



AGENDA
CHARTER TOWNSHIP OF MERIDIAN
TOWNSHIP BOARD – REGULAR MEETING
February 4, 2020 6:00 pm

1. CALL MEETING TO ORDER
2. PLEDGE OF ALLEGIANCE/INTRODUCTIONS
3. ROLL CALL
4. PRESENTATION
 - A. 2019 Township Annual Report
5. CITIZENS ADDRESS AGENDA ITEMS AND NON-AGENDA ITEMS*
6. TOWNSHIP MANAGER REPORT
7. BOARD MEMBER REPORTS OF ACTIVITIES AND ANNOUNCEMENTS
8. APPROVAL OF AGENDA
9. CONSENT AGENDA
 - A. Communications
 - B. Minutes-January 21, 2020 Regular Meeting
 - C. Bills
 - D. Resolution in Recognition of Ann Chapman, Haslett Library Head Librarian
 - E. Resolution in Recognition of Bart Wegenke, Haslett High School Principal
10. QUESTIONS FOR THE ATTORNEY
11. HEARINGS (CANARY)
 - A. Mixed Use Planned Unit Development #19034 (Hudson Senior Living) Pine Village
12. ACTION ITEMS (PINK)
 - A. Rezoning #19090 (Planning Commission) Hagadorn Road-**Final Adoption**
 - B. Township Manager 2019 Performance Review Summary
 - C. Resolution Commemorating Black History Month
13. BOARD DISCUSSION ITEMS (ORCHID)
 - A. Mixed Use Planned Unit Development #19034 (Hudson Senior Living) Pine Village
 - B. Special Use Permit #19181 (Hudson Senior Living) Pine Village
 - C. Woodward Way PILOT
 - D. Rezoning #19100 (Durow) 1259 Grand River Avenue RR and RRA to C-2
 - E. Fixed Asset Capitalization Policy
14. COMMENTS FROM THE PUBLIC
15. OTHER MATTERS AND BOARD MEMBER COMMENTS
16. ADJOURNMENT

All comments limited to 3 minutes, unless prior approval for additional time for good cause is obtained from the Supervisor.
Appointment of Supervisor Pro Tem and/ or Temporary Clerk if necessary.

Individuals with disabilities requiring auxiliary aids or services should contact the Meridian Township Board by contacting:
Township Manager Frank L. Walsh, 5151 Marsh Road, Okemos, MI 48864 or 517.853.4258 - Ten Day Notice is Required.
Meeting Location: 5151 Marsh Road, Okemos, MI 48864 Township Hall



2019

Annual Report

Charter Township of Meridian



Meridian Township

5151 Marsh Road
Okemos, MI 48864
517.853.4000



meridian.mi.us

TOWNSHIP BOARD MEMBERS

Ronald J. Styka, Supervisor

Brett Dreyfus, Clerk

Phil Deschaine, Treasurer

Courtney Wisinski, Trustee

Patricia Herring Jackson, Trustee

Dan Opsommer, Trustee

Kathy Ann Sundland, Trustee





To: Board Members

From: Frank L. Walsh, Township Manager

Date: January 24, 2020

Re: 2019 Annual Report

The Meridian Township Management Team is pleased to present you with the Township's 2019 Annual Report. The enclosed report of departmental activities is meant to satisfy the requirements of the Charter Township Act and provide our residents with a complete overview of 2019 operations. This report is a compilation of activities provided by each department.

Distribution of the Annual Report is limited to those individuals on boards and commissions who specifically request a copy. A copy of this report will be on file in the Clerk's Office, both libraries and posted on the Township's website at www.meridian.mi.us.

Please feel free to contact me should you have any questions regarding this report. We will continue our efforts in 2020 to work as a team united in spirit for the betterment of our 42,000 Township residents.

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2019 GOALS ACTION PLAN

- A. In conjunction with the Transportation Commission, and Township Board, develop and implement a strategic plan to increase our annual funding for local roads.**
- B. Complete the relocation of the Farmers' Market to the "Marketplace on the Green" at the Meridian Mall.**
- C. Break ground on redevelopment of Downtown Okemos and Downtown Haslett.**
- D. With the support of the Transportation Commission, and Township Board, finalize and implement a long term funding plan for public transportation. The plan shall include a detailed scope for Redi-Ride services.**
- E. Continue to work to connect the Township's pathway system, including construction of the Okemos Road Boardwalk.**
- F. Work closely with Meridian Mall ownership to strengthen the vitality of the mall's future within our community.**
- G. Develop a plan to fairly negotiate new labor agreements with our seven bargaining groups.**
- H. Complete state accreditation of the Meridian Township Police Department through the Michigan Association of Chiefs of Police.**
- I. Continue to maximize recruiting and networking efforts to achieve increased diversity in our workforce.**
- J. Explore housing options and alternatives to encourage diverse populations and targeted groups to live in the Township.**

Meridian Township

2019 Action Plan Overview

A. In conjunction with the Transportation Commission, and Township Board, develop and implement a strategic plan to increase our annual funding for local roads.

In Meridian Township, the Ingham County Road Department (ICRD) is responsible for all road (excluding MDOT routes), and bridge maintenance and repairs. For the past several years, the ICRD has only been able to allocate approximately \$173,000 per year towards our 147 miles of local roads for pavement resurfacing. After conducting an engineering analysis, it was determined that our local road system needed annual funding of \$3.5 million to improve the roads to a Pavement Surface Evaluation and Rating (PASER) condition rating of 8 (“good”), within a ten year period.

Upon receiving and reviewing the analysis, the Meridian Transportation Commission recommended, and the Township Board approved, the placement of a proposal on the August 6, 2019 ballot to improve significantly the local road system. The proposal, upon approval of the voters, would provide a dedicated millage of 1.95 mills each year to support a \$35 million, ten-year bond.

Throughout the summer of 2019, Deputy Manager Perry and others, provided over 30 neighborhood association and community group meetings, to discuss facts related to the ballot proposal and the associated strategic plan. On August 6, 2019, 60% of the voters casting a ballot approved the \$35 million, ten-year local road plan.

On December 10, 2019, the Township Board and community was presented with year one of the 10 year plan. The 2020 plan will involve resurfacing work to roads that have a poor condition rating and preventative maintenance work to preserve roads so that they do not continue to deteriorate and require costlier repairs in the future.

B. Complete the relocation of the Farmers’ Market to the “Marketplace on the Green” at the Meridian Mall.

A tremendous amount of legwork has been done in preparation for the new Marketplace on the Green. The contract for construction was awarded to Gordon Construction Services for site work and the pavilion contract was awarded to Mid-States Recreation. The pavilion design/engineering is in process and once finalized, will move to the fabrication stage. Site work is scheduled to begin once we obtain a required Storm Water Permit from the Ingham County Drain Office. We have experienced difficulties in permit approval which has caused a delay in construction. Our hope is to begin site work in December with the pavilion installation in late winter. We have received proposals for play equipment and site furnishings which will be ordered before the end of 2019.

C. Break ground on redevelopment of Downtown Okemos and Downtown Haslett.

True North Development Company submitted for an MUPUD and SUP on April 23, 2019 for a full, two-block development plan west of Okemos Road on the blocks north and south of Hamilton. The Township Board approved the plans formally on July 9, 2019. True North deployed the architects

and engineers to create detailed design plans, which were then submitted to construction companies for pricing for the project. EGLE (formally MDEQ) utilized funds that were granted for the project to begin the mitigation of the source contamination from the drycleaner site. This work was completed in September 2019, as the funds needed to be spent before EGLE's fiscal year end. True North and its partners are confirming final designs for the utilities and other infrastructure needs before beginning construction in the late spring of 2020 on a mixed use project expected to house 200+ luxury residential units and more than 50,000 square feet of commercial space including the new Douglas J flagship salon and spa. A 24-month build cycle is expected with a completion date of spring 2022.

Due to a lack of activity in the Haslett PICA, Director Buck solicited the MEDC for pre-development funding for a market assessment of the broader Haslett commercial district. A grant of \$25,000 was earned and the firm of Giffels-Webster was selected to perform the study. There were two community forums held on July 24, 2019 and September 4, 2019. The result is a document that was finalized in November which clearly states the consultants assessment of the pent up demand for housing, commercial and office space usage that they feel would be welcomed and absorbed if constructed between now and 2025. The results of this study were shared with the Township Board, the Planning Commission, the property owners and prospective developers.

D. With the support of the Transportation Commission, and Township Board, finalize and implement a long term funding plan for public transportation. The plan shall include a detailed scope for Redi-Ride services.

The Capital Area Transportation Authority (CATA) has provided the Township residents with a Redi-Ride transportation service funded with a voter approved dedicated millage since 1999.

In 2019, the Meridian Township voters approved the renewal of a 5-year millage to fund the continuation of the service until 2024. The 0.1983 millage was approved by 63% of the electorate, and will generate \$360,756 in its first year.

In May of 2019, the Township and CATA revised the existing operating agreement to include: an update on the expanded operating hours, an update on the fares to reflect the new rates, the incorporation of new detailed reporting requirements to the Transportation Commission, the implementation of new scheduling and tracking software, new termination language and a commitment from CATA to include new capacity to the service.

In October, the agreement was amended to add an additional bus Monday through Friday from 1:45 to 5:00 pm and one bus on Saturday from 10:00 am to 2:00 pm upholding their commitment to the Township to add additional capacity.

E. Continue to work to connect the Township's pathway system, including construction of the Okemos Road Boardwalk.

Since 1974, the residents of Meridian Township have supported a dedicated pathway millage to fund over 70 miles of seven-foot wide sidewalk throughout the community.

As part of the Pathway Master Plan, a proposed elevated boardwalk along the east side of Okemos Road, crossing the Mud Lake Drain, has existed for several decades. The challenges of the drain, associated wetland, poor soils, frequent flooding and narrow right-of-way made the project prohibitively expensive and difficult to complete.

In 2019, the Public Works and Parks team undertook the challenge to pursue a grant that would fund the estimated \$1.3 million dollar boardwalk. With the assistance of our Ingham County partners, and the County Parks and Trails millage, the funding was successfully secured.

Design, permitting and construction inspection was overseen by the DPW Engineering Team. Construction of the quarter mile wooden boardwalk was completed in the fall of 2019. A ribbon cutting ceremony to a crowd of over 75 attendees, and walk was held on November 4, 2019.

F. Work closely with Meridian Mall ownership to strengthen the vitality of the mall's future within our community.

On February 18, 2019, Launch Trampoline Park opened its doors in nearly 30,000 square feet of the former Gordman's space welcoming a new entertainment option not only for mall shoppers, but as a regional destination. On May 22, 2019, there was a ground breaking ceremony for the Marketplace on the Green, the new farmer's market location. This regional gem will provide ample parking, safe crossing to Central Park - complete with enhanced wayfinding, improved trail system, dog parks, access to Nancy Moore Park and the long awaited "Campus to Lake Lansing" spur of the Lansing River Trail. Not to take away from Launch, High Caliber Karting and Entertainment (HCK) hosted a VIP "soft" opening on August 30, 2019 and a full grand opening and ribbon cutting ceremony on September 20, 2019. HCK is located in the former single-story Younkers site comprised of nearly 80,000 square feet. They feature indoor go-karts, axe throwing, pocket soccer, video games, meeting rooms and a full bistro. Located adjacent to Launch Trampoline Park, facing the Marketplace on the Green, the south side of the mall has become the regions premier entertainment district. Director Buck is deeply engaged with CBL Properties, the owners of Meridian Mall, and everything from new restaurants, housing, office space, hotel and convention center have been discussed and there is reason to believe that one or more of these uses could be proposed on the mall campus in 2020.

G. Develop a plan to fairly negotiate new labor agreements with our seven bargaining groups.

Meridian Township has seven bargaining groups including the Administrative Professionals, Supervisory Professionals, Non-Supervisory Professionals, Department of Public Works, Meridian Township Firefighters Association, Meridian Township Police Supervisory Unit and Meridian Township Police Officers. Township Collective Bargaining Team members strategically evaluated township unfunded MERS liability and OPEB risks, current retirement healthcare, dental and vision coverage for Police and Fire units, comparable wages, annual percentage increases for comparable cities and townships, cost of living, recruitment and retention, continued ability for providing a superior benefits package including no employee cost sharing for healthcare, dental or vision coverages and overall work environment conditions. There is also a willingness to look at different contract durations if proven beneficial to both sides. To date, we have settled four of the seven collective bargaining agreements.

H. Complete state accreditation of the Meridian Township Police Department through the Michigan Association of Chiefs of Police.

A preliminary accreditation assessment was conducted by outside assessors on September 24, 2019. We will have our final assessment for accreditation on December 9-10, 2019. Once the final assessment is complete, a report will be submitted to the Michigan Law Enforcement Accreditation Commission for review. If the Commission awards our Department accreditation, we will receive accreditation at the February 6, 2020 Commission meeting that will be held at the Michigan Association of Chiefs of Police mid-winter conference.

I. Continue to maximize recruiting and networking efforts to achieve increased diversity in our workforce.

Meridian Township as a whole, continues to be represented by Human Resources at the highly recognized and attended MSU sponsored Diversity Career Fair and Lansing Community College

(LCC) Career Fairs. Other primary efforts focused on employee referrals, personalized networking in the community and ongoing outreach through the highest viewed job sites through our on-line application process and social media accounts connected to our Township website. Current employment numbers for the 2019 Bureau of Labor Statistics, Department of Labor, show our utilization as 34% females and 12% minority representation. Equal Employment Opportunity reports generated from voluntary submission for the on-line application system show 824 applicants thus far in 2019 with a 20% minority application rate.

J. Explore housing options and alternatives to encourage diverse populations and targeted groups to live in the Township.

The Township Board in May approved an amendment to the Code of Ordinances to allow for facilities (Senior Living Community) that provide a continuity of residential occupancy and health care for seniors. The first project using the amendment is being proposed on Hannah Boulevard. The special use application for the project is expected to be submitted in early 2020. The Township Board, in September, approved a 49 unit townhouse/apartment development (Woodward Way) on Sirhal Drive that will provide housing for persons of low to moderate income. In November, a Mixed Use Planned Unit Development application was submitted for the western portion of Haslett Village Square shopping center. The proposed project (Pine Village) will include 133 apartment units for seniors. An amendment was also initiated by the Township Board to allow detached single family dwelling units as part of a multiple family development. Staff is currently working on a draft ordinance for the amendment.

ACCOUNTING AND BUDGETING



The Department of Accounting and Budgeting is responsible for all aspects of the Township's accounting system. The Department maintains the general ledger, processes outgoing payments through the accounts payable system, approves purchase orders, processes utility billing transactions, prepares and monitors the budget, coordinates the pension board meeting, coordinates grant accounting, and is the coordinating department for the annual financial audit.

Meridian Cares functions to ensure that the human infrastructure within the community remains strong and vital. To that end, the program strives to help residents by developing, coordinating, and promoting local resources.

Information, referral, or emergency assistance was provided to Township residents for various services on an as-needed basis. 1,326 requests were received and included, but were not limited to, emergency assistance for shelter, utilities, furniture, food, clothing, transportation, food baskets, or other issues. Requests for assistance came from 465 households.

Year	Number of Households Served	Funding Spent
2015	491	\$12,587
2016	488	\$9,810
2017	436	\$8,475
2018	509	\$10,589
2019	465	\$16,855

2019 DEPARTMENT GOALS AND ACTION PLAN

Work with Invoice Cloud to Implement the Online Payment System

Invoice cloud is up and running for both Utility Billing and Tax. As of December 31st, we have had 8,920 payments processed through the system totaling \$3,579,335. There are 1,922 residents signed up for paperless and 1,513 signed up for auto pay. We will continue to see these numbers climb as we transition people off the old system and as we see the payments for the winter taxes start to come into the system.

Implement GASB 84 Fiduciary Activities

Finance will be working on identifying and moving accounts to comply with this new GASB. This will be done as part of the year-end audit.

Implement New Chart of Accounts from MI Treasury

The State of Michigan has changed the implementation of this new chart of account. They have set a new date of December 2021 for this implementation. The State of Michigan is encouraging early implementation. We will look at this for a 2020 goal.

Review and Update Purchasing Policy

Finance will be working with the new Purchasing Coordinator to update this policy. We have extended an offer to a talented candidate and he will be starting in January 2020.

Adopt the 2020 budget

The budget was approved by the Township Board on September 17, 2019.

Prepare the 2018 Audit

The audit has been completed and presented to the Township Board. We received a clean audit.

TEAM MEMBERS

Miriam Mattison, Director
Bernie Faulkner, Bookkeeper
Deanne Muliatt, Bookkeeper
Danielle Hughes, Bookkeeper
Tom Warner, Accountant

Darla Jackson, Human Services Specialist

ADMINISTRATION



The Township Manager works directly with the Township Board and the various departments of Meridian Township. The Manager is responsible for overseeing the day-to-day operations of the Township, budget preparation and administration, human resources, public service, public safety, public works, parks and recreation, and community relations. The Department Directors report directly to the Township Manager.

Numerous activities and projects were accomplished in 2019 under the leadership of the Township Manager's office:

- Coordinated the 2019 Goals and Objectives process
- Continued to seek opportunities to reduce overall operating costs
- Development and oversight of the Township's 2020 Budget
- Continued the efforts to enhance economic development in the Township
- Created a diversity and inclusion strategy supported by leadership and employee involvement to maintain a well-rounded workforce
- Attended the monthly meetings of the Okemos Downtown Development Authority and the Economic Development Corporation
- Continued our collective efforts to foster an environment that is welcoming, diverse and inclusive
- Facilitated neighborhood development discussions with Bennett Road and Coppercreek
- Prepared for the 2020 Census
- Approved a \$35 million, 10 year local road plan
- Completed the Okemos Road Boardwalk
- Implemented landscaping around the Township's first solar array
- Held groundbreaking for the new Township Farmers' Market

TEAM MEMBERS

Frank L. Walsh, Township Manager
Derek N. Perry, Deputy Township Manager/Director of Public Works & Engineering
Michelle Prinz, Executive Assistant

ASSESSING

The Assessing Department is responsible for establishing assessments of taxable property for the equitable distribution of the property tax burden in accordance with Michigan's General Property Tax Act and other applicable statutes. The Assessing Department's responsibilities include creating the annual assessment roll, maintaining ownership records and property descriptions for taxing purposes, processing Personal Property Statements and personal property exemption requests, and inspecting existing property and new construction for property tax purposes. Taxable values established by the Assessing Department annually are used by the Township Treasurer to produce property tax bills for property within the Township.

2019 TOP TEN TAXPAYERS

2019 TOP TEN TAXPAYERS (BY TAXABLE VALUE)					
RANK	TAXPAYER	PROPERTY TYPE	REAL PROPERTY TAXABLE VALUE	PERSONAL PROPERTY TAXABLE VALUE	TOTAL TAXABLE VALUE
1	CONSUMERS ENERGY COMPANY	UTILITY	\$977,006	\$25,540,300	\$26,517,306
2	MERIDIAN MALL, LP	RETAIL	\$21,608,351	\$509,500	\$22,117,851
3	C150 2929 HANNAH LOFTS, LLC	APARTMENTS	\$21,500,995	\$0	\$21,500,995
4	EAST LANSING I, LLC	APARTMENTS	\$14,427,514	\$0	\$14,427,514
5	EAST LANSING ATHLETIC CLUB, INC.	HEALTH CLUB	\$9,367,924	\$732,500	\$10,100,424
6	TEG CENTRAL, LLC	APARTMENTS	\$9,963,129	\$33,800	\$9,996,929
7	OKEMOS POINTE, LLC	APARTMENTS	\$9,298,893	\$0	\$9,298,893
8	BRANDYWINE CREEK II, LLC	APARTMENTS	\$8,730,746	\$0	\$8,730,746
9	TEG CLUB MERIDIAN, LLC	APARTMENTS	\$8,308,000	\$33,500	\$8,341,500
10	ACC OP, LLC	APARTMENTS	\$8,159,627	\$0	\$8,159,627

2019 VALUE SUMMARY

PROPERTY CLASS	PARCEL COUNT	SEV	TV
Commercial	677	460,826,400	403,817,012
Industrial	42	3,440,100	2,798,499
Residential	13,170	1,539,847,750	1,346,089,088
Personal	1,950	66,539,338	66,539,338
Exempt	340	0	0
TOTALS:	16,179	2,070,653,588	1,819,243,937

2019 DEPARTMENT GOALS AND ACTION PLAN

Defend Tax Appeals with Vigor

Currently, there are four parcels under appeal in the Entire Tribunal Division of the Michigan Tax Tribunal. Seven appeals covering eight parcels were resolved during 2019. The taxable value in contention for pending 2019 appeals is just 0.30 percent of the Township's tax base. Efforts are being made to determine which of the pending cases can be resolved without a trial and which, if any, may need to be defended at trial.

Conduct Annual Assessment/Re-Inspection of Taxable Properties

Approximately 125 residential parcels were re-inspected as part of this program in 2019. Additionally, photographs of all commercial parcels were taken and uploaded to the Township's assessment software. The project resulted in the enhanced accuracy and quality of assessing records to be used for 2020 assessments.

2019 Board of Review Members

Martha Bashore (alternate)	Diane Galbraith
Xavier Durand-Hollis	Charles Hagen (alternate)
Bertice Ellis	Sonya Pentecost
Deborah Federau	Lanny Brunette

TEAM MEMBERS

David Lee, Assessor
Jennifer Flower, Appraiser II
Angela Ryan, Assessing Clerk
Dawn Wozniak, Appraiser II

CLERK'S OFFICE



RESPONSIBILITIES AND 2019 ACTIVITY

The responsibilities of the Meridian Township Clerk are largely set by state statute and include: Election Administration – responsible for all local, state, federal and school board elections; maintaining voter registration files; serving as an officer and voting member of the Meridian Township Board; keeper of official Township records; minutes preparation for the Township Board and Zoning Board of Appeals; updating and maintaining the Code of Ordinances Book and online directory; publishing all legal notices; maintaining the Township general ledger; preparing warrants for checks; reviewing invoices & receipts, serving as Township Freedom of Information Act Coordinator; providing Notary Public services; providing an information and referral service for Township citizens, and other administrative and municipal services.

BOARDS AND COMMISSIONS MEMBER LISTS

The Clerk's Office maintains the member lists for all official Meridian Township Boards, Commissions, Committees, Authorities, and various public bodies. The Clerk's Office, in conjunction with our Township IT Department, developed a database that facilitates Board member review of Applications for Public Service and makes it easier to recommend applicants for public boards and commissions.

CODE OF ORDINANCES ONLINE

The Clerk's Office is responsible for the codification and publication of Township ordinances. This includes publishing all ordinances in a single binder (with copies distributed to appropriate staff and public officials), checking new ordinances for compliance with Michigan law, and completion of updates for both the full Code of Ordinances Book and the smaller zoning portion of the Ordinance Book.

A high priority of the Clerk was to transition our Codebook to a comprehensive online system that was user-friendly and easy-to-navigate. Meridian Township's ordinances can now be easily accessed through a link on the Township website. Users can enter queries using simple keyword searches and then review a list of results in a format similar to Google search results. The online codebook allows users to quickly find the ordinances they are seeking and makes it easy to print out relevant sections. The online code is updated periodically; new and changed ordinances are merged into the Ordinance Book on an annual basis.

ELECTION ADMINISTRATION

The Electronic Poll Book (EPB) is designed to automate the voter verification and ballot tracking functions carried out by election inspectors at the polls on Election Day. The application also supports the automatic uploading of voter history into the QVF (Qualified Voter File) following the election.

Michigan's Qualified Voter File (QVF) continues to be recognized around the nation for its innovative use of technology to enable efficient statewide voter registration data. The statewide file contains computerized signatures to efficiently assist in validating identity prior to issuing absentee ballots as well as other signature checking requirements. The QVF tracks voters through daily changes to Michigan's Driver License file and simultaneously transfers the information to Meridian Township where it is reviewed, verified and files updated.

The Clerk's Office registers new voters and manages address changes, cancellations, absentee ballots, overseas voting, and the issuance of voter registration cards. Other duties related to election administration include: preparation, publication and posting of all public notices, performing accuracy testing on tabulators and Voter Assistance Terminals, supervising the set-up and logistics for each polling location, providing information related to polling locations, processing ballots, transmitting election data to the County Clerk, and determining preliminary election results. Duties also involve confidential storage and disposal of ballots and other election-related materials as directed by State of Michigan statutes.

The Clerk conducted an extensive recruitment campaign to encourage a variety of citizens to become Election Inspectors. Seeking diversity in age, culture, and technology proficiency, we recruited over 25 new workers in 2019, bringing the total to over 150 Election Inspectors (election workers) that staff the polling locations in our 19 voting precincts. Our office provides several days of training for all election inspectors, including hands-on practice with the Electronic Poll Book and various election equipment.

The Clerk conducted a number of voter registration drives in the Township, including Haslett and Okemos High Schools, the Meridian campus of Lansing Community College, and a number of adult care, senior facilities, and medical rehabilitation facilities.

The Clerk conducted an outreach program to seniors in our community, educating voters on the benefits of signing up to be placed on the Meridian Township Permanent Absentee Voter List. All voters on the list are automatically mailed an Application for Absentee Voter Ballot before every election. A postcard was mailed to all seniors that were registered voters, and a response card was attached that citizens could mail back to be placed on the list. As a result of the outreach program, the Permanent Absentee Voter List nearly doubled – from 3,200 to over 6,200 voters.

In 2019 the Clerk's Office began implementing the changes resulting from passage of Proposition 3 in November 2018. No-reason absentee voting – also called Early Voting – has been implemented in Meridian Township, along with the opportunity for all voters to be placed on the Permanent Absentee Voter List. Additionally, voter registration has been extended from 30 days prior to an election (previous state law), to registration until 8pm on Election Day.

The use of Absentee Ballot Counting Boards (AVCB) is now a critical component of ballot processing during elections. The AVCB greatly improves efficiency in handling and processing absentee ballots during high-turnout elections, while maintaining strict privacy and security protocols to preserve the integrity of the secret ballot. Because absentee ballots are no longer processed at precincts on Election Day, Election Inspectors at voting locations are freed up from having to handle and process AV ballots, resulting in voters spending less time in line. In 2019, more than 50% of voters used Absentee Ballots

in the August election.

A more powerful high-speed tabulator that can better handle folded ballot stock was purchased to address the increasing number of absentee ballots. It has considerably improved AV ballot tabulation, with much fewer paper jams and ballot-reading errors than the previous tabulator used to process absentee ballots.

2019 ELECTIONS CONDUCTED IN MERIDIAN TOWNSHIP

May 7, 2019 Special Election **Okemos Public Schools Bonding Proposal**

Election Results

4,236 votes cast (18,303 Okemos voters) → 23% voter turnout
YES: 3,082 NO: 1,148
Bond approved

August 6, 2019 Election

1. Meridian Township Street Improvement Bond Proposal

Election Results

7,134 votes cast (31,106 voters) → 23% voter turnout
YES: 4,250 NO: 2,866
Bond approved

2. Meridian Township Redi-Ride Millage Renewal

Election Results

7,134 votes cast (31,106 voters) → 23% voter turnout
YES: 4,487 NO: 2,622
Millage renewal approved

FREEDOM OF INFORMATION (FOIA) COORDINATOR

The Clerk is the Freedom of Information Act (FOIA) Coordinator for Meridian Township.

The purpose of the Freedom of Information Act (Public Act 442 of 1976) is to allow citizens access to information about the priorities, deliberations, and decisions made by their government. The FOIA supports full disclosure of certain public records, unless a statutory exemption allows an agency or unit of government to deny disclosure. The Act details specific actions and timetables that public bodies must follow in order to remain in compliance.

Under sweeping changes in FOIA law enacted by the State legislature in 2015, the Clerk was responsible for writing and disseminating new, comprehensive Township FOIA policies which were compliant with new State of Michigan policies. The Township Board adopted the FOIA Procedures & Guidelines presented by the Clerk, which went into effect July 1, 2015. All Meridian Township FOIA forms and documents are available on the Township website and at the Township Municipal Building.

The Clerk's Office responded to fifty-six (56) FOIA requests during 2019. The Police Department handles their FOIAs on their own, separately from other Township Departments.

LEGAL NOTICES AND POSTING OF OFFICIAL TOWNSHIP MEETINGS

Numerous legal and public notices, advising residents of upcoming meeting dates, agendas, information for public hearings, proposed resolutions, and ordinance changes were published or

posted during 2019.

NEIGHBORHOOD ASSOCIATIONS CONTACT LIST

The Clerk's Office maintains a list of Neighborhood Associations that contains contact names, addresses, and phone numbers. This list is very useful to residents, business owners, township staff, public officials and others who may need to reach out to homeowners throughout our community. The list was updated and "scrubbed" for duplication and out-of-date information, including identifying condominium and homeowner associations in new developments.

NOTARY SERVICE

The Clerk's Office has Notary Public service available to residents. By the end of 2019, all members of the Clerk's Office have served the public as qualified Notary Publics, providing numerous citizens with notary services at no cost. Banks no longer provide this necessary service, and they typically refer their customers to the Meridian Township Clerk's Office for notary services.

PETITION SIGNATURE VALIDATION PROCESS

The Clerk's Office carries the responsibility to verify and validate petition signatures received for school board candidates, all local candidates for public office, as well as, periodic referendum and annexation petitions.

TOWNSHIP BOARD MEETING PACKETS & MINUTES/COMMUNICATION

The Clerk's Office coordinates the preparation and distribution of Township Board Meeting packets twice per month on the Friday before meetings, and for Special Board meetings as well. Township Board meetings are recorded and minutes prepared by the Clerk's staff. The Clerk's Office also digitizes the Board packet and uploads the document to the Township website to make them available to the public. The Clerk worked to add oversized documents (such as building site plans and blueprints) to the Meridian Township website so citizens could access all relevant documents used by the Board in its deliberations. The Clerk's Office is responsible for handling communications to the Board from various stakeholders.

TOWNSHIP CEMETERY OVERSIGHT

There were 18 lot sales and 28 burials during 2019. The Clerk's Office responds to genealogical inquiries by referencing the original 11" x 18" leather bound books used to track cemetery records.

TOWNSHIP MAIL SERVICE

The Clerk's Office processes incoming mail and distributes it to appropriate departments. The Clerk's Office works with the U.S. Postal Service to ensure each department is using the most cost-effective method for all mailings. The Clerk's Office utilizes a state-of-the-art mail processing system that provides additional digital features with more accurate scale functions, resulting in faster throughput, lower costs and increased efficiency.

TOWNSHIP RECORDS MANAGEMENT

Evaluation of our record keeping needs, status, priorities, retention periods, and storage options (both paper and electronic) is an ongoing process. Each year the Clerk's Office reviews and updates record management procedures. We have placed emphasis on continually building efforts to permanently preserve records as well as increase the efficiency through which records may be retrieved. Some voter records are now digitally scanned and stored, freeing up valuable space and allowing faster voter data retrieval.

ZONING BOARD OF APPEALS

Clerk's Office staff records and prepares the minutes for Zoning Board of Appeals meetings.

CLERK'S ACTIVITIES

- Chair of the Meridian Township Election Commission
- Election Official for Haslett and Okemos Schools
- Member of Tri-County Region Planning Commission: Urban & Rural Services Management Committee
- Member of Regional Groundwater Management Board
- Member, Capital Area Municipal Clerks Association
- Member, Michigan Association of Municipal Clerks

In 2015, the Township Clerk graduated from a comprehensive three (3) year training program and attained the designation of Certified Michigan Municipal Clerk (CMMC). Instruction for the official Clerk certification program is provided by Central Michigan University in partnership with the Michigan Association of Municipal Clerks.

TEAM MEMBERS

Brett Dreyfus, Township Clerk, CMMC (Certified Michigan Municipal Clerk)

Robert Cwierniewicz, Deputy Clerk and Assistant to the Clerk

Daria Forbes, Administrative Assistant II

Rebekah Kelly, Records Technician II

COMMUNICATIONS



The highest priority of the Communications Department is to provide residents with an increased access to transparency in governance with relevant information in a timely fashion. The Department is responsible for coordinating a strategic and comprehensive effort to inform the public of the Township's goals, plans, activities and events through various multimedia platforms including web, digital and print. The Department oversees, creates and coordinates the writing, publication and production of all communication products – printed materials, photos/videos, website and social media postings generated from the Township. The Department ensures that all media and communications successfully reaches their intended audience. Other main functions of the Communications Department includes serving as the Local Franchise Authority for nine Public, Educational and Governmental (PEG) Channels in Meridian Township, overseeing the operations and production for HOMTV (Government Access Channel) and CAMTV (Public Access Channel), operating a multimedia television internship training program and providing staff support to the Township's Communications Commission.

2019 DEPARTMENT GOALS AND ACTION PLAN

Continue CSC Communication Efforts

These efforts were continued in 2019 through social media, programming and the website.

Website Enhancements

Major enhancements to the website in 2019 included recreating the project section, creating a new marihuana section, redesigning the layout for park pages, updating information for individual parks, creating a section for redevelopment, reconfiguring navigation links, reconfiguring the resident section and creating layouts for every mobile page. With the restructuring of the Communications Department, additional staff were trained on how to create news items, share news items on social media, archive digital newsletters, create meetings and events, retrieve documents and properly replace documents.

Create/Find Additional HOMTV Revenue Sources

Additional revenue sources included contractual agreements for programming, launching the Alumni Giving Program and hosting a summer kids' camp. Staff looks to create a marketing plan for the Alumni Giving Program in 2020 that includes involvement by the Commission. They also seek to continue offering the Summer Kids Camp.

Develop HOMTV Video Archive System & Integrate in to Current System

The archiving system has moved forward this year with the digitization of approximately 300-500 hundred hours of historical programming. Part of the importance of this process is to tag footage with information about it that makes the files searchable by location, topics, people or show name, rather than just a filename. Interns and staff have been working on reviewing footage, tagging and organizing so that this footage is in a logical order and follows the

production manager's structure, and that all current and future files and information follow this same structure for organization.

Repair and Update Intern & Alumni Access Database

The Intern and Alumni Database has a new design layout, which will allow for a more efficient workflow during the exit interview process. The next steps will include transferring the paper records to digital records and reconfiguring some of the database queries. This will assist with the Alumni Giving Program that the Communications Commission approved and supports.

Develop Township Visitor's Guide

Director Guthrie worked with Graphic Designer Lynn Meikle to create the framework for a Visitor Guide size, ad space, costs and layout. Given the careful time taken in restructuring the department, the Communications team put the visitor guide on hold. With reduced staff, it may be more difficult for the Communications Department to take this project on, but this could be something the Township may wish to work with the EDC, or hire a marketing firm to accomplish. The framework is in place if the Township desires to publish a Visitor Guide.

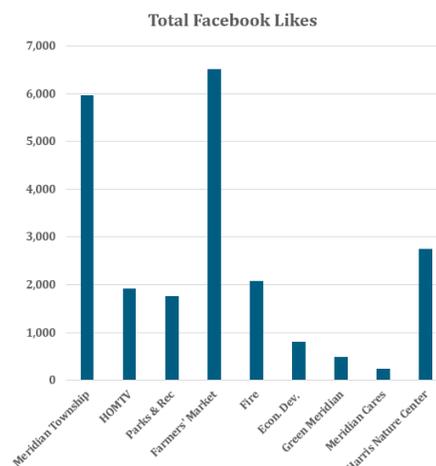
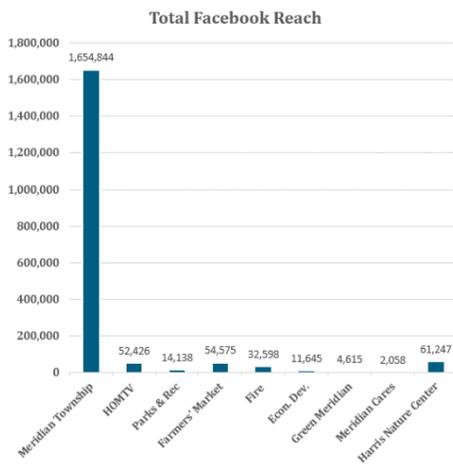
Branded Meridian Signage

Director Guthrie led efforts with the sign committee to create a proposed plan of action for internal and external signage, wayfinding, directional and entryway signage and corridor signs. She conducted an internal audit of needed signage in each area. She worked with Graphic Designer Lynn Meikle and Johnson Signs on proposed signage. The back-end elements are complete and the elements are in place, ready to move forward once a budget presents itself.

Digital/Print Analytics

The Communications Department oversees the content development and engagement of 25 different social media accounts across multiple platforms, including Facebook, Twitter, Instagram, LinkedIn, Flickr, YouTube and Nextdoor. The Township was added to Nextdoor as an agency in June 2019. Nextdoor is a communications platform that allows neighborhoods to connect and have conversations. The platform allows the Township to post messages to specific neighborhoods and then verified residents will automatically receive the updates.

In 2019, staff evaluated the Michigan Economic Development Facebook page and made the decision to fade out the page. Future postings and shares were made on the Township Facebook page. The Meridian Cares and Green Meridian Facebook pages were also evaluated, and based on the engagement, reach and followers, these pages will not move forward into 2020. All postings and shares will be made on the Township Facebook page.

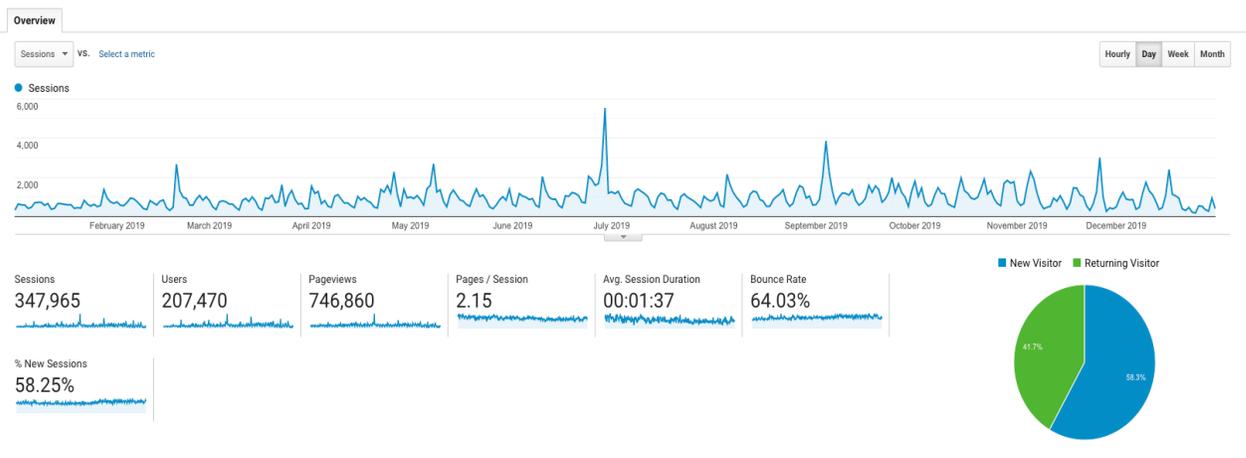


In 2019, staff began live streaming Township meetings on HOMTV’s Facebook page and additional videos were posted to the various social media accounts. On Facebook, over 116,000 minutes of video were viewed and nearly 200,000, 3-seconds of video were viewed. These results show that our audience is engaged with the content that is being shared and also, how important social video sharing is for relaying information to the community.

Staff created various print publications, including three editions of the Prime Meridian Magazine, six Senior Center Newsletters and weekly Township digital newsletters. In September 2019, staff redesigned the Township weekly digital newsletters to include HOMTV and the Farmers’ Market rather than offering separate newsletters. Marketing materials such as flyers, programs, brochures, logos, posters, signage, website and social graphics were created for Township events, activities, ribbon cuttings, groundbreaking and social campaigns.

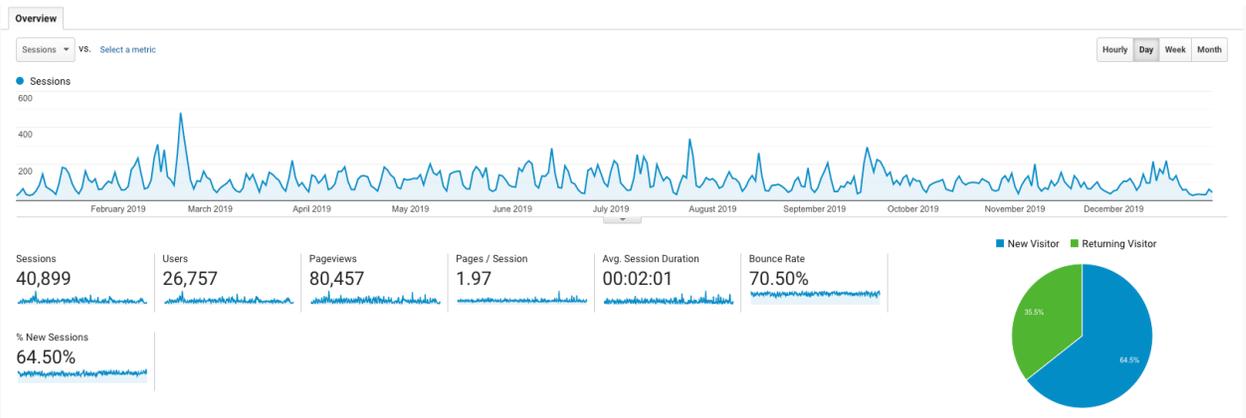
Meridian Township Website Traffic 2019

The Meridian Township website experienced increased traffic with 746,860 page views from 207,470 visitors. 58.3% are new visitors, which shows that over half of the website traffic are new people discovering the website and utilizing the information presented on it.



HOMTV Website Traffic 2019

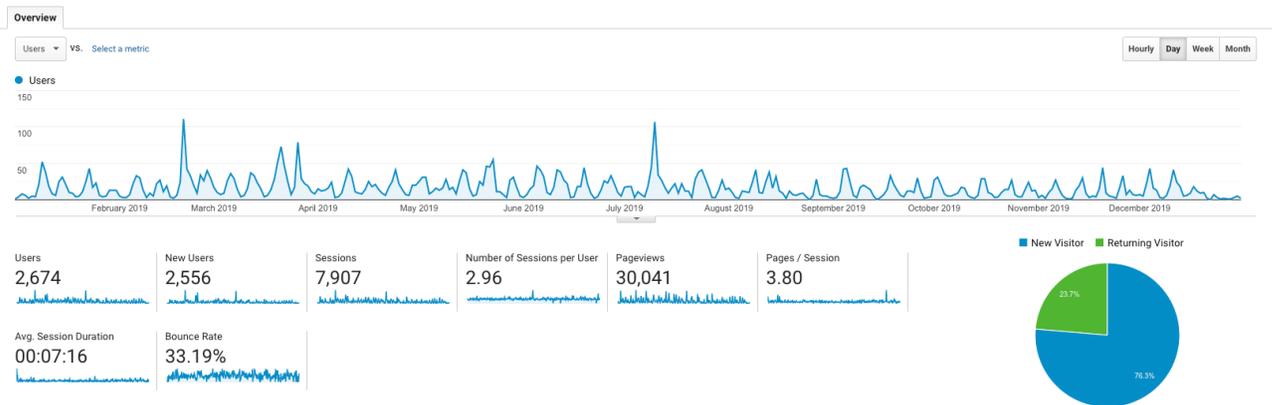
HOMTV.net statistics for 2019 show a total of 80,457 views to the website, coming from 26,757 visitors on the site, in which 64.5% of those visitors are new. This shows that people are seeing stories on social media or other sources and visiting the website to see additional information, reading articles and watching programs.



HOMTV Video On-Demand Traffic 2019

Video On-Demand had 30,041 page views from 5,230 visitors, of which 76.3% are new visitors

to the HOMTV website showing a positive trend that new people are discovering and watching HOMTV's programming online.



HOMTV Programming

To better serve the diverse cultures in the community, HOMTV began incorporating bilingual newscasts as part of the 2019 program lineup. A weekly Mandarin version of the “Meridian News Now” program began airing in February 2019. This program is expected to continue in 2020. In 2019, HOMTV aired a total of 234 regular programs, 75 live Township meetings, 60 PSA’s and 82 social media videos. A new switcher was installed at the end of 2019, due to the old equipment experiencing technical difficulties during Township meeting coverage. The new equipment has streamlined production processes and allows for multiple source streaming and additional production capabilities.

HOMTV Internship Program

Thirty-nine (39) interns participated in HOMTV’s multimedia television internship program with a total of seven paid interns and freelance employees. The interns contributed approximately 13,385 hours, produced more than 600 stories and promo/PSAs, covered approximately 50 Township events and served as crew, as well as, on-air talent for 234 programs and 75 Township meetings.

Awards

HOMTV received an Alliance for Community Media (ACM) 1st place national award for “Overall Excellence in Governmental Access Programming”. HOMTV received an “Award of Honor” for “2018 General Election Night Coverage” in the Election Coverage Category in the 2019 National Association of Telecommunications Officers and Advisors (NATOA) Government Programming National Awards Competition. HOMTV also received “Finalist Awards” from ACM’s Central States Region 2019 Philo Festival of Media Arts Competition in the Overall Excellence Access TV Category as well as the Health Category for “Open Line – Opioid Crisis”.

MEMBERS OF THE CABLE COMMUNICATIONS COMMISSION IN 2019

Walter Benenson, Chair
Tunga Kiyak, Vice Chair
Leslie Charles, Commissioner
Mike Nevells, Commissioner
Brian Seipel, Commissioner
Kevin Thatcher, Alternate Commissioner
Riti Adhi, Alternate Commissioner

TEAM MEMBERS

Deborah Guthrie, Communications Director/Public Information Officer

Brandie Yates, HOMTV Executive Producer/Internship Coordinator

Andrea Smiley, Administrative Assistant II

Roy Kellerman, Studio TV Production Manager

Ben Makulski, Video Programmer

Erin Cornett, Part-Time Social Media Specialist (Resigned May 2019)

Lingfanglu Han, Temporary Part-Time Social Media Specialist (Hired June-December 2019)

Lynn Meikle, Freelance Media/Print Publications/Graphics

COMMUNITY PLANNING AND DEVELOPMENT



During 2019, the Department of Community Planning and Development continued to provide quality service to the community related to permit applications, zoning updates, building inspections, code enforcement, and rental housing. In addition to working closely with Township residents, business owners and leaders on a day-to-day basis, staff provided ongoing services to various Boards, Commissions, and Committees, including the following:

- ✓ Township Board
- ✓ Planning Commission
- ✓ Zoning Board of Appeals
- ✓ Building Board of Appeals
- ✓ Environmental Commission
- ✓ Transportation Commission
- ✓ Brownfield Redevelopment Authority

2019 DEPARTMENT GOALS AND ACTION PLAN

Consider Adoption of Form Base Code in Portions of the Township

The Planning Commission has been working on Form Based Code for the properties along Grand River Avenue from Brookfield Drive to Park Lake Road. Form Based Code, which emphasizes the design and placement of buildings to create a more walkable and pedestrian-friendly development, will replace traditional zoning along the corridor.

Complete a Plan for the Review and Update of the Master Plan in 2020

The Planning Commission has reviewed a list of potential updates to the Future Land Use Map and will be considering if any other amendments are desired in 2020. Amendments to the Future Land Use Map will be proposed in 2020 as part of the overall Master Plan update process.

Update and Amend the Mixed Use Planned Unit Development Ordinance

The Planning Commission had several meetings devoted to updating the Mixed Use Planned Unit Development ordinance. Issues discussed included the amount of commercial space vs. the number of residential units, establishing a minimum square footage of commercial space required, improving the list of amenities to be more substantial and essential elements of the development, considering the horizontal and vertical design of a building to better define what

the Township wants in development projects. Staff will continue to focus on updating the ordinance in 2020.

Revise the Sign ordinance so it is Content Neutral

Staff shared the concept of content neutral sign policy at meetings with the Planning Commission in 2019. A review of the existing sign ordinance and proposed changes to meet content neutral standards will be considered in 2020.

Finish updating all Applications used by the Department

The rental housing application has been modified and a section has been added to the electrical permit application with regards to outdoor lighting requirements. Updates are still needed for the applications for development projects.

Adopt 2018 International Property Maintenance Code

The Township Property Maintenance Code is based on the International Property Maintenance Code (IPMC). In December, staff presented to the Township Board a proposed amendment to adopt the 2018 edition of the IPMC with Township amendments. The 2018 edition of the IPMC with Township amendments was approved for adoption in January 2020.

Evaluate the Need for an Additional Part-Time Rental Housing Inspector

After evaluating the need for an additional part-time rental housing inspector staff determined it was not necessary at this time. Staff will continue to monitor the situation.

Streamline the Scheduling of Mechanical, Electrical and Plumbing Inspections

Inspectors now have access to the Township permit system, not only for scheduling inspections but also for data entry resulting from completed inspections.

Evaluate Providing Office Hours to the City of Mason for Reviewing and Issuing Building Permits

Staff has had ongoing discussions with the City of Mason’s Community Development Director. The Service Agreement with the City may need to be amended to cover the additional cost of providing the services.

Complete the Ordinances for Commercial Medical Marihuana Facilities

Non-zoning and zoning ordinances were approved by the Township Board in May. The first lottery was held in September for provisioning centers in Overlay Areas 1, 2, 5, 6, and 7. The second lottery for a provisioning center in Overlay Area 3/4 was held in October. Special use permit applications for the provisioning centers in Overlay Areas 1, 2, 5, 6, and 7 are currently under review by staff, with public hearings likely to commence in 2020.

2019 COMMISSION AND BOARD MEMBERS

(* indicates former member)

PLANNING COMMISSION

John Scott-Craig, Chair
Holly Cordill
Kenneth Lane, Vice-Chair
Gerald Richards

Scott Hendrickson
David Premoe, Secretary
Alisande Shrewsbury
Peter Trezise

ZONING BOARD OF APPEALS

Brian Beauchine, Chair
Alexia Mansour, Vice-Chair

Phil Deschaine*
Kenneth Lane

Courtney Wisinski
Rick Shafter (Alternate)

Monique Field-Foster

TRANSPORTATION COMMISSION

Chris Hackbarth, Chair
Phil Deschaine
Bob Lovell
Jon Kolbasa

Tim Potter, Vice Chair
Karla Hudson
Steven Vagnozzi

BROWNFIELD REDEVELOPMENT AUTHORITY

James E. Jackson
John Matuszak
John Scott-Craig, Chair
Jade Sims

Joyce Van Coevering
Frank L. Walsh
Jeff Theuer, Vice Chair

TEAM MEMBERS

Mark Kieselbach, Director of Community Planning and Development
Debbie Budzynski, Administrative Assistant II
Silva Brownlee, Administrative Assistant I
Peter Menser, Principal Planner
Justin Quagliata, Assistant Planner
Mackenzie Dean, Assistant Planner
John Heckaman, Chief Building Inspector
Ron Rau, Building Inspector
John Martin, Building Inspector
Frank Christmas, Rental Housing Inspector
Kevin Reed, Rental Housing Inspector
Joe Wade, Code Enforcement Officer

ECONOMIC DEVELOPMENT



Village of Okemos Rendering

The Economic Development Department is designed to implement many aspects of the Township Master Plan. The Township is committed to building a sustainable and vibrant community where businesses thrive and residents have a variety of local shopping, dining and housing options.

The Meridian Township Economic Development team is here to help with starting or expanding your business, providing feedback on a development project and engaging with residents, business owners and land owners on new ideas.

The Economic Development Director works closely with the Township business-related volunteer boards & commissions: the Downtown Development Authority, the Economic Development Corporation, the Corridor Improvement Authority and assists the Planning Department with the Brownfield Redevelopment Authority.

2019 DEPARTMENT GOALS AND ACTION PLAN

Formally Engage Haslett Village Square Project in the Approval Process

Cypress Partners approached the Township in March 2019 with a desire to build a modern 55+ housing complex. Director Buck facilitated a driving tour which included the Haslett Village Square. On November 19, 2019 the Township received a site plan and MUPUD project on 9.6 acres of the Haslett Village Square. The public hearing occurred at the Planning Commission on December 16, 2019, and a recommendation to approve occurred on January 13, 2020. The Township Board will review the project throughout February and March of 2020. These nearly ten acres are a part of over 28 acres that make up the Haslett Village Square. Another 16.5 acres is actively being marketed for development projects, leaving approximately 2.5 acres for a final phase of the complete redevelopment of this underutilized space within the Haslett PICA, as defined by our 2017 Master

Plan. Director Buck believes strongly that once these three phases are complete, the Haslett Village Square will be very similar to what was outlined in the Master Plan.

Online Database for the Township Business Community

With the help of Executive Assistant Michelle Prinz, Director Buck implemented a free version of the software Hubspot. Contact information for businesses in the Township that staff has amassed over the years is currently loaded. Each business can be filtered by geographic location or by industry type. There is still some data entry to complete and more businesses to be added, but once that is done access will be shared with department directors.

Series of Educational Presentations on Population and Housing Needs for the Township Resulting in a Generally understood Direction for the Planning Commission and Township Board to Lead the Development Community. Amendment to the Master Plan?

Director Buck has attended numerous seminars and has read dozens of articles in an effort to educate himself on the housing stock that is becoming more popular around the country and in Mid-Michigan. He has advocated for projects that meet these criteria and has shared some content with members of the Planning Commission and Township Board in both formal and informal settings. When it is time for a Master Plan update, Director Buck will have plenty of information to share.

Form Based Code, Deeper MUPUD Revision and/or Creation of the MFPUD (multi-family without need for commercial). Consider Adopting Small Square Footage Minimums for Single Family and Apartments for Micro-Unit Abilities

Form Based Code has been the primary focus in 2019 and Director Buck has engaged with the Planning Division in its many work sessions and full meetings to approve a draft for a public hearing and recommendation to the Township Board, slated for the first quarter of 2020. It is Director Buck's opinion that if/when Form Based Code is adopted, a decision will need to be made as to whether implementing it on more districts is the solution, or if further MUPUD or possible MFPUD is the best move-forward plan.

DOWNTOWN DEVELOPMENT AUTHORITY

Susan Fulk, Chair
Peter Campbell
Bill Cawood
Renee Korrey, Vice-Chair
Ronald J. Styka, Township Supervisor

James Spanos, Secretary/Treasurer
Will Randle
Scott Weaver
James Raynak

ECONOMIC DEVELOPMENT CORPORATION

Jade Sims, Chair
Phil Deschaine, Township Treasurer, Ex-Officio
Kathy Sundland, Township Board Liaison
Frank L. Walsh, Township Manager
Shawn Dunham
Brenda Chapman

Dave Ledebuhr
Kim Thompson, Vice-Chair
Tom Conway
Adam Carlson
Joel Conn
Mikhail Murshak

CORRIDOR IMPROVEMENT AUTHORITY

Chris Nugent,
Ron Styka, Township Supervisor

Kellie Johnson
Bruce Peffers

Barry Goetz
Jeff Ross, Chair
Eric Foster, Vice-Chair

Chris Rigterink
Brian Jones

TEAM MEMBERS

Chris Buck, Economic Development Director
Michelle Prinz, Executive Assistant

EMS/FIRE



Serving our community with Pride, Integrity and Professionalism since 1929.

OUR MISSION

Our mission is to provide efficient, dependable, and professional services to the citizens of Meridian Township. Our values are to educate and to provide caring, compassionate service with excellence and dignity. Our vision is to exceed the expectations of the community by proactively responding to the established priorities and needs.

Following the mission, MTFD has developed into a multi-faceted department responsible for providing a wide range of emergency and non-emergency services. Being a “Full Service Department,” MTFD supports Meridian Township by providing emergency response to all phases of emergencies. Being the second busiest department in Ingham County, MTFD responds to an average of 4,680 emergencies annually.

The Meridian Township Fire Department organizational structure consists of 36 personnel. Fire Suppression has 32 firefighters/paramedics and administrative staff includes the Fire Chief, Administrative Assistant, EMS/Training Chief, and the Fire Inspector.

- Administration
 - Chief
 - Administrative Assistant II
 - Training/EMS Chief
 - Fire Inspector
 - Safety Inspections
 - Fire Prevention Education
- Fire Inspector
 - Arson Investigation
 - Plan Review
- Training
 - Provides EMS, fire safety and fire prevention and other safety education to Township employees and the community.

- Provides superior and proactive training to the members of the MTFD to develop and retain a staff of 32 full time employee
- Suppression
 - Provides quick response and action to reduce or eliminate real or perceived emergencies.
 - Emergency Medical Calls
 - Structure Fires
 - Vehicle Extrications
 - Water & Ice Rescue
 - Hazardous Materials
 - Building Inspections
 - Public Education
 - Technical Rescue
 - Rope Rescue
 - Trench Rescue
 - Collapse Rescue
 - Confined Space Rescue

Since 2012, the Metro Lansing Fire Shared Services Initiative, consisting of Delta, Delhi, Lansing, and Meridian Townships as well as the cities of Lansing and East Lansing, have worked jointly for the protection of citizens and the safety of firefighters. Together the following joint efforts were instituted:

- Metro Shared Services Committee
- Metro Training Consortium
- Ingham 911 Advisory Committee
- Ingham County Chiefs Committee
- Metro Technical Rescue Team
- Metro Hazmat Response Team
- Metro Arson Investigation Team
- Metro AVI Response Team
- Ingham County Office of Emergency Management
- Automatic Aid for Structure fires from East Lansing and Williamston (NIESA) Fire Department
- Automatic Aid on I-96 Extrication with Delhi, Mason, Williamston and East Lansing
- Automatic Aid into Alaiedon Township with Mason and Delhi Township Fire Departments
- Mutual Aid Box Alarm System (MABAS) Ingham County Program Director

Meridian Township Fire Department, working with Delhi Township, NIESA (Williamston), and Mason established Automatic Aid for fire response to vehicle accidents and medical emergencies on I-96 and US-127 in 2019. This adds to the existing 2018 auto aid agreements for structure fires. Ultimately, these agreements support a safe response with the correct number of personnel to meet NFPA minimum response standards to protect the safety of firefighters.

Firefighter/paramedics responded to 261 chest pains of which 16 of these resulted in cardiac arrests. The national survival rate for cardiac arrest is 4 to 16%. MTFD firefighter/paramedics were able to save three patients (18%) from cardiac arrest all of whom are alive today. Today cardiac arrest survival is increasing due to more bystander CPR, advances in technology, staffing levels, and quicker paramedic response times.

Fire Prevention completed 71 plan reviews of construction projects, 412 fire inspections, 21 fire alarm inspections, 17 fire sprinkler inspections, and 6 commercial hood inspections. Twelve fire investigations were completed in the year including two as part of mutual aid with neighboring municipalities. The annual Fire Prevention Open House was held on Saturday, October 12th. It is estimated nearly 300 people attended the event where they were able to tour the fire trucks and

ambulances, participate in fire safety drills in the smoke trailer, watch a car cutting demonstration, and learn about how fire and smoke moves throughout a building

In 2019, the Meridian Township Fire Department demonstrated it continues to be a leader in the State through its many accomplishments. Over the past 10 years, MTFD has seen an overall increase of 33% (4% annually) in its call volume. This includes a 107% increase in fire and 21% increase in EMS incidents over the same time (see Table 1). This increase correlates with population growth, Medicare and Medicaid changes, the Affordable Care Act, a decreased number of primary care physicians, an aging population, availability of mental health, the Opioid epidemic, and access to preventative care. These issues affect the fire service throughout the United States.

Since the 2010 Census, the Township has grown in population by approximately 7.5 % with the US Census estimating Meridian Township at 42,636 as of July 1, 2018. This increase has been a direct result of decreased populations of cities and increased populations of townships. “A Prime Community”, Meridian Township is expected to have significant population increases as it continues to attract new residents and businesses. There are many proposed developments over the next five years with a potential population growth of 5 to 15%.

2019 DEPARTMENT GOALS AND ACTION PLAN

Installed 1,250 Combination Smoke/CO Alarms as part of the FEMA grant

In 2017, the Fire Department received a FEMA Assistance to Firefighters Grant to install 2,500 combination smoke and carbon monoxide alarms in resident homes. This grant, awarded over a two-year period, afforded the fire department the ability to install 2,514 detectors in 617 homes. Knowing that smoke and carbon monoxide detectors save lives, this project supports the safety of the residents of Meridian Township.

Outdoor Warning Sirens

The Meridian Township Fire Department, with support of the Township Board, has committed to a multi-year plan to install outdoor warning sirens for the protection of its citizens. This year, a new siren was installed on Dobie Road near Kinawa Drive. Being six years out from expected project completion, there are currently eight sirens in the Township with an additional seven more installations planned.

Fire Department Safety Equipment

Maintaining a strong budget is important to stay fiscally smart while evaluating the operation of the Fire Department. All equipment used by the Meridian Township Fire Department is evaluated annually for life safety and life expectancy based on national standards.

As MTFD's five-year plan is updated annually, it includes replacement schedules supporting NFPA 1971 and MISOHA Part 74 for Personal Protective Equipment such as structural firefighting clothing, saws, hose, SCBA, tools and more.

This year the department was able to meet equipment needs by purchasing structural firefighting suits, hose, saws, tools, a positive pressure fan, self-contained breathing apparatus (SCBA) cylinders, medical cots, and new computers.

New Ambulance

A Braun custom ambulance was ordered and placed into frontline service in July. Staffing three Advanced Life Support ambulances 24/7 supports 81% of all emergency responses.

Table 1: 10 Year Incident Count			
Year	Fire Incidents	EMS Incidents	Total Incidents
2010	588	3,490	4,078
2011	532	3,711	4,243
2012	600	3,847	4,447
2013	737	3,619	4,356
2014	714	3,683	4,397
2015	623	3,884	4,507
2016	925	4,028	4,953
2017	1,181	3,988	5,169
2018	991	4,226	5,217
2019	1,217	4,220	5,437

Table 2: Confirmed Fire Responses (Incident Type)	
Fire, other	1
Building fire	33
Fires in structures other than in a building	1
Cooking fire, confined to container	27
Chimney or flue fire, confined to chimney or flue	2
Trash or rubbish fire, contained	4
Passenger vehicle fire	11
Natural vegetation fire, other	2
Brush, or brush and grass mixture fire	6
Grass fire	1
Outside rubbish fire, other	2
Outside rubbish, trash or waste fire	2
Dumpster or other outside trash receptacle fire	5
Outside equipment fire	1

Top Medical Responses by Complaint Type	
Sick Person	751
Falls	648
Breathing Problem	321
Medical Alarm	329
Chest Pain (Non-Traumatic)	261
Abdominal Pain/Problems	242
Unconscious/Syncope/Near-Syncopal	152

MVC/Transportation Incident	162
Seizure	141
Psychiatric/Behavioral/Suicide Attempt	127
Average Age of all Patients: 59 years old	

A Note from Fire Chief Michael Hamel:

The Meridian Township Fire Department has a long history of providing a high level of fire and rescue services to the community. Our men and women are highly trained and professional individuals that place their lives on the line every day to keep the Township safe. It is my goal as the Fire Chief to continue to work closely with our community to identify risk and mitigate those potential hazards that impact life and property while tasking our firefighters to rise and meet new challenges.

HUMAN RESOURCES



The Human Resources Department is responsible for multiple employment related matters including labor relations and contract negotiations, staffing, diversity and inclusion initiatives, payroll, personnel record keeping, benefits administration, pension administration, risk management, legal compliance, personnel policy manual administration and skill-based training programs.

2019 DEPARTMENT GOALS AND ACTION PLAN

Labor Relations

The Township successfully negotiated 3-year contracts (2020-2022) with four units: Department of Public Works, Administrative Professional Employees, Professional Non-Supervisory Employees and Professional Supervisory Association. Negotiations continue with the 312 groups, Police Command (CCLP), Police Patrol (POAM) and Fire (MTFFA).

Personnel Policy Manual

The 2020 update is on schedule for a March 31 completion. The update requires language that is consistent with certain applicable content in the seven Collective Bargaining Agreements. Ongoing negotiations and settlements for police and fire units through the first quarter 2020 may influence the revisions.

Diversity Initiatives

The Township maintained a 12% minority utilization over the course of 2019 for full-time employees whereas voluntary 2019 EEO applicant data is about 20% minorities applying for positions (see table). HR Director Marx represented the Township at two (2) Diversity Career Fairs; one at Michigan State University (Police jointly represented, as well) and one at Lansing Community College. A continuing challenge is recruiting in a very competitive field for Police Officers, Firefighters, Engineers and Public Works positions.

Additional employment statistics: Full-time employee ratio is 28% female and 72% male; 43% of Township employees have ten (10) or more years of service and 20% of employees have twenty (20) or more years of service. There were twenty (21) separations: seven (7) retirements, nine (9) voluntary quits, four (4) involuntary and one (1) reduction in force. Fifteen (15) new hires included three (3) Police officers (2 of which filled retirement openings) and two (2) Firefighters. The remaining hires filled other department vacancies due to separations. Turnover for 2019 averaged 13.5% overall, or 9% excluding expected retirements.

Healthcare Benefits

For the fourth year, the self-insured Blue Care Network (BCN) product continued to save money for the Township even with rising healthcare costs. The Township calculations continued to remain under the PA 152 Hard Cap allowing for no employee premium cost sharing for BCN insurance. Calculations under the hard cap provided an opportunity for a Health Savings Account (HSA) deposit for those employees with BCN coverage. There is a nominal employee premium cost sharing for the alternative option for Blue Cross Blue Shield Michigan (BCBSM) insurance. The expected costs for active employees is running 3.5% below a fully insured product and expected costs for the whole group (includes retirees) is running 1% below a fully insured product. The HR Team, along with Gallagher Healthcare Benefits Consultants, closely monitored actual expenses versus maximum expected costs throughout the benefit year and will continue to do so in 2020 to ensure maximum cost effectiveness.

Loss Prevention

Greater Safety Committee involvement provided awareness that is more practical across Township departments. More detailed incident reports with direct follow-up investigations has reduced repeat injuries. For employees with lost work time, mandated specific re-training is conducted upon return to work. All township vehicles are now equipped with first aid safety kits in case of an emergency. Township-wide mandatory Acts of Violence training for emergency preparedness and procedures will continue into 2020. First Aid/CPR/AED employee training and certification covering every building in the Township continues through instruction provided by EMS/Training Chief Priese.

Workplace Ergonomics

Employee workstation assessments resulted in recommendations for sit-to-stand workstations and ergonomic chairs. This is the first step for implementation in 2020.

TEAM MEMBERS

Joyce A. Marx, Human Resources Director
Carol Hasse, Human Resources Specialist/Payroll
Michelle Prinz, Executive Assistant

2019 EQUAL EMPLOYMENT OPPORTUNITY COMMISSION REPORT

Job Categories		Number of Applicants (Report employees in only one category)														Total Col A-N
		Race/Ethnicity														
		Hispanic or Latino		Not-Hispanic or Latino												
				Male						Female						
		Male	Female	White	Black or African American	Native Hawaiian or Other Pacific Islander	Asian	American Indian or Alaska Native	Two or More Races	White	Black or African American	Native Hawaiian or Other Pacific Islander	Asian		American Indian or Alaska Native	
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O		
Executive/Senior Level Officials and Managers	1.1	0	0	2	0	0	0	0	0	3	0	0	0	0	0	5
Mid Level Officials and Managers	1.2	4	1	75	2	0	3	0	2	36	4	0	0	0	0	127
First Level Officials and Managers	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Professionals	2	1	1	48	12	0	1	0	2	31	2	0	0	0	0	98
Technicians	3	6	5	100	12	0	10	0	6	64	16	0	11	0	2	232
Sales Workers	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Administrative Support Workers	5	1	6	41	5	0	3	1	0	169	17	0	8	3	8	262
Craft Workers	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Operatives	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laborers and Helpers	8	0	0	25	0	0	0	0	0	46	2	0	0	0	1	74
Service Workers	9	2	1	39	4	0	0	0	4	18	2	0	2	0	0	72
Other		0	0	4	1	0	0	0	0	5	2	0	0	0	0	12
TOTAL	10	14	14	334	36	0	17	1	14	379	45	0	21	3	11	882

INFORMATION TECHNOLOGY



New Technology in Ambulances

METHODOLOGY FOR OPERATIONAL IMPERATIVES

1. Highest priority is given to core infrastructure stability and keeping existing services and resources operating at optimum performance and availability.
2. Resolution of emergent end-user issues related to technology is an important function that all Department personnel spend a significant time addressing.
3. Training initiatives are utilized in cases where staff resources are recognized to be deficient in the use of available technology or additional expertise would increase employee productivity.
4. Remaining resources are committed to replacing technology that is still functioning, but aging, and at end of useful life.

2019 DEPARTMENT GOALS AND ACTION PLAN

The year brought with it many unexpected challenges & opportunities. Foremost was the departure of two System Administrators mid-year. With the assistance of the Township Manager's Office & Human Resources Director, the decision was made to combine the two lesser skilled positions into a single position that would attract candidates with a higher level of technical ability to efficiently meet end-user needs. The process culminated with the hiring of the Assistant Director of IT in late August. The new assistant director brings a wealth of knowledge and skills that have proven invaluable in the provision of services to the other Departments throughout the organization.

Routine Items

The Department serviced over 780 requests for service throughout the year, and also managed a network with over 1,000 nodes, including security and backup services.

Telephone System Renovation

IT staff replaced the core telephone system for the Township, and over 250 handsets throughout six of our facilities. The new voice over IP system is a step forward in integration with our existing network infrastructure, and provides a much lower cost of ownership than the other considered alternatives.

Replacement Closed Circuit Camera System at the Public Safety Building

The aging system was overhauled with a new central recording system, conversion of five existing analog

cameras, and the addition of new digital cameras around the facility, including those used in the interview rooms.

Replacement of Public Works Mobile Computing Devices

The aging Public Works tablets were replaced with newer Dell semi ruggedized tablets to support enhancements to the constantly evolving Cartegraph Work Order Management System.

Replacement of Ambulance Technology

The aging ambulance panasonic toughbooks were replaced with newer Dell semi ruggedized laptops to improve performance and provide better integration with other equipment including the Cradlepoint routers and Zoll Heart Monitors used in the rear of our ambulances. Dual mounts were included to better facilitate the manner in which the equipment is actually used in the rigs.

Expansion of Mobile Computing Options for Desk Workers

Enhancements were made to the mobile computing devices used by Building & Rental Housing inspectors. In cases where users had a need to be more mobile with their computing devices, laptops with docking stations were installed.

TEAM MEMBERS

Stephen Gebes, Director of Information Technology
Troy Kaminga, Assistant Director of Information Technology

PARKS AND RECREATION



We put the “P” and “R” in PRIME! In 2019, the Parks and Recreation Department continued their dedication to keep Meridian Township a vital and vibrant place to live through programs, special events, and management of publicly owned parks and natural areas.

This was accomplished through the dedicated efforts of the Park Commission, Land Preservation Advisory Board, a professional and enthusiastic staff of 15 full-time parks and recreation employees, numerous part-time and seasonal staff, and many passionate volunteers from the community. These individuals worked in concert to manage 955 acres of parkland, 76 miles of pedestrian/bicycle pathway, 20 miles of nature trails, the Harris Nature Center, Snell-Towar Recreation Center, Meridian Senior Center, year-around Farmers' Market, Meridian Historical Village, 968-acres of land preserves, and a wide variety of community recreation programs, special events and senior activities.

2019 DEPARTMENT GOALS AND ACTION PLAN

Marketplace on the Green

This year the project was awarded to Gordon Construction Services for the site work and restroom/office facility. The pavilion portion was awarded to Mid-States Recreation/Coverworx. This facility, when completed will contain a large pavilion, music stage, playground, patio area, rain gardens, and open green space and will become our premier community event location as well as the new home for the Meridian Township Farmers Market. Construction will begin in January 2020 with completion in late spring.

Central Meridian Regional Trail Connector Project Footbridge and Restroom in Historical Village

Staff worked with Wolverine Engineering and Surveyors on the design and specifications for the paved trail, boardwalk, and restroom projects in Central Park, and following DNR and Planning Department review, the projects were put out for bid. All the proposals we received were rejected due to higher than anticipated costs. Based on the outcome of the first bids, we were able to re-evaluate the plans and make minor adjustments to help bring the costs more in line with our budget. The plans have been revised and the project will be re-bid in January. Construction is planned for spring of 2020.

Small Dog Park

The new Small Dog Park opened in 2019 in Nancy Moore Park. This fenced facility contains a welcoming area with a drinking fountain for pets and owners, dog washing station and benches. The control gate regulates use on a registration basis. Inside the fenced area is green grass, trees and fun agility equipment. Much of the installation work was done in-house by the Parks Maintenance staff. A total of 172 dogs are registered to utilize the park. Two special events took place there this year including a Howl-o ween Costume Party and a Holiday Hounds party that included pictures with Santa!

Large Dog Park

Planning for development of the large dog park has been underway with many of the components completed in 2019. These elements include clearing of dead trees, grading and seeding of the central hub area, purchasing the perimeter fencing, gate and access system, new signage, and awarding of a bid to create an internal loop trail. All the pieces will come together in the spring of 2020, in conjunction with construction of the Central Meridian Trail Connector, which will provide access to the park. A ribbon-cutting event will be scheduled for early summer 2020.

Pavilion and Restroom at Harris Nature Center

Grants were received from the LWCF and the MNRTF for the addition of a pavilion and restroom building at the Nature Center. Site plans and bid specifications were developed and approved by the DNR and the Meridian Township Planning Department. The projects were put out for bid this fall and was awarded in December 2019. Construction will take place in the spring for early summer 2020 grand opening.

Senior Center Outdoor Improvements

The Meridian Senior Center is a joint collaboration between the Okemos School District and Meridian Township. With a current membership of 510, the senior center is an important facility for enrichment, socialization, and fitness for our older adults. In order to take advantage of the space provided Chippewa School, the outdoor courtyard was developed with a paved loop trail, outdoor furniture, raised plant beds and landscaping which will provide additional opportunities and experiences for seniors. A ribbon cutting was held with school and township officials present in October.

Parkland Additions

Nearly 45-acres of parkland were added to the park system in 2019. A big THANK YOU to the following donors:

- T.J Acquisitions, LLC donated 9-acres adjacent to Hillbrook Park in Haslett.
- Marilyn Pinnavaia Trust donated a 2-acre parcel adjacent to Brattin Woods Park in the Sleepy Hollow neighborhood.
- Dr. Maureen Sander donated a 31-9 acre parcel on Dobie Road named the Sander Farm Preserved Natural Area.
- In preparation for development of Marketplace on the Green, Meridian Township acquired 2.5 acres of green space on Central Park Drive as part of a land transfer agreement with CBL Properties/Meridian Mall.

New Trailhead and Directional Signage in Parks

This project began in 2018 and continued throughout 2019 of adding new trailhead and directional signage in multiple parks with the goal of making our parks more welcoming, informative and easier to navigate. All 20 miles of park trails were GPS marked and uploaded to a Google-based smartphone app called "All Trails". The remaining 15 parks will receive new signs in 2020.

New Fence at Riverside Cemetery

The fencing in Riverside Cemetery had deteriorated to the point that repair was no longer an option. Therefore, new black fencing was installed this summer that replicates the wrought iron that existed there previously. We saved some portions of the old fence for a future amenity in the Historical Village.

RECREATION PROGRAMS

Recreation Programs for Youth, Adults and Seniors

Providing recreation services to our residents creates a positive connection with government, other participants, as well as to our community. Programs were offered for persons of all ages and abilities including exercise and enrichment programs for seniors, environmental education classes and team sports for adults and youth, as well as our ever-popular Sporties for Shorties.

Okemos

- K-6th Spring Season/556; Fall Season/423; Total = 979
- K-7th Grade Flag Football Program: 120
- T-Ball-8th Grade Baseball Programs: 109
- 1st-8th Grade Softball Program: 106

Haslett

- K-6th Grade Spring Soccer/247; Fall Season/247; Total = 553
- K-6th Grade Basketball Program: 268
- K-7th Flag Football Program: 140
- 1st-5th Softball Program: 43
- 1st-8th Grade Baseball Program: 98
- T-Ball Program: 42

Sporties for Shorties: 380 (4-6 year olds)

Adult Kickball Leagues (Summer & Fall): 14 teams

Adult Softball Leagues (Summer): 21 teams

4 on 4 Sand Volleyball Leagues (Summer & Fall): 25 teams

139 registered Seniors participated in exercise class at Meridian Mall M,W,F year around.

Special Events

Conducting special events engages a wide cross-section of community members with multiple areas of interest. Some of the larger events include:

- Love a Park- over 100 volunteers and service group members spruced-up nine park areas with flowers, mulch, trail building, playground surfacing maintenance
- Senior Health and Fitness Day – this event was held in Wonch Park and included vendor booths, demonstrations, dancing and food and was attended by 62 seniors.
- Halloween Adventures at Harris Nature Center – record setting attendance with 1,475
- Christmas in the Village in the Historical Village – Hosted by the Friends of Historic Meridian
- Blue and Grey Civil War Reenactment in the Historical Village –Hosted by the Friends of Historic Meridian
- Chinese New Year Celebration – this event is conducted at Meridian Mall each year and serves as an cultural education experience with a wide variety of entertainment.
- CELEBRATE MERIDIAN FESTIVAL This event was the major event of the year that included the farmers market, arts and crafts fair, pet adoption, inflatable obstacle course and children's games, dunk tank, live music, car show, Historical Village tours, food trucks, beer and wine garden and FIREWORKS! It was great event with approximately 20,000 people in attendance.

Harris Nature Center

The Harris Nature Center continues to be one of the top gems of our park system by educating and engaging a large number of youth in environmental education and programs. Notable stats include:

- Adopt-an-Animal donations totaled \$625 for 8 animals
- Hosted 7 weeks of Annie's Big Nature Lesson exposing 290 students to a weeklong of learning in an outdoor classroom
- 8,439 drop-in visitors
- 8,634 program participants (this includes ALL programs including school groups)
- Halloween Adventures had a record year with 1,475 participants
- Summer Camp had a record year with 440 participants

- Kicked off Music in Nature with 3 dates and had 225 attendees
- Welcomed a new American Crow to our education programs
- Designed and installed new interpretive signs at the Boulder Garden
- HNC is the only nature center in the Great Lansing Area with Live Animals. Harris is home to 24 animals including several species of reptiles, amphibians and birds.
- Welcomed Allison Goodman to our staff full-time!
- Upgraded rooms at HNC to create new, much needed, classroom space

Pavilion Rentals

In 2019, the Township rented pavilions at the following parks: Wonch, Central Park, North Meridian Road Park, Hartrick Park, Nancy Moore Park and Towner Road Park.

	Total Days
Pavilion Rentals	161
3 Special Events (7 days)& 4 - 5K Races (4 days)	11
Weddings	6
7 Tournaments	27
Cricket	12
Total Reservation Days	217

Meridian Township Farmers Market

The Meridian Township Farmers Market continues to be a valuable community resource and social gathering opportunity. New this year was the time change on Wednesdays from 8am-2pm to 3pm to 7pm. This change welcomed new vendors and food trucks and better accommodated after-work customers.

- The Spring and Summer Markets had a combined total of 85 unique vendors – 58 of whom were seasonal and 27 daily vendors.
- Winter (Dec-April) 10 dates 10am-2pm inside Meridian Mall - The Winter Market hosted 42 vendors

The Market once again participated in State and Federal Food Assistance programs including SNAP, Double-Up Food Bucks, Senior Project Fresh and WIC. A total of \$12,350 of assistance money was redeemed at our market in 2019.

During the last five weeks of the outdoor season, we collected produce donations from our vendors and forwarded them to the Haslett Food Pantry at Haslett Community Church. This donation served 127 different households (240 adults/156 children).

Meridian Senior Center

The Meridian Senior Center, located at Chippewa Middle School, provides for the educational, enrichment and social needs of adults aged 55 and over for all older adults in the Township. This program is a joint effort between Meridian Township and Okemos Public Schools.

In 2019, 2,552 programs were conducted with member attendance at 25,050 and non-member attendance at 1,283. The three most popular programs were:

- Games (with 2,948 participants)
- Fitness and exercise (with 3,619 participants)
- Congregate meal program (with 15,743 participants.)

The Senior Center ended 2019 with 503 members (82 new members) and had 35 volunteers. A new addition to the center was the outdoor patio area that now expands available use and opportunity for new programs. The Haslett-Okemos Rotary Club funded much-needed upgrades and landscaping to the front sign.

Deer Management Program (9th year)

The Deer Management Program utilized local archery hunters to assist with managing the white

tailed deer over-population in Meridian Township by participating in this highly managed cull program. All participants were background screened, participated in an orientation and proficiency test, and then assigned to a specific location to hunt. In addition to the 80 deer that were culled through the program in 2019, Township maintenance staff picked up 88 additional dead deer along Township roadways.

Deer Management Program Statistics

(Collision based on data provided on the MSP “Traffic Crash Reporting System – Crash Statistics Report Selection Criteria”)

	Total Hunters	Properties Hunted	Deer Harvested	Reported Deer/Car Collisions
2011	25	7	43	152
2012	50	18	90	153
2013	60	20	127	180
2014	73	21	150	137
2015	30	19	63	144
2016	73	31	73	164
2017	66	30	80	129
2018	74	38	57	129
2019	85	38	80	Available 2/20

PARK COMMISSION

The Meridian Township Park Commissioners are elected to 4-year terms and have the responsibility of setting policy and direction for the acquisition, development, and maintenance of parks. In 2019, they held eleven (11) regular meetings. Mark Stephens was re-appointed as the Park Commission’s representative to the Land Preservation Advisory Board.

PARK COMMISSION MEMBERS

- Michael McDonald, Chair
- Amanda Lick, Vice Chair
- Mark Stephens
- Annika Brixie Schaetzl (resigned 11/2019)
- Courtney Wisinski (appointed to Township Board 1/2019)

LAND PRESERVATION PROGRAM

Description of the Land Preservation Program

The Meridian Township Land Preservation Advisory Board members are appointed to 4-year terms with a two term limit. The LPAB has the responsibility of advising staff in implementing the land preservation program. The program was developed to preserve lands and waters that provide valuable habitat for native plants and animals, protect air and water quality, add aesthetic value, and enhance public enjoyment of the outdoors. To date, 968 acres have been acquired in 22 preserves located throughout the Township. Strong efforts have been made to implement stewardship plans. The Board held eight (8) regular meetings, and conducted four (4) site visits to properties.

LAND PRESERVATION ADVISORY BOARD MEMBERS

- Jon Mayes, Chairman,
- James Kielbaso, Vice-Chair and Environmental
- Commission Liaison
- Roland Harmes (resigned October, 2019)

Jamie Hiller
Yu Man Lee
Kirk Lapham

Dan Opsommer, Township Board Liaison
Mark Stephens, Park Commissioner Liaison

Program Highlights

- Installed five new land preservation signs
- Held a total of 13 stewardship days
- Worked with over 300 volunteers in the land preserves during 2019

Site restoration refers to anything that increases ecosystem health within the preserve.

Davis Foster

- Removal of invasive species, autumn olive from front field
- Prescribed burn was conducted March, 2019 (33 acre area)
- 90 students from Murphy Elementary participated in seed ball project

Towar Woods

- Tree planting- 500 trees planted and tubed in the spring
- Invasive species management - glyphosate around newly planted trees to kill weeds
- Over 5 acres of mature Buckthorn treated with basal bark herbicide
- \$1,000 received as a generous donation to the tree planting project for 2019

SW Meridian Uplands

- Continue grassland/prairie monitoring

Serafine

- Four workdays complete removing shrubby invasive species such as Buckthorn, Autumn Olive and Honeysuckle
- Jim Hewitt has also been working on his own multiple days a week to treat the shrubby invasives along the roadside
- HOA paid for native plants to enhance the grassland area

Red Cedar Glen

- Continue the removal of invasive autumn olive with neighbors

Ponderosa Preserve

- Contracted for Japanese/Bohemian Knotweed removal over the next four years.

Sower Woods

- Over 100 blue stem and zig zag goldenrod planted

DEPARTMENT RETIREMENTS/RESIGNATIONS

- Dennis Antone, Facilities Superintendent, retired and was replaced by Kati Adams (new Parks and Land Preserve Superintendent); and Rob MacKenzie (new Public Works Superintendent)
- Kit Rich, Director of Harris Nature Center, retired and was replaced by Kati Adams. Kati's former position was replaced with the hiring of Allison Goodman, Park Naturalist
- Darcie Weigand, Recreation Programmer, moved out of state and was replaced by Kayla Scelfo
- Kelsey Dillon, Stewardship Coordinator, resigned and was replaced by Emma Campbell (start date January, 2020)
- Corey Patrick, resigned as the Farmers Market Manager and was replaced by Tom Cary
- Welcomed two new Utility Workers to the Parks Maintenance Division: Mike Love and Tom Baker

TEAM MEMBERS

Administration

LuAnn Maisner	Director of Parks and Recreation
Robin Faust	Administrative Assistant II
Michael Devlin	Parks and Recreation Specialist
Kayla Scelfo	Parks and Recreation Specialist
Jane Greenway	Senior Parks and Land Management Coordinator
Kelsey Dillon	Park Naturalist/Stewardship Coordinator
Kati Adams	Parks, Pathways and Land Preservation Superintendent
Tom Cary	Farmers' Market Manager

Harris Nature Center

Kati Adams	Parks and Land Preservation Superintendent
Allison Goodman	Park Naturalist
Ali Olsen	Assistant Naturalist
Audra Francis	Assistant Naturalist
Jacey Jackard	Assistant Naturalist
Molly Link	Assistant Naturalist
Daniel Kontra	Assistant Naturalist
Kayla Glenn	Assistant Naturalist

Parks, Land Preservation and Pathways

Kati Adams	Parks and Land Preservation Superintendent
Larry Bobb	Parks, Land Preservation & Pathways Maintenance Lead
Don Cuson	Utility Worker
Josh Cannon	Utility Worker
Dan Inman	Utility Worker
Tom Baker	Utility Worker
Mike Love	Utility Worker

Meridian Senior Center

Cherie Wisdom	Center Coordinator
Courtney Caltrider	Administrative Assistant
Laura Schultz	Kitchen Lead

POLICE



The Meridian Township Police Department is committed to establishing and maintaining partnerships in our community; and with understanding, cooperation and equality; we strive to enhance the quality of life and protect the rights of our community.

CORE VALUES

COMPASSION

We care for and empathize with our fellow human beings.

COURAGE

We face danger to ensure the safety of others. We will stand up for what is right. We will be brave when others may not. We strive to eliminate fear through our actions.

EXCELLENCE

We employ those who strive to achieve a higher standard. We listen to our employees and the members of our community to continually improve our effectiveness and reliability. We strive to exceed community and professional expectations.

FAIRNESS

We will treat all individuals impartially. We will act in a just manner. We appreciate different points of view. We exercise discretion appropriately.

INTEGRITY

We will fulfill our mission in its entirety using sound principles, honesty and sincerity.

RESOURCEFULNESS

We can be relied upon for help and support. We have the ability to deal with situations effectively. We build on our mutual experiences to effectively resolve problems.

RESPECT

We value the rights and beliefs of others. We are courteous. We treat others as we expect to be treated. We appreciate diversity.

WORK ETHIC

We are self-motivated and self-directed. We do what is asked and strive to achieve

expectations. We hold ourselves to a higher standard.

In 2019, there were 18,552 calls for service (excluding traffic stops 4,873).

2019 Written Reports	
Alarms	771
Traffic Crashes	891
All Other	4,759
Total	6,421

Yearly Comparisons

Written Reports

2016	2017	2018	2019
6,332	6,282	6,801	6,421

Calls for Service

2016	2017	2018	2019
18,364	17,545	18,588	18,552

Arrests

2016	2017	2018	2019
700	559	577	563

Citations

	2016	2017	2018	2019
Citations Issued	2,272	1,752	1,922	2,096
Total # of Charges	2,768	2,188	2,379	2,857

TRAFFIC SAFETY

The Meridian Township Police Department views traffic safety as an important key to keeping the community safe. The Department works with the Ingham County Road Commission and the State Highway Department to address road design related concerns. Officers take enforcement in areas identified as directed patrols based on complaints from citizens. Additionally, the speed trailer and speed sign are utilized to educate motorists regarding speed-related safety concerns.

Three of our officers provide car seat inspections at the Department. A total of 26 inspections were completed in 2019. Officers completed car seat inspections at the annual Halloween Open House at the police department in October.

TRAFFIC CRASH INVESTIGATION TEAM

Traffic crashes involving fatal or potentially fatal injuries require investigators with specialized training and equipment. Area law enforcement agencies have committed personnel to a regional crash investigation team. On-duty team members are called to assist participating agencies with potentially fatal crash investigations. This effort has increased the experience of the investigators while reducing overtime costs for the Departments.

VOLUNTEERS

We are fortunate to have three volunteers who assist the Department on a regular basis. One volunteer helps with the annual Halloween Open House by greeting and organizing the visitors as they arrive in the lobby of the Department.

Two Volunteer Parking Enforcement personnel provided a total of 75 volunteer hours in 2019. The total number of department citations written was 305 for the year. The Department does not require payment of handicap citations when the disabled person shows that he/she had a permit that was not displayed. Our concern is to keep the spaces available for those who have permits, not collecting fines from persons with disabilities.

COMMUNITY POLICE OFFICERS

Community policing is an important element of fulfilling our Mission Statement and effectively serving the community. Officers are in regular contact with their neighborhood leaders and residents to improve communication and build trust with the community. The officers contact the leader a minimum of once per month to check in and provide the leader with information on crimes that have occurred and upcoming events.

National Night Out is an annual event to promote community partnerships with law enforcement. Officers attended twenty-six events with some locations receiving a visit from McGruff the Crime Dog, the police motorcycle, canine teams, and fire trucks and ambulances.

ADULT CROSSING GUARDS

The Department hires, trains, and manages the six adult school crossing guards for the six schools in the township. The guards are supervised by the School Resource Officers.

CANINE TEAM

In 2019, the Department maintained a single K9 Team, Officer Tobias and K9 Yukon. The team was trained for article searches, building searches, narcotics detection, and tracking. The K9 Team was also assigned to the Ingham Regional Special Response Team (IRSRT) to assist with perimeter, high risk tracking and area searches during activation. Area departments request and/or provide mutual aid from canines when they either do not have a canine on duty or they do not have a team on the Department. The canine team completed 192 hours of monthly training. In addition, Officer Tobias and Yukon trained with the IRSRT for a total of 48 hours in 2019. Officer Tobias was promoted to the rank of Sergeant in June of 2019. This promotion led to fewer uses of K9 Yukon because of other duties. K9 Yukon was retired and purchased by Sgt. Tobias in December 2019 after 6.5 years of service.

SPECIAL RESPONSE TEAM

The Ingham Regional Special Response Team (IRSRT) is comprised of personnel from the Ingham County Sheriff's Department, East Lansing Police Department, MSU Police Department, and Meridian Township Police Department. The team is called upon by agencies when a tactical team is needed to respond. Meridian Township commits three officers and one sergeant to the team. Meridian Township Officers received 528 hours of regular monthly training and 180 hours of annual training. This totals 708 hours of yearly training. IRSRT had three call outs in 2019.

IRSRT also has a Negotiator Team comprised of hostage negotiators. The negotiators are not activated unless the situation dictates a need for negotiators. Meridian Township has one officer and one sergeant assigned to the team.

SCHOOL AND COMMUNITY RESOURCE UNIT

The School and Community Resource Unit is comprised of two officers who work with the Haslett and

Okemos Public Schools. The officers provide a number of services to the schools in an effort to provide a safe environment for children to learn. The officers also assist with a number of community events.

The officers participated in “No Senior without Christmas” event. This is a Tri County TRIAD program. There were 350 holiday baskets delivered in the tri-county elderly residents. Meridian Township had 35 of those.

Meridian Township held their own “Shop with a Cop” event in 2019. The officers worked with school counselors and 14 area students participated. The officers worked in conjunction with Walmart, Jets Pizza and Haslett Okemos Rotary Foundation, as well as the FOP and POAM unions.

The officers attended annual DARE training and received updates to include Vaping lessons.



A total of \$131,177.47 worth of stolen property was recovered in 2019. The majority of the recovered stolen property was returned to the victims.

Noteworthy investigations for 2019 include:

- A homicide investigation that spanned two jurisdictions. The suspect is awaiting trial.
- Multiple armed robberies across several jurisdictions. Worked with multiple agencies to locate and arrested four subjects. Suspect’s are currently awaiting trial.
- A large illegal marijuana dispensary was discovered operating in the township. The case is still be investigated.

COURT SERVICES

The Court Services Officer (CSO) processes criminal complaints and submits them to the Ingham County Prosecutors Office and the Township Attorney to request arrest warrants and juvenile petitions. The CSO swears to warrants, arraigns prisoners, attends juvenile hearings, serves subpoenas, delivers citations to the court and collects bond money posted and delivers it to the court. Registered Sex Offenders report to the CSO as required by law. The CSO schedules Sex Offender Address Verifications on a regular basis. The CSO investigates Sex Offender Registry Act violations and submits those complaints to the Ingham County Prosecutor’s Office for arrest warrants.

COURT SERVICES	2016	2017	2018	2019
Arraignments	273	215	154	143
Subpoenas Served	952	842	832	692

Personal Protection Orders	38	67	38	41
Warrant Requests	641	522	605	614
Warrants Signed by CSO	418	431	429	378
Twp. Attorney Requests	212	177	188	144
Total Petition Requests	74	152	134	102
Retail Fraud Requests	342	319	332	234
OWI Requests	60	80	66	62
Assault Requests	60	62	48	42
Assault Requests-Domestic	137	144	175	180
Larceny/Fraud Requests	87	76	95	82
Narcotics Requests	53	75	75	20

TRAINING

Under the direction of the Chief of Police, the Training Sergeant oversees all training for the Department. The Department provided employees with 5,432.5 hours of training in 2019.

The in-service training program consists of monthly training for all sworn employees, periodic roll call videos, policy tests, quarterly firearms sessions, and computer based instruction. The external training program utilizes universities and private providers to handle specialized training outside the scope of the Department trainers. The Department strives to remain at the forefront of progressive policing by acknowledging the importance of both continuing education to retain current skills and the acquisition of new knowledge for officers to expand their skill base.

MID-MICHIGAN POLICE ACADEMY

The Services Division Commander is assigned as a coordinator for the Lansing Community College's Mid-Michigan Police Academy. During the seventeen-week academy, the coordinator works closely with the recruits in training and career development. The coordinator also has the unique position of monitoring the recruit's individual progress and identifying potential future Department employees.

21st CITIZENS' ACADEMY

The Department hosts a ten-week Citizens' Academy that meets once a week for three hours in the fall. This academy exposes the attendees to police operations and procedures. Sixteen citizens from Meridian, Lansing and Williamstown Townships participated in 2019.

13th YOUTH CITIZENS' ACADEMY

The Department hosts a seven-week Youth Academy that meets once a week for two hours in the spring. The students learn about police work while being able to experience hands-on activities. Eleven students from the Haslett, Okemos, Lansing, and Bath school districts attended the Academy in 2019.

2019 DEPARTMENT GOALS AND ACTION PLAN

In conjunction with the Township Manager, the Department establishes goals to help in the delivery of law enforcement services. Many of our goal accomplishments and other activities are listed as follows.

Complete State Accreditation through the Michigan Association of Chiefs of Police

A preliminary assessment was conducted by outside assessors on September 24, 2019. Our final assessment for accreditation was December 9-10, 2019 and a report was submitted to the Michigan Law Enforcement Accreditation Commission for review. If the Commission awards our Department

accreditation, we will receive accreditation at the February 6, 2020, Commission meeting that will be held at the Michigan Association of Chiefs of Police mid-winter conference.

Continue Efforts to Reduce Workers Compensation and Lawsuits Claims

The Department is an active participant in the Township Safety Committee and we continue to seek safer and more efficient ways of conducting business. The Department has conducted numerous trainings to reduce liabilities. Some of the trainings attended by officers included: emergency vehicle operations, fair and impartial policing, vulnerable and impaired persons as well as legal update.

Upgrade the Public Safety Building Video Surveillance System

The Department completed this project and the new system has been operational since November 15th. The new camera system added eight new cameras to increase the coverage on the public safety building to include the exterior. This expansion allows for coverage on the main parking and front entrance.

Work Diligently toward Full Staffing (41)

The Department has hired four new officers in 2019 and we continue to work with the Mid-Michigan Police Academy to identify qualified applicants. The Department has attended several job fairs and sends recruiting team members to academies throughout the state. We are also partnering with Michigan State University Athletics Department in an effort to recruit from a more educated and diverse candidate pool than what we traditionally are exposed to at the police academies.

Continue Collective Efforts to Foster an Environment that is Welcoming, Diverse and Inclusive

The Department's recruitment team is attending various police academies around the State to encourage applications for employment to our Department. The Department also attends the monthly Advocates and Leaders for Police and Community Trust (ALPACT) meetings and receives input and feedback from a diverse group of community leaders.

The Chief's office, and command staff continue to have an open door policy with employees in regards to improvements in our business practice. This openness has led to implementing a Senior Watch program, voluntary range days for officers, and other improvements to the Public Safety Building. Welcoming input from employees and including them in the process has led to employee ownership of their work product.

Continue to Seek Opportunities to Reduce Overall Operating Costs

The Department seeks competitive bids on all purchases over \$250.00. The Department has also adjusted work shift hours to reduce the potential for overtime needs. Supervisors have been diligent in controlling staff overtime throughout the year when possible.

Deploy a Portable Fingerprint Scanning System to Identify Missing or Endangered Children and Adults, as well as, Persons with Outstanding Warrants

The Department deployed the fingerprint scanner in the field in February 2019. Since the deployment of this equipment, it has been used 66 times and 17 persons have been identified that attempted to conceal their identity.

Take a Leadership Role in Finalizing the Police Department's 2020-2022 Collective Bargaining Agreements

Contract negotiations have begun and preliminary offers have been exchanged with the command group. Negotiations are set to continue in 2020.

WILLIAMSTOWN TOWNSHIP POLICE SERVICES

The Meridian Township Police Department provides law enforcement services to Williamstown Township. The 2019-2021 contract arranges for Williamstown Township to compensate Meridian Township \$225,217.00 for calendar year 2019, \$229,721.00 for calendar year 2020 and \$58.41 per hour outside of the 80 hours of weekly patrol for emergency and non-emergency responses.

Williamstown Township Statistics				
	2016	2017	2018	2019
Written Reports	379	381	384	323
Calls for Service	1546	1616	1769	1451
Calls for Service (excluding traffic stops)	1103	1226	1239	1038
Arrests	11	12	20	17
Citations Issued	159	73	101	170
Total Number of Charges	175	89	120	204

Written Reports				
	2016	2017	2018	2019
Alarms	68	66	61	52
Traffic Crashes	127	115	116	107
All Other	184	200	207	164
Total	379	381	384	323

MTPD TEAM MEMBERS

CHIEF

Ken Plaga

ASSISTANT CHIEF

Brad Bach

LIEUTENANT

Richard Grillo

SERGEANTS

Scott Dawson**

Bart Crane

Andrew McCready

Edward Besonen

Chris Lofton

Jason Clements

Brian Canen

Andrew Tobias

OFFICERS BY SENIORITY

Kristi Lysik**

Paul Rambo

Dave Metts

Christina Scaccia

Jeff Adams

Curt Squires

Brett Reed***

Erin Linn

Kyle Royston

Rebecca Payne

Kevin Harvey

Mark Divney

Michael Hagbom

Bryan LeRoy

Doug Strouse

Aaron McConaughy

Dan King

Adam Slavick

Stephanie Lewis

Ian Mandernack

Kolby Casaday

Lerico White

Megan Klein

Austin Dietz

Blaine Anderson

Lorenzo Velasquez

Antonio Trevino

Kyle Cornell

Jaclyn Allen*

David Reinke*

Dustin Badder * ***

Wes Talbot*

CIVILIAN PERSONNEL

Kristi Schaeding, Administrative Assistant

Lynne Bach, Records Supervisor

Lori Hagan, Records Technician

Marcie Barnum, Records Technician

Jennifer Ramsey, Records Technician

CADETS

Evan Buckner***

Jonathan Kendrick*

Ryan Tunkl*

Baylie Kaiser*

Danielle Huettner*

Yutaka Benson* ***

Dhospina Qipo***

Maryam Masood

Marissa Fura***

Matthew Kristufek***

Allison Akins***

Jennah Wilson***

Maxwell Bland*

Cody Lefler*

*Hired in 2019

**Retired in 2019

***Resigned in 2019

PUBLIC WORKS



Charter Township of Meridian Code of Ordinances: Chapter 2, Article 1

A Department of Public Works shall be created and the department shall be headed by the Director of Public Works and Engineering. The department shall be responsible for all matters relating to the management, maintenance, and operation of all the physical properties of the Township. This department shall have exclusive control of the construction, maintenance, and operation of the Township sewers and water mains, the operation of Township dumps and landfills, the operation and maintenance of the cemetery, and the maintenance of all Township facilities.

2019 DEPARTMENT GOALS AND ACTION PLAN

Complete the Haslett Road Water Main Replacement Project, the Valve Replacement Project and the South Water Tank Improvements

In conjunction with the Ingham County Road Department (ICRD), the Department reprioritized the replacement of the water main on Haslett Road and valves replacement and used the existing funding to replace the water main on Towner Road and Lake Lansing Road. Both projects were completed in the fall of 2019. The Haslett Road water main will be replaced in 2020.

The south tank improvements, which included a new overflow discharge, were completed in November of 2019. In addition to the south tank, the Lansing Board of Water and Light (BWL) expressed interest in the placement of an antenna to read their meters on the north tower. As compensation for the placement, an attachment agreement was negotiated that provides a cash payment over three years and covers the cost of the installation of a safety handrail on the top of the elevated tank. The installation of a handrail and antenna were completed in December.

Implement the Improved Cross Connection Control Program as Required by the MDEQ

The State of Michigan requires all public water supplies to adopt cross connection rules to protect the public health and safety of its customers. A cross connection is a plumbing connection that could allow an undesirable reversal of flow of water of questionable quality, waste or other contaminants.

In the summer of 2019, the Department of Public Works contracted with Hydrocorp to assist and enhance our existing cross connection program. The current program focuses on industrial and commercial properties in the Township, but will eventually include residential customers of the system. The first inspections using the proactive notification and highly trained inspectors from Hydrocorp began in November.

Begin the Water Service Material Inventory as Required by the MDEQ

The Meridian Water Service Material Inventory was submitted to the Michigan Department of Environment, Great Lakes and Energy (EGLE) in December, meeting the required deadline of January 1, 2020.

We are more fortunate than many of our neighbors, as we do not have any lead services in our system. This new State mandate is the result of the health hazards posed by lead water service to homes and businesses.

Complete the Sewer Main Rehabilitation Projects as Outlined in the 2017 MDEQ SAW Grant and Complete the Installation of an On-Site Backup Generator at the Mud Lake Lift Station

685 feet of 16-inch on Grand River and 805 feet of 12-inch sanitary sewer main was lined by our contractor, Insituform Technologies in October and November of 2019. The cured-in-place-pipe (CIPP) process restores the structural integrity of the pipe, reduces infiltration and eliminates the need to excavate and remove the deteriorating sanitary sewer main.

DVT Electric has been selected to provide the new 30kW standby generator; concrete foundation and automatic transfer switch for the Mud Lake Lift Station. The generator is currently on order and is expected to be installed and placed in service in the spring of 2020.

Assist with the Installation of the Haslett Beautification Association Art and Landscape Project at the Haslett Triangle Property

The Meridian DPW assisted the Haslett Beautification Association with installation of the sailboat art pieces and provided an irrigation system to water the associated landscaping this summer. The Township also installed a small section of pathway on the north end of the property to connect and service the Marsh Road pathway and Lake Drive paved shoulders.

Complete the 2019 Local Road Program, Including the Delayed 2018 Projects

In 2019, the Township resurfaced 3.1 miles of local roads using the Hot-In-Place Recycling method that we were not able to complete in 2018. The roads resurfaced included: Island Lake, Cade, Biscayne Way, Hallendale, Jo Pass, Burcham, White Owl, Woodfield, Sheldrake and Starboard.

In addition, Towner Road, from Marsh Road to Saginaw Highway was also completed. This long delayed project to allow for the construction of the Township Park, now provides a new paved surface and improved paved shoulders along the roadway for biking and walking.

The final local road project for 2019 was the resurfacing of five cul-de-sacs with PASER ratings of 2. The five cul-de-sacs selected for work included: Arundel Place, Hazy Lane, Coventry Circle, Wood Valley and Moss Glen Circle. All five cul-de-sacs received their base paving, with Hazy Lane and Coventry Circle receiving final paving on November 23, 2019. The remaining three roads will receive final paving in the spring of 2020.

The Township also provided direction to the Ingham County Road Department (ICRD) regarding the replacement of the Okemos Road Bridge over the Red Cedar River. The Township will continue to collaborate, and work cooperatively with the County in 2020 on its final design and coordinate with its construction in 2021.

Complete the Municipal Building HVAC Replacement Engineering Study

Final design was completed on the Municipal Building HVAC replacement by our engineering contractor in the summer of 2019. Bidding will occur on the estimated \$2.2 million dollar project over the winter of 2019/2020, with selection and installation in 2020.

Complete the 2019 Facility Projects Funded in the 2019 Budget (kitchens, HVAC and drainage improvements at the fire stations, parking lot surface maintenance, rain gardens installations and building energy lighting replacements at the Municipal Building)

The Solar Panel Landscaping, which included over 530 perennials, grasses, shrubs and trees, was completed in October. An irrigation system was also included as part of the project.

The Municipal Building and Service Center parking lot crack received crack sealing and seal coating over the summer. The North Fire Station Drainage and rear parking lot improvements were also completed.

New kitchen appliances were purchased for the Fire Stations and the South Fire Station HVAC improvements are in progress and will be completed by the end of the year.

Continue to Actively Participate and Represent the Township with the Ongoing and Proposed Improvements at the East Lansing Water Reclamation and Reuse Facility (WRRF)

Throughout 2019, we attended and participated in quarterly meetings with Michigan State University (MSU) and the City of East Lansing regarding progress on the improvements at the WRRF. Work continues steadily on the headworks screening and grit removal portion of the project, as well as, the solids handling and digestion. As part of the State Revolving Loan fund (SRF), the WRRF qualified for \$1.94 million in loan forgiveness because of the inclusion of an anaerobic digester that will provide both heat and electricity for reuse at the WRRF.

Continue the Implementation and Enhancement of the DPW Cartegraph Operations Management Software system (OMS)

The Department continues to improve its use of the Cartegraph OMS system in conjunction with our ever-increasing GIS mapping and asset tracking functionality. This year we began to incorporate the Verizon Fleet modules into our vehicle fleet to track odometer and error codes so that preventative maintenance schedules could be created in Cartegraph to improve the maintenance and repair of our fleet of vehicles and equipment.

A significant reorganization of the DPW and Parks maintenance team occurred this year with the retirement of the Facility Superintendent. With no increase in the number of overall employees, the new organization has the DPW Maintenance Team responsible for Water Distribution, Sanitary Sewer Collection, Buildings and Grounds (Cemetery) and the Motor Pool. The Parks Maintenance team will now solely focus its efforts on Park properties and facilities, Recreation fields, Land Preservation properties and maintaining the pathway system.

Fully participate in the Local Update of the Census Addresses (LUCA) program in preparation of the 2020 US Census

Our LUCA was prepared and submitted to the US Census in the summer of 2019. In preparation for the 2020 US Census, we have organized a Meridian Complete Count Committee, assisted with census taker recruitment and outreach and prepared our 2020 information campaign to promote the census.

Operation and Maintenance Highlights in 2019

Our dedicated field crew completed 3,607 MISS DIG requests, repaired 15 water service breaks, repaired 14 water main breaks, repaired 20 fire hydrants, cleaned 84,602 feet of sanitary sewer main, televised 19,852 feet of sewer main, cleaned 24 lift stations, completed 756 vehicle maintenance and repair requests, completed 306 facility maintenance requests, and completed 32 burials at Glendale Cemetery. The Engineering team processed 232 soil erosion permits, inspected 139 utility service repairs and connections, reviewed 143 utility development plan permits and approved 35 pathway and sidewalk permits.

ENVIRONMENTAL COMMISSION

Bill McConnell, Chair
J. James Kielbaso
Linda Burghardt
Aparna Krishnamurthy

James E. Jackson, Vice-Chair
John Sarver
Susan Masten
Kirk Lapham

TEAM MEMBERS

Administration

Derek N. Perry Deputy Township Manager
Director of Public Works & Engineering
Denise Green Administrative Assistant II

Engineering

Younes Ishraidi, P.E., C.F.M. Chief Engineer
Nyal Nunn, C.F.M. Senior Project Engineer
Jay Graham Records Manager
David Liviskie Engineering Technician
Tom Westerfield Engineering Technician

Geographic Information Systems

Cara Maney GIS Specialist

Environmental Programs

LeRoy Harvey Environmental Programs Coordinator (PT)

Public Works Superintendent Rob MacKenzie

Water Utility

Chad Houck Lead Utility Worker
Mike Ellis Utility Worker
Dan Palacios Utility Worker
James Arnett Utility Worker
David Lester Utility Worker
Derrick Bobb Utility Worker
D'Destin Kaufmann Utility Worker
Robert Stacy Utility Worker

Sewer Utility

Matt Foreman Lead Utility Worker
Kyle Fogg Utility Worker
Ben McCann Utility Worker
Jacob Flannery Utility Worker

Buildings, Grounds and Cemetery

Tyler Kennel Lead Utility Worker
Keith Hewitt Utility Worker

Motor Pool

Todd Frank Lead Mechanic
Jim Hansen Mechanic

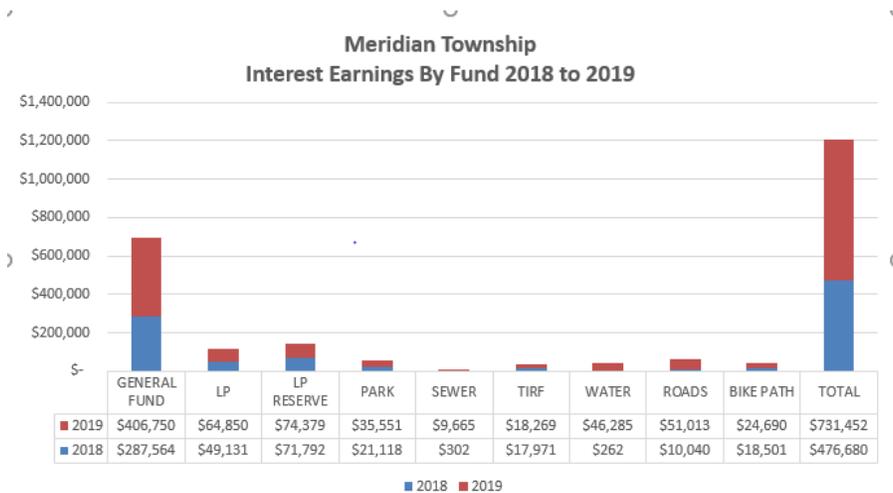
TREASURER'S OFFICE



The Treasurer's Office is required by law to receive and take charge of all funds belonging to the Township and those funds to be distributed to other taxing authorities. These collections are primarily real estate and personal property taxes, but also include fines, licenses, permits, deposits, bonds, and fees. Included in this responsibility is the accurate accounting of all funds. The Treasurer is also required to pay out funds to local school districts. In Meridian Township, these include Okemos, Haslett, East Lansing, Williamston, Ingham Intermediate Schools, and Lansing Community College. Other governmental units also receive tax money from Meridian Township according to each taxing authority's millage. Temporary surplus funds are invested prudently with the emphasis on the safety of the principal as required by statelaw.

During the calendar year 2019, the Treasurer's Office reported:

- Total property taxes collected and processed in 2019 were \$102,919,239.76. In 2018, \$91,411,904.19 in property taxes collected in 2018.
- Total delinquent personal property taxes collected in 2019 for the 2013 to 2018 tax years were \$35,008.78. At the close of 2019, there were \$5,658.39 owed in delinquent personal property bankruptcies, down from \$10,770.46 at the end of 2018.
- In 2019, interest earning for all investments made by the Treasurer were \$732,452. This is an increase of \$254,772 over the \$476,679 in interest income earned in 2018. By Michigan statute, all investments must meet strict criteria for safety, liquidity, and yield.



- There were three new bankruptcies/receiverships filed by businesses in the Township in 2019, down from five bankruptcies in 2018.
- In January 2019, Treasurer Deschaine earned accreditation of Certified Public Funds Investment Manager (CPFIM). This certification is awarded by the Association of Public Treasurers of the United States and Canada.
- The Treasurer worked with the Finance Director to implement a new on-line payment system, Invoice Cloud. This new on-line payments portal provides more options for electronic payments for to our residents, without any additional costs to our tax and utility payers. The move to Invoice Cloud will save Meridian Township approximately \$50,000 annually in bank fees and other costs associated with the previous on-line payment system.
- In October 2019, the Treasurer worked with the Finance Director, and Township Manager, to sell \$11,500,000 in bonds for road improvements in Meridian Township. Due to Meridian's excellent bond rating, the Township financed the bonds at a 1.3% interest rate. The extremely low interest rate will effectively allow the Township to receive an additional \$300,000 of net bond proceeds, over the next three years, without increasing the 1.9429 millage rate.



- The Treasurer served as a Township Board member and attended semi-monthly meetings. This responsibility includes deliberation and voting on all Board actions
- The Treasurer presented quarterly and special reports to the Township Board on Township investments and collections.
- The Treasurer served as a member of the Meridian Township Pension Board, which meets in November to oversee its financial condition.
- Treasurer Deschaine served the Meridian Economic Development Corporation (EDC) as treasurer and attended monthly meetings to report finances and provide input on development projects.
- The Treasurer provided three Consumer Education seminars at the Meridian Senior Center in 2019: Phone, Email and e-Scams (6/18), On-Line Safety (10/8), and Identity Theft (11/19). In all, over 75 residents attended the series that was led by staff from the Michigan Attorney General's and the Meridian Police Department.
- The Treasurer served on the Transportation Commission and attended all of its meetings in 2019.
- The Treasurer attended weekly meetings of the Rotary Club of Haslett & Okemos, and served as director of Kiwanis Club of Haslett & Okemos. As an active member of these groups, the Treasurer improved communications between the Township and the business and non-profit community.
- Treasurer Deschaine attended monthly Meridian Area Business Association (MABA) meetings in order to facilitate communication between the Township and the business community.

- The Treasurer served on the Capital Area Treasurer’s association, and hosted 25 members for the August meeting.
- The Treasurer collaborated with Delhi Township and the City of Mason in the statutory cancellation of delinquent personal property taxes.
- The Treasurer assisted with various Tax Tribunal property tax appeal cases.
- The Treasurer assisted the Finance Director with approval of paperwork for audit purposes.
- Taxpayers can receive free tax information on their own property by using the Township website (www.meridian.mi.us) or calling the Treasurer’s Office at (517)853-4140.

TEAM MEMBERS

Phil Deschaine, Treasurer
Mary Ann Groop, Deputy/Assistant to the Treasurer
Stephaney Guild, Bookkeeper



**CLERK'S OFFICE
BOARD COMMUNICATIONS
February 04, 2020**

**BOARD INFORMATION
(BI)**



January 23, 2020

Ms. Brandi Yates, Communications Manager
Meridian Township
5151 Marsh Road
Okemos, MI 48864

Re: Xfinity TV Updates

Dear Ms. Yates:

We are committed to keeping you and our customers informed about changes to Xfinity TV services.

We are committed to keeping you and our customers informed about Xfinity TV changes. In a letter dated October 15, 2019, we informed you that as of December 10, 2019, we would add Epix programming to certain packages and remove Starz programming from those packages. While we did add Epix to those packages, we delayed the removal of Starz programming. We will now be removing Starz from those packages as of February 11, 2020.

As part of our new agreement with Starz, the channel will be available to Xfinity customers separately from those packages at a reduced rate of \$8.99 per month and StarzEncore, StarzEncore Westerns, StarzEncore Black and StarzEncore Action will be included with that subscription to Starz.

In addition, we will be removing Movieplex programming on March 24, 2020.

Please feel free to contact me at 734-359-2077 if you have any questions.

Sincerely,

John P. Gardner
Director, External Affairs
Comcast, Heartland Region
1401 E. Miller Rd.
Lansing, MI 48911

From: [Samuel Zuke](#)
To: [Board](#)
Subject: Haslett Village Square
Date: Tuesday, January 28, 2020 9:35:47 AM

I am writing to share my opinion on the Haslett independent community possibly replacing the Village Square.

There are plenty of other places that can be built up for that purpose if there is a new one needed. I find it questionable that we even need one, considering how many others we already have in the area.

I'm very much opposed to this.

From: [Lori Conklin](#)
To: roads@ingham.org; Board
Subject: Jolly Road Diet Proposal Input
Date: Thursday, January 30, 2020 1:13:45 AM

Thank you for holding the Jolly Road public hearing and letting the people voice their thoughts on putting Jolly Road on a Road Diet. I appreciate the opportunity, and the patience of the stake holders who took the time to listen to me as well as the other community members.

I agree that something should be done to help Jolly Road, but am not convinced that a road diet is the appropriate course of action – especially between Okemos and Hagadorn Roads. This road diet proposal seems it is more of an attempt to try to Band-aid the issues instead of truly addressing them. After hearing Bill Conklin speak and explain, it sounds like the Road Commission is attempting a solution within a limited dollar amount. As a project manager, I get this as cost is always an issue, no matter the project.

The number one issue I heard at the public hearing for the road diet is to try to improve safety – especially for left turn vehicles. Yes, adding a left turn lane will definitely be an improvement for those turning left. But reducing the lanes ultimately will cause a long line of cars and increase the risk of rear-end crashes. While left turn crashes may go down with adding a center turn lane, the rear-end crashes will go up. Already, reported rear-end crashes are the number one accident type in the 5-year study for Jolly between Hagadorn and Kansas Roads – 31 (compared to only 11 head-on left turn accidents). Other communities with road diets noticed an increase in rear-end collisions, and a Federal Highway case study of Division Street in Grand Rapids showed rear-end collisions tripled after a road diet. (https://safety.fhwa.dot.gov/road_diets/case_studies/) Given this data, if head-on left turn accidents decrease to zero, and rear-end crashes triple like they did in Grand Rapids, we're looking at a possible net increase of 40 accidents in a 5 year period. This doesn't sound like a road diet will improve safety and reduce accidents to me.

During my opportunity to speak, I mentioned that I see many rear-end collisions between Kansas and Hewlett Roads. I realize the reported numbers don't support what I see. This is likely due to the damage in these accidents being valued at less than the drivers' deductibles and Michigan's No Fault Insurance Law. When the damage is minimal or potentially valued less than the deductibles carried on the vehicles, drivers here in Michigan are less likely to report as doing so will cause those drivers' insurance rates to increase, often to a higher amount than their deductibles. Thus there is little or no incentive to file police reports unless the damage is more substantial.

A repeated concern with road diets is gaps between vehicles. With the traffic forced into a single file in a direction instead of the more efficient 2 lane in a direction model, traffic will form a long line with very little in the way of gaps. This lack of gaps presents the issue of cross traffic being able to make a right turn, and much less a left turn, onto the roadway in a timely manner. As such, drivers waiting for gaps become less patient, more frustrated, and more willing to take risks, such as pulling out into or in front of oncoming traffic. Obviously this increases the risk of collisions. This lack of gaps can also increase the number of animal/vehicle accidents. With the deer population level in Meridian township, and the habitat surrounding Jolly Road being conducive to supporting deer, it is likely that deer and other animals will have less chance of making it across Jolly Road safely due to the lack of gaps between vehicles. Again, this will drive up the accident numbers instead of reducing, thus negatively impacting safety.

With the traffic being forced into a single file line each direction, travel time will increase due to the increased congestion. Drivers may sit through more than one traffic light cycle, there will be a loss of passing opportunities, and there will be increased emissions and fuel

consumption due to increased traffic lines and travel times. An Iowa study of US-75 after it went on a road diet showed a 36% increase in travel time.

<https://iowadot.gov/iowabikes/pdf/Road%20Diet.pdf>

The Michigan State University Department of Civil Engineering did an Operational Analysis of 4-lane to 3-lane Conversions (Road Diets) in Michigan for back in 2012, which was submitted to the Michigan Department of Transportation (MDOT).

https://www.michigan.gov/documents/mdot/MDOT_Research_Report_RC1555_376149_7.pdf

Within this document, it is stated:

Road diets, specifically 4-to-3 lane conversions, implemented in various locations in Michigan were studied to determine the safety- and delay-related impacts, develop crash modification factors (CMFs), and develop guidelines that would be useful in deciding when it might be desirable to implement such road diets. The results of the operational analysis support a guideline that suggests that 4-to-3 lane conversions result in significant delay when average daily traffic (ADT) exceeds 10,000 and, more importantly, when peak hour volumes exceed 1,000. A CMF of 0.91 (after adjustment for background citywide trends) for all crash types is recommended although the factor is not statistically different from 1.0. There was considerable site-to-site variation among the 24 sites studied, and this should always be considered when a road diet is contemplated.

The overarching purpose of the project was to estimate a crash modification factor (CMF or CMFs) that could be used to estimate crash savings that result from the implementation of 4-to-3-lane road diets in Michigan. From the outset it needs to be clear that road diets can have any of the following results (or combinations of results):

- decreases in crashes since, for example, left-turning vehicles are moved out of a through lane and into the reserved turning lane (the TWLTL) at mid-block non-intersection locations;
- increases in crashes since two lanes of through vehicles are moved into a single through lane (e.g., rear-end crashes in the right-hand lane become more likely simply due to higher volumes in the lane);
- decreases in pedestrian and bicyclist crashes because of the provision of better infrastructure for these users; and
- increases in pedestrian and bicyclist crashes since such users/trips are attracted to the improved infrastructure.

In addition, crash increases or decreases can vary substantially given the prevailing ADTs, road usage patterns, adjacent land uses (e.g., are there pedestrian/bicyclist attractors adjacent to the road diet site), turning volumes (especially mid-block), peak hour characteristics, and type of area (e.g., tourist area, university campus, small town) among others. Finally, background variation in crash frequencies (e.g., all crashes are steadily decreasing in a particular city) must be considered when trying to isolate the effect of a road diet.

The point is that there is likely to be significant variation in existing conditions prior to the implementation of a road diet. Crash savings (if there are any) are, likewise, likely to vary substantially with all of these variables.

During the hearing, Bill Conklin diagrammed the Jolly/Hewlett intersection and stated that Jolly Road would not be widened. While diagramming this intersection, he also mentioned

that a narrow bike lane would be implemented on the south side of Jolly through that area. I am puzzled as to how the bike lane will be added if the road won't be widened, and it is still 4 lanes across (westbound right turn lane, westbound travel lane, center left turn lane, and eastbound travel lane). The proposed bike lane in this section really puts bicycles in the same lane as the eastbound travel lane, thus putting bicyclists at risk because it puts them so close to traffic. If the bike lane is set up in this manner, it will surely increase bike/car accidents. In Brooklyn, NY, a road diet that was supposed to increase pedestrian and bike safety actually increased bike/car accidents by 133%. https://safety.fhwa.dot.gov/road_diets/case_studies/

The MSU analysis also found:

In several conversations with residents and in observations (both at various sites) of interactions between motorized and non-motorized traffic, it was apparent that there was an intentional lack of proper usage of the road diets by their users and/or a lack of knowledge of what usage is allowed.

- Bicyclists were often observed riding on sidewalks rather than using the unmarked bike lanes. Pedestrians were also occasionally observed using bike lanes, even when there was an adjacent sidewalk. There appeared to be a better understanding of the purpose of bike lanes at the sites in East Lansing, where there were appropriate pavement markings.
- There was a perceived lack of clarity regarding right-of-way at crosswalks along the road diets. Typically, motorists correctly assumed they had the right of way; residents complained, however, that crossing was difficult when vehicles did not routinely yield to pedestrians (most notably in Ludington) even though the motorists actually had the right of way.

With the implementation of a road diet, especially around Okemos High School, it can be expected that OHS motorists will get creative to get to the school as quickly as possible. As a school of choice parent, I have been dropping my kids off at OHS for the last 5 years and have seen parents being quite creative in their interpretations of circumventing Car Line. No doubt parents and students will get more creative in their attempts to get to school in a timely manner. Based upon what I've observed these past 5 years, I could see any of the following happening:

- Parents dropping their kids off in the center turn lane, and their kids having to cross the westbound lanes to get to OHS.
- Utilizing the center turn lane to pass.
- Driving wherever there is space without regard to lane designations.
- Driving on the sidewalks (yes, this does happen).
- Westbound drivers in the travel lane cutting off other drivers in the right turn lane (without sufficient space) as they move into the right turn lane.

The MSU study also found that drivers improperly used the center lane:

- Motorists occasionally used the two-way left-turn lane (TWLTL) as a waiting (or acceleration) lane in making left turns from a driveway or side-street onto the road diet.
- On occasions when the TWLTL was used as a waiting/acceleration lane to turn into the far moving lane, motorists in the far lane appeared indecisive, perhaps thinking they

were about to be cut off.

- On a few occasions, motorists were seen making left turns from the right moving lane, rather than moving into the TWLTL and then making the left.

During the public hearing, the Meridian Township police officer gave an explanation of what he thought was the legal and illegal usage of the center left turn lane. It was close, but not quite right. The proper usage of the center left turn lane is not specified, nor does it say whether driving in this lane is allowed in the Michigan Vehicle Code, but is found in the Michigan Manual on Uniform Traffic Control Devices (MMUTCD) and applied to the Michigan Vehicle Code. MMUTCD determines what signs, lane markings, etc. mean. And, under the MMUTCD, driving in a turn lane is not allowed. An Mlive article I found on this issue recaps to say it is illegal to use the center turn lane to merge with traffic.

https://www.mlive.com/news/2011/07/traffic_talk_can_drivers_use_t.html

While a road diet for Jolly Road can be an attempt to improve safety within the budget constraints, it likely is not the right solution. I do think a center left turn lane will help, but reducing the eastbound lanes from 2 to 1 lane, and reducing the westbound lanes from Dobie to Okemos Roads from 2 to 1 lane will not provide the safety return on investment that the road commission and township are hoping for. Please take this into consideration when making your decision.

Thank you again for your time, patience, and consideration.

Respectfully yours,

Lori Conklin

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Lori Conklin

C | 517-410-7798

E | lconklin@conklinsystems.com

From: [Paul Workman](#)
To: [Board](#)
Subject: Jolly Road Reconfiguration
Date: Thursday, January 30, 2020 12:04:29 PM

I do not understand why Jolly Road between Dobie and Hagadorn is being changed from 4 lanes (2 in each direction) to 2 lanes (1 lane each direction with a left turn lane).

It seems to me that with this configuration, less traffic will be accommodated and more traffic congestion will result.

I think we should leave it as it is.

Is it an issue of funding and not traffic flow?

Thank you.
Paul Workman
Hiawatha Park



PROPOSED DRAFT MINUTES

PROPOSED MOTION:

Move to approve and ratify the minutes of the Regular Meeting of January 21, 2020 as submitted.

ALTERNATE MOTION:

Move to approve and ratify the minutes of the January 21, 2020 Regular Meeting with the following amendment(s): [insert amendments]

CHARTER TOWNSHIP OF MERIDIAN
TOWNSHIP BOARD REGULAR MEETING **-DRAFT-**
5151 Marsh Road, Okemos MI 48864-1198
853-4000, Township Hall Room
TUESDAY, January 21, 2020 **6:00 pm.**

PRESENT: Supervisor Styka, Clerk Dreyfus, Treasurer Deschaine, Trustees Opsommer, Wisinski, Jackson

ABSENT: Trustee Sundland

STAFF: Township Manager Walsh, Director of Public Works Perry, Fire Chief Hamel, Police Chief Plaga, Community Planning Director Kieselbach, Information Technology Director Gebes, Economic Development Director Buck, Parks and Recreation Director LuAnn Maisner

1. CALL MEETING TO ORDER

Supervisor Styka called the meeting to order at 6:01 pm.

2. PLEDGE OF ALLEGIANCE/INTRODUCTIONS

Supervisor Styka led the Pledge of Allegiance.

3. ROLL CALL

The Recording Secretary called the roll of the Board.

4. PRESENTATIONS

A. Moment of Silence for the passing of Principal of Haslett High School, Bart Wegenke

B. Resolution in Recognition of Ann Chapman, Haslett Library Head Librarian, retiring, honored for her 15 years of service.

C. Special Recognition of Mark Kieselbach for his 40 years of service at Meridian Township.

5. CITIZENS ADDRESS AGENDA ITEMS AND NON-AGENDA ITEMS

Supervisor Styka opened public remarks at 6:10 pm.

Supervisor Styka closed public remarks at 6:10 pm.

6. TOWNSHIP MANAGER REPORT

Township Manager Walsh spoke on the future site of the Market Place on the Green (Farmer's Market) to open in mid-late 2020, roads approved and ready for bidding, ladder truck from the 2017 Police and Fire mileage request, 2019 Annual Report.

7. BOARD MEMBER REPORTS AND ANNOUNCEMENTS

Treasurer Deschaine:

- Thanked Ann Chapman for her years of service.
- Transportation Commission meeting at the Central Fire Station, January 23, 2020, 6:00 pm. Public Meeting on the proposed “road diet” (lane reductions) for Jolly Road.
- Chinese New Year Celebration at Meridian Mall, January 26, 2020, 1:00 pm – 4:00 pm.
- Taxes due Friday, February 14, 2020, 5:00 pm. Suggestion to mail two weeks ahead of time if using the US mail. Can sign up for online payment at no cost (if paying from bank account).
- Attended the Lansing Economic Chamber Forecast Luncheon January 9, 2020.
- Attended the Economic Development Corporation meeting January 9, 2020.
- Attended the Ribbon Cutting for new exercise equipment for the Meridian Senior Center on January 10, 2020.
- Attended the Michigan Municipal Treasurer Association Winter Conference on January 17, 2020.

Trustee Opsommer:

- Spoke on the CATA Collective Bargaining negotiations with the Amalgamated Transit Union (ATU), and the CATA Board Retreat.

Clerk Dreyfus:

- Attended the Tri-County Regional Planning Commission meeting on January 21, 2020. New Environmental Sustainability Planner, replacing Jeremy Orr.
- Early voting begins week of January 27, 2020, hours: 8 AM – 5 PM, Monday through Friday.
- Preparation for the March 10th Presidential Primary election will include Training the Trainer from the Bureau of Elections on Jan 29.
- The new Director for the Bureau of the Elections is Jonathan Brater.
- Agreement with the Superintendent of Haslett to install a police officer in each of the three Haslett School District polling locations for the upcoming Presidential Primary.

Supervisor Styka:

- Meridian Township Financial Department received the highest achievement award for governmental accounting and financial reporting from the Government Finance Officers Association.
- The Code Enforcement group meeting was on January 13, 2020.

8. APPROVAL OF AGENDA

Trustee Opsommer moved to approve the Agenda. Seconded by Trustee Jackson.

VOICE VOTE: Motion carried: 6 – 0

9. CONSENT AGENDA

Supervisor Styka reviewed the consent agenda.

Clerk Dreyfus moved to approve the Consent Agenda. Seconded by Trustee Jackson.

ROLL CALL VOTE: YEAS: Clerk Dreyfus, Treasurer Deschaine, Supervisor Styka, Trustees Jackson, Opsommer, Wisinski

NAYS:

Motion carried: 6 – 0

A. Communications

Clerk Dreyfus moved that the communications be received and placed on file and any communications not already assigned for disposition be referred to the Township Manager or Supervisor for follow-up. Seconded by Trustee Jackson.

ROLL CALL VOTE: YEAS: Clerk Dreyfus, Treasurer Deschaine, Supervisor Styka, Trustees Jackson, Opsommer, Wisinski

NAYS:

Motion carried: 6 – 0

B. January 07, 2020 Regular Meeting Minutes

Clerk Dreyfus moved to approve and ratify the minutes of the Regular Meeting of January 07, 2020 as submitted. Seconded by Trustee Jackson.

ROLL CALL VOTE: YEAS: Clerk Dreyfus, Treasurer Deschaine, Supervisor Styka, Trustees Jackson, Opsommer, Wisinski

NAYS:

Motion carried: 6 – 0

C. Bills

Clerk Dreyfus moved to approve that the Township Board approve the Manager’s Bills as follows. Seconded by Trustee Jackson.

Common Cash		\$	761,014.71
Public Works		\$	16,210.47
Trust & Agency		\$	9,968,197.33
	Total Checks	\$	10,745,422.51
Credit Card Transactions		\$	17,689.82
Nov 14th - Nov 25th			
	Total Purchases	\$	<u>10,763,112.33</u>
ACH Payments		\$	<u>705,309.92</u>

ROLL CALL VOTE: YEAS: Clerk Dreyfus, Treasurer Deschaine, Supervisor Styka, Trustees Jackson, Opsommer, Wisinski

NAYS:

Motion carried: 6 – 0

D. Treasurer’s Report-Phil Deschaine

E. Celebrate Meridian Liquor License Resolution

Clerk Dreyfus moved to approve the attached resolution supporting the application of a one-day liquor license from the Michigan Liquor Control Commission For Sale of Beer and Wine at the Celebrate Meridian Festival on June 27, 2020. Seconded by Trustee Jackson.

ROLL CALL VOTE: YEAS: Clerk Dreyfus, Treasurer Deschaine, Supervisor Styka, Trustees Jackson, Opsommer, Wisinski

NAYS:

Motion carried: 6 – 0

F. Charitable Gaming License-Red Cedar River Carvers Guild

Clerk Dreyfus moved to approve a request from the Red Cedar River Carvers Guild of Meridian Township, Ingham County, asking that they be recognized as a Non-Profit organization operating in the community for the purposes of obtaining a gaming license for approval, and further that the Township Clerk be authorized to execute the resolution from the State of Michigan. Seconded by Trustee Jackson.

ROLL CALL VOTE: YEAS: Clerk Dreyfus, Treasurer Deschaine, Supervisor Styka, Trustees Jackson, Opsommer, Wisinski

NAYS:

Motion carried: 6 – 0

G. Reappointment of Supervisor Pro-Term

Clerk Dreyfus moved that the Board reappoint, through November 05, 2020, Trustee Dan Opsommer to act as President Pro-term at any meeting of the Township Board wherein the Supervisor is absent. Seconded by Trustee Jackson.

ROLL CALL VOTE: YEAS: Clerk Dreyfus, Treasurer Deschaine, Supervisor Styka, Trustees Jackson, Opsommer, Wisinski

NAYS:

Motion carried: 6 – 0

H. Board Liaison Appointment to Environmental Commission

Clerk Dreyfus moved to appoint Trustee Courtney Wisinski to serve as a Township Board Liaison to the Environmental Commission for a term ending November 05, 2020. Seconded by Trustee Jackson.

ROLL CALL VOTE: YEAS: Clerk Dreyfus, Treasurer Deschaine, Supervisor Styka, Trustees Jackson, Opsommer, Wisinski

NAYS:

Motion carried: 6 – 0

10. QUESTIONS FOR THE ATTORNEY – NONE

11. HEARINGS (CANARY)

12. ACTION ITEMS (PINK)

A. ZBA Appointments

Trustee Jackson moved to approve the appointment made by Supervisor Styka, effective January 01, 2020, of Don Kulhanek to the Zoning Board of Appeals for a 3 Year Term Ending 12/31/2022 and Brian Shorkey for a 1 Year Term as an Alternate to the Zoning Board of Appeals with a 1 Year Term Ending 12/31/2020. Seconded by Treasurer Deschaine.

VOICE VOTE: Motion carried: 6 – 0

B. Planning Commission Appointment

Treasurer Deschaine moved to approve the appointment made by Supervisor Styka of Bill McConnell to the Planning Commission for a 1 Year Term Ending December 31, 2020. Seconded by Clerk Dreyfus.

VOICE VOTE: Motion carried: 6 – 0

C. Rezoning #19090 (Planning Commission) Hagadorn Road – **Introduction**

Trustee Opsommer moved to adopt the resolution to approve Rezoning #19090 to rezone 2.2 acres addressed as 4036, 4038, 4046, 4108, and 4118 Hagadorn Road from RP (Research Park) to RAA (Single Family-Low Density). Seconded by Trustee Wisinski.

Board discussion: Rezoning was necessary to match the zoning initiated at the corner of Marsh and Lake Lansing, original zoning was from a “bygone era” when land was designated for a research park, zoning now

reflects the 425 agreement with Lansing, small row of single-family lots facing Hagadorn remaining, board member offered support as long as there is no high-density MUPUD scenario in the future that comes before the Board, zoning allows property owners to be in compliance with single-family when maintenance is required – but cannot add height or area.

ROLL CALL VOTE: YEAS: Trustees Opsommer, Wisinski, Jackson, Clerk Dreyfus, Supervisor Styka, Treasurer Deschaine

NAYS:

Motion carried: 6 – 0

D. Support Emergency Operations Plan Update

Trustee Jackson moved to approve the updated Support Emergency Operations Plan, direct the named parties to sign the plan, and adopt the resolution to appoint the Ingham County Emergency Management Coordinator as the Municipal Emergency Management Coordinator. Seconded by Trustee Wisinski.

Board discussion: Chief Hamel, Chief Plaga, and Sergeant Besonen updated the Support Emergency Operations Plan (SEOP), resolution with an up-to-date plan with the name of the county as the Agency for Meridian Township, required to acquire certain state and federal assistance, municipalities can declare local emergency through damage assessments, can qualify for reimbursements for overtime, equipment, etc. from the State under Section 19, residents can apply for low-interest disaster loans, federal team support such as Urban Search and Rescue (US&R), Hazmat, and Disaster Mortuary Operation (DMORT) teams available to municipalities without a declaration.

ROLL CALL VOTE: YEAS: Trustees Wisinski, Jackson, Opsommer, Treasurer Deschaine, Clerk Dreyfus, Supervisor Styka

NAYS:

Motion carried: 6 – 0

E. Sander Farm Preserved Natural Area Donation

Trustee Opsommer moved to accept with gratitude donation of 31.9 acres of Open Space from Dr. Maureen Sander Property Number 33-02-02-27-177-007 and ratify the December 31, 2019 executed donation agreement. Seconded by Trustee Jackson.

Parks and Recreation Director Maisner spoke on the request to ratify the donation agreement between Dr. Maureen Sander and Meridian Township.

Board discussion: easement agreement, donation part of Township Parks and not Land Preservation Program, paved trail connector was approved through the northern part of the pathway adjacent to the Tacoma Hills neighborhood.

ROLL CALL VOTE: YEAS: Clerk Dreyfus, Supervisor Styka, Treasurer Deschaine, Trustee Opsommer, Wisinski, Jackson

NAYS:

Motion carried: 6 – 0

13. BOARD DISCUSSION ITEMS (ORCHID)- NONE

14. COMMENTS FROM THE PUBLIC

Supervisor Styka Opened Public Remarks at 6:41 pm.

Sima Pavar, 5697 Edson St., Haslett, MI; spoke in support of the recognition of Ann Chapman.

Supervisor Styka Closed Public Remarks at 6:42 pm.

15. OTHER MATTERS AND BOARD MEMBER COMMENTS

Trustee Wisinski:

- Member Mansour has been appointed as the new Chair of the Zoning Board of Appeals, replacing Chair Beauchine whom has retired.

16. CLOSED SESSION – Township Manager Performance Review

Supervisor Styka moved to go into closed session for purposes of the Township Manager’s contract review at his request pursuant to subsection 8(e) of the Open Meetings Act. Seconded by Trustee Jackson.

ROLL CALL VOTE: YEAS: Trustees Jackson, Opsommer, Wisinski, Supervisor Styka, Clerk Dreyfus, Treasurer Deschaine.

NAYS:

Motion carried: 6 – 0

Supervisor Styka moved the meeting into closed session at 6:45 pm.

Supervisor Styka moved to return the meeting to open session. Seconded by Trustee Jackson.

VOICE VOTE: Motion carried: 6 – 0

Supervisor Styka moved the meeting back into open session at 7:58 pm.

17. BOARD DISCUSSION ITEMS (ORCHID)

A. Township Manager Contract

Board discussion: 3 year rolling contract request, increase in salary from \$130,000/year to \$132,600, increase the number of consulting search services offered outside of work by the Manager from four (4) to six (6).

Question about Township Manager ability to run consulting business outside of regular work week involving 6 recruitment searches per year, Township Manager responded he has a partner to help, board member comments that they have not seen any problems with current 4 recruitment searches per year, Township Manager must notify the Supervisor when embarking on a search, several board member comments on salary level and comparisons with other communities and opinion that Manager is not paid enough compared to others, board member comment to consider all forms of compensation when making salary comparisons as municipalities offer different types of compensation such as Meridian Township’s automobile allowance offered in the contract, not appropriate to compare only salaries because total compensation is more than salary, board member belief that Manager compensation is much higher due to permission for Manager to manage consulting and recruitment business which other municipalities might not allow, opinion that it is premature discussing salary increases based on speculation on unknown future plans of Manager, concern about future boards skimping on this position and making a poor hire, board member view that compensation of the Township Manager reflects the level of service provided, Manager stated he would like the contract voted on this evening.

Trustee Opsommer moved to suspend our rules so we can take the Manager’s revised contract up for consideration this evening. Seconded by Trustee Jackson.

VOICE VOTE: Motion carried: 6 – 0

Trustee Opsommer moved to approve extending the Township Manager’s Contract for one year, changing (the previous contract) from four to six major searches, and raising the salary from \$130,000 to \$132,600. Seconded by Treasurer Deschaine.

ROLL CALL VOTE: YEAS: Trustees Opsommer, Wisinski, Jackson, Treasurer Deschaine, Clerk Dreyfus, Supervisor Styka

NAYS:

Motion carried: 6 – 0

18. ADJOURNMENT

Trustee Opsommer moved to adjourn the meeting. Seconded by Trustee Jackson.

VOICE VOTE: Motion carried: 6 – 0

Supervisor Styka adjourned the meeting at 8:12 pm.

RONALD J. STYKA,
TOWNSHIP SUPERVISOR

BRETT DREYFUS,
TOWNSHIP CLERK



To: Board Members
From: Miriam Mattison, Finance Director
Date: February 4th 2020
Re: Board Bills

Charter Township of Meridian
Board Meeting
2/4/2020

MOVED THAT THE TOWNSHIP BOARD APPROVE THE MANAGER'S
BILLS AS FOLLOWS:

COMMON CASH	\$	705,398.68
PUBLIC WORKS	\$	539,825.65
TRUST & AGENCY	\$	2,206,072.86
TOTAL CHECKS:	\$	3,451,297.19
CREDIT CARD TRANSACTIONS		
Jan 16th - Jan 29th	\$	10,748.26
TOTAL PURCHASES:	\$	<u>3,462,045.45</u>
ACH PAYMENTS	\$	<u>456,435.04</u>

01/30/2020 01:59 PM
User: FAULKNER
DB: Meridian

INVOICE APPROVAL BY INVOICE REPORT FOR CHARTER TOWNSHIP OF MERIDIAN
EXP CHECK RUN DATES 02/04/2020 - 02/04/2020
BOTH JOURNALIZED AND UNJOURNALIZED OPEN AND PAID
BANK CODE: GF

Vendor Name	Description	Amount	Check #
1. ABSOLUTE SECUTIRY & INVESTIGATIONS	ABSOLUTE S&I AVIGILON CAMERA IMPROVEMENTS FOR PSB	29,163.00	
2. AFFORDABLE TIRE	STATE CONTRACT FLEET TIRES 2020 - POLICE TIRE STOC	1,776.84	
	#49 - STATE CONTRACT FLEET TIRES 2020	213.88	
	TOTAL	1,990.72	
3. ANTONIO TREVINO	REIMB FOR MFR TEST THAT WAS PAID WITH PERSONAL CC	75.00	
4. AT & T	SWITCHED ETHERNET TO FS 91 - 2 MONTHS	2,139.11	
5. SIERRA HOMES OF MICHIGAN	5185 ANACOSTIA DRIVE - RELEASE IN FULL	500.00	
6. AUTO VALUE OF EAST LANSING	DOUBLE PAID - CREDIT ACCOUNT	(16.78)	
	UNIT 150 - CLR MRK RED , SEALED BEAM	29.61	
	UNIT 26 - FLEET REPAIR PARTS 2020	12.69	
	UNIT 38 -FLEET REPAIR PARTS 2020	15.77	
	UNIT 89 - FLEET REPAIR PARTS 2020	70.91	
	UNIT 89 -FLEET REPAIR PARTS 2020	25.58	
	STOCK - FLEET REPAIR PARTS 2020	67.16	
	UNIT 9 - FLEET REPAIR PARTS 2020	194.00	
	UNIT 635 - FLEET REPAIR PARTS 2020	23.39	
	CLEANER BATTERY	2.09	
	SERP. BELT TOOL	28.19	
	UNIT 49 - FLEET REPAIR PARTS 2020	24.29	
	UNIT 150 - FLEET REPAIR PARTS 2020	10.09	
	TOTAL	486.99	
7. BANNASCH WELDING INC	SNOWPLOW PARTS	362.39	

Vendor Name	Description	Amount	Check #
8. BARYAMES CLEANERS	CREDIT - STANDARD POLICE UNIFORM CLEANING	(6.20)	
	STANDARD POLICE UNIFORM CLEANING- BRAD BACH	22.00	
	STANDARD POLICE UNIFORM CLEANING- JEFF ADAMS	24.80	
	STANDARD POLICE UNIFORM CLEANING-JACLYN	9.30	
	STANDARD POLICE UNIFORM CLEANING-BLANE ANDERSON	6.20	
	STANDARD POLICE UNIFORM CLEANING - BRAD BACH	9.30	
	STANDARD POLICE UNIFORM CLEANING-EDWARD BESONEN	18.60	
	STANDARD POLICE UNIFORM CLEANING-BRIAN CANEN	15.50	
	STANDARD POLICE UNIFORM CLEANING-AUSTIN DIETZ	26.90	
	STANDARD POLICE UNIFORM CLEANING-MARE DIVNEY	12.40	
	STANDARD POLICE UNIFORM CLEANING-RICHARD GRILLO	18.60	
	STANDARD POLICE UNIFORM CLEANING-MICHAEL HAGBOM	38.20	
	STANDARD POLICE UNIFORM CLEANING-KEVIN HARVEY	12.50	
	STANDARD POLICE UNIFORM CLEANING-JOHNTHAN KENDRICK	6.20	
	STANDARD POLICE UNIFORM CLEANING-BRYAN LEROY	6.20	
	STANDARD POLICE UNIFORM CLEANING- STEPHAIN LEWIS	12.40	
	STANDARD POLICE UNIFORM CLEANING-ERIN LINN	7.50	
	STANDARD POLICE UNIFORM CLEANING-MARYAM MASOOD	27.55	
	STANDARD POLICE UNIFORM CLEANING-ANDREW MCCREADY	15.50	
	STANDARD POLICE UNIFORM CLEANING-DAVE METTS	6.20	
	STANDARD POLICE UNIFORM CLEANING-REBECCA PAYNE	50.90	
	STANDARD POLICE UNIFORM CLEANING-KEN PLAGA	12.40	
	STANDARD POLICE UNIFORM CLEANING-DAVID REINKE	6.20	
	STANDARD POLICE UNIFORM CLEANING-CHRISSEY SCACCIA	19.90	
	STANDARD POLICE UNIFORM CLEANING-ADAM SLAVICK	21.70	
	STANDARD POLICE UNIFORM CLEANING- ANDREW TOBIAS	18.60	
	STANDARD POLICE UNIFORM CLEANING-ARRON MCCONAUGHY	24.80	
	STANDARD POLICE UNIFORM CLEANING-CURT SQUIRES	17.05	
	STANDARD POLICE UNIFORM CLEANING-ANTONIO TREVINO	24.80	
	STANDARD POLICE UNIFORM CLEANING- LORENZO VELASQUE	6.20	
	STANDARD POLICE UNIFORM CLEANING- JEFF ADAMS	12.40	
	STANDARD POLICE UNIFORM CLEANING- JACLYN ALLEN	6.20	
	STANDARD POLICE UNIFORM CLEANING- BLANE ANDERSON	6.20	
	STANDARD POLICE UNIFORM CLEANING-BRIAN CANEN	6.20	
	STANDARD POLICE UNIFORM CLEANING-JASON CLEMENTS	12.40	
	STANDARD POLICE UNIFORM CLEANING-BART CRANE	9.30	
	STANDARD POLICE UNIFORM CLEANING- MARC DIVNEY	6.20	
	STANDARD POLICE UNIFORM CLEANING-RICHARD GRILLO	12.40	
	STANDARD POLICE UNIFORM CLEANING-DANIELLE HUETTNER	6.20	
	STANDARD POLICE UNIFORM CLEANING-DAN KING	15.50	
	STANDARD POLICE UNIFORM CLEANING-CODY LEFLER	6.20	
	STANDARD POLICE UNIFORM CLEANING-STEPHAIN LEWIS	9.30	
	STANDARD POLICE UNIFORM CLEANING-CHRISTOPHER LOFTO	18.80	
	STANDARD POLICE UNIFORM CLEANING-MARYAM MASOOD	6.20	
	STANDARD POLICE UNIFORM CLEANING-ARRON MCCONAUGHY	6.20	
	STANDARD POLICE UNIFORM CLEANING-DAVE METTS	6.20	
	STANDARD POLICE UNIFORM CLEANING-REBECCA PAYNE	12.40	
	STANDARD POLICE UNIFORM CLEANING-KEN PLAGA	6.20	
	STANDARD POLICE UNIFORM CLEANING-PAUL RAMBO	37.95	
	STANDARD POLICE UNIFORM CLEANING-DAVID REINKE	9.30	
	STANDARD POLICE UNIFORM CLEANING-KYLE ROYSTON	6.20	
	STANDARD POLICE UNIFORM CLEANING-CHRISSEY SCACCIA	9.30	
	STANDARD POLICE UNIFORM CLEANING-CURT SQUIRES	6.20	
	STANDARD POLICE UNIFORM CLEANING-WES TALBOT	18.60	
	STANDARD POLICE UNIFORM CLEANING-ANTONIO TREVINO	9.30	
	STANDARD POLICE UNIFORM CLEANING-LERICO WHITE	9.30	
	STANDARD POLICE UNIFORM CLEANING-ADAM SLAVICK	12.40	
	STANDARD POLICE UNIFORM CLEANING-ANDREW TALBOT	6.20	
	STANDARD POLICE UNIFORM CLEANING-RYAN TUNKL	9.30	
	STANDARD POLICE UNIFORM CLEANING- LORENZO VELASQUE	6.20	
	TOTAL	796.95	
9. BBI HOLDINGS LLC	2190 ASSOCIATION DRIVE FULL RELEASE	500.00	

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 User: FAULKNER
 DB: Meridian

INVOICE APPROVAL BY INVOICE REPORT FOR CHARTER TOWNSHIP OF MERIDIAN
 EXP CHECK RUN DATES 02/04/2020 - 02/04/2020
 BOTH JOURNALIZED AND UNJOURNALIZED OPEN AND PAID
 BANK CODE: GF

Vendor Name	Description	Amount	Check #
10. BOYNTON FIRE SAFETY SERVICE	FIRE EXTENGUISHERS	110.00	
	SCHEDULED REPAIRS - BACKFLOW MATERIALS	190.00	
	TOTAL	<u>300.00</u>	
11. JEFFORY BROUGHTON	CAR #120 - ANALYZE ANTENNA, COAX, CONNECTOR ETC	200.00	
12. CHRIS BUCK	MILEAGE REIMBURSEMENT - DEC	126.75	
13. CITY OF ALMA	BS&A TRAINING AT GRATIOT ISABELLA RESD 12/11/19 -	260.00	
14. COMCAST	JAN 29TH - FEB 28TH - HNC INTERNET, PHONE, TV	208.80	
	JAN 29TH - FEB 28TH - MERIIDAN TWP PD	22.49	
	SERVICES JAN 16- FEB 15TH - CENTRAL FIRE TV AND IN	163.35	
	JAN 19TH - FEB 18TH - SCABA INTERNET	148.35	
	TOTAL	<u>542.99</u>	
15. CREATIVE PRODUCT SOURCING	DARE PRODUCTS	1,894.72	
16. CUMMINS BRIDGEWAY LLC	FULL PM SERVICE - FIRE STATION 92	367.74	
	PUBLIC SAFETY BUILD - INSPEC W/2 HR LOAD BANK	629.59	
	SERVICE ON EMERGENCY GENERATOR	1,125.60	
	TOTAL	<u>2,122.93</u>	
17. DANIEL KONTRA	INSTRUCTOR FEE FOR FITNESS OVER 50 - JAN	192.00	
18. DBI	STAPLES, TAPE	14.28	
	STAPLER REMOVER, BINDER	18.33	
	JOINT BOARD MEETING SNACKS	42.04	
	TOTAL	<u>74.65</u>	
19. BRETT DREYFUS	MILEAGE REIMBURSEMENT - DEC 2019	49.30	
20. DUNN & BALESKY DEVELOPMENT	BENNETT VILLAGE PHASE I	6,050.00	
21. EASTBROOK HOMES INC	5239 TWINGING DRIVE - RELEASE IN FULL	2,500.00	
22. EASTERN MI CONTRACTING, LLC	PAY EST 15 OKEMOS ROAD BOARDWALK 2019	42,260.00	

Vendor Name	Description	Amount	Check #
23. FAHEY SCHULTZ BURZYCH RHODES PLC			
	LEGAL FEES	414.40	102198
	LEGAL FEES	1,783.00	102198
	LEGAL FEES	4,140.00	102198
	LEGAL FEES	7,597.00	102198
	LEGAL FEES	624.00	102198
	LEGAL FEES	1,086.00	102198
	LEGAL FEES	1,749.00	102198
	LEGAL FEES	144.00	102198
	LEGAL FEES	270.00	102198
	LEGAL FEES	974.00	102198
	LEGAL FEES	2,761.68	102198
	LEGAL FEES	20.29	102198
	LEGAL FEES	1,271.21	102198
	LEGAL FEES	243.42	102198
	LEGAL FEES	953.40	102198
	LEGAL FEES	42.00	102198
	LEGAL FEES	579.00	102198
	LEGAL FEES	750.00	102198
	LEGAL FEES	322.50	102198
	LEGAL FEES	200.50	102198
	TOTAL	25,925.40	
24. FAMILY GRADE & GRAVEL			
	GRADE ENTIRE RECYCLING FACILITY	750.00	
25. FEDEX			
	EXPRESS SHIPMENT	15.40	
26. FIRST ADVANTAGE LNS OCC HEALTH			
	MDOT RANDOM DRUG TESTING	112.18	
27. FORESIGHT GROUP			
	#10 WINDOW ENV - WATER BILLS	472.31	
	CYCLE 3 WATER BILLS	829.09	
	TOTAL	1,301.40	
28. GIGUERE HOMES INC.			
	2317 FIELDSTONE DRIVE - FULL RELEASE	750.00	
	5045 GIESBORO - RELEASE IN FULL	250.00	
	TOTAL	1,000.00	
29. GORDON CONSTRUCTION SERVICES			
	CONSTRUCTION OF MARKETPLACE ON THE GREEN PROJECT -	17,536.00	
30. GRANGER			
	MUN BUILDING - MONTHLY SERVICE	124.33	
	SERVICE CENTER - MONTHLY SERVICE	266.98	
	FIRE STATION - MONTHLY CHARGE	84.26	
	CENTRAL FIRE STATION - MONTHLY SERVICE	78.28	
	MARSH RD RECYCLING SERVICE CHARGE	87.00	
	TOTAL	640.85	
31. GREAT LAKES INTERIOR & DESIGN			
	TWO INVESTIGATIONS OFFICE CHAIRS	858.00	
32. GS FEDEWA BUILDERS			
	SIERRA RIDGE ESTATES II - RELEASE IN FULL	1,250.00	
33. THE HARKNESS LAW FIRM PLLC			
	LEGAL FEES-UTC	6,680.77	
34. HDI BUILDERS INC			
	1416 WANDERING WAY - RELEASE IN FULL	500.00	
35. INGHAM COUNTY 911			
	RADIO MIC FEES - 10/1/19 -12/31/19	1,710.62	
	INGHAM 911 MIC FEES 1/1/2020 - 12/31-2020	6,842.49	
	TOTAL	8,553.11	
36. INGHAM COUNTY DEPARTMENT OF			
	2018 AND 2019 LOCAL STREET PAVEMENT IMPROVEMENT PR	345,743.39	

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 EXP CHECK RUN DATES 02/04/2020 - 02/04/2020
 BOTH JOURNALIZED AND UNJOURNALIZED OPEN AND PAID
 BANK CODE: GF

Vendor Name	Description	Amount	Check #
37. INGHAM COUNTY HEALTH DEPT	INGHAM COUNTY POLLUTION PREVENTION FOR REPORTING Y	230.00	
38. INGHAM COUNTY TREASURER	SWITCHED ETHERNET JAN- DEC 2019	7,296.04	
39. LANSING SANITARY SUPPLY INC	DEPARTMENT CLEANING SUPPLIES	52.68	
40. LANSING UNIFORM COMPANY	STANDING PO FOR UNIFORMS	279.75	
	STANDING PO FOR UNIFORMS	95.00	
	STANDING PO FOR UNIFORMS	129.90	
	TOTAL	504.65	
41. LORENZO VELASQUEZ	REIMB FOR MFR TEST - PAID WITH PERSONAL CC CARD	75.00	
42. MADISON NATIONAL LIFE INS CO	NATIONAL LIFE INSURANCE - FEB	3,145.44	
43. MANNIK AND SMITH	ESTIMATES AND REPORT FOR 3 YR PLAN - SERVICES THRU	1,300.00	
	DEAD END PAVING PROJECT CLOSEOUT - SERVICES THRU 1	1,038.50	
	TOTAL	2,338.50	
44. MAYBERRY HOMES	1544 BELVEDERE - RELEASE IN FULL	500.00	
	1403 KALORAMA WAY - RELEASE IN FULL	250.00	
	TOTAL	750.00	
45. MERIDIAN CHARTER TOWNSHIP	PARCEL 33-02-02-09-201-013 WINTER TAX BILL	265.85	
	PARCEL 33-02-02-10-251-004 WINTER TAX BILL	26,234.35	
	PARCEL 33-02-02-15-300-031 WINTER TAX BILL	6,849.68	
	TOTAL	33,349.88	
46. MERIDIAN TOWNSHIP	TRANSFER FLEX CHECKING FOR 1/31/2020 PAYROLL	550.69	
47. MERIDIAN TOWNSHIP RETAINAGE	RETAINAGE - CONSTRUCTION OF MARKETPLACE ON THE GRE	1,050.00	
	RETAINAGE PAY EST 15 - OKEMOS ROAD BOARDWALK 2019	1,980.00	
	TOTAL	3,030.00	
48. MERRILL FORD	FORD FLEET REPAIR PARTS 2019 - UNIT 121	187.49	
	FORD FLEET REPAIR PARTS 2019 - UNIT 121	328.67	
	FORD FLEET REPAIRS AND PARTS 2020 - UNIT 124	129.92	
	UNIT 124 FORD FLEET REPAIRS AND PARTS 2020	198.75	
	FORD FLEET REPAIRS AND PARTS 2020	133.80	
	TOTAL	978.63	
49. MICHIGAN ASSOCIATION OF PLANNING	ASSISTANT PLANNER ADVERTISEMENT	75.00	
50. MICHIGAN MUNICIPAL LEAGUE	POLICY PREMIUM INSTALLMENT #4	33,959.86	
51. MICHIGAN WATER ENVIRONMENT	MWEA WATER EXPO 2020	230.00	
52. MID MICHIGAN EMERGENCY EQUIPMENT	UPFIT 2020 POLICE INTERCEPTORS PER QUOTE- UNIT 121	9,358.00	
53. MCKESSON MEDICAL-SURGICAL GOC SOL	STANDING PO FOR MEDICAL SUPPLIES/EQUIPMENT	92.97	
	STANDING PO FOR MEDICAL SUPPLIES/EQUIPMENT	10.87	
	STANDING PO FOR MEDICAL SUPPLIES/EQUIPMENT	22.95	
	STANDING PO FOR MEDICAL SUPPLIES/EQUIPMENT	239.00	
	STANDING PO FOR MEDICAL SUPPLIES/EQUIPMENT	1,156.23	
	STANDING PO FOR MEDICAL SUPPLIES/EQUIPMENT	78.00	
	TOTAL	1,600.02	

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INVOICE APPROVAL BY INVOICE REPORT FOR CHARTER TOWNSHIP OF MERIDIAN
 EXP CHECK RUN DATES 02/04/2020 - 02/04/2020
 BOTH JOURNALIZED AND UNJOURNALIZED OPEN AND PAID
 BANK CODE: GF

Vendor Name	Description	Amount	Check #
54. MTECH	PARTS FOR JOHNSTON STREET SWEEPER UNIT #649	4,077.84	
55. OFFICE DEPOT	COMM SPECIAL EVENTS - GOLDEN TAPE AWARDS	27.00	
56. OKEMOS MARATHON	CAR #109 - GAS	19.25	
	CAR #110 - GAS	23.07	
	CAR # 114 - GAS	23.73	
	CAR # 177 - GAS	28.59	
	CAR 115 - GAS	40.53	
	TOTAL	135.17	
57. ORKIN, 551-LANSING, MI	2020 BUILDING PESTICIDE TREATMENT -FEB SVC	75.00	
58. PC MALL GOV	DELL OPTIPLEX 7070 + MONITOR + RAM	808.29	
	ADOBE ACROBAT PRO & CREATIVE CLOUD	1,108.28	
	DELL THUNDERBOLT DOCK WD19TB 130W DOCK180W AC PD	271.99	
	TOTAL	2,188.56	
59. PHOENIX SAFETY OUTFITTERS	POSITIVE PRESSURE FAN	3,200.00	102200
60. PRINTING SYSTEMS INC	REORDER - GENERAL FUND CHECKS (3000)	328.39	
61. PRINT MAKERS SERVICE INC	KIP 860 PRINTER MAINTENANCE	178.76	
62. PRO-TECH MECHANICAL SERVICES	HVAC REPLACEMENT - SOUTH FIRE STATION	35,262.00	
63. RECLAIMED BY DESIGN	2020 MONTHLY OPERATION OF RECYCLING CENTER - JANU	2,000.00	
	FEB 2020 MONTHLY OPERATION OF RECYCLING CENTER	2,000.00	
	TOTAL	4,000.00	
64. HASLETT-OKEMOS ROTARY	1ST QUARTER MEMBERSHIP DUES - KEN PLAGA	140.00	
	1ST QUARTER DUES- CHIEF HAMEL	140.00	
	2020 1ST QUARTER - FRANK WALSH DUES	140.00	
	TOTAL	420.00	
65. ROWERDINK AUTOMOTIVE PARTS	UNIT 118 - ARMASY FRONT SUSPENSION	228.38	
	FLEET - OIL	45.36	
	UNIT 37 - BATTERY, CORE CHARGE	190.38	
	UNITR 60 - BATTERY/CORE CHARGE	87.78	
	WARRANTY REPLACEMENT	101.78	
	BATTERY - WARR RETURN	(101.78)	
	UNIT 125 - IGNITION	391.40	
	UNIT 653 - COIL	34.08	
	UNIT 51 - WIPERS	20.52	
	UNIT 51 - TRANSMITTER ASM-R/ CON	53.14	
	UNIT 28 - WIPER BLADES	20.52	
	UNIT 110 - BATTERY , CORE CHARGE	98.80	
	TOTAL	1,170.36	

Vendor Name	Description	Amount	Check #
66. SAFETY SYSTEMS INC	ANNUAL FIRE ALARM SERVICE - SEP	456.68	
	QUARTERLY LEASE MAINT	180.00	
	QUARTERLY LEASE MAINT	321.00	
	QUARTERLY LEASE MAINT	123.00	
	QUARTERLY LEASE MAINT	162.00	
	QUARTERLY LEASE MAINT	129.00	
	QUARTERLY LEASE MAINT	156.00	
	QUARTERLY MONITORING	93.00	
	QUARTERLY LEASE MAINT	153.00	
	TOTAL	<u>1,773.68</u>	
67. SHERWIN WILLIAMS CO	PAINTING SUPPLIES	52.46	
	GALLONS OF PAINT	70.94	
	TOTAL	<u>123.40</u>	
68. SHOWROOM SHINE	6 POLICE VEHICLES WASHED 5/2019-8/2019	90.00	
69. SOLDAN'S FEED & PET SUPPLIES	CANINE SUPPLIES FOR ONE DOG	56.99	
	CANINE SUPPLIES FOR ONE DOG	56.99	
	TOTAL	<u>113.98</u>	
70. SOURCE MEDIA LLC	LEGAL AD IN THE BOND BUYER	1,705.00	
71. SPARROW OCCUPATIONAL	2 PHYSICAL DOT	190.00	
72. SUPREME SANITATION	1/1 - 1/31 PORTABLE TOILET RENTAL HNC	160.00	
73. TEAM FINANCIAL GROUP	EQUIPMENT CONTRACT	1,471.50	
74. LEAH TRACIAK	INSTRUCTOR FEE FOR FITNESS OVER 50	112.00	
75. VENTURE CONTRACTING	5055 MARSH RD - CHILIS RESTURANT #200	500.00	
76. WEST SHORE FIRE INC	SCBA FILL MAINTENANCE	637.85	
77. YOUNG ST JOHNS CHEVROLET	EMERGENCY REPAIR - MEDIC 93 - #134	1,545.43	
78. YOUNGSTROM CONTRACTING	PATHWAY BRIDGE REHAB 2017 - PAY ESTIMATE #10 - REI	14,306.95	102128
	PATHWAY BRIDGE REHAB 2017 - PAY EST 11	1,560.00	
	TOTAL	<u>15,866.95</u>	
79. ZOLL MEDICAL CORP	4 OF 4 HEART MONITOR PURCHASE	28,624.92	
	STANDING PO FOR HEART MONITOR SUPPLIES/EQUIP.	442.50	
	TOTAL	<u>29,067.42</u>	
TOTAL - ALL VENDORS		705,398.68	

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INVOICE APPROVAL BY INVOICE REPORT FOR CHARTER TOWNSHIP OF MERIDIAN
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Vendor Name	Description	Amount	Check #
1. CITY OF EAST LANSING	ELMWSA OPERATING COST SHARE - JAN PMT	269,779.17	
	SEWER- SEMI ANNUAL SEWER BILLING - JAN	215,185.84	28105
	TOTAL	<u>484,965.01</u>	
2. CUMMINS BRIDGEWAY LLC	GENERATOR MAINTENANCE - SIERRA RIDGE LS	576.59	
	GENERATOR MAINTENANCE	682.74	
	GENERATOR MAINTENANCE - EAST END LS	682.74	
	GENERATOR MAINTENANCE - TOWER GARDENS	576.59	
	GENERATOR MAINTENANCE - PORTABLES	629.59	
	GENERATOR MAINTENANCE - WILDWOOD LS	576.59	
	WOOD VALLEY LS - INPEC W/2 HR LOAD BANK	583.59	
	GENERATOR MAINTENANCE - PORTABLES	629.59	
	TOTAL	<u>4,938.02</u>	
3. FERGUSON WATERWORKS #3386	FOOD GRADE ANTI-SEIZE 7LB CAN	156.00	
	REG P/C USG 5/8, T10 MTR P/C, T10 MTR P/C USG 4 WH	7,328.00	
	WWTP - LF 1X3/4 BA23-342WR-NL AND BV	120.65	
	LF 1 T10 MTR P/C	5,133.90	
	STOCK - LF 1 CTS QJ COMP 90 BEND	301.12	
	SP-NED2B31RPDG11 - 75	1,072.26	
	CREDIT MEMO 0917 - STOCK	(301.00)	
	CERDIT - T10 MTR P/C X, 4 WHL	(4,048.00)	
	CREDIT - REG P/C USG 5/8	(3,280.00)	
	CREDIT MEMO 0467	(730.00)	
	CREDIT MEMO 0923 - STOCK	(301.00)	
	TOTAL	<u>5,451.93</u>	
4. FORESIGHT GROUP	2 ENGINEERING STAMPS FOR PLANS	119.70	
5. CHAD HOUCK	MILAGE REIMBURSEMENT TO MISS DIGG CONFERENCE	85.10	28106
6. INSITUFORM TECHNOLOGIES USA, LLC	2019 SANITARY SEWER REHABILITATION PROJECT - PAY E	1,362.50	
7. KENNEDY INDUSTRIES INC	MAIN LIFT STATION FLYGT PUMP REPAIR	26,585.00	
8. LOPEZ CONCRETE CONSTRUCTION	LAKE LANSING WATER MAIN CONCRETE WORK - PAY EST 10	10,551.80	
9. MADISON NATIONAL LIFE INS CO	NATIONAL LIFE INSURANCE - FEB	364.35	
10. MICHIGAN MUNICIPAL LEAGUE	POLICY PREMIUM INSTALLMENT #4	3,437.14	
11. MICHIGAN WATER ENVIRONMENT	MWEA WATER EXPO 2020	1,380.00	
12. MIKE ELLIS	MILEAGE REIMBURSEMENT FOR MISS DIGG CONFERENCE	85.10	28107
13. PERCEPTIVE CONTROLS	MAIN LIFT STATION CONTROL DIAGNOSTICS	504.00	
TOTAL - ALL VENDORS		<u>539,829.65</u>	

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INVOICE APPROVAL BY INVOICE REPORT FOR CHARTER TOWNSHIP OF MERIDIAN
EXP CHECK RUN DATES 02/04/2020 - 02/04/2020
BOTH JOURNALIZED AND UNJOURNALIZED OPEN AND PAID
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Vendor Name	Description	Amount	Check #
1. CAPITAL AREA DISTRICT LIBRARY	WINTER TAX COLLECTION	219,114.97	12833
2. CAPITAL REGION AIRPORT AUTHORITY	WINTER TAX COLLECTION	98,177.06	12835
3. CAPITAL AREA TRANSPORTATION	WINTER TAX COLLECTION	422,362.38	12834
4. CORELOGIC	33-02-02-02-151-017 OVERPMT OF WINTER PROPERTY TAX	173.24	12836
5. EAST LANSING PUBLIC SCHOOLS	SUMMER TAX COLLECTION	2,561.84	12837
6. HASLETT PUBLIC SCHOOLS	WINTER & SUMMER TAX COLLECTION	256,468.17	12838
7. INGHAM CO TREASURER-LAND BANK BRA	33-02-02-03-181-015/MARSH - 2019 WINTER LAND BANK	13.81	12839
8. INGHAM COUNTY LAND BANK	33-02-02-03-403-011/6198 COLUMBIA - WINTER 2019 LA	2,688.80	12840
9. INGHAM INTERMEDIATE SCHOOL	SUMMER TAX COLLECTION	11,845.26	12841
10. LANSING COMMUNITY COLLEGE	WINTER TAX COLLECTION	534,759.61	12842
11. OKEMOS PUBLIC SCHOOLS	WINTER AND SUMMER TAX COLLECTION	646,905.06	12843
12. STATE OF MICHIGAN	33-02-02-03-403-011 2019 WINTER COLLECTION TAX REV SOR REGISTRATION DATE 12/31/2019	632.25 30.00	12844
	TOTAL	<u>662.25</u>	
13. WILLIAMSTON SCHOOLS	WINTER TAX COLLECTION	10,340.41	12845
TOTAL - ALL VENDORS		2,206,072.86	

Credit Card Report 1/16/2020 to 1/29/2020

Posting Date	Merchant Name	Amount	Name
2020/01/16	MIDWEST POWER EQUIPMENT	\$230.96	LAWRENCE BOBB
2020/01/16	THE HOME DEPOT 2723	\$229.36	LAWRENCE BOBB
2020/01/16	GRAINGER	\$9.00	ROBERT STACY
2020/01/16	MARKS LOCK SHOP INC	\$167.00	TYLER KENNEL
2020/01/16	AMAZON.COM*6Z9V77KJ3	\$246.94	KRISTI SCHAEING
2020/01/16	THE HOME DEPOT #2723	\$24.97	MIKE ELLIS
2020/01/16	SQ *MILLENNIA TECHN	\$57.00	STEPHEN GEBES
2020/01/16	THE HOME DEPOT #2723	\$29.97	DAVID LESTER
2020/01/16	COMPLETE BATTERY SOURCE	\$59.49	ANDREW MCCREADY
2020/01/16	MUNIWEB	\$60.00	ANDREW MCCREADY
2020/01/16	LANSING PKG PARKEON PS	\$4.00	KENNITH PHINNEY
2020/01/16	AMZN MKTP US*5G1616JM3	\$68.15	MICHELLE PRINZ
2020/01/16	AMAZON.COM*AC2KR8XX3	\$249.99	MICHELLE PRINZ
2020/01/16	SMK*SURVEYMONKEY.COM	\$336.00	DENISE GREEN
2020/01/16	THE HOME DEPOT #2723	\$31.02	CATHERINE ADAMS
2020/01/17	THE HOME DEPOT #2723	\$16.41	LAWRENCE BOBB
2020/01/17	FASTENAL COMPANY 01MILAN	\$59.56	ROBERT STACY
2020/01/17	GRAINGER	\$29.82	ROBERT STACY
2020/01/17	ALRO STEEL CORP	\$19.88	ROBERT STACY
2020/01/17	COVERT WIRELESS COM	\$18.99	BART CRANE
2020/01/17	LANSING PKG FRONT COUNTER	\$101.00	BART CRANE
2020/01/17	THE HOME DEPOT #2723	\$77.28	TODD FRANK
2020/01/17	RP *WILDFLOWERASSOCMI	\$90.00	JANE GREENWAY
2020/01/17	RP *WILDFLOWERASSOCMI	\$90.00	JANE GREENWAY
2020/01/17	BEST BUY 00004168	\$149.98	RICHARD GRILLO
2020/01/17	INGHAM COUNTY ROD	\$270.00	YOUNES ISHRAIDI
2020/01/17	THE HOME DEPOT #2723	\$48.00	DAVID LESTER
2020/01/17	THE HOME DEPOT 2723	\$90.78	MICHAEL DEVLIN
2020/01/17	JACK DOHENY COMPANIES	\$45.22	MATT FOREMAN
2020/01/17	FEDEX OFFIC40600004069	\$4.49	DENISE GREEN
2020/01/17	THE HOME DEPOT #2723	\$19.97	WILLIAM PRIESE
2020/01/20	THE HOME DEPOT #2723	\$17.69	LAWRENCE BOBB
2020/01/20	THE HOME DEPOT #2723	\$6.78	LAWRENCE BOBB
2020/01/20	FERGUSON WTRWRKS #3386	\$58.02	ROBERT STACY
2020/01/20	THE HOME DEPOT #2723	\$23.88	ROBERT STACY
2020/01/20	THE HOME DEPOT #2723	\$20.91	ROBERT STACY
2020/01/20	THE HOME DEPOT #2723	\$6.23	ROBERT STACY
2020/01/20	THE HOME DEPOT #2723	\$56.97	NYAL NUNN
2020/01/20	AMZN MKTP US*N1F42DH3	\$169.96	KRISTI SCHAEING
2020/01/20	MICHIGAN NOTARY SERVICE	(\$44.00)	BRETT DREYFUS
2020/01/20	MICHIGAN NOTARY SERVICE	\$44.00	BRETT DREYFUS
2020/01/20	KELLOGG HOTEL & CONF F&B	\$4.50	JANE GREENWAY
2020/01/20	INGHAM COUNTY ROD	\$90.00	YOUNES ISHRAIDI
2020/01/20	AMZN MKTP US*763A82BE3 AM	\$139.95	ROBERT MACKENZIE
2020/01/20	AMZN MKTP US*0H9ID4753	\$139.95	ROBERT MACKENZIE
2020/01/20	MEIJER # 025	\$76.48	MICHAEL DEVLIN
2020/01/20	PREUSS PETS	\$35.98	CATHERINE ADAMS
2020/01/20	OFFICEMAX/OFFICEDEPT#3379	\$152.46	CATHERINE ADAMS
2020/01/20	PETSMART # 0724	\$269.99	CATHERINE ADAMS
2020/01/20	SOLDANS FEEDS & PET S	\$17.20	CATHERINE ADAMS
2020/01/21	AMZN MKTP US*5Y2NE6RD3	\$53.36	MICHELLE PRINZ
2020/01/21	AMAZON.COM*N9C000B3	\$2.90	MICHELLE PRINZ

2020/01/21	PREUSS PETS	\$31.50	CATHERINE ADAMS
2020/01/21	PREUSS PETS	\$39.97	CATHERINE ADAMS
2020/01/22	CATHEY COMPANY	\$11.06	ROBERT STACY
2020/01/22	PAYPAL *MICHIGANSTO	\$200.00	NYAL NUNN
2020/01/22	AMZN MKTP US*A92E33E13	\$6.99	KRISTI SCHAEING
2020/01/22	LARRY CUSHION TROPHIES	\$50.00	ROBIN FAUST
2020/01/23	AMZN MKTP US*G07L60EL3	\$29.81	BENJAMIN MAKULSKI
2020/01/23	THE HOME DEPOT 2723	\$241.54	TYLER KENNEL
2020/01/23	SOARING EAGLE HOTEL	\$147.06	CHAD HOUCK
2020/01/23	SOARING EAGLE LEGENDS	\$18.68	CHAD HOUCK
2020/01/23	SIMPLISAFE	\$24.99	KYLE ROYSTON
2020/01/23	MMTA	\$325.00	PHIL DESCHAI
2020/01/23	GFS STORE #1901	\$26.94	ANDREA SMILEY
2020/01/23	SOARING EAGLE HOTEL	\$147.06	MIKE ELLIS
2020/01/23	SOARING EAGLE LEGENDS	\$18.67	MIKE ELLIS
2020/01/23	AWWA.ORG	\$83.00	DEREK PERRY
2020/01/23	COSTCO WHSE#1277	\$99.88	MICHAEL DEVLIN
2020/01/23	MSU POLICE DEPT	\$3.00	CATHERINE ADAMS
2020/01/24	THE HOME DEPOT #2723	\$20.50	LAWRENCE BOBB
2020/01/24	AMAZON.COM*643NX91V3	\$3.96	KRISTI SCHAEING
2020/01/24	AMZN MKTP US*195VK51H3	\$62.14	KRISTI SCHAEING
2020/01/24	AMAZON.COM*8M02196I3	\$40.78	KRISTI SCHAEING
2020/01/24	TOM'S FOOD	\$16.99	ANDREA SMILEY
2020/01/24	COSTCO WHSE#1277	\$123.51	ROBIN FAUST
2020/01/24	MI STATE POLICE PMTS	\$200.00	ANDREW MCCREADY
2020/01/24	THE HOME DEPOT #2723	\$12.50	KEITH HEWITT
2020/01/24	LANSINGSTATE JOURNAL	\$1.00	MICHELLE PRINZ
2020/01/24	AMERICAN MEDICAL RESPO	\$175.00	WILLIAM PRIESE
2020/01/24	PETSMART # 0724	\$21.99	CATHERINE ADAMS
2020/01/24	THE HOME DEPOT 2723	\$91.96	CATHERINE ADAMS
2020/01/27	THE HOME DEPOT #2723	\$5.25	LAWRENCE BOBB
2020/01/27	THE HOME DEPOT #2723	\$35.64	LAWRENCE BOBB
2020/01/27	THE HOME DEPOT #2723	\$13.98	TYLER KENNEL
2020/01/27	THE HOME DEPOT #2723	\$36.31	TYLER KENNEL
2020/01/27	AMZN MKTP US*M98NS1B71	\$95.98	KRISTI SCHAEING
2020/01/27	AMAZON.COM*PO9E59QY3	\$49.30	KRISTI SCHAEING
2020/01/27	GFS STORE #1901	\$71.04	ROBIN FAUST
2020/01/27	GFS STORE #1901	\$154.69	ROBIN FAUST
2020/01/27	SPARTANCHASSIS (APA)	\$215.00	TODD FRANK
2020/01/27	PAYPAL *MICHIGANSTO	\$200.00	YOUNES ISHRAIDI
2020/01/27	AMAZON.COM*TJ6CW5BL3 AMZN	\$114.04	ROBERT MACKENZIE
2020/01/27	ADOBE ACROPRO SUBS	\$15.89	DEREK PERRY
2020/01/27	MICHIGAN TOWNSHIPS ASS	\$91.00	DEREK PERRY
2020/01/27	WAL-MART #2866	\$16.65	KENNITH PHINNEY
2020/01/27	THE HOME DEPOT #2723	\$5.28	KENNITH PHINNEY
2020/01/27	DICK'S CLOTHING&SPORTING	\$14.99	MICHAEL DEVLIN
2020/01/27	YOURMEMBER-CAREERS	\$215.00	MICHELLE PRINZ
2020/01/27	AMAZON.COM*W991F9UN3	\$189.89	MICHELLE PRINZ
2020/01/27	ADOBE ACROPRO SUBS	\$15.89	DENISE GREEN
2020/01/27	PETSMART # 0724	\$59.98	CATHERINE ADAMS
2020/01/27	SOLDANS FEEDS & PET S	\$17.90	CATHERINE ADAMS
2020/01/27	WAL-MART #2866	\$17.66	CATHERINE ADAMS
2020/01/27	WAL-MART #2866	\$21.18	CATHERINE ADAMS
2020/01/27	THE HOME DEPOT #2723	\$9.98	CATHERINE ADAMS
2020/01/27	MEIJER # 025	\$31.01	CATHERINE ADAMS

2020/01/28	QUALITY DAIRY 31120025	\$20.58	ROBIN FAUST
2020/01/28	AMZN MKTP US*6J4763V33	\$25.77	MICHELLE PRINZ
2020/01/29	AC&E RENTALS INC	\$60.00	LAWRENCE BOBB
2020/01/29	THE HOME DEPOT #2723	\$36.30	LAWRENCE BOBB
2020/01/29	SHAHEEN CHEVROLET	\$105.53	JIM HANSEN
2020/01/29	MICHIGAN CAT LANSING	\$41.17	JIM HANSEN
2020/01/29	DAVIS & STANTON	\$112.00	KYLE ROYSTON
2020/01/29	INTL ASSN ADMIN PRO	\$150.00	KRISTEN COLE
2020/01/29	CELEBRATION GROUP SALES	\$854.00	ANDREA SMILEY
2020/01/29	STATE OF MI EMS	\$25.00	MARK VROMAN
2020/01/29	HASLETT TRUE VALUE HARDW	\$35.96	TODD FRANK
2020/01/29	SPARTANCHASSIS (APA)	\$46.32	TODD FRANK
2020/01/29	POTBELLY #165	\$12.18	LUANN MAISNER
2020/01/29	FERGUSON ENT, INC 934	\$99.98	KEITH HEWITT
2020/01/29	AMAZON.COM*2G4PT5393	\$217.56	MATT FOREMAN
2020/01/29	AMAZON.COM*0G9R91AA3	\$638.46	CATHERINE ADAMS

Total	\$10,748.26
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ACH Transactions

Date	Payee	Amount	Purpose
1/17/2020	ICMA	\$ 55,711.15	Payroll Deductions 1/17/2020
1/17/2020	Nationwide	\$ 3,680.66	Payroll Deductions 1/17/2020
1/17/2020	Various Financial Institutions	\$ 279,538.29	Direct Deposit 1/17/2020
1/17/2020	IRS	\$ 106,025.52	Payroll Taxes 1/17/2020
1/23/2017	Blue Care Network	\$ 11,225.24	Employee Health Insurance
1/23/2020	MCT-Utilities	\$ 254.18	Water/Sewer for MCT
	Total ACH Payments	<u>\$ 456,435.04</u>	



To: Board Members
From: Ronald J. Styka, Township Supervisor
Date: January 31, 2020
Re: Resolution in Recognition of Ann Chapman, Haslett Library Head Librarian

The resolution that was presented to Ann Chapman, at the last Township Board meeting on January 21, 2020, needs to be adopted.

A motion is prepared for Board consideration:

MOVE TO ADOPT THE RESOLUTION IN RECOGNITION OF ANN CHAPMAN, HASLETT LIBRARY HEAD LIBRARIAN.

Attachment:

1. Resolution in Recognition of Ann Chapman, Haslett Library Head Librarian

I, the undersigned, the duly qualified and acting Clerk of the Township Board of the Charter Township of Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and complete copy of a resolution adopted at a regular meeting of the Township Board on the 4th day of February 2020.

Brett Dreyfus, Clerk
Meridian Charter Township



11.A/13.A

To: Township Board

From: Mark Kieselbach, Director of Community Planning and Development
Peter Menser, Principal Planner

Date: January 30, 2020

Re: Mixed Use Planned Unit Development #19034 (Hudson Senior Living) Pine Village

Hudson Senior Living has submitted a mixed use planned unit development (MUPUD) request to redevelop the westernmost building in the Haslett Village Square shopping center at 1673 Haslett Road and construct a 146,734 square foot, three-story senior apartment building with 133 dwelling units. The project, identified as Pine Village, is proposed on a 9.6 acre property zoned C-2 (Commercial).

In addition to the MUPUD, a special use permit (SUP) is required for constructing a building totaling more than 25,000 square feet in gross floor area. The special use permit (SUP #19181) is being processed concurrently with the MUPUD request.

The Planning Commission held a public hearing on the proposal at its meeting on December 16, 2019 and on January 13, 2020 voted to recommend approval, citing the following reasons for their decision:

- The proposed mixed use planned unit development meets the minimum MUPUD design standards as outlined in Section 86-440(f) of the Code of Ordinances.
- The requested waiver for the number of motor vehicle parking spaces is appropriate and necessary to facilitate development of the property consistent with the intent of the MUPUD ordinance
- The number and type of amenities provided in the mixed use planned unit development are consistent with the requirements, guidelines, and criteria stated in Section 86-440(e) of the Code of Ordinances.
- The proposed mixed use planned unit development is consistent with Objective B of Goal 1 of the 2017 Master Plan to ensure new residential developments meet high standards of visual attractiveness, health and safety, and environmental sensitivity.
- The proposed mixed use planned unit development is consistent with Objective A of Goal 3 of the 2017 Master Plan to upgrade commercial areas by improving and enhancing the Haslett Road commercial area while maintaining its traditional character.

**Mixed Use Planned Unit Development #19034 (Hudson Senior Living)
Township Board (February 4, 2020)
Page 2**

Staff memorandums outlining the MUPUD request and minutes from the Planning Commission meetings at which the request was discussed are attached for the Board's review.

Township Board Options

The Township Board may approve or deny the proposed mixed use planned unit development project. If the Board amends the proposal, the request may be referred back to the Planning Commission for a recommendation. A resolution will be provided at a future meeting.

Attachments

1. Staff memorandums dated December 11, 2019 and January 8, 2020 with attachments.
2. Resolution recommending approval.
3. Planning Commission minutes dated December 16, 2019 (public hearing) and January 13, 2020 (decision).
4. Articles submitted by applicant.

G:\Community Planning & Development\Planning\MIXED USE PLANNED UNIT DEVELOPMENTS (MUPUD)\2019\MUPUD 19034 (Hudson Senior Living)\MUPUD 19034.tb1.docx



To: Planning Commission

From: Peter Menser, Principal Planner

Date: December 11, 2019

**Re: Mixed Use Planned Unit Development #19034 (Hudson Senior Living),
construct Pine Village senior apartment building at 1673 Haslett Road.**

Hudson Senior Living has submitted a mixed use planned unit development (MUPUD) proposal to redevelop the westernmost building in the Haslett Village Square shopping center and construct a 146,734 square foot, 133-unit senior apartment building. The project, identified as Pine Village, is located at 1673 Haslett Road. The property is zoned C-2 (Commercial). As proposed, the overall project area is 9.6 acres, which includes the entire 5.293 acre parcel at 1673 Haslett Road and an additional 4.3 acres from the 12.63 acre parcel to the south. The subject property currently has approximately 316 feet of frontage on Haslett Road. If approved the parcel frontage would increase to 411 feet as the applicant would be purchasing additional land for the project.

The proposal includes the demolition of the existing 23,415 square foot multi-tenant shopping center building, which is currently occupied by Mr. R's Driving School, Hungry Howie's Pizza, Edward Jones, Tari's Dance Studio, and Patriot Ambulance, and the construction of a 146,734 square foot, three story, senior apartment building with 133 dwelling units. The existing building was constructed in 1985 and approved under Site Plan Review #85-04. The rest of the Haslett Village Square development was constructed in 1980 and approved under Special Use Permit #78051 and Site Plan Review #80-05. Other Township approvals granted for the property include special use permits for the establishment of Mr. R's Driving School in 2003 (SUP #03061) and Patriot Ambulance in 2017 (SUP #17021).

The 133 dwelling units consist of 109 one bedroom units and 24 two bedroom units. The apartments would be age-restricted, meaning only those aged 55 or older would qualify for residency. The apartments are considered independent living as no health care services will be provided by the operator. The site plan indicates approximately 9,558 square feet of non-residential uses in the building, which includes site amenities such as an arts and crafts room, salon, wellness office, pub, cafeteria, fitness room, library, parlor, game room, and chapel.

With 133 dwelling units on 9.6 total acres, overall residential density of the proposed project is 13.85 dwelling units per acre (du/a). Redevelopment projects are typically allowed a maximum of 14 du/a in a MUPUD (18 du/a with provision of four or more amenities), however the project is proposed in the three block (53 acre) area in downtown Haslett where the ordinance was amended to grant the Township Board authority to establish appropriate limits for density and building height based on consistency with a list of 11 performance criteria. The amendment, Zoning Amendment #18020, removed the limitations on residential density and raised the maximum building height from 45 feet to 60 feet for areas in both downtown Okemos and downtown Haslett. The proposed building is 39 feet tall and has a density of 13.85 du/a, therefore the applicant is not requesting additional density or building height greater than typically allowed under a MUPUD.

Mixed Use Planned Unit Development #19034 (Hudson Senior Living)
Planning Commission (December 16, 2019)
Page 2

In addition to the MUPUD, a special use permit (SUP) is required for constructing a building totaling more than 25,000 square feet in gross floor area. The special use permit (SUP #19181) is being processed concurrently with the MUPUD request.

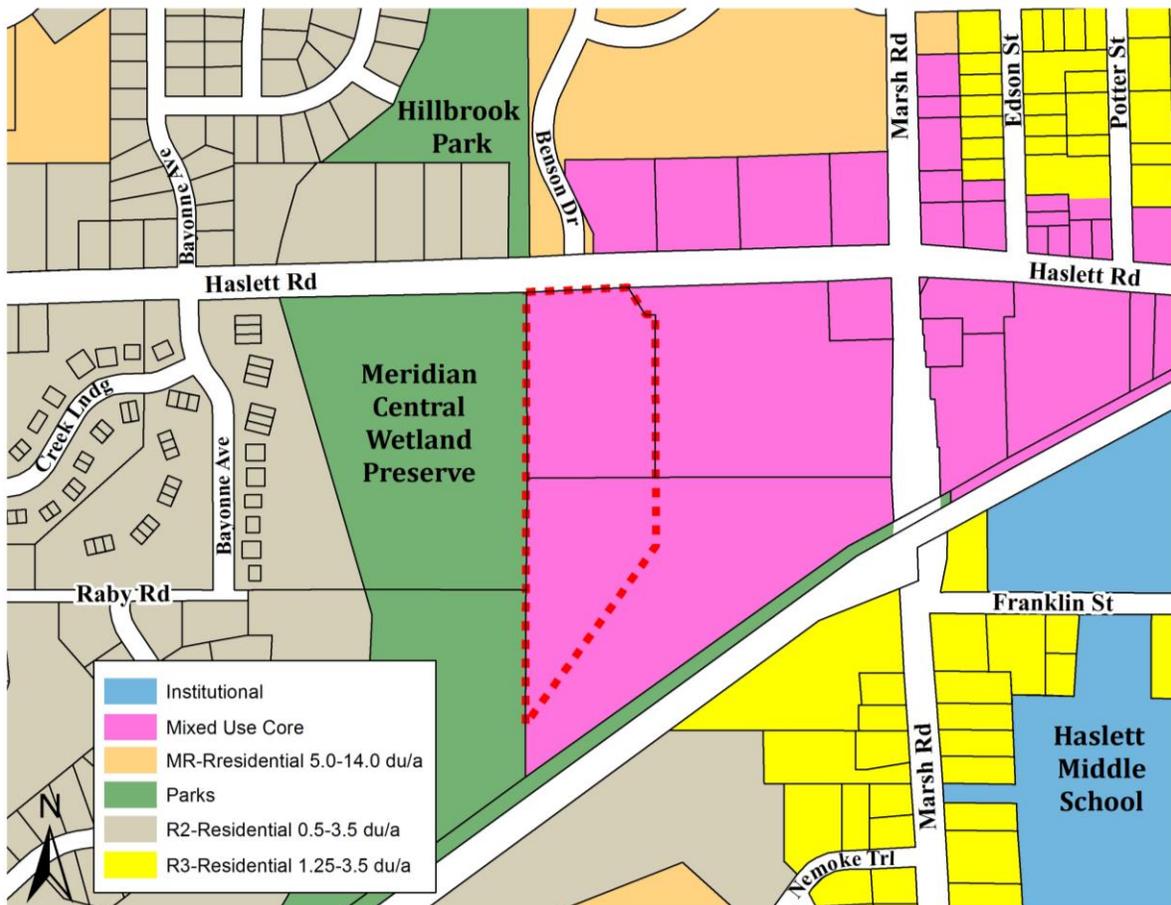
LOCATION MAP



Master Plan

The Future Land Use Map from the 2017 Master Plan designates the subject property in the Mixed Use Core category.

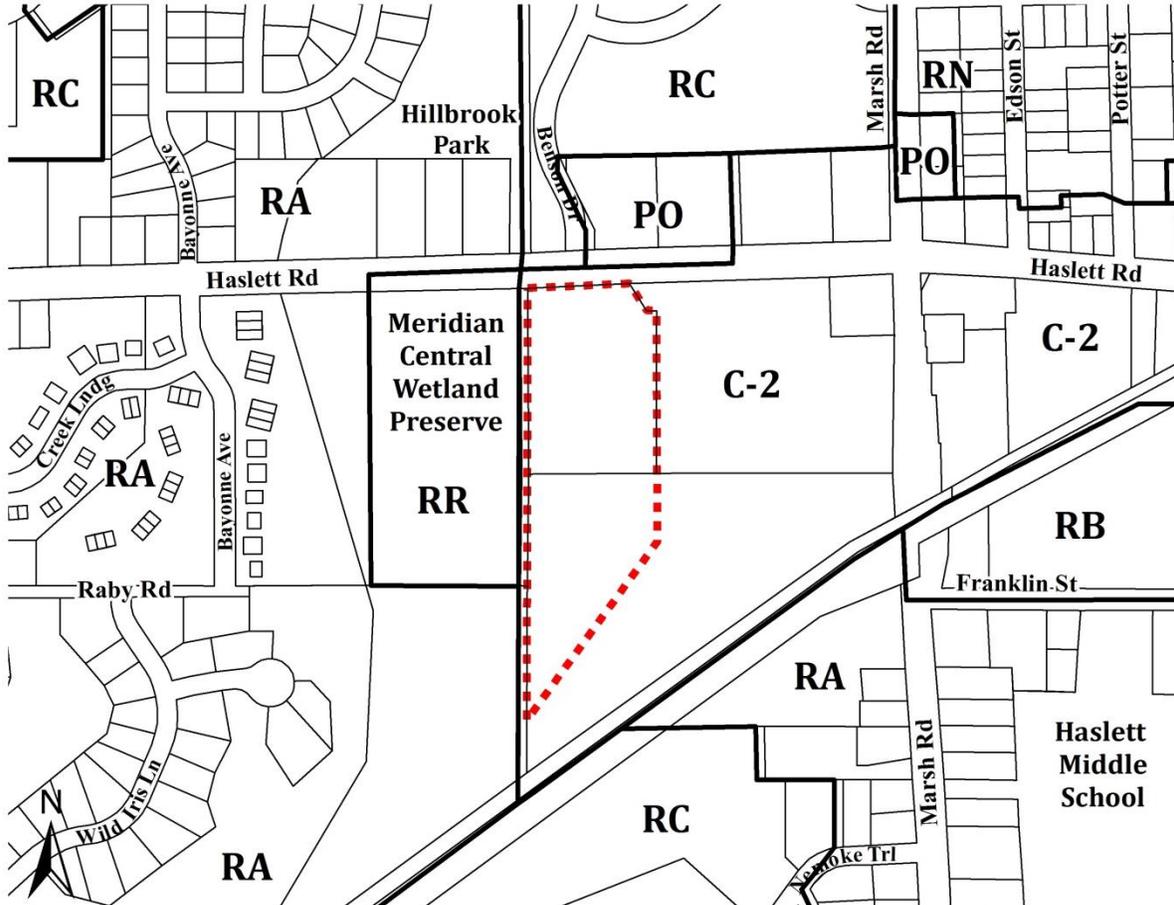
FUTURE LAND USE MAP



Zoning

The proposed project is located in the C-2 (Commercial) zoning district. A MUPUD is permitted in the C-2, C-3 (Commercial), CR (Commercial Recreation), and CS (Community Service) zoning districts and is also permitted in C-1 (Commercial) and PO (Professional and Office) where public water and sewer is available. All uses permitted by right and by special use permit in the underlying C-2 zoning district are permitted in a MUPUD.

ZONING MAP



Physical Features

The subject property is currently occupied by the Haslett Village Square shopping center, which includes four commercial buildings totaling 105,698 square feet and related surface parking and landscaping. The shopping center consists of a 71,018 square foot multi-tenant commercial building currently occupied by Little Caesars, Village Laundry, and Fringe Hair Design, a 9,646 square foot multi-tenant building occupied by BestWay Pak-N-Send along the Haslett Road property frontage, and the 23,415 square foot multi-tenant commercial building proposed for demolition on the west side of the property. The 1,619 square foot former PNC Bank building is located at the northeast corner of the site.

The property drops off approximately 15 feet in elevation to the west of the proposed MUPUD toward the 24 acre Township Land Preservation parcel and Pine Lake Drain. Located directly to the south of the shopping center are the Interurban Pathway, a vacated portion of Raby Road, and the Canadian National (CN) Railroad tracks.

Floodplain

The Flood Insurance Rate Map (FIRM) for Meridian Township indicates a portion of the property is located in the floodplain of the Pine Lake Drain. The submitted site plan shows the exact location of the floodplain on the site. No work is proposed in the floodplain at this time.

FLOODPLAIN MAP



Wetlands

The applicant submitted a wetland delineation, which has been verified by the Township’s wetland consultant, identifying six wetlands on or adjacent to the subject property. Meridian Township regulates wetlands 0.25 acre or greater in size, or those contiguous to or within 500 feet of a regulated inland lake, stream, river, or pond. For wetlands equal to or greater than two acres in area the Township requires a 40 foot setback from the delineated wetland boundary. For wetlands equal to or greater than 0.25 acre but less than two acres in area a 20 foot setback is required from the delineated boundary.

The applicant is proposing to fill Wetland C, currently used as a detention basin, to facilitate development of the property. A permit is not required to fill Wetland C as it is not regulated by the State or Township due to it being under 0.25 acre in size. There are no proposed impacts to any regulated wetland for the development of Pine Village. The following table shows the size, regulatory status, and required setback, if any, of each wetland on the property.

	Delineated Size	Regulatory Authority	Required Setback
Wetland A-1	0.02 acre (on site)	Township and State	40 feet
Wetland A-2	0.24 acre (on-site)	Township and State	40 feet
Wetland B	2.64 acres	Township and State	40 feet
Wetland C	0.11 acre	Not regulated	No setback required
Wetland D	0.18 acre	Not regulated	No setback required
Wetland E	0.02 acre	Not regulated	No setback required

WETLAND MAP



**Wetlands depicted by staff, see attached delineation for details.*

Greenspace Plan

The Township Greenspace Plan shows a Priority Conservation Corridor (PCC) and Fragile Link to the southwest of the project area. An Off-Road Pathway is shown along the vacated portion of Raby Road and the Interurban Pathway. A PCC is a network of ecologically significant open spaces and a Fragile Link is an area where a PCC is exceptionally narrow or fragmented.

GREENSPACE MAP



Streets and Traffic

The project site is located on the south side of Haslett Road, west of Marsh Road. At the project site Haslett Road is four lanes wide with a center turn lane and curb and gutter. It is classified as a Minor Arterial on the Street Setbacks and Service Drives Map in the zoning ordinance. A seven foot wide pathway is present along the south side of Haslett Road.

The applicant has submitted a trip generation letter prepared by Traffic Engineering Associates, Inc. (TEA, Inc.) providing information on the number of vehicle trips expected to be generated by the redevelopment of the existing multi-tenant commercial building into a senior independent living apartment building with 133 units. The letter uses the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th edition) to classify and compare traffic generation from both the existing and proposed land uses. Land Use Code 820 (Shopping Center) was used to represent the existing 23,415 square foot shopping center and Land Use Code 252 (Senior Adult Housing) was used to represent the proposed 133 unit apartment building.

The submitted letter finds that the proposed land use will generate less traffic than the existing land use. A total of 26 trips are anticipated in the AM peak hour and 34 trips during the PM peak hour, with 509 total weekday trips. For a MUPUD, a traffic impact study is required when the proposed project would generate over 100 directional trips during a peak hour of traffic on adjacent roadways. Based on the information in the letter from TEA, Inc. a traffic study is not required for the proposed project.

Parking

The Township Code of Ordinances requires two parking spaces for each dwelling unit in the apartment building for a multiple family land use. Additional parking is required for the salon, the standard for which is two spaces for each chair in the salon. The applicant's site plan references a different parking calculation, the "housing for the elderly" parking category from the zoning ordinance, however the parking requirement for general apartments better represents the project given the proposed use is independent living apartments with no medical care or other assistance provided to residents. Using the multiple family parking standard, 266 parking spaces are required for the apartments and four spaces for the two chairs in the approximate 400 square foot salon, for a total of 270 parking spaces required for the project.

In addition to the required motor vehicle parking, one bicycle parking space for every 10 required motor vehicle parking spaces must also be provided. With 270 motor vehicle parking spaces required, 27 bicycle parking spaces are necessary for the project. 12 bicycle parking spaces (six bicycle racks) are provided in different areas on the property. An unidentified amount of additional bicycle spaces are planned to be provided in a bicycle shelter or locker.

The ordinance allows the number of required motor vehicle parking spaces on the site to be reduced by one motor vehicle parking space for every two bicycle parking spaces installed on a site, up to a maximum of 10 percent of the total number of required motor vehicle parking spaces. Using this formula the required number of motor vehicle parking spaces can be reduced by six spaces. With the allowed reduction granted for bicycle parking, the total required motor vehicle parking is reduced to 264 spaces. With 264 required parking spaces and 101 proposed spaces the applicant is seeking a 163 space waiver from the Township Board as part of the MUPUD approval.

Utilities

Municipal water and sanitary sewer is available to serve the project site. If the MUPUD and SUP are approved, the location and capacity of utilities for the proposed development will be reviewed in detail by Public Works and Engineering staff during the site plan review process.

Staff Analysis

The applicant has requested to construct a mixed use planned unit development (MUPUD) identified as Pine Village. In a MUPUD request the Planning Commission makes a recommendation on the project and the Township Board makes the final decision. When reviewing the proposal the Planning Commission needs to consider the appropriateness of the requested waivers, the proposed amenities and related review criteria, and the MUPUD design standards as outlined in Section 86-440(f) of the Code of Ordinances.

The MUPUD ordinance generally waives the standard requirements for lot size, yards, frontage requirements, setbacks, maximum impervious surface, and type and size of dwelling unit, provided the purpose and intent of the ordinance are incorporated into the overall development plan. The MUPUD ordinance is intended to provide flexibility for the Planning Commission and Township Board to set appropriate standards during the review process.

The following is a summary of the project's consistency with the MUPUD ordinance standards. As part of this project analysis, standards for the underlying C-2 zoning district will be compared to what is proposed on the submitted site plan.

Land Use: All uses permitted by right and by special use permit in the underlying zoning district are allowed in a MUPUD. The applicant is proposing a mix of residential and non-residential space.

Density: The submitted plan proposes 133 dwelling units on 9.6 total acres, for a density of 13.85 dwelling units per acre (du/a). Redevelopment projects are allowed a maximum of 14 du/a, which may be increased to no more than 18 du/a when an applicant offers four or more unique and extraordinary amenities acceptable to the Township.

Phasing: It is expected the development will be completed in one phase.

Building height: The applicant is proposing a three-story building that is 39 feet, 2 inches in height measured at the midpoint of the peak and eaves. Building elevations are provided in the MUPUD application materials, which indicate the building complies with the maximum height limitation of 45 feet.

Railings, benches, trash receptacles, or bicycle racks: Accessory items such as railings, benches, trash receptacles, or bicycle racks are required to be of commercial quality and complement the building design and style. Details on the proposed benches are shown in the application materials. The Township requires the use of an inverted "U" shaped bicycle rack, which are the type proposed in the project.

Mixed Use Planned Unit Development #19034 (Hudson Senior Living)
Planning Commission (December 16, 2019)
Page 10

Trash and recycling: One dumpster with screening is shown on the submitted site plan at the southeast corner of the site. The Township requires any proposed trash or recycling structure to be screened by an enclosure.

Amenities: One or more amenities are required for every MUPUD project and should represent multiple amenity categories in the MUPUD ordinance, which are Conservation; Environment; Parks, Recreation, and Culture; Social Interaction; and Site and Building Design. Criteria to determine whether a proposed amenity is acceptable for consideration can be found in Section 86-440(e)(2) of the MUPUD ordinance. Amenities proposed by the applicant are detailed below:

Proposed Amenity	Amenity Category	Ordinance Reference/Staff comment
Electric car charging station	Conservation	One electric car charging station is proposed on the east side of the building.
Foot and bicycle pathways and sidewalks that connect to the Township's pathway system	Accessibility	A pedestrian connection from the building to the Haslett Road pathway is provided. Staff has requested the applicant provide a connection along the west side of the property between the Interurban Pathway and Hillbrook Park on the north side of Haslett Road, which is under consideration.
Covered bicycle storage	Accessibility	The applicant is considering either a bicycle locker or bicycle shelter.
Outdoor gathering and eating spaces	Social Interaction	Outdoor gathering areas are being proposed in both the north and south courtyards.
Outdoor seating	Social Interaction	The MUPUD ordinance requires public outdoor seating plazas to be adjacent to or visible and accessible from the street.
Private courtyards	Social Interaction	Courtyards are proposed on the north and south side of the building. The MUPUD ordinance requires courtyards to include seating for the public.
Porches	Site and Building Design	Porches are depicted on the submitted building elevations.
Sidewalk planters	Site and Building Design	Planters are proposed on sidewalks surrounding the building.
Public art	Parks, Recreation, and Culture	Public art is proposed on the south side of the building adjacent to one of the Interurban Pathway connections.
Building recycling program	Not listed	Valuable addition to the project.
Energy star appliances	Not listed	Valuable addition to the project.
New bus stop	Accessibility	The applicant is working with the Capital Area Transportation Authority (CATA) to install a bus stop pad along the Haslett Road frontage.

Building materials: Generally, building materials in a MUPUD should include, but are not limited to, wood, brick, clapboards, beadboard, glass, and stone. Other materials such as vinyl, aluminum, and metal sidings should be avoided. All buildings should be completed on all sides with acceptable materials. The design of the buildings should relate to and blend with the facades of adjacent buildings and complement streetscape improvements in the area. The proposed building materials for the project are a mix of fiber cement lap siding and simulated stone veneer with asphalt shingle roofing. Elevations of the buildings were submitted that show the different building materials for the project.

Architectural design: The MUPUD ordinance states that buildings wider than 50 feet shall be divided into increments of not more than 50 feet through articulation of the façade and nonresidential street level facades must be covered by at least 50 percent windows. Scaled building elevations have been provided which indicate the building has the required facade articulation.

Parking: The setbacks for a parking area and the number of parking spaces required can be waived in a MUPUD. Parking lots are encouraged to be on the side or in the rear of a building. 264 parking spaces are required for the project and the applicant is proposing 101 spaces located around the building.

Landscaping: Proposed landscaping must generally comply with the provisions of the Code of Ordinances. Landscaping should be designed to preserve existing significant natural features and to buffer service areas, parking lots, or dumpsters. A mix of evergreen and deciduous plants and trees are preferred, along with seasonal accent plantings. A landscape plan is not required as part of the MUPUD application, but was provided for consideration and will be reviewed in detail during site plan review if the MUPUD is approved.

Lighting: The MUPUD ordinance requires proposed site lighting to comply with the Outdoor Lighting Ordinance and limits street lighting intended to provide illumination for pedestrians on the sidewalk to no taller than 15 feet in height. Information on site lighting was provided and will be reviewed in detail during site plan review.

Signs: A sign program is required as part of the MUPUD application showing the style, size, number, and location of any proposed signs and is approved by the Township Board as part of the MUPUD. Freestanding signs are generally not permitted in a MUPUD. Exceptions for freestanding signs of the monument type may be permitted when a building is set back a minimum of 15 feet from the right-of-way (ROW) line with the resulting yard set aside for permanent public open space. Freestanding signs are required to be at least 10 feet back from the adjacent road right-of-way (ROW). The applicant is proposing a 65 square foot, five-foot tall monument sign located south of the Haslett Road pathway and 10 feet from the adjacent ROW. The building elevations show two wall signs on the east façade of the building, one for the art studio and one for the salon.

Sidewalks: Generally, sidewalks in a MUPUD must be a minimum of five feet in width. Seven foot wide sidewalks are required when a sidewalk is located immediately adjacent to an off-street parking area. The submitted site plan shows a seven foot wide sidewalk around the perimeter of the building.

Waiver requests

The MUPUD ordinance generally waives the standard requirements for lot size, setbacks, type and size of dwelling unit, lot frontage, number of required parking spaces, and impervious surface coverage, provided the purpose and intent of the ordinance are incorporated into the overall development plan. Based on the submitted site plan the applicant is requesting the following waivers for the Pine Village project.

Parking

264 parking spaces are required for the project based on the number of residential units and salon in the building and the allowed reduction granted for bicycle parking. 101 parking spaces are proposed by the applicant. A waiver of 163 parking spaces is required.

Bicycle Parking

27 bicycle parking spaces are required for the project. A total of 12 bicycle parking spaces (six bicycle racks) are provided in different areas on the property, therefore a waiver of 15 bicycle parking spaces (eight bicycle racks) is requested. An unidentified amount of additional bicycle spaces are planned to be provided in a bicycle shelter or locker, which may either reduce or eliminate the bicycle parking waiver.

Freestanding Sign

The applicant is proposing a 65 square foot, five-foot tall monument sign for the project. For structures over 25,000 square feet but less than 150,000 square feet in size, freestanding signs five feet or less in height can be up to 38 square feet in size. The applicant is requesting a waiver of 27 square feet for the sign.

Planning Commission Options

The Planning Commission may recommend approval, approval with conditions, or denial of the proposed MUPUD. The Planning Commission is required to make a recommendation on the MUPUD within 60 days of the date of the public hearing. A resolution will be provided at a future meeting.

Attachments

1. Application and attachments.
2. Site plan prepared by Kebs, Inc. dated October 7, 2019 (revision date December 11, 2019) and received by the Township on December 11, 2019.
3. Floor plans and building elevations prepared by Shelter Design Studio LLC dated December 12, 2019 and received by the Township on December 12, 2019.
4. Trip generation letter prepared by TEA, Inc. dated November 7, 2019.
5. Natural Features Assessment prepared by Marx Wetlands, LLC dated November 1, 2019.
6. Wetland Delineation prepared by Marx Wetlands, LLC dated October 30, 2019.

G:\Community Planning & Development\Planning\MIXED USE PLANNED UNIT DEVELOPMENTS (MUPUD)\2019\MUPUD 19034 (Hudson Senior Living)\MUPUD 9034.pc1.docx

**CHARTER TOWNSHIP OF MERIDIAN
DEPARTMENT OF COMMUNITY PLANNING AND DEVELOPMENT
5151 MARSH ROAD, OKEMOS, MI 48864
PHONE: (517) 853-4560, FAX: (517) 853-4095**

RECEIVED
NOV 19 2019

MIXED USE PLANNED UNIT DEVELOPMENT APPLICATION

Before submitting this application for review, an applicant shall participate in the pre-application conference with the Director of Community Planning and Development to discuss the requirements for a Mixed Use Planned Unit Development.

Part I

A. Applicant Jeff Buck, Hudson Senior Living
 Address of Applicant 280 W. Maple Rd, Suite 230, Birmingham, MI 48009
 Telephone - Work 248-540-9300 ext. 12 E-Mail jbuck@cypresspartners.biz Fax 248-988-8867
 Interest in property (circle one): Owner Tenant Option Other _____
 (Please attach a list of all persons with an ownership interest in the property.)

B. Site address / location / parcel number 1673 Haslett Rd, Meridian Township, MI 48840 33-02-02-10-401-003
 Legal description (please attach if necessary) See Attached 33-02-02-10-402-001
 Current zoning _____
 Project name Pine Village of Meridian

C. Developer (if different than applicant) _____
 Address _____
 Telephone: Work _____ E-Mail _____ Fax _____

D. Architect, Engineer Planner or Surveyor responsible for design of project if different from applicant:
 Name Greg Petru, Kebs, Inc.
 Address 2116 Haslett Rd, Haslett, MI 48840
 Telephone(s) 517-339-1014 E-Mail gpetru@kebs.com Fax _____

E. Acreage of all parcels in the project: Gross 9.6 Acres Net 9.6 Acres

F. Proposed Uses and Site Amenities:

1. Non-residential uses:
 a. Type Dining/Restaurant, Salon, Healthcare Clinic Office, etc.
 b. Percent of project area 6.5 %
 c. Total square feet for non-residential uses 9,558 sq. ft.
 d. Usable floor area 9,558 sq. ft.
 e. Number of employees Approx. 20
 f. Hours of operation Varies

2. Residential Uses:
 a. Percent of project area _____
 b. Total dwelling units 133 Units
 c. Dwelling unit mix:
 i. Number of single family detached: for Rent 0 Condo 0
 ii. Number of duplexes: for Rent 0 Condo 0
 iii. Number of townhouses: for Rent 0 Condo 0
 iv. Number of garden style apartments: for Rent 133 Condo 0
 v. Number of other dwellings: for Rent 0 Condo 0

3. Parking:
 - a. Non-residential uses 100 spaces total for both non- and residential uses
 - b. Residential uses See above

4. Proposed Amenities:

(General)	Type	<u>Electric Car Charging Station</u>
	Type	<u>Foot & Bicycle Pathways that connect into path system</u>
	Type	<u>Covered Bicycle Storage on site</u>
	Type	<u>Outdoor Gathering Spaces & Outdoor Eating Spaces</u>
Proposed Amenities: (Density Bonus)	Type	<u>Benches or outdoor seating</u>
	Type	<u>Private courtyards</u>
	Type	<u>Porches on any structure</u>
	Type	<u>Sidewalk Planter-pots</u>

G. The following support materials must be submitted with the application:

1. Nonrefundable fee.
2. Legal Description of the property. (A sealed survey may be required)
3. Evidence of fee or other ownership of the property or a letter from the owner authorizing the request including the owner's proof of ownership.
4. A written description of the project including, but not limited to: a site analysis; the principal factors which influenced the site plan and architectural elements; and, the proposed phasing program for non-residential and residential uses, installation and/or construction of amenities.
5. Fourteen copies (Thirteen (13) 24"x36" and one 8½" x11") of a Site Plan drawn to a readable scale containing the following (may be a set of plans for readability):
 - Total property, its location in the Township, its relationship to adjacent properties
 - Boundaries of subject property
 - Location and dimensions of all existing and proposed structures
 - Approximate location and distance of all structures within 100 feet of the subject property
 - Proposed means of vehicular and pedestrian ingress and egress to the subject property
 - Public and private roads and streets, rights-of-way and easements indicating names and widths of streets which abut or cross the site
 - Existing and proposed parking spaces and vehicular and pedestrian circulation patterns
 - Dimensions of setbacks from streets, property lines and between buildings on the site
 - Location of proposed amenities
 - Location and size of existing utilities including power lines and towers, both above and below ground
 - Amount and location and calculation of all impervious surfaces
 - Verified boundaries of all natural water features and required setback lines
6. A reproducible two foot contour topographic map based on United States Geological Survey (USGS) drawn at the same scale as the site plan and showing existing relief features on the site.
7. A schematic layout of the proposed storm sewer system.
8. Architectural sketches of all elevations of proposed buildings or structures, including the project entrances, as they will appear upon completion. The sketches should be accompanied by material samples or a display board of the proposed exterior materials and colors.
9. Floor plans of proposed residential units.

10. A Traffic Study (if the project will exceed 100 vehicle trips during the peak hours of the roadway(s), prepared by a qualified traffic engineer, based on the most current edition of *Evaluating Traffic Impact Studies: A Recommended Practice for Michigan Communities*, published by the State Department of Transportation.
 11. Natural Features Study for previously undeveloped properties which includes a written description of natural features proposed to be retained, removed, or modified. Natural features shall include, but are not limited to, wetlands, floodways, floodway fringe, waterbodies, significant stands of trees or individual trees greater than 12 inches dbh, identified groundwater vulnerable areas, slopes greater than 20 percent.
 12. Preliminary engineering reports in accordance with the adopted Township water and sewer standards, together with a letter of review from the Township Engineer.
 13. A sign program illustrating size and location of each proposed sign type.
 14. A lighting plan (see Chapter 38, Article VII).
 15. Copies of comments from reviewing agencies such as, but not limited to, the following:
 - Ingham County Road Commission
 - Ingham County Drain Commission
 - Michigan Department of Transportation (if applicable)
 - Michigan Department of Environmental Quality (if applicable)
 - The appropriate school board (as applicable)
- H. Any other information specified by the Director of Community Planning and Development which is deemed necessary to evaluate the application.

Part II

I (we) hereby grant permission for members of the Charter Township of Meridian's Boards and/or Commissions, Township staff member(s) and the Township's representatives or experts the right to enter onto the above described property (or as described in the attached information) in my (our) absence for the purpose of gathering information including but not limited to the taking and the use of photographs.

Yes No (Please check one)

By the signature(s) attached hereto, I (we) certify that the information provided within this application and accompanying documentation is, to the best of my (our) knowledge, true and accurate

Jeffrey Buck
 Signature of Applicant

November 19, 2019
 Date

Jeffrey Buck
 Type/Print Name

Fee: \$ 1,165

Received by: Notre M... ..
 Date: 11-19-19

Pre-Application Meeting Held: _____
 Date

Application Complete: _____
 Date

By: _____
 Staff

Pine Village of Meridian Township

1673 Haslett Road
Haslett, MI 48840

RECEIVED

DEC 09 2019

Pine Village of Meridian Township is a proposed independent senior living apartment community in the Ingham County township of Meridian. The site is located on just over Nine (9.6) acres of property on the south side of Haslett Road just west of Marsh Road

The three (3) story building will consist of a unit mix of one-bedroom and two-bedroom units. With a total of 133 units overall there will be 109 one-bedroom units, 12 two-bedroom/one-bathroom units and 12 two-bedroom/two-bathroom units. Units will be equipped with a full kitchen; refrigerator, dishwasher, microwave, stove/oven & garbage disposal. Select units will also include in-unit washer and dryer. Select units depending on floor will include patios and balconies.

One-bedroom units will be 633 sq. ft., two-bedroom/one-bathroom units will be 842 sq. ft. and the two-bedroom/two-bathroom units will be 913 sq. ft.

Pine Village will have a porte-cochere at the front entrance with a front covered porch. This entrance will lead into the main core of the building that will house the majority of our common space which includes our main parlor, community offices, art studio, salon, home healthcare office, pub & cafe. Also included on the first floor is a full commercial kitchen with formal dining room and an outside dining patio. Two elevators service both wings of the building.

The building will have a third-party food operator that will run the dining room, café & pub. These areas will be serviced by a full commercial kitchen and serve meals throughout the day to residents, visitors, staff & others. The dining room will offer restaurant style dining and the café & pub will accommodate a more casual dining experience.

The salon located on the first floor & equipped with a separate entrance will be leased by a local group who will operate the space for hair styling, cuts and other beauty services. This space will be open to all residents as well as other clients of the operating group.

A home health care office will be located on the first floor. This space will be leased by a home healthcare agency. They will use this space as an office for clients in the area as well as clients in the building.

The art studio, located on the first floor, will be a space for residents to participate in a variety of artistic activities from painting to pottery. Also, in partnership with local artisans this space will serve as a gathering space to hold classes and sell art pieces to the greater community. Like the salon, this space is accessible from inside the building, as well as from an outside entrance.

Our second floor is home to a fitness room, library and games room. It will also have the office of our building's activities director. A communal laundry room is located in both wings of the building with a gathering space for residents.

Located on our third floor is a multi-purpose room for movies & other activities, a chapel and a guest suite that will be available to family and friends visiting loved ones. As with the other floors, a communal laundry room is located in both wings of the building with a gathering space for residents.

Parking and entrances to the building are located all around the property and building. Those residents that do not drive or have a car will be able to utilize the community van that will make several trips throughout the week to grocery stores, restaurants, social outings, medical appointments, etc.

Other non-residential spaces within the building that will host people from the building and community are theatre and chapel spaces.







Pocket Shelter

Small and versatile, the Pocket Shelter stores bikes in areas that would not normally accommodate bike parking. This shelter is a modular system that provides covered and secure bike storage but is extremely space efficient and cost-effective. The vertical Ultra Space Saver system allows both the frame and wheel of each bike to be secured with a u-lock for the greatest bike security. Optional side and back panels add increased protection against the elements. Optional interior or exterior benches are also available.

Covered bike parking earns your site LEED credits.

American Bicycle Security Company

P.O. Box 7359

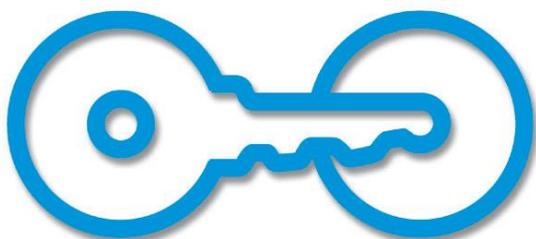
Ventura, CA 93006

Ph: (800) 245-3723 or (805) 933-3688

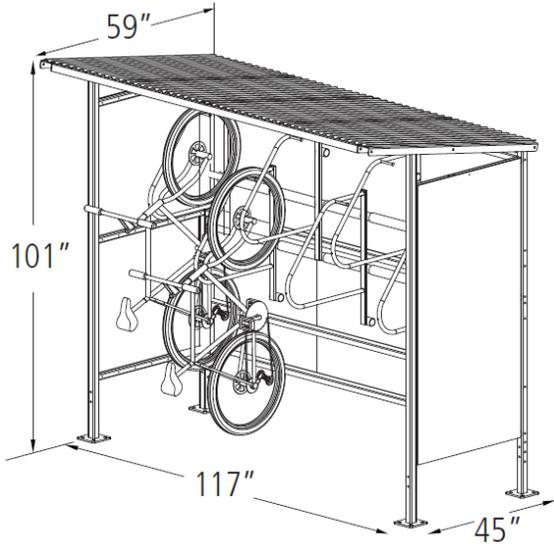
Fax: (805) 933-1865

www.ameribike.com

Email: turtle@ameribike.com



Pocket Shelter



Product Pocket Shelter

Capacity With Ultra Space Savers: 6 Bikes
With Bike Files: 10 Bikes

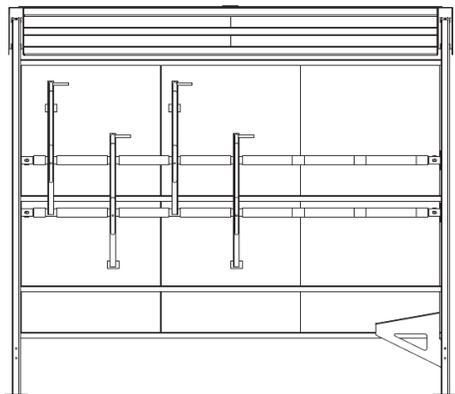
Materials Uprights: 2" x 3/16" square tube
Feet: 3/8" plate
Horizontal members: 3/16" formed sheet
Roof panels: 26g type S deck or 1/4" polycarbonate
Roof members: 3/16" formed sheet
Side panels: 1/4" polycarbonate

Finishes Standard options: Galvanized



Powder Coated

RAL 9005	Flat Black	RAL 9003	RAL 2004	RAL 1023	Bright Yellow
RAL 6016	RAL 6018	RAL 6005	RAL 5005	RAL 5015	Purple
RAL 7011	RAL 7042	RAL 9007	RAL 1001	RAL 8014	Bronze
RAL 3003	RAL 3005				

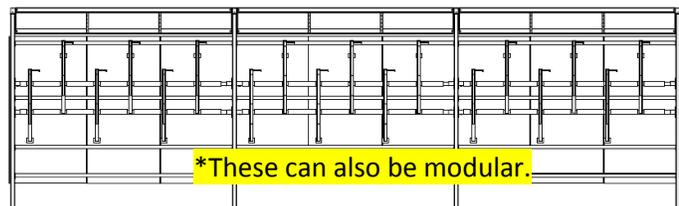


A bench may be mounted to the inside of the Pocket Shelter and still allow room for four bikes.

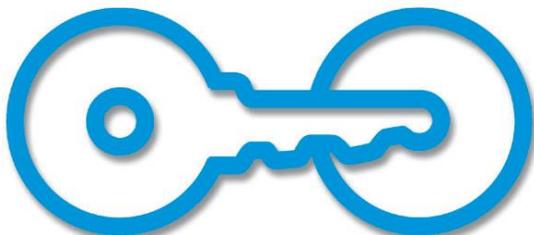
Installation Methods **Surface Mount** has four 6" square feet which must be anchored to the ground with supplied anchors. See footing details on page 4.

Space Use & Setbacks Consult local building codes for acceptable setbacks and placement.

Load Data Dead load = self weight of structure
Live load = snow load = 45 psf
Wind load = 90 mph exposure B
Seismic load = moderate
Footing: see page 4
Anchor bolt = Simpson strong-bolt 2, 1/2" x 5 1/2", 3 7/8" minimum embed



*These can also be modular.



American Bicycle Security Company

P.O. Box 7359

Ventura, CA 93006

Ph: (800) 245-3723 or (805) 933-3688

Fax: (805) 933-1865

www.ameribike.com

Email: turtle@ameribike.com

D

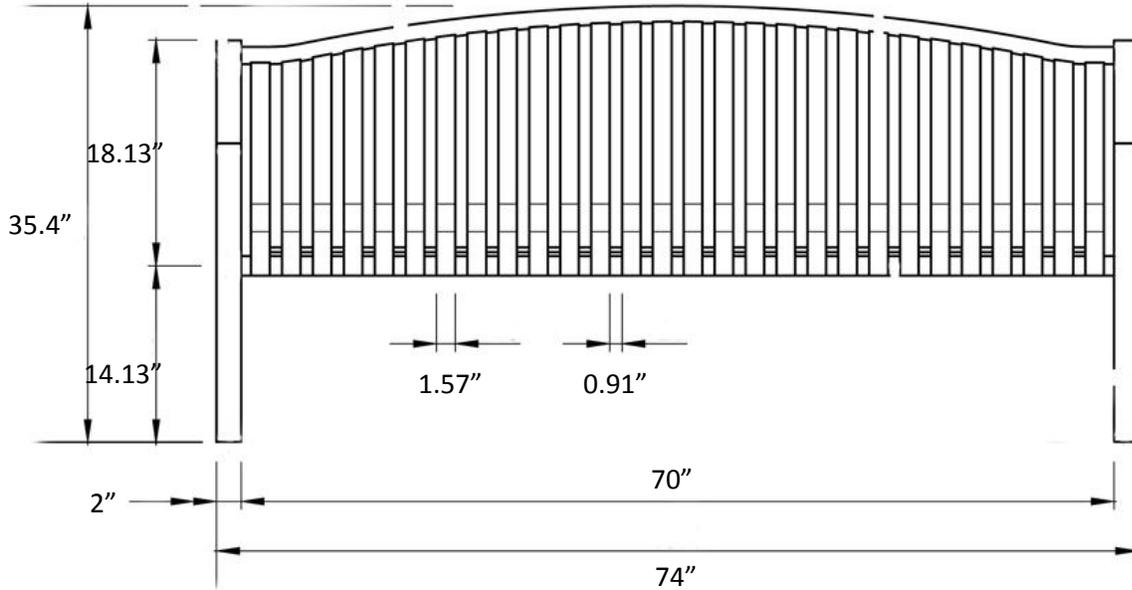
Outdoor Gathering Spaces &
Outdoor Eating Spaces
(See Plans)

E

Benches or
Outdoor Seating

Specifications

Steel Slat Arched Back Park Bench



Front View

Length
74"

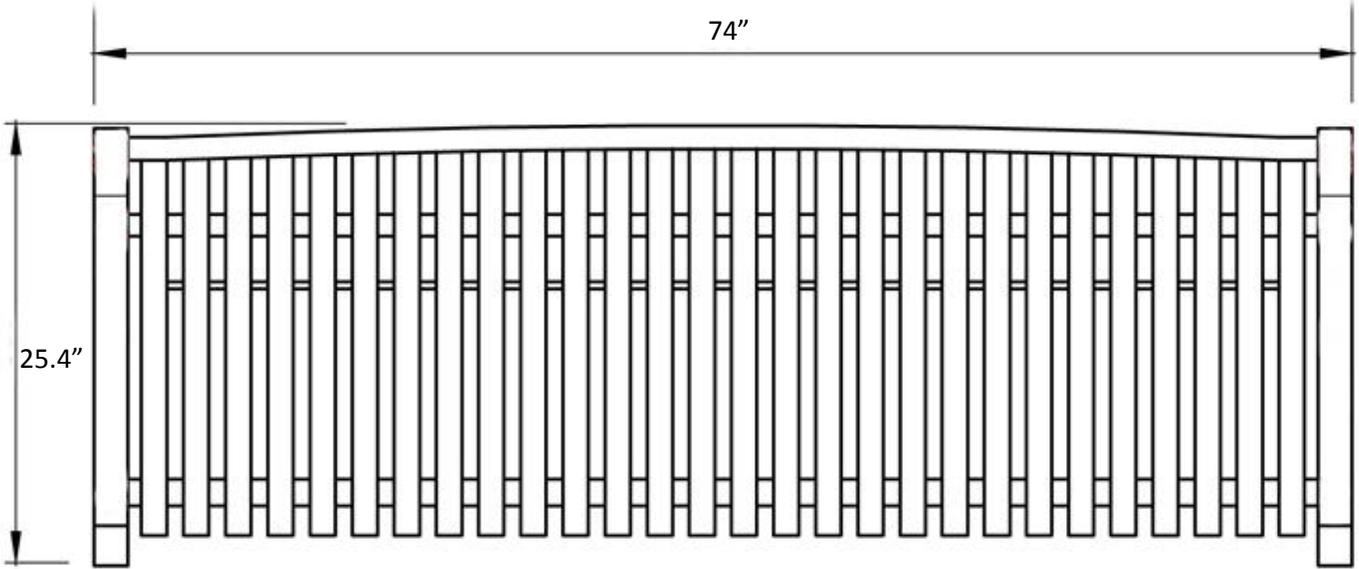
Width
25.4"

Height
35"

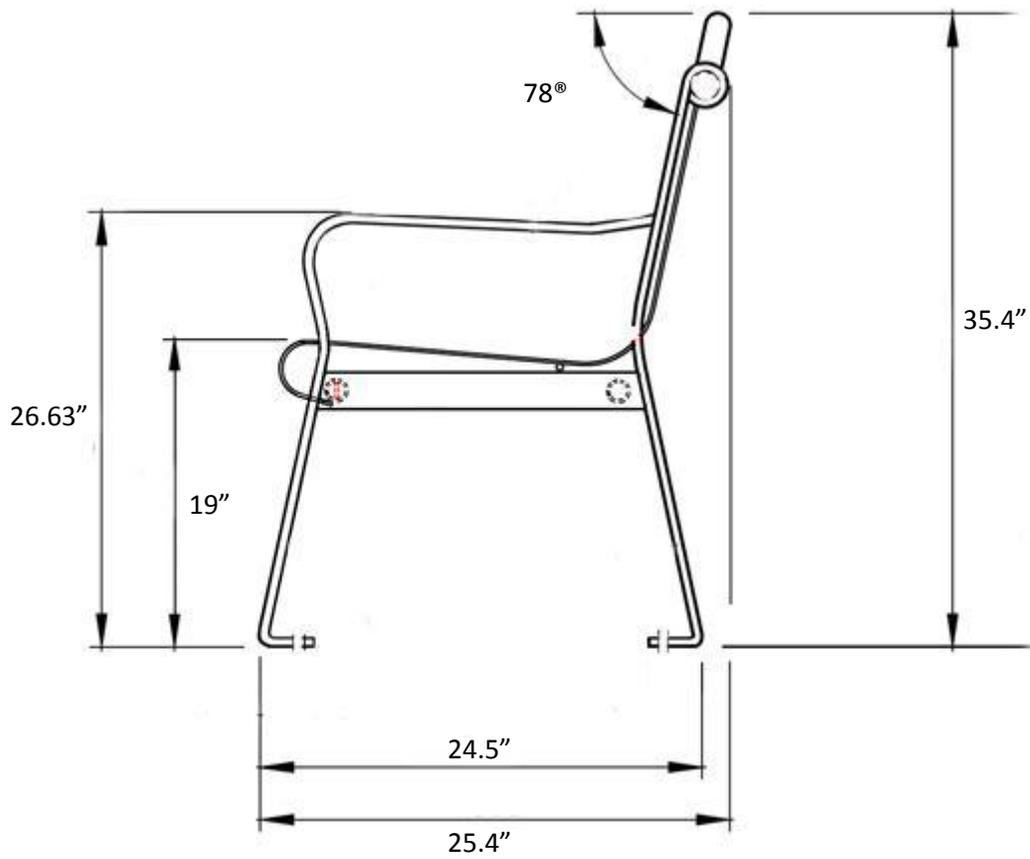
Seat height
19"

Steel slats
Width: 1.57"
Thickness: 0.177"
Space in between: 0.91"

Material: Cold rolled carbon steel
Finish: Powder coating
Fasteners: Stainless steel
Seat Steel Slats: 7 Gauge
Bench End Steel: 0.4" thickness



Top View



End View

F

Private Courtyards
(See Plans)

G

Porches on
Any Structure
(See Plans)

H

Sidewalk
Planters-Pots



IAP INTERNATIONAL ART PROPERTIES
 2868 CHAPMAN STREET
 OAKLAND, CA 94601
 TOLL FREE: 1-800-426-6471
 PHONE: (510) 536-4886
 www.iapsf.com

SELECT DESIRED FINISH:

- SR - SILVER
- W - WHITE
- B - BRONZE
- TC - TERRACOTTA
- I - CAST IRON
- BK - BLACK
- CF - COFFEE
- MB - MATTE BLACK
- BR - BRASS
- SS - STAINLESS STEEL
- SW - SHINY WHITE
- CB - COBALT BLUE
- R - OXBLOOD
- C - COPPER
- ES - ESPRESSO

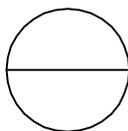


ISOMETRIC VIEW

OUTSIDE DIMENSIONS			INSIDE DIMENSIONS			WEIGHT WITH CARTON (LBS)
DIAMETER	BASE	HEIGHT	DIAMETER	BASE	HEIGHT	
19	8.5	18.5	15.5	9	18.25	20
23	10	22	18.5	9.5	21.75	25
30	14.75	29	25.5	14.25	28.75	37
36	16.5	34	29	16	33.75	62
36	16.5	42	29	16	41.75	73
36	20	72	32.25	15.75	71.75	119

NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.
3. DO NOT SCALE DRAWING.
4. THESE DRAWINGS ARE NOT FOR CONSTRUCTION PURPOSES AND ARE FOR INFORMATION PURPOSES ONLY. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.
5. CONTRACTOR'S NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info REFERENCE NUMBER 2653-003.



PLANTERS

026 YORK - PLANTER

FINISHES



BONE - **BN**



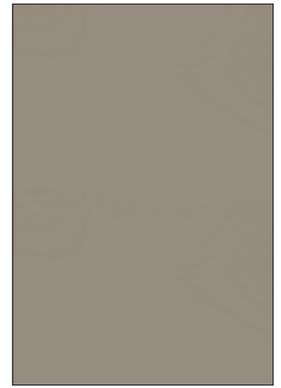
BRASS - **BR**



*BRONZE - **B**



*CAST IRON - **I**



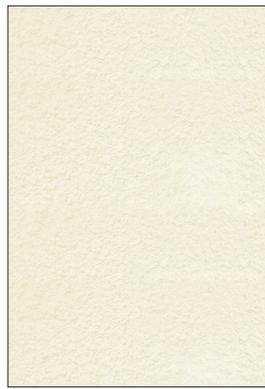
COFFEE - **CF**



*COPPER - **C**



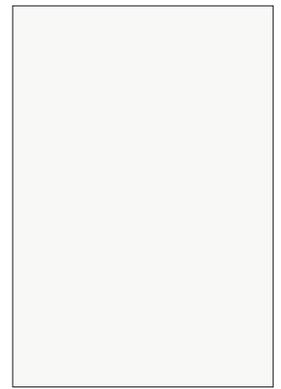
ESPRESSO - **ES**



LIMESTONE - **LS**



*MATTE BLACK - **MB**



MATTE WHITE - **MW**



OXBLOOD - **R**



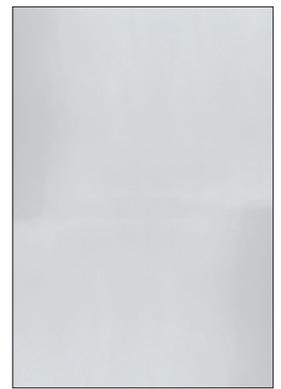
SHINY BLACK - **BK**



SHINY WHITE - **SW**



*STAINLESS STEEL - **SS**



STERLING - **ST**

* Indicates a fusion of metal and fiberglass technology that will patina naturally over time.

CUSTOM FINISHES

All custom orders require a 50% non-refundable deposit and are non-cancelable. There is a minimum quantity of 12 pieces per design, size and color. Delivery time is longer as new molds require an additional 8 weeks of manufacturing time, with an additional cost for custom colors. This is only a printed representation of the color and may not be 100% accurate.

I

Public Art



J

Building
Recycling Program



Recycling Guide

Questions?

Call 517.853.4466
Write recycle@meridian.mi.us
or visit meridian.mi.us

Printed on recycled paper. Please recycle.

Version: April 10, 2019



What can I recycle?

Recycle Curbside

- mixed paper - magazines, books, newspaper
- mixed plastics - bottles and jugs with narrow, threaded neck; plastic tubs (margarine, sour cream, etc.); microwave trays; and yogurt containers.
- tin cans & aluminum
- corrugated cardboard & brown paper bags
- boxboard
- glass (container glass)

Curbside collection is available to most Granger customers in Meridian Township, call Granger: 517.372.2800

More at www.grangernet.com/curbside-recycling



Paint and Motor Oil

See bit.ly/commonquests under "paint" and "oil."

FreeCycle!

Is it still usable but you don't need it anymore? Use [Craigslist.org](http://craigslist.org), [Let Go](http://letgo.com), [Offer Up](http://offerup.com), [Facebook](http://facebook.com) Marketplace, [Ebay](http://ebay.com), and [Freecycle.org](http://freecycle.org). Meridian Police offer a safe place for on-line transactions in their lobby at 5151 Marsh in Okemos any time.

Donate items at [Salvation Army](http://salvationarmy.org) (525 N Pennsylvania Ave, Lansing), Goodwill (1860 W. Grand River, Okemos), and [Volunteers of America](http://volunteersofamerica.org) (6102 Abbot Rd, East Lansing).



Yard Waste

Yard waste does not belong in your trash! You can compost it, or your neighbors or close-by community gardens might be interested in doing so.

Ask your hauler about curbside collection or drop it off at the Recycling Center for a fee.

More Questions?

Visit <http://bit.ly/commonquests> for answers about what, when, where, and how to recycle.

Where can I recycle?

Hazardous Waste

If possible, use it up or find someone that can - following instructions on the label. Ingham County collects household hazardous waste & medicines. Call 517.887.4312 or visit <https://bit.ly/2NKZd4r>

Apartments/Condos

Contact your property manager to find out what programs are available for your complex. Call 517.853.4466 for more information about starting a program.

Meridian Recycling Center



5976 E. Lake Drive, Haslett
517.703.4498
reclaimedbydesign.com

November - March

Monday & Friday	2 pm - 5 pm
Tuesday - Thursday	10 am - 5 pm
Saturday	10 am - 4 pm

April - October

Monday & Friday	2 pm - 6 pm
Tuesday - Thursday	10a m - 6 pm
Saturday	10 am - 5 pm

Recycle items including...

- Styrofoam™ - clean, no peanuts, no insulation
- glass - sorted by color
- plastic bottles and jugs with narrow, threaded neck; plastic tubs (margarine, sour cream, etc.), microwave trays, and yogurt containers.
- paper, cardboard, boxboard
- large metal
- brush, leaves and branches \$2/30 gal bag or \$15/cu yd

You may also dispose of most compactable and non-compactable waste for a fee.



Discover more recycling drop-off locations at midmichrecycles.org

K

Energy Star
Appliances

U.S. Government

Federal law prohibits removal of this label before consumer purchase.

ENERGYGUIDE

- Refrigerator-Freezer
- Automatic Defrost
- Top-Mounted Freezer
- No Through-The-Door-Ice

Whirlpool Corporation
 Model: WRT318FZD*0*
 Capacity: 18.2 Cubic Feet

Compare ONLY to other labels with yellow numbers.
 Labels with yellow numbers are based on the same test procedures.

Estimated Yearly Energy Cost

\$49

Cost Ranges

Models with similar features

\$43

\$59

All models

\$34

\$73

411 kWh
Estimated Yearly Electricity Use

- Your cost will depend on your utility rates and use.
- Both cost range based only on models of similar size capacity.
- Models with similar features have automatic defrost, top-mounted freezer, and no through-the-door-ice.
- Estimated energy cost based on a national average electricity cost of 12 cents per kWh.

ftc.gov/energy

(P/N W11110662 Rev. A)

Canada

ENERGYGUIDE

Energy consumption / Consommation énergétique

411 kWh
 per year / par année

Uses least energy /
 Consomme le moins d'énergie

Type 3

16.5 to 18.4

Similar models compared

volume in ft³ / volume en pi³

Modèles similaires comparés

Model number

WRT318FZD*0*

Numéro du modèle

Removal of this label before first retail purchase is an offense (S.C. 1992, c.36).
 Enlever cette étiquette avant le premier achat au détail constitue une violation de la loi (L.C. 1992, ch.36)

W11110662 Rev. A

U.S. Government

Federal law prohibits removal of this label before consumer purchase.

ENERGYGUIDE

Clothes Washer
Capacity Class: Standard

Whirlpool Corporation
Model WFW5620H* , WFW6620H*
Capacity (tub volume): 4.5 cubic feet



Compare **ONLY** to other labels with yellow numbers.
Labels with yellow numbers are based on the same test procedures.

Estimated Yearly Energy Cost (when used with an electric water heater)

\$16



139 kWh

Estimated Yearly Electricity Use

- Your cost will depend on your utility rates and use.
- Cost range based only on standard capacity models.
- Estimated energy cost based on six wash loads a week and a national average electricity cost of 12 cents per kWh and natural gas cost of \$1.09 per therm.

\$10

Estimated Yearly Energy Cost

(when used with a natural gas water heater)

ftc.gov/energy



Canada

ENERGUIDE

Energy consumption / Consommation énergétique

139 kWh

per year / par année

This model / Ce modèle ▼

60 kWh

Uses least energy /
Consomme le moins
d'énergie

Similar models
compared

Model numbers

Front Load Standard/
À Changement Frontal ordinaires

Model numbers **WFW5620H* , WFW6620H***

159 kWh

Uses most energy /
Consomme le plus
d'énergie

Modèles similaires
comparés

Numéro du modèle

Removal of this label before first retail purchase is an offence (S.C. 1992, c.36).
Enlever cette étiquette avant le premier achat
au détail constitue une violation de la loi (S.C. 1992, c.36).

W11356840



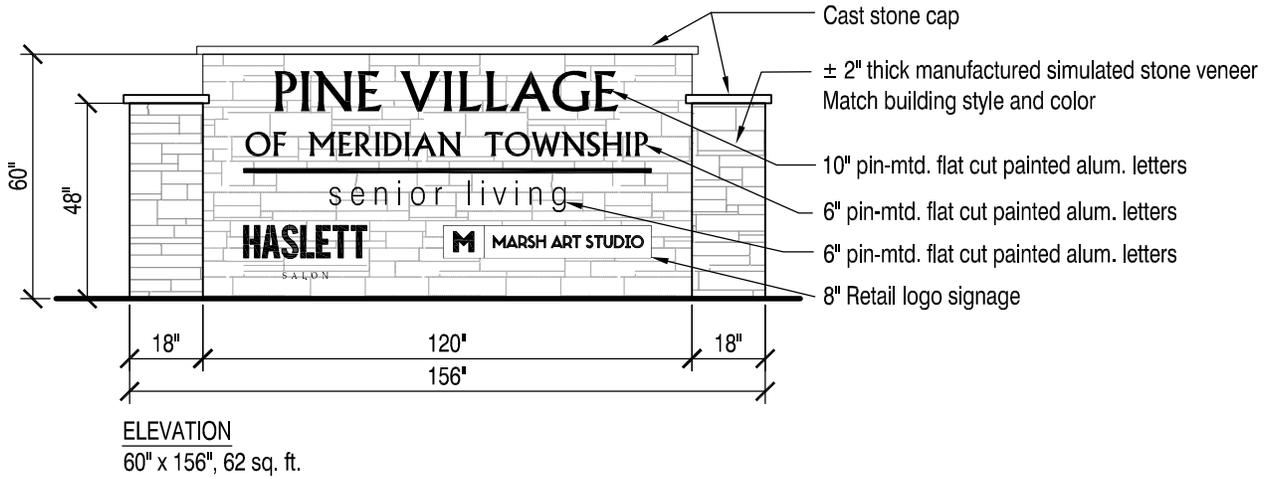
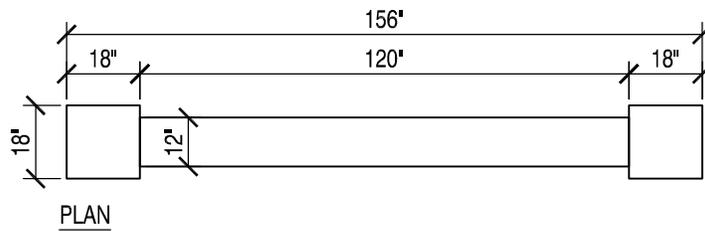
The Energy Star® mark on this EnerGuide label signifies that this is an energy-efficient appliance. Its energy performance meets or exceeds the Government of Canada's high efficiency levels. Use the EnerGuide rating to determine how this appliance compares to other similar models.

La marque Energy Star® sur cette étiquette EnerGuide signifie que l'appareil est éconergétique et que son rendement énergétique satisfait ou dépasse les niveaux de haute efficacité du gouvernement du Canada. Utilisez la cote EnerGuide afin de comparer le rendement de l'appareil avec celui d'autres modèles similaires.

L

CATA Bus
Stop Pad





104 W. Fourth St., Suite 303
 Royal Oak, Michigan 48067
 T: 248.629.7153 F: 248.629.7154
 www.SHELTERSTUDIO.LLC.com

Project
**Pine Village of Meridian Twp
 Monument Sign**

Drawing Title
 Plan & Elevation 1/4" = 1'-0"

Issued For	Date
MUPUD Submittal	11.12.2019
REV. MUPUD Submittal	12.12.2019

Drawing No.: **Sign1**

RECEIVED
NOV 19 2019

Illustration Example of Building Colors and Materials

Pine Village of Meridian
Charter Township of Meridian, Michigan



Proposed Exterior Materials

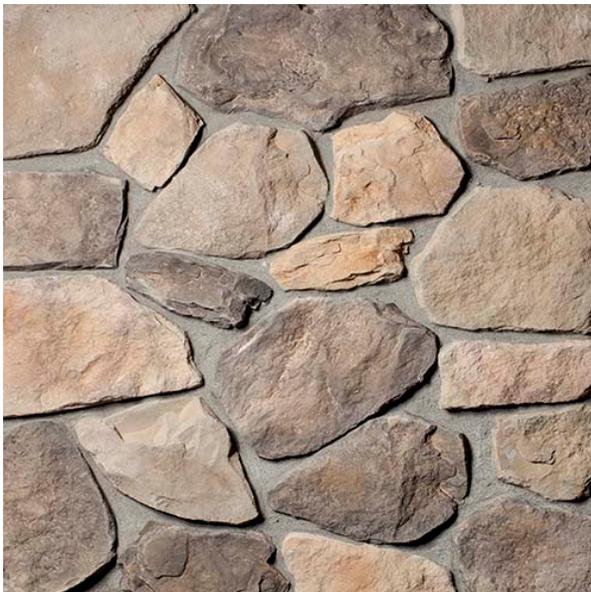
Pine Village of Meridian
Meridian Township, Michigan



Cedar Shake, Vinyl, Granite Grey



Asphalt Shingle, Moire Black



Eastern Fieldstone, Walden



Siding, Fiber Cement, Light Mist

Proposed Exterior Materials

Pine Village of Meridian
Meridian Township, Michigan



Siding, Vinyl, Sterling Grey

MUPUD PLAN FOR: Pine Village of Meridian

MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

APPLICANT:
HUDSON SENIOR LIVING, LLC
280 W. MAPLE RD.
BIRMINGHAM, MI 48009
PH: (248) 540-9300

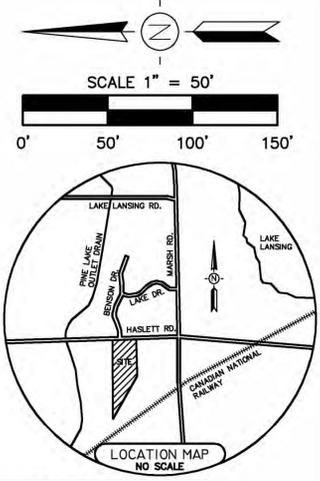
ENGINEER/SURVEYOR:
KEBS, Inc.
2116 HASLETT RD.
HASLETT, MI 48840
PH: (517) 339-1014

LANDOWNER:
LTO HASLETT LLC
1111 MICHIGAN AVE., SUITE 300
EAST LANSING, MI 48823

LEGAL DESCRIPTION:

AS SURVEYED:
(The following legal description describes the same parcel of land as the provided description)

A parcel of land in the Southeast 1/4 of Section 10, T4N, R1W, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as: Commencing at the South 1/4 corner of said Section 10; thence N00°22'20"W along the North-South 1/4 line of said Section 10 a distance of 746.99 feet to the point of beginning of this description; thence continuing N00°22'20"W along said North-South 1/4 line 1509.68 feet to the South right-of-way line of Haslett Road, said South line being South of and 50.00 feet measured perpendicularly to the centerline of Haslett Road; thence N88°08'51"E along said South line 1124.95 feet to the West right-of-way line of Marsh Road, said West line being West of and 60.00 feet measured perpendicularly to the centerline of Marsh Road; thence along said West line S01°25'28"E 629.15 feet to the centerline of former Raby Road; thence N89°45'31"W along said centerline 20.01 feet to the West line of Marsh Road, said West line being West of and 80.00 feet measured perpendicularly to the centerline of Marsh Road; thence S01°25'28"E along said West line 83.28 feet to the Northerly line of a Consumers Energy tower line easement; thence along said Northerly line the following three courses: S54°02'30"W 638.21 feet, S46°14'05"W 124.14 feet; S53°35'08"W 628.79 feet to the point of beginning; said parcel containing 28.63 acres more or less; said parcel subject to all easements and restrictions if any.



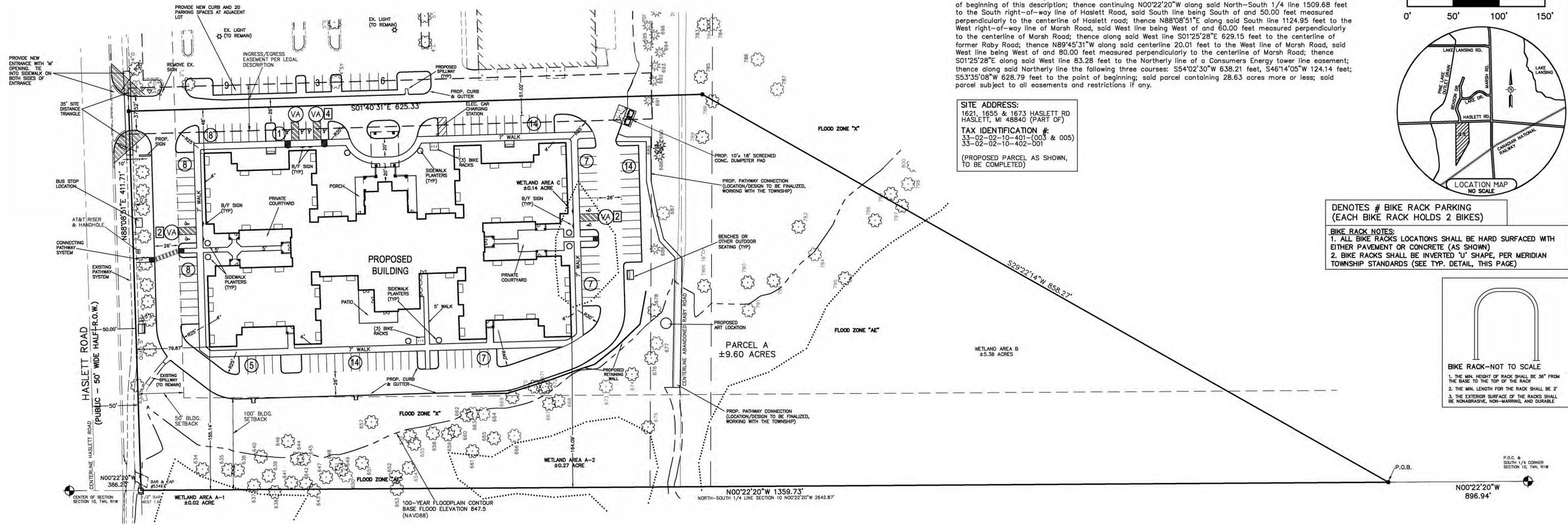
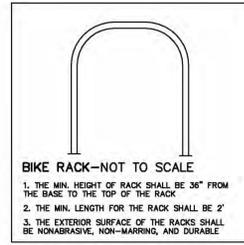
SITE ADDRESS:
1621, 1655 & 1673 HASLETT RD
HASLETT, MI 48840 (PART OF)

TAX IDENTIFICATION #:
33-02-02-10-401-003 & 005
33-02-02-10-402-001

(PROPOSED PARCEL AS SHOWN,
TO BE COMPLETED)

1 DENOTES # BIKE RACK PARKING
(EACH BIKE RACK HOLDS 2 BIKES)

BIKE RACK NOTES:
1. ALL BIKE RACKS LOCATIONS SHALL BE HARD SURFACED WITH EITHER PAVEMENT OR CONCRETE (AS SHOWN)
2. BIKE RACKS SHALL BE INVERTED 'U' SHAPE, PER MERIDIAN TOWNSHIP STANDARDS (SEE TYP. DETAIL, THIS PAGE)



1 DENOTES NUMBER OF D/F SPACES

VA DENOTES VAN ACCESS D/F SPACES

0 DENOTES PROPOSED NUMBER OF 9' x 20' PARKING SPACES

EX. SANITARY SEWER INVENTORIES:

SANITARY MANHOLE #200 RIM ELEV. = 861.50 8" VCP S INV. = 854.18 8" VCP W INV. = 854.22	SANITARY MANHOLE #201 RIM ELEV. = 861.75 8" VCP E INV. = 855.03 8" VCP W INV. = 855.07	SANITARY MANHOLE #202 RIM ELEV. = 862.08 8" VCP E INV. = 856.14	SANITARY MANHOLE #203 RIM ELEV. = 862.12 6" VCP N INV. = 853.68 8" VCP E INV. = 853.48	SANITARY MANHOLE #204 RIM ELEV. = 858.48 8" VCP E INV. = 852.51 8" VCP W INV. = 852.53	SANITARY MANHOLE #205 RIM ELEV. = 859.64 8" VCP E INV. = 851.44 8" VCP W INV. = 851.48	SANITARY MANHOLE #206 RIM ELEV. = 861.41 8" VCP N INV. = 850.71 8" VCP S INV. = 850.63 8" VCP W INV. = 850.76	SANITARY MANHOLE #207 RIM ELEV. = 872.54 PIPES NOT VISIBLE N INV. = 849.42 SW INV. = 849.36	SANITARY MANHOLE #208 RIM ELEV. = 863.08 24" RCP NE INV. = 837.43 24" RCP SW INV. = 837.37	SANITARY MANHOLE #209 RIM ELEV. = 844.61 24" RCP NE INV. = 836.62 24" RCP SW INV. = 836.57	SANITARY MANHOLE #210 RIM ELEV. = 830.51 PIPES NOT VISIBLE NE INV. = 832.35 SW INV. = 832.30 T/WATER ELEV. = 834.25	SANITARY MANHOLE #211 RIM ELEV. = 840.85 PIPES NOT VISIBLE NE INV. = 832.35 SW INV. = 832.30 T/WATER ELEV. = 834.25
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EX. STORM SEWER INVENTORIES:

CATCH BASIN #100 RIM ELEV. = 860.14	CATCH BASIN #101 RIM ELEV. = 861.52	CATCH BASIN #103 RIM ELEV. = 863.83	CATCH BASIN #104 RIM ELEV. = 859.05 12" RCP NW INV. = 853.73	CATCH BASIN #105 RIM ELEV. = 862.12 12" RCP SE INV. = 853.24 18" RCP SW INV. = 852.76	CATCH BASIN #106 RIM ELEV. = 861.75 8" UNKNOWN NE INV. = 856.69 12" RCP S INV. = 856.54 12" RCP NW INV. = 856.67	CATCH BASIN #107 RIM ELEV. = 861.90 12" RCP SE INV. = 857.94	CATCH BASIN #108 RIM ELEV. = 861.63 12" RCP S INV. = 854.88	CATCH BASIN #109 RIM ELEV. = 861.08 12" RCP SE INV. = 856.72	CATCH BASIN #110 RIM ELEV. = 860.02 24" RCP E INV. = 849.62 30" RCP SW INV. = 849.58	CATCH BASIN #111 RIM ELEV. = 859.77 12" RCP NE INV. = 854.78 24" RCP SE INV. = 850.37 24" RCP W INV. = 850.32	CATCH BASIN #112 RIM ELEV. = 859.46 24" RCP NE INV. = 850.78 24" RCP W INV. = 850.76	CATCH BASIN #113 RIM ELEV. = 858.81 12" RCP N INV. = 852.50 18" RCP NE INV. = 852.13 24" RCP SW INV. = 851.58
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EX. SANITARY SEWER INVENTORIES (CONT.):

CATCH BASIN #114 RIM ELEV. = 859.08 12" RCP W INV. = 855.92	STORM MANHOLE #115 RIM ELEV. = 860.22 10" VCP NE INV. = 853.72 12" VCP E INV. = 853.67 18" RCP W INV. = 853.40	CATCH BASIN #116 RIM ELEV. = 858.65 18" RCP E INV. = 852.06 18" RCP W INV. = 852.03	STORM MANHOLE #117 RIM ELEV. = 848.26 12" RCP NE INV. = 843.95 12" RCP SW INV. = 843.90	CATCH BASIN #118 RIM ELEV. = 850.16 8" HOPE N INV. = 844.61 12" RCP SW INV. = 844.36	CATCH BASIN #119 RIM ELEV. = 860.94 12" RCP N INV. = 856.32 12" RCP SE INV. = 856.25	CATCH BASIN #120 RIM ELEV. = 861.42 12" RCP S INV. = 856.93
---	--	--	--	---	---	---

SITE DATA:
ZONED C-2 - (COMMERCIAL DISTRICT)
TOTAL SITE AREA = 418,211 S.F. = 9.60 ACRES
TOTAL UNITS = 133 (SEE UNIT BREAKDOWN)
TOTAL BEDS = 157

BUILDING DATA (OVERALL):
PROPOSED BUILDING HEIGHT: 37'-2" (3 STORIES)

GROUND FLOOR AREA: 51,328 SF
= 35 (1-BED) UNITS AND 8 (2-BED) UNITS

SECOND FLOOR AREA: 47,703 SF
= 36 (1-BED) UNITS AND 8 (2-BED) UNITS

THIRD FLOOR AREA: 47,703 SF
= 38 (1-BED) UNITS AND 8 (2-BED) UNITS

TOTAL CONSTRUCTABLE AREA: 146,734 SF

RETAIL-COMMERCIAL GROSS S.F. = 9,558 S.F.
TOTAL PROJECT GROSS S.F. = 9,558 S.F.

PROPOSED SETBACKS:
FRONT (HASLETT ROAD) = 129.87' From C/L
SIDE (WEST) = 155.14'
SIDE (EAST) = 48'
REAR (ADJ. PROPERTY) = VARIES, OVER 100'

PARKING DATA:
93 - 9' x 20' SPACES
8 - BARRIER FREE SPACES
101 TOTAL SPACES PROVIDED

REQUIRED VEHICLE PARKING:
ONE FOR EVERY 2 UNITS AND 1 EACH FOR EMPLOYEE AND/OR DOCTORS.
133 DWELLING UNITS = 133/2 = 66.5 = 67 SPACES
EMPLOYEE/VISITORS = USE 0.25 SPACES/UNIT = 33

TOTAL PARKING = 67 + 33 SPACES = 100 SPACES
TOTAL PARKING REQ. = 100 SPACES

PARKING SPACES PROVIDED: 101

BIKE PARKING DATA:
BIKE PARKING SPACES REQUIRED = 1 PER 10
REQUIRED CAR PARKING SPACES = 100/10 = 10
TOTAL BIKE PARKING PROVIDED = 12 SPACES

EXISTING OPENSOURCE

TOTAL PROPERTY = 418,211 S.F. (±9.60 AC.)
TOTAL PERVIOUS AREA (INCLUDES WETLAND) = 303,985 SF = 72.69%
TOTAL IMPERVIOUS AREA (BUILDING, PARKING, WALKS) = 114,226 SF = 27.31%

PROPOSED OPENSOURCE

TOTAL PROPERTY = 418,211 S.F. (±9.60 AC.)
TOTAL PERVIOUS AREA (INCLUDES WETLAND) = 287,696 SF = 68.79%
TOTAL IMPERVIOUS AREA (BUILDING, PARKING, WALKS) = 130,515 SF = 31.21%

SHEET INDEX

1. COVER/DIMENSION PLAN
2. UTILITY PLAN
3. GRADING & STORM SEWER PLAN
4. PERVIOUS/IMPERVIOUS PLAN
5. LANDSCAPE PLAN
6. AMENITIES PLAN
7. EXISTING PLAN

LIGHTING PLAN (BY OTHERS)



BENCHMARKS:

BENCHMARK #1 ELEV. = 862.07
CHISELED "X" IN NORTH SIDE OF CONCRETE LIGHT POLE BASE, 170± EAST AND 90± NORTH OF NORTHWEST CORNER OF #1655 HASLETT ROAD.

BENCHMARK #4 ELEV. = 863.05
SOUTHWEST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "A" IN "TRAVERSE CITY", 18± EAST AND 80± NORTH OF NORTHEAST CORNER OF #1655 HASLETT ROAD.

NOTE: WATER SHALL HAVE 10' HORIZONTAL SEPARATION & 18" VERTICAL SEPARATION FROM ALL SEWERS.

EX. LEGEND

(M) = MEASURED DISTANCE	(R) = RECORD DISTANCE	● = SANITARY MANHOLE	⊙ = DRAINAGE MANHOLE
● = SET 1/2" BAR WITH CAP	□ = FOUND IRON AS NOTED	⊙ = ELECTRIC MANHOLE	⊙ = TELEPHONE MANHOLE
○ = CATCHBASIN	⊙ = SANITARY CLEANOUT	⊙ = FIRE HYDRANT	⊙ = VALVE
— = DISTANCE NOT TO SCALE	— = FENCE	— = UTILITY POLE	— = LIGHT POLE
— = ASPHALT	— = CONCRETE	— = GUY POLE	— = GUY WIRE
— = DECK	— = GRAVEL	— = UTILITY PEDESTAL	— = TRANSFORMER
— = EXISTING SPOT ELEVATION	— = EXISTING CONTOUR ELEVATION	— = HANDHOLE	— = ELECTRIC METER
— = BUILDING OVERHANG	— = SANITARY SEWER	— = GAS METER	— = WATER METER
— = WATER LINE	— = STORM SEWER	— = SOIL BORING	— = SIGN
— = GAS LINE	— = UNDERGROUND TELEPHONE	— = POST	— = AIR CONDITIONING UNIT
— = UNDERGROUND TELEVISION	— = UNDERGROUND ELECTRIC	— = LIGHT POSTS (±3" TALL, 8" DIAMETER)	
— = OVERHEAD WIRES	— = EDGE OF WOODS		
— = DECIDUOUS TREE	— = CONIFEROUS TREE		

LEGEND

— = EXT. CONTOURS	— = EXT. WATER MAIN	— = EXT. SANITARY SEWER	— = EXT. STORM SEWER
— = EXT. ELEVATIONS	— = PROPOSED WATER MAIN	— = PROPOSED SANITARY SEWER	— = PROPOSED STORM SEWER
— = MANHOLE (NEW)	— = PROPOSED C.B. MANHOLE (EX.)	— = UTILITY EASEMENT	— = CENTER LINE OF ROAD
— = ROAD RIGHT OF WAY	— = PROPERTY LINE	— = FIRE HYDRANT	— = WATER VALVE
— = THRUST BLOCK	— = PROPOSED TOP OF CURB ELEV.		

SURVEY#95688.BND

KEBS, INC. KEYS ENGINEERING
BRYAN LAND SURVEYS
2116 HASLETT ROAD, HASLETT, MI 48840
PH. 517-339-1014 FAX. 517-339-8047

Marshall Office
Ph. 269-781-9800

Pine Village of Meridian
COVER/DIMENSION PLAN

DESIGNER: GVP	APPROVED BY: GVP
PROJECT MGR. GVP	SHEET 1 OF 7
AUTHORIZED BY: HUDSON SENIOR LIVING, LLC	JOB # 95818

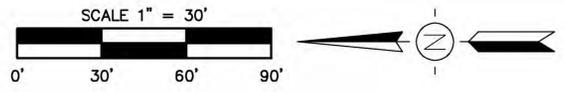
REVISIONS

11-19-19 MUPUD SUBMITTAL	
12-9-19 MUPUD REVISIONS	
12-11-19 MUPUD REVISIONS	

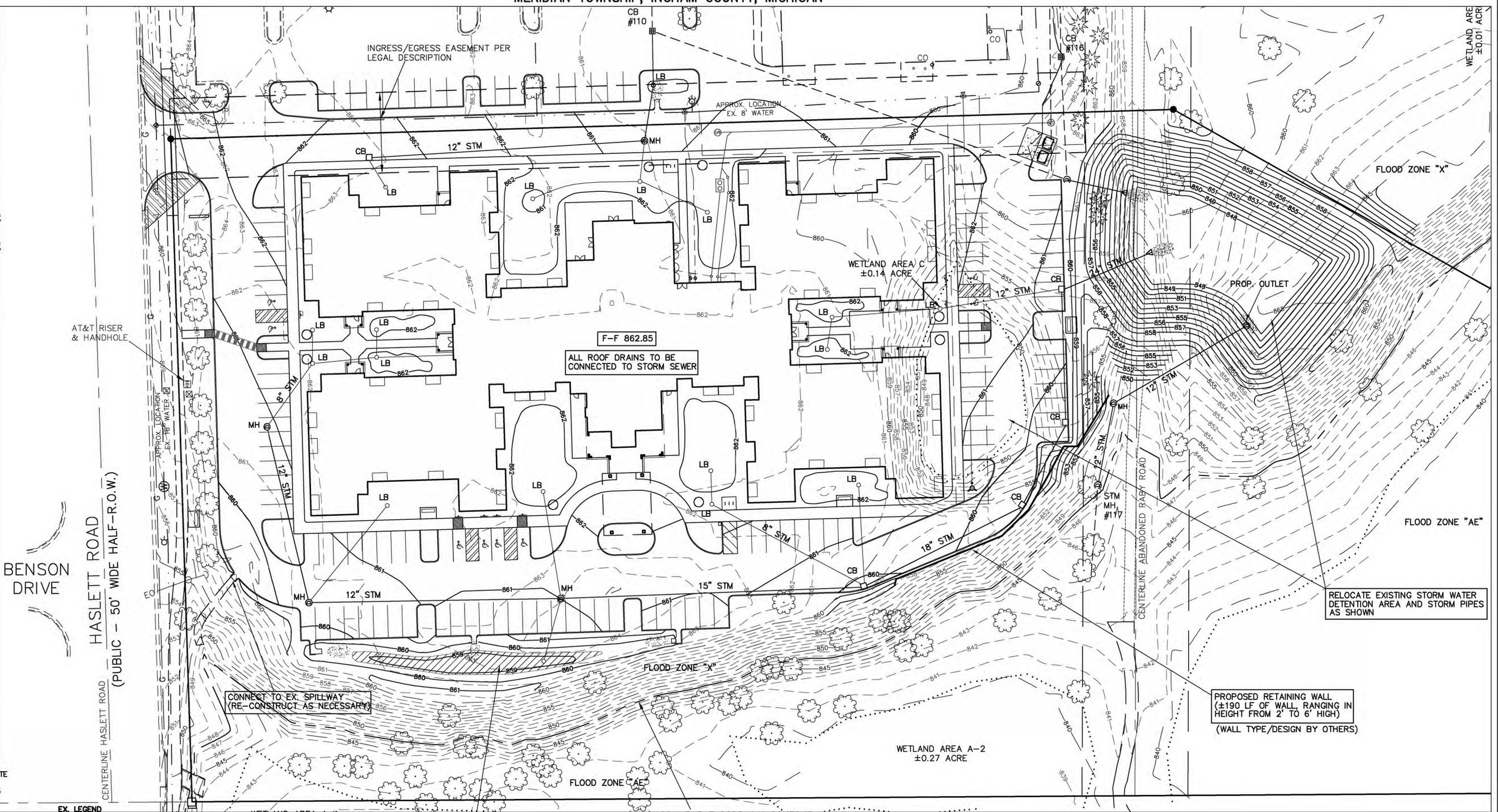
SCALE: 1" = 50'

DATE: 10-7-19

MUPUD PLAN FOR:
Pine Village of Meridian
 MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN



EX. STORM SEWER INVENTORIES:	EX. SANITARY SEWER INVENTORIES:
CATCH BASIN #100 RM ELEV. = 860.14	SANITARY MANHOLE #200 RM ELEV. = 861.50
CATCH BASIN #101 RM ELEV. = 861.52	8" VCP S INV. = 854.18
STORM MANHOLE #102 RM ELEV. = 864.12	8" VCP W INV. = 854.22
CATCH BASIN #103 RM ELEV. = 863.83	SANITARY MANHOLE #201 RM ELEV. = 861.75
CATCH BASIN #104 RM ELEV. = 859.05	8" VCP E INV. = 855.03
12" RCP NW INV. = 853.73	8" VCP W INV. = 855.07
CATCH BASIN #105 RM ELEV. = 859.37	SANITARY MANHOLE #202 RM ELEV. = 862.08
12" RCP N INV. = 853.24	8" VCP E INV. = 855.48
12" RCP SE INV. = 853.23	8" VCP W INV. = 855.53
18" RCP SW INV. = 852.76	SANITARY MANHOLE #203 RM ELEV. = 862.12
CATCH BASIN #106 RM ELEV. = 861.75	6" VCP N INV. = 853.68
8" UNKNOWN NE INV. = 856.69	6" VCP E INV. = 853.48
12" RCP S INV. = 856.54	SANITARY MANHOLE #204 RM ELEV. = 859.48
12" RCP NW INV. = 856.67	8" VCP E INV. = 852.51
CATCH BASIN #107 RM ELEV. = 861.90	8" VCP W INV. = 852.53
12" RCP SE INV. = 857.94	SANITARY MANHOLE #205 RM ELEV. = 859.64
CATCH BASIN #108 RM ELEV. = 861.63	8" VCP E INV. = 851.44
12" RCP S INV. = 854.88	8" VCP W INV. = 851.48
CATCH BASIN #109 RM ELEV. = 861.08	SANITARY MANHOLE #206 RM ELEV. = 861.41
12" RCP SW INV. = 856.72	8" VCP N INV. = 850.71
CATCH BASIN #110 RM ELEV. = 860.02	8" VCP S INV. = 850.63
24" ROP E INV. = 848.62	8" VCP W INV. = 850.76
30" ROP SW INV. = 849.58	SANITARY MANHOLE #207 RM ELEV. = 872.54
CATCH BASIN #111 RM ELEV. = 859.77	8" VCP E INV. = 851.44
12" RCP NE INV. = 854.79	N INV. = 849.42
24" RCP SE INV. = 850.37	SW INV. = 849.36
24" RCP W INV. = 850.32	SANITARY MANHOLE #208 RM ELEV. = 853.05
CATCH BASIN #112 RM ELEV. = 859.46	24" RCP NE INV. = 837.43
24" ROP NE INV. = 850.78	24" RCP SW INV. = 837.43
24" ROP W INV. = 850.76	SANITARY MANHOLE #209 RM ELEV. = 844.61
CATCH BASIN #113 RM ELEV. = 858.81	24" RCP NE INV. = 836.62
12" RCP N INV. = 852.50	24" RCP SW INV. = 836.57
18" RCP NE INV. = 852.13	SANITARY MANHOLE #210 RM ELEV. = 839.51
24" RCP SW INV. = 851.58	8" VCP E INV. = 839.51
CATCH BASIN #114 RM ELEV. = 859.08	NE INV. = 832.35
12" RCP W INV. = 855.92	SW INV. = 832.30
STORM MANHOLE #115 RM ELEV. = 860.22	7/WATER ELEV. = 834.25
10" VCP NE INV. = 853.72	
12" VCP E INV. = 853.67	
18" RCP W INV. = 853.40	
CATCH BASIN #116 RM ELEV. = 858.65	
18" RCP E INV. = 852.06	
18" RCP W INV. = 852.03	
STORM MANHOLE #117 RM ELEV. = 848.26	
12" RCP NE INV. = 843.95	
12" RCP SW INV. = 843.90	
CATCH BASIN #118 RM ELEV. = 850.16	
8" HDPE N INV. = 844.61	
12" RCP SW INV. = 844.36	
CATCH BASIN #119 RM ELEV. = 860.94	
12" RCP N INV. = 856.32	
12" RCP SE INV. = 856.25	
CATCH BASIN #120 RM ELEV. = 861.42	
12" RCP S INV. = 856.93	



NOTE: WATER SHALL HAVE 10' HORIZONTAL SEPARATION & 18" VERTICAL SEPARATION FROM ALL SEWERS.

BENCHMARKS:
 BENCHMARK #1 ELEV. = 862.07
 CHISELED "X" IN NORTH SIDE OF CONCRETE LIGHT POLE BASE, 170'± EAST AND 90'± NORTH OF NORTHWEST CORNER OF #1655 HASLETT ROAD.
 BENCHMARK #4 ELEV. = 863.05
 SOUTHWEST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "A" IN "TRAVERSE CITY", 18'± EAST AND 80'± NORTH OF NORTHEAST CORNER OF #1655 HASLETT ROAD.

LEGEND	
---	EXT. CONTOURS
---	EXT. WATER MAIN
---	EXT. SANITARY SEWER
---	EXT. STORM SEWER
---	EXT. ELEVATIONS
---	PROPOSED WATER MAIN
---	PROPOSED SANITARY SEWER
---	PROPOSED STORM SEWER
○	MANHOLE (NEW)
○	PROPOSED C.B. MANHOLE (EX.)
---	UTILITY EASEMENT
---	CENTER LINE OF ROAD
---	ROAD RIGHT OF WAY
---	PROPERTY LINE
○	FIRE HYDRANT
○	WATER VALVE
○	THRUST BLOCK
▲	PROPOSED TOP OF CURB ELEV.

(M)	= MEASURED DISTANCE	○	= SANITARY MANHOLE
(R)	= RECORD DISTANCE	○	= DRAINAGE MANHOLE
●	= SET 1/2" BAR WITH CAP	○	= ELECTRIC MANHOLE
□	= FOUND IRON AS NOTED	○	= TELEPHONE MANHOLE
---	= DISTANCE NOT TO SCALE	○	= CATCHBASIN
---	= FENCE	○	= SANITARY CLEANOUT
---	= ASPHALT	○	= FIRE HYDRANT
---	= CONCRETE	○	= VALVE
---	= DECK	○	= UTILITY POLE
---	= GRAVEL	○	= LIGHT POLE
---	= EXISTING SPOT ELEVATION	○	= GUY POLE
---	= EXISTING CONTOUR ELEVATION	○	= GUY WIRE
---	= BUILDING OVERHANG	○	= UTILITY PEDESTAL
---	= SANITARY SEWER	○	= TRANSFORMER
---	= STORM SEWER	○	= HANDHOLE
---	= WATER LINE	○	= ELECTRIC METER
---	= GAS LINE	○	= GAS METER
---	= UNDERGROUND TELEPHONE	○	= WATER METER
---	= UNDERGROUND TELEVISION	○	= SOIL BORING
---	= UNDERGROUND ELECTRIC	○	= SIGN
---	= OVERHEAD WIRES	○	= POST
---	= EDGE OF WOODS	○	= AIR CONDITIONING UNIT
---	= DECIDUOUS TREE	○	= LIGHT POSTS (6.3' TALL, 8" DIAMETER)
---	= CONIFEROUS TREE		

BIO-RETENTION AREA

100-YEAR FLOODPLAIN CONTOUR
 BASE FLOOD ELEVATION 847.5
 (NAVD88)

RELOCATE EXISTING STORM WATER DETENTION AREA AND STORM PIPES AS SHOWN

PROPOSED RETAINING WALL
 (±190 LF OF WALL, RANGING IN HEIGHT FROM 2' TO 6' HIGH)
 (WALL TYPE/DESIGN BY OTHERS)

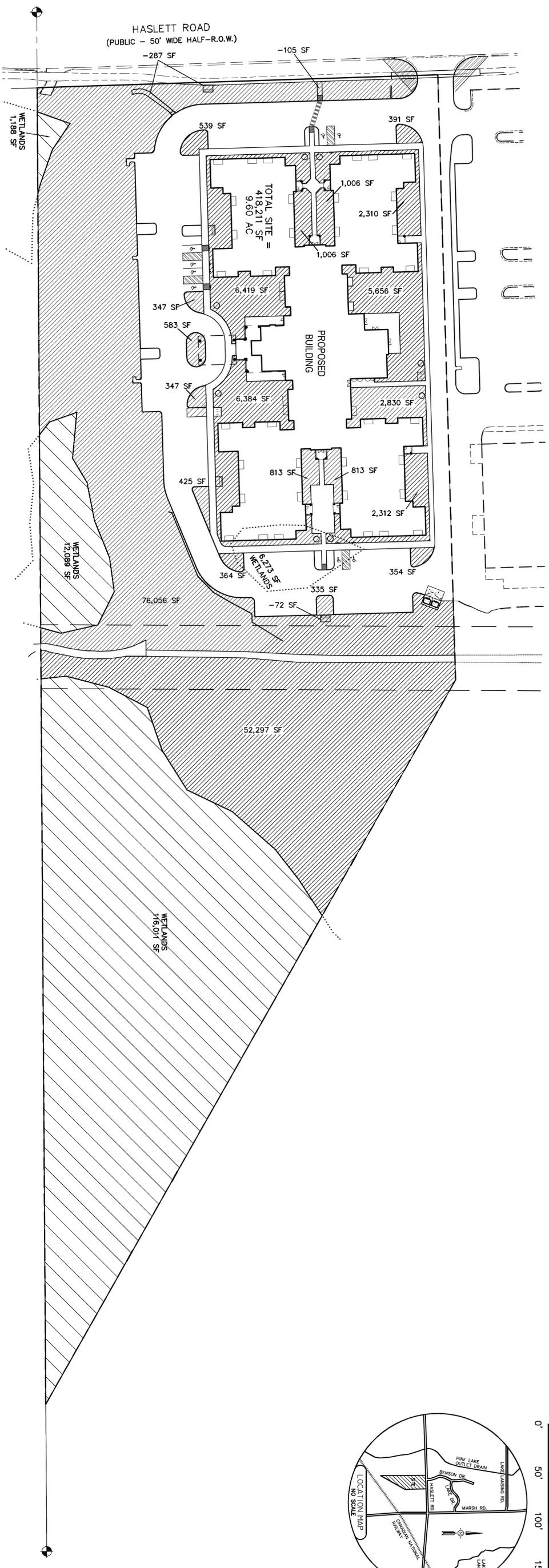
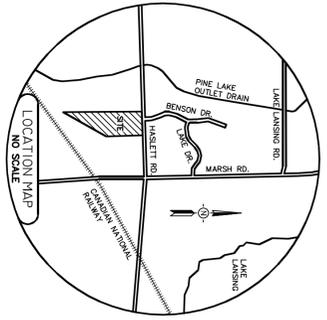
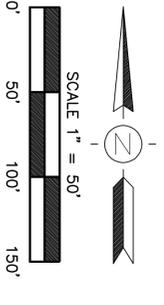


REVISIONS 11-19-19 MUPUD SUBMITTAL		SURVEY#95688.BND KEBS, INC. KYES ENGINEERING BRYAN LAND SURVEYS 2116 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-1014 FAX. 517-339-8047 Marshall Office Ph. 269-781-9800	
SCALE: 1" = 30' DATE: 10-7-19 AUTHORIZED BY: HUDSON SENIOR LIVING, LLC		Pine Village of Meridian GRADING & STORM SEWER PLAN DESIGNER: G.A.P. PROJECT MGR: G.A.P. APPROVED BY: G.A.P. SHEET 3 OF 7 JOB # 95818	

Pine Village of Meridian

MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

MUPUD PLAN FOR:



<p>EXISTING OPENSACE</p> <p>TOTAL PROPERTY = 418,211 S.F. (±9.60 AC.)</p> <p>TOTAL PERVIOUS AREA (INCLUDES WETLAND) = 303,985 SF = 72.69%</p> <p>TOTAL IMPERVIOUS AREA (BUILDING, PARKING, WALKS) = 114,226 SF = 27.31%</p>	<p>PROPOSED OPENSACE</p> <p>TOTAL PROPERTY = 418,211 S.F. (±9.60 AC.)</p> <p>TOTAL PERVIOUS AREA (INCLUDES WETLAND) = 290,411 SF = 69.44%</p> <p>TOTAL IMPERVIOUS AREA (BUILDING, PARKING, WALKS) = 127,800 SF = 30.66%</p>
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EX. SANITARY SEWER (EXISTING)

<p>SANITARY MANHOLE #200 RM ELEV. = 891.50 8" VCP N INV. = 894.18 8" VCP W INV. = 854.22</p> <p>SANITARY MANHOLE #201 RM ELEV. = 861.75 8" VCP E INV. = 855.03 8" VCP W INV. = 855.07</p> <p>SANITARY MANHOLE #202 RM ELEV. = 892.08 8" VCP E INV. = 868.14</p> <p>SANITARY MANHOLE #203 RM ELEV. = 859.05 12" RCP NW INV. = 853.73</p> <p>SANITARY MANHOLE #204 RM ELEV. = 853.48 12" RCP N INV. = 853.24 18" RCP SW INV. = 852.78</p> <p>SANITARY MANHOLE #205 RM ELEV. = 892.51 8" VCP E INV. = 892.51</p> <p>SANITARY MANHOLE #206 RM ELEV. = 881.41 8" VCP N INV. = 850.71 8" VCP W INV. = 850.75</p> <p>SANITARY MANHOLE #207 PIPES NOT VISIBLE</p> <p>SANITARY MANHOLE #208 RM INV. = 849.42</p> <p>SANITARY MANHOLE #209 RM ELEV. = 837.43 24" RCP NE INV. = 837.43</p> <p>SANITARY MANHOLE #210 RM ELEV. = 844.61 24" RCP SW INV. = 836.62</p> <p>SANITARY MANHOLE #211 RM ELEV. = 840.85 24" RCP W INV. = 850.76</p> <p>SANITARY MANHOLE #212 RM ELEV. = 832.43</p> <p>SANITARY MANHOLE #213 RM ELEV. = 840.85 18" RCP NE INV. = 852.35 18" RCP W INV. = 851.58</p>	<p>EX. STORM SEWER (EXISTING)</p> <p>CATCH BASIN #104 RM ELEV. = 860.14</p> <p>CATCH BASIN #105 RM ELEV. = 861.52</p> <p>STORM MANHOLE #102 RM ELEV. = 864.12</p> <p>CATCH BASIN #103 RM ELEV. = 863.83</p> <p>CATCH BASIN #104 RM ELEV. = 859.05</p> <p>CATCH BASIN #105 RM ELEV. = 853.73</p> <p>CATCH BASIN #106 RM ELEV. = 853.24</p> <p>CATCH BASIN #107 RM ELEV. = 852.78</p> <p>CATCH BASIN #108 RM ELEV. = 852.51</p> <p>CATCH BASIN #109 RM ELEV. = 856.69</p> <p>CATCH BASIN #110 RM ELEV. = 849.58</p> <p>CATCH BASIN #111 RM ELEV. = 859.77</p> <p>CATCH BASIN #112 RM ELEV. = 854.79</p> <p>CATCH BASIN #113 RM ELEV. = 850.76</p> <p>CATCH BASIN #114 RM ELEV. = 850.76</p> <p>CATCH BASIN #115 RM ELEV. = 854.90</p> <p>CATCH BASIN #116 RM ELEV. = 858.65</p> <p>CATCH BASIN #117 RM ELEV. = 844.61</p> <p>CATCH BASIN #118 RM ELEV. = 843.95</p> <p>CATCH BASIN #119 RM ELEV. = 856.32</p> <p>CATCH BASIN #120 RM ELEV. = 856.25</p> <p>CATCH BASIN #121 RM ELEV. = 851.16</p> <p>CATCH BASIN #122 RM ELEV. = 856.69</p>
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NOTE: WATER SHALL HAVE 10' HORIZONTAL SEPARATION & 18" VERTICAL SEPARATION FROM ALL SEWERS.

EX. LEGEND

- (M) = MEASURED DISTANCE
- (R) = RECORD DISTANCE
- = SET 1/2" BAR WITH CAP
- = FOUND IRON AS NOTED
- = DISTANCE NOT TO SCALE
- = FENCE
- = ASPHALT
- = CONCRETE
- = GRAVEL
- = EXISTING SPOT ELEVATION
- = EXISTING CONTOUR ELEVATION
- = BUILDING OVERHANG
- = SANITARY SEWER
- = STORM SEWER
- = WATER LINE
- = GAS LINE
- = UNDERGROUND TELEVISION
- = UNDERGROUND ELECTRIC
- = OVERHEAD WIRES
- = EDGE OF WOODS
- = DECIDUOUS TREE
- = CONIFEROUS TREE
- = SANITARY MANHOLE
- = DRAINAGE MANHOLE
- = ELECTRIC MANHOLE
- = TELEPHONE MANHOLE
- = CATCHBASIN
- = FIRE HYDRANT
- = VALVE
- = UTILITY POLE
- = LIGHT POLE
- = GUY WIRE
- = UTILITY PEDESTAL
- = TRANSFORMER
- = HANDHOLE
- = ELECTRIC METER
- = GAS METER
- = WATER METER
- = SOIL BORING
- = SIGN
- = POST
- = AIR CONDITIONING UNIT
- = LIGHT POSTS (43" TALL, 8" DIAMETER)

BENCHMARKS:

- BENCHMARK #1 ELEV. = 862.07
CHISELED "X" IN NORTH SIDE OF CONCRETE LIGHT POLE BASE, 170' ± EAST AND 90' ± NORTH OF NORTHWEST CORNER OF #1655 HASLETT ROAD.
- BENCHMARK #4 ELEV. = 863.05
SOUTHWEST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "A" IN "TRANSVERSE CITY", 18' ± EAST AND 80' ± NORTH OF NORTHEAST CORNER OF #1655 HASLETT ROAD.

LEGEND

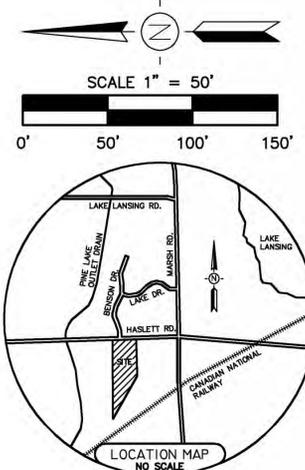
- = EXT. CONTOURS
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- = EXT. STORM SEWER
- = EXT. ELEVATIONS
- = PROPOSED WATER MAIN
- = PROPOSED SANITARY SEWER
- = PROPOSED STORM SEWER
- = MANHOLE (NEW)
- = MANHOLE (EX)
- = UTILITY EASMENT
- = CENTER LINE OF ROAD
- = ROAD RIGHT OF WAY
- = PROPERTY LINE
- = FIRE HYDRANT
- = WATER VALVE
- = HIGHEST TOP OF CURB ELEV.
- ▲ = 1/8" BEYOND

<p>KEBS, INC. 216 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-0144 FAX. 517-339-8047</p> <p>Project Office Meridian, Michigan</p> <p>Pine Village of Meridian</p> <p>DESIGNER: PERVIOUS/IMPERVIOUS PLAN PROJECT MGR: GAP APPROVED BY: _____</p> <p>SCALE: 1" = 50' DATE: 10-7-19 AUTHORIZED BY: HUDSON SENIOR LIVING, LLC</p>	<p>REVISIONS: 11-19-19 MUPUD SUBMITTAL</p> <p>SURVEY: 095868.BND</p> <p>KEBS ENGINEERING BRYAN LAND SURVEYS</p> <p>SHEET 4 OF 7 JOB # 95818</p>
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NOTE: LANDSCAPE ISLANDS TO BE IRRIGATED, IRRIGATION DESIGN BY OTHERS.

MUPUD PLAN FOR: Pine Village of Meridian MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

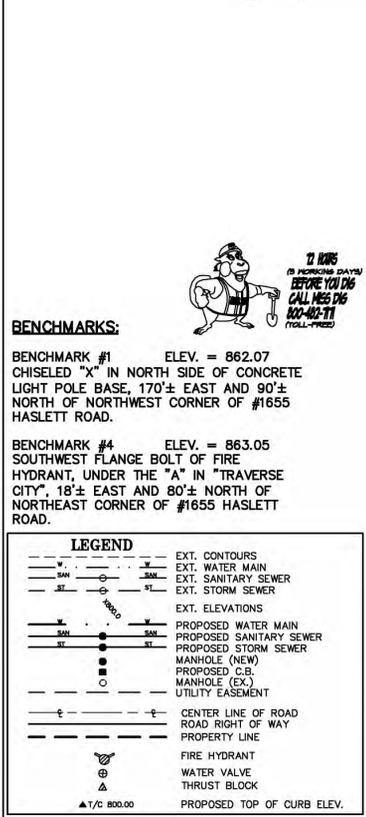
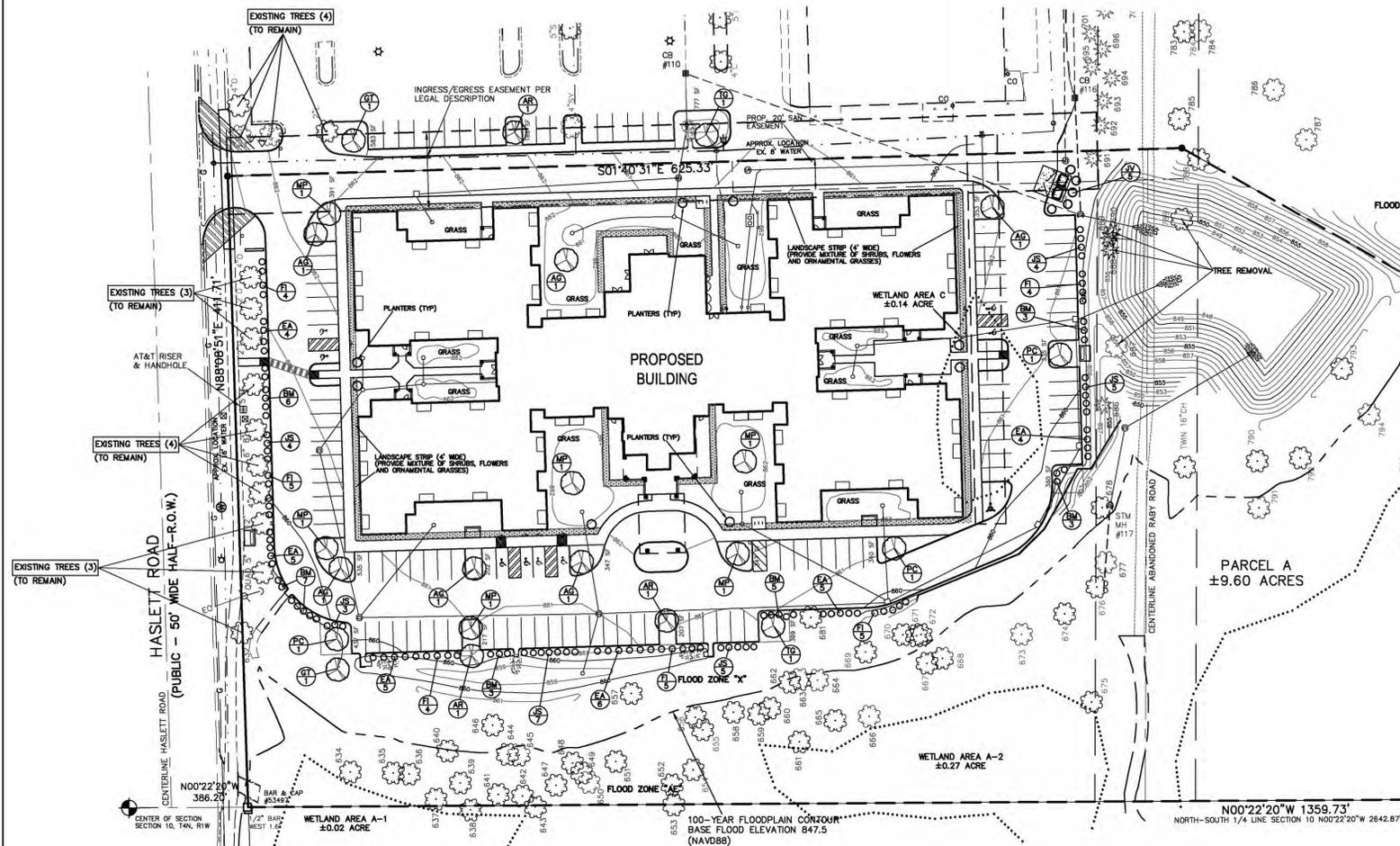
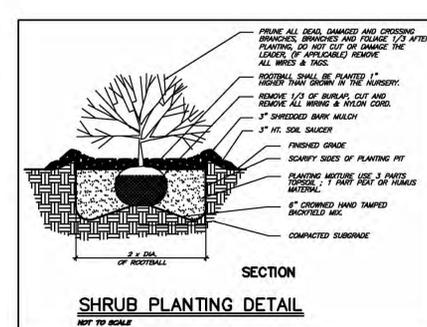
QUANT.	SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE	ROOT
DECIDUOUS					
3	AR	RED SUNSET MAPLE	ACER RUBRUM "RED SUNSET"	2.5" CAL.	B & B
2	TG	GREENSPIRE LITTLELEAF LINDEN	TILIA TOMENTOSA "GREENSPIRE"	2.5" CAL.	B & B
2	GT	SKYLINE HONEY LOCUST	GLEDTISIA TRIANTHANCOS INERMIS "SKYLINE"	2.5" CAL.	B & B
3	PC	CHANTICLEER PEAR	PYRUS CALLERYANA	2.5" CAL.	B & B
6	AG	AUTUMN BRILLIANCE SERVICEBERRY	AMELANCHIER x GRANDIFLORA	2.5" CAL.	B & B
6	MP	PROFUSION CRABAPPLE	MALUS PROFUSION	2.5" CAL.	B & B
SHRUBS					
27	FI	LYNWOOD GOLD FORSYTHIA	FORSYTHIA X INTERMEDIA 'LYNWOOD GOLD'	24"-26" HT.	CONT.
29	EA	BURNING BUSH	EUONYMUS ALATUS COMPACTUS	24"-36" HT.	CONT.
27	BM	LITTLELEAF BOXWOOD	BUXUS MICROPHYLLA "WINTER GEM"	24"-36" HT.	CONT.
28	JS	SEAGREEN JUNIPER	JUNIPERUS SEAGREEN	24"-36" HT.	CONT.
EVERGREENS					
5	JV	EASTERN RED CEDAR	JUNIPERUS VIRGINIANA	15 GAL.	B & B



LANDSCAPE REQUIRED = 200 S.F./10 PARKING SPACES
100 SPACES/10 x 200 = 2,000 S.F.
LANDSCAPE AREA PROVIDED = 4,470 S.F.

INTERIOR TREES REQUIRED
2 CANOPY TREES/10 SPACES
100/10 x 2 = 20 = 20 TREES
TREES PROVIDED = 20

STREET TREES REQUIRED
1 TREE/70' OF FRONTAGE
412/70 = 5.88 = 6
PROVIDED = 12 (ALL EXISTING)



EX. LEGEND

(M) = MEASURED DISTANCE	⊙ = SANITARY MANHOLE
(R) = RECORD DISTANCE	⊕ = DRAINAGE MANHOLE
● = SET 1/2" BAR WITH CAP	⊖ = ELECTRIC MANHOLE
□ = FOUND IRON AS NOTED	⊗ = TELEPHONE MANHOLE
— = DISTANCE NOT TO SCALE	⊙ = CATCHBASIN
— = FENCE	⊙ = SANITARY CLEANOUT
— = ASPHALT	⊕ = FIRE HYDRANT
— = CONCRETE	⊖ = VALVE
— = DECK	⊗ = UTILITY POLE
— = GRAVEL	⊙ = LIGHT POLE
— = EXISTING SPOT ELEVATION	⊙ = GUY POLE
— = EXISTING CONTOUR ELEVATION	⊙ = GUY WIRE
— = BUILDING OVERHANG	⊙ = UTILITY PEDESTAL
— = SANITARY SEWER	⊕ = TRANSFORMER
— = STORM SEWER	⊖ = HANDHOLE
— = WATER LINE	⊗ = ELECTRIC METER
— = GAS LINE	⊙ = GAS METER
— = UNDERGROUND TELEPHONE	⊙ = WATER METER
— = UNDERGROUND TELEVISION	⊙ = SOIL BORING
— = UNDERGROUND ELECTRIC	⊙ = SIGN
— = OVERHEAD WIRES	⊙ = POST
— = EDGE OF WOODS	⊙ = AIR CONDITIONING UNIT
— = DECIDUOUS TREE	⊙ = LIGHT POSTS (±3" TALL, 8" DIAMETER)
— = CONIFEROUS TREE	

EX. SANITARY SEWER INVENTORIES:

SANITARY MANHOLE #200 RIM ELEV. = 861.50 8" VCP S INV. = 854.18 8" VCP W INV. = 854.22	SANITARY MANHOLE #201 RIM ELEV. = 861.75 8" VCP E INV. = 855.03 8" VCP W INV. = 855.07	SANITARY MANHOLE #202 RIM ELEV. = 862.08 8" VCP E INV. = 856.14	SANITARY MANHOLE #203 RIM ELEV. = 862.12 6" VCP N INV. = 853.68 8" VCP E INV. = 853.48	SANITARY MANHOLE #204 RIM ELEV. = 858.48 8" VCP E INV. = 852.51 8" VCP W INV. = 852.53	SANITARY MANHOLE #205 RIM ELEV. = 859.64 8" VCP E INV. = 851.44 8" VCP W INV. = 851.48	SANITARY MANHOLE #206 RIM ELEV. = 861.41 8" VCP N INV. = 850.71 8" VCP S INV. = 850.63 8" VCP W INV. = 850.76	SANITARY MANHOLE #207 RIM ELEV. = 872.54 PIPES NOT VISIBLE N INV. = 849.42 SW INV. = 849.36	SANITARY MANHOLE #208 RIM ELEV. = 853.12 24" RCP NE INV. = 837.43 24" RCP SW INV. = 837.37	SANITARY MANHOLE #209 RIM ELEV. = 844.61 24" RCP NE INV. = 836.62 24" RCP SW INV. = 836.57	SANITARY MANHOLE #210 RIM ELEV. = 839.51 PIPES NOT VISIBLE NE INV. = 832.35 SW INV. = 832.30	SANITARY MANHOLE #211 RIM ELEV. = 840.85 PIPES NOT VISIBLE NE INV. = 832.35 SW INV. = 832.30 T/WATER ELEV. = 834.25
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EX. STORM SEWER INVENTORIES:

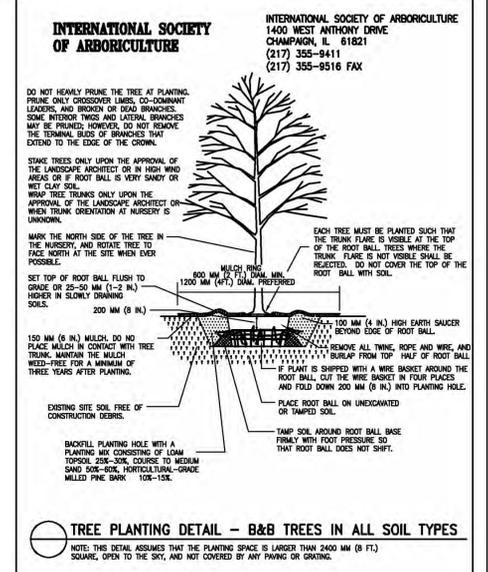
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LANDSCAPE SPECIFICATIONS

- Prior to construction, the Landscape Contractor shall be responsible for locating all underground utilities and shall avoid damage to all utilities during the course of the work. The Landscape Contractor is responsible for repairing any and all damage to utilities, structures, site appearances, etc., which occur as a result of the landscape construction.
- All plants shall be healthy, vigorous materials, free from disease and pests and that comply with the latest edition of the publication ANSI Z60 American Standard for Nursery Stock by the American Nursery and Landscape Association.
- The Landscape Contractor is responsible for verifying all quantities shown on these plans before pricing the work. Any difference in quantities should be brought to the attention of the owner/landscape architect for clarification.
- The Landscape Contractor shall completely guarantee all plant material for the period of one (1) year beginning at the date of total acceptance. The Landscape Contractor shall promptly make all replacements before or at the end of the guarantee period as the growing season permits.
- All plants shall be balled and burlapped as indicated on the plant list. All trees shall be straight trunked, full headed and meet all requirements specified. All trees must be guyed or staked and be mulched with 3" hardwood shredded mulch.
- All Plants and installation are subject to the approval of the owner/tenant.
- All planting beds must have weed barrier and be completely mulched with 3" hardwood shredded mulch, free of mold and debris. Some locations may call for stone mulch, refer to plan.
- The top of all areas of bark cover shall be at grade of adjacent curb, walk or edge of pavement, with exception to the raised planter in which the top of the mulch shall meet the bottom of the cap of the planter.
- The planting soil mixture specified for any planters shall be compressed of topsoil and additional amendments appropriate for the location and plantings and be backfilled to a depth of 12". Topsoil shall be fertile, natural topsoil, typical of locality, obtained from well-drained area. It shall be without admixture of subsoil, and shall be free of stones, lumps, sticks, toxic substances or other extraneous matter that may be harmful to plant growth or that would interfere with future maintenance.
- At all times, the contractor shall keep the premises clean.
- It is the Landscape Contractor's responsibility to determine water application rates and timer cycling. The Irrigation Contractor will instruct the Landscape Contractor on the operation and programming of the controller.
- No substitutions of plant materials shall be made without prior written permission of the owner.
- Owner/tenant will inspect the plants at the end of the warranty period. (All plants are to be warranted for a period of one year.) Plants that are dead or not in satisfactory growth shall be removed and replaced during the next normal planting season at no additional cost to the owner/tenant.

TURF ESTABLISHMENT

- The Landscape Contractor shall place a 4" compacted layer of topsoil over all areas to be established in turf. The topsoil layer shall bring all turf areas to finish grade.
- Remove stones bigger than 1-1/2" in any dimension and sticks, roots, rubbish and other extraneous matter.
- Hydroseed all new lawn areas as specified below unless plans call for sod.
- Mix seed, fertilizer, and pulverized mulch in water, using equipment specifically designed for hydroseed application.
- Apply slurry uniformly to all areas to be seeded. Rate of application as required to obtain specified seed sowing rate.
- Lay sod within 24 hours of stripping. Do not lay dormant sod or if ground is frozen. Lay sod to form a solid mass with tightly fitted joints. Do not overlap.
- Water sod with fine spray immediately after planting. During first week, water daily or more frequently as necessary to maintain moist soil to depth of 4".



INTERNATIONAL SOCIETY OF ARBORICULTURE

INTERNATIONAL SOCIETY OF ARBORICULTURE
1400 WEST ANTHONY DRIVE
CHAMPAIGN, IL 61821
(217) 355-8411
(217) 355-9516 FAX

DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSBRED LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.

STAKE TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT OR IN HIGH WIND AREAS OR IF ROOT BALL IS VERY SNAGGY OR WET CLAY SOIL.

WIND TRUNK TRIMMING ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT OR WHEN TRUNK ORIENTATION AT NURSERY IS UNKNOWN.

MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND MOVE TREE TO FACE NORTH AT THE SITE WHEN EVER POSSIBLE.

SET TOP OF ROOT BALL FLUSH TO GRADE OR 25-50 MM (1-2 IN.) HIGHER IN SLOWLY DRAINING SOIL.

150 MM (6 IN.) MULCH. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. REMOVE THE MULCH WEED-FREE FOR A MINIMUM OF THREE YEARS AFTER PLANTING.

BACKFILL PLANTING HOLE WITH A MIXTURE OF TOPSOIL AND LOW FERTILIZER. COURSE TO MEDIUM SAND. SOIL-CORRECTION HORIZONTAL-GRADE MULLED PINE BARK. 10%-15%.

EACH TREE MUST BE PLANTED SUCH THAT THE TRUNK PLANE IS VISIBLE AT THE TOP OF THE ROOT BALL. TRIM THE TRUNK PLANE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.

REMOVE ALL TWIGS, ROPE AND WIRE, AND 1/4" SUBAP FROM TOP HALF OF ROOT BALL.

PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, CUT THE WIRE BASKET IN FOUR PLACES AND FOLD DOWN 200 MM (8 IN.) INTO PLANTING HOLE.

PLACE ROOT BALL ON UNCOMPACTED OR TAMPED SOIL.

TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT ROOT BALL DOES NOT SHIFT.

TREE PLANTING DETAIL - B&B TREES IN ALL SOIL TYPES

NOTE: THIS DETAIL ASSUMES THAT THE PLANTING SPACE IS LARGER THAN 2400 MM (8 FT.) SQUARE, OPEN TO THE SKY, AND NOT COVERED BY ANY PAVING OR GRATING.

SURVEY#95688.BND

REVISIONS

11-19-19 MUPUD SUBMITTAL	
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KEBS, INC. KEYS ENGINEERING
BRYAN LAND SURVEYS
2116 HASLETT ROAD, HASLETT, MI 48840
PH. 517-339-1014 FAX. 517-339-8047

Marshall Office
Ph. 269-781-9800

Pine Village of Meridian
LANDSCAPE PLAN

SCALE: 1" = 50'	DESIGNER:	APPROVED BY:
DATE: 10-7-19	PROJECT MGR.:	GAP
AUTHORIZED BY:	JOB #:	SHEET 5 OF 7
HUDSON SENIOR LIVING, LLC	95818	

MUPUD PLAN FOR: Pine Village of Meridian

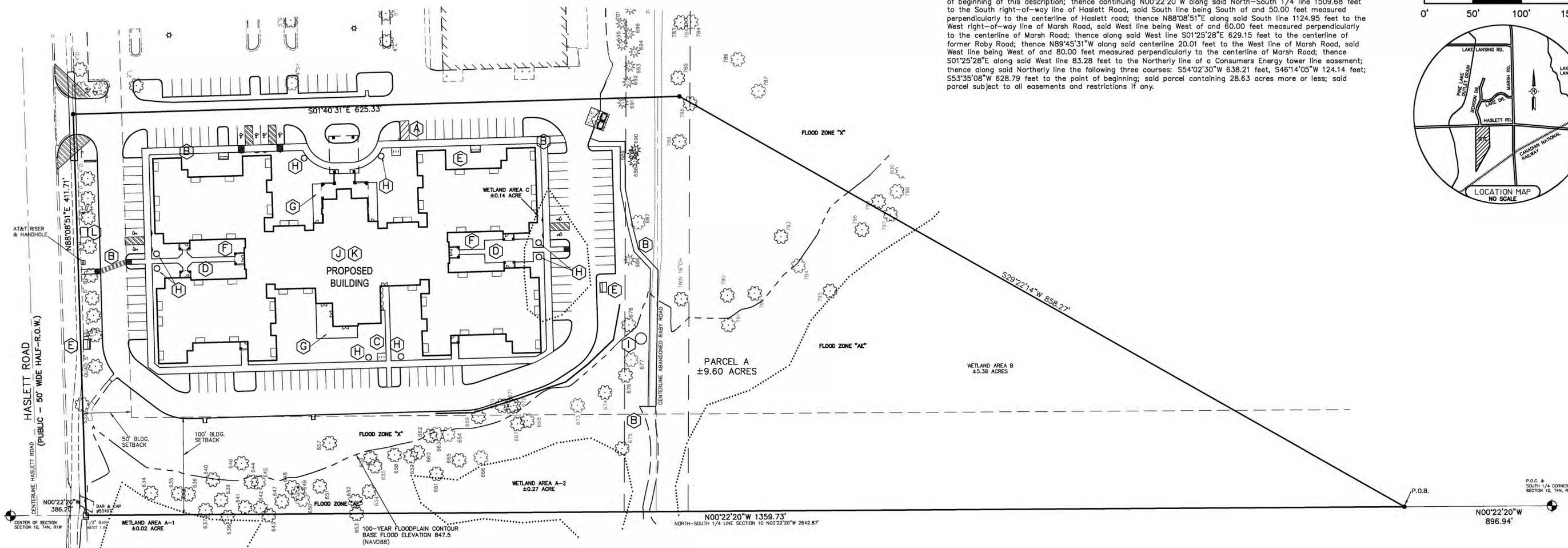
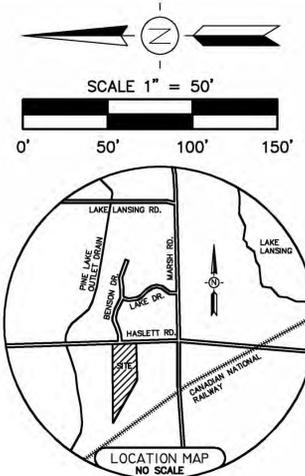
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

LEGAL DESCRIPTION:

AS SURVEYED:

(The following legal description describes the same parcel of land as the provided description)

A parcel of land in the Southeast 1/4 of Section 10, T4N, R1W, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as: Commencing at the South 1/4 corner of said Section 10; thence N00°22'20"W along the North-South 1/4 line of said Section 10 a distance of 746.99 feet to the point of beginning of this description; thence continuing N00°22'20"W along said North-South 1/4 line 1509.68 feet to the South right-of-way line of Haslett Road, said South line being South of and 50.00 feet measured perpendicularly to the centerline of Haslett road; thence N88°08'51"E along said South line 1124.95 feet to the West right-of-way line of Marsh Road, said West line being West of and 60.00 feet measured perpendicularly to the centerline of Marsh Road; thence along said West line S01°25'28"E 629.15 feet to the centerline of former Raby Road; thence N89°45'31"W along said centerline 20.01 feet to the West line of Marsh Road, said West line being West of and 80.00 feet measured perpendicularly to the centerline of Marsh Road; thence S01°25'28"E along said West line 83.28 feet to the Northerly line of a Consumers Energy tower line easement; thence along said Northerly line the following three courses: S54°02'30"W 638.21 feet, S46°14'05"W 124.14 feet; S53°35'08"W 628.79 feet to the point of beginning; said parcel containing 28.63 acres more or less; said parcel subject to all easements and restrictions if any.



BENCHMARKS:
BENCHMARK #1 ELEV. = 862.07
 CHISELED "X" IN NORTH SIDE OF CONCRETE LIGHT POLE BASE, 170± EAST AND 90± NORTH OF NORTHWEST CORNER OF #1655 HASLETT ROAD.
BENCHMARK #4 ELEV. = 863.05
 SOUTHWEST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "A" IN "TRAVERSE CITY", 18± EAST AND 80± NORTH OF NORTHEAST CORNER OF #1655 HASLETT ROAD.

NOTE: WATER SHALL HAVE 10' HORIZONTAL SEPARATION & 18" VERTICAL SEPARATION FROM ALL SEWERS.

EX. LEGEND

(M) = MEASURED DISTANCE	⊙ = SANITARY MANHOLE
(R) = RECORD DISTANCE	⊕ = DRAINAGE MANHOLE
• = SET 1/2" BAR WITH CAP	⊖ = ELECTRIC MANHOLE
□ = FOUND IRON AS NOTED	⊗ = TELEPHONE MANHOLE
— = DISTANCE NOT TO SCALE	⊘ = CATCHBASIN
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— = ASPHALT	⊕ = FIRE HYDRANT
— = CONCRETE	⊖ = VALVE
— = DECK	⊗ = UTILITY POLE
— = GRAVEL	⊘ = LIGHT POLE
— = EXISTING SPOT ELEVATION	⊙ = GUY POLE
— = EXISTING CONTOUR ELEVATION	⊕ = UTILITY PEDESTAL
— = BUILDING OVERHANG	⊖ = TRANSFORMER
— = SANITARY SEWER	⊗ = HANDHOLE
— = STORM SEWER	⊘ = ELECTRIC METER
— = WATER LINE	⊙ = GAS METER
— = GAS LINE	⊕ = WATER METER
— = UNDERGROUND TELEPHONE	⊖ = SOIL BORING
— = UNDERGROUND TELEVISION	⊗ = SIGN
— = UNDERGROUND ELECTRIC	⊘ = POST
— = OVERHEAD WIRES	⊙ = AIR CONDITIONING UNIT
— = EDGE OF WOODS	⊕ = LIGHT POSTS (±3" TALL, 8" DIAMETER)
— = DECIDUOUS TREE	
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EX. SANITARY SEWER INVENTORIES:

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EX. STORM SEWER INVENTORIES:

CATCH BASIN #100 RIM ELEV. = 860.14	CATCH BASIN #101 RIM ELEV. = 861.52	CATCH BASIN #103 RIM ELEV. = 863.83	CATCH BASIN #104 RIM ELEV. = 859.05 12" RCP NW INV. = 853.73	CATCH BASIN #105 RIM ELEV. = 862.12 12" RCP N INV. = 853.24 12" RCP SE INV. = 853.23 18" RCP SW INV. = 852.76	CATCH BASIN #106 RIM ELEV. = 861.75 8" UNKNOWN NE INV. = 856.69 12" RCP S INV. = 856.54 12" RCP NW INV. = 856.67	CATCH BASIN #107 RIM ELEV. = 861.90 12" RCP SE INV. = 857.94	CATCH BASIN #108 RIM ELEV. = 861.63 12" RCP S INV. = 854.88	CATCH BASIN #109 RIM ELEV. = 861.08 12" RCP SW INV. = 856.72	CATCH BASIN #110 RIM ELEV. = 860.02 24" RCP E INV. = 849.62 30" RCP SW INV. = 849.58	CATCH BASIN #111 RIM ELEV. = 859.77 12" RCP NE INV. = 854.78 24" RCP SE INV. = 850.37 24" RCP W INV. = 850.32	CATCH BASIN #112 RIM ELEV. = 859.46 24" RCP NE INV. = 850.78 24" RCP W INV. = 850.76	CATCH BASIN #113 RIM ELEV. = 858.81 12" RCP N INV. = 852.50 18" RCP NE INV. = 852.13 24" RCP SW INV. = 851.58
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CATCH BASIN #114
RIM ELEV. = 855.92
12" RCP W INV. = 855.92

STORM MANHOLE #115
RIM ELEV. = 860.22
10" VCP NE INV. = 853.72
12" VCP E INV. = 853.67
18" RCP W INV. = 853.40

CATCH BASIN #116
RIM ELEV. = 858.65
18" RCP E INV. = 852.06
18" RCP W INV. = 852.03

STORM MANHOLE #117
RIM ELEV. = 848.28
12" RCP NE INV. = 843.95
12" RCP SW INV. = 843.90

CATCH BASIN #118
RIM ELEV. = 850.16
8" HDPE N INV. = 844.61
12" RCP SW INV. = 844.36

CATCH BASIN #119
RIM ELEV. = 860.94
12" RCP N INV. = 856.32
12" RCP SE INV. = 856.25

CATCH BASIN #120
RIM ELEV. = 861.42
12" RCP S INV. = 856.93

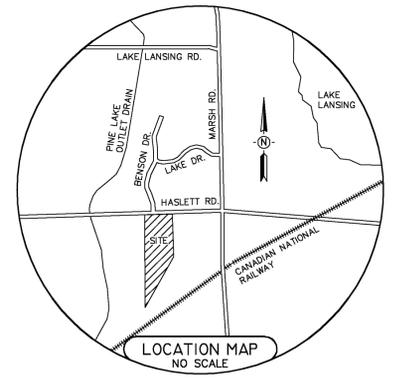
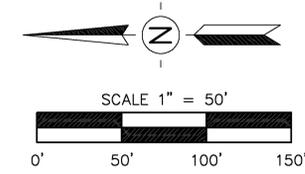
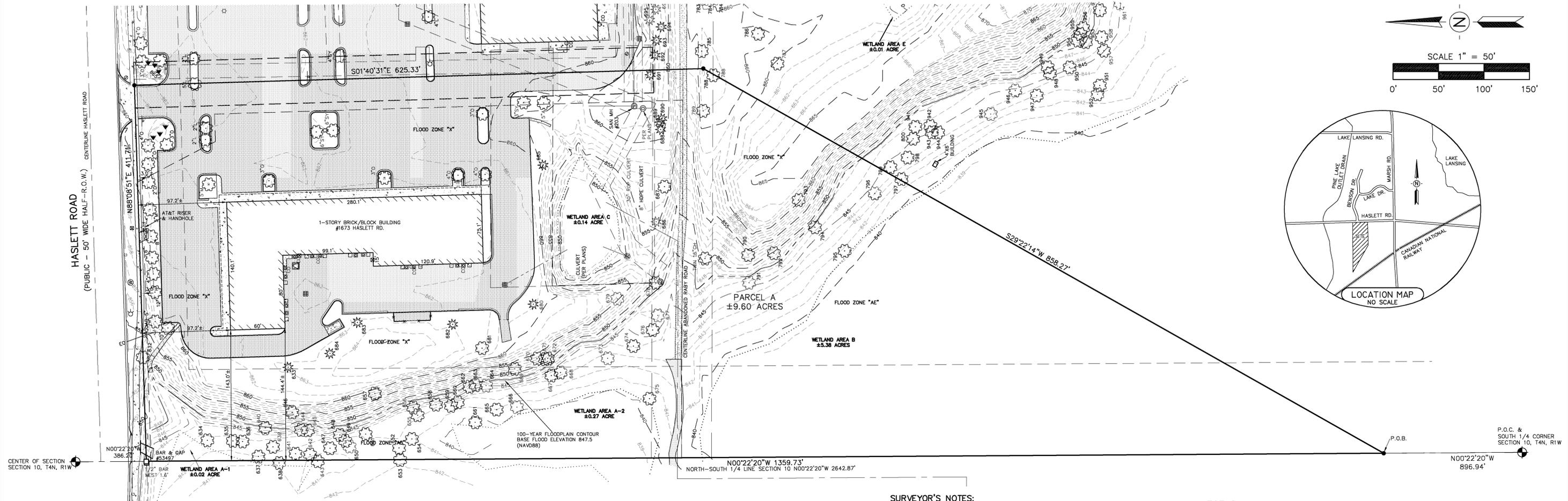
- PROPOSED AMENITIES:**
- (A) ELECTRIC CAR CHARGING STATION
 - (B) FOOT & BICYCLE PATHWAYS AND SIDEWALKS THAT CONNECT INTO PATH SYSTEM
 - (C) COVERED BICYCLE STORAGE ON SITE
 - (D) OUTDOOR GATHERING SPACES & OUTDOOR EATING SPACES
 - (E) BENCHES OR OUTDOOR SEATING
 - (F) PRIVATE COURTYARDS
 - (G) PORCHES ON ANY STRUCTURE
 - (H) SIDEWALK PLANTERS-POTS
 - (I) PUBLIC ART
 - (J) BUILDING RECYCLING PROGRAM
 - (K) ENERGY STAR APPLIANCES
 - (L) CATA BUS STOP PAD

<p>REVISIONS</p> <p>11-19-19 MUPUD SUBMITTAL</p> <p>12-9-19 MUPUD REVISIONS</p> <p>12-11-19 MUPUD REVISIONS</p>	<p>KEBS, INC. KYES ENGINEERING BRYAN LAND SURVEYS</p> <p>2116 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-1014 FAX. 517-339-8047</p> <p>Marshall Office Ph. 269-781-9800</p> <p>Pine Village of Meridian AMENITIES PLAN</p>	<p>APPROVED BY: GAP</p> <p>DESIGNER: GAP</p> <p>PROJECT MGR: GAP</p> <p>AUTHORIZED BY: HUDSON SENIOR LIVING, LLC</p>
<p>SCALE: 1" = 50'</p> <p>DATE: 10-7-19</p>	<p>SHEET 6 OF 7</p> <p>JOB # 95818</p>	

SURVEY#95688.BND

EXISTING PLAN

"1655 & 1673 HASLETT ROAD & 1659 RABY ROAD, HASLETT, MI 48840"



LEGAL DESCRIPTION:
 (As provided by Transnation Title Agency, underwritten by Fidelity National Title Insurance Company, Commitment No. 284081LANS, Revision No. 1, dated August 22, 2019)

PARCEL A:
 A parcel of land in the Southeast 1/4 of Section 10, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as: Commencing at the South 1/4 corner of said Section 10; thence North 00 degrees 22 minutes 20 seconds West along the North-South 1/4 line of said Section 10 a distance of 896.94 feet to the point of beginning of this description; thence continuing North 00 degrees 22 minutes 20 seconds West along said North-South 1/4 line 1359.73 feet to the South right-of-way line of Haslett Road, said South line being South of and 50.00 feet measured perpendicularity to the centerline of Haslett Road; thence North 88 degrees 08 minutes 51 seconds East along said South line 411.71 feet; thence South 01 degrees 40 minutes 31 seconds East 625.33 feet; thence South 29 degrees 22 minutes 14 seconds East 858.27 feet to the point of beginning.

Together with and subject to an Ingress/Egress Easement described as: A area of land in the Southeast 1/4 of Section 10, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as commencing at the South 1/4 corner of said Section 10; thence North 00 degrees 22 minutes 20 seconds West along the North-South 1/4 line of said Section 10 a distance of 2256.67 feet to the South right-of-way line of Haslett Road, said South line being South of and 50.00 feet measured perpendicularity to the centerline of Haslett road; thence North 88 degrees 08 minutes 51 seconds East along said South line 386.71 feet to the point of beginning; thence North 88 degrees 08 minutes 51 seconds East continuing along said South line 50.00 feet; thence South 01 degrees 40 minutes 31 seconds East 570.00 feet; thence South 88 degrees 08 minutes 51 seconds West 50.00 feet; thence North 01 degrees 40 minutes 31 seconds West 570.00 feet to the point of beginning.

SCHEDULE B, SECTION II, EXCEPTIONS:
 (As provided by Transnation Title Agency, underwritten by Fidelity National Title Insurance Company, Commitment No. 284081LANS, Revision No. 1, dated August 22, 2019)

Item 11: Easement for Nemoka Drain purposes vested in Ingham County Drain Commissioner by instrument recorded in Liber 70 of Miscellaneous Records, Page 472, may cross parcel, is not plottable, therefore not shown hereon. Portions of instrument recorded in Liber 70 of Miscellaneous Records, Page 472 are illegible.

Item 12: Easement for Nemoka Drain purposes vested in Ingham County Drain Commissioner by instrument recorded in Liber 70 of Miscellaneous Records, Page 484, may cross parcel, is not plottable, therefore not shown hereon. Instrument recorded in Liber 70 of Miscellaneous Records, Page 484 allows for enlargement and repair of existing drain with no specific easement location or route and course affected.

Item 13: Easement granted to Consumers Energy Company recorded in Liber 948, Page 670, does not cross parcel, therefore not shown hereon.

Item 14: Easement for Road purposes vested in Ingham County Road Commissioner by instrument recorded in Liber 1374, Page 996, abuts parcel, is plottable and shown hereon.

Item 15: Easement for water main and sanitary sewer purposes vested in Charter Township of Meridian, a Municipal Corporation by instrument recorded in Liber 1377, Page 34, crosses parcel, is plottable and shown hereon.

Item 16: Area affected by terms, conditions and provisions which are recited in Agreement recorded in Liber 1416, Page 828, crosses parcel, is plottable and shown hereon.

Item 17: Easement for Haslett Village Square Branch of Pine Lake Outlet Drain purposes vested in Ingham County Drain Commissioner by instrument recorded in Liber 1416, Page 835, crosses parcel, is plottable and shown hereon.

Item 18: Easement for Haslett Village Square Branch of Pine Lake Outlet Drain purposes vested in Ingham County Drain Commissioner by instrument recorded in Liber 1416, Page 839, now held by Long Development, Inc., crosses parcels, is plottable and shown hereon.

Item 19: Easement for Haslett Village Square Branch of Pine Lake Outlet Drain purposes recorded in Liber 1416, Page 843, crosses parcel, is plottable and shown hereon.

Item 23: Easement granted to Consumers Energy Company recorded in Liber 1541, Page 549, crosses parcel, is blanket over a portion of the parcel, but no specific location of easement is described; area affected is plottable and shown hereon.

Item 24: Area affected by terms, conditions and provisions which are recited in Declaration of Reciprocal Covenants, Restrictions and Easements recorded in Liber 1542, Page 206, crosses parcel; no specific location is described for perpetual ingress/egress easement described in said document, therefore not plottable, therefore not shown hereon.

Item 25: Easement granted to Michigan Bell Telephone Company recorded in Liber 1545, Page 36, crosses parcel, is plottable and shown hereon.

Item 26: Area affected by terms, conditions and provisions which are recited in the Drainage Easement recorded in Liber 1653, Page 1017, crosses parcel, is plottable and shown hereon.

Item 27: Easements for utilities within abandoned Raby Street which are recited in Notice recorded in Liber 2592, Page 199, and corrected in Liber 2594, Page 568, cross parcel, are plottable and shown hereon.

Item 28: Easement for pedestrian pathway purposes recorded in Liber 3225, Page 660, crosses parcel, is plottable and shown hereon.

Item 29: Grant of Communications System Easement/Release recorded in Liber 3279, Page 237, does not cross parcel, therefore not shown hereon.

Item 33: Easement Deed by Court Order recorded in Instrument No. 2013-005529. Modified in Instrument No. 2015-022038, does not cross parcel, therefore not shown hereon.

Item 35: Easements which are recited in Warranty Deed recorded in Liber _____, Page _____ (To be recorded)

SURVEYOR'S NOTES:

- This plan was made at the direction of the parties named hereon and is intended solely for their immediate use. Survey prepared from fieldwork performed in September 2019.
- All bearings and distances on the survey are record and measured unless otherwise noted. All bearings are Michigan State Plane South Zone grid bearings obtained from GPS observations using corrections obtained from the Lansing C.O.R.S.
- All dimensions are in feet and decimals thereof.
- No building tie dimensions are to be used for establishing the property lines.
- There are no observable potential encroachments onto the subject property from adjoining lands, or from the subject property onto adjoining lands, except as shown hereon.
- Parcel abuts public Haslett Road and has vehicular access to said roadway via the ingress/egress easement described in the parcel legal description.
- Utilities are shown based on above-ground field evidence only. No MISS DIG ticket was submitted.

ALTA/NSPS LAND TITLE SURVEY - TABLE "A" REQUIREMENTS:

Item 1: Shown on the survey map.

Item 2: Addresses of the surveyed property per the titework provided: 1655 Haslett Road, 1673 Haslett Road, & 1659 Raby Road, Haslett, MI 48840.

Item 3: By scaled map location and graphic plotting only, this property lies partly within Flood Zone "AE", areas within the 1% annual chance floodplain and partly within Flood Zone "X", areas outside the 1% annual chance floodplain, according to the National Flood Insurance Program, Flood Insurance Rate Map for the Charter Township of Meridian, Ingham County, Michigan, Community Panel No. 260093 0156 D, dated August 16, 2011. The base flood elevation as determined from said mapping is 847.5 feet (NAVD88 datum), and said contour is shown graphically on the survey drawing.

Item 4: 9.60 Acres (418,211 square feet)

Item 7a: Shown on the survey map.

Item 8: Shown on the survey map.

CERTIFICATION:
 To Cypress Partners, LLC, a Michigan limited liability company; Haslett Village Square, LLC; Transnation Title Agency; and Fidelity National Title Insurance Company.

This is to certify that this map or plot and the survey on which it is based were made in accordance with the 2016 "Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys," jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 7a, and 8 of Table A thereof. The fieldwork was completed on September 13, 2019.

Erick R. Friestrom Date of Plot or Map:
 Professional Surveyor No. 53497
 erfriestrom@kebs.com

LEGEND

(M)	= MEASURED DISTANCE	⊗	= SANITARY MANHOLE
(R)	= RECORD DISTANCE	⊙	= DRAINAGE MANHOLE
●	= SET 1/2" BAR WITH CAP	⊕	= ELECTRIC MANHOLE
□	= FOUND IRON AS NOTED	⊖	= TELEPHONE MANHOLE
—	= DEED LINE	⊗	= CATCHBASIN
—	= DISTANCE NOT TO SCALE	⊙	= SANITARY CLEANOUT
—	= FENCE	⊕	= FIRE HYDRANT
▨	= ASPHALT	⊖	= VALVE
▩	= CONCRETE	⊕	= UTILITY POLE
▧	= DECK	⊖	= LIGHT POLE
▦	= GRAVEL	⊕	= GUY POLE
⊕	= EXISTING SPOT ELEVATION	⊖	= GUY WIRE
—	= EXISTING CONTOUR ELEVATION	⊕	= UTILITY PEDESTAL
—	= BUILDING OVERHANG	⊖	= TRANSFORMER
—	= SANITARY SEWER	⊕	= HANDHOLE
—	= STORM SEWER	⊖	= ELECTRIC METER
—	= WATER LINE	⊕	= GAS METER
—	= GAS LINE	⊖	= WATER METER
—	= UNDERGROUND TELEPHONE	⊕	= SOIL BORING
—	= UNDERGROUND TELEVISION	⊖	= SIGN
—	= UNDERGROUND ELECTRIC	⊕	= POST
—	= OVERHEAD WIRES	⊖	= AIR CONDITIONING UNIT
⊕	= EDGE OF WOODS	⊕	= LIGHT POSTS
⊖	= DECIDUOUS TREE	⊖	(±3' TALL, 8" DIAMETER)
⊕	= CONIFEROUS TREE		

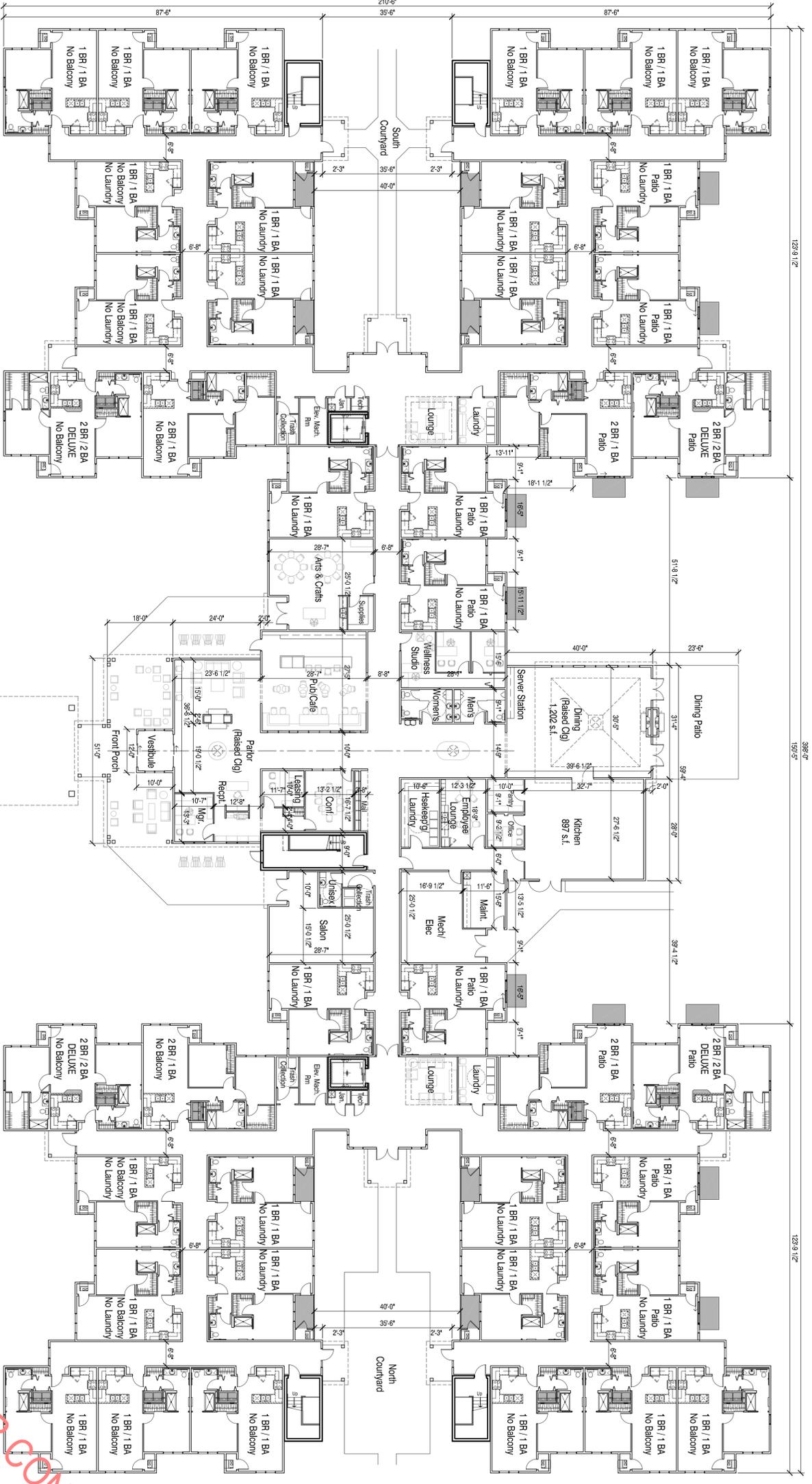
REVISIONS	COMMENTS	E-95688.ALT	
09/13/2019	PRELIMINARY	KEBS, INC. ENGINEERING AND LAND SURVEYING 2116 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-1014 FAX 517-339-8047 WWW.KEBS.COM	
		Marshall Office — Ph. 269-781-9800	
	DRAWN BY	SSF	SECTION 10, T4N, R1W
	FIELD WORK BY	NAW	JOB NUMBER:
	SHEET	7 OF 7	95688.ALT

1"=1'-0"	1/2"=1'-0"	3/8"=1'-0"	1/8"=1'-0"
3"	1 1/2"=1'-0"	3/4"=1'-0"	1/4"=1'-0"

Issued For	Date
MUPUD Submitted	11.12.2019
Review	08.07.2019
Reverse Balcony Quantity	10.30.2019
Reverse Core & Unit Types	12.05.2019
Reverse Core & Unit Types	12.11.2019
Reverse Core & Unit Types	12.12.2019

2019-236
 Project No.
 JMH
 Drawn By
 As Noted
 Scale
A1.1
 Drawing No.

Overall Floor Plans
STUDY 3



NOT FOR CONSTRUCTION

1
 Overall First Floor Plan
 Scale: 1/16" = 1'-0"



Architect of Record

Owner
Cypress Partners, LLC
280 West Maple Road, Suite 200
Birmingham, MI 48009

Project
New Senior Apartments
PINE VILLAGE
of MERIDIAN TOWNSHIP
1673 Fraser Road
Haslett, MI 48840

1"=1'-0"	1/2"=1'-0"	1/8"=1'-0"
3/8"=1'-0"	3/16"=1'-0"	1/16"=1'-0"
1 1/2"=1'-0"	3/4"=1'-0"	1/4"=1'-0"

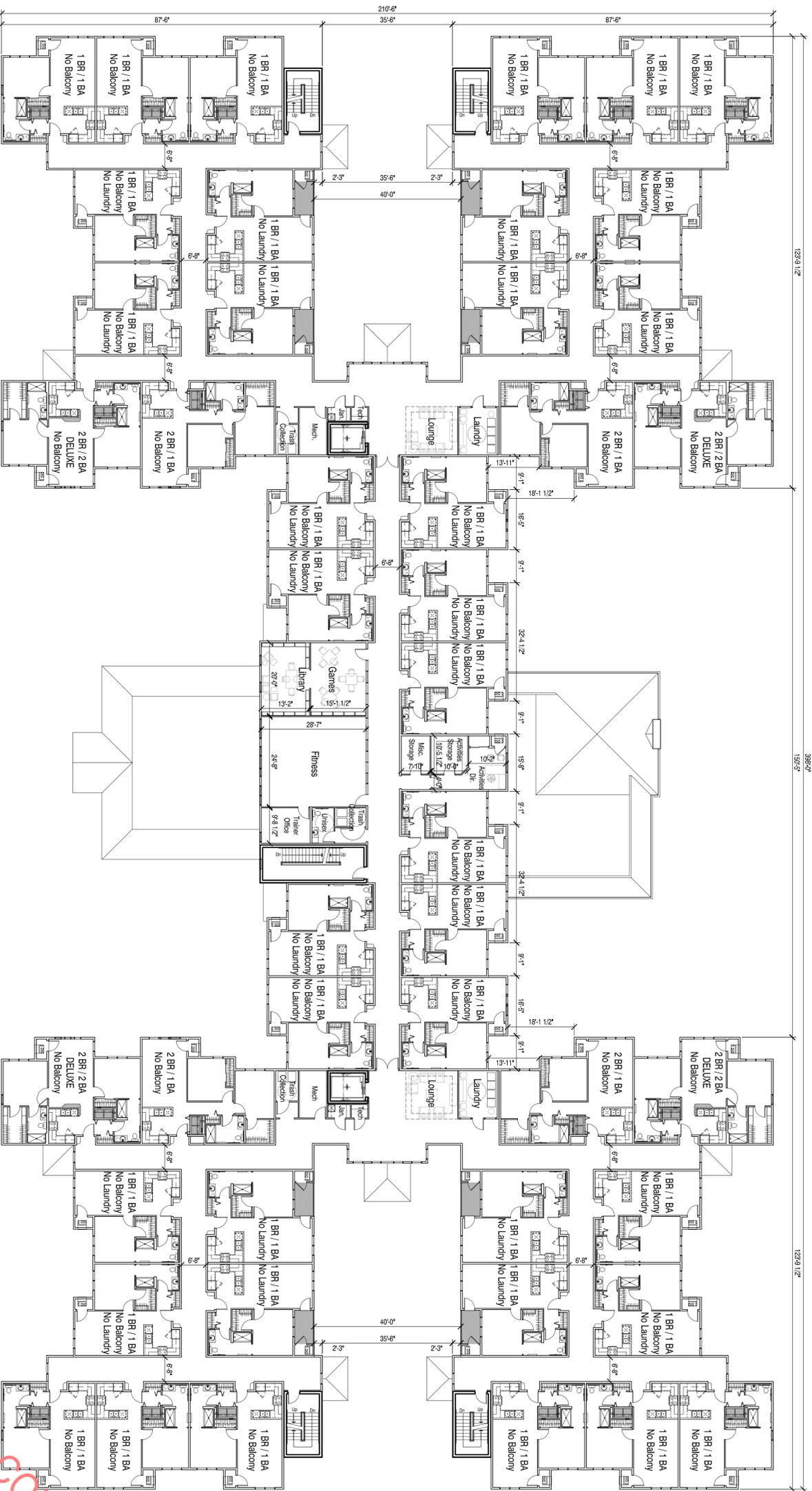
Issued For	Date
MLPUD Submittal	11.12.2019
Review	08.07.2019
Revised Balcony Quantity	10.30.2019
Revised Core & Unit Types	12.05.2019
Revised Core & Unit Types	12.11.2019
Revised Core & Unit Types	12.12.2019

Overall Floor Plans
STUDY 3

2019-2-26	SGP
Project No.	SGP
Drawn By	Checked By
As Noted	Scale

A1.2

Drawing No.



1 Overall Second Floor Plan

A1.2 Scale: 1/16" = 1'-0"



NOT FOR CONSTRUCTION

Architect of Record

Owner
Cypress Partners, LLC
 280 West Maple Road, Suite 200
 Birmingham, MI 48009

Project
**New Senior Apartments
 PINE VILLAGE
 of MERIDIAN TOWNSHIP**
 1673 Fraser Road
 Hazellet, MI 48940

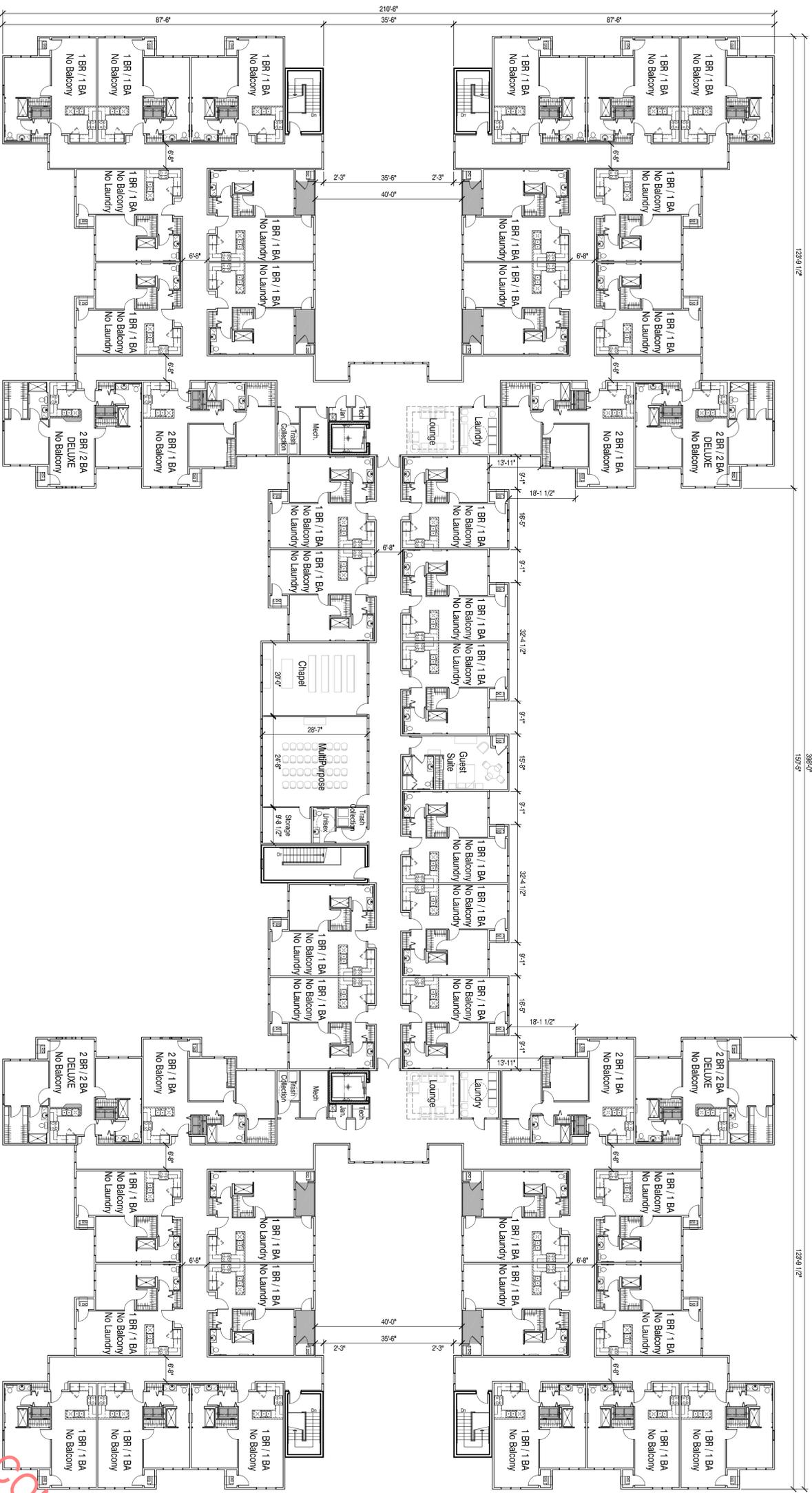
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3/8"=1'-0"	3/16"=1'-0"	1/4"=1'-0"
1 1/2"=1'-0"	3/4"=1'-0"	1/2"=1'-0"

Issued For	Date
MLPUD Submittal	11.12.2019
Review	08.07.2019
Revised Balcony Quantity	10.30.2019
Revised Core & Unit Types	12.05.2019
Revised Core & Unit Types	12.11.2019
Revised Core & Unit Types	12.12.2019

**Overall Floor Plans
 STUDY 3**

2019-2026
 Project No.
 JMH
 Drawn By
 As Noted
 Scale
 SGP
 Checked By

A1.3
 Drawing No.



Overall Third Floor Plan
 Scale: 1/16" = 1'-0"



NOT FOR CONSTRUCTION

1"=1'-0"	1/2"=1'-0"	1/8"=1'-0"
3/8"=1'-0"	3/4"=1'-0"	1/4"=1'-0"
1 1/2"=1'-0"	3/4"=1'-0"	1/4"=1'-0"
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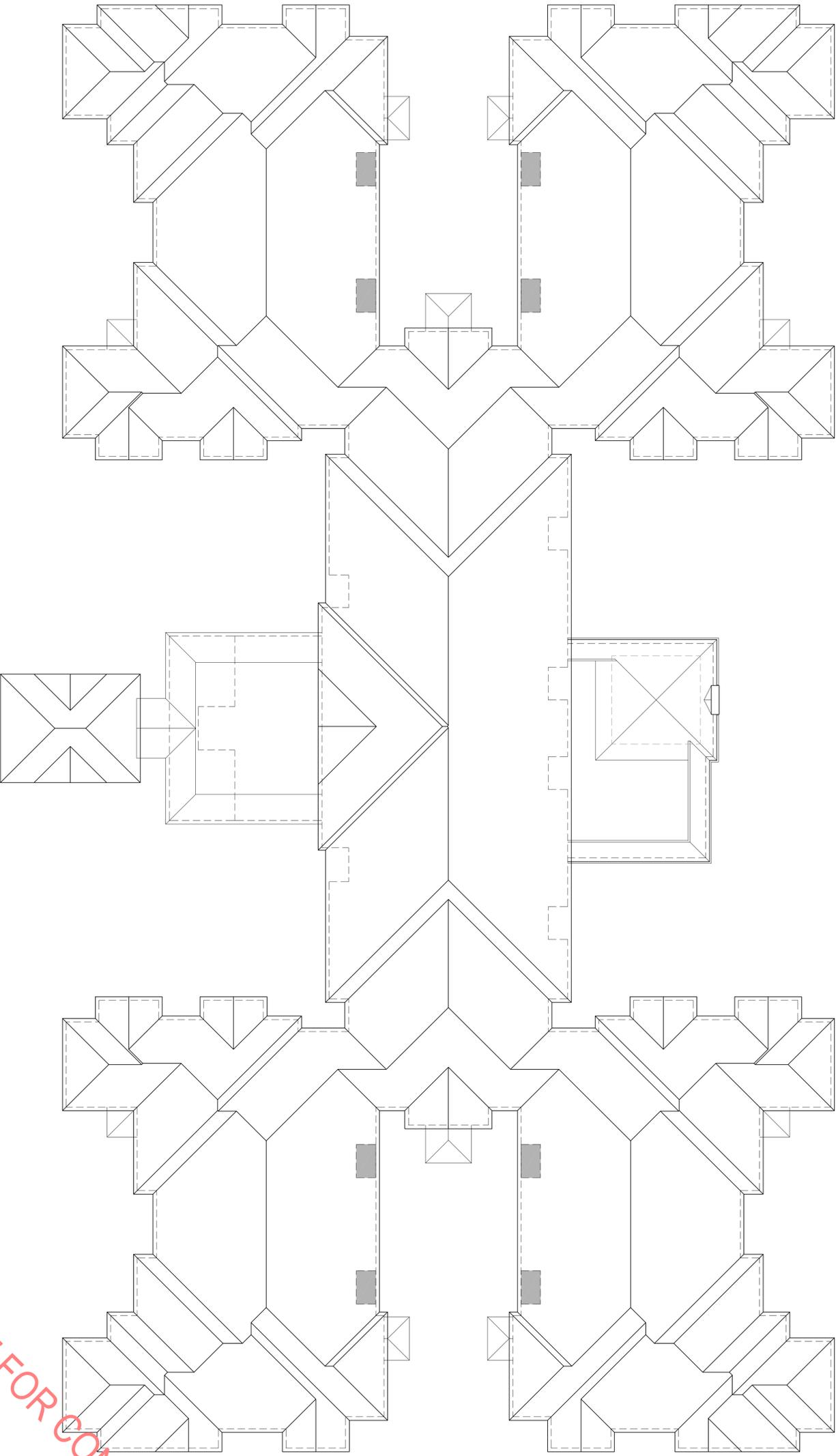
Issued For	Date
MLPUD Submittal	11.12.2019
Review	08.07.2019
Revised Balcony Quantity	10.30.2019
Revised Core & Unit Types	12.05.2019
Revised Core & Unit Types	12.11.2019
Revised Core & Unit Types	12.12.2019

Overall Floor Plans
 STUDY 3

2019-208
 Project No.
 JMH
 Drawn By
 SGP
 Checked By
 As Noted
 Scale

A1.4

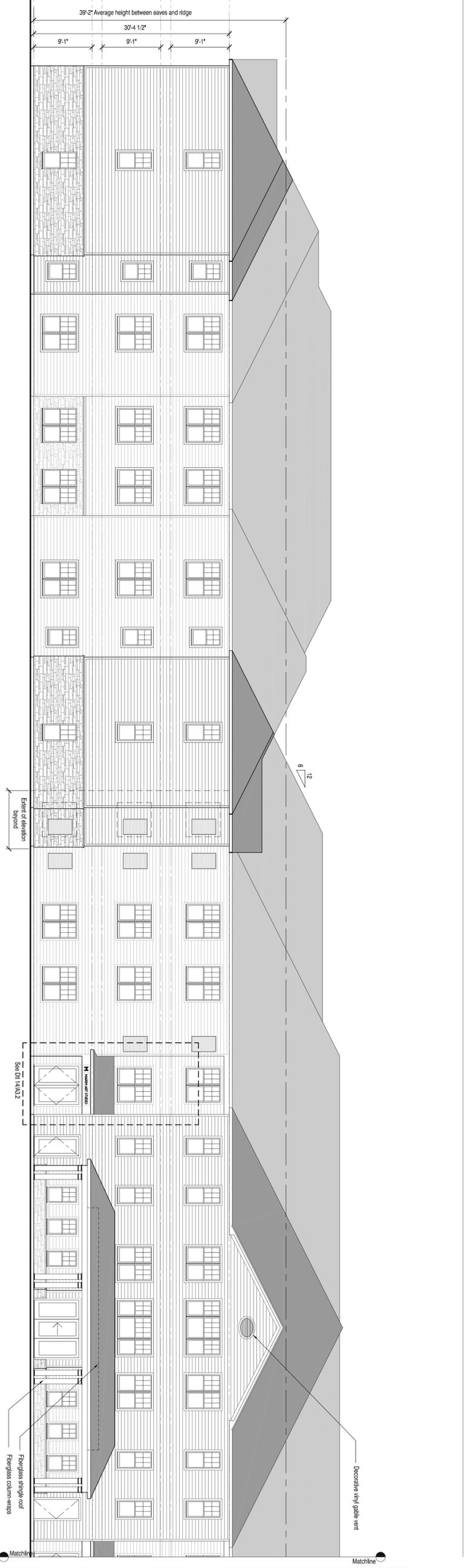
Drawing No.



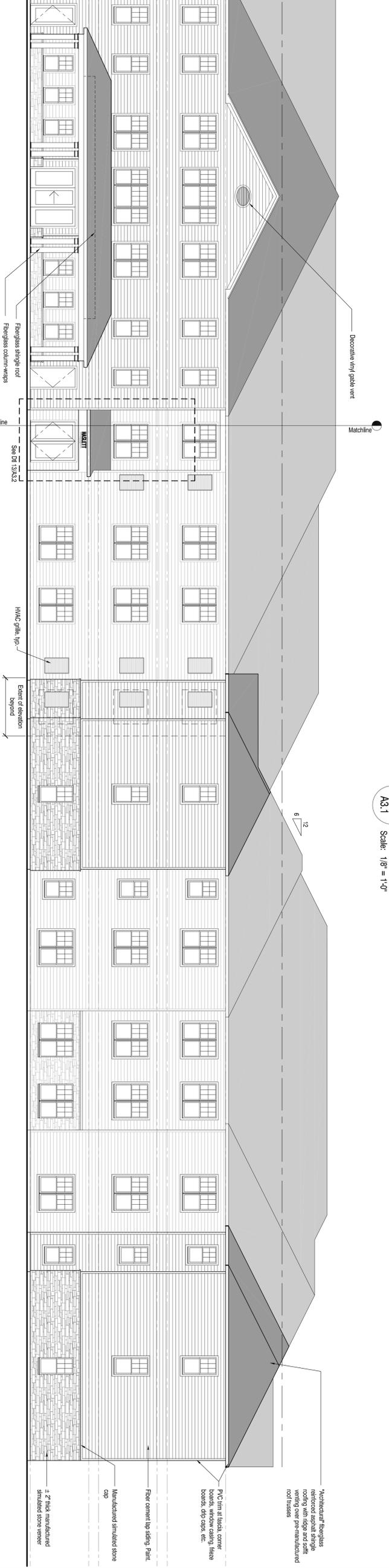
1 Overall Roof Plan

A1.4 Scale: 1/16" = 1'-0"

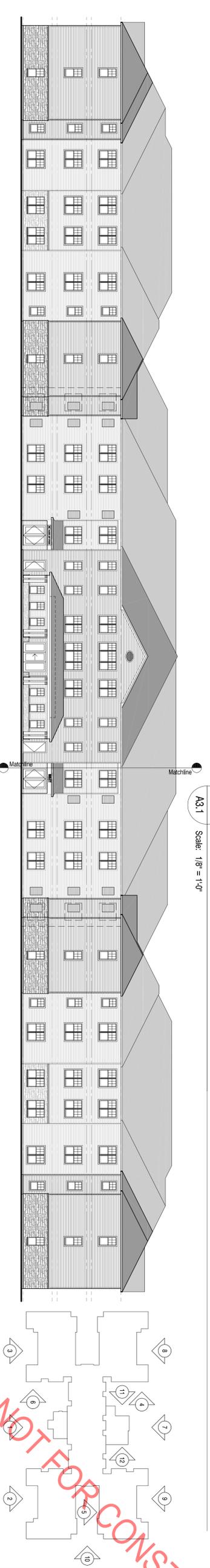




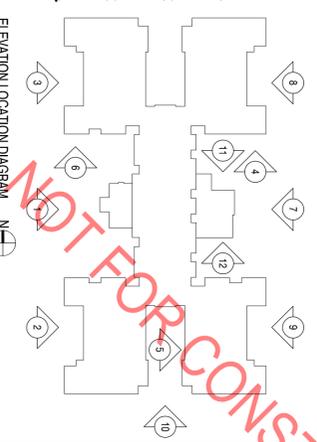
3 Partial West Elevation - Front
 A3.1 Scale: 1/8" = 1'-0"



2 Partial West Elevation - Front
 A3.1 Scale: 1/8" = 1'-0"



1 Overall West Elevation - Front
 A3.1 Scale: 1/16" = 1'-0"



SHELTER
 DESIGN STUDIO LLC
 104 W. Fourth Street
 Suite 303
 Royal Oak, Michigan 48067
 248.629.7153 ph.
 248.629.7154 fax
 www.SHELTERSUDIO.LLC.com

Architect of Record

Owner
Cypress Partners, LLC
 280 West Maple Road, Suite 200
 Birmingham, MI 48009

Project
 New Senior Apartments
PINE VILLAGE
 of MERIDIAN TOWNSHIP
 1673 Fraser Road
 Hazellet, MI 48940

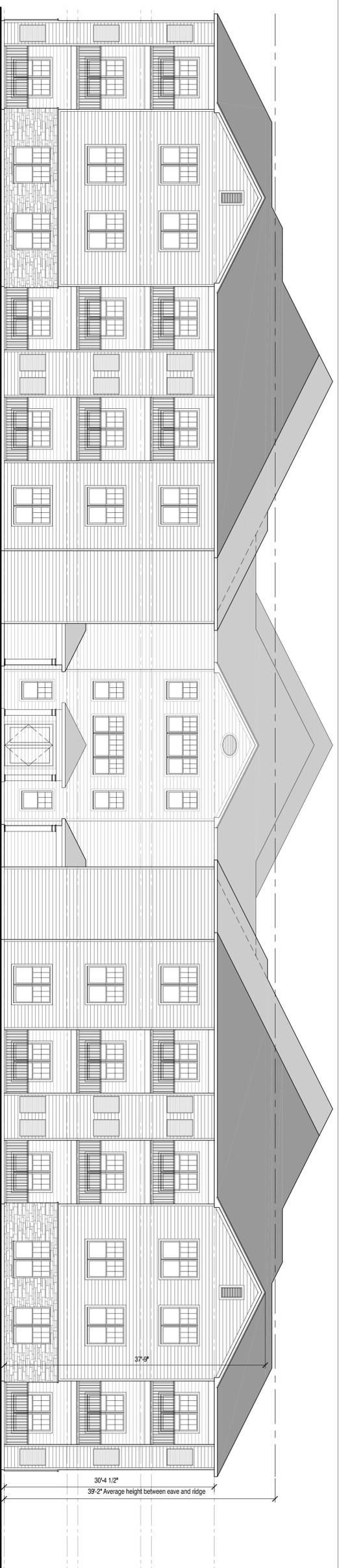
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3/8"=1'-0"	3/4"=1'-0"	1/4"=1'-0"
1 1/2"=1'-0"	3/4"=1'-0"	1/4"=1'-0"

Issued For	Date
M/PLD Submittal	11.12.2019
Review	08.07.2019
Add Overall Height	08.12.2019
Revised Balcony Quantity	10.30.2019
Revised Floor Height	12.06.2019
Revised Front Elev. & Signage	12.12.2019

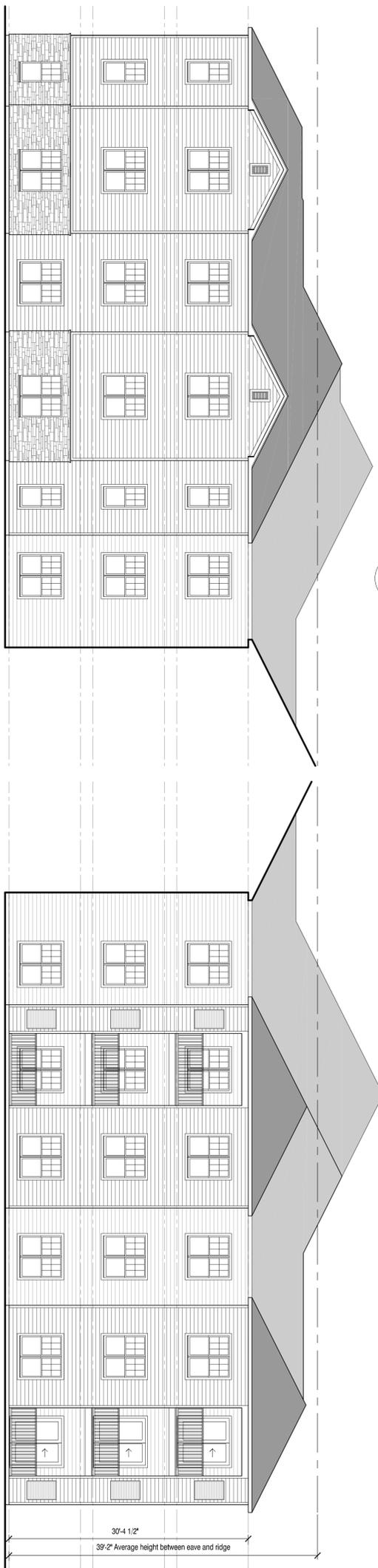
Elevations
STUDY 3

2019-9-268
 Project No.
 JMH
 Designer By
 JAs Noted
 SGP
 Checked By
 Scale
A3.1
 Drawing No.

NOT FOR CONSTRUCTION

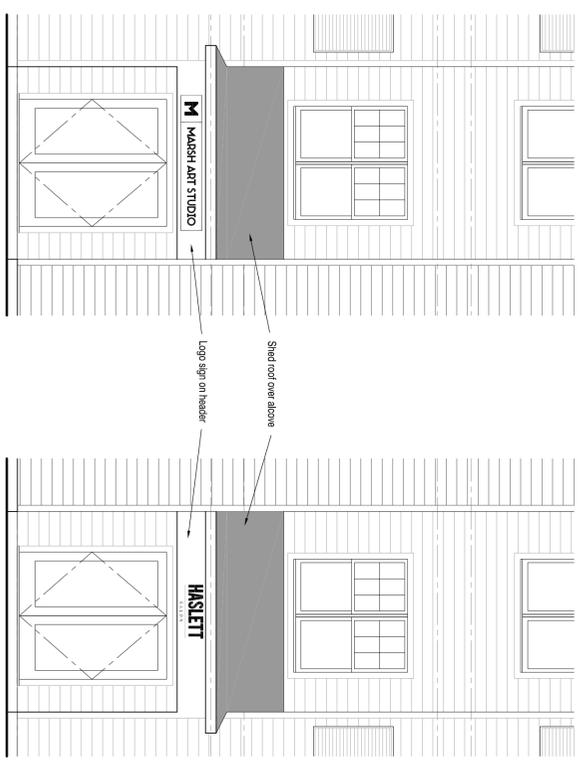


10 North Side Elevation (South Side, Opp.)
Scale: 1/8" = 1'-0"



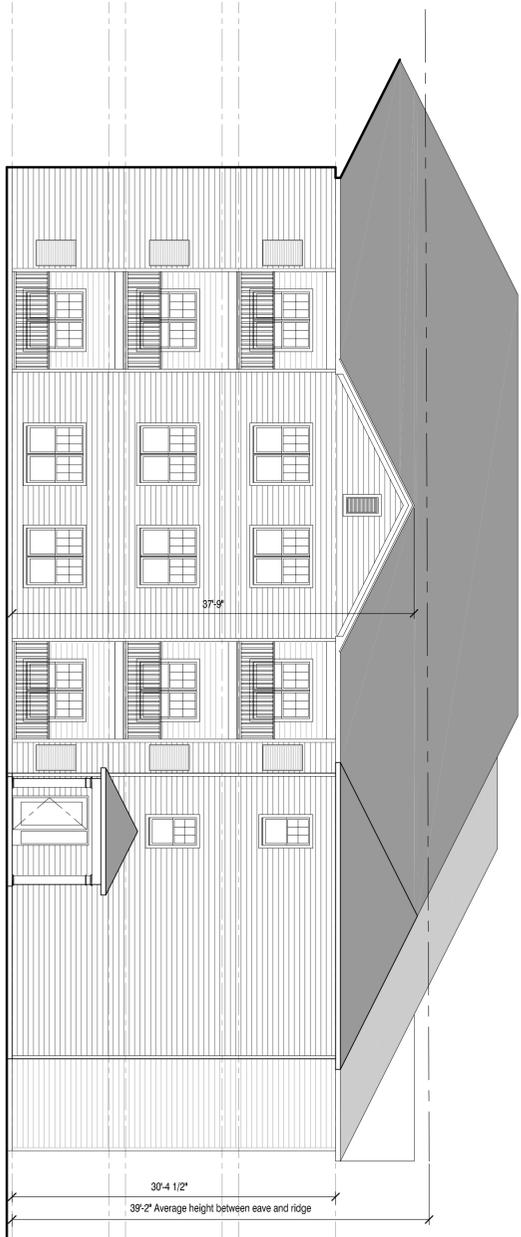
6 West Courtyard, South Facing Elevation (North Facing, Opp.)
Scale: 1/8" = 1'-0"

4 East Courtyard, South Facing Elevation (North Facing, Opp.)
Scale: 1/8" = 1'-0"

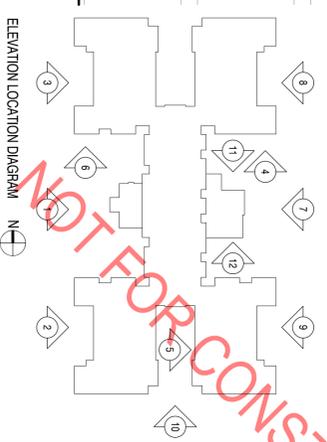


14 Retail Signage Detail
Scale: 1/4" = 1'-0"

13 Retail Signage Detail
Scale: 1/4" = 1'-0"



5 South Courtyard, West Facing Elevation (East Facing, Opp.) (North Courtyard, Sim.)
Scale: 1/8" = 1'-0"



ELEVATION LOCATION DIAGRAM

SHELTER
DESIGN STUDIO LLC
104 W. Fourth Street
Suite 303
Royal Oak, Michigan 48067
248.629.7153 ph.
248.629.7154 fax
www.SHELTERSTUDIO.LLC.com

Owner
Cypress Partners, LLC
280 West Maple Road, Suite 200
Birmingham, MI 48009

Project
New Senior Apartments
PINE VILLAGE
of MERIDIAN TOWNSHIP
1673 Haslett Road
Haslett, MI 48840

Issued For	Date
W/UPUD Submittal	11.12.2019
Review	08.07.2019
Add Overall Height	08.12.2019
Revises Balcony Quantity	10.30.2019
Revises Floor Height	12.06.2019
Revises Front Elev. & Signage	12.12.2019

Elevations
STUDY 3

2019-206
Project No.
JMH
Drawn By
SGP
Checked By
As Noted
Scale

A3.2
Drawing No.

NOT FOR CONSTRUCTION

Architect of Record

Owner

Cypress Partners, LLC
280 West Maple Road, Suite 200
Birmingham, MI 48009

Project

New Senior Apartments
PINE VILLAGE
of MERIDIAN TOWNSHIP
1673 Fraser Road
Riveston, MI 48840

1"=1'-0"	1/2"=1'-0"	1/8"=1'-0"
3/8"=1'-0"	3/16"=1'-0"	1/4"=1'-0"
1 1/2"=1'-0"	3/4"=1'-0"	1/2"=1'-0"
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Issued For

11.12.2019

MLPUD Submittal

08.07.2019

Review

08.12.2019

Add Overall Height

10.30.2019

Revise Balcony Quantity

12.06.2019

Revise Floor Height

12.12.2019

Revise Front Elev. & Signage

**Elevations
STUDY 3**

2019-9-26

Project No.

JMH

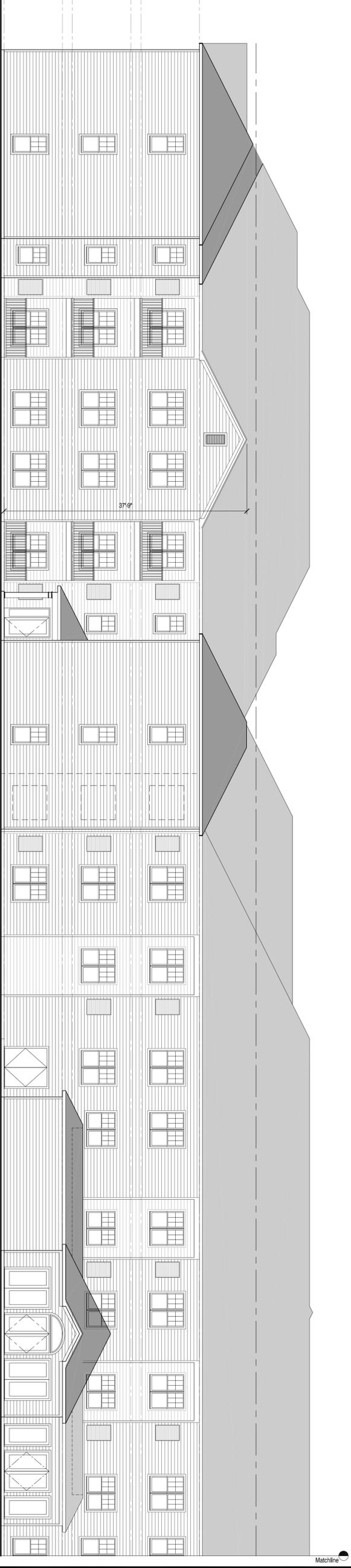
Drawn By

As Noted

Scale

A3.3

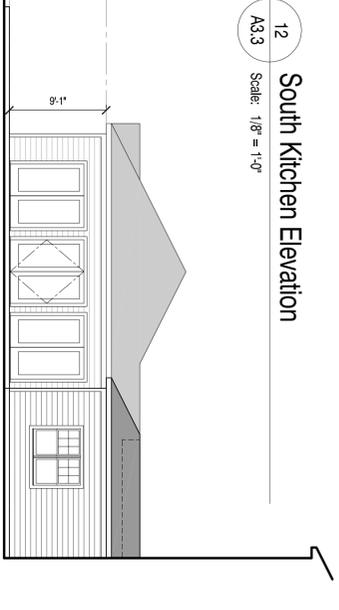
Drawing No.



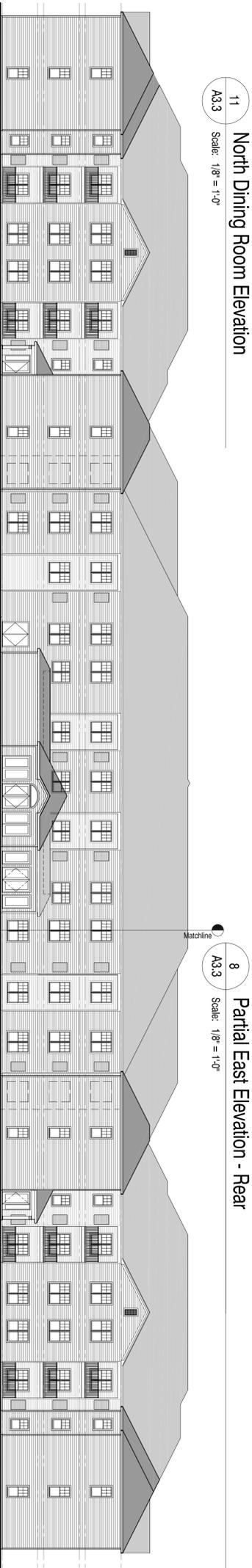
9
Partial East Elevation - Rear
Scale: 1/8" = 1'-0"
A3.3



8
Partial East Elevation - Rear
Scale: 1/8" = 1'-0"
A3.3



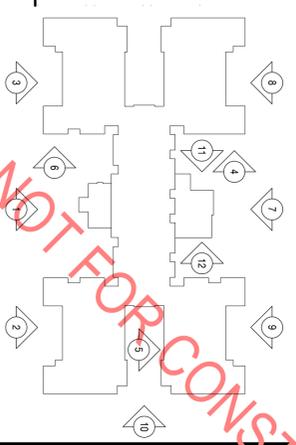
12
South Kitchen Elevation
Scale: 1/8" = 1'-0"
A3.3



11
North Dining Room Elevation
Scale: 1/8" = 1'-0"
A3.3



7
Overall East Elevation - Rear
Scale: 1/16" = 1'-0"
A3.3



ELEVATION LOCATION DIAGRAM

NOT FOR CONSTRUCTION

**Traffic Engineering
Associates, Inc.**
517/627-6028 FAX: 517/627-6040

PO Box 100
Saranac, Michigan 48881

Jeff Buck
Property Manager
Hudson Senior Living
280 West Maple Road, Suite 230
Birmingham, MI 48009

November 7, 2019

Dear Mr. Buck:

Traffic Engineering Associates, Inc. (TEA) conducted a trip generation comparison for the senior housing development which will be located at the Haslett Village Square in Meridian Charter Township, Ingham County, Michigan.

PROJECT DESCRIPTION

The proposed development will consist of an independent living senior housing development with a total of 133 units. The proposed senior housing will be located at the western end in the Haslett Village Square. An existing 23,415 square foot commercial building will be demolished and replaced with the proposed senior housing.

TRAFFIC ANALYSIS

Existing Use

For this analysis, trip generation rates were derived from the ITE TRIP GENERATION MANUAL (10th edition). The ITE trip generation rates for Shopping Center (Land Use Code 820) were selected as representing the existing land use for the 23,415 square foot commercial building. The ITE description of Shopping Center is as follows:

A shopping center is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. A shopping center's composition is related to its market area in terms of size, location, and type of store. A shopping center also provides on-site parking facilities sufficient to serve its own parking demands.

Shopping centers, including neighborhood centers, community centers, regional centers, and super regional centers, were surveyed for this land use. Some of these centers contained non-merchandising facilities, such as office buildings, movie theaters, restaurants, post offices, banks, health clubs, and recreational facilities (for example, ice skating rinks or indoor miniature golf courses).

Many shopping centers, in addition to the integrated unit of shops in one building or enclosed around a mall, include outparcels (peripheral buildings or pads located on the



perimeter of the center adjacent to the streets and major access points). These buildings are typically drive-in banks, retail stores, restaurants, or small offices. Although the data herein do not indicate which of the centers studied included peripheral buildings, it can be assumed that some of the data show their effect.

It is projected that the existing land use generates 163 vehicle trips during the AM peak hour, 186 vehicle trips during the PM peak hour, and a weekday (24-hour) total of 2,240 vehicle trips.

Existing Vehicle Trips

Land Use	Size	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	
Shopping Center, Land Use Code 820	23,415 Sq. ft.	101	62	163	89	97	186	2,240

Proposed Use

For this analysis, trip generation rates were derived from the ITE TRIP GENERATION MANUAL (10th edition). The ITE trip generation rates for Senior Adult Housing—Attached (Land Use Code 252) were selected as representing the proposed land use for the senior housing development with a total of 133 units. The ITE description of Senior Adult Housing—Attached is as follows:

Senior adult housing consists of attached independent living developments, including retirement communities, age-restricted housing, and active adult communities. These developments may include limited social or recreational services. However, they generally lack centralized dining and onsite medical facilities. Residents in these communities live independently, are typically active (requiring little to no medical supervision) and may or may not be retired.

It is projected that the proposed land use would generate 26 vehicle trips during the AM peak hour, 34 vehicle trips during the PM peak hour, and a weekday (24-hour) total of 509 vehicle trips.

Proposed Vehicle Trips

Land Use	Size	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	
Senior Adult Housing - Attached, Land Use Code 252	133 units	9	17	26	19	15	34	509

COMPARISON



A comparison of the site traffic generated from the existing commercial building versus the proposed senior housing development shows that the proposed development is expected to generate 137 less vehicle trips during the AM peak hour, 152 less vehicle trips during the PM peak hour, and 1,731 less vehicle trips during the 24-hour weekday.

Comparison of Vehicle Trips

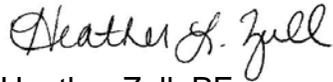
Description	AM Peak Hour			PM Peak Hour			Weekday
	In	Out	Total	In	Out	Total	
Existing Site	101	62	163	89	97	186	2,240
Proposed Site	9	17	26	19	15	34	509
Difference	-92	-45	-137	-70	-82	-152	-1,731

FINDINGS

The expected trip generation for the proposed senior housing development with a total of 133 units compared to the existing commercial development is projected to reduce traffic volumes on the roadway system.

If you have any questions, please write or call.

Sincerely,



Heather Zull, PE



NATURAL FEATURES ASSESSMENT

for the

**Haslett Road and Marsh Road – Haslett Village
Section 10, Meridian Township, Michigan**

Prepared for:

**Mr. Greg Petru
KEBS, Inc.
2116 Haslett Road
Haslett, MI 48840**

Prepared by:

Marx Wetlands, LLC

11/1/2019



MARX
WETLANDS
LLC

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1.0 INTRODUCTION

Marx Wetlands, LLC (MW) was contracted by KEBS, Inc. to perform a natural features inventory and impact assessment for an approximately 15-acre Assessment Area, which spans two (2) parcels: #33-02-02-10-401-003 (1673 Haslett Road; partially commercial/vacant) and #33-02-02-10-402-001(1659 Raby Road; partially vacant/residential)–(“Site”). The Site is located directly south of Haslett Road and approximately 0.15 miles west of its intersection with Marsh Road within Section 10 of Meridian Township (T4N, R1W), Ingham County, Michigan.

As part of a Special Use Permit Application, the Charter Township of Meridian Department of Community Planning and Development requires a “Natural Features Assessment,” which is to include “a written description of the anticipated impacts on the natural features at each phase and at project completion that contains the following:

- a. An inventory of natural features proposed to be retained, removed, or modified. Natural features shall include, but are not limited to, wetlands, significant stands of trees or individual trees greater than 12 inches dbh, floodways, floodplains, water bodies, identified groundwater vulnerable areas, slopes greater than 20 percent, ravines, and vegetative cover types with potential to sustain significant or endangered wildlife.
- b. Description of the impacts on natural features.
- c. Description of any proposed efforts to mitigate any negative impacts.”

After obtaining site location information, Marx Wetlands LLC (MW) conducted desktop information reviews, site assessments, a wetland determination and delineation, and information analysis to help address the Township’s natural features assessment requirements. In addition, a tree survey was conducted by MW (Gary Marx) in 2016 and verified by Bryana of MW in 2019. The tree survey results are included in this report as well.

2.0 SITE LOCATION AND PROJECT DESCRIPTION

The approximately 15-acre Site is located directly south of Haslett Road and approximately 0.15 west of Marsh Road within Section 10 of Meridian Township (T4N, R1W) of Ingham County, Michigan. The Developer (Hudson Senior Living LLC) is proposing a new independent senior living facility. The project will involve the construction of one 3-story building, comprised of 133 units (109 single bed and 24 two-bed) with associated parking and utility infrastructure. The majority of the project footprint will utilize the existing developed land where the existing shopping center is currently situated; however, project activities, such as grading, clearing and the construction of one (1) stormwater basin will extend into an undeveloped area directly south/southeast of the existing shopping center.

Prior to site clearing and grading, soil erosion and sediment control measures will be installed and will be inspected and maintained during the construction project. All soil erosion and sedimentation control measures will be removed upon completion of construction and stabilization. Please refer to *Figure 1: Site Location Map* in **Appendix I**.

Based on review of aerial photographs, available on-line resources, and an on-site visit, the Site consists of primarily 15 acres of vacant land. An existing shopping center with mowed upland lawn areas occupies most of the northern parcel, except for a vacant strip on the west end of the parcel. The southern parcel is mostly vacant; however, contains a paved trail (abandoned Raby Road), which continues west off-site into the neighboring Meridian Township park. The vacant parts of the Site contains primarily upland scrub-shrub/forest, and wetland areas. The Site is situated within a largely commercial and residential region of Meridian Township, Michigan. The Site is bounded by undeveloped land to the west, commercial development/Marsh Road to the east, Haslett Road to the north, and the Inter-Urban Pathway and existing railroad to the south.

The general topography of the Site is rolling with some relatively steep slopes. An upland forested ridge was observed along the west edge of the shopping center infrastructure, which drops in elevation to the on-site wetlands. Refer to the *Figure 2: Aerial Imagery Map* in **Appendix I**.

3.0 METHODS

MW conducted a desktop review for the Site using existing information and imagery, including the United States Geological Service (USGS) topographic map, aerial photographs, National Wetland Inventory (NWI) map, county soil survey map, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), and Meridian Township's Natural Features Map, which primarily includes wetlands and floodplains.

On September 19, 2019, MW conducted a wetland determination and delineation and followed by an additional site visit on October 24, 2019. The on-site visits consisted of a site reconnaissance to evaluate the current and prior land use, conduct habitat type determination, habitat quality evaluation, tree assessment, wetland determination and delineation, wildlife observations, and floodplain or other special concern observations. The wetland determination and delineation was performed in accordance with the Michigan Department of Environmental Quality Wetland Identification Manual (2001), the Northcentral-Northeast Manual to the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual. The findings from the desktop review, site assessments, tree survey update, and wetland delineation were combined to help interpret the Site's natural features and evaluate potential project impacts upon those natural features.

4.0 RESULTS, FINDINGS, AND DISCUSSION

4.1 Existing Structures, Materials, and Adjacent Land use

The northern parcel (#10-401-003) contains an existing shopping center and associated lawn, landscaped trees, and parking infrastructure. Additionally, an existing overhead electric distribution line runs along the northern boundary along the south side of Haslett Road. The southern parcel (#10-402-001) is largely undeveloped; however, contains two (2) vacated structures and an existing path (abandoned Raby Road), particularly in the north/northeast portions of this parcel. The Inter-Urban Pathway lines the southern periphery of the overall Site.

The Site is situated within a largely commercial and residential region of Meridian Township, Michigan. The Site is bounded by undeveloped land to the west, commercial development/Marsh Road to the east, Haslett Road to the north, and the Inter-Urban Pathway and off-site railroad to the south. Refer to *Figure 2: Aerial Imagery Map* in **Appendix I**.



Photograph 1. View of the existing Haslett Village shopping center located on the northern parcel.



Photograph 2. View of an existing structure observed on the southern parcel.



Photograph 3. View of an existing path (abandoned Raby Road), which leads to the Meridian Township Nature Area.



Photograph 4. View of the Inter-Urban pathway observed along the southern boundary of the Site. Wetland B, a large wetland system, is depicted in the foreground of the photograph.

4.2 Topography

The Site varies in elevation from approximately 840 to 875 feet above sea level (asl) and can be characterized as relatively hilly and/or undulating. Gradual sloping and local microtopographic relief was observed near wetland areas. However, an upland ridge with relatively steep slopes was observed along the western and southern edges of the existing shopping center. This ridge starts at Haslett Road and transects the overall Site in a roughly northwest-southeast orientation and runs roughly east-west along the southeastern boundary of the Site. It appears that this upland wooded ridge would likely separate the low-lying areas (i.e., wetland & 100-year

floodplain) along the western boundary from the areas directly east of the ridge. Refer to *Figure 1: Site Location Map* in **Appendix I**.

4.3 Vegetation

A vegetation assessment was conducted during the on-site visits to describe the dominant cover or community types observed throughout the Site. Based on review of aerial photographs and the on-site visits, the northern parcel of the Site contains an existing shopping center surrounded by vacant, undeveloped land (to the west and south), consisting of areas of upland lawn, scrub-shrub/forest, and wetland. In addition, the southern parcel is also largely undeveloped, but also contains a couple abandoned structures and a path (abandoned Raby Road).

MW found three (3) distinct community types present on the Site: 1) lawn with landscaped trees associated with the shopping center (northern parcel); 2) upland scrub-shrub/forest (both parcels); and 3) wetlands (both parcels). The majority of the Site contains upland scrub-shrub/forest identified primarily on sandy soils along relatively steep slopes and northeastern portions of the Site. Lawn was observed along the perimeter of the existing shopping center and is characterized by herbaceous vegetation, grasses, shrubs, and scattered rows of landscaped or planted trees. Wetland areas were observed primarily within the western and southern portions of the Site and were primarily forested wetland types. The descriptions of the three (3) main cover types are described below:

Cover Type Descriptions

1) Lawn with Landscaped Trees

Upland herbaceous species found in the areas of lawn or forest openings include bluegrasses (*Poa pratensis* & *P. compressa*), orchard grass (*Dactylus glomerata*), common milkweed (*Asclepias syriaca*), white vervain (*Verbena urticifolia*), smooth brome (*Bromus inermis*), Japanese hedge-parsley (*Torilis japonica*), timothy (*Phleum pratense*), wild-bergamont (*Monarda fistulosa*), common plantain (*Plantago major*), Queen Anne's lace (*Daucus carota*), field thistle (*Cirsium arvense*), and goldenrods (*Solidago altissima* and *S. canadensis*). Scattered planted trees observed include cottonwood (*Populus deltoides*), Siberian elm (*Ulmus pumila*), Callery pear (*Pyrus calleryana*), white pine (*Pinus strobus*), Scotch pine (*Pinus sylvestris*), white spruce (*Picea glauca*), and Norway spruce (*Picea abies*).

2) Upland Scrub-shrub/Forest

The upland forested and scrub-shrub areas were observed along the steep slopes or ridges. These areas generally contain the following species: penn sedge (*Carex pennsylvanica*), orchard grass, white vervain, Dame's rocket (*Hesperis matronalis*), strawberry (*Fragaria virginiana*), wild geranium (*Geranium maculatum*), white avens (*Geum canadense*), riverbank grape (*Vitis riparia*), Virginia creeper (*Parthenocissus quinquefolia*), poison-ivy (*Toxicodendron radicans*), black locust (*Robinia pseudoacacia*), crabapple/apple (*Malus spp.*), oaks (*Quercus alba*, *Q. rubra* and *Q. velutina*), box-elder (*Acer negundo*), black cherry (*Prunus serotina*), cottonwood scattered with sugar maple (*Acer saccharum*), silver maple (*Acer saccharinum*), Scotch pine, white pine, black walnut (*Juglans nigra*), white mulberry (*Morus alba*), American elm (*Ulmus americana*), red-

cedar (*Juniperus virginiana*), trembling aspen (*Populus tremuloides*), and ash (*Fraxinus spp.*) trees. Common native and non-native shrub species include autumn-olive (*Elaeagnus umbellata*), Eurasian honeysuckles (*Lonicera maackii* and *L. tatarica*), Japanese barberry (*Berberis thunbergii*), buckthorn (*Rhamnus cathartica*), multi-flora rose (*Rosa multiflora*), blackberry (*Rubus allegheniensis*), and black raspberry (*Rubus occidentalis*).

3) Wetlands

Majority of the on-site wetlands (Wetlands A1, A2, B, D, and E) are mainly forested with minor scrub-shrub or emergent components; however, Wetland C (potential retention area) is emergent with trees along its margins.

Herbaceous vegetation generally observed within Wetlands A1, A2, and B include reed canary grass (*Phalaris arundinacea*), fowl manna grass (*Glyceria striata*), late goldenrod (*Solidago gigantea*), calico aster (*Symphotrichum lateriflorum*), redtop (*Agrostis gigantea*), sedges (*Carex bromoides*, *C. intumescens*, *C. lupulina*, and *C. vulpinoidea*), and black ash saplings (*Fraxinus nigra*). Other less common herbaceous vegetation observed include sensitive fern (*Onoclea sensibilis*), white avens, jumpseed (*Persicaria virginiana*), marsh fern (*Thelypteris palustris*), and purple avens (*Geum rivale*). Common shrubs and vines observed include common buckthorn, silky dogwood (*Cornus amomum*), gray dogwood (*C. racemosa*), holly (*Ilex verticillata*), elderberry (*Sambucus canadensis*), and red raspberry (*Rubus strigosus*); vines include riverbank grape and poison-ivy. Tree species include cottonwood, silver maple, American elm, box-elder, and swamp white oak (*Quercus bicolor*).

Wetland C is an approximately 0.11-acre emergent wetland that appears to have been constructed as a stormwater basin located directly south of the southwest corner of the existing shopping center. The dominant wetland vegetation includes broadleaf cattail (*T. latifolia*), reed canary grass, purple loosestrife (*Lythrum salicaria*), cinnamon willow-herb (*Epilobium coloratum*), joe-pye-weed (*Eutrochium maculatum*), black ash saplings, and black willow (*Salix nigra*).

Wetlands D and E are small (i.e., less than 0.25 acres in size) depressional, forested wetlands with a minor scrub-shrub component. Dominant wetland vegetation includes common buckthorn, silky dogwood, gray dogwood, black ash saplings, box-elder, swamp white oak, and silver maple. Scattered herbaceous vegetation observed include white avens, rushes (*Juncus dudleyi* and *J. tenuis*), and sedges (*Carex bebbi* & *C. intumescens*). Woody vines observed include poison-ivy and river-bank grape.

Vegetation Assessment

Several species associated with disturbed lands in the Great Lakes region were observed throughout these parcels. These include non-native species, invasive species, native species that are tolerant of human land uses, and native pioneer species that normally colonize land after activities are abandoned. Examples of these species present on the Site include Japanese hedge-parsley (non-native), common plantain, orchard grass (non-native), Japanese barberry (invasive), common buckthorn (invasive), autumn-olive (invasive), black locust (invasive), multiflora rose

(invasive), tall goldenrod (weedy), white vervain (native but tolerant of human land uses), and cottonwood/trembling aspen (pioneer species, early successional species). The weedy aspect of the Site is likely due to possible previous site disturbance on-site or adjacent lands.

The Vegetation ca. 1800 map produced by the Michigan Natural Features Inventory (MNFI) shows the Site appears to be part of an extensive oak-hickory forest that once extended many miles northward from the Red Cedar River. Refer to *Figure 3: Pre-settlement Vegetation/MNFI ca. 1800 map* in **Appendix I**. Prior to extensive land clearing, these forests were found throughout Michigan in a wide range of site conditions; however, these forests generally prefer moist, well-drained, sandy/loamy soils. These forests often contained a wide variety of (non-oak/hickory) tree species, such as are red maple, black cherry, white pine, basswood, white ash, sugar maple, green ash, American elm, and red pine. These forests were commonly cleared for agricultural production; however, some areas remain largely intact, particularly where soils are sandy and/or ridges are too steep to farm. It is likely that some areas of the Site were not fully cleared many decades ago because of the steep slopes. As twentieth century commercial and residential development began to fill in lands between East Lansing and Okemos, the southern parcel of the Site was likely left idle due to the presence of wetland and steep slopes and the infeasibility of continuing agriculture on such a small scale. As a result, the Site contains both native and non-native plants that are adept to recolonize.

Refer to the 1983 USGS Topographic map that depict light (gray) color indicating some areas of open land in the property particularly near the existing shopping center (refer to Figure 1 in **Appendix I**). These areas of lawn with landscaped trees have a relatively low native mean Coefficient of Conservatism of 1.6 (adventive species were assumed as 0) is an overall indicator that this Site has been subjected to past disturbances.

There is evidence that as vegetation recolonization progressed, the Site became brushier, particularly along forest edges, the upland ridge, the existing Raby Road (pathway) and Inter-Urban Pathway (along the southern boundary) where autumn-olive, Eurasian honeysuckles, and common buckthorn have formed thickets. These areas of upland scrub-shrub/forest are dominated by native hardwood forest trees, invasive trees, and relatively weedy shrubs and groundcover plants. This assemblage includes both native and non-native species. Examples of the species present on the Site include white pine, naturally established black walnut, invasive black locust, and non-native smooth brome, common buckthorn (invasive), and autumn-olive (invasive).

The undeveloped and forested areas of the Site would normally have been cleared for agriculture; however, it is likely that these areas were retained due to the relatively steep slopes and nearby wetlands. In addition, Meridian Township Natural Area is located directly west of the overall Site and includes natural areas (i.e., wetlands, forest) that adjoin the Pine Lake Outlet Drain. The on-site scrub-shrub/forest contains remnant forest species, including scattered red oaks, maples, black cherry, cottonwood, and elm trees. Although there are some remaining native species, which are possibly descendent and/or residual from the original oak-hickory forest that likely occurred within this location, this portion of the Site contain relatively weedy

tree species. Therefore, due to the possible previous disturbances of habitat fragmentation, full or partial prior clearing, surrounding commercial and residential development of this general region of Meridian Township, etc., the areas of scrub-shrub/forest appear to contain a relatively weedy understory, rather than a native forest understory. The scrub-shrub/forest habitat's low native mean Coefficient of Conservatism of 2.57 is an overall indicator that this site was modified in the past but does retain some native remnant species. Refer to the *Vegetation Lists* in **Appendix II**.

The wetland areas were identified in low-lying lands or small depressions within the Site and contain both native and non-native species. Examples of the species present on the Site include naturally established cottonwood, common buckthorn (invasive), reed canary grass (weedy native), common reed (non-native), and purple loosestrife (invasive). More native species were generally observed along the western boundary and southwest corner of the Site, particularly within Wetlands A1, A2, and B. This is likely because these wetlands abut Meridian Township's Nature Area and it has not likely been subject to any recent site disturbance or significant modifications. The overall wetland habitat still has a relatively low native mean Coefficient of Conservatism of 2.86; however, it has the highest rating compared with the lawn and upland scrub-shrub/forest. Therefore, this overall rating indicates that this site was likely modified in the past; however, the wetlands appear to contain more native species than the other cover types.



Photograph 5. View of upland wooded slope directly west of the ex. shopping center.



Photograph 6. Another upland wooded slope observed along the southeastern portion of the Site.



Photograph 7. Typical view of scrub-shrub/forest.



Photograph 8. Typical view of an on-site forested wetland.



Photograph 9. View of Wetland C, which appears to be a constructed stormwater basin.



Photograph 10. View of a row of trees with a brushy understory observed along the existing path (Raby Road).

Although the Developer intends to preserve as many trees as possible particularly within the higher quality wetlands or forest, the proposed development of the Site will likely require clearing some existing vegetation. The northern parcel contains the existing shopping center and associated lawn with landscaped trees; however, the western and southern boundaries are undeveloped. Most the southern parcel contains upland scrub-shrub/forest, consisting of non-native shrubs and native trees and wetlands with both native and non-native species. No formal mitigation for vegetation removal has been planned. Traditional landscape grass, shrub, and tree plantings are expected for this development; however, no formal landscaping plans are designed at this time. It is likely that much of the existing vegetation, particularly some of the large or remnant trees may be incorporated into the traditional landscaping to the maximum extent possible.

4.4 Significant Tree Inventory

Separate from the vegetation assessment conducted on October 19 & 24, 2019 by Marx Wetlands LLC (Bryana J. Guevara), a tree survey was also conducted by Gary Marx in 2016. During the two (2) on-site visits in 2019, Bryana (ISA certified arborist MI-4240A) updated and verified the current tree survey to accompany this inventory and impact assessment of natural features. The survey included trees considered “significant” or deserving special protection because of their size, relative rarity, or historical importance. During the inventory, trees with a diameter at breast height (DBH) (the standard measure for tree size) of 12 inches or greater were located on the Site and mapped. The trees were identified to species and their size recorded in a table (**Appendix III**). Results of the inventory identified approximately 206 significant trees within the Site. Approximately 75% consisted of hardwood species and approximately 25% were softwood/conifer species. Of the 206 trees, approximately 2 trees were larger than or equal to 30 inches in diameter, the largest trees were with a diameter of 32 inches. Twenty-two (22) of the trees were between 20 and 30 inches and remaining 184 trees were between 12 and 19 inches DBH. Refer to *Marx Wetlands’ Tree Survey Results* in **Appendix III**.

Impact Assessment:

Based on the current site plan, most trees will be retained post-construction, particularly in the western and southwest portions of the Site where impacts to Wetlands A1, A2, and B will be avoided. The forest habitat in these areas are likely considered higher quality due to a less weedy understory and the predominance of native tree species. In addition, trees proposed for clearing are primarily non-native, planted (i.e., Norway spruce, Scotch pine, Callery pear, etc.) or weedier species (i.e., cottonwood, Siberian elm, white mulberry, box-elder, etc.). Tree clearing activities are primarily restricted to an area directly south of the existing shopping center and developed land. A few native species are anticipated for removal; however, it is the professional opinion of MW that tree clearing activities will not significantly impact the overall existing forest habitat.

4.5 Wetlands

Marx Wetlands LLC conducted a wetland determination and delineation while on the Site. In accordance with the *Midwestern Interim Regional Supplement to the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual*, wetlands are defined by the presence of three basic parameters: 1) the presence of hydrophytic vegetation (plants adapted to living in saturated soils), 2) hydric soils (distinctive soil types that develop under saturated conditions), and 3) wetland hydrology (the presence of water at or near the surface for a specific period of time). The above parameters are virtually always inter-related and normally present in wetland systems.

Six (6) Wetlands (Wetlands A1, A2, B, C, D, and E) were identified within or along the Site. No ponds or watercourses were observed within the Assessment Area or overall Site. Refer to the enclosed *Wetland Map* (Prepared by KEBS, Inc.) for the locations of the on-site wetlands and *USACE Wetland Determination Data Forms*. See Table 1, Natural Features Table below, for feature name, type, regulatory statuses for State of Michigan and Meridian Township. Refer to the *Wetland Delineation Report* included with this report in **Appendix IV**.

Table 1. Natural Features Table

Feature Name	Type*	On-site Acreage (AC)	Regulated by the State of Michigan?	Meridian Township Regulated?
Wetland A1	PEM/PSS /PFO	0.02 AC	Yes; > 5 acres in size (includes off-site acreage) & connection to Pine Lake Outlet	Likely
Wetland A2	PEM/PSS /PFO	0.24 AC	Yes; > 5 acres in size (includes off-site acreage) & connection to Pine Lake Outlet	Likely
Wetland B	PEM/PSS /PFO	2.64 AC (West) 5.63 AC (Overall)	Yes; > 5 acres in size (includes off-site acreage)	Likely
Wetland C/Detention Basin	PEM	0.11 AC	Not Likely	Not Likely
Wetland D	PFO	0.18 AC	Not Likely	Not Likely
Wetland E	PFO	0.02 AC	Not Likely	Not Likely

*PEM- Emergent; PSS- Scrub-shrub; PFO-Forested

Most of the on-site wetlands are largely forested with minor scrub-shrub or emergent wetland types, particularly Wetlands A1, A2, B, D, and E. Wetland C is an approximately 0.11-acre emergent wetland that appears to have been constructed as a stormwater basin. *Meridian Township Natural Features Map* (Figure 4 in **Appendix I**) depicts one (1) township mapped wetland areas along the western boundary and southwest portion of the Site. Wetlands A1, A2, and B generally correspond to those areas indicated by the Township’s map. In addition, the National Wetland Inventory Map-NWI (Figure 5 in **Appendix I**) also indicates one large wetland system that adjoins an off-site drain (Pine Lake Outlet Drain) along the western boundary and within the southwest portion of the Site, which appears to correspond to the same wetlands (Wetlands A1, A2, and B) shown on the Meridian Township’s Map.

Regulations

State Regulations

Part 301, Inland Lakes and Streams, states that a feature is considered a regulated watercourse by the Michigan Department of Environment, Great Lakes, and Energy (EGLE), if it possesses a defined bed, bank, and evidence of continued flow or a continued occurrence of water. Based on the site visit, no watercourses or ponds were observed on-site.

Part 303, Wetlands Protection, of the NREPA states that if a wetland is five acres in size or larger and/or connected to or located within 500 feet of a river, stream, lake, or pond, it is considered regulated by the EGLE. Marx Wetlands, LLC has the professional opinion that three (3) wetlands (Wetlands A1, A2, and B) are likely regulated by the EGLE. Wetlands A1, A2, and B extend off-site, presumably connect and appear larger than 5 acres in size. In addition, these wetlands are also contiguous to a regulating watercourse (Pine Lake Outlet Drain). Wetlands C, D, and E are less than 5 acres in size and appear isolated (i.e., not connected and/or within 500 feet of a regulating feature). Therefore, Marx Wetlands LLC has the professional opinion that Wetlands A1, A2, and B appear to meet the requirements of Part 303, Wetlands Protection, of the NREPA, and therefore likely fall under the jurisdiction of the EGLE.

Local Regulations

In addition, Meridian Township's *Chapter 22 Environment, Article IV Wetland Protection*, states that protected wetlands include all wetlands subject to the regulation by the EGLE as well as any wetlands two acres or more, in size, including the area of any contiguous inland lake, pond, river, or stream. Any wetlands less than two acres in size and not connected to a body of water may still be regulated, if it is determined that the protection of the area is important for the preservation of the state's natural resources. In addition, any wetlands, equal to or greater than one-quarter acre and equal to or less than two acres in size, which are not contiguous to any inland lake, stream, river or pond and are determined to be essential to the preservation of the natural resources of the Township (Meridian Township- Code 1974, § 105-3; Ord. No. 2002-02, 3-19-2002; Ord. No. 2003-11, 7-6-2003; Ord. No. 2011-04, 3-15-2011).

It is the professional opinion of Marx Wetlands LLC that Wetlands A1, A2, and B are also likely regulated by Meridian Township. Wetlands C, D and E appear to be less than 0.25 acres in size and do not appear to be within 500 feet of any regulating water body. Pine Lake Outlet Drain is further than 500 linear feet from these wetlands. In addition, there is a small pond south of the railroad tracks; however, it appears to be less than 1 acre in size and may not qualify as a regulating water body.

Impact Assessment

The current site plan avoids the regulated wetlands and wetland buffers and minimizes native vegetation clearing to the maximum extent practicable. However, Wetland C which appears to have been constructed for stormwater retention is also an anticipated non-regulated wetland that will be removed and re-located as an on-site proposed stormwater basin area. Therefore, it is the professional opinion of Marx Wetlands LLC that the current site plan is the most prudent and viable option for the development of the Site.

4.6 Special Flood Hazard Area

Flood Hazard Areas are those which are most likely to be inundated during flood events. Flood Hazard Areas are regulated by local, state, and federal regulations designed to reduce the damage to structures during floods. The regulations apply to areas within 100-year floodplains, which are defined by a one percent (1%) annual probability of flood occurrence. These areas are mapped by the Federal Emergency Management Agency (FEMA) on Flood Insurance Rate Maps, or FIRMs. These maps were developed using flow modeling and the existing USGS topographic maps. The modeling produces an elevation associated with 100-year flood events, and areas below these elevations are designated as the 100-year floodplains.

FEMA FIRMs for Ingham County were reviewed to determine if portions of the Site are mapped as floodplains, floodways, or other flood prone areas. These maps record the following data: 100-year (1% chance of annual flooding) and 500-year (0.2% annual chance of flooding) floodplains, the height of the base flood elevation, and the risk to premium areas developed across a floodplain. Based on FEMA FIRM Panel No. 26065C0156D (effective 08/16/2011), the Site contains a 100-year floodplain mapped as Zone AE (with Base Flood Elevation-BFE available; 847 feet mean sea level) associated with the off-site drain (Pine Lake Outlet Drain- tributary to

Red Cedar River), which appears to largely occupy the areas of the delineated (likely regulated) wetlands (Wetlands A1, A2, and B). The remaining areas on-site are mapped as Zone X: an area that is determined to be outside the 100-year floodplain. Refer to *Figure 6: Flood Insurance Rate Map* in **Appendix I**.

FIRM maps can incorrectly show areas of 100-year floodplain. In such cases, a site's topography can be surveyed using modern techniques. When such studies show that the mapped floodplain is above the determined flood elevation or that the FIRM is otherwise inaccurate, this information can be sent to the National Flood Insurance Program to obtain a Letter of Map Amendment (LOMA) which officially changes the area included within the floodplain.

Part 31, Water Resources Protection, of the NREPA regulates activities within the 100-year floodplain and floodway of a river, stream, or drain, and within the floodplain of any watercourse with an upstream drainage area of two square miles or larger. A permit would have to be obtained through EGLE to allow construction within the 100-year floodplain or below the base flood elevation of 847 feet mean sea level. Most construction activities that take place above the designated 100-year floodplain elevation may not require EGLE permitting and/or approvals.

Impact Assessment

The current site plan appears to avoid construction activities within the 100-year floodplain areas or above the designated 100-year floodplain's base flood elevation of 847 feet mean sea level.

Therefore, it is the professional opinion of Marx Wetlands that, although the Site contains a likely EGLE-regulated 100-year floodplain associated with Pine Lake Outlet, impacts to the 100-year floodplain are not anticipated by project activities. However, a pre-application meeting or a floodplain request through EGLE can help determine whether the project activities will require a permit or not.

4.7 Floodways

A *floodway* is the portion of the floodplain that is required to carry and discharge flood waters during a flood event. They have more rapidly moving water during flood events. They include river channels, upper banks, and adjacent areas that effectively become part of the water transit process during a flood. The FIRM for Meridian Township shows that there are no floodway areas on the Site. The floodway of Pine Lake Outlet Drain is approximately 350 feet further west of the Site. No activities at the Site are anticipated to have any impact upon these floodway areas, nor will these floodway areas have any impact on development at the Site. Therefore, it is the professional opinion of Marx Wetlands that the Site appears to contain an EGLE regulated 100-year floodplain associated with Pine Lake Outlet; however, no floodway areas are anticipated to occur within the Site or be impacted by project activities.

4.8 Water Bodies

Streams, rivers, lakes, and many ponds are afforded legal protection under a combination of Township, county, state, and federal regulations pertaining to wetlands, flood prone areas, and

water bodies. Any filling or alteration of these areas would typically require one or more permits from state agencies, county agencies, federal agencies, or Meridian Township.

There are no open water bodies or watercourses located within the Site. This includes ponds, lakes, creeks, rivers, and sloughs. However, there is a wetland area (Wetland C) that appears to be a constructed stormwater basin located on the northern parcel. This feature is a primarily emergent wetland that does not contain a significant area (~0.10 acre) of open water (i.e., ponded). Therefore, no water bodies are located on the Site.

4.9 Soils

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey, the soils contained within the Site have been mapped with four (4) soil types—Houghton muck, 0 to 1 percent slopes (Hn; 100% hydric rating), Urban land-Marlette complex, 2 to 12 percent slopes (UtB; 5% hydric rating), Urban land-Boyer-Spinks complex, 0 to 10 percent slopes (UeB; 4% hydric rating), and Urban land-Capac-Colwood complex, 0 to 4 percent slopes (UpA; 28% hydric rating). Refer to *Figure 7.1: County Soils Survey Map* in **Appendix I**.

Houghton mucks are typically formed in depressions or outwash plains. Urban land-Capac-Colwood complex are formed from loamy glaciofluvial deposits over silty clay loam in lake plains. Urban land-Marlette complex soils are formed from loamy till in end moraines. Urban land-Boyer-Spinks complex soils are formed on ridges or outwash plains. These soils range from very poorly drain to well drained with no likelihood to infrequent flooding or ponding. Houghton muck, Urban land-Boyer-Spinks complex, Urban land-Capac-Colwood, and Urban land-Marlette complexes are classified as hydric or contain hydric inclusions; however, UtB and UeB soils have very low hydric ratings of 5% and 4%, respectively. Hydric soils are conducive to the growth and regeneration of hydrophytic vegetation by their ability to hold water for extended periods of time (USDA-NRCS 2010). Refer to *Figure 7.2: Hydric Soils Map* in **Appendix I**.

Site balancing, filling, and subsurface excavation activities will take place within the limits of disturbance which are contained primarily within the areas of the more well-drained soil types or previously developed areas. The most suitable soils will largely be utilized on the Site during parking lot, driveway, and building construction. However, Wetland C which appears to have been constructed for stormwater retention is also an anticipated non-regulated wetland that will be removed and re-located as an on-site proposed stormwater basin area. Soil erosion and sedimentation control (SESC) measures will be installed and maintained by the Developer throughout the construction period, as required by the State of Michigan, Meridian Township, and the Ingham County Drain Commissioner, and will be removed once the entire Site has been stabilized. These measures will significantly reduce the possibility of soil erosion and the water transport of these soil materials, which could cause the degradation of areas receiving the Site's stormwater.

4.10 Identified Areas of Groundwater Vulnerability

Areas of groundwater vulnerability are those areas where the hydrologic and geologic surface and subsurface setting makes the groundwater more vulnerable to contamination than in other areas. Although the Site contains wetland areas, it is anticipated that the Site does not contain groundwater vulnerable or sensitive areas. In addition, most construction activities on the Site will be outside the bounds of the regulated wetlands and wetland buffers. However, Wetland C which appears to have been constructed for stormwater retention is also a likely non-regulated wetland that will be removed and replaced by another proposed stormwater basin area. Stormwater on the site will be collected and treated in accordance with local and state regulations designed to protect water quality and runoff volumes. The proposed project design for will require the construction of one (1) stormwater basin in upland to manage the on-site stormwater, minimize stormwater fluctuation concerns, and maintain a functioning stormwater management basin. In addition, the project proposes a stormwater outlet structure that will likely discharge into Wetland B.

The proposed basin will collect and slow the first flush stormwater runoff prior to discharge; detain the runoff for initial settling of coarse particulates and remove and oil, grease and sediment that may be present. The proposed detention basins will treat the first flush runoff with a pretreatment structure and is designed to meet all the stormwater requirements of the Ingham County Drain Office. The new stormwater basin is designed to catch contributing runoff from the surrounding developed areas and hold discharge from the overland sheet-flow stormwater from the Site. This water quality design will filter large pollutants from the water, preventing them from entering downstream water resources. The proposed design for the detention basin accommodates the total storage requirement and provides the required discharge outflow rates.

Therefore, the project proposes discharges that will meet state and local water quality standards; 2) the discharges will pass through stormwater treatment devices to maximize the removal of sediments and other contaminants using the best available technologies that are necessary when considering the receiving waters and associated aquatic resources; 3) the proposed outlet shall not result in changes in the ecological type of the wetland or result in changes to the wetland watershed area; and 4) the outlets shall be stabilized with riprap to prevent soil erosion. All excavated material and structures will be placed in upland (non-wetland). It is MW's professional opinion that the proposed stormwater discharge into wetland will not significantly impact on-site features or impact any sensitive areas identified for groundwater vulnerability because the current site plan avoids direct impacts to the likely regulated wetlands (Wetlands A1, A2, and B) and buffers.

4.11 Slopes Greater than 20 Percent

Slopes of greater than 20% are highly susceptible to soil erosion which can lead to sedimentation in other on and off-site areas such as ponds, streams and lakes. The Site does appear to contain slopes that may be steeper than 20%, particularly along an upland ridge directly west and south of the existing shopping center, which slopes down to low-lying areas of wetland (Wetlands A1, A2, and B) and the 100-year floodplain associated with the off-site Pine Lake Outlet Drain. In

addition, local microtopographic relief was also observed within the Site, particularly within the remaining wetland areas (Wetlands C, D, and E).

The development project is anticipated to follow structure and grading setbacks and requirements provided in Meridian Township ordinances. During construction, the on-site slopes, particularly over 20% will be stabilized with appropriate landscaping materials. Soil erosion and sedimentation control (SESC) measures will be placed and maintained in the areas necessary to control any erosion that may occur during construction.

4.12 Wildlife

Evidence of wildlife presence has been observed throughout the Site in the form of both direct and indirect observations, including sightings, tracks, and droppings, although the amount of animal usage is naturally limited by the size of the Site and the surrounding commercial/rural context. Evidence of common wildlife were observed within the Site, including white-tailed deer (*Odocoileus virginiana*), gray squirrels (*Sciurus carolinensis*), and raccoon (*Procyon lotor*). Squirrel evidence was mainly near the forested areas. Deer usage appeared most concentrated along the western boundary and southwest corner of the Site near the Meridian Township Nature Area. Fresh deer and raccoon droppings were also observed. Cardinals (*Cardinalis cardinalis*) and blue jays (*Cyanocitta cristata*) were seen and heard during the on-site assessments.

It is highly likely that the Site also serves as foraging or resting ground for numerous other insects and birds, such as Monarch butterflies (*Danaus plexippus*), honeybees (*Apis mellifera*), robins (*Turdus migratorius*), mourning doves (*Zenaida macroura*), and black-capped chickadees (*Poecile atricapillus*). Overall, the Site appears to contain species that can be considered urban or suburban wildlife, which are common across the Midwest. Urban and suburban wildlife are mainly generalists species that have wide tolerance in diet and behavioral flexibility. They are very unlike threatened and endangered species, which are almost all specialized and intolerant of numerous human disturbances or interferences.

The proposed site plan has been designed to minimize impacts to natural on-site features, regulated wetlands, and habitat. Most of the on-site development is restricted to the northern parcel which contains the existing shopping center. The regulated wetlands, buffers, and on-site features have been avoided to the maximum extent practicable. Therefore, any declines in certain very abundant wildlife species should not be assumed to bear negative consequences. Wildlife will be displaced to a small degree by the proposed development; however, the undeveloped southern parcel will remain relatively intact after the development. It is anticipated that some of these common urban and suburban wildlife species will continue to use the Site post-construction.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The proposed Site was reviewed for remnant and existing natural resources and features. The approximately 15-acre Assessment consists of two (2) parcels (#33-02-02-10-401-003 and 33-02-02-10-402-001), which contain vacant, undeveloped land and an existing shopping center

(Haslett Village Square). The undeveloped land portions contain lawn with landscaped trees, scrub-shrub/forest, and wetland. MW identified six (6) wetlands (Wetlands A1, A2, B, C, D, and E) within the Site and/or along the Site's perimeters. No ponds or watercourses appear within the Site. The Site also contains existing vacated buildings observed within the eastern portion of the Site. In addition, an existing path (abandoned Raby Road) was also identified, which extends off-site to the west connecting to the Township's Nature Area. The Site is situated within a largely commercial and residential region of Meridian Township, Michigan. The Site is bounded by undeveloped land to the west, commercial development/Marsh Road to the east, Haslett Road to the north, and the Inter-Urban Pathway and existing railroad to the south.

Most of the on-site soils are upland sandy loams and loams with some hydric inclusions that formed under what was once an oak-hickory forest, which appear to be largely original to the Site. It is likely that this Site was once a small portion of that forest which covered many acres but was cleared for agriculture or development. The areas south or west of the upland ridge may have been retained due to the relatively steep slopes. Within the last few decades this Site has been surrounded by roads and growing commercial and residential development. Wildlife that appear to utilize the Site are common in urban and suburban landscapes. It is anticipated that their populations will not be significantly affected by the development of this Site. Vegetation on the Site includes planted pines/spruces, native trees, and relatively common native and non-native groundcover species. The loss of vegetation due to development on the Site will occur, though the species lost are very unlikely to include any that are locally rare (i.e. rare county-wide) or state threatened and endangered. There are numerous trees on the Site which are in good condition, including both landscaped pines/spruces and unplanted hardwood species.

The proposed development is largely positioned on the northern parcel (developed portions) of the overall Site, primarily situated in the area of the existing shopping center. Most of the southern parcel does not appear to be proposed for much development; however, some land clearing, landscaping activities, and the construction of a stormwater basin are expected. The natural heritage on this Site appears to be the original topography, soils, and some of the native vegetation identified along the western boundary of the northern parcel and most of the southern parcel.

The Developer's selection of the site plan included an analysis of alternative on-site layouts, while taking into consideration existing site conditions, specific project and site requirements, building requirements and setbacks, visibility and accessibility, safety, traffic flow into and out of the Site, and existing natural features. The existing shopping center and associated parking and utility infrastructure and on-site existing conditions (i.e., 100-year floodplain, wetlands, topography) have also limited site design options. On-site natural features, including the 100-year floodplain and regulated wetlands are preserved to the maximum extent practicable. The preservation of on-site features will likely serve as an amenity for the proposed development. The current design likely provides accessibility and encourages usage by the future residents to enjoy the on-site features, including woodlands and wetlands. The primary likelihood of preserving natural resource values would be associated with minimal development on the southern parcel, avoidance of regulated wetlands and wetland buffers, 100-year floodplain, and by incorporating

some of the larger or native trees into the overall landscape design; and thereby, preserving them on the post-development landscape.

Therefore, through consideration of these factors and requirements, it appears that the preferred site plan is the most prudent and viable layout for the development of the proposed Site because it avoids the regulated (likely higher quality) wetlands and buffers and minimizes native vegetation clearing to the maximum extent practicable.

Thank you for the opportunity to provide this wetland determination. If you have any questions, please contact me at your convenience.

Sincerely,

Marx Wetlands, LLC



Bryana J. Guevara, CSWO (MI)
Environmental Scientist
ISA Certified Arborist #MI-4202A
Professional Wetland Scientist #2949

APPENDIX I

Figure 1: Site Location Map

Figure 2: Aerial Imagery Map

Figure 3: Presettlement Vegetation/MNFI ca. 1800 map

Figure 4: Township Natural Features Map

Figure 5: National Wetland Inventory Map

Figure 6: Flood Insurance Rate Map

Figures 7.1 & 7.2: County Soils Survey Map & Hydric Soils Map

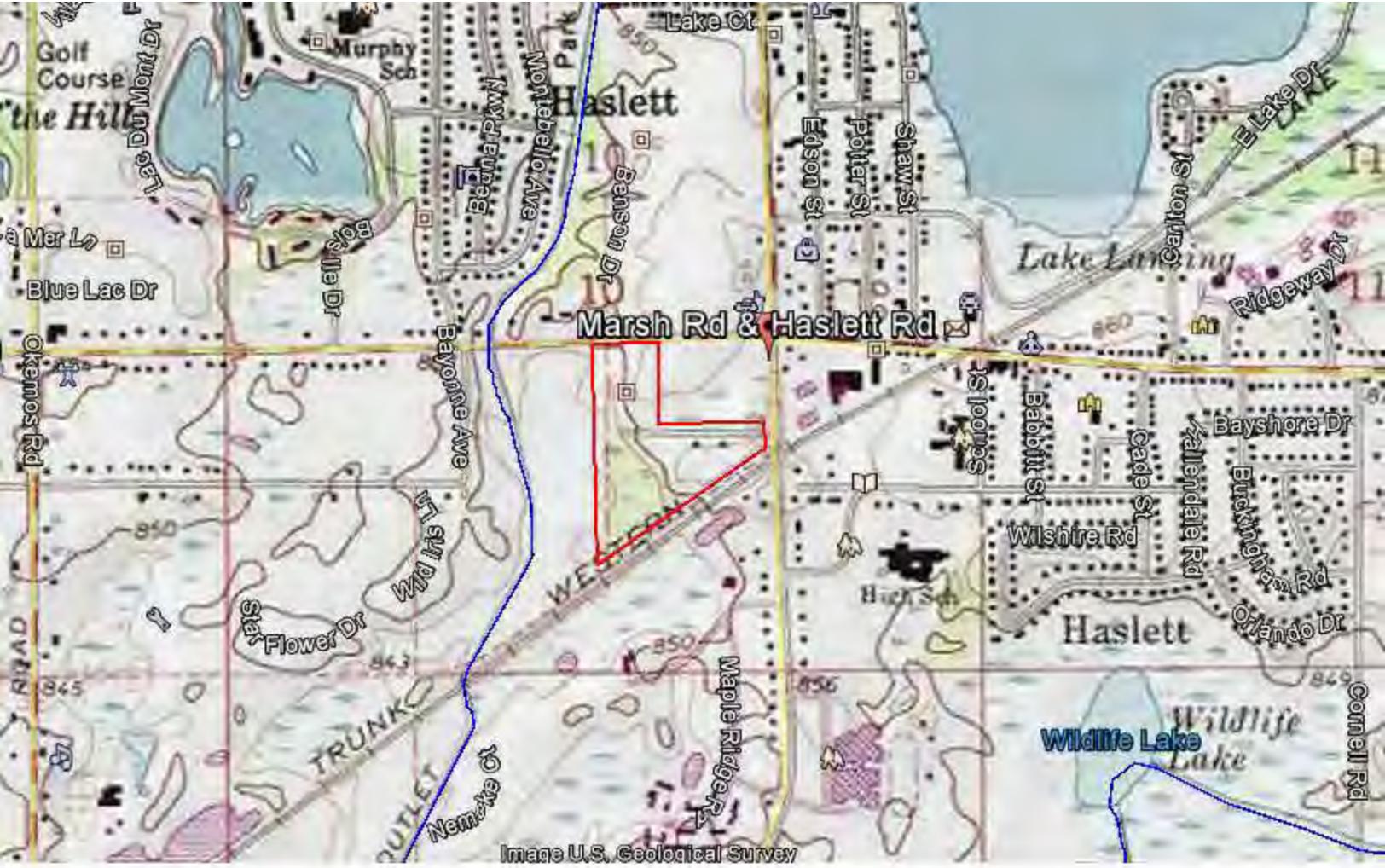
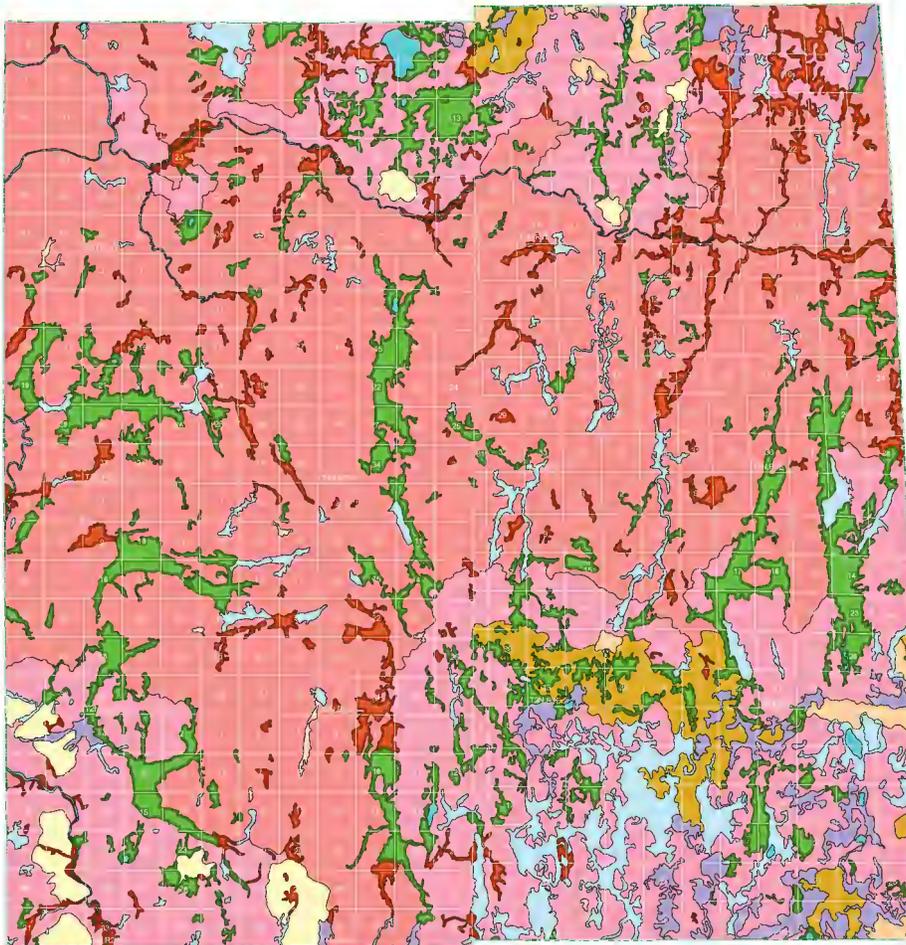


Image U.S. Geological Survey





Vegetation circa 1800 of Ingham County, Michigan

An Interpretation of the General Land Office Surveys

By P. J. Corner and D. A. Albert
Michigan Natural Resources Inventory
1997

- Legend**
- ASPEN-BIRCH FOREST
 - BEECH-SUGAR MAPLE FOREST
 - BEECH-SUGAR MAPLE-HEMLOCK FOREST
 - BLACK ASH SWAMP
 - BLACK OAK BARREN
 - CEDAR SWAMP
 - GRASSLAND
 - HEMLOCK-WHITE PINE FOREST
 - HEMLOCK-YELLOW BIRCH FOREST
 - JACK PINE-RED PINE FOREST
 - LAKE/RIVER
 - MIXED CONIFER SWAMP
 - MIXED HARDWOOD SWAMP
 - MIXED OAK FOREST
 - MIXED OAK SAVANNA
 - MIXED PINE-OAK FOREST
 - MUSKEG/BOG
 - OAK-HICKORY FOREST
 - OAK-PINE BARREN
 - PINE BARREN
 - SAND DUNE
 - SHRUB SWAMP/EMERGENT MARSH
 - SPRUCE-FIR-CEDAR FOREST
 - WET PRAIRIE
 - WHITE PINE-MIXED HARDWOOD FOREST
 - WHITE PINE-RED PINE FOREST
 - WHITE PINE-WHITE OAK FOREST
- = LAND COVER TYPE PRESENT ON THIS MAP



Scale 1:80,000



Map Projection: Lambert Conformal Conic

SOURCE: Corner, P. J., D.A. Albert, H.A. Wells, & L. Hart, J. B. Raab, D. L. Price, D. M. Kuhn, R. A. Corner, D. W. Schwan (Map Interpretation), M. B. Austin, T. R. Laflamme, K. M. Kozlowski, L. Piening-Gregory, J. S. Siskind, C. J. DeLain, L. J. Schinger, (Digital Map Production) 1995.
Michigan's Predecessors Vegetation, as Interpreted from the General Land Office Surveys 1816-1868.
Michigan Natural Resources Inventory, Lansing, MI. Digital Map.





Haslett and Marsh Roads, Meridian Township



October 31, 2019

Wetlands

-  Estuarine and Marine Deepwater
-  Freshwater Emergent Wetland
-  Freshwater Forested/Shrub Wetland
-  Lake
-  Other
-  Estuarine and Marine Wetland
-  Freshwater Pond
-  Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

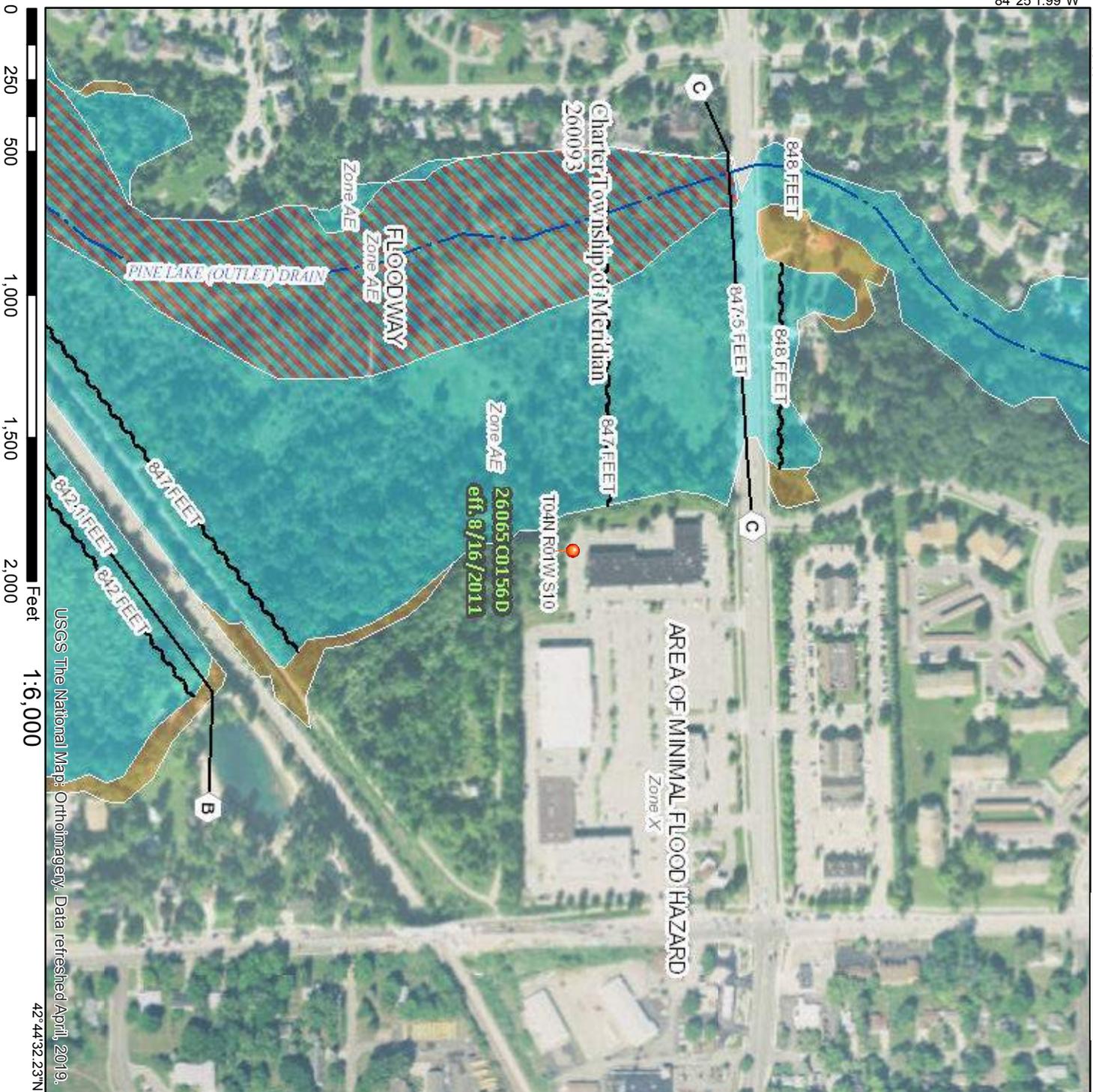
U.S. Fish and Wildlife Service, National Standards and Support Team.
wetlands_team@fws.gov

National Flood Hazard Layer FIRMette



42°44'58.65"N

84°25'1.99"W



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	<ul style="list-style-type: none"> Without Base Flood Elevation (BFE) Zone A, V, A99 With BFE or Depth Zone AE, AO, AH, VE, AR Regulatory Floodway
-----------------------------------	---

OTHER AREAS OF FLOOD HAZARD	<ul style="list-style-type: none"> 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X Future Conditions 1% Annual Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes. Zone X Area with Flood Risk due to Levee Zone D
------------------------------------	---

OTHER AREAS GENERAL STRUCTURES	<ul style="list-style-type: none"> NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs Area of Undetermined Flood Hazard Zone D Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall
---------------------------------------	---

OTHER FEATURES	<ul style="list-style-type: none"> 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation 17.5 Coastal Transect Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary Coastal Transect Baseline Profile Baseline Hydrographic Feature
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MAP PANELS	<ul style="list-style-type: none"> Digital Data Available No Digital Data Available Unmapped
-------------------	---

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/30/2019 at 5:34:59 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and undetermined areas cannot be used for regulatory purposes.

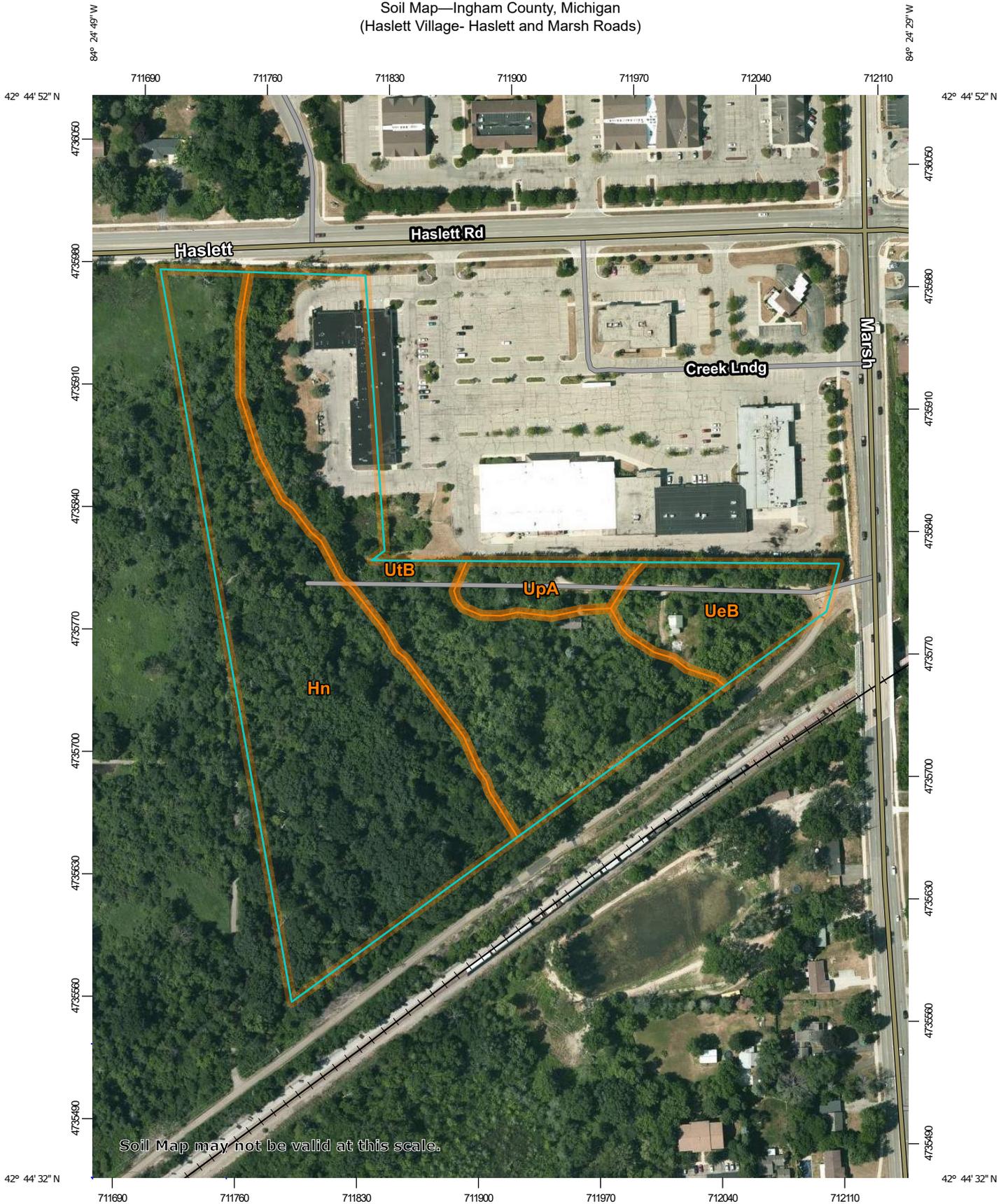
0 250 500 1,000 1,500 2,000 Feet

84°24'24.54"W

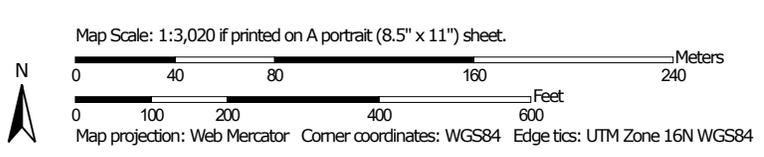
USGS The National Map: Orthoimagery, Data refreshed April, 2019.

42°44'32.23"N

Soil Map—Ingham County, Michigan
(Haslett Village- Haslett and Marsh Roads)



Soil Map may not be valid at this scale.



MAP LEGEND

	Area of Interest (AOI)		Spoil Area
	Area of Interest (AOI)		Stony Spot
Soils			Very Stony Spot
	Soil Map Unit Polygons		Wet Spot
	Soil Map Unit Lines		Other
	Soil Map Unit Points		Special Line Features
Special Point Features		Water Features	
	Blowout		Streams and Canals
	Borrow Pit	Transportation	
	Clay Spot		Rails
	Closed Depression		Interstate Highways
	Gravel Pit		US Routes
	Gravelly Spot		Major Roads
	Landfill		Local Roads
	Lava Flow	Background	
	Marsh or swamp		Aerial Photography
	Mine or Quarry		
	Miscellaneous Water		
	Perennial Water		
	Rock Outcrop		
	Saline Spot		
	Sandy Spot		
	Severely Eroded Spot		
	Sinkhole		
	Slide or Slip		
	Sodic Spot		

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Ingham County, Michigan
Survey Area Data: Version 17, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 4, 2018—Jul 18, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

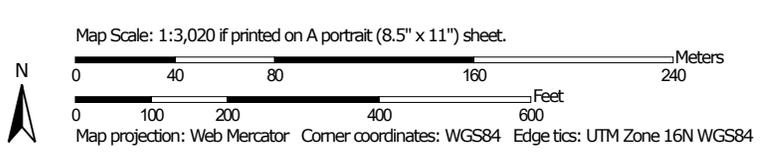
Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Hn	Houghton muck, 0 to 1 percent slopes	7.8	47.5%
UeB	Urban land-Boyer-Spinks complex, 0 to 10 percent slopes	1.5	9.3%
UpA	Urban land-Capac-Colwood complex, 0 to 4 percent slopes	0.7	4.2%
UtB	Urban land-Marlette complex, 2 to 12 percent slopes	6.4	39.0%
Totals for Area of Interest		16.5	100.0%

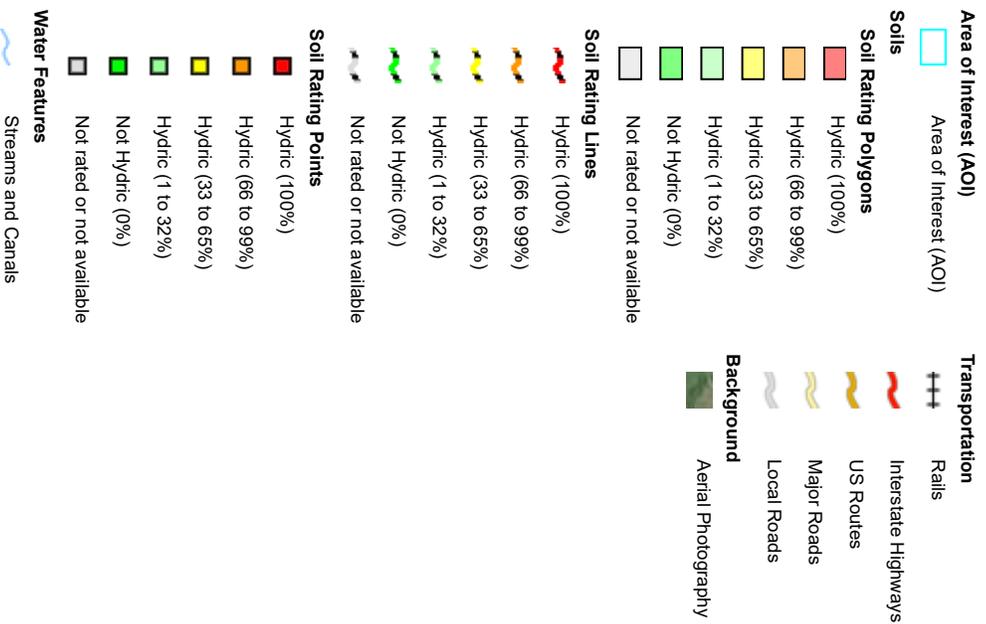
Hydric Rating by Map Unit—Ingham County, Michigan
(Haslett Village- Haslett and Marsh Roads)



Soil Map may not be valid at this scale.



MAP LEGEND



MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Ingham County, Michigan
 Survey Area Data: Version 17, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 4, 2018—Jul 18, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Hn	Houghton muck, 0 to 1 percent slopes	100	7.8	47.5%
UeB	Urban land-Boyer-Spinks complex, 0 to 10 percent slopes	4	1.5	9.3%
UpA	Urban land-Capac-Colwood complex, 0 to 4 percent slopes	28	0.7	4.2%
UtB	Urban land-Marlette complex, 2 to 12 percent slopes	5	6.4	39.0%
Totals for Area of Interest			16.5	100.0%

Description

This rating indicates the percentage of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is rated based on its respective components and the percentage of each component within the map unit.

The thematic map is color coded based on the composition of hydric components. The five color classes are separated as 100 percent hydric components, 66 to 99 percent hydric components, 33 to 65 percent hydric components, 1 to 32 percent hydric components, and less than one percent hydric components.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

APPENDIX II- VEGETATION LISTS

Table 1. Species list including scientific and common name, wetness indicator code (WET), wetness co-efficient (W), conservation co-efficient (C), nativity, habit, and occurrence of species identified at Haslett Village project site - Lawn with scattered landscape trees

Scientific Name	Common Name	WET	W	C	Native	Habit	Occurrence
<i>Agrostis gigantea</i>	Redtop	FACW	-3	*	No	Herb	Common
<i>Asclepias syriaca</i>	Common Milkweed	UPL	5	1	Yes	Herb	Infrequent
<i>Bromus inermis</i>	Smooth Brome	UPL	5	*	No	Herb	Common
<i>Cirsium arvense</i>	Field Thistle	FACU	3	*	No	Herb	Occasional
<i>Dactylis glomerata</i>	Orchard Grass	FACU	3	*	No	Herb	Common
<i>Daucus carota</i>	Queen Anne's Lace	UPL	5	*	No	Herb	Occasional
<i>Elaeagnus umbellata</i>	Autumn-olive	FACU	3	*	No	Shrub	Common
<i>Morus alba</i>	White Mulberry	FACU	3	*	No	Tree	Infrequent
<i>Monarda fistulosa</i>	Wild Bergamot	FACU	3	2	Yes	Herb	Infrequent
<i>Picea abies</i>	Norway Spruce	UPL	5	*	No	Tree	Occasional
<i>Picea glauca</i>	White Spruce	FACU	3	3	Yes	Tree	Infrequent
<i>Pinus strobus</i>	White Pine	FACU	3	3	Yes	Tree	Infrequent
<i>Pinus sylvestris</i>	Scotch Pine	FACU	3	*	No	Tree	Infrequent
<i>Plantago major</i>	Common Plantain	FACU	3	*	No	Herb	Occasional
<i>Phalaris arundinacea</i>	Reed Canary Grass	FACW	-3	0	Yes	Herb	Occasional
<i>Phleum pratense</i>	Timothy	FACU	3	*	No	Herb	Occasional
<i>Poa compressa</i>	Canada bluegrass	FACU	3	*	No	Herb	Common
<i>Poa pratensis</i>	Kentucky bluegrass	FACU	3	*	No	Herb	Common
<i>Populus deltoides</i>	Cottonwood	FAC	0	1	Yes	Tree	Occasional
<i>Prunus serotina</i>	Black Cherry	FACU	3	2	Yes	Tree	Occasional
<i>Pyrus calleryana</i>	Callery Pear	FACU	3	*	No	Tree	Infrequent
<i>Rubus allegheniensis</i>	Blackberry	FACU	3	1	Yes	Herb	Occasional
<i>Rubus occidentalis</i>	Black Raspberry	UPL	5	1	Yes	Herb	Occasional
<i>Solidago altissima</i>	Tall Goldenrod	FACU	3	1	Yes	Herb	Occasional
<i>Solidago canadensis</i>	Canada Goldenrod	FACU	3	1	Yes	Herb	Common
<i>Torilis japonica</i>	Japanese hedge-parsley	FACU	3	*	No	Herb	Occasional
<i>Toxicodendron radicans</i>	Poison-ivy	FAC	0	2	Yes	Vine	Common
<i>Ulmus pumila</i>	Siberian Elm	FACU	3	*	No	Tree	Infrequent
<i>Verbena urticifolia</i>	White Vervain	FAC	0	4	Yes	Herb	Infrequent

Count = 29	Average Wetness Co-efficient =	2.62
	Average Conservation Co-efficient =	1.69

Table 2. Species list including scientific and common name, wetness indicator code (WET), wetness co-efficient (W), conservation co-efficient (C), nativity, habit, and occurrence of species identified at Haslett Village project site - Upland Forest/Scrub-shrub

Scientific Name	Common Name	WET	W	C	Native	Habit	Occurrence
<i>Acer negundo</i>	Box-elder	FAC	0	0	Yes	Tree	Common
<i>Acer saccharum</i>	Sugar Maple	FACU	3	5	Yes	Tree	Infrequent
<i>Acer saccharinum</i>	Silver Maple	FACW	-3	2	Yes	Tree	Infrequent
<i>Acer rubrum</i>	Red Maple	FAC	0	1	Yes	Tree	Infrequent
<i>Bromus inermis</i>	Smooth Brome	UPL	5	*	No	Herb	Common
<i>Carex pensylvanica</i>	Penn Sedge	UPL	5	4	Yes	Herb	Common
<i>Cornus amomum</i>	Silky Dogwood	FACW	-3	2	Yes	Shrub	Occasional
<i>Cornus foemina/racemosa</i>	Gray Dogwood	FAC	0	1	Yes	Shrub	Occasional
<i>Dactylis glomerata</i>	Orchard Grass	FACU	4	*	No	Herb	Common
<i>Elaeagnus umbellata</i>	Autumn-olive	FACU	3	*	No	Shrub	Common
<i>Fragaria virginiana</i>	Wild Strawberry	FACU	3	2	Yes	Herb	Occasional
<i>Fraxinus nigra</i>	Black Ash	FACW	-3	6	Yes	Tree	Infrequent
<i>Fraxinus pennsylvanica</i>	Green Ash	FACW	-3	2	Yes	Tree	Common
<i>Geum canadense</i>	White Avens	FAC	0	1	Yes	Herb	Occasional
<i>Hesperis matronalis</i>	Dame's Rocket	FACU	3	*	No	Herb	Common
<i>Juniperus virginiana</i>	Red cedar	FACU	3	2	Yes	Tree	Infrequent
<i>Lonicera maackii</i>	Amur honeysuckle	UPL	5	*	No	Shrub	Common
<i>Lonicera tatarica</i>	Tartarian honeysuckle	FACU	3	*	No	Shrub	Common
<i>Malus spp.</i>	Crabapple/Apple	UPL	5	*	No	Tree	Infrequent
<i>Parthenocissus quinquefolia</i>	Virginia creeper	FACU	3	5	Yes	Vine	Common
<i>Pinus strobus</i>	White Pine	FACU	3	3	Yes	Tree	Common
<i>Pinus sylvestris</i>	Scotch Pine	FACU	3	*	No	Tree	Common
<i>Populus deltoides</i>	Cottonwood	FAC	0	1	Yes	Tree	Occasional
<i>Populus tremuloides</i>	Trembling Aspen	FAC	0	1	Yes	Tree	Infrequent
<i>Prunus serotina</i>	Black Cherry	FACU	3	2	Yes	Tree	Common
<i>Quercus alba</i>	White Oak	FACU	3	5	Yes	Tree	Infrequent
<i>Quercus rubra</i>	Red Oak	FACU	3	5	Yes	Tree	Occasional
<i>Quercus velutina</i>	Black Oak	UPL	5	6	Yes	Tree	Infrequent
<i>Rhamnus cathartica</i>	Common Buckthorn	FAC	0	*	No	Shrub	Common
<i>Robinia pseudoacacia</i>	Black Locust	FACU	3	*	No	Tree	Occasional
<i>Rosa multiflora</i>	Multiflora Rose	FACU	3	*	No	Shrub	Occasional
<i>Rubus allegheniensis</i>	Blackberry	FACU	3	1	Yes	Herb	Occasional
<i>Rubus occidentalis</i>	Black Raspberry	UPL	5	1	Yes	Herb	Common
<i>Solidago altissima</i>	Tall Goldenrod	FACU	3	1	Yes	Herb	Common
<i>Solidago canadensis</i>	Canada Goldenrod	FACU	3	1	Yes	Herb	Occasional
<i>Tilia americana</i>	Amerian Basswood	FACU	3	5	Yes	Tree	Infrequent
<i>Toxicodendron radicans</i>	Poison-Ivy	FAC	0	2	Yes	Vine	Common
<i>Ulmus americana</i>	American Elm	FACW	-3	1	Yes	Tree	Infrequent

Ulmus pumila	Siberian Elm	FACU	3	*	No	Tree	Occasional
Verbena urticifolia	White Vervain	FAC	0	4	Yes	Herb	Occasional
Vitis riparia	Riverbank Grape	FAC	0	3	Yes	Vine	Common

Count = 40

Average Wetness Co-efficient =

1.85

Average Conservation Co-efficient =

2.57

Table 3. Species list including scientific and common name, wetness indicator code (WET), wetness co-efficient (W), conservation co-efficient (C), nativity, habit, and occurrence of species identified at Haslett Village project site -Wetlands

Scientific Name	Common Name	WET	W	C	Native	Habit	Occurrence
<i>Acer negundo</i>	Box-elder	FAC	0	0	Yes	Tree	Common
<i>Acer saccharinum</i>	Silver Maple	FACW	-3	2	Yes	Tree	Occasional
<i>Acer rubrum</i>	Red Maple	FAC	0	1	Yes	Tree	Occasional
<i>Agrostis gigantea</i>	Redtop	FACW	-3	*	No	Herb	Common
<i>Carex bebbii</i>	Bebb's Sedge	OBL	-5	4	Yes	Herb	Occasional
<i>Carex bromoides</i>	Sedge	FACW	-3	6	Yes	Herb	Infrequent
<i>Carex intumescens</i>	Sedge	FACW	-3	3	Yes	Herb	Occasional
<i>Carex lupulina</i>	Sedge	FACW	-3	4	Yes	Herb	Infrequent
<i>Carex vulpinoidea</i>	Fox Sedge	OBL	-5	1	Yes	Herb	Occasional
<i>Cornus amomum</i>	Silky Dogwood	FACW	-3	2	Yes	Shrub	Occasional
<i>Cornus foemina/racemosa</i>	Gray Dogwood	FAC	0	1	Yes	Shrub	Occasional
<i>Epilobium coloratum</i>	Cinnamon Willow-herb	OBL	-5	3	Yes	Herb	Occasional
<i>Eutrochium maculatum</i>	Joe-pye-weed	OBL	-5	4	Yes	Herb	Infrequent
<i>Fraxinus nigra</i>	Black Ash	FACW	-3	6	Yes	Tree	Common
<i>Fraxinus pennsylvanica</i>	Green Ash	FACW	-3	2	Yes	Tree	Occasional
<i>Geum canadense</i>	White Avens	FAC	0	1	Yes	Herb	Occasional
<i>Geum rivale</i>	Purple Avens	OBL	-5	7	Yes	Herb	Infrequent
<i>Glyceria striata</i>	Fowl Manna Grass	OBL	-5	4	Yes	Herb	Occasional
<i>Ilex verticillata</i>	Michigan Holly	FACW	-3	5	Yes	Shrub	Infrequent
<i>Juncus dudleyi</i>	Dudley's Rush	FACW	-3	5	Yes	Herb	Occasional
<i>Juncus tenuis</i>	Path Rush	FAC	0	1	Yes	Herb	Occasional
<i>Lonicera maackii</i>	Amur honeysuckle	UPL	5	*	No	Shrub	Infrequent
<i>Lonicera tatarica</i>	Tartarian honeysuckle	FACU	3	*	No	Shrub	Infrequent
<i>Lythrum salicaria</i>	Purple Loosestrife	OBL	-5	*	No	Herb	Infrequent
<i>Onoclea sensibilis</i>	Sensitive Fern	FACW	-3	2	Yes	Fern	Occasional
<i>Persicaria virginiana</i>	Jumpseed	FAC	0	4	Yes	Herb	Occasional
<i>Phalaris arundinacea</i>	Reed canary grass	FACW	-3	0	Yes	Herb	Occasional
<i>Phragmites australis var. australis</i>	Common Reed	FACW	-3	*	No	Herb	Infrequent
<i>Populus deltoides</i>	Cottonwood	FAC	0	1	Yes	Tree	Common
<i>Populus tremuloides</i>	Trembling Aspen	FAC	0	1	Yes	Tree	Infrequent
<i>Quercus bicolor</i>	Swamp White Oak	FACW	-3	8	Yes	Tree	Infrequent
<i>Rhamnus cathartica</i>	Common Buckthorn	FAC	0	*	No	Shrub	Occasional
<i>Rosa multiflora</i>	Multiflora Rose	FACU	3	*	No	Shrub	Infrequent
<i>Rubus strigosus</i>	Red Raspberry	FAC	0	2	Yes	Herb	Common
<i>Salix nigra</i>	Black Willow	OBL	-5	5	Yes	Tree	Infrequent
<i>Sambucus canadensis</i>	Elderberry	FACW	-3	3	Yes	Shrub	Infrequent
<i>Solidago gigantea</i>	Late Goldenrod	FACW	-3	3	Yes	Herb	Common
<i>Symphotrichum lateriflorum</i>	Calico American-aster	FAC	0	2	Yes	Herb	Occasional
<i>Thelypteris palustris</i>	Marsh Fern	FACW	-3	2	Yes	Fern	Infrequent
<i>Toxicodendron radicans</i>	Poison-Ivy	FAC	0	2	Yes	Vine	Common
<i>Typha angustifolia</i>	Narrowleaf Cattail	OBL	-5	*	No	Herb	Infrequent
<i>Typha latifolia</i>	Broadleaf Cattail	OBL	-5	1	Yes	Herb	Infrequent
<i>Ulmus americana</i>	American Elm	FACW	-3	1	Yes	Tree	Occasional

Verbena urticifolia	White Vervain	FAC	0	4	Yes	Herb	Occasional
Vitis riparia	Riverbank Grape	FAC	0	3	Yes	Vine	Common

Count = 45	Average Wetness Co-efficient =	-
		2.07
	Average Conservation Co-efficient =	2.86

APPENDIX III

Marx Wetlands LLC Tree Survey Results

Tree Survey Data for Haslett Village Square, Meridian Twp., Ingham County Sorted by Species and DBH

<u>Tree No.</u>	<u>Tree Identification</u> <u>Common Name</u>	<u>Scientific Name</u>	<u>Size</u> <u>(DBH)</u>	<u>Condition</u>	<u>M?</u>	<u>Totals</u>
632	Cottonwood	<i>Populus deltoides</i>	25	Poor		Box Elder <i>Acer negundo</i>
633	Scotch Pine	<i>Pinus sylvestris</i>	15	Good		Silver Maple <i>Acer saccharinum</i>
634	Box Elder	<i>Acer negundo</i>	15	Fair		Green Ash <i>Fraxinus pennsylvanica</i>
635	Box Elder	<i>Acer negundo</i>	13	Fair		Black Walnut <i>Juglans nigra</i>
636	Box Elder	<i>Acer negundo</i>	15	Fair		Juniper <i>Juniperus virginiana</i>
637	Box Elder	<i>Acer negundo</i>	19	Fair		Norway Spruce <i>Picea abies</i>
638	Box Elder	<i>Acer negundo</i>	13	Good		Blue Spruce <i>Picea pungens</i>
639	Box Elder	<i>Acer negundo</i>	15	Good		Scotch Pine <i>Pinus sylvestris</i>
640	Box Elder	<i>Acer negundo</i>	15	Poor		Cottonwood <i>Populus deltoides</i>
641	Box Elder	<i>Acer negundo</i>	13	Fair		Black Cherry <i>Prunus serotina</i>
642	Cottonwood	<i>Populus deltoides</i>	12	Good		White Oak <i>Quercus alba</i>
643	Cottonwood	<i>Populus deltoides</i>	13	Good		Swamp White Oak <i>Quercus bicolor</i>
644	Cottonwood	<i>Populus deltoides</i>	16	Poor		American Elm <i>Ulmus americana</i>
645	Cottonwood	<i>Populus deltoides</i>	15	Good		Siberian Elm <i>Ulmus pumila</i>
646	Cottonwood	<i>Populus deltoides</i>	18	Good		
647	Box Elder	<i>Acer negundo</i>	13	Good		
648	Box Elder	<i>Acer negundo</i>	19	Good		
649	Box Elder	<i>Acer negundo</i>	17	Good		
650	Box Elder	<i>Acer negundo</i>	14	Good		
651	Box Elder	<i>Acer negundo</i>	14	Good		
652	Cottonwood	<i>Populus deltoides</i>	23	Good		
653	American Elm	<i>Ulmus americana</i>	26	Good		
654	Box Elder	<i>Acer negundo</i>	14, 14	Fair	M	
655	American Elm	<i>Ulmus americana</i>	15	Good		
656	Box Elder	<i>Acer negundo</i>	14	Fair		
657	American Elm	<i>Ulmus americana</i>	21	Good		
658	Box Elder	<i>Acer negundo</i>	13	Good		
659	Box Elder	<i>Acer negundo</i>	16	Fair		
660	Box Elder	<i>Acer negundo</i>	17, 14	Good	M	
661	Box Elder	<i>Acer negundo</i>	14	Good		
662	Cottonwood	<i>Populus deltoides</i>	13	Good		
663	Cottonwood	<i>Populus deltoides</i>	14	Good		
664	Cottonwood	<i>Populus deltoides</i>	12	Good		
665	Box Elder	<i>Acer negundo</i>	13	Good		
666	Silver Maple	<i>Acer saccharinum</i>	12	Fair		
667	American Elm	<i>Ulmus americana</i>	14	Good		
668	American Elm	<i>Ulmus americana</i>	15	Good		
669	Cottonwood	<i>Populus deltoides</i>	13	Fair		
670	American Elm	<i>Ulmus americana</i>	13	Good		
671	Cottonwood	<i>Populus deltoides</i>	18	Good		
672	Cottonwood	<i>Populus deltoides</i>	12	Good		
673	Box Elder	<i>Acer negundo</i>	14	Dead		
674	Black Cherry	<i>Prunus serotina</i>	12	Fair		
675	Green Ash	<i>Fraxinus pennsylvanica</i>	12	Fair		
676	Green Ash	<i>Fraxinus pennsylvanica</i>	12	Good		
677	American Elm	<i>Ulmus americana</i>	14	Fair		
679	Green Ash	<i>Fraxinus pennsylvanica</i>	16	Fair		
680	Scotch Pine	<i>Pinus sylvestris</i>	12	Good		
681	Siberian Elm	<i>Ulmus pumila</i>	19	Good		
682	Scotch Pine	<i>Pinus sylvestris</i>	14	Good		
683	Scotch Pine	<i>Pinus sylvestris</i>	12	Good		
684	Scotch Pine	<i>Pinus sylvestris</i>	12	Good		
685	Scotch Pine	<i>Pinus sylvestris</i>	12	Good		
686	Scotch Pine	<i>Pinus sylvestris</i>	13	Good		
687	Black Walnut	<i>Juglans nigra</i>	18	Good		
688	Scotch Pine	<i>Populus deltoides</i>	14	Good		
689	Scotch Pine	<i>Populus deltoides</i>	12	Good		
690	Scotch Pine	<i>Populus deltoides</i>	17	Good		
691	Norway Spruce	<i>Picea abies</i>	16	Good		
692	Norway Spruce	<i>Picea abies</i>	14	Good		
693	Norway Spruce	<i>Picea abies</i>	12	Good		
694	Scotch Pine	<i>Pinus sylvestris</i>	16	Good		
695	Norway Spruce	<i>Picea abies</i>	12	Good		
696	Norway Spruce	<i>Picea abies</i>	13	Good		
701	Norway Spruce	<i>Picea abies</i>	13	Good		
702	Norway Spruce	<i>Picea abies</i>	12	Good		
703	Norway Spruce	<i>Picea abies</i>	16	Good		
704	Scotch Pine	<i>Pinus sylvestris</i>	13	Good		
705	Cottonwood	<i>Populus deltoides</i>	13	Good		
706	Cottonwood	<i>Populus deltoides</i>	12	Good		
707	Cottonwood	<i>Populus deltoides</i>	13	Good		
708	Cottonwood	<i>Populus deltoides</i>	13	Good		
709	Cottonwood	<i>Populus deltoides</i>	16	Good		
710	Cottonwood	<i>Populus deltoides</i>	13	Good		

711	Norway Spruce	<i>Picea abies</i>	12	Good	
712	American Elm	<i>Ulmus americana</i>	13	Good	
713	Norway Spruce	<i>Picea abies</i>	17	Good	
714	Norway Spruce	<i>Picea abies</i>	13	Good	
715	Cottonwood	<i>Populus deltoides</i>	20	Good	
716	Cottonwood	<i>Populus deltoides</i>	21	Good	
717	Norway Spruce	<i>Picea abies</i>	14	Good	
718	Cottonwood	<i>Populus deltoides</i>	20	Good	
719	Cottonwood	<i>Populus deltoides</i>	19	Good	
720	Norway Spruce	<i>Picea abies</i>	13	Good	
721	Norway Spruce	<i>Picea abies</i>	15	Good	
722	Norway Spruce	<i>Picea abies</i>	12	Good	
723	Norway Spruce	<i>Picea abies</i>	16	Good	
724	Cottonwood	<i>Populus deltoides</i>	16	Good	
725	Cottonwood	<i>Populus deltoides</i>	16	Good	
726	Norway Spruce	<i>Picea abies</i>	16	Good	
727	Norway Spruce	<i>Picea abies</i>	17	Good	
728	Norway Spruce	<i>Picea abies</i>	16	Good	
729	Green Ash	<i>Fraxinus pennsylvanica</i>	13	Good	
730	Norway Spruce	<i>Picea abies</i>	15	Good	
731	Cottonwood	<i>Populus deltoides</i>	14	Fair	
732	Cottonwood	<i>Populus deltoides</i>	12,17	Good	M
733	Cottonwood	<i>Populus deltoides</i>	13	Good	
734	Norway Spruce	<i>Picea abies</i>	14	Good	
735	Norway Spruce	<i>Picea abies</i>	13	Good	
736	Norway Spruce	<i>Picea abies</i>	14	Good	
737	Norway Spruce	<i>Picea abies</i>	16	Good	
738	Cottonwood	<i>Populus deltoides</i>	12	Good	
739	Norway Spruce	<i>Picea abies</i>	16	Good	
740	Norway Spruce	<i>Picea abies</i>	18	Good	
741	Norway Spruce	<i>Picea abies</i>	15	Good	
742	Norway Spruce	<i>Picea abies</i>	13	Good	
743	Black Walnut	<i>Juglans nigra</i>	25	Fair	
744	Black Walnut	<i>Juglans nigra</i>	21	Good	
745	Scotch Pine	<i>Pinus sylvestris</i>	16	Good	
746	Norway Spruce	<i>Picea abies</i>	14	Good	
747	American Elm	<i>Ulmus americana</i>	15	Good	
748	Norway Spruce	<i>Picea abies</i>	14	Good	
749	Norway Spruce	<i>Picea abies</i>	17	Good	
750	Norway Spruce	<i>Picea abies</i>	13	Good	
751	Cottonwood	<i>Populus deltoides</i>	21	Good	
752	Cottonwood	<i>Populus deltoides</i>	24	Good	
753	Scotch Pine	<i>Pinus sylvestris</i>	18	Good	
754	Norway Spruce	<i>Picea abies</i>	13	Good	
755	Cottonwood	<i>Populus deltoides</i>	32	Good	
756	Box Elder	<i>Acer negundo</i>	16	Poor	
757	Box Elder	<i>Acer negundo</i>	16,15	Good	M
758	Box Elder	<i>Acer negundo</i>	13	Good	
759	Box Elder	<i>Acer negundo</i>	13	Fair	
760	Box Elder	<i>Acer negundo</i>	14	Poor	
761	Juniper	<i>Juniperus virginiana</i>	13	Good	
762	Juniper	<i>Juniperus virginiana</i>	16	Good	
763	Juniper	<i>Juniperus virginiana</i>	18	Good	
764	Box Elder	<i>Acer negundo</i>	12	Fair	
765	Scotch Pine	<i>Pinus sylvestris</i>	12	Good	
766	Scotch Pine	<i>Pinus sylvestris</i>	12	Good	
767	Box Elder	<i>Acer negundo</i>	16	Fair	
768	American Elm	<i>Ulmus americana</i>	13	Fair	
769	Blue Spruce	<i>Picea pungens</i>	12	Good	
770	Blue Spruce	<i>Picea pungens</i>	13	Good	
771	Green Ash	<i>Fraxinus pennsylvanica</i>	15	Fair	
772	Blue Spruce	<i>Picea pungens</i>	13	Good	
773	Green Ash	<i>Fraxinus pennsylvanica</i>	13	Poor	
774	Green Ash	<i>Fraxinus pennsylvanica</i>	12	Poor	
775	Cottonwood	<i>Populus deltoides</i>	12	Good	
776	Cottonwood	<i>Populus deltoides</i>	15	Good	
777	American Elm	<i>Ulmus americana</i>	14	Good	
778	Cottonwood	<i>Populus deltoides</i>	14	Fair	
779	American Elm	<i>Ulmus americana</i>	14	Good	
780	Box Elder	<i>Acer negundo</i>	12	Fair	
781	Black Cherry	<i>Prunus serotina</i>	13	Good	
782	Cottonwood	<i>Populus deltoides</i>	15	Good	
783	Cottonwood	<i>Populus deltoides</i>	13	Good	
784	Cottonwood	<i>Populus deltoides</i>	18	Good	
785	American Elm	<i>Ulmus americana</i>	16	Good	
786	Cottonwood	<i>Populus deltoides</i>	21	Good	
787	Cottonwood	<i>Populus deltoides</i>	13	Good	
788	Black Cherry	<i>Prunus serotina</i>	12,12	Good	M
789	Black Cherry	<i>Prunus serotina</i>	15	Good	

790	Cottonwood	<i>Populus deltoides</i>	12	Fair	
791	Black Cherry	<i>Prunus serotina</i>	17	Good	
792	Black Cherry	<i>Prunus serotina</i>	15	Good	
793	Cottonwood	<i>Populus deltoides</i>	17	Good	
794	Black Cherry	<i>Prunus serotina</i>	18	Good	
795	Green Ash	<i>Fraxinus pennsylvanica</i>	25	Good	
796	Black Cherry	<i>Prunus serotina</i>	24	Good	
797	Box Elder	<i>Acer negundo</i>	24	Fair	
798	Black Cherry	<i>Prunus serotina</i>	18	Fair	
799	Black Cherry	<i>Prunus serotina</i>	12	Fair	
800	Black Cherry	<i>Prunus serotina</i>	16	Good	
941	White Oak	<i>Quercus alba</i>	17	Good	
942	Black Cherry	<i>Prunus serotina</i>	15	Fair	
943	Box Elder	<i>Acer negundo</i>	13	Fair	
944	Black Cherry	<i>Prunus serotina</i>	14	Fair	
945	Black Cherry	<i>Prunus serotina</i>	23	Fair	
946	Black Cherry	<i>Prunus serotina</i>	19	Fair	
947	Black Cherry	<i>Prunus serotina</i>	13	Fair	
948	Black Cherry	<i>Prunus serotina</i>	16	Good	
949	Black Cherry	<i>Prunus serotina</i>	19	Good	
950	Box Elder	<i>Acer negundo</i>	17	Good	
951	Swamp White Oak	<i>Quercus bicolor</i>	32	Poor	
952	Black Cherry	<i>Prunus serotina</i>	18	Fair	
953	Black Cherry	<i>Prunus serotina</i>	13	Good	
954	Black Cherry	<i>Prunus serotina</i>	24	Good	
955	American Elm	<i>Ulmus americana</i>	14	Poor	
956	Black Cherry	<i>Prunus serotina</i>	16	Fair	
957	Black Cherry	<i>Prunus serotina</i>	13	Fair	
958	Swamp White Oak	<i>Quercus bicolor</i>	17	Poor	
959	American Elm	<i>Ulmus americana</i>	12	Good	
960	Box Elder	<i>Acer negundo</i>	12	Poor	
961	Black Cherry	<i>Prunus serotina</i>	14	Fair	
962	Black Cherry	<i>Prunus serotina</i>	12	Poor	
963	Black Cherry	<i>Prunus serotina</i>	15	Good	
964	Black Cherry	<i>Prunus serotina</i>	12	Good	
965	Black Cherry	<i>Prunus serotina</i>	16	Good	
966	Black Cherry	<i>Prunus serotina</i>	13	Good	
967	American Elm	<i>Ulmus americana</i>	15	Fair	
968	Swamp White Oak	<i>Quercus bicolor</i>	13,12	Poor	M
969	Cottonwood	<i>Populus deltoides</i>	13	Good	
970	Cottonwood	<i>Populus deltoides</i>	21	Good	
971	Cottonwood	<i>Populus deltoides</i>	16	Good	
972	Cottonwood	<i>Populus deltoides</i>	12	Good	
973	Cottonwood	<i>Populus deltoides</i>	16,14	Good	M
974	Cottonwood	<i>Populus deltoides</i>	20	Good	
975	Cottonwood	<i>Populus deltoides</i>	16	Good	
976	Cottonwood	<i>Populus deltoides</i>	18	Good	
977	Cottonwood	<i>Populus deltoides</i>	14	Good	
978	Cottonwood	<i>Populus deltoides</i>	18	Good	
979	Cottonwood	<i>Populus deltoides</i>	17	Good	
980	Cottonwood	<i>Populus deltoides</i>	17	Fair	
981	Black Walnut	<i>Juglans nigra</i>	22	Good	
982	Cottonwood	<i>Populus deltoides</i>	17	Good	

APPENDIX IV

Marx Wetlands LLC Wetland Determination and Delineation Report (Dated October 30, 2019)



MARX
WETLANDS
LLC

October 30, 2019

Mr. Greg Petru
KEBS, Inc.
2116 Haslett Road
Haslett, MI 48840

Re: **Wetland Delineation Report: Haslett and Marsh Roads– Haslett Village
Parcels #33-02-02-10-401-003 and 33-02-02-10-402-001
Section 10, Meridian Township, Ingham County, Michigan**

Dear Mr. Petru:

Pursuant to your request, Marx Wetlands LLC (MW) conducted a wetland delineation and determination for the above-referenced project, which includes an approximately 15-acre Assessment Area that spans two (2) parcels: #33-02-02-10-401-003 (1673 Haslett Road; partially commercial/vacant) and #33-02-02-10-402-001(1659 Raby Road; partially vacant/residential). The Site is located directly south of Haslett Road and approximately 0.15 miles west of its intersection with Marsh Road within Section 10 of Meridian Township (T4N, R1W), Ingham County, Michigan.

The intent of this wetland delineation and determination is to provide a report of the character of any wetland areas within the Site and an opinion as to the possible jurisdiction of the Michigan Department of Energy, Great Lakes, and Environment (EGLE) and/or local governances over wetland areas identified on-site. The wetland determination was performed in accordance with the Michigan Department of Environmental Quality Wetland Identification Manual (2001), the Northcentral-Northeast and Midwest Interim Regional Supplements to the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual. The delineation of any wetland depends on three basic parameters. These parameters are: 1) the presence of hydrophytic vegetation (plants adapted to living in saturated soils), 2) hydric soils (distinctive soil types that develop under saturated conditions), and 3) wetland hydrology (the presence of water at or near the surface for a specific period of time). The above parameters are virtually always inter-related and present in wetland systems. The wetland determination and delineation consisted of desktop review of available background documentation and mapping followed by one (1) on-site visit conducted on October 19, 2019. A review of the findings is provided below.

Site Characteristics

Based on review of aerial photographs, available on-line resources, and an on-site visit, the Assessment Area consists of approximately 15 acres of vacant land. An existing shopping center with mowed upland lawn areas occupies most of the northern parcel, except for a vacant strip on the west end of the parcel. The southern parcel is mostly vacant as well with mowed paths and a paved trail along the west end. The vacant parts of the Assessment Area contains primarily upland scrub-shrub/forest, and wetland areas. The general topography of the Site is rolling with some relatively steep slopes.

3309 Platt Road
Ann Arbor, Michigan
Mobile: 734-478-8277
e-mail:
bg.marxwetlands@gmail.com

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The upland lawn areas generally contain bluegrasses (*Poa compressa* and *P. pratensis*), field thistle (*Cirsium arvense*), smooth brome (*Bromus inermis*), and goldenrods (*Solidago altissima* and *S. canadensis*).

The upland forested and scrub-shrub areas were observed along the steep slopes or ridges. These areas generally contain oaks (*Quercus alba* and *Q. rubra*), black walnut (*Juglans nigra*), black cherry (*Prunus serotina*), cottonwood (*Populus deltoides*), box-elder (*Acer negundo*), scattered with sugar maple (*Acer saccharum*), trembling aspen (*Populus tremuloides*), American elm (*Ulmus americana*), Scotch pine (*Pinus sylvestris*), white pine (*Pinus strobus*), white mulberry (*Morus alba*), hawthorn (*Crataegus spp.*), Siberian elm (*Ulmus pumila*), Norway spruce (*Picea abies*), and ash (*Fraxinus spp.*) trees. Upland herbaceous understory or forest opening species include strawberry (*Fragaria virginiana*), wild geranium (*Geranium maculatum*), white avens (*Geum canadense*), penn sedge (*Carex pennsylvanica*), wild-bergamont (*Monarda fistulosa*), and hedge-parsley (*Torilis japonica*). Upland shrub and vine species include common blackberry (*Rubus allegheniensis*), multiflora rose (*Rosa multiflora*), Japanese barberry (*Berberis thunbergii*), Eurasian honeysuckles (*Lonicera spp.*), common buckthorn (*Rhamnus cathartica*), autumn-olive (*Elaeagnus umbellata*), Virginia creeper (*Parthenocissus quinquefolia*), and black raspberry (*Rubus occidentalis*). Refer to the enclosed *Site Photographs Log*.

Wetland Determination & Delineation

Six (6) Wetlands (Wetlands A1, A2, B, C, D, and E) were identified within or along the Assessment Area. No ponds or watercourses were observed within the Assessment Area. Refer to the enclosed *Wetland Map* (Prepared by KEBS, Inc.) for the locations of the on-site wetlands and *USACE Wetland Determination Data Forms*. See Table 1, Natural Features Table below, for feature name, type, regulatory statuses for State of Michigan and Meridian Township.

Table 1. Natural Features Table

Feature Name	Type*	On-site Acreage (AC)	Regulated by the State of Michigan?	Meridian Township Regulated?
Wetland A1	PEM/PSS/PFO	0.02 AC	Yes; > 5 acres in size (includes off-site acreage) & connection to Pine Lake Outlet	Likely
Wetland A2	PEM/PSS/PFO	0.24 AC	Yes; > 5 acres in size (includes off-site acreage) & connection to Pine Lake Outlet	Likely
Wetland B	PEM/PSS/PFO	2.64 AC (West) 5.63 AC (Overall)	Yes; > 5 acres in size (includes off-site acreage)	Likely
Wetland C/Detention Basin	PEM	0.11 AC	Not Likely	Not Likely
Wetland D	PFO	0.18 AC	Not Likely	Not Likely
Wetland E	PFO	0.02 AC	Not Likely	Not Likely

*PEM- Emergent; PSS- Scrub-shrub; PFO-Forested

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Vegetation

Wetlands A1, A2, and B are multi-classified wetlands consisting of emergent, scrub-shrub, and forested components and were identified along the western portions of the Site. These wetlands extend off-site and appear connected to a large wetland system associated with the Pine Lake Outlet Drain. Although, Wetland B is separated by a paved path, it appears to be contiguous to this large off-site wetland system.

Herbaceous vegetation generally observed within Wetlands A1, A2, and B include reed canary grass (*Phalaris arundinacea*), fowl manna grass (*Glyceria striata*), late goldenrod (*Solidago gigantea*), calico aster (*Symphotrichum lateriflorum*), redtop (*Agrostis gigantea*), sedges (*Carex bromoides*, *C. intumescens*, *C. lupulina*, and *C. vulpinoidea*), and black ash saplings (*Fraxinus nigra*). Other less common herbaceous vegetation observed include sensitive fern (*Onoclea sensibilis*), white avens, jumpseed (*Persicaria virginiana*), marsh fern (*Thelypteris palustris*), and purple avens (*Geum rivale*). Common shrubs and vines observed include common buckthorn, dogwoods (*Cornus amomum* & *C. racemosa*), holly (*Ilex verticillata*), elderberry (*Sambucus canadensis*), and red raspberry (*Rubus strigosus*); vines include riverbank grape (*Vitis riparia*) and poison-ivy (*Toxicodendron radicans*). Tree species include cottonwood, silver maple (*Acer saccharinum*), American elm, box-elder, and swamp white oak (*Quercus bicolor*).

Wetland C is an emergent wetland that appears to have been constructed as a detention basin and is approximately 0.11 acre in size. This area is located directly south of the southwest corner of the paved parking area associated with the existing shopping center. The dominant wetland vegetation includes broadleaf cattail (*T. latifolia*), reed canary grass, purple loosestrife (*Lythrum salicaria*), cinnamon willow-herb (*Epilobium coloratum*), Joe-pye-weed (*Eutrochium maculatum*), black ash saplings, and black willow (*Salix nigra*). A catch basin and outlet/inlet pipe was also observed along the wetland's southern boundary.

Wetlands D and E are small depressional, forested wetlands with a minor scrub-shrub component contained entirely within the Assessment Area. Dominant wetland vegetation includes common buckthorn, dogwoods (*Cornus amomum* and *C. racemosa*), box-elder, swamp white oak, and silver maple. Scattered herbaceous vegetation observed include white avens, rushes (*Juncus dudleyi* and *J. tenuis*), and sedges (*Carex bebbi* & *C. intumescens*). Woody vines observed include poison-ivy and river-bank grape.

Hydrology

Typical hydrology indicators observed include saturation, water-stained leaves, water marks, geomorphic position, and FAC Neutral Test. These wetlands appear to receive hydrology from precipitation (including snowmelt), runoff from adjacent developed areas, and roadways, and overflow adjacent wetlands, resulting in seasonally saturated to seasonally inundated water regimes.

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Soils

Hydric soil indicators were observed in soil sample pits within each of the wetlands. Please refer to enclosed USACE Wetland Determination Data Forms.

Regulations & Recommendations

Part 301, Inland Lakes and Streams, states that a feature is considered a regulated watercourse by the EGLE if it possesses a defined bed, bank, and evidence of continued flow or a continued occurrence of water. No watercourses or ponds were identified within the Assessment Area or overall Site.

Part 303, Wetlands Protection, of the NREPA states that if a wetland is five acres in size or larger and/or connected to or located within 500 feet of a river, stream, lake, or pond, it is considered regulated by the EGLE.

Marx Wetlands, LLC has the professional opinion that three (3) wetlands (Wetlands A1, A2, and B) are likely regulated by the EGLE. Wetlands A1, A2, and B extend off-site, presumably connecting and appear larger than 5 acres in size. In addition, these wetlands are also contiguous to a regulating watercourse (Pine Lake Outlet Drain). Wetlands C, D, and E are less than 5 acres in size and appear isolated (i.e., not connected and/or within 500 feet of a regulating feature). Therefore, Marx Wetlands LLC has the professional opinion that Wetlands A1, A2, and B appear to meet the requirements of Part 303, Wetlands Protection, of the NREPA, and therefore likely fall under the jurisdiction of the EGLE.

A permit is required by the EGLE for any proposed work that takes place within the boundaries of a regulated wetland. Most construction activities that take place outside of these boundaries do not require a wetland permit from the EGLE. **The EGLE has the final authority on the extent, size, shape, and regulatory status of wetlands, lakes, and streams in the State of Michigan.**

Local Regulations

In addition, Meridian Township (Township) has its own wetland protection ordinance. The township's Wetland Protection ordinance (Chapter 22, Article IV) states that wetlands are protected if they are:

- contiguous to any inland lake stream, river, or pond.
- Partially or entirely within 500 feet of the ordinary high-water mark of any inland lake, stream, river or pond.
- Two or more areas of wetland separated only by barriers, such as dikes, roads, berms or other similar features, if any of those wetlands are contiguous to an inland lake, stream, river or pond.
- larger than two acres, even if not contiguous to an inland lake, stream, river or pond.

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- not contiguous to any inland lake, stream, river or pond, if the state department of environmental quality determines the protection of the wetland is essential to the preservation of the natural resources of the state from pollution, impairment or destruction.
- wetlands, equal to or greater than one-quarter acre and equal to or less than two acres in size, which are not contiguous to any inland lake, stream, river or pond and are determined to be essential to the preservation of the natural resources of the Township as provided in township code § 22-156. Code § 22-156 provides that a wetland is essential to the preservation of the township's natural resources if it fulfills any of ten criteria.

It is the professional opinion of Marx Wetlands LLC that Wetlands A1, A2, and B are also likely regulated by Meridian Township.

Wetlands C, D and E appear to be less than 0.25 acres in size and do not appear to be within 500 feet of any regulating water body. Pine Lake Outlet Drain is further than 500 linear feet from these wetlands. In addition, there is a small pond south of the railroad tracks; however, it appears to be less than 1 acre in size and may not qualify as a regulating water body. Please note that Meridian Township's wetland consultant will make the final decision regarding the regulatory statuses, shape, and extent of the on-site wetlands during a wetland verification visit.

It is important to note that the Meridian Township Board has a policy of no net loss of wetlands and impacts to wetlands may require wetland mitigation. A mitigation plan, if required, shall be approved as part of the wetland use permit decision.

A permit or approval is likely required by the Meridian Township for any proposed work (e.g., filling, dredging, construction, and draining and/or other development) that takes place within the boundaries of a regulated wetland. Most construction activities that take place outside of these boundaries do not require a wetland permit from the EGLE or Meridian Township. **Please note that the EGLE and Township have the final authority on the extent of regulated wetlands, lakes, and streams in the State of Michigan and Meridian Township, respectively.**

Please be advised that the information provided in this report is a professional opinion. The ultimate decision on wetland boundary locations and jurisdiction thereof rests with the EGLE and/or local government, and, in some cases, the federal government. Therefore, there may be adjustments to boundaries based upon review by a regulatory agency. An agency determination can vary depending on various factors including, but not limited to, experience of the agency representative making the determination and the season of the year. In addition, the physical characteristics of the site can change over time, depending on the

October 30, 2019

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weather, vegetation patterns, drainage, activities on adjacent parcels, or other events. Any of these factors can change the nature and/or extent of wetlands on the site.

Thank you for the opportunity to provide this wetland delineation and determination. If you have any questions, please contact me at your convenience.

Sincerely,



Marx Wetlands LLC
Bryana J. Guevara, PWS 2949
ISA Certified Arborist #MI-4240A

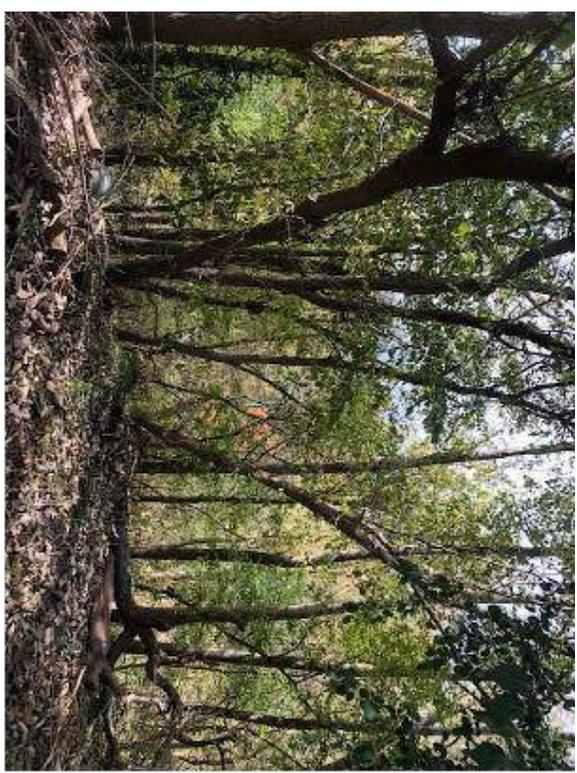
Enclosures:

1. Site Photographs Log
2. Wetland Sketch/Map
3. Wetland Determination Data Forms

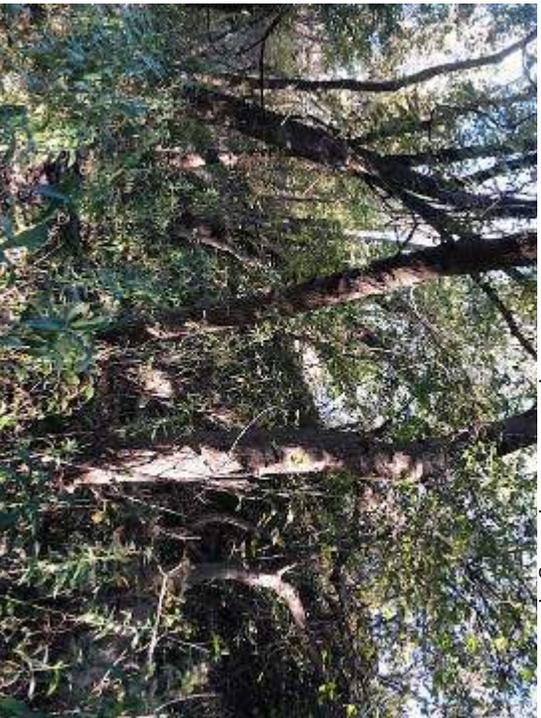
Site Photographs



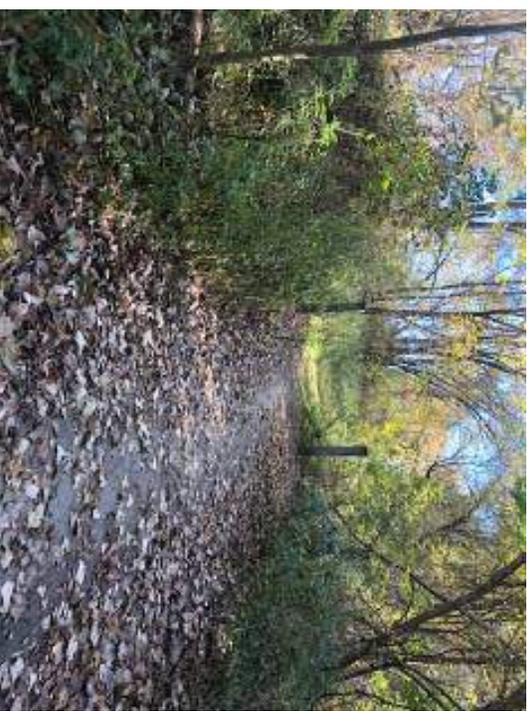
1) A north-facing view of the existing shopping center building and paved parking infrastructure observed within the northern parcel. Landscaped trees and mowed lawn are also depicted in this photograph.



2) View of upland, wooded slope observed directly west of the existing shopping center, which slopes down to the on-site wetlands (Wetlands A1, A2, and B).

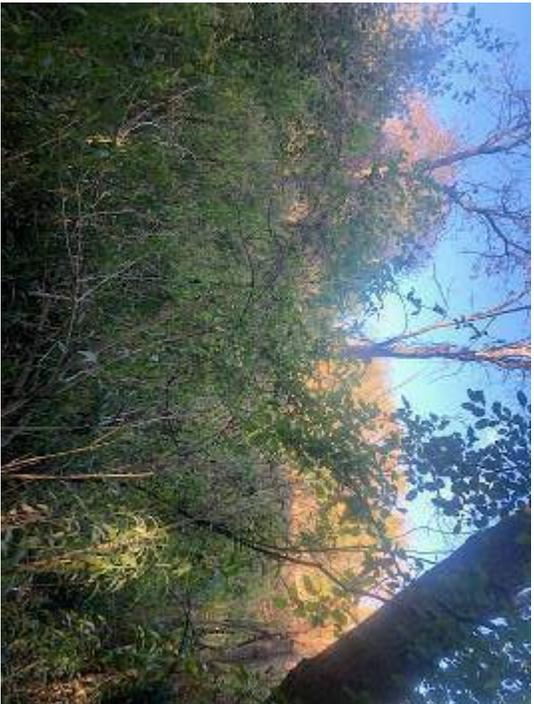


3) A typical view of upland forest/scrub-shrub observed throughout the Site.



4) A typical view of the existing trail, which transects the south-central portion of the Site. This trail is paved and mowed in segments.

Site Photographs



5) A west-facing view of Wetland A1, extending west off-site.



6) A north-facing view of Wetland A2, extending west off-site.



7) A west-facing view of Wetland B, a forested wetland system observed in the western and southern portions of the overall Site.



8) View of the emergent component of Wetland B observed along the southern boundary of the Site.

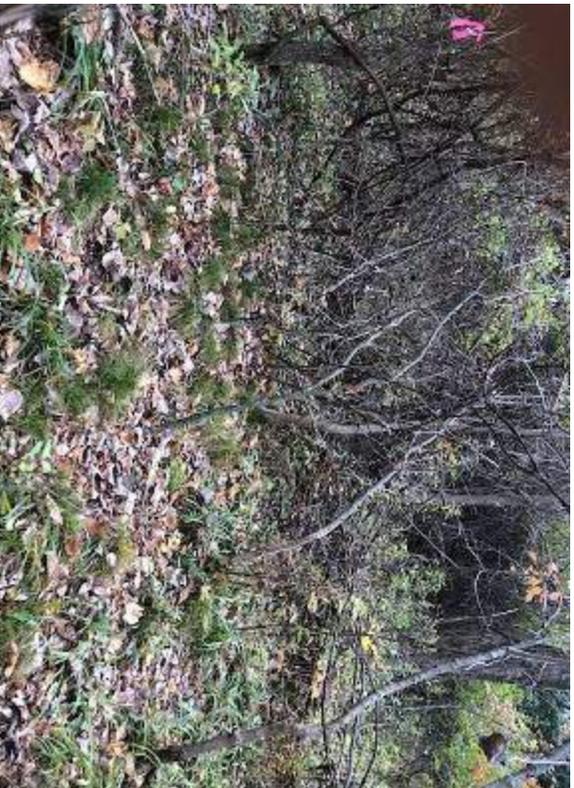
Site Photographs



9) A north-facing view of Wetland C/Possible Stormwater Facility.



10) View of existing outlet/inlet pipe identified within Wetland C/Possible Stormwater Facility.



11) A north-facing view of Wetland D observed in the eastern portion of the Site.



12) An east-facing view of Wetland E. Watermarks and water-stained leaves were observed as the main hydrological indicators.

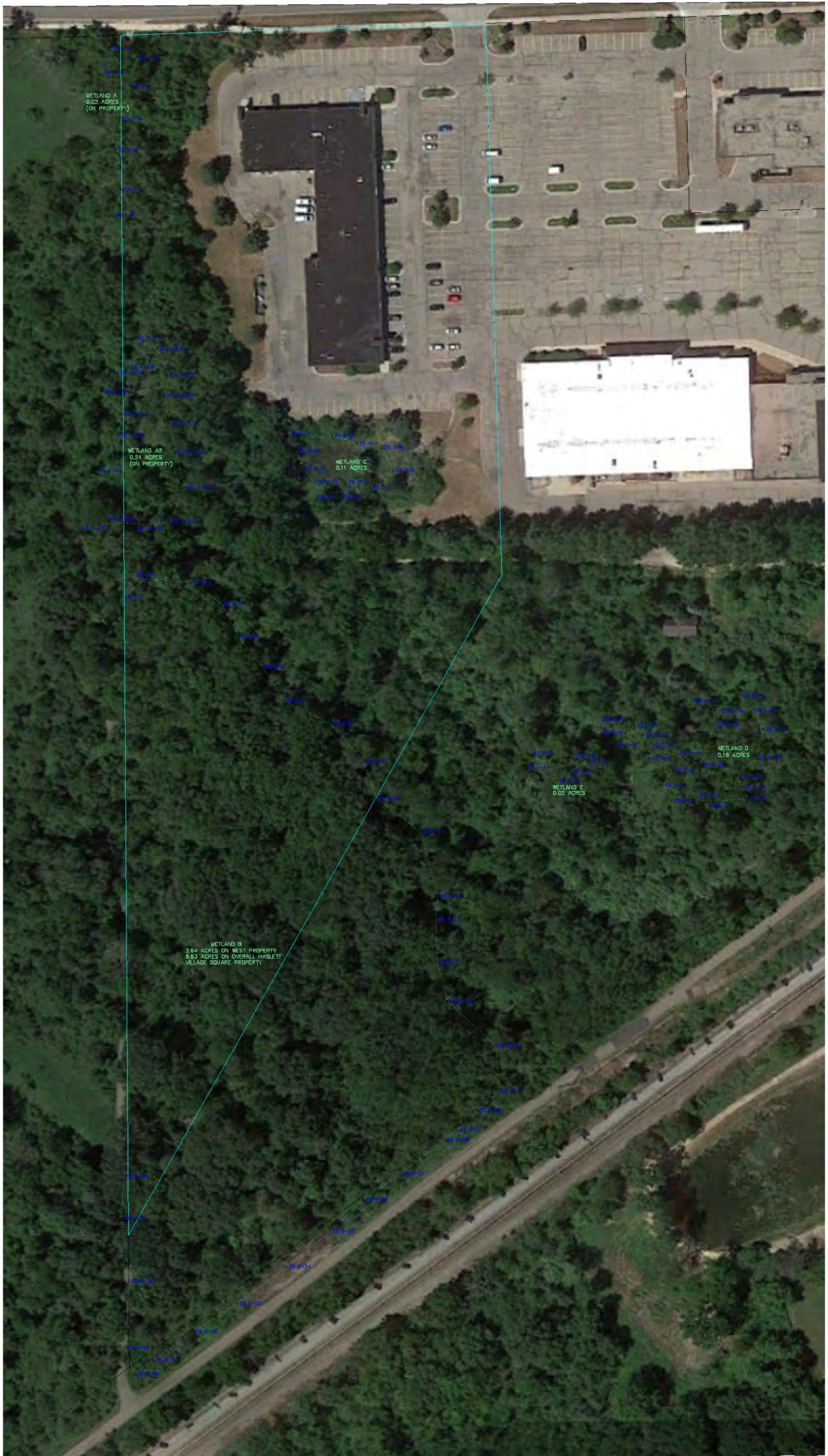
Site Photographs



13) A typical soil sample observed within the onsite Wetlands A1, A2, and B. A dark brown (10YR 2/1 matrix).



14) A Soil sample taken within Wetland E, which depicts the hydric soil indicator F3- Depleted Matrix.



ES A-2
ES A-3
ES A-4
ES A-5
ES A-6
ES A-7
ES A-8
WETLAND A
0.02 ACRES
(ON PROPERTY)

ES A-17
ES A-18
ES A-19
ES A-20
ES A-21
ES A-22
ES A-23
ES A-24
ES A-25
ES A-26
ES A-27
ES A-28
ES A-29
ES A-30
ES A-31
ES A-32
ES A-33
ES A-34
ES A-35
WETLAND A2
0.24 ACRES
(ON PROPERTY)

ES C-1
ES C-2
ES C-3
ES C-4
ES C-5
ES C-6
ES C-7
ES C-8
ES C-9
ES C-10
ES C-11
ES C-12
WETLAND C
0.11 ACRES

ES B-1
ES B-2
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ES B-93
ES B-94
ES B-95
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ES B-98
ES B-99
ES B-100
WETLAND B
2.64 ACRES ON WEST PROPERTY
5.63 ACRES ON OVERALL HASLETT
VILLAGE SQUARE PROPERTY

ES D-1
ES D-2
ES D-3
ES D-4
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WETLAND D
0.18 ACRES

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WETLAND E
0.02 ACRES

VEGETATION – Use scientific names of plants.

Sampling Point: A1

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30-ft radius</u>)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 9 </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> 100.0% </u> (A/B) Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: center;">Total % Cover of:</td> <td style="width:50%; text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u> 10 </u></td> <td>x 1 = <u> 10 </u></td> </tr> <tr> <td>FACW species <u> 160 </u></td> <td>x 2 = <u> 320 </u></td> </tr> <tr> <td>FAC species <u> 105 </u></td> <td>x 3 = <u> 315 </u></td> </tr> <tr> <td>FACU species <u> 0 </u></td> <td>x 4 = <u> 0 </u></td> </tr> <tr> <td>UPL species <u> 0 </u></td> <td>x 5 = <u> 0 </u></td> </tr> <tr> <td>Column Totals: <u> 275 </u></td> <td>(A) <u> 645 </u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u> 2.35 </u></td> </tr> </table> Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	Total % Cover of:	Multiply by:	OBL species <u> 10 </u>	x 1 = <u> 10 </u>	FACW species <u> 160 </u>	x 2 = <u> 320 </u>	FAC species <u> 105 </u>	x 3 = <u> 315 </u>	FACU species <u> 0 </u>	x 4 = <u> 0 </u>	UPL species <u> 0 </u>	x 5 = <u> 0 </u>	Column Totals: <u> 275 </u>	(A) <u> 645 </u> (B)	Prevalence Index = B/A = <u> 2.35 </u>	
Total % Cover of:	Multiply by:																			
OBL species <u> 10 </u>	x 1 = <u> 10 </u>																			
FACW species <u> 160 </u>	x 2 = <u> 320 </u>																			
FAC species <u> 105 </u>	x 3 = <u> 315 </u>																			
FACU species <u> 0 </u>	x 4 = <u> 0 </u>																			
UPL species <u> 0 </u>	x 5 = <u> 0 </u>																			
Column Totals: <u> 275 </u>	(A) <u> 645 </u> (B)																			
Prevalence Index = B/A = <u> 2.35 </u>																				
1. <u>Populus deltoides</u>	30	Yes	FAC																	
2. <u>Acer negundo</u>	20	Yes	FACW																	
3. <u>Ulmus americana</u>	10	No	FACW																	
4. <u>Fraxinus nigra</u>	15	Yes	FACW																	
5. _____																				
6. _____																				
7. _____																				
	75	=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15-ft radius</u>)																				
1. <u>Frangula alnus</u>	15	Yes	FACW																	
2. <u>Rubus strigosus</u>	5	No	FACW																	
3. <u>Cornus racemosa</u>	10	No	FAC																	
4. <u>Rhamnus cathartica</u>	20	Yes	FAC																	
5. <u>Fraxinus nigra</u>	20	Yes	FAC																	
6. _____																				
7. _____																				
	70	=Total Cover																		
Herb Stratum (Plot size: <u>5-ft radius</u>)																				
1. <u>Phalaris arundinacea</u>	60	Yes	FACW																	
2. <u>Solidago gigantea</u>	15	No	FACW																	
3. <u>Geum canadense</u>	10	No	OBL																	
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	85	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30-ft radius</u>)																				
1. <u>Toxicodendron radicans</u>	25	Yes	FAC																	
2. <u>Vitis riparia</u>	20	Yes	FACW																	
3. _____																				
4. _____																				
	45	=Total Cover																		
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 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 <u> X </u> No <u> </u>																				
Remarks: (Include photo numbers here or on a separate sheet.)																				

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Haslett Village- Haslett & Marsh Roads City/County: Meridian Twp./Ingham Co. Sampling Date: 10/19/2019
 Applicant/Owner: KEBS, Inc. State: MI Sampling Point: A2
 Investigator(s): B.Guevara; Marx Wetlands LLC Section, Township, Range: Section 10; T4N, R1W
 Landform (hillside, terrace, etc.): lowland/depression Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L Lat: 42.746409 Long: -84.413028 Datum: WSG84
 Soil Map Unit Name: Houghton muck, 0 to 1 percent slopes NWI classification: PFO/PEM

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 <u> </u> Hydric Soil Present? Yes <u>x</u> No <u> </u> Wetland Hydrology Present? Yes <u>x</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>x</u> No <u> </u> If yes, optional Wetland Site ID: <u>Wetland A2</u>
Remarks: (Explain alternative procedures here or in a separate report.) 	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input checked="" type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input checked="" type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Water Table Present? Yes <u> </u> No <u>X</u> Depth (inches): <u> </u> Saturation Present? Yes <u>XX</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 	
Remarks: This wetland appears to receive hydrology from precipitation, groundwater, runoff from adjacent developed areas, and roadways, and overflow adjacent wetland, resulting in seasonally saturated to seasonally inundated water regime.	

VEGETATION – Use scientific names of plants.

Sampling Point: A2

	Absolute % Cover	Dominant Species?	Indicator Status																																	
Tree Stratum (Plot size: <u>30-ft radius</u>)																																				
1. <u>Fraxinus nigra</u>	10	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 9 </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> 100.0% </u> (A/B)																																
2. <u>Acer negundo</u>	20	Yes	FACW																																	
3. <u>Ulmus americana</u>	5	No	FACW																																	
4. _____																																				
5. _____																																				
6. _____																																				
7. _____																																				
	<u>35</u>	=Total Cover																																		
Sapling/Shrub Stratum (Plot size: <u>15-ft radius</u>)																																				
1. <u>Frangula alnus</u>	15	Yes	FACW	Prevalence Index worksheet: <table style="width:100%; border:none;"> <tr> <td style="text-align:right;">Total % Cover of:</td> <td style="text-align:center;"><u> 15 </u></td> <td style="text-align:right;">Multiply by:</td> <td style="text-align:center;"><u> 15 </u></td> </tr> <tr> <td>OBL species</td> <td style="text-align:center;"><u> 15 </u></td> <td>x 1 =</td> <td style="text-align:center;"><u> 15 </u></td> </tr> <tr> <td>FACW species</td> <td style="text-align:center;"><u> 120 </u></td> <td>x 2 =</td> <td style="text-align:center;"><u> 240 </u></td> </tr> <tr> <td>FAC species</td> <td style="text-align:center;"><u> 55 </u></td> <td>x 3 =</td> <td style="text-align:center;"><u> 165 </u></td> </tr> <tr> <td>FACU species</td> <td style="text-align:center;"><u> 0 </u></td> <td>x 4 =</td> <td style="text-align:center;"><u> 0 </u></td> </tr> <tr> <td>UPL species</td> <td style="text-align:center;"><u> 0 </u></td> <td>x 5 =</td> <td style="text-align:center;"><u> 0 </u></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align:center;"><u> 190 </u></td> <td>(A)</td> <td style="text-align:center;"><u> 420 </u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A =</td> <td></td> <td style="text-align:center;"><u> 2.21 </u></td> </tr> </table>	Total % Cover of:	<u> 15 </u>	Multiply by:	<u> 15 </u>	OBL species	<u> 15 </u>	x 1 =	<u> 15 </u>	FACW species	<u> 120 </u>	x 2 =	<u> 240 </u>	FAC species	<u> 55 </u>	x 3 =	<u> 165 </u>	FACU species	<u> 0 </u>	x 4 =	<u> 0 </u>	UPL species	<u> 0 </u>	x 5 =	<u> 0 </u>	Column Totals:	<u> 190 </u>	(A)	<u> 420 </u> (B)	Prevalence Index = B/A =			<u> 2.21 </u>
Total % Cover of:	<u> 15 </u>	Multiply by:	<u> 15 </u>																																	
OBL species	<u> 15 </u>	x 1 =	<u> 15 </u>																																	
FACW species	<u> 120 </u>	x 2 =	<u> 240 </u>																																	
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Column Totals:	<u> 190 </u>	(A)	<u> 420 </u> (B)																																	
Prevalence Index = B/A =			<u> 2.21 </u>																																	
2. <u>Rubus strigosus</u>	5	No	FACW																																	
3. <u>Cornus racemosa</u>	5	No	FAC																																	
4. <u>Rhamnus cathartica</u>	5	No	FAC																																	
5. <u>Fraxinus nigra</u>	20	Yes	FAC																																	
6. _____																																				
7. _____																																				
	<u>50</u>	=Total Cover																																		
Herb Stratum (Plot size: <u>5-ft radius</u>)																																				
1. <u>Phalaris arundinacea</u>	30	Yes	FACW	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. <u>Symphytichum lateriflorum</u>	15	Yes	FACW																																	
3. <u>Agrostis gigantea</u>	15	Yes	OBL																																	
4. _____																																				
5. _____																																				
6. _____																																				
7. _____																																				
8. _____																																				
9. _____																																				
10. _____																																				
11. _____																																				
12. _____																																				
	<u>60</u>	=Total Cover																																		
Woody Vine Stratum (Plot size: <u>30-ft radius</u>)																																				
1. <u>Toxicodendron radicans</u>	25	Yes	FAC	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 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.																																
2. <u>Vitis riparia</u>	20	Yes	FACW																																	
3. _____																																				
4. _____																																				
	<u>45</u>	=Total Cover																																		
<table style="width:100%; border:none;"> <tr> <td style="width:35%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:10%;"></td> <td style="width:35%;"> Hydrophytic Vegetation Present? Yes <u> X </u> No <u> </u> </td> </tr> </table>									Hydrophytic Vegetation Present? Yes <u> X </u> No <u> </u>																											
				Hydrophytic Vegetation Present? Yes <u> X </u> No <u> </u>																																

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

VEGETATION – Use scientific names of plants.

Sampling Point: B-1

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30-ft radius</u>)																				
1. <u><i>Acer saccharinum</i></u>	65	Yes	FACW	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u> 11 </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> 91.7% </u> (A/B)																
2. <u><i>Acer rubrum</i></u>	20	No	FAC																	
3. <u><i>Ulmus americana</i></u>	15	No	FACW																	
4. <u><i>Fraxinus nigra</i></u>	10	No	FACW																	
5. _____																				
6. _____																				
7. _____																				
	110	=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15-ft radius</u>)																				
1. <u><i>Frangula alnus</i></u>	10	Yes	FACW	Prevalence Index worksheet: <table style="width:100%; border:none;"> <tr> <td style="text-align:center;">Total % Cover of:</td> <td style="text-align:center;">Multiply by:</td> </tr> <tr> <td>OBL species <u> 35 </u></td> <td>x 1 = <u> 35 </u></td> </tr> <tr> <td>FACW species <u> 145 </u></td> <td>x 2 = <u> 290 </u></td> </tr> <tr> <td>FAC species <u> 80 </u></td> <td>x 3 = <u> 240 </u></td> </tr> <tr> <td>FACU species <u> 0 </u></td> <td>x 4 = <u> 0 </u></td> </tr> <tr> <td>UPL species <u> 0 </u></td> <td>x 5 = <u> 0 </u></td> </tr> <tr> <td>Column Totals: <u> 260 </u> (A)</td> <td><u> 565 </u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u> 2.17 </u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u> 35 </u>	x 1 = <u> 35 </u>	FACW species <u> 145 </u>	x 2 = <u> 290 </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> 260 </u> (A)	<u> 565 </u> (B)	Prevalence Index = B/A = <u> 2.17 </u>	
Total % Cover of:	Multiply by:																			
OBL species <u> 35 </u>	x 1 = <u> 35 </u>																			
FACW species <u> 145 </u>	x 2 = <u> 290 </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> 260 </u> (A)	<u> 565 </u> (B)																			
Prevalence Index = B/A = <u> 2.17 </u>																				
2. <u><i>Rubus strigosus</i></u>	5	No	FACW																	
3. <u><i>Cornus racemosa</i></u>	5	No	FAC																	
4. <u><i>Rhamnus cathartica</i></u>	10	Yes	FAC																	
5. <u><i>Fraxinus nigra</i></u>	20	Yes	FAC																	
6. _____																				
7. _____																				
	50	=Total Cover																		
Herb Stratum (Plot size: <u>5-ft radius</u>)																				
1. <u><i>Carex bromoides</i></u>	15	Yes	OBL	Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
2. <u><i>Symphyotrichum lateriflorum</i></u>	5	No	FACW																	
3. <u><i>Persicaria virginiana</i></u>	10	Yes	FAC																	
4. <u><i>Glyceria striata</i></u>	10	Yes	IBK																	
5. <u><i>Onoclea sensibilis</i></u>	10	Yes	FACW																	
6. <u><i>Carex lupulina</i></u>	10	Yes	OBL																	
7. <u><i>Geum rivale</i></u>	10	Yes	OBL																	
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	70	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30-ft radius</u>)																				
1. <u><i>Toxicodendron radicans</i></u>	15	Yes	FAC	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 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.																
2. <u><i>Vitis riparia</i></u>	25	Yes	FACW																	
3. _____																				
4. _____																				
	40	=Total Cover																		
				Hydrophytic Vegetation Present? Yes <u> X </u> No <u> </u>																

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

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Haslett Village- Haslett & Marsh Roads City/County: Meridian Twp./Ingham Co. Sampling Date: 10/19/2019
 Applicant/Owner: KEBS, Inc. State: MI Sampling Point: C-1
 Investigator(s): B.Guevara; Marx Wetlands LLC Section, Township, Range: Section 10; T4N, R1W
 Landform (hillside, terrace, etc.): lowland/depression Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L Lat: 42.745781 Long: -84.41206 Datum: WSG84
 Soil Map Unit Name: Urban land-Marlette complex, 2 to 12 percent slopes 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 <u> </u> Hydric Soil Present? Yes <u>x</u> No <u> </u> Wetland Hydrology Present? Yes <u>x</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>x</u> No <u> </u> If yes, optional Wetland Site ID: <u>Wetland C</u>
Remarks: (Explain alternative procedures here or in a separate report.) This area was flagged due to the predominance of wetland rated vegetation and the presence of hydric soils and hydrological indicators; however, it appears to be an existing stormwater facility.	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations: Surface Water Present? Yes <u>XX</u> No <u> </u> Depth (inches): <u>6</u> Water Table Present? Yes <u>XX</u> No <u> </u> Depth (inches): <u>2</u> Saturation Present? Yes <u>XX</u> No <u> </u> Depth (inches): <u>0</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>X</u> No <u> </u>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
 This wetland appears to receive hydrology from precipitation, groundwater, runoff from adjacent developed areas, and roadways, resulting in seasonally saturated to seasonally inundated water regime.

VEGETATION – Use scientific names of plants.

Sampling Point: C-1

	Absolute % Cover	Dominant Species?	Indicator Status																
Tree Stratum (Plot size: <u>30-ft radius</u>)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>8</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>88.9%</u> (A/B)															
1. <u>Populus deltoides</u>	10	Yes	FAC																
2. <u>Salix amygdaloides</u>	5	Yes	FACW																
3. <u>Salix nigra</u>	5	Yes	FACW																
4. _____																			
5. _____																			
6. _____																			
7. _____																			
	20	=Total Cover																	
Sapling/Shrub Stratum (Plot size: <u>15-ft radius</u>)																			
1. <u>Fraxinus nigra</u>	10	Yes	FACW																
2. _____																			
3. _____																			
4. _____																			
5. _____																			
6. _____																			
7. _____																			
	10	=Total Cover																	
Herb Stratum (Plot size: <u>5-ft radius</u>)																			
1. <u>Typha angustifolia</u>	35	Yes	OBL																
2. <u>Typha latifolia</u>	5	No	FACW																
3. <u>Lythrum salicaria</u>	10	No	FAC																
4. <u>Epilobium coloratum</u>	30	Yes	IBK																
5. <u>Eutrochium maculatum</u>	25	Yes	FACW																
6. <u>Verbena urtifolia</u>	10	No	OBL																
7. <u>Phalaris arundinacea</u>	10	No	OBL																
8. _____																			
9. _____																			
10. _____																			
11. _____																			
12. _____																			
	125	=Total Cover																	
Woody Vine Stratum (Plot size: <u>30-ft radius</u>)																			
1. <u>Toxicodendron radicans</u>	10	Yes	FAC																
2. <u>Vitis riparia</u>	10	Yes	FACW																
3. _____																			
4. _____																			
	20	=Total Cover																	
Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%; text-align:center;">Total % Cover of:</th> <th style="width:50%; text-align:center;">Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>55</u></td> <td>x 1 = <u>55</u></td> </tr> <tr> <td>FACW species <u>60</u></td> <td>x 2 = <u>120</u></td> </tr> <tr> <td>FAC species <u>30</u></td> <td>x 3 = <u>90</u></td> </tr> <tr> <td>FACU species <u>0</u></td> <td>x 4 = <u>0</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>145</u> (A)</td> <td><u>265</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align:center;">Prevalence Index = B/A = <u>1.83</u></td> </tr> </tbody> </table>				Total % Cover of:	Multiply by:	OBL species <u>55</u>	x 1 = <u>55</u>	FACW species <u>60</u>	x 2 = <u>120</u>	FAC species <u>30</u>	x 3 = <u>90</u>	FACU species <u>0</u>	x 4 = <u>0</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>145</u> (A)	<u>265</u> (B)	Prevalence Index = B/A = <u>1.83</u>	
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Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)																			
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																			
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<table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">Hydrophytic Vegetation Present?</td> <td style="width:20%; text-align:center;">Yes <input checked="" type="checkbox"/></td> <td style="width:20%; text-align:center;">No <input type="checkbox"/></td> </tr> </table>				Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>													
Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>																	
Remarks: (Include photo numbers here or on a separate sheet.)																			

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Haslett Village- Haslett & Marsh Roads City/County: Meridian Twp./Ingham Co. Sampling Date: 10/19/2019
 Applicant/Owner: KEBS, Inc. State: MI Sampling Point: D-1
 Investigator(s): B.Guevara; Marx Wetlands LLC Section, Township, Range: Section 10; T4N, R1W
 Landform (hillside, terrace, etc.): lowland/depression Local relief (concave, convex, none): concave Slope (%): 0-2
 Subregion (LRR or MLRA): LRR L Lat: 42.744875 Long: -84.409725 Datum: WSG84
 Soil Map Unit Name: Urban land-Marlette complex, 2 to 12 percent slopes NWI classification: PFO

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 <u> </u> Hydric Soil Present? Yes <u>x</u> No <u> </u> Wetland Hydrology Present? Yes <u>x</u> No <u> </u>	Is the Sampled Area within a Wetland? Yes <u>x</u> No <u> </u> If yes, optional Wetland Site ID: <u>Wetland D</u>
Remarks: (Explain alternative procedures here or in a separate report.) 	

HYDROLOGY

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

VEGETATION – Use scientific names of plants.

Sampling Point: D-1

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u> 30-ft radius </u>)				<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u> 12 </u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u> 12 </u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u> 100.0% </u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: center;">Total % Cover of:</td> <td style="width:50%; text-align: center;">Multiply by:</td> </tr> <tr> <td>OBL species <u> 55 </u></td> <td>x 1 = <u> 55 </u></td> </tr> <tr> <td>FACW species <u> 180 </u></td> <td>x 2 = <u> 360 </u></td> </tr> <tr> <td>FAC species <u> 60 </u></td> <td>x 3 = <u> 180 </u></td> </tr> <tr> <td>FACU species <u> 0 </u></td> <td>x 4 = <u> 0 </u></td> </tr> <tr> <td>UPL species <u> 0 </u></td> <td>x 5 = <u> 0 </u></td> </tr> <tr> <td>Column Totals: <u> 295 </u> (A)</td> <td><u> 595 </u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u> 2.02 </u></td> </tr> </table> <p>Hydrophytic Vegetation Indicators:</p> <p><u> </u> Rapid Test for Hydrophytic Vegetation</p> <p><input checked="" type="checkbox"/> Dominance Test is >50%</p> <p><input checked="" type="checkbox"/> Prevalence Index is ≤3.0¹</p> <p><u> </u> Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)</p> <p><u> </u> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p><small>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</small></p> <p>Definitions of Vegetation Strata:</p> <p>Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.</p> <p>Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.</p> <p>Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</p> <p>Woody vines – All woody vines greater than 3.28 ft in height.</p> <p>Hydrophytic Vegetation Present? Yes <u> X </u> No <u> </u></p>	Total % Cover of:	Multiply by:	OBL species <u> 55 </u>	x 1 = <u> 55 </u>	FACW species <u> 180 </u>	x 2 = <u> 360 </u>	FAC species <u> 60 </u>	x 3 = <u> 180 </u>	FACU species <u> 0 </u>	x 4 = <u> 0 </u>	UPL species <u> 0 </u>	x 5 = <u> 0 </u>	Column Totals: <u> 295 </u> (A)	<u> 595 </u> (B)	Prevalence Index = B/A = <u> 2.02 </u>	
Total % Cover of:	Multiply by:																			
OBL species <u> 55 </u>	x 1 = <u> 55 </u>																			
FACW species <u> 180 </u>	x 2 = <u> 360 </u>																			
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FACU species <u> 0 </u>	x 4 = <u> 0 </u>																			
UPL species <u> 0 </u>	x 5 = <u> 0 </u>																			
Column Totals: <u> 295 </u> (A)	<u> 595 </u> (B)																			
Prevalence Index = B/A = <u> 2.02 </u>																				
1. <u> <i>Acer saccharinum</i> </u>	<u> 25 </u>	<u> Yes </u>	<u> FACW </u>																	
2. <u> <i>Ulmus americana</i> </u>	<u> 10 </u>	<u> No </u>	<u> FACW </u>																	
3. <u> <i>Fraxinus nigra</i> </u>	<u> 20 </u>	<u> Yes </u>	<u> FACW </u>																	
4. <u> <i>Quercus bicolor</i> </u>	<u> 15 </u>	<u> No </u>	<u> FACW </u>																	
5. <u> <i>Populus deltoides</i> </u>	<u> 20 </u>	<u> Yes </u>	<u> FAC </u>																	
6. <u> </u>																				
7. <u> </u>																				
	<u> 90 </u>	=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u> 15-ft radius </u>)																				
1. <u> <i>Rhamnus cathartica</i> </u>	<u> 25 </u>	<u> Yes </u>	<u> FACW </u>																	
2. <u> <i>Fraxinus nigra</i> </u>	<u> 15 </u>	<u> Yes </u>	<u> FACW </u>																	
3. <u> <i>Frangula alnus</i> </u>	<u> 10 </u>	<u> Yes </u>	<u> FACW </u>																	
4. <u> </u>																				
5. <u> </u>																				
6. <u> </u>																				
7. <u> </u>																				
	<u> 50 </u>	=Total Cover																		
Herb Stratum (Plot size: <u> 5-ft radius </u>)																				
1. <u> <i>Carex bebbii</i> </u>	<u> 15 </u>	<u> Yes </u>	<u> OBL </u>																	
2. <u> <i>Carex grayii</i> </u>	<u> 15 </u>	<u> Yes </u>	<u> FACW </u>																	
3. <u> <i>Carex vulpinoidea</i> </u>	<u> 15 </u>	<u> Yes </u>	<u> OBL </u>																	
4. <u> <i>Juncus tenuis</i> </u>	<u> 15 </u>	<u> Yes </u>	<u> OBL </u>																	
5. <u> <i>Juncus dudleyii</i> </u>	<u> 10 </u>	<u> No </u>	<u> OBL </u>																	
6. <u> <i>Geum canadense</i> </u>	<u> 10 </u>	<u> No </u>	<u> FAC </u>																	
7. <u> </u>																				
8. <u> </u>																				
9. <u> </u>																				
10. <u> </u>																				
11. <u> </u>																				
12. <u> </u>																				
	<u> 80 </u>	=Total Cover																		
Woody Vine Stratum (Plot size: <u> 30-ft radius </u>)																				
1. <u> <i>Toxicodendron radicans</i> </u>	<u> 30 </u>	<u> Yes </u>	<u> FAC </u>																	
2. <u> <i>Vitis riparia</i> </u>	<u> 45 </u>	<u> Yes </u>	<u> FACW </u>																	
3. <u> </u>																				
4. <u> </u>																				
	<u> 75 </u>	=Total Cover																		

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

VEGETATION – Use scientific names of plants.

Sampling Point: E-1

	Absolute % Cover	Dominant Species?	Indicator Status																	
Tree Stratum (Plot size: <u>30-ft radius</u>)				<p>Dominance Test worksheet:</p> <p>Number of Dominant Species That Are OBL, FACW, or FAC: <u>7</u> (A)</p> <p>Total Number of Dominant Species Across All Strata: <u>8</u> (B)</p> <p>Percent of Dominant Species That Are OBL, FACW, or FAC: <u>87.5%</u> (A/B)</p> <p>Prevalence Index worksheet:</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%; text-align: center;">Total % Cover of:</td> <td style="width:50%; text-align: center;">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>80</u></td> <td>x 2 = <u>160</u></td> </tr> <tr> <td>FAC species <u>60</u></td> <td>x 3 = <u>180</u></td> </tr> <tr> <td>FACU species <u>30</u></td> <td>x 4 = <u>120</u></td> </tr> <tr> <td>UPL species <u>0</u></td> <td>x 5 = <u>0</u></td> </tr> <tr> <td>Column Totals: <u>170</u> (A)</td> <td><u>460</u> (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = <u>2.71</u></td> </tr> </table> <p>Hydrophytic Vegetation Indicators:</p> <p><u> </u> Rapid Test for Hydrophytic Vegetation</p> <p><input checked="" type="checkbox"/> Dominance Test is >50%</p> <p><input checked="" type="checkbox"/> Prevalence Index is ≤3.0¹</p> <p><u> </u> Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)</p> <p><u> </u> Problematic Hydrophytic Vegetation¹ (Explain)</p> <p><small>¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.</small></p> <p>Definitions of Vegetation Strata:</p> <p>Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.</p> <p>Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.</p> <p>Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.</p> <p>Woody vines – All woody vines greater than 3.28 ft in height.</p> <p>Hydrophytic Vegetation Present? Yes <u>X</u> No <u> </u></p>	Total % Cover of:	Multiply by:	OBL species <u>0</u>	x 1 = <u>0</u>	FACW species <u>80</u>	x 2 = <u>160</u>	FAC species <u>60</u>	x 3 = <u>180</u>	FACU species <u>30</u>	x 4 = <u>120</u>	UPL species <u>0</u>	x 5 = <u>0</u>	Column Totals: <u>170</u> (A)	<u>460</u> (B)	Prevalence Index = B/A = <u>2.71</u>	
Total % Cover of:	Multiply by:																			
OBL species <u>0</u>	x 1 = <u>0</u>																			
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Column Totals: <u>170</u> (A)	<u>460</u> (B)																			
Prevalence Index = B/A = <u>2.71</u>																				
1. <u>Rhamnus cathartica</u>	30	Yes	FACU																	
2. <u>Populus deltoides</u>	35	Yes	FAC																	
3. <u>Ulmus americana</u>	10	No	FACW																	
4. <u>Quercus bicolor</u>	10	No	FACW																	
5. <u>Populus tremuloides</u>	10	No	FAC																	
6. _____																				
7. _____																				
	95	=Total Cover																		
Sapling/Shrub Stratum (Plot size: <u>15-ft radius</u>)																				
1. <u>Rhamnus cathartica</u>	30	Yes	FACW																	
2. <u>Fraxinus nigra</u>	15	Yes	FACW																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
	45	=Total Cover																		
Herb Stratum (Plot size: <u>5-ft radius</u>)																				
1. <u>Geum canadense</u>	5	Yes	FAC																	
2. <u>Carex grayii</u>	5	Yes	FACW																	
3. _____																				
4. _____																				
5. _____																				
6. _____																				
7. _____																				
8. _____																				
9. _____																				
10. _____																				
11. _____																				
12. _____																				
	10	=Total Cover																		
Woody Vine Stratum (Plot size: <u>30-ft radius</u>)																				
1. <u>Toxicodendron radicans</u>	10	Yes	FAC																	
2. <u>Vitis riparia</u>	10	Yes	FACW																	
3. _____																				
4. _____																				
	20	=Total Cover																		

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



To: Planning Commission

From: Peter Menser, Principal Planner

Date: January 8, 2020

**Re: Mixed Use Planned Unit Development #19034 (Hudson Senior Living),
construct Pine Village senior apartment building at 1673 Haslett Road.**

The Planning Commission held the public hearing on MUPUD #19034 at its meeting on December 16, 2019. Since the public hearing the applicant has submitted a revised site plan that adds 24 bicycle parking spaces (12 racks), four parking spaces, identifies locations for 23 possible future parking spaces, and adds the extension of a branch of the Township's Inter-Urban pathway along the west side of the property. A revised sign plan was also submitted. Details on the revisions are provided below.

Bicycle Parking

12 bicycle parking spaces (six bicycle racks) were originally provided in different areas on the property. Since the public hearing the applicant has added 16 bicycle parking spaces (eight racks) to the site, for a total of 28 bicycle parking spaces (14 racks). The total number of required bicycle parking spaces has now been met and therefore removed as a waiver request.

Motor Vehicle Parking

The site plan has been revised to add four motor vehicle parking spaces to the project for a total of 105 proposed parking spaces. With the allowed bicycle parking reduction of 14 spaces, a total of 256 parking spaces are required for the project. Locations for 23 additional possible future parking spaces are identified on the plan but are not proposed for construction at this time and will not be counted towards total provided.

Interurban Pathway

The Interurban Pathway will encroach into the portion of the property located in the floodplain of the Pine Lake Drain. A special use permit (SUP) from the Planning Commission will be required for any grading or fill in the floodplain to facilitate the construction of the pathway. The SUP can be addressed after final consideration of the MUPUD by the Township Board and once a final design of the pathway is completed.

Freestanding Sign

The applicant had originally proposed a 65 square foot, five-foot tall monument sign for the project. For structures over 25,000 square feet but less than 150,000 square feet in size, freestanding signs five feet or less in height can be up to 38 square feet in size. The applicant has submitted a revised sign plan showing a 37.5 freestanding sign that now meets the ordinance, so the previously requested waiver for the sign has been removed.

Updated waiver request

The MUPUD ordinance generally waives the standard requirements for lot size, setbacks, type and size of dwelling unit, lot frontage, number of required parking spaces, and impervious surface coverage, provided the purpose and intent of the ordinance are incorporated into the overall development plan. Based on the submitted site plan the applicant is requesting the following waiver for the Pine Village project.

Parking

256 parking spaces are required for the project based on the number of residential units and salon in the building and the allowed reduction granted for bicycle parking. 105 parking spaces are proposed by the applicant. A waiver of 151 parking spaces is requested by the applicant.

Planning Commission Options

The Planning Commission may recommend approval, approval with conditions, or denial of the proposed MUPUD. The Planning Commission is required to make a recommendation on the MUPUD within 60 days of the date of the public hearing, which was held on December 16, 2019. A resolution to recommend approval of the MUPUD to the Township Board is provided.

- **Motion to adopt the resolution recommending approval of Mixed Use Planned Unit Development #19034 to construct a senior apartment building with 133 dwelling units at 1673 Haslett Road with conditions.**

Attachments

1. Revised site plan prepared by Kebs, Inc. dated October 7, 2019 (revision date January 6, 2020) and received by the Township on January 6, 2020.
2. Revised sign plan prepared by Shelter Design Studio LLC dated January 8, 2020 and received by the Township on January 8, 2020.
3. Resolution to recommend approval.

G:\Community Planning & Development\Planning\MIXED USE PLANNED UNIT DEVELOPMENTS (MUPUD)\2019\MUPUD 19034 (Hudson Senior Living)\MUPUD 19034.pc2.docx

MUPUD PLAN FOR: Pine Village of Meridian MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

APPLICANT:
HUDSON SENIOR LIVING, LLC
280 W. MAPLE RD.
BIRMINGHAM, MI. 48009
PH: (248) 540-9300

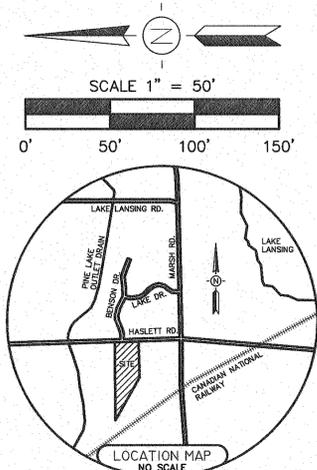
ENGINEER/SURVEYOR:
KEBS, Inc.
2116 HASLETT RD.
HASLETT, MI. 48840
PH: (517) 339-1014

LANDOWNER:
LTG HASLETT LLC.
1111 MICHIGAN AVE., SUITE 300
EAST LANSING, MI. 48823

LEGAL DESCRIPTION:

AS SURVEYED:
(The following legal description describes the same parcel of land as the provided description)

A parcel of land in the Southeast 1/4 of Section 10, T4N, R1W, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as: Commencing at the South 1/4 corner of said Section 10; thence N00°22'20"W along the North-South 1/4 line of said Section 10 a distance of 746.99 feet to the point of beginning of this description; thence continuing N00°22'20"W along said North-South 1/4 line 1509.68 feet to the South right-of-way line of Haslett Road, said South line being South of and 50.00 feet measured perpendicularly to the centerline of Haslett Road; thence N88°08'51"E along said South line 1124.95 feet to the West right-of-way line of Marsh Road, said West line being West of and 60.00 feet measured perpendicularly to the centerline of Marsh Road; thence along said West line S01°25'28"E 629.15 feet to the centerline of former Raby Road; thence N89°45'31"W along said centerline 20.01 feet to the West line of Marsh Road, said West line being West of and 80.00 feet measured perpendicularly to the centerline of Marsh Road; thence S01°25'28"E along said West line 83.28 feet to the Northerly line of a Consumers Energy tower line easement; thence along said Northerly line the following three courses: S54°02'30"W 638.21 feet, S46°14'05"W 124.14 feet, S53°35'05"W 628.79 feet to the point of beginning; said parcel containing 28.63 acres more or less; said parcel subject to all easements and restrictions if any.

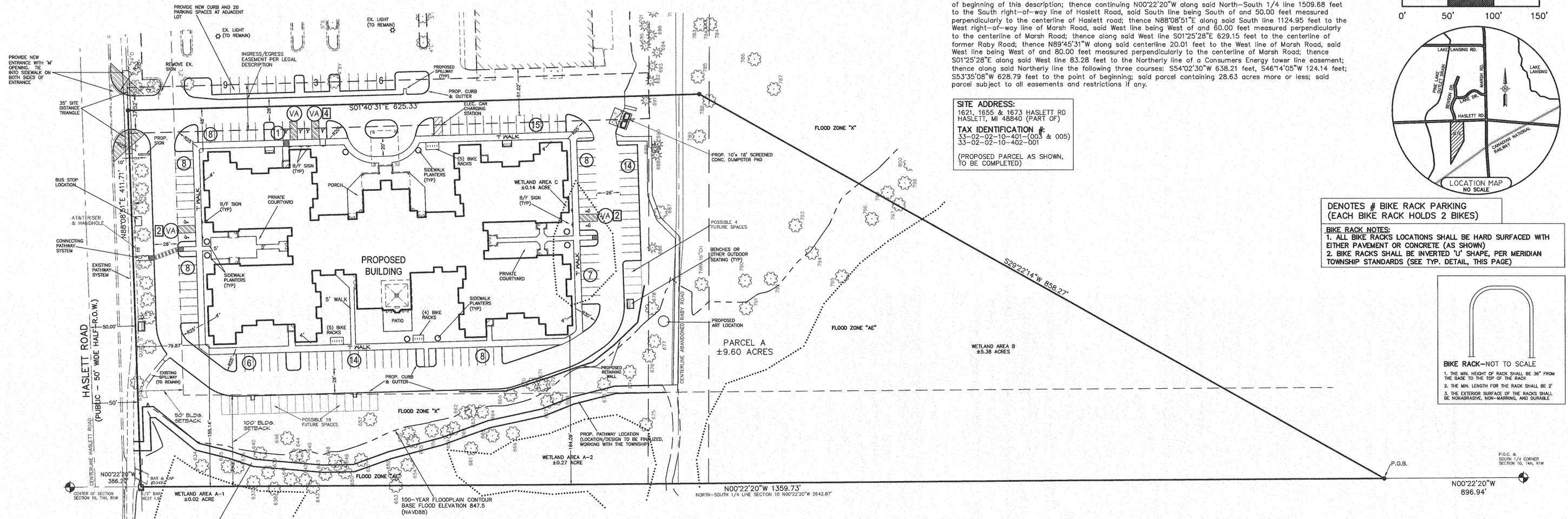
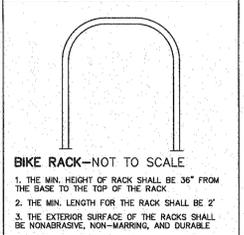


SITE ADDRESS:
1621, 1655 & 1673 HASLETT RD
HASLETT, MI 48840 (PART OF)

TAX IDENTIFICATION #:
33-02-02-10-401-(003 & 005)
33-02-02-10-402-001

(PROPOSED PARCEL AS SHOWN,
TO BE COMPLETED)

BIKE RACK NOTES:
1. ALL BIKE RACKS LOCATIONS SHALL BE HARD SURFACED WITH EITHER PAVEMENT OR CONCRETE (AS SHOWN)
2. BIKE RACKS SHALL BE INVERTED 'U' SHAPE, PER MERIDIAN TOWNSHIP STANDARDS (SEE TYP. DETAIL, THIS PAGE)



1 DENOTES NUMBER OF B/F SPACES
VA DENOTES VAN ACCESS B/F SPACES
0 DENOTES PROPOSED NUMBER OF 9' x 20' PARKING SPACES

NOTE: WATER SHALL HAVE 10' HORIZONTAL SEPARATION & 18" VERTICAL SEPARATION FROM ALL SEWERS.

EX. LEGEND

(M) = MEASURED DISTANCE	⊙ = SANITARY MANHOLE
(R) = RECORD DISTANCE	⊙ = DRAINAGE MANHOLE
● = SET 1/2" BAR WITH CAP	⊙ = ELECTRIC MANHOLE
□ = FOUND IRON AS NOTED	⊙ = TELEPHONE MANHOLE
— = DISTANCE NOT TO SCALE	⊙ = CATCHBASIN
— = FENCE	⊙ = SANITARY CLEANOUT
— = ASPHALT	⊙ = FIRE HYDRANT
— = CONCRETE	⊙ = VALVE
— = DECK	⊙ = UTILITY POLE
— = GRAVEL	⊙ = LIGHT POLE
— = EXISTING SPOT ELEVATION	⊙ = GUY WIRE
— = EXISTING CONTOUR ELEVATION	⊙ = UTILITY PEDESTAL
— = BUILDING OVERHANG	⊙ = TRANSFORMER
— = SANITARY SEWER	⊙ = HANDHOLE
— = STORM SEWER	⊙ = ELECTRIC METER
— = WATER LINE	⊙ = GAS METER
— = GAS LINE	⊙ = WATER METER
— = UNDERGROUND TELEPHONE	⊙ = SOIL BORING
— = UNDERGROUND TELEVISION	⊙ = SIGN
— = OVERHEAD WIRE	⊙ = POST
— = EDGE OF WOODS	⊙ = AIR CONDITIONING UNIT
— = DECIDUOUS TREE	⊙ = LIGHT POSTS (±3" TALL, 8" DIAMETER)
— = CONIFEROUS TREE	

EX. SANITARY SEWER INVENTORIES:

SANITARY MANHOLE #200 RIM ELEV. = 861.50 8" VCP S INV. = 854.18 8" VCP W INV. = 854.22	SANITARY MANHOLE #201 RIM ELEV. = 861.75 8" VCP E INV. = 855.03 8" VCP W INV. = 855.07	SANITARY MANHOLE #202 RIM ELEV. = 862.08 8" VCP E INV. = 856.14	SANITARY MANHOLE #203 RIM ELEV. = 862.12 6" VCP N INV. = 853.68 8" VCP E INV. = 853.48	SANITARY MANHOLE #204 RIM ELEV. = 859.48 8" VCP E INV. = 852.51 8" VCP W INV. = 852.53	SANITARY MANHOLE #205 RIM ELEV. = 859.64 8" VCP E INV. = 851.44 8" VCP W INV. = 851.49	SANITARY MANHOLE #206 RIM ELEV. = 861.41 8" VCP N INV. = 850.71 8" VCP S INV. = 850.63 8" VCP W INV. = 850.76	SANITARY MANHOLE #207 RIM ELEV. = 872.54 PIPES NOT VISIBLE N INV. = 849.42 SW INV. = 849.36	SANITARY MANHOLE #208 RIM ELEV. = 853.05 24" RCP NE INV. = 837.43 24" RCP SW INV. = 837.37	SANITARY MANHOLE #209 RIM ELEV. = 844.61 24" RCP NE INV. = 836.62 24" RCP SW INV. = 836.57	SANITARY MANHOLE #210 RIM ELEV. = 839.51 PIPES NOT VISIBLE BOTTOM ELEV. = 832.43	SANITARY MANHOLE #211 RIM ELEV. = 840.85 PIPES NOT VISIBLE NE INV. = 832.35 SW INV. = 832.30 T/WATER ELEV. = 834.25
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EX. STORM SEWER INVENTORIES:

CATCH BASIN #100 RIM ELEV. = 860.14	CATCH BASIN #114 RIM ELEV. = 859.08 12" RCP W INV. = 855.92	CATCH BASIN #115 RIM ELEV. = 860.22	CATCH BASIN #116 RIM ELEV. = 859.65 18" RCP E INV. = 852.06 18" RCP W INV. = 852.03	CATCH BASIN #117 RIM ELEV. = 848.26 12" RCP NE INV. = 843.95 12" RCP SW INV. = 843.90	CATCH BASIN #118 RIM ELEV. = 850.16 8" HOPE N INV. = 844.61 8" HOPE SW INV. = 844.36	CATCH BASIN #119 RIM ELEV. = 860.94 12" RCP N INV. = 856.32 12" RCP SE INV. = 856.25	CATCH BASIN #120 RIM ELEV. = 861.42 12" RCP S INV. = 856.93	CATCH BASIN #121 RIM ELEV. = 859.77 12" RCP NE INV. = 854.79 24" RCP SE INV. = 850.37 24" RCP SW INV. = 850.32	CATCH BASIN #122 RIM ELEV. = 859.46 24" RCP NE INV. = 850.78 24" RCP W INV. = 850.76	CATCH BASIN #123 RIM ELEV. = 858.81 12" RCP N INV. = 852.50 18" RCP NE INV. = 852.13 24" RCP SW INV. = 851.58
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SITE DATA:
ZONED C-2 - (COMMERCIAL DISTRICT)
TOTAL SITE AREA = 418,211 S.F. = 9.60 ACRES
TOTAL UNITS = 133 (SEE UNIT BREAKDOWN)
TOTAL BEDS = 157

BUILDING DATA (OVERALL):
PROPOSED BUILDING HEIGHT: 37'-2" (3 STORIES)

GROUND FLOOR AREA: 51,328 SF
= 35 (1-BED) UNITS AND 8 (2-BED) UNITS

SECOND FLOOR AREA: 47,703 SF
= 36 (1-BED) UNITS AND 8 (2-BED) UNITS

THIRD FLOOR AREA: 47,703 SF
= 38 (1-BED) UNITS AND 8 (2-BED) UNITS

TOTAL CONSTRUCTABLE AREA: 146,734 SF

RETAIL-COMMERCIAL GROSS S.F. - 9,558 S.F.
TOTAL PROJECT GROSS S.F. - 9,558 S.F.

PROPOSED SETBACKS:
FRONT (HASLETT ROAD) = 129.87' From C/L
SIDE (WEST) = 155.14'
SIDE (EAST) = 48'
REAR (ADJ. PROPERTY) = VARIES, OVER 100'

PARKING DATA:
97 - 9' x 20' SPACES
8 - BARRIER FREE SPACES
105 TOTAL SPACES PROVIDED**

** 23 FUTURE SPACES AVAILABLE (SHOWN ON PLAN), WOULD BE 128 SPACES IF NEEDED

REQUIRED VEHICLE PARKING:
TWO PER UNIT FOR APARTMENTS AND
2 PER CHAIR AT HAIR SALON
= 133 UNITS X 2 + 2 CHAIRS X 2 = 270

TOTAL PARKING REQ. PER ORDINANCE= 270 SPACES

PARKING SPACES PROVIDED: 105 + 23 (FUTURE)
PARKING SPACES AVAILABLE = 128

BIKE PARKING DATA:
BIKE PARKING SPACES REQUIRED = 1 PER 10
REQUIRED CAR PARKING SPACES = 270/10 = 27
TOTAL BIKE PARKING PROVIDED = 28 SPACES

EXISTING OPENSOURCE

TOTAL PROPERTY = 418,211 S.F. (±9.60 AC.)
TOTAL PERVIOUS AREA (INCLUDES WETLAND) = 303,985 SF = 72.69%
TOTAL IMPERVIOUS AREA (BUILDING, PARKING, WALKS) = 114,226 SF = 27.31%

PROPOSED OPENSOURCE

TOTAL PROPERTY = 418,211 S.F. (±9.60 AC.)
TOTAL PERVIOUS AREA (INCLUDES WETLAND) = 286,416 SF = 68.49%
TOTAL IMPERVIOUS AREA (BUILDING, PARKING, WALKS) = 131,795 SF = 31.51%

BENCHMARKS:

BENCHMARK #1 ELEV. = 862.07
CHISELED "X" IN NORTH SIDE OF CONCRETE LIGHT POLE BASE, 170'± EAST AND 90'± NORTH OF NORTHWEST CORNER OF #1655 HASLETT ROAD.

BENCHMARK #4 ELEV. = 863.05
SOUTHWEST FLANGE BLT OF FIRE HYDRANT, UNDER THE "A" IN "TRAVERSE CITY", 16'± EAST AND 80'± NORTH OF NORTHEAST CORNER OF #1655 HASLETT ROAD.

LEGEND

— = EXT. CONTOURS	— = EXT. WATER MAIN
— = EXT. SANITARY SEWER	— = EXT. STORM SEWER
— = EXT. ELEVATIONS	— = PROPOSED WATER MAIN
— = PROPOSED SANITARY SEWER	— = PROPOSED STORM SEWER
— = MANHOLE (EX.)	— = PROPOSED C.B. MANHOLE (NEW)
— = UTILITY EASEMENT	— = CENTER LINE OF ROAD
— = ROAD RIGHT OF WAY	— = PROPERTY LINE
— = FIRE HYDRANT	— = WATER VALVE
— = THRUST BLOCK	— = PROPOSED TOP OF CURB ELEV.

SHEET INDEX

- COVER/DIMENSION PLAN
- UTILITY PLAN
- GRADING & STORM SEWER PLAN
- PERVIOUS/IMPERVIOUS PLAN
- LANDSCAPE PLAN
- AMENITIES PLAN
- EXISTING PLAN

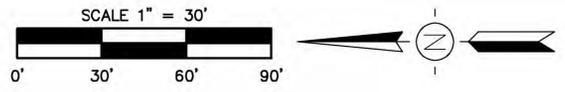
LIGHTING PLAN (BY OTHERS)



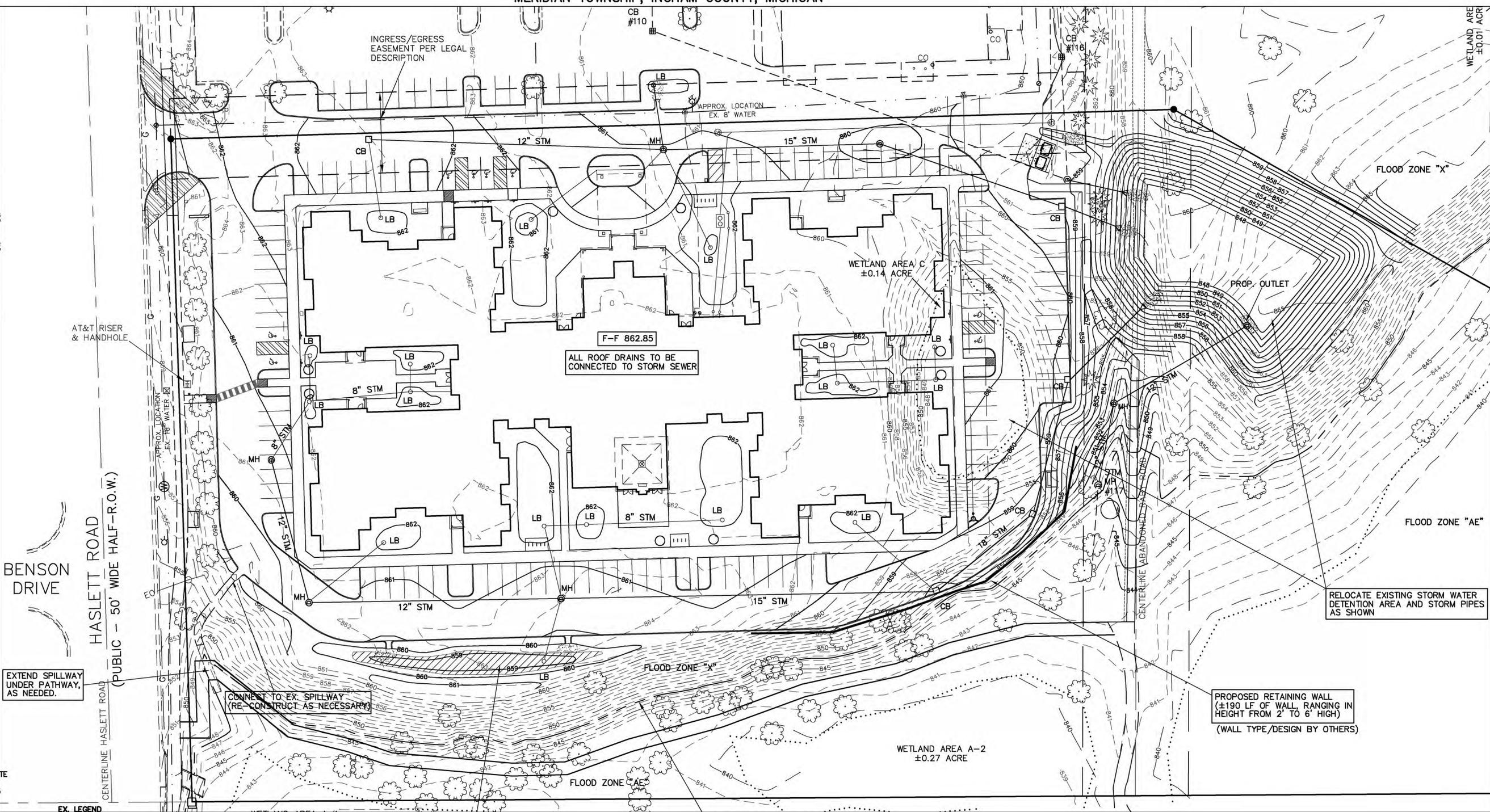
REVISIONS 11-19-19 MUPUD SUBMITTAL 12-9-19 MUPUD REVISIONS 12-11-19 MUPUD REVISIONS 1-8-20 MUPUD REVISIONS	KEBS, INC. KYES ENGINEERING BRYAN LAND SURVEYS 2116 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-1014, FAX. 517-339-8047 Marshall Office Ph. 269-781-9800
Pine Village of Meridian COVER/DIMENSION PLAN	
SCALE: 1" = 50' DATE: 10-7-19 AUTHORIZED BY: HUDSON SENIOR LIVING, LLC	DESIGNER: GAP PROJECT MGR. GAP APPROVED BY: GAP SHEET 1 OF 7 JOB #: 95818

SURVEY#95688.BND

MUPUD PLAN FOR:
Pine Village of Meridian
 MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN



EX. STORM SEWER INVENTORIES:	EX. SANITARY SEWER INVENTORIES:
CATCH BASIN #100 RIM ELEV. = 860.14	SANITARY MANHOLE #200 RIM ELEV. = 861.50 8" VCP S INV. = 854.18 8" VCP W INV. = 854.22
CATCH BASIN #101 RIM ELEV. = 861.52	SANITARY MANHOLE #201 RIM ELEV. = 861.75 8" VCP E INV. = 855.03 8" VCP W INV. = 855.07
STORM MANHOLE #102 RIM ELEV. = 864.12	SANITARY MANHOLE #202 RIM ELEV. = 862.08 8" VCP E INV. = 856.14 12" RCP NW INV. = 853.73
CATCH BASIN #103 RIM ELEV. = 863.83	SANITARY MANHOLE #203 RIM ELEV. = 862.12 6" VCP N INV. = 853.68 6" VCP E INV. = 853.48
CATCH BASIN #104 RIM ELEV. = 859.05	SANITARY MANHOLE #204 RIM ELEV. = 859.48 8" VCP E INV. = 852.53 8" VCP W INV. = 852.53
CATCH BASIN #105 RIM ELEV. = 859.37	SANITARY MANHOLE #205 RIM ELEV. = 859.64 12" RCP S INV. = 856.54 12" RCP NW INV. = 856.67
CATCH BASIN #106 RIM ELEV. = 861.75	SANITARY MANHOLE #206 RIM ELEV. = 861.41 8" VCP N INV. = 850.71 8" VCP S INV. = 850.63 8" VCP W INV. = 850.76
8" UNKNOWN NE INV. = 856.69	SANITARY MANHOLE #207 RIM ELEV. = 872.54 8" VCP E INV. = 851.44 8" VCP W INV. = 851.48
12" RCP S INV. = 856.54	SANITARY MANHOLE #208 RIM ELEV. = 853.05 24" RCP NE INV. = 837.43 24" RCP SW INV. = 837.37
12" RCP NW INV. = 856.67	SANITARY MANHOLE #209 RIM ELEV. = 844.61 24" RCP NE INV. = 836.62 24" RCP SW INV. = 836.57
CATCH BASIN #107 RIM ELEV. = 861.90	SANITARY MANHOLE #210 RIM ELEV. = 839.51 8" VCP E INV. = 851.44 8" VCP W INV. = 851.48
12" RCP SE INV. = 857.94	SANITARY MANHOLE #211 RIM ELEV. = 840.85 12" RCP N INV. = 852.50 12" RCP NE INV. = 852.13 12" RCP SE INV. = 852.35 12" RCP SW INV. = 852.30 12" RCP W INV. = 852.30 12" RCP NW INV. = 852.30 12" RCP SW INV. = 852.30 12" RCP W INV. = 852.30
CATCH BASIN #108 RIM ELEV. = 861.63	SANITARY MANHOLE #212 RIM ELEV. = 859.46 24" RCP NE INV. = 850.78 24" RCP W INV. = 850.76
12" RCP S INV. = 854.88	SANITARY MANHOLE #213 RIM ELEV. = 859.81 12" RCP N INV. = 852.50 12" RCP NE INV. = 852.13 12" RCP SE INV. = 852.35 12" RCP SW INV. = 852.30 12" RCP W INV. = 852.30
CATCH BASIN #109 RIM ELEV. = 861.08	SANITARY MANHOLE #214 RIM ELEV. = 859.08 12" RCP W INV. = 855.92
12" RCP SW INV. = 856.72	STORM MANHOLE #115 RIM ELEV. = 860.22 10" VCP NE INV. = 853.72 12" VCP E INV. = 853.67 18" RCP W INV. = 853.40
CATCH BASIN #110 RIM ELEV. = 860.02	CATCH BASIN #116 RIM ELEV. = 858.65 18" RCP E INV. = 852.06 18" RCP W INV. = 852.03
24" RCP E INV. = 848.62 30" RCP SW INV. = 849.58	STORM MANHOLE #117 RIM ELEV. = 848.26 12" RCP NE INV. = 843.95 12" RCP SW INV. = 843.90
CATCH BASIN #111 RIM ELEV. = 859.77	CATCH BASIN #118 RIM ELEV. = 850.16 8" HDPE N INV. = 844.61 12" RCP SW INV. = 844.36
12" RCP NE INV. = 854.79 24" RCP SE INV. = 850.37 24" RCP W INV. = 850.32	CATCH BASIN #119 RIM ELEV. = 860.94 12" RCP N INV. = 856.32 12" RCP SE INV. = 856.25
CATCH BASIN #112 RIM ELEV. = 859.46	CATCH BASIN #120 RIM ELEV. = 861.42 12" RCP S INV. = 856.93
24" RCP NE INV. = 850.78 24" RCP W INV. = 850.76	
CATCH BASIN #113 RIM ELEV. = 859.81	
12" RCP N INV. = 852.50 12" RCP NE INV. = 852.13 12" RCP SE INV. = 852.35 12" RCP SW INV. = 852.30 12" RCP W INV. = 852.30	
CATCH BASIN #114 RIM ELEV. = 859.08	
12" RCP W INV. = 855.92	



NOTE: WATER SHALL HAVE 10' HORIZONTAL SEPARATION & 18" VERTICAL SEPARATION FROM ALL SEWERS.

BENCHMARKS:
 BENCHMARK #1 ELEV. = 862.07
 CHISELED "X" IN NORTH SIDE OF CONCRETE LIGHT POLE BASE, 170'± EAST AND 90'± NORTH OF NORTHWEST CORNER OF #1655 HASLETT ROAD.
 BENCHMARK #4 ELEV. = 863.05
 SOUTHWEST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "A" IN "TRAVERSE CITY", 18'± EAST AND 80'± NORTH OF NORTHEAST CORNER OF #1655 HASLETT ROAD.

LEGEND

---	EXT. CONTOURS	○	SANITARY MANHOLE
---	EXT. WATER MAIN	○	DRAINAGE MANHOLE
---	EXT. SANITARY SEWER	○	ELECTRIC MANHOLE
---	EXT. STORM SEWER	○	TELEPHONE MANHOLE
---	EXT. ELEVATIONS	○	CATCHBASIN
---	PROPOSED WATER MAIN	○	SANITARY CLEANOUT
---	PROPOSED SANITARY SEWER	○	FIRE HYDRANT
---	PROPOSED STORM SEWER	○	VALVE
○	MANHOLE (NEW)	○	UTILITY POLE
○	MANHOLE (EX.)	○	LIGHT POLE
---	UTILITY EASEMENT	○	GUY POLE
---	CENTER LINE OF ROAD	○	GUY WIRE
---	ROAD RIGHT OF WAY	○	UTILITY PEDESTAL
---	PROPERTY LINE	○	TRANSFORMER
○	FIRE HYDRANT	○	HANDHOLE
○	WATER VALVE	○	ELECTRIC METER
○	THRUST BLOCK	○	GAS METER
○	PROPOSED TOP OF CURB ELEV.	○	WATER METER
		○	SOIL BORING
		○	SIGN
		○	POST
		○	AIR CONDITIONING UNIT
		○	LIGHT POSTS (6'3" TALL, 8" DIAMETER)

EX. LEGEND

(M)	MEASURED DISTANCE	○	SANITARY MANHOLE
(R)	RECORD DISTANCE	○	DRAINAGE MANHOLE
○	SET 1/2" BAR WITH CAP	○	ELECTRIC MANHOLE
○	FOUND IRON AS NOTED	○	TELEPHONE MANHOLE
○	DISTANCE NOT TO SCALE	○	CATCHBASIN
---	FENCE	○	SANITARY CLEANOUT
---	ASPHALT	○	FIRE HYDRANT
---	CONCRETE	○	VALVE
---	DECK	○	UTILITY POLE
---	GRAVEL	○	LIGHT POLE
---	EXISTING SPOT ELEVATION	○	GUY POLE
---	EXISTING CONTOUR ELEVATION	○	GUY WIRE
---	BUILDING OVERHANG	○	UTILITY PEDESTAL
---	SANITARY SEWER	○	TRANSFORMER
---	STORM SEWER	○	HANDHOLE
---	WATER LINE	○	ELECTRIC METER
---	GAS LINE	○	GAS METER
---	UNDERGROUND TELEPHONE	○	WATER METER
---	UNDERGROUND TELEVISION	○	SOIL BORING
---	UNDERGROUND ELECTRIC	○	SIGN
---	OVERHEAD WIRES	○	POST
---	EDGE OF WOODS	○	AIR CONDITIONING UNIT
---	DECIDUOUS TREE	○	LIGHT POSTS (6'3" TALL, 8" DIAMETER)
---	CONIFEROUS TREE	○	

EX. LEGEND

---	MEASURED DISTANCE	○	SANITARY MANHOLE
---	RECORD DISTANCE	○	DRAINAGE MANHOLE
○	SET 1/2" BAR WITH CAP	○	ELECTRIC MANHOLE
○	FOUND IRON AS NOTED	○	TELEPHONE MANHOLE
○	DISTANCE NOT TO SCALE	○	CATCHBASIN
---	FENCE	○	SANITARY CLEANOUT
---	ASPHALT	○	FIRE HYDRANT
---	CONCRETE	○	VALVE
---	DECK	○	UTILITY POLE
---	GRAVEL	○	LIGHT POLE
---	EXISTING SPOT ELEVATION	○	GUY POLE
---	EXISTING CONTOUR ELEVATION	○	GUY WIRE
---	BUILDING OVERHANG	○	UTILITY PEDESTAL
---	SANITARY SEWER	○	TRANSFORMER
---	STORM SEWER	○	HANDHOLE
---	WATER LINE	○	ELECTRIC METER
---	GAS LINE	○	GAS METER
---	UNDERGROUND TELEPHONE	○	WATER METER
---	UNDERGROUND TELEVISION	○	SOIL BORING
---	UNDERGROUND ELECTRIC	○	SIGN
---	OVERHEAD WIRES	○	POST
---	EDGE OF WOODS	○	AIR CONDITIONING UNIT
---	DECIDUOUS TREE	○	LIGHT POSTS (6'3" TALL, 8" DIAMETER)
---	CONIFEROUS TREE	○	

EX. LEGEND

---	MEASURED DISTANCE	○	SANITARY MANHOLE
---	RECORD DISTANCE	○	DRAINAGE MANHOLE
○	SET 1/2" BAR WITH CAP	○	ELECTRIC MANHOLE
○	FOUND IRON AS NOTED	○	TELEPHONE MANHOLE
○	DISTANCE NOT TO SCALE	○	CATCHBASIN
---	FENCE	○	SANITARY CLEANOUT
---	ASPHALT	○	FIRE HYDRANT
---	CONCRETE	○	VALVE
---	DECK	○	UTILITY POLE
---	GRAVEL	○	LIGHT POLE
---	EXISTING SPOT ELEVATION	○	GUY POLE
---	EXISTING CONTOUR ELEVATION	○	GUY WIRE
---	BUILDING OVERHANG	○	UTILITY PEDESTAL
---	SANITARY SEWER	○	TRANSFORMER
---	STORM SEWER	○	HANDHOLE
---	WATER LINE	○	ELECTRIC METER
---	GAS LINE	○	GAS METER
---	UNDERGROUND TELEPHONE	○	WATER METER
---	UNDERGROUND TELEVISION	○	SOIL BORING
---	UNDERGROUND ELECTRIC	○	SIGN
---	OVERHEAD WIRES	○	POST
---	EDGE OF WOODS	○	AIR CONDITIONING UNIT
---	DECIDUOUS TREE	○	LIGHT POSTS (6'3" TALL, 8" DIAMETER)
---	CONIFEROUS TREE	○	

EX. LEGEND

---	MEASURED DISTANCE	○	SANITARY MANHOLE
---	RECORD DISTANCE	○	DRAINAGE MANHOLE
○	SET 1/2" BAR WITH CAP	○	ELECTRIC MANHOLE
○	FOUND IRON AS NOTED	○	TELEPHONE MANHOLE
○	DISTANCE NOT TO SCALE	○	CATCHBASIN
---	FENCE	○	SANITARY CLEANOUT
---	ASPHALT	○	FIRE HYDRANT
---	CONCRETE	○	VALVE
---	DECK	○	UTILITY POLE
---	GRAVEL	○	LIGHT POLE
---	EXISTING SPOT ELEVATION	○	GUY POLE
---	EXISTING CONTOUR ELEVATION	○	GUY WIRE
---	BUILDING OVERHANG	○	UTILITY PEDESTAL
---	SANITARY SEWER	○	TRANSFORMER
---	STORM SEWER	○	HANDHOLE
---	WATER LINE	○	ELECTRIC METER
---	GAS LINE	○	GAS METER
---	UNDERGROUND TELEPHONE	○	WATER METER
---	UNDERGROUND TELEVISION	○	SOIL BORING
---	UNDERGROUND ELECTRIC	○	SIGN
---	OVERHEAD WIRES	○	POST
---	EDGE OF WOODS	○	AIR CONDITIONING UNIT
---	DECIDUOUS TREE	○	LIGHT POSTS (6'3" TALL, 8" DIAMETER)
---	CONIFEROUS TREE	○	

100-YEAR FLOODPLAIN CONTOUR
 BASE FLOOD ELEVATION 847.5
 (NAVD88)

WETLAND AREA A-2
 ±0.27 ACRE

WETLAND AREA C
 ±0.14 ACRE

WETLAND AREA
 ±0.01 ACR

<p>REVISIONS</p> <p>11-19-19 MUPUD SUBMITTAL</p> <p>12-9-19 MUPUD REVISIONS</p> <p>1-6-20 MUPUD REVISIONS</p>		<p>KEBS, INC. KYES ENGINEERING BRYAN LAND SURVEYS</p> <p>2116 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-1014 FAX. 517-339-8047</p> <p>Marshall Office Ph. 269-781-9800</p> <p>Pine Village of Meridian GRADING & STORM SEWER PLAN</p>
<p>SCALE: 1" = 30'</p> <p>DATE: 10-7-19</p> <p>AUTHORIZED BY: HUDSON SENIOR LIVING, LLC</p>	<p>DESIGNER: GAP</p> <p>PROJECT MGR. GAP</p> <p>APPROVED BY: GAP</p> <p>SHEET 3 OF 7</p> <p>JOB # 95818</p>	

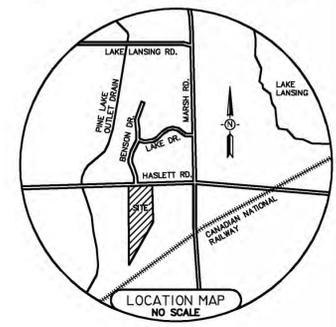
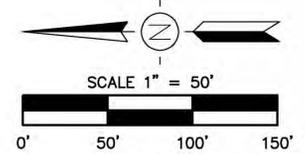


SURVEY#95688.BND

NOTE: LANDSCAPE ISLANDS TO BE IRRIGATED, IRRIGATION DESIGN BY OTHERS.

MUPUD PLAN FOR: Pine Village of Meridian MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

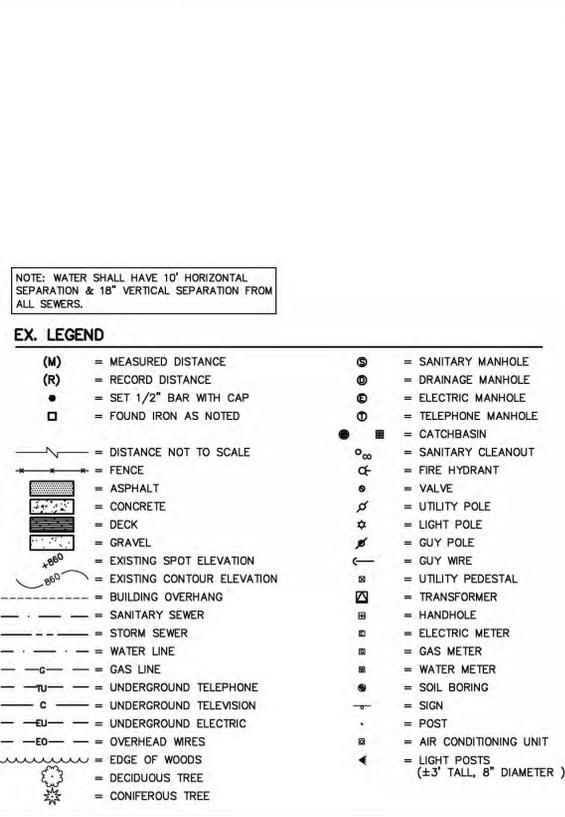
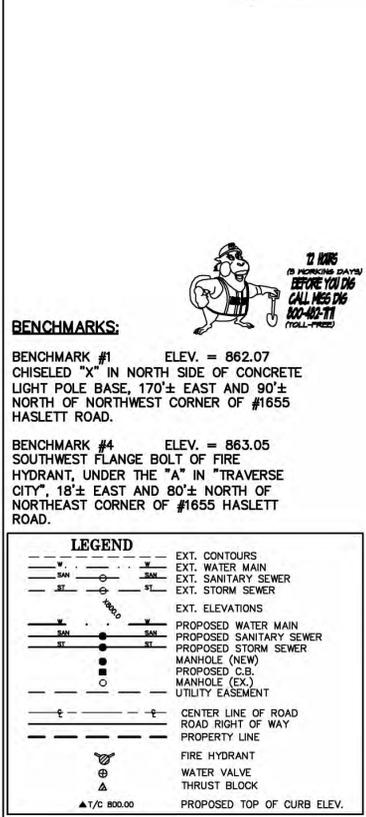
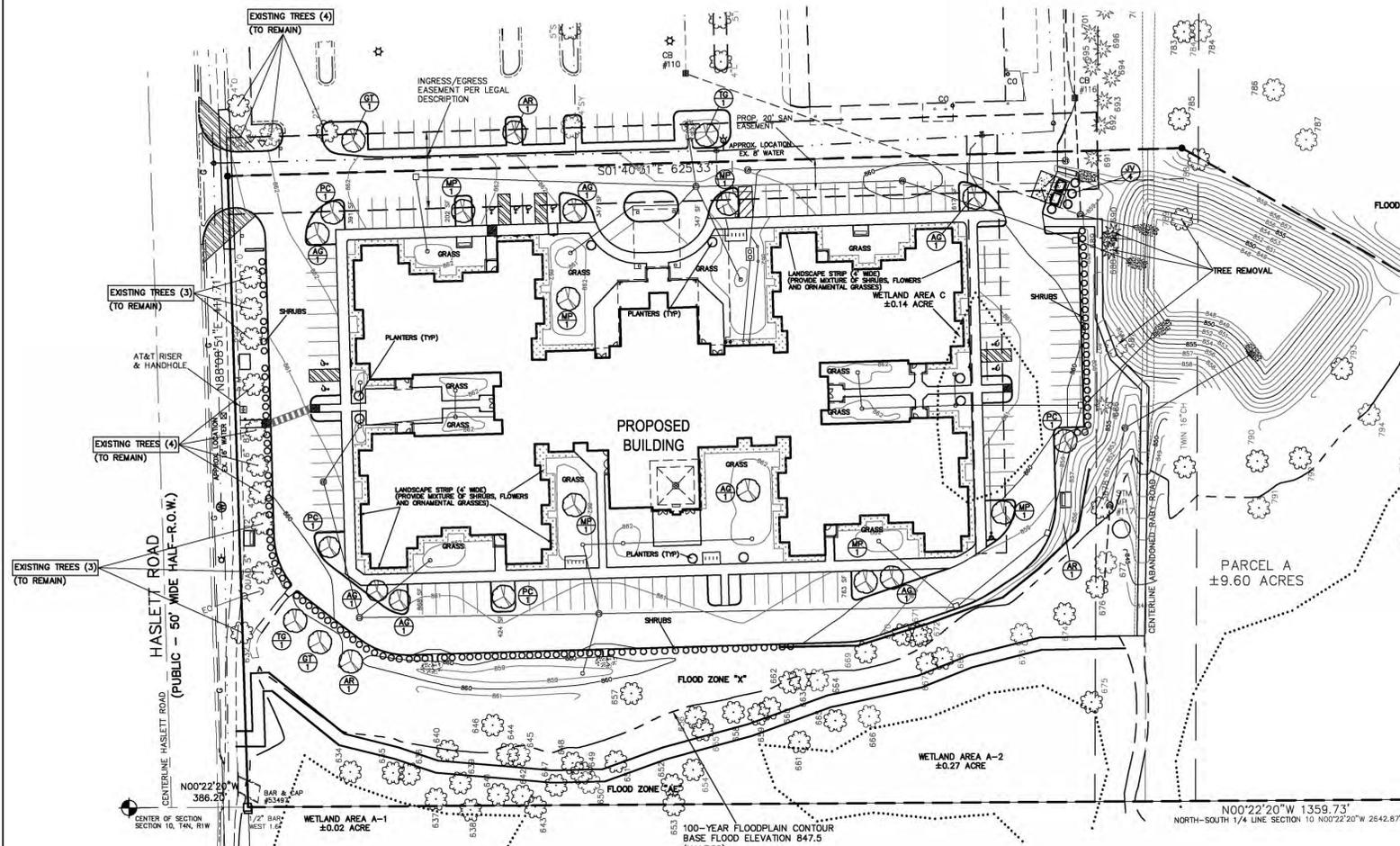
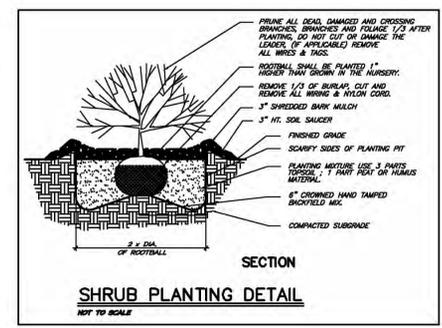
QUANT.	SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE	ROOT
DECIDUOUS					
3	AR	RED SUNSET MAPLE	ACER RUBRUM "RED SUNSET"	2.5" CAL.	B & B
2	TG	GREENSPIRE LITTLELEAF LINDEN	TILIA TOMENTOSA "GREENSPIRE"	2.5" CAL.	B & B
2	GT	SKYLINE HONEY LOCUST	GLEDTSIA TRIATHANCOS INERMIS "SKYLINE"	2.5" CAL.	B & B
4	PC	CHANTICLEER PEAR	PYRUS CALLERYANA	2.5" CAL.	B & B
7	AG	AUTUMN BRILLIANCE SERVICEBERRY	AMELANCHIER x GRANDIFLORA	2.5" CAL.	B & B
7	MP	PROFUSION CRABAPPLE	MALUS PROFUSION	2.5" CAL.	B & B
SHRUBS					
27	FI	LYNWOOD GOLD FORSYTHIA	FORSYTHIA X INTERMEDIA 'LYNWOOD GOLD'	24"-26" HT.	CONT.
29	EA	BURNING BUSH	EUONYMUS ALATUS COMPACTUS	24"-36" HT.	CONT.
27	BM	LITTLELEAF BOXWOOD	BUXUS MICROPHYLLA "WINTER GEM"	24"-36" HT.	CONT.
28	JS	SEAGREEN JUNIPER	JUNIPERUS SEAGREEN	24"-36" HT.	CONT.
EVERGREENS					
4	JV	EASTERN RED CEDAR	JUNIPERUS VIRGINIANA	15 GAL.	B & B



LANDSCAPE REQUIRED = 200 S.F./10 PARKING SPACES
100 SPACES/10 x 200 = 2,000 S.F.
LANDSCAPE AREA PROVIDED = 4,470 S.F.

INTERIOR TREES REQUIRED
2 CANOPY TREES/10 SPACES
100/10 x 2 = 20 = 20 TREES
TREES PROVIDED = 23

STREET TREES REQUIRED
1 TREE/70' OF FRONTAGE
412/70 = 5.88 = 6
PROVIDED = 12 (ALL EXISTING)



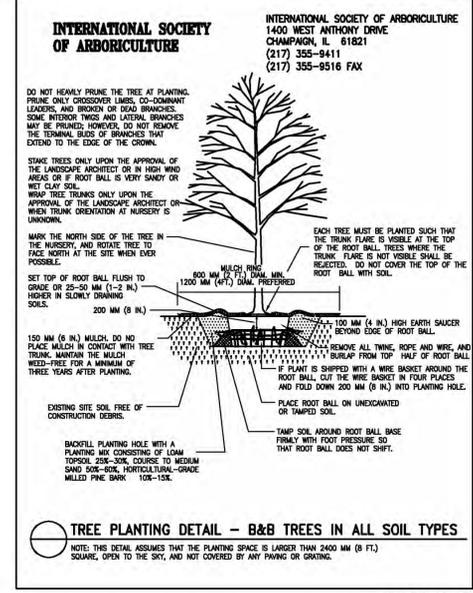
EX. SANITARY SEWER INVENTORIES:		EX. STORM SEWER INVENTORIES:	
SANITARY MANHOLE #200 RIM ELEV. = 861.50 8" VCP S INV. = 854.18 8" VCP W INV. = 854.22	SANITARY MANHOLE #201 RIM ELEV. = 861.75 8" VCP E INV. = 855.03 8" VCP W INV. = 855.07	SANITARY MANHOLE #202 RIM ELEV. = 862.08 8" VCP E INV. = 856.14 8" VCP W INV. = 856.18	SANITARY MANHOLE #203 RIM ELEV. = 862.12 6" VCP N INV. = 853.68 8" VCP E INV. = 853.48
SANITARY MANHOLE #204 RIM ELEV. = 858.48 8" VCP E INV. = 852.51 8" VCP W INV. = 852.53	SANITARY MANHOLE #205 RIM ELEV. = 859.64 8" VCP E INV. = 851.44 8" VCP W INV. = 851.48	SANITARY MANHOLE #206 RIM ELEV. = 861.41 8" VCP N INV. = 850.71 8" VCP S INV. = 850.63 8" VCP W INV. = 850.76	SANITARY MANHOLE #207 RIM ELEV. = 872.54 PIPES NOT VISIBLE N INV. = 849.42 SW INV. = 849.36
SANITARY MANHOLE #208 RIM ELEV. = 853.12 24" RCP NE INV. = 837.43 24" RCP SW INV. = 837.37	SANITARY MANHOLE #209 RIM ELEV. = 844.61 24" RCP NE INV. = 836.62 24" RCP SW INV. = 836.57	SANITARY MANHOLE #210 RIM ELEV. = 839.51 PIPES NOT VISIBLE NE INV. = 832.35 SW INV. = 832.30	SANITARY MANHOLE #211 RIM ELEV. = 840.85 PIPES NOT VISIBLE NE INV. = 832.35 SW INV. = 832.30 T/WATER ELEV. = 834.25
CATCH BASIN #100 RIM ELEV. = 860.14 12" RCP W INV. = 859.08	CATCH BASIN #101 RIM ELEV. = 861.52	CATCH BASIN #102 RIM ELEV. = 864.12	CATCH BASIN #103 RIM ELEV. = 863.83
CATCH BASIN #104 RIM ELEV. = 859.05 12" RCP NW INV. = 853.73	CATCH BASIN #105 RIM ELEV. = 859.37 12" RCP N INV. = 853.24 12" RCP SE INV. = 853.23 18" RCP SW INV. = 852.76	CATCH BASIN #106 RIM ELEV. = 861.75 8" UNKNOWN NE INV. = 856.69 12" RCP S INV. = 856.54 12" RCP NW INV. = 856.67	CATCH BASIN #107 RIM ELEV. = 861.90 12" RCP SE INV. = 857.94
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CATCH BASIN #112 RIM ELEV. = 859.46 24" RCP NE INV. = 850.78 24" RCP W INV. = 850.76	CATCH BASIN #113 RIM ELEV. = 858.81 12" RCP N INV. = 852.50 18" RCP NE INV. = 852.13 24" RCP SW INV. = 851.58	CATCH BASIN #114 RIM ELEV. = 859.08 12" RCP W INV. = 855.92	CATCH BASIN #115 RIM ELEV. = 860.22 10" VCP NE INV. = 853.72 12" VCP E INV. = 853.67 18" RCP W INV. = 853.40
CATCH BASIN #116 RIM ELEV. = 858.65 18" RCP E INV. = 852.06 18" RCP W INV. = 852.03	CATCH BASIN #117 RIM ELEV. = 848.28 12" RCP N INV. = 843.95 12" RCP SW INV. = 843.90	CATCH BASIN #118 RIM ELEV. = 850.16 8" HOPE N INV. = 844.61 12" RCP SW INV. = 844.36	CATCH BASIN #119 RIM ELEV. = 860.94 12" RCP N INV. = 856.32 12" RCP SE INV. = 856.25
CATCH BASIN #120 RIM ELEV. = 861.42 12" RCP S INV. = 856.93	CATCH BASIN #121 RIM ELEV. = 851.58	CATCH BASIN #122 RIM ELEV. = 851.58	

LANDSCAPE SPECIFICATIONS

- Prior to construction, the Landscape Contractor shall be responsible for locating all underground utilities and shall avoid damage to all utilities during the course of the work. The Landscape Contractor is responsible for repairing any and all damage to utilities, structures, site appearances, etc., which occur as a result of the landscape construction.
- All plants shall be healthy, vigorous materials, free from disease and pests and that comply with the latest edition of the publication ANSI Z60 American Standard for Nursery Stock by the American Nursery and Landscape Association.
- The Landscape Contractor is responsible for verifying all quantities shown on these plans before pricing the work. Any difference in quantities should be brought to the attention of the owner/landscape for clarification.
- The Landscape Contractor shall completely guarantee all plant material for the period of one (1) year beginning at the date of total acceptance. The Landscape Contractor shall promptly make all replacements before or at the end of the guarantee period as the growing season permits.
- All plants shall be balled and burlapped as indicated on the plant list. All trees shall be straight trunked, full headed and meet all requirements specified. All trees must be guyed or staked and be mulched with 3" hardwood shredded mulch.
- All Plants and installation are subject to the approval of the owner/tenant.
- All planting beds must have weed barrier and be completely mulched with 3" hardwood shredded mulch, free of mold and debris. Some locations may call for stone mulch, refer to plan.
- The top of all areas of bark cover shall be at grade of adjacent curb, walk or edge of pavement, with exception to the raised planter in which the top of the mulch shall meet the bottom of the cap of the planter.
- The planting soil mixture specified for any planters shall be compressed of topsoil and additional amendments appropriate for the location and plantings and be backfilled to a depth of 12". Topsoil shall be fertile, natural topsoil, typical of locality, obtained from well-drained area. It shall be without admixture of subsoil, and shall be free of stones, lumps, sticks, toxic substances or other extraneous matter that may be harmful to plant growth or that would interfere with future maintenance.
- At all times, the contractor shall keep the premises clean.
- It is the Landscape Contractor's responsibility to determine water application rates and timer cycling. The Irrigation Contractor will instruct the Landscape Contractor on the operation and programming of the controller.
- No substitutions of plant materials shall be made without prior written permission of the owner.
- Owner/tenant will inspect the plants at the end of the warranty period. (All plants are to be warranted for a period of one year.) Plants that are dead or not in satisfactory growth shall be removed and replaced during the next normal planting season at no additional cost to the owner/tenant.

TURF ESTABLISHMENT

- The Landscape Contractor shall place a 4" compacted layer of topsoil over all areas to be established in turf. The topsoil layer shall bring all turf areas to finish grade.
- Remove stones bigger than 1-1/2" in any dimension and sticks, roots, rubbish and other extraneous matter.
- Hydroseed all new lawn areas as specified below unless plans call for sod.
- Mix seed, fertilizer, and pulverized mulch in water, using equipment specifically designed for hydroseed application.
- Apply slurry uniformly to all areas to be seeded. Rate of application as required to obtain specified seed sowing rate.
- Lay sod within 24 hours of stripping. Do not lay dormant sod or if ground is frozen. Lay sod to form a solid mass with tightly fitted joints. Do not overlap.
- Water sod with fine spray immediately after planting. During first week, water daily or more frequently as necessary to maintain moist soil to depth of 4".



INTERNATIONAL SOCIETY OF ARBORICULTURE

INTERNATIONAL SOCIETY OF ARBORICULTURE
1400 WEST ANTHONY DRIVE
CHAMPAIGN, IL 61821
(217) 355-8411
(217) 355-9516 FAX

DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSBRED LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.

STAKE TREES ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT OR IN HIGH WIND AREAS OR IF ROOT BALL IS VERY SNAGGY OR WET CLAY SOIL.

WARP TREE TRUNKS ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT OR WHEN TRUNK ORIENTATION AT NURSERY IS UNKNOWN.

MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND MOVE THE TREE TO FACE NORTH AT THE SITE WHEN EVER POSSIBLE.

SET TOP OF ROOT BALL FLUSH TO GRADE OR 25-50 MM (1-2 IN.) HIGHER IN SLOWLY DRAINING SOILS.

150 MM (6 IN.) MULCH, DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. MARK THE MULCH WEED-FREE FOR A MINIMUM OF THREE YEARS AFTER PLANTING.

EXISTING SITE SOIL FREE OF CONSTRUCTION DEBRIS.

BACKFILL PLANTING HOLE WITH A MIXTURE OF TOPSOIL AND LOW TOPSOIL, 20% COARSE TO MEDIUM SAND, 50% FINE, HORIZONTAL-GRADE MULLED PINE BARK, 10%-15%.

EACH TREE MUST BE PLANTED SUCH THAT THE TRUNK PLANE IS VISIBLE AT THE TOP OF THE ROOT BALL. TRUNKS WHERE THE TRUNK PLANE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.

REMOVE ALL TWIGS, ROPE AND WIRE, AND 1/2" SUBAP FROM TOP HALF OF ROOT BALL.

PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, CUT THE WIRE BASKET IN FOUR PLACES AND FOLD DOWN 200 MM (8 IN.) INTO PLANTING HOLE.

PLACE ROOT BALL ON UNCOMPACTED OR TAMPED SOIL.

TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT ROOT BALL DOES NOT SHIFT.

TREE PLANTING DETAIL - B&B TREES IN ALL SOIL TYPES

NOTE: THIS DETAIL ASSUMES THAT THE PLANTING SPACE IS LARGER THAN 2400 MM (8 FT.) SQUARE, OPEN TO THE SKY, AND NOT COVERED BY ANY PAVING OR GRATING.

REVISIONS

11-19-19 MUPUD SUBMITTAL	
12-9-19 MUPUD REVISIONS	
12-11-19 MUPUD REVISIONS	
1-6-20 MUPUD REVISIONS	

KEBS, INC. KEYS ENGINEERING
BRYAN LAND SURVEYS
2116 HASLETT ROAD, HASLETT, MI 48840
PH. 517-339-1014 FAX. 517-339-8047

Marshall Office
Ph. 269-781-9800

Pine Village of Meridian
LANDSCAPE PLAN

SCALE: 1" = 50' DESIGNER: APPROVED BY:
DATE: 10-7-19 PROJECT MGR. GAP
AUTHORIZED BY: HUDSON SENIOR LIVING, LLC JOB # 95818 SHEET 5 OF 7

SURVEY#95688.BND

MUPUD PLAN FOR: Pine Village of Meridian

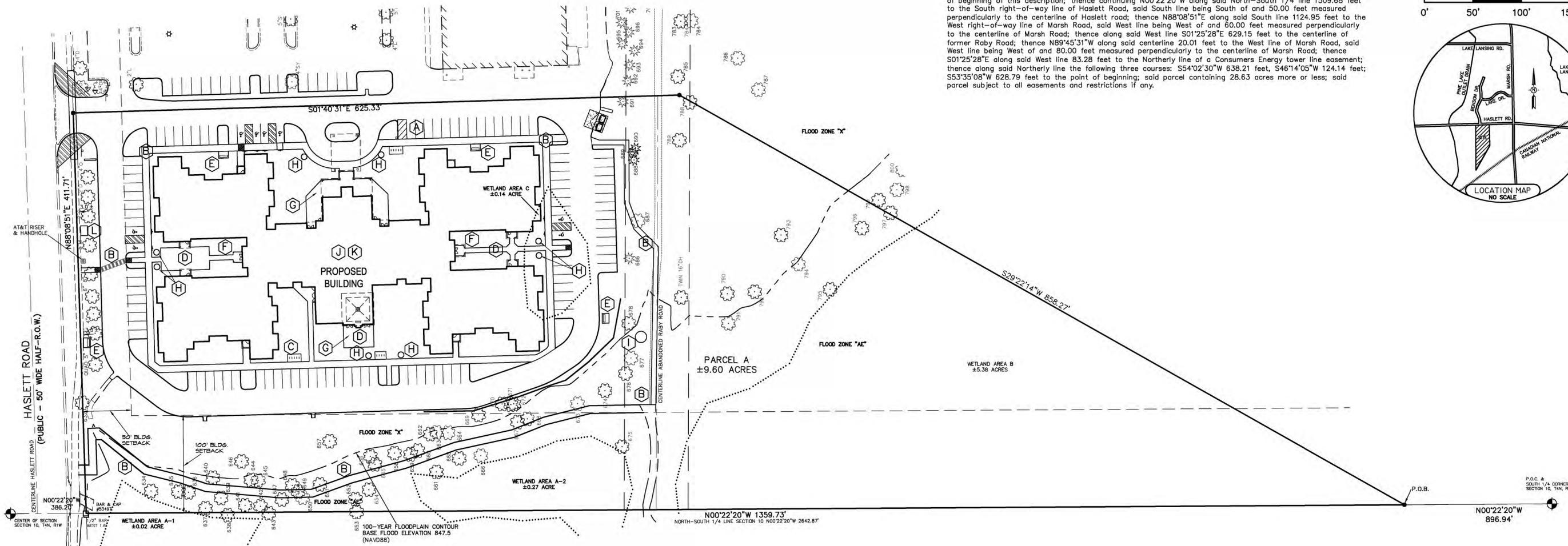
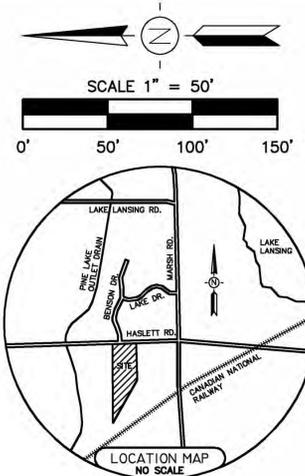
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

LEGAL DESCRIPTION:

AS SURVEYED:

(The following legal description describes the same parcel of land as the provided description)

A parcel of land in the Southeast 1/4 of Section 10, T4N, R1W, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as: Commencing at the South 1/4 corner of said Section 10; thence N00°22'20"W along the North-South 1/4 line of said Section 10 a distance of 746.99 feet to the point of beginning of this description; thence continuing N00°22'20"W along said North-South 1/4 line 1509.68 feet to the South right-of-way line of Haslett Road, said South line being South of and 50.00 feet measured perpendicularly to the centerline of Haslett road; thence N88°08'51"E along said South line 1124.95 feet to the West right-of-way line of Marsh Road, said West line being West of and 60.00 feet measured perpendicularly to the centerline of Marsh Road; thence along said West line S01°25'28"E 629.15 feet to the centerline of former Raby Road; thence N89°45'31"W along said centerline 20.01 feet to the West line of Marsh Road, said West line being West of and 80.00 feet measured perpendicularly to the centerline of Marsh Road; thence S01°25'28"E along said West line 83.28 feet to the Northerly line of a Consumers Energy tower line easement; thence along said Northerly line the following three courses: S54°02'30"W 638.21 feet, S46°14'05"W 124.14 feet; S53°35'08"W 628.79 feet to the point of beginning; said parcel containing 28.63 acres more or less; said parcel subject to all easements and restrictions if any.



BENCHMARKS:

BENCHMARK #1 ELEV. = 862.07
CHISELED "X" IN NORTH SIDE OF CONCRETE LIGHT POLE BASE, 170± EAST AND 90± NORTH OF NORTHWEST CORNER OF #1655 HASLETT ROAD.

BENCHMARK #4 ELEV. = 863.05
SOUTHWEST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "A" IN "TRAVERSE CITY", 18± EAST AND 80± NORTH OF NORTHEAST CORNER OF #1655 HASLETT ROAD.

NOTE: WATER SHALL HAVE 10' HORIZONTAL SEPARATION & 18" VERTICAL SEPARATION FROM ALL SEWERS.

EX. LEGEND

(M) = MEASURED DISTANCE	⊙ = SANITARY MANHOLE
(R) = RECORD DISTANCE	⊕ = DRAINAGE MANHOLE
• = SET 1/2" BAR WITH CAP	⊖ = ELECTRIC MANHOLE
□ = FOUND IRON AS NOTED	⊗ = TELEPHONE MANHOLE
— = DISTANCE NOT TO SCALE	⊘ = CATCH BASIN
— = FENCE	⊙ = SANITARY CLEANOUT
— = ASPHALT	⊕ = FIRE HYDRANT
— = CONCRETE	⊖ = VALVE
— = DECK	⊗ = UTILITY POLE
— = GRAVEL	⊘ = LIGHT POLE
— = EXISTING SPOT ELEVATION	⊙ = GUY POLE
— = EXISTING CONTOUR ELEVATION	⊕ = UTILITY PEDESTAL
— = BUILDING OVERHANG	⊖ = TRANSFORMER
— = SANITARY SEWER	⊗ = HANDHOLE
— = STORM SEWER	⊘ = ELECTRIC METER
— = WATER LINE	⊙ = GAS METER
— = GAS LINE	⊕ = WATER METER
— = UNDERGROUND TELEPHONE	⊖ = SOIL BORING
— = UNDERGROUND TELEVISION	⊗ = SIGN
— = UNDERGROUND ELECTRIC	⊘ = POST
— = OVERHEAD WIRES	⊙ = AIR CONDITIONING UNIT
— = EDGE OF WOODS	⊕ = LIGHT POSTS (±3" TALL, 8" DIAMETER)
— = DECIDUOUS TREE	
— = CONIFEROUS TREE	

LEGEND

— = EXT. CONTOURS	— = EXT. WATER MAIN
— = EXT. SANITARY SEWER	— = EXT. STORM SEWER
— = EXT. ELEVATIONS	— = PROPOSED WATER MAIN
— = PROPOSED SANITARY SEWER	— = PROPOSED STORM SEWER
— = MANHOLE (NEW)	— = PROPOSED C.B. MANHOLE (EX.)
— = UTILITY EASEMENT	— = CENTER LINE OF ROAD
— = ROAD RIGHT OF WAY	— = PROPERTY LINE
— = FIRE HYDRANT	— = WATER VALVE
— = THRUST BLOCK	— = PROPOSED TOP OF CURB ELEV.

EX. SANITARY SEWER INVENTORIES:

SANITARY MANHOLE #200 RIM ELEV. = 861.50 8" VCP S INV. = 854.18 8" VCP W INV. = 854.22	SANITARY MANHOLE #201 RIM ELEV. = 861.75 8" VCP E INV. = 855.03 8" VCP W INV. = 855.07	SANITARY MANHOLE #202 RIM ELEV. = 862.08 8" VCP E INV. = 856.14	SANITARY MANHOLE #203 RIM ELEV. = 862.12 6" VCP N INV. = 853.68 8" VCP E INV. = 853.48	SANITARY MANHOLE #204 RIM ELEV. = 858.48 8" VCP E INV. = 852.51 8" VCP W INV. = 852.53	SANITARY MANHOLE #205 RIM ELEV. = 859.64 8" VCP E INV. = 851.44 8" VCP W INV. = 851.48	SANITARY MANHOLE #206 RIM ELEV. = 861.41 8" VCP N INV. = 850.71 8" VCP S INV. = 850.63 8" VCP W INV. = 850.76	SANITARY MANHOLE #207 RIM ELEV. = 872.54 PIPES NOT VISIBLE N INV. = 849.42 SW INV. = 849.36	SANITARY MANHOLE #208 RIM ELEV. = 853.05 24" RCP NE INV. = 837.43 24" RCP SW INV. = 837.37	SANITARY MANHOLE #209 RIM ELEV. = 844.61 24" RCP NE INV. = 836.62 24" RCP SW INV. = 836.57	SANITARY MANHOLE #210 RIM ELEV. = 839.51 PIPES NOT VISIBLE BOTTOM ELEV. = 832.43	SANITARY MANHOLE #211 RIM ELEV. = 840.85 PIPES NOT VISIBLE NE INV. = 832.35 SW INV. = 832.30 T/WATER ELEV. = 834.25
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EX. STORM SEWER INVENTORIES:

CATCH BASIN #100 RIM ELEV. = 860.14	CATCH BASIN #101 RIM ELEV. = 861.52	CATCH BASIN #103 RIM ELEV. = 863.83	CATCH BASIN #104 RIM ELEV. = 859.05 12" RCP NW INV. = 853.73	CATCH BASIN #105 RIM ELEV. = 862.12 12" RCP N INV. = 853.24 12" RCP SE INV. = 853.23 18" RCP SW INV. = 852.76	CATCH BASIN #106 RIM ELEV. = 861.75 8" UNKNOWN NE INV. = 856.69 12" RCP S INV. = 856.54 12" RCP NW INV. = 856.67	CATCH BASIN #107 RIM ELEV. = 861.90 12" RCP SE INV. = 857.94	CATCH BASIN #108 RIM ELEV. = 861.63 12" RCP S INV. = 854.88	CATCH BASIN #109 RIM ELEV. = 861.08 12" RCP SW INV. = 856.72	CATCH BASIN #110 RIM ELEV. = 860.02 24" RCP E INV. = 849.62 30" RCP SW INV. = 849.58	CATCH BASIN #111 RIM ELEV. = 859.77 12" RCP NE INV. = 854.78 24" RCP SE INV. = 850.37 24" RCP W INV. = 850.32	CATCH BASIN #112 RIM ELEV. = 859.46 24" RCP NE INV. = 850.78 24" RCP W INV. = 850.76	CATCH BASIN #113 RIM ELEV. = 858.81 12" RCP N INV. = 852.50 18" RCP NE INV. = 852.13 24" RCP SW INV. = 851.58
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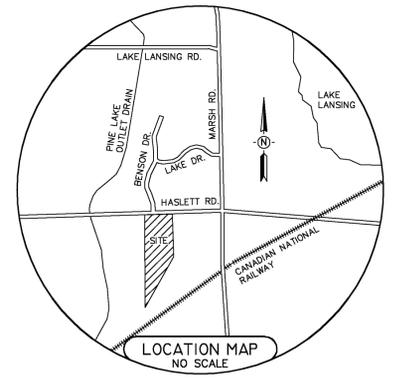
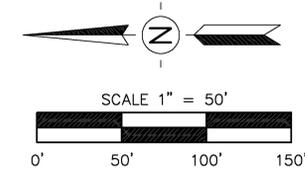
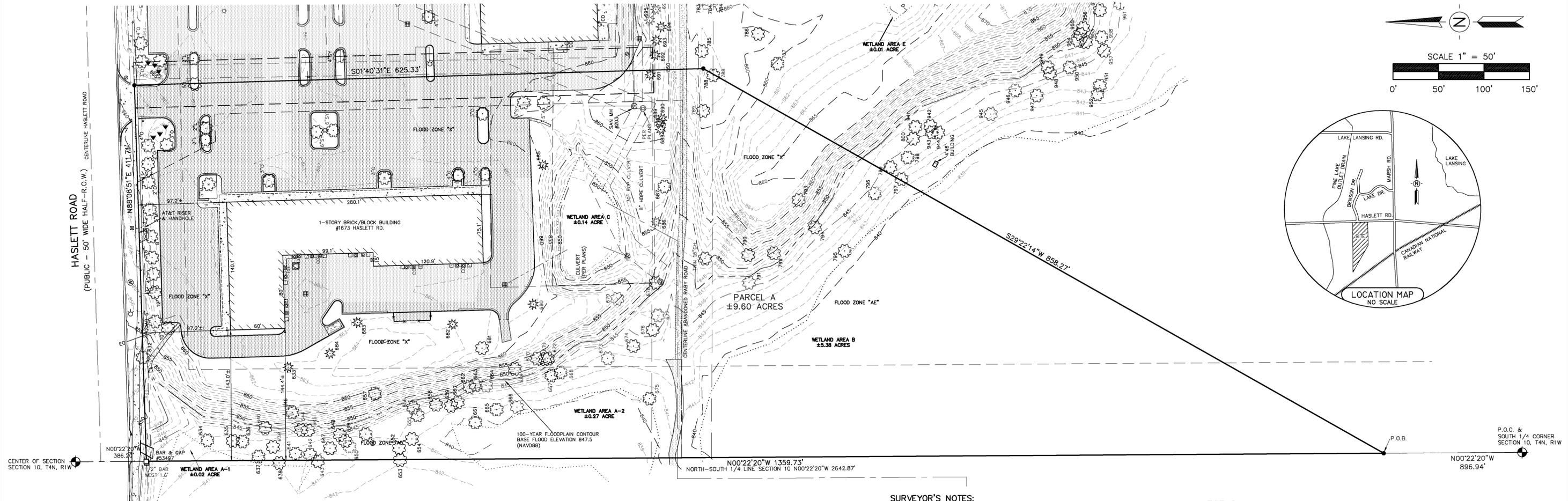
PROPOSED AMENITIES:

- (A) ELECTRIC CAR CHARGING STATION
- (B) FOOT & BICYCLE PATHWAYS AND SIDEWALKS THAT CONNECT INTO PATH SYSTEM
- (C) COVERED BICYCLE STORAGE ON SITE
- (D) OUTDOOR GATHERING SPACES & OUTDOOR EATING SPACES
- (E) BENCHES OR OUTDOOR SEATING
- (F) PRIVATE COURTYARDS
- (G) PORCHES ON ANY STRUCTURE
- (H) SIDEWALK PLANTERS-POTS
- (I) PUBLIC ART
- (J) BUILDING RECYCLING PROGRAM
- (K) ENERGY STAR APPLIANCES
- (L) CATA BUS STOP PAD

REVISIONS	<p>11-19-19 MUPUD SUBMITTAL</p> <p>12-9-19 MUPUD REVISIONS</p> <p>12-11-19 MUPUD REVISIONS</p> <p>1-6-20 MUPUD REVISIONS</p>	<p>KEBS, INC. KYES ENGINEERING BRYAN LAND SURVEYS</p> <p>2116 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-1014 FAX. 517-339-8047</p> <p>Marshall Office Ph. 269-781-9800</p> <p>Pine Village of Meridian AMENITIES PLAN</p>	<p>APPROVED BY: GAP</p> <p>DESIGNER: GAP</p> <p>PROJECT MGR: GAP</p> <p>AUTHORIZED BY: HUDSON SENIOR LIVING, LLC</p>
SCALE: 1" = 50'	DATE: 10-7-19	SHEET 6 OF 7	JOB # 95818

EXISTING PLAN

"1655 & 1673 HASLETT ROAD & 1659 RABY ROAD, HASLETT, MI 48840"



LEGAL DESCRIPTION:
(As provided by Transnation Title Agency, underwritten by Fidelity National Title Insurance Company, Commitment No. 284081LANS, Revision No. 1, dated August 22, 2019)

PARCEL A:
A parcel of land in the Southeast 1/4 of Section 10, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as: Commencing at the South 1/4 corner of said Section 10; thence North 00 degrees 22 minutes 20 seconds West along the North-South 1/4 line of said Section 10 a distance of 896.94 feet to the point of beginning of this description; thence continuing North 00 degrees 22 minutes 20 seconds West along said North-South 1/4 line 1359.73 feet to the South right-of-way line of Haslett Road, said South line being South of and 50.00 feet measured perpendicularity to the centerline of Haslett Road; thence North 88 degrees 08 minutes 51 seconds East along said South line 411.71 feet; thence South 01 degrees 40 minutes 31 seconds East 625.33 feet; thence South 29 degrees 22 minutes 14 seconds East 858.27 feet to the point of beginning.

Together with and subject to an Ingress/Egress Easement described as: A area of land in the Southeast 1/4 of Section 10, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as commencing at the South 1/4 corner of said Section 10; thence North 00 degrees 22 minutes 20 seconds West along the North-South 1/4 line of said Section 10 a distance of 2256.67 feet to the South right-of-way line of Haslett Road, said South line being South of and 50.00 feet measured perpendicularity to the centerline of Haslett road; thence North 88 degrees 08 minutes 51 seconds East along said South line 386.71 feet to the point of beginning; thence North 88 degrees 08 minutes 51 seconds East continuing along said South line 50.00 feet; thence South 01 degrees 40 minutes 31 seconds East 570.00 feet; thence South 88 degrees 08 minutes 51 seconds West 50.00 feet; thence North 01 degrees 40 minutes 31 seconds West 570.00 feet to the point of beginning.

SCHEDULE B, SECTION II, EXCEPTIONS:
(As provided by Transnation Title Agency, underwritten by Fidelity National Title Insurance Company, Commitment No. 284081LANS, Revision No. 1, dated August 22, 2019)

Item 11: Easement for Nemoka Drain purposes vested in Ingham County Drain Commissioner by instrument recorded in Liber 70 of Miscellaneous Records, Page 472, may cross parcel, is not plottable, therefore not shown hereon. Portions of instrument recorded in Liber 70 of Miscellaneous Records, Page 472 are illegible.

Item 12: Easement for Nemoka Drain purposes vested in Ingham County Drain Commissioner by instrument recorded in Liber 70 of Miscellaneous Records, Page 484, may cross parcel, is not plottable, therefore not shown hereon. Instrument recorded in Liber 70 of Miscellaneous Records, Page 484 allows for enlargement and repair of existing drain with no specific easement location or route and course affected.

Item 13: Easement granted to Consumers Energy Company recorded in Liber 948, Page 670, does not cross parcel, therefore not shown hereon.

Item 14: Easement for Road purposes vested in Ingham County Road Commissioner by instrument recorded in Liber 1374, Page 996, abuts parcel, is plottable and shown hereon.

Item 15: Easement for water main and sanitary sewer purposes vested in Charter Township of Meridian, a Municipal Corporation by instrument recorded in Liber 1377, Page 34, crosses parcel, is plottable and shown hereon.

Item 16: Area affected by terms, conditions and provisions which are recited in Agreement recorded in Liber 1416, Page 828, crosses parcel, is plottable and shown hereon.

Item 17: Easement for Haslett Village Square Branch of Pine Lake Outlet Drain purposes vested in Ingham County Drain Commissioner by instrument recorded in Liber 1416, Page 835, crosses parcel, is plottable and shown hereon.

Item 18: Easement for Haslett Village Square Branch of Pine Lake Outlet Drain purposes vested in Ingham County Drain Commissioner by instrument recorded in Liber 1416, Page 839, now held by Long Development, Inc., crosses parcels, is plottable and shown hereon.

Item 19: Easement for Haslett Village Square Branch of Pine Lake Outlet Drain purposes recorded in Liber 1416, Page 843, crosses parcel, is plottable and shown hereon.

Item 23: Easement granted to Consumers Energy Company recorded in Liber 1541, Page 549, crosses parcel, is blanket over a portion of the parcel, but no specific location of easement is described; area affected is plottable and shown hereon.

Item 24: Area affected by terms, conditions and provisions which are recited in Declaration of Reciprocal Covenants, Restrictions and Easements recorded in Liber 1542, Page 206, crosses parcel; no specific location is described for perpetual ingress/egress easement described in said document, therefore not plottable, therefore not shown hereon.

Item 25: Easement granted to Michigan Bell Telephone Company recorded in Liber 1545, Page 36, crosses parcel, is plottable and shown hereon.

Item 26: Area affected by terms, conditions and provisions which are recited in the Drainage Easement recorded in Liber 1653, Page 1017, crosses parcel, is plottable and shown hereon.

Item 27: Easements for utilities within abandoned Raby Street which are recited in Notice recorded in Liber 2592, Page 199, and corrected in Liber 2594, Page 568, cross parcel, are plottable and shown hereon.

Item 28: Easement for pedestrian pathway purposes recorded in Liber 3225, Page 660, crosses parcel, is plottable and shown hereon.

Item 29: Grant of Communications System Easement/Release recorded in Liber 3279, Page 237, does not cross parcel, therefore not shown hereon.

Item 33: Easement Deed by Court Order recorded in Instrument No. 2013-005529. Modified in Instrument No. 2015-022038, does not cross parcel, therefore not shown hereon.

Item 35: Easements which are recited in Warranty Deed recorded in Liber _____, Page _____ (To be recorded)

SURVEYOR'S NOTES:

- This plan was made at the direction of the parties named hereon and is intended solely for their immediate use. Survey prepared from fieldwork performed in September 2019.
- All bearings and distances on the survey are record and measured unless otherwise noted. All bearings are Michigan State Plane South Zone grid bearings obtained from GPS observations using corrections obtained from the Lansing C.O.R.S.
- All dimensions are in feet and decimals thereof.
- No building tie dimensions are to be used for establishing the property lines.
- There are no observable potential encroachments onto the subject property from adjoining lands, or from the subject property onto adjoining lands, except as shown hereon.
- Parcel abuts public Haslett Road and has vehicular access to said roadway via the ingress/egress easement described in the parcel legal description.
- Utilities are shown based on above-ground field evidence only. No MISS DIG ticket was submitted.

ALTA/NSPS LAND TITLE SURVEY - TABLE "A" REQUIREMENTS:

Item 1: Shown on the survey map.

Item 2: Addresses of the surveyed property per the titework provided: 1655 Haslett Road, 1673 Haslett Road, & 1659 Raby Road, Haslett, MI 48840.

Item 3: By scaled map location and graphic plotting only, this property lies partly within Flood Zone "AE", areas within the 1% annual chance floodplain and partly within Flood Zone "X", areas outside the 1% annual chance floodplain, according to the National Flood Insurance Program, Flood Insurance Rate Map for the Charter Township of Meridian, Ingham County, Michigan, Community Panel No. 260093 0156 D, dated August 16, 2011. The base flood elevation as determined from said mapping is 847.5 feet (NAVD88 datum), and said contour is shown graphically on the survey drawing.

Item 4: 9.60 Acres (418,211 square feet)

Item 7a: Shown on the survey map.

Item 8: Shown on the survey map.

LEGEND

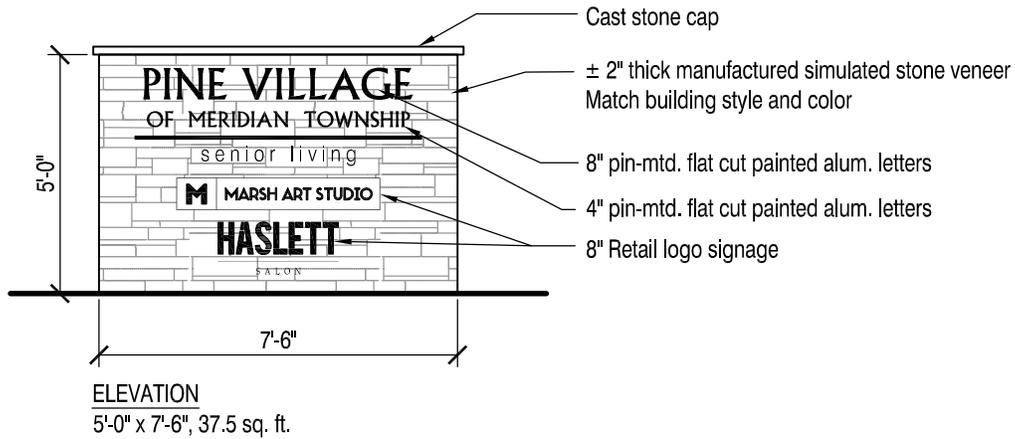
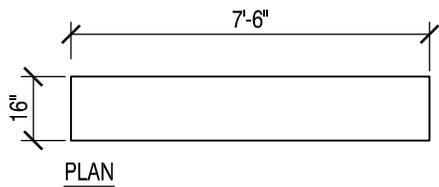
(M)	= MEASURED DISTANCE	⊗	= SANITARY MANHOLE
(R)	= RECORD DISTANCE	⊕	= DRAINAGE MANHOLE
●	= SET 1/2" BAR WITH CAP	⊖	= ELECTRIC MANHOLE
□	= FOUND IRON AS NOTED	⊙	= TELEPHONE MANHOLE
—	= DEED LINE	⊗	= CATCHBASIN
—	= DISTANCE NOT TO SCALE	⊗	= SANITARY CLEANOUT
—	= FENCE	⊗	= FIRE HYDRANT
▨	= ASPHALT	⊗	= VALVE
▩	= CONCRETE	⊗	= UTILITY POLE
▧	= DECK	⊗	= LIGHT POLE
▦	= GRAVEL	⊗	= GUY POLE
⊕	= EXISTING SPOT ELEVATION	⊗	= GUY WIRE
—	= EXISTING CONTOUR ELEVATION	⊗	= UTILITY PEDESTAL
—	= BUILDING OVERHANG	⊗	= TRANSFORMER
—	= SANITARY SEWER	⊗	= HANDHOLE
—	= STORM SEWER	⊗	= ELECTRIC METER
—	= WATER LINE	⊗	= GAS METER
—	= GAS LINE	⊗	= WATER METER
—	= UNDERGROUND TELEPHONE	⊗	= SOIL BORING
—	= UNDERGROUND TELEVISION	⊗	= SIGN
—	= UNDERGROUND ELECTRIC	⊗	= POST
—	= OVERHEAD WIRES	⊗	= AIR CONDITIONING UNIT
⊗	= EDGE OF WOODS	⊗	= LIGHT POSTS (±3' TALL, 8" DIAMETER)
⊗	= DECIDUOUS TREE		
⊗	= CONIFEROUS TREE		

CERTIFICATION:
To Cypress Partners, LLC, a Michigan limited liability company; Haslett Village Square, LLC; Transnation Title Agency; and Fidelity National Title Insurance Company.

This is to certify that this map or plot and the survey on which it is based were made in accordance with the 2016 "Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys," jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 7a, and 8 of Table A thereof. The fieldwork was completed on September 13, 2019.

Erick R. Friestrom Date of Plot or Map:
Professional Surveyor No. 53497
erfriestrom@kebs.com

REVISIONS	COMMENTS	E-95688.ALT	
09/13/2019	PRELIMINARY	KEBS, INC. ENGINEERING AND LAND SURVEYING 2116 HASLETT ROAD, HASLETT, MI 48840 PH. 517-339-1014 FAX 517-339-8047 WWW.KEBS.COM Marshall Office - Ph. 269-781-9800	
		DRAWN BY	SECTION 10, T4N, R1W
		FIELD WORK BY	JOB NUMBER:
		SHEET 7 OF 7	95688.ALT



104 W. Fourth St., Suite 303
Royal Oak, Michigan 48067
T: 248.629.7153 F: 248.629.7154
www.SHELTERSTUDIOLLC.com

Project
Pine Village of Meridian Twp
Monument Sign

Drawing No.: **Sign1**

Drawing Title
Plan & Elevation 1/4" = 1'-0"

Issued For	Date
MUPUD Submittal	11.12.2019
REV. MUPUD Submittal	12.12.2019
REV. MUPUD Submittal	01.08.2020

RESOLUTION TO RECOMMEND APPROVAL

**Mixed Use Planned Unit Development #19034
(Hudson Senior Living)**

At a regular meeting of the Planning Commission of the Charter Township of Meridian, Ingham County, Michigan, held at the Meridian Municipal Building, in said Township on the 13th day of January, 2020, at 7:00 p.m., Local Time.

PRESENT: _____

ABSENT: _____

The following resolution was offered by _____ and supported by _____.

WHEREAS, Hudson Senior Living has submitted a request to establish a mixed use planned unit development (MUPUD) identified as Pine Village on 9.6 acres located at 1673 Haslett Road; and

WHEREAS, the proposed mixed use planned unit development includes the demolition of the existing 23,415 square foot multi-tenant shopping center building and construction of a 146,734 square foot senior apartment building with a total of 133 dwelling units and 9,558 square feet of non-residential space; and

WHEREAS, a total of 146,734 square feet is proposed in the project, consisting of 9,558 square feet of non-residential space and 137,176 square feet of residential space; and

WHEREAS, the Planning Commission held a public hearing at its regular meeting on December 16, 2019, and has reviewed staff material forwarded under cover memorandums dated December 11, 2019 and January 8, 2020; and

WHEREAS, the subject site is appropriately zoned C-2 (Commercial), which allows for a mixed use planned unit development; and

WHEREAS, the proposed mixed use planned unit development meets the minimum MUPUD design standards as outlined in Section 86-440(f) of the Code of Ordinances; and

WHEREAS, the requested waiver for the number of motor vehicle parking spaces is appropriate and necessary to facilitate development of the property consistent with the intent of the MUPUD ordinance; and

WHEREAS, the number and type of amenities provided in the mixed use planned unit development are consistent with the requirements, guidelines, and criteria stated in Section 86-440(e) of the Code of Ordinances; and

WHEREAS, municipal water and sanitary sewer is available to serve the subject site; and

WHEREAS, the proposed mixed use planned unit development is consistent with Objective B of Goal 1 of the 2017 Master Plan to ensure new residential developments meet high standards of visual attractiveness, health and safety, and environmental sensitivity; and

**Resolution to Recommend Approval
MUPUD #19034 (Hudson Senior Living)
Page 2**

WHEREAS, the proposed mixed use planned unit development is consistent with Objective A of Goal 3 of the 2017 Master Plan to upgrade commercial areas by improving and enhancing the Haslett Road commercial area while maintaining its traditional character.

NOW THEREFORE, BE IT RESOLVED THE PLANNING COMMISSION OF THE CHARTER TOWNSHIP OF MERIDIAN hereby recommends approval of Mixed Use Planned Unit Development #19034, subject to the following conditions.

1. Approval is in accordance with the site plan prepared by Kebs, Inc. dated October 7, 2019 (revision date January 6, 2020) and received by the Township on January 6, 2020.
2. Approval is in accordance with the floor plans and building elevations prepared by Shelter Design Studio LLC dated December 12, 2019 and received by the Township on December 12, 2019.
3. Approval of the mixed use planned unit development is contingent on the approval of Special Use Permit #19181.
4. The waiver requested for the number of parking spaces is recommended for approval as depicted on the submitted site plan prepared by Kebs, Inc. dated October 7, 2019 (revision date January 6, 2020) and received by the Township on January 6, 2020.
5. The amenities proposed for the project are approved in accordance with the Amenities Plan prepared by Kebs, Inc. dated October 7, 2019 (revision date January 6, 2020) and received by the Township on January 6, 2020.
6. Approval is subject to the applicant obtaining all necessary permits, licenses, and approvals from the Ingham County Road Department, Ingham County Drain Commissioner, Michigan Department of Environment, Great Lakes, and Energy (EGLE), and the Township, as applicable. Copies of all permits and approval letters shall be submitted to the Department of Community Planning and Development.
7. The utility, grading, and storm drainage plans for the site are subject to the approval of the Director of Public Works and Engineering and Ingham County Drain Commissioner and shall be completed in accordance with the Township Engineering Design and Construction Standards.
8. No grading or land clearing shall take place on the site until the site plan has been approved by the Director of Community Planning and Development and grading and soil erosion and sedimentation control (SESC) permits have been issued for the project.
9. A demolition permit is required to demolish the existing commercial building.
10. All utility service distribution lines shall be installed underground.
11. Any future building additions or revisions to the site layout will require amendments to Mixed Use Planned Unit Development #19034 and Special Use Permit #19181.
12. The final design of the trash and recycling facilities and related enclosures shall be subject to the approval of the Director of Community Planning and Development.

**Resolution to Recommend Approval
MUPUD #19034 (Hudson Senior Living)**

Page 3

13. Site accessories such as railings, benches, exterior lighting fixtures, and bicycle racks shall be of commercial quality and complement the building design. Final design and location shall be subject to the approval of the Director of Community Planning and Development.
14. Landscaping shall comply with the provisions of the Code of Ordinances, including the standards outlined in Section 86-440(f)(4) and other applicable sections of the Ordinance pertaining to landscaping.
15. Site and building lighting shall comply with Article VII of Chapter 38 of the Code of Ordinances and shall be subject to the approval of the Director of Community Planning and Development.
16. Submittal and approval of a parcel split/combination is required to add the proposed approximate 4.3 acres from the 12.63 acre parcel to the south to the subject parcel for development of the project.
17. All pathways and sidewalks shall be designed and constructed in accordance with Township Engineering Design and Construction Standards. The design and location of the sidewalks and pathways shall be subject to the approval of the Director of Public Works and Engineering.
18. The applicant shall construct the extension of the Inter-Urban pathway along the west side of the property or provide payment to the Township in lieu of constructing the pathway. The final design of the pathway is subject to the approval of the Director of Public Works and Engineering.
19. All mechanical, heating, ventilation, air conditioning, and similar systems shall be screened from view by an opaque structure or landscape materials (if at street level) selected to complement the building. Such screening is subject to the approval by the Director of Community Planning and Development.

ADOPTED: YEAS: _____

NAYS: _____

STATE OF MICHIGAN)

) ss

COUNTY OF INGHAM)

I, the undersigned, the duly qualified and acting Chair of the Planning Commission of the Charter Township Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and a complete copy of a resolution adopted at a regular meeting of the Planning Commission on the 13th day of January, 2020.

Ken Lane
Planning Commission Chair

**CHARTER TOWNSHIP OF MERIDIAN
PLANNING COMMISSION
REGULAR MEETING MINUTES**

APPROVED

**December 16, 2019
5151 Marsh Road, Okemos, MI 48864-1198
517-853-4560, Town Hall Room, 7:00 P.M.**

**PRESENT: Commissioners Lane, Hendrickson, Trezise, Richards, Premoe, Shrewsbury
Clark and Cordill
ABSENT: None
STAFF: Director of Community Planning & Development Mark Kieselbach, Economic
Development Director Chris Buck, and Principal Planner Peter Menser**

1. Call meeting to order

Chair Lane called the regular meeting to order at 7:01 P.M.

2. Public Remarks - None

3. Approval of Agenda

Commissioner Richards moved to approve the agenda as written.
Seconded by Commissioner Premoe.
VOICE VOTE: Motion approved unanimously.

4. Approval of Minutes

A. December 9 2019 Regular Meeting

Commissioner Hendrickson moved to approve the minutes as written.
Seconded by Commissioner Cordill.
VOICE VOTE: Motion approved unanimously.

5. Communications

Chair Lane noted the communication listed in the meeting packet for consideration.

6. Public Hearings

- 
- A. Mixed Use Planned Unit Development #19034 (Hudson Senior Living), construct a 146,743 square foot independent senior apartment building with 133 dwelling units at 1673 Haslett Road.
 - B. Special Use Permit #19181 (Hudson Senior Living), construct an independent senior apartment building over 25,000 square feet in size at 1673 Haslett Road.

Chair Lane opened the public hearing at 7:05 p.m.

Principal Planner Menser welcomed everyone and stated the Mixed Use Planned Unit Development #19034 and Special Use Permit #19181 proposals would be combined in the public hearing and staff overview.

The applicant, Jeff Buck, with Hudson Senior Living, 280 W. Maple Road, Suite 230, Birmingham, MI 48009 provided additional information about the proposed project. Mr. Buck expressed his excitement about the project and the vibrancy it would bring to the area. He said each apartment would have a full kitchen and noted other amenities which include: a full commercial kitchen with a dining room and an outside dining patio, a café and pub, salon, art studio, home health care office, fitness room, library, game room, a multipurpose room, chapel, two commercial laundry rooms, and numerous gathering spaces throughout the complex.

He also noted residents who do not drive or own a car will have access to additional transportation options including an on-site community van and public transportation.

Mr. Buck stated he would be available to answer any questions.

Public Comment: None

Planning Commission Discussion:

- The funding source for this project would not include a PILOT (payment in lieu of taxes).
- The applicant was asked a question about what other projects Hudson Senior Living has done and he responded with the following information: The proposed building would be modeled after a similar project done recently in St. Clair Shores, Michigan. He also noted another senior living project completed in Traverse City, Michigan of similar size.
- While reviewing the multiple family parking standards, the proposed project would require a total of 270 parking spaces and the applicant is seeking a 163 space waiver as part of the MUPUD approval. Planning Commission members expressed their concerns with the limited parking spaces and questioned if parking for employees, family members visiting and special events have been considered. In the future when the east side of the property is redeveloped they shared concern that there may not be enough parking.
- The applicant, Jeff Buck, was asked a question about the sign waiver and he noted it was to request larger signs than allowed in the ordinance to advertise community classes and space that is planned for the complex in the salon and art studio.
- A comment was made regarding another senior living complex that didn't have enough parking to accommodate extra parking spaces when needed.
- The Site Engineer, Greg Petru of Kebs, Inc. located at 2116 Haslett Road noted they are proposing to fill in the current detention basin and relocate it to the southeast corner of the property.
- Belief that the proposal would provide an opportunity for the local elderly population to continue to live locally and remain socially active in the community.
- The applicant stated that each wing of the building would have its own elevator.
- Planning Commission belief the project could provide the opportunity to enjoy bike paths and live in a walkable community as well as easy access to public transportation.

A straw poll indicated the Planning Commission would be in support of recommending approval of both Mixed Use Planned Unit Development #19034 and Special Use Permit #19181 at the January 13, 2020 meeting.

Chair Lane closed the public hearing at 7:50 p.m.

- C. Rezoning #19100 (Durow), rezone approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial).

Chair Lane opened the public hearing at 7:51 p.m.

Principal Planner Menser provided a brief overview of the proposed rezoning. He noted the split zoning was discovered when staff conducted research on the proposal but did not show up on the zoning maps.

The traffic assessment shows a mischaracterization of the current land use due to the lack of a land use category for comparison. The property is and has not been used as a shopping center and the numbers are inflated compared to the actual amount of traffic realistically generated.

Principal Planner Menser noted he would be available to answer questions.

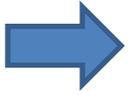
The owner/applicant Gary Durow, 1259 West Grand River Avenue, Okemos, Michigan said he has owned the business on the property since 1955. He resides in the farm home that was built in 1928 and said the noise from traffic is deafening on Grand River Avenue where the 5 lane state highway has a speed limit of 50 miles per hour. He stated the Rural Residential zoning is wrong for his property and this is the reason his property has been for sale for 7 years and no one is interested in leasing the property unless it is rezoned.

Public Comment:

1. Chris Potterpin, 4534 Ethel Street, spoke in opposition to Rezoning #19100.
2. Pete Potterpin, 1250 Ethel Street, spoke in opposition to Rezoning #19100.
3. Tom Saad, 4554 Cornell Road, spoke in opposition to Rezoning #19100.
4. Amanda Hopper, 5485 Martinique, spoke in support of Rezoning #19100.

Planning Commission Discussion:

- This is a challenging site because it has been a commercial use for a long time.
- The eastern portion of Meridian Township was Rural Residential and is part of the Master Plan. The line for commercial uses is considered west of Cornell Road.
- Consideration that C-2 zoning may not be appropriate for the property. The property is on a major highway and maybe there could be a compromise for the property owner and less intrusive for surrounding neighbors.
- The property owner has significant limitations with the property as it is currently zoned.
- There is a school nearby and already a lot of traffic on the busy, narrow road as well as congestion during certain times of the day.



7. Unfinished Business

- A. Mixed Use Planned Unit Development #19034 (Hudson Senior Living), construct a 146,743 square foot independent senior apartment building with 133 dwelling units at 1673 Haslett Road.
- B. Special Use Permit #19181 (Hudson Senior Living), construct an independent senior apartment building over 25,000 square feet in size at 1673 Haslett Road.

Principal Planner Menser noted both items could be discussed but motions should be voted on separately. He provided an update since the public hearing held in December. The applicant submitted a revised sign plan and a revised site plan adding 24 bicycle parking spaces, 4 motor vehicle parking spaces, identified 23 possible future parking spaces and an extension of the Township's Inter-Urban pathway along the west side of the property. Principal Planner Menser noted he would be available to answer questions.

Motion by Commissioner Premoe to recommend approval of Mixed Use Planned Unit Development #19034 with conditions.

Commissioner Premoe offered a friendly amendment to condition approval on adding the additional 23 possible future parking spaces to the site plan was accepted by the maker. Supported by Commissioner Shrewsbury.

Planning Commission Discussion:

- Commissioner Hendrickson questioned if the proposed project met the intent of the ordinance for the Mixed Use Planned Unit Development. He stated one key goal is to mix uses in the development by providing common areas for residents and the public.
- The applicant stated the salon would be operated by a local business and would service residents of the complex as well as residents in the community. The dining room, pub and art studio in the complex would also be available to the public. Local groups would also be able to use the community rooms for meetings.
- The applicant stated they need 0.7 parking spaces per unit which is based on similar projects they have completed.
- There will be approximately 20 employees at the Pine Village senior apartment building.
- Director Chris Buck discussed the demographics of the 28 acres of property located in the Haslett Village Square area. The area is being marketed for redevelopment projects and the proposed Mixed Use Planned Unit Development is phase one. The other two sections (16.5 acre in the center section and 2.5 acre at the corner of Haslett/Marsh) of the property are being marketed to other projects.
- Chair Lane asked the applicant if they would consider revising the site plan to add the 23 parking spaces for a total of parking spaces to a total of 128 and the applicant agreed.
- Commissioner Trezise asked for a Friendly Amendment to the motion to make the 23 additional parking spaces part of the revised site plan.

ROLL CALL VOTE:

YEAS: Commissioners Premoe, Shrewsbury, Clark, Cordill, Trezise and Chair Lane.

NAYS: Commissioners Richards and Hendrickson

MOTION CARRIES: 6-2

Motion by Commissioner Cordill to recommend approval of Special Use Permit #19181 with conditions.

Supported by Commissioner Trezise.

ROLL CALL VOTE:

YEAS: Commissioners Cordill, Trezise, Premoe, Clark, Shrewsbury, Richards and Chair Lane.

NAYS: Commissioner Hendrickson

MOTION CARRIES: 7-1

- C. Rezoning #19100 (Durow), rezone approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial).

Motion by Commissioner Hendrickson to recommend denial of Rezoning #19100.

Supported by Commissioner Cordill.

Planning Commission Discussion:

- The property has been used for commercial purposes for many years.
- The request is inconsistent with the Future Land Use Map and surrounding properties which are residential.
- Rezoning the property to C-2 would be considered spot zoning.

ROLL CALL VOTE:

YEAS: Commissioners Hendrickson, Cordill, Trezise, Shrewsbury, Clark, Richards and Chair Lane.

NAYS: Commissioner Premoe

MOTION CARRIES: 7-1

8. Other Business

A. Election of Officers

Commissioner Premoe nominated Commissioner Lane as Chair.

Supported by Commissioner Trezise.

ROLL CALL VOTE:

YEAS: Commissioners Richards, Clark, Shrewsbury, Hendrickson, Cordill, Trezise, Premoe and Lane.

NAYS: None

MOTION CARRIES: 8-0

Commissioner Richards nominated Commissioner Hendrickson as Vice Chair.

Supported by Commissioner Clark.

October 14, 2016 (New York Times)

Few people in America walk to work. Most of us drive to the supermarket. But more older people these days are looking for a community where they can enjoy a full life without a car.

Enter a new paradigm: the walkable, urban space. It may range from existing neighborhoods in places like Brooklyn or San Francisco to newly built housing within city and suburban cores from coast to coast.

Walkability, though, is much more than a hip marketing pitch. It's linked to better health, social engagement and higher property values.

“The model used to be to isolate old people on cul-de-sacs backing up to a golf course,” Mr. Leinberger said. “The new model just beginning to rise is for walkable urban places.”

January 28, 2017 (New York Times)

But suburban homes were originally designed, and for the most part still are, for young families — and for drivers. They are typically surrounded by other single-family houses. Lacking a fitter partner or a network of helpful neighbors and caring family members, older residents can end up feeling isolated, unable to do basic errands or keep up their property. Further, most suburbs are zoned to prevent any non-single-family housing from being built, whether multiunit projects or the seemingly benign granny flat.

Thoughtfully designed housing for older adults is not being created on a scale commensurate with the growing need. It's not a market many architects or developers have embraced. Conversely, a disproportionate amount of attention has been focused on the presumed desires of millennials. We hear all the time that it's that group that craves walkability, good transit and everything- at-their-doorstep amenities — and that only cities can provide it.

But what if these offerings weren't exclusively urban? What if suburban communities could provide some of them? And what if more communities weren't so keyed into specific demographics, maybe even aiming instead to serve multiple generations? Professionals are starting to pay attention, with some suggesting that the housing industry ditch the term “senior” altogether.

July 26, 2017 (Senior Housing News)

Baby boomers are bringing new expectations to senior living—including a distaste for isolated, rural communities.

Nowadays, walkable, urban neighborhoods and proximity to transportation are high priorities for prospective senior living residents, according to a recent survey report from A Place for Mom.

These urban pockets don't necessarily happen overnight, Severn pointed out. Developers should monitor the pulse of growing suburban areas to try and predict where walkable town centers are emerging.

"These urban, walkable sites are not the only smart way to do senior housing," Pettit said. "Still, there is a healthy demand today for these types of sites and I believe there will be a much stronger demand in the future with the baby boomer generation."

February 23, 2018 (Forbes)

Increasing longevity has spurred unprecedented economic growth and new opportunities for personal fulfillment. Older individuals are generally healthier than their counterparts in generations past, and they seek to remain engaged and relevant as long as possible.

With consumption habits and service needs distinct from those of younger adults, Americans over 50 already account for \$7.6 trillion in direct spending and related economic activity annually and control more than 80% of household wealth, according to Oxford Economics.

When it comes to housing, transportation, entertainment, food and alcohol, older people already have their checkbooks out. Americans 60-plus are expected to account for at least 40% of consumption growth in those areas between 2015 and 2030.

Today's older adults seek meaning and purpose, disrupting retirement norms and expressing increasing interest in lifelong work and volunteering.

March 26, 2018 (Suddenly Senior)

Freed from the constraints of raising a family and with more time of their own, mature consumers seek products, services, and activities that compliment their desire to live life to the fullest. The mature market has over \$1.6 trillion in spending power and a net worth that's nearly twice the U.S. average.

May 2, 2019 (AMAC)

America's aging population – the country is growing older at the rate of ten thousand new 65-year-olds a day – has become a lucrative market for a variety of businesses, according to the Association of Mature American Citizens [AMAC].

In other words, says Weber, "today's seniors are active, not sedentary. They are healthier and living longer than ever before. And, they are more likely to be focused on their to-do lists than on their no-no lists. The old-school notion that you can't teach an old dog new tricks hardly describes today's mature Americans."

May 28, 2019 (Senior Housing News)

That's partly because the age cohort looks at senior housing not just as real estate, but also as a platform to access wellness and lifestyle offerings, according to Dana Wollschlager, a partner with Plante Moran Living Forward. And, they're not as interested in senior housing as a peace-of-mind option — rather, boomers want a place to live where they can continue to thrive and grow in their later years.

One upcoming active adult design trend is building communities around purposeful “town centers” as a focal point instead of clubhouses, according to Dean Maddalena, president and co-founder of senior living design firm StudioSIX5

September 4, 2019 (Senior Housing News)

“Most of what we've been concentrating on for the last five to seven years has been focused on seeking out sites that connect seniors to all generations,” Pettit said.

“Seniors don't want to be isolated off to the outskirts of the community they live in, they want to be right in the middle of a vibrant, walkable neighborhood,” Anderson told SHN. “What really makes these communities special is not so much the building or what it was before but how it can be converted into a village and a neighborhood.”

January 20, 2020 (Worcester Business Journal)

The National Association of Home Builders estimated by last year homes headed by someone 55 or older would constitute more than 45% of all American households.

Now it's more often about finding social and fitness activities for residents who might be retirees itching for something to do and people to meet. Baby Boomers are more likely to stay active in retirement than the generation before them, Mace said, and they like to pack their calendars with leisure activities or things like cooking classes.

Active adult communities are becoming more common as a way to meet that need.



12.A

To: Township Board

From: Mark Kieselbach, Director of Community Planning and Development
Mackenzie Dean, Assistant Planner

Date: January 30, 2020

Re: Rezoning #19090 (Planning Commission) Hagadorn Road – Final Adoption

The Township Board voted to approve for introduction the rezoning of five parcels identified as 4036, 4038, 4046, 4108, and 4118 Hagadorn Road from RP (Research Park) to RAA (Single Family-Low Density) at its last meeting on January 21, 2020. As directed by the Board, the Clerk published the proposed ordinance as required. The following motion has been provided for the Board's consideration:

- **Move to adopt the resolution for final adoption of Ordinance No. 2020-03 pursuant to Rezoning Petition #19090 to rezone 2.2 acres addressed as 4036, 4038, 4046, 4108, and 4118 Hagadorn Road from RP (Research Park) to RAA (Single Family-Low Density).**

Attachment

1. Resolution to approve.

RESOLUTION TO APPROVE

**Rezoning #19090 (Planning Commission)
4036, 4038, 4046, 4108, and
4118 Hagadorn Road
FINAL ADOPTION**

RESOLUTION

At a regular meeting of the Township Board of the Charter Township of Meridian, Ingham County, Michigan, held at the Meridian Municipal Building, in said Township on the 4th day of February, 2020, at 6:00 p.m., Local Time.

PRESENT: _____

ABSENT: _____

The following resolution was offered by _____ and supported by _____.

WHEREAS, the Planning Commission initiated the rezoning of five parcels approximately 2.2 acres in total size identified as 4036, 4038, 4046, 4108, and 4118 Hagadorn Road from RP (Research Park) to RAA (Single Family-Low Density); and

WHEREAS, the Planning Commission held a public hearing at its regular meeting on November 25, 2019 and recommended approval at its meeting on December 9, 2019; and

WHEREAS, the Township Board discussed the rezoning at its meeting on January 7, 2020 and has reviewed the staff and Planning Commission material forwarded under a cover memorandum dated January 2, 2020; and

WHEREAS, the proposed rezoning to RAA (Single Family-Low Density) is consistent with the 2017 Future Land Use Map designation of R2 Residential 0.5 – 3.5 dwelling units per acre; and

WHEREAS, the properties proposed for rezoning meet or exceed the minimum standards for lot area and lot width of the proposed RAA (Single Family-Low Density) zoning district, except the currently undeveloped parcel addressed as 4036 Hagadorn Road; and

WHEREAS, the properties included in the rezoning are developed with single family residences, except the undeveloped parcel located at 4036 Hagadorn Road, which are uses allowed by right in the proposed RAA (Single Family-Low Density) zoning district; and

WHEREAS, the area proposed for rezoning is located adjacent to properties used for single family purposes to the east and south; and

ORDINANCE NO. 2020-03
ORDINANCE AMENDING THE ZONING DISTRICT MAP
OF MERIDIAN TOWNSHIP
PURSUANT TO REZONING #19090

The Charter Township of Meridian ordains:

Section 1. Amending the Zoning District Map.

A. The Zoning District Map of Meridian Township, as adopted in Section 86-312 of the Code of the Charter Township of Meridian, Michigan, as previously amended, is hereby amended by changing the RP (Research Park) District symbol and indication as shown on the Zoning District Map, for 4036, 4038, 4046, 4108, and 4118 Hagadorn Road, the properties legally described as:

COMMENCING AT THE SOUTHWEST CORNER OF SECTION 29, T4N, R1W, MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN, ALSO KNOWN AS THE INTERSECTION OF CENTERLINES OF HAGADORN ROAD AND BENNETT ROAD, THENCE NORTH ALONG SAID CENTERLINE 711 FT. TO THE POINT OF BEGINNING, THENCE EAST 233 FT., THENCE NORTH 265 FT., THENCE WEST 26.75 FT., THENCE NORTH 223.4 FT., THENCE WEST 206.25 FT. TO THE CENTERLINE OF HAGADORN ROAD, THENCE SOUTH 488.4 FT. TO THE POINT OF BEGINNING (2.48 ACRES).

to that of RAA (Single Family-Low Density).

Section 2. Validity and Severability. The provisions of this Ordinance are severable and the invalidity of any phrase, clause or part of this Ordinance shall not affect the validity or effectiveness of the remainder of the Ordinance.

Section 3. Repealer Clause. All ordinances or parts of ordinances in conflict therewith are hereby repealed only to the extent necessary to give this Ordinance full force and effect.

Section 4. Savings Clause. This Ordinance does not affect rights and duties matured, penalties that were incurred, and proceedings that were begun, before its effective date.

Section 5. Effective Date. This Ordinance shall be effective seven (7) days after its publication or upon such later date as may be required under Section 402 of the Michigan Zoning Enabling Act (MCL 125.3402) after filing of a notice of intent to file a petition for a referendum.

Ronald J. Styka, Township Supervisor

Brett Dreyfus, Township Clerk



12. B

To: Board Members
From: Ronald J. Styka, Township Supervisor
Date: January 31, 2020
Re: Township Manager Performance Review Summary

On Tuesday, January 21, 2020, the Township Board convened to conduct our annual assessment of the Township Manager. As approved by the Board, we used the same evaluation tool we used in previous years. The Manager requested that his review be conducted in closed session. This is allowable, and is in accordance, with the Michigan Open Meetings Act. As Supervisor, I have prepared a summary of the conclusions reached at the performance review for adoption and the public record.

Motion for Township Board's Consideration:

MOVE TO APPROVE THE 2019 TOWNSHIP MANAGER'S PERFORMANCE REVIEW AS PRESENTED. THE REVIEW DOCUMENT SHALL BE FORWARDED TO THE HUMAN RESOURCE OFFICE FOR PROPER FILING.

Attachments:

1. 2019 Annual Performance Evaluation

Meridian Charter Township
February 4, 2020
Annual Performance Evaluation of 2019
Frank L. Walsh, Township Manager

On January 21, 2020, the members of the Meridian Township Board met to evaluate Meridian Township Manager, Frank L. Walsh. Each board member and the manager reviewed and discussed the manager's performance during the 2019 calendar year. It was a year of many accomplishments and the resolution of many difficult issues. After careful review the Board determined that throughout the year Manager Walsh performed his duties in an outstanding manner. The Board's determination was based on review of the manager's performance in nine areas.

First, the Board determined that Manager Walsh excelled in providing customer service. He responded in a timely, courteous, and effective manner to the hundreds of annual calls for service received from Meridian residents. Board members determined that he prided himself on providing service to residents, created a culture of excellent customer service, fostered a sense of confidence and cooperation in many township employees, and quickly brought about solutions to problems presented by residents or board members.

Next, the Board determined that Mr. Walsh excelled in planning and problem solving. He anticipated and analyzed problem areas, researched and established alternative solutions, and was skillful in conflict resolution. Board members determined that he watched for signs of problems and took cues from board members and citizens before problems arose. He used innovative thinking and relied on his wealth of experience and fact-finding to resolve conflicts and problems. One example was his response to the public's concerns over the condition of township roads. He proposed to the Board and carried out a plan for funding that will bring the roads that are within the township's purview to a very good condition within 10 years.

Third, the Board determined that the manager excelled in the management of interpersonal relations. He cooperated effectively with the governing body, department heads, supervisors, unions, employees and the public. He is empathetic and exhibited tact and sensitivity to the needs of others. He kept Board members in the loop on all on-going matters. Board members determined that, in an overwhelming majority of instances, he was very helpful to them on issues and cooperated very effectively with all constituencies—the board, employees, citizens, and businesses.

Fourth, the Board determined that Mr. Walsh excelled in his organizational skills. He demonstrated the ability to arrange work and to respond to conflicting or changing priorities. He maintained orderliness of documentation and assured the effective functioning of township government. Board members noted that he had to deal with many issues and did so in a very efficient and productive manner. One example is the reorganization of the communications department, which has resulted in efficiencies in personnel and work constructs. He has also created an environment where employees remain focused on the Board's goals, not just day-to-day activities.

Also, the Board determined that Manager Walsh is a strong communicator. During the year he demonstrated the ability to effectively communicate in oral and written form with the governing body, department heads, supervisors, employees, media, other government leaders, and the public. He kept others informed of pertinent information and listened to the positions of others. Board members determined that the manager excelled in all aspects of this skill. His messages

were clear, concise, and easily understood. He kept board members informed of all aspects of township operations. In specific instances he brought together a developer and members of the public and facilitated resolution of difficult issues, bringing all sides to the table and guiding them to mutually beneficial conclusions. These included difficult disputes over zoning and construction.

Sixth, the Board determined that the manager also excelled in his work attitudes and ethics. He was open and straight-forward, accepted responsibility, responded to direction from the governing body, and conformed to high ethical standards. Board members determined that he was very responsible in responding to board issues, and seemed to always be on the job. It was noted that Mr. Walsh responded to board direction without complaint and accepted responsibility for success and failure. He willingly spent many evenings making community presentations, and did so without complaint. He rarely used sick or vacation time.

Seventh, the Board determined that Manager Walsh was excellent in providing supervision and leadership. He motivated others, effectively assigned work, encouraged employees and gave them the opportunity to increase their skills. Board members determined that Mr. Walsh was an excellent motivator and leader. Under his direction numerous employees received recognition, enhancing morale. Overall, the board found him to be an excellent leader and supervisor.

Next, the Board determined that, with regard to financial management, Mr. Walsh performed in an excellent manner. He accurately and effectively managed financial and material resources, maintained policies in purchasing procedures, materials replacement, equipment, etc. Also, he prioritized expenditures to reflect board policies. The budget process was very straight forward. Under Mr. Walsh's leadership the fund balance increased, allowing the board to approve additional expenditures on roads and other projects being demanded by the public. Due to his financial management skills, the township buildings will have new HVAC systems installed, using existing funds.

Ninth, the Board determined that the manager performed excellently, as he worked to accomplish the township's goals. He focused on efforts to accomplish the goals and needs as outlined by the board, effectively working as a team player. The board appreciated the accomplishments that had occurred under Mr. Walsh's leadership. He led staff to work toward goal completion, with most being completed and significant progress being made on others. The manager was a team player and team leader, deferring to the board's wishes on matters. Significant progress was made on meeting one of the Board's highest goals, improving the streets and roads.

In conclusion, the township board determined that Manager Frank Walsh is an excellent township manager. The consensus of the Board was that he was excellent in all phases of township governance. His insights and calm discernment of solutions to problems are to be envied. He cares about his job and about the community and its citizens, and takes pride in his work. His devotion to outstanding customer service gave the township government a reputation for caring about all of its citizens. In a year with difficult challenges, he was able to continue his focus on sustainability and stability, so that all programs and services of the township continued at a high level, even as the difficult tasks were being accomplished. It was observed that the success of Meridian Township government in the last year was reflective of the hard work and effectiveness of Manager Frank Walsh.

Ronald J. Styka, Supervisor
On behalf of the Township Board



To: Board Members
From: Ronald J. Styka, Township Supervisor
Date: January 31, 2020
Re: Resolution Commemorating Black History Month

Black history month is an annual observance in the United States during the month of February. The attached document has been drafted by staff members for Township Board approval. Our diversity is something we welcome, embrace and celebrate in Meridian Township.

A motion is prepared for Board consideration:

MOVE TO APPROVE THE RESOLUTION COMMEMORATING BLACK HISTORY MONTH.

Attachment:

1. Resolution Commemorating Black History Month

RESOLUTION COMMEMORATING BLACK HISTORY MONTH

At a regular meeting of the Township Board of the Charter Township of Meridian, Ingham County, Michigan, held on the 4th day of February 2020, at 6:00 p.m. local time.

PRESENT: _____

ABSENT: _____

The following resolution was offered by _____ and supported by _____

WHEREAS, Meridian Township acknowledges the contributions of African Americans to the history of the United States and that all people of the United States benefit from the inclusion of African American contributions to US history; and

WHEREAS, In February, Meridian Township recognizes Black History Month as an opportunity to reflect on the contributions of black history to Township history, Michigan history and US history; and

WHEREAS, Meridian Township encourages learning from the past in order to understand and improve the experiences that shape the United States; and

WHEREAS, African Americans engage and serve the United States at all levels of American life including government, military, academia, and industry; and

WHEREAS, During Black History Month Meridian Township acknowledges and commemorates the importance of African American citizenship, engagement and resilience; and

WHEREAS, In Meridian Township, Gilbert Sherman was the first African American to serve on the Township Board, appointed Township Treasurer in 1999. In 2000, Gilbert Sherman was the first African American to run for the office of Treasurer and thus for a Township Board seat; and

WHEREAS, It is recognized that Milton L. Scales was the first African American elected to the Township Board in 2012. He served from 2012-2016; and

WHEREAS, Since 2015, the Meridian Township Board has adopted a recurring commitment to increased diversity in all aspects of Township function, and specifically in it's "Board Goals and Objectives"; and

WHEREAS, It is recognized that in November 2016, Patricia Herring Jackson, became the first African American female elected to the Township Board, as a Trustee.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWNSHIP BOARD OF THE CHARTER TOWNSHIP OF MERIDIAN, INGHAM COUNTY, MICHIGAN, that Meridian Township commemorates Black History Month to pay tribute to the generations of African Americans who struggled with adversity and to celebrate the accomplishments, contributions, and history of African Americans.

ADOPTED: YEAS: _____

NAYS: _____

STATE OF MICHIGAN)
) ss
COUNTY OF INGHAM)

I, the undersigned, the duly qualified and acting Clerk of the Township Board of the Charter Township of Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and complete copy of a resolution adopted at a regular meeting of the Township Board on the 4th day of February 2020.

Brett Dreyfus, Clerk
Meridian Charter Township



13.B

To: Township Board

From: Mark Kieselbach, Director of Community Planning and Development
Peter Menser, Principal Planner

Date: January 30, 2020

Re: Special Use Permit #19181 (Hudson Senior Living) Pine Village

Hudson Senior Living has submitted a mixed use planned unit development (MUPUD) request to redevelop the westernmost building in the Haslett Village Square shopping center at 1673 Haslett Road and construct a 146,734 square foot, three-story senior apartment building with 133 dwelling units. The project, identified as Pine Village, is proposed on a 9.6 acre property zoned C-2 (Commercial). Overall, 146,734 total square feet of building area is proposed, consisting of 137,176 square feet of residential space and 9,558 square feet of non-residential space.

The special use permit is being processed concurrently with Mixed Use Planned Unit Development (MUPUD) #19034. The staff report for MUPUD #19034 should be referenced for a more complete overview of the project.

The Planning Commission held a public hearing on the proposal at its meeting on December 16, 2019 and on January 13, 2020 voted to recommend approval, citing the following reasons for their decision:

- The proposed project is consistent with the general standards for granting a special use permit found in Section 86-126 of the Code of Ordinances
- Municipal water and sanitary sewer is available to serve the subject site

Staff memorandums outlining the SUP request and minutes from the Planning Commission meetings at which the request was discussed are attached for the Board's review.

Township Board Options

The Township Board may approve or deny the proposed special use permit. If the Board amends the proposal, the request may be referred back to the Planning Commission for a recommendation. A resolution will be provided at a future meeting.

Attachments

1. Staff memorandums dated December 12, 2019 and January 9, 2020 with attachments.
2. Resolution recommending approval.
3. Planning Commission minutes dated December 16, 2019 (public hearing) and January 13, 2020 (decision).



To: Planning Commission

From: Peter Menser, Principal Planner

Date: December 12, 2019

Re: Special Use Permit #19181 (Hudson Senior Living), construct building greater than 25,000 square feet in size at 1673 Haslett Road.

Hudson Senior Living has submitted a mixed use planned unit development (MUPUD #19034) proposal for a project identified as Pine Village. The C-2 (Commercial) zoned 9.6 acre project site is located on the south side of Haslett Road, west of Marsh Road. The proposal includes the demolition of an existing 24,415 multi-tenant shopping center building on the site and construction of a new 146,734 square foot senior apartment building with 133 dwelling units. Overall, 146,734 total square feet of building area is proposed, consisting of 137,176 square feet of residential space and 9,558 square feet of non-residential space consisting of an arts and crafts room, salon, wellness office, pub, cafeteria, fitness room, library, parlor, game room, and chapel.

The construction of any building or group of buildings with a combined gross floor area greater than 25,000 square feet requires a special use permit due to the significant impact such development may have upon adjacent property owners, neighborhoods, and public infrastructure. The Code of Ordinances requires the special use permit to ensure that public utilities, roads, and other infrastructure systems are or will be adequate to support the proposed development.

The special use permit is being processed concurrently with the MUPUD request. The staff report for MUPUD #19034 should be referenced for a more complete overview of the project.

Staff Analysis

The special use permit review criteria found in Section 86-126 of the Code of Ordinances should be used when evaluating the proposed special use permit. The Planning Commission makes a recommendation on the special use permit request and the Township Board has final approval.

Planning Commission Options

The Planning Commission may recommend approval, approval with conditions, or denial of the proposed special use permit. A resolution will be provided at a future meeting.

Attachment

1. Special use permit application.

G:\Community Planning & Development\Planning\SPECIAL USE PERMITS (SUP)\2019\SUP 19181 (Hudson Senior Living)\SUP 19181.pc1.docx

CHARTER TOWNSHIP OF MERIDIAN
DEPARTMENT OF COMMUNITY PLANNING AND DEVELOPMENT
5151 MARSH ROAD, OKEMOS, MI 48864
PLANNING DIVISION PHONE: (517) 853-4560, FAX: (517) 853-4095

RECEIVED
NOV 19 2019

SPECIAL USE PERMIT APPLICATION

Before submitting this application for review, an applicant may meet with the Director of Community Planning and Development to discuss the requirements for a special use permit and/or submit a conceptual plan for review to have preliminary technical deficiencies addressed prior to submittal of the application. If the property or land use is located in the following zoning districts RD, RC, RCC, RN then the applicant must meet with the Planning Director to discuss technical difficulties before filing a formal application.

Part I

- A. Applicant Jeff Buck, Hudson Senior Living
Address of Applicant _____
280 W. Maple Rd, Suite 230, Birmingham, MI 48009 jbuck@cypresspartners.biz
Telephone - Work 248-540-9300 ext. 12 Home _____ Fax 248-988-8867 Email _____
Interest in property (circle one): Owner Tenant Option Other
(Please attach a list of all persons with an ownership interest in the property.)
33-02-02-10-401-003
33-02-02-10-402-001
- B. Site address / location / parcel number 1673 Haslett Rd, Meridian Township, MI 48840
Legal description (please attach if necessary) _____
- Current zoning C-2 (Commercial District)
Use for which permit is requested / project name MUPUD, Pine Village of Meridian
Corresponding ordinance number 86-658 Buildings greater than 25,000 square feet in gross floor area
- C. Developer (if different than applicant) _____
Address _____
Telephone - Work _____ Home _____ Fax _____
- D. Architect, Engineer Planner or Surveyor responsible for design of project if different from applicant:
Name Greg Petru, Kebs, Inc.
Address 2116 Haslett Rd, Haslett, MI 48840
Telephone - Work 517-339-1014 Home gpetru@kebs.com Fax _____
- E. Acreage of all parcels in the project: Gross 9.6 Acres Net 9.6 Acres
- F. Explain the project and development phases:
- G. Total number of:
Existing: structures 1 bedrooms 0 offices N/A parking spaces 162 carports 0
garages 0 Proposed: structures 1 bedrooms 181 offices N/A parking spaces 100 carports
45 garages 0
- H. Square footage: existing buildings 23,441 proposed buildings 146,734
Usable Floor area: existing buildings 19,925 proposed buildings 124,724
- I. If employees will work on the site, state the number of full time and part time employees working per shift and hours of operation:
- J. Existing Recreation: Type None Acreage 0
Proposed Recreation: Type None Acreage 0

Existing Open Space:	Type	<u>Grass, wooded, landscape</u>	Acreage	<u>6.98 Acres</u>
Proposed Open Space:	Type	<u>Grass, wooded, landscape</u>	Acreage	<u>6.67 Acres</u>

K.

If Multiple Housing:

Total acres of property	<u>9.6 Acres</u>			
Acres in floodplain	<u>4.3 Acres</u>	Percent of total	<u>44.79</u>	
Acres in wetland (not in floodplain)	<u>0.14</u>	Percent of total	<u>1.46</u>	
Total dwelling units	<u>133 Units</u>			
Dwelling unit mix:				
Number of single family detached:	for Rent	<u>0</u>	Condo	<u>0</u>
Number of duplexes:	for Rent	<u>0</u>	Condo	<u>0</u>
Number of townhouses:	for Rent	<u>0</u>	Condo	<u>0</u>
Number of garden style apartments:	for Rent	<u>133</u>	Condo	<u>0</u>
Number of other dwellings:	for Rent	<u>0</u>	Condo	<u>0</u>

L. The following support materials must be submitted with the application:

1. Nonrefundable Fee.
2. Legal Description of the property.
3. Evidence of fee or other ownership of the property.
4. Site Plan containing the information listed in the attachment to this application.
5. Architectural sketches showing all sides and elevations of the proposed buildings or structures, including the project entrance, as they will appear upon completion. The sketches should be accompanied by material samples or a display board of the proposed exterior materials and colors.
6. A Traffic Study, prepared by a qualified traffic engineer, based on the most current edition of *Evaluating Traffic Impact Studies: A Recommended Practice for Michigan Communities*, published by the State Department of Transportation.
 - a. A traffic assessment will be required for the following:
 - 1) New special uses which could, or expansion or change of an existing special use where increase in intensity would, generate between 50 to 99 directional trips during a peak hour of traffic.
 - 2) All other special uses requiring a traffic assessment as specified in the Township Code of Ordinances, Chapter 86, Article IV, Division 2.
 - b. A traffic impact study will be required for the following:
 - 1) New special uses which would, or expansion or change of an existing special use where increase in intensity would, generate over 100 directional trips or more during a peak hour of traffic, or over 750 trips on an average day.
 - 2) All other special uses requiring a traffic assessment as specified in the Township Code of Ordinances, Chapter 86, Article IV, Division 2.
7. Natural features assessment which includes a written description of the anticipated impacts on the natural features at each phase and at project completion that contains the following:
 - a. An inventory of natural features proposed to be retained, removed, or modified. Natural features shall include, but are not limited to, wetlands, significant stands of trees or individual trees greater than 12 inches dbh, floodways, floodplains, waterbodies, identified groundwater vulnerable areas, slopes greater than 20 percent, ravines, and vegetative cover types with potential to sustain significant or endangered wildlife.
 - b. Description of the impacts on natural features.
 - c. Description of any proposed efforts to mitigate any negative impacts.

The natural features assessment may be waived by the Director of Community Planning and Development in certain circumstances.

- M. Any other information specified by the Director of Community Planning and Development which is deemed necessary to evaluate the application.
- N. In addition to the above requirements, for zoning districts, **RD, RC, RCC, RN, and CV** and **Group Housing Residential Developments** the following is required:
1. Existing and proposed contours of the property at two foot intervals based on United States Geological Survey (USGS) data.
 2. Preliminary engineering reports in accordance with the adopted Township water and sewer standards, together with a letter of review from the Township Engineer.
 3. Ten copies of a report on the intent and scope of the project including, but not limited to: Number, size, volume, and dimensions of buildings; number and size of living units; basis of calculations of floor area and density and required parking; number, size, and type of parking spaces; architectural sketches of proposed buildings.
 4. Seven copies of the project plans which the Township shall submit to local agencies for review and comments.
- O. In addition to the above requirements, a special use application in zoning district **RP** requires the following material as part of the site plan:
1. A description of the operations proposed in sufficient detail to indicate the effects of those operations in producing traffic congestion, noise, glare, air pollution, water pollution, fire hazards or safety hazards or the emission of any potentially harmful or obnoxious matter or radiation.
 2. Engineering and architectural plans for the treatment and disposal of sewerage and industrial waste tailings, or unusable by-products.
 3. Engineering and architectural plans for the handling of any excessive traffic congestion, noise, glare, air pollution, or the emission of any potentially harmful or obnoxious matter or radiation.
- P. In addition to the above requirements, a special use application for a use in the Floodway Fringe of zoning district **CV** requires the following:
1. A letter of approval from the State Department of Environmental Quality.
 2. A location map including existing topographic data at two-foot interval contours at a scale of one inch representing 100 feet.
 3. A map showing proposed grading and drainage plans including the location of all public drainage easements, the limits, extent, and elevations of the proposed fill, excavation, and occupation.
 4. A statement from the County Drain Commissioner, County Health Department, and Director of Public Works and Engineering indicating that they have reviewed and approved the proposal.
- Q. In addition to the above requirements, a special use application for a use in the Groundwater Recharge area or zoning district **CV** requires the following:
1. A location map including existing topographic data at two-foot interval contours.
 2. A map showing proposed grading and drainage plans including the location of all public drainage easements, the limits and extent of the proposed fill, excavation, and occupation.
 3. A statement from the County Drain Commissioner, County Health Department, and Director of Public Works and Engineering indicating that they have reviewed and approved the proposal.
- R. In addition to the above requirements, the Township Code of Ordinances, Article VI, should be reviewed for the following special uses: group housing residential developments, mobile home parks, nonresidential structures and uses in residential districts, planned community and regional shopping center developments, sand or gravel pits and quarries, sod farms, junk yards, sewage treatment and disposal installations, camps and clubs for outdoor sports and buildings greater than 25,000 square feet in gross floor area.
- S.

Part II

SUP REQUEST STANDARDS
Township Code of Ordinances, Section 86-126

Applications for Special Land Uses will be reviewed with the standards stated below. An application that complies with the standards stated in the Township Ordinance, conditions imposed pursuant to the Ordinance, other applicable Ordinances, and State and Federal statutes will be approved. Your responses to the questions below will assist the Planning Commission in its review of your application.

- (1) The project is consistent with the intent and purposes of this chapter.
- (2) The project is consistent with applicable land use policies contained in the Township's comprehensive development plan of current adoption.
- (3) The project is designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity and that such a use will not change the essential character of the same area.
- (4) The project will not adversely affect or be hazardous to existing neighboring uses.
- (5) The project will not be detrimental to the economic welfare of surrounding properties or the community.
- (6) The project is adequately served by public facilities, such as existing roads, schools, stormwater drainage, public safety, public transportation, and public recreation, or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide any such service.
- (7) The project is adequately served by public sanitation facilities if so designed. If on-site sanitation facilities for sewage disposal, potable water supply, and storm water are proposed, they shall be properly designed and capable of handling the longterm needs of the proposed project.
- (8) The project will not involve uses, activities, processes, materials, and equipment and conditions of operation that will be detrimental to any persons, property, or the general welfare by reason of excessive production of traffic, noise, smoke, fumes, glare, or odors.
- (9) The project will not directly or indirectly have a substantial adverse impact on the natural resources of the Township, including, but not limited to, prime agricultural soils, water recharge areas, lakes, rivers, streams, major forests, wetlands, and wildlife areas.

Part III

I (we) hereby grant permission for members of the Charter Township of Meridian's Boards and/or Commissions, Township staff member(s) and the Township's representatives or experts the right to enter onto the above described property (or as described in the attached information) in my (our) absence for the purpose of gathering information including but not limited to the taking and the use of photographs.

Yes No (Please check one)

By the signature(s) attached hereto, I (we) certify that the information provided within this application and accompanying documentation is, to the best of my (our) knowledge, true and accurate



Signature of Applicant

November 19, 2019

Date

Jeffrey Buck

Type/Print Name

Fee: \$ 740

Received by/Date:  11-19-19

SUP RESPONSES

Pine Village of Meridian

1. The project is consistent with the intent and purposes of the Township Ordinance. Section 86-440(c)1a allows for development of a mixed-use PUD within the C-2 zoning district. The C-2 district also allows buildings over 25,000 s.f. to be permitted by SUP. The setbacks and standards of the C-2 zoning district have been met.
2. The project is consistent with current land use policies in the Township's comprehensive development plan. The property is part of a larger commercial site that has had several vacancies within the complex. The new parcel would be furthest to the West along the wooded area and existing floodplain to the West. The use of independent living and lighter commercial retail would be a good fit for the West end of the development as it transitions to residential as you go West.
3. The project is to be designed, constructed, operated, and maintained so as to be harmonious and appropriate in appearance with the existing and intended character of the area and will not change the essential character of the area. The proposed project consists of a mixed use building with independent living for seniors, that is designed to be harmonious with the adjacent and surrounding uses. It will maintain the wooded buffer to the West and to the South, and provide the ability to walk around the site and connect to the public walkways.
4. The project will not adversely affect or be hazardous to existing neighboring uses. The proposed project should be beneficial to the existing commercial/retail uses to the East, and may provide more opportunities for leasing in the area. The project will not affect any properties to the South or the West, there will still remain a large wooded buffer between the two properties.
5. The project will not be detrimental to the economic welfare of surrounding properties. The proposed project will be beneficial to the existing commercial/retail center as it will provide additional business and traffic to their leased space and may attract additional users.
6. The project is adequately served by public facilities. There is existing public water and sanitary sewer available to the property for service. There is an existing detention basin on the site that is labeled as wetland 'C'. The existing detention basin is proposed to be relocated to the South and the existing storm pipes will also be relocated as necessary. The existing storm outlet can be left in place but we will need to re-connect to it. Existing gas and electric are also available to the site.
7. The project is adequately served by public sanitation facilities. Public sanitary and water mains are located near the building and have sufficient capacity to support development of this property.
8. The project will not be detrimental to persons, property, or general welfare from excessive traffic, noise, smoke, fumes, glare, or odors. The proposed project will generate less traffic than the current use so traffic will be reduced or similar to existing. No manufacturing or construction operations are proposed. No other activities, processes, materials, or equipment is proposed which would produce the detriments listed above.
9. The project will not directly or indirectly create adverse impacts on natural resources of the Township. The proposed project will construct new storm piping and utilize low impact treatment methods to collect and pre-treat stormwater as much as possible prior to outletting to the existing watershed. The existing wetland we are proposing to disturb is the existing stormwater detention area. We will be relocating this to the South. The project will try to keep as many of the existing trees on-site as possible.



To: Planning Commission

From: Peter Menser, Principal Planner

Date: January 9, 2020

Re: Special Use Permit #19181 (Hudson Senior Living), construct building greater than 25,000 square feet in size at 1673 Haslett Road.

The Planning Commission held the public hearing on Special Use Permit #19181 at its last meeting on December 16, 2019. The request is in conjunction with Mixed Use Planned Unit Development #19034. At the meeting the Commission agreed to consider a resolution to recommend approval of the request.

Planning Commission Options

The Planning Commission may recommend approval, approval with conditions, or denial of the proposed special use permit. A resolution to recommend approval of the special use permit is provided.

- **Move to adopt the resolution recommending approval of Special Use Permit #19181 with conditions.**

Attachment

1. Resolution to recommend approval.

G:\Community Planning & Development\Planning\SPECIAL USE PERMITS (SUP)\2019\SUP 19181 (Hudson Senior Living)\SUP 19181.pc2.docx

RESOLUTION TO RECOMMEND APPROVAL

**Special Use Permit #19181
(Hudson Senior Living)**

At a regular meeting of the Planning Commission of the Charter Township of Meridian, Ingham County, Michigan, held at the Meridian Municipal Building, in said Township on the 13th day of January, 2020, at 7:00 p.m., Local Time.

PRESENT: _____

ABSENT: _____

The following resolution was offered by _____ and supported by _____.

WHEREAS, Hudson Senior Living has submitted a request to establish a mixed use planned unit development (MUPUD) identified as Pine Village on 9.6 acres located at 1673 Haslett Road; and

WHEREAS, the proposed mixed use planned unit development includes the demolition of the existing 23,415 square foot multi-tenant shopping center building and construction of a 146,734 square foot senior apartment building with a total of 133 dwelling units and 9,558 square feet of non-residential space; and

WHEREAS, a total of 146,734 square feet is proposed in the project, consisting of 9,558 square feet of non-residential space and 137,176 square feet of residential space; and

WHEREAS, a special use permit is required for constructing a building or group of buildings totaling more than 25,000 square feet in gross floor area; and

WHEREAS, the Planning Commission held a public hearing at its regular meeting on December 16, 2019, and has reviewed staff material forwarded under cover memorandums dated December 11, 2019 and January 8, 2020; and

WHEREAS, the subject site is appropriately zoned C-2 (Commercial), which permits the construction of buildings greater than 25,000 square feet in size by special use permit; and

WHEREAS, the proposed project is consistent with the general standards for granting a special use permit found in Section 86-126 of the Code of Ordinances; and

WHEREAS, municipal water and sanitary sewer is available to serve the subject site.

NOW THEREFORE, BE IT RESOLVED THE PLANNING COMMISSION OF THE CHARTER TOWNSHIP OF MERIDIAN hereby recommends approval of Special Use Permit #19181, subject to the following conditions:

1. Approval is in accordance with the site plan prepared by Kebs, Inc. dated October 7, 2019 (revision date January 6, 2020) and received by the Township on January 6, 2020.
2. Approval of the special use permit is subject to all conditions placed on Mixed Use Planned Unit Development #19034 by the Township.

**Resolution to Recommend Approval
SUP #19181 (Hudson Senior Living)
Page 2**

3. Any future building additions will require an amendment to Special Use Permit #19181.

ADOPTED: YEAS: _____

NAYS: _____

STATE OF MICHIGAN)

) ss

COUNTY OF INGHAM)

I, the undersigned, the duly qualified and acting Chairperson of the Planning Commission of the Charter Township Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and a complete copy of a resolution adopted at a regular meeting of the Planning Commission on the 13th day of January, 2020.

Ken Lane
Planning Commission Chairperson

RESOLUTION TO RECOMMEND APPROVAL

**Special Use Permit #19181
(Hudson Senior Living)**

At a regular meeting of the Planning Commission of the Charter Township of Meridian, Ingham County, Michigan, held at the Meridian Municipal Building, in said Township on the 13th day of January, 2020, at 7:00 p.m., Local Time.

PRESENT: _____

ABSENT: _____

The following resolution was offered by _____ and supported by _____.

WHEREAS, Hudson Senior Living has submitted a request to establish a mixed use planned unit development (MUPUD) identified as Pine Village on 9.6 acres located at 1673 Haslett Road; and

WHEREAS, the proposed mixed use planned unit development includes the demolition of the existing 23,415 square foot multi-tenant shopping center building and construction of a 146,734 square foot senior apartment building with a total of 133 dwelling units and 9,558 square feet of non-residential space; and

WHEREAS, a total of 146,734 square feet is proposed in the project, consisting of 9,558 square feet of non-residential space and 137,176 square feet of residential space; and

WHEREAS, a special use permit is required for constructing a building or group of buildings totaling more than 25,000 square feet in gross floor area; and

WHEREAS, the Planning Commission held a public hearing at its regular meeting on December 16, 2019, and has reviewed staff material forwarded under cover memorandums dated December 11, 2019 and January 8, 2020; and

WHEREAS, the subject site is appropriately zoned C-2 (Commercial), which permits the construction of buildings greater than 25,000 square feet in size by special use permit; and

WHEREAS, the proposed project is consistent with the general standards for granting a special use permit found in Section 86-126 of the Code of Ordinances; and

WHEREAS, municipal water and sanitary sewer is available to serve the subject site.

NOW THEREFORE, BE IT RESOLVED THE PLANNING COMMISSION OF THE CHARTER TOWNSHIP OF MERIDIAN hereby recommends approval of Special Use Permit #19181, subject to the following conditions:

1. Approval is in accordance with the site plan prepared by Kebs, Inc. dated October 7, 2019 (revision date January 6, 2020) and received by the Township on January 6, 2020.
2. Approval of the special use permit is subject to all conditions placed on Mixed Use Planned Unit Development #19034 by the Township.

**Resolution to Recommend Approval
SUP #19181 (Hudson Senior Living)
Page 2**

3. Any future building additions will require an amendment to Special Use Permit #19181.

ADOPTED: YEAS: _____

NAYS: _____

STATE OF MICHIGAN)

) ss

COUNTY OF INGHAM)

I, the undersigned, the duly qualified and acting Chairperson of the Planning Commission of the Charter Township Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and a complete copy of a resolution adopted at a regular meeting of the Planning Commission on the 13th day of January, 2020.

Ken Lane
Planning Commission Chairperson

**CHARTER TOWNSHIP OF MERIDIAN
PLANNING COMMISSION
REGULAR MEETING MINUTES**

APPROVED

**December 16, 2019
5151 Marsh Road, Okemos, MI 48864-1198
517-853-4560, Town Hall Room, 7:00 P.M.**

**PRESENT: Commissioners Lane, Hendrickson, Trezise, Richards, Premoe, Shrewsbury
Clark and Cordill
ABSENT: None
STAFF: Director of Community Planning & Development Mark Kieselbach, Economic
Development Director Chris Buck, and Principal Planner Peter Menser**

1. Call meeting to order

Chair Lane called the regular meeting to order at 7:01 P.M.

2. Public Remarks - None

3. Approval of Agenda

Commissioner Richards moved to approve the agenda as written.
Seconded by Commissioner Premoe.
VOICE VOTE: Motion approved unanimously.

4. Approval of Minutes

A. December 9 2019 Regular Meeting

Commissioner Hendrickson moved to approve the minutes as written.
Seconded by Commissioner Cordill.
VOICE VOTE: Motion approved unanimously.

5. Communications

Chair Lane noted the communication listed in the meeting packet for consideration.

6. Public Hearings

- 
- A. Mixed Use Planned Unit Development #19034 (Hudson Senior Living), construct a 146,743 square foot independent senior apartment building with 133 dwelling units at 1673 Haslett Road.
 - B. Special Use Permit #19181 (Hudson Senior Living), construct an independent senior apartment building over 25,000 square feet in size at 1673 Haslett Road.

Chair Lane opened the public hearing at 7:05 p.m.

Principal Planner Menser welcomed everyone and stated the Mixed Use Planned Unit Development #19034 and Special Use Permit #19181 proposals would be combined in the public hearing and staff overview.

The applicant, Jeff Buck, with Hudson Senior Living, 280 W. Maple Road, Suite 230, Birmingham, MI 48009 provided additional information about the proposed project. Mr. Buck expressed his excitement about the project and the vibrancy it would bring to the area. He said each apartment would have a full kitchen and noted other amenities which include: a full commercial kitchen with a dining room and an outside dining patio, a café and pub, salon, art studio, home health care office, fitness room, library, game room, a multipurpose room, chapel, two commercial laundry rooms, and numerous gathering spaces throughout the complex.

He also noted residents who do not drive or own a car will have access to additional transportation options including an on-site community van and public transportation.

Mr. Buck stated he would be available to answer any questions.

Public Comment: None

Planning Commission Discussion:

- The funding source for this project would not include a PILOT (payment in lieu of taxes).
- The applicant was asked a question about what other projects Hudson Senior Living has done and he responded with the following information: The proposed building would be modeled after a similar project done recently in St. Clair Shores, Michigan. He also noted another senior living project completed in Traverse City, Michigan of similar size.
- While reviewing the multiple family parking standards, the proposed project would require a total of 270 parking spaces and the applicant is seeking a 163 space waiver as part of the MUPUD approval. Planning Commission members expressed their concerns with the limited parking spaces and questioned if parking for employees, family members visiting and special events have been considered. In the future when the east side of the property is redeveloped they shared concern that there may not be enough parking.
- The applicant, Jeff Buck, was asked a question about the sign waiver and he noted it was to request larger signs than allowed in the ordinance to advertise community classes and space that is planned for the complex in the salon and art studio.
- A comment was made regarding another senior living complex that didn't have enough parking to accommodate extra parking spaces when needed.
- The Site Engineer, Greg Petru of Kebs, Inc. located at 2116 Haslett Road noted they are proposing to fill in the current detention basin and relocate it to the southeast corner of the property.
- Belief that the proposal would provide an opportunity for the local elderly population to continue to live locally and remain socially active in the community.
- The applicant stated that each wing of the building would have its own elevator.
- Planning Commission belief the project could provide the opportunity to enjoy bike paths and live in a walkable community as well as easy access to public transportation.

A straw poll indicated the Planning Commission would be in support of recommending approval of both Mixed Use Planned Unit Development #19034 and Special Use Permit #19181 at the January 13, 2020 meeting.

Chair Lane closed the public hearing at 7:50 p.m.

- C. Rezoning #19100 (Durow), rezone approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial).

Chair Lane opened the public hearing at 7:51 p.m.

Principal Planner Menser provided a brief overview of the proposed rezoning. He noted the split zoning was discovered when staff conducted research on the proposal but did not show up on the zoning maps.

The traffic assessment shows a mischaracterization of the current land use due to the lack of a land use category for comparison. The property is and has not been used as a shopping center and the numbers are inflated compared to the actual amount of traffic realistically generated.

Principal Planner Menser noted he would be available to answer questions.

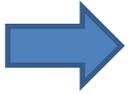
The owner/applicant Gary Durow, 1259 West Grand River Avenue, Okemos, Michigan said he has owned the business on the property since 1955. He resides in the farm home that was built in 1928 and said the noise from traffic is deafening on Grand River Avenue where the 5 lane state highway has a speed limit of 50 miles per hour. He stated the Rural Residential zoning is wrong for his property and this is the reason his property has been for sale for 7 years and no one is interested in leasing the property unless it is rezoned.

Public Comment:

1. Chris Potterpin, 4534 Ethel Street, spoke in opposition to Rezoning #19100.
2. Pete Potterpin, 1250 Ethel Street, spoke in opposition to Rezoning #19100.
3. Tom Saad, 4554 Cornell Road, spoke in opposition to Rezoning #19100.
4. Amanda Hopper, 5485 Martinique, spoke in support of Rezoning #19100.

Planning Commission Discussion:

- This is a challenging site because it has been a commercial use for a long time.
- The eastern portion of Meridian Township was Rural Residential and is part of the Master Plan. The line for commercial uses is considered west of Cornell Road.
- Consideration that C-2 zoning may not be appropriate for the property. The property is on a major highway and maybe there could be a compromise for the property owner and less intrusive for surrounding neighbors.
- The property owner has significant limitations with the property as it is currently zoned.
- There is a school nearby and already a lot of traffic on the busy, narrow road as well as congestion during certain times of the day.



7. Unfinished Business

- A. Mixed Use Planned Unit Development #19034 (Hudson Senior Living), construct a 146,743 square foot independent senior apartment building with 133 dwelling units at 1673 Haslett Road.
- B. Special Use Permit #19181 (Hudson Senior Living), construct an independent senior apartment building over 25,000 square feet in size at 1673 Haslett Road.

Principal Planner Menser noted both items could be discussed but motions should be voted on separately. He provided an update since the public hearing held in December. The applicant submitted a revised sign plan and a revised site plan adding 24 bicycle parking spaces, 4 motor vehicle parking spaces, identified 23 possible future parking spaces and an extension of the Township's Inter-Urban pathway along the west side of the property. Principal Planner Menser noted he would be available to answer questions.

Motion by Commissioner Premoe to recommend approval of Mixed Use Planned Unit Development #19034 with conditions.

Commissioner Premoe offered a friendly amendment to condition approval on adding the additional 23 possible future parking spaces to the site plan was accepted by the maker. Supported by Commissioner Shrewsbury.

Planning Commission Discussion:

- Commissioner Hendrickson questioned if the proposed project met the intent of the ordinance for the Mixed Use Planned Unit Development. He stated one key goal is to mix uses in the development by providing common areas for residents and the public.
- The applicant stated the salon would be operated by a local business and would service residents of the complex as well as residents in the community. The dining room, pub and art studio in the complex would also be available to the public. Local groups would also be able to use the community rooms for meetings.
- The applicant stated they need 0.7 parking spaces per unit which is based on similar projects they have completed.
- There will be approximately 20 employees at the Pine Village senior apartment building.
- Director Chris Buck discussed the demographics of the 28 acres of property located in the Haslett Village Square area. The area is being marketed for redevelopment projects and the proposed Mixed Use Planned Unit Development is phase one. The other two sections (16.5 acre in the center section and 2.5 acre at the corner of Haslett/Marsh) of the property are being marketed to other projects.
- Chair Lane asked the applicant if they would consider revising the site plan to add the 23 parking spaces for a total of parking spaces to a total of 128 and the applicant agreed.
- Commissioner Trezise asked for a Friendly Amendment to the motion to make the 23 additional parking spaces part of the revised site plan.

ROLL CALL VOTE:

YEAS: Commissioners Premoe, Shrewsbury, Clark, Cordill, Trezise and Chair Lane.

NAYS: Commissioners Richards and Hendrickson

MOTION CARRIES: 6-2

Motion by Commissioner Cordill to recommend approval of Special Use Permit #19181 with conditions.

Supported by Commissioner Trezise.

ROLL CALL VOTE:

YEAS: Commissioners Cordill, Trezise, Premoe, Clark, Shrewsbury, Richards and Chair Lane.

NAYS: Commissioner Hendrickson

MOTION CARRIES: 7-1

C. Rezoning #19100 (Durow), rezone approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial).

Motion by Commissioner Hendrickson to recommend denial of Rezoning #19100.

Supported by Commissioner Cordill.

Planning Commission Discussion:

- The property has been used for commercial purposes for many years.
- The request is inconsistent with the Future Land Use Map and surrounding properties which are residential.
- Rezoning the property to C-2 would be considered spot zoning.

ROLL CALL VOTE:

YEAS: Commissioners Hendrickson, Cordill, Trezise, Shrewsbury, Clark, Richards and Chair Lane.

NAYS: Commissioner Premoe

MOTION CARRIES: 7-1

8. Other Business

A. Election of Officers

Commissioner Premoe nominated Commissioner Lane as Chair.

Supported by Commissioner Trezise.

ROLL CALL VOTE:

YEAS: Commissioners Richards, Clark, Shrewsbury, Hendrickson, Cordill, Trezise, Premoe and Lane.

NAYS: None

MOTION CARRIES: 8-0

Commissioner Richards nominated Commissioner Hendrickson as Vice Chair.

Supported by Commissioner Clark.



13.C

To: Township Board

From: Mark Kieselbach, Director of Community Planning and Development

Date: January 31, 2020

Re: Woodward Way PILOT

The Township Board on September 17, 2019 approved a PILOT for the proposed Woodward Way housing project. The project is located at the east end of Sirhal Drive and consists of 49 townhouse/apartment units that provide housing for persons of low to moderate income. The applicant had submitted their project in the most current round of funding through the Michigan State Housing Development Authority (MSHDA) but was not successful. The applicant plans to submit the project in March 2020 for next round of funding. The Township ordinance requires the construction of the housing project to commence within one year from the effective date of the Township Board resolution approving the tax exempt status.

As a result of resubmitting the project to MSHDA the applicant will not be able to have construction started within one year and has requested the Board to re-approve the PILOT. A resolution to re-approve the PILOT is attached for the Board's consideration.

Attachment

1. Resolution

G:\Community Planning & Development\Planning\PILOTS\Woodward WayPILOT.tb3.docx

RESOLUTION TO APPROVE

**Tax Exempt Status with Payment In Lieu of Taxes
(Woodward Way Housing Project)**

RESOLUTION

At a regular meeting of the Township Board of the Charter Township of Meridian, Ingham County, Michigan, held at the Meridian Municipal Building, in said Township on the 4th day of February, 2020, at 6:00 p.m., Local Time.

PRESENT: _____

ABSENT: _____

The following resolution was offered by _____ and supported by _____.

WHEREAS, the Township Board in 1995 enacted an ordinance pursuant to Section 15a of the State Housing Development Authority Act of 1966, being MCL 125.1415a, which limited the class of housing projects that qualify to pay the Township an annual service charge for public services in lieu of taxes (PILOT); and

WHEREAS, on September 17, 2019 the Township Board adopted Ordinance No. 2019-14 amending Chapter 66, Article II of the Code of Ordinances to make tax exemptions and payments in lieu of taxes available to qualified housing projects for persons of low and moderate income in accordance with criteria established by state and/or federal laws; and

WHEREAS, Woodward Way Limited Dividend Housing Association Limited Partnership, as owner of the Woodward Way housing project, located in the Charter Township of Meridian, has requested tax exempt status from all property taxes during and after commencement of construction of the housing project pursuant to the Township's ordinance as amended; and

WHEREAS, the Woodward Way housing project is eligible for the requested exemption and payment in lieu of taxes and without such treatment the construction and operation of the housing project would not be feasible; and

WHEREAS, the Woodward Way housing project development will be maintained as housing for persons of low to moderate income for 45 years, representing its economic life; and

WHEREAS, the Township Board has determined that it is in the best interest of the Township to encourage housing projects for persons of low to moderate income by granting Woodward Way a tax exemption with payment in lieu of taxes; and

WHEREAS, the Township Board at a regular meeting held on September 17, 2019 granted tax exempt status to the Woodward Way housing project; and

**Resolution to Approve (Tax Exempt Status with Payment in Lieu of Taxes)
Woodward Way Housing Project (February 4, 2020)**

Page 2

WHEREAS, Woodward Way Limited Dividend Housing Association Limited Partnership is not able to commence construction of the housing project within one year from the effective date of the Township Board's September 17, 2019 resolution granting tax exempt status and has requested the PILOT be re-approved.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWNSHIP BOARD OF THE CHARTER TOWNSHIP OF MERIDIAN, INGHAM COUNTY, MICHIGAN, in reliance on, in consideration of, and incorporating the foregoing, that the housing project known as Woodward Way and the property on which said housing project is developed shall be exempt from all property taxes which shall remain in effect and shall not terminate for so long as the housing project is subject to a federally-aided or authority-aided mortgage or an advance or grant from the authority is outstanding, but not to exceed 45 years.

BE IT FURTHER RESOLVED that the Charter Township of Meridian will accept payment of an annual service charge for public services in lieu of all property taxes in an amount equal to five percent of the annual shelter rents for the Woodward Way housing project, said payments to be due on or before July 1 of each year and otherwise payable in the same manner as general property taxes are payable to the Township.

BE IT FURTHER RESOLVED that the tax exempt status granted by the Township Board shall be forfeited unless construction of the housing project to which such status is granted is commenced within one year from the effective date of this resolution approving that status.

BE IT FURTHER RESOLVED that the tax exempt status of the property is conditioned on the housing project being subject to a federally-aided or Authority-aided mortgage or advance or grant from the Authority or income and rent restrictions under Section 42 of the Internal Revenue Code.

BE IT FURTHER RESOLVED that this Resolution shall and does have binding contractual effect on the Township and Woodward Way Limited Dividend Housing Association Limited Partnership, with the Authority as third party beneficiary under the contract, to provide the tax exemption and accept payments in lieu of taxes, as previously described in this Resolution by the Township Board.

BE IT FURTHER RESOLVED that the Township Board authorizes the Township Manager to execute such agreements and other documents that may be necessary or proper to effect this Resolution or arising out of or in connection with the payment in lieu of taxes.

ADOPTED: YEAS: _____

NAYS: _____

**Resolution to Approve (Tax Exempt Status with Payment in Lieu of Taxes)
Woodward Way Housing Project (February 4, 2020)**

Page 3

STATE OF MICHIGAN)

)ss

COUNTY OF INGHAM)

I, the undersigned, the duly qualified and acting Clerk of the Charter Township of Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and complete copy of a resolution adopted at a regular meeting of the Township Board on the 4th day of February, 2020.

Brett Dreyfus, Clerk
Charter Township of Meridian



13.D

To: Township Board

From: Mark Kieselbach, Director of Community Planning and Development
Peter Menser, Principal Planner

Date: January 30, 2020

Re: Rezoning #19100 (Durow) 1259 Grand River Avenue RR and RRA to C-2

Gary Durow has requested the rezoning of approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial). The site is located at the southwest corner of Grand River Avenue and Cornell Road, east of the Whispering Oaks subdivision (37 lots), south of Doggy Daycare, and west of St. Martha's Church. Approximately 1.207 acres of the subject property is zoned RR and approximately 0.28 acre is zoned RRA.

The Planning Commission held a public hearing on the proposal at its meeting on December 16, 2019 and on January 13, 2020 voted to recommend denial of the rezoning, citing the following reasons for their decision:

- The current residential zoning of the subject property is consistent with the residential zoning of adjacent properties to the east, west, north, and south of the site.
- The current residential use of the subject property is consistent with the residential use of adjacent properties to the east, west, and south of the site.
- The C-2 zoning proposed by the applicant is inconsistent with the R2-Residential Future Land Use Map designation in the 2017 Master Plan.
- The applicant has not adequately demonstrated why the requested rezoning to C-2 is appropriate or why the current RR and RRA zoning is unreasonable.
- The subject property could be used as currently zoned.

After the Planning Commission recommendation the applicant submitted a letter (attached) offering conditions on the rezoning, which are as follows:

- No drive-through windows
- No fast food restaurants
- No bars
- No gas stations
- No customer use after 12:00 a.m.

Rezoning #19100 (Durow)
Township Board (February 4, 2020)
Page 2

Staff memorandums outlining the rezoning request and minutes from the Planning Commission meetings at which the request was discussed are attached for the Board's review.

Township Board Options

The Township Board may approve or deny the proposed rezoning from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial). If the Board amends the proposal, the request may be referred back to the Planning Commission for a recommendation. A resolution will be provided at a future meeting.

Attachments

1. Staff memorandums dated December 13, 2019 and January 10, 2020 with attachments.
2. Resolution recommending denial.
3. Planning Commission minutes dated December 16, 2019 (public hearing) and January 13, 2020 (decision).
4. Letter from applicant offering conditions on rezoning dated January 22, 2020.

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To: Planning Commission

From: Peter Menser, Principal Planner

Justin Quagliata, Assistant Planner

Date: December 13, 2019

Re: Rezoning #19100 (Durow), rezone approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial).

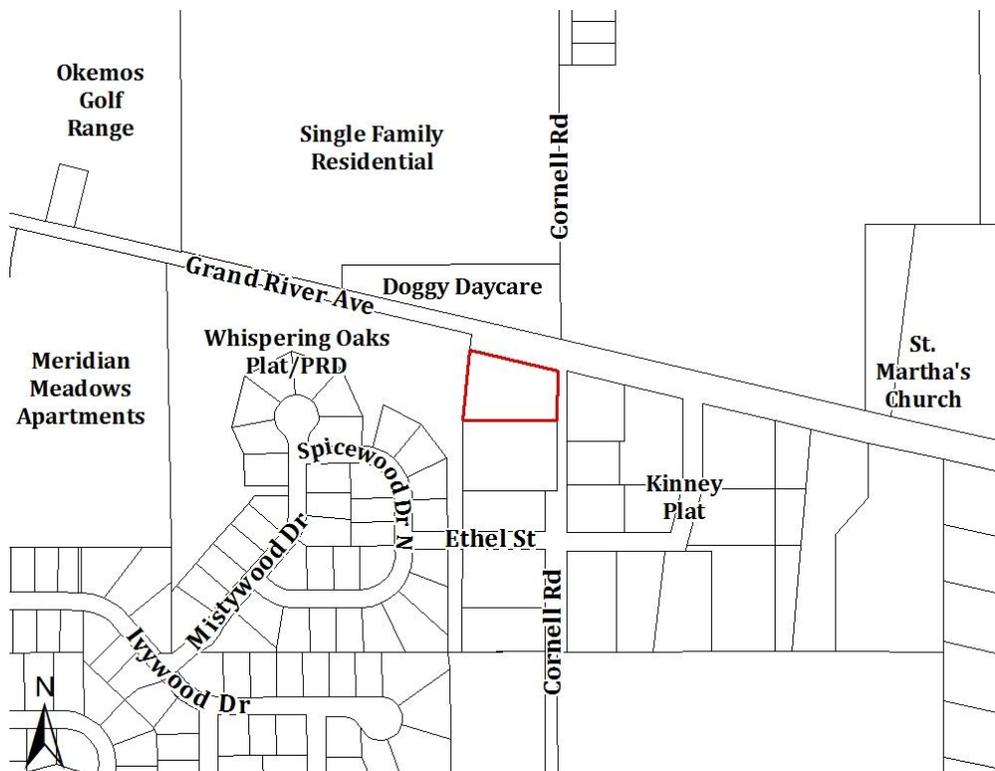
Gary Durow has requested the rezoning of approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial). The site is located at the southwest corner of Grand River Avenue and Cornell Road, east of the Whispering Oaks subdivision (37 lots), south of Doggy Daycare, and west of St. Martha's Church. The parcel contains approximately 306 feet of frontage on Grand River Avenue and approximately 168 feet of frontage on Cornell Road. Approximately 1.207 acres of the subject property is zoned RR and approximately 0.28 acre is zoned RRA.

The property has split zoning which includes both RR and RRA zoning districts. Most of the property is zoned RR; the west 47 feet of the property is zoned RRA. In 1994 the property which is now the Whispering Oaks subdivision was rezoned to RAAA (Single Family-Low Density). At the time the developer of Whispering Oaks owned the west 47 feet of the subject property. The rezoning and planned residential development (PRD) approvals for Whispering Oaks intentionally excluded the 47 foot strip of land from the Whispering Oaks development. The Township Board chose to rezone the land referred to as the "excluded strip" from RR to RRA to serve as a transition between the higher density of the Whispering Oaks development and the RR zoning to the east. After the 1994 rezoning the applicant acquired ownership of the "excluded strip." This left a split of RR and RRA zoning on the subject property which has been in place since 1994.

A 1,921 square foot two-story house built in approximately 1935 with two dwelling units, a 7,194 square foot two-story retail building constructed in the 1960s, and associated parking area occupies the subject site. Dietz Pools, a pool sales and service establishment, occupied the property in 1960. The business initially operated in the house prior to constructing the retail building. At the time the zoning ordinance allowed temporary-conditional permits subject to the approval of the zoning administrator for a structure and/or use to occupy a residential zoning district outside of the use regulations of the residential district. Dietz Pools operated under a conditional permit issued by the Director.

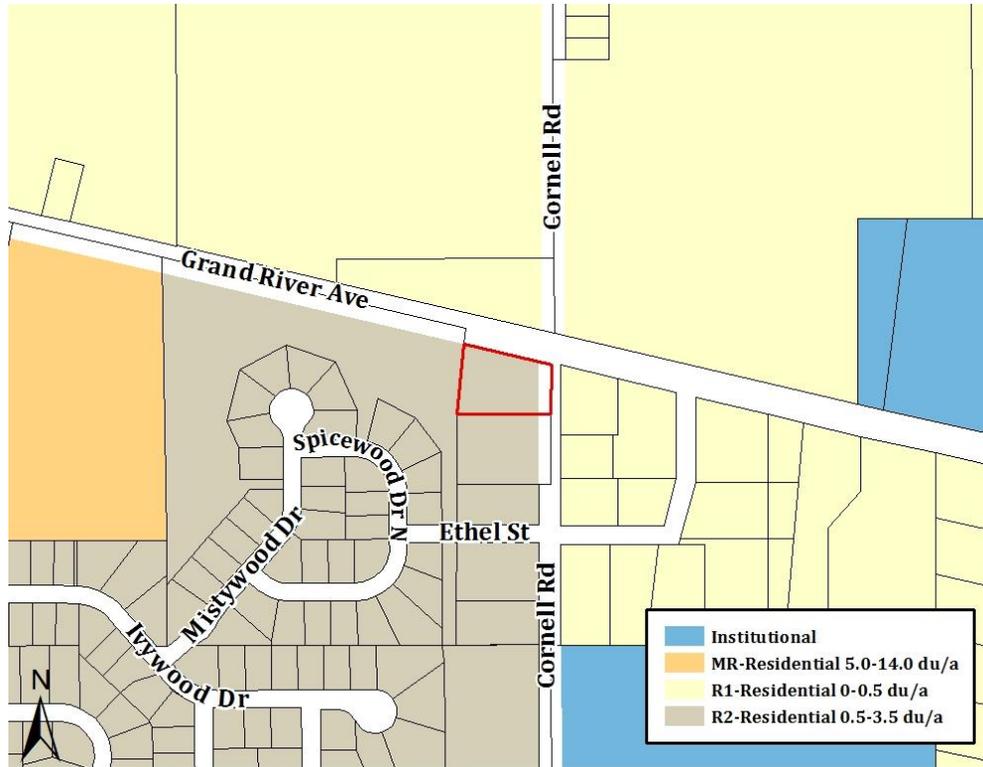
In 1966 the Township Board denied a request from the Dietz family to rezone the property from RR to HS (Highway Service). The applicant purchased the property in 1973 with the intention of operating an antique and jewelry store. At the time the Township Attorney provided a legal opinion stating the Zoning Board of Appeals had the authority to permit a change from one nonconforming use to another nonconforming use if the proposed nonconforming use was more suitable to the zoning district. In 1973 the Zoning Board of Appeals permitted the change in use from Dietz Pools to the Wooden Skate antique store, which is not currently operating. Kellie's Consignments briefly operated from the retail building in 2018.

LOCATION MAP



The Future Land Use Map from the 2017 Master Plan designates the subject property in the R2-Residential 0.5 – 3.5 dwelling units per acre (du/a) category.

2017 FUTURE LAND USE MAP



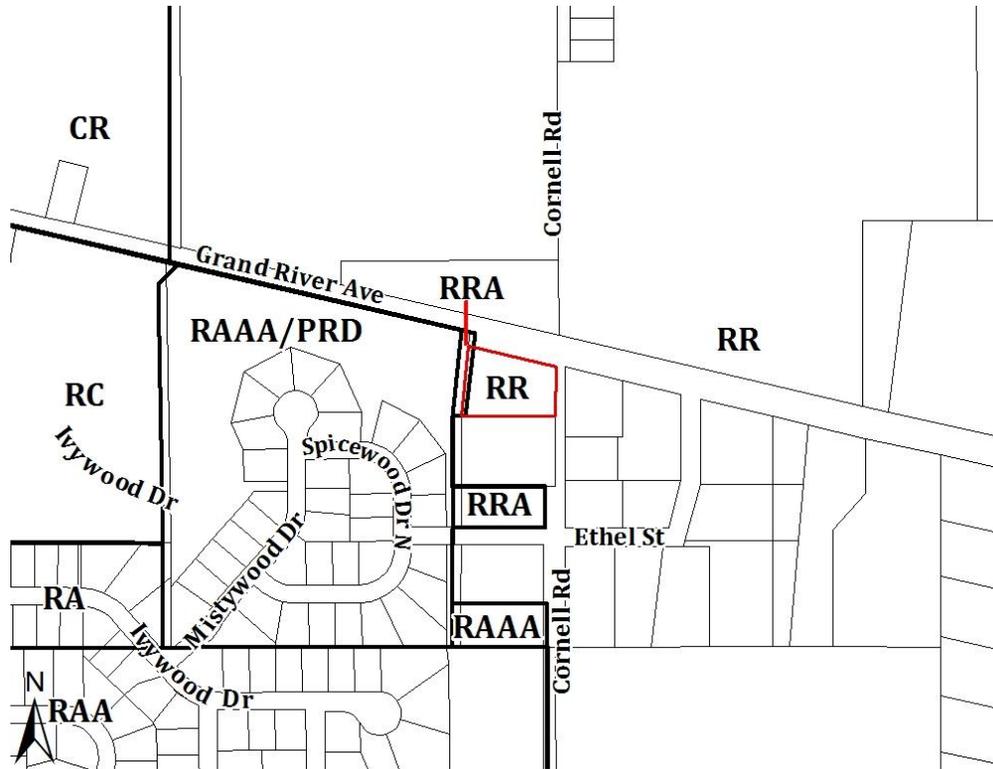
Zoning

The property is currently zoned RR (Rural Residential) and RRA (Single Family-Suburban Estates). The RR zoning district requires a minimum of 200 feet of lot width and 40,000 square feet of lot area and the RRA zoning district requires a minimum of 135 feet of lot width and 30,000 square feet of lot area. The requested C-2 zoning district requires a minimum of 100 feet of lot width and 4,000 square feet of lot area.

With 306 feet of lot width on Grand River Avenue, 168 feet of lot width on Cornell Road, and 1.487 acres (64,773.72 square feet) of lot area the site meets the minimum standards for both lot area and lot width of the existing RR and the proposed C-2 zoning districts. The RRA zoned portion of the property does not meet the minimum lot area and lot width standards of the RRA district. The following table illustrates the minimum lot width and lot area requirements for the existing RR/RRA and proposed C-2 zoning districts:

ZONING DISTRICT	MINIMUM LOT AREA	MINIMUM LOT WIDTH
RR	40,000 sq. ft.	200 ft.
RRA	30,000 sq. ft.	135 ft.
C-2	4,000 sq. ft.	100 ft.

ZONING MAP



Physical Features

The topography of the site slopes from 888 feet above mean sea level near the west property line to 876 feet above mean sea level near the east property line. The Township Wetland Map and the Flood Insurance Rate Map indicate neither wetlands nor floodplain are present on or near the site. The site has no special designation on the Township Greenspace Plan.

Streets & Traffic

The site fronts on both Grand River Avenue and Cornell Road. Grand River Avenue is a five lane road with curb and gutter and a center turn lane classified as a Principal Arterial on the Street Setbacks and Service Drives Map in the zoning ordinance. Cornell Road is a two lane road classified as a Collector street. The southernmost Grand River Avenue eastbound lane is a right-turn only lane to southbound Cornell Road along the frontage of the subject property. A seven foot wide pedestrian pathway is located along the Grand River Avenue and Cornell Road property frontage. The most recent (2016) traffic count information from the Michigan Department of Transportation (MDOT) for Grand River Avenue, between Dobie Road and Cornell Road, showed a total of 15,980 vehicles in a 24 hour period, specifically 7,977 westbound vehicle trips and 8,003 eastbound vehicle trips. The most recent (2008) traffic count information from the Ingham County Road Department (ICRD) for Cornell Road, from Ethel Street to Grand River Avenue, showed a total of 3,308 vehicles in a 24 hour period.

The applicant submitted a rezoning traffic assessment prepared by Traffic Engineering Associates, Inc. dated December 2019 that compares estimated traffic generation by the existing uses of the property and potential redevelopment of the property under the proposed zoning. The Institute of Transportation Engineers (ITE) trip generation rates for Single-Family Detached Housing (Land Use Code 210), Small Office Building (Land Use Code 712), and Shopping Center (Land Use Code 820) were selected to represent vehicle trips generated by the existing uses of the property. The assessment estimates future vehicle trips that could be generated by a 13,068 square foot Clinic (Land Use Code 630) under the proposed C-2 zoning, using a 5:1 ratio or 20 percent of the total area of the property as a guideline for the maximum building footprint for commercial zoning. The following table summarizes findings from the submitted traffic assessment.

Land Use	Size	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	
Single-Family Detached Housing	2 Units	2	4	6	1	1	2	28
Small Office Building	600 sq. ft.	1	0	1	0	1	1	10
Shopping Center	7,000 sq. ft.	96	59	155	36	40	76	986
Total existing zoning		99	63	162	37	42	79	1,024
Clinic	13,068 sq. ft.	37	11	48	13	33	46	499
Difference		-62	-52	-114	-24	-9	-33	-525

The rezoning traffic assessment concluded the proposed rezoning to C-2 is anticipated to generate less vehicle trips during the AM and PM peak hours and on a weekday when compared to the existing zoning.

The purpose of a rezoning traffic assessment is to compare potential trip generation from land uses that could be developed under the requested zoning district with uses permitted under the current zoning, including traffic generation by the existing use of the property. The current use of the property is not a shopping center. Two occupied dwelling units are located on the property. The typical use in the RR and RRA zoning districts is single family residential.

A clinic could operate under the existing zoning as a nonresidential use in a residential district with a special use permit from the Planning Commission. ITE trip generation rates show a 13,068 square foot shopping center would generate more vehicle trips than a 13,068 square foot clinic. A trip generation analysis comparing the existing residential use of the property with uses that could generate the highest potential number of vehicle trips under the proposed C-2 zoning district would likely show anticipated vehicle trips would increase following the rezoning and redevelopment of the site with a commercial use.

Utilities

Public water and sanitary sewer serve the subject site. The location and capacity of utilities for any proposed development will be reviewed in detail by the Department of Public Works and Engineering at the time of a development submittal.

Staff Analysis

The applicant has requested the rezoning of approximately 1.487 acres from RR and RRA to C-2. When evaluating a rezoning request, the Planning Commission should consider all uses permitted by right and by special use permit in the current and proposed zoning districts, as well as the reasons for rezoning listed on page two of the rezoning application (attached).

Uses permitted in the RR and RRA zoning districts include single family dwellings, home occupations, golf courses, and private noncommercial kennels. The home occupation ordinance (Section 86-368(b)(2) of the Code of Ordinances) allows home offices for professional services, personal service establishments, and offices of professionals licensed by the state to treat human patients. Home occupations cannot utilize more than 500 square feet of a dwelling and must be accommodated on an appointment basis.

Section 86-654(c) of the Code of Ordinances lists nonresidential uses that may be permitted in residential zoning districts by special use permit. Institutions for human care (clinics, homes for the aged, hospitals, nursing or convalescent homes), religious institutions, and educational and social institutions are nonresidential uses allowed by special use permit.

The area surrounding the subject property consists of various land uses. The Doggy Daycare and Spa located at the northwest corner of Grand River Avenue and Cornell Road received a special use permit in 2014 to operate the 6,000 square foot commercial kennel as a nonresidential use in a residential zoning district. The Planning Commission limited the number of dogs to 95 at any one time, specifically 60 dogs in daycare and 35 dogs in boarding. St. Martha's Church, located on the north side of Grand River Avenue and east of Cornell Road, received a special use permit in 1988 to operate a church and school facilities as a nonresidential use in a residential zoning district. In 2013 the Township Board approved a special use permit to allow a group of buildings greater than 25,000 square feet in size. St. Martha's facilities total 102,949 square feet in size.

The stated purpose of the C-2 zoning district (Section 86-404 of the Code of Ordinances) is to accommodate commercial and business service activities that serve the community. Uses permitted by right in the C-2 zoning district include financial institutions, offices, restaurants, and retail establishments. Uses allowed by special use permit in the C-2 district include hospitals and medical clinics, financial institutions and restaurants with drive-through facilities, gasoline stations, hotels, and enclosed climate controlled facilities.

If the site is rezoned to C-2 any new building on the property would be subject to a 100 foot setback from the residential zoning district boundaries to the south, east, and west. The setback from a residential district may be reduced to 60 feet with landscape screening that incorporates a double row of interlocking trees. There is also a 100 foot building setback from the centerline of the Grand River Avenue right-of-way. The following chart outlines the differences in lot area, lot width, and building setbacks between the RR, RRA, and C-2 zoning districts.

	RR	RRA	C-2
Side/Rear Setback:	20 feet/35 feet	15 feet/30-40 feet	100 feet (when adjacent to a residential district)
Setback when adjacent to Residential district:	N/A	N/A	100 feet
Lot Area:	40,000 square feet	30,000 square feet	4,000 square feet
Lot Width:	200 feet	135 feet	100 feet
Maximum Lot Coverage/ Impervious Surface:	20 percent	25 percent	70 percent
Building Height:	35 feet	35 feet	35 feet

Planning Commission Options

The Planning Commission may recommend approval or denial of the request, or it may recommend a different zoning designation than proposed by the applicant to the Township Board. A resolution will be provided at a future meeting.

Attachments

1. Rezoning application dated November 3, 2019 and received by the Township on November 4, 2019.
2. Rezoning traffic assessment prepared by Traffic Engineering Associates, Inc. dated December 2019 and received by the Township on December 9, 2019.
3. Rezoning criteria.

G:\Community Planning & Development\Planning\REZONINGS (REZ)\2019\REZ 19100 (Durow)\REZ 19100.pc1.docx

CHARTER TOWNSHIP OF MERIDIAN
DEPARTMENT OF COMMUNITY PLANNING AND DEVELOPMENT
5151 MARSH ROAD, OKEMOS, MI 48864
PHONE: (517) 853-4560, FAX: (517) 853-4095

REZONING APPLICATION

Part I, II and III of this application must be completed. Failure to complete any portion of this form may result in the denial of your request.

Part I

A. Owner/Applicant Gary Durow
Address of applicant 1259 W. Grand River Ave
Telephone: Work _____ Home (517)256-1389
Fax _____ Email myles9145@comcast.net

If there are multiple owners, list names and addresses of each and indicate ownership interest. Attach additional sheets if necessary. If the applicant is not the current owner of the subject property, the applicant must provide a copy of a purchase agreement or instrument indicating the owner is aware of and in agreement with the requested action.

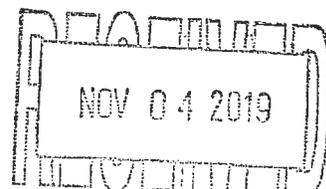
B. Applicant's Representative, Architect, Engineer or Planner responsible for request:
Name / Contact Person _____
Address _____
Telephone: Work _____ Home _____
Fax _____ Email _____

C. Site address/location 1259 W. Grand River Ave
Legal description (Attach additional sheets if necessary)
Parcel number 33-02-02-23-377-008 Site acreage 1.487

D. Current zoning RAA Requested zoning C-2

E. The following support materials must be submitted with the application:

1. Nonrefundable fee.
2. Evidence of fee or other ownership of the subject property.
3. A rezoning traffic study prepared by a qualified traffic engineer based on the most current edition of the handbook entitled *Evaluating Traffic Impact Studies: A Recommended Practice for Michigan Communities*, published by the State Department of Transportation, is required for the following requests:
 - a. Rezoning when the proposed district would permit uses that could generate more than 100 additional directional trips during the peak hour than the principal uses permitted under the current zoning.
 - b. Rezoning having direct access to a principal or minor arterial street, unless the uses in the proposed zoning district would generate fewer peak hour trips than uses in the existing zoning district.
(Information pertaining to the contents of the rezoning traffic study will be available in the Department of Community Planning and Development.)
4. Other information deemed necessary to evaluate the application as specified by the Director of Community Planning and Development.



Part II

REASONS FOR REZONING REQUEST

Respond only to the items which you intend to support with proof. Explain your position on the lines below, and attach supporting information to this form.

A. Reasons why the present zoning is unreasonable:

- 1) There is an error in the boundaries of the Zoning Map, specifically:

- 2) The conditions of the surrounding area have changed in the following respects: This property currently sits on a hard corner with a traffic signal, this is not a rural with the 7,000 SF commercial building and 33 parking spots on the property

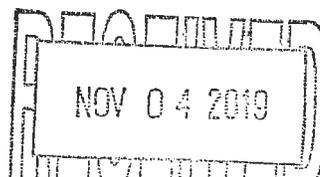
- 3) The current zoning is inconsistent with the Township’s Master Plan, explain: The Township wants to retain rural zoning and apply rural ordinances in an area that is currently expanding. This is inconsistent with the growth patterns in the township. The Master Plan even has this zoned RRA. This has raised the concern of Inverse Condemnation.

- 4) _____
- 5) The Township did not follow the procedures that are required by Michigan laws, when adopting the Zoning Ordinance, specifically:

- 6) The Township did not have a reasonable basis to support the current zoning classification at the time it was adopted; and the zoning has exempted the following legitimate uses from the area: The five-lane highway, traffic signal and the existing configuration of 7,000 s.f. retail and office with 33 parking spots certainly do not meet the RRA use. This property sits at a major intersection that must have warranted a signal with the traffic count.
- 7) The current zoning restrictions on the use of the property do not further the health safety or general welfare of the public, explain: Currently the property is “non-conforming”. The Property Class is “Commercial Improved”, see attached.

B. Reasons why the requested zoning is appropriate:

- 1) Requested rezoning is consistent with the Township’s Master Plan, explain:
- 2) Requested rezoning is compatible with other existing and proposed uses surrounding the site, specifically: The existing facility operated as a viable business for years. There have been other businesses interested in this facility. They are at the mercy of the current zoning which only allows antique and resale. The current market for Antiques is non-existent. The resale market (Kelly Consignments) couldn’t make it in this location. There is one or two car dealership being constructed in the immediate vicinity. There are barking dogs across the street and 50 mph traffic speeding by.



- 3) Requested rezoning would not result in significant adverse impacts on the natural environment, explain: Plan to use existing facility.
- 4) Requested rezoning would not result in significant adverse impacts on traffic circulation, water and sewer systems, education, recreation or other public services, explain: Traffic impact is addressed in the rezoning study. There are always impacts to the public services, but it is minor in the current Meridian Township plan.
- 5) Requested rezoning addresses a proven community need, specifically: Interesting enough this property serves as a cut-through for many walkers and people in the community. Mr. Durow takes phenomenal care of this property and it shows. Again, he has people in his back yard using this as a cut through-rural use?
- 6) Requested rezoning results in logical and orderly development in the Township, explain: As described above, this is reasonable and sensible for those very reasons. This is not a residential property as it has two points of access along with: accelerating traffic, barking dogs, random pedestrians and bikers
- 7) Requested rezoning will result in better use of Township land, resources and properties and therefore more efficient expenditure of Township funds for public improvements and services, explain: This is currently sitting empty, Mr. Durow has put in \$150,000 to keep the property from becoming an eyesore.

Part III

I (we) hereby grant permission for members of the Charter Township of Meridian's Boards and/or Commissions, Township staff member(s) and the Township's representatives or experts the right to enter onto the above described property (or as described in the attached information) in my (our) absence for the purpose of gathering information including but not limited to the taking and the use of photographs.

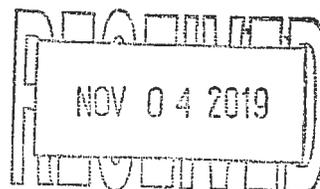
Yes No (Please check)

By the signature(s) attached hereto, I (we) certify that the information provided within this application and accompanying documentation is, to the best of my (our) knowledge, true and accurate

Signature of Applicant Gay Durow Date 11/03/19

Type/Print Name Justin Quagliata

Fee: \$700 Received by/Date:





TRAFFIC ASSESSMENT

For the Proposed

Rezoning of 1.5 Acres

Meridian Charter Township, Ingham County, MI

December 2019

Prepared by:

**Traffic Engineering
Associates, Inc.**

PO Box 100 • Saranac, Michigan 48881
517/627-6028 FAX: 517/627-6040

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PROJECT DESCRIPTION

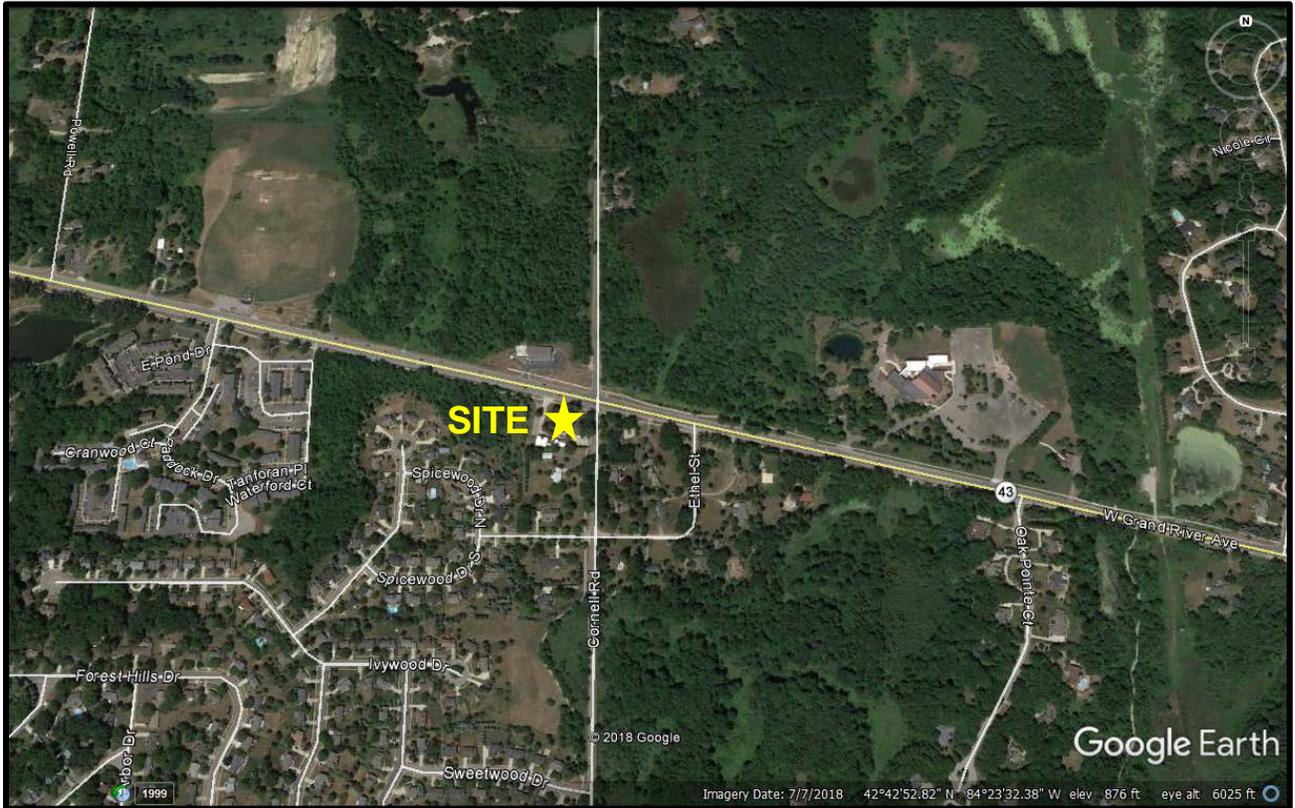
The purpose of this study is to compare the traffic generated by the existing zoning and the proposed rezoning of approximately 1.5 acres of property in Meridian Charter Township, Ingham County, Michigan. The traffic generation comparison will be based on the existing Single-Family Suburban Estate (RRA) to a Commercial (C-2) zoning. The project site is located on the southwest corner of Grand River Avenue (M-43) and Cornell Road.

Access to the proposed development is provided via two (2) existing driveways, one (1) on Grand River Avenue (M-43) and one (1) on Cornell Road. Currently, there are existing buildings on the property which include two (2) residential units, 600 square feet of office space and 7,000 square feet of retail. There are 30 existing parking spots on the site. The intersection of Grand River Avenue (M-43) and Cornell Road is controlled by a traffic signal.

The traffic analysis will include the following items:

- Trip generation for the existing Single-Family Suburban Estate (RRA) zoning based on the existing use.
- Trip generation for the proposed Commercial (C-2) zoning based on maximum allowable buildable area and usage.
- Comparison of traffic generation for the existing Single-Family Suburban Estate (RRA) zoning to the traffic generation for the proposed Commercial (C-2) zoning.
- Discussion of any potential sight distance issues





AERIAL PHOTO



EXISTING CONDITIONS

Grand River Avenue (M-43) is a five-lane roadway with a two-way center left turn lane west of Cornell Road, and a three-lane roadway with a two-way center left turn lane east of Cornell Road. Grand River Avenue (M-43) is under the jurisdiction of the Michigan Department of Transportation (MDOT). The posted speed limit is 50 MPH in the project area.

Cornell Road is a two-lane roadway with an exclusive left turn lane at Grand River Avenue (M-43). The posted speed limit is 45 MPH north of Grand River Avenue (M-43) and 35 MPH south of Grand River Avenue (M-43). Cornell Road is under the jurisdiction of the Ingham County Road Department (ICRD).

LAND USE

The proposed property to be rezoned currently has an existing business located on the property. Nearby zoning categories include:

- One-Family Rural Residential (RR)
- Single-Family Suburban Estates (RRA)
- Single-Family Low-Density (RAAA)



TRAFFIC GENERATION

Existing Zoning

The trip generation rates for the existing and proposed zoning categories were derived from the ITE TRIP GENERATION MANUAL (10th edition). For the existing zoning, Single-Family Suburban Estate (RRA), the existing buildings on the property were utilized. Currently there are two (2) residential units, 600 square feet of office space and 7,000 square feet of retail.

The ITE trip generation rates for Single-Family Detached Housing (Land Use Code 210) were selected as representing the two (2) single family residential units under the existing Single-Family Suburban Estate (RRA) zoning category. The ITE description of Single-Family Detached Housing is as follows:

Single-family detached housing includes all single-family detached homes on individual lots. A typical site surveyed is a suburban subdivision.

The ITE trip generation rates for Small Office Building (Land Use Code 712) were selected as representing the existing 600 square feet of office space. The ITE description of Small Office Building is as follows:

A small office building houses a single tenant and is less than or equal to 5,000 gross square feet in size. It is a location where affairs of a business, commercial or industrial organization, or professional person or firm are conducted.

The ITE trip generation rates for Shopping Center (Land Use Code 820) were selected as representing the existing 7,000 square feet of retail space. The ITE description of Shopping Center is as follows:

A shopping center is an integrated group of commercial establishments that is planned, developed, owned, and managed as a unit. A shopping center's composition is related to its market area in terms of size, location, and type of store. A shopping center also provides on-site parking facilities sufficient to serve its own parking demands.

Shopping centers, including neighborhood centers, community centers, regional centers, and super regional centers, were surveyed for this land use. Some of these centers contained non-merchandising facilities, such as office buildings, movie theaters, restaurants, post offices, banks, health clubs, and recreational facilities (for example, ice skating rinks or indoor miniature golf courses).

It is projected that the existing zoning, Single-Family Suburban Estate (RRA), could generate 162 vehicle trips in the AM peak hour, 79 vehicle trips in the PM peak hour, and 1,024 vehicle trips daily. The existing trip generation is summarized in **Table 1**.



Proposed Zoning

For the proposed zoning it was estimated that approximately 20% of the property could be buildings, which allows for yard setbacks, parking and landscaping on site. This equates to approximately 13,068 square feet of building, sometimes called the footprint of the building or buildings. The maximum buildable area allowed under the proposed zoning category is 25,000 square feet. For this analysis, the 13,068 square foot estimate was utilized for the traffic generation comparison.

Under the proposed C-2 zoning, possible land uses include banks, churches, community centers, offices, restaurants, and retail. Based on discussions with the Meridian Charter Township Planning Department, the ITE trip generation rates for Clinic (Land Use Code 630) were selected as representing the proposed 13,068 square feet of retail space. The ITE description of Clinic is as follows:

A clinic is any facility that provides limited diagnostic and outpatient care but is unable to provide prolonged in-house medical and surgical care. Clinics commonly have lab facilities, supporting pharmacies, and a wide range of services (compared to the medical office, which may only have specialized or individual physicians).

It is anticipated that the proposed Commercial (C-2) zoning, with a 20% buildable footprint for a clinic, could generate 48 vehicle trips in the AM peak hour, 46 vehicle trips in the PM peak hour, and 499 vehicle trips daily. The proposed trip generation is summarized in **Table 2**.

The comparison of trip generation for the proposed rezoning of the 1.5 acre property is summarized in **Table 3**.



**Table 1
Existing Zoning Trip Generation**

Land Use	Size	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	
Single-Family Detached Housing, Land Use Code 210	2 units	2	4	6	1	1	2	28
Small Office Building, Land Use Code 712	600 sq. ft.	1	0	1	0	1	1	10
Shopping Center, Land Use Code 820	7,000 sq. ft.	96	59	155	36	40	76	986
Total		99	63	162	37	42	79	1,024

**Table 2
Future Zoning Trip Generation**

Land Use	Size	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	
Clinic, Land Use Code 630	13,068 sq. ft.	37	11	48	13	33	46	499

**Table 3
Vehicle Trip Generation Comparison**

Land Use	AM Peak Hour			PM Peak Hour			Weekday
	In	Out	Total	In	Out	Total	
Existing Zoning	99	63	162	37	42	79	1,024
Proposed Zoning	37	11	48	13	33	46	499
Difference	-62	-52	-114	-24	-9	-33	-525



SIGHT DISTANCE

There are two (2) existing driveways. It is unknown if these driveways are going to remain or if new driveway locations will be proposed. The final driveway locations should be reviewed by the site design engineer to determine if sight distance requirements are met.

CONCLUSIONS

Based on the analysis, proposed rezoning to Commercial (C-2) is anticipated to generate less trips during the AM peak hour, the PM peak hour, and on a weekday when compared to the existing zoning.



SUPPLEMENTAL INFORMATION

Meridian Charter Township Zoning Codes
Zoning Map for the Project Area



Charter Township of Meridian
Monday, October 21, 2019

Chapter 86. Zoning

ARTICLE IV. District Regulations

DIVISION 3. Commercial, Retail, and Business Districts C-1, C-2, and C-3

§ 86-404. C-2 Commercial District.

[Code 1974, § 82-11.4; Ord. No. 2002-04, 4-16-2002; Ord. No. 2005-01, 1-30-2005; Ord. No. 2005-04, 3-13-2005; Ord. No. 2007-09, 10-14-2007; Ord. No. 2008-02, 2-17-2008; Ord. No. 2009-05, 8-2-2009; Ord. No. 2009-10, 11-22-2009]

- (a) Purpose and intent. The C-2 commercial district is established for the accommodation of those commercial and business service activities that serve a community level trade area. Patrons would have the option of walking or using private or public transportation to reach the destination. Such activities require land and structure uses that are typically compact and densely grouped generating a larger volume of pedestrian and vehicular traffic than expected in the C-1 district. It is the purpose of these regulations to permit the establishment of a wide variety of business enterprise types in this district. This section applies to the C-2 district.
- (b) Standards applying to all C-2 commercial uses.
 - (1) Minimum lot area: 4,000 square feet.
 - (2) Minimum lot width: 100 feet.
 - (3) Side and rear setback adjacent to a residential district. No building, parking, access drive, or other structure shall be less than 100 feet from a residential district line, except a sixty-foot setback shall be required if screening that incorporates a double row of interlocking trees, primarily evergreens, or the equivalent in addition to general screening standards.
- (c) Uses permitted by right.
 - (1) Any combination of uses permitted in the district when located in a building or group of buildings with a maximum combined gross floor area of 25,000 square feet and located on a lot.
 - (2) Banks, credit unions, and savings and loan establishments.
 - (3) Instructional centers for business, trade, music, art, dance, craft, martial arts, or other places of instruction.
 - (4) Churches or similar places of worship.
 - (5) Community centers; indoor recreation such as bowling alleys, billiard rooms, tennis

facilities; and health and physical fitness establishments.

- (6) Libraries, post offices, fire and police stations, and similar public service buildings.
 - (7) Offices of professionals licensed by the State of Michigan to treat human patients such as, but not limited to, chiropractors, dentists, dietitians/nutritionists, massage therapists, occupational therapists, optometrists, osteopaths, physical therapists, physicians, podiatrists and psychologists. This shall not include facilities accommodating overnight patients.
 - (8) Offices.
 - (9) Personal and business service establishments which perform services on the premises such as, but not limited to, barber shops, or hair salons, repair shops (shoe, electronic, small appliance, jewelry, etc.), tailor shops, laundries and dry cleaners (with the exception of dry cleaning plants), and self-service laundries, printing, including publishing, photographic reproduction, blueprinting and related trades and arts.
 - (10) Restaurants or other eating establishments which serve food and may serve alcoholic beverages for consumption on the premises or for carryout. This shall not include drive-through type restaurants. An outdoor eating area is allowed by right, subject to site plan review. The outdoor seating area shall be either attached to or be immediately adjacent to the principal building to which the outdoor seating area is accessory.
 - (11) Retail establishments selling new or used merchandise, except pawn shops.
 - (12) Retail food establishments, such as supermarkets which supply groceries and similar commodities for consumption off-premises.
 - (13) Social clubs and institutions and similar public and semipublic uses.
 - (14) Theaters and auditoriums. This shall not include outdoor, drive-in theaters.
- (d) Permitted conditional uses.
- (1) Bars, taverns, lounges, and brewpubs, provided the property line of such uses shall be a minimum of 500 feet from a residential property line and 100 feet from a child care center.
 - (2) Child care centers. In addition to compliance with § 86-403(d)(1), in this district the property line of a child care center shall be set back 100 feet from incompatible uses, including but not limited to gas stations, bars, taverns, and lounges.
[Amended by Ord. No. 2014-07, 12-9-2014]
 - (3) Adult care centers. Adult care centers, provided structures and sites meet all current building, residential, fire and property maintenance codes as adopted by the Township.
[Added by Ord. No. 2014-07, 12-9-2014^[1]
^[1] *Editor's Note: This ordinance also provided for the renumbering of former Subsections (d)(3) and (4) as Subsections (d)(4) and (5).*
 - (4) Small animal veterinary clinics. See § 86-403(d)(2) for conditions.
 - (5) Temporary outdoor uses including, but not limited to, the sale of Christmas trees, shrubbery, flowers, fruits and vegetables, special sidewalk sales, or promotional activities. Motor vehicle sales are excluded from the use. See § 86-403(d)(4) for conditions.
- (e) Uses permitted by special use permit:

- Funeral homes and mortuaries, excluding crematoriums.
- (2) Hospitals and medical clinics providing in-patient services.
 - (3) Light manufacturing including processing, assembly, or fabrication establishments.
 - (4) Open air business uses, such as retail sales of nursery stock, lawn furniture, playground equipment, and garden supplies, provided the total sales and storage area is fenced (chain link shall not be acceptable) or otherwise enclosed in a permanent manner.
 - (5) Parking buildings or lots.
 - (6) Public or private utility buildings or structures, except those with storage yards.
 - (7) Satellite passenger bus terminals.
 - (8) Tattoo and body piercing establishments:
 - a. All operations shall be carried on inside a building and shall not be visible from the street.
 - b. Location a minimum of 500 feet from any residential district, school, church, or child care use.
 - c. Proof that all state, county, and local permitting requirements have been met.
 - (9) Any building or group of buildings with a combined gross floor area of greater than 25,000 square feet and located on a lot.
 - (10) Uses or combinations of uses permitted in the district located in a structure greater than 75,000 square feet in gross floor area. Provisions are established herein for the Township to accommodate the construction and operation of such uses to the extent and in accordance with such standards that result in the optimum future development of the Township.
 - a. Uses permitted. Any use which is permitted by right, by conditional use, or by special use permit in the C-1 or C-2 commercial district.
 - b. Site development requirements.
 1. Types of structures. All permitted activities shall be conducted entirely within a wholly enclosed permanent building, except as noted in the following:
 - i. The parking of customer and employee vehicles.
 - ii. The loading and unloading of commercial vehicles which shall take place directly into or out of a building.
 - iii. Temporary exhibitions, provided they are properly licensed as a temporary outdoor use under the provisions of this Code of Ordinances.
 - iv. Gasoline service stations, provided they comply with all design requirements of this Code of Ordinances.
 2. Minimum lot area: five acres.
 3. Minimum lot frontage: 300 feet.

- (11) Banks, credit unions, savings and loan establishments with a maximum of five drive-through lanes.
- (12) Restaurants or other eating establishments with drive-through facilities which serve food and may serve alcoholic beverages for consumption on the premises or for carryout.
- (13) Drive-in or drive-through uses.
 - a. Standards applying to all drive-in or drive-through uses:
 1. Side and rear yards shall be at least 20 feet, except that all buildings shall be located in accordance with the Master Plan for Major Streets and Highways, Meridian Charter Township, Ingham County, Michigan for established setbacks. This subsection does not apply to drive-in uses adjacent to residential districts.
 2. Screening:
 - i. Screening shall be provided to a height acceptable to the Director of Community Planning and Development along all property lines abutting a residential district and sufficient to visibly obscure adjoining uses. Fences and walls shall not exceed six feet.
 - ii. No screening shall be closer than 30 feet to the nearest edge of any street right-of-way.
 - b. Standards applying to gasoline and automobile service stations, and oil change establishments.
 1. No gasoline service station shall have more than 10 vehicle fueling stations.
 2. Any building, gas island, air compressors, tire filling stations, vacuum cleaners, or similar equipment shall be set back a minimum of 300 feet from an abutting residential district line.
 3. Any building or structure shall be set back a minimum of 100 feet from the property line when adjacent to a child care center.
 4. The site shall accommodate safe internal vehicle circulation.
 5. Setbacks for vehicle fueling stations, and similar equipment, shall be a minimum of 20 feet from any right-of-way lines as specified in the Master Plan for Major Streets and Highways, Meridian Charter Township, Ingham County, Michigan. Gasoline pump islands, and similar equipment shall be a minimum of 25 feet from a side or rear property line.
 6. Off-street vehicle storage. No outdoor storage of wrecked or partially dismantled vehicles shall be permitted unless such vehicles are required to be temporarily stored for a period of time by police or court order. All such storage facilities shall be screened or shielded, in accordance with the special use permit.
 7. All activities, except routine maintenance performed at the fuel pump shall be carried on entirely within a building.
 8. There shall be no outdoor displays of items for sale, such as tires, tractors, lawnmowers, or other materials, except that supplies intended to be provided to customers directly, such as oil or windshield washer fluid, may be displayed on the pump islands.

9. The extensive physical modification of vehicles shall not be permitted in a gasoline service station.
 10. Storage of flammable products. Outside aboveground tanks for the storage of gasoline, oil or other inflammable liquids or gases for sale, other than liquefied petroleum gas, shall be prohibited at any gasoline service station.
- c. Standards applying only to drive-in car washes, automatic and self-service:
1. In self-service car washes, no equipment, such as a vacuum cleaner, shall be located in the front yard.
 2. Buildings shall be set back a minimum of 500 feet from an abutting residential district.
 3. Storage of flammable products. Outside aboveground tanks for the storage of gasoline, oil or other flammable liquids or gases, other than liquid petroleum gas, for sale shall be prohibited.
 4. Car washes, including self-service types, shall not be allowed to operate so as to adversely affect the adjacent residential properties and surrounding area.
- d. All other drive-in or drive-through facilities. For all other drive-in or drive-through facilities, excluding drive-in theaters, service may be in automobiles, but all other activities must be totally within a building. Such facilities shall receive review under the provisions of Article II, Division 5, of this chapter and the approval of the Planning Commission. All standards applicable to the district in which the use is located shall also be met.

(14) Hotels or motels.

- a. Standards applying to hotels and motels in the C-2 district:
1. Access to the site containing the hotel or motel shall be from a street designated as a minor or principal arterial in § **86-367** of the Code of Ordinances or by means of a street designed for the purpose of serving a commercial development.
 2. Ancillary guest services such as, but not limited to maid and linen service, telephone/fax/e-mail, continental breakfast, meeting rooms, banquet room/hall, gift shop, restaurant and lounge, and recreation and fitness facilities shall be allowed in conjunction with an approved hotel or motel.
 3. None of the guest rooms or suites shall be occupied as an apartment or primary residence with an exception for one resident manager/owner, who may reside in a dwelling located within the hotel or motel.
 4. The hotel or motel shall be setback a minimum of 150 feet from any adjacent residential zoning district, except a one-hundred-foot setback shall be required if the screening that incorporates a double row of interlocking trees, primarily evergreens, or the equivalent is provided in addition to the general screening standards.
 5. The minimum parcel size shall be 2.5 acres.

(15) Enclosed climate controlled storage facilities.

- a. Standards applying to enclosed climate controlled storage facilities in the C-2 district:

1. No trucks shall be allowed to park overnight or idle their engines on the site.
2. There shall be no outside storage. All items warehoused or stored on the property shall be within an enclosed building that is climate controlled. The building shall have a maximum of two loading/unloading doors, plus one additional loading dock and door for oversized vehicles located at the rear of the building's facade, or the facade that is least visible from the public street.
3. All mechanical, heating, ventilation, and air conditioning (HVAC) and like systems shall be screened from street level view on all sides, or property line where streets are not present, by an opaque structure made to match the building.
4. The dumpster enclosure shall be located adjacent to the building and shall be screened on all four sides, with three sides containing similar building materials made to match the building. Unique site circumstances may necessitate the dumpster to be located away from the building, in which the location shall be subject to the review and approval of the Director of Community Planning and Development.
5. The building, equipment, and off-street parking area on the site shall be properly screened from adjoining properties, especially residentially zoned properties, and the use of natural screening materials shall be required.
6. Building materials shall include, but are not limited to, wood, brick, clapboards, beadboard, glass, and stone. Materials such as vinyl, aluminum and other metal sidings shall be avoided.
7. The buildings shall be designed so that exterior materials are consistent with and are sensitive to nearby historical features, blend with facades of adjacent buildings and complement streetscape improvements in the area.
8. Interior doors shall not be visible from outside of the enclosed climate controlled storage facility.
9. When located adjacent to a residential zoning district, enclosed climate controlled storage facilities shall be setback a minimum of 200 feet from all residential zoning district lines and include a double row of evergreens for screening.
10. When the boundary of the C-2 (Commercial) zoned lot or parcel on which the enclosed climate controlled storage facility is located is separated from a residential zoning district by a railroad, river, or public road, the 200 foot setback and double row of evergreens shall not be required.

(16) New car dealerships, subject to the following:

- a. Minimum lot size: four acres.
- b. Vehicle service and repair and used car sales shall be permitted ancillary uses to the principal new car sales use.
- c. Body shops shall not be a permitted ancillary use.

(17) Outdoor recreation, such as, but not limited to, batting cages and court games, such as basketball and volleyball, when ancillary to a bowling alley, indoor recreation facility, or health and physical fitness establishment.

[Added 7-24-2018 by Ord. No. 2018-08]

Charter Township of Meridian
Monday, October 21, 2019

Chapter 86. Zoning

ARTICLE IV. District Regulations

DIVISION 2. Residential Districts

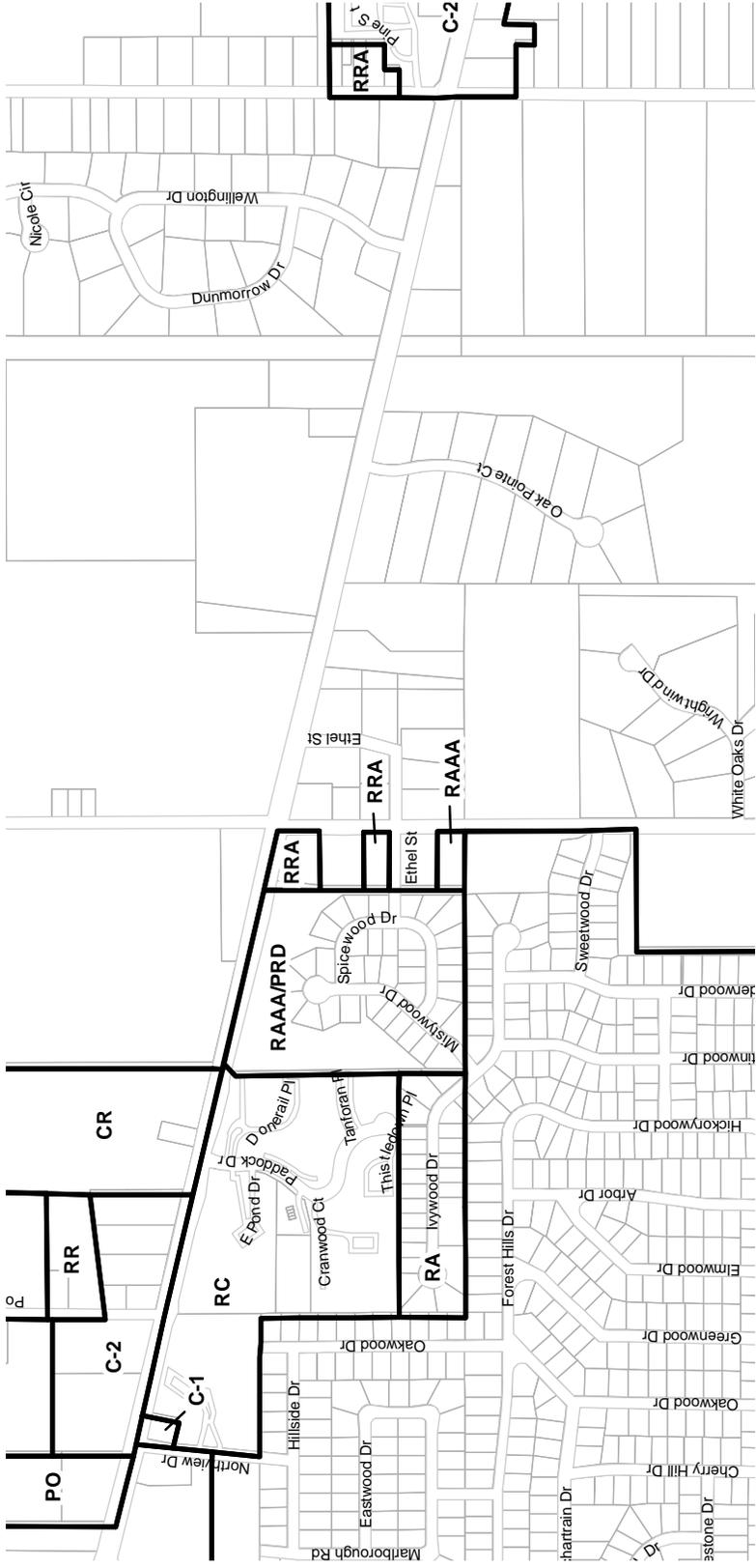
§ 86-370. RRA District: One-Family Suburban Estate Residential District.

[Code 1974, § 82-2.5]

- (a) Purpose. The purpose of the RRA district is to achieve the same character, stability and sound residential environment as intended for the one-family rural residential district (RR). The difference between RR and RRA districts is that the smaller lot size will permit a slightly higher population density that makes it possible to service the dwelling units with public sewer and water facilities when the facilities are available. This district is intended to serve as a transition between higher density zoning districts and RR. This section applies to the RRA district.
- (b) Uses permitted by right. All uses permitted by right in the RR district subject to all the restrictions specified therein are also permitted in the RRA district with the exception of private noncommercial kennels.
- (c) Uses permitted by special use permit. All uses permitted by special use permit in the RR district, subject to all restrictions specified therein, are permitted by special use permit in the RRA district, except the following uses are not permitted:
 - (1) Public riding stables and livestock auction yards.
 - (2) Greenhouses and nurseries selling at retail on the premises.
 - (3) Veterinary hospitals; clinics; kennels, including commercial kennels and private noncommercial kennels.
 - (4) Game or hunting preserves operated for profit.
 - (5) Sand or gravel pits, quarries, incinerators, junk yards, sanitary fills, public or semiprivate sewage treatment and disposal installations, as provided for in Article **VI** of this chapter.
 - (6) Airports.
- (d) Dimensional requirements. The following minimum dimensions for lot area and width, front, side, and rear yards, together with maximum dimensions for lot coverage and building heights, shall be required for every structure and land use in this district, except as noted:
 - (1) Minimum lot area: 30,000 square feet.

- (2) Minimum interior lot width: 135 feet.
- (3) Minimum corner lot width: 135 feet along street upon which the lot fronts.
- (4) Maximum lot coverage. All buildings, including accessory buildings, shall not cover more than 25% of the total lot area.
- (5) Minimum yard dimensions.
 - a. Front yards. In accordance with the setback requirements of § **86-367** for the type of street upon which the lot fronts.
 - b. Side yards: 15 feet.
 - c. Rear yards. For lots up to 150 feet in depth the rear yard shall not be less than 35 feet in depth, for lots over 150 feet in depth the rear yard shall not be less than 40 feet in depth.
 - d. Corner lots. A front yard shall be maintained on each street side of a corner lot. Setbacks shall be equal to those required in § **86-367** for the type of streets upon which the lot has frontage and all regulations applicable to front yards shall apply.
 - e. Through and reverse frontage lots. Principal buildings shall be located in accordance with the front yard setback requirements of § **86-367** for the type of streets upon which the lot has frontage and all regulations applicable to front yards shall apply. All regulations applicable to front yards shall apply except freestanding accessory buildings or structures, such as decks, garages, sheds, swimming pools, and tennis courts, proposed for reverse frontage lots shall be located no closer than 30 feet from the right-of-way of the designated rear yard.
- (6) Supplementary yard regulations. For permitted reductions in yard dimensions, for permitted yard encroachments, and for placement of accessory buildings in yard area, refer to Article **V**, Division 3 of this chapter.
- (7) Maximum building height. No residential structure shall exceed 2 1/2 stories or 35 feet, whichever is less. Accessory buildings shall not exceed a height of 15 feet on any residential lot. For permitted exceptions to residential building heights, refer to Article **V**, Division 5 of this chapter. For building height limitations for nonresidential structures and uses in residential districts, refer to § **86-654**.
- (8) Minimum living space. Minimum gross living area per family shall not be less than 1,000 square feet of floor area on the first floor if one story or 625 square feet of floor area on the first floor level of two stories. In any case, the total living area shall not be less than 1,000 square feet.

State law reference: State-mandated residential uses, MCL 125.286g.



Part II

REASONS FOR REZONING REQUEST

Respond only to the items which you intend to support with proof. Explain your position on the lines below, and attach supporting information to this form.

A. Reasons why the present zoning is unreasonable:

- 1) There is an error in the boundaries of the Zoning Map, specifically: _____

- 2) The conditions of the surrounding area have changed in the following respects: _____

- 3) The current zoning is inconsistent with the Township's Master Plan, explain: _____

- 4) The Township did not follow the procedures that are required by Michigan laws, when adopting the Zoning Ordinance, specifically: _____

- 5) The Township did not have a reasonable basis to support the current zoning classification at the time it was adopted; and the zoning has exempted the following legitimate uses from the area: _____

- 6) The current zoning restrictions on the use of the property do not further the health safety or general welfare of the public, explain: _____

B. Reasons why the requested zoning is appropriate:

- 1) Requested rezoning is consistent with the Township's Master Plan, explain: _____

- 2) Requested rezoning is compatible with other existing and proposed uses surrounding the site, specifically: _____

- 3) Requested rezoning would not result in significant adverse impacts on the natural environment, explain: _____

- 4) Requested rezoning would not result in significant adverse impacts on traffic circulation, water and sewer systems, education, recreation or other public services, explain: _____

- 5) Requested rezoning addresses a proven community need, specifically: _____

- 6) Requested rezoning results in logical and orderly development in the Township, explain: _____

- 7) Requested rezoning will result in better use of Township land, resources and properties and therefore more efficient expenditure of Township funds for public improvements and services, explain: _____



To: Planning Commission

From: Peter Menser, Principal Planner
Justin Quagliata, Assistant Planner

Date: January 10, 2020

Re: Rezoning #19100 (Durow), rezone approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial).

The Planning Commission held a public hearing on Rezoning #19100 at its last meeting on December 16, 2019. After discussing the request the consensus of the Planning Commission was to consider a resolution to recommend denial at its next meeting on January 13, 2020.

Planning Commission Options

The Planning Commission may recommend approval or denial of the request. A resolution to recommend denial of the request is provided.

- **Move to adopt the resolution to recommend denial of Rezoning #19100 to rezone approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial).**

Attachment

1. Resolution to recommend denial.

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RESOLUTION TO RECOMMEND DENIAL

**Rezoning #19100
1259 Grand River Avenue**

RESOLUTION

At a regular meeting of the Planning Commission of the Charter Township of Meridian, Ingham County, Michigan, held at the Meridian Municipal Building, in said Township on the 13th day of January, 2020, at 7:00 p.m., Local Time.

PRESENT: _____

ABSENT: _____

The following resolution was offered by _____ and supported by _____.

WHEREAS, Gary Durow requested the rezoning of approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial); and

WHEREAS, the Planning Commission held a public hearing on the request at its regular meeting on December 16, 2019 and has reviewed the staff materials provided under a cover memorandum dated December 13, 2019; and

WHEREAS, the current residential zoning of the subject property is consistent with the residential zoning of adjacent properties to the east, west, north, and south of the site; and

WHEREAS, the current residential use of the subject property is consistent with the residential use of adjacent properties to the east, west, and south of the site; and

WHEREAS, the C-2 zoning proposed by the applicant is inconsistent with the R2-Residential Future Land Use Map designation in the 2017 Master Plan; and

WHEREAS, the applicant has not adequately demonstrated why the requested rezoning to C-2 is appropriate or why the current RR and RRA zoning is unreasonable; and

WHEREAS, the subject property could be used as currently zoned.

NOW THEREFORE, BE IT RESOLVED THE PLANNING COMMISSION OF THE CHARTER TOWNSHIP OF MERIDIAN hereby recommends denial of Rezoning #19100 to rezone approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial).

ADOPTED: YEAS: _____

NAYS: _____

Resolution to Recommend Denial

Rezoning #19100 (Durow)

Page 2

STATE OF MICHIGAN)

) ss

COUNTY OF INGHAM)

I, the undersigned, the duly qualified and acting Chairperson of the Planning Commission of the Charter Township of Meridian, Ingham County, Michigan, DO HEREBY CERTIFY that the foregoing is a true and a complete copy of a resolution adopted at a regular meeting of the Planning Commission on the 13th day of January, 2020.

Ken Lane
Planning Commission Chairperson

RESOLUTION TO RECOMMEND DENIAL

**Rezoning #19100
1259 Grand River Avenue**

RESOLUTION

At a regular meeting of the Planning Commission of the Charter Township of Meridian, Ingham County, Michigan, held at the Meridian Municipal Building, in said Township on the 13th day of January, 2020, at 7:00 p.m., Local Time.

PRESENT: Chair Lane, Vice-Chair Hendrickson, Commissioners Premoe, Shrewsbury, Clark, Cordill, Richards, and Trezise

ABSENT: None

The following resolution was offered by Vice-Chair Hendrickson and supported by Commissioner Cordill.

WHEREAS, Gary Durow requested the rezoning of approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial); and

WHEREAS, the Planning Commission held a public hearing on the request at its regular meeting on December 16, 2019 and has reviewed the staff materials provided under a cover memorandum dated December 13, 2019; and

WHEREAS, the current residential zoning of the subject property is consistent with the residential zoning of adjacent properties to the east, west, north, and south of the site; and

WHEREAS, the current residential use of the subject property is consistent with the residential use of adjacent properties to the east, west, and south of the site; and

WHEREAS, the C-2 zoning proposed by the applicant is inconsistent with the R2-Residential Future Land Use Map designation in the 2017 Master Plan; and

WHEREAS, the applicant has not adequately demonstrated why the requested rezoning to C-2 is appropriate or why the current RR and RRA zoning is unreasonable; and

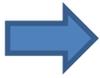
WHEREAS, the subject property could be used as currently zoned.

NOW THEREFORE, BE IT RESOLVED THE PLANNING COMMISSION OF THE CHARTER TOWNSHIP OF MERIDIAN hereby recommends denial of Rezoning #19100 to rezone approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial).

ADOPTED: YEAS: Chair Lane, Vice-Chair Hendrickson, Commissioners Premoe, Shrewsbury, Clark, Cordill, Richards, and Trezise

NAYS: None

Chair Lane closed the public hearing at 7:50 p.m.



- C. Rezoning #19100 (Durow), rezone approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial).

Chair Lane opened the public hearing at 7:51 p.m.

Principal Planner Menser provided a brief overview of the proposed rezoning. He noted the split zoning was discovered when staff conducted research on the proposal but did not show up on the zoning maps.

The traffic assessment shows a mischaracterization of the current land use due to the lack of a land use category for comparison. The property is and has not been used as a shopping center and the numbers are inflated compared to the actual amount of traffic realistically generated.

Principal Planner Menser noted he would be available to answer questions.

The owner/applicant Gary Durow, 1259 West Grand River Avenue, Okemos, Michigan said he has owned the business on the property since 1955. He resides in the farm home that was built in 1928 and said the noise from traffic is deafening on Grand River Avenue where the 5 lane state highway has a speed limit of 50 miles per hour. He stated the Rural Residential zoning is wrong for his property and this is the reason his property has been for sale for 7 years and no one is interested in leasing the property unless it is rezoned.

Public Comment:

1. Chris Potterpin, 4534 Ethel Street, spoke in opposition to Rezoning #19100.
2. Pete Potterpin, 1250 Ethel Street, spoke in opposition to Rezoning #19100.
3. Tom Saad, 4554 Cornell Road, spoke in opposition to Rezoning #19100.
4. Amanda Hopper, 5485 Martinique, spoke in support of Rezoning #19100.

Planning Commission Discussion:

- This is a challenging site because it has been a commercial use for a long time.
- The eastern portion of Meridian Township was Rural Residential and is part of the Master Plan. The line for commercial uses is considered west of Cornell Road.
- Consideration that C-2 zoning may not be appropriate for the property. The property is on a major highway and maybe there could be a compromise for the property owner and less intrusive for surrounding neighbors.
- The property owner has significant limitations with the property as it is currently zoned.
- There is a school nearby and already a lot of traffic on the busy, narrow road as well as congestion during certain times of the day.

A straw poll indicated the Planning Commission would not be in support of approving Rezoning #19100.

Chair Lane closed the public hearing at 8:31 p.m.

Motion by Commissioner Cordill to recommend approval of Special Use Permit #19181 with conditions.

Supported by Commissioner Trezise.

ROLL CALL VOTE:

YEAS: Commissioners Cordill, Trezise, Premoe, Clark, Shrewsbury, Richards and Chair Lane.

NAYS: Commissioner Hendrickson

MOTION CARRIES: 7-1



- C. Rezoning #19100 (Durow), rezone approximately 1.487 acres located at 1259 Grand River Avenue from RR (Rural Residential) and RRA (Single Family-Suburban Estates) to C-2 (Commercial).

Motion by Commissioner Hendrickson to recommend denial of Rezoning #19100.

Supported by Commissioner Cordill.

Planning Commission Discussion:

- The property has been used for commercial purposes for many years.
- The request is inconsistent with the Future Land Use Map and surrounding properties which are residential.
- Rezoning the property to C-2 would be considered spot zoning.

ROLL CALL VOTE:

YEAS: Commissioners Hendrickson, Cordill, Trezise, Shrewsbury, Clark, Richards and Chair Lane.

NAYS: Commissioner Premoe

MOTION CARRIES: 7-1

8. Other Business

- A. Election of Officers

Commissioner Premoe nominated Commissioner Lane as Chair.

Supported by Commissioner Trezise.

ROLL CALL VOTE:

YEAS: Commissioners Richards, Clark, Shrewsbury, Hendrickson, Cordill, Trezise, Premoe and Lane.

NAYS: None

MOTION CARRIES: 8-0

Commissioner Richards nominated Commissioner Hendrickson as Vice Chair.

Supported by Commissioner Clark.

The Board of Meridian Township

1259 W Grand River has been a business since 1955 (64 years), Dietz pools for 18 years and Wooden Skate for 46 years. All the buildings were legally built for business except the house. The house was built in 1928 and was the farm house for that 80 acres. It is now a rental unit house with two offices which Dietz built for their offices. The house has 3500 square feet and the store in back has 7000 square feet. The property has 32 legally paved parking spaces. Sewer use was paid for in full when 47 feet of additional width to the property was purchased from Keith Schroder in the 90's. Water use is available. The property is on a 5 lane state highway with a 50 mile per hour speed limit. There is also access to the property on both Grand River Avenue and Cornell Road. No road work on the turn lanes is required.

There has not been a house that can be visibly seen on Grand River Avenue from Okemos Road to Meridian Road built in those 64 years. It is obvious to me, Rural Residential is the wrong zoning for this property. If you lived on Grand River Avenue, as I do, you would understand why the traffic is deafening.

It has been a joy to live and work in Meridian Township, however; since closing the store to regular hours, I am open by chance or by appointment. It is now proved it is no longer financially affordable to keep the store with its present zoning. The property has been for sale or lease for 7 years with only being able to lease it for a portion of one year. The present zoning for an antique shop or a jewelry store is no longer in demand. I have been patient, but the taxes are \$10,000, the insurance is \$8000, and the up keep is several thousand. I'm sure you understand that with the zoning I have, the list of who I can lease or sell it to is non-existent.

This townships' elected officials gave me permission to build these buildings after I bought the property, not before. In my opinion, this township should let me sell or lease this property for the purpose it was designed for, C2.

I need your help, people who have looked at the property don't want the trouble of trying to get permission from the township, with a zoning that is not a right. I believe the planning commission turned me down for one of two reasons, 1 – Politics - they want rural which I have proved doesn't make sense and 2 – They didn't know what the property would be used for. I am not looking to expand the general retail use of the property. I only want low density retail like the property has had for 64 years. To prove that, I am willing to offer the following conditions: 1 – No drive thru windows, 2 – No fast food restaurants, 3 – No bars, 4 – No gas stations and 5 – No customer use after 12:00 am.

I believe these conditions show that I have gone the distance to prove I want the type of retail these buildings were built for, and that the elected officials of this township allowed me to build. I have spent 46 years doing the right thing in this township, now I humbly ask you to do the right thing.

Gary Durov
1-22-2020



To: Board Members
From: Miriam Mattison, Finance Director
Date: January 30, 2020
Re: Fixed Asset Capitalization Policy

The Township auditors – Yeo & Yeo have recommended that a written policy be adopted for the capitalization of fixed assets. The following policy has been developed by the Finance Department for your consideration.

Purpose

The primary purpose of this Capital Asset Policy is to (a) provide direction to the Finance Department staff for handling discretionary areas within the generally accepted accounting principles for governmental entities as applied to capital assets, and (b) to inform the public and readers of the Township’s financial statements of decisions made and implemented where such discretion is allowed within the accounting standards. Capital assets include property, plant, equipment, intangible assets and infrastructure assets such as roads, bridges, sidewalks, etc. The intent of capitalizing assets owned by the Township is to spread the cost of an asset over the useful life of the asset rather than show the entire acquisition cost as an expense in the year it was acquired.

Policy

1. Capital assets will be capitalized if the expected useful life exceeds one year and the value is at least \$5,000. Such assets are recorded at historical cost if purchased or constructed. Exceptions may be made for certain electronic equipment (i.e. computers, mobile radios, radar units) where the total acquisition cost is significant and the Township desires to track them. Exceptions can be approved by the Manager for amounts of at least \$5,000.
2. The capitalization of an asset is accomplished by (a) recording the full value (cost) on the statement of net position, (b) showing each year, as an expense (depreciation), that part of the asset which is used (consumed) during a fiscal year, and (c) tracking on the statement of net position the sum of the annual expenses (accumulated depreciation) charged since the asset was first acquired and placed into service.
3. Capital assets that are capitalized on the Financial Statements will be depreciated using the half-year straight-line method of depreciation. However, land and easements will not be depreciated.
4. Capital assets are reported in the applicable governmental or business-type activities column in the government-wide financial statements.

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January 30, 2020
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5. If an item is donated, it will be recorded at its estimated fair value at the time of the donation.
6. The cost of normal maintenance and repairs that do not add to the value of the asset or materially extend its useful life will not be added to the value of the asset.
7. Capital assets with a value under the applicable capitalization parameters will be expensed in the year purchased and recorded as such on the financial statements.
8. The projected useful life of the asset is set forth as follows:

Capital Asset Class	Useful Life
Water and sewer mains	10 to 50 Years
Drainage flow rights	50 Years
Building, additions and improvements	10 to 30 Years
Vehicles	5 to 10 Years
Furniture and equipment	5 to 10 Years
Machinery and equipment	5 to 10 Years
Other tools and equipment	5 to 20 Years
Road and improvements	5 Years