



PLANNING COMMISSION
TUESDAY, SEPTEMBER 10, 2019
Sycamore Room - 1st Floor - 6:30 P.M.
201 West Ash Street, Mason MI

AGENDA

- 1. CALL TO ORDER**
- 2. ROLL CALL**
- 3. PUBLIC COMMENT**
- 4. APPROVAL OF MINUTES**
 - A. Approve Minutes of Regular Planning Commission Meeting July 7, 2019
- 5. PUBLIC HEARINGS**
 - A. Resolution 2019-12: Jamie Robinson, Robinson Realty LLC, has requested a zoning text amendment to add short-term rentals as an allowed use in the C1 Central Business District.
 - B. Resolution 2019-10: Matt Haenlien, FED Corporation, on behalf of Paul Davis Corporation, has submitted a request for a Special Use Permit and approval of a Preliminary Site Plan for new construction of a 27,000 sq. ft., building to include offices and storage related to their business of home damage restoration services, on property located at the northeast corner of Temple Street and Kipp Road, parcel 33-19-10-09-400-009.
- 6. UNFINISHED BUSINESS**
- 7. NEW BUSINESS**
 - A. Resolution 2019-11: James Giguere, Giguere Realty & Development, LLC, is requesting a Preliminary Site Plan Approval for the development of a new residential subdivision containing 20 residential lots and one common area. The subdivision will include paved public streets, public water, public sanitary sewer, and public storm sewer. The new subdivision will be developed on property located north of the intersection of Stratford and Eaton roads, parcel 33-19-10-04-426-002 POLP, City of Mason, Ingham Co.
- 8. LIAISON REPORT**
- 9. ADJOURN**

**CITY OF MASON
PLANNING COMMISSION MEETING
MINUTES OF JULY 9, 2019
DRAFT**

Waxman called the meeting to order at 6:30 p.m. in the Sycamore Room 1st floor at 201 West Ash Street, Mason MI.

Present: Barna, Droscha, Perrault, Vercher, Waxman, Wren
Absent: Howe, Sabbadin, Shattuck
Also Present: Elizabeth A. Hude, AICP, Community Development Director

PUBLIC COMMENT

NONE.

APPROVAL OF MINUTES

MOTION by Droscha second by Vercher, to approve the Planning Commission meeting minutes from June 11, 2019.

Yes (6) Barna, Droscha, Perrault, Vercher, Waxman, Wren
No (0)
Absent (3) Howe, Sabbadin, Shattuck

MOTION PASSED

UNFINISHED BUSINESS

None.

NEW BUSINESS

- A. Resolution 2019-08: Jesse Howard of Service Master Inc. has requested joint preliminary and final site plan approval related to a change of use in an existing building and construction of an 11-space parking lot on property located at 213 N. East St.

DISCUSSION:

Hude explained the proposal was in a C-1 zoning district and the project appears to meet the zoning requirements. The applicant understands that there is no parking in the surrounding area so the site plan now includes a parking lot adjacent to the building to accommodate Service Master vehicles. Hude reviewed comments from other departments and agencies. The fire chief had no issues with the site plans, but the police chief asked for additional lighting on the building. The Department of Public Works and the city engineer requested relocating water service to new spot on East Street and evaluate sewer line when it is exposed during parking lot improvements. Hude added that the Department of Public Works would be able to help during this inspection. Hude indicated that all requirements have been met in the site plan and the only addition is to add lighting to the building.

VOTE

Motion by Droscha, second by Barna to approve resolution 2019-08.

Yes (6) Barna, Droscha, Perrault, Vercher, Waxman, Wren

No (0)

Absent (3) Howe, Sabbadin, Shattuck

MOTION PASSED

Planning Commission took a recess at 6:45 p.m. and resumed at 6:55 p.m.

- B. Resolution 2019-09: Pacifica companies is seeking approval of a final site plan amending a previously approved site plan to build a 5,460 addition that will accommodate up to four new retailers on property located at 125 E. Kipp Rd.

DISCUSSION:

Hude gave an overview of the project and reviewed comments received from city departments and outside agencies. She noted DPW requirements related to water service and a fire hydrant, and that police department would like to see lighting above each door along the backside of building to address safety concerns.

Waxman asked if any amendments needed to be made. Hude confirmed that the only amendment would be the requirement of lighting above each retail door.

Barna asked if the applicant could be asked to change the color of the building finish. Hude explained that the commission does have legal power to ask for a change in the façade to ensure that the site shall be developed so all elements are harmoniously and efficiently organized in relation to the size, shape, type and topography of the site and surrounding property. Hude added that the site plan indicated the façade would be masonry.

Droscha asked if there was a way to require the applicant to finish the façade so that the color is consistent around the entire building, including the existing Dollar Tree. Waxman added there were concerns for the aesthetics on the east side of the building because it backs up to an existing trail.

VOTE - AMENDMENTS

Motion by Droscha, second by Perrault to amend resolution 2019-09 by requiring the applicant to finish the façade on the north side of the building with a consistent pattern and color as the west and south façade of the building.

Yes (6) Barna, Droscha, Perrault, Vercher, Waxman, Wren

No (0)

Absent (3) Howe, Sabbadin, Shattuck

MOTION APPROVED TO AMEND RESOLUTION

Motion by Droscha, second by Wren to approve Resolution 2019-09 as amended.

Yes (6) Barna, Droscha, Perrault, Vercher, Waxman, Wren

No (0)
Absent (3) Howe, Sabbadin, Shattuck

MOTION PASSED

LIAISON REPORT

A. Development Update: City Manager's Report

Council Member Droscha informed the commission that City Council accepted a motion for the construction project on Temple Street.

Hude informed the commission that city managers reports can be found online at the city managers if they are not completed by the time meeting packets are sent out.

Hude formally introduced and recognized Ross Whitehead, an Intern in the Community Development Department. During his time working for the City of Mason he set up the city's first GIS library of existing layers. He accepted a position with Wolverine Engineering.

ADJOURN

The meeting adjourned at approximately 7:16 p.m.



City of Mason Planning Commission *Staff Report*

TO: Planning Commission
FROM: Elizabeth A. Hude, AICP, Community Development Director
SUBJECT: C-1 Central Business District Short Term Rentals Amendment
DATE: September 5, 2019

Jamie Robinson, Robinson Realty, LLC, has requested an amendment to the Mason Code to amend the City of Mason ordinances Part II, Chapter 1, Sec 1-2; Chapter 94, Article IV, Section 94-141(b); and Chapter 94, Article IV, Section 94-192 to allow for short term rentals in the C-1: Central Business district.

Chapter 94 Article XII. Amendments of the Mason Code Section 94-392 provides for an amendment to this chapter (94 – Zoning) may be initiated by the city council, by the planning commission, or by petition of one or more persons having an interest in property located within the jurisdiction of this chapter.

PUBLIC NOTICE

Notice was given as required in Sec. 94-394 and Sec. 94-395. The public hearing notice was published in the Ingham County Community News Legal Section on Sunday, August 25, 2019.

STAFF REVIEW

This application has brought forward an aspect of our zoning ordinance that challenges our goals for economic development, community character, and vitality downtown. Communities across the country are debating the pros and cons of Short-term Rentals. An article shared by the Michigan Municipal League is attached for reference. Because the use is being proposed exclusively in a C-1 Central Business District, it is somewhat similar to the transient nature of commercial hotel activity. The difference is that there is no staff or owner present on a 24/7 basis to monitor guests or immediately respond to issues.

In considering the importance of the C1 District as the historical, commercial center of Mason, Staff finds that the request for the C-1 District would allow for even more flexibility in the future for activation of properties in the Downtown Center.

The City of Mason Master Plan discusses future land uses related to Commercial Development and the Downtown Center on page 3-2. The proposed amendment is also tied to the City's Economic Development goals discussed on page 2-5, specifically Objective 8 calling for development of a bed and breakfast program.

A Bed and Breakfast as a use is defined in Mason as a short-term use in an owner-occupied residential structure, and is currently allowed by right in the C1 District. As the applicant's proposed Short-term rental use is defined as a non-owner-occupied use in a residential structure, staff recommends in

proposed Ordinance 227 that the use require a Special Use Permit to ensure adequate provisions for health, safety and welfare are addressed.

Short-term non-owner-occupied rentals are currently not allowed in any zoning district in the City of Mason. However, owner-occupied short-term rentals such as a Rooming House with a limited number of rooms are allowed in some residential districts.

Staff is also recommending a sunset provision of three years which would allow the City to observe the use and address any unforeseen impacts that may arise.

In accordance with Sec. 94-396, the matters to be considered by the planning commission which shall include the following findings of fact:

1. **Compliance with the Master Plan of the City.** *The proposed amendment supports several objectives of the City of Mason Master Plan including Future Land Use; Growth Management, Public Services, and Quality of Life; Community Character, Historic Preservation and the Environment; Economic Development.*
2. **What, if any, identifiable conditions related to the proposed amendment have changed which justify the proposed amendment?** *Significant investment in Downtown Mason over the years has made it more attractive for economic development; land use practices today are encouraging a return to mixed-uses in downtowns which is consistent with the historical pattern in Downtown Mason.*
3. **What, if any, error in judgment, procedure or administration was made in the original chapter which justifies the petitioner's change in zoning?** *There is no known error of this sort.*
4. **What are the precedents and the possible effects of such precedent which might result from the approval or denial of the petition?** *Land use practices have shifted to promote more mixed-use zoning in downtown districts. The approval of the petition may result in increased property values, more economic activity, an increase in pedestrian activity, and improved vitality overall.*
5. **What is the impact of the amendment on the ability of the City and other governmental agencies to provide adequate public services and facilities, and/or programs that might reasonably be required in the future if the petition is approved?** *There is no unique impact. The C-1 District is currently served with public utilities.*
6. **Does the proposed amendment adversely affect the value of the surrounding property?** *The amendment may result in an increase in property values due to potential development in the district.*
7. **Are there any significant environmental impacts which would reasonably occur if the petitioned zoning change and resulting allowed structures were built?** *There are no known significant environmental impacts associated with the proposed amendment. The additional use will not uniquely impact the downtown.*
8. **The ability of the property in question to be put to a reasonable economic use in the zoning district in which it is presently located.** *The additional use made possible by this amendment will increase the ability of all properties in the C-1 Central Business District to be put to a reasonable economic use.*

ACTION

The Planning Commission has the following options:

- Recommend City Council approve the request as presented,
- Recommend City Council deny the request as presented,
- Recommend City Council consider an amendment to the request with consideration for one or more of the items noted by staff above and/or presented by others through the public hearing process. This option would require that a new public hearing be posted to allow the public to reconsider the revised request.
- Recommend City Council approve the request as presented, separately discuss options for a future amendment which considers one or more of the items noted by staff above and/or presented by others through the public hearing process.

Relation to Other Actions

Pending the recommendation of the Planning Commission, City Council would conduct the first reading at their September 23, 2019 meeting, second reading and possible adoption on October 7, 2019. The ordinance would go into effect on the date of its publication, anticipated to be October 13, 2019. If the Planning Commission recommends adoption, staff would recommend allowing the applicant to move forward.

Staff Recommendation

With the findings and analysis described above, the following action is recommended for consideration by the Planning Commission:

The Planning Commission approve Resolution No. 2019-12 recommending that City Council adopt Ordinance 227.

Attachments:

1. Resolution 2019-12
2. Image of the C1 District
3. Application

**CITY OF MASON
PLANNING COMMISSION RESOLUTION No. 2019-12**

**A RESOLUTION RECOMMENDING THAT THE CITY COUNCIL
ADOPT ORDINANCE NO. 221 – AN ORDINANCE TO AMEND
CHAPTER 100 TABLE 100-02 (i)e – BUILDING DIMENSIONAL REGULATIONS**

September 10, 2019

WHEREAS, Jamie Robinson, Robinson Realty, LLC, has requested an amendment to the Mason Code to amend the City of Mason ordinances Part II, Chapter 1, Sec 1-2; Chapter 94, Article IV, Section 94-141(b); and Chapter 94, Article IV, Section 94-192 to allow for short term rentals in the C-1: Central Business district; and,

WHEREAS, a public hearing on the request was noticed and held at the Planning Commission's regular meeting of September 10, 2019, with testimony given and public comment solicited in accordance with Section 94-101 of the Mason Code; and,

WHEREAS, the Planning Commission finds that proposed Ordinance 227 is consistent with the relevant criteria of Section 94-396(a) and accepts the Staff Report dated September 5, 2019 as findings of fact which includes:

- 9. Compliance with the Master Plan of the City.** *The proposed amendment supports several objectives of the City of Mason Master Plan including Future Land Use; Growth Management, Public Services, and Quality of Life; Community Character, Historic Preservation and the Environment; Economic Development.*
- 10. What, if any, identifiable conditions related to the proposed amendment have changed which justify the proposed amendment?** *Significant investment in Downtown Mason over the years has made it more attractive for economic development; land use practices today are encouraging a return to mixed-uses in downtowns which is consistent with the historical pattern in Downtown Mason.*
- 11. What, if any, error in judgment, procedure or administration was made in the original chapter which justifies the petitioner's change in zoning?** *There is no known error of this sort.*
- 12. What are the precedents and the possible effects of such precedent which might result from the approval or denial of the petition?** *Land use practices have shifted to promote more mixed-use zoning in downtown districts. The approval of the petition may result in increased property values, more economic activity, an increase in pedestrian activity, and improved vitality overall.*
- 13. What is the impact of the amendment on the ability of the City and other governmental agencies to provide adequate public services and facilities, and/or programs that might reasonably be required in the future if the petition is approved?** *There is no unique impact. The C-1 District is currently served with public utilities.*

14. Does the proposed amendment adversely affect the value of the surrounding property?

The amendment may result in an increase in property values due to potential development in the district.

15. Are there any significant environmental impacts which would reasonably occur if the petitioned zoning change and resulting allowed structures were built?

There are no known significant environmental impacts associated with the proposed amendment. The additional use will not uniquely impact the downtown.

16. The ability of the property in question to be put to a reasonable economic use in the zoning district in which it is presently located.

The additional use made possible by this amendment will increase the ability of all properties in the C-1 Central Business District to be put to a reasonable economic use.

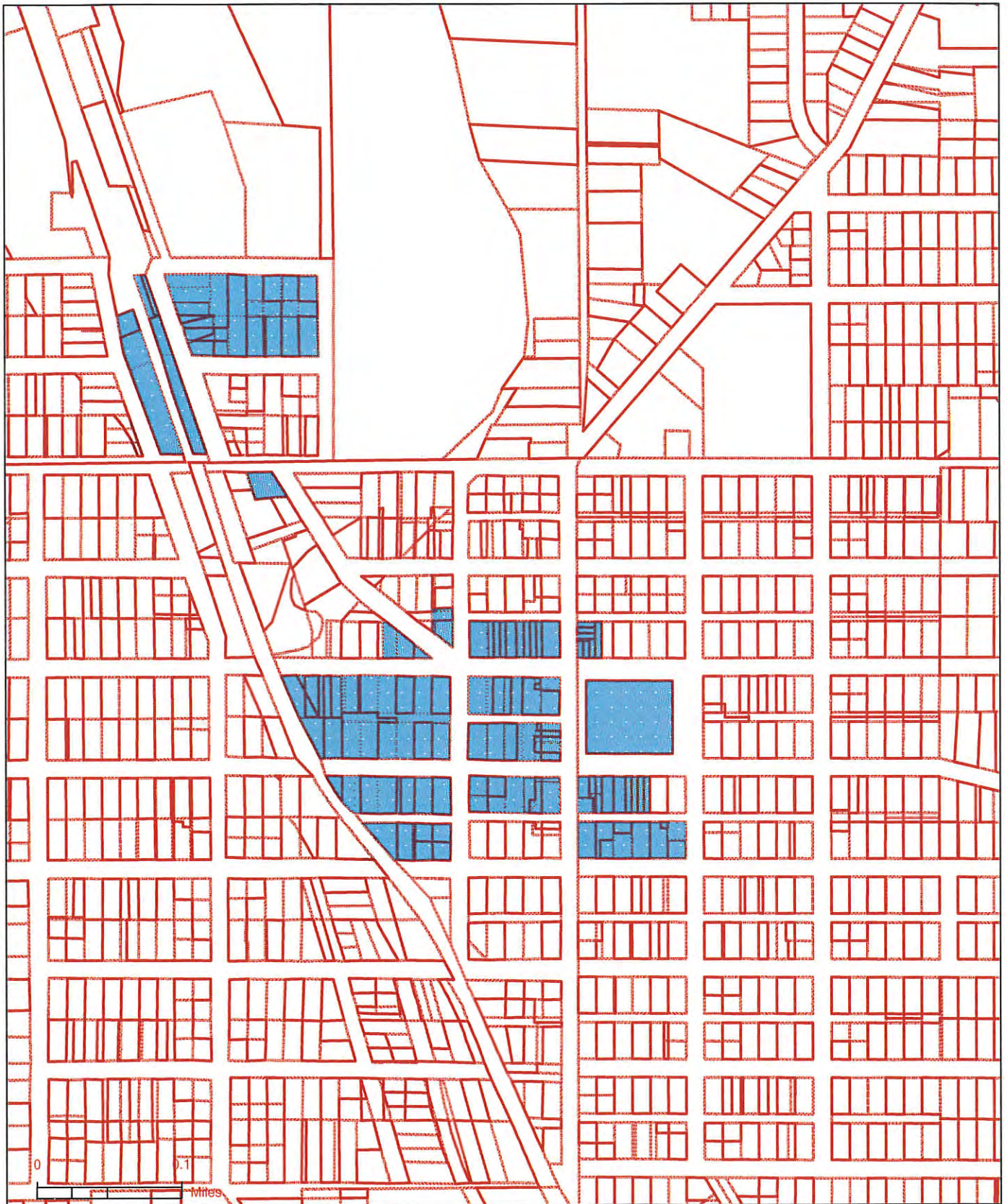
NOW THEREFORE BE IT RESOLVED, that the City of Mason planning Commission does hereby recommend that the City Council adopt Ordinance No. 227 – an ordinance to amend the City of Mason ordinances Part II, Chapter 1, Sec 1-2; Chapter 94, Article IV, Section 94-141(b); and Chapter 94, Article IV, Section 94-192 to allow for short term rentals in the C-1: Central Business district.

Yes (0)

No (0)

Absent (0)

C-1 PARCELS



Introduced: September 9, 2019
First Reading: September 9, 2019
Second Reading: _____
Adopted: _____
Effective: _____

CITY OF MASON

CENTRAL BUSINESS DISTRICT REGULATION

AN ORDINANCE TO AMEND PART II, CHAPTER 1, SEC 1-2;
CHAPTER 94, ARTICLE IV, SECTION 94-141(B); AND
CHAPTER 94, ARTICLE VI, SECTION 94-192
TO ALLOW FOR SHORT TERM RENTALS IN THE
C-1: CENTRAL BUSINESS DISTRICT

THE CITY OF MASON ORDAINS:

Part II, Sec 1-2 Definitions of the Mason City Code is hereby amended by adding:

Part II Code of Ordinances

Chapter 1 Sec 1-2. Definitions

Short-term rental consists of a legal dwelling rented for a period of less than thirty days and is non-owner occupied.

Chapter 94 of the Mason City Code is hereby amended by adding short-term rentals to Article IV, Sec. 94-141(b) and Article VI, Sec. 94-192, which amended, articles shall read as follows:

Chapter 94 Zoning

Article IV. Sec. 94-141. C-1: Central business district

- (a) *Intent and purpose.* It is the primary purpose of this district to provide opportunities for business establishments in the area generally referred to as the Downtown Center in the city master plan that address the local day-to-day office, retail, and service needs of residents of, and visitors to, the city. It is the intent of this district to prohibit uses that draw from a regional population causing excessive traffic levels or that may otherwise undermine the intended function and character of the historic business area of the city.
- (b) *Uses permitted by right.*
 - (1) Offices for financial institutions, real estate offices, insurance offices, investment brokers, credit reporting agencies, business management and consulting, information technology services and consulting, and similar business offices.

- (2) Photographic studios.
 - (3) Professional services establishments providing human health care on an outpatient basis.
 - (4) Medical, optical and dental offices and laboratories.
 - (5) Offices for non-profit organizations, professional associations, labor unions, civic-social-fraternal organizations, political organizations, and religious organizations.
 - (6) Music, dance, or performing arts studios.
 - (7) Offices for professional practitioners in the component fields of medicine, dentistry, psychiatry, and psychology including practitioners committed to ministering to individual and community health. These offices can include group or clinical practice and therapeutic paramedical services.
 - (8) Offices for the practice of law, professional services, business services, scientific endeavors, creative activities and similar professions, and the operation of professional associations, societies, and institutes.
 - (9) Retail trade, office and personal service businesses including financial institutions, hardware and appliance stores, barber and beauty shops, clothing, food, restaurants, with or without outdoor food and drink service (refer to section 94-173(j)), drug, variety, furniture, jewelry, self-service and/or drop off laundry including dry cleaning performed off-premise, small job printing provided non-explosive fluids are used and similar uses when conducted within a building and no part of which consists of manufacturing or processing on the premises.
 - (10) Bed and breakfast (refer to section [94-192\(7\)](#)).
 - (11) Residential use located above a business use that meets the minimum floor area standards of the RM multiple-family residential district.
 - (12) Establishments licensed for the sale of alcoholic beverages where consumption is allowed on and/or off the premises.
 - (13) Public assembly buildings, indoor theaters, and auditoriums.
- (c) *Permitted accessory uses.* Accessory uses and structures as defined in this chapter.
- (d) *Uses authorized by special use permit.*
- (1) Public buildings including nonresidential governmental, utility, or public service use excluding storage yards, transformer stations, and substations (refer to section [94-192\(8\)](#)).
 - (2) Public or private educational structures or uses (refer to section [94-192\(8\)](#)).
 - (3) Vehicular drive-in service when associated with a principal use.
 - (4) Off-street public or private parking facilities (refer to section [94-192\(8\)](#)).
 - (5) Boarding and rooming houses.

- (6) Pub, tavern, or restaurant with outdoor entertainment, including music.
- (7) Any use permitted in this district involving one or more structures that occupy, either individually or collectively, more than 15,000 square feet of gross floor area.
- (8) Monopole telecommunication towers and antennae in accordance with the requirements of section [94-173\(d\)\(13\)\(a\)5](#).

(9) Short-term dwelling rental (refer to section 94-192(11)).

- (e) *Development standards.* Any use of land or structures in this district shall comply with the general development standards of section [94-121\(c\)](#) of this chapter.

(Ord. No. 152, 5-1-2006; Ord. No. 156, 9-5-2006; Ord. No. 161, 9-4-2007; Ord. No. 166, 8-4-2008)

Article VI. Sec. 94-192. Listed special uses.

Special land uses listed in this section shall satisfy the supplementary standards found in this section in addition to the general standards found in section [94-191](#). The following are the listed special uses subject to this section:

- (1) *Planned residential developments (PRD).*
 - a. *Intent and purpose.* The intent and purpose of a PRD shall be the same as that described for a PUD under section [94-161\(a\)](#) insofar as subsection [94-161\(a\)](#) is consistent with other requirements of this section.
 - b. *Permitted uses.* Only the following uses may be permitted in a PRD:
 - 1. All uses permitted by right in the district in which the PRD is proposed.
 - 2. Any additional uses which can be shown to be compatible with the general objectives of the Master Plan as well as integral to the specific PRD scheme in which they are contained. For the purpose of this section, an integral use shall be defined as a use which has a specific functional relationship with other uses contained in the development, such as a day care center which serves primarily the needs of residents of the development.
 - c. *Site development standards and deviations.* All proposed individual land uses and facilities in a PRD shall be in conformance with the standards of the district in which the PRD is proposed and any other applicable sections of this code, including such standards pertaining to lot area and dimensions, density, lot coverage, setbacks, building height, parking, loading, landscaping and screening, road widths, and similar requirements, except that the planning commission may permit deviations from such standards where such deviations will result in a higher quality of development than would be possible without the deviations.
 - 1. Any deviation from applicable standards affecting density shall not result in an increase in density in excess of 30% of the density allowed in the district in which the PRD is proposed.
 - 2. Except where a deviation is granted, mixed uses shall comply with the regulations applicable for each individual use, including applicable standards for special uses contained in Article VI of this chapter. If

regulations are inconsistent with each other, the regulations applicable to the most dominant use shall apply.

3. Deviation from development standards may be authorized only upon a finding by the planning commission that said deviation will encourage creative design including the enhancement of open space and the protection of natural features, and that there are adequate features or planning mechanisms designed into the project to achieve the objectives intended to be accomplished with respect to each of the standards from which a deviation is sought.
 - d. *Minimum eligibility criteria.* A PRD shall satisfy the minimum eligibility criteria for a PUD as provided by section [94-161](#)(g) insofar as such criteria are consistent with this section.
 - e. *Phasing.* A PRD may be constructed in phases in the manner described for a PUD as provided by section [94-161](#)(l) insofar as such phasing is consistent with this section.
- (2) *Auto service station.* Location and special needs for auto service stations require careful planning to properly integrate this type of use into the pattern of other commercial and retail activities and special consideration, therefore, must be given to location, site, layout, use and storage facilities, traffic safety and compatibility with surrounding uses. The following are minimum requirements:
- a. Site size of 20,000 square feet with a minimum width of 150 feet of frontage on a major street.
 - b. Buildings shall be set back 50 feet from all street right-of-way lines and shall not be less than 25 feet from a property line of a residentially used lot. Structures, except signs and buildings, shall be no closer than 15 feet to the street right-of-way line.
 - c. All activities connected with auto service, except sale of gasoline and associated products, shall be carried on within the building. Outdoor storage of wrecked or partially dismantled vehicles is prohibited.
 - d. No more than two driveway approaches shall be permitted directly from any major street nor more than one drive approach from any minor street, each of which shall not exceed 30 feet in width at the property line. If the property fronts on two or more streets, the driveway shall be located as far from the street intersection as practicable, but not less than 30 feet measured from the intersecting corner lot lines. All parking areas shall be constructed from hard-surface materials together with curb, gutter, and sidewalks as exist in the area.
 - e. An opaque fence or wall six feet in height shall be erected along all property lines abutting residentially used lots.
 - f. Lighting shall be deflected away from adjacent residential properties.
- (3) *Junk and salvage yards.* Dealers in junk or salvage shall maintain such records of operation as required by the laws of the State of Michigan and satisfy the requirements of this section and any other applicable parts of this chapter.
- a. No junk or salvage operation shall be located on the same lot as a residential use.
 - b. All junk or salvage material shall be stored in a building constructed specifically for that purpose, provided however, that junk automobiles, farm machinery, or recreational vehicles, and parts thereof, stored for the purpose of dismantling may be stored on an outdoor lot. Such a lot shall have an opaque fence or wall eight feet in height which encloses the view of said dismantled automobiles from any public road or street and from adjoining residential and commercial properties. Outdoor storage shall be completely within the enclosed area and shall not exceed the height of the fence.
 - c. Junk and salvage yards adjacent to a residential or agricultural zone shall be set back from the property line 100 feet with an intervening greenbelt. The planning commission may reduce the setback

requirements of this provision where, by reason of natural or artificial barriers, topographic conditions, the use of natural screening, or the nature of operations, a lesser setback would substantially meet the purpose and intent of this chapter.

- d. No open burning shall be permitted and all industrial processes involving the use of cutting, compression, or packaging shall be conducted within a completely enclosed building.
 - e. Signs are permitted only as they apply to the junk or salvage business.
 - f. No materials, trash, or garbage causing offensive odors or unsanitary conditions shall be stored on the premises.
- (4) *Removal and disposal of soil, sand, gravel, and other materials.* To minimize and avoid open and dangerous excavations, accumulations of stagnant water, erosion of land and conditions unfit for growing of turf and other land uses, harmful and dangerous landfills and potential pollution of the city water supply, the removal of soil, sand, stone, gravel or the dumping of such material or other refuse on any lands in the city, except in the excavation for a structure pursuant to a building permit, is prohibited unless by a special use permit issued by the planning commission. In permitting such use, the commission shall condition the permit on the following requirements:
- a. A fence, adequate to protect trespassing children, and at least six feet in height shall be placed around the entire periphery of the property and no closer than 50 feet to the top of any slope.
 - b. No slope shall exceed an angle with the horizontal of 45 degrees.
 - c. The planning commission shall establish truck traffic haul routes where necessary to minimize traffic hazards and road damage to and from the site.
 - d. Depleted or abandoned areas shall be rehabilitated progressively to a condition entirely lacking in hazards, inconspicuous and blended with the surrounding ground topography. A site reclamation plan must be submitted and approved by the planning commission prior to the granting of a special use permit.
 - e. All slopes, banks, pits and denuded areas shall be reasonably graded, filled and treated to prevent erosion.
 - f. All material used for landfill shall be reasonably leveled, covered and graded and no refuse shall be dumped at any location, which might imperil the city water supply or endanger persons or property.
 - g. A performance guarantee in accordance with section 94-100 of this chapter may be required to assure compliance with these requirements.
- (5) *Community commercial center.* The unique and changing characteristics of this type of business activity requires standards and procedures specifically designed to provide for the flexible application of protective regulations to insure that a safe, efficient, attractive and pleasing shopping environment can be created and maintained.
- a. Area, height, bulk and placement requirements. Except as herein specified, the district regulations shall apply to area, height, bulk and placement requirements.
 - 1. Lot size. Not less than five acres.
 - 2. Lot frontage. Not less than 300 feet.
 - 3. Minimum yard setbacks. Where side or rear yard setbacks, or vehicular parking abuts a residential area, a minimum yard setback of 25 feet shall be provided with an intervening fence or wall and greenbelt adjacent to the residential area. No parking shall be permitted within the front yard setback.

4. Minimum floor area. Not less than 800 square feet per business unit.
- b. Parking areas and circulation.
 1. All areas accessible to vehicles or pedestrians shall be clearly illuminated, adequately graded and paved, clearly marked and maintained, and adequately drained.
 2. Automobile circulation design shall provide access to and from the parking areas without backing-up or interfering with traffic onto or from an external street under normal anticipated traffic conditions and, where deemed necessary, the front yard setback requirement may be increased to insure against such congestion and/or to provide for safe ingress and egress. A determination shall be made by the planning commission that the external access street to the shopping center shall be fully capable of absorbing the maximum hourly traffic generated by the center without undue interference to other traffic and pedestrians in the area.
 3. All ingress and egress approaches from the external street shall have adequate acceleration and deceleration lanes.
 4. Design of the site shall consider pedestrian protection by providing site access sidewalks and internal walkways separated from the traffic circulation and parking bays. Such pedestrian walkways shall be a minimum of five-feet wide.
- (6) *Temporary outdoor use.* Temporary and seasonal uses on private property in all districts may be permitted by the planning commission when such uses do not impede pedestrian and vehicular traffic. Such uses may include sale of Christmas trees, shrubbery, flowers, fruits and vegetables in season, sidewalk or garage sales or short term promotional activities. The licensee shall be required to indemnify the city against the cost of removing and cleaning up any waste or debris, or replacing or repairing any damage to public facilities. If approved, a license shall be issued specifying the terms, conditions and time limitations of the activity in accordance with the applicable city ordinance.
- a. Any temporary use of public streets or public property shall be permitted only by the prior approval of the city council, and the council shall, where deemed necessary for the protection of the public interest, require an adequate personal injury and property damage liability policy indemnifying the city against any claim, suit or loss occasioned by the use of city streets or public property.
 - b. Any license issued shall be carried by the owner in charge of the activities or posted on the property by the licensee and shall be available for inspection by a police officer at all times.
- (7) *Bed and breakfast.* It is the intent of this section to provide standards for the utilization of the older large residential structures located in older neighborhoods of the city as bed and breakfast accommodations for tourists while maintaining the character of the surrounding neighborhoods. Bed and breakfast accommodations are subject to the following requirements:
- a. Meals shall only be served to residents, the guests of residents, employees, family members and overnight guests. There shall be no food preparation in any guest sleeping room. Restaurant type operation is prohibited.
 - b. Accessory retail or service uses to a bed and breakfast establishment shall be prohibited including gift shops, antique shops, restaurants, and bakeries.
 - c. Each premises must be occupied and operated by its owner. The dwelling unit in which the bed and breakfast operations take place shall be the principal residence of the operator, who shall live on the premises while the operation is active. The living area for the owner/operator may be separated from the guest rooms. No more than six transient/guest rooms shall be provided.

- d. Only one sign shall be allowed for identification purposes only. Such sign shall be non-illuminated and unanimated, be mounted flat against the wall of the principal building or freestanding, and not exceed four square feet in area. The planning commission, in its sole discretion, shall approve the indirect lighting of any sign on the site.
 - e. Exterior solid waste facilities beyond what might normally be expected for a single-family dwelling shall be prohibited.
 - f. Additions or modifications to a structure for the purpose of accommodating additional guests shall be allowed only if such additions or modifications maintain the character of the buildings on, and within the neighborhood of, the property operating a bed and breakfast. Physical modifications to the structure may be permitted including the provision of barrier free access in order to meet building code requirements.
 - g. Meals for bed and breakfast patrons shall be prepared using the same kitchen facilities as are used for the residents. Kitchen facilities shall comply with all appropriate city, county and state regulations.
 - h. One off-street parking space per room to be rented shall be provided, in addition to the parking required for a single-family dwelling. Parking shall be arranged so as not to pose negative impacts on adjacent properties or necessitate on-street parking.
 - i. All sleeping rooms in the bed and breakfast shall be provided in accordance with the Michigan Residential Code promulgated pursuant to MCL 125.1504 and the additional requirements of MCL 125.1504b.
 - j. Every bed and breakfast bedroom shall contain a functional smoke detector, and an approved fire extinguisher shall be located on each floor on which such sleeping rooms are located.
 - k. Bed and breakfast bedrooms shall be a minimum of 120 square feet for the first two occupants and an additional 30 square feet for each additional occupant in that bedroom.
 - l. One bathroom group for every three sleeping rooms shall be provided, with a minimum of two bathrooms for the exclusive use of bed and breakfast guests.
 - m. The stay of bed and breakfast occupants shall be no more than 14 consecutive days and not more than 30 days in any one calendar year.
 - n. The operator of each facility shall keep a list of the names of all persons staying at the bed and breakfast, which list shall be available for inspection by the zoning official.
 - o. The bed and breakfast use shall not cause a nuisance to adjoining residences due to noise, odor, lighting, or traffic.
 - p. All dimensional requirements and setbacks shall be maintained for the district in which the bed and breakfast is located. No unique or special equipment or mechanical devices shall be permitted that are not common for single-family dwelling use.
- (8) *Institutional structures and uses.* In recognition of the institutional types of nonresidential uses which may be found compatible with and useful in residential areas, and in recognition of the peculiar and unique functional requirements of certain types of institutional uses, the planning commission may authorize such uses by special use permit when in compliance with the general standards and specific requirements of this article.
- a. Institutional uses include the following:

1. Institutions for human care including hospitals, sanitariums, day care, nursing or convalescent homes, homes for the aged, and philanthropic institutions, but not institutions for substance abuse patients or correctional institutions.
 2. Religious uses including churches, or similar places of worship, convents, parsonages, parish houses and other houses for clergy.
 3. Education and social uses including public and private schools, auditoriums and other places of assembly, centers for social activities, lodges, fraternities, and sororities.
 4. Public buildings and public service uses including publicly owned and operated buildings, public utility buildings and structures, transformer stations and substations, gas regulator stations, radio, television, and microwave towers.
 5. Recreation uses including parks, playgrounds, ball fields, public swimming pools, stadiums, community centers, and country clubs.
- b. Site location standards. In addition to any other regulations or requirements of this chapter, the following standards shall be utilized to evaluate any institutional use for approval:
1. An institutional use shall preferably be located at the edge of a residential district, or abutting a business or industrial district or public open space.
 2. All means shall be utilized to face an institutional use on a major street with motor vehicle egress and ingress thereon to avoid the impact of traffic generated by the institutional use in the surrounding area.
 3. An institutional use shall preferably be located on a site that offers natural or manmade barriers that will lessen the effect of the institutional use on the surrounding area.
 4. A proposed institutional use shall not require costly or uneconomical extensions of public services inconsistent with the growth of the district.
- (9) *Racetrack, racing theater, and casino.* To recognize and accommodate the unique and functional requirements of this use, the intensity of the use, the exceptional demands on transportation facilities and public services that may be generated, the potential for excessive light, noise, dust, odors and fumes, all of which require that special consideration be given to siting, location, layout, parking, storage, traffic circulation, hours of operation, and to ensure compatibility with neighboring uses, such uses shall be subject to the following additional requirements:
- a. Minimum site.
 1. Racetrack. Twenty acres with an aggregate minimum frontage of not less than 300 feet on at least two major streets.
 2. Racing theatre. A minimum site of 10 acres with at least 200 feet of frontage on at least one major street.
 3. Casino. A minimum site of 10 acres with at least 200 feet of frontage on at least one major street.
 4. Adequate ingress and egress from major street approaches shall be available through appropriate deceleration and acceleration and turning lanes as determined by the city Traffic Engineer.
 - b. Setbacks. All buildings shall be set back 100 feet from the public street right-of-way and 50 feet from all side and rear lot lines. Parking facilities shall be set back 50 feet from the public street right-of-way and 25 feet from all side and rear lot lines.

- c. Lighting. Lighting shall be contained on site, directed inward and downward and not be deflected onto adjacent properties. Except for entry drives, no lighting fixtures shall be located within the required setbacks.
 - d. Parking requirements. There shall be provided 0.5 paved parking spaces per seat or one space per 6 feet of bench seating in the stadium or grandstand areas of such facilities plus the following additional parking:
 - 1. One paved parking space for each employee on the largest shift of the facility and each owner and trainer.
 - 2. One paved parking space per 50 square feet of usable floor area in any area where food or beverage is sold.
 - 3. One paved parking space per 100 square feet of usable floor area for all betting areas or viewing areas where seats are not provided.
 - 4. One paved parking area suitable to accommodate parking of one truck and horse trailer for each horse entered on the daily racing card.
 - e. Hours of operation. Such facility shall not be opened to the public except between the hours of 8:00 a.m. and 2:00 a.m., Monday through Saturday and 12:00 p.m. and 2:00 a.m. on Sunday.
- (10) *Outdoor retail sales and service.* Location and special needs for outdoor retail sales and service require careful planning to properly integrate this type of use into the pattern of the local commercial activities that is compatible with adjacent populations including size, site layout, screening, duration, hours of operation and compatibility of surrounding areas. The following minimum standards shall apply:
- a. Sales and service shall be limited to 15% of the gross floor area of the individual business unit.
 - b. Outdoor retail sales and service hours shall not exceed 8 a.m. to 8 p.m. Monday through Saturday and 10 a.m. to 4 p.m. Sunday.
 - c. All merchandise shall be removed from the outdoor sales area and placed within a fully enclosed building during non-business hours.
 - d. Permanent outdoor display areas may be allowed provided they are fully screened from view on all sides at all times of year.

(11) Short term rentals for legal dwelling units are permitted in the C1 Central Business District. No more than six adults per bathroom may occupy a unit. No more than two adults per bed. One annual city parking permit per unit is required if no onsite parking is provided.

Sunset Provision. The provisions of this ordinance shall expire 36 months (3 years) from the date the ordinance goes into effect.

Effective Date. This ordinance shall take effect immediately upon publication of the notice of adoption in a newspaper of general circulation within the city.

The foregoing Ordinance was moved for adoption by Council Member _____ and supported by Council Member _____, with a vote thereon being: YES () NO (), at a regular meeting of the City Council held pursuant to public notice in compliance with the Michigan Open Meetings Act, on the _____ day of _____, 2019. Ordinance No. 227 declared adopted this _____ day of _____, 2019.

Russell Whipple, Mayor

Sarah J. Jarvis, City Clerk



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Michigan Government

Short-term rental advocates, foes work toward a deal on laws in Michigan



Lawmakers this spring convened a work group of local government advocates and representatives of the hotel and real estate industries to see if they can find a path toward a compromise on statewide short-term rental regulations. One of the biggest sticking points: whether municipalities should be allowed to use local zoning rules to decide in which neighborhoods short-term rentals are allowed to operate. (Shutterstock image)



August 21, 2019



Lindsay VanHulle



Michigan Government

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Michigan policymakers are again working to regulate short-term rentals such as those on sites like Airbnb, as they try to balance neighborhood concerns with private property rights.

But unlike previous attempts in Lansing, legislators are enlisting the help of groups that have fought on opposite sides of the issue.

Since the spring, a group of local government advocates, hotel representatives and real estate agents -- all with strong, often conflicting stances on how to manage the growing short-term rental industry -- has met to find middle ground.

It's not yet clear if they will be successful, but both sides report progress. How cities and townships use zoning rules to determine where rentals are allowed remains a sticking point. They do, however, seem to have found consensus that local governments should not be allowed to enact outright bans on short-term rentals.

On one side is the real estate industry, which supports giving homeowners expansive leeway to rent out their properties and views local restrictions as potentially dampening sales in Michigan's second home market.

On the other side are municipal government leaders, who want to maintain control over zoning practices and preserve neighborhood stability. Aligning with local governments is the hotel industry, which has its own stake in short-term rental policy. Hotels see Airbnb and sites like it as direct competition for hospitality dollars, and argue that people who routinely rent out their homes are engaged in a commercial enterprise and should have to pay the same industry fees hotels are saddled with.

Despite the potential for conflict, those engaged in negotiations told Bridge Magazine they feel like early talks have unfolded in a spirit of good faith, [perhaps another example](#) of an effort to seek common ground in a new era of divided government in Lansing.

"There's been ideas we're throwing out on the table," said Jennifer Rigterink, a legislative associate for the Michigan Municipal League, which represents the interests of cities. "I think

there's a path, but all the different stakeholders around the table have to be willing to give something up."

Whether they reach an agreement or not, the short-term rental industry isn't going away. More than 7,000 Michigan residents listed their homes on [Airbnb](#) as of August 2018, per the company. Another site, [Vrbo](#), says it has more than 10,000 vacation listings in Michigan in 2019.

In 2018, an estimated 640,000 guests booked stays through Airbnb in Michigan, and homeowners in the state who used the service earned roughly \$78 million from the rentals, Allison Schraub, Airbnb's deputy policy director, said in House committee testimony earlier this year.

Competing laws introduced

The debate over regulating short-term rentals is playing out in two competing sets of legislation in Lansing.

The first, [introduced in January by Rep. Jason Sheppard](#), a commercial real estate agent, would forbid outright zoning bans and is supported by Airbnb. It defines a short-term rental as housing leased for fewer than 28 days at one time and, crucially, classifies it as a residential property use, not a commercial one, and would allow them in all residential zones.

Sheppard's bill would not preclude local governments from enforcing ordinances on noise, traffic or nuisances to deal with nightmare renters, nor would it prevent towns from setting rules about occupancy or allowing local fees, such as for inspections or permits.

Sheppard, R-Temperance, did not respond to messages left with his office seeking comment.

In [testimony on his bill at a House committee hearing in May](#), Sheppard argued that homeowners have rented second vacation homes long before sites like Airbnb were created to offset more expensive non-homestead taxes and costs incurred for a house they don't use the entire year.

People who book short-term homestays contribute to the local economies they visit, notably in resort communities popular with tourists, Sheppard said.

"Many local units of government have shut down this practice by zoning out the use of short-term rentals completely," he testified. "We are looking to reverse those bans today with this bill, because I believe that's a clear violation of a personal property right."

Airbnb declined to comment to Bridge on Sheppard's legislation, citing the ongoing work group discussions, which it said it is not participating in.

The company paid more than \$4.2 million in state use taxes to the Michigan Department of Treasury in the first year of a voluntary agreement it reached with the state, starting in July 2017, according to Airbnb. Treasury does not release information about individual taxpayers, but said in general a 6 percent use tax is applied to each nightly rental.

Sheppard's effort is backed by Michigan Realtors, a trade association representing real estate agents in the state. The group [worked with Sheppard on crafting the bill](#).

Prospective buyers ask real estate agents if they're allowed to rent out the property when they're not using it, Brian Westrin, the association's public policy and legal affairs director, told Bridge. If the home is located in a neighborhood that a municipality has closed off to short-term rentals, he said, it creates uncertainty for potential buyers and may lead them not to buy the home.

"This idea that Realtors would want to support the second-home market, yes, absolutely, that makes good sense because that's good for Michigan," Westrin said. "Also, Realtors want to support people's rights to maximize the value of their property."

Private property rights also get invoked by opponents of Sheppard's bill – namely, the right of exasperated neighbors to be free from loud partying and trash produced by a revolving cast of renters.

Local government leaders say they're concerned about what they view as a proliferation of people buying homes not as a secondary residence, but as an investment for the sole purpose of renting it out. Absentee owners, they argue, are less invested in renting out to responsible guests and less attuned to neighbors' concerns. Evidence of an uptick in investment purchases is mostly anecdotal, but municipal leaders say it already has had the effect of changing the character of primarily owner-occupied neighborhoods.

In Grand Haven, city leaders surveyed property owners and occupants about short-term rentals and found that, in general, residents supported the positive impact they have on the local economy. But they also wanted them thoughtfully placed in neighborhoods, City Manager Pat McGinnis told Bridge.

In late 2016, the city released a report that led to an overhaul of a city ordinance related to short-term rentals. It allowed short-term rentals in some neighborhoods, prohibited them in another and required special use permits in still others, McGinnis said. The changes were

developed with input from property owners based on the share of short-term rentals they believed their neighborhoods could support.

Local leaders like McGinnis say Sheppard's bill is more overreach from Lansing and infringes on the ability of communities to make their own land-use decisions based on what their residents want.

"The proponents of these bills are saying, 'You're trying to tell people what to do with their properties.' Well, that's what zoning is," McGinnis said. "It's what supports and stabilizes property values."

If every individual property was developed however someone wanted, with no guiding principles or rules, "you'd have a real patchwork and hodgepodge of uses in every town," he said.

Legislators seek compromise

A bipartisan group of legislators, led by Rep. Jim Lilly, a Republican from Ottawa County's Park Township, responded to Sheppard's measure by [introducing a separate package of bills](#) that places specific restrictions on such rentals. It would create a statewide short-term rental registry and require operators of short-term rentals to pay the kind of state excise taxes also required of hotels, which support such things as tourism promotion and convention facilities.

The legislation would exempt homes or apartments from the regulations if they're rented for no more than 14 days out of the year. This is intended to exclude homeowners who only sporadically rent out their homes from having to comply with the proposed rules.

Like the Sheppard package, these bills would also prevent local governments from completely banning short-term rentals from their communities.

Lilly did not respond to messages seeking comment about the bill. But Rep. Julie Brixie, a Democrat from Ingham County's Meridian Township who cosponsored the legislation, told Bridge that short-term rentals are essentially commercial properties and should be treated as such.

"I am a big fan of local control," said Brixie, a former township elected official, "and every community is different."

The lobbying arm for Michigan's hotel industry, the Michigan Restaurant and Lodging Association, said it was involved in crafting the bills Lilly and Brixie sponsored.

Homeowners who open their homes to vacationers have [disrupted the traditional hotel industry](#), offering travelers vacation experiences without charging the same fees hotels are legally required to pass on to guests. That's a sore point for the lodging industry, which argues short-term rentals are essentially hotels, and so their operators should have to play by similar rules.

Last term, when Sheppard introduced a similar bill to the one this year that challenges local zoning rules, the hotel industry "was only on defense," said Justin Winslow, the association's president and CEO. "We got a lot more aggressive this year."

Why? Because, Winslow said, short-term rental operators and hosts like Airbnb benefit from regional tourism marketing efforts, but don't pay the taxes hotels do to support the larger system, Winslow said.

"I think the Airbnbs or any of these short-term rentals would benefit just as much as the hotels would on that return on investment," he said, since the purpose of the fees is to help drive tourism and visitors to a region.

Lilly's legislation has not been debated in a House committee hearing; Sheppard and Lilly convened the work group to find a compromise, several participants told Bridge.

Representatives of the three industries involved in the discussions say the groups remain far apart on local zoning rules.

But they are finding other areas of compromise. Westrin, of Michigan Realtors, said his association hasn't necessarily opposed the idea of a statewide registry of short-term rentals. Rigterink, of the Michigan Municipal League, said it has compromised on language that exempts rentals of 14 days or less from regulation, even though some city leaders aren't happy about that.

While differences remain, "we're not going to leave the conversation," Westrin said. "We still think it's an important discussion to have."

Related Articles:



City of Mason Planning Commission

Staff Report

TO: Planning Commission
 FROM: Elizabeth A. Hude, AICP, Community Development Director
 SUBJECT: Special Use Permit and Preliminary Site Plan Review – Paul Davis Corporation
 DATE: September 6, 2018

Matt Haenlien, FED Corporation, on behalf of Paul Davis Corporation, has submitted a request for a Special Use Permit and approval of a Preliminary Site Plan for new construction of a 27,000 sq. ft., building to include offices and storage related to their business of home damage restoration services, on five acres of property located at the northeast corner of Temple Street and Kipp Road, parcel 33-19-10-09-400-009, City of Mason, Ingham Co. This is shown on plans as follows:

- Sheets C-1-13, prepared by Paul Davis Corporation, dated August 9, 2019, revised August 15, 2019, and
- Sheets A-1-2, prepared by Seidell Architects, LLC, dated August 9, 2019, revised August 16, 2019.

LAND USE AND ZONING

The development is proposed on a parcel currently owned by the City of Mason and zoned AG. The property was previously leased for farming. If the proposal is approved, the City will initiate the necessary steps to have the property re-zoned to M-1: Light Manufacturing District and complete the sale of the property to Paul Davis. Section 94-222 states that any use permitted in this district requires site plan review and Section 94-141(7) states that any use permitted in the district involving one or more structures that occupy, either individually or collectively, more than 15,000 square feet of gross floor area requires a Special Use Permit. Section 94-191(e) states that a preliminary site plan must be submitted with the application for a Special Use Permit.

The surrounding land uses and zoning are as follows:

	Current Land Use	Zoning	Future Land Use
North	Agriculture	AG (Single-Family Agriculture District)	Mixed Use
East	Agriculture	AG (Single-Family Agriculture District)	Mixed Use
South	Commercial	B-2 (Highway Service District)	Mixed Use
West	Agriculture	AG (Single-Family Agriculture District)	Mixed Use

REVIEW OF SUBMITTAL

All applications for preliminary site plan review and approval shall comply with the basic required submittal standards of subsection 94-225(d)(1). The additional required submittal standards of subsection 94-225(d)(2) shall be satisfied by any application for site plan review and approval. The planning commission may require

that supplemental information and analysis be submitted as part of any application for preliminary site plan review and approval if such information is deemed necessary to demonstrate compliance with the requirements of Chapter 94 Zoning. The costs for such supplemental analysis and information shall be incurred by the applicant. Supplemental information may include the items listed in section 94-225(d)(2).

The proposed preliminary site plan offers detailed information to help staff determine if the city’s ordinances have been met. The vision for future development in this area is discussed in several sections of the City’s Master Plan, including but not limited to, page 2-6 Industrial Development, and page 3-7 item 3-Airport. While the general concept appears to be consistent with the vision for this area, there are several concerns stated in the comments below that will need to be addressed to support development of the site to be complementary to the City and meet requirements for health and safety.

COMMENTS

Police	Include lighting on the building near doors
Fire	No concerns
Building	Building permit required. Per the Michigan Building Code, the Architect is responsible for identifying all required Special Inspections from Chapter 17 and submitting them along with the credentials of the testing agency for the Building Official to approve.
City Engineer	<ol style="list-style-type: none"> 1. It appears the storm water outlet pipe coming from the proposed stormwater detention basin is crossing into the adjacent private parcel. 2. Because this site is within the recharge area for Well No. 8, all storm sewer should be piped to the detention basin. Overland flow is not preferred. 3. When the building is relocated to eliminate front yard parking along Temple Street and Kipp Road, it may be necessary for a fire hydrant to be installed on the easterly side of the building to meet Fire Code requirements.
Water	<ul style="list-style-type: none"> • On page #8 require curb and gutter surrounding all parking. (also required as part of buffer/landscaping) • Provide hard surface pavement on all parking. • Drainage from all parking by configuration of catch basin with grease / oil trap and pipe to retention pond instead of ditching runoff to pond. • These conditions for Parking area added because of Drinking water wellhead protection from runoff and percolation in to the soil of contamination from parking area. • The USGS delineations of 10-year water movement in the recharge of the area aquifer indicate water movement in this area. • To reduce risk to this aquifer requires attention to detail because four of the seven water producing wells for the city of Mason are in an 1800 ft triangle that this parcel of land is located within said triangle.
Ingham County Drain Commissioner	Pending
Ingham County	The applicant will need to apply for a permit from the Ingham County Road

Road Commission	Department for any work occurring within the Kipp Road right of way, such as the sidewalk construction and any associated grading/restoration.
Zoning	•

Table 1: Submittal Standards

Ordinance	Status	Note
§94-225(d)(1) Basic required submittal standards	D	Sheet C-2 and throughout: Change jurisdictional references to City of Mason, Ingham County, etc. 94-225 (d)(1)h9: Will there be additional signage on site – monument/pole? See Ch 58 for requirements, separate sign permits will be required. §94-225(d)(1)f and g: Please provide a narrative that includes a description of intent for all uses on site; a Statement of facts is required.
§94-225(d)(2) Additional required submittal standards	D	§94-225(d)(2)g – A detailed cost estimate has not been provided.
§94-225(d)(3) Supplemental analysis and information.	TBD	
M = Meets requirements; I = Information Needed; R = Recommendation		

§94-227. Standards for site plan review and approval. In reviewing an application for site plan review and approval the following standards shall apply:

STATUS/NOTE	REQUIREMENT
*M = Meets requirements; I = Information Needed; R = Recommendation	
D	(1) The site shall be developed so that all elements shall be harmoniously and efficiently organized in relation to the size, shape, type and topography of the site and surrounding property.
M – The site will be served by adequate access points and parking/loading areas.	(2) The site shall be developed so as not to impede the normal and orderly development, improvement, and use of surrounding property for uses permitted in this chapter.
M	(3) All buildings or groups of buildings shall be arranged to permit emergency vehicle access by some practical means to all sites.
M – Access on Temple St., a public street.	(4) Every structure or dwelling unit shall have direct access to a public street or indirect access to a public street via an approved dedicated private street.
D – See City Engineer, Water comments	(5) Appropriate measures shall be taken to ensure that the addition or removal of surface waters will not adversely affect neighboring properties, that controls are in place to minimize sedimentation and erosion, and that

	topographic alterations are minimized to accommodate storm water management.
D – See City Engineer, Water comments	(6) Provisions shall be made for the construction of storm sewer facilities including grading, gutters, piping, on-site storage, and treatment of turf as required to handle stormwater and prevent erosion.
I - Unknown	(7) Secondary containment for above ground areas where hazardous substances are stored or used shall be provided as required by the city fire chief.
M – See comments	(8) Exterior lighting shall be designed and located so that the source of illumination is directed away from adjacent properties, the intensity of lighting is the minimum necessary, and the direction of lighting is downward as much as is possible and appropriate for the project.
D – See comments	(9) All loading and unloading areas, outside storage areas, and refuse receptacles shall be screened from casual view from the public rights-of-way and adjoining land uses.
R – Generally meets requirements provided conditions are met to address comments	(10) Site plans shall meet the driveway, traffic safety, and parking standards of the city in such manner as necessary to address the following:
	a. Safe and efficient vehicular and non-vehicular circulation, including parking areas, non-motorized linkages to abutting parcels, uses, sidewalks, and trails.
	b. Shared driveways and service drives.
	c. Adequate and properly located utilities.
M – None proposed	(11) Provisions shall be made for proposed common areas and public features to be reasonably maintained.
D – See staff comments above and below	(12) The site plan submittal shall demonstrate compliance with all applicable requirements of this chapter, chapters 58 and 74, the building code, and county, state, and federal law.
<p>Sec. 94-172 d-3-a: Add vision clearance triangles at drive and corner to ensure landscaping/signs do not encroach</p> <p>94-173 b: See also discussion on parking. The goal is to keep dumpsters out of the view of the general public. Dumpsters should be located behind the building, out of sight and enclosed.</p> <p>94-176 d: Note – Right of way permits required – City for Temple, County for Kipp</p> <p>94-173 f: Access – please add measurements/reference</p> <p>94-177 c: Discharges and flammable/hazardous materials. Please provide information</p> <p>94-177 e: Lighting – include height of poles as ‘accessory structure’ in zoning table; add lighting above doors on building; update the photometric plan to include all light sources, some appear to be missing where numbers are high</p> <p>94-177 q: This site is near city wells. Stricter measures for water management will be requested per City Engineer and Water Dept.</p> <p>94-241: Landscaping Standards Please review the requirements carefully and provide a summary table on the sheet to indicate you have met all requirements:</p> <ul style="list-style-type: none"> • 94-241(c)8: Buffer area + parking lot + 10% of site area + 1 tree per 10k if disturbed land. (M-1 to AG = Buffer D) 	

- 94-241(h): Standards for screen walls/fences (detention pond, option for dumpsters)
- 94-241(i): parking area landscape standards

94-292: Off-Street Parking - Please review this section carefully:

- Parking is not allowed in a front yard unless proven to be critical to the operation. You have 2 front yards. Staff recommends the building and parking flip – mirror image. This is important for meeting the objectives stated for zoning/special use and community master plan vision – social/economic welfare, character, and walkability.
- Provide a detailed breakdown of calculations, # of ADA spaces/measurements required/provided.
- Note option to reduce parking space size – where more than 40 spaces required, 20% can be 180 sq. ft.; and to defer parking for future.

In addition to these standards, Section 94-191(f) of the Mason Code provides the Basis of Determination for Special Use Permits. These standards must be met before a Special Use Permit can be approved. The standards and staff commentary regarding compliance follow:

- (1) *Be 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 adjacent property or the zoning district in which it is proposed.*
The location is currently zoned agricultural. The surrounding area on the north side of Kipp Rd is mostly natural and undeveloped or used for agricultural purposes. This property is owned by the city and the outcome of the proposed project will be an important influence for leading future development this area. Provided the conditions listed in the resolution are met, the proposed development will meet this requirement.
- (2) *Not be hazardous or disturbing to uses in the same general vicinity and will be a substantial improvement to property in the immediate vicinity and to the community as a whole.*
Provided the conditions listed in the resolution are met, the development appears to have the potential to be a substantial improvement to the area. The western elevation should consider aesthetics to break up the façade along Temple such as architectural lighting, additional landscaping or sculpture art. Staff is not aware of any additional conflicts of a hazardous or disturbing nature associated with the proposed use.
- (3) *Be served adequately by essential facilities and services, such as highways, streets, police and fire protection, drainage structures, refuse disposal, water and sewage facilities, and schools.*
Provided the conditions listed in the resolution are met, the site will be adequately served by essential facilities and services.
- (4) *Not create additional requirements at public cost for public facilities and services.*
It does not appear that the proposed use will create additional public costs.
- (5) *Not involve uses, activities, processes, materials, and equipment or conditions of operation that will be detrimental to any person, property, or the general welfare by noise, fumes, glare, or odors.*
Staff is not aware of any conflicts of this nature. A full description of the uses as requested should disclose information to support a determination.

(6) *Not be located such that it will directly or indirectly have a substantial adverse impact on the natural resources of this city.*

Provided the conditions listed in the resolution are met, there will not be any substantial adverse impact.

(7) *Be in compliance with other applicable local, county, state, or federal rules and regulations.*

It appears that the proposed use will be in compliance, provided the specified conditions of approval are met. Additional permits through the county will be required for soil erosion.

STAFF RECOMMENDATION:

The concurring vote of a majority of the members appointed to and serving on the planning commission shall be necessary to approve a special use permit.

Because of the nature of the conditions requested during the preliminary site plan review, staff recommends that the Planning Commission approve the Preliminary Site Plan with conditions that address comments in the staff report, and continue the Public Hearing to allow the applicant to submit the Final Site Plan as evidence of fact that the proposal will meet the criteria for issuance of a Special Use Permit have been met.

Staff offers the following motions:

MOTIONS

1 – Motion to continue the Public Hearing for the Special Use Permit to the next regular meeting on October 15, 2019 at 6:30 p.m. or shortly thereafter to allow the applicant to submit a revised plan in the form of a Final Site Plan with the requested conditions addressed.

2 - Motion to approve Resolution 2019-10.

Attachments:

1. Resolution 2019-10
2. Application
3. Site Plan

**CITY OF MASON
PLANNING COMMISSION
RESOLUTION No. 2019-10**

A RESOLUTION GRANTING PRELIMINARY SITE PLAN APPROVAL FOR NEW CONSTRUCTION OF A 27,000 SQ. FT. BUILDING TO INCLUDE OFFICES AND STORAGE RELATED TO THE BUSINESS OF HOME DAMAGE RESTORATION SERVICES, ON FIVE ACRES OF PROPERTY LOCATED AT THE NORTHEAST CORNER OF TEMPLE STREET AND KIPP ROAD, PARCEL 33-19-10-09-400-009.

SEPTEMBER 10, 2019

WHEREAS, a request has been received from Matt Haenlien, FED Corporation, on behalf of Paul Davis Corporation, for Preliminary Site Plan Approval to construct a new 27,000 sq. ft., building to include offices and storage related to their business of home damage restoration services; and,

WHEREAS, the subject property contains five acres of land located at the northeast corner of Temple Street and Kipp Road, parcel 33-19-10-09-400-009; and,

WHEREAS, the proposal was shown on plans dated August 9, 2019 and revised August 15, 2019; and

WHEREAS, the parcel is zoned AG Agricultural; and

WHEREAS, Section 94-222 states that proposal requires site plan review; and

WHEREAS, the Planning Commission finds that the proposal exhibits sufficient deficiencies and lack of clarity in instances that the granting of a Special Use Permit is improper at this time, according to the finding of facts and overall comments in the Staff Report, but that the Planning Commission generally supports the overall concept for the redevelopment of the subject property;

WHEREAS, the Planning Commission accepts the staff report dated September 6, 2019 as findings of fact that, with the conditions listed herein, the plans will comply with the Preliminary Site Plan Review Standards listed in Section 94-227 of the Mason Code:

NOW THEREFORE BE IT RESOLVED, that the City of Mason Planning Commission does hereby grant preliminary site plan approval for the construction of a new 27,000 sq. ft., building to include offices and storage related to their business of home damage restoration services on five acres of land located at the northeast corner of Temple Street and Kipp Road, parcel 33-19-10-09-400-009 with the following conditions:

1. A revised Final Site Plan will be submitted addressing the concerns presented in the comments by staff and agencies stated in the Staff Report dated September 6, 20219; and
2. Approval of a Special Use Permit is required consistent with Section 94-141(7) of the Mason Code; and
3. The property will be re-zoned to M-1 Light Manufacturing prior to submittal of a Building Permit.

Yes ()

No ()

Absent ()

Vacant ()



PERMIT APPLICATION

ZONING

Applicant- Please check one of the following:

- | | |
|-------------------------------------|------------------------------|
| <input checked="" type="checkbox"/> | Preliminary Site Plan Review |
| <input type="checkbox"/> | Final Site Plan Review |
| <input type="checkbox"/> | Special Use Permit* |
| <input type="checkbox"/> | Administrative Review |

* includes Preliminary Site Plan Review

DEPARTMENT USE ONLY

Application Received: _____

Tax ID: _____

Fee: _____

Receipt #: _____

Applicant Information:

Name: Mat Haenlien

Organization: FED Corporation

Address: 777 W. Cedar Ave Gladwin MI 48624

Telephone Number: (989) 709-0891 Facsimile Number: (989) 243-9122

Interest in Property (owner, tenant, option, etc.): General Contractor

Note: If applicant is anyone other than owner, request must be accompanied by a signed letter of authorization from the owner.

Property Information:

Owner: Paul Davis Corp. Telephone Number: (517) 719-5052

Property Address: TBD Temple St. Mason, MI 48854

Legal Description: If in a subdivision: Subdivision Name: Attached w/ packet Lot Number: _____

If Metes and Bounds (can be provided on separate sheet): _____

APPLICANT CERTIFICATION

By execution of this application, the person signing represents that the information provided and the accompanying documentation is, to the best of his/her knowledge, true and accurate. In addition, the person signing represents that he or she is authorized and does hereby grant a right of entry to City officials for the purpose of inspecting the premises and uses thereon to verify compliance with the terms and conditions of any Special Use Permit and/or Site Plan approval issued as a result of this application.

Signature: Mat Haenlien Date: 8-9-19

Requested Description:

Written Description: Please use this section to describe the use or uses proposed. Attach additional pages, if necessary.

OFFICE Building (New Construction)

Available Services

Public Water Yes No

Paved Road (Asphalt or Concrete) Yes No

Public Sanitary Sewer Yes No

Public Storm Sewer Yes No

Estimate the Following

Traffic Generated _____

Total Employees _____

Population Increase _____

Employees in Peak Shift _____

House of Operation 8 AM AM to 9 PM
Mon day through Sat day

Total Bldg. Area Proposed 27,000

Parking Spaces Provided 90

Project Phasing

This project will be completed in: One Phase Multiple Phases – Total No. of Phases: _____

Note: The phases of construction for multi-phase projects must be shown on the site plan

Application Materials

The following are checklists of items that generally must be submitted with applications for Preliminary Site Plan Review, Final Site Plan Review, and Special Use Permits. Applicants should review Articles VI and VII of Chapter 94 of the Mason Code for a complete listing of application requirements. All site plan drawings must comply with the requirements of Section 94-226(d) of the Zoning Ordinance. Incomplete applications will not be processed.

- Completed application form
- 2 copies of full scale site plan drawings
- Plans submitted on CD or PDF (email is acceptable)
- Legal description
- Proof of ownership/owner authorization
- Construction schedule for proposed project
- Construction calculations for utilities
- Fee (see below)
- Any other information deemed necessary

Application Fee

All requests must be accompanied by a fee, as established by the City Council. The fee schedule for Preliminary Site Plan Reviews, Final Site Plan Reviews, and Special Use Permits is as follows (As of October 16, 2006):

Administrative Reviews	\$70.00
Preliminary Site Plan Reviews	\$200.00
Final Site Plan Review	\$100.00
Special Use Permits (includes preliminary site plan review)	\$275.00

201 West Ash Street; Mason, MI 48854-0370

Office: 517.676.9155; Website: www.mason.mi.us

Engineering Review

\$220.00*

*Two—hour minimum fee for projects increasing demand on public utilities. Actual fees incurred are billed to applicant upon completion of review.

Application Deadlines

Preliminary Site Plan/Special Use Permit Review

Applications for Preliminary Site Plan Review may be submitted at any time. Complete applications must be received a minimum four (4) weeks prior to a Planning Commission meeting to be placed on the agenda. Upon receipt of a complete application, a public hearing will be scheduled for the next regularly scheduled meeting (for Special Use Permits only). The Planning Commission has the final authority to approve, approve with conditions or deny an application for Preliminary Site Plan/Special Use Permit Review. The Planning Department staff will issue a letter to the applicant advising of any changes or revisions that may be necessary prior to making application for Final Site Plan Review.

Final Site Plan Review

Complete applications must be received a minimum of four (4) weeks prior to a Planning Commission meeting to be placed on an agenda. The Planning Commission has the final authority to approve, approve with conditions or deny an application for Final Site Plan Review. Planning Commission meetings are held on the second Tuesday after the first Monday of every month, unless the Tuesday is a Township recognized holiday, in which case the meeting is held on the following day (Wednesday).

Staff Report

The Planning Department Staff will prepare a report to the Planning Commission regarding an application for Preliminary Site Plan Review, Final Site Plan Review or Special Use Permit. The report will explain the request and review whether it complies with the zoning standards of the Mason Code. Staff will present the findings of that report during the Planning Commission meeting. An applicant who wishes to obtain one (1) copy of that report, at no cost, prior to the meeting must provide a written request to the Planning Department. The report is generally complete on the Friday before the meeting and can be mailed to the applicant or picked up by the applicant in the Planning Department.

Resources: More questions? Please contact our Customer Service Desk at 517.676.9155.

Revised 7.2.2018 (Community Development)

Legal Description

Part of the Southeast $\frac{1}{4}$ of Section 9, T@N, R1W, City of Mason, Ingham County, Michigan, described as: Beginning at the Southeast Corner of said Section 9; thence N89°58'20"W, along the South Section line, 425.00 feet; thence N00°01'45"W, parallel with the East Section line, 512.47 feet; thence S89°58'20"E, parallel with the South section line, 425.00 feet; thence S00°01'45"E, along the East Section Line 512.47 feet to the Point of Beginning. Containing 5.0 acres, and being subject to restrictions, reservations, easements, right-of-way, zoning, governmental regulations and matters visible, if any, upon or affecting said lands.



CITY OF MASON

LAND DIVISION/COMBINATION, CONVEYANCE APPLICATION

Approval of a division of land is required **before it is sold**. This form is designed to comply with the Michigan Land Division Act (formerly the Subdivision Control Act, P.A. 288 of 1967, as amended (particularly by P.A. 591 of 1996). MCL 560.101 ct.seq.), City of Mason's Land Division Ordinance No. 131, and applicable local zoning ordinances.

You **MUST** answer all questions and include all attachments, or this application will be returned to you.

Type of Request (Please Check one)

Land Division Lot/Parcel Combination Conveyance

Applicant Information (If not the property owner):

Business Name: FED Corporation

Contact Name: Matt Haenlein

Address: 777 W. Cedar Ave., Ste. 203 Gladwin, MI 48624

Telephone Number: (989) 709-0891 Facsimile Number: _____

Location of Parent Parcel

Parent parcel number: 33-19- 10 - 09 - 400 - 009

Property Address: Temple Street

Legal description of Parent Parcel (attach extra sheets if needed):

See Attached

Property Owner Information:

Name: City of MASON Telephone Number: (517) 676-9155

Property Address: 201 W. Ash

Proposal:

Describe the division/combination/conveyance(s) being proposed:

Number of new Parcels: 1

Intended use (residential, commercial, etc.) Industrial

The new description(s) provide(s) access to an existing public road by: (check one)

Each new division has frontage on an existing public road.

A new public road, proposed road name: _____

(Road name cannot duplicate an existing road name)

_____ A new private road or easement, proposed road name: _____

(Road name cannot duplicate an existing road name)

_____ A recorded easement (driveway). (Cannot service more than one potential site.)

Write here, or attach, a legal description of the proposed new road, easement or shared driveway (attach extra sheets if needed): _____
N/A

Write here, or attach, a legal description for each proposed new parcel (attach extra sheets if needed):

See Attached

Development Site Limits:

Check each that represents a condition which exists on the parent parcel. Any part of the parcel:

_____ is riparian or littoral (it is a river or lake front parcel)

x includes a wetland.

_____ includes a beach.

_____ is within a flood plain.

_____ includes slopes more than twenty five percent (a 1:4 pitch or 14 degree angle) or steeper

_____ is on muck soils or soils known to have severe limitations for on site sewage system.

_____ is known or suspected to have an abandoned well, underground storage tank or contaminated soils.

Improvements:

Describe any existing improvements (buildings, well, septic, etc.) which are on the parent parcel, or indicate none (attach extra sheets if needed): _____
None - Vacant

Future Divisions:

Will there be any future divisions that might be allowed, but not included in this application? _____

The number of future divisions being transferred from the parent parcel to another parcel? _____

Identify the other parcel: _____

(See section 109(2) of the Statute: Make sure your deed includes both statements as required in section 109(3) and 109(4) of the Statute.)

Attachments (all attachments must be included):

Letter each attachment as shown here.

- X A. 1. A survey, sealed by a professional surveyor at a readable scale, of proposed division(s)/combination(s)/conveyance(s)

OR

2. A map/drawing drawn to a readable scale, of proposed changes to the parent parcel and the 45 day time limit is waived until a professional survey can be submitted:

Signature: _____ Date: _____

The survey or map must show:

- 1) Current boundaries (as of March 31, 1997), and
- 2) All previous divisions made after March 31, 1997 (indicate when made or none),
and
- 3) The proposed division/combination/conveyance, and
- 4) Dimensions of the proposed division/combination/conveyance, and
- 5) Existing and proposed road/easement rights-of-way, and
- 6) Easements for public utilities from each parcel to existing public utility facilities, and
- 7) Any existing improvements (buildings, wells, septic system, driveways, etc.)
- 8) Any of the features checked in question number 6.

- N/A B. A soil evaluation or septic system permit for each proposed parcel prepared by the Health Department, or each proposed parcel is serviced by a public sewer system.

- N/A C. An evaluation/indication of approval will occur, or a well permit for potable water for each proposed parcel prepared by the Health Department, or each proposed parcel is serviced by a public water system.

- N/A D. Indication of approval, or permit from County Road Commission, MDOT, or respective city/village street administrator, for each proposed new road, easement or shared driveway.

- _____ E. A copy of any transferred division rights (S109(4) of the Act) in the parent parcel.

- _____ F. A fee of \$ _____.

- _____ G. Proof of all taxes paid.

- _____ H. Other

Affidavit:

I agree the statements made above are true, and if found not to be true this application and any approval will be void. Further, I agree to comply with the conditions and regulations provided with this parent parcel division/combination. Further, I agree to give permission for officials of the municipality, county and the State of Michigan to enter the property where this parcel division/combination is proposed for purposes of inspection to verify that the information on the application is correct at a time mutually agreed with the applicant. Finally, I understand this is only a parcel division/combination which conveys only certain rights under the applicable local

land division ordinance, the local zoning ordinance, and the State Land Division Act (formerly representation or conveyance of rights in any other statute, building code, zoning ordinance, deed restriction or other property rights.

Finally, even if this division/combination is approved, I understand zoning, local ordinances and State Acts change from time to time, and if changed the divisions/combination made here must comply with the new requirements (apply for division/combination approval again) unless deeds, land contract, leases or surveys representing the approved divisions/combination are recorded with the Register of Deeds or the division/combination is built upon before the changes to laws are made.

Property Owner's Signature _____ Date: _____

ASSESSOR'S ACTION

_____ Approved
List any conditions: _____

_____ Denied
State reasons for denial: _____

_____ Special Assessment – Temple Street: Amount Due _____

_____ Special Assessment – Riverwalk Meadows Sewer Suspension: Amount Due _____

_____ Special Assessment – South Cedar Street Sewer Suspension: Amount Due _____

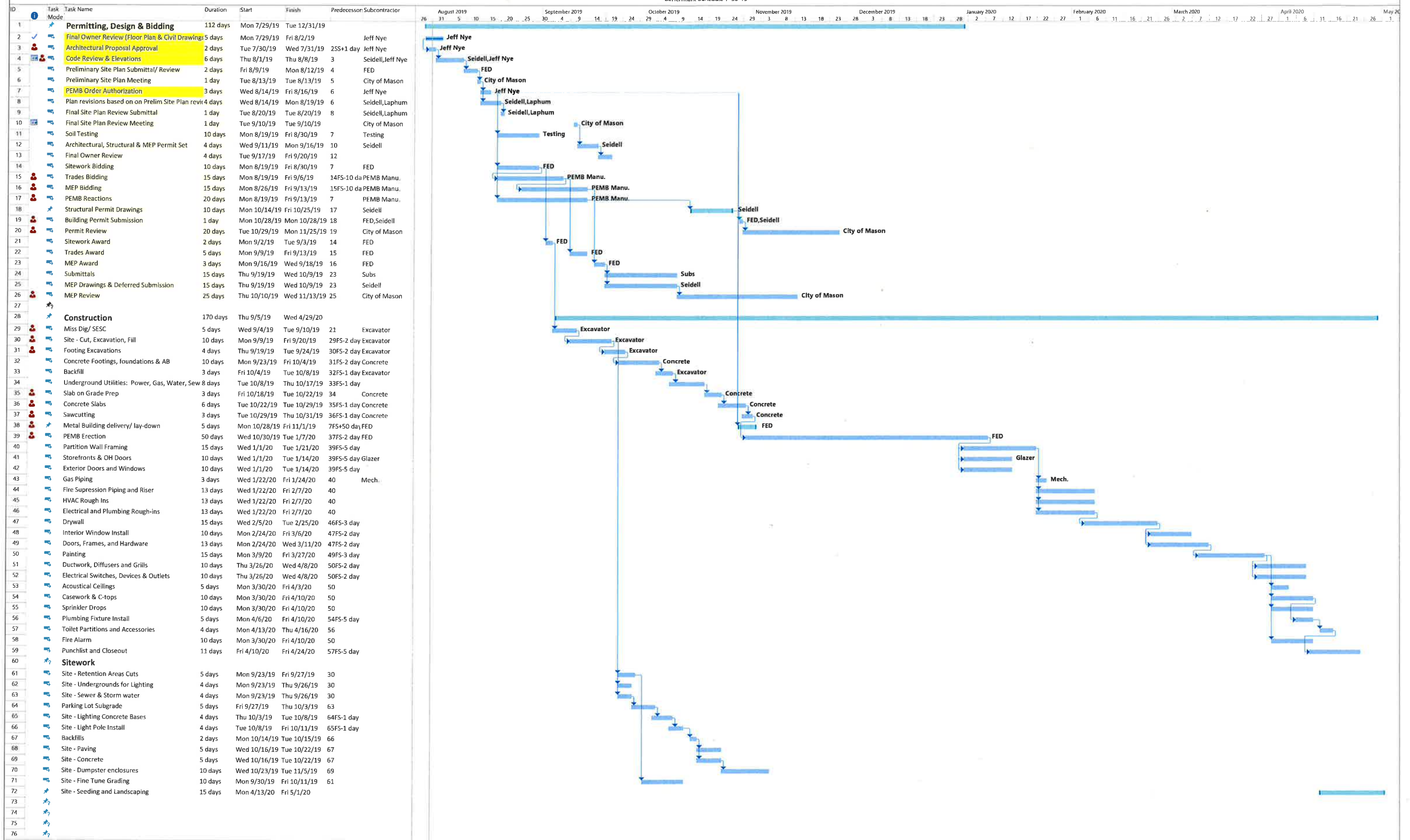
Signature: _____ Date: _____

ZONING ADMINISTRATOR'S ACTION

_____ Approved
List any conditions: _____

_____ Denied
State reasons for denial: _____

Signature: _____ Date: _____



SEIDELL ARCHITECTS

www.seidellarchitect.com

114 North Court Avenue, Suite 201
Post Office Box 2189
Gaylord, Michigan 49734

Office (989) 731-0372
Fax (989) 731-6932

Drawing Sheet Index

Sheet Number	Sheet Content
TS	Title Sheet and Code Review
C-1	Cover Sheet
C-2	General Notes
C-3	Existing Topographic Survey
C-4	Demolition Plan
C-5	Site Plan
C-6	Site Details
C-7	Utility Plan
C-8	Site Lighting / Photometric Plan
C-9	Grading Plan
C-10	Landscaping Plans & Details
C-11	Stormwater Management
C-12	Specifications
C-13	Specifications
A1	Floor Plan
A2	Exterior Elevations

Sealed by others

Building Code Review

PROJECT: PAUL DAVIS
LOCATION: LOT #2 - TEMPLE STREET, MASON, MICHIGAN 48854
SCOPE OF PROJECT: NEW OFFICE/WAREHOUSE BUILDING
BUILDING USE GROUP: S1 - MODERATE STORAGE
B - BUSINESS

BUILDING CODE EVALUATION UTILIZED:
2015 MICHIGAN BUILDING CODE
2015 MICHIGAN MECHANICAL CODE
2015 MICHIGAN PLUMBING CODE
2017 NATIONAL ELECTRIC CODE
W / 2017 MICHIGAN PART 8
2015 MICHIGAN ENERGY CODE
ASHRAE 90.1-2013
NFPA 101 LIFE SAFETY CODE 2012

USE GROUP SEPARATION PROVIDED: NONE REQUIRED
TYPE OF CONSTRUCTION: 2B
FIRE RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS MBC TABLE 601
STRUCTURAL FRAME: 0-HOUR
EXTERIOR BEARING WALLS: 0-HOUR
INTERIOR BEARING WALLS: 0-HOUR
NON-BEARING WALLS AND PARTITIONS: 0-HOUR
FLOOR CONSTRUCTION: 0-HOUR
ROOF CONSTRUCTION: 0-HOUR

ACTUAL BUILDING AREA: 27,500 SQ. FT.
ALLOWABLE AREA: MOST RESTRICTIVE: S1 USE GROUP
S1 - MODERATE STORAGE: 17,500 sq. ft.
B - BUSINESS: 23,000

AREA INCREASE: UNLIMITED WITH FIRE SUPPRESSION AND 60 FT. PUBLIC WAYS AND YARDS PER SECTION 507.4
ALLOWABLE BUILDING HEIGHT: 75 FT WITH FIRE SUPPRESSION
ALLOWABLE BUILDING STORIES: 3 STORIES WITH FIRE SUPPRESSION
ACTUAL BUILDING HEIGHT: 32 FT TO HIGHEST POINT AND 1-STORY

FIRE SPRINKLER SYSTEM: YES PER NFPA 13 (SHOP DRAWING TO BE SUBMITTED BY SUBCONTRACTOR FOR APPROVAL)
FIRE ALARM AND SMOKE DETECTION SYSTEM: YES (SHOP DRAWING TO BE SUBMITTED BY SUBCONTRACTOR FOR APPROVAL)

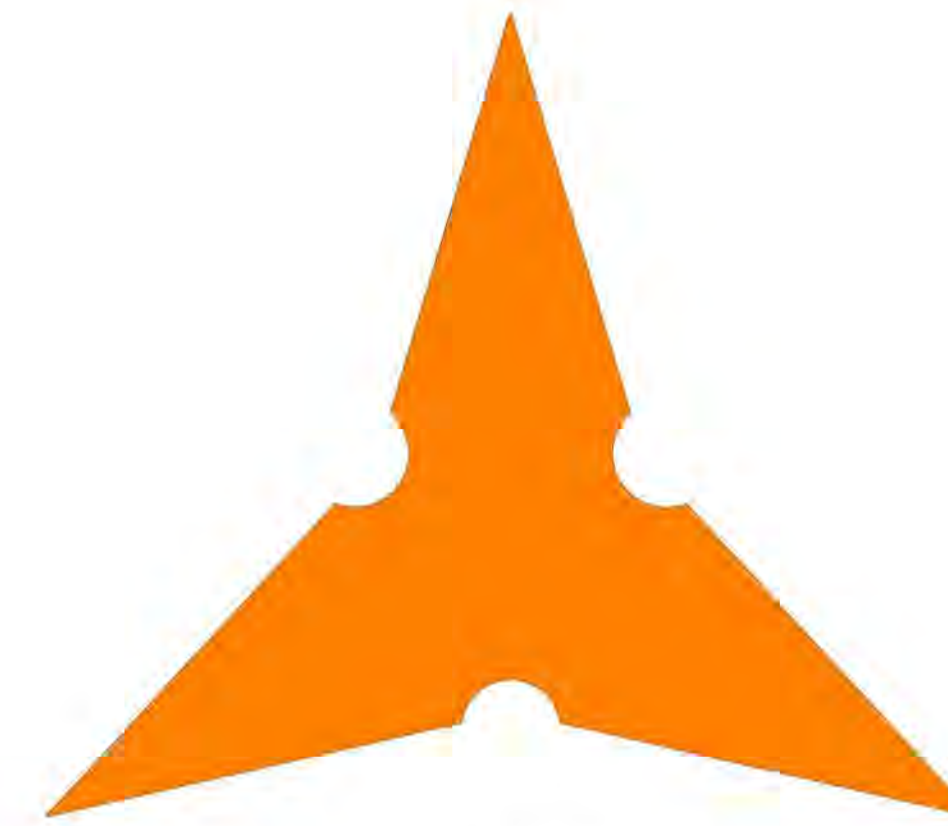
DESIGN LOADS:
ROOF SNOW LOAD
GROUND SNOW LOAD PG = 60.0 PSF
FLOOR LOAD
100 PSF (SLAB ON GRADE)
WIND LOAD
BASIC WIND SPEED = 115 MPH
MEZZANINE LOAD
100 PSF

MAXIMUM TRAVEL DISTANCE: 250'-0"
NUMBER OF EGRESS EXITS PROVIDED: 7 EXITS
OCCUPANT LOAD: PER TABLE 104.1.2
OFFICE: 7,000 / 100 = 75
CONFERENCE / TRAINING: 1,788 / 15 = 119.2
WAREHOUSE: 11,390 / 500 = 22.78
TOTAL OCCUPANT LOAD = 217 OCCUPANTS

INTERIOR FINISHES:
EXIT PASSAGEWAYS: CLASS "B"
LOBBIES AND CORRIDORS: CLASS "C"
ENCLOSED ROOMS AND SPACES: CLASS "C"
INTERIOR FLOOR FINISH: CLASS "2"

PLUMBING REQUIRED:
MEN: 3-WC, 2-LAV
WOMEN: 3-WC, 2-LAV
SERVICE SINK: 1
DUAL HEIGHT DRINKING FOUNTAIN: 1

PLUMBING PROVIDED:
MEN: 2-WC, 2-URINALS, 3-LAV
WOMEN: 3-WC, 3-LAV
SERVICE SINK: 1
DUAL HEIGHT DRINKING FOUNTAIN: 1



Paul Davis New Office/Warehouse

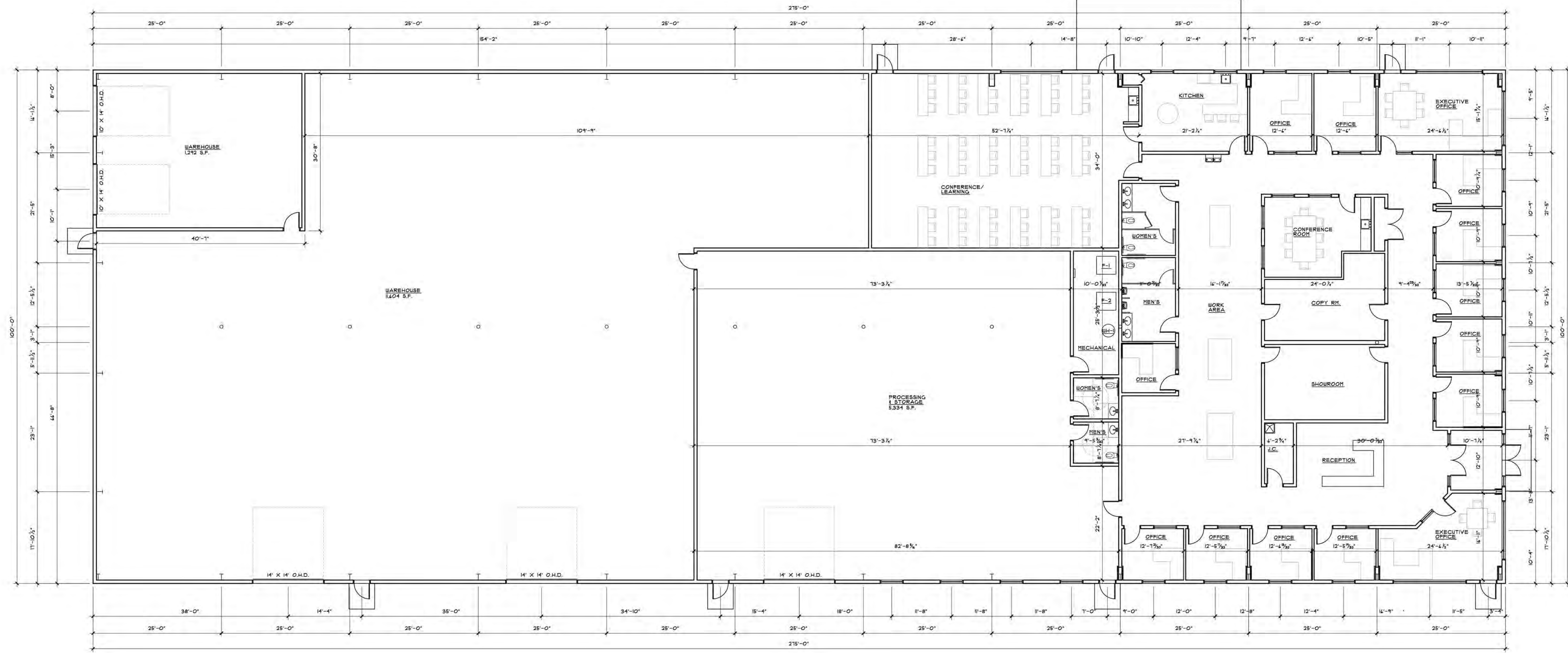
Lot #2 Temple Street

Mason, Michigan

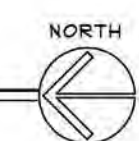
PLANNING COMMISSION SUBMITTAL
8/9/2019



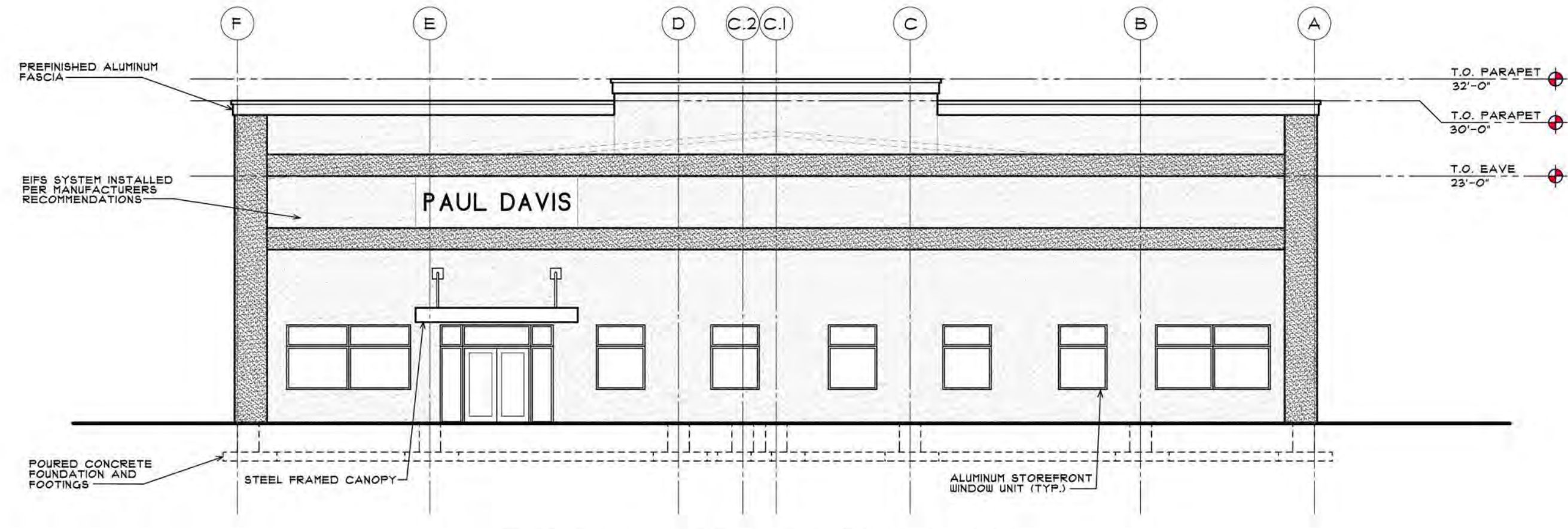
Documents provided and prepared
under the direct supervision of
Todd L. Seidell, Architect.
License #43749



FLOOR PLAN
 SCALE: 3/32" = 1'-0"

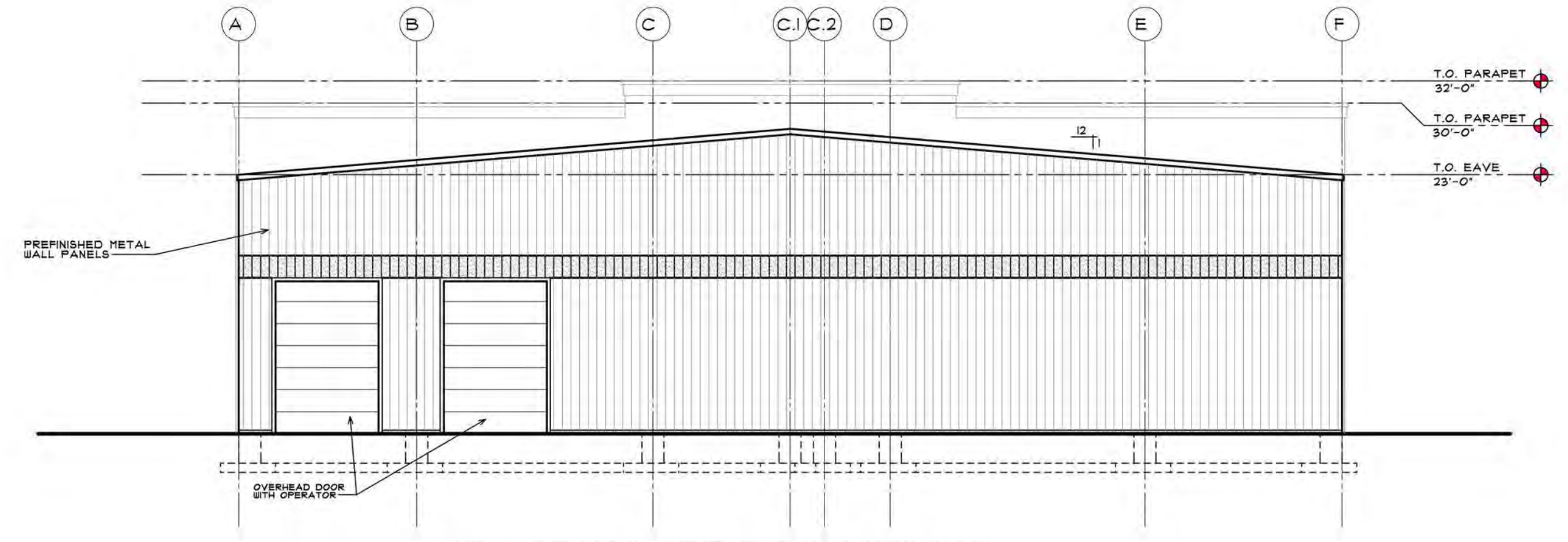


PROJECT PAUL DAVIS NEW OFFICE/WAREHOUSE BUILDING LOT #2 - TEMPLE STREET MASON, MICHIGAN 48854	ISSUED	DATE	ISSUED	DATE
	PLANNING COMMISSION SUBMITTAL	8/11/19	PLANNING COMMISSION SUBMITTAL	8/14/19
PROJECT NO. 19-021	CREATED BY T.L.S.	CHECKED BY T.L.S.	APPROVED BY T.L.S.	DATE 8/14/19
SHEET AI	COMMERCIAL	RESIDENTIAL	INDUSTRIAL	PRINT DATE
	114 N. COURT AVE. STE. 201 POST OFFICE BOX 289 GAYLORD, MICHIGAN 49734	PHONE (989) 731-0372 FAX (989) 731-6932		



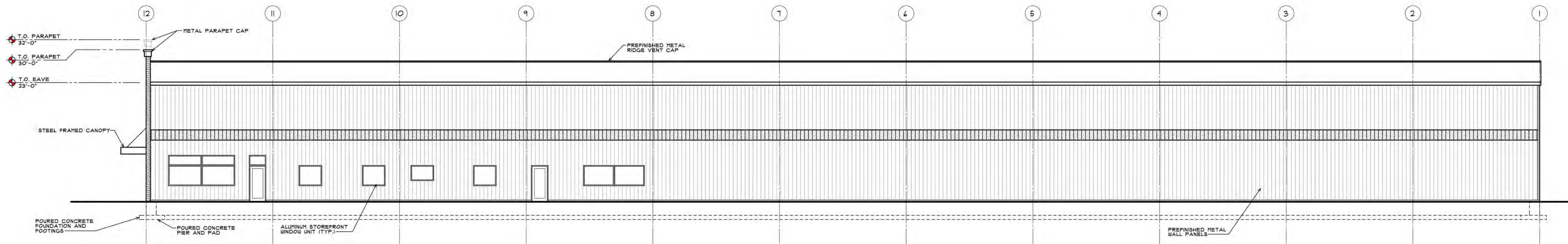
SOUTH ELEVATION

SCALE: 3/32" = 1'-0"



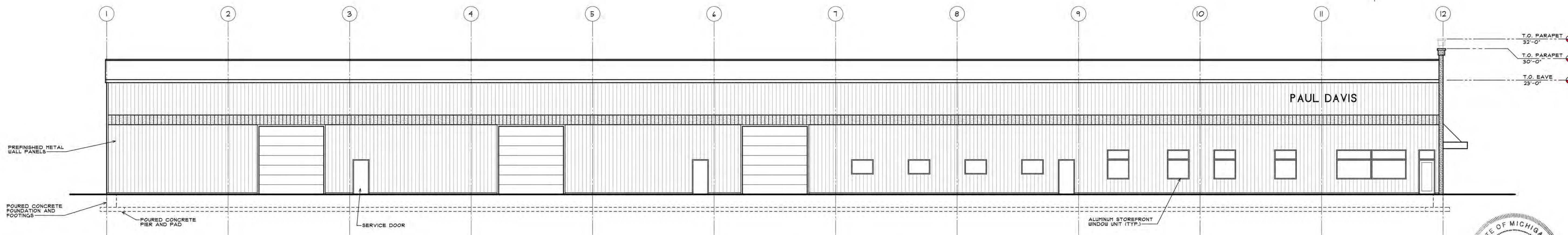
NORTH ELEVATION

SCALE: 3/32" = 1'-0"



EAST ELEVATION

SCALE: 3/32" = 1'-0"



WEST ELEVATION

SCALE: 3/32" = 1'-0"



PROJECT	PAUL DAVIS	PROJECT NO.	19-021
PROJECT	NEW OFFICE/WAREHOUSE BUILDING	SHEET	A2
PROJECT	LOT #2 - TEMPLE STREET	MASON, MICHIGAN	48854
ARCHITECT	SEIDELL ARCHITECTS	INDUSTRIAL	114 N. COURT AVE. STE. 201 POST OFFICE BOX 289 GAYLORD, MICHIGAN 49734
COMMERCIAL	RESIDENTIAL	PHONE (989) 731-0372	FAX (989) 731-6932
ISSUED	DATE	ISSUED	DATE
PLANNING COMMISSION SUBMITTAL	8/14/19	PLANNING COMMISSION SUBMITTAL	8/14/19
PLANNING COMMISSION SUBMITTAL	8/14/19	PLANNING COMMISSION SUBMITTAL	8/14/19
DATE	8/14/19	DATE	8/14/19
PRINT DATE		PRINT DATE	
DRAWN BY	T.L.S.	CHECKED	T.L.S.
APPROVED BY	T.L.S.	DATE	8/14/19

PAUL DAVIS

RECOVER • RECONSTRUCT • RESTORE

Building Development
Prepared For

FED Corporation

Section 9, T.2N., R.1W., City of Mason, Ingham County, Michigan

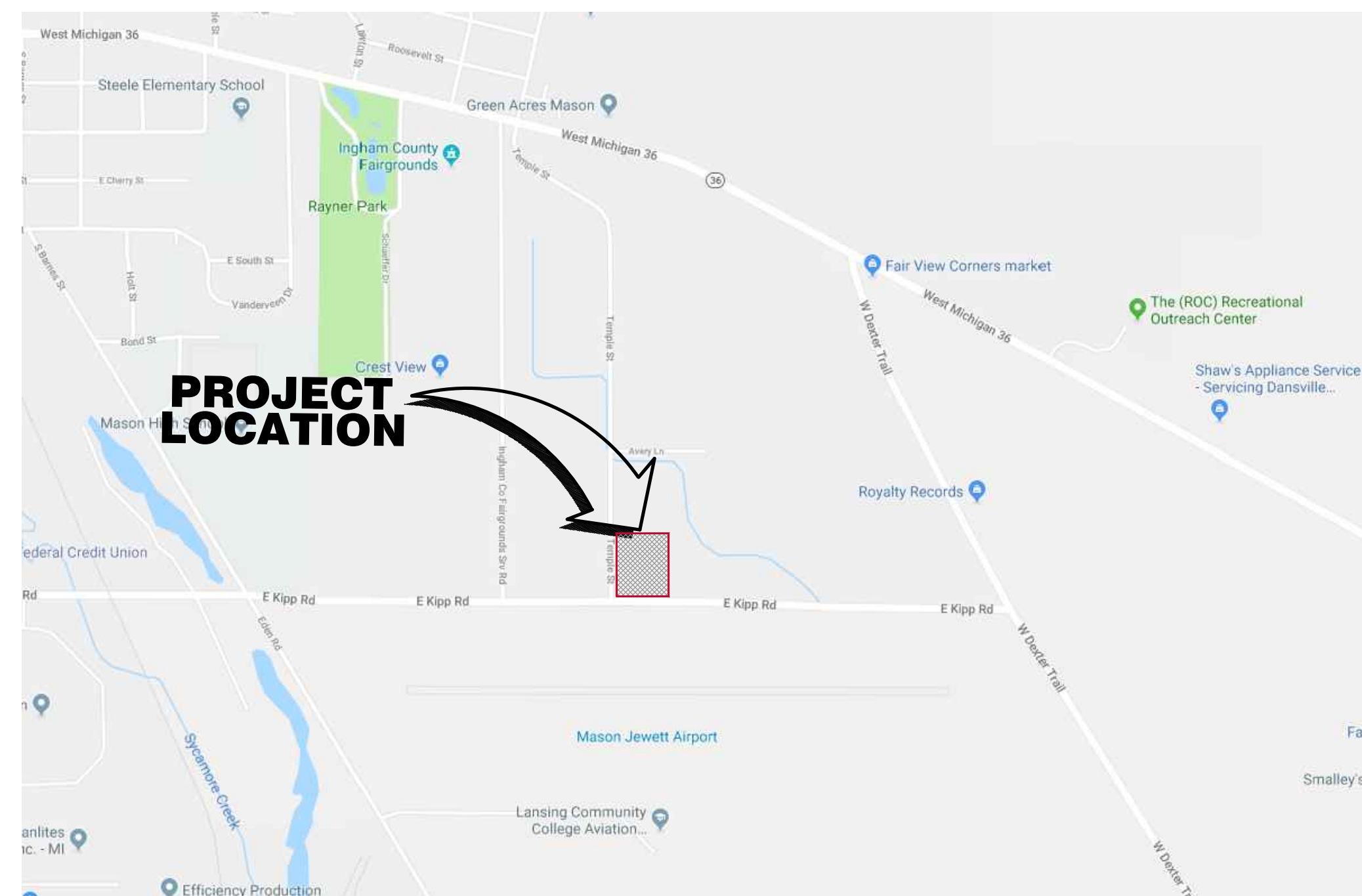
SITE ADDRESS: Temple Street, Mason, MI. 48854

Property Description:

Part of the Southeast 1/4 of Section 9, T2N, R1W, City of Mason, Ingham County, Michigan, described as: Beginning at the Southeast Corner of said Section 9; thence N89°58'20"W, along the South Section line, 425.00 feet; thence N00°01'45"W, parallel with the East Section line, 512.47 feet; thence S89°58'20"E, parallel with the South Section line, 425.00 feet; thence S00°01'45"E, along the East Section line, 512.47 feet to the Point of Beginning. Containing 5.0 acres, and being subject to restrictions, reservations, easements, rights-of-way, zoning, governmental regulations and matters visible, if any, upon or affecting said lands.

Sheet Index:

- C-1 Cover Sheet
- C-2 General Notes
- C-3 Existing Topographic Survey
- C-4 Demolition Plan
- C-5 Site Plan
- C-6 Site Details
- C-7 Utility Plan
- C-8 Site Lighting / Photometric Plan
- C-9 Grading Plan
- C-10 Landscaping Plans & Details (by others)
- C-11 Stormwater Management
- C-12 Specifications
- C-13 Specifications



LOCATION SKETCH:

Submission Table:

- Aug 9, 2019 Submit initial preliminary site plans to City of Mason for their review. **These plans are not to be used for construction.**
- Aug 15, 2019 Revised plans to include storm water management and grading plans and to address early comments from city planner from email dated Aug. 12th. **These plans are not to be used for construction.**



PROJECT NUMBER: P-190259	SCALE: N/A
ENGINEER: Timothy L. Lapham, P.E., P.S. 27895	SHEET C-1
DRAWN BY: S.E. Bell	
DATE: August 15, 2019	
REVISIONS:	

PAUL DAVIS
 RECOVER • RECONSTRUCT • RESTORE
Cover Sheet
 Paul Davis Restoration Mason Development
 For
FED Corporation

LAPHAM ASSOCIATES
 ENGINEERING
 PLANNING
 ENVIRONMENTAL
 SURVEYING
 116 South 3rd Street
 West Branch, MI 48861
 P (989) 345-5030
 F (989) 345-7302
 www.laphamassoc.com
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APPROVED USE FOR:
 ● PRELIMINARY
 ○ PERMIT BID
 ○ CONSTRUCTION
 ○ FINAL RECORD

NOTE SHEET

- 1. EXTENSION OF PUBLIC UTILITIES:** All public sanitary sewer and/or watermain **SHALL** be extended to the fullest limits of the property, including corner lots, with the pipe size and material approved by Milford Township. This is necessary for plan approval. For water service of 1" or less or a building on a corner lot, the requirements to extend the public watermain and/or sanitary sewer along both property lines will be reviewed.
- 2. SOIL EROSION:** The DEVELOPER shall submit a detailed Soil Erosion and Sedimentation Control plan and obtain an Act 451 Part 91, Soil Erosion and Sedimentation Control permit. This includes the payment of fees and the providing of necessary bonds. **No earth changes or excavation shall be started prior to the issuance of this permit.** The DEVELOPER shall protect all existing and proposed storm sewer facilities on and adjacent to the site during excavation and construction. All sediment shall be contained on site. Any silt in county drains, storm sewer, culverts, etc. as a result of this project, shall be removed by the DEVELOPER at the cost of the DEVELOPER.
- 3. FLOOD PLAIN OR WETLAND CONSTRUCTION:** The DEVELOPER shall apply to the Michigan Department of Environment Great Lakes and Energy (EGLE) for a permit for the alteration and/or occupation of a flood plain or floodway, as required under PA 451. Evidence of this permit may be required prior to plan approval by Milford Township.
- 4. NPDES STORM WATER DISCHARGE PERMIT:** The owner of the property shall obtain a NPDES Storm Water Discharge permit for construction activities from EGLE as required under Public Act 451. The notice of coverage form shall be submitted through **The City of Midland Public Works** with the Soil Erosion Control permit application. All EGLE fees shall accompany the Notice of Coverage.
- 5. ROAD COMMISSION FOR OAKLAND COUNTY OF ROADS PERMIT:** The DEVELOPER shall obtain a permit from the Road Commission for Oakland County to perform work within the RCOC Right-of-Way. All fees for the permit, bonds and insurances are the responsibility of the developer.
- 6. MUNICIPALITY SANITARY SEWER AND WATER PERMIT:** Prior to the issuance of a building permit by the local municipality, the developer may be required to obtain a sanitary sewer and/or water tap-in permit from Milford Township.
- 7. STATE CONSTRUCTION PERMITS:** The sanitary sewer and watermain construction permits from the Michigan Department of Environment Great Lakes and Energy shall be submitted to the EGLE after approval by Milford Township. Construction shall not begin until these state permits are issued.
- 8. Utility Warning -** Underground locations as shown on the plans were obtained from utility owners, and were not field located. A minimum of three (3) working days prior to beginning construction, the contractor shall notify "MISS DIG" (800-482-7171) and have all underground utilities staked before any work may begin. The contractor shall be responsible for the protection and/or relocation of all utilities that may interfere with construction. Three (3) Working Days Before You DIG - Call MISS DIG (1-800-482-7171).

OTHER NOTES

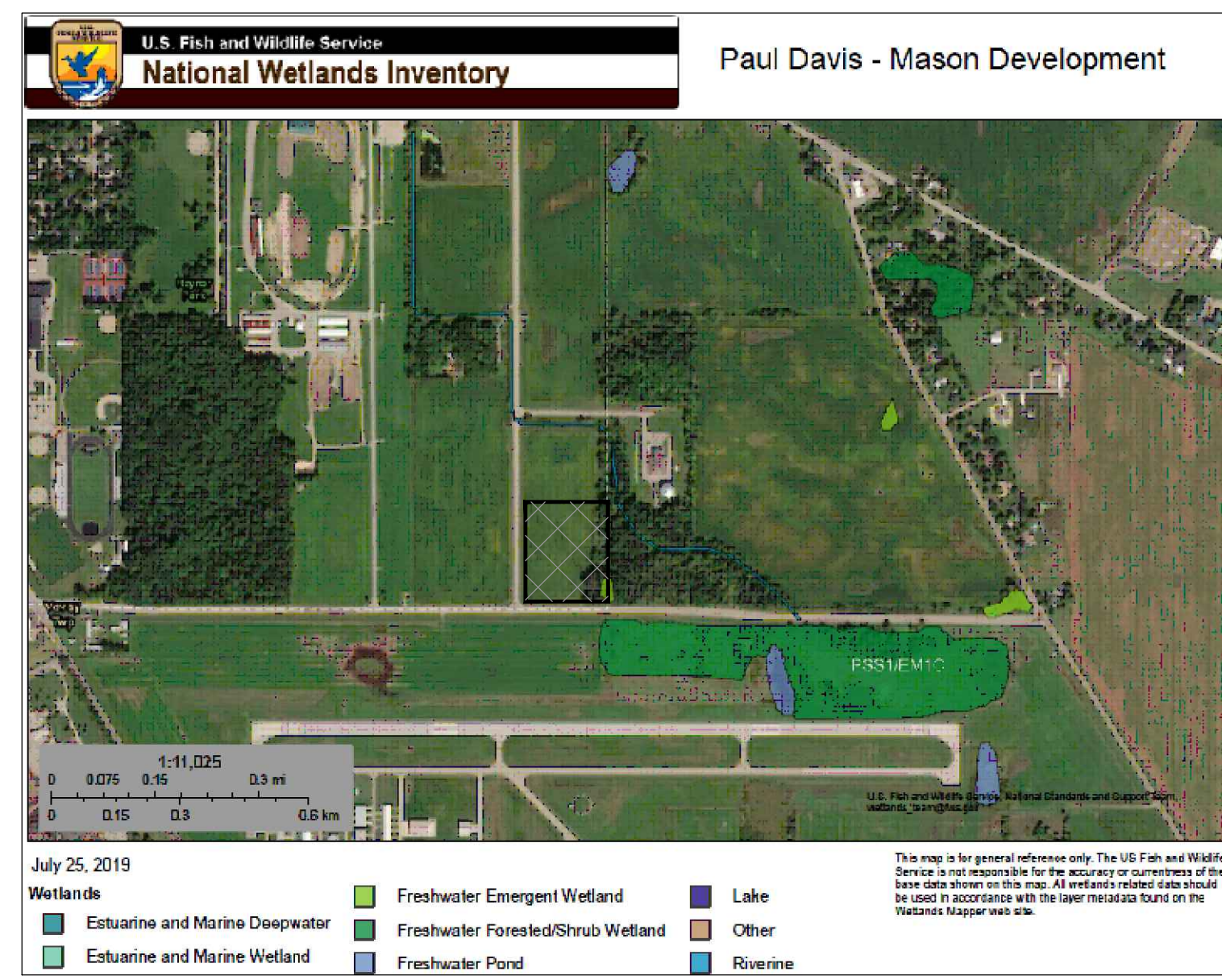
- The contractor shall be responsible to review and be familiar with all portions of these plans. Any discrepancies between different portions of the plans shall be brought to the attention of the Engineer and shall be resolved prior to construction.

NRCS SOILS MAP

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AnA	Aubbeaubee-Capac sandy loams, 0 to 3 percent slopes	0.4	8.7%
CvraaB	Conover loam, 0 to 4 percent slopes	3.4	68.4%
Gf	Gifford sandy loam, 0 to 2 percent slopes, gravelly subsoil	1.0	19.8%
Hn	Houghton muck, 0 to 1 percent slopes	0.2	3.1%
Totals for Area of Interest		5.0	100.0%



WETLAND MAP



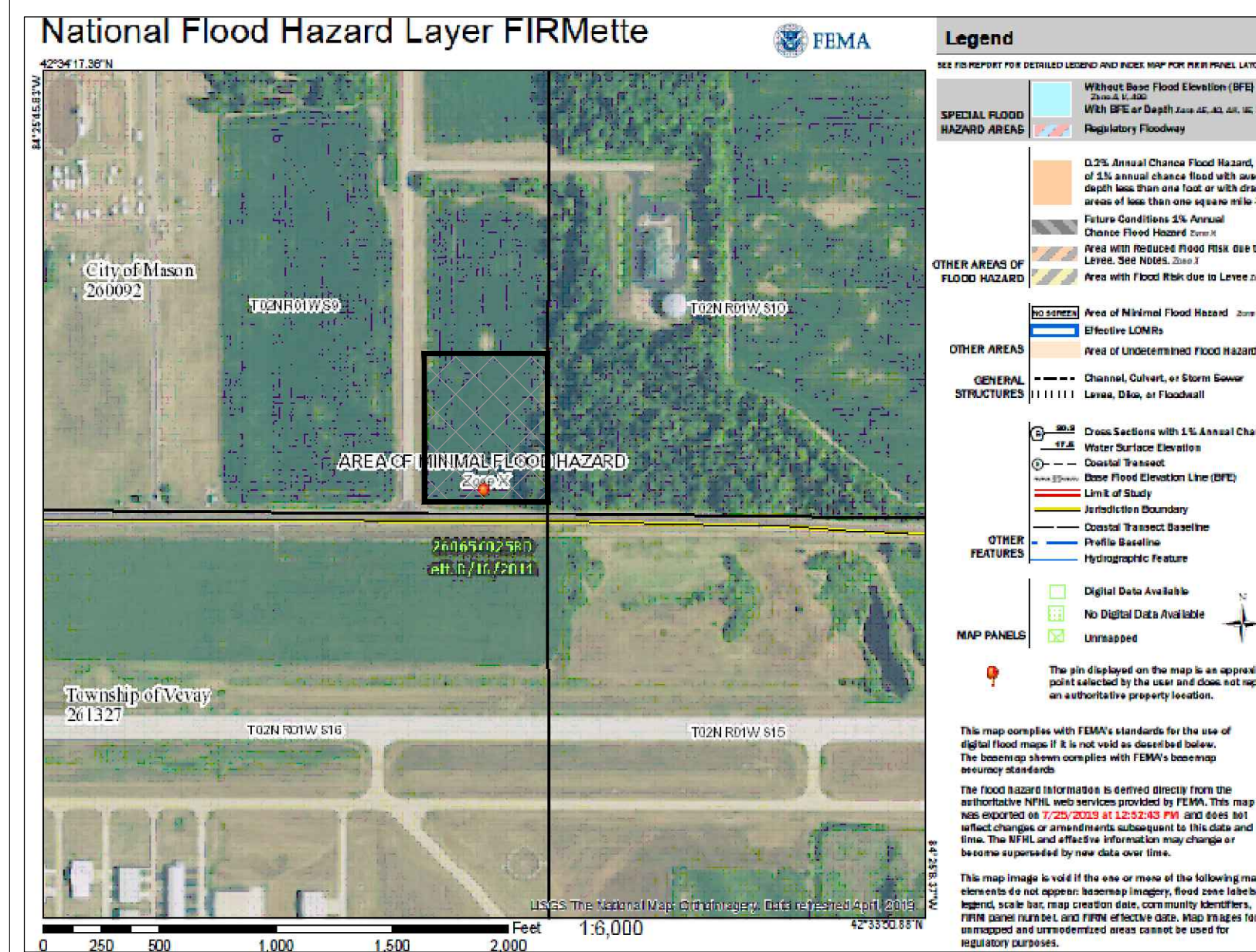
BENCHMARKS

- Benchmark #1**
South bolt on fire hydrant flange on south side of Kipp Road at southeast of intersection of Temple Street and Kipp Road. Elev. = 910.72
- Benchmark #2**
East bolt on fire hydrant flange on east side of Temple Street approximately 340 feet north of centerline of Kipp Road. Elev. = 910.81

PLAN LEGEND

- O—ELECT— = OVERHEAD ELECTRIC LINE
- GAS—GAS— = BURIED GAS LINE
- SAN—SAN— = SANITARY SEWER
- WATER— = WATER MAIN
- UG TELE— = UNDERGROUND TELEPHONE
- ⊙ = SANITARY MANHOLE
- ⊙ = STORM MANHOLE
- ⊙ = CATCH BASIN
- ⊙ = CURB INLET
- ⊙ = FIRE HYDRANT
- ⊙ = WATER VALVE
- ⊙ = LIGHT POLE
- ⊙ = STREET SIGN
- ⊙ = FENCE LINE
- ⊙ = UTILITY POLE
- ⊙ = FOUND CAPPED IRON
- ⊙ = SET CAPPED IRON
- ⊙ = BITUMINOUS PAVING
- ⊙ = CONCRETE PAVING OR WALKWAY
- ⊙ = PLS SYSTEM CORNER
- R = RECORDED AS IN TITLE DESCRIPTION
- P = PREVIOUSLY DESCRIBED
- M = MEASURED AS
- ⊙ = PROPOSED LIGHT POLE

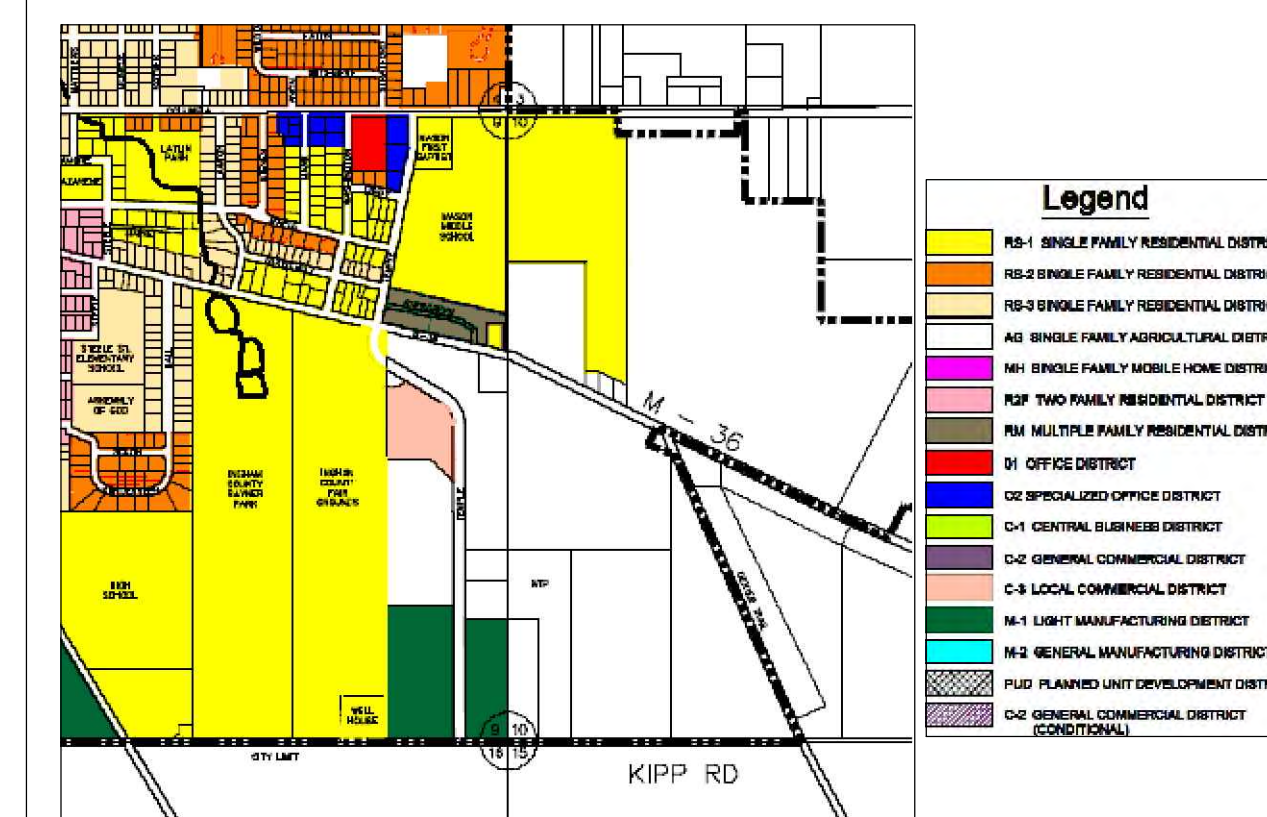
FLOODZONE MAP



ABBREVIATIONS

LIST OF ABBREVIATIONS	Definitions
A.C.	Alternating Current
A.F.C.	Adult Foster Care
ASPH.	Asphalt Paving
ASTM	American Society of Testing Materials
AWS	American Welding Society
AWWA	American Waterworks Association
BLDG.	Building
CIP	Compacted in place
CL	Class
CONC.	Concrete
C.Yd. or CYD	Cubic Yard
DR	Dimension Ratio
°	Degrees
EA	Each
EJ	East Jordan Iron Works
ELEV.	Elevation
EX	Existing
F.F.	Finish Floor
G.P.M.	Gallons Per Minute
I.Q.	Inside Diameter
Inv.	Invert
Lbs.	Pounds
LFT	Lineal Feet
L.S.	Lump Sum
Max.	Maximum
MDOT	Michigan Department of Transportation
M.H.	Manhole
Mil.	Millimeter
Min.	Minimum
MUW	Maximum Unit Weight at optimum moisture content
No.	Number
NSF	National Sanitation Foundation
OSHA	Occupational Safety Health Administration
PSIGP	Pounds per square inch gauge
PVC	Polyvinyl Chloride
R.O.W. or R/W	Right-of-Way
RAD.	Radius
SDR	Standard Dimension Ratio
SYD	Square Yard
T.D.H.	Total Dynamic Head
V.L.F.	Vertical Lineal Feet
'	Minutes of angles or Feet
"	Seconds of angles or Inches
%	Percent
#	Pounds

ZONING MAP



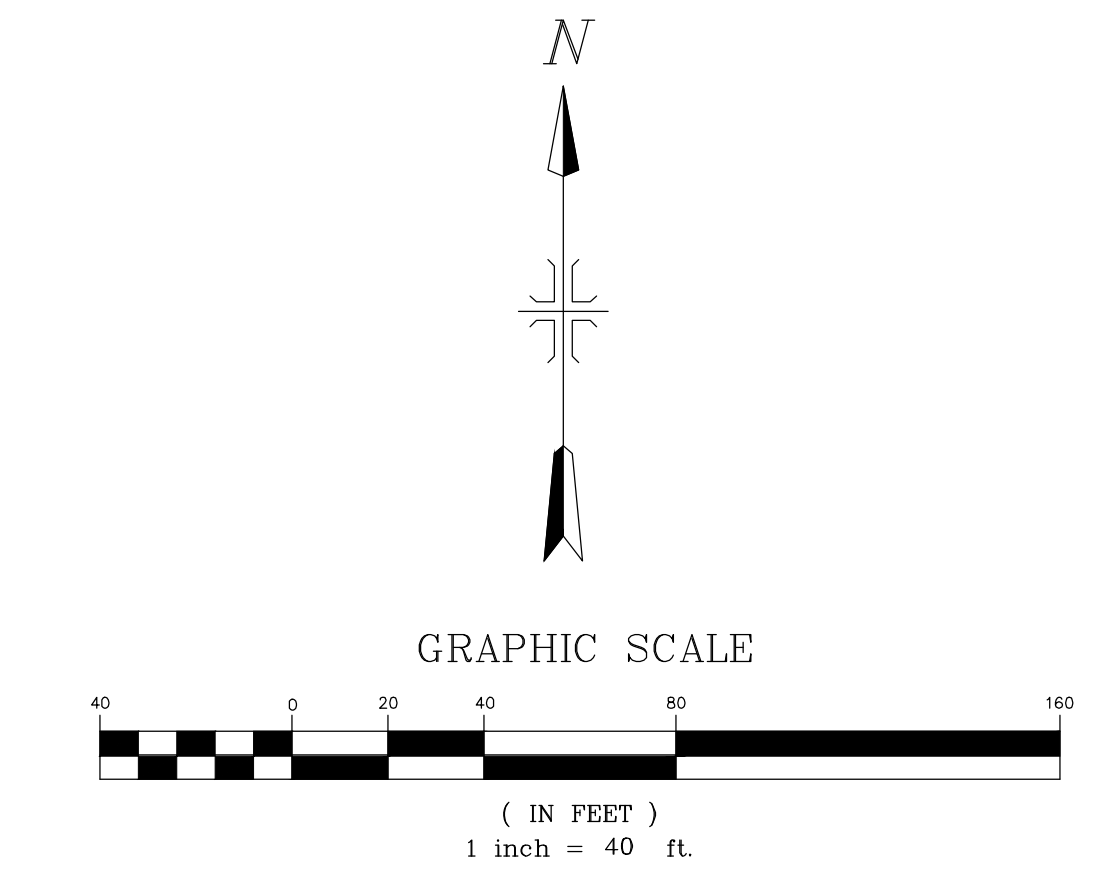
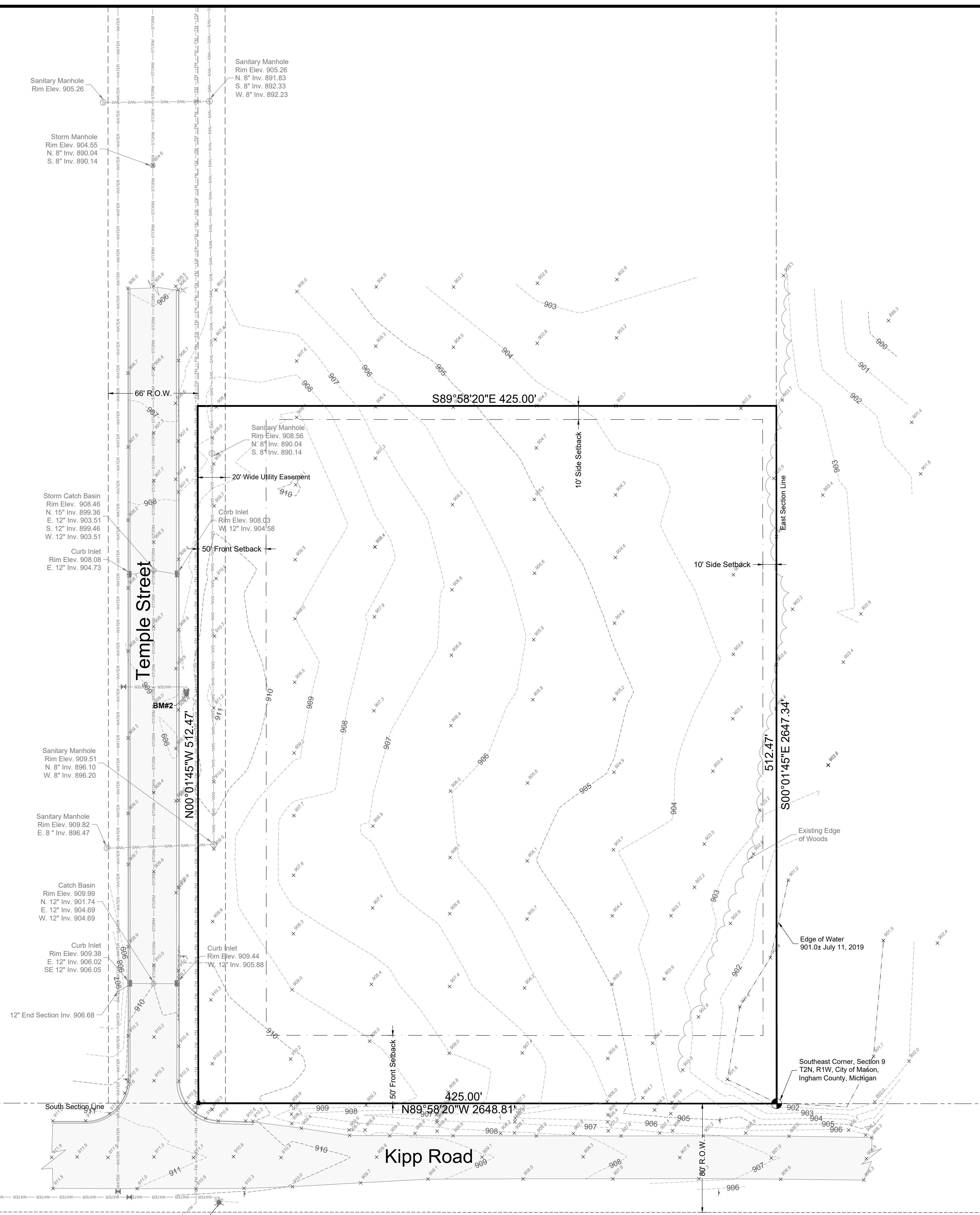
PROJECT NUMBER: P-1902559
ENGINEER: Timothy L. Lapham, P.E., P.S. 27585
DRAWN BY: S.E. Bell
DATE: August 15, 2019
SHEET C-2

General Notes
Paul Davis Restoration Mason Development
For
FED Corporation

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C-2



PROJECT NUMBER: P-190259	DRAWN BY: S.E. Bell	SCALE: 1" = 40'
ENGINEER: Timothy L. Lapham, P.E., P.S. 27585	DATE: August 15, 2019	SHEET C-3
REVISED:	REVISED:	

Existing Topographic Survey
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C-3

Sanitary Manhole
Rim Elev. 905.26

Storm Manhole
Rim Elev. 904.55
N. 8" Inv. 890.04
S. 8" Inv. 890.14

Sanitary Manhole
Rim Elev. 905.26
N. 8" Inv. 891.83
S. 8" Inv. 892.33
W. 8" Inv. 892.23

Storm Catch Basin
Rim Elev. 908.46
N. 15" Inv. 899.36
E. 12" Inv. 903.51
S. 12" Inv. 899.46
W. 12" Inv. 903.51

Curb Inlet
Rim Elev. 908.06
E. 12" Inv. 904.73

Sanitary Manhole
Rim Elev. 909.51
N. 8" Inv. 896.10
W. 8" Inv. 896.20

Sanitary Manhole
Rim Elev. 909.82
E. 8" Inv. 896.47

Catch Basin
Rim Elev. 909.99
N. 12" Inv. 901.74
E. 12" Inv. 904.69
W. 12" Inv. 904.69

Curb Inlet
Rim Elev. 909.38
E. 12" Inv. 906.02
SE 12" Inv. 906.05

Sanitary Manhole
Rim Elev. 908.56
N. 8" Inv. 890.04
S. 8" Inv. 890.14

Curb Inlet
Rim Elev. 908.03
W. 12" Inv. 904.58

Curb Inlet
Rim Elev. 909.44
W. 12" Inv. 905.88

12" End Section Inv. 906.68

Temple Street

Kipp Road

Remove 6" of
Concrete Curb & Gutter

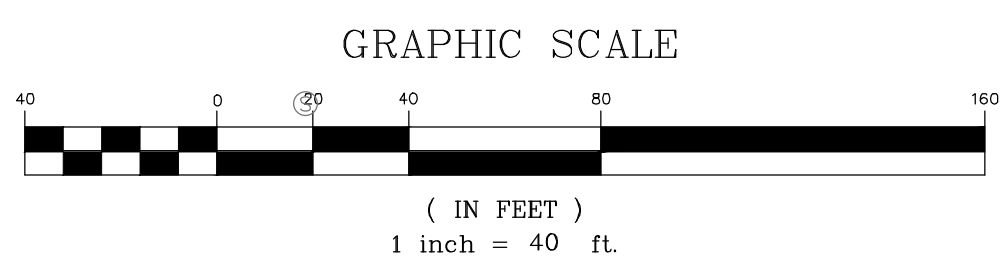
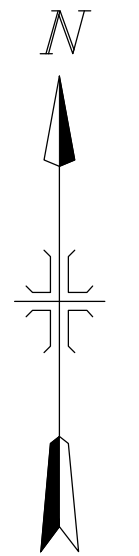
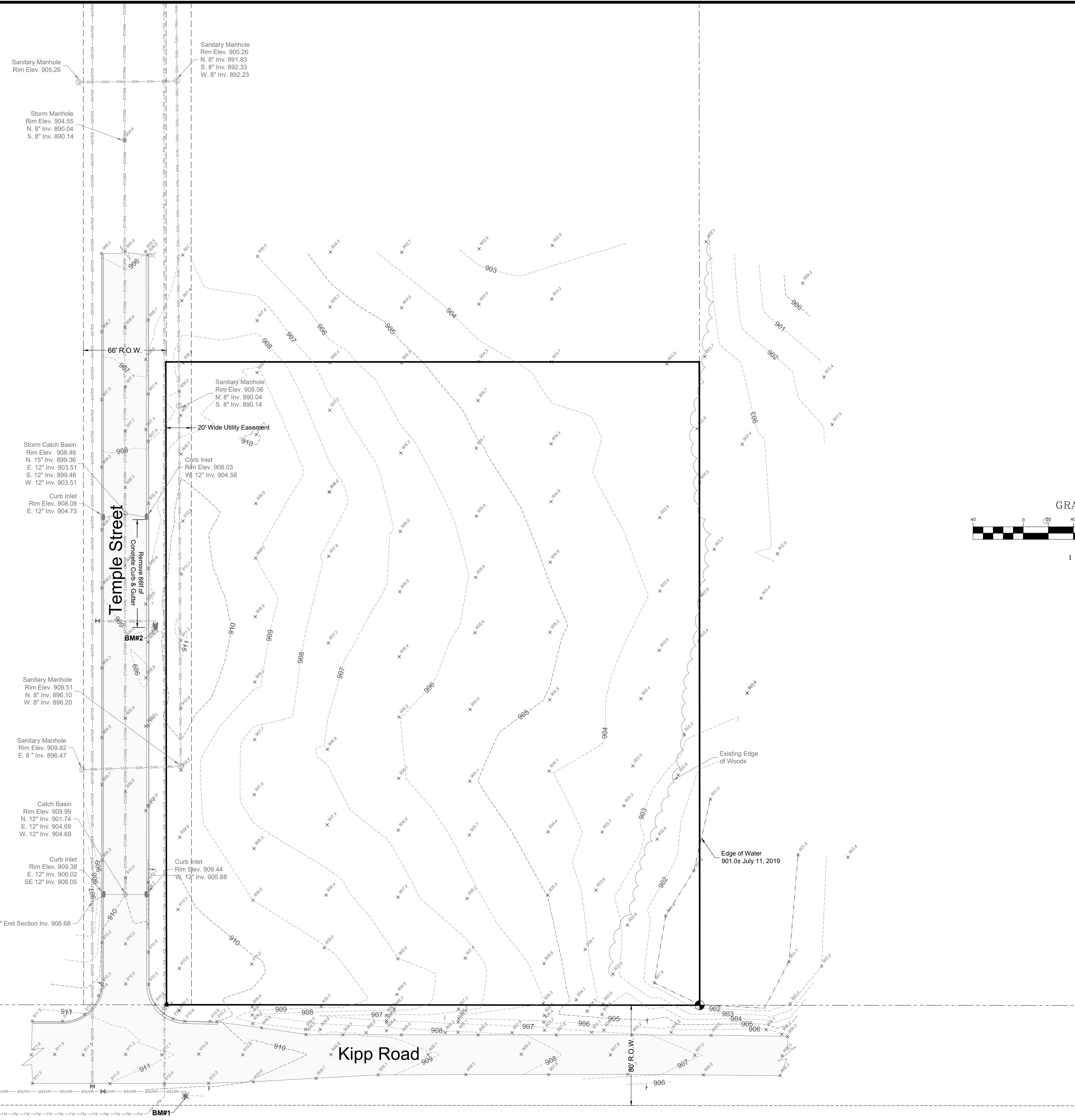
20' Wide Utility Easement

BM#2

BM#1

66' R.O.W.

80' R.O.W.



PROJECT NUMBER: P-190289
ENGINEER: Timothy L. Lapham, P.E., P.S. 27595
REVISIONS:

SCALE: 1" = 40'
DRAWN BY: S.E. Bell
DATE: August 15, 2019
SHEET C-4

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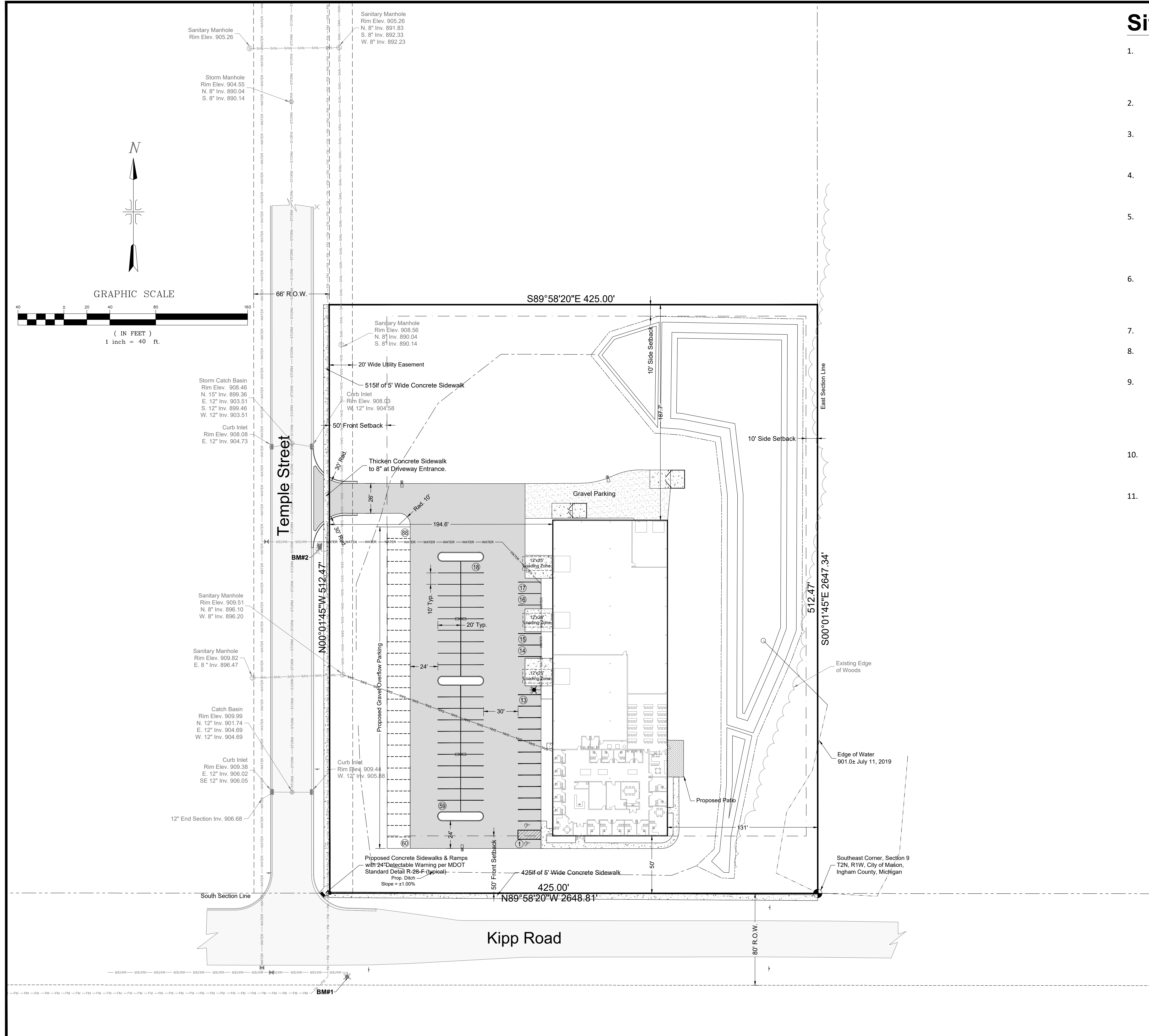
Demolition Plan
Paul Davis Restoration Mason Development
For
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C-4



Site Plan Notes:

- These plans and specifications are subject to modification during construction when conditions develop that were not apparent during the design and preparation of these plans. All modifications must be approved by local jurisdiction prior to construction and/or implementation.
- In the event of any discrepancy between any drawing and the figures written thereon, the figures shall be taken as correct.
- Should it appear that the work to be done or any matter relative thereto is not sufficiently detailed or explained on these plans, the contractor shall contact the engineer for such further explanations as may be necessary.
- Before commencement of work, the contractor shall review all plans and specifications and the job site. The contractor shall notify the owner and the engineer of any discrepancies that may require modification to these plans or of any field conflicts.
- Contractor agrees that in accordance with generally accepted construction practices, the contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property. This requirement shall be made to apply continuously and not be limited to normal working hours.
- Contractor shall obtain all necessary permits prior to commencing construction involving right-of-ways, and for the construction, modification, or connection to facilities. All workmanship, equipment and materials shall conform to local jurisdiction standards and specifications.
- Traffic control shall be provided in accordance with local jurisdiction.
- The contractor shall provide all lights, signs, barricades, flag men, or other devices necessary to provide for public safety.
- Where soil or geologic conditions encountered in grading operations are different from those generally anticipated, or where conditions warrant changes to the recommendations contained therein, a report of soil or geologic conditions shall be submitted along with proposed changes for approval and shall be accompanied by an engineer's opinion as to the safety of the site from the possibility of land slippage, settlement and seismic activity.
- A preconstruction meeting shall be scheduled with the developer, services personnel and the developer's contractor. A preconstruction meeting shall take place prior to the starting of any construction on the site.
- Meet all current applicable ADA requirements for parking, signage, ramps, sidewalks, and warning notification on sidewalks approaching drives as required.

Parking Calculations:

Parking Spaces Required:
 0.33 Spaces per 100ft² per Table 100.5 for Industrial use
 27,500ft² x 0.33 / 100ft² = 91 Spaces

Zoning Notes:

Owner: Paul Davis Restoration
 881 Hull Road
 Mason, MI 48854

Use: Warehouse & light manufacturing permitted use by right per Sec. 94-151(b)

Zoning: M1 Light Manufacturing

Setbacks: Front Setback 50'
 Side Setback 10'
 Rear Setback 20'

Lot Coverage: 50% maximum allowed

Zoning Compliance Matrix:

	Required	Existing	Proposed
Lot size	60,000 ft ²	N/A	217,912 ft ²
Lot width	200'	N/A	512.47'
Set-backs			
Front	50'	N/A	50'
Side	10'	N/A	151'
Rear	20'	N/A	N/A
Coverage	50%	0%	12.6%
Height			
Principal Structure	40'	N/A	32'
Accessory Structure	40'	N/A	N/A
Parking			
Industrial use	91 spaces	0 spaces	88 spaces
Dimensions	10' x 20'	N/A	10' x 20'
Loading Area	2 loading spaces		3 loading spaces

Site Plan

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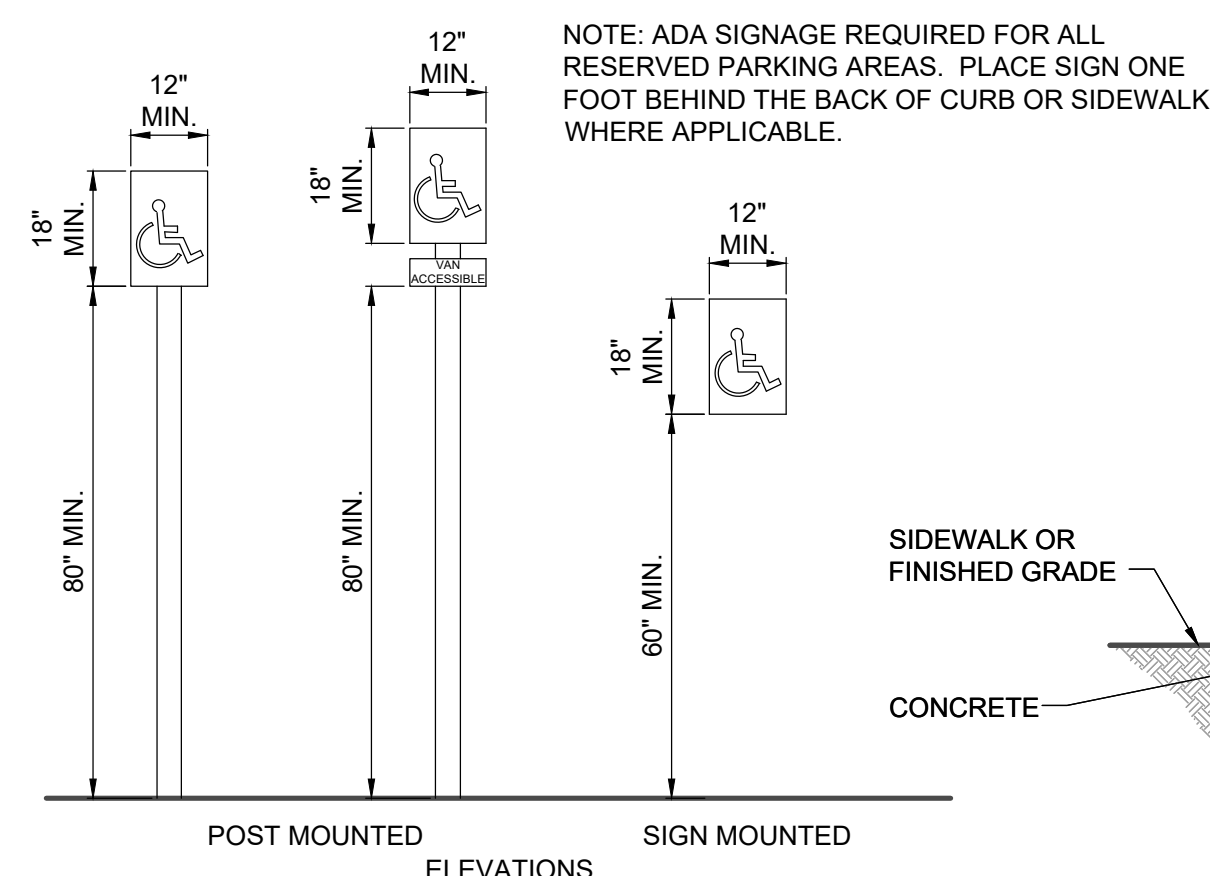
C-5

PROJECT NUMBER: P-190289
 ENGINEER: Timothy L. Lapham, P.E., P.S. 27595
 REVISIONS:

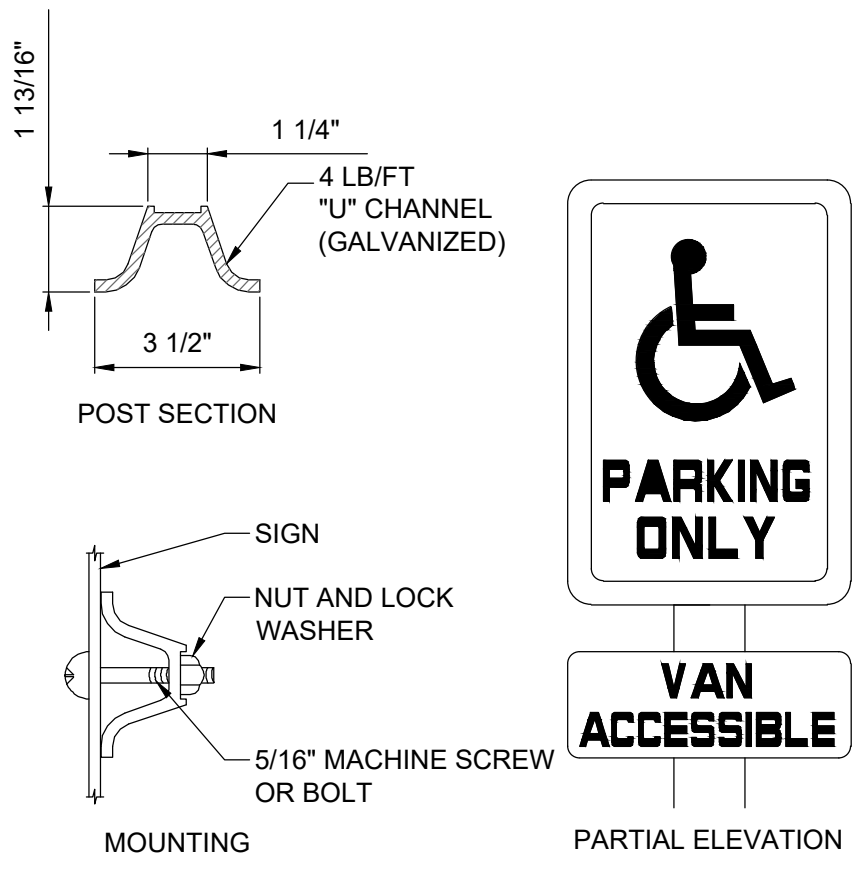
SCALE: 1" = 40'
 SHEET: C-5

DRAWN BY: S.E. Bell
 DATE: August 15, 2019

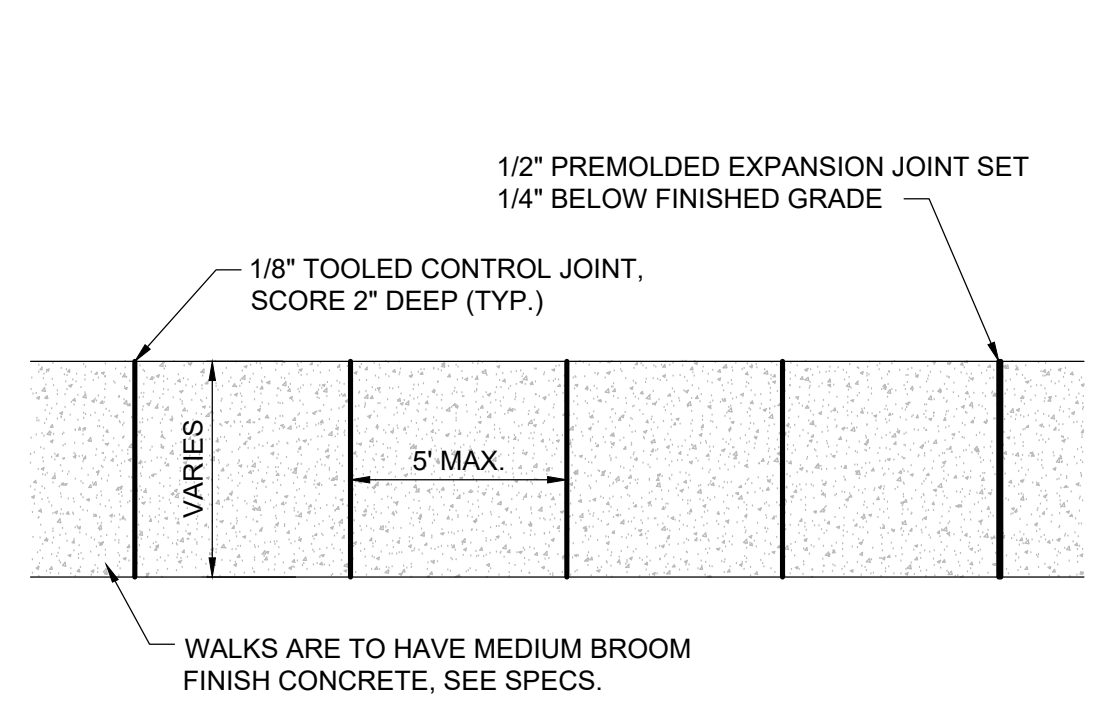
GRAPHIC SCALE
 (IN FEET)
 1 inch = 40 ft



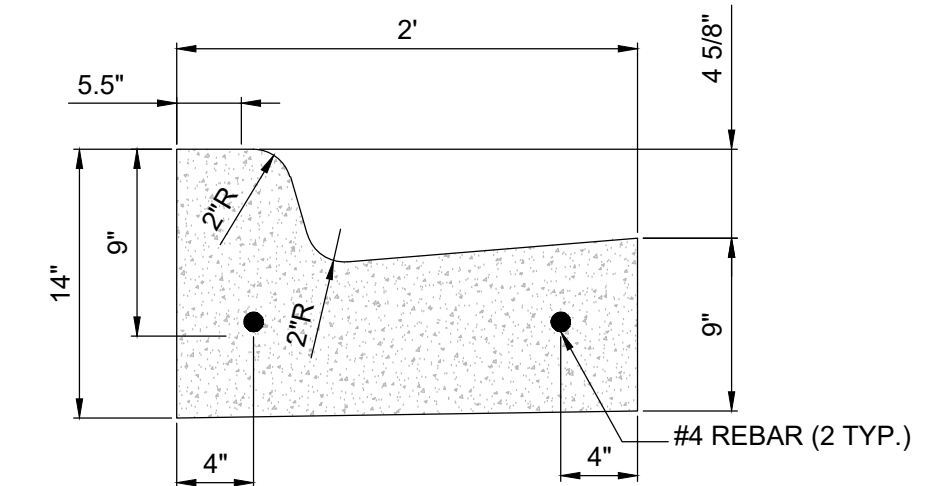
1 ADA SIGNAGE DETAIL
SCALE: NONE



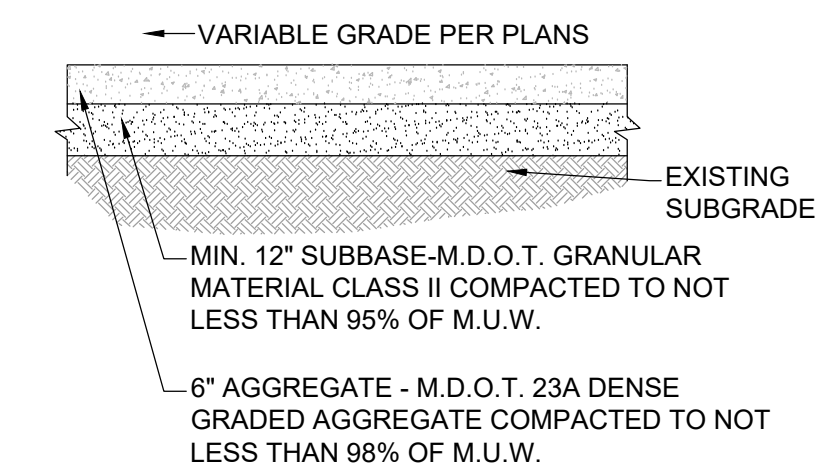
2 TYPICAL CONCRETE SIDEWALK LAYOUT
SCALE: NONE



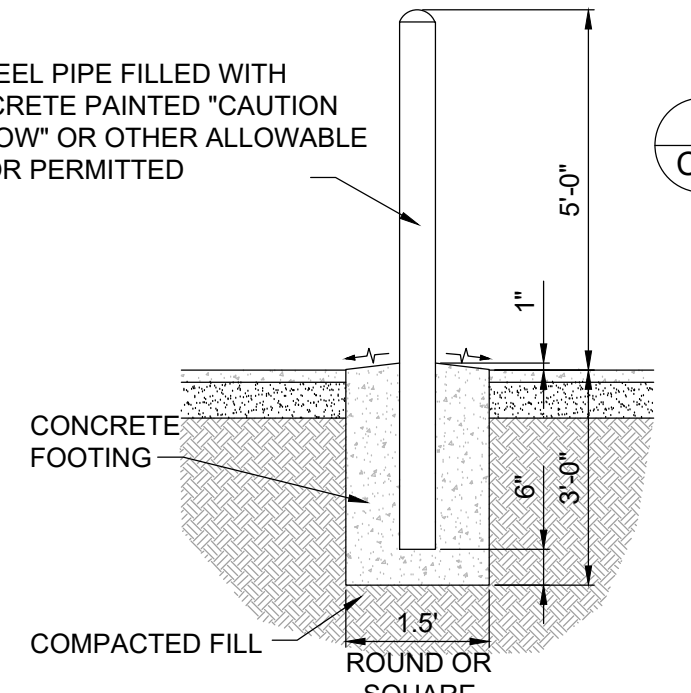
3 BITUMINOUS PAVEMENT DETAIL
SCALE: NONE



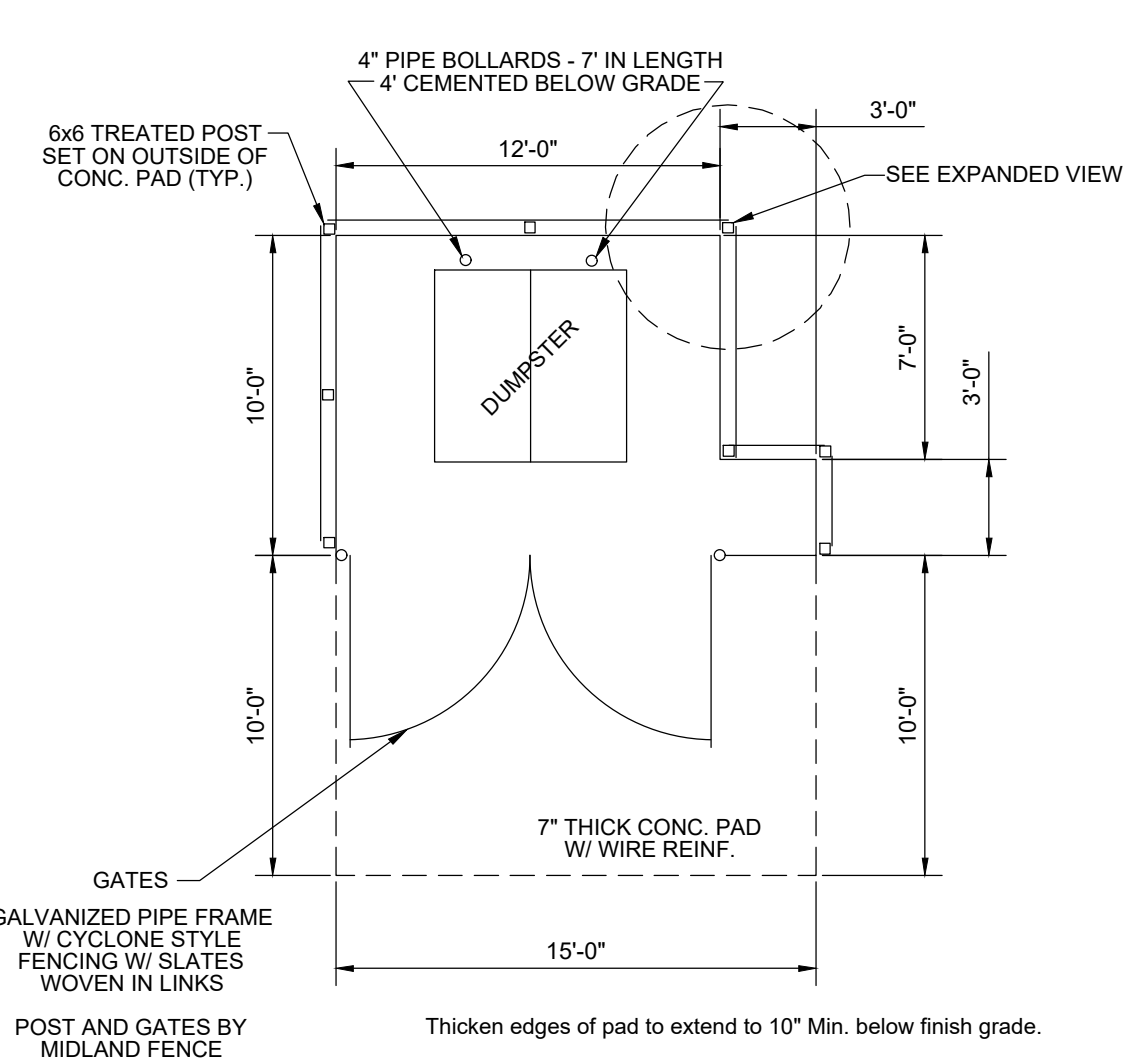
4 MDOT F4 CURB
SCALE: NONE



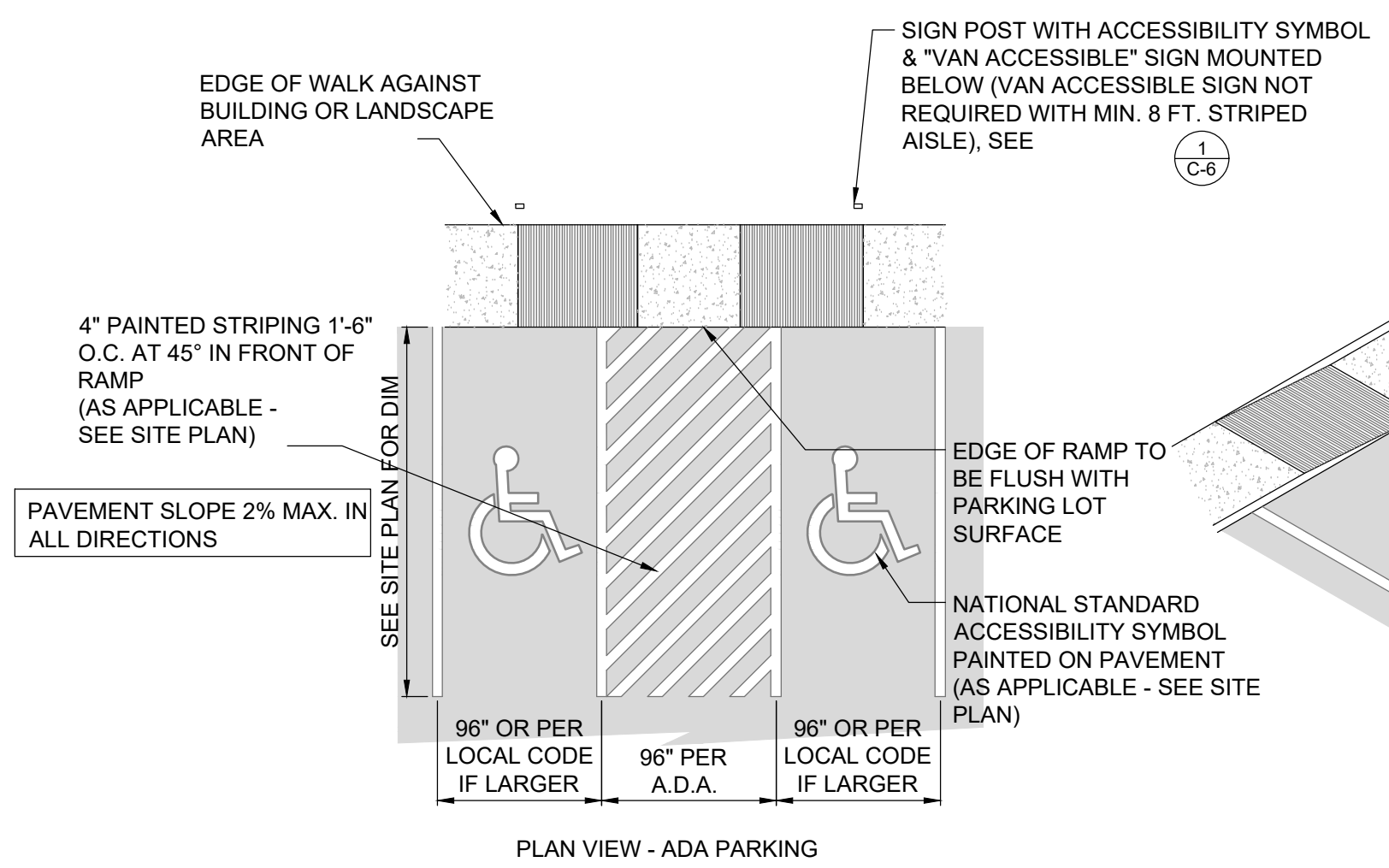
7 GRAVEL FIRE DRIVE DETAIL
SCALE: NONE



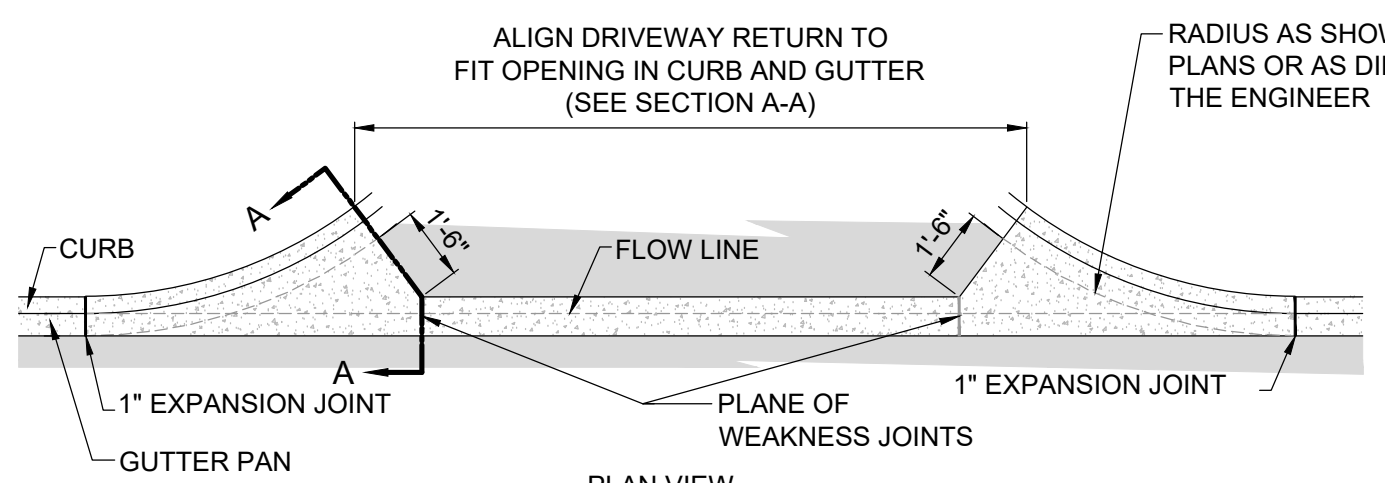
6 TYPICAL BOLLARD
SCALE: NONE



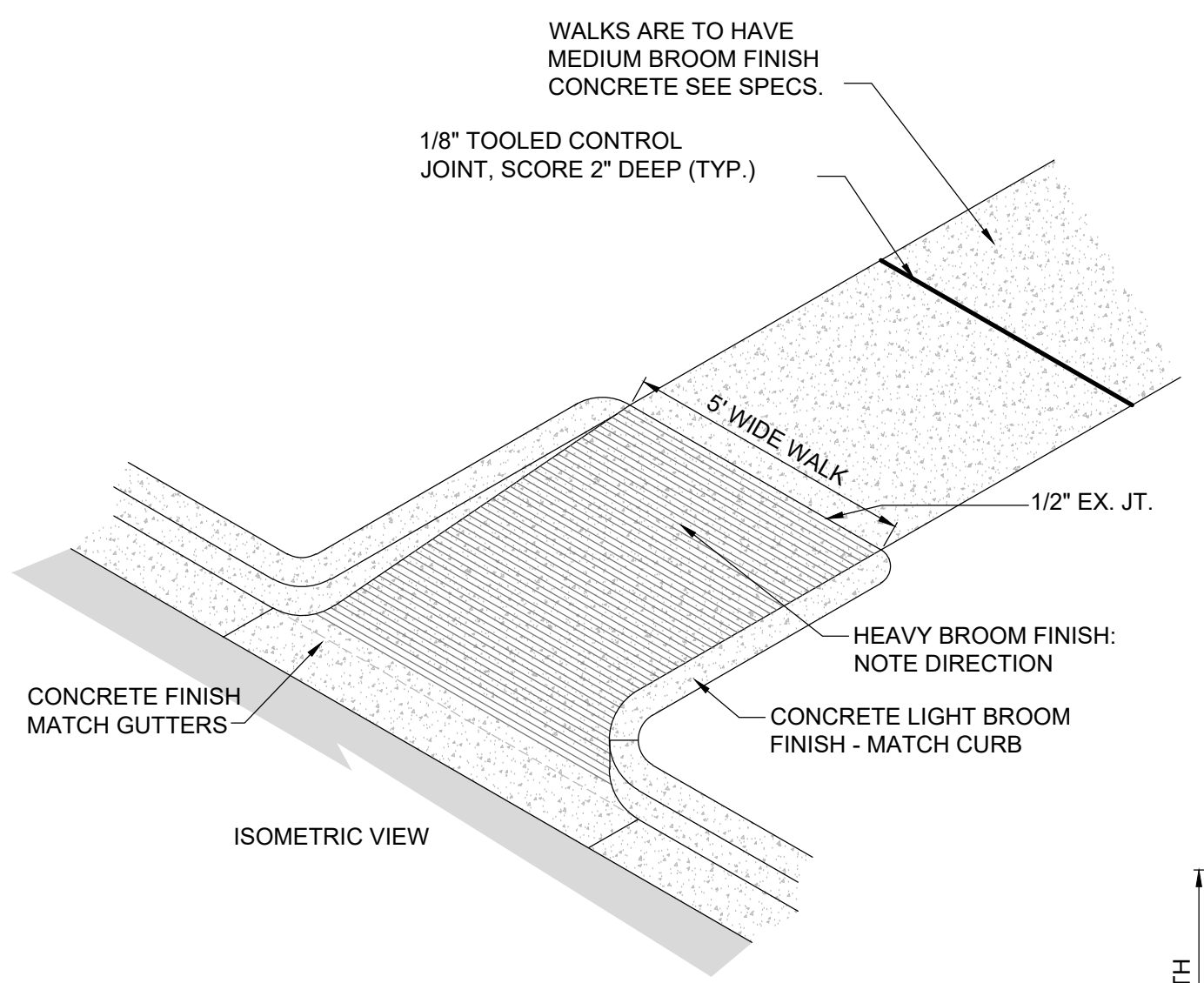
8 DUMPSTER ENCLOSURE DETAIL
SCALE: As Shown



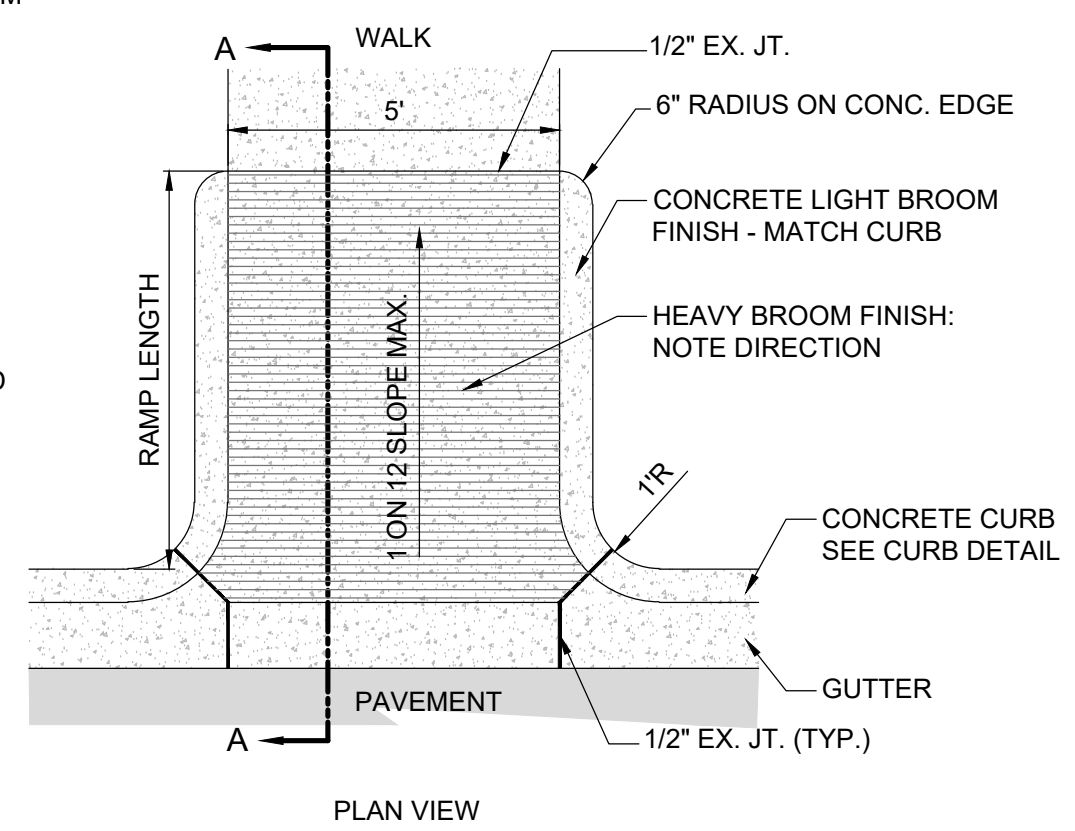
5 ACCESSIBLE PARKING STALLS
SCALE: NONE



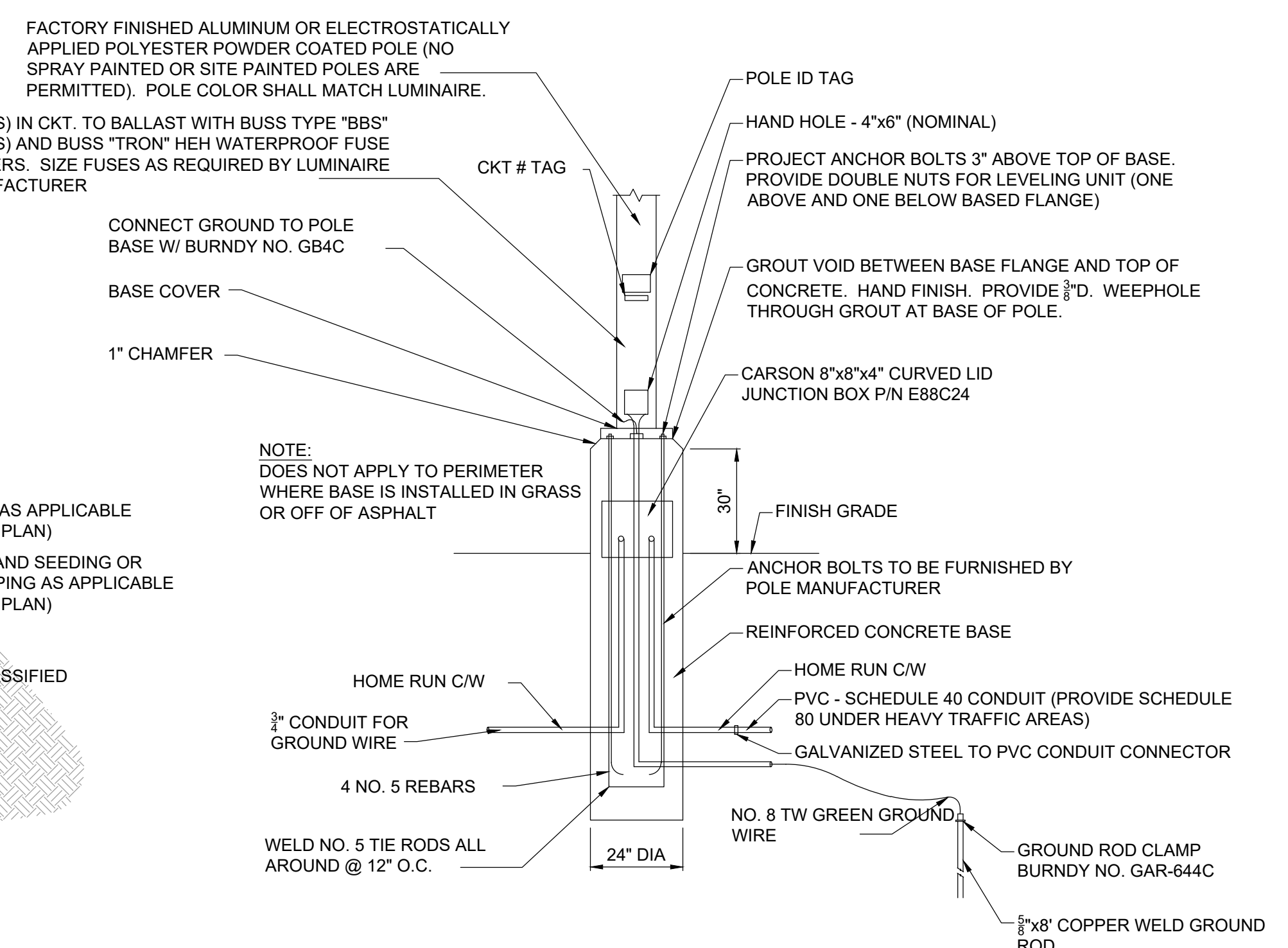
9 TYPE M CONCRETE DRIVEWAY OPENING
SCALE: NONE



10 BARRIER FREE RAMP - TYPE I
SCALE: NONE



11 TYPICAL SIDEWALK DETAIL
SCALE: NONE



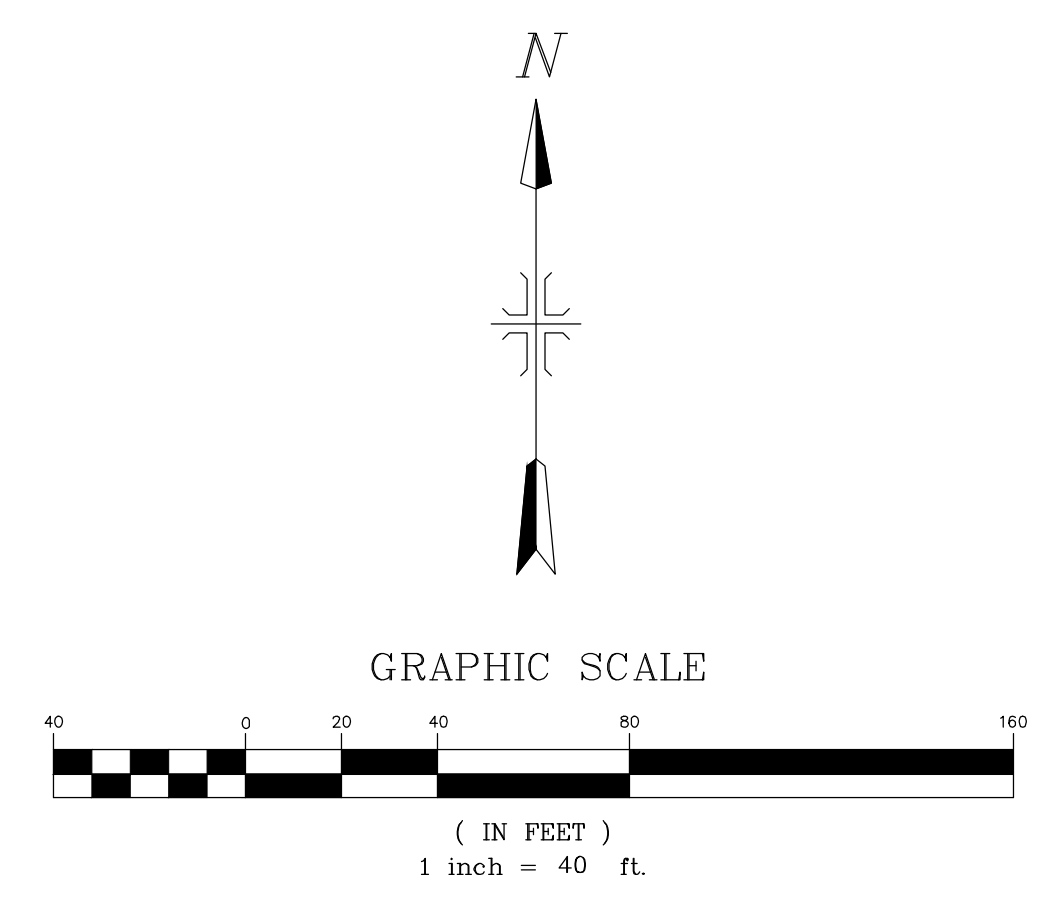
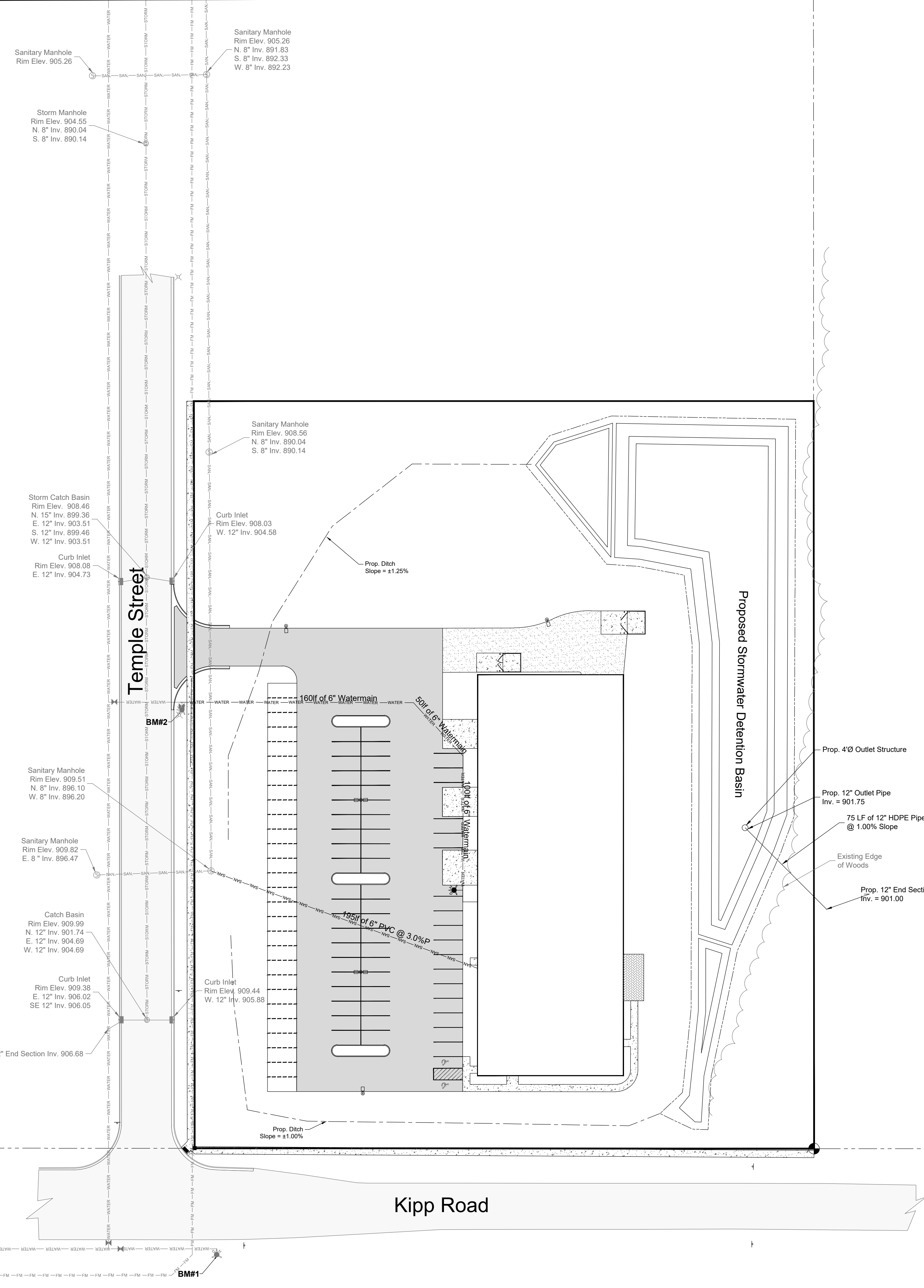
12 LIGHT POLE BASE
SCALE: NONE

PROJECT NUMBER: P-190289	SCALE: N/A
DRAWN BY: S.E. Bell	SHEET: C-6
ENGINEER: Timothy L. Lapham, P.E., P.S. 27595	DATE: August 15, 2019
REVISOR:	
REVISED:	

Site Details
Paul Davis Restoration Mason Development
For
PAUL DAVIS
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PROJECT NUMBER: P-190259	SCALE: 1" = 60'
ENGINEER: Timothy L. Lapham, P.E., P.S. 27692	DRAWN BY: S.E. Bell
REVISER:	DATE: August 15, 2019
SHEET C-7	

Utility Plan

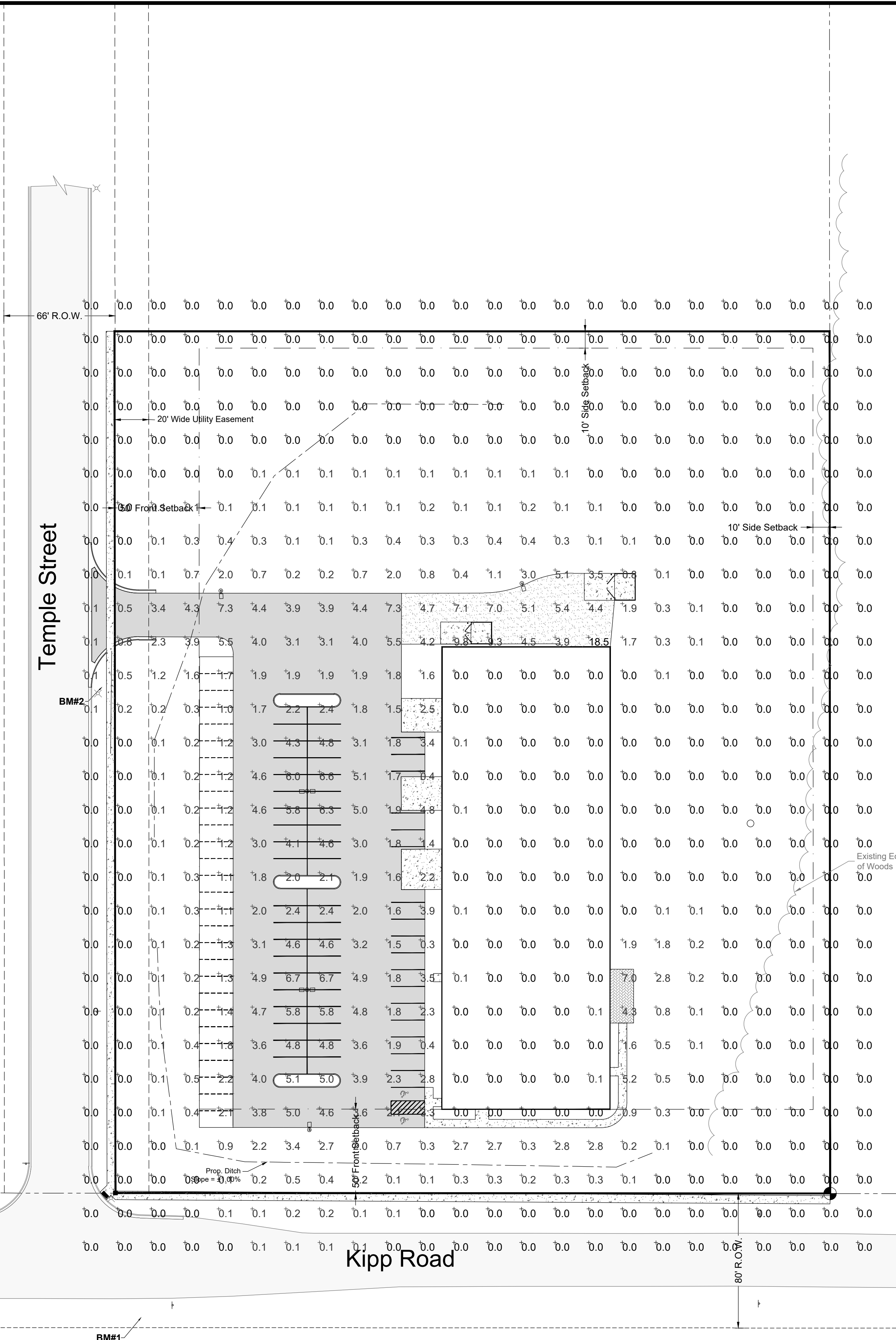
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Lumark

DESCRIPTION
The personal Lumark Crossour™ MAXX LED wall pack series of luminaires provides long-proven architectural style with super bright, energy-efficient LEDs. The rugged die-cast aluminum construction, back box with secure lock hinges, shock-free hardware along with a sealed and gasketed optical compartment make Crossour™ impervious to contaminants. The Crossour™ MAXX wall luminaire is ideal for wall surfaces, inverted mount for fence/utility structures, perimeter and site lighting. Typical applications include pedestrian walkways, building entrances, multi-use facilities, industrial facilities, perimeter parking areas, storage facilities, institutions, schools and loading docks.

SPECIFICATION FEATURES

Construction
Low-profile LED design with rugged one-piece, die-cast aluminum back box and hinged removable door. Mounting housing utilizes anodized aluminum and refractive lens design. Full cast and refractive lens models are available in 80W, 110W and 150W. Patent pending secure lock hinges feature a secure lock hinge feature allow for safe and easy tool-less electrical connections with the supplied push-in connectors. Back box includes four 1/2" NPT threaded conduit entry ports. The back box is secured by four lag bolts (supplied by others). External design details include a recessed gasket made floor and back box. Not recommended for car wash applications.

Optical
Efficient sealed optical LED chamber incorporates a custom engineered reflector providing high-efficiency illumination. Full shield model integrates an impact-resistant modular refractive prism reflector lens assembly meeting requirements for Dark Sky compliance. Refractive lens models incorporate a modular lens.

Electrical
Low-profile LED design with rugged one-piece, die-cast aluminum housing for optimal heat sinking. LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from the LEDs. 80W, 110W and 150W models operate in -40°C to 40°C. 40W to 100W, High ambient 80°C (176°F) models available in 80W, 110W and 150W only. Crossour™ MAXX luminaire models greater than 80W are field installed light output after 72,000 hours of operation. Four half-inch threaded conduit entry ports. Back box is an authorized electrical professional only. 40W to 100W electrical systems other than 240V are not recommended for use with 80W Vys systems only.

Emergency Egress
Optional integrated weather battery emergency egress includes emergency exit switch (available in 80W and 110W models only), an AC/DC indicator light and a premium extended rated sealed maintenance-free sealed-cell marine battery pack. The separate emergency lighting LEDs are tested to provide redundant emergency lighting. Listed to UL Standard E84, Emergency Lighting.

Area and Site Pole Mounting
Optional extended aluminum 1/2" arm houses internal bolt guides for simplified hardware installation allowing for easy positioning of the luminaire during installation to pole. Supplied with round plate adapter fits 2-3/8" or 3-1/2" O.D. Tenon.

Finish
Crossour™ MAXX is protected with a super TOC carbon fiber powder coat. Super TOC powder coat provides superior corrosion resistance and application flexibility. Available in 4000K, 4800K, 5000K, 5600K, 6000K, 6500K, 7000K CCT. Optional 3000K, 5000K and 6000K CCT.

Warranty
Five-year warranty.

APPLICATIONS:
WALL / GARAGE
INVERTED
SITE LIGHTING

XTOR CROSSOUR MAXX LED

DESCRIPTION
XTOR CROSSOUR MAXX LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy-conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and ULULU Listed for wet locations.

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-weld, die-cast aluminum and cast enclosure housing and die-cast aluminum heat sink. A unique, patented, interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics
Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics ensure consistent beam patterns with consistent beam diameter and application spacing. Inherent bolt guides allowing for easy positioning of fixtures during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table.

Electrical
LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 34V 60W or 48V 80W operation. 48V is compatible for use with 48V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galileo LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 80W luminaire maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 800mA, 800mA and 1200mA drive currents (nominal).

Mounting
Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table.

Warranty
Five-year warranty.

FINISHES:
WALL / GARAGE
INVERTED
SITE LIGHTING

POWER AND LUMEN BY FIXTURE MODEL

LED Information	XTOR60	XTOR110	XTOR150	XTOR80W	XTOR110W	XTOR150W
Delivered Lumens	6,132	6,236	6,339	6,132	6,311	6,528
BALB Rating	80-100-C1	80-100-C2	80-100-C1	80-100-C2	80-100-C1	80-100-C2
CCT Range	3000K	5000K	4000K	4000K	3000K	5000K
CR (Color Rendering Index)	90	90	90	90	90	90
Power Consumption (Watts)	60W	80W	80W	80W	80W	80W

LED Information	XTOR60	XTOR110	XTOR150	XTOR80W	XTOR110W	XTOR150W
Delivered Lumens	6,882	6,936	6,972	6,884	7,018	6,678
BALB Rating	80-100-C1	80-100-C2	80-100-C1	80-100-C2	80-100-C1	80-100-C2
CCT Range	3000K	5000K	4000K	4000K	3000K	5000K
CR (Color Rendering Index)	90	90	90	90	90	90
Power Consumption (Watts)	60W	80W	80W	80W	80W	80W

LED Information	XTOR60	XTOR110	XTOR150	XTOR80W	XTOR110W	XTOR150W
Delivered Lumens	12,768	12,890	12,890	12,768	11,861	12,366
BALB Rating	80-100-C1	80-100-C2	80-100-C1	80-100-C2	80-100-C1	80-100-C2
CCT Range	3000K	5000K	4000K	4000K	3000K	5000K
CR (Color Rendering Index)	90	90	90	90	90	90
Power Consumption (Watts)	120W	120W	120W	120W	120W	120W

LED Information	XTOR60	XTOR110	XTOR150	XTOR80W	XTOR110W	XTOR150W
Delivered Lumens	189	N/A	4936	N/A	4936	4936
BALB Rating	N/A	N/A	4000K	N/A	4000K	4000K
CCT Range	N/A	N/A	4000K	N/A	4000K	4000K
CR (Color Rendering Index)	85	N/A	85	N/A	85	85
Power Consumption (Watts)	1.89W	N/A	1.89W	N/A	1.89W	1.89W

LUMEN MAINTENANCE

CURRENT DRAW

Voltage	XTOR60	XTOR110	XTOR150	XTOR80W	XTOR110W	XTOR150W
120V	0.51	0.71	0.94	0.60/0.76	0.60/0.76	0.60/0.76
80V	0.58	0.58	0.52	-	-	-
60V	0.58	0.58	0.50	-	-	-
48V	0.52	0.51	0.50	0.36/0.31	0.36/0.31	0.36/0.31
34V	0.18	0.28	0.30	-	-	-
24V	0.14	0.18	0.24	-	-	-

Streetworks

DESCRIPTION
The Galileo™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy-conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and ULULU Listed for wet locations.

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-weld, die-cast aluminum and cast enclosure housing and die-cast aluminum heat sink. A unique, patented, interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics
Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics ensure consistent beam patterns with consistent beam diameter and application spacing. Inherent bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table.

Warranty
Five-year warranty.

FINISHES:
WALL / GARAGE
INVERTED
SITE LIGHTING

GAN GALLEON LED

DESCRIPTION
The Galileo™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy-conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and ULULU Listed for wet locations.

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Warranty
Five-year warranty.

FINISHES:
WALL / GARAGE
INVERTED
SITE LIGHTING

STANDARD ARM MOUNTING REQUIREMENTS

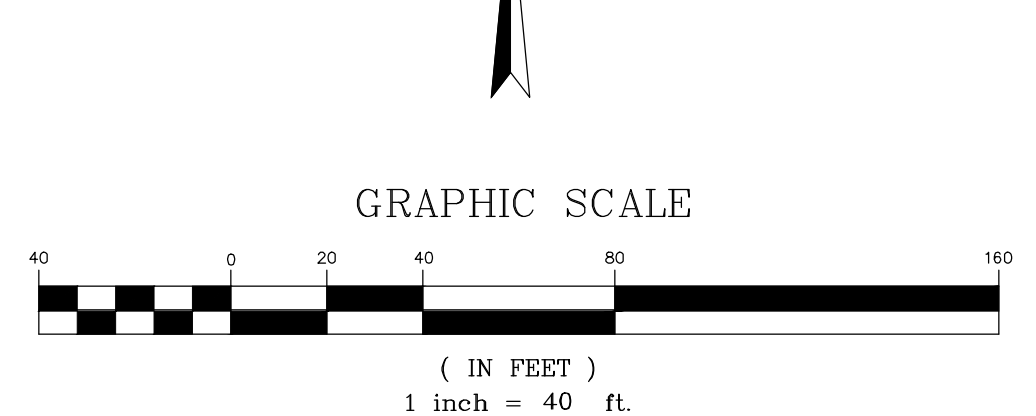
STANDARD WALL MOUNT

QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)

QUICK MOUNT ARM DATA

Number of Light Squares	"1" Width	Weight with GM Arm (Lbs.)	Weight with CMEA Arm (Lbs.)	SPA (Sq. Ft.)
1-4	16-1/2" (419mm)	26 (11.8)	26 (11.8)	1.11
1-4	21-5/8" (550mm)	48 (21.8)	48 (21.8)	1.11
1-4	27-5/8" (707mm)	68 (30.8)	68 (30.8)	1.11

NOTE: 1 GM option available with 1.8 light square configurations. 2 CMEA option available with 1.8 light square configurations. 3 CMEA Arm to be used when mounting two fixtures at 90° on a single pole.



DETENTION POND DESIGN
Per Oakland County Specifications

- Determine contributing acreage (A) and runoff Coefficient (C)

Contributing Acreage

A = 5.00acres

Runoff Coefficient

Cover Description	C	Area (acres)	CxArea
Pervious	0.45	3.21	1.445
Gravel	0.85	0.22	0.187
Impervious	0.95	1.57	1.492
Totals =		5.00	3.124

C (weighted) = Total C x Area / Total Area = 0.625

- Determine maximum allowable outflow Qa

Allowable outflow 0.2 cfs/ac = 0.2cfs/ac x 5.00 ac = 1.00 cfs

- Calculate Outflow Qo

Qo = Qa / (A x C) = (0.2cfs/ac x A) / (A x C) = 0.2cfs/ac / 0.625 = 0.32 cfs/Ac

- Determine the type of outlet that will be used

Orifice outlet

- Calculate Maximum Storage Time (T)

T = -25 + (6875/Qo)^{0.5} = 121.575 min.

- Calculate the Maximum Storage (Vs) from the storage equation

Vs = (16500 T (T + 25)) - 40 Qo T = (2005987.5 / 146.575) - 1556.16

Vs = 12129.58 cft/acre imperviousness

- Calculate Total Volume of storage required for total site (Vt)

Vt = Vs * A * C = 12129.58 * 5.00 * 0.625

Vt = 37,905 cft

- Calculate the Volume of the Sediment Forebay

Required volume = 5% total volume

V = 37,905 cft x 0.05 = 1895.25 cft

South Sediment Forebay:

ELEV	AREA (sq. ft.)	DEPTH (ft)	AVG END INC. VOL. (cu. ft.)	AVG END TOTAL VOL. (cu. ft.)
902.5	343	N/A	0	0
903	953	0.50	324	324
903.5	1633	0.50	647	971

Volume = 971 cft > 948 cft (1/2 required volume)

North Sediment Forebay:

ELEV	AREA (sq. ft.)	DEPTH (ft)	AVG END INC. VOL. (cu. ft.)	AVG END TOTAL VOL. (cu. ft.)
903	2100	N/A	0	0
903.5	2657	0.50	1189	1,189

Volume = 1189 cft > 948 cft (1/2 required volume)

TOTAL VOLUME IN SEDIMENT FOREBAYS = 2160 cft > 1895.25 cft

TOTAL STORAGE VOLUME:

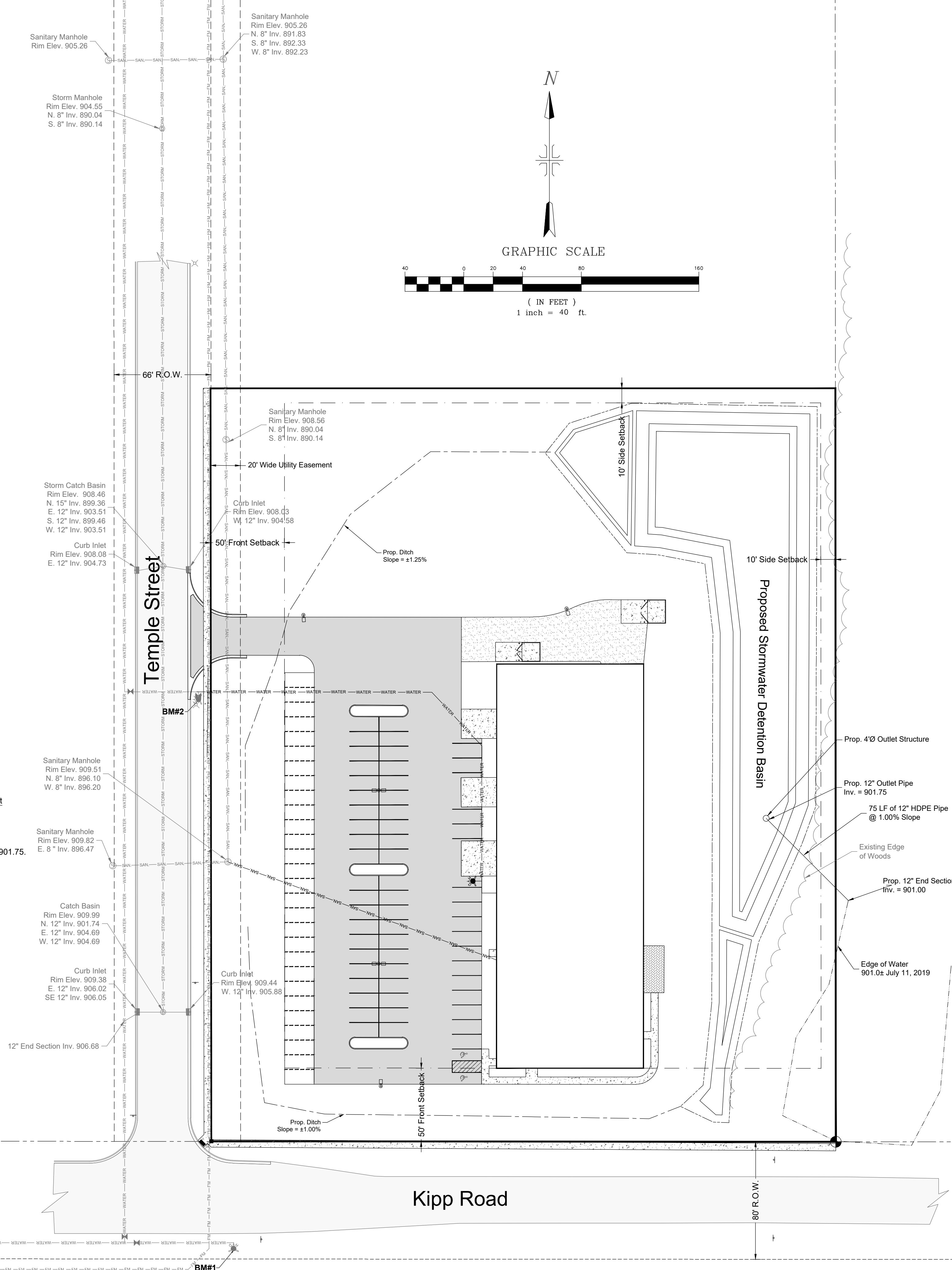
Note: Does not include the permanent pond volume between 900.75-901.75.

ELEV	AREA (sq. ft.)	DEPTH (ft)	AVG END INC. VOL. (cu. ft.)	AVG END TOTAL VOL. (cu. ft.)
901.75	17924	N/A	0	0
902	18971	0.25	4612	4612
902.5	21102	0.50	10018	14,630
903	23282	0.50	11096	25,726
903.5	25511	0.50	12198	37,924

Plus the forebay volume of 2160 cft = 40084 cft > 37905 cft
Freeboard Elevation = 904.50

Grading & Storm Water Notes:

- All sidewalks to have an integral curb with an exposed face of typically 6" above paving unless a ramp at Barrier Free parking spaces.
- Roof drains from the southwest portion of the building shall be connected to drain tiles discharge to CB#9. Roof drains from the northwest portion of the building shall be connected and discharge into CB#12. Roof drains from the east half of the building shall be connected to and discharge into the
- All Grades subject to field adjustment.



OUTLET DESIGN

Required = Permanent Pool Volume (not included in total pond volume) = 4540 x C x A
 = First Flush Volume = 1st Inch of Rainfall = 3630 x C x A
 = Bankfull Volume (discharges between 24-48 hours) = 8170 x C x A

P.P. = 4540 x C x A = 4540 x 5.00 x 0.625 = 14187.50 cft

ELEV	AREA (sq. ft.)	DEPTH (ft)	AVG END INC. VOL. (cu. ft.)	AVG END TOTAL VOL. (cu. ft.)
900.75	13862	N/A	0	0
901	14856	0.25	3590	3590
901.25	15867	0.25	3840	7,430
901.5	16889	0.25	4095	11,525
901.75	17924	0.25	4352	15,877

F.F. = 3630 x C x A = 3630 x 5.00 x 0.625 = 11343.75 cft
 B.F. = 8170 x C x A = 8170 x 5.00 x 0.625 = 25531.25 cft

Proposed Outlet Orifices = (8) 1" Orifices at 901.75 = 0.28 cfs
 First Flush Volume Occurs at an Elevation of 902.33
 First Flush Maximum Discharge = 0.192 cfs = ±24 Hours to Discharge

Bankfull Volume occurs at an Elevation of 902.98
 Bankfull Volume average discharge rate: 25531.25 cft / 86400 sec = 0.2955 cfs
 Additional Orifices = (8) 1" Orifices at 902.33
 Max Discharge Rate = 0.48 cfs, 0.192 cfs at First Flush = average rate of 0.336 cfs
 = ±12 Hours to First Flush Volume = 36 Hours Total (26-48 hours required)

At 100-yr Volume:
 Discharge through orifices at 901.75 = 8 x 0.042 = 0.336 cfs
 Discharge through orifices at 902.33 = 8 x 0.034 = 0.272 cfs
 Additional (4) 2" Orifices at 903.00 = 4 x 0.089 = 0.356 cfs
 MAXIMUM DISCHARGE = 0.964 cfs < 1.00 cfs allowable

ORIFICE DISCHARGE CALCULATIONS

FIRST FLUSH OUTLET VELOCITY

Di	Inch	1
Orifice Equation = CFS =		C*A*(2*g*H) ^{0.5}
REQUIRED ORIFICE DIA (d) = ft	0.083	
Cumulative Area of Orifice (A) = ft ²	0.01	
Orifice Coefficient (C)	0.72	
Gravity Acceleration (G) = ft/s ²	32.20	
Depth of Orifice (H) = ft	0.58	
Orifice Equation = CFS =	0.024	

BANKFULL OUTLET VELOCITY

Di	Inch	1
Orifice Equation = CFS =		C*A*(2*g*H) ^{0.5}
REQUIRED ORIFICE DIA (d) = ft	0.083	
Cumulative Area of Orifice (A) = ft ²	0.01	
Orifice Coefficient (C)	0.72	
Gravity Acceleration (G) = ft/s ²	32.20	
Depth of Orifice (H) = ft	1.75	
Orifice Equation = CFS =	0.042	

BANKFULL OUTLET VELOCITY

Di	Inch	1
Orifice Equation = CFS =		C*A*(2*g*H) ^{0.5}
REQUIRED ORIFICE DIA (d) = ft	0.083	
Cumulative Area of Orifice (A) = ft ²	0.01	
Orifice Coefficient (C)	0.72	
Gravity Acceleration (G) = ft/s ²	32.20	
Depth of Orifice (H) = ft	1.25	
Orifice Equation = CFS =	0.035	

BANKFULL OUTLET VELOCITY

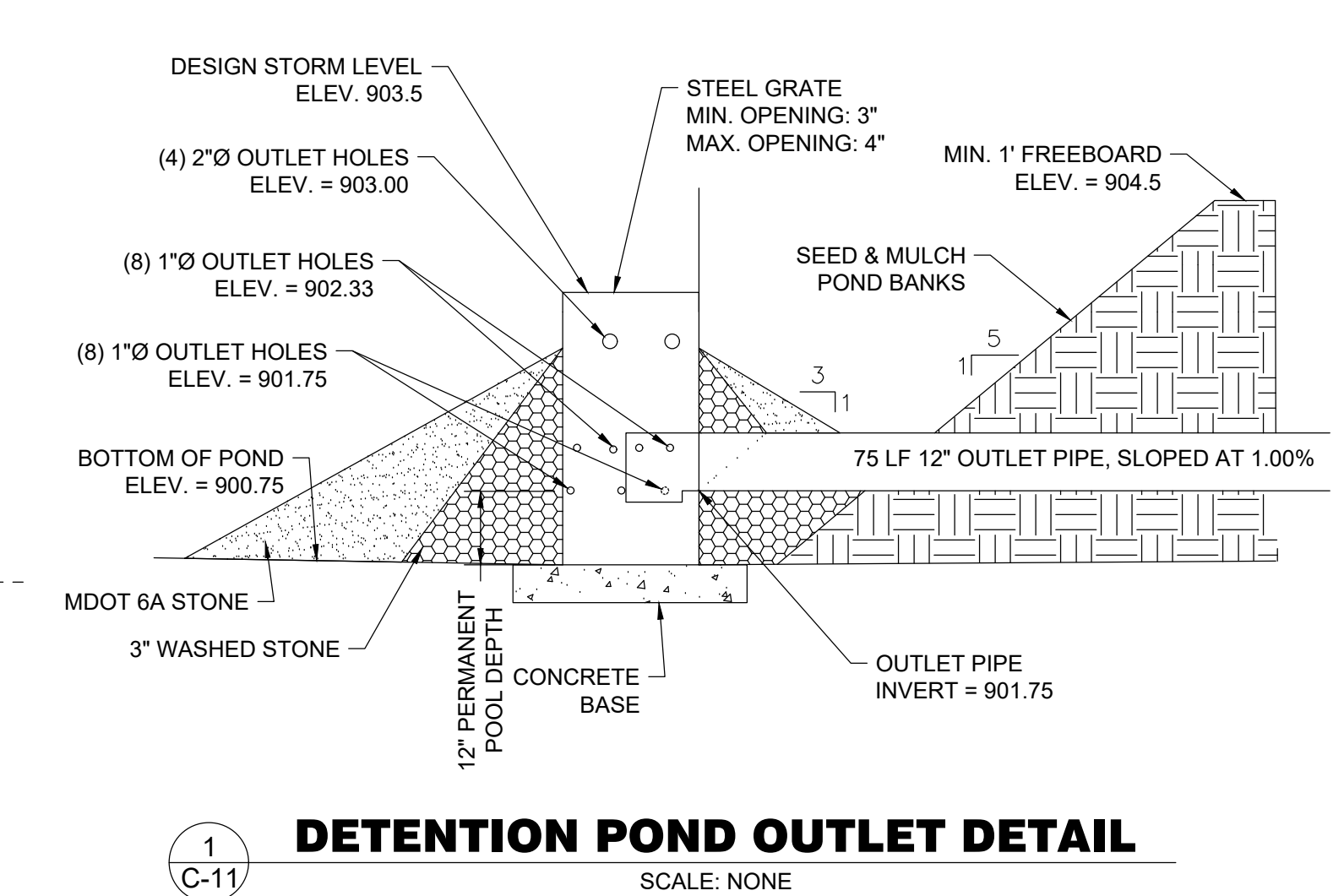
Di	Inch	1
Orifice Equation = CFS =		C*A*(2*g*H) ^{0.5}
REQUIRED ORIFICE DIA (d) = ft	0.083	
Cumulative Area of Orifice (A) = ft ²	0.01	
Orifice Coefficient (C)	0.72	
Gravity Acceleration (G) = ft/s ²	32.20	
Depth of Orifice (H) = ft	1.17	
Orifice Equation = CFS =	0.034	

BANKFULL OUTLET VELOCITY

Di	Inch	1
Orifice Equation = CFS =		C*A*(2*g*H) ^{0.5}
REQUIRED ORIFICE DIA (d) = ft	0.083	
Cumulative Area of Orifice (A) = ft ²	0.01	
Orifice Coefficient (C)	0.72	
Gravity Acceleration (G) = ft/s ²	32.20	
Depth of Orifice (H) = ft	0.65	
Orifice Equation = CFS =	0.025	

BANKFULL OUTLET VELOCITY

Di	Inch	2
Orifice Equation = CFS =		C*A*(2*g*H) ^{0.5}
REQUIRED ORIFICE DIA (d) = ft	0.167	
Cumulative Area of Orifice (A) = ft ²	0.02	
Orifice Coefficient (C)	0.72	
Gravity Acceleration (G) = ft/s ²	32.20	
Depth of Orifice (H) = ft	0.50	
Orifice Equation = CFS =	0.089	



DETENTION POND OUTLET DETAIL
SCALE: NONE

SCALE: 1" = 40'
SHEET C-11
DRAWN BY: S.E. Baill
DATE: August 15, 2019
PROJECT NUMBER: P-190259
ENGINEER: Timothy L. Lapham, P.E., P.S. 27585
REVISOR:
REVISIONS:
Storm Water Management Plan
Paul Davis Restoration Mason Development
For
FED Corporation
PAULDAVIS
RECOVER • RECONSTRUCT • RESTORE
LAPHAM ASSOCIATES
ENGINEERING PLANNING ENVIRONMENTAL SURVEYING
116 South 3rd Street
West Branch, MI 48861
P (989) 345-5030
F (989) 345-7302
www.laphamassoc.com
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C-11

CONCRETE FORMING DIVISION 03 10 00
PART 1 GENERAL
1.01 Scope:
A. Provide, install and remove all concrete formwork and accessories necessary for concrete construction as indicated on the drawings and specified herein.
1.02 Related Work Specified Elsewhere:
A. Concrete Reinforcement -DIVISION 03 20 00
B. Cast-in-place Concrete -DIVISION 03 30 00
1.03 Referenced Standards:
A. ACI, "ACI Manual of Concrete Practice"
B. American Plywood Association, "Plywood for Concrete Forming"
C. American Institute of Timber Construction, "Timber Construction Manual"
D. National Forest Products Association, "Design of Wood Formwork for Concrete Structures"
1.04 Design:
A. The Design and Engineering of Concrete Formwork shall be the responsibility of the Contractor.
PART 2 PRODUCTS
2.01 Form Materials:
A. Forms shall be either metal free of irregularities, dents, and/or sags; or plywood made specifically for concrete form use complying with APA "Plywood for Concrete Forming."
2.02 Coatings and Release Agents:
A. Steel Forms: Colorless mineral oil which will not stain concrete.
2.03 Accessories:
A. Form ties and spreaders shall be removable or snap-off commercially manufactured metal with cone ends leaving no metal exposed within 1" of finished face of concrete and causing no surface disfigurement greater than 3/4" in diameter.
PART 3 EXECUTION
3.01 General Requirements:
A. Design, install, and remove Concrete Formwork specified herein in strict accordance with the Referenced Standards.
3.03 Supplemental Requirements:
A. Attach, as required elsewhere in the Construction Documents or as required to properly interface Concrete Work with the Work of other trades, all required accessories, anchor bolts, hangers, sleeves, slots and/or inserts.
B. Unless indicated otherwise on the Drawings, provide 3/4" chamfer strips at all outside corners of exposed Cast-in-Place Concrete.
C. Earth cuts may be used as forms where concrete is not to be exposed or to receive waterproofing.
D. Formwork shall be constructed to the shape, line, and dimension as required by the plans. Do not scale off plans. Construction is to be according to written dimensions.
E. Forms shall be sufficiently tight to prevent leakage of concrete and shall be properly braced and tied together to maintain position and shape during concrete placement.
END OF SECTION
CONCRETE REINFORCEMENT DIVISION 03 20 00
PART 1 GENERAL
1.01 Scope:
A. Provide and install all concrete reinforcement and accessories, complete, as indicated on the drawings and specified herein.
1.02 Related Work Specified Elsewhere:
A. Concrete Forming -DIVISION 03 10 00
B. Cast-in-Place Concrete -DIVISION 03 30 00
1.03 Referenced Standards:
A. ACE "ACI Manual of Concrete Practice"
B. ASTM A185, "Welded Steel Wire Fabric for Concrete Reinforcement"
C. ASTM A615, "Specifications for Pre formed and Plain Built-Steel Bars for Concrete Reinforcement"
1.04 Storage of Materials:
A. Materials shall be stored so as not to deteriorate due to excessive rusting or become contaminated by foreign substances.
PART 2 PRODUCTS
2.10 Bar Reinforcement:
A. Shall comply with ASTM A615, grade 60 billet steel deformed bars, uncoated finish.
2.02 Welded Wire Fabric:
A. Shall conform to ASTM A185, plain type.
2.03 Accessories:
A. Tie Wire: Annealed steel, 16-gauge minimum.
B. Reinforcement Supports: Galvanized steel bolster, chairs and supports with plastic coating where in contact with formwork.

PART 3 EXECUTION
3.01 General Requirements:
A. Design, fabricate and place Concrete Reinforcement specified herein in strict accordance with Referenced Standards.
3.02 Supplemental Requirements:
A. Unless indicated otherwise on the Drawings, maintain a minimum 3" clearance between all reinforcement specified and the outside face of the concrete enclosing the reinforcement through the use of concrete bricks and galvanized reinforcement bars anchored into adjacent earth where earth cut forms are utilized and through the use of prefabricated chairs and spreaders with vinyl coated feet where concrete formwork utilized.
END OF SECTION
CAST-IN-PLACE CONCRETE DIVISION 03 30 00
PART 1 GENERAL
1.01 Scope:
A. Provide, place, patch, cure and finish all concrete as indicated on the Drawings and specified herein.
1.02 Related Work Specified Elsewhere:
A. Concrete Forming -DIVISION 03 10 00
B. Concrete Reinforcement -DIVISION 03 20 00
1.03 Submittals:
A. Concrete test results.
B. Concrete design mix proposed to comply with Specifications.
C. Provide Specification indicating materials to actually be utilized under this Section if choice permitted.
D. Concrete Truck batch ticket indicating presence of specified admixture and amount added.
1.04 Referenced Standards:
A. ACI, "Manual of Concrete Practice"
B. ASTM C31, "Practice for Making and Curing Concrete Test Specimens in the field"
C. ASTM C33, "Specification for Concrete Aggregates"
D. ASTM C39, "Test Method of Compressive Strength of Cylindrical Concrete Specimens"
E. ASTM C94, "Specification for Ready-Mixed Concrete"
F. ASTM C143, "Test Method for Slump of Hydraulic Cement Concrete"
G. ASTM C150, "Specification for Portland Cement"
H. ASTM C172, "Method of Sampling Freshly Mixed Concrete"
I. ASTM C231, "Test Method of Air Content of Freshly Mixed Concrete By the Pressure Method"
J. ASTM C260, "Specification for Air-Entraining Admixtures for Concrete"
1.05 Testing:
A. Testing of concrete as specified in this section shall be arranged by the Contractor.
B. Concrete shall be sampled, handled and tested in strict accordance with the following Referenced Standards for the procedure indicated.
1) Sampling fresh Concrete: ASTM C172
2) Slump Determination: ASTM C143
3) Making, curing, protecting and transporting concrete test specimens: ASTM C31
4) Testing Compressive Strength: ASTM C39
5) Testing Air Content: ASTM C231
C. The following information shall be recorded concerning each sampling by the Testing Technician:
1) Name of Technician taking sample.
2) Date and time of sampling.
3) Air temperature and weather condition at time of sampling.
4) Design compressive strength of Concrete being sampled.
5) Source of Concrete, Truck Number and Ticket Number if batched offsite.
6) List of Admixtures indicated to be present in Concrete on batch ticket.
7) List of Admixtures and/or water added to the Concrete mix on site, whether added before or after sampling taken by Testing Technician and quantity of item added.
8) Specific location in structure in which the concrete is placed after sampling.
D. Tests shall be performed for each Concrete Sampling to determine the following:
1) Concrete temperature at time of sampling.
2) Concrete Slump.
3) Concrete Air Content, if air entrainment specified, at the time of sampling.
4) Compressive Strength of Test Cylinders in the following quantities at the following increments from the date of sampling:
a) One test at 7 days
b) Two tests at 28 days
c) One specimen shall be retained in reserve for later testing if required.
E. The Testing Laboratory shall prepare a report recording the information required in items C. and D. above and mail the report directly to the Owner, Engineer and Contractor the day of the compressive tests.
F. Four cylinders shall be made for each test. Perform a minimum of one test for each 100 cubic yards per class of concrete placed, but in no case shall there be less than one test for each day's concreting per class of concrete.
G. Concrete to be tested shall be randomly selected by the Testing Technician without direction from the Contractor or material supplier.
PART 2 PRODUCTS
2.01 Concrete:
A. Concrete shall be composed of Portland Cement in conformance with ASTM C150, aggregates in conformance with ASTM C33 and water in conformance with ASTM C94, proportioned to achieve a compressive strength of 3,500 psi at 28 days unless noted otherwise in the specifications or on the drawings. Unless noted otherwise the maximum allowable slump shall be 4".
B. Unless noted otherwise the water-cement ration shall not exceed .5 by weight.
C. Air-entraining Admixture, where specified, shall conform with Referenced Standard ASTM C260. Provide air entraining admixture for all concrete exposed to freeze-thaw cycling. Air content shall be 7% +/- 1%.
2.02 Additives:
A. Admixtures containing thioyanates or calcium chloride are not permitted.
B. Water reducing chemical admixtures shall conform to ASTM C494 - Type A.

C. Unless specified herein, additives or admixtures shall not be used without written approval from the Engineer.
2.03 Curing Compound:
A. "Ellis Clear Acrylic cure 309" as manufactured by Ellis Construction Accessories, or equal meeting ASTM C309. Curing compound shall be an acrylic formula designed and certified to be compatible with resilient flooring adhesives.
2.04 Non-Shrink Grout:
A. "Masterflow 713" by Master Building Co.; "Sonogrount" by Sonnebrone Building Products; "Crystex", as manufactured by L&M Construction Chemicals, Inc., or approved equal; with a minimum compressive strength of 5 psi at 28 days.
2.05 Vapor Barrier:
A. 6 mil. polyethylene film.
PART 3 EXECUTION
3.01 General Requirements:
A. Mix, transport, test, place, finish and cure all Cast-In-Place Concrete and other products specified herein in strict accordance with Referenced Standards and manufacturer's written specifications.
B. Notify Testing Laboratory 24 hours prior to placement of all concrete.
3.02 Supplemental Requirements:
A. Grind smooth surface projections, remove loose concrete and patch with Non-shrink grout, in strict accordance with manufacturer's written specifications, all surface honeycombs, wall tie holes and other vertical wall surface deformations on concrete walls to be exposed or to receive waterproofing assembly.
B. Provide light broom finish on sidewalks unless noted otherwise.
C. Apply curing Compound to all slab concrete in strict accordance with manufacturer's written specifications. Apply in sufficient quantity and reapply if necessary depending on weather conditions to protect concrete from premature drying. Apply additional coat of Curing Compound to slab concrete immediately after final cleaning of floor.
D. Perform Cold Weather Concreting operations in strict accordance with the requirements of ACI 306R.
E. Perform Hot Weather Concreting operations in strict accordance with the requirements of ACI 305R.
F. Secure and install items to be embedded in Cast-In-Place Concrete in strict accordance with the manufacturer's written specifications, Referenced Standards and/or as indicated in the Drawings and Specifications.
3.03 Defective Concrete:
A. Modify or replace concrete not conforming to required strength, levels, lines, details, and elevations.
B. Repair or replace concrete not properly placed or not of the specified type or finish.
END OF SECTION
SITE CLEARING SECTION 31 10 00
PART 1 - GENERAL
1.01 DESCRIPTION OF WORK
The extent of site preparation work expected to be minimal. This work includes, but is not limited to furnishing all labor, material, equipment, tools, incidentals, and services necessary for:
Temporary silt fencing
Protection of existing trees and vegetation
Related work as required
1.02 SOIL EROSION AND SEDIMENTATION CONTROL
A. Purpose - The purpose of this section is to minimize soil erosion and control sedimentation as required by the Soil Erosion and Sedimentation Control Act, Part 91, PA 451 of 1994 of the State of Michigan as amended.
B. Permit - It is anticipated that a Soil Erosion and Sedimentation Control Permit will be required for this project. If a permit is required it shall be obtained prior to construction and shall be the responsibility of the contractor.
C. Implementation - It shall be the responsibility of the Contractor to implement the Soil Erosion and Sedimentation Control Plan for this project in strict accordance with the permit, if required to be obtained. Unless specified within other sections of the specifications, all work under this section shall be in strict accordance with the construction methods as prescribed by the State of Michigan Department of Natural Resources for the implementation of this legislation. Refer to Michigan Guidebook for Soil Erosion and Sedimentation Control, prepared for and distributed by the Water Resources Commission of the Department of Natural Resources, State of Michigan.
1.03 JOB CONDITIONS
A. Protection of Existing Improvements - Provide barricades, coverings or other types of protection necessary to prevent damage to existing improvements indicated to remain in place. Protect improvements on adjoining properties and on the Owner's property. Restore any improvements damaged by this work to the original condition as acceptable to the Owner and other parties or authorities having jurisdiction.
PART 2 - PRODUCTS
2.01 PREASSEMBLED SILT FENCE
A. Geotextile fabric - Polypropylene woven fabric, 2.3 oz./sq.yd., UV resistance 80% Proplex 2127, as mfd by Amoco Fabrics and Fibers Company, Austell, GA (770-944-4569), or approved equal.
B. Silt Fence posts - As mfd by Amoco Fabrics and Fibers Company, Austell, GA (770-944-4569), or approved equal.
PART 3 - EXECUTION
3.01 GENERAL
Call Miss Dig (1-800-482-7171) 72 hours prior to start of clearing and excavation work. Work shall not begin on site until after the project site has been marked by all utility companies.
3.02 PREASSEMBLED SILT FENCE
Install silt fencing where shown on drawings and prior to beginning site clearing and grubbing work. Unroll, stretch, and drive fence posts plumb. Posts shall be installed on the downward side of the fencing. The bottom of the fabric shall be placed under 6" of compacted soil to prevent sediment from flowing underneath the fence.
3.01 GENERAL
Call Miss Dig (1-800-482-7171) 72 hours prior to start of clearing and excavation work. Work shall not begin on site until after the project site has been marked by all utility companies.
3.02 PREASSEMBLED SILT FENCE
Install silt fencing where shown on drawings and prior to beginning site clearing and grubbing work. Unroll, stretch, and drive fence posts plumb. Posts shall be installed on the downward side of the fencing. The bottom of the fabric shall be placed under 6" of compacted soil to prevent sediment from flowing underneath the fence.
3.01 EXCAVATION
A. Excavation consists of removal and disposal of material encountered when establishing required grade elevations. Earth excavation includes removal and disposal of pavements and other obstructions visible on the ground surface, underground structures and utilities indicated to be demolished and removed, material of any classification indicated in data on subsurface conditions, and other materials encountered that are not classified as rock excavation or unauthorized excavation. Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of the owner or engineer. Unauthorized excavation, as well as remedial work directed by the owner or engineer, shall be at the expense of the Contractor.

3.03 SITE CLEARING AND GRUBBING
Remove vegetation, improvements or obstruction interfering with the installation of new construction. Clear the project site of trees, shrubs and other vegetation - except for those indicated to be left standing. Removal includes new and old stumps of trees and their roots. Carefully and cleanly cut roots and branches of trees indicated to be left standing, where such roots and branches obstruct new construction. Completely remove stumps, roots and other debris protruding through the ground surface. Use only hand methods for grubbing inside the drip line of trees indicated to be left standing. Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated. Place fill material in horizontal layers not exceeding 0.5' loose depth, and thoroughly compact to a density equal to adjacent original ground.
3.04 DISPOSAL OF WASTE MATERIALS
Burning of combustible cleared and grubbed materials is not permitted on the Owner's property. Remove from the Owner's property and legally dispose of all waste materials and unsuitable or excess soils.
3.05 TOPSOIL REMOVAL
Topsoil is defined as friable clay loam surface soil found in a depth of not less than 0.4' or greater depth as indicated on the drawings. Satisfactory topsoil is reasonably free of subsoil, clay lumps, stones and other objects over 2.0" in diameter, and without weeds, roots and foreign materials. Strip topsoil from within the areas to be occupied by the construction and from other areas within the grading limits to be cut, filled or re-graded. Strip topsoil to whatever depth encountered in a manner to prevent intermingling with the underlying subsoil or objectionable material. Remove heavy growth of grass from areas before stripping. Where trees are indicated to be left standing, strip topsoil stripping at a sufficient distance to prevent damage to the main root system. Stockpile topsoil as indicated and where it will not interfere with construction operations or site work. Locate topsoil storage piles in areas shown or where otherwise directed. Construct storage piles to freely drain surface water and cover if required to prevent windblown dust. If soil or weather conditions are unsuitable, the Contractor shall cease topsoil removal operations and resume only when directed to do so by the owner or engineer. Dispose of excess topsoil the same as waste material, herein specified.
3.06 SILT FENCE REMOVAL
Upon completion of all work, remove the silt control fence and legally dispose off project site. Rake and smooth soil along location of silt fence, and seed as required.
END OF SECTION
EARTH MOVING SECTION 31 20 00
PART 1 - GENERAL
1.01 DESCRIPTION OF WORK
The extent of Earthwork required is shown on the drawings. This work includes, but is not limited to furnishing all labor, material, equipment, tools, incidentals, and services necessary for:
Site grading
Placement of fill materials
Related work as required
1.02 QUALITY ASSURANCE
A. Codes and Standards - Perform excavation work in compliance with applicable requirements of governing authorities having jurisdiction.
B. Lines and Grades - The Contractor shall provide all instrumental surveying required to lay out and construct this work in conformance with the drawings.
1.03 JOB CONDITIONS
A. Site Information - The Contractor shall make his or her own investigation, as he or she deems necessary prior to the bid opening. Data on surface or subsurface conditions is not intended as representations or warranties of accuracy or continuity of actual site conditions. It is expressly understood that the Owner and project consultants employed as representatives of the work will not be responsible for interpretations or conclusions drawn therefrom by the Contractor. Data made available is for the convenience of the Contractor.
B. Existing Utilities - Call MISS DIG prior to beginning work on the site. Locate existing underground utilities in the areas of work. If utilities are to remain in place, provide adequate means of protection during earthwork operations. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult the utility owner immediately for directions. Cooperate with the Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to the satisfaction of the utility owner. Do not interrupt existing utilities serving facilities occupied and used by the Owner or others, except when permitted in writing by the owner or engineer, and then only after acceptable temporary utility services have been provided.
C. Explosives - The use of explosives is not permitted.
D. Protection of Persons and Property - Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washouts and other hazards created by earthwork operations.
PART 2 - PRODUCTS
2.01 DEFINITIONS
A. Standards - Satisfactory soil materials are defined as those complying with American Association of State Highway and Transportation Officials (AASHTO) M145, soil classification Groups A-1, A-2-4, A-2-5 and A-3. Unsatisfactory soil materials are those defined in AASHTO M145 Soil Classification Groups A-2-6, A-2-7, A-4, A-6 and A-7. Also listed as unsatisfactory are peat and other highly organic soils. Cohesion-less soil materials include gravel, sand gravel mixture and gravelly sands. Cohesive soil materials include clay and silty gravel, sand clay mixtures, gravel silt mixtures, clay and silty sands, sand silt mixtures, clays, silts and very fine sands.
B. Subbase Material - Subbase material shall be properly graded mixtures of natural or crushed gravel, crushed stone, crushed slag, or natural or processed sand that will readily compact to the required density complying with AASHTO M147, Grade A, unless otherwise indicated or acceptable to the owner or engineer.
C. Topsoil - Topsoil shall be fertile, friable organic soil, characteristic of the soils in the project area that will produce heavy growths of vegetation. Topsoil shall be capable of supporting a healthy and vigorous stand of turf (lawn) grass.
PART 3 - EXECUTION
3.01 EXCAVATION
A. Excavation consists of removal and disposal of material encountered when establishing required grade elevations. Earth excavation includes removal and disposal of pavements and other obstructions visible on the ground surface, underground structures and utilities indicated to be demolished and removed, material of any classification indicated in data on subsurface conditions, and other materials encountered that are not classified as rock excavation or unauthorized excavation. Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of the owner or engineer. Unauthorized excavation, as well as remedial work directed by the owner or engineer, shall be at the expense of the Contractor.

B. Dewatering - Prevent surface water and subsurface or groundwater from flowing into excavations and from flooding project site and surrounding area. Convey water removed from excavations and rainwater to collecting or runoff areas. Establish and maintain temporary drainage ditches and other diversions outside excavation limits for each structure. Do not use trench excavations as temporary drainage ditches.
C. Materials Storage - Stockpile satisfactory excavated materials where directed, until required for fill. Place grade and shape stockpiles for proper drainage. Locate and retain soil materials away from the edge of excavations. Cover stockpile, or provide temporary vegetative cover as may be required to comply with the Soil Erosion and Sedimentation Act. Dispose of excess soil material and waste materials as directed.
3.03 COMPACTION
Control soil compaction during construction providing minimum percentages of density specified for each area classification. Compact soil to not less than the following percentages of maximum dry density for soils that exhibit a well-defined moisture density relationship determined in accordance with ASTM D 1557.
3.04 BACKFILL AND FILL
Place acceptable soil material in layers to required subgrade elevations, for each area classification listed below:
A. Placement and Compaction - Place fill materials in layers not more than 1.0 foot in loose depth for material compaction by heavy construction equipment and not more than 0.5 foot in loose depth for material compacted by hand operated tampers.
B. At Existing Trees to Remain - Remove vegetation within drip line and fill with a single layer of uncompacted topsoil. Hand grade to attain required finish grade.
3.05 DISTRIBUTION OF TOPSOIL
Prior to topsoil placement, the subgrade shall be prepared to uniform levels and slope between points where elevations are shown. Abrupt changes in slope are to be rounded off. Loosen subgrade to a minimum depth of 0.4 foot. Remove stones over 1.0" in any dimension and sticks, roots, rubbish and other extraneous matter. Fine rake by York Rake®, Viking Roller Blade®, or approved equal or by hand to produce a smooth even surface that conforms to the grades established on the drawings. Any irregularities shall be corrected in order to prevent the formation of depressions or water pockets. Topsoil shall be uniformly distributed to a minimum depth of 0.4 foot after firming, unless otherwise indicated. Topsoil in planting bed areas, if applicable, shall be placed to a minimum depth of 1.0 foot. Topsoil shall be spread in such a manner that finish grading, seeding or sodding, and landscape planting operations can proceed with a minimum of additional soil preparation. Place approximately 50% of the total amount of the topsoil required, work into top of loosened subgrade to create a transition layer, and then place remainder of topsoil. Topsoil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet or in a condition that may otherwise be detrimental to proper grading. Irregularities in the surface resulting from topsoil spreading or other operations shall be corrected in order to prevent the formation of depressions or water pockets. Provide additional clean topsoil - subject to approval of the owner or engineer - as may be required to complete work. Remove any excess topsoil from the site, or distribute it and grade it as directed by engineer on site if approved by Owner.
3.06 MAINTENANCE
A. Protection of Graded Areas - Protect newly graded areas from traffic and erosion. Keep free of trash and debris. Repair and reestablish grades in settled, eroded and rutted areas to specified tolerances.
B. Reconditioning of Compacted Areas - Where completed compacted areas are disturbed by subsequent construction operation or adverse weather, scarify surface, reshape and compact to required density prior to further construction.
3.07 DISPOSAL OF EXCESS AND WASTE MATERIALS
Remove excess excavated material, soil, trash, debris and waste materials and legally dispose of such off the property, except as otherwise specifically noted.
END OF SECTION
BASES, BALLASTS AND PAVING DIVISION 32 10 00
PART 1 GENERAL
1.01 Scope:
A. Provide sub-base, base and bituminous paving for driveways walkway, sidewalk, and concrete pads, as indicated on the drawings, as specified herein, and as needed for a complete and proper installation.
1.02 Referenced Standards:
A. MDOT Standard Specifications
PART 2 PRODUCTS
2.01 Materials
A. MDOT 22A Aggregate (Base)
B. MDOT Class II Granular Material (Subbase)
C. MDOT 13A HMA (Pavement)
D. Seed, Mulch and Fertilizer (See Seeding Section 32 92 00)

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Site Specifications
Paul Davis Restoration Mason Development
For
FED Corporation

PROJECT NUMBER: P-190289
ENGINEER: Timothy L. Lapham, P.E., P.S., 27595
DRAWN BY: S.E. Bell
SCALE: N/A
SHEET C-12

PART 3 EXECUTION

3.01 General Requirements:

A. Base

- Subgrade Preparation for Subbase - The subgrade shall be smoothed and trimmed to the required line, graded and cross sectioned to receive the sub base course with no topsoil, organic material, sticks, roots or other deleterious materials and shall be compacted to not less than 90 percent (90%) M.U.W.
- Subbase Preparation for Base - The subbase shall be smoothed and trimmed to the required line, grade, and cross section to receive the base course and shall be compacted to not less than 95 percent (95%) of M.U.W.
- The subbase thus formed shall be maintained in a smooth and compacted condition until the base course has been placed.
- No base course shall be placed on the subbase until it has been approved in writing by the Engineer or owner.
 - Placing Base - aggregate base shall not be placed when there are indications that the mixture may become frozen before the M.U.W. is attained and in no case shall the base be placed on a frozen subbase or subgrade.
- The subbase shall be shaped to the specified crown and grade and maintained in a smooth condition. If hauling equipment should cause ruts in the subbase, such equipment will not be permitted on the subbase but shall be operated on the aggregate base.
- The aggregate shall be placed in uniform layers to such a depth that when compacted the course will have the thickness shown on the plans. The aggregate shall be compacted to not less than 98% of M.U.W.
- The finished surface shall be shaped to the crown and grade within a tolerance of ¼ inch, more or less. The surface shall be continuously maintained in a smooth condition.
- Should the subbase or aggregate base become damaged due to the Contractor's operation, the subgrade, subbase or base shall be restored to the conditions required by these specifications at the Contractor's expense.
- If the subbase or subgrade at any time prior to acceptance of the work becomes soft or unstable to the extent that it is forced up through or prevents compaction of the aggregate, such subbase or subgrade material and aggregate shall be immediately removed and disposed of and new material shall be placed and compacted as required by these documents.
- A certification that the base material is in compliance with MDOT Specifications for Aggregate Base under Bituminous 22A shall be furnished to the Owner prior to payment or test slips shall be provided.

B. Bituminous Paving

- All materials and placement shall meet the requirements specified in MDOT Specifications, current Edition.
- A certification that the bituminous material is in compliance with MDOT Specifications shall be furnished to the Owner prior to payment for the material.

C. Foundation Preparation

- Before placing the bituminous mixture, the surface of the foundation shall be swept clean and all foreign material removed.
- The finished aggregate base surface shall be shaped to the crown and grade within a tolerance of plus or minus ¼ inch, and compacted to at least 98% of M.U.W. before placing bituminous material.
- Catch basins, manhole covers, and water valve covers shall be adjusted to the proper elevation by removing the castings and setting them to the required elevation by supporting them on a concrete collar or on masonry so constructed as to hold them firmly in place and not allow settlement around them.

D. Rollers

- Self-propelled steel tandem rollers weighing not less than eight tons each will be required unless rollers of other types are specifically permitted. Rollers shall be equipped with wheel sprinklers and scrapers.

E. Placing Bituminous Paving

- Bituminous mixture shall be placed with an approved mechanical paver. Bituminous material thickness shall not exceed 2-½ inches per application. Placing, rolling and other requirements or restrictions shall be governed by the MDOT Specifications, current Edition.
- No bituminous material shall be placed without written permission from the Engineer.

END OF SECTION

TURF & GRASSES
SECTION 32 92 00

PART 1 - GENERAL

1.01 SCOPE
The extent of seeding work required for this project is shown on the drawings. The work of this section includes, but is not limited to furnishing all labor, materials, tools, incidentals, equipment and service for:

- Seeding of all turf.
- Related work as required

1.03 DELIVERY, STORAGE AND HANDLING
Seed and fertilizer materials shall be in original unopened containers and shall indicate weight, analysis, germination rate, name, and date code of the manufacturer. Materials shall be stored in an orderly manner, at a location acceptable to the Engineer, in a manner to prevent wetting and/or deterioration.

1.04 PROJECT CONDITIONS

- Seed Blend - Submit proposed seed blend to the owner or Engineer for approval.
- Seeding - Perform seeding work only after other work affecting ground surface has been completed.
- Watering - Provide adequate hose and watering equipment as required.
- Germination - Within thirty (30) days after seeding, it is expected that 60-80% of the seed will have germinated and grown.

1.05 SITE CONDITIONS
All unsatisfactory topsoil quantities or qualities or other unsatisfactory conditions detrimental to seeding shall be reported in writing to the Engineer or Owner. Seeding shall not continue prior to correction of, or written acceptance of the encountered conditions by the Owner.

1.06 WARRANTY
The Contractor shall provide a uniform stand of grass and shall provide watering, mowing and maintenance of all seeded areas prior to final acceptance by the Owner. The Contractor shall reseed all areas, with specified materials, which fail to provide a uniform stand of grass until the Owner accepts all affected areas.

PART 2 - PRODUCTS

2.01 TURF SEED

- Turf Supplier: All turf seed shall be as supplied from Michigan State Seed Company, 717 Clinton St., Grand Ledge, MI (Ph. 800-647-8873) or approved alternate source.
- Permanent cover (& Dormant Cover): shall be a consistent mixture of the following varieties for the Area Designated:

Grade A Mixture	
Seed %/Wt. Germination	
Kentucky Bluegrass (Mix.)	40% 85%
Fine Fescue	40% 85%

Note: On highly erodible slopes, contractor may have to add other varieties to the seed mix such as cereal grass.

2.02 FERTILIZER
Fertilizer for turf areas shall have a chemical analysis of at least 12% available nitrogen, 12% readily available phosphoric acid and 12% total available potash (12-12-12).

2.03 HYDRO-SEED MULCH
Nu-Wool® HydroGreen Plus™ 50/50 Hydroseeding Mulch, prepared for use in a tank of a hydro-mulching machine, as mfd by Nu-Wool, Inc., Jenison, MI, (Ph. 800-748-0128), or approved equal. Mulch shall be made from recycled paper material and be green in color. Mulch may be made from 50% virgin wood fiber and 50% recycled paper where approved by the Engineer.

2.04 STRAW MULCH
Mulch shall be straw or other approved organic material commonly used by the industry for the purpose of the mulching of seeded areas, and approved by the Engineer. Mulch shall be held in place with an approved seal/binder agent and Nu-Wool® HydroGreen Plus™ 50/50 Hydroseeding Mulch.

2.05 STRAW BINDER/ SEALER
Terra-Mulch Tacking Agent III, a water emulsified acrylic resin, Seal, as manufactured by Profile Products, Buffalo Grove, IL, (Ph. 800-508-8681), or approved equal.

2.06 WATER
Water shall be potable water, free of substance harmful to seed growth or other foreign mater. The Contractor shall furnish hoses and other methods of water transportation and application.

PART 3 - EXECUTION

3.01 TURF AREA SURFACE PREPARATION
Topsoil shall be fine raked to produce a smooth even surface that conforms to established grades. All stones, roots, clods 1.0" and larger in diameter, and all foreign matter shall be removed from the surface of areas to be seeded. The area shall be made smooth and uniform and parallel to the finished grade. The tops and bottoms of all slopes shall be rounded to blend into the natural ground or adjacent slopes by vertical curves. Seeded areas will be allowed a tolerance of 0.1 foot. Slope for drainage over turf areas shall have a minimum grade of 0.5%.

3.02 TURF - HYDRO-SEEDING METHOD

- This method shall be used for permanent seeding unless otherwise authorized in writing by the Engineer. The mixture of the seed, fertilizer, mulch and a tackifier used shall be as follows (2 parts water to one part mulch):
Grade A Seed Mixture: 4-5# /1,000 sq. ft. (175-220#/acre)
Fertilizer: 3.5# /1,000 sq. ft.
Hydro-Seed Mulch:
On slopes up to 3/1: (38) 40# bags / acre
On slopes from 3:1 to 2:1: (50) 40# bags / acre
Greater than 2:1 slopes: (62.5) 40# bags / acre. Tackifier: 20# /acre (or more based on slope and mfr's recommendations)
- Slopes 2:1 and greater shall also be straw mulched after being hydroseeded. Apply straw, and then apply Terra-Mulch Seal and Nu-Wool® HydroGreen Plus™ 50/50 with a hydroseeder at the rate as recommended by mfr.
- Protect surfaces and areas from overspray which are not indicated to be hydroseeded, including shrub bed, walks, light poles, etc. Immediately remove and clean hydroseed material from all such areas, which may accidentally have been sprayed.
- Provide barriers as required to keep traffic off the seeded areas after they are completed. Contractor shall remove all barriers he installed when turf is established, and before acceptance by Owner.
- For dormant cover areas, mulching must also be used on the hydro-seeded areas. The rate of application shall be 3 tons per acre of prepared seed bed.

3.09 TURF - MULCHING
Spread straw at the rate of one bale per 1000 square feet (43.5 bales /acre). Straw shall be mechanically crimped, and a sealer/binder shall be applied by hydro-seeder at the rate of 30# to 1,000 gallons of water along with 150# cellulose fiber per acre.

3.12 WATERING
To the point of acceptance, the Contractor shall be responsible for providing adequate water and application to assure the establishment of a dense, permanent turf. Provide adequate water during germination and after to continually keep the seed bed moist (without puddling).

END OF SECTION

PROJECT NUMBER: P-190269	DRAWN BY: S.E. Bell	SCALE: N/A
ENGINEER: Timothy L. Lapham, P.E., P.S., 27595	DATE: August 15, 2019	SHEET C-13
REVISED:		
REVISED:		

Site Specifications
Paul Davis Restoration Mason Development
For
FED Corporation

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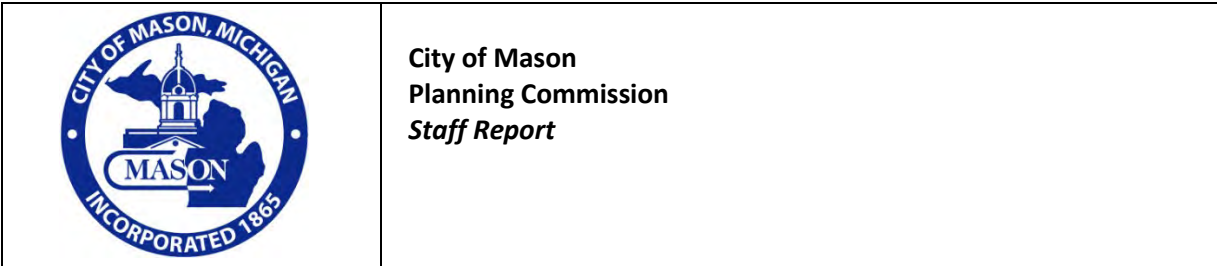
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C-13



TO: Planning Commission
 FROM: Elizabeth A. Hude, AICP, Community Development Director
 SUBJECT: Rayner Ponds Phase 4
 DATE: Thursday, September 5, 2019

James Giguere, Giguere Realty & Development, LLC, is requesting a Preliminary Site Plan Approval for the development of a new subdivision with 20 buildable lots and one common area. The subdivision will include paved public streets, public water, public sanitary sewer, and public storm sewer. The new subdivision will be developed on property located north of the intersection of Stratford and Eaton roads, parcel 33-19-10-04-426-002 POLP, City of Mason, Ingham Co. A full legal description is included in the application materials.

The proposal is shown on the following plans and documents:

- Zoning Permit Application, received August 13, 2019
- Plan set dated August 9, 2019

The applicant paid a fee of \$200 (\$200 Preliminary Site Plan Review), and together with the plans and documents listed above, the application appears to satisfy the submittal requirements of Sec. 94-226(c).

CONSTRUCTION SCHEDULE

The project is expected to begin as soon as possible for completion in May 2020.

LAND USE/ZONING/MASTER PLAN

The development is proposed on parcels zoned RS-2 Single Family Residential. The existing surrounding land uses, zoning, and planned future use are as follows:

	Current Land Use	Current Zoning	Future Land Use (Master Plan)
North	Single-family Residential	RS-2 Single Family Residential	Residential
West	Single-family Residential	RS-2 Single Family Residential	Residential
South	Single-family Residential	RS-2 Single Family Residential	Residential
East	Single-family Residential	RS-2 Single Family Residential	Residential

The use and redevelopment of this property is generally consistent with the Master Plan’s Future Land Use Strategy (Chapter Three) as described on page 3-5, Residential.

COMMENTS – DEPARTMENTS AND AGENCIES

Staff circulated the application and plans to city staff and agencies with jurisdiction over the project. The following comments were received:

CITY ENGINEER	Pending
FIRE	No concerns
POLICE	No concerns
Ingham County Drain Commission	Pending

STAFF REVIEW

Staff finds that the site plan appears to meet the site development standards of the Zoning Ordinance Preliminary Site Plan approval is recommended. Comments are presented below regarding the proposal’s compliance with review standards and is intended to serve as findings of fact.

§94-227. Standards for site plan review and approval. In reviewing an application for site plan review and approval the following standards shall apply:

STATUS/ NOTE	REQUIREMENT
M = Appears to meet requirement; D = Does not appear to meet requirement; I = Information Needed; R = Recommendation; W = Waiver Requested; <i>Italics = Staff comments</i>	
M	(1) The site shall be developed so that all elements shall be harmoniously and efficiently organized in relation to the size, shape, type and topography of the site and surrounding property.
<i>The new 20 residential lot subdivision, phase four of the existing Rayner Ponds Estates development, appears to be developed in a manner that fits the character of the surrounding neighborhood. Access to Martells Lane is provided by Stratford Drive, creating adequate circulation of vehicles and access for emergency vehicles.</i>	
M	(2) The site shall be developed so as not to impede the normal and orderly development, improvement, and use of surrounding property for uses permitted in this chapter.
<i>The new residential neighborhood will not impede future developments and improvements on surrounding properties. All surrounding properties are residential in character and part of the Rayner Ponds Estates Development. It is anticipated that traffic levels will not be excessive or that the use of the property would generate excessive noise or other nuisance conditions. Martells Lane provides for the extension of the road to serve potential future development to the east.</i>	
M	(3) All buildings or groups of buildings shall be arranged to permit emergency vehicle access by some practical means to all sites.
<i>The new residential lots will be accessible to emergency vehicles from either Stratford Drive, Martells Lane, or both. Emergency access is also available directly from Stratford Drive and Martells Lane, with the proposed housing no more than 15’ to 30’ from the drivable surface of the streets.</i>	
M	(4) Every structure or dwelling unit shall have direct access to a public street or indirect access to a public street via an approved dedicated private street.
<i>The proposed development will include two public streets, Stratford Drive and Martells Lane. Both streets are under the jurisdiction of the City of Mason. Martells Lane is only accessible from Stratford</i>	

<i>Drive.</i>	
M	(5) Appropriate measures shall be taken to ensure that the addition or removal of surface waters will not adversely affect neighboring properties, that controls are in place to minimize sedimentation and erosion, and that topographic alterations are minimized to accommodate storm water management.
<i>NOTE: See (6) below.</i>	
M	(6) Provisions shall be made for the construction of storm sewer facilities including grading, gutters, piping, on-site storage, and treatment of turf as required to handle stormwater and prevent erosion.
<i>Two proposed storm sewer pipes are located on both Stratford Drive (15-inch diameter) and Martells Lane (12-inch).</i>	
M/I	(7) Secondary containment for above ground areas where hazardous substances are stored or used shall be provided as required by the city fire chief.
<i>Assuming the uses are to be limited to residential, it is reasonable to assume there will be no hazardous substances stored or used on the lots other than common household cleaning supplies. It is recommended that the applicant provide information regarding the extent to which hazardous substances will be present and if so, the type of substances.</i>	
I	(8) Exterior lighting shall be designed and located so that the source of illumination is directed away from adjacent properties, the intensity of lighting is the minimum necessary, and the direction of lighting is downward as much as is possible and appropriate for the project.
<i>The city anticipates that there will be public lighting provided by Consumer's Energy along the two public roads within the development, Stratford Drive and Martells Lane.</i>	
M	(9) All loading and unloading areas, outside storage areas, and refuse receptacles shall be screened from casual view from the public rights-of-way and adjoining land uses.
<i>There will not be any loading/unloading areas, outside storage areas, or refuse receptacles within the new development.</i>	
See a-c below	(10) Site plans shall meet the driveway, traffic safety, and parking standards of the city in such manner as necessary to address the following:
M	a. Safe and efficient vehicular and non-vehicular circulation, including parking areas, non-motorized linkages to abutting parcels, uses, sidewalks, and trails.
<i>There is a proposed 4' wide sidewalk in the Stratford Drive and Martells Lane right of way. The proposed plan appears to meet the requirements for safe and efficient vehicular access and Sec. 94-176 Supplemental Access Regulations. See also comments in (12) below, Sec. 94 Art. X – Parking and Loading Areas.</i>	
M	b. Shared driveways and service drives.
<i>The residential lots are accessible from Stratford Drive. Per Sec. 94-292(j)5, Adequate ingress and egress to each lot by means of clearly limited and defined drives shall be provided.</i>	
M	c. Adequate and properly located utilities.
<i>The site will be served by public water, public storm sewer, and public sanitary sewer. Water to serve the new residential lots will be located along Stratford Drive and Martells Lane with a proposed water main. Proposed sanitary sewer pipe is also located along Stratford Drive and Martells Lane.</i>	
M	(11) Provisions shall be made for proposed common areas and public features to be reasonably maintained.
<i>The site plan provides details for one common area that will be maintained by the Rayner Ponds Estates Community Association (RPECA). The Rayner Ponds Estates Community Association states that the deed restrictions and association by-laws require extensions to the subdivision to be part of the RPECA.</i>	
See	(12) The site plan submittal shall demonstrate compliance with all applicable

below	requirements of this chapter, chapters 58 and 74, the building code, and county, state, and federal law.
M	Chapter 94 – Zoning and Chapter 100 – Dimensional Requirements
	<i>The plan appears to meet the setbacks and lot coverage site development standards listed in Section 94-121(c) and Tables 100-1 and 100-2 as noted on the plan sheets and in the zoning</i>
M	Sec. 94-172(d)(3)(a) Vision clearance
	<i>There appear to be no vision clearance problems with the proposed site plan.</i>
M	Sec. 94 – Art. X Off-street Parking and Circulation
	<i>The proposed plan appears to meet the requirements for circulation with a clear and logical design.</i>
M	Sec. 94-241 Landscape, screening and buffer requirements
	<i>Table 100-4 sets forth the required landscape buffers for the RS-2 Zoning District, which requires no buffers.</i>
M	Chapter 58 - Signs
	<i>No sign information has been submitted at this time.</i>
I	Building Code
	<i>Approval of a Final Site Plan is required prior to a submittal for a building permit. See Building Official comments.</i>
I	County, State and Federal Law
	<i>The applicant is responsible for seeking and complying with additional permit requirements.</i>
M	Sec. 74-77 Data Required
	<i>It appears all requirements are met.</i>
M	Sec. 74-127 Streets
	<i>The proposed plan shows Martells Lane with a 66' right of way with a 150' diameter turnaround.</i>
M	Sec. 74-128 Easements and Utilities
	<i>The proposed plan shows all lots being served with public sanitary sewer, public water, and public storm sewer. All lots will have a service lead for each public utility.</i>
I	Sec. 74-129 Underground Wiring
	<i>Requires more information.</i>
M	Sec. 74-130 Blocks
	<i>The proposed length of Martells Lane from the intersection of Stratford is 200+/- feet going west and 460+/- feet going east, which is less than the 600 feet maximum allowed.</i>
M	Sec. 74-131 Public Walkways
	<i>The proposed plan includes a 4' sidewalk on both sides of Martells Lane.</i>
M/R	Sec. 74-132 Public Reservations

<p><i>The plan shows a proposed common area. A letter from the Rayner Ponds Estates Community Association (RPECA) dated April 15, 2018 was sent to Jim Giguere stating that the deed restrictions and association by-laws require extensions to the subdivision to be part of the RPECA (attached).</i></p> <p><i>Staff recommends a neighborhood playground be installed in the common area.</i></p>	
M	Sec. 74-133 Lots
<p><i>Lots appear to meet the minimum requirements of the zoning ordinance and the depth-to-width ratio of 3:1.</i></p>	
M	Sec. 74-157 Streets
<p>The extension of Stratford Drive and Martells Lane appear to be proposed as public roads. The proposed curb cut is intended to be permanent and greater than 24 feet wide to serve as a private right of way for the purpose of meeting the necessary zoning requirements for frontage on an approved public or private road.</p>	
M	Sec. 74-158 Water Supply
<p>It appears all requirements are met. The lots will be served by the public water system.</p>	
M	Sec. 74-159 Sanitary Sewer System
<p>It appears all requirements are met. The lots will be served by the public sewer system.</p>	
M	Sec. 74-160 Storm Drainage System
<p>It appears all, requirements are met. The lots will be served by the proposed storm drainage system indicated on the plan.</p>	
M	Sec. 74-161 Street Trees
<p>Street trees will be expected on the construction plans in accordance with this section.</p>	
I	Sec. 74-162 Monuments
<p>Monuments will be installed and inspected by the city prior to the issuance of building permits. An as-built plan of the right of way and lot divisions must be provided.</p>	
I	Sec. 74-163 Guarantee of completion of required improvements
<p>To be determined.</p>	

ACTION

§94-226. Final site plan review and approval.

The planning commission shall have the authority to approve, approve with conditions, or deny an application for final site plan review and approval. *The Planning Commission may also choose to amend the proposed resolution, or continue the review to a future time and date certain to allow for plans to be revised and/or for the applicant to provide additional information.*

§94-229. Extension of site plan approval.

Approvals of a final site plan are valid for a period of 12 months. Only one extension of a final site plan may be granted for an additional 12 months at the sole discretion of the approving authority. A final site plan is deemed to have expired if a building permit has not been obtained for the development within 12 months of approval of the final site plan. A request to extend preliminary or final site plan validity shall be submitted prior to the expiration of the preliminary or final site plan.

§94-230. Conformance to approved site plan.

A development project shall conform to the approved final site plan. Failure to conform to the approved final site plan shall constitute a violation of this chapter.

However, amendments to an approved site plan can be made subject to the provisions of §94-228 Amendments to an approved site plan.

§94-231. Review standards for planning commission decision.

(a) A decision rejecting, approving, or conditionally approving a site plan shall be based upon requirements and standards contained in the zoning ordinance, other statutorily authorized and properly adopted local unit of government planning documents, other applicable ordinances, and state and federal statutes.

(b) A site plan shall be approved if it contains the information required by the zoning ordinance and is in compliance with the conditions imposed under the zoning ordinance, other statutorily authorized and properly adopted local unit of government planning documents, other applicable ordinances, and state and federal statutes.

The applicant has submitted a Preliminary Site Plan. Staff recommends approval of the proposed preliminary site plan.

Therefore, the following motion is offered for consideration:

MOTION

Motion to approve Resolution 2019-11.

Attachments:

1. Resolution 2019-11
2. Zoning Permit Application, received August 13, 2019
3. Plan set dated March 29, 2019 and revised August 9, 2019

**CITY OF MASON
PLANNING COMMISSION
RESOLUTION No. 2019-11**

**A RESOLUTION GRANTING PRELIMINARY SITE PLAN APPROVAL TO DEVELOP NEW 20 HOME
RESIDENTIAL SUBDIVISION.**

SEPTEMBER 10, 2019

WHEREAS, a request has been received from James Giguere, Giguere Realty & Development, LLC, for Preliminary Site Plan Approval to develop new residential subdivision with 20 buildable lots and one common area on property located north of the intersection of Stratford and Eaton roads, parcel 33-19-10-04-426-002 POLP; and,

WHEREAS, the proposal was shown on plans dated March 29, 2019 and revised August 9, 2019; and

WHEREAS, the parcel is zoned RS-2, Single Family Residential; and

WHEREAS, Section 94-222 states that platted subdivisions require site plan review; and

WHEREAS, the Planning Commission accepts the staff report dated September 5, 2019 and revised, 2019 as findings of fact that, with the conditions listed herein, the plans will comply with the Site Plan Review Standards listed in Section 94-227 of the Mason Code; and

NOW THEREFORE BE IT RESOLVED, that the City of Mason Planning Commission does hereby grant preliminary site plan approval for the development of new subdivision with 20 buildable lots and one common area on property located north of the intersection of Stratford and Eaton roads, parcel 33-19-10-04-426-002 POLP with the following condition:

1. A final site plan will be submitted for review consistent with all requirements of Chapter 94, Article VII, and will address the requests for more information as noted in the Staff Report dated September 5, 2019.

Yes ()
No ()
Absent ()
Vacant ()



APPLICATION – SITE PLAN REVIEW/SPECIAL USE PERMIT

City of Mason

Planning Department • 201 W. Ash Street • Mason, MI 48854

Phone: 517/676-9155 • Fax: 517/676-1330

www.mason.mi.us

Applicant– Please check one of the following:	
<input checked="" type="checkbox"/>	Preliminary Site Plan Review
<input type="checkbox"/>	Final Site Plan Review
<input type="checkbox"/>	Special Use Permit*
<input type="checkbox"/>	Administrative Review
* includes Preliminary Site Plan Review	

<u>PLANNING DEPARTMENT USE ONLY</u>	
Application Received:	_____
Tax ID:	_____
Fee:	_____
Receipt #:	_____



I. APPLICANT INFORMATION

Name James Giguere

Organization Giguere Realty & Development, LLC

Address 6200 Pine Hollow Drive, Ste.100, East Lansing, MI 48823

Telephone Number 1-517-339-3600 Facsimile Number 1-517-339-7201

Interest in Property (owner, tenant, option, etc.) Owner

Note: If applicant is anyone other than owner, request must be accompanied by a signed letter of authorization from the owner.

II. PROPERTY INFORMATION

Owner Giguere Realty & Development, LLC Telephone Number 1-517-339-3600

Property Address Vacant

Legal Description: If in a Subdivision: Subdivision Name _____ Lot Number _____

If Metes and Bounds (can be provided on separate sheet): See attached

APPLICANT CERTIFICATION

By execution of this application, the person signing represents that the information provided and the accompanying documentation is, to the best of his/her knowledge, true and accurate. In addition, the person signing represents that he or she is authorized and does hereby grant a right of entry to City officials for the purpose of inspecting the premises and uses thereon to verify compliance with the terms and conditions of any Special Use Permit and/or Site Plan approval issued as a result of this application.

Signature _____

Date _____

8/13/19

III. REQUEST DESCRIPTION

A. Written Description – Please use this section to describe the use or uses proposed. Attach additional pages, if necessary.

Development of new 20 home residential Subdivision. Subdivision will include paved public streets, public water, public sanitary sewer, and public storm sewer.

B. Available Services

Public Water YES NO
 Public Sanitary Sewer YES NO

Paved Road (Asphalt or Concrete) YES NO
 Public Storm Sewer YES NO

C. Estimate the Following

Traffic Generated 40 trips during peak hours
 Population Increase 60
 Hours of Operation N/A AM to N/A PM
N/A day through N/A day

Total Employees N/A Shifts N/A
 Employees in Peak Shift N/A
 Total Bldg. Area Proposed 45,000sf for 20 homes (Estimated)
 Parking Spaces Provided 40 driveway spaces (Minimum)

D. Project Phasing

This project will be completed in: One Phase Multiple Phases – Total No. of Phases: _____

Note: The phases of construction for multi-phase projects must be shown on the site plan

IV. APPLICATION MATERIALS

The following are checklists of items that generally must be submitted with applications for Preliminary Site Plan Review, Final Site Plan Review, and Special Use Permits. Applicants should review Articles VI and VII of Chapter 94 of the Mason Code for a complete listing of application requirements. All site plan drawings must comply with the requirements of Section 94-226(d) of the Zoning Ordinance. Incomplete applications will not be processed.

- Completed application form
- ~~20~~ **30** copies of site plan drawings is larger than 11" x 17" (**30 copies for Special Use Permits**)
- ~~1 - 11" x 17" copy of the site plan~~
- Plans submitted on CD (Commercial only)
- Legal description
- Proof of ownership/owner authorization
- Construction schedule for proposed project
- Construction calculations for utilities
- Fee (see below)
- Any other information deemed necessary



Application Fee – all requests must be accompanied by a fee, as established by the City Council. The fee schedule for Preliminary Site Plan Reviews, Final Site Plan Reviews, and Special Use Permits is as follows (As of October 16, 2006):

<u>Administrative Reviews</u>	\$70.00
<u>Preliminary Site Plan Reviews</u>	\$200.00
<u>Final Site Plan Review</u>	\$100.00
<u>Special Use Permits</u> (includes preliminary site plan review)	\$275.00
<u>Engineering Review</u>	\$220.00*

*Two-hour minimum fee for projects increasing demand on public utilities. Actual fees incurred are billed to applicant upon completion of review.

CITY OF MASON
P.O. BOX 370
201 W. ASH ST.
MASON MI 48854-370
Phone : (517) 676-9155
WWW.MASON.MI.US

Received From:
GIGUERE HOMES
6200 PINE HOLLOW DR SUITE 100
EAST LANSING MI 48823

Date: 08/13/2019 Time: 3:36:41 PM
Receipt: 100254309
Cashier: SO

SITE PLAN REVIEW, RAYNER PONDS

ITEM REFERENCE	AMOUNT
PERBUS PERMIT-VARIOUS BUS LICENSE & PERMIT S	
SITE PLAN-RAYNER PONDS	\$200.00
TOTAL	\$200.00
CHECK 1076	\$200.00
Total Tendered:	\$200.00
Change:	\$0.00

Plan being reviewed as the Site Plan are the Construction Plans for the Required Improvements listed in Section 74-157 through 74-160, except that the street name signs and street lights are not shown on the Plans. Street name signs will be paid for by the developer and installed at places "designated by the city engineer" in accord with Section 74-157c. Streetlighting will be designed by Consumers Energy and the lights will be installed by Consumers Energy crews at the designed locations.

Street trees required in Section 74-161 are not shown on the Plans. One tree per lot will be provided. It will be provided on a lot at the time the lot is developed with a house. These trees will be from the varieties listed in the city specification on file with the City Clerk.

The required sidewalk is shown on the Plans. Sidewalk in front of the several numbered lots will be installed at the time the lot is developed with a house. Sidewalk not in front of a numbered lot will be built as part of the construction of the rest of the required improvements.

Section 74-163(b)4 provides for a performance guarantee deposit to insure the sidewalk and street trees are installed when the house is built. The developer of the subdivision intends to build the houses on all of these lots through his home building division, Giguere Homes, so it is unlikely that a lot will be sold undeveloped.

Monuments required in Section 74-162 are not shown on the Plans. They will be shown on the Final Plat made pursuant to the Michigan Land Division Act. They will be in the ground at time the Final Plat is presented to the City for approval, or the required surety will be posted to guarantee that they will be installed within one year of the approval of the Final Plat by the City.

The review by the City Engineer of the Plans and the required inspections at the time of construction will insure that the required improvements are completed in accord with the City's Standards, including those in Sections 74-126 through 74-129.

The Required Improvements are being built to serve the 20 Lots in the Rayner Ponds Subdivision Number 4.

Each lot will be developed with a single family house. It is expected that Giguere Homes will build all of the houses in this subdivision. Two house plans are attached to this narrative. The plans depict two of the home plans that are proposed for use in Rayner Ponds No. 4. The builder believes that these plans comply with the Building Dimensional Regulations in Table 100-2 and the City's other building requirements. Both plans have floor area greater than 1000 square feet. Plan 1 is a two story house that is 41 feet wide and has more house than garage in the front elevation view and the front wall of the garage is not closer to the street than the front wall of the porch. Plan 2 is a ranch style house that is about 61 feet wide and has 21 feet of garage and almost 40 feet of house in the front elevation view and the front wall of the garage is set back from the front wall of the house by over 2 feet.

The Future Land Use map in the City's Master Plan shows the land being developed as Rayner Ponds Subdivision Number 4 to be used for Residential.

A Traffic Impact Statement is not being submitted as part of the Site Plan because the Peak Hourly traffic is estimated to be 2 Trips per Lot, so 40 Trips at the Peak Hour, which less than the amount that triggers the requirement for a Traffic Impact Statement.

The developer of the subdivision will prepare a document of restrictive deed covenants. These covenants will mandate that the all of the owners of the lots in Rayner Ponds Subdivision No. 4 are to be part of the Rayner Ponds Estates Community Association. These covenants will mandate that the owners of lots in Rayner Ponds Subdivision No. 4 that touch the pond will also be part of the affiliated lake owners association.

The land proposed for the subdivision is shown on the FEMA Flood Insurance Map in their ZONE X, "Area of Minimal Flood Hazard". 100 year flood plain is shown as ZONE A or AE. So the land with the proposed Rayner Ponds No 4 is not in the flood plain, so home purchasers will not be required to purchase flood insurance.

August 12, 2019

RAYNER PONDS NO 4
LEGAL DESCRIPTION

Exhibit "A"

A parcel of land in the Southeast 1/4 of Section 4, Town 2 North, Range 1 West, City of Mason, Ingham County, Michigan; the surveyed boundary of said parcel being described as commencing at the South 1/4 corner of Section 4, Town 2 North, Range 1 West, Michigan, Meridian; thence South 89 degrees 14 minutes 20 seconds East, along the South Section line, 1456.14 feet; thence North 00 degrees 29 minutes 00 seconds East, 660.00 feet to the Southeast corner of Lot 64, Rayner Ponds Estates No. 2, recorded in Liber 44 of Plats, Pages 41 and 42, Ingham County Records and the point of beginning; thence North 00 degrees 29 minutes 00 seconds East, along the Easterly line of Rayner Ponds Estates No. 2, 125.00 feet; thence North 89 degrees 14 minutes 20 seconds West, along the Northerly line of Rayner Ponds Estates No. 2, 415.28 feet to the Northwest corner of Lot 68, Rayner Ponds Estates No. 2 and the Southeast corner of Lot 80, Rayner Ponds Estates No. 3, recorded in Liber 50 of Plats, Pages 35, 36 and 37, Ingham County Records; thence North 00 degrees 29 minutes 00 seconds East, along the Easterly line of Rayner Ponds Estates No. 3, 390.99 feet; thence South 89 degrees 14 minutes 20 seconds East, along the Easterly line of Rayner Ponds Estates No. 3, 69.00 feet to a point on an intermediate traverse line of an unnamed Pond, said point being North 89 degrees 14 minutes 00 seconds West, 9 feet from the water's edge; thence along said intermediate traverse line the following six courses, South 29 degrees 39 minutes 28 seconds East, 49.01 feet; thence South 70 degrees 00 minutes 00 seconds East 115.30 feet; thence North 87 degrees 27 minutes 55 seconds East 48.02 feet; thence North 25 degrees 06 minutes 53 seconds East 143.49 feet; thence South 55 degrees 56 minutes 23 seconds East, 293.62 feet; thence South 89 degrees 14 minutes 20 seconds East, 361.15 feet to a point on said intermediate traverse line being South 55 degrees 00 minutes 00 seconds East, 70 feet from the water's edge; thence South 00 degrees 45 minutes 40 seconds West, 171.01 feet; thence South 19 degrees 18 minutes 29 seconds East, 70.27 feet; thence South 00 degrees 29 minutes 37 seconds West, 171.00 feet; thence North 89 degrees 14 minutes 20 seconds West, 329.99 feet; thence South 00 degrees 29 minutes 37 seconds West 19.00 feet to the Northeast corner of Lot 63, Rayner Ponds Estates, recorded in Liber 36 of Plats, Pages 50 and 51, Ingham County Records; thence along the Northerly boundary of Rayner Ponds Estates the following three courses; North 89 degrees 14 minutes 20 seconds West, 127.47 feet; thence North 00 degrees 29 minutes 00 seconds East, 19.00 feet; thence North 89 degrees 14 minutes 20 seconds West, 66.00 feet to the point of beginning.

ARB: 0201W-04-SE-0010 and 0201W-04-SE-0005

33-19-10-04-426-002 POLP

STATE OF
MICHIGAN

INGHAM COUNTY MI
02/20/2019
2019-004659



REAL ESTATE ★
TRANSFER TAX ★
\$209.00 CO ★
\$1425.00 ST ★
TTX# 4261302 ★

02/20/2019 8:27 AM
INST. # 2019-004659
DERRICK QUINNEY
REGISTER OF DEEDS
INGHAM COUNTY MICHIGAN
RECORDED ON:
02/20/2019 8:41 AM
PAGES: 3

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.

Eric Schertzing, Ingham County Treasurer
Sec.135, Act 206, 1893 as amended
2/19/2019 by BL

WARRANTY DEED

KNOW ALL PERSONS BY THESE PRESENTS: That Homestead Acceptance Corporation, a Michigan corporation, whose address is 37308 Van Dyke Avenue Sterling Heights, MI 48312

Convey(s) and Warrant(s) to Giguere Realty & Development, L.L.C., a Michigan limited liability company, whose address is 6200 Pine Hollow Drive, Sulte 100, East Lansing, MI 48823

the following described premises situated in the City of Mason, County of Ingham, and State of Michigan to-wit:

SEE ATTACHED EXHIBIT "A"

Tax Parcel # 33-19-10-04-426-002 POLP

for the consideration of: One Hundred Ninety Thousand and 00/100 Dollars (\$190,000.00)

subject to any and all building and use restrictions, zoning ordinances, those matters which an ALTA survey could disclose, if any; and subject to all terms, conditions and provisions which are recited in the Judgment recorded in Liber 674, Page 583; and terms, conditions and provisions which are recited in the Annexation recorded in Liber 1369, Page 656; and Oil and Gas Lease recorded in Liber 1115, Page 906, Ingham County Records together with any Assignments, Assignment of Working Interest, Assignments of Overriding Royalty Interest, Pooling Agreements, and/or Mortgages and Security Assignments affecting said Lease, whether recorded or unrecorded; and further, subject to covenants, conditions and restrictions and other provisions but omitting restrictions, if any, based on race, color, religion, sex, handicap, familial status, or national origin as contained in instrument recorded in Liber 1331, Page 154, First Amendment recorded in Liber 1490, Page 1009, Second Amendment recorded in Liber 1754, Page 623, Third Amendment recorded in Liber 2333, Page 1038, Fourth Amendment recorded in Liber 2439, Page 66, Fifth Amendment recorded in Liber 2466, Page 1040, Sixth Amendment recorded in Liber 2851, Page 90, Seventh Amendment recorded in Liber 3143, Page 1268.

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 does not grant to the grantee the right to make any division(s) under Section 108 of the Land Division Act, Act No. 288 of the Public Acts of 1967 and must be platted.

212133LAN

TRANSNATION TITLE AGENCY
1675 WATERTOWER PLACE
SUITE 200
EAST LANSING, MI 48823

WARRANTY DEED

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212133LAN

TRANSNATION TITLE AGENCY
1675 WATERTOWER PLACE
SUITE 200
EAST LANSING, MI 48823

(Warranty Deed (page 2)
dated: February 1, 2019

between Homestead Acceptance Corporation, a Michigan corporation, Seller(s) and Giguere Realty & Development, L.L.C., a Michigan limited liability company, Purchaser(s).)

Signed and Sealed:
Homestead Acceptance Corporation, a Michigan corporation



By: David C. Belcovson, Vice President

LYUBOV MARDUKHAYEVA
Notary Public, State of Michigan
County of Oakland
My Commission Expires Feb. 02, 2020
Acting in the County of Oakland

STATE OF MICHIGAN)
COUNTY OF Oakland)ss
)

The foregoing instrument was acknowledged before me on February 1st, 2019, by David C. Belcovson, Vice President of Homestead Acceptance Corporation, a Michigan corporation.



Print Name: _____
Notary Public _____ County, Michigan
Acting in _____ County
My term expires: _____

File No. 212133LAN

Drafted by:	Return to:
David C. Belcovson 37308 Van Dyke Avenue Sterling Heights, MI 48312	Jim Giguere 6200 Pine Hollow Drive, Suite 100 East Lansing, MI 48823
County Treasurer's Certificate	City Treasurer's Certificate

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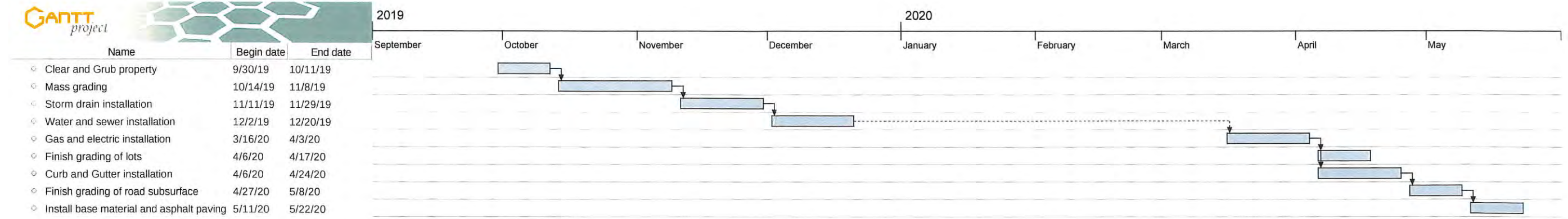
ARB: 0201W-04-SE-0010 and 0201W-04-SE-0005

33-19-10-04-426-002 POLP

Tasks

Name	Begin date	End date
Clear and Grub property	9/30/19	10/11/19
Mass grading	10/14/19	11/8/19
Storm drain installation	11/11/19	11/29/19
Water and sewer installation	12/2/19	12/20/19
Gas and electric installation	3/16/20	4/3/20
Finish grading of lots	4/6/20	4/17/20
Curb and Gutter installation	4/6/20	4/24/20
Finish grading of road subsurface	4/27/20	5/8/20
Install base material and asphalt paving	5/11/20	5/22/20

Gantt Chart



RAYNER PONDS NO 4
For Preliminary Site Plan Approval Package

CONSTRUCTION CALCULATIONS FOR UTILITIES

2 Sheets Attached

Preliminary Storm Sewer Design

Location			Runoff			Total Section A. R.	Total Trunk A. R.	②		Length of Pipe	Size Pipe In	Slope %	Fall In Feet	M. H. Drop	Inverts		③ Actual Cap. Q CFS	④ Vel. Feet Per Second	Time ⑤ (Entry: 10 Min.)	
Street	M. H. From	M. H. To	Area-Acres	① R	Ac. x R.			Intensity 1 Ins/Hr	Q CFS						Up Stream	Down Stream			Sect. Min	Accum. Min
	CB1	MH3	1.20	.6	0.72	0.72	0.72	3.97	2.9	19	12	1.00					3.6			
	CB2	MH3	0.67	.6	0.40	0.40	0.40	3.97	1.6	26	12	1.00					3.6			
	CB3	MH3	0.88	.6	0.53	0.53	0.53	3.97	2.1	42	12	1.00					3.6			
						1.65														
	YD5	EXYD	0.29	.3	0.09	0.09	0.09	3.97	0.4	142'	12"	1.30	1.85				4.2	4.8	0.5	15.5
	EXYD	EXMH	0.67	.3	0.20		0.29	3.90	1.1	EX108'	EX12"	1.2	1.30				4.0	5.0	0.4	15.9
	INL3	MH7	0.8	.3	0.24	0.24	0.24	3.97	1.0	177'	8"	0.60	1.06				0.95	3.1		
	PIPE	YD5	EXYD						1.0		8"	1.30	1.85				1.6	4.7		

TILY N-12

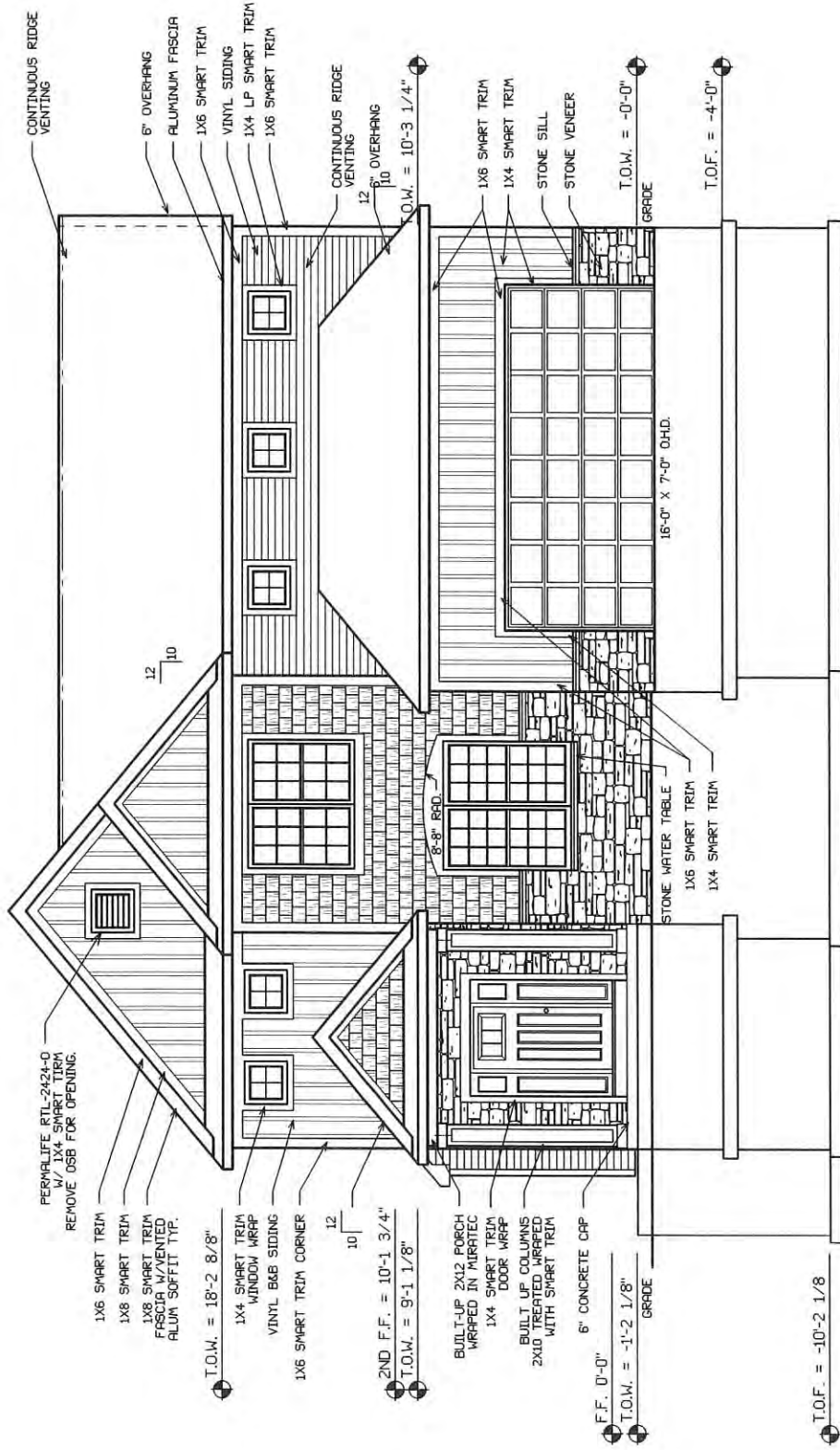
- ① Runoff coefficient based on weighted value of after improvement conditions.
- ② From attached "East Lansing, Michigan" Intensity - Duration curves.
- ③ Based on Manning's "n" 0.012 for reinforced concrete pipe.
- ④ Meet or exceed 3.0 FPS for full flow in storm sewer.

RAYNER PONDS 4
MARCH 2019

This form shall be completed and attached to all site plan reviews & subdivision

Rayner Ponds- Plan 1

GIGUERE *Planner*

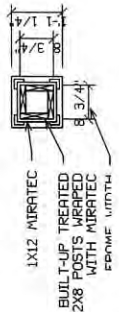
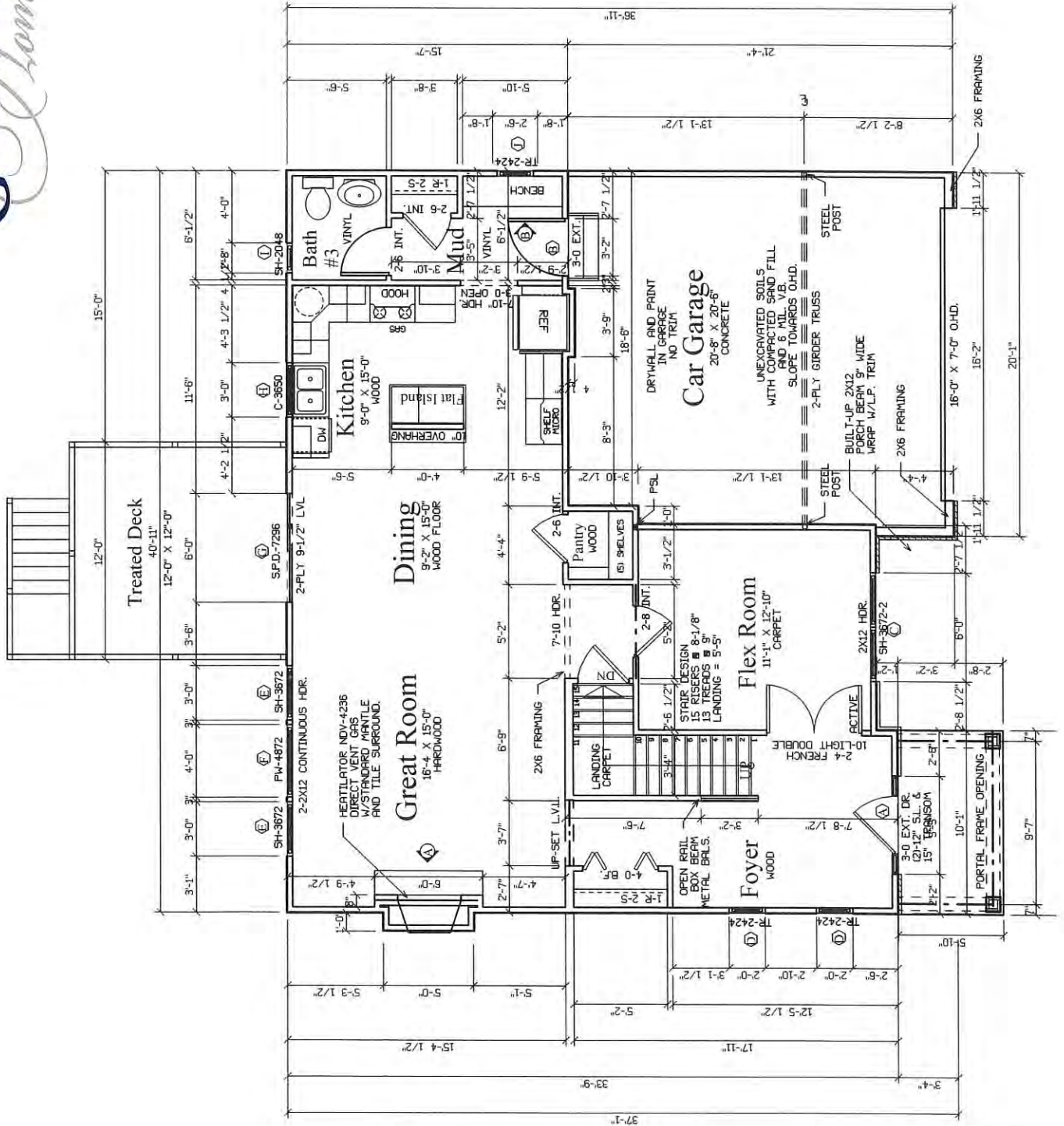


Front Elevation

SCALE 1/4" = 1'-0"

Rayner Ponds- Plan 1 - Main Floor

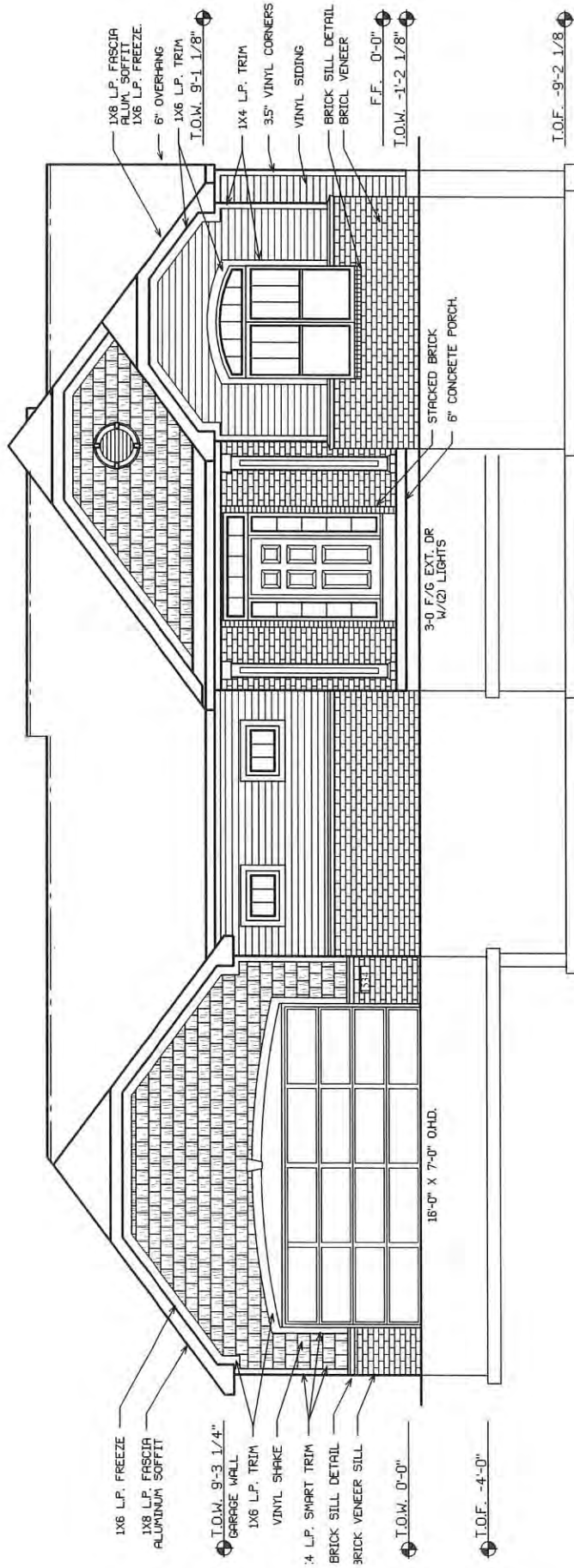
GIGUERRE
James



1X12 MIRRTEC
BUILT-UP TREATED
2X6 POSTS
WITH MIRRTEC
SCREW LUMINA

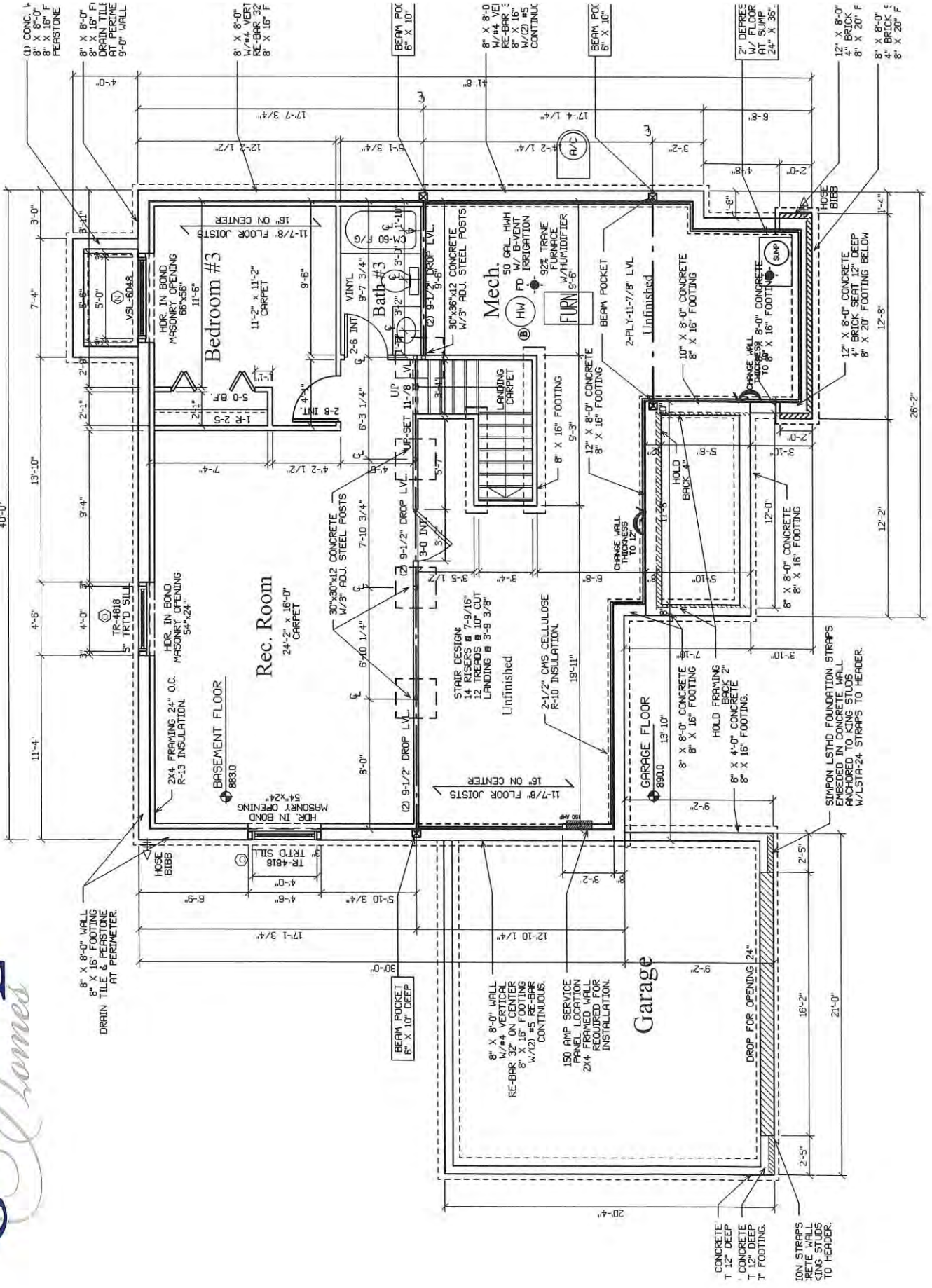
Rayner Ponds- Plan 2

GIGUERE
James

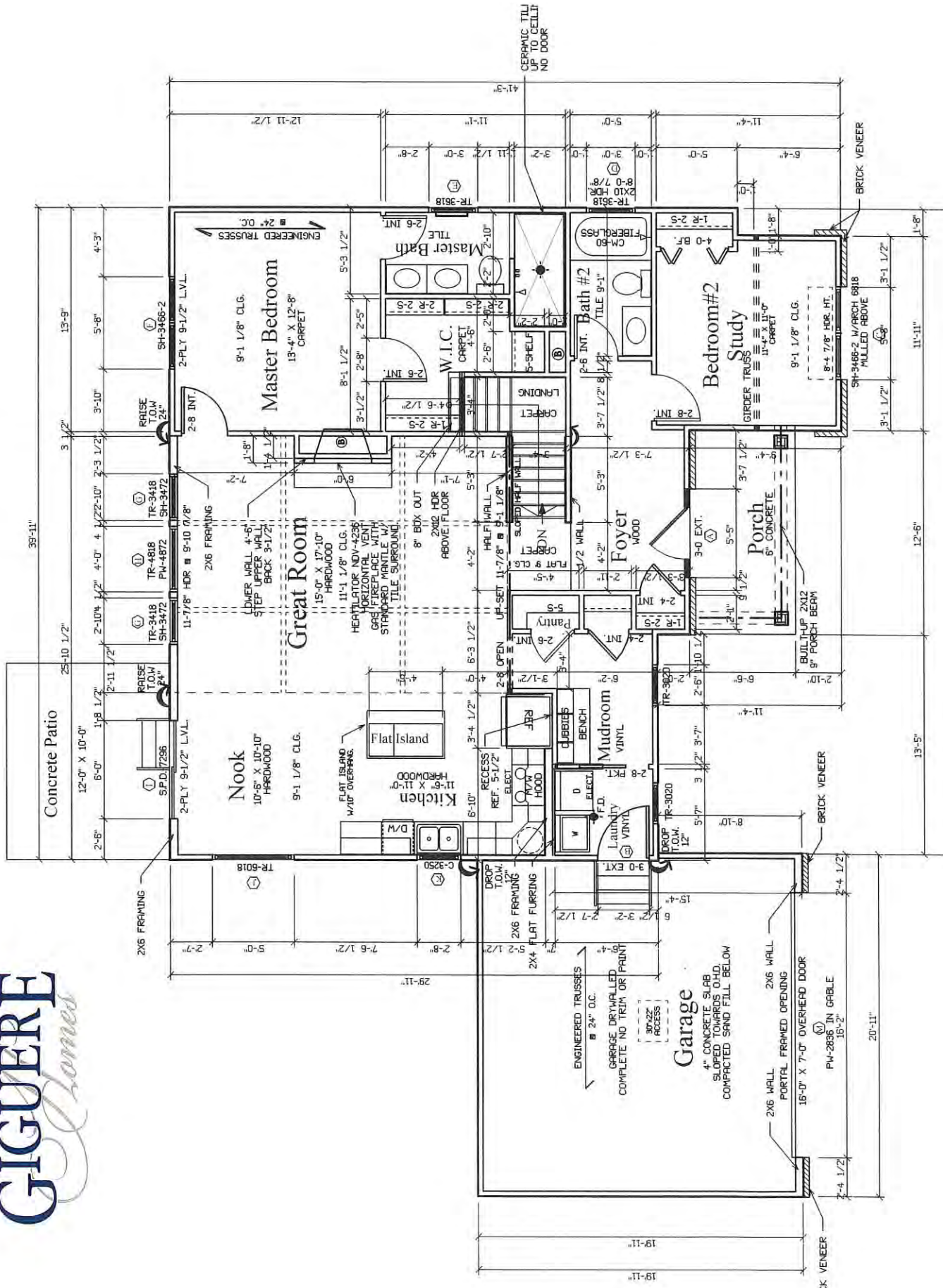


Front Elevation

Rayner Ponds- Plan 2- Basement

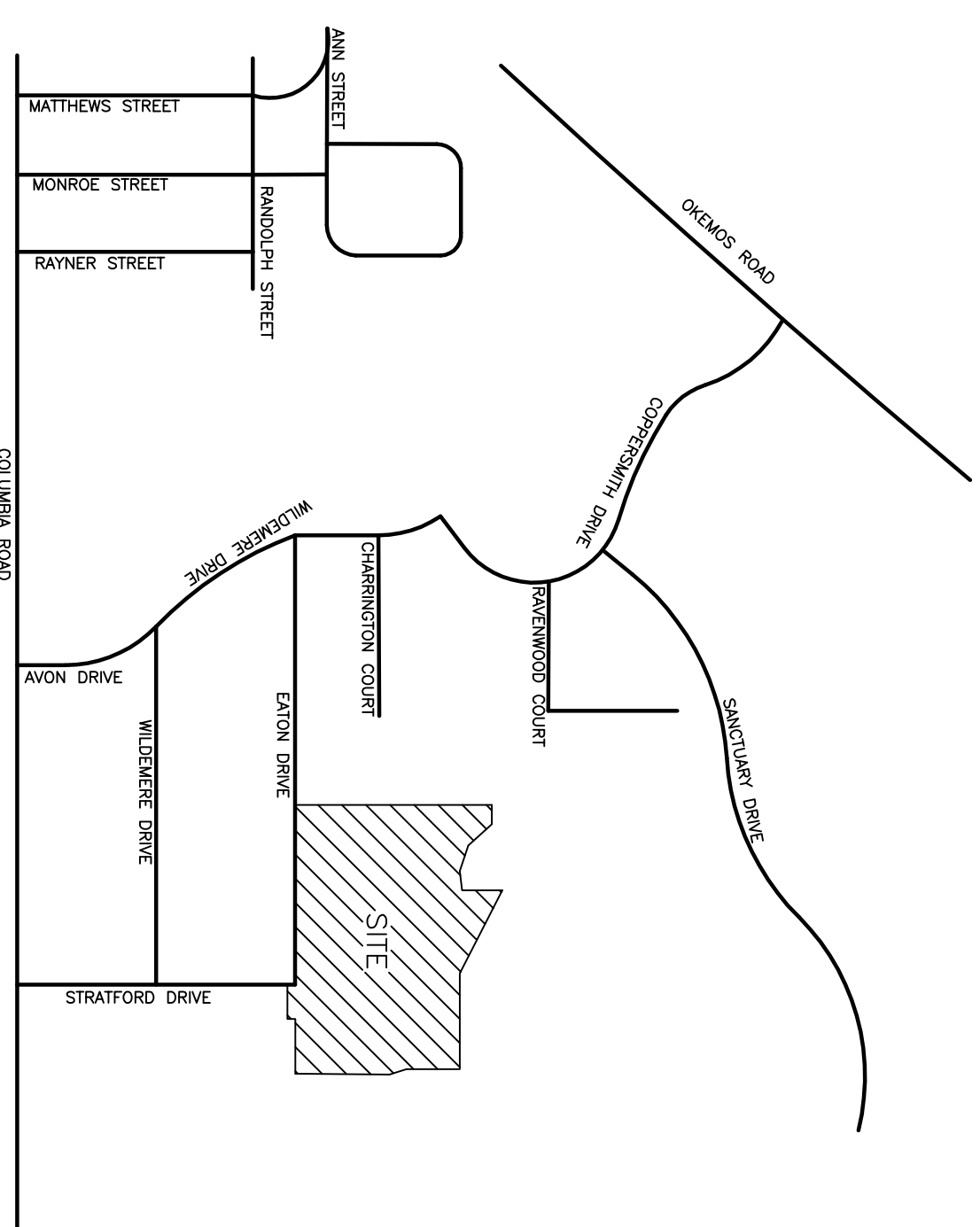
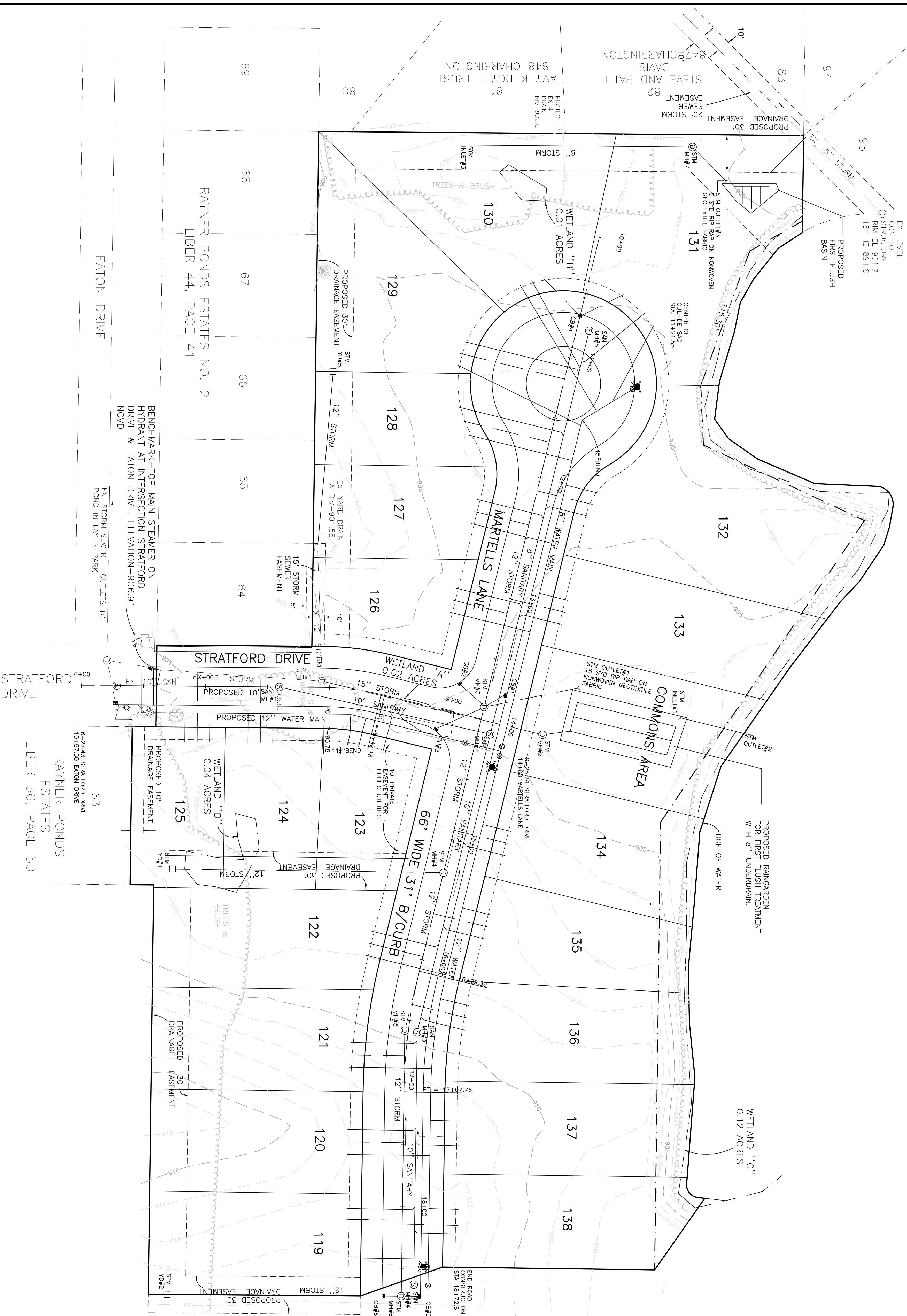
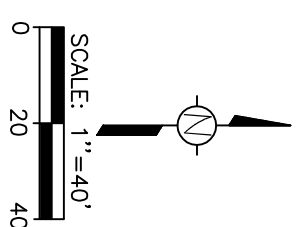


Rayner Ponds- Plan 2- Main Floor



CONSTRUCTION PLANS FOR RAYNER PONDS ESTATES NO. 4

A SUBDIVISION OF PART OF THE SOUTHEAST 1/4 OF SECTION 4,
T2N, R1W, CITY OF MASON, INGHAM COUNTY, MICHIGAN



LOCATION MAP
NO SCALE

LEGAL DESCRIPTION -
A parcel of land in the Southeast 1/4 of Section 4, T2N, R1W, City of Mason, Ingham County, Michigan, the surveyed boundary of said parcel being described as commencing at the South 1/4 Corner of Section 4, T2N, R1W, Michigan Meridian; thence S89°14'20"E, along the South Section line, 1456.14 feet; thence N00°29'00"E, 660.00 feet to the Southeast Corner of Lot 64, Royner Ponds Estates No. 2, recorded in Liber 44 of Plots, Pages 41 and 42, Ingham County Records and the POINT OF BEGINNING; thence N00°29'00"E, along the Easterly line of Royner Ponds Estates No. 2, 125.00 feet; thence N89°14'20"W, along the Northerly line of Royner Ponds Estates No. 2 and the Southeast Corner of Lot 80, Royner Ponds Estates No. 3, recorded in Liber 50 of Plots, Pages 35, 36 and 37, Ingham County Records; thence N00°29'00"E, along the Easterly line of Royner Ponds Estates No. 3, 390.99 feet; thence S89°14'20"E, along the easterly line of an unnamed Pond, said point being N69°14'00"W, 9 feet from the water's edge; thence along said intermediate traverse line the following six courses, S29°39'28"E, 49.01 feet; thence S70°00'00"E, 115.30 feet; thence N87°27'55"E, 48.02 feet; thence N25°06'53"E, 143.49 feet; thence S55°56'23"E, 293.62 feet; thence S89°14'20"E, 361.15 feet to a point on said intermediate traverse line being S55°00'00"E, 70 feet from the water's edge; thence S00°45'40"W, 171.01 feet; thence S19°18'29"E, 70.27 feet; thence S00°29'37"W, 171.00 feet; thence N89°14'20"W, 329.99 feet; thence S00°29'37"W, 19.00 feet to the Northeast Corner of Lot 63, Royner Ponds Estates, recorded in Liber 36 of Plots, Pages 50 and 51, Ingham County Records, thence along the Northerly boundary of Royner Ponds Estates the following three courses, N39°20'W, 127.47 feet; thence N00°29'00"E, 193.00 feet; thence N89°14'20"W, 66.00 feet the point of beginning; said parcel contains 9.0 acres.

SHEET INDEX:

SHEET 1	COVER
SHEET 2	GRADED DRIVE PLAN & PROFILE
SHEET 3	MARTELLS LANE PLAN & PROFILE
SHEET 4	CROSS LOT STORM PLAN & PROFILE
SHEET 5	CROSS LOT STORM & RAIN GARDEN PLAN & PROFILE
SHEET 6	GRADING AND EROSION CONTROL PLAN
SHEET 7	DETAILS

LOT NUMBER	GROSS AREA SQ FT	BUILDABLE AREA SQ FT	LOT WIDTH FT
119	14140	6401	82.41
120	14140	6915	82.30
121	14073	7042	80.00
122	14271	14271	80.00
123	15016	7618	80.00
124	9688	3835	75.00
125	9688	3835	75.00
126	9680	2796	85.46
127	10610	4461	75.00
128	10026	3915	75.00
129	17592	7753	81.09
130	20826	8873	101.03
131	25195	15878	158.73
132	22395	12086	154.96
133	17178	7015	86.95
134	14380	7015	86.95
135	12401	5937	82.22
136	15022	7664	80.53
137	14899	7622	75.00
138	14426	6941	75.00

REVISIONS

DATE	ADD LOT SIZE TABLE
8-9-19	

DEVELOPER: GIGUERE HOMES
6200 PINE HOLLOW DRIVE, STE 100
EAST LANSING, MI 48823

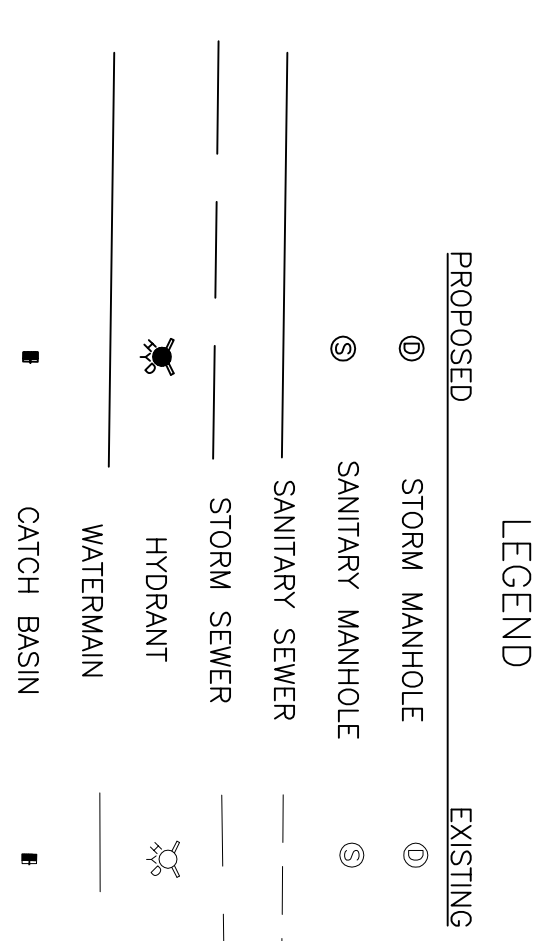
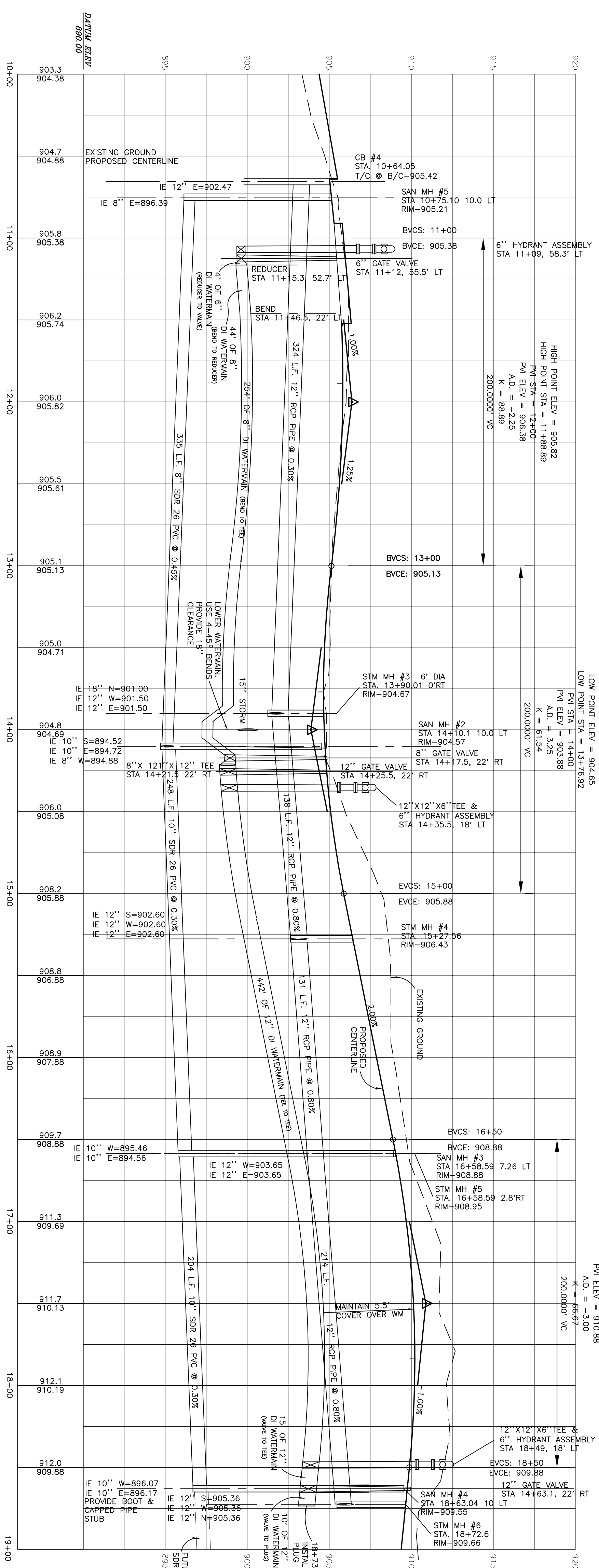
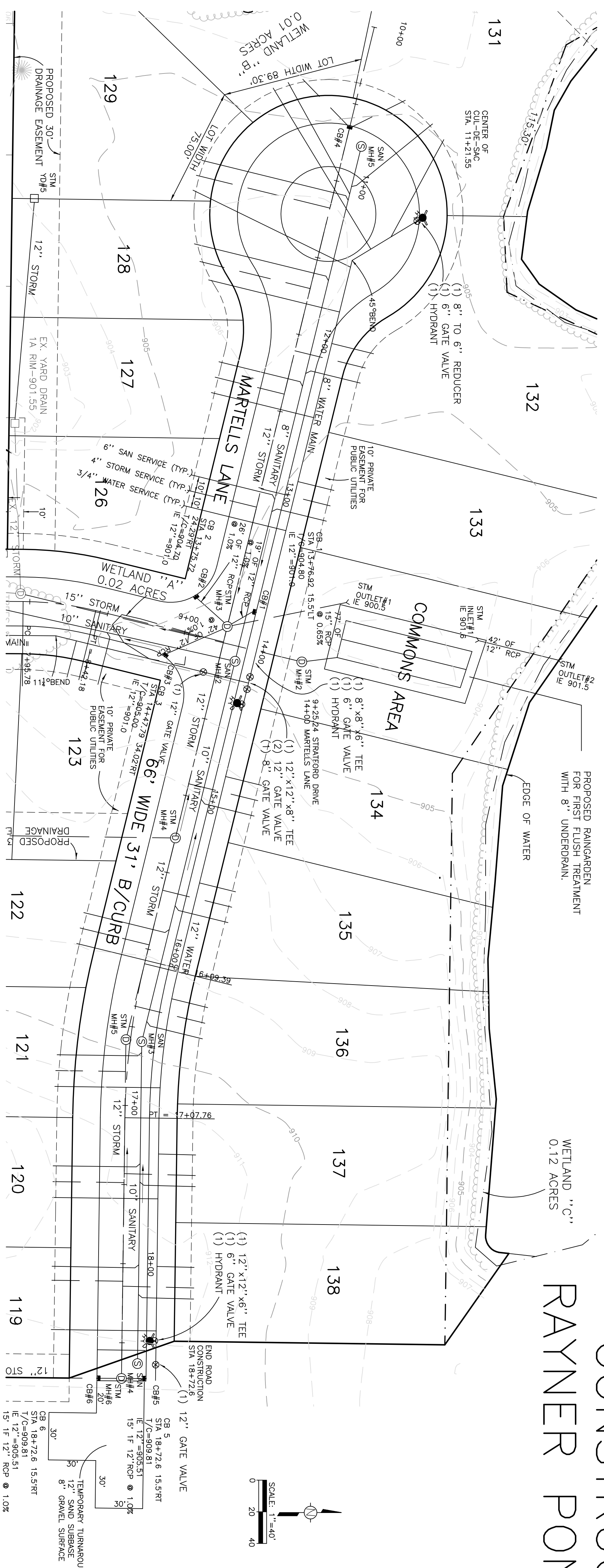
ENGINE SURVEYING & ENGINEERING
805 N. CEDAR, PO. BOX 87
MASON, MICHIGAN 48854-0087
517-679-6965
FAX 517-678-6875

CONSTRUCTION PLANS
RAYNER PONDS ESTATES NO. 4
COVER

REV 1: AUGUST 9, 2019
PLAN DATE: MARCH 29, 2019
HORZ SCALE: 1" = 40'
VERT SCALE: 1" = 4'
SHEET 1 OF 7

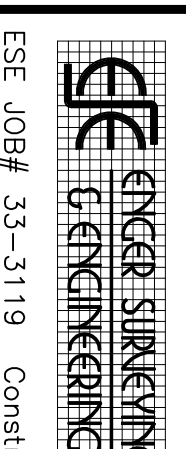
CONSTRUCTION PLANS FOR RAYNER PONDS ESTATES NO. 4

BENCHMARK—TOP MAIN STEAMER ON
HYDRANT AT INTERSECTION STRATFORD
DRIVE & EATON DRIVE. ELEVATION—
906.91 NGVD



DATE	REVISIONS

DEVELOPER: GIGIERE HOMES
6200 PINE HOLLOW DRIVE, STE 100
EAST LANSING, MI 48823



ENGINE SURVEYING & ENGINEERING
805 N. CEDAR PO BOX 87
MASON, MICHIGAN 48854-0087
517-679-6565
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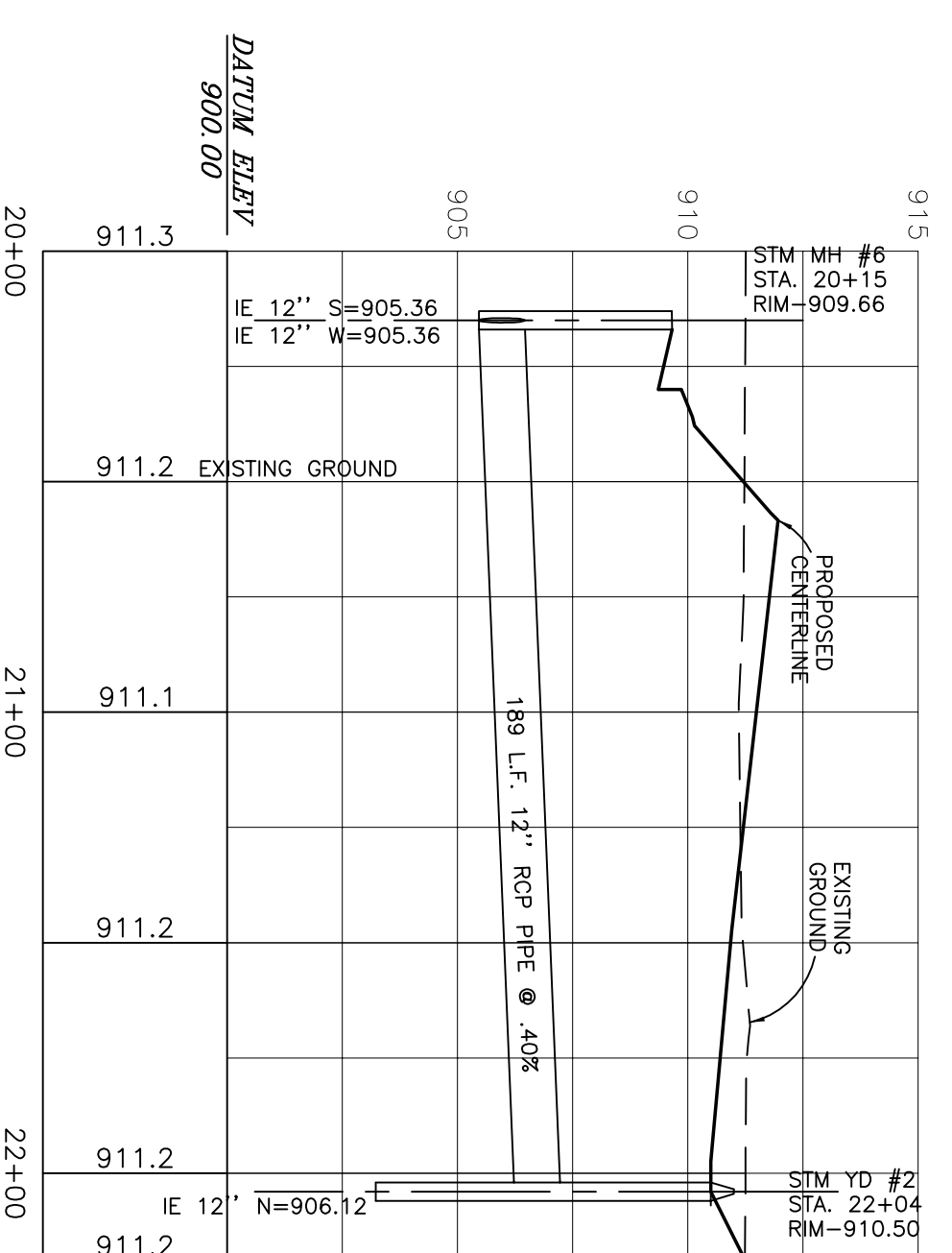
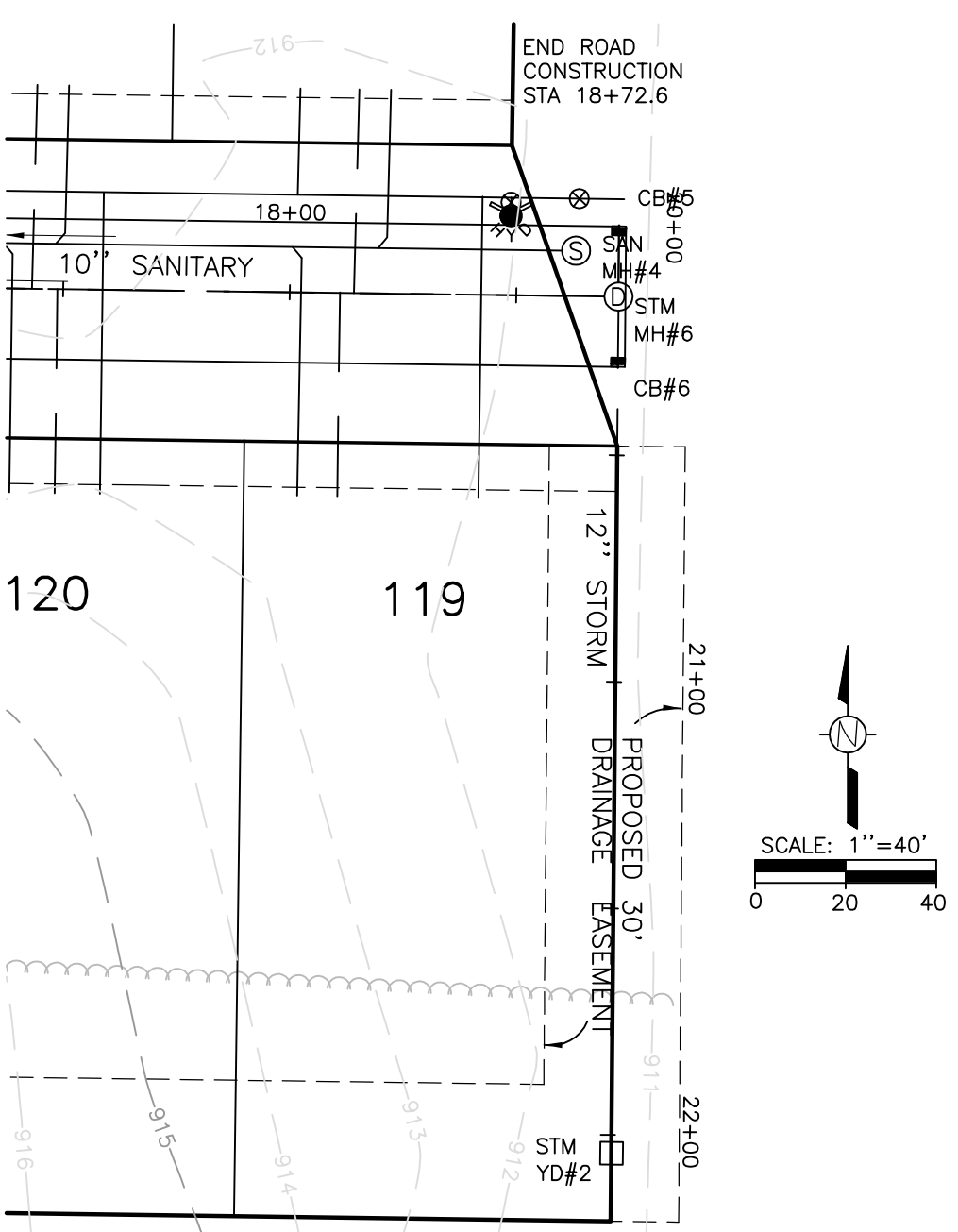
CONSTRUCTION PLANS
MARTELLS LANE
PLAN & PROFILE

PLAN DATE: MARCH 29, 2019

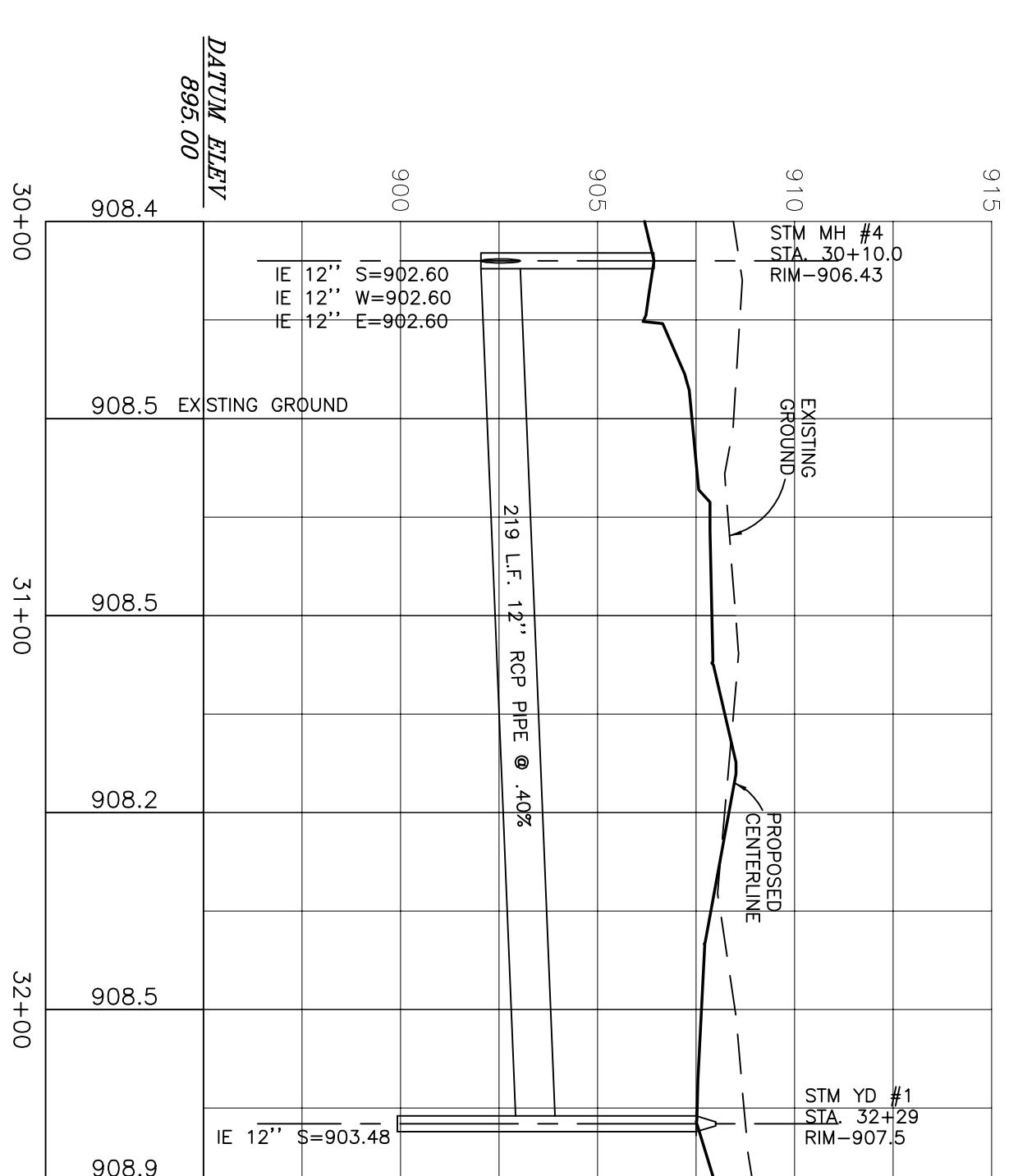
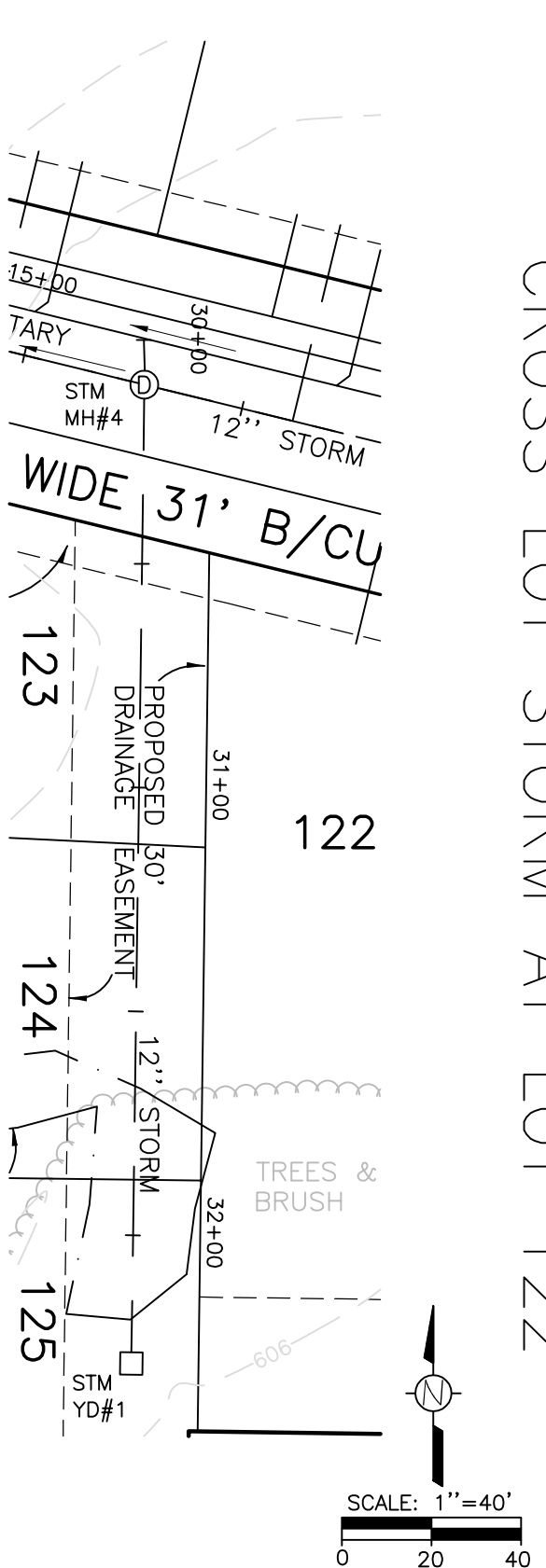
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VERT SCALE: 1" = 4'
SHEET 3 OF 7

CONSTRUCTION PLANS FOR RAYNER PONDS ESTATES NO. 4

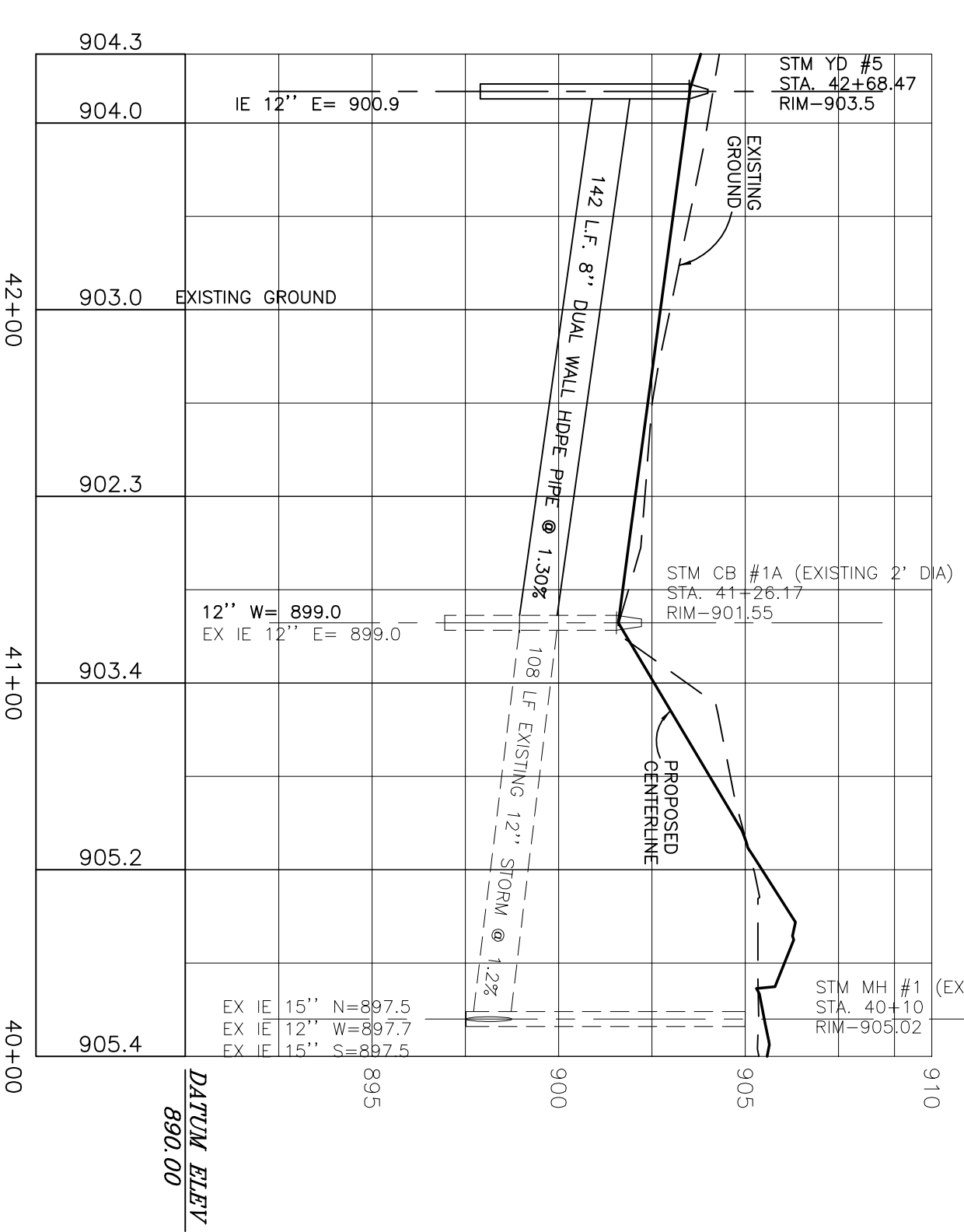
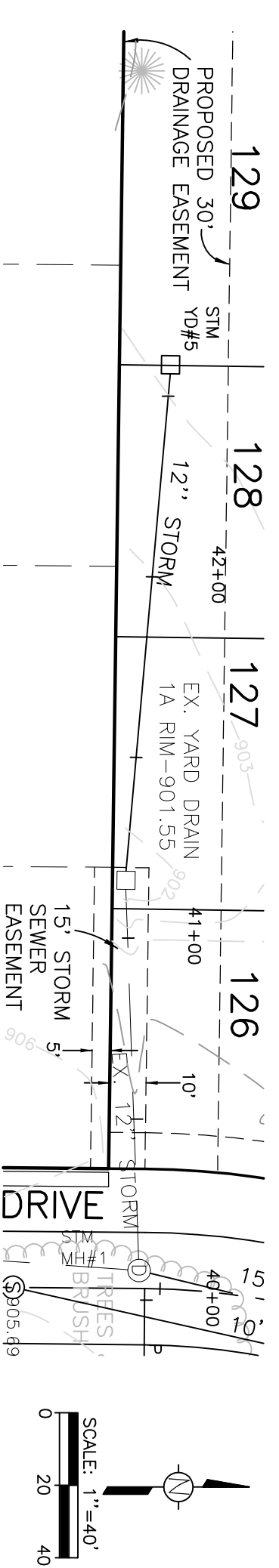
CROSS LOT STORM AT LOT 119



CROSS LOT STORM AT LOT 122



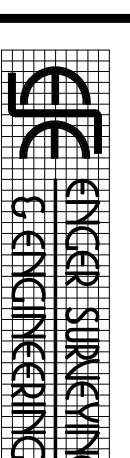
CROSS LOT STORM AT LOT
 126, 127, 128



DATE

REVISIONS

DEVELOPER: GIGUERE HOMES
 6200 PINE HOLLOW DRIVE, STE 100
 EAST LANSING, MI 48823



GENGER SINKING & ENGINEERING
 33-3119 Construction Plans.dwg

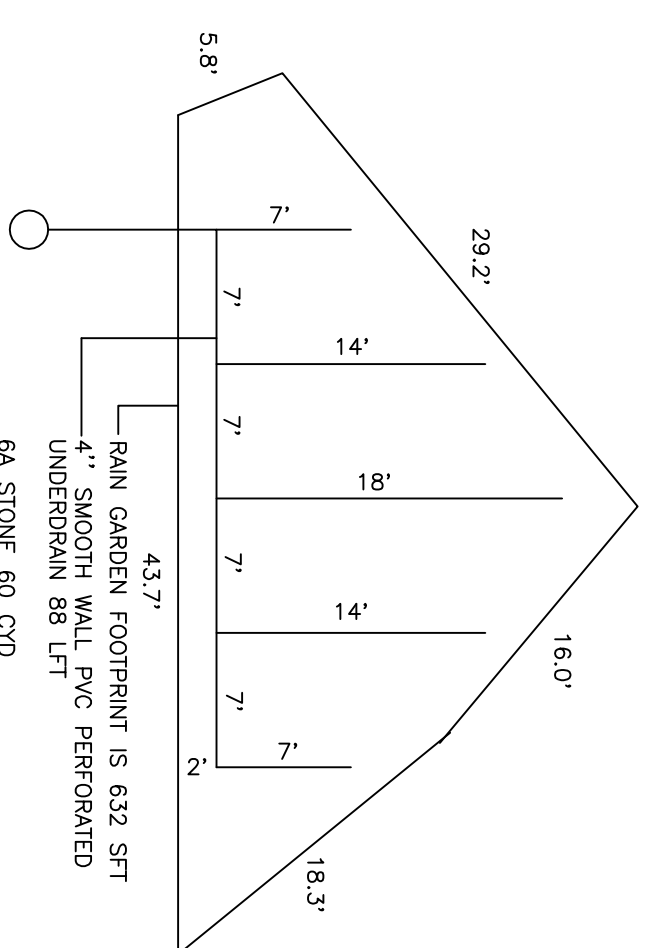
ENGINE SURVEYING & ENGINEERING
 805 N. CEDAR PO BOX 87
 MASON, MICHIGAN 48854-0087
 517-679-6565
 FAX 517-678-6875

CONSTRUCTION PLANS
 RAYNER PONDS ESTATES NO. 4
 CROSS LOT PLAN & PROFILE

PLAN DATE: MARCH 29, 2019

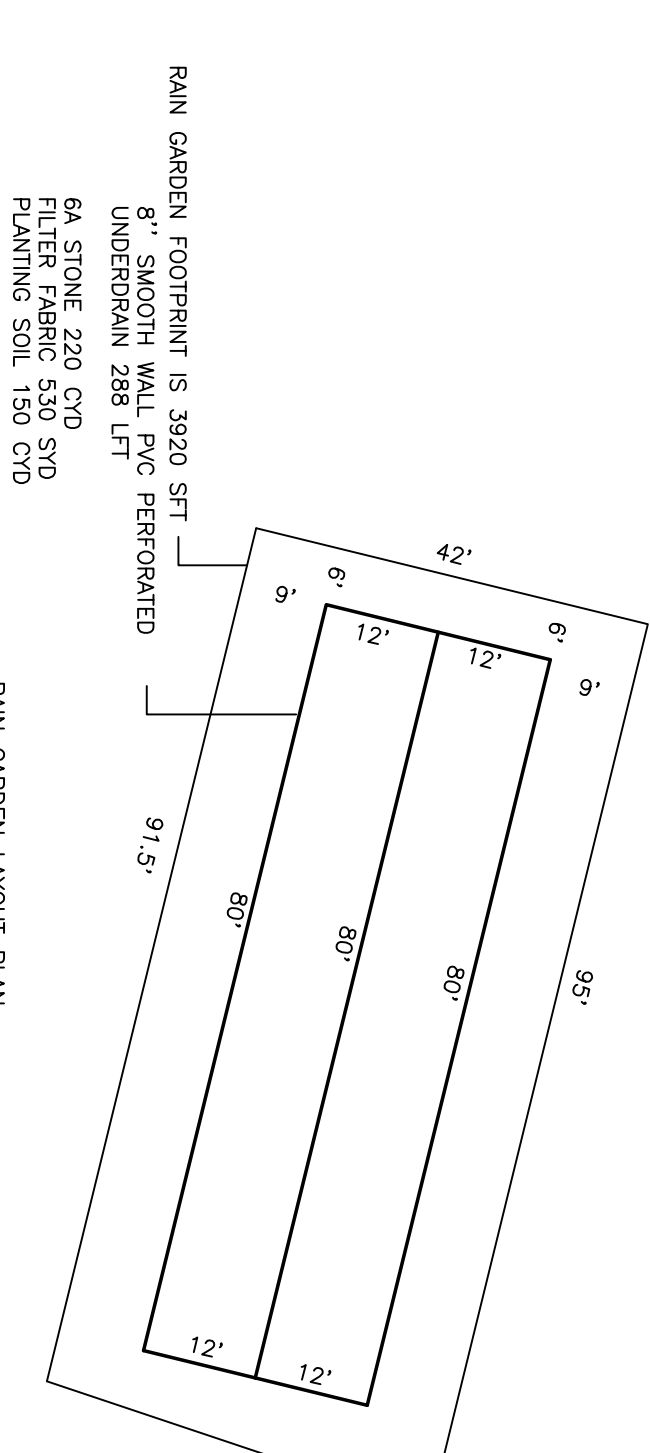
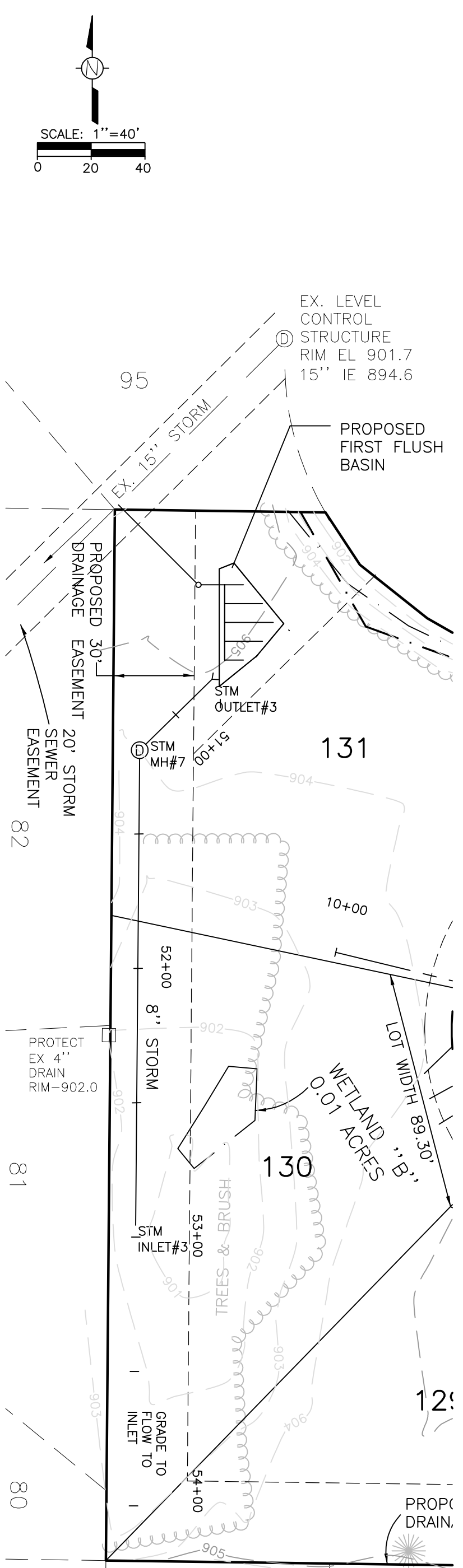
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 VERT SCALE: 1" = 4'
 SHEET 4 OF 7

BENCHMARK—TOP MAIN STEAMER ON HORRANT AT INTERSECTION STRATFORD DRIVE & EATON DRIVE. ELEVATION—906.91 NGVD 88

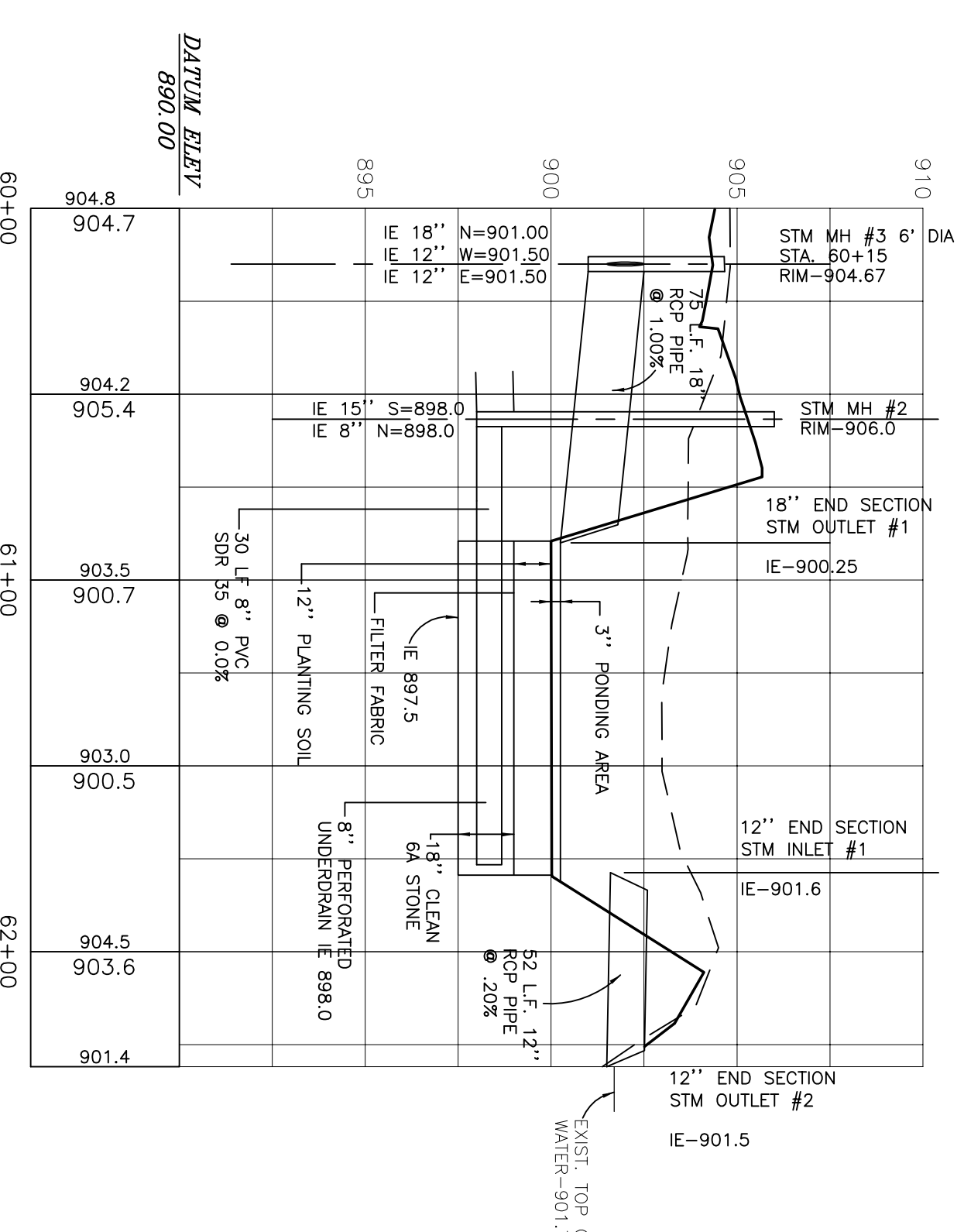
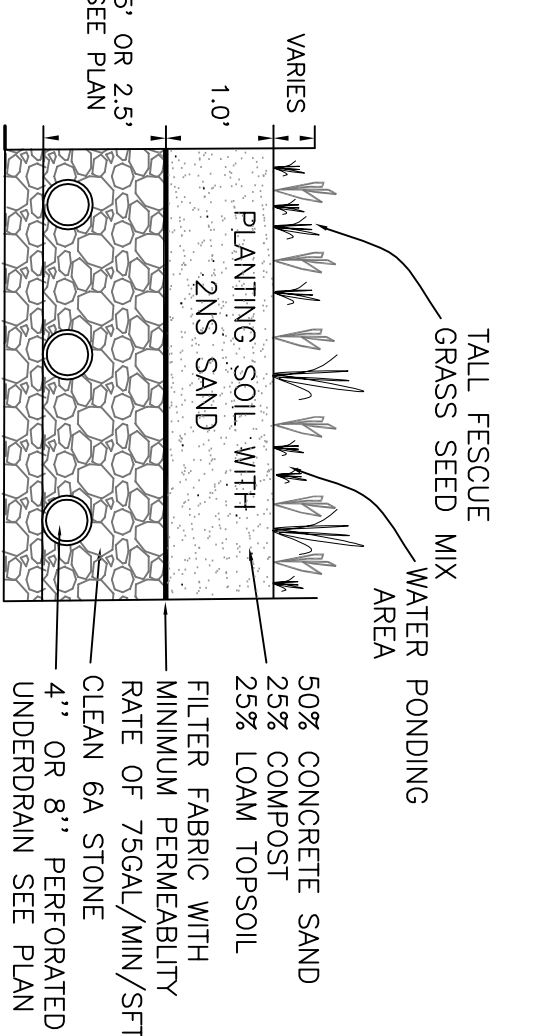
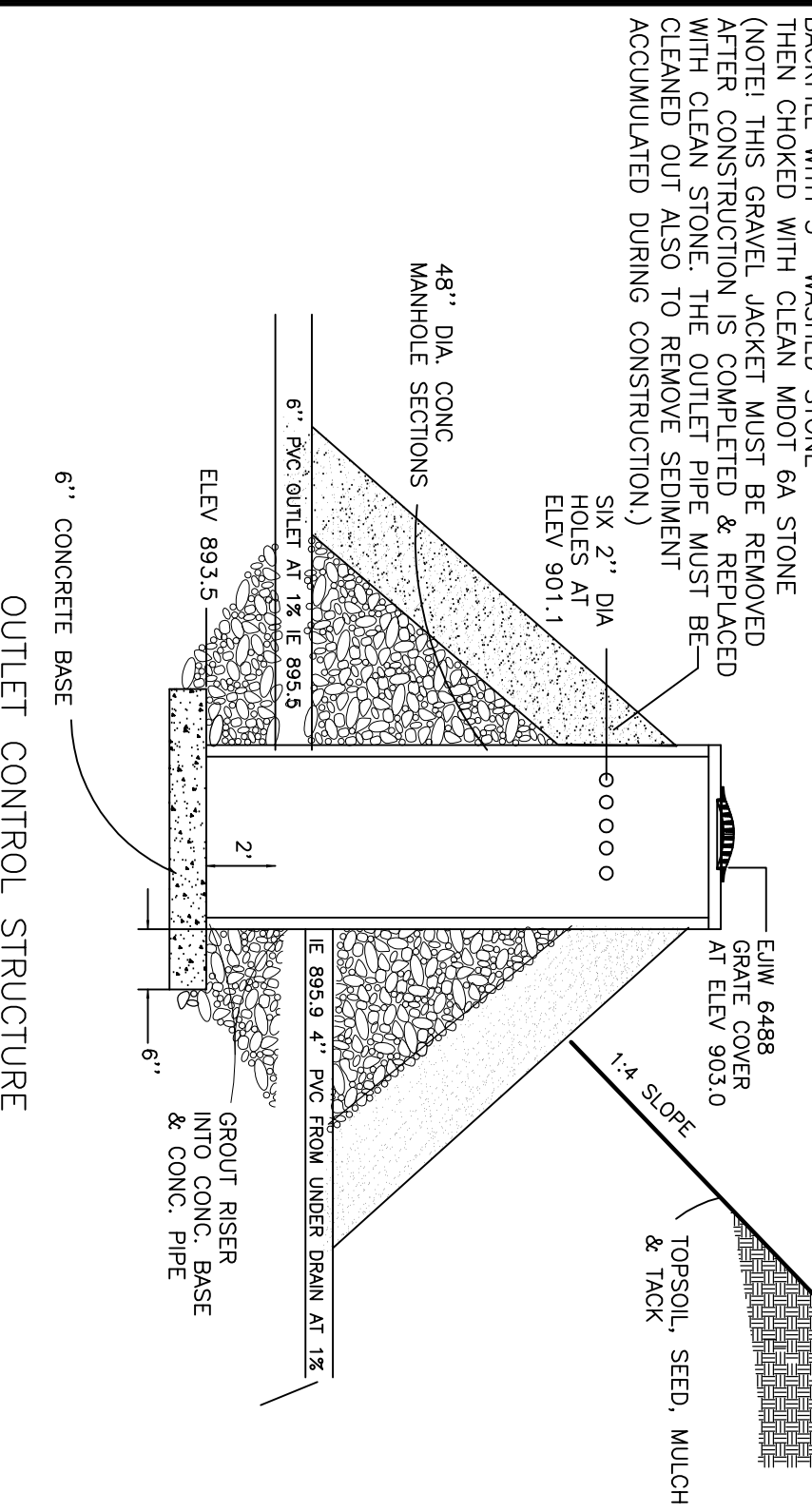
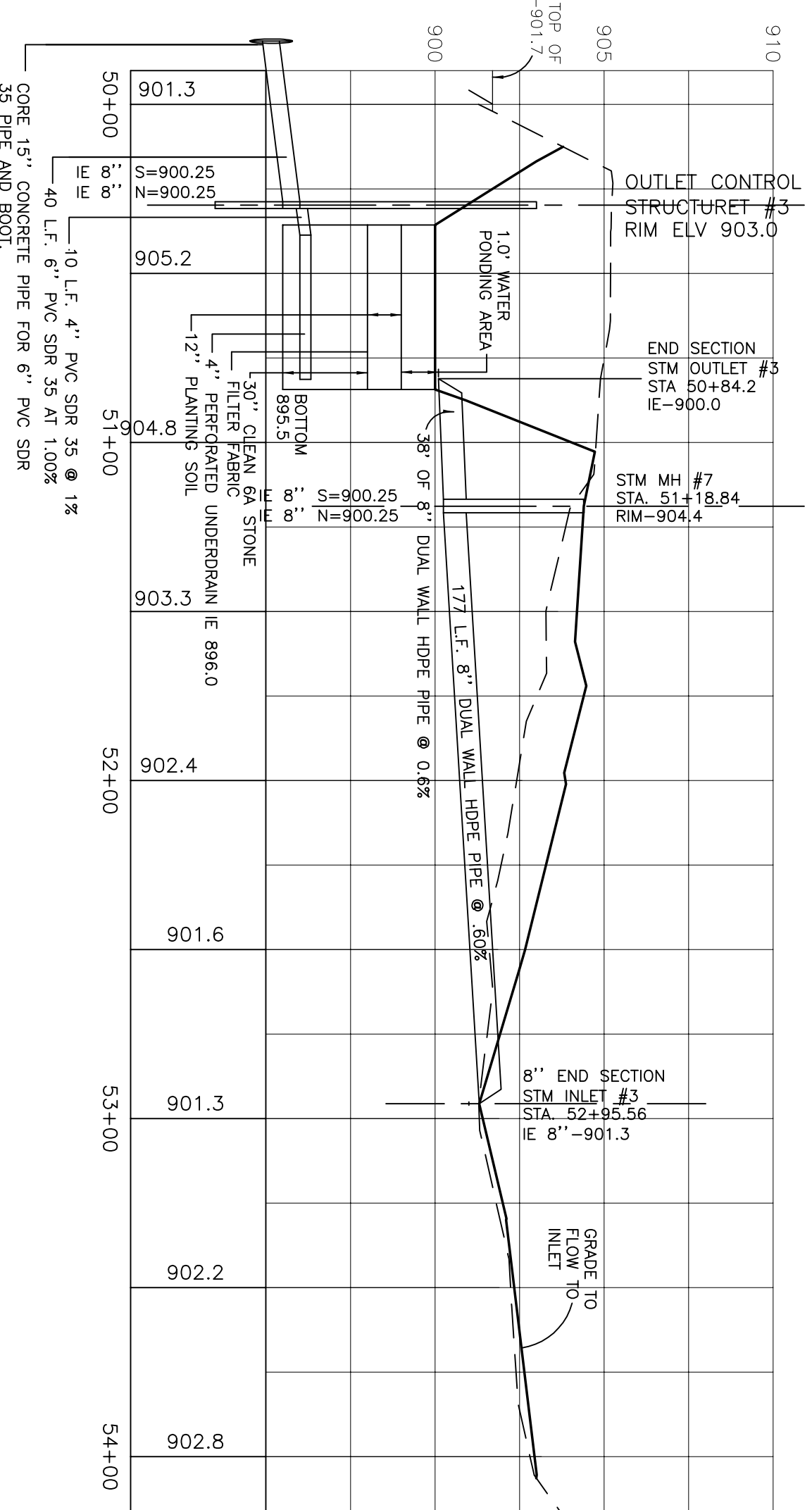
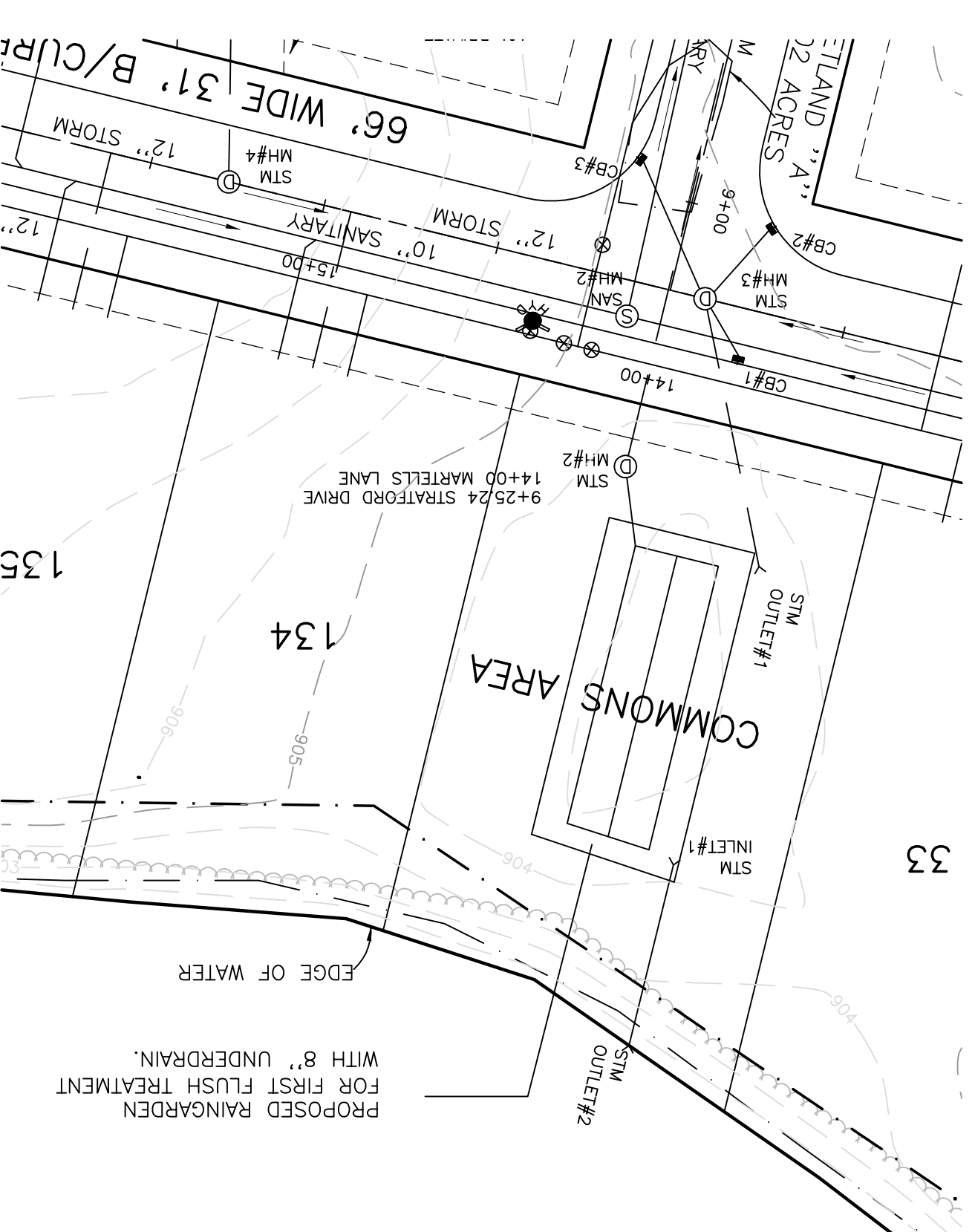


CONSTRUCTION PLANS FOR RAYNER PONDS ESTATES NO. 4

WESTERLY CROSS LOT STORM



RAIN GARDEN



BACKFILL WITH 3" WASHED STONE THEN CHOKED WITH CLEAN MDOT 6A STONE (NOTE: THIS GRAVEL JACKET MUST BE REMOVED AFTER CONSTRUCTION IS COMPLETED & REPLACED WITH CLEAN MDOT 6A STONE TO REMOVE SEDIMENT ACCUMULATED DURING CONSTRUCTION.)

NOTE: NO WHEELED VEHICLE ARE ALLOWED ON BIG-RETENTION AREA. ALL RUNOFF MUST BE DIVERTED AWAY FROM TREATMENT AREA UNTIL SUCH TIME AS IT IS BUILT & VEGETATION IS ESTABLISHED.

REVISIONS

DATE	REVISIONS

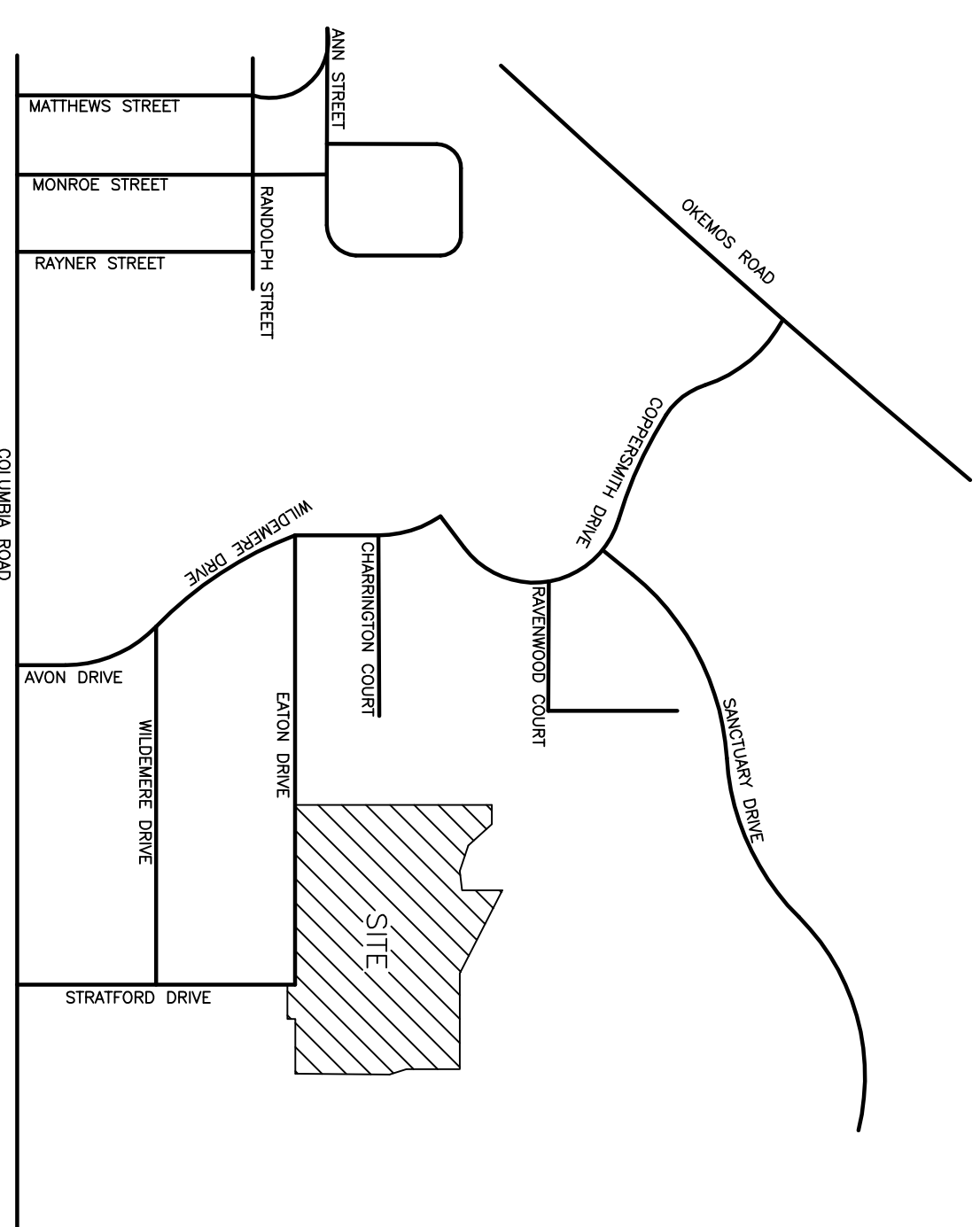
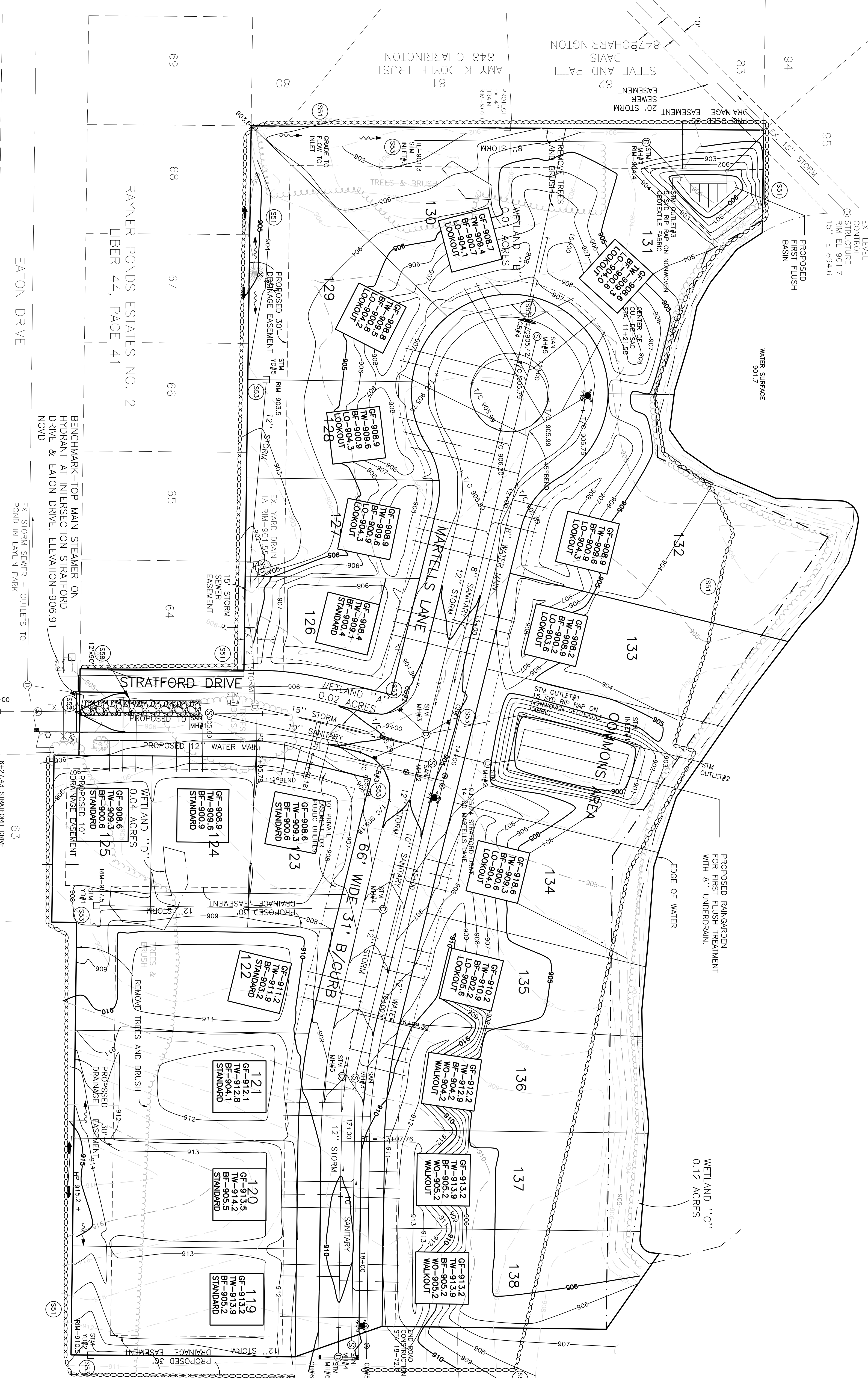
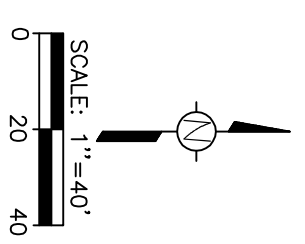
DEVELOPER: GIGIERE HOMES
6200 PINE HOLLOW DRIVE, STE 100
EAST LANSING, MI 48823

CONSTRUCTION PLANS RAYNER PONDS ESTATES NO. 4 CROSS LOT PLAN & PROFILE

PLAN DATE: MARCH 29, 2019
HORZ SCALE: 1" = 40'
VERT SCALE: 1" = 4'
SHEET 5 OF 7

BENCHMARK—TOP MAIN STEAMER ON HORRANT AT
INTERSECTION STRATFORD DRIVE & EATON DRIVE.
ELEVATION—906.91 NGVD 88

CONSTRUCTION PLANS FOR RAYNER PONDS ESTATES NO. 4



LOCATION MAP
NO SCALE

- LEGEND**
- LIMIT OF TREES AND BRUSH
 - EXISTING CONTOUR
 - PROPOSED CONTOUR
 - PROPOSED ELEVATION
 - TOP OF CURB - T/C 904.39
 - HIGH POINT - HP 915.2
 - SEWER STRUCTURE RIM ELEVATION - RM 905.89
 - PROPOSED BUILDING ELEVATIONS
 - TW - TOP OF CONCRETE FOUNDATION WALL
 - LO - BASEMENT FLOOR SILL
 - WO - WALKOUT DOOR THRESHOLD
 - PROPOSED SURFACE FLOW DIRECTION
 - EXISTING SURFACE FLOW DIRECTION
 - FOUNDATION TYPES:
 - STANDARD
 - STANDARD WALKOUT
 - BUILDING ELEVATIONS AND FOUNDATION TYPES COULD CHANGE AT TIME OF BUILDING PERMIT APPLICATION AND MAY VARY FROM THOSE SHOWN ON THIS PLAN.

DATE	REVISIONS

DEVELOPER: GIGUERE HOMES
6200 PINE HOLLOW DRIVE, STE 100
EAST LANSING, MI 48823

ENGINEER SUPERVISING & ENGINEERING
805 N. CEDAR, PO. BOX 87
MASON, MICHIGAN 48854-0087
517-679-6565
FAX 517-678-6675

ENGINEERING
CONSTRUCTION PLANS

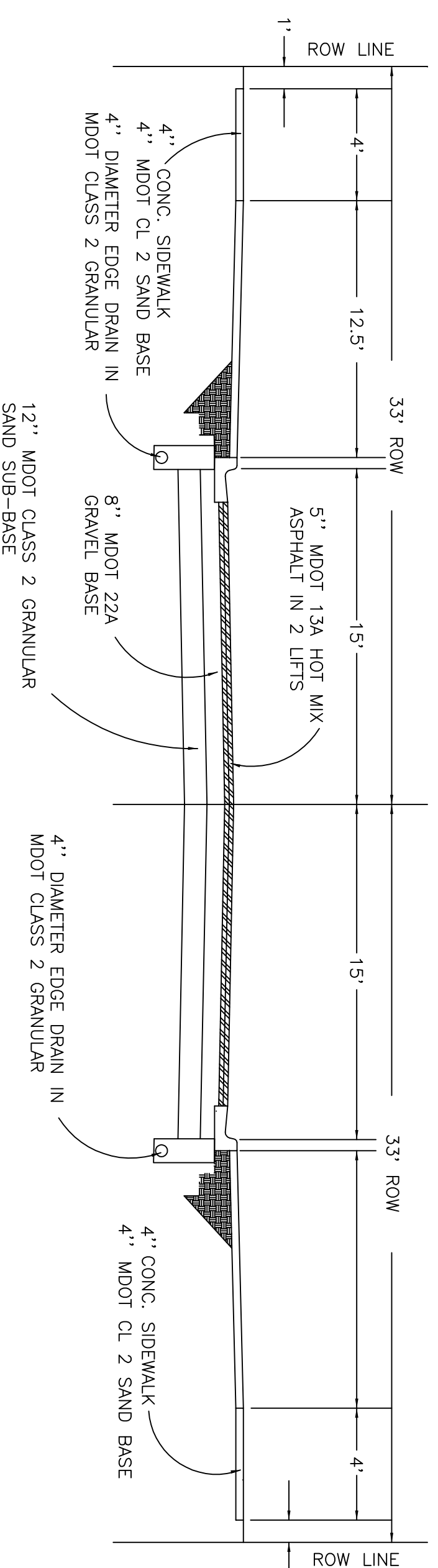
CONSTRUCTION PLANS
RAYNER PONDS ESTATES NO. 4
GRADING AND SOIL EROSION AND
SEDIMENTATION CONTROL

PLAN DATE: AUGUST 9, 2019

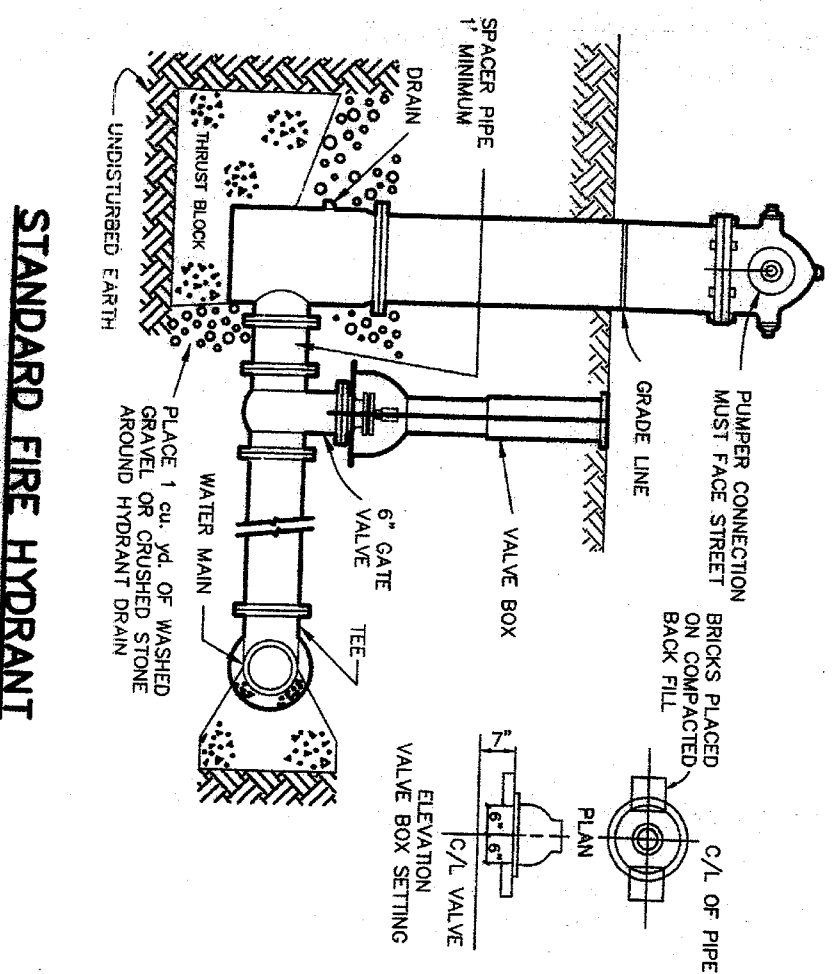
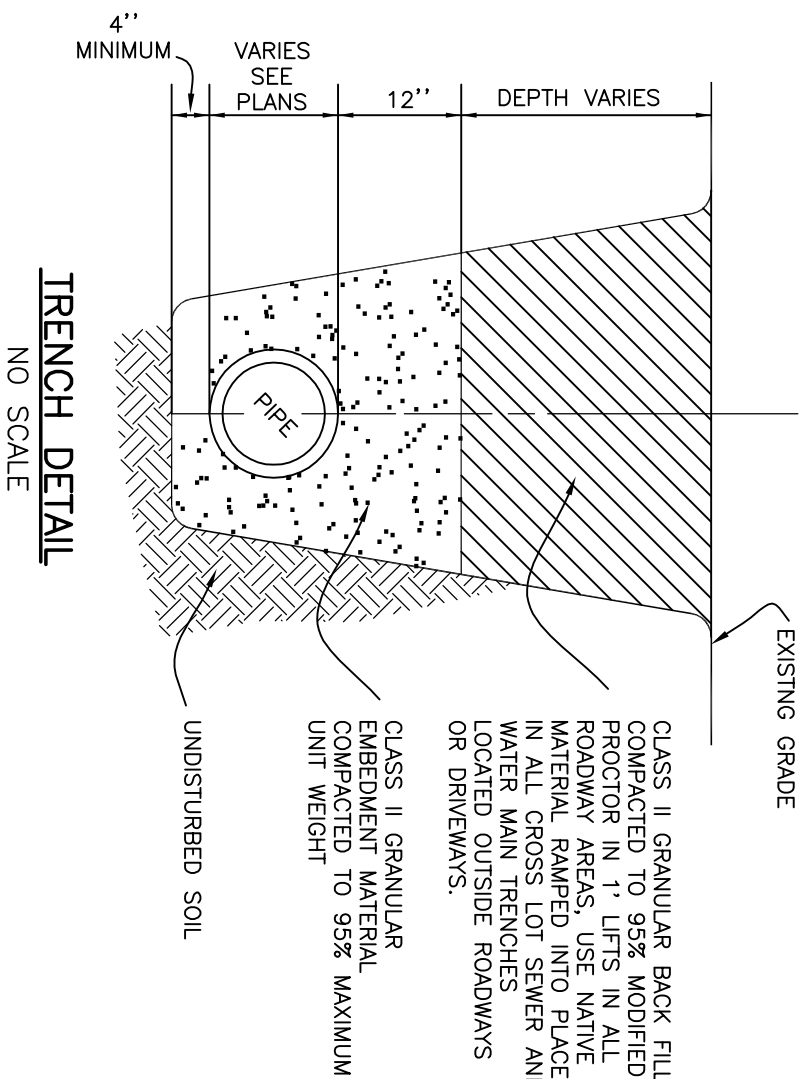
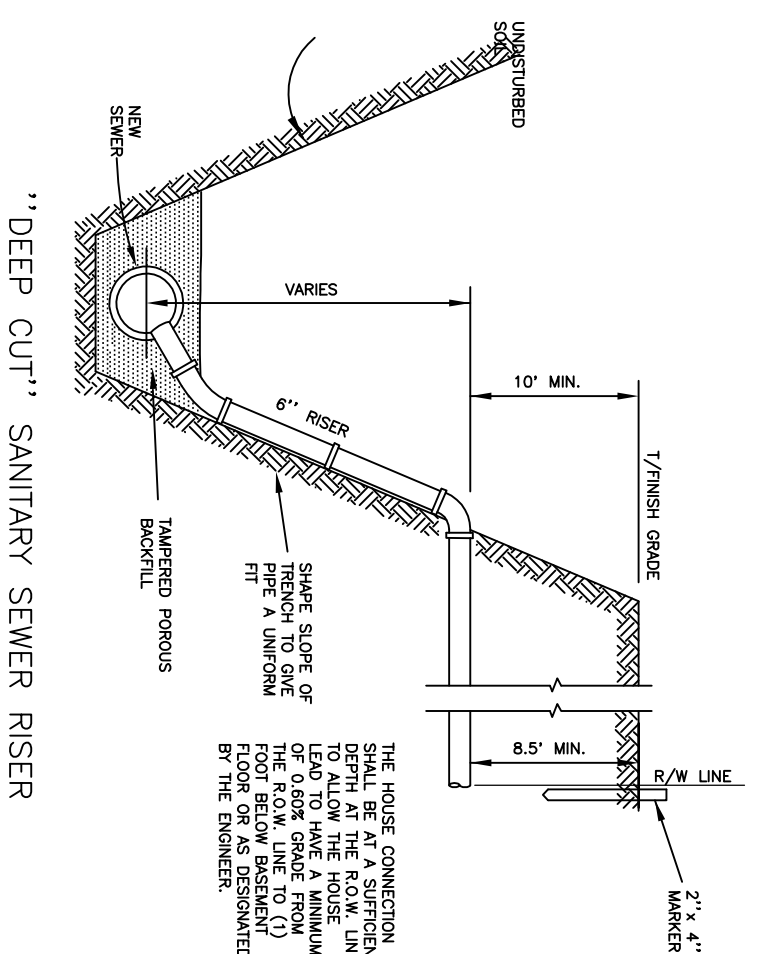
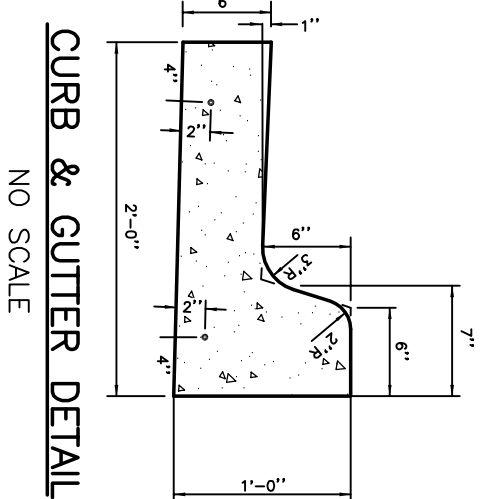
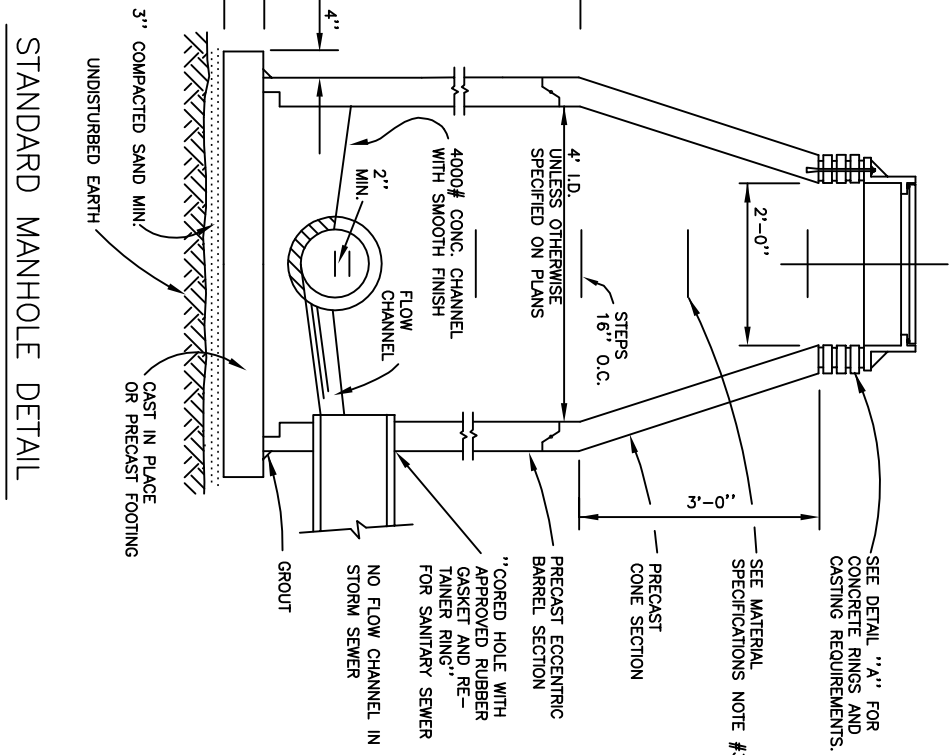
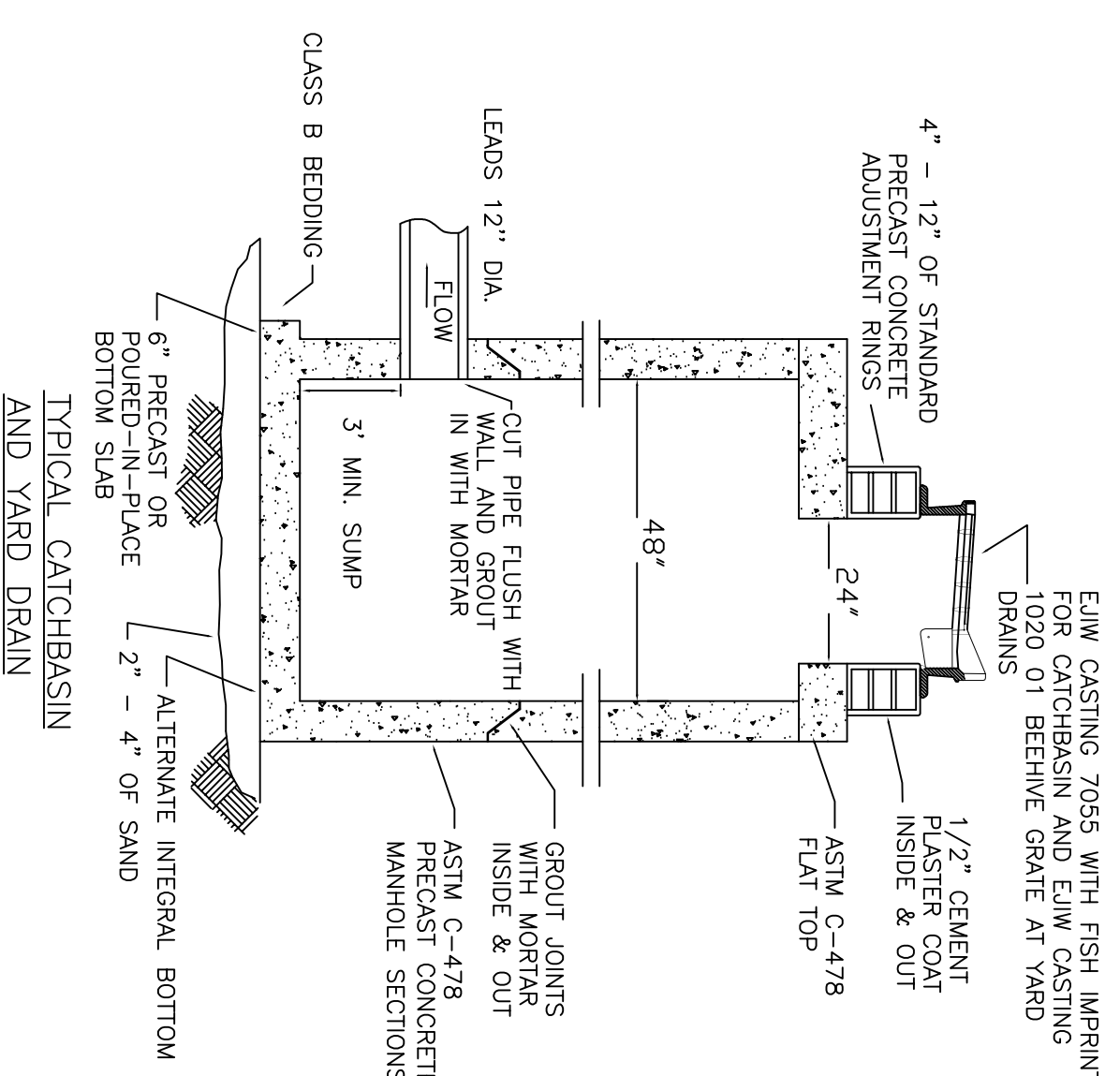
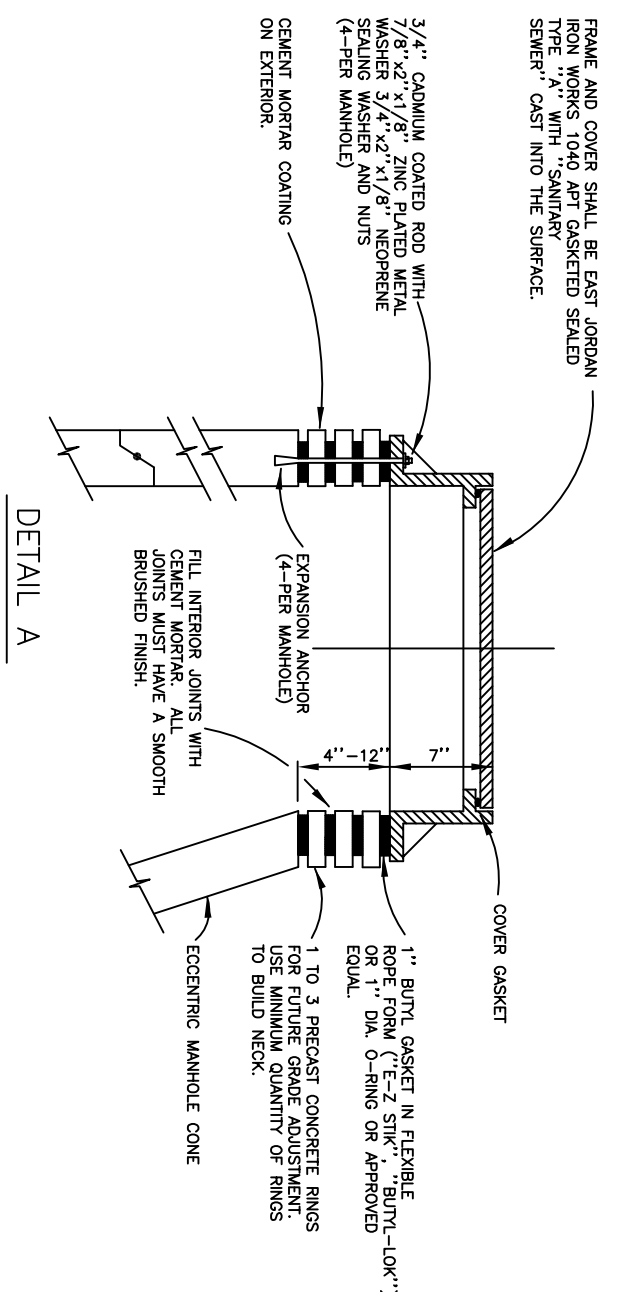
HORZ SCALE: 1" = 40'
VERT SCALE: 1" = 4'
SHEET 6 OF 7

CONSTRUCTION PLANS FOR RAYNER PONDS ESTATES NO. 4

A SUBDIVISION OF PART OF THE SOUTHEAST 1/4 OF SECTION 4,
T2N, R1W, CITY OF MASON, INGHAM COUNTY, MICHIGAN



TYPICAL ROAD CROSS SECTION
NO SCALE
PROPOSED PUBLIC STREETS
APPLIES TO
STRATFORD DRIVE AND MARTELLS LANE



- WATER MAIN SPECIFICATIONS:
- PIPE FOR WATER MAINS SHALL BE DUCTILE IRON CLASS 52, CEMENT LINED IN ACCORDANCE WITH ASA A21.4. JOINTS SHALL BE SLIP-ON TYPE CONFORMING TO ASA A21.11.
 - VALVES 12" & SMALLER SHALL BE MULLER GATE VALVES, RESILIENT SEAT MODEL A-2370-20 OR US PIPE METRO 250 RESILIENT SEAT GATE VALVES OR AMERICAN DARLING RESILIENT SEAT GATE VALVE, CRS-80. VALVES TO HAVE NON-RISING STEM AND OPEN TO THE LEFT. VALVES SHALL BE INSTALLED IN MUELLER H-10357, 3-PIECE ADJUSTABLE BUFFALO BOX.
 - HYDRANTS SHALL BE EAST JORDAN IRON WORKS NO. 5BR WITH 5'-6" STANDARD BURY, TO INCLUDE 2'-5" RIS QUICK CONNECT STORZ, FIRE FLOW PUMPER NOZZLES AND CAP. HYDRANTS SHALL OPEN TO THE LEFT. THE OPERATING NUT SHALL BE 1-1/8". CAST IRON, PENITON. COLOR OF HYDRANT SHALL BE YELLOW.
 - WATER LINES SHALL BE INSTALLED TO LINES AND GRADES SET BY THE ENGINEER. THE PRESS SHALL BE INSTALLED AT A DEPTH TO PROVIDE A MINIMUM OF 5'-0" OF COVER.
 - WATER SERVICE LINES SHALL BE 3/4" TYPE "K" COPPER. LINES SHALL EXTEND TO THE PERMANENT EASEMENT LINE. INSTALL A PLUG ON ENDS OF SERVICE LINES. CORPORATION STOPS SHALL BE AWMA THREAD INLET, FORO, F1000 PACK-JOINT AND INSTALLED AS DIRECTED BY ENGINEER. INSTALL ONE CURB STOP ON EACH SERVICE LEAD AS DIRECTED BY ENGINEER. MUELLER 95E BUFFALO BOX SHALL BE USED WITH CURB STOPS.
 - ALL FITTINGS, HYDRANTS, AND VALVES SHALL BE FIXED TO THE WATER MAIN BY WEGALUG MECHANICAL JOINT.
 - COMPLETED MAINS MUST PASS PRESSURE TEST AND BACTERIA TESTS.

STORM SEWER SPECIFICATIONS:

- MATERIALS FOR STORM SEWER PIPE 12" OR GREATER SHALL BE C76 CLASS III OR IV CONCRETE PIPE. JOINTS FOR STORM SEWER SHALL BE WRAPPED. 8" STORM SEWER SHALL BE HDPE DUAL WALL PIPE, ADS N-12 OR EQUAL.
- SUB-GRADE DRAINAGE PIPE MATERIAL SHALL BE 4" PERFORATED, CORRUGATED POLYETHYLENE MEETING THE REQUIREMENTS OF ASTM D3350 WITH SYNTHETIC FIBER WRAP.
- MANHOLES AND CATCH BASINS SHALL BE PRE-CAST MEETING REQUIREMENTS OF ASTM C-478-63T WITH RUBBER GASKET JOINTS MEETING REQUIREMENTS OF ASTM C-425.
- MANHOLE CASTINGS SHALL BE EAST JORDAN 1620 WITH A PERFORATED COVER. CASTINGS SHALL BE SET IN A FULL BED OF MORTAR TO PROVIDE A WATERPROOF JOINT BETWEEN THE FRAME AND THE MASONRY.
- CASTING SHALL BE SET IN A FULL BED OF MORTAR TO PROVIDE A WATERPROOF JOINT BETWEEN THE FRAME AND THE MASONRY.
- STEPS SHALL BE OF AN APPROVED DESIGN, MADE OF CAST IRON, ALUMINUM OR PLASTIC COATED STEEL. RUNGS SHALL BE A MIN. OF 10" CLEAR LENGTH, DESIGNED TO PREVENT THE FOOT FROM SLIPPING OFF THE END AND CAPABLE OF SUPPORTING 300 LBS.
- STORM SEWER LEADS SHALL BE 4" SDR-35 OR PVC SCH 40. LOCATION OF LEADS SHALL BE AS SHOWN ON PLANS.
- SANITARY SEWER SPECIFICATIONS:
 - Materials for Sanitary Sewer Pipe shall be as follows:
 - SDR 26 PVC
 - Sanitary sewer leads shall be SDR 26 PVC.
 - Manholes shall be precast meeting requirements of ASTM C-478 with rubber gasket joints meeting requirements of ASTM C-425. Manholes shall be furnished with flexible rubber sleeves for pipe connections. Press Wedge II, Lock Joint or approved equal.
 - Steps shall be of an approved design, made of cast iron, aluminum or plastic coated steel. Rungs shall be a minimum of 10" clear length, designed to prevent the foot from slipping off the end and capable of supporting 300 lbs.
 - Completed mains must be televised. Completed mains must pass low pressure air test.

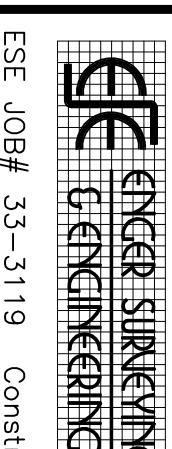
GENERAL NOTES:

- All utilities shall be notified in accordance with Act 53 of 1974, Public Utilities Act, Michigan, prior to excavation for any construction required under this contract.
- The Developer shall exercise care when excavating near existing utilities. Hand excavation or locating of utilities shall be required and the Developer shall be responsible for all damages caused by its operations.
- The Developer shall be responsible for restoration of all public and private property removed or damaged during this construction. Developer shall replace all damaged or destroyed items with new material as approved by the Engineer.
- All temporary pumping of ground water encountered during the construction process shall be the responsibility of the Developer.
- All work shall be performed in accordance with the Soil Erosion and Sedimentation Control Plan (SECP) attached as Addendum A-1 for Act 347. It shall be the responsibility of the owner, Contractor's and Developer's responsibility to adhere to all requirements of the permit and to the Act.
- Street construction shall be in accordance with the requirements of the City of Mason.
- Dust control for the project is the Contractor's and Developer's responsibility and must be maintained or as directed by the Engineer.
- Minimum 10 ft. horizontal clearance and 18 inch vertical clearance must be maintained between sewers and water pipes.
- Surplus excavated material shall be hauled and disposed of by the Developer. Spillage of material along haul routes will not be allowed.

DATE

REVISIONS

DEVELOPER: GIGIERE HOMES
6200 PINE HOLLOW DRIVE, STE 100
EAST LANSING, MI 48823



ENGINE SURVEYING & ENGINEERING
805 N. CEDAR ST. BOX 87
MASON, MICHIGAN 48854-0087
517-679-6565
FAX 517-678-6675

CONSTRUCTION PLANS
RAYNER PONDS ESTATES NO. 4
DETAIL SHEET

PLAN DATE: MARCH 29, 2019

HORZ SCALE: 1" = 40'
VERT SCALE: 1" = 4'
SHEET 7 OF 7