	-
252	PB	7	Paper Birch	Betula papyrifera	Poor		WOODLAND	R	Y	-
253	PB	9	Paper Birch	Betula papyrifera	Poor		WOODLAND	R	Y	-
254	PB	6	Paper Birch	Betula papyrifera	Poor		WOODLAND	R	Y	-
255	PB	6	Paper Birch	Betula papyrifera	Very Poor		WOODLAND	R	Y	-
256	PB	6	Paper Birch	Betula papyrifera	Poor		WOODLAND	R	Y	-
257	CT	32	Cottonwood	Populus deltoides	Very Poor		INVASIVE	R	Y	-
258	CT	11	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
259	CT	12	Cottonwood	Populus deltoides	Good	x1	INVASIVE	R	Y	-
260	CT	13	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
261	PB	8	Paper Birch	Betula papyrifera	Good		WOODLAND	R	Y	REPLACE
262	PB	6	Paper Birch	Betula papyrifera	Fair		WOODLAND	R	Y	REPLACE
263	E	6	American Elm	Ulmus americana	Fair		INVASIVE	R	Y	-
264	RO	6	Red Oak	Quercus rubra	Fair		WOODLAND	R	Y	REPLACE
265	SWO	6	Swamp White Oak	Quercus bicolor	Fair		WOODLAND	R	Y	REPLACE
266	CT	38	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
267	E	8	American Elm	Ulmus americana	Fair		INVASIVE	R	Y	-
268	E	10	American Elm	Ulmus americana	Fair		INVASIVE	R	Y	-
269	CT	10	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
270	WC	14	White Cedar	Thuja occidentalis	Poor		LANDMARK	R	Y	-
271	CT	9	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
272	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
273	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
274	CT	12	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
275	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
276	CT	11	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
277	CT	13	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
278	CT	9	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
279	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
280	E	17	American Elm	Ulmus americana	Poor	x1	INVASIVE	R	Y	-
281	BX	13	Box elder	Acer negundo	Poor		INVASIVE	R	Y	-
282	WC	6	White Cedar	Thuja occidentalis	Poor		WOODLAND	R	Y	-
283	CT	9	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
284	WC	12	White Cedar	Thuja occidentalis	Very Poor		LANDMARK	R	Y	-
285	EE	18	Siberian Elm	Ulmus pumila	Fair		INVASIVE	R	Y	-
286	TH	6	Thornapple Hawthorne	Craegoga spp.	Poor		WOODLAND	R	Y	-
287	WC	6	White Cedar	Thuja occidentalis	Poor		WOODLAND	R	Y	-
288	EE	8	Siberian Elm	Ulmus pumila	Fair		INVASIVE	R	Y	-
289	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
290	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
291	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
292	CT	14	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y	-
293	BW	5	Black Walnut	Juglans nigra	Fair		WOODLAND	R	Y	REPLACE
294	AP	9	Domestic Apple	Malus sylvestris	Very Poor		WOODLAND	R	Y	-
295	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
296	CT	13	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
297	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
298	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
299	CT	11	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
300	CT	9	Cottonwood	Populus deltoides	Fair	x1	INVASIVE	R	Y	-
301	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
302	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
303	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
304	BX	8	Box elder	Acer negundo	Poor		INVASIVE	R	Y	-
305	BX	9	Box elder	Acer negundo	Very Poor		INVASIVE	R	Y	-
306	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
307	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
308	CT	10	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
311	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
309	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
310	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
312	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
313	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
314	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
315	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
316	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
317	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
318	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
319	CT	9	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y	-
320	CT	8	Cottonwood	Populus deltoides	Good		INVASIVE	R	Y	-
321	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
322	WP	10	(Eastern) White Pine	Pinus strobus	Fair		WOODLAND	R	Y	REPLACE
323	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
324	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
325	CO	6	Chestnut Oak	Quercus Prinus	Fair		WOODLAND	R	Y	REPLACE
326	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
327	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
328	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
329	BW	9	Black Walnut	Juglans nigra	Poor		WOODLAND	R	Y	-
330	CT	21	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
331	BX	7	Box elder	Acer negundo	Fair		INVASIVE	R	Y	-
332	E	6	American Elm	Ulmus americana	Fair		INVASIVE	R	Y	-
333	WP	7	(Eastern) White Pine	Pinus strobus	Very Poor		WOODLAND	R	Y	-
334	BW	7	Black Walnut	Juglans nigra	Fair		WOODLAND	R	Y	REPLACE
335	WP	8	(Eastern) White Pine	Pinus strobus	Poor		WOODLAND	R	Y	-
336	PB	8	Paper Birch	Betula papyrifera	Poor		WOODLAND	R	Y	-
337	PW	10	White Poplar	Populus alba	Poor		INVASIVE	R	Y	-
338	PW	7	White Poplar	Populus alba	Very Poor		INVASIVE	R	Y	-

TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
2045	EE	7	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
2046	EE	7	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
2047	EE	6	Siberian Elm	Ulmus pumila	Poor		INVASIVE	R	Y	-
2048	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2049	CT	9	Cottonwood	Populus deltoides	Fair	x1	INVASIVE	R	Y	-
2050	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2051	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2052	EE	7	Siberian Elm	Ulmus pumila	Fair		INVASIVE	S	Y	-
2053	AP	8	Domestic Apple	Malus sylvestris	Fair		WOODLAND	S	Y	-
2054	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2055	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2056	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2057	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2058	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2059	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2060	AP	7	Domestic Apple	Malus sylvestris	Poor		WOODLAND	S	Y	-
2061	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2062	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2063	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2064	AP	6	Domestic Apple	Malus sylvestris	Poor		WOODLAND	R	Y	-
2065	CT	8	Cottonwood	Populus deltoides	Poor	x1	INVASIVE	R	Y	-
2066	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2067	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2068	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2069	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2070	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2071	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2072	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2073	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2074	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2075	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2076	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2077	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2078	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2079	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2080	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2081	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2082	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2083	CT	9	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2084	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2085	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2086	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2087	E	9	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
2088	PW	6	White Poplar	Populus alba	Poor	x4	INVASIVE	R	Y	-
2089	RO	8	Red Oak	Quercus rubra	Fair		WOODLAND	R	Y	REPLACE
2090	PW	7	White Poplar	Populus alba	Poor		INVASIVE	R	Y	-
2091	BW	7	Black Walnut	Juglans nigra	Fair		WOODLAND	R	Y	REPLACE
2092	BW	9	Black Walnut	Juglans nigra	Fair		WOODLAND	S	Y	-
2093	PW	10	White Poplar	Populus alba	Poor	x4	INVASIVE	S	Y	-
2094	BW	7	Black Walnut	Juglans nigra	Fair		WOODLAND	R	Y	REPLACE
2095	E	15	American Elm	Ulmus americana	Fair		INVASIVE	R	Y	-
2096	CT	21	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2097	BW	7	Black Walnut	Juglans nigra	Good		WOODLAND	R	Y	REPLACE
2098	PW	6	White Poplar	Populus alba	Poor	x2	INVASIVE	R	Y	-
2099	E	17	American Elm	Ulmus americana	Poor		INVASIVE	R	Y	-
2100	E	25	American Elm	Ulmus americana	Fair		INVASIVE	R	Y	-
2101	SWD	9	Swamp White Oak	Quercus bicolor	Poor		WOODLAND	R	Y	-
2102	SM	21	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	Y	-
2103	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2104	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	R	Y	-
2105	CT	14	Cottonwood	Populus deltoides	Fair		INVASIVE	R	Y	-
2106	RM	7	Red Maple	Acer rubrum	Fair		WOODLAND	R	Y	REPLACE
2107	PW	7	White Poplar	Populus alba	Poor		INVASIVE	R	Y	-
2108	PW	7	White Poplar	Populus alba	Poor		INVASIVE	R	Y	-
2109	BW	7	Black Walnut	Juglans nigra	Very Poor		WOODLAND	R	Y	-
2110	PW	8	White Poplar	Populus alba	Very Poor		INVASIVE	R	Y	-
2111	PW	8	White Poplar	Populus alba	Very Poor		INVASIVE	R	Y	-
2112	PW	10	White Poplar	Populus alba	Very Poor		INVASIVE	R	Y	-
2113	PW	10	White Poplar	Populus alba	Fair		INVASIVE	R	Y	-
2114	PW	9	White Poplar	Populus alba	Poor		INVASIVE	R	Y	-
2115	SM	13	Silver Maple	Acer saccharinum	Fair	x4	INVASIVE	R	Y	-
2116	E	6	American Elm	Ulmus americana	Fair		INVASIVE	R	Y	-
2117	RP	6	Red Pine	Pinus resinosa	Poor		WOODLAND	R	Y	-
2118	AP	6	Domestic Apple	Malus sylvestris	Poor		WOODLAND	R	Y	-
2119	SM	6	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
2120	E	8	American Elm	Ulmus americana	Poor		INVASIVE	R	Y	-
2121	SM	7	Silver Maple	Acer saccharinum	Fair		INVASIVE	R	Y	-
2122	SM	7	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
2123	E	6	American Elm	Ulmus americana	Poor		INVASIVE	R	Y	-
2124	E	9	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
2125	E	9	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
2126	E	6	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
2127	CT	15	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2128	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2129	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2130	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2131	CT	16	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2132	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2133	CT	14	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2134	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2135	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2136	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2137	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2138	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2139	AP	7	Domestic Apple	Malus sylvestris	Poor		WOODLAND	S	Y	-
2140	CT	21	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2141	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2142	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2143	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2144	CT	9	Cottonwood	Populus deltoides	Fair	x1	INVASIVE	S	Y	-
2145	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2146	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2147	SM	7	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
2148	SM	15	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
2149	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2150	E	15	American Elm	Ulmus americana	Poor		INVASIVE	S	Y	-
2151	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-

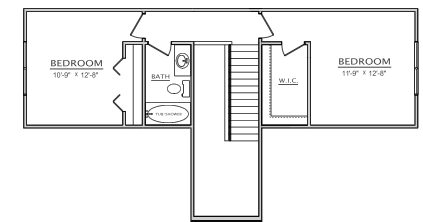
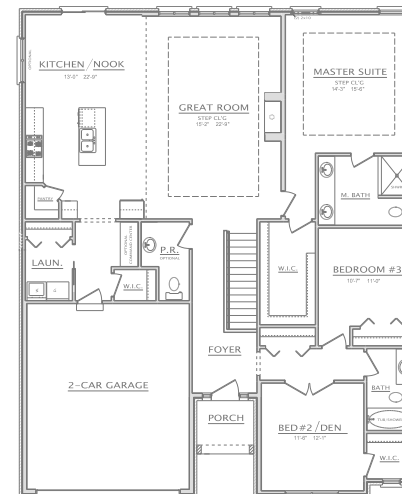
TAG	CODE	DBH	COMMON NAME	LATIN NAME	COND	COMMENTS	CLASS	SAVE / REMOVE	ON-SITE	REPLACE
2152	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2153	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2154	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2155	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2156	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2157	CT	6	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2158	CT	15	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2159	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2160	CT	7	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2161	CT	24	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2162	CT	9	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2163	CT	8	Cottonwood	Populus deltoides	Fair	x1	INVASIVE	S	Y	-
2164	CT	18	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2165	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2166	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2167	CT	15	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2168	BW	8	Black Walnut	Juglans nigra	Fair		WOODLAND	S	Y	-
2169	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2170	E	8	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
2171	E	7	American Elm	Ulmus americana	Poor		INVASIVE	S	Y	-
2172	E	7	American Elm	Ulmus americana	Fair		INVASIVE	S	Y	-
2173	E	7	American Elm	Ulmus americana	Very Poor		INVASIVE	S	Y	-
2174	SM	8	Silver Maple	Acer saccharinum	Fair		INVASIVE	S	Y	-
2175	E	6	American Elm	Ulmus americana	Poor		INVASIVE	S	Y	-
2176	RC	10	Red Cedar	Juniperus virginiana	Poor		INVASIVE	S	Y	-
2177	CT	9	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2178	E	7	American Elm	Ulmus americana	Poor	x1	INVASIVE	S	Y	-
2179	BX	8	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2180	E	8	American Elm	Ulmus americana	Poor		INVASIVE	S	Y	-
2181	BW	10	Black Walnut	Juglans nigra	Poor		WOODLAND	S	N	-
2182	BX	10	Box elder	Acer negundo	Poor		INVASIVE	S	N	-
2183	BX	24	Box elder	Acer negundo	Poor		INVASIVE	S	N	-
2184	BX	7	Box elder	Acer negundo	Poor	x1	INVASIVE	S	N	-
2185	BX	10	Box elder	Acer negundo	Poor		INVASIVE	S	N	-
2186	E	7	American Elm	Ulmus americana	Poor		INVASIVE	S	Y	-
2187	BX	8	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2188	BX	7	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2189	BX	9	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2190	BX	8	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2191	BX	8	Box elder	Acer negundo	Poor	x1	INVASIVE	S	Y	-
2192	BX	8	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2193	CT	12	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2194	CT	6	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2195	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2196	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2197	CT	14	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2198	CT	12	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2199	CT	8	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2200	CT	13	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2201	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2202	CT	10	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2203	CT	22	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2204	CT	16	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2205	CT	8	Cottonwood	Populus deltoides	Fair		INVASIVE	S	Y	-
2206	BX	8	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2207	CT	15	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2208	BX	6	Box elder	Acer negundo	Fair		INVASIVE	S	Y	-
2209	BX	7	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2210	BX	6	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2211	CT	7	Cottonwood	Populus deltoides	Poor		INVASIVE	S	Y	-
2212	BX	12	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2213	BX	8	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2214	BX	10	Box elder	Acer negundo	Fair		INVASIVE	S	N	-
2215	BX	7	Box elder	Acer negundo	Poor		INVASIVE	S	Y	-
2216	BW	10	Black Walnut	Juglans nigra	Fair		WOODLAND	S	Y	-
2217	E	10	American Elm	Ulmus americana	Fair	x2	INVASIVE	S	Y	-
2218	E	7	American Elm	Ulmus americana	Poor		INVASIVE	S	N	-
2219	BW	6	Black Walnut	Juglans nigra	Fair		WOODLAND	S	N	-
2220	E	16	American Elm	Ulmus americana	Poor	x1	INVASIVE	S	N	-
2221	BW	6	Black Walnut	Juglans nigra	Fair		WOODLAND	S	N	-
2222	BW	8	Black Walnut	Juglans nigra	Fair		WOODLAND	S	N	-
2223	CT	9	Cottonwood	Populus deltoides	Very Poor		INVASIVE	S	N	-





# HOMWOOD RANCH W/ OPTIONAL SECOND FLOOR 1990 SQFT.

MONDRIAN PROPERTIES

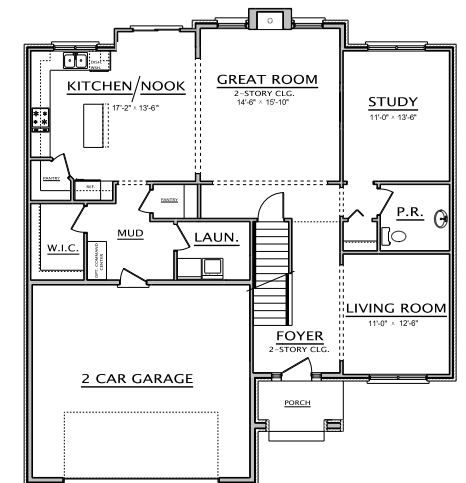


OPTIONAL SECOND FLOOR

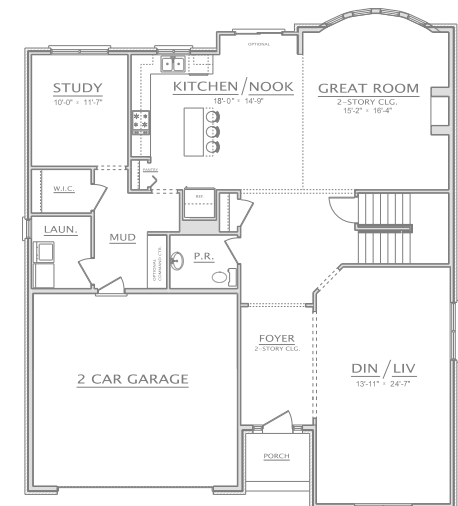
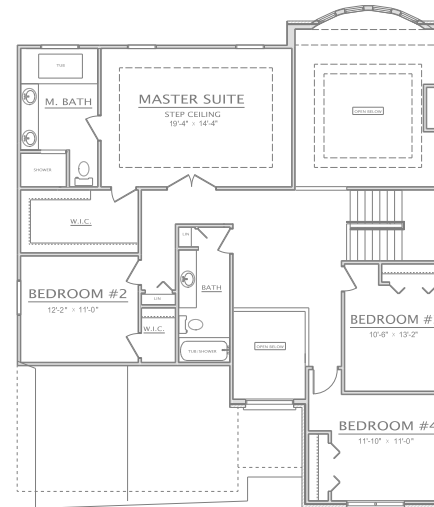
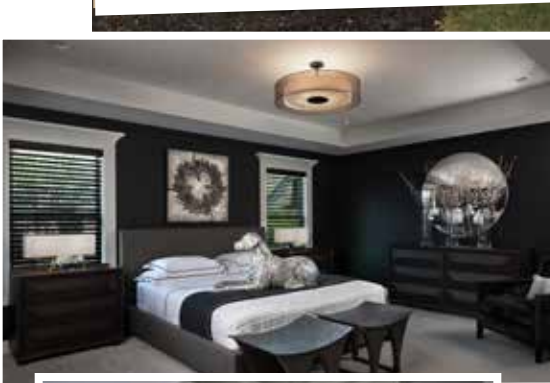
\*PLANS ARE CONCEPTUAL AND MAY VARY



MONDRIAN PROPERTIES







# MANOR COLONIAL 2900 sqft

October 4, 2021  
UPDATE: November 9, 2021

Project Applicant / Developer:

**Mondrian Properties**

50215 Schoenherr Road  
Shelby Township, MI 48315

Attn: Joseph Maniaci  
586-726-7350  
jmaniaci@mondrianproperties.com

Development Team Consultants:

**Civil Engineer:**

**PEA Group**  
John Thompson, PE  
2430 Rochester Court  
Troy, MI 48083  
844-813-2949

**Site Planning:**

**J Eppink Partners, Inc.**  
Jim Eppink, RLA  
9336 Sashabaw Road  
Clarkston, MI 48348  
248-922-0789

Site Data:

**Parcel Size:**  
10 acres

**Location:**  
South side of E. Long Lake,  
east of John R Road within  
the City of Troy, MI

**Existing Zoning:**  
R-1C One Family Residential

**Proposed Zoning:**  
R-1C One Family Residential  
using the Cluster Option

**Proposed Uses:**  
20 single family residential  
homes

## Project Narrative

### Adler Cove

A Proposed Single-Family Residential Neighborhood  
City of Troy, Michigan

*The Adler Cove Site Plan Submission Package was updated in response to the Carlisle Wortman Associates review letter dated September 20, 2021*

#### Project Vision:

Adler Cove is a proposed single family residential neighborhood to be constructed in the City of Troy. The 10-acre site is currently undeveloped and is located on the south side of E. Long Lake Road, east of John R Road. Twenty single-family homes with nearly 60% open space will have direct access to 'Adler Court', a proposed private street that will have its connection to E. Long Lake Road.



The 10-acre Adler Cove site is located on the south side of E. Long Lake Road just east of John R Road. The property abuts Commercial / Neighborhood Node zoning to the west, R-1C residential to the east, and the Larson Middle School to the southeast.

The Adler Cove property is comprised of three adjacent parcels which were assembled to form the 10-acre subject property. The parcel is wooded and because of its adjacency to the Gibson-Renshaw Drain and associated floodway, the property is located within a 'Flood Hazard Area' (See Sheet P-1.0 within the attached Preliminary Site Plan Submission package for additional information).

#### Existing R-1C Zoning & Permitted Development Patterns:

The subject property is currently zoned R-1C One-Family Residential, which, according to the City's Zoning Ordinance, permits single family residential homes to be built on the site providing the meet the following standards:



R1-C – Lot Size per dwelling unit (when public sewer is available):

- Lot Area: 10,500sf
- Lot Width: 85'
- Lot Frontage: 85'
- Max Height: 30' / 2.5 stories
- Front Setback: 30'
- Side Setback: 10' / 20' total
- Rear Setback: 40'
- Open Space: 0% required

A 'parallel site plan' or 'by-zoning rights' plan was developed using the ordinance standards (see Sheet P-2.1 within the attached Preliminary Site Plan Submission package). The parallel site plan provides 16 single family lots all with access to E. Long Lake Road via a new public road. Each lot meets the minimum ordinance standards and could accommodate a 5,000-sf single family home. The parallel plan provides a detention basin at the southern end of the site, however, does not provide any additional community open space or preservation areas within the development.



*A conventional R-1C sub-division development pattern would provide only large-lot parcels and homes, as well as unnecessarily 'privatize' all natural areas within the development into the individual lots, leaving no community open space or ability to protect and set aside the natural features. Because of the desire to provide smaller homes and preserve significant open space within the development, alternate zoning vehicles within the Zoning Ordinance were evaluated.*

As noted, this property has significant natural features including densely wooded areas, floodways, and floodplain areas. A conventional R-1C single family development, designed according to the zoning ordinance would in-essence 'privatize' those features by incorporating them within the lot areas of the individual R-1C home sites. In so doing there would be limited means to prevent future homeowners from removing trees or altering the topography or native landscape if it was located within their lots. This predicably would have detrimental impacts on the natural features of the site over time. Because of the limited ability to protect the natural features of the site and the very large homes sizes that result from the use of the R-1C zoning, Mondrian Properties examined alternative zoning and development opportunities for the site to better align with the development objectives.

## R-1C One-Family Cluster Option:

Section 10.04 of the City's Zoning Ordinance permits One-Family Cluster Option developments within parcels currently zoned R-1C as an alternative to conventional residential development as a means to:

1. Encourage the use of property in accordance with its natural character
2. Assure the permanent preservation of open space and other natural features
3. Provide recreation and/or open space within a reasonable distance of all residents in the Cluster development
4. Allow greater flexibility in the design of the neighborhood
5. Facilitate the construction and maintenance of infrastructure in a more efficient manner
6. Ensure compatibility of design and use between neighboring property
7. Encourage a less sprawling form of development and ability to preserve open space
8. Allow for innovative design to align with City goals

Using the Cluster Option standards, Mondrian Properties developed site plan alternatives that sought to maximize and protect the open space preservation on the property as well as provide home sites that would accommodate smaller and various size homes compared to those that may typically be built in the large-lot R-1C conventional developments. To that end, we have developed Adler Cove, a premier single family residential neighborhood that will preserve 38% of the site as dedicated open space and existing trails, and cluster twenty homes within the center of the walkable community. In total, only 4.73 acres of the site will be developed, and 5.27 acres will remain undeveloped. (See the data table on Sheet P-2.0 for proposed site and development data)



*The R-1C Single Family Cluster Zoning Option enables the ability to develop a compact neighborhood with 38% dedicated open space and a total of 5.27 acres of undeveloped land on the 10-acre site **resulting in nearly 60% of the site being common area open space**. The walkable community will provide 20 homes of various size, adding additional housing choices to the vibrant Troy market.*

Using the R-1C Cluster Option standards outlined within the Zoning Ordinance, the minimum lots size within Adler Cove will be 6,900 sf (60'x115') with the average lot size of 8,341 sf. A 40' wide private road easement will be constructed with sidewalks located on each side of the private road as well as along the E. Long Lake frontage and a walking connection to the Larson Middle School.



The homes within Adler Cove will vary in size to appeal to a range of choices within the Troy housing market. There will be three homes styles beginning with a 1,990-sf ranch home with a ground floor owner's suite with options for additional bedrooms on an optional second-floor. All Cluster Option Zoning Ordinance dimensional and area standards, including perimeter setbacks, open space, and lot areas have been achieved or exceeded on the attached proposed site plan. Additionally, Cluster Option Calculations can be found of Sheet P-2.0 which provide the information needed to substantiate the total proposed density (20 units) based on the conventional plan's number of units allowed plus the 20% open space bonus as well as the additional 10% additional open space allowance which results in the permitted 20-unit density.



*Adler Cove, using the R-1C Single Family Cluster Option will provide a high-quality compact neighborhood of 20 homes while preserving 38% of the site as dedicated open space and a total of 5.27-acres of the site and non-developed area. The proposed Family Cluster Option plan will protect the important natural features of the site and maintain the existing community trail system.*



*A side-by-side comparison of the Conventional R1-C site plan and development pattern (on the left) and the proposed Adler Cove Single Family Cluster Option site plan and development pattern (on the right) demonstrates the ability to preserve and protect nearly 60% of the site as open space and common area while still providing a compact walkable neighborhood with several housing styles and sizes when the Single-Family Cluster Option is used. Using the less preferred Conventional R1-C zoning guidelines would result in a monolithic, standard large home subdivision with no common area open space or natural features preservation.*

### **Standards for Review:**

The Zoning Ordinance outlines standards from which the Planning Commission should review a Cluster Option Development, and may, based on its review, make a recommendation to the City Council. The proposed Adler Cove development will create a beautiful neighborhood within the City of Troy and will provide several of housing options while preserving a substantial portion of the site as permanent open space. We believe that the proposed development meets the standards of review in the following ways:

- a. Adler Cove provides long-term protection and preservation of the property's natural resources, natural features, and open space through the preservation of 38% dedicated open space and a total of 5.27-acres of undeveloped areas within the site. This amount of open space and neighborhood character would not be possible if developed under conventional R-1C zoning.
- b. Adler Cove incorporates innovative site design and flexibility in the placement and clustering of homes within the site. This innovative clustered design approach allowed the home sites to remain out of the floodway and enabled the ability to preserve quality natural features.
- c. Adler Cove provides appropriate buffers to the E. Long Lake frontage as well as to the adjacent single-family home to the east as outlined within the Zoning Ordinance.



- d. Adler Cove takes advantage of its proximity to Larson Middle School by providing walking trails to the school to maximize neighborhood connections and walkability. Additionally, sidewalks are provided throughout the neighborhood and along the E. Long Lake frontage.
- e. Stormwater features and other site design elements we're designed to minimize their impact on the site, integrate with the natural systems of the local area, and provide long-term sustainability of this floodway system.
- f. Adler Cove homeowner's associate will ultimately own the dedicated open space and will have systems in place within the Master Deed and Bylaws that ensure its long-term viability.
- g. Adler Cove seeks a density bonus of four units, as permitted by the Zoning Ordinance, in exchange for the significant open space (nearly 60% of the site), diverse housing types, and neighborhood character provided by the development.
- h. Adler Cove will be served by existing essential public facilities, services, and infrastructure and will not put an undue burden on those systems.
- i. Adler Cove will provide a range of housing types and sizes that are appropriate for the Cluster Option lots sizes including home sizes beginning at 1,990 sf.

We are proud of the innovative design solutions we are submitting and excited to bring the character, quality, and benefits of the Adler Cove neighborhood to the City of Troy. The attached Preliminary Site Plan Submission document set provides the information required by the city and outlines the technical details of the development. We appreciate the opportunity to have the project reviewed by the City Planning Department and related professionals and look forward to being placed on the next available Planning Commission agenda to review the merits of the project.

Our entire team is available to provide any additional information as requested.

Sincerely,

Joe Maniaci  
Mondrain Properties

Mailing Address:  
P.O. Box 2160  
Brighton, MI 48116-2160800 395-ASTI  
Fax: 810.225.3800[www.asti-env.com](http://www.asti-env.com)**Sent Via Email Only**

September 10, 2018

Mr. Joseph Maniaci  
**Mondrian Properties**  
50215 Schoenherr Road  
Shelby Township, MI 48315*RE: Wetland Delineation and Jurisdictional Assessment  
2112, 2124, & 2152 Long Lake Road  
City of Troy, Oakland County, Michigan  
ASTI File No. 10809*

Dear Mr. Maniaci:

A site investigation was completed on September 5, 2018 by ASTI Environmental (ASTI) to delineate wetland boundaries on three parcels with the addresses of 2112, 2124, and 2152 Long Lake Road located east of John R Road and west of Dequindre Road within the City of Troy, Oakland County, Michigan (Property). One wetland and one watercourse likely regulated by the Michigan Department of Environmental Quality (DEQ) were found on the Property (Figure 1 – *Approximate Wetland Boundaries*).

**SUPPORTING DATA**

The United States Geological Survey (USGS) Warren, Michigan 7.5' Quadrangle Map, the USDA Web Soil Survey (WSS), the National Wetland Inventory Map (NWI), the DEQ Wetlands Map Viewer web site, and digital aerial photographs were all used to support the wetland delineation and subsequent regulatory status determination. No reviewed data indicated the presence of wetlands on the Property. All reviewed data indicated the Gibson Drain along the western portion of the Property

The WSS indicates the Property is comprised of the soil complexes of Brookston and Colwood loams, Sebewa loam (disintegration moraine, 0-2% slopes), Cohoctah fine sandy loam, and Selfridge loamy sand (0-3% slopes). Colwood loams, Sebewa loam (disintegration moraine, 0-2% slopes), and Cohoctah fine sandy loam are on the list *Hydric Soils of Michigan*.



## **FINDINGS**

ASTI investigated the Property for the presence of lakes, ponds, wetlands, and watercourses. This work is based on MCL 324 Part 301, Inland Lakes and Streams and Part 303, Wetlands Protection. The delineation protocol used by ASTI for this delineation is based on the US Army Corps of Engineers' *Wetland Delineation Manual*, 1987, the *Regional Supplement to the Corps of Engineer Wetland Delineation Manual: Northcentral/Northeast Region*, and related guidance/documents, as appropriate. Wetland vegetation, hydrology, and soils were used to locate the wetland boundaries.

One wetland and one watercourse were found on the Property.

### Watercourse A/Gibson Drain

The Gibson Drain was observed in the western portion of the Property. This watercourse exhibited defined channel bed and banks and was flowing on the day of the site inspection; therefore it meets the definition of a stream under Part 301.

### Wetland B

Wetland B is a scrub/shrub wetland approximately 0.2 acres in size on the Property located in the eastern portion of the Property (see Figure 1). Vegetation within Wetland B was dominated by gray dogwood (*Cornus racemosa*), green ash saplings (*Fraxinus pennsylvanica*), and glossy buckthorn (*Frangula alnus*). Soils within Wetland B were comprised of fine sandy loams and are considered hydric because the criteria for a sandy redox matrix was met. Indicators of wetland hydrology observed within Wetland B included sparsely vegetated concave surfaces and soil cracks.

Vegetation observed within the upland adjacent to Wetland B was dominated by southern crab apple (*Malus angustifolia*), honeysuckle (*Lonicera tatarica*), gray dogwood, prickly ash (*Zanthoxylum americanum*), and multiflora rose (*Rosa multiflora*). Soils in the adjacent upland were comprised of sandy loams that did not exhibit hydric soil characteristics. No indicators of wetland hydrology were observed.

It is ASTI's opinion that Wetland B is regulated by the DEQ under Part 303 because it is within 500 feet of the Gibson Drain, which meets the definition of a regulated stream under Part 301.

Wetland Flagging

Wetland boundaries were marked in the field with day-glo pink and black striped flagging and numbered as follows:

Watercourse A/Gibson Drain = A-1 through A-11

Wetland B = B-1 through B-16

A professional survey should be conducted to determine the exact location of the wetland flagging on the Property.

**SUMMARY**

Based upon the data, criteria, and evidence noted above, it is ASTI's professional opinion the Property includes one watercourse (Gibson Drain) and one wetland (Wetland B) regulated by the DEQ. However, the DEQ has the final authority on the extent of regulated wetlands, lakes, and streams in the State of Michigan.

Attached are Figure 1, which shows the approximate locations of flagging on the Property, and a completed US Army Corps of Engineers (ACOE) Wetland Data Form.

Thank you for the opportunity to assist you with this project. Please let us know if we can be of any further assistance in moving your project forward.

Cordially,

ASTI ENVIRONMENTAL



Kyle Hottinger  
Wetland Ecologist  
Professional Wetland Scientist #2927



Dana R. Knox  
Wetland Ecologist  
Professional Wetland Scientist #213

Attachments: Figure 1 – Approximate Wetland Boundaries  
Completed ACOE Wetland Data Forms





2112, 2124, & 2152 E. Long Lake Road

Troy, Oakland Co., MI

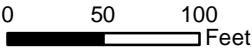


Figure 1 - Approximate Wetland Boundaries



## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18  
Applicant/Owner: Mondrian Properties State: MI Sampling Point: UP1  
Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E  
Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): flat Slope %: 1-3  
Subregion (LRR or MLRA): LRR L Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
Soil Map Unit Name: Brookston and Colwood loams NWI classification: none  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

<table style="width: 100%;"><tr><td style="width: 30%;">Hydrophytic Vegetation Present?</td><td style="width: 10%;">Yes _____</td><td style="width: 10%;">No <u>X</u></td></tr><tr><td>Hydric Soil Present?</td><td>Yes _____</td><td>No <u>X</u></td></tr><tr><td>Wetland Hydrology Present?</td><td>Yes _____</td><td>No <u>X</u></td></tr></table>	Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Hydric Soil Present?	Yes _____	No <u>X</u>	Wetland Hydrology Present?	Yes _____	No <u>X</u>	<table style="width: 100%;"><tr><td colspan="2"><b>Is the Sampled Area</b></td></tr><tr><td colspan="2"><b>within a Wetland?</b> Yes _____ No <u>X</u></td></tr><tr><td colspan="2">If yes, optional Wetland Site ID: _____</td></tr></table>	<b>Is the Sampled Area</b>		<b>within a Wetland?</b> Yes _____ No <u>X</u>		If yes, optional Wetland Site ID: _____	
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Hydric Soil Present?	Yes _____	No <u>X</u>														
Wetland Hydrology Present?	Yes _____	No <u>X</u>														
<b>Is the Sampled Area</b>																
<b>within a Wetland?</b> Yes _____ No <u>X</u>																
If yes, optional Wetland Site ID: _____																
Remarks: (Explain alternative procedures here or in a separate report.) Conditions in the east central portion of the Property																

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <table style="width: 100%;"><tr><td>_____ Surface Water (A1)</td><td>_____ Water-Stained Leaves (B9)</td></tr><tr><td>_____ High Water Table (A2)</td><td>_____ Aquatic Fauna (B13)</td></tr><tr><td>_____ Saturation (A3)</td><td>_____ Marl Deposits (B15)</td></tr><tr><td>_____ Water Marks (B1)</td><td>_____ Hydrogen Sulfide Odor (C1)</td></tr><tr><td>_____ Sediment Deposits (B2)</td><td>_____ Oxidized Rhizospheres on Living Roots (C3)</td></tr><tr><td>_____ Drift Deposits (B3)</td><td>_____ Presence of Reduced Iron (C4)</td></tr><tr><td>_____ Algal Mat or Crust (B4)</td><td>_____ Recent Iron Reduction in Tilled Soils (C6)</td></tr><tr><td>_____ Iron Deposits (B5)</td><td>_____ Thin Muck Surface (C7)</td></tr><tr><td>_____ Inundation Visible on Aerial Imagery (B7)</td><td>_____ Other (Explain in Remarks)</td></tr><tr><td>_____ Sparsely Vegetated Concave Surface (B8)</td><td></td></tr></table>		_____ Surface Water (A1)	_____ Water-Stained Leaves (B9)	_____ High Water Table (A2)	_____ Aquatic Fauna (B13)	_____ Saturation (A3)	_____ Marl Deposits (B15)	_____ Water Marks (B1)	_____ Hydrogen Sulfide Odor (C1)	_____ Sediment Deposits (B2)	_____ Oxidized Rhizospheres on Living Roots (C3)	_____ Drift Deposits (B3)	_____ Presence of Reduced Iron (C4)	_____ Algal Mat or Crust (B4)	_____ Recent Iron Reduction in Tilled Soils (C6)	_____ Iron Deposits (B5)	_____ Thin Muck Surface (C7)	_____ Inundation Visible on Aerial Imagery (B7)	_____ Other (Explain in Remarks)	_____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> <table style="width: 100%;"><tr><td>_____ Surface Soil Cracks (B6)</td></tr><tr><td>_____ Drainage Patterns (B10)</td></tr><tr><td>_____ Moss Trim Lines (B16)</td></tr><tr><td>_____ Dry-Season Water Table (C2)</td></tr><tr><td>_____ Crayfish Burrows (C8)</td></tr><tr><td>_____ Saturation Visible on Aerial Imagery (C9)</td></tr><tr><td>_____ Stunted or Stressed Plants (D1)</td></tr><tr><td>_____ Geomorphic Position (D2)</td></tr><tr><td>_____ Shallow Aquitard (D3)</td></tr><tr><td>_____ Microtopographic Relief (D4)</td></tr><tr><td>_____ FAC-Neutral Test (D5)</td></tr></table>	_____ Surface Soil Cracks (B6)	_____ Drainage Patterns (B10)	_____ Moss Trim Lines (B16)	_____ Dry-Season Water Table (C2)	_____ Crayfish Burrows (C8)	_____ Saturation Visible on Aerial Imagery (C9)	_____ Stunted or Stressed Plants (D1)	_____ Geomorphic Position (D2)	_____ Shallow Aquitard (D3)	_____ Microtopographic Relief (D4)	_____ FAC-Neutral Test (D5)
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:																																	
Remarks:																																	

**VEGETATION** – Use scientific names of plants.

Sampling Point: UP1

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Juglans nigra</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>12</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33.3%</u> (A/B)																
2. <u>Fraxinus americana</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Fraxinus pennsylvanica</u>	<u>10</u>	<u>Yes</u>	<u>FACW</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>25</u>		=Total Cover		<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>15</u></td> <td>x 2 = <u>30</u></td> </tr> <tr> <td>FAC species <u>35</u></td> <td>x 3 = <u>105</u></td> </tr> <tr> <td>FACU species <u>75</u></td> <td>x 4 = <u>300</u></td> </tr> <tr> <td>UPL species <u>15</u></td> <td>x 5 = <u>75</u></td> </tr> <tr> <td>Column Totals: <u>140</u> (A)</td> <td><u>510</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.64</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>15</u>	x 2 = <u>30</u>	FAC species <u>35</u>	x 3 = <u>105</u>	FACU species <u>75</u>	x 4 = <u>300</u>	UPL species <u>15</u>	x 5 = <u>75</u>	Column Totals: <u>140</u> (A)	<u>510</u> (B)	Prevalence Index = B/A = <u>3.64</u>	
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Prevalence Index = B/A = <u>3.64</u>																				
Sapling/Shrub Stratum (Plot size: <u>15'</u> )																				
1. <u>Fraxinus americana</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Cornus racemosa</u>	<u>15</u>	<u>Yes</u>	_____																	
3. <u>Fraxinus pennsylvanica</u>	<u>5</u>	<u>No</u>	<u>FACW</u>																	
4. <u>Frangula alnus</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>																	
5. <u>Malus angustifolia</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>55</u>		=Total Cover																		
Herb Stratum (Plot size: <u>5'</u> )																				
1. <u>Apocynum cannabinum</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>_____</u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Cirsium vulgare</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Euthamia graminifolia</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u>Digitaria ischaemum</u>	<u>15</u>	<u>Yes</u>	<u>FACU</u>																	
5. <u>Poa annua</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
6. <u>Solidago speciosa</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>75</u>		=Total Cover																		
Woody Vine Stratum (Plot size: <u>15'</u> )																				
1. _____	_____	_____	_____	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____		=Total Cover																		
Hydrophytic Vegetation Present?      Yes <u>_____</u> No <u>X</u>																				

Remarks: (Include photo numbers here or on a separate sheet.)

## SOIL

Sampling Point      UP1

[illegible]



## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18  
Applicant/Owner: Mondrian Properties State: MI Sampling Point: UP2  
Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E  
Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): flat Slope %: 1-3  
Subregion (LRR or MLRA): LRR L Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
Soil Map Unit Name: Brookston and Colwood loams NWI classification: none  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Conditions in the central portion of the Property	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b>		<u>Secondary Indicators (minimum of two required)</u>	
<u>Primary Indicators (minimum of one is required; check all that apply)</u>			
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Surface Soil Cracks (B6)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Drainage Patterns (B10)	
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Marl Deposits (B15)	<input type="checkbox"/> Moss Trim Lines (B16)	
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Dry-Season Water Table (C2)	
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3)	<input type="checkbox"/> Crayfish Burrows (C8)	
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)	
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)	<input type="checkbox"/> Stunted or Stressed Plants (D1)	
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Thin Muck Surface (C7)	<input type="checkbox"/> Geomorphic Position (D2)	
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Shallow Aquitard (D3)	
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		<input type="checkbox"/> Microtopographic Relief (D4)	
		<input type="checkbox"/> FAC-Neutral Test (D5)	
<b>Field Observations:</b>			
Surface Water Present? Yes _____ No <u>x</u>	Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>	
Water Table Present? Yes _____ No <u>x</u>	Depth (inches): _____		
Saturation Present? Yes _____ No <u>x</u>	Depth (inches): _____ (includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

Sampling Point: UP2

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Juglans nigra</u>	40	Yes	FACU	
2. <u>Populus alba</u>	20	Yes	UPL	
3. <u>Ulmus pumila</u>	10	No	FACU	
4. <u>Fraxinus americana</u>	10	No	FACU	
5. _____				
6. _____				
7. _____				
		80	=Total Cover	
<b>Sapling/Shrub Stratum (Plot size: 15')</b>				
1. <u>Juglans nigra</u>	5	No	FACU	
2. <u>Frangula alnus</u>	25	Yes		
3. <u>Cornus racemosa</u>	25	Yes	FAC	
4. <u>Elaeagnus umbellata</u>	5	No	UPL	
5. _____				
6. _____				
7. _____				
		60	=Total Cover	
<b>Herb Stratum (Plot size: 5')</b>				
1. <u>Carex pensylvanica</u>	5	Yes	UPL	
2. <u>Parthenocissus inserta</u>	5	Yes	FACU	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
11. _____				
12. _____				
		10	=Total Cover	
<b>Woody Vine Stratum (Plot size: 15')</b>				
1. _____				
2. _____				
3. _____				
4. _____				
			=Total Cover	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 16.7% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:		Multiply by:
OBL species	<u>0</u>	x 1 = <u>0</u>
FACW species	<u>0</u>	x 2 = <u>0</u>
FAC species	<u>25</u>	x 3 = <u>75</u>
FACU species	<u>70</u>	x 4 = <u>280</u>
UPL species	<u>30</u>	x 5 = <u>150</u>
Column Totals:	<u>125</u> (A)	<u>505</u> (B)
Prevalence Index = B/A = <u>4.04</u>		

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0<sup>1</sup>

4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)

         Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes          No   X

Remarks: (Include photo numbers here or on a separate sheet.)

## SOIL

Sampling Point      UP2

[illegible]

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18  
 Applicant/Owner: Mondrian Properties State: MI Sampling Point: UP3  
 Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E  
 Landform (hillside, terrace, etc.): slight slope toe Local relief (concave, convex, none): gentle slope Slope %: 2-4  
 Subregion (LRR or MLRA): LRR L Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Brookston and Colwood loams NWI classification: none  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Conditions in the south west portion of the Property	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:	

**VEGETATION** – Use scientific names of plants.

 Sampling Point: UP3

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Populus deltoides</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>9</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>44.4%</u> (A/B)																
2. <u>Juglans nigra</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Populus alba</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>40</u>	=Total Cover	<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>75</u></td> <td>x 3 = <u>225</u></td> </tr> <tr> <td>FACU species <u>45</u></td> <td>x 4 = <u>180</u></td> </tr> <tr> <td>UPL species <u>30</u></td> <td>x 5 = <u>150</u></td> </tr> <tr> <td>Column Totals: <u>150</u> (A)</td> <td><u>555</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>3.70</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>75</u>	x 3 = <u>225</u>	FACU species <u>45</u>	x 4 = <u>180</u>	UPL species <u>30</u>	x 5 = <u>150</u>	Column Totals: <u>150</u> (A)	<u>555</u> (B)	Prevalence Index = B/A = <u>3.70</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>75</u>	x 3 = <u>225</u>																			
FACU species <u>45</u>	x 4 = <u>180</u>																			
UPL species <u>30</u>	x 5 = <u>150</u>																			
Column Totals: <u>150</u> (A)	<u>555</u> (B)																			
Prevalence Index = B/A = <u>3.70</u>																				
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Juglans nigra</u>	<u>30</u>	<u>Yes</u>	<u>FACU</u>																	
2. <u>Frangula alnus</u>	<u>10</u>	<u>No</u>	<u>FAC</u>																	
3. <u>Cornus racemosa</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u>Elaeagnus umbellata</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		<u>90</u>	=Total Cover	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Toxicodendron radicans</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>																	
2. <u>Parthenocissus inserta</u>	<u>5</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Verbena urticifolia</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		<u>20</u>	=Total Cover	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																
<b>Woody Vine Stratum (Plot size: <u>15'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		_____	=Total Cover																	
<b>Hydrophytic Vegetation Present?</b> Yes <u>      </u> No <u>  X  </u>																				

Remarks: (Include photo numbers here or on a separate sheet.)

## SOIL

Sampling Point      UP3

[illegible]



## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18  
Applicant/Owner: Mondrian Properties State: MI Sampling Point: UP4  
Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E  
Landform (hillside, terrace, etc.): flat Local relief (concave, convex, none): flat Slope %: 1-3  
Subregion (LRR or MLRA): LRR L Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
Soil Map Unit Name: Brookston and Colwood loams NWI classification: none  
Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: (Explain alternative procedures here or in a separate report.) Conditions in the west west portion of the Property	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> ____ Surface Water (A1)      ____ Water-Stained Leaves (B9) ____ High Water Table (A2)      ____ Aquatic Fauna (B13) ____ Saturation (A3)      ____ Marl Deposits (B15) ____ Water Marks (B1)      ____ Hydrogen Sulfide Odor (C1) ____ Sediment Deposits (B2)      ____ Oxidized Rhizospheres on Living Roots (C3) ____ Drift Deposits (B3)      ____ Presence of Reduced Iron (C4) ____ Algal Mat or Crust (B4)      ____ Recent Iron Reduction in Tilled Soils (C6) ____ Iron Deposits (B5)      ____ Thin Muck Surface (C7) ____ Inundation Visible on Aerial Imagery (B7)      ____ Other (Explain in Remarks) ____ Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> ____ Surface Soil Cracks (B6) ____ Drainage Patterns (B10) ____ Moss Trim Lines (B16) ____ Dry-Season Water Table (C2) ____ Crayfish Burrows (C8) ____ Saturation Visible on Aerial Imagery (C9) ____ Stunted or Stressed Plants (D1) ____ Geomorphic Position (D2) ____ Shallow Aquitard (D3) ____ Microtopographic Relief (D4) ____ FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION** – Use scientific names of plants.

 Sampling Point: UP4

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. <u>Acer negundo</u>	<u>10</u>	<u>No</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>5</u> (A)  Total Number of Dominant Species Across All Strata: <u>7</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>71.4%</u> (A/B)																
2. <u>Juglans nigra</u>	<u>40</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Populus deltoides</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>																	
4. <u>Prunus serotina</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>85</u>		=Total Cover		<b>Prevalence Index worksheet:</b>  <table style="width: 100%;"> <tr> <th style="width: 50%;">Total % Cover of:</th> <th style="width: 50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>120</u></td> <td>x 3 = <u>360</u></td> </tr> <tr> <td>FACU species <u>60</u></td> <td>x 4 = <u>240</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>180</u> (A)</td> <td><u>600</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>3.33</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>120</u>	x 3 = <u>360</u>	FACU species <u>60</u>	x 4 = <u>240</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>180</u> (A)	<u>600</u> (B)	Prevalence Index = B/A = <u>3.33</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>120</u>	x 3 = <u>360</u>																			
FACU species <u>60</u>	x 4 = <u>240</u>																			
UPL species <u>0</u>	x 5 = <u>0</u>																			
Column Totals: <u>180</u> (A)	<u>600</u> (B)																			
Prevalence Index = B/A = <u>3.33</u>																				
<u>60</u>		=Total Cover																		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Cornus racemosa</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Frangula alnus</u>	<u>30</u>	<u>Yes</u>	<u>FAC</u>																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
<u>60</u>		=Total Cover																		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Toxicodendron radicans</u>	<u>15</u>	<u>Yes</u>	<u>FAC</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																
2. <u>Parthenocissus inserta</u>	<u>10</u>	<u>Yes</u>	<u>FACU</u>																	
3. <u>Verbena urticifolia</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
<u>35</u>		=Total Cover																		
<b>Woody Vine Stratum (Plot size: <u>15'</u>)</b>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____		=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)

## SOIL

Sampling Point UP4**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
1-6	10YR 5/3	100					Sandy	fine sandy loam
6-18	10YR 6/3	90	10R 5/4	10	C	M	Sandy	Prominent redox concentrations
								fine sandy loam

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.**Hydric Soil Indicators:**

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Thin Dark Surface (S9) (LRR R, MLRA 149B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> High Chroma Sands (S11) (LRR K, L)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (LRR K, L)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)
<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> Marl (F10) (LRR K, L)
<input type="checkbox"/> Stripped Matrix (S6)	
<input type="checkbox"/> Dark Surface (S7)	

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

<input type="checkbox"/> 2 cm Muck (A10) (LRR K, L, MLRA 149B)
<input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)
<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
<input type="checkbox"/> Polyvalue Below Surface (S8) (LRR K, L)
<input type="checkbox"/> Thin Dark Surface (S9) (LRR K, L)
<input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R)
<input type="checkbox"/> Piedmont Floodplain Soils (F19) (MLRA 149B)
<input type="checkbox"/> Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Very Shallow Dark Surface (F22)
<input type="checkbox"/> Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.**Restrictive Layer (if observed):**Type:                      noneDepth (inches):                     Hydric Soil Present? Yes        No   X  

Remarks:

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18  
 Applicant/Owner: Mondrian Properties State: MI Sampling Point: UPA10  
 Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E  
 Landform (hillside, terrace, etc.): terrace along Gibson Drain Local relief (concave, convex, none): flat Slope %: 2-3  
 Subregion (LRR or MLRA): LRR L Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Cohoctah fine sandy loam NWI classification: none  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Upland adjacent to Gibson Drain at flag A10	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:	

**VEGETATION** – Use scientific names of plants.

Sampling Point: UPA10

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																	
1. _____	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <table style="width: 100%;"> <tr> <td style="width: 50%;">Total % Cover of:</td> <td style="width: 50%;">Multiply by:</td> </tr> <tr> <td>OBL species <u>0</u></td> <td>x 1 = <u>0</u></td> </tr> <tr> <td>FACW species <u>0</u></td> <td>x 2 = <u>0</u></td> </tr> <tr> <td>FAC species <u>5</u></td> <td>x 3 = <u>15</u></td> </tr> <tr> <td>FACU species <u>60</u></td> <td>x 4 = <u>240</u></td> </tr> <tr> <td>UPL species <u>35</u></td> <td>x 5 = <u>175</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>430</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.30</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>0</u>	x 2 = <u>0</u>	FAC species <u>5</u>	x 3 = <u>15</u>	FACU species <u>60</u>	x 4 = <u>240</u>	UPL species <u>35</u>	x 5 = <u>175</u>	Column Totals: <u>100</u> (A)	<u>430</u> (B)	Prevalence Index = B/A = <u>4.30</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
FACW species <u>0</u>	x 2 = <u>0</u>																			
FAC species <u>5</u>	x 3 = <u>15</u>																			
FACU species <u>60</u>	x 4 = <u>240</u>																			
UPL species <u>35</u>	x 5 = <u>175</u>																			
Column Totals: <u>100</u> (A)	<u>430</u> (B)																			
Prevalence Index = B/A = <u>4.30</u>																				
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																				
1. <u>Malus angustifolia</u>	<u>10</u>	<u>Yes</u>	<u>UPL</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>2</u> - Dominance Test is >50% <u>3</u> - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)  <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u>Elaeagnus umbellata</u>	<u>10</u>	<u>Yes</u>	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
		=Total Cover																		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																				
1. <u>Bromus inermis</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>      </u> No <u>X</u>																
2. <u>Daucus carota</u>	<u>5</u>	<u>No</u>	<u>UPL</u>																	
3. <u>Sonchus arvensis</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
4. <u>Trifolium pratense</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
5. <u>Poa annua</u>	<u>20</u>	<u>Yes</u>	<u>FACU</u>																	
6. <u>Prunella vulgaris</u>	<u>5</u>	<u>No</u>	<u>FAC</u>																	
7. <u>Symphyotrichum ericoides</u>	<u>10</u>	<u>No</u>	<u>FACU</u>																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
12. _____	_____	_____	_____																	
		=Total Cover																		
<b>Woody Vine Stratum (Plot size: <u>15'</u>)</b>																				
1. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>      </u> No <u>X</u>																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
		=Total Cover																		

Remarks: (Include photo numbers here or on a separate sheet.)

## SOIL

Sampling Point UPA10

[illegible]



# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18  
 Applicant/Owner: Mondrian Properties State: MI Sampling Point: UPB2  
 Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E  
 Landform (hillside, terrace, etc.): slight slope Local relief (concave, convex, none): slight slope Slope %: 2-4  
 Subregion (LRR or MLRA): LRR L Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Cohoctah fine sandy loam NWI classification: none  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	<b>Is the Sampled Area within a Wetland?</b> Yes _____ No <u>X</u> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) Upland adjacent to Wetland B at flag B2	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) _____ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> _____ Surface Soil Cracks (B6) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) _____ Microtopographic Relief (D4) _____ FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes _____ No <u>X</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:  Remarks:	

## Sampling Point: UPB2

Tree Stratum (Plot size: 30' )	Absolute % Cover	Dominant Species?	Indicator Status
1. <i>Malus angustifolia</i>	70	Yes	UPL
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	70 =Total Cover		
<b>Sapling/Shrub Stratum (Plot size: 15' )</b>			
1. <i>Cornus racemosa</i>	10	Yes	FAC
2. <i>Frangula alnus</i>	10	Yes	
3. <i>Lonicera tatarica</i>	10	Yes	FACU
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
	30 =Total Cover		
<b>Herb Stratum (Plot size: 5' )</b>			
1. <i>Toxicodendron radicans</i>	5	Yes	FAC
2. <i>Parthenocissus inserta</i>	5	Yes	FACU
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. _____	_____	_____	_____
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. _____	_____	_____	_____
	10 =Total Cover		
<b>Woody Vine Stratum (Plot size: 15' )</b>			
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
	_____ =Total Cover		

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species 0	x 1 = 0
FACW species 0	x 2 = 0
FAC species 15	x 3 = 45
FACU species 15	x 4 = 60
UPL species 70	x 5 = 350
Column Totals: 100 (A)	455 (B)
Prevalence Index = B/A = 4.55	

**Hydrophytic Vegetation Indicators:**

1 - Rapid Test for Hydrophytic Vegetation \_\_\_\_\_

2 - Dominance Test is >50% \_\_\_\_\_

3 - Prevalence Index is ≤3.0<sup>1</sup> \_\_\_\_\_

4 - Morphological Adaptations<sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) \_\_\_\_\_

\_\_\_\_\_ Problematic Hydrophytic Vegetation<sup>1</sup> (Explain) \_\_\_\_\_

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Vegetation Strata:**

**Tree** – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/shrub** – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody vines** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes \_\_\_\_\_ No X \_\_\_\_\_

Remarks: (Include photo numbers here or on a separate sheet.)

## SOIL

Sampling Point UPB2

[illegible]

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2112, 2124, & 2152 E. Long Lake Road City/County: Troy-Oakland Co. Sampling Date: 9-5-18  
 Applicant/Owner: Mondrian Properties State: MI Sampling Point: WETB2  
 Investigator(s): ASTI-KAH Section, Township, Range: Sec 13 T2N R11E  
 Landform (hillside, terrace, etc.): slight slope Local relief (concave, convex, none): slight slope Slope %: 2-4  
 Subregion (LRR or MLRA): LRR L Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Cohoctah fine sandy loam NWI classification: none  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes x No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes x No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <u>X</u> No _____ If yes, optional Wetland Site ID: _____
Hydric Soil Present?	Yes <u>X</u>	No _____	
Wetland Hydrology Present?	Yes <u>X</u>	No _____	
Remarks: (Explain alternative procedures here or in a separate report.) Wetland B at flag B2			

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> _____ Surface Water (A1) _____ Water-Stained Leaves (B9) _____ High Water Table (A2) _____ Aquatic Fauna (B13) _____ Saturation (A3) _____ Marl Deposits (B15) _____ Water Marks (B1) _____ Hydrogen Sulfide Odor (C1) _____ Sediment Deposits (B2) _____ Oxidized Rhizospheres on Living Roots (C3) _____ Drift Deposits (B3) _____ Presence of Reduced Iron (C4) _____ Algal Mat or Crust (B4) _____ Recent Iron Reduction in Tilled Soils (C6) _____ Iron Deposits (B5) _____ Thin Muck Surface (C7) _____ Inundation Visible on Aerial Imagery (B7) _____ Other (Explain in Remarks) <u>x</u> Sparsely Vegetated Concave Surface (B8)		<u>Secondary Indicators (minimum of two required)</u> <u>x</u> Surface Soil Cracks (B6) _____ Drainage Patterns (B10) <u>x</u> Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Stunted or Stressed Plants (D1) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) <u>x</u> Microtopographic Relief (D4) <u>X</u> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes _____ No <u>x</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>x</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>x</u> Depth (inches): _____ (includes capillary fringe)		<b>Wetland Hydrology Present?</b> Yes <u>X</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		

**VEGETATION** – Use scientific names of plants.

Sampling Point: WETB2

Tree Stratum (Plot size: <u>30'</u> )	Absolute % Cover	Dominant Species?	Indicator Status																																	
1. <u>Fraxinus pennsylvanica</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A)  Total Number of Dominant Species Across All Strata: <u>5</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.0%</u> (A/B)  <b>Prevalence Index worksheet:</b> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Total % Cover of:</th> <th style="width: 20%;"></th> <th style="width: 20%;">Multiply by:</th> <th style="width: 20%;"></th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td><u>0</u></td> <td>x 1 =</td> <td><u>0</u></td> </tr> <tr> <td>FACW species</td> <td><u>20</u></td> <td>x 2 =</td> <td><u>40</u></td> </tr> <tr> <td>FAC species</td> <td><u>80</u></td> <td>x 3 =</td> <td><u>240</u></td> </tr> <tr> <td>FACU species</td> <td><u>0</u></td> <td>x 4 =</td> <td><u>0</u></td> </tr> <tr> <td>UPL species</td> <td><u>0</u></td> <td>x 5 =</td> <td><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td><u>100</u> (A)</td> <td></td> <td><u>280</u> (B)</td> </tr> <tr> <td colspan="4">Prevalence Index = B/A = <u>2.80</u></td> </tr> </tbody> </table>	Total % Cover of:		Multiply by:		OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>20</u>	x 2 =	<u>40</u>	FAC species	<u>80</u>	x 3 =	<u>240</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>100</u> (A)		<u>280</u> (B)	Prevalence Index = B/A = <u>2.80</u>			
Total % Cover of:		Multiply by:																																		
OBL species	<u>0</u>	x 1 =	<u>0</u>																																	
FACW species	<u>20</u>	x 2 =	<u>40</u>																																	
FAC species	<u>80</u>	x 3 =	<u>240</u>																																	
FACU species	<u>0</u>	x 4 =	<u>0</u>																																	
UPL species	<u>0</u>	x 5 =	<u>0</u>																																	
Column Totals:	<u>100</u> (A)		<u>280</u> (B)																																	
Prevalence Index = B/A = <u>2.80</u>																																				
2. <u>Acer saccharinum</u>	<u>5</u>	<u>Yes</u>	<u>FACW</u>																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
6. _____	_____	_____	_____																																	
7. _____	_____	_____	_____																																	
		<u>10</u> =Total Cover																																		
<b>Sapling/Shrub Stratum (Plot size: <u>15'</u>)</b>																																				
1. <u>Cornus racemosa</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	<b>Hydrophytic Vegetation Indicators:</b> <u>1</u> - Rapid Test for Hydrophytic Vegetation <u>X</u> 2 - Dominance Test is >50% <u>X</u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <u>4</u> - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. <u>Fraxinus pennsylvanica</u>	<u>30</u>	<u>Yes</u>	_____																																	
3. <u>Cornus amomum</u>	<u>10</u>	<u>No</u>	<u>FACW</u>																																	
4. <u>Frangula alnus</u>	<u>20</u>	<u>No</u>	<u>FAC</u>																																	
5. _____	_____	_____	_____																																	
6. _____	_____	_____	_____																																	
7. _____	_____	_____	_____																																	
		<u>110</u> =Total Cover																																		
<b>Herb Stratum (Plot size: <u>5'</u>)</b>																																				
1. <u>Symphyotrichum lateriflorum</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.  <b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																																
2. _____	_____	_____	_____																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
6. _____	_____	_____	_____																																	
7. _____	_____	_____	_____																																	
8. _____	_____	_____	_____																																	
9. _____	_____	_____	_____																																	
10. _____	_____	_____	_____																																	
11. _____	_____	_____	_____																																	
12. _____	_____	_____	_____																																	
		<u>10</u> =Total Cover																																		
<b>Woody Vine Stratum (Plot size: <u>15'</u>)</b>																																				
1. _____	_____	_____	_____																																	
2. _____	_____	_____	_____																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
		_____ =Total Cover																																		

Remarks: (Include photo numbers here or on a separate sheet.)

## SOIL

Sampling Point WETB2

[illegible]



**From:** [lena anaie](#)  
**To:** [Planning](#)  
**Subject:** New sub  
**Date:** Thursday, December 9, 2021 7:22:55 PM

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CAUTION: This email did not originate from within the City of Troy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To whom it may concern,

My children currently attend Larson middle school and what I love about it is the long drive with trees surrounding the school. It makes the school feel homey and safe and it would be a shame to put giant houses do take away from the scenic grounds, I propose no on building giant houses that will affect wildlife and the scenic grounds.

Sent from my iPhone

12/12/21

Mr. Brent Savidant, AICP, Community Development Director  
City of Troy Planning Commission Board  
City of Troy City Council Members  
500 W. Big Beaver Road  
Troy, MI 48084

*Sent to Troy Development Director and Planning Commission: Via email to: [planning@troymi.gov](mailto:planning@troymi.gov)  
Sent to Troy City Council: Via email to: [CityCouncilEmail@troymi.gov](mailto:CityCouncilEmail@troymi.gov)*

**RE: Adler Cove Residential Development and Commitment to Green Space**

Dear Planning Development Director, Planning Commission Board Members, and City Council,

As a 33+ year resident who lives adjacent to Larson Middle School, I write this letter regarding your consideration of not approving the 10 - acre proposed "Adler Cover" residential development located on the south side of Long Lake just east of John R. As part of the many who favored further greening of the City, in the latest Troy survey, we are not in favor of the subject development. The proposed 16 or 20 new homes mean the loss of green space and many wildlife animals (deer, fox, ducks, birds, etc.). I understand the rights of the sellers to sell their property; however, the full intent was to build yet another high priced subdivision that the residents do not want and the City Council Members have communicated over and over again that they are committed to "saving green space". Currently, there are other proposed residential development sites, as well as others currently in phase one or two of their development. When will this stop.

Transparency is what everyone talks about, yet communication on new subdivisions is limited. The posted sign required by the City regarding this development appears very deceiving to me, because the quoted "Open Space Preservation Development" although legal terminology, it does not convey common understanding. I read it as a possible site that would be used to include continuation of the trails and path initiative by the City or nature related preservation. In my opinion, to be truly transparent, it should clearly state that the property is for a "Proposed Residential Development" or "Proposed Commercial Development". This might convey a clearer picture to the Troy residents that would be directly affected, and provide better feedback to those that approve these developments.

If the Adler Cove development is approved by the Planning Board and then the City Council, I ask that you stay as committed as possible to maintaining and preserving the green space on the site above what is currently proposed.

How much more developments does the City of Troy need? With 33.63 square miles and a population of 87,294 (from the 2020 census), Troy is the 13<sup>th</sup> most-populous municipality in the state. What kind of vision do you have for our City? How many more residential homes, condos, apartments, commercial buildings, etc. do we need to add? Let's stay committed to the voice of the residents.

Respectfully,  
Renee and Pietro Sarcina

**From:** [Julia E. Rodriguez](#)  
**To:** [Planning](#)  
**Subject:** Mondrian Properties on the south side of Long Lake Road east of John R  
**Date:** Thursday, December 9, 2021 3:53:38 PM

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**CAUTION:** This email did not originate from within the City of Troy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Planning Commission,

I would like to submit comment regarding the proposed Mondrian Properties development on the south side of Long Lake Road east of John R. I would like to Commission to consider the lack of green space in Troy and overdevelopment that will soon impact our quality of life. While the property owners may be developing within the present zoning code the commission has the ability to listen to residents and require more green space be preserved. The latest city survey strongly demonstrated that residents want more green space and this parcel is especially important being along the Clinton River Watershed. I hope you will consider residents wishes for a green more nature friendly Troy when evaluating the plans for this development.

Thank you,  
Julia Rodriguez  
5941 Endicott Dr  
Troy, 48085

**From:** [Kimberly Ethridge](#)  
**To:** [Brent Savidant](#); [Planning](#)  
**Subject:** Comments on the proposed Adler Cove Development  
**Date:** Thursday, December 9, 2021 12:59:23 PM

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Hello, I am a resident of the Mount Vernon Subdivision in Troy, which neighbors the proposed Adler Cove one-family development planned for the South Side of East Long Lake Road, East of John R Road. I have reviewed the proposal and project narrative that was provided to me by Mondrian Properties. I advocate for the R-1C Single Family Cluster Zoning Option to be utilized at Adler Cove. The cluster option allows for a more compact neighborhood, with reasonably-sized homes that are similar in size to the homes in the Mt. Vernon Sub. More importantly, the cluster option would preserve over half of the natural habitat that is present on this property, valuable wildlife habitat in our neighborhood. This wooded 10-acres abuts the Gibson-Renshaw (G-R) Drain. The small amount of habitat surrounding this and other natural drains, are important wildlife travel corridors. It is important to keep native habitat along a contiguous corridor for wildlife to traverse it, to stay off the streets, to not get hit by cars. We enjoy our wildlife, I just say an 8 point buck in this woods a few days ago! If we lose their corridors for travel we lose the wildlife, even birds. Keeping at least some of this contiguous wildlife corridor along the drain, appears to be considered in the cluster home design that is proposed. The traditional single-residential option would be a bad alternative, wiping out all of the wildlife corridor along the G-R Drain.

The Cluster option also keeps substantial trees, shrubs, native soil and soil cover that will help with surface rainwater retention. Native soils and vegetation prevent runoff from new homes' roofs, yards, driveways. Fill sand brought in to replace native 'percolating' soils, often drastically increases soil erosion and runoff into waterways like the G-R Drain. Although there is a retention basin in the design, and explained to me that stormwater will be diverted into the stormwater system and not a direct discharge to the drain, that inevitably is released back into the G-R Drain, or other Drains in the Clinton River Watershed. I am concerned about the drastic increase in stormwater rushing through the drain this last year, an effect of the allowed increased development as a whole in this area (and climate change affecting our precipitation levels). Behind my home on Terova Dr., the drain has reached concerning levels this year, more than any of the last ten years I've lived here. Stormwater upwelling of this size, have made it a mess along the drain banks once they subside. Since July 2021, I've observed small white foam bubbles floating down the drain, daily. The bubbles are indicative of some kind of surfactant getting into stormwater. It is collecting in pools of white foam right at the three large stormwater discharge pipes under the southeast corner of Long Lake & John R. Surface water sample results from the drain, behind my home, had no detections of PFAS chemicals luckily. The more runoff is going to increase the load on this Drain which causes a mess downstream, more foam, etc. Even with the proposed stormwater retention basin and diverting the new homes' runoff, stormwater all eventually gets into waterways in an open drain system. No one wants surfactant bubbles floating down the creek, but non-degrading substances like this are the reality now, sadly. My point in this observation, is that the increased stormwater loads on our stormwater system need to be managed appropriately by everyone to prevent pollution from getting worse, regionally. To that effect, state and local stormwater discharge, soil erosion and floodplain/wetlands laws should be complied with when building Adler Cove. Any direct discharge into the drain during construction should be prevented: excavated sediments & soils, oils, petroleum products, should all be managed



responsibly being so close to the G-R Drain.

Even if Mondrian Properties itself will not reside in the new homes, the construction they propose, makes them our neighbor.

The development will be a direct neighbor to Larson Middle School. The cluster option that allows some natural area to remain, provides a buffer for LMS, which is safer and fosters LMS's science, ecologic, and environmental education to continue. That is important because LMS uses the woods and G-R Drain as learning tools by walking the trails and even outside gym class, to foster the 'get outside' lifestyle which we all greatly need. Adler Cove's traditional residential plan has houses surrounding LMS, then a big stormwater retention next to the west side of the school. That seems unrealistic, and unsafe for students that go outside for recess and gym and science class, to construct homes and utilities along that small strip of woods that close to LMS. The Cluster option proposes to leave it alone, I also support leaving the small strip of the property's southern woods alone. I think this is the most important reason to consider the Cluster Zoning option here.

Increased traffic, especially truck traffic during construction, should be taken into consideration and safely managed. This is an already congested area during the school year, near Athens HS and adjoining Larson MS; Care should be made to notify the school, so they may notify parents, if construction is planned during the school year, to prevent loaded trucks coming and going, before 7:30 am. During summer construction: The kids in our neighborhood use the wooded trail that will be destroyed, they walk it and ride their bikes or walk on it, to 7-11. To ensure no one inadvertently enter the construction zone, signage, caution tape and the like should be utilized so they know the trail isn't to be used by them anymore. So, this development is impacting wildlife corridor and the kids' Slurpee corridor, haha.

I have walked this path myself for many years, thinking it was school property not private. Our community spread wood chips on the muddy portion of this path as a community project to keep it less messy for kids and bikes. It is part of the natural features that make Troy distinctive, why residents and government was compelled to adopt a local Woodland Ordinance into the city's code. I am sad to see this wooded area go, but I understand it is the property owner's right to build, in compliance with Troy's Woodland Ordinance and other state and local laws. I am grateful Mondrian Properties seems to understand, our community uses this wooded area, and is attempting to preserve some of it. I am hopeful that the clearing of land and trees, and development of infrastructure to support the homes, then the homes themselves, are done in a fashion that preserves the natural health of the nature around it, and is protective of human health and the environmental as a whole. Thank you for your consideration of all these issues going forward, and good luck,  
Kim Ethridge, Terova Drive, Troy Mi 48085

**From:** [Kimberly Culbert](#)  
**To:** [Planning](#)  
**Subject:** New development by Mondrian Properties  
**Date:** Thursday, December 9, 2021 6:49:08 PM

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>  
> Dear Planning Commission,  
>  
> I don't believe we need so many new development. One of the reasons people are attracted to living in Troy is that there are still many undeveloped areas!! The wooded areas are so important to our community!!  
>  
> If you won't listen to what people truly want please make them plant 2 trees for every single tree they cut down. Make sure they are mature trees not tiny little one, please!!  
>  
> Thank you for taking the time to read my email!!  
>  
> Sincerely,  
>  
>  
> Kimberly Baker  
> Troy, MI 48085  
>  
>

**From:** [mary bain](#)  
**To:** [Planning](#)  
**Subject:** City Planning Commission/Adler Cover  
**Date:** Sunday, December 12, 2021 5:09:46 PM

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**CAUTION:** This email did not originate from within the City of Troy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

I have learned of development of a new subdivision to be built along Long Lake Road, east of John R. Mondrian Properties. This is an area where families can see actual wooded land with trees, animals and water. My family and neighbors enjoy walking along the path to watch the ducks in the Clinton River creek, in the spring Red Winged Blackbirds are numerous. The loss of this area for yet another Mondrian Ghetto is truly sad. The new 16-20 near identical houses would be crammed into another area that would actually bring down property value. When we moved into this area 20 years ago, Troy motto was 'City of trees' now it is the City of Mondrian. No one wants their homes next door to a Mondrian Ghetto with decreased open land, decreased deer, rabbits and even coyotes. Troy is no longer considered a prime 'green' city.

Sincerely,

Mary Bain  
4710 Bramford Drive  
Troy, MI 48085

**From:** [Dale Lancaster](#)  
**To:** [Planning](#)  
**Subject:** Proposed Adler Cove subdivision  
**Date:** Wednesday, December 15, 2021 3:57:41 PM

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**CAUTION:** This email did not originate from within the City of Troy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello Planning Manager,

Addressing the newly proposed Adler Cove by Mondrian Properties:

We, the residents of E.Long Lake, would like to see a deceleration.lane into the property. The sidewalk in that area is traveled by children on foot and via bicycle.to and from Larson Middle School.

Also, there needs to be a cul-de-sac to accommodate a standard school bus at the end of the street

School bus stops should not be attempted on Long Lake rd.

This is necessary for child safety and traffic .

Thirdly, we would like Mondrian Properties not to invade the 100 ft flood plane to the bank of the Gibson Drain.

Due to seasonal flooding this year in Macomb County,

We should not contribute to the flooding of the river system there.

Your consideration of these requests is sincerely appreciated.

Dale Lancaster

Citizen

[Sent from the all new AOL app for Android](#)





500 West Big Beaver  
Troy, MI 48084  
troymi.gov

I-04

## CITY COUNCIL AGENDA ITEM

Date: February 14, 2022

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
Rob Maleszyk, Chief Financial Officer  
Lisa Burnham, Controller  
Kurt Bovensiepe, Public Works Director  
Scott Carruthers, Streets and Drains Operations Manager  
Emily Frontera, Purchasing Manager

Subject: Contract Extension - Concrete Slab Replacement

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### History

- The Streets and Drains Division is responsible for the maintenance on City of Troy concrete Major and Local Roads.
- This responsibility includes identifying and replacing sections of concrete roads.
- The Streets and Drains Division uses the Pavement Surface Evaluation Rating program (PASER) to identify the most deteriorated roads in the City of Troy.
- April 14, 2014, Troy City Council approved the one (1) year contract with an option to renew for one (1) additional year to the low total bidder, *DiLisio Contracting, Inc. of Clinton Township, MI* (Resolution #2014-04-063-J-4a).
- March 9, 2015, Troy City Council additionally approved the one (1) year extension with an increase that directly reflected the increase in all infrastructure trades in the Metro Detroit Area (Resolution #2015-03-039).
- April 18, 2016, Troy City Council approved an additional two (2) year contract extension with a 3% increase in pricing the second year (Resolution #2016-04-073-J-4b).
- January 22, 2018, Troy City Council approved another one (1) year contract renewal; contract to expire June 30, 2019. (Resolution #2018-01-010).
- April 22, 2019, Troy City Council postponed the approval of a one (1) year contract with the option to renew for two (2) additional years to the low total bidder, *DiLisio Contracting, Inc. of Clinton Township, MI* until after the Forensic Audit was completed and presented to City Council and the Public (Resolution #2019-04-044).
- Although the Forensic Audit was not complete the auditors provided an opinion that *DiLisio Contracting, Inc.* demonstrated no cause for concern for the city.
- June 3, 2019, Troy City Council approved a one (1) year contract with the option to renew for two (2) additional years to the low total bidder, *DiLisio Contracting, Inc. of Clinton Township, MI* (Resolution #2019-06-062).
- The approved pricing was 7.5% lower than the next lowest bidder
- *DiLisio Contracting, Inc. of Clinton Township, MI*, continues to be an outstanding contractor that values the relationship with the City of Troy and has the city and Troy residents in its best interest.
- *DiLisio Contracting, Inc.* is requesting an additional one (1) year extension with a 3% increase to satisfy union negotiated obligations.



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Troy, MI 48084  
troymi.gov

## **CITY COUNCIL AGENDA ITEM**

### **Purchasing**

A market survey was conducted and it was determined the City would not benefit from soliciting new bids for concrete slab replacement services as the entire infrastructure construction and reconstruction industry has increased. The City of Troy is unique in that the City of Troy bids slab replacement as an all-inclusive project where most cities divide the tasks into different line items for bidding. In order to demonstrate a more accurate comparison and analysis some of the *other* City's bid items were added together as detailed in the attached Market Survey. Additionally, the requested 3% increase is still lower priced than the next lowest bidder when received in 2019.

### **Financial**

Funds are budgeted in the current Capital Budget for 2023 in the 2022 Budget and will be proposed in the 2023 Budget through the normal budget process. Expenditures will not exceed budget totals.

### **Recommendation**

City management recommends awarding a one (1) year contract extension to *DiLisio Contracting, Inc. of Clinton Township, MI* for the Concrete Slab Replacement Program with a 3% increase to its current unit prices with a contract expiration of June 30, 2023.



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Troy, MI 48084  
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## CITY COUNCIL AGENDA ITEM

### Market Survey

	Troy, DiLisio (Major Roads) 2019 Prices	Troy, DiLisio (Local Roads) 2019 Prices	Troy, DiLisio (Major Roads) 3% Increase	Troy, DiLisio (Local Roads) 3% Increase	City of Pontiac Florence Cement	Royal Oak Italia Construction	Farmington Hills Pamar Enterprises	Rochester Hills Florence Cement	OHM Engineer Estimate	Village of Beverly Hills Cipparrone Contracting	City of Berkley Italia Construction
Sawcut, Remove, Replace 9" Concrete	\$64.68/SY	\$30.00/SY	\$66.62/SY	\$30.90/SY	46.75/SY						
Sawcut, Remove, Replace 8" Concrete	\$63.68/SY	\$30.00/SY	\$65.59/SY	\$30.90/SY		\$56.00/SY		\$77.75/SY			
Sawcut, Remove, Replace 7" Concrete	\$55.62/SY	\$61.64/SY	\$57.29/SY	\$63.49/SY					\$75.00/SY	\$57.00/SY	\$61.00/SY
Sawcut, Remove, Replace 6" Concrete	\$10.00/SF	\$10.00/SF	\$10.30/SF	\$10.30/SF		\$52.00/SY	\$47.00/				
Sawcut, Remove & Pour Curb & Gutter	\$20.60/LF	\$20.60/LF	\$21.22/LF	\$21.22/LF			\$20.00/LF				
Catch Basin Adjustment	\$206/EA	\$206/EA	\$212.18/EA	\$212.18/EA	\$400/EA	\$435/EA	\$400/EA			\$300/EA	\$335/EA
Topsoil, Sod, Watering - Restoration	Included	Included	Included	Included		\$13/ CY	\$6.00/EA	\$1,000/EA		\$200.00/LS	\$9,000/LS
Traffic Maintenance Control	Included	Included	Included	Included		\$13,000/ LS	\$80.00/EA	\$81,000/LS		\$100.00/LS	\$23,000/LS
Irrigation Repairs	Included	Included	Included	Included		\$43/ EA	\$.01/EA	\$100/EA			



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Troy, MI 48084  
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## CITY COUNCIL AGENDA ITEM



23525 Lakepointe Drive, Clinton Township, Michigan, 48036

Phone 586.783.4044 Fax: 586.783.4058

January 25, 2022

Kurt Bovensiep  
City of Troy  
Department of Public Works  
4693 Rochester Road  
Troy, MI 48085

Re: City of Troy Concrete Slab Replacement Program 2019-2020

Dear Mr. Bovensiep,

DiLisio Contracting Inc. previously accepted the two contact extensions provision for the above-mentioned project and retained the unit prices from the 2019-2020 contract. In efforts to continue the partnership in achieving the city's infrastructure improvement needs, DiLisio Contracting Inc. is willing to accept the 2022-2023 contract with the increase of 3% on existing unit prices. Said increases reflect negotiated prices with the concrete supplier (Protocon Transit Mix Inc.) overhead, wages and benefits to its employees.

If you have any questions to not hesitate to call me at 586-405-4578

Respectfully yours,

Giuseppe D. Lia  
Giuseppe D. Lia  
Jan 25 2022 9:27 AM

Giuseppe D. Lia  
Treasurer

DocuSign





500 West Big Beaver  
Troy, MI 48084  
troymi.gov

# CITY COUNCIL AGENDA ITEM

Opening Date - 3/21/2019		CITY OF TROY						ITB-COT 19-12
Date Reviewed - 3/22/2019		BID TABULATION						Page 1 of 4
		CONCRETE SLAB REPLACEMENT PROGRAM						

VENDOR NAME:	Dilisio Contracting, Inc.	Dilisio Contracting, Inc. 3% Increase	Great Lakes Contracting Solutions, LLC	JB Contractors, Inc.
CITY:	Clinton Twp., MI	Clinton Twp., MI	Waterford, MI	Detroit, MI
CHECK NUMBER:	56681199		56680985	2013007321
CHECK AMOUNT:	\$20,000		\$20,000	\$20,000

## Proposal A: 2019-2020 Local Road Maintenance - Scattered locations

NO.	DESCRIPTION	EST. QTY.	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
1	Remove & Replace with Concrete 9" Non-reinforced-	1,000 S.Y.	\$30.00	\$30,000.00	\$30.90	\$30,900.00	\$62.50	\$62,500.00	\$87.20	\$87,200.00
2	Remove & Replace with Concrete 8" Non-reinforced-	1,000 S.Y.	\$30.00	\$30,000.00	\$30.90	\$30,900.00	\$58.00	\$58,000.00	\$82.20	\$82,200.00
3	Remove & Replace with Concrete 7" Non-reinforced-	12,000 S.Y.	\$61.64	\$739,680.00	\$63.49	\$761,870.40	\$56.70	\$680,400.00	\$74.70	\$896,400.00
4	Remove & Replace with Concrete Sidewalk/ Driveway 6" Non-reinforced (Locations not specified)	100 S.F.	\$10.00	\$1,000.00	\$10.30	\$1,030.00	\$11.95	\$1,195.00	\$6.00	\$600.00
5	Remove & Replace with Concrete Sidewalk/ 4" Non-reinforced (Locations not specified)	7,000 S.F.	\$3.73	\$26,110.00	\$3.84	\$26,893.30	\$7.90	\$55,300.00	\$5.00	\$35,000.00
6	Remove Concrete and rplc with topsoil/seed	300 S.F.	\$0.10	\$30.00	\$0.10	\$30.90	\$5.00	\$1,500.00	\$3.00	\$900.00
7	Structure Cover, (Adjustment)	75 each	\$206.00	\$15,450.00	\$212.18	\$15,913.50	\$375.00	\$28,125.00	\$200.00	\$15,000.00
8	Structure Cover, Adj, Add Depth (Reconst)	10 L.F.	\$250.00	\$2,500.00	\$257.50	\$2,575.00	\$200.00	\$2,000.00	\$200.00	\$2,000.00
9	Misc. Base Repair per CY to excavate/replace with 21AA Limestone, compacted in place if and where needed	1,500 TON	\$35.00	\$52,500.00	\$36.05	\$54,075.00	\$39.90	\$59,850.00	\$33.00	\$49,500.00
10	Installation of 6" edge drain	100 L.F.	\$15.00	\$1,500.00	\$15.45	\$1,545.00	\$15.00	\$1,500.00	\$15.00	\$1,500.00
11	Remove and Replace Curb & Gutter	200 L.F.	\$20.60	\$4,120.00	\$21.22	\$4,243.60	\$38.50	\$7,700.00	\$40.00	\$8,000.00
12	Install Handicap Ramps per MDOT R-28H	5,000 S.F.	\$9.00	\$45,000.00	\$9.27	\$46,350.00	\$9.50	\$47,500.00	\$9.00	\$45,000.00
13	Sidewalk Ramp, Retrofit, modified	100 S.F.	\$9.00	\$900.00	\$9.27	\$927.00	\$20.00	\$2,000.00	\$7.00	\$700.00
14	Restoration	Included	Included		Included		Included		Included	
15	Traffic Maintenance	Included	Included		Included		Included		Included	
16	Detectable Warning	150 L.F.	\$30.00	\$4,500.00	\$30.90	\$4,635.00	\$40.00	\$6,000.00	\$35.00	\$5,250.00
17	Asphalt Milling	2,000 S.Y.	\$3.00	\$6,000.00	\$3.09	\$6,180.00	\$4.75	\$9,500.00	\$4.50	\$9,000.00
18	Additional 21AA Limestone	200 TON	\$30.00	\$6,000.00	\$30.90	\$6,180.00	\$39.90	\$7,980.00	\$25.00	\$5,000.00
19	Fine Grading	Labor Price	\$5.00	\$5.00	\$5.15	\$5.15	\$390.00	\$390.00	\$200.00	\$200.00
20	Joint Sealing	2,000 L.F.	\$0.10	\$200.00	\$0.10	\$206.00	\$1.45	\$2,900.00	\$1.50	\$3,000.00
Estimated Total Cost – Proposal A				\$965,495.00		\$994,459.85		\$1,034,340.00		\$1,246,450.00

## Proposal B: 2019-2020 Major Road Maintenance - Scattered Locations

NO.	DESCRIPTION	EST. QTY.	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL	UNIT PRICE	TOTAL
1	Remove & Replace with Concrete 10" Non-reinforced-	5,500 S.Y.	\$66.59	\$366,245.00	\$68.59	\$377,232.35	\$72.00	\$396,000.00	\$92.20	\$507,100.00
2	Remove & Replace with Concrete 9" Non-reinforced-	6,000 S.Y.	\$64.68	\$388,080.00	\$66.62	\$399,722.40	\$68.00	\$408,000.00	\$87.20	\$523,200.00
3	Remove & Replace with Concrete 8" Non-reinforced-	200 S.Y.	\$63.68	\$12,736.00	\$65.59	\$13,118.08	\$58.00	\$11,600.00	\$82.20	\$16,440.00
4	Remove & Replace with Concrete 7" Non-reinforced-	200 S.Y.	\$55.62	\$11,124.00	\$57.29	\$11,457.72	\$56.70	\$11,340.00	\$77.20	\$15,440.00
5	Remove & Replace with Concrete Sidewalk/ Driveway 6" Non-reinforced (Locations not specified)	200 S.F.	\$10.00	\$2,000.00	\$10.30	\$2,060.00	\$10.95	\$2,190.00	\$6.50	\$1,300.00
6	Remove & Replace with Concrete Sidewalk/ 4" Non-reinforced (Locations not specified)	100 S.F.	\$10.00	\$1,000.00	\$10.30	\$1,030.00	\$7.50	\$750.00	\$5.00	\$500.00
7	Remove Concrete and rplc with topsoil/seed	100 S.F.	\$0.10	\$10.00	\$0.10	\$10.30	\$5.00	\$500.00	\$3.00	\$300.00
8	Structure Cover, (Adjustment)	20 each	\$206.00	\$4,120.00	\$212.18	\$4,243.60	\$375.00	\$7,500.00	\$200.00	\$4,000.00
9	Structure Cover, Adj, Add Depth (Reconst)	10 L.F.	\$250.00	\$2,500.00	\$257.50	\$2,575.00	\$200.00	\$2,000.00	\$200.00	\$2,000.00
10	Misc. Base Repair per CY to excavate/replace with 21AA Limestone, compacted in place	600 TON	\$35.00	\$21,000.00	\$36.05	\$21,630.00	\$39.90	\$23,940.00	\$33.00	\$19,800.00
11	Installation of 6" edge drain	100 L.F.	\$15.00	\$1,500.00	\$15.45	\$1,545.00	\$15.00	\$1,500.00	\$15.00	\$1,500.00
12	Remove and Replace Curb & Gutter	100 L.F.	\$20.60	\$2,060.00	\$21.22	\$2,121.80	\$38.50	\$3,850.00	\$40.00	\$4,000.00
13	Install Handicap Ramps per MDOT R-28H	500 S.F.	\$14.25	\$7,125.00	\$14.68	\$7,338.75	\$9.50	\$4,750.00	\$9.00	\$4,500.00
14	Sidewalk Ramp, Retrofit, modified	100 S.F.	\$14.25	\$1,425.00	\$14.68	\$1,467.75	\$20.00	\$2,000.00	\$7.00	\$700.00
15	Restoration	Included	Included		Included		Included		Included	
16	Traffic Maintenance	Included	Included		Included		Included		Included	
17	Detectable Warning	150 L.F.	\$0.01	\$1.50	\$0.01	\$1.55	\$40.00	\$6,000.00	\$35.00	\$5,250.00
18	Asphalt Milling	2,000 S.Y.	\$3.00	\$6,000.00	\$3.09	\$6,180.00	\$4.75	\$9,500.00	\$4.50	\$9,000.00
19	Additional 21AA Limestone	200 TON	\$30.00	\$6,000.00	\$30.90	\$6,180.00	\$39.90	\$7,980.00	\$25.00	\$5,000.00
20	Fine Grading	Labor Price	\$5.00	\$5.00	\$5.15	\$5.15	\$390.00	\$390.00	\$200.00	\$200.00
21	Joint Sealing	2,000 L.F.	\$0.10	\$200.00	\$0.10	\$206.00	\$1.45	\$2,900.00	\$1.50	\$3,000.00
Estimated Total Cost – Proposal B				\$833,131.50		\$858,125.45		\$902,690.00		\$1,123,230.00
Estimated Total Cost – Proposal A & B				\$1,798,626.50		\$1,852,585.30		\$1,937,030.00		\$2,369,680.00



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

I-05

## CITY COUNCIL AGENDA ITEM

Date: January 31, 2022

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
Rob Maleszyk, Chief Financial Officer  
Lisa Burnham, Controller  
Emily Frontera, Purchasing Manager  
M. Aileen Dickson, City Clerk

Subject: Bid Waiver – Additional Election Equipment for New Voting Precincts

---

### **History**

- In 2017, City Council authorized the purchase of a new voting system from *Hart Intercivic, Inc., of Austin, TX* as part of the countywide contract. The new system has been in use since the November, 2017 election.
- Every 10 years, after the Census, municipal clerks are authorized by Michigan Election Law to redraw the voting precinct maps for their municipalities. Some reasons to revise the precinct map include:
  - Reduce voter population in precincts to be within restrictions set by Michigan Election Law
  - Relocate precincts to polling locations that are more suitable in regards to capacity, distance for voters to travel, or location, or in the case of a facility not wishing to continue as a polling location
  - Newly drawn boundaries of statewide or countywide districts that conflict with precinct boundaries
- Michigan Election Law restricts the precinct size to not more than 2,999 registered voters. Whenever a precinct is found to have a voter population that exceeds the maximum, the municipal clerk is required to alter the boundaries of the precinct in order to reduce the voter population.
- The City Clerk's Office has been working on revising Troy's precinct map, which we hope to bring to City Council for approval in February, 2022. We have added 6 precincts to the map, resulting from dividing 6 current precincts due to population size approaching the maximum allowed by Michigan Election Law. We are also adding 2 new polling locations to the map.
- These 6 new precincts will each need a Verity Scan device, and the 2 new polling locations will require new Verity Touch Writers. We are also requesting 1 additional Verity Touch Writer in order to have a backup device to deploy in an emergency.

### **Purchasing**

- In the best interest of the City it is recommended that the bid process be waived since *Hart Intercivic, Inc.* is the vendor chosen by the County Clerk, and Troy is required by State law to use the election system chosen by the County Clerk.



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

## CITY COUNCIL AGENDA ITEM

- The total cost for six (6) Verity Scan devices is \$33,000 (unit price of \$5,500). The total cost for three (3) Verity Touch Writer devices is \$13,500 (unit price of \$4,500). The purchase price includes the warranty and maintenance for the first five years for all devices.
- The countywide election system agreement is for a total of ten years, so the funds for maintenance will be budgeted for years six through ten beginning in 2027. The maintenance charges for the additional six Verity Scan devices will be approximately \$3,384 per year. The maintenance charges for the additional three Verity Touch Writers will be approximately \$1,545 per year. Total annual maintenance for years 6-10 will be approximately \$4,929 per year as detailed in Quote #9585, which is attached.
- Due to supply chain concerns, we hope to place the order as soon as possible in order to assure delivery before the August, 2022 election season begins in May, 2022.

### **Financial**

- Funds are budgeted and available in City Clerk – Elections – Capital Fund 401.215.262.7978.010 under Project# is 2022C0001.
- Funds for future payments of equipment maintenance starting in 2027 will be budgeted in the Elections account.

### **Recommendation**

City Management recommends that the bid process be waived and a contract be awarded to *Hart Intercivic, Inc. of Austin, TX* for the purchase of six (6) additional Verity Scan devices for an estimated total cost of \$33,000; and three (3) additional Verity Touch Writer devices for an estimated total cost of \$13,500; including a 5-year service and maintenance warranty. City Management also requests the approval to purchase the service and maintenance for years six through ten for the Verity Scan and Verity Touch Writer devices in the estimated total amount of \$24,645 as detailed in Quote #9585, which is attached.



Quote Number

00009585

Account Name

Troy, MI

Grand Total

\$46,770.00

Item	Description	Unit Price	Quantity	Total Price
Verity Scan	Digital ballot scanner with remote transmission capability; includes 5 years of Service and Maintenance	\$5,500.00	6	\$33,000.00
Verity Touch Writer w/ Access	Ballot marking device with accessibility	\$4,500.00	3	\$13,500.00
vDrive	Flash memory card/audio card for use with Verity devices	\$45.00	6	\$270.00
Subtotal				\$46,770.00
Grand Total				\$46,770.00

## Annual Service and Maintenance (Years 6-10)

Item	Description	Unit Price	Quantity	Total Price
Service and Maintenance - Verity Touch Writer w/ Access	Annual Service and Maintenance fee for Verity Touch Writer w/ Access in years 6-10	\$515.00	3	\$1,545.00
Service and Maintenance - Verity Scan	Annual Service and Maintenance fee for Verity Scan in years 6-10	\$564.00	6	\$3,384.00

Proposed Annual Service &amp; Maintenance

\$4,929.00

Total Years 6-10

\$24,645.00

Bill To 500 W Big Beaver Rd.  
Troy, MI 48084Ship To 500 W Big Beaver Rd.  
Troy, MI 48084

## Customer Contact

Contact Name	Aileen Dickson	Email	dicksona@troymt.gov
		Phone	(248) 524-3331

## General Information

Expiration Date	2/19/2022	Instructions	Please fax with signature to or scan and email to <a href="mailto:ssaenz@hartic.com">ssaenz@hartic.com</a> to order.
Payment Terms	Net 30		

## Terms and Conditions

Pricing subject to inventory availability at time of quote execution and acceptance.  
Taxes will be calculated in conjunction with the Customer based on the final approved price list.

## Hart Approval

Prepared By	Simon Saenz	Title	Sales Account Manager
Signature			

## Customer Approval

Name: _____	Title: _____
-------------	--------------





Quote Number

00009585

Account Name

Troy, MI

Grand Total

\$46,770.00

Customer Approval: \_\_\_\_\_

Date: \_\_\_\_\_



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

## CITY COUNCIL AGENDA ITEM

Date: February 10, 2022

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager

Subject: 2022 City Council Meeting Schedule  
*(Introduced by: Robert J. Bruner, Assistant City Manager)*

---

### History

The City Council approved its calendar year 2022 Regular Meeting schedule on November 22, 2021. The schedule also included two Special Meetings in April for presentation of the proposed fiscal year 2021-2022 budget in accordance with City Charter Section 8.2. City Council scheduled additional Special Meetings as follows:

Monday, February 28, 2022  
Wednesday, March 23, 2022

City Council Rules of Procedure  
Personnel Evaluations

### Recommendation

City staff recommends City Council schedule a Special Meeting for a Neighborhood Node “Walk & Talk” similar to those conducted by the Planning Commission in November 2021. An example is attached. The meeting will be convened at the Community Center at 4:00 PM. City Council and staff will travel to three nodes by bus and return to the Community Center for discussion. We plan to adjourn the meeting at 7:30 PM. City staff and planning consultants are available on the following dates:

Wednesday, March 9, 2022  
Thursday, March 10, 2022  
Wednesday, March 16, 2022

City staff also recommends City Council schedule a Special Meeting for the 2022 City of Troy Advance. The meeting should be held in November or December to allow time for the process to provide input on the proposed budget for the following fiscal year. The meeting will be convened at the Community Center at 8:00 AM and adjourned by 4:30 PM. City staff proposes one of the following dates:

Saturday, November 19, 2022  
Saturday, December 3, 2022  
Saturday, December 10, 2022

Pastor Simion Timbuc from Bethesda Romanian Pentecostal Church performed the Invocation. The Pledge of Allegiance to the Flag was given.

#### **A. CALL TO ORDER:**

A Regular Meeting of the Troy City Council was held on January 24, 2022, at City Hall, 500 W. Big Beaver Rd. Mayor Baker called the meeting to order at 7:32 PM.

#### **B. ROLL CALL:**

- a) Mayor Ethan Baker
- Edna Abraham
- Theresa Brooks
- Rebecca A. Chamberlain-Creanga
- Ann Erickson Gault
- David Hamilton
- Ellen Hodorek

#### **C. CERTIFICATES OF RECOGNITION AND SPECIAL PRESENTATIONS:**

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**C-1** Service Commendation for Information Technology Director Gert Paraskevin  
(Presented by: Mayor Ethan Baker)

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**C-2** Legislative Update (Presented by: State Representative Padma Kuppa)

#### **D. CARRYOVER ITEMS:**

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**D-1** No Carryover Items

#### **E. PUBLIC HEARINGS:**

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**E-1** No Public Hearings

#### **F. PUBLIC COMMENT FOR ITEMS ON THE AGENDA FROM TROY RESIDENTS AND BUSINESSES:**

#### **G. CITY COUNCIL/CITY ADMINISTRATION RESPONSE/REPLY TO PUBLIC COMMENT FOR ITEMS ON THE AGENDA FROM TROY RESIDENTS AND BUSINESSES:**

#### **H. POSTPONED ITEMS:**

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**H-1** No Postponed Items

**I. REGULAR BUSINESS:****I-1 Board and Committee Appointments: a) Mayoral Appointments – Board of Review; b) City Council Appointments – Building Code Board of Appeals, Zoning Board of Appeals****a) Mayoral Appointments:**

Resolution #2022-01-010

Moved by Baker

Seconded by Hamilton

RESOLVED, That the Mayor of the City of Troy hereby **APPOINTS** the following nominated person(s) to serve on the Boards and Committees as indicated:

**Board of Review**

Appointed by Mayor

3 Regular Members

3 Year Term

**Nominations to the Board of Review:****Term Expires: 1/31/2025****Michele Shoan**

Term currently held by: Michele Shoan

Yes: All-7

No: None

**MOTION CARRIED****b) City Council Appointments:**

Resolution #2022-01-011

Moved by Erickson Gault

Seconded by Chamberlain-Creanga

RESOLVED, That Troy City Council hereby **APPOINTS** the following nominated person(s) to serve on the Boards and Committees as indicated:

**Building Code Board of Appeals**

Appointed by Council

5 Regular Members: Three (3) Residents with background, training or experience in construction or similar trades; at least one shall be a professional structural or civil engineer of architectural engineering experience; Two (2) by Ordinance - City Manager and Oakland County Health Department Representative

5 Year Term

**Nominations to the Building Code Board of Appeals:**

**Term Expires: 1/1/2027****Gary Abitheira**

Term currently held by: Gary Abitheira

Yes: All-7

No: None

**MOTION CARRIED**

Resolution #2022-01-012

Moved by Erickson Gault

Seconded by Brooks

RESOLVED, That Troy City Council hereby **CONFIRMS** the appointment of the following person to serve on the Boards and Committees as indicated:

**Zoning Board of Appeals**

Appointed by Council

7 Regular Members; 2 Alternates

3 Year Term

**Term Expires: 12/31/2022****Lakshmi Malalahalli****PC Rep. on ZBA**

Yes: All-7

No: None

**MOTION CARRIED****I-2 Board and Committee Nominations: a) Mayoral Nominations – None; b) City Council Nominations – Election Commission****a) Mayoral Nominations: None****b) City Council Nominations:**

Resolution #2022-01-013

Moved by Erickson Gault

Seconded by Hodorek

RESOLVED, That Troy City Council hereby **FORWARDS** the following nominated person(s) to serve on the Boards and Committees as indicated to the next Regular City Council Meeting for action:

**Election Commission**

Appointed by Council

2 Regular Members and 1 Charter Member

1 Year Term

**Nominations to the Election Commission:**



**Term Expires: 1/31/2023****Stephen Sadlier****Democrat**

Term currently held by: Stephen Sadlier

**Term Expires: 1/31/2023****Ray Watts****Republican**

Term currently held by: Ray Watts

Yes: All-7  
No: None

**MOTION CARRIED**

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**I-3 Request for Closed Session**

Resolution #2022-01-014  
Moved by Baker  
Seconded by Erickson Gault

BE IT RESOLVED, That Troy City Council **SHALL MEET** in Closed Session, as permitted by MCL15.268 (e) Pending Litigation – *Stafa v. Troy, Tollbrook v. Troy, Tollbrook West v. Troy.*

Yes: All-7  
No: None

**MOTION CARRIED**

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**I-4 The Leadership Group – 2021 City of Troy Advance Presentation (*Introduced by: Mark F. Miller, City Manager*)**

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**I-5 Bid Waiver – Troy Public Library Youth Area Renovation Architectural Services (*Introduced by: Emily Dumas, Library Director*)**

Resolution #2022-01-015  
Moved by Abraham  
Seconded by Hodorek

RESOLVED, That in the best interest of the City, Troy City Council hereby **WAIVES** the bid process and **AWARDS** a contract for design development documents, construction documents, and construction administration, to *Integrated Design Services of Troy, MI*, for an estimate cost of \$107,747.51 with a 10% contingency of \$10,744.75; for a not to exceed total of \$118,522.26.

BE IT FURTHER RESOLVED, That the award is **CONTINGENT** upon vendor's submission of properly executed contract documents, including insurance certificates and all other specified requirements.

Yes: All-7  
No: None

**MOTION CARRIED**

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**I-6 Bid Waiver – SmartPower Generator for Ladder 1 (Introduced by: Richard Riesterer, Fire Chief)**

Resolution #2022-01-016  
Moved by Brooks  
Seconded by Erickson Gault

RESOLVED, That in the best interest of the City, Troy City Council hereby **WAIVES** the formal bid process and **AWARDS** a contract to *Apollo Fire Equipment Company of Romeo, MI*, the authorized distributor for SmartPower in Southeast Michigan, to purchase and install a SmartPower ER-6 6kW generator for an estimated total cost of \$11,450 with a 20% contingency not to exceed amount of \$13,740, at prices detailed in the attached quoted; a copy of which shall be **ATTACHED** to the original Minutes of this meeting.

Yes: All-7  
No: None

**MOTION CARRIED**

---

**I-7 2022 City Council Meeting Schedule (Introduced by: Robert J. Bruner, Assistant City Manager)**

Resolution #2022-01-017  
Moved by Baker  
Seconded by Hamilton

RESOLVED, That Troy City Council **SCHEDULES** a Special Meeting at 6:00 PM as follows:

Monday, February 28, 2022	City Council Rules of Procedure
Wednesday, March 23, 2022	Personnel Evaluations

BE IT FURTHER RESOLVED, That Troy City Council **MAY RESCHEDULE** and/or **SCHEDULE** additional Special Meetings in accordance with the City Charter and Michigan Open Meetings Act.

Yes: All-7  
No: None

**MOTION CARRIED****J. CONSENT AGENDA:**

---

**J-1a Approval of “J” Items NOT Removed for Discussion**

Resolution #2022-01-018-J-1a  
Moved by Abraham  
Seconded by Brooks

RESOLVED, That Troy City Council hereby **APPROVES** all items on the Consent Agenda as printed.

Yes: All-7  
No: None

## MOTION CARRIED

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### J-1b Address of “J” Items Removed for Discussion by City Council

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### J-2 Approval of City Council Minutes

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Resolution #2022-01-018-J-2

RESOLVED, That Troy City Council hereby **APPROVES** the following Minutes as submitted:

- a) City Council Minutes-Draft – January 10, 2022

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### J-3 Proposed City of Troy Proclamations: None Submitted

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### J-4 Standard Purchasing Resolutions:

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- a) **Standard Purchasing Resolution 10: Travel Authorization and Approval to Expend Funds for City Council Member Travel – 2022 Michigan Municipal League Cap Con**

Resolution #2022-01-018-J-4a

RESOLVED, That Council hereby **AUTHORIZES** City Council Member travel expenses for the Michigan Municipal League 2022 Cap Con, in accordance with accounting procedures of the City of Troy.

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### J-5 City of Troy Investment Policy and Establishment of Investment Accounts

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Resolution #2022-01-018-J-5

RESOLVED, That Troy City Council hereby **APPROVES** the *Investment Policy and Establishment of Investment Accounts* as outlined in the memorandum and revised by Chief Financial Officer, Robert C. Maleszyk, dated January 24, 2022; a copy of which shall be **ATTACHED** to the original Minutes of this meeting.

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### J-6 Request to Vacate a Sanitary Sewer Easement – Sidwell #88-20-21-352-016 and #88-20-21-352-017

---

Resolution #2022-01-018-J-6

RESOLVED, That Troy City Council hereby **VACATES** a sanitary sewer previously granted to the City of Troy and recorded in Liber 51871 Page 298, Oakland County Register of Deeds.

BE IT FURTHER RESOLVED, That Troy City Council **AUTHORIZES** the Mayor and City Clerk to **EXECUTE** a Quit Claim Deed returning the City of Troy's interest in a portion of the sanitary sewer recorded in Liber 51871, Page 298 to Zen Troy, LLC, owner of the property having Sidwell #88-20-21-352-016.

BE IT FURTHER RESOLVED, That Troy City Council **AUTHORIZES** the Mayor and City Clerk to **EXECUTE** a Quit Claim Deed returning the City of Troy's interest in a portion of the sanitary sewer recorded in Liber 51871 Page 298 to Troy 888, LLC, owner of the property having Sidwell #88-20-21-352-017.

BE IT FINALLY RESOLVED, That the City Clerk is hereby **DIRECTED TO RECORD** the Quit Claim Deeds with Oakland County Register of Deeds, copies of which shall be **ATTACHED** to the original Minutes of this meeting.

## **K. MEMORANDUMS AND FUTURE COUNCIL AGENDA ITEMS:**

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### **K-1 Announcement of Public Hearings:**

- a) Preliminary Site Plan Review (File Number SP2021-0020) – Proposed Adler Cove (One Family Residential Cluster), South Side of Long Lake, East of John R (Parcels #88-20-13-100-012, #88-20-13-100-014 and #88-20-13-100-025), Currently Zoned R-1C (One Family Residential) Zoning District

---

### **K-2 Memorandums (Items submitted to City Council that may require consideration at some future point in time): None Submitted**

## **L. PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA FROM TROY RESIDENTS AND BUSINESSES:**

## **M. CITY COUNCIL/CITY ADMINISTRATION RESPONSE/REPLY TO PUBLIC COMMENT FOR ITEMS NOT ON THE AGENDA FROM TROY RESIDENTS AND BUSINESSES:**

## **N. COUNCIL REFERRALS:**

Items Advanced to the City Manager by the Mayor and City Council Members for Placement on the Agenda

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### **N-1 No Council Referrals**

## **O. REPORTS:**

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### **O-1 Minutes – Boards and Committees: None Submitted**

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**O-2 Department Reports:**

- a) PA 202 of 2017 – The Protecting of Local Government Retirement and Benefits Act
  - b) Coronavirus State and Local Fiscal Recovery Funds and Final Rule
  - c) 2021 State Treasurer Reports for Troy Local Development Finance Authority (LDFA) and Troy Downtown Development Authority (DDA)
  - d) 4<sup>th</sup> Quarter 2021 Litigation Report
  - e) Planning Commission 2021 Annual Report
- Noted and Filed

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**O-3 Letters of Appreciation: None Submitted**

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**O-4 Proposed Proclamations/Resolutions from Other Organizations: None Submitted**

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**P. COUNCIL COMMENTS:**

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**P-1 Council Comments**

Council Member Hodorek commented that tomorrow, January 25<sup>th</sup>, is National Poll Worker Recruitment Day. She encouraged every registered voter to consider signing up to work as an election worker.

Council Member Hodorek commented that we all have the members of the Oxford community, including students, teachers, first responders, and our own first responders from Troy who assisted that day, in our thoughts since the tragedy at Oxford High School. She commented that it is timely to note that the 4<sup>th</sup> Annual Gun Violence Survivors Week is approaching. She said that this week is dedicated to focusing on the survivors of gun violence incidents, safety, and responsible gun ownership.

Council Member Chamberlain-Creanga commented that the Troy Recreation Department is now offering cricket classes. She thanked Mr. Brian Goul, Recreation Director, for putting these programs together for Troy residents.

Council Member Chamberlain-Creanga commented that she met with a council member in Sterling Heights over the weekend, and she heard about many initiatives they are doing in Sterling Heights that would be great for Troy such as trails and pathways.

Mayor Baker commented that he spoke briefly at the graduation ceremony for Chamberlain College of Nursing. He encourages everyone to keep healthcare heroes and frontline responders in your thoughts during this time.

Mayor Baker thanked the Public Works staff and Director Bovensiep for their hard work tonight during the heavy snow event that came through Troy today.

---

**Q. PUBLIC COMMENT FOR ITEMS ON OR NOT ON THE AGENDA FROM MEMBERS OF THE PUBLIC OUTSIDE OF TROY (NOT RESIDENTS OF TROY AND NOT FROM TROY BUSINESSES):**



The Meeting **RECESSED** at 8:42 PM.

The Meeting **RECONVENED** at 8:47 PM.

**R. CLOSED SESSION**

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**R-1** Closed Session

**S. ADJOURNMENT:**

The Meeting **ADJOURNED** at 10:01 PM.

---

Mayor Ethan Baker

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M. Aileen Dickson, MMC, MiPMC II  
City Clerk

**2022 SCHEDULED SPECIAL CITY COUNCIL MEETINGS:**

April 4, 2022 ..... Special Budget Study Meeting  
April 6, 2022 ..... Special Budget Study Meeting

**2022 SCHEDULED REGULAR CITY COUNCIL MEETINGS:**

February 14, 2022 ..... Regular Meeting  
February 28, 2022 ..... Regular Meeting  
March 14, 2022 ..... Regular Meeting  
March 21, 2022 ..... Regular Meeting  
April 11, 2022 ..... Regular Meeting  
April 25, 2022 ..... Regular Meeting  
May 9, 2022 ..... Regular Meeting  
May 23, 2022 ..... Regular Meeting  
June 13, 2022 ..... Regular Meeting  
June 27, 2022 ..... Regular Meeting  
July 11, 2022 ..... Regular Meeting  
July 25, 2022 ..... Regular Meeting  
August 15, 2022 ..... Regular Meeting  
August 22, 2022 ..... Regular Meeting  
September 12, 2022 ..... Regular Meeting  
September 19, 2022 ..... Regular Meeting  
October 3, 2022 ..... Regular Meeting  
October 24, 2022 ..... Regular Meeting  
November 14, 2022 ..... Regular Meeting  
November 21, 2022 ..... Regular Meeting  
December 5, 2022 ..... Regular Meeting  
December 12, 2022 ..... Regular Meeting

**SERVICE COMMENDATION  
ECONOMIC DEVELOPMENT SPECIALIST  
GLENN LAPIN**

**WHEREAS, Glenn Lapin** began his career with the City of Troy on November 3, 2011 as the Economic Development Specialist. **Glenn** graduated from the University of Michigan with a Bachelor of Arts Degree in Sociology and Political Science, and a Master of Urban Planning Degree; and

**WHEREAS,** Prior to coming to the City of Troy, **Glenn** was the Director of Planning & Development for Detroit Renaissance from 1981-2009, including leading site management activities for the Detroit Grand Prix. During his stellar career he directed urban revitalization and economic development initiatives for the nonprofit business leadership organization dedicated to accelerating economic growth in Detroit and the region. After that **Glenn** was the Interim Director of Workforce Development at Henry Ford Community College; and

**WHEREAS,** As the City of Troy's Economic Development Specialist, **Glenn** developed, implemented and managed economic development programs for the City of Troy. He led business attraction and retention initiatives including the successful attraction of global companies like Aptiv and Flex-N-Gate to Troy; and

**WHEREAS, Glenn** managed Troy's Brownfield Redevelopment Authority leading to the transformation of blighted properties into vibrant community assets including the MJR Theaters, Uptown Square Apartments and Somerset Shoppes. **Glenn** also managed Troy's Local Development Finance Authority including the extension of the Automation Alley SmartZone. He coordinated Downtown Development Authority programs including adoption of the Quality Development Initiative to encourage mixed-use, higher density development along the Big Beaver corridor; and

**WHEREAS,** During **Glenn's** career with the City of Troy he instituted the Troy Business Connect e-newsletter to keep Troy's business community informed on local business matters; engaged in community partnerships to bring valuable business resources to Troy including PACE Energy Program, Tech248, Economic Gardening, and Restaurant Relief Program; and established strong, effective relationships throughout the state and region to encourage local economic development; and

**WHEREAS, Glenn** is a member of the American Planning Association and Michigan Economic Developers Association. He has also served on numerous Boards including the Nonprofit Finance Fund Midwest Region Advisory Board, Detroit University Cultural Center Association Board, Detroit Investment Fund Predevelopment Loan Fund Advisory Committee, Detroit Mayor's Office Neighborhood Commercial Revitalization Board, and SEMCOG Community and Economic Development Advisory Council. Glenn served on both the Huntington Woods Zoning Board of Appeals and Planning Commission as Chair; and

**WHEREAS, Glenn** will retire from the City of Troy on March 31, 2022 after 10 years of dedicated service, many commendation letters in his employee file, and the utmost respect from the Troy employees, City Council, the Troy business community, and residents. **Glenn** will now enjoy spending more time with his wife **Natalie** (married 38 years on April 8, 2022) and family members including daughter **Michelle** and son **Andrew**, as well as enjoying traveling around the country and beyond, biking, hiking, and tackling home improvement projects;

**NOW, THEREFORE, BE IT KNOWN,** That the Mayor and City Council of the City of Troy take this opportunity to express their appreciation to **City of Troy Economic Development Specialist Glenn Lapin** for his professionalism and his many contributions to the City of Troy for the betterment of the community; and

**BE IT FURTHER KNOWN,** That the Mayor and City Council of the City of Troy, City Management, and the citizens of the City of Troy, extends wishes of prosperity, good health and happiness to **Glenn** during his well-deserved retirement years.

**Presented the 28<sup>th</sup> day of February 2022.**



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

## CITY COUNCIL AGENDA ITEM

Date: February 14, 2022

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
Rob Maleszyk, Chief Financial Officer  
Lisa Burnham, Controller  
Frank Nastasi, Chief of Police  
Mike Villerot, Police Sergeant  
Emily Frontera, Purchasing Manager

Subject: Standard Purchasing Resolution 2 – Award to Low Bidder Meeting Specifications – sUAS/Drone with camera – Police Department

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### History

In 2018, the Troy Police Department developed and implemented the sUAS (small unmanned aerial system)/drone program into the resource pool for incidental use. Upon approval by City Council in 2019, the Police Department purchased five DJI Mavic Pro sUAS/drones for use in various capacities (Resolution #2019-04-039-J-8). Several officers with different specialties were trained in their usage for varying scenarios which include (but not limited to) traffic scene investigation, crime-scene assessment, search and rescue, and assisting with crowd management. To date, officers have deployed the sUAS/drones to a high level of success. Officers assigned to the program often train with the sUAS/drones in varying conditions and circumstances and benefit greatly from the added resource and capability.

sUAS/drone usage by law enforcement agencies continues to grow and evolve, and provide an added level of safety to officers and efficiency to their job function. With that, the DJI Mavic Pro sUAS/drones are subject to some limitations that would otherwise be mitigated with a larger, more robust sUAS/drone, such as the DJI Matrice 300 RTK. Smaller sUAS/drones are subject to minor weather variations, shorter battery capacity for flying and limited in their ability to carry more highly capable cameras.

The DJI Matrice 300 RTK is a sUAS/drone that is a larger, more robust system able to withstand weather variance to a higher degree, has a fly time that is 55 minutes (approximately 90% longer than the DJI Mavic Pro currently employed) and has the capability of carrying cameras that are far more advanced like the Zenmuse H20T which has radiometric thermal imaging and 23x zoom. With these capabilities, this sUAS is able to relay information in real-time to the user/observer more effectively than the smaller, less capable Mavic Pro, and to allow for effective and strategic planning to optimally resolve an incident in a safer manner. Circumstances like barricaded subjects, assistance with crowd control, fire scenes and searches over large swathes of land are made easier, more safely and done more efficiently. The DJI Matrice 300 RTK also has the capability to map scenes, like traffic crashes or crime scenes and is compatible with the currently employed software.



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

## CITY COUNCIL AGENDA ITEM

### Purchasing

- On January 20, 2022 a bid opening was conducted as required by City Charter and Code, for the purchase of the DJI Matrice 300 RTK sUAS/Drone with Zenmuse H20T camera for the City of Troy Police Department.
- The bid was posted on Bidnet Direct/MITN website; [www.bidnetdirect.com/mitn/city-of-troy-mi](http://www.bidnetdirect.com/mitn/city-of-troy-mi).
- One hundred and seventy-six (176) vendors were notified via the Bidnet Direct/MITN website. Four (4) bid responses were received. Below is a detailed summary of potential vendors for the bid opportunity:

<b>Companies notified via MITN</b>	176
Troy Companies notified via MITN	8
Troy Companies notified Active email Notification	6
Troy Companies - Active Free	2
<b>Companies that viewed the bid</b>	13
Troy Companies that viewed the bid	0

**MITN** provides a resourceful online platform to streamline the procurement process, reduce costs, and make it easier and more transparent for vendors to do business with the City of Troy. **Active MITN** members with a current membership and paying annual dues receive automatic electronic notification which allows instant access to Bids, RFPS and Quote opportunities with the City. **Active MITN non-paying members** are responsible to monitor and check the MITN website for opportunities to do business with the City. **Inactive MITN member** status can occur when a company does not renew their account upon expiration. Inactive members cannot be notified of solicitations or access any bid information.

- After review of the bid proposals, the apparent low bidder *Focus Camera* failed to submit their bid deposit and did not offer training as required per the bid specifications. Therefore, *Noar Technologies of Clawson, MI* is the low bidder meeting all bid specifications and is being recommended for the purchase of the DJI Matrice 300 RTK with camera and on site training.
- Noar Technologies* has successfully completed other projects for the City.

### Financial

Funds are budgeted and available in the Police Department Forfeiture Fund under Project Number 2022C0151 for the 2022 fiscal year. Expenditures will be charged to account number 401.301.12.315.7978.046.

### Recommendation

City Management recommends awarding a contract to the low bidder meeting specifications; *NOAR Technologies of Clawson, MI* to supply the Police Department with the DJI Matrice 300 RTK with Zenmuse H20T camera for an estimated total cost of \$27,240.30.



CITY OF TROY  
BID TABULATION  
DRONE - SMALL UNMANNED AERIAL VEHICLE

VENDOR NAME:	FOCUS CAMERA	NOAR TECHNOLOGIES	VOLATUS AEROSPACE	ADORAMA INC.
CITY:	Brooklyn, NY	Clawson, MI	Wilmington, DE	New York, NY
CHECK NUMBER:	Not Included	9202248142	Not Included	116198110
CHECK AMOUNT:		\$1,500.00		\$1,500.00

**PROPOSAL: To furnish DRONE/(SMALL UNMANNED AERIAL SYSTEM)**

Description	Qty	Unit Price	Extension	Unit Price	Extension	Unit Price	Extension	Unit Price	Extension
1. DJI Matrice 300 RTK sUAS/Drone - To include "in the box": the aircraft body, DJI smart controller enterprise, USB-charger, USBC cable, (2) TB60 Intelligent Flight battery, WB37 Intelligent battery (battery for smart controller), 2110 propeller (CW)(pair), 2110 (CCW) (pair), landing gear, spare stick cover (pair), (2) spare propeller holder, (4) spare gimbal damper, USB cable (with double A ports), visual system calibration plate, carrying case, smart controller lanyard, rubber port cover, screws and tools, BS60 Intelligent battery station.	1	\$10,200.00	\$10,200.00	\$11,879.10	\$11,879.10	\$13,199.00	\$13,199.00	\$12,539.05	\$12,539.05
2. DJI Enterprise Shield - Basic Support Package for DJI Matrice 300 RTK	1	\$900.00	\$900.00	INCLUDED		\$0.00	\$0.00	Included in Item 1	
3. Zenmuse H20T Camera - Optical zoom camera (20MP zoom camera) / Fixed lens camera (12MP wide camera) / Laser range finder (1200m LRF) / Thermal radiometric camera (640x512 px 30Hz, 2x/4x/8x digital zoom).	1	\$9,999.00	\$9,999.00	\$10,088.10	\$10,088.10	\$11,209.00	\$11,209.00	\$10,648.55	\$10,648.55
4. DJI Enterprise Shield-Basic Support Package for Zenmuse H20T	1	Included in Line 3		INCLUDED		\$0.00	\$0.00	Included in Item 3	
5. DJI Matrice 300 Series – TB60 Intelligent Drone Battery	6	\$680.00	\$4,080.00	\$630.00	\$3,780.00	\$700.00	\$4,200.00	\$665.00	\$3,990.00
6. WB37 Intelligent Battery	1	\$55.00	\$55.00	\$53.10	\$53.10	\$59.00	\$59.00	\$56.05	\$56.05
7. Staff training with equipment from vendor – The expectations of this training is not for certification but a familiarization on how to properly deploy, operate, care for equipment that is purchased.	1	NO TRAINING		\$1,440.00	\$1,440.00	\$0.00	\$0.00	\$3,000.00	\$3,000.00
<b>TOTAL PRICE:</b>		<b>\$25,234.00</b>		<b>\$27,240.30</b>		<b>\$28,667.00</b>		<b>\$30,233.65</b>	

AUTHORIZED DEALER: or N	Y	Y	Y	Y
WARRANTY:	Standard warranty that comes with product	DSI Manufacture Warranty Included	1 Year	Manufacturer's warranties included with products
CONTACT INFORMATION: Name(s):	Igal Avshalom	Sarah Laskaska	Joseph Scapenotta	Andrea Simmon
Hours of Operation:	9 AM - 6 PM EST	8 - 5	10 AM - 6 PM	9 AM-6 PM M-Th 9 AM-2 PM F eastern time
24 Hour Phone #:	718-431-7978	248-906-2375	516-732-8996	NOT SPECIFIED
ABLE TO PROVIDE TRAINING: or N	N	Y	Y	Y
REFERENCES: or N	Y	Y	Y	Y
PAYMENT TERMS:	NET 30	NET 30	30 DAYS	NET 30
DELIVERY DATE:	15 Days	48 hours after PO receipt	2/20/2022	7 to 15 days ARO
ALL OR NONE AWARD: or N	Y	N	Y	N
ACKNOWLEDGMENT: or N	Y	Y	Y	Y
EXCEPTIONS:	NONE	NONE	NONE	NONE
FORMS: or N	Y	Y	Missing Proposer's Sworn and Notarized Familial Disclosure	Y

**Low bidder meeting specifications**

Attest:  
(\*Bid Opening conducted via Zoom)

Michael Villerot  
Laurence Schehr  
Andrew Chambliss  
Heather Chomiak

Emily Frontera  
Purchasing Manager



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

J-04b

## CITY COUNCIL AGENDA ITEM

Date: February 14, 2022

To: Mark Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
Lisa Burnham, Controller  
Frank Nastasi, Police Chief  
Laurence Schehr, Police Lieutenant  
Richard Riesterer, Fire Chief  
Peter Hullinger, Assistant Fire Chief  
Kurt Bovensiepe, Public Works Director  
Brian Varney, Fleet Operations Manager  
Emily Frontera, Purchasing Manager

Subject: Standard Purchasing Resolution 2 - Sole bidder Meeting Specifications - Vehicle Graphic Materials

### History

The Police, Fire and Fleet Departments are responsible for the maintenance of City vehicles and emergency equipment as per Troy City Council's ongoing objective to enhance the health and safety of the community. This maintenance includes the installation and/or purchase of vehicle graphic materials for the Police, Fire and Public Works Departments. In 2018, City Council approved a two (2) year contract with an option to renew for two (2) additional years. The existing contract has expired, necessitating Vehicle Graphics to be re-bid.

### Purchasing

On January 20, 2022, bids were received as required by City Charter and Code for two (2) year requirements of Vehicle Graphic Materials and installation with an option to renew for two (2) additional years. The bid was posted on the Michigan Inter-governmental Trade Network (MITN) website; [www.bidnetdirect.com/city-of-troy-mi](http://www.bidnetdirect.com/city-of-troy-mi). Two hundred and twenty-nine (229) vendors were notified via the MITN website. One (1) sole bid response was received.

Below is a detailed summary of potential vendors for the bid opportunity:

Companies notified via MITN	229
Troy Companies notified via MITN	5
Troy Companies notified Active email Notification	5
Troy Companies notified Active Free	0
Companies that viewed the bid	8
Troy Companies that viewed the bid	1

**MITN** provides a resourceful online platform to streamline the procurement process, reduce costs, and make it easier and more transparent for vendors to do business with the City of Troy.

**Active MITN** members with a current membership and paying annual dues receive automatic electronic notification which allows instant access to Bids, RFPS and Quote opportunities with the City.

**Active MITN non-paying members** are responsible to monitor and check the MITN website for opportunities to do business with the City.

**Inactive MITN member** status can occur when a company does not renew their account upon expiration. Inactive members cannot be notified of solicitations or access any bid information.



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## CITY COUNCIL AGENDA ITEM

### **Purchasing (continued)**

*Majik Graphics, Inc. of Clinton Township, MI* was the sole bidder meeting specifications and is being recommended for the installation and/or purchase of vehicle graphic materials at the unit prices identified in the attached bid tabulation. *Majik Graphics, Inc.* has successfully provided vehicle graphics for the City of Troy and meets all requirements.

### **Financial**

Funds are budgeted and available in the operating accounts of the Police and Fire Departments, and Fleet Division of the Public Works Department respectively.

### **Recommendation**

City management recommends awarding a two (2) year contract to provide and install Vehicle Graphic Materials for the Police, Fire and Public Works Departments; with an option to renew for two (2) additional years to the sole bidder meeting specifications; *Majik Graphics, Inc. of Clinton Township, MI* at unit prices contained in the attached bid tabulation for an estimated total cost of \$44,999. This estimate may increase but will not exceed budgetary limitations. The award is contingent upon the contractor's submission of properly executed bid documents including insurance certificates and all other specified requirements.

Opening Date: 01/20/2022  
Date Reviewed: 01/20/2022

CITY OF TROY  
BID TABULATION  
VEHICLE GRAPHICS

ITB-COT 22-02  
Page 1 of 2

VENDOR:	MAJIK GRAPHICS, INC.
CITY:	CLINTON TWP., MI
CHECK NUMBER:	9105221829
CHECK AMOUNT:	\$500.00

**PROPOSAL: VEHICLE GRAPHICS**

**1. POLICE VEHICLE GRAPHICS (COMPLETE) INCLUDING INSTALLATION**  
In accordance with the specifications - new vehicles

ITEM	EST. QTY	UNIT	DESCRIPTION - (Non-Reflective)	COMPLETE FOR THE SUM OF:	EXTENSION
1A.	12	Each	Police Vehicles (Fully Marked Patrol)	\$475.00	\$5,700.00
1B.	7	Each	Police Vehicles (Subdued Marked Traffic)	\$475.00	\$3,325.00
1C.	3	Each	Police Vehicles (K-9)	\$515.00	\$1,545.00
1D.	3	Each	Police Vehicles (Evidence Tech)	\$515.00	\$1,545.00
1E.	3	Each	Police Vehicle (Community Services)	\$515.00	\$1,545.00
1F.	1	Each	Police Vehicle (Service Aide) - reflective	\$630.00	\$630.00
1G.	5	Each	Police Vehicle (Supervisor)	\$515.00	\$2,575.00
<b>Sub -Total</b>					<b>\$16,865.00</b>

**COST FOR REPLACEMENT OF DAMAGED SECTIONS**

ITEM	EST. QTY	UNIT	DESCRIPTION	MATERIAL (Lump Sum/Unit)	LABOR (Lump Sum/Unit)	TOTAL COST (Material+ Labor/Unit)
1H.	14	Each	Front Fender – either side	\$55.00	\$65.00	\$120.00
1I.	14	Each	Rear Quarter Panel – either side	\$45.00	\$65.00	\$110.00
1J.	24	Each	Doors - Front – either side	\$225.00	\$65.00	\$290.00
1K.	24	Each	Doors – Rear – either side	\$140.00	\$65.00	\$205.00
1L.	12	Each	Vehicle Trunk – Letters and Numbers	\$45.00	\$65.00	\$110.00
<b>Sub -Total</b>						<b>\$16,420.00</b>

**LABOR COST FOR REMOVAL OF DECALS AND GRAPHICS FROM**

1M.	20	Each	Fully Marked Patrol Cars:		\$145.00	
1N.	4	Each	Subdued Marked Traffic Safety Vehicles:		\$145.00	
1O.	1	Each	Fully Marked PSA Vehicle – (reflective)		\$180.00	
Sub-Total						\$3,660.00

**ADDITIONAL ITEMS**

				*Each		
1P.	4	Each	K-9 Markings (Head on Pillar)	\$18.00	\$30.00	\$66.00
1Q.	4	Each	K-9 Graphics (Name on Pillar)	\$10.00	\$10.00	\$30.00
1R.	4	Each	K-9 Graphics (Caution on Window)	\$18.00	\$30.00	\$66.00
1S.	4	Each	2" Unit Designator (K-9, Evidence Tech, Traffic Safety, Community Services)	\$18.00	\$30.00	\$66.00
1T.	8	Sets	12" Roof Numbers (set of 3)	\$38.00	\$35.00	\$73.00
1U.	16	Each	3" American Flags (Sample shown at site visit)	\$8.00	\$10.00	\$26.00
<b>Sub-Total</b>						<b>\$1,912.00</b>

\* Pricing is per graphic; typically 2 purchased per vehicle

Manufacturer Used: Avery, 3M, FDC

**2. FIRE VEHICLE GRAPHICS (COMPLETE) INCLUDING INSTALLATION**  
In accordance with the specifications - new vehicles

ITEM	EST. QTY	UNIT	DESCRIPTION - (Reflective)	COMPLETE FOR THE SUM OF:	EXTENSION
2A.	2	Each	Staff/ Utility Vehicles	\$245.00	\$490.00

Opening Date: 01/20/2022  
Date Reviewed: 01/20/2022

CITY OF TROY  
BID TABULATION  
VEHICLE GRAPHICS

ITB-COT 22-02  
Page 2 of 2

VENDOR: MAJIK GRAPHICS, INC.  
CITY: CLINTON TWP., MI

COST FOR REPLACEMENT OF DAMAGED SECTIONS						
ITEM	EST. QTY	UNIT	DESCRIPTION - (Reflective)	MATERIAL (Lump Sum/Unit)	LABOR (Lump Sum/Unit)	TOTAL COST (Material+ Labor/Unit)
2B.	2	Each	Doors - Front or Rear – either side	\$140.00	\$65.00	\$205.00
2C.	2	Each	Vehicle Rear Hatch – Letters and Numbers	\$30.00	\$65.00	\$95.00
					<b>TOTAL:</b>	\$300.00
2D.	4	Each	Labor Cost for removal of decals and graphics from Fire vehicles		\$115.00	
<b>Sub-Total</b>						<b>\$1,060.00</b>

Manufacturer Used: 3M

3. DEPARTMENT OF PUBLIC WORKS (FLEET OPERATIONS) GRAPHICS ONLY In accordance with the specifications						
ITEM	EST. QTY	UNIT	DESCRIPTION - (Reflective)	COMPLETE FOR THE SUM OF:	EXTENSION	
3A.	36	Each	Decals, 8", Department Designated	\$23.00	\$828.00	
3B.	4	Each	Decals, 8", Plain	\$23.00	\$92.00	
3C.	6	Each	Decals, 12", Department Designated	\$36.00	\$216.00	
3D.	6	Each	Decals, 12", Plain	\$36.00	\$216.00	
3E.	60	Each	Decals, 16", Department Designated	\$45.00	\$2,700.00	
3F.	12	Each	Decals, 16", Plain	\$45.00	\$540.00	
<b>Sub-Total</b>					<b>\$4,592.00</b>	

5. Computerized "New" Vehicle Layout Design No Charge

Manufacturer Used: Avery, 3M, FDC

<b>ESTIMATED TOTAL COST:</b>	<b>\$44,999.00</b>
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**CONTACT INFORMATION:** Hours of Operation: 8:00 AM - 5:00 PM M-F  
24 Hour Phone #: 586-354-8392  
MADE SITE INSPECTION: Y or N Yes, 01/07/2022  
REFERENCES: Y or N Y  
ABLE TO PROVIDE INSURANCE: Y or N Y  
PAYMENT TERMS: NET 30  
WARRANTY: LIFE OF VEHICLE  
DELIVERY OF DECALS: DPW  
EXCEPTIONS: NONE  
ACKNOWLEDGMENT: Y or N Y  
ADDENDUM 1 & 2 PROVIDED: Y or N MISSING SIGN ADDENDUM 2 SIGNATURE  
FORMS: NONE PROVIDED

SOLE BIDDER

Attest:  
(\*Bid Opening conducted via Zoom)  
Laurence Schehr  
Pete Hullinger  
Brian Varney  
Andrew Chambliss  
Heather Chomiak

Emily Frontera  
Purchasing Manager





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J-04c

## CITY COUNCIL AGENDA ITEM

Date: February 14, 2022

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
Lisa Burnham, Controller  
Chuck Riesterer, Fire Chief  
Peter Hullinger, Assistant Fire Chief  
Emily Frontera, Purchasing Manager

Subject: Standard Purchasing Resolution 2: Award to Low Bidder Meeting Specifications - Fire Hose and Ground Ladder Testing

### History

The Fire Department is required, by the National Fire Protection Association (NFPA), to annually test many pieces of its equipment. This includes fire hoses and ground ladders. These tests are conducted by certified and trained 3<sup>rd</sup> party companies.

### Purchasing

On January 27, 2022 a bid opening was conducted, as required by City Charter and Code for two (2) year requirements of fire hose and ground ladder testing services with an option to renew for one (1) additional year. The bid was posted on the Michigan Inter-governmental Trade Network (MITN) website; [www.mitn.info](http://www.mitn.info). One hundred fifty-four (154) vendors were notified via the MITN website. Two (2) bid responses were received. Below is a detailed summary of potential vendors for the bid opportunity.

<b>Companies notified via MITN</b>	154	<b><u>MITN</u></b> provides a resourceful online platform to streamline the procurement process, reduce costs, and make it easier and more transparent for vendors to do business with the City of Troy. <b>Active MITN</b> members with a current membership and paying annual dues receive automatic electronic notification which allows instant access to Bids, RFPS and Quote opportunities with the City. <b>Active MITN non-paying members</b> are responsible to monitor and check the MITN website for opportunities to do business with the City. <b>Inactive MITN member</b> status can occur when a company does not renew their account upon expiration. Inactive members cannot be notified of solicitations or access any bid information.
Troy Companies notified via MITN	9	
Troy Companies notified Active email Notification	9	
Troy Companies - Active Free	0	
<b>Companies that viewed the bid</b>	4	
Troy Companies that viewed the bid	0	

*Waterway of Michigan, LLC* failed to provide a complete proposal and therefore *Fire Catt, LLC of Troy, MI* was the lowest bidder meeting specifications and is being recommended for award. The testing will be performed in the City of Troy and within the required time frame.

### Financial

Funds are budgeted and available in the Fire Department Contractual Services General Account Number 101.336.344.7802.070 for the 2022 fiscal year.



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## CITY COUNCIL AGENDA ITEM

### **Recommendation**

City management recommends awarding a contract to furnish all equipment, material and labor for fire hose and ground ladder testing for two (2) years with an option to renew for one (1) additional year to low bidder meeting specifications *Fire Catt, LLC of Troy, MI* for an estimated total cost of \$17,600 for fiscal year 2022 year and \$21,695 for fiscal year 2023, at prices contained in the bid tabulation opened January 27<sup>th</sup>, 2022. The award is contingent upon the contractor's submission of properly executed bid documents including insurance certificates, and all specified requirements.

VENDOR NAME:	Fire Catt, LLC	Waterway of Michigan, LLC
CITY:	Troy, MI	Byron Center, MI

PROPOSAL: FURNISH ON-SITE FIRE HOSE TESTING IN ACCORDANCE WITH SPECIFICATION					
DESCRIPTION	ESTIMATED QTY. (FT)	YEAR 2022	YEAR 2023	YEAR 2022	YEAR 2023
		Unit Price (Per Ft.)		Unit Price (Per Ft.)	
Remove, test and return fire hose on truck as found	55,000	\$0.32	\$0.32	Pricing Not Provided	
Estimated Total Cost		\$17,600.00	\$17,600.00		
Minimum amount of hose to be tested under this proposal (State in Feet)		55,000 FT			

OPTIONAL PROPOSAL: LADDER TESTING IN ACCORDANCE WITH SPECIFICATION NFPA 1932 TO BE PERFORMED AT SAME TIME AS HOSE TESTING					
DESCRIPTION	ESTIMATED QTY. (FT)	YEAR 2022	YEAR 2023	YEAR 2022	YEAR 2023
		Unit Price		Unit Price	
Ladder Testing	2,100 FT	Free	\$1.95/FT	Pricing Not Provided	
Heat Labels	50 EA	Free	Free		
Estimated Total Cost		\$0.00	\$4,095.00		

CONTACT INFORMATION:		HOURS OF OPERATION:	9 AM - 4:30 PM M-F	Not Provided
		24 HOUR PHONE #:	248-643-7200	Not Provided
		REFERENCES:	Y or N	Not Provided
		# OF DAYS COMPLETED WITHIN	6 Days	Not Provided
TECHNICIANS TRAINING AND CERTIFICATIONS PROVIDED:		Y or N	N	Not Provided
CAN PROVIDE INSURANCE:		Y or N	Y	Y
AUTHORIZED FINAL INSURANCE CERTIFICATE SUBMISSION:		Y or N	Y	Not Provided
		PAYMENT TERMS:	Upon Receipt	Net 30
ACKNOWLEDGMENT:		Y or N	Y	Y
EXCEPTIONS:			None	None
FORMS:		Y or N	Y	Y

Low bidder meeting specifications

Attest:  
(\*Bid Opening conducted via Zoom)  
Peter Hullinger  
Heather Chomiak  
Jackie Ahlstrom

Emily Frontera  
Purchasing Manager



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

J-04d

## CITY COUNCIL AGENDA ITEM

Date: February 14, 2022

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
Robert C. Maleszyk, Chief Financial Officer  
Lisa Burnham, Controller  
Kurt Bovensiepe, Public Works Director  
Brian Goul, Recreation Director  
Dennis Trantham, Facilities and Grounds Operations Manager  
Emily Frontera, Purchasing Manager

Subject: Standard Purchasing Resolution 5: Approval to Expend Budgeted Funds – Wagon Shop Repair Design and Construction Documents.

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### **History**

During the 1800s blacksmith shops were as common and as important as gas stations are today. This simple board and baton workshop was built at Troy Corners before the Civil War. Blacksmiths used the shop for decades. However, in 1947 the old building and adjacent farmstead became Gow's Little Acre, a collection of popular antique and gift shops. In February 1972, fire destroyed the farmhouse and singed the old wagon shop. Five years later Alex Gow retired, sold the northwest corner to a developer, and donated the deteriorated wagon shop to the Troy Historical Society. The Society raised funds to relocate the building to the Village in February 1978. Today skilled artisans continue to shape metal and wood in the shop using centuries-old tools and techniques.

The Wagon Shop is one of multiple buildings located within the Troy Historic Village campus. The Wagon Shop is used primarily March through November annually as interpretative space and as an active blacksmith shop. Classes are also held in the building to teach the art of blacksmithing.

Roof replacement was identified in the Facilities Condition Assessment and Analysis, conducted in 2018. The initial assessment by the City of Troy Facilities Staff and the Troy Historic Society identified possible structural concerns, including bowing of walls and missing knee walls. To better understand the condition of the structure, Facilities reached out OHM for a proposal to conduct a structural analysis and provide an opinion on the necessary repairs prior to the replacement of the roof.

Phase one, the structural analysis of the Wagon Shop by OHM, was approved at the October 11, 2021 meeting of the Troy City Council (Resolution #2021-10-148-J-e). On January 21, 2022 an onsite review of the report occurred and recommendations were made. The report revealed the need to remove the added loft area along with repairing and reinforcing structural elements that have failed for various reasons over time.



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## **CITY COUNCIL AGENDA ITEM**

### **Purchasing**

The current contract with OHM Advisors (OHM) was adopted by City Council in 2017 for engineering and design services (Resolution #2017-06-105-J-4a). Under the current contract pricing, OHM proposes a fee of \$17,000 for the development of design and construction documents, as per the attached detailed proposal.

### **Financial**

Funds are budgeted and available in the Museum Capital Fund under Project Number 2022C0074 for the 2022 fiscal year. Expenditures will be charged to account number 401.804.804.7975.900.

### **Recommendation**

City Management recommends granting the authority to expend budgeted capital funds to OHM Advisors (OHM), which is one of the City's professional service engineering firms (Resolution #2017-06-105-J-4a), for the Wagon Shop Repair Design and Construction Documents for a total estimated cost of \$17,000 not to exceed budgetary limitations.



February 4, 2022

Mr. Dennis Trantham  
City of Troy  
Facilities and Grounds Operations Manager  
4693 Rochester Rd.  
Troy, MI 48085

RE: Proposal for Professional Services  
Troy Historic Village – Wagon Shop

Dear Mr. Trantham:

In our original proposal to the City for this work, the first phase involved a study to assess the existing building conditions and provide recommendations, as required, for repairs to the building. That phase of the work has been completed and delivered to the City. We understand that the City would like to proceed to complete design documents for work to be completed by one of their contractors. In this proposal, we have outlined the scope of work, fee, schedule and terms and conditions.

This proposal's scope includes development of construction drawings and specifications to address the recommendations set forth in the attached report as reviewed on-site and a decision on approach to design made in January of 2022. The scope of work to include:

1. Remove the existing loft floor and install roof framing similar to the roof framing on the north half of the building.
2. Reinforce the distressed fractured and charred rafters at the southern half of the building.
3. Install cross-bracing at the set of northern rafters where existing cross-bracing is not secured to the rafters.
4. New support for bellows which is currently supported by the loft.

### **SCOPE OF SERVICES**

Our Scope of Services for this work will be completed as one task:

#### **Analysis and Repair Design of Roof structure.**

During this task our team will continue the limited structural analysis of the roof framing. The roof framing on the south half of the building will be reviewed for the removal of the loft floor. Additional review of the new bellows support framing to be developed with the removal of the loft framing currently supporting it. One site visit to be included to review and verify existing geometry or conditions as the design is developed further.

#### **Development of Construction Documents**

During this task, structural drawings to express the design intent for the contractor's use in completing the repair effort will be prepared. Anticipated drawings to include:

- A title sheet with specifications in the form of general notes.
- A demolition drawing indicating which members are to be removed.
- A framing plan, sections and details of the new work to be constructed.

One formal design review on-site with contractor and final design drawings to be included during this phase.



### COMPENSATION AND SCHEDULE

OHM Advisors will perform the outlined services above based for a lump-sum fee of \$17,000, in accordance with our current contract with the City. OHM is able to begin work upon written authorization by the client with an estimated project schedule of 5 weeks.

No reimbursable expenses are expected or included in the fee. Neither the fee nor the schedule reflects unforeseen conditions that may arise. If unforeseen conditions are determined OHM will immediately notify owner if there is an impact to our fee.

### ASSUMPTIONS, EXCLUSIONS & OWNER RESPONSIBILITIES

OHM Advisors is prepared to complete the work as outlined above per our understanding of the project, which includes the following assumptions, exclusions and identified Owner responsibilities.

- ▶ OHM Advisors point of contact for this project is Dennis Trantham
- ▶ Any additional reviews/meetings that might be required not specifically noted in this proposal will be billed on an hourly basis.
- ▶ Construction phase professional services are not included in this proposal.
- ▶ Non-structural elements/design are included such as roofing systems or flashing details.

### ACCEPTANCE

Work will be done in accordance with the terms and conditions of the Continuing Services Agreement between OHM and the City. If this proposal is acceptable to you, please provide signature below or e-mail confirming us to proceed on the project.

Thank you for giving us the opportunity to be of service. We look forward to working with you on this project.

**Orchard, Hiltz, & McCliment, Inc.**  
CONSULTANT



(Signature)

Christopher Ozog  
(Name)

Project Architect  
(Title)

February 4, 2022  
(Date)

**City of Troy**  
OWNER

\_\_\_\_\_

(Signature)

\_\_\_\_\_

(Name)

\_\_\_\_\_

(Title)

\_\_\_\_\_

(Date)

Cc: Rhett Gronevelt



Wiss, Janney, Elstner Associates, Inc.  
30700 Telegraph Road, Suite 3580  
Bingham Farms, Michigan 48025  
248.593.0900 tel  
[www.wje.com](http://www.wje.com)

January 14, 2022

Mr. Christopher Ozog  
Project Architect  
OHM Advisors  
34000 Plymouth Road  
Livonia, MI 48150

## **Troy Historic Village Wagon Shop Structural Assessment**

60 West Wattles Road, Troy, MI 48098  
WJE No. 2021.5313

Dear Mr. Ozog:

As requested, Wiss, Janney, Elstner Associates, Inc. (WJE) performed a structural assessment of the Wagon Shop in the Troy Historic Village located at 60 West Wattles Road in Troy, Michigan. The primary purpose of our assessment and analysis was to evaluate the capacity of the roof for a planned roofing replacement effort and develop conceptual repair recommendations for any structural strengthening, if needed, for your consideration. This letter summarizes our findings and recommendations.

### **BACKGROUND**

#### **Building Description**

The Wagon Shop is one of multiple historic buildings located within the Troy Historic Village campus. The Wagon Shop is used primarily during March through November each year as interpretive space and as an active blacksmith shop. Classes are held within the building to teach the art of blacksmithing. Located within the Wagon Shop, the bellows, used in the blacksmithing activities, are reported to be the oldest artifact on the campus.

The Wagon Shop (Figure 1) is a wood framed building that was reportedly constructed around the mid-1800s and relocated in the 1980s, after a fire event, from a local farm to the Troy Historic Village. The less than 1,000 square foot building has a gable roof with the ridge parallel to the longer sides of the rectangular footprint. A loft floor is located on the front (south) half of the building. A brick masonry chimney extends through the roof level at the west wall. There are larger window and door openings in the north and south gable end walls, and smaller window openings in the east and west bearing walls.

The gable roofing consists of cedar roof shingles supported on wood plank decking that spans between dimensional lumber rafters. Horizontal collar ties are located near the ridge at the south half of the building. At the north half, rafter ties are located at the rafter bearing elevation, and cross-bracing, located parallel to the rafters, is attached to the rafters. The roof is visibly displaced downward, most notably on the southern half of the roof.

Nominal 2x4 stud-framed knee walls are located 5-1/2 feet from the roof ridge in the loft area. The knee walls are supported on the wood plank flooring and underlying dimensional lumber joists of the loft level

structure. The dimensional lumber loft floor joists span in the north-south direction between the south exterior wall and a timber beam located near the middle of the building. The timber beam has been reinforced with metal tension rods. The beam has mortise and tenon connections to timber columns located at the east and west side walls; additional 2x members have been added inset of the column surface at each end of the beam. The beam to column connection is located below the column and wall timber top plate connection. The tension rods are secured with washers and nuts against the exterior surface, at the top of the east and west side walls, and above the centerline of the interior beam.

The wood stud walls are sided with horizontal plank boards on the interior and vertical boards and batten system on the exterior. Timber top plates are present at the top of the east and west walls, and newer treated timbers are located at the bottom of the east and west walls. Similarly, a timber top plate and header is present above the door and windows at the south, gable end of the building, supporting the loft floor joists and dimensional lumber stud wall above. The north, gable end of the building is of similar construction as the south gable, though the wood header is comprised of three-ply dimensional lumber, spanning over a wide sliding door. A gutter and downspout are present on the east side of the building. The west bearing wall is visibly bowing outward.

The main level floor is an unfinished earth floor. A concrete masonry unit (CMU) foundation wall is exposed at the northeast corner of the building on the exterior.

## **Project Background**

We understand there are plans to replace the cedar shake shingles with new roofing materials. Roofing materials being considered include new cedar shakes or a metal roof system. Concerns regarding the capacity of the existing roof structure to complete the roofing replacement project and visual observations of the condition of the center beam and side wall bowing prompted the request for a structural assessment and conceptual repair recommendations, if warranted.

## **FIELD ASSESSMENT**

Mr. Justin Barden and Ms. Jordan Reinhardt, both of WJE, visited the site on November 15, 2021, to perform a visual assessment of the Wagon Shop. The assessment was limited to accessible portions of the roof structure where WJE measured and documented the geometry and detailing to complete a limited structural analysis. Pertinent observations from the assessment are as follows:

### **General Conditions**

1. Multiple cedar shingles are damaged or missing. Vegetation growth is present on the roof shingles, and localized areas of decay is common along the edges of the shingles (Figure 2).
2. The roof ridge is visually displaced downward, with the south half of the roof exhibiting greater displacement than the north (Figure 3). Additionally, the rafters are deflected downward along their span most noticeably on the south half of the roof.
3. Localized char is present on multiple roof framing members, primarily within the south half of the building, though the center beam and perimeter top plates and headers also exhibit localized char (Figure 4). The measured char depth typically measures 1/16-inch, but extends up to 1/8-inch. Soot staining, but no char, is also present at some of the roof framing members.

## Roof Framing

4. The roof framing supports cedar shingles that are attached to 3/4-inch wood plank decking. The roof framing is generally at an 8 on 12 slope and is approximately 7-foot in total depth, spanning approximately 23 feet between the east and west walls. The framing differs between the north and south halves of the building as described below. Refer to Figure 5 for general elevations of the two framing systems.
5. The original rafters are nominal 3x4 members spaced an average of 36 inches on-center. The collar ties, rafter ties, and cross-bracing are nominal 2x4 and 2x6 members.
  - a. The north half of the building consists of eight sets of rafters, with newer, unpainted, members located between the painted original rafters, reducing the average spacing of the rafters to 18 inches on center. The painted rafters are typically 2-3/4 inches by 3-1/2 inches, and the unpainted rafters are typically 1-1/2 inches by 3-1/2 inches. The rafters of each set abut each other at the ridge; there is no ridge board. Nominal 2x6 rafter ties are secured to the rafter ends at the eaves. Nominal 2x4 cross-bracing, parallel to each rafter set, is secured to the rafter ends at the eaves and to the rafters at approximately 4-foot from the ridge, measured horizontally.
    - i. At one set of rafters, both cross-bracing members are unsecured to the west rafter to accommodate the masonry chimney (Figure 6). The rafter is also notched to accommodate the chimney (Figure 7).
    - ii. At the ridge, the vertical surfaces of the rafters, at the abutting ends, are not always painted (Figure 8).
    - iii. The rafter ties are lapped and bolted together near mid span with four, 5/16 inch diameter bolts, except for the northmost rafter tie, which is bolted with five bolts (Figure 9).
  - b. The south half of the building consists of four rafter sets. Nominal 2x4 collar ties are connected with three nails at each end. The ends of the collar tie are located approximately 3-feet from the ridge, as measured horizontally, to the original, 2-3/4 inch by 4-inch rafters. A nominal 2x4 knee wall is located near midspan of the rafters with the studs aligned with each rafter and a top and bottom plate consisting of nominal 2x4s.
    - i. A set of rafters are fractured near 1x gusset plates at the ridge. The gusset plates are unique to this set of rafters. The gusset plates and the west rafter, at the fracture location, are charred up to 1/8-inch deep (Figure 10). While the rafter is charred around the fracture, the exposed fractured surface is not charred (Figure 11).
    - ii. A gap is present between most rafters and the knee wall top plate (Figure 12). A gap also commonly exists between the top plate and studs or between the studs and the bottom plate (Figure 13). The nail shanks connecting the various components are visible in the gaps.
    - iii. A stud is missing in the west knee wall (Figure 14).

## Loft Floor Joists

6. The wood plank flooring of the loft is supported by nominal 2x8 joists spanning between the south exterior wall and center 7x7 timber beam. The joists are notched over the top of the center beam and wall top plate timber. The depth of the notch is approximately 1-1/4 inch (Figure 15), except where



the tension rods extend above the top of the center beam. In these areas, the joists were notched up to 3-inches around the tension rods (Figure 16).

7. Cross-bridging is located at midspan of the loft floor joists. (Figure 17).
8. A partial depth fracture is located near midspan of the fifth joist as counted from the east wall. The fracture extends from a knot on the bottom edge of the wood member where the fracture is widest (Figure 18).

## Center Beam

9. The center beam is a hand-hewn timber reinforced with 1/2-inch diameter metal tension rods to create a composite "truss" with a 19-inch depth at midspan (Figure 19). The tension rods are secured with washers and double nuts at the top, exterior surface of the east and west walls and turnbuckles at midspan.
  - a. The northwest tension rod is no longer in direct contact with the wood spacers located on the underside of the timber beam.
  - b. There are two abandoned mortises on the underside, one at each end of the beam, suggesting knee braces or columns were once connected to the beam (Figure 20). Additionally, a ghosting of a past column is present near midspan on the underside of the beam (Figure 21).
  - c. Checks are present in the underside and north faces of the timber beam (Figure 22).
  - d. Surface char is present on the timber beam, intermittently along the span of the beam (Figure 23).
  - e. A maximum beam deflection of 1-1/2 inches was measured referencing a datum, under essentially self-weight of the structure and minimal storage in the loft space.
10. The center beam is connected to 7x7 timber columns through a mortise and tenon joint with wood trennels (i.e., wood dowel "nails") visible on the sides of the beam (Figure 24). A 2x wood member, secured to the interior face of each of the columns, provides an additional 1-1/2 inches of bearing for the center beam.

## Wall Framing

11. Nominal 2x4 wood stud walls are sided with horizontal plank boards on the interior and vertical boards and batten system on the exterior.
  - a. Timber beams serve as top plates of the south, east, and west walls. Three, 1-1/8 inch to 1-1/2 inch by 12-inch-deep wood members span over the large door opening in the north wall.
  - b. The base plates are of treated nominal 4x6 members. The wood studs are secured with nails to the wood base plates which are secured to the CMU foundation wall.
    - i. In at least one location, the wood stud is spliced at the bottom, likely as a previous repair of deteriorated wood (Figure 25).
    - ii. Minor water staining is present at one exposed location at the top surface of the treated base plate.
12. The top of the west wall is visibly, horizontally displaced outward on the south half of the building (Figure 26) up to 7/8 of an inch over the 9 foot height of the wall. At the center beam location, the wall is displaced inward 1/2 of an inch over the height of the wall. A 3/8 of an inch outward

displacement was measured near the location where the north rafter cross-bracing is interrupted by the masonry chimney at the north end of the west wall.

13. Localized decay is present in the exterior wood boards intermittently throughout but is more concentrated at the bottom of the battens (Figure 27).

## **LIMITED STRUCTURAL ANALYSIS**

To supplement our site observations, WJE performed a limited structural analysis of the rafters, loft floor joists, and center beam per the 2015 edition of *The National Design Specification for Wood Construction* (NDS), as referenced in the 2015 edition of the *Michigan Rehabilitation Code for Existing Buildings* (MRCEB), to determine an order of magnitude of stresses in the members to be compared with calculated design loads as described below. Considering the lack of brittle finishes, serviceability considerations (e.g., deflection under design load, wood crushing) were not included in our analysis. Additionally, a review of the connections between members was not included in our analysis.

The allowable design strength of a wood member depends on the species, mechanical design properties, and dimensions of the wood. Based on our review of wood specimens obtained from a painted rafter, unpainted rafter, and the center beam, the wood appears to belong to the Pinaceae family; therefore, we utilized the spruce-pine-fir (SPF) species when selecting the allowable design stresses tabulated in the NDS. Although not individually reviewed and graded, based upon the general tightness of the grain, slope of grain relative to the length of the members, and the limited size, locations, and quantity of knots, we assumed No.1/No.2 grade for the rafter and joist wood members and No.1 grade for the center beam.

For the analysis, dead, live, snow, and wind loads were calculated following the prescribed procedures in the 2010 edition of the American Society of Civil Engineers' *Minimum Design Loads for Buildings and Other Structures* (ASCE 7), which is referenced by the MRCEB.

Our limited analysis considered the following imposed loading conditions:

- Load Case 1 (LC1): dead load only (10 psf design dead load)
- Load Case 2 (LC2): dead load plus uniform live load (16 psf reduced roof live load for the roof and 20psf live load for the loft)
- Load Case 3 (LC3): dead load plus snow load (21 psf sloped roof snow load)

A limited wind load analysis was completed to determine an order of magnitude wind uplift force at the rafter bearing ends. The net wind uplift on the roof structure is minimal, and is thus, not considered further in this limited analysis effort.

Refer to the descriptions and Table 1 below for a summary of the analysis.

## **Roof Framing**

Considering the three design load cases, the combined flexural and axial demand-over-capacity ratio (DCR) for the rafters is less than 1.0, which indicates the calculated demand is less than the calculated capacity of the rafters. However, when considering reduced section of the rafters due to the observed char on the bottom surface and a side surface of a set of southern rafters, the DCR exceeds 1.0 for load cases

**Table 1. Structural Analysis Demand over Capacity Ratios**

Load Case	Combined Bending and Compression			Bending	
	North Half Rafters	South Half Rafters	South Half Rafters with Char	Loft Joists	Loft Joists Under Knee Wall*
LC1: Dead Load	0.33	0.38	0.93	0.34	2.63
LC2: Dead Load + Live Load	0.54	0.62	1.55	0.93	4.00 (Roof Live Load only; no Loft Live Load)
LC3: Dead Load + Snow Load	0.71	0.78	1.99	N/A	5.02 (No Loft Live Load)

\*The DCRs shown for the loft joists below the knee wall assume one joist supports all of the load from the knee wall. When assuming three joists evenly support the knee wall load, the DCR still exceeds 1.0 for LC2 and LC3.

LC2 and LC3, meaning the calculated demand exceeds the calculated capacity. Specifically, for this analysis, the 1/8 of an inch char depth and an additional 1/4 of an inch depth of the member in the heat effected zone (i.e. the weakening of a thin layer of wood just below the char due to the rise in temperature of the wood<sup>1,2,3</sup>) were assumed to provide zero strength to the rafter members. Note that the analysis of the rafters assumes the knee wall provides adequate bearing and the cross-bracing of the northern rafters is attached to the rafters and rafter ties.

Based on the limited wind analysis, there is a net uplift force, up to 250 pounds, at the rafter bearing locations. Further verification of the connection of the rafters at their bearings to withstand the net uplift force is recommended, although not required by current building codes for a replacement roofing project.

## Loft Floor Joists

The loft joists were analyzed for flexure. The DCR for the typical loft joists does not exceed 1.0; however, when considering full design loads acting at the knee wall on a single joist, the loft joist is overstressed with a DCR significantly exceeding 1.0. Additionally, by inspection, the depth of the typical notch at the center beam bearing is at or exceeds current limits set by the NDS. The notch depth can significantly reduce the shear strength capacity of the joist members and may limit the live load capacity of the loft floor structure.

## Center Beam

Although there are two sets of spacers located between the bottom of the timber beam and the steel rods, the spacers are within 24 inches of each other and are at midspan of the beam. The two spacers

<sup>1</sup> Wood Handbook - Wood as an Engineering Material, Forest Products Laboratory, Gen. Tech. Rep. FPL-GTR-113, 1999.

<sup>2</sup> White, R. H., *Analytical Methods for Determining the Fire Resistance of Timber Members*, in Handbook for Fire Protection Engineering published by the Society of Fire Protection Engineers, 2002.

<sup>3</sup> Schaffer, E. L. et. al., *Strength Validation and Fire Endurance of Glued-Laminated Timber Beams*, Research Paper FPL 467, Forest Products Laboratory, 1986.

would term this post-tensioning reinforcement as a “queen truss.” however, due to the proximity of the spacers to each other, the center beam analysis could consider the reinforcement as a “king truss” with a single spacer system for simplicity. The tension rods being located 12 inches above the centerline of the timber beam at the east and west walls creates an eccentric connection between the tension rods and the center beam, and involves the complexity of the mortise and tenon joinery of the original post and beam building frame.

Presuming the southern rafters are supported by the existing stud knee wall at the loft level and underlying loft floor framing, under full design load including snow loading on the roof and 20 psf live loads in the loft space, the DCR is more than 3 when only the center beam, and not the post-tensioning effect, is considered. Based upon the limit of the washer bearing against the wood on the exterior of the building, the axial capacity of the tension rods is likely not more than 1000 pounds, much less than the tensile capacity of the rods.

The metal tension rods, if adequately secured, will improve the capacity of the beam, but due to the eccentric connections of the rods relative to the centerline of the timber beam and the actual “queen truss” geometry, the actual capacity would need to be verified through advanced analysis techniques that go beyond the scope of our services.

## **DISCUSSION**

### **Roofing**

The existing, deteriorating shingles can be replaced with new roofing materials, either similar cedar shingles with a fire retardant or a metal roofing system. Either roofing system will not overstress the rafters under dead load only. Repair and temporary shoring or strengthening of the existing structure is recommended, however, to accommodate live loads resulting from maintenance, construction, and full design snow and wind loads.

### **Roof and Wall Framing**

The northern rafters are adequate for the load cases considered in this analysis, mainly due to the installation of additional rafters between the original painted members and the presence of the rafter ties and parallel cross bracing members. The outward displacement measured at the west wall relates to the unsecured cross bracing at the chimney location. The unpainted vertical faces at the ridge of the original members may indicate structural movement of the rafters, but the movement may have occurred during the relocation of the building, prior to the installation of the newer rafters and bracing, or simply, the vertical surfaces were missed during the painting effort.

The observed southern roof deflections, wall displacement, and fractured rafters are consistent with the calculated DCR values being greater than 1.0. Because the support of the knee walls is insufficient, the span of the south rafters is increased, resulting in overstress conditions and excessive deflection of the rafter members, especially those affected by the fire event. Additionally, the southern rafter collar ties provide minimal restraint for the lateral thrust of the rafters due to their location relative to the ridge. Without the support at the knee wall or attachment of the rafter system to the loft floor structure, the roof thrust presents itself through the outward displacement of the timber beam at the top of the walls and the downward displacement of the ridge line. The timber top plate of the west wall is actively supporting

the roof thrust, spanning between the west center and southwest corner support posts. With proper support provided, the roof thrust should be minimal, and the outward displacement of the west wall may be able to be resolved back to a near-plumbed condition.

The separation of the knee wall members between the rafters and the loft floor framing is likely related to the seasonal loading of the roof acting on the loft floor joists. Under the snow load conditions of the unheated building, the loft floor joists supporting the knee wall deflect, potentially inelastically (creep). The joists will not recover to a level condition if the deformation is inelastic, allowing the knee wall members to separate at connection points as the seasonal loading is removed and the rafters return to their undeflected condition. Additionally, the net wind uplift forces may contribute to the separation of the knee wall members. Reinforcement of the knee wall member connections to accept the uplift force at the rafter bearing locations, and either modification to the southern rafter framing system to support the demand loads, or temporary shoring of the knee wall during the winter months, is recommended.

Although the openings in the north and south walls are relatively large, the observed wall displacement is not solely related to the "racking" of the overall structure due to lateral wind forces acting on the building. The wood sheathing located on both the interior and exterior surfaces, provides rigidity to these shear walls and the walls are anchored to the foundation. The observed displacement is primarily related to the roof thrust concerns discussed above.

### **Loft Floor Joists**

As stated in the analysis discussion above, the notch in the loft floor joists to accommodate the tension rods at the center beam will limit the capacity of the joists. However, the addition of a wood 2x ledger secured to the timber beam will alleviate the concern with the deep notches. The typical joists will then be adequate for a 20psf floor live load, but the joists supporting the knee wall above are to be reinforced, assuming there are no alterations made of the southern rafter system. The fracture through the knot of the one joist may be related to the seasonal overloading of the joists, and occurred at this joist due to the presence of the knot at the bottom edge of the member.

### **Center Beam**

The addition of the steel tension rods at the center beam is a common method employed to gain additional capacity of a wood beam. The rods are typically installed when columns or other supports located within the length of the beam are removed. With the installation of the tension rods, the timber beam is working compositely with the steel as a "truss" with the timber beam accepting the compression loads and the steel rods accepting the tension loads of the "truss." This specific strengthening of the timber beam is not a true "truss" due to the location of the end anchorage of the tension rods relative to the centerline of the timber beam. A more detailed analysis would be necessary to verify the capacity of the center beam to support the loft floor and knee walls.

The additional 2x support provided inset of the columns at each end of the beam allows for an increase in bearing forces as compared to the original mortise and tenon joinery. The 2x members were likely installed when the center beam was reinforced with the tension rods to accommodate the increased support reaction required of the longer span of the beam.



## CONCEPTUAL REPAIR RECOMMENDATIONS

Prior to replacement of the roofing, WJE recommends the following:

1. Install cross-bracing at the set of northern rafters where the existing cross-bracing is not secured to the rafters. The cross-bracing can be attached on the northern side of the rafters, avoiding interference from the chimney.
2. Provide adequate vertical support for the southern rafters. There are multiple methods in which this can be accomplished, each with its own advantage and disadvantage that will need to be considered regarding the use and historic importance of the building. Additionally, the vertical support system is to be coordinated with the lateral roof thrust resistance system. Some options available include:
  - a. Replicate the rafter tie and cross-bracing system employed at the north rafters. This will prohibit use of the loft floor space, but will provide the additional strengthening for the lateral roof thrust.
  - b. Strengthen the existing rafters to eliminate the need of the knee wall at midspan. The depth of the rafters in relation to how they will fit within the existing geometry constraints at the supporting walls will be challenging to accommodate. Additional strengthening addressing the lateral roof thrust will be required.
  - c. Reduce the tributary area the rafters support, and thus the demand loading on the rafters, by adding adequately sized rafters between the existing rafters to reduce the spacing. Additional strengthening addressing the lateral roof thrust will be required.
  - d. Replace the knee wall with a girder beam or add a roof ridge beam. The supports for either beam system will require new columns bearing onto new foundations located within the span of the window in the south wall and in the interior space, near the center beam. The girder beam method will eliminate the need to strengthen the support of the knee wall, and the ridge beam option will reduce the amount of strengthening required for the support of the knee wall, but the support columns for either option will likely interfere with the use of the building. Installation of the beams will minimize the roof thrust concern and will not require additional strengthening for the lateral roof thrust.
  - e. Implement repairs and strengthen the knee wall as required; re-level, as reasonably possible, the loft floor joists; and strengthen the loft floor joists and center beam to accept the roof load from the knee walls. Additional strengthening for the lateral roof thrust will not be required with this approach but would likely involve the following:
    - i. Replace the missing stud member of the knee walls, reinforce the knee wall member connections to allow for the design wind uplift force, and provide hardwood shims as necessary to ensure full bearing between the rafters and the supporting loft floor joists.
    - ii. Sister the joists with wood or steel members or add support within the span of the joists. If the deformations are inelastic, a true level condition may not be achievable with the existing joists, further complicating the effort to install the new members.
    - iii. Strengthening of the center beam would likely involve adding additional midspan supports, although other strengthening methods may be applicable upon further review.
  - f. Provide temporary shoring below the knee walls for the planned roofing work and during the winter months annually. This will not require additional strengthening for the lateral roof thrust.

3. Resolve the lateral roof thrust of the southern rafters, as coordinated with the vertical support of the rafters as described above. Alternatives to address the lateral roof thrust include:
  - a. Install collar ties directly above the loft floor elevation, making use of the floor difficult. Tension ties may be able to be added in lieu of collar ties, but further review of the wind uplift loads would be required to verify the ties will remain in tension.
  - b. Connect the rafter system to the existing loft floor diaphragm. A significant amount of wood blocking, sheet metal connectors, and fasteners will be required to achieve the connection between the roof system and loft floor diaphragm and may be visible to the building occupants.
  - c. Remove and replace the loft floor framing so that it is spanning perpendicular to the ridge, allowing the floor joists to also serve as ties for the roof rafters. Mid-span support will be required, which will require columns and foundations within the interior space of the building.
4. Regardless of the strengthening method(s) pursued, reinforce the distressed fractured and charred rafters at the southern half of the building by means of attaching dimensional or engineered lumber to the side of the rafters for their full length.
5. Verify the tension rods at the center support beam are snug-tightened.

While unrelated to the roof framing, WJE also recommends the following structural improvements:

6. Reinforce the fractured loft joist by means of attaching dimensional lumber on one side of the joist for the full span of the joist.
7. Replace the deteriorated portions of the exterior battens and trim along the walls.

The recommendations provided above are conceptual approaches to improve the strength of the wood roof structure and its interior supporting elements. Other repair approaches are possible, and many options provided above will greatly impact the use of the interior space or alter the historic interpretation of the structure. WJE can discuss the conceptual designs further to help with the decision-making process. Further analysis and design are required to provide member sizes and materials of the strengthening systems, complete a more detailed analysis of the center beam system, and review the header beams over door and window openings.

## CLOSING

Thank you for the opportunity to assist you with this historic structure. Please call if you have any questions or would like to discuss our findings or next steps for reinforcement of the structure.

Sincerely,

**WISS, JANNEY, ELSTNER ASSOCIATES, INC.**



Cheryl L. Early, P.E.  
Senior Associate



Justin D. Barden  
Associate III

*Enclosure: Figures 1 to 28*

## FIGURES



Figure 1. Overall view of the Wagon Shop, looking from the southwest corner of the building.



Figure 2. Localized decay (boxed areas) and lichen growth (arrows) on the roof shingles.

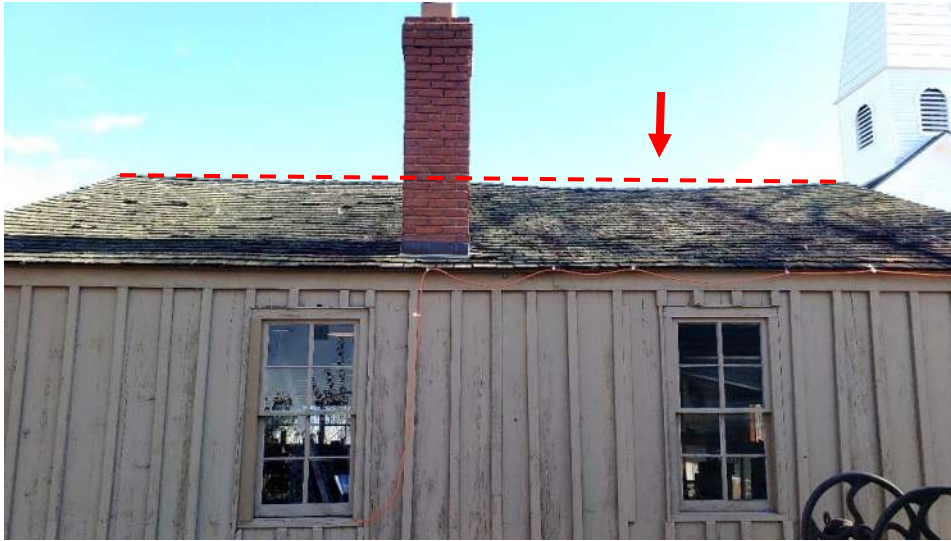


Figure 3. Visible deflection of the roof viewed from the west side of the building.

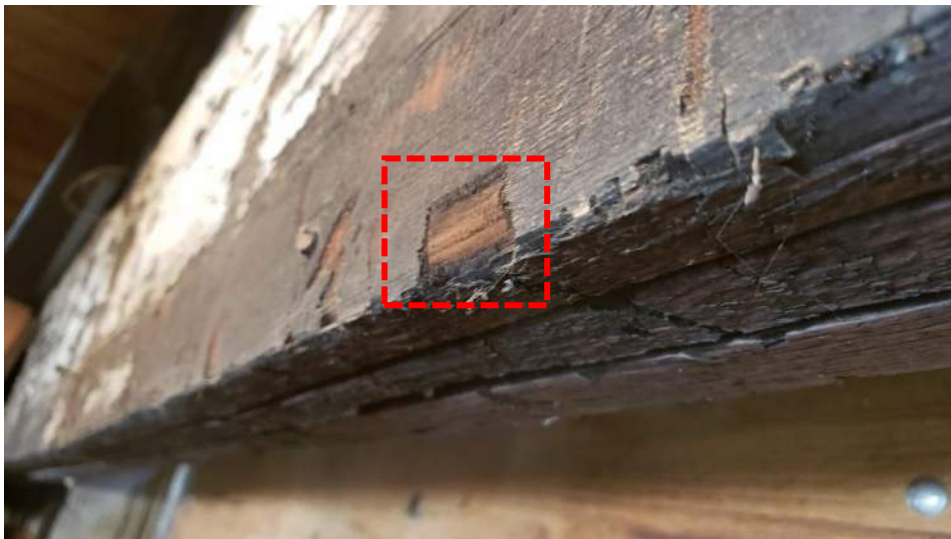


Figure 4. Char on the north wall header. The box indicated a location where char was removed.

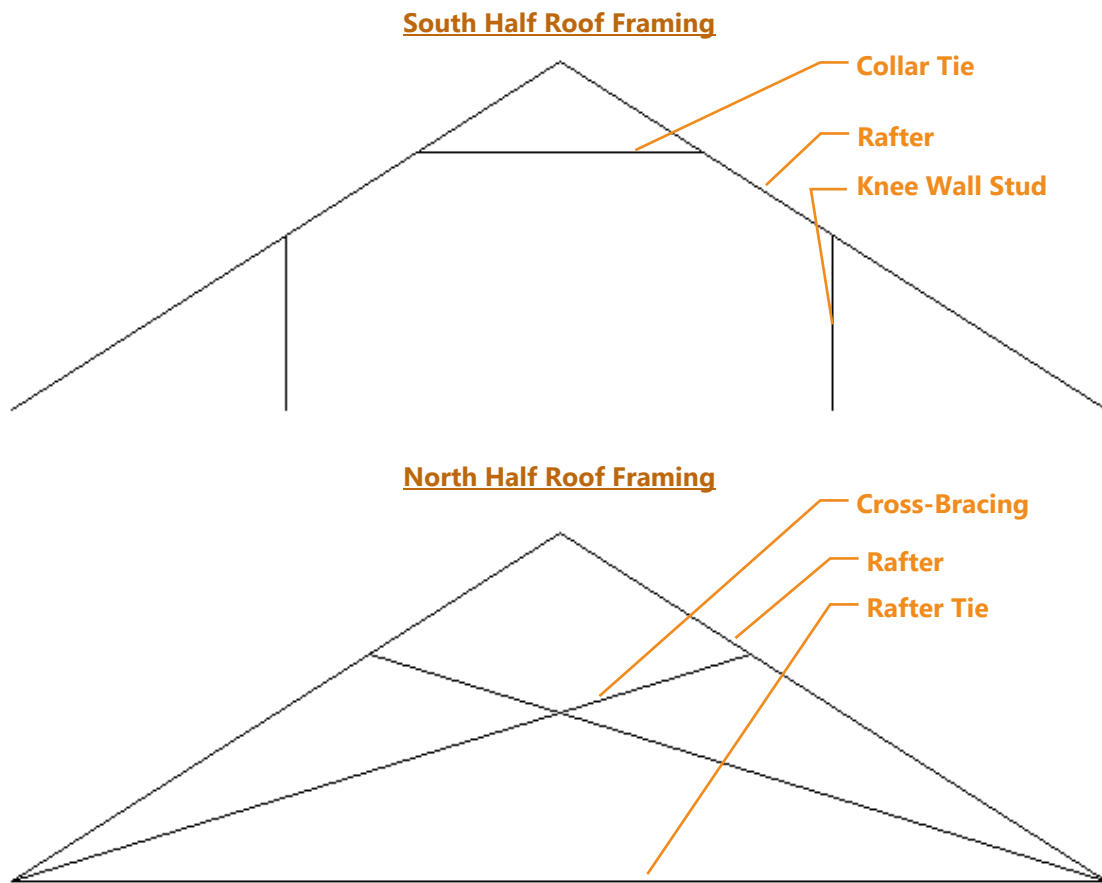


Figure 5. Typical roof framing systems. The lines represent wood members.





Figure 6. Cross-bracing is unsecured to west rafter to accommodate chimney.



Figure 7. Notched rafter at chimney.



Figure 8. Unpainted end of rafters. Note paint on underside of some of the roof decking.



Figure 9. Rafter ties bolted and lapped.





Figure 10. Fractured rafter (arrow) near the ridge, where char is located.

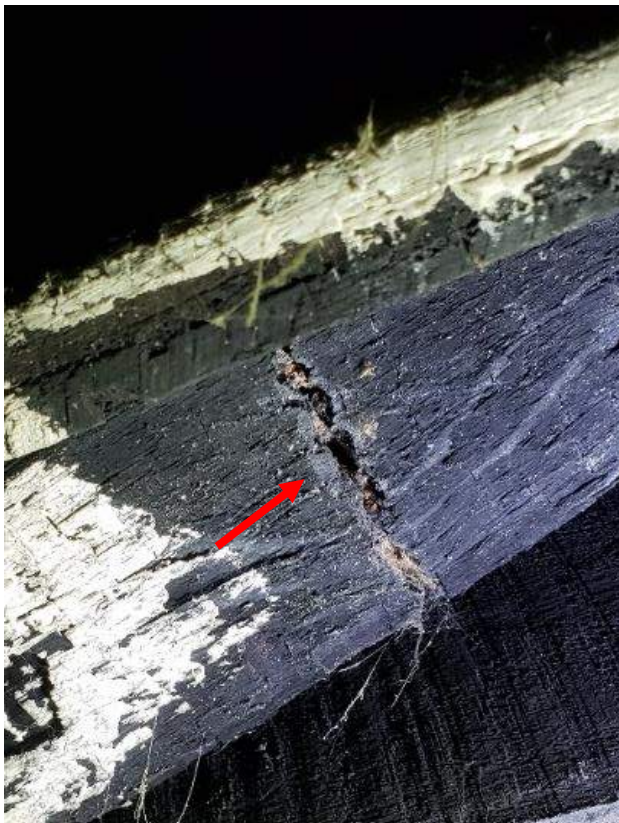


Figure 11. Up-close view of the fractured rafter shown in Figure 10. Note the absence of char and smoke staining within the fractured surface.



Figure 12. Rafter not bearing directly on a knee wall top plate.



Figure 13. Knee wall stud is not bearing directly on the knee wall bottom plate.



Figure 14. Missing stud below rafter in the west knee wall.



Figure 15. Typical notch in loft area joist bearing end.





Figure 16. Large notch to accommodate center beam tension rod.



Figure 17. Cross-bridging at the loft floor joists.

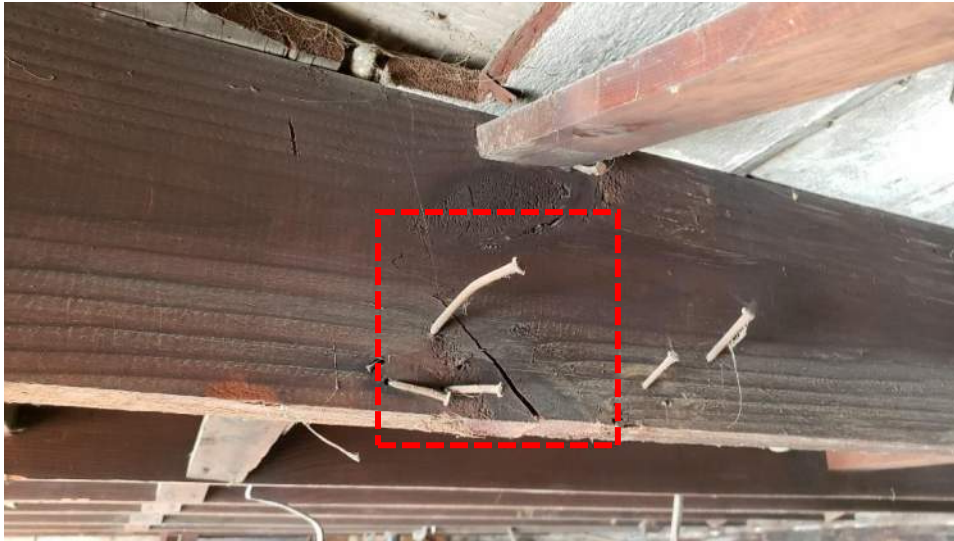


Figure 18. Fracture at loft area joint extending from knot.



Figure 19. Post-tensioned 'truss' comprised of timber (yellow arrow) and tension rods (red arrow).



Figure 20. Abandoned mortise on center beam underside.



Figure 21. Shadow of likely previous column on underside of center beam.





Figure 22. Check on center beam underside.



Figure 23. Surface char on center beam underside.



Figure 24. Wood trennels on side of column (arrows).



Figure 25. Wood splice at a wall stud.





Figure 26. West wall of the building. The arrow indicates the approximate location of maximum outward displacement.

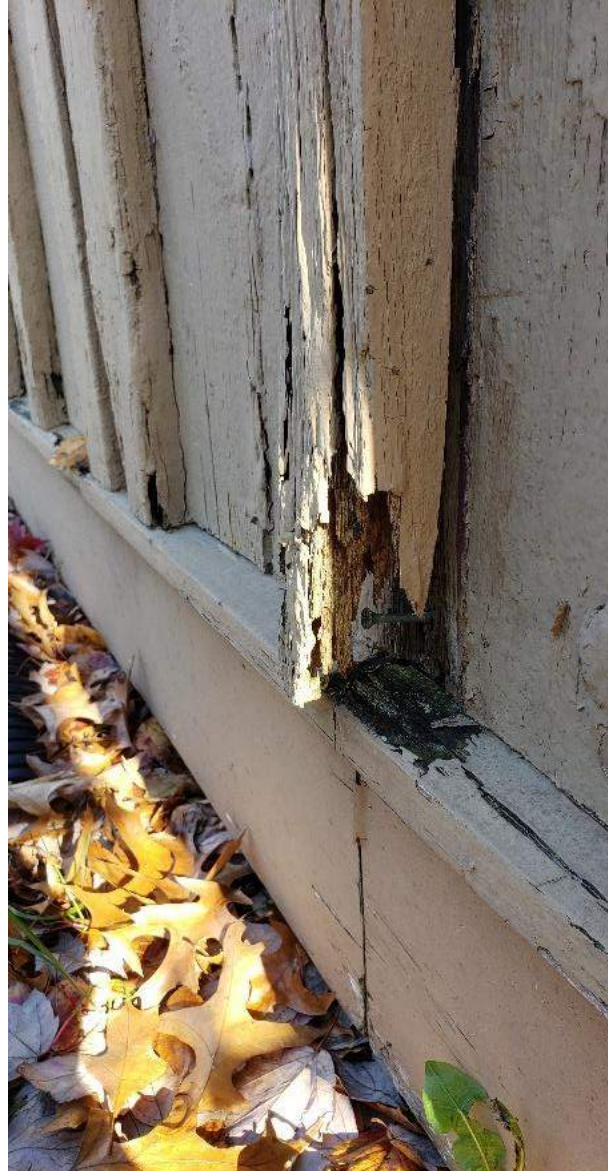


Figure 27. Decay at the bottom of batten and horizontal trim board.



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

J-05

## CITY COUNCIL AGENDA ITEM

Date: January 25, 2022

To: Mark F. Miller, City Manager

From: Robert Bruner, Assistant City Manager  
Robert C. Maleszyk, Chief Financial Officer  
Lisa Burnham, Controller  
William J. Huotari, City Engineer

Subject: Cost Participation Agreement for Road Work on Livernois, Long Lake to South Blvd

### **History:**

Through our continued partnership with the Road Commission for Oakland County (RCOC) and our willingness to look for ways to improve our roads utilizing outside funding, the attached cost participation agreement details costs associated with the resurfacing of Livernois Road, from Long Lake Road to South Boulevard.

The RCOC offered to move this major road project up if the city agreed to a 50/50 project cost split. By moving this project, we avoid a conflict with Rochester Road in the future as both projects were originally anticipated to be under construction in 2025.

RCOC will design the resurfacing project and will perform the resulting construction engineering (inspection, testing and project management) at no cost to the project or city. Construction will take place in the summer of 2022.

### **Financial:**

The estimated total project cost is \$550,000. Exhibit A provides details as to each agencies share of project costs. Troy's share is \$275,000 but is further reduced by utilizing Tri-Party funds such that the city's share is 1/3 of \$275,000 or an estimated \$91,667. RCOC's share is \$366,666 and Oakland County's share is \$91,667. Funds for Troy's share of the work are included in the proposed 2023 Major Road Fund. The RCOC would not invoice the city for our share until after July 1, 2022.

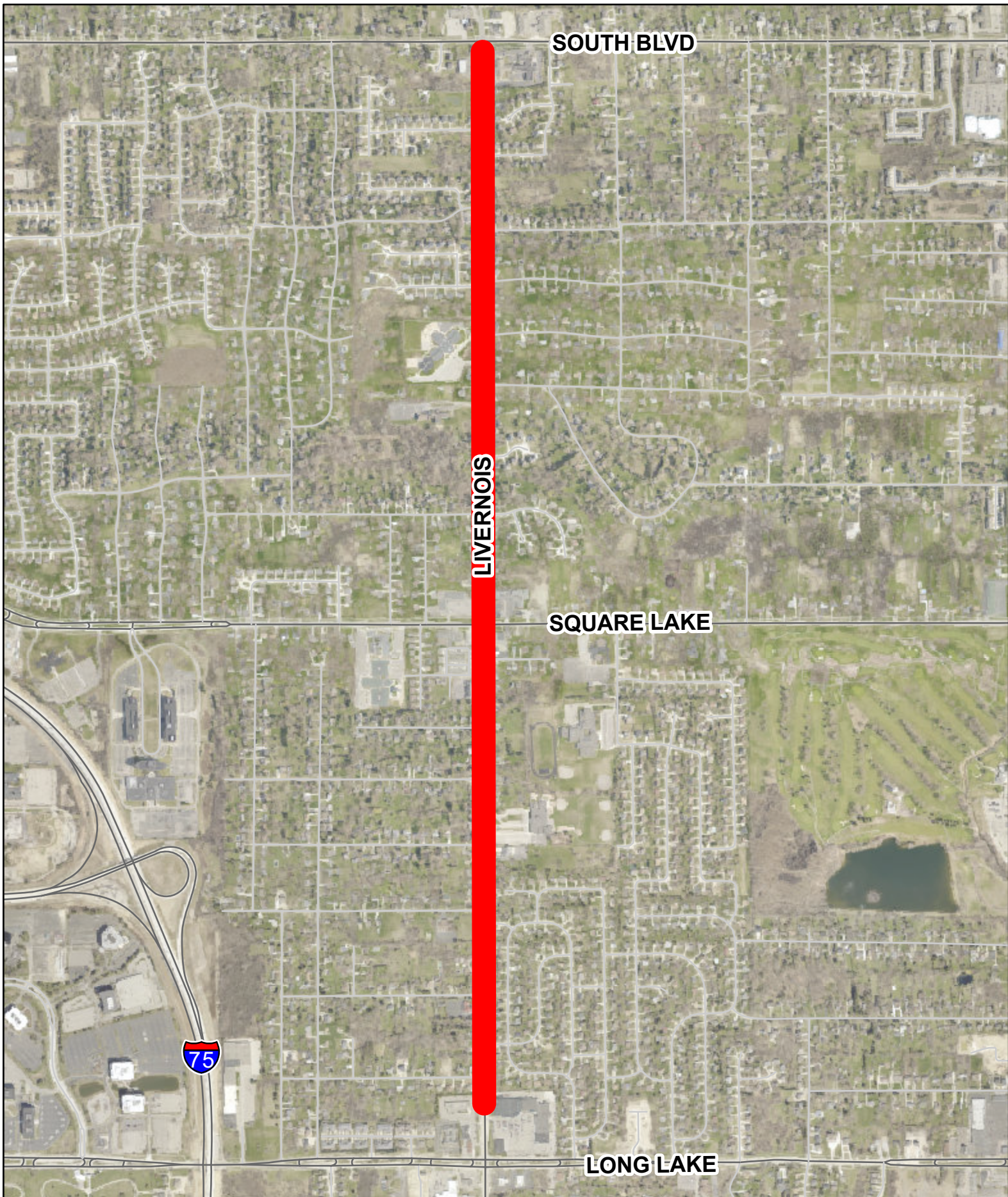
### **Recommendation:**

Staff recommends that City Council approve the attached Cost Participation Agreement between the City of Troy and the Board of County Road Commissioners for Oakland County for the resurfacing of Livernois Road, from Long Lake Road to South Boulevard in the amount of \$550,000 with the City of Troy share estimated at \$91,667. Furthermore, staff recommends that the Mayor and City Clerk be authorized to execute the agreement.

### **Legal Review:**

This item was submitted to the City Attorney for review pursuant to City Charter Section 3.17.





Pavement Resurfacing  
Livernois - Long Lake to South Blvd





**From:** [Luebbert, Laura L](#)  
**To:** [William J Huotari](#)  
**Cc:** [Noechel, Tom](#)  
**Subject:** Cost Participation Agreement for Livernois Road - Project No. 56721  
**Date:** Tuesday, January 25, 2022 10:07:57 AM  
**Attachments:** [image001.png](#)  
[Cost Participation Agreement for Livernois Road, Troy - Project No. 56721.pdf](#)

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**CAUTION:** This email did not originate from within the City of Troy. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning Mr. Huotari,

Attached is the cost participation agreement for Livernois Road.

Please arrange for the agreement to be signed **without the date**.

The signed agreement can be returned electronically or through US Mail. Our Board will return a fully executed original to you after their action.

Please reply to this email to confirm your receipt of the agreement and feel free to contact me for any questions or concerns.

Sincerely,

**Laura Luebbert**

Engineering Aide

Email: [lluebbert@rcoc.org](mailto:lluebbert@rcoc.org)



Programming Division

31001 Lahser Road

Beverly Hills, MI 48025

Phone: 248-645-2000 Ext. 2213

Fax: 248-645-0618

Report road concerns to 877-858-4804 or [www.rcocweb.org](http://www.rcocweb.org)

## **COST PARTICIPATION AGREEMENT**

### **CONSTRUCTION**

Livernois Road

Long Lake Road to South Boulevard

City of Troy

Board Project No. 56721

This Agreement, made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2022, by and between the Board of County Road Commissioners of the County of Oakland, Michigan, hereinafter referred to as the BOARD, and the City of Troy, hereinafter referred to as the COMMUNITY, provides as follows:

WHEREAS, the BOARD and the COMMUNITY have programmed the resurfacing of Livernois Road from Long Lake Road to South Boulevard, as described in Exhibit "A", attached hereto, and made a part hereof, which improvements involve roads under the jurisdiction of the BOARD and within the COMMUNITY, which improvements are hereinafter referred to as the PROJECT; and

WHEREAS the estimated total cost of the PROJECT is \$550,000; and

WHEREAS, said PROJECT involves certain designated and approved Tri-Party Program funding in the amount of \$275,000, which amount shall be paid through equal contributions by the BOARD, the COMMUNITY, and the Oakland County Board of Commissioners, hereinafter referred to as the COUNTY; and

WHEREAS, the BOARD and the COMMUNITY have reached a mutual understanding regarding the cost sharing of the PROJECT and wish to commit that understanding to writing in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants set forth herein and in conformity with applicable law, it is hereby agreed between the COMMUNITY and the BOARD that:



1. The COMMUNITY approves of the PROJECT, declares its public necessity, and authorizes the BOARD to perform or cause to be performed, and complete the PROJECT along with all administration in reference thereto.
2. The PROJECT shall include total payments to the contractor. Any costs incurred by the BOARD prior to this agreement date shall be allowable.
3. The estimated total PROJECT cost of \$550,000 shall be invoiced simultaneously and proportionately as follows:
  - a. Tri-Party Program funding in the amount of \$275,000.
  - b. The BOARD shall contribute \$275,000 toward the LOCAL SHARE.
  - c. Any PROJECT costs above the Tri-Party Program funding of \$550,000 will be funded 100% by the BOARD.
4. After July 1, 2022, the BOARD shall submit an invoice to the COMMUNITY in the amount of \$91,667 (being 100% of the COMMUNITY'S Tri-Party contribution).
5. After July 1, 2022, the BOARD shall submit an invoice to the COUNTY in the amount of \$91,667 (being 100% of the COUNTY'S Tri-Party contribution).
  - a. The invoice shall be sent to:

Lynn Sonkiss, Manager of Fiscal Services  
Executive Office Building  
2100 Pontiac Lake Road, Building 41 West  
Waterford, MI 48328
6. Upon receipt of said invoice(s), the COMMUNITY and the COUNTY shall pay to the BOARD the full amount thereof, within thirty (30) days of such receipt.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and date first written above.

BOARD OF ROAD COMMISSIONERS OF THE  
COUNTY OF OAKLAND  
A Public Body Corporate

By\_\_\_\_\_

Its\_\_\_\_\_

CITY OF TROY

By\_\_\_\_\_

Its\_\_\_\_\_

By\_\_\_\_\_

Its\_\_\_\_\_

**EXHIBIT A**  
**TRI-PARTY PROGRAM**  
Livernois Road  
Long Lake Road to South Boulevard  
City of Troy  
Board Project No. 56721

---

Resurfacing Livernois Road from Long Lake Road to South Boulevard.

<b>ESTIMATED CONSTRUCTION COST</b>
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Contractor Payments:	<u>\$550,000</u>
Total Estimated Project Cost:	<u><u>\$550,000</u></u>

<b>COST PARTICIPATION BREAKDOWN</b>
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	COMMUNITY	COUNTY	BOARD	TOTAL
FY2022 Tri-Party Program	\$91,667	\$91,667	\$91,666	\$275,000
Contribution			\$275,000	\$275,000
TOTAL SHARES	\$91,667	\$91,667	\$366,666	\$550,000



**CITY COUNCIL AGENDA ITEM**

Date: January 25, 2022

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
R. Brent Savidant, Community Development Director  
William J. Huotari, City Engineer  
Larysa Figol, Sr. Right-of-Way Representative

Subject: Request for Acceptance of Two Permanent Easements from GFA Development, Inc., Sidwell #88-20-25-351-072 & 073

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**History**

As part of the development of two residential parcels, the City of Troy received two permanent easements for storm sewers and surface drainage from GFA Development, Inc., owner of the properties having Sidwell #88-20-25-351-072 & 073.

The parcels are located on Vermont Ave in the southwest ¼ of Section 25, east of John R Road and north of Maple.

**Financial**

The consideration amount on each document is \$1.00.


**Recommendation**

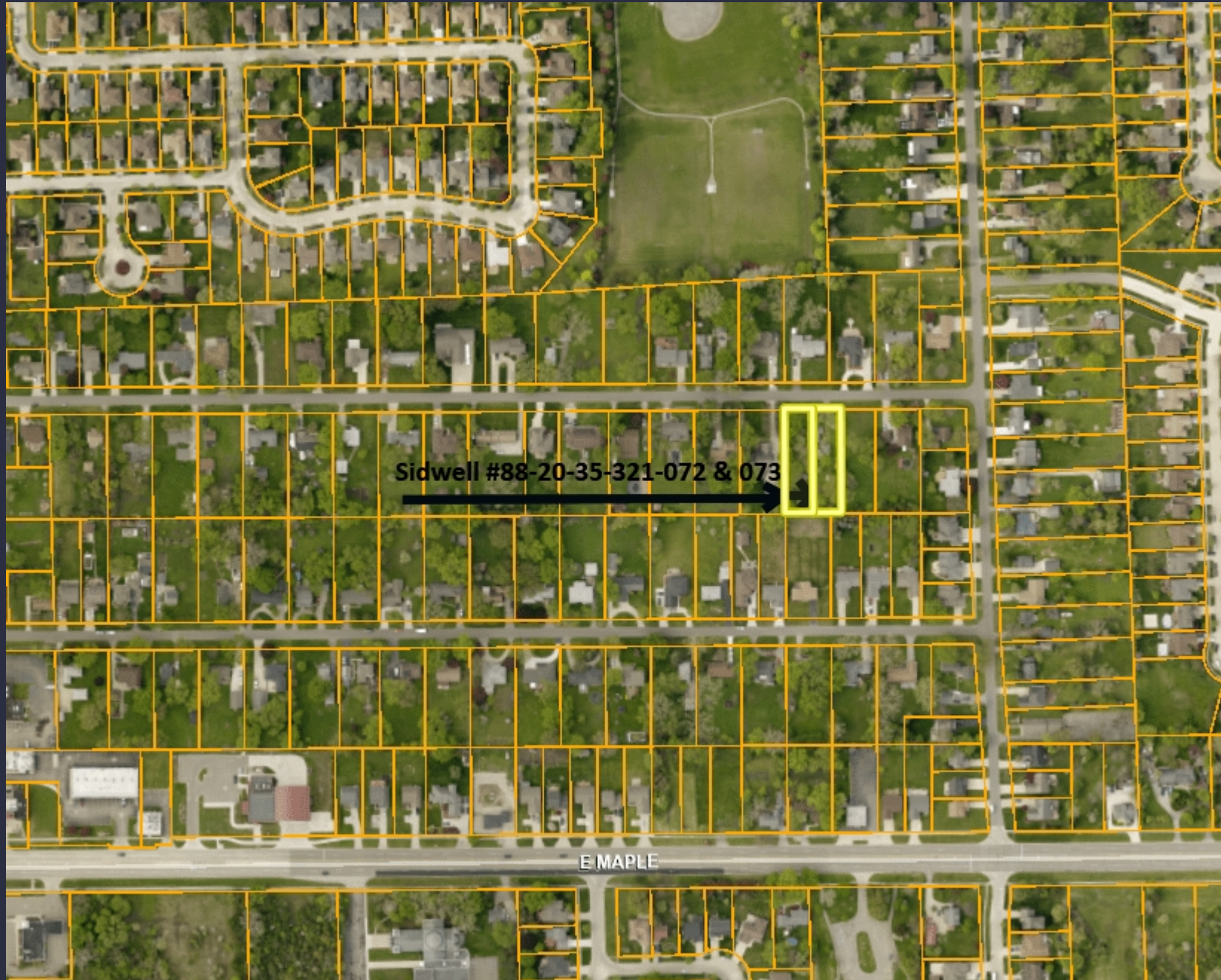
City Management recommends that City Council accept the attached permanent easements consistent with our policy of accepting easements for development and improvement purposes.



# GIS Online

Legend:

 Tax Parcel



Notes:

#88-20-35-351-072 & 073  
GFA Development, Inc.  
Storm Sewers and Surface  
Drainage Esmnts

Map Scale: 1=428

Created: January 25, 2022



Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.



**PERMANENT EASEMENT  
FOR STORM SEWERS AND SURFACE DRAINAGE**

Sidwell #88-20-25-351-072 (pt of)

**GFA DEVELOPMENT, INC.**, a Michigan corporation, Grantor, whose address 3301 Mirage Drive, Troy, MI 48083, for and in consideration of the sum of: One and no/100 Dollar (\$1.00) paid by the **CITY OF TROY**, a Michigan municipal corporation, Grantee, whose address is 500 West Big Beaver Road, Troy, Michigan, 48084 grants to the Grantee the right to access, construct, reconstruct, modify, operate, maintain, repair, upgrade, improve, inspect, enlarge or remove and/or replace **storm sewers and surface drainage** said easement for land situated in the City of Troy, Oakland County, Michigan described as:

The East 6.00 feet of the West 62.50 feet of Lot 74 of Supervisor's Plat of Maple Acres.


and to enter upon sufficient land adjacent to said improvement(s) for the purpose of the construction, operation, maintenance, repair and/or replacement thereof.

The premises so disturbed by the exercise of any of the foregoing powers shall be reasonably restored to its original condition by the Grantee.

This instrument shall be binding upon and inure to the benefit of the parties hereto, their heirs, representatives, successors and assigns and the covenants contained herein shall run with the land.

IN WITNESS WHEREOF, the undersigned hereunto affixed 1 signature(s)  
this 24<sup>th</sup> day of January, 2022.

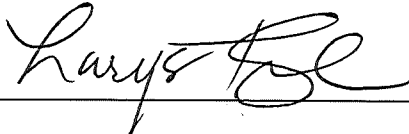
GFA Development, Inc.,  
a Michigan corporation

By  (L.S.)  
Gary Abitheira  
Its: President

STATE OF MICHIGAN       )  
COUNTY OF OAKLAND    )

The foregoing instrument was acknowledged before me this 24<sup>th</sup> day of January, 2022, by Gary Abitheira, President of GFA Development, Inc., a Michigan corporation, on behalf of the corporation.

LARYSA FIGOL  
Notary Public, State of Michigan  
County of Oakland  
My Commission Expires 03-02-2024  
Acting in the County of Oakland

  
\*  
Notary Public, \_\_\_\_\_ County, Michigan  
My Commission Expires \_\_\_\_\_  
Acting in \_\_\_\_\_ County, Michigan

Prepared by:   Larysa Figol, SR/WA  
City of Troy  
500 W. Big Beaver Road  
Troy, MI 48084

Return to: City Clerk  
City of Troy  
500 W. Big Beaver Road  
Troy, MI 48084

**PERMANENT EASEMENT  
FOR STORM SEWERS AND SURFACE DRAINAGE**

Sidwell #88-20-25-351-073 (pt of)

**GFA DEVELOPMENT, INC.**, a Michigan corporation, Grantor, whose address 3301 Mirage Drive, Troy, MI 48083, for and in consideration of the sum of: One and no/100 Dollar (\$1.00) paid by the **CITY OF TROY**, a Michigan municipal corporation, Grantee, whose address is 500 West Big Beaver Road, Troy, Michigan, 48084 grants to the Grantee the right to access, construct, reconstruct, modify, operate, maintain, repair, upgrade, improve, inspect, enlarge or remove and/or replace **storm sewers and surface drainage** said easement for land situated in the City of Troy, Oakland County, Michigan described as:

The East 6.00 feet of the West 25.00 feet of Lot 73 of Supervisor's Plat of Maple Acres and  
the West 6.00 feet of the East 37.50 feet of Lot 74 of Supervisor's Plat of Maple Acres


and to enter upon sufficient land adjacent to said improvement(s) for the purpose of the construction, operation, maintenance, repair and/or replacement thereof.

The premises so disturbed by the exercise of any of the foregoing powers shall be reasonably restored to its original condition by the Grantee.

This instrument shall be binding upon and inure to the benefit of the parties hereto, their heirs, representatives, successors and assigns and the covenants contained herein shall run with the land.

IN WITNESS WHEREOF, the undersigned hereunto affixed   1   signature(s)  
this 24<sup>th</sup> day of January, 2022.

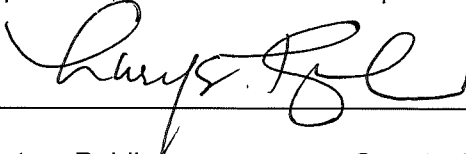
GFA Development, Inc.,  
a Michigan corporation

By  (L.S.)  
Gary Abitheira  
Its: President

STATE OF MICHIGAN       )  
COUNTY OF OAKLAND    )

The foregoing instrument was acknowledged before me this 24<sup>th</sup> day of January, 2022, by Gary Abitheira, President of GFA Development, Inc., a Michigan corporation, on behalf of the corporation.

LARYSA FIGOL  
Notary Public, State of Michigan  
County of Oakland  
My Commission Expires 03-02-2024  
Acting in the County of Oakland

  
\*  
Notary Public, \_\_\_\_\_ County, Michigan  
My Commission Expires \_\_\_\_\_  
Acting in \_\_\_\_\_ County, Michigan

Prepared by: Larisa Figol, SR/WA  
City of Troy  
500 W. Big Beaver Road  
Troy, MI 48084

Return to: City Clerk  
City of Troy  
500 W. Big Beaver Road  
Troy, MI 48084



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

## CITY COUNCIL AGENDA ITEM

Date: January 31, 2022

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
R. Brent Savidant, Community Development Director  
William J. Huotari, City Engineer  
Larysa Figol, Sr. Right-of-Way Representative

Subject: Request for Acceptance of a Permanent Easement from Meelad and Mirvat Hannawa, Sidwell #88-20-25-351-074

---

### **History**

The City of Troy received a permanent easement for storm sewers and surface drainage from Meelad and Mirvat Hannawa, owners of the property having Sidwell #88-20-25-351-074.

The parcel is located on Vermont Avenue in the southwest ¼ of Section 25, east of John R Road and north of Maple.

### **Financial**

The consideration amount on this document is \$1.00.


### **Recommendation**

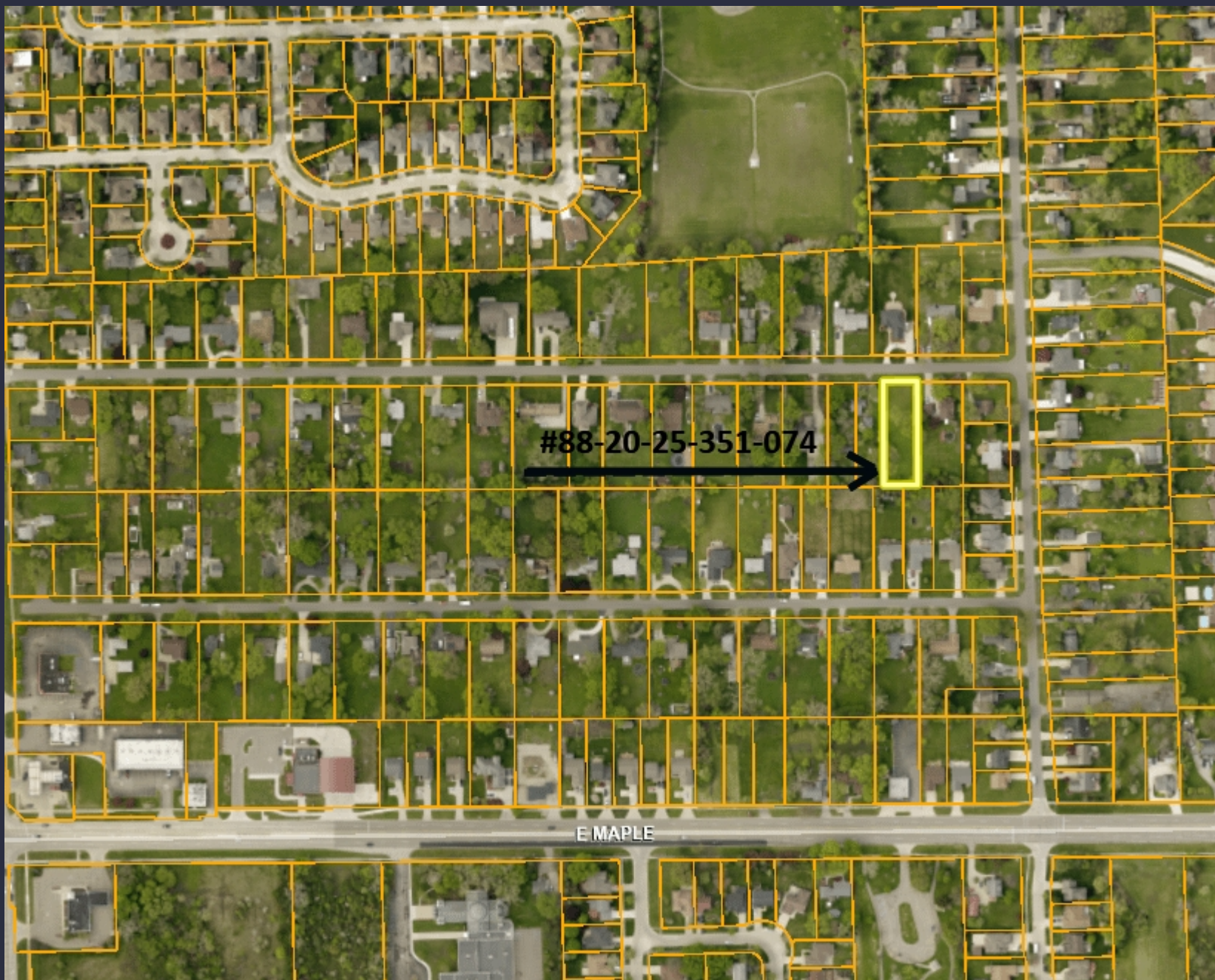
City Management recommends that City Council accept the attached permanent easement consistent with our policy of accepting easements for improvement and development purposes.



# GIS Online

Legend:

 Tax Parcel



Notes:

#88-20-25-351-074  
Storm Sewers & Drainage  
Easement

Map Scale: 1=428

Created: January 31, 2022



Note: The information provided by this application has been compiled from recorded deeds, plats, tax maps, surveys, and other public records and data. It is not a legally recorded map survey. Users of this data are hereby notified that the source information represented should be consulted for verification.

**PERMANENT EASEMENT  
FOR STORM SEWERS AND SURFACE DRAINAGE**

Sidwell #88-20-25-351-074 (part of)

**Meelad Hannawa and Mirvat Hannawa**, husband and wife, whose address is 35448 Wellston Ave, Sterling Heights, MI 48312 for and in consideration of the sum of: One and no/100 Dollar (\$1.00) paid by the **CITY OF TROY**, a Michigan municipal corporation, Grantee, whose address is 500 West Big Beaver Road, Troy, Michigan, 48084 grants to the Grantee the right to access, construct, reconstruct, modify, operate, maintain, repair, upgrade, improve, inspect, enlarge or remove and/or replace **storm sewers and surface drainage**, said easement for land situated in the City of Troy, Oakland County, Michigan described as:

The West 6.00 feet of the East 75.00 feet of Lot 73 of Supervisor's Plat of Maple Acres

and to enter upon sufficient land adjacent to said improvement(s) for the purpose of the construction, operation, maintenance, repair and/or replacement thereof.

This instrument shall be binding upon and inure to the benefit of the parties hereto, their heirs, representatives, successors and assigns and the covenants contained herein shall run with the land.

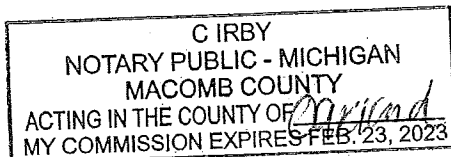
IN WITNESS WHEREOF, the undersigned hereunto affixed their signature(s)  
this 27 day of January, 2022.

Meelad Hannawa (L.S.)  
\*Meelad Hannawa

Mirvat Hannawa (L.S.)  
\*Mirvat Hannawa

STATE OF MICHIGAN     )  
COUNTY OF OAKLAND    )

The foregoing instrument was acknowledged before me this 27 day of January, 2022, by Meelad Hannawa and Mirvat Hannawa, husband and wife.



[Signature]  
\*  
Notary Public, \_\_\_\_\_ County, Michigan  
My Commission Expires \_\_\_\_\_  
Acting in \_\_\_\_\_ County, Michigan

Prepared by: Larysa Figol, SR/WA  
City of Troy  
500 W. Big Beaver Road  
Troy, MI 48084

Return to: City Clerk  
City of Troy  
500 W. Big Beaver Road  
Troy, MI 48084



Chair Krent called the Regular meeting of the Troy City Planning Commission to order at 7:00 p.m. on January 11, 2022, in the Council Chamber of the Troy City Hall. Chair Krent presented opening remarks relative to the role of the Planning Commission and procedure of tonight's meeting.

1. ROLL CALL

Present:

Carlton M. Faison  
Michael W. Hutson  
Tom Krent  
David Lambert  
Lakshmi Malalahalli  
Marianna Perakis  
Sadek Rahman  
Jerry Rauch  
John J. Tagle

Also Present:

R. Brent Savidant, Community Development Director  
Ben Carlisle, Carlisle Wortman Associates  
Julie Quinlan Dufrane, Assistant City Attorney  
Kathy L. Czarnecki, Recording Secretary

2. APPROVAL OF AGENDA

**Resolution # PC-2022-01-001**

Moved by: Faison

Support by: Tagle

**RESOLVED**, To approve the Agenda as prepared.

Yes: All present (9)

**MOTION CARRIED**

3. APPROVAL OF MINUTES

There was discussion on:

- Proposed revisions to October 26, 2021 draft minutes by Mr. Rauch.
- Proposed revisions to December 14, 2021 draft minutes by Mr. Lambert.
- Conflict of interest; procedure in recusing oneself.

**Resolution # PC-2022-01-002**

Moved by: Lambert

Support by: Perakis

**RESOLVED**, To approve the minutes of the October 26, 2021 and December 14, 2021 Regular meetings with corrections.

Yes: All present (9)

**MOTION CARRIED**4. **PUBLIC COMMENT** – For Items Not on the Agenda

There was no one present who wished to speak.

**SPECIAL USE APPROVAL AND PRELIMINARY SITE PLAN REVIEWS**5. **PUBLIC HEARING - SPECIAL USE AND PRELIMINARY SITE PLAN REVIEW (SU JPLN2021-026)** – Proposed Biggby Coffee Drive-Through Window Addition, North side of Long Lake, east of Rochester (1057 E. Long Lake, Suite A), Section 11, Currently Zoned NN (Neighborhood Node “L”) District

Mr. Tagle recused himself from this item. He stated his firm worked with the petitioner on the project.

Mr. Lambert disclosed his son is a former employee at Biggby Coffee and indicated no conflict of interest on his part. The Board was in consensus.

(Mr. Tagle exited the meeting at 7:08 p.m.)

Mr. Carlisle reviewed the Special Use and Preliminary Site Plan application for the proposed drive-through window addition at Biggby Coffee. He addressed proposed site improvements as relates to parking along the western property line, speed humps for traffic calming and new dumpster screening. Mr. Carlisle said review of the application by the City’s Traffic Consultant OHM addressed the change to angle parking, the addition of bollards along the existing sidewalk at the rear of the retail center and removal of the parking bumper blocks adjacent to the new parallel parking spaces.

Mr. Carlisle clarified the loading space requirement or waiver of such is no longer an issue, contrary to comments in his report. He asked the applicant to provide transparency calculations and to submit a photometric plan should there be new lighting proposed. Mr. Carlisle addressed the Zoning Ordinance Design Standards (Section 5.05) and Special Use Standards (Section 9.02D).

Mr. Carlisle offered support in the reinvestment to the site and recommended approval of the Special Use and Preliminary Site Plan application with conditions as identified in his report dated December 7, 2021, with the exclusion of the condition relating to the loading space.

A brief discussion among Board members and the administration followed, some comments relating to:

- Non/conforming use.
- Traffic pattern and circulation.
- Calming traffic methods; speed bumps, signage.
- Safety concerns for employees, pedestrians.
- Length of drive-through loop; directional flow (one way, two way).

Applicant Sanford (Sandy) Green said he and his daughter-in-law partner purchased Biggby Coffee on July 15, 2021. He said in the last six months they have made improvements to the store and have made a concerted effort to become a stronger part of the community. Mr. Green addressed how the pandemic has affected the business and how a drive-through window would most likely boost business. Mr. Green said they care for the safety of their employees, customers and existing retail tenants and hope that together they and the Commission can come up with a workable plan for a drive-through addition.

Traffic Engineer Julie Kroll of Fleis & VandenBrink addressed the proposed circulation and flow of traffic. She addressed specifics relating to the length of the drive-through loop, directional flow of traffic, the bypass lane, 7-foot sidewalk with bollards, access to the dumpster, loading area and traffic calming measures. Ms. Kroll noted commercial property is to the west of the drive-through window and residential is located only to the north and east of the project. She believes OHM's suggestion to remove the bumper blocks might be to alleviate a potential trip hazard, and she would confer with the landlord who placed the bumper blocks there to protect the existing fence. Ms. Kroll said speed bumps would be placed in accordance with the recommendations of the manufacturer. Ms. Kroll indicated the applicant would be receptive to additional measures of traffic calming, such as signage, striping, etc.

Mr. Green addressed the length of the drive-through loop, directional flow of traffic, the bypass lane, width of the road in the rear of the retail center, communication with existing tenants, and various types of traffic calming measures.

There was discussion on:

- Safety concerns.
- Directional flow of traffic.
- Speed bumps; manufacturer recommendations relating to placement, spacing.
- Posting speed limit signs; striping directional arrows.
- Loading space; access, time of day, maneuverability of trailer.
- Peak store hours (7am to 9:30 pm); number of anticipated customers daily (200).
- Potential use of drive-through loop by other tenants.

PUBLIC HEARING OPENED

There was no one present to speak.

PUBLIC HEARING CLOSED

The administration suggested that the item could be sent back to the traffic consultant for review to address safety concerns expressed by some members.

Mr. Rauch made a motion that was supported by Mr. Lambert. A lengthy discussion followed with respect to the conditions cited. The recording secretary respectfully requested if the motion could be stated again for clarification on the conditions.

**Resolution # PC-2022-01-003**

Moved by: Rauch  
Support by: Lambert

**RESOLVED**, That Special Use Approval and Preliminary Site Plan Approval for the proposed Biggby Coffee Drive-Through Window Addition, North side of Long Lake, East of Rochester (1057 E. Long Lake, Suite A), Section 11, Currently Zoned NN (Neighborhood Node “L”) District, be granted, subject to the following conditions:

1. That the Traffic Consultant and planning staff will review and satisfy themselves with the placement of the bumper blocks that are being removed.
2. That the Traffic Consultant and planning staff will look at potentially a third speed bump in the traffic flow to the drive-up window.
3. That the applicant will provide the transparency calculations.
4. If new lighting is proposed, the applicant shall submit a photometric plan.
5. That the plan will provide ultimately for signage at the store in the form of a monument sign at the west end and in the form of a street-type sign at the east end of the property that clearly designates direction to the drive-through.
6. That speed limit signs will be provided in conformance with the manufacturer’s recommendation of the speed bumps.
7. That the driveways will be clearly marked with one-way and two-way.
8. That there will be a yellow striped lane divider on the north side.

Discussion on the motion on the floor.

There was clarification that the conditions relating to the parking bumper blocks and speed bumps are to be reviewed by the Traffic Consultant and planning staff and the remaining conditions would be required.

Vote on the motion on the floor.

Yes: Faison, Hutson, Krent, Lambert, Malalahalli, Perakis, Rahman, Rauch  
Recused: Tagle

**MOTION CARRIED**

Mr. Tagle returned to the meeting at 8:36 p.m. Ms. Dufrane exited the meeting at 8:34 p.m.; returned at 8:38 p.m.

The meeting resumed at 8:38 p.m.

6. PUBLIC HEARING - SPECIAL USE AND PRELIMINARY SITE PLAN REVIEW (SU JPLN2021-024) – Proposed Red Wagon Fuel Station, West side of Livernois, North of Maple (1613 and 1631 Livernois), Section 28, Currently Zoned MR (Maple Road) District

Mr. Carlisle reviewed the Special Use and Preliminary Site Plan application for the proposed Red Wagon Fuel Station to add six islands, 12 gas pumps, a canopy to the existing Red Wagon store and the combination of two sites. He specifically addressed the canopy in relation to the Zoning Ordinance requirement (Section 6.28.B) and the applicant's rationale for not connecting the canopy to the store building. Mr. Carlisle addressed the applicant's request to seek a deviation in the parking requirement and a waiver from the loading space requirement. He reported the applicant is providing significant landscaping to both sites and particularly to the north site, but as well is seeking a deviation in the location of street trees and parking lot trees.

Mr. Carlisle addressed the Special Use Standards (Section 9.02.D.). He asked the Board to consider in its deliberation the applicant's rationale for not connecting the canopy to the building and the applicant's request to seek deviations from the requirements for parking, loading space and location of street trees and parking lot trees.

Mr. Carlisle recommended approval of the Special Use and Preliminary Site Plan application subject to addressing the canopy material and color and any design changes as directed by the Board prior to Final Site Plan approval.

A brief discussion among Board members and the administration followed, some comments relating to:

- Combination of two sites; demolition of existing building (Troy Tile).
- Complimentary material and color for canopy to Red Wagon building.
- Deviation of parking requirement; no setback requirements, potential to add parking to north.

Present were applicant Ken Koza of RW Troy LLC and James Butler of Professional Engineering Associates.

Mr. Butler clarified the application would not meet the 20% required landscaping requirement should parking spaces be added to the north. He assured the Board there is sufficient parking for the site. Mr. Butler showed the Board where an existing space near an overhead door located in the far northwest corner of the property is being used for loading/unloading.



Mr. Koza said connecting the canopy to the Red Wagon building would be challenging with respect to the building height differences, alignment and the need for structural columns. He said the yellow and red colors of the Shell brand would complement and tie together the brick and limestone color of the convenience store. He said a separation between the canopy and the convenience store would be aesthetically more pleasing and retain the Red Wagon building identity. Mr. Koza shared their forward thinking in replacing some pumps to accommodate charge stations for electric vehicles in the near future.

There was discussion on:

- Material and color of the canopy; no color changes to convenience store.
- Market viability for service stations.
- Accommodation of charge stations for future use.
- Sufficiency of parking.

#### PUBLIC HEARING OPENED

Prithipal Singh and Sukhnoor Kaur, owners of the Citgo service station at 1654 Livernois Road, voiced opposition. Ms. Kaur expressed concerns with competition among several service stations in the area.

#### PUBLIC HEARING CLOSED

In response to Mr. Rauch's question asking if there is background information on the potential of saturation of service stations in the City, Mr. Savidant said the City does not track statistics on service stations.

#### **Resolution # PC-2022-01-**

Moved by: Faison

Support by: Malalahalli

**RESOLVED**, The Planning Commission hereby approves a reduction in the total number of required parking spaces for the proposed Red Wagon Fuel Station to 44 when a total of 48 spaces are required on the site based on the off-street parking space requirements for convenience store and gas stations. This 4-space reduction maintains 36 parking spaces for the 4,455 square foot convenience store and is sufficient to meet parking demands based on existing activity; and,

**RESOLVED**, The Planning Commission hereby waives the loading space requirement; and,

**RESOLVED**, That Special Use Approval and Preliminary Site Plan Approval for the proposed Red Wagon Fuel Station, West side of Livernois, North of Maple (1613 and 1631 Livernois), Section 28, Currently Zoned MR (Maple Road) District, be granted.

Discussion on the motion on the floor.

In response to Mr. Lambert's question, Mr. Carlisle said he would like a detailed or colored rendering of the canopy to confirm it matches the elevation and aesthetics of the existing Red Wagon.

The administration confirmed that all service stations require Special Use approval.

Vote on the motion on the floor as amended.

Moved by: Faison  
Support by: Malalahalli

**Resolution # PC-2022-01-004**

Moved by: Faison  
Support by: Malalahalli

**RESOLVED**, The Planning Commission hereby approves a reduction in the total number of required parking spaces for the proposed Red Wagon Fuel Station to 44 when a total of 48 spaces are required on the site based on the off-street parking space requirements for convenience store and gas stations. This 4-space reduction maintains 36 parking spaces for the 4,455 square foot convenience store and is sufficient to meet parking demands based on existing activity; and,

**RESOLVED**, The Planning Commission hereby waives the loading space requirement; and,

**RESOLVED**, That Special Use Approval and Preliminary Site Plan Approval for the proposed Red Wagon Fuel Station, West side of Livernois, North of Maple (1613 and 1631 Livernois), Section 28, Currently Zoned MR (Maple Road) District, be granted subject to:

1. The applicant submitting a colored rendering of the canopy and canopy support.

Yes: All present (9)

**MOTION CARRIED**

**OTHER ITEMS****7. POTENTIAL PLANNED UNIT DEVELOPMENT (PUD) APPLICATION**

Mr. Carlisle gave a brief review of the proposed Village of Troy Planned Unit Development concept plan, noting the item is for discussion only to give feedback to the developer and no action would be taken this evening. He addressed the proposed residential products, surrounding zoning, how the plan relates to the Master Plan, proposed public benefit and flexibility in using the PUD option.

Tim Loughrin, Director of Land Acquisition and Development for Robertson Brothers Homes, conducted a PowerPoint presentation. His presentation covered:

- Project summary and highlights.
- Site Concept Plan, Connectivity and Context.
- Parallel Plan under Existing RT Zoning.
- PUD qualifications.
- Housing products: townhomes, attached and detached single family lots and condominiums.

Discussion followed, some comments relating to:

- Public amenity; safety, liability, maintenance of sledding hill.
- Consideration to an alternate amenity, possibly all-season use.
- Regional pond/stormwater connection.
- Housing options; townhomes not preferred.
- Sustainable elements of housing material.
- Transition to adjacent industrial use.
- Apply *village* concept to the project.

#### 8. ELECTION OF OFFICERS

Chair Krent opened the floor for nominations for Chair.

Chair Krent nominated David Lambert.

Acknowledging there were no further nominations, Chair Krent closed the floor to nominations.

Roll Call vote on the nomination for **David Lambert as Chair.**

Yes: All present (9)

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Chair Krent opened the floor for nominations for Vice Chair.

Chair Krent nominated Marianna Perakis.

Mr. Faison nominated Sadek Rahman.

Acknowledging there were no further nominations, Chair Krent closed the floor to nominations.

Roll Call vote on the nomination on the floor for **Marianna Perakis as Vice Chair.**

Yes: Hutson, Krent, Lambert, Malalahalli, Rahman, Rauch, Tagle  
No: Faison  
Abstain: Perakis

Several members expressed the value in the liaison position on the Zoning Board of Appeals.

Ms. Malalahalli offered to be considered for the appointment.

Roll Call vote on the recommendation of appointment for **Lakshmi Malalahalli as ZBA Representative.**

Yes: Faison, Hutson, Krent, Lambert, Perakis, Rahman, Rauch, Tagle  
Abstain: Malalahalli

9. PLANNING COMMISSION ANNUAL REPORT FOR 2021

Mr. Savidant introduced the 2021 Planning Commission Annual Report. There was no discussion on the item.

10. PUBLIC COMMENTS – For Items on the Agenda

There was no one present to speak.

11. PLANNING COMMISSION COMMENT

Ms. Perakis thanked the Board for their support and confidence in the Vice Chair role.

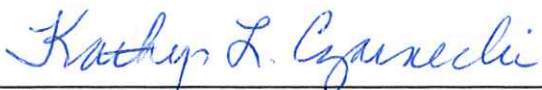
12. ADJOURN

The Regular meeting of the Planning Commission adjourned at 10:29 p.m.

Respectfully submitted,



Tom Krent, Chair



Kathy L. Czarnecki, Recording Secretary

Chair Lambert called the Regular meeting of the Troy City Planning Commission to order at 7:01 p.m. on January 25, 2022, in the Council Chamber of the Troy City Hall. Chair Lambert and Vice Chair Perakis presented opening remarks relative to the role of the Planning Commission and procedure of tonight's meeting.

1. ROLL CALL

Present:

Carlton M. Faison  
Michael W. Hutson  
Tom Krent  
David Lambert  
Lakshmi Malalahalli  
Marianna Perakis  
Sadek Rahman  
John J. Tagle

Also Present:

R. Brent Savidant, Community Development Director  
Ben Carlisle, Carlisle Wortman Associates  
Julie Quinlan Dufrane, Assistant City Attorney  
Kathy L. Czarnecki, Recording Secretary

2. APPROVAL OF AGENDA

**Resolution # PC-2022-01-005**

Moved by: Faison  
Support by: Tagle

**RESOLVED**, To approve the Agenda as prepared.

Yes: All present (8)

**MOTION CARRIED**

3. APPROVAL OF MINUTES – January 11, 2022

There was discussion specifically on Conditions #2, #5 and #6 on Resolution #2022-01-003 granting approval for the Biggby Coffee Drive-Through Window Addition.

Mr. Tagle had recused himself from the agenda item at the January 11, 2022 meeting. Ms. Dufrane declared that Mr. Tagle could remain in the meeting but not participate in discussion or vote on approval of the draft minutes.

The discussion was on:

- Intent and actual verbiage of Conditions #2 and #6, with respect to parking bumper(s) and speed bump(s).
- Clarification on Condition #5 that it relates to two (2) signs.



**Resolution # PC-2022-01-006**

Moved by: Krent

Support by: Perakis

**RESOLVED**, To approve the minutes of the January 11, 2022 Regular meeting with corrections to the conditions to Resolution # PC-2022-01-003, to read as follows:

1. Condition # 2 – That the Traffic Consultant and planning staff will look at potentially a third speed bump in the traffic flow to the drive-up window.
2. Condition #6 – That speed limit signs will be provided in conformance with the manufacturer's recommendation of the speed bumps.
3. Condition #5 – That the plan will provide ultimately for signage at the store in the form of a monument sign at the west end and in the form of a street-type sign at the east end of the property that clearly demonstrates direction to the drive-through.

Yes: Hutson, Faison, Krent, Lambert, Malalahalli, Perakis, Rahman

Recused: Tagle

**MOTION CARRIED****4. PUBLIC COMMENT – For Items Not on the Agenda**

Jerry Rauch, 4187 Penrose, Troy; addressed distribution of meeting notices and agenda packets. He said distribution on a Friday before a meeting does not allow sufficient time for Planning Commission to review and prepare for meetings, nor enough notice for residents to be aware of proposed developments. He suggested consideration of an alternative timeline for agenda distribution and asked that the matter be placed on a future agenda for discussion.

**PRELIMINARY SITE PLAN REVIEWS****5. PRELIMINARY SITE PLAN REVIEW (SP JPLN2021-016) – Proposed The Westington II, South of Wattles, East of Crooks (870 Barilane Drive; PIN 88-20-21-101-009), Section 21, Currently Zoned NN (Neighborhood Node “I”) District**

Mr. Carlisle asked the Board's consideration to present his review on Agenda item #5 and Agenda item #6 at the same time, noting the relationship between the two projects.

The Board had no objections. Ms. Dufrane stated that each agenda item must have a separate vote.

Review and discussion followed on both the proposed The Westington II application and the proposed Hills West application. (*Refer to page 7 for Agenda item #6 caption.*)

Mr. Carlisle reviewed the Preliminary Site Plan applications for The Westington II and Hills West. He addressed access, natural features, open space, building height, parking, landscaping, traffic study, elevations, Design Standards (Section 5.06E) and Site Plan Review Design Standards (Section 8.06).

Review comments on The Westington II:

- Access via the 7-Eleven store cross access easement.
- Tree mitigation: 486 trees.
- Consideration by applicant to shift building or reduce project size to preserve a clumping of protected trees.
- 2.5 story building height in compliance; verified by Building Official.
- Combination of Phase I and Phase II to meet open space and parking requirements.
- Consideration of additional guest parking.
- Conclusion of Traffic Impact Study; no mitigation measures recommended; confirmed by OHM.

Review comments on Hills West:

- Tree mitigation: 115 trees.
- Consideration by applicant to reconfigure site to preserve additional trees.
- 2.5 story building height in compliance; verified by Building Official.
- Confirmation of open space and landscape calculations.
- Deficient one (1) bicycle parking.
- Conclusion of Traffic Impact Study; no mitigation measures recommended; confirmed by OHM.

Mr. Carlisle asked the Planning Commission in its deliberation of the applications to discuss the following items with the applicant:

- Shift the building or reduce the size to preserve additional trees.
- Tree mitigation requirements.
- Open space/landscaping calculations.
- The need for additional guest parking.
- Compliance with Design Standards.
- Compliance with Site Plan Review Standards.

A brief discussion among Board members and the administration followed, some comments relating to:

- Approval of The Westington Phase I at the December 8, 2020 meeting; access via Barilane EVA (emergency vehicle access). Cross access easement at 7-Eleven store not discussed.
- Purpose; use of EVA's.
- Accuracy of tree survey conducted by applicant.
- Mitigation of trees; allowances to remove trees based on quality; landmark trees.
- Neighborhood Node zoning designations; intensity of Site Type A and Site Type B.

Mr. Savidant exited the meeting at 7:48 p.m. Upon his return at 7:58 p.m., he shared email dialogue among the Fire Department and Engineering Department conducted during Final Site Plan review for The Westington Phase I, in which the departments determined the more sensible access for the project would be to use the 7-Eleven store cross access easement. Mr. Savidant explained cross access easements are established at the time of site plan approval to provide access for future developments.

The City's Traffic Consultant, Stephen Dearing of OHM Advisors, said he was directed by the City to review the traffic impact study prepared by Fleis & Vandenbrink for the proposed residential projects. He agrees with the results that there is negligible impact on the developments and no mitigation measures are recommended.

Mr. Dearing advised the Board of the various criteria considered in a traffic study to reach a conclusion. He addressed level of service, average control delay, average of counts during peak hours, effect of numbers due to pandemic and future traffic conditions. Mr. Dearing indicated the D level of service (LOS) is when there is a concern and action might be taken to mitigate traffic congestion, such as auxiliary turn lanes, double left turns and double right turns. He reported consideration was given to the pandemic and adjustments were made to the numbers accordingly by a review of historical counts.

Traffic Engineer Julie Kroll of Fleis & Vandenbrink stepped up to the podium to communicate to Mr. Dearing, and he addressed the percentages in the adjustments to the numbers due to the pandemic.

Ms. Perakis referenced conclusions in the report that identified levels of service (LOS) D and E during peak hours. She expressed concern because LOS D is characterized as *approaching unstable flow, tolerable delay and occasional waits through more than one signal cycle before proceeding*, and LOS E is characterized as *unstable flow and intolerable delay*. Ms. Perakis asked if there is crash data available at this intersection.

Mr. Dearing said he did not pull crash statistics on this location and reviewed only the model completed by Fleis & Vandenbrink on capacity calculations. He stated there is no numerical threshold to suggest an intersection is dangerous, and it is recognized that there is a bias involved in how crashes are counted. Mr. Dearing said the data compiled for crashes can be "*sliced and diced*" in many different ways.

Project Architect Peter Stuhlreyer of Designhaus said the applications meet Zoning Ordinance requirements as relates to the height, use, density, parking, landscaping, tree mitigation, traffic flow and fire. He addressed the architecture and design, noting a demand for two-bedroom units with accessibility to the first floor. Mr. Stuhlreyer said reducing the density of the project would not be economically feasible.

There was discussion on:

- Elevations; orientation of the building as relates to primary entrances per Design Standards, Section 5.06 D (Hills West project).
- Open space calculations.
- Communication with neighboring residential.
- City survey comments relating to multi-family residential.
- Location of required bicycle rack; (Hills West project).
- Landscape requirements, spacing.
- Guest parking.
- Traffic concerns.

Mr. Stuhlmeyer said The Westington Phases I and II combined meet the open space requirement at 20.99%, and Hills West meets the open space requirement on its own at 24.7%. He said Hills West meets all Zoning Ordinance requirements as a stand-alone project. Mr. Stuhlmeyer said the open space consists of trees, landscape and grass. He said there is recreational space in The Westington Phase I with benches, play set, grill and picnic tables.

Mr. Savidant said the applicant's intent is to combine the phases of The Westington prior to Final Site Plan approval to achieve the open space requirements. He said the Zoning Ordinance is not specific in terms that each site is required to meet a minimum open space requirement.

Landscape Architect Mike Pizzola addressed types, variety and spacing of proposed landscape and the growth and maturity of landscape. He said the property management firm of the apartment complex would be responsible for the maintenance.

Mr. Stuhlmeyer addressed guest sparking spaces. It is his understanding that the number of guest parking spaces is included in the ratio parking calculations for the projects and believes the total parking spaces provided will accommodate guest parking.

Mr. Stuhlmeyer said they provided a significant distance from the project and a heavily landscaped buffer to accommodate a neighborly design for the single family home on Barilane.

Arvin Stafa, representing the applicant, posed a procedural request before the Board asking for an opportunity to cross examine any adverse testimony during the public hearing, referencing the right to do so under the 14<sup>th</sup> Amendment.

Ms. Dufrane responded the application before the Board this evening does not require a Public Hearing. She denied the request to cross examine those who speak during public comment.

Chair Lambert opened the floor for public comment.

- Jerry Rauch 4187 Penrose, Troy; in opposition; addressed Neighborhood Node zoning districts as relates to compliance with the Zoning Ordinance and Master Plan, level of intensity, types of development, transition and compatibility to adjacent uses, public amenities, orientation of buildings.
- Paul Balas, 4087 Parkstone; in opposition; addressed concerns with traffic congestion and safety, accuracy of traffic study results, transition and compatibility to adjacent uses.
- Laura Lipinski, 4233 Carson, Troy; in opposition; addressed limited notification of agenda items, approved access for The Westington Phase I, concerns with traffic congestion, safety and accuracy of traffic study results.
- Daryl Dickhudt, 4143 Glencastle, Troy; addressed comments/feedback as a participant at Neighborhood Node Walks & Talks, Neighborhood Node zoning districts as relates to Zoning Ordinance and intent.
- Tom Reiss, 1400 Bradbury, Troy; in opposition; addressed compatibility with surrounding upscale residential, traffic congestion concerns, noise, crime and property values.
- Michelle Kleiman, 1157 Provincial, Troy; addressed concerns with traffic congestion and safety, access, comments/feedback as participant in Neighborhood Node Walks & Talks and compatibility with residential.

Chair Lambert closed public comment.

Mr. Hutson shared concerns with traffic congestion, accuracy of traffic study results, upward trend of multi-family developments, intent of Neighborhood Node zoning designations as relates to Master Plan and surrounding residential, specifically access, open space and recreational amenities.

Mr. Faison addressed concerns with the character of the residential environment, traffic, safety of motorists and pedestrians and access to the site.

Mr. Krent addressed the Planning Consultant report with respect to the unknown number identified in the open space requirement for Hills West.

Mr. Carlisle addressed the applications with respect to open space and landscape requirements. He read the definition of Open Space and confirmed that streets, driveways, parking lots or other surfaces designed or intended for vehicular traffic are not considered as open space. He advised the Board that the requirements for landscape hold a higher threshold than open space and he would like the applicant to confirm the numbers/percentages of both the open space and landscape requirements for Hills West.



**Resolution # PC-2022-01-007**

Moved by: Perakis  
Support by: Malalahalli

**RESOLVED**, That Preliminary Site Plan Approval, pursuant to Article 8 of the Zoning Ordinance, as requested for the proposed The Westington II 30-unit apartment development, South of Wattles, East of Crooks, (870 Barilane Drive; PIN 88-20-21-101-009), Section 21, Currently Zoned NN (Neighborhood Node “I”) District, be **denied**, for the following reasons:

1. The Planning Commission does not approve the tree mitigation requirement.
2. The open space fails the Zoning Ordinance calculations.
3. The site Design Standards fail to promote public health, safety and welfare, primarily due to traffic issues.
4. The project fails to meet the transition requirements of the Zoning Ordinance as well as the density requirements.

**Discussion on the motion on the floor.**

Chair Lambert said his main concerns are the destruction of the trees on the site and his belief there is not enough of a transition going from the higher height buildings that are closer to the street as proposed to where it comes up to residential areas farther to the east and to the south.

**Vote on the motion on the floor.**

Yes: All present (8)

**MOTION CARRIED**

6. **PRELIMINARY SITE PLAN REVIEW (SP JPLN2021-017)** – Proposed Hills West, East side of Crooks, South of Wattles (3902 Crooks; PIN 88-20-21-101-003), Section 21, Currently Zoned NN (Neighborhood Node “I”) District

Mr. Carlisle stated the two projects on tonight’s agenda stand on their own merits with respect to the Resolution. He said any issues cited on the former project and are similar to this project should be reflected in the Resolution; as well, any rationale should be cited if there is support for this project.

**Resolution # PC-2022-01-008**

Moved by: Perakis  
Support by: Rahman

**RESOLVED**, That Preliminary Site Plan Approval, pursuant to Article 8 of the Zoning Ordinance, as requested for the proposed Hills West 30-unit apartment development, East side of Crooks, South of Wattles, (3902 Crooks, PIN 88-20-21-101-003), Section

21, Currently Zoned NN (Neighborhood Node "I") District, be **denied**, for the following reasons:

1. The orientation of the buildings violates the Zoning Ordinance.
2. Planning Commission does not approve the tree mitigation requirement.
3. The open space failed the Zoning Ordinance calculations.
4. The site Design Standards fail to promote public health, safety and welfare, primarily due to traffic issues.
5. The project fails to meet the transition requirements of the zoning ordinance as well as the density requirements.

Yes: All present (8)

**MOTION CARRIED**

### OTHER ITEMS

7. PUBLIC COMMENT – For Items on the Agenda

There was no one present to speak.

8. PLANNING COMMISSION COMMENT

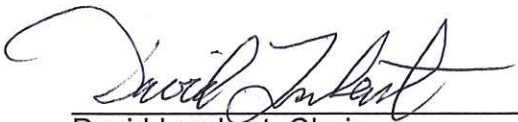
There were general comments, some relating to:

- Information sourced by Mr. Savidant regarding project access.
- Appreciation for public comment by residents.
- Open space calculations.
- Scheduling of Neighborhood Node Walks & Talks with City Council.

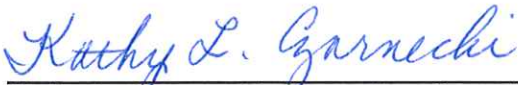
9. ADJOURN

The Regular meeting of the Planning Commission adjourned at 9:53 p.m.

Respectfully submitted,



David Lambert, Chair



Kathy L. Garnecki, Recording Secretary



## CITY COUNCIL REPORT

Date: January 25, 2022

To: Mark Miller, City Manager

From: Robert Bruner, Assistant City Manager  
Robert C. Maleszyk, Chief Financial Officer  
Lisa Burnham, Controller  
William J. Huotari, City Engineer

Subject: Federal Funding for Rochester Road, Barclay to Trinway

At the Oakland County Federal Aid Funding Committee meeting of January 25, 2022, we were successful in requesting and receiving approval for additional federal funding for the Rochester Road, Barclay to Trinway reconstruction and widening project. Federal funding approved:

- 2022 ROW - \$694,020
- 2023 ROW - \$4,998,020
- 2024 CON - \$903,981

The right-of-way (ROW) phase is currently under an MDOT contract, as approved by City Council at their meeting of December 6, 2021. The additional \$694,020 in federal funds would be added to this existing contract with MDOT to increase the current funding available for the ROW phase in 2022.

After October 1, 2022 (MDOT FY 2023), we would request obligation of the \$4,998,020 in federal funds for a continuation of the ROW phase. A separate authorization by MDOT would be made to add these funds to the ROW phase.

The ROW phase would be funded at a total amount of \$12,372,550 with \$9,995,202 in federal funds available with a corresponding city match of \$2,377,246, once federal funds are available for obligation.

In MDOT FY 2024, the construction (CON) phase is approved for federal funds in the amount of \$13,386,000. The additional \$903,981 in federal funds would be added to this amount to provide a total of \$14,289,981 in federal funds that will be available for the physical construction.

The CON phase would be funded at a total amount of \$17,862,476 with \$14,289,981 in federal funds available with a corresponding city match of \$3,572,495, once federal funds are available for obligation.

The city match, for all phases, is included in the budget within the Major Road, Water &/or Sewer funds.

Future cost participation agreements will be presented to City Council for approval once the federal funds are available to obligate.



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

O-02b

## FROM THE OFFICE OF THE CITY MANAGER

Date: February 8, 2022

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
William J. Huotari, City Engineer

Subject: Verizon Small Cell Update

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A new Verizon Wireless utility pole proposed near 3320 Essex generated concerns and questions in July 2021. City staff met with Verizon representatives and prepared the attached memo dated July 26, 2021. City staff met with Verizon representatives again in September 2021 and subsequently prepared the attached memo dated September 9, 2021. That memo was included in the September 13, 2021 City Council agenda packet (M-02B Verizon Small Cell Update).

As promised, Verizon reevaluated the new utility pole locations in Section 30 of the City and met with City staff in January. The proposed small cell locations are based on supply and demand. Demand is high in the residential subdivisions so locating new poles in the commercial area near Golfview is not feasible. There are no City-owned utility poles in the area either. Verizon prefers to use existing utility poles because they are less disruptive for the neighborhood and less expensive for Verizon. Unfortunately, DTE Energy will not allow Verizon to use an existing utility pole near 3320 Essex.

Public Act 365 of 2018 (MCL 460.1301 et. seq.), the “small wireless communications facilities deployment act”, prioritizes the use of existing utility poles and wireless support structures for collocation over the installation of new utility poles or wireless support structures. However, the purpose of the act is to “increase investment in wireless networks” and “encourage the deployment of” wireless services by “streamlining the process” for the operation of wireless facilities in the public rights-of-way. It specifically allows wireless services providers and wireless infrastructure providers access to the public rights-of-way. It would be difficult to establish that the placement of these new utility poles will obstruct or hinder the usual travel or public safety on the right-of-way or obstruct the legal use of the right-of-way by the City or other utilities and communications service providers

Streamlining the process includes limiting the fees the City can charge, the number of days the City has to process applications, and the alternate locations the City may propose to within 75 feet of the proposed location. However, the City cannot compel the applicant to use an alternate location if, as determined by the applicant, the alternate location imposes unreasonable technical limits or significant additional costs.

Verizon has cooperated with the City’s attempts to identify alternate locations that may be less objectionable to residents. Unfortunately, none have been identified. At this point, the City has exhausted its potential remedies pursuant to Public Act 365 of 2018. Future correspondence should be directed to David Haslinger via email at: [david.haslinger@verizonwireless.com](mailto:david.haslinger@verizonwireless.com). Verizon requires email so all correspondence can be managed and tracked internally.



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

## FROM THE OFFICE OF THE CITY MANAGER

Date: September 9, 2021

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
William J. Huotari, City Engineer

Subject: Verizon Small Cell Update

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A new Verizon Wireless utility pole to be located near 3320 Essex Drive generated many questions in July (see attached). City staff met with Verizon representatives on September 8 to discuss small cell facilities proposed in the Buckingham Woods subdivision in Section 30 of the City.

The Verizon representatives explained that the proposed small cell locations are based on supply and demand. Mobile networks consist of a mix of macrocell sites to provide wide area coverage and small cells to improve localized coverage and increase capacity. Verizon has good macrocell coverage in much of Troy and is installing small cells to improve localized coverage and increase capacity in areas where macrocell coverage is weaker and mobile data demand is highest.

The Verizon representatives also explained that existing utility poles are preferred because they are less disruptive for the neighborhood and less expensive for Verizon. However, the owners of existing utility poles, primarily DTE Energy, may not allow small cell equipment on all existing utility poles. In addition, small cells must also be located within proximity to Verizon's underground fiber network and underground power.

The Verizon representatives reiterated that no new utility poles will be installed in 2021. In the meantime, Verizon will reevaluate the proposed new utility pole locations to determine if alternate locations are available. This review will take several months so City staff plans to meet with Verizon again in late 2021 or early 2022.

In the meantime, specific questions may be directed to David Haslinger via email at: [david.haslinger@verizonwireless.com](mailto:david.haslinger@verizonwireless.com). Verizon requires email so all correspondence can be managed and tracked internally. City staff will continue to monitor the situation and provide updates as necessary.





500 West Big Beaver  
Troy, MI 48084  
troymi.gov

## FROM THE OFFICE OF THE CITY MANAGER

Date: July 26, 2021

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager  
William J. Huotari, City Engineer

Subject: Small Wireless Communications Facilities

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A new Verizon Wireless utility pole to be located near 3320 Essex Drive has generated many questions and suggestions regarding this and other new utility poles. City staff cannot answer or address them all before tonight's City Council meeting. Instead, this report is intended to provide a brief update before the meeting. Additional information will follow.

First, an update about the new utility pole to be located near 3320 Essex Drive specifically. City staff met with Verizon Wireless this morning and Verizon agreed to reevaluate its locations. Verizon Wireless has permits to install small cell equipment on six existing utility poles and eight new utility poles. Network operators generally prefer existing utility poles because they are less expensive. However, that is not always feasible and the City cannot compel them to do so. Four of the new utility poles are located in Section 30 of the City east of Adams Road, south of Big Beaver Road, west of Coolidge Highway, and north of Maple Road. This afternoon Verizon Wireless told City staff it has no plans to build the four new utility poles located in Section 30 in 2021. City staff will work with Verizon Wireless to explore alternatives.

In the meantime, City staff believes residents will attend tonight's City Council meeting to speak about this issue. One may ask the City Council to "rescind the permit" and take other specific action. That is a bad idea for two reasons. First, permitting is an administrative function and the City Manager is responsible for all administrative departments (except the City Attorney). The City Charter prohibits the Council or any of its members from giving orders to any of the subordinates of the City Manager. Second, the small wireless communications facilities deployment act, Public Act 365 of 2018, significantly restricts municipal regulation of these facilities. City Council action without further input from City staff may inadvertently violate the limitations of Public Act 365. City Attorney Bluhm can address the City's legal obligations and options.

Second, an update regarding small wireless communications facilities (small cells) generally. The City Council held a special meeting on March 4, 2019 to learn about and discuss communications facilities before Public Act 365 took effect on March 12, 2019. A copy of the presentation is attached. The meeting video is available online at <https://youtu.be/vtc2f1k1VIQ>.

Since then, the City has approved right-of-way permits for twelve (12) small wireless communications facilities on existing utility poles and twelve (12) new utility poles.



500 West Big Beaver  
Troy, MI 48084  
troymi.gov

## FROM THE OFFICE OF THE CITY MANAGER

### Right-of-way permits for EXISTING utility poles:

1.	2040 BARRETT	EXTENET	NOT INSTALLED
2.	1350 KIRTS	EXTENET	NOT INSTALLED
3.	489 E. MAPLE	AT&T	NOT INSTALLED
4.	471 CHERRY	AT&T	NOT INSTALLED
5.	3222 ROCHESTER	AT&T	NOT INSTALLED
6.	3955 W. BIG BEAVER	VERIZON	NOT INSTALLED
7.	2595 DERBY	VERIZON	NOT INSTALLED
8.	3290 CAMDEN	VERIZON	NOT INSTALLED
9.	1914 WITHERBEE	VERIZON	INSTALLED
10.	926 NORWICH	VERIZON	NOT INSTALLED
11.	6044 NILES	VERIZON	NOT INSTALLED
12.	2100 W. MAPLE	VERIZON	INSTALLED

These are installed; not sure if they were installed before or after this memo was written in July.

### Right-of-way permits for NEW utility poles:

1.	629 KURTS	EXTENET	NOT INSTALLED
2.	4597 BEACH	AT&T	INSTALLED
3.	4365 BEACH	AT&T	INSTALLED
4.	4013 BEACH	AT&T	INSTALLED
5.	600 W. BIG BEAVER	VERIZON	NOT INSTALLED
6.	769 CHICAGO	VERIZON	NOT INSTALLED
7.	1240 WRENWOOD	VERIZON	NOT INSTALLED
8.	1035 CROOKS	VERIZON	NOT INSTALLED
9.	3320 ESSEX	VERIZON	NOT INSTALLED
10.	3077 GLOUCESTER	VERIZON	NOT INSTALLED
11.	1452 WRENWOOD	VERIZON	NOT INSTALLED
12.	1150 W. MAPLE	VERIZON	NOT INSTALLED



**Interim Financial Report  
2nd Quarter  
For The Three Months Ended  
December 31, 2021**

**CITY OF TROY**  
**QUARTERLY REPORT**  
**THREE MONTHS ENDED December 31, 2021**  
**HIGHLIGHTS**

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**General Fund**

***Revenues***

Total revenues are \$45.2 million to date and represent 76.7% of total budgeted revenues and other sources. This is a decrease of \$3.4 million or 6.8% compared to the same time period in the prior year and includes recognition of total annual tax revenues of \$36.2 million. Tax revenue increased \$0.8 million or 2.3%. Grant revenue has decreased because of the CARES Act funding received and recognized as revenue in the prior year. Charges for Services increased by \$0.6 million or 35.3% primarily in the Recreation department.

***Expenditures***

Total General Fund expenditures to date are \$27.4 million or 43.4% of the annual budget. Majority of departments appear to be within expected budgetary parameters to date. The total expenditures compared with the prior year are within expectations.

**Capital Fund**

***Revenues***

Total revenues are \$11.1 million to date and represent 59.9% of total budgeted revenues and other sources. This amount is consistent with the prior year per expectations.

***Expenditures***

Expenditures for capital projects of \$6.7 million represent 24.3% of budgeted projects. This is down approximately \$0.9 million from the prior year.

## **Debt Service Fund**

### **Revenues**

Total revenues of \$0.0 million are down \$2.0 million or 100% compared to the prior year as expected due to the debt being paid off and no millage in 2022.

### **Expenditures**

Total expenditures of \$0.0 million due to the debt being paid off in the prior year.

## **Major Streets Fund**

### **Revenues**

Total revenues of \$2.5 million represent 35.1% of total budgeted revenues. This is a decrease of \$0.8 million or 24% from prior year. The decrease is due primarily to the timing of payments from the State as the current year has one fewer payment recorded. Current trends indicate that the fund will generate budgeted amounts by the end of the fiscal year.

### **Expenditures**

Total expenditures of \$3.4 million represent 41.3% of total budgeted expenditures. This is a decrease of \$0.2 million over the prior year amount or 5.2%.

## **Local Streets Fund**

### **Revenues**

Total revenues of \$1.7 million represent 40.4% of total budgeted revenues. This is a decrease of \$0.3 million or 15.1% from prior year. The decrease is due primarily to the timing of payments from the State as the current year has one fewer payment recorded. Current trends indicate that the fund will generate budgeted amounts by the end of the fiscal year.

### **Expenditures**

Total expenditures of \$2.1 million represent 39.6% of total budgeted expenditures. This is an increase of \$0.5 million over the prior year amount or 29.4% as expected.



## **Aquatic Center**

### **Revenues**

Total revenues of \$0.4 million represent 67.4% of total budgeted revenues. This is an increase of 100% as the Aquatic Center was closed in the prior year.

### **Expenses**

Expenses of \$478 thousand or 68.9% compared to budget are substantially higher due to the closure of the Aquatic Center in the prior year.

## **Sanctuary Lake Golf Course**

### **Revenues**

Revenues of \$1.2 million are down \$0.08 million or 5.8% compared to the prior year for the same time period. Total year to date rounds are 23,754 representing a decrease of approximately 6,546 rounds from prior year. Average revenue per round is \$51.76 compared to prior year of \$43.07.

### **Expenses**

Total expenditures of \$1.2 million are up \$0.2 million or 17.6% compared to the prior year within expectations.

As in prior years, it is not anticipated that income from operations will cover the entire debt service amount budgeted at \$825 thousand. Weather conditions can have a significant impact on financial results.

## **Sylvan Glen Golf Course**

### **Revenues**

Revenues of \$1.0 million are consistent with the prior year to date amounts. Total year to date rounds are 28,062 representing a decrease of approximately 5,679 rounds from the prior year. Average revenue per round is \$31.24 compared to prior year of \$25.96.

### **Expenses**

Total expenditures of \$0.7 million are flat compared to prior year. Weather conditions can have a significant impact on financial results.

## **Sanitary Sewer Fund**

### **Revenues**

Sanitary Sewer fund revenues of \$7.8 million are down \$1.1 million or 12% from the prior year to date due primarily from consumption (sold 242,265 mcf, down 50,169 mcf or 17.2%).

### **Expenses**

Sewer fund expenses of \$9.1 million are up \$1.0 million from the prior year to date due primary to capital work on the Big Beaver Relief Drain.

## **Water Fund**

### **Revenues**

Water fund revenues of \$11.2 million are down \$1.8 million or 13.8% primarily due to a decrease in consumption (sold 242,265 mcf, down 50,169 mcf or 17.2%). Weather patterns can have a significant impact on consumption over the summer months.

### **Expenses**

Water fund total expenses of \$12.3 million are consistent with the prior year as expected.

**Quarterly Financial Report**  
**Aquatic Center Fund**  
**For the Period Ending December 31, 2021**

Description	Last Year Total Actual	Last Year Budget	Last Year Year To Date	Last Year Percent to Budget	Current Year Budget	Current Year Year To Date	Current Year % to Budget
<b>Aquatic Center Fund Revenues</b>							
CHARGES FOR SERVICES	245,220	590,000	-5,078	(0.86)	600,000	412,369	68.73
INTEREST & RENT	998	26,800	496	1.85	33,000	14,827	44.93
OTHER REVENUE	-74,362	0	0	0.00	0	-421	0.00
	<b>171,856</b>	<b>616,800</b>	<b>-4,582</b>	<b>-0.74</b>	<b>633,000</b>	<b>426,775</b>	<b>67.42</b>
<b>Aquatic Center Fund Expenditures</b>							
Aquatic Center	405,631	891,170	219,472	24.63	693,724	477,766	68.87
	<b>405,631</b>	<b>891,170</b>	<b>219,472</b>	<b>24.63</b>	<b>693,724</b>	<b>477,766</b>	<b>68.87</b>

**Quarterly Financial Report**  
**Capital Fund**  
**For the Period Ending December 31, 2021**

Description	Last Year Total Actual	Last Year Budget	Last Year Year To Date	Last Year Percent to Budget	Current Year Budget	Current Year Year To Date	Current Year % to Budget
<b>Capital Fund Revenues</b>							
TAXES	6,941,975	7,172,751	6,942,510	96.79	7,008,000	6,997,906	99.86
GRANTS	95,289	160,000	93,154	58.22	1,720,000	120,434	7.00
CONTRIBUTIONS FROM LOCAL UNITS	222,411	620,000	202,237	32.62	570,000	273,910	48.05
CHARGES FOR SERVICES	172,749	326,000	72,746	22.31	326,000	35,269	10.82
INTEREST & RENT	-87,928	11,600	76,813	662.18	36,600	89,534	244.63
OTHER REVENUE	275,249	30,000	9,637	32.12	30,000	7,252	24.17
OTHER FINANCING SOURCES	8,111,369	8,459,000	3,750,000	44.33	8,858,000	3,591,698	40.55
	<b>15,731,112</b>	<b>16,779,351</b>	<b>11,147,096</b>	<b>66.43</b>	<b>18,548,600</b>	<b>11,116,003</b>	<b>59.93</b>
<b>Capital Fund Expenditures</b>							
Capital Outlay	13,472,117	20,478,779	7,575,297	36.99	27,662,563	6,708,789	24.25
	<b>13,472,117</b>	<b>20,478,779</b>	<b>7,575,297</b>	<b>36.99</b>	<b>27,662,563</b>	<b>6,708,789</b>	<b>24.25</b>

**Quarterly Financial Report  
General Debt Service Fund  
For the Period Ending December 31, 2021**

Description	Last Year Total Actual	Last Year Budget	Last Year Year To Date	Last Year Percent to Budget	Current Year Budget	Current Year Year To Date	Current Year % to Budget
<b>General Debt Service Fund Revenues</b>							
TAXES	1,957,965	1,944,240	2,000,764	102.91	0	1,993	0.00
GRANTS	39,022	0	39,022	0.00	0	0	0.00
INTEREST & RENT	-418	9,000	304	3.37	0	0	0.00
	<b>1,996,569</b>	<b>1,953,240</b>	<b>2,040,089</b>	<b>104.45</b>		<b>1,993</b>	<b>199285.00</b>
<b>General Debt Service Fund Expenditures</b>							
Debt Service	2,905,061	2,879,260	2,844,511	98.79	0	514	0.00
	<b>2,905,061</b>	<b>2,879,260</b>	<b>2,844,511</b>	<b>98.79</b>		<b>514</b>	<b>51432.00</b>



**Quarterly Financial Report  
General Fund  
For the Period Ending December 31, 2021**

Description	Last Year Total Actual	Last Year Budget	Last Year Year To Date	Last Year Percent to Budget	Current Year Budget	Current Year Year To Date	Current Year % to Budget
<b>General Fund Revenues</b>							
TAXES	35,702,861	35,404,700	35,428,544	100.07	36,285,700	36,169,045	99.68
LICENSES AND PERMITS	2,575,883	2,948,520	1,249,829	42.39	2,692,978	1,208,456	44.87
GRANTS	14,508,368	12,438,909	7,019,141	56.43	8,454,449	3,760,950	44.48
CONTRIBUTIONS FROM LOCAL UNITS	83,193	99,390	78,664	79.15	26,000	22,986	88.41
CHARGES FOR SERVICES	6,824,049	5,652,950	1,682,994	29.77	7,448,396	2,329,283	31.27
FINES AND FORFEITURES	870,384	730,500	384,521	52.64	887,700	307,948	34.69
INTEREST & RENT	564,674	1,288,780	726,707	56.39	1,458,280	618,999	42.45
OTHER REVENUE	1,276,749	1,236,930	609,110	49.24	1,282,300	646,863	50.45
OTHER FINANCING SOURCES	233,977	339,355	1,365,671	402.43	315,835	87,911	27.83
	<b>62,640,138</b>	<b>60,140,034</b>	<b>48,545,181</b>	<b>80.72</b>	<b>58,851,638</b>	<b>45,152,441</b>	<b>76.72</b>
<b>General Fund Expenditures</b>							
General government	8,783,095	9,515,054	4,372,495	45.95	9,527,577	4,356,801	45.73
Public Safety	35,357,243	37,029,656	16,484,197	44.52	38,168,879	16,215,790	42.48
Public Works	1,795,445	1,981,432	2,661,316	134.31	2,137,070	1,217,007	56.95
Community Development	3,543,335	4,429,508	1,762,699	39.79	4,449,120	1,741,481	39.14
Recreation and Culture	5,514,447	7,634,812	3,028,869	39.67	7,712,375	3,321,860	43.07
Transfers Out & Other Uses	1,000,000	1,000,000	500,000	50.00	1,000,000	500,000	50.00
Recreation and culture-OLD	0	0	2,189	0.00	0	0	0.00
	<b>55,993,564</b>	<b>61,590,462</b>	<b>28,811,766</b>	<b>46.78</b>	<b>62,995,021</b>	<b>27,352,939</b>	<b>43.42</b>

**Quarterly Financial Report**  
**Library Fund**  
**For the Period Ending December 31, 2021**

Description	Last Year Total Actual	Last Year Budget	Last Year Year To Date	Last Year Percent to Budget	Current Year Budget	Current Year Year To Date	Current Year % to Budget
<b>Library Fund Revenues</b>							
TAXES	3,495,199	3,452,000	3,499,954	101.39	5,800,000	5,746,793	99.08
GRANTS	114,458	33,000	76,915	233.08	53,000	58,624	110.61
CONTRIBUTIONS FROM LOCAL UNITS	143,489	169,000	139,465	82.52	131,000	0	0.00
CHARGES FOR SERVICES	476	17,800	453	2.55	8,900	3,098	34.81
FINES AND FORFEITURES	2,768	50,000	1,573	3.15	25,000	2,036	8.15
INTEREST & RENT	-6,994	8,000	7,832	97.91	3,000	17,699	589.98
OTHER REVENUE	13,305	5,000	12,389	247.79	7,000	1,231	17.58
	<b>3,762,700</b>	<b>3,734,800</b>	<b>3,738,583</b>	<b>100.10</b>	<b>6,027,900</b>	<b>5,829,482</b>	<b>96.71</b>
<b>Library Fund Expenditures</b>							
Recreation and Culture	3,905,600	4,127,518	1,636,431	39.65	5,827,898	2,197,741	37.71
	<b>3,905,600</b>	<b>4,127,518</b>	<b>1,636,431</b>	<b>39.65</b>	<b>5,827,898</b>	<b>2,197,741</b>	<b>37.71</b>

**Quarterly Financial Report**  
**Local Street Fund**  
**For the Period Ending December 31, 2021**

Description	Last Year Total Actual	Last Year Budget	Last Year Year To Date	Last Year Percent to Budget	Current Year Budget	Current Year Year To Date	Current Year % to Budget
<b>Local Street Fund Revenues</b>							
GRANTS	2,683,567	2,753,650	1,269,726	46.11	2,742,000	964,489	35.17
INTEREST & RENT	-20,890	32,000	15,871	49.60	32,000	13,053	40.79
OTHER FINANCING SOURCES	1,500,000	1,500,000	750,000	50.00	1,500,000	750,000	50.00
	<b>4,162,677</b>	<b>4,285,650</b>	<b>2,035,597</b>	<b>47.50</b>	<b>4,274,000</b>	<b>1,727,542</b>	<b>40.42</b>
<b>Local Street Fund Expenditures</b>							
Public Works	1,824,055	2,482,345	0	0.00	2,488,977	744,642	29.92
Recreation and Culture	622,151	689,110	0	0.00	694,600	307,418	44.26
Transfers Out & Other Uses	1,800,000	1,800,000	1,585,176	88.07	2,000,000	1,000,000	50.00
	<b>4,246,205</b>	<b>4,971,455</b>	<b>1,585,176</b>	<b>31.89</b>	<b>5,183,577</b>	<b>2,052,060</b>	<b>39.59</b>

**Quarterly Financial Report**  
**Major Street Fund**  
**For the Period Ending December 31, 2021**

Description	Last Year Total Actual	Last Year Budget	Last Year Year To Date	Last Year Percent to Budget	Current Year Budget	Current Year Year To Date	Current Year % to Budget
<b>Major Street Fund Revenues</b>							
GRANTS	6,785,651	6,976,570	3,211,791	46.04	6,948,200	2,443,248	35.16
INTEREST & RENT	-18,666	50,000	16,577	33.15	35,000	9,938	28.39
	<b>6,766,985</b>	<b>7,026,570</b>	<b>3,228,368</b>	<b>45.95</b>	<b>6,983,200</b>	<b>2,453,186</b>	<b>35.13</b>
<b>Major Street Fund Expenditures</b>							
Public Works	2,397,294	3,117,471	0	0.00	3,230,757	921,000	28.51
Recreation and Culture	43,551	110,690	0	0.00	112,307	27,112	24.14
Transfers Out & Other Uses	6,200,000	6,200,000	3,641,046	58.73	5,000,000	2,500,000	50.00
	<b>8,640,845</b>	<b>9,428,161</b>	<b>3,641,046</b>	<b>38.62</b>	<b>8,343,064</b>	<b>3,448,112</b>	<b>41.33</b>

**Quarterly Financial Report**  
**Refuse Fund**  
**For the Period Ending December 31, 2021**

Description	Last Year Total Actual	Last Year Budget	Last Year Year To Date	Last Year Percent to Budget	Current Year Budget	Current Year Year To Date	Current Year % to Budget
<b>Refuse Fund Revenues</b>							
TAXES	5,601,191	5,630,000	5,608,331	99.62	5,717,000	5,727,445	100.18
GRANTS	70,463	0	70,463	0.00	30,000	93,902	313.01
CHARGES FOR SERVICES	422	600	48	7.92	500	312	62.36
INTEREST & RENT	-13,980	40,000	11,984	29.96	10,000	18,723	187.23
	<b>5,658,096</b>	<b>5,670,600</b>	<b>5,690,825</b>	<b>100.36</b>	<b>5,757,500</b>	<b>5,840,382</b>	<b>101.44</b>
<b>Refuse Fund Expenditures</b>							
Sanitation	5,534,659	5,586,855	2,511,038	44.95	5,747,460	2,570,867	44.73
	<b>5,534,659</b>	<b>5,586,855</b>	<b>2,511,038</b>	<b>44.95</b>	<b>5,747,460</b>	<b>2,570,867</b>	<b>44.73</b>



**Quarterly Financial Report**  
**Sanctuary Lake Golf Course**  
**For the Period Ending December 31, 2021**

Description	Last Year Total Actual	Last Year Budget	Last Year Year To Date	Last Year Percent to Budget	Current Year Budget	Current Year Year To Date	Current Year % to Budget
<b>Sanctuary Lake Golf Course Revenues</b>							
CHARGES FOR SERVICES	2,310,026	1,738,800	1,305,040	75.05	1,775,350	1,229,603	69.26
	<b>2,310,026</b>	<b>1,738,800</b>	<b>1,305,040</b>	<b>75.05</b>	<b>1,775,350</b>	<b>1,229,603</b>	<b>69.26</b>
<b>Sanctuary Lake Golf Course Expenditures</b>							
Sanctuary Lake	2,204,505	2,485,385	1,049,707	42.24	2,720,920	1,234,845	45.38
	<b>2,204,505</b>	<b>2,485,385</b>	<b>1,049,707</b>	<b>42.24</b>	<b>2,720,920</b>	<b>1,234,845</b>	<b>45.38</b>

**Quarterly Financial Report**  
**Sewer Fund**  
**For the Period Ending December 31, 2021**

Description	Last Year Total Actual	Last Year Budget	Last Year Year To Date	Last Year Percent to Budget	Current Year Budget	Current Year Year To Date	Current Year % to Budget
<b>Sewer Fund Revenues</b>							
CONTRIBUTIONS FROM LOCAL UNITS	5,910	0	5,910	0.00	0	63,672	0.00
CHARGES FOR SERVICES	13,753,882	14,284,400	8,695,280	60.87	14,721,800	7,614,992	51.73
INTEREST & RENT	-109,203	300,000	114,996	38.33	200,000	77,287	38.64
OTHER REVENUE	962,189	0	0	0.00	0	0	0.00
	<b>14,612,777</b>	<b>14,584,400</b>	<b>8,816,186</b>	<b>60.45</b>	<b>14,921,800</b>	<b>7,755,951</b>	<b>51.98</b>
<b>Sewer Fund Expenditures</b>							
Sewer	15,092,151	26,668,550	8,098,471	30.37	20,108,603	9,081,730	45.16
	<b>15,092,151</b>	<b>26,668,550</b>	<b>8,098,471</b>	<b>30.37</b>	<b>20,108,603</b>	<b>9,081,730</b>	<b>45.16</b>

**Quarterly Financial Report**  
**Sylvan Glen Golf Course**  
**For the Period Ending December 31, 2021**

Description	Last Year Total Actual	Last Year Budget	Last Year Year To Date	Last Year Percent to Budget	Current Year Budget	Current Year Year To Date	Current Year % to Budget
<b>Sylvan Glen Golf Course Revenues</b>							
CHARGES FOR SERVICES	1,597,244	1,146,070	875,811	76.42	1,180,120	876,655	74.29
INTEREST & RENT	202,040	182,400	148,800	81.58	182,400	151,560	83.09
OTHER REVENUE	750	0	0	0.00	0	0	0.00
	<b>1,800,034</b>	<b>1,328,470</b>	<b>1,024,611</b>	<b>77.13</b>	<b>1,362,520</b>	<b>1,028,215</b>	<b>75.46</b>
<b>Sylvan Glen Golf Course Expenditures</b>							
Sylvan Glen	1,260,070	1,366,480	647,008	47.35	1,303,150	735,874	56.47
	<b>1,260,070</b>	<b>1,366,480</b>	<b>647,008</b>	<b>47.35</b>	<b>1,303,150</b>	<b>735,874</b>	<b>56.47</b>

**Quarterly Financial Report**  
**Water Fund**  
**For the Period Ending December 31, 2021**

Description	Last Year Total Actual	Last Year Budget	Last Year Year To Date	Last Year Percent to Budget	Current Year Budget	Current Year Year To Date	Current Year % to Budget
<b>Water Fund Revenues</b>							
CONTRIBUTIONS FROM LOCAL UNITS	0	0	0	0.00	0	63,672	0.00
CHARGES FOR SERVICES	20,482,601	20,947,500	12,923,427	61.69	21,406,500	11,017,613	51.47
INTEREST & RENT	-132,439	104,300	53,262	51.07	104,400	45,652	43.73
OTHER REVENUE	1,115,475	100,100	45,050	45.01	100,100	53,385	53.33
	<b>21,465,637</b>	<b>21,151,900</b>	<b>13,021,739</b>	<b>61.56</b>	<b>21,611,000</b>	<b>11,180,322</b>	<b>51.73</b>
<b>Water Fund Expenditures</b>							
Water	20,674,276	26,061,184	12,328,933	47.31	25,466,336	12,305,526	48.32
	<b>20,674,276</b>	<b>26,061,184</b>	<b>12,328,933</b>	<b>47.31</b>	<b>25,466,336</b>	<b>12,305,526</b>	<b>48.32</b>

**City of Troy**  
**Schedule of Cash and Investments**  
**12/31/2021**

Fund	Financial Institution	Type of Investment	Rate	Maturity Date	G/L Account	Balance per Bank (cost)	Deposits in Transit	Outstanding Checks	Transfers	Other Items	Balance per Books
Pooled Investment Fund	Comerica	Money Market	0.06%		751.1120	\$ 629,990.54					\$ 629,990.54
Pooled Investment Fund	Comerica	Checking Account	-		751.1001.001	\$ 38,675,722.83	\$ 107,163.77	\$ (3,629,197.61)	\$ (264,432.54)	\$ (312,023.74)	\$ 34,577,232.71
Pooled Investment Fund	Comerica	Cash & Cash Equivalents	0.00%		751.1001.230	\$ 42,619.37					\$ 42,619.37
Pooled Investment Fund	Comerica	Government & Municipal Bonds	0.02%		751.1120	\$ 23,327,481.05					\$ 23,327,481.05
Pooled Investment Fund	Fifth Third Bank	Cash & Cash Equivalents	0.03%		751.1001.230	\$ 1,108,267.54					\$ 1,108,267.54
Pooled Investment Fund	Fifth Third Bank	Government & Municipal Bonds	0.02%		751.1120	\$ 50,284,521.34					\$ 50,284,521.34
Pooled Investment Fund	Huntington Investment Co	Cash & Cash Equivalents	0.03%		751.1001.230	\$ 56,828.96					\$ 56,828.96
Pooled Investment Fund	Huntington Investment Co	Government Bonds	0.01%		751.1120	\$ 1,129,374.82					\$ 1,129,374.82
Pooled Investment Fund	Huntington Nat'l Bank	Money Market	0.01%		751.1001.140	\$ 615,547.63					\$ 615,547.63
Pooled Investment Fund	Independent Bank	Certificate of Deposit	0.08%	01/11/22	751.1003	\$ 5,979,823.25					\$ 5,979,823.25
Pooled Investment Fund	Level One Bank	Certificate of Deposit	0.20%	05/17/22	751.1003	\$ 221,786.86					\$ 221,786.86
Pooled Investment Fund	MBIA-Class	Money Market	0.03%		751.1120	\$ 1,816,392.91					\$ 1,816,392.91
Pooled Investment Fund	Morgan Stanley Smith Barney	Cash & Cash Equivalents	0.01%		751.1001.230	\$ 7,005,544.02					\$ 7,005,544.02
Pooled Investment Fund	Morgan Stanley Smith Barney	Certificate of Deposit	-		751.1120	\$ -					\$ -
Pooled Investment Fund	PNC Bank	Money Market	0.01%		751.1120	\$ 5,286,186.44					\$ 5,286,186.44
Pooled Investment Fund	Huntington (Formerly TCF Bank)	Money Market	0.01%		751.1120	\$ 5,145,911.35					\$ 5,145,911.35
Sanctuary Lake Golf Course	Fifth Third Bank	Checking Account	-		583.1001.100	\$ 932,766.06	\$ 12,180.63	\$ (48,369.70)			\$ 896,576.99
Sanctuary Lake Golf Course	Fifth Third Bank	Checking Account	-		583.1001.130	\$ 4,007.15	\$ -	\$ (3,082.53)			\$ 924.62
Sylvan Glen Golf Course	Fifth Third Bank	Checking Account	-		584.1001.100	\$ 821,577.39	\$ -	\$ (9,153.05)		\$ (523.26)	\$ 811,901.08
Sylvan Glen Golf Course	Fifth Third Bank	Checking Account	-		584.1001.130	\$ 632.58	\$ -	\$ -			\$ 632.58
Trust & Agency Fund	Comerica	Checking Account	-		701.1001.001	\$ 5,927,606.83	\$ 583,138.57	\$ (21,798.17)	\$ 264,402.54	\$ (159,895.83)	\$ 6,593,453.94
Water Fund	Fifth Third Bank	Cash & Cash Equivalents	0.03%		591.1001.100	\$ 138,457.05					\$ 138,457.05
Water Fund	Fifth Third Bank	Government & Municipal Bonds	0.02%		591.1120	\$ 4,545,422.65					\$ 4,545,422.65
<b>Total</b>						<b>\$ 153,696,468.62</b>	<b>\$ 702,482.97</b>	<b>\$ (3,711,601.06)</b>	<b>\$ (30.00)</b>	<b>\$ (472,442.83)</b>	<b>\$ 150,214,877.70</b>





500 West Big Beaver  
Troy, MI 48084  
troymi.gov

O-02d

## FROM THE OFFICE OF THE CITY MANAGER

Date: February 10, 2022

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Assistant City Manager

Subject: Fiscal Year 2022-2023 Budget Proposals

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### **Background**

The 2021 City of Troy Advance was held on November 13, 2021. City Council and staff met for discussions facilitated by The Leadership Group (TLG). TLG facilitators presented their report to City Council on January 24, 2022. One of the goals of this project was to provide input on the proposed budget for fiscal year 2022-2023. The fiscal year 2022-2023 proposed budget will be presented to City Council on April 4, 2022. In the meantime, the purpose of this memo is to provide a brief update regarding forthcoming budget proposals resulting from the 2021 City of Troy Advance.

### **Topic 1: Communication and Community Engagement**

Solutions and Recommendations:

- Develop a centralized communication and engagement team dedicated to public relations and outreach.
- Create our vision/identity with resident feedback first.
- Create 5-minute educational videos on issues and topics, like funding scenarios.

The fiscal year 2022-2023 proposed budget will include a new position to lead the City's communication and engagement team. Assistant City Manager Bruner is preparing a job description. The communication and engagement team will be responsible for the City's external diversity, equity and inclusion initiatives.

### **Topic 2a: Facilities (core facilities and infrastructure)**

Solutions and Recommendations:

- Create and implement a vision for staffing (number of positions, benefits, etc.).
- Create, implement and communicate publicly a vision and budget for City Hall capital improvements.
- Explore use of the infrastructure bill to support City Hall improvements.

The fiscal year 2022-2023 proposed budget will include a new position to help address staffing. In 2021, job postings increased by 68% compared to a typical year. Full-time new-hires and promotions increased 71% and full-time separations (including retirements) increased by 111% compared to a typical year. Accordingly, employee attraction, engagement, and retention has never been more challenging or important. Human Resources Director Menig is preparing a job description. Human



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## FROM THE OFFICE OF THE CITY MANAGER

Resources has taken the lead on instituting diversity, equity and inclusion practices internally and will continue to lead those efforts.

A team of City staff will be tasked with addressing the Solutions and Recommendations related to City Hall. City Hall capital improvements will be discussed when the budget is presented.

### **Topic 2b: Facilities (quality of life amenities and facilities)**

Solutions and Recommendations:

- Formulate a plan for the Aquatic Center.
- Develop a vision and 10-20-year plan for quality of life and leisure activities.
- Explore ideas and publicly share options including funding strategies.

A team of City staff will be tasked with formulating a plan for the Aquatic Center. Capital improvements will be discussed when the budget is presented. The City's communication and engagement team will be tasked with addressing the Solutions and Recommendations related to quality of life and leisure activities, and funding strategies. In addition, the fiscal year 2022-2023 proposed budget will include funding for a resident survey to help prioritize amenities and funding strategies.

### **Topic 3: Funding**

Solutions and Recommendations:

- Ask residents for a parks and recreation millage (i.e. greenspace, specific projects).
- Explore non-committee approaches to remove millage cap (i.e. ballot vote).
- Utilize community engagement forums to identify priorities and then develop funding options.
- Separate funding between wants and needs.

The City's communication and engagement team will be tasked with determining what, if any, new funding strategies the community is most likely to support. This is related to, not separate from, the activities described above.

**Beth L Tashnick**

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**Subject:** FW: Gratitude

-----Original Message-----

From: P Tennes

Sent: Tuesday, February 8, 2022 10:25 PM

To: City Manager Distribution Group

Subject: Gratitude

Manager Miller-

We often recognize our first responders for the work they do in our community on behalf of others, but tonight I witnessed some who probably don't receive as much recognition.

There appeared to be a water main break in our neighborhood on Shallowdale. As I return to write this in my warm home, members of the DPW were in a wet, muddy hole addressing this issue. I'm sure this is a regular occurrence, but wanted to express our gratitude to these employees and the city for services we often take for granted.

Respectfully,  
Paul Tennes

Sent from my iPhone

**Beth L Tashnick**

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**Subject:** add to agenda?

**From:** Ethan Baker

**Sent:** Thursday, February 10, 2022 10:50 AM

**To:** Bob Bruner

**Subject:** add to agenda?

Can we make sure this is shared?

"Hey Ethan Good Morning.

I just wanted to reach out to you to tell you about the Wonderful experience that I had today at our City Assesors Office. There was a Great lady with blonde hair, who took care of me and I can not express enough how nice she was along with being professional. If there is some way that you could show her some positive recognition, I would greatly appreciate it. Please have a wonderful day knowing that your office is in good hands."



**Ethan Baker**  
**Mayor of Troy**

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Office of the Mayor  
500 W. Big Beaver Road  
Troy, Michigan 48084  
248.716.4279 | 888.320-0488 fax  
[www.TroyMI.gov](http://www.TroyMI.gov)  
Twitter: @EthanBakerMI  
[www.facebook.com/EthanBakerMI](https://www.facebook.com/EthanBakerMI)  
Instagram: @EthanBakerMI



January 27, 2022

CITY CLERK  
CITY OF TROY  
500 W. BIG BEAVER ROAD  
TROY, MI 48084

**STATE OF MICHIGAN  
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION NOTICE OF HEARING  
FOR THE ELECTRIC CUSTOMERS OF  
DTE ELECTRIC COMPANY  
CASE NO. U-20836**

- DTE Electric Company requests Michigan Public Service Commission's approval for authority to increase its rates, amend its rate schedules and rules governing the distribution and supply of electric energy, and for miscellaneous accounting authority.
- The information below describes how a person may participate in this case.
- You may call or write DTE Electric Company, One Energy Plaza, 570 SB, Detroit, MI 48226, (800) 477-4747, for a free copy of its application. Any person may review the documents at the offices of DTE Electric Company or on the Commission's website at: [michigan.gov/mpscedockets](https://michigan.gov/mpscedockets).
- A pre-hearing will be held:

**DATE/TIME:** Friday, February 18, 2022 at 9:00 AM

**BEFORE:** Administrative Law Judge Sharon Feldman

**LOCATION:** Video/Teleconferencing

**PARTICIPATION:** Any interested person may participate. Persons needing any assistance to participate should contact the Commission's Executive Secretary at (517) 284-8090, or by email at [mpscedockets@michigan.gov](mailto:mpscedockets@michigan.gov) in advance of the hearing.

The Michigan Public Service Commission (Commission) will hold a pre-hearing to consider DTE Electric Company's (DTE Electric) January 21, 2022 application requesting the Commission to: 1) approve an additional annual revenue increase in the amount of approximately \$388 million effective as early as November 10, 2022, in order to recover, among other things, DTE Electric's increased investments in plant involving generation and the electric distribution system and the associated depreciation and property tax increases; 2) approve DTE Electric's proposed capital structure and return on equity; 3) grant DTE Electric's request for tree trimming expenditures and the associated request for regulatory asset treatment through 2024; 4) approve new rates effective as early as November 10, 2022 as proposed by DTE Electric; 5) grant DTE Electric's request to approve the PSCR base; 6) approve DTE Electric's proposals to implement certain customer rate schedules and tariffs; 7) approve recovery of DTE Electric's generation investments; 8) approve recovery of DTE Electric's investments related to the



strengthening of its distribution system and reliability improvements; 9) approve all proposed pilot programs as requested by DTE Electric; 10) approve all proposed regulatory accounting treatments as requested by DTE Electric; 11) approve a capacity charge based on the methodology established in Case No. U- 20162 and the capacity-related costs approved as proposed; 12) grant any other relief described and requested as proposed by DTE Electric.

All documents filed in this case shall be submitted electronically through the Commission's E-Dockets website at: [michigan.gov/mpscdockets](http://michigan.gov/mpscdockets). Requirements and instructions for filing can be found in the User Manual on the E-Dockets help page. Documents may also be submitted, in Word or PDF format, as an attachment to an email sent to: [mpscdockets@michigan.gov](mailto:mpscdockets@michigan.gov). If you require assistance prior to e-filing, contact Commission staff at (517) 284-8090 or by email at: [mpscdockets@michigan.gov](mailto:mpscdockets@michigan.gov).

Any person wishing to intervene and become a party to the case shall electronically file a petition to intervene with this Commission by February 11, 2022. (Interested persons may elect to file using the traditional paper format.) The proof of service shall indicate service upon DTE Electric Company's attorney, Jon P. Christinidis, One Energy Plaza, Detroit, MI 48226.

The prehearing is scheduled to be held remotely by video conference or teleconference. Persons filing a petition to intervene will be advised of the process to participate in the hearing.

Any person wishing to participate without intervention under Mich Admin Code, R 792.10413 (Rule 413), or file a public comment, may do so by filing a written statement in this docket. The written statement may be mailed or emailed and should reference Case No. **U-20836**. Statements may be emailed to: [mpscdockets@michigan.gov](mailto:mpscdockets@michigan.gov). Statements may be mailed to: Executive Secretary, Michigan Public Service Commission, 7109 West Saginaw Hwy., Lansing, MI 48917. All information submitted to the Commission in this matter becomes public information, thus available on the Michigan Public Service Commission's website, and subject to disclosure. Please do not include information you wish to remain private. For more information on how to participate in a case, you may contact the Commission at the above address or by telephone at (517) 284-8090.

Requests for adjournment must be made pursuant to Michigan Office of Administrative Hearings and Rules R 792.10422 and R 792.10432. Requests for further information on adjournment should be directed to (517) 284-8130.

For more information on how to participate in a case, you may contact the Commission at the above address or by telephone at (517) 284-8090.

The Utility Consumer Representation Fund has been created for the purpose of aiding in the representation of residential utility customers in various Commission proceedings. Contact the Chairperson, Utility Consumer Participation Board, Department of Licensing and Regulatory Affairs, P.O. Box 30004, Lansing, Michigan 48909, for more information.

Jurisdiction is pursuant to 1909 PA 106, as amended, MCL 460.551 et seq.; 1919 PA 419, as amended, MCL 460.54 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; and Parts 1 & 4 of the Michigan Office of Administrative Hearings and Rules, Mich. Admin Code, R 792.10106 and R 792.10401 through R 792.10448.