AGENDA

CHARTER TOWNSHIP OF MERIDIAN
PLANNING COMMISSION – REGULAR MEETING
August 12, 2019 7PM

1. CALL MEETING TO ORDER
2. PUBLIC REMARKS
3. APPROVAL OF AGENDA
4. APPROVAL OF MINUTES
   A. July 22, 2019 Regular Meeting

5. COMMUNICATIONS – listed on separate page

6. PUBLIC HEARINGS
   A. Special Use Permit #19101 (LaFontaine Chrysler, Dodge, Jeep, & Ram of Okemos), construct 24,902 square foot new car dealership at 1510 Grand River Avenue.
   B. Wetland Use Permit #19-03 (LaFontaine Chrysler, Dodge, Jeep, & Ram of Okemos), discharge storm water to regulated wetland at 1510 Grand River Avenue.
   C. Special Use Permit #19-74011 (Michigan Montessori), appeal of approved special use permit to add 0.50 acre parcel to Montessori Radmoor School property at 2745 Mt. Hope Road.
   D. Preliminary Plat #19012 (Giguere Homes), proposed seven lot subdivision titled Sanctuary 3 located on the north side of Robins Way, east of Hulett Road.

7. UNFINISHED BUSINESS
   A. Special Use Permit #19111 (Woodward Limited Dividend Housing Association), develop 49 unit apartment complex with four buildings on north side of Sirhal Drive, west of Greencliff Drive.
   B. Special Use Permit #19121 (Woodward Limited Dividend Housing Association), construct group of buildings greater than 25,000 square feet in size on north side of Sirhal Drive, west of Greencliff Drive.

8. OTHER BUSINESS
   A. None.

9. REPORTS AND ANNOUNCEMENTS
   A. Township Board update.

10. PROJECT UPDATES
   A. New Applications - None
   B. Site Plans Received - None
   C. Site Plans Approved
      1. Site Plan Review #19-08 (Haslett Road Holding LLC), construct 88 lot Copper Creek development on north side of Haslett Road, east of Creekwood Lane.

2. Site Plan Review #19-03 (Meridian Township Parks), construct pedestrian/bicycle pathway on north side of Central Park Drive, east of Marsh Road.

11. PUBLIC REMARKS
12. ADJOURNMENT
13. POST SCRIPT: PETER TREZISE

TENTATIVE PLANNING COMMISSION AGENDA
August 26, 2019

1. PUBLIC HEARINGS
   A. None

2. UNFINISHED BUSINESS
   A. Special Use Permit #19111 (Woodward Limited Dividend Housing Association), develop 49 unit apartment complex with four buildings on north side of Sirhal Drive, west of Greencliff Drive.
   B. Special Use Permit #19121 (Woodward Limited Dividend Housing Association), construct group of buildings greater than 25,000 square feet in size on north side of Sirhal Drive, west of Greencliff Drive.
   C. Special Use Permit #19101 (LaFontaine Chrysler, Dodge, Jeep, & Ram of Okemos), construct 24,902 square foot new car dealership at 1510 Grand River Avenue.
   D. Wetland Use Permit #19-03 (LaFontaine Chrysler, Dodge, Jeep, & Ram of Okemos), discharge storm water to regulated wetland at 1510 Grand River Avenue.
   E. Special Use Permit #19-74011 (Michigan Montessori), appeal of approved special use permit to add 0.50 acre parcel to Montessori Radmoor School property at 2745 Mt. Hope Road.
   F. Preliminary Plat #19012 (Giguere Homes), proposed seven lot subdivision titled Sanctuary 3 located on the north side of Robins Way, east of Hulett Road.

3. OTHER BUSINESS
   A. Form based code initiative.

CHARTER TOWNSHIP OF MERIDIAN
PLANNING COMMISSION
REGULAR MEETING MINUTES

DRAFT

July 22, 2019
5151 Marsh Road, Okemos, MI 48864-1198
517-853-4560, Town Hall Room, 7:00 P.M.

PRESENT: **Commissioners Lane, Scott-Craig, Hendrickson, Trezise, Premoe, Cordill, Richards and Shrewsbury**
ABSENT: **None**
STAFF: **Director of Community Planning & Development Mark Kieselbach, Principal Planner Peter Menser, Director of Parks & Recreation LuAnn Maisner**

1. Call meeting to order

Chair Scott-Craig called the regular meeting to order at 7:00 P.M.

2. Public Remarks

A. Jason Mir, 4289 Shadow Ridge, spoke in opposition to Rezoning #19060.
B. Gerry Broski, 4332 Aztec Way, spoke in opposition to Rezoning #19060.
C. Norman Grannemann, 2628 Creekstone Trail, spoke in opposition to Rezoning #19060.

3. Approval of Agenda

Commissioner Cordill moved to approve the agenda as written.
Seconded by Commissioner Hendrickson.
VOICE VOTE: Motion approved unanimously.

4. Approval of Minutes

A. July 8, 2019 Regular Meeting

Commissioner Trezise moved to approve the minutes as written.
Seconded by Commissioner Lane.
VOICE VOTE: Motion approved unanimously.

5. Communications

Chair Scott-Craig noted the communications listed in the meeting packet and said hard copies of the communications received after the meeting packet was sent out were assembled and distributed to the Planning Commission at their places on the dais prior to the meeting.

6. Public Hearings

A. Special Use Permit #19111 (Woodward Limited Dividend Housing Association), develop 49 unit apartment complex with four buildings on north side of Sirhal Drive, west of Greencliff Drive.

B. Special Use Permit #19121 (Woodward Limited Dividend Housing Association), construct group of buildings greater than 25,000 square feet in size on north side of Sirhal Drive, west of Greencliff Drive.

Chair Scott-Craig opened the public hearing at 7:13 P.M.

Principal Planner Menser provided an overview of the proposals and noted the public hearing would cover both items.

Applicant Frank Fugate, 500 South Front Street Columbus, Ohio, with Woda Cooper Company provided additional information on the requests and said he was available to answer questions.

Public Comments:

A. Lynne Page, 3912 Raleigh Drive, spoke in opposition to Special Use Permit #19111 and Special Use Permit #19121.

Planning Commission Discussion:

- The Planning Commission should determine if the proposals fits the area, meets the design standards of multi-family zoning districts, and if the proposals meet the special use criteria.
- The numbers of variances are not consistent with the purpose and intent of the ordinance by having too much building in a small area.
- Appreciation for the conditions offered by the developer after listening to concerned residents during the rezoning process.
- The ordinance for this type of development has very strict guidelines and as a result has generated a list of ten requested variances.
- The Greencliff access will be an emergency-only and will also serve as a pedestrian connection.
- Proper screening should be added on the north and east side of the proposed development to provide a natural barrier for light pollution from vehicles.
- The developer has agreed to review the ten variances and meet with staff to see if the number can be reduced and come back to a future meeting with revised plans.

Chair Scott-Craig closed the public hearing at 7:53 p.m.

7. Unfinished Business

A. Rezoning #19060 (Bennett Road Holding LLC), rezone approximately 83 acres from RR (Rural Residential) and RAAA (Single Family-Low Density) to RAA (Single Family-Low Density).

Motion by Commissioner Lane to adopt the resolution recommending denial of Rezoning #19060. Supported by Commissioner Hendrickson.

ROLL CALL VOTE:
YEAS: Commissioners Lane, Hendrickson, Shrewsbury, Cordill, Trezise, and Scott-Craig.
NAYS: Commissioner Richards, Premoe
MOTION CARRIED: 6-2

Principal Planner Menser noted the Township Board would discuss the rezoning at its meeting on Thursday, August 8, 2019 starting at 6:00 P.M.

B. Special Use Permit #19061 (Meridian Township Parks Department), work in floodplain to construct pedestrian/bicycle pathway on north side of Central Park Drive, west of Marsh Road.

Motion by Commissioner Trezise to approve Special Use Permit #19061 with conditions.
Supported by Commissioner Lane.

ROLL CALL VOTE:
YEAS: Commissioners Trezise, Lane, Cordill, Premoe, Shrewsbury, Hendrickson, Richards and Scott-Craig
NAYS: None
MOTION CARRIED: 8-0

C. Wetland Use Permit #19-02 (Meridian Township Parks Department), fill in regulated wetland to construct pedestrian/bicycle pathway on north side of Central Park Drive, west of Marsh Road.

Motion by Commissioner Cordill to recommend approval of Wetland Use Permit #19-02.
Supported by Commissioner Premoe.

ROLL CALL VOTE:
YEAS: Commissioners Cordill, Premoe, Trezise, Lane, Hendrickson, Richards and Scott-Craig.
NAYS: None
MOTION CARRIED: 8-0

8. Other Business - None

9. Reports and Announcements

A. Township Board updates.

Principal Planner Menser provided an update from the Township Board's recent agenda.

Commissioner Premoe provided an update from the July 10, 2019 joint Environmental Commission meeting with the Land Preservation Advisory Board.

Commissioner Hendrickson provided an update from the Corridor Improvement Authority meeting held on July 17, 2019.

Commissioner Richards provided an update from the June, 27, 2019 Transportation Commission meeting.

Chair Scott-Craig provided an update from attending the Economic Development Corporation meeting on July 11, 2019.

10. Project Updates

A. New Applications - None
B. Site Plans Received - None
C. Site Plans Approved
   1. Site Plan Review #19-09 (Meridian Township Parks), establish Market Place on the Green/Farmers' Market on the south side of Central Park Drive, west of Marsh Road.

11. Public Remarks

A. Karen Grannemann, 2826 Creekstone Trail, spoke in opposition to Rezoning #19060.

12. Adjournment

Chair Scott-Craig moved to adjourn the meeting.
Supported by all.
VOICE VOTE: Motion carried unanimously.

Chair Scott-Craig adjourned the regular meeting at 8:30 P.M.

Respectfully Submitted,
Debbie Budzynski, Recording Secretary

Communications Received

Meridian Township Planning Commission

Monday, August 12, 2019

1. William Hutchens RE: Special Use Permit #19101
2. Barbara Loyer RE: Special Use Permit #19101
3. Richard Horan RE: Special Use Permit #19101
4. Carolyn Sebestyen RE: Rezoning #19060
5. Jim Banas RE: Special Use Permit #19101
6. Rich RE: Special Use Permit #19101
7. Anonymous RE: Senior Housing
8. Beth Hubbell RE: Special Use Permit #19101
9. Sarah and Ben Singer RE: SUP #19-74011
10. Jane McCarthy RE: Special Use Permit #19101
11. Betty Tesner RE: Special Use Permit #19101
12. Betty Tesner RE: Special Use Permit #19101
13. Yingxin Zhou RE: Rezoning #19060
14. Chuck & Renee Maniaci RE: Rezoning #19060
15. Lynne Page RE: Rezoning #19060
16. Lynn Page RE: Rezoning #19060
17. Fabio Casagrande RE: Rezoning #19060
18. Jessi Adler RE: Special Use Permit #19101
19. Jessi Adler RE: Special Use Permit #19101

Peter Menser

From: William Hutchens <hutchmsu@gmail.com>
Sent: Sunday, July 21, 2019 6:51 PM
To: Planning Commision (DG)
Subject: LaFontaine

We do NOT need another car dealership in Okemos, particularly one that sells down-scale cars & trucks. The dealerships have been running from South Lansing for years because of the vandalism they experience from the ne'er-do-wells who live there. It is the business version of "white flight" that took place in the late '60's & '70's. I understand a business wanting its' footprint on Grand River Ave, but if they wait just a bit, they can have the Meridian Mall property. You don't believe that the axe throwing & go-cart palace will save the mall, do you? And, a more efficient use of township land would be to make the dealership a deal (tax incentives, etc) to occupy the property on the southwest corner of Marsh & Lake Lansing Rds. That area is a disaster and a precursor of things to come with the Meridian Mall. You've already been sold a bill of goods & green-lighted a disastrous project at Okemos & Hamilton Rds. Please, don't green-light another one.
William Hutchens
Tacoma Hills

Peter Menser

From: Barbara Loyer <nomadpc@att.net>
Sent: Sunday, July 21, 2019 4:26 PM
To: Peter Menser
Subject: Objection to LaFontain's Special Use Permit

Dear Mr. Mensor,

I made the following comments on Nextdoor Okemos. I hope you take my points seriously.

I live at Walden Pond, right across the road from this beautiful parcel of land. I agree with it's importance as habitat & as green space to maintain the healthier and more beautiful environment we all came here for. We at Walden Pond have already been struggling with problems caused by run-off from all the paved areas surrounding us & I'm sure this development would make matters worse. To my mind, however, what's more important is that more & more people are buying cars ON-LINE! (my son just bought one from CARVANA) On-line shopping is one of the biggest reasons retailers are closing all around us. The writing is on the wall! It WILL happen to the auto sales industry as well. Sacrificing this land for short term gain is not wise.

Thank you for your consideration,
~ Barbara Loyer

Peter Menser

From: Horan, Richard <horan@msu.edu>
Sent: Monday, July 22, 2019 9:47 AM
To: Peter Menser
Cc: Kelli Horan
Subject: LaFontaine special use permit

Dear Mr. Menser,

I am writing to you to object to the LaFontaine special use permit. I live in the Shoals neighborhood at the southern end of Cornell road (1292 Starboard Drive). I bought the house because it is far enough from development that I can enjoy nature, not hear any car noise, and (mostly) see the stars at night. I also like that Grand River Ave does not become congested until I get past Dobie/Central Park road.

I am very concerned about the existing and continued development "creep" in our area, and new large developments like a car dealership will only open the door for more creep in the future.

As an environmental economist, I understand the benefits of development, but I also understand the tradeoffs associated with the external costs of development. By external costs, I mean the adverse impacts to those who have no say in the transaction. Those impacts are real costs and they need to be included in any cost-benefit analysis. Indeed, even the Federal government recognizes these costs and mandates that they be considered when doing policy analysis.

Moreover, the benefits of development need to take into account opportunities to develop in existing, but largely abandoned, developed areas within the township. The benefits of developing on the proposed site are not simply the benefits of building on that sire versus not building at all. Rather, they are the benefits of building on that site relative to an alternative site within the township that has already been developed but is now under-utilized. The Pizza hut site is a great example of a long-abandoned site that could go into an alternative use. Perhaps it is not large enough for a car dealership, but hopefully you get my point: there are alternatives and that fact reduces the benefits of developing on the proposed site.

I may not be able to attend the Aug. 12 meeting on this, so I hope you will share my concerns with the other Planning Commission members. I strongly disagree with the proposed special use permit, and my votes in the next election will certainly reflect the outcome of this decision.

Best regards,

Richard Horan
1292 Starboard Dr.
Okemos, MI

Peter Menser

From: Carolyn Sebestyen <555csebestyen@gmail.com>
Sent: Monday, July 22, 2019 1:16 PM
To: Planning Commision (DG)
Subject: Hagadorn/Bennett development

Dear Commissioners
Mayberry's adjusted proposal does NOT address the concerns about traffic, wetlands and impact on schools. It is already zoned and can be developed as is. Nothing has been presented by Mayberry to indicate there is a NEED for more houses on small lots and its sufficient. We bought in Okemos within the last year (2nd in 5 years). No housing shortage for all price ranges.Vote no to their request. Thank you.

Peter Menser

From: James Banas <jandtbanas@att.net>
Sent: Monday, July 22, 2019 12:37 PM
To: Peter Menser
Subject: LaFontaine car dealership

Dear Mr. Menser,

I hope you are doing well and enjoying the summer. I hope to do the same for many more years while living in Meridian Twshp. Sadly, a possible car dealership on Grand River may make the enjoyment less in the coming years.

I extremely appreciate the green spaces and cleaner air afforded me by living in this area and I'm afraid that more pavement and less nature will lessen that enjoyment. I sincerely hope that you will do everything possible to halt this proposed "development" and keep this parcel of land as green and permeable as possible.

Thank you for keeping our world livable. It's all we've got.

Sincerely,

Jim Banas
4108 Spinnaker Lane
Okemos, MI 48864

5176140346

Peter Menser

From: Luna the lab <richard.voci@gmail.com>
Sent: Wednesday, July 24, 2019 4:28 PM
To: Planning Commision (DG)
Subject: Opposition to Special Use Permit #1910

Ladies and Gentlemen,

I am communicating with you in order to voice my opposition to the Special Use Permit #19101. As a resident of Meridian Township I am very displeased with the amount of light pollution that has invaded our community from the already existing dealerships. Allowing this proposed project to be approved would needlessly destroy woodlands, turn night to day in that area, and dramatically reduce our quality of life.

Rich

To Whom it May Concern.

We would like to make a suggestion to improve the housing situation in Okemos. My husband and I are both retired and would like to downsize to a ranch home. However we would like a new home custom built in a neighborhood geared for seniors. So many seniors are leaving the state to more South. We would like to remain in Michigan, preferably Okemos but find that new builds either are meant as family homes and are much too large or are cheaply made & each home looks like every other one.

We believe a small subdivision of custom built ranches specifically geared for seniors makes sense & would enhance the area. We do not desire a condominium but want to own our own home. It would be a plus if the subdivision included walking paths. Many other cities with limited land for building have bought up land with older homes & then rebuilt. We hope you can contact quality builders to determine if there is any interest in such a project. As our

generation is the largest group, we are confidant you would have many interested in purchasing a new home in such an area.

Thank you for your consideration of such a project.

Peter Menser

From: Meridian Township, MI <meridian-mi@enotify.visioninternet.com>
Sent: Thursday, July 25, 2019 10:56 PM
To: Peter Menser
Subject: La Fontaine proposal

Message submitted from the <Meridian Township, MI> website.

Site Visitor Name: Beth Hubbell
Site Visitor Email: jeremiah@shytoun.com

Please stop the madness - no more development of green space until all the vacant areas are used. Such a disaster for the environment & global warming! All kinds of room for development on huge shopping center on main intersection in Haslett - practically empty for years. We can't even get a walkable grocery store there. That should be your top priority - not giving into developers mega plans. We don't need another car dealer - we do need accessible fresh food! Your job is to plan for our needs - your decisions should not be just about the money!

Justin Quagliata

From: Singer, Sarah <singer@broad.msu.edu>
Sent: Tuesday, July 30, 2019 11:47 AM
To: Justin Quagliata
Subject: Appeal of SUP#19-74011

Hello,

We are submitting this email in support of the Montessori Radmoor School, and specifically their intention to add the property at 2749 Mt. Hope Road to their existing parcel. For nearly 13 years, we have been neighbors with the school (our home shares a property line to the south) and have found them to be very good neighbors, and also very good stewards of their property. They maintain their property well, and we would be pleased to see them expand their footprint in the area.

Sincerely,
Sarah and Ben Singer

Peter Menser

From: Jane McCarthy <jermc46@hotmail.com>
Sent: Thursday, August 01, 2019 8:42 PM
To: Planning Commision (DG)
Cc: Jane McCarthy
Subject: LaFontaine special use permit

Hello. My name is Jane McCarthy. I have lived at 1925 Tahoe Circle, Okemos since 1978.

Obviously I have observed many changes to Grand River Avenue through those years—some good, some bad in my opinion. However, this is the first time I ever contacted you about an upcoming approval.

I am APPALLED that you are even considering allowing LaFontaine to construct yet another car dealership on Grand River! I also have observed the growth of Jolly Road with all their dealerships and have been grateful our house was not in that neighborhood . Now you are turning Grand River in to another Jolly Road, just farther north, and definitely close to my neighborhood. Please do not allow that to happen to my home.

I appreciate your reading this, and sincerely hope common sense prevails and this LaFontaine request is denied.

Please keep the green and trees along Grand River as much as possible. Car dealerships with cement , large buildings, and worst of all, all those bright lights do not maintain the peaceful nature of the township. We have enough of that disruption done to Grand River already. Stop the removing of the pretty parts of our township. You certainly can find something to do with that land that would be less bold. Or—just leave it as it is... LaFontaine is capable of finding another area where they might be welcome.

Sincerely, Jane McCarthy
349-4914

Peter Menser

From: Betty Tesner <betesner@comcast.net>
Sent: Friday, August 02, 2019 8:23 AM
To: Planning Commision (DG)
Subject: LaFontaine's special use permit

Planning Commission.

I object to allowing another automobile dealership on Grand River. You are turning Grand River into another Cedar Street or Pennsylvania Avenue. When I moved here 35 years ago, there was so much green space… and over the years, developers have been given the green light every time they decide to grow their businesses. With the board's approval, developers are paving over the entire township. I don't know anyone at LaFontaine, and I'm sure they're good people but we don't need another dealership on Grand River Avenue. There are so many empty spaces that need to be re-developed. Stop allowing developers to use up all the beautiful green spaces that are left. We NEED the green spaces! We need a place where rain and snow can melt and saturate our lands. We need wet lands to filter the impurities that descend on our land. Wells need clean, fresh rainwater to replenish our earth. Don't Do This!

Betty Tesner
1909 Tahoe Circle
(Tacoma Hills)
349-7665

Peter Menser

From: Betty Tesner <betesner@comcast.net>
Sent: Friday, August 02, 2019 9:05 AM
To: Planning Commision (DG)
Subject: Hamilton Rd.

Planning Commission.

I live off Hamilton Road east, in Tacoma Hills which has over 300 homes and Edgewood School. There's a church on Hamilton Rd. at Manitou. There are many condos on the north side of the street. Our ONLY exit is Hamilton Road. Township boards at some point, decided that Hamilton east could and should be re-zoned so that developers can build anywhere they choose. But never on Hamilton west, which is open to Grand River in many ways, and has fewer people/houses (no condos or apartments for Hamilton West [a bit of sarcasm here]) than Hamilton east. Except for the corner of Hamilton Road and Okemos Road which now will cause traffic tie-ups for years to come as they re-develop that corner. I worry every time a small house goes up for sale because I know that a developer will come along and re-develop that land by building as big a building on the property as they can, and pave the rest for parking spaces. As they did recently with the Ericson house (which became a commercial venture) but there was no change in the space. Now a developer took the land, tore down the single family dwelling/house and with the adjoining empty lot, paved over ALL the property, building a **3-story** 5-condo/apartment complex, and adding a few trees/shrubs.

And speaking of parking spaces, maybe someone should reconsider how much parking space is really needed for a property and stop paving over SO much land. The parking spaces at Meijer's and the Kroger/Target shopping centers are extreme! Not to mention all the space that was paved over at Haslett and Marsh Roads when they built the now-empty (and has been for a very long time) grocery store and shops. Someone… please fix that! And no one should plant a tree on a parking lot and then pave it up to 4- or 5-feet of the base of the tree. If you can't plant a tree and give it some space to grow, (20-30 feet) then you don't know much… or care much… about trees…or nature. And people would appreciate the shade in the summer.

The township decided that the traffic on Hamilton West was 2000 cars a day. Has anyone taken a traffic study to see how many cars use Hamilton East every day? It takes a long time for me to make a left turn on Hamilton to exit Tacoma Hills. And now the traffic circle is backed up to the east on Hamilton, and often times the southbound traffic is backed up north of Meijer's southern entrance/exit road. With the development on the corner of Hamilton Road West and Okemos Road, traffic will be a mess for years. Not well planned!

Betty Tesner
1909 Tahoe Circle
Tacoma Hills
349-7665
betesner@comcast.net

Peter Menser

From: Yingxin Zhou <zhou0824@gmail.com>
Sent: Friday, August 02, 2019 8:42 AM
To: Peter Menser
Cc: Eric Torng; Planning Commision (DG)
Subject: Re: Rezoning #19060 new application form

Hi, Peter,

Could you please take a look at the message below? I'll really appreciate it if you could get back to us on this.

On Thu, Aug 1, 2019 at 7:59 AM Yingxin Zhou <zhou0824@gmail.com> wrote:

> Hi, Peter,
>
> There is an error on the form. It says the applicants are requesting to rezone 7 parcels of 96.74 acres in total from RAAA and RR to RAA. But our understanding is that partial of the 96.74 acres are already zoned RAA. Could you please ask the applicant to make correction?
>
> Thank you,
> Yingxin Zhou

Peter Menser

From: Chuck Maniaci <chuckmaniaci@gmail.com>
Sent: Thursday, August 01, 2019 11:20 PM
To: Planning Commision (DG); Peter Menser
Subject: Rezoning request for Bennett Road Holding LLC (against)

Hello again, Planning Commission and Mr. Menser.

Just a reminder of the letter we sent on June 8th, prior to a meeting where the rezoning request was to be considered. The developer should be required to build within the existing zoning, and also to stay off the existing wetlands.

Please consider taking the time to visit Sundance Estates and Heron Creek neighborhoods. Look between the houses, beyond the back yards of the houses along the left size of Aztec Way, as you enter the Woods of Heron Creek from Sundance Estates. What was once wooded space is now dead trees sticking out of standing water. This situation occurred when Champion Woods was developed.

Or, look deep in the back of the almost 5 acres at 3720 Hulett Road, where there was once wetlands that dried up during the summer. There is now a permanent pond in that area as a result of the Sanctuary being built on portions of the wetlands. The developer directed a majority of the run-off from the backfilled home sites to the north, onto property owned by other people.

These are just two examples of the situation we are trying to avoid. I know many more exist, and you likely can create a list of them without even referring to records. The developers say there won't be issues, and pay someone big dollars to prepare an official looking report to convince the planning commission and township staff. But when the runoff water does accumulate, it's too late to do anything about it, leaving existing property owners stuck with the problem.

Please be proactive in protecting the current surrounding property owners. Let Bennett Holdings develop a beautiful neighborhood that conforms with current zoning and wetland delineations.

Sincerely,

CHUCK & RENEE MANIACI
2553 Sundance Lane
Okemos, MI 48864

From: Chuck Maniaci
Sent: Saturday, June 8, 2019 4:49 PM
To: planningcommission@meridian.mi.us; Peter Menser @ Township
Subject: Rezoning request #19060 for Bennett Road Holding LLC (against)

Hello Planning Commission and Mr. Menser;

We do not support the rezoning to allow for an increase in density (from RR, RAA and RAAA to RA) for the property north of Bennett Road. Any development of that land will probably result in water-related issues, just as the Champion Woods development caused areas west of Sundance Estates and adjacent to the Woods of Heron Creek to become permanently flooded. Hundreds of trees were killed. It's an eerie sight to see the dead trees rising out of the standing water. Property owners didn't sign up to have permanent ponds just a few yards from the back of their houses.

Some of my personal thoughts in addition to keeping the zoning as it is:

- Please be sure a well thought out drainage plan is put in place. Drainage retention ponds may be necessary within the bounds of the parcel(s) to be developed, not allowing runoff to go to the surrounding areas and neighborhoods.
- There should be no building allowed within existing wetlands. The developer should work around the natural contours of the land. Too often developers are allowed to build on existing wetlands. The Sanctuary, east of Hulett Road, is one such development. This caused permanent flooding of one or more parcels to the north of that development, causing property owners to lose large areas of their land to standing water.
- As owners of buildable land on Hulett Road, we were informed by members of the Meridian Township Planning Dept. that there is no option to build within 40 feet of the existing wetlands behind our property. And we even had to pay the township to have your contracted wetlands expert draw the line of delineation. If a small project like ours has to follow the rules, so should a large project such as the one that may occur with the 96+ acres north of Bennett, east of Hagadorn, west of Sophia Parkway.

We also agree with many of the concerns identified in the June 1st letter written by Carla and James Galligan.

Sincerely,

Chuck & Renee Maniaci
2553 Sundance Lane
Okemos, MI 48864

Peter Menser

From: Lynne Page <page.okemos@gmail.com>
Sent: Monday, August 05, 2019 2:48 PM
To: Board; Planning Commision (DG)
Subject: Rezoning #19060 Bennett Road Holdings LLC-Agenda Item 13-A

To the Meridian Township Board and Planning Commission:

I have several concerns regarding the documents provided for Agenda Item 13-A (Rezoning #19060 Bennett Road Holdings LLC) included in the August 8, 2019 Township Board meeting packet posted on the Township website on Friday, August 2, 2019.

1. Mayberry Homes' original Rezoning Application for this property (#18120) was submitted on 9/27/18. The Planning Commission held a Public Hearing on this application on 10/22/18. Mayberry submitted an amended application for this property on 4/16/19 (#19060). The Planning Commission held a Public Hearing on this application on 6/10/19. Mayberry submitted a further amendment to its Rezoning Application on 6/19/19, subsequent to the 6/10/19 Public Hearing. On 7/22/19, the Planning Commission voted to recommend denial of Mayberry's Rezoning Application.

2. The Township Board meeting packet for 8/8/19 contains a new Rezoning Application signed by Mayberry on 7/23/19. Every page of the application is different than that of all the previous rezoning applications. Unlike Mayberry's previous Rezoning Applications, there is no dated receipt stamp or signed acknowledgement by Meridian Township for this application.

3. According Principal Planner Peter Menser, the new application is an "update" and does not constitute a new or amended application. Per Mr. Menser, the previous applications dated 4/16/19 6/19/19 were "modification(s)". These terms are not defined in Meridian Township's Code of Ordinances, and are merely semantics which undermine accountability, transparency and consistency in the application review process. Despite incurring additional staff time for the review of each new rezoning application, Mayberry was charged only a single application fee, remitted in 2018.

4. Mr. Menser's staff memo dated 8/1/19 (included in the Township Board's meeting packet for 8/8/19) regarding this Rezoning Application is addressed to the Planning Commission. Has this revised application been sent back to the Planning Commission for review?

Allowing multiple, significant revisions of a Rezoning Application without holding a new Public Hearing for each change or imposing additional application fees sets a dangerous new precedent for our Township and its Boards and Commissions. Please take immediate action to develop a fair, consistent, democratic process.

Sincerely,
Lynne Page
3912 Raleigh Drive
Okemos, MI 48864

Peter Menser

From: Lynne Page <page.okemos@gmail.com>
Sent: Monday, August 05, 2019 2:53 PM
To: Board; Planning Commision (DG)
Subject: Rezoning #19060 Bennett Road Holdings LLC-Agenda Item 13-A

To the Meridian Township Board and Planning Commission:

I have several concerns regarding the documents provided for Agenda Item 13-A (Rezoning #19060 Bennett Road Holdings LLC) included in the August 8, 2019 Township Board meeting packet posted on the Township website on Friday, August 2, 2019.

1. Mayberry Homes' original Rezoning Application for this property (#18120) was submitted on 9/27/18. The Planning Commission held a Public Hearing on this application on 10/22/18. Mayberry submitted an amended application for this property on 4/16/19 (#19060). The Planning Commission held a Public Hearing on this application on 6/10/19. Mayberry submitted a further amendment to its Rezoning Application on 6/19/19, subsequent to the 6/10/19 Public Hearing. On 7/22/19, the Planning Commission voted to recommend denial of Mayberry's Rezoning Application.

2. The Township Board meeting packet for 8/8/19 contains a new Rezoning Application signed by Mayberry on 7/23/19. Every page of the application is different than that of all the previous rezoning applications. Unlike Mayberry's previous Rezoning Applications, there is no dated receipt stamp or signed acknowledgement by Meridian Township for this application.

3. According Principal Planner Peter Menser, the new application is an "update" and does not constitute a new or amended application. Per Mr. Menser, the previous applications dated 4/16/19 and 6/19/19 were "modification(s)". These terms are not defined in Meridian Township's Code of Ordinances, and are merely semantics which undermine accountability, transparency and consistency in the application review process. Despite incurring additional staff time for the review of each new rezoning application, Mayberry was charged only a single application fee, remitted in 2018.

4. Mr. Menser's staff memo dated 8/1/19 (included in the Township Board's meeting packet for 8/8/19) regarding this Rezoning Application is addressed to the Planning Commission. Has this revised application been sent back to the Planning Commission for review?

Allowing multiple, significant revisions of a Rezoning Application without holding a new Public Hearing for each change or imposing additional application fees sets a dangerous new precedent for our Township and its Boards and Commissions. Please take immediate action to develop a fair, consistent, democratic process.

Sincerely,
Lynne Page
3912 Raleigh Drive
Okemos, MI 48864

Peter Menser

From: Fabio Casagrande <fabiocasagrande61@gmail.com>
Sent: Thursday, August 08, 2019 8:58 AM
To: Planning Commision (DG)
Subject: Re: Champion Woods Opposition to Rezoning

Hello
Again for another meeting tonight
No change, we stay firm in our position of complete opposition to this relentless charge to make money against the will of the community
I loved my family to Okemos I can move it out if things change
We signed again the petition, no changes but we still signed
We are the Casagrande
2672 LaForet Circle, Okemos 48864
We are against the rezoning
Thank you

On Mon, Jun 10, 2019 at 10:31 AM Fabio Casagrande <fabiocasagrande61@gmail.com> wrote:

> Hello my Name is Fabio Casagrande
> With my wife Terri, two boys and one daughter we live at
> 2672 Laforet Circle, Okemos 48864
> I would like to notify you of our strong opposition to rezoning that would affect negatively our subdivision.
> One of the reason why I accepted the job at MSU when I was recruited is the school system for my boys and the area to live in
> I would consider to move away if any of the two conditions would not match our standards and expectations
> I plan to attend tonight meeting at 7pm
> My best regards
> Fabio Casagrande

Peter Menser

From: Jessi Wortley Adler <jessicawortley@gmail.com>
Sent: Friday, August 09, 2019 7:05 AM
To: Planning Commision (DG); Peter Menser; Gary Laundroche; Cecelia Kramer
Subject: Proposed wording for SUP 19101
Attachments: Prosposed wording for Special Use Permit 19101.docx

Commissioners,
The Forest Hills Homeowners Association objects to SUP 19101 and urges you to reject the special use permit for LaFontaine.

However, should you choose to ignore the consequences and detriments to the Township and approve it, please ensure it includes the following conditions for the applicant:

1. The applicant shall use light poles covered and aimed to not allow light to escape the property and contribute to light pollution. When possible, short ground lights should be used that are covered, dimmed and angled so light does not leave the property and does not shine into eyes of passing drivers. 90percent of parking area lights on the property shall be turned off completely after business hours and security shall be maintained with motion sensors to turn these lights on only when tripped.

2. The applicant shall refrain from taking customers on new vehicle test drives through the local subdivisions.

3. Applicant shall use new trends in design and building, including the use of green parking and pervious grass surfaces, instead of traditional pavement. This also includes designing a smaller footprint site to account for new trends in car buying.

4. Applicant shall redesign the site to maintain current mature trees and vegetation along the side facing Grand River. The application shall not line up 45 cars along the road in clusters of 5, but instead, move those cars further back on the property.

5. Signage for the company (both freestanding and on the building) shall be as minimal as possible and not contribute to light pollution

Thank you!
Jessi Adler, representing the Forest Hills Homeowners Association

Peter Menser

From: Jessi Wortley Adler <jessicawortley@gmail.com>
Sent: Thursday, August 08, 2019 8:16 PM
To: Planning Commision (DG); Peter Menser; Gary Laundroche
Subject: Objection to SUP 19101
Attachments: Green parking1.jpg; Objection to Special Use Permit #19101 - Jessi Adler.docx; Green parking2.jpg; Green parking3.jpg

Dear Commissioners,
Please find attached a letter regarding my concerns to SUP 19101 and why you should vote no on this proposal (a LaFontaine car dealership)

The letter is long with data and facts, so I'll summarize the main points:
1) This is not the look and feel that is best for the east entrance to Merdian Township
2) It is paving paradise to put up a parking lot (deforestation, wildlife destruction, water redirection, among a few issues)
3) Increased light pollution
4) Decreased property values
5) Increased traffic and safety concerns
6) Destruction of wetlands
7) Ignoring master plan and not changing zoning to allow buildings to be built near the road like in the corridor project you keep hyping

However, should you choose to ignore all these concerns and approve it, we request the following:
1) Turn off all the lights at night and only use motion detector lighting
2) No test drives in our neighborhood
3) Save as many mature trees, woods, grass and wetlands as possible
4) Use new building techniques and styles to put the building in front and cars in back away from the road and use "green parking" - grass instead of pavement. See attached for photos of this concept.

You can find much more detail in the attached letter.

Thank you for listening. The residents of Meridian Township are concerned about what is happening to our community and hope you will listen to us.

Thanks,
Jessi Adler
1580 Hillside Drive

August 2019
Re: Special Use Permit #19101

Dear Planning Commissioners and Planning Department,

My husband and I live at the corner of Hillside and Northview, within visual sightline of 1510/1560 Grand River Ave. This is the address for a planned LaFontaine Automotive Group dealership.

I strongly object and urge you to reject/vote no on this special use permit and wetland use permit.

Is this really the look you want for the entrance to the township? A long row of cars? That doesn't scream "Welcome to Meridian Township" to me. At least not the welcoming, progressive, homey, environmentally friendly, walkable community you say it is.

Along with our neighbors, we have watched this township continue to rezone acres upon acres of rural residential property into commercial zones and allow way too many commercial entities to move in. Many of us purposely bought houses in the more rural sections of the community. Now, we are being subjected to decreased property values as well as increased traffic, light pollution, noise, deforestation, and displacement of wildlife. The words "they paved paradise and put up a parking lot" couldn't be more true for what this planning commission is doing to our township, specifically if you allow yet another car dealership.

A car dealership will bring all of those items I just mentioned and negatively impact our daily lives and house values. Listed below are my major concerns and reasons why you should reject this special use permit.

1) **Light Pollution.** Car dealerships are known to have more light poles than any business ever needs. Our relatively dark sky area will now be lit up like a major city.
    a. Light pollution is an increasing problem globally and we need to stop this. Why does a dealership need to be lit up like a runway 24-hours a day? If they're concerned with security there are other ways to handle this, without having all the lights on. Even the new LEDs and downward facing or angled lights aren't enough – people are still shorter than a light pole so we would be subjected to seeing these lights while driving down the road or looking to the night sky.
    b. Research has shown that bright lights, like the ones often used at car dealerships, contribute to negative changes in circadian rhythms, disrupting natural cycles for both humans and animals. Being subjected to these types of lights late at night would be detrimental to those of us who live nearby and the wildlife who inhabit the nearby woods.

2) **Wetland destruction.** This parcel includes wetlands, which are protected under state and federal law. In fact, Michigan's wetlands law recognizes the important benefits provided by wetlands and their vital role in recreation, flood control, wildlife habitat, recharging groundwater supplies, erosion control, and more. Yet, Meridian Township seems intent on destroying wetlands in favor of pavement, which does not contribute to any of those vital things.

3) **Deforestation.** Grass and trees are necessary to cool the earth, produce much-needed oxygen, and help with water runoff and drainage. The wholesale removal of large mature trees that they will attempt to replace with tiny sticks that do not even cast a shadow is alarming. We must act now to save these mature trees. The site plan shows teeny pockets of grass with little to no trees or shrubs dispersed on islands throughout the parking lot. That is not enough to counteract the vast amount of pavement planned. Again, for a township that has a Greenspace Plan, you sure are doing a good job of trying to get rid of all of it.

   A recent study shows tree cover in the US is shrinking and includes these quotes:
   - "*If we continue on this path, cities will become warmer, more polluted and generally more unhealthy for inhabitants*," said David Nowak, a senior US Forest Service scientist and co-author of the study.
   - *But the one reason for tree loss that humans can control is sensible development. "Every time we put a road down, we put a building and we cut a tree or add a tree, it not only affects that site, it affects the region,"* Nowak says.

   a. New building options include grass parking lots that are permeable and allow for natural features to be maintained while protecting the environment. JoAnn Forsberg is a local developer who has considered using this type of green parking and I think it's something to consider.

   b. Have you considered working with LaFontaine and other parties in town to allow them to build on sections of land already paved over, such as the Meridian Mall or Toys R Us? That parking lot sits empty now most of the time and would be an ideal location for a car dealership that desires lots of pavement. This would prevent additional deforestation and greenspace destruction.

   c. Most people know what car they want before they step foot at a dealership, and many buy cars online. Why on earth does LaFontaine need such a huge paved space to park hundreds of cars? The wave of car buying is changing, yet this township is living in the past. If you want to build a new community, the time is now to start making the necessary changes to allow for non-traditional development and site planning.

4) **Wildlife destruction.** A study released recently by the World Wildlife Foundation says that in the past 40 years, humans have been responsible for causing the wildlife populations to fall by more than half due to deforestation and pollution – both things a car dealership will contribute to. We already have a large deer herd in this area, and it is well-known they live in the woods on Powell and cross regularly into Forest Hills and Walden Ponds. Where are those deer going to go if you eliminate their entire forest? And not just the deer, but the rest of the wildlife that live there and who have made that their home much longer than any of us? Deforestation up and down Powell and Grand River has caused more and more animals to move into our neighborhoods because they have nowhere else to go. As the study says *"We're facing a rapidly closing window for action and the urgent need for everyone—everyone—to collectively rethink and redefine how we value, protect, and restore nature."* The township is already paying hunters to unnecessarily reduce the deer population in the township that is seen as a threat. But the deer wouldn't be a threat if we would stop removing the natural areas they want to live in for the sake of more tax revenue.

5) **Increased traffic.** Grand River is heavily traveled and in the 11+ years we have lived in Forest Hills, we find it harder and harder every day to exit our subdivision due to increased traffic from the urban sprawl east of us. Almost exactly at the corner of Northview and Grand River the speed limit changes to 50 mph. That will be right at the entrance to the LaFontaine dealership.

   a. I'm concerned about the ability to get in and out of the subdivision and crashes from cars trying to turn every which way. The curb cuts are already too close together and every day it's a serious crash waiting to happen when someone is turning out of Northview headed west and someone is trying to turn north into Sparrow, and someone else is trying to get in or out of Baryames. I have witnessed and been party to many near-misses. Adding a car dealership will add to an already bad situation.

   b. We also are concerned about increased traffic in our neighborhood from customers test-driving vehicles through it. Too many cars speed through our neighborhood already. We should not be subjected to additional traffic from people who aren't familiar with the area or the vehicle they are driving testing out cars and not paying attention to their surroundings. The past decade has seen an increase in families living in our subdivision and we are noticing more kids on foot and on bikes traveling through. They should not have their neighborhood streets turned into a test track.

   c. I am an avid runner and regularly train on Powell Road. I have a hard enough time crossing Grand River to get there now due to it not being the most pedestrian-friendly area. I am concerned that a dealership on the corner with increased traffic and de-acceleration lanes will prevent me from being able to safely reach Powell on foot. As it is, I have to carefully watch traffic before crossing the road since the nearest actual crosswalk would add an additional half-mile or more. This township continues to say

it wants to be trailway and pedestrian friendly, but this proposed development is quite the opposite of that and will deter runners and walkers from heading down Powell. Powell is designated as a scenic road corridor and yet continues to be pilfered for development.

6) **Water redirection.** Car dealers also need as much pavement as possible to park their cars on – pavement is not environmentally friendly because it generates heat, is not permeable, and contributes to global warming. Water that drains into the ground helps replenish the aquifer. If the ground is paved over, that water will be redirected and quite likely contaminated with runoff from the parking lot. As a household that is still on a well, this is extremely concerning to me as we rely on that water.

7) **Poor drainage and flooding.** You are aware that the Daniels Drain runs behind my house, under Walden Ponds, under Grand River and would be directly under LaFontaine's proposed dealership. LaFontaine would contribute a lot of water to an already overburdened and failing drain system. This would be bad for everyone. Many of the condo units in Walden Ponds are already unusable because they flood regularly from the drain backing up.

8) **Decreased property values.** Realtors always tell you Location, Location, Location. Where a house is located is extremely important – and across the street from a large car dealership probably isn't the first location a family would choose when looking for a house or condo. It's not a business you frequent regularly, unlike a grocery store, pharmacy or restaurant. We were sold on our house because of its proximity to a grocery store, as well as how rural it was – there was nothing commercial to the east of us except the driving range, which is still rural because it's 99% green space. The land north and east was all zoned rural residential, which appealed greatly to us. Now it's been rezoned commercial and you want to add a car dealership to the mix – a business that isn't great for what was supposed to be a semi-rural family neighborhood. Our property value has finally recovered after the recession and I worry significantly that it will drop again if this proposal is approved.

While my husband and I object to this proposal and strongly urge you to reject it based on the concerns listed above, I assume it is likely a foregone conclusion that you will be approving it.

Therefore, the following items need to be required as a condition of the special use permit:

1) Require LaFontaine to shut off all their parking lot lights at night, especially since they close at 6 p.m. most evenings. For security reasons, the lights could be on a motion sensor so they only go on if tripped. For lights that are on during evening business hours, require the lights to be covered, dimmed, and angled so light does not leave their property.

2) Require any maintenance facilities to be placed as far back from the road as possible to minimize sound. This includes any service bays, car wash, loading docks, etc. In addition, there should be requirements for bioswales or other measures to help filter the water runoff from this industrial space prior to it reaching the aquifer.

3) Do not allow any outside sound like a public address system, music or honking.

4) Require modern construction techniques such as “green pavement” instead of traditional asphalt.

5) Require preservation of the existing mature trees and wetlands by designing and constructing their parking lot and buildings around the established trees instead of cutting them down and planting new tiny ones. Design the site layout to cluster cars together, allowing for as much green space as possible to be saved and incorporated.

6) Require that cars not be lined up in a straight row along the front of the property. Planning Commissioner Scott-Craig said it best last time: “We don’t want people driving down the road looking at your cars lined up along the front row, we want their eyes on the road.” Put all the cars out back and the building at the front.

7) Require that test drives not be allowed in our neighborhood.

Again, we feel this project will be extremely detrimental to the environment, our property values, and quality of life. **We urge you to vote no** on this special use permit. Meridian Township was already special and continued approval of these types of permits is ruining that.

Jessi Wortley Adler
1580 Hillside Drive
Okemos, MI
517-230-9923
jessicawortley@gmail.com

Related images

Grey Concrete Grass Paver, For Pave...

indiamart.com

Grass protection mesh - GP ST - Sytec

Interlocking Paver Block, I-shape - All...

5:54

green parking

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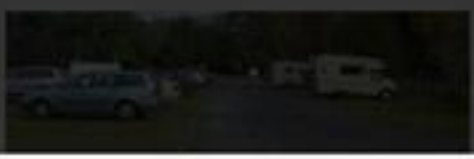


To: **Planning Commission**

From: **Peter Menser, Principal Planner**

Justin Quagliata, Assistant Planner

Date: **August 9, 2019**

Re: **<u>Special Use Permit #19101 (LaFontaine Chrysler Dodge Jeep & Ram of Okemos)</u>, construct a new car dealership at 1510 and 1560 Grand River Avenue.**

LaFontaine Chrysler Dodge Jeep & Ram of Okemos has requested a special use permit to construct a new car dealership on two parcels at 1510 and 1560 Grand River Avenue, located on the north side of Grand River Avenue, west of Powell Road. The approximate 7.68 acre (excluding road right-of-way) subject site is zoned C-2 (Commercial) and contains 762.50 feet of total frontage of Grand River Avenue and 618.44 feet of total frontage on Powell Road. An approximately 883 square foot dilapidated/vacant single family house built in 1924 is located on the site. A special use permit (SUP #16091) was granted in 2017 to establish a drive-through window at 1560 Grand River Avenue. The project for which that SUP was approved did not commence within two years of issuance so SUP #16091 expired and is void.

At its meeting on December 10, 2018 the Planning Commission approved Special Use Permit #18081, a request from LaFontaine to construct a new car dealership at 1492, 1478, 1476, and 1448 Grand River Avenue, located on the north side of Grand River Avenue, east of Powell Road. The project consists of renovating the existing commercial building at 1492 Grand River Avenue, constructing a parking lot (which includes filling a 304 square foot wetland approved under Wetland Use Permit #19-01), converting the existing house at 1448 Grand River Avenue to an office for the dealership, and installation of two detention ponds on the north side of the property. LaFontaine received site plan review approval for the project on July 3, 2019. Construction of the project has not commenced.

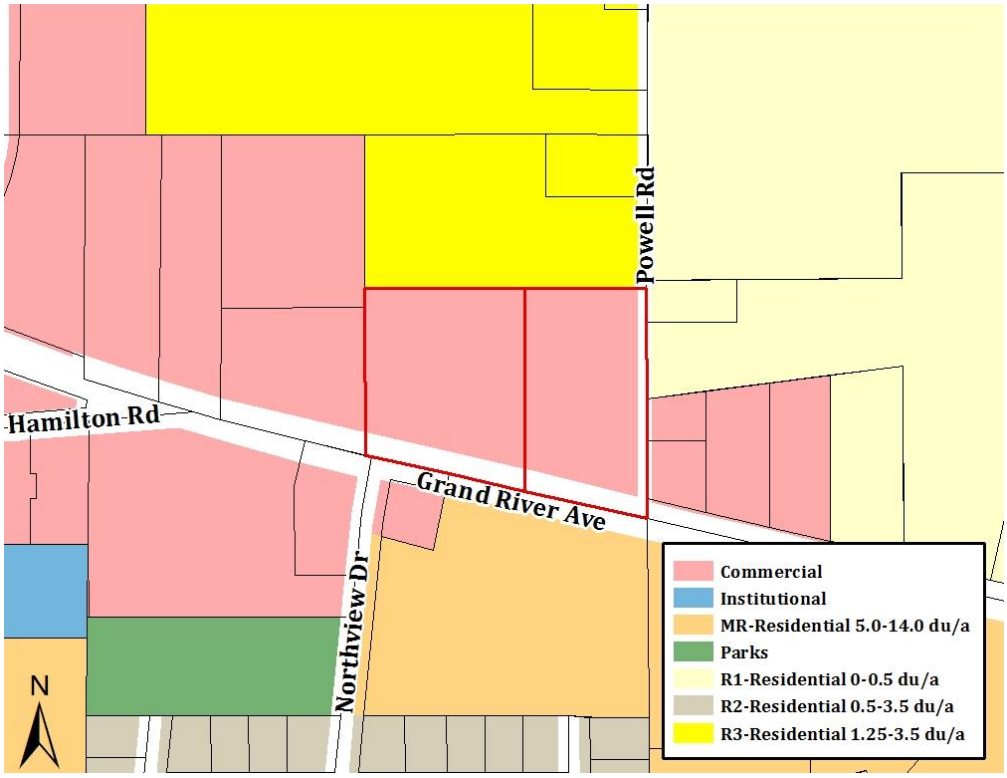
The proposed dealership will contain sales and service for Chrysler, Dodge, Ram, and Jeep automobiles. The proposed two-story structure contains 24,902 square feet of floor area.

LOCATION MAP

Master Plan

The Future Land Use Map from the 2017 Master Plan designates the subject site in the Commercial category.

FUTURE LAND USE MAP

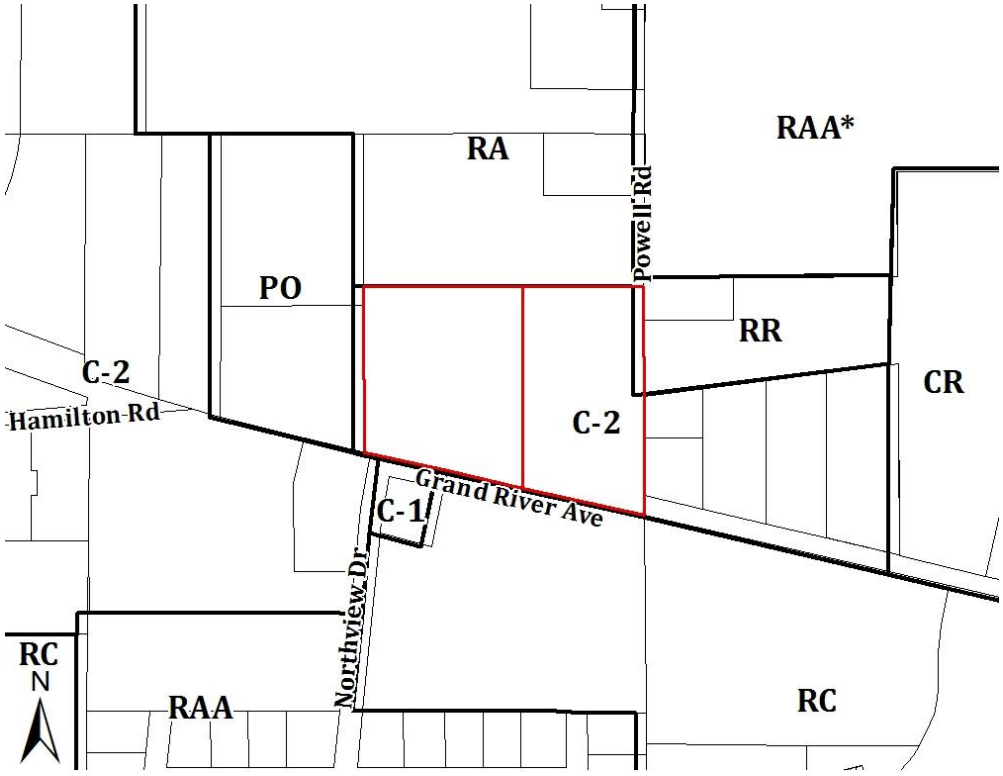


Zoning

The subject site (two parcels) is located in the C-2 (Commercial) zoning district, which requires a minimum of 100 feet of lot width and 4,000 square feet of lot area. The parcel addressed as 1510 Grand River Avenue contains 332 feet of lot width on Grand River Avenue, 618.44 of lot width on Powell Road, and 4.36 acres of lot area. The parcel addressed as 1560 Grand River Avenue contains 430.5 feet of lot width on Grand River Avenue and 4.71 acres of lot area. Both parcels conform to the minimum lot area and lot width standards of the C-2 zoning district.

New car dealerships are an allowed use in the C-2 zoning district by special use permit. A zoning ordinance amendment (Zoning Amendment #07160) adopted in January 2008 permitted new car dealerships to operate in the C-2 district, subject to special use permit approval. Prior to the zoning amendment new car dealerships were only permitted in the C-3 district. Section 86-404(e)(16)(1) requires a minimum lot size of four acres for new car dealerships. The gross area of both parcels which make up the subject site meet this standard.

ZONING MAP



Physical Features

The topography of the site slopes from 857 feet above mean sea level near the wetlands at the northeast and northwest corners of the property to a high point of 891 feet above mean sea level at the southwest portion of the site. The applicant has indicated extensive grading would be necessary to balance and stabilize the site prior to construction. The Flood Insurance Rate Map (FIRM) for Meridian Township indicates the property is not located in a floodplain. The site does not have any special designation on the Township Greenspace Plan.

The applicant submitted a natural features assessment prepared by Marx Wetlands, LLC dated June 24, 2019. The report includes a tree survey which depicts 144 trees located on the subject site. Eight trees are greater than or equal to approximately 30 inches in diameter at breast height (DBH). 26 trees are between 20 and 30 inches DBH, 21 of which are slated for removal. Four of the eight trees approximately 30 inches or larger in diameter are proposed to be removed:

- 32 inch DBH White Oak (Tree #5)
- 31 inch DBH Sugar Maple (Tree #111)
- 29 inch DBH Butternut (Tree #117)
- 28 inch DBH Sugar Maple (Tree #6)

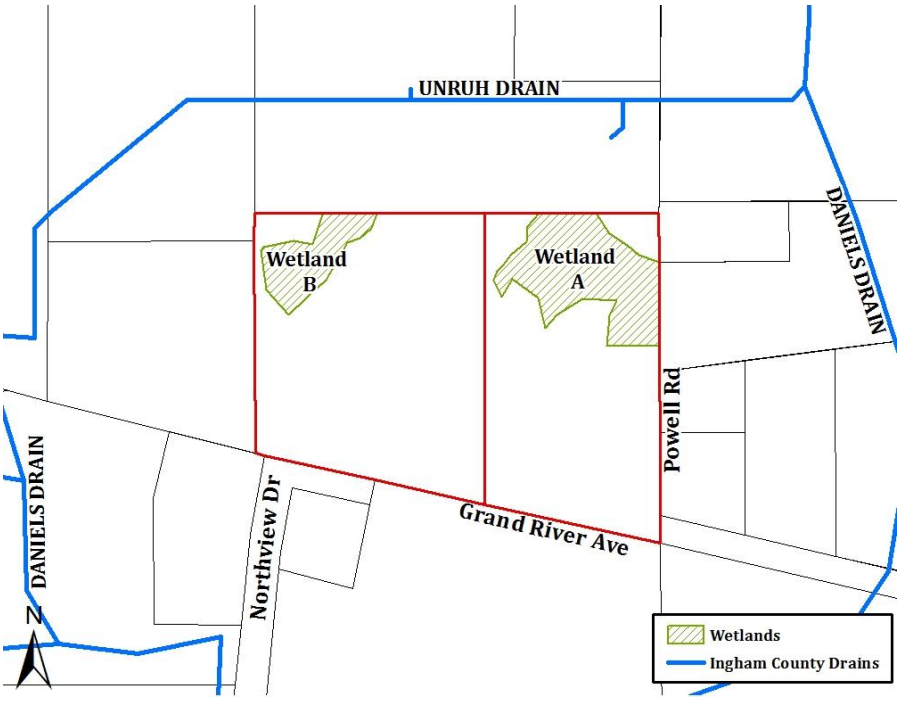
Wetlands

Wetlands on the property were delineated by Marx Wetlands in 2015 and verified by the Township wetland consultant in 2016. The delineation identified two wetlands, designated by letters A and B on the site plan. Wetland A (1.24 acres) is regulated by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and Meridian Township because it is located within 500 feet of the Unruh Drain; Wetland B (0.30 acre) is regulated by EGLE and Meridian Township because it is located within 500 feet of a pond and is contiguous to a stream.

For regulated wetlands greater than one quarter acre but smaller than two acres in size the Code of Ordinances requires a 20 foot setback/natural vegetation strip from a delineated wetland boundary for all structures and grading activities. The submitted plans shows the required 20 foot setback/natural vegetation strip incorporated into the site design.

A wetland use permit (WUP #16-06) was granted in 2017 to discharge stormwater from a 0.36 acre on-site detention pond into Wetland A. The Environmental Commission reviewed the application materials for Wetland Use Permit #16-06 at its meeting on December 7, 2016 and voted to recommend approval of the permit. Wetland use permit approval remains effective for the time period coincidental with any other land use permit reviewed and approved concurrent with the wetland use permit. Since the previously approved project did not commence within 24 months of special use permit approval, both the special use permit and wetland use permit expired. The applicant has resubmitted for the wetland use permit (WUP #19-03). The special use permit to construct the new car dealership and wetland use permit will be processed concurrently.

WETLANDS MAP



Streets and Traffic

The site fronts on both Grand River Avenue and Powell 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. Powell Road is a two lane road classified as a Collector street. The Pedestrian and Bicycle Pathway Map shows a required seven foot wide pathway along the Grand River Avenue property frontage and a paved shoulder along the Powell Road property frontage, which the applicant will be required to install as part of the project. The most recent (2008) traffic count information from the Ingham County Road Department (ICRD) for Powell Road, between Grand River Avenue and Tihart Road, showed a total of 121 vehicles in a 24 hour period. 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.

A traffic impact study is required for new special uses which would generate over 100 directional trips during morning and afternoon peak hours of traffic, or over 750 trips on an average day. The applicant submitted a traffic impact study prepared by Traffic Engineering Associates, Inc. dated July 2019 that provides information on traffic generated by the proposed new car dealership. The study looks at existing, background (future traffic volumes without the traffic generated by the proposed development), and future level of service (LOS) during AM (7:45-8:45 a.m.) and PM (5:00-6:00 p.m.) peaks hours at the following four intersections around the project site:

- Grand River Avenue and Powell Road
- Grand River Avenue and Northview Drive
- Grand River Avenue and Hamilton Road
- Grand River Avenue and Central Park Drive/Dobie Road

The traffic study notes that existing traffic at the studied intersections all operate at an acceptable LOS (LOS D or better) during the AM and PM peak hours. The study shows background traffic and future traffic at the studied intersections will continue to operate at an acceptable level of service during AM and PM peak hours.

The submitted traffic impact study contains a trip generation analysis which estimates future vehicle trips that could be generated by the proposed automobile dealership. The Institute of Transportation Engineers (ITE) trip generation rates for Automobile Sales (New) (Land Use Code 840) were selected to represent the dealership. The following table summarizes findings from the submitted trip generation analysis.

Description	Size	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	
Automobile Sales (New)	24,902 sq. ft.	34	13	47	26	40	66	684

The submitted site plan shows a 50 foot right turn lane for westbound Grand River Avenue at the proposed driveway. The findings of the traffic study show no additional recommendations to the existing road system based on the projected level of service.

Utilities

Municipal water is available in the vicinity to serve the proposed development and sanitary sewer is not currently in the vicinity and would have to be extended to serve the subject site. The location and capacity of utilities will be reviewed in detail during site plan review if the special use permit is approved.

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. Section 86-404(e)(16) outlines the regulations pertaining to new car dealerships in the C-2 zoning district, which are as follows:

- Minimum lot size: four acres.

- Vehicle service and repair and used car sales shall be permitted ancillary uses to the principal new car sales use.

- Body shops shall not be a permitted ancillary use.

Parking

The Code of Ordinances requires one parking space for each 200 square feet of useable floor space of sales room, and one for each one vehicle displayed for sale. The submitted floor plan notes the proposed building contains 5,561 square feet of useable floor space of sales room, therefore 28 parking spaces are required to serve the building (not including a two space reduction for the provision of bicycle parking) and 26 spaces are provided. The submitted plans indicate 268 vehicles will be displayed for sale and 268 parking spaces are provided for vehicle display.

One bicycle parking space must be provided for every ten motor vehicle parking spaces required. With 28 parking spaces required to serve the building, three bicycle parking spaces are required. The submitted site plan shows four bicycle parking spaces (two bike racks) proposed at the southwest corner of the building. 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 two spaces. With the allowed reduction granted for bicycle parking, the total required motor vehicle parking is reduced to 26 spaces.

C-2 zoned sites are allowed 70 percent impervious surface coverage. Impervious surface coverage would be 49 percent.

Landscaping

Section 86-758 of the Code of Ordinances outlines the landscape requirements for off-street parking areas including landscaped islands at least 10 feet in width, building perimeter landscaping at least four feet in width, a minimum of 200 square feet of interior landscaping for every ten parking spaces, and two interior canopy trees per ten parking spaces. The submitted landscape plan shows landscaping around the perimeter of the building and the provision of interior landscaping and canopy trees.

If the Planning Commission decides to approve the special use permit request, staff recommends the following conditions:

- Vehicle service and repair and used car sales are permitted at the subject site only when ancillary to the principal new car sales use.

- Paint and/or automobile bodywork are prohibited uses at the subject site.

- The applicant shall combine the two subject parcels into one parcel.

- Prior to the issuance of a certificate of occupancy Powell Road shall be paved from the northern extent of the property frontage southward to the northern extent of the LaFontaine property on the east side of Powell Road.

If the project is approved by the Planning Commission, the applicant will be required to submit for Site Plan Review before work on the project can begin. Site Plan Review is a detailed staff-level analysis of the project which includes reviews of stormwater, utilities, landscaping, grading, and other matters to ensure compliance with all applicable ordinances as well as confirmation of approvals from local agencies such as the Ingham County Drain Commissioner's Office and Road Department.

Planning Commission Options

The Planning Commission may approve, approve with conditions, or deny the special use permit. A resolution will be provided at a future meeting.

Attachments

1. Special use permit application and project narrative dated May 23, 2019.
2. Traffic impact study prepared by Traffic Engineering Associates, Inc., dated July 2019 and received by the Township on July 5, 2019.
3. Natural features assessment prepared by Marx Wetlands dated June 24, 2019 and received by the Township on July 5, 2019.
4. Site plans prepared by Kebs, Inc. dated April 17, 2018 (revision date July 31, 2019) and received by the Township on August 2, 2019.
5. Building elevations and floor plans prepared by Studio Detroit dated May 23, 2019 and received by the Township on May 24, 2019.
6. Site renderings prepared by Studio Detroit received by the Township on May 24, 2019.

7. Employee count and hours of operation provided by the applicant received by the Township on May 24, 2019.

G:\Community Planning & Development\Planning\SPECIAL USE PERMITS (SUP)\2019\SUP 19101 (LaFontaine)\SUP 19101.pc1.doc

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

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 LaFontaine Chrysler Dodge Jeep & Ram of Okemos
Address of Applicant 4000 W. Highland Road, Highland, MI 48357
Telephone - Work 2487141188 Home _____ Fax 2488875293 Email tladd@lafontaine.com
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 1510 Grand River Ave, Okemos, MI 48864
Legal description (please attach if necessary) See attached
Current zoning C2
Use for which permit is requested / project name Proposed new Chrysler Dodge Jeep & Ram Dealership
Corresponding ordinance number _____

C. Developer (if different than applicant) LAG Development, LLC
Address 4000 W Highland Road, Highland, MI 48357
Telephone – Work 2487141188 Home _____ Fax 2488875293

D. Architect, Engineer Planner or Surveyor responsible for design of project if different from applicant:
Name KEBS, Inc. / Studio Detroit
Address 2116 Haslett Road, Haslett, MI 48840 / 2111 Woodward Ave Ste. 1001, Detroit, Mi 48201
Telephone – Work (517)339-1014/(313)919-5886 Home _____ Fax _____

E. Acreage of all parcels in the project: Gross 9.07 Net 7.67

F. Explain the project and development phases: See attached narrative.

G. Total number of:
Existing: structures 1 bedrooms 3 offices 0 parking spaces 0 carports 0 garages 0
Proposed: structures 1 bedrooms 0 offices 30 parking spaces 294 carports 0 garages 1

H. Square footage: existing buildings 1350 proposed buildings 24,902
Usable Floor area: existing buildings 0 proposed buildings 24,902

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: See attached schedule

J. Existing Recreation: Type n/a Acreage n/a
Proposed Recreation: Type n/a Acreage n/a
Existing Open Space: Type Residential/Commerical/Vacant Land Acreage 9.07
Proposed Open Space: Type Commercial Lawn/Landscape Acreage 3.9

K. If Multiple Housing:

Total acres of property _____

Acres in floodplain _____ Percent of total _____

Acres in wetland (not in floodplain) _____ Percent of total _____

Total dwelling units _____

Dwelling unit mix:

Number of single family detached:	for Rent _____	Condo _____
Number of duplexes:	for Rent _____	Condo _____
Number of townhouses:	for Rent _____	Condo _____
Number of garden style apartments:	for Rent _____	Condo _____
Number of other dwellings:	for Rent _____	Condo _____

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.

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 Master 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 Date

_____
Type/Print Name

Fee: _____ Received by/Date: _____

Special Use Permit Application Attachment
Site Plan Requirements Per Section 86-124(c)(4)

A site plan, drawn to a legible scale, containing the following information where applicable:

a. Boundaries of the subject property.

b. Total area of the subject property.

c. Location of all existing and proposed structures.

d. Approximate location and distance of all structures within 100 feet of the subject property.

e. Uses of existing and proposed buildings, on the subject site.

f. Proposed means of vehicular and pedestrian ingress and egress to the subject property.

g. Public and private roads and streets, rights-of-way, and easements, indicating names and widths, which abut or cross the site.

h. Existing and proposed parking spaces, and vehicular and pedestrian circulation patterns.

i. The buildable area of the subject property indicating all required setbacks, yards and open space.

j. Zoning classification of the subject and adjacent properties.

k. Existing and proposed fencing, screening, landscaping, and buffers.

l. Location and sizes of existing utilities including power lines and towers, both above and below the ground.

m. Amount and location of all impervious surfaces.

n. The verified boundaries of all natural water features and required setback lines.

May 23, 2019

Charter Township of Meridian
Department of Community Planning and Development
5151 Marsh Road, Okemos, MI 48864

Re: Project Narrative of 1510 Grand River Ave, LaFontaine Chrysler Dodge Jeep & Ram of Okemos

Dear Commissioners,

Commencing shortly after final approval and permitting, the LaFontaine Automotive Group will begin development on our nine-acre site on the corner of Powell Road and Grand River Ave. Early stages of the project will consist of site clearing, land balancing & earthwork, and installation of underground utilities. The current topography of 1510 and 1560 Grand River is intense with highs and lows that will need to be cut and filled in order to level out the site to Grand River Ave, Powell Road and Sparrow Health. On the north edge of the nine-acre parcel between the two regulated wetlands (noted Wetland A & Wetland B on the submitted site plans), we will excavate roughly a half acre detention pond for our storm water runoff. Once mass grading and underground utilities have concluded, we will begin production on the building pad and foundations. With a building footprint of roughly 20,000 square feet, it will be imperative that the ground is level and our foundations are square. Proposed finished floor elevation will be similar to that of the down slope of Grand River Ave.

At this point, we will be geared up for erecting the shell of our future store. Masons will be on site to lay bricks and structural steel erectors will be lifting beams and columns into place. The sanitary lead and the domestic water main get brought into their perspective areas for future use ultimately by Mid-Michigan customers from all walks of life. Natural gas and electric services via Consumers Energy get integrated into the shell of the newly standing facility by local mechanical & electrical contractors.

Pending approval of each trade's inspections, we can invite the concrete haulers in to pour in the floors for flatwork. Keeping our momentum moving forward on the project we turn our focus to the various finishing touches involved. Carpentry, roofing, lighting, flooring, plumbing, HVAC, furniture, painting, landscaping, signage, site lighting and a multitude of other trades continue to work until the once vacant land becomes a stunning new Chrysler Dodge Jeep & Ram facility. The finished product; crisp with new manicured vegetation across the 762 feet of Grand River Ave frontage and standing tall with an alluring ACM siding that is easy on the eyes yet functional with its surroundings, awaits opening its doors to the City of Okemos.

Sincerely,

Trevor G. Ladd

LaFontaine Automotive Group

LAG Development
Your Strong Construction Connection

LaFontaine Chrysler Dodge Jeep & Ram of Okemos
1510 Grand River Ave
Okemos, MI 48864

Employee count, shifts and hours of operation:

- Estimated 60-65 full time LaFontaine Employees working per day
- Estimated 5-10 part time LaFontaine Employees working per day
- Hours of Operation
    - Monday's: 9am-9pm
    - Tuesday's: 9am-6pm
    - Wednesday's: 9am-6pm
    - Thursday's: 9am-9pm
    - Friday's: 9am-6pm
    - Saturday's: 10am-4pm
    - Sunday's: Closed

LAG
Development
Your Strong Construction Connection

LaFontaine Chrysler Dodge Jeep & Ram of Okemos
1510 Grand River Ave
Okemos, MI 48864

Ownership interest list:

1. LAG Wixom, LLC

LAG Development
Your Strong Construction Connection

STATE OF MICHIGAN
INGHAM COUNTY MI
08/09/2018
2018-027711

REAL ESTATE TRANSFER TAX
$1760.00 CO
$12000.00 ST
TTX# 4244877

8390865
Tx:4244877
8/7/2018 10:17:00 AM

2018-027711
DERRICK QUINNEY
INGHAM COUNTY MICHIGAN
REGISTER OF DEEDS
RECORDED ON:
08/09/2018 12:35 PM
PAGES: 3
ALTERNATE TAG FOR ERETURN DOCUMENTS

INGHAM COUNTY TREASURER'S CERTIFICATE
I HEREBY CERTIFY that there are no TAX LIENS or TITLES held by the state or any individual against the within description, and all TAXES on same are paid for five years previous to the date of this instrument as appears by the records of this office except as stated.
8-8-2018 Eric Schertzing, Ingham County Treasurer
Sec. 135, Act 206, 1893 as amended
TRG

AFF

WARRANTY DEED

KNOW ALL PERSONS BY THESE PRESENTS: That 1510 W. Grand River, LLC, a Michigan limited liability company
whose address is 5485 Martinique Circle, East Lansing, MI 48823
Convey(s) and Warrant(s) to LAG Wixom, LLC
whose address is 4000 W. Highland Road, Highland, MI 48357
the following described premises situated in the Township of Meridian, County of Ingham, and State of Michigan to-wit:

SEE ATTACHED EXHIBIT "A"

Commonly known as: 1510 Grand River, Okemos, MI 48864; 1560 Grand River, Okemos, MI 48864
Tax Parcel # 33-02-02-22-426-007, 33-02-02-22-426-006

For the consideration of: One Dollar ($1.00). Real Estate Transfer Valuation Affidavit has been filed. PLEASE AFFIX REVENUE STAMPS AFTER RECORDING.

subject to easement, use, building, and other restrictions of record, if any.

This property may be located within the vicinity of farmland or farm operations. Generally accepted agricultural and management practices which may generate noise, dust, odors and other associated conditions may be used and are protected by the Michigan right to farm act.

The grantor grants to the grantee the right to make all division(s) under Section 108 of the Land Division Act, Act No. 288 of the Public Acts of 1967.

Dated: July 27, 2018

Signed and Sealed:
1510 W. Grand River, LLC,
a Michigan limited liability company
A. Hopper
By: Amanda Hopper
Its: Manager

H.S.K.

(Warranty Deed (page 2) dated: July 27, 2018
between 1510 W. Grand River, LLC, a Michigan limited liability company, Seller(s) and Comerica Bank as QI for LAG Wixom, LLC, Purchaser(s).)

STATE OF MICHIGAN)
)ss
COUNTY OF Ingham)

The foregoing instrument was acknowledged before me on July 25, 2018, by Amanda Hopper, who is the Manager of 1510 W. Grand River, LLC, a Michigan limited liability company.

Print Name: Kathy Gruhn
Notary Public Ingham County, Michigan
Acting in Ingham County
My term expires: April 5, 2019

KATHY GRUHN
NOTARY PUBLIC - STATE OF MICHIGAN
COUNTY OF INGHAM
My Commission Expires April 5, 2019
Acting in the County of

File No. 235148LANS

Drafted by: Amanda Hopper	Return to:
1510 W. Grand River, LLC, a Michigan limited liability company 5485 Martinique Circle East Lansing, MI 48823	LAG Wixom, LLC, a Michigan limited liability company 4000 W. Highland Road Highland, MI 48357
County Treasurer's Certificate	City Treasurer's Certificate

Exhibit "A"

PARCEL 1:

Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

PARCEL 2:

Commencing 24 rods South of the East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan; thence West parallel with the 1/4 line 321 feet; thence South parallel with the East Section line to the center of Grand River Road; thence Southeasterly down the center of said road to the East Section line; thence North along Section line to the place of beginning.

PARCELS 1 AND 2 NOW SURVEYED AS:

A parcel of land in the Southeast 1/4 of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as: Commencing at the East 1/4 corner of said Section 22; thence South 00 degrees 19 minutes 28 seconds East along the East line of said Section 22 a distance of 396.00 feet to the point of beginning of this description; thence continuing South 00 degrees 19 minutes 28 seconds East along said East line 618.44 feet to the centerline of W. Grand River Avenue; thence North 77 degrees 00 minutes 11 seconds West along said centerline 762.50 feet; thence North 00 degrees 19 minutes 28 seconds West parallel with said East line 447.04 feet; thence South 89 degrees 59 minutes 34 seconds East parallel with the East-West 1/4 line of said Section 22 a distance of 742.00 feet to the point of beginning.

33-02-02-22-426-007, 33-02-02-22-426-006

1510 Grand River Road
Okemos MI, 48864

A PARCEL OF LAND IN THE SOUTHEAST ¼ OF SECTION 22, TOWN 4 NORTH, RANGE 1 WEST, MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN, THE SURVEYED BOUNDARY OF SAID PARCEL DESCRIBED AS: COMMENCING AT THE EAST ¼ CORNER OF SAID SECTION 22; THENCE SOUTH 00 DEGREES 19 MINUTES 28 SECONDS EAST ALONG THE EAST LINE OF SAID SECTION 22 A DISTANCE OF 396.00 FEET TO THE POINT OF BEGINNING OF THIS DESCRIPTION; THENCE CONTINUING SOUTH 00 DEGREES 19 MINUTES 28 SECONDS EAST ALONG SAID EAST LINE 618.44 FEET TO THE CENTERLINE OF W. GRAND RIVER AVENUE; THENCE NORTH 77 DEGREES 00 MINUTES 11 SECONDS WEST ALONG SAID CENTERLINE 762.50 FEET; THENCE NORTH 00 DEGREES 19 MINUTES 28 SECONDS WEST PARALLEL WITH SAID EAST LINE 447.04 FEET; THENCE SOUTH 89 DEGREES 59 MINUTES 34 SECONDS EAST PARALLEL WITH EAST-WEST ¼ LINE OF SAID SECTION 22 A DISTANCE OF 742.00 FEET TO THE POINT OF BEGINNING.

LAG
Development
Your Strong Construction Connection

TRAFFIC IMPACT STUDY

For The Proposed

LaFontaine Automotive Group Dealership

Meridian Charter Township, Ingham County, MI

July 2019

Prepared by:

Traffic Engineering Associates, Inc.
PO Box 100 • Saranac, Michigan 48881
517/627-6028 FAX: 517/627-6040

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EXECUTIVE SUMMARY

Traffic Engineering Associates, Inc. (TEA) conducted a traffic impact study for the proposed LaFontaine Automotive Group Dealership development in Meridian Charter Township, Ingham County, Michigan. The purpose of this study is to determine the impact on the surrounding road system by the new traffic to be generated from this development. The new development will consist of an approximate 24,902 square foot car dealership.

The LaFontaine Automotive Group Dealership development will be located on the north side of Grand River Avenue (M-43) west of Powell Road. There will be two (2) access points, one (1) onto Grand River Avenue (M-43) and one (1) onto Powell Road, with a shared access to the medical office building to the west. The site is expected to open in the summer of 2020.

TEA, Inc. conducted vehicle turning movement counts during the midweek, of a non-holiday week in the month of June, 2019, at the intersections of Grand River Avenue (M-43) and Powell Road, as well as Grand River Avenue (M-43) and Northview Drive. In addition, existing turning movements taken by TEA, Inc. during the midweek, of a non-holiday week in the month of September, 2018, at the intersections of Grand River Avenue (M-43) and Central Park Drive/ Dobie Road, and Grand River Avenue (M-43) and Hamilton Road were utilized. The existing weekday AM and PM peak hours are 7:45 – 8:45 AM and 5:00 – 6:00 PM. All existing turning movements at the studied intersections operate at an acceptable level of service (LOS D or better).

Background traffic represents future volumes without the traffic generated by the proposed LaFontaine Automotive Group Dealership development. The target year for completion is the summer of 2020; therefore, a one (1) year growth rate was applied to the existing traffic volumes. It is anticipated that all movements at the studied intersections will operate at an acceptable level of service (LOS D or better) under background conditions.

The ITE trip generation rates for Automobile Sales (New) (Land Use Code 840), were selected as representing the 24,902 square foot dealership. It is projected that the proposed LaFontaine Automotive Group Dealership will generate 47 vehicle trips in the AM peak hour, 66 vehicle trips in the PM peak hour, and 684 weekday trips. It is projected that all movements at the studied intersections will operate at an acceptable level of service (LOS D or better) under future conditions.

A 50’ right turn lane was shown on the proposed site plan for westbound Grand River Avenue (M-43) at the proposed driveway and was included in this analysis as anticipated to be built with the development. The findings of this study show that there are no recommendations to the existing road system.

INTRODUCTION

PROJECT DESCRIPTION

The purpose of this study is to determine the impact of traffic to be generated by the proposed LaFontaine Automotive Group Dealership development in Meridian Charter Township, Ingham County, Michigan. The new development will consist of an approximate 24,902 square foot car dealership.

The LaFontaine Automotive Group Dealership development will be located on the north side of Grand River Avenue (M-43) west of Powell Road. There will be two (2) access points, one (1) onto Grand River Avenue (M-43) and one (1) onto Powell Road, with a shared access to the medical office building to the west. The site is expected to open in the summer of 2020.

SCOPE OF WORK

The scope of work contained in this report is as follows:

- Analysis of existing traffic conditions on the adjoining street system, including the following intersections;
    - Grand River Avenue (M-43) and Powell Road
    - Grand River Avenue (M-43) and Northview Drive
    - Grand River Avenue (M-43) and Hamilton Road
    - Grand River Avenue (M-43) and Central Park Drive/ Dobie Road
- Analysis of background traffic conditions on the adjoining street system, which includes the above listed intersections, for the future year 2020 volumes without the proposed LaFontaine Automotive Group Dealership development.
- Projection of future traffic volumes to be generated by the proposed LaFontaine Automotive Group Dealership development for the future year.
- Analysis of the impact of future traffic for the proposed LaFontaine Automotive Group Dealership development at the above listed intersections.
- Determination of what roadway and traffic control improvements, if any, will be needed to accommodate future traffic volumes for the proposed LaFontaine Automotive Group Dealership development.

Aerial Site Map

EXISTING CONDITIONS

ROADWAYS AND INTERSECTIONS

Roadways

Grand River Avenue (M-43) is a five (5) lane east/west roadway with a two-way center left turn lane in the project area. Grand River Avenue (M-43) has concrete curb and gutter with sidewalks on the south side of the roadway, the sidewalk ends at the west property line of the proposed development on the north side. The posted speed limit is 45 MPH west of Northview Drive and 50 MPH east of Northview Drive. Grand River Avenue (M-43) is under the jurisdiction of the Michigan Department of Transportation.

Powell Road is a two (2) lane gravel roadway with no sidewalks. There is no posted speed limit; therefore, the prima facie speed is 55 MPH. Powell Road is under the jurisdiction of the Ingham County Department of Roads.

Northview Drive is a two (2) lane north/south roadway and is under the jurisdiction of the Ingham County Road Department. Northview Drive has concrete curb and gutter and continuous sidewalk on the west side of the road. The posted speed limit is 25 MPH.

Hamilton Road is a four (4) lane east/west roadway and is under the jurisdiction of the Ingham County Road Department. Hamilton Road has concrete curb and gutter and sidewalks on both sides of the road. The posted speed limit is 35 MPH.

Central Park Drive, north of Grand River Avenue (M-43), is a four (4) lane north/south roadway. It is under the jurisdiction of the Ingham County Road Department. Central Park Drive has concrete curb and gutter and sidewalk on both sides of the road. The posted speed limit is 35 MPH.

Dobie Road, south of Grand River Avenue (M-43), is a three (3) lane north/south roadway with a center left turn lane. It is under the jurisdiction of the Ingham County Road Department. Dobie Road has concrete curb and gutter and sidewalk on both sides of the road. The posted speed limit is 35 MPH.

Intersections

<u>Powell Road and Grand River Avenue (M-43)</u>
The intersection of Grand River Avenue (M-43) and Powell Road forms a “T” intersection and is controlled by a stop sign on southbound Powell Road. The north approach on Powell Road is two (2) lanes, with one (1) left-right lane and one (1) outbound lane. The east and west approaches on Grand River Avenue (M-43) are five (5) lanes; one (1) thru-right turn lane, one (1) thru lane, one (1) center left turn lane with two (2) outbound lanes.

Northview Drive and Grand River Avenue (M-43)
This is a "T" intersection with stop sign control on northbound Northview Drive. The east and west approaches on Grand River Avenue (M-43) have five (5) lanes; one (1) center left turn lane, two (2) thru lanes, with two (2) outbound lanes. Northview Drive has two (2) lanes; one (1) left-right turn lane with one (1) outbound lane.

Hamilton Road and Grand River Avenue (M-43)
This is a "T" intersection with stop sign control on northbound Hamilton Road. The east and west approaches on Grand River Avenue (M-43) have five (5) lanes; one (1) center left turn lane, two (2) thru lanes with two (2) outbound lanes. Hamilton Road has two (2) lanes; one (1) left-right turn lane with one (1) outbound lane.

Central Park Drive/Dobie Road and Grand River Avenue (M-43)
The intersection of Grand River Avenue (M-43) and Central Park Drive/Dobie Road is controlled by a traffic signal. The east approach has five (5) lanes; one (1) exclusive left turn lane, one (1) thru lane, one (1) thru-right turn lane with two (2) outbound lanes. The west approach on Grand River Avenue (M-43) has six (6) lanes; one (1) exclusive left turn lane, two (2) thru lanes, one (1) exclusive right turn lane with two (2) outbound lanes. The north approach on Central Park Drive has five (5) lanes; one (1) exclusive left turn lane, one (1) thru lane, one (1) exclusive right turn lane with two (2) outbound lanes. The south approach on Dobie Road has three (3) lanes; one (1) exclusive left turn lane, one (1) thru-right turn lane with (1) outbound lane. This intersection is under the jurisdiction of the Michigan Department of Transportation.

LAND USE

The proposed LaFontaine Automotive Group Dealership development will consist of a 24,902 square foot car dealership. The proposed site is vacant. The surrounding land use includes residential with various types of commercial uses such as retail, restaurant, and gas station.

EXISTING TRAFFIC VOLUMES

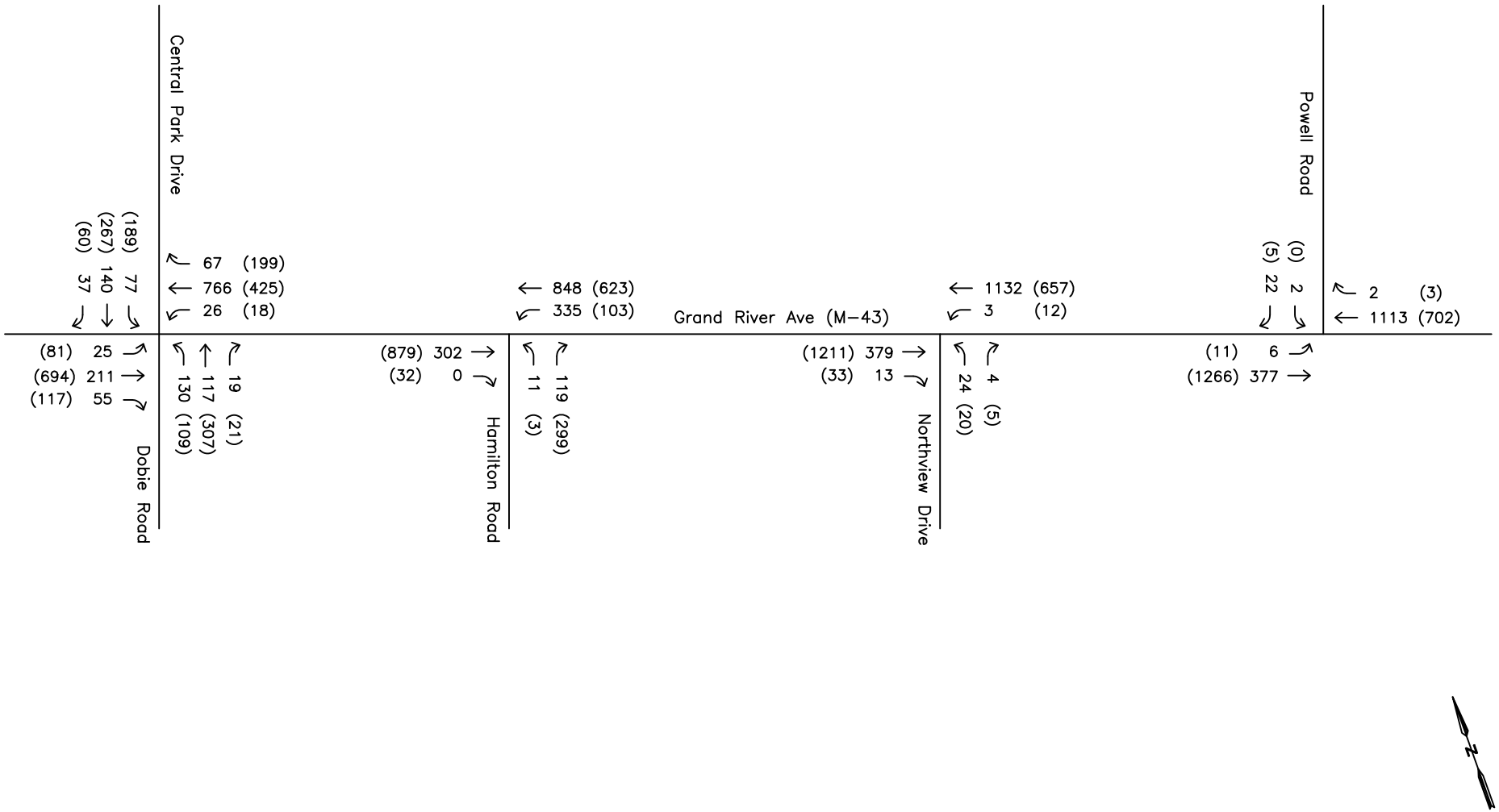
TEA, Inc. conducted vehicle turning movement counts during the midweek, of a non-holiday week in the month of June, 2019, at the following locations:

- Grand River Avenue (M-43) and Powell Road
- Grand River Avenue (M-43) and Northview Drive

In addition, existing turning movement counts taken by TEA, Inc. during the midweek, of a non-holiday week in the month of September, 2018, at the following locations were utilized:

- Grand River Avenue (M-43) and Central Park Drive/ Dobie Road
- Grand River Avenue (M-43) and Hamilton Road

The existing weekday AM and PM peak hours are 7:45 – 8:45 AM and 5:00 – 6:00 PM at the key locations, respectively. The existing volumes are illustrated in **Figure 1**.



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LEGEND

XXX AM Pk Hr (7:45-8:45 AM) Volumes

(XXX) PM Pk Hr (5:00-6:00 PM) Volumes

FIGURE 1: Existing Traffic – Peak Hours

DATE: July, 2019 | SCALE: NTS | PAGE: 8

LEVEL OF SERVICE ANALYSIS FOR EXISTING TRAFFIC

The critical intersections defined for this study were analyzed according to the methodologies published in the most recent edition of the *Highway Capacity Manual.* The analysis determines the "Level of Service" of the intersections and is based on factors such as the number and types of lanes, signal timing, traffic volumes, pedestrian activity, etc. The level of service (LOS) is defined by average vehicle delay in seconds created by a traffic control device for a given traffic movement or intersection approach.

Level of Service	Delay per Vehicle (seconds)	
	Non-Signalized	Signalized
A	< 10	<10
B	10 to 15	10 to 20
C	15 to 25	20 to 35
D	25 to 35	35 to 55
E	35 to 50	55 to 80
F	> 50	> 80

Levels of Service are expressed in a range from "A" to "F," with "A" being the highest LOS and "F" representing the lowest LOS. Level of service "D" is considered the minimum acceptable LOS in an urban area.

The above table shows the thresholds for Levels of Service "A" through "F" for non-signalized and signalized intersections, respectively.

All Level of Service computations contained in this report were based upon the Synchro software package which is approved by the Michigan Department of Transportation (MDOT). Delay per vehicle includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

The Level of Service analysis for existing traffic at the subject intersections during the peak hours is summarized in **Table 1.** All existing turning movements at the studied intersections operate at an acceptable level of service (LOS D or better).

Table 1
Level of Service (LOS) Summary
Existing Traffic

Location	Movement	Weekday AM Peak Hour		Weekday PM Peak Hour	
		Avg. Delay	LOS	Avg. Delay	LOS
Grand River Avenue (M-43) and Central Park Drive/ Dobie Road	EB Left	14.0	B	22.1	C
	EB Thru	7.5	A	15.9	B
	EB Right	7.3	A	13.2	B
	WB Left	8.3	A	19.2	B
	WB Thru-Right	11.3	B	16.7	B
	NB Left	25.1	C	18.7	B
	NB Thru-Right	19.5	B	14.9	B
	SB Left	22.9	C	23.6	C
	SB Thru	19.7	B	14.1	B
	SB Right	18.1	B	12.2	B
	Intersection	13.8	B	16.5	B
Grand River Avenue (M-43) and Hamilton Road	EB Thru-Right	0.0	A	0.0	A
	WB Left	9.3	A	11.0	B
	WB Thru	0.0	A	0.0	A
	NB Left-Right	15.1	C	25.4	D
	Intersection	3.6	A	4.9	A
Grand River Avenue (M-43) and Northview Drive	EB Thru-Right	0.0	A	0.0	A
	WB Left	8.2	A	12.0	B
	WB Thru	0.0	A	0.0	A
	NB Left-Right	16.2	C	27.4	D
	Intersection	0.3	A	0.6	A
Grand River Avenue (M-43) and Powell Road	EB Left	11.7	B	9.2	A
	EB Thru	0.0	A	0.0	A
	WB Thru-Right	0.0	A	0.0	A
	SB Left-Right	14.9	B	10.8	B
	Intersection	0.3	A	0.1	A

Note: Delay = Average control delay per vehicle in seconds.
LOS = Level of Service

BACKGROUND CONDITIONS

BACKGROUND TRAFFIC VOLUMES – GROWTH RELATED

Background traffic represents future volumes without the traffic generated by the proposed LaFontaine Automotive Group Dealership development. The target year for completion is the summer of 2020.

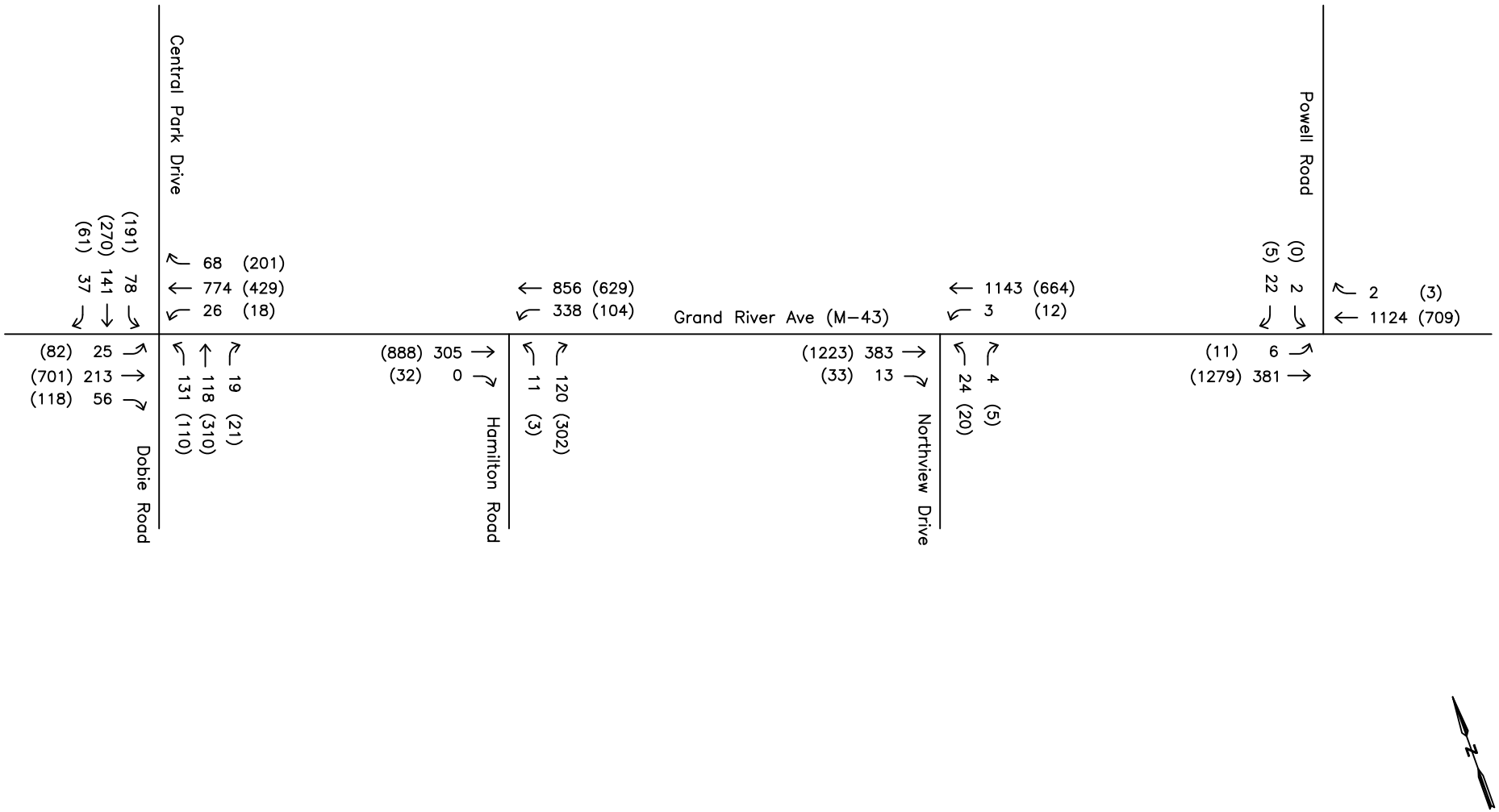
According to the US Census Bureau, the exponential annual growth rate for the population of Meridian Charter Township from 2010 to 2017 was one point zero four percent (1.04%) over the seven (7) year period, and the exponential annual growth rate for the population of Ingham County was zero point four seven percent (0.47%) for the same time period. For the purposes of this study, a one percent (1.0%) growth rate was applied over one (1) year for the proposed completion date of summer of 2020. Background traffic growth volumes are illustrated in **Figure 2**.

BACKGROUND TRAFFIC VOLUMES – DEVELOPMENT RELATED

The Meridian Charter Township Planning Department identified several developments in the nearby vicinity for consideration as background traffic. There is a proposed 25 lot subdivision on Powell Road that was approved for rezoning. TEA, Inc. conducted a Traffic Assessment for the proposed rezoning of the 25 acres on Powell Road in July, 2015. The study projected an increase of 5 vehicle trips during AM peak hour, 9 vehicle trips during the PM peak hour, and 87 vehicle trips during the weekday. Traffic distribution was not part of the rezoning assessment; therefore, there were no volumes to add to this study.

There is a proposed LaFontaine Dealership development on the northeast corner of Powell Road and Grand River Avenue (M-43). TEA, Inc. completed a trip generation analysis for the proposed 2,950 square foot building. The trip generation letter, dated September 24, 2018, projected 6 vehicle trips during the AM peak hour, 7 vehicle trips during the PM peak hour, and a weekday total of 55 vehicle trips. Traffic was not distributed as part of the trip generation letter; therefore, the volumes were not added to this study.

There were two (2) additional sites that are being considered for development. The first proposed site is on Central Park Drive, north of Grand River Avenue (M-43) and the second is the redevelopment of the driving range on Grand River Avenue (M-43). Neither of these developments had available traffic studies to include in this report.



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LEGEND

XXX AM Pk Hr (7:45-8:45 AM) Volumes

(XXX) PM Pk Hr (5:00-6:00 PM) Volumes

FIGURE 2: Background Growth Traffic – Peak Hours

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LEVEL OF SERVICE ANALYSIS FOR BACKGROUND TRAFFIC

The level of service analysis for background 2020 traffic is summarized in **Table 2**. All existing roadway geometrics and traffic control devices were utilized for the background analysis. Under background conditions, it is anticipated that all movements at the studied intersections will continue to operate at an acceptable level of service (LOS D or better).

Table 2
Level of Service (LOS) Summary
Background Traffic

Location	Movement	Weekday AM Peak Hour		Weekday PM Peak Hour	
		Avg. Delay	LOS	Avg. Delay	LOS
Grand River Avenue (M-43) and Central Park Drive/ Dobie Road	EB Left	14.2	B	22.5	C
	EB Thru	7.6	A	16.2	B
	EB Right	7.4	A	13.3	B
	WB Left	8.4	A	19.6	B
	WB Thru-Right	11.5	B	17.0	B
	NB Left	25.1	C	18.6	B
	NB Thru-Right	19.5	B	14.8	B
	SB Left	22.9	C	23.7	C
	SB Thru	19.6	B	14.0	B
	SB Right	18.0	B	12.1	B
	Intersection	13.8	B	16.7	B
Grand River Avenue (M-43) and Hamilton Road	EB Thru-Right	0.0	A	0.0	A
	WB Left	9.3	A	11.1	B
	WB Thru	0.0	A	0.0	A
	NB Left-Right	15.2	C	26.3	D
	Intersection	3.6	A	5.0	A
Grand River Avenue (M-43) and Northview Drive	EB Thru-Right	0.0	A	0.0	A
	WB Left	8.2	A	12.1	B
	WB Thru	0.0	A	0.0	A
	NB Left-Right	16.3	C	27.8	D
	Intersection	0.3	A	0.6	A
Grand River Avenue (M-43) and Powell Road	EB Left	11.8	B	9.3	A
	EB Thru	0.0	A	0.0	A
	WB Thru-Right	0.0	A	0.0	A
	SB Left-Right	14.9	B	10.9	B
	Intersection	0.3	A	0.1	A

Note: Delay = Average control delay per vehicle in seconds.
LOS = Level of Service

FUTURE CONDITIONS

SITE TRAFFIC GENERATION

The trip generation rates for the proposed LaFontaine Automotive Group Dealership development were derived from the ITE TRIP GENERATION MANUAL (10th edition). The ITE trip generation rates for Automobile Sales (New) (Land Use Code 840), were selected as representing the proposed 24,902 square foot dealership. The ITE description of Automobile Sales (New) is as follows:

A new automobile sales dealership is typically located along a major arterial street characterized by abundant commercial development. The sale or leasing of new cars is the primary business at these facilities; however, automobile services, parts sales, and used car sales may also be available. Some dealerships also include leasing options, truck sales, and servicing.

It is projected that the proposed LaFontaine Automotive Group Dealership development will generate 47 vehicle trips in the AM peak hour, 66 vehicle trips in the PM peak hour and 684 24-hour weekday trips. The projected traffic to be generated by the LaFontaine Automotive Group Dealership development is summarized in **Table 3**.

Table 3
Vehicle Trip Generation Summary
LaFontaine Automotive Group Dealership Development

Land Use	Size	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	
Automobile Sales (New), Land Use Code 840	24,902 sq. ft.	34	13	47	26	40	66	684
Total Trips		**34**	**13**	**47**	**26**	**40**	**66**	**684**

SITE TRAFFIC DISTRIBUTION

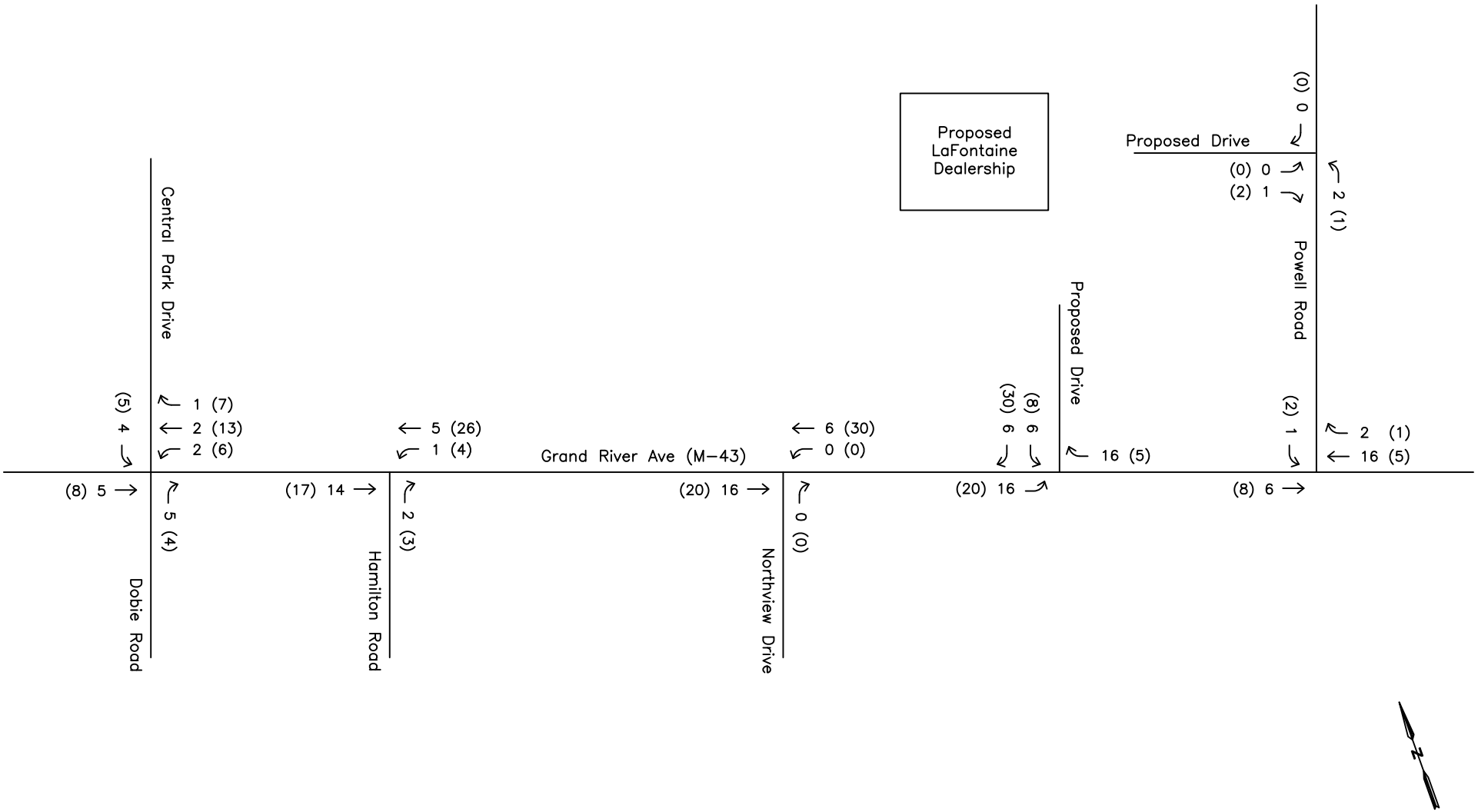
Traffic distribution for the proposed LaFontaine Automotive Group Dealership development was distributed based on the surrounding roadway patterns. Typically, a commercial development is a destination type of facility; therefore, the existing, entering traffic pattern on the roadway system during the morning and evening peak hours dictated the distribution of the proposed new site traffic for this study. The distribution for the commercial generated traffic is as follows.

Direction of Approach and Departure	AM Peak Hour	PM Peak Hour
To/From the West on Grand River Avenue	14%	31%
To/From the East on Grand River Avenue	53%	25%
To/From the North on Central Park Drive	12%	18%
To/From the South on Dobie Road	13%	15%
To/From the South on Hamilton Road	6%	10%
To/From the South on Northview Drive	1%	1%
To/From the North on Powell Road	1%	0%

Traffic was further distributed by driveway. Based on the existing traffic volumes on Grand River Avenue (M-43) and Powell Road, ninety-five percent (95%) of the traffic was distributed to the driveway on Grand River Avenue (M-43). The remaining five percent (5%) was distributed to the driveway on Powell Road. There was no traffic distributed to the cross access connection to the adjacent office development to represent a worst case scenario at the proposed driveways.

The total estimated site generated traffic for the proposed LaFontaine Automotive Group Dealership development during the AM and PM peak hours is illustrated in **Figure 3**.

Adding the project site traffic (Figure 3) to the background traffic (Figure 2) generates the total anticipated future traffic which is displayed in **Figure 4**.



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XXX AM Pk Hr (7:45–8:45 AM) Volumes

(XXX) PM Pk Hr (5:00–6:00 PM) Volumes

FIGURE 3: Site Traffic – Peak Hours

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LEGEND
XXX AM Pk Hr (7:45-8:45 AM) Volumes
(XXX) PM Pk Hr (5:00-6:00 PM) Volumes

FIGURE 4: Future Traffic - Peak Hours

DATE: July, 2019 | SCALE: NTS | PAGE: 21

LEVEL OF SERVICE ANALYSIS FOR FUTURE TRAFFIC

The level of service analysis for future traffic is summarized in **Table 4**. Comparing future level of service conditions to background level of service conditions determines the impact on the surrounding road system that can be expected from the addition of new traffic generated from the LaFontaine Automotive Group Dealership development.

All existing roadway geometrics and traffic control devices were used for the future analysis. The two (2) proposed new driveways were modeled as a two-lane driveway with one (1) inbound lane and one (1) outbound lane. The proposed driveway onto Grand River Avenue (M-43) has a 50' right turn lane shown on the proposed site plan; therefore, a 50' right turn lane was added to the analysis. Under future conditions, it is projected that all movements at the studied intersections will continue to operate at an acceptable level of service (LOS D or better).

Table 4
Level of Service (LOS) Summary
Future Traffic

Location	Movement	Weekday AM Peak Hour		Weekday PM Peak Hour	
		Avg. Delay	LOS	Avg. Delay	LOS
Grand River Avenue (M-43) and Central Park Drive/ Dobie Road	EB Left	14.3	B	23.5	C
	EB Thru	7.6	A	16.6	B
	EB Right	7.4	A	13.6	B
	WB Left	8.4	A	20.5	C
	WB Thru-Right	11.5	B	17.6	B
	NB Left	25.1	C	18.3	B
	NB Thru-Right	19.6	B	14.6	B
	SB Left	23.2	C	23.8	C
	SB Thru	19.6	B	13.7	B
	SB Right	18.0	B	11.9	B
	Intersection	13.9	B	17.0	B
Grand River Avenue (M-43) and Hamilton Road	EB Thru-Right	0.0	A	0.0	A
	WB Left	9.4	A	11.3	B
	WB Thru	0.0	A	0.0	A
	NB Left-Right	15.4	C	27.5	D
	Intersection	3.7	A	5.2	A
Grand River Avenue (M-43) and Northview Drive	EB Thru-Right	0.0	A	0.0	A
	WB Left	8.3	A	12.3	B
	WB Thru	0.0	A	0.0	A
	NB Left-Right	16.5	C	28.7	D
	Intersection	0.3	A	0.6	A
Grand River Avenue (M-43) and Powell Road	EB Left	11.9	B	9.3	A
	EB Thru	0.0	A	0.0	A
	WB Thru-Right	0.0	A	0.0	A
	SB Left-Right	15.6	C	13.5	B
	Intersection	0.4	A	0.1	A

Note: Delay = Average control delay per vehicle in seconds.
LOS = Level of Service

Table 4 (Cont.)
Level of Service (LOS) Summary
Future Traffic

Location	Movement	Weekday AM Peak Hour		Weekday PM Peak Hour	
		Avg. Delay	LOS	Avg. Delay	LOS
Grand River Avenue (M-43) and Proposed Drive	EB Left	12.2	B	9.3	A
	EB Thru	0.0	A	0.0	A
	WB Thru	0.0	A	0.0	A
	WB Right	0.0	A	0.0	A
	SB Left-Right	19.6	C	13.3	B
	Intersection	0.3	A	0.3	A
Powell Road and Proposed Drive	EB Left-Right	8.4	A	8.4	A
	NB Left-Thru	1.5	A	0.5	A
	SB Thru-Right	0.0	A	0.0	A
	Intersection	0.7	A	0.9	A

Note: Delay = Average control delay per vehicle in seconds.
LOS = Level of Service

SIGNIFICANT FINDINGS

ANALYSIS FOR A RECOMMENDED RIGHT TURN TREATMENT

A 50’ right turn lane was shown on the proposed site plan for westbound Grand River Avenue (M-43) at the proposed driveway and was included in this analysis as anticipated to be built with the development; therefore, no right turn lane analysis was conducted.

ANALYSIS FOR A RECOMMENDED LEFT-TURN TREATMENT

Grand River Avenue (M-43) currently has a two-way center left turn lane, and Powell Road is a gravel road; therefore, no left turn analysis was conducted.

RECOMMENDATIONS

The findings of this study show that there are no recommendations to the existing road system based on projected level of service.

SUPPLEMENTAL INFORMATION

Supplemental Information

Site Plan
Vehicle Volume Counts
LOS Computations

NATURAL FEATURES ASSESSMENT

for the

W. Grand River Avenue and Powell Road
Section 22, Meridian Township, Michigan

Prepared for:

LAG Wixom LLC (LaFontaine Automotive Group)
4000 W. Highland Road
Highland, Michigan 48357

MARX
WETLANDS
LLC

Prepared by:
Marx Wetlands, LLC

6/24/2019

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APPENDICES

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
Figure 7: County Soils Survey Map
II. Vegetation Lists, Tables 1-4
III. MW's Tree Survey Results Table
IV. Wetland Verification Application Package (Includes MW Wetland Report 2016)

1.0 INTRODUCTION

Marx Wetlands, LLC (MW) was contracted by LAG Wixom LLC to perform a natural features assessment for two (2) parcels (33-02-02-22-426-006; 1560 W. Grand River Avenue and 33-02-02-22-426-007; 1510 W. Grand River Avenue), totaling approximately 9.1 acres ("Site"). The parcels are located directly north of W. Grand River Avenue and west of Powell Road within section 22, Meridian Township, Ingham County, Michigan. Please refer to *Figure 1: Site Location Map* in **Appendix I.**

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, MW conducted a desktop review of available on-line resources, a site assessment (June 13, 2019), and information analysis to help address the Township's natural features assessment requirements. In addition, a wetland delineation was conducted by MW in November of 2015 and identified two (2) (Wetlands A & B) within the Site. In addition, a tree survey was also conducted by MW in 2016 as well.

2.0 SITE LOCATION AND PROJECT DESCRIPTION

The approximately 9-acre Site is located directly northwest of the intersection of Powell Road and W. Grand River Avenue within Section 22 of Meridian Township (T4N, R1W) of Ingham County, Michigan. LAG Wixom LLC (Developer) is proposing a new car dealership building, associated parking and utility infrastructure. This development is directly adjacent to a recently approved site plan on vacant parcels directly northeast of the intersection of Grand River Avenue and Powell Road. In addition, the project includes the construction of one (1) on-site detention pond for on-site stormwater management. Prior to site clearing and grading, soil erosion and sediment control measures will be installed and be inspected and maintained during the construction project. All soil erosion and sedimentation control measures should 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 and the on-site visit, the Site contains primarily vacant, undeveloped land consisting of mainly scrub-shrub/forest with scattered areas of upland field

and overgrown lawn. There is an existing gravel drive off W. Grand River Avenue and a dilapidated single-family house.

The Site is situated within a largely commercial and residential region of Meridian Township, Michigan. The Site is bounded by undeveloped land and residences to the north, Sparrow Medical group building to the west, Powell Road to the east, and W. Grand River Avenue to the south.

The topography of the Site has some moderately sloping hills gradually sloping to the low-lying or depressional areas (i.e., wetlands). The Site mainly contains upland forest/scrub-shrub with a couple openings of upland field with scattered trees, and 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.

MW Staff (Bryana Guevara, PWS) conducted a site assessment on June 13, 2019 to perform a natural features assessment as required by Meridian Township. The on-site assessment consisted of a site reconnaissance to evaluate the current and prior land use, conduct habitat type determination, habitat and tree quality evaluation, on-site wetlands, wildlife observations, and floodplain or other special concern observations.

Separate from the vegetation assessment conducted by MW during the June 13, 2019 site visit, a tree survey was also conducted by MW (Gary Marx) in 2016. The tree survey is in accordance with Meridian Township Tree Ordinance and recorded all protected trees–any tree 12.0 inches diameter at breast height (DBH) or larger. The trees were identified to species and their size recorded (**Appendix III**).

In addition, a wetland delineation was conducted by MW (Gary Marx) on November 9, 2015 and identified two (2) wetlands (Wetlands A & B) within the Site. 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 wetland determination consisted of desktop review of available background documentation and mapping followed by one site visit performed on November 9, 2015. In addition, the wetland delineation has been approved and reviewed by Meridian Township's environmental consultant. Refer to the wetland verification application package, which includes MW's wetland report (Dated February 2016) (**Appendix IV**).

The findings from the desktop review, on-site assessments, tree survey, and results from the 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 Site contains undeveloped land, consisting of primarily areas of upland scrub-shrub/forest. In addition, small openings of upland field and/or overgrown lawn were observed in the southern portions of the Site. The Site contains an abandoned single-family house in the southeast corner of the Site. Wetland areas were also observed within the northern portions of the Site. The upland forest contains a relatively weedy understory including the following species common buckthorn (*Rhamnus cathartica*), Eurasian honeysuckles (*Lonicera spp*.), autumn-olive (*Elaeagnus umbellata*), black raspberry (*Rubus occidentalis*), and blackberry (*Rubus allegheniensis*). The weedy aspect is likely due previous site disturbances adjacent to and/or within the Site.

The Site is situated within a largely commercial and residential region of Meridian Township, Michigan. The Site is bounded by undeveloped land and residences to the north, Sparrow Medical group building to the west, Powell Road to the east, and W. Grand River Avenue to the south. Refer to *Figure 2: Aerial Imagery Map* in **Appendix I**.

Photograph 1. View of upland scrub-shrub/forest identified as the main cover type throughout the Site.

Photograph 2. View of the southeast portion of the Site, containing an abandoned house and upland field.

4.2 Topography

The Site is relatively hilly ranging in elevation between approximately 855 to 950 feet above sea level (asl). Moderate sloping and local microtopographic relief areas were observed within the Site, particularly near the low-lying, wetland areas. There a few locations within the Site that contain relatively steep slopes, specifically in the central portions of the Site. There were some

areas of uneven terrain associated with what appears to be previously vegetated stockpiles, which may have been created during past disturbance activities. Refer to *Figure 1: Site Location Map* in **Appendix I**.

4.3 Vegetation

A vegetation assessment was conducted during the on-site visit to describe the dominant cover or community types observed throughout the Site. Based on review of aerial photographs and the on-site visit, the two (2) parcels contain largely vacant, undeveloped land consisting of areas of upland scrub-shrub/forest, upland field, and wetland. One vacant house was identified in the southeast corner of the overall Site (easternmost parcel).

MW identified three (3) distinct cover types present on the Site:

1) Upland, scrub-shrub/forest
2) Upland Field/Overgrown Lawn
3) Wetland

Most of the Site contains upland scrub-shrub/forest, which is characterized by a predominance of trees and an understory of herbaceous vegetation, shrubs, and vines. Upland field and overgrown lawn with landscape trees, including Norway maple (*Acer platanoides*), pines (*Pinus spp.)* and spruces (*Picea spp.*), were identified near the dilapidated house in the southeast corner of the Site. The on-site wetlands contain emergent, scrub-shrub, and forested components and had trees with trunks larger than approximately 5 inches diameter at breast height (DBH). The descriptions of the main cover types are discussed below:

Cover Type Descriptions

Upland Scrub-shrub/Forest

Most of the Site contains upland scrub-shrub/forest and generally contains the following herbaceous species penn sedge (*Carex pennsylvanica*), orchard grass *(Dactylus glomerata*), Queen Anne's lace (*Daucus carota*), white avens (*Geum canadense*), spinulose woodfern (*Dryopteris carthusiana*), Dame's rocket (*Hesperis matronalis*), wild strawberry (*Fragaria virginiana*), bluegrasses (*Poa pratensis* & *P. compressa*), lily-of-the-valley (*Convallaria majalis*), and garlic-mustard (*Alliaria petiolate).* Common vine species include Virginia creeper (*Parthenocissus quinquefolia*), riverbank grape (*Vitis riparia*), and poison-ivy (*Toxicodendron radicans*). Tree species observed include box-elder (*Acer negundo*), sugar maple (*Acer saccharum*), Norway maple, red maple (*Acer rubrum*), oaks (*Quercus alba, Q. bicolor, Q. macrocarpa, Q. rubra, & Q. velutina),* black walnut (*Juglans nigra*), black cherry (*Prunus serotina*), cottonwood (*Populus deltoides*), scattered with basswood (*Tilia americana*), hackberry (*Celtis occidentalis*), sassafra (*Sassafras albidum*), crabapple/apple (*Malus spp*.), hawthorn (*Crataegus spp*.), white pine (*Pinus strobus*), Siberian elm (*Ulmus pumila*), American elm (*Ulmus americana*), willows (*Salix alba & fragilis*), and ash (*Fraxinus spp*.) trees.

Common shrub species observed include multi-flora rose Eurasian honeysuckles (*Lonicera maackii, L. morrowii,* and *L. tatarica*), common buckthorn, autumn-olive, maple-leaved viburnum (*Viburnum acerifolium*), common privet (*Ligustrum vulgare*), common blackberry, and black raspberry (*Rubus occidentalis*). Refer to *Table 1* provided in **Appendix II**- Vegetation Tables.

In addition, the west-central portion of the Site contains areas with uneven terrain, which may have been created as a result of vegetated stockpiles left behind from possible, previous site disturbances.

Open Field & Overgrown Lawn

Upland herbaceous species found in the scattered open field areas and overgrown lawn associated with the abandoned residence generally include bluegrasses, orchard grass, Queen Anne's lace, common milkweed (*Asclepias syriac*a), fleabane (*Erigeron philadelphicus*), smooth brome (*Bromus inermis*), timothy (*Phleum pratense*), mullein (*Verbascum thapsus*), common plantain (*Plantago major*), Indian-hemp (*Apocynum cannabinum*), wild-bergamont (*Monarda fistulosa*), yarrow (*Achillea millefolium*), goldenrods (*Solidago altissima* and *S. canadensis*), and thistles (*Cirsium arvense* and *C. vulgare*). Scattered trees and shrub species observed include black walnut, black cherry, black oak (*Quercus velutina*), red oak (*Quercus rubra*), Norway spruce (*Picea abies*), staghorn sumac (*Rhus typhina*), multi-flora rose, autumn-olive, blackberry, and black raspberry. Refer to *Table 2* provided in **Appendix II**- Vegetation Tables.

Wetland

The on-site wetlands (Wetlands A & B) are largely emergent and/or scrub-shrub wetlands with a minor forested component. These wetlands generally contain the following species woolgrass (*Scirpus cyperinus*), rough avens (*Geum laciniatum*), reed canary grass (*Phalaris arundinacea*), sedges (*Carex intumescens, C. lacustris, and C. vulpinoidea)*, fowl manna grass (*Glyceria striata*), sensitive fern (*Onoclea sensibilis*), glossy buckthorn (*Frangula alnus*), common buckthorn, calico aster (*Symphyotrichum lateriflorum*), wild blue flag (*Iris versicolor*). Common vine species include riverbank grape, poison-ivy, and bittersweet nightshade (*Solanum dulcamara*). Trees observed generally include cottonwood, red maple, silver maple (*Acer saccharinum*), American elm, black ash (*Fraxinus nigra*), box-elder, and willows (*Salix alba & fragilis*). Refer to *Table 3* provided in **Appendix II**- Vegetation Tables. Additionally, standing dead ash trees were observed within these wetlands.

<u>Vegetation Assessment</u>

Several species associated with disturbed or ruderal lands in the Great Lakes region were observed in abundance within the Site. 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 common plantain, orchard grass (non-native), mullein (non-native), autumn-olive (invasive), common buckthorn (non-native), multiflora rose (invasive), tall goldenrod (weedy), and cottonwood pioneer species, early successional species). The weedy aspect of the Site is likely due to possible previous site disturbance on-site or adjacent lands.

According to the Vegetation ca. 1800 map produced by the Michigan Natural Features Inventory (MNFI), the Site appears to be part of an extensive oak-hickory forest that once extended several 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; however, these forests generally prefer moist, well-drained, 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. It is possible that that the Site may have been cleared for agricultural purposes; notice the light (gray/tan) color indicating open land in the 1983 USGS Topographic map (refer to Figure 1 in **Appendix I**). However, as twentieth century commercial and residential development began to fill in lands between East Lansing and Okemos. As evidenced by the existing abandoned and dilapidated house observed within the southeast corner of the Site, this parcel was likely previously residential. This Site was likely left idle due to the infeasibility of agriculture on such a small scale or due to the presence of the two wetland areas in the northern portion of the Site.

The majority of the Site contains upland scrub-shrub/forest with a relatively weedy understory, consisting of both native and non-native species. These areas would normally have been cleared for agriculture; however, it is likely that due to the adjacent commercial and residential development, these forested portions remain to serve as screening, privacy or wind/noise barriers. Examples of the species present on the Site include planted white pine, naturally established black walnut, non-native Siberian elm (non-native), and non-native smooth brome, common buckthorn (invasive), and autumn-olive (invasive). The scrub-shrub/forest also appear to contain remnant forest species, including oaks, maples, basswood, black cherry, cottonwood, and elm trees. The changes on this Site over the last two-hundred years have not left any true remnant forests, 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. The scrub-shrub/forest habitat's low native mean Coefficient of Conservatism of 3.3 is an overall indicator that this site was modified in the past but does retain native forest species.

The upland open field and overgrown lawn areas are located primarily along W. Grand River Drive within the southern portions of the Site. There is evidence that as this recolonization progressed the Site became brushier, particularly south-central portions of the Site where common buckthorn and multi-flora rose has formed small thicket areas, directly south of the wetland areas. This community includes both native and non-native species. The old field habitat's low native mean Coefficient of Conservatism of 2.1 is an overall indicator that this Site was subject to possible disturbances in the past.

The on-site wetlands were primarily emergent and/or scrub-shrub wetlands with a minor forested wetland component. Both wetlands contain native and non-native species. Wetlands A and B contain a high percent cover of reed canary grass (weedy), common buckthorn (invasive), glossy buckthorn (invasive), and bittersweet nightshade (non-native). Due to the predominance of these weedy, non-native, or invasive species it is likely due previous site disturbances. The wetlands have low native mean Coefficient of Conservatism of 2.4. This low average indicates

that these wetlands likely have experienced prior disturbances and now contain relatively common and/or weedy species. Therefore, due to the possible previous disturbances of habitat fragmentation, partial prior clearing, surrounding commercial and residential development of the area, the three (3) distinct cover types appear to contain some weedy, invasive, and/or non-native species. Refer to the *Vegetation Lists* in **Appendix II**.

Photograph 3. View of upland forest with planted pines/spruces associated with the abandoned house.

Photograph 4. Typical view of the upland old field scattered trees and shrubs.

Photograph 5. View of upland field and scrub-shrub areas.

Photograph 6. View of upland forest and open fields observed in the southwest portion of the Site.

Photograph 7. View of Wetland A observed in the northeast portion of the Site.

Photograph 8. View of Wetland B observed within the northwest corner of the Site.

Although the Developer intends to preserve trees wherever feasible, development of the Site will require clearing some existing vegetation. Most of the Site contains upland scrub-shrub/forest scattered with open field opening or overgrown lawn areas with non-native shrubs, and planted trees. It is anticipated that some existing vegetation, particularly some of the large or remnant trees may be incorporated into the conventional landscaping to the maximum extent possible.

4.4 Significant Tree Inventory

MW conducted a tree survey, which 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 (**Appendix III**). Results of the inventory identified approximately 144 significant trees, consisting of 19 different tree species within the Site.

Approximately 96.5% consisted of hardwood species and approximately 3.5% were softwood/conifer species. Of the 144 trees, approximately 8 trees were larger than or equal to 30 inches in diameter, the largest being a crack willow (*Salix fragilis*) with a diameter of 56 inches and in fair condition. Twenty-six of the trees were between 20 and 30 inches and remaining 110 trees were between 12 and 20 inches DBH. The average tree size recorded for the on-site protected trees was approximately 17.6 inches DBH, with a maximum tree size documented at 56.0 inches DBH. Refer to MW's *Tree Survey Results* in **Appendix III**.

<u>Impact Assessment</u>

Tree clearing will be necessary for the placement of the proposed development to be outside of the wetland boundaries. As part of the stormwater system, a detention pond is proposed between Wetlands A and B and will not directly impact these wetlands; however, treated stormwater will be discharged into the wetland buffer of Wetland A. The current site plan intends to retain trees whenever practicable, particularly within the northern portions of the Site. Approximately 32 protected trees will remain post-construction, which includes the largest tree

recorded by the tree survey. Conventional landscaping including the tree and/or shrub plantings are anticipated for the site development. Therefore, the proposed site plan utilizes upland and the developed portions of the Site as the buildable space wherever possible, while avoiding on-site natural features to the maximum extent practicable.

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, while considering the preservation of the on-site natural features.

4.5 Wetlands

A wetland delineation was conducted by MW (conducted by Gary Marx) on November 9, 2015 and identified two (2) wetlands (Wetlands A & B) within the Site. No ponds or watercourses were observed. 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.

Both wetlands are primarily emergent and/or scrub-shrub wetlands; however, also contain a minor forested component. Wetland A is a relatively large (approximately 1.05 acres on-site) emergent/scrub-shrub wetland with scattered trees located within the northeast portion of the Site and extends north off-site. Wetland B is largely an emergent wetland (approximately 0.18-acres on-site) with a forested fringe located in the northwest corner of the Site, which also extends north off-site.

Meridian Township Natural Features Map (Figure 4 in **Appendix I**) depicts two (2) township mapped wetland areas. One wetland in the northwest corner, extending north off-site. One wetland located in the northeast corner, extending north off-site. Wetlands A & 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 two (2) wetlands, which generally correspond to the delineated wetlands within the Site. One (1) forested wetland (PFO) is within the northeast portion of the Site and one (1) emergent wetland (PEM1C) associated with an off-site pond is located within the northwest corner of the Site.

In addition, the wetland delineation has been approved and reviewed by Meridian Township's environmental consultant. The two (2) on-site wetlands (Wetlands A & B) were determined to be regulated by the State of Michigan and Meridian Township. Refer to the wetland verification application package, which includes MW's wetland report (Dated February 2016) (**Appendix IV**).

<u>Impact Assessment</u>

The current site plan avoids the on-site wetlands and wetland buffers and minimizes native vegetation clearing to the maximum extent practicable. As part of the stormwater system, a detention pond is proposed between Wetlands A and B and will not directly impact these

wetlands. However, the proposed detention pond will have an outlet that will discharge treated stormwater into the wetland buffer of Wetland A.

The stormwater design intends to slow the runoff from the improved areas, detain in the proposed basin and will treat the stormwater runoff for sedimentation prior to release. The 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 first flush event will be stored in the basins and discharged at a rate which allows the basin to drain no less than a 24-hour period. This time frame should allow most suspended solids to settle before being discharged.

Therefore, the proposed stormwater system is anticipated to meet state and local water quality standards. Any stormwater runoff 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. All excavated material and structures will be placed in upland (non-wetland). It is MW's professional opinion that the proposed treated stormwater discharge from the basin into upland, which will eventually drain as overland flow into wetland will not significantly impact on-site features.

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, while ensuring the preservation of on-site natural features.

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 Panels No. 26065C0159D (eff. 8/16/2011), FEMA mapped 100-year and 500-year floodplains are not associated with the Site. Refer to *Figure 6: Flood Insurance Rate Map* in **Appendix I**.

Areas more than 3,400 feet further northeast of the Site associated with Mud Lake Foster Drain (tributary to Red Cedar River) are designated "A," "AE," or "X500" indicating risk areas of 100-

year floodplain or lesser. If an area on the Site were within the floodplain, a permit would have to be obtained to allow construction within the floodplain, and the project designed to the flood proofing standards that would minimize the risk of flood damage.

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. It does not appear that this Site will require such additional work.

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 subject property. As previously mentioned, there are areas that are further than 3,400 feet northeast of the Site, associated with Mud Lake Foster Drain, which are designated as floodways. No activities at the Site will have any impact upon these floodway areas, nor will these floodway areas have any impact on development at the Site.

Part 31, Water Resources Protection, of the NREPA regulated 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 Part 31 permit is required for construction within a regulated floodplain or floodway. Therefore, it is the professional opinion of MW that the Site does not appear to contain a regulated 100-year floodplain or floodway.

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 located within the Site. This includes ponds, lakes, creeks, rivers, sloughs, or stormwater detention basins. However, there is an off-site pond northwest of the Site and appears to have an open water area that is larger than 1 acre in size.

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 five (5) soil types— Houghton muck, 0 to 1 percent slopes (Hn; 100% hydric rating), Palms muck, 0 to 1 percent slopes (Pa; 100% hydric rating), Sebewa loam, 0 to 2 percent slopes (Sb; 95% hydric rating), Urban land-Capac Colwood complex, 0 to 4 percent slopes (UpA; 28% hydric rating), and

Urban land-Marlette complex, 2 to 12 percent slopes (UtB; 5% hydric rating). Refer to *Figure 7: County Soils Survey Map* in **Appendix I**.

Houghton and palms mucks are typically formed in depression in moraines and outwash plains. Sebewa loams are formed on moraines and within drainageways. Urban land-Capac Colwood complex soils are formed on knolls, till plains, and in depressions. Urban land-Marlette complex soils are formed in moraines and backslopes of end moraines.

These soils range from very poorly drain to well drained with no likelihood to infrequent flooding or ponding. Houghton muck (Hn), Palms muck (Pa), Sebewa loam (Sb), and Urban land-Capac Colwood complex (UpA) are classified as hydric or contain hydric inclusions. Hydric soils are conducive to the growth and regeneration of hydrophytic vegetation by their ability to hold water for extended periods of time. Due to the low hydric rating of the Urban land-Marlette complex, it is not considered a hydric soil type (USDA-NRCS 2010).

Site balancing, filling, and any subsurface excavation activities will take place within the limits of disturbance which are contained primarily within the areas of these well drained soil types. However, project activities include the construction of one (1) stormwater detention basin in upland within the north-central portion of the Site, which requires an outlet pipe that will eventually discharge into the west end of an existing wetland (Wetland A). The proposed outlet pipe is proposed within and/or directly adjacent to the 20-foot wetland buffer.

The proposed 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 control 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. All construction activities on the Site will be outside the bounds of the on-site wetlands and wetland buffers. Stormwater on the site will be collected and treated within the proposed detention basin, which is engineered to be in accordance with local and state regulations designed to protect water quality and runoff volumes.

Therefore, it is the professional opinion of Marx Wetlands LLC that the site development will not impact any sensitive areas identified for groundwater vulnerability because the current site plan avoids on-site wetlands 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 not appear to contain significant slopes steeper than 20%; however, moderate sloping and local microtopographic relief areas were observed within the Site, particularly near the on-site wetland areas and within the west-central portion of the Site. Although these areas are relatively hilly, these areas do not appear to exceed 20% grade.

The development project will follow structure, building, and grading setbacks and requirements provided in Meridian Township ordinances. During construction, any slopes (if applicable) created by the project that are over 20% will be intentionally designed and stabilized with appropriate landscaping materials. Soil erosion and sedimentation 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 urbanized context. Evidence of common wildlife were observed within the Site, including white-tailed deer (*Odocoileus virginiana*), gray squirrels (*Sciurus carolinensis*), and raccoon (*Procyon lotor*). Cardinals (*Cardinalis cardinalis*), black-capped chickadees (*Poecile atricapillus*), American robin (*Turdus migratorius),* and red-wing blackbirds (*Agelaius phoeniceus*) were seen and heard during the on-site assessment. Deer usage appeared most concentrated near the northern boundary of the Site. Fresh deer and raccoon droppings were also observed throughout the Site. In addition, several common European ambersnail (*Succinea putris*) were observed on emergent vegetation within the on-site wetlands.

It is likely that the Site serves as foraging and/or resting grounds for numerous other common species of insects and birds, such as Monarch butterflies (*Danaus plexippus*), honeybees (*Apis mellifera*), and mourning doves (*Zenaida macroura*). 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/or intolerant of numerous human disturbances or interferences.

The proposed site plan has been designed to minimize impacts to on-site natural features, including wetlands and potential habitat to the maximum extent practicable. Most of the on-site development is sited within the disturbed portions of the Site, specifically within the southern end of the Site along W. Grand River Avenue, which contains the existing dilapidated house. The wetlands and wetland buffers have been avoided; however, in order to utilize the buildable space within the Site, the proposed development will require tree removal.

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 northernmost 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 9.1-acre Site consists of two (2) parcels (33-02-02-22-426-006; 1560 W. Grand River Avenue and 33-02-02-22-426-007; 1510 W. Grand River Avenue), which largely contain vacant, undeveloped land. One abandoned single-family house was identified in the southeast corner of the Site. The undeveloped land portions contain scrub-shrub/forest, upland field, and wetland. MW identified two (2) (Wetlands A & B) within the Site and/or along the Site's perimeters. No ponds or watercourses appear within the Site. The Site is situated within a largely commercial and residential region of Meridian Township, Michigan. The Site is bounded by an undeveloped land and residences to north, Sparrow Medical Group building to the west, Powell Road to the east, and W. Grand River Avenue to the south.

Most of the on-site soils are upland loams and loams with some hydric inclusions that formed under what was once an oak-hickory forest. These soils appear to be largely original to the Site and lack the presence of fill or commercial material. However, there was an area in the west-central portion of the Site, which appeared to contain vegetated stockpiles. It is likely that this Site was once a small, fragmented portion of that forest that once covered many acres but was cleared for agriculture and/or residential development. 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 trees, native trees, and relatively common native and non-native understory species. As a result of site development, some vegetation will be cleared, though the species lost are very unlikely to include any that are locally rare (i.e. rare county-wide) or state threatened and endangered. Overall, the majority of the northern portions of the Site will not be cleared and will retain numerous native trees that are in good condition post-construction.

The majority of the Site contains scrub-shrub/forest with a weedy understory as well as two (2) wetlands, which will not be directly impacted by proposed project activities. These wetlands appear to be of low to moderate quality due the predominance of reed canary grass and high likelihood of prior disturbances.

The proposed development is largely positioned in the central and southern portions of the Site. The northern portion of the Site is not anticipated to be developed, except for the construction of the proposed on-site stormwater detention basin and associated outlet pipe. The only remaining natural heritage on this Site appears to be the original topography, soils, and some of

the native vegetation identified primarily within the northern portion of the Site. These areas contain the forest/scrub-shrub habitat, which includes Wetlands A and B.

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 commercialized land use, associated parking and utility infrastructure has limited site design options; however, for this Site the primary likelihood of preserving natural resource values would be associated with minimal development on the northern portions of the Site, avoidance of on-site wetlands and wetland buffers, 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 has been determined that the preferred site plan is the most prudent and viable layout for the development of the proposed Site because it avoids the on-site wetlands and buffers and minimizes native vegetation clearing to the maximum extent practicable.

Thank you for the opportunity to provide a natural features inventory and assessment for the aforementioned Site.

If you have any questions, please contact me at your convenience.

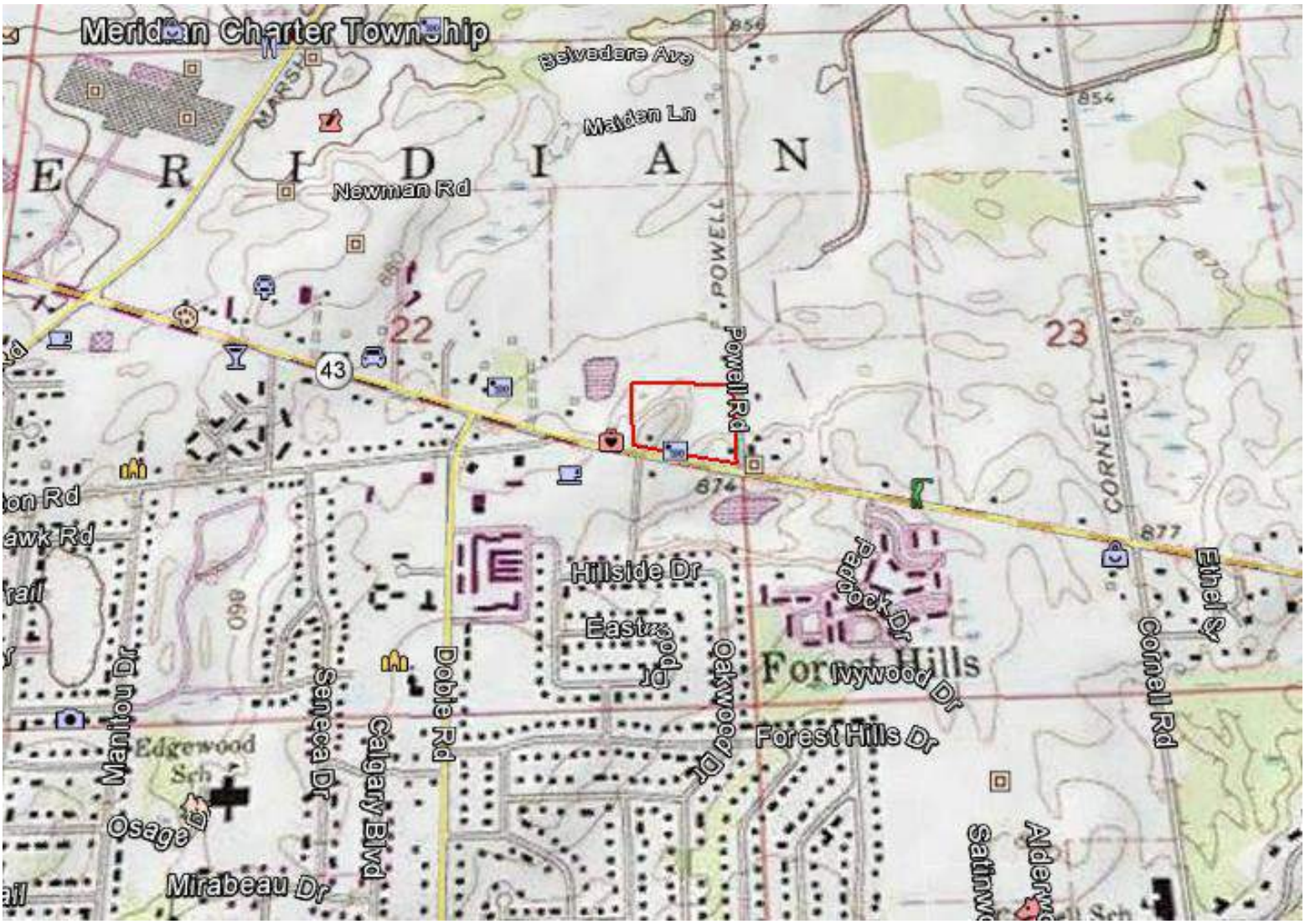
Sincerely,

Marx Wetlands, LLC

Bryana J. Guevara, CSWO (MI)
Environmental Scientist
ISA Certified Arborist #MI-4240A
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: Meridian Township Natural Features Map
Figure 5: National Wetland Inventory Map
Figure 6: Flood Insurance Rate Map
Figure 7: County Soils Survey Map & Hydric Soils M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Newman Rd
POWELL
Powell Rd
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23
43
CORNELL
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Hillside Dr
Eastwood Dr
Peacock Dr
Ivywood Dr
Forest Hills
Forest Hills Dr
Oakwood Dr
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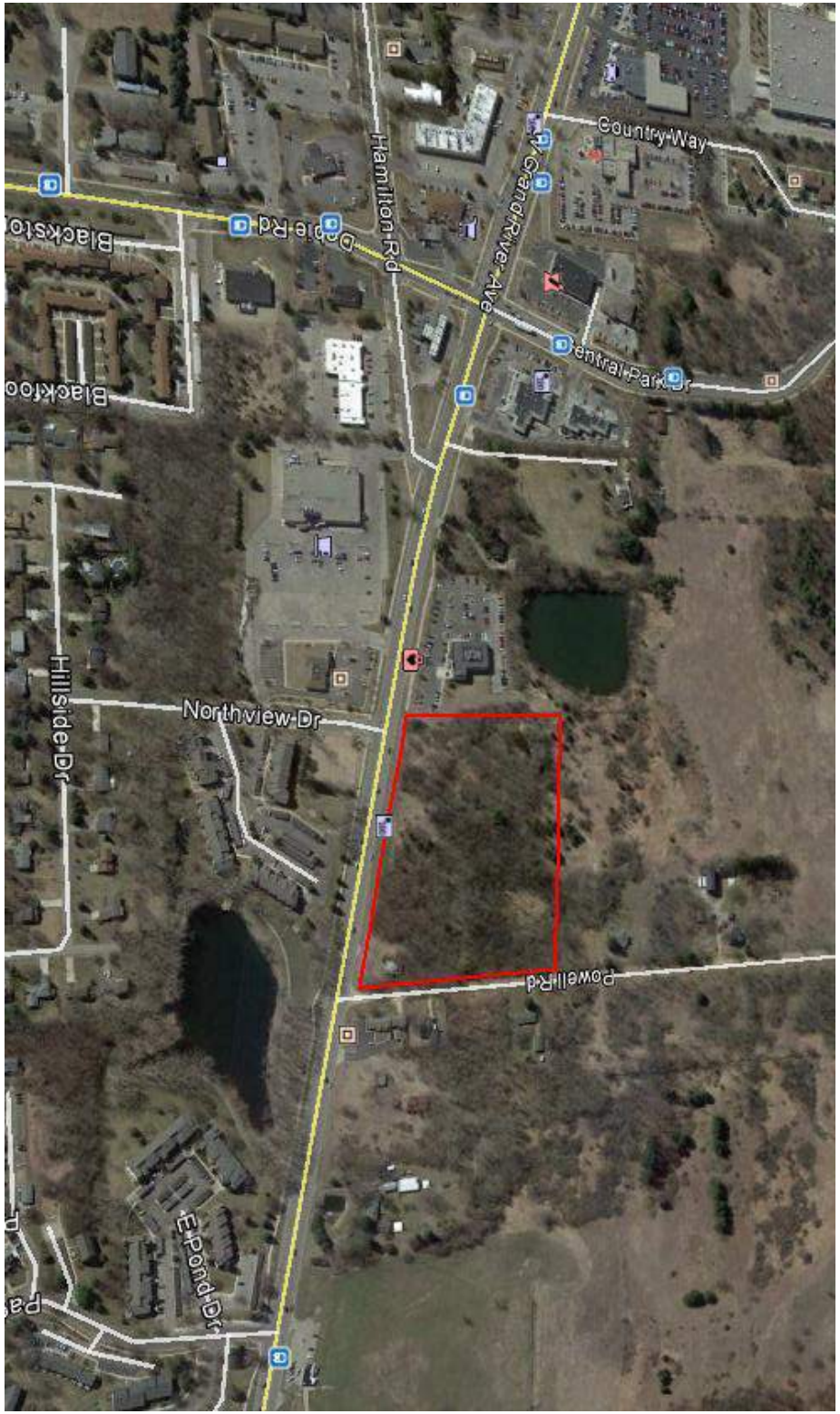
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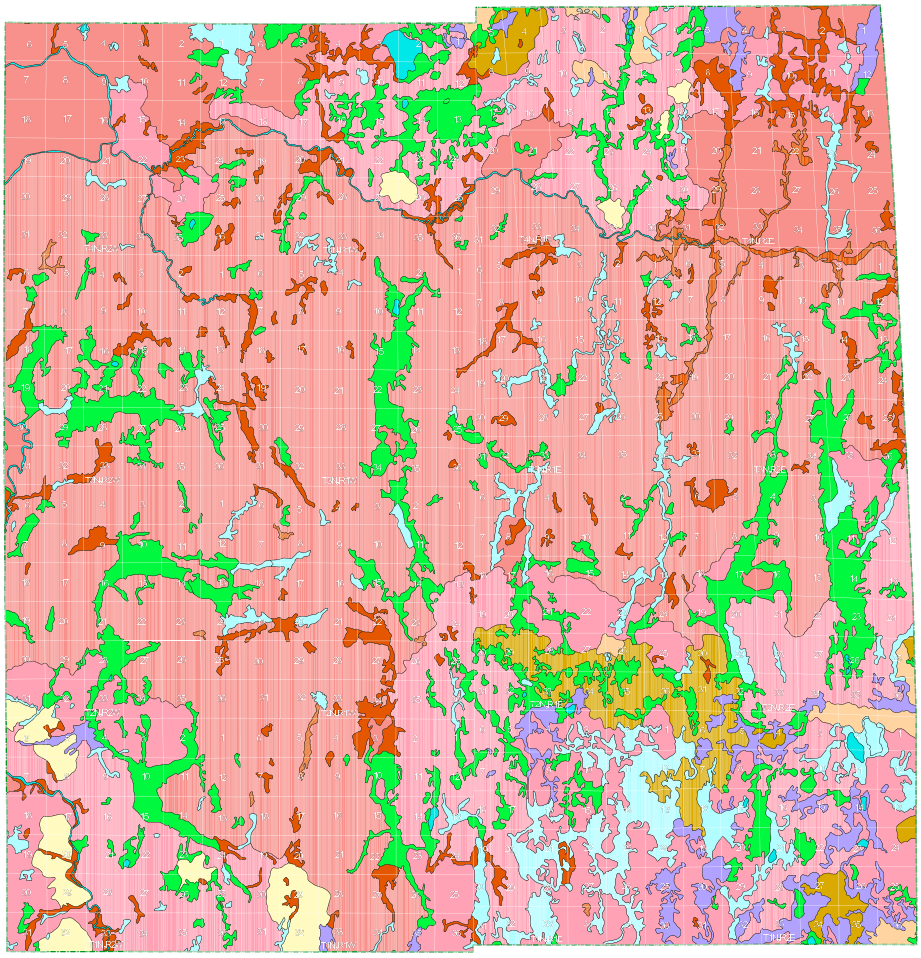
Country Way
Central Park Dr
Northview Dr
Hillside Dr
Powell Rd
E Pond Dr



Vegetation circa 1800 of Ingham County, Michigan

An Interpretation of the General Land Office Surveys

By P. J. Comer and D. A. Albert
Michigan Natural Features 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

1 0 1 2 3 4 Miles
1 0 1 2 3 4 5 6 7 8 Kilometers

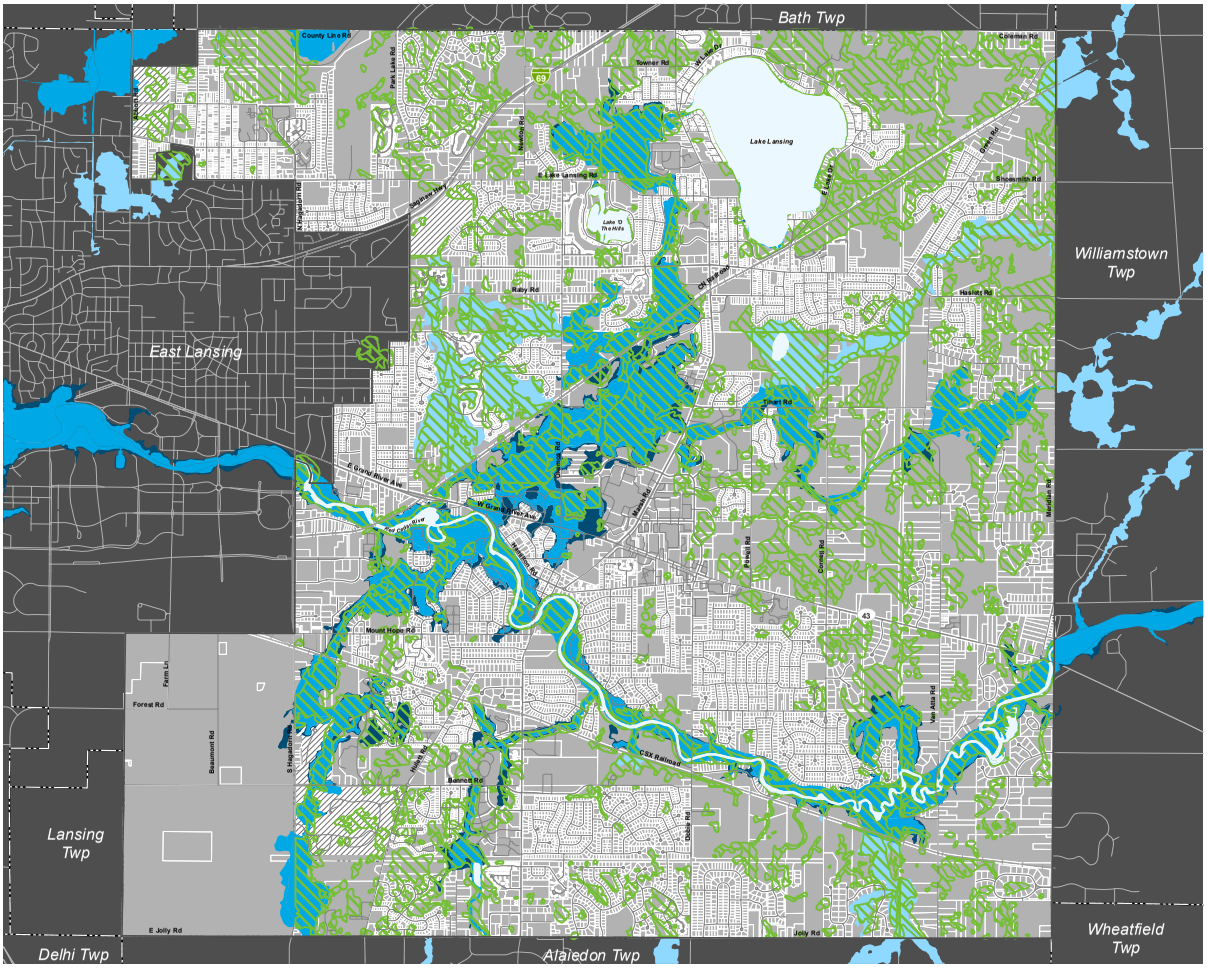
Map Projection: Lambert Conformal Conic

SOURCE: Comer, P. J., D. A. Albert, H. A. Wells, B. L. Hart, J. B. Raab, D. L. Price, D. M. Kashian, R. A. Corner, D. W. Schuen (Map Interpretation); M. S. Austin, T. R. Lupinski, K. M. Korroch, L. Prange-Gregory, J. G. Spisiak, C. J. Delain, L. J. Scriger, (Digital Map Production). 1995. Michigan's Presettlement Vegetation, as Interpreted from the General Land Office Surveys 1816-1856. Michigan Natural Features Inventory, Lansing, MI. Digital Map.

Michigan DNR Department of Natural Resources Wildlife Division

MICHIGAN STATE UNIVERSITY EXTENSION

Michigan Natural Features Inventory



MAP 11

Natural Features

Meridian Charter Township
Ingham County, Michigan

January 17, 2017

Wetlands

Wetlands

Flood Hazard Areas

No Base Flood Elevations Determined

Base Flood Elevations Determined

500-year Flood Plain

Cooperative Agreement

0 2,000 4,000 FEET

McKenna ASSOCIATES

Map Feature Source: Meridian Charter Township, 2016

U.S. Fish and Wildlife Service

National Wetlands Inventory

1510 & 1560 W. Grand River Avenue, Meri

June 20, 2019

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- 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.

National Flood Hazard Layer FIRMette

FEMA

42°43'12.91"N

84°24'31.64"W

84°23'54.19"W

42°42'46.48"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- 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
- 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
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

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 6/20/2019 at 3:50:40 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 unmodernized areas cannot be used for regulatory purposes.

Soil Map—Ingham County, Michigan
(1510 & 1560 W. Grand River Avenue, Meridian Twp, MI)

Map Scale: 1:1,610 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

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 16, Sep 6, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 1, 2011—Mar 10, 2017

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	1.9	20.3%
Pa	Palms muck, 0 to 1 percent slopes	0.0	0.2%
Sb	Sebewa loam, 0 to 2 percent slopes	0.2	2.4%
UpA	Urban land-Capac-Colwood complex, 0 to 4 percent slopes	1.1	12.2%
UtB	Urban land-Marlette complex, 2 to 12 percent slopes	6.0	64.9%
Totals for Area of Interest		**9.3**	**100.0%**

Hydric Rating by Map Unit—Ingham County, Michigan
(1510 & 1560 W. Grand River Avenue, Meridian Twp, MI)

Map Scale: 1:1,610 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

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 16, Sep 6, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 1, 2011—Mar 10, 2017

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	1.9	20.3%
Pa	Palms muck, 0 to 1 percent slopes	100	0.0	0.2%
Sb	Sebewa loam, 0 to 2 percent slopes	95	0.2	2.4%
UpA	Urban land-Capac-Colwood complex, 0 to 4 percent slopes	28	1.1	12.2%
UtB	Urban land-Marlette complex, 2 to 12 percent slopes	5	6.0	64.9%
Totals for Area of Interest			**9.3**	**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-efficent (C), nativity, physiognomy, and occurrence of species identified at Powell Road and W. Grand River Avenue project site - Scrub-shrub/Forest

Scientific Name	Common Name	WET	W	C	Native	Physiognomy	Occurrence
Acer negundo	Box-elder	FAC	0	0	Yes	Tree	Common
ACER PLATANOIDES	Norway Maple	UPL	5	*	No	Ad. Tree	Uncommon
Acer rubrum	Red Maple	FAC	0	1	Yes	Tree	Occasional
Acer saccharum	Sugar Maple	FACU	3	5	Yes	Tree	Occasional
Acer saccharinum	Silver Maple	FACW	-3	2	Yes	Tree	Uncommon
ALLIARIA PETIOLATA	Garlic Mustard	FACU	3	*	No	Ad. Forb	Uncommon
BROMUS INERMIS	Smooth Brome	UPL	5	*	No	Ad. Grass	Common
Carex pensylvanica	Penn Sedge	UPL	5	4	Yes	Sedge	Common
Celtis occidentalis	Northern Hackberry	FAC	0	5	Yes	Tree	Occasional
Cornus amomum	Silky Dogwood	FACW	-3	2	Yes	Shrub	Occasional
Cornus foemina/racemosa	Gray Dogwood	FAC	0	1	Yes	Shrub	Occasional
Crataegus calpodendron	Hawthorn	UPL	5	5	Yes	Tree	Uncommon
DACTYLIS GLOMERATA	Orchard Grass	FACU	4	*	No	Ad. Grass	Common
ELAEAGNUS UMBELLATA	Autumn-olive	FACU	3	*	No	Ad. Shrub	Common
Fragaria virginiana	Strawberry	FACU	3	2	Yes	Forb	Occasional
Fraxinus americana	White Ash	FACU	3	5	Yes	Tree	Uncommon
Fraxinus nigra	Black Ash	FACW	-3	6	Yes	Tree	Uncommon
Geum canadense	White Avens	FAC	0	1	Yes	Forb	Occasional
LIGUSTRUM VULGARE	Common Privet	FACU	3	*	No	Ad. Shrub	Occasional
LONICERA MAACKII	Amur Honeysuckle	UPL	5	*	No	Ad. Shrub	Occasional
LONICERA MORROWII	Morrow Honeysuckle	FACU	3	*	No	Ad. Shrub	Uncommon
LONICERA TATARICA	Tartarian honeysuckle	FACU	3	*	No	Ad. Shrub	Occasional
Malus spp.	Crabapple/Apple	UPL	5	*	No	Ad. Tree	Uncommon
Parthenocissus quinquefolia	Virginia creeper	FACU	3	5	Yes	Vine	Common
PICEA ABIES	Norway Spruce	UPL	5	*	No	Ad. Tree	Uncommon
Pinus strobus	White Pine	FACU	3	3	Yes	Tree	Occasional
Populus deltoides	Cottonwood	FAC	0	1	Yes	Tree	Common
Prunus serotina	Black Cherry	FACU	3	2	Yes	Tree	Common
Quercus alba	White Oak	FACU	3	5	Yes	Tree	Uncommon
Quercus bicolor	Swamp White Oak	FACW	-3	8	Yes	Tree	Uncommon
Quercus macrocarpa	Bur Oak	FACU	3	5	Yes	Tree	Uncommon
Quercus rubra	Red Oak	FACU	3	5	Yes	Tree	Occasional
Quercus velutina	Black Oak	UPL	5	6	Yes	Tree	Occasional
RHAMNUS CATHARTICA	Common Buckthorn	FAC	0	*	No	Ad. Shrub	Occasional
Ribes cynosbati	Prickly Gooseberry	FACU	3	4	Yes	Shrub	Uncommon
ROBINIA PSEUDOACACIA	Black Locust	FACU	3	*	No	Ad. Tree	Uncommon
ROSA MULTIFLORA	Multiflora Rose	FACU	3	*	No	Ad. Shrub	Occasional
Rubus allegheniensis	Blackberry	FACU	3	1	Yes	Shrub	Occasional
Rubus occidentalis	Black Raspberry	UPL	5	1	Yes	Shrub	Occasional
Sassafras albidum	Sassafras	FACU	3	5	Yes	Tree	Uncommon
Solidago altissima	Tall Goldenrod	FACU	3	1	Yes	Forb	Occasional

Solidago canadensis	Canada Goldenrod	FACU	3	1	Yes	Forb	Common
Tilia americana	Amerian Basswood	FACU	3	5	Yes	Tree	Uncommon
Toxicodendron radicans	Poison-Ivy	FAC	0	2	Yes	Vine	Occasional
Ulmus americana	American Elm	FACW	-3	1	Yes	Tree	Occasional
ULMUS PUMILA	Siberian Elm	FACU	3	*	No	Ad. Tree	Uncommon
Viburnum acerifolium	Maple-leaved Viburnum	UPL	5	6	Yes	Shrub	Occasional
Vitis riparia	Riverbank Grape	FAC	0	3	Yes	Vine	Common
Count = 48	**Average Wetness Co-efficient =**		**2.3**				
	Average Conservation Co-efficient =			**3.3**			

Table 2. Species list including scientific and common name, wetness indicator code (WET), wetness co-efficient (W), conservation co-efficent (C), nativity, physiognomy, and occurrence of species identified at Powell Road and W. Grand River Drive project site - Open Field with scattered shrubs and trees

Scientific Name	Common Name	WET	W	C	Native	Physiognomy	Occurrence
Achillea millefolium	Yarrow	FACU	3	1	Yes	Forb	Uncommon
AGROSTIS GIGANTEA	Redtop	FACW	-3	*	No	Ad. Grass	Common
Andropogon virginicus	Broom-sedge	FACU	3	4	Yes	Grass	Uncommon
Apocynum cannabinum	Indian-hemp	FAC	0	3	Yes	Forb	Uncommon
Asclepias syriaca	Common Milkweed	UPL	5	1	Yes	Forb	Uncommon
BROMUS INERMIS	Smooth Brome	UPL	5	*	No	Ad. Grass	Common
CIRSIUM ARVENSE	Field Thistle	FACU	3	*	No	Ad. Forb	Occasional
CIRSIUM VULGARE	Bull Thistle	FACU	3	*	No	Ad. Forb	Occasional
DACTYLIS GLOMERATA	Orchard Grass	FACU	4	*	No	Ad. Grass	Common
DAUCUS CAROTA	Queen Anne's Lace	UPL	5	*	No	Ad. Forb	Occasional
ELAEAGNUS UMBELLATA	Autumn-olive	FACU	3	*	No	Ad. Shrub	Common
Erigeron philadelphicus	Fleabane	FAC	0	2	Yes	Forb	Occasional
Monarda fistulosa	Wild-bergamont	FACU	3	2	Yes	Forb	Occasional
PICEA ABIES	Norway Spruce	UPL	5	*	No	Ad. Tree	Uncommon
Phalaris arundinacea	Reed Canary Grass	FACW	-3	0	Yes	Grass	Occasional
PHLEUM PRATENSE	Timothy	FACU	3	*	No	Ad. Grass	Occasional
PLANTAGO MAJOR	Common Plantain	FACU	3	*	No	Ad. Forb	Occasional
POA COMPRESSA	Canada bluegrass	FACU	3	*	No	Ad. Grass	Abundant
POA PRATENSIS	Kentucky bluegrass	FACU	3	*	No	Ad. Grass	Abundant
Populus deltoides	Cottonwood	FAC	0	1	Yes	Tree	Uncommon
Prunus serotina	Black Cherry	FACU	3	2	Yes	Tree	Occasional
Quercus rubra	Red Oak	FACU	3	5	Yes	Tree	Uncommon
Quercus velutina	Black Oak	UPL	5	6	Yes	Tree	Occasional
RHAMNUS CATHARTICA	Common buckthorn	FAC	0	*	No	Ad. Tree	Uncommon
Rhus typhina	Staghorn Sumac	FACU	3	2	Yes	Shrub	Uncommon
ROSA MULTIFLORA	Multiflora Rose	FACU	3	*	No	Ad. Shrub	Uncommon
Rubus allegheniensis	Blackberry	FACU	3	1	Yes	Shrub	Occasional
Rubus occidentalis	Black Raspberry	UPL	5	1	Yes	Shrub	Occasional
RUMEX CRISPUS	Curly Dock	FAC	0	*	No	Ad. Forb	Occasional
Solidago altissima	Tall Goldenrod	FACU	3	1	Yes	Forb	Occasional
Solidago canadensis	Canada Goldenrod	FACU	3	1	Yes	Forb	Occasional
Toxicodendron radicans	Poison-Ivy	FAC	0	2	Yes	Vine	Common
VERBASCUM THAPSUS	Mullein	UPL	5	*	No	Ad. Forb	Uncommon
Count = 33	**Average Wetness Co-efficient =**		**2.5**				
	Average Conservation Co-efficient =			**2.1**			

Table 3. Species list including scientific and common name, wetness indicator code (WET), wetness co-efficient (W), conservation co-efficent (C), nativity, physiognomy, and occurrence of species identified at Powell Road and Grand River Drive project site - Wetland

Scientific Name	Common Name	WET	W	C	Native	Physiognomy	Occurrence
Acer negundo	Box-elder	FAC	0	0	Yes	Tree	Common
Acer rubrum	Red Maple	FAC	0	1	Yes	Tree	Occasional
Acer saccharinum	Silver Maple	FACW	-3	2	Yes	Tree	Uncommon
Apocynum cannabinum	Indian-hemp	FAC	0	3	Yes	Forb	Occasional
Carex intumescens	Sedge	FACW	-3	3	Yes	Sedge	Occasional
Carex stricta	Sedge	OBL	-5	4	Yes	Sedge	Common
Carex vulpinoidea	Sedge	OBL	-5	1	Yes	Sedge	Common
Cornus amomum	Silky Dogwood	FACW	-3	2	Yes	Shrub	Occasional
Cornus foemina/racemosa	Gray Dogwood	FAC	0	1	Yes	Shrub	Occasional
ELAEAGNUS UMBELLATA	Autumn-olive	FACU	3	*	No	Ad. Shrub	Uncommon
FRANGULA ALNUS	GLOSSY FALSE BUCKTHORN	FAC	0	*	No	Ad. Shrub	Common
Fraxinus nigra	Black Ash	FACW	-3	6	Yes	Tree	Uncommon
Geum laciniatum	Rough Avens	FACW	-3	2	Yes	Forb	Occasional
Glyceria striata	Fowl Manna Grass	OBL	-5	4	Yes	Grass	Occasional
Iris versicolor	Blue Flag Iris	OBL	-5	5	Yes	Forb	Uncommon
Onoclea sensibilis	Sensitive Fern	FACW	-3	2	Yes	Forb	Occasional
Phalaris arundinacea	Reed Canary Grass	FACW	-3	0	Yes	Grass	Abundant
Populus deltoides	Cottonwood	FAC	0	1	Yes	Tree	Abundant
RHAMNUS CATHARTICA	Common Buckthorn	FAC	0	*	No	Ad. Shrub	Occasional
Rubus strigosus	Red Raspberry	FAC	0	2	Yes	Shrub	Uncommon
SALIX ALBA	White Willow	FACW	-3	*	No	Ad. Tree	Uncommon
SALIX FRAGILIS	Crack Willow	FAC	0	*	No	Ad. Tree	Uncommon
Scirpus cyperinus	Woolgrass	OBL	-5	5	Yes	Sedge	Uncommon
Solidago gigantea	Late Goldenrod	FACW	-3	3	Yes	Forb	Occasional
SOLANUM DULCAMARA	Bittersweet Nightshade	FAC	0	*	No	Ad. Vine	Common
Symphyotrichum lateriflorum	Calico Aster	FAC	0	2	Yes	Forb	Occasional
Toxicodendron radicans	Poison-Ivy	FAC	0	2	Yes	Vine	Occasional
Ulmus americana	American Elm	FACW	-3	1	Yes	Tree	Occasional
Vitis riparia	Riverbank Grape	FAC	0	3	Yes	Vine	Common
Count = 29	**Average Wetness Co-efficient =**		**-1.79**				
	Average Conservation Co-efficient =			**2.4**			

APPENDIX III

Tree Survey Results Table (MW; 2016)

Tree Survey Data - Powell Rd & Grand River Site

Tag #	Scientific Name	Common Name	DBH	Condition	Multiple
1	*Quercus alba*	White Oak	20.5	Good	
2	*Quercus alba*	White Oak	33	Good	
3	*Acer saccharum*	Sugar Maple	14.5	Good	
4	*Ailanthus altissima*	Tree of Heaven	12.5	Good	
5	*Quercus alba*	White Oak	32	Good	
6	*Acer saccharum*	Sugar Maple	28	Good	
7	*Acer saccharum*	Sugar Maple	12	Good	
8	*Acer saccharum*	Sugar Maple	12	Good	
9	*Acer saccharum*	Sugar Maple	12	Good	
10	*Acer saccharum*	Sugar Maple	13	Good	
11	*Acer saccharum*	Sugar Maple	15	Good	
13	*Acer saccharum*	Sugar Maple	15	Good	
14	*Acer saccharum*	Sugar Maple	13.5	Good	
15	*Acer saccharum*	Sugar Maple	13	Good	
16	*Acer negundo*	Box Elder	16.5	Fair	
17	*Salix fragilis*	Crack Willow	56	Fair	
18	*Acer saccharum*	Sugar Maple	21	Good	
19	*Acer saccharum*	Sugar Maple	14	Good	
20	*Acer saccharum*	Sugar Maple	18	Good	
21	*Acer saccharum*	Sugar Maple	13.5	Good	
22	*Acer saccharum*	Sugar Maple	12.5	Good	
23	*Acer negundo*	Box Elder	18.5	Good	
24	*Acer saccharum*	Sugar Maple	17	Good	
25	*Acer saccharum*	Sugar Maple	19	Good	
26	*Acer saccharum*	Sugar Maple	19.5	Good	
27	*Acer negundo*	Box Elder	17	Good	
28	*Populus deltoides*	Cottonwood	28	Good	
29	*Populus deltoides*	Cottonwood	34	Good	
30	*Populus deltoides*	Cottonwood	13	Good	
31	*Populus deltoides*	Cottonwood	19	Good	
32	*Populus deltoides*	Cottonwood	19	Good	
33	*Tilia americana*	Basswood	12	Good	
34	*Ulmus americana*	American Elm	22	Good	
35	*Acer negundo*	Box Elder	14	Fair	
36	*Acer saccharum*	Sugar Maple	15	Good	
37	*Acer saccharum*	Sugar Maple	15.5	Good	
38	*Acer negundo*	Box Elder	12.5	Good	
39	*Acer saccharum*	Sugar Maple	20	Good	
40	*Acer saccharum*	Sugar Maple	12.5	Good	
41	*Acer saccharum*	Sugar Maple	12	Good	

42	*Acer saccharum*	Sugar Maple	12	Good	
43	*Acer saccharum*	Sugar Maple	13	Good	
44	*Acer saccharum*	Sugar Maple	13	Good	
45	*Acer saccharum*	Sugar Maple	26	Good	
46	*Picea abies*	Norway Spruce	12	Good	
47	*Acer saccharum*	Sugar Maple	26	Good	
48	*Acer saccharum*	Sugar Maple	13	Good	
49	*Acer saccharum*	Sugar Maple	22	Good	
50	*Acer negundo*	Box Elder	14	Good	
51	*Quercus rubra*	Red Oak	15	Fair	
52	*Quercus rubra*	Red Oak	24.5	Good	
53	*Quercus rubra*	Red Oak	13	Good	
54	*Quercus rubra*	Red Oak	13	Good	
55	*Quercus rubra*	Red Oak	19	Good	
56	*Ulmus americana*	American Elm	15	Good	
57	*Pinus sylvestris*	Scotch Pine	12.5	Good	
58	*Quercus rubra*	Red Oak	17	Good	
59	*Acer negundo*	Box Elder	17	Good	
60	*Acer negundo*	Box Elder	12.5	Good	
61	*Acer negundo*	Box Elder	15.5	Good	
62	*Acer negundo*	Box Elder	15	Good	
63	*Pinus sylvestris*	Scotch Pine	12	Good	
64	*Pinus sylvestris*	Scotch Pine	12	Good	
65	*Pinus sylvestris*	Scotch Pine	13	Good	
66	*Acer negundo*	Box Elder	13.5	Good	
67	*Acer negundo*	Box Elder	16,17	Fair	M
68	*Acer negundo*	Box Elder	15.5	Fair	
69	*Acer negundo*	Box Elder	19,16.5	Fair	M
70	*Acer negundo*	Box Elder	12.5	Fair	
71	*Acer negundo*	Box Elder	22	Fair	
72	*Populus deltoides*	Cottonwood	19	Fair	
73	*Populus deltoides*	Cottonwood	30.5	Good	
74	*Populus deltoides*	Cottonwood	15.5	Fair	
75	*Ulmus pumila*	Siberian Elm	18	Fair	
76	*Celtis occidentalis*	Hackberry	12	Good	
77	*Prunus serotina*	Black Cherry	15	Good	
78	*Celtis occidentalis*	Hackberry	14	Good	
79	*Prunus serotina*	Black Cherry	12	Good	
80	*Prunus serotina*	Black Cherry	13	Good	
81	*Acer negundo*	Box Elder	16	Fair	
82	*Prunus serotina*	Black Cherry	19.5	Fair	
83	*Acer negundo*	Box Elder	18	Fair	
84	*Ulmus pumila*	Siberian Elm	22.5	Fair	

85	*Populus deltoides*	Cottonwood	28.5	Good	
86	*Prunus serotina*	Black Cherry	16	Fair	
87	*Ulmus americana*	American Elm	16	Fair	
88	*Prunus serotina*	Black Cherry	16	Good	
89	*Pinus resinosa*	Red Pine	15	Good	
90	*Pinus resinosa*	Red Pine	14.5	Good	
91	*Prunus serotina*	Black Cherry	16.5	Good	
92	*Prunus serotina*	Black Cherry	17	Fair	
93	*Acer negundo*	Box Elder	19	Fair	
94	*Juglans nigra*	Black Walnut	13	Good	
95	*Populus deltoides*	Cottonwood	14.5	Good	
96	*Pinus strobus*	White Pine	20.5	Good	
97	*Pinus sylvestris*	Scotch Pine	14.5	Fair	
98	*Ulmus americana*	American Elm	24	Good	
99	*Acer saccharum*	Sugar Maple	15.5	Good	
100	*Ulmus pumila*	Siberian Elm	12,13,13	Fair	M
101	*Pinus sylvestris*	Scotch Pine	15	Good	
102	*Acer rubrum*	Red Maple	14	Good	
103	*Ulmus pumila*	Siberian Elm	12,12	Good	M
104	*Ulmus americana*	American Elm	18	Good	
105	*Sassafras albidum*	Sassafras	15.5	Fair	
106	*Sassafras albidum*	Sassafras	19	Poor	
107	*Acer rubrum*	Red Maple	23	Good	
108	*Acer saccharum*	Sugar Maple	28	Good	
109	*Quercus alba*	White Oak	26	Good	
110	*Acer saccharum*	Sugar Maple	19	Good	
111	*Acer saccharum*	Sugar Maple	31	Good	
112	*Acer saccharum*	Sugar Maple	24.5	Good	
113	*Pinus sylvestris*	Scotch Pine	18	Good	
114	*Prunus serotina*	Black Cherry	14	Good	
115	*Juglans nigra*	Black Walnut	24	Good	
116	*Juglans nigra*	Black Walnut	20	Good	
117	*Juglans cinerea*	Butternut	29	Good	
118	*Juglans nigra*	Black Walnut	13	Fair	
119	*Juglans nigra*	Black Walnut	14.5	Good	
120	*Juglans nigra*	Black Walnut	12	Good	
121	*Juglans nigra*	Black Walnut	12	Good	
122	*Juglans nigra*	Black Walnut	13.5	Good	
123	*Ulmus americana*	American Elm	13	Good	
124	*Prunus serotina*	Black Cherry	17	Good	
125	*Juglans nigra*	Black Walnut	24	Good	
126	*Juglans nigra*	Black Walnut	18,15,17	Good	M
127	*Juglans nigra*	Black Walnut	16	Good	

128	*Juglans nigra*	Black Walnut	17	Good	
129	*Juglans nigra*	Black Walnut	17.5	Good	
130	*Juglans nigra*	Black Walnut	15	Good	
131	*Juglans nigra*	Black Walnut	19	Good	
132	*Acer negundo*	Box Elder	14	Fair	
133	*Acer negundo*	Box Elder	14	Good	
134	*Juglans nigra*	Black Walnut	19	Good	
135	*Acer negundo*	Box Elder	12,13,12	Good	M
136	*Populus deltoides*	Cottonwood	17	Good	
137	*Juglans nigra*	Black Walnut	17	Good	
138	*Ulmus americana*	American Elm	25	Good	
139	*Juglans nigra*	Black Walnut	16.5	Good	
140	*Juglans nigra*	Black Walnut	14.5	Good	
141	*Pinus sylvestris*	Scotch Pine	14.5	Good	
142	*Pinus sylvestris*	Scotch Pine	14.5	Good	
143	*Pinus sylvestris*	Scotch Pine	15	Good	
144	*Acer saccharum*	Sugar Maple	26	Good	

TOTALS

	Scientific Name	**Common Name**	**Count**
1	*Acer negundo*	Box Elder	22
2	*Acer rubrum*	Red Maple	2
3	*Acer saccharum*	Sugar Maple	36
4	*Ailanthus altissima*	Tree of Heaven	1
5	*Celtis occidentalis*	Hackberry	2
6	*Juglans nigra*	Black Walnut	41
7	*Juglans cinerea*	Butternut	1
8	*Picea abies*	Norway Spruce	1
9	*Pinus resinosa*	Red Pine	2
10	*Pinus strobus*	White Pine	1
11	*Populus deltoides*	Cottonwood	11
12	*Prunus serotina*	Black Cherry	10
13	*Quercus alba*	White Oak	4
14	*Quercus rubra*	Red Oak	6
15	*Salix fragilis*	Crack Willow	1
16	*Sassafras albidum*	Sassafras	2
17	*Tilia americana*	Basswood	1
18	*Ulmus americana*	American Elm	7
19	*Ulmus pumila*	Siberian Elm	4

APPENDIX IV

Wetland Verification Application Package

MW's Wetland Determination Report (2016)

SITE PLAN (Dated 6-5-2019)

MARX
WETLANDS
LLC

February 16, 2016

Amanda Hopper
5485 Martinique Circle
East Lansing, MI 48823

Re: Wetland Determination Report
Parcels 33-02-02-22-046-006 and 007
Meridian Township, Ingham County, MI

Pursuant to your request, Marx Wetlands LLC conducted a wetland evaluation for the above-referenced site. The intent of this determination is to provide a report of the character of the wetland areas within the subject parcel and an opinion as to the possible jurisdiction of the Michigan Department of Environmental Quality (MDEQ) over wetland areas identified on-site.

The wetland delineation was performed in accordance with the Northcentral-Northeast Interim Regional Supplement 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 field delineation was performed on November 9, 2015. A review of the findings is presented below.

The Assessment Area consists of approximately acres of mostly vacant land with one house located on the northwest corner of Powell Road and Grand River Avenue in Okemos, MI, in Section 22 of Meridian Township, Ingham County, Michigan. The Assessment Area is a more or less rectangular site bounded on the south by Grand River Avenue, the east by Powell Road, the west by professional offices, and by vacant land on the north. The site is largely forested with a variety of tree species. The topography of the site is steeply sloping except in the northeast part, where there is flatter wetland area.

Information gathered from site reconnaissance indicates that much of the site appears to be wetland. This is identified on the Wetland Survey included as an attachment.

2990 Lake Lansing Rd.
Suite 201
East Lansing, MI 48823
Tel: 517.333.8833
Mobile: 517.898.4187
e-mail
gmarx@marxwetlands.com

Wetland A occupies approximately one acre on the site in its northeast corner and extends slightly off the site to the north. This wetland area was observed to have primarily emergent and scrub shrub characteristics. The dominant wetland flora consisted of common buckthorn (*Rhamnus cathartica*), side flower aster (*Symphiotrichum lateriflorum*), reed canary grass (*Phalaris arundinacea*), lake sedge (*Carex lacustris*), softstem bulrush (*Juncus effuses*), rough avens (Geum laciniatum), woolgrass (*Scirpus cyperinus*), blueflag iris (*Iris versicolor*), box elder (*Acer negundo*), and American elm (*Ulmus americana*). These species range in wetland indicator status from FAC to OBL, which indicates that they typically occur in wetlands. These areas appeared to receive their hydrology from stormwater runoff, precipitation, seasonal snow melt and runoff from adjacent upland areas. At the time of the delineation, the hydrology was observed to include saturated soils present in some of the wetland area.

Wetland B occupies a small low area in the northwest part of the site. This wetland area was observed to have primarily emergent vegetation characteristics with a forested frings. The dominant wetland flora consisted of reed canary grass (*P. arundinacea*), green ash (*Fraxinus pennsylvanica*), box elder (*A. negundo*), silky dogwood (*Cornus amomum*), and sandbar willow (*Salix exigua*). These species range in wetland indicator status from FAC to OBL, which indicates that they typically occur in wetlands. These areas appeared to receive their hydrology from stormwater runoff, precipitation, seasonal snow melt and runoff from adjacent upland areas. At the time of the delineation, the hydrology was observed to include saturated soils present in much of the wetland area.

Marx Wetlands LLC has determined that both of the wetland areas appear to meet the requirements of Part 303, Wetlands Protection, of the NREPA, and appears to fall under the jurisdiction of the MDEQ and Meridian Township.

Part 303, MDEQ Wetlands Protection, states that if a wetland is five acres or larger and/or connected to or located within 500 feet of a river, stream, watercourse, lake or pond, it would be regulated. Both wetlands appear to be within 500 feet of the pond immediately to the northwest of the site. Consequently, it was determined that they should therefore, be considered regulated by the MDEQ.

A permit is required by the MDEQ and 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 permit from the MDEQ. In addition, the muck soils present on the site are not suitable for building construction.

Please be advised the information provided in this report is a professional opinion. The ultimate decision on wetland boundary locations and jurisdiction thereof rests with the MDEQ and, in some cases, the Federal government. Therefore, there may be adjustments to boundaries based upon review of 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 with time, depending on the weather, vegetation patterns, drainage, activities on adjacent parcels, or other events. Any of these factors can change the nature / extent of wetlands on the site.

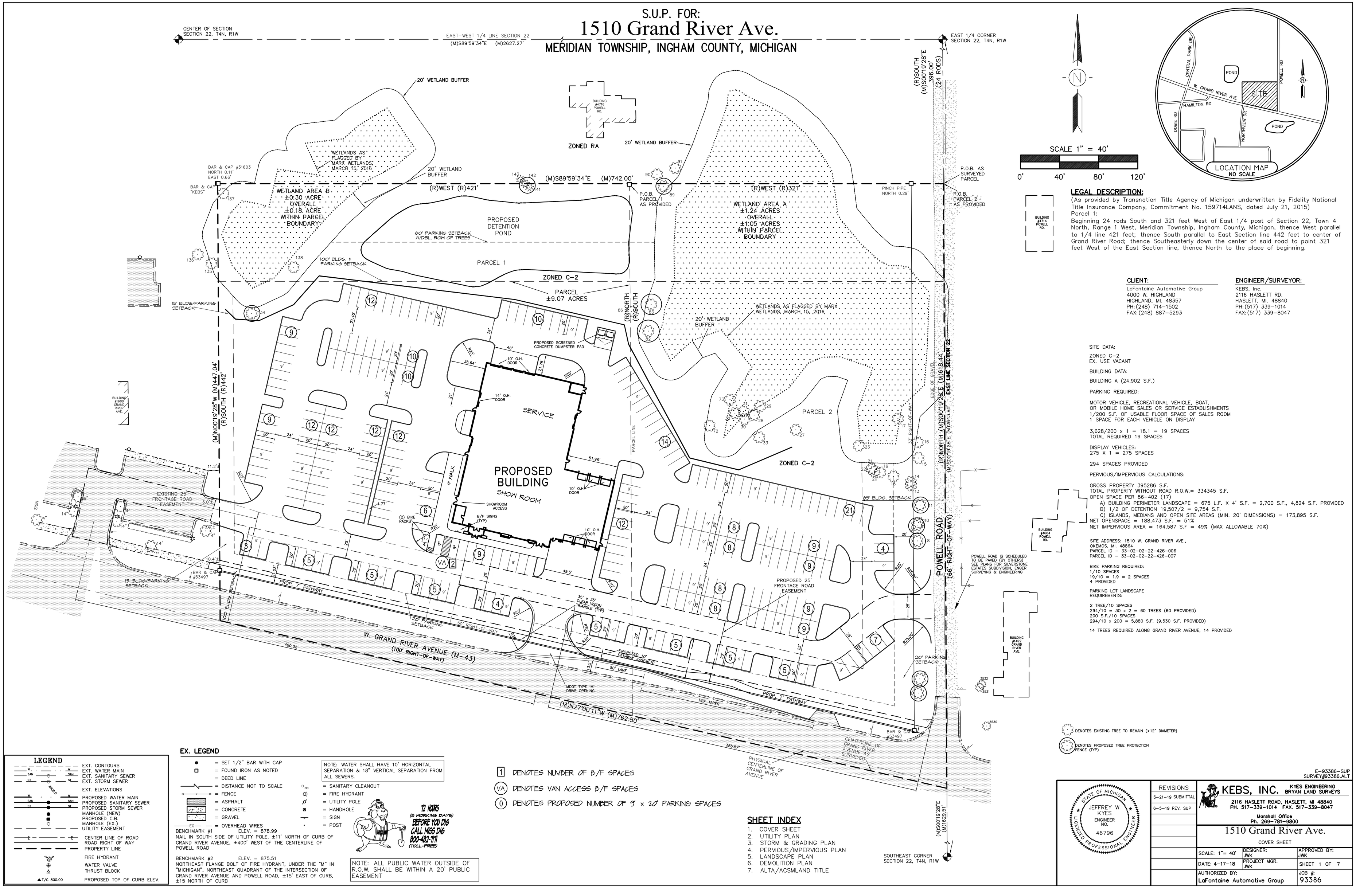
Thank you for the opportunity to provide this wetland determination. If you have any questions, please contact me at your convenience.

Sincerely,

Marx Wetlands LLC
Gary F. Marx

Attachment

S.U.P. FOR:
1510 Grand River Ave.
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN



LEGAL DESCRIPTION:
(As provided by Transnation Title Agency of Michigan underwritten by Fidelity National Title Insurance Company, Commitment No. 159714LANS, dated July 21, 2015)
Parcel 1:
Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

CLIENT:
LaFontaine Automotive Group
4000 W. HIGHLAND
HIGHLAND, MI. 48357
PH: (248) 714-1502
FAX: (248) 887-5293

ENGINEER/SURVEYOR:
KEBS, Inc.
2116 HASLETT RD.
HASLETT, MI. 48840
PH: (517) 339-1014
FAX: (517) 339-8047

SITE DATA:

ZONED C-2
EX. USE VACANT

BUILDING DATA:

BUILDING A (24,902 S.F.)

PARKING REQUIRED:

MOTOR VEHICLE, RECREATIONAL VEHICLE, BOAT, OR MOBILE HOME SALES OR SERVICE ESTABLISHMENTS
1/200 S.F. OF USABLE FLOOR SPACE OF SALES ROOM
1 SPACE FOR EACH VEHICLE ON DISPLAY

3,628/200 x 1 = 18.1 = 19 SPACES
TOTAL REQUIRED 19 SPACES

DISPLAY VEHICLES:
275 X 1 = 275 SPACES

294 SPACES PROVIDED

PERVIOUS/IMPERVIOUS CALCULATIONS:

GROSS PROPERTY 395286 S.F.
TOTAL PROPERTY WITHOUT ROAD R.O.W.= 334345 S.F.
OPEN SPACE PER 86-402 (17)
A) BUILDING PERIMETER LANDSCAPE = 675 L.F. X 4' S.F. = 2,700 S.F., 4,824 S.F. PROVIDED
B) 1/2 OF DETENTION 19,507/2 = 9,754 S.F.
C) ISLANDS, MEDIANS AND OPEN SITE AREAS (MIN. 20' DIMENSIONS) = 173,895 S.F.
NET OPENSPACE = 188,473 S.F. = 51%
NET IMPERVIOUS AREA = 164,587 S.F = 49% (MAX ALLOWABLE 70%)

SITE ADDRESS: 1510 W. GRAND RIVER AVE.,
OKEMOS, MI. 48864
PARCEL ID - 33-02-02-22-426-006
PARCEL ID - 33-02-02-22-426-007

BIKE PARKING REQUIRED:
1/10 SPACES
19/10 = 1.9 = 2 SPACES
4 PROVIDED

PARKING LOT LANDSCAPE REQUIREMENTS:

2 TREE/10 SPACES
294/10 = 30 x 2 = 60 TREES (60 PROVIDED)
200 S.F./10 SPACES
294/10 x 200 = 5,880 S.F. (9,530 S.F. PROVIDED)

14 TREES REQUIRED ALONG GRAND RIVER AVENUE, 14 PROVIDED

DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)
DENOTES PROPOSED TREE PROTECTION FENCE (TYP)

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
▲T/C 800.00 PROPOSED TOP OF CURB ELEV.

EX. LEGEND

= SET 1/2" BAR WITH CAP
= FOUND IRON AS NOTED
= DEED LINE
= DISTANCE NOT TO SCALE
= FENCE
= ASPHALT
= CONCRETE
= GRAVEL
= OVERHEAD WIRES
= SANITARY CLEANOUT
= FIRE HYDRANT
= UTILITY POLE
= HANDHOLE
= SIGN
= POST

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

BENCHMARK #1 ELEV. = 878.99
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB

NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

[1] DENOTES NUMBER OF B/F SPACES
(VA) DENOTES VAN ACCESS B/F SPACES
(0) DENOTES PROPOSED NUMBER OF 9' x 20' PARKING SPACES

SHEET INDEX

1. COVER SHEET
2. UTILITY PLAN
3. STORM & GRADING PLAN
4. PERVIOUS/IMPERVIOUS PLAN
5. LANDSCAPE PLAN
6. DEMOLITION PLAN
7. ALTA/ACSMLAND TITLE

STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER NO. 46796
LICENSED PROFESSIONAL ENGINEER

REVISIONS
5-21-19 SUBMITTAL
6-5-19 REV. SUP

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

1510 Grand River Ave.
COVER SHEET

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 1 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

E-93386-SUP
SURVEY#93386.ALT

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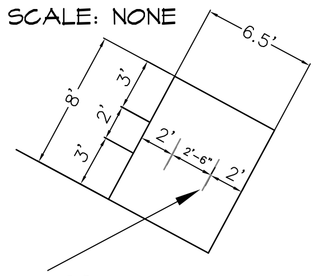
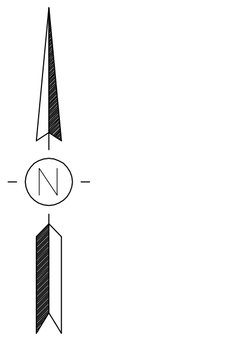
S.U.P. FOR:
1510 Grand River Ave.
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

BIKE RACK DETAIL
SCALE: NONE

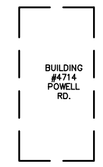


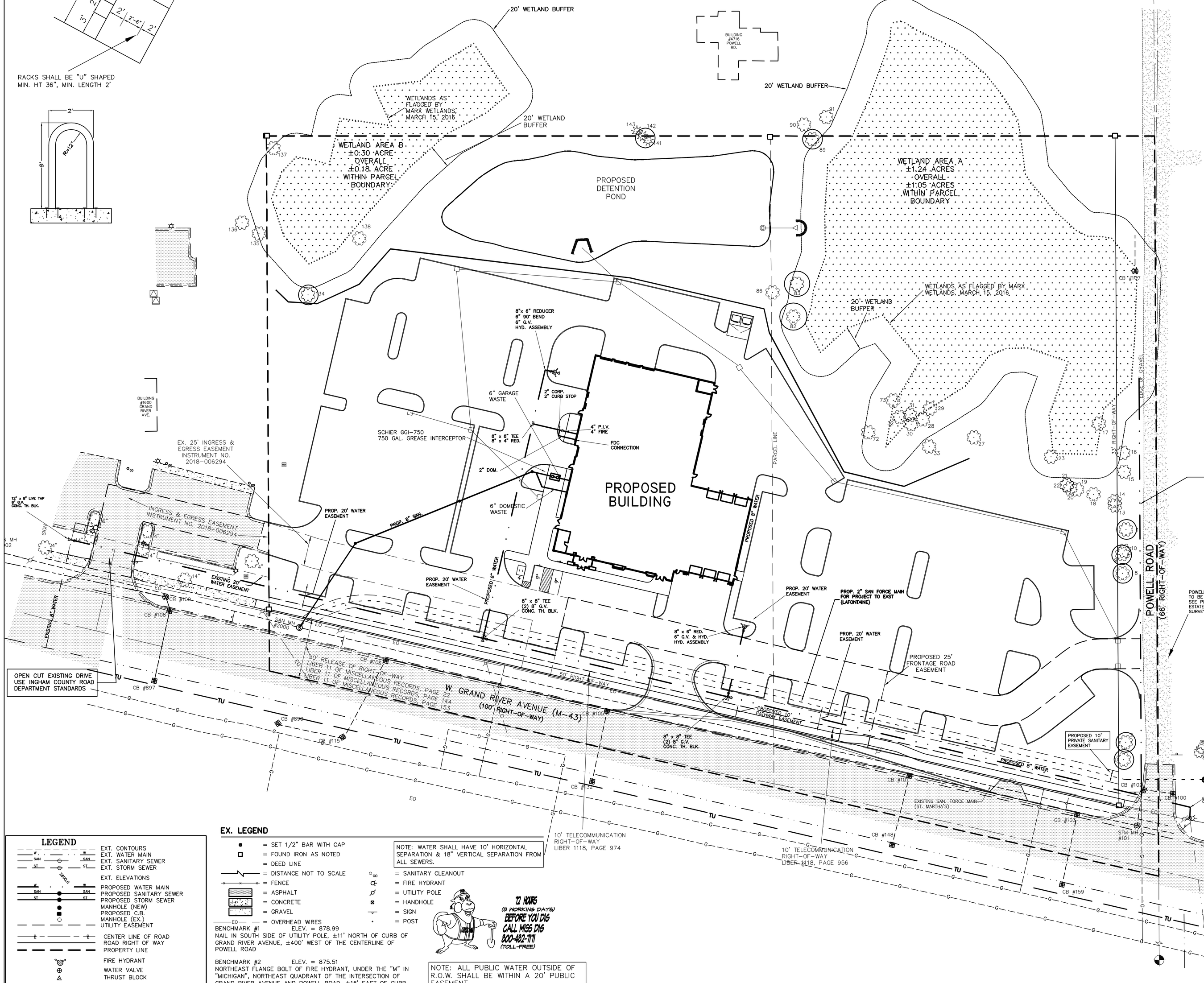
RACKS SHALL BE "U" SHAPED
MIN. HT 36", MIN. LENGTH 2'



SCALE 1" = 40'

0' 40' 80' 120'





SANITARY STRUCTURE INVENTORY

SANITARY MANHOLE #1002
RIM ELEV. = 876.20
12" STEEL SE INV. = 865.24
12" STEEL NW INV. = 865.18

SANITARY MANHOLE #2000
RIM ELEV. = 880.92
8" STEEL NE INV. = 873.66
6" STEEL SE INV. = 874.29
12" STEEL NW INV. = 873.22

STORM STRUCTURE INVENTORY

CATCH BASIN #26
RIM ELEV. = 871.64
12" RCP W INV. = 869.28

STORM MANHOLE #51
RIM ELEV. = 873.44
12" RCP N INV. = 868.48
18" RCP SE INV. = 867.95
18" RCP NW INV. = 868.04

CATCH BASIN #65
RIM ELEV. = 871.54
12" RCP E INV. = 868.63
12" RCP S INV. = 868.54

CATCH BASIN #74
RIM ELEV. = 874.19
18" RCP SE INV. = 868.27
12" RCP SW INV. = 868.70
18" RCP NW INV. = 868.43

CATCH BASIN #83
RIM ELEV. = 875.62
18" RCP SE INV. = 869.03
12" RCP SW INV. = 869.17
18" RCP NW INV. = 869.03

CATCH BASIN #96
RIM ELEV. = 878.07
18" RCP SE INV. = 869.57
12" RCP SW INV. = 869.65
12" RCP NW INV. = 869.61

CATCH BASIN #105
RIM ELEV. = 879.86
12" RCP SE INV. = 870.70
12" RCP SW INV. = 870.70

CATCH BASIN #115
RIM ELEV. = 879.93
12" RCP NE INV. = 871.41
12" RCP NW INV. = 871.61

CATCH BASIN #132
RIM ELEV. = 878.34
12" RCP NE INV. = 873.44

CATCH BASIN #148
RIM ELEV. = 875.75
12" RCP NE INV. = 872.23

CATCH BASIN #159
RIM ELEV. = 874.28
12" RCP NE INV. = 870.28

CATCH BASIN #890
RIM ELEV. = 879.85
12" RCP SE INV. = 872.55

CATCH BASIN #897
RIM ELEV. = 879.47
12" RCP NE INV. = 876.37

CATCH BASIN #987
RIM ELEV. = 857.44
8" RCP N INV. = 855.54

CATCH BASIN #2003
RIM ELEV. = 879.04
12" RCP SW INV. = 874.48
12" RCP NW INV. = 874.34

STORM MANHOLE #2029
RIM ELEV. = 879.38
12" RCP SE INV. = 873.86
12" RCP NW INV. = 873.51

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
- ▲T/C 800.00 PROPOSED TOP OF CURB ELEV.

EX. LEGEND

- = SET 1/2" BAR WITH CAP
- = FOUND IRON AS NOTED
- = DEED LINE
- = DISTANCE NOT TO SCALE
- = FENCE
- = ASPHALT
- = CONCRETE
- = GRAVEL
- = OVERHEAD WIRES
- = SANITARY CLEANOUT
- = FIRE HYDRANT
- = UTILITY POLE
- = HANDHOLE
- = SIGN
- = POST

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

BENCHMARK #1 ELEV. = 878.99
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB

NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER NO. 46796
LICENSED PROFESSIONAL ENGINEER

REVISIONS
5-21-19 SUBMITTAL
6-5-19 REV. SUP

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

1510 Grand River Ave.

UTILITY PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 2 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

E-93386-SUP
SURVEY#93386.ALT

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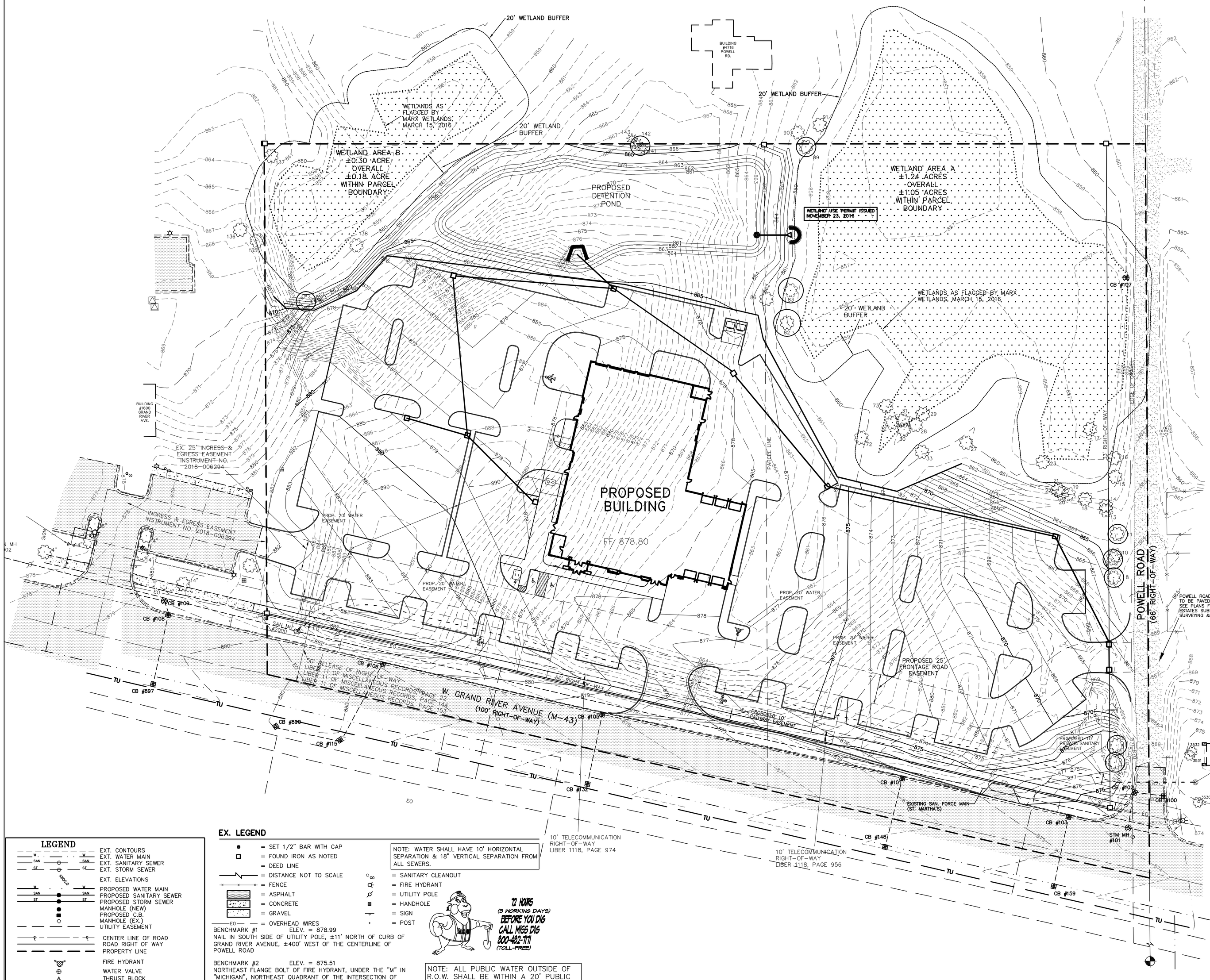
S.U.P. FOR:

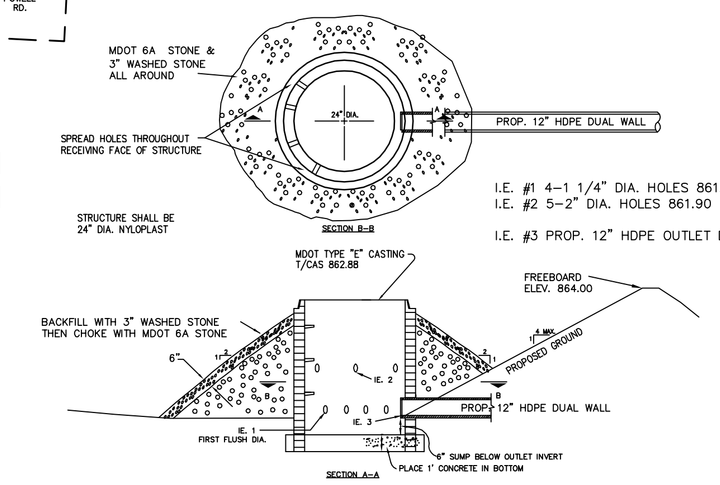
1510 Grand River Ave.

MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN



OS#1 OUTLET RISER DETAIL

NO SCALE



DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)

DENOTES PROPOSED TREE PROTECTION FENCE (TYP)

LEGEND

- EXT. CONTOURS
- EXT. WATER MAIN
- EXT. SANITARY SEWER
- EXT. STORM SEWER
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NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB

72 HOURS (3 WORKING DAYS) BEFORE YOU DIG CALL MISS DIG 800-482-7171 (TOLL-FREE)

NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

STATE OF MICHIGAN
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1510 Grand River Ave.

STORM & GRADING PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 3 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

E-93386-SUP
SURVEY#93386.ALT

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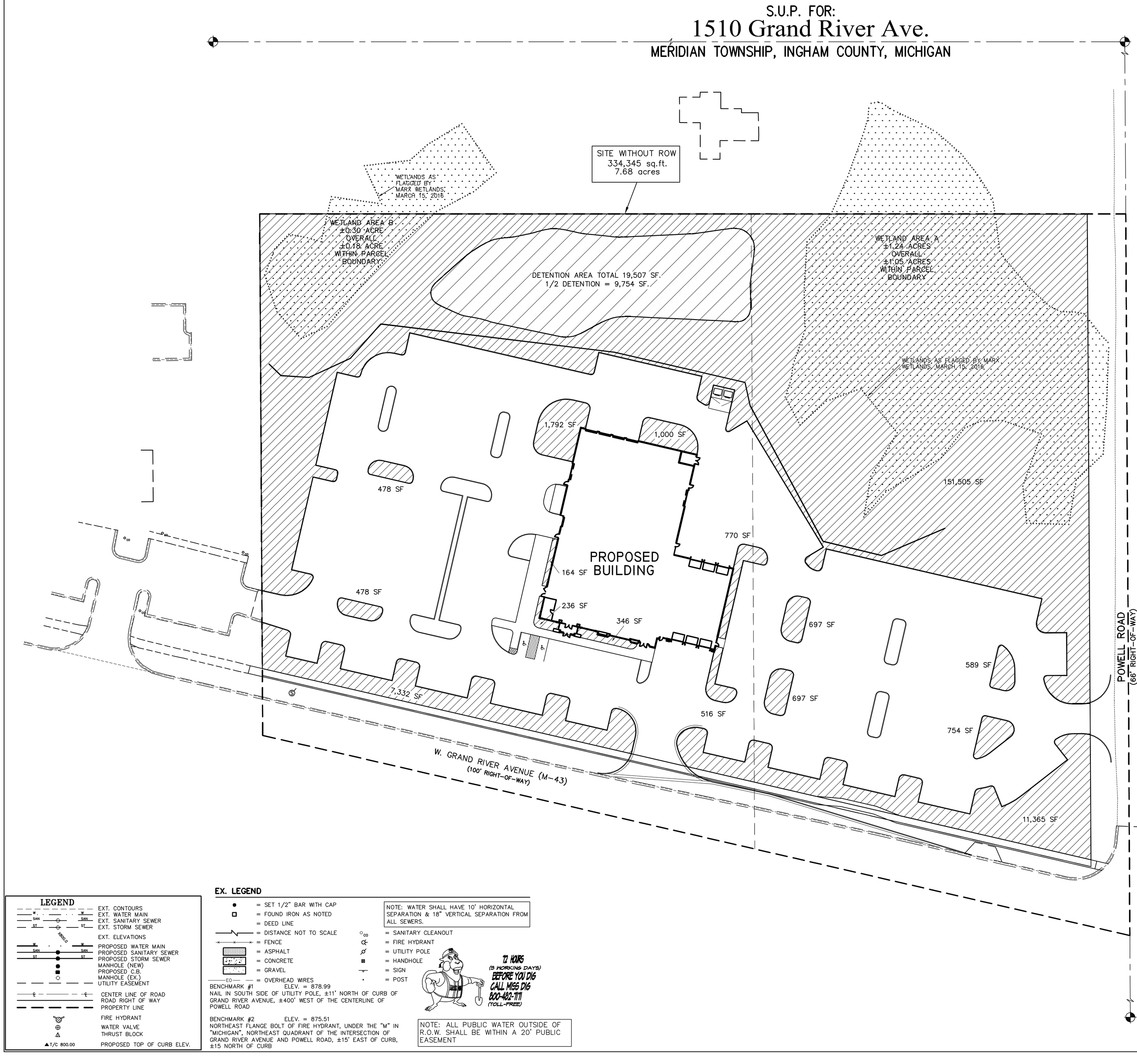
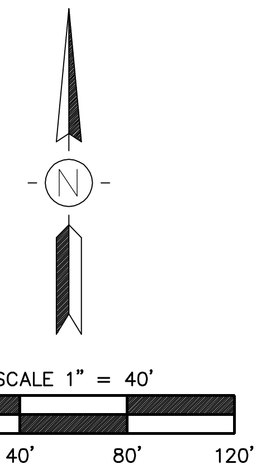
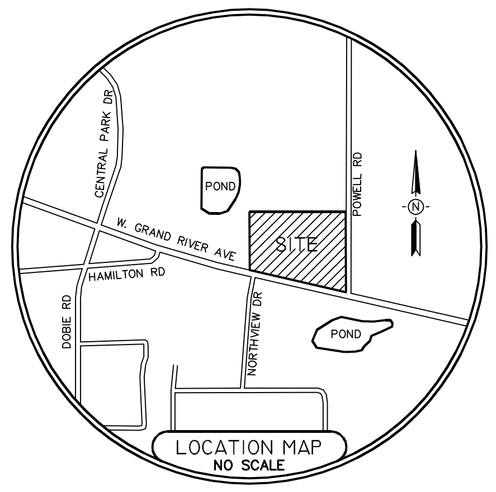
S.U.P. FOR:

1510 Grand River Ave.

MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN







PERVIOUS/IMPERVIOUS CALCULATIONS:

GROSS PROPERTY 395286 S.F.
TOTAL PROPERTY WITHOUT ROAD R.O.W.= 334345 S.F.
OPEN SPACE PER 86-402 (17)
A) BUILDING PERIMETER LANDSCAPE = 675 L.F. X 4' S.F. = 2,700 S.F., 4,824 S.F. PROVIDED
B) 1/2 OF DETENTION 19,507/2 = 9,754 S.F.
C) ISLANDS, MEDIANS AND OPEN SITE AREAS (MIN. 20' DIMENSIONS) = 173,895 S.F.
NET OPENSPACE = 188,473 S.F. = 51%
NET IMPERVIOUS AREA = 164,587 S.F = 49% (MAX ALLOWABLE 70%)

LEGEND

- EXT. CONTOURS
- EXT. WATER MAIN
- EXT. SANITARY SEWER
- EXT. STORM SEWER
- EXT. ELEVATIONS
- PROPOSED WATER MAIN
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NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

E-93386-SUP
SURVEY#93386.ALT

STATE OF MICHIGAN
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REVISIONS
5-21-19 SUBMITTAL
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PERVIOUS/IMPERVIOUS PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 4 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

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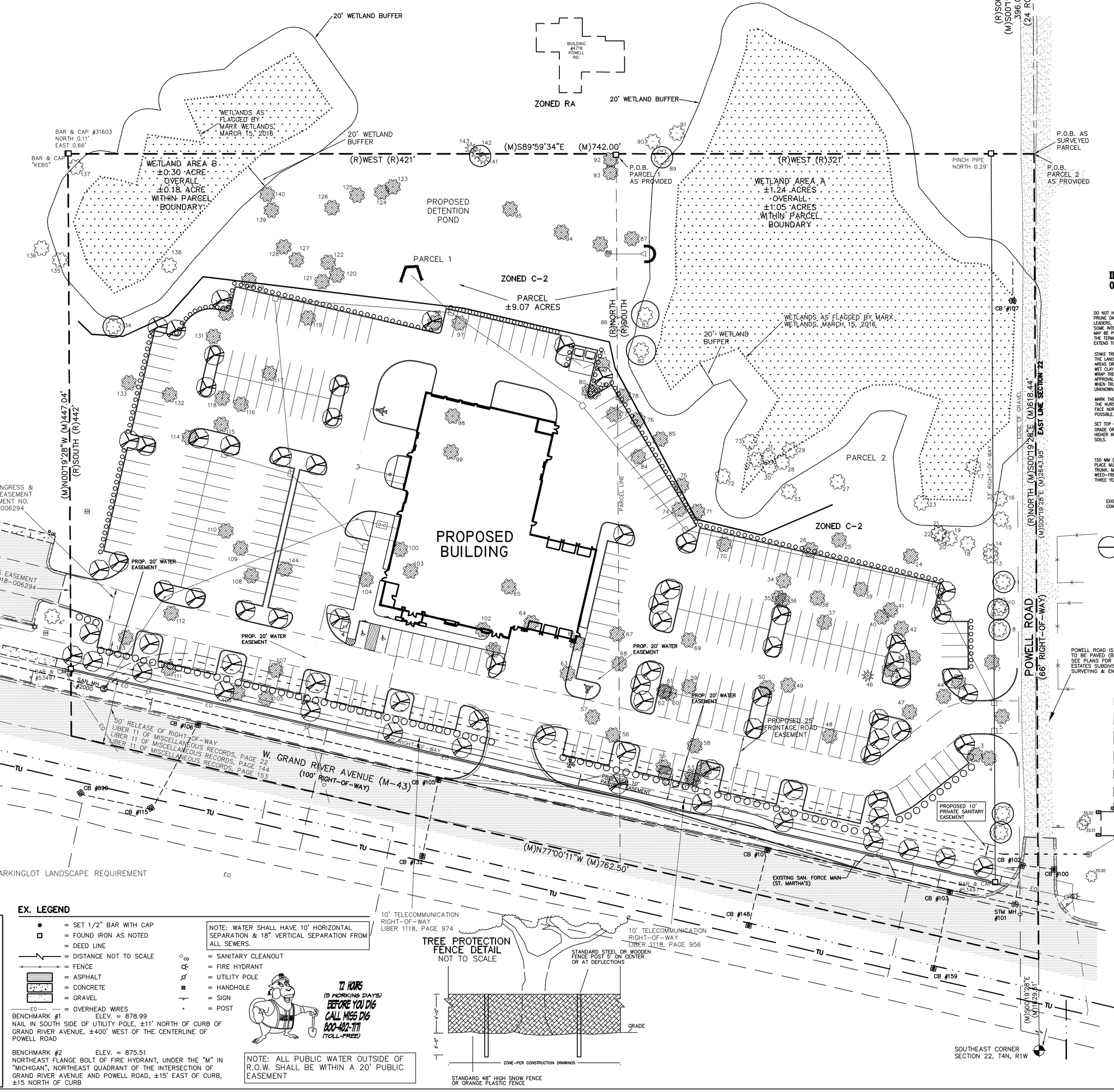
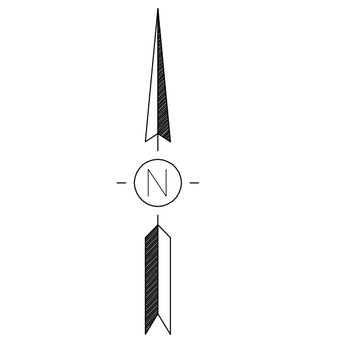
S.U.P. FOR:
1510 Grand River Ave.
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN





LEGAL DESCRIPTION:

(As provided by Transnation Title Agency of Michigan underwritten by Fidelity National Title Insurance Company, Commitment No. 159714LANS, dated July 21, 2015)

Parcel 1:

Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

LANDSCAPE NOTES

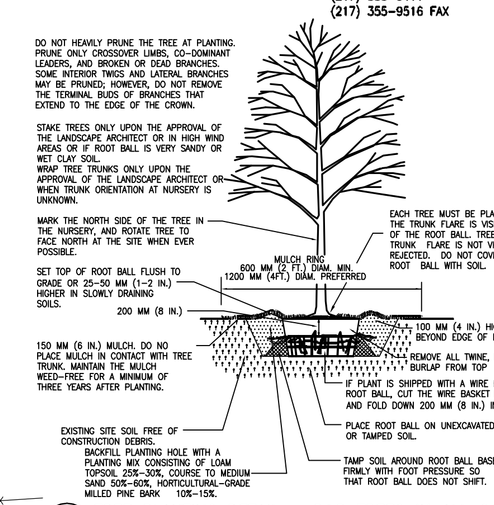
1. INSTALL 3" X 12 GA. EDGING TO SEPARATE LAWN FROM PLANTING BED. (AROUND SHRUBS ONLY)
2. INSTALL 3" DEEP SHREDDED BARK MULCH TO ALL PLANTING AREAS/BEDS AND TREE SAUCERS (NO POLY-FILM).
3. INSTALL A KENTUCKY BLUEGRASS SOD (SUN/SHADE) VARIETY) THAT IS FREE OF WEEDS.

3A. SEED AREAS WITH THE FOLLOWING:
- 25# SYDSPORT KENTUCKY BLUEGRASS
- 20# MASTER KENTUCKY BLUEGRASS
- 10# PARK KENTUCKY BLUEGRASS
- 10# ANNUAL RYE GRASS

APPLY AT THE RATE OF 2 TO 3 LBS. PER 1,000 SQUARE FOOT.

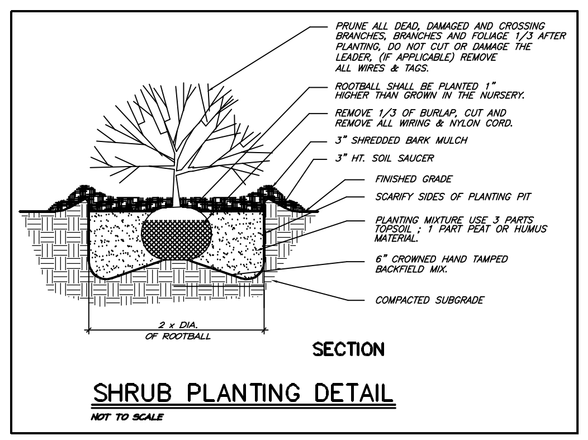
4. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES, AS WELL AS THE LOCATION OF EXISTING TREES AND VEGETATION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COST INCURRED DUE TO DAMAGE/REMOVAL OF SAID ELEMENTS.
5. ANY DISCREPANCIES BETWEEN PLANS, NOTES, DETAILS AND EXISTING CONDITIONS SHALL BE IMMEDIATELY REPORTED TO THE OWNER'S AUTHORIZED REPRESENTATIVE FOR REVIEW AND DECISION. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
6. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING MATERIALS/IMPROVEMENTS, DAMAGED DURING CONSTRUCTION.
7. SITE BOUNDARY, TOPOGRAPHY, UTILITIES AND OTHER BASE INFORMATION PROVIDED BY OTHERS.
8. CONTRACTOR SHALL VERIFY QUANTITIES SHOWN ON PLANT SCHEDULES AND THOSE INDICATED ON PLANS. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF QUANTITIES SHOWN.
9. CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO PLANT MATERIAL LOCATIONS IN FIELD, AS NECESSARY. THE LOCATION OF ALL PLANT MATERIAL SHALL BE SUBJECT TO APPROVAL BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
10. ALL PLANT MATERIAL SHALL BE OF THE SIZES CALLED FOR IN THE PLANT SCHEDULES. ANY PLANT MATERIAL NOTED TO BE SIZED LARGER SHALL BE AT NO ADDITIONAL COST TO THE OWNER. ALL TREES SHALL BE INSPECTED AND APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE. NO SUBSTITUTIONS OF PLANT MATERIAL SHALL BE MADE WITHOUT APPROVAL FROM THE OWNER'S AUTHORIZED REPRESENTATIVE.
11. ALL PROPOSED TREES OVER 3" CAL. SHALL BY GUYED/STAKED SECURE, SEE EVERGREEN TREE PLANTING/GUYING DETAIL, OR DECIDUOUS TREES PLANTING/STAKING DETAIL WHERE APPLICABLE.
12. ALL PLANTING BEDS TO BE TREATED WITH PRE-EMERGENT HERBICIDE. CONTRACTOR SHALL INSURE THAT PRODUCT IS APT MATERIAL IS APPROPRIATE TO THE INTENDED USE AND THAT HERBICIDE IS APPLIED AT LABEL RATE AND IN ACCORDANCE WITH LABEL INSTRUCTIONS AND IS APPLIED IN ACCORDANCE WITH SOUND HORTICULTURAL PRACTICES.
13. CONTRACTOR SHALL DETERMINE APPROPRIATE PLANTING BACKFILL MIXES (BASED ON SOIL/SUBSURFACE CONDITIONS) AND REVISE ALTERNATIVES WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.

INTERNATIONAL SOCIETY OF ARBORICULTURE
1400 WEST ANTHONY DRIVE
CHAMPAIGN, IL 61821
(217) 355-9411
(217) 355-9516 FAX



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.



SECTION

SHRUB PLANTING DETAIL

NOT TO SCALE

PARKING LOT LANDSCAPE REQUIREMENTS:

2 TREE/10 SPACES
298/10 = 29.8 x 2 = 60 TREES (60 PROVIDED)
1 SHRUB/200 SPACES
298/10 x 200 = 5,960 S.F. (9,530 S.F. PROVIDED)

DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)

DENOTES PROPOSED TREE PROTECTION FENCE (TYP)

14 TREES REQUIRED ALONG GRAND RIVER AVENUE, 14 PROVIDED

DENOTES TREES TO BE REMOVED (TYP)

SHRUBS 3' HIGH MIN. REQUIRED ON W. GRAND RIVER AVE.

E-93386-SUP
SURVEY#93386.ALT

LEGEND

- EXT. CONTOURS
- EXT. WATER MAIN
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- EXT. STORM SEWER
- EXT. ELEVATIONS
- PROPOSED WATER MAIN
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BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB

NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

TREE PROTECTION FENCE DETAIL
NOT TO SCALE

KEBS, INC.
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STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER NO. 46796
LICENSED PROFESSIONAL ENGINEER

REVISIONS
5-21-19 SUBMITTAL
6-5-19 REV. SUP

1510 Grand River Ave.
LANDSCAPE PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 5 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

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S.U.P. FOR:
1510 Grand River Ave.
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

CENTER OF SECTION
SECTION 22, T4N, R1W

EAST–WEST 1/4 LINE SECTION 22
(M)S89°59'34"E (M)2627.27'

EAST 1/4 CORNER
SECTION 22, T4N, R1W

(R)SOUTH (M)S00°19'28"E 396.00' (24 RODS)

20' WETLAND BUFFER

BUILDING #4716 POWELL RD.

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

BAR & CAP #31603
NORTH 0.11'
EAST 0.66'

BAR & CAP "KEBS"

(M)S89°59'34"E (M)742.00'

(R)WEST (R)421'

P.O.B. AS SURVEYED PARCEL

P.O.B. PARCEL 2 AS PROVIDED

P.O.B. PARCEL 1 AS PROVIDED

PINCH PIPE NORTH 0.29'

WETLAND AREA B
±0.30 ACRE
OVERALL
±0.18 ACRE
WITHIN PARCEL
BOUNDARY

(R)WEST (R)321'

WETLAND AREA A
±1.24 ACRES
OVERALL
±1.05 ACRES
WITHIN PARCEL
BOUNDARY

PARCEL 1

PARCEL
±9.07 ACRES

(R)NORTH (R)SOUTH

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

CB #107

PARCEL 2

PARCEL LINE

EDGE OF GRAVEL

RIGHT-OF-WAY

(M)N00°19'28"W (M)447.04'
(R)SOUTH (R)442'

(R)NORTH (M)S00°19'28"E (M)618.44'
(M)S00°19'28"E (M)2643.95'
EAST LINE SECTION 22

BUILDING #1600 GRAND RIVER AVE.

SIGN

CB #108

CB #109

BAR & CAP #53497

SAN. MH #2005

CB #106

CB #897

CB #896

CB #115

CB #105

CB #122

50' RIGHT-OF-WAY

W. GRAND RIVER AVENUE (M-43)
(100' RIGHT-OF-WAY)

(M)N77°00'11"W (M)762.50'

CB #104

CB #148

CB #159

EXISTING SAN. FORCE MAIN (ST. MARTHA'S)

DEMO ALL EXISTING CONCRETE / ASPHALT

DEMO
12" WALL

DEMO
1.5-STORY
FRAME/STUCCO BUILDING
#1510 GRAND RIVER AVE.

15.5'±
18.0'±
30.4'
16.9'
13.9'
70.1'±

BUILDING #1492 GRAND RIVER AVE.

BUILDING #4684 POWELL RD.

BAR & CAP #5349

CB #103

STM MH #101

CB #102

CB #100

SOUTHEAST CORNER
SECTION 22, T4N, R1W

SCALE 1" = 40'
0' 40' 80' 120'

LEGAL DESCRIPTION:
(As provided by Transnation Title Agency of Michigan underwritten by Fidelity National Title Insurance Company, Commitment No. 159714LANS, dated July 21, 2015)
Parcel 1:
Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

BUILDING #4714 POWELL RD.

DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)

DENOTES PROPOSED TREE PROTECTION FENCE (TYP)

DENOTES TREES TO BE REMOVED (TYP)

LEGEND

- EXT. CONTOURS
- EXT. WATER MAIN
- EXT. SANITARY SEWER
- EXT. STORM SEWER
- EXT. ELEVATIONS
- PROPOSED WATER MAIN
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- PROPOSED C.B.
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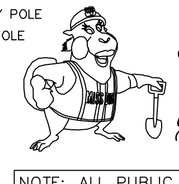
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB



NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER NO. 46796
LICENSED PROFESSIONAL ENGINEER

REVISIONS
5-21-19 SUBMITTAL
6-5-19 REV. SUP

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

1510 Grand River Ave.
DEMOLITION PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 6 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

E-93386-SUP
SURVEY#93386.ALT

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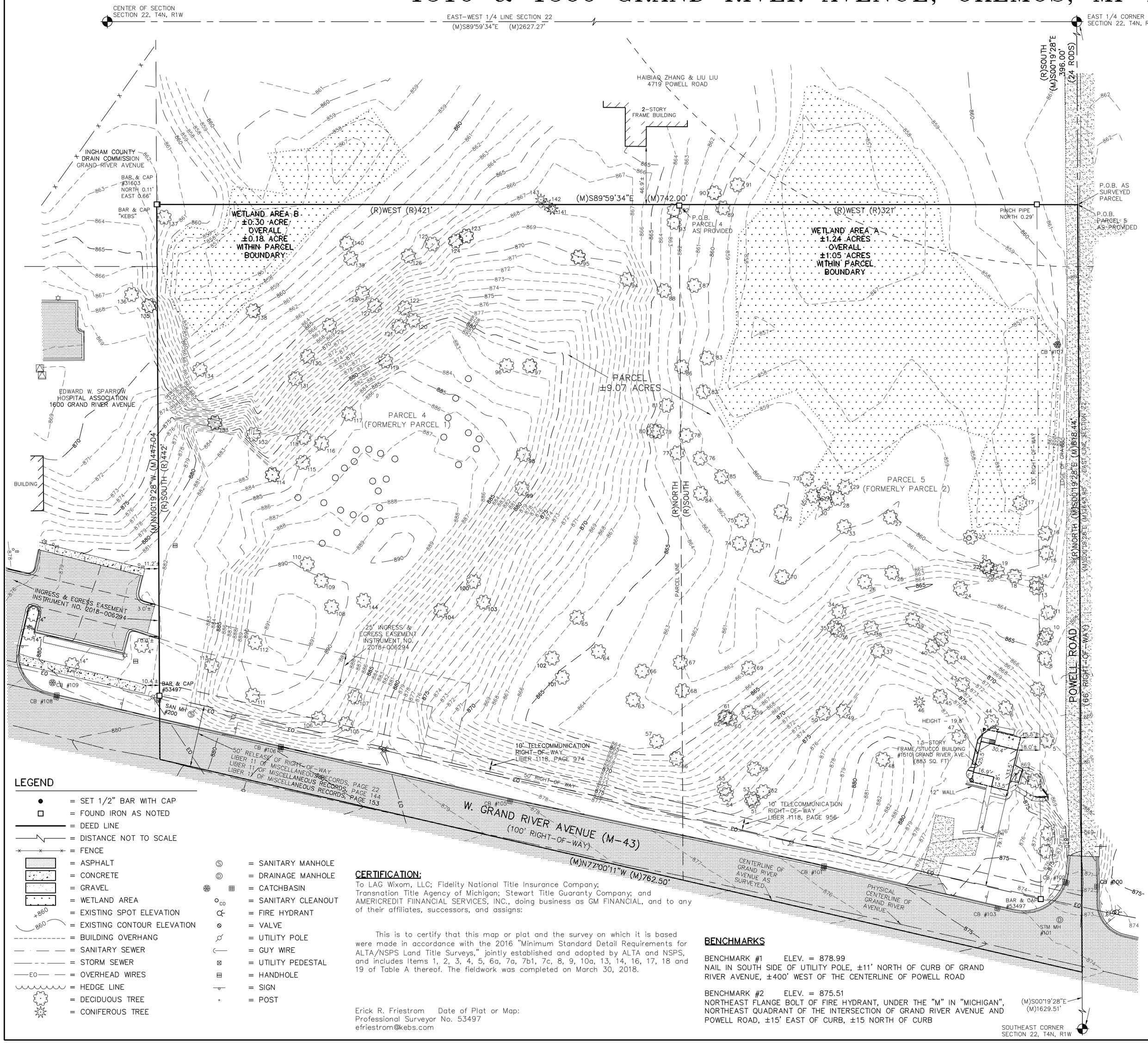
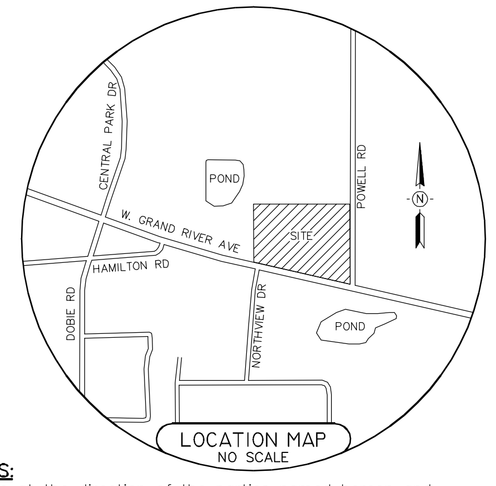
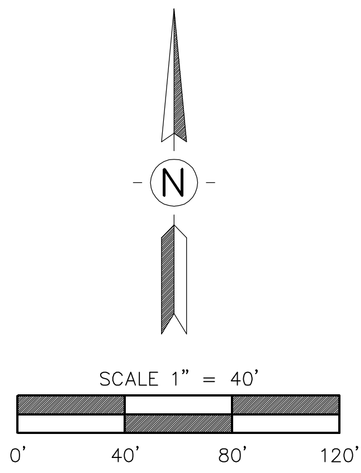
ALTA/NSPS LAND TITLE SURVEY

"1510 & 1560 GRAND RIVER AVENUE, OKEMOS, MI 48864"







SURVEYOR'S NOTES:

1. 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 March 2018.

2. 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 Mason C.O.R.S.

3. All dimensions are in feet and decimals thereof.

4. No building tie dimensions are to be used for establishing the property lines.

5. 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.

6. Parcel has direct access to public W. Grand River Avenue and public Powell Road.

7. Labels for all trees shown are per tag numbers identified by Marx Wetlands, LLC, during tagging completed in March 2016.

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

Item 1: Shown on the survey map.

Item 2: Addresses of the surveyed property: 1510 & 1560 Grand River Avenue, Okemos, MI 48864

Item 3: By scaled map location and graphic plotting only, this property lies entirely within Flood Zone "X", areas outside the 0.2% 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 0159 D, dated August 16, 2011.

Item 4: 9.07 Acres (395,285 square feet)

Item 6a: Parcel is zoned C-2 per a letter provided by client from Keith Chapman, Assistant Planner/Community Development & Planning, Meridian Township, dated July 25, 2018. No minimum required setbacks or parking spaces were listed in said letter for the property.

Item 7a: Shown on the survey map.

Item 7b1: Shown on the survey map.

Item 7c: Shown on the survey map.

Item 8: Shown on the survey map.

Item 9: Parking:
Regular Parking Spaces: 0
Disabled Parking Spaces: 0
Total on-site Parking Spaces: 0

Item 10a: There are no party walls on-site.

Item 13: Shown on the survey map.

Item 14: Shown on the survey map.

Item 16: There is no observable evidence of earth moving work, building construction, or building additions within recent months.

Item 17: There is no observable evidence of proposed changes in street right of way lines, or recent street or sidewalk construction or repairs.

Item 18: Shown on the survey map. Wetland delineation completed by Marx Wetlands, LLC, on March 15, 2016.

Item 19: There is a reciprocal easement that both benefits and burdens the parcel per the exceptions shown in Schedule B-II of said provided title commitment. Said easement is shown hereon.

Item 20: KEBS Inc. carries Professional Liability Insurance.

SEWER INVENTORIES

CATCH BASIN #100
RIM ELEV. = 871.64
12" RCP W INV. = 869.28

STORM MANHOLE #101
RIM ELEV. = 873.44
12" RCP N INV. = 868.48
18" RCP SE INV. = 867.95
18" RCP NW INV. = 868.04

CATCH BASIN #102
RIM ELEV. = 871.54
12" RCP E INV. = 868.63
12" RCP S INV. = 868.54

CATCH BASIN #103
RIM ELEV. = 874.19
18" RCP SE INV. = 868.27
12" RCP SW INV. = 868.70
18" RCP NW INV. = 868.43

CATCH BASIN #104
RIM ELEV. = 875.62
18" RCP SE INV. = 869.03
12" RCP SW INV. = 869.17
18" RCP NW INV. = 869.03

CATCH BASIN #105
RIM ELEV. = 878.07
18" RCP SE INV. = 869.57
12" RCP SW INV. = 869.65
12" RCP NW INV. = 869.61

CATCH BASIN #106
RIM ELEV. = 879.86
12" RCP SE INV. = 870.70
12" RCP SW INV. = 870.70

CATCH BASIN #107
RIM ELEV. = 857.44
8" RCP N INV. = 855.54

CATCH BASIN #108
RIM ELEV. = 879.04
12" RCP SW INV. = 874.48
12" RCP NW INV. = 874.34

STORM MANHOLE #109
RIM ELEV. = 879.38
12" RCP SE INV. = 873.86
12" RCP NW INV. = 873.51

SANITARY MANHOLE #200
RIM ELEV. = 880.92
8" STEEL NE INV. = 873.66
6" STEEL SE INV. = 874.29
12" STEEL NW INV. = 873.22

LEGAL DESCRIPTION:

(As provided in Stewart Title Guaranty Company title commitment No. 18000350028 dated June 15, 2018)

PARCEL 4 (Formerly Parcel 1):
Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

PARCEL 5 (Formerly Parcel 2):
Commencing 24 rods South of the East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan; thence West parallel with the 1/4 line 321 feet; thence South parallel with the East Section line to the center of Grand River Road; thence Southeasterly down the center of said road to the East Section line; thence North along Section line to the place of beginning.

PARCELS 4 AND 5 NOW SURVEYED AS:
A parcel of land in the Southeast 1/4 of Section 22, T4N, R1W, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as: Commencing at the East 1/4 corner of said Section 22; thence South 00 degrees 19 minutes 28 seconds East along the East line of said Section 22 a distance of 396.00 feet to the point of beginning of this description; thence continuing South 00 degrees 19 minutes 28 seconds East along said East line 618.44 feet to the centerline of W. Grand River Avenue; thence North 77 degrees 00 minutes 11 seconds West along said centerline 762.50 feet; thence North 00 degrees 19 minutes 28 seconds West parallel with said East line 447.04 feet; thence South 89 degrees 59 minutes 34 seconds East parallel with the East-West 1/4 line of said Section 22 a distance of 742.00 feet to the point of beginning.

SCHEDULE B, SECTION II, EXCEPTIONS:

(As provided in Stewart Title Guaranty Company title commitment No. 18000350028 dated June 15, 2018)

Item 12: Release of Right of Way vested in State of Michigan by instrument dated July 16, 1923 and recorded February 13, 1924 in Liber 11 of Misc. Records, Page 22, crosses parcel, is plottable and shown hereon.

Item 13: Release of Right of Way vested in County of Ingham by instrument dated April 28, 1924 and recorded January 19, 1925 in Liber 11 of Misc. Records, Page 144, crosses parcel, is plottable and shown hereon.

Item 14: Release of Right of Way vested in County of Ingham by instrument dated April 28, 1924 and recorded January 19, 1925 in Liber 11 of Misc. Records, Page 153, crosses parcel, is plottable and shown hereon.

Item 15: Easement granted to Consumers Power Company dated August 16, 1950 and recorded May 9, 1951 in Liber 50 of Misc. Records, Page 382, may cross parcel, is not plottable, therefore not shown hereon.

Item 16: Easement granted to Consumers Energy Company recorded in Liber 50 of Misc. Records, Page 385, may cross parcel, is not plottable, therefore not shown hereon.

Item 17: Easement granted to Michigan Bell Telephone Company dated October 5, 1973 and recorded October 25, 1973 in Liber 1118, Page 956, crosses parcel, is plottable and shown hereon.

Item 18: Easement granted to Michigan Bell Telephone Company recorded in Liber 1118, Page 974, crosses parcel, is plottable and shown hereon.

Item 19: Reciprocal Easement Agreement recorded in Instrument No. 2018-006294, crosses and abuts parcel, is plottable and shown hereon.

LEGEND

- = SET 1/2" BAR WITH CAP
- = FOUND IRON AS NOTED
- = DEED LINE
- = DISTANCE NOT TO SCALE
- = FENCE
- = ASPHALT
- = CONCRETE
- = GRAVEL
- = WETLAND AREA
- = EXISTING SPOT ELEVATION
- = EXISTING CONTOUR ELEVATION
- = BUILDING OVERHANG
- = SANITARY SEWER
- = STORM SEWER
- = OVERHEAD WIRES
- = HEDGE LINE
- = DECIDUOUS TREE
- = CONIFEROUS TREE
- = SANITARY MANHOLE
- = DRAINAGE MANHOLE
- = CATCHBASIN
- = SANITARY CLEANOUT
- = FIRE HYDRANT
- = VALVE
- = UTILITY POLE
- = GUY WIRE
- = UTILITY PEDESTAL
- = HANDHOLE
- = SIGN
- = POST

CERTIFICATION:

To LAG Wixom, LLC; Fidelity National Title Insurance Company; Transnation Title Agency of Michigan; Stewart Title Guaranty Company; and AMERICREDIT FIINANCIAL SERVICES, INC., doing business as GM FINANCIAL, and to any of their affiliates, successors, and assigns:

This is to certify that this map or plat 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, 5, 6a, 7a, 7b1, 7c, 8, 9, 10a, 13, 14, 16, 17, 18 and 19 of Table A thereof. The fieldwork was completed on March 30, 2018.

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

BENCHMARKS

BENCHMARK #1 ELEV. = 878.99
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB

REVISIONS	COMMENTS
04/17/2018	PRELIMINARY
05/24/2018	SIGNED FINAL
07/25/2018	UPDATED CERTIFICATIONS
07/27/2018	REVISE PER COMMENTS
07/27/2018	SIGNED FINAL

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 22, T4N, R1W
FIELD WORK BY SL | JOB NUMBER: 93386.ALT
SHEET 7 OF 7

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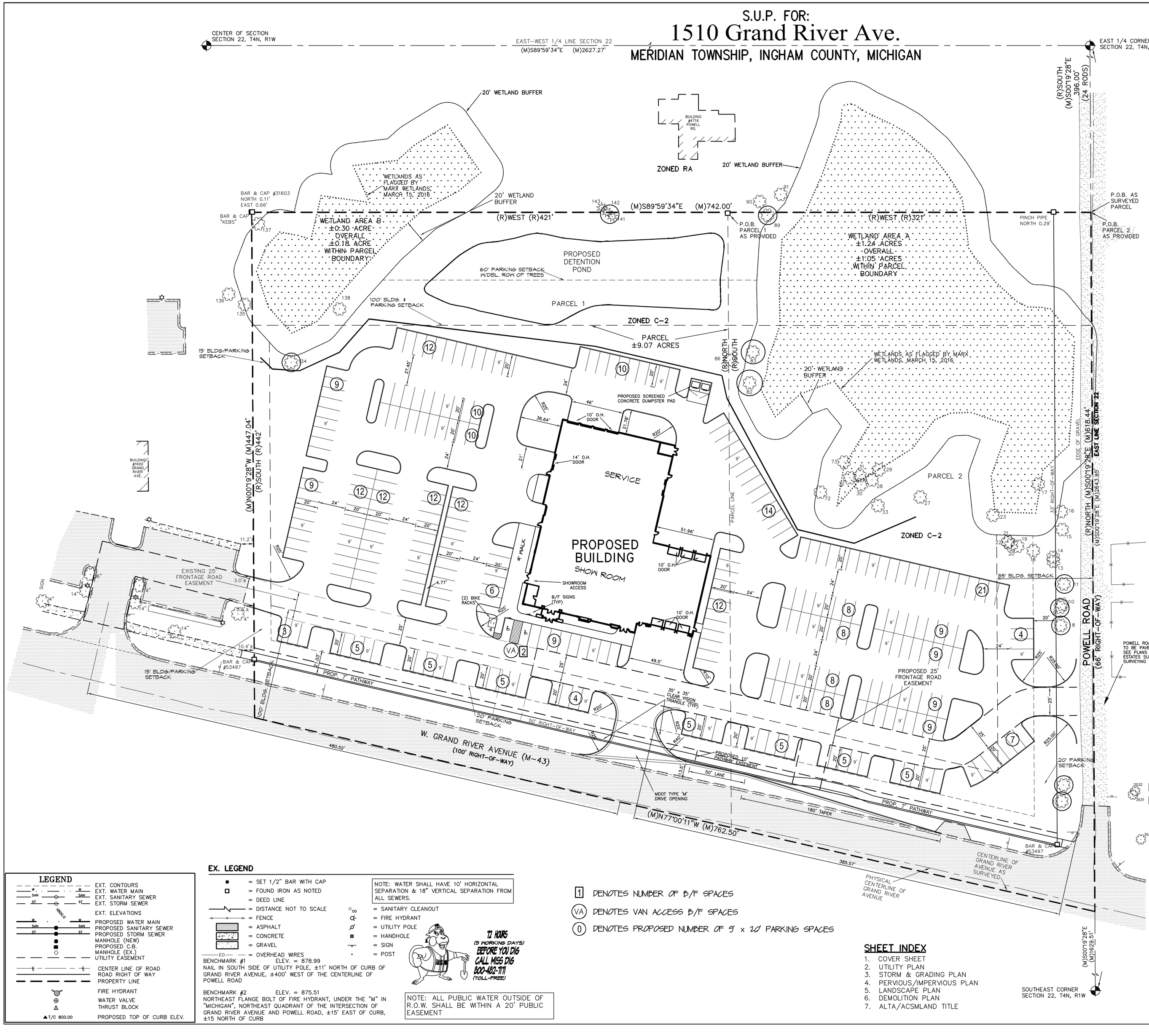
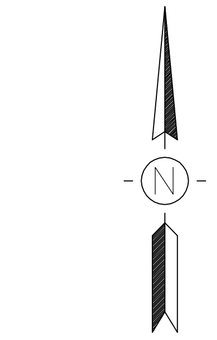
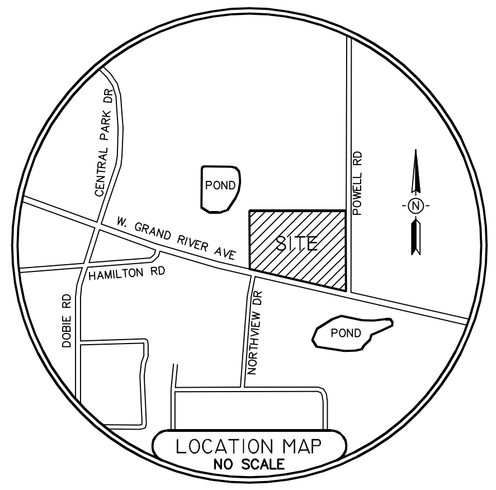
S.U.P. FOR:
1510 Grand River Ave.
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN







BUILDING #4714 POWELL RD.

LEGAL DESCRIPTION:
(As provided by Transnation Title Agency of Michigan underwritten by Fidelity National Title Insurance Company, Commitment No. 159714LANS, dated July 21, 2015)
Parcel 1:
Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

CLIENT:
LaFontaine Automotive Group
4000 W. HIGHLAND
HIGHLAND, MI. 48357
PH: (248) 714-1502
FAX: (248) 887-5293

ENGINEER/SURVEYOR:
KEBS, Inc.
2116 HASLETT RD.
HASLETT, MI. 48840
PH: (517) 339-1014
FAX: (517) 339-8047

SITE DATA:

ZONED C-2
EX. USE VACANT

BUILDING DATA:

BUILDING A (24,906 S.F.)

PARKING REQUIRED:

MOTOR VEHICLE, RECREATIONAL VEHICLE, BOAT, OR MOBILE HOME SALES OR SERVICE ESTABLISHMENTS
1/200 S.F. OF USABLE FLOOR SPACE OF SALES ROOM
1 SPACE FOR EACH VEHICLE ON DISPLAY

5,561/200 x 1 = 27.8 = 28 SPACES
- 2 SPACES (1 SPACE PER EVERY 2 BICYCLE SPACES)
TOTAL REQUIRED 26 SPACES

DISPLAY VEHICLES:
268 X 1 = 268 SPACES

TOTAL 294 SPACES PROVIDED

PERVIOUS/IMPERVIOUS CALCULATIONS:

GROSS PROPERTY 395286 S.F.
TOTAL PROPERTY WITHOUT ROAD R.O.W.= 334345 S.F.
OPEN SPACE PER 86-402 (17)
A) BUILDING PERIMETER LANDSCAPE = 675 L.F. X 4' S.F. = 2,700 S.F., 4,824 S.F. PROVIDED
B) 1/2 OF DETENTION 15,687/2 = 7,844 S.F.
C) ISLANDS, MEDIANS AND OPEN SITE AREAS (MIN. 20' DIMENSIONS) = 157,252 S.F.
NET OPENSPACE = 169,920 S.F. = 51%
NET IMPERVIOUS AREA = 164,425 S.F = 49% (MAX ALLOWABLE 70%)

SITE ADDRESS: 1510 W. GRAND RIVER AVE., OKEMOS, MI. 48864
PARCEL ID - 33-02-02-22-426-006
PARCEL ID - 33-02-02-22-426-007

BIKE PARKING REQUIRED:
1/10 SPACES
19/10 = 1.9 = 2 SPACES
4 PROVIDED

PARKING LOT LANDSCAPE REQUIREMENTS:

2 TREE/10 SPACES
294/10 = 30 x 2 = 60 TREES (60 PROVIDED)
200 S.F./10 SPACES
294/10 x 200 = 5,880 S.F. (9,530 S.F. PROVIDED)

14 TREES REQUIRED ALONG GRAND RIVER AVENUE, 14 PROVIDED

DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)
DENOTES PROPOSED TREE PROTECTION FENCE (TYP)

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
- ▲T/C 800.00 PROPOSED TOP OF CURB ELEV.

EX. LEGEND

- = SET 1/2" BAR WITH CAP
- = FOUND IRON AS NOTED
- = DEED LINE
- = DISTANCE NOT TO SCALE
- = FENCE
- = ASPHALT
- = CONCRETE
- = GRAVEL
- = OVERHEAD WIRES
- = SANITARY CLEANOUT
- = FIRE HYDRANT
- = UTILITY POLE
- = HANDHOLE
- = SIGN
- = POST

BENCHMARK #1 ELEV. = 878.99
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB

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

NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

[1] DENOTES NUMBER OF B/F SPACES
(VA) DENOTES VAN ACCESS B/F SPACES
(0) DENOTES PROPOSED NUMBER OF 9' x 20' PARKING SPACES

SHEET INDEX

1. COVER SHEET
2. UTILITY PLAN
3. STORM & GRADING PLAN
4. PERVIOUS/IMPERVIOUS PLAN
5. LANDSCAPE PLAN
6. DEMOLITION PLAN
7. ALTA/ACSMLAND TITLE

STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER
NO. 46796
LICENSED PROFESSIONAL ENGINEER

REVISIONS
5-21-19 SUBMITTAL
6-5-19 REV. SUP
7-31-19 REV. SUP

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

1510 Grand River Ave.
COVER SHEET

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 1 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

E-93386-SUP
SURVEY#93386.ALT

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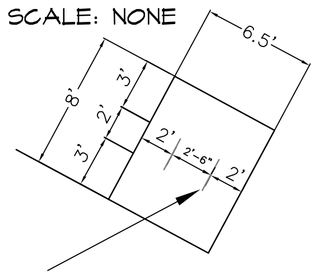
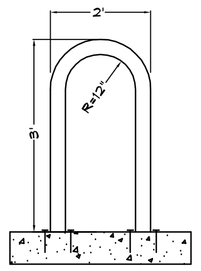
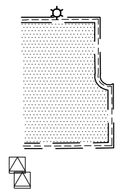
S.U.P. FOR:
1510 Grand River Ave.
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

BIKE RACK DETAIL
SCALE: NONE



RACKS SHALL BE "U" SHAPED
MIN. HT 36", MIN. LENGTH 2'





BUILDING #1600 GRAND RIVER AVE.

EX. 25' INGRESS & EGRESS EASEMENT INSTRUMENT NO. 2018-006294

INGRESS & EGRESS EASEMENT INSTRUMENT NO. 2018-006294

12" x 8" LIVE TAP 8" G.V. CONC. TH. BLK.

EXISTING 8" WATER

EXISTING 20' WATER EASEMENT

SAN. MH #2000

CB #108

CB #109

CB #897

CB #836

CB #115

CB #106

CB #105

CB #104

CB #148

CB #159

CB #107

CB #100

CB #101

STM MH #101

OPEN CUT EXISTING DRIVE. USE INGHAM COUNTY ROAD DEPARTMENT STANDARDS

20' WETLAND BUFFER

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

WETLAND AREA B
±0.30 ACRE
OVERALL
±0.18 ACRE
WITHIN PARCEL
BOUNDARY

PROPOSED DETENTION POND

WETLAND AREA A
±1.24 ACRES
OVERALL
±1.05 ACRES
WITHIN PARCEL
BOUNDARY

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

BUILDING #4716 POWELL RD.

8"x 6" REDUCER
6" 90° BEND
6" G.V.
HYD. ASSEMBLY

6" GARAGE WASTE

2" CORP.
2" CURB STOP

SCHIER GGI-750
750 GAL. GREASE INTERCEPTOR

8" x 8" TEE
8" x 4" RED.

4" P.I.V.
4" FIRE

FDC CONNECTION

2" DOM.

6" DOMESTIC WASTE

PROPOSED BUILDING

PARCEL LINE

PROP. 20' WATER EASEMENT

PROP. 8" SAN.

PROPOSED 8" WATER

8" x 6" RED.
6" G.V. & HYD.
HYD. ASSEMBLY

8" x 8" TEE
(2) 8" G.V.
CONC. TH. BLK.

PROP. 2" SAN FORCE MAIN FOR PROJECT TO EAST (LAFONTAINE)

PROPOSED 25' FRONTAGE ROAD EASEMENT

PROPOSED 10' PATHWAY EASEMENT

50' RELEASE OF RIGHT-OF-WAY
LIBER 11 OF MISCELLANEOUS RECORDS, PAGE 22
LIBER 11 OF MISCELLANEOUS RECORDS, PAGE 144
LIBER 11 OF MISCELLANEOUS RECORDS, PAGE 153

50' RIGHT-OF-WAY

W. GRAND RIVER AVENUE (M-43)
(100' RIGHT-OF-WAY)

10' TELECOMMUNICATION RIGHT-OF-WAY LIBER 1118, PAGE 974

10' TELECOMMUNICATION RIGHT-OF-WAY LIBER 1118, PAGE 956

EXISTING SAN. FORCE MAIN (ST. MARTHA'S)

PROPOSED 10' PRIVATE SANITARY EASEMENT

PROPOSED 8" WATER

POWELL ROAD
(66' RIGHT-OF-WAY)

PROPOSED 12" WATER BY OTHERS (SILVERSTONE).

POWELL ROAD IS SCHEDULED TO BE PAVED (BY OTHERS). SEE PLANS FOR SILVERSTONE ESTATES SUBDIVISION, ENGER SURVEYING & ENGINEERING

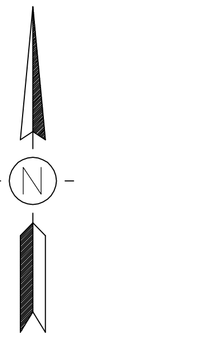
BUILDING #4684 POWELL RD.

BUILDING #1492 GRAND RIVER AVE.

PER ENGER SURVEYING & ENGINEERING SILVERSTONE SUBDIVISION APPROVED PLAN

DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)

DENOTES PROPOSED TREE PROTECTION FENCE (TYP)



SCALE 1" = 40'

0' 40' 80' 120'

SANITARY STRUCTURE INVENTORY

SANITARY MANHOLE #1002
RIM ELEV. = 876.20
12" STEEL SE INV. = 865.24
12" STEEL NW INV. = 865.18

SANITARY MANHOLE #2000
RIM ELEV. = 880.92
8" STEEL NE INV. = 873.66
6" STEEL SE INV. = 874.29
12" STEEL NW INV. = 873.22

STORM STRUCTURE INVENTORY

CATCH BASIN #26
RIM ELEV. = 871.64
12" RCP W INV. = 869.28

STORM MANHOLE #51
RIM ELEV. = 873.44
12" RCP N INV. = 868.48
18" RCP SE INV. = 867.95
18" RCP NW INV. = 868.04

CATCH BASIN #65
RIM ELEV. = 871.54
12" RCP E INV. = 868.63
12" RCP S INV. = 868.54

CATCH BASIN #74
RIM ELEV. = 874.19
18" RCP SE INV. = 868.27
12" RCP SW INV. = 868.70
18" RCP NW INV. = 868.43

CATCH BASIN #83
RIM ELEV. = 875.62
18" RCP SE INV. = 869.03
12" RCP SW INV. = 869.17
18" RCP NW INV. = 869.03

CATCH BASIN #96
RIM ELEV. = 878.07
18" RCP SE INV. = 869.57
12" RCP SW INV. = 869.65
12" RCP NW INV. = 869.61

CATCH BASIN #105
RIM ELEV. = 879.86
12" RCP SE INV. = 870.70
12" RCP SW INV. = 870.70

CATCH BASIN #115
RIM ELEV. = 879.93
12" RCP NE INV. = 871.41
12" RCP NW INV. = 871.61

CATCH BASIN #132
RIM ELEV. = 878.34
12" RCP NE INV. = 873.44

CATCH BASIN #148
RIM ELEV. = 875.75
12" RCP NE INV. = 872.23

CATCH BASIN #159
RIM ELEV. = 874.28
12" RCP NE INV. = 870.28

CATCH BASIN #890
RIM ELEV. = 879.85
12" RCP SE INV. = 872.55

CATCH BASIN #897
RIM ELEV. = 879.47
12" RCP NE INV. = 876.37

CATCH BASIN #987
RIM ELEV. = 857.44
8" RCP N INV. = 855.54

CATCH BASIN #2003
RIM ELEV. = 879.04
12" RCP SW INV. = 874.48
12" RCP NW INV. = 874.34

STORM MANHOLE #2029
RIM ELEV. = 879.38
12" RCP SE INV. = 873.86
12" RCP NW INV. = 873.51

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
- ▲T/C 800.00 PROPOSED TOP OF CURB ELEV.

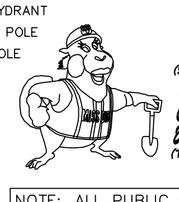
EX. LEGEND

- = SET 1/2" BAR WITH CAP
- = FOUND IRON AS NOTED
- = DEED LINE
- = DISTANCE NOT TO SCALE
- = FENCE
- = ASPHALT
- = CONCRETE
- = GRAVEL
- = OVERHEAD WIRES
- = SANITARY CLEANOUT
- = FIRE HYDRANT
- = UTILITY POLE
- = HANDHOLE
- = SIGN
- = POST

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

BENCHMARK #1 ELEV. = 878.99
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB



72 HOURS (3 WORKING DAYS) BEFORE YOU DIG CALL MISS DIG 800-482-7171 (TOLL-FREE)

NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER NO. 46796
LICENSED PROFESSIONAL ENGINEER

REVISIONS
5-21-19 SUBMITTAL
6-5-19 REV. SUP
7-31-19 REV. SUP

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

1510 Grand River Ave.

UTILITY PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 2 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

E-93386-SUP
SURVEY#93386.ALT

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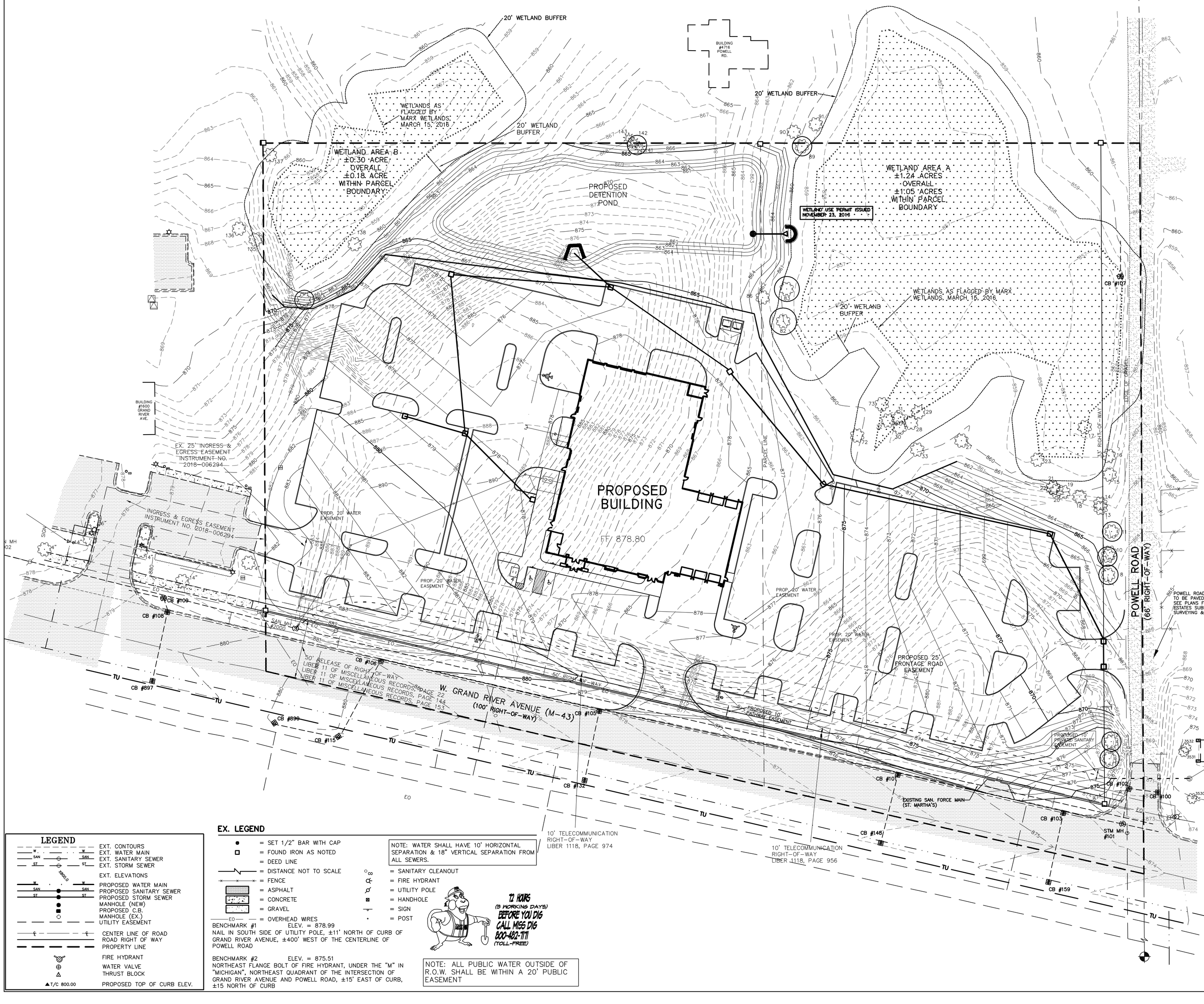
S.U.P. FOR:

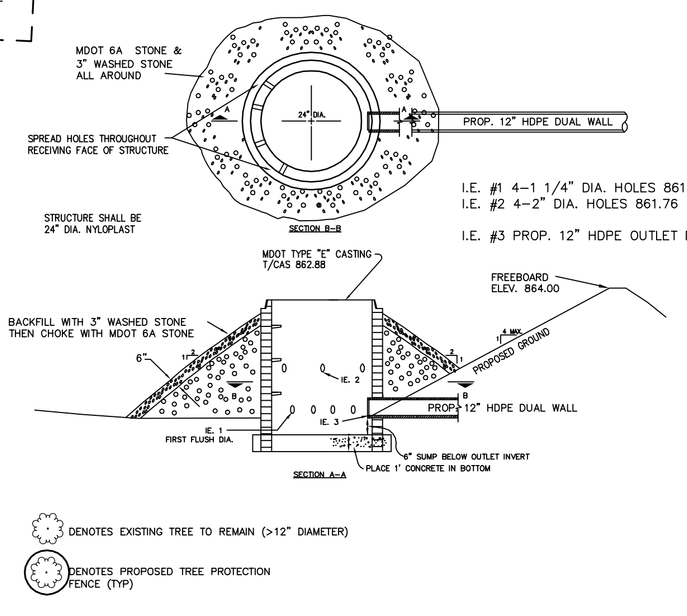
1510 Grand River Ave.

MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN



OS#1 OUTLET RISER DETAIL

NO SCALE



DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)

DENOTES PROPOSED TREE PROTECTION FENCE (TYP)

LEGEND

- EXT. CONTOURS
- EXT. WATER MAIN
- EXT. SANITARY SEWER
- EXT. STORM SEWER
- EXT. ELEVATIONS
- PROPOSED WATER MAIN
- PROPOSED SANITARY SEWER
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- MANHOLE (NEW)
- PROPOSED C.B.
- MANHOLE (EX.)
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- CENTER LINE OF ROAD
- ROAD RIGHT OF WAY
- PROPERTY LINE
- FIRE HYDRANT
- WATER VALVE
- THRUST BLOCK
- ▲T/C 800.00 PROPOSED TOP OF CURB ELEV.

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NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB

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1510 Grand River Ave.

STORM & GRADING PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 3 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

E-93386-SUP
SURVEY#93386.ALT

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S.U.P. FOR:

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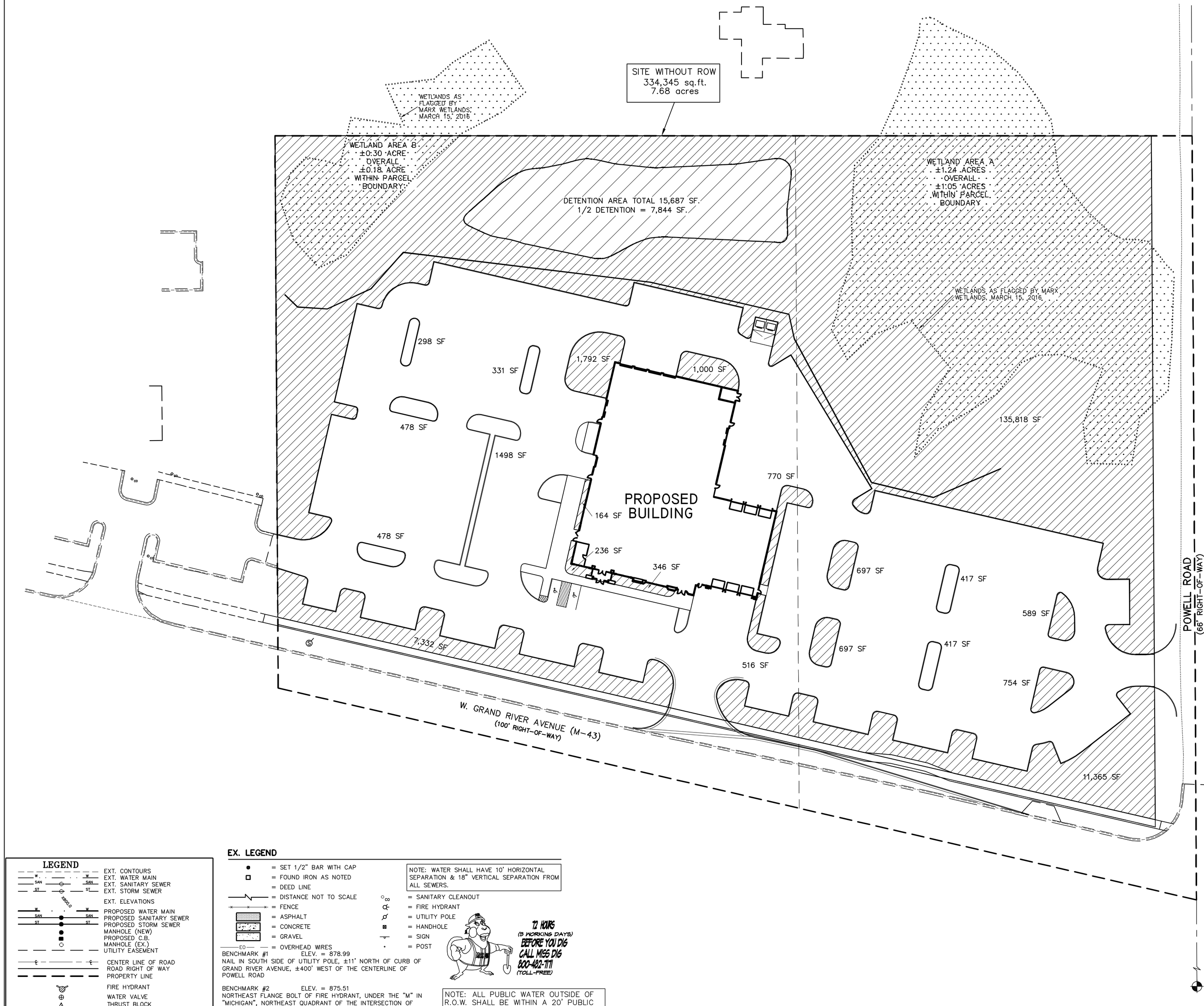
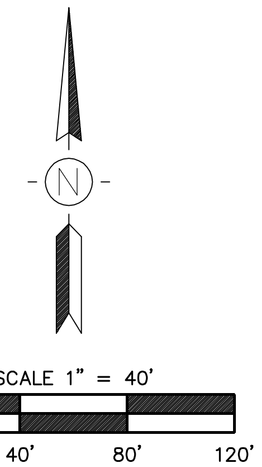
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN





PERVIOUS/IMPERVIOUS CALCULATIONS:

GROSS PROPERTY 395286 S.F.
TOTAL PROPERTY WITHOUT ROAD R.O.W.= 334345 S.F.
OPEN SPACE PER 86-402 (17)
A) BUILDING PERIMETER LANDSCAPE = 675 L.F. X 4' S.F. = 2,700 S.F., 4,824 S.F. PROVIDED
B) 1/2 OF DETENTION 15,687/2 = 7,844 S.F.
C) ISLANDS, MEDIANS AND OPEN SITE AREAS (MIN. 20' DIMENSIONS) = 157,252 S.F.
NET OPENSPACE = 169,920 S.F. = 51%
NET IMPERVIOUS AREA = 164,425 S.F = 49% (MAX ALLOWABLE 70%)

LEGEND

- EXT. CONTOURS
- EXT. WATER MAIN
- EXT. SANITARY SEWER
- EXT. STORM SEWER
- EXT. ELEVATIONS
- PROPOSED WATER MAIN
- PROPOSED SANITARY SEWER
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BENCHMARK #2 ELEV. = 875.51
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PERVIOUS/IMPERVIOUS PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 4 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

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S.U.P. FOR:
1510 Grand River Ave.
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

CENTER OF SECTION
SECTION 22, T4N, R1W

EAST–WEST 1/4 LINE SECTION 22
(M)S89°59'34"E (M)2627.27'

EAST 1/4 CORNER
SECTION 22, T4N, R1W

(R)SOUTH (M)S00°19'28"E 396.00' (24 RODS)

20' WETLAND BUFFER

BUILDING #4716 POWELL RD.

ZONED RA

BAR & CAP #31603
NORTH 0.11'
EAST 0.66'

BAR & CAP "KEBS"

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

WETLAND AREA B
±0.30 ACRE OVERALL
±0.18 ACRE WITHIN PARCEL BOUNDARY

(M)S89°59'34"E (M)742.00'

(R)WEST (R)421'

P.O.B. PARCEL 1 AS PROVIDED

(R)WEST (R)321'

P.O.B. AS SURVEYED PARCEL

P.O.B. PARCEL 2 AS PROVIDED

PINCH PIPE NORTH 0.29'

PROPOSED DETENTION POND

WETLAND AREA A
±1.24 ACRES OVERALL
±1.05 ACRES WITHIN PARCEL BOUNDARY

PARCEL 1

ZONED C-2

PARCEL
±9.07 ACRES

(R)NORTH (R)SOUTH

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

CB #107

(M)N00°19'28"W (M)447.04'
(R)SOUTH (R)442'

BUILDING #1600 GRAND RIVER AVE.

EX. 25' INGRESS & EGRESS EASEMENT INSTRUMENT NO. 2018-006294

INGRESS & EGRESS EASEMENT INSTRUMENT NO. 2018-006294

PARCEL 2

(M)N00°19'28"E (M)618.44'
EAST LINE SECTION 22

RIGHT-OF-WAY

PROPOSED BUILDING

ZONED C-2

PROP. 20' WATER EASEMENT

CB #109

CB #108

SAN MH #2006

CB #106

50' RELEASE OF RIGHT-OF-WAY
LIBER 11 OF MISCELLANEOUS RECORDS, PAGE 22
LIBER 11 OF MISCELLANEOUS RECORDS, PAGE 144
LIBER 11 OF MISCELLANEOUS RECORDS, PAGE 153

CB #897

CB #896

CB #115

W. GRAND RIVER AVENUE (M-43)
(100' RIGHT-OF-WAY)

CB #105

PROPOSED 10' PRIVATE SANITARY EASEMENT

PROPOSED 25' FRONTAGE ROAD EASEMENT

(M)N77°00'11"W (M)762.50'

CB #104

CB #102

CB #101

EXISTING SAN. FORCE MAIN (ST. MARTHA'S)

BAR & CAP #5349

CB #103

STM MH #101

CB #148

CB #159

(M)N00°19'28"E (M)439.41'

SOUTHEAST CORNER
SECTION 22, T4N, R1W

POWELL ROAD
(66' RIGHT-OF-WAY)

POWELL ROAD IS SCHEDULED TO BE PAVED (BY OTHERS). SEE PLANS FOR SILVERSTONE ESTATES SUBDIVISION, ENGER SURVEYING & ENGINEERING

BUILDING #4684 POWELL RD.

BUILDING #1492 GRAND RIVER AVE.

DENOTES AREAS UTILIZED FOR PARKINGLOT LANDSCAPE REQUIREMENT

10' TELECOMMUNICATION RIGHT-OF-WAY LIBER 1118, PAGE 974

10' TELECOMMUNICATION RIGHT-OF-WAY LIBER 1118, PAGE 956

TREE PROTECTION FENCE DETAIL
NOT TO SCALE

STANDARD STEEL OR WOODEN FENCE POST 5' ON CENTER OR AT DEFLECTIONS

GRADE

4'-0"

ZONE-PER CONSTRUCTION DRAWINGS

STANDARD 48" HIGH SNOW FENCE OR ORANGE PLASTIC FENCE

NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

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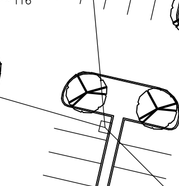

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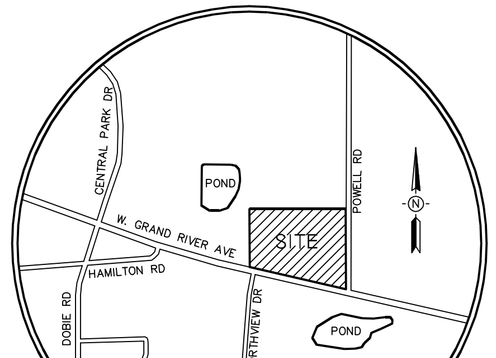
SCALE 1" = 40'
0' 40' 80' 120'



BUILDING #4714 POWELL RD.

LEGAL DESCRIPTION:
(As provided by Transnation Title Agency of Michigan underwritten by Fidelity National Title Insurance Company, Commitment No. 159714LANS, dated July 21, 2015)
Parcel 1:
Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

INTERNATIONAL SOCIETY OF ARBORICULTURE
1400 WEST ANTHONY DRIVE
CHAMPAIGN, IL 61821
(217) 355-9411
(217) 355-9516 FAX

DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER 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 SANDY OR WET CLAY SOIL.
WRAP 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 ROTATE 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 NO PLACE MULCH IN CONTACT WITH TREE TRUNK. MAINTAIN THE MULCH WEED-FREE FOR A MINIMUM OF THREE YEARS AFTER PLANTING.

EXISTING SITE SOIL FREE OF CONSTRUCTION DEBRIS.
BACKFILL PLANTING HOLE WITH A PLANTING MIX CONSISTING OF LOAM TOPSOIL 25%–30%, COURSE TO MEDIUM SAND 50%–60%, HORTICULTURAL-GRADE MILLED PINE BARK 10%–15%.

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

MULCH RING
600 MM (2 FT.) DIAM. MIN.
1200 MM (4FT.) DIAM. PREFERRED

100 MM (4 IN.) HIGH EARTH SAUCER BEYOND EDGE OF ROOT BALL

REMOVE ALL TWINE, ROPE AND WIRE, AND BURLAP FROM TOP HALF OF ROOT BALL

IF 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.

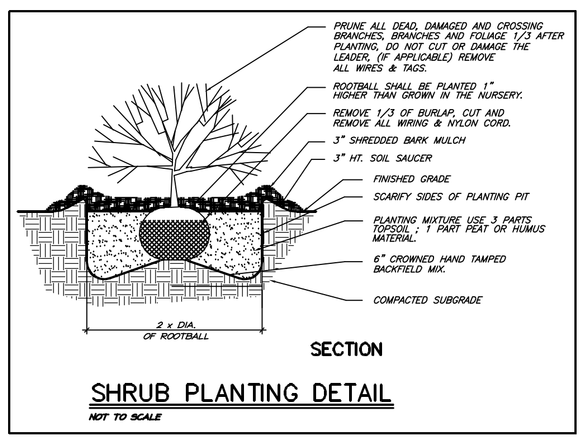
PLACE ROOT BALL ON UNDISTURBED OR TAMPED SOIL.

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.

LANDSCAPE NOTES

1. INSTALL 3" X 12 GA. EDGING TO SEPARATE LAWN FROM PLANTING BED. (AROUND SHRUBS ONLY)
2. INSTALL 3" DEEP SHREDDED BARK MULCH TO ALL PLANTING AREAS/BEDS AND TREE SAUCERS (NO POLY-FILM).
3. INSTALL A KENTUCKY BLUEGRASS SOD (SUN/SHADE) VARIETY) THAT IS FREE OF WEEDS.
3A. SEED AREAS WITH THE FOLLOWING:
   25# SYDSPORT KENTUCKY BLUEGRASS
   20# MASTER KENTUCKY BLUEGRASS
   20# BARON KENTUCKY BLUEGRASS
   10# ANNUAL RYE GRASS
   APPLY AT THE RATE OF 2 TO 3 LBS. PER 1,000 SQUARE FOOT.
4. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES, AS WELL AS THE LOCATION OF EXISTING TREES AND VEGETATION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COST INCURRED DUE TO DAMAGE/REMOVAL OF SAID ELEMENTS.
5. ANY DISCREPANCIES BETWEEN PLANS, NOTES, DETAILS AND EXISTING CONDITIONS SHALL BE IMMEDIATELY REPORTED TO THE OWNER'S AUTHORIZED REPRESENTATIVE FOR REVIEW AND DECISION. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
6. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING MATERIALS/IMPROVEMENTS, DAMAGED DURING CONSTRUCTION.
7. SITE BOUNDARY, TOPOGRAPHY, UTILITIES AND OTHER BASE INFORMATION PROVIDED BY OTHERS.
8. CONTRACTOR SHALL VERIFY QUANTITIES SHOWN ON PLANT SCHEDULES AND THOSE INDICATED ON PLANS. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF QUANTITIES SHOWN.
9. CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO PLANT MATERIAL LOCATIONS IN FIELD, AS NECESSARY. THE LOCATION OF ALL PLANT MATERIAL SHALL BE SUBJECT TO APPROVAL BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
10. ALL PLANT MATERIAL SHALL BE OF THE SIZES CALLED FOR IN THE PLANT SCHEDULES. ANY PLANT MATERIAL NOTED TO BE SIZED AND/OR QUALITY AS CALLED FOR SHALL BE REMOVED FROM SITE. ALL TREES SHALL BE INSPECTED AND APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE. NO SUBSTITUTIONS OF PLANT MATERIAL SHALL BE MADE WITHOUT APPROVAL FROM THE OWNER'S AUTHORIZED REPRESENTATIVE.
11. ALL PROPOSED TREES OVER 3" CAL. SHALL BY GUYED/STAKED SECURE, SEE EVERGREEN TREE PLANTING/GUYING DETAIL, OR DECIDUOUS TREES PLANTING/STAKING DETAIL WHERE APPLICABLE.
12. ALL PLANTING BEDS TO BE TREATED WITH PRE-EMERGENT HERBICIDE. CONTRACTOR SHALL INSURE THAT PROPER TYPE OF MATERIAL IS APPLICATED TO THE AREAS PROPERLY. ALL MATERIALS USED FOR HERBICIDE APPLICATION FOLLOW ALL MANUFACTURER'S SPECIFICATIONS AND IS APPLIED IN ACCORDANCE WITH SOUND HORTICULTURAL PRACTICES.
13. CONTRACTOR SHALL DETERMINE APPROPRIATE PLANTING BACKFILL MIXES (BASED ON SOIL/SUBSURFACE CONDITIONS) AND REVIEW ALTERNATIVES WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.



SECTION

SHRUB PLANTING DETAIL
NOT TO SCALE

DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)

DENOTES PROPOSED TREE PROTECTION FENCE (TYP)

DENOTES TREES TO BE REMOVED (TYP)

PARKING LOT LANDSCAPE REQUIREMENTS:

2 TREE/10 SPACES
298/10 = 29.8 x 2 = 60 TREES (60 PROVIDED)
200 S.F./10 SPACES
298/10 x 200 = 5,960 S.F. (9,530 S.F. PROVIDED)

14 TREES REQUIRED ALONG GRAND RIVER AVENUE, 14 PROVIDED

SHRUBS 3' HIGH MIN. REQUIRED ON W. GRAND RIVER AVE.

E-93386-SUP
SURVEY#93386.ALT

STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER NO. 46796
LICENSED PROFESSIONAL ENGINEER

REVISIONS
5-21-19 SUBMITTAL
6-5-19 REV. SUP
7-31-19 REV. SUP

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

1510 Grand River Ave.
LANDSCAPE PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 5 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

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S.U.P. FOR:
1510 Grand River Ave.
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

CENTER OF SECTION
SECTION 22, T4N, R1W

EAST–WEST 1/4 LINE SECTION 22
(M)S89°59'34"E (M)2627.27'

EAST 1/4 CORNER
SECTION 22, T4N, R1W

(R)SOUTH (M)S00°19'28"E 396.00' (24 RODS)

20' WETLAND BUFFER

BUILDING #4716 POWELL RD.

BAR & CAP #31603
NORTH 0.11'
EAST 0.66'

BAR & CAP "KEBS"

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

WETLAND AREA B
±0.30 ACRE OVERALL
±0.18 ACRE WITHIN PARCEL BOUNDARY

(R)WEST (R)421'

(M)S89°59'34"E (M)742.00'

P.O.B. PARCEL 1 AS PROVIDED

(R)WEST (R)321'

PINCH PIPE NORTH 0.29'

P.O.B. AS SURVEYED PARCEL

P.O.B. PARCEL 2 AS PROVIDED

WETLAND AREA A
±1.24 ACRES OVERALL
±1.05 ACRES WITHIN PARCEL BOUNDARY

PARCEL 1

PARCEL
±9.07 ACRES

(R)NORTH (R)SOUTH

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

CB #107

PARCEL 2

PARCEL LINE

EDGE OF GRAVEL

RIGHT-OF-WAY

(R)NORTH (M)S00°19'28"E (M)618.44'

EAST LINE SECTION 22

(M)S00°19'28"E (M)2643.95'

(M)N00°19'28"W (M)447.04'
(R)SOUTH (R)442'

BUILDING #1600 GRAND RIVER AVE.

SIGN

CB #109

CB #108

BAR & CAP #53497

SAN. MH #2000

CB #106

CB #897

CB #896

CB #115

CB #105

CB #122

W. GRAND RIVER AVENUE (M-43)
(100' RIGHT-OF-WAY)

50' RIGHT-OF-WAY

(M)N77°00'11"W (M)762.50'

CB #104

CB #148

CB #159

DEMO ALL EXISTING CONCRETE / ASPHALT

DEMO 12" WALL

DEMO 1.5-STORY FRAME/STUCCO BUILDING #1510 GRAND RIVER AVE.

15.5'±

18.0'±

30.4'

16.9'

13.9'

70.1'±

EXISTING SAN. FORCE MAIN (ST. MARTHA'S)

CB #101

CB #102

CB #100

BAR & CAP #5349

CB #103

STM MH #101

BUILDING #1492 GRAND RIVER AVE.

BUILDING #4684 POWELL RD.

SOUTHEAST CORNER
SECTION 22, T4N, R1W

SCALE 1" = 40'

0' 40' 80' 120'

BUILDING #4714 POWELL RD.

LEGAL DESCRIPTION:
(As provided by Transnation Title Agency of Michigan underwritten by Fidelity National Title Insurance Company, Commitment No. 159714LANS, dated July 21, 2015)
Parcel 1:
Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)

DENOTES PROPOSED TREE PROTECTION FENCE (TYP)

DENOTES TREES TO BE REMOVED (TYP)

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
- ▲T/C 800.00 PROPOSED TOP OF CURB ELEV.

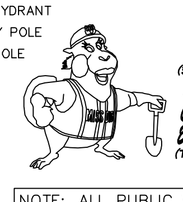
EX. LEGEND

- = SET 1/2" BAR WITH CAP
- = FOUND IRON AS NOTED
- = DEED LINE
- = DISTANCE NOT TO SCALE
- = FENCE
- = ASPHALT
- = CONCRETE
- = GRAVEL
- = OVERHEAD WIRES
- = SANITARY CLEANOUT
- = FIRE HYDRANT
- = UTILITY POLE
- = HANDHOLE
- = SIGN
- = POST

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

BENCHMARK #1 ELEV. = 878.99
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB



NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER NO. 46796
LICENSED PROFESSIONAL ENGINEER

REVISIONS
5–21–19 SUBMITTAL
6–5–19 REV. SUP
7–31–19 REV. SUP

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

1510 Grand River Ave.

DEMOLITION PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4–17–18	PROJECT MGR. JWK	SHEET 6 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

E–93386–SUP
SURVEY#93386.ALT

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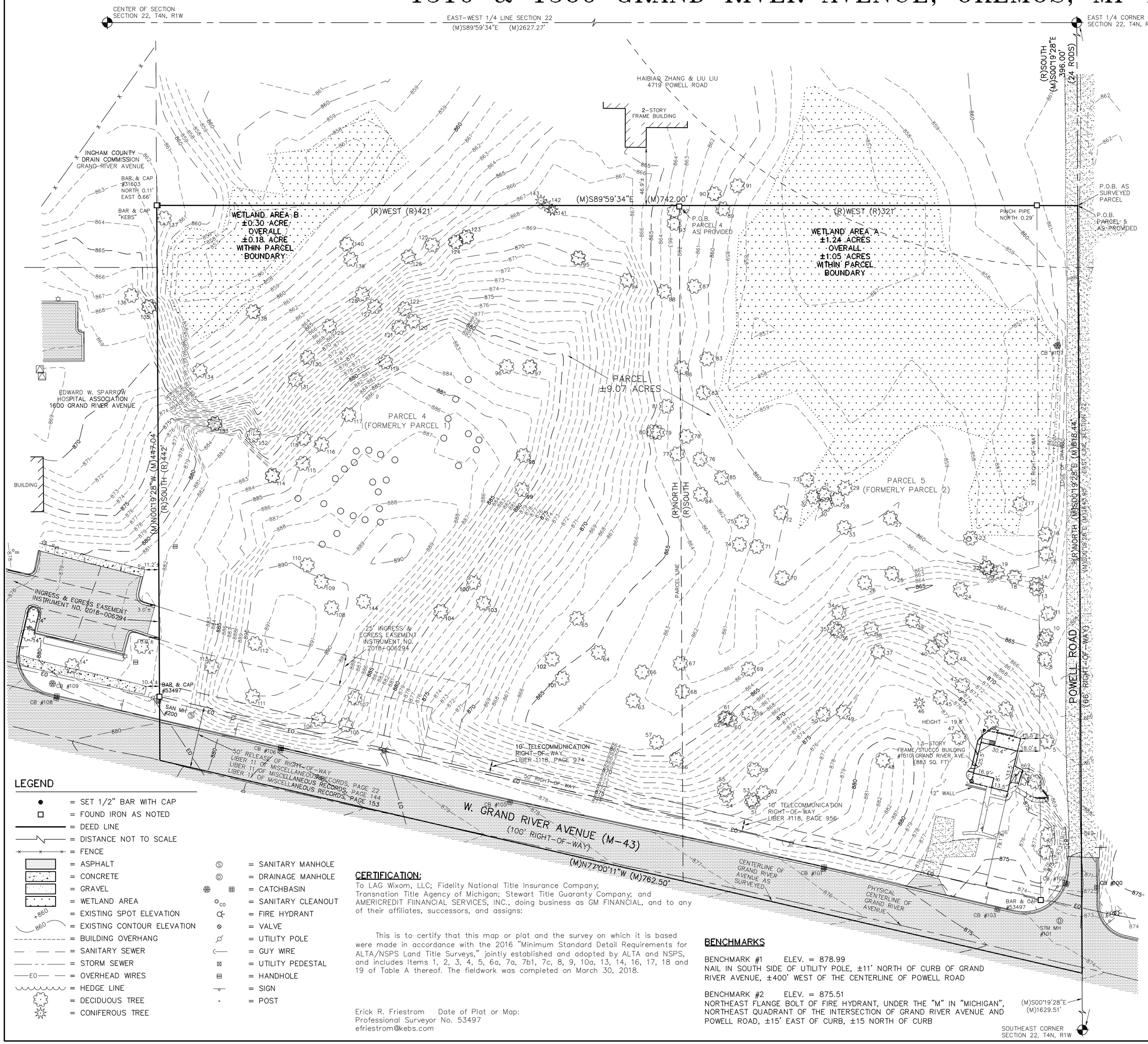
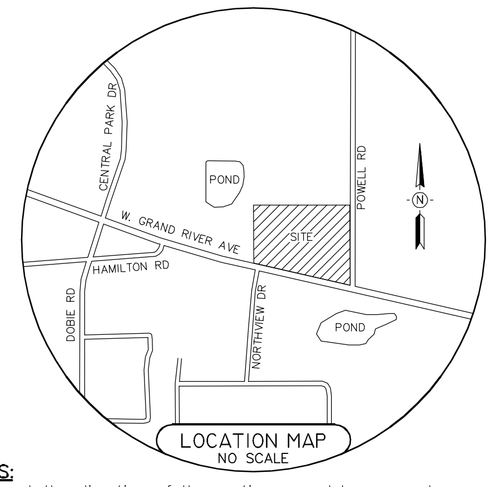
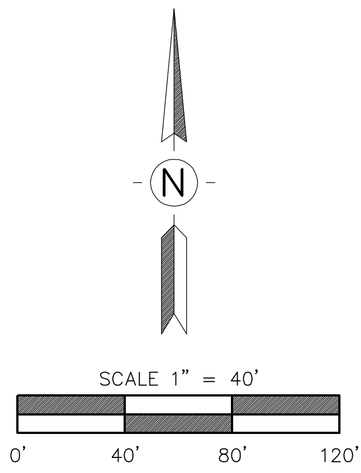
ALTA/NSPS LAND TITLE SURVEY

"1510 & 1560 GRAND RIVER AVENUE, OKEMOS, MI 48864"







SURVEYOR'S NOTES:

1. 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 March 2018.

2. 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 Mason C.O.R.S.

3. All dimensions are in feet and decimals thereof.

4. No building tie dimensions are to be used for establishing the property lines.

5. 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.

6. Parcel has direct access to public W. Grand River Avenue and public Powell Road.

7. Labels for all trees shown are per tag numbers identified by Marx Wetlands, LLC, during tagging completed in March 2016.

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

Item 1: Shown on the survey map.

Item 2: Addresses of the surveyed property: 1510 & 1560 Grand River Avenue, Okemos, MI 48864

Item 3: By scaled map location and graphic plotting only, this property lies entirely within Flood Zone "X", areas outside the 0.2% 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 0159 D, dated August 16, 2011.

Item 4: 9.07 Acres (395,285 square feet)

Item 6a: Parcel is zoned C-2 per a letter provided by client from Keith Chapman, Assistant Planner/Community Development & Planning, Meridian Township, dated July 25, 2018. No minimum required setbacks or parking spaces were listed in said letter for the property.

Item 7a: Shown on the survey map.

Item 7b1: Shown on the survey map.

Item 7c: Shown on the survey map.

Item 8: Shown on the survey map.

Item 9: Parking:
Regular Parking Spaces: 0
Disabled Parking Spaces: 0
Total on-site Parking Spaces: 0

Item 10a: There are no party walls on-site.

Item 13: Shown on the survey map.

Item 14: Shown on the survey map.

Item 16: There is no observable evidence of earth moving work, building construction, or building additions within recent months.

Item 17: There is no observable evidence of proposed changes in street right of way lines, or recent street or sidewalk construction or repairs.

Item 18: Shown on the survey map. Wetland delineation completed by Marx Wetlands, LLC, on March 15, 2016.

Item 19: There is a reciprocal easement that both benefits and burdens the parcel per the exceptions shown in Schedule B-II of said provided title commitment. Said easement is shown hereon.

Item 20: KEBS Inc. carries Professional Liability Insurance.

SEWER INVENTORIES

CATCH BASIN #100
RIM ELEV. = 871.64
12" RCP W INV. = 869.28

STORM MANHOLE #101
RIM ELEV. = 873.44
12" RCP N INV. = 868.48
18" RCP SE INV. = 867.95
18" RCP NW INV. = 868.04

CATCH BASIN #102
RIM ELEV. = 871.54
12" RCP E INV. = 868.63
12" RCP S INV. = 868.54

CATCH BASIN #103
RIM ELEV. = 874.19
18" RCP SE INV. = 868.27
12" RCP SW INV. = 868.70
18" RCP NW INV. = 868.43

CATCH BASIN #104
RIM ELEV. = 875.62
18" RCP SE INV. = 869.03
12" RCP SW INV. = 869.17
18" RCP NW INV. = 869.03

CATCH BASIN #105
RIM ELEV. = 878.07
18" RCP SE INV. = 869.57
12" RCP SW INV. = 869.65
12" RCP NW INV. = 869.61

CATCH BASIN #106
RIM ELEV. = 879.86
12" RCP SE INV. = 870.70
12" RCP SW INV. = 870.70

CATCH BASIN #107
RIM ELEV. = 857.44
8" RCP N INV. = 855.54

CATCH BASIN #108
RIM ELEV. = 879.04
12" RCP SW INV. = 874.48
12" RCP NW INV. = 874.34

STORM MANHOLE #109
RIM ELEV. = 879.38
12" RCP SE INV. = 873.86
12" RCP NW INV. = 873.51

SANITARY MANHOLE #200
RIM ELEV. = 880.92
8" STEEL NE INV. = 873.66
6" STEEL SE INV. = 874.29
12" STEEL NW INV. = 873.22

LEGAL DESCRIPTION:

(As provided in Stewart Title Guaranty Company title commitment No. 18000350028 dated June 15, 2018)

PARCEL 4 (Formerly Parcel 1):
Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

PARCEL 5 (Formerly Parcel 2):
Commencing 24 rods South of the East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan; thence West parallel with the 1/4 line 321 feet; thence South parallel with the East Section line to the center of Grand River Road; thence Southeasterly down the center of said road to the East Section line; thence North along Section line to the place of beginning.

PARCELS 4 AND 5 NOW SURVEYED AS:
A parcel of land in the Southeast 1/4 of Section 22, T4N, R1W, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as: Commencing at the East 1/4 corner of said Section 22; thence South 00 degrees 19 minutes 28 seconds East along the East line of said Section 22 a distance of 396.00 feet to the point of beginning of this description; thence continuing South 00 degrees 19 minutes 28 seconds East along said East line 618.44 feet to the centerline of W. Grand River Avenue; thence North 77 degrees 00 minutes 11 seconds West along said centerline 762.50 feet; thence North 00 degrees 19 minutes 28 seconds West parallel with said East line 447.04 feet; thence South 89 degrees 59 minutes 34 seconds East parallel with the East-West 1/4 line of said Section 22 a distance of 742.00 feet to the point of beginning.

SCHEDULE B, SECTION II, EXCEPTIONS:

(As provided in Stewart Title Guaranty Company title commitment No. 18000350028 dated June 15, 2018)

Item 12: Release of Right of Way vested in State of Michigan by instrument dated July 16, 1923 and recorded February 13, 1924 in Liber 11 of Misc. Records, Page 22, crosses parcel, is plottable and shown hereon.

Item 13: Release of Right of Way vested in County of Ingham by instrument dated April 28, 1924 and recorded January 19, 1925 in Liber 11 of Misc. Records, Page 144, crosses parcel, is plottable and shown hereon.

Item 14: Release of Right of Way vested in County of Ingham by instrument dated April 28, 1924 and recorded January 19, 1925 in Liber 11 of Misc. Records, Page 153, crosses parcel, is plottable and shown hereon.

Item 15: Easement granted to Consumers Power Company dated August 16, 1950 and recorded May 9, 1951 in Liber 50 of Misc. Records, Page 382, may cross parcel, is not plottable, therefore not shown hereon.

Item 16: Easement granted to Consumers Energy Company recorded in Liber 50 of Misc. Records, Page 385, may cross parcel, is not plottable, therefore not shown hereon.

Item 17: Easement granted to Michigan Bell Telephone Company dated October 5, 1973 and recorded October 25, 1973 in Liber 1118, Page 956, crosses parcel, is plottable and shown hereon.

Item 18: Easement granted to Michigan Bell Telephone Company recorded in Liber 1118, Page 974, crosses parcel, is plottable and shown hereon.

Item 19: Reciprocal Easement Agreement recorded in Instrument No. 2018-006294, crosses and abuts parcel, is plottable and shown hereon.

LEGEND

- = SET 1/2" BAR WITH CAP
- = FOUND IRON AS NOTED
- = DEED LINE
- = DISTANCE NOT TO SCALE
- = FENCE
- = ASPHALT
- = CONCRETE
- = GRAVEL
- = WETLAND AREA
- = EXISTING SPOT ELEVATION
- = EXISTING CONTOUR ELEVATION
- = BUILDING OVERHANG
- = SANITARY SEWER
- = STORM SEWER
- = OVERHEAD WIRES
- = HEDGE LINE
- = DECIDUOUS TREE
- = CONIFEROUS TREE
- = SANITARY MANHOLE
- = DRAINAGE MANHOLE
- = CATCHBASIN
- = SANITARY CLEANOUT
- = FIRE HYDRANT
- = VALVE
- = UTILITY POLE
- = GUY WIRE
- = UTILITY PEDESTAL
- = HANDHOLE
- = SIGN
- = POST

CERTIFICATION:

To LAG Wixom, LLC; Fidelity National Title Insurance Company; Transnation Title Agency of Michigan; Stewart Title Guaranty Company; and AMERICREDIT FIINANCIAL SERVICES, INC., doing business as GM FINANCIAL, and to any of their affiliates, successors, and assigns:

This is to certify that this map or plat 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, 5, 6a, 7a, 7b1, 7c, 8, 9, 10a, 13, 14, 16, 17, 18 and 19 of Table A thereof. The fieldwork was completed on March 30, 2018.

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

BENCHMARKS

BENCHMARK #1 ELEV. = 878.99
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB

REVISIONS	COMMENTS
04/17/2018	PRELIMINARY
05/24/2018	SIGNED FINAL
07/25/2018	UPDATED CERTIFICATIONS
07/27/2018	REVISE PER COMMENTS
07/27/2018	SIGNED FINAL

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
FIELD WORK BY	SL
SHEET	7 OF 7
SECTION	22, T4N, R1W
JOB NUMBER:	93386.ALT

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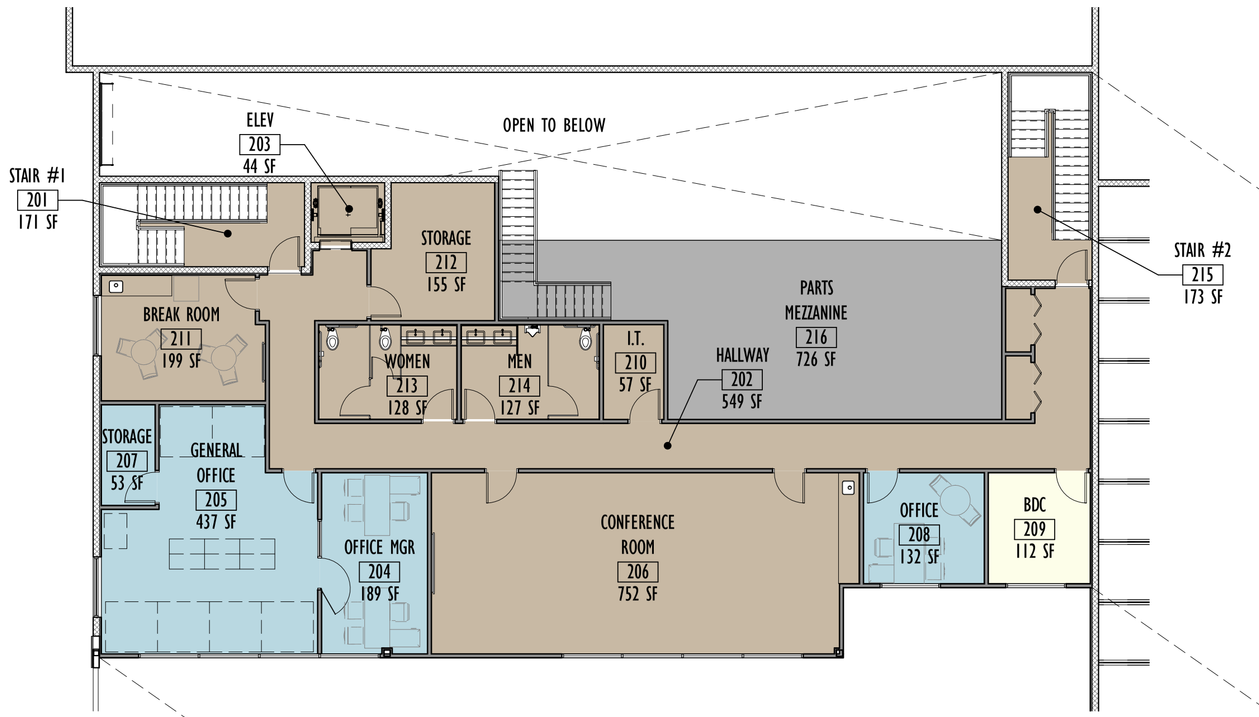

N

SECOND FLOOR PLAN - COMPOSITE

3/32" = 1'-0"

N

FIRST FLOOR PLAN - COMPOSITE

3/32" = 1'-0"

DEALERSHIP ZONES

- SALES
- CUSTOMER
- SERVICE
- PARTS
- ADMINISTRATION
- EMPLOYEE FACILITIES

DEPARTMENT AREA BY FLOOR

DEPARTMENT	LEVEL	AREA (NSF)
ADMINISTRATION	FINISH FIRST FLOOR	107 SF
ADMINISTRATION	FINISH SECOND FLOOR	812 SF
		918 SF
CUSTOMER	FINISH FIRST FLOOR	1270 SF
		1270 SF
EMPLOYEE FACILITIES	FINISH FIRST FLOOR	832 SF
EMPLOYEE FACILITIES	FINISH SECOND FLOOR	2385 SF
		3217 SF
PARTS	FINISH FIRST FLOOR	1453 SF
PARTS	FINISH SECOND FLOOR	726 SF
		2179 SF
SALES	FINISH FIRST FLOOR	5449 SF
SALES	FINISH SECOND FLOOR	112 SF
		5561 SF
SERVICE	FINISH FIRST FLOOR	10800 SF
		10800 SF
TOTAL (NSF)		23944 SF
BUILDING FOOTPRINT		20947 SF
2ND FLOOR		3960 SF
TOTAL GROSS AREA		24906 SF

STUDIO DETROIT
VISIONARIES
INNOVATORS
ARCHITECTS

2111 WOODWARD AVE STE 1001
DETROIT MICHIGAN 48201
313.919.5886 - 313.909.3607
STUDIO-DETROIT.COM

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DO NOT SCALE DRAWINGS

ISSUED	
06.29.18	PRELIM SUP
11.08.18	OWNER REVIEW
12.21.18	OWNER REVIEW
01.17.19	OWNER REVIEW
03.26.19	50% REVIEW
03.28.19	PERMITTING
05.23.19	SUP
FILE	
DRAWN	PNP
CHECKED	SMB
SEAL	

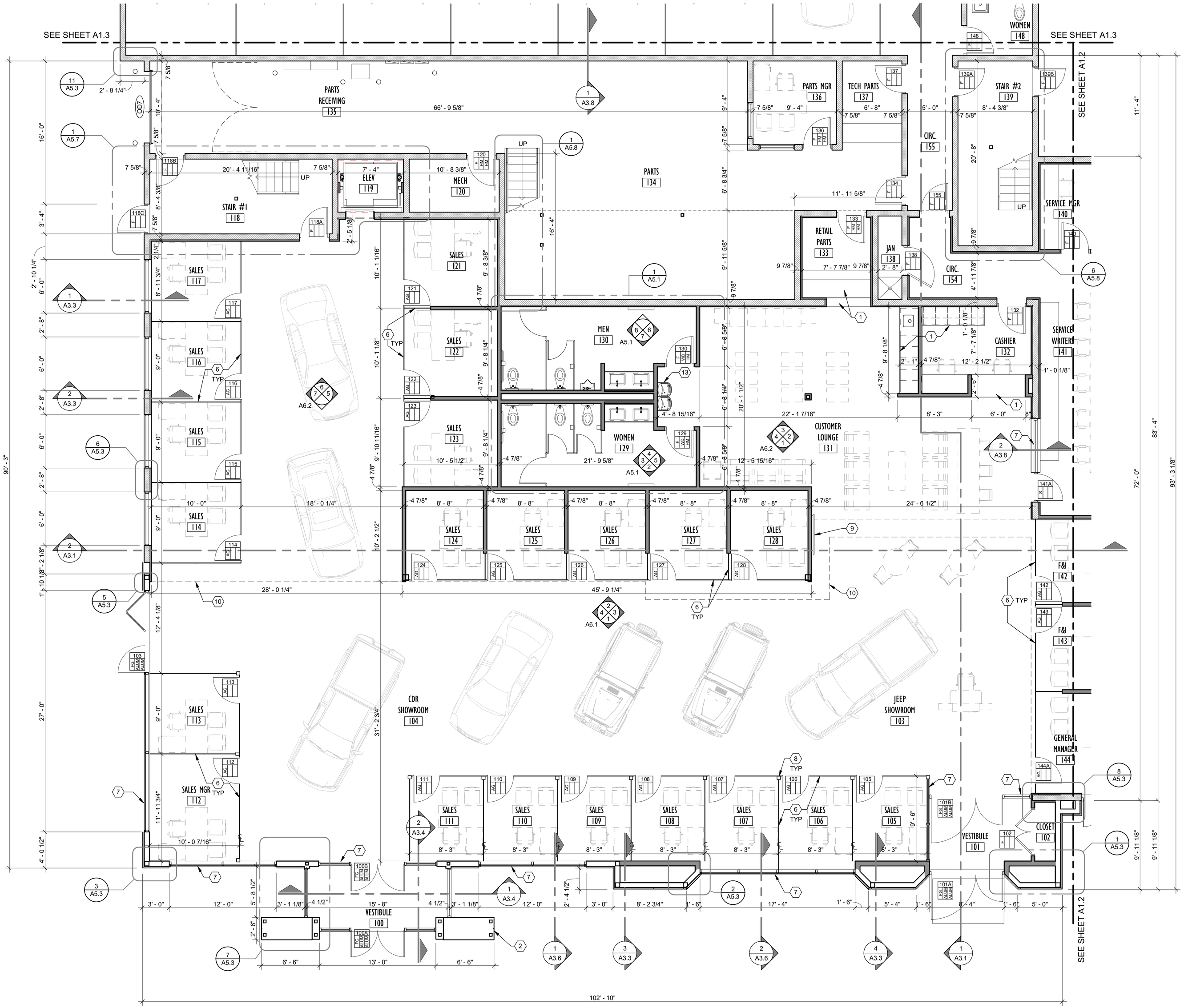
CLIENT
LAFONTAINE AUTOMOTIVE GROUP
4000 W. HIGHLAND RD.
HIGHLAND, MI 48357
RYAN LAFONTAINE

PROJECT
LAFONTAINE CDJR
PROPOSED NEW FACILITY
OKEMOS, MI

JOB NO.
1760

SHEET
COMPOSITE FLOOR PLAN

SHEET NO.
A1.0



PARTIAL FIRST FLOOR PLAN - NEW WORK
3/16" = 1'-0"

GENERAL FLOOR PLAN NOTES:

1. THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE SET OF WORK AS INDICATED AND SHALL FIELD VERIFY ALL WORK, COORDINATE ALL DRAWINGS / NEW WORK AND SHALL NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCIES.
2. ALL DIMENSIONS ARE SHOWN FROM FINISH FACE TO FINISH FACE OF PARTITION UNLESS OTHERWISE NOTED.
3. WALL THICKNESS' ARE NOMINAL NOT ACTUAL DIMENSIONS. SEE WALL SCHEDULE FOR ACTUAL DIMENSIONS.
4. ALL WOOD, INCLUDING BLOCKING, USED ON THE PROJECT SHALL BE FIRE RETARDANT TREATED.
5. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL LOCAL, STATE, COUNTY CODE REGULATIONS, O.S.H.A., AND THE AMERICAN WITH DISABILITIES ACT (ADA). REFER TO THE CODE PLAN FOR MORE INFORMATION AND ADA REQUIRED CLEARANCES.
6. PROVIDE POSITIVE SLOPE TO ALL FLOOR DRAINS WHILE KEEPING FLOOR LEVEL AT WALL BASE CONDITION.
7. PROVIDE TRANSITION STRIPS AT EACH CHANGE IN FLOOR FINISH MATERIALS.
8. REINFORCE WALL AND PROVIDE BLOCKING AS REQUIRED TO SUPPORT WALL CABINETS AND COUNTERTOPS.
9. THE CONTRACTOR SHALL PROVIDE AND INSTALL WALL REINFORCING FOR INSTALLATION OF ACCESSORIES, COAT RACKS, CASEWORK, AND OTHER WALL MOUNTED ITEMS.
10. CLEAN AND REPAIR ALL EXISTING FLOOR FINISHES AS NECESSARY.
11. PROVIDE CONTROL JOINTS IN GYPSUM BOARD PARTITIONS AT 24'-0" O.C. MAXIMUM AND AS INDICATED IN THE CONTRACT DOCUMENTS.
12. COORDINATE WITH OWNER'S EQUIPMENT SUPPLIER FOR INSTALLATION REQUIREMENTS / LOCATIONS OF FLOOR / WALL / CEILING MOUNTED ITEMS; IE. CAMERAS, TV'S, SPEAKERS, SENSORS, SECURITY WIRING, ETC.
13. CONTRACTOR SHALL CONDUCT A ROUGH ELECTRICAL INSPECTION WITH OWNER, PRIOR TO ENCLOSING WALLS, FOR THE PURPOSE OF CONFIRMING ALL J-BOX LOCATIONS FOR POWER, DATA, VOICE, SWITCH, THERMOSTAT, ETC.
14. A TACTILE SIGN STATING 'EXIT' AND COMPLYING WITH ICC-A117.1 SHALL BE PROVIDED ADJACENT TO EACH DOOR TO AN 'AREA OF REFUGE', AN EXTERIOR AREA FOR ASSISTED RESCUE, AN EXIT STAIRWAY, AN EXIT RAMP, AN EXIT PASSAGEWAY, AND THE EXIT DISCHARGE.
15. PROVIDE PERMANENT 2-INCH HIGH LETTERING MARKING AND IDENTIFICATION AT ALL FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS, SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS AT 30 FEET MAXIMUM HORIZONTAL INTERVALS, MINIMUM 2 LOCATIONS EACH WALL, IN ACCESSIBLE CONCEALED FLOOR, FLOOR-CEILING, OR ATTIC SPACES PER CODE.
16. ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES SHALL BE FIRE CAULKED/TAPED

FLOOR PLAN KEY NOTES: (TYPICAL THIS SHEET ONLY)

1. PROVIDE NEW MILLWORK; SEE MILLWORK PLANS
2. CHRYSLER PORTAL BY VENDOR
3. LINE OF FLOORING TRANSITION; SEE FINISH FLOOR PLAN
4. INDICATES LOCATION OF MASS CONC. POUR FROST SLAB; SEE STRUCT.
5. STEEL COLUMN; SEE STRUCTURAL
6. FRAMELESS GLASS WALL SYSTEM; 1/2" TEMPERED GLASS W/ CLEAR ANODIZED TRACK TOP AND BOTTOM
7. ALUMINUM STOREFRONT/ CURTAINWALL SYSTEM W/ DOORS AS SCHED.; SEE FRAME ELEVATIONS
8. ALUMINUM STOREFRONT VERTICAL AND HORIZONTAL ABOVE TO ENCLOSE FRAMELESS GLASS WALL SYSTEM; SEE FRAME ELEVATIONS
9. OWNER PROVIDED TELEVISION; CONFIRM FINAL MOUNTING HEIGHT WITH OWNER AND PROVIDE BLOCKING IN WALL FOR TV BRACKET SUPPORT
10. INDICATES LINE OF SOFFIT ABOVE
11. NEW ELECTRICAL FLOOR BOX (POWER/DATA); COORDINATE w/ FINAL FURNITURE LAYOUT AND ELECTRICAL
12. SEMI-RECESSED FIRE EXTINGUISHER CABINET; SEE SPECS
13. ELECTRIC WATER COOLER; COORD. W/ PLUMBING AND ELECTRICAL - SEE SPECIFICATIONS

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05.24.19	OWNER REVIEW

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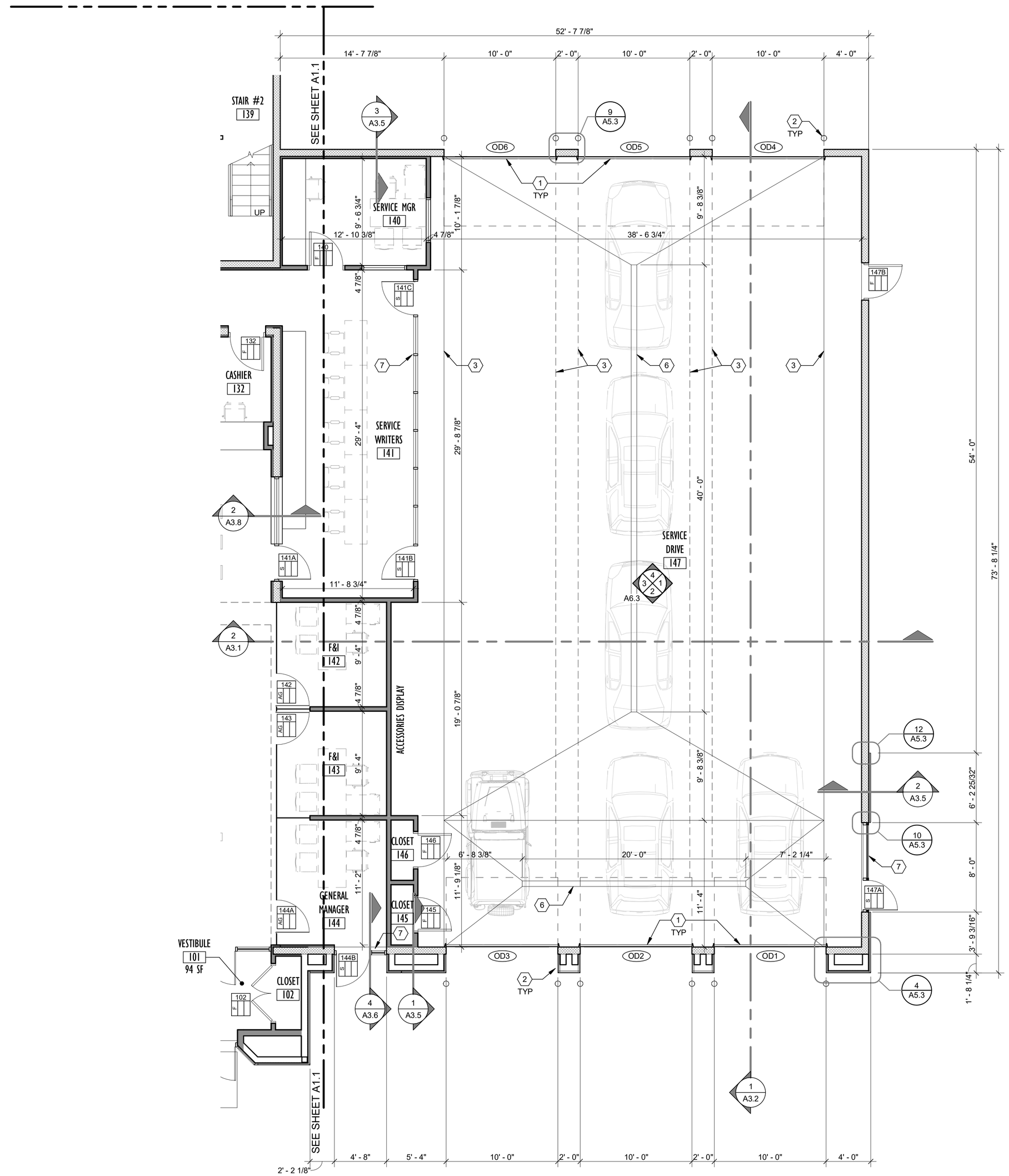
4000 W. HIGHLAND RD.
HIGHLAND, MI 48357
RYAN LAFONTAINE

PROJECT
LAFONTAINE CDJR
PROPOSED NEW FACILITY
OKEMOS, MI

JOB NO.
1760

SHEET
PARTIAL FIRST FLOOR PLAN - NEW WORK

SHEET NO.
A1.1



N

PARTIAL FIRST FLOOR PLAN - NEW WORK

3/16" = 1'-0"

GENERAL FLOOR PLAN NOTES:

1. REFER TO GENERAL FLOOR PLAN NOTES ON SHEET A1.1

FLOOR PLAN KEY NOTES: (TYPICAL THIS SHEET ONLY)

1. NEW OVERHEAD DOOR AND FRAME AS SCHEDULED; PROVIDE STEEL CHANNEL JAMB TO MATCH MASONRY WIDTH
2. NEW CONCRETE FILLED STEEL BOLLARD; PRIME. PROVIDE PLASTIC COVER
3. LINE OF FLOORING TRANSITION; SEE FINISH FLOOR PLAN
4. INDICATES LOCATION OF MASS CONC. POUR FROST SLAB; SEE STRUCT.
5. STEEL COLUMN; SEE STRUCTURAL
6. NEW TRENCH DRAIN; COORDINATE W/ PLUMBING
7. ALUMINUM STOREFRONT/ CURTAINWALL SYSTEM W/ DOORS AS SCHED.; SEE FRAME ELEVATIONS
8. OWNER PROVIDED TELEVISION; CONFIRM FINAL MOUNTING HEIGHT WITH OWNER AND PROVIDE BLOCKING IN WALL FOR TV BRACKET SUPPORT
9. NEW ELECTRICAL FLOOR BOX (POWER/DATA); COORDINATE w/ FINAL FURNITURE LAYOUT AND ELECTRICAL
10. SEMI-RECESSED FIRE EXTINGUISHER CABINET; SEE SPECS

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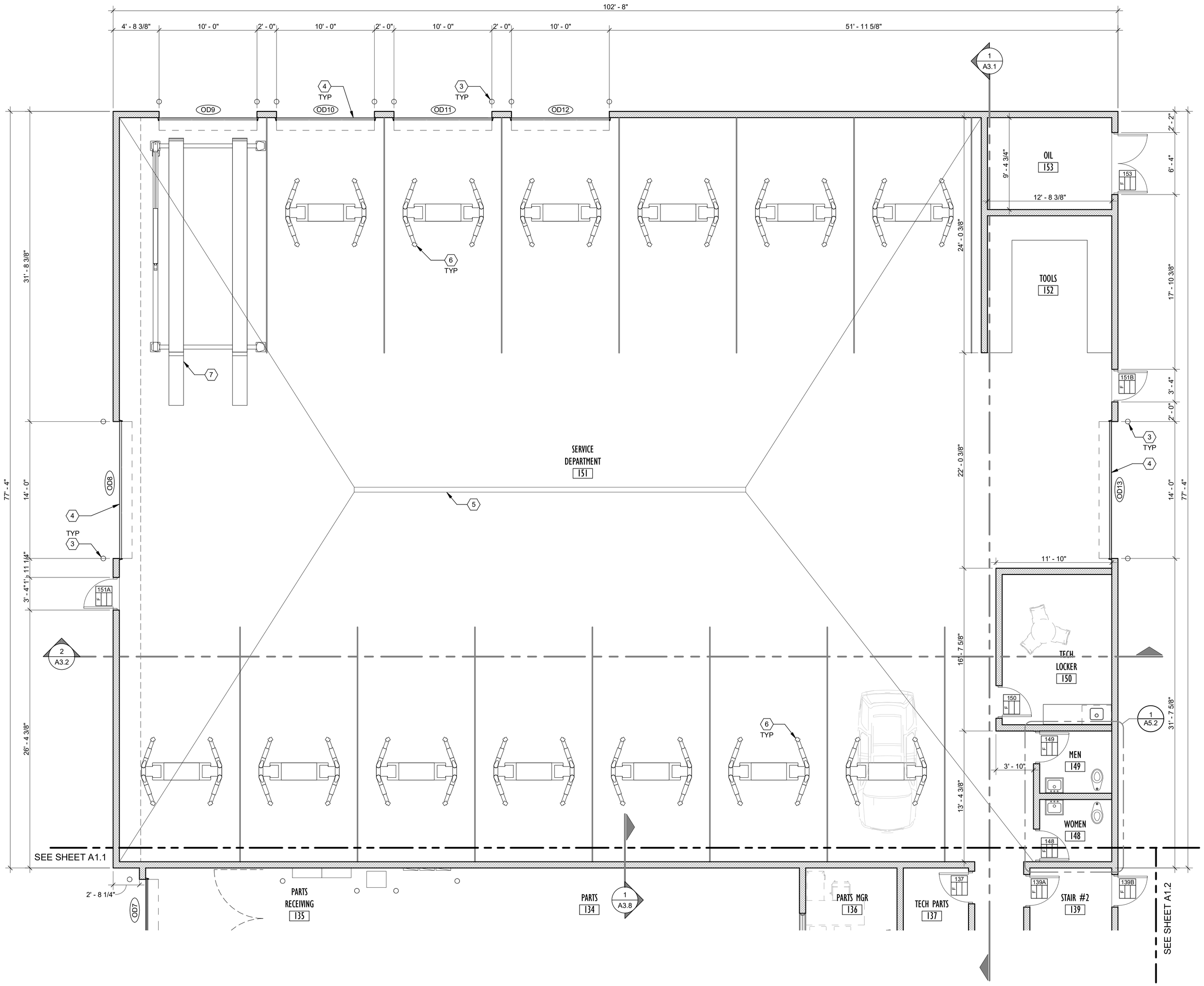
SHEET
PARTIAL FIRST FLOOR PLAN - NEW WORK

SHEET NO.
A1.2



PARTIAL FIRST FLOOR PLAN - NEW WORK

3/16" = 1'-0"

GENERAL FLOOR PLAN NOTES:

1. REFER TO GENERAL FLOOR PLAN NOTES ON SHEET A1.1

FLOOR PLAN KEY NOTES: (TYPICAL THIS SHEET ONLY)

1.
2. NEW CONCRETE APRON; SEE CIVIL
3. NEW CONCRETE FILLED STEEL BOLLARD; PRIME. PROVIDE PLASTIC COVER
4. NEW OVERHEAD DOOR AND FRAME AS SCHEDULED; PROVIDE STEEL CHANNEL JAMB TO MATCH MASONRY WIDTH
5. NEW TRENCH DRAIN; COORDINATE W/ PLUMBING
6. NEW 2-POST HOIST; COORDINATE W/ OWNER EQUIPMENT VENDOR
7. NEW 4-POST HOIST; COORDINATE W/ OWNER EQUIPMENT VENDOR
8. INDICATES LOCATION OF MASS CONC. POUR FROST SLAB; SEE STRUCT.

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SHEET
PARTIAL FIRST FLOOR PLAN - NEW WORK

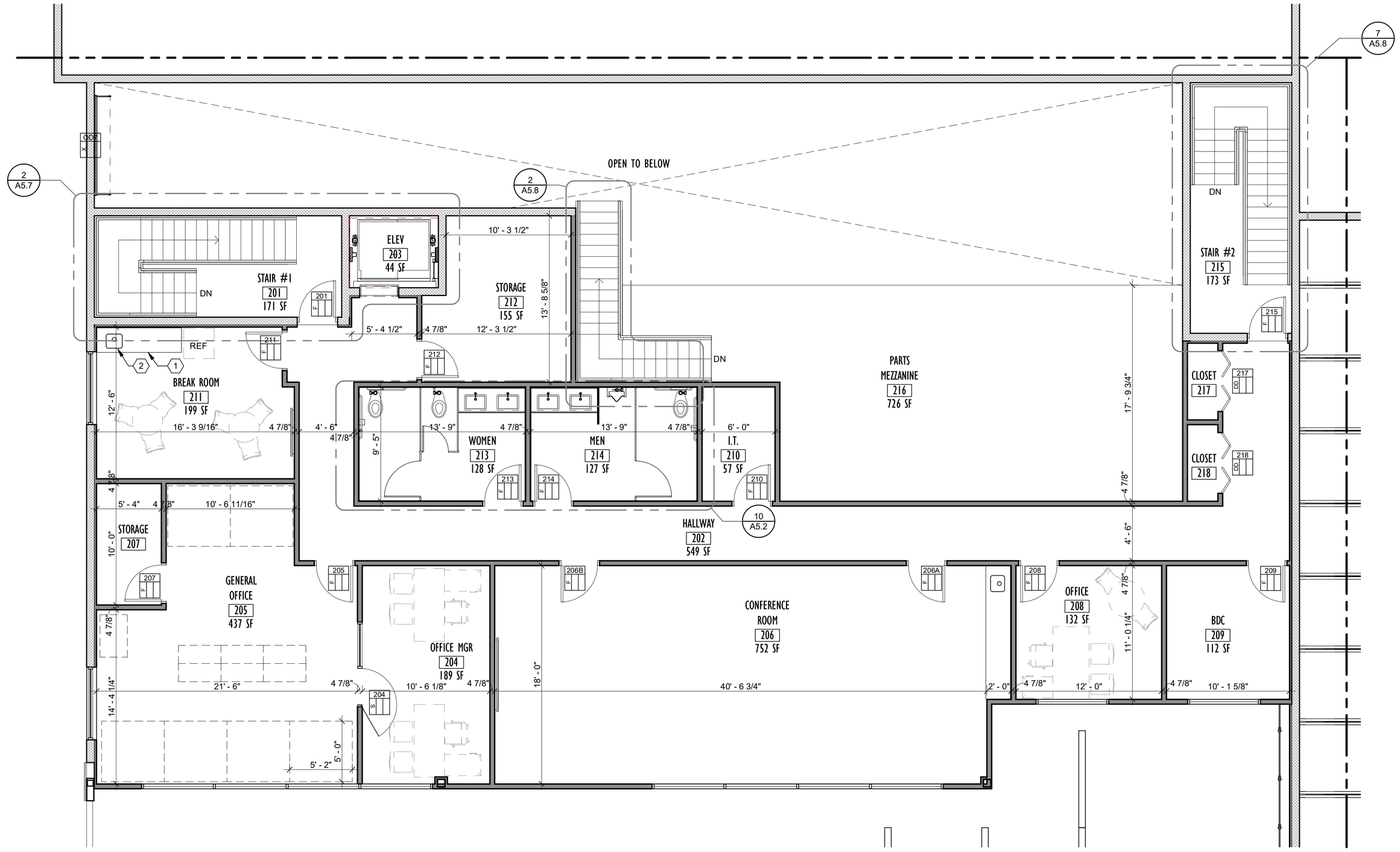
SHEET NO.
A1.3

GENERAL FLOOR PLAN NOTES:

1. REFER TO GENERAL FLOOR PLAN NOTES ON SHEET A1.1

FLOOR PLAN KEY NOTES:
(TYPICAL THIS SHEET ONLY)

1. PROVIDE NEW MILLWORK; SEE MILLWORK PLANS
2. NEW SINK, SEE PLUMBING
3. NEW LADDER TO ROOF HATCH ABOVE



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SECOND FLOOR PLAN - NEW WORK

3/16" = 1'-0"

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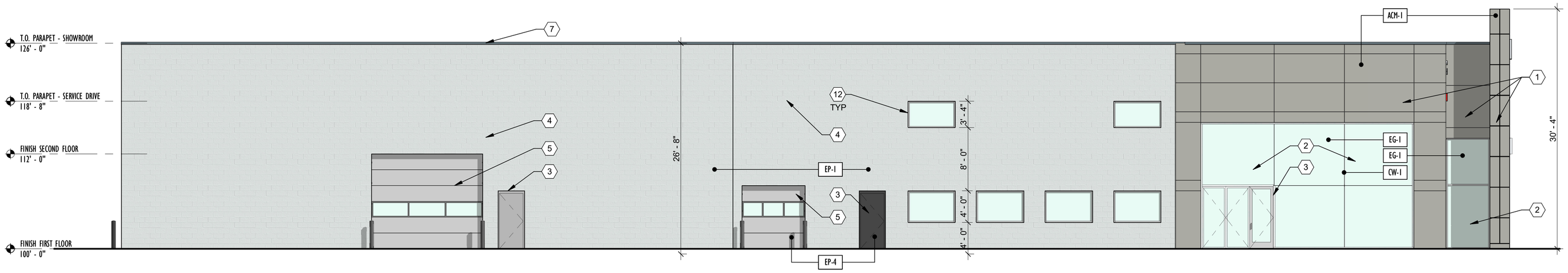
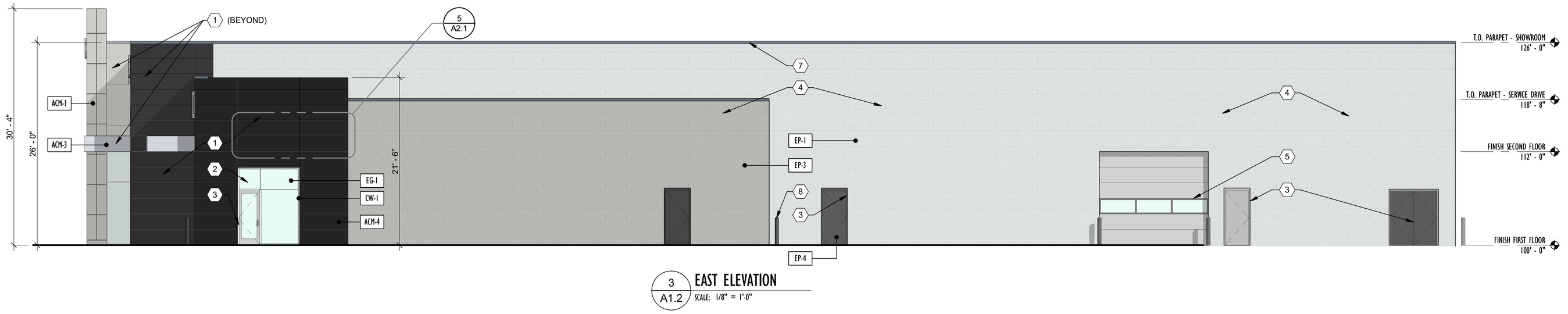
SHEET
SECOND FLOOR PLAN - NEW WORK

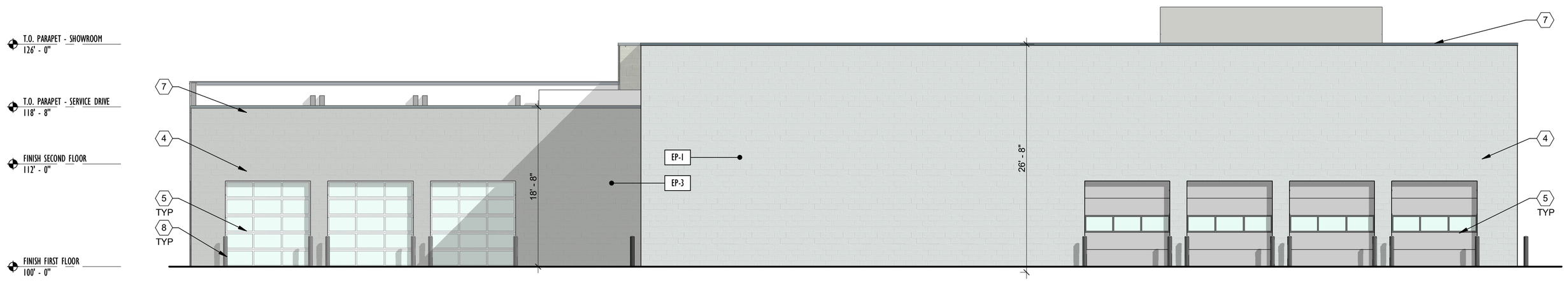
SHEET NO.
A1.4



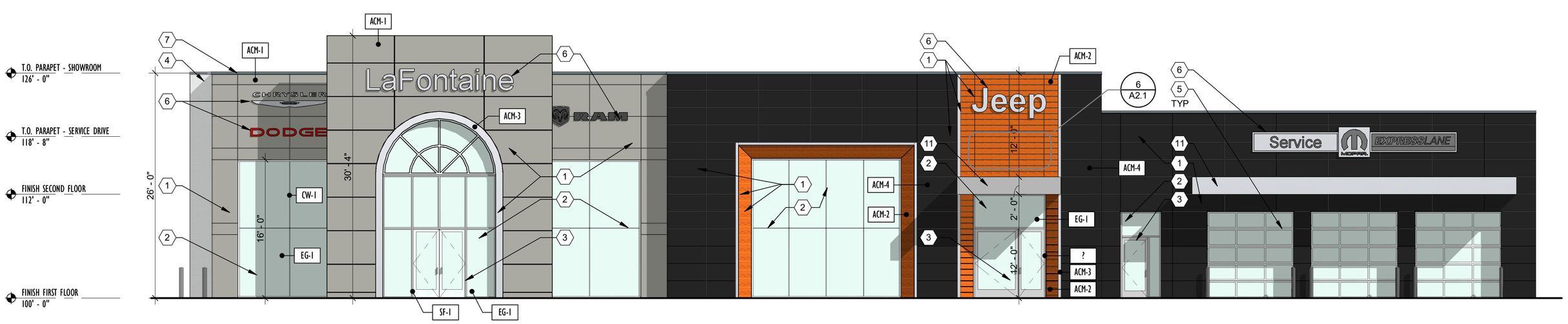
4 A1.1 **WEST ELEVATION**
SCALE: 1/8" = 1'-0"



3 A1.2 **EAST ELEVATION**
SCALE: 1/8" = 1'-0"



2 A1.2 **NORTH ELEVATION**
SCALE: 1/8" = 1'-0"



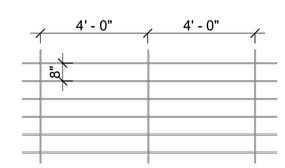
1 A1.1 **SOUTH ELEVATION**
SCALE: 1/8" = 1'-0"

EXTERIOR ELEVATION KEY NOTES: (TYPICAL THIS SHEET ONLY)

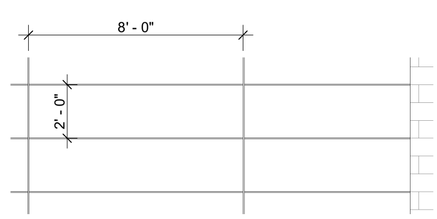
1. ACM PANELS; SEE FINISH SCHEDULE
2. GLASS & ALUMINUM STOREFRONT / CURTAINWALL AS SCHEDULED
3. DOOR AND FRAME AS SCHEDULED
4. CMU WALL (CMU-1); PAINT
5. OVERHEAD DOOR AND FRAME
6. BUILDING MOUNTED SIGNAGE, PROVIDE J-BOX / WIRING TROUGH AND POWER PER APPROVED SIGNAGE DRAWINGS
7. PRE-FINISHED METAL COPING; SEE FINISH SCHEDULE
8. CONC. FILLED STEEL BOLLARD; PRIME & PROVIDE PLASTIC COVER
9. INDICATES LINE OF FOUNDATION
10. ACM CHRYSLER PORTAL
11. ACM CLAD ENTRY CANOPY
12. WINDOW AND FRAME AS SCHEDULED

EXTERIOR MATERIALS

	MATERIAL	FINISH
ACM-1	ALUMINUM COMPOSITE MATERIAL	ALPOLIC - SILVER METALLIC (MTLC BSX SILVER)
ACM-2	ALUMINUM COMPOSITE MATERIAL	ALPOLIC - HARVEST TRAIL BAMBOO
ACM-3	ALUMINUM COMPOSITE MATERIAL	ALPOLIC - HIGH POLISHED ALUMINUM (DM HPA SLVR)
ACM-4	ALUMINUM COMPOSITE MATERIAL	ALPOLIC - ANTHRACITE GRAY
CMU-1	CONCRETE MASONRY UNIT	SMOOTH FACE
EP-1	EXTERIOR PAINT	BENJAMIN MOORE - #1612 - PELICAN GRAY
EP-2	EXTERIOR PAINT	BENJAMIN MOORE - #1615 - ROCK GRAY
EP-3	EXTERIOR PAINT	SHERWIN WILLIAMS - #SW7067 - CITYSCAPE
EP-4	EXTERIOR PAINT	SHERWIN WILLIAMS - #SW6991 - BLACK MAGIC
SF-1 CW-1	STOREFRONT/ CURTAINWALL	CLEAR ANODIZED ALUMINUM FRAMING; THERMALLY BROKEN; SSG WHERE INDICATED
GL-1	EXTERIOR GLAZING	1" CLEAR INSULATED GLAZING
MET-1	PREFINISHED ALUMINUM	METAL COPING; COLOR: TO BE SELECTED



6 A2.1 **ACM-2 JOINT LAYOUT**
SCALE: 1/4" = 1'-0"



5 A2.1 **ACM-4 JOINT LAYOUT**
SCALE: 1/4" = 1'-0"

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11.08.18	OWNER REVIEW
12.21.18	OWNER REVIEW
01.17.19	OWNER REVIEW
03.26.19	50% REVIEW
03.28.19	PERMITTING
05.23.19	SUP
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CHECKED	SMB
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OKEMOS, MI

JOB NO.
1760

SHEET
EXTERIOR ELEVATIONS

SHEET NO.
A2.1

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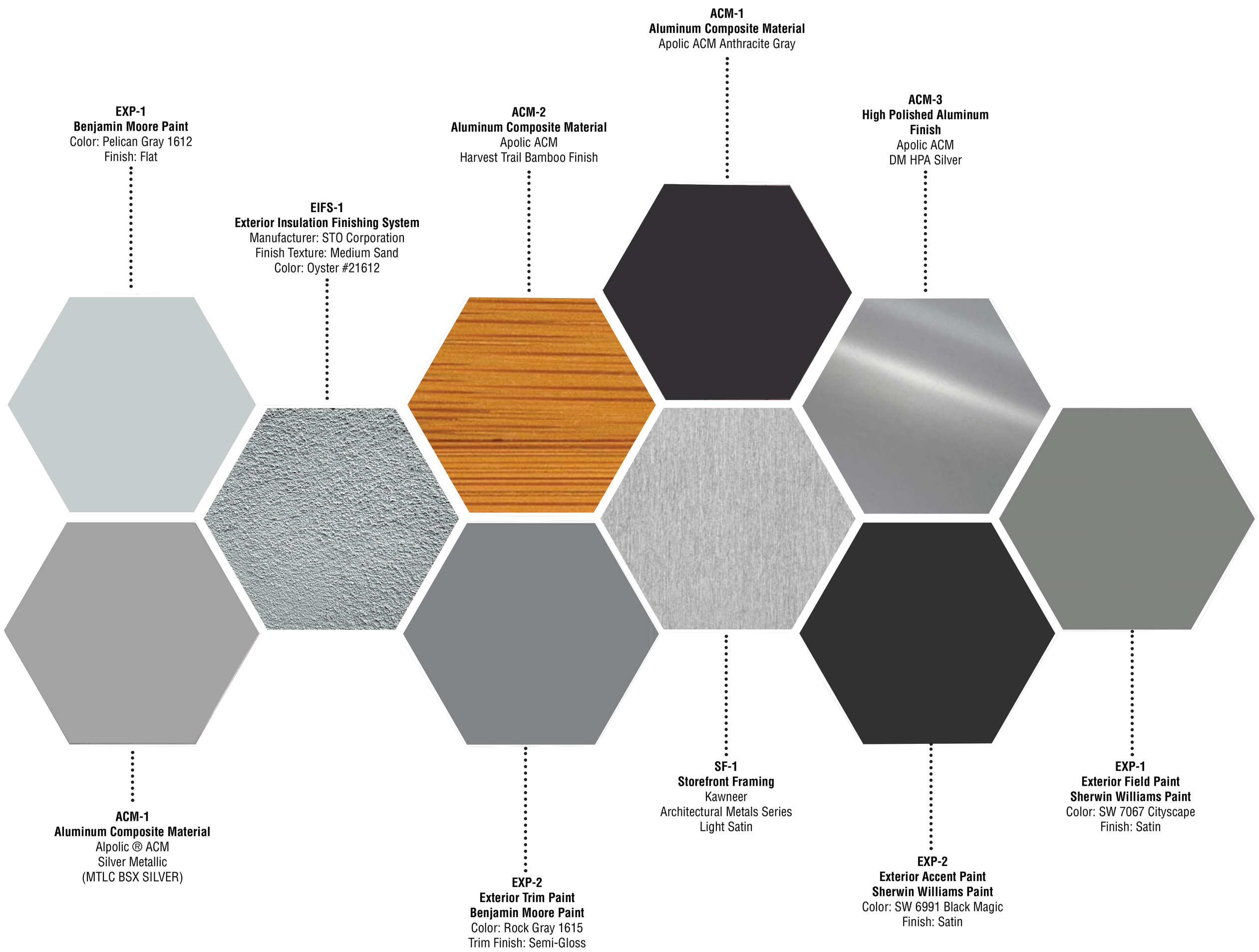
LaFONTAINE

1510 Grand River
Okemos, MI 48864

CHRYSLER DODGE Jeep RAM

Exterior Building Materials



ACM-1
Aluminum Composite Material
Apolic ACM Anthracite Gray

EXP-1
Benjamin Moore Paint
Color: Pelican Gray 1612
Finish: Flat

ACM-2
Aluminum Composite Material
Apolic ACM
Harvest Trail Bamboo Finish

ACM-3
High Polished Aluminum Finish
Apolic ACM
DM HPA Silver

EIFS-1
Exterior Insulation Finishing System
Manufacturer: STO Corporation
Finish Texture: Medium Sand
Color: Oyster #21612

ACM-1
Aluminum Composite Material
Alpolic ® ACM
Silver Metallic
(MTLC BSX SILVER)

EXP-2
Exterior Trim Paint
Benjamin Moore Paint
Color: Rock Gray 1615
Trim Finish: Semi-Gloss

SF-1
Storefront Framing
Kawneer
Architectural Metals Series
Light Satin

EXP-2
Exterior Accent Paint
Sherwin Williams Paint
Color: SW 6991 Black Magic
Finish: Satin

EXP-1
Exterior Field Paint
Sherwin Williams Paint
Color: SW 7067 Cityscape
Finish: Satin

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DODGE

Jeep

RAM

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DODGE

Jeep

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LaFONTAINE

1510 Grand River
Okemos, MI 48864

CHRYSLER DODGE Jeep RAM

To: **Planning Commission**

From: **Peter Menser, Principal Planner**

Justin Quagliata, Assistant Planner

Date: **August 9, 2019**

Re: **<u>Wetland Use Permit #19-03 (LaFontaine Chrysler Dodge Jeep & Ram of Okemos)</u>, request to discharge stormwater from a detention basin into a regulated wetland at 1510 and 1560 Grand River Avenue.**

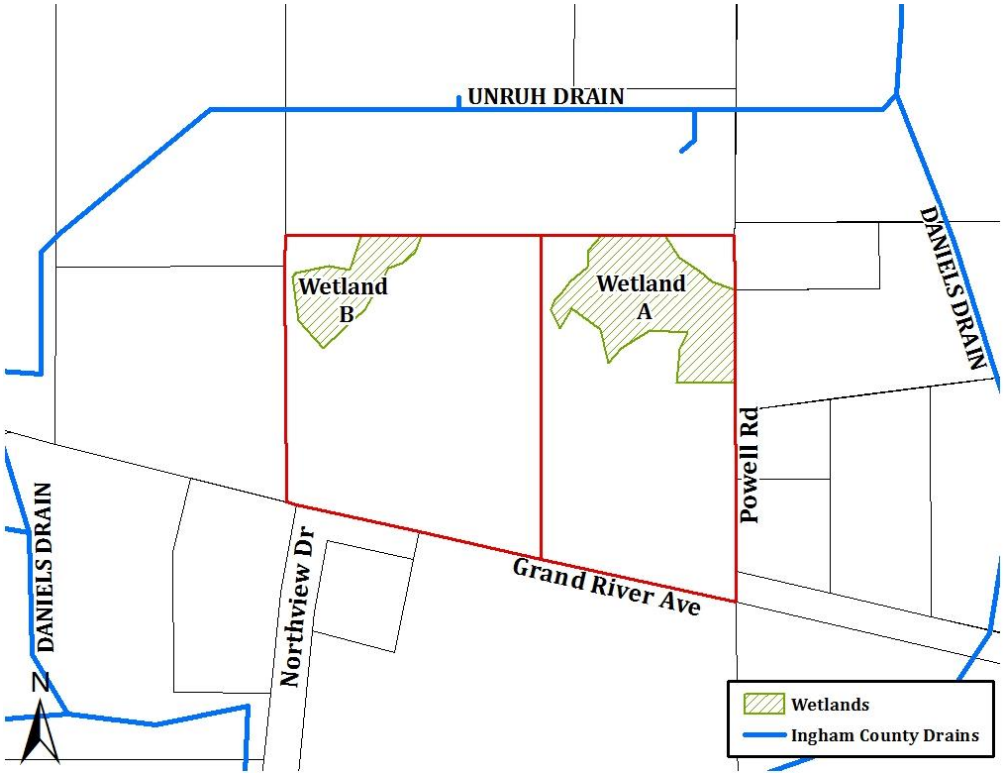
LaFontaine Chrysler Dodge Jeep & Ram of Okemos is requesting a wetland use permit to discharge stormwater from a detention pond at 1560 Grand River Avenue into a regulated wetland at 1510 Grand River Avenue. The request is in conjunction with Special Use Permit #19101, a proposal to construct a 24,902 square foot new car dealership. The Code of Ordinances requires a wetland use permit for draining into a regulated wetland.

Wetland Use Permit (WUP) #16-06, which was approved by the Planning Commission on January 23, 2017, approved the discharge of stormwater from a detention pond into a regulated wetland at 1510 Grand River Avenue. The expiration of Special Use Permit #16091 triggered the expiration of WUP #16-06. As WUP #16-06 has expired, the applicant has resubmitted the project for a new WUP.

The requested WUP is consistent with the original permit approved by the Planning Commission in 2017. The LaFontaine project maintains the same size and location of the detention pond permitted by WUP #16-06. Additionally, the drainage area was reduced 0.62 acre for a total of 4.69 acres. The proposed first-flush discharge, the 100-year storm discharge, and the 100-year discharge volume would be reduced from previously permitted levels. The Township wetland consultant recommended approval of the original WUP in 2016, reviewed the updated materials provided by the applicant, and recommended approval of WUP #19-03. The Michigan Department of Environment, Great Lakes, and Energy (EGLE) issued a permit for the project on November 23, 2016. The EGLE permit was transferred to the applicant on June 5, 2019.

The applicant submitted a wetland delineation report from Marx Wetlands, LLC dated November 9, 2015. The report shows the delineated boundaries of two wetlands on the project site, identified as Wetland A (Wetland 22-16 on the Township's wetland inventory map) and Wetland B (Wetland 22-15 on the Township's wetland inventory map). In March 2016 the Township wetland consultant verified the boundaries of both wetlands.

WETLANDS MAP



Wetland B is a 0.30 acre wetland located at the northwest corner of 1560 Grand River Avenue. Wetland B is connected through a drainage way to a two acre pond and a larger wetland complex to the northwest of the subject property. Wetland A is a 1.24 acre wetland located on the north portion of 1510 Grand River Avenue. Wetland A discharges into a catch basin located on the west side of Powell Road which runs to the Unruh Drain approximately 300 feet to the north.

Both wetlands are regulated by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and Meridian Township as they are located within 500 feet of the ordinary high water mark of an inland lake, stream, river or pond. In this case, Wetland A is within 500 feet of the Unruh Drain to the north and Wetland B is within 500 feet of the two acre pond to the northwest. Due to their regulatory status, a 20 foot setback/natural vegetation strip is required from the delineated boundary of each wetland.

The applicant is proposing to discharge stormwater from a 0.36 acre on-site detention pond into Wetland A. The detention pond will be used to capture and manage stormwater runoff from the proposed development. The detention pond will connect by a 12 inch diameter outlet pipe to Wetland A. An outlet structure will be installed to restrict flow between the detention pond and the wetland to the pre-development discharge rate. The pipe will outlet into an area of riprap and go through a level spreader to filter and disperse the flow as it sheet drains to the wetland. A portion of the riprap area is located within the 20 foot setback/natural vegetation strip.

Staff Analysis

There are eleven general criteria provided in the Wetland Protection Ordinance, Section 22-157(2) of the Code of Ordinances, that must be considered when deciding whether to grant a wetland use permit. These include (paraphrased):

a. The relative extent of public and private need for the proposed activity.
b. Availability of prudent and feasible alternatives.
c. Extent and permanence of beneficial or detrimental effects from the activity.
d. Probable impact of the proposal in relation to the cumulative effect by other activities in the watershed.
e. Probable impact on recognized historic, cultural, scenic, ecological, or recreational values, as well as on public health and safety or fish and wildlife.
f. Economic value of the proposed land change.
g. The size and quality of the wetland being considered.
h. The findings of necessity for the proposed activity by other agencies.
i. Amount of wetland remaining in the general area and proximity to a waterway.
j. Proximity to any water body.
k. Extent to which upland soil erosion adjacent to the wetland is controlled.

The Township wetland consultant reviewed the wetland use permit application and recommended issuance of Wetland Use Permit #19-03 with the following conditions:

1. Submit a construction plan detail noting the design of the check dam/level spreader, including the volume and area of riprap and stone placement.

2. Implement appropriate Soil Erosion and Sedimentation Control (SESC) measures during construction to ensure there are no impacts to wetlands outside of project activities as a result of soil erosion. Protective measures shall include installation of silt fence around proposed work areas, especially around the wetland buffer perimeter. Earthwork to construct the detention basin and to establish desired grades shall follow installation of silt fences. Construction of the building and parking area and installation of utilities shall not begin until earthwork is completed and the site is stabilized. The stormwater outlet to the wetland shall be constructed after the site is stabilized and functional.

The Environmental Commission reviewed the application materials for Wetland Use Permit #16-06 at its meeting on December 7, 2016 and voted to recommend approval of the permit.

Planning Commission Options

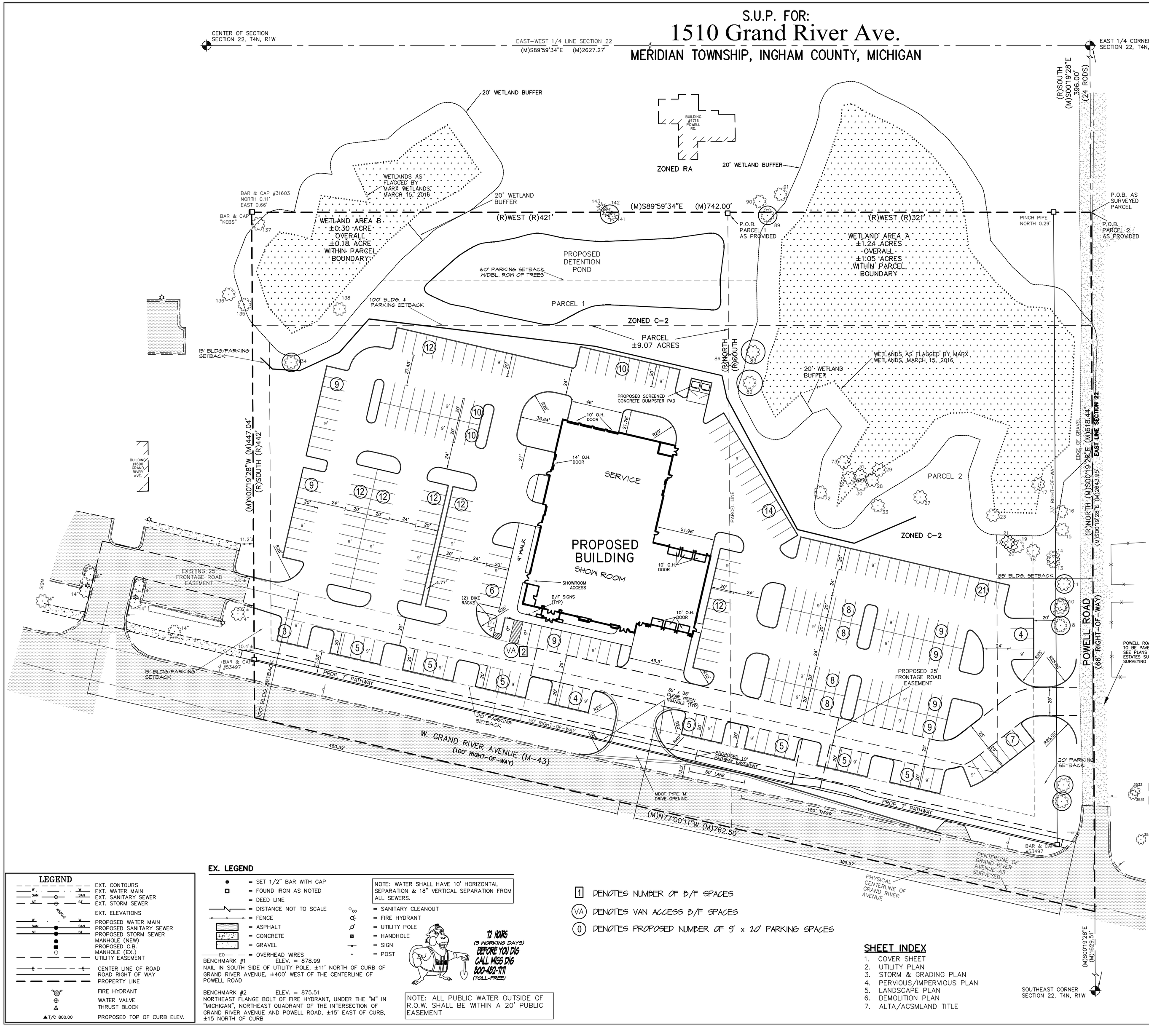
Pursuant to Section 22-157(1) of the Code of Ordinances, the Planning Commission has the option to approve, approve with conditions, or deny Wetland Use Permit #19-03. Based on the submittal date of July 23, 2019 and the 90-day review timeline established in the State Wetland Act and the Township's Wetland Ordinance, the deadline for action is October 21, 2019. A resolution will be provided at a future meeting.

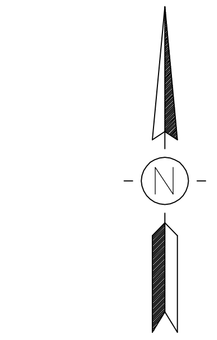
Attachments

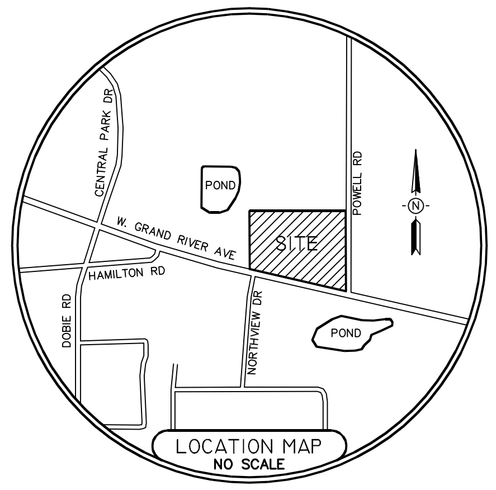
1. Site plans prepared by Kebs, Inc. dated April 17, 2018 (revision date July 31, 2019) and received by the Township on August 2, 2019.
2. Township wetland consultant review letter dated July 30, 2019.
3. Letter from Kebs, Inc. dated July 23, 2019.
4. Proposed drainage calculations prepared by Kebs, Inc. dated July 23, 2019.
5. EGLE wetland permit transfer dated June 5, 2019.
6. EGLE wetland permit dated November 23, 2016.
7. Township wetland consultant review letter dated November 22, 2016.
8. Minutes from the January 9, 2017 Planning Commission meeting (public hearing).

G:\Community Planning & Development\Planning\WETLAND USE PERMITS (WUP)\2019\WUP 19-03 (LaFontaine)\WUP 19-03.pc1

S.U.P. FOR:
1510 Grand River Ave.
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN







BUILDING #4714 POWELL RD.

LEGAL DESCRIPTION:
(As provided by Transnation Title Agency of Michigan underwritten by Fidelity National Title Insurance Company, Commitment No. 159714LANS, dated July 21, 2015)
Parcel 1:
Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

CLIENT:
LaFontaine Automotive Group
4000 W. HIGHLAND
HIGHLAND, MI. 48357
PH: (248) 714-1502
FAX: (248) 887-5293

ENGINEER/SURVEYOR:
KEBS, Inc.
2116 HASLETT RD.
HASLETT, MI. 48840
PH: (517) 339-1014
FAX: (517) 339-8047

SITE DATA:

ZONED C-2
EX. USE VACANT

BUILDING DATA:

BUILDING A (24,906 S.F.)

PARKING REQUIRED:

MOTOR VEHICLE, RECREATIONAL VEHICLE, BOAT, OR MOBILE HOME SALES OR SERVICE ESTABLISHMENTS
1/200 S.F. OF USABLE FLOOR SPACE OF SALES ROOM
1 SPACE FOR EACH VEHICLE ON DISPLAY

5,561/200 x 1 = 27.8 = 28 SPACES
- 2 SPACES (1 SPACE PER EVERY 2 BICYCLE SPACES)
TOTAL REQUIRED 26 SPACES

DISPLAY VEHICLES:
268 X 1 = 268 SPACES

TOTAL 294 SPACES PROVIDED

PERVIOUS/IMPERVIOUS CALCULATIONS:

GROSS PROPERTY 395286 S.F.
TOTAL PROPERTY WITHOUT ROAD R.O.W.= 334345 S.F.
OPEN SPACE PER 86-402 (17)
A) BUILDING PERIMETER LANDSCAPE = 675 L.F. X 4' S.F. = 2,700 S.F., 4,824 S.F. PROVIDED
B) 1/2 OF DETENTION 15,687/2 = 7,844 S.F.
C) ISLANDS, MEDIANS AND OPEN SITE AREAS (MIN. 20' DIMENSIONS) = 157,252 S.F.
NET OPENSPACE = 169,920 S.F. = 51%
NET IMPERVIOUS AREA = 164,425 S.F = 49% (MAX ALLOWABLE 70%)

SITE ADDRESS: 1510 W. GRAND RIVER AVE., OKEMOS, MI. 48864
PARCEL ID - 33-02-02-22-426-006
PARCEL ID - 33-02-02-22-426-007

BIKE PARKING REQUIRED:
1/10 SPACES
19/10 = 1.9 = 2 SPACES
4 PROVIDED

PARKING LOT LANDSCAPE REQUIREMENTS:

2 TREE/10 SPACES
294/10 = 30 x 2 = 60 TREES (60 PROVIDED)
200 S.F./10 SPACES
294/10 x 200 = 5,880 S.F. (9,530 S.F. PROVIDED)

14 TREES REQUIRED ALONG GRAND RIVER AVENUE, 14 PROVIDED

DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)
DENOTES PROPOSED TREE PROTECTION FENCE (TYP)

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
- ▲T/C 800.00 PROPOSED TOP OF CURB ELEV.

EX. LEGEND

- = SET 1/2" BAR WITH CAP
- = FOUND IRON AS NOTED
- = DEED LINE
- = DISTANCE NOT TO SCALE
- = FENCE
- = ASPHALT
- = CONCRETE
- = GRAVEL
- = OVERHEAD WIRES
- = SANITARY CLEANOUT
- = FIRE HYDRANT
- = UTILITY POLE
- = HANDHOLE
- = SIGN
- = POST

BENCHMARK #1 ELEV. = 878.99
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB

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

NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

[1] DENOTES NUMBER OF B/F SPACES
(VA) DENOTES VAN ACCESS B/F SPACES
(0) DENOTES PROPOSED NUMBER OF 9' x 20' PARKING SPACES

SHEET INDEX

1. COVER SHEET
2. UTILITY PLAN
3. STORM & GRADING PLAN
4. PERVIOUS/IMPERVIOUS PLAN
5. LANDSCAPE PLAN
6. DEMOLITION PLAN
7. ALTA/ACSMLAND TITLE

STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER
NO. 46796
LICENSED PROFESSIONAL ENGINEER

REVISIONS
5-21-19 SUBMITTAL
6-5-19 REV. SUP
7-31-19 REV. SUP

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

1510 Grand River Ave.
COVER SHEET

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 1 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

E-93386-SUP
SURVEY#93386.ALT

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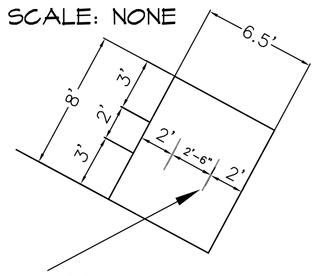
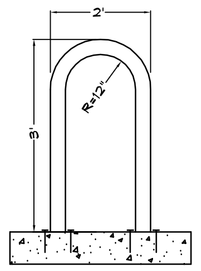
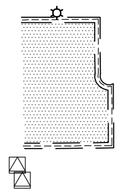
S.U.P. FOR:
1510 Grand River Ave.
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

BIKE RACK DETAIL
SCALE: NONE



RACKS SHALL BE "U" SHAPED
MIN. HT 36", MIN. LENGTH 2'





BUILDING #1600 GRAND RIVER AVE.

EX. 25' INGRESS & EGRESS EASEMENT INSTRUMENT NO. 2018-006294

INGRESS & EGRESS EASEMENT INSTRUMENT NO. 2018-006294

12" x 8" LIVE TAP 8" G.V. CONC. TH. BLK.

EXISTING 8" WATER

EXISTING 20' WATER EASEMENT

SAN. MH #2000

CB #108

CB #109

CB #897

CB #836

CB #115

CB #106

CB #105

CB #104

CB #148

CB #159

CB #107

CB #100

CB #101

STM MH #101

OPEN CUT EXISTING DRIVE. USE INGHAM COUNTY ROAD DEPARTMENT STANDARDS

20' WETLAND BUFFER

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

WETLAND AREA B
±0.30 ACRE
OVERALL
±0.18 ACRE
WITHIN PARCEL
BOUNDARY

PROPOSED DETENTION POND

WETLAND AREA A
±1.24 ACRES
OVERALL
±1.05 ACRES
WITHIN PARCEL
BOUNDARY

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

BUILDING #4716 POWELL RD.

8"x 6" REDUCER
6" 90° BEND
6" G.V.
HYD. ASSEMBLY

6" GARAGE WASTE

2" CORP.
2" CURB STOP

SCHIER GGI-750
750 GAL. GREASE INTERCEPTOR

8" x 8" TEE
8" x 4" RED.

4" P.I.V.
4" FIRE

FDC CONNECTION

2" DOM.

6" DOMESTIC WASTE

PROPOSED BUILDING

PARCEL LINE

PROP. 20' WATER EASEMENT

PROP. 8" SAN.

PROPOSED 8" WATER

8" x 6" RED.
6" G.V. & HYD.
HYD. ASSEMBLY

8" x 8" TEE
(2) 8" G.V.
CONC. TH. BLK.

PROP. 2" SAN FORCE MAIN FOR PROJECT TO EAST (LAFONTAINE)

PROPOSED 25' FRONTAGE ROAD EASEMENT

PROPOSED 10' PATHWAY EASEMENT

50' RELEASE OF RIGHT-OF-WAY
LIBER 11 OF MISCELLANEOUS RECORDS, PAGE 22
LIBER 11 OF MISCELLANEOUS RECORDS, PAGE 144
LIBER 11 OF MISCELLANEOUS RECORDS, PAGE 153

50' RIGHT-OF-WAY

W. GRAND RIVER AVENUE (M-43)
(100' RIGHT-OF-WAY)

10' TELECOMMUNICATION RIGHT-OF-WAY LIBER 1118, PAGE 974

10' TELECOMMUNICATION RIGHT-OF-WAY LIBER 1118, PAGE 956

EXISTING SAN. FORCE MAIN (ST. MARTHA'S)

PROPOSED 10' PRIVATE SANITARY EASEMENT

PROPOSED 8" WATER

POWELL ROAD
(66' RIGHT-OF-WAY)

PROPOSED 12" WATER BY OTHERS (SILVERSTONE).

POWELL ROAD IS SCHEDULED TO BE PAVED (BY OTHERS). SEE PLANS FOR SILVERSTONE ESTATES SUBDIVISION, ENGER SURVEYING & ENGINEERING

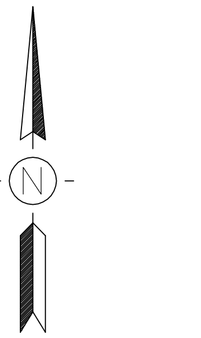
BUILDING #4684 POWELL RD.

BUILDING #1492 GRAND RIVER AVE.

PER ENGER SURVEYING & ENGINEERING SILVERSTONE SUBDIVISION APPROVED PLAN

DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)

DENOTES PROPOSED TREE PROTECTION FENCE (TYP)



SCALE 1" = 40'

0' 40' 80' 120'

SANITARY STRUCTURE INVENTORY

SANITARY MANHOLE #1002
RIM ELEV. = 876.20
12" STEEL SE INV. = 865.24
12" STEEL NW INV. = 865.18

SANITARY MANHOLE #2000
RIM ELEV. = 880.92
8" STEEL NE INV. = 873.66
6" STEEL SE INV. = 874.29
12" STEEL NW INV. = 873.22

STORM STRUCTURE INVENTORY

CATCH BASIN #26
RIM ELEV. = 871.64
12" RCP W INV. = 869.28

STORM MANHOLE #51
RIM ELEV. = 873.44
12" RCP N INV. = 868.48
18" RCP SE INV. = 867.95
18" RCP NW INV. = 868.04

CATCH BASIN #65
RIM ELEV. = 871.54
12" RCP E INV. = 868.63
12" RCP S INV. = 868.54

CATCH BASIN #74
RIM ELEV. = 874.19
18" RCP SE INV. = 868.27
12" RCP SW INV. = 868.70
18" RCP NW INV. = 868.43

CATCH BASIN #83
RIM ELEV. = 875.62
18" RCP SE INV. = 869.03
12" RCP SW INV. = 869.17
18" RCP NW INV. = 869.03

CATCH BASIN #96
RIM ELEV. = 878.07
18" RCP SE INV. = 869.57
12" RCP SW INV. = 869.65
12" RCP NW INV. = 869.61

CATCH BASIN #105
RIM ELEV. = 879.86
12" RCP SE INV. = 870.70
12" RCP SW INV. = 870.70

CATCH BASIN #115
RIM ELEV. = 879.93
12" RCP NE INV. = 871.41
12" RCP NW INV. = 871.61

CATCH BASIN #132
RIM ELEV. = 878.34
12" RCP NE INV. = 873.44

CATCH BASIN #148
RIM ELEV. = 875.75
12" RCP NE INV. = 872.23

CATCH BASIN #159
RIM ELEV. = 874.28
12" RCP NE INV. = 870.28

CATCH BASIN #890
RIM ELEV. = 879.85
12" RCP SE INV. = 872.55

CATCH BASIN #897
RIM ELEV. = 879.47
12" RCP NE INV. = 876.37

CATCH BASIN #987
RIM ELEV. = 857.44
8" RCP N INV. = 855.54

CATCH BASIN #2003
RIM ELEV. = 879.04
12" RCP SW INV. = 874.48
12" RCP NW INV. = 874.34

STORM MANHOLE #2029
RIM ELEV. = 879.38
12" RCP SE INV. = 873.86
12" RCP NW INV. = 873.51

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
- ▲T/C 800.00 PROPOSED TOP OF CURB ELEV.

EX. LEGEND

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- = HANDHOLE
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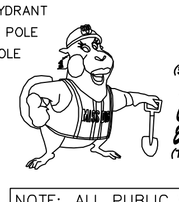
- = POST

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

BENCHMARK #1 ELEV. = 878.99
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB



72 HOURS (3 WORKING DAYS) BEFORE YOU DIG CALL MISS DIG 800-482-7171 (TOLL-FREE)

NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER NO. 46796
LICENSED PROFESSIONAL ENGINEER

REVISIONS
5-21-19 SUBMITTAL
6-5-19 REV. SUP
7-31-19 REV. SUP

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

1510 Grand River Ave.

UTILITY PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 2 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

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SURVEY#93386.ALT

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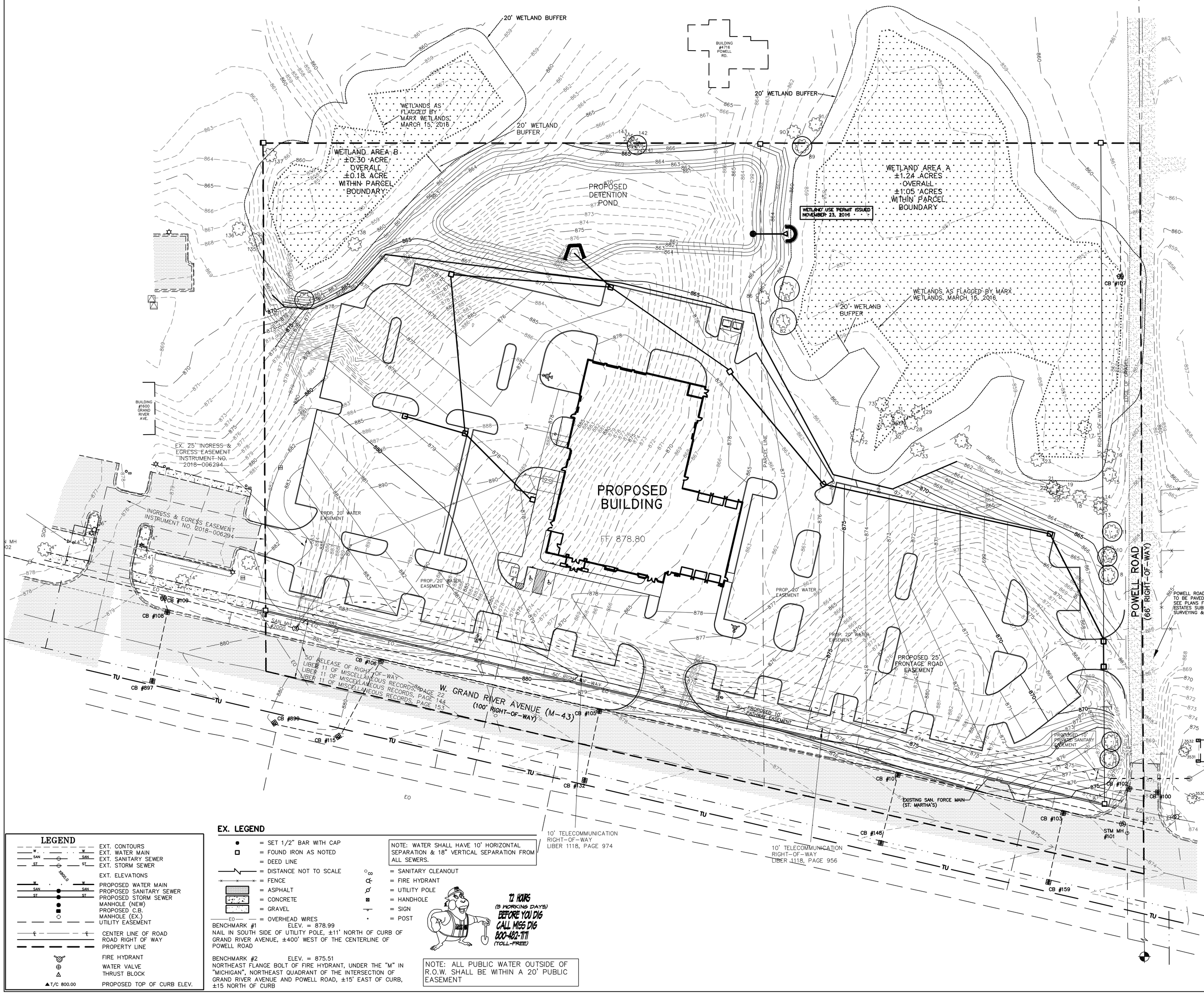
S.U.P. FOR:

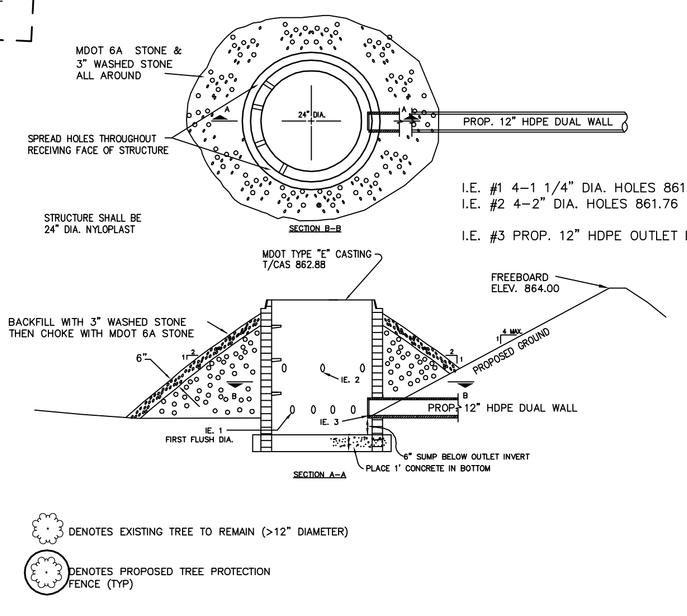
1510 Grand River Ave.

MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN



OS#1 OUTLET RISER DETAIL

NO SCALE



DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)

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LEGEND

- EXT. CONTOURS
- EXT. WATER MAIN
- EXT. SANITARY SEWER
- EXT. STORM SEWER
- EXT. ELEVATIONS
- PROPOSED WATER MAIN
- PROPOSED SANITARY SEWER
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- MANHOLE (NEW)
- PROPOSED C.B.
- MANHOLE (EX.)
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BENCHMARK #2 ELEV. = 875.51
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72 HOURS (3 WORKING DAYS) BEFORE YOU DIG CALL MISS DIG 800-482-7171 (TOLL-FREE)

NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER
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PH. 517-339-1014 FAX. 517-339-8047
Marshall Office
Ph. 269-781-9800

1510 Grand River Ave.

STORM & GRADING PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 3 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

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SURVEY#93386.ALT

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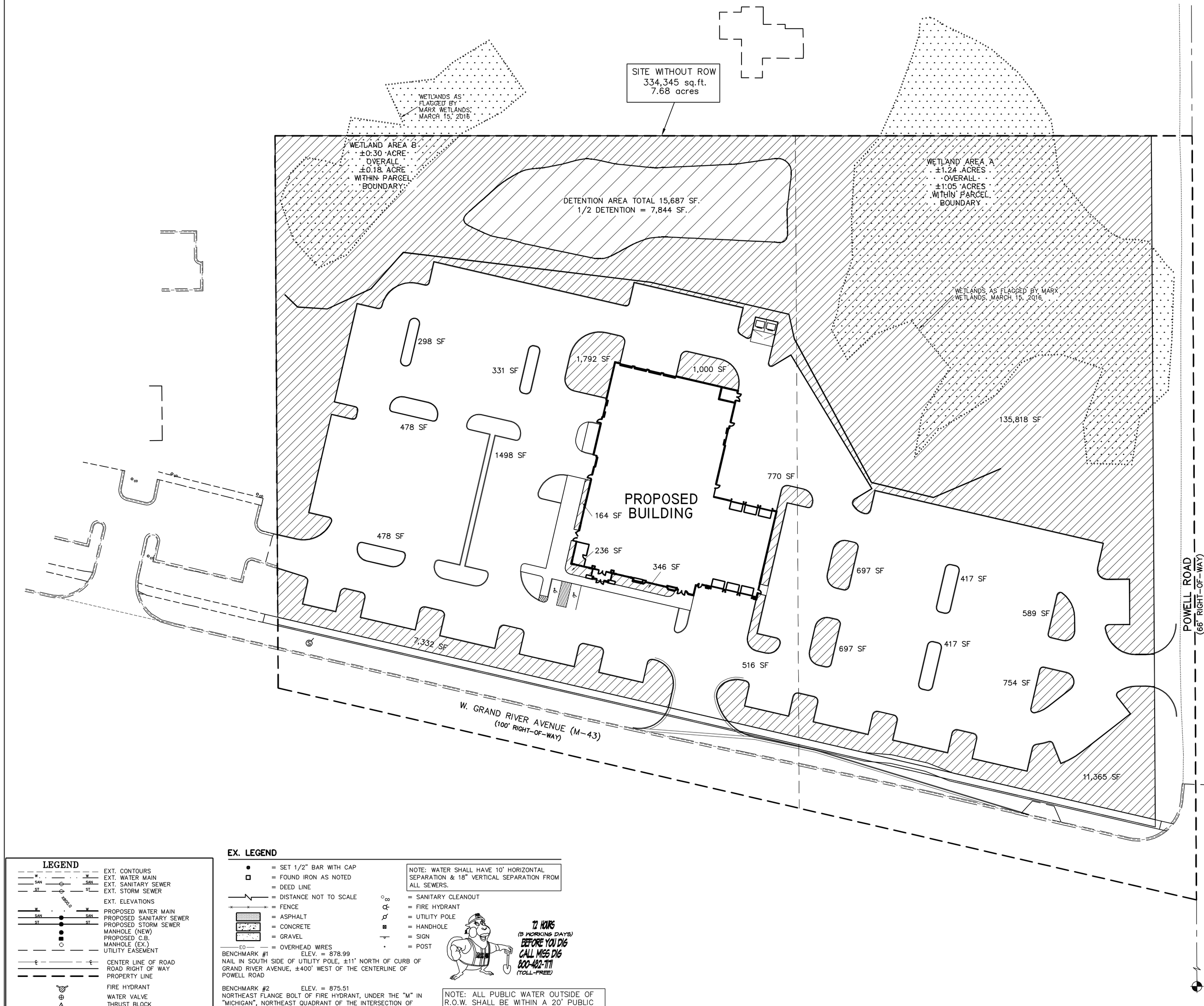
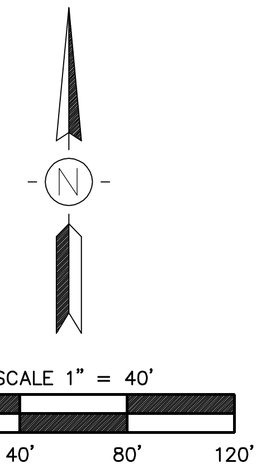
S.U.P. FOR:

1510 Grand River Ave.

MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN





PERVIOUS/IMPERVIOUS CALCULATIONS:

GROSS PROPERTY 395286 S.F.
TOTAL PROPERTY WITHOUT ROAD R.O.W.= 334345 S.F.
OPEN SPACE PER 86-402 (17)
A) BUILDING PERIMETER LANDSCAPE = 675 L.F. X 4' S.F. = 2,700 S.F., 4,824 S.F. PROVIDED
B) 1/2 OF DETENTION 15,687/2 = 7,844 S.F.
C) ISLANDS, MEDIANS AND OPEN SITE AREAS (MIN. 20' DIMENSIONS) = 157,252 S.F.
NET OPENSPACE = 169,920 S.F. = 51%
NET IMPERVIOUS AREA = 164,425 S.F = 49% (MAX ALLOWABLE 70%)

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
- ▲T/C 800.00 PROPOSED TOP OF CURB ELEV.

EX. LEGEND

- = SET 1/2" BAR WITH CAP
- = FOUND IRON AS NOTED
- = DEED LINE
- = DISTANCE NOT TO SCALE
- = FENCE
- = ASPHALT
- = CONCRETE
- = GRAVEL
- = OVERHEAD WIRES
- = SANITARY CLEANOUT
- = FIRE HYDRANT
- = UTILITY POLE
- = HANDHOLE
- = SIGN
- = POST

BENCHMARK #1 ELEV. = 878.99
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB

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

NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER NO. 46796
LICENSED PROFESSIONAL ENGINEER

E-93386-SUP
SURVEY#93386.ALT

REVISIONS
5-21-19 SUBMITTAL
6-5-19 REV. SUP
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KEBS, INC.
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PH. 517-339-1014 FAX. 517-339-8047
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Ph. 269-781-9800

1510 Grand River Ave.

PERVIOUS/IMPERVIOUS PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 4 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

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S.U.P. FOR:
1510 Grand River Ave.
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

CENTER OF SECTION
SECTION 22, T4N, R1W

EAST–WEST 1/4 LINE SECTION 22
(M)S89°59'34"E (M)2627.27'

EAST 1/4 CORNER
SECTION 22, T4N, R1W

(R)SOUTH (M)S00°19'28"E 396.00' (24 RODS)

20' WETLAND BUFFER

BUILDING #4716 POWELL RD.

ZONED RA

BAR & CAP #31603
NORTH 0.11'
EAST 0.66'

BAR & CAP "KEBS"

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

WETLAND AREA B
±0.30 ACRE OVERALL
±0.18 ACRE WITHIN PARCEL BOUNDARY

(M)S89°59'34"E (M)742.00'

(R)WEST (R)421'

P.O.B. PARCEL 1 AS PROVIDED

(R)WEST (R)321'

P.O.B. AS SURVEYED PARCEL

P.O.B. PARCEL 2 AS PROVIDED

PINCH PIPE NORTH 0.29'

PROPOSED DETENTION POND

WETLAND AREA A
±1.24 ACRES OVERALL
±1.05 ACRES WITHIN PARCEL BOUNDARY

PARCEL 1

ZONED C-2

PARCEL
±9.07 ACRES

(R)NORTH (R)SOUTH

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

CB #107

(M)N00°19'28"W (M)447.04'
(R)SOUTH (R)442'

BUILDING #1600 GRAND RIVER AVE.

EX. 25' INGRESS & EGRESS EASEMENT INSTRUMENT NO. 2018-006294

INGRESS & EGRESS EASEMENT INSTRUMENT NO. 2018-006294

PARCEL 2

(M)N00°19'28"E (M)618.44'
EAST LINE SECTION 22

RIGHT-OF-WAY

PROPOSED BUILDING

ZONED C-2

PROP. 20' WATER EASEMENT

CB #109

CB #108

SAN MH #2006

CB #106

50' RELEASE OF RIGHT-OF-WAY
LIBER 11 OF MISCELLANEOUS RECORDS, PAGE 22
LIBER 11 OF MISCELLANEOUS RECORDS, PAGE 144
LIBER 11 OF MISCELLANEOUS RECORDS, PAGE 153

CB #897

CB #896

CB #115

W. GRAND RIVER AVENUE (M-43)
(100' RIGHT-OF-WAY)

CB #105

PROPOSED 10' PRIVATE SANITARY EASEMENT

PROPOSED 25' FRONTAGE ROAD EASEMENT

(M)N77°00'11"W (M)762.50'

CB #104

CB #102

CB #101

EXISTING SAN. FORCE MAIN (ST. MARTHA'S)

BAR & CAP #5349

CB #103

STM MH #101

CB #148

CB #159

(M)N00°19'28"E (M)439.41'

SOUTHEAST CORNER
SECTION 22, T4N, R1W

POWELL ROAD
(66' RIGHT-OF-WAY)

POWELL ROAD IS SCHEDULED TO BE PAVED (BY OTHERS). SEE PLANS FOR SILVERSTONE ESTATES SUBDIVISION, ENGER SURVEYING & ENGINEERING

BUILDING #4684 POWELL RD.

BUILDING #1492 GRAND RIVER AVE.

DENOTES AREAS UTILIZED FOR PARKINGLOT LANDSCAPE REQUIREMENT

10' TELECOMMUNICATION RIGHT-OF-WAY LIBER 1118, PAGE 974

10' TELECOMMUNICATION RIGHT-OF-WAY LIBER 1118, PAGE 956

TREE PROTECTION FENCE DETAIL
NOT TO SCALE

STANDARD STEEL OR WOODEN FENCE POST 5' ON CENTER OR AT DEFLECTIONS

GRADE

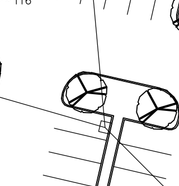
4'-0"

ZONE-PER CONSTRUCTION DRAWINGS

STANDARD 48" HIGH SNOW FENCE OR ORANGE PLASTIC FENCE

NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

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



LEGEND
- EXT. CONTOURS
- EXT. WATER MAIN
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- EXT. ELEVATIONS
- PROPOSED WATER MAIN
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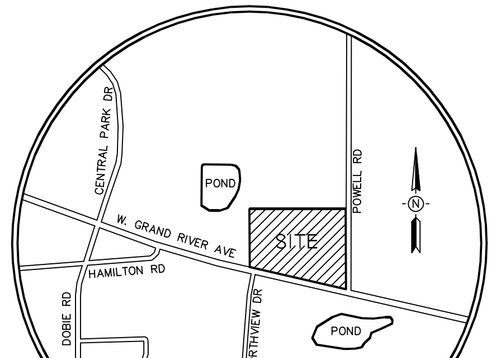
BENCHMARK #1 ELEV. = 878.99
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB

SCALE 1" = 40'
0' 40' 80' 120'



BUILDING #4714 POWELL RD.

LEGAL DESCRIPTION:
(As provided by Transnation Title Agency of Michigan underwritten by Fidelity National Title Insurance Company, Commitment No. 159714LANS, dated July 21, 2015)
Parcel 1:
Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

INTERNATIONAL SOCIETY OF ARBORICULTURE
1400 WEST ANTHONY DRIVE
CHAMPAIGN, IL 61821
(217) 355-9411
(217) 355-9516 FAX

DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER 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 SANDY OR WET CLAY SOIL.
WRAP 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 ROTATE 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 NO PLACE MULCH IN CONTACT WITH TREE TRUNK. MAINTAIN THE MULCH WEED-FREE FOR A MINIMUM OF THREE YEARS AFTER PLANTING.

EXISTING SITE SOIL FREE OF CONSTRUCTION DEBRIS.
BACKFILL PLANTING HOLE WITH A PLANTING MIX CONSISTING OF LOAM TOPSOIL 25%–30%, COURSE TO MEDIUM SAND 50%–60%, HORTICULTURAL-GRADE MILLED PINE BARK 10%–15%.

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

MULCH RING
600 MM (2 FT.) DIAM. MIN.
1200 MM (4FT.) DIAM. PREFERRED

100 MM (4 IN.) HIGH EARTH SAUCER BEYOND EDGE OF ROOT BALL

REMOVE ALL TWINE, ROPE AND WIRE, AND BURLAP FROM TOP HALF OF ROOT BALL

IF 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.

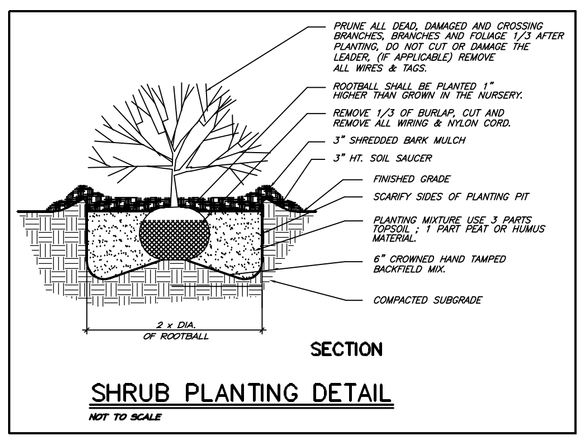
PLACE ROOT BALL ON UNDISTURBED OR TAMPED SOIL.

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.

LANDSCAPE NOTES

1. INSTALL 3" X 12 GA. EDGING TO SEPARATE LAWN FROM PLANTING BED. (AROUND SHRUBS ONLY)
2. INSTALL 3" DEEP SHREDDED BARK MULCH TO ALL PLANTING AREAS/BEDS AND TREE SAUCERS (NO POLY-FILM).
3. INSTALL A KENTUCKY BLUEGRASS SOD (SUN/SHADE) VARIETY) THAT IS FREE OF WEEDS.
3A. SEED AREAS WITH THE FOLLOWING:
   25# SYDSPORT KENTUCKY BLUEGRASS
   20# MASTER KENTUCKY BLUEGRASS
   20# BARON KENTUCKY BLUEGRASS
   10# ANNUAL RYE GRASS
   APPLY AT THE RATE OF 2 TO 3 LBS. PER 1,000 SQUARE FOOT.
4. CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES, PIPES AND STRUCTURES, AS WELL AS THE LOCATION OF EXISTING TREES AND VEGETATION. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COST INCURRED DUE TO DAMAGE/REMOVAL OF SAID ELEMENTS.
5. ANY DISCREPANCIES BETWEEN PLANS, NOTES, DETAILS AND EXISTING CONDITIONS SHALL BE IMMEDIATELY REPORTED TO THE OWNER'S AUTHORIZED REPRESENTATIVE FOR REVIEW AND DECISION. CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATION.
6. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING MATERIALS/IMPROVEMENTS, DAMAGED DURING CONSTRUCTION.
7. SITE BOUNDARY, TOPOGRAPHY, UTILITIES AND OTHER BASE INFORMATION PROVIDED BY OTHERS.
8. CONTRACTOR SHALL VERIFY QUANTITIES SHOWN ON PLANT SCHEDULES AND THOSE INDICATED ON PLANS. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF QUANTITIES SHOWN.
9. CONTRACTOR SHALL MAKE MINOR ADJUSTMENTS TO PLANT MATERIAL LOCATIONS IN FIELD, AS NECESSARY. THE LOCATION OF ALL PLANT MATERIAL SHALL BE SUBJECT TO APPROVAL BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
10. ALL PLANT MATERIAL SHALL BE OF THE SIZES CALLED FOR IN THE PLANT SCHEDULES. ANY PLANT MATERIAL NOTED TO BE SIZED AND/OR QUALITY AS CALLED FOR SHALL BE REMOVED FROM SITE. ALL TREES SHALL BE INSPECTED AND APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE. NO SUBSTITUTIONS OF PLANT MATERIAL SHALL BE MADE WITHOUT APPROVAL FROM THE OWNER'S AUTHORIZED REPRESENTATIVE.
11. ALL PROPOSED TREES OVER 3" CAL. SHALL BY GUYED/STAKED SECURE, SEE EVERGREEN TREE PLANTING/GUYING DETAIL, OR DECIDUOUS TREES PLANTING/STAKING DETAIL WHERE APPLICABLE.
12. ALL PLANTING BEDS TO BE TREATED WITH PRE-EMERGENT HERBICIDE. CONTRACTOR SHALL INSURE THAT PROPER TYPE OF MATERIAL IS APPLICATED TO THE AREAS PROPERLY. ALL MATERIALS USED FOR HERBICIDE APPLICATION FOLLOW ALL MANUFACTURER'S SPECIFICATIONS AND IS APPLIED IN ACCORDANCE WITH SOUND HORTICULTURAL PRACTICES.
13. CONTRACTOR SHALL DETERMINE APPROPRIATE PLANTING BACKFILL MIXES (BASED ON SOIL/SUBSURFACE CONDITIONS) AND REVIEW ALTERNATIVES WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.



SECTION

SHRUB PLANTING DETAIL
NOT TO SCALE

DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)

DENOTES PROPOSED TREE PROTECTION FENCE (TYP)

DENOTES TREES TO BE REMOVED (TYP)

PARKING LOT LANDSCAPE REQUIREMENTS:

2 TREE/10 SPACES
298/10 = 29.8 x 2 = 60 TREES (60 PROVIDED)
200 S.F./10 SPACES
298/10 x 200 = 5,960 S.F. (9,530 S.F. PROVIDED)

14 TREES REQUIRED ALONG GRAND RIVER AVENUE, 14 PROVIDED

SHRUBS 3' HIGH MIN. REQUIRED ON W. GRAND RIVER AVE.

E-93386-SUP
SURVEY#93386.ALT

STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER NO. 46796
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1510 Grand River Ave.
LANDSCAPE PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4-17-18	PROJECT MGR. JWK	SHEET 5 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

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S.U.P. FOR:
1510 Grand River Ave.
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

CENTER OF SECTION
SECTION 22, T4N, R1W

EAST–WEST 1/4 LINE SECTION 22
(M)S89°59'34"E (M)2627.27'

EAST 1/4 CORNER
SECTION 22, T4N, R1W

(R)SOUTH (M)S00°19'28"E 396.00' (24 RODS)

20' WETLAND BUFFER

BUILDING #4716 POWELL RD.

BAR & CAP #31603
NORTH 0.11'
EAST 0.66'

BAR & CAP "KEBS"

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

WETLAND AREA B
±0.30 ACRE OVERALL
±0.18 ACRE WITHIN PARCEL BOUNDARY

(R)WEST (R)421'

(M)S89°59'34"E (M)742.00'

P.O.B. PARCEL 1 AS PROVIDED

(R)WEST (R)321'

PINCH PIPE NORTH 0.29'

P.O.B. AS SURVEYED PARCEL

P.O.B. PARCEL 2 AS PROVIDED

WETLAND AREA A
±1.24 ACRES OVERALL
±1.05 ACRES WITHIN PARCEL BOUNDARY

PARCEL 1

PARCEL
±9.07 ACRES

(R)NORTH (R)SOUTH

WETLANDS AS FLAGGED BY MARX WETLANDS, MARCH 15, 2016

CB #107

PARCEL 2

PARCEL LINE

EDGE OF GRAVEL

RIGHT-OF-WAY

(R)NORTH (M)S00°19'28"E (M)618.44'

EAST LINE SECTION 22

(M)S00°19'28"E (M)2643.95'

(M)N00°19'28"W (M)447.04'
(R)SOUTH (R)442'

BUILDING #1600 GRAND RIVER AVE.

SIGN

CB #109

CB #108

BAR & CAP #53497

SAN. MH #2000

CB #106

CB #897

CB #896

CB #115

CB #105

CB #122

W. GRAND RIVER AVENUE (M-43)
(100' RIGHT-OF-WAY)

50' RIGHT-OF-WAY

(M)N77°00'11"W (M)762.50'

CB #104

CB #148

CB #159

DEMO ALL EXISTING CONCRETE / ASPHALT

DEMO 12" WALL

DEMO 1.5-STORY FRAME/STUCCO BUILDING #1510 GRAND RIVER AVE.

15.5'±

18.0'±

30.4'

16.9'

13.9'

70.1'±

EXISTING SAN. FORCE MAIN (ST. MARTHA'S)

CB #101

CB #102

CB #100

BAR & CAP #5349

CB #103

STM MH #101

BUILDING #1492 GRAND RIVER AVE.

BUILDING #4684 POWELL RD.

SOUTHEAST CORNER
SECTION 22, T4N, R1W

SCALE 1" = 40'

0' 40' 80' 120'

BUILDING #4714 POWELL RD.

LEGAL DESCRIPTION:
(As provided by Transnation Title Agency of Michigan underwritten by Fidelity National Title Insurance Company, Commitment No. 159714LANS, dated July 21, 2015)
Parcel 1:
Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

DENOTES EXISTING TREE TO REMAIN (>12" DIAMETER)

DENOTES PROPOSED TREE PROTECTION FENCE (TYP)

DENOTES TREES TO BE REMOVED (TYP)

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
- ▲T/C 800.00 PROPOSED TOP OF CURB ELEV.

EX. LEGEND

- = SET 1/2" BAR WITH CAP
- = FOUND IRON AS NOTED
- = DEED LINE
- = DISTANCE NOT TO SCALE
- = FENCE
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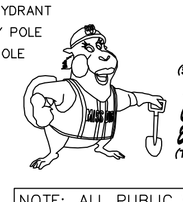
NOTE: WATER SHALL HAVE 10' HORIZONTAL SEPARATION & 18" VERTICAL SEPARATION FROM ALL SEWERS.

BENCHMARK #1 ELEV. = 878.99
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB



NOTE: ALL PUBLIC WATER OUTSIDE OF R.O.W. SHALL BE WITHIN A 20' PUBLIC EASEMENT

STATE OF MICHIGAN
JEFFREY W. KYES
ENGINEER NO. 46796
LICENSED PROFESSIONAL ENGINEER

REVISIONS
5–21–19 SUBMITTAL
6–5–19 REV. SUP
7–31–19 REV. SUP

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

1510 Grand River Ave.

DEMOLITION PLAN

SCALE: 1"= 40'	DESIGNER: JWK	APPROVED BY: JWK
DATE: 4–17–18	PROJECT MGR. JWK	SHEET 6 OF 7
AUTHORIZED BY: LaFontaine Automotive Group		JOB #: 93386

E–93386–SUP
SURVEY#93386.ALT

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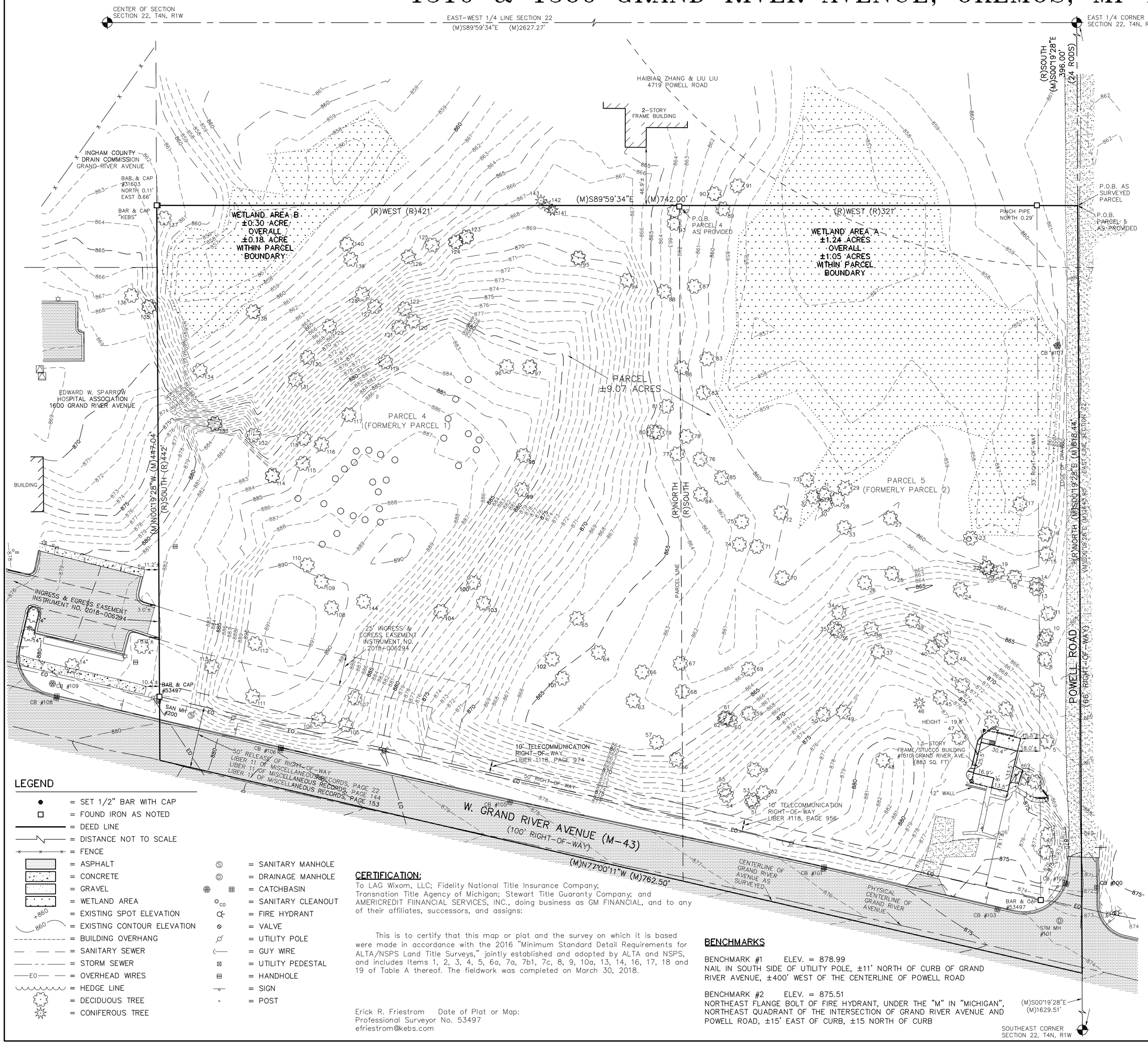
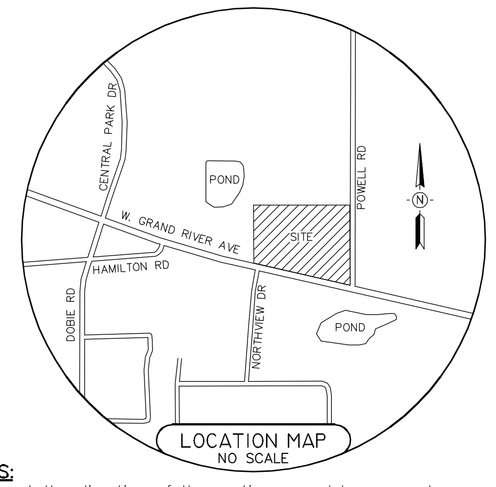
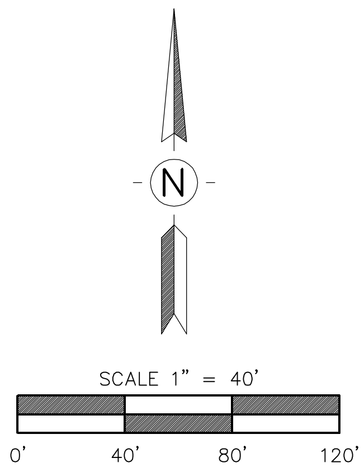
ALTA/NSPS LAND TITLE SURVEY

"1510 & 1560 GRAND RIVER AVENUE, OKEMOS, MI 48864"







SURVEYOR'S NOTES:

1. 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 March 2018.

2. 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 Mason C.O.R.S.

3. All dimensions are in feet and decimals thereof.

4. No building tie dimensions are to be used for establishing the property lines.

5. 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.

6. Parcel has direct access to public W. Grand River Avenue and public Powell Road.

7. Labels for all trees shown are per tag numbers identified by Marx Wetlands, LLC, during tagging completed in March 2016.

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

Item 1: Shown on the survey map.

Item 2: Addresses of the surveyed property: 1510 & 1560 Grand River Avenue, Okemos, MI 48864

Item 3: By scaled map location and graphic plotting only, this property lies entirely within Flood Zone "X", areas outside the 0.2% 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 0159 D, dated August 16, 2011.

Item 4: 9.07 Acres (395,285 square feet)

Item 6a: Parcel is zoned C-2 per a letter provided by client from Keith Chapman, Assistant Planner/Community Development & Planning, Meridian Township, dated July 25, 2018. No minimum required setbacks or parking spaces were listed in said letter for the property.

Item 7a: Shown on the survey map.

Item 7b1: Shown on the survey map.

Item 7c: Shown on the survey map.

Item 8: Shown on the survey map.

Item 9: Parking:
Regular Parking Spaces: 0
Disabled Parking Spaces: 0
Total on-site Parking Spaces: 0

Item 10a: There are no party walls on-site.

Item 13: Shown on the survey map.

Item 14: Shown on the survey map.

Item 16: There is no observable evidence of earth moving work, building construction, or building additions within recent months.

Item 17: There is no observable evidence of proposed changes in street right of way lines, or recent street or sidewalk construction or repairs.

Item 18: Shown on the survey map. Wetland delineation completed by Marx Wetlands, LLC, on March 15, 2016.

Item 19: There is a reciprocal easement that both benefits and burdens the parcel per the exceptions shown in Schedule B-II of said provided title commitment. Said easement is shown hereon.

Item 20: KEBS Inc. carries Professional Liability Insurance.

SEWER INVENTORIES

CATCH BASIN #100
RIM ELEV. = 871.64
12" RCP W INV. = 869.28

STORM MANHOLE #101
RIM ELEV. = 873.44
12" RCP N INV. = 868.48
18" RCP SE INV. = 867.95
18" RCP NW INV. = 868.04

CATCH BASIN #102
RIM ELEV. = 871.54
12" RCP E INV. = 868.63
12" RCP S INV. = 868.54

CATCH BASIN #103
RIM ELEV. = 874.19
18" RCP SE INV. = 868.27
12" RCP SW INV. = 868.70
18" RCP NW INV. = 868.43

CATCH BASIN #104
RIM ELEV. = 875.62
18" RCP SE INV. = 869.03
12" RCP SW INV. = 869.17
18" RCP NW INV. = 869.03

CATCH BASIN #105
RIM ELEV. = 878.07
18" RCP SE INV. = 869.57
12" RCP SW INV. = 869.65
12" RCP NW INV. = 869.61

CATCH BASIN #106
RIM ELEV. = 879.86
12" RCP SE INV. = 870.70
12" RCP SW INV. = 870.70

CATCH BASIN #107
RIM ELEV. = 857.44
8" RCP N INV. = 855.54

CATCH BASIN #108
RIM ELEV. = 879.04
12" RCP SW INV. = 874.48
12" RCP NW INV. = 874.34

STORM MANHOLE #109
RIM ELEV. = 879.38
12" RCP SE INV. = 873.86
12" RCP NW INV. = 873.51

SANITARY MANHOLE #200
RIM ELEV. = 880.92
8" STEEL NE INV. = 873.66
6" STEEL SE INV. = 874.29
12" STEEL NW INV. = 873.22

LEGAL DESCRIPTION:

(As provided in Stewart Title Guaranty Company title commitment No. 18000350028 dated June 15, 2018)

PARCEL 4 (Formerly Parcel 1):
Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

PARCEL 5 (Formerly Parcel 2):
Commencing 24 rods South of the East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan; thence West parallel with the 1/4 line 321 feet; thence South parallel with the East Section line to the center of Grand River Road; thence Southeasterly down the center of said road to the East Section line; thence North along Section line to the place of beginning.

PARCELS 4 AND 5 NOW SURVEYED AS:
A parcel of land in the Southeast 1/4 of Section 22, T4N, R1W, Meridian Township, Ingham County, Michigan, the surveyed boundary of said parcel described as: Commencing at the East 1/4 corner of said Section 22; thence South 00 degrees 19 minutes 28 seconds East along the East line of said Section 22 a distance of 396.00 feet to the point of beginning of this description; thence continuing South 00 degrees 19 minutes 28 seconds East along said East line 618.44 feet to the centerline of W. Grand River Avenue; thence North 77 degrees 00 minutes 11 seconds West along said centerline 762.50 feet; thence North 00 degrees 19 minutes 28 seconds West parallel with said East line 447.04 feet; thence South 89 degrees 59 minutes 34 seconds East parallel with the East-West 1/4 line of said Section 22 a distance of 742.00 feet to the point of beginning.

SCHEDULE B, SECTION II, EXCEPTIONS:

(As provided in Stewart Title Guaranty Company title commitment No. 18000350028 dated June 15, 2018)

Item 12: Release of Right of Way vested in State of Michigan by instrument dated July 16, 1923 and recorded February 13, 1924 in Liber 11 of Misc. Records, Page 22, crosses parcel, is plottable and shown hereon.

Item 13: Release of Right of Way vested in County of Ingham by instrument dated April 28, 1924 and recorded January 19, 1925 in Liber 11 of Misc. Records, Page 144, crosses parcel, is plottable and shown hereon.

Item 14: Release of Right of Way vested in County of Ingham by instrument dated April 28, 1924 and recorded January 19, 1925 in Liber 11 of Misc. Records, Page 153, crosses parcel, is plottable and shown hereon.

Item 15: Easement granted to Consumers Power Company dated August 16, 1950 and recorded May 9, 1951 in Liber 50 of Misc. Records, Page 382, may cross parcel, is not plottable, therefore not shown hereon.

Item 16: Easement granted to Consumers Energy Company recorded in Liber 50 of Misc. Records, Page 385, may cross parcel, is not plottable, therefore not shown hereon.

Item 17: Easement granted to Michigan Bell Telephone Company dated October 5, 1973 and recorded October 25, 1973 in Liber 1118, Page 956, crosses parcel, is plottable and shown hereon.

Item 18: Easement granted to Michigan Bell Telephone Company recorded in Liber 1118, Page 974, crosses parcel, is plottable and shown hereon.

Item 19: Reciprocal Easement Agreement recorded in Instrument No. 2018-006294, crosses and abuts parcel, is plottable and shown hereon.

LEGEND

- = SET 1/2" BAR WITH CAP
- = FOUND IRON AS NOTED
- = DEED LINE
- = DISTANCE NOT TO SCALE
- = FENCE
- = ASPHALT
- = CONCRETE
- = GRAVEL
- = WETLAND AREA
- = EXISTING SPOT ELEVATION
- = EXISTING CONTOUR ELEVATION
- = BUILDING OVERHANG
- = SANITARY SEWER
- = STORM SEWER
- = OVERHEAD WIRES
- = HEDGE LINE
- = DECIDUOUS TREE
- = CONIFEROUS TREE
- = SANITARY MANHOLE
- = DRAINAGE MANHOLE
- = CATCHBASIN
- = SANITARY CLEANOUT
- = FIRE HYDRANT
- = VALVE
- = UTILITY POLE
- = GUY WIRE
- = UTILITY PEDESTAL
- = HANDHOLE
- = SIGN
- = POST

CERTIFICATION:

To LAG Wixom, LLC; Fidelity National Title Insurance Company; Transnation Title Agency of Michigan; Stewart Title Guaranty Company; and AMERICREDIT FIINANCIAL SERVICES, INC., doing business as GM FINANCIAL, and to any of their affiliates, successors, and assigns:

This is to certify that this map or plat 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, 5, 6a, 7a, 7b1, 7c, 8, 9, 10a, 13, 14, 16, 17, 18 and 19 of Table A thereof. The fieldwork was completed on March 30, 2018.

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

BENCHMARKS

BENCHMARK #1 ELEV. = 878.99
NAIL IN SOUTH SIDE OF UTILITY POLE, ±11' NORTH OF CURB OF GRAND RIVER AVENUE, ±400' WEST OF THE CENTERLINE OF POWELL ROAD

BENCHMARK #2 ELEV. = 875.51
NORTHEAST FLANGE BOLT OF FIRE HYDRANT, UNDER THE "M" IN "MICHIGAN", NORTHEAST QUADRANT OF THE INTERSECTION OF GRAND RIVER AVENUE AND POWELL ROAD, ±15' EAST OF CURB, ±15 NORTH OF CURB

REVISIONS	COMMENTS
04/17/2018	PRELIMINARY
05/24/2018	SIGNED FINAL
07/25/2018	UPDATED CERTIFICATIONS
07/27/2018	REVISE PER COMMENTS
07/27/2018	SIGNED FINAL

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
FIELD WORK BY	SL
SHEET	7 OF 7
SECTION	22, T4N, R1W
JOB NUMBER:	93386.ALT

I:\93\93386\dwg\93386ALT.dwg, 7/31/2019 12:13:12 PM

July 30, 2019
Project No. 191044

Mr. Peter Menser
Charter Township of Meridian
5151 Marsh Road
Okemos, MI 48864

Re: Wetland Use Permit (WUP) #19-03 Application Review
LaFontaine Automotive Group
1510 Grand River Avenue, Okemos, Michigan

Dear Mr. Menser:

LaFontaine Automotive Group (LaFontaine) proposes to construct an automobile dealership at 1510 Grand River Avenue, with an associated stormwater detention basin and outfall. The basin will discharge to Meridian Township Wetland No. 22-16. FTCH verified wetland boundaries on the subject property (WDV #16-01) and summarized our findings in a letter to you entitled *Wetland Verification and Regulatory Review, 1510 and 1560 West Grand River, Okemos, MI*, dated August 16, 2016. The wetland delineation was completed for Stockwell Development Company, which obtained Wetland Use Permit (WUP) #16-06 from the Charter Township of Meridian (Township) for commercial development; however, the project was not constructed.

At the request of the Township, FTCH reviewed LaFontaine's WUP request, including a Michigan Department of Environmental Quality Joint Permit, dated November 23, 2016, for construction of a detention basin and 12-inch diameter outfall discharging to wetland. FTCH also reviewed a set of design drawings for the LaFontaine project prepared by Kebs, Inc, and a letter from Kebs, Inc., comparing the differences between the Stockwell and LaFontaine projects with regards to drainage calculations. The LaFontaine project maintains the size and location of the detention pond permitted in the Stockwell project. However, the drainage area was reduced 0.62 acre to a total of 4.69 acres. In addition, the proposed first-flush discharge, the one-hundred-year storm discharge, and the 100-year discharge volume will all be reduced from previous, permitted levels.

This report provides a brief description of the resources that would be impacted by the proposed work, evaluates WUP Application #19-03 according to review standards in the Township Wetland Protection Ordinance (Article IV of Chapter 22 of the Code of Ordinances of the Charter Township of Meridian), and makes recommendations to the Township regarding issuance or denial of the WUP application. This evaluation is limited to a review of wetland impacts and does not assess design of the stormwater basin or other site design considerations.

Overview of Proposed Wetland Impacts

The proposed activities are located in Section 22 of Town 4 North, Range 1 West, Ingham County, Michigan. Proposed impacts are located on:

- Parcel Number 33-02-02-22-426-006, owned by LAG Wixom, LLC. This parcel is undeveloped and contains a 0.30-acre wetland at its northwest corner. This wetland extends onto adjacent property and is noted as Wetland B in the WUP application. It is part of Township Wetland No. 22-15, an 8.95-acre emergent, scrub-shrub and open water wetland complex. This wetland is regulated by the State and the Township because it is located within 500 feet of a pond and is contiguous to a stream.

- Parcel Number 33-02-02-22-426-007, owned by LAG Wixom, LLC. This parcel is also undeveloped. The north half of the parcel contains a 1.24-acre wetland (Township Wetland No. 22-16). This wetland also extends upon adjacent property and is noted as Wetland A in the WUP application. The wetland discharges into Catch Basin No. 987, located just west of Powell Road, at the northeast edge of the wetland. The catch basin likely drains north to the Unruh County Drain. Wetland A is regulated by the State and the Township because it is located within 500 feet of the Unruh Drain.

LaFontaine has submitted a WUP application to the Township proposing the following:

- Construct a 0.45-acre detention basin in upland between Wetlands A and B. The pond would be constructed outside the 20-foot buffer of Wetlands A and B.
- Construct an outlet structure within the basin which restricts flow to the pre-developed stormwater discharge rate. Discharged stormwater will flow to Wetland A.
- Install a 12-inch diameter outlet pipe to discharge stormwater within the 20-foot wetland buffer. Kebs' storm and grading plan (Sheet 3 of 7) indicates a check dam/level spreader at the pipe outlet. However, the plans do not contain a detail of the outlet or check dam/level spreader.

Review of WUP Application

The review standards used to evaluate WUP applications are found in Section 22-157 of Article IV (Wetland Protection) of Chapter 22 of the Township's Code of Ordinances. WUPs are not to be issued unless the proposed activity is found to be in the public interest, the permit is necessary to realize the benefits from the activity, and the proposed activity is otherwise lawful in all respects. Section 22-157(2) lists eleven general criteria to be considered when evaluating whether or not a proposed activity is in the public interest. An evaluation of the proposed activity, according to each of the eleven criteria, is as follows:

Section 22-157(2)(a) *The relative extent of the public and private need for the proposed activity.*

- FTCH was not provided information regarding the relative extent of the public and private need for the proposed activity.

Section 22-157(2)(b) *The availability of feasible and prudent alternative locations and methods to accomplish the expected benefits from the activity.*

- One proposed alternative was to provide stormwater pretreatment and then discharge directly to Wetland A. The Ingham County Drain Commissioner rejected this option in 2016 and required bank full and 100-year stormwater volume detention provided within a basin before discharging stormwater to the wetland.
- A second alternative combined the wetland with the detention basin. This alternative was not feasible due to the existing and proposed site elevations.
- The proposed alternative provides needed stormwater detention with no wetland fill or excavation. This alternative provides pretreatment of stormwater through detention in the basin, and then filtration as it flows through the stone filter berm and the vegetation between the berm and Wetland A. The only impact within the vicinity of the wetland is construction of the check dam/level spreader within the wetland buffer. This alternative appears to be the most feasible and prudent alternative.

Section 22-157(2)(c) *The extent and permanence of the beneficial or detrimental effects which the proposed activity may have on the public and private uses to which the area is suited, including the benefits the wetlands provide.*

- The proposed development provides positive public benefits by providing commercial development on vacant land located along a commercial corridor.
- The existing wetlands provide the following functions and values: water storage, water quality improvement, wildlife habitat, and aesthetic value. The project will result in limited impact to these wetland functions and values.

Section 22-157(2)(d) *The probable impact of each proposal in relation to the cumulative effect created by other existing and anticipated activities in the watershed.*

- There are no identified cumulative impacts of the proposed project.

Section 22-157(2)(e) *The probable impact on recognized historic, cultural, scenic, ecological, or recreational values and on the public health or safety, or fish or wildlife.*

- FTCH has no direct information pertaining to historic, cultural, scenic, or recreational values or issues relating to impacts on public health or safety.
- The proposed project is likely to have a slight impact upon the ecological health of site wetlands. Although no wetland excavation or fill is proposed, development of upland areas (i.e. clearing of upland forest, grading and building construction) will impact overall wildlife habitat at the site, resulting in diminished wildlife usage in the wetlands.
- No impact on the fish communities is anticipated, since it is unlikely such communities are present within site wetlands.

Section 22-157(2)(f) *Economic value, both public and private, of the proposed land change to the general township area.*

- The question of economic value associated with the proposed activity is beyond the scope of the issues FTCH was retained to address. Accordingly, FTCH offers no opinion, recommendations, or advice with respect to this criterion.

Section 22-157(2)(g) *The size and quality of the wetland being considered.*

- The site contains a 1.24-acre, emergent/scrub-shrub wetland (Wetland A) and a 0.30-acre, emergent wetland (Wetland B). The only proposed impacts to site wetlands is discharge of pretreated stormwater to Wetland A at a predevelopment discharge rate and fragmentation of wildlife habitat due to site development in adjacent upland.

Section 22-157(2)(h) *The findings of necessity for the proposed activity which have been made by other agencies.*

- FTCH is not aware of any findings of necessity for the proposed activity which have been made by other agencies.

Section 22-157(2)(i) *Amount of wetland remaining in the general area and proximity to a waterway.*

- Wetland A is part of a large forested, emergent and scrub-shrub wetland complex associated with the Unruh and Foster Drains. This complex contains, in part, Township Wetlands No. 23-2A (41.78 acres), 23-2B (4.36 acres), 23-2C (19.97 acres), and 23-21 (11.71 acres).

- Wetland B is part of Township Wetland No. 22-15, an 8.95-acre emergent, scrub-shrub and open water wetland complex.

Section 22-157(2)(j) *Proximity to any waterbody.*

- Wetland A is located approximately 460 feet southwest of the point where the Unruh Drain becomes an open stream.
- A drainageway connects Wetland B to a 2-acre pond located approximately 130 feet to the northwest.

Section 22-157(2)(k) *Extent to which upland soil erosion adjacent to the protected wetland is controlled.*

- The WUP application did not indicate the soil erosion and sedimentation control (SESC) measures that will be implemented onsite.

Recommendations

Based upon our review of the submitted materials, it is our opinion that the proposed project meets the Township's requirements for permit issuance. FTCH recommends the WUP permit be issued with the following conditions:

- Submit a construction plan detail noting the design of the check dam/level spreader, including the volume and area of riprap and stone placement.
- Implement appropriate SESC measures during construction to ensure there are no impacts to wetlands outside of project activities as a result of soil erosion. Protective measures should include installation of silt fence around proposed work areas, especially around the wetland buffer perimeter. Earthwork to construct the detention basin and to establish desired grades should follow installation of silt fences. Construction of the building and parking area and installation of utilities should not begin until earthwork is completed and the site is stabilized. The stormwater outlet to the wetland should be constructed after the site is stabilized and functional.

We appreciate the opportunity to assist in the review of this file. If you have any questions or require additional information, please contact me at 616.464.3738 or ehtripp@ftch.com.

Sincerely,

FISHBECK, THOMPSON, CARR & HUBER, INC.

Elise Hansen Tripp, PWS

pmb
By email
cc: Mr. Mark Kieselbach – Meridian Township

KEBS, INC.

July 23, 2019

Charter Township of Meridian
5151 Marsh Road
Okemos, MI 48864

Attn: Justin Quagliata – Assistant Planner

Re: LaFontaine West Campus Wetland Use Permit

Dear Mr. Quagliata,

Please find attached our current drainage calculations and copies of the Wetland Use Permit and the DEQ permit.

The drainage area has been reduced 0.62 acres for a total of 4.69 acres. The pond size and location has not changed. The proposed first-flush discharge will be reduced from 0.152 cfs to 0.140 cfs. One-hundred-year storm discharge will be reduced from 00.80 cfs to 0.77 cfs. The 100-year discharge volume will be reduced from 34652 ft^3 to 32291 ft^3.

With these reductions in flow and volume this plan will meet the original permit requirements from Meridian Township and the Michigan Department of Environmental Quality.

If you need any additional information or material please let me know and we will get it to you as soon as possible.

Sincerely,

Kevin J. Kalmbach
KEBS Inc.

2116 Haslett Road • Haslett, MI 48840 • Phone: 517-339-1014 • Fax: 517-339-8047 • www.kebs.com

Detention Requirement and Discharge Allowance for Small Sites

Storm Outlet:	WETLANDS TO UNRUH DRAIN	Existing "C" Value	0.25
Job Name:	LaFontaine SUP	Proposed "C" Value	0.71
Job Number:	E-93386	Allowable Outflow (CFS)	0.70
Drainage Area (Acres)	4.69	Storm Recurrence Interval (Yrs)	100

Duration	A Rainfall	B 100% Runoff	C Runoff "C"	D Runoff (Ac.-Ft.)	E Outflow (Ac.-Ft.)	F Storage (Ac.-Ft.)
10 min.	0.17x6.60= 1.10	0.430	0.71	0.305	0.010	0.296
15 min.	0.25x5.60= 1.40	0.547	0.71	0.388	0.015	0.374
30 min.	0.50x3.80= 1.90	0.743	0.71	0.527	0.029	0.498
1 hr.	1.00x2.40= 2.40	0.938	0.71	0.666	0.058	0.608
2 hr.	2.00x1.50= 3.00	1.173	0.71	0.832	0.116	0.716
3 hr.	3.00x1.10= 3.30	1.290	0.71	0.916	0.174	0.741
6 hr.	6.00x0.65= 3.90	1.524	0.71	1.082	0.349	0.733
12 hr.	12.00x0.38= 4.50	1.759	0.71	1.249	0.698	0.551
24 hr.	24.00x0.22= 5.20	2.032	0.71	1.443	1.395	0.048
48 hr.	48.00x0.12= 5.70	2.228	0.71	1.582	2.791	-1.209

A) Inches of Rainfall: Based on Technical Bulletin No. 17, which is an update of the "U.S. Weather Bureau Technical Paper No. 40, Rainfall Frequency Atlas of the United States, 1961".

B) 100% Runoff for 4.69 Acres: Divide inches of rainfall by 12 and multiply by number of acres.

C) Proposed % Runoff: Insert selected "C" value. "C" value of the total site can be adjusted as a ratio of impervious area, plus 0.05 for vacant area.

D) Runoff: Multiply 100% runoff value by "C" value.

E) Outflow: Multiply outflow in cfs by duration in hours, then by 3600 and divide by 43,560.

F) Storage Required: Subtract Outflow from Runoff. Storage value will increase to a peak value and then decrease. The peak (largest) value for storage should be used.

* Maximum allowable Outflow (CFS) Q=(0.15cfs/acre) Q(CFS)= 0.7035

KEBS INC. 2116 Haslett Road Haslett, MI 48840 (517) 339-1014	Runoff Detention (cft): 32291	By: Kevin Kalmbach	Date: 7/23/2019

Standpipe Dimensions for Detention Pond (First Flush, Bank Full, 100 yr Flood)

Storm Outlet:	WETLANDS TO UNRUH DRAIN	Existing "C" Value	0.25
Job Name:	LaFontaine SUP	Proposed "C" Value	0.71
Job Number:	E-93386	Maximum Allowable Outflow (CFS)	0.77
Drainage Area (Acres)	4.69	Required Detention Volume (ft^3)	32291

STORAGE PROVIDED

Elevation (ft)	Area (ft^2)	Incremental Volume (ft^3)	Detention Pond Volume (ft^3)
864.0	21497	20502	55678
863.0	19507	18541	35176
862.0	17574	16635	16635
861.0	15696	0	0

Detention Pond Storage Capacity (ft^3) 55678

☑ 100 yr Flood Storage Rquirement (ft^3) 32291 Storage Elevation (ft) 862.84

Area = Q / [0.62*(SQRT(2*g*h))]

$Q_{FF} + Q_{BF}$ (CFS) 0.23

$Q_{100} - (Q_{FF} + Q_{BF})$ (CFS) 0.54

Discharge Area (ft^2) 0.104

A 2.00" diameter hole has an area of 0.0218 ft^2

Use **4** 2.00" holes at **861.76**

☐ Bank Full Storage Requirement (ft^3) _____ Storage Elevation (ft) _____

(V_{BF} = 8784.6 x (Ac) x (C)) The *bankfull* storm is the 24 hour, 2 year storm event:

Check first flush holes:

h_{ave} (ft) _____

Q_{ff} (CFS) _____

T_{ff} (hrs) _____

V_1 (ft^3) _____

V_2 (ft^3) _____

Q_{BF} (CFS) _____

(h_{ave} = 2/3 H) h_{ave} (ft) _____

Discharge Area (ft^2) _____

A 0" diameter hole has an area of 0.0000 ft^2

Use 0" holes at

☑ First Flush Storage Requirement (ft^3) 12088 Storage Elevation (ft) 861.73

(V_{FF} = 3630 x (Ac) x (C)) The *first flush storm* is the first 1" of rain over the entire watershed:

Allowable Q_{FF} (CFS) 0.140

(h_{ave} = 2/3 H) h_{ave} (ft) 0.48

Discharge Area (ft^2) 0.041 T_{ff}(hrs) 28.6

(Area = Q / [0.62*(SQRT(2*g*h))])

A 1.25" diameter hole has an area of 0.0085 ft^2

Use **4** 1.25" holes at **861.00**

KEBS INC. 2116 Haslett Road Haslett, MI 48840 (517) 339-1014	Runoff Detention Required: First Flush 12088 CFT 100 Year 32291 CFT	By: BRUCE PORTER	Date: 7/23/2019

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING DISTRICT OFFICE

GRETCHEN WHITMER
GOVERNOR

LIESL EICHLER CLARK
DIRECTOR

June 5, 2019

Stockwell Development Company LLC
Mr. Ken Stockwell
Mr. A. Hopper
4277 Okemos Road, Suite 100
Okemos Michigan 48864

LaFontaine Automotive Group
LAG Development
Mr. Trevor G. Ladd
4000 Highland Road
Highland, Michigan 48357

Dear Sirs:

SUBJECT: Transfer of Permit Number WRP005135
Site Name: 33-1510 Grand River Ave-Okemos
Submission Number: HNQ-50GJ-ZH8NE

The Lansing District Office of the Water Resources Division (WRD) received the request for the transfer of Permit No. WRP005135 from the original permittee, Stockwell Development Company LLC, to the new owners of the parcel, LaFontaine Automotive Group, LAG of Wixom, LLC as of June 6, 2019. By this correspondence, Permit No. WRP005135 is effectively transferred on the closing date of the property sale/purchase for 1510 and 1560 Grand River Avenue, Okemos, Michigan 48864.

If you have any questions regarding this letter, please contact me at 517-388-3667; valorc@michigan.gov; or EGLE, WRD, Lansing District Office, 525 West Allegan Street, Constitution Hall, 1st Floor South, P.O. Box 30242, Lansing, Michigan 48909-7742. Please include Submission No. HNQ-50GJ-ZH8NE in your response.

Sincerely,

Carol Valor
Lansing District Office
Water Resources Division

cv/sea

Enclosures

NOTICE OF AUTHORIZATION

Permit Number: WRP005135 v. 1
Site Name: Grand River Ave at Powell Road

Date Issued: November 23, 2016
Expiration Date: November 23, 2021

The Michigan Department of Environmental Quality, Water Resources Division, P.O. Box 30458, Lansing, Michigan 48909-7958, under provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended; specifically:

- ☐ Part 31, Floodplain Regulatory Authority of the Water Resources Protection.
- ☐ Part 301, Inland Lakes and Streams.
- ☒ Part 303, Wetlands Protection.
- ☐ Part 315, Dam Safety.
- ☐ Part 323, Shorelands Protection and Management.

Authorized activity:

Minor Project #42

Construct a detention basin and 12-inchd diameter outfall discharging to wetland.

To be conducted at property located in: Ingham County, Waterbody: Wetland
Section 22, Town 04N, Range 01W, Meridian Charter Township
Property Tax No. 33-02-02-426-006, 33-02-02-22-426-007

Permittee: Mr. Ken Stockwell
Stockwell Development Company, LLC
4277 Okemos Road, Suite 100
Okemos, MI 48864-3283

Carol Valor
Lansing District Office
Water Resources Division
517-284-6670

This notice must be displayed at the site of work.
Laminating this notice or utilizing sheet protectors is recommended.
Please refer to the above permit number with any questions or concerns.

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES DIVISION
PERMIT

Issued To:

Stockwell Development Company, LLC
Attention: Mr. Ken Stockwell
4277 Okemos Road
Okemos, Michigan 48864-3283

Permit No: WRP005135 v. 1
Submission No: 2KR-V0YZ-2BKH
Site Name: 33-NW Corner-Grand River Ave. at Powell Rd.-Okemos
Issued: November 23, 2016
Extended:
Revised:
Expires: November 23, 2021

This permit is being issued by the Michigan Department of Environmental Quality (MDEQ), Water Resources Division, under the provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA); specifically:

- ☐ **Part 301, Inland Lakes and Streams**
- ☐ **Part 315, Dam Safety**
- ☐ **Part 325, Great Lakes Submerged Lands**
- ☐ **Part 323, Shorelands Protection and Management**
- ☒ **Part 303, Wetlands Protection**
- ☐ **Part 353, Sand Dunes Protection and Management**
- ☐ **Part 31, Water Resources Protection (Floodplain Regulatory Authority)**

Permission is hereby granted, based on permittee assurance of adherence to State of Michigan requirements and permit conditions, to:

Authorized Activity:

Minor Project #42

Construct a detention basin and 12-inch diameter outfall discharging to wetland.

Water Course Affected: Wetland
Property Location: Ingham County, Meridian Charter Township, Town/Range/Section: 04N01W22, Property Tax No. 33-02-02-426-006, 33-02-02-22-426-007

Authority granted by this permit is subject to the following limitations:

A. Initiation of any work on the permitted project confirms the permittee's acceptance and agreement to comply with all terms and conditions of this permit.
B. The permittee, in exercising the authority granted by this permit, shall not cause unlawful pollution as defined by Part 31 of the NREPA.
C. This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
D. All work shall be completed in accordance with the approved plans and specifications submitted with the application and/or plans and specifications attached to this permit.
E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved.
F. It is made a requirement of this permit that the permittee give notice to public utilities in accordance with 2013 PA 174 (Act 174) and comply with each of the requirements of Act 174.

G. This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits, or complying with other state statutes.
H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his rights.
I. Permittee shall notify the MDEQ within one week after the completion of the activity authorized by this permit by completing and forwarding the attached preaddressed postcard to the office addressed thereon.
J. This permit shall not be assigned or transferred without the written approval of the MDEQ.
K. Failure to comply with conditions of this permit may subject the permittee to revocation of permit and criminal and/or civil action as cited by the specific state act, federal act, and/or rule under which this permit is granted.
L. All dredged or excavated materials shall be disposed of in an upland site (outside of floodplains, unless exempt under Part 31 of the NREPA, and wetlands).
M. In issuing this permit, the MDEQ has relied on the information and data that the permittee has provided in connection with the submitted application for permit. If, subsequent to the issuance of a permit, such information and data prove to be false, incomplete, or inaccurate, the MDEQ may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.
N. The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents, and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representative of the permittee, undertaken in connection with this permit. The permittee's obligation to indemnify the State of Michigan applies only if the state: (1) provides the permittee or its designated representative written notice of the claim or cause of action within 30 days after it is received by the state, and (2) consents to the permittee's participation in the proceeding on the claim or cause of action. It does not apply to contested case proceedings under the Administrative Procedures Act, 1969 PA 306, as amended, challenging the permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.
O. Noncompliance with these terms and conditions and/or the initiation of other regulated activities not specifically authorized shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, the MDEQ may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.
P. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity from the MDEQ. Such revision request shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by the MDEQ prior to being implemented.
Q. This permit may be transferred to another person upon written approval of the MDEQ. The permittee must submit a written request to the MDEQ to transfer the permit to the new owner. The new owner must also submit a written request to the MDEQ to accept transfer. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties that includes all of the above information may be provided to the MDEQ. The MDEQ will review the request and, if approved, will provide written notification to the new owner.
R. Prior to initiating permitted construction, the permittee is required to provide a copy of the permit to the contractor(s) for review. The property owner, contractor(s), and any agent involved in exercising the permit are held responsible to ensure that the project is constructed in accordance with all drawings and specifications. The contractor is required to provide a copy of the permit to all subcontractors doing work authorized by the permit.
S. Construction must be undertaken and completed during the dry period of the wetland. If the area does not dry out, construction shall be done on equipment mats to prevent compaction of the soil.
T. Authority granted by this permit does not waive permit requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from the County Enforcing Agent (CEA).

U. Authority granted by this permit does not waive permit requirements under the authority of Part 305, Natural Rivers, of the NREPA. A Natural Rivers Zoning Permit may be required for construction, land alteration, streambank stabilization, or vegetation removal along or near a natural river.
V. The permittee is cautioned that grade changes resulting in increased runoff onto adjacent property is subject to civil damage litigation.
W. Unless specifically stated in this permit, construction pads, haul roads, temporary structures, or other structural appurtenances to be placed in a wetland or on bottomland of the water body are not authorized and shall not be constructed unless authorized by a separate permit or permit revision granted in accordance with the applicable law.
X. For projects with potential impacts to fish spawning or migration, no work shall occur within fish spawning or migration timelines (i.e., windows) unless otherwise approved in writing by the Michigan Department of Natural Resources, Fisheries Division.
Y. Work to be done under authority of this permit is further subject to the following special instructions and specifications:

1. All work shall be completed in accordance with plans prepared by KEBS INC, dated October 10, 2016, being sheets 1-6 entitled Grand River/Powell Road Property. Said plans are kept on file at the MDEQ's Water Resources Division, MDEQ WRD, Lansing District Office, 525 West Allegan, First Floor-South Tower, P.O. Box 30242, Lansing, Michigan 48909.

2. This permit authorizes only the commercial building development located on Parcel No. 33-02-02-22-426-006 with the associated outfall located at the property line of adjacent Parcel No. 33-02-02-22-426-007 as shown on plans submitted to MDEQ on the date of October 27, 2015, and approved on November 23, 2016.

3. All raw areas in uplands resulting from the permitted construction activity shall be effectively stabilized with sod and/or seed and mulch (or other technology specified by this permit or project plans) in a sufficient quantity and manner to prevent erosion and any potential siltation to surface waters or wetlands. Temporary stabilization measures shall be installed before or upon commencement of the permitted activity, and shall be maintained until permanent measures are in place. Permanent measures shall be in place within five (5) days of achieving final grade.

4. All riprap shall be properly sized and graded based on wave action and velocity, and shall consist of natural field stone or rock (free of paint, soil or other fines, asphalt, soluble chemicals, or organic material). Broken concrete is not allowed.

5. Authority granted by this permit does not waive permit or program requirements under Part 91 of the NREPA or the need to acquire applicable permits from the CEA. To locate the Soil Erosion Program Administrator for your county, visit www.mi.gov/deqstormwater and select "Soil Erosion and Sedimentation Control Program" under "Related Links."

6. The authority to conduct the activity as authorized by this permit is granted solely under the provisions of the governing act as identified above. This permit does not convey, provide, or otherwise imply approval of any other governing act, ordinance, or regulation, nor does it waive the permittee's obligation to acquire any local, county, state, or federal approval or authorization necessary to conduct the activity.

7. No fill, excess soil, or other material shall be placed in any wetland or surface water area not specifically authorized by this permit, its plans, and specifications.

8. This permit does not authorize or sanction work that has been completed in violation of applicable federal, state, or local statutes.

9. The permit placard shall be kept posted at the work site, in a prominent location at all times for the duration of the project, or until permit expiration.

10. This permit is being issued for the maximum time allowed and no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee's acceptance of this condition. The permit, when signed by the MDEQ, will be for a five-year period beginning on the date of issuance. If the project is not completed by the expiration date, a new permit must be sought.

Issued By: _____

Carol Valor
Lansing District Office
Water Resources Division
517-284-6670

cc: Mr. Jeff Kyes PE, KEBS Inc.
Meridian Charter Township Clerk
Ingham County Drain Commissioner

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OCT 27 2016
DEQ-LANSING DO

LEGAL DESCRIPTION:

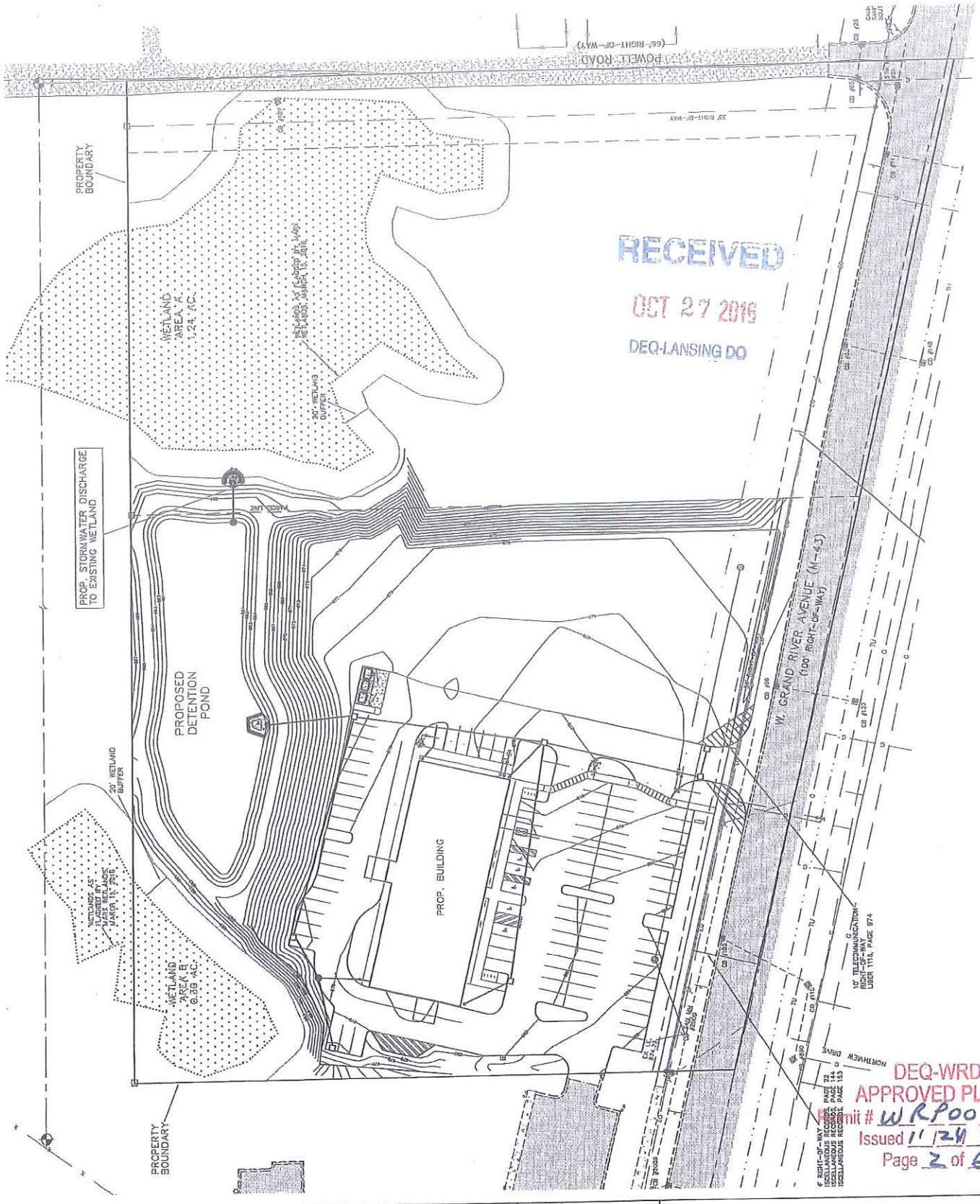
(As provided by Transnation Title Agency of Michigan underwritten by Fidelity National Title Insurance Company, Commitment No. 159714LANS, dated July 21, 2015)

Parcel 1:

Beginning 24 rods South and 321 feet West of East 1/4 post of Section 22, Town 4 North, Range 1 West, Meridian Township, Ingham County, Michigan, thence West parallel to 1/4 line 421 feet; thence South parallel to East Section line 442 feet to center of Grand River Road; thence Southeasterly down the center of said road to point 321 feet West of the East Section line, thence North to the place of beginning.

DEQ-WRD
APPROVED PLANS
Permit # WRP 00 5135
Issued 11 /24 2016
Page 1 of 6

SHEET 1 OF 6	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	NO SCALE PROJECT MGR. ALLEN PATRICK APPROVED BY: A.J.P. DRAWN BY: A.J.P. DATE: 10-12-16	Grand River/Powell Road Property AUTHORIZED BY: STOCKWELL DEVELOPMENT CO., LLC	JOB #: 89807



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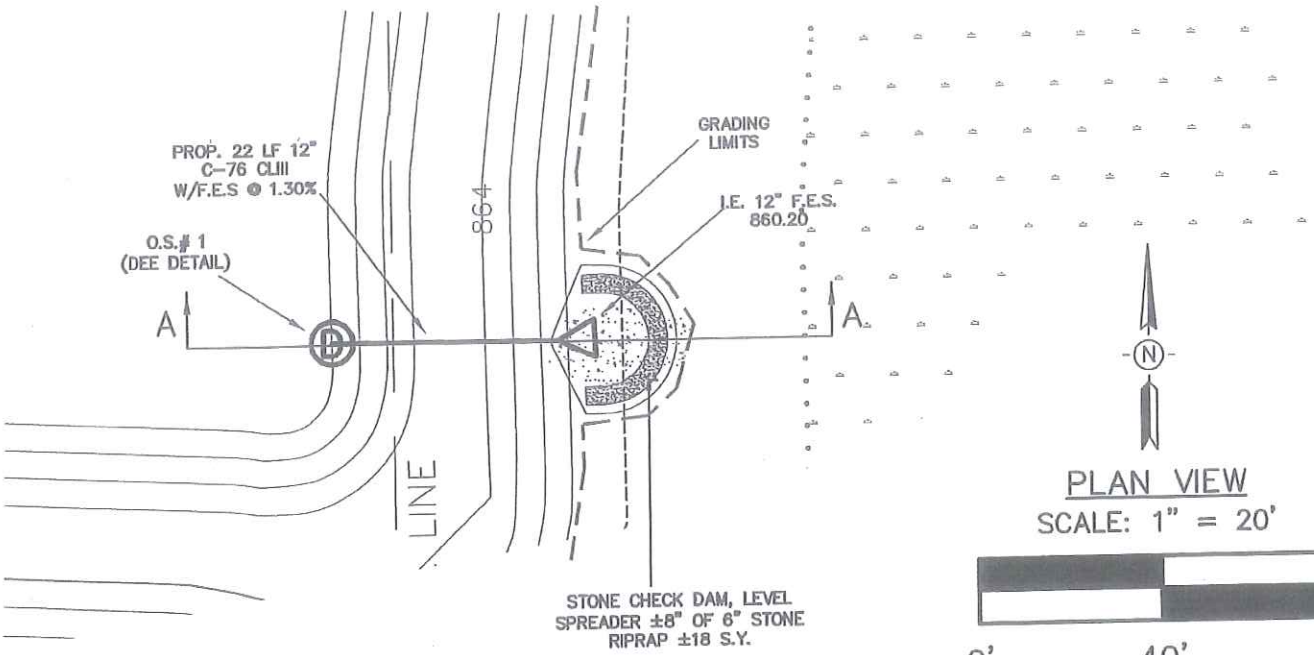
OCT 27 2016
DEQ-LANSING DO

DEQ-WRD
APPROVED PLANS
Permit # WRP005513
Issued 11/29/2016
Page 2 of 6

SHEET 2 OF 6	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	SCALE: 1"=200' PROJECT MGR. ALLEN PATRICK APPROVED BY: A.J.P. DRAWN BY: A.J.P. DATE: 10-12-16	Grand River/Powell Road Property OVERALL SITE PLAN AUTHORIZED BY: STOCKWELL DEVELOPMENT CO., LLC	JOB #: 89807



PLAN VIEW

SCALE: 1" = 20'

0' 40' 80'

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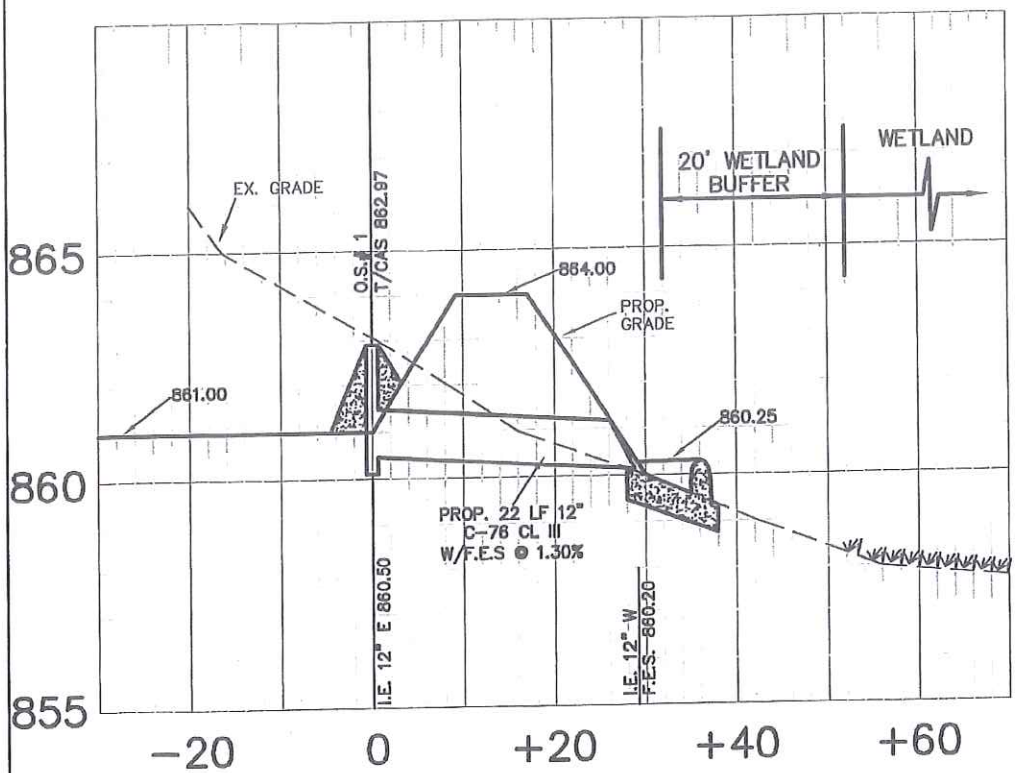
OCT 27 2016
DEQ-LANSING DO

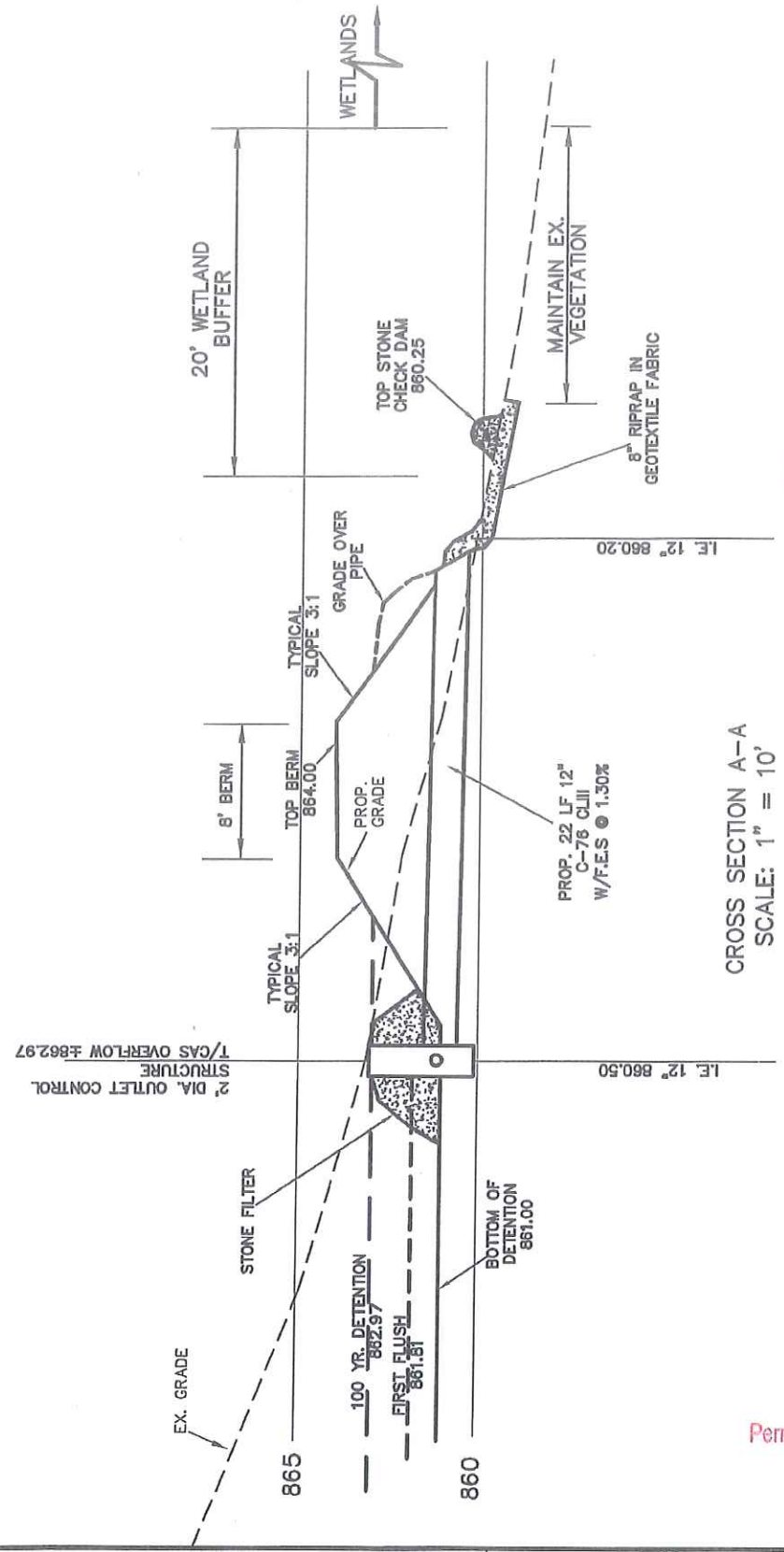


PROFILE VIEW

SCALE: HORIZ. 1" = 20'
VERT. 1" = 4'

DEQ-WRD
APPROVED PLANS
Permit # WRP 005135
Issued 11/24/2016
Page 3 of 6

SHEET 3 OF 6	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	NO SCALE PROJECT MGR. ALLEN PATRICK APPROVED BY: A.J.P. DRAWN BY: A.J.P. DATE: 10-12-16	Grand River/Powell Road Property AUTHORIZED BY: STOCKWELL DEVELOPMENT CO., LLC	JOB #: 89807



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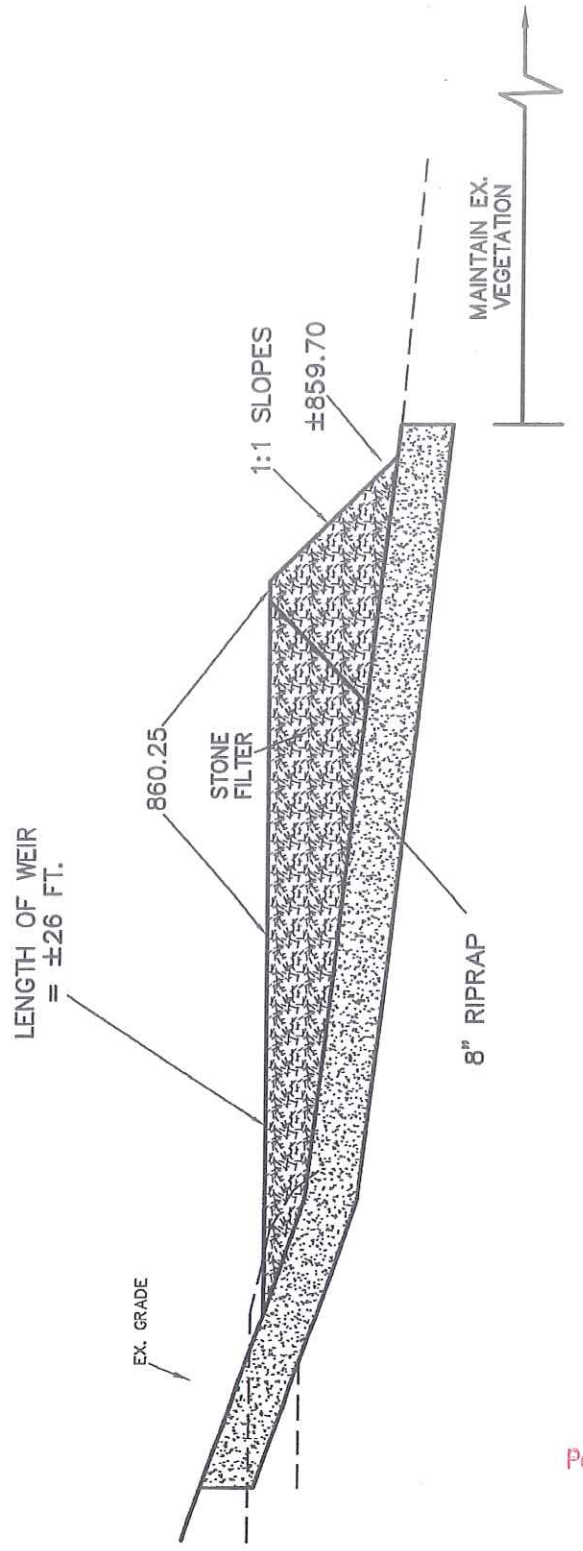
OCT 27 2016
DEQ-LANSING DO

DEQ-WRD
APPROVED PLANS
Permit # WRP005135
Issued 11/28 2016
Page 4 of 6

SHEET 4 OF 6	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	NO SCALE PROJECT MGR. ALLEN PATRICK APPROVED BY: A.J.P. DRAWN BY: A.J.P. DATE: 10/12/16	Grand River/Powell Road Property AUTHORIZED BY: STOCKWELL DEVELOPMENT CO., LLC JOB #: 89807



STONE CHECK DAM
LEVEL SPREADER
SCALE: 1" = 2'

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OCT 27 2016
DEQ-LANSING DO

DEQ-WRD
APPROVED PLANS
Permit # WRP 00 5135
Issued 12/4/2016
Page 5 of 6

SHEET 5 OF 6	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

NO SCALE	
PROJECT MGR. ALLEN PATRICK	
APPROVED BY: A.J.P.	
DRAWN BY: A.J.P.	
DATE: 10-12-16	

Grand River/Powell Road Property

AUTHORIZED BY:	JOB #:
STOCKWELL DEVELOPMENT CO., LLC	89807

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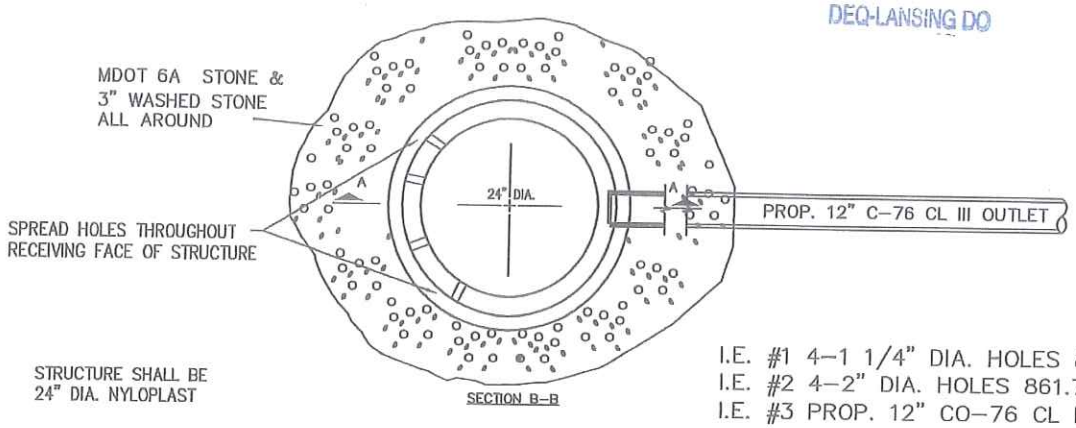
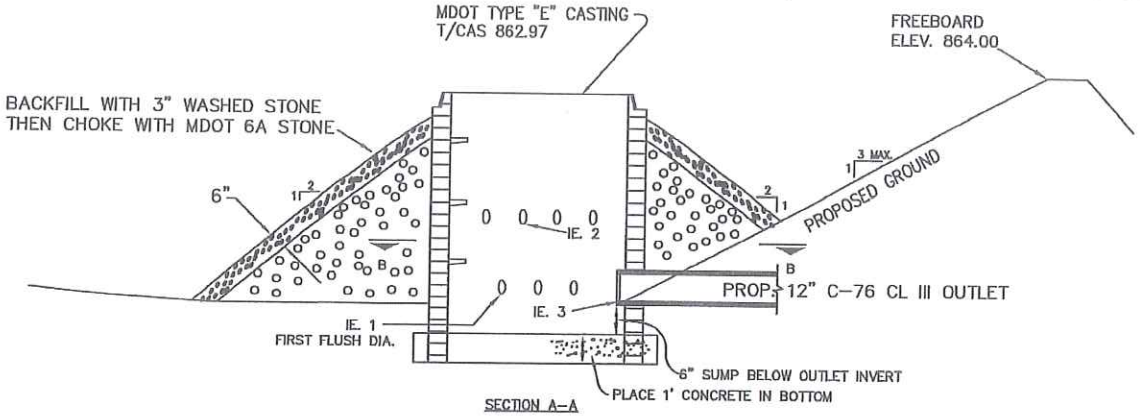
OCT 27 2016
DEQ-LANSING DO

OUTLET STRUCTURE O.S.# 1 DETAIL

NO SCALE



I.E. #1 4-1 1/4" DIA. HOLES 861.00
I.E. #2 4-2" DIA. HOLES 861.79
I.E. #3 PROP. 12" CO-76 CL III OUTLET 860.50



DEQ-WRD
APPROVED PLANS
Permit # WRP00 5135
Issued 11/24 2016
Page 6 of 6

SHEET 6 OF 6	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	NO SCALE	Grand River/Powell Road Property	
			PROJECT MGR. ALLEN PATRICK		
			APPROVED BY: A.J.P.		
			DRAWN BY: A.J.P.		
			DATE: 10-12-16	AUTHORIZED BY: STOCKWELL DEVELOPMENT CO., LLC	JOB #: 89807

November 22, 2016
Project No. G160096W10

Mr. Mark Kieselbach
Charter Township of Meridian
5151 Marsh Road
Okemos, MI 48864

Re: Wetland Use Permit (WUP) #16-06 Application Review
Stockwell Development Company, LLC
1560 Grand River Avenue, Okemos, Michigan

Dear Mr. Kieselbach:

Stockwell Development Company, LLC (Stockwell) proposes to construct a commercial building at 1560 Grand River Avenue, with an associated storm water detention basin and outfall. The basin will discharge to Meridian Township Wetland No. 22-16. FTCH verified wetland boundaries on the subject property (WDV #16-01) and summarized our findings in a letter to you entitled "Wetland Verification and Regulatory Review, 1510 and 1560 West Grand River, Okemos, MI", dated August 16, 2016.
At the request of the Charter Township of Meridian (Township), FTCH reviewed the WUP request, including a Joint Permit Application, dated October 24, 2016, prepared by Stockwell and Kebs, Inc. This report provides a brief description of the resources that would be impacted by the proposed work, evaluates WUP Application #16-06 according to review standards in the Township Wetland Protection Ordinance (Article IV of Chapter 22 of the Code of Ordinances of the Charter Township of Meridian), and makes recommendations to the Township regarding issuance or denial of the WUP application. This evaluation is limited to a review of wetland impacts and does not assess design of the storm water basin or other site design considerations.

Overview of Proposed Wetland Impacts

The proposed activities are located in Section 22 of Town 4 North, Range 1 West, Ingham County, Michigan. Proposed impacts are located on:

- Parcel Number 33-02-02-22-426-006, owned by T S & P, LLC. This parcel is undeveloped and contains a 0.30-acre wetland at its northwest corner. This wetland extends onto adjacent property and is noted as Wetland B in the WUP application. It is part of Township Wetland No. 22-15, an 8.95-acre emergent, scrub-shrub and open water wetland complex. This wetland is regulated by the State and the Township because it is located within 500 feet of a pond and is contiguous to a stream.
- Parcel Number 33-02-02-22-426-007, owned by T S & P, LLC. This parcel is also undeveloped. The north half of the parcel contains a 1.24-acre wetland (Township Wetland No. 22-16). This wetland also extends upon adjacent property and is noted as Wetland A in the WUP application. The wetland discharges into Catch Basin No. 987, located just west of Powell Road, at the northeast edge of the wetland. The catch basin likely drains north to the Unruh County Drain. Wetland A is regulated by the State and the Township because it is located within 500 feet of the Unruh Drain.

Stockwell has submitted a WUP application to the Township proposing the following:

- Construct a 0.36-acre detention basin in upland between Wetlands A and B. The pond would be constructed outside the 20-foot buffer of Wetlands A and B.

- Construct an outlet structure within the basin which restricts flow to the pre-developed storm water discharge rate. Discharged storm water will flow to Wetland A.
- Install a 12-inch diameter outlet pipe to discharge storm water within the 20-foot wetland buffer. At the pipe outlet, water will filter through riprap and a stone check dam/level spreader. Although the end of the pipe will not be located within the 20-foot wetland buffer, a portion of the associated stone and riprap will be located within it, covering an area of approximately 300 square feet.

Review of WUP Application

The review standards used to evaluate WUP applications are found in Section 22-157 of Article IV (Wetland Protection) of Chapter 22 of the Township's Code of Ordinances. WUPs are not to be issued unless the proposed activity is found to be in the public interest, the permit is necessary to realize the benefits from the activity, and the proposed activity is otherwise lawful in all respects. Section 22-157(2) lists eleven general criteria to be considered when evaluating whether or not a proposed activity is in the public interest. An evaluation of the proposed activity, according to each of the eleven criteria, is as follows:

Section 22-157(2)(a) *The relative extent of the public and private need for the proposed activity.*

- FTCH was not provided information regarding the type of proposed commercial development nor the relative extent of the public and private need for the proposed activity.

Section 22-157(2)(b) *The availability of feasible and prudent alternative locations and methods to accomplish the expected benefits from the activity.*

- One proposed alternative was to provide storm water pretreatment and then discharge directly to Wetland A. The Ingham County Drain Commissioner rejected this option and required bank full and 100-year storm water volume detention provided within a basin before discharging storm water to the wetland.
- A second alternative combined the wetland with the detention basin. This alternative was not feasible due to the existing and proposed site elevations.
- The proposed alternative provides needed storm water detention with no wetland fill or excavation. This alternative provides pretreatment of storm water through detention in the basin, and then filtration as it flows through the stone filter berm and the vegetation between the berm and Wetland A. The only impact within the vicinity of the wetland is placement of 3 cubic yards of riprap within the wetland buffer. This alternative appears to be the most feasible and prudent alternative.

Section 22-157(2)(c) *The extent and permanence of the beneficial or detrimental effects which the proposed activity may have on the public and private uses to which the area is suited, including the benefits the wetlands provide.*

- The proposed development provides positive public benefits by providing commercial development on vacant land located along a commercial corridor.
- The existing wetlands provide the following functions and values: water storage, water quality improvement, wildlife habitat, and aesthetic value. The project will result in limited impact to these wetland functions and values.

Section 22-157(2)(d) *The probable impact of each proposal in relation to the cumulative effect created by other existing and anticipated activities in the watershed.*

- There are no identified cumulative impacts of the proposed project.

Section 22-157(2)(e) *The probable impact on recognized historic, cultural, scenic, ecological, or recreational values and on the public health or safety, or fish or wildlife.*

- FTCH has no direct information pertaining to historic, cultural, scenic, or recreational values or issues relating to impacts on public health or safety.
- The proposed project is likely to have a slight impact upon the ecological health of site wetlands. Although no wetland excavation or fill is proposed, development of upland areas (i.e. clearing of upland forest, grading and building construction) will impact overall wildlife habitat at the site, resulting in diminished wildlife usage in the wetlands.
- No impact on the fish communities is anticipated, since it is unlikely such communities are present within site wetlands.

Section 22-157(2)(f) *Economic value, both public and private, of the proposed land change to the general township area.*

- The question of economic value associated with the proposed activity is beyond the scope of the issues FTCH was retained to address. Accordingly, FTCH offers no opinion, recommendations, or advice with respect to this criterion.

Section 22-157(2)(g) *The size and quality of the wetland being considered.*

- The site contains a 1.24-acre, emergent/scrub-shrub wetland (Wetland A) and a 0.30-acre, emergent wetland (Wetland B). The only proposed impacts to site wetlands is discharge of pretreated storm water to Wetland A at a predevelopment discharge rate and fragmentation of wildlife habitat due to site development in adjacent upland.

Section 22-157(2)(h) *The findings of necessity for the proposed activity which have been made by other agencies.*

- FTCH is not aware of any findings of necessity for the proposed activity which have been made by other agencies.

Section 22-157(2)(i) *Amount of wetland remaining in the general area and proximity to a waterway.*

- Wetland A is part of a large forested, emergent and scrub-shrub wetland complex associated with the Unruh and Foster Drains. This complex contains, in part, Township Wetlands No. 23-2A (41.78 acres), 23-2B (4.36 acres), 23-2C (19.97 acres), and 23-21 (11.71 acres).
- Wetland B is part of Township Wetland No. 22-15, an 8.95-acre emergent, scrub-shrub and open water wetland complex.

Section 22-157(2)(j) *Proximity to any waterbody.*

- Wetland A is located approximately 460 feet southwest of the point where the Unruh Drain becomes an open stream.
- A drainageway connects Wetland B to a 2-acre pond located approximately 130 feet to the northwest.

Section 22-157(2)(k) *Extent to which upland soil erosion adjacent to the protected wetland is controlled.*

- The WUP application indicated that before construction begins, soil erosion and sedimentation control (SESC) measures will be implemented onsite. Protective measures will include installation of silt fence around proposed work areas, especially around the wetland buffer perimeter. Earthwork to construct the detention basin and to establish desired grades will follow installation of silt fences. Construction of the building and parking area and installation of utilities will not begin until earthwork is completed and the site is stabilized. The storm water outlet to the wetland will be constructed after the site is stabilized and functional.

Recommendations

Based upon our review of the submitted materials, it is our opinion that the proposed project meets the Township's requirements for permit issuance. FTCH recommends the WUP permit be issued with the following condition:

- Implement appropriate SESC measures during construction to ensure there are no impacts to wetlands outside of project activities as a result of soil erosion.

We appreciate the opportunity to assist in the review of this file. If you have any questions or require additional information, please contact me at 616.464.3738 or ehtripp@ftch.com.

Sincerely,

FISHBECK, THOMPSON, CARR & HUBER, INC.

Elise Hansen Tripp, PWS

pmb
By email
cc: Mr. Peter Menser – Meridian Township

B. Wetland Use Permit #16-06 (Stockwell), discharge storm water runoff to regulated wetland at 1650 Grand River Avenue.

Chair Ianni opened the public hearing at 7:45 p.m.

- Summary of subject matter
  Senior Planner Menser summarized the wetland use permit request.

- Applicant
  The applicant's representative stated the design of the detention pond took into account the future development of the site in order to eliminate a future request to increase the size of the retention pond.

- Public
  Mr. Leonard Provencher, 5824 Buena Parkway, asked if pervious pavement had been considered when developing plans for the site. The applicant's representative responded that pervious pavement would not be functional for the site.

Planning Commission, applicant's representative, and staff discussion:

- Concerns about the amount of paved surface in the proposed development
- Question about the retention pond having enough space for future development
- Ingham County Drain Commissioner approval would occur during site plan review

Consensus of the Planning Commission was to place the wetland use permit on the next regular meeting agenda for action to approve the request.

Chair Ianni closed the public hearing at 8:00 p.m.

9. Unfinished Business

A. Special Use Permit #16091 (Stockwell Development Co., LLC), request to construct an approximately 12,000 square foot shopping center with two (2) drive-through windows at 1560 Grand River Avenue.

- Senior Planner Menser summarized the special use permit for discussion.
- Applicant, Mr. Ken Stockwell, stated he believes two drive-through windows are needed at the location to accommodate the maximum number of customers. He said his plans for the development include a restaurant with a patio and perhaps 4 to 5 other tenants.

Planning Commission, applicant's representative, and staff discussion:

- Concerns about the traffic impact on pedestrians and bicyclists from two drive-through windows
- A patio may not be appropriate with traffic from drive-through use
- Representative of the applicant stated the middle drive-through could be a service business such as a bank or a dry cleaner, not necessarily a restaurant
- Additional parking spaces are for potential restaurant tenant
- Concern that paving of Powell Road and traffic from Silverstone Estates were not included in traffic study

To: **Planning Commission**

From: **Mark Kieselbach, Director of Community Planning and Development**

Justin Quagliata, Assistant Planner

Date: **August 9, 2019**

Re: **Special Use Permit #19-74011 (Michigan Montessori), appeal of approved special use permit to add a 0.50 acre parcel to Montessori Radmoor School property at 2745 Mt. Hope Road.**

In accordance with Section 86-188 of the Code of Ordinances, Sergey Baryshev and Evgenia Barysheva, who reside at 2767 Mt. Hope Road, have filed an appeal of the Director of Community Planning and Development's approval of Special Use Permit (SUP) #19-74011. Montessori Radmoor School submitted a request to amend an existing SUP to add land area to their property at 2745 Mt. Hope Road, located on the south side of Mt. Hope Road, west of Copperhill Drive, and east of Fairlane Drive. The school property is 9.14 acres in size and zoned RR (Rural Residential).

The minor amendment included the addition of land, 0.50 acre (21,780 square feet) in size, located at 2749 Mt. Hope Road to the school's SUP. Section 86-129(b)(3) states the addition of site area less than two times the original site size for sites over 40,000 square feet is a minor amendment. Minor amendments to a SUP are considered by the Director of Community Planning and Development. The Director held a public hearing regarding the request on June 25, 2019 and granted approval on June 28, 2019. The following conditions were placed on the SUP approval by the Director:

1. Approval is granted in accordance with the certificate of survey prepared by Enger Surveying & Engineering dated May 21, 2019 and received by the Township on June 3, 2019.

2. The two subject parcels shall be combined into one parcel.

3. A landscape buffer consisting of a double row of interlocking conifer trees shall be planted along the west property line of the subject parcel, 2749 Mt. Hope Road. Conifer trees shall be a minimum of eight feet in height at the time of planting. A landscape plan shall be submitted to the Department of Community Planning and Development. The final location, species, and quantity of trees are subject to the approval of the Director of Community Planning and Development. All trees shall be planted within one year of this special use permit approval.

4. All applicable conditions of Special Use Permit #74011 and subsequent amendments shall remain in effect.

The decision of the Director of Community Planning and Development to approve or deny a minor amendment to a special use permit may be appealed by an aggrieved person to the body making the original land use decision. The zoning ordinance defines an aggrieved person as any person, firm, partnership, corporation, or association with an interest in real property sharing a common property line with the subject site or any person, firm, partnership, corporation, or association with an interest in real property which will suffer special damages as a result of the decision in question. The term "special damages" is defined as a particular injury to a land owner's beneficial use or enjoyment of his own land, which injury is not shared in common with other members of the general public. The appellants' property shares a common lot line with the subject site.

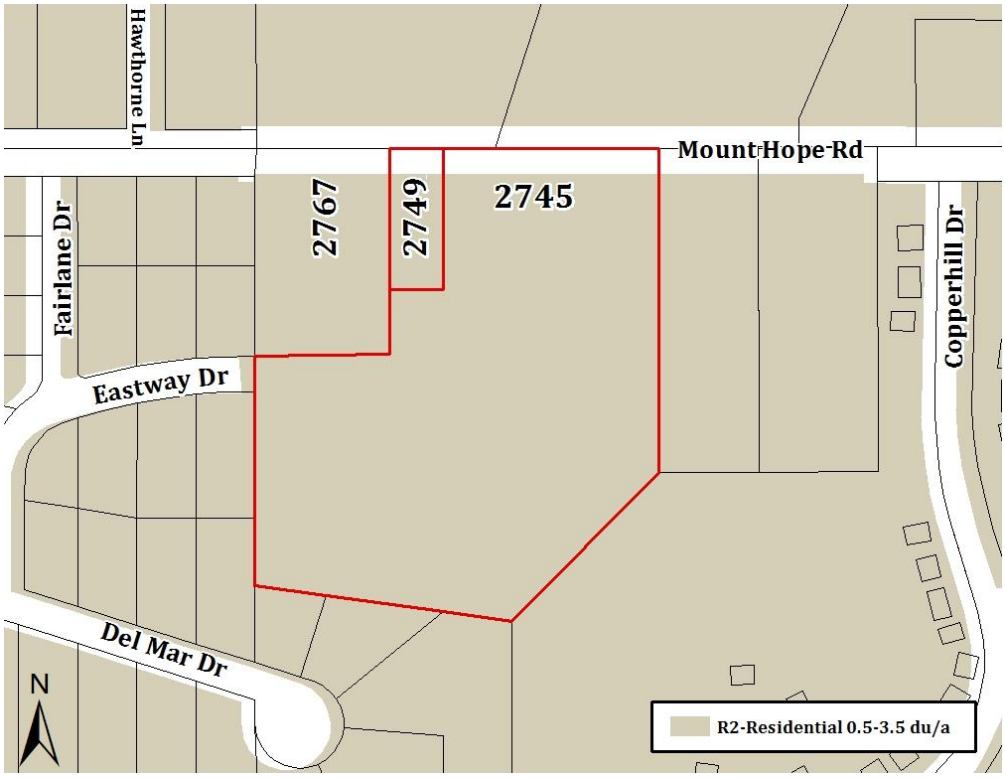
Section 86-654(c) lists nonresidential uses that may be permitted in residential zoning districts by special use permit. Educational and social institutions, which includes public and private elementary schools, high schools, and institutions of higher education may be permitted by special use permit. Montessori Radmoor School received SUP approval from the Planning Commission in 1974.

Since the initial approval amendments to the SUP have been approved over the years. In 1982 the Planning Commission approved a modification to allow the construction of a 1/16 mile running track at the northwest corner of the site. The running track was never constructed. Modifications were also approved by the Planning Commission in 1989 and 2002 to allow the construction of additions to the existing school facility (a 4,800 square foot gymnasium in 1989 and 1,750 square feet in 2002 to reconfigure the school entrance and add toddler space). A condition of the 2002 amendment approval limited enrollment at the school to 150 students. In 2009 the Director of Community Planning and Development approved a minor amendment to the SUP to allow the installation of 20 parking spaces located east of the access drive to the site. The following year the Director approved a minor amendment for the construction of an approximately 400 square foot greenhouse located northwest of the school building.

Master Plan

The Future Land Use Map from the 2017 Master Plan designates the subject site in the R2-Residental 0.5-3.5 dwelling units per acre category.

FUTURE LAND USE MAP

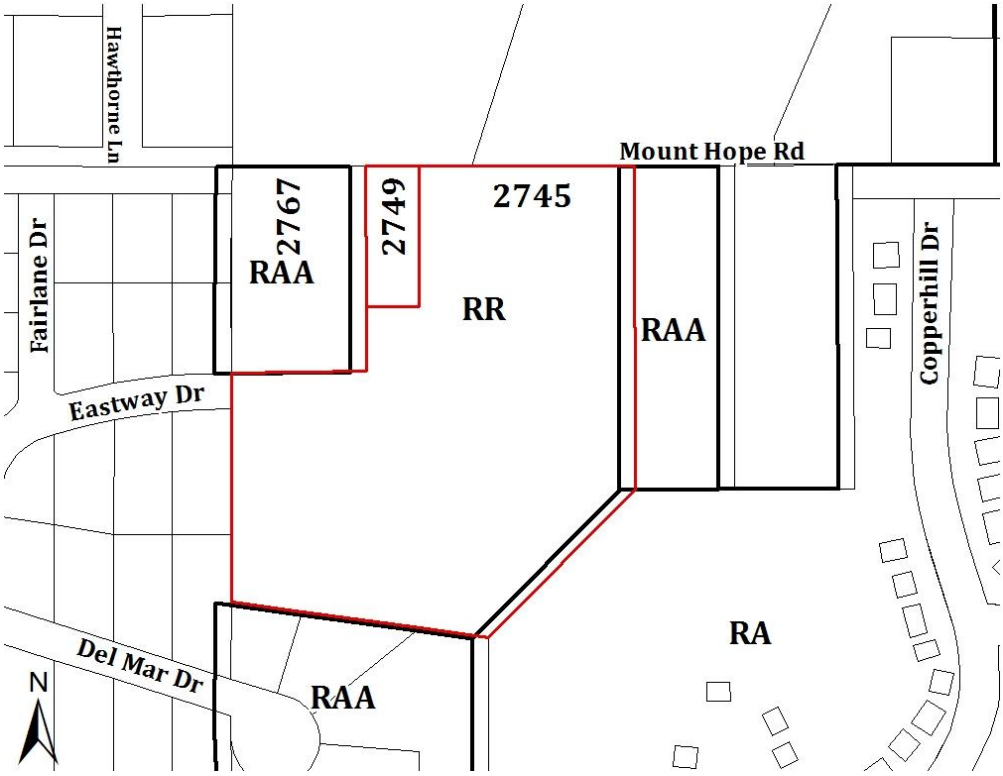


Zoning

The subject site is located in the RR (Rural Residential) zoning district, which requires a minimum of 200 feet of lot width and 40,000 square feet of lot area. With 365 feet of lot width on Mt. Hope Road and 9.14 acres (409,899.60 square feet) of lot area the parcel addressed as 2745 Mt. Hope Road meets the minimum standards for both lot area and lot width of the RR zoning district. With 90 feet of lot width on Mt. Hope Road and 0.50 acre (21,780 square feet) of lot area the parcel addressed as 2749 Mt. Hope Road does not meet the minimum standards for both lot area and lot width of the RR zoning district.

Section 86-654(f)(1)(a) requires a minimum lot area of two acres for nonresidential uses and structures in residential zoning districts. The school site is currently 9.14 acres in size. After approving the addition of land area to Montessori Radmoor's SUP the school site is 9.64 acres in size. There is not a maximum lot area standard for nonresidential uses in residential districts.

ZONING MAP

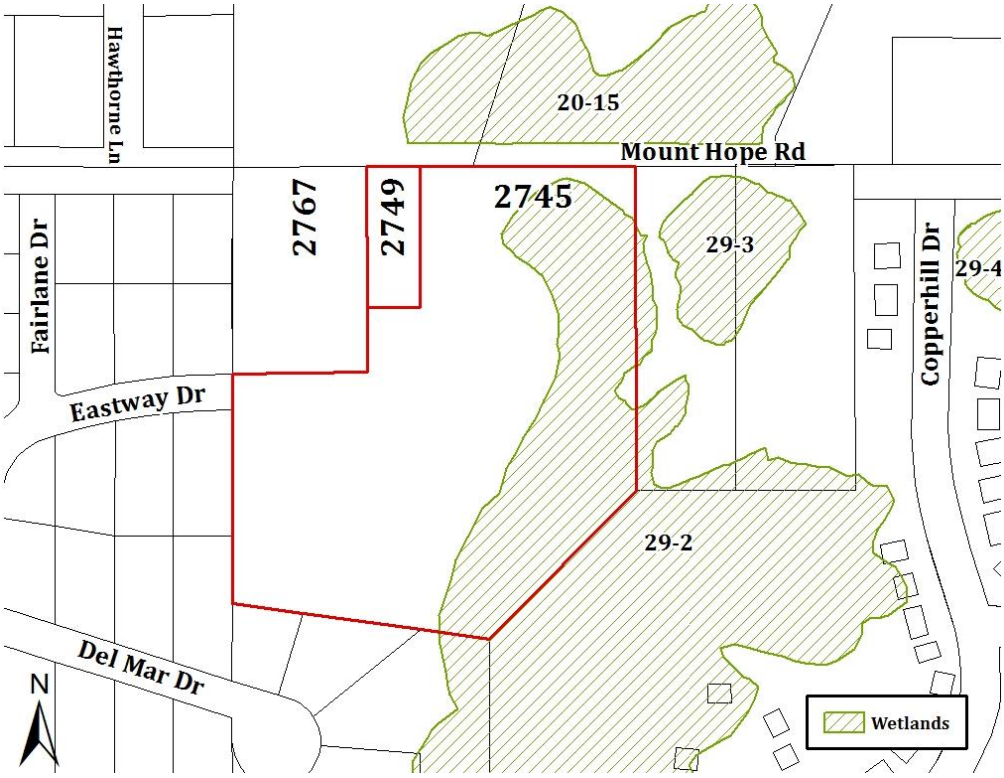


Physical Features

The property addressed as 2745 Mt. Hope Road is developed with a 15,635 square foot school building and associated parking area and landscaping. An approximately 400 square foot greenhouse is located northwest of the school building. A single family house built in 1935 and a detached garage occupy 2749 Mt. Hope Road. The Montessori School has indicated their intention to demolish the house and plan to utilize the garage for storage. If the house is demolished the garage would be located in the front yard of the school building and be nonconforming due to its location in the front yard, and by not meeting the required 50 foot setback from the west property line, which is a requirement of Section 86-654(f)(1)(a).

The Flood Insurance Rate Map (FIRM) for Meridian Township indicates floodplain is not present on or near the site. The Township Wetland Map indicates a section of Wetland #29-2 is present on the eastern portion of the site.

WETLANDS MAP



Streets and Traffic

Access to the school site is provided from a single driveway to Mt. Hope Road, which is designated a primary road by the National Functional Classification System (NFCS) utilized by the Ingham County Road Department. A seven foot wide pathway is installed along the Mt. Hope Road property frontage.

Staff Analysis

Montessori Radmoor School submitted a request to add land area, 0.50 acre (21,780 square feet) in size, to the school site. As the school was developed under a special use permit, an amendment to the SUP was required to add land area. The Code of Ordinances states the addition of site area less than two times the original site size for sites over 40,000 square feet is a minor amendment. Minor amendments to a SUP are considered by the Director of Community Planning and Development. The special use permit review criteria found in Section 86-126 and the site location standards for nonresidential structures and uses in residential districts provided in Section 86-654(e) were used by the Director of Community Planning and Development to evaluate the minor amendment.

In regard to the issues raised in the appellants' letter, staff provides the following comments:

1. *Increased levels of noise (coming not only from school children, but also from increased maintenance.*

   Montessori School representatives have indicated after the house is demolished the property would remain as open space and the garage would be used for storage. The lawn is required to be maintained whether the property is owned by a resident or the school.

2. *Decreased sense of privacy and freedom of using our land, feeling of our home being embedded into a nonresidential area.*

   Schools may be permitted by special use permit as a nonresidential use in a residential zoning district. Montessori Radmoor School received SUP approval in 1974. Aware of the neighboring school the appellants purchased their property in 2017. The Montessori School purchased the property at 2749 Mt. Hope Road in July 2018. The appellants could have purchased the subject site at the time it was on the market to prevent the school from acquiring the property.

   To address the privacy concern of the appellants, the SUP amendment was approved with a condition requiring a landscape buffer consisting of a double row of interlocking conifer trees planted along the west property line of 2749 Mt. Hope Road. A landscape plan was required to be submitted to staff with the final location, species, and quantity of trees subject to the approval of the Director of Community Planning and Development. All trees were required to be planted within one year of the special use permit approval.

3. *Increased air pollution from possible future rise in school traffic and/or driveway and parking lot expansions.*

   In accordance with a condition placed on the 2002 SUP amendment by the Planning Commission enrollment at the school is limited to 150 students. Any future increase of students beyond 150 would require an amendment to the SUP subject to Planning Commission approval. An increase of parking or a building addition would require an amendment to the SUP, decided by either the Director of Community Planning and Development or the Planning Commission. The addition of land area to the school site would not have an adverse impact on air quality; after demolishing the house the property would remain as open space.

4. *Decreased resale value of our property and subsequent loss on our investment.*

   Based on a discussion with the Township Assessor there is no evidence to indicate being located adjacent to a school correlates to a reduction in property value.

5. *Unfair treatment and discrimination toward our property and us as the landlords of this property by the Meridian Township Administration.*

   The Director of Community Planning and Development followed the procedure outlined in the zoning ordinance to process the minor amendment requested by Montessori Radmoor School. An application for an amended special use permit was submitted and the Director held a public hearing regarding the request on June 25, 2019. The public hearing was noticed in accordance with the zoning ordinance and state law. The appellants attended the public hearing and were provided every opportunity to address their concerns. The special use permit review criteria in Section 86-126 of the Code of Ordinances was used by the Director of Community Planning and Development to evaluate the minor amendment.

Following is a staff response to the nine special use permit review criteria:

1. *The project is consistent with the intent and purposes of this Chapter.*

   In recognition that some nonresidential uses may be useful to the occupants of residential areas and of the community, the stated purpose of allowing certain nonresidential structures and uses in residential zoning districts is to accommodate institutional types of nonresidential functions found to be reasonably harmonious and compatible with residential functions. Institutional types of uses include publicly or privately owned facilities providing recreational, educational, religious, governmental, and other services to the community.

   Section 86-654(c) lists nonresidential uses that may be permitted in residential zoning districts by special use permit. Educational and social institutions, which includes public and private elementary schools, high schools, and institutions of higher education may be permitted by special use permit. Montessori Radmoor School received special use permit approval from the Planning Commission in 1974.

2. *The project is consistent with applicable land use policies contained in the Township's comprehensive development plan of current adoption.*

   The Future Land Use Map from the 2017 Master Plan designates the subject site in the R2-Residental 0.5-3.5 dwelling units per acre category. Schools may be permitted by special use permit as a nonresidential use in a residential zoning district.

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.*

   Allowing the combination of land would not change the essential character of the area. The minor amendment was for the addition of land, 0.50 acre (21,780 square feet) in size, located at 2749 Mt. Hope Road to the school's SUP. The Montessori School has indicated their intention to demolish the house and plan to utilize the garage for storage.

4. *The project will not adversely affect or be hazardous to existing neighboring uses.*

   The school maintaining the subject property as open space will not adversely impact neighboring properties. Furthermore, by requiring the school to install a landscape buffer along the west property line of 2749 Mt. Hope Road the appellants' property will be screened from the from the subject site to their east.

5. *The project will not be detrimental to the economic welfare of surrounding properties or the community.*

   Based on a discussion with the Township Assessor there is no evidence to indicate being located adjacent to a school correlates to a reduction in property value.

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.*

   Alterations to the existing road network or storm drainage system are not needed to facilitate the addition of land area to the school site. CATA bus service is available approximately two-tenth mile east of the site at the intersection of Comanche Drive and Mt. Hope Road, and approximately two-tenth mile west of the site at the intersection of Fairlane Drive and Mt. Hope Road. Route 22/23 travels to Meridian Mall, Meijer, and the Michigan State University campus.

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 stormwater are proposed, they shall be properly designed and capable of handling the longterm needs of the proposed project.*

   The site is served by municipal water and sanitary sewer. Improvements to the public utility systems are not necessary to facilitate the addition of land area to the school site.

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*.

   The school intends to use the property at 2749 Mt. Hope Road as open space. Any future additions to the existing school building, addition of land area, or expansion of parking would require an amendment to the school's special use permit. Major amendments to the SUP would be considered by the Planning Commission and minor amendments to the SUP would be considered by the Director of Community Planning and Development. As the amendment makes the existing garage on the property nonconforming, any structural alteration or extension to the garage would require a variance from the Zoning Board of Appeals.

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.*

   The addition of land area to the school site will not adversely impact natural resources of the Township. The school has indicated once the house is demolished the site would remain as open space.

The site location standards for nonresidential structures and uses in residential districts provided in Section 86-654(e) were also utilized with the special use permit review criteria to evaluate the addition of land to the school site.

1. *Any permitted nonresidential structure or use should preferably be located at the edge of a residential district, abutting a business or industrial district, or a public open space.*

   Montessori Radmoor School is located at the eastern edge of the RR zoning district. An approximately 13 acre wetland separates the school facility from residences to the east and southeast. Mt. Hope Road separates the school site from residential areas located to the north.

2. *All means shall be utilized to face any permitted nonresidential use on a major street.*

   The school faces Mt. Hope Road, which is designated a primary road by the National Functional Classification System (NFCS) utilized by the Ingham County Road Department.

3. *Motor vehicle entrance and exit should be made on a major street or as immediately accessible from a major street as to avoid the impact of traffic generated by the nonresidential use upon the residential area.*

   Access to the school site is provided from a single driveway to Mt. Hope Road. The existing house at 2749 Mt. Hope Road is accessed from a driveway to Mt. Hope Road.

4. *Site locations should be preferred that offer natural or manmade barriers that would lessen the effect of the intrusion of the nonresidential use into a residential area.*

   Mt. Hope Road is located along the north edge of the property and a 13 acre wetland is located on the east side of the site. The SUP amendment was approved with a condition requiring a landscape buffer consisting of a double row of interlocking conifer trees planted along the west property line of 2749 Mt. Hope Road.

5. *Any proposed nonresidential use will not require costly or uneconomic extensions of utility service.*

   Public water and sanitary sewer serves the subject site.

Planning Commission Options

The special use permit review criteria found in Section 86-126 of the Code of Ordinances should be used when evaluating Special Use Permit #19-74011. In its determination of the appeal, the Planning Commission may take, but is not limited to, any of the following actions:

1. Affirm the decision of the Director of Community Planning and Development with or without modification.

2. Reverse the decision of the Director of Community Planning and Development and state its reason therefor.

3. Refer the matter back to the Director of Community Planning and Development for further hearings or other action prior to final determination of the appeal by the Planning Commission.

4. Refer the matter to the Zoning Board of Appeals if the issue appears to be a matter of interpretation of the provisions of the zoning ordinance.

A resolution will be provided at a future meeting.

Attachments

1. Notice of Appeal dated July 3, 2019 and received by the Township on July 3, 2019.
2. Special Use Permit #19-74011 approval letter dated June 28, 2019.
3. Minutes from the June 25, 2019 public hearing of Special Use Permit #19-74011.
4. Special use permit amendment application dated January 9, 2019 and received by the Township on June 3, 2019.
5. Certificate of survey prepared by Enger Surveying & Engineering dated May 21, 2019 and received by the Township on June 3, 2019.
6. Previous Montessori School special use permit approvals.

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Notice of Appeal

Sergey Baryshev and Evgenia Barysheva

2767 Mount Hope Rd.

Okemos, MI 48864

07/03/2019

Charter Township of Meridian

The Planning Commission

Notice of Appeal to the Planning Commission

This notice is being submitted in order to appeal the approval of a minor amendment to Montessori Radmoor School's special use permit #19-74011 (SUP). The minor amendment to add the parcel of land at 2749 Mt. Hope Road to the school's SUP was approved by the Director of Community Planning and Development on 06/28/2019.

As the owners and residents of a neighboring parcel at 2767 Mt. Hope Road we disagree with the granted approval and are asking the Planning Commission to reverse the decision of the Director of Community Planning and Development. Following are the reasons for our concern and protest:

Expanding nonresidential use (school) to the parcel at 2749 Mt. Hope Rd. will have the following impacts on our neighboring property:

1) Increased levels of noise (coming not only from school children, but also from increased maintenance);
2) Decreased sense of privacy and freedom of using our land, feeling of our **home** being embedded into the nonresidential area;
3) Increased air pollution from possible future rise in school traffic and/or driveway and parking lot expansions;
4) Decreased resale value of our property and subsequent loss on our investment;
5) Unfair treatment and discrimination toward our property and us as the landlords of this property by the Meridian Township Administration. Upon approval of this minor amendment, 50% of the perimeter of our property line will be bordered by the school/nonresidential use in a residential area, and, to the best of our knowledge, it is not the case with any other residential properties in our neighborhood. If the township has the need to create additional space to allow for the Montessori Radmoor School expansion, we believe it shall not be achieved at our expense. It will be fair to establish new rules that would set a maximum land area limit for nonresidential uses in residential districts, and that would regulate the extent of expansion of such land with regards to each

neighboring property. For example, we suggest that nonresidential use must not be allowed in situations where newly acquired parcels would expand such use beyond one side of the perimeter of a neighboring property line.

While being thankful to the Director of Community Planning and Development for taking into account some of our concerns and requiring a landscape buffer as a condition of the approval, we insist that this condition does not address all effects to existing neighboring uses. Even if the trees do not fail to survive over time and provide sufficient screening, they will not protect us neither from noise nor from possible monetary losses on our investment.

Upon verifying with review criteria used to evaluate special use permit requests (Section 86-126 of the Code of Ordinances), we found that the granted approval of the minor amendment to Montessori Radmoor School's special use permit #19-74011 fails to comply with the following criteria:

1) Considering items 1 through 3, these criteria cannot be used to properly evaluate and justify the minor amendment request since no adequate written description of "*the project*" was provided by the applicant. If there is no plan for this parcel, how can it be found to satisfy these criteria?
2) Item 4 of the criteria states *"The project will not adversely affect or be hazardous to existing neighboring uses"*. We believe, it will adversely affect existing neighboring uses (see 5 points outlined above);
3) Item 5 states *"The project will not be detrimental to the economic welfare of surrounding properties or the community"*. We believe, it will be detrimental to the economic welfare of our family by reducing resale value of our property (outlined above);
4) Item 8 states *"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."* We believe it will involve uses and/or activities that will be detrimental to our family and our property by reason of excessive production of traffic and noise (outlined above).

In addition, we would like to bring to attention of the Planning Commission the fact that Montessori Radmoor School does not maintain any sufficient landscape screening along its northern property line (where it respectively borders southern line of our property). There used to be a patch of a wild growth including trees, bushes and weeds/grasses along this property line that provided partial screening in summertime only (no conifer trees). However, as we noticed over two years of our ownership at 2767 Mt. Hope Rd., these plants have been being progressively removed by the school, and instead of planting appropriate screening trees the school utilizes this area to intensify the school activities. For example, last summer a significant

portion of those plants was removed, and the cleared land was used for building new structures. The structures are a pergola and a group of benches, both come very close to our property line (about 5-8 feet) and this area doesn't have any screening whatsoever. While the structures were built skillfully and look harmoniously with the surroundings, their main function is to entertain the school children and hence to bring more school activities right next to our property line. This does not set us happy. Considering the fact that the school strictly follows Montessori philosophy, which suggests intensive use of green areas, the children indeed spend a lot of time outdoors and we receive a lot of noise from their activities. Moreover, there is insufficient screening at the south-east corner of our lot where it borders the school's parking lot. This area has another wild patch of plants that only provide screening in summertime when the plants are covered with green foliage. In winter, there is a wide open see-through at the parking lot.

Again, while we did not have a problem with that when only bordering the school at the southern line and south-east corner of our parcel (which are the most remote from our house), we think it is unacceptable to let the school expand along the longest (eastern) line of the perimeter of our lot (over 300 feet).

CHARTER TOWNSHIP OF MERIDIAN

Ronald J. Styka	Supervisor		Courtney Wisinski	Trustee
Brett Dreyfus	Clerk		Patricia Herring Jackson	Trustee
Phil Deschaine	Treasurer		Dan Opsommer	Trustee
Frank L. Walsh	Manager		Kathy Ann Sundland	Trustee

June 28, 2019

Michigan Montessori Internationale
Irina Jamison
2745 Mt. Hope Road
Okemos, MI 48864

Re: Special Use Permit #19-74011 (Michigan Montessori)
2745 and 2749 Mt. Hope Road

Dear Ms. Jamison:

The Department of Community Planning and Development has completed its review of your request for a minor amendment to Montessori Radmoor School's special use permit (SUP) at 2745 Mt. Hope Road. The minor amendment is to add the parcel of land at 2749 Mt. Hope Road, 0.50 acre (21,780 square feet), to the school's SUP. Approval is hereby granted subject to the following conditions:

1. Approval is granted in accordance with the certificate of survey prepared by Enger Surveying & Engineering dated May 21, 2019 and received by the Township on June 3, 2019.

2. The two subject parcels shall be combined into one parcel.

3. A landscape buffer consisting of a double row of interlocking conifer trees shall be planted along the west property line of the subject parcel, 2749 Mt. Hope Road. Conifer trees shall be a minimum of eight feet in height at the time of planting. A landscape plan shall be submitted to the Department of Community Planning and Development. The final location, species, and quantity of trees are subject to the approval of the Director of Community Planning and Development. All trees shall be planted within one year of this special use permit approval.

4. All applicable conditions of Special Use Permit #74011 and subsequent amendments shall remain in effect.

Representatives from the school indicated at the public hearing the house at 2749 Mt. Hope Road will be removed. Please be aware the existing detached garage would become nonconforming if the house on the parcel is removed. Any structural alteration or extension to the garage would require prior approval of the Zoning Board of Appeals.

The decision by the Director of Community Planning and Development regarding the minor amendment to the special use permit may be appealed to the Planning Commission. An appeal must be filed within 10 days of the Director's action and be in accordance with Section 86-188 of the Code of Ordinances. Consequently, your amendment to the special use permit will not become valid until July 9, 2019.

If you have any questions, please contact Assistant Planner Justin Quagliata at (517) 853-4580 or email at quagliata@meridian.mi.us.

Sincerely,

Mark Kieselbach

Mark Kieselbach
Director of Community Planning and Development

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CHARTER TOWNSHIP OF MERIDIAN
5151 Marsh Road, Okemos, MI 48864-1198
517-853-4560, Town Hall Room

MINOR AMENDMENT PUBLIC HEARING
Special Use Permit #19-74011 (Montessori Radmoor School)
June 25, 2019

PRESENT: Irina Jamison, applicant; Jay Sallcotte, Montessori Radmoor; Tianna Dart, neighbor; Evgenia Barysheva and Sergey Baryshev, neighbors

STAFF PRESENT: Mark Kieselbach, Director of Community Planning and Development; Justin Quagliata, Assistant Planner

1. Call meeting to order

Director Kieselbach called the special use permit minor amendment hearing to order at 3:00 p.m.

2. Public Comment

- Evgenia Barysheva and Sergey Baryshev, 2767 Mt. Hope Road, spoke in opposition to Special Use Permit #19-74011.

3. Communication

A. Evgenia Barysheva and Sergey Baryshev RE: Special Use Permit #19-74011.

4. Public Hearing

Special Use Permit #19-74011 (Montessori Radmoor School), minor amendment to add the parcel of land at 2749 Mt. Hope Road to the school's special use permit.

- Assistant Planner Quagliata provided a summary of the staff report and explained the minor amendment was to allow for the addition of land, 0.50 acre (21,780 square feet) in size, located at 2749 Mt. Hope Road to the school's special use permit.

- The school property, addressed as 2745 Mt. Hope Road, is currently 9.14 acres in size and developed with a school building and associated parking area and landscaping. A single family house built in 1935 and a detached garage occupy 2749 Mt. Hope Road.

- Assistant Planner Quagliata noted the Code of Ordinances states the addition of site area less than two times the original site size for sites over 40,000 square feet is a minor amendment. Minor amendments to a special use permit are considered by the Director of Community Planning and Development.

- The applicant indicated their intention to demolish the house in 2019 and plan to utilize the garage for storage.

- Director Kieselbach stated if the house was demolished the garage would become nonconforming. The school would be allowed to maintain the garage, but any structural alteration or extension to the garage would require a variance from the Zoning Board of Appeals (ZBA).

- The applicant stated they wanted to seek a variance for the garage from the ZBA.

- Director Kieselbach stated the two subject parcels would be required to be combined into one parcel.

- Discussion of buffering the west property line of 2749 Mt. Hope Road. School representatives expressed willingness to provide landscaping along the west property line. Assistant Planner Quagliata and Director Kieselbach noted landscape requirements in the ordinance. Director Kieselbach stated the provision of a buffer and the final location and type of buffer would be a condition of the special use permit amendment approval.

5. Public Comment

- Evgenia Barysheva and Sergey Baryshev, 2767 Mt. Hope Road, did not believe a buffer along the west property line of 2749 Mt. Hope Road would resolve their concerns regarding their opposition to Special Use Permit #19-74011.

- Tianna Dart, 2720 Mt. Hope Road, spoke in support of Special Use Permit #19-74011.

6. Adjournment

Director Kieselbach adjourned the special use permit hearing at 3:38 p.m.

Respectfully Submitted,

Justin Quagliata
Assistant Planner

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

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 Michigan Montessori Internationale
Address of Applicant 2745 Mt Hope Okemos MI 48864
Telephone - Work 517 351 3655 Home _____ Fax 517 9136005 Email ijamison@montessoriacademy.org
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 2749 Mt Hope Okemos MI 48864 33-02-02-29-201-000
Legal description (please attach if necessary) see attached
Current zoning residential
Use for which permit is requested / project name added to the special use permit
Corresponding ordinance number _____

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 _____
Address _____
Telephone – Work _____ Home _____ Fax _____

E. Acreage of all parcels in the project: Gross 0.43 Net _____

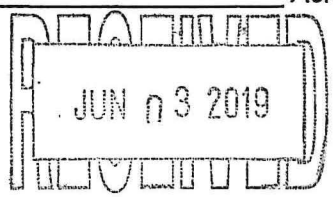
F. Explain the project and development phases: adding this property to special use permit. The house will be demolished in 2019 and garage will be used for maintenance storage

G. Total number of:
Existing: structures 2 bedrooms 4 offices ____ parking spaces 2 carports ____ garages ____
Proposed: structures ____ bedrooms ____ offices ____ parking spaces ____ carports ____ garages ____

H. Square footage: existing buildings 1670 proposed buildings ____
Usable Floor area: existing buildings ____ proposed buildings ____

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 _____ Acreage _____
Proposed Recreation: Type _____ Acreage _____
Existing Open Space: Type _____ Acreage _____
Proposed Open Space: Type _____ Acreage _____



K. If Multiple Housing:

Total acres of property _____

Acres in floodplain _____ Percent of total _____

Acres in wetland (not in floodplain) _____ Percent of total _____

Total dwelling units _____

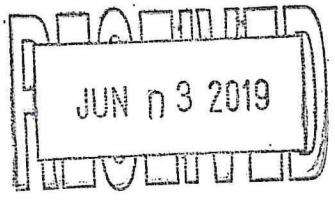
Dwelling unit mix:

Number of single family detached:	for Rent _____	Condo _____
Number of duplexes:	for Rent _____	Condo _____
Number of townhouses:	for Rent _____	Condo _____
Number of garden style apartments:	for Rent _____	Condo _____
Number of other dwellings:	for Rent _____	Condo _____

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.

JUN 03 2019

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 Master 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

I Jamison
Signature of Applicant

1/9/19
Date

Irina Jamison
Type/Print Name

Fee: $250.00

Received by/Date: Justin Quagliata 6/3/19

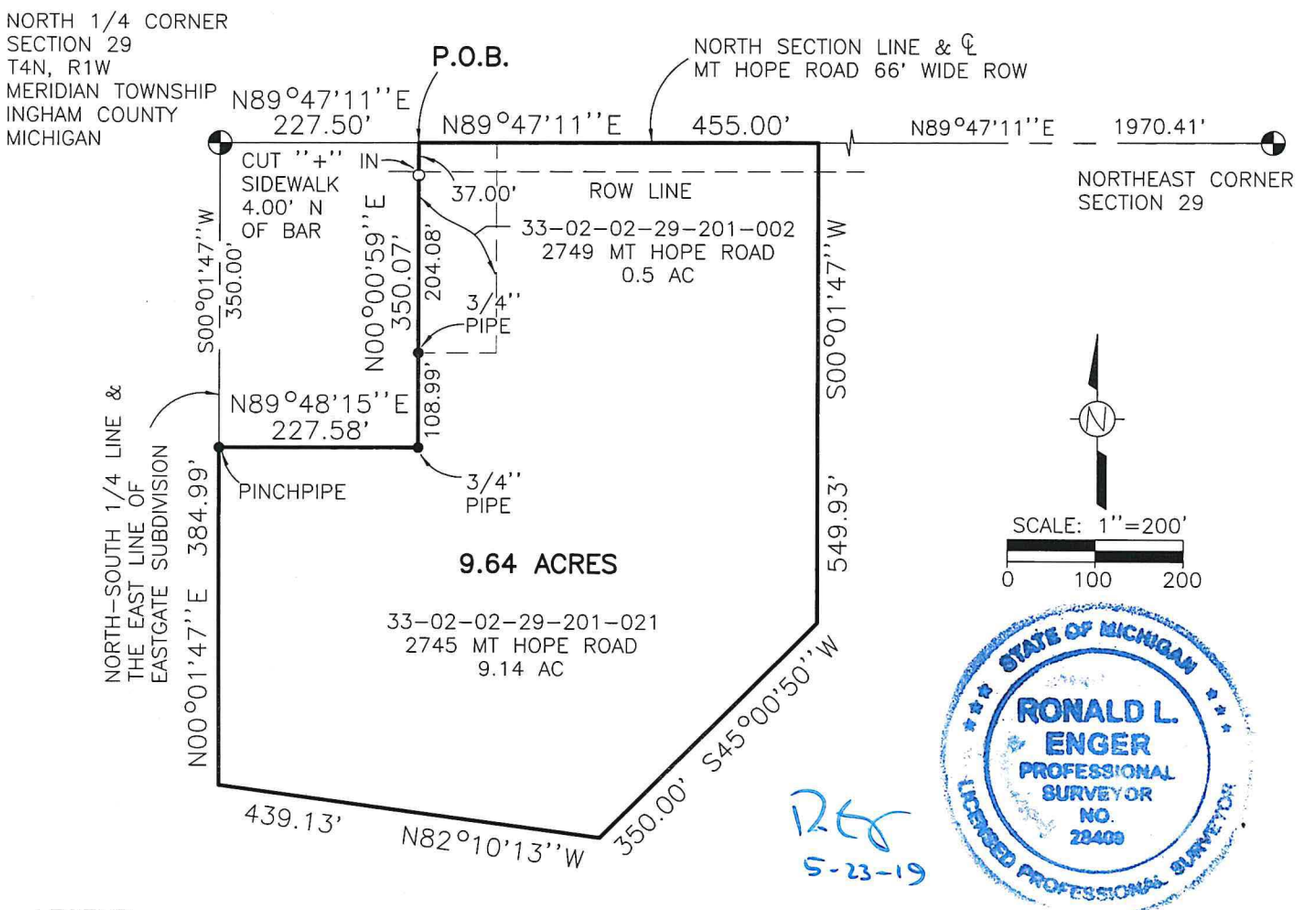
JUN 03 2019

CERTIFICATE OF SURVEY

For: Montessori Radmoor School

COMBINED LEGAL DESCRIPTION –
Parcel Number 33–02–02–29–201–002 combined with Parcel Number 33–02–02–29–201–021

A parcel of land in the Northeast 1/4 of Section 29, T4N, R1W, Meridian Township, Ingham County, Michigan; the boundary of said parcel being described as Commencing at the North 1/4 Corner of Section 29, T4N, R1W, Meridian Township, Ingham County, Michigan; thence N89°47'11''E, along the North Section line, 227.50 feet to the POINT OF BEGINNING; thence N89°47'11''E, continuing along the North Section line, 455.00 feet; thence S00°01'47''W, 549.93 feet; thence S45°00'50''W, 350.00 feet; thence N82°10'13''W, 439.13 feet; thence N00°01'47''E, 384.99 feet; thence N89°48'15''E, 227.58 feet, thence N00°00'59''E, 350.07 feet to the point of beginning; said parcel contains 9.64 acres.



LEGEND
1. Bearings are based on the Michigan State Plane Coordinate System, South Zone.
2. All dimensions are in feet.
3. ——— indicates boundary of described parcel.
4. –x——x——x– indicates old fence line.
5. ——\/\/—— indicates distance not to scale.
6. o indicates a set 5/8 inch diameter by 24 inch long rebar with cap imprinted "LS 28409", unless otherwise noted.
7. ● indicates a found surveyor's marker as noted.

ENGER SURVEYING & ENGINEERING
805 N. CEDAR PO BOX 87
MASON, MICHIGAN 48854–0087
517–676–6565

JUN 03 2019

NE 1/4 Section 29, T4N, R1W
Meridian Twp., Ingham Co., Michigan

May 21, 2019

Job No. 33–3258
Sheet 1 of 2

CERTIFICATE OF SURVEY

For: Montessori Radmoor School

CORNERS OF THE UNITED STATES PUBLIC LAND SURVEY
Section 29, T4N, R1W, Meridian Township, Ingham County, Michigan

D-9 T4N, R1W, North 1/4 Corner Section 29 Recorded Liber 8 Page 453
Found 3/4" bar in monument box

Dimple mark on East side of 2" steel anchor post	N05°E	33.56'
Nail & tag (18994) East side 28" Oak	S02°W	28.00'
Nail & tag (25832) SE side Utility pole	S82°W	105.16'
Nail & tag (18994) South side 10" Elm	N75°E	109.14'

E-9 T4N, R1W, Northeast Corner Section 29 Recorded Liber 8 Page 455
Found 1/2" bar in monument box

SE corner 18" square brick post	N04°E	41.40'
Nail & tag (25832) NW side power pole	N75°E	87.86'
Nail & tag (18994) NE side power pole	N74°W	89.23'
Nail & tag (18994) SE side power pole	S79°W	89.20'
Top of fire Hydrant	S59°W	87.38'

CERTIFICATE OF SURVEY
I hereby certify to the entity named hereon, that we have, at the direction of Irina Jamison, surveyed and combined two parcels into one parcel from land previously described for tax purposes as:

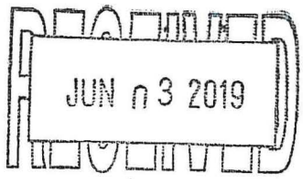
33-02-02-29-201-002:
BEG AT PT 13 RDS 13 FT E OF NW COR OF NE 1/4 OF SEC 29 -S 240 FT -E 90 FT -N 240 FT -W 90 FT TO BEG ON NE 1/4 OF SEC 29, T4N R1W

33-02-02-29-201-021:
COM AT N 1/4 COR OF SEC 29 -N89D46'57"E ALNG N SEC LN 317.5 FT TO POB -N89D46'57"E ALNG SD N LN 365 FT -S PLL WITH E LN OF EASTGATE SUBD 549.93 FT -S45DW 350 FT -N82D08'48"W 439.13 FT TO PT ON E LN OF EASTGATE SUBD -N ALNG E LN OF PLAT 384.99 FT -N89D55'41"E 227.58 FT -N00D10'06"E 110.07 FT -N89D52'36"E 90.06 FT -N00D05'46"W 240 FT TO POB ON NE 1/4 OF SEC 29 T4N R1W 9.14 AC M/L

that we performed the fieldwork for this survey on May 13, 2019; that a concise description of the parcel is given hereon.

This survey complies with the requirements of Act 132 of P.A. 1970.

5-23-2019
Ronald L. Enger, LLS No. 28409



ENGER SURVEYING & ENGINEERING
805 N. CEDAR PO BOX 87
MASON MI 48854-0087
517-676-6565

NE 1/4 Section 29, T4N, R1W
Meridian Twp., Ingham Co., Michigan

May 21, 2019

Job No. 33-3258
Sheet 2 of 2

March 7, 1974

Mrs. Lila Radway
Montessori Internationale, Inc.
4828 S. Hagadorn
East Lansing, Michigan 48823

Dear Mrs. Radway:

At their regular meeting of March 4, 1974, the Meridian Township Planning Commission voted to approve your Special Use Permit #74011 with the following stipulations:

1. Adequate design - maximum use of natural site.

2. Activity not incompatible with surrounding area.

Conditions

1. Private road (28') from Mt. Hope to school--

2. Do not extend Eastway Dr.-provide for walk for emergencies.

3. 2 year limit on S.U.P.

4. Landscaping subject to approval by Department of Development Control.

If I can be of any assistance, please contact me.

Respectfully yours,

Robert W. Terry
Director of Development Control, Planning

RWT:cz

RICH

CHARTER TOWNSHIP OF MERIDIAN

TOWNSHIP BOARD

CARLENE L. WEBSTER *SUPERVISOR*
VIRGINIA L. WHITE *CLERK*
THOMAS L. MINTER *TREASURER*

•

LOUISE KELLEY *TRUSTEE*
THOMAS E. KLUNZINGER *TRUSTEE*
RUTH L. KOSITCHEK *TRUSTEE*
ULREH V. MOSTOSKY *TRUSTEE*

•

RICHARD N. CONTI *SUPERINTENDENT*

October 20, 1982

Amelia S. Moore
Michigan Montessori International
Montessori School
P.O. Box 49
Okemos, MI 48864

RE: Special Use Permit #74011

Dear Ms. Moore:

At their regular meeting held on October 18, 1982 the Planning Commission voted to approve a modification to your original Special Use Permit. Your request was to locate a 1/16 mile running track at the northwest corner of your site. Approval was granted by the Commission with the following stipulations:

1. The final site plan shall be subject to the approval of the Director of Development Control.

2. Screening along the north and west property lines shall be subject to the approval of the Director of Development Control.

The Department of Development Control staff will be pleased to work with you on possible options for screening the running track. Please feel free to contact me in this regard.

Sincerely,

Richard A. Harlow

Richard A. Harlow
Assistant Director, Planning

RAH:sj
cc: Fred Hull

CHARTER TOWNSHIP OF MERIDIAN

TOWNSHIP BOARD

STEVEN L. THOMAS *SUPERVISOR*
VIRGINIA L. WHITE *CLERK*
THOMAS L. MINTER *TREASURER*

TED BLACK *TRUSTEE*
LOUISE KELLEY *TRUSTEE*
LYNN OCHBERG *TRUSTEE*
STEPHEN J. PETER *TRUSTEE*

RICHARD N. CONTI *SUPERINTENDENT*

January 18, 1989

Mr. John N. Ferris
Montessori School
P. O. Box 49
Okemos, MI 48864

RE: Special Use Permit #74011 - Modification

Dear Mr. Ferris:

At their Regular Meeting held on January 16, 1989, the Planning Commission voted to approve your request to modify Special Use Permit #74011 (Montessori School) for the purpose of permitting a 4,800 square foot addition to the existing school facility located at 2745 Mt. Hope Road. Approval was granted with the following conditions:

1. Approval is granted in accordance with site plan approved by the Planning Commission on January 16, 1989.

2. Total square footage for the school, with addition, will be approximately 13,700 square feet. With the proposed S.U.P. modification, the school facility shall not exceed the 13,700 square footage figure in terms of overall building and/or facility size.

3. Enrollment capacities for the school shall not exceed current enrollments for the school year 1988-1989.

4. The Special Use conditions setforth in a letter dated March 7, 1974, shall remain in affect (see attachment).

Decisions of the Planning Commission regarding Special Use Permits may be appealed to the Township Board. Such an appeal would have to be made within ten (10) days of the date of the Planning Commission action.

Consequently, your Special Use Permit will not be valid until January 27, 1989. As is customary, this letter shall act as the Special Use Permit for your request.

Should you have any questions concerning this matter, please do not hesitate to contact me.

Sincerely,

John E. Ambrose,
Director, Planning Division

JEA/hld

Enc.

CHARTER TOWNSHIP OF MERIDIAN

Susan McGillicuddy	Supervisor	Julie Brixie	Trustee
Mary M.G. Helmbrecht	Clerk	Steve Stier	Trustee
Bruce D. Hunting	Treasurer	Andrew J. Such	Trustee
Gerald J. Richards	Manager	Anne M. Woiwode	Trustee

July 23, 2002

Ms. Susan Hyatt, Administrator
Michigan Montessori Internationale
2745 Mt. Hope Road
Okemos, MI 48864

RE: Special Use Permit #02-74011 (Michigan Montessori)

Dear Ms. Hyatt:

At its regular meeting held on July 22, 2002, the Planning Commission voted to approve Special Use Permit #02-74011, to construct an approximate 1,750 square foot addition to the Okemos Montessori Radmoor School at 2745 Mt. Hope Road. Approval was granted with the following conditions:

1. Approval is granted in accordance with the revised site plans prepared by Ledy Design Group dated May 31, 2002, subject to revisions as required.

2. The final site and landscaping plans shall be subject to the approval of the Director of Community Planning and Development.

3. The final grading, utility, and storm drainage plans shall be designed and constructed in accordance with the Township Engineering Design and Construction Standards.

4. Prior to any grading or construction, all necessary approvals and permits from the Ingham County Drain Commissioner's office and the Township shall be secured. A copy of the approval letters shall be submitted to the Department of Community Planning and Development.

5. Site lighting shall be subject to the approval of the Director of Community Planning and Development. Lighting shall be down-shielded and accomplished in such a manner so that the lighting will not be disturbing to adjacent landowners in the vicinity and the site lighting shall not create problems with vehicular and/or

pedestrian traffic.

6. Enrollment at the school shall be limited to one hundred fifty (150) students, as permitted by the State of Michigan. Any proposed increase in enrollment above one hundred fifty (150) students shall receive approval as an amendment to the Special Use Permit and an amendment to the permit issued by the State of Michigan.

7. All applicable conditions of Special Use Permit #74011 and subsequent amendments shall remain in effect.

Decisions by the Planning Commission regarding special use permits may be appealed to the Township Board. Such an appeal would have to be made within 10 days of the date of the Planning Commission's action and must be in accordance with Section 81-3.2.E of the Code of Ordinances. Consequently, your special use permit will not become valid until August 2, 2002.

As is customary, this letter shall act as the special use permit. The use permitted by the granting of the special use permit or construction related to the use must have commenced within one year after issuance or the permit shall be void. Furthermore, all construction related to the special use must be completed within three years from the effective date of the special use permit. The next step in the process is for you to proceed through site plan review, obtain all required permits and approvals, as well as coordinate the tree replacement effort described in the July 15, 2002 letter from Ledy Design Group. If you have any questions regarding this matter, please contact me at (517) 349-1200, ext. 373.

Sincerely,

Richard F. Brown, Jr., AICP
Associate Planner

cc: Martha Wyatt, Landscape Architect
Younes Ishraidi, Chief Engineer
John Heckaman, Chief Building Inspector

planning\brown\sup02-74011.let

CHARTER TOWNSHIP OF MERIDIAN

Susan McGillicuddy	Supervisor	Brett Dreyfus	Trustee
Mary M.G. Helmbrecht	Clerk	Elizabeth Ann LeGoff	Trustee
Julie Brixie	Treasurer	Lynn Ochberg	Trustee
Gerald J. Richards	Manager	John Veenstra	Trustee

July 13, 2009

Mollee Neff
Okemos Montessori Radmoor School
2745 Mt. Hope Road
Okemos, MI 48864

RE: Special Use Permit #09-74011 (Okemos Montessori)

Dear Ms. Neff:

The Department of Community Planning and Development has completed its review of your request for a minor amendment to Special Use Permit #74011, which permitted a non-residential use (school) in a residential district at 2745 Mt. Hope Road. The requested amendment would allow for the installation of 20 new parking spaces on the site in a location east of the primary entrance drive into the site.

Approval of Special Use Permit #09-74011 is hereby granted with the following conditions:

1. Approval is granted in accordance with the site plan prepared by Ledy Design Group, dated June 5, 2009.

2. Final site plan approval is subject to the Director of Community Planning and Development.

3. The site plans shall be revised to meet the standards required in the Code of Ordinances or variances shall be granted by the Township Zoning Board of Appeals for the following items:

   - Section 86-756(7), requires curb and gutter for the proposed parking area and the plans do not indicate curb and gutter.

   - Section 86-471(b)(1), requires all structures and grading activities to be setback forty feet from the edge of a wetland regulated by the township, the state, or by federal law equal to or greater than two acres in area. Grading activities associated with the project encroach into the forty foot structure and grading setback of the regulated wetland.

   - Section 86-471(c)(1), requires a twenty foot natural vegetation strip to be maintained from the edge of a wetland regulated by the township, the state, or by federal law. Grading activities associated with the project encroach into the twenty foot natural vegetation strip of the regulated wetland.

- Section 86-758(1)(b), requires one parking island for every ten parking spaces and the site plans do not comply.

- Section 86-758(c), requires two canopy trees for every ten parking spaces. Based on the number of proposed parking spaces (20 spaces), four interior canopy trees are required.

4. Prior to construction, the applicant shall obtain any necessary permits, licenses, and approvals from the Ingham County Drain Commissioner's office, the Township, and any other relevant agencies. Copies of all permits, licenses, and approval letters shall be submitted to the Department of Community Planning and Development.

The decision by the Director of Community Planning and Development regarding a special use permit may be appealed to the Planning Commission. An appeal must be filed within 10 days of the date of the Director's action and be in accordance with the Code of Ordinances. Consequently, your special use permit will not become valid until July 22, 2009.

If the special use or construction related to the special use has not commenced within two years after the effective date of the special use permit, such permit shall be void. All construction related to the special use must be completed within three years from the effective date of the special use permit. As is customary, this letter shall act as the permit for the special use. If you have any questions regarding this matter, please contact me.

Sincerely,

Mark Kieselbach

Mark Kieselbach
Director of Community Planning and Development

cc: Martha Wyatt

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CHARTER TOWNSHIP OF MERIDIAN

Susan McGillicuddy	Supervisor	Brett Dreyfus	Trustee
Mary M.G. Helmbrecht	Clerk	Elizabeth Ann LeGoff	Trustee
Julie Brixie	Treasurer	Lynn Ochberg	Trustee
Gerald J. Richards	Manager	John Veenstra	Trustee

April 1, 2010

Bob Miller
Miller Building, Inc.
4660 S. Hagadorn Road
East Lansing, MI 48823

RE: Special Use Permit #10-74011 (Okemos Montessori Radmoor School)

Dear Mr. Miller:

The Department of Community Planning and Development has completed its review of the request for a minor amendment to Special Use Permit #74011, which permitted a non-residential use (school) in a residential district at 2745 Mt. Hope Road. The requested amendment would allow for the installation of a free-standing greenhouse, approximately 400 square feet in size, to be located northwest of the school building.

Approval of Special Use Permit #10-74011 is hereby granted with the following conditions:

1. Approval is granted in accordance with the site plan prepared by Bob Miller and received by the Township on March 30, 2010.

2. Approval is granted in accordance with the preliminary specification sheet and elevation drawing for the proposed greenhouse, by Rimol Greenhouse Systems, Inc., submitted on February 19, 2010.

3. Approval of the greenhouse does not include approval for exterior lighting or interior grow lights and circulating fans. Separate reviews and approvals are required for these items.

4. If necessary, additional screening may be required between the proposed greenhouse and the western property line of the subject site, as determined by the Director of Community Planning and Development during site plan review. Additional screening may be required in the future should existing trees be removed in this area.

5. Any future expansion of the greenhouse after its installation shall require an amendment to Special Use Permit #74011.

6. The greenhouse shall be used as an educational experience for the school children and shall not be used as a commercial operation.

7. The property owner shall provide an easement to the Township for the existing water main located in the northwest corner of the school site, as part of this project. The easement format and specifications shall be in accordance with the Township standards.

8. Final site plan approval is subject to the Director of Community Planning and Development.

9. Prior to construction, the applicant shall obtain any necessary permits, licenses, and approvals from the Ingham County Drain Commissioner's office, the Township, and any other relevant agencies. Copies of all permits, licenses, and approval letters shall be submitted to the Department of Community Planning and Development.

The decision by the Director of Community Planning and Development regarding a special use permit may be appealed to the Planning Commission. An appeal must be filed within 10 days of the date of the Director's action and be in accordance with the Code of Ordinances. Consequently, your special use permit will not become valid until April 11, 2010.

If the special use or construction related to the special use has not commenced within two years after the effective date of the special use permit, such permit shall be void. All construction related to the special use must be completed within three years from the effective date of the special use permit. As is customary, this letter shall act as the permit for the special use. If you have any questions regarding this matter, please contact me.

Sincerely,

Mark Kieselbach

Mark Kieselbach
Director of Community Planning and Development

cc: Mollee Neff, Okemos Montessori Radmoor School
Martha Wyatt

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To: **Planning Commission**

From: **Peter Menser, Principal Planner**

Mackenzie Dean, Assistant Planner

Date: **August 8, 2019**

Re: **Tentative Preliminary Plat #19012 (Giguere Homes), proposed seven lot subdivision titled Sanctuary 3 located on the north side of Robins Way, east of Hulett Road.**

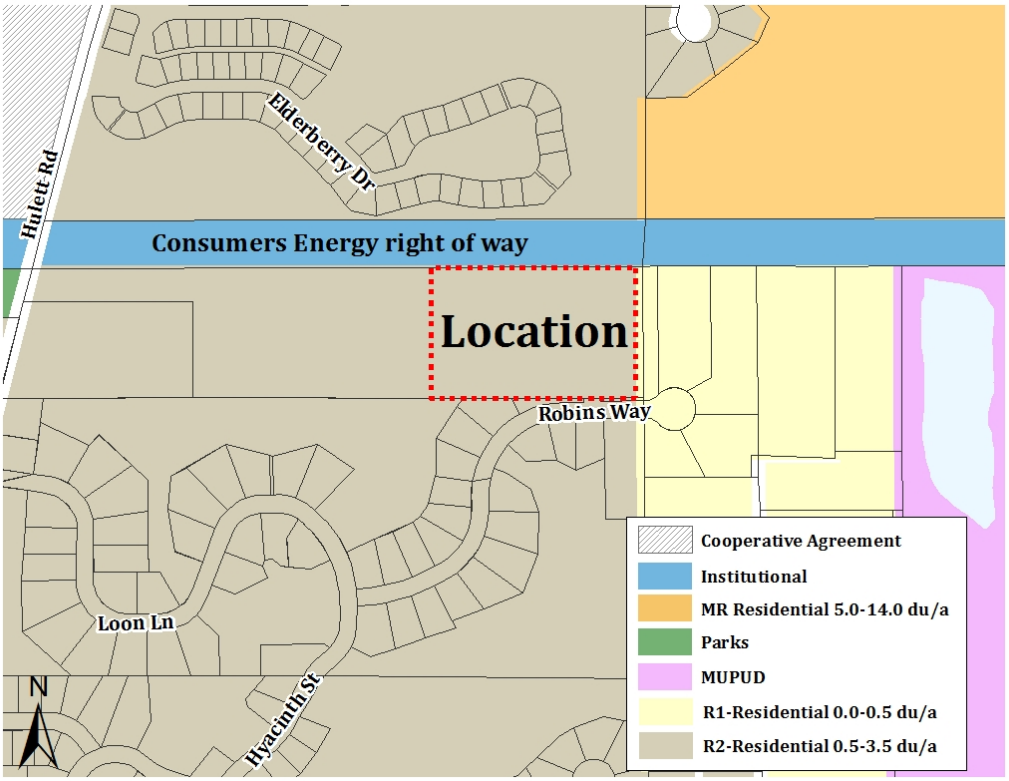
Giguere Homes has requested tentative preliminary plat (TPP) approval for Sanctuary 3, a subdivision consisting of seven lots on 7.36 acres located on the north side of Robins Way, east of Hulett Road. The property is zoned RAAA (Single Family-Low Density) and is bound by 11 conditions stemming from the rezoning of the parcel (REZ #18160) from RR (Rural Residential), which was approved by the Township Board on March 19, 2019. The Planning Commission discussed the conceptual prepreliminary plat at its meeting on June 24, 2019.

The Tentative Preliminary Plat process includes a public hearing and a recommendation from the Planning Commission. The Township Board has the final authority to approve, approve with conditions, or deny the tentative preliminary plat. After the TPP, the next steps in the plat process are final preliminary plat, and final plat. The final preliminary plat and final plat are subject to only Township Board approval.

Master Plan

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 category. The proposed seven lot subdivision on 7.36 acres results in a 0.95 dwelling unit per acre density, which meets the Master Plan designation for the property.

FUTURE LAND USE MAP



Zoning

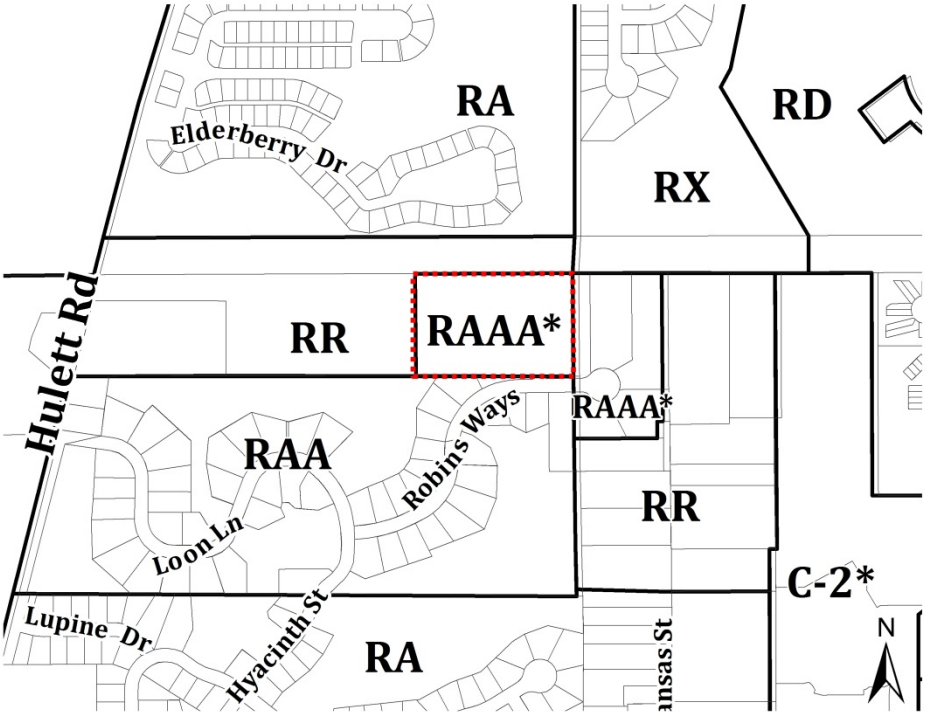
The subject site is located in the RAAA (Single Family-Low Density) zoning district, which requires a minimum of 100 feet of lot width and 20,000 square feet of lot area. The lots in the TPP meet the minimum lot width and lot area standards for the RAAA zoning district. The front yard setback for houses would be 25 feet. Side yard setbacks in RAAA zoning is 10 feet. Rear yard setbacks are established based on the depth of the lot, with 30 foot rear yard setbacks required for lots 150 feet or less in depth and 40 foot setbacks for those lots greater than 150 feet in depth. Maximum lot coverage, which includes both principal buildings and accessory buildings (detached garages, sheds) in RAAA, is 30 percent. The maximum building height permitted is 35 feet or 2.5 stories.

Rezoning #18160 was approved with 11 conditions that run with the land and will impact future development of the property. The conditions are as follows:

1. Limit current development of the site to a maximum of seven lots.
2. Limit future development of the site to a maximum of seven lots.
3. Establishment of a 50 foot wide natural preservation area along the south side of the parcel to be deeded to the homeowners association.

4. Establishment of a five foot wide tree buffer on the north side of the 50 foot wide natural preservation area on the south side of the parcel, including deed restrictions on Lots 6 & 7 requiring preservation of any trees within the buffer that have a trunk diameter greater than or equal to 12 inches.
5. Establishment of an 80 foot natural preservation area along the west side of the parcel to be deeded to the homeowners association.
6. Establishment of a 20 foot wide preservation area along the north side of the parcel, including deed restrictions on Lots 3, 4, & 5 requiring the preservation area remain undisturbed.
7. Establishment of a 10 foot wide tree buffer area on the south side of the 20 foot wide preservation area along the north side of the parcel, including deed restriction on Lots 3, 4, & 5 requiring preservation of any trees within the buffer that have a trunk diameter greater than or equal to 12 inches.
8. Establishment of deed restrictions for the homes in any new development on the property that meet or exceed those of the existing Sanctuary development.
9. Reservation of one seat on the architectural review board established in the deed restrictions for an elected representative from the existing Sanctuary Homeowners Association.
10. Limitation imposed on Giguere Homes to not seek a variance to encroach into the required wetland buffer on Lots 4, 5, and 6.
11. Restriction of construction hours to only between 8 a.m. to 6 p.m., Monday-Saturday.

ZONING MAP



Physical Features

The 7.36 acre site is undeveloped, with single family homes surrounding the property on all sides. The topography of the site slopes from 876 feet above mean sea level in the center of the parcel to a low point of 865 feet above mean sea level near the western edge of the site. The Flood Insurance Rate Map (FIRM) for Meridian Township indicates the property is not located in a floodplain.

The Turtle Crossing Drain is located on the southeastern corner of the property, running through Lot 1 of the plat. The Township's water features setback ordinance (Sec. 86-471) requires a 50-foot setback measured from the top of the bank on the side of the drain for any structure or grading.

Wetlands

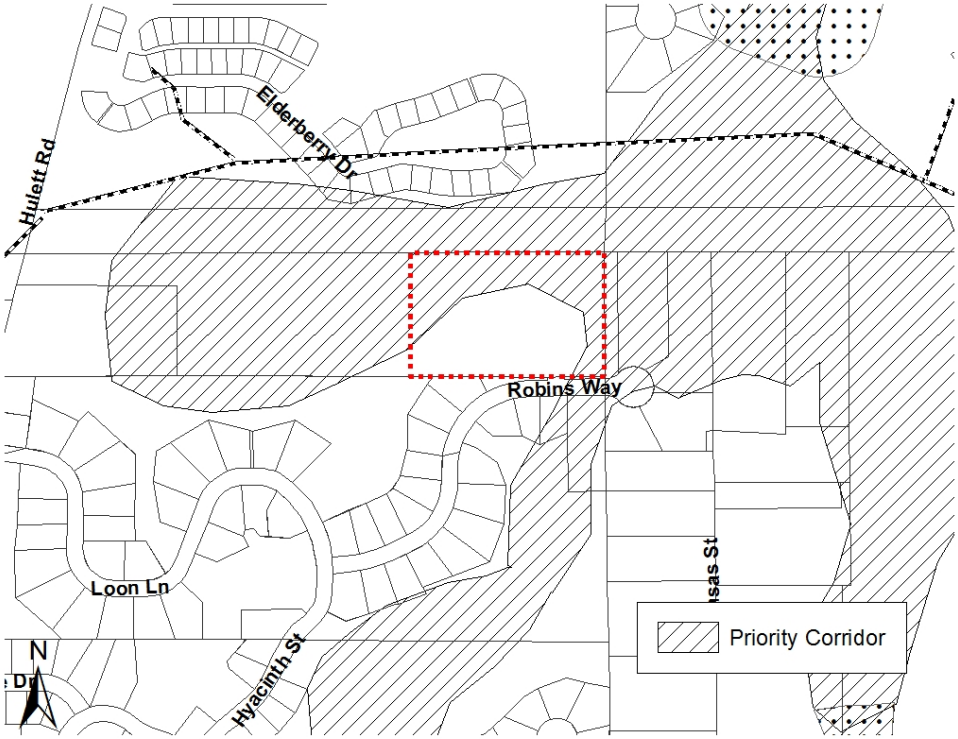
A wetland delineation report was submitted for the property (WDV #19-05) which shows two wetlands regulated by both the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and Meridian Township are present. The Township wetland consultant has verified the wetland delineation. The submitted site plan depicts the wetlands as identified in the delineation and verified by the Township.

The Township's water features setback ordinance calls for a 40-foot setback from the boundary of a wetland, within which no grading or construction may occur. Since the wetland areas within the site are each part of larger wetlands exceeding two acres in size, the plat correctly shows a 40-foot water features setback around each wetland. The setback encroaches onto portions of Lots 1, 2, 4, 5, and 6 near the rear of each lot. The buildable areas of each lot are depicted on the submitted plans. A wetland use permit will be required for any work proposed in the wetlands or storm drainage directed to the wetlands, neither of which are proposed.

Greenspace Plan

The Township Greenspace Plan shows a Priority Conservation Corridor (PCC) on the property. A PCC is a network of ecologically significant open spaces.

GREENSPACE PLAN



Streets & Traffic

The site fronts on Robins Way. Robins Way is a two-lane road designated as a Local Street. Traffic counts are not available for Robins Way. The most recent (2017) traffic count information from the Ingham County Road Department (ICRD) for Hulett Road, between Jolly Road and Bennett Road, showed a total of 3,552 vehicles in a 24 hour period.

During the 2018 rezoning (REZ #18160), data from the Institute of Transportation Engineers (ITE) Trip Generation Manual (8th Edition) was utilized to estimate future traffic volumes, shown below:

	RAAA zoning (7 lots)
Peak Hour trips	6.16 (a.m.) 8.16 (p.m.)
Weekday trips	76.56

A traffic assessment or study is required for a tentative preliminary plat if the project generates between 50 and 99 directional trips during a morning or afternoon peak hour (assessment) or if the project generates 100 or more directional trips during a peak hour or over 750 trips per day (study). In this case a traffic assessment is not required.

Utilities

The applicant intends to extend public water and sewer to the subdivision and will work with the Township Engineering Department on the extension of public utilities to the site. Design and construction of public water and sewer services must be consistent with Department of Public Works and Engineering standards.

While a preliminary storm sewer plan is not required at the TPP stage, the system may not drain into regulated wetlands without the appropriate permits, and the runoff volumes from the site may not exceed predevelopment levels. The future storm drainage system must be reviewed and approved by the Director of Public Works and Engineering and the Ingham County Drain Commissioner.

Staff Analysis

The requirements of the RAAA Zoning District, the Land Division Ordinance, and other Township regulations are the standards to consider when reviewing the plat. The design standards from Chapter 62 (Land Division) found in Section 62-60 of the Code of Ordinances will be used to assess the proposed platted subdivision at every step of review in the platting process. The design standards provide detailed requirements related to lot dimensions, common areas, streets, sidewalks, landscaping, easements, and utilities. Review by staff indicates the lots in the plat generally conform to the size and arrangement standards identified in the land division ordinance. Further, the plat appears to meet the conditions established in Rezoning #18160 related to the maximum number of lots and areas identified for preservation.

The TPP stage does not grant the developer any rights or assurances to begin work on the site. TPP approval confers upon the applicant for a period of one year approval of lot sizes, lot orientation, street layout, and application of the subdivision regulations which are in effect at the time of the approval. Once the applicant has received TPP approval from the Township, the plat will be submitted, as necessary, to other agencies, including the Ingham County Drain Commissioner, Ingham County Road Department, Ingham County Health Department, Michigan Department of Environment, Great Lakes, and Energy (EGLE), Ingham County Plat Board, and Tri-County Regional Planning Commission for consideration. Once the applicant has received approval from these agencies, the plat will be submitted to the Township for Final Preliminary Plat approval.

Planning Commission Options

The Planning Commission may recommend approval, approval with conditions, or disapproval of the tentative preliminary plat (TPP) within 60-days of the plat being filed with the Township. The application was deemed complete on July 26, 2019 therefore the Planning Commission must make its recommendation no later than the September 23, 2019 regular meeting. A resolution will be provided for the Commission's consideration at a future meeting.

Attachments

1. Tentative Preliminary Plat Application.
2. Letter from Derek Lisabeth dated July 15, 2019.
3. Tentative Preliminary Plat prepared by Enger Surveying and Engineering dated July 12, 2019.
4. Wetland verification letter report prepared by FTC&H dated May 23, 2019.

G:\Community Planning & Development\Planning\PLATS (PLAT)\2019\Tentative Preliminary Plat #19012 (Giguere) Sanctuary 3

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

RECEIVED
JUL 15 2019

TENTATIVE PRELIMINARY PLAT APPLICATION

A. Proprietor(s) Giguere Homes
Address of proprietor 6200 Pine Hollow Drive, Ste.100, East Lansing, MI 48823
Contact information: Work 1-517-339-3600 Home
Fax 1-517-339-7201 Email dlisabeth@giguerehomes.com

B. Plat name Sanctuary III Number of lots 7
Site address/location East end of Robins Way on North side of road
Legal description (Attach additional sheets if necessary) See attached
Parcel number(s) Parent parcel (33-02-02-32-400-005) Zoning designation RAAA
Acreage of site 7.36 Acres of floodplain N/A Acres of wetlands 1.16

C. Architect, engineer, planner, and/or surveyor responsible for the design of the plat:
Name of Company Enger Surveying & Engineering
Contact person Ron Enger
Contact information: Work 1-517-676-6565 Home
Fax 1-517-676-6675 Email ese@acd.net

D. The proprietor shall submit the application, fee and all required materials as outlined in Section 62-34 of the Township Code of Ordinances. An application will not be considered complete until all required materials have been submitted.

E. 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 Proprietor — 7/16/19 Date — $670.00 Fee

James Giguere
Proprietor's name (Printed)

Received by/Date 7/15/19

RECEIVED
JUL 15 2019

TENTATIVE PRELIMINARY PLAT CHECKLIST

The checklist is intended only as a guide to the information and materials that are required to be submitted with a tentative preliminary plat application. For a detailed list, refer to Section 62-34 of the Township Code of Ordinances.

Plat name Sanctuary III

Check if provided

✓	1.	Ten sealed copies on paper not greater than 24" X 36" drawn at a scale of not more than 200 feet to one inch.
✓	2.	Scale and north arrow shown on the plat.
✓	3.	One 8.5 " X 11" copy of the plat.
✓	4.	Proof of property ownership in the form of a title insurance policy or a title opinion prepared by an attorney licensed in Michigan showing all legal and equitable owners (including mortgagees, contract purchasers, and fee owners) of the land, all grants, reservations, restrictions, or easements.
✓	5.	Legal description of the property proposed for the subdivision.
✓	6.	Vicinity map showing the general relationship of the subdivision to the surrounding area and nearby facilities.
✓	7.	The boundary of the proposed subdivision with dimensions of the entire property and of any easements.
✓	8.	Owners of all adjacent properties and the names of adjacent subdivisions identified on the plat.
✓	9.	Boundary and character of woodlands, wetlands, 100-year floodplain, other features, and required setbacks. Wetlands shall be delineated by a wetlands professional, with data provided in a written report.
✓	10.	Existing stormwater drainage patterns.
✓	11.	Soils based on the soil survey for Ingham County or soil borings.
N/A	12.	Identified habitat of endangered, threatened, or special concern species.
✓	13.	Sight distance limitations along existing or proposed streets.
✓	14.	Topographic relief of the site and land within 100-feet of the site at two foot contour intervals (referenced to a USGS elevation datum). Slopes greater than eight percent must be highlighted.
✓	15.	The general topography and features of adjacent land, when stub streets are proposed at or near the boundaries of the subdivision.
N/A	16.	Other unique features of the site (such as historic or archaeological).
✓	17.	Zoning classification of the site and all adjacent properties.
✓	18.	Table providing the area (in square feet), width, and depth of each lot.
✓	19.	Buildable area shall be indicated on each lot as well as the required setbacks from any wetland or water feature.
✓	20.	Name, location, and right-of-way width of any existing public roads, street, highways, or railroads adjacent to or on the site and within 100 feet of the site. Number of lanes and the most current traffic volumes shall be noted for existing public streets, roads, and highways.
✓	21.	Location and size of any existing public or private water lines, sanitary sewers, or storm sewers, drains, culverts, and other underground structures within the site or immediately adjacent.
✓	22.	Location of above or below ground utilities within the site or adjacent, including gas, electric, telephone, and cable.
✓	23.	Location of existing permanent structures on or within 100' of the site.
✓	24.	A written statement specifying the intended use of the plat.
N/A	25.	Traffic assessment or study (if required).
✓	26.	Proposed subdivision name.
✓	27.	Layout, right-of-way width, typical cross-section, and names of proposed public streets.
N/A	28.	Sight distance plan and profile at each intersection of a planned subdivision street with any existing public street.
✓	29.	Location, width, and construction material of any sidewalks or pathways.
✓	30.	Location, width, and purpose of any proposed easements.
✓	31.	Dimensions and area of all proposed lots or outlots. Lots shall be numbered consecutively and outlots alphabetically.
✓	32.	Location, dimensions, and area of all parcels of land proposed to be set aside for commons, parks, playgrounds, or other grounds. The conditions of any dedication or reservation shall be specified.
N/A	33.	For phased subdivisions; a general layout for the entire development shall be provided. The temporary construction and permanent access to future phases shall be identified.
✓	34.	A statement indicating whether street lighting is proposed in the subdivision.

GIGUERE Homes

July 15, 2019

RECEIVED
JUL 15 2019

Re: Tentative Preliminary Plat, Parcel #32-400-005

To whom it may concern,

The intended use of the plat is for the construction of (7) single family residential homes.

The proposed name for the plat is "Sanctuary III".

Street lighting will be included in the plat.

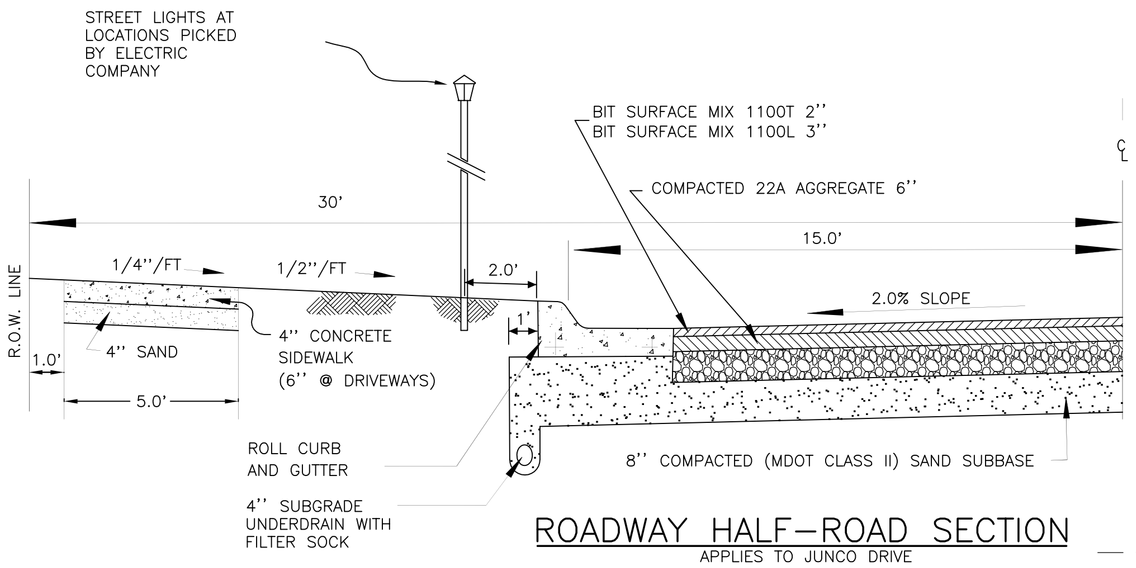
Sincerely,

Derek Lisabeth
Giguere Homes

PRELIMINARY PLAT OF

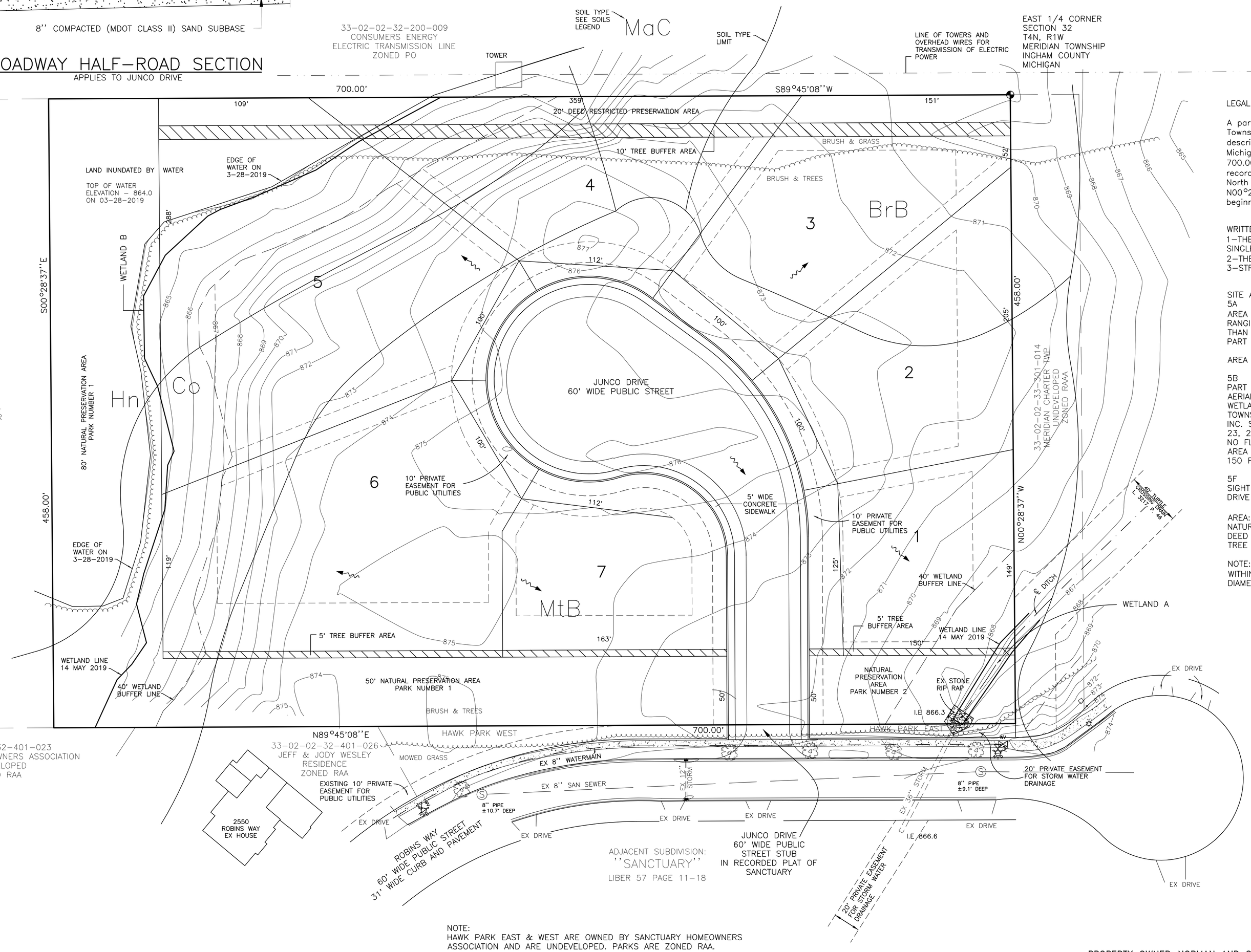
SANCTUARY III

A SUBDIVISION OF A PART OF THE SOUTHEAST 1/4 OF SECTION 32, T4N, R1W,
MERIDIAN TOWNSHIP, INGHAM COUNTY, MICHIGAN

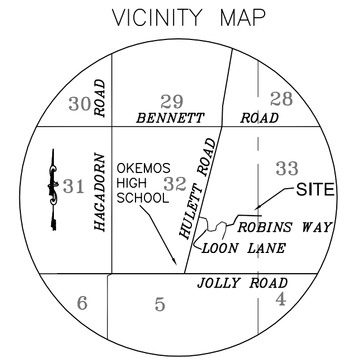


ROADWAY HALF–ROAD SECTION

APPLIES TO JUNCO DRIVE



VICINITY MAP



SCALE: 1''=40'

ELEVATIONS ARE NAVD 88

LEGAL DESCRIPTION –

A parcel of land in the Southeast 1/4 of Section 32, T4N, R1W, Meridian Township, Ingham County, Michigan; the boundary of said parcel being described as BEGINNING at the East 1/4 Corner of Section 32, T4N, R1W, Michigan Meridian; thence S89°45'08''W, along the East–West 1/4 line, 700.00 feet; thence S00°28'37''E, 458.00 feet to the North line of the recorded subdivision named Sanctuary; thence N89°45'08''E, along said North line, 700.00 feet to the East line of said Section; thence N00°28'37''W, along said Section line, 458.00 feet to the point of beginning; said parcel contains 7.36 acres.

WRITTEN STATEMENTS
1–THE INTENDED USE OF THE PLAT IS FOR THE CONSTRUCTION OF (7) SINGLE FAMILY RESIDENTIAL HOMES.
2–THE PROPOSED NAME FOR THE PLAT IS ''SANCTURARY III''
3–STREET LIGHTING WILL BE INCLUDED IN THE PLAT.

SITE ANALYSIS
5A
AREA LABELED ''BRUSH AND TREES'' IS HARDWOOD TREES DIAMETER RANGING FROM 2 INCH TO 36 INCH, WITH PERHAPS SOME WITH GREATER THAN 36 INCH DIAMETER. SOME SCATTERED BRUSH BELOW, BUT FOR MOST PART IS OPEN BENEATH THE CANOPY.

AREA LABELED BRUSH AND GRASS IS TALL GRASS AND LOW BRUSH.

5B
PART OF THE LAND IS INUDATED BY WATER. THIS POND IS VISIBLE ON AERIAL PHOTOGRAPHS DATING BACK TO 1999.
WETLAND AREAS DETERMINED BY MARX WETLAND AND VERIFIED BY THE TOWNSHIP'S WETLAND CONSULTANT, FISHBECK, THOMPSON, CARR & HUBER, INC. STAFF ON MAY 14, 2019 AND DESCRIBED IN THEIR LETTER DATED MAY 23, 2019 FOR WETLAND BOUNDARY VERIFICATION WDV 19–05.
NO FLOODPLAIN AREA IS MAPPED BY FEMA ON THIS PROPERTY. FLOODPLAIN AREA WITH ELEVATION 866 NAVD 88 IS SHOWN ON THE FEMA MAP ABOUT 150 FEET EAST OF THIS PROPERTY.

5F
SIGHT DISTANCE LIMITATION DOES NOT EXIST THE INTERSECTION OF JUNCO DRIVE WITH ROBINS WAY.SITE

AREA:
NATURAL PRESERVATION AREA= 64610 SFT
DEED RESTRICTED PRESERVATION AREA= 12382 SFT
TREE BUFFER AREA= 9000 SFT

NOTE:
WITHIN THE 10' AND 5' TREE BUFFER AREAS 12'' AND LARGER DIAMETER TREES WILL NOT BE CUT

SOILS LEGEND
SOILS INFORMATION IS FROM THE ''SOIL SURVEY OF INGHAM COUNTY MICHIGAN''

BrB – BOYER SANDY LOAM
0 TO 6 PERCENT SLOPE
Co – COLWOOD–BROOKSTONE LOAMS
Hn – HOUGHTON MUCK
MaC – MARLETTE FINE SANDY LOAM
6 TO 12 PERCENT SLOPE
MtB – M METEA LOAMY SAND
2 TO 6 PERCENT SLOPE

LOT	AREA (SQUARE FEET)	WIDTH	DEPTH
1	20200	125.27'	149.60'
2	25800	100.79'	182.93
3	29100	100.00'	230.11'
4	30200	112.39'	131.20'
5	52700	100.00'	284.34'
6	41800	100.00'	285.23'
7	20100	110.58'	128.67'

NOTE:
HAWK PARK EAST & WEST ARE OWNED BY SANCTUARY HOMEOWNERS ASSOCIATION AND ARE UNDEVELOPED. PARKS ARE ZONED RAA.

LAND IN SUBDIVISION IS IN ZONING DISTRICT RAAA:
20000 SFT MIN
100' MIN WIDTH
25' FRONT YARD
10' SIDE YARD
30' REAR YARD IF LOT UP 150' DEEP
40' REAR YARD FOR LOT OVER 150' DEEP

LEGEND
EXISTING HYDRANT
EXISTING WATER VALVE
EXISTING SANITARY MANHOLE
EXISTING CATCH BASIN
EXISTING 1 FOOT CONTOUR NAVD 88 DATUM
EXISTING DRAINAGE FLOW DIRECTION
LIMIT OF BUILDABLE AREA

ENGINEER AND SURVEYOR: RON ENGER PS PE

PROPERTY OWNER: NORMAN AND CARMEN GEAR
3760 HULETT ROAD
OKEMOS MICHIGAN 48864

PLAN DATE: JULY 12, 2019

DATE		REVISIONS

ENGER SURVEYING & ENGINEERING
805 N. CEDAR PO BOX 87
MASON, MICHIGAN 48854–0087
517–676–6565
FAX 517–676–6675

ESE JOB# 33–3152 (PRELIMINARY PLAT.DWG)

SANCTUARY III PRELIMINARY PLAT

DEVELOPER: GIGUERE HOMES
6200 PINE HOLLOW DR STE 100
EAST LANSING MI 48823

HORZ SCALE: 1"= 40'

SHEET 1 OF 1

May 23, 2019
Project No. 190708

Mr. Peter Menser
Charter Township of Meridian
5151 Marsh Road
Okemos, MI 48864-1198

Re: Wetland Boundary Verification – WDV 19-05
3760 Hulett Road, Meridian Township, Ingham County, Michigan

Dear Peter:

On May 14, 2019, Fishbeck, Thompson, Carr & Huber, Inc. (FTCH) staff conducted a field investigation and verified wetland boundaries on an approximately 7.36-acre site located at 3760 Hulett Road (the Site). The Site is in Section 32 of Meridian Township (Town 4 North, Range 1 West).

Site wetlands were delineated by Marx Wetlands (Marx), as described in its October 6, 2017, report entitled *Wetland Determination Report: Giguere Homes Site, Section 32, Meridian Township, Ingham County, Michigan* (Report). Giguere Homes intends to construct seven single-family residences and Junco Drive at the Site.

Site Investigation

FTCH staff met Ms. Bryana Guevara of Marx at the site on May 14th to inspect the wetland boundary. Site conditions were generally consistent as described in the Report. Marx delineated two wetlands, which are discussed below.

Wetland A: This emergent wetland is located along a drainageway at the southeast corner of the Site. The creek flows through a culvert under Robins Way Drive to the northeast. The creek appears to drain into wetland contiguous with the Smith Drain. Ms. Guevara indicated wetland boundary flags were originally placed on both sides of the creek, labelled A1 through A5 (with duplicate flags on each side of the creek). Flags labelled A4 were observed and were appropriately placed. The remaining flags were no longer present. We reflagged the wetland boundary with wetland flags labelled A2 and A3.

Wetland B: Wetland B is a large wetland complex with its eastern edge at the western end of the Site. Wetland B corresponds to Township Wetland 32-36, an approximately 31.67-acre emergent, scrub/shrub, forested and open water wetland. Wetland boundary flags B1 through B25 were evaluated on the Site. Most of the wetland flags were observed. Some of the wetland flags were placed too high in the landscape, as verified by the presence of spring ephemeral wildflowers that confirmed the presence of mesic forest. The following adjustments to the wetland boundary were made:

- Wetland flag B0 was placed near the northern property boundary. This is a new wetland flag.
- Flag B1 was moved north, closer to open water.
- Flags B2 through B5 were removed.
- New flag B2 was placed to the north of the original flag B2 location. It connects to new flag B1 and existing flag B8. Flags B6 through B7 were not observed.
- Flag B12 was moved approximately 10 feet northwest.
- Flag B13 was removed.
- Flag B14 was moved northwest (it connects to new flag B12 and original flag B15).
- Flag B20 was moved closer to open water.
- All other wetland flags were appropriately placed (i.e. flags B8 through B11, B15 through B19, and B21 through B25).

Regulatory Review

The regulatory review was based upon the Report and site observations. Section 22-116 of the Township's Wetland Protection Ordinance defines "protected wetlands" as wetlands greater than two acres in size and wetlands, regardless of size, which are contiguous (i.e. within 500 feet of) to any inland lake, stream, river, or pond, whether partially or entirely within the project site. Wetland A is contiguous with a stream. Wetland B is greater than two-acres in size and is also contiguous with a pond. Therefore, both wetlands are regulated by the Township.

A Wetland Use Permit (WUP) is required from the Township for any of the following activities:

- Placing fill or permitting the placement of fill in regulated wetland.
- Dredging, removing, or permitting the removal of soil or minerals from regulated wetland.
- Constructing, operating, or maintaining any use or development in regulated wetland.
- Draining surface water from regulated wetland.

In addition, the Township requires that all structures and grading activities during site development shall be set back 40 feet from the delineated wetland boundary and a natural vegetation strip shall be maintained within 20 feet of the wetland boundary.

FTCH recommends the wetland boundaries and buffers on the Site survey be updated as described in this letter. If you have any questions regarding this letter or any other wetland-related issues, please contact me at 616.464.3738 or ehtripp@ftch.com.

Sincerely,

FISHBECK, THOMPSON, CARR & HUBER, INC.

Elise Hansen Tripp, PWS

pmb
By email
cc: Mr. Mark Kieselbach – Charter Township of Meridian

To: **Planning Commission**

From: **Peter Menser, Principal Planner**

Date: **August 8, 2019**

Re: **Special Use Permit #19111 & 19121 (Woodward Limited Dividend Housing Association)**

The Planning Commission held the public hearings for Special Use Permit #19111 and #19121 at its meeting on July 22, 2019. Since the meeting the applicant has submitted a revised site plan that includes several changes to the layout of the project. The revised site plan was received late in the week and therefore staff has not had time to review it in detail. Additional comments will be provided at the meeting on August 12, 2019 and in a future memorandum.

Planning Commission Options

The Planning Commission may approve, approve with conditions, or deny the special use permit. A resolution will be provided at a future meeting.

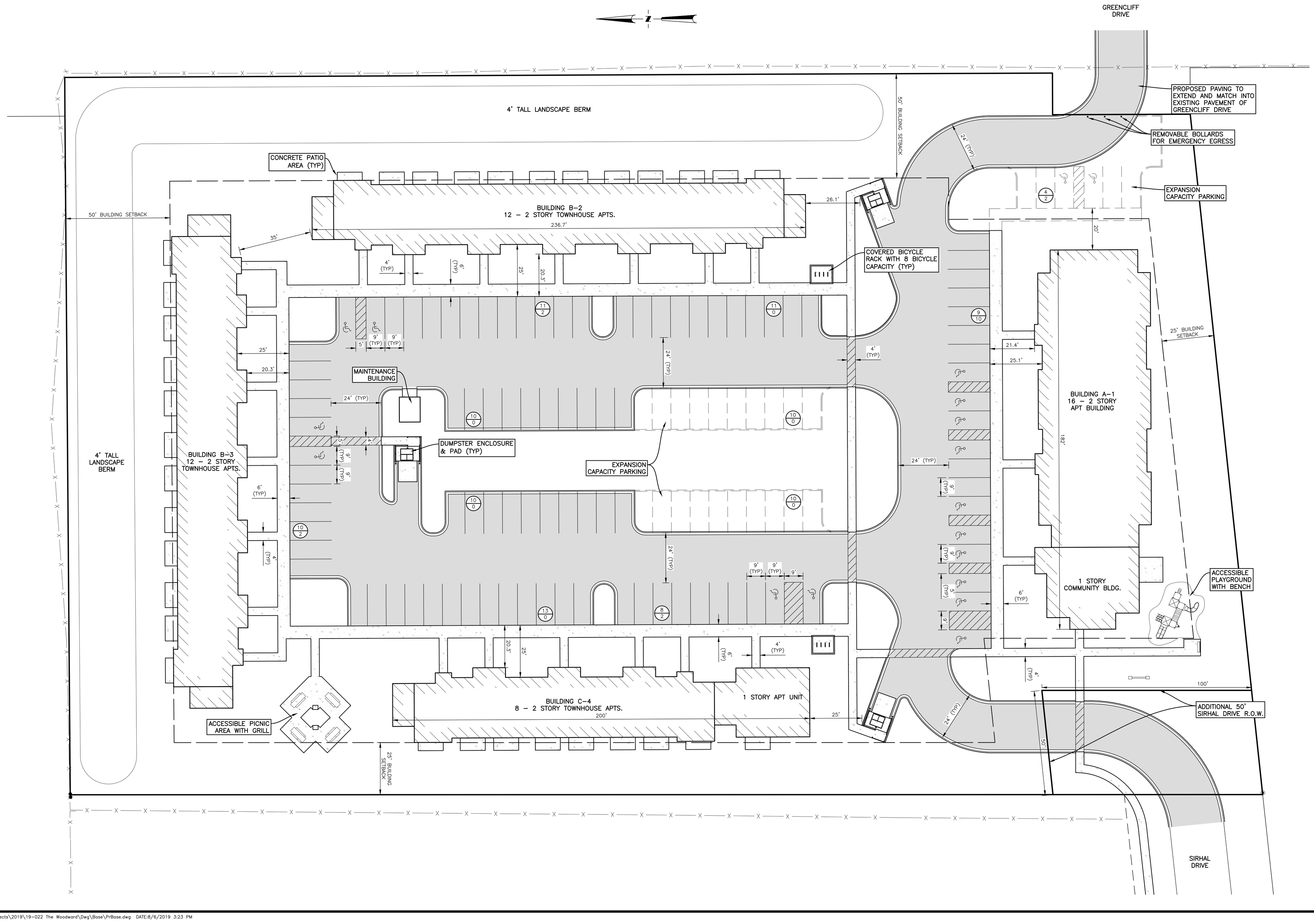
Attachment

1. Revised site plan prepared by Monument Engineering Group Associates, Inc. dated August 7, 2019 and received by the Township on August 8, 2019.

G:\Community Planning & Development\Planning\SPECIAL USE PERMITS (SUP)\2019\SUP 19111 (Woodward Limited Dividend Housing Association)\SUP 19111.pc2.doc

WOODWARD WAY

SITE PLAN



ENGINEERS · SURVEYORS
CONSULTANTS · LAND PLANNERS

MONUMENT ENGINEERING GROUP ASSOCIATES, INC.

298 VETERANS DRIVE
FOWLERVILLE,
MICHIGAN 48836
(OFFICE) 517-223-3512
MONUMENTENGINEERING.COM

SERVICE DISABLED VETERAN OWNED SMALL BUSINESS (SDVOSB)

Call MISS DIG
3 full working days before you dig:
Michigan's One-Call — Utility Notification Organization
1-800-482-7171
www.missdig.org

THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO REPRESENTATION IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT :

WODA COOPER COMPANIES, INC.

500 S FRONT STREET
SUITE 975
COLUMBUS, OH 43215

WOODWARD WAY - SITE PLAN

SIRHAL & GREENCLIFF DRIVES
MERIDIAN TOWNSHIP, MI

PLAN SUBMITTALS/REVISIONS	DATE
PRELIMINARY SITE PLAN LAYOUT	8/07/2019

ORIGINAL ISSUE DATE: 8/07/2019

PROJECT NO: 19-022

SCALE: 1" = 20'
0 1/2" 1"

FIELD:
DRAWN BY:
DESIGN BY:
CHECK BY: AP

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FILE:P:\Projects\2019\19-022 The Woodward\Dwg\Base\PrBase.dwg DATE:8/6/2019 3:23 PM

WOODWARD WAY

SITE PLAN

PAVEMENT LEGEND

- EX. ASPHALT
- EX. CONCRETE
- EX. GRAVEL
- PR. STANDARD DUTY ASPHALT
- PR. HEAVY DUTY ASPHALT
- PR. CONCRETE
- PR. GRAVEL
- STANDARD CURB AND GUTTER
- REVERSE CURB AND GUTTER

ZONING INFORMATION

THIS ZONING INFORMATION IS TAKEN FROM MERIDIAN TOWNSHIP ZONING ORDINANCE
DATED: JANUARY 25, 2019

SUBJECT PARCEL ZONING CLASSIFICATION:
RC

BUILDING SETBACKS:	REQUIRED	PROVIDED
FRONT (WEST):	25'	25'
SIDE (NORTH):	50'	50'
SIDE (SOUTH):	25'	25'
REAR (EAST):	50'	50'

SUBJECT PARCEL AREA: 4.37 ACRES

PROPOSED BUILDING:

BUILDING A-1:	9,014 SF
BUILDING B-2:	7,109 SF
BUILDING B-3:	7,109 SF
BUILDING C-4:	6,047 SF
MAINTENANCE BLDG:	120 SF

LOT COVERAGE:

UNIT DENSITY: 49 UNITS/4.37 ACRES = 11.21 UNITS/ACRE

BUILDING COVERAGE:
29,399 SF BUILDINGS/190,297 SF PARCEL = 15.45%

IMPERVIOUS SURFACE COVERAGE:
29,399 SF PR BUILDINGS + 2,363 SF PATIO AREA + 9,959 SF SIDEWALK + 765 SF CONCRETE PAD + 2,678 SF CURB AND GUTTER = 91.201 SF TOTAL IMPERVIOUS SURFACE
91,201 SF IMPERVIOUS/190,297 SF PARCEL = 47.93%

ADJACENT ZONING:

NORTH:	RA
SOUTH:	C-2
EAST:	RX
WEST:	RC

PROPOSED PARKING

2/UNIT PLUS
25% EXPANSION CAPACITY FOR PROPOSED UNITS PLUS
1/200 SF COMMUNITY/OFFICE SPACE MINUS
1/2 BICYCLE PARKING SPACES

49 UNITS X 2 = 98 SPACES PLUS
98 X 25% = 25 EXPANSION CAPACITY SPACES PLUS
1,418 SF COMMUNITY SPACE/200 = 7 SPACES MINUS
16 BICYCLE PARKING SPACES/2 = 8

TOTAL PARKING REQUIRED:
98 + 25 + 7 - 8 = 122 PARKING SPACES
(97 SPACES AND 25 EXPANSION CAPACITY SPACES)

XX REGULAR SPACES
XX BARRIER FREE SPACES

PARKING SPACES:	98
BARRIER FREE PARKING SPACES:	16
EXPANSION PARKING SPACES:	24
EXPANSION BARRIER FREE SPACES:	2
TOTAL PARKING PROVIDED:	124

(98 SPACES AND 26 EXPANSION SPACES)

NOTES

1. SIGN TO BE LOCATED AND MEET ALL TOWNSHIP STANDARDS
2. SCREENING SHALL BE PROVIDED FOR ALL MECHANICAL EQUIPMENT.
3. PARKING LOT ISLANDS SHALL BE FINISHED IN GRASS, GROUND COVER OR MULCH.
4. STORM WATER MANAGEMENT TO MEET ALL TOWNSHIP & STATE STORM WATER MANAGEMENT REQUIREMENTS

LANDSCAPE LEGEND

- DECIDUOUS TREE
- CONIFEROUS TREE
- ORNAMENTAL TREE
- SHRUB

ENGINEERS · SURVEYORS
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