



Planning Commission

Larry Fox, Chairperson	Summer L. McMullen, Trustee
Michael Mitchell, Vice-Chairperson	Keith Voight, Secretary
Michelle LaRose, Commissioner	Sue Grissim, Commissioner
	Tom Murphy, Commissioner

Planning Commission Meeting Agenda Hartland Township Hall Thursday, October 14, 2021 7:00 PM

1. Call to Order
2. Pledge of Allegiance
3. Roll Call
4. Approval of the Agenda
5. Approval of Meeting Minutes
 - [a.](#) Planning Commission Meeting Minutes of July 8, 2021
 - [b.](#) Planning Commission Meeting Minutes of September 23, 2021
6. Call to Public
7. Old and New Business
 - [a.](#) Site Plan Application #21-014 Multi-tenant building with drive-through window (Hartland Towne Square PD)
8. Call to Public
9. Planner's Report
10. Committee Reports
11. Adjournment

HARTLAND TOWNSHIP PLANNING COMMISSION **DRAFT** REGULAR MEETING MINUTES

July 8, 2021 – 7:00 p.m.

1. **Call to Order:** Chair Fox called the meeting to order at approximately 7:00 p.m.
2. **Pledge of Allegiance:**
3. **Roll Call and Recognition of Visitors:**
Present – Commissioners Fox, Grissim, McMullen, Mitchell, Murphy, Voight
Absent – Commissioner LaRose
4. **Approval of the Agenda:**
A Motion to approve the July 8, 2021 Planning Commission Regular Meeting Agenda was made by Commissioner Mitchell and seconded by Commissioner Murphy. Motion carried unanimously.
5. **Approval of Meeting Minutes:**
 - a. **Planning Commission Minutes of May 13, 2021**
A Motion to approve the May 13, 2021 Planning Commission Regular Meeting Minutes was made by Commissioner Grissim and seconded by Commissioner Voight. Motion carried unanimously.
 - b. **Planning Commission Minutes of May 27, 2021**
A Motion to approve the May 27, 2021 Planning Commission Regular Meeting Minutes was made by Commissioner Grissim and seconded by Commissioner Mitchell. Motion carried unanimously.
6. **Call to Public:**
None
7. **Old and New Business:**
 - a. **Site Plan #21-010 Private Shared Driveway (Mitchell)** a request to approve the construction of a private shared driveway which is intended to serve two (2) single-family residential lots, currently addressed as 12102 Dunham Road.

Director Langer summarized the location and scope of the request stating the following:

- Zoned CA Conservation Agriculture.
- Applicant intends to divide the property into four parcels.
- Livingston County Road Commission (LCRC) will not approve, or issue separate driveway permits for Parcel C and Parcel D due to site distance issues on Dunham Road.
- Shared driveway requires Planning Commission approval.

Wayne Perry of Desine Inc., representing the property owners, stated it is simply the proximity of the hill on Dunham Road which precludes the property owner's from have their own driveway at this location; otherwise, they are completely conforming parcels.

The Planning Commission reviewed the staff memorandum dated July 1, 2021.

Section 5.23.4.B.xii. requires proposed public and private utility locations. Mr. Perry stated usually a shared driveway request is due to a parcel not having road frontage with the accompanying utility easements. This is not the case for this request.

Section 5.23.4.C. requires a construction cost estimate. Director Langer explained a cost estimate helps establish the Developer Account dollar amount that will be requested as part of the inspection process by HRC following the application of a Land Use Permit.

Commissioner Grissim offered the following Motion:

Move to approve Site Plan Application #21-010, a request to construct a private shared driveway which is intended to provide access to two (2) single-family residential lots, which will be created under a separate land division application.

Approval is subject to the following conditions:

- 1. The applicant shall adequately address the outstanding items noted in the Planning Department's memorandum, dated July 1, 2021.**
- 2. Applicant complies with any requirements of the Department of Public Works Director, Township Engineering Consultant, Hartland Deerfield Fire Authority, and any other governmental agency.**
- 3. Approval of the proposed shared driveway does not include approval of any future land divisions.**
- 4. The proposed easement maintenance agreement shall comply with the requirements of the Township Attorney.**

Seconded by Commissioner Voight.

Director Langer corrected a typographical error in the case number for clarification.

Motion carried unanimously.

b. Site Plan #21-009 (Heritage Meadows PDMDR– Amendment to SP #225 for lot coverage standard)

Director Langer summarized the location and scope of the request stating the following:

- Located north of Highland Road, east of Clark Road.
- Approved as part of a Planned Development.
- Modifying lot coverage limitation from twenty percent (20%) to thirty percent (30%).
- Similar request to some other developments that came before the Planning Commission in the recent past.

Danielle Langenbruch, President of Heritage Meadows Association; Renee Lounsberry, Vice-president of Heritage Meadows Association introduced themselves and stated the following:

- Previous HOA Board contacted by Planning staff.
- More recently some property owners wanted to make property improvements but could not.
- Generally calculated, 66 of the 84 homes may be over the twenty percent (20%) limitation which is why they are bringing this request.

Chair Fox summarized other developments previous requests for a similar issue.

Commissioner Voight offered the following Motion:

Move to approve Site Plan Application #21-009, a request to amend the approved site plan for Heritage Meadows PDMDR (SP #225) to amend the maximum lot coverage from twenty percent (20%) to thirty percent (30%). Approval is subject to the following conditions:

- 1. The applicant shall adequately address the outstanding items noted in the Planning Department's memorandum, dated July 1, 2021.**
- 2. Applicant complies with any requirements of the Department of Public Works Director and Hartland Deerfield Fire Authority and all other government agencies, as applicable.**

Seconded by Commissioner Mitchell. Motion carried unanimously.

c. Site Plan #21-011 – Hartland Senior Living Planned Development/PIRHL (PD) Final Plan

Director Langer summarized the location and scope of the request stating the following:

- Located between Bullard Road and Fenton Road, north of Highland Road (M-59).
- Completed Conceptual and Preliminary reviews before both the Planning Commission and the Township Board.
- A hybrid of senior apartments and assisted living.
- Included possible future interior uses if there is a change in the market.
- Possible interconnection proposed for the future.

Kevin Brown, VP of Development PIRHL, the Applicant, shared his presentation.

The Planning Commission discussed the Hartland Senior Planned Development Agreement Outline Draft.

Director Langer recommended the section related to signage be revised or eliminated if, for some reason, the sign regulations change, they would not be locked into this set of parameters for signage.

Director Langer stated in the Final Plan, some of the landscaping has been modified as requested at the Preliminary Review.

Director Langer stated it is typically beneficial for both properties when developed to have interconnection. If an agreement cannot be agreed upon, the Township has required PIHRL to pave an access up to the property line which would be completed when the neighboring property makes changes to their site. Commissioner Murphy asked if the Fire Department was satisfied with this arrangement. Director Langer stated they were.

Commissioner Voight stated he is very pleased with the roofline variations on the façade plan and the general design of the building. Chair Fox agreed as did other members of the Planning Commission.

Commissioner Mitchell offered the following Motion:

Move to recommend approval of Site Plan Application #21-011, the Final Planned Development Site Plan for Hartland Senior Living Planned Development, subject to the following conditions:

1. The Final Planned Development Site Plan for Hartland Senior Living Planned Development, SP PD #21-011, is subject to the approval of the Township Board.
2. Final approval of the Hartland Senior Living Planned Development (SP PD #21-011) shall require an amendment to the Zoning Ordinance to revise the zoning map and designate the subject properties as PD (Planned Development). The subject properties, which constitute the planned development project area (17.91 acres total), and which are to be rezoned to PD, are as follows:
 - a. Tax Parcel ID #4708-23-300-025 (13.71 acres in size); currently zoned CA (Conservation Agricultural)
 - b. Tax Parcel ID #4708-23-300-026 (2.00 acres in size); currently zoned OS (Office Service)
 - c. Tax parcel ID #4708-23-300-027 (2.22 acres in size); currently zoned OS (Office Service)
3. The applicant shall adequately address the outstanding items noted in the Planning Department's memorandum, dated July 1, 2021, on the Construction Plan set, subject to an administrative review by Planning staff prior to the issuance of a land use permit.
4. The Planned Development Agreement and any easements shall comply with the requirements of the Township Attorney.
5. Municipal water shall be available for this development. In the event that municipal water is not available for this project, the developer shall re-submit plans to be approved by the Planning Commission and Township Board that provide an acceptable water source.
6. The applicant shall apply for and secure all applicable approvals and permits from the Michigan Department of Transportation prior to the issuance of a land use permit for the project.
7. Applicant complies with any requirements of the Township Engineering Consultant, Department of Public Works Director, Hartland Deerfield Fire Authority, and all other governmental agencies, as applicable.

Seconded by Commissioner Murphy. Motion carried unanimously.

8. **Call to Public:**
None
9. **Planner's Report:**
None
10. **Committee Reports:**
None

11. Adjournment:

A Motion to adjourn was made by Commissioner Voight and seconded by Commissioner Mitchell. Motion carried unanimously. The meeting was adjourned at approximately 7:48 p.m.

HARTLAND TOWNSHIP PLANNING COMMISSION **DRAFT** REGULAR MEETING MINUTES

September 23, 2021 – 7:00 p.m.

1. **Call to Order:** Chair Fox called the meeting to order at approximately 7:00 p.m.
2. **Pledge of Allegiance:**
3. **Roll Call and Recognition of Visitors:**
Present – Commissioners Fox, McMullen, Mitchell, Murphy
Absent – Commissioners Grissim, LaRose, Voight
5. **Approval of Meeting Minutes:**
 - a. **Planning Commission Minutes of June 24, 2021**
A Motion to approve the June 24, 2021 Planning Commission Regular Meeting Minutes was made by Commissioner Mitchell and seconded by Commissioner Murphy. Motion carried unanimously.
6. **Call to Public:**
None
7. **Old and New Business:**
 - a. **Site Plan #21-012 Hartland Crossing Planned Development (PD) Concept Plan** – Request for Concept Review of a mixed use planned development with commercial and residential uses, known as Hartland Crossing.

Director Langer described the location of the project and stated the following:
 - Proposed Planned Development Concept Review.
 - Ten acres to the north could be commercial with multi-family residential use in the southern 20 acres.
 - Possibility of another lesser commercial use in the southern portion.
 - Reviewed at the August 12, 2021 Planning Commission meeting where the density was discussed; original submittal did not include the number of units being requested.
 - Future Land Use Map (FLUM) designation allows up to four units per acre with a bonus density of 40% or 168 units.
 - The Applicants indicated they are looking at 15 units per acre to support this project on the southern 20-acre portion only; approximately 300 units.
 - Planning Commission desired to see examples of other developments the Applicant has constructed with this density and asked for that information to be provided.
 - The Applicant has provided the density information and some additional details about amenities.

The Applicants introduced themselves: Chris Kojaian and Tony Antone of Kojaian Management Corporation; and Mark Szerlag of Thomas Duke Company. The Applicant confirmed the Planning Director's summary of the plan and added some of the examples of the density they are proposing, 15 dwelling units per acre, are not projects they were involved in but do show a visual representation of what they are proposing or companies that have constructed similar developments. He continued many developers are looking for a site this size; it is the sweet spot for this type of development. Also stated they are open to another lesser

commercial use to the south which could be an amenity such as a day care or some other destination business that would not need the M-59 frontage.

Director Langer presented some of the illustrated examples of this level of density reminding the Planning Commission these are not the exact layouts being requested; the actual project may look different.

The Planning Commission had the following comments:

- Same as what was proposed in August with the addition of some possible amenities.
- Higher density than any other project in Hartland to date.
- Housing study recommended higher density developments near existing utilities and access, which fits this site. A project like this belongs in this location if it belongs anywhere in the Township.
- Bonus density is 40%; this proposal is approximately 150% over the existing density allowed. Concerned about setting a precedent allowing this density here.
- Density proposed is not unreasonable, it is just different for Hartland.
- One recognizable benefit is a second access to the Charyl Stockwell Academy which is something that is needed but cannot see other recognizable benefits.
- Unsure how to move forward to allow the requested density; amend the Ordinance or something else.
- Can find nothing wrong with the photo examples of the density request; that type of density is not offensive, it is just not something Hartland is used to.
- Density should be where infrastructure is. There is no more infrastructure possible in Hartland today than this location.
- The Township needs a variety of housing which will support the commercial uses like restaurants and stores residents say they want.
- Good planning is to have more intense development and uses near this very location; it is inevitable.
- Consultants say the market has changed; this development is providing a product that Hartland currently does not offer and the market demands.
- Must think of the whole Township. Residents state they want more amenities, then more residents are needed, and this is the location for such a development.
- This development will look better in 20 years than a less intense product.
- Development of this kind will also draw new business to the area.

The Applicant stated they appreciate the comments; these are things they have thought about as well. With regard to setting a precedent; there is already an option for 40% bonus density, there could be an option for a “super bonus” if desired. There are clearly benefits that can be identified for this location that would not be present in other proposals at another location; this is a unique, higher-end project. A community could not support more than one or two developments of this kind. Believes this will be one of those really special corners that the Township will be proud of for years to come.

Chair Fox stated he believes there is a way forward, whether it is the “super bonus”, or a specific area designated around the M-59/US 23 interchange for more intense development. He believes it is the number, the 15 units per acre, that is tripping us up; should think about it for what it is and what it could do for the existing and future business community.

Commissioner Murphy stated the following:

- Rooftops help drive commercial development.
- Still dealing with the pandemic.

- If it belongs anywhere, it belongs here.
- Traffic is a consideration.
- Not an easy position to be in; trying to consider all aspects.
- This is a walkable development opportunity.
- Could be a springboard project for Hartland Township; something we need to go forward that will bring the desired development.
- It is new but maybe it is what we need here.

Chair Fox stated he supports this concept if the Applicant comes back with the right project, if they decide to come back. The density is not an issue.

The Applicant stated the following:

- Understand this is the Conceptual phase and there are many more steps at two different governing bodies.
- Township Board may not support it at all, but if they do, then they will be back with more detailed plans.
- The density is the gating issue; they are interested in bringing this high-end product to Hartland.
- If all are on the same page, much more will be presented at the Preliminary stage.

Commissioner Mitchell stated the following:

- Most people look at rooftops and not architecture, but we want excellent design. To get 15 units per acre, the design must look exceptional to gain his approval.
- He is still apprehensive.

Director Langer shared that Commissioner Grissim sent an email which stated she too has concerns about the density.

b. Initiate Ordinance Amendment to Section 4.6 (Ponds)

Director Langer stated the following:

- Township received a complaint regarding the construction of a pond without the proper permits.
- The current process involves a costly Site Plan Review application and a requirement to appear before the Planning Commission.
- Admin committee suggested applications for a pond could be reviewed and approved by staff rather than the Planning Commission which requires a Zoning Amendment.
- Zoning Amendments must be initiated by either the Planning Commission or the Township Board.

Chair Fox stated in all of his years on the Planning Commission he can remember one pond, possibly two, that has been approved by the Planning Commission. He suggested surrounding communities pond requirements be examined. He thinks staff could easily handle this.

Commissioner Mitchell concurred.

Chair Fox suggested maybe we could have the Township Engineer, HRC, review the standards as this issue has not been reviewed for many years.

Commissioner Murphy also agreed; staff is capable of reviewing and approving these applications.

Chair Fox stated they should have a Land Use Permit to ensure the slope is safe and the other site elements are taken into consideration such as wetlands, drainage, and septic systems.

The Planning Commission briefly discussed the difference in approval times between being heard at the Planning Commission or a staff approval.

Commissioner McMullen agreed stating she thinks it would be appropriate on properties that are larger than two acres.

Director Langer stated if one is adding a pond in a wetland area, the Michigan Department of Environment, Great Lakes and Energy (EGLE) would be involved. It can get tricky as the pond could potentially become part of a regulated wetland network at some point and the property owners might not be able to fill it in or change it without getting a permit from EGLE formerly known as the Michigan Department of Environmental Quality (MDEQ).

**Commissioner Mitchell offered the following Motion:
Move to initiate an Ordinance Amendment to Section 4.6 of Zoning Ordinance.
Seconded by Commissioner McMullen. Motion carried unanimously.**

9. Planner's Report:

Director Langer stated the Shops at Waldenwoods has an opportunity for another tenant and has requested to modify the development entry sign. The sign was approved as part of the Planned Development (PD). Director Langer stated as long as they maintain the same dimensions, he will allow them to modify or change the inside portion which is the part of the monument sign they want to modify. He wanted to share with the Planning Commission that he is working with the applicant rather than requiring they modify the PD Agreement, which is much longer and more costly process.

The Planning Commission briefly discussed the recent history of the sign and the PD modification.

Director Langer stated they will be required to provide a before and after representation of the sign showing no change in the dimensions of the overall sign.

10. Committee Reports:

None

11. Adjournment:

A Motion to adjourn was made by Commissioner Murphy and seconded by Commissioner McMullen. Motion carried unanimously. The meeting was adjourned at approximately 8:03 p.m.

Hartland Township Planning Commission Meeting Agenda Memorandum

Submitted By: Troy Langer, Planning Director

Subject: Site Plan Application #21-014 Multi-tenant building with drive-through window (Hartland Towne Square PD)

Date: October 7, 2021

Recommended Action

Move to approve Site Plan Application #21-014 a request to amend the previously approved plans for Hartland Towne Square Planned Development (PD), to construct an approximate 7,980 square foot multi-tenant building with one (1) drive through window. Approval is subject to the following conditions:

1. The applicant shall adequately address the outstanding items noted in the Planning Department's memorandum, dated October 7, 2021, on the Construction Plan set, subject to an administrative review by the Planning staff prior to the issuance of a land use permit.
2. The applicant shall change the building materials of the dumpster enclosure to match the building elevations. Revised plans shall be submitted as part of a land use permit.
3. The applicant shall eliminate the proposed river rock in the landscape beds and replace it with either lawn, shredded hardwood mulch, or another acceptable material. Revised plans shall be submitted as part of a land use permit.
4. Applicant complies with any requirements of the Department of Public Works Director, Township Engineering Consultant, and Hartland Deerfield Fire Authority Fire Marshal.
5. Applicant shall secure a letter of authorization from all applicable property owners prior to issuance of a land use permit for the project.
6. *(Any other conditions the Planning Commission deems necessary)*

Discussion

Applicant Thomas Hannawa, DPS Development, LLC

Site Description

The Hartland Towne Square Planned Development (PD) is located north of Highland Road (M-59) and west of Clark Road in Section 21 of Hartland Township. The entire planned development is approximately 81.34 acres in size and is comprised of multiple parcels. The PD is located north of Highland Road (M-59), south of Rovey Drive, west of Clark Road. On the development plan for Hartland Towne Square (Final Plan dated June 18, 2008), the subject site is labeled as Outlot #10 and #11. The site is currently vacant; however, the site was prepared for development when Hartland Square Drive was constructed.

The plans indicate the subject site is approximately 1.73 acres in area which is the combined total of Outlot #10 (1.02 acres) and Outlot #11 (0.71 acres). Outlot #10 (Tax Parcel ID #4708-21-400-056) is under the ownership of Flagstar Bank FSB. Outlot #11 (Tax Parcel ID #4708-21-400-077) is under the ownership of Ramco RM Hartland SC, LLC. It is presumed that the applicant will request to combine the two (2) parcels, once purchased, through a land division application with the Township.

Hartland Towne Square Planned Development is zoned Planned Development (PD) and was approved in 2008, under Site Plan Application #419F.

Request

The applicant is requesting approval to amend the previously approved site plans for Hartland Towne Square Planned Development (PD) and construct an approximate 7,980 square foot multi-tenant building with one (1) drive-through window under Site Plan #21-014.

Overview and Background Information

The Hartland Towne Square Planned Development was approved by the Township on March 18, 2008, under SP #429F. The approved plans for PD include the Planned Development Agreement (the “Agreement”), the Pattern Book for Hartland Towne Square (site design standards), and the Final Plan (detailed site and landscape plans). Together these documents, and applicable zoning standards, provide the development standards for Hartland Towne Square PD. Eight amendments to the PD have occurred between 2008 and 2019 as outlined below:

1st Amendment

The first amendment to the PD was approved on July 1, 2008. The Agreement, Final Plan (Amended Final Plan, dated June 18, 2008), and Pattern Book (Rev. NO. 3 dated June 18, 2008) were updated in conjunction with the construction of Meijer’s.

2nd Amendment

The second amendment to the PD was approved on August 6, 2008 which facilitated the granting of certain alternate access easements within the PD site. The second amendment did not require changes to the previously approved site plans (Amended Final Plan) or Pattern Book.

3rd Amendment

On January 20, 2009, the third amendment to the PD Agreement was approved. The text of Paragraph 21 of the PD Agreement (Integration) was amended to establish the required signatories of any amendment to the PD Agreement. Changes to the Amended Final Plan and Pattern Book were not required.

4th Amendment

The fourth amendment was approved on March 30, 2009, which amended the text of Paragraph 14.3 of the Agreement as it related to the newly configured Hartland Road and the granting of the Highway Easement to the Livingston County Road Commission. Changes to the Amended Final Plan and Pattern Book were not required.

5th Amendment

On August 4, 2010, the fifth amendment was approved. The text of Paragraphs 2 (Intent) and Section 6.6.4 (Signs) were amended to provide for the incorporation of approved amendments to the Agreement into the Final Plan and to provide for the relocation of and replacement of a directional sign to direct traffic to businesses on Rovey Drive. Drawings of the directional sign and revised site plans showing the location of the sign are incorporated into the fifth amendment document and as part of Sign Application #715. The Amended Final Plan and Pattern Book were not formally amended.

6th Amendment

On February 7, 2017, the Township Board approved the sixth amendment, which amended the wall sign standards as outlined in the Hartland RAMCO Planned Development Agreement (Section 6.6.3) and Hartland Towne Square Pattern Book (Page 28), under Site Plan Application #439A.

7th Amendment

On March 5, 2019, the Township Board approved Site Plan #19-002, a request to amend the Planned Development (PD) Agreement for the Hartland Township Square PD to permit up to three (3) drive-through restaurants in the Hartland Towne Square Planned Development (PD) and a total of eight (8) drive-through businesses. The language in the original PD Agreement allows for one (1) drive through for a bagel, donut, or coffee shop, and this language was not amended.

8th Amendment

On September 19, 2019, the Township Board approved the request to amend the Planned Development (PD) Agreement and Pattern Book for the Hartland Towne Square PD as the 8th Amendment. This request was initiated by the Planning Department to address several concerns in the planned development, that had come to staff's attention via several parties. The 8th Amendment established guidelines for the on-going maintenance of private roads withing the development; allowed for improvements to the existing development monument sign at the northwest corner of Hartland Road and Highland Road; allowed for two (2) additional ground signs along Highland Road; allowed selective tree removals along the berm on Highland Road (near Culver's restaurant); adjusted the lighting standards for parking lot lighting (light pole style); and eliminated the restriction on the number of drive-through establishments.

Other History

Currently, Hartland Towne Square includes the following businesses: Meijer's, Taco Bell, Belle Tire, Tim Horton's/Cold Stone Creamery, Culver's, Emagine Theatre, and Panda Express. On January 25, 2018, the Planning Commission approved Site Plan Application #17-019, a request to construct an approximate 2,900 square foot Flagstar Bank, with three (3) drive-through windows, to be located at the northwest corner of Hartland Road and Highland Road (M-59), on Outlot #10. The project did not move forward.

Planned Development Procedure

New construction within the Hartland Towne Square PD must go through the Township's standard site plan approval process with review and approval by the Planning Commission. The proposed project will be reviewed for compliance with applicable standards with the Planned Development Agreement, Pattern Book, Final Plan, and the Township's Zoning Ordinance as applicable. The Planning Commission has Site Plan review authority and will make a final decision on Site Plan #21-014. As a point of clarification, a separate special use permit is not required for the drive-through use as it is a permitted use in the PD Agreement.

Current Project Summary

SITE PLAN #21-014 (REQUEST TO AMEND FINAL PLAN AND CONSTRUCT MULTI-TENANT BUILDING WITH DRIVE-THROUGH WINDOW)

Existing Site Conditions

The proposed multi-tenant building is to be constructed on Outlot #10 and #11, as designated on the Final Plan (Development Area D). This site is bounded by Highland Road (M-59) on the south, Hartland Road on the east, and Hartland Square Drive on the north. The site is east of the Taco Bell restaurant. The site is vacant of buildings but was prepared for development when Hartland Square Drive was constructed.

The proposed plan shows an access point from Hartland Square Drive and an internal drive connection to the Taco Bell restaurant, along the south end of the subject site. Utilities (water and sewer) are available,

and a stormwater management plan is in place for the entire Hartland Towne Square PD development. A landscaped berm is in place on the subject site, along the frontage of Highland Road. The landscaping was installed as part of the development of the PD sites (outlots along Highland Road) and generally follows the 2008 PD Landscape Plan (see Landscape Plan for Outlots #9-11). The intent is to preserve this landscaping with replacement plants to be installed as necessary.

Overview of the Proposed Use

The applicant proposes to construct an approximate 7,980 square foot multi-tenant building with one (1) drive-through window, although the business has not been identified. The business with the drive-through window occupies the most southern tenant space, with the drive-through window on the south side of the building. Three (3) additional tenant spaces in the building are shown.

Twelve (12) stacking spaces are provided in the drive-through lane, with five (5) spaces before the ordering station. The stacking spaces are along the north, west (rear), and south sides of the building. Fifty-one (51) parking spaces are shown.

The layout for Outlot #10 on the Final PD Plan shows an approximate 2,780 square foot bank building, parking area with 31 parking spaces, and landscaping. Outlot #11 on the Final PD Plan shows an approximate 1,758 square foot restaurant with 12 parking spaces. For the current request the combination of the two (2) outlot parcels (Outlot #10 and #11) will occur under a separate land division application which is subject to an administrative review and approval.

Impact Assessment

No separate impact assessment is required for the proposed new use.

Traffic Generation

No separate traffic impact assessment is required for the proposed new use.

Access and Circulation

The site is accessed from a proposed driveway from Hartland Square Drive and an internal access that connects to the adjacent property to the west property, which is currently the Taco Bell restaurant.

Requirements

Lot Size (Sec 3.1.18 of Zoning Ordinance)

- Required – Min. 20 acres for a Planned Development (entire development area); minimum lot size undefined for individual parcel or lot
- Proposed – 1.73 acre parcel for subject site, that is within the PD
- Meets Requirement? Minimum lot size undefined for individual lots
- Comments – (none)

Frontage

- Required – Minimum Frontage undefined for individual lots with an approved Planned Development
- Proposed – Approx. 211.49' along Highland Road/M-59; approx. 186.8' along Hartland Square Drive; and approx. 386.7' along Hartland Road
- Meets Requirement? – N/A
- Comments – (none)

Building Setbacks (Per approved Final Plan – Sheet SP 1.04 & Pattern Book – Page 34)

Setback	Required	Proposed	Meets Requirements? (Y / N)	Comment
Front (E)– Hartland Rd.	40.5'	118.06'	Y	
Front (N) – Hartland Square Drive	20'	120.54'	Y	
Front (S) – Highland Road (M-59)	20'	60.80'	Y	
Side (W)	20'	31.02'	Y	

- Meets Requirement? – Yes
- Comments – (none)

Parking Lot / Driveway / Internal Roads Setbacks (Per Final Plan – Sheet SP 1.04 & Pattern Book – Page 34)

Setback	Required	Proposed	Meets Requirements? (Y / N)	Comment
Front (E)– Hartland Rd.	40.5'	41.27'	Y	
Front (N) – Hartland Square Drive	20'	20'	Y	
Front (S) – Highland Road (M-59)	20'	51.53'	Y	
Side (W)	10'	11.02'	Y	

- Meets Requirement? – Yes
- Comment – (none)

Building Height (Per approved Pattern Book – Page 36, for Outlots along Hartland Square Drive)

- Required – Max. 24' from finished floor to roof parapet & 28' max. to any exterior feature element
- Proposed – 24'-0" to top of parapet wall of building (front/east side of building)
- Meets Requirement? – Yes
- Comments – (none)

Lot Coverage

- Required – Undefined for a Planned Development, 75% for principal building in GC
- Proposed – 10.60%
- Meets Requirement? – Lot coverage undefined in the Planned Development standards
- Comment – (none)

Site Requirements

Off-Street Parking (Per Final Plan & current Ord. standards for retail use)

- Required – 1 space for each 300 square feet of gross floor area, equates to 27 parking spaces (7,980 gross Sq. ft. ÷ 300), 10' X 20' spaces
- Proposed – 51 spaces, 10' X 20' spaces, and some spaces are 10' X 20.5'

- Meets Requirement? – Yes, meets Final Plan and current parking standards
- Comments – The requirement is 27 parking spaces; however, the applicant is providing 51 spaces, which exceed the required amount by 24 spaces. There is no requirement regarding a maximum number of parking spaces. **The landscape island in the parking area north of the building has one (1) parking space. Since there are extra parking spaces, staff would suggest this parking space be eliminated and a sidewalk be added to align with the sidewalk by the building. Lawn should be added on either side of the sidewalk in this island.**

Barrier-Free Parking (Per ADA guidelines and approved Pattern Book – Page 44)

- Required – 3 barrier-free spaces in a location most accessible to the building entrance, with at least 1 space van-accessible
- Proposed – 1 van-accessible, and 2 barrier-free spaces, located in row of parking by tenant entrances
- Meets Requirement? – Yes
- Comments – (none)

Loading (Per approved Pattern Book – Page 41)

- Required – 10' X 50' loading area located away from primary/secondary entrances, not visible from the street, must be screened.
- Proposed – Loading area is not shown
- Meets Requirements? – **TBD**
- Comments – Although a separate loading area is not provided, it is assumed the deliveries will occur outside the normal business hours for each tenant, thus avoiding conflicts with parking and vehicular circulation. The plan is similar with other approved sites in the Hartland Towne Square PD which do not show a loading area. **Planning Commission to determine if a dedicated loading is required.**

Dumpster Enclosure (Per approved Pattern Book – Page 41)

- Required – Service and refuse areas should be incorporated into the structure as much as possible and screened from view via a minimum 6' high masonry enclosure to match building with a solid framed door. If not incorporated into the structure, refuse areas shall be located along the furthest drive to the west of the building and all other provisions shall remain. Final location to be approved by Hartland Township. Remote or detached refuse areas shall be screened with landscape materials.
- Proposed – A screened refuse enclosure, with two stalls and wooden gates is provided in the northwest corner of the site, with a 6-foot high screen wall comprised of CMU (Sheet SP 1.01)
- Meets Requirements – **TBD. The dumpster enclosure walls as shown do not comply and as the enclosure walls are required to be comprised of masonry products to match the brick on the building. Landscape materials shall be provided.**
- Comments – **Revised drawings of the dumpster enclosure (brick to be used in place of CMU) will be required as part of the construction set of plans.**

Outdoor Eating Areas (Per approved Pattern Book – Section 3.6, Pages 39-41; Planned Development Agreement, Section 3.1.15; and Section 4.47 of Zoning Ordinance)

Location

- Required – Outdoor seating and dining areas shall be located immediately adjacent to the establishment with which it is associated and shall not encroach upon any public right-of-way. A minimum 5 feet of sidewalk shall be maintained free of tables and other encumbrances.
- Proposed – Outdoor seating area is provided adjacent to the building entrance for the drive-through business, with a 7-foot wide sidewalk and 14-foot by 20-foot patio area with landscape

screening. A fence surrounds the patio area.

- Meets Requirements? – Yes
- Comments – (none)

Defined Area

- Required – Applicable if alcoholic beverages are to be served in outdoor seating and dining areas.
- Proposed – Alcoholic beverages are not proposed to be served in outdoor seating and dining area.
- Meets Requirements? – NA
- Comments – (none)

Capacity

- Required – Outdoor seating and dining areas shall not exceed 25% of the total seating for the establishment.
- Proposed – Seating plans (indoors and outdoors) were not provided.
- Meets Requirements? – **TBD**
- Comments – The seating plans will be required and reviewed with the construction set of plans.

Screening

- Required – Appropriate screening or fencing complimentary and aesthetically pleasing to the site shall be provided as determined necessary by the Planning Commission.
- Proposed – A drawing of the fence was not provided.
- Meets Requirements? – **TBD**
- Comments – A detail drawing of the fence will be required and reviewed as part of the construction set of plans.

Pedestrian Circulation

- Required – The seating arrangement of outdoor seating and dining areas must comply with the State of Michigan Building Code and is subject to review and approval by the Hartland Township Fire Marshal.
- Proposed – A seating plan was not provided.
- Meets Requirements – The seating arrangement plan will be required and reviewed with the construction set of plans.
- Comments – (none)

Parking Spaces

- Required – No additional parking spaces are required to accommodate outdoor seating and dining spaces.
- Proposed – None proposed or required.
- Meets Requirement? – Yes
- Comments – (none)

Furniture (Outdoor furniture, etc.)

- Required (Pattern Book & Zoning Ordinance) – Tables, chairs, table umbrellas, railings, planters, posts, and other items shall be of quality, design, materials, and workmanship to ensure safety and convenience of users and to enhance the visual and aesthetic quality of the area. All furniture must be made primarily of wood, metal, or a material of comparable quality.
- Required (Zoning Ordinance) – Display & Advertising: No outdoor seating or dining area may be used for the display or location of merchandise, advertising materials or storage. No permitted canopy, awning, or umbrella shall contain advertising material or signage. Except umbrellas shall be permitted to include the name of the business and/or logo at the outer edge of the fabric with a maximum width of (6) inches.
- Proposed – Furniture specification information was not provided.
- Meets Requirements? – Furniture and other furnishings will be reviewed under the land use permit application.

- Comments – Corporate logo or business name, if provided on the patio umbrella, must comply with the Zoning Ordinance. Applicant has been informed of the regulation. Dissonant colors are not permitted.

Waste Disposal

- Required – Appropriate waste disposal containers shall be provided for the convenience and sanitary disposal of garbage or waste within and around outdoor seating and dining areas. Containers shall be complimentary to the style of furniture.
- Proposed – Information was not provided.
- Meets Requirement? – Staff review will occur under the land use permit application.
- Comments – Dissonant colors are not permitted for waste containers

Hours of Operation (Zoning Ordinance)

- Required – All outdoor seating and dining areas shall be allowed to operate until 10:00 p.m. Sunday through Thursday and until 11:00 p.m. Friday and Saturday. All activities shall cease by the required times.
- Proposed – The restaurant hours of operation were not provided.
- Meets Requirements? – Applicant has been informed of the regulation.
- Comments – (none)

Season of Operation (Zoning Ordinance)

- Required – All outdoor seating and dining areas shall be allowed to operate from April 1st through November 15th of a given year.
- Proposed – Applicant has been informed of the restrictions.
- Meets Requirements? – Yes
- Comments –(none)

Furniture Storage (Zoning Ordinance)

- Required – During the off-season, from November 16th to March 31st of a given year, all tables, chairs, table umbrellas, posts, and other furniture not fastened to the ground shall be removed and shall not be stored outside. It is the responsibility of the establishment to secure adequate storage of these items.
- Proposed – Applicant has been informed of the regulation.
- Meets Requirements? – Yes
- Comments – (none)

Lighting

- Required – Additional lighting on the property shall be designed and erected in accordance with Section 5.13, Lighting of the Zoning Ordinance. Lighting shall be reviewed by the Planning Commission.
- Proposed – A lighting plan for the subject site has been submitted and will be reviewed in the next section of this memorandum.
- Meets Requirements? – Yes
- Comments – (none)

Noise

- Required – No music, intercom, or other noise shall be permitted that impacts adjacent properties in accordance with the Township's Nuisance Ordinance.
- Proposed – Information on intercom system was not provided.
- Meets Requirements? – Applicant has been informed of the restrictions.
- Comments – (none)

Patron Entrance and Exit

- Required – Regulations pertain to enclosed outdoor seating and dining areas at establishments serving alcohol.

- Proposed – Alcoholic beverages are not proposed for the drive-through establishment/tenant.
- Meets Requirements? – NA
- Comments – (none)

Food and Beverage Services

- Required – All food and beverages shall be prepared within the main establishment. The service of alcoholic beverages is subject to the current Michigan Liquor Control Commission Rules and Regulations.
- Proposed – Alcoholic beverages are not proposed for the drive-through establishment/tenant.
- Meets Requirements? – NA
- Comments – (none)

Lighting (Per approved Pattern Book – Pages 23 and 44 and Section 5.13 of Zoning Ordinance)

A. Light levels at Property Lines

- Required – Max. 0.5 fc along property line adjacent to residential, or 1.0 fc along property line adjacent to non-residential (Sec. 5.13 of Zoning Ordinance)
- Proposed – Max. 0.6 fc along west property line; Max. 0.5 fc along south property line; Max. 0.1 fc along east property line; Max. 1.0 fc along north property line
- Meets Requirement? – Yes
- Comments – (none)

B. Average Illumination Levels

- Required – Between 2.4 and 3.6 fc (average) within main parking area, and up to 5.0 fc (average) at main building entrance(s) and main driveway(s) (Per Pattern Book)
- Proposed – Average illumination within main parking area is 2.2 fc; average illumination at building entrance is 2.2 fc; average illumination at the main driveway (Hartland Square Drive) is 2.2 fc.
- Meets Requirement? – Yes
- Comments – **Sheet SL 1.1 should be revised to state the correct “Average Illumination Levels” in the Site Photometric Data chart. The correct average levels are between 2.4 and 3.6 footcandles. The revised plan shall be submitted as part of the construction set of plans.**

C. Maximum Illumination Level

- Required – Not defined in Pattern Book, max. 10.0 fc per Zoning Ordinance
- Proposed – Max. 6.2 fc
- Meets Requirement? – Yes
- Comments – (none)

D. Fixture Height

- Required – Max. 28 feet (25-foot fixture on 3-foot base)
- Proposed – 9 poles, with 23-foot overall height (pole with light fixture, 21 feet in height; and base, 2 feet in height)
- Meets Requirements? – Yes
- Comments – (none)

E. Fixture Type

- Required – Light pole fixture style shown on Page 6 of Pattern Book (8th Amendment); Black shoe-box fixture, fully recessed, consistent with overall development.
- Proposed – LED light fixtures on square, black light poles (8 single head and 1 double-head light poles); and 5 wall-mounted shoe-box LED light fixtures on the west/rear facade. Another style of wall-mounted light fixtures is shown on the east and north sides of the building, but a specification sheet was not provided. The photometric plan does not include

footcandle values for any wall-mounted light fixtures.

- Meets Requirement? – **TBD**
- Comments – **Photometric plan is to be revised to include all wall-mounted light fixtures in the calculations, and a cut sheet is to be provided for the decorative wall-mounted fixture. The revised photometric plan and cut sheet can be submitted with the construction set of plans.**

Landscaping (Per approved Pattern Book – Pages 10, 42, and 43 as well as approved Final Plan/Landscape Plan for Development Area ‘E’, for reference of existing plant materials)

A. Adjacent to Roads

Hartland Square Drive

- Required – 1 deciduous or evergreen tree per 40 lineal feet of road frontage, PLUS 1 ornamental tree per 80 lineal feet of road frontage, PLUS 8 shrubs per 40 lineal feet of road frontage
- Hartland Square Drive (approx. 186.8 lineal feet of road frontage): 5 deciduous/ evergreen trees, 2 ornamental trees, and 35 shrubs **REQUIRED**
- Proposed – 5 deciduous trees; 2 ornamental trees and 42 shrubs (including 10 shrubs around monument sign)
- Meets Requirement? – Yes
- Comments – (none)

Hartland Road

- Required – 1 deciduous or evergreen tree per 40 lineal feet of road frontage, PLUS 1 ornamental tree per 80 lineal feet of road frontage, PLUS 8 shrubs per 40 lineal feet of road frontage
- Hartland Road (approx. 386.7 lineal feet of road frontage): 10 deciduous / evergreen trees, 4 ornamental trees, and 77 shrubs **REQUIRED**
- Proposed – 6 deciduous trees; 4 evergreen trees; 4 ornamental trees; and 78 shrubs
- Meets Requirement? – Yes
- Comments – (none)

Highland Road/M-59

- Required – 1 deciduous or evergreen tree per 40 lineal feet of road frontage, PLUS 1 ornamental tree per 80 lineal feet of road frontage, PLUS 8 shrubs per 40 lineal feet of road frontage
- Highland Road/M-59 (approx. 211.49 lineal feet of road frontage): 3-foot high berm plus 5 deciduous / evergreen trees, 3 ornamental trees, and 42 shrubs **REQUIRED**
- Proposed – Existing berm and landscaping were previously installed and are to remain. Existing plant count is as follows: 2 deciduous trees; 5 evergreen trees; 7 ornamental trees; and 58 shrubs
- Meets Requirement? – Yes
- Comments – Dead, missing, or diseased plant material should be replaced as applicable, as part of this project.

B. Berm Requirements

- Required – Area adjacent to a public right-of-way (Highland Road/M-59) shall be required to have a berm, with berm to be a minimum three feet in height
- Proposed – Existing landscaped berm along Highland Road /M-59
- Meets Requirements? – Yes
- Comments – (none)

C. Parking Lot Landscaping

- Required – 10 sf of landscape area per parking space (510 sf of landscape area required for 51

- parking spaces); 1 tree per 320 sf landscape area (2,848 sf landscape area proposed; equates to 9 trees required); 50% (minimum) of each island/landscaped area must be “sod, shrubs, etc.” Shredded hardwood mulch is the required type of mulch.
- Proposed – 2,848 sf of parking lot landscaping (510 sf required); and 9 parking lot trees (9 trees required). All interior landscape areas to be sodded or landscaped with a mixture of deciduous and evergreen shrubs and areas meet the 50% coverage. River rock is proposed in in some landscape areas and shredded hardwood mulch, or plant material is required.
 - Meets Requirement? – **TBD**. Plan complies for required square feet of landscaped area (based on stated square footage of parking lot landscape area of 2,848 sf); 50% plant coverage; and number of required trees. **River rock is not permitted as a type of mulch.**
 - Comments – **The landscape plan should be revised to state the correct formula for “Parking Lot Landscaping” which is stated above in this section; a plan should be provided to show areas counted as parking lot landscaping and open space landscaping; and the river rock shall be replaced with shredded hardwood mulch or plant material. The revised landscape plan shall be submitted as part of the construction set of plans.**
- D. Open Space Landscaping
- Required – 1 tree per 3,000 square feet of open space. Per previous landscape standards the open space landscaping formula pertains to landscaped areas that are unpaved, open areas for which specific landscape requirements are not provided. For this site, the landscaped area long the west lot line could be considered Open Space Landscaping (approx. 2,510 sf, which equates to 1 tree required)
 - Proposed – 3 conifer trees and 3 ornamental trees are shown in the landscape area along the west property line.
Meets Requirement? – Yes
 - Comments – **Staff would suggest using a narrow habit conifer tree in place of 3 proposed Norway Spruce trees in the west landscape area due to spatial constraints.**
- E. Total Required Landscaping
(Excluding berm along Highland Road /M-59)
- REQUIRED:
- | | |
|----------------------------|-----|
| Deciduous/Evergreen Trees: | 16 |
| Ornamental Trees: | 6 |
| Required Shrubs: | 112 |
- PROPOSED:
- | | |
|----------------------------|-----|
| Deciduous/Evergreen Trees: | 21 |
| Ornamental Trees: | 6 |
| Shrubs: | 120 |
- Meets Requirement? – Yes
 - Comments – (none)
- F. Foundation Landscaping
- Required – Foundation landscaping required as determined by the Township (Sec. 7.2 of Pattern Book, page 42).
 - Provided – planting beds provided on east, west, and south side of the building, varying in width from 4 feet (east), 3 feet (west), and 5 feet (south), using a combination of plant material (shrubs, perennial flowers, and ornamental grasses)
 - Meets Requirement? – Yes
 - Comment – **There is an approximate 5.5 foot wide area along the north side of the building which is not clearly labeled as sidewalk or landscape planter. Per the applicant this area will be landscaped. The landscape plan shall be revised to show plant material for this area as part of the construction set of plans.**

G. Landscaping Species

- Proposed – Proposed tree species deviates from standards called for in the Pattern Book, including:
Tree species:
Black Gum (*Nyssa Sylvatica*) is proposed and is not listed in the Pattern Book in the Tree category
- Meets Requirement? – **TBD**
- Comments – **Plant diversity can be beneficial and can provide seasonal interest. Planning Commission to determine if the proposed plant material meets the intent of the plant list provided in the Pattern Book and are appropriate for the overall development.**

Architecture / Building Materials (Per approved Pattern Book, Pages 24, and 36-38)

PD Requirements		Submitted Materials		Meets Requirements? (Y / N)
Building Articulation. Horizontal and vertical offsets, glazing and canopy and shading systems as well as exposed structural components. Use of a diverse but complimentary color and finish palette will be required		<p>The building has a mixed palette of building materials in complimentary earthtones which consist of face (clay) brick (Glen Gery brick); cast stone bands; fiber cement siding (6-inch wide composite wood planks); split face block; perforated metal siding; and black canvas awnings.</p> <p>Two different tones of grey clay brick are proposed (3½" x 2¼" x 7 5/8"; depth x height x length)</p> <p>Vertical fiber cement siding, horizontal bands of cast stone; perforated metal siding; and canvas awnings are used to provide visual interest.</p>		Y
Materials Used as Defined in the Pattern Book dated March 18, 2008		Materials: Brick (2 colors); Fiber cement siding; perforated metal siding (similar to flat metal panels); cast stone (similar to limestone); split face CMU block; black canvas awnings; and dark bronze window frames.		Y
Materials Schedule - Required		Materials Schedule – Proposed		
Split-face CMU	25% Max.	East Elevation	2%	Y
		South Elevation	8%	Y
		West Elevation*	9%	Y
		North Elevation	8%	Y

Cast Stone (limestone)*	50% Max.	East Elevation	2%	Y
		South Elevation	3%	Y
		West Elevation*	0%	Y
		North Elevation	3%	Y
Brick (2½" clay brick)*	100% (40% Min.)	East Elevation	53%	Y
		South Elevation	74%	Y
		West Elevation*	90%	Y
		North Elevation	78%	Y
Wood-look siding (fiber cement siding)	10% Max.	East Elevation	3%	Y
		South Elevation	0%	Y
		West Elevation	0%	Y
		North Elevation	2%	Y
Metal (combination of Metal & Perforated Metal categories)	20% Max.	East Elevation	5%	Y
		South Elevation	9%	Y
		West Elevation	1%	Y
		North Elevation	0%	Y
Storefront (Glass)	50% Max.	East Elevation	35%	Y
		South Elevation	7%	Y
		West Elevation	0%	Y
		South Elevation	10%	Y
Canvas Awnings**	10% Max.	East Elevation	3%	Y
		South Elevation	0%	Y
		West Elevation	0%	Y
		South Elevation	0%	Y

*Applicant has noted in an email dated 10/4/2021, that the percentages for split-face CMU and brick are flipped in the chart on Sheet A5.01R (Façade Materials Calculations N & W). The correct percentages for brick and split-face CMU are listed above. Also, on that same sheet, cast stone is shown on the west elevation (64.88 square feet) however the percentage is listed as 0% in the chart, and should be revised.

**Canvas awning percentages were not provided on the architectural renderings (Façade Materials Calculations E & S; or N&W); staff estimated the percentages as noted above using the scaled elevations drawings.

- Meets Requirements? – Yes
- Comments –
- Building materials –The fiber cement siding is a composite wood product in 6" wide, horizontal planks. This product is not specifically listed in the Materials Schedule; however, it could be considered similar to the products listed under the category of "Wood, vinyl, or aluminum siding". Siding is limited to a maximum of 10% coverage on any façade and the plans comply.
- Brick – The proposed brick size is 2½" in height and brick used on other buildings in the same development is 4" in height (Panda Express and Taco Bell). The Pattern Book does not specify brick sizes.
- Roof appurtenances – All rooftop equipment is required to be screened with a parapet wall or roof structure in building materials that matches the structure or is visually compatible and shall not be visible from any direction. Site line sections may be required. Metal panels may not be used for rooftop screening (Page 38 of Pattern Book).

Parapet walls are shown, as well as the line of roof beyond the walls, on the north, south, and west elevation drawings. The line of roof beyond the wall is not shown on the east (front) elevation drawing. Sheet A5.01 (see west elevation) states the "rooftop mounted HVAC units,

screen with Cityscape rooftop screen or equal, TYP". A Cityscape rooftop screen or equal is not a permitted screening method and the note should be removed.

An outline of the rooftop mounted HVAC unit is only shown on the west building elevation drawing, and scales to be approximately 4 feet in height. The parapet wall appears to adequately screen the HVAC unit on the west building elevation. In order to confirm if adequate screening of the rooftop units is provided by the parapet wall on all sides of the building, the building elevations should be revised to show the line of roof on the east building elevation and an outline of each rooftop mounted HVAC unit (4 feet in height) should be provided on the east, south, and north building elevations.

Revised plans shall be submitted as part of the construction set of plans to address the items noted, including screening of roof appurtenances and updating the Façade Materials Calculations drawings and material summary charts.

Pedestrian Access (Per the approved Pattern Book)

- Required – 7' sidewalk where adjacent to parking spaces and 5' sidewalk elsewhere; sidewalks required on all sides of the building where adjacent to parking.
- Proposed – A sidewalk is provided along east (front) side of the building, adjacent to parking, and varies in width from 7' to 11'. A 5-foot wide sidewalk is shown along the west side of the building.
- Requirements Met? – Yes
- Comments – (none)

Other Comments:

- Transformer – If a transformer is proposed, the unit should be shown on the plans and all required screening.
- Bike Racks – A detail drawing of a bike hoop is provided on Sheet SP 1.01 however the bike hoop is not shown on the plans.
- Ground Sign – A monument sign is shown on the plans. The Pattern Book provides design standards for a monument sign regarding size, height and type of building materials (Page 27A of the Pattern Book). A monument sign, if proposed, will be reviewed as part of a sign permit application.
- Wall Sign – Wall sign standards are provided in the PD Agreement (Section 6.6). Signs will be reviewed as part of a sign permit application.

Hartland Township DPW Review

Please see the review letter from the Hartland Township DPW Director dated September 30, 2021. DPW approves the final plans subject to the contingencies noted in his letter.

Township Engineer's Review

Please see the review letter from Hubbell, Roth, and Clark (HRC) dated September 28, 2021. The Engineer recommends site plan approval subject to some items being addressed on the construction plans which they will review following site plan approval.

Hartland Deerfield Fire Authority Review

Please see the review letter from the Fire Marshal's office dated September 15, 2021. The Fire Authority recommends approval with some changes, as outlined in the letter.

Attachments:

1. Hartland Township DPW, Review letter dated September 30, 2021 – PDF version provided
2. Hartland Township Engineer (HRC) Review letter dated September 28, 2021 – PDF version provided
3. Hartland Deerfield Fire Authority Review letter dated September 15, 2021 – PDF version provided
4. Digital Materials Board – PDF version provided
5. Exterior Renderings dated September 9, 2021 – PDF version provided
6. Façade Materials Calculations E & S, dated September 30, 2021 – PDF version provided
7. Façade Materials Calculations N & W, dated September 30, 2021 – PDF version provided
8. Specification Sheet for Wall Pack – PDF version provided
9. Hartland Towne Square PD Setbacks from Pattern Book– PDF version provided
10. Final Plan and Landscape Plan Hartland Towne Square dated June 18, 2008 – PDF version provided
11. Site Plans dated August 23, 2021

CC:

Rick Anthony, RPT

HRC, Twp Engineer (via email)

M. Luce, Twp DPW Director (via email)

A. Carroll, Hartland FD Fire Chief (via email)

T:\PLANNING DEPARTMENT\PLANNING COMMISSION\2021 Planning Commission Activity\Site Plan Applications\SP #21-014 multi tenant with drive thru Hartland Towne Square\Staff Reports\SP #21-014 staff report PC 10.07.2021.docx



DEPARTMENT OF PUBLIC WORKS

Michael Luce, Public Works Director
2655 Clark Road
Hartland MI 48353
Phone: (810) 632-7498

TO: Planning Department
DATE: 09/30/2021
DEVELOPMENT NAME: Hartland Town Square Lots 10 & 11
PIN#: 4708-21-400-077 / 4708-21-400-056
APPLICATION #: 21-014
REVIEW TYPE: Preliminary Site Plan

The Department of Public Works (DPW) has reviewed the site plans for the proposed Hartland Town Square lot's 10 & 11. This retail building is comprised of 4 retail spaces one being 2,228 sq ft and three being 1,913 sq ft. Tenant suite #1 would require 3.42 REU's with each additional tenant suite requiring .28 REU's per suite. As the suites are built out and occupied Public Works will be required to re-assess the REU's needed for the use of each suite. This development would require 4.25 Water and 4.25 Sewer REUs. Parcel 4708-21-400-056 currently has 1 REU assigned to it.

	Sewer REUs	Water REUs
Owned	1	1
Required	4.25	4.25
# REUs Needed	3.25	3.25
Cost Each	\$9,439.20	\$5,816.01
Total Due Each	\$30,677.40	\$18,902.03
TOTAL REU COST	\$49,579.43	

Public Works approves the above plans subject to applicant securing the required number of REUs and the inclusion of the following details on the site plans and construction plans:

1. All Utility easements noted as public.
2. Notes to indicate that all existing utility infrastructure within the development envelope will be required to be upgraded to the current design and engineering standards.
3. All Sewer and Storm must meet Livingston County Drain Commission specs and standards.

Prior to interior construction, applicant will be required to purchase a 2" water meter from the Township. Please contact the Public Works Department (810-632-7498) to purchase the water meter.

Please feel free to contact me with any further questions or comments regarding this matter, and thank you for your time.

Michael Luce
Public Works Director

September 28, 2021

Hartland Township
2655 Clark Road
Hartland, MI 48353

Attn: Mr. Troy Langer, Planning Director

Re: Preliminary Site Plan Review
Hartland Towne Square – Lots 10 & 11
Section 21, Hartland Township

HRC Job No. 20210859.02

Dear Mr. Langer:

As requested, this office has reviewed the plans for the above project as prepared by PEA Group (plans dated August 23, 2021) The proposed project is located on Outlot 10 and 11 in Hartland Towne Square. The following items will need to be addressed:

General

1. All permits are to be obtained prior to the start of construction. At this time, the permits for this development may include: Livingston County Building & Utility Services, LCDC Soil Erosion, and Hartland Township Water Service.
2. All applicable Hartland Township standard detail sheets shall be attached to the plans.

Water Supply

1. All proposed water supply improvements must be designed in accordance with Hartland Township Engineering Design Standards.
2. It appears that only a water service is proposed for this development and that no new fire hydrants are proposed. The proposed firefighting ability of the site will require the review and approval of the Hartland Deerfield Fire Authority. Additional water main and fire hydrant coverage may be required.

Sanitary Sewer

1. All proposed sanitary sewer lead improvements must be designed in accordance with the current standards of the Livingston County Drain Commissioner's Office and will require their review and permitting.

Storm Drainage

1. The proposed storm water collection system must be designed in accordance with Hartland Township Engineering Design Standards.
2. Storm water detention for this site has been accounted for in the construction of the Hartland Towne Square development. Therefore, onsite detention is not required.

Paving & Grading

1. The proposed paving and grading improvements must be designed in accordance with Hartland Township Engineering Design Standards.

Subject to these items being addressed in the construction plans, we have no objection to the approval of the site plan. One (1) complete set of the construction plans should be submitted to the Township Planning Department for review.

If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.



Michael P. Darga, P.E.

MPD/mpd

pc: Hartland Twp; B. West M. Wyatt
HRC; R. Alix, T. Pietila



HARTLAND DEERFIELD FIRE AUTHORITY
FIRE MARSHALS OFFICE

Hartland Area Fire Dept.
3205 Hartland Road
Hartland, MI. 48353-1825

Voice: (810) 632-7676

E-Mail: jwhitbeck@hartlandareafire.com

To: Hartland Township Planning Commission
Attn: Zoning Department

Re: Hartland Towne Square Retail Strip Request for Site Plan Review
Hartland Square Drive, Hartland MI 48353

September 15, 2021

This office has reviewed the Hartland Plaza Site Plan dated 08-23-21 and received from the Hartland Township Planning Commission by email on September 15, 2021.

We have the following comments regarding both Unit #1 through Unit #4.

1. An address visible from the center of Highland Rd. right-of-way. (Ordinance #77-505.1)
2. As it is already serviced by municipal water, we highly recommend evaluating the cost comparison and numerous substantial advantages to a fire suppression system throughout the building. Aside from the obvious protection of life and property, there are many cost savings in construction, along with insurance cost savings that will exceed the cost of the system day one or over the next few years.
3. All emergency lighting and exit signage to be wired to a dedicated and labeled circuit breaker. (Ordinance #77-506.1.2)
4. A Supra Brand lock box to be installed prior to obtaining the certificate of occupancy. An order form can be supplied by the Fire Department to be ordered. (Ordinance #77-506.1)
5. A LadderPort Ladder Receiver (Type 1, Type 2, Type 3 or Type 4) would be installed for equipment and/or appliances installed on the rooftop, in a location as agreed upon by this office. (MBC306.5 & Ordinance #77-5401.1) Exception: If the commercial building is 100% protected by an approved automatic fire suppression system, the access may be located in the interior of the building. (Ordinance #77-504.1.1.1)
6. If the occupancies are required to have a commercial hood system those plans for a Commercial Hood Suppression System shall be submitted to Brighton Fire Department for review. Once approved the set of plans shall be picked up and taken to the Livingston County Building Department to pull a permit.
*Note: UL300 system tests will be conducted with a "wet test" using an agent recommended by the manufacturer. (Ordinance #77-105.7.1.1)
7. Once structural work is complete, contact this office to schedule an Emergency Services Communications Test, the results of which may require a bi-directional amplifier be installed for interior emergency communications. (Ordinance #77-509)
8. Ensure that all corners are serviceable by the turning radius requirements for our apparatus. Requirements can be sent separately in an attached document.
9. The street name will have to be confirmed for the alarm system to send the proper signal for dispatch to correctly notify emergency services.
10. A final walk through shall be required to inspect all emergency systems are in proper working order and the keys to the occupancy are in the Rapid Entry box to receive a CO.

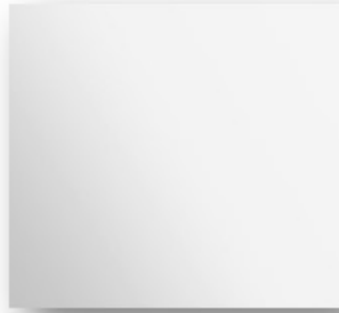
The Fire Marshal's office approves with the above contingencies the submittal. Any revised drawings affecting the Fire Department must be submitted for review.

Yours In Fire Safety,

Jenn Whitbeck



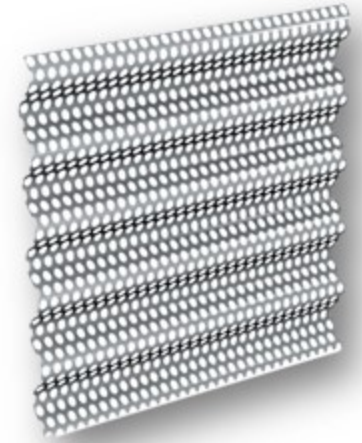
NICHIHA FIBER CEMENT SIDING
VINTAGE WOOD SERIES - BARK



ATAS PREFIN. METAL. PANEL
CLEAR ANODIZED



CANVAS AWNING
BLACK



PAC-CLAD PETERSEN
PERFORATED METAL SIDING
CLEAR ANODIZED



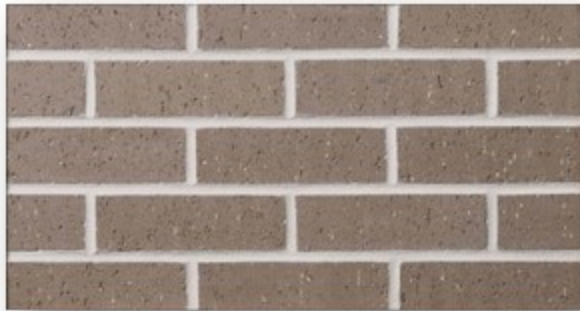
GLEN GERY BRICK
CASTILE GRAY VELOUR



ROCK CAST ACCENT BAND
CRYSTAL WHITE



INSULATED GLAZING
CLEAR



GLEN GERY BRICK
CHARCOAL GRAY VELOUR



GRAND BLANC SPLIT FACE CMU
IRONWOOD



TUBELITE STOREFRONT
DARK BRONZE ANODIZED

EXTERIOR MATERIALS













1 EAST ELEVATION
A5.00 A5.00 SCALE: 1/4" = 1'-0"

TOTAL EAST ELEVATION AREA = 2694.1		
MATERIAL	AREA	COVERAGE
SPLIT-FACE CMU	45.1	2%
CAST STONE	47	2%
BRICK	1431.1	53%
WOOD-LOOK SIDING	71.1	3%
METAL	0	0%
PERFORATED METAL	146.6	5%
STOREFRONT	953.2	35%



2 SOUTH ELEVATION
A5.00 A5.00 SCALE: 1/4" = 1'-0"

TOTAL SOUTH ELEVATION AREA = 1609.75		
MATERIAL	AREA	COVERAGE
SPLIT-FACE CMU	125.3	8%
CAST STONE	41.8	3%
BRICK	1189	74%
WOOD-LOOK SIDING	0	0%
METAL	10.75	1%
PERFORATED METAL	133	8%
STOREFRONT	109.9	7%

LEGEND

- SPLIT FACE CMU
- CAST STONE
- BRICK
- WOOD-LOOK SIDING
- METAL
- PERFORATED METAL
- STOREFRONT

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CONSULTANT + NAME

PROJECT + INFORMATION
**HARTLAND TOWNE SQUARE
LOT 10 & 11**
HARTLAND TOWNSHIP, MI

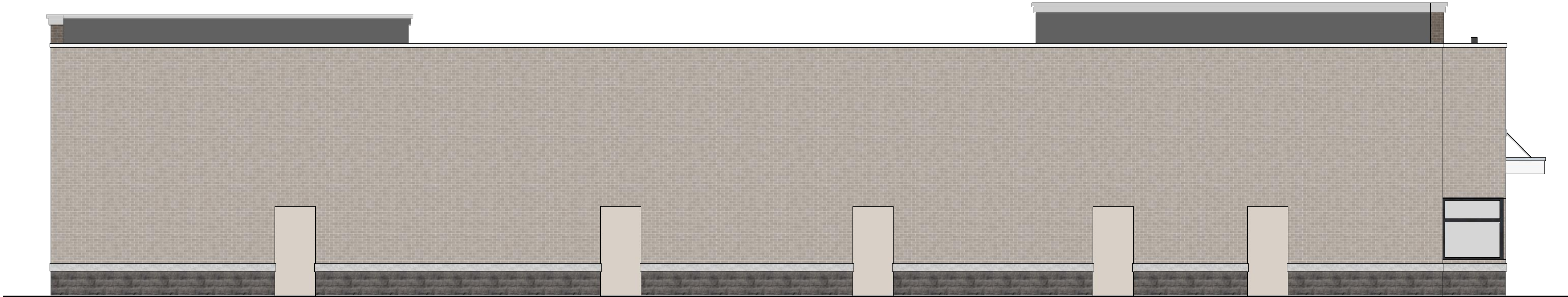
PROJECT + NUMBER
19-300

ISSUE + DATE
30 SEP 2021

SHEET + TITLE
RENDERED
ELEVATIONS
19300A500R.dwg

SHEET + NUMBER
A5.00R

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1
A5.01 A5.01 SCALE: 1/4" = 1'-0"
WEST ELEVATION

TOTAL WEST ELEVATION AREA = 20665.24		
MATERIAL	AREA	COVERAGE
SPLIT-FACE CMU	18541.96	90%
CAST STONE	64.88	0%
BRICK	1936.2	9%
WOOD-LOOK SIDING	0	0%
METAL	122.2	1%
PERFORATED METAL	0	0%
STOREFRONT	0	0%

LEGEND

- SPLIT FACE CMU
- CAST STONE
- BRICK
- WOOD-LOOK SIDING
- METAL
- PERFORATED METAL
- STOREFRONT



2
A5.01 A5.01 SCALE: 1/4" = 1'-0"
NORTH ELEVATION

TOTAL NORTH ELEVATION AREA = 1449.21		
MATERIAL	AREA	COVERAGE
SPLIT-FACE CMU	113.66	8%
CAST STONE	36.75	3%
BRICK	1127.8	78%
WOOD-LOOK SIDING	24.4	2%
METAL	0	0%
PERFORATED METAL	0	0%
STOREFRONT	146.6	10%



WDGE1 LED

Architectural Wall Sconce



Catalog
Number

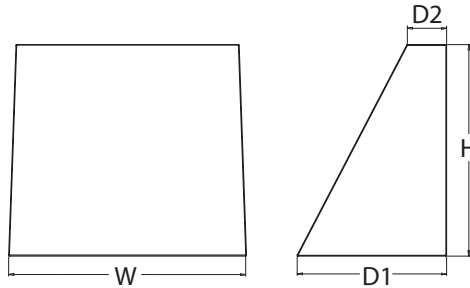
Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

Depth (D1): 5.5"
Depth (D2): 1.5"
Height: 8"
Width: 9"
Weight: 9 lbs
 (without options)



Introduction

The WDGE1 LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing true site-wide solution.

WDGE1 delivers up to 2,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of WDGE1, with its integrated emergency battery backup option, makes it an ideal over-the-door wall-mounted lighting solution.

WDGE LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, -20°C	Sensor	Lumens (4000K)					
				P1	P2	P3	P4	P5	P6
WDGE1 LED	4W	--	--	1,200	2,000	--	--	--	--
WDGE2 LED	10W	18W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000	--
WDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000	--	--
WDGE4 LED	--	--	Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WDGE1 LED P2 40K 80CRI VF MVOLT SRM PE DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WDGE1 LED	P1	27K 2700K	80CRI	VF Visual comfort forward throw	MVOLT 347 ²	Shipped included SRM Surface mounting bracket ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only) ⁵ Shipped separately AWS 3/8inch Architectural wall spacer PBBW Surface-mounted back box (top, left, right conduit entry) Use when there is no junction box available.
	P2	30K 3000K	90CRI	VW Visual comfort wide		
		35K 3500K				
		40K 4000K				
		50K ¹ 5000K				

Options	Finish
E4WH ³ Emergency battery backup, Certified in CA Title 20 MAEDBS (4W, 0°C min)	DDBXD Dark bronze
PE ⁴ Photocell, Button Type	DBLXD Black
DS Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)	DNAXD Natural aluminum
DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	DWHXD White
BCE Bottom conduit entry for back box (PBBW). Total of 4 entry points.	DSSXD Sandstone
	DDBTXD Textured dark bronze
	DBLTXD Textured black
	DNATXD Textured natural aluminum
	DWHGXD Textured white
	DSSTXD Textured sandstone

Accessories

Ordered and shipped separately.

WDGEAWS DDBXD WDGE 3/8inch Architectural Wall Spacer (specify finish)
 WDGE1PBBW DDBXD U WDGE1 surface-mounted back box (specify finish)

NOTES

- 50K not available in 90CRI.
- 347V not available with E4WH, DS or PE.
- E4WH not available with PE or DS.
- PE not available with DS.
- Not qualified for DLC. Not available with E4WH.



COMMERCIAL OUTDOOR

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WDGE1
Rev. 1.0

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance Package	System Watts	Dist. Type	27K (2700K, 80 CRI)					30K (3000K, 80 CRI)					35K (3500K, 80 CRI)					40K (4000K, 80 CRI)					50K (5000K, 80 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P1	10W	VF	1,120	112	0	0	0	1,161	116	0	0	0	1,194	119	0	0	0	1,227	123	0	0	0	1,235	123	0	0	0
		VW	1,122	112	0	0	0	1,163	116	0	0	0	1,196	120	0	0	0	1,229	123	0	0	0	1,237	124	0	0	0
P2	15W	VF	1,806	120	1	0	0	1,872	125	1	0	0	1,925	128	1	0	0	1,978	132	1	0	0	1,992	133	1	0	0
		VW	1,809	120	1	0	0	1,876	125	1	0	0	1,929	128	1	0	0	1,982	132	1	0	0	1,996	133	1	0	0

Electrical Load

Performance Package	System Watts	Current (A)				
		120V	208V	240V	277V	347V
P1	10W	0.082	0.049	0.043	0.038	--
	13W	--	--	--	--	0.046
P2	15W	0.132	0.081	0.072	0.064	--
	18W	--	--	--	--	0.056

Lumen Multiplier for 90CRI

CCT	Multiplier
27K	0.845
30K	0.867
35K	0.845
40K	0.885
50K	0.898

Lumen Output in Emergency Mode (4000K, 80 CRI)

Option	Dist. Type	Lumens
E4WH	VF	646
	VW	647

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

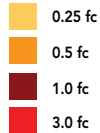
To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.96	>0.95	>0.91

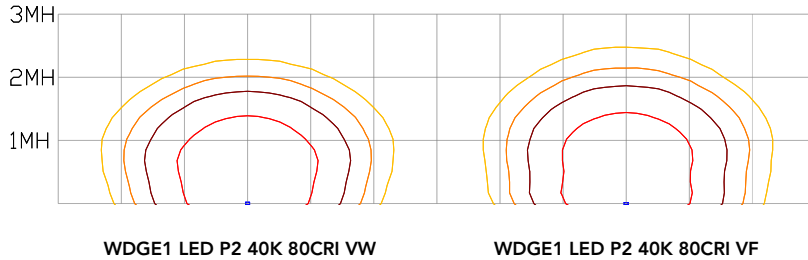
Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage.
Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND



MH = 8ft
Grid = 8ft x 8ft



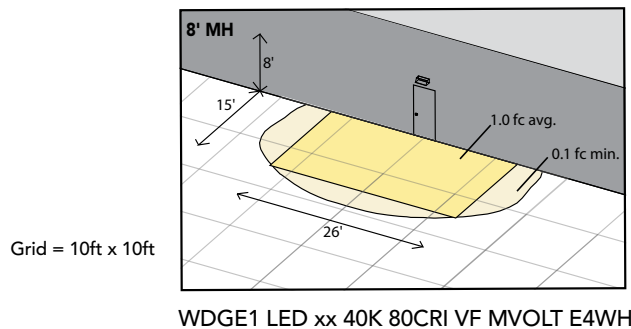
Emergency Egress Options

Emergency Battery Backup

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90 minutes.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9

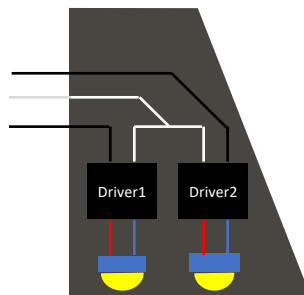
The example below shows illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E4WH and VF distribution.



Dual Switching (DS) Option

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with two drivers and two light engines. These work completely independent to each other so that a failure of any individual component does not cause the whole luminaire to go dark. This option is typically used with a back generator or inverter providing emergency power.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9





E4WH – 4W Emergency Battery Backup

D = 5.5"

H = 8"

W = 9"



PBBW – Surface-Mounted Back Box

Use when there is no junction box available.

D = 1.75"

H = 8"

W = 9"



AWS – 3/8inch Architectural Wall Spacer

D = 0.38"

H = 4.4"

W = 7.5"

FEATURES & SPECIFICATIONS

INTENDED USE

Common architectural look, with clean rectilinear shape, of the WEDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

CONSTRUCTION

The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP66 rating for the luminaire.

FINISH

Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

OPTICS

Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WEDGE LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

ELECTRICAL

Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L91/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2).

INSTALLATION

A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

LISTINGS

CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and SRM mounting only.

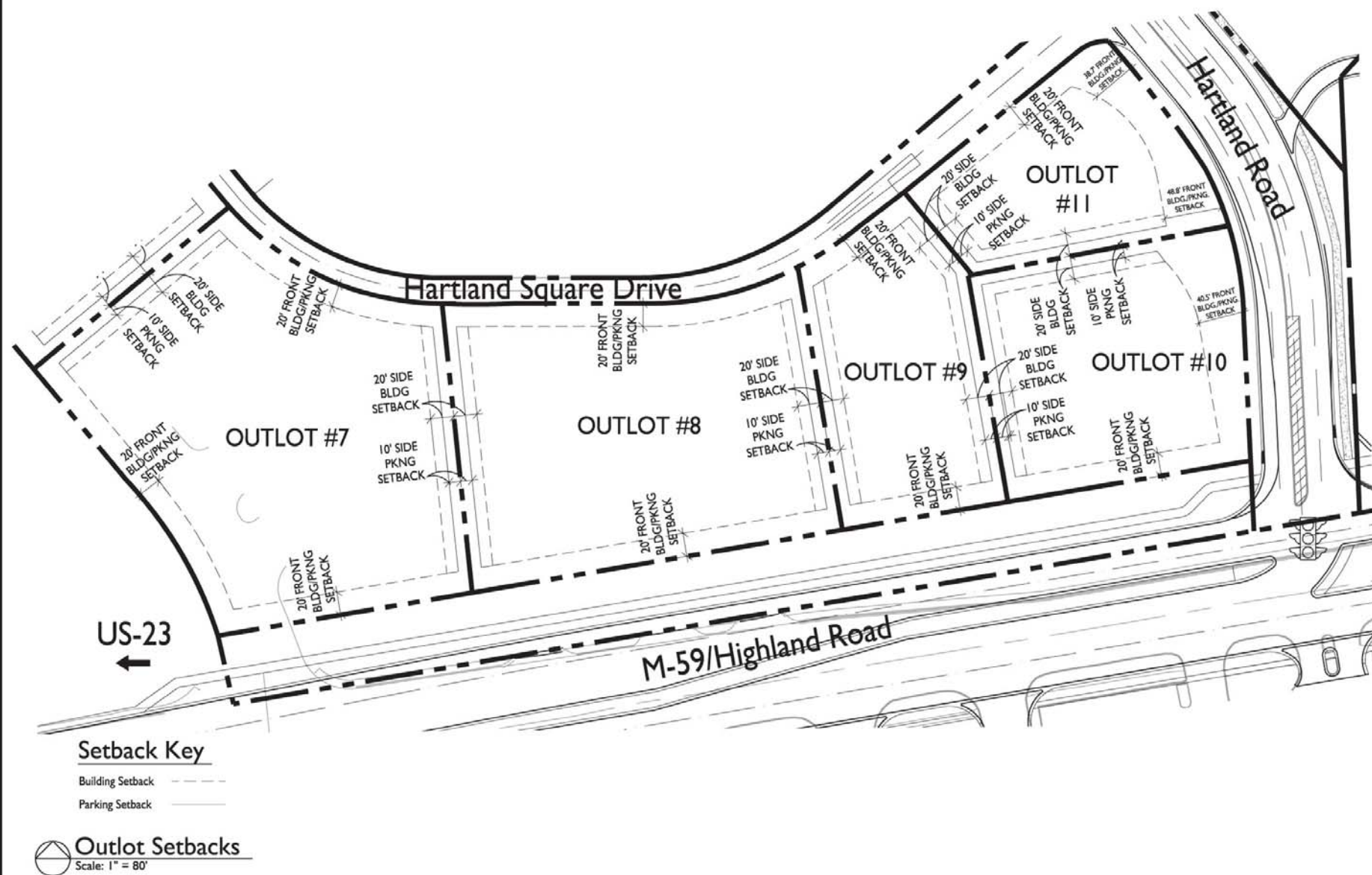
BUY AMERICAN

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FARS, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



DEVELOPMENT SETBACKS FOR OUTLOTS 7, 8, 9, 10 AND 11

HARTLAND TOWNE SQUARE HARTLAND TOWNSHIP, MICHIGAN

34

Outlots #7 - #11

General Notes

- 1. All outdoor lights shall be shielded to reduce glare and shall be arranged to not interfere with the vision of persons on adjacent roadways or property. Maximum height to be 28 feet. The proposed light fixtures shall have luminance cutoff angles of 90 degrees or less.
- 2. All light fixtures to be dark anodized metal (black). Poles and lights will not be painted as part of final finish.
- 3. All parking spaces (excluding handicapped) shall be 10' wide by 20' long. All aisles shall be 24' wide minimum, unless otherwise noted.
- 4. All dumpsters (see plan) shall be completely enclosed by a masonry screen wall (6' ht. min.) on three sides with opaque and lockable wooden gates. Masonry to complement or match building exterior materials. Dumpster to be on concrete pad with 10' apron in front. See Detail Sheet.
- 5. All rooftop mechanical units shall be screened by either a parapet wall or other architectural feature. All ground mechanical units shall be screened by a masonry wall of plant material.
- 6. All unpaved portions of the site shall be planted with grass, ground cover, shrubbery or other live plant material, which shall extend to any abutting aisle/street pavement edge.
- 7. All crosswalks to be striped, will be striped a minimum of every two years.
- 8. All current outlot layouts are conceptual plans. Final outlot layouts will be subject to Planning Commission review.

Outlot #7

Site/ Building Data

Parcel Size	2.00 Acres
Existing Zoning	PD District
Proposed Use	Restaurant
Required Front Setback	20'
Proposed Front Setback	20'
Required Side Setback	133'
Proposed Side Setback	203'
Required Side Setback	20'
Proposed Side Setback	65'
Max. Building Height	35'
Proposed Max Building Height	35'
Proposed Building Area	5,810 S.F.

Parking Data

Parking Required per Ordinance:
Fourteen (14) Spaces per 1,000 SF of UFA
5,810 SF * 80% / 1,000 SF * 14 = 66 Spaces
Total Required = 66 Spaces
Total Provided = 93 Spaces

Outlot #8

Site/ Building Data

Parcel Size	1.64 Acres
Existing Zoning	PD District
Proposed Use	Retail
Required Front Setback	20'
Proposed Front Setback	136'
Required Side Setback	20'
Proposed Side Setback	45.2'
Max. Building Height	35'
Proposed Max Building Height	35'
Proposed Building Area	12,000 S.F.

Parking Data

Parking Required per Ordinance:
One (1) Space per 300 SF of GFA
12,000 SF / 300 SF = 40 Spaces
Total Required = 40 Spaces
Total Provided = 68 Spaces

Outlot #9

Site/ Building Data

Parcel Size	0.81 Acres
Existing Zoning	PD District
Proposed Use	Restaurant
Required Front Setback	100'
Proposed Front Setback	84.2'
Required Side Setback	20'
Proposed Side Setback	79'
Max. Building Height	35'
Proposed Max Building Height	35'
Proposed Building Area	2,800 S.F.

Parking Data

Parking Required per Ordinance:
Fourteen (14) Spaces per 1,000 SF of UFA
2,800 SF * 80% / 1,000 SF * 14 = 32 Spaces
Total Required = 31 Spaces
Total Provided = 23 Spaces

Outlot #10

Site/ Building Data

Parcel Size	1.03 Acres
Existing Zoning	PD District
Proposed Use	Bank
Required Front Setback	20'
Proposed Front Setback	82'
Required Side Setback	78'
Proposed Side Setback	84.5'
Max. Building Height	37'
Proposed Max Building Height	35'
Proposed Building Area	2,780 S.F.

Parking Data

Parking Required per Ordinance:
One (1) Space per 200 SF of GFA plus
Two (2) Spaces per 24-Hour Teller plus
Four (4) Spaces per Drive-Thru Window
2,780 SF / 200 SF = 14 Spaces
1 Teller Window * 2 = 2 Spaces
3 Drive-Thru Windows * 4 = 12 Spaces
Total Parking Required = 16 Spaces
Total Parking Provided = 31 Spaces
Total Stacking Required = 12
Total Stacking Provided = 12

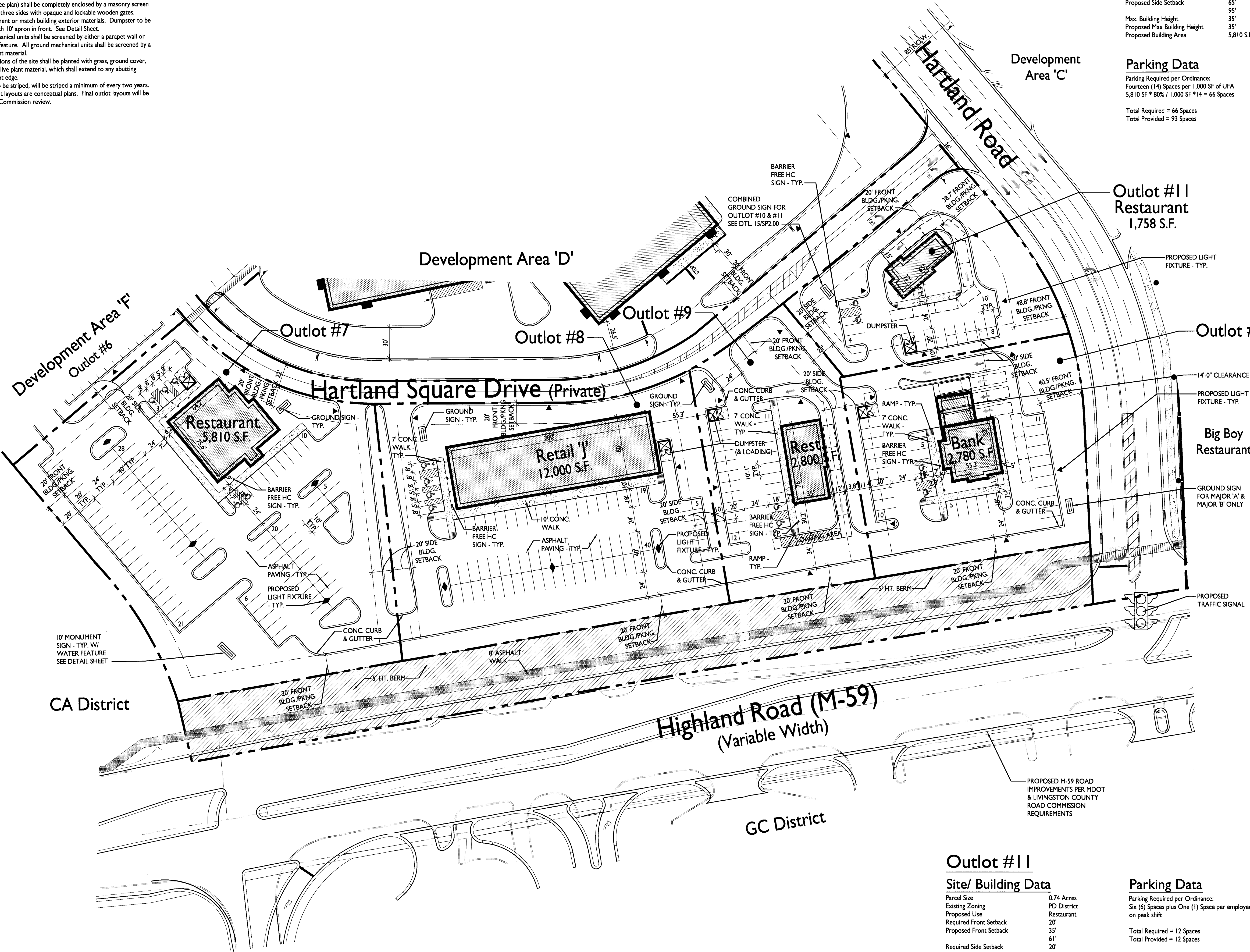
Outlot #11

Site/ Building Data

Parcel Size	0.74 Acres
Existing Zoning	PD District
Proposed Use	Restaurant
Required Front Setback	20'
Proposed Front Setback	35'
Required Side Setback	61'
Proposed Side Setback	20'
Max. Building Height	94.7'
Proposed Max Building Height	64.1'
Proposed Building Area	35'
	1,758 S.F.

Parking Data

Parking Required per Ordinance:
Six (6) Spaces plus One (1) Space per employee
on peak shift
Total Required = 12 Spaces
Total Provided = 12 Spaces



Final Site Plan - Development Area 'E'

Scale: 1" = 50'

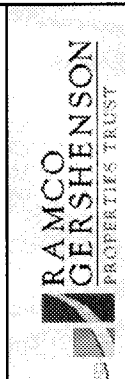
Development Area - Site Key

Not to Scale

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www.bowersrein.com

Consultant + Name



Project + Information

HARTLAND TOWNE SQUARE

HIGHLAND ROAD (M-59) & US-23
HARTLAND TOWNSHIP, MI

Project + Number

07-001

Issue + Date

AUG. 30, 2007	
OCT. 25, 2007	
NOV. 27, 2007	
DEC. 19, 2007	
JAN. 8, 2008	
JAN. 15, 2008	
FEB. 7, 2008	FINAL SITE
FEB. 26, 2008	FINAL SITE
MAR. 11, 2008	FINAL SITE
MAY 7, 2008	REV. NO. 1
JUNE 18, 2008	REV. NO. 3

Sheet + Title

SITE PLAN -
DEVELOPMENT AREA 'E'
7001z10ac.dwg

Sheet + Number

SP1.04

General Notes

- The contractor shall verify all rights of way, easments, property lines and limits of work, etc. prior to commencing work.
- The contractor shall be responsible for contacting and coordinating with all pertinent utility companies 72 hours in advance of any construction. The contractor shall take sole responsibility for any cost incurred due to damage of said utilities.
- All planting beds and landscape islands shall have 4" minimum depth of shredded hardwood bark over black, water permeable landscape fabric.
- All multi-stemmed trees shall be heavily branched and have symmetrical crowns. One sided trees or those with thin or open crowns shall not be accepted.
- All single trunk shade trees to have straight and symmetrical crowns with a central leader. Trees with forked or irregular trunks shall not be accepted.
- All evergreen trees shall be fully to the ground, symmetrical in shape and not sheared in the last five (5) growing seasons.
- It is mandatory that positive drainage be provided away from the building, specifically in the lawn areas around the building.
- The contractor shall not proceed with construction as designed when it is obvious that obstructions and/ or grade differences exist. Such conditions shall be immediately brought to the attention of the owner's representative and/ or landscape architect. The contractor shall assume full responsibility for all necessary revisions due failure to give such notification.
- Any discrepancies between dimensioned layout and actual field conditions shall be reported to the owner's representative and landscape architect. Failure to make such discrepancies known will result in contractor's responsibility and liability for any changes and associated cost.
- The contractor shall be responsible for any coordination with subcontractors as required to accomplish construction installation operations.
- Landscape contractor to install automatic irrigation system as part of contract and provide as-built drawing. All landscape areas and islands to be irrigated.
- All lawn areas to be sodded, unless otherwise noted.
- The contractor shall be responsible for any existing materials the are damaged during construction.
- The proposed vegetation shall be maintained in a healthy, neat and orderly appearance; free of refuse and debris and meet current standards. All broken, unhealthy and dead plant materials shall be replaced as soon as is feasible by the Owner.
- The contractor shall coordinate lawn repair in conjunction with demolition work by others.
- All trees to be installed 10 feet minimum away from utility structures.

Plant List

KEY	QTY	COMMON NAME	SCIENTIFIC NAME	REMARKS
A	11	Red Maple	A. rubrum 'Red Sunset'	3 cal. B+B
B	5	Sugar Maple	A. saccharum 'Legacy'	3 cal. B+B
C	9	Redmond Linden	T. americana 'Redmond'	3 cal. B+B
D	8	Aristocrat Callery Pear	P. calleryana 'Aristocrat'	3" cal. B+B
E6	0	White Spruce	Picea glauca	6' Ht. B+B
E8	0	White Spruce	Picea glauca	8' Ht. B+B
E10	0	White Spruce	Picea glauca	10' Ht. B+B
F6	17	Norway Spruce	Picea abies	6' Ht. B+B
F8	12	Norway Spruce	Picea abies	8' Ht. B+B
F10	6	Norway Spruce	Picea abies	10' Ht. B+B
G	6	Prairie Fire Crab	Malus cv. 'Prairie Fire'	2" cal. B+B
H	13	Shadblow Serviceberry	Amelanchier canadensis	12' Ht. B+B
I	0	Donald Wyman Crab	Malus cv. 'Donald Wyman'	2" cal. B+B
J	34	Compact Amer. Cran. Viburnum	V. cuneatum 'Bailey Compact'	24" Ht. + Spread
K	10	Dwarf Fothergilla	Fothergilla gardenii	24" Ht. + Spread
L	45	Norman Spirea	S. x. bumalda 'Norman'	24" Ht. + Spread
M	15	Broadmoor Juniper	J. sabina 'Broadmoor'	5 gal. 5' O.C.
N	98	Dense Yews	Taxus x. densiformis	24" Ht. + Spread
O	18	Shrub Roses	Rosa 'Nearly Wild'	3 gallon cont.
P	26	Burning Bush	E. alatus 'compactus'	24" Ht. + Spread

Landscape Requirements - Outlot #11

Adjacent to Roads
Required: One (1) Deciduous / Evergreen Tree per 40 LF / Road plus
One (1) Ornamental Tree per 80 LF / Road plus
Eight (8) shrubs per 40 LF / Road

170 LF / Hartland Square Drive Frontage =
170 LF / 40 LF = 5 Trees (Deciduous or Evergreen)
170 LF / 80 LF = 3 Ornamental Trees
170 LF / 40 LF x 8 = 34 Shrubs

185 LF / Hartland Road Frontage =
185 LF / 40 LF = 5 Trees (Deciduous or Evergreen)
185 LF / 80 LF = 3 Ornamental Trees
185 LF / 40 LF x 8 = 37 Shrubs

Berm Requirements
Required: Area adjacent to a public right-of-way (M-59) shall be required to have a berm. Berm shall be minimum of three feet (3') in height.
Provided: Berm (3' ht. min.) has been provided along M-59 except where prohibited due to vehicle sight distance as required by the Livingston County Road Commission.

Parking Lot Landscaping
Area Required: Ten (10) SF of Landscaped Area per Parking Space
12 Spaces x 10 SF = 120 SF
Total Required: 120 SF

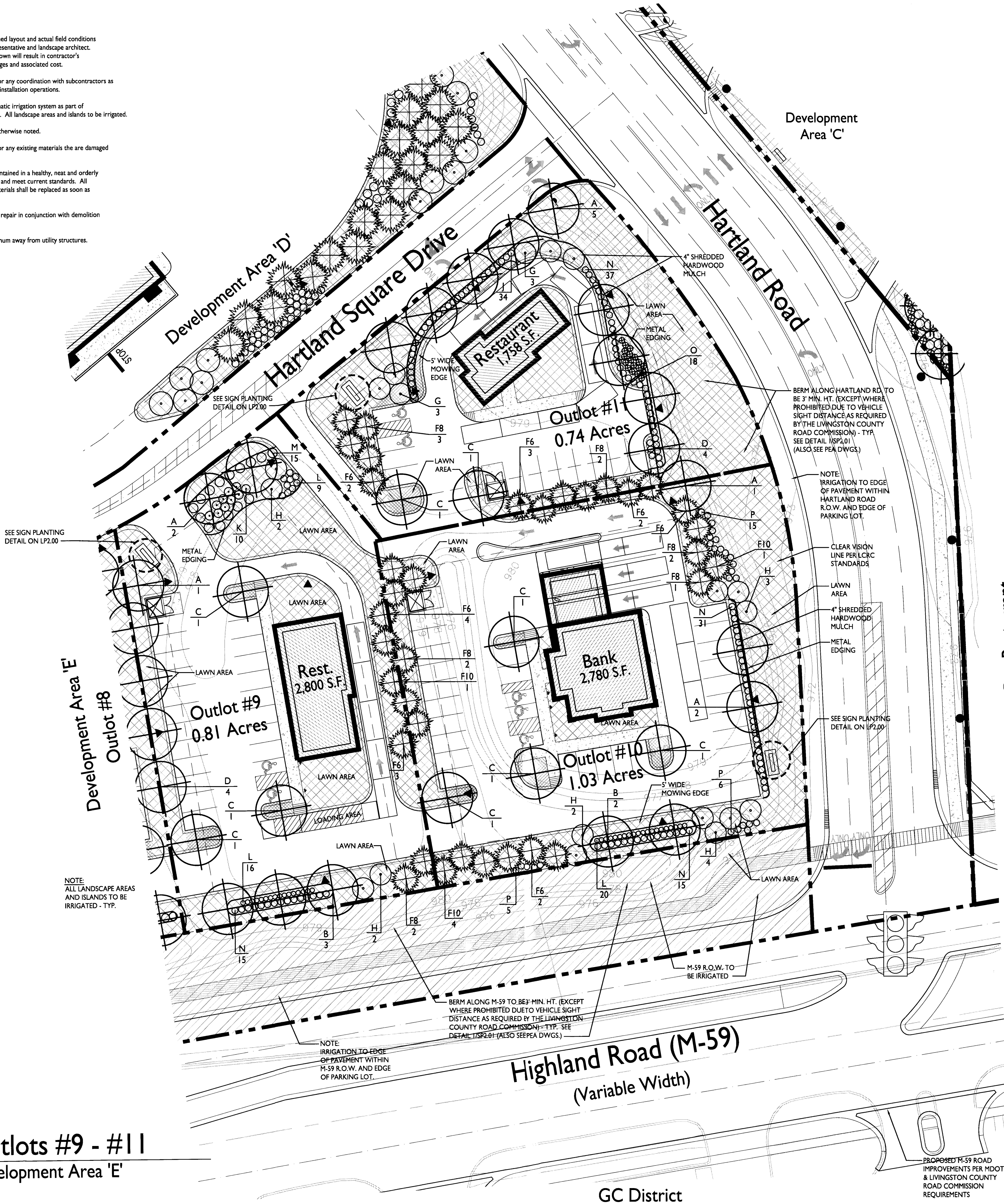
Area Provided: 635 SF

Vegetation Required: One (1) Tree per 320 SF / Area + 50% of the islands must be sod, shrubs, etc.
635 SF / 320 SF = 2 Trees
Trees Required = 2 Trees

Open Space Landscaping
Area Required: One (1) Tree per 3,000 SF of Open Space
17,250 SF / 3,000 SF = (1) Tree = 6 Trees
Total Required: 6 Trees

Total Required: 18 Deciduous/Evergreen Trees
6 Ornamental Trees
71 Shrubs

Total Provided: 19 Deciduous/Evergreen Trees
6 Ornamental Trees
89 Shrubs



Big Boy Restaurant

Landscape Requirements - Outlot #9

Adjacent to Roads
Required: One (1) Deciduous / Evergreen Tree per 40 LF / Road plus
One (1) Ornamental Tree per 80 LF / Road plus
Eight (8) shrubs per 40 LF / Road

160 LF / Hartland Square Drive Frontage =
160 LF / 40 LF = 4 Trees (Deciduous or Evergreen)
160 LF / 80 LF = 2 Ornamental Trees
160 LF / 40 LF x 8 = 32 Shrubs

146 LF / Highland Road (M-59) Frontage =
146 LF / 40 LF = 4 Trees (Deciduous or Evergreen)
146 LF / 80 LF = 2 Ornamental Trees
146 LF / 40 LF x 8 = 30 Shrubs

Berm Requirements
Required: Area adjacent to a public right-of-way (Hartland Road) shall be required to have a berm. Berm shall be minimum of three feet (3') in height.
Provided: Berm (3' ht. min.) has been provided along Hartland Road except where prohibited due to vehicle sight distance as required by the Livingston County Road Commission.

Parking Lot Landscaping
Area Required: Ten (10) SF of Landscaped Area per Parking Space
23 Spaces x 10 SF = 230 SF
Total Required: 230 SF

Area Provided: 604 SF

Vegetation Required: One (1) Tree per 320 SF / Area + 50% of the islands must be sod, shrubs, etc.
604 SF / 320 SF = 2 Trees
Trees Required = 2 Trees

Open Space Landscaping
Area Required: One (1) Tree per 3,000 SF of Open Space
14,370 SF / 3,000 SF = (1) Tree = 5 Trees
Total Required: 5 Trees

Total Required: 15 Deciduous/Evergreen Trees
4 Ornamental Trees
62 Shrubs

Total Provided: 18 Deciduous/Evergreen Trees
4 Ornamental Trees
65 Shrubs

Landscape Requirements - Outlot #10

Adjacent to Roads
Required: One (1) Deciduous / Evergreen Tree per 40 LF / Road plus
One (1) Ornamental Tree per 80 LF / Road plus
Eight (8) shrubs per 40 LF / Road

205 LF / Hartland Road Frontage =
205 LF / 40 LF = 6 Trees (Deciduous or Evergreen)
205 LF / 80 LF = 3 Ornamental Trees
205 LF / 40 LF x 8 = 41 Shrubs

222 LF / Highland Road (M-59) Frontage =
222 LF / 40 LF = 6 Trees (Deciduous or Evergreen)
222 LF / 80 LF = 3 Ornamental Trees
222 LF / 40 LF x 8 = 45 Shrubs

Berm Requirements
Required: Area adjacent to a public right-of-way (Hartland Road) shall be required to have a berm. Berm shall be minimum of three feet (3') in height.
Provided: Berm (3' ht. min.) has been provided along Hartland Road except where prohibited due to vehicle sight distance as required by the Livingston County Road Commission.

Parking Lot Landscaping
Area Required: Ten (10) SF of Landscaped Area per Parking Space
31 Spaces x 10 SF = 310 SF
Total Required: 310 SF

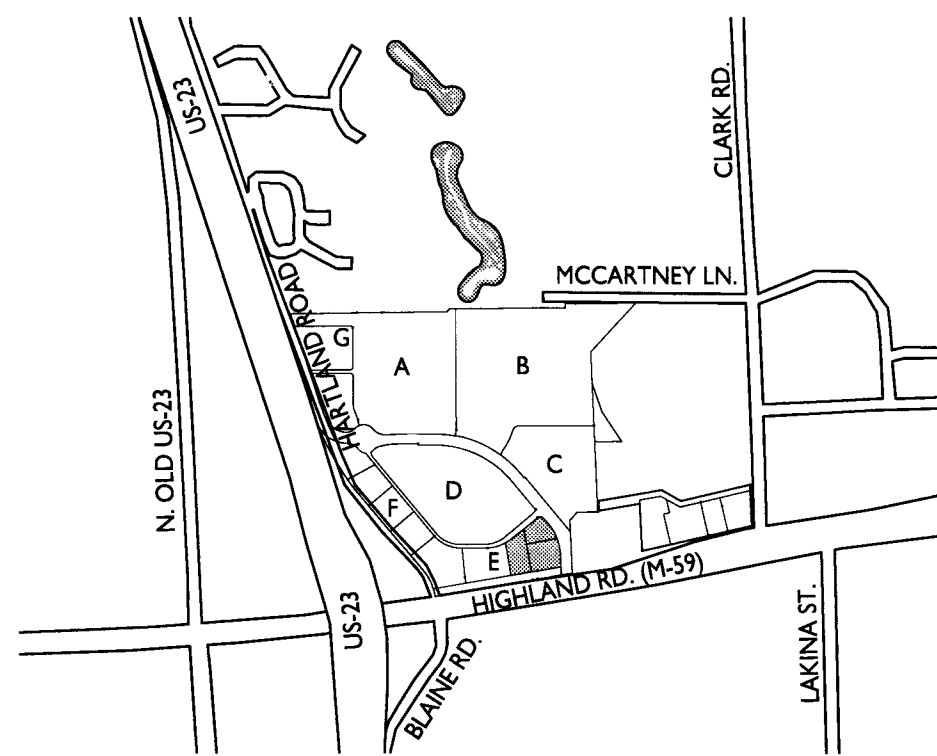
Area Provided: 1,010 SF

Vegetation Required: One (1) Tree per 320 SF / Area + 50% of the islands must be sod, shrubs, etc.
1,010 SF / 320 SF = 4 Trees
Trees Required = 4 Trees

Open Space Landscaping
Area Required: One (1) Tree per 3,000 SF of Open Space
15,166 SF / 3,000 SF = (1) Tree = 6 Trees
Total Required: 6 Trees

Total Required: 22 Deciduous/Evergreen Trees
6 Ornamental Trees
86 Shrubs

Total Provided: 28 Deciduous/Evergreen Trees
9 Ornamental Trees
92 Shrubs



Development Area - Site Key
Not to Scale

BOWERSREIN
Achieving Your Vision™

2400 South Huron Parkway • Ann Arbor, MI 48104
T: 734.975.2400 • F: 734.975.2410
www.bowersrein.com

Consultant + Name

RAMCO
GERSHENSON
PROPERTIES, TRUST

Project + Information
HARTLAND TOWNE SQUARE
HIGHLAND ROAD (M-59) & US-23
HARTLAND TOWNSHIP, MI

Project + Number

07-001

Issue + Date

AUGUST 30, 2007
OCT. 25, 2007
NOV. 27, 2007
DEC. 19, 2007
JAN. 8, 2008
JAN. 15, 2008
FEB. 7, 2008
FEB. 26, 2008
MAR. 11, 2008
MAY 29, 2008
JUNE 18, 2008
FINAL SITE
FINAL SITE
FINAL SITE
LCRC REV.
REV. NO. 3

Sheet + Title

LANDSCAPE PLAN -
OUTLOTS #9 - #11
700\LI\0a.dwg

Sheet + Number

LP1.04

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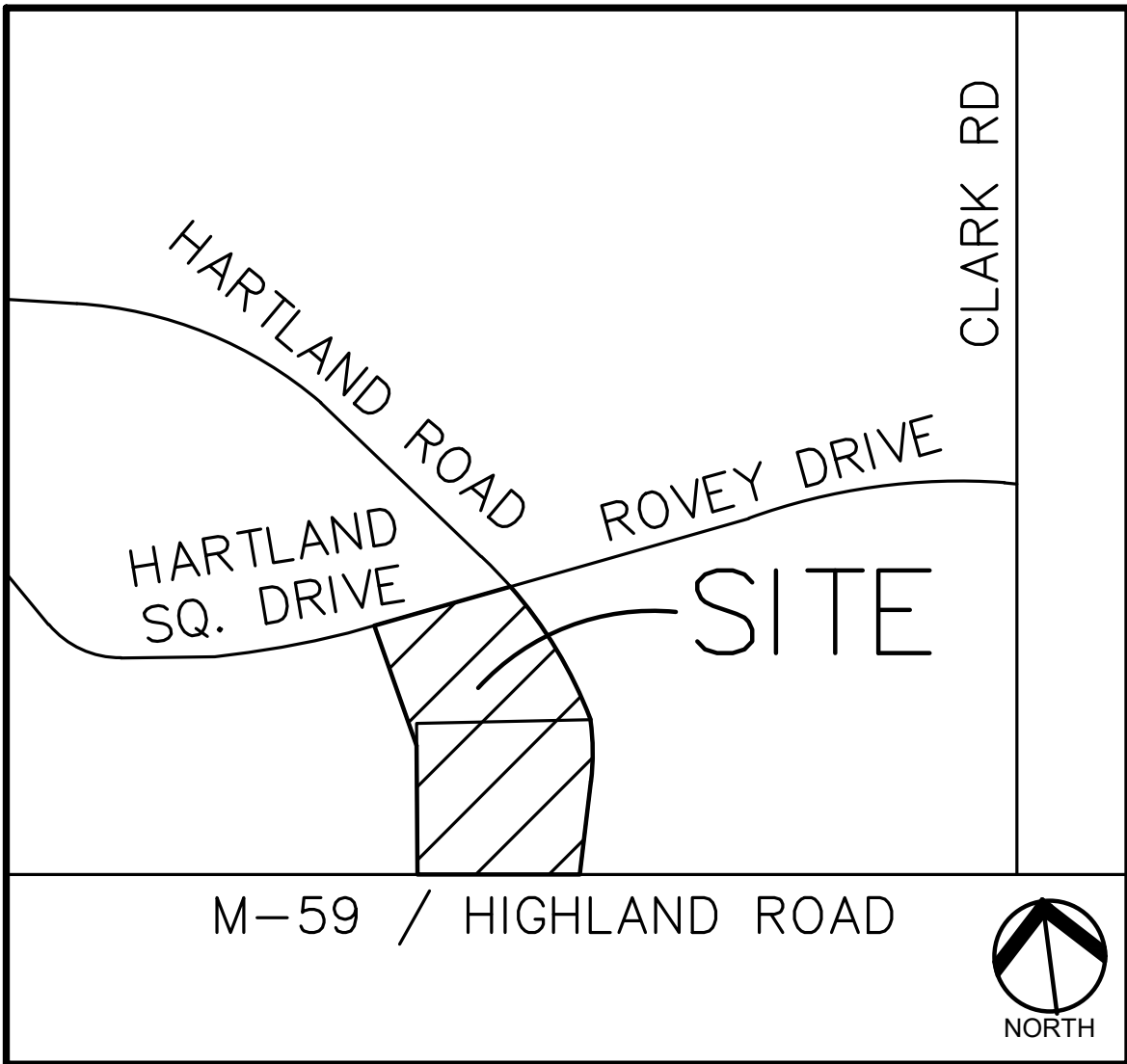
PRELIMINARY SITE PLANS

LOTS 10 & 11 HARTLAND TOWNE SQUARE

PART OF THE SOUTH 1/2 OF SECTION 21, T3N-R6E

HARTLAND, LIVINGSTON, MICHGIAN

PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL



LOCATION MAP
NO SCALE

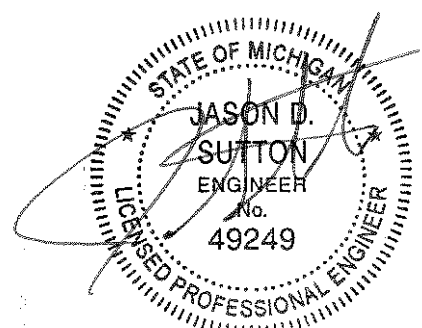
SHEET INDEX	
SHEET NUMBER	SHEET TITLE
C-0.0	COVER SHEET
C-1.0	TOPOGRAPHIC SURVEY
C-3.0	PRELIMINARY DIMENSION PLAN
C-4.0	PRELIMINARY GRADING PLAN
C-5.0	PRELIMINARY SESC PLAN
C-6.0	PRELIMINARY UTILITY PLAN
C-9.0	NOTES AND DETAILS
L-1.0	PRELIMINARY LANDSCAPE PLAN
SL-1.1	PHOTOMETRIC PLAN
SL-1.2	PHOTOMETRIC DETAILS
ARCHITECTURAL	
SP1.01	SITE DETAILS
A1.00	FLOOR PLAN
A3.00	ROOF PLAN
A5.00	EXTERIOR ELEVATIONS
A5.01	EXTERIOR ELEVATIONS

DESIGN TEAM

OWNER/APPLICANT/DEVELOPER	CIVIL ENGINEER
AFFINITY 8 INVESTMENTS, LLC 1721 MAPLELANE AVE HAZEL PARK, MI 48030 CONTACT: THOMAS HANNAWA PHONE: 248.361.1666 EMAIL: THOMASHANNAWA@GMAIL.COM	PEA GROUP 2430 ROCHESTER COURT, STE. 100 TROY, MI 48063-1872 CONTACT: JASON SUTTON, PE PHONE: 844.813.2949 EMAIL: JSUTTON@PEAGROUP.COM
ARCHITECT	LANDSCAPE ARCHITECT
BOWERS + ASSOCIATES, INC. 2400 S. HURON PARKWAY ANN ARBOR, MI 48104 CONTACT: SUSAN BOWERS RA, LEED AP PHONE: 734.975.2400 EXT. 701 EMAIL: SUSANB@BOWERSARCH.COM	PEA GROUP 7927 NEMCO WAY, STE. 115 BRIGHTON, MI 48116 CONTACT: JANET EVANS, PLA PHONE: 844.813.2949 EMAIL: JEVANS@PEAGROUP.COM

PEA
GROUP

REVISIONS	
DESCRIPTION	DATE
ORIGINAL ISSUE DATE	7/13/2021
PER TOWNSHIP REVIEW	8/23/2021



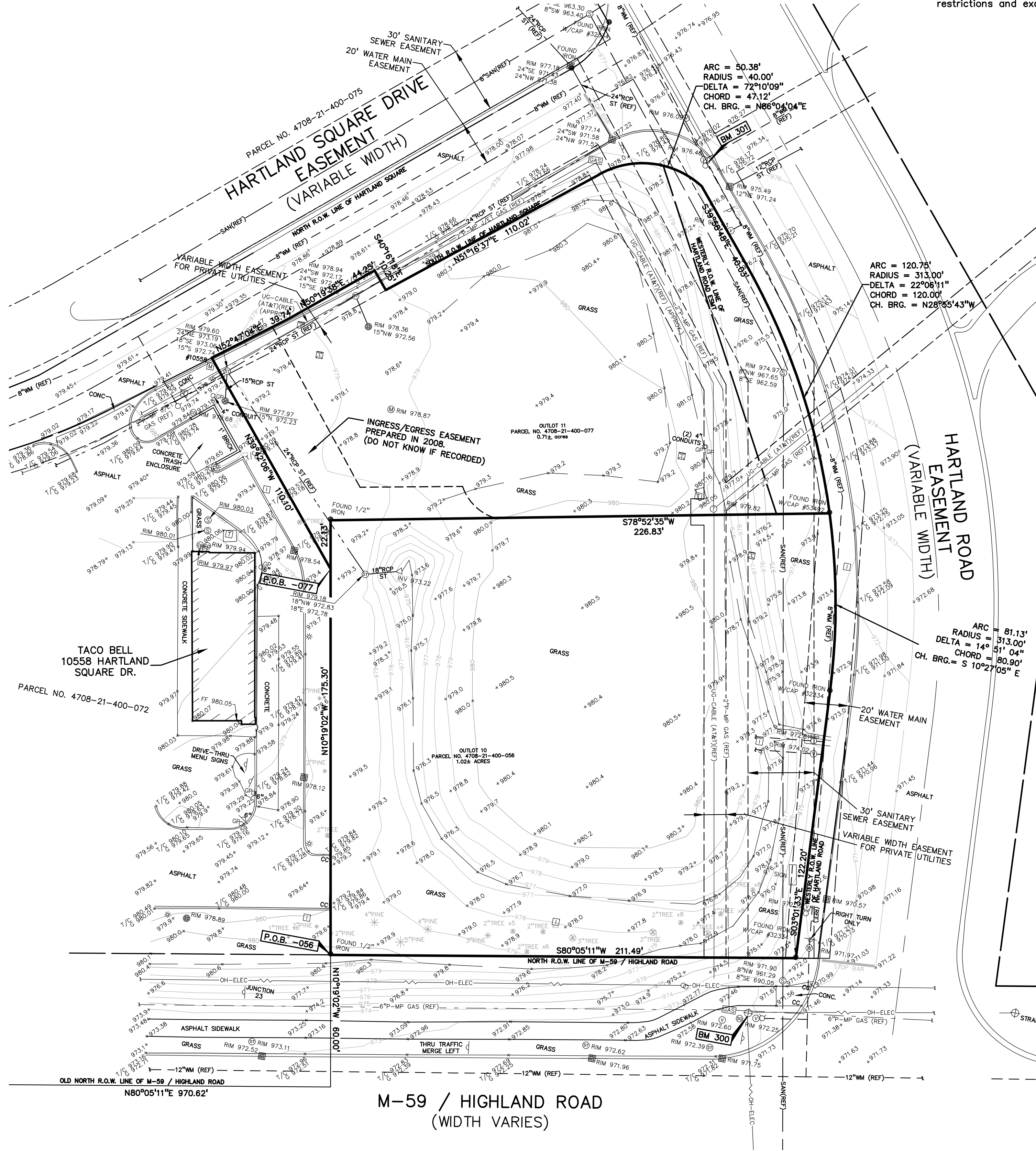
BENCHMARKS
(GPS DERIVED - NAVD88)

BM #300
SET NAIL AND TAG ON NORTH SIDE OF A STRAIN POLE LOCATED APPROX. 80'± WEST OF THE CENTERLINE OF HARTLAND ROAD AND APPROX. 40'± NORTH OF CENTERLINE OF WESTBOUND M-59/HIGHLAND ROAD, ELEV. - 972.43

BM #301
SET DIMPLE ON A HYDRANT ARROW LOCATED APPROX. 35'± WEST OF HARTLAND ROAD AND APPROX. 50'± SOUTH OF ROVEY DRIVE, ELEV. - 978.56

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26093C0238D, DATED 9/17/2008.

S:\PROJECTS\2018\2018-398 HARTLAND OUTLOT 11-JPB\DWG\SITE PLANS\01-10700-18306.dwg



LEGAL DESCRIPTION

PARCEL ID 4708-21-400-056

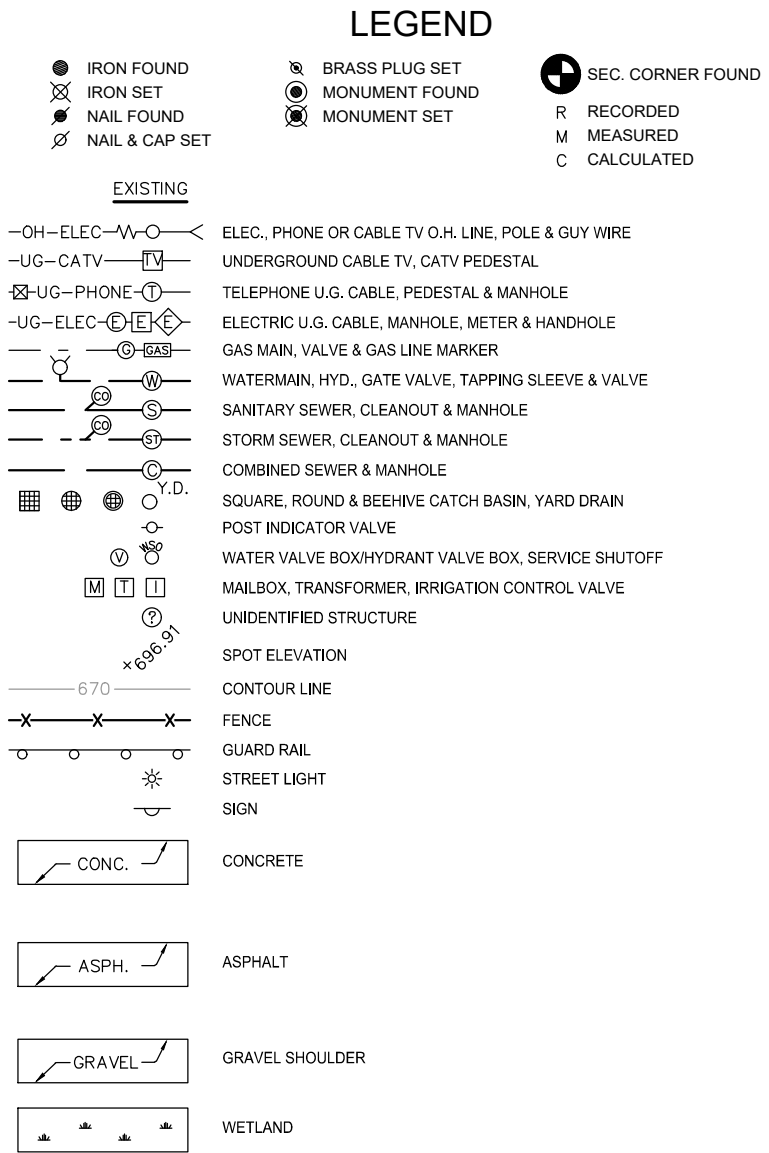
A parcel of land being a part of the South 1/2 of Section 21, T3N-R6E, Hartland Township, Livingston County, Michigan, being more particularly described as follows:

Commencing at the South 1/4 of said Section 21; thence N 02°55'00" W, 214.93 feet along the North-South 1/4 line (as monumented); thence N 80°05'11" E, 970.62 feet along the North Right-of-Way of M-59 (Highland Road); thence N 10°19'02" W, 60.00 feet to a point on the future North Right-of-Way line of said M-59 (120'-1/2 width), and the POINT OF BEGINNING; thence continuing N 10°19'02" W, 197.43 feet; thence N 78°52'35" E, 226.83 feet; thence 81.13 feet along a curve to the right, said curve having a radius of 313.00 feet, a central angle of 14°51'04", and a chord which bears S 10°27'05" E, 80.90 feet; thence S 03°01'33" E, 122.20 feet to a point on the future Northerly Right-of-Way line of said Highland Road; thence along said Northerly line, S 80°05'11" W, 211.49 feet to the POINT OF BEGINNING. Containing 1.02 acres of land and subject to easements, conditions, restrictions and exceptions of record or otherwise.

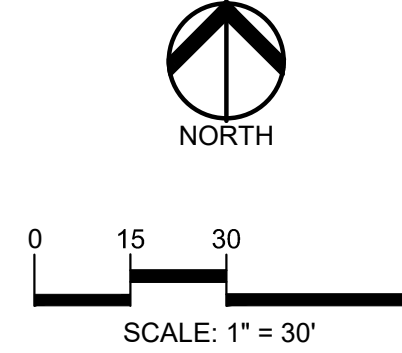
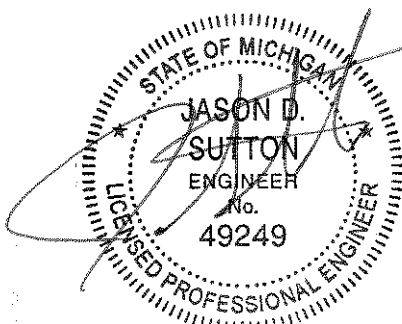
PARCEL ID 4708-21-400-077 (Outlot 11)

A parcel of land being a part of the South 1/2 of Section 21, T3N-R6E, Hartland Township, Livingston County, Michigan, being more particularly described as follows:

Commencing at the South 1/4 of said Section 21; thence N 02°55'00" W, 275.38 feet along the North-South 1/4 line (as monumented) to the North 120 foot Right-of-Way of M-59 (Highland Road); thence N 80°05'11" E, 962.84 feet along said North Right-of-Way line to the west line of Parcel 4708-21-400-056, also being the east line of Parcel 4708-21-400-072; thence along said line N 10°19'02" W, 175.30 feet to the POINT OF BEGINNING; thence continuing along said east line of Parcel 4708-21-400-072 N 39°42'06" W, 110.11 feet to the south line of the Hartland Square Drive Easement (width varies); thence along said south line the following five courses and distances: 1) N 52°47'04" E, 39.74 feet; 2) N 50°19'38" E, 44.25 feet; 3) S 40°16'18" E, 10.25 feet; 4) N 51°16'37" E, 110.02 feet to a point of curvature; 5) 50.38 feet along the arc of a curve to the right, said curve having a radius of 40.00 feet, a central angle of 72°10'09", and a chord that bears N 86°04'04" E, 47.12 feet to the westerly line of Hartland Road; thence along said westerly line S 39°58'48" E, 40.03 feet to a point of curvature; thence 120.75 feet along the arc of a curve to the right, said curve having a radius of 313.00 feet, a central angle of 22°06'11", and a chord that bears S 28°55'43" E, 120.00 feet to the north line of said Parcel 4708-21-400-056; thence along said north line S 78°52'35" W, 226.83 feet to the northwest corner of said Parcel 4708-21-400-056; thence S 10°19'02" E, 22.13 feet to the POINT OF BEGINNING. Containing 0.71 acres



PEA GROUP
t: 844.813.2949
www.peagroup.com



CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT
AFFINITY 8 INVESTMENTS, LLC
1721 MAPLELANE AVENUE
HAZEL PARK, MICHIGAN 48030

PROJECT TITLE
LOTS 10 & 11 HARTLAND TOWNE SQUARE
HARTLAND, MICHIGAN

REVISIONS	
PER TOWNSHIP REVIEW	8-23-21

ORIGINAL ISSUE DATE:
JULY 13, 2021
DRAWING TITLE
TOPOGRAPHIC SURVEY

PEA JOB NO.	2018-398
P.M.	JPB
DN.	JKS
DES.	JDS
DRAWING NUMBER:	

NOT FOR CONSTRUCTION

C-1.0

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #300
SET NAIL AND TAG ON NORTH SIDE OF A STRAIN POLE LOCATED APPROX. 60'± WEST OF THE CENTERLINE OF HARTLAND ROAD AND APPROX. 40'± NORTH OF CENTERLINE OF WESTBOUND M-59/HIGHLAND ROAD, ELEV. - 972.43

BM #301
SET SIMPLE ON A HYDRANT ARROW LOCATED APPROX. 35'± WEST OF HARTLAND ROAD AND APPROX. 50'± SOUTH OF ROVEY DRIVE, ELEV. - 978.56

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X'. AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26093C0238D, DATED 9/17/2008.

SIGN LEGEND:

'NO PARKING FIRE LANE' SIGN

'STOP' SIGN

'BARRIER FREE PARKING' SIGN

'VAN ACCESSIBLE' SIGN

'DO NOT ENTER' SIGN

REFER TO DETAIL SHEET FOR SIGN DETAILS

NOTE:

ALL DIMENSIONS ARE TO BACK OF CURB.

LEGAL DESCRIPTION

PARCEL ID 4708-21-400-056

A parcel of land being a part of the South 1/2 of Section 21, T3N-R6E, Hartland Township, Livingston County, Michigan, being more particularly described as follows:

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PARCEL ID 4708-21-400-077 (Outlot 11)

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LEGEND

● IRON FOUND

⊗ IRON SET

⊗ NAIL FOUND

⊗ NAIL & CAP SET

⊗ BRASS PLUS SET

⊗ MONUMENT SET

⊗ SEC. CORNER FOUND

⊗ R RECORDED

⊗ M MEASURED

⊗ C CALCULATED

EXISTING

—OH-ELEC—W—O— ELEC. PHONE OR CABLE TV OH LINE, POLE & GUY WIRE

—UG-CATV— ELEC. PHONE OR CABLE TV CATV PEDESTAL

—UG-UG—PHONE— ELEC. PHONE U.G. CABLE, PEDESTAL & MANHOLE

—UG-ELEC— ELEC. U.G. CABLE, MANHOLE, METER & HANDHOLE

—GAS— GAS MAIN, VALVE & GAS LINE MARKER

—WATER— WATERMAIN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE

—SEWER— SANITARY SEWER, CLEANOUT & MANHOLE

—STORM— STORM SEWER, CLEANOUT & MANHOLE

—SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN

—POST INDICATOR VALVE

—WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF

—MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE

—UNIDENTIFIED STRUCTURE

—SPOT ELEVATION

—CONTOUR LINE

—FENCE

—GUARDRAIL

—STREET LIGHT

—SIGN

—CONC. CONCRETE

—ASPH. ASPHALT

—GRAVEL GRAVEL SHOULDER

—WETLAND

PROPOSED

STD. HEAVY DUTY

STD. HEAVY DUTY ONLY

STD. HEAVY DEEP DUTY

STD. HEAVY DEEP DUTY STRENGTH

SITE DATA TABLE:		
SITE AREA:	1.74 ACRES (75,800 SQ.FT.) NET AND GROSS	
ZONING:	PD - PLANNED DEVELOPMENT	
PROPOSED USE:	MULTI-TENANT RETAIL (8,000 SF)	
BUILDING INFORMATION:		
MAXIMUM ALLOWABLE BUILDING HEIGHT = 40 FEET (2 STORIES)		
PROPOSED BUILDING HEIGHT = 23 FT (1 STORY)		
BUILDING FOOTPRINT AREA = 8,000 SQ.FT.		
BUILDING LOT COVERAGE = 10.6%		
SETBACK REQUIREMENTS:		
	REQUIRED:	PROPOSED:
BUILDING		
FRONT (SOUTH):	20'	60.80'
SIDE (EAST):	40.5'	118.06'
SIDE (WEST):	20'	31.02'
FRONT (NORTH):	20'	120.54'
PARKING		
FRONT (SOUTH):	20'	51.53'
SIDE (EAST):	40.5'	41.27'
SIDE (WEST):	10'	11.02'
FRONT (NORTH):	20'	20'
PARKING CALCULATIONS:		
RETAIL = 1 SPACE PER 300 S.F.		
TOTAL RETAIL PARKING REQUIRED = 8,000/300 = 27 SPACES		
TOTAL REQUIRED PARKING = 27 SPACES		
TOTAL PROPOSED PARKING SPACES = 51 SPACES INC. 3 H/C SPACES (1 VAN ACCESSIBLE)		

PEA GROUP

t: 844.813.2949

www.peagroup.com

NORTH

0 15 30 60

SCALE: 1" = 30'

811

Know what's below. Call before you dig.

CAUTION!!
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CLIENT

AFFINITY 8 INVESTMENTS, LLC

1721 MAPLELANE AVENUE
HAZEL PARK, MICHIGAN 48030

PROJECT TITLE

LOTS 10 & 11 HARTLAND TOWNE SQUARE

HARTLAND, MICHIGAN

REVISIONS	
PER TOWNSHIP REVIEW	8-23-21

ORIGINAL ISSUE DATE:

JULY 13, 2021

DRAWING TITLE

PRELIMINARY DIMENSION PLAN

PEA JOB NO.	2018-398
P.M.	JPB
DN.	JKS
DES.	JDS
DRAWING NUMBER:	

NOT FOR CONSTRUCTION

C-3.0

S:\PROJECTS\2018\2018-398 HARTLAND OUTLOT 11-JPB\DWG\SITE PLANS\C-3.0DIM-18398.dwg

47

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #300
SET NAIL AND TAG ON NORTH SIDE OF A STRAIN POLE LOCATED APPROX. 80'± WEST OF THE CENTERLINE OF HARTLAND ROAD AND APPROX. 40'± NORTH OF CENTERLINE OF WESTBOUND M-59/HIGHLAND ROAD,
ELEV. - 972.43

BM #301
SET DIMPLE ON A HYDRANT ARROW LOCATED APPROX. 35'± WEST OF HARTLAND ROAD AND APPROX. 50'± SOUTH OF ROVEY DRIVE,
ELEV. - 978.56

FLOODPLAIN NOTE:
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SIGN LEGEND:

'NO PARKING FIRE LANE' SIGN
'STOP' SIGN
'BARRIER FREE PARKING' SIGN
'VAN ACCESSIBLE' SIGN
'DO NOT ENTER' SIGN

REFER TO DETAIL SHEET FOR SIGN DETAILS

SYMBOLS: GRADING

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

PROPOSED CONTOUR LINE

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

LEGAL DESCRIPTION

PARCEL ID 4708-21-400-056

A parcel of land being a part of the South 1/2 of Section 21, T3N-R6E, Hartland Township, Livingston County, Michigan, being more particularly described as follows:

Commencing at the South 1/4 of said Section 21; thence N 02°55'00" W, 214.93 feet along the North-South 1/4 line (as monumented); thence N 80°05'11" E, 970.62 feet along the North Right-of-Way of M-59 (Highland Road); thence N 10°19'02" W, 60.00 feet to a point on the future North Right-of-Way line of said M-59 (120'-1/2 width), and the POINT OF BEGINNING; thence continuing N 10°19'02" W, 197.43 feet; thence N 78°52'35" E, 226.83 feet; thence 81.13 feet along a curve to the right, said curve having a radius of 313.00 feet, a central angle of 14°51'04", and a chord which bears S 10°27'05" E, 80.90 feet; thence S 03°01'33" E, 122.20 feet to a point on the future Northerly Right-of-Way line of said Highland Road; thence along said Northerly line, S 80°05'11" W, 211.49 feet to the POINT OF BEGINNING. Containing 1.02 acres of land and subject to easements,conditions, restrictions and exceptions of record or otherwise.

PARCEL ID 4708-21-400-077 (Outlet 11)

A parcel of land being a part of the South 1/2 of Section 21, T3N-R6E, Hartland Township, Livingston County, Michigan, being more particularly described as follows:

Commencing at the South 1/4 of said Section 21; thence N 02°55'00" W, 275.38 feet along the North-South 1/4 line (as monumented) to the North 120 foot Right-of-Way of M-59 (Highland Road); thence N 80°05'11" E, 962.84 feet along said North Right-of-Way line to the west line of Parcel 4708-21-400-056, also being the east line of Parcel 4708-21-400-072; thence along said line N 10°19'02" W, 175.30 feet to the POINT OF BEGINNING; thence continuing along said east line of Parcel 4708-21-400-072 N 39°42'06" W, 110.11 feet to the south line of the Hartland Square Drive Easement (width varies); thence along said south line the following five courses and distances: 1) N 52°47'04" E, 39.74 feet; 2) N 50°19'38" E, 44.25 feet; 3) S 40°16'18" E, 10.25 feet; 4) N 51°16'37" E, 110.02 feet to a point of curvature; 5) 50.38 feet along the arc of a curve to the right, said curve having a radius of 40.00 feet, a central angle of 72°10'09", and a chord that bears N 86°04'04" E, 47.12 feet to the westerly line of Hartland Road; thence along said westerly line S 39°58'48" E, 40.03 feet to a point of curvature; thence 120.75 feet along the arc of a curve to the right, said curve having a radius of 313.00 feet, a central angle of 22°06'11", and a chord that bears S 28°55'43" E, 120.00 feet to the north line of said Parcel 4708-21-400-056; thence along said north line S 78°52'35" W, 226.83 feet to the northwest corner of said Parcel 4708-21-400-056; thence S 10°19'02" E, 22.13 feet to the POINT OF BEGINNING. Containing 0.71 acres

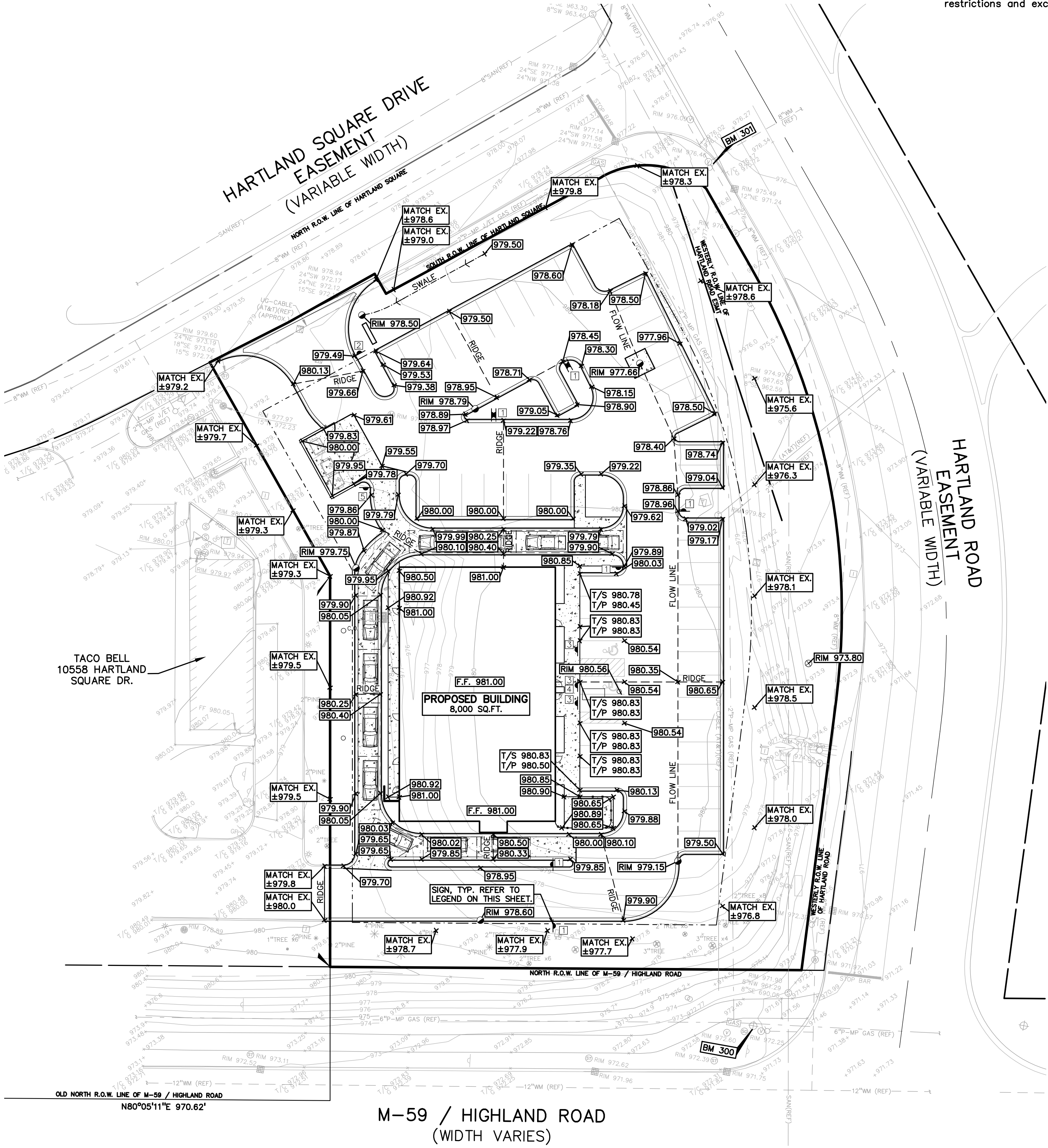
LEGEND

EXISTING
-OH-ELEC-W-O- ELEC. PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE
-UG-CATV-E- UNDERGROUND CABLE TV, CATV PEDESTAL
-UG-ELEC-E- ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE
-UG-ELEC-G- GAS MAIN, VALVE & GAS LINE WARMER
-W-S- WATERMAIN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE
-S-S- SANITARY SEWER, CLEANOUT & MANHOLE
-C-S- COMBINED SEWER, CLEANOUT & MANHOLE
-S-S- SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
-P-R- POST INDICATOR VALVE
-W-W- WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF
-M-M- MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE
-U-U- UNIDENTIFIED STRUCTURE
-S-E- SPOT ELEVATION
-C-L- CONTOUR LINE
-F-F- FENCE
-G-R- GUARD RAIL
-S-L- STREET LIGHT
-S- SIGN

CONC. CONCRETE
ASPH. ASPHALT
GRAVEL GRAVEL SHOULDER
WETLAND

PROPOSED
-S-C- SEC. CORNER FOUND
-R- RECORDED
-M- MEASURED
-C- CALCULATED

31D HEAVY FLOW DUTY ONLY
31D HEAVY DEEP DUTY STRENGTH



PEA GROUP
t: 844.813.2949
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0 15 30 60
SCALE: 1" = 30'

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CLIENT

AFFINITY 8 INVESTMENTS, LLC
1721 MAPLELANE AVENUE
HAZEL PARK, MICHIGAN 48030

PROJECT TITLE

LOTS 10 & 11 HARTLAND TOWNE SQUARE
HARTLAND, MICHIGAN

REVISIONS

PER TOWNSHIP REVIEW	8-23-21

ORIGINAL ISSUE DATE:
JULY 13, 2021

DRAWING TITLE
PRELIMINARY GRADING PLAN

PEA JOB NO.	2018-398
P.M.	JPB
DN.	JKS
DES.	JDS
DRAWING NUMBER:	C-4.0

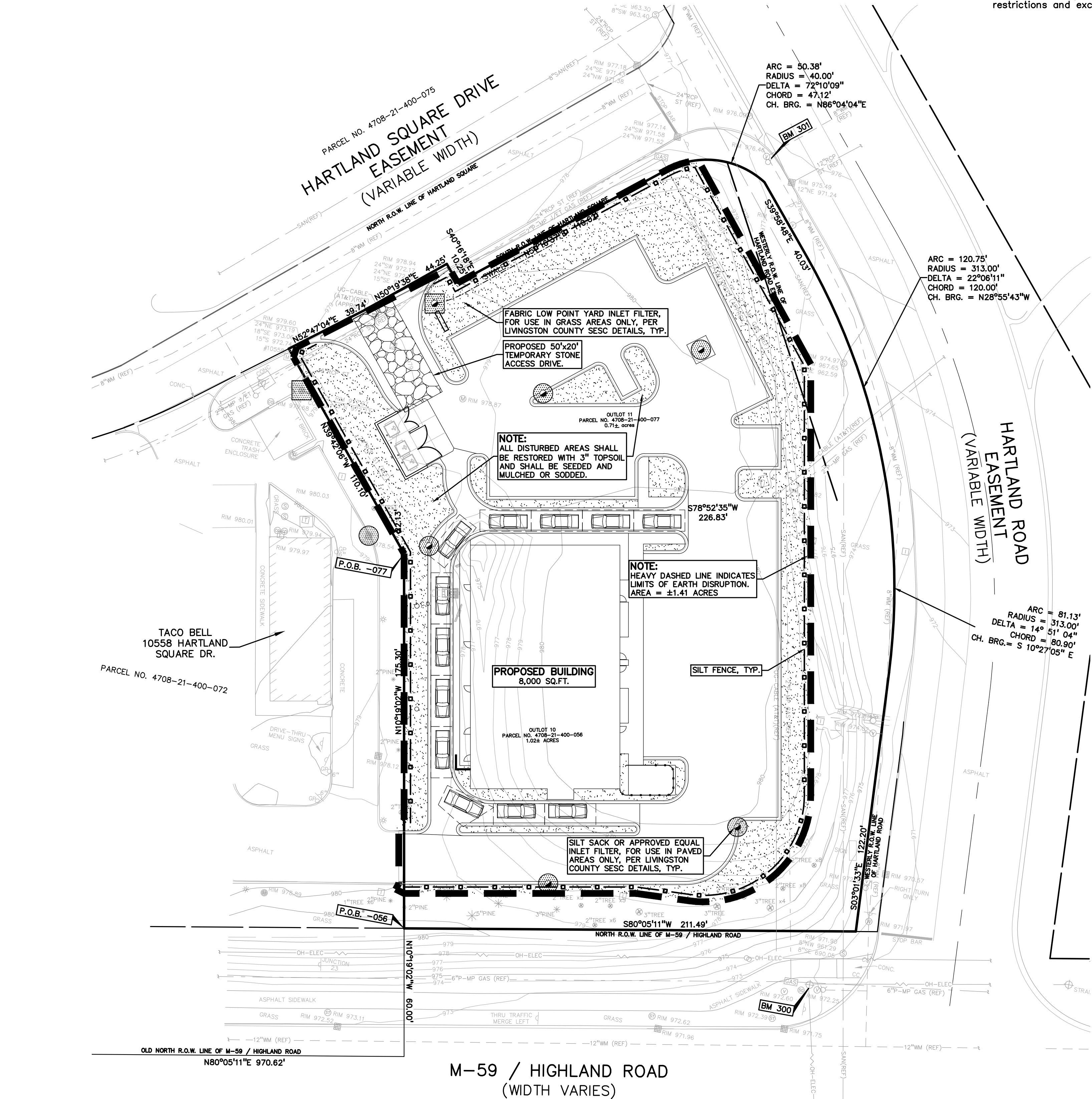
NOT FOR CONSTRUCTION

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #300
SET NAIL AND TAG ON NORTH SIDE OF A STRAIN POLE LOCATED APPROX. 80'± WEST OF THE CENTERLINE OF HARTLAND ROAD AND APPROX. 40'± NORTH OF CENTERLINE OF WESTBOUND M-59/HIGHLAND ROAD, ELEV. - 972.43

BM #301
SET DIMPLE ON A HYDRANT ARROW LOCATED APPROX. 35'± WEST OF HARTLAND ROAD AND APPROX. 50'± SOUTH OF ROVEY DRIVE, ELEV. - 978.56

FLOODPLAIN NOTE:
BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26093C02380, DATED 9/17/2008.



S:\PROJECTS\2018-2019\HARTLAND-398\HARTLAND-OUTLOT 11--PROPOSED SITE PLANS\10-10250--10306.dwg

LEGAL DESCRIPTION

PARCEL ID 4708-21-400-056

A parcel of land being a part of the South 1/2 of Section 21, T3N-R6E, Hartland Township, Livingston County, Michigan, being more particularly described as follows:

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PARCEL ID 4708-21-400-077 (Outlet 11)

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STORMWATER MANAGEMENT SYSTEM MAINTENANCE TASKS AND SCHEDULE DURING CONSTRUCTION									
TASKS	CHAMPIONS	Storm Sewer System	Storm Sewer Sumps	Catch Basin Inlets	Channels & Ditches	Bank Outlet Filters	Bank Forebay	Storm Basins	Overflow Structures
Install & maintain soil erosion control measures		X	X		X	X	X	X	
Inspect for accumulated sediment		X			X	X	X	X	X
Removal of accumulated sediment > 1' deep		X	X		X	X	X	X	X
Inspect for erosion					X		X	X	X
Reestablish permanent & temporary controls				X	X		X	X	X
Inspect for floatables and debris		X	X	X	X	X	X	X	X
Remove floatables and debris		X	X	X	X	X	X	X	X
Replace Outlet Filter gravel jackets					X				
Replace rip-rap or stone check dams					X	X	X	X	X
Mowing					X	X	X	X	X
Certified Stormwater Manager Inspections		X	X	X	X	X	X	X	X
Professional engineer, reporting to developer, construction observations		X	X	X	X	X	X	X	X
Modifications per engineering recommendation		X	X	X	X	X	X	X	X
Certified Stormwater Manager maintenance and inspection records									

EROSION CONTROL QUANTITIES:		
SILT FENCE	904 LF	
INLET FILTER	8 EA.	
TEMPORARY SEEDING	1,884 SY.	

SYMBOLS: EROSION CONTROL	
	SILT FENCE (REFER TO LIVINGSTON COUNTY SOIL EROSION AND SEDIMENTATION CONTROL DETAIL SHEET)
	PAVEMENT INLET FILTER (SILT SACK OR EQUAL) (REFER TO LIVINGSTON COUNTY SOIL EROSION AND SEDIMENTATION CONTROL DETAIL SHEET)
	GRASS INLET FILTER (REFER TO LIVINGSTON COUNTY SOIL EROSION AND SEDIMENTATION CONTROL DETAIL SHEET)
	TEMPORARY CONSTRUCTION ACCESS DRIVE (REFER TO LIVINGSTON COUNTY SOIL EROSION AND SEDIMENTATION CONTROL DETAIL SHEET)
	APPROXIMATE TEMPORARY SEEDING LOCATIONS

TOTAL AREA OF EARTH DISTURBANCE = 1.41 ACRES

LEGEND	
	IRON FOUND
	IRON SET
	NAIL FOUND
	NAIL & CAP SET
	BRASS PLUG SET
	MONUMENT FOUND
	MONUMENT SET
	RECORDED
	MEASURED
	CALCULATED
	OH-ELEC
	UG-CATV
	UG-PHONE
	UG-ELEC
	GAS MAN. VALVE & GAS LINE MARKER
	WATERMAN. HYD. GATE VALVE, TAPPING SLEEVE & VALVE
	SANITARY SEWER, CLEANOUT & MANHOLE
	STORM SEWER, CLEANOUT & MANHOLE
	COMBINED SEWER & MANHOLE
	SQUARE, ROUND & BEEHIVE CATCH BASIN, YARD DRAIN
	POST INDICATOR VALVE
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	SPOT ELEVATION
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	STREET LIGHT
	SIGN
	CONCRETE
	ASPHALT
	GRAVEL SHOULDER
	WETLAND
	STD. DUTY ONLY
	STD. DUTY DEEP
	STD. DUTY STRENGTH

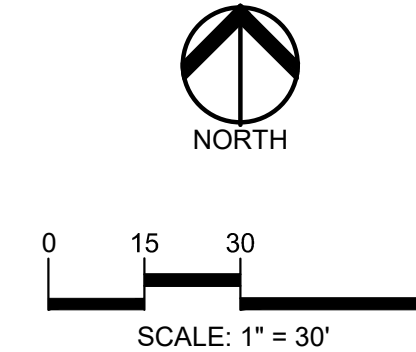
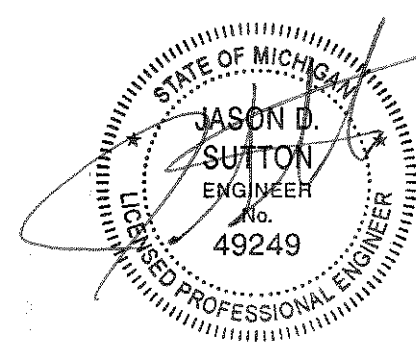
EROSION CONTROL STANDARDS:

1. ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS AND SPECIFICATIONS OF THE JURISDICTIONAL AGENCY UNDER PART 91 OF ACT 451 OF 1994, AS AMENDED.
2. DAILY INSPECTIONS SHALL BE MADE BY CONTRACTOR WHILE WORKING TO DETERMINE THE EFFECTIVENESS OF EROSION AND SEDIMENT CONTROL MEASURES. ANY NECESSARY REPAIRS SHALL BE PERFORMED WITHOUT DELAY. ALL SOIL EROSION CONTROL PROVISIONS SHALL BE PROPERLY MAINTAINED DURING CONSTRUCTION.
3. EROSION AND ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF- SITE AREAS OR IN WATERWAYS. WATERWAYS INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES, AND PONDS.
4. CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES WHEN REQUIRED AND AS DIRECTED ON THESE PLANS. CONTRACTOR SHALL REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT PERMANENT STABILIZATION OF SLOPES, DITCHES, AND OTHER EARTH CHANGE AREAS HAVE BEEN COMPLETED.
5. STAGING THE WORK WILL BE DONE BY THE CONTRACTOR AS DIRECTED IN THESE PLANS AND AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED EARTH.
6. SOIL EROSION CONTROL PRACTICES WILL BE ESTABLISHED IN EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENT CONTROL PRACTICES WILL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SILT OFF THE SITE.
7. DUST SHALL BE CONTROLLED BY WATERING OR BY OTHER APPROVED MEANS THROUGHOUT ALL CONSTRUCTION OPERATIONS.
8. PERMANENT SOIL EROSION CONTROL MEASURES FOR SLOPES, CHANNELS, AND DISTURBED LAND SHALL BE COMPLETED WITHIN 5 CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED. WHEN IT IS NOT POSSIBLE TO PERMANENTLY STABILIZE A DISTURBED AREA AFTER AN EARTH CHANGE HAS BEEN COMPLETED OR WHERE SIGNIFICANT EARTH CHANGE HAS BEEN COMPLETED OR WHERE SIGNIFICANT EARTH CHANGE ACTIVITY CEASES, TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE IMPLEMENTED WITHIN 5 CALENDAR DAYS. ALL TEMPORARY SOIL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED BEFORE A CERTIFICATE OF COMPLIANCE IS ISSUED.
9. THE CONTRACTOR SHALL PRESERVE NATURAL VEGETATION AS MUCH AS POSSIBLE.
10. ANY WORK OUTSIDE OF THE LIMITS OF DISTURBANCE SHALL REQUIRE A SEPARATE GRADING PERMIT.
11. FOLLOWING THE PLACEMENT OF 4" OF TOPSOIL AND HYDROSEED, STRAW MULCH BLANKET IS TO BE INSTALLED PERPENDICULAR ALONG THE PROPOSED SLOPES 1:4 OR STEEPER FROM TOP OF SLOPE TO TOE OF SLOPE, INCLUDING DITCH BOTTOMS, AND IT MUST BE PEGGED IN PLACE.
12. ALL MUD/DIRT TRACKED ONTO EXISTING COUNTY/CITY ROADS FROM THIS SITE, DUE TO CONSTRUCTION, SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.
13. TEMPORARY STABILIZATION OF THE ENTIRE SITE SHALL BE COMPLETED AND APPROVAL OBTAINED FROM THE LIVINGSTON COUNTY DRAIN COMMISSIONERS OFFICE PRIOR TO THE ISSUANCE OF ANY SINGLE FAMILY DWELLING PERMITS.

SOIL EROSION SCHEDULE AND SEQUENCE OF CONSTRUCTION:

1. PLACE SILT FENCE AND SEDIMENT TRAPS AS INDICATED ON PLANS. NOTE THAT ALL SILT FENCE SHALL BE 36" HIGH, NO EXCEPTIONS (DATE)
2. INSTALL MUD MAT AT SITE ENTRANCE. (DATE)
3. REMOVE ALL TOPSOIL, ORGANIC MATTER, AND DELETERIOUS MATERIALS FROM AREAS TO BE GRADED. TOPSOIL MAY BE STORED ON SITE IN AREAS INDICATED AND USED FOR FUTURE PLANTING AND FILL AREAS IN GREENSPACE, BERMS, AND REAR YARDS. TRUCK TOPSOIL OFF SITE AT OWNER'S REQUEST. STOCKPILE AREAS SHALL BE SEEDDED AND MULCHED OR MATTED WITH STRAW, AND PROVIDED WITH A PERIMETER OF SILT FENCE IMMEDIATELY FOLLOWING THE STRIPPING PROCESS. (DATE)
4. CONSTRUCT DETENTION PONDS AND SEDIMENTATION PONDS. PONDS SHALL BE TOPSOILED, SEEDDED, MULCHED AND TACKED PRIOR TO ANY OTHER EARTH DISRUPTION. (DATE)
5. GRADE ROADS TO PAVEMENT SUBGRADE ELEVATION. (DATE)
6. ROUGH GRADE SITE TO WITHIN 0.5' OF FINAL GRADE PRIOR TO BEGINNING UTILITY CONSTRUCTION. (DATE)
7. INSTALL UTILITIES. PLACE INLET FILTERS ON ALL CATCH BASINS AND INLETS. (DATE)
8. PLACE ROAD PAVING. (DATE)
9. REDISTRIBUTE TOPSOIL. SITE SHALL BE GRADED ACCORDING TO GRADING PLAN. FINAL GRADES WILL BE SET AT THE TIME SITE PLANS ARE AVAILABLE FOR EACH HOUSE. (DATE)
10. INSTALL FRANCHISE UTILITIES (ELECTRIC, GAS, TELEPHONE). (DATE)
11. ESTABLISH VEGETATION AND/OR LANDSCAPE ANY REMAINING DISTURBED AREAS. (DATE)
12. CLEAN PAVEMENT AND STORM SEWERS. (DATE)
13. REMOVE ALL SEDIMENT FROM SEDIMENT BASIN AND DETENTION POND. (DATE)
14. REMOVE ALL TEMPORARY SEDIMENTATION AND EROSION CONTROLS. (DATE)

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LOTS 10 & 11 HARTLAND TOWNE SQUARE
HARTLAND, MICHIGAN

REVISIONS	
PER TOWNSHIP REVIEW	8-23-21

ORIGINAL ISSUE DATE:
JULY 13, 2021

DRAWING TITLE
PRELIMINARY SESC PLAN

PEA JOB NO. 2018-398

P.M. JPB

DN. JKS

DES. JDS

DRAWING NUMBER:

NOT FOR CONSTRUCTION

C-5.0

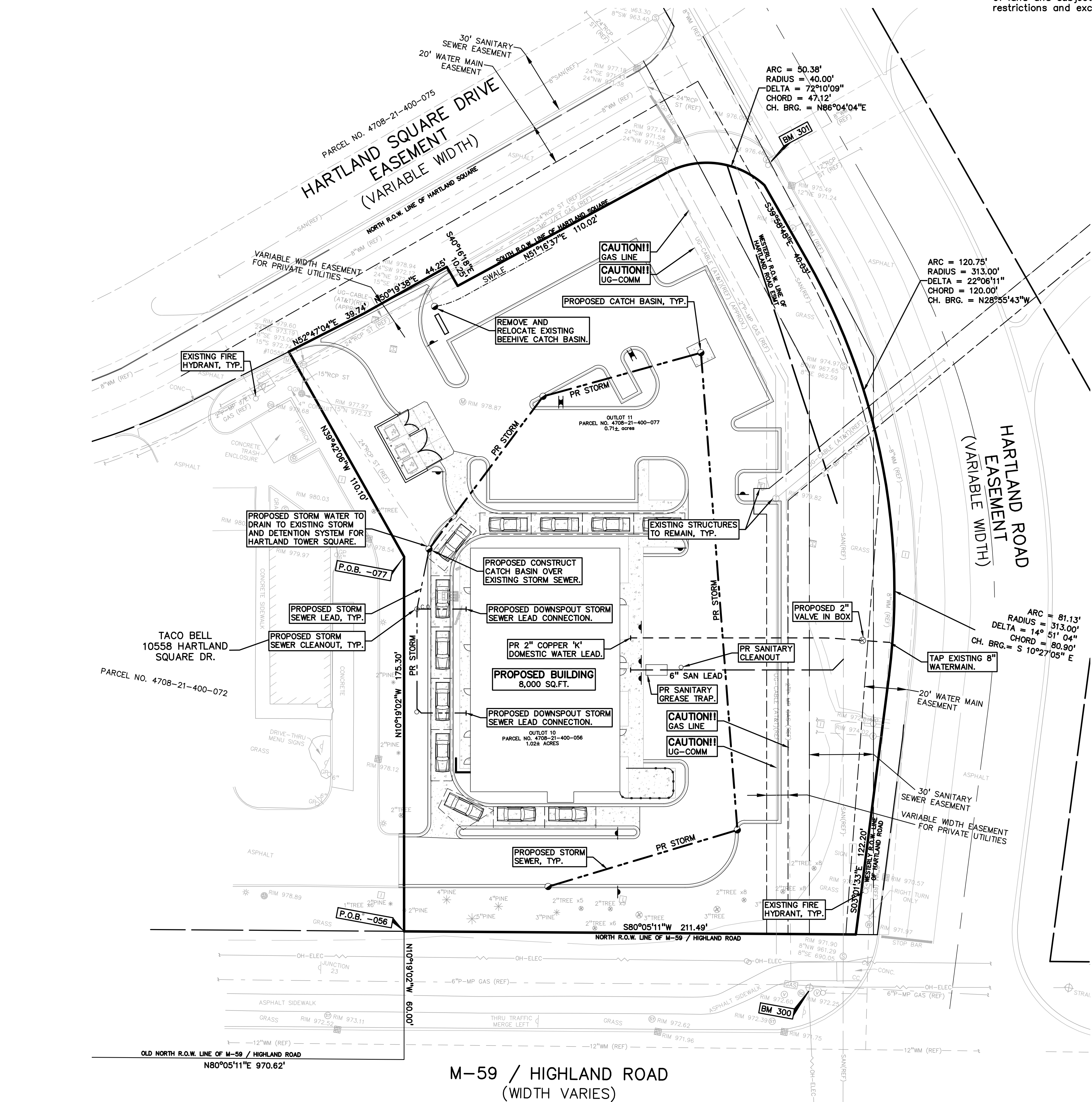
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REFER TO UTILITY NOTES ON SHEET C-9.0.



LEGAL DESCRIPTION

PARCEL ID 4708-21-400-056

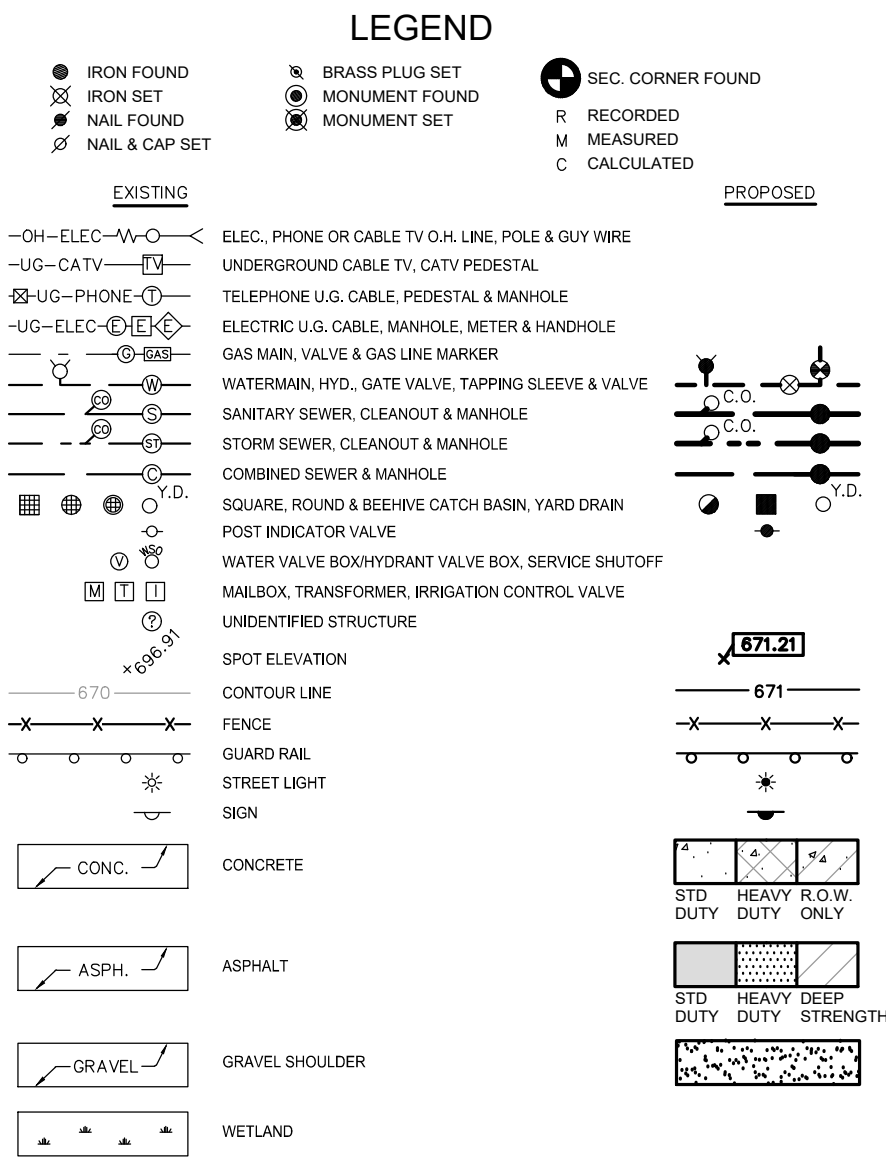
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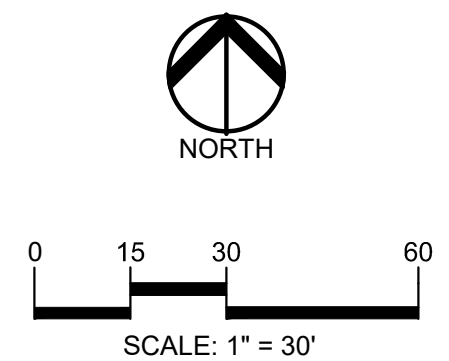
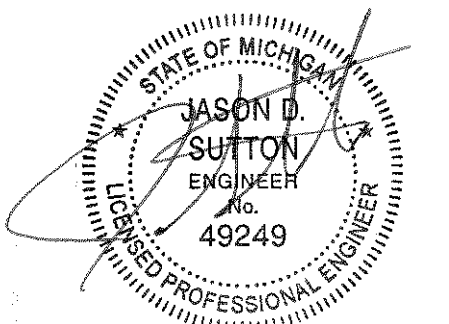
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PRELIMINARY UTILITY PLAN

PEA JOB NO.	2018-398
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C-6.0

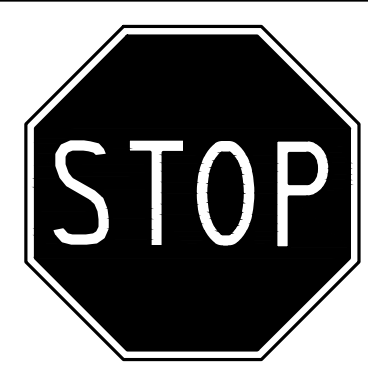
GENERAL NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

- ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT OSHA, MDOT AND MUNICIPALITY STANDARDS AND REGULATIONS.
- THE CONTRACTOR SHALL NOTIFY THE TOWNSHIP ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- THE CONTRACTOR MUST CONTACT THE ENGINEER SHOULD THEY ENCOUNTER ANY DESIGN ISSUES DURING CONSTRUCTION. IF THE CONTRACTOR MAKES DESIGN MODIFICATIONS WITHOUT THE WRITTEN DIRECTION OF THE DESIGN ENGINEER, THE CONTRACTOR DOES SO AT HIS OWN RISK.
- ALL NECESSARY PERMITS, TESTING, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL TOWNSHIP INSPECTION FEES.
- THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. IF NO NOTIFICATION IS GIVEN AND DAMAGE RESULTS, SAID DAMAGE WILL BE REPAIRED AT SOLE EXPENSE OF THE CONTRACTOR. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
- CONTRACTOR TO VERIFY THAT THE PLANS AND SPECIFICATIONS ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHERMORE, VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING FINAL APPROVAL, HAVING TO BE ADJUSTED OR RE-DONE, SHALL BE AT THE CONTRACTORS EXPENSE. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND/OR SPECIFICATIONS, THEY SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE TO THE CONTRACTOR.
- ANY WORK WITHIN THE STREET OR HIGHWAY RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
- ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, SIGNAGE, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY MAINTAIN TRAFFIC IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION). THE DESIGN ENGINEER, OWNER, TOWNSHIP AND STATE SHALL NOT BE HELD LIABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY REGULATIONS DURING THE CONSTRUCTION PERIOD.
- THE USE OF CRUSHED CONCRETE IS PROHIBITED ON THE PROJECT WITHIN 100 FEET OF ANY WATER COURSE (STREAM, RIVER, COUNTY DRAIN, ETC.) AND LAKE, REGARDLESS OF THE APPLICATION OR LOCATION OF THE WATER COURSE OR LAKE RELATIVE TO THE PROJECT LIMITS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

PAVING NOTES:

- IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.
- PROVIDE EXPANSION JOINTS AND JOINT SEALANT AT TWO "END-OF-RADIUS" LOCATIONS (OPPOSITE SIDES AT EACH LONG END) OF CONCRETE CURB ISLANDS.
- REFER TO ARCHITECTURAL PLANS FOR DETAILS OF FROST SLAB AT EXTERIOR BUILDING DOORS.
- CONSTRUCTION TRAFFIC SHOULD BE MINIMIZED ON THE NEW PAVEMENT. IF CONSTRUCTION TRAFFIC IS ANTICIPATED ON THE PAVEMENT STRUCTURE, THE INITIAL LIFT THICKNESS COULD BE INCREASED AND PLACEMENT OF THE FINAL LIFT COULD BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED. THIS ACTION WILL ALLOW REPAIR OF LOCALIZED FAILURE, IF ANY DOES OCCUR, AS WELL AS REDUCE LOAD DAMAGE ON THE PAVEMENT SYSTEM.
- CONCRETE PAVEMENT JOINTING - UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION:
 - WHERE PROPOSED CONCRETE ABUTS A STRUCTURE PROVIDE A MINIMUM 1/2" EXPANSION JOINT WITH SEALANT, THE JOINT FILLER BOARD MUST BE AT LEAST THE FULL DEPTH OF THE CONCRETE AND HELD DOWN A 1/2" INCH TO ALLOW FOR SEALING
 - WHERE PROPOSED CONCRETE ABUTS EXISTING CONCRETE OR IN BETWEEN POURS OF PROPOSED CONCRETE (CONSTRUCTION JOINT) PROVIDE 5/8" DOWELS EVERY 30" CENTER TO CENTER HALF WAY ALONG THE THICKNESS OF THE PROPOSED PAVEMENT. ALTERNATE DOWELS SIZES AND SPACING MUST BE APPROVED THE ENGINEER PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
 - WHERE PROPOSED CONCRETE ABUTS EXISTING OR PROPOSED SIDEWALK PROVIDE A MINIMUM 1/2" EXPANSION JOINT WITH SEALANT
 - WHERE PROPOSED CONCRETE ABUTS EXISTING OR PROPOSED CURBING PROVIDE A MINIMUM 1/2" EXPANSION JOINT WITH SEALANT
 - CONTROL, LONGITUDINAL AND/OR TRANSVERSE JOINTS SHALL BE PLACED TO PROVIDE PANELS WITHIN THE PAVEMENT AS SQUARE AS POSSIBLE WITH THE FOLLOWING MAXIMUM SPACING PARAMETERS:
 - 6-INCH THICK CONCRETE PAVEMENT: 12' X 12'
 - 8-INCH THICK CONCRETE PAVEMENT: 15' X 15'
 - IRREGULAR-SHAPED PANELS MAY REQUIRE THE USE OF REINFORCING MESH OR FIBER MESH AS DETERMINED BY THE ENGINEER. THE USE OF MESH MUST BE APPROVED THE ENGINEER PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
 - IF A JOINT PLAN IS NOT PROVIDED IN THE PLANS, THE CONTRACTOR SHALL SUBMIT ONE TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCING WORK AND VIA THE SUBMITTAL PROCESS.
- CONCRETE CURBING JOINTING - UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION:
 - WHERE PROPOSED CONCRETE CURBING ABUTS A STRUCTURE PROVIDE A MINIMUM 1/2" EXPANSION JOINT WITH SEALANT
 - WHERE PROPOSED CONCRETE ABUTS EXISTING OR PROPOSED SIDEWALK PROVIDE A MINIMUM 1/2" EXPANSION JOINT WITH SEALANT
 - WHERE PROPOSED CONCRETE ABUTS EXISTING CURBING PROVIDE A MINIMUM 1/2" EXPANSION JOINT WITH SEALANT
 - IN BETWEEN POURS OF PROPOSED CONCRETE CURBING (CONSTRUCTION JOINT)
 - CARRY THE REBAR CONTINUOUSLY BETWEEN POURS
 - IF THE REBAR IS NOT LONG ENOUGH TO CARRY CONTINUOUSLY THEN TIE TWO PIECES OF REBAR PER THE LATEST MDOT SPECIFICATIONS
 - CONTROL JOINTS SHALL BE PLACED A MAXIMUM 10' CENTER TO CENTER AND AT ALL RADIUS RETURNS



STOP SIGN DETAIL
NOT TO SCALE

NO
PARKING
FIRE
LANE

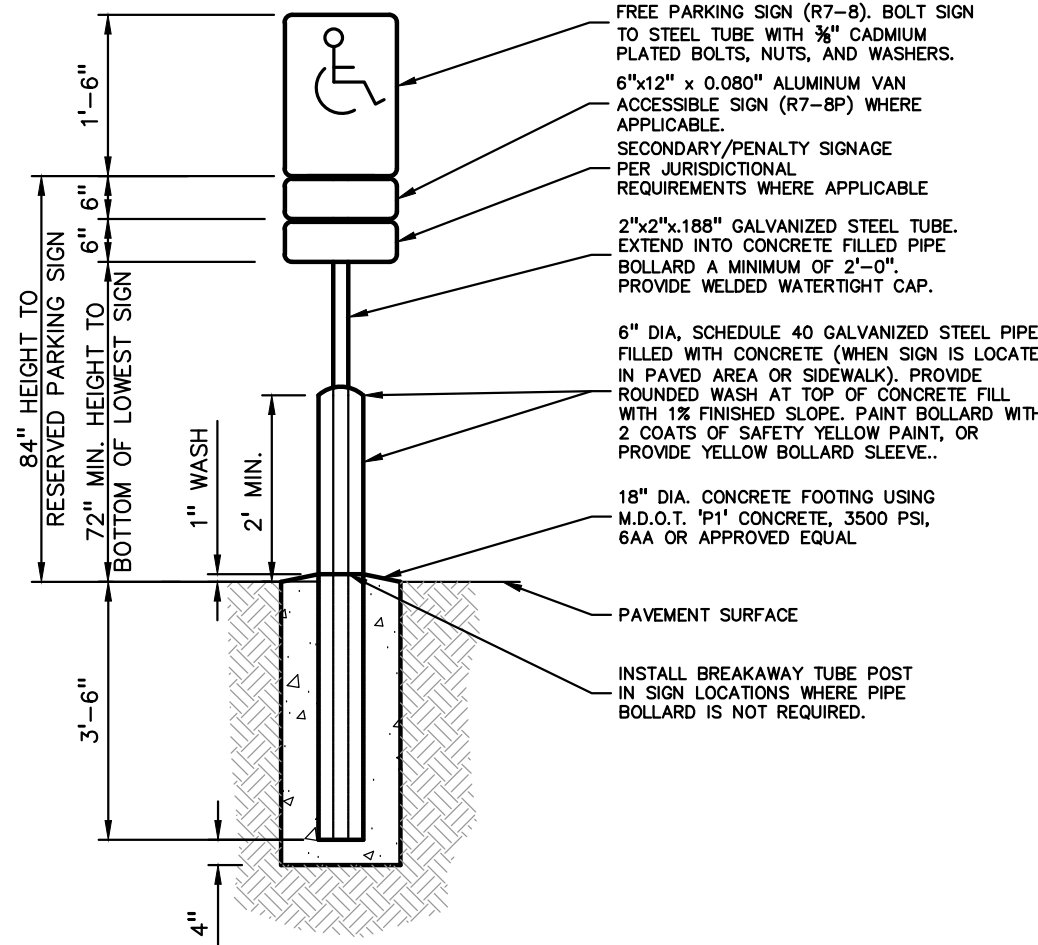
NO PARKING SIGN DETAIL
NOT TO SCALE

DO NOT
ENTER

DO NOT ENTER SIGN DETAIL
NOT TO SCALE

BARRIER FREE SIGN NOTES:

- ONE SIGN IS REQUIRED AT EACH BARRIER FREE PARKING SPACE.
- ALL SIGNS SHALL COMPLY WITH THE LATEST STANDARDS OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD).
- WHEN TWO BARRIER FREE PARKING SPACES ARE ADJACENT AND FACING EACH OTHER, TWO SIGNS ARE REQUIRED, BUT CAN BE MOUNTED ON THE SAME POST.
- SIGN POSTS SHALL BE 2" NOM. SQUARE 14-GAUGE GALVANIZED STEEL TUBE WITH 7/16" HOLES AT 1" CENTERS. POSTS SHALL TELESCOPE INSIDE ANCHOR POSTS A MINIMUM OF 12".
- ANCHOR POSTS SHALL BE 2.25" NOM. SQUARE 12-GAUGE GALVANIZED STEEL POST, A MINIMUM OF 3 FEET LONG.
- IF THESE NOTES AND DETAILS CONFLICT WITH LOCAL CODES AND ORDINANCES, THE STRICTER REQUIREMENT SHOULD BE USED.
- ALTERNATE MATERIALS MAY BE USED IF IN COMPLIANCE WITH A.D.A. GUIDELINES AND LOCAL REQUIREMENTS.



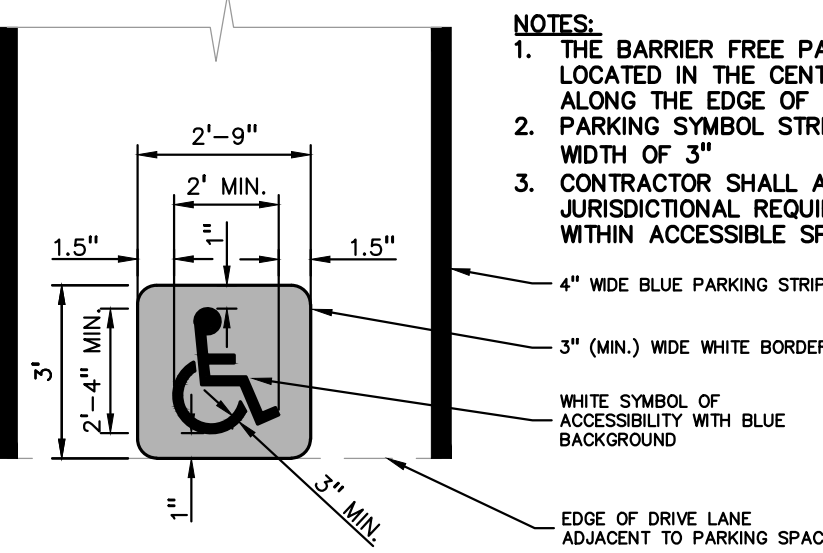
BARRIER FREE SIGN AND POST DETAIL
NOT TO SCALE



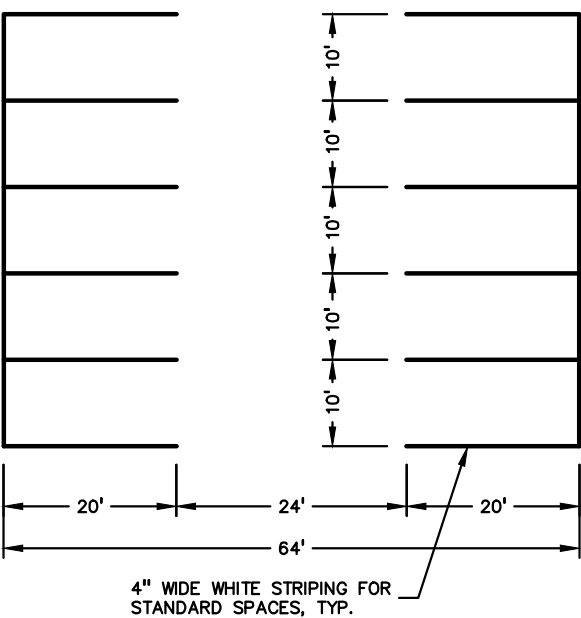
RESERVED
PARKING
ONLY
DET 2
BARRIER FREE
PARKING SIGN DETAIL
NOT TO SCALE



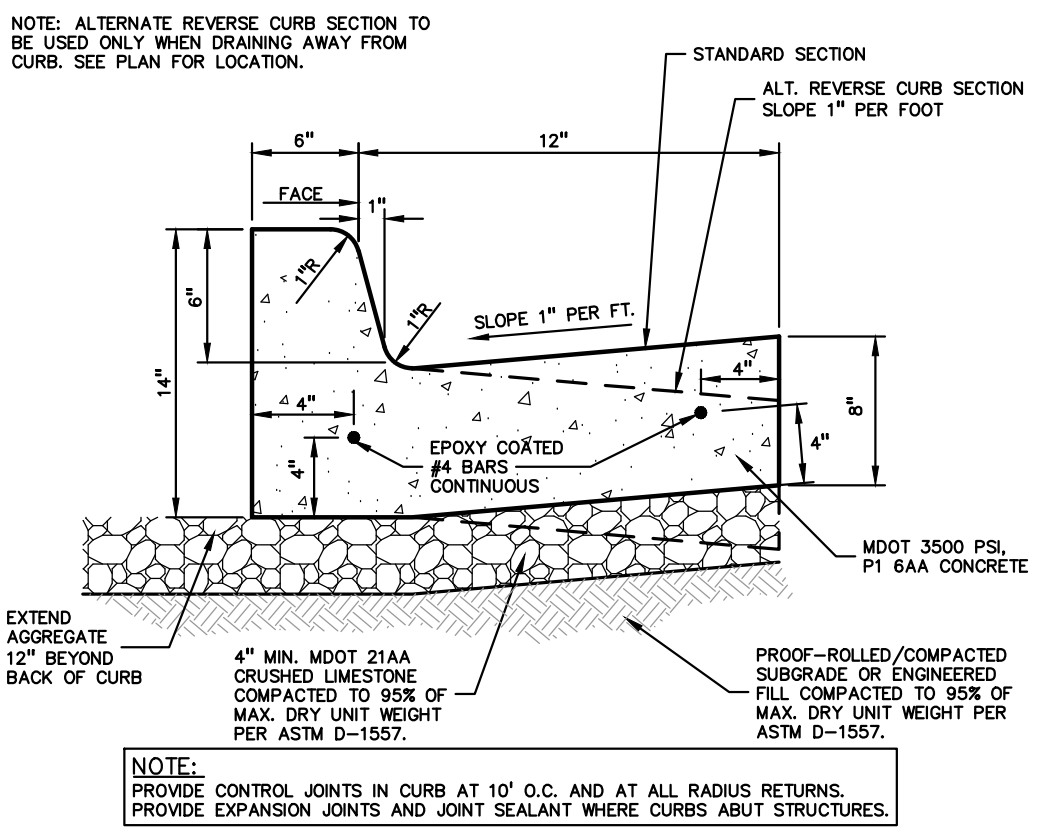
RESERVED
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ONLY
VAN
ACCESSIBLE
DET 3
VAN ACCESSIBLE
PARKING SIGN DETAIL
NOT TO SCALE



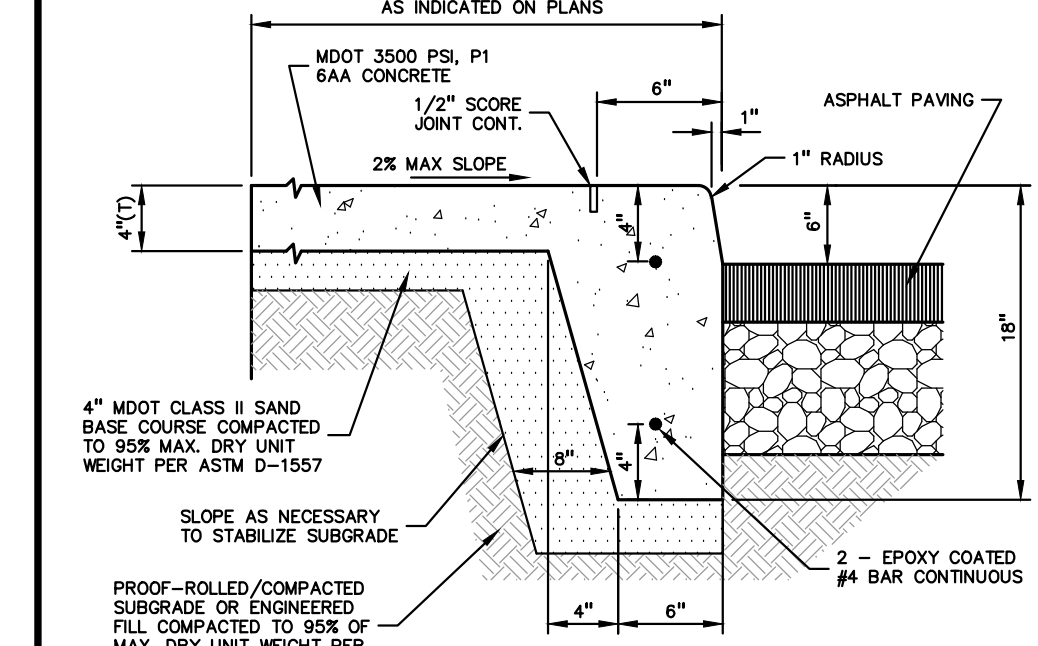
BARRIER FREE PARKING SYMBOL DETAIL
(INTERNATIONAL SYMBOL OF ACCESSIBILITY)
NOT TO SCALE



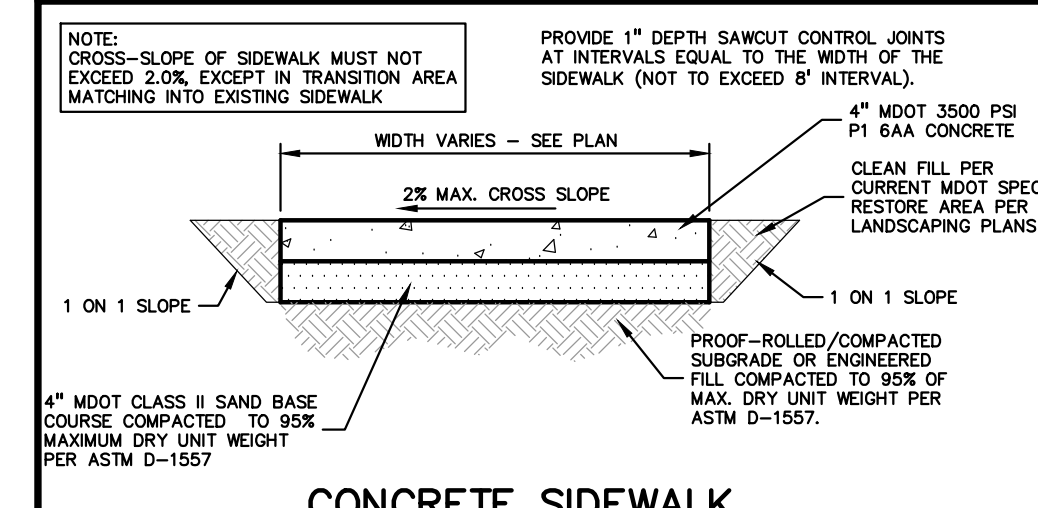
TYPICAL PARKING BAY DETAIL
NOT TO SCALE



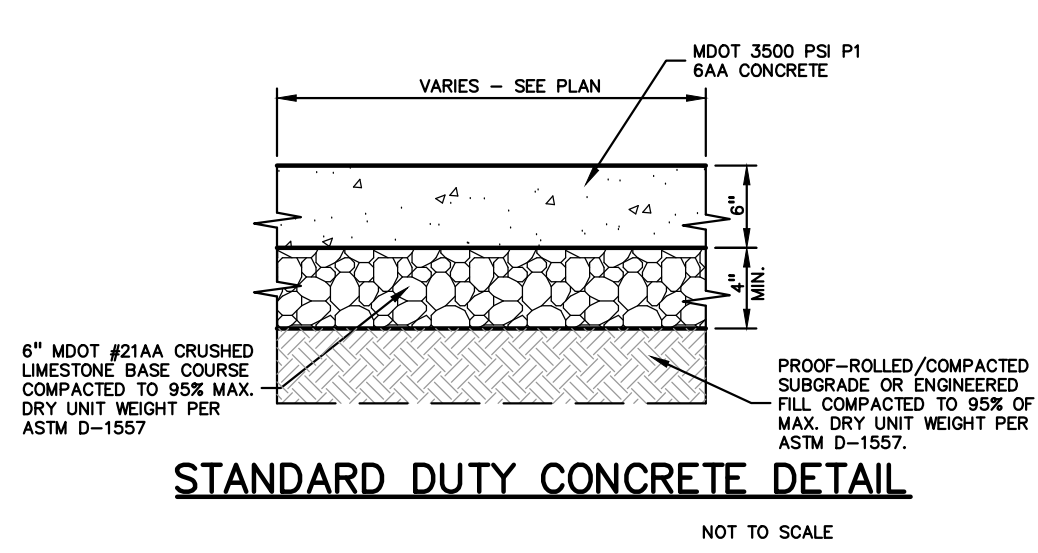
18"x6" STANDARD CONCRETE CURB AND GUTTER
NOT TO SCALE



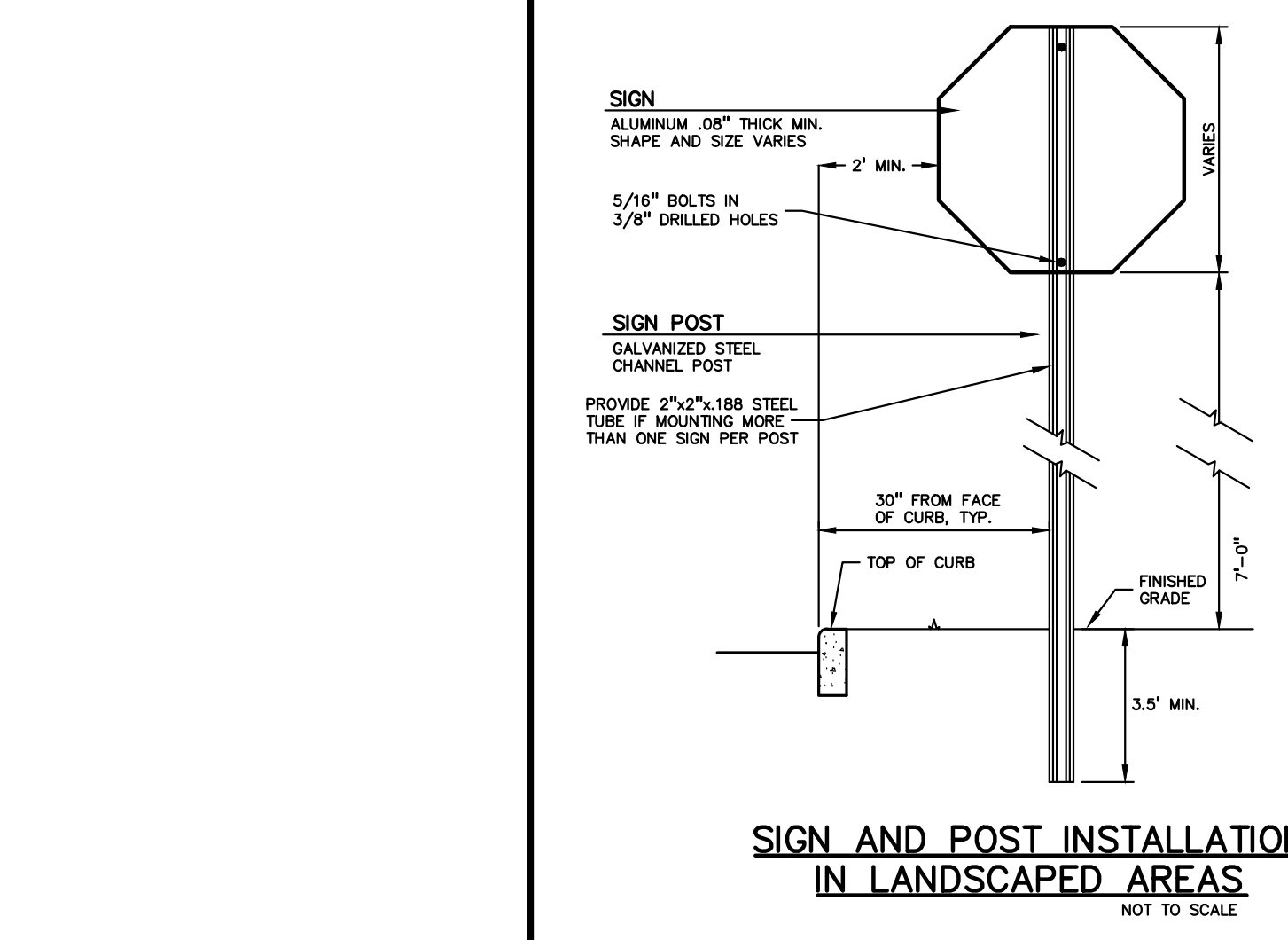
INTEGRAL CURB AND SIDEWALK
NOT TO SCALE



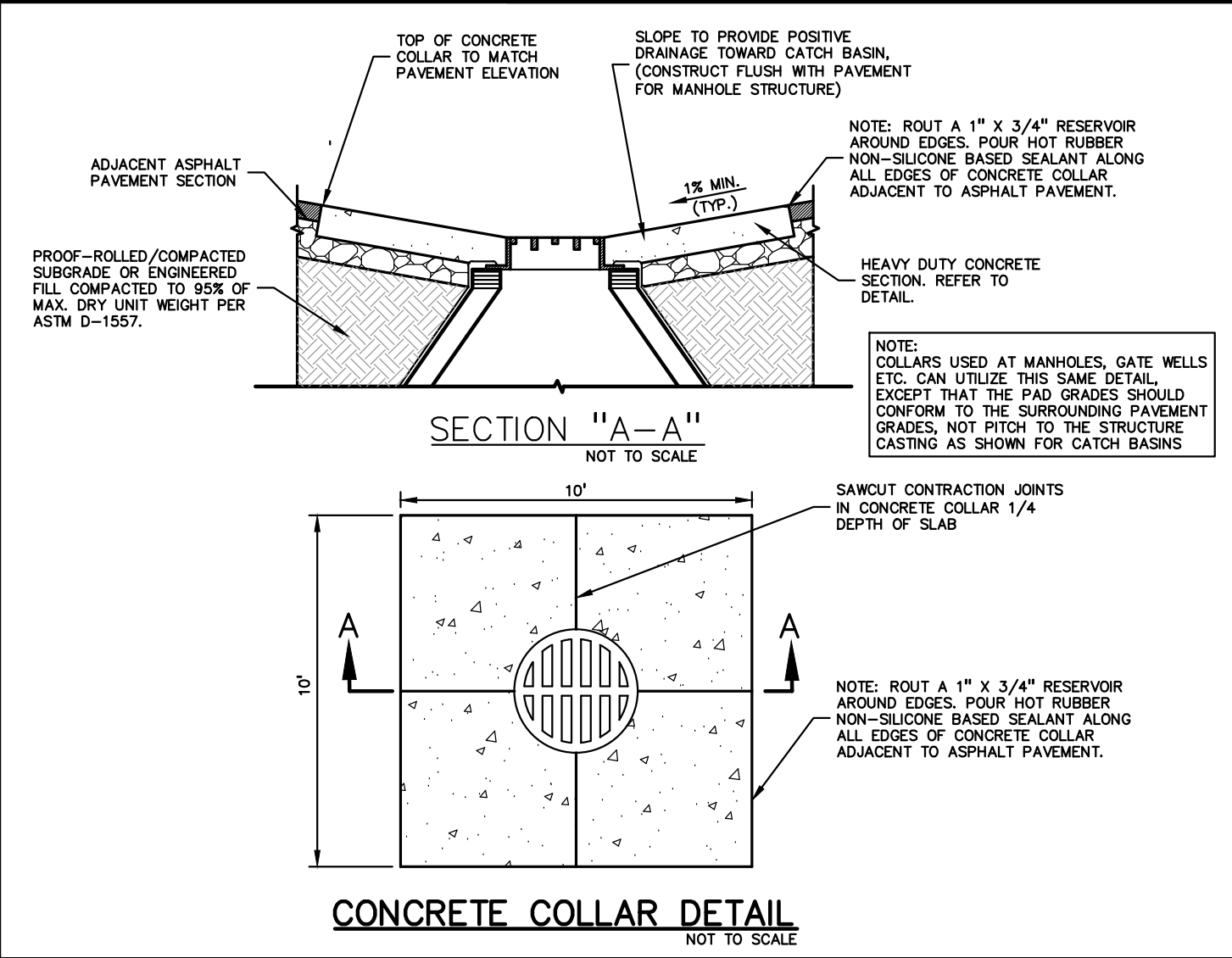
CONCRETE SIDEWALK
NOT TO SCALE



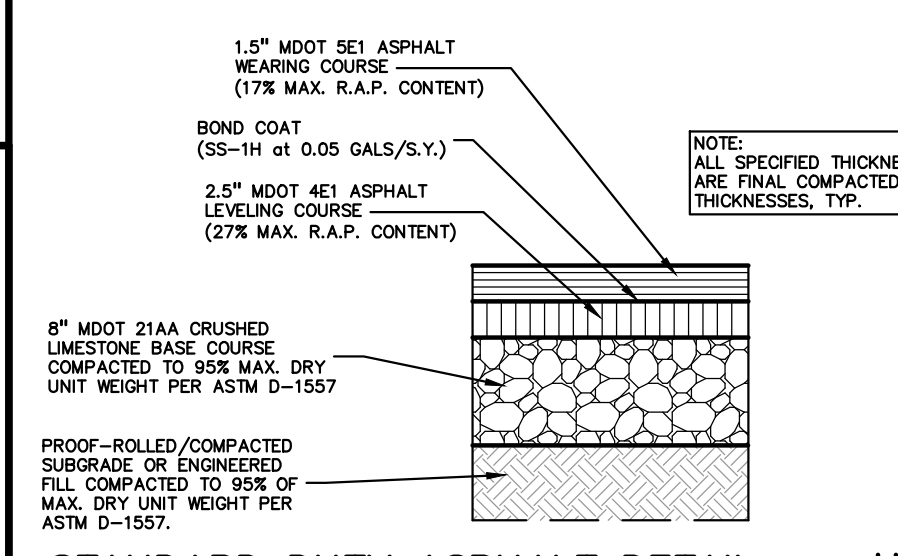
STANDARD DUTY CONCRETE DETAIL
NOT TO SCALE



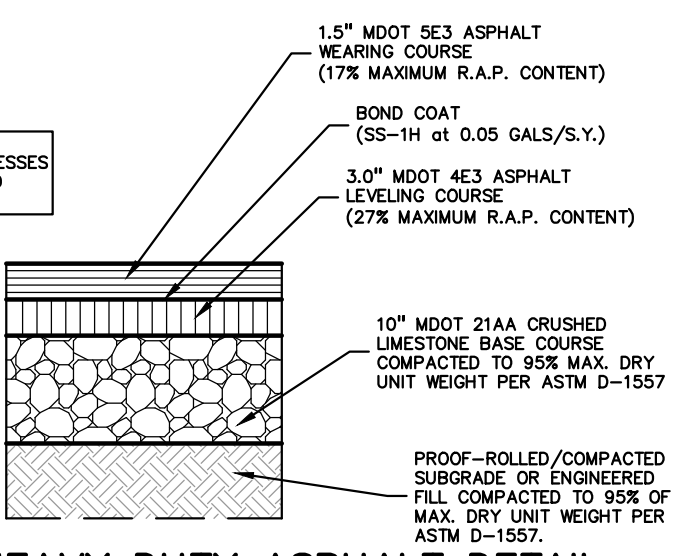
SIGN AND POST INSTALLATION
IN LANDSCAPED AREAS
NOT TO SCALE



CONCRETE COLLAR DETAIL
NOT TO SCALE



STANDARD DUTY ASPHALT DETAIL
(NOT FOR USE IN THE RIGHT-OF-WAY)
NOT TO SCALE

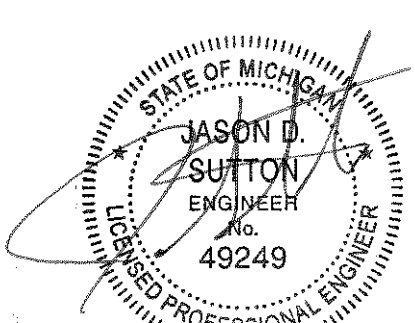


HEAVY DUTY ASPHALT DETAIL
(NOT FOR USE IN THE RIGHT-OF-WAY)
NOT TO SCALE

AGGREGATE BASE NOTE:
THIS PAVEMENT SECTION ASSUMES THE USE OF MDOT 21AA CRUSHED LESTONE BASE MATERIAL THAT MEETS THE REQUIREMENTS OF MDOT STANDARD SPECIFICATION SECTION 402 FOR AGGREGATES. IF CRUSHED CONCRETE AGGREGATE BASE IS PROPOSED IN LIEU OF THE SPECIFIED CRUSHED LESTONE MATERIAL, PEA GROUP WILL REQUIRE A MINIMUM 25% INCREASE IN BASE THICKNESS. HOWEVER, IF TESTING DOCUMENTATION IS PROVIDED TO PEA GROUP THAT SHOWS THAT THE CRUSHED CONCRETE MATERIAL MEETS ALL REQUIREMENTS OF MDOT SPECIFICATION SECTION 402, THEN THE 25% INCREASE IN THICKNESS MAY BE REEVALUATED.

ASPHALT MATERIAL NOTES:
HOT-MIX ASPHALT MIXTURES UTILIZING RECYCLED ASPHALT PAVEMENT (RAP) MUST MEET MDOT SPECIAL PROVISION 12SPR010E, THE BINDER GRADE FOR THIS WORK IS PG64-28. IF ASPHALT MIXES CONTAINING RAP ARE TO BE SUPPLIED FOR THIS PROJECT, THE ASPHALT BINDER MUST BE REVISED PER MDOT "TIER 1" OR "TIER 2" REQUIREMENTS (RAP CONTENT UP TO 27% MAXIMUM). TIER 3 MIXES ARE NOT ACCEPTABLE ON THIS PROJECT. AN ASPHALT MIX DESIGN FOR ALL SPECIFIED MIXES SHOULD BE FORWARDED TO PEA GROUP FOR REVIEW PRIOR TO CONSTRUCTION.

PEA
GROUP
t: 844.813.2949
www.peagroup.com



0 15 30 60
SCALE: 1" = 30'



CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT
**AFFINITY 8
INVESTMENTS, LLC**
1721 MAPLELANE AVENUE
HAZEL PARK, MICHIGAN 48030

PROJECT TITLE
**LOTS 10 & 11
HARTLAND
TOWNE SQUARE**
HARTLAND, MICHIGAN

REVISIONS

PER TOWNSHIP REVIEW 8-23-21

ORIGINAL ISSUE DATE:
JULY 13, 2021

DRAWING TITLE

**NOTES AND
DETAILS**

PEA JOB NO. 2018-398

P.M. JPB

DN. JKS

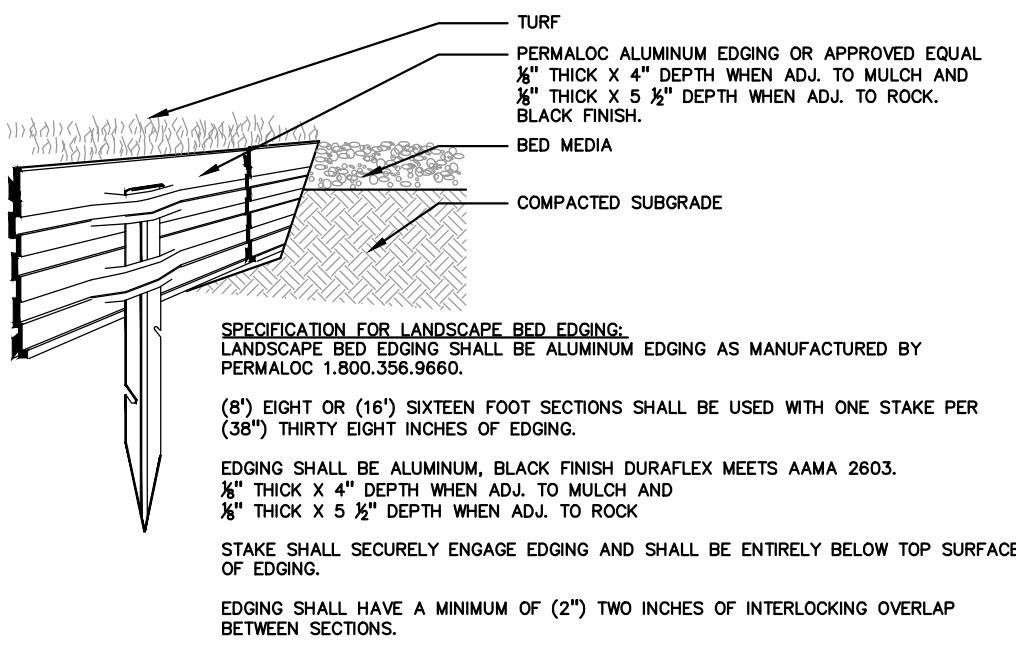
DES. JDS

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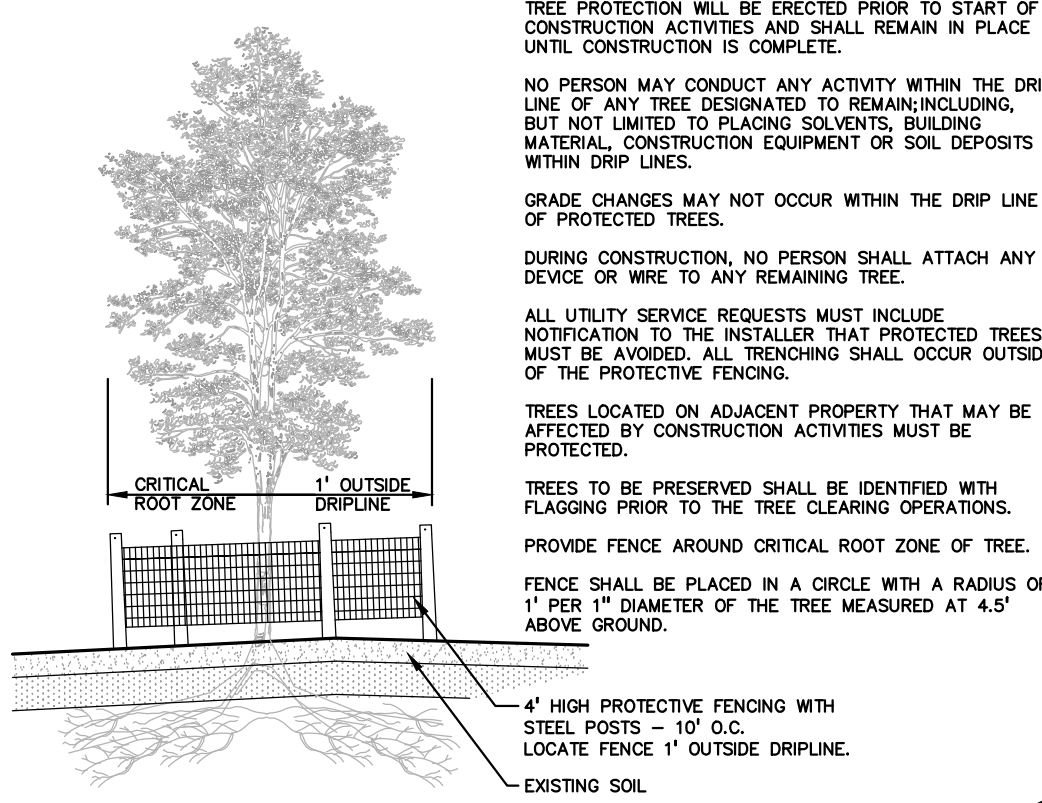
NOT FOR CONSTRUCTION

C-9.0

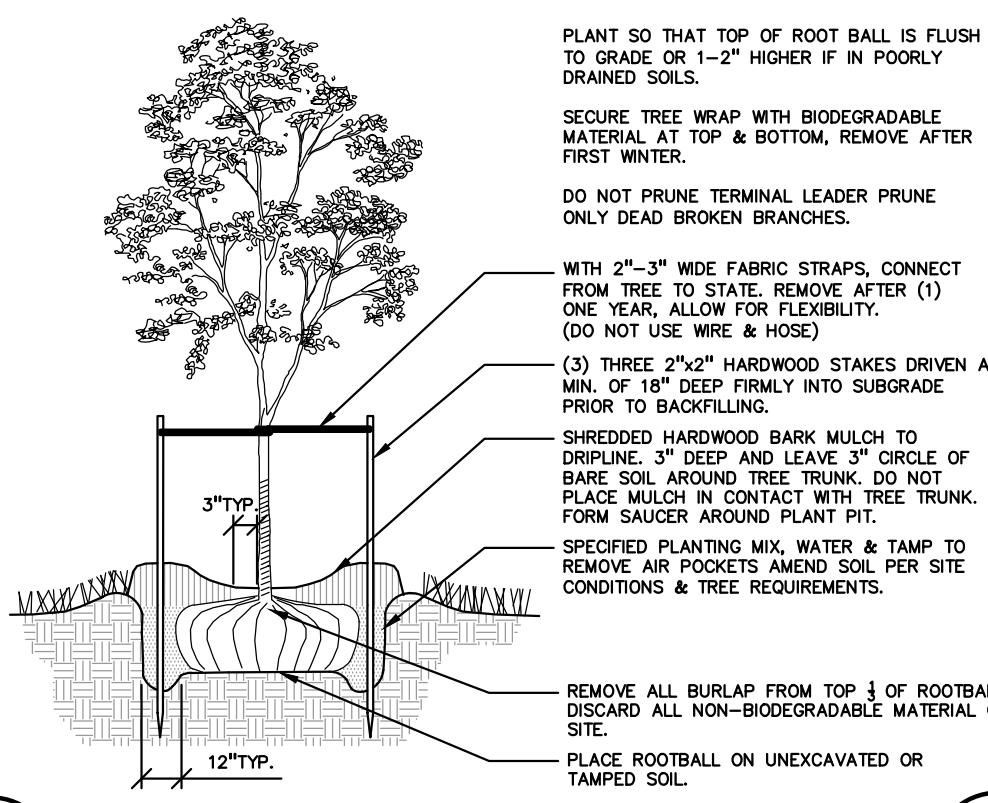
7 ALUMINUM EDGE DETAIL
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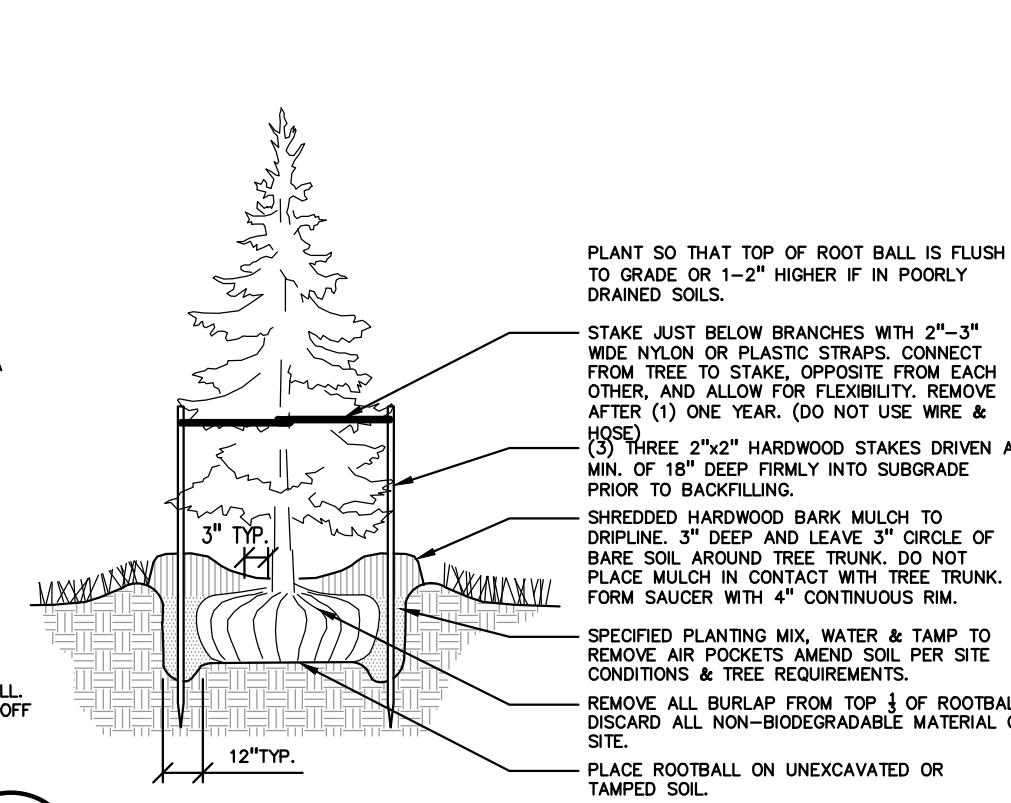
6 TREE PROTECTION DETAIL
NOT TO SCALE



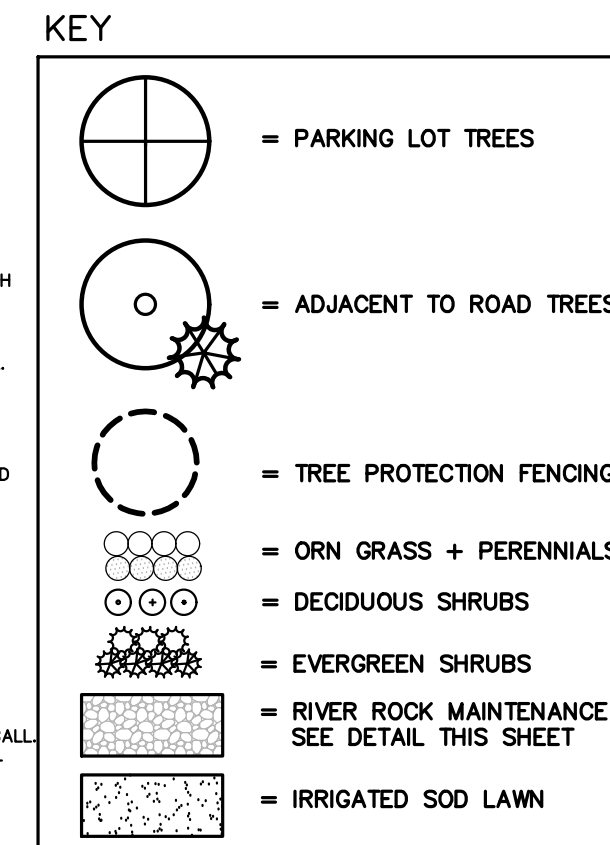
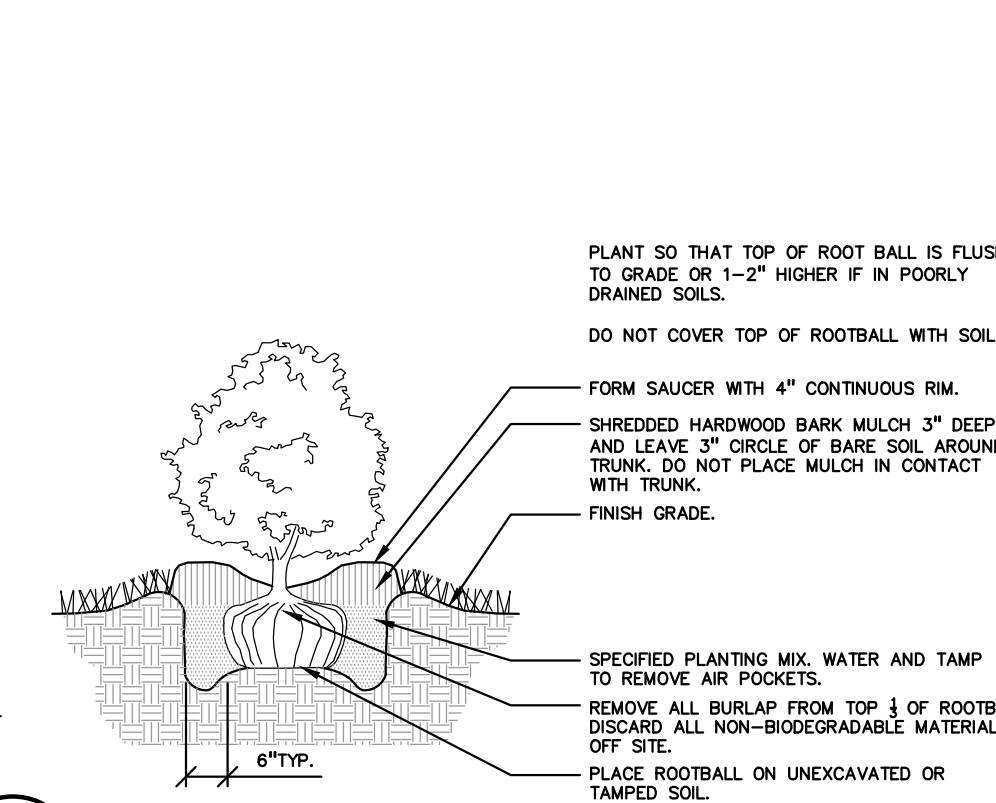
5 DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



4 EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE

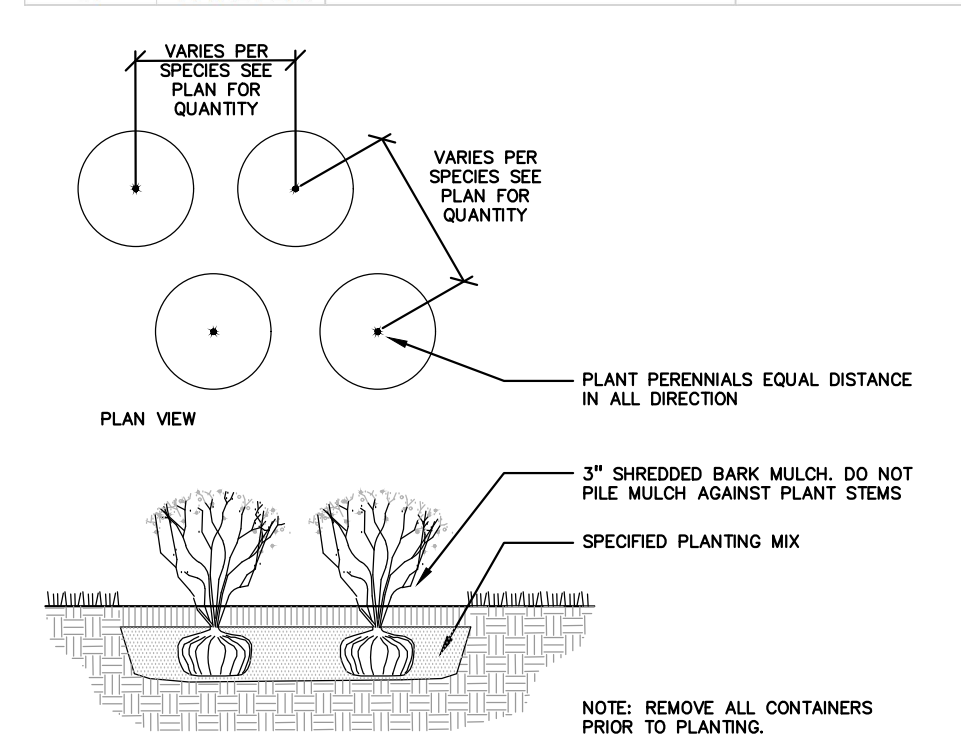


3 SHRUB PLANTING DETAIL
NOT TO SCALE

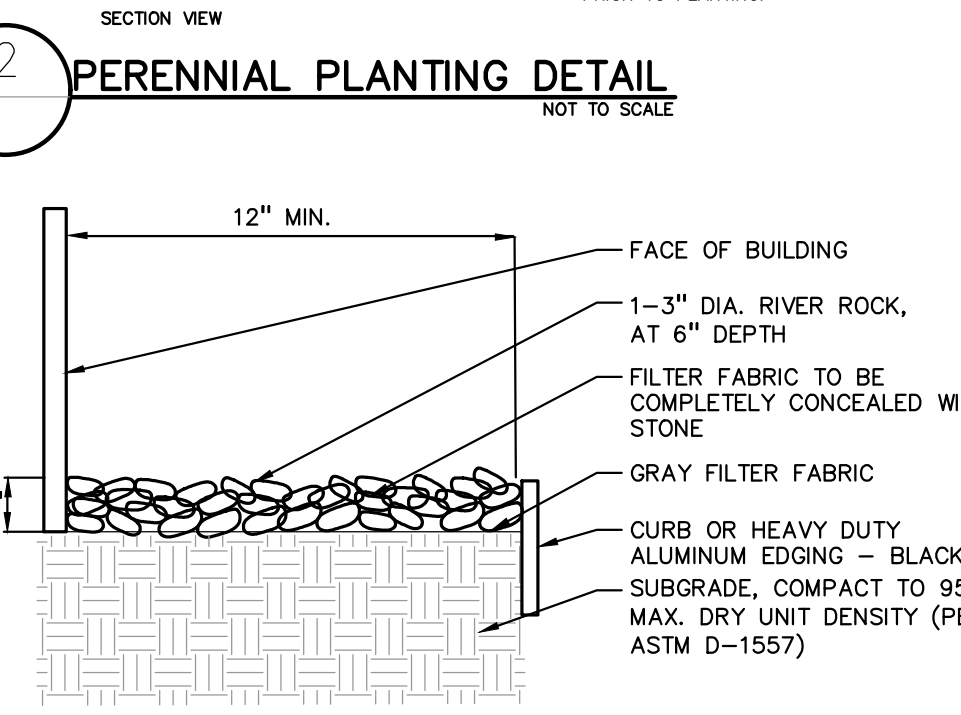


DECIDUOUS TREE PLANT LIST:					
QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
7	AR3	Red Maple	<i>Acer rubrum 'Red Pointe'</i>	3" Cal.	B&B
3	AG10	Princess Diana Serviceberry	<i>Amelanchier x grandiflora 'Princess Diana'</i>	10' Ht.	B&B
4	CV2	White Fringe Tree	<i>Chionanthus virginicus</i>	2" Cal.	B&B
2	MD2	Donald Wyman Crabapple	<i>Malus 'Donald Wyman'</i>	2" Cal.	B&B
3	NS3	Black Gum	<i>Nyssa sylvatica</i>	3" Cal.	B&B
3	SR3	Japanese Tree Lilac	<i>Syringa reticulata 'Ivory Silk'</i>	3" Cal.	B&B
8	TA3	Redmond Linden	<i>Tilia americana 'Redmond'</i>	3" Cal.	B&B
30	TOTAL DEC.				
EVERGREEN TREE PLANT LIST:					
QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
7	PA8	Norway Spruce	<i>Picea abies</i>	8' Ht.	B&B
7	TOTAL EVG.				
SHRUB PLANT LIST:					
QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
26	EA36	Compact Burning Bush	<i>Euonymus alatus 'Compactus'</i>	36" Ht.	Cont.
14	FG24	Dwarf Fothergilla	<i>Fothergilla gardenii</i>	24" Ht.	Cont.
2	JH6	Green Columnar Juniper	<i>Juniperus chinensis 'Hetzi Columnaris'</i>	6" Ht.	Cont.
25	JB24	Moor Dense Juniper	<i>Juniperus sabina 'Moor Dense'</i>	24" Ht.	Cont.
53	RA24	Fragrant Sumac	<i>Rhus aromatica 'Gro-Low'</i>	24" Ht.	Cont.
24	RK24	Red Knockout Rose	<i>Rosa 'Radrazz'</i>	24" Ht.	Cont.
13	RR24	Sunny Knockout Rose	<i>Rosa 'Radsunny' PP 18,562</i>	24" Ht.	Cont.
40	SN24	Magic Carpet Spirea	<i>Spiraea japonica 'Walburna' (1-2' ht)</i>	24" Ht.	Cont.
10	SNF24	Neon Flash Spirea	<i>Spiraea japonica 'Neon Flash'</i>	24" Ht.	Cont.
65	TM24	Dense Yew	<i>Taxus x media 'Densiformis'</i>	24" Ht.	Cont.
5	VT36	Compact American Cran. Viburnum	<i>Viburnum trilobum 'Bailey Compact'</i>	36" Ht.	Cont.
277	TOTAL SHRUBS				
PERENNIAL PLANT LIST:					
QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
42	HS	Little Grapette Daylily	<i>Hemerocallis 'Little Grapette'</i>	1 Gal.	Cont.
9	NF	Walker's Low Catmint	<i>Nepeta x faassenii 'Walkers Low'</i>	1 Gal.	Cont.
25	RF	Black-Eyed Susan	<i>Rudbeckia fulgida var. sylvanica 'Goldsturm'</i>	1 Gal.	Cont.
4	SJ	Autumn Joy Sedum	<i>Hylotelephium spectabile 'Autumn Joy'</i>	1 Gal.	Cont.
11	MS	Purple Maiden Grass	<i>Miscanthus sinensis 'Purpurascens'</i>	1 Gal.	Cont.
91	TOTAL PER.				

2 PERENNIAL PLANTING DETAIL
NOT TO SCALE



1 ROCK MAINTENANCE EDGE DETAIL
NOT TO SCALE



LANDSCAPE CALCULATION:
PER HARTLAND TOWNSHIP ZONING ORDINANCE - ZONED PD PLANNED DEVELOPMENT. CALCS BASED ON 2008 APPROVED PLAN

ADJACENT TO ROADS
REQUIRED:
1 DECIDUOUS/EVERGREEN TREE PER 40 LF
1 ORNAMENTAL TREES PER 100 LF
8 SHRUBS PER 40 LF

HARTLAND ROAD
386.7 LF/40 LF = 9.7 CANOPY/EVERGREEN TREES
386.7 LF/100 LF = 3.8 SUB-CANOPY TREES
386.7 LF/40 LF x 8 = 77.2 SHRUBS

HARTLAND SQUARE DRIVE
186.8 LF/40 LF = 4.7 CANOPY/EVERGREEN TREES
186.8 LF/100 = 1.9 SUB-CANOPY TREES
186.8 LF/40 x 8 = 37.4 SHRUBS

PROVIDED:
HARTLAND ROAD = 10 CANOPY/EVERGREEN TREES, 4 SUBCANOPY TREES, AND 78 SHRUBS

HARTLAND SQUARE DRIVE = 5 CANOPY/EVERGREEN TREES, 2 SUBCANOPY TREES, AND 32 SHRUBS + 10 MONUMENT SIGN

REQUIRED/PROVIDED:
HIGHLAND ROAD (M-59) FRONTAGE = EXISTING BERM AND LANDSCAPING

BERM
REQUIRED: AREA ADJACENT TO A PUBLIC ROW (HARTLAND ROAD) SHALL BE REQUIRED TO HAVE A BERM. BERM SHALL BE MINIMUM OF THREE FEET IN HEIGHT

PROVIDED: EXISTING BERM (3' HT MIN.) ALONG HARTLAND ROAD EXCEPT WHERE PROHIBITED DUE TO VEHICLE SIGHT DISTANCE AS REQUIRED BY THE LIVINGSTON COUNTY ROAD COMMISSION. EXISTING BERM TO BE REVIEWED BY PLANNING COMMISSION TO DETERMINE IF CONSISTENT WITH THE INTENT OF THE PATTERN BOOK.

PARKING LOT INTERIOR LANDSCAPING
REQUIRED: 30 SF OF INT. LANDSCAPE AREA PER PARKING SPACE
1 TREE PER 180 SF/AREA + 50% OF ISLANDS MUST BE SHRUBS;
51 PARKING SPACES X 10 SF = 1,530 / 180 SF = 8.5 TREES

PROVIDED: 9 TREES AND 2,648 SF OF LANDSCAPE AREA + 50% OF EACH ISLAND PLANTED W/ SHRUBS

PARKING LOT BUFFER
REQUIRED: MIN 3' WIDE EVERGREEN HEDGE PLANTED ALONG ROW

PROVIDED: A MIXTURE OF DECIDUOUS/EVERGREEN TREES, ORNAMENTAL TREES, SHRUBS, AND PERENNIAL GRASSES ALONG HARTLAND ROAD AND HIGHLAND (M-59) ROAD.

FOUNDATION PLANTING
REQUIRED: PLANTING AREAS ADJ. TO BUILDING
PROVIDED: 3 UPRIGHT EVG. SHRUBS, 5 LARGE SHRUBS, 11 TALL ORNAMENTAL GRASSES, 24 SMALL SHRUBS, 29 PERENNIALS + DRIVE-THROUGH + SEATING AREA LANDSCAPING

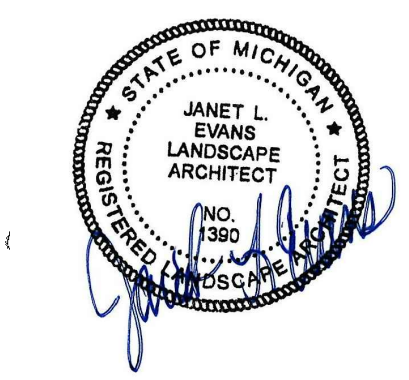
MONUMENT SIGN PLANTING
REQUIRED/PROVIDED: 5' PLANTING BED AT LONG SIDES OF SIGN

NOTE:
ALL LANDSCAPED AREAS MUST BE IRRIGATED WITH AN UNDERGROUND IRRIGATION SYSTEM

GENERAL PLANTING NOTES:

- LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING SITE CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS/HER PHASE OF WORK. ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION MAY BE LOCATED BY CALLING MISS DIG 1-800-487-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES ON THE JOB AND SHALL REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER'S REPRESENTATIVE PRIOR TO COMMENCING.
- ALL PLANT MATERIAL TO BE PREMIUM GRADE NURSERY STOCK AND SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARD FOR NURSERY STOCK. ALL LANDSCAPE MATERIAL SHALL BE NORTHERN GROWN, NO. 1, GRADE.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON LANDSCAPE PLAN PRIOR TO PRICING THE WORK.
- THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
- ALL SINGLE STEM SHADE TREES TO HAVE STRAIGHT TRUNKS AND SYMMETRICAL CROWNS.
- ALL SINGLE TRUNK SHADE TREES TO HAVE A CENTRAL LEADER; TREES WITH FORKED OR IRREGULAR TRUNKS WILL NOT BE ACCEPTED.
- ALL MULTI STEM TREES SHALL BE HEAVILY BRANCHED AND HAVE SYMMETRICAL CROWNS. ONE SIDED TREES OR THOSE WITH THIN OR OPEN CROWNS SHALL NOT BE ACCEPTED.
- ALL EVERGREEN TREES SHALL BE HEAVILY BRANCHED AND FULL TO THE GROUND, SYMMETRICAL IN SHAPE AND NOT SHEARED FOR THE LAST FIVE GROWING SEASONS.
- ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS, TREES WITH SAND BALLS WILL BE REJECTED.
- NO MACHINERY IS TO BE USED WITHIN THE DRIP LINE OF EXISTING TREES; HAND GRADE ALL LAWN AREAS WITHIN THE DRIP LINE OF EXISTING TREES.
- ALL TREE LOCATIONS SHALL BE STAKED BY LANDSCAPE CONTRACTOR AND ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF THE PLANT MATERIAL.
- IT IS MANDATORY THAT POSITIVE DRAINAGE IS PROVIDED AWAY FROM ALL BUILDINGS.
- ALL PLANTING BEDS SHALL RECEIVE 3" SHREPPED HARDWOOD BARK MULCH WITH PRE EMERGENT, SEE SPECIFICATIONS. SHREPPED PALETTE AND DYED MULCH WILL NOT BE ACCEPTED.
- ALL LANDSCAPED AREAS SHALL RECEIVE 3" COMPACTED TOPSOIL.
- SEE SPECIFICATIONS FOR ADDITIONAL COMMENTS, REQUIREMENTS, PLANTING PROCEDURES AND WARRANTY STANDARDS.
- FOR NON-LAWN SEED MIX AREAS, AS NOTED ON PLAN, BRUSH MOW ONCE SEASONALLY FOR INVASIVE SPECIES CONTROL.
- CONTRACTOR SHALL NOT INSTALL PLANTS UNDER BUILDING OVERHANG AND SHALL NOTIFY LANDSCAPE ARCHITECT IF DRAWINGS CONFLICT WITH BUILDING OVERHANGS.

PEA GROUP
t: 844.813.2949
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0 15 30 60
SCALE: 1" = 30'



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CLIENT
AFFINITY 8 INVESTMENTS, LLC
1721 MAPLELANE AVENUE
HAZEL PARK, MICHIGAN 48030

PROJECT TITLE
**LOTS 10 & 11
HARTLAND TOWNE SQUARE**
HARTLAND, MICHIGAN

REVISIONS
PER TOWNSHIP REVIEW 8-23-21

ORIGINAL ISSUE DATE:
JULY 13, 2021

DRAWING TITLE
**PRELIMINARY
LANDSCAPE
PLAN**

PEA JOB NO. 2018-398

P.M. JPB

DN. CLR

DES. JLE

DRAWING NUMBER:

L-1.0

NOT FOR CONSTRUCTION

BENCHMARKS

(GPS DERIVED — NAVD88)

BM #300

SET NAIL AND TAG ON NORTH SIDE OF A STRAIN POLE LOCATED APPROX. 80'± WEST OF THE CENTERLINE OF HARTLAND ROAD AND APPROX. 40'± NORTH OF CENTERLINE OF WESTBOUND M-59/HIGHLAND ROAD, ELEV. — 972.43

BM #301

SET DIMPLE ON A HYDRANT ARROW LOCATED APPROX. 35'± WEST OF HARTLAND ROAD AND APPROX. 50'± SOUTH OF ROVEY DRIVE, ELEV. — 978.56

FLOODPLAIN NOTE:

BY GRAPHICAL PLOTTING, SITE IS WITHIN ZONE 'X', AREA DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FLOOD INSURANCE RATE MAP NUMBER 26093C0238D, DATED 9/17/2008.

S:\PROJECTS\2018\2018-2019 HARTLAND OUTLOT 11-JPB\DWG\SITE PLANS\01-01PHOTOMETRIC-18208.dwg

LEGAL DESCRIPTION

PARCEL ID 4708-21-400-056

A parcel of land being a part of the South 1/2 of Section 21, T3N-R6E, Hartland Township, Livingston County, Michigan, being more particularly described as follows:

Commencing at the South 1/4 of said Section 21; thence N 02°55'00" W, 214.93 feet along the North-South 1/4 line (as monumented); thence N 80°05'11" E, 970.62 feet along the North Right-of-Way of M-59 (Highland Road); thence N 10°19'02" W, 60.00 feet to a point on the future North Right-of-Way line of said M-59 (120'-1/2 width), and the POINT OF BEGINNING; thence continuing N 10°19'02" W, 197.43 feet; thence N 78°52'35" E, 226.83 feet; thence 81.13 feet along a curve to the right, said curve having a radius of 313.00 feet, a central angle of 14°51'04", and a chord which bears S 10°27'05" E, 80.90 feet; thence S 03°01'33" E, 122.20 feet to a point on the future Northerly Right-of-Way line of said Highland Road; thence along said Northerly line, S 80°05'11" W, 211.49 feet to the POINT OF BEGINNING. Containing 1.02 acres of land and subject to easements, conditions, restrictions and exceptions of record or otherwise.

PARCEL ID 4708-21-400-077 (Outlet 11)

A parcel of land being a part of the South 1/2 of Section 21, T3N-R6E, Hartland Township, Livingston County, Michigan, being more particularly described as follows:

Commencing at the South 1/4 of said Section 21; thence N 02°55'00" W, 275.38 feet along the North-South 1/4 line (as monumented) to the North 120 foot Right-of-Way of M-59 (Highland Road); thence N 80°05'11" E, 962.84 feet along said North Right-of-Way line to the west line of Parcel 4708-21-400-056, also being the east line of Parcel 4708-21-400-072; thence along said line N 10°19'02" W, 175.30 feet to the POINT OF BEGINNING; thence continuing along said east line of Parcel 4708-21-400-072 N 39°42'06" W, 110.11 feet to the south line of the Hartland Square Drive Easement (width varies); thence along said south line the following five courses and distances: 1) N 52°47'04" E, 39.74 feet; 2) N 50°19'38" E, 44.25 feet; 3) S 40°16'18" E, 10.25 feet; 4) N 51°16'37" E, 110.02 feet to a point of curvature; 5) 50.38 feet along the arc of a curve to the right, said curve having a radius of 40.00 feet, a central angle of 72°10'09", and a chord that bears N 86°04'04" E, 47.12 feet to the westerly line of Hartland Road; thence along said westerly line S 39°58'48" E, 40.03 feet to a point of curvature; thence 120.75 feet along the arc of a curve to the right, said curve having a radius of 313.00 feet, a central angle of 22°06'11", and a chord that bears S 28°55'43" E, 120.00 feet to the north line of said Parcel 4708-21-400-056; thence along said north line S 78°52'35" W, 226.83 feet to the northwest corner of said Parcel 4708-21-400-056; thence S 10°19'02" E, 22.13 feet to the POINT OF BEGINNING. Containing 0.71 acres

LEGEND

EXISTING

PROPOSED

IRON FOUND

IRON SET

NAIL FOUND

NAIL & CAP SET

BRASS PLUG SET

MONUMENT FOUND

MONUMENT SET

SEC. CORNER FOUND

RECORDED

MEASURED

CALCULATED

OH-ELEC-W-W

UG-CATV

UG-PHONE

UG-ELEC-CH

WATERMAIN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE

SANITARY SEWER, CLEANOUT & MANHOLE

STORM SEWER, CLEANOUT & MANHOLE

COMBINED SEWER & MANHOLE

POST INDICATOR VALVE

WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF

MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE

UNIDENTIFIED STRUCTURE

SPOT ELEVATION

CONTOUR LINE

FENCE

GUARD RAIL

STREET LIGHT

CONC.

ASPH.

GRAVEL

WETLAND

ELEC. PHONE OR CABLE TV O.H. LINE, POLE & GUY WIRE

UNDERGROUND CABLE TV, CATV PEDESTAL

TELEPHONE U.G. CABLE, PEDESTAL & MANHOLE

ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE

GAS MAIN, VALVE & GAS LINE WARMER

WATERMAIN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE

SANITARY SEWER, CLEANOUT & MANHOLE

STORM SEWER, CLEANOUT & MANHOLE

COMBINED SEWER & MANHOLE

POST INDICATOR VALVE

WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF

MAILBOX, TRANSFORMER, IRRIGATION CONTROL VALVE

UNIDENTIFIED STRUCTURE

SPOT ELEVATION

CONTOUR LINE

FENCE

GUARD RAIL

STREET LIGHT

CONC.

ASPH.

GRAVEL

WETLAND

STD. HEAVY DUTY ONLY

STD. HEAVY DEEP DUTY STRENGTH

GENERAL SITE LIGHTING NOTES:

1. THE LIGHTING PATTERN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS.

2. ALL POLES ARE TO BE MOUNTED ON CONCRETE PEDESTALS 2 FEET ABOVE GRADE AS SHOWN IN DETAIL.

3. ALL POLES LOCATED OUTSIDE OF THE PARKING LOT AREA SHALL BE LOCATED 3 FEET FROM BACK OF CURB OR EDGE OF SIDEWALKS AND 5 FEET FROM UTILITIES WHENEVER POSSIBLE.

4. SHOP DRAWINGS FOR THE ELECTRICAL WIRING OF THE FIXTURES NEED TO BE SUPPLIED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR COORDINATION OF UNDERGROUND CONDUIT AND APPROVAL OF LAYOUT.

5. ALL AREA LIGHT FIXTURES ARE TO BE DIRECTED AWAY FROM NEIGHBORING PROPERTIES AND ROADWAYS.

6. CONTRACTOR SHALL FURNISH, INSTALL AND CONNECT ALL MATERIALS AND EQUIPMENT FOR THIS WORK UNLESS OTHERWISE NOTED.

7. COORDINATE LIGHT FIXTURE PLACEMENT AND INSTALLATION WITH LANDSCAPE.

8. ALL CONDUCTORS SHALL BE IN CONDUIT.

SITE PHOTOMETRIC DATA:

	ALLOWED	PROPOSED
1. SITE FOOTCANDLE (SITE)		
MAIN PARKING AREA		
+AVERAGE	2.4 FC — 3.0 FC	2.2 FC
MAIN BUILDING ENTRANCE AND ENTRY/EXIT DRIVE		
+AVERAGE	5.0 FC	2.2 FC
+PROPERTY LINE	1.0 FC (MAX)	1.0 FC (MAX)
SITE MAXIMUM	10.0 FC	6.2 FC
2. **FIXTURE HEIGHT	23 FT. (MAX)	23 FT.

* VALUES CALCULATED AT 5.0 FT ABOVE GROUND LEVEL PER ORDINANCE

** PER ORDINANCE, PROPOSED BUILDING HEIGHT DETERMINED MAXIMUM FIXTURE HEIGHT

Schedule

Symbol	Label	Mounting Height (ft.)	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage
	P1	23	5	Lithonia Lighting	DSX1 LED P5 40K T4M MVOLT HS	DSX1 LED P5 40K T4M MVOLT with housewide shield	1	12025	0.95	138
	P2	23	1	Lithonia Lighting	DSX1 LED P6 40K T4M MVOLT HS	DSX1 LED P6 40K T4M MVOLT with housewide shield	1	14462	0.95	163
	P3	23	2	Lithonia Lighting	DSX1 LED P2 40K BLC MVOLT	DSX1 LED P2 40K BLC MVOLT	1	7293	0.95	70
	P4	23	1	Lithonia Lighting	DSX1 LED P4 40K T4M MVOLT HS	DSX1 LED P4 40K T4M MVOLT with housewide shield	1	11006	0.95	250

PEA GROUP

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NORTH

0 15 30 60

SCALE: 1" = 30'

811

Know what's below. Call before you dig.

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HAZEL PARK, MICHIGAN 48030

PROJECT TITLE

LOTS 10 & 11 HARTLAND TOWNE SQUARE

HARTLAND, MICHIGAN

REVISIONS

PER TOWNSHIP REVIEW	8-23-21

ORIGINAL ISSUE DATE:

JULY 13, 2021

DRAWING TITLE

PHOTOMETRIC PLAN

PEA JOB NO.

2018-398

P.M.

JPB

DN.

BLA

DES.

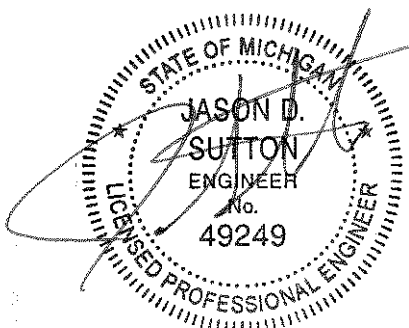
JDS

DRAWING NUMBER:

NOT FOR CONSTRUCTION

SL-1.1

53



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HARTLAND TOWNE SQUARE**
HARTLAND, MICHIGAN

REVISIONS	
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DRAWING TITLE
**PHOTOMETRIC
DETAILS**


PEA JOB NO.	2018-398
P.M.	JPB
DN.	BLA
DES.	JDS

DRAWING NUMBER:

NOT FOR CONSTRUCTION

SL-1.2

LUMENS: P1, P2, P3, & P4



**D-Series Size 1
LED Area Luminaire**

Specifications

EPA: 1,011 ft² (0.09 hp)

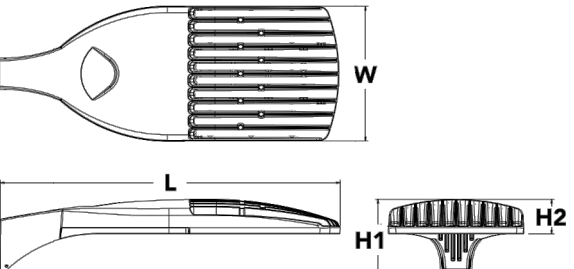
Length: 33" (84.1 mm)

Width: 13" (33.0 mm)

Height H1: 7-1/2" (190 mm)

Height H2: 3-1/2" (89 mm)

Weight (max): 27 lbs (12.2 kg)



Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

Catalog Number _____

Notes _____

Type _____

811 On Call App or connect smart plug page to view all interactive elements.

Ordering Information

EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX1 LED	Forward optics P1 P4 P7 P2 P5 P8 P3 P6 P9 Rotated optics P10 P12 P11 P13	30K 3000 K 40K 4000 K 50K 5000 K	T1S Type I short T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium	TSVS Type V very short ¹ TSS Type V short ¹ TSM Type V medium ¹ TSW Type V wide ¹ BLC Backlight control ¹ LECO Left corner cutoff ¹ RCCO Right corner cutoff ¹	MVOLT ¹ 120V ¹ 208V ¹ 240V ¹ 277V ¹ 347V ¹ 480V ¹
					Shipped included SPA Square pole mounting RPA Round pole mounting WBA Wall bracket ¹ SPUMBA Square pole universal mounting adaptor ¹ RPUIMBA Round pole universal mounting adaptor ¹ Shipped separately KMA8 DDBXD U Must arm mounting bracket adaptor (specify finish) ¹

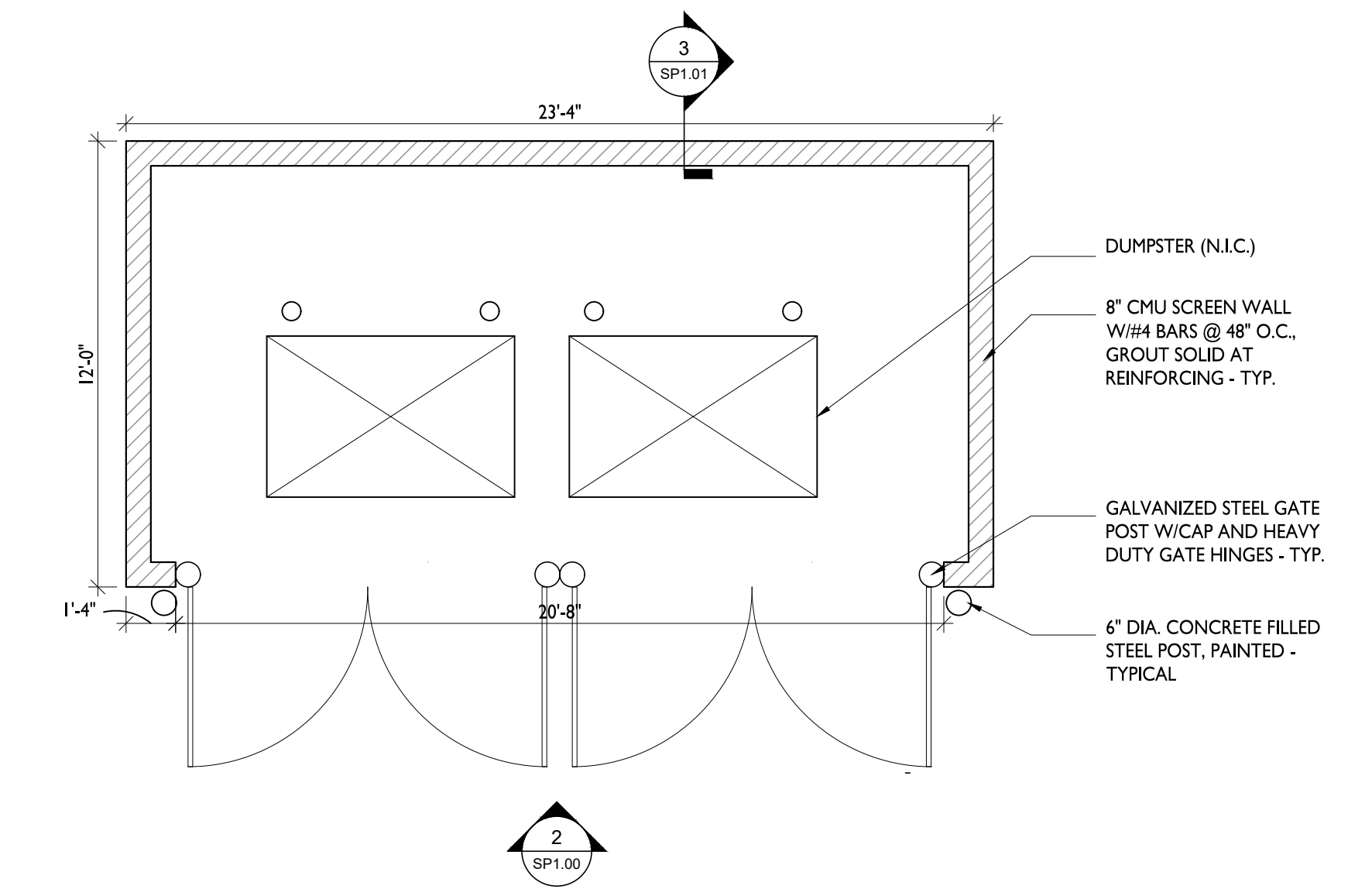
Control options	Other options	Finish (optional)	
Shipped installed NLTAIR2 All light AIR generation 2 enabled ¹ PIRHN Network, high/low motion/ambient sensor ¹ PIRHN NEEMA twice-lock receptacle only (controls ordered separately) ¹ PIRHS Plug-in receptacle only (controls ordered separately) ¹ PIRHS Seven-pin receptacle only (controls ordered separately) ¹ PIRHS 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) ¹ DS Dual switching ¹ (1)(2)	PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 36" ¹ (2) PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 36" ¹ (2) PIRHFCV High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 36" ¹ (2) PIRHFCV Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 36" ¹ (2) FAO Field adjustable output ¹	Shipped installed HS House-side shield ¹ SF Single fuse (120, 277, 347V) ¹ DF Double fuse (208, 240, 480V) ¹ LW Left rotated optics ¹ RW Right rotated optics ¹ Shipped separately BS Bird spikes ¹ EGS External glare shield	DDBXD Dark bronze DBLXD Black DNALD Natural aluminum DWBXD White DDBXD Textured dark bronze DDBXD Textured black DNALXD Textured natural aluminum DWBXD Textured white

LITHONIA LIGHTING

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com

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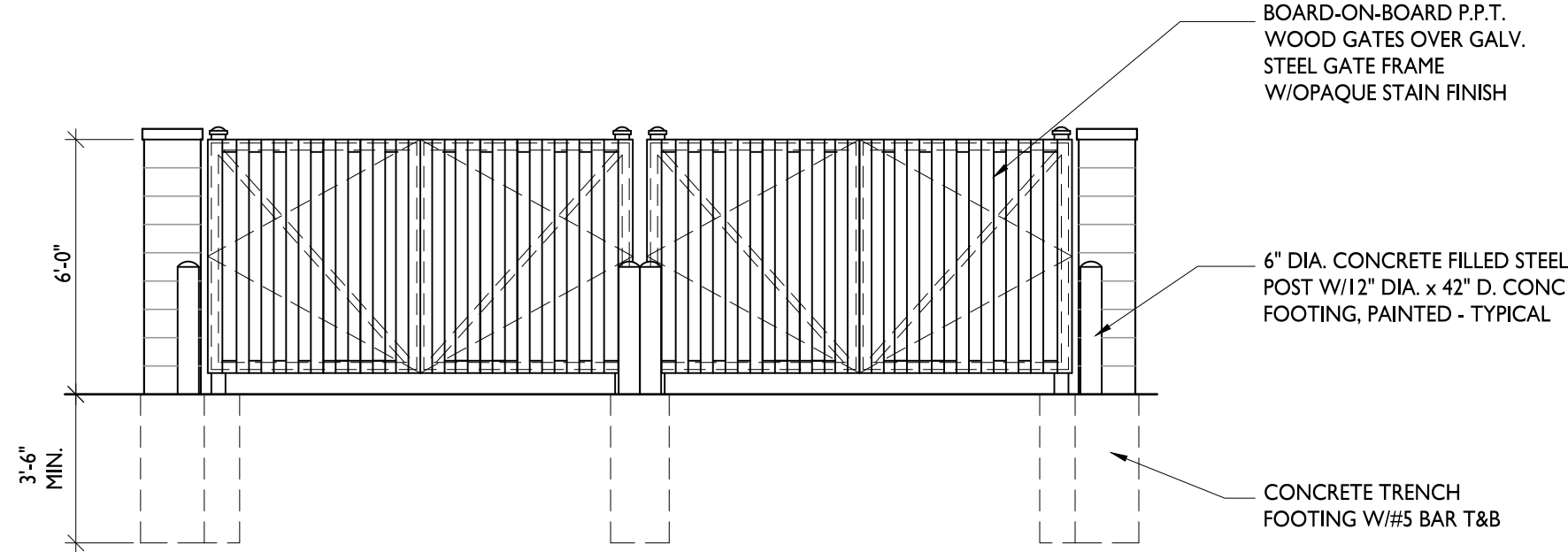
DSX1-LED
Rev. 01/2020
Page 1 of 8



1

DUMPSTER ENCLOSURE PLAN

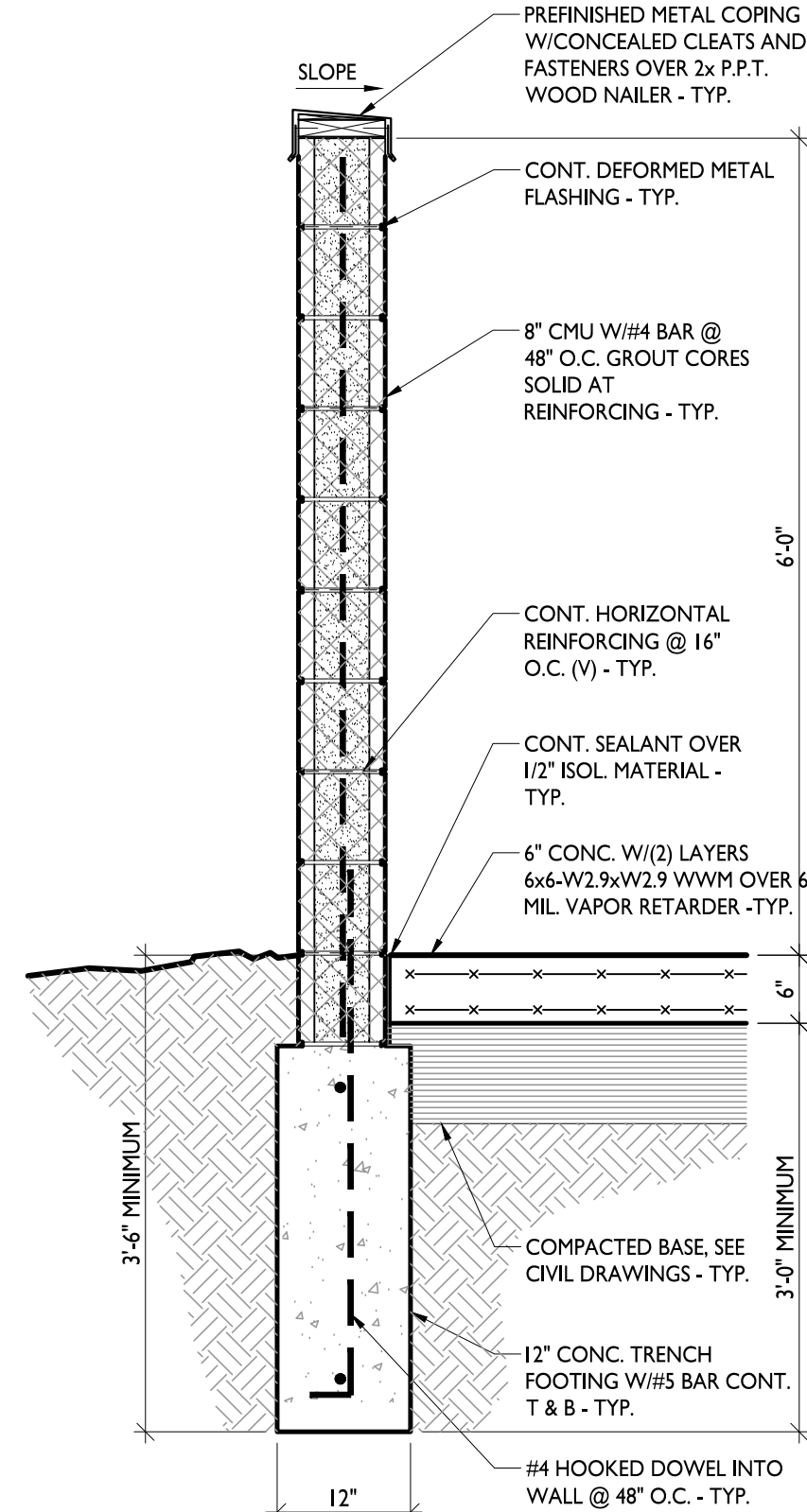
SP1.01 SP1.00 SCALE: 1/4"=1'-0"



2

DUMPSTER ENCLOSURE ELEVATION

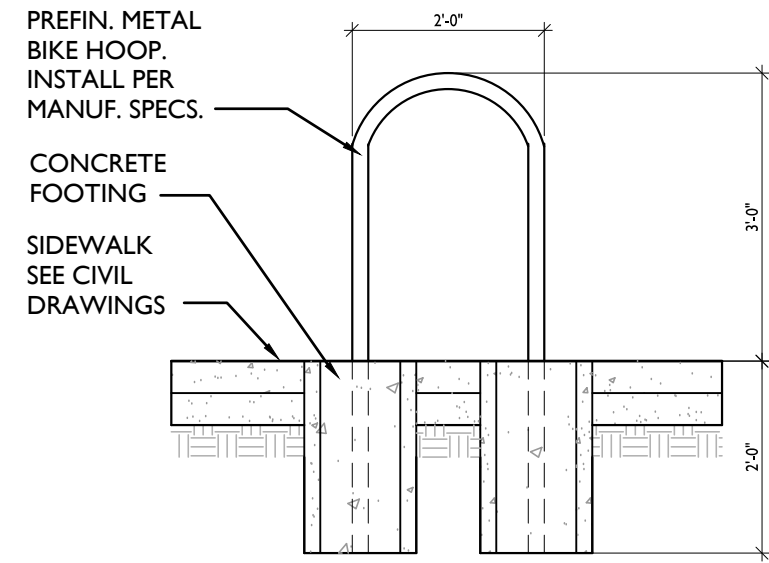
SP1.01 SP1.01 SCALE: 1/4"=1'-0"



3

TYPICAL DUMPSTER
SCREEN WALL DETAIL

SP1.01 SP1.01 SCALE: 3/4"=1'-0"

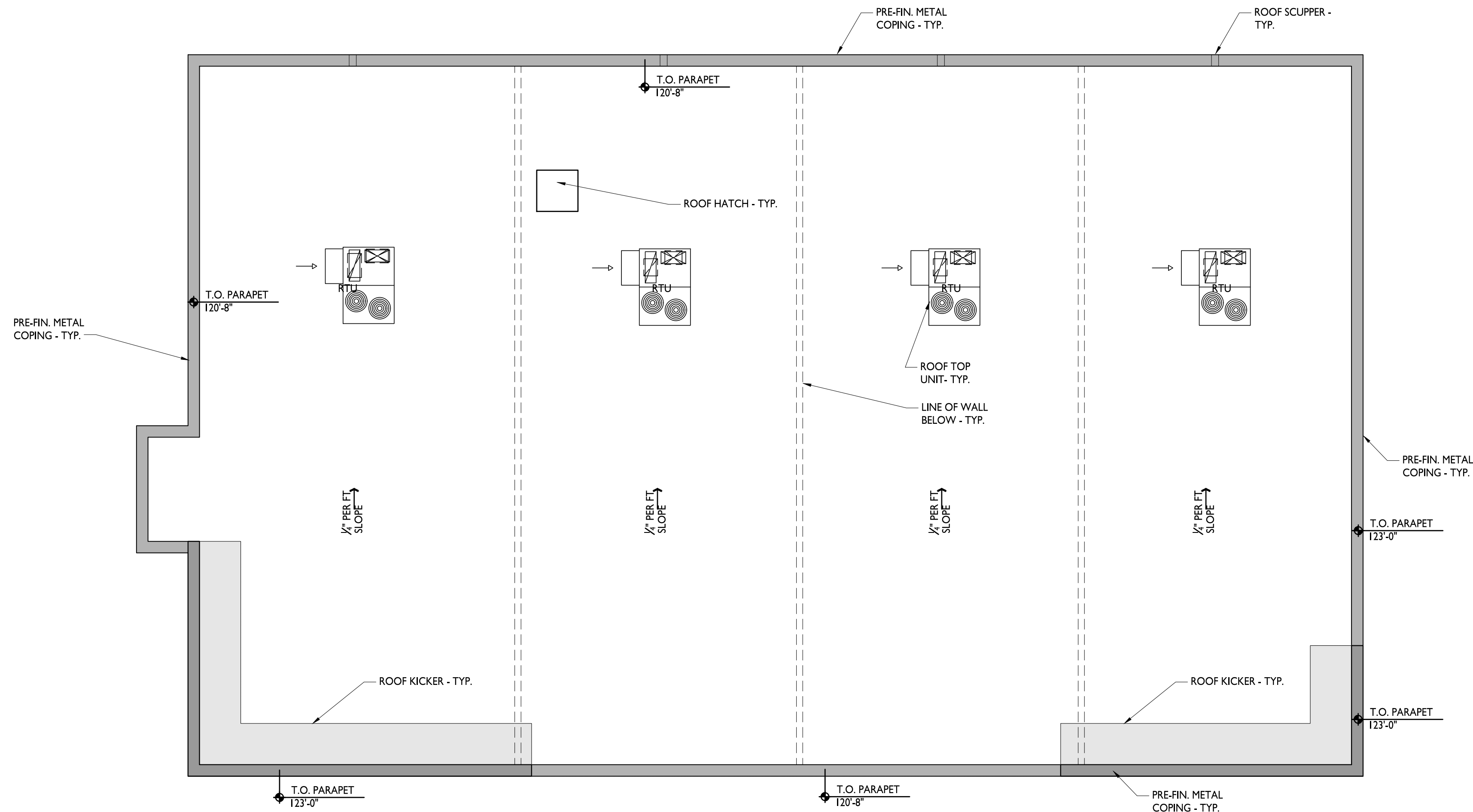


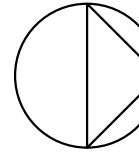
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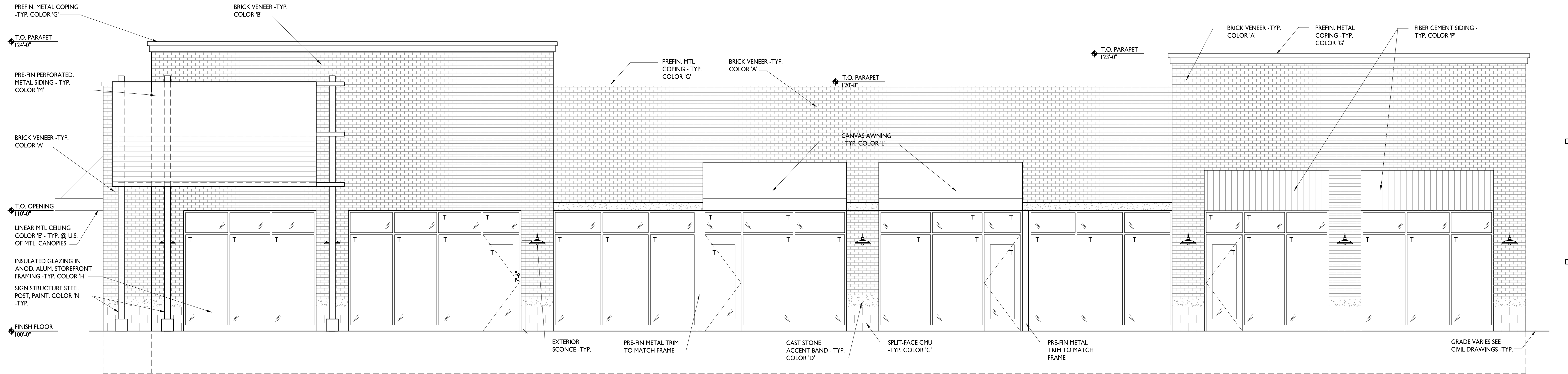
BIKE HOOP

SP1.01 SP1.00 SCALE: 1/2"=1'-0"

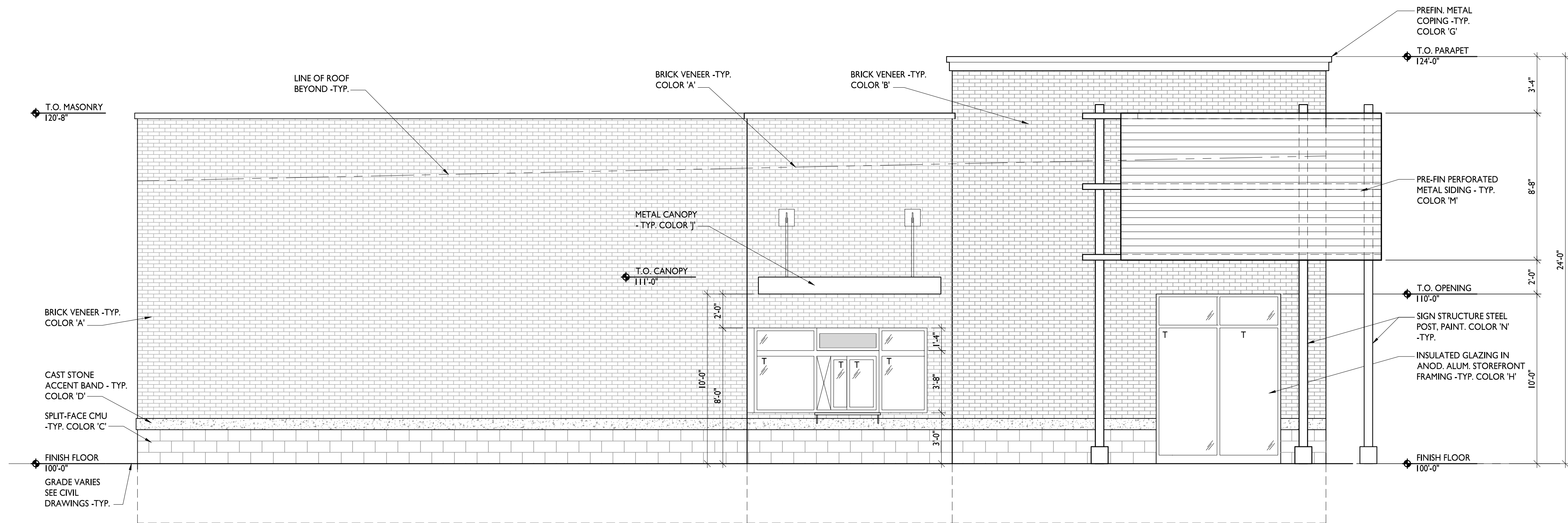




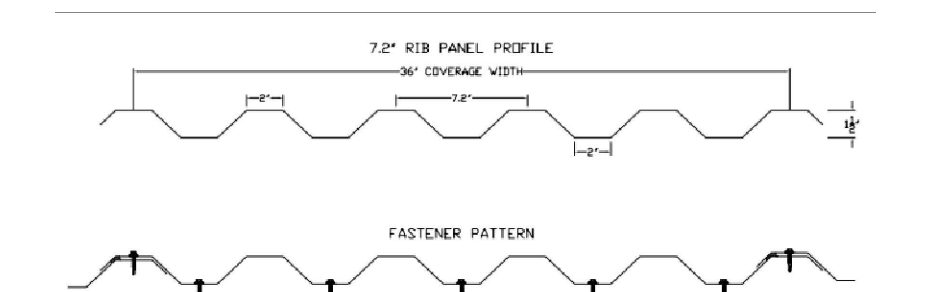
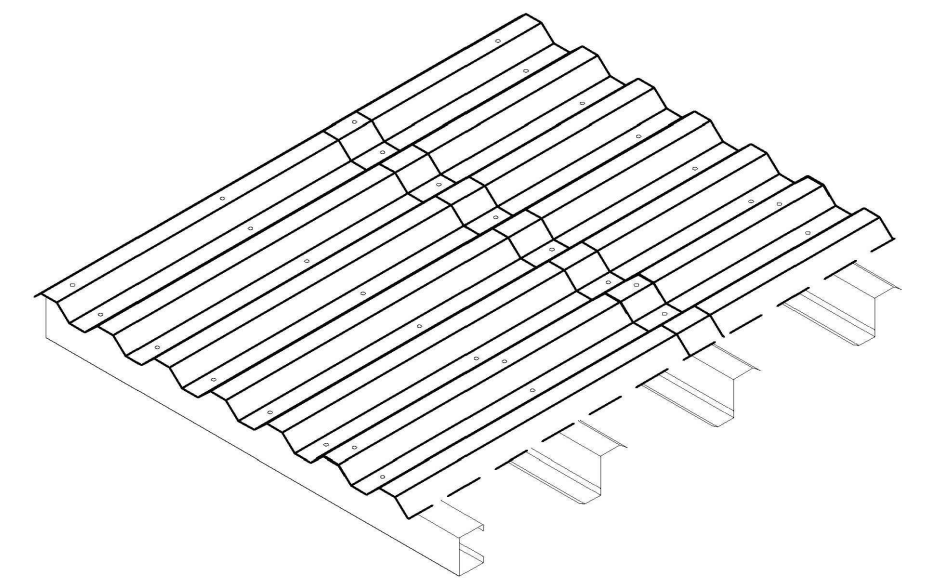
 **PRELIMINARY ROOF PLAN**
SCALE: 1/8" = 1'-0"



1
A5.00 A5.00
EAST ELEVATION
SCALE: 1/4" = 1'-0"

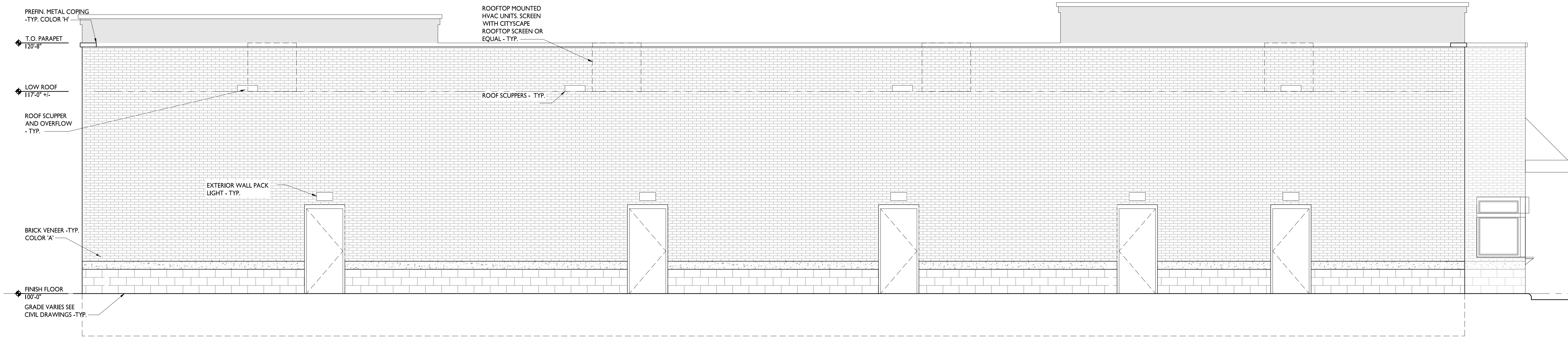


2
A5.00 A5.00
SOUTH ELEVATION
SCALE: 1/4" = 1'-0"

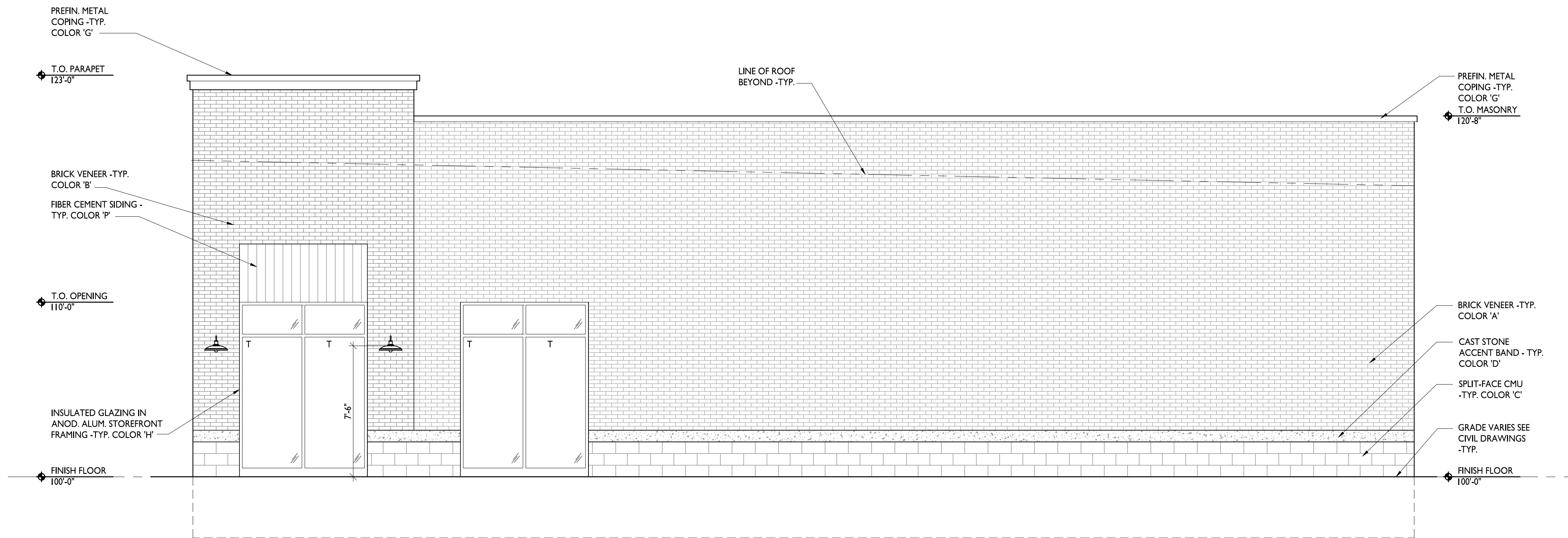


PRE-FINISHED PERFORATED
METAL SIDING DETAILS
NO SCALE

EXTERIOR FINISH LEGEND				
TAG	MATERIAL	MANUF/STYLE	COLOR	PERCENTAGE OF BUILDING FAÇADE
A	BRICK VENEER	TBD	TBD	51%
B	BRICK VENEER	TBD	TBD	14%
C	SPLIT FACE CMU	GRAND BLANC	IRONWOOD	6%
D	CAST STONE	ROCK CAST ACCENT BAND	CRYSTAL WHITE	2%
E	LINEAR MTL CEILING	RULON ENDURE LINEAR	TBD	--
G	METAL COPING	ATAS	PREFIN. MATCH ADJ MATERIAL	3%
H	STOREFRONT	TUBELITE	DARK BRONZE ANODIZED	16%
J	METAL CANOPY	ATAS	CLEAR ANODIZED	--
K	HM DOOR FRAMES	PAINT SHERWIN WILLIAMS	TO MATCH COLOR 'A'	1%
L	CANVAS AWNING	TBD	TBD	--
M	PERFORATED METAL SIDING	PAC-CLAD	CLEAR ANODIZED	5%
N	STEEL POST PAINT	TBD	TO MATCH COLOR 'H'	--
P	FIBER CEMENT SIDING	NICHIHA	TBD	1%



1 WEST ELEVATION
A5.01 A5.01 SCALE: 1/4" = 1'-0"



2 NORTH ELEVATION
A5.01 A5.01 SCALE: 1/4" = 1'-0"