



PLANNING COMMISSION

March 13, 2018, Council Chambers, 6:30 pm
201 West Ash Street, Mason, MI

AGENDA

- 1. CALL TO ORDER**
- 2. ROLL CALL**
- 3. PUBLIC COMMENT**
- 4. APPROVAL OF MINUTES** (February 13, 2018)
- 5. UNFINISHED BUSINESS**
 - A. Development Update
 - B. Workplan Update
- 6. NEW BUSINESS**
 - A. Site Plan Review (SPR) – 661 N. Cedar Street (Commercial Bank/Biggby Coffee)
Commercial Bank is requesting preliminary and final site plan approval to construct a 1,673 square foot building addition and add 13 parking spaces onto the property located at 661 N. Cedar Street.
 - B. Resolution – A Resolution Approving the Capital Improvements Plan (CIP) for the Fiscal Years 2018-2024
 - C. Draft Sign Ordinance – Discussion
 - D. Draft Office District Ordinance – Discussion
 - E. Rezoning for 440 and 448 S. Jefferson (Bad Brewing) from O-1 to C-1 – Discussion
- 7. LIAISON REPORT**
- 8. ADJOURN**

**CITY OF MASON
PLANNING COMMISSION MEETING
MINUTES OF FEBRUARY 13, 2018**

DRAFT

Chairman Sabbadin called the meeting to order at 6:00 p.m. in the Council Chambers at 201 West Ash Street, Mason, Michigan.

Commissioner(s) Present: Barna, Droscha, Feintuch, Hagle, Sabbadin, Waxman
Commissioner(s) Absent: Howe, Reeser
Also present: Elizabeth A. Hude, AICP, Community Development Director

PUBLIC COMMENT

None.

APPROVAL OF MINUTES

Motion to approve January 9, 2018 minutes with amendments was made by Waxman, second by Droscha.

MOTION APPROVED UNANIMOUSLY

UNFINISHED BUSINESS

- A. Hude gave a brief update on development issues in the City.
- B. Staff is preparing a summary of feedback from the Laylin Park improvements activities for the March meeting.
- C. Hude reminded Commissioners of the Joint Council/Planning Commission CIP Workshop on February 19, 2018, beginning at 7 pm in Council Chambers.

NEW BUSINESS

- A. Staff reviewed meeting procedures. Waxman reported the Mayor wants all boards and commissions to follow Robert's Rules of Order so they will be consistent with the City Council. Motions and Resolutions are approved by vote as are approval of meeting minutes and financial reports. When an issue is tabled, it is not debatable. When it is postponed it can be debated at a future meeting. Hude reminded Commissioners that third-party conversations between them outside of a scheduled meeting is a violation of the Open Meetings Act. If a Commissioner has information to share, it must be brought before the entire group. Waxman has a copy of Roberts Rules of Order if anyone is interested in looking at them.

LIAISON REPORTS

Droscha reported the Council is in the process of eliminating the Traffic Commission and the Utility Rate Commission. The Council has sent a Letter of Intent to the Mason School Administration to set in motion their move to City Hall.

ADJOURN

The meeting adjourned at ?? p.m.

Lori Hagle, Secretary

MEMORANDUM

TO: Planning Commission

FROM: Elizabeth A. Hude, AICP - Community Development Director

SUBJECT: Site Plan Review – 661 N. Cedar Street (Commercial Bank/Biggby Coffee)

DATE: March 8, 2018

Commercial Bank is requesting preliminary and final site plan approval to construct a 1,673 square foot building addition onto the property located at 661 N. Cedar Street. This is a mixed-use property currently consisting of a Biggby Coffee Shop with a drive through window and banking without a lobby. The intended/proposed use of the additional space is as a bank lobby. The applicant further proposes to remove and replace the existing drive through lanes; relocate the existing ATM to a drive through lane; remove vegetation and add 13 new parking spaces. The parcel is zoned C-2 (General Commercial District). Section 94-222 states that any use within the C-2 zoning district requires site plan review. Section 94-142. C2 General Commercial District (b) Uses permitted by right, paragraphs 1 and 9 indicate that the financial institution and restaurant (coffee shop) uses are permitted by right in the C2 Zoning District. The applicant has, therefore, made application for site plan review.

LAND USE AND ZONING:

The site is located and fronts on Cedar Street (M36), which is under the jurisdiction of the Michigan Department of Transportation (MDOT). The surrounding land uses and zoning are as follows:

	Current Land Use	Zoning	Future Land Use
North	Commercial	C-2 (General Commercial District)	Commercial
East	Commercial	C-2 (General Commercial District)	Commercial
South	Vacant	O-1 (Office District)	Mixed Use
West	Commercial	C-2 (General Commercial District)	Commercial

SITE PLAN REVIEW:

The following sections address compliance with site plan requirements. The following comments are provided based upon the plans dated January 24, 2018; pages C4 (Site Plan) and C6 (Details) were revised on March 7, 2018. A lighting plan with photometric data and fixtures was also provided on March 7, 2018.

Plan Details:

The building elevations indicate a single, new public entrance on the northern exposure. A new employee entry point will be provided on the southern exposure. The existing entry points to the building, including to the coffee shop remain unchanged.

Areas of vegetation removal, particularly along the westerly property line are shown. This area and portions along the southerly property line will be used for parking expansion.

The site plan shows a new dumpster area, including enclosure, at the southwesterly corner of the parking area. The plans note a gated dumpster enclosure.

The dumpster gate will need to be consistent with the standards listed in Section 94-173(b) Solid Waste Disposal.

There are no new utility services proposed to serve the building expansion.

Height, Bulk, Density, and Area Requirements:

The plan appears to meet the building height, setbacks and lot coverage site development standards listed in Section 94-121(c) and Table 100-1.

Off-Street Parking & Circulation:

Table 100-5 indicates that a drive-in restaurant* use requires 6 parking space for every 100 square feet of useable floor area (UFA)** and that a financial institution use requires 1 parking space for every 200 square feet UFA. There are currently 22 spaces and 13 new spaces will be added.

Use	Gross Floor Area	UFA (per applicant)	Parking/UFA	Parking Req.
Bank Lobby	1,673	490	1/200	3
Biggby Coffee	2,175	674	6/100*	41

*Section 1-2. Definitions of the Code of Ordinances of the City of Mason states Drive-In facility means a commercial enterprise that permits the consumer to transact business, receive a service, or be entertained while remaining in a motor vehicle.

**Table 100-5. Parking Space Requirements notes that a Drive-In Restaurant requires 6 spaces per 100 square feet UFA.

There are currently 22 parking spaces plus spaces in the drive-thru lane. The analysis indicates 44 off street parking spaces would be required. 13 new parking spaces will be constructed for a total of 35 parking places, including two (2) barrier-free spaces, and the additional nine spaces required will be accommodated in the drive-thru lanes of the bank and coffee shop.

The Applicant has provided an hourly customer count and a letter from the Owner of the Biggby operations indicating the mix of drive through versus walk in customers and how the proposed parking configuration meets or exceeds the needs of the facility. The data as presented and attached for reference indicates in the period of study the peak parking use was 21 in the existing lot consisting of 22 spaces.

In addition to the number of parking spaces required, the site as currently used and proposed for continued use proposes front yard parking.

Pursuant to Article IX. Off Street Parking and Loading, Section 94-292. General Off Street Parking Requirements, Paragraph (j).(1.) "... *Front yard parking in the C-2, C-3, M-1, and M-2 districts is prohibited except upon a finding by the planning commission that such parking is a critical component of the operation of the particular use and that adequate provisions are included for the screening and landscaping of such parking area.*", the Planning Commission will need to determine that the front yard parking is a critical component of the operation of the particular use.

A loading and unloading space 12 feet wide by 25 feet in length has been provided and is defined on the site plan.

The plan as presented appears to meet the parking space requirements as set forth in Table 100-5.

Landscaping:

Table 100-4 sets forth the required landscape buffers for the C-2 Zoning District.

	Zoning	Landscape Buffer Required
North	Cedar Street (M-36)	A
East	C-2	A
South	O-1	A
West	C-2	A

The Applicant has provided a total of six (6) Cleveland Pear trees along the northerly and westerly boundary and leaving intact the 60-inch Oak. The 12-inch Maple along the southerly property line will also remain intact. The southerly side of the property is densely screened with existing vegetation. It is staff's opinion that the addition of vegetation along the southerly property line in strict accordance with the requirements of Buffer Zone A is excessive; therefore, staff recommends the Planning Commission waive the requirement for the additional vegetation pursuant to Section 94-241 (e)(6).

The easterly property line requires Buffer Zone A and is adjacent to a commercial parking lot. The Applicant has not proposed any method of landscaping as noted in Section 94-241(f)(1)(a). Staff recommends the Planning Commission waive the requirement for the additional vegetation pursuant to Section 94-241 (e)(6).

The parking area has been provided with an appropriate amount of landscaped area and canopy trees as required by Section 94-241(i).

Staff recommends approval contingent upon a revised landscape plan being provided for administrative review and acceptance.

Signs:

The site plan does not propose a new or expanded sign located within the property.

If any new signage is to be located on the site it will be subject to the requirements of Chapter 58 of the Zoning Ordinance, including Division 2 of said chapter.

Site Lighting:

Site lighting is indicated on the site plan, a photometric data and fixtures have been provided and appear to be proposed in accordance with the requirements listed in Section 94-177(e) of the Zoning Ordinance.

Construction Schedule:

A general construction schedule is outlined on Sheet 1 of 6. In general, the project will begin in the Fall of 2017 with restoration slated for completion in the Spring of 2018.

PUBLIC SERVICES AND FACILITIES:

Water and Sanitary Sewer:

No new water or sanitary sewer services are proposed for this project.

Storm Water Management:

The site plan proposes to connect the roof drains and parking storm water lines to an on-site detention basin. The storm water system is sized to accommodate the increase in the impervious area. A drain facilities maintenance agreement is required prior to the issuance of an occupancy permit.

This site will require a soil erosion permit through the Ingham County Drain Commissioner's Office. Additional comments from the Ingham County Drain Commissioner's Office are attached.

All storm sewer contained within the site shall remain private.

Approval is recommended with this condition.

Agency Comments:

Copies of the MDOT and ICRD emails are attached.

The Mason Fire Department and Mason Police Department take no exceptions to the proposed site plan.

Site Plan Review Standards:

It appears that the site and proposed use will comply with the site plan review standards listed in Section 94-227 of the Code, provided the previously noted conditions are met. In reviewing an application for site plan review and approval the following standards shall apply:

- (1) The site shall be developed so that all elements shall be harmoniously and efficiently organized in relation to the size, shape, type and topography of the site and surrounding property.*
- (2) The site shall be developed so as not to impede the normal and orderly development, improvement, and use of surrounding property for uses permitted in this chapter.*
- (3) All buildings or groups of buildings shall be arranged to permit emergency vehicle access by some practical means to all sites.*
- (4) Every structure or dwelling unit shall have direct access to a public street or indirect access to a public street via an approved dedicated private street.*
- (5) Appropriate measures shall be taken to ensure that the addition or removal of surface waters will not adversely affect neighboring properties that controls are in place to minimize sedimentation and erosion, and that topographic alterations are minimized to accommodate storm water management.*
- (6) Provisions shall be made for the construction of storm sewer facilities including grading, gutters, piping, on-site storage, and treatment of turf as required to handle storm water and prevent erosion.*
- (7) Secondary containment for above ground areas where hazardous substances are stored or used shall be provided as required by the city fire chief.*
- (8) Exterior lighting shall be designed and located so that the source of illumination is directed away from adjacent properties, the intensity of lighting is the minimum necessary, and the direction of lighting is downward as much as is possible and appropriate for the project.*
- (9) All loading and unloading areas, outside storage areas, and refuse receptacles shall be screened from casual view from the public rights-of-way and adjoining land uses.*
- (10) Site plans shall meet the driveway, traffic safety, and parking standards of the city in such manner as necessary to address the following:*
 - a. Safe and efficient vehicular and non-vehicular circulation, including parking areas, non-motorized linkages to abutting parcels, uses, sidewalks, and trails.*
 - b. Shared driveways and service drives.*
 - c. Adequate and properly located utilities.*
- (11) Provisions shall be made for proposed common areas and public features to be reasonably maintained.*
- (12) The site plan submittal shall demonstrate compliance with all applicable requirements of this chapter, chapters 58 and 74, the building code, and county, state, and federal law.*

RECOMMENDATION:

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

The Planning Commission approve Resolution No. 2018-01.

Attachments:

1. Resolution
2. Application
3. Site Plan
4. Elevation Plan
5. ICDC Comments Letter
6. MDOT Comments – Email

S:\Comm Devel\Planning Comm\661 N Cedar - Commercial Bank

Introduced:
Second:

**CITY OF MASON
PLANNING COMMISSION RESOLUTION
No. 2018-01**

**A RESOLUTION APPROVING A PRELIMINARY AND FINAL SITE PLAN AND SPECIAL USE
PERMIT TO CONSTRUCT A 1,673 SQUARE FOOT BUILDING ADDITION AND ADD 13
PARKING SPACES ON TO THE PROPERTY LOCATED AT 661 N. CEDAR STREET**

March 13, 2018

WHEREAS, a request has been received from Commercial Bank for preliminary and final site plan approval to be allowed to construct 1,673 square foot building addition on to the property located at 661 N. Cedar Street; and

WHEREAS, site plans were submitted dated January 24, 2018; pages C4 (Site Plan) and C6 (Details) were revised on March 7, 2018; a lighting plan with photometric data and fixtures were provided on March 7, 2018; and

WHEREAS, the subject property is further described as BEG ON C/L OF CEDAR ST AT PT 46.9 FT NW OF INTER OF SD C/L & EW 1/4 LN OF SEC 5, SELY ON CURVE TO RT WITH RADIUS OF 5729.6 FT & CHD BRG S 49-45-21 E 197.7 FT, S 34-18-39 W 292.7 FT, N 51-45-21 W 217.7 FT, N 38-14-39 E 298.9 FT TO BEG. ALSO COM AT W 1/4 COR OF SEC 5, S 89-25-40 E ALG EW 1/4 LN 1108.07 FT, S 46-22-46 E ALG C/L OF CEDAR ST 370.58 FT, S 43-37-14 W 43 FT TO WLY R/W LN OF CEDAR ST, NWLY 155.74 FT ALG CURVE CONCAVE SW, RADO 5686.6 FT, CHD BRG N 47-09-42 W 155.72 FT TO POB, S 51-25-49 W 251.04 FT, N 34-03-14 E 263.59 FT TO SD WLY R/W LN, SELY ALG SD R/W LN TO POB ON SW 1/4 OF SEC 5 T2N R1W CITY OF MASON. 1.87 AC M/L; and

WHEREAS, the parcel is zoned C-2 (General Commercial district); and

WHEREAS, Section 94-222 states that any use within the C-2 zoning district requires site plan review; and

WHEREAS, Section 94-142. C2 General Commercial District (b) Uses permitted by right, paragraphs 1 and 9 indicate that the financial institution and restaurant with drive-thru (coffee shop) uses are permitted by right in the C2 Zoning District; and

WHEREAS, Section 94-292. General Off Street Parking Requirements, the Planning Commission finds that front yard parking is a critical component of the operation of the particular use; and

WHEREAS with the waivers and conditions listed herein, the plans will comply with the site plan review standards listed in Section 94-227 of the Mason Code; and

WHEREAS, approval is granted with the following waivers and conditions:

- Additional vegetation beyond what is proposed is waived pursuant to Section 94-241 (e)(6)
- The dumpster gate will be consistent with the standards listed in Section 94-173(b) Solid Waste Disposal
- That all storm sewer contained within the site shall remain private.

NOW THEREFORE BE IT BE RESOLVED, that the Mason Planning Commission does hereby approve a Preliminary and Final Site Plan to construct a 1,673 square foot building addition and add 23 parking spaces on to the property located at 661 N. Cedar based on the site plan dated January 24, 2018 and revised March 7, 2018.

Yes ()

No ()

CLERK'S CERTIFICATION: I hereby certify that the foregoing is a true and accurate copy of a resolution adopted by the Planning Commission at its regular meeting held Tuesday, March 13, 2018, the original of which is part of the Planning Commission minutes.

Sarah Jarvis, Clerk
City of Mason
Ingham County, Michigan



APPLICATION – SITE PLAN REVIEW/SPECIAL USE PERMIT

City of Mason

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

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

www.mason.mi.us

Applicant– Please check one of the following:

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

* includes Preliminary Site Plan Review

PLANNING DEPARTMENT USE ONLY

Application Received: _____

Tax ID: _____

Fee: _____

Receipt #: _____

RECEIVED

FEB 06 2018

**CITY OF MASON
PLANNING DEPT.**

I. APPLICANT INFORMATION

Name Kevin D. Collison, President & CEO

Organization Commercial Bank

Address 101 North Pine River Street, Ithaca, MI 48847

Telephone Number (989) 875-5516

Facsimile Number (989) 875-4534

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

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

II. PROPERTY INFORMATION

Owner Commercial Bank

Telephone Number (989) 875-5516

Property Address 661 N. Cedar Street, Mason, MI 48854

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

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

BEGINNING ON THE CENTERLINE OF CEDAR STREET AT A POINT 46.9 FEET NORTHWEST OF THE INTERSECTION OF SAID CENTERLINE AND THE EAST-WEST 1/4 LINE OF SECTION 5; THENCE SOUTHEASTERLY ON A CURVE TO THE RIGHT WITH A RADIUS OF 5729.6 FEET AND A CHORD BEARING OF SOUTH 49°45'21" EAST 197.7 FEET; THENCE SOUTH 34°18'39" WEST 292.7 FEET; THENCE NORTH 51°45'21" WEST 217.7 FEET; THENCE NORTH 38°14'39" EAST 298.9 FEET TO THE POINT OF BEGINNING. ALSO COMMENCING AT THE WEST 1/4 CORNER OF SECTION 5; THENCE SOUTH 89°25'40" EAST ALONG THE EAST-WEST 1/4 LINE 1108.07 FEET; THENCE SOUTH 46°22'46" EAST ALONG THE CENTERLINE OF CEDAR STREET 370.58 FEET; THENCE SOUTH 43°37'14" WEST 43 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF CEDAR STREET; THENCE NORTHWESTERLY 155.74 FEET ALONG A CURVE CONCAVE SOUTHWEST, A RADIUS OF 5686.6 FEET, CHORD BEARING OF NORTH 47°09'42" WEST 155.72 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 51°25'49" WEST 251.04 FEET; THENCE NORTH 34°03'14" EAST 263.59 FEET TO SAID WESTERLY RIGHT-OF-WAY LINE; THENCE SOUTHERLY ALONG SAID RIGHT-OF-WAY LINE TO THE POINT OF BEGINNING. BEING IN THE SOUTHWEST 1/4 OF SECTION 5, TOWNSHIP 2 NORTH, RANGE 1 WEST, CITY OF MASON. 1.87 ACRES MORE OR LESS.

APPLICANT CERTIFICATION

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

Signature _____

Kevin D. Collison
Kevin D. Collison

Date _____

2-5-18

III. REQUEST DESCRIPTION

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

The property currently has one mixed use building on it. The building is being used as a coffee shop and bank.
The proposed project will not change the current use. The project consists of adding a small lobby for the bank, replacing the bank drive through lanes and canopy and adding additional parking spaces.

B. Available Services

Public Water ☒ YES ☐ NO
Public Sanitary Sewer ☒ YES ☐ NO

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

C. Estimate the Following

Traffic Generated 800 cars/day

Population Increase -0-

Hours of Operation 6 AM to 9 PM
Sun. day through Sun. day

Fri. (9 am to 11 am) = 9 each
All other times = 6 each

Total Employees Shifts 1

Employees in Peak Shift 9

Total Bldg. Area Proposed 2,993 Sq. Ft.

Parking Spaces Provided 35

D. Project Phasing

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

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

IV. APPLICATION MATERIALS

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

- ☒ Completed application form
- ☒ 20 copies of site plan drawings is larger than 11" x 17" (30 copies for Special Use Permits) **
- ☒ 1 – 11" x 17" copy of the site plan **
- ☒ Plans submitted on CD (Commercial only) (Emailed plans)
- ☒ Legal description
- ☒ Proof of ownership/owner authorization (Tax statement Attached)
- ☒ Construction schedule for proposed project (Const. to start spring 2018 as weather permits)
- ☒ Construction calculations for utilities (N/A no proposed changes to utilities)
- ☒ Fee (see below)
- ☒ Any other information deemed necessary

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

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

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

V. APPLICATION DEADLINES

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

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

VI. STAFF REPORT

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

CITY OF MASON

2017 Winter

MESSAGE TO TAXPAYER

PENALTY ADDED FEBRUARY 15TH. POSTMARKS
DO NOT COUNT. CREDIT CARDS ACCEPTED
ONLY ON OUR WEBSITE WWW.MASON.MI.US OR
BY PHONE 800-272-9829 CODE 7038
PLEASE READ REVERSE SIDE OF STATEMENT

PAYMENT INFORMATION

This tax is due by: 02/14/2018

Pay by mail to: CITY OF MASON
PAUL BORDE, TREASURER
201 W. ASH ST. PO BOX 370
MASON, MI 48854-0370

PROPERTY INFORMATION

Property Assessed To:
COMMERCIAL BANK
661 N CEDAR
MASON, MI 48854

Prop #: 33-19-10-05-302-013
Prop Addr: 661 N CEDAR
MASON PUBLIC
School: 33130

Legal Descriptions:

BAG ON C/L OF CEDAR ST AT W 48.5 FT NW OF INTER OF RD C/L & E 1/4 LN
OF SEC 5 SEELY ON CURVE TO RT WITH RADIUS OF 572.6 FT & CHD BNC S 43-45-
31 21.97.7 FT. S 34-16-39 W 282.7 FT. N 31-45-21 E 212.7 FT. N 38-14-38
E 209.9 FT TO BEC. ALSO COM AT N 1/4 COR OF SEC 5, S 34-28-40 E A/C BE
1/4 LN 1104.09 FT. S 48-32-46 E A/C 2/3 OF CEDAR ST 370.56 FT. S 43-27-
14 W 43 FT TO WLY E/W LN OF CEDAR ST. NWCY 135.14 FT A/C CURVE CONCARE
24. BADOE 5686.6 FT. CHD BNC N 47-09-42 E 315.77 FT TO 600. S 31-23-49 W
251.04 FT. N 34-03-14 E 367.54 FT TO 84 WLY E/W LN. SELV A/C RD R/W LN
TO 600 ON 1/4 OF SEC 5 T1R R/W CITY OF MASON. 1.87 AC N/2.

BALANCE OF DESCRIPTION ON FILE

OPERATING FISCAL YEARS

The taxes on bill will be used for governmental
operations for the following fiscal year(s):

County: 01/01/17 - 12/31/17
Twp/Cty: 07/01/17 - 06/30/18
School: 07/01/17 - 06/30/18
State: 10/01/17 - 09/30/18

Does NOT affect when the tax is due or its amount

TAX DETAIL

Taxable Value: 257,215 COMM-IMPROVED
State Equalized Value: 253,300 Class: 201
PRE/NET %: 0.0000

Mort Code:

Taxes are based upon Taxable Value.
1 mill equals \$1.00 per \$1000 of Taxable Value.
Amounts with no millage are either Special
Assessments or other charges added to this bill.

DESCRIPTION	MILLAGE	AMOUNT
COUNTY	3.6900	986.02
LIBRARY	1.5600	416.85
MPS SINKING 2009	1.0000	257.21
MPS DEBT 2004	2.9500	788.26
AIRPORT	0.6990	186.78
AURELIUS VEWAY	0.0000	12.49
AUR & VVY II	0.0000	4.46

Total Tax 9,89900
Administration Fee 26.62

DECEMBER AMOUNT DUE

2,688.71

JULY AMOUNT DUE

0.00

TOTAL AMOUNT DUE

2,688.71

Please detach along perforation. Keep the top portion.

Hourly Parking for Lot and Customer Totals for Bank from 1/17/18-1/24/18

	Wednesday		Thursday		Friday		Saturday		Monday		Tuesday		Wednesday	
	9:00-5:30		9:00-5:30		9:00-6:00		9:00-12:00		9:00-5:30		9:00-5:30		9:00-5:30	
	Park.	Bank Cust.	Park.	Bank Cust.	Park.	Bank Cust.	Park.	Bank Cust.	Park.	Bank Cust.	Park.	Bank Cust.	Park.	Bank Cust.
8:30-9:30	6	3	9	1	10	3	11	3	15	1	15	0	8	1
9:30-10:30	14	0	13	2	16	6	11	2	12	4	13	3	13	3
10:30-11:30	13	4	16	2	14	5	13	4	11	3	16	1	18	3
11:30-12:30	17	2	9	3	15	4	15	6	9	6	8	2	12	1
12:30-1:30	11	7	6	4	8	5	N/A	N/A	8	5	14	4	15	5
1:30-2:30	17	3	11	4	14	8	N/A	N/A	10	2	14	3	13	4
2:30-3:30	18	3	13	3	11	3	N/A	N/A	10	3	15	3	10	1
3:30-4:30	15	5	11	8	14	12	N/A	N/A	11	6	6	4	16	3
4:30-5:30	13	4	13	7	10	7	N/A	N/A	9	3	6	4	12	3
5:30-6:00	N/A	N/A	N/A	N/A	7	2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Current available parking spaces on the lot is 22 which includes handicap parking.

*(Park.) Once per hour the amount of parking being used was recorded.

*(Bank Cust.) The number of bank customers that used the drive-thru in an hour.

*MAX transaction time per bank customer is 5 minutes.



BIGGBY

COFFEE

661 N. Cedar Street
Mason, MI 48854

Mason Community Development Department,

In reference to the use of the shared parking lot with Commercial Bank customers and employee's at 661 North Cedar Street, Mason, MI.

We currently see 75% of our customers through our Drive Thru Monday through Friday. Saturday and Sunday and evenings we see more walk in customers. When the parking lot is full, our customers park in front of the building (which there is a yellow curb stating no parking) but when my staff tries to let customers know that it is a no parking zone and there is nowhere else to park they get quite angry with my staff. If we could get an additional 8 to 10 spaces, we would be able to meet the needs of our walk in customers at those peak times and reduce the stress this is causing my staff.

There was also a question raised about the food that we prepare and serve. We toast bagels through a toaster and heat sliced deli meat and eggs for our breakfast bagel. We have Banana's, muffins, donut holes, cookies, and Misc. Candies. Less than 10% of our business is food with less than 3% heating for eggs. We do not have ovens or grills, Just the toaster and a microwave. The majority of our business is espresso based drinks.

Thank You!

Lori L. DeYoung
Owner
BIGGBY Coffee
661 N. Cedar Street
Mason, MI 48854

**COMMERCIAL BANK
COMPOSITE RUNOFF COEFFICIENTS**

REQUIRED DETENTION CALCULATION BASED ON PROPOSED CONDITIONS

PARCEL AREA 62243 SQ. FT.
 1.43 ACRES

EXISTING (PRE-CONSTRUCTION) RUNOFF COEFFICIENT

	AREA (SQ. FT.)	AREA (ACRES)	RUNOFF COEFF.	AREA*COEFF
EXISTING ASPHALT	25612	0.59	0.95	24331.4
EXISTING CONCRETE	2071	0.05	0.95	1967.3
EXISTING BUILDING	2369	0.05	0.95	2250.6
PREVIOUS AREA	32191	0.74	0.3	9657.4
TOTAL	62243	1.43		38206.6
COEFFICIENT =	38206.6 / 62243		=	0.61

PROPOSED (POST-CONSTRUCTION) RUNOFF COEFFICIENT

	AREA (SQ. FT.)	AREA (ACRES)	RUNOFF COEFF.	AREA*COEFF
ASPHALT	30647	0.70	0.95	29114.6
CONCRETE	2071	0.05	0.95	1967.3
BUILDING	2987	0.07	0.95	2837.7
PREVIOUS AREA	26538	0.61	0.3	7961.5
TOTAL	62243	1.43		41881.0
COEFFICIENT =	41881 / 62243		=	0.67

REQUIRED DETENTION BASED ON EXISTING CONDITIONS

DETENTION POND DESIGN CALCULATION

REQUIRED DETENTION CALCULATION BASED ON PROPOSED CONDITIONS

Site Location Commercial Bank

	Area (Acres)	C		
Hard Surface/Imperv. Area	0.69	0.95		
Gravel	0.00	0.75	Proposed Runoff "C" Value	0.61 (I)
Green Space/Lawn	0.74	0.30	Maximum Allowable Outflow (CFS)	0.21 (G)
Cont. Drainage Area (Acres)	1.43 (J)		Storm Recurrence Interval (Yrs)	100

A	B	C	D	E	F	G	H
Duration (Minutes)	Duration (Hours)	100-Year Total Rainfall (Inches)	100-Year Rainfall Intensity (Inch/Hr)	Proposed Runoff Flow Rate (CFS)	Proposed Runoff Volume (CFT)	Maximum Allowable Outflow (CFS)	Required Detention Storage (CFT)
5	0.08	0.62	7.44	6.53	1,959	0.21	1,894
10	0.17	1.09	6.54	5.74	3,443	0.21	3,315
15	0.25	1.40	5.60	4.91	4,423	0.21	4,230
20	0.33	1.61	4.83	4.24	5,086	0.21	4,829
30	0.50	1.92	3.84	3.37	6,065	0.21	5,679
40	0.67	2.13	3.20	2.80	6,729	0.21	6,214
50	0.83	2.29	2.75	2.41	7,234	0.21	6,591
60	1.00	2.44	2.44	2.14	7,708	0.21	6,936
90	1.50	2.78	1.85	1.63	8,782	0.21	7,624
120	2.00	3.02	1.51	1.33	9,540	0.21	7,996
180	3.00	3.33	1.11	0.97	10,519	0.21	8,203
360	6.00	3.90	0.65	0.57	12,320	0.21	7,687
720	12.00	4.52	0.38	0.33	14,279	0.21	5,012
1080	18.00	4.89	0.27	0.24	15,448	0.21	1,548
1440	24.00	5.20	0.22	0.19	16,427	0.21	-2,106

Maximum: 8,203

- A) Duration of the storm event in minutes.
 B) Duration of the storm event in hours.
 C) Total amount of rainfall during a 25-year recurrence storm event for the given duration in Column A & B (ref.: midwestern climatological center rainfall Atlas-Bulletin 71).
 D) Average rainfall intensity during the 25-year recurrence storm event. Calculated by dividing Column C by Column B.
 E) The unrestricted 25-year recurrence discharge flow rate from the proposed site under fully developed conditions. Calculated by multiplying Intensity (D) and Drainage Area (L).
 F) The unrestricted storm event for the given duration in Column A and B. Calculated by multiplying the Proposed Runoff Flow Rate (E) by the Storm Duration (A) and by 60 seconds/minute.
 G) The maximum allowable discharge from the site is determined by multiplying the drainage area by 0.15 CFS per acre or if the proposed outlet is restrictive by determining the sites share of the existing outlets capacity on a contributing area basis.
 H) The required retention storage is determined by multiplying the difference flow rate (Inflow (E) - Outflow (G), by the corresponding duration (A) and by 60 seconds/minute. The amount of storage required for various storm durations will vary based on rainfall intensity, the size of the drainage area, and the allowable discharge. The maximum volume of storage for the various storm durations will be the required detention storage volume.
 I) Proposed weighted runoff coefficient.
 J) Contributing Drainage to the proposed detention or retention system.

Calculation By: _____

Date: _____

REQUIRED DETENTION BASED ON PROPOSED CONDITIONS

DETENTION POND DESIGN CALCULATION

REQUIRED DETENTION CALCULATION BASED ON PROPOSED CONDITIONS

Site Location Commercial Bank

	Area (Acres)	C		
Hard Surface/Imperv. Area	0.82	0.95		
Gravel	0.00	0.75	Proposed Runoff "C" Value	0.67 (I)
Green Space/Lawn	0.61	0.30	Maximum Allowable Outflow (CFS)	0.21 (G)
Cont. Drainage Area (Acres)	1.43 (J)		Storm Recurrence Interval (Yrs)	100

A	B	C	D	E	F	G	H
Duration (Minutes)	Duration (Hours)	100-Year Total Rainfall (Inches)	100-Year Rainfall Intensity (Inch/Hr)	Proposed Runoff Flow Rate (CFS)	Proposed Runoff Volume (CFT)	Maximum Allowable Outflow (CFS)	Required Detention Storage (CFT)
5	0.08	0.62	7.44	7.16	2,147	0.21	2,083
10	0.17	1.09	6.54	6.29	3,775	0.21	3,646
15	0.25	1.40	5.60	5.39	4,848	0.21	4,655
20	0.33	1.61	4.83	4.65	5,576	0.21	5,318
30	0.50	1.92	3.84	3.69	6,649	0.21	6,263
40	0.67	2.13	3.20	3.07	7,377	0.21	6,862
50	0.83	2.29	2.75	2.64	7,931	0.21	7,287
60	1.00	2.44	2.44	2.35	8,450	0.21	7,678
90	1.50	2.78	1.85	1.78	9,628	0.21	8,469
120	2.00	3.02	1.51	1.45	10,459	0.21	8,914
180	3.00	3.33	1.11	1.07	11,532	0.21	9,216
360	6.00	3.90	0.65	0.63	13,506	0.21	8,873
720	12.00	4.52	0.38	0.36	15,654	0.21	6,387
1080	18.00	4.89	0.27	0.26	16,935	0.21	3,035
1440	24.00	5.20	0.22	0.21	18,009	0.21	-524

Maximum: 9,216

- A) Duration of the storm event in minutes.
 B) Duration of the storm event in hours.
 C) Total amount of rainfall during a 25-year recurrence storm event for the given duration in Column A & B (ref.: midwestern climatological center rainfall Atlas-Bulletin 71).
 D) Average rainfall intensity during the 25-year recurrence storm event. Calculated by dividing Column C by Column B.
 E) The unrestricted 25-year recurrence discharge flow rate from the proposed site under fully developed conditions. Calculated by multiplying Intensity (D) and Drainage Area (L).
 F) The unrestricted storm event for the given duration in Column A and B. Calculated by multiplying the Proposed Runoff Flow Rate (E) by the Storm Duration (A) and by 60 seconds/minute.
 G) The maximum allowable discharge from the site is determined by multiplying the drainage area by 0.15 CFS per acre or if the proposed outlet is restrictive by determining the sites share of the existing outlets capacity on a contributing area basis.
 H) The required retention storage is determined by multiplying the difference flow rate (Inflow (E) - Outflow (G), by the corresponding duration (A) and by 60 seconds/minute. The amount of storage required for various storm durations will vary based on rainfall intensity, the size of the drainage area, and the allowable discharge. The maximum volume of storage for the various storm durations will be the required detention storage volume.
 I) Proposed weighted runoff coefficient.
 J) Contributing Drainage to the proposed detention or retention system.

Calculation By: _____

Date: _____

**COMMERCIAL BANK
REQUIRED DETENTION**

REQUIRED DETENTION CALCULATION BASED ON PROPOSED CONDITIONS 9,216 CFT.

REQUIRED DETENTION CALCULATION BASED ON EXISTING CONDITIONS 8,203 CFT.

REQUIRED DETENTION FOR PROPOSED NEW IMPREVIOUS AREAS

9,216 - 8,203 = 1,013 CFT.



RECEIVED

FEB 06 2018

CITY OF MASON
PLANNING DEPT.

COMMERCIAL BANK

661 N. CEDAR ST.
MASON, MI 48854

SHEET INDEX:

<u>PAGE</u>	<u>CONTENT</u>
	TITLE SHEET
01	GENERAL NOTES
C1	SITE PLAN
D1	DEMO PLAN
S1	FOUNDATION PLAN
S2	FOUNDATION DETAILS
S3	STRUCTURAL ROOF FRAMING PLAN
A1	FLOOR PLAN
A2	EXTERIOR ELEVATIONS
A3	SECTIONS
A4	FINISH SCHEDULE
A5	REFLECTED CEILING AND FLOOR COVERING PLAN

CODE REVIEW:

BASED ON MICHIGAN BUILDING CODE 2015

1. USE GROUP B- BUSINESS - BASED ON SECTION 304.
2. CONSTRUCTION TYPE - 5B BASED ON SECTION 602.5.
3. MAXIMUM ALLOWABLE BUILDING AREA = 9,000S.F. PER TABLE 506.2
EXISTING AREA TO REMAIN = 2,175 S.F.
PROPOSED ADDITION AREA = 1,673 S.F.
PROPOSED BUILDING TOTAL AREA = 3,848 S.F.
4. OCCUPANT LOAD = 13 PEOPLE BASED ON TABLE 1004.1.2
@ COMMERCIAL BANK SPACE (BIGBY COFFEE TO REMAIN UNCHANGED)

MAIN FLOOR: 1,110 S.F./100 = 11 PEOPLE
BASEMENT: 512 S.F./300 = 2 PEOPLE
TOTAL OCCUPANT LOAD = 13 PEOPLE
5. TWO MEANS OF EGRESS REQUIRED PER SECTION 1021.2 = 2 PROVIDED.
6. AUTOMATIC SPRINKLER SYSTEM IS NOT REQUIRED PER SECTION 903.
7. GROUND SNOW LOAD = 35PSF PER FIGURE 1608.2
GROUND SNOW LOAD EXPOSURE FACTOR - 1.0
GROUND SNOW LOAD IMPORTANCE FACTOR - 1.0
GROUND SNOW LOAD THERMAL FACTOR - 1.0
8. WIND LOAD = 115 MPH PER FIGURE 1609A
EXPOSURE CATEGORY - B
IMPORTANCE FACTOR - 1.0
TOPOGRAPHICAL FACTOR - 1.0
9. SEISMIC USE GROUP - I
10. SEISMIC SITE CLASS - D
IMPORTANCE FACTOR - 1.0

JBS *Contracting Inc.*

P.O. BOX 370
MT. PLEASANT, MI 48804
(800) 773-1132

COMMERCIAL / INDUSTRIAL
CONSTRUCTION

DATE: 1/ 24/ 2018

COMMERCIAL
BANK

LOCATION MAP
NO SCALE

VICINITY MAP
NO SCALE

SHEET INDEX

C-1

COVER SHEET

C-2

TOPOGRAPHIC SURVEY

C-3

DEMOLITION PLAN

C-4

SITE PLAN

C-5

GRADING PLAN & STORM WATER PLAN

C-6

DETAILS

PARCEL AREA

61,940 SQ. FT. = 1.42 ACRES
(EXCLUDING ROAD RIGHT OF WAY)

ZONING REQUIREMENTS

C-2 GENERAL COMMERCIAL DISTRICT

MIN. LOT SIZE:

20,000 SQ. FT.

MIN. LOT WIDTH:

100 FT.

MIN. YARD SETBACKS

MIN. FRONT YARD SETBACK:

50 FT. (FOOTNOTE 11)

MIN. SIDE YARD SETBACK:

10 FT. (FOOTNOTE 3)

MIN. REAR YARD SETBACK:

10 FT. (FOOTNOTE 3)

MAX. % LOT COVERAGE BY ALL STRUCTURES:

50%

FOOTNOTES:

3. 20 feet when adjacent to residentially used or zoned land.

11. The site plan approving body may reduce the required front yard setback by a maximum of 50% upon finding that the reduced setback is in keeping with predominant development patterns in the immediate area and such reduction would encourage a more uniform, unified and orderly development pattern.

PROPERTY DESCRIPTION

LEGAL DESCRIPTION PER TAX ID #33-19-10-05-302-013:
BEGINNING ON THE CENTERLINE OF CEDAR STREET AT A POINT 46.9 FEET NORTHWEST OF THE INTERSECTION OF SAID CENTERLINE AND THE EAST-WEST 1/4 LINE OF SECTION 5; THENCE SOUTHEASTERLY ON A CURVE TO THE RIGHT WITH A RADIUS OF 5729.6 FEET AND A CHORD BEARING OF SOUTH 49°45'21" EAST 197.7 FEET; THENCE SOUTH 34°18'39" WEST 292.7 FEET; THENCE NORTH 51°45'21" WEST 217.7 FEET; THENCE NORTH 38°14'39" EAST 298.9 FEET TO THE POINT OF BEGINNING. ALSO COMMENCING AT THE WEST 1/4 CORNER OF SECTION 5; THENCE SOUTH 89°25'40" EAST ALONG THE EAST-WEST 1/4 LINE 1108.07 FEET; THENCE SOUTH 46°22'48" EAST ALONG THE CENTERLINE OF CEDAR STREET 370.58 FEET; THENCE SOUTH 43°37'14" WEST 43 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF CEDAR STREET; THENCE NORTHWESTERLY 155.74 FEET ALONG A CURVE CONCAVE SOUTHWEST, A RADIUS OF 5686.6 FEET, CHORD BEARING OF NORTH 47°09'42" WEST 155.72 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 51°25'49" WEST 251.04 FEET; THENCE NORTH 34°03'14" EAST 263.59 FEET TO SAID WESTERLY RIGHT-OF-WAY LINE; THENCE SOUTHERLY ALONG SAID RIGHT-OF-WAY LINE TO THE POINT OF BEGINNING. BEING IN THE SOUTHWEST 1/4 OF SECTION 5, TOWNSHIP 2 NORTH, RANGE 1 WEST, CITY OF MASON. 1.87 ACRES MORE OR LESS.

CONTACTS

OWNER:

COMMERCIAL BANK
101 NORTH PINE RIVER ST.
ITHACA, MI 48847
KEVIN COLLISON - PRESIDENT & CEO
Ph: (989) 875-5516

GENERAL CONTRACTOR:

JBS CONTRACTING, INC
P.O. BOX 370
MT. PLEASANT, MI 48858-0370
PHONE: (989) 773-0770
FAX: (989) 772-9272

NOTES

1. SHOWN UNDERGROUND UTILITY LOCATIONS REFLECT INFORMATION COLLECTED FROM UTILITY OWNERS AND VISIBLE MARKERS FOUND AT THE TIME OF SURVEY. SHOWN LOCATIONS ARE NOT INTENDED TO BE EXACT AND CONTRACTORS MUST VERIFY LOCATIONS OF ALL UTILITIES PRIOR TO EXCAVATION.

MISS DIG/UNDERGROUND UTILITY NOTIFICATION

FOR THE PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174 OF 2013, THE CONTRACTOR SHALL CONTACT MISS DIG SYSTEM, INC. BY PHONE AT 811 OR 800-482-7171 OR VIA THE WEB AT EITHER ELOCATE.MISSDIG.ORG FOR SINGLE ADDRESS OR RTE.MISSDIG.ORG, A MINIMUM OF 3 BUSINESS DAYS PRIOR TO EXCAVATING, EXCLUDING WEEKENDS AND HOLIDAYS.

PARKING REQUIREMENTS

94-291 (J)(1)
FRONT YARD PARKING IN THE C-2, C-3, M-1, AND M-2 DISTRICTS IS PROHIBITED EXCEPT UPON A FINDING BY THE PLANNING COMMISSION THAT SUCH PARKING IS A CRITICAL COMPONENT OF THE OPERATION OF THE PARTICULAR USE AND THAT ADEQUATE PROVISIONS ARE INCLUDED FOR THE SCREENING AND LANDSCAPING OF SUCH PARKING AREA.

94-291 (J)(3)
A MINIMUM AREA OF 200 SQUARE FEET WITH A MINIMUM WIDTH OF TEN FEET SHALL BE PROVIDED FOR EACH VEHICLE PARKING SPACE. EACH SPACE SHALL BE DEFINITELY DESIGNATED AND RESERVED FOR PARKING PURPOSES EXCLUSIVE OF SPACE REQUIREMENTS FOR ADEQUATE INGRESS AND EGRESS. THE PLANNING COMMISSION MAY ALLOW UP TO 20 PERCENT OF THE SPACES TO BE A MINIMUM OF 180 SQ. FT. WITH A MINIMUM WIDTH OF NINE FEET IN THOSE CASES WHERE MORE THAN 40 SPACES ARE REQUIRED.

94-291 (J)(6)(A)
FOR RIGHT ANGLE PARKING PATTERNS 75 TO 90 DEGREES, THE MANEUVERING LANE WIDTH SHALL BE A MINIMUM OF 20 FEET FOR ONE-WAY TRAFFIC MOVEMENT OR A MINIMUM OF 24 FEET FOR TWO-WAY TRAFFIC MOVEMENT.

94-291 (J)(6)(B)
FOR PARKING PATTERNS 54 TO 74 DEGREES, THE MANEUVERING LANE WIDTH SHALL BE A MINIMUM OF 15 FEET.

94-291 (J)(6)(C)
FOR PARKING PATTERNS 30 TO 53 DEGREES, THE MANEUVERING LANE WIDTH SHALL BE A MINIMUM OF 12 FEET.

TABLE 100-5 PARKING SPACE REQUIREMENTS
PROFESSIONAL OFFICES, BANKS: 1 PER 200 SQ. FT. UFA
DRIVE-IN RESTAURANT: 6 PER 100 SQ. FT. UFA

UFA DEFINITION
USABLE FLOOR AREA (UFA) MEANS THE AREA USED FOR OR INTENDED TO BE USED FOR THE DISPLAY OR SALE OF MERCHANDISE OR SERVICES, OR FOR USE TO SERVE PATRONS, CLIENTS, CUSTOMERS, OR OCCUPANTS. SUCH FLOOR AREA WHICH IS USED OR INTENDED TO BE USED FOR HALLWAYS, STAIRWAYS, ELEVATOR SHAFTS, CLOSETS, COLUMNS, THICKNESS OF WALLS, UTILITY OR SANITARY FACILITIES SHALL BE EXCLUDED FROM THE COMPUTATION OF USABLE FLOOR AREA. FOR OFFICE, MERCHANDISING, OR SERVICE USES, THOSE AREAS USED FOR STORAGE OR PROCESSING MERCHANDISE OR WHERE CUSTOMERS, PATIENTS, CLIENTS AND THE GENERAL PUBLIC ARE DENIED ACCESS SHALL BE EXCLUDED FROM THE COMPUTATION OF USABLE FLOOR AREA. MEASUREMENT OF USABLE FLOOR AREA SHALL BE THE SUM OF THE HORIZONTAL AREAS OF EACH STORY OF A STRUCTURE MEASURED FROM THE INTERNAL FACES OF THE EXTERIOR WALLS.

LEGEND

⊙

STORM SEWER MANHOLE

⊙

SANITARY MANHOLE

⊙

FIRE HYDRANT

⊙

WATER VALVE

⊙

CURB STOP

●

FOUND PROPERTY CORNER

○

SET CAPPED IRON (#46677)

■

FOUND CONC. MONUMENT

⊕

TELEPHONE PEDESTAL

☆

LIGHT POLE

—

SIGN

—

UTILITY POLE

—

GUY WIRE

—

FLAG POLE

⊙

WELL

⊙

EXISTING DEC. TREE

⊙

EXISTING CON. TREE

⊙

EXISTING SHRUB OR BUSH

■

EXISTING ASPHALT

■

PROPOSED ASPHALT

■

EXISTING CONCRETE

■

PROPOSED CONCRETE

■

EXISTING GRAVEL

■

STONE GROUND COVER

— W —

WATER LINE

— SAN —

SANITARY SEWER LINE

— ST —

STORM SEWER LINE

— OHW —

OVERHEAD WIRE

— GAS —

GAS LINE

— P —

TELEPHONE LINE

PLAN ISSUE: PERMIT

REVISIONS

NO.

DATE

DESCRIPTION

NO.

DATE

DESCRIPTION

COVER SHEET

COMMERCIAL BANK
Section 5, T2N., R1W, City of Mason,
Ingham County, Michigan

LORENZ & S ENGINEERING, INC.

3229 W. Beal City Road
Weidman, Michigan 48893
Phone: (989) 644-5953
Fax: (989) 644-8659
plorenz@vnnel.net

JOB NO.

170083

SCALE:

NA

DRAWN BY:

TPL

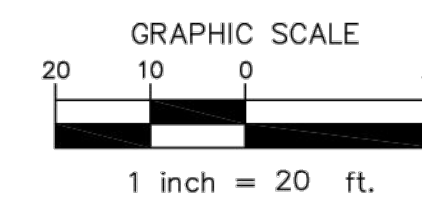
DATE:

02/05/18

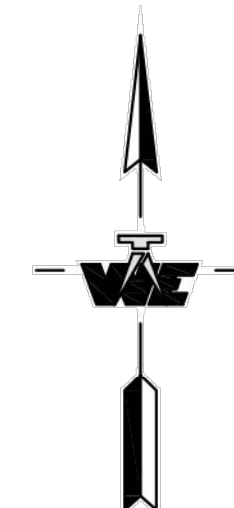
SHEET NO.

C1

#1 RAIL ROAD SPIKE NORTHWEST SIDE OF POWER POLE,
SOUTH SIDE OF CEDAR STREET, EAST OF EASTERLY
DRIVE (EXIT) TO BIGGBY COFFEE.
ELEVATION= 909.70 NAVD 88



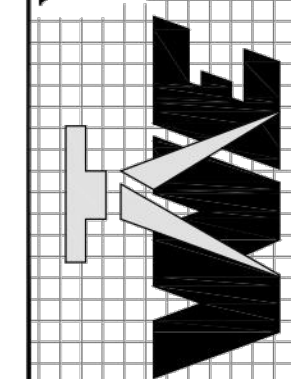
CENTER OF SECTION
SECTION 5
T2N, R1W



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REVISION	DATE	DRAWN	DESCRIPTION
1	01/17/2018	DER	ADDED FINISH FLOOR ELEVATION AND OUTLET INFORMATION

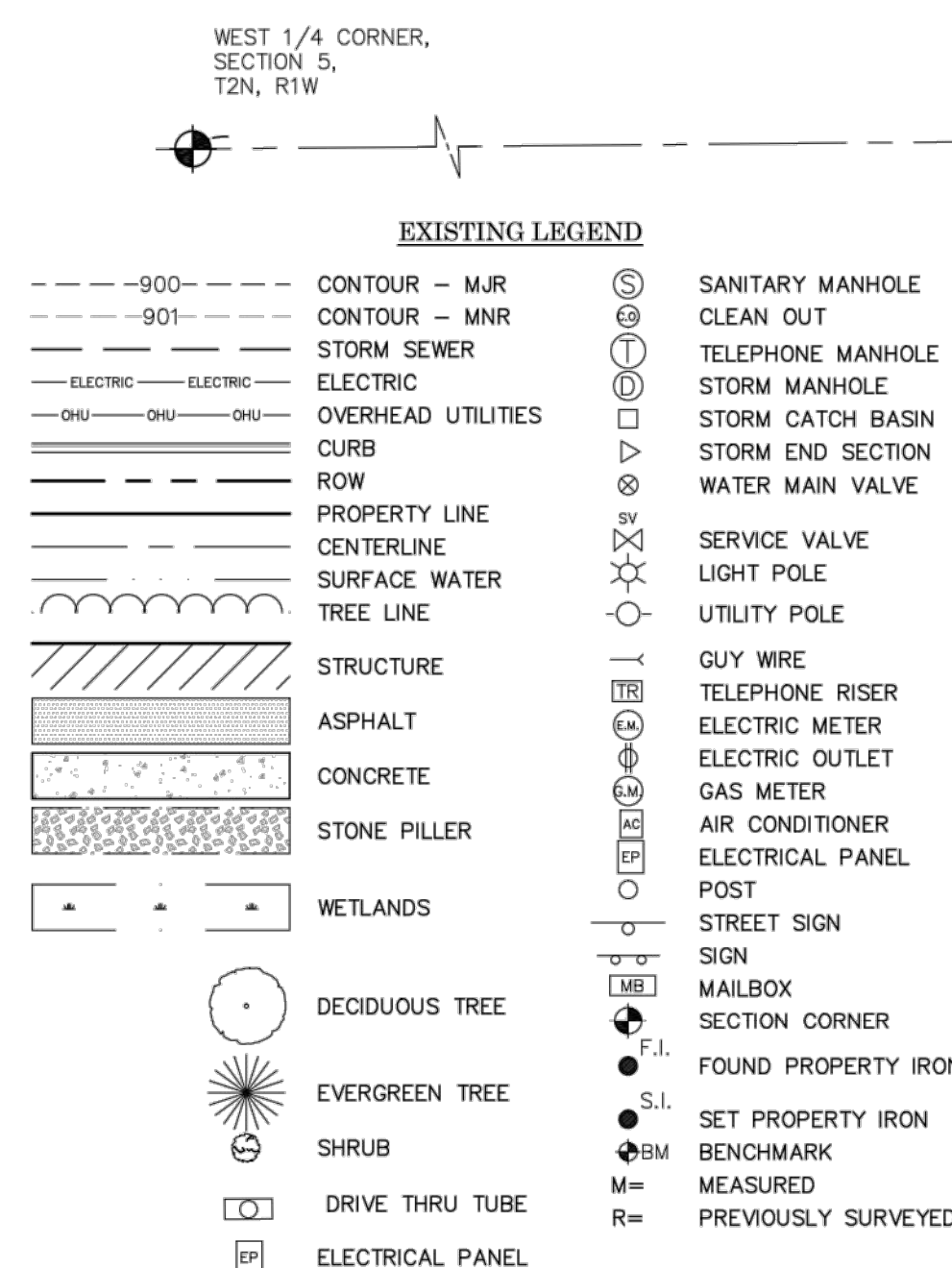
WOLVERINE
Engineers & Surveyors Inc.



MASON STATE BANK
CITY OF MASON
INGHAM COUNTY, MICHIGAN
TOPOGRAPHIC SURVEY

SHEET TITLE

PROJECT	APPROVED	SHEET TITLE
	JCW	
	CHECKED	
	BSH	
	DRAWN	
	DER	
	JOB NO.	
	17-0526	
	DATE	
	11/15/2017	
	SCALE	
	1" = 20'	
	SHEET NO.	
	C2	



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

!!! CAUTION !!!

THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS ~~MADE~~ ^{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. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITY OWNERS IN ACCORDANCE WITH MICHIGAN P.A. NO. 174 OF 2013.

 $XYXY \quad XY/XY/XY$

LEGAL DESCRIPTION PER TAX ID #33-19-10-05-302-013:

BEGINNING ON THE CENTERLINE OF CEDAR STREET AT A POINT 46.9 FEET NORTHWEST OF THE INTERSECTION OF SAID CENTERLINE AND THE EAST-WEST 1/4 LINE OF SECTION 5; THENCE SOUTHEASTERLY ON A CURVE TO THE RIGHT WITH A RADIUS OF 5729.6 FEET AND A CHORD BEARING OF SOUTH 14°52'21" EAST 197.7 FEET; THENCE SOUTH 51°18'39" WEST 292.7 FEET; THENCE NORTH 51°45'21" WEST 217.7 FEET; THENCE NORTH 38°14'39" EAST 298.9 FEET TO THE POINT OF BEGINNING ALSO COMMENCING AT THE WEST 1/4 CORNER OF SECTION 5; THENCE SOUTH 89°25'40" EAST ALONG THE EAST-WEST 1/4 LINE 108.0 FEET; THENCE SOUTH 46°22'46" EAST ALONG THE CENTERLINE OF CEDAR STREET 158.7 FEET; THENCE SOUTH 42°17'14" WEST 43 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF CEDAR STREET; THENCE NORTHEASTERLY 155.74 FEET ALONG A CURVE CONCAVE SOUTHWEST, A RADIUS OF 5686.6 FEET, CHORD BEARING OF NORTH 47°09'42" WEST 155.72 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 51°25'49" WEST 251.04 FEET; THENCE NORTH 34°03'14" EAST 263.59 FEET TO SAID WESTERLY RIGHT-OF-WAY LINE; THENCE SOUTHERLY ALONG SAID RIGHT-OF-WAY LINE TO THE POINT OF BEGINNING, BEING IN THE SOUTHWEST 1/4 OF SECTION 5, TOWNSHIP 2 NORTH, RANGE 1 WEST, CITY OF MASON, 1.87 ACRES MORE OR LESS.

PARKING

REQUIRED:

COMMERCIAL BANK - 1 PER 200 SQ. FT. OF USABLE FLOOR SPACE = $490 / 200 = 2.45$ OR 3 SPACES
BIGGBY COFFEE - 6 PER 100 SQ. FT. OF USABLE FLOOR SPACE = $(674 / 100) * 6 = 40.44$ OR 41 SPACE
TOTAL REQUIRED = 44 SPACES

PROPOSED

2 HANDICAPPED SPACES
33 REGULAR SPACES
35 TOTAL SPACES (CURRENT SPACES = 22 TOTAL)

(REQUESTING 35 SPACES BASED ON THE CHARACTERISTICS OF THE USE AND SEATING CAPACITY OF THE COFFEE SHOP. THE COFFEE SHOP REQUIRES LESS PARKING THAN REQUIRED BY THE ZONING ORDINANCE FOR A DRIVE-IN RESTAURANT BASED ON OBSERVED NEED FROM PAST USE.

SITE LIGHTING NOTES

1. NO LIGHTING SHALL IN ANY WAY IMPAIR THE SAFE MOVEMENT OF TRAFFIC ON ANY ROAD.
2. LIGHTING SHALL BE DESIGNED AND CONSTRUCTED TO ENSURE THAT DIRECT AND REFLECTED LIGHT IS CONFINED TO THE LOT OR PARCEL UPON WHICH THE LIGHT SOURCE IS LOCATED.
3. EXTERIOR LIGHTING SHALL BE SO INSTALLED THAT THE SURFACE OF THE SOURCE OF LIGHT SHALL BE HOODED OR LOUVERED TO THE GREATEST EXTENT PRACTICAL SO THAT:
 - LIGHT SOURCES SHALL NOT BE VISIBLE FROM BEYOND THE LOT LINES AND SHALL BE SO ARRANGED TO REFLECT LIGHT AWAY FROM ADJACENT PROPERTIES.
 - NO MORE THAN ONE FOOT CANDLE POWER OF LIGHT SHALL CROSS A LOT LINE FIVE FEET ABOVE THE GROUND ON A RESIDENTIALLY USED LOT.
 - LIGHTING IS DIRECTED DOWNWARD AS MUCH AS IS POSSIBLE AND APPROPRIATE FOR THE APPLICATION.

LANDSCAPING NOTES

- 5 EACH CANOPY TREES ARE PROPOSED TO REMAIN
- 6 EACH CLEVELAND PEAR (PYRUS CALLERYANA 'CLEVELAND SELECT') TREES ARE PROPOSED TO BE PLACED (SPRING FLOWERING TREES)
- TOTAL 11 TREES

REQUIRED PER SEC. 94-241 (C)(8)
IN ADDITION TO ANY REQUIRED BUFFER AREA OR PARKING LOT LANDSCAPING, AT LEAST TEN PERCENT OF THE SITE AREA SHALL BE LANDSCAPED WITH GRASSES AND OTHER LIVE GROUNDCOVERS, PLANTING BEDS, AND TREES, OR COMBINATIONS THEREOF, AND THE SITE SHALL INCLUDE A MINIMUM OF ONE TREE PER 10,000 SQUARE FEET OF DISTURBED LAND, OR FRACTION THEREOF.

PROPOSED: GRASS AND TREE AREA = 24,103 SQ. FT. OR 38.9%
DISTURBED LAND = 37,830 SQ. FT. (4 TREES REQUIRED)

REQUIRED PER SEC. 94-241 (I)(1)
OFF-STREET PARKING AREAS CONTAINING SIX OR MORE PARKING SPACES SHALL BE PROVIDED WITH LANDSCAPING IN ACCORDANCE WITH THE FOLLOWING:
SIX THROUGH 50 SPACES: ONE CANOPY TREE AND 50 SQ. FT. OF LANDSCAPED AREA PER SIX SPACES. (AT LEAST ONE-HALF OF THE REQUIRED TREES SHALL BE INSTALLED IN THE INTERIOR OF THE PARKING AREA. THE INTERIOR SHALL BE CONSIDERED AS ANY POINT TEN FEET OR MORE FROM THE OUTSIDE BOUNDARY OF THE PARKING AREA)

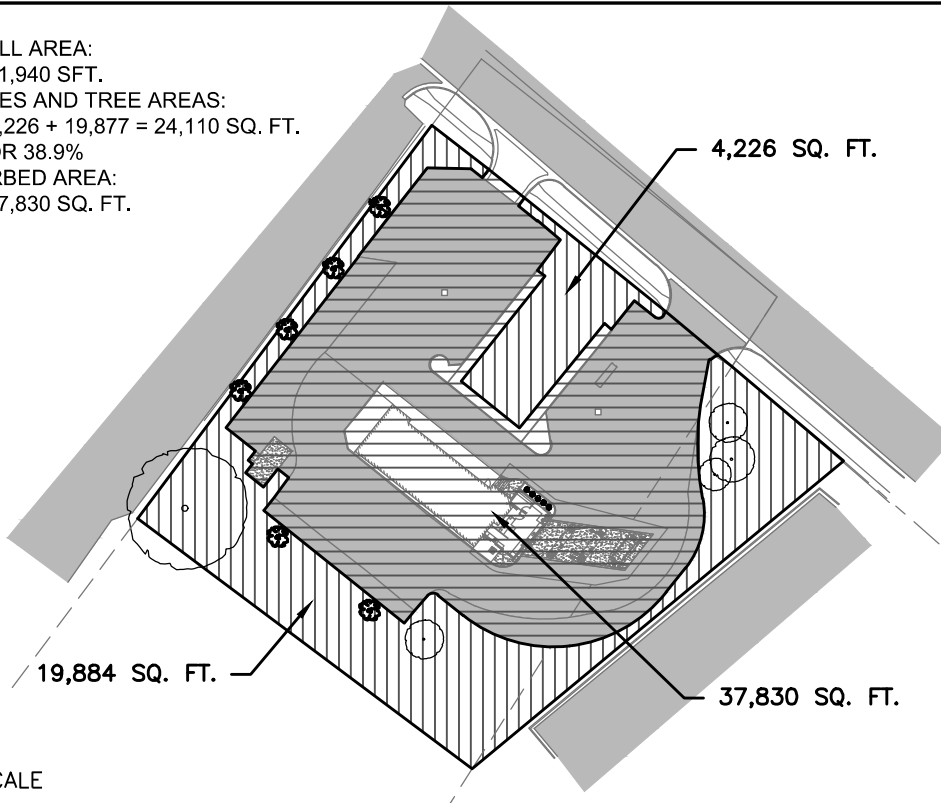
PROPOSED: 35 SPACES / 6 = 5.83 OR 6 TREES REQUIRED & PROPOSED

LOT COVERAGE BY BUILDINGS

LOT AREA 62,243 SQ. FT.
BUILDING AREA = 2,994 SQ. FT.
LOT COVERAGE = 4.8%

AREAS FOR LANDSCAPING CALCULATIONS

OVERALL AREA:
61,940 SFT.
GRASSES AND TREE AREAS:
 $4,226 + 19,877 = 24,103$ SQ. FT.
OR 38.9%
DISTURBED AREA:
37,830 SQ. FT.



PLAN ISSUE:

PERMIT

REVISIONS

DESCRIPTION

SITE PLAN

COMMERCIAL BANK
Section 5, T2N., R1W, City of Mason,
Ingham County, Michigan

SHEET TITLE:

PROJECT NAME:

LORENZ & S
URVEYING & ENGINEERING, INC.
3229 W. Beal City Road
Weidman, Michigan 48893
Phone: (989) 644-5953
Fax: (989) 644-8659
plorenz@vnnel.net

JOB NO. 170083

SCALE: 1"=20'

DRAWN BY: TPL

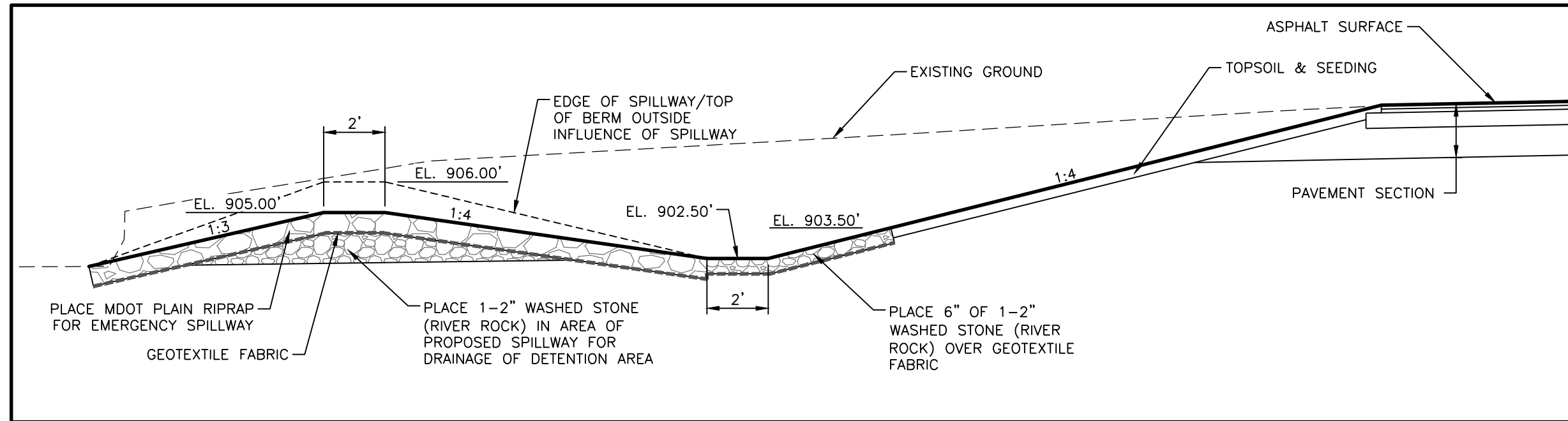
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SHEET NO.

C4

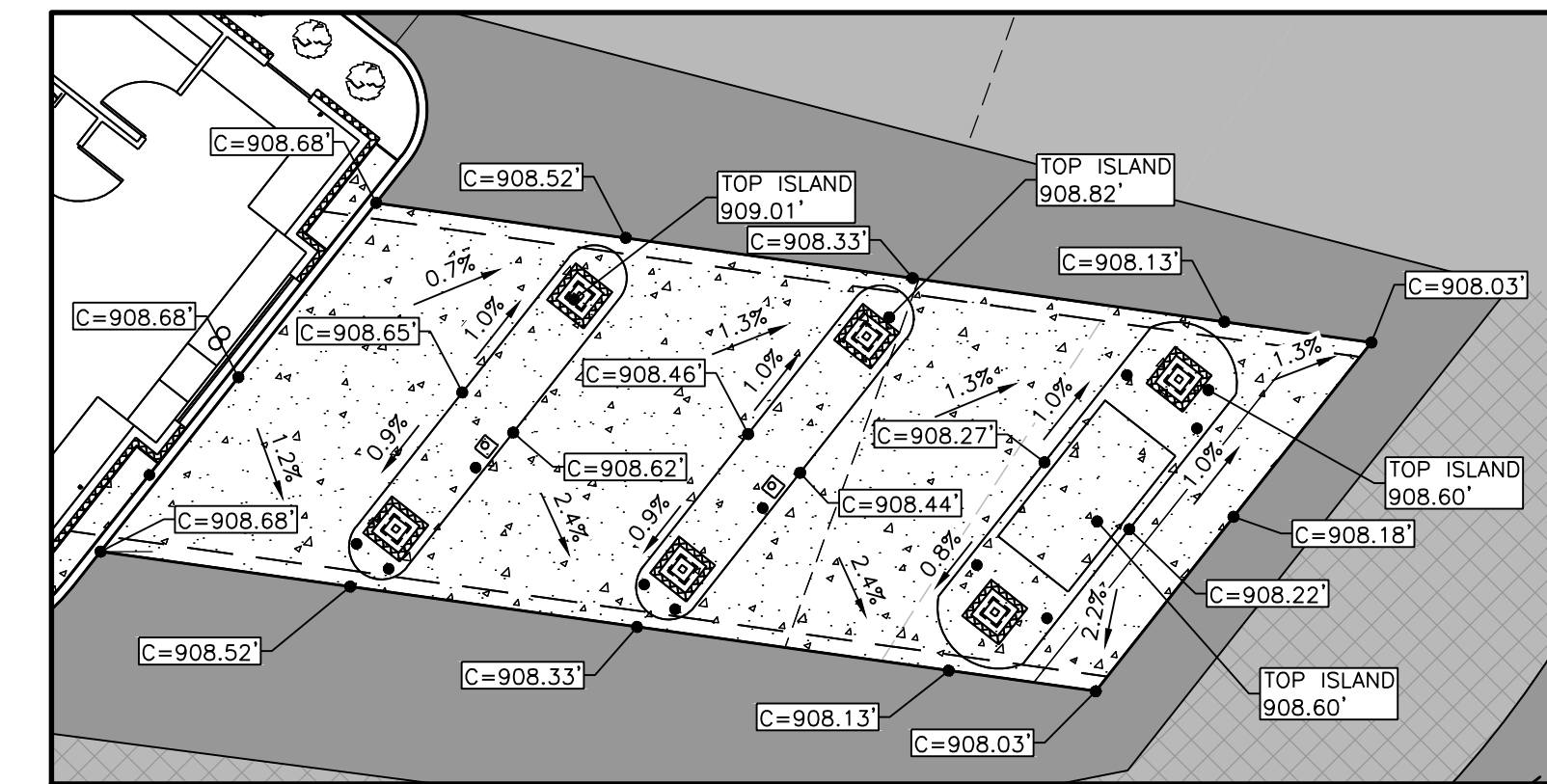
SECTION A-A

SCALE: 1"=4'



DRIVE THRU DETAIL

SCALE: 1"=10'



NOTE: PROPOSED DESIGN GRADES FOR DRIVE THRU MAY REQUIRE FIELD ADJUSTMENTS TO MAINTAIN POSITIVE DRAINAGE WITH RESPECT TO EXISTING ASPHALT TO BE LEFT IN PLACE. ALSO, DEMOLITION AREAS/LIMITS OF THE EXISTING ASPHALT MAY REQUIRE ADJUSTMENT TO MAINTAIN PROPER DRAINAGE

SPOT ELEVATION LEGEND

- A = PROPOSED TOP OF ASPHALT ELEVATION
- B = PROPOSED BERM ELEVATION
- C = PROPOSED TOP OF CONCRETE ELEVATION
- D = PROPOSED DITCH ELEVATION
- E = EXISTING ELEVATION (FIELD VERIFY)
- R = PROPOSED RIM FLOWLINE ELEVATION
- S = PROPOSED DRAINAGE SWALE ELEVATION

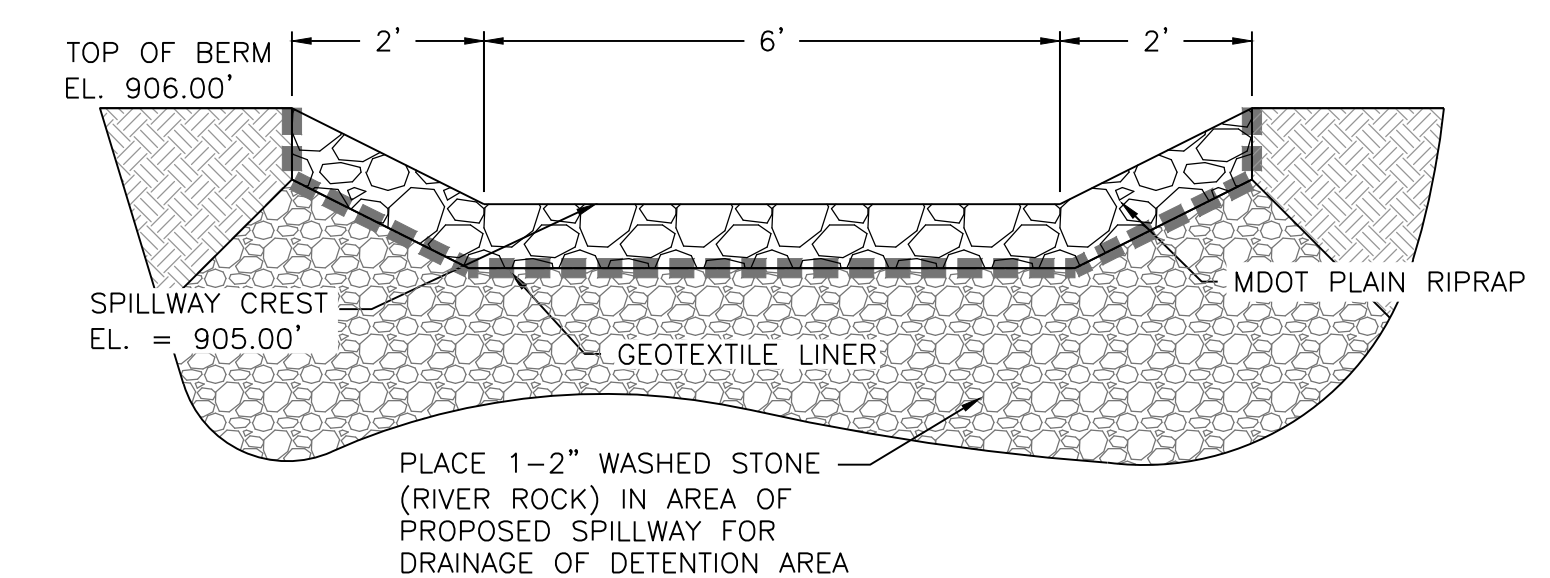
DISTURBANCE AREA

PROPOSED AREA OF EARTH DISTURBANCE IS 0.42 ACRES

EMERGENCY SPILLWAY CROSS-SECTION

NO SCALE

CROSS-SECTION AT CREST OF SPILLWAY



ELEV	AREA (sq. ft.)	DEPT H (ft)	AVG END INC. VOL. (cu. ft.)	AVG END TOTAL VOL. (cu. ft.)
902.5	20.00	N/A	N/A	0.00
902.6	53.33	0.1	3.67	3.67
902.7	95.12	0.1	7.42	11.09
902.8	145.39	0.1	12.03	23.11
902.9	204.13	0.1	17.48	40.59
903.0	271.34	0.1	23.77	64.36
903.1	347.02	0.1	30.92	95.28
903.2	431.20	0.1	38.91	134.19
903.3	523.90	0.1	47.76	181.95
903.4	635.22	0.1	57.96	239.91
903.5	777.20	0.1	70.62	310.53
903.5	777.20	0.0	0.00	310.53
903.6	935.41	0.1	85.63	396.16
903.7	1,110.33	0.1	102.29	498.44
903.8	1,301.75	0.1	120.60	619.05
903.9	1,481.19	0.1	139.15	758.19
904.0	1,652.97	0.1	156.71	914.90
904.1	1,828.66	0.1	174.08	1088.98
904.2	2,008.28	0.1	191.85	1280.83
904.3	2,192.10	0.1	210.02	1490.85
904.4	2,379.82	0.1	228.60	1719.45
904.5	2,570.12	0.1	247.50	1966.94
904.6	2,762.10	0.1	266.61	2233.55
904.7	2,956.07	0.1	285.91	2519.46
904.8	3,152.02	0.1	305.40	2824.87
904.9	3,350.10	0.1	325.11	3149.97
905.0	3,550.84	0.1	345.05	3495.02

PLAN ISSUE: PERMIT

REVISIONS

NO. DATE DESCRIPTION

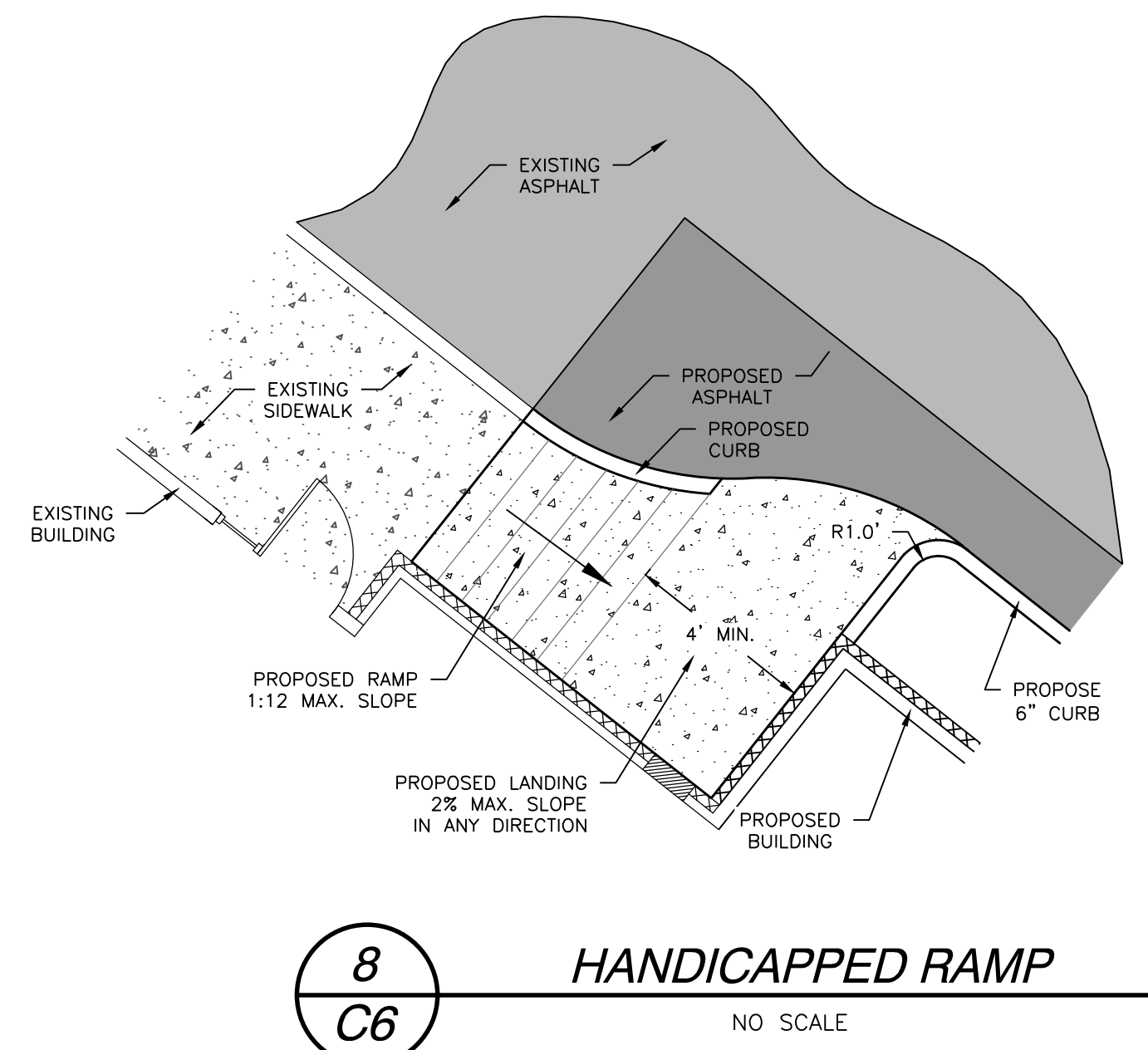
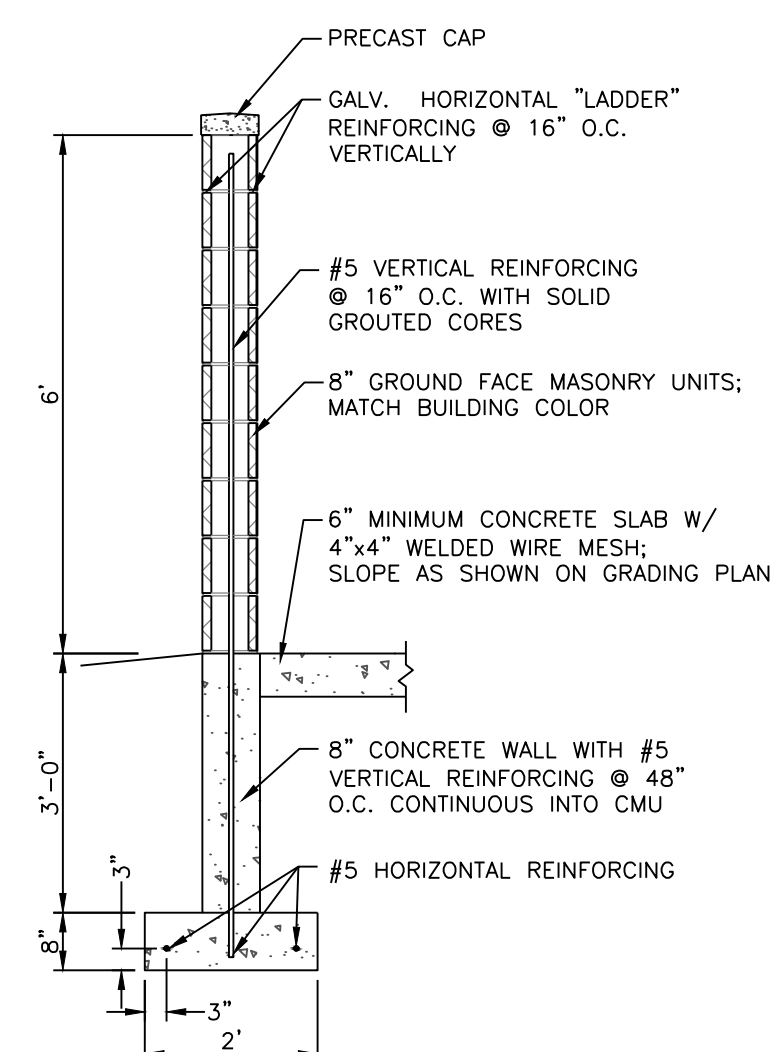
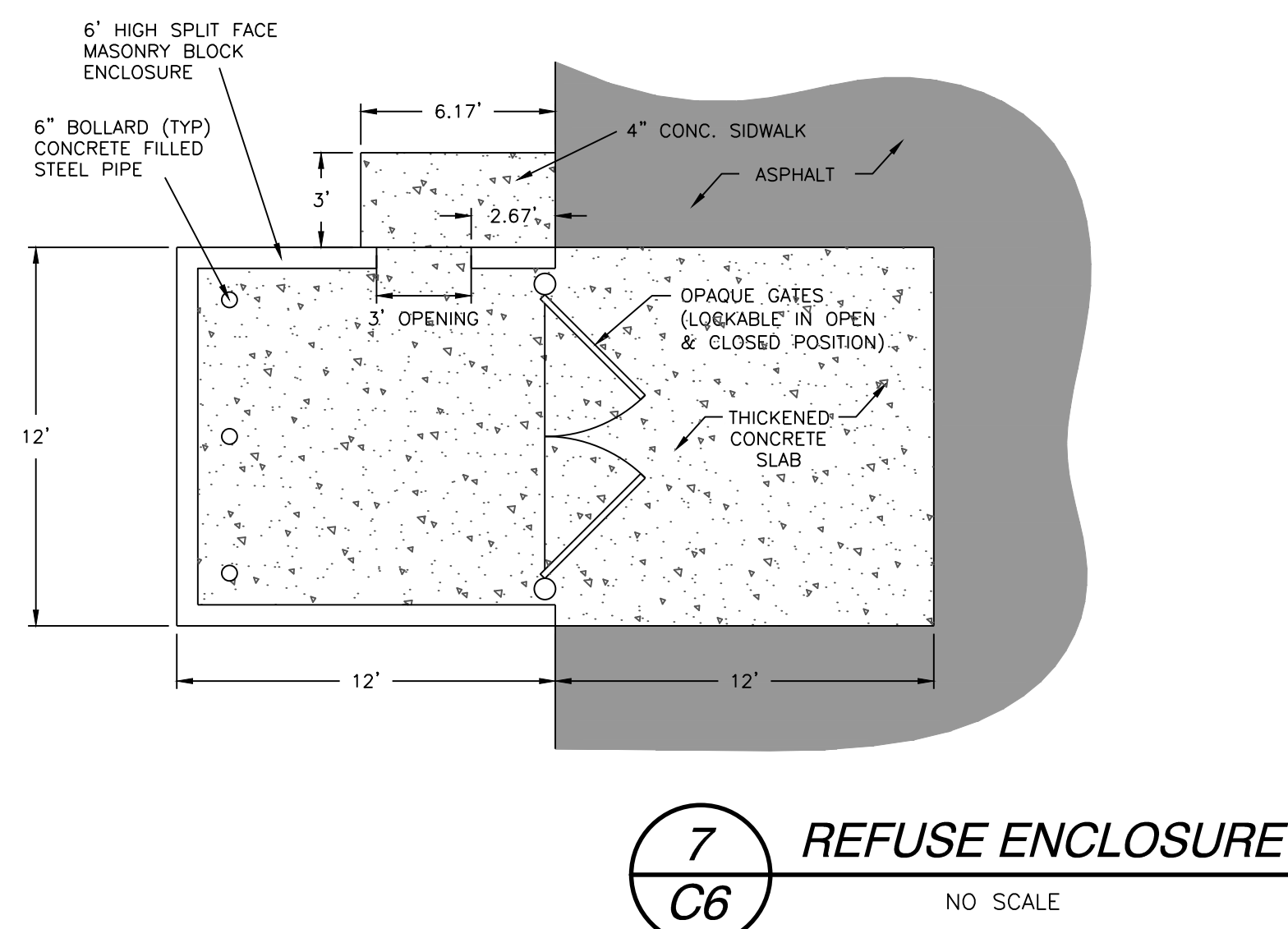
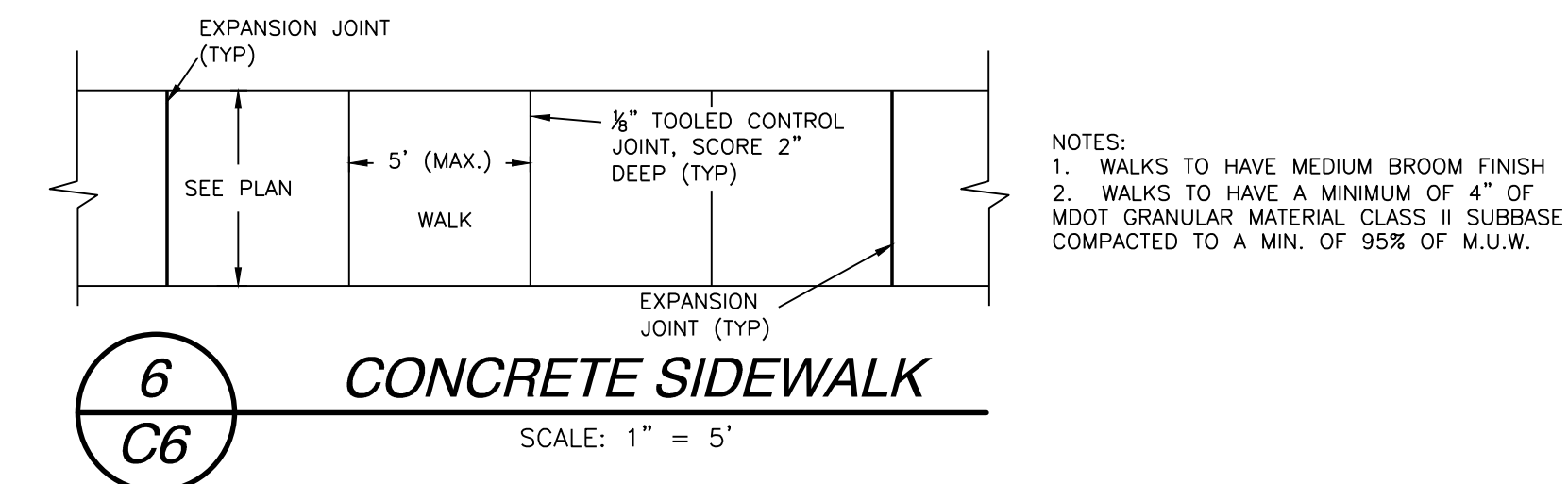
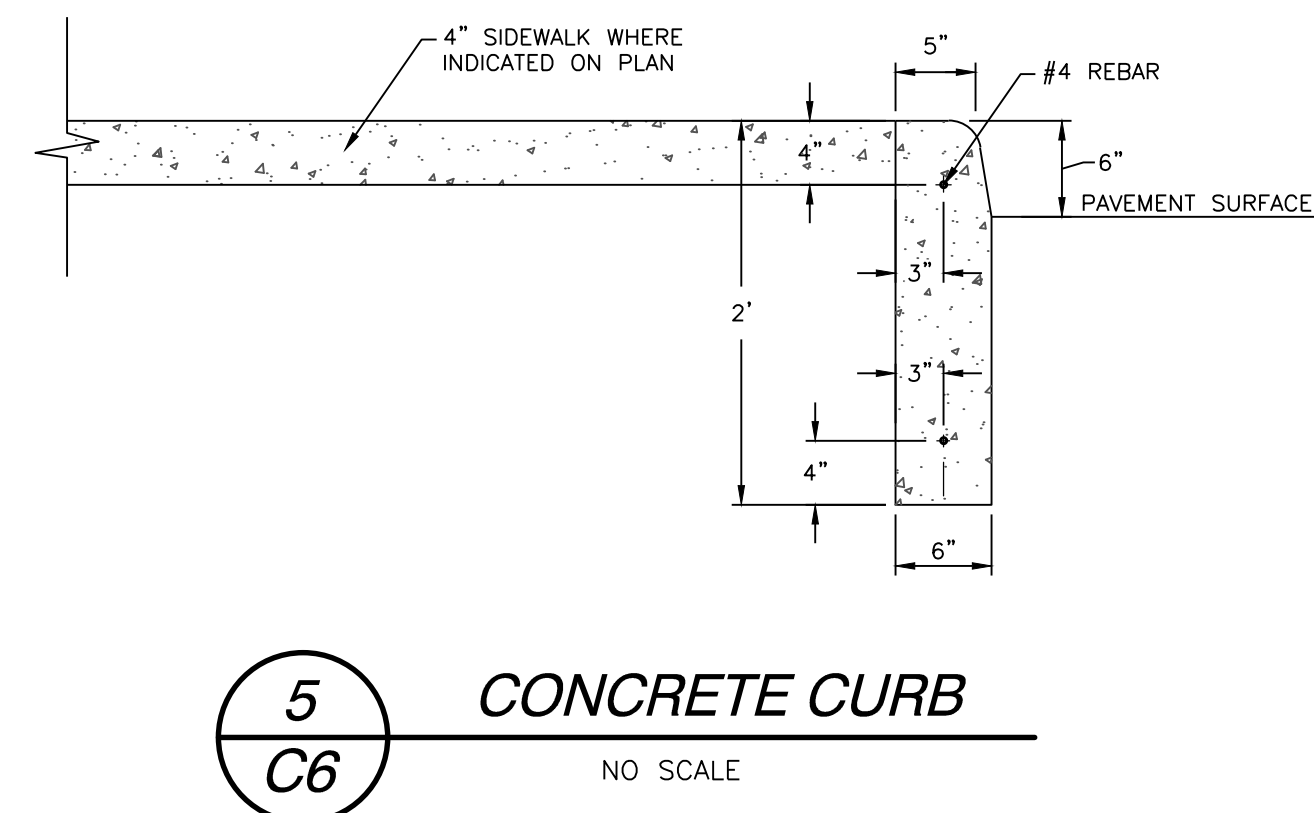
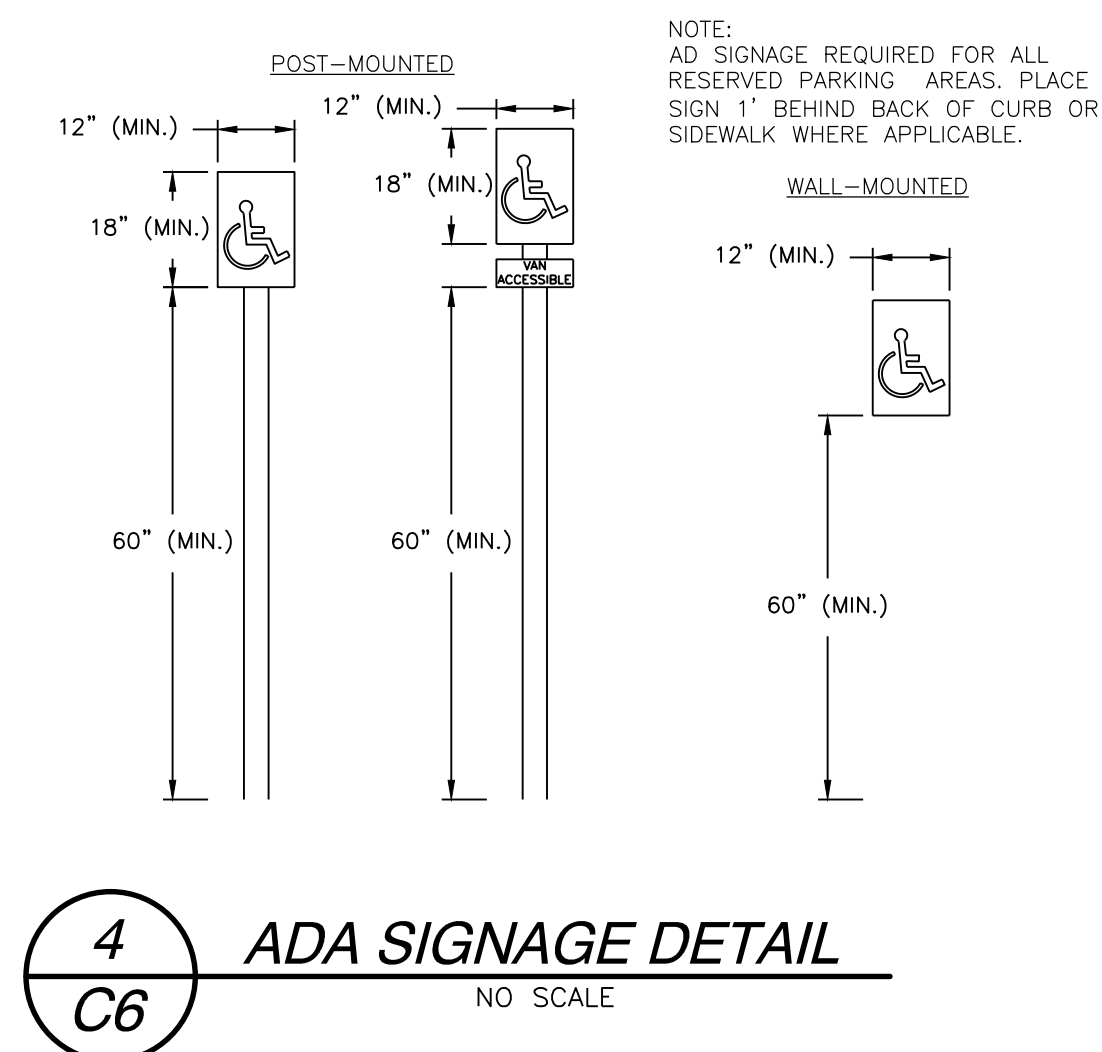
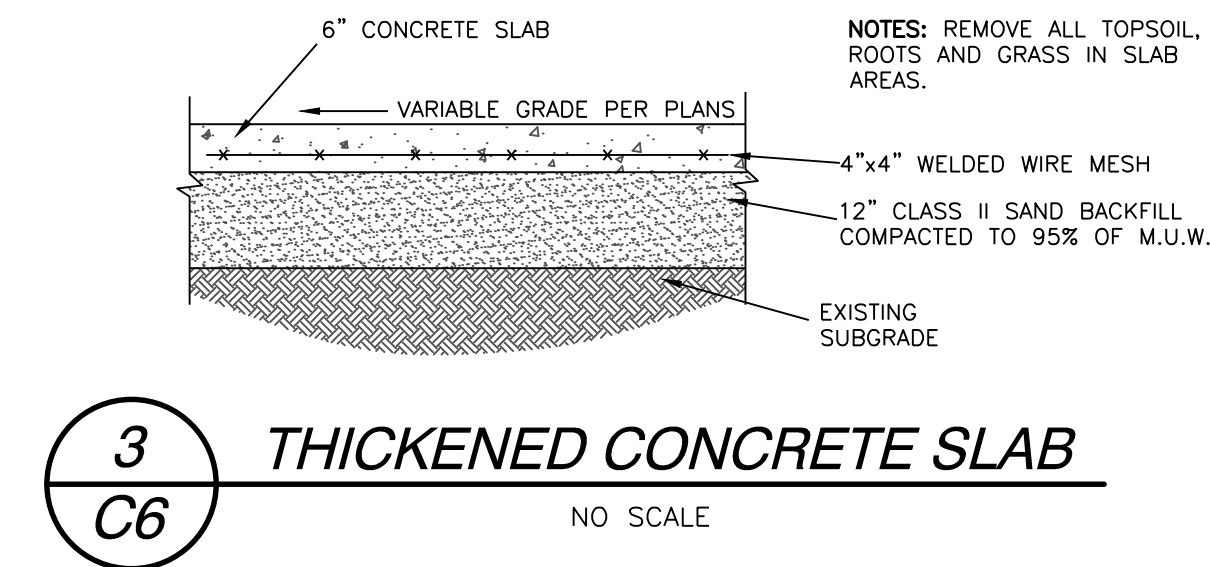
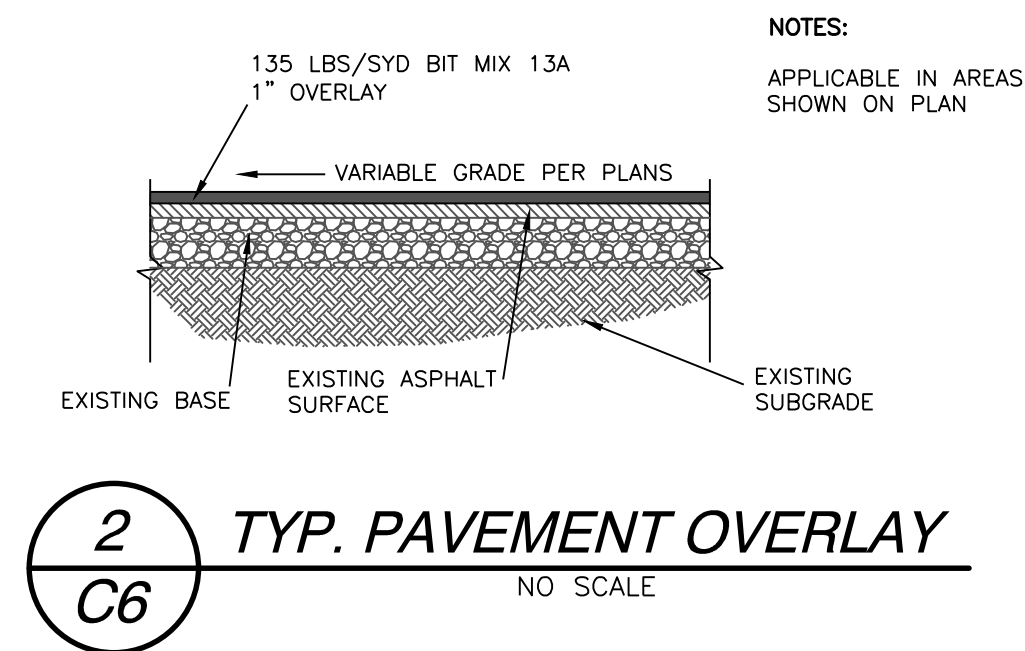
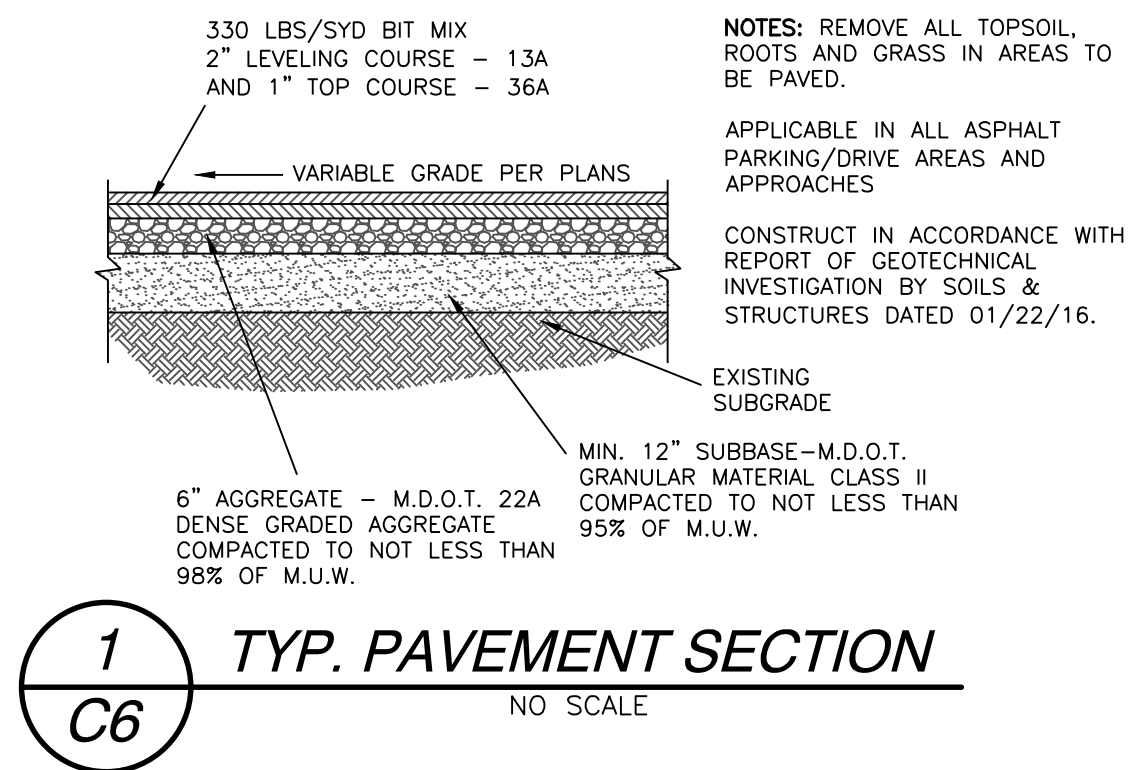
SHEET TITLE: GRADING & STORM WATER PLAN

PROJECT NAME: COMMERCIAL BANK
Section 5, T2N., R1W, City of Mason,
Ingham County, Michigan

SHEET NAME:

L'ORENZ SURVEYING & ENGINEERING, INC.
3229 W. Beal City Road
Weidman, Michigan 48893
Phone: (989) 644-5953
Fax: (989) 644-8659
plorenz@vnnel.net

JOB NO. 170083
SCALE: 1"=20'
DRAWN BY: TPL
DATE: 02/05/18
SHEET NO. **G5**

[illegible]

DETAILS

COMMERCIAL BANK
Section 5, T2N., R1W, City of Mason,
Ingham County, Michigan

LORENZ
**SURVEYING &
ENGINEERING, INC.**

Phone: (989) 644-5953
Fax: (989) 644-8659
plorenz@winnel.net

2229 W. Beal City Road
Weidman, Michigan 48893

JOB NO.	170083
SCALE:	SHOWN
DRAWN BY:	TPL
DATE:	02/05/18
SHEET NO.	C6

Typical Building Notes:

General Notes:

- 1. All work shall be performed in compliance with applicable federal, state and local codes and regulations.
- 2. Verify the sizes, locations, elevations and details of existing conditions that affect the work. Notify the owner and/or the engineer of any discrepancies in dimensions, sizes, locations and conditions before proceeding with the work.
- 3. Provide shoring, bracing, underpinning and any other means required to protect the safety, integrity and stability of all new and existing construction.
- 4. The contractor shall familiarize himself with the existing conditions at the site, including utilities, services, etc., and shall be responsible for any damage to the property, new and existing construction, and for unauthorized disruptions to the Owner's operation, utilities and service.
- 5. The contractor shall call "Miss Dig" at 1-800-482-7171 a minimum of 72 hours prior to any excavation or digging.

Foundations:

- 1) Footings are designed to bear on natural materials with an allowable bearing capacity of 2500 psf (to be field verified by qualified testing agency). If material of the capacity is not found at the elevations indicated, footings shall be lowered or enlarged at the direction of the engineer. All fill under slabs shall be clean granular soil compacted to a minimum of 95% modified proctor.

Concrete:

- 1) f'c (28 day compressive strength) to be minimum of 3000 psi for footings, piers and foundation walls.
- 2) f'c to be a minimum of 4000 psi for slabs on grade.
- 3) Reinforcing bars shall conform to ASTM A615, Grade 60.
- 4) Welded wire fabric shall conform to ASTM A185 with minimum laps of 8".
- 5) Reinforcing steel splices shall be lap splices with 24" lap lengths.
- 6) Provide 6x6-W1.4 x W1.4 welded wire fabric for all slabs on grade unless noted otherwise. Place fabric in top third of slab.
- 7) Control joints to be installed by saw cutting. Depth of cut to be minimum ¼ the slab depth.
- 8) Cure slab with curing compound or keep wet for 7 days.
- 9) Provide 5/8" anchor bolts in foundation walls at a maximum of 4'-0" o/c, minimum two per plate and within 12" of any corner. Anchor bolts shall have a minimum embedment length of 8".
- 10) Anchor rods shall conform to ASTM F1554 grade 55.

Lumber:

- 1) All framing lumber (including rafters, studs, joist, etc.) shall be #2 spruce-pine-fir or better, uno.
- 2) All lumber in contact with concrete or masonry shall be pressure-treated.
- 3) Trusses shall be designed and manufactured to the necessary profiles and to design loads listed above and the governing code, whichever is more severe. Shop drawings shall be submitted with the seal of a registered professional engineer in the State of Michigan.
- 4) LVL's shall have a minimum bending stress of 2600 psi.

Post Frame Materials:

- 1) A non-conductive, water resistant barrier (such as ice and water shield or equal) shall be applied between steel panels or components and ACQ/CA lumber. This shield shall completely insulate the steel from the wood.
- 2) Any fasteners that penetrate ACQ/CA lumber shall be stainless steel, type 304.
- 3) Treated wood requirements:
 - a) Use 0.60 pcf CCA-treatment on all laminated columns and on all solid-sawn posts 5x5 and larger.
 - b) Use Category 4B or 4C ACQ or CA on all skirtboards.
 - c) Use Category 4B or 4C ACQ or CA on all solid-sawn posts with any side less than 5".
- 5) Nails shall conform to ASTM F1667, "Post-Frame Nails".



3 WORKING DAYS |
BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171 |
FOR THE LOCATION OF
UNDERGROUND FACILITIES

REVISIONS		
TAG:	DATE:	CHANGE:

SCALE:
NO SCALE

01

COMMERCIAL BANK

JBS JOB NUMBER:	GENERAL NOTES
DRAWING NAME:	DJC
REVIEWED BY:	
FIELD SUPERVISOR:	
DATE:	10/25/2017

ENGINEER'S SEAL:

COMMERCIAL BANK

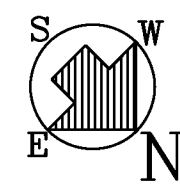
661 N. CEDAR ST.

MASON MI, 48854



COMMERCIAL/INDUSTRIAL
CONSTRUCTION

JBS Contracting Inc.
1680 COVER PARKWAY
MT. PLEASANT, MI 48858
PH: (989) 772-0770
FAX (989) 772-9272

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D1

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MASON MI. 48854

COMMERCIAL/INDUSTRIAL CONSTRUCTION

JBS Contracting Inc.
1680 COVER PARKWAY
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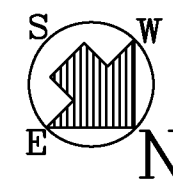
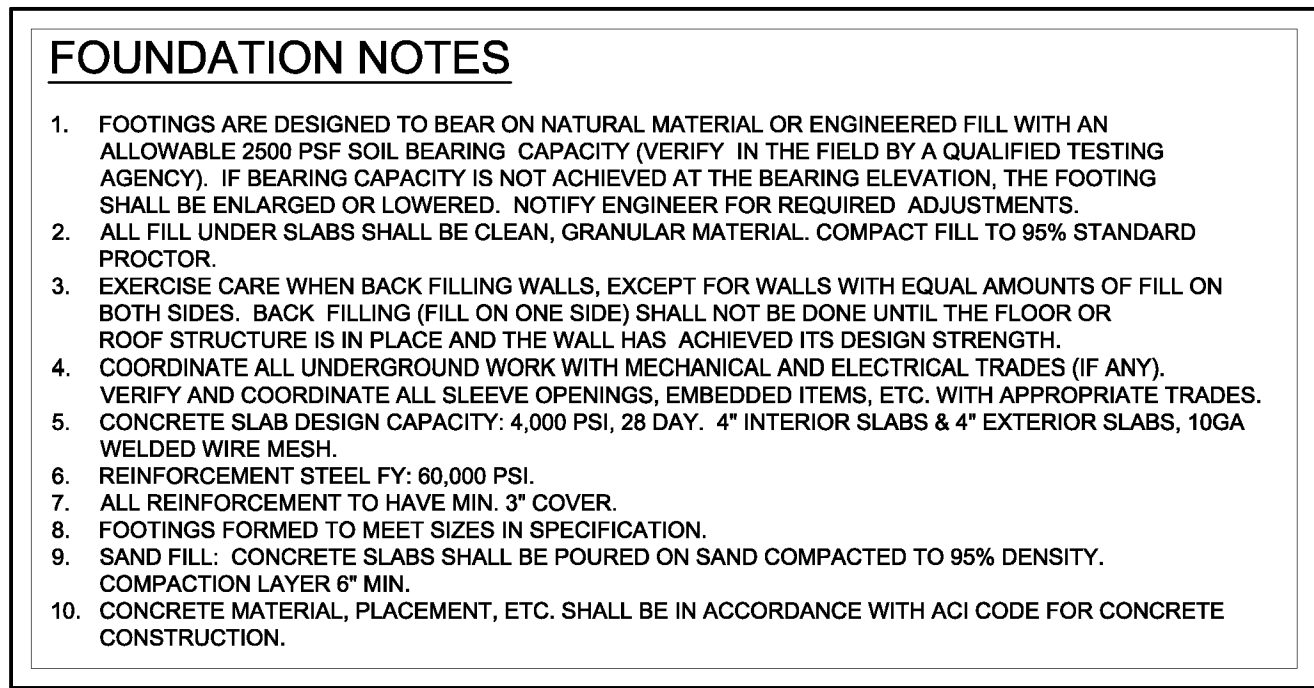
DRAWING NAME: DEMO PLAN

DRAWN BY: DJC

REVIEWED BY:

FIELD SUPERVISOR:

DATE: 1/24/2018



FOUNDATION PLAN

SCALE 1/8" = 1'-0"

DRAWING NAME: FOUNDATION PLAN
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 1/24/2018

COMMERCIAL BANK
661 N. CEDAR ST.
MASON MI. 48854

CONSTRUCTION

JBS Contracting Inc.
1680 GOVER PARKWAY
MT. PLEASANT, MI 48858
PH. (988) 773-0770
FAX (988) 772-9272

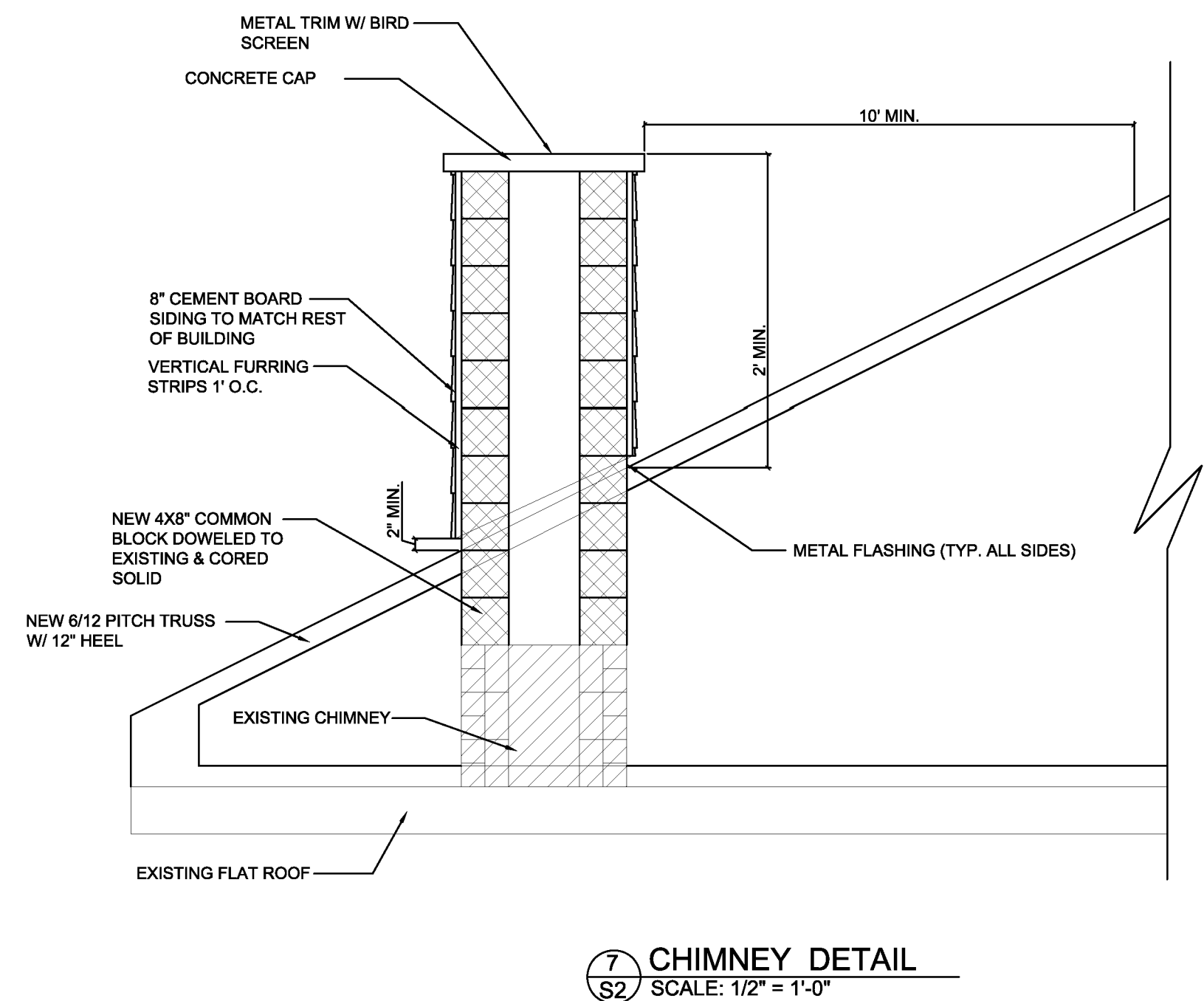
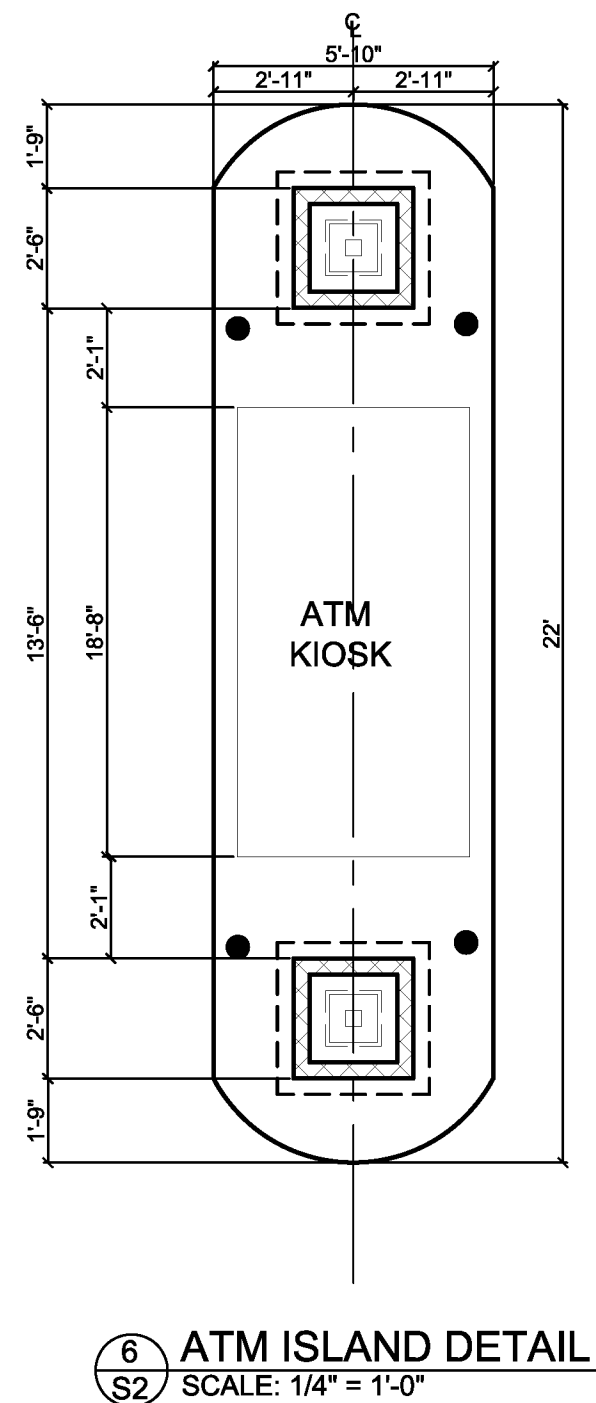
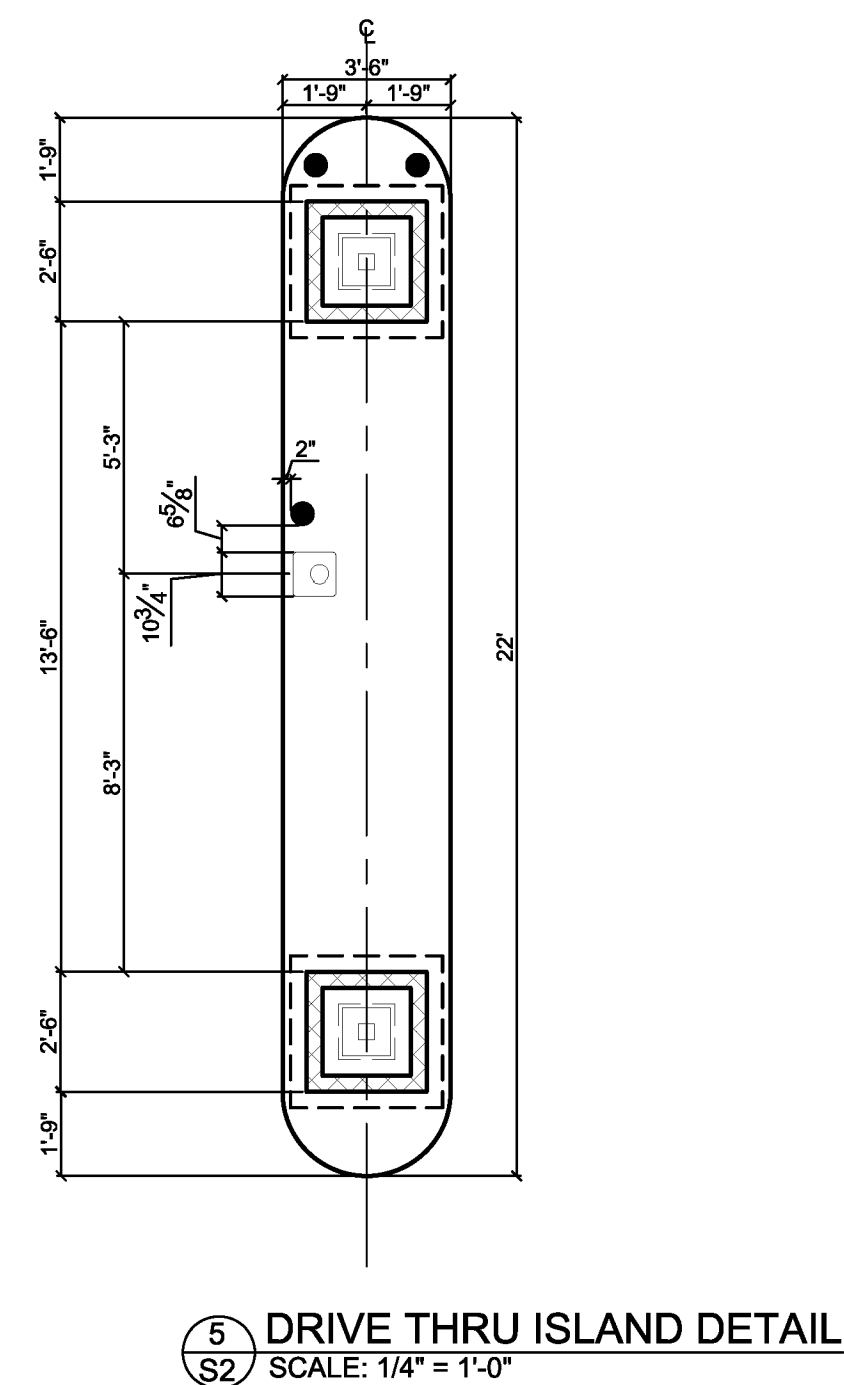
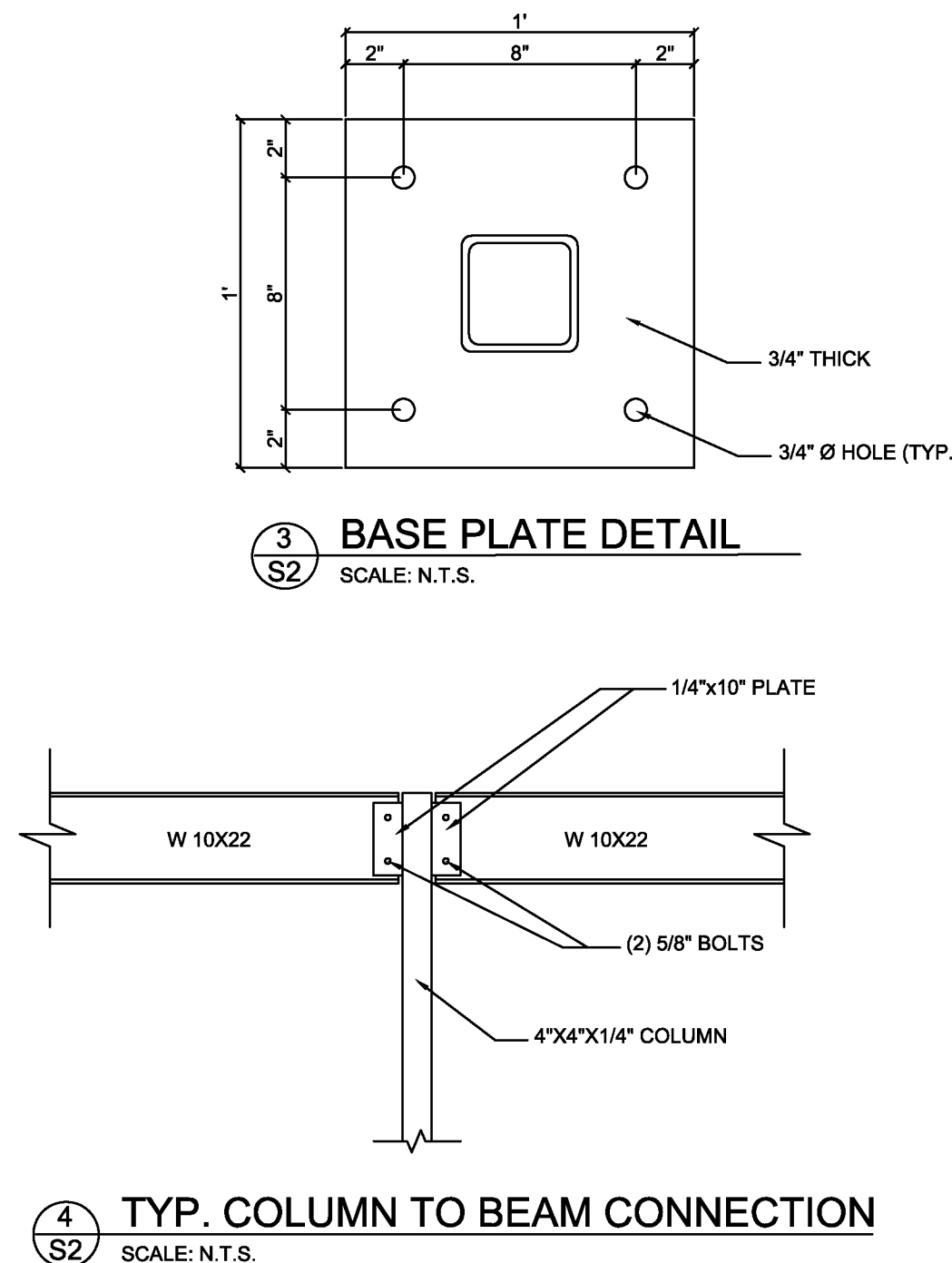
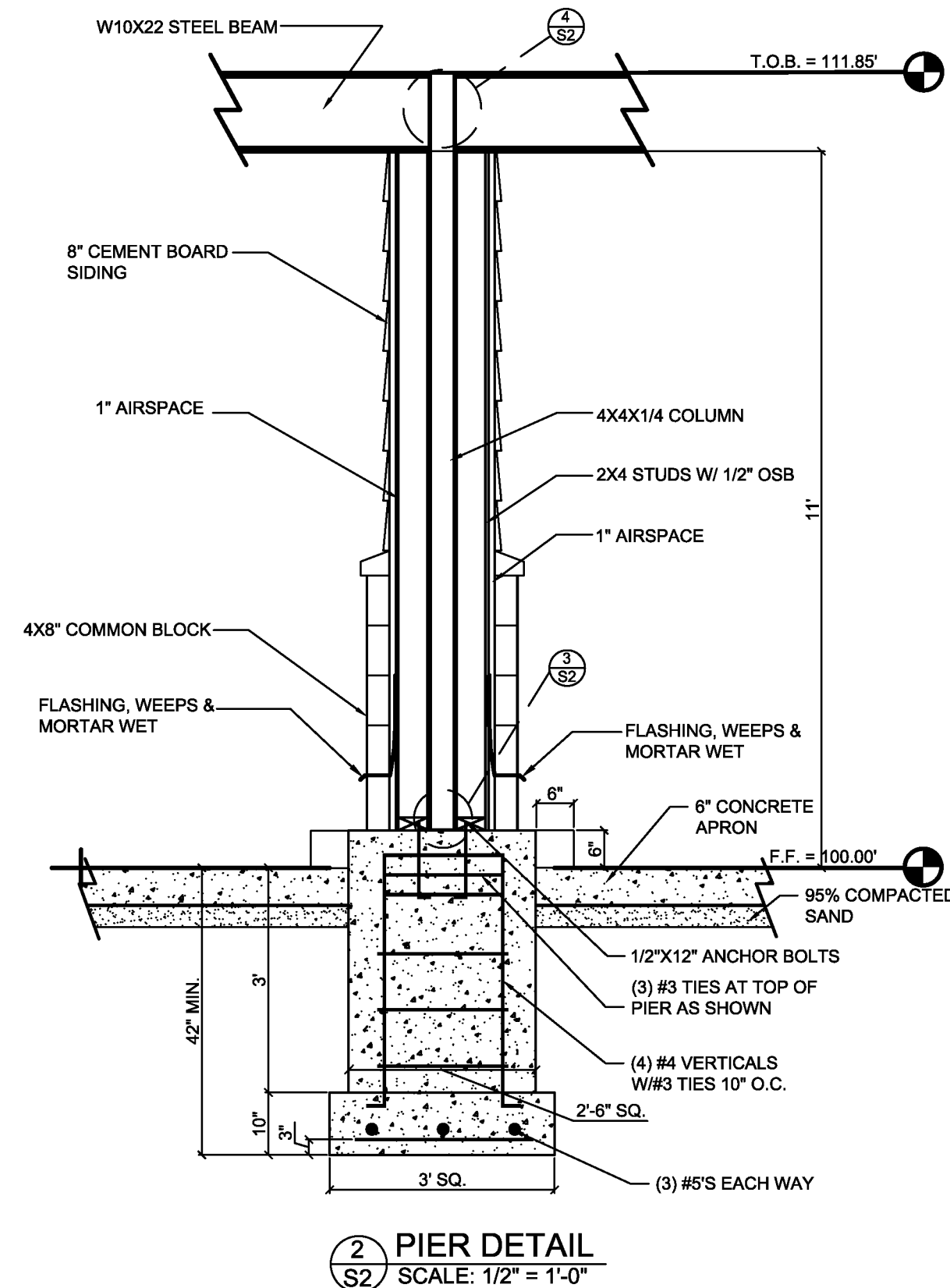
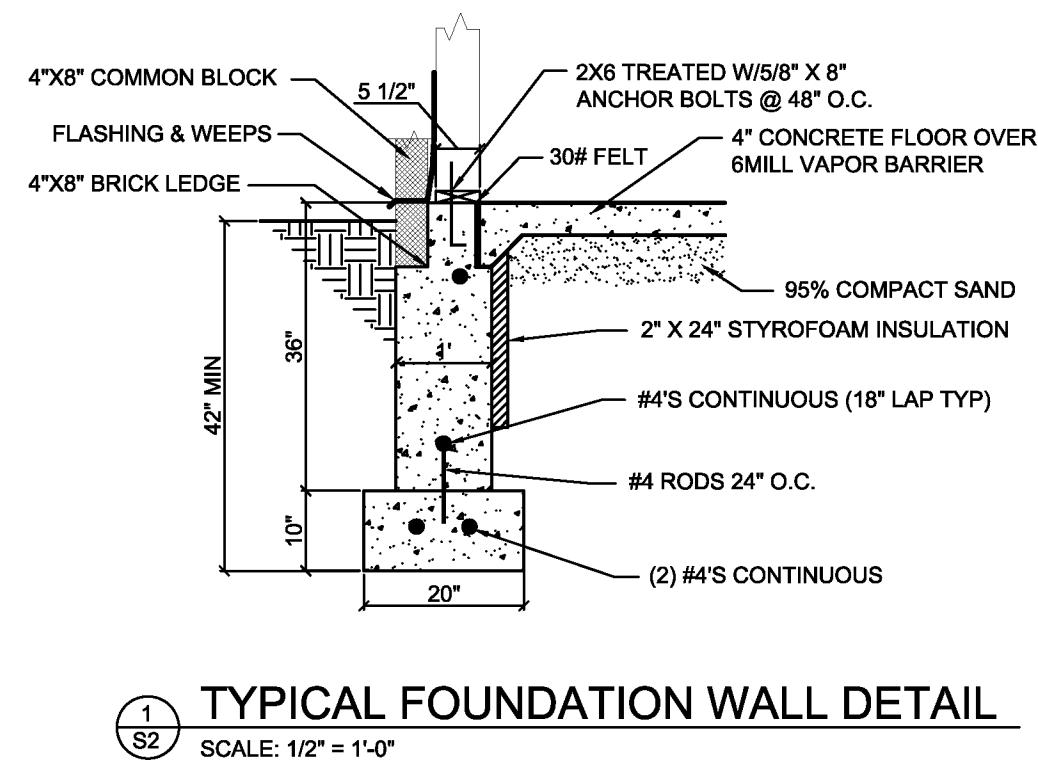
3 WORKING DAYS |
BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171 |
FOR THE LOCATION OF
UNDERGROUND FACILITIES

[illegible]

SCALE:
1/8" = 1'

S1

COMMERCIAL BANK



REVISIONS		
TAG:	DATE:	CHANGE:

SCALE:
VARIES

S2

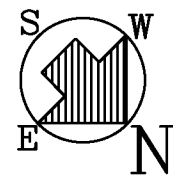
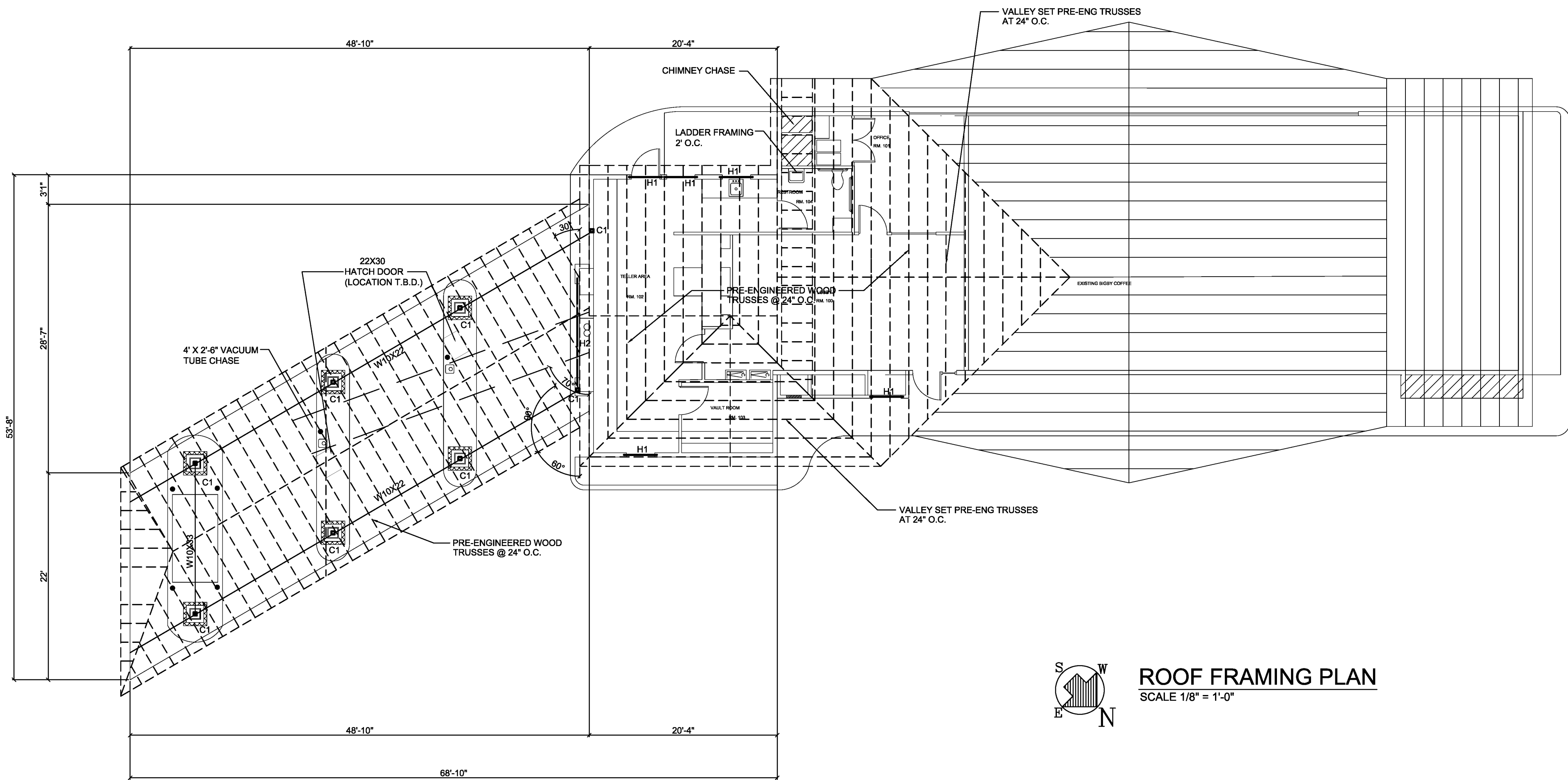
COMMERCIAL BANK

COMMERCIAL BANK
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MASON MI. 48854

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1680 COVER PARKWAY
MT. PLEASANT, MI 48858
PH: (989) 772-0770
FAX (989) 772-9272

COMMERCIAL/INDUSTRIAL
CONSTRUCTION

JBS JOB NUMBER:	DRAWING NAME: FOUNDATION PLAN
DRAWN BY: DJC	REVIEWED BY:
FIELD SUPERVISOR:	DATE: 1/24/2018
ENGINEER'S SEAL:	

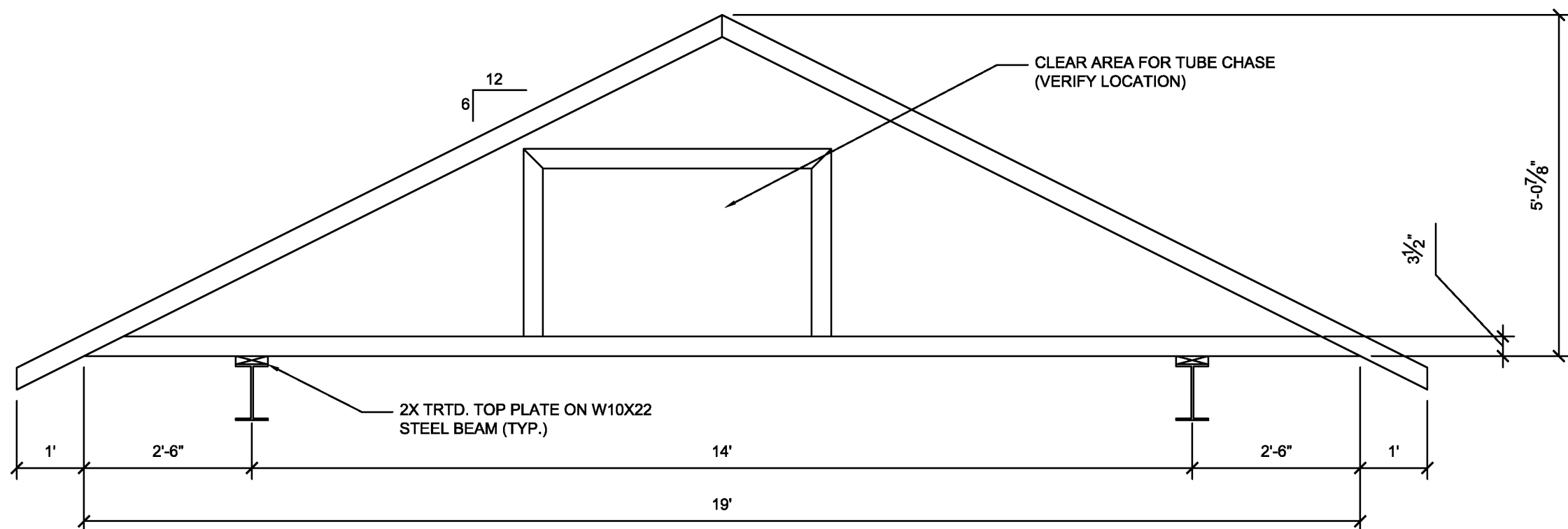


ROOF FRAMING PLAN
SCALE 1/8" = 1'-0"

NOTE:
PRE-ENGINEERED TRUSSES TO BE CLIPPED TO EXTERIOR LOAD BEARING WALLS WITH SIMPSON HURRICANE CLIPS - HZ.5A.
TRUSS BEARING HEIGHT = 11'-0" A.F.F.

HEADER SCHEDULE			
MARK	DESCRIPTION	BEARING STUDS	KING STUDS
H1	(2) 2 X 10	2	1
H2	(2) 1-3/4X11-7/8 LVL	2	1

COLUMN SCHEDULE	
MARK	DESCRIPTION
C1	HS6XXXX1A



1 DRIVE THRU CANOPY TRUSS DETAIL
S3 SCALE: 1/2" = 1'-0"



3 WORKING DAYS |
BEFORE YOU DIG
CALL MISS DIG
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FOR THE LOCATION OF
UNDERGROUND FACILITIES

REVISIONS		
TAG:	DATE:	CHANGE:

SCALE:
1/8" = 1'-0"

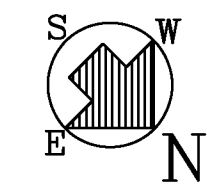
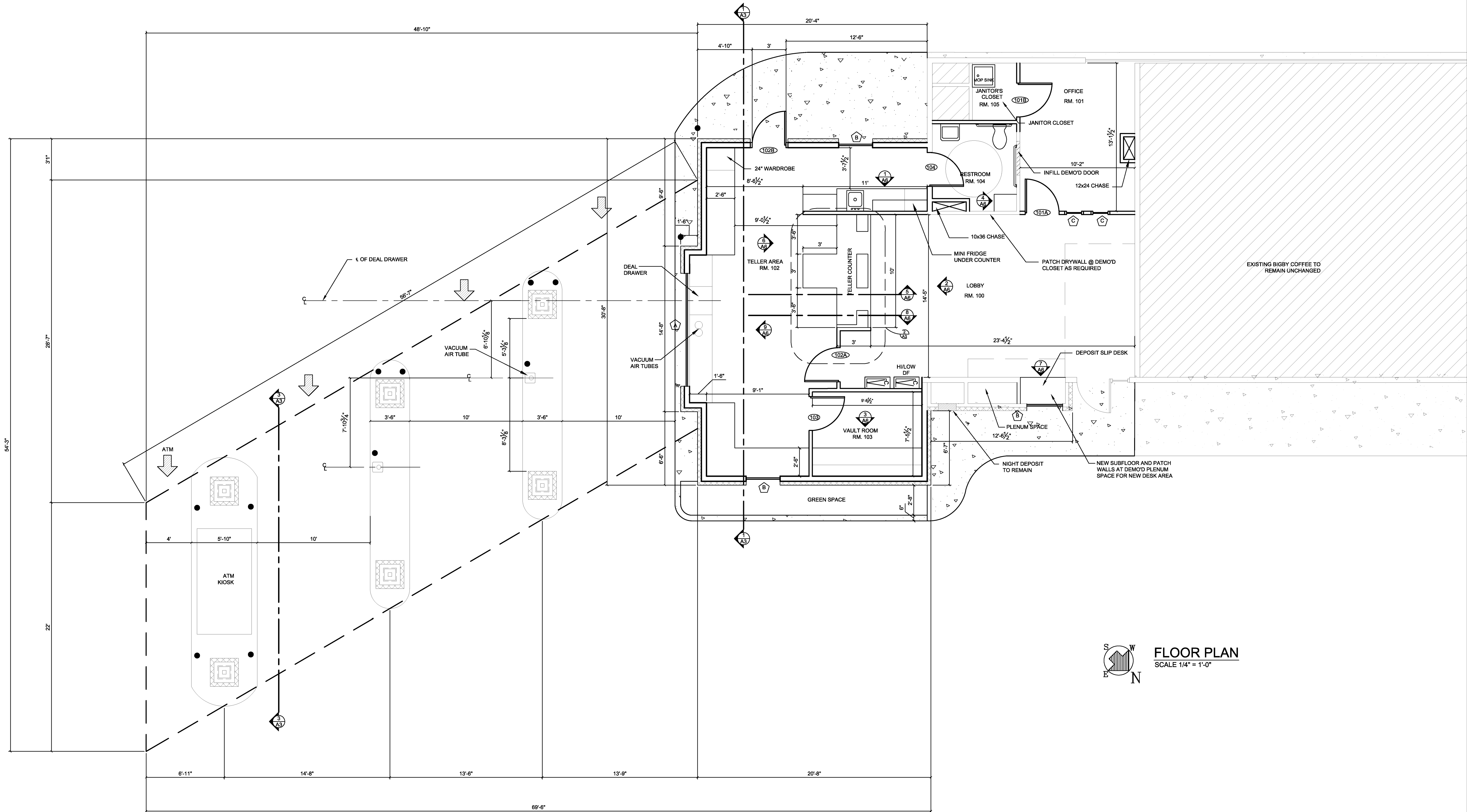
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COMMERCIAL BANK

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661 N. CEDAR ST.
MASON MI. 48854

JBS Contracting Inc.
1680 COVER PARKWAY
MT. PLEASANT, MI 48858
PH: (989) 772-0770
FAX (989) 772-9272
COMMERCIAL/INDUSTRIAL
CONSTRUCTION

JBS JOB NUMBER:
DRAWING NAME: TRUSS FRAMING PLAN
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 7/8/2018
ENGINEER'S SEAL:



FLOOR PLAN
SCALE 1/4" = 1'-0"



3 WORKING DAYS |
BEFORE YOU DIG
CALL MISS DIG
1-800-482-7171
FOR THE LOCATION OF
UNDERGROUND FACILITIES

REVISIONS		
TAG:	DATE:	CHANGE:

SCALE:
1/4" = 1'-0"

A1

COMMERCIAL BANK

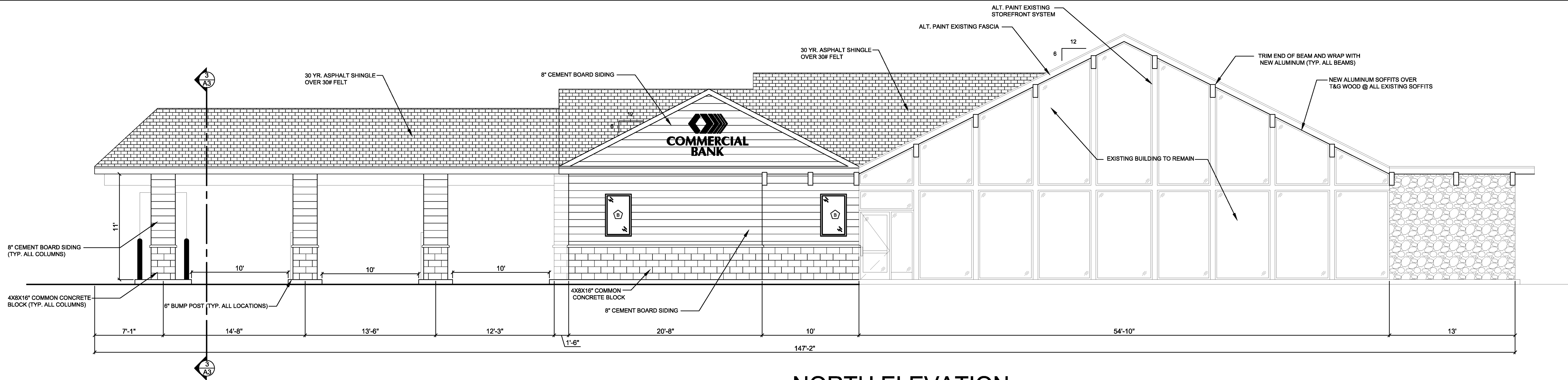
COMMERCIAL BANK

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MASON MI. 48854

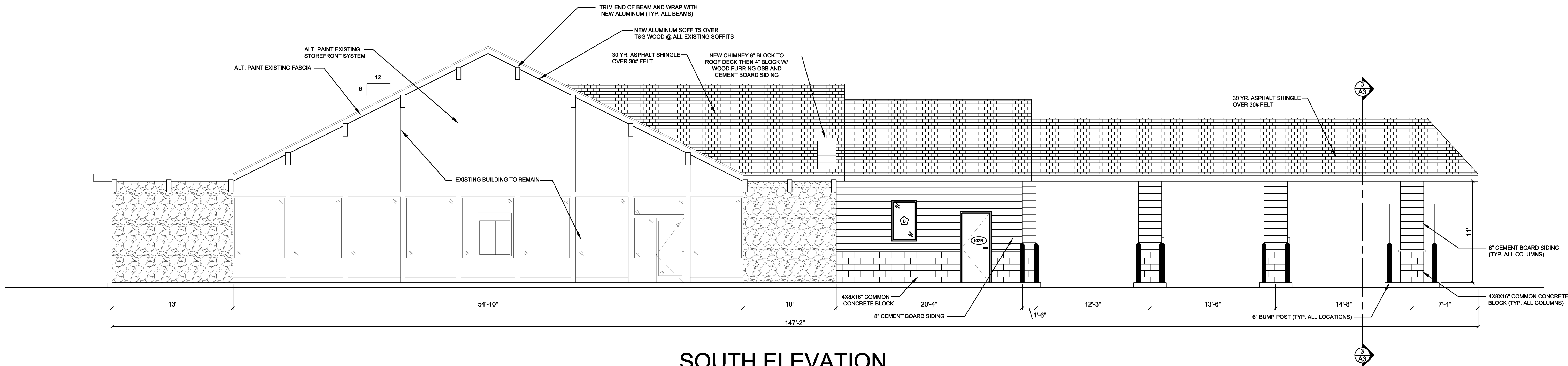
COMMERCIAL/INDUSTRIAL
CONSTRUCTION

JBS Contracting Inc.
1680 COVER PARKWAY
MT. PLEASANT, MI 48858
PH: (989) 772-0770
FAX: (989) 772-9272

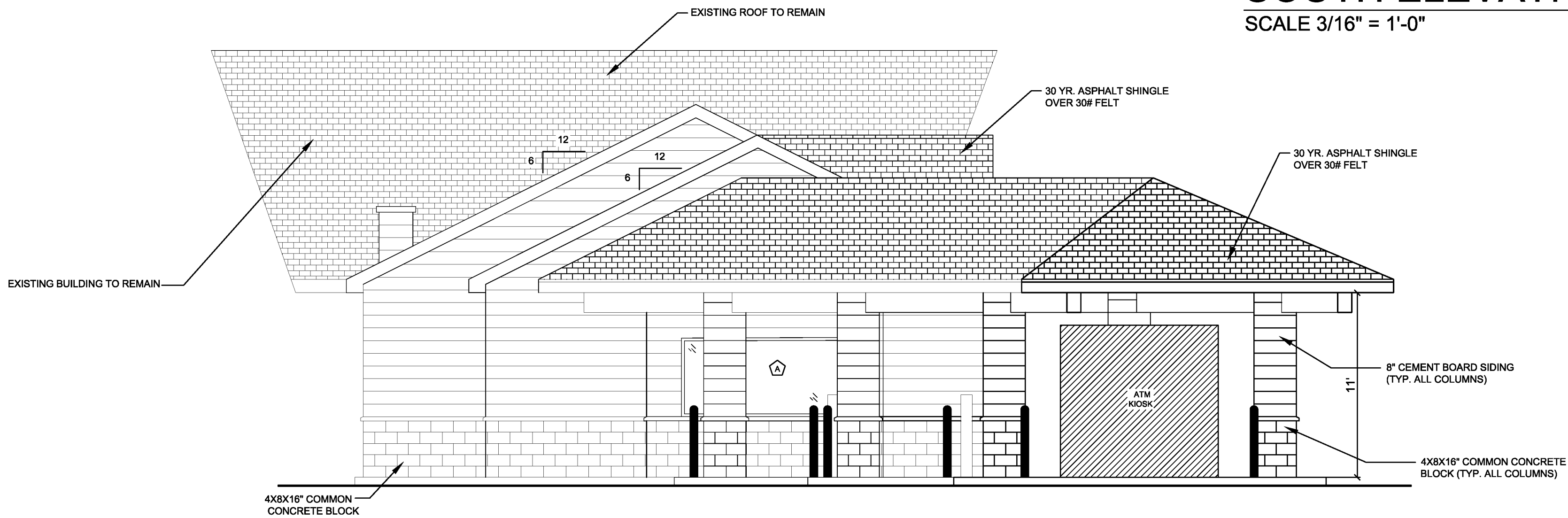
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DRAWING NAME: FLOOR PLAN
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 7/24/2018
ENGINEER'S SEAL:



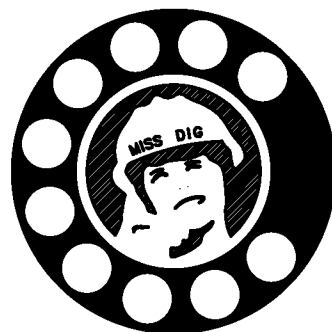
NORTH ELEVATION
SCALE 3/16" = 1'-0"



SOUTH ELEVATION
SCALE 3/16" = 1'-0"



EAST ELEVATION
SCALE 3/16" = 1'-0"



3 WORKING DAYS
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1-800-482-7171
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UNDERGROUND FACILITIES

REVISIONS		
TAG:	DATE:	CHANGE:

SCALE:
3/16" = 1'-0"

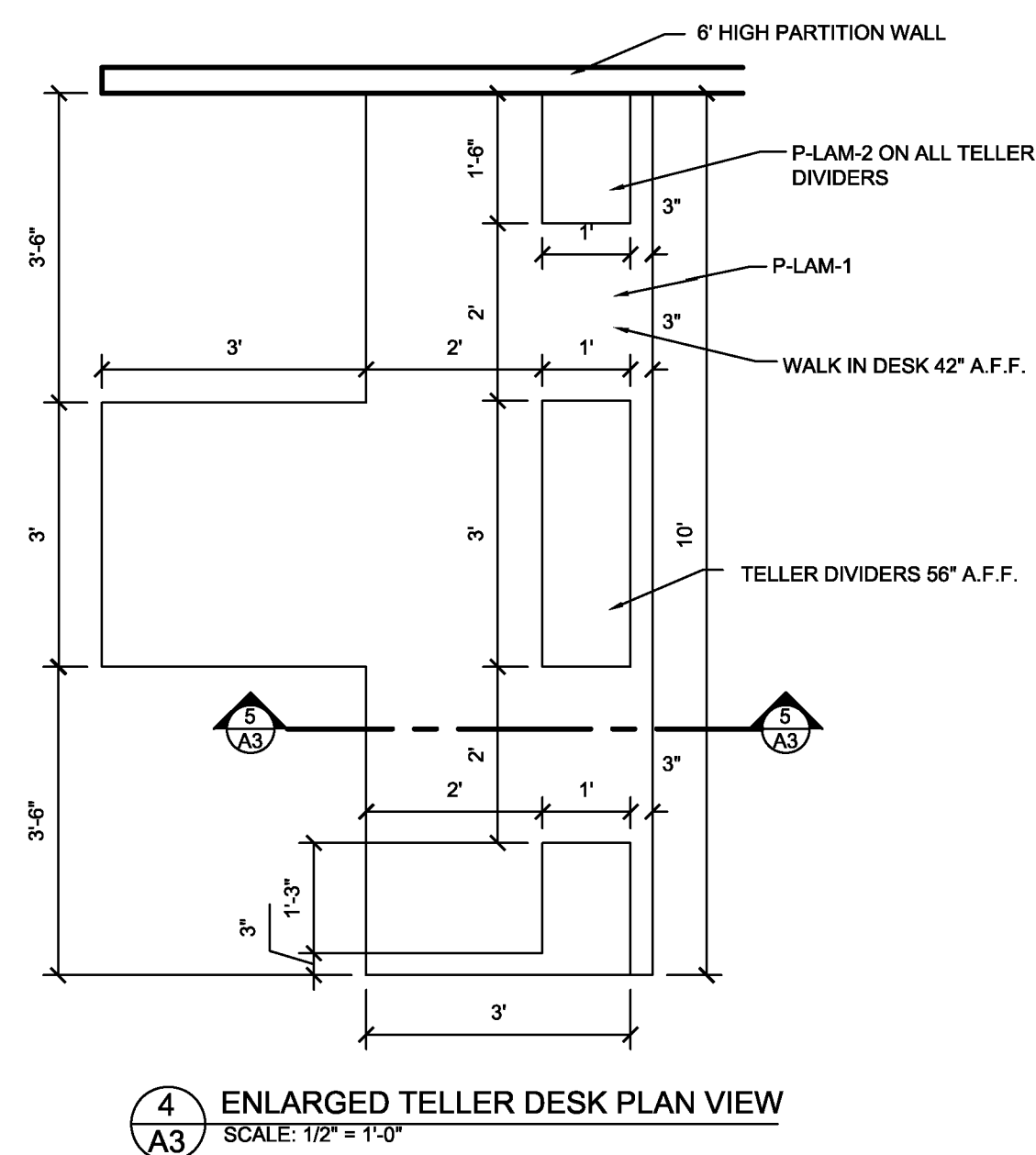
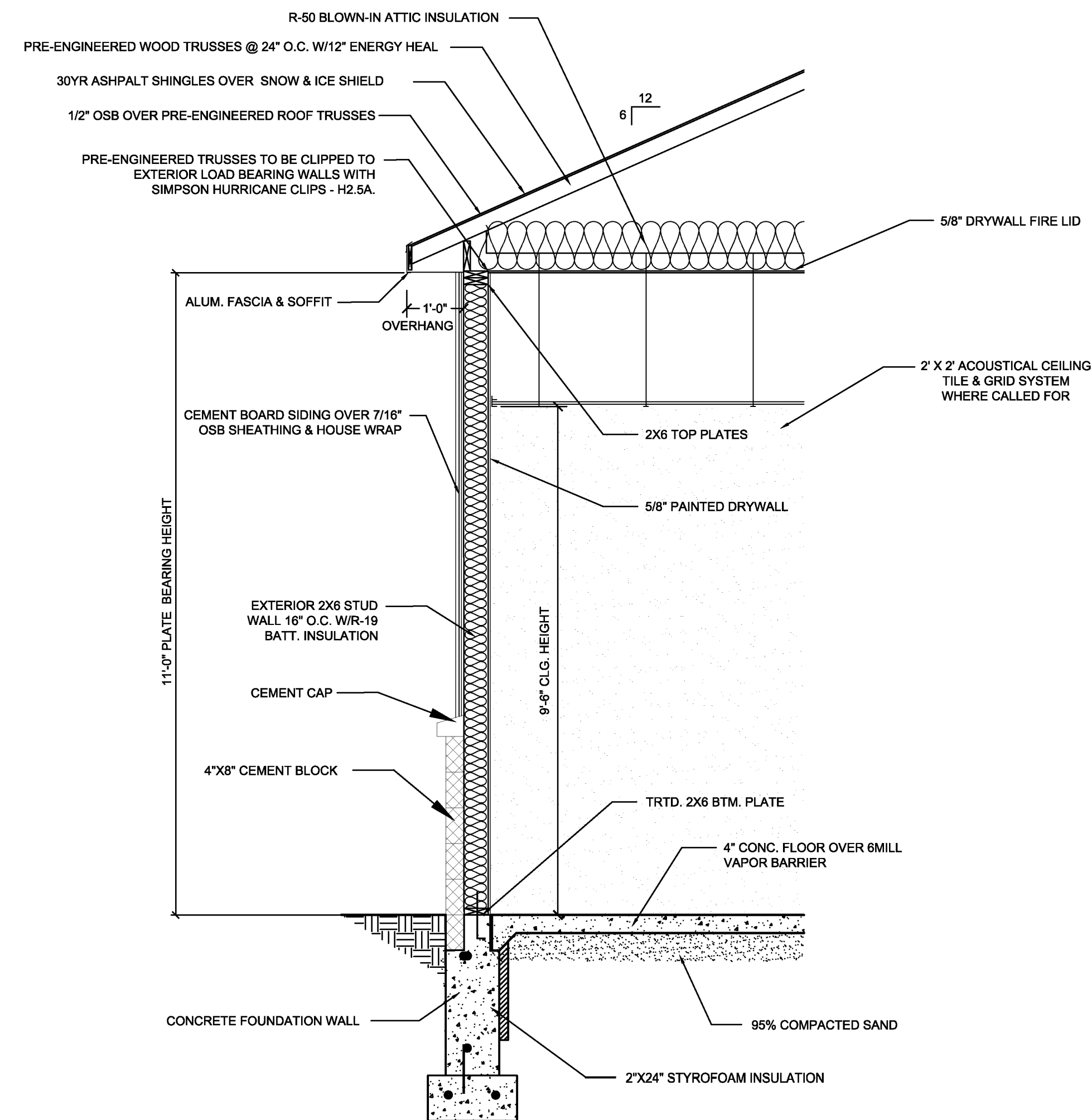
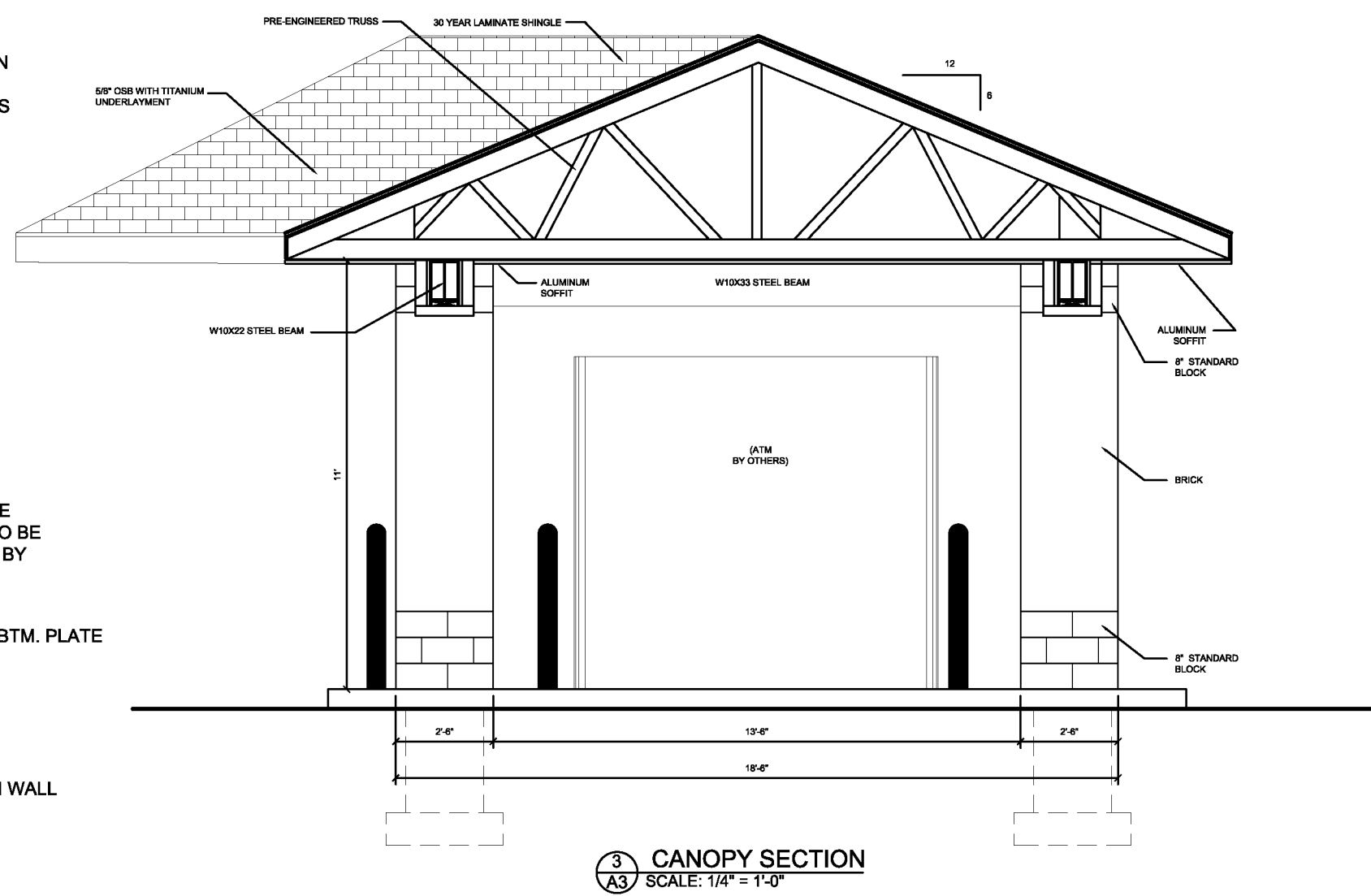
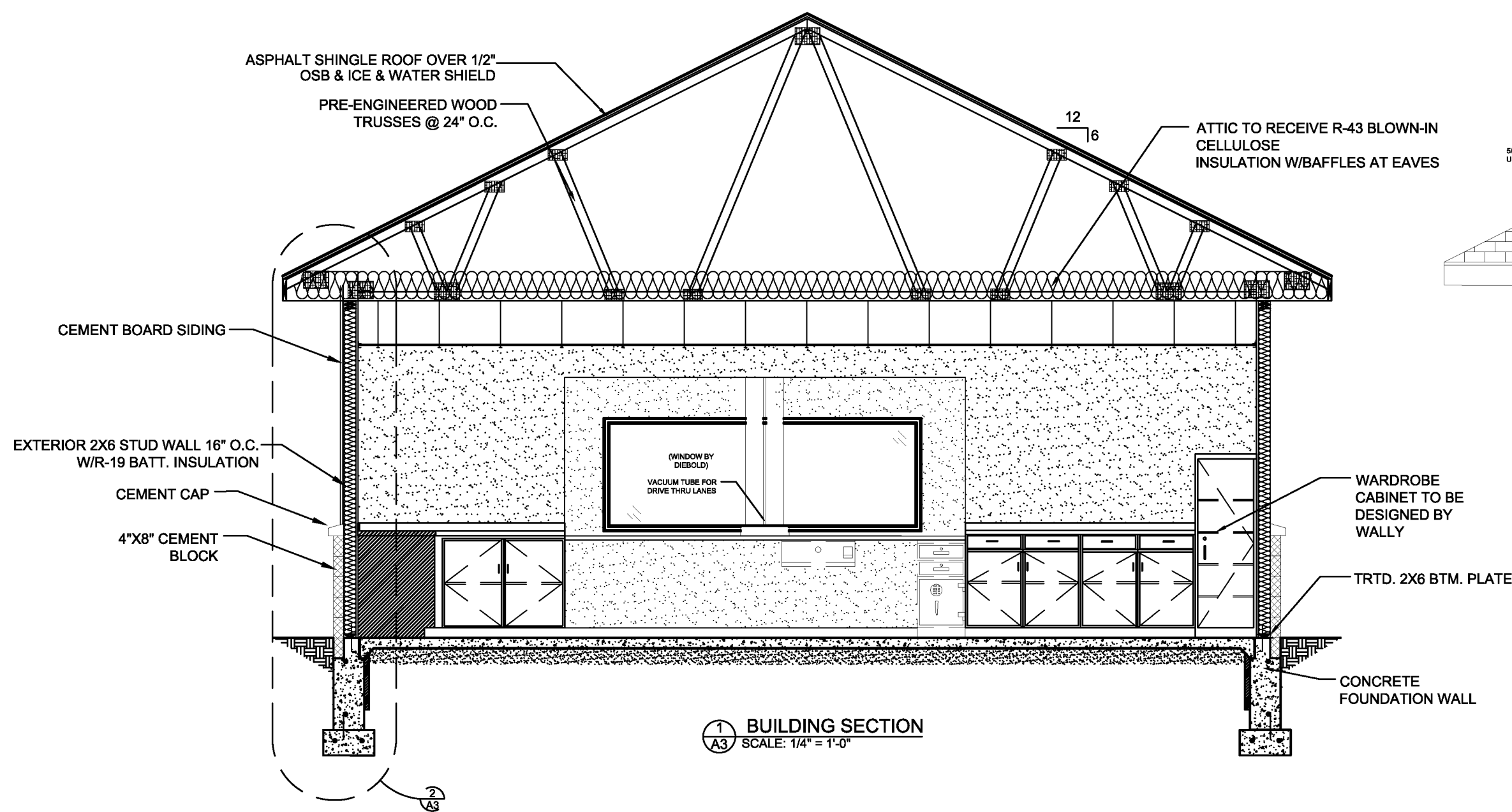
A2

COMMERCIAL BANK

JBS JOB NUMBER:
DRAWING NAME: ELEVATIONS
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 1/24/2018
ENGINEER'S SEAL:

COMMERCIAL BANK
661 N. CEDAR ST.
MASON MI. 48854

COMMERCIAL/INDUSTRIAL
CONSTRUCTION
JBS Contracting Inc.
1680 COVER PARKWAY
MT. PLEASANT, MI 48858
PH: (989) 772-0770
FAX (989) 772-9272



REVISIONS		
TAG:	DATE:	CHANGE:

SCALE:
VARIES

A3

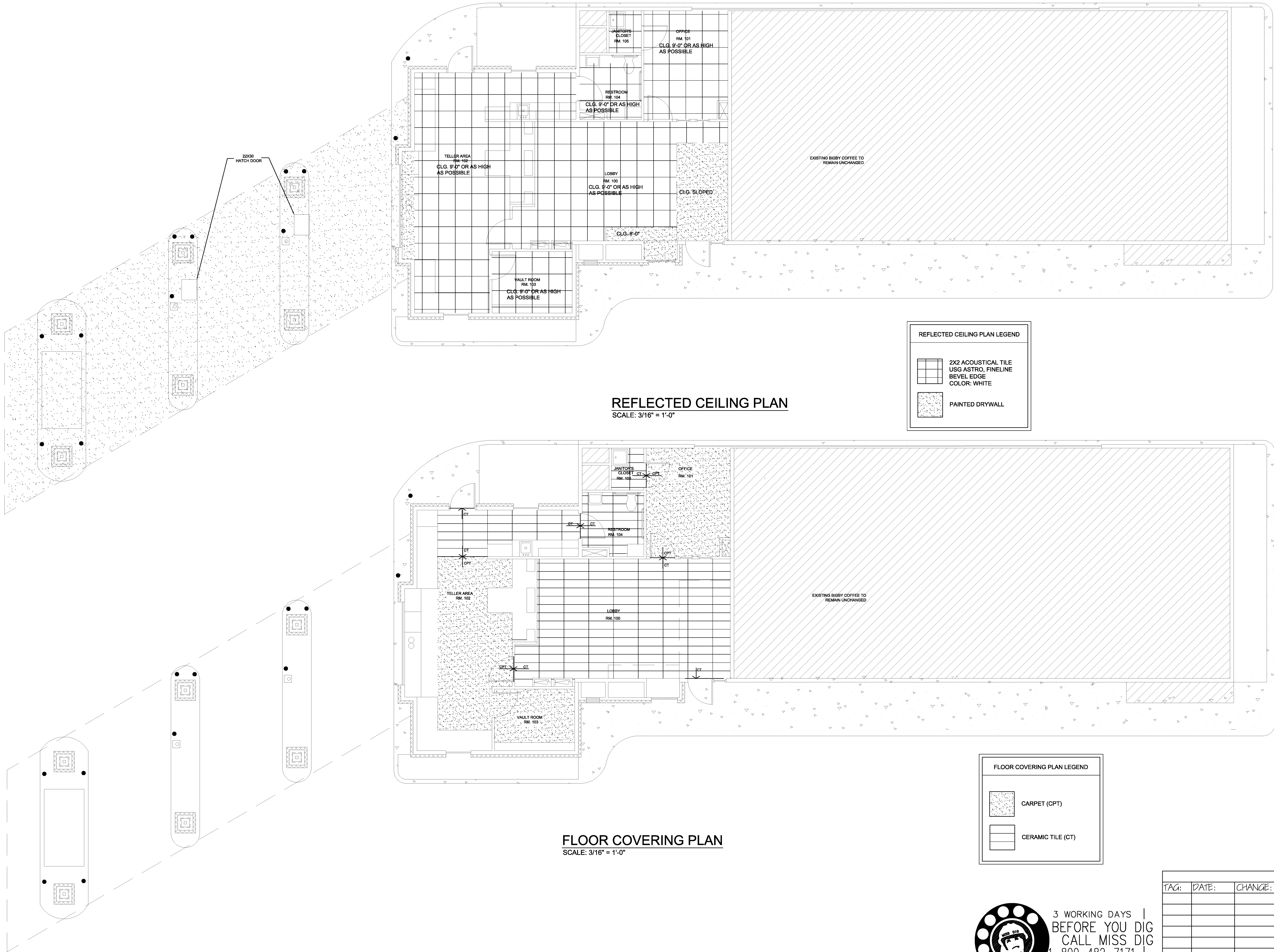
COMMERCIAL BANK

JBS JOB NUMBER:
DRAWING NAME: SECTIONS & INT. ELEVATIONS
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 7/24/2018

COMMERCIAL BANK
661 N. CEDAR ST.
MASON MI. 48854

COMMERCIAL/INDUSTRIAL
CONSTRUCTION

JBS Contracting Inc.
1680 COVER PARKWAY
MT. PLEASANT, MI 48858
PH: (989) 772-9770
FAX (989) 772-9272



REFLECTED CEILING PLAN
SCALE: 3/16" = 1'-0"

REFLECTED CEILING PLAN LEGEND

2X2 ACOUSTICAL TILE
USG ASTRO, FINELINE
BEVEL EDGE
COLOR: WHITE

PAINTED DRYWALL

FLOOR COVERING PLAN
SCALE: 3/16" = 1'-0"

FLOOR COVERING PLAN LEGEND

CARPET (CPT)

CERAMIC TILE (CT)



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FOR THE LOCATION OF
UNDERGROUND FACILITIES

REVISIONS		
TAG:	DATE:	CHANGE:

JBS JOB NUMBER:
DRAWING NAME: CEILING AND FLOOR FINISH
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 7/2/2018

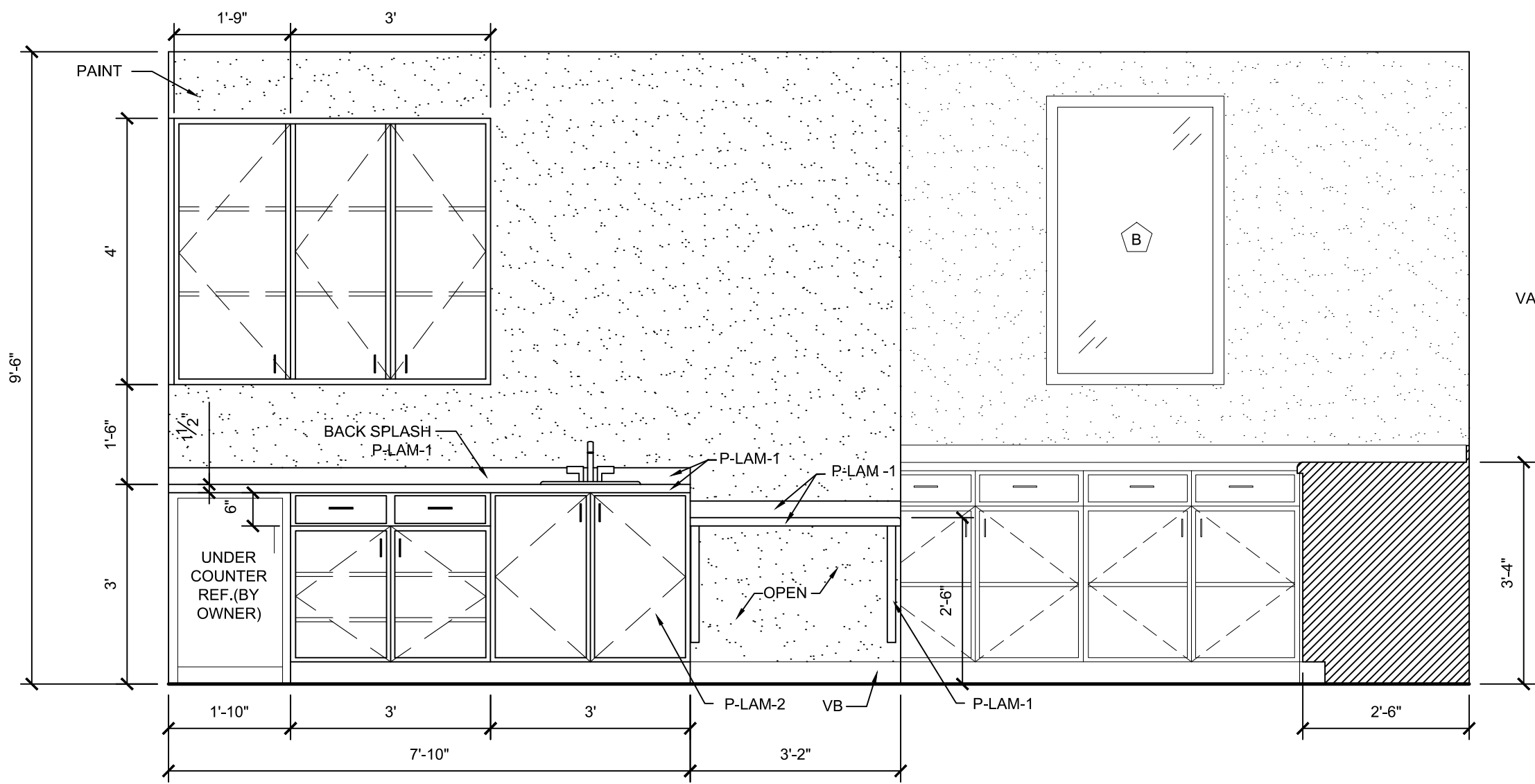
ENGINEER'S SEAL:

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661 N. CEDAR ST.
MASON MI. 48854

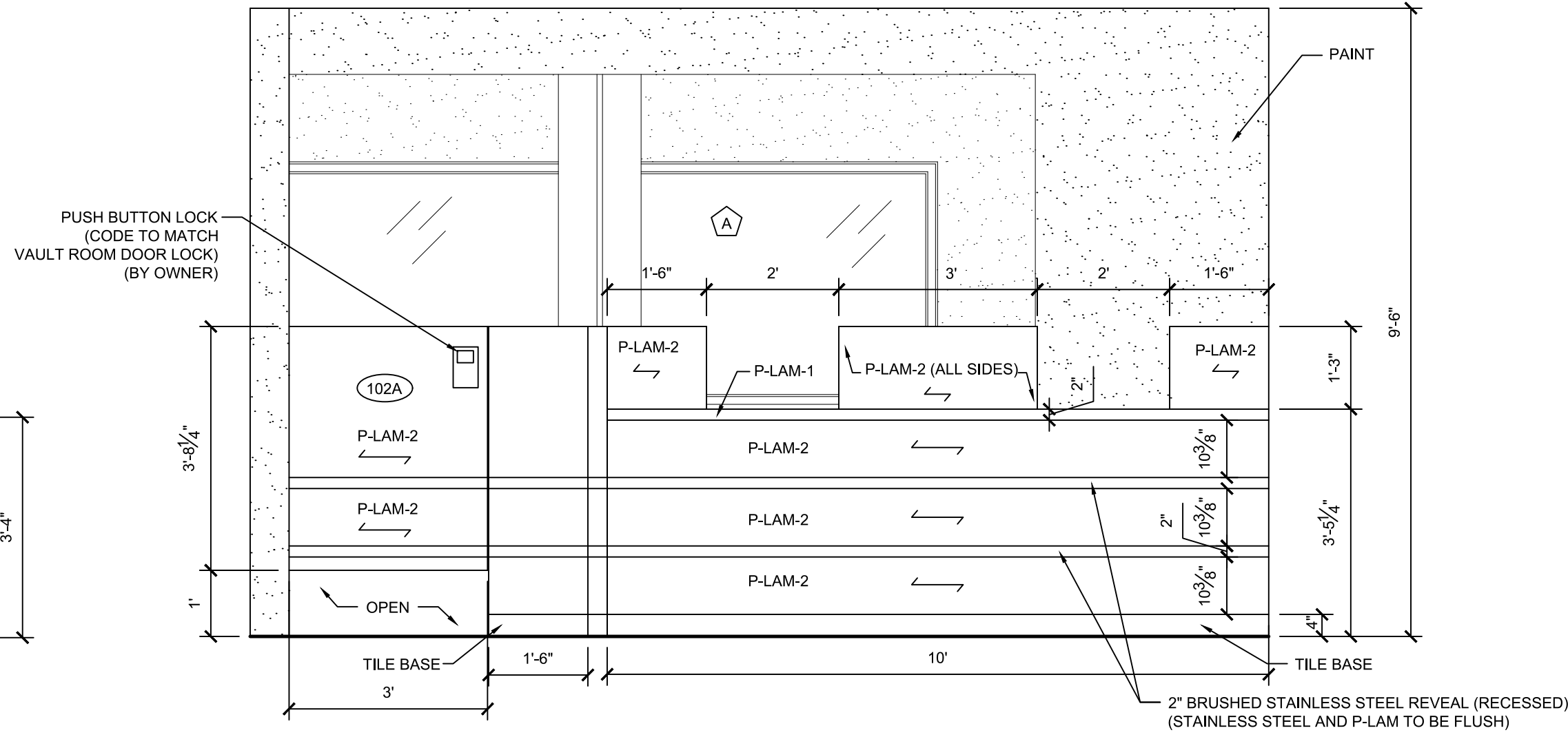
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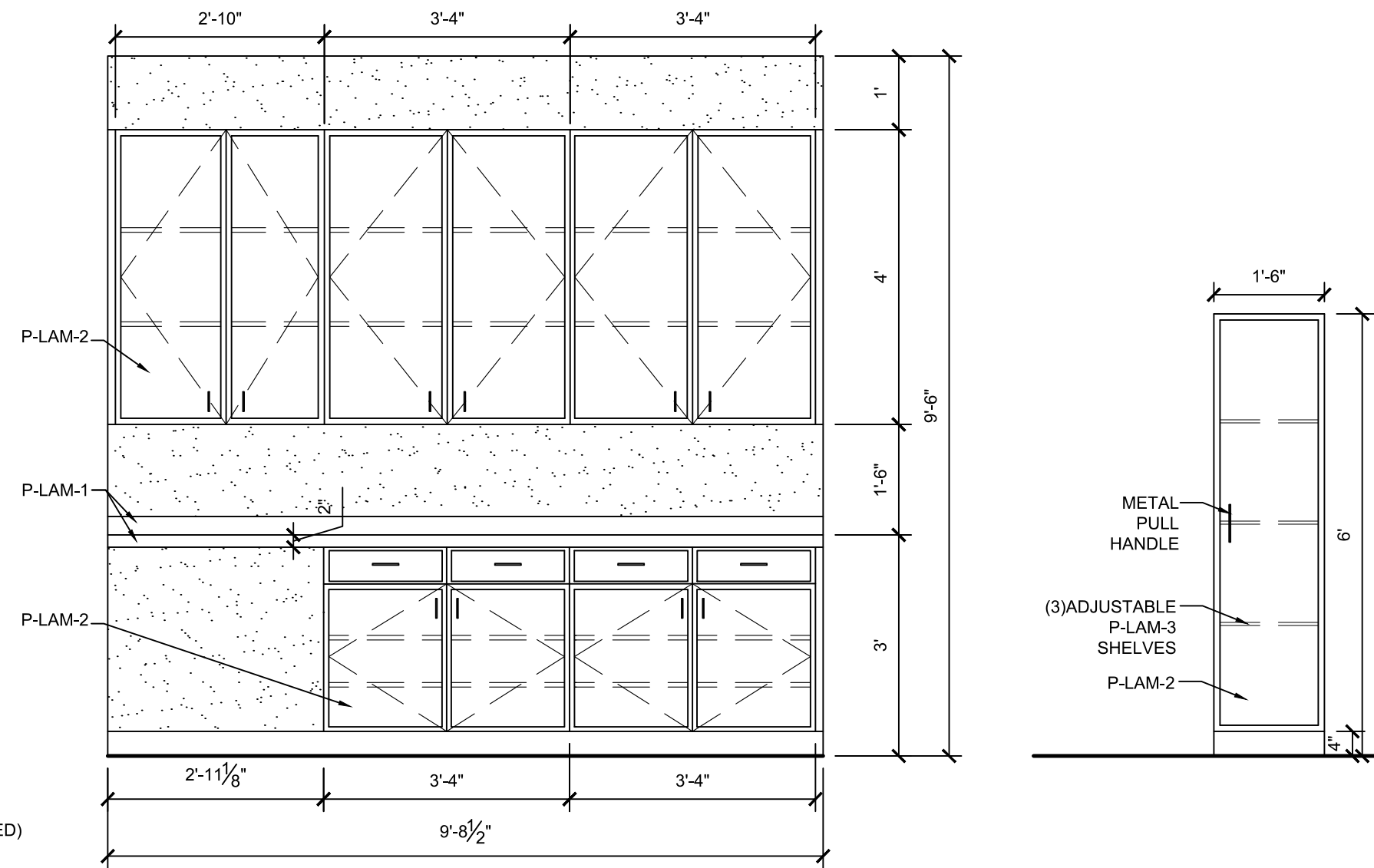
SCALE:
3/16" = 1'-0"
A5
COMMERCIAL BANK



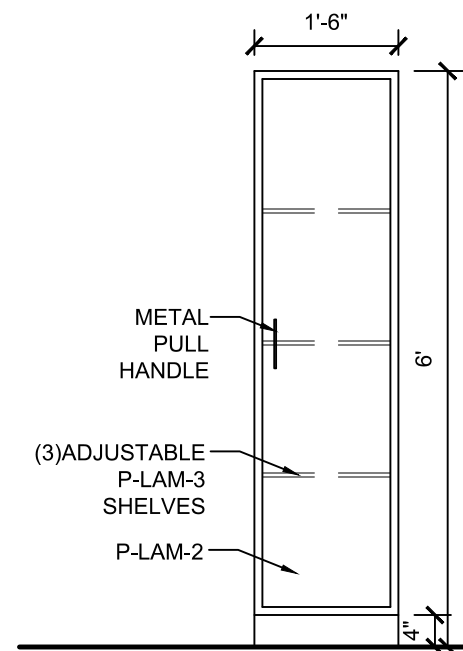
1 BREAK AREA ELEVATION
A6 SCALE: 1/2" = 1'-0"



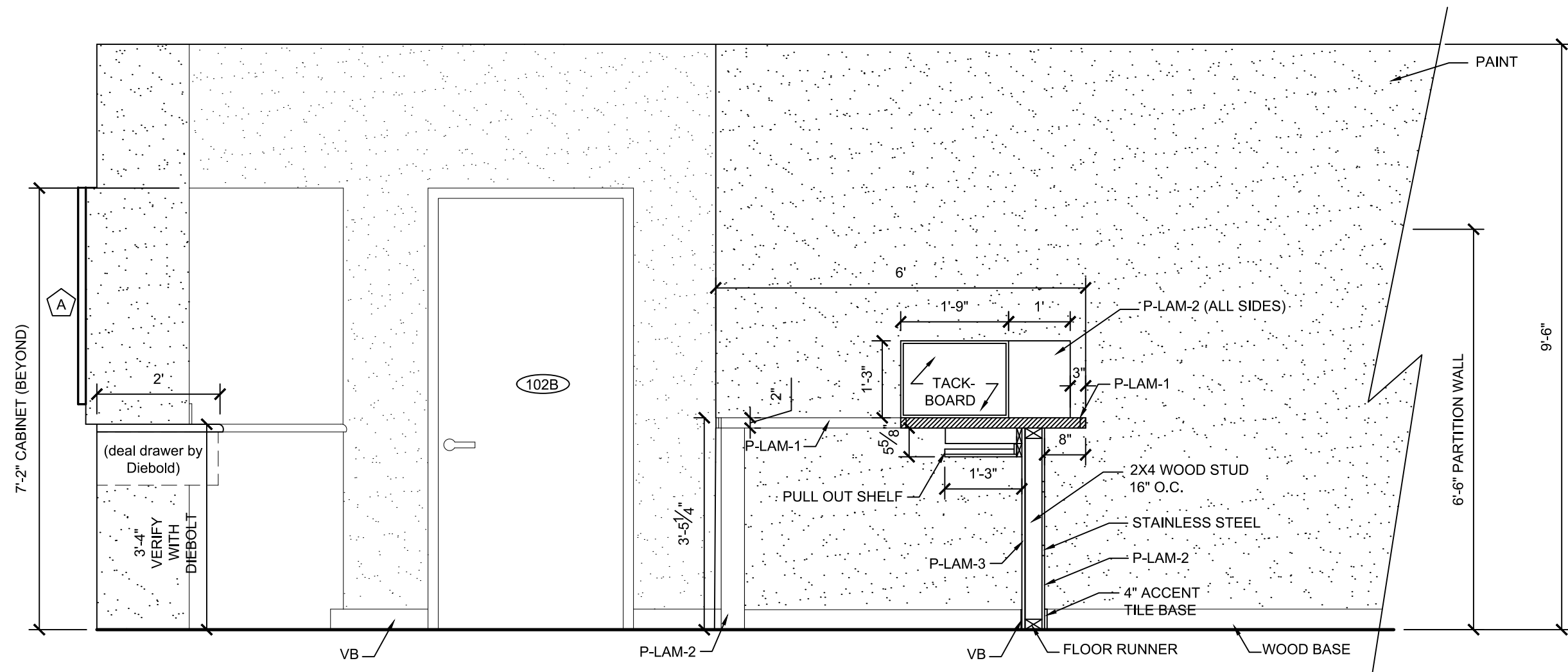
2 TELLER COUNTER FRONT ELEVATION
A6 SCALE: 1/2" = 1'-0"



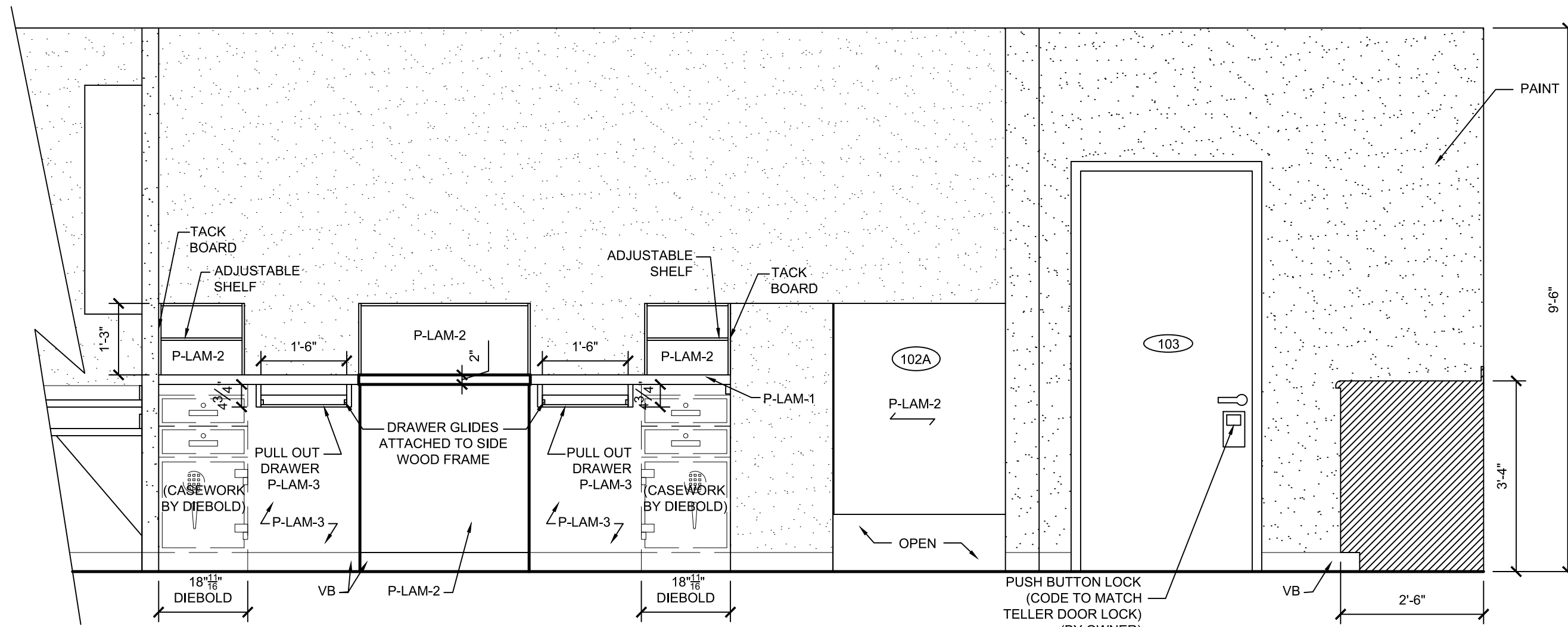
3 VAULT ROOM ELEVATION
A6 SCALE: 1/2" = 1'-0"



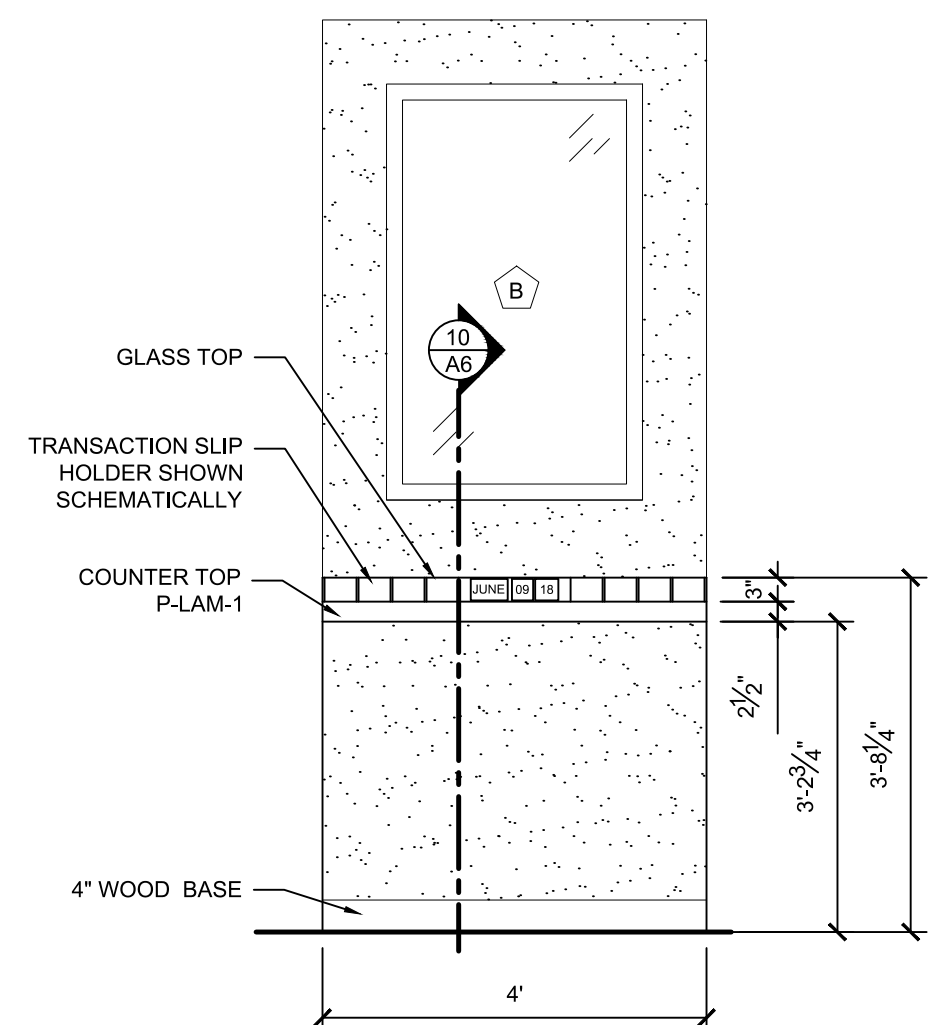
4 CABINET
A6 SCALE: 1/2" = 1'-0"



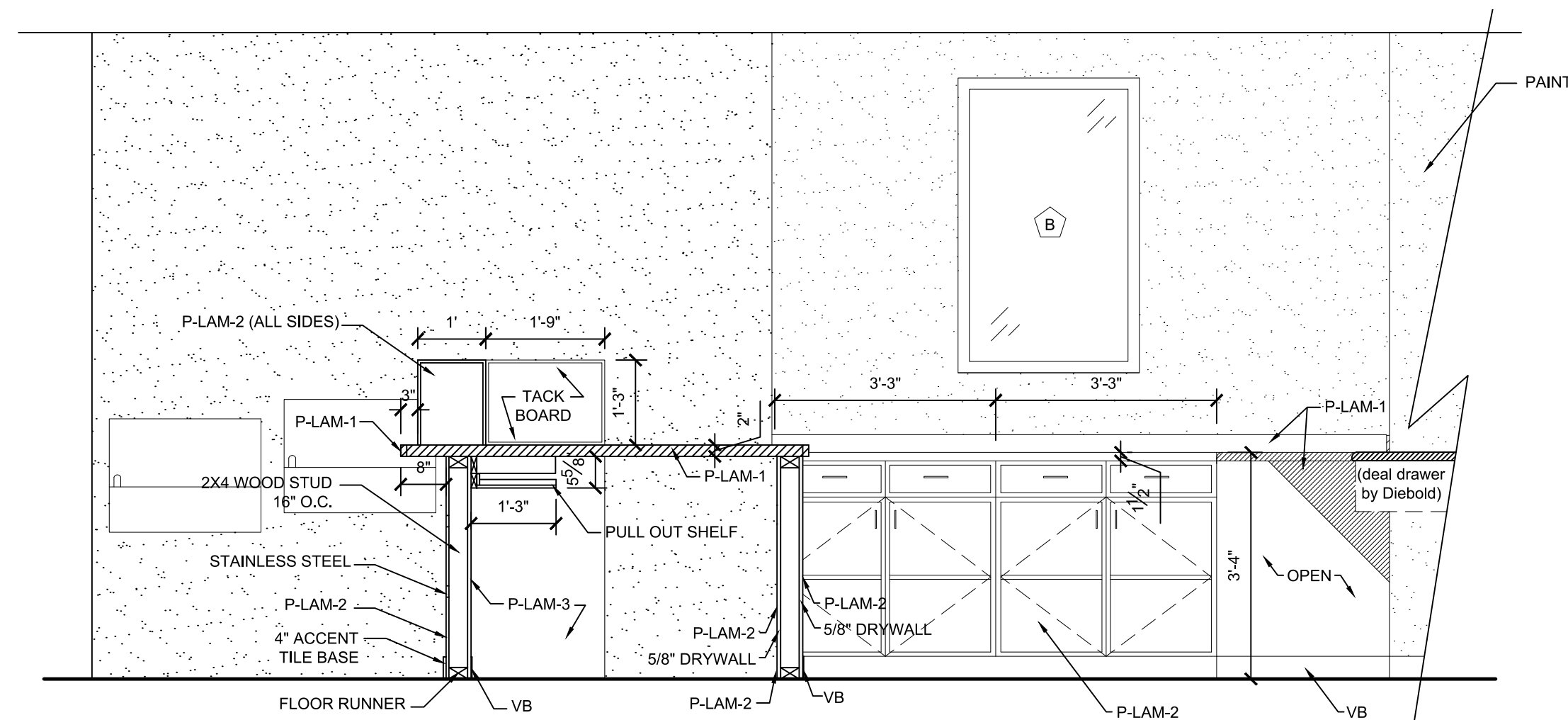
5 TELLER COUNTER SECTION
A6 SCALE: 1/2" = 1'-0"



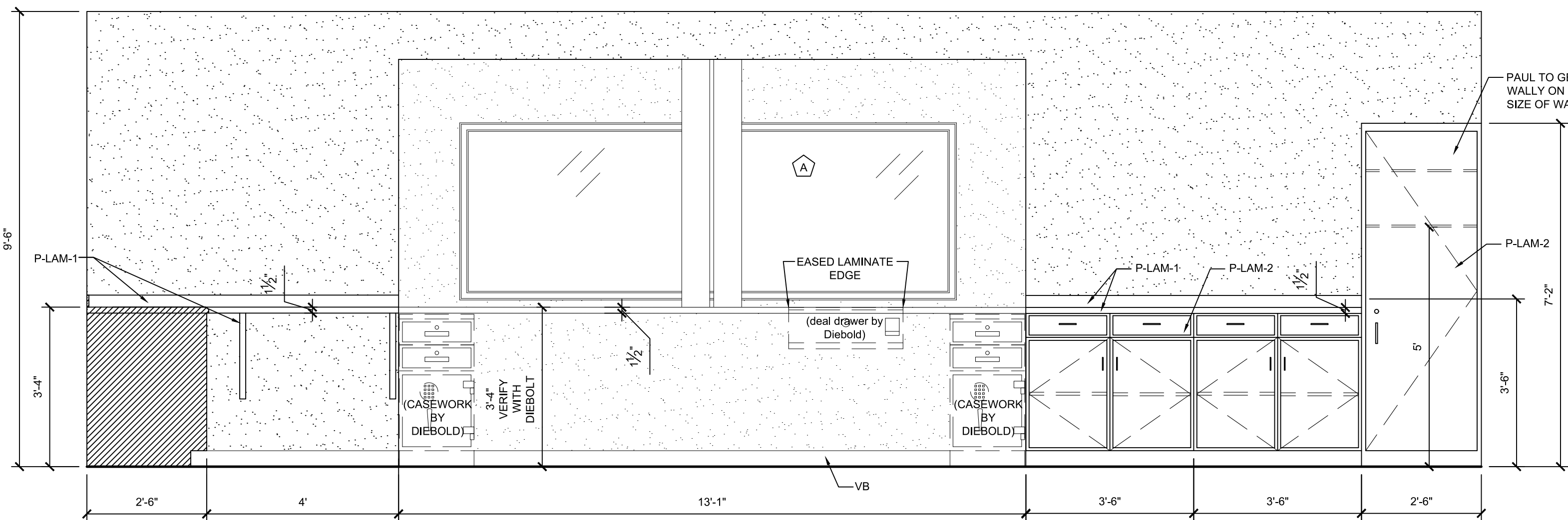
6 TELLER COUNTER WEST ELEVATION
A6 SCALE: 1/2" = 1'-0"



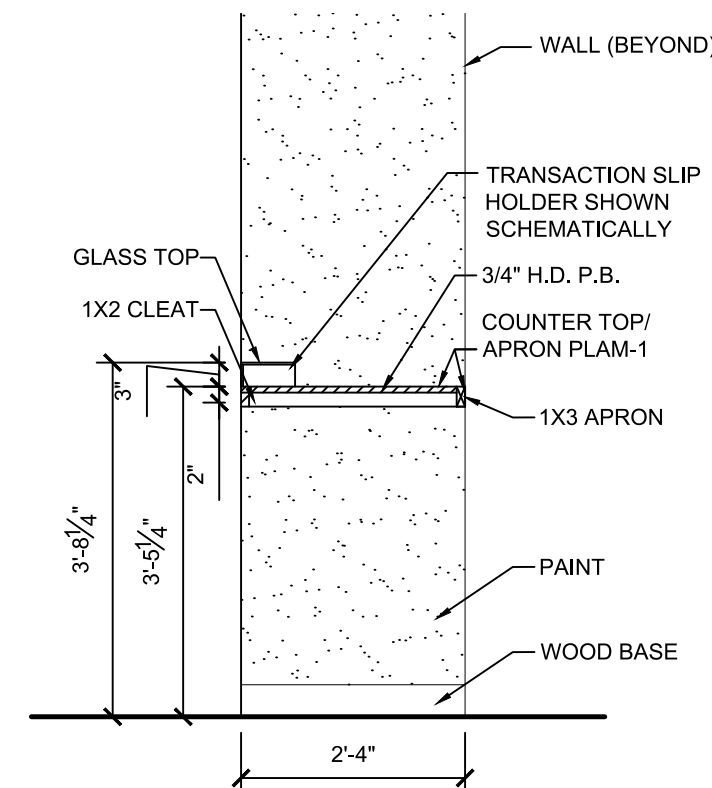
7 CHECK CASHING STATION
A6 SCALE: 1/2" = 1'-0"



8 TELLER COUNTER SECTION
A6 SCALE: 1/2" = 1'-0"



9 DRIVE THRU WINDOW ELEVATION
A6 SCALE: 1/2" = 1'-0"



10 CHECK STATION SECTION
A6 SCALE: 1/2" = 1'-0"



REVISIONS		
TAG:	DATE:	CHANGE:

JBS JOB NUMBER:
DRAWN BY: DKG
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 7/7/2018
ENGINEER'S SEAL:

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MASON MI.

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CONSTRUCTION

JBS Contracting Inc.
1680 COVER PARKWAY
MT. PLEASANT, MI 48858
PH: (989) 775-0770
FAX (989) 772-9272

SCALE:
1/2" = 1'-0"

A6

COMMERCIAL BANK

[illegible]

GENERAL

A. REFER TO GENERAL NOTES THAT ARE PART OF THIS CONTRACT.

B. THESE DRAWINGS ARE SCHEMATIC AND INTENDED TO DEPICT THE GENERAL LOCATION OF MECHANICAL SYSTEM COMPONENTS. CONSULT ARCHITECTURAL PLANS FOR PROPER DIMENSIONS AND LOCATION OF EQUIPMENT.

C. PROVIDE ALL NECESSARY TRANSITIONS IN DUCTWORK AND PIPING FOR COMPLETE INSTALLATION. NOT ALL OFFSETS ARE SHOWN ON THE DRAWINGS. AIR PIPING AND DUCTWORK AND THEIR ACCESSORIES SHALL BE FULL SIZE AND REDUCED IN SIZE ONLY IMMEDIATELY BEFORE THE CONNECTION POINT TO EQUIPMENT.

D. THE INSTALLATION OF ALL MECHANICAL WORK SHALL BE IN ACCORDANCE WITH ALL CODES AND AUTHORITIES HAVING JURISDICTION INCLUDING:

- 1) THE LATEST VERSION OF THE LOCALLY RECOGNIZED BUILDING CODE.
- 2) THE LATEST VERSIONS OF ASHRAE, SMACNA, ARI AS APPLICABLE.
- 3) THE LATEST VERSION OF N.E.C., ALL LOCAL CODES AND LOCAL N.E.C. AMENDMENTS.
- 4) THE AMERICANS WITH DISABILITIES ACT (ADA).

E. ALL SYSTEMS THAT ARE TO REMAIN IN SERVICE UPON COMPLETION OF THIS PROJECT, WHICH ARE PRESENTLY OPERATING MUST BE CONTINUED IN SERVICE. OUTAGES SHALL BE COORDINATED WITH THE OWNER. ADVANCE NOTICE SHALL BE GIVEN TO OWNER BEFORE COMMENCEMENT OF WORK ON ANY MECHANICAL SYSTEMS, WHETHER OR NOT AN OUTAGE IS REQUIRED.

F. UNLESS SPECIFICALLY NOTED ON THE PLANS, ALL DUCTWORK, DUCT SPECIALTIES, PIPING, PIPING SPECIALTIES, EQUIPMENT, DEVICES, ETC., NOT NOTED AS EXISTING TO REMAIN OR TO BE RELOCATED, SHALL BE NEW.

G. ALL EQUIPMENT AND DEVICES OUTSIDE SHALL BE SUITABLE FOR OUTDOOR LOCATION.

H. ALL EQUIPMENT SHALL BE LOCATED AS TO PROVIDE ACCEPTABLE SERVICE CLEARANCE AND AS REQUIRED TO MEET THE CLEARANCES REQUIRED BY THE NATIONAL ELECTRICAL CODE AND THE MANUFACTURERS' PUBLISHED INSTALLATION AND SERVICE GUIDES/MANUALS.

I. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THE QUIET OPERATION OF ANY NEW HEATING, VENTILATION AND AIR CONDITIONING SYSTEM UPON COMPLETION OF INSTALLATION. THE TRANSMISSION OF VIBRATION OR SOUND TO THE STRUCTURE OR OCCUPIED SPACES SHALL NOT BE PERMITTED. FINAL DECISION OF THE QUIETNESS OF ANY NEW SYSTEM AND EQUIPMENT SHALL BE THAT OF THE PROJECT OFFICER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECTION OR REPLACEMENT OF ANY NOISY SYSTEMS OR EQUIPMENT.

J. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS INCLUDING LAYOUT AND PERFORMANCE AND ENERGY EFFICIENCY DATA FOR ALL EQUIPMENT, DEVICES AND ALL ASSOCIATED APPURTENANCES TO BE PROVIDED FOR THIS PROJECT. SHOP DRAWINGS SHALL INCLUDE ALL PERFORMANCE DATA, CONNECTION, INSTALLATION HEIGHTS, SERVICE CLEARANCES, ACCESS AND SERVICE REQUIREMENTS. SHOP DRAWINGS SHALL ALSO INDICATE ALL NEW AND EXISTING ITEMS NEAR THE AREA OF INSTALLATION AND CLEARLY SHOW HOW THE INSTALLATION WILL BE ACCOMPLISHED, IN ACCORDANCE WITH THESE DOCUMENTS, EXISTING CONDITIONS AND LOCAL CODES, FOR THE EXACT EQUIPMENT THAT THE CONTRACTOR WILL BE USING. SHOP DRAWING SUBMITTALS SHALL INCLUDE, BUT NOT LIMITED TO:

- 1) AIR DEVICES
- 2) FLEXIBLE DUCTWORK
- 3) FURNACES
- 4) AIR CONDITIONING UNITS
- 5) CONDENSING UNITS
- 6) EXHAUST FANS

K. PROVIDE FOUR (4) HOURS TRAINING OF OWNER'S PERSONNEL OF SYSTEMS PROVIDED UNDER THIS CONTRACT. TRAINING SHALL INCLUDE PERIODIC MAINTENANCE, START-UP, SHUT DOWN AND NORMAL OPERATION.

M. THE CONTRACTOR SHALL BALANCE ALL AIR SYSTEMS IN EACH OPERATING MODE AND SUBMIT SIX (6) COPIES OF THE FINAL BALANCE REPORT(S) TO THE ARCHITECT. ALL BALANCING SHALL BE PERFORMED ACCORDING TO THE PROCEDURES AS OUTLINED BY NEBB OR AABC. FURNISH ALL LABOR, INSTRUMENTS, TOOLS AND MATERIALS AS REQUIRED FOR THE TESTS. ALL BALANCING DEVICES SHALL BE CLEARLY MARKED AFTER BALANCING. AIRFLOW QUANTITIES INDICATED ON THE DRAWING ARE MAXIMUMS.

2. DUCTWORK

A. SUPPLY AND RETURN AIR DUCTWORK SHALL BE FABRICATED FROM G60 OR G90 GALVANIZED SHEET STEEL ACCORDING TO SMACNA DUCT CONSTRUCTION STANDARDS. DUCTWORK SHALL BE CONSTRUCTED TO SMACNA MINIMUM 2" W.G., MAXIMUM VELOCITY OF 1200 FPM, SEAL CLASS A. NO DUCT LEAKAGE SHALL BE NOTICEABLE TO THE HAND OR EAR OF THE ENGINEER. ALL DUCTWORK SHALL BE SEALED WITH HARDCAST. DUCT TAPE OR PRESSURE SENSITIVE TAPES SHALL NOT BE USED.

B. EXHAUST AIR DUCTWORK SHALL BE FABRICATED FROM G60 OR G90 GALVANIZED SHEET STEEL ACCORDING TO SMACNA DUCT CONSTRUCTION STANDARDS. DUCTWORK SHALL BE CONSTRUCTED TO SMACNA MINIMUM 2" W.G., MAXIMUM VELOCITY OF 1200 FPM, SEAL CLASS A. NO DUCT LEAKAGE SHALL BE NOTICEABLE TO THE HAND OR EAR OF THE ENGINEER. ALL DUCTWORK SHALL BE SEALED WITH HARDCAST. DUCT TAPE OR PRESSURE SENSITIVE TAPES SHALL NOT BE USED.

C. ALL NECESSARY ALLOWANCES AND PROVISIONS SHALL BE MADE BY THIS CONTRACTOR FOR BEAMS, COLUMNS OR OTHER OBSTRUCTIONS OF THE BUILDING OR THE WORK OF OTHER CONTRACTORS, WHETHER OR NOT SAME IS SHOWN. WHERE NECESSARY TO AVOID OBSTRUCTIONS THE SHEET METAL DUCTWORK SHALL BE TRANSFORMED, DIVIDED, OFFSET, RAISED OR LOWERED WITH THE REQUIRED FREE AREA BEING MAINTAINED WITH A MAXIMUM VELOCITY OF 1200 FPM FOR SUPPLY AIR DUCTWORK AND 1500 FPM FOR EXHAUST SYSTEMS. ADJUST DUCTWORK SIZES, LOCATION AND CONFIGURATION AS REQUIRED TO COORDINATE WITH WORK OF THIS AND ALL OTHER TRADES. THIS SHALL INCLUDE DIAGONAL STEEL BRACING AT THE EXTERIOR WINDOW WALLS AND SIMILAR LOCATIONS SUCH AS BRACING FOR DOORFRAMES. REFER TO ARCHITECTURAL AND/OR STRUCTURAL DRAWINGS FOR BRACING DETAILS. COORDINATION ITEMS SHALL BE SHOWN BY THE CONTRACTOR ON THE SHOP DRAWINGS.

D. ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH THE SMACNA DUCT CONSTRUCTION STANDARDS. DUCTWORK SUPPORTS SHALL BE SECURELY ATTACHED TO THE STRUCTURE ABOVE.

E. BRANCH CONNECTIONS SHALL BE IN ACCORDANCE WITH SMACNA FIG. NO. 2-8 WITH THE EXCEPTION OF STRAIGHT TAPS AND DOVETAIL JOINTS WHICH ARE NOT ALLOWED. PROVIDE MANUAL BALANCING DAMPERS AT ALL BRANCH CONNECTIONS.

F. PROVIDE MANUAL BALANCING DAMPERS WHERE INDICATED AND AT EACH CHANGE IN DIRECTION. DAMPERS SHALL BE REINFORCED TO PREVENT WITHIN THE DUCT. ACCESS DOORS PROVIDED IN INSULATED DUCTWORK SHALL BE EXTENDED OUTSIDE OF FINISHED INSULATION AND NOT RECESSED. MAXIMUM BLADE WIDTH SHALL BE 6 INCHES EXCEPT AT FLEXIBLE DUCTWORK TAKE OFF'S.

G. FLEXIBLE DUCTWORK SHALL BE U.L. 181 CLASS 1 AIR DUCT MATERIAL FACTORY INSULATED, R=8.0. FLEXIBLE DUCTWORK LENGTH SHALL NOT EXCEED FIVE (5) FEET. FLEXIBLE DUCTWORK DIAMETER SHALL BE THE SAME SIZE AS THE DIFFUSER COLLAR TO WHICH IT IS CONNECTED. WHERE FLEXIBLE DUCTWORK LENGTH WILL EXCEED THE DISTANCE LISTED ABOVE, RIGID ROUND DUCT SHALL BE USED TO MINIMIZE THE FLEXIBLE DUCTWORK LENGTH. FLEXIBLE DUCTWORK SHALL BE CONNECTED TO LOW PRESSURE SHEET METAL DUCTWORK THROUGH A FLANGED "AIR-TIGHT" COLLAR WITH A DAMPER.

H. PROVIDE MINIMUM 12X12 ACCESS DOORS IN DUCTS WITHIN 12 INCHES OF ALL DEVICES THAT REQUIRE ADJUSTMENT OR INSPECTION FROM WITHIN THE DUCT. ACCESS DOORS PROVIDED IN INSULATED DUCTWORK SHALL BE DOUBLE WALL TYPE. ACCESS DOORS SHALL BE LABELED AS TO WHAT THEY ACCESS.

I. PROVIDE AIR TURNING DEVICES IN DUCTWORK AT ANY CHANGES IN DIRECTION OF 30 DEGREES OR GREATER WHEN THE CROSS SECTION AREA OF THE DUCT IS OVER 90 SQUARE INCHES. TURNING VANES SHALL BE DOUBLE THICKNESS TYPE.

J. PROVIDE FLEXIBLE CONNECTIONS AT ALL EQUIPMENT. FLEXIBLE CONNECTIONS SHALL BE INSTALLED AS INDICATED AND SHALL BE NEOPRENE IMPREGNATED FIBERGLASS FLEXIBLE CONNECTIONS SHALL BE VENT FABRICS "VENTGLAS" 30 OZ/SQ YARD AND APPROVED FOR OUTDOOR INSTALLATIONS.

K. PROVIDE AIR DISTRIBUTION DEVICES WITH FRAMES THAT MATCH CEILING CONSTRUCTION AS SCHEDULED.

- 1) AIR DEVICE FRAMES AND FACE CONFIGURATION SHALL MATCH CEILING TILE.
- 2) FINISH SHALL BE AS SELECTED BY THE ARCHITECT FROM THE MANUFACTURER'S STANDARD LIST OF FINISHES. SUBMIT COLOR CHARTS FOR APPROVAL.
- 3) THE INSIDE OF ALL AIR DEVICES SHALL BE PAINTED FLAT BLACK.

3. INSULATION

A. INSULATION SHALL BE CONTINUOUS THROUGH WALLS AND FLOORS.

B. ALL INSULATION SHALL BE INSTALLED IN ACCORDANCE WITH ASTM-84 AND HAVE A FLAME SPREAD RATING OF LESS THAN 25 AND A SMOKE RATING OF LESS THAN 50.

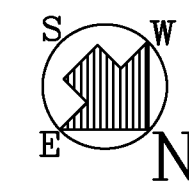
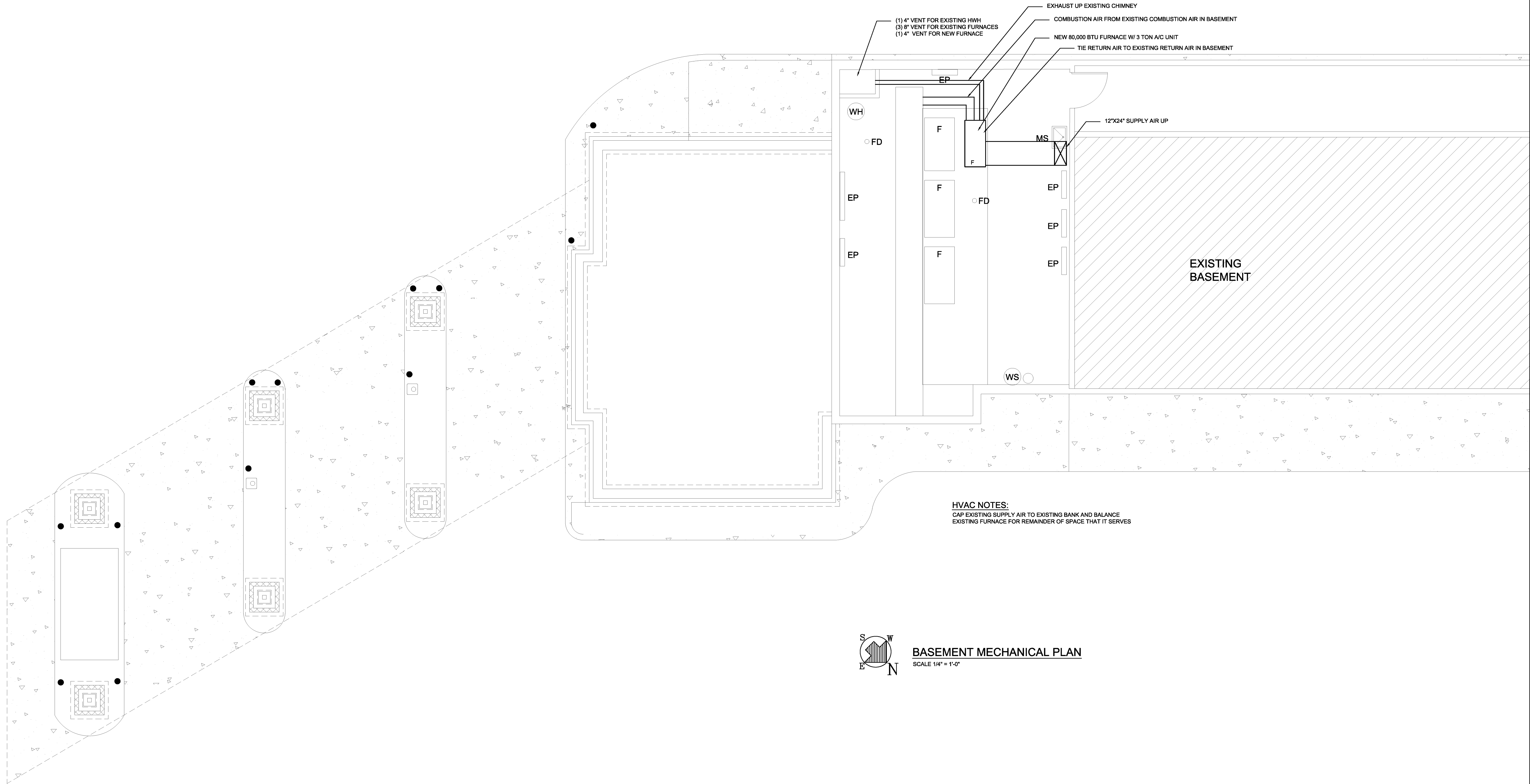
<u>DETAIL DESIGNATOR</u>	
	DRAWING NUMBER DETAIL NUMBER
<u>GRILLE, REGISTER AND DIFFUSER DESIGNATOR</u>	
	DEVICE TYPE CFM
	CEILING MOUNTED SUPPLY DIFFUSER
	CEILING MOUNTED EXHAUST GRILLE
	CARBON DIOXIDE SENSOR
	THERMOSTAT/TEMPERATURE SENSOR
	SMOKE DETECTOR
	VOLUME DAMPER
	FIRE DAMPER
	WATER FLOW DIRECTION
	NEW CONNECTION
	POINT OF DISCONNECTION
	MOTORIZED DAMPER
	PIPE PITCHED IN DIRECTION OF ARROW
	CONDENSATE DRAIN PIPING
	SINGLE WALL DUCTWORK
	DOUBLE WALL DUCTWORK
	PIPE UP, PIPE DOWN
	CLEANOUT (CO)
	PIPE CAP
	SHUT-OFF VALVE (GATE)
	SHUT-OFF VALVE (BALL)
	RELIEF VALVE
	PRESSURE REDUCING VALVE
	BALANCE VALVE, AUTOMATIC
	UNION
	STRAINER W/BLOWDOWN VALVE
	PRESSURE GAUGE
	RIGID DUCTWORK W/ FLEXIBLE DUCTWORK
	FLEXIBLE DUCTWORK
	SUPPLY DUCT UP
	SUPPLY DUCT DN
	EXHAUST/RETURN DUCT UP
	EXHAUST/RETURN DUCT DN

ABSORB	ABSORPTION
AB	ABOVE FINISHED FLOOR
AC	AIR CONDITIONING UNIT
APD	AIR PRESSURE DROP
BHP	BRAKE HORSEPOWER
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BTUH	BRITISH THERMAL UNIT PER HOUR
CAP	CAPACITY
CD	CEILING DIFFUSER
CFM	CUBIC FEET OF AIR PER MINUTE
Ø	DIAMETER
DN	DOWN
(D)	EXISTING TO BE REMOVED
D	CONDENSATE DRAIN
DB	DRY BULB
DISC	DISCHARGE
DIST	DISTANCE
(E)	EXISTING TO REMAIN
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EFF	EFFICIENCY
EG	EXHAUST GRILLE
ESP	EXTERNAL STATIC PRESSURE
EXH	EXHAUST
F	DEGREES FAHRENHEIT
FD	FIRE DAMPER
FLA	FULL LOAD AMPS
FLEX	FLEXIBLE
FPM	FEET PER MINUTE
FSR	FLOOR SUPPLY REGISTER
HZ	HERTZ
HP	HORSEPOWER
IN WG	INCHES OF WATER GAUGE
KW	KILOWATTS
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
MAX	MAXIMUM
MA	MINIMUM CURRENT AMPACITY
MFS	MAXIMUM FUSE SIZE
MOOP	MAXIMUM OVERCURRENT PROTECTION
MIN	MINIMUM
NC	NOISE CRITERIA
NO	NUMBER
NOA	OUTSIDE AIR
OPER	OPERATING
PD	PRESSURE DROP
PRV	PRESSURE REDUCING VALVE
QTY.	QUANTITY
RAD.	RADIATED
(R)	EXISTING TO BE RELOCATED
RA	RETURN AIR
RH	RELATIVE HUMIDITY
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SP	STATIC PRESSURE
SR	SUPPLY REGISTER
SQ.FT.	SQUARE FEET
STM.	STEAM
TSP	TOTAL STATIC PRESSURE
TG	TRANSFER GRILLE
TYP	TYPICAL
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
V	VOLTAGE
VD	VOLUME DAMPER
W/	WITH
WB	WET BULB
W.G.	WATER GAUGE

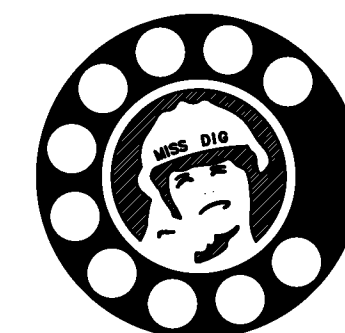
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JBS Contracting Inc.
1680 COVER PARKWAY
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BASEMENT MECHANICAL PLAN
SCALE 1/4" = 1'-0"



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REVISIONS		
TAG:	DATE:	CHANGE:

SCALE:
1/4" = 1'

M2

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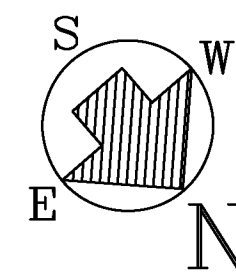
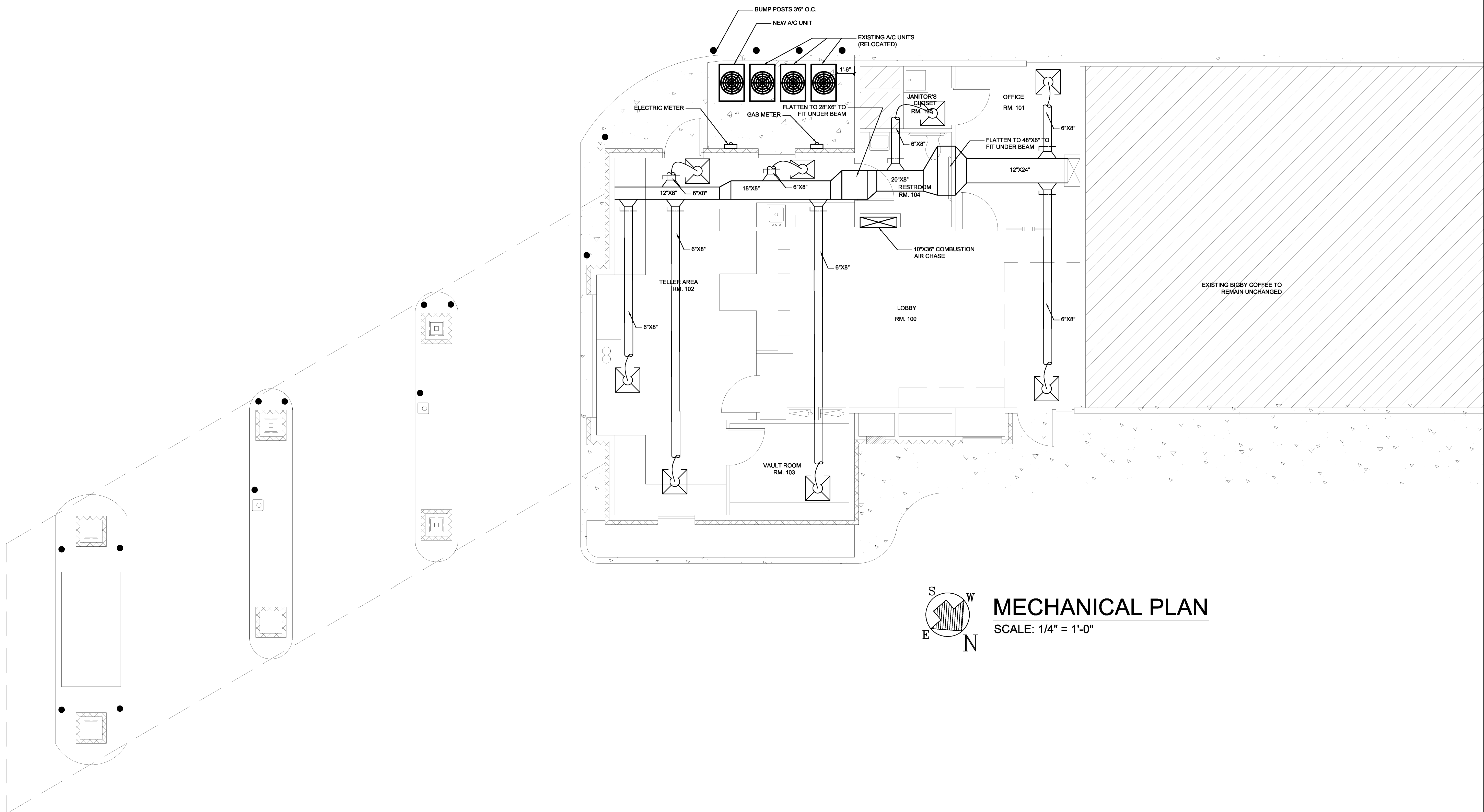
JBS JOB NUMBER:
DRAWING NAME: BASEMENT MECH. PLAN
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 7/22/2018

ENGINEER'S SEAL:

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661 N. CEDAR ST.
MASON MI. 48854

JBS Contracting Inc.
1680 COVER PARKWAY
MT. PLEASANT, MI 48858
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MECHANICAL PLAN

SCALE: 1/4" = 1'-0"



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REVISIONS		
TAG:	DATE:	CHANGE:

SCALE:
1/4" = 1'

M3

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JBS JOB NUMBER:
DRAWING NAME: MECHANICAL PLAN
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 7/22/2018

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PLUMBING GENERAL NOTES

1. ALL WORK IS TO BE PERFORMED IN STRICT COMPLIANCE WITH WASHINGTON SUBURBAN SANITARY COMMISSION, THE INTERNATIONAL PLUMBING CODE 2009 EDITION, ALL LOCAL CODES, AND ALL OTHER REGULATIONS GOVERNING WORK OF THIS NATURE.
2. THE CONTRACTOR SHALL PAY ALL FEES AND OBTAIN PERMITS AND LICENSES REQUIRED FOR COMPLETE INSTALLATION OF WORK.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.
4. THE PLUMBING PLANS ARE DIAGRAMMATIC AND ARE BASED ON ONE MANUFACTURER'S EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION, THE EXACT DIMENSIONS, OR ALL THE DETAILS OF THE EQUIPMENT. THE CONTRACTOR SHALL VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT PROPOSED TO ENSURE THAT THE EQUIPMENT WILL FIT IN THE AVAILABLE SPACE.
5. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH MECHANICAL AND ELECTRICAL CONTRACTORS.
6. THE CONTRACTOR SHALL CONFORM WITH ALL APPLICABLE MECHANICAL NOTES.

PLUMBING SPECIFICATIONS

1. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.
2. THESE DRAWINGS ARE SCHEMATIC AND INTENDED TO DEPICT THE GENERAL LOCATION OF PLUMBING SYSTEMS COMPONENTS. CONSULT ARCHITECTURAL PLANS FOR PROPER DIMENSIONS AND LOCATION OF FIXTURES.
3. PROVIDE ALL NECESSARY TRANSITIONS IN PIPING FOR COMPLETE INSTALLATION. NOT ALL OFFSETS ARE SHOWN ON THE DRAWINGS. ALL PIPING AND ACCESSORIES SHALL BE FULL SIZE AND REDUCED IN SIZE ONLY IMMEDIATELY BEFORE THE CONNECTION POINT TO THE EQUIPMENT.
4. FREE ACCESS IS REQUIRED ON ALL SIDES OF EQUIPMENT. ALL SUCH EQUIPMENT SHALL BE LOCATED AS TO PROVIDE ADEQUATE SERVICE CLEARANCE AND AS REQUIRED TO MEET THE CLEARANCES REQUIRED BY THE NATIONAL ELECTRIC CODE (NEC).
5. PLUMBING FIXTURES SHALL BE AS INDICATED ON THE FIXTURE CONNECTION SCHEDULE.
6. DOMESTIC HOT AND COLD WATER PIPING SHALL BE TYPE "L" HARD DRAWN COPPER TUBING PER ASTM B-88 AND FEDERAL SPEC. WW7-799. FITTINGS SHALL BE SOLDER JOINT COPPER FITTINGS PER B16.18 OR B16.22. JOINTS SHALL BE SOLDER TYPE CONSISTING OF 95% TIN AND 5% ANTIMONY. THE DISINFECTION OF POTABLE WATER PIPING SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL REQUIREMENTS.
7. WASTE AND VENT PIPING: CAST IRON NO-HUB TYPE WITH MANUFACTURER'S STANDARD COUPLINGS OR DWV COPPER WITH SOLDER JOINT COPPER FITTINGS. PVC PIPING SHALL ONLY BE USED IF ACCEPTABLE BY THE AUTHORITIES HAVING JURISDICTION. PVC PIPING SHALL NOT BE USED IN ANY PLENUM CEILING AREAS. ALL WASTE AND VENT PIPING SHALL BE INSTALLED AS PER THE INTERNATIONAL PLUMBING CODE AND SHALL BE PITCHED TO DRAIN AT A MINIMUM SLOPE OF 2% FOR PIPING SMALLER THAN 4". PIPING INSTALLED UNDERGROUND SHALL BE INSTALLED AS PER THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS FOR SERVICE INDICATED.
8. PLUMBING SHUT-OFF VALVES (CONCEALED): NIBCO 585 FULL PORT BALL VALVES, SWEAT CONNECTION.
9. PLUMBING STOP VALVES (EXPOSED): BRASSCRAFT, OVAL HANDLE, CHROME PLATED, ANGLE TYPE WITH SWEAT EXTENSION TUBE INLET AND COMPRESSION OUTLET. PROVIDE STOP VALVES ON ALL FIXTURES.
10. UNIONS: BRONZE BODY, SOLDERED ENDS, 125# - THREADED GROUND JOINT TYPE.
11. PIPE HANGERS FOR ALL PLUMBING PIPING SHALL BE CLEVIS TYPE OF THE SAME MATERIAL AS ASSOCIATED PIPING. PIPING HANGERS SHALL BE INSTALLED AT 5 FOOT INTERVALS AND AT BOTH SEGMENTS OF ALL DIRECTION CHANGES.
12. DOMESTIC HOT AND COLD WATER PIPING SHALL BE INSULATED WITH 1" THICK FIBERGLASS INSULATION WITH WHITE KRAFT PAPER REINFORCED WITH FIBERGLASS LAP SEAL JOINTS. ALL JOINTS SHALL BE STAPLED AND THE STAPLES COVERED WITH MASTIC TO MAINTAIN VAPOR BARRIER. PROVIDE PRE-MOLDED FITTING COVERS FOR ALL VALVES AND FITTINGS. INSULATION AT FITTINGS SHALL BE SEGMENTED PIECES OF PIPE OF PIPE INSULATION MATERIAL JOINTED WITH INSULATION CEMENT.
13. MANUFACTURED PLASTIC WRAPS FOR COVERING PLUMBING FIXTURE HOT AN COLD WATER SUPPLIES AND TRAP AND DRAIN PIPING. COMPLY WITH AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS.
14. ALL INSULATION SHALL BE INSTALLED IN ACCORDANCE WITH ASTM-84 AND HAVE A FLAME SPREAD RATING OF LESS THAN 25 AND A SMOKE RATING OF LESS THAN 50.

PLUMBING SYMBOLS

	COLD WATER PIPING
	HOT WATER PIPING
	VENT PIPING
	SANITARY PIPING
	GAS PIPING
	PIPE TURNING DOWN
	PIPE TURNING UP
	PIPE CONTINUING
	PLUMBING NOTE DESIGNATION
	RISER DESIGNATION
	BALL VALVE
	BALANCING VALVE
	UNION
	GAS COCK
	THERMOSTATIC MIXING VALVE
	OS&Y VALVE W/ TAMPER SWITCH
	CHECK VALVE
	FLOW SWITCH
	FIRE DEPARTMENT HOSE CONNECTION
	BACKFLOW PREVENTER
	FLOOR DRAIN
	WATER FILTER
	FLOOR CLEANOUT
	CLEANOUT
	HOSE BIBB
	WATER HAMMER ARRESTOR
	TRAP PRIMER
	PRESSURE REDUCING VALVE

PLUMBING ABBREVIATIONS

ABV	ABOVE
AFF	ABOVE FINISHED FLOOR
CO	CLEANOUT
CW	COLD WATER
CONT	CONTINUED
(D)	EXISTING TO BE REMOVED
DIA	DIAMETER
DW	DISHWASHER
DWG	DRAWING
EWC	ELECTRIC WATER COOLER
ELEV	ELEVATION
(E)	EXISTING TO REMAIN
F	FIRE
FCO	FLOOR CLEANOUT
FD	FLOOR DRAIN
GD	GARBAGE DISPOSAL
G	GAS
HB	HOSE BIBB
HW	HOT WATER
IM	ICE MAKER
INV	INVERT
LAV	LAVATORY
MB	MOP BASIN
PD	PUMPED DRAIN
(R)	EXISTING TO BE RELOCATED
SAN	SANITARY
SH	SHOWER
SK	SINK
SP	SPRINKLER
SS	SERVICE SINK
TP	TRAP PRIMER VALVE
UR	URINAL
V	VENT
VTR	VENT THROUGH ROOF
WCO	WALL CLEANOUT
WB	WASHER BOX
WC	WATER CLOSET
WHA	WATER HAMMER ARRESTOR
W/	WITH

JBS JOB NUMBER:
DRAWING NAME: PLUMBING NOTES
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 7/23/2018

ENGINEER'S SEAL:

COMMERCIAL BANK
661 N. CEDAR ST.
MASON MI. 48854

JBS Contracting Inc.
1680 COVER PARKWAY
MT. PLEASANT, MI 48858
PH: (989) 772-0170
FAX (989) 772-9272

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SCALE:
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COMMERCIAL BANK

PLUMBING DIVISION (15410) (2014 MICHIGAN PLUMBING CODE)

01.00 INSTALLATION AND FIXTURES ARE TO MEET MICHIGAN PLUMBING CODE AND LOCAL CODE AS ENFORCED BY THE GOVERNING AUTHORITY. PLUMBING PERMITS REQUIRED TO COMPLETE THE JOB ARE INCLUDED.

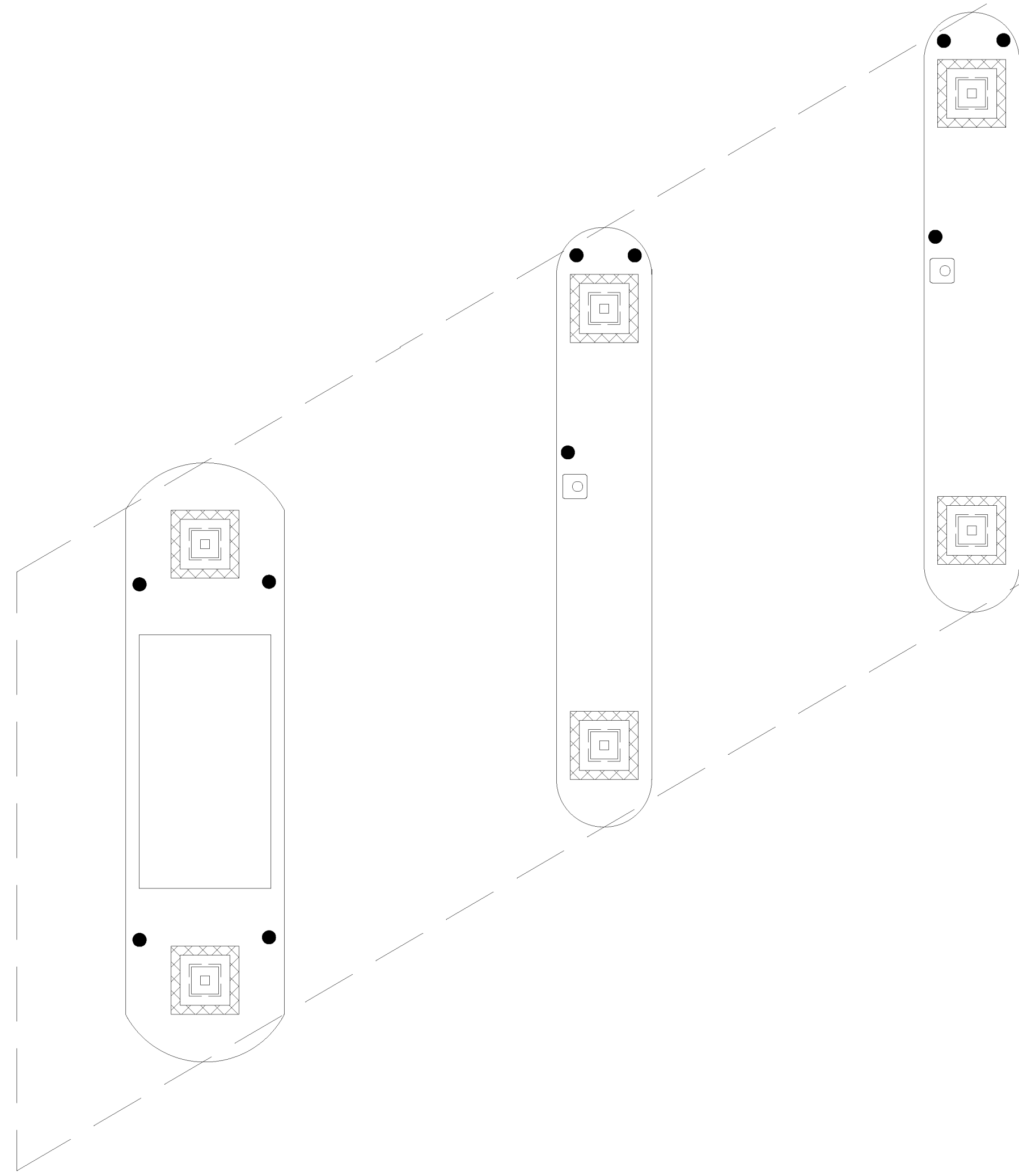
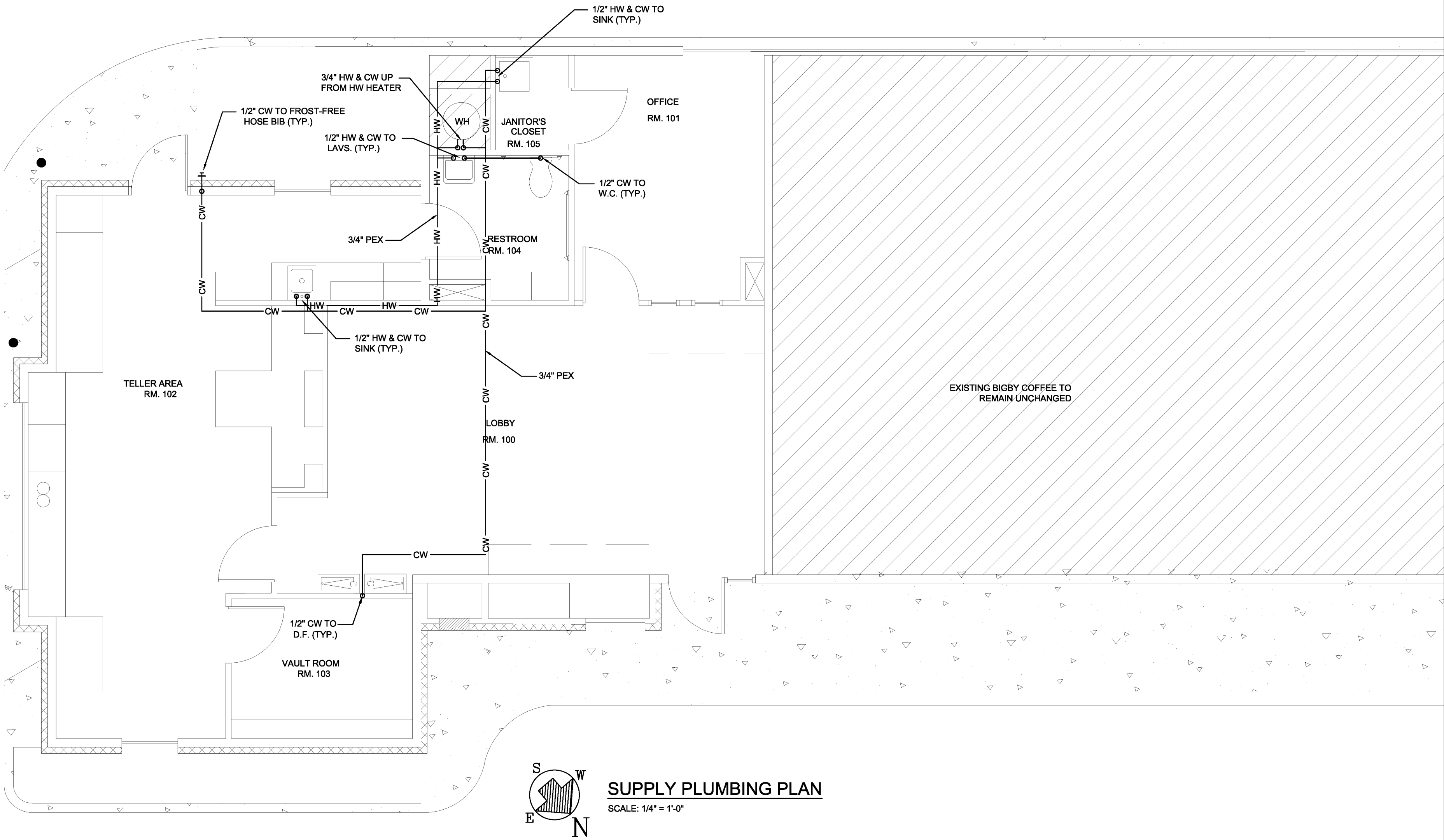
02.00 THE FOLLOWING FIXTURES ARE INCLUDED:

- (1) A.D.A. COMPLIANT WATER CLOSET
- (1) A.D.A. COMPLIANT WALL HUNG LAVATORY W/MOAN FAUCET AND UNDER SINK ASSE 1070 MIXING VALVE AND TRAP WRAP
- (1) STAINLESS STEEL DOUBLE BOWL KITCHEN SINK
- (1) FURNACE CONDENSATE DRAIN
- (1) FLOOR MOUNTED UTILITY SINK
- (1) FROST-FREE EXTERIOR HOSE BIBS
- (1) FLOOR DRAIN - WADE 3" W/TRAP PRIMER
- (2) HI-LOW ELECTRIC DRINKING FOUNTAIN

03.00 WATER - ALL UNDERGROUND WATER SUPPLY LINES ARE TO BE TYPE "K" COPPER OR PEX. ALL ABOVE GROUND WATER SUPPLY LINES ARE TO BE TYPE "M" COPPER OR PEX. A SHUTOFF VALVE IS REQUIRED FOR EACH FIXTURE. PROVIDE HAMMER RELIEF, TEMPERATURE VALVES AND PRESSURE RELIEF VALVES AS REQUIRED.

PLUMBING NOTES: (2014 MICHIGAN PLUMBING CODE)

1. ALL WORK SHALL COMPLY WITH ALL STATE, FEDERAL AND LOCAL CODES.
2. PROVIDE SERVICE VALVES AT ALL FIXTURES.
3. PROVIDE ACCESS DOORS TO ALL VALVES AND EQUIPMENT.
4. UNDERGROUND SANITARY SEWER SHALL BE MINIMUM OF 2" DIAMETER.
5. PITCH ALL UNDERGROUND SANITARY SEWER AT 1/8" PER 1'-0".
6. VERIFY ALL PLUMBING FIXTURE LOCATIONS AND BARRIER FREE FIXTURES WITH ARCHITECTURAL PLANS.
7. PROVIDE AND INSTALL ALL VENTS AND CLEAN OUTS REQUIRED IN ACCORDANCE WITH ALL APPLICABLE CODES.
8. PLUMBING CONTRACTOR SHALL PROVIDE DEEP SEAL TRAPS AND PRIMERS IN LOCATIONS WHERE TRAP SEAL MAY BE LOST DUE TO EVAPORATION.
9. MECHANICAL AND PLUMBING PLANS ARE DIAGRAMMATIC IN NATURE. CONTRACTOR IS RESPONSIBLE TO COORDINATE SPECIFIC LOCATIONS OF ITEMS AND ADJUST AS REQUIRED TO ACCOMMODATE CONSTRUCTION CONDITIONS, CODE REQUIREMENTS AND THE WORK OF OTHER TRADES.



REVISIONS		
TAG:	DATE:	CHANGE:

SCALE: 1/4" = 1'

P2

COMMERCIAL BANK

JBS JOB NUMBER:
DRAWING NAME: BASEMENT PLUMBING PLAN
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 1/23/2018

ENGINEER'S SEAL:

COMMERCIAL BANK
661 N. CEDAR ST.
MASON MI. 48854

COMMERCIAL/INDUSTRIAL
CONSTRUCTION

JBS Contracting Inc.
1680 COVER PARKWAY
MT. PLEASANT, MI 48858
PH: (989) 772-0770
FAX (989) 772-9272

PLUMBING DIVISION (15410) (2014 MICHIGAN PLUMBING CODE)

01.00 INSTALLATION AND FIXTURES ARE TO MEET MICHIGAN PLUMBING CODE AND LOCAL CODE AS ENFORCED BY THE GOVERNING AUTHORITY. PLUMBING PERMITS REQUIRED TO COMPLETE THE JOB ARE INCLUDED.

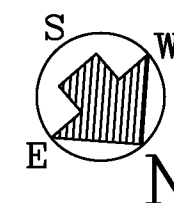
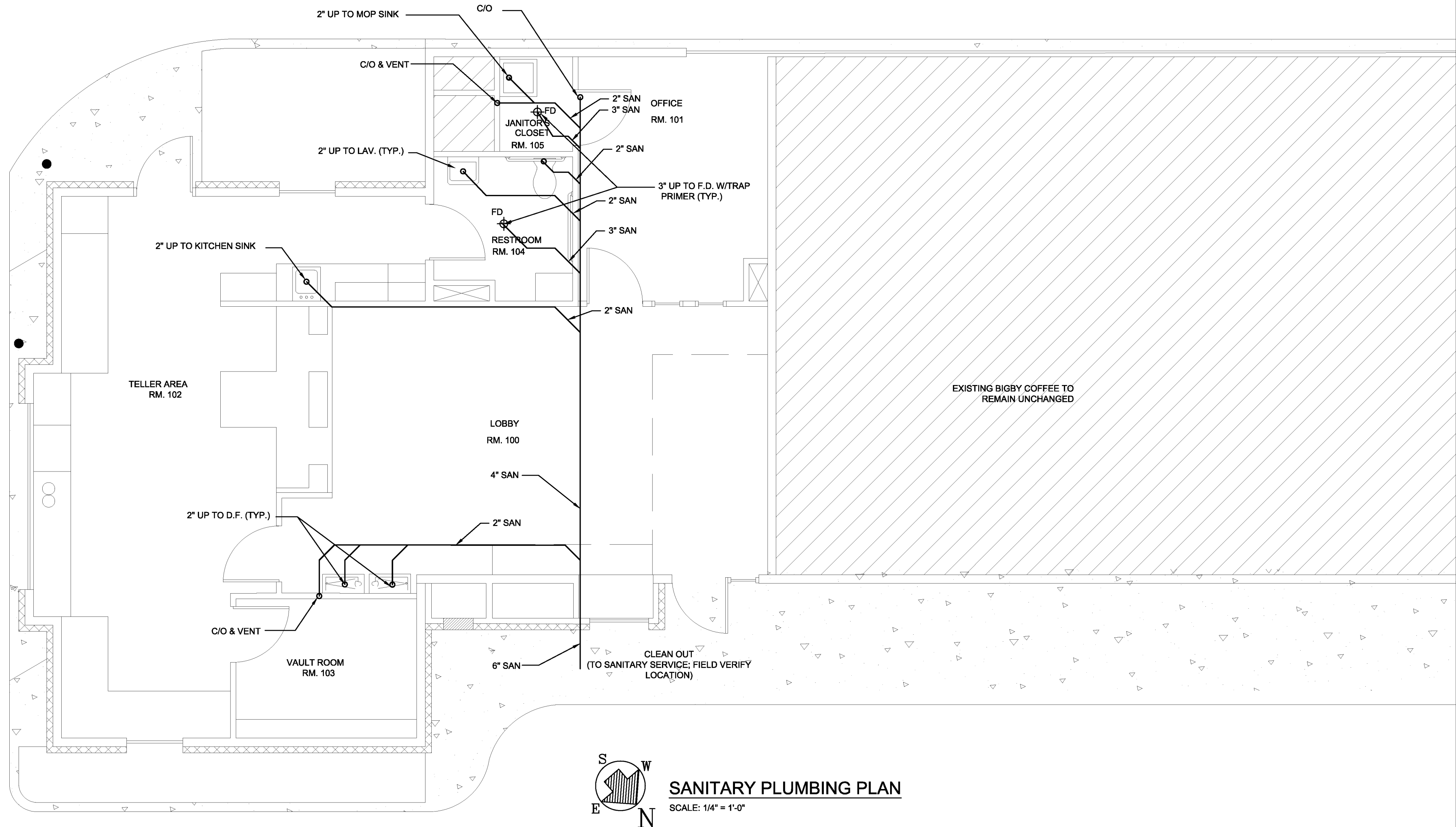
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PLUMBING NOTES: (2014 MICHIGAN PLUMBING CODE)

1. ALL WORK SHALL COMPLY WITH ALL STATE, FEDERAL AND LOCAL CODES.
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3. PROVIDE ACCESS DOORS TO ALL VALVES AND EQUIPMENT.
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SANITARY PLUMBING PLAN

SCALE: 1/4" = 1'-0"



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SCALE:
1/4" = 1'

P3

COMMERCIAL BANK

JBS JOB NUMBER:
DRAWING NAME: PLUMBING PLAN
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 7/23/2018

ENGINEER'S SEAL:

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661 N. CEDAR ST.
MASON MI. 48854

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PLUMBING FIXTURE SCHEDULE										
MARK	FOXTURE	TYPE	EQUAL TO MAKE AND MODEL NO.	SUPPLY TRIM MAKE AND MODEL	CONNECTION SIZES				REMARKS	
					SAN.	VENT	CW	HW		
WC-1	WATER CLOSET - ADA	FLOOR MTD, FLUSH TANK	KOHLER WELLWORTH	---	4"	---	1/2"	---	FURNISH W/ ELONGATED SEAT WITH COVER- CENTOCO 1500CC, CHROME PLATE SUPPLY AND STOP	
LAV-1	LAVATORY	WALL MOUNTED - ADA	KOHLER GREENWICH	DELTA 501-WF - SINGLE LEVER	1 1/4"	1 1/4"	1/2"	1/2"	FURNISH WITH GRID DRAIN, CHROME PLATED P-TRAP, SUPPLIES AND STOPS	
S-1	DOUBLE SINK	COUNTERTOP MTD STAINLESS STEEL	ELKAY LRADQ3319	DELTA 100-BH-DST	1 1/2"	1 1/2"	1/2"	1/2"	FURNISH WITH STRAINER AND BASKET, CHROME PLATED SUPPLIES AND STOPS	
EW-1	ELECTRIC WATER COOLER	WALL MOUNTED	HALSEY TAYLOR MODEL HVR8	---	1 1/4"	1 1/4"	1/2"	---		
EW-1A	ELECTRIC WATER COOLER	WALL MOUNTED - ADA	HALSEY TAYLOR MODEL HVR8	---	1 1/4"	1 1/4"	1/2"	---		
MSB-1	MOP SINK BASIN	FLOOR MOUNTED	FIAT MODEL MSB2424	FIAT MODEL 830-AA	3"	---	1/2"	1/2"	FURNISH W/ INTEGRAL VACUUM BREAKERS AND STOPS, WALL BRACE, PAIL HOOK, THREADED OUTLET	

- NOTES:
- AT ALL SINKS AND LAVATORIES. WHERE PIPING IS EXPOSED, INSULATE EXPOSED PIPING WITH ADA COMPLIANT WRAP. EQUAL TO HAND-LAV.
 - INSTALL AT ALL PUBLIC HAND WASHING SINKS AND LAVATORIES AN ASSE 1070 APPROVED TEMPERING VALVE, TV-1, SEE PLUMBING ACCESSORIES SCHEDULE FOR MORE INFORMATION.

PLUMBING ACCESSORIES SCHEDULE												
MARK	ACCESSORY	TYPE	EQUAL TO MAKE AND MODEL NO.	CONNECTION SIZES				ELECTRICAL DATA				REMARKS
				SAN.	CW	HW	TW	VOLTS	PHASE	AMPS	WATTS	
TV-1	SINK TEMPERING VALVE	THERMOSTATIC MIXING VALVE	WATTS LF8MV	---	1/2"	1/2"	1/2"	---	---	---	---	MUST MEET ASSE 1070, ANSINFS 372 LOW LEAD REQUIREMENT
BFP-1	BACKFLOW PREVENTER	DOUBLE CHECK BACKFLOW PREVENTER	ZURN WILKENS MODEL 950XL72	---	1"	---	---	---	---	---	---	MUST MEET ASSE 1015, ANSINFS 372 LOW LEAD REQUIREMENT, FURNISH WITH STRAINER
WH-1	WALL HYDRANT	NON-FREEZE AUTOMATIC DRAINING	ZURN Z1320XL	---	3/4"	---	---	---	---	---	---	MUST MEET ANSINFS 372 LOW LEAD REQUIREMENT
FD-1	FLOOR DRAIN	FLOOR DRAIN	ZURN Z415	3"	1/2"	---	---	---	---	---	---	FURNISH WITH NICKEL BRONZE TOP, FURNISH WITH RECTORSEAL SURE SEAL PLUS TRAP GUARD
GCO-1	GRADE CLEANOUT	CLEANOUT	ZURN Z1400	4"	---	---	---	---	---	---	---	FURNISH WITH STAINLESS STEEL EXTRA HEAVY DUTY TOP
FCO-1	FLOOR CLEANOUT	CLEANOUT	ZURN Z1400	3"	---	---	---	---	---	---	---	FURNISH WITH POLISHED BRONZE LIGHT DUTY TOP

PIPING PRODUCTS SCHEDULE						
MARK	SERVICE	PIPING SPECIFICATIONS		FITTING SPECIFICATIONS		JOINTS
		TYPE	REFERENCE	TYPE	REFERENCE	
SAN	SANITARY - ABOVE GROUND	POLY VINYL CHLORIDE (PVC), SCHEDULE 40	ASTM D2729	PVC	ASTM D2729	SOLVENT WELD WITH SOLVENT CEMENT
SAN	SANITARY - BELOW GROUND	POLY VINYL CHLORIDE (PVC), SCHEDULE 40	ASTM D2729	PVC	ASTM D2729	SOLVENT WELD WITH SOLVENT CEMENT
P.STORM	PUMPED STORM	POLY VINYL CHLORIDE (PVC), SCHEDULE 40	ASTM D2729	PVC	ASTM D2729	SOLVENT WELD WITH SOLVENT CEMENT
VENT	PLUMBING VENTS	POLY VINYL CHLORIDE (PVC), SCHEDULE 40	ASTM D2729	PVC	ASTM D2729	SOLVENT WELD WITH SOLVENT CEMENT
WATER	WATER PIPING BURIED IN BLDG.	COPPER TUBING TYPE K, ANNEALED	ASTM B88	CAST BRONZE OR WROUGHT COPPER	ASTM B16.18, ASTM B16.22	AWS A5.8, BCuP SILVER BRAZE
CW, HW, HWR	WATER PIPING ABOVE GRADE	COPPER TUBING HARD DRAWN, TYPE L	ASTM B88	WROUGHT COPPER AND BRONZE	ASTM B16.22	SOLDER, LEAD FREE
GAS	NATURAL GAS ABOVE GRADE	STEEL PIPE SCHEDULE 40, BLACK	ASTM A53 OR A120	MALLEABLE IRON OR FORGED STEEL WELDED	ASTM B16.3 OR ASTM A234	THREADED OR WELDED
COND. DR.	CONDENSATE DRAINS INSIDE BUILDING	POLY VINYL CHLORIDE (PVC)	ASTM D2241	PVC	ASTM D2241	SOLVENT WELD WITH SOLVENT CEMENT

INSULATION SCHEDULE							
MARK	ITEM	INSULATION TYPE	VAPOR BARRIER	THICKNESS	MIN. "U" VALUE	SIMILAR TO MAKE AND MODEL NO.	REMARKS
CW	COLD DOMESTIC WATER	FIBERGLASS	FRK	1"	3.7/IN.	CERTAINTED SNAP-ON, OR EQUAL	
HW	HOT DOMESTIC WATER	FIBERGLASS	FRK	1"	3.7/IN.	CERTAINTED SNAP-ON, OR EQUAL	

PUMPS									
MARK	USE	TYPE	GPM	HEAD FEET	MOTOR				REMARKS
					WATTS/HP	VOLTS	PHASE	RPM	
SP-1	SEWAGE EJECTOR PUMP	SEWAGE	30.0	15	0.4 HP	115	1	3400	ZOELLER AQUA-MATE MODEL 211 FURNISH WITH INTEGRAL FLOAT, A-PAK ALARM SYSEM
SP-2	DRAIN TILE SUMP PUMP	DEWATERING	30.0	15	0.4 HP	115	1	3400	ZOELLER AQUA-MATE MODEL 211 FURNISH WITH INTEGRAL FLOAT, A-PAK ALARM SYSEM



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FAX (989) 772-9272

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MASON MI. 48854

JBS JOB NUMBER:
DRAWING NAME: PLUMBING SCHEDULE
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 7/23/2018

ENGINEER'S SEAL:



2014 MICHIGAN ELECTRICAL CODE

1. ALL ELECTRICAL WORK INCLUDING INSTALLING CONDUIT, WIRE, LIGHTING, PANEL BOARDS ETC. SHALL BE INSTALLED BY A LICENSED REPRESENTATIVE OF THE ELECTRICAL CONTRACTOR AND INSPECTED PRIOR TO COVERING.
2. LISTED OR LABELED EQUIPMENT SHALL BE USED AND INSTALLED IN ACCORDANCE WITH ANY INSTRUCTIONS INCLUDED IN THE LISTING OR LABELING. PER SECTION 110 - 3 (B)
3. THE SERVICE EQUIPMENT IS REQUIRED TO CARRY THE AVAILABLE FAULT CURRENT THAT IS PROVIDED BY THE UTILITY COMPANY. PER SECTION 110 - 9
4. THE LOCATION OF SERVICE DISCONNECTING MEANS SHALL COMPLY WITH SECTION 230 - 70
5. ALL UNDERGROUND CONDUIT AND CONDUCTOR INSTALLATIONS SHALL BE INSTALLED BY A LICENSED REPRESENTATIVE OF THE ELECTRICAL CONTRACTOR AND SHALL MEET THE REQUIREMENTS OF SECTION 300 - 5, AND APPROVED PRIOR TO COVERING.
6. PROVIDE THE PROPER SIZING AND INSTALLATION OF THE GROUNDING ELECTRODE SYSTEM PER CODE.

ELECTRICAL DIVISION (16000)

- 01.00 ELECTRICAL INSTALLATION IS TO MEET ALL STATE AND LOCAL CODES AS ENFORCED BY THE LOCAL GOVERNING AUTHORITY. ELECTRICAL PERMITS REQD TO COMPLETE THE JOB ARE INCLUDED.
- 02.00 FURNISH & INSTALL ALL NECESSARY WIRING, SERVICE PANELS DESIGNED TO ADEQUATELY SUPPLY ALL FIXTURES INSTALLED. THE FOLLOWING FIXTURES ARE TO BE INSTALLED:
- 03.00 THE ELECTRICIAN WILL INSTALL 3/4" PLYWOOD BACKER FOR THE SERVICE PANEL AND ANY SPECIALTY BACKER REQUIRED FOR THE INSTALLATION OF THE ELECTRICAL.
- 04.00 PROVIDE METAL CONDUIT FOR 24 VOLT WIRING AT ALL OVERHEAD DOORS. PUSH BUTTON CONTROL TO OPERATOR.

SYM	DESCRIPTION	FIXTURE NUMBER	WATTS PER FIXTURE
	DUPLEX RECEPTACLE		
	G.F.I. DUPLEX RECEPTACLE		
	WATER PROOF G.F.I. DUPLEX RECEPTACLE		
	VOICE/DATA OUTLET		
	SWITCHING TO CONSIST OF OCCUPANCY SENSORS (LOCATIONS TBD)		
	LED 2X4 LAY IN FIXTURE	24ED-LD2-45-UNV-L840-CD1 OR EQUIVALENT	38
	LED 2X4 LAY IN W/ EM BALLAST	24EN-LD2-45-UNV-EL7W-7840-CD1 OR EQUIVALENT	38
	RECESSED CANOPY LIGHT	LRC-B16-1-LED-E1-VAT-WH OR EQUIVALENT	50
	6" RECESSED CAN LIGHT	LIGHTING SCIENCE GLP6-WW-WH-120 OR EQUIV.	15
	6" RECESSED CAN LIGHT WATER PROOF		15
	OWNER PROVIDE STOP LIGHT	OWNER PROVIDED	
	ATM SIGN	OWNER PROVIDED	
	WALL PACK	LPI-W/57WLED/4000K/120-277V OR EQUIVALENT	20
	LED EXIT LIGHT W/ REMOTE HEAD	ALLPRO APCH7R OR EQUIVALENT	10



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REVISIONS		
TAG:	DATE:	CHANGE:

JBS JOB NUMBER:
DRAWING NAME: ELECTRICAL PLAN
DRAWN BY: DJC
REVIEWED BY:
FIELD SUPERVISOR:
DATE: 1/24/2018
ENGINEER'S SEAL:

COMMERCIAL BANK
661 N. CEDAR ST.
MASON MI. 48854

JBS Contracting Inc.
1680 COVER PARKWAY
MT. PLEASANT, MI 48858
PH: (989) 712-0770
FAX (989) 712-9272
COMMERCIAL/INDUSTRIAL
CONSTRUCTION

SCALE:
3/16" = 1'-0"
E1
COMMERCIAL BANK

REQUIRED:

COMMERCIAL BANK - 1 PER 200 SQ. FT. OF USABLE FLOOR SPACE = $490 / 200 = 2.45$ OR 3 SPACES

BIGGBY COFFEE - 6 PER 100 SQ. FT OF USABLE FLOOR SPACE = $(674 / 100) * 6 = 40.44$ OR 41 SPACES

TOTAL REQUIRED = 44 SPACES

PROPOSED

2 HANDICAPPED SPACES

33 REGULAR SPACES

9 DRIVE THRU SPACES

44 TOTAL SPACES

1. NO LIGHTING SHALL IN ANY WAY IMPAIR THE SAFE MOVEMENT OF TRAFFIC ON ANY ROAD.
2. LIGHTING SHALL BE DESIGNED AND CONSTRUCTED TO ENSURE THAT DIRECT AND REFLECTED LIGHT IS CONFINED TO THE LOT OR PARCEL UPON WHICH THE LIGHT SOURCE IS LOCATED.
3. EXTERIOR LIGHTING SHALL BE SO INSTALLED THAT THE SURFACE OF THE SOURCE OF LIGHT SHALL BE HOODED OR LOUVERED TO THE GREATEST EXTENT PRACTICAL SO THAT:
 - LIGHT SOURCES SHALL NOT BE VISIBLE FROM BEYOND THE LOT LINES AND SHALL BE SO ARRANGED TO REFLECT LIGHT AWAY FROM ADJACENT PROPERTIES.
 - NO MORE THAN ONE FOOT CANDLE POWER OF LIGHT SHALL CROSS A LOT LINE FIVE FEET ABOVE THE GROUND ON A RESIDENTIALLY USED LOT.
 - LIGHTING IS DIRECTED DOWNWARD AS MUCH AS IS POSSIBLE AND APPROPRIATE FOR THE APPLICATION.

- 5 EACH CANOPY TREES ARE PROPOSED TO REMAIN
- 6 EACH CLEVELAND PEAR (PYRUS CALLERYANA 'CLEVELAND SELECT') TREES ARE PROPOSED TO BE PLACED (SPRING FLOWERING TREES)
- TOTAL 11 TREES

REQUIRED PER SEC. 94-241 (C)(8)
IN ADDITION TO ANY REQUIRED BUFFER AREA OR PARKING LOT LANDSCAPING, AT LEAST TEN PERCENT OF THE SITE AREA SHALL BE LANDSCAPED WITH GRASSES AND OTHER LIVE GROUNDCOVERS, PLANTING BEDS, AND TREES, OR COMBINATIONS THEREOF, AND THE SITE SHALL INCLUDE A MINIMUM OF ONE TREE PER 10,000 SQUARE FEET OF DISTURBED LAND, OR FRACTION THEREOF.

PROPOSED:	GRASS AND TREE AREA = 24,103 SQ. FT. OR 38.9% DISTURBED LAND = 37,830 SQ. FT. (4 TREES REQUIRED)
-----------	---

REQUIRED PER SEC. 94-241 (I)(1)
OFF-STREET PARKING AREAS CONTAINING SIX OR MORE PARKING SPACES SHALL BE PROVIDED WITH LANDSCAPING IN ACCORDANCE WITH THE FOLLOWING:
SIX THROUGH 50 SPACES: ONE CANOPY TREE AND 50 SQ. FT. OF LANDSCAPED AREA PER SIX SPACES. (AT LEAST ONE-HALF OF THE REQUIRED TREES SHALL BE INSTALLED IN THE INTERIOR OF THE PARKING AREA. THE INTERIOR SHALL BE CONSIDERED AS ANY POINT TEN FEET OR MORE FROM THE OUTSIDE BOUNDARY OF THE PARKING AREA)
PROPOSED: 35 SPACES / 6 = 5.83 OR 6 TREES REQUIRED & PROPOSED

LOT AREA 62,243 SQ. FT.
BUILDING AREA = 2,994 SQ. FT.
LOT COVERAGE = 4.8%

OVERALL AREA:
61,940 SFT.

GRASSES AND TREE AREAS:
4,226 + 19,877 = 24,103 SQ. FT.
OR 38.5%

DISTURBED AREA:
37,830 SQ. FT.

19,884 SQ. FT.

4,226 SQ. FT.

37,830 SQ. FT.

NO SCALE

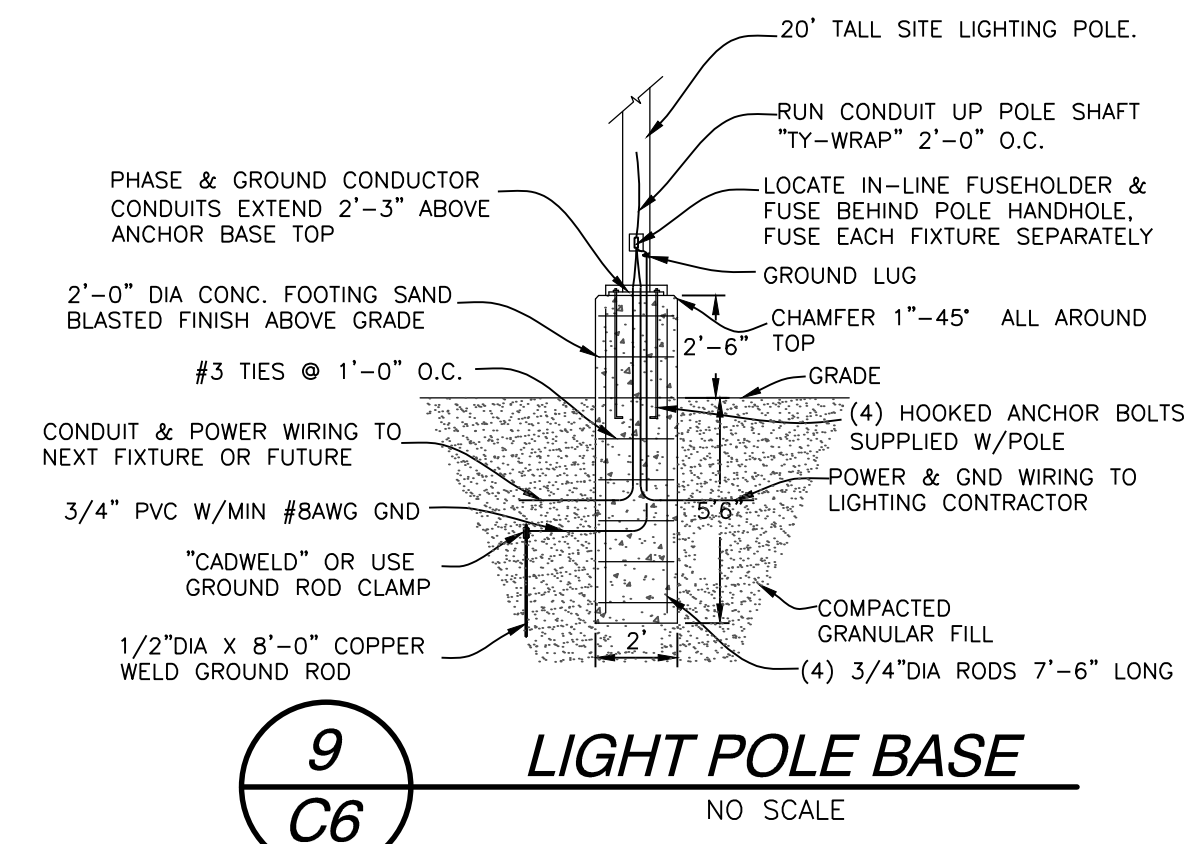
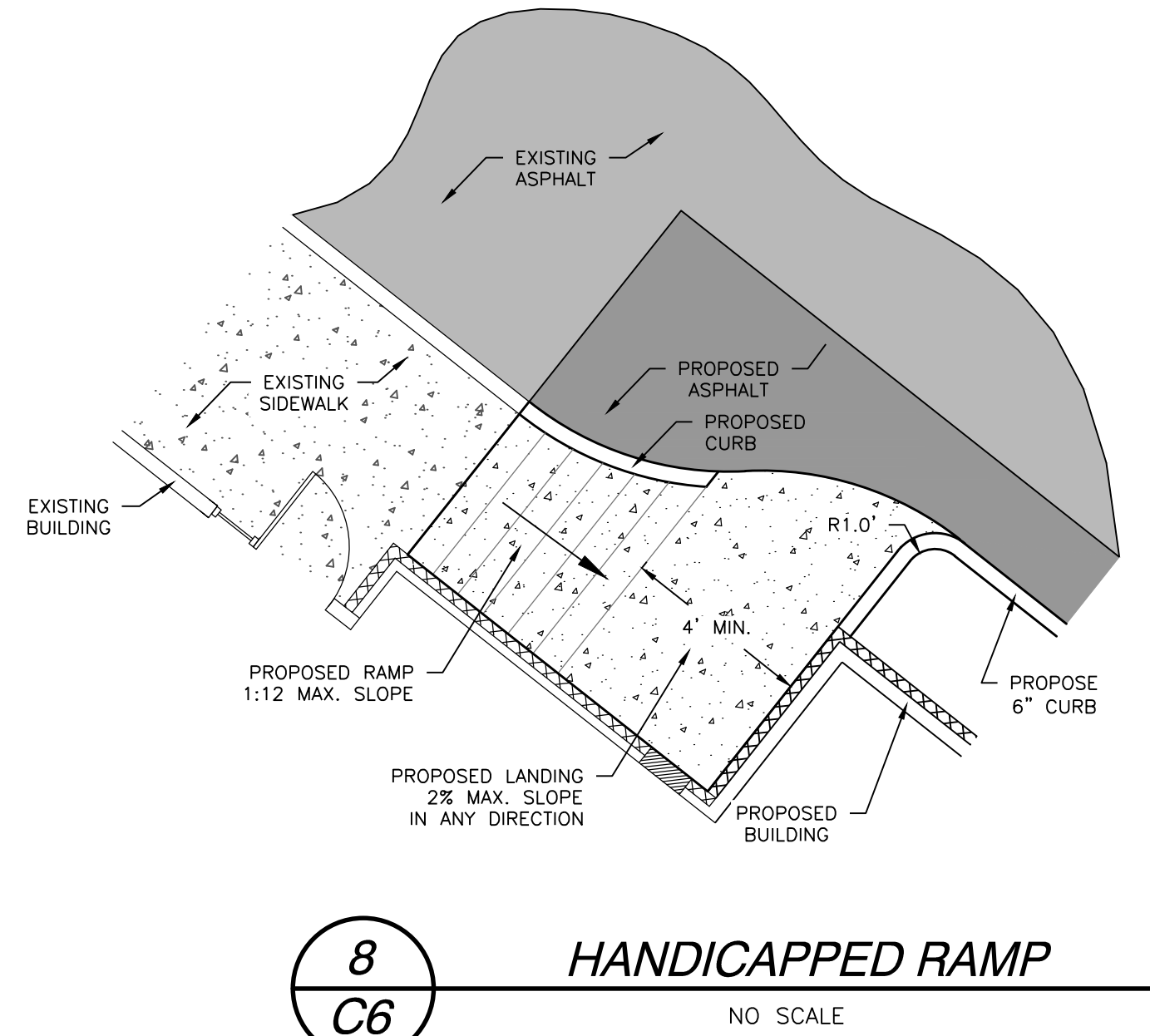
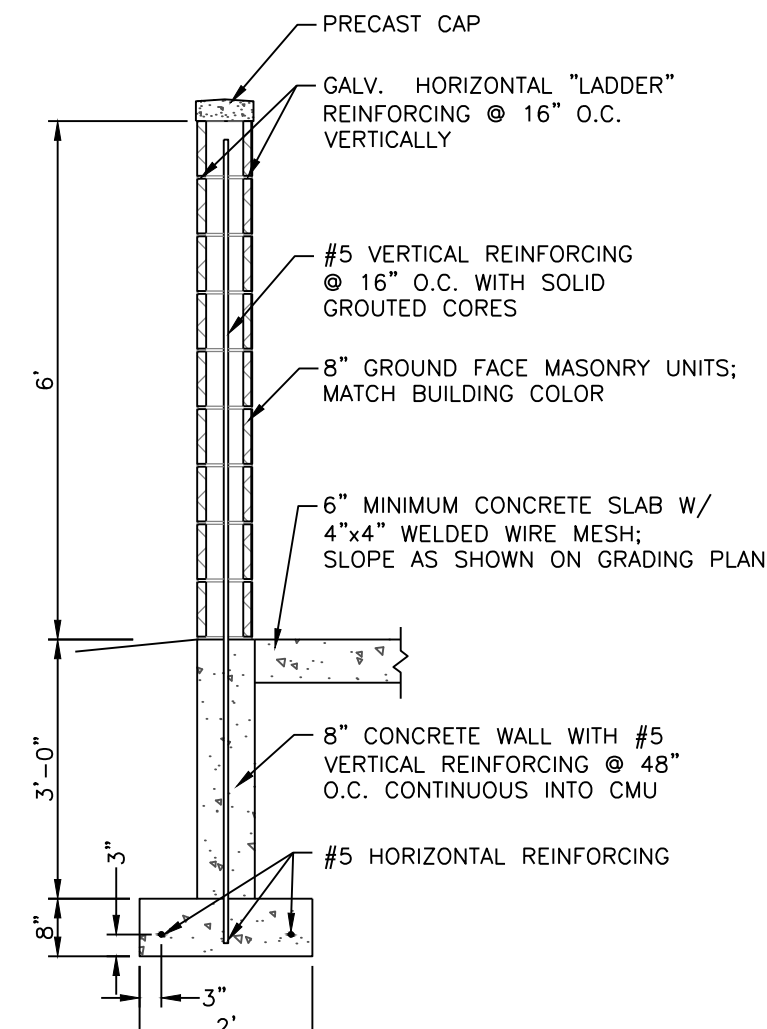
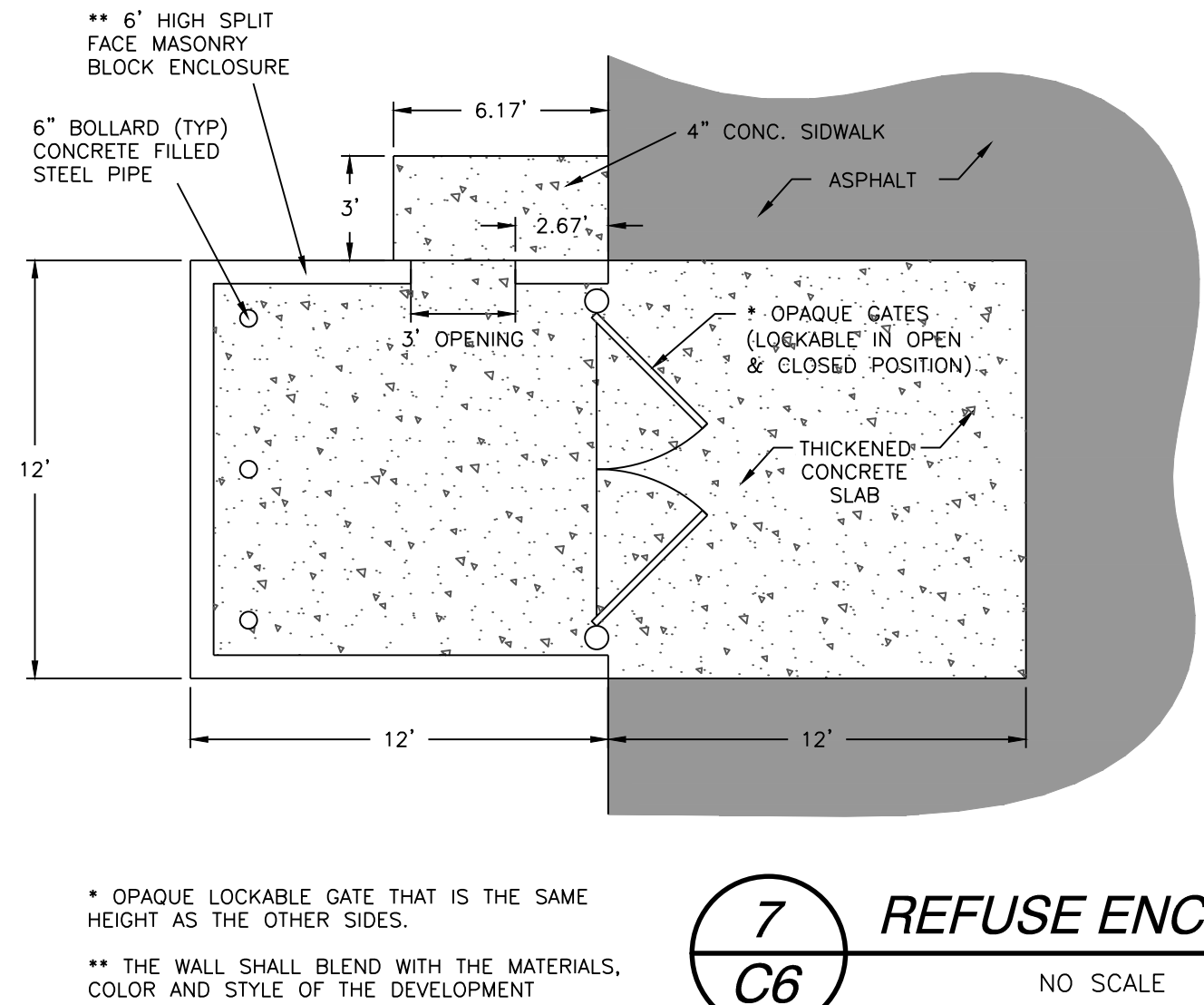
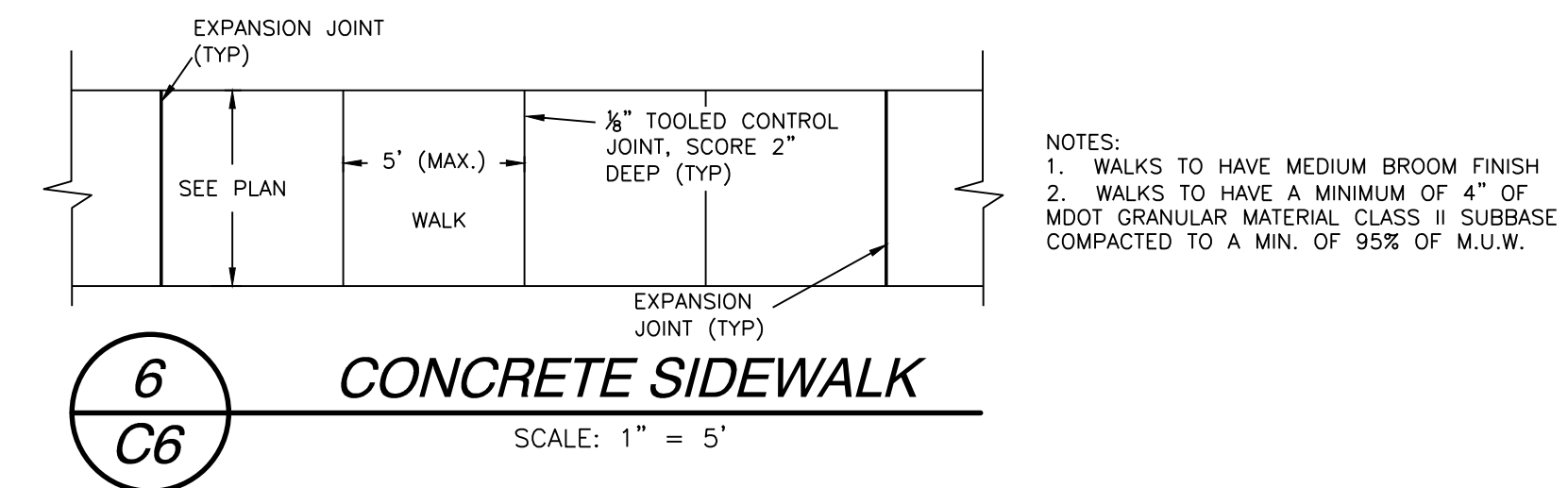
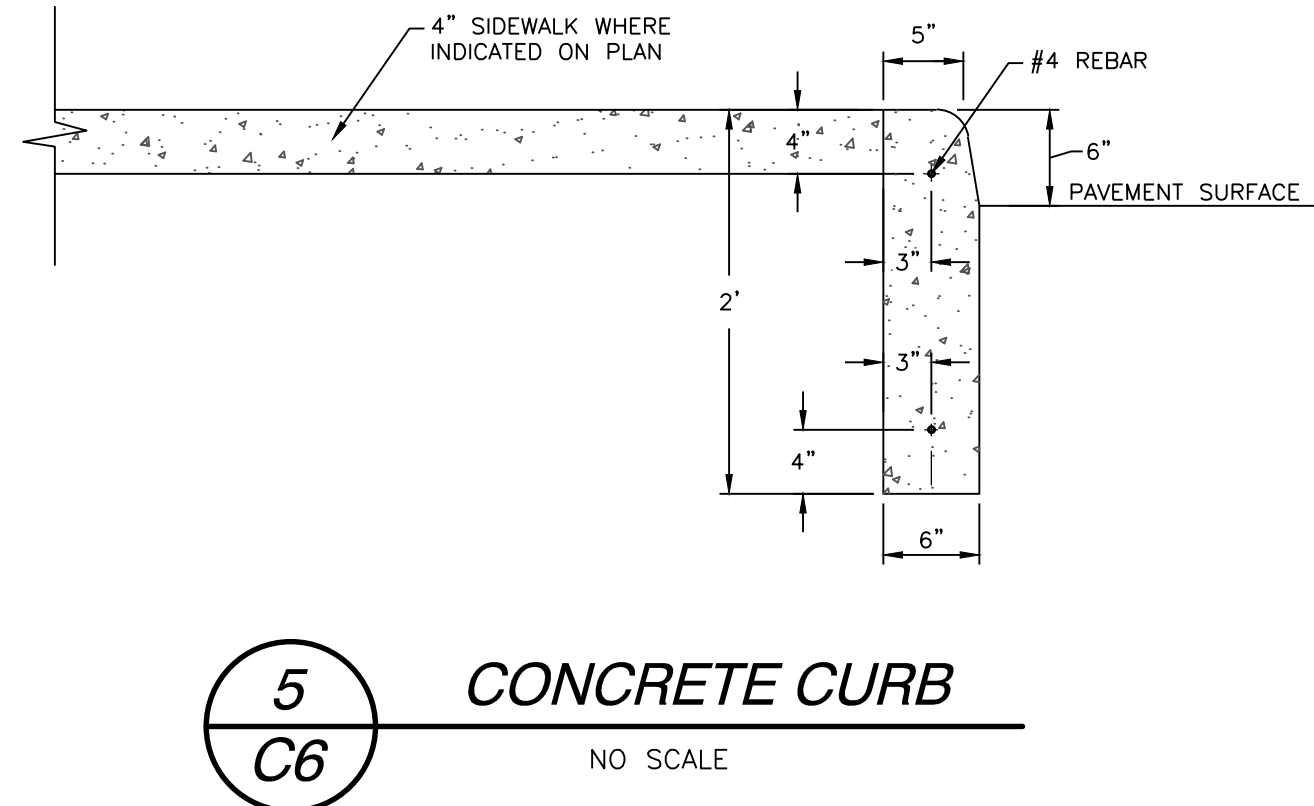
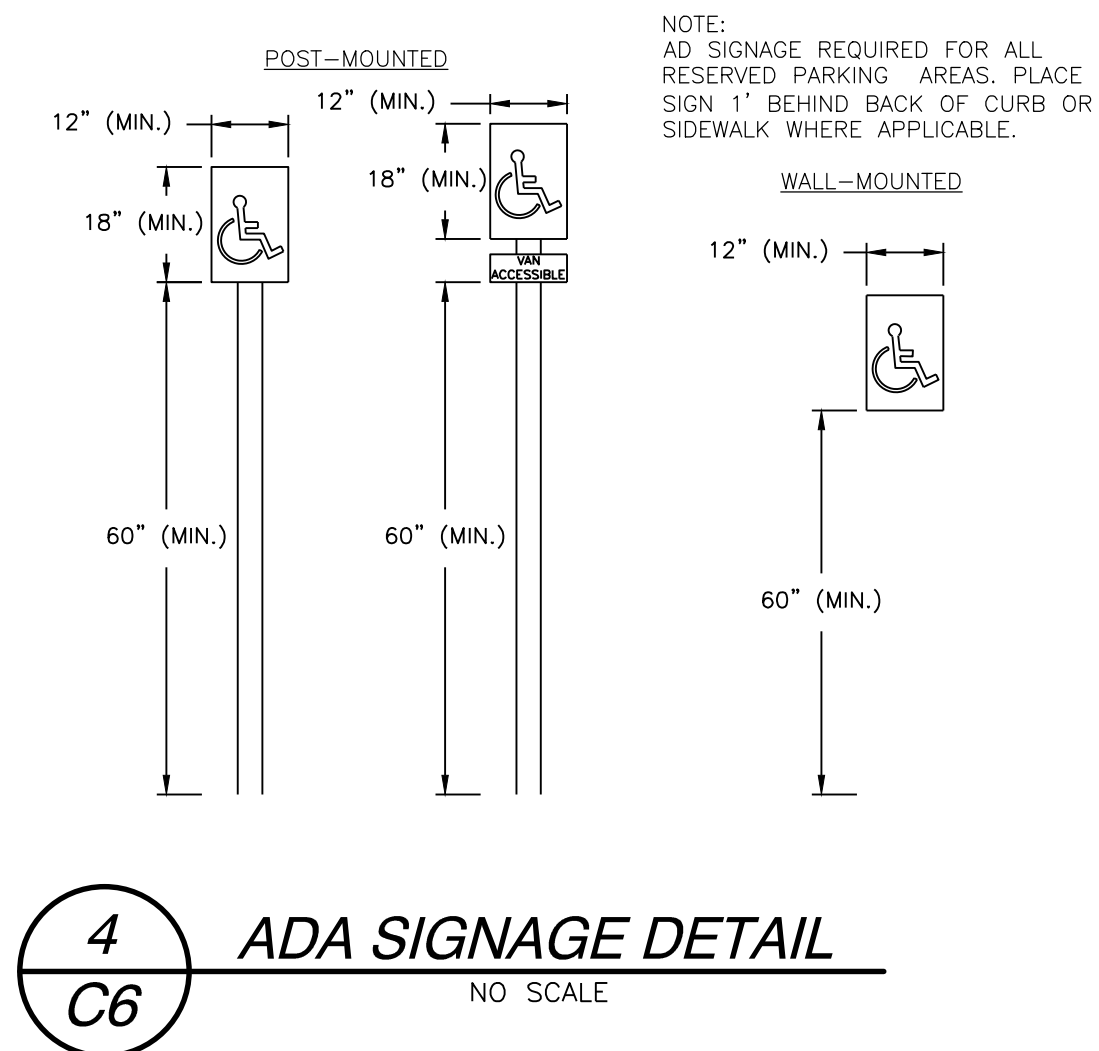
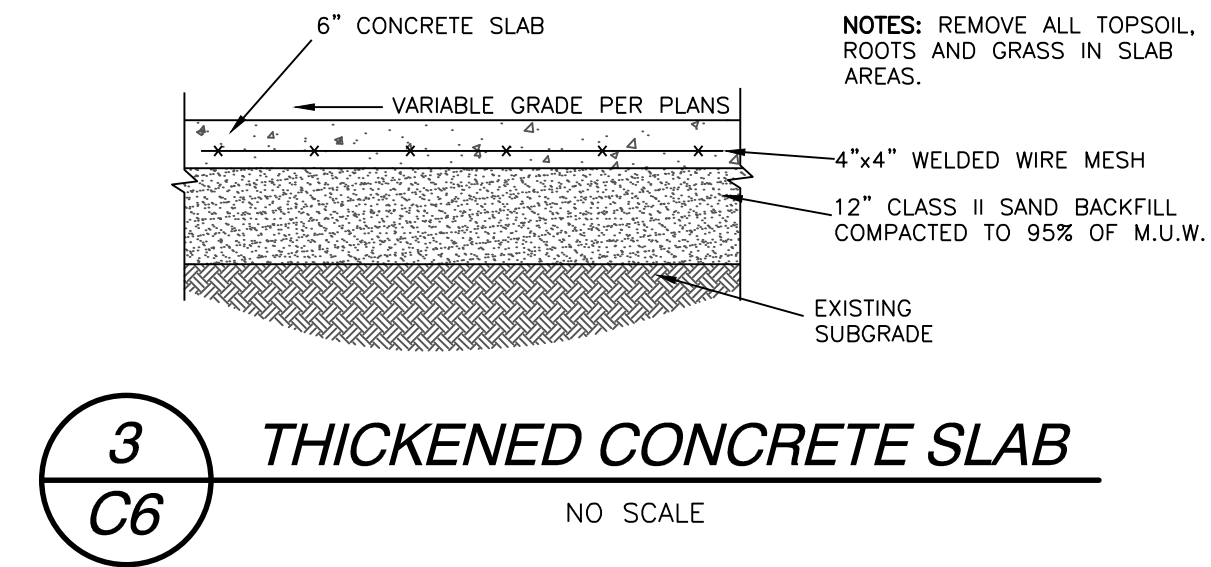
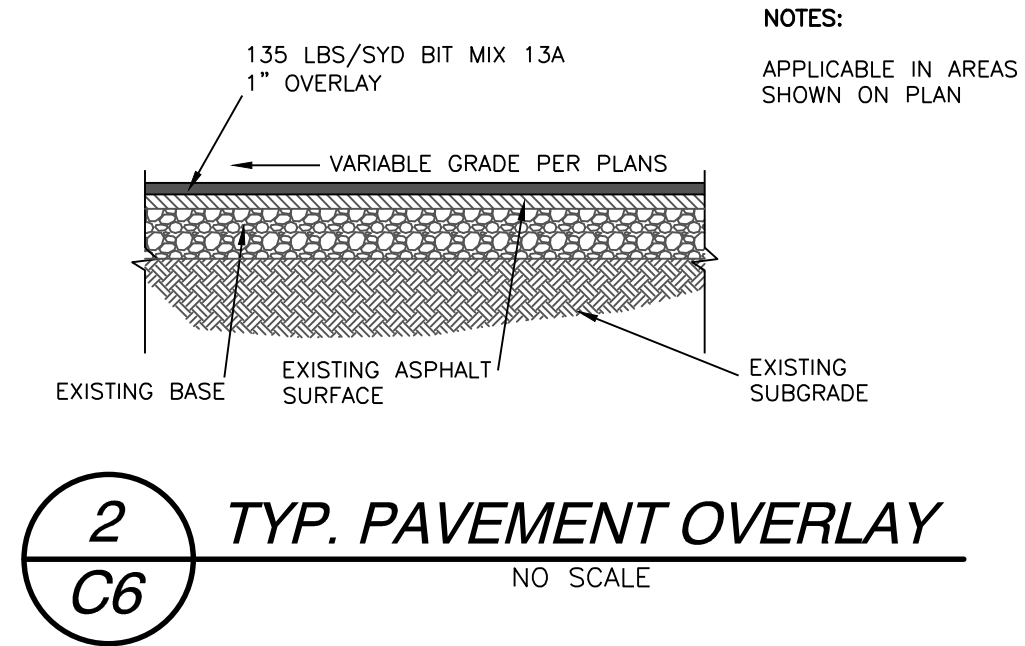
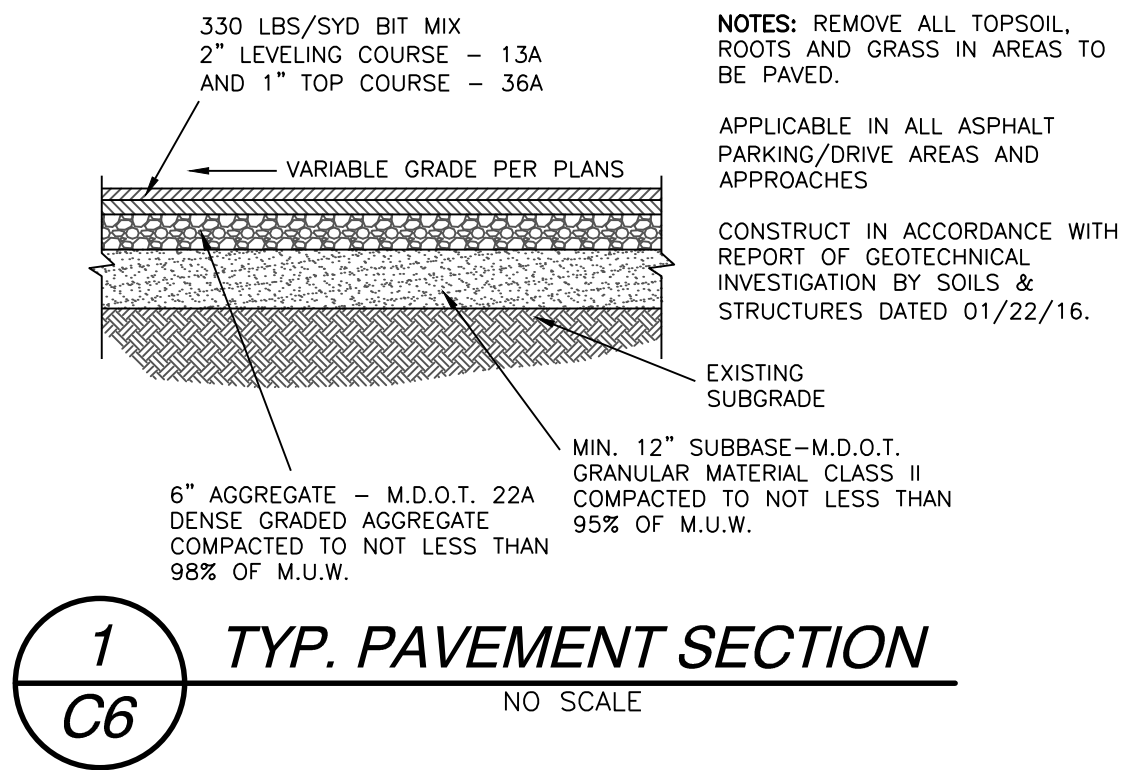
COMMERCIAL BANK
Section 5, T2N., R1W, City of Mason,
Ingham County, Michigan

LORENZ
**SURVEYING &
ENGINEERING, INC.**

3329 W. Beal City Road
Weidman, Michigan 48893

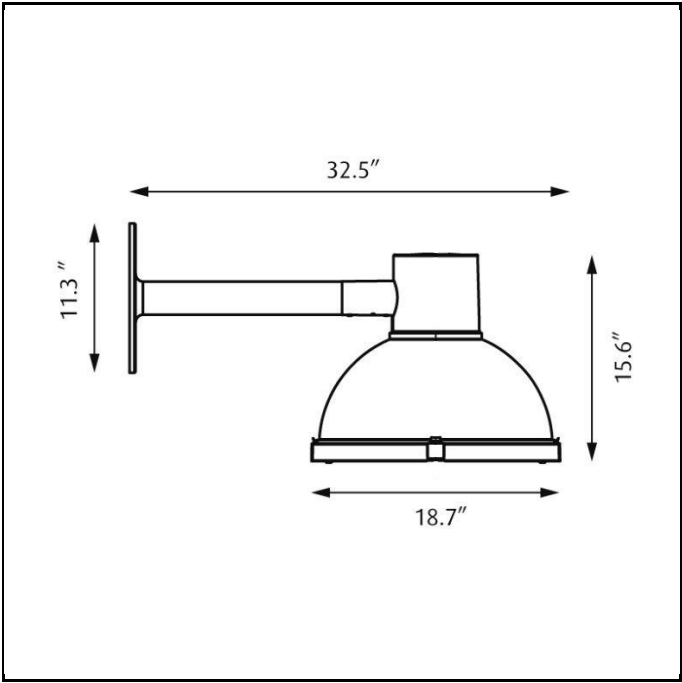
Phone: (989) 644-5953
Fax: (989) 644-8659
plorenz@wintnet.net

34



PLAN ISSUE:		PERMIT													
SHEET TITLE:		REVISIONS		NO.		DATE		DESCRIPTION							
PROJECT NAME:		NO.		DATE		DESCRIPTION		NO.							
DETAILS		COMMERCIAL BANK		Section 5, T2N., R1W, City of Mason, Ingham County, Michigan		NO.		DATE		DESCRIPTION		NO.			
JOB NO.		170083		SCALE:		SHOWN		DRAWN BY:		TPL		DATE:		02/05/18	
SHEET NO.		C6		JOB NO.		170083		SCALE:		SHOWN		DRAWN BY:		TPL	

LP Icon Mini Wall



- Design

Mads Odgård
- Concept

The fixture provides mainly direct downward illumination. In the opal version the shade is lit up from within and creates a soft diffuse upwards light. In the basic version the shade is opaque. Depending on the choice of reflector, the downward lighting characteristics will vary. The reflector types have been designed in two variations to provide either asymmetrical or symmetrical distributions of light.
- Finish

Natural painted aluminum, powder coated.
- Material

Enclosure: Injection molded opaque ASA (basic) or impact resistant acrylic (opal). Reflector: Pre-anodized segmented high reflectance aluminum (MH) or metallized plastic (LED). Bottom enclosure: Silk screened heat tempered glass. Housing: Die cast aluminum. Mounting plate: Cast aluminum. Arm: Extruded aluminum.
- Mounting

Surface: Mounted directly to finished surface over a recessed 4" octagonal junction box.
- Weight

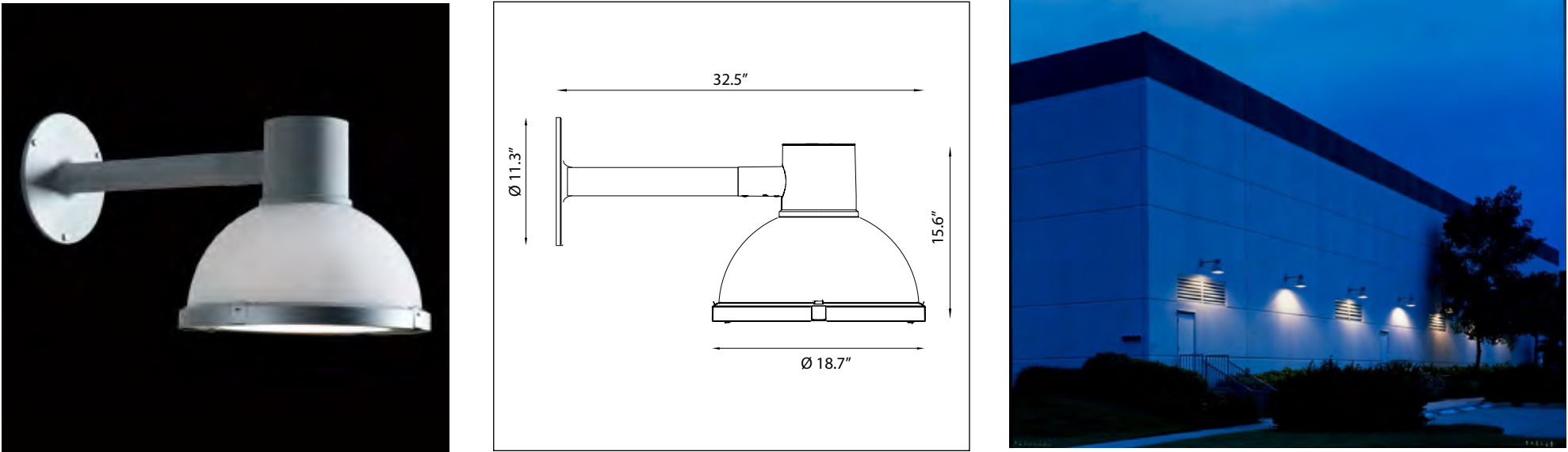
Max. 35 lbs.
- Label

cULus. Wet location. IBEW.

Product Code	Light source	Voltage	Finish	Distribution/Trim	Reflector/Optics	Shade
LPI-W	1/100W/MH/ED-17 medium	120/208/240/277V	NAT PAINT ALU	T3	MATTE	BASIC
	1/150W/MH/ED-17 medium	120-277V				OPAL
	57W LED/3000K					
	57W LED/4000K				POLISHED	

Specification notes
a. 150W variant provided with a 120/208/240/277V ballast.
b. 100W variant provided with a 120-277V ballast.
c. 57W LED variant provided with a 120-277V dimmable driver (0-10V).
d. MH variants only available with polished reflector.

Design Jens Møller-Jensen



Light source	Voltage	Weight	Electric shock protection	Ingress protection
1/100W/MH/ED-17 medium 1/150W/MH/ED-17 medium	120-277V 120/208/240/277V	35 Lbs	Cl. I	IP 66, wet location

Recommended cleaning substances:

Wipe off dust wiht a dry, soft cloth. Remove greasy spots etc. with a soft cloth dampe-
ned in lukewarm water (<122° F/ 50° C) with a mild detergent.

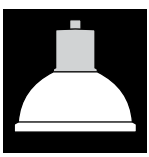
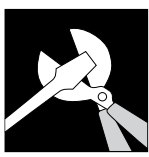
Warning: Scouring powder and similar substances will scratch surfaces.

All installation is subject to local code and jurisdiction.

Consult a qualified electrician to ensure correct branch circuit conductor.

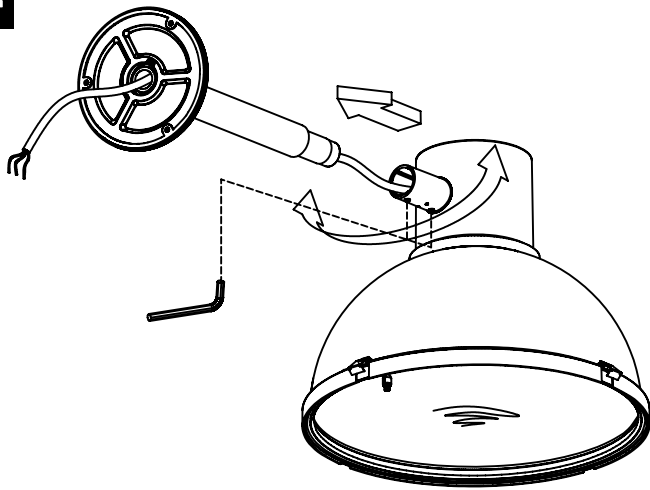
The installer must ensure that the foundation is stable and can support the luminiare’s
weight.

The Installer must use proper means to secure the luminiare to the ground.



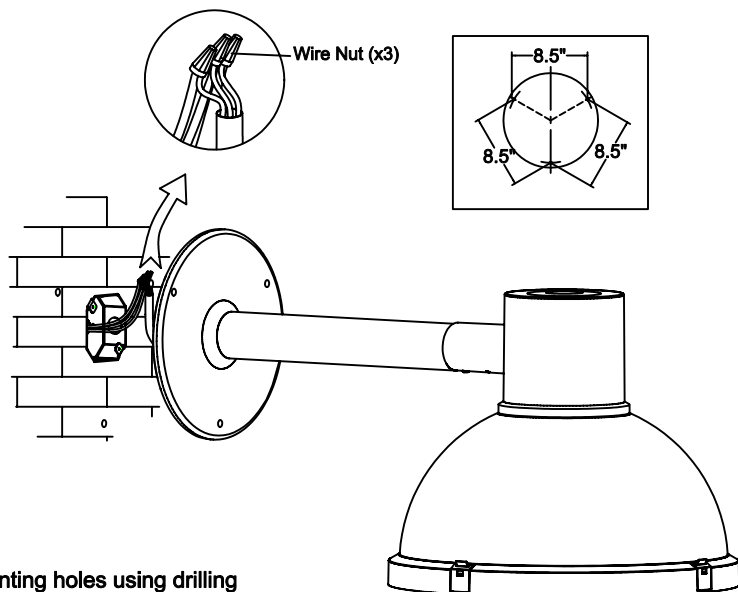
5 mm

1



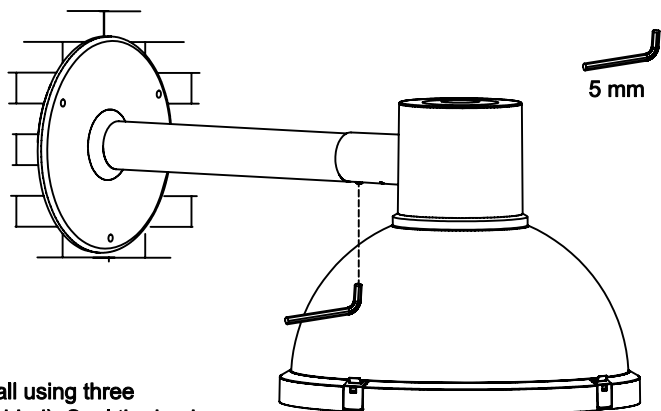
Feed wire provided through the arm and slide luminaire over arm, then secure by tightening two hex set screws on the luminaire head as shown.

2



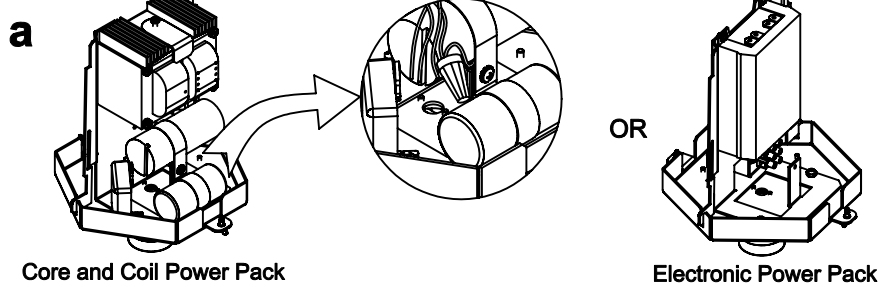
Drill mounting holes using drilling template (provided). Ensure that the power is turned off and wire the fixture: White to Common, Black to Line and Green to Ground

3



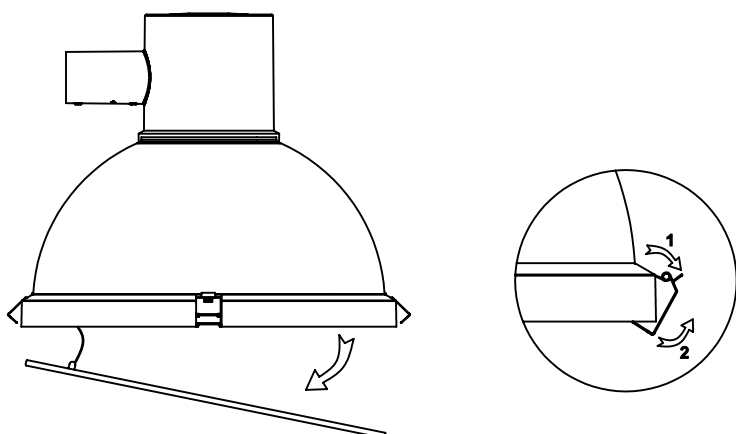
Secure to the wall using three screws (not provided). Seal the back of the flange to the wall with a bead of silicone. Loosen two hex set screws on the luminaire head, level the luminaire so that the glass and the ground are parallel and then secure by tightening as shown.

4



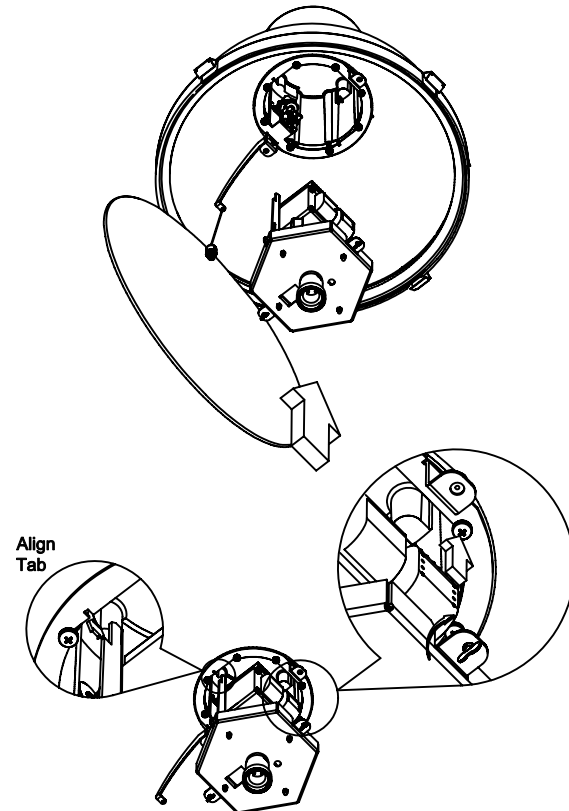
Core and Coil Power Pack is pre wired for 277 Volts. To choose voltage disconnect orange wire nut from the jumper from terminal block and the 277V line from ballast. Using the orange wire nut connect the jumper to the ballast voltage line needed. Voltage will be labeled on the wire: 120, 208, 240 or 277V.

b



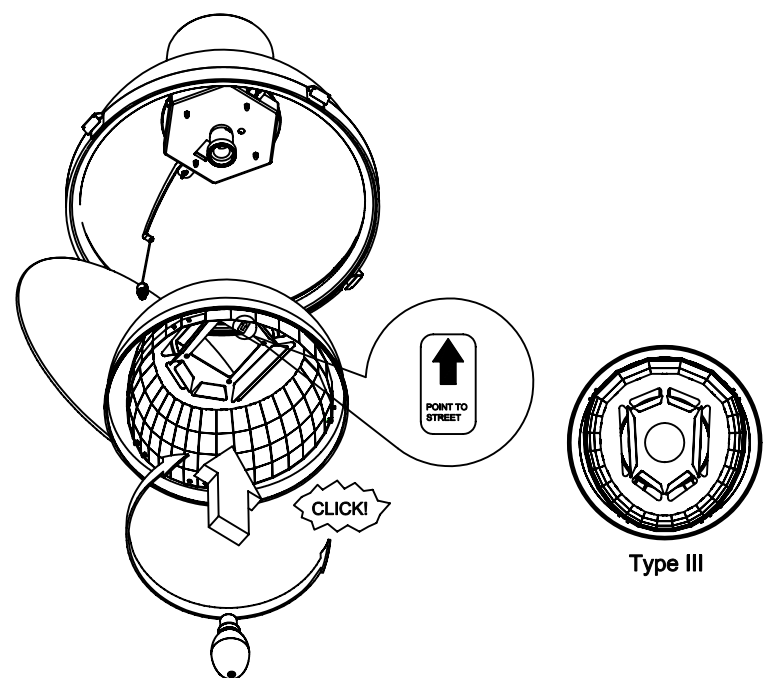
Open luminaire by unlatching four mounting clips and lowering the glass. First pull down on the top of the clip and then swing the bottom of the clip upward as shown. NO TOOLS NEEDED.

5



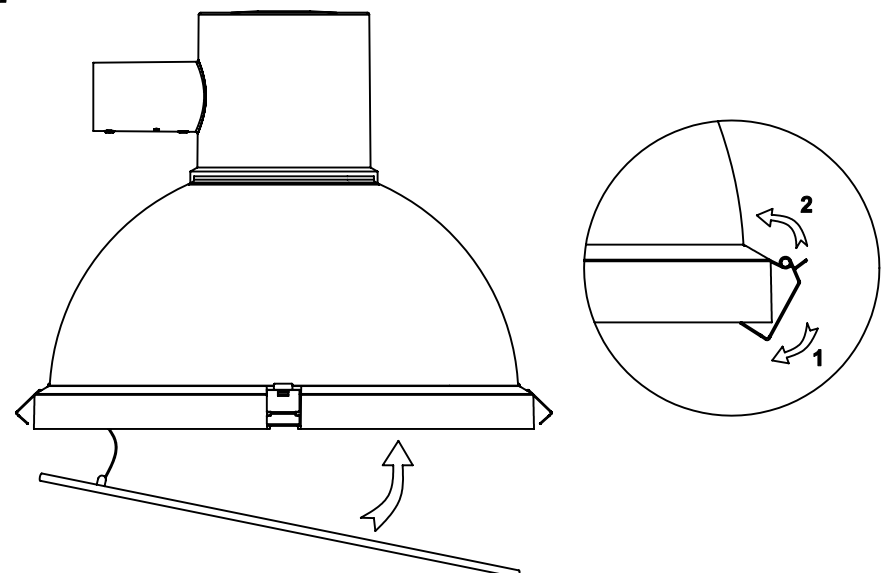
Align quick plugs, slide power pack into place and turn mounting tabs one quarter turn to secure. All electrical connections are made.

6



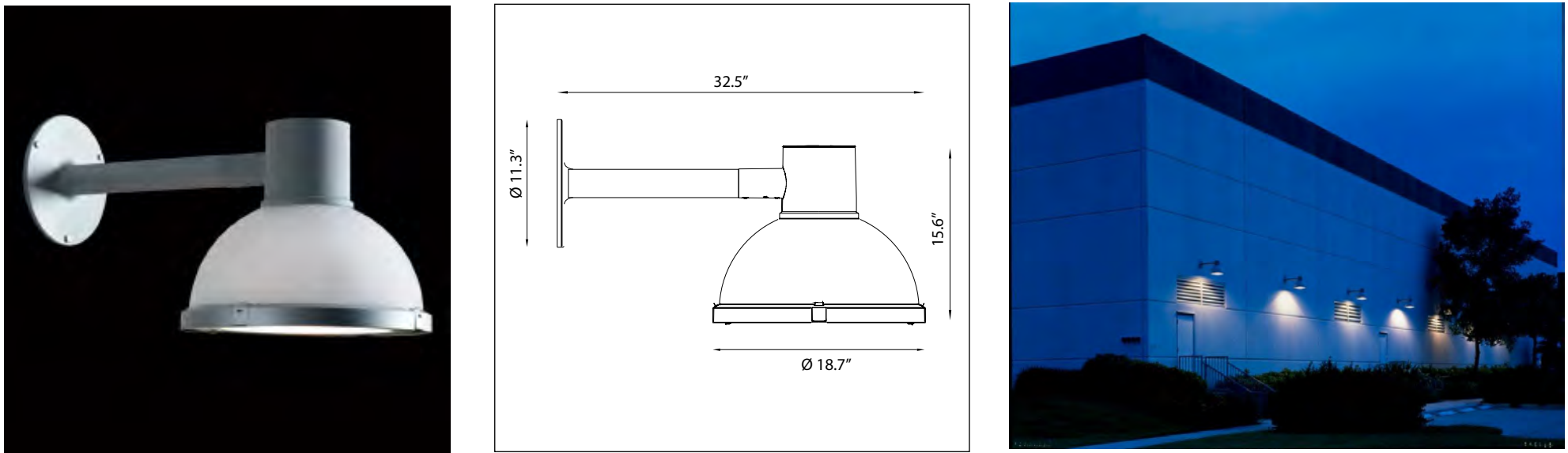
Push reflector up into luminaire until it "CLICKS" into place. Insure that the reflector is in the proper orientation (Type III only). Then install the proper lamp (not included).

7



Place glass back into place and secure it using four mounting clips.

Design Jens Møller-Jensen



Light source	Voltage	Weight	Electric shock protection	Ingress protection
57W/LED/3000K 57W/LED/4000K	120-277V	35 Lbs	Cl. I	IP 66, wet location

Recommended cleaning substances:

Wipe off dust wiht a dry, soft cloth. Remove greasy spots etc. with a soft cloth dampe-
ned in lukewarm water (<122° F/ 50° C) with a mild detergent.

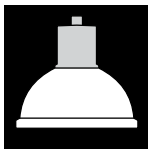
Warning: Scouring powder and similar substances will scratch surfaces.

All installation is subject to local code and jurisdiction.

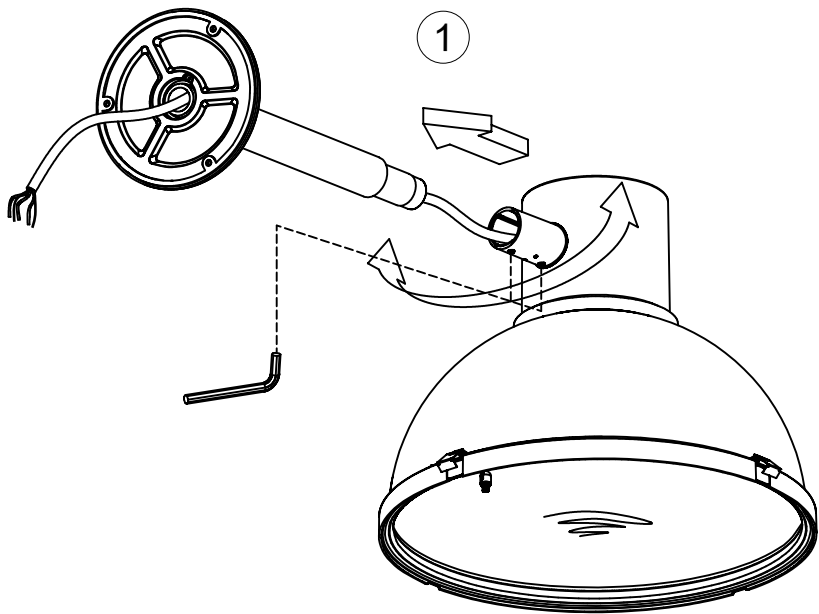
Consult a qualified electrician to ensure correct branch circuit conductor.

The installer must ensure that the foundation is stable and can support the luminiare’s
weight.

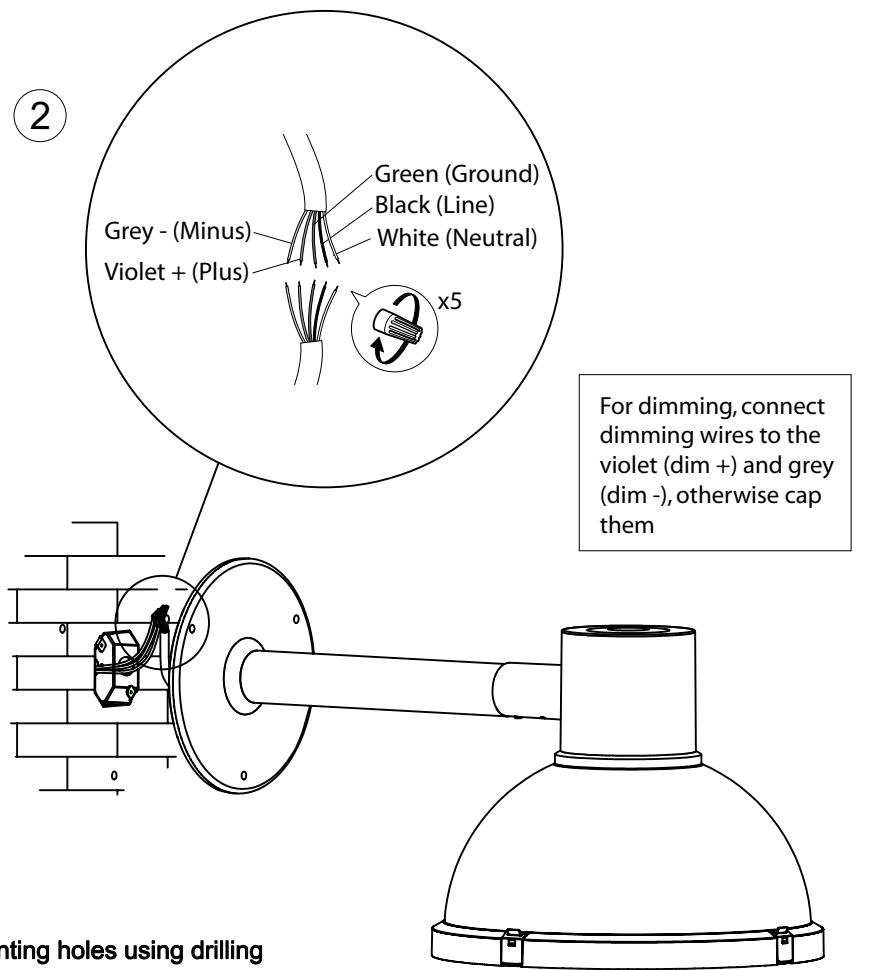
The Installer must use proper means to secure the luminiare to the ground.



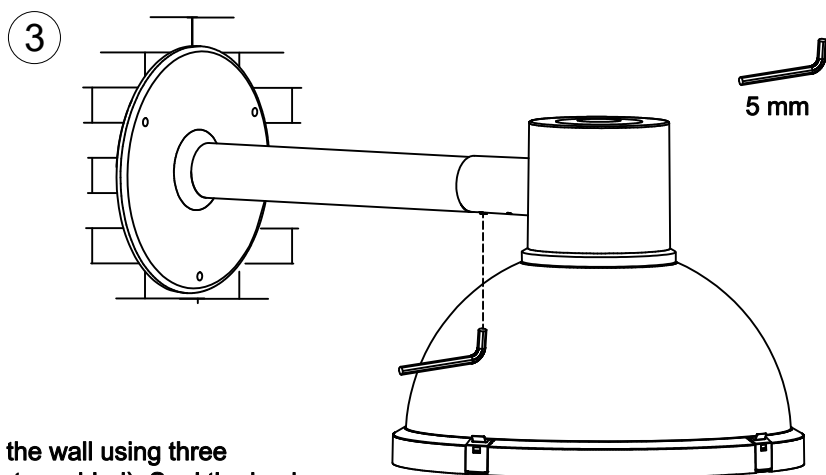
5 mm



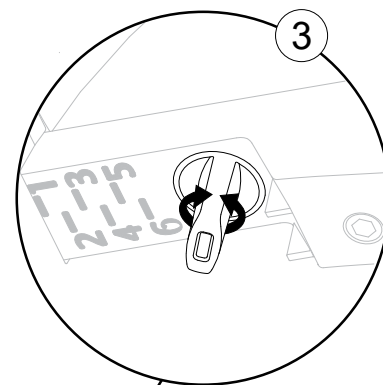
Feed wire provided through the arm and slide luminaire over arm, then secure by tightening two hex set screws on the luminaire head as shown.



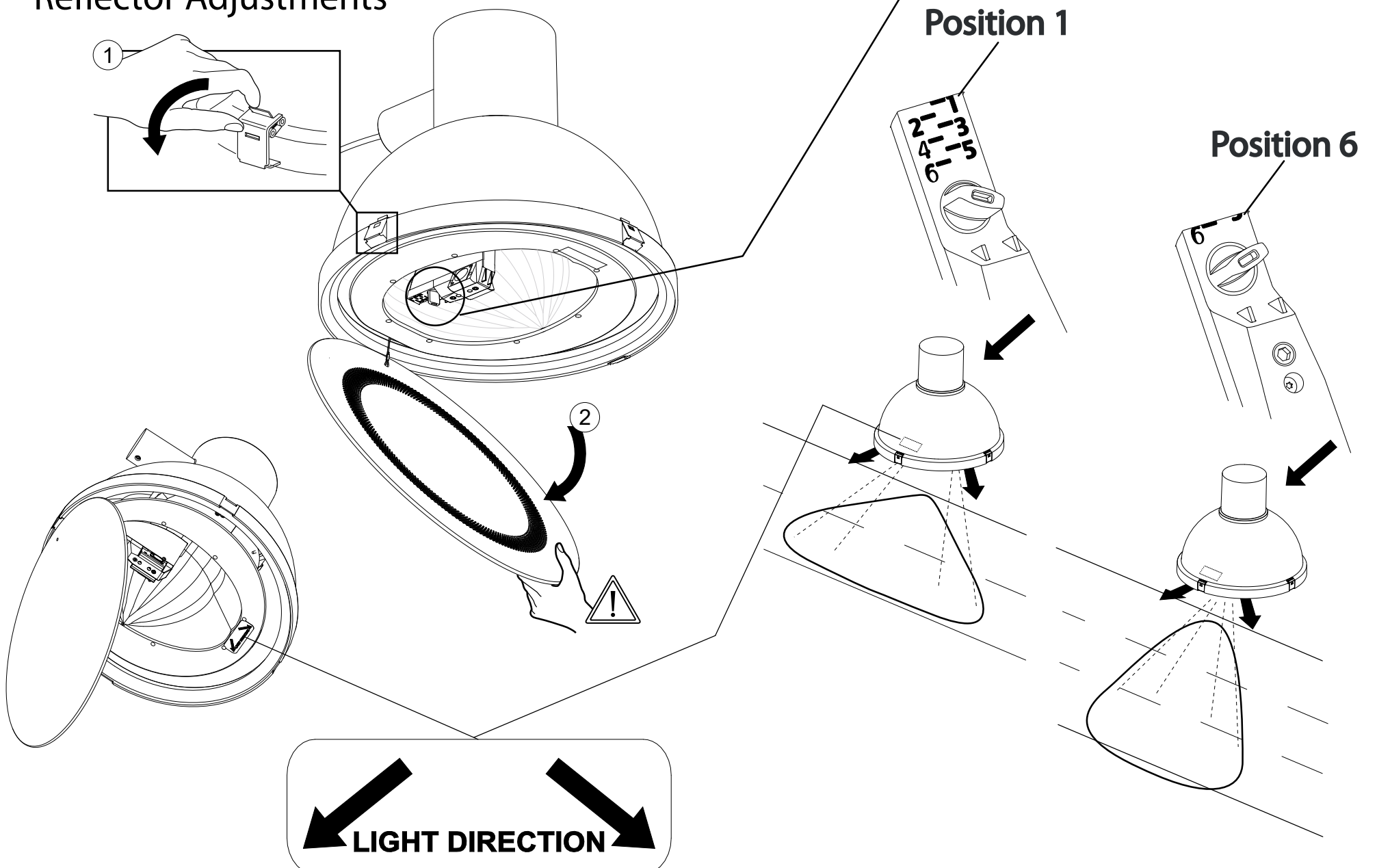
Drill mounting holes using drilling template (provided). Ensure that the power is turned off and wire the fixture: White to Common, Black to Line and Green to Ground



Secure to the wall using three screws (not provided). Seal the back of the flange to the wall with a bead of silicone. Loosen two hex set screws on the luminaire head, level the luminaire so that the glass and the ground are parallel and then secure by tightening as shown.



Reflector Adjustments

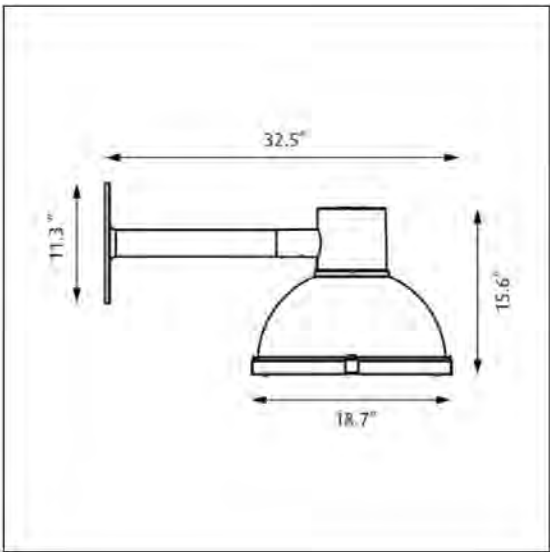


LP Icon Mini Wall

LPI-W-OPAL

PRODUCT SPECIFICATION

Product description



Design Mads Odgård

Concept The fixture provides mainly direct downward illumination. In the opal version the shade is lit up from within and creates a soft diffuse upwards light. In the basic version the shade is opaque. Depending on the choice of reflector, the downward lighting characteristics will vary. The reflector types have been designed in two variations to provide either asymmetrical or symmetrical distributions of light.

Finish Natural painted aluminum, powder coated.

Material Enclosure: Injection molded opaque ASA (basic) or impact resistant acrylic (opal). Reflector: Pre-anodized segmented high reflectance aluminum (MH) or metallized plastic (LED). Bottom enclosure: Silk screened heat tempered glass. Housing: Die cast aluminum. Mounting plate: Cast aluminum. Arm: Extruded aluminum.

Mounting Surface: Mounted directly to finished surface over a recessed 4" octagonal junction box.

Weight Max. 35 lbs.

Label cULus. Wet location. IBEW.

Product Code	Light source	Voltage	Finish	Distribution/Trim	Reflector/Optics	Shade
LPI-W	1/100W/MH/ED-17 medium	120/208/240/277V	NAT PAINT ALU	T3	MATTE	BASIC
	1/150W/MH/ED-17 medium	120-277V			POLISHED	OPAL
	57W LED/3000K					
	57W LED/4000K					

Specification notes

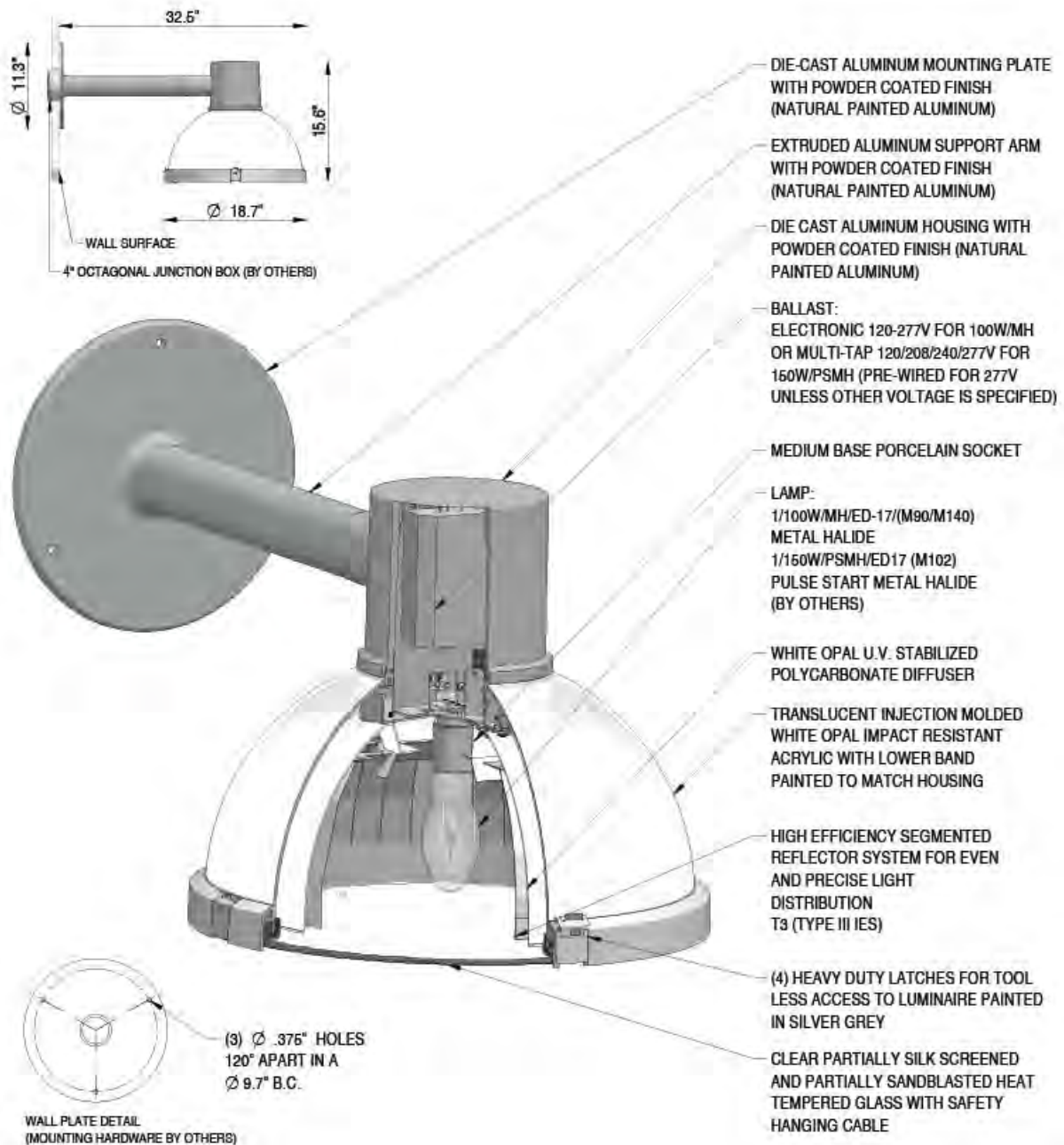
- a. 150W variant provided with a 120/208/240/277V ballast.
- b. 100W variant provided with a 120-277V ballast.
- c. 57W LED variant provided with a 120-277V dimmable driver (0-10V).
- d. MH variants only available with polished reflector.

LP Icon Mini Wall

LPI-W-OPAL

PRODUCT SPECIFICATION

Material description



LP Icon Mini Wall

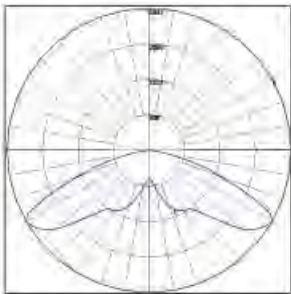
LPI-W-OPAL

PRODUCT SPECIFICATION

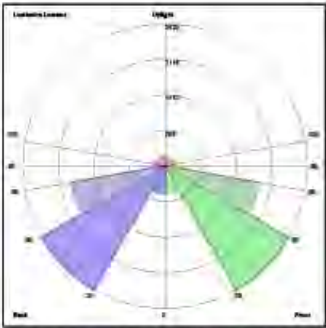
Light Measurements

Photometric Report: LPI-W-1-150W-MH-T5-OPAL
Report No.: ITL53417
Poulsen Report No.: LPI-W-1-150W-MH-T5-OPAL
Luminaire: LP ICON MINI WALL
Lamp: 1/150W/MH/ED17 MEDIUM
Efficiency: 77%

Description: All data shown are per 14000 lumens. This report can be used for calculation on all versions listed below. Use only actual lumen data calculating.



Candlepower Distribution	
Vertical Angle	Candela
0	813.7
5	885.4
15	1048.3
25	1409.4
35	1822.8
45	2246.7
55	3162.8
65	2783.0
75	1008.0
90	21.2
125	33.6
155	38.9
180	36.9



LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Lum
FL - Front-Low (0-30)	526.5	3.8	4.9
FM - Front-Medium (30-60)	2819.8	20.1	26.1
FH - Front-High (60-90)	1881.7	13.4	17.4
FVH - Front-Very High (90-100)	71.2	0.5	0.7
BL - Back-Low (0-30)	526.5	3.8	4.9
BM - Back-Medium (30-60)	2819.8	20.1	26.1
BH - Back-High (60-90)	1881.7	13.4	17.4
BVH - Back-Very High (90-100)	71.2	0.5	0.7
UL - Uplight-Low (90-100)	26.6	0.2	0.2
UH - Uplight-High (100-180)	174.4	1.2	1.6
Total	10799.4	77.0	100.0
BUG Rating	B3-U3-G2		

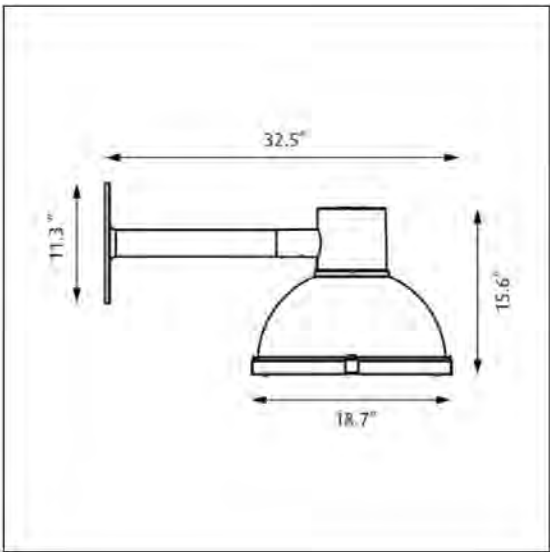
Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Fixture
0-20	375.66	2.70	3.50
0-30	1052.93	7.50	9.70
0-40	2099.25	15.00	19.40
0-60	6692.56	47.80	62.00
0-80	10455.95	74.70	96.80
0-90	10598.42	75.70	98.10
10-90	10528.19	75.20	97.50
20-40	1723.59	12.30	16.00
20-50	3601.43	25.00	32.40
40-70	7268.8	51.90	67.30
60-80	3763.39	26.90	34.80
70-80	1087.9	7.80	10.10
80-90	142.47	1.00	1.30
90-110	41.57	0.30	0.40
90-120	72.69	0.50	0.70
90-130	103.50	0.70	1.00
90-150	158.25	1.10	1.50
90-180	201.00	1.40	1.90
110-180	159.44	1.10	1.50
0-180	10799.42	77.10	100.00

LP Icon Mini Wall

LPI-W-BASIC

PRODUCT SPECIFICATION

Product description



Design Mads Odgård

Concept The fixture provides mainly direct downward illumination. In the opal version the shade is lit up from within and creates a soft diffuse upwards light. In the basic version the shade is opaque. Depending on the choice of reflector, the downward lighting characteristics will vary. The reflector types have been designed in two variations to provide either asymmetrical or symmetrical distributions of light.

Finish Natural painted aluminum, powder coated.

Material Enclosure: Injection molded opaque ASA (basic) or impact resistant acrylic (opal). Reflector: Pre-anodized segmented high reflectance aluminum (MH) or metallized plastic (LED). Bottom enclosure: Silk screened heat tempered glass. Housing: Die cast aluminum. Mounting plate: Cast aluminum. Arm: Extruded aluminum.

Mounting Surface: Mounted directly to finished surface over a recessed 4" octagonal junction box.

Weight Max. 35 lbs.

Label cULus. Wet location. IBEW.

Product Code	Light source	Voltage	Finish	Distribution/Trim	Reflector/Optics	Shade
LPI-W	1/100W/MH/ED-17 medium	120/208/240/277V	NAT PAINT ALU	T3	MATTE	BASIC
	1/150W/MH/ED-17 medium	120-277V			POLISHED	OPAL
	57W LED/3000K					
	57W LED/4000K					

Specification notes

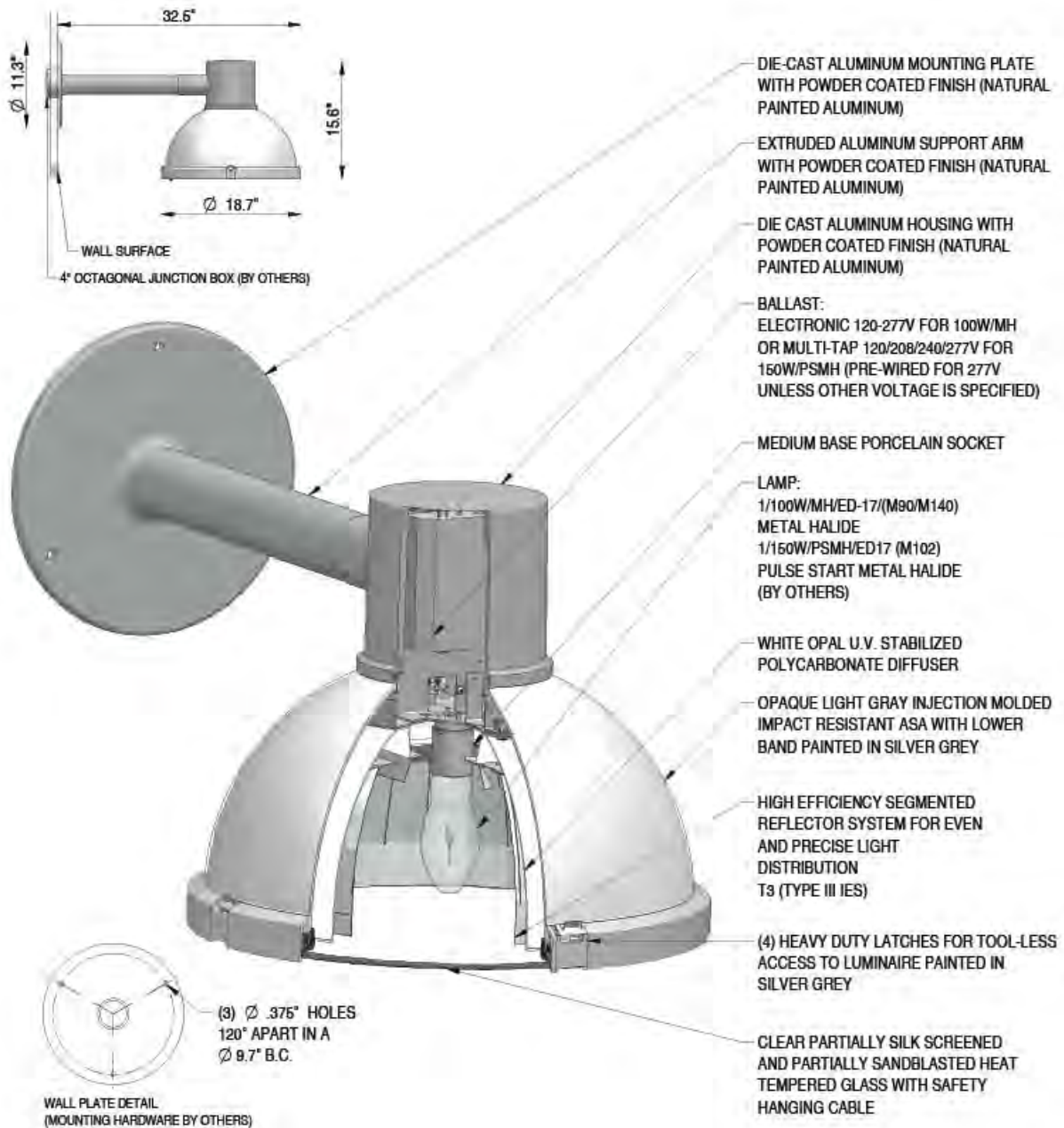
- a. 150W variant provided with a 120/208/240/277V ballast.
- b. 100W variant provided with a 120-277V ballast.
- c. 57W LED variant provided with a 120-277V dimmable driver (0-10V).
- d. MH variants only available with polished reflector.

LP Icon Mini Wall

LPI-W-BASIC

PRODUCT SPECIFICATION

Material description



LP Icon Mini Wall

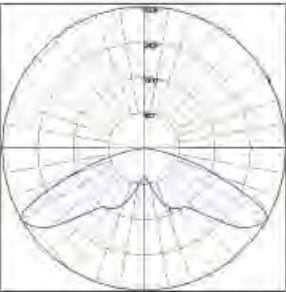
LPI-W-BASIC

PRODUCT SPECIFICATION

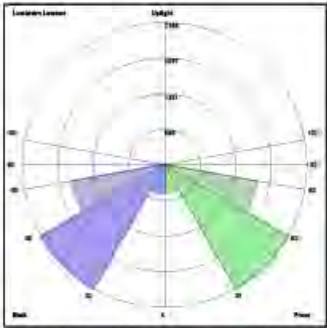
Light Measurements

Photometric Report: LPI-W-T-150W-MH-T5-BASIC
Report No.: ILL56872
Poulsen Report No.: LPI-W-T-150W-MH-T5-BASIC
Luminaire: LP ICON MINI WALL
Lamp: 1/150W/MH/ED17 MEDIUM
Efficiency: 75%

Description: All data shown are per 14000 lumens. This report can be used for calculation on all versions listed below. Use only actual lumen data calculating.



Candlepower Distribution	
Vertical Angle	Candela
0	833
5	718
15	1120
25	1488
35	1823
45	2257
55	3084
65	2675
75	1005
90	0



LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Lum.
FL - Front-Low (0-30)	542.0	3.9	5.2
FM - Front-Medium (30-60)	2782.6	19.9	26.6
FH - Front-High (60-90)	1831.0	13.1	17.5
FVH - Front-Very High (90-120)	67.7	0.5	0.6
BL - Back-Low (0-30)	542.0	3.9	5.2
BM - Back-Medium (30-60)	2782.6	19.9	26.6
BH - Back-High (60-90)	1831.0	13.1	17.5
BVH - Back-Very High (90-120)	67.7	0.5	0.6
UL - Uplight-Low (120-150)	0.0	0.0	0.0
UH - Uplight-High (150-180)	0.0	0.0	0.0
Total	10446.6	74.8	100.0
BUG Rating	B3-U0-G2		

Zonal Lumen Summary

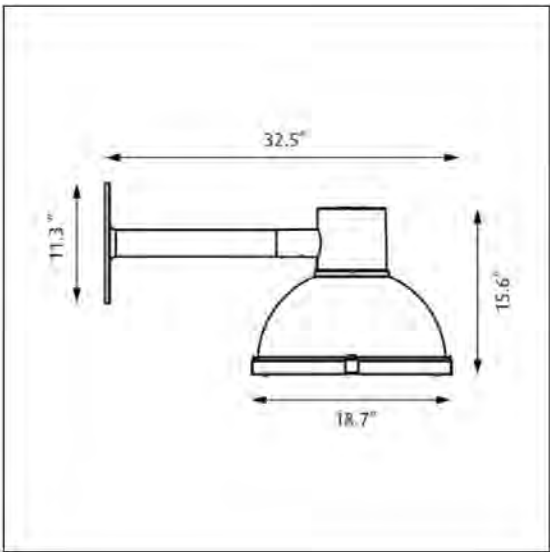
Zone	Lumens	% Lamp	% Fixture
0-20	397.15	2.80	3.80
0-30	1063.98	7.70	10.40
0-40	2128.82	15.20	20.40
0-60	6649.21	47.50	63.60
0-80	10311.19	73.70	98.70
0-90	10446.61	74.60	100.00
10-90	10372.56	74.10	99.30
20-40	1731.67	12.40	16.60
20-60	3511.75	25.10	33.60
40-70	7105.96	50.80	68.00
60-80	3661.98	26.20	35.10
70-80	1076.41	7.70	10.30
80-90	135.42	1.00	1.30
90-110	0.00	0.00	0.00
90-120	0.00	0.00	0.00
90-130	0.00	0.00	0.00
90-150	0.00	0.00	0.00
90-180	0.00	0.00	0.00
110-180	0.00	0.00	0.00
0-180	10446.61	74.60	100.00

LP Icon Mini Wall

LPI-W- 57W LED-OPAL

PRODUCT SPECIFICATION

Product description



Design Mads Odgård

Concept The fixture provides mainly direct downward illumination. In the opal version the shade is lit up from within and creates a soft diffuse upwards light. In the basic version the shade is opaque. Depending on the choice of reflector, the downward lighting characteristics will vary. The reflector types have been designed in two variations to provide either asymmetrical or symmetrical distributions of light.

Finish Natural painted aluminum, powder coated.

Material Enclosure: Injection molded opaque ASA (basic) or impact resistant acrylic (opal). Reflector: Pre-anodized segmented high reflectance aluminum (MH) or metallized plastic (LED). Bottom enclosure: Silk screened heat tempered glass. Housing: Die cast aluminum. Mounting plate: Cast aluminum. Arm: Extruded aluminum.

Mounting Surface: Mounted directly to finished surface over a recessed 4" octagonal junction box.

Weight Max. 35 lbs.

Label cULus. Wet location. IBEW.

Product Code	Light source	Voltage	Finish	Distribution/Trim	Reflector/Optics	Shade
LPI-W	1/100W/MH/ED-17 medium	120/208/240/277V	NAT PAINT ALU	T3	MATTE	BASIC
	1/150W/MH/ED-17 medium	120-277V			POLISHED	OPAL
	57W LED/3000K					
	57W LED/4000K					

Specification notes

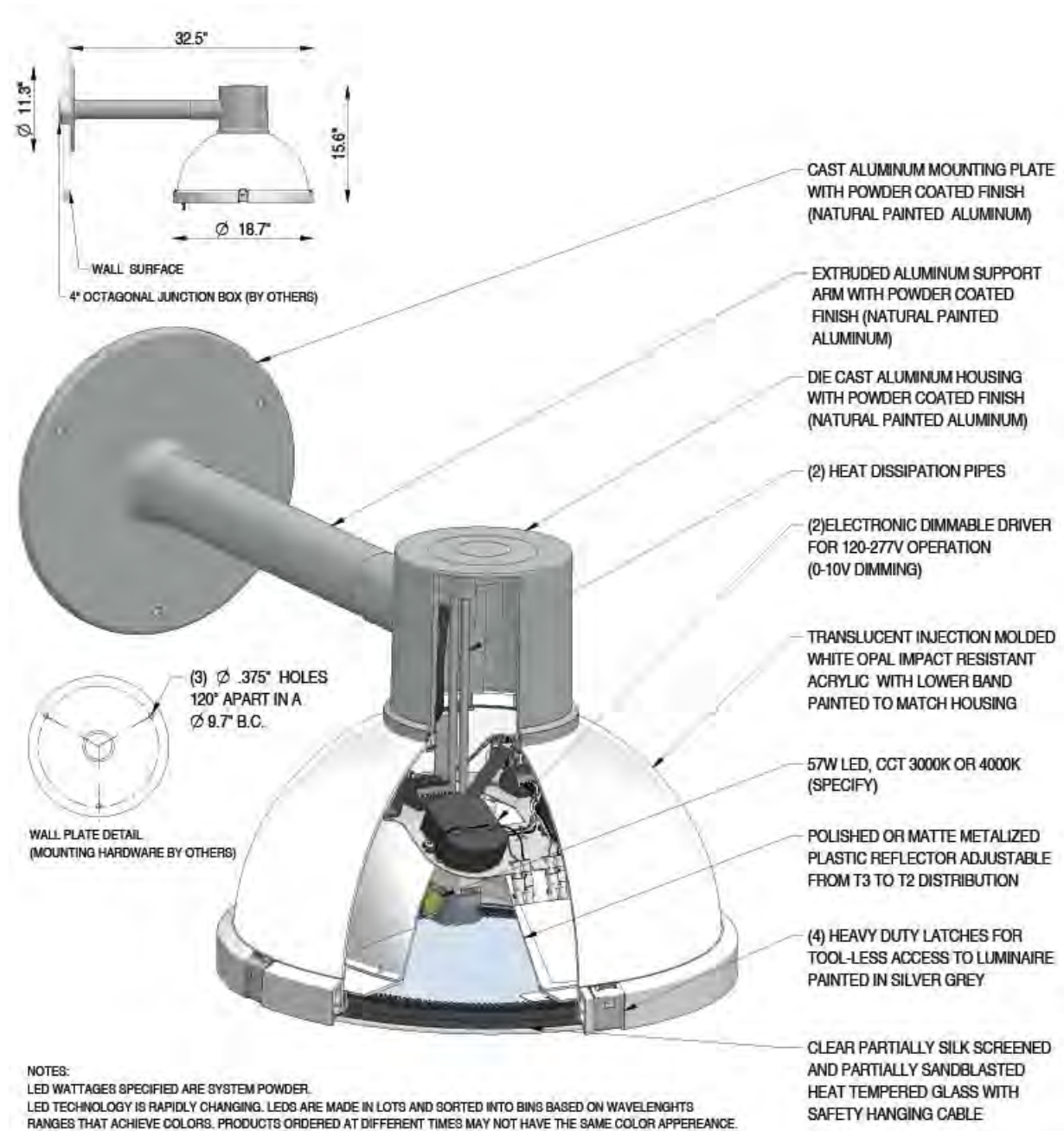
- a. 150W variant provided with a 120/208/240/277V ballast.
- b. 100W variant provided with a 120-277V ballast.
- c. 57W LED variant provided with a 120-277V dimmable driver (0-10V).
- d. MH variants only available with polished reflector.

LP Icon Mini Wall

LPI-W- 57W LED-OPAL

PRODUCT SPECIFICATION

Material description



LP Icon Mini Wall

LPI-W- 57W LED-OPAL

PRODUCT SPECIFICATION

Light Measurements

Photometric Report: LPI-W-57W-LED-T3-P6-OPAL

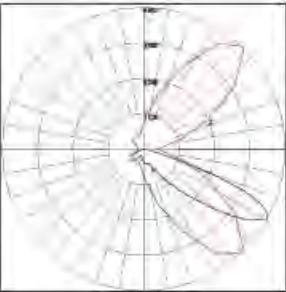
Report No.: TL79216

Poulsen Report No.: LPI-W-57W-LED-T3-P6-OPAL

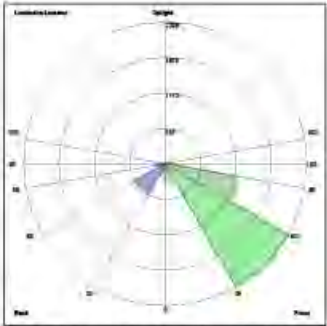
Luminaire: LP ICON MINI WALL

Lamp: 57W/LED/4000K

Description: All data shown are per 4476 lumens. This report can be used for calculation on all versions listed below. Use only actual lumen data calculating.



Candlepower Distribution	
Vertical Angle	Candela
0	398
5	478
15	769
25	1388
35	1994
45	2382
55	1315
65	156
75	18
90	1
120	1
150	1
180	1



LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Lum
FL - Front-Low (0-30)	287.1	N.A.	6.0
FM - Front-Medium (30-60)	2226.2	N.A.	49.7
FH - Front-High (60-90)	1153.1	N.A.	25.8
FVH - Front-Very High (90-180)	3.7	N.A.	0.1
BL - Back-Low (0-30)	122.4	N.A.	2.7
BM - Back-Medium (30-60)	525.1	N.A.	11.7
BH - Back-High (60-90)	165.3	N.A.	3.7
BVH - Back-Very High (90-180)	2.1	N.A.	0.0
UL - Uplight-Low (90-180)	1.8	N.A.	0.0
UH - Uplight-High (100-180)	9.8	N.A.	0.2
Total	4476.4	N.A.	100.0
BUG Rating	B1-U1-G1		

Zonal Lumen Summary

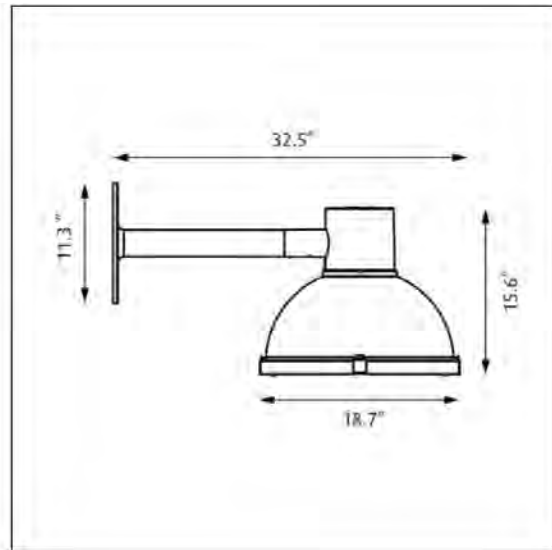
Zone	Lumens	% Lamp	% Fixture
0-20	149.73	N.A.	3.30
0-30	389.51	N.A.	8.70
0-40	901.29	N.A.	20.10
0-60	3140.77	N.A.	70.20
0-80	4459.15	N.A.	99.60
0-90	4464.92	N.A.	99.70
10-90	4426.21	N.A.	98.90
20-40	751.56	N.A.	16.80
20-50	1686.02	N.A.	37.70
40-70	3347.16	N.A.	74.80
60-80	1318.39	N.A.	29.50
70-80	210.71	N.A.	4.70
80-90	5.76	N.A.	0.10
90-110	3.30	N.A.	0.10
90-120	4.92	N.A.	0.10
90-130	6.62	N.A.	0.10
90-150	9.73	N.A.	0.20
90-180	11.37	N.A.	0.30
110-180	8.07	N.A.	0.20
0-180	4476.29	N.A.	100.00

LP Icon Mini Wall

LPI-W- 57W LED-BSC

PRODUCT SPECIFICATION

Product description



Design Mads Odgård

Concept The fixture provides mainly direct downward illumination. In the opal version the shade is lit up from within and creates a soft diffuse upwards light. In the basic version the shade is opaque. Depending on the choice of reflector, the downward lighting characteristics will vary. The reflector types have been designed in two variations to provide either asymmetrical or symmetrical distributions of light.

Finish Natural painted aluminum, powder coated.

Material Enclosure: Injection molded opaque ASA (basic) or impact resistant acrylic (opal). Reflector: Pre-anodized segmented high reflectance aluminum (MH) or metallized plastic (LED). Bottom enclosure: Silk screened heat tempered glass. Housing: Die cast aluminum. Mounting plate: Cast aluminum. Arm: Extruded aluminum.

Mounting Surface: Mounted directly to finished surface over a recessed 4" octagonal junction box.

Weight Max. 35 lbs.

Label cULus. Wet location. IBEW.

Product Code	Light source	Voltage	Finish	Distribution/Trim	Reflector/Optics	Shade
LPI-W	1/100W/MH/ED-17 medium	120/208/240/277V	NAT PAINT ALU	T3	MATTE	BASIC
	1/150W/MH/ED-17 medium	120-277V			POLISHED	OPAL
	57W LED/3000K					
	57W LED/4000K					

Specification notes

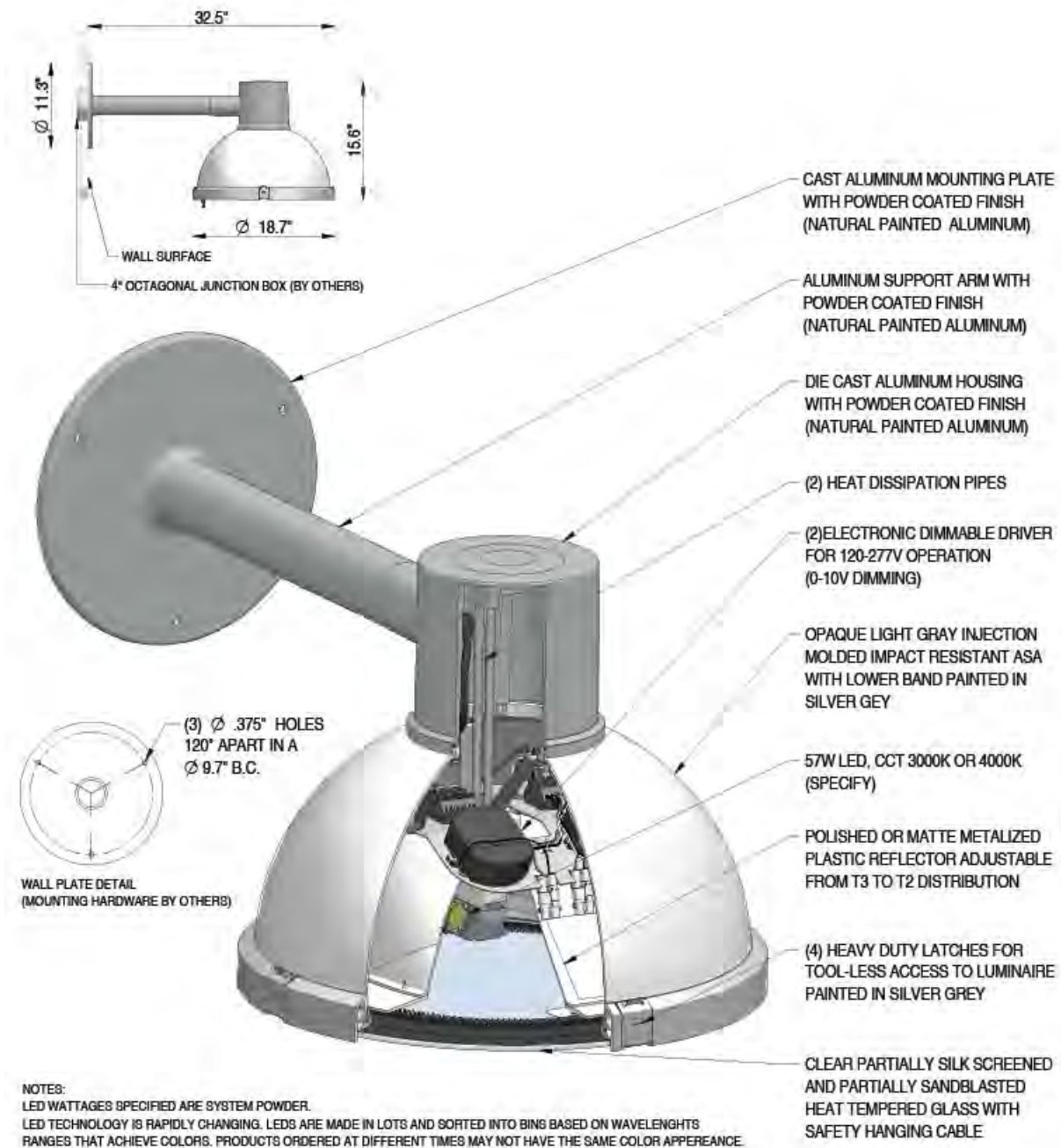
- a. 150W variant provided with a 120/208/240/277V ballast.
- b. 100W variant provided with a 120-277V ballast.
- c. 57W LED variant provided with a 120-277V dimmable driver (0-10V).
- d. MH variants only available with polished reflector.

LP Icon Mini Wall

LPI-W- 57W LED-BSC

PRODUCT SPECIFICATION

Material description



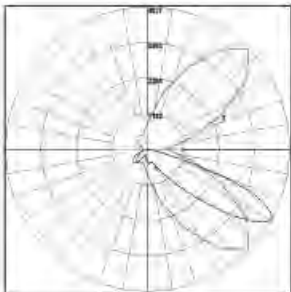
LP Icon Mini Wall

LPI-W- 57W LED-BSC

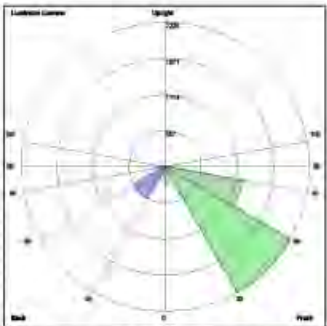
PRODUCT SPECIFICATION

Light Measurements

Photometric Report: LPI-W-57W-LED-T3-P6-BASIC
Report No.: ITL81198
Poulsen Report No.: LPI-W-57W-LED-T3-P6-BASIC
Luminaire: LP ICON MINI WALL
Lamp: 57W/LED/4000K
Description: All data shown are per 4515 lumens. This report can be used for calculation on all versions listed below. Use only actual lumen data calculating.



Candlepower Distribution	
Vertical Angle	Candela
0	373
5	428
15	676
25	915
35	1427
45	2088
55	1231
65	165
75	12
90	0



LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Lum
FL - Front-Low (0-30)	246.9	N.A.	5.5
FM - Front-Medium (30-60)	2228.1	N.A.	49.4
FH - Front-High (60-90)	1211.3	N.A.	26.8
FVH - Front-Very High (90-180)	1.7	N.A.	0.0
BL - Back-Low (0-30)	121.5	N.A.	2.7
BM - Back-Medium (30-60)	544.8	N.A.	12.1
BH - Back-High (60-90)	159.3	N.A.	3.5
BVH - Back-Very High (90-180)	0.0	N.A.	0.0
UL - Uplight-Low (90-180)	0.0	N.A.	0.0
UH - Uplight-High (180-360)	0.0	N.A.	0.0
Total	4514.6	N.A.	100.0
BUG Rating	B1-U0-G1		

Zonal Lumen Summary

Zone	Lumens	% Lamp	% Fixture
0-20	139.36	N.A.	3.10
0-30	368.43	N.A.	8.20
0-40	867.67	N.A.	19.20
0-60	3141.32	N.A.	69.60
0-80	4511.96	N.A.	99.90
0-90	4514.62	N.A.	100.00
10-90	4477.68	N.A.	99.20
20-40	728.51	N.A.	16.10
20-50	1661.94	N.A.	36.80
40-70	3413.66	N.A.	75.60
60-80	1370.64	N.A.	30.40
70-80	230.53	N.A.	5.10
80-90	2.66	N.A.	0.10
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	4514.62	N.A.	100.00

DESCRIPTION

The LRC LED Recessed Canopy Luminaire is specifically designed for recessed applications in single or double skin canopies. Three specialized optics are optimized for efficiency and uniformity, delivering high light levels on task. Typical applications include retail gas stations, convenience stores, banks and pharmacy drive thru canopies. UL/cUL listed for wet locations.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Heavy-duty cast aluminum housing with aluminum mounting frame. Wet location driver enclosure is elevated to prevent water ingress. 1/2" knockouts provided for wiring connections. IP66 Rated.

Optics

Dedicated optical cavities for the array of 16 individual LEDs to maximize the efficiency and control of the distribution out of each module. To enhance visual comfort, a glare-reducing optical system is utilized to maximize delivered lumens while minimizing glare. Scalable in 1, 2 or 4 Light Square LED modules to optimize cost and lumen output. Each reflector is precision manufactured via injection molding and coated with a highly reflective optical coating via vacuum metallization. Two symmetric optics and one asymmetric optic are specifically designed for efficiency and uniformity. Offered standard in

4000K (+/- 275K) CCT and nominal 70 CRI. Optional 6000K CCT with nominal 70 CRI, and 3000K with nominal 80 CRI.

Electrical

LED driver is enclosed in a wet location box, designed to manage thermals for longevity. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Optional proprietary circuit module designed to withstand 10kV of transient line surge. 90% lumen maintenance expected at 60,000 hours. The LRC LED Recessed Canopy Luminaire is suitable for operation in -40°C to 40°C ambient operations.

Mounting

Designed to recess in single or double skin canopies. Luminaire can be installed from above or below canopy, through 14" square cutout in the canopy.

Finish

Housing and lens frame are finished in super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard housing and lens frame trim finished in true white color. Optional lens frame trim colors include white, grey, black, bronze, dark platinum, and graphite metallic. RAL and color matches available.

Warranty

Five-year warranty.



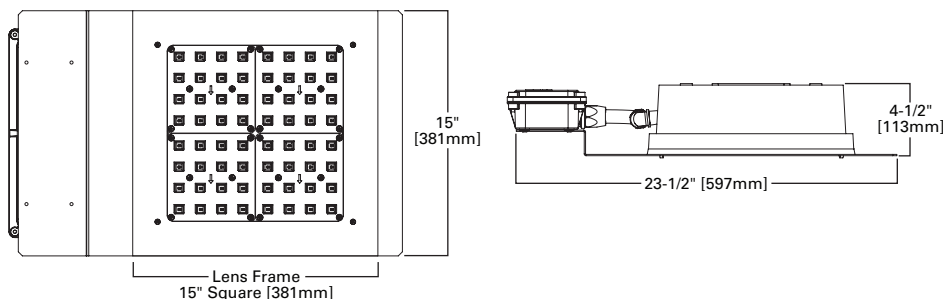
LRC LED RECESSED CANOPY

1, 2 or 4 Light Squares

Solid State LED

CANOPY LUMINAIRE

DIMENSIONS



CERTIFICATION DATA

UL/cUL Listed
LM79 / LM80 Compliant
ISO 9001

ENERGY DATA

Electronic LED Driver

>0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 & 60Hz, 347V/60Hz,
480V/60Hz
-40°C Minimum Temperature
40°C Maximum Ambient Temperature

SHIPPING DATA

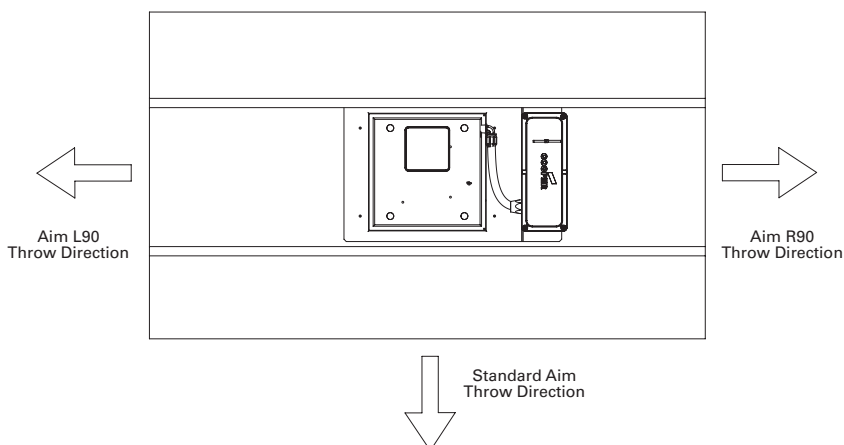
Approximate Net Weight:
20-29 lbs. (9.07-13.15 kgs.)

POWER AND LUMENS BY NUMBER OF LEDs

Number of LEDs	LED Drive Current	Input Wattage	Input Current (Amps)		Optics	MST	VAT	WST
			120V	277V				
16	700mA	37W	0.33	0.15	Lumens	3,099	2,987	3,026
					BUG Rating	2-0-0	2-0-0	1-0-0
	950mA	50W	0.41	0.19	Lumens	3,841	3,702	3,751
					BUG Rating	2-0-1	2-0-0	2-0-0
32	350mA	35W	0.30	0.14	Lumens	3,448	3,323	3,367
					BUG Rating	2-0-0	2-0-0	2-0-0
	450mA	46W	0.40	0.18	Lumens	4,285	4,130	4,184
					BUG Rating	2-0-1	2-0-0	2-0-0
	700mA	73W	0.62	0.23	Lumens	6,048	5,829	5,906
					BUG Rating	3-0-1	3-0-0	2-0-0
64	350mA	69W	0.59	0.28	Lumens	6,679	6,439	6,524
					BUG Rating	3-0-1	3-0-0	2-0-0
	450mA	88W	0.77	0.36	Lumens	8,212	8,019	8,125
					BUG Rating	3-0-1	3-0-0	3-0-0

NOTE: Lumen values tested at 4000K CCT.

VAT OPTIC ORIENTATION



LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Theoretical L70 (Hours)
25°C	> 94%	> 350,000
40°C	> 93%	> 250,000

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.04
15°C	1.03
25°C	1.00
40°C	0.96

ORDERING INFORMATION

Sample Number: LRC-B64-4-LED-E1-VAT

Product Family	Generation	Number of LEDs	Drive Current ¹	Lamp Type	Voltage	Distribution	Trim Color
LRC=LED Recessed Canopy	B=B	16=16 32=32 64=64	1=950mA 3=350mA 4=450mA 7=700mA	LED=Solid State Light Emitting Diodes	E1=Electronic 120-277V 347=347V 480=480V ²	VAT=Vertical Asymmetric WST=Wide Symmetric MST=Medium Symmetric	[Blank]=True White AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White
Option (Add as Suffix)						Accessories (Order Separately)	
10K=10kV Surge Module 2L=Two Circuits ³ L90=Optics Rotated 90° Left ⁴ R90=Optics Rotated 90° Right ⁴ 7060=70 CRI/6000K CCT ⁵ 8030=80 CRI/3000K CCT ⁵						MA1253=10kV Circuit Module Replacement	

Notes:

- 950mA available only in 16 LEDs. 700mA available in 16 or 32 LEDs. 450mA available only in 32 or 64 LEDs. 350mA only available in 32 or 64 LEDs.
- Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
- Not available in 347V or 480V. Not available with 16 LEDs. Not available with 32 LEDs in 350mA or 450mA.
- Only applies with VAT distribution. MST and WST distributions are symmetrical.
- Consult factory for lead times and lumen multiplier.



Job Name:
COMMUNITY BANK ALMA - REVISED

Catalog Number:
PRVS-A25-UNV-T4

Notes:

Type:

SA

CTA16-68322

Lumark

DESCRIPTION

The Prevail LED area, site luminaire combines optical performance, energy efficiency and long term reliability in an advanced, patent pending modern design. Utilizing the latest LED technology, the Prevail luminaire delivers unparalleled uniformity resulting in greater pole spacing. A versatile mount standard arm facilitates ease of installation for both retrofit and new installations. With energy savings greater than 62%, the Prevail fixture replaces 150-400W metal halide fixtures in general area lighting applications such as parking lots, walkways, roadways and building areas.

SPECIFICATION FEATURES

Construction

Construction is comprised of a heavy-duty, single-piece die-cast aluminum housing. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. The die-cast aluminum door is tethered to provide easy access to the driver if replacement is required. A one-piece silicone gasket seals the door to the fixture housing. The optics is mounted on a versatile, aluminum plate that dissipates heat from the LEDs resulting in longer life of the fixture. The fixture is IP66 and 3G vibration rated (ANSI C136.31) to insure strength of construction and longevity in the selected application.

Optics

Precision molded, high efficiency optics are precisely designed to shape the distribution, maximizing efficiency and application spacing. Available in Type II, III, IV and V distributions with lumen packages ranging from 6,100 to 15,100 nominal lumens. Light engine configurations consist of 1 or 2 high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L92/60,000 hours at 25°C) per IESNA TM-21. For the ultimate level of spill light control, an optional house side shield accessory can be field or factory installed.

Electrical

LED drivers are mounted to the fixture for optimal heat sinking and ease of maintenance. Thermal management incorporates both conduction and convection to transfer heat rapidly away from the LED source for optimal efficiency and light output. Class 1 electronic drivers have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Available in 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. 10kV/10 kA surge protection standard. 0-10V dimming driver is standard with leads external to the fixture to accommodate controls capability such as dimming and occupancy. Suitable for ambient temperatures from -40°C to 40°C. Optional 50°C HA (high ambient) available. Standard NEMA 3-PIN twistlock photocontrol receptacle and NEMA 7-PIN twistlock photocontrol receptacles are available as options.

Controls

The Prevail LED luminaire control options are designed to be simple and cost-effective ASHRAE and California Title 24 compliant solutions. The ANSI C136.41 compliant NEMA 7-PIN receptacle enables wireless dimming when used with compatible photocontrol. An integrated dimming and occupancy sensor is a standalone control option available in on/off (MSP) and bi-level dimming

(MSP/DIM) operation. The optional LumaWatt system is best described as a peer-to-peer wireless network of luminaire-integral sensors that operate in accordance with programmable profiles. Each sensor is capable of motion and photo sensing, metering power consumption and wireless communication.

Mounting

Standard pole mount arm is bolted directly to the pole and the fixture slides onto the arm and locks in place with a bolt facilitating quick and easy installation. The versatile, patent pending, standard mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the standard mounting arm enables wiring of the fixture without having to access the driver compartment. A knock-out on the standard mounting arm enables round pole mounting. Wall mount and mast arm mounting options are available. Mast arm adapter fits 2-3/8" O.D. tenon.

Finish

Housing and cast parts finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard color is bronze. Additional colors available in white, grey, black, dark platinum and graphite metallic.

Warranty

Five-year warranty.



PRV PREVAIL

LED

AREA / SITE / ROADWAY
LUMINAIRE



CERTIFICATION DATA

UL and cUL Wet Location Listed
IP66-Rated
3G Vibration Rated
ISO 9001
DesignLights Consortium™ Qualified*

ENERGY DATA

Electronic LED Driver
0.9 Power Factor
<20% Total Harmonic Distortion
120-277V/50 and 60Hz,
347V/60Hz, 480V/60Hz
-40°C Minimum Temperature Rating
+40°C Ambient Temperature Rating

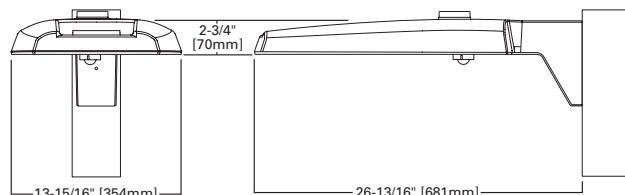
EPA

Effective Projected Area (Sq. Ft.): 0.75

SHIPPING DATA

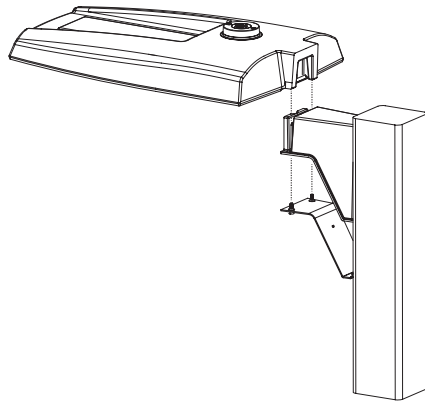
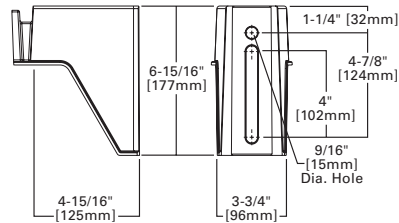
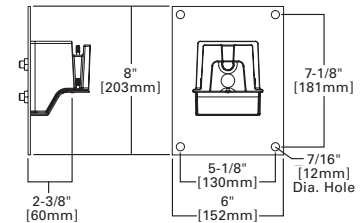
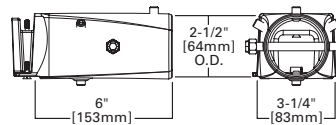
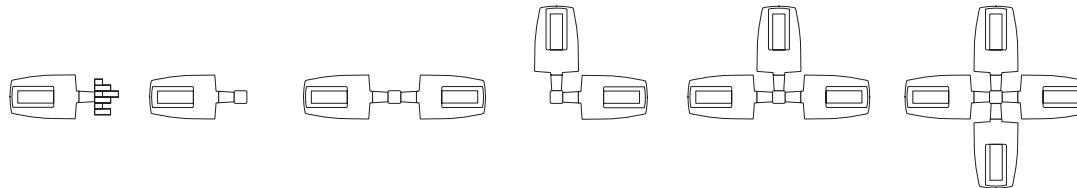
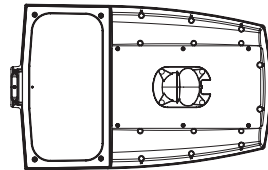
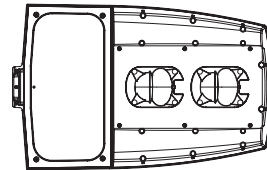
Approximate Net Weight:
20 lbs. (9.09 kgs.)

DIMENSIONS





PRV PREVAIL

VERSATILE MOUNT SYSTEM**POLE MOUNT ARM****WALL MOUNT****MAST ARM MOUNT****MOUNTING CONFIGURATIONS AND EPAS****Wall Mount****Arm Mount Single**
EPA 0.75**Arm Mount 2 @ 180°**
EPA 1.50**Arm Mount 2 @ 90°**
EPA 1.50**Arm Mount 3 @ 90°**
EPA 2.25**Arm Mount 4 @ 90°**
EPA 3.00**OPTICAL CONFIGURATIONS****A15** (6,100 Nominal Lumens)**A25/A40** (10,200/15,100 Nominal Lumens)**POWER AND LUMENS**

Light Engine		A15	A25	A40
Nominal Power (Watts)		57W	87W	143W
Input Current @ 120V (A)		0.49	0.76	1.23
Input Current @ 277V (A)		0.22	0.35	0.54
Input Current @ 347V (A)		0.18	0.28	0.45
Input Current @ 480V (A)		0.13	0.21	0.33
Type II	Lumens	6,139	10,204	15,073
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3
Type III	Lumens	6,192	10,292	15,203
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3
Type IV	Lumens	6,173	10,261	15,157
	BUG Rating	B1-U0-G3	B2-U0-G3	B2-U0-G4
Type V	Lumens	6,393	10,627	15,697
	BUG Rating	B3-U0-G3	B4-U0-G3	B4-U0-G4

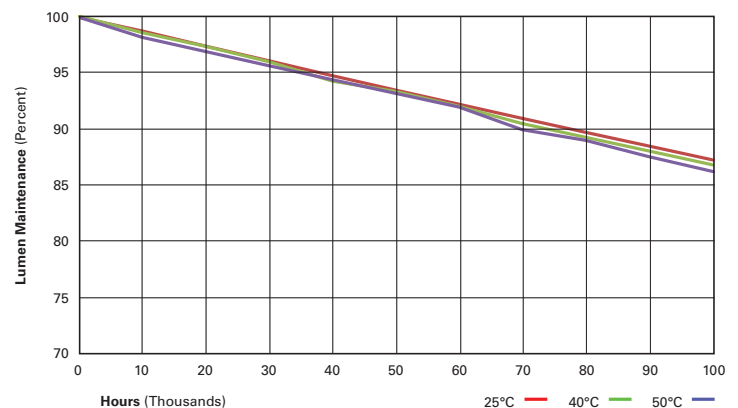
NOTE: Lumen output for standard bronze fixture color. Different housing colors impact lumen output. IES files for the non-standard colors are available upon request.


LUMEN MAINTENANCE

Ambient Temperature	25,000 Hours*	50,000 Hours*	60,000 Hours*	Theoretical 100,000 Hours	Theoretical L70 (Hours)*
25°C	> 96%	> 93%	> 92%	> 87%	> 260,000
40°C	> 96%	> 93%	> 92%	> 87%	> 255,000
50°C	> 95%	> 92%	> 91%	> 86%	> 250,000

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.02
15°C	1.01
25°C	1.00
40°C	0.99



Submitted by Crites Tidey & Associates, Inc		Catalog Number: PRVS-A25-UNV-T4	Type: SA
	Job Name: COMMUNITY BANK ALMA - REVISED	Notes:	CTA16-68322

PRV PREVAIL

ORDERING INFORMATION

Sample Number: PRV-A25-D-UNV-T3-SA-BZ

Product Family ¹	Light Engine ²	Driver ³	Voltage	Distribution	Mounting	Color ⁵
PRV=Prevail	A15=(1 LED) 6,100 Nominal Lumens A25=(2 LEDs) 10,200 Nominal Lumens A40=(2 LEDs) 15,100 Nominal Lumens	D=Dimming (0-10V)	UNV=Universal (120-277V) 347=347V 480=480V ⁴	T2=Type II T3=Type III T4=Type IV T5=Type V	SA=Standard Versatile Arm MA=Mast Arm WM=Wall Mount Arm	AP=Grey BZ=Bronze (Standard) BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White
Options (Add as Suffix)				Accessories (Order Separately) ¹⁰		
7030=70 CRI / 3000K CCT ⁶ 7050=70 CRI / 5000K CCT ⁶ 10K=10kV/10kA UL 1449 Fused Surge Protective Device DIMRF-LW=LumaWatt Wireless Sensor, Wide Lens for 8' - 16' Mounting Height ^{7,8} DIMRF-LN=LumaWatt Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height ^{7,8} MSP/DIM-L12=Integrated Sensor for Dimming Operation, 8' - 12' Mounting Height MSP/DIM-L30=Integrated Sensor for Dimming Operation, 12' - 30' Mounting Height MSP-L12=Integrated Sensor for ON/OFF Operation, 8' - 12' Mounting Height MSP-L30=Integrated Sensor for ON/OFF Operation, 12' - 30' Mounting Height PER=NEMA 3-PIN Twistlock Photocontrol Receptacle ⁹ PER7=NEMA 7-PIN Twistlock Photocontrol Receptacle ⁹ HSS=House Side Shield HA=50°C High Ambient Temperature				PRVWM-XX=Wall Mount Kit PRVMA-XX=Mast Arm Mounting Kit PRVSA-XX=Standard Arm Mounting Kit HS/VERD=House Side Shield MA1010-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon MA1011-XX=2 @ 180° Tenon Adapter for 3-1/2" O.D. Tenon MA1012-XX=3 @ 120° Tenon Adapter for 3-1/2" O.D. Tenon MA1013-XX=4 @ 90° Tenon Adapter for 3-1/2" O.D. Tenon MA1014-XX=2 @ 90° Tenon Adapter for 3-1/2" O.D. Tenon MA1015-XX=2 @ 120° Tenon Adapter for 3-1/2" O.D. Tenon MA1016-XX=3 @ 90° Tenon Adapter for 3-1/2" O.D. Tenon MA1017-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon MA1018-XX=2 @ 180° Tenon Adapter for 2-3/8" O.D. Tenon MA1019-XX=3 @ 120° Tenon Adapter for 2-3/8" O.D. Tenon MA1045-XX=4 @ 90° Tenon Adapter for 2-3/8" O.D. Tenon MA1048-XX=2 @ 90° Tenon Adapter for 2-3/8" O.D. Tenon MA1049-XX=3 @ 90° Tenon Adapter for 2-3/8" O.D. Tenon MA1191-XX=2 @ 120° Tenon Adapter for 2-3/8" O.D. Tenon OA/RA1013=Photocontrol Shorting Cap OA/RA1014=NEMA Photocontrol - 120V OA/RA1016=NEMA Photocontrol - Multi-Tap 105-285V OA/RA1027=NEMA Photocontrol - 480V OA/RA1201=NEMA Photocontrol - 347V ISHH-01=Integrated Sensor Programming Remote		

NOTES:

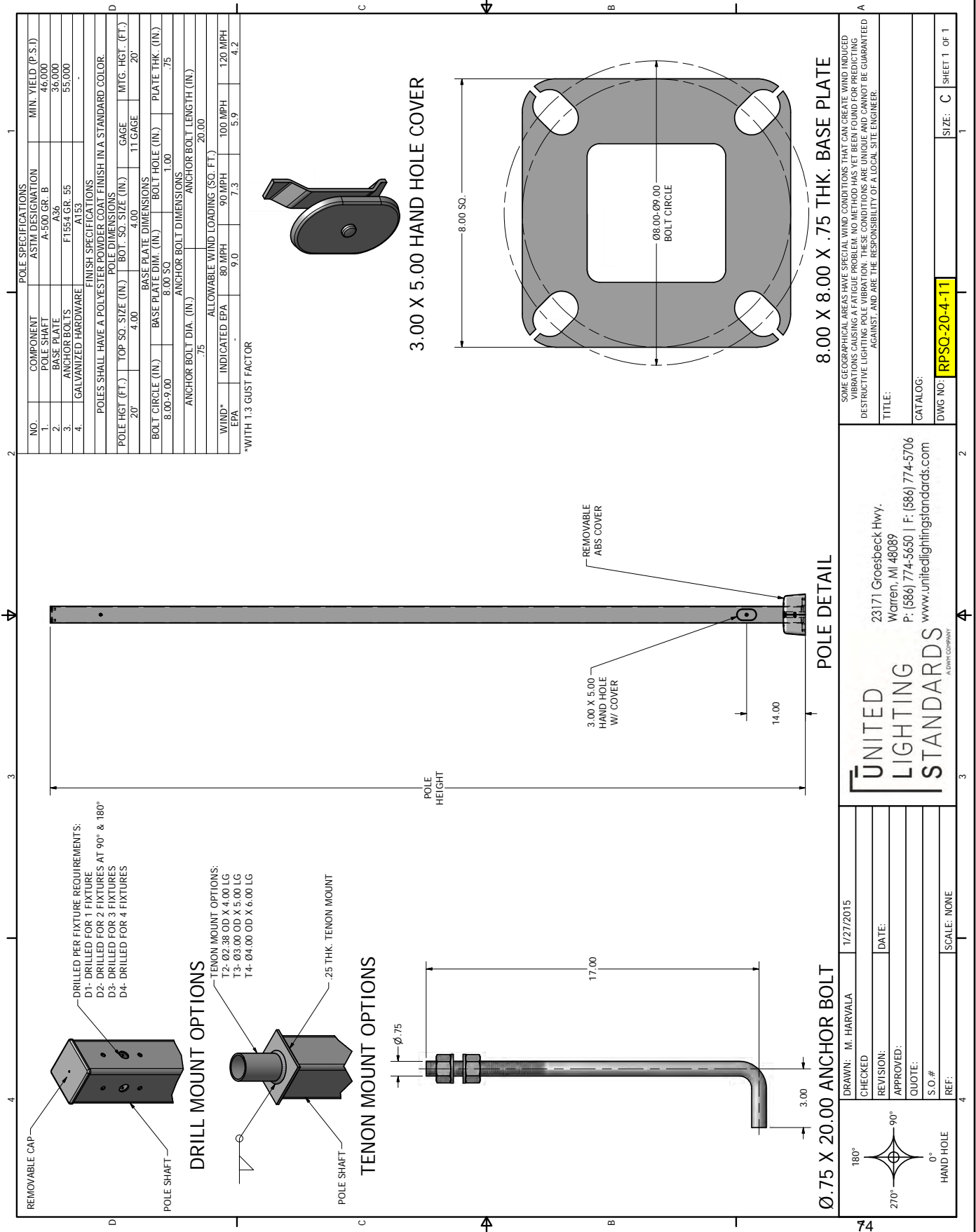
- DesignLights Consortium™ Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.
- Standard 4000K CCT and 70 CRI.
- Consult factory for driver surge protection values.
- Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
- Different housing colors impact lumen output. IES files for the non-standard colors are available upon request.
- Extended lead times apply. Use dedicated IES files for 3000K and 5000K when performing layouts. These files are published on the Prevail luminaire product page on the website.
- LumaWatt wireless sensors are factory installed and require network components RF-EM-1, RF-GW-1 and RF-ROUT-1 in appropriate quantities. See website for LumaWatt application information.
- LumaWatt wireless system is not available with photocontrol receptacle (Not needed).
- Not available with MSP or DIMRF options.
- Replace XX with paint color.

STOCK ORDERING INFORMATION

Stock Sample Number: PRVS-A25-UNV-T3

Product Family	Light Engine	Voltage	Distribution	Options (Add as Suffix)
PRVS=Prevail	A15=(1 LED) 6,100 Nominal Lumens A25=(2 LEDs) 10,200 Nominal Lumens A40=(2 LEDs) 15,100 Nominal Lumens	UNV=Universal (120-277V) 347=347V	T3=Type III T4=Type IV	MSP/DIM-L30=Integrated Sensor for Dimming Operation, Maximum 30' Mounting Height

NOTE: Bronze only, 4000K CCT, 120-277V, 347V, standard mounting arm, standard non-fused 10kV MOV and 0-10V dimming.



Patrick E. Lindemann

Ingham County Drain Commissioner

PO Box 220
707 Buhl Avenue
Mason, MI 48854-0220

Phone: (517) 676-8395

Fax: (517) 676-8364

<http://dr.ingham.org>



Carla Florence Clos
Deputy Drain Commissioner

Paul C. Pratt
Deputy Drain Commissioner

David C. Love
Chief of Engineering and Inspection

Sheldon Lewis
Administrative Assistant

March 6, 2018

Elizabeth Hude, Community Development Director
Mason City Hall
201 West Ash Street
P.O. Box 370
Mason, MI 48854

RE: Site Plan Review Request – 661 North Cedar Street
Conceptual Plan Review; Drain Office #18019

Dear Ms. Hude:

We are in receipt of a February 16, 2018 request by the City of Mason for site plan review for a parcel at 661 North Cedar Street that is the location of two businesses: Commercial Bank and Biggby Coffee. This conceptual review is offered as a courtesy to the City of Mason only and should not be construed by the project owner or others as formal submission to the Ingham County Drain Commissioner for site plan or drainage review.

The Ingham County Drain Commissioner (ICDC) offers the City of Mason the following conceptual review comments on the stormwater system for this project:

1. The plan calls for stormwater to continue to discharge into an existing wetland on the parcel to the west of the site. We recommend that an executed Flowage Easement be obtained from the neighboring parcel owner.
2. The site is located in a Phase II area; therefore, we recommend that the stormwater discharge be held to adequate pretreatment standards to protect the receiving waters of the adjacent wetland.
3. We recommend that drainage plans meet the Rules of the Ingham County Drain Commissioner for low impact development (LID), pretreating the first 1.0-inch of runoff from the new impervious portion of the site and outletting the treated water to a positive public outlet. The Rules of the Ingham County Drain Commissioner can be found at the Drain Commissioner's web site at ingham.org.
4. The plans must be submitted to the Drain Commissioner's Office for Soil Erosion Control Permit evaluation. Fees and application are found at the Drain Commissioner's web site at ingham.org.

We appreciate the opportunity to comment on this plan. It is an honor and a privilege to serve you and the other businesses, citizens and municipalities of Ingham County.

Sincerely,

A handwritten signature in blue ink, appearing to read "David C. Love". The signature is fluid and cursive, with the first name "David" being more prominent than the last name "Love".

David C. Love
Ingham County Drain Engineer

From: Thelen, Lawrence (MDOT)
To: [Elizabeth Hude](#)
Subject: Site Plan Review-661 North Cedar Street-Mason
Date: Wednesday, February 21, 2018 8:46:41 AM

Elizabeth,

Since this is not a change of use MDOT would be fine with the access staying as is. If you need anything else feel free to contact me.

Regards,

Larry Thelen
Permit Agent/Transportation Technician
Lansing TSC(MDOT)
Phone:517-749-8733
Fax:517-335-3752
Thelenl3@michigan.gov

 Please consider the environment before printing this email. Thanks!



CAPITAL IMPROVEMENTS PROGRAM 2018-2024

DRAFT for Public Review

February 19, 2018

REVISION - 3/2/18

STREETS, SIDEWALKS, BRIDGES (S)					BUDGET	FORECAST		PROJECTIONS			Total Project Cost
Requester	Project Number	Category	Project Name/Description	Funding Source	2018-19	2019-20	2020-2021	2021-2022	2022-2023	2023-2024	
Heck	2017-S6	Streets/ Sidewalks	South Street - Northbrook Street to West City Limits	Local	\$ 71,259.00						\$ 71,259.00
Heck	2017-S7	Streets/ Sidewalks	Avon Street - All	Local	\$ 28,745.00						\$ 28,745.00
Heck	2017-S8	Streets/ Sidewalks	Northbrook Street - South Street to Carom Circle	Local	\$ 291,078.00						\$ 291,078.00
Heck	2017-S9	Streets/ Sidewalks	S. Jefferson - Oak Street to Kipp Road	Major	\$ 664,804.00						\$ 664,804.00
Heck	2017-S10	Streets/ Sidewalks	Sidewalk Program - Summerwood (Doesn't count toward 4 mil)	General Fund	\$ 20,000.00						\$ 20,000.00
Heck	2018-S1	Streets/ Sidewalks	Temple Street Safety Grant from MDOT (Local match)	General Fund	\$ 25,000.00						\$ 25,000.00
Heck	2018-S32	Streets/ Sidewalks	Columbia Street - Cedar Street to US 127	General Fund	\$ 181,635.00						\$ 181,635.00
Heck	2017-S5	Streets/ Sidewalks	Walnut- Columbia to North End	Local		\$ 71,954					\$ 71,954.00
Heck	2017-S10	Streets/ Sidewalks	Sidewalk Program - Northwest Quadrant of the City (Doesn't count toward 4 mil)	General Fund		\$ 20,000					\$ 20,000.00
Heck	2017-S11	Streets/ Sidewalks	Kerns Road - Cedar Street to Howell Road	Major		\$ 709,217					\$ 709,217.04
Heck	2017-S12	Streets/ Sidewalks	W. Elm Street - Henderson Street to Jefferson Street (Sewer/Water improvements)	Local		\$ 95,589					\$ 95,588.64
Heck	2017-S13	Streets/ Sidewalks	Park Street - Elm Street to Oak Street	Local		\$ 42,317					\$ 42,316.80
Heck	2017-S10	Streets/ Sidewalks	Sidewalk Program - Northeast Quadrant of the City (Doesn't count toward 4 mil)	General Fund			\$ 20,000				\$ 20,000.00
Heck	2017-S14	Streets/ Sidewalks	East Cherry Street - Rogers Street to End	Local			\$ 109,608				\$ 109,608.00
Heck	2017-S15	Streets/ Sidewalks	S. Barnes Street - Ash Street to Kipp Road	Major			\$ 755,160				\$ 755,160.00
Heck	2017-S16	Bridge	Maple Street Bridge Repair	Local			\$ 20,000				\$ 20,000.00
Heck	2017-S10	Streets/ Sidewalks	Sidewalk Program - Southeast Quadrant of the City (Doesn't count toward 4 mil)	General Fund				\$ 20,000			\$ 20,000.00
Heck	2017-S17	Streets/ Sidewalks	Center Street - Walnut Street to N. Bush Street	Local				\$ 100,920			\$ 100,920.00
Heck	2017-S18	Streets/ Sidewalks	Brookdale Street - Judy Court to Willow Street	Local				\$ 84,100			\$ 84,100.00
Heck	2017-S19	Streets/ Sidewalks	Cherry- McRoberts to Henderson	Local				\$ 218,660			\$ 218,660.00
Heck	2017-S21	Streets/ Sidewalks	Eaton Drive - All	Local				\$ 168,200			\$ 168,200.00
Heck	2017-S22	Streets/ Sidewalks	W. Elm Street - McRoberts Street to Henderson Street	Local				\$ 210,250			\$ 210,250.00
Heck	2017-S10	Streets/ Sidewalks	Sidewalk Program - Southwest Quadrant of City (Doesn't count toward 4 mil)	General Fund				\$ 20,000			\$ 20,000.00
Heck	2017-S23	Streets/ Sidewalks	Rayner Street - Randolph Street to Columbia Street	Local				\$ 53,430			\$ 53,429.60
Heck	2017-S24	Streets/ Sidewalks	Eugenia Drive - Northbrook to End	Local				\$ 316,680			\$ 316,680.00
Heck	2017-S25	Streets/ Sidewalks	Hall Blvd - Ash Street to South Street	Local				\$ 422,240			\$ 422,240.00
Heck	2017-S26	Streets/ Sidewalks	Columbia Street - Park Street to Jefferson Street	Major				\$ 75,690			\$ 75,690.00
Heck	2017-S10	Streets/ Sidewalks	Sidewalk Program - Northwest Quadrant of City (Doesn't count toward 4 mil)	General Fund						\$ 20,000.00	\$ 20,000.00
Heck	2018-S27	Streets/ Sidewalks	Peachtree Place Columbia Street to South Street	Major						\$ 457,720.00	\$ 457,720.00
Heck	2018-S29	Streets/ Sidewalks	McRoberts Street - Columbia Street to Maple Street	Local						\$ 84,355.00	\$ 84,355.00
Heck	2018-S30	Streets/ Sidewalks	Steele Street - Ash Street to Elm Street	Local						\$ 68,900.00	\$ 68,900.00
Heck	2018-S31	Streets/ Sidewalks	W. Oak Street - McRoberts Street to Lansing Street	Local						\$ 130,188.00	\$ 130,188.00
					\$ 1,282,521.00	\$ 939,076	\$ 904,768	\$ 802,130	\$ 888,040	\$ 761,163.00	\$ 5,577,698.08

UTILITIES: SANITARY SEWER, STORM WATER, AND WATER DISTRIBUTION (U)					BUDGET	FORECAST		PROJECTIONS			Total Project Cost
Requester	Project Number	Category	Project Name/Description	Funding Source	2018-19	2019-20	2020-2021	2021-2022	2022-2023	2023-2024	
Heck	2018-U1	Streets/Sidewalks	Utilities for Properties on Kipp Road (Klavor's, S & Sue, Vacant Lot)	Water/Sewer	\$ 200,000.00						\$ 200,000.00
Baker	2017-U3.2	POTW	Design and Construction - Waste Water Treatment Plant Upgrades	Water/Sewer/LDFA	\$ 12,000,000.00						\$ 12,000,000.00
Baker	2017-U3.3	DPW	Design of the New Department of Public Works Facility	Water/Sewer/LDFA	\$ 75,000.00						\$ 75,000.00
Baker	2017-U6	DPW	Abandon Monitoring Wells by Airport	Water/Sewer	\$ 30,000.00						\$ 30,000.00
Heck	2017-U9	Streets/ Sidewalks	Northbrook Street - South Street to Carom Circle	Water/Sewer	\$ 3,500.00						\$ 3,500.00
Heck	2017-U10	Streets/ Sidewalks	S. Jefferson Street - Oak Street to Kipp Road	Water/Sewer	\$ 100,000.00						\$ 100,000.00
Baker	2017-U12	POTW	300,000 Gallon Storage Tank Top Sealing	Water/Sewer	\$ 12,000.00						\$ 12,000.00
Baker	2017-U13	DPW	Well No. 7 Rebuild	Water/Sewer	\$ 40,000.00						\$ 40,000.00
Baker	2017-U15	DPW	Replace Two Fire Hydrants Behind Mason Plaza	Water/Sewer	\$ 25,000.00						\$ 25,000.00
Baker	2017-U16	DPW	Cathodic protection for Ground Storage Tank	Water/Sewer	\$ 25,000.00						\$ 25,000.00
Baker	2017-U17	DPW	High Service Pump No. 1 Rebuild	Water/Sewer	\$ 18,000.00						\$ 18,000.00
Baker	2017-U18	DPW	Replace Chlorine Analyzer for High Service Pump Room	Water/Sewer	\$ 10,000.00						\$ 10,000.00
Baker	2018- U35	DPW	BS&A Software Work Order Application	Water/Sewer	\$ 12,000.00						\$ 12,000.00
Baker	2018- U36	DPW	Sewer Push Camera Replacement	Water/Sewer	\$ 16,000.00						\$ 16,000.00
Baker	2018-U37	POTW	Log Jam Removal in the Sycamore Creek	Water/Sewer	\$ 16,000.00						\$ 16,000.00
Baker	2017-U11	POTW	Turbine Aeration Blower at POTW	Water/Sewer		\$ 260,000.00					\$ 260,000.00
Baker	2017-U14	DPW	Department of Public Works Facility Design and Construction	Water/Sewer		\$ 6,780,000.00					\$ 6,780,000.00
Baker	2017-U19	Streets/ Sidewalks	Kerns Road - Cedar Street to Howell Road	Major		\$ 96,461.00					\$ 96,461.00
Heck	2017-U20	Streets/ Sidewalks	W. Elm Street - Henderson Street to Jefferson Street	Local		\$ 170,520.00					\$ 170,520.00
Baker	2017-U21	Streets/ Sidewalks	Park Street - Elm Street to Oak Street	Local		\$ 33,802.40					\$ 33,802.40
Baker	2017-U22	POTW	Stop Gates for Aeration Discharge Piping	Water/Sewer		\$ 10,000.00					\$ 10,000.00
Baker	2017-U23	DPW	Well No. 6 Rebuild and New Variable Frequency Drive (VFD)	Water/Sewer		\$ 45,000.00					\$ 45,000.00
Baker	2017-U24	DPW	Study of Sewer Flow on Mason Street	Water/Sewer		\$ 15,000.00					\$ 15,000.00
Baker	2017-U25	DPW	Gutters for Water Treatment Plant	Water/Sewer		\$ 7,000.00					\$ 7,000.00
Baker	2017-U26	DPW	New Well Franklin Farms	Water/Sewer		\$ 400,000.00					\$ 400,000.00
Baker	2018-U32	DPW	South Water Tower Interior Maintenance and Repair	Water/Sewer			\$ 300,000.00				\$ 300,000.00
Baker	2017-U8	DPW	Replace Programmable Logic Controllers (PLC) on 3 Wells	Water/Sewer			\$ 40,000.00				\$ 40,000.00
Heck	2017-U27	Streets/ Sidewalks	Cherry Street - Rogers Street to End	Water/Sewer			\$ 160,800.00				\$ 160,800.00
Heck	2017-U28	Streets/ Sidewalks	S. Barnes Street - Ash Street to Kipp Road	Water/Sewer			\$ 546,360.00				\$ 546,360.00
Baker	2017-U29	DPW	Generators for ISD and Curtis Street Lift Stations	Water/Sewer			\$ 40,000.00				\$ 40,000.00
Baker	2018-U33	DPW	Well No. 4 Rebuild	Water/Sewer			\$ 40,000.00				\$ 40,000.00
Baker	2017-U34	DPW	Well No. 5 Rebuild	Water/Sewer				\$ 40,000.00			\$ 40,000.00
Baker	2018-U37	DPW	Well No. 10 Rebuild	Water/Sewer					\$ 40,000.00		\$ 40,000.00
Baker	2017-U8	DPW	Replace Programmable Logic Controllers (PLC) on Three (3) Wells	Water/Sewer						\$ 45,000.00	\$ 45,000.00
Baker	2018-U39	DPW	Well No. 9 Rebuild	Water/Sewer						\$ 40,000.00	\$ 40,000.00
Baker	2018-U40	DPW	North Water Tower Exterior/Interior Evaluation and Repaint 20 Year	Water/Sewer						\$ 750,000.00	\$ 750,000.00
					\$ 12,582,500.00	\$ 7,817,783.40	\$ 1,127,160.00	\$ 40,000.00	\$ 40,000.00	\$ 835,000.00	\$ 22,442,443.40

PARKS/ CEMETERY/ FORESTRY/ NONMOTORIZED (P)											
					BUDGET	FORECAST		PROJECTIONS			
Requester	Project Number	Category	Project Name/Description	Funding Source	2018-19	2019-20	2020-2021	2021-2022	2022-2023	2023-2024	Total Project Cost
Hude	2017-P8	Laylin	Laylin Park Improvements	Rayner Bond/General Fund	\$ 85,000.00						\$ 85,000.00
Hude	2018-P1	Non-Motorized	Howell Road - Hayhoe Riverwalk Trailhead (Dart Trailhead)	Rayner/County	\$ 1,000,000.00						\$ 1,000,000.00
Heck	2018-P2	Non-Motorized	Howell Road - Hayhoe Riverwalk Trail Extension	Rayner/Dart Found	\$ 37,000.00						\$ 37,000.00
Hude	2018-P3	All	Planning: Parks/Recreation Plan - 5 year update (minor)	Rayner Bond	\$ 5,000.00						\$ 5,000.00
Baker	2018-P5	Forestry	City Tree Evaluation	General Fund	\$ 20,000.00						\$ 20,000.00
Hude	2017-P10	Bond	Bond Park Improvements	Rayner Bond		\$ 100,000.00					\$ 100,000.00
Heck	2018-P3	Non-Motorized	Kerns Road - Hayhoe Riverwalk Trail Extension	Rayner Bond		\$ 160,000.00					\$ 160,000.00
Hude	2017-P11	Hayes	Hayes Park Improvements	Rayner Bond			\$ 100,000.00				\$ 100,000.00
Hude	2017-P14	Griffin	Griffin Park Improvements	Rayner Bond				\$ 20,000.00			\$ 20,000.00
Hude	2018-P4	Austin	Lee Austin Park Improvements	Rayner Bond				\$ 100,000.00			\$ 100,000.00
Hude	2017-P13	Rayner	Rayner Park Pond Dredging	General Fund					\$ 300,000.00		\$ 300,000.00
Hude	2017-P12	Rayner	Rayner Park Improvements	Rayner Bond						\$ 150,000.00	\$ 150,000.00
Hude	2018-P3	All	Planning: Parks/Recreation Plan - 5 year update (major)	Rayner Bond						\$ 15,000.00	\$ 15,000.00
Hude	2018-P5	Non-Motorized	Hayhoe Trail: Internal Loop-South Side (Jefferson/High School/Rayner Street)	General Fund						\$ 150,000.00	\$ 150,000.00
Hude	2018-P6	Non-Motorized	Hayhoe Trail: Internal Loop North Side- (Howell/ Mason Street/Cemetery)	General Fund						\$ 150,000.00	\$ 150,000.00
Hude	2018-P7	Non-Motorized	Hayhoe Trail: Internal Loop West Side- (Columbia 127 pedestrian bridge w/mid-block crossing)	General Fund						\$ 1,675,000.00	\$ 1,675,000.00
Hude	2018-P8	Non-Motorized	Hayhoe Trail: Internal Loop East Side- (Rayner/Middle School/Laylin)	General Fund						\$ 15,000.00	\$ 15,000.00
Baker	2018 P15	Cemetery	Second Drive - Cemetery	General Fund						\$ 70,000.00	\$ 70,000.00
					\$ 25,000.00	\$ 260,000.00	\$ 100,000.00	\$ 120,000.00	\$ 300,000.00	\$ 2,140,000.00	\$ 2,945,000.00

MOTOR VEHICLE POOL (MVP)											
					BUDGET	FORECAST		PROJECTIONS			
Requester	Project Number	Category	Project Name/Description	Funding Source	2018-19	2019-20	2020-2021	2021-2022	2022-2023	2023-2024	Total Project Cost
Baker	2017-MVP6	Equipment- DPW	1/2 Ton 2x4 Pickup Truck	MVP	\$ 26,000.00						\$ 26,000.00
Baker	2017-MVP7	Equipment- DPW	Mower	MVP	\$ 11,000.00						\$ 11,000.00
Baker	2017-MVP8	Equipment- DPW	Police Cars	MVP	\$ 39,000.00						\$ 39,000.00
Baker	2017-MVP9	Equipment- DPW	Large Items	MVP	\$ 60,000.00						\$ 60,000.00
Baker	2017-MVP10	Equipment- DPW	5-yard Dump/Plow Trucks	MVP	\$ 165,000.00						\$ 165,000.00
Baker	2017-MVP18	Equipment- DPW	Other Equipment	MVP	\$ 85,000.00						\$ 85,000.00
Baker	2017-MVP30	Equipment- DPW	Front End Material Loader: Lease ends 6 / 2018	MVP	\$ 130,000.00						\$ 130,000.00
Baker	2017-MVP11	Equipment- DPW	1/2 Ton 2x4 Pickup Truck	MVP		\$ 26,000.00					\$ 26,000.00
Baker	2017-MVP12	Equipment- DPW	Mower	MVP		\$ 11,000.00					\$ 11,000.00
Baker	2017-MVP13	Equipment- DPW	Police Cars	MVP		\$ 39,000.00					\$ 39,000.00
Baker	2017-MVP15	Equipment- DPW	1/2 Ton 2x4 Pickup Truck	MVP			\$ 26,000.00				\$ 26,000.00
Baker	2017-MVP16	Equipment- DPW	Mower	MVP			\$ 11,000.00				\$ 11,000.00
Baker	2017-MVP17	Equipment- DPW	Police Cars	MVP			\$ 39,000.00				\$ 39,000.00
Baker	2017-MVP19	Equipment- DPW	5-yard Dump/Plow Trucks	MVP			\$ 150,000.00				\$ 150,000.00
Baker	2017-MVP20	Equipment- DPW	1/2 Ton 2x4 Pickup Truck	MVP				\$ 26,000.00			\$ 26,000.00
Baker	2017-MVP21	Equipment- DPW	Mower	MVP				\$ 11,000.00			\$ 11,000.00
Baker	2017-MVP22	Equipment- DPW	Police Cars	MVP				\$ 39,000.00			\$ 39,000.00
Baker	2017-MVP23	Equipment- DPW	3/4 Ton Pickup Truck	MVP				\$ 35,000.00			\$ 35,000.00
Baker	2017-MVP24	Equipment- DPW	Other Equipment: Asphalt roller and trailer	MVP				\$ 12,000.00			\$ 12,000.00
Baker	2017-MVP25	Equipment- DPW	1/2 Ton 2x4 Pickup Truck	MVP					\$ 26,000.00		\$ 26,000.00
Baker	2017-MVP26	Equipment- DPW	Mower	MVP					\$ 11,000.00		\$ 11,000.00
Baker	2017-MVP27	Equipment- DPW	Police Cars	MVP					\$ 39,000.00		\$ 39,000.00
Baker	2017-MVP28	Equipment- DPW	3/4 Ton Pickup Truck	MVP					\$ 35,000.00		\$ 35,000.00
Baker	2017-MVP29	Equipment- DPW	6x4 John Deer Gator UTV	MVP					\$ 10,000.00		\$ 10,000.00
Baker	2018-MVP1	Equipment- DPW	1/2 Ton 2x4 Pickup Truck	MVP						\$ 26,000.00	\$ 26,000.00
Baker	2018-MVP2	Equipment- DPW	Mower	MVP						\$ 11,000.00	\$ 11,000.00
Baker	2018-MVP3	Equipment- DPW	Police Cars	MVP						\$ 39,000.00	\$ 39,000.00
Baker	2018-MVP4	Equipment- DPW	3/4 Ton Pickup Truck	MVP						\$ 35,000.00	\$ 35,000.00
Baker	2018-MVP5	Equipment- DPW	Back Hoe	MVP						\$ 130,000.00	\$ 130,000.00
					\$ 380,000.00	\$ 76,000.00	\$ 226,000.00	\$ 123,000.00	\$ 121,000.00	\$ 241,000.00	\$ 1,167,000.00

BUILDING, PROPERTY, EQUIPMENT (B)					BUDGET	FORECAST				PROJECTIONS	
Requester	Project Number	Category	Project Name/Description	Funding Source	2018-19	2019-20	2020-2021	2021-2022	2022-2023	2023-2024	Total Project Cost
Stressman	2017-B3.1	Equipment- Police	Police: Portable Radios	General Fund	\$ 8,000.00						\$ 8,000.00
Minshall	2017-B4	Building- City Hall	Building: Landscaping and Outdoor Lighting Conversion to LED	General Fund	\$ 32,100.00						\$ 32,100.00
Minshall	2017-B6	Equipment- Fire	Fire: Fire Engine 809/Tower 808	Fire Equipment	\$ 750,000.00						\$ 750,000.00
Borle	2018-B4	Equipment- IT	IT: BS&A Timesheet Program	General Fund	\$ 8,000.00						\$ 8,000.00
Borle	2018-B4	Equipment-IT	IT: BS&A Cemetery Upgrade and BS&A Human Resource Upgrade	General Fund	\$ 16,000.00						\$ 16,000.00
Borle	2018-B6	Equipment- IT	IT: AV Room Technology Patch	General Fund	\$ 10,000.00						\$ 10,000.00
Hude	2018-B7	Planning	Planning: Cedar/127 Corridor (Transportation and Land Use)	General Fund	\$ 50,000.00						\$ 50,000.00
Minshall	2018-B24	Building- City Hall	Building: Rental Space Furniture Replacement	General Fund	\$ 5,000.00						\$ 5,000.00
Stressman	2017-B3.1	Equipment- Police	Police: Portable Radios	General Fund		\$ 8,000.00					\$ 8,000.00
Minshall	2017-B5	Building- Library	Building: Library Improvements	General Fund		\$ 300,000.00					\$ 300,000.00
Haywood	2017-B7	Building- City Hall	Building: Parking Lot Repairs	General Fund		\$ 40,350.00					\$ 40,350.00
Minshall	2017-B10	Building- Fire	Fire: Fire Station 1- Furnace/AC, Office Area and Training Room	General Fund		\$ 20,000.00					\$ 20,000.00
Minshall	2017-B11	Equipment- Fire	Fire: Fire Station 1- Commercial Washing and Drying Machines	General Fund		\$ 7,500.00					\$ 7,500.00
Smith	2017-B12	Equipment- IT	IT: New Servers (windows and mail exchange)	General Fund		\$ 20,000.00					\$ 20,000.00
Borle	2018-B8	Equipment- IT	IT: Phone Upgrades	General Fund		\$ 30,000.00					\$ 30,000.00
Hude	2018-B10	Equipment- IT	IT: BS&A Planning and AccessMyGov Module for Online Permitting	General Fund		\$ 6,260.00					\$ 6,260.00
Hude	2018-B11	Planning	Planning: Kipp Road/Temple Street (Transportation and Land Use)	General Fund		\$ 30,000.00					\$ 30,000.00
Minshall	2018-B12	Building- City Hall	Building: Carpet Replacement	General Fund		\$ 20,000.00					\$ 20,000.00
Minshall	2018-B13	Equipment- Fire	Fire: Extrication Tools (Jaws of Life) in Engine 809's Replacement	General Fund		\$ 50,000.00					\$ 50,000.00
Minshall	2018-B14	Equipment- Fire	Fire: Rehab 815 Replacement	General Fund		\$ 75,000.00					\$ 75,000.00
Minshall	2018-B15	Building- Fire	Fire: Sprinkler System in Fire Department Truck Bay	General Fund		\$ 25,000.00					\$ 25,000.00
Minshall	2018-B16	Building- Fire	Fire: Rear Approach Fire Station 1	General Fund		\$ 25,000.00					\$ 25,000.00
Stressman	2018-B17	Equipment- Police	Police: Mobile Data Computers	General Fund		\$ 7,500.00					\$ 7,500.00
Borle	2018-B19	Equipment- IT	IT: Wireless connectivity to DPW and POTW	General Fund		\$ 35,000.00					\$ 35,000.00
Stressman	2017-B3.1	Equipment- Police	Police: Portable Radios	General Fund			\$ 16,000.00				\$ 16,000.00
Borle	2017-B13	Equipment- IT	IT: AV Room Technology Replacement	General Fund			\$ 150,000.00				\$ 150,000.00
Minshall	2017-B18	Equipment- Fire	Fire: Self-Contained Breathing Apparatus (SCBA) units	General Fund			\$ 205,000.00				\$ 205,000.00
Stressman	2018-B18	Equipment- Police	Police: Taser Units	General Fund			\$ 16,733.00				\$ 16,733.00
Minshall	2018-B20	Building- Fire	Fire: Carpet Replacement for Fire Station	General Fund			\$ 15,000.00				\$ 15,000.00
Stressman	2018-B21	Equipment- Police	Police: Interview & Interrogation Digital Recording System	General Fund			\$ 13,308.00				\$ 13,308.00
Hude	2018-B23	Planning	Planning: Master Plan/Zoning 5-year Update (Major): Phase I	General Fund			\$ 25,000.00				\$ 25,000.00
Minshall	2017-B15	Equipment- Fire	Fire: Rescue Boat and Motor	General Fund				\$ 10,000.00			\$ 10,000.00
Minshall	2017-B16	Equipment- Fire	Fire: Portable Radios	General Fund				\$ 108,000.00			\$ 108,000.00
Stressman	2018-B22	Equipment- Police	Police: Body Worn Cameras and Redaction Software	General Fund				\$ 8,250.00			\$ 8,250.00
Hude	2018-B23	Planning	Planning: Master Plan/Zoning 5-year Update (Major): Phase II	General Fund				\$ 100,000.00			\$ 100,000.00
Minshall	2018-B24	Building- City Hall	Building: Rental Space Furniture Replacement	General Fund				\$ 5,000.00			\$ 5,000.00
Hude	2018-B23	Planning	Planning: Master Plan/Zoning 5-year Update (Major): Phase III	General Fund					\$ 25,000.00		\$ 25,000.00
Stressman	2018-B26	Equipment-Police	Police: Patrol Car Modem Upgrades	General Fund					\$ 5,000.00		\$ 5,000.00
Stressman	2018-B25	Equipment- Police	Police: In-Car Digital Recording System	General Fund						\$ 40,000.00	\$ 40,000.00
					\$ 879,100.00	\$ 699,610.00	\$ 441,041.00	\$ 231,250.00	\$ 30,000.00	\$ 40,000.00	\$ 2,321,001.00

	BUDGET	FORECAST		PROJECTIONS			
	2018-19	2019-20	2020-2021	2021-2022	2022-2023	2023-2024	Total Project Cost
GRAND TOTALS	\$ 15,149,121.00	\$ 9,792,469.88	\$ 2,798,969.00	\$ 1,316,380.00	\$ 1,379,039.60	\$ 4,017,163.00	\$ 34,453,142.48



CAPITAL IMPROVEMENTS PROGRAM 2018 – 2024

Approved Month/Day/Year

DRAFT FOR PUBLIC REVIEW
February 19, 2018

REVISION – 3/2/18



City of Mason Planning Commission

Approved: xxxx

Received: xxxxx

John Sabbadin, Chairperson
Seth Waxman, Vice Chairperson
Lori Hagle, Secretary

Jon Droscha, Council Liaison
Anne Klein Barna
Jettie Feintuch

Mark Howe
Ed Reeser

City of Mason City Council

Approved: xxxx

Received: xxxxx

Russell Whipple, Mayor
Marlon Brown, Mayor Pro Tem

Jon Droscha
Elaine Ferris
Angela Madden

Rita Vogel
Mike Waltz

Prepared by:

Deborah Stuart, City Administrator

Ken Baker, Public Works Director
Paul Borle, Finance Director/Treasurer
Donald B. Heck, P.E., City Engineer
Elizabeth A. Hude, AICP, Community Development Director
Sarah Jarvis, City Clerk
Kerry Minshall, Fire Chief
John Stressman, Chief of Police

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Introduction

A Capital Improvements Program (CIP) is a multi-year planning instrument used to identify needs and financing sources for public infrastructure improvements. The purpose of a CIP is to facilitate the orderly planning of infrastructure improvements; to maintain, preserve, and protect the community of Mason's existing infrastructure system; and to provide for the acquisition or scheduled replacement of equipment to ensure the efficient delivery of services to the community. The CIP is also utilized to ensure that capital improvements are fiscally sound and consistent with the goals and policies of the governing body and the residents of the community.

A comprehensive CIP is an essential tool for the planning and development of the social, physical, and economic wellbeing of the community. This process is a necessary step in an organized effort to strengthen the quality of public facilities and services; provide a framework for the realization of community goals and objectives; and provide a sound basis on which to build a healthy and vibrant community.

The CIP informs Mason residents and stakeholders on how the municipality plans to address significant capital needs over the next six years. The CIP provides visual representations of the community's needs including maps that detail the timing, sequence, and location of capital projects. The CIP can also influence growth because infrastructure can impact development patterns.

Some of the many benefits the CIP provides for the residents and stakeholders include:

- Optimize the uses of revenue
- Focus attention on community goals, needs, and capabilities
- Guide future growth and development
- Encourage efficient government
- Improve intergovernmental and regional cooperation
- Help maintain a sound and stable financial program
- Enhance opportunities for the participation in federal and/or state grant programs

The projects identified in the CIP represent the community's plan to serve residents and anticipate the needs of a dynamic community. Projects are guided by various development plans and policies established by the planning commission, governing body, and administration.

Plans and policies include:

- 20-Year Master Plan
- Downtown Development Authority Plan
- Local Development Finance Authority TIF Plan
- Administrative Policies
- Five-Year Parks and Recreation Plan

Definition of a Capital Improvement

The CIP allows for responsible and thoughtful planning of future major expenditures that are not necessarily financed or automatically included in the annual budgeting process. All capital projects that fit the description under the policy (see Page 6) should be part of this CIP.

Legal Basis of the Capital Improvements Program

The CIP has been authorized by the Michigan Planning Enabling Act (Public Act 33 of 2008). This mandate gives responsibility for preparing a CIP for local Planning Commission bodies, and reads as follows:

125.3865 Capital Improvements program of public structures and improvements/ preparation; basis. Sec. 65. (1) To further the desirable future development of the local unit of government under the master plan, a planning commission, after adoption of a master plan, shall annually prepare a capital improvements program of public structures and improvements, unless the planning commission is exempted from this requirement by charter or otherwise. If the planning commission is exempted, the legislative body either shall prepare and adopt a capital improvements program, separate from or as a part of the annual budget, or shall delegate the preparation of the capital improvements program to the chief elected official or a nonelected administrative official, subject to final approval by the legislative body. The capital improvements program shall show those public structures and improvements, in the general order of their priority, that in the commission's judgment will be needed or desirable and can be undertaken within the ensuing 6-year period. The capital improvements program shall be based upon the requirements of the local unit of government for all types of public structures and improvements. Consequently, each agency or department of the local unit of government with authority for public structures or improvements shall upon request furnish the planning commission with lists, plans, and estimates of time and cost of those public structures and improvements.

Planning and Benefits of the Capital Improvements Program

The CIP is, first and foremost, a planning tool and is dynamic. Each year all projects included within the CIP are reviewed, a call for new projects is made, and adjustments are made to existing projects arising from changes in the amount of funding required, conditions, or time line. A new year of programming is also added each year to replace the year funded in the annual operating budget. With thoughtful foresight and review as a result of a CIP, the many outstanding capital projects that Mason is faced with implementing every year can be viewed as one package, rather than as small, fragmented groups or lists, with no unified sense of focus and direction.

When capital improvements begin with careful planning and study, the City of Mason's chances for receiving state and federal grants are greatly enhanced. Some grants require the inclusion of a CIP with their application. Formulation of a CIP helps those involved to look at alternative funding mechanisms that might not have been considered before. Instead of relying on local revenue sources alone, the CIP allows the City to think more creatively to fulfill Master Plan for Land Use goals and policies. The CIP will continue to develop over time by adding features to gradually improve quality and sophistication. Greater attention shall be devoted to provide more detailed information about individual project requests, program planning, fiscal analysis, fiscal policies, and developing debt strategy. The CIP often avoids reactive planning, and instead replaces it with balanced growth initiatives.

Impact of Capital Budget on the Operating Budget

As new policies and programs are approved, both the operating and capital budgets are impacted. For example, an increase in service levels approved as part of the operating budget would have long-term effects on the Capital Improvements Program. Conversely, a restrictive change to the use of long-term debt would slow capital programs. Regardless of the difference between the operating and capital budgets, the two are interdependent.

Approval of the CIP by the Mason Planning Commission does not mean they grant final approval of all projects contained within the plan. Rather by approving the CIP, the Planning Commission acknowledges that these projects represent a reasonable interpretation of the upcoming needs for the community and that projects contained in the first year of the plan are suitable for inclusion in the upcoming budget.

The community of Mason strives to maximize resources by maintaining a balance between operating and capital budgets. A continuous relationship exists between the CIP and the annual budget. A direct link can be seen between the two documents, as there should be in a strategic planning environment.

Process

Mason Leadership Team: recommends projects from their area of expertise, reviews all projects, evaluates the prioritization of projects based on established criteria, considers funding options, and presents the recommendation to the Planning Commission.

- City Administrator
- City Clerk/Human Resources Director
- Community Development Director
- Finance Director/Treasurer
- Fire Chief
- Police Chief
- Public Works Director

City Administrator: clarifies any issues, finalizes the ratings and approves the CIP draft. The City Administrator recommends the CIP draft at the Planning Commission workshop and presents the CIP at the Planning Commission public hearing.

Mason Planning Commission: reviews the Policy Group's recommendation, conducts workshops (if necessary), receives public input, conducts public hearings, adopts the plan, and requests the governing body to consider incorporating funding for the first-year projects into the budget plan.

Mason City Council: is encouraged to use the CIP as a tool in the adoption of the annual budget process in accordance with the governing body goals and objectives.

Mason Residents: are encouraged to participate in plan development by working with various boards and commissions at the Planning Commission workshops, the Planning Commission public hearings, and at the governing body's budget workshops and public hearings. As always, communication is open between residents, governing body representatives, Planning Commission representatives, and staff.

Policy

As used in the City of Mason Capital Improvements Program, a capital improvements project is defined as a major, nonrecurring expenditure that includes one or more of the following:

1. Any construction of a new facility (i.e., a public building, water/sanitary sewer mains, storm sewers, major/local roadways, recreational facilities), an addition to, or extension of, such a facility, provided the cost is \$5,000 or more and that the improvement will have a useful life of three years or more.
2. Any nonrecurring rehabilitation of all or part of a building, its grounds, a facility, or equipment, provided the cost is \$5,000 or more and the improvement will have a useful life of three years or more.
3. Any purchase or replacement of major equipment to support community programs provided the cost is \$5,000 or more and will be coded to a capital asset account.
4. Any planning, feasibility, engineering, or design study related to an individual capital improvements project or to a program that is implemented through individual capital improvements projects provided the cost is \$5,000 or more and will have a useful life of three years or more.
5. Any planning, feasibility, engineering, or design study costing \$10,000 or more that is not part of an individual capital improvements project or a program that is implemented through individual capital improvements projects.

Funding Overview

Capital improvements projects involve the outlay of substantial funds making numerous sources of funding necessary to provide financing over the life of the project. Most capital funding sources are earmarked for specific purposes and cannot be transferred from one capital program to another. The CIP has to be prepared with some projections as to the amount of money available. The following is a summary of the funding sources for projects included in the CIP:

Bonds

When the community of Mason sells bonds, purchasers are, in effect, lending the community money. The money is repaid, with interest, from taxes or fees over the years. The logic behind issuing bonds (or “floating a bond issue”) for capital projects is that the citizens who benefit from the capital improvements over a period of time should help the community pay for them.

General Obligation (G.O.) bonds: Perhaps the most flexible of all capital funding sources, G.O. bonds can be used for the design or construction of any capital project. These bonds are financed through property taxes. In financing through this method, the taxing power of the community is pledged to pay interest and principal to retire the debt. Voter approval is required if the community wants to increase the taxes that it levies and the amount is included in Mason’s state-imposed debt limits. To minimize the need for property tax increases, the community makes every effort to coordinate new bond issues with the retirement of previous bonds. G.O. bonds are authorized by a variety of state statutes.

- *Mason currently has one outstanding bond related to the infrastructure put in place on Temple Street. The bond has a remaining payment balance of \$210,000 with a final payment estimated in 11/2020.*
- *Mason also has one outstanding bond related to the City Hall/Police Station. The bond has a remaining payment balance of \$3,520,000 with a final payment estimated in 04/2040.*

Revenue bonds: Revenue bonds are sold for projects that produce revenues such as water and sewer system projects. Revenue bonds depend on user charges and other project-related income to cover their costs. Unlike G.O. bonds, Revenue bonds are not included in the community state-imposed debt limits because the full faith and credit of the community backs them. Revenue bonds are authorized by Public Act of 1933, the Revenue Bond Act. The City of Mason currently has no outstanding revenue bonds.

Building Authority

The Mason Building Authority was established for the purpose of acquiring, furnishing, equipping, owning, improving, enlarging, operating, and maintaining a building or buildings, automobile parking lots or structures, recreation facilities and the necessary site or sites therefore thereof, and the payment of the bond principal and interest for any related debt incurred. The Building Authority functions as a mechanism to facilitate the selling of bonds to finance public improvements.

- *Mason currently has one outstanding bond related to the Fire Station. The bond has a remaining payment balance of \$75,000 with a final payment estimated in 10/2018.*

Enterprise Fund (Water and Sewer Fund)

In enterprise financing, funds are accumulated in advance for capital requirements. Enterprise funds not only pay for capital improvements, but also for the day-to-day operations of community services and the debt payment on revenue bonds. The community can set levels for capital projects; however, increases

in capital expenditures for water mains, for example, could result in increased rates. Enterprise fund dollars can only be used on projects related to that particular enterprise fund.

The revenues generated from the Mason's Water and Sewer system must be set aside and collected in accounts as designated by existing revenue bond ordinances. These revenues are pledged for the specific purposes and transferred in a manner specified by those ordinances.

The City of Mason charges for water service supplied by the system based on a rate schedule measured by water usage. These charges must be sufficient to provide adequate revenues for operations, maintenance, replacements, improvements, and debt retirement. The last utility rate study was completed in 2014, with an update planned in 2018.

- *Mason currently has one outstanding loan with the State of Michigan Drinking Water Revolving Fund (DWRF) related to the Water Treatment Plant. The loan has a remaining payment balance of \$4,588,674 with a final payment estimated in 04/2028.*

Federal and State Funds

The federal and state governments make funds available to communities through numerous grants and aid programs. Some funds are tied directly to a specific program. The community has discretion (within certain guidelines) over the expenditure of others. For the most part, the community has no direct control over the amount of money received under these programs.

Millages

The property tax is a millage that is one of the most important sources of community revenue. The property tax rate is stated in mills (one dollar per \$1,000 of valuation). This rate is applied to a property's net value, following the application of all exemptions and a 50% equalization ratio. Mason is authorized to utilize millages under Public Act 279 of 1909, the Home Rule Cities Act. The City of Mason's current millage rate is 15.25. Under the Headlee Amendment, the City of Mason City Council is authorized to raise the millage up to 18.485 without a vote of the people.

Special Assessments

Capital improvements that benefit particular properties, rather than the community as a whole, may be financed more equitably by special assessment, i.e., by those who directly benefit. Local improvements often financed by this method in Mason are sidewalk and drive approach improvements.

State Shared Revenue

The City of Mason receives its share of various taxes and fees from programs and requirements by the State of Michigan. This refers to both constitutional and statutory Revenue Sharing payments.

- The Constitutional portion consists of 15% of gross collections from the 4% sales tax distributed to cities, villages, and townships based on their population. The Legislature cannot reduce or increase this amount.
- The Statutory portion is distributed by a formula, set in Public Act 532 of 1998. The Act calls for 21.3% of the 4% sales tax collections to be distributed in accordance with the formula. The Legislature has the ability to reduce the statutory portion based on the State's priorities for the State's budget.

Tax Increment Financing (TIF)

TIF is a municipal financing tool that can be used to renovate or redevelop declining areas while improving their tax base. TIF applies the increase in various state and local taxes that results from a redevelopment project to pay for project-related public improvements.

- *For purposes of financing activities within the community of Mason's downtown district, the Downtown Development Authority adopted a 30-year TIF plan in 1984 (extended to expire in 2030) that generates roughly \$70,000 in revenue annually.*
- *For purposes of financing activities related to Mason's south industrial area, the Local Development Finance Authority Act adopted a 30-year TIF plan in 1989 that generates roughly \$325,000 in revenue annually.*

Weight and Gas Tax

Based on a formula set by the State of Michigan, the community of Mason receives a portion of the tax placed on motor fuel and highway usage in the state. The restrictions placed on the expenditure of these funds insure that they will be spent on transportation-related projects or operations and services. These are commonly called Act 51 funds.

- *Mason on average receives \$630,000 split between the Major and Local Street Funds.*

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CAPITAL IMPROVEMENTS PROGRAM 2018-2024

LIST OF PROJECTS

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Streets, Sidewalks, Bridges (S)

OVERVIEW

Transportation-related issues are a high priority for the City of Mason. The City of Mason contains both public and private roadways. Public roads are owned and operated by the Michigan Department of Transportation (MDOT), the Ingham County Road Commission, and the City of Mason. Private roads are owned and operated by private developments and homeowner groups. The City currently maintains 12.25 miles of major streets, 19.78 miles of local streets, 2.21 miles of cemetery drives, and 2.5 miles of non-motorized trail.

In order to define priorities for the local street and major road rehabilitation programs, the City has a formal asset management program that categorizes roads based on their Pavement Surface Evaluation and Rating (PASER) first. Table 1 illustrates PASER ratings for asphalt pavements.

Table 1. PASER Rating Overview

Rating	Visible Distress	General Treatment and Conditions
10 Good	None	New construction.
9 Good	None	Recent overlay.
8 Good	No longitudinal cracks except reflection of paving joints. Occasional transverse cracks, widely spaced (40' or greater). All cracks sealed or tight (open less than 1/4").	Recent sealcoat or new cold mix. Little or no maintenance required.
7 Fair	Very slight or no raveling, surface shows some traffic wear. Longitudinal cracks (open 1/4") due to reflection or paving joints. Transverse cracks (open 1/4") spaced 10' or more apart, little or slight crack raveling. No patching or very few patches in excellent condition.	First signs of aging. Maintain with routine crack filling.
6 Fair	Slight raveling (loss of fines) and traffic wear. Longitudinal cracks (open 1/4" – 1/2"), some spaced less than 10'. First sign of block cracking. Slight to moderate flushing or polishing. Occasional patching in good condition.	Shows signs of aging. Sound structural condition. Could extend life with sealcoat.
5 Fair	Moderate to severe raveling (loss of fine and coarse aggregate). Longitudinal and transverse cracks (open 1/2") show first signs of slight raveling and secondary cracks. First signs of longitudinal cracks near pavement edge. Block cracking up to 50% of surface. Extensive to severe flushing or polishing. Some patching or edge wedging in good condition.	Surface aging. Sound structural condition. Needs sealcoat or thin non-structural overlay (less than 2").
4 Poor	Severe surface raveling. Multiple longitudinal and transverse cracking with slight raveling. Longitudinal cracking in wheel path. Block cracking (over 50% of surface). Patching in fair condition. Slight rutting or distortions (1/2" deep or less).	Significant aging and first signs of need for strengthening. Would benefit from a structural overlay (2" or more).
3 Poor	Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion. Severe block cracking. Some alligator cracking (less than 25% of surface). Patches in fair to poor condition. Moderate rutting or distortion (1" or 2" deep). Occasional potholes.	Needs patching and repair prior to major overlay. Milling and removal of deterioration extends the life of overlay.
2 Poor	Alligator cracking (over 25% of surface). Severe distortions (over 2" deep). Extensive patching in poor condition. Potholes.	Severe deterioration. Needs reconstruction with extensive base repair. Pulverization of old pavement is effective
1 Poor	Severe distress with extensive loss of surface integrity.	Failed. Needs total reconstruction.

The lowest-rated roads in each of these categories would generally be addressed first. However, the last PASER evaluation was completed in 2017 so staff takes into account changes in conditions. PASER ratings will be scheduled and completed on a two-year cycle beginning in 2019.

Following the PASER evaluation, the City looks at underground utilities and considers whether the condition of those utilities would move a street project up in priority. This is followed by the impact to residents and how many property owners would be impacted positively due to the improvement.

Finally, the City considers the budget and how many streets can be completed within a year based on the resources available. Mason voters have approved that a minimum value of 4 mills must be used for road projects every year. Due to the construction season crossing fiscal years and unforeseen factors impacting the ability for a project to be completed, the City maintains a rolling summary to assure the City is meeting this requirement (see Table A). This allocation can be funded by numerous resources to meet this requirement.

The City's policy is to evaluate sidewalks on any road that is being improved and replace them as needed.

Once prioritized the road work will typically be completed in one of the three following ways:

- **Mill and Fill:** Consists of grinding the surface layer with a milling machine, hauling and disposing of the milled bituminous pavement. A new lift of hot mix asphalt (HMA) is laid over the milled surface. This treatment methodology can facilitate up to 10 years of additional service life without full reconstruction. This method of surface rehabilitation provides the greatest value in areas where the base layers of pavement do not have extensive cracking and utility repairs or replacements are not warranted. Sidewalks are evaluated and replaced as necessary.
- **Pulverize, Shape and Repave:** Consists of crushing the full depth of the existing pavement and intermixing the pulverized HMA with the aggregate base. This pulverized material is then graded and compacted to the original cross slope of the street. Any excess material is hauled off site. New HMA is placed upon this pulverized section in as many as three lifts. This method provides the equivalent of a new street cross-section without the added expenses of removing and replacing all of the concrete curb and gutter. In addition, the pulverized material can be temporarily stockpiled on the adjacent lane to facilitate any utility repairs or replacements. Sidewalks are evaluated and replaced as necessary.
- **Reconstruction:** Consists of the complete removal and replacement of all components of the street, including but not limited to concrete curb and gutter, existing pavement and gravel section. This method of construction is limited to areas too badly deteriorated to be improved using the Mill and Fill or Pulverize, Shape and Repave methods. After removal, the street is completely rebuilt by re-grading the base, placing new aggregate, pouring new concrete curb and gutters, and repaving the road. Often new drainage structures and storm sewer are installed as a reconstruction project. Typically, this method is reserved for circumstances such as a road widening or narrowing or the complete replacement or reconstruction of deep utilities such as a sanitary sewer interceptor. This is also the costliest, most time-consuming and disruptive street construction.

Table 2. Road Appropriation Summary: 1997-2018

Fiscal Year	Required Appropriation	Actual Spent	Over/(Under)
96/97	507,106.00	803,717.10	296,611.10
97/98	503,411.00	1,134,462.84	631,051.84
98/99	521,918.00	862,454.56	340,536.56
99/00	558,522.00	477,509.15	(81,012.85)
00/01	629,313.00	858,359.18	229,046.18
01/02	666,271.00	1,658,096.87	991,825.87
02/03	764,684.00	454,414.70	(310,269.30)
03/04	792,587.00	888,647.89	96,060.89
04/05	828,705.00	976,705.77	148,000.77
05/06*	739,970.00	1,045,585.41	305,615.41
06/07	824,935.00	648,943.35	(175,991.65)
07/08	871,830.00	1,042,490.52	170,660.52
08/09	916,258.08	2,876,791.12	1,960,533.04
09/10	967,322.26	539,350.61	(427,971.65)
10/11	896,553.96	823,558.74	(72,995.22)
11/12**	871,232.00	3,573.02	(867,658.98)
12/13	860,205.00	68,164.78	(792,040.22)
13/14	869,376.00	1,477,869.35	608,493.35
14/15	853,096.00	480,704.23	(372,391.77)
15/16	864,892.00	1,509,285.83	644,393.83
16/17	853,788.00	369,815.29	(483,972.71)
17/18***	872,460.00	266,211.67	(606,248.33)
Totals	17,034,435.30	19,266,711.98	2,232,276.88

* Note: 5 Mill to 4 Mill Requirement

** Note: Street Construction Waived

*** Note: Partial Year

Proposed Project Year: 2018-19

Project Number: 2017-S6 South Street - Northbrook Street to West City Limits

Description: The road from Northbrook to the City limit will be pulverized, shaped and repaved thereby restoring the road to excellent condition with an anticipated 20-year life span.

Justification: The road was reconstructed nearly 20 years ago in 1998. The road has a current PASER rating of 4 with a portion of the road rated as 9; however, the higher rating of 9 is due to a recent cosmetic overlay which does not increase the overall longevity of the road. The overlay was intended to patch the road temporarily until this year for reconstruction. Sidewalks will be evaluated and replaced as necessary.

Project Number: 2017-S7 Avon Street - All

Description: Pulverize, shape and repave. The road was last worked on in 1980 and had a total reconstruction in that year. The top course is starting to break down and base is showing cracks through to base course. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 4. Normal maintenance is no longer adequate. Four homes will be directly impacted by this improvement.

Project Number: 2017-S8 Northbrook Street – South Street to Carom Circle

Description: Full reconstruction and narrowing of road. The road was last worked on in 1996 and was milled and refilled. The road is in poor condition and is in need of spot storm sewer repairs and narrowing. Sidewalks will be evaluated and replaced as necessary. Driveways will be extended to accommodate the road narrowing.

Justification: This is a priority brought forward by Council primarily as a traffic calming action to slow traffic going into this subdivision. The road had a PASER rating of 4. Normal maintenance is no longer adequate. Eighteen homes will be directly impacted by this improvement.

Project Number: 2017-S9 S. Jefferson Street – Oak Street to Kipp Road

Description: Mill and fill. The road was last worked on in 1997 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 5. Normal maintenance is no longer adequate. Thirty-seven homes will be directly impacted by this improvement. MDOT has provided 80% of the funding and the City will be responsible for the 20% local match.

Project Number: 2017-S10 Sidewalk Program: Summerwood

Description: The sidewalk program will evaluate the sidewalks in a designated area of the City. This may be included in our Special Assessments as appropriate. The City will let a bidding package specifically for sidewalk work. See Figure 1.

Justification: Summerwood was selected as these public sidewalks are currently not in compliance with the Americans with Disabilities Act (ADA).

Project Number: 2018-S1 Temple Street Safety Grant From MDOT

Description: The City of Mason applied for and received a Safety Grant from MDOT to improve the safety crossing of Temple Street in front of the Middle School.

Justification: Eighty percent of the construction cost will be provided by MDOT. A 20% local match is required to accept the grant. Improvements will consist of a mid-block raised pedestrian crossing with striping and flashing beacon advance warning signage. The improvements will be made in two locations at the intersections of Temple and Maple Street and at Temple and Cindy Street.

Project Number: 2018-S32 Columbia Street – Cedar Street to US 127

Description: Pulverize, shape and repave Columbia Street from Cedar Street to the US 127 overpass.

Justification: Records indicate the last time this portion of Columbia was reconstructed was approximately 42 years ago. The pavement has outlived its anticipated useful life while the condition of the road base has deteriorated and been exacerbated by the recent wet weather and fluctuating temperatures. Originally estimated for 2026, this project has been moved to FY 18-19 from FY 21-22 due to the recent deterioration.

Proposed Project Year: 2019-20

Project Number: 2017-S5 Walnut Street - Columbia Street to North End

Description: Pulverize, shape and repave. The road was last worked on in 1989 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 3. Normal maintenance is no longer adequate. Eight homes will be directly impacted by this improvement.

Project Number: 2017-S10 Sidewalk Program: Northwest Quadrant of the City

Description: This program will evaluate the sidewalks in a designated area of the City. This may be included in our Special Assessments as appropriate. The City will let a bidding package specifically for sidewalk work. See Figure 1.

Justification: The current evaluation of sidewalks only occurs when a street is being worked on, which can result in 20 years before that sidewalk is evaluated again. Without a systematic review of the sidewalks, we are currently only allocating resources on a spot basis when the problem becomes a safety hazard. This program will allow us to address affected areas proactively and receive the cost savings of bidding it with a concrete-specific project.

Project Number: 2017-S11 Kerns Road – Cedar Street to Howell Road

Description: Full reconstruction of the road with the addition of sidewalks.

Justification: The road has a PASER rating of 1. Normal maintenance is no longer adequate. No reconstruction records could be found for this street. It does not have curb and gutter and the base of the road is failing due to the limited drainage system in place to serve the road. Eight businesses will be directly impacted by this improvement. This project has been delayed to 2019-2020 in order to coordinate work with the Hayhoe Trail Extension to Kerns and Howell roads. (2018-P3)

Project Number: 2017-S12 W. Elm Street - Henderson Street to Jefferson Street

Description: Pulverize, shape and repave. The road was last worked on in 1998 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 4. Normal maintenance is no longer adequate. Seven homes will be directly impacted by this improvement.

Project Number: 2017-S13 Park Street – Elm Street to Oak Street

Description: Pulverize, shape and repave. 1998 had total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 4. Normal maintenance is no longer adequate. The project was moved back due to cost estimates increasing for Jefferson project (2017-S9).

Proposed Project Year: 2020-21

Project Number: 2017-S10 Sidewalk Program: Northeast Quadrant of the City

Description: This program will evaluate the sidewalks in a designated area of the City. This may be included in our Special Assessments as appropriate. The City will let a bidding package specifically for sidewalk work. See Figure 1.

Justification: The current evaluation of sidewalks only occurs when a street is being worked on, which can result in 20 years before that sidewalk is evaluated again. Without a systematic review of the sidewalks, we are currently only allocating resources on a spot basis when the problem becomes a safety hazard. This program will allow us to address affected areas proactively and receive the cost savings of

bidding it with a concrete-specific project.

Project Number: 2017-S14 East Cherry Street – Rogers Street to End

Description: Mill and fill. The road was last worked on in 1997 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 5. Normal maintenance is no longer adequate. Thirty-two homes will be directly impacted by this improvement.

Project Number: 2017-S15 S. Barnes Street – Ash Street to Kipp Road

Description: Mill and fill. The road was last worked on in 1988 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 5. Normal maintenance is no longer adequate. Fifty-six homes will be directly impacted by this improvement.

Project Number: 2017-S16 Maple Street Bridge Repair

Description: Bridge repair due to safety concerns. These repairs are only for the top of the bridge and further repairs will need to be done in the future.

Justification: Bridge was evaluated and the report shows that the concrete head walls have severe spalling and are in need of repair and hand rails on the bridge are not safe.

Proposed Project Year: 2021-22

Project Number: 2017-S10 Sidewalk Program: Southeast Quadrant of the City

Description: This program will evaluate the sidewalks in a designated area of the City. This may be included in our Special Assessments as appropriate. The City will let a bidding package specifically for sidewalk work. See Figure 1.

Justification: The current evaluation of sidewalks only occurs when a street is being worked on, which can result in 20 years before that sidewalk is evaluated again. Without a systematic review of the sidewalks, we are currently only allocating resources on a spot basis when the problem becomes a safety hazard. This program will allow us to address affected areas proactively and receive the cost savings of bidding it with a concrete-specific project.

Project Number: 2017-S17 Center Street – Walnut Street to N. Bush Street

Description: Mill and fill. Staff does not have any records indicating when the road was constructed. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 5. Normal maintenance is no longer adequate. Eighteen homes will be directly impacted by this improvement.

Project Number: 2017-S18 Brookdale Street - Judy Court to Willow Street

Description: Pulverize, shape and repave. The road was last worked on in 1997 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 5. Normal maintenance is no longer adequate. Sixteen homes will be directly impacted by this improvement.

Project Number: 2017-S19 Cherry Street - McRoberts Street to Henderson Street

Description: Pulverize, shape and repave. The road was last worked on in 1998 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 5. Normal maintenance is no longer adequate. Twenty-six homes will be directly impacted by this improvement.

Project Number: 2017-S20 Columbia Street – Orchard Lane to Walnut Street

Description: Pulverize, shape and repave. The road was last worked on in 2009 and was a mill and fill. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 4. Normal maintenance is no longer adequate. Thirteen homes will be directly impacted by this improvement.

Project Number: 2017-S21 Eaton Drive - All

Description: Pulverize, shape and repave. The road was last worked on in 1979 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 4. Normal maintenance is no longer adequate. Twenty-four homes will be directly impacted by this improvement.

Project Number: 2017-S22 W. Elm Street – McRoberts Street to Henderson Street

Description: Pulverize, shape and repave. The road was last worked on in 1998 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 4. Normal maintenance is no longer adequate. Twenty-five homes will be directly impacted by this improvement.

Proposed Project Year: 2022-23

Project Number: 2017-S10 Sidewalk Program: Southwest Quadrant of the City

Description: This program will evaluate the sidewalks in a designated area of the City. This may be included in our Special Assessments as appropriate. The City will let a bidding package specifically for sidewalk work. See Figure 1.

Justification: The current evaluation of sidewalks only occurs when a street is being worked on, which can result in 20 years before that sidewalk is evaluated again. Without a systematic review of the sidewalks, we are currently only allocating resources on a spot basis when the problem becomes a safety hazard. This program will allow us to address affected areas proactively and receive the cost savings of bidding it with a concrete specific project.

Project Number: 2017-S23 Rayner Street – Randolph Street to Columbia Street

Description: Pulverize, shape and repave. The road was last worked on in 1996 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 3. Normal maintenance is no longer adequate. Eleven homes will be directly impacted by this improvement.

Project Number: 2017-S24 Eugenia Drive – Northbrook Street to End

Description: Pulverize, shape and repave. The road was last worked on in 1996 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 5. Normal maintenance is no longer adequate. Fifty homes will be directly impacted by this improvement.

Project Number: 2017-S25 Hall Blvd - Ash Street to South Street

Description: Pulverize, shape and repave. The road was last worked on in 1980 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 4. Normal maintenance is no longer adequate. Twenty-seven homes will be directly impacted by this improvement.

Project Number: 2017-S26 Columbia Street - Park Street to Jefferson Street to South Street

Description: Pulverize, shape and repave. The road was last worked on in 1999 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 5. Normal maintenance is no longer adequate. Four homes will be directly impacted by this improvement.

Proposed Project Year: 2023-24

Project Number: 2017-S10 Sidewalk Program: North West Quadrant of the City

Description: This program will evaluate the sidewalks in a designated area of the City. This may be included in our Special Assessments as appropriate. The City will let a bidding package specifically for sidewalk work. See Figure 1.

Justification: The current evaluation of sidewalks only occurs when a street is being worked on, which can result in 20 years before that sidewalk is evaluated again. Without a systematic review of the sidewalks, we are currently only allocating resources on a spot basis when the problem becomes a safety hazard. This program will allow us to address affected areas proactively and receive the cost savings of bidding it with a concrete specific project.

Project Number: 2018-S27 Peachtree Place - Columbia Street to South Street

Description: Pulverize, shape and repave. The road was last worked on in 1997 and had a mill and repave. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 4. Normal maintenance is no longer adequate. Sixty-three homes will be directly impacted by this improvement.

Project Number: 2018-S29 McRoberts Street - Columbia Street to Maple Street

Description: Pulverize, shape and repave. The road was last worked on in 1998 and had mill and fill work done. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 4. Normal maintenance is no longer adequate. Nine homes will be directly impacted by this improvement.

Project Number: 2018-S30 Steele Street – Ash Street to Elm Street

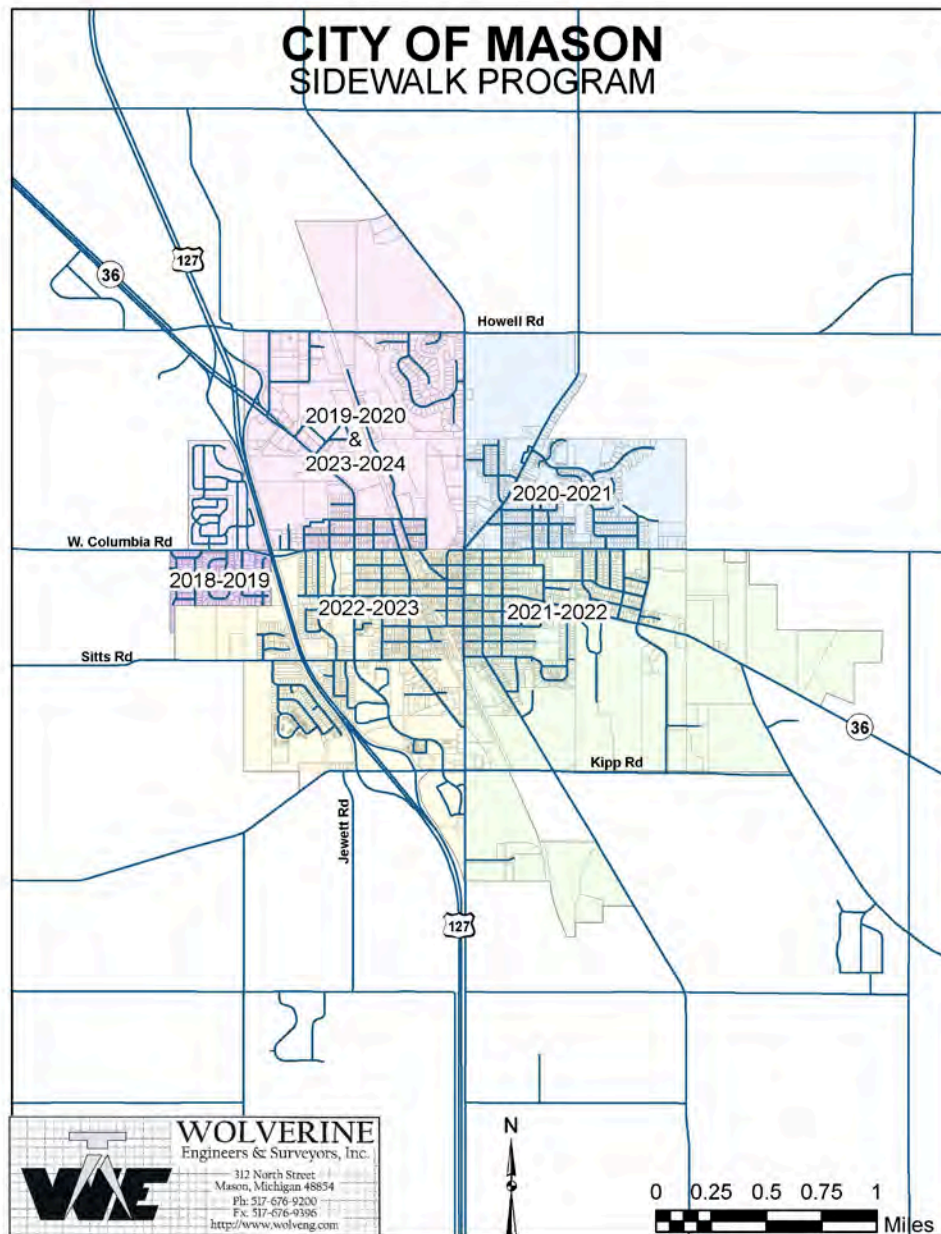
Description: Pulverize, shape and repave. The road was last worked on in 1996 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 4. Normal maintenance is no longer adequate. Seven homes will be directly impacted by this improvement.

Description: Pulverize, shape and repave. The road was last worked on in 1998 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

Justification: The road had a PASER rating of 5. Normal maintenance is no longer adequate. Seventeen homes will be directly impacted by this improvement.

Figure 1 - Sidewalk Program



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Utilities: Sanitary Sewer, Storm Water, and Water Distribution (U)

OVERVIEW

Sanitary Sewer: The sewage collection and treatment system consist of a 1.5 Million Gallons per Day (MGD) activated sludge treatment plant, 32 miles of sewer line including interceptors, and four lift stations. The City, like most other communities in Michigan, operates under a National Pollutant Discharge Elimination System permit (NPDES) administered by the MDEQ. This permit establishes the allowable effluent levels to be discharged to the receiving waters, namely Sycamore Creek.

A study was completed by Wolverine Engineers to determine the best method of providing sewer service to areas on the undeveloped east side of Mason. The feasibility study has identified six districts, known as the Rayner Creek Utility Districts, which are served via a common lift station and force main. During 2005, as part of the Temple Street extension from M-36 to Kipp Road, the sewer and pump station were constructed to serve District 3 as this area develops.

Storm Water System: The State of Michigan Department of Environmental Quality regulates Municipal Separate Storm Sewer Systems (MS4). The goal of the MS4 program is to reduce the discharge of pollutants to surface waters of the state. The current gravity system consists of concrete drainage pipes ranging from 6 inches to 42 inches in diameter, along with corrugated metal pipes up to 72 inches in diameter. These pipes are connected to the street network through a series of catch basins. Eventual outflow is to one of the three creeks flowing through town - Sycamore, Willow or Rayner - since the system is separated from the sanitary sewer system.

Maintenance of the storm water system is divided between the City and the Ingham County Drain Commission. The county has designated drains that flow through the City such as the Willow and Rayner Creek Drains.

Water: The City's water system consists of seven wells, two 500,000-gallon elevated storage towers, 600 fire hydrants and one one-million-gallon ground storage tank and approximately 45 miles of water main in various sizes (4" to 16"). The City has a centralized treatment facility; the water is pumped through raw water mains to the treatment plant to remove Radium 226 and 228 as well as iron.

The development of the proposed sanitary sewer and water projects is funded through the Water and Sewer Fund and is based upon system deficiencies and needed improvement to the treatment plant.

Utilities in streets are planned for the first three years of the CIP. The plan is to extend the Utility estimates out to six years next year.

Proposed Project Year: 2018-19

Project Number: 2018-U1 Utilities for Properties on Kipp Road (Klavon's, S & Sue, Vacant Lot)

Description: The extension of water, sanitary sewer and storm sewer to serve the redevelopment of property located at the northeast quadrant of US-127 and Kipp Road.

Justification: The utility extension is necessary to serve the redevelopment of property located within the City that is not currently served by public utilities. Funding for the utility extension is through a tax increment financing plan supported by the County Brownfield Authority.

Project Number: 2017-U3.2 Design and Construction – Waste Water Treatment Plant Upgrades

Description: This is the design and construction of the upgrades to the waste water plant that have been recommended from the study that was done in the 2017-2018 budget. The study looked at the plant and evaluated the processes and condition of the equipment and made recommendations to make improvements to the plant that will put the City of Mason waste water treatment plant back in good condition for another 20 years. This project is to start in 2018-2019 budget and is estimated to be completed in the 2019-2020 budget.

Justification: The study of the waste water Plant will show equipment and processes that need improvement as they were getting to the end of their life cycle. The waste water plant is struggling to meet permit requirements with high flows in the spring and in the summer the equipment cannot produce enough dissolved oxygen to meet the needs of the process. These upgrades will address the problems at hand and design for the next 20 year's growth.

Project Number: 2017-U3.3 Design of the New Department of Public Works Facility

Description: Contract an engineering firm to plan and design a new DPW facility.

Justification: The existing facility is estimated to be nearly 90 years old, built in the 1930s and renovated in the 1970s. A new DPW facility will need to be constructed whether or not the waste water treatment plant expansion is found to be moved to the DPW site. If the DPW site is not needed for the expansion the site is in poor shape and will need to be reconstructed. This design work will be to put a plan in place for future needs and expansion.

Project Number: 2017-U6 Abandon Monitoring Wells by Airport

Description: Abandon two monitoring wells by the Airport that were put in place in consideration of adding a well near the Airport.

Justification: This project was pushed back a year because of other unexpected expenses and a lack of urgency by the airport since they are no longer selling the property. Also, the Airport has determined it is

not selling the property this year which allows the City more time to get this project completed.

Project Number: 2017-U9 Northbrook Street – South Street to Carom Circle

Description: Relocate storm sewer structures to allow for narrowing of the street.

Justification: Narrowing of the street will require the relocation of some storm structures and leads to allow for a narrower road. This project is connected to project number 2017-S8

Project Number: 2017-U10 S. Jefferson Street – Oak Street to Kipp Road

Description: Replace valves on the current water main. Replace storm sewer that is in need of repair.

Justification: The valves on this water main do not work to stop water when working on repairs on other streets. The storm and sanitary sewers were evaluated this year and the sanitary sewer was found to be okay. The storm sewer will need to be replaced as it is in poor shape on the North end of the project. This project is connected to project number 2017-S9

Project Number: 2017-U12 300,000-Gallon Storage Tank Top Sealing

Description: This 300,000-gallon sludge storage tank is the older of the two storage tanks at the WWTP. This tank is used to hold digested sludge until it can be applied to the land as bio-solids.

Justification: The 300,000-gallon tank is receiving inflow from snow melt and rainwater through the cracks in the top of the tank. This inflow reduces the sludge storage capacity of the tank. This storage capacity, along with the other storage tank, is needed to store the digested sludge that accumulates throughout the year. These storage tanks will not be affected by the construction upgrades of the waste water treatment plant.

Project Number: 2017-U13 Well No. 7 Rebuild

Description: Kipp Road Well No. 7 Rebuild

Justification: History of this well indicates the need to rebuild this well every five-to-six years and this well was last serviced in 2012. Well maintenance and regular replacement are critical steps to maintaining the water supply for our residents.

Project Number: 2017-U15 Replace Two Fire Hydrants Behind Mason Plaza

Description: Replace two fire hydrants behind Mason Plaza

Justification: These hydrants break easily and parts are difficult to source. It has also been determined by

Fire Chief Minshall that the hydrants are too close to the building for safety during firefighting operations.

Project Number: 2017-U16 Cathodic Protection for Ground Storage Tank

Description: Cathodic protection for ground storage tank. Cathodic protection is when measures are taken to prevent or minimize electrolytic corrosion of metallic equipment and structures.

Justification: The Finish Water Ground Storage Tank at the Water Treatment Plant was constructed in 2008. This tank is constructed of painted steel and is subject to stray voltage cathodic corrosion. A Cathodic Corrosion Inhibiting System was installed on this tank when new and is currently not operable. The manufacturer of this system is no longer in business and used a proprietor specific system. Other vendors have been engaged and do not have the ability to fix the current system. In FY 2015-16 a cathodic study was performed and the recommendation was to install an industry-standard system.

Project Number: 2017-U17 High Service Pump No. 1 Rebuild

Description: Water Treatment Plant High Service Pump No. 1 Rebuild

Justification: The Water Treatment Plant has three high service pumps; two pumps were rebuilt in FY 2016-17. Chlorine has attacked the zinc impregnated in the brass impellers, causing “Zincification.” The zinc replaced lead in the manufacture of the impellers mandated by the EPA Lead in Drinking Water Elimination Program in the early 2000s. This issue was unforeseen when these pumps were originally specified for the Water Treatment Plant completed in 2008. The rapid drop in performance necessitated the emergency rebuild of pumps #2 and #3. Stainless steel impellers were specified in the rebuild of pumps #2 and #3. Pump #1 is demonstrating the same indications of “Zincification.”

Project Number: 2017-U18 Replace Chlorine Analyzer for the High Service Pump Room

Description: Replacement of chlorine analyzer for finish water in 2018-2019

Justification: The Water Treatment Plant was originally designed with two Chlorine residual level analyzers. These analyzers are expensive to operate and required frequent maintenance. The post filter analyzer has been updated with another brand/process machine with more capabilities and less expense and maintenance. It is beneficial to replace this analyzer to save time in frequent maintenance and expense of monthly reagent replacement. Standardization of brand/process machines will save expense on service supplies and spare parts.

Project Number: 2018-U35 BS&A Software Work Order Application

Description: BS&A work order application is designed for centralized tracking of both non-integrated as well as integrated (i.e., utility billing, community development and requests for service) work orders.

Justification: This program will help the Public Works Department track and manage resources to help better service our customers. Our goal is to have our costumers be able to be heard and have a quick

response from our staff with the ability to track the costs of work being done for asset management.

Project Number: 2018-U36 Sewer Push Camera Replacement

Description: Push camera used to investigate inflow problems in small leads

Justification: Our current one has broken this year and needs to be replaced. This is a vital tool for doing investigations for sewer inflow investigation.

Project Number: 2018-U37 Log Jam Removal in the Sycamore Creek

Description: The Sycamore Creek currently has numerous log jams in the creek downstream of the Waste Water plant that need to be removed.

Justification: During high flow events in the creek, these log jams artificially raise the creek level interrupting the out flow from the Waste Water Plant into the creek. This causes major operational issues in the treatment process of the waste water plant.

Proposed Project Year: 2019-20

Project Number: 2017-U11 Turbine Aeration Blower at POTW (Publicly Owned Treatment Work)

Description: Variable speed turbine blower used to supply oxygen to the activated sludge process. This project was pushed back to year 2019-2020 because the study has not been completed yet.

Justification: The Hoffman Blowers currently in use supply oxygen to the activated sludge process. These blowers have become worn and less productive. During hot weather events these blowers do not supply enough oxygen to aeration tanks to maintain the desired dissolved oxygen levels needed to provide adequate ammonia removal. Ammonia removal is a critical process in treating waste water and must be achieved to maintain compliance with the NPDES permit. It has been estimated that the electrical cost savings on this variable speed turbine blower could show a payback to the City within five years.

Project Number: 2017-U14 Department of Public Works Facility Design and Construction

Description: A new facility will need to be built to allow for the Waste Water Plant to be expanded and because the existing facility is reaching the end of its useful life. This new facility will house all public works activities and equipment for the future needs of the City of Mason.

Justification: When the City upgrades the Waste Water Treatment Plant the DPW facilities may need to be relocated. This anticipated relocation provides the opportunity to consolidate all operations to a single point including streets, water, sewer, parks and cemeteries. The conceptual DPW facility will put all facets of the City Physical Plant operations under one roof. This will aid in streamlining the operations, supervision and coordination of the DPW.

The greatest amount of space will likely be dedicated to housing all vehicles and equipment indoors. This will reduce stresses particularly in the winter months and could result in an increase in vehicle longevity and/or salvage values. In addition, greater controls of consumable items, such as vehicle parts and water fittings, will be gained through the elimination of multiple storage areas. As was the case with the recently constructed Water Treatment Plant, an understanding of future needs and expansion will be given to the overall dimensions of the proposed DPW building. The building will also include storage currently housed at Fire Station 2, so that property can be sold and provide for additional document storage needed for the City Hall facility.

Project Number: 2017-U19 Kerns Road – Cedar Street to Howell Road

Description: New storm sewer and extend sanitary sewer to Cedar Street.

Justification: There are currently no storm sewer pipes on this street and the sanitary sewer only goes 3/4 of the way down the street. While we are putting in curb and gutter, it is the ideal time to address these issues. This project is connected to project number 2017-S11

Project Number: 2017-U20 W. Elm Street - Henderson Street to Jefferson Street

Description: Replace 4" water main under the bridge to Park Street then up to Oak Street with new 8" main and valves.

Justification: The water main that went under this bridge was washed out in the 1970s and there is very poor fire flow. This will also improve water quality as the current main is 4". This project is connected to project number 2017-S12.

Project Number: 2017-U21 Park Street – Elm Street to Oak Street

Description: New 8" water main from the bottom of the hill at Elm and Oak. This is part of the W. Elm to Henderson Project.

Justification: This is part of the water main loop from W. Elm to Oak and will eliminate a dead end. This will increase fire flow to the west side of town. This project is connected to project number 2017-S13.

Project Number: 2017-U22 Stop Gates for Aeration Discharge Piping

Description: Stop gates located at the entrance and at the outfall of the "bottle neck" piping that was installed in 2016 between the aeration tanks and the secondary clarifiers.

Justification: These gates would prevent this pipe from collecting unwanted flow during normal operations conditions and will reduce the amount of settleable solids forming in the pipe. These solids could build up in the pipe creating a restriction or a stoppage of flow. These gates would be opened when

needed during high flow conditions.

Project Number: 2017-U23 Well No. 6 Rebuild and New Variable Frequency Drive (VFD)

Description: Franklin Farm Well No. 6 rebuild and new VFD

Justification: History of this well indicates the need to rebuild this well every five-to-six years and this well was last serviced in 2015. Well maintenance and replacement are critical to maintaining the water supply for our residents. Original VFD installed in 2008 on all other wells in 2008 have failed. Life cycle for VFDs of this size are 10 years. We have changed the VFD brand for better service.

Project Number: 2017-U24 Study of Sewer Flow on Mason Street

Description: Study of sewer flow on Mason Street.

Justification: This sewer is running over 80% full most of the time and the City needs to plan for the future of this line. The City will have to either upsize this line or put a second line in to relieve some flow off this line. This line takes the flow from Cedar Street and could be a limiting factor for future growth on Cedar Street.

Project Number: 2017-U25 Gutters for Water Treatment Plant

Description: Rain gutters for entire Water Treatment Plant.

Justification: The Water Treatment Plant was constructed in 2008. In an effort to control construction costs, the rain gutters on the plant were reduced to installation over the doors. Water management for the administration portion of the Water Treatment Plant is essential to keep the foundation and sidewalk of the building stable. The process end of the Water Treatment Plant is in need of rainwater management to keep the asphalt around the plant from excessive wear and tear.

Project Number: 2017-U26 New Well at Franklin Farms

Description: New well at Franklin Farms site. The proposal is to drill a small-bore deep well at the Franklin site and case off the bore past the zone of collapse. A submersible pump would be installed to pull water from the lower formation. If approved, the original vertical turbine pump of Well No. 6 would be reengineered and a more economical submersible pump would be installed during the well rebuild scheduled for this year. This would be similar to the setup of Wells No. 9 and No. 10. This will save considerable funds as opposed to building a new well site. The configuration will likely yield more water from this site than current production.

Justification: The well bore for the Franklin well is compromised. There is screen in the bottom of this well to stabilize the bore from collapse. The bore is also not aligned with the screen so total well cleaning is not possible. The production has fallen off from the original level to approximately 30%. An additional

well at the Franklin Well No. 6 site is being requested.

The likelihood of the City of Mason utilizing Well No. 3 at the north tower site is unlikely. It will be too expensive to install a water main to pump to the Water Plant or install treatment on site. To keep this well on standby status is also expensive. Monthly and quarterly testing is a draw on resources that will bear no fruit.

Proposed Project Year: 2020-21

Project Number: 2018-U32 South Water Tower Interior Maintenance and Repair

Description: Clean out inside the bowl and sand blast and repaint the wet interior of the south water tower.

Justification: The South water tower was inspected in 2017 and was found to have some paint flaking and bare metal showing on the interior of the bowl where the water is stored. It was recommended to have the interior wet section of the bowl sand blasted and repainted to extend the life of the tower. There was also ice damage to the ladder inside the bowl that will need to be fixed.

Project Number: 2017-U8 Replace Programmable Logic Controllers (PLC) on 3 Wells

Description: Supervisory Control and Data Acquisition (SCADA) Control Work Upgrades on PLC, power supply and any control panel issues from the original installation. This project is to do three wells at a time to help reduce costs on this project.

Justification: Control Wave Programmable Logic Computer boards are the originals installed in 2002. These PLCs are not available or repairable. The low voltage power supplies for the control panels are experiencing stability issues. There are control issues at all three sites. The upgrades to sites will allow staff to be more effective and efficient with system operations. This is the first phase of the three-year replacement cycle for the three controllers plan.

Project Number: 2017-U27 Cherry Street – Rogers Street to End

Description: Sewer main replacement and manhole replacement.

Justification: The sanitary sewer was constructed in 1940 and needs to be replaced. It has clay tile and inflow problems. The sanitary manholes are brick and in poor shape, requiring replacement.

Project Number: 2017-U28 S. Barnes Street – Ash Street to Kipp Road

Description: New water main and valves to replace existing 4" and dual mains.

Justification: This is an old water main from the early 1900s from Ash Street to Bond. Upsizing to 8" water

mains and eliminating places where dual mains exist will help with firefighting ability and water quality. It will also allow staff to isolate for water main breaks.

Project Number: 2017-U29 Generators for ISD* and Curtis Street Lift Stations

Description: Install standby generators for ISD and Curtis Street lift stations.

Justification: Staff gets called out to these locations multiple times a year for power-related problems. This requires them to have a bypass pump or set up portable generators for as long as three days at a time for power outages.

**ISD = Ingham Intermediate School District. When this station was originally installed, ISD was the only user. While the users have changed, the name of the lift station has remained.*

Project Number: 2018-U33 Well No. 4 Rebuild

Description: Hayes Park Well No. 4 Rebuild

Justification: History of this well indicates the need to rebuild this well every 5-6 years and this well was last serviced in 2015. Pump efficiency testing will be another tool to use for indicating the need to rebuild this well at the time. Well maintenance and replacement are critical to maintaining the water supply for our residents.

Proposed Project Year: 2021-22

Project Number: 2018-U34 Well No. 5 Rebuild

Description: Ash Street Well No. 5 Rebuild

Justification: History of this well indicates the need to rebuild this well every five-to-six years and this well was last serviced in 2016. Well maintenance and replacement are critical to maintaining the water supply for our residents.

Proposed Project Year: 2022-23

Project Number: 2018-U37 Well No. 10 Rebuild

Description: Temple Street Well No. 10 Rebuild

Justification: History of this well indicates the need to rebuild this well every five-to-six years and this well was last serviced in 2016. Well maintenance and replacement are critical to maintaining the water supply for our residents.

Proposed Project Year: 2023-24

Project Number: 2017-U8 Replace Programmable Logic Controllers (PLC) on Three (3) Wells

Description: Supervisory Control and Data Acquisition (SCADA) Control Work- Upgrades on PLC, power supply and any control panel issues from the original installation. Wells are improved on a three-year cycle, three wells at a time, which helps to reduce project costs. This is the second phase of the three-year replacement plan for three controllers.

Justification: Control Wave Programmable Logic Computer boards are the originals installed in 2002. These PLCs are not available or repairable. The low voltage power supplies for the control panels are experiencing stability issues. There are control issues at all three sites. The upgrades to sites will allow staff to be more effective and efficient with system operations.

Project Number: 2018-U39 Well No. 9 Rebuild

Description: Temple Street Well No. 9 Rebuild.

Justification: History of this well indicates the need to rebuild this well every five-to-six years and this well was last serviced in 2016. Well maintenance and replacement are critical to maintaining the water supply for our residents.

Project Number: 2018-U40 North Water Tower Exterior/Interior Evaluation and Repaint

Description: This is a place holder and estimate for a repaint for the North water tower.

Justification: During the last inspection of the North water tower it was suggested that the City plan for a tower repaint in 20 years. This is only a recommendation from the inspector; the tower will be inspected every five years and this time line may be extended.

Parks, Cemetery and Forestry (P)

OVERVIEW

The City of Mason operates Mason's only cemetery, Maple Grove Cemetery, located in the central portion of the City within the northern sector. Established in 1844, it comprises approximately 38 acres with additional acreage available for expansion. Sycamore Creek flows along the eastern edge of the property which is important to the development of the Hayhoe Riverwalk Trail throughout the City. Approximately 50 burials are performed on average per year. The older portion of the cemetery has been listed on the National Register of Historic Places.

The City of Mason owns and operates eight municipal parks within the City limits totaling 92.74 acres and includes a wide variety of seasonal recreation activities.

Table 4- City of Mason Inventory of City Parks

Property	Park Type*	Service Area**	Acres	Description/Facilities
Laylin Park	NP	CQ	7.2	Two stocked fishing ponds w/fishing docks, catch/release, picnic shelter, restrooms, picnic tables, grills, playground equipment
Lee Austin Park	NP	N	0.9	Sycamore Creek/Hayhoe Riverwalk Trail, picnic tables, grill, workout equipment
Hayes Park	CP	VS	9.22	Lighted softball field, basketball court, two tennis courts, sledding hill, playground equipment, shelter, restrooms, picnic tables, grills
Bond Park	NP/SU	N	5.3	Lighted softball field, skateboard park, roller hockey rink, drinking fountain, restrooms, Rayner Creek
Griffin Park	NP	N	0.65	Historical markings, landscape plantings, picnic table, gazebo
Bicentennial Park	SU	VS	2.27	Pink school house, serves as one of Mason Historical Society museums
Maple Grove Park	NRA	CQ	5.2	Undeveloped property, Sycamore Creek, used for nature walking
Rayner Park	CP	EC	62	Playground, one large soccer playing field, one small soccer practice field, basketball court, one baseball field, picnic shelter, picnic tables, grills, nature area
Hayhoe Riverwalk Trail	PT	VS	2.5 miles	Nature walk/trail heads

*Park types: NP (Neighborhood Park), CP (Community Park), NRA (Natural Resource Area), SU (Special Land Use), PP (Private Park), PT (Park Trail)

**Service area: N (Neighborhood), CQ (City Quadrant), VS (Village/Surrounding Townships), EC (Entire County)

Proposed Project Year: 2018-2019

Project Number: 2017-P8

Laylin Park Improvements

Description: Rebuild two bridges over open drain. Enhance existing walking path with a new walking path entrance off Columbia St. Upgrade pavilion with rest room improvements, new roof and electrical. Add permanent handicap accessible picnic tables and grills to north side of park. New fishing docks for both ponds. Stock ponds with fish.

Justification: All the above listed improvements were presented to and discussed at a neighborhood forum in December 2017. The attendees voted on improvements offered during the forum.

Project Number: 2018-P-1

Howell Road - Hayhoe Riverwalk Trailhead (Dart Trailhead)

Description: Extension of Hayhoe Riverwalk Trail along the south side of Howell Road from the current terminus north of Riverwalk Subdivision to Kerns Road, including the construction of a trailhead parking area on the City of Mason property.

Justification: The River Walk extension and trailhead provide needed parking and safety improvements for users of the River Walk and begin the link to the Cedar Street corridor.

Project Number: 2018 P-2

Howell Road - Hayhoe Riverwalk Trail Extension

Description: Extension of Hayhoe Riverwalk Trail along the south side of Howell Road from the current terminus north of Riverwalk Subdivision to Kerns Road, including the construction of a trailhead parking area on the City of Mason property. This project is to complete the new construction of the next phase of the Hayhoe Riverwalk Trail that will bring it to the northeastern corner of the City of Mason near Dart Headquarters, in preparation for a connection with the trail from Delhi Township's Sycamore Trail. This project has been identified as a regional priority corridor of the Ingham County Trails and Parks Comprehensive Report. The trail extension and trailhead will be owned by the City of Mason, and the Ingham County Road Commission owns the right of way where the trail will be placed. They have approved their support of the trail location on that right of way. The City of Mason owns the land where the trailhead will be located. This extension will address safety concerns along Howell where no sidewalk exists and eliminate parking on the side of the road.

Justification: The Hayhoe trail is a shared-use trail that passes through Lee Austin Park and Maple Grove Cemetery, close to downtown Mason wandering predominantly by the Creek. One of the challenges with the trail is the lack of a safe entrance from the north. Visitors park on the edge of Howell Road (55 mph) and our police department has indicated that there are major traffic and safety concerns with this practice. This trailhead and extension will solve that issue, while completing a critical piece of the puzzle that will ultimately connect the Hayhoe Riverwalk Trail through Delhi and finally to the City of Lansing. The City has received funding for majority of this project through grants and private donations.

Project Number: 2018-P3**Planning: Parks/Recreation Plan – 5-year update (minor)**

Description: The City of Mason Parks/Recreation Plan outlines the plan for operations, maintenance, capital improvements and programming of the City’s parks and trails. Public engagement is a critical component of the planning process and community input will be obtained to inform decisions about park and trail improvements. A minor update is recommended to maintain grant eligibility with a major update in the next five-year cycle to coincide with the Master Plan update and the 2020 Census.

Justification: The Parks/Recreation plan is required by statute in order to be eligible for grants, in particular, the Michigan Department of Natural Resources (DNR). The plan provides detailed descriptions of our parks spending and ensure that the community members’ vision for and usage of the parks is considered in the decision-making process for improvements. The plan also serves as documentation of our compliance with State and Federal requirements such as the Americans with Disabilities Act.

Project Number: 2018-P5**City Tree Evaluation**

Description: This is an evaluation of all City-owned trees. This will provide City staff with the health condition of each tree size, type, and geographical location. This information could be brought into a GIS map layer of the City.

Justification: Maintaining the tree canopy is important to a city. A tree canopy will moderate storm water runoff to ease pressure on the storm water system during a storm event to lessen flooding. This is also a great process to help City staff plan for tree removals and replacements and assess the condition of our City trees.

Proposed Project Year: 2019-20**Project Number: 2017-P10****Bond Park Improvements**

Description: TBD based upon Recreation Plan recommendations.

Justification: Evaluate usage and input from the neighborhood to determine improvements.

Project Number: 2018 P-3**Kerns Road - Hayhoe Riverwalk Trail Extension**

Description: Extension of Hayhoe Riverwalk Trail along the east side of Kerns Road from Howell to Cedar Street, due to land constraints on the west side. This will connect to the Howell Road Extension CIP 2018-P1 anticipated to be completed in the Summer of 2018. This project would be done in coordination with the complete reconstruction of Kern Road. During the ongoing analysis of the Howell Road extension, it became clear that many pedestrians, especially from Angel House, are currently walking on Kerns Road to Howell to get to the trail. Based on that, the City believes a better solution would be a wider 10' extension of the trail instead of the planned sidewalk.

Justification: No sidewalks currently exist along this road and it is one of the few City roads remaining that does not have pedestrian access. This extension will address safety concerns along Kerns Road where no

sidewalk exists and encourage use of the trail to get to business establishments. The City is currently pursuing grant funding to help offset the costs of this extension.

Proposed Project Year: 2020-21

Project Number: 2017-P11 Hayes Park Improvements

Description: TBD based upon Recreation Plan recommendations

Justification: Evaluate usage and input from the neighborhood to determine improvements.

Proposed Project Year: 2021-22

Project Number: 2017-P14 Griffin Park Improvements

Description: TBD based upon Recreation Plan recommendations.

Justification: Evaluate usage and input from the neighborhood to determine improvements.

Project Number: 2017-P4 Lee Austin Park improvements

Description: TBD based upon Recreation Plan recommendations.

Justification: Evaluate usage and input from the neighborhood to determine improvements.

Proposed Project Year: 2022-23

Project Number: 2017-P13 Rayner Park Pond Dredging

Description: TBD based upon Recreation Plan recommendations.

Justification: Evaluate usage and input from the neighborhood to determine improvements.

Proposed Project Year: 2023-24

Project Number: 2017-P12 Rayner Park Improvements

Description: TBD based upon Recreation Plan recommendations.

Justification: Evaluate usage and input from the neighborhood to determine improvements.

Project Number: 2018-P3**Planning: Parks/Recreation Plan – 5-Year Update (major)**

Description: The City of Mason Parks/Recreation plan outlines the plan for operations, maintenance, capital improvements and programming of the City's parks and trails. Public engagement is a critical component of the planning process and community input will be obtained to inform decisions about park and trail improvements. A major update is recommended to account for changes related to the Master Plan update and the 2020 Census data.

Justification: The Parks/Recreation plan is required by statute in order to be eligible for grants, in particular, the Michigan Department of Natural Resources (DNR). The plan provides detailed descriptions of our parks spending and ensure that the community members' vision for and usage of the parks is considered in the decision-making process for improvements. The plan also serves as documentation of our compliance with State and Federal requirements such as the Americans with Disabilities Act.

Project Number: 2018-P5,6,7,8 Hayhoe Trail Internal Loops – East, North, South, West

Description: TBD based upon Recreation Plan recommendations.

Justification: Dependent upon final plans.

Project Number: 2018-P15**Second Drive - Cemetery**

Description: Put second entrance into the Cemetery on East Street.

Justification: This is a second entrance into the Cemetery that will help with traffic and give our residents a second entrance.

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Motor Vehicle Pool (MVP)

The City of Mason maintains a motor vehicle pool (MVP) consisting of over 59 trucks, cars, and pieces of motorized equipment. Each one has a lifespan determined by a combination of information from the manufacturers, condition based upon maintenance records including number of miles/hours between repairs, and the trade-in value compared to estimated maintenance costs. Below is a summary of the MVP and replacement schedule for each MVP type. The detailed replacement schedule showing the fiscal year of replacement can be found in the CIP Budget on page 57.

Table 3. City of Mason MVP Summary and Replacment Schedule

Department	Type	Units	Lifespan	# of Years Between Replacement	# of Replacements Per Rotation
Police	Patrol Cars	5	5	1	1
Police	Detective Car	1	10	10	1
Fire	Command Truck	2	10	5	1
Fire	Brush Truck	1	5	5	1 received from DPW/WTP ¾ Ton 4x4 Truck
Fire	3/4 Ton 4x4 Front V-plow Pick-up Truck	1	10	5	1 from DPW
DPW	Mowers	5	6	1	1
DPW	5-yard Dump/Plow Truck	4	20	5	1
DPW	Salt Spreaders	2	20	20	2
DPW	3/4 Ton 4x4 Front V-plow Pick-up Truck	2	10	5	1 purchased, old truck goes to Fire Dept. (above)
DPW-WTP	3/4 Ton 4x4 Front V-plow Pick-up Truck	1	10	10	1
DPW-WTP	Mower	1	6	1	
DPW	½ Ton 2x4 Pickup trucks	9	10	1	1
DPW	SUV-Personnel	1	8	8	1
DPW	1 1/4 ton Front Plow Dump Truck	1	15	15	1
DPW	Man lift truck	1	25	25	1
DPW	Street Sweeper	1	25	25	1
DPW	Vactor/Sewer Rodding Truck	1	25	25	1
DPW	Front End Material Loader	1	3	3	1

DPW	Back Hoe	1	25	25	1
DPW	4x4 Universal Terrain Vehicle (UTV) - Tool Cat	1	20	20	1
DPW	6x4 UTV (currently JD Gator, to be replaced with Tool Cat)	1	20	20	1
DPW	20-yard Leaf Loader	2	25	25	2
DPW	Utility Tractor	1	25	25	1
DPW	Utility Tractor with Front Loader and Belly Mower	1	25	25	1
DPW	Utility Tractors with Brush Hog	2	25	25	2
DPW	High Cubic Feet per Minute (CFM) Air Compressor with Jack Hammer	1	25	25	1
DPW	Trailers in various configurations	6	20	20	6
DPW	75 kilowatt (kw) Stand By Portable Generators	2	40	40	2
DPW	Other equipment		20	as needed	as needed
	Total Vehicles/Equipment	59	17		
	plus Other Equipment		Avg. Lifespan		

Building, Property and Equipment (B)

OVERVIEW

Administrative Services and City Hall: The current City Hall was built in 2010 and houses the following Departments: Administration, Assessing, Finance, Police, and Zoning and Development.

The Council Chambers and Community Room is located on the main floor of City Hall. This is a multi-purpose room that can be divided into two meeting rooms by tract walls, facilitating more than one event at a time. It is primarily used for City Council meetings, various other board and commission meetings, election precincts for all elections, as well as the Mason Area Seniors Club. This room is used by a variety of groups and residents for various functions.

Fire Services: The Mason Fire Department operates out of two stations. Station 1 (12,403 square feet) was built in 1998 and is located at 221 West Ash Street adjacent to City Hall. The building houses the administrative offices as well as most of the firefighting equipment. Station 2 is located at 615 Curtis Street and was built in 1976. The 1,800 square-foot building currently houses Ingham County Hazardous Materials equipment, reserve firefighting equipment and a DPW pump. The City plans to relocate the items in Station 2 to the new DPW facility and sell the property to reduce maintenance costs.

Department staffing consists of a full-time Chief, a paid on-call Assistant Chief, Captain, two Lieutenants and 34 Engineer, Firefighter and/or Trainees for a total of 39 members. The fire service area includes the City of Mason, Aurelius Township and Vevay Township, and a portion of Alaiedon Township for a total of 85 square miles serving a population of approximately 16,000 residents.

Police Services: The Mason Police Department, a full-time, full-service law enforcement agency, is conveniently located on the first floor of the Mason City Hall at 201 West Ash Street. The Department staff is comprised of the Chief of Police, two patrol sergeants, one detective corporal, nine police patrol officers, one code enforcement officer, and one clerical support members responsible for all staff support services.

Library: The Mason Library at 145 West Ash is owned by the City of Mason and operated by the Capital Area District Library as part of its 13-branch library system serving 13 communities and 23 municipalities. The building was commissioned by Mr. Albert Hall and constructed in 1938 as a memorial to his wife, Ada. Through the years it has undergone two expansions/renovations bringing the total area used to 6,424 square feet on three floors. A major renovation of the Mason Library was completed in 2012, which included upgraded equipment, interior remodeling, updated furnishings, roof repairs, partial window replacement, storm sewer upgrade and landscaping.

Proposed Project Year: 2018-19

Project Number: 2017-B3.1 Police: Portable Radios

Description: Five portable radios

Justification: The Department needs to upgrade its portable radios. Ingham County has begun the process of replacing the county-wide system but has no timeline for completion. The Department needs 16 units over three years, modifying its purchases as the prospect of the County's initiative comes to fruition. The Department intends to purchase five units this year, of a model that can be converted to other systems to replace two patrol radios and supply three reserve officers with an assigned unit.

The Department's portable radios have become outdated and unsupportable by the single proprietary vendor who now offers a smaller updated version compatible to the current county-wide radio system and can be programmed to other system networks. Costs and frequency of repairs are increasing and as on-shelf parts become less available, the chance of units going off line increases. Each radio is programmed to an individual officer for tracking and safety purposes so each officer is assigned a unit.

Project Number: 2017-B4 Building: Landscaping and Outdoor Lighting Conversion to LED

Description: Remove and replace existing landscaping around City Hall that is overgrown and that requires maintenance and weeding. Recommending more visually appealing landscaping designed around the windows and design of the building with a focus on less maintenance.

Convert 29 exterior light fixtures to LED, including exterior building sconces (12), canopy can lights (10), and parking pole lights (7).

Justification: Much of the existing landscaping is overgrown and does not compliment the building. Many windows are blocked due to the placement and variety of the shrubs and trees. It is conducive to weeds and regularly contains poison ivy. The grasses have grown together and require frequent trimming as they obstruct the sidewalks and are unsightly. This project would improve the look of City Hall while reducing the costs of maintenance.

LED fixtures require less staff time for bulb replacement and use a fraction of the energy. This will make staff more efficient and save on utility costs.

Project Number: 2017-B6 Fire: Fire Engine 809/Tower 808

Description: Engine 809 is a 1990 Grumman built on an HME chassis. It currently responds as our first-out pumper in the townships and for mutual aid and second-out in the City. As it is a pre-1991 apparatus, the National Fire Protection Agency recommends that it be put in reserve or replaced. Tower 808 is a 2001 Pierce 105' aerial platform truck and makes few runs as a ladder. Staff recommends selling T808 and consolidating Engine 809's replacement into one vehicle being a 75' Quint ladder truck.

Justification: NFPA 1911 Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire

Apparatus recommends that fire apparatus manufactured prior to 1991 but less than 25 years old be placed in reserve status and any pre-1991 apparatus replaced. Tower 808 is a great piece of equipment; however, it is often too large to maneuver into the majority of our fire scenes making it less effective. It is not used as a ladder and ends up staged at the road. A smaller piece of equipment would be dispatched first and used more frequently.

Project Number: 2018-B4 IT: BS&A Timesheet Program

Description: BSA Timesheet Software Module

Justification: Currently we have different timekeeping in all departments making it inconsistent and very time-consuming. The Timesheet Module will integrate with the Human Resource and Payroll systems. The Timesheet program would be loaded on computers in all the departments giving employees access to enter their own time and submit to the supervisors for approval. The Timesheet modular will make the payroll process more efficient, consistent and more accurate.

Project Number: 2018-B4 IT: BS&A Cemetery Upgrade and BS&A Human Resource Upgrade

Description: BS&A Cemetery Software Module and BS&A Human Resource Module

Justification: Currently our cemetery system is completely handwritten and a time-intensive process. By implementing an electronic cemetery record system, it will allow for quick access to cemetery records for all employees involved in the process of cemetery lot purchases and grave openings/closings, as well as increase employee productivity by decreasing the processing time of cemetery records.

Currently we have no Human Resource software module. With the implementation of the Clerk/Human Resource position it has become apparent that this position needs access to certain Human Resource information as well as a place to track important personnel-related information. In addition, the module is set up to provide job posting and application tracking which would provide a smoother hiring process.

Project Number: 2018-B6 IT: AV Room Technology Patch

Description: Convert the video control system to a manual control system. Revise the lectern presentation system so presentations can easily be incorporated into the final program. Revise the control system responsible for control of the in-room projection system. Revise the video camera monitoring system. Simplify the live-stream signal flow and associated physical connections.

Justification: The AV system is outdated and complicated, resulting in difficulties in the broadcast of City Council and Planning Commission meetings.

Project Number: 2018-B7 Planning: Cedar/127 Corridor (Transportation and Land Use)

Description: Sub-area corridor study along the Cedar/127 Corridor to evaluate transportation infrastructure improvements that support and maximize land-use development opportunities in

accordance with the community's vision and master plan.

Justification: The City of Mason is growing as a place for new and renewed investment. Available land for development is becoming scarcer. The Cedar/127 Corridor is an area that is served by existing infrastructure, contains undeveloped and under-developed land and is easily accessible to/from highway U.S. 127. This area was identified in the community's Master Plan as an area to incentivize future growth. A professional corridor study will position Mason to maximize capital funding, grants, zoning, and partnerships with Michigan Department of Transportation and Ingham County to ensure changes in this corridor result in a well-planned area that supports quality development for current and future residents and businesses.

Project Number: 2018-B24 Building: Rental Space Furniture Replacement

Description: Replace tables, chairs and other items as necessary in the rental space

Justification: The City Hall offers space available to our community for rent to accommodate special events such as parties and club meetings. Average wear and tear on tables, chairs and other furniture in those spaces is to be expected. Chairs that are worn and stained need to be replaced, as well as tables with wear or damage that make them unsafe.

Proposed Project Year: 2019-20

Project Number: 2017-B3.1 Police: Portable Radios

Description: Portable Radios (8)

Justification: The current radio system used by Ingham County is not going to be supported by the manufacturer after 2021. The 911 Advisory Committee is in the process of deciding on the replacement of the radios and system. The replacement radios purchased will be compatible with the new system upgrade.

Project Number: 2017-B5 Building: Library Improvements

Pending the results of the Library Facilities Evaluation, this line item combines the previous Phase I and Phase II Library projects.

Description: Tuck pointing is needed in many areas of the building exterior, particularly the chimney, near doors and windows, and foundation. Replace 27 exterior windows. Relocate basement bathrooms to first floor garage to make them ADA compliant. Install hot water circulation pump to all facility sink faucets. Install new central air conditioning system and a fire alarm system. Install ADA automatic door and push button. Remove/replace ceiling tiles in magazine room and book rooms. Create hallway doorway pass-through from magazine room to front desk.

Justification: Exterior brickwork is preventive maintenance. There are 27 original exterior windows that remain in the building. These windows are single pane, steel frame and are rusting in many places and

very energy inefficient. The current bathrooms are located in the basement and are inaccessible to persons with disabilities. Hot water supplied to bathrooms and sink faucets is supplied by a single hot water heater in the basement. A new central air system has been requested by CADL to help preserve the collections in the building as well as to keep employees and patrons comfortable. The library facility currently does not have a fire alarm system. Fire alarm systems are a standard early warning system for institutional facilities. The library facility currently does not have an automatic ADA door anywhere in the facility. Library staff has reported that the facility is very difficult to access by persons with disabilities, particularly those in wheelchairs. An ideal location for an automatic door, with push button, is at the top of the ADA ramp. Adding this feature would greatly enhance the accessibility of the library facility. Much of the library facility has older fiberboard ceiling tiles that are sagging, stained or damaged. Replacing the material with drywall, new tile or other product would greatly enhance the appearance of the facility. Currently patrons moving from the magazine room to the front desk must maneuver through the employee area behind the front desk. Library staff has requested that the City explore the possibility of extending the magazine room hallway through the wall to circumvent the employee area.

Project Number: 2017-B7 **Building: Parking Lot Repairs**

Description: Repairs to City Hall parking lot including additional curb, curb and asphalt repair

Justification: Over time, parking lot surfaces and curb shrink and expand with changing weather systems. The parking lot asphalt surface at City Hall is showing signs of settling and cracking. Crack sealing has been performed for the past few years. However, there are a few areas that are beginning to crumble to the point where sealing will no longer provide the required fix. Also, there are several curbs with significant chunks broken out. There isn't any curb or gutter at the west end allowing the water runoff to erode the dirt onto the railroad tracks. Some of the parking lot is very old and broken and was not replaced at the time of the City Hall project and was not built to withstand the fire trucks.

Project Number: 2017-B10 **Fire: Fire Station 1- Furnace/AC, Office Area and Training Room**

Description: Replacement of furnaces and air conditioners. Fire Station 1 has two furnaces and air conditioners - one for the basement training room and the other for the office areas.

Justification: The furnaces are original to the station in 1998 and will likely need replacing in the near future.

Project Number: 2017-B11 **Fire: Fire Station 1- Commercial Washing and Drying Machines**

Description: Replacement of Heavy Duty Commercial Washing and Drying Machines located within Fire Station 1

Justification: NFPA 1851: Standard on Selection, Care, and Maintenance of Structural Firefighting Protective Ensembles requires the regular cleaning and advanced cleaning of all turnout gear every six months or sooner depending on use to help prevent exposures to toxins and carcinogens. Our commercial washer and dryer were purchased in 1994 and have been repaired several times. They should be considered for replacement.

Project Number: 2017-B12 IT: New Servers (windows and mail exchange)

Description: New Windows and Exchange Servers

Justification: The servers need to be upgraded on a five-year rotation to keep up with the technology changes and meet the needs of both the staff and citizens. Microsoft begins limiting updates to older servers as new versions are released.

Project Number: 2018-B8 IT: Phone Upgrades

Description: Upgrade 50 new phones City-wide

Justification: The current phones were purchased in 2010 and have been failing over the last year. According to the manufacturer they have a five-year life expectancy. We are using VoIP (Voice over Internet Protocol) technology. A VoIP telephone is essentially a mini computer and consists of hardware and software components. The software requires standard networking components such as a TCP/IP network stack, client implementation for DHCP, and the Domain Name System (DNS).

Project Number: 2018-B10 IT: BS&A Planning and AccessMyGov Module for Online Permitting

Description: Software module to allow for building permits and development applications to be submitted and paid for online, and processed for internal review.

Justification: The City of Mason is growing as a place for new and renewed investment. The need to expedite permit applications at higher volumes will require additional support. The Online Permitting module will allow our customers to submit applications and plans online, pay permit fees, receive permits and inspection results by email, and check on the status of permits - all at their convenience 24/7/365. The Planning module automates the review process, serves as a central database of permits and development applications, reviewer comments, inspection results, and code enforcement activity connected with Assessors property records and searchable by any staff member with BS&A access. By using these modules in BS&A, data will be more readily available for the purposes of monitoring development activity in the City, meeting statutory reporting requirements (Census), and providing leadership with better information for planning and decision making.

Project Number: 2018-B11 Planning: Kipp Road/Temple Street (Transportation and Land Use)

Description: Sub-area corridor study along both Kipp Road and the Temple Street Corridors to evaluate transportation infrastructure improvements that support and maximize land-use development opportunities in accordance with the community's vision and master plan.

Justification: The City of Mason is growing as a place for new and renewed investment. Available land for development is becoming scarcer. Kipp Road serves as access from US 127 to Temple Street. Both corridors are areas that are served by existing infrastructure, contain undeveloped and under-developed

land and are easily accessible to/from the highway U.S. 127. These areas were identified in the community's Master Plan as an area to incentivize future growth. A professional corridor study will position Mason to maximize capital funding, grants, zoning, and partnerships with Michigan Department of Transportation and Ingham County to ensure changes in this corridor result in a well-planned area that supports quality development for current and future residents and businesses.

Project Number: 2018-B12 Building: Carpet Replacement

Description: Replace foyer/Community Room and worn/stained areas

Justification: The carpeting in these areas gets the most use and is getting worn and stained. The Community Room gets rented often with food and drinks getting spilled. This is part of a regular replacement program to keep the facility updated.

Project Number: 2018-B13 Fire: Extrication Tools (Jaws of Life) in Engine 809's Replacement

Description: New extrication tools (Jaws of Life) to replace 20-year-old set

Justification: Extrication tools are primarily used by the Fire Department to cut patients out of their vehicles that have been involved in a serious accident. The current set of extrication tools is our oldest set and was purchased about 20 years ago. It only allows us to run one tool at a time and doesn't have the strength to cut through some of the newer vehicles. The new sets allow for simultaneous tool operation and have more cutting power.

Project Number: 2018-B14 Fire: Rehab 815 Replacement

Description: Mason Fire Rehab 815, formerly Squad 815, is a Chevrolet 3500 HD Ambulance Body. It is used to bring extra equipment, manpower and rehabilitation supplies to fire incidents. Rehab is important to help keep our firefighters rested and safe from heat stroke and dehydration. It provides a place to get vitals checked, get out of the weather and get air tanks changed.

Justification: The vehicle is currently 26 years old and is becoming unreliable. It is an ambulance box and is not user friendly as a rehab truck. Staff recommends replacing it with a vehicle more conducive to rehab operations and also with the capacity to transport more personnel to and from fire incidents.

Project Number: 2018-B15 Fire: Sprinkler System in Fire Department Truck Bay

Description: Install new automatic sprinkler system for truck bay.

Justification: The Mason Fire Station was built in 1998 and at the time the fire sprinkler system was not extended from the office to the apparatus bays. The Mason Fire Station currently houses roughly 3.2 million dollars in vehicles along with other costly equipment. Staff recommends that the fire sprinkler system in Station 1 be expanded from the office area to include the apparatus bays. This fire station

provides essential services to the community which should be protected in order to avoid interruption of emergency response service capabilities. The time and future cost to repair or rebuild the Fire Station as well as replace or repair the damaged vehicles and equipment would be difficult. Automatic sprinkler protection should be considered a means for protecting the community's investment in the Fire Station.

Project Number: 2018-B16 **Fire: Rear Approach Fire Station 1**

Description: Rebuild rear approach to Fire Station 1

Justification: The rear approach of Fire Station 1 currently has the original concrete from 1998 when the building was built. The concrete is worn, crumbling and in need of repair. The rear approach is used by fire trucks as they enter the garage. The concrete approach needs to be stable, bear heavy weight and create a safe driving condition for the parking of the fire apparatus.

Project Number: 2018-B17 **Police: Mobile Data Computers**

Description: Five patrol car Mobile Data Computers (MDCs) will be eight years old. The Department maintains one MDC in each patrol car and one on the shelf as backup in case needed if an in-car unit fails and needs to be replaced.

Justification: The Mobile Data Computers are critical tools for patrol operations. They provide up-to-date dispatch capability, field-based reporting, electronic crash reports and can be used for e-ticket features including remote downloading to district court records. The field-based reporting and e-daily features are an effective mechanism to keep officers on the street, visible to the public.

Project Number: 2018-B19 **IT: Wireless connectivity to DPW and POTW**

Description: Install antenna and wireless bridge on all three buildings to connect DPW, POTW and City Hall.

Justification: Current connectivity speed at DPW and POTW is less than 3 mpbs. This upgrade will increase the speed to at least 400 mbps.

Proposed Project Year: 2020-21

Project Number: 2017-B3.1 Police: Portable Radios

Description: Portable Radios (8)

Justification: With the anticipated termination of manufacturer support for the existing radio system hardware in 2021, the Department is requesting eight additional replacement portable radios to update its supply. The Department's portable radio units will continue failing limiting availability of radios to officers and reserves. Replacement parts are no longer manufactured and the on-shelf parts supplies will dissipate rendering repairs impossible. The Department needs eight additional new radios for distribution to patrol operations and needs to replace the units in use. The replacement models can be converted to a new radio system which is most likely the Michigan State Police 800 megahertz system thus reducing cost when the conversion occurs.

Project Number: 2017-B13 IT: AV Room Technology Replacement

Description: Replacement of failing audio, video, and camera equipment by which meetings of City Council, boards and commissions may be recorded, televised and streamed.

Justification: Staff continues to have challenges with the existing equipment due to the programs no longer being supported and the aging technology. We will need to upgrade the equipment in the near future to assure we continue to provide public viewing of our meetings through the website and the cable access channel. This project would include comprehensive system design, equipment selection, bid packets, bid analysis, integration, testing, training, and as-built documentation.

Project Number: 2017-B17 Fire: Self-Contained Breathing Apparatus (SCBA) units

Description: Air Packs-SCBA 24 units were purchased in 2008 through a FEMA grant and are required by our Fire Department for entering into atmospheres immediately dangerous to life and health. Each pack is required to have an extra cylinder for a total of 48. The confined entry cart is used for more constricted areas where an SCBA won't fit or where we may have need for a longer work time. It must be compatible with the SCBA's being used.

Justification: The Self Contained Breathing Apparatuses (SCBA) and the confined entry cart are currently sufficient and in good working order. SCBA packs are flow-tested annually and repaired as necessary. Many of components on the packs were originally warranted for 10 years. They are now 10 years old the costs to service them has gone up. Availability of parts will begin to become more difficult. The cylinders have service life of 15 years from the manufacture date and cost about \$1,000 each today.

Project Number: 2018-B18 Police: Taser Units

Description: Ten new Electronic Control Weapons (ECWs) commonly known as tasers. The purchase of 10 units would also include holsters, cartridges and a four-year warranty. Ten units will be an appropriate

number to assign field officers as well as newly added reserves during large special events as well as one back-up to allow for a unit to be taken out of inventory if the need for repair/support arises.

Justification: The Department currently owns units, all still in service since 2009, but their life cycle is ending and support from the manufacturer will soon not be available. At times during large community events six units have not been enough to field the police force during the event. ECWs have proven themselves to be a safe less-than-lethal control option for officers in the field, while reducing risk to the public, suspects and officers. ECWs are recognized industry-wide as an outstanding and strongly endorsed risk management option.

Project Number: 2018-B20 **Fire: Carpet Replacement for Fire Station**

Description: Replace the carpet in the office building at Fire Station 1. It is the original carpet that was laid when the building was built in 1998.

Justification: The carpet in Fire Station 1 is 20 years old and suffers from general wear and tear. The walking paths are worn and the general meeting areas are worn and stained. It is now at the point of being unable to clean at an acceptable level. The Fire Station is used regularly for fire training classes, bi-weekly meetings and firefighter training, other local meetings and is open to the public. Staff recommends re-carpeting Fire Station 1 to maintain an appearance of excellence in our community.

Project Number: 2018-B21 **Police: Interview & Interrogation Digital Recording System**

Description: Replace two existing interview room cameras through replacement and add one digital recording system in the waiting room outside the Department's front entrance.

Justification: The State of Michigan, by statute, mandates interrogations involving major felonies and some serious misdemeanors. The Mason Police Department requires all interviews and or contacts, with rare exception identified by policy, be recorded. To this end, the Department currently has two L3 digital recording camera systems located one each in the soft interview room, the other in the secured interview room. At the time of this request, the interview/interrogation system will be seven years old and in need of upgrading. This is a critical piece of technology the Department must maintain in order to comply with SOM statute. The Department wishes to add a third digital recording system in the waiting room outside the Department's front entrance and update the two existing interrogation and interview room cameras. The cameras all download into the L3 server which also stores data from the in-car recording systems and body worn cameras.

Project Number: 2018-B23 **Planning: Master Plan/Zoning 5-year Update (Major): Phase I**

Description: The City of Mason Master Plan is intended to be a robust community conversation that results in a 20-year roadmap for keeping the City of Mason a special place for generations to come. The Master Plan is comprised of professional technical studies, graphics, maps, analysis and recommendations for ensuring that land uses, public facilities and infrastructure investments are well coordinated in a manner that supports the public's health, safety and social/economic/environmental welfare consistent

with the community's vision. This phase will focus on community engagement and technical analysis.

Justification: The City of Mason is growing as a place for new and renewed investment. Available land for development is becoming scarcer. As development pressures challenge Mason's desire to retain its "small town character," it is critical that we proactively identify ways to harness economic opportunity to support the community's vision. In order to implement the Master Plan, the City's Zoning Ordinance will need to be updated to ensure alignment between the ordinances and the Master Plan. The Master Plan will also serve as an important foundation for the City's Capital Improvement Program.

Further, a Master Plan is required by State of Michigan statute for communities that have adopted the Michigan Zoning Enabling Act, which Mason has. The Master Plan is required to be updated every five years. Staff recommends that investment in this effort be made to make a major update following the 2020 Census. The City of Mason's boundary will also be expanding as the 425 Agreements expire, resulting in more land and infrastructure to be managed.

A professional Master Plan process will position Mason to maximize capital funding, grants, zoning, private investment, and partnerships with economic partners, Michigan Department of Transportation and Ingham County to ensure changes in the community over time are well-planned and carefully coordinated.

Note - The Master Plan investment is phased over three fiscal years - community engagement and technical analysis in phases one and two (FY2021 and 2022) with the city ordinance updates taking place in phases two and three (FY2022 and 2023).

Proposed Project Year: 2021-22

Project Number: 2017-B15 Fire: Rescue Boat and Motor

Description: One Rescue Boat and Motor

Justification: The boat is used for ice and water rescues in lakes, ponds, or streams by the Fire Department. This equipment was initially purchased in reaction to a double drowning in Columbia Lakes that the Fire Department did not have the equipment to respond to. This was originally purchased by the Fire Association, but will need to be replaced in the near future.

Project Number: 2017-B16 Fire: Portable Radios

Description: Portable (26)/ Truck (10) Radios

Justification: The current radio system used by Ingham County is not going to be supported by the manufacturer after 2021. The 911 Advisory Committee is in the process of deciding on the replacement of the radios and system. Depending on the outcome of those discussions, we may have to either share in the purchase of updating our existing Fire and Police radios or purchase them all ourselves.

Project Number: 2018-B22 Police: Body Worn Cameras and Redaction Software

Description: Fifteen Body Worn Cameras; Redaction Software

Justification: The City's current BWCs were purchased and put online in 2015. In 2016, L3 MobilVision recognized a factory defect and replaced each unit under warranty. In the 2021 – 2022 Fiscal Year the BWCs will be five years old and at the end of their life cycle. The BWCs are critical to the functions of the Department for a myriad of reasons including, but not least, as best evidence in criminal and internal quality controls, personnel audits and both internal and external transparency. The Michigan Municipal Risk Management Authority considers BWCs a high quality and effective risk management tool. The internal auditing, quality control and evidentiary features alone insure their value of these tools. Fifteen BWCs will provide one for each sworn personnel and reserve officers, excluding the chief. The purpose of individually assigned BWCs is so each camera can be digitally entered into the server identifying it to the assigned user for data tracking and recovery for viewing and duplication.

Project Number: 2018-B23 **Planning: Master Plan/Zoning 5-year Update (Major): Phase II**

Description: The City of Mason Master Plan is intended to be a robust community conversation that results in a 20-year roadmap for keeping the City of Mason a special place for generations to come. The Master Plan is comprised of professional technical studies, graphics, maps, analysis and recommendations for ensuring that land uses, public facilities and infrastructure investments are well coordinated in a manner that supports the public's health, safety and social/economic/environmental welfare consistent with the community's vision. This phase will focus on technical analysis and city ordinance updates.

Justification: The Master Plan investment is phased over three fiscal years - community engagement and technical analysis in phases one and two (FY2021 and 2022) with the city ordinance updates taking place in phases two and three (FY2022 and 2023).

Project Number: 2018-B24 **Building: Rental Space Furniture Replacement**

Description: Replace tables, chairs and other items as necessary in the rental space

Justification: The City Hall offers space available to our community for rent to accommodate special events such as parties and club meetings. Average wear and tear on tables, chairs and other furniture in those spaces is to be expected. Chairs that are worn and stained need to be replaced, as well as tables with wear or damage that make them unsafe.

Proposed Project Year: 2022-23

Project Number: 2018-B23 Planning: Master Plan/Zoning 5-year Update (Major): Phase III

Description: The City of Mason Master Plan is intended to be a robust community conversation that results in a 20-year roadmap for keeping the City of Mason a special place for generations to come. The Master Plan is comprised of professional technical studies, graphics, maps, analysis and recommendations for ensuring that land uses, public facilities and infrastructure investments are well coordinated in a manner that supports the public's health, safety and social/economic/environmental welfare consistent with the community's vision. This final phase will focus on city ordinance updates.

Justification: The Master Plan investment is phased over three fiscal years - community engagement and technical analysis in phases one and two (FY2021 and 2022) with the city ordinance updates taking place in phases two and three (FY2022 and 2023).

Project Number: 2018-B26 Police: Patrol Car Modem Upgrades

Description: Six Patrol Car Modems

Justification: The department intends to upgrade the patrol car modems which were installed in 2017, and maintain a spare unit for replacement if a unit in use needs to be removed for repairs or maintenance. Modems have a certain amount of data capacity for communications from the car to the recipient and back again. As patrol car technology becomes faster and more efficient, the amount of data produced increases as well. 5G technology is currently in the works. With the amount of data output from a patrol car, a higher handling capacity is imperative to keep the car's systems on-line and reduce the chance of failure and data loss.

Proposed Project Year: 2023-24

Project Number: 2018-B25 Police: In-Car Digital Recording System

Description: Four patrol cars will receive replacement in-car digital recording systems.

Justification: The L3 MobilVision in-car digital recording systems will be six years old and beyond their life expectancy. The Department must replace four in-car digital recording systems. To support the in-car systems, current body cameras and interview/interrogation room cameras, the Department will purchase a high-definition server from L3 MobilVision to manage increased data storage, easier extrapolation and higher quality evidentiary recordings for reproduction. This includes four replacement back seat infra-red cameras and collision sensors.

The digital recording system used by patrol operations is a significant tool for mitigating risk to the City. Interview room systems, Body Worn Cameras and patrol car systems, including impact detectors and back seat digital recorders are unequivocally the best tools for accurately documenting and recalling incidents and officer actions during every event the Department is involved in. These tools are so critical; the Department mandates usage with only few exceptions to protect certain privacies. Unfortunately, the

technology changes at such a rapid rate that every five years obtaining service or repairs becomes almost impossible and when it is, is exceedingly expensive or cost prohibitive. By the 2023-2024 Fiscal Year, it is unknown what technology will be available at what cost but a certainty is that the hardware will become unsupported and it is in the City's best interest to renew this outstanding risk management tool.



CAPITAL IMPROVEMENTS PROGRAM 2018-2024

BUDGET

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**CITY OF MASON
PLANNING COMMISSION RESOLUTION
2018-02**

**A RESOLUTION APPROVING THE CAPITAL IMPROVEMENTS PLAN FOR THE
FISCAL YEARS 2018-2024
March 13, 2018**

WHEREAS, the Capital Improvements Plan is a result of significant review and consideration by the City of Mason administrative staff, Planning Commission and City Council of the numerous capital project requests from City department heads for the next six fiscal-year periods; and,

WHEREAS, prioritization of projects listed in the plan is based on the overall benefit to the community, especially when improving public health, safety and welfare, and so that the most-needed projects will be accomplished first and scarce financial resources are allocated appropriately; and,

WHEREAS, the Capital Improvements Plan is consistent with the Capital Improvements Programming component of the Master Plan; and,

NOW THEREFORE BE IT RESOLVED, that the City of Mason Planning Commission does hereby approve the Capital Improvements Plan for fiscal years 2018 – 2024.

Yes ()

No ()

CLERK'S CERTIFICATION: I hereby certify that the foregoing is a true and accurate copy of a resolution adopted by the Planning Commission at its regular meeting held Tuesday, March 13, 2018, the original of which is part of the Planning Commission minutes.

Sarah Jarvis, Clerk
City of Mason
Ingham County, Michigan

Date: February 28, 2018

To: Elizabeth Hude, AICP, City of Mason Community Development Director

From: Mark A. Eidelson, AICP

Re: *Revised Chapter 58 of City Code – Signs*

Attached is a fully redrafted Chapter 58 of the City Code, addressing signs. There were several primary goals in the development of this redrafted Chapter 58:

- Improve user-friendliness including the use of tables where practical, incorporating term and phrase definitions within the body of Chapter 58 rather than in Chapter 1 of the City Code, and presenting standards in a manner that is less subject to variable interpretation.
- Address a number of sign issues about which the current Chapter 58 is silent such as more expanded provisions addressing the measurement of sign setbacks, measurement of sign areas, maintenance requirements, and illumination restrictions.
- Incorporate new sign standards to replace existing standards that may not be in the best interest of the City due to issues pertaining to administration and enforcement, design, and general community character issues, or otherwise highlight provisions that officials may want to consider for further revision.
- Address the implications of *Reed v Gilbert* (Supreme Court, 2015), which strongly discourages content-based sign regulations and as further elaborated in my previous November 11, 2017 review of the current sign regulations.

To the greatest extent practical, I have tried to carry forward into the draft Chapter 58 the same section numbers/section topics as in the current Chapter 58.

The next several pages strive to highlight the substantive differences between the current Chapter 58 and this draft Chapter 58. A clear and comprehensive comparison to the current Chapter 58 is challenging due to differing terminology in instances, lack of clarity in instances, and overall formatting and organization of requirements and standards. Still, I believe this summary reasonably captures the principle differences between the two sets of provisions.

It is very reasonable to assume that whatever version of a new Chapter 58 is eventually adopted, with or without minor or major revisions to the version presented within, the City's sign regulations will have to be updated periodically as more case law evolves following Reed v Gilbert. Consultation with legal counsel is advised as well.

I am available to meet with you to discuss these draft provisions or discuss them over the phone. Please do not hesitate to contact me if you have any questions.

The following summarizes the substantive differences between the current Chapter 58 and the draft Chapter 58.

1. **Draft Sec. 58-1, purpose**, presents the purpose statement for the Chapter. The draft purpose statement is generally similar in substance to the current Sec. 58-1 except that it is more descriptive in character and expressly references the Article's intention of supporting free speech rights under the Constitution, within a balanced framework, while also recognizing that certain temporary uses necessitate more tailored regulations but which still support free speech.
2. **Draft Sec. 58-2, applicability of the chapter**, is more descriptive than the current Sec. 58-2.
3. **Draft Sec. 58-3, nonregulated signs**, is significantly narrower in scope than the current Sec. 58-3. The narrower scope is largely due to the deletion of the content-based elements of the current list, although some of the draft provisions do include content-based signage. The draft provisions focus principally on signs within public right-of-ways and spaces, or other signs about which it could be reasonably argued that they are directly related to public health, safety and welfare matters, or are otherwise linked to official state operations such as in the case of an historical marker issued by the state historic preservation office.

Please also note that draft Sec. 58-3(6) exempts from regulation all signs no greater than 2 sq. ft. in area. This provision extends the current Sec. 58-3(9) exception for directional signs and applies the exception across the board irrespective of the sign's content. This change is intended to minimize administrative burdens and focus regulations on those signs that are more visually evident. This is a substantive change that officials may welcome or prefer to delete.

4. **Draft Section 58-4** address a new matter – signs that are subject to chapter 58 but which do not require a permit. The purpose of this section is to minimize administrative burdens for all parties in the case of comparatively minor signage while still mandating that such signage comply with all relevant standards of the Chapter (area, height, setbacks, etc.). The current Chapter 58 does not have a similar element. To clarify, draft Sec. 58-3 (above) lists signs that are not subject to Chapter 58 while draft Sec. 58-4 lists signs that are subject to the Chapter but which are not required to go through the permitting process.
5. **Draft Section 58-5, definitions**, presents important terms and phrases and corresponding definitions. As we previously discussed, the intent is to remove sign-related definitions from Chapter 1 of the City Code of Ordinances and insert sign definitions directly into the updated Chapter 58 to improve the ease of use of the Chapter. Please note the following:
 - a) The draft definitions generally coincide in substance with the applicable existing definitions of Chapter 1 of the Code of Ordinances, but all of the definitions have undergone review with the intent to clarify ambiguous wording or otherwise provide expanded definitions that offer the reader greater clarification of the defined term.
 - b) Some of the existing definitions in Chapter 1 were not carried over into draft Sec. 58-5 because they do not appear to be used in Chapter 58 or elsewhere in the code, such as in the case of “*banner sign*” and “*marquee sign*.”
 - c) Unlike the current definitions in Chapter 1, draft Sec. 98-5 does not present separate definitions for “portable sign” and “temporary sign.” Under the draft definitions and the regulations of this new draft Chapter 58, both sign classifications are treated as one – “temporary signs.”
 - d) Unlike the current Chapter 1 definition of sign that states that a sign must be viewable from a public place (road, park, etc.) to be a sign, the draft definition does not include this restriction and clarifies that a sign is a sign if it is viewable from any property.

- e) The draft definitions include terms/phrases that are not currently addressed in the current Chapter 1 such as electronic message sign, business center, and storefront tenant.
6. **Draft Sections 58-86 to 58-92, sign board of appeals (SBA)**. While the intent of these draft sections are the same as the current Chapter 58, the draft provisions are substantively different in the following principal ways:
- As we discussed, the draft provisions provide for the zoning board of appeals to serve as the sign board of appeals.
 - Like the recently prepared zoning ordinance amendments addressing the ZBA, the draft SBA provisions present clearer step-by-step procedures for the three available appeals – variances, interpretations and administrative reviews. The provisions are modeled after the ZBA amendments in this regard.
 - The draft standards of approval for variances are more specific to the issue of signage as compared to the more generic standards of the current Chapter 58.
7. **Draft Section 58-126, prohibited signs**, generally corresponds to the current Sec. 58-126, except for the deletion of content-based prohibited signs such as in the case of signs that no longer advertise a product available on the lot, and hand-painted signs “*not of a commercial quality*,” the latter being subject to excessive discretion and free speech issues.
8. **Draft Section 58-127, permanent signs**, generally corresponds to Sec. 58-127 of the current Chapter 58. Where practical, standards for each district have been incorporated into a table (Table 58-127.1) though there is a list of “Special Provisions” that follow the table and are more difficult and/or less practical to put in tabular format. The provisions of this draft section carry forward the standards and restrictions of the current Sec. 58-127 except as provided or clarified below:
- Whereas Sec. 58-127 of the current Chapter 58 limits the number of wall signs to one in all or nearly all districts, draft Table 58-127.1 does not place limitations on the number of signs. Instead, the Table places restrictions on the percentage of a building’s face that may be occupied by such signs. This is a common approach, one that affords the property owner an added degree of flexibility, and one that recognizes common practice by store owners. For example, many of the downtown storefronts in Mason have two or more wall signs displayed.
- The percentage standards in the Table are 10% in all districts, with a maximum of 300 sq. ft., except agricultural and residential districts where the standard is 5% with a maximum 200 sq. ft. The current Chapter 58 places no restrictions on maximum wall sign area in agricultural and residential districts, and limits wall signs to 30 sq. ft. in non-residential districts – a comparably very stringent standard.
- As a point of reference, the wall signage on the front of the following randomly selected storefronts occupies the following approximate percentage of the building’s face (storefront story only): Family Farm and Home-3%; Vault Delicatessen-4%; Darb’s-5%; Advanced Auto Parts-7%; Auto Zone-8%, Kean’s-9%, Bestsellers-10%, and D&G Equipment-10%.
- Unlike Sec. 58-127 of the current Chapter 58, the draft Table requires increased side and rear yard setbacks for freestanding signs where the adjacent yard is in an agricultural or residential district. This is intended to minimize negative impacts but, at the same time, adds restrictions that may not be supported. Aside from this issue, the setback standards for freestanding signs come from Sec. 58-128(4) of the current Chapter 58. Officials may want to consider increasing the 10’ setback for signs in excess of 10’ in height, in agricultural and residential districts, in the interest in minimizing negative impacts.
 - In the interest of consistency, the maximum freestanding sign height in the manufacturing districts was decreased from 24’ to 20’, to match those of the commercial/office districts.

- d) The current Chapter 58 prohibits **roof signs** except in the C-2 District and this has been carried over to the draft Table. However, unlike the current Chapter 58, which establishes no maximum size limits other than the 1.5 sq. ft. per 1' of building length, the draft Table establishes a maximum area of 200 sq. ft. but not to exceed 25% of the building's length. This change is suggested in the interest of encouraging signage of appropriate scale.
- e) The Special Provisions following the Table address additional signage permitted in association with **"business centers"** in subsection (3), something the current Chapter 58 does not appear to address. Please refer to the definition of *"business center"* in draft Sec. 58-5.
- f) The Special Provisions following the Table address signs in association with dwellings and directional signs (subsection (4) and (5)). The provisions are intended to address a variety of circumstances without being content-based including dwelling/address identification and signs at entrances to buildings within a multiple family development, and signs at entrances into parking lots. *You may want to contact your legal counsel to get an opinion if exempting all "purely" directional signs (not content-neutral), with appropriate area and height standards, is an option for the city as such an approach may simplify these aspects of the chapter or otherwise permit some of the content to be deleted.*
- g) The Special Provisions following the Table address signs in association with **drive-through facilities** (subsection (6)), something the current Chapter 58 does not appear to address.
- h) The Special Provisions following the Table address the **display of flags** (subsection (7)). Under Sec. 58-3(3) of the current Chapter 58, flags are exempt from regulation based on the content of the flag. Such an approach will likely not survive a legal challenge. The draft flag provisions are intended to be content neutral.
- i) The Special Provisions following the Table address **"off-premises" signs** (subsection (7)) without specifically using the "off-premises" sign phrase so as to remain content-neutral. The draft provisions carry forward the substance of Sec. 58-129 of the current Chapter 58 except for the deletion of provisions addressing clear vision areas and illumination, which are addressed under draft Sec. 58-129.

I recommend officials reconsider its regulations regarding this matter, according to the following minimum issues:

- A designated "off-premises sign" district (C-2, M-1, etc.) may be more than a ¼-mile from a US-127 interchange and yet any lot within the district is permitted the additional signage. This does not seem, on the surface, to be logical given that this type of signage is typically intended to be viewed from the highway. Perhaps I do not understand the basis for the current off-premises sign regulations.
- The height and area standards for these signs does not appear to support interests in enhancing the visual character of the Cedar Street corridor (most particularly), such as in the case of the permissible 25' heights and 300 sq. ft. areas.
- Officials may want to consider whether allowing the additional signage permitted by Sec. 58-129 of the current Chapter 58 is something officials want to continue to carry forward, or perhaps establishing greater limitations on where such additional signage is permitted.

Please note that in the interest of being content-neutral, the draft provisions of Sections 58-127 (permanent signs) and 58-128 (temporary signs) do not prohibit such authorized signs from being used as off-premises signs. For example, if McDonald's prefers to use its one freestanding sign for the purpose of advertising Los Tres Amigos, it is free to do so. Chapter 58 does not differentiate between on-premises and off-premises signs.

9. **Draft Section 58-128, temporary/portable signs**, generally corresponds to Sec. 58-130 of the current Chapter 58. Where practical, standards for each district have been incorporated into a table (Table 58-128.1) though there is a list of “Special Provisions” that follow the table and are more difficult and/or less practical to put in tabular format. Please note the following:

- a) Table 58-128.1 presents temporary sign provisions that are **not specific to a particular temporary activity** (unlike garage sales, construction signs, etc.). The signs permitted by the Table can be used by the respective lot owner/tenant however he/she deems appropriate including to advertise a merchandise sale, make a political statement, express support for the Mason Bulldogs, or for any other purpose. The current Chapter 58 appears to prohibit these options, which raises free speech issues. The number and size of such signs are more restricted in the agricultural and residential districts and more lenient in the commercial, industrial and office districts. I suspect many (perhaps most) property owners/tenants already post such signs and the Table expressly authorizes such signage with restrictions.

As I understand the current Chapter 58, these draft provisions are a substantive addition to Chapter 58 and do not relate to any provisions of the current Section 58-130 except for the maximum 40 sq. ft. temporary signs permitted in non-residential districts, which has been carried forward into the draft Table. A 40 sq. ft. temporary sign is comparatively large and officials may want to consider reducing the permissible area and/or height (10’), particularly if this upper limit size is not normally exercised by members of the community.

- b) The **setback standards** for temporary freestanding signs come from Sec. 58-128(4) of the current Chapter 58. Unlike Sec. 58-128 of the current Chapter 58, the draft Table requires increased side and rear yard setbacks for freestanding signs where the adjacent yard is in an agricultural or residential district. This is intended to minimize negative impacts but, at the same time, adds restrictions that may not be supported. Officials may want to consider increasing the 10’ setback for signs in excess of 10’ in height, in agricultural and residential districts, in the interest in minimizing negative impacts.
- c) Much of the current Sec. 58-130 addresses temporary signage associated with specific temporary activities, and the draft Sec. 58-128 addresses these matters in the **“Special Provisions”** that follow Table 58-128.1. The standards presented in the Special Provisions generally correspond to the current Sec. 58-130 in this regard.

10. **Draft Section 58-129, design and placement standards**, most closely corresponds to Sec. 58-128 of the current Chapter 58 but it has been expanded considerably in scope. The expanded scope of provisions address various issues including construction materials, maintenance, dimension ratios, lighting, and measuring sign area and height. All of the substance of the current Sec. 58-128 has been carried over into the draft Sec. 58-129 except for the deletion of Sec. 58-128(6) that prohibits an on-premise and off-premise sign on the same lot – a content-based restriction. The setback standards of the current Sec. 58-128(4) are addressed in draft Sec. 58-127 as previously discussed.

Please also note the following:

- a) The current Sec. 58-130(7) requires that a **sidewalk sign** be located a minimum of 4’ from the building, and this provision has been carried forward into draft Sec. 58-129(4). However, I recommend officials reconsider this requirement as many storeowners prefer (based on my experience) to have their sidewalk sign much closer to the wall and allowing lesser distances may minimize interruptions in the normal flow of pedestrian traffic.
- b) Draft Sec. 58-129(5) carries forward the provisions of the current Sec. 58-130(8) regarding **electronic message signs** except for the deletion of the provision that exempts such signs from permit/fee requirements. Given that electronic message signs can be as large as or larger than many other freestanding and/or wall signs, I question why the City would want to exempt all such signs across the board.

c) The draft provisions also address matters about which the current Sec. 58-130(8) is silent. Specifically:

- Any change or transition in display on an image shall not exceed one second in duration.
- Such signs in an Agricultural or Residential District shall not have any message changes during the hours from 5:00 p.m. to 8:00 a.m.
- Such signs shall be equipped with automatic dimming technology that automatically adjusts the sign's brightness in direct correlation with ambient light conditions. The formula presented in the draft is the commonly accepted manner for measuring brightness.

Officials may find these additions beneficial or may prefer to delete one or more of them.

11. **Draft Section 58-130, nonconforming signs**, corresponds to the substance of Sec. 58-131 of the current Chapter 58, except for the insertion of an additional key restriction – a nonconforming sign shall not be enlarged, expanded or extended, so as to increase its nonconformity.
12. **CURRENT Section 58-132, removal of discontinued/abandoned signs**. The substance of this section was not carried over into this draft Chapter 58. These restrictions are content-based. However, draft Sec. 58-129(2) addresses required maintenance of signs including “abandoned” signs.

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CITY OF MASON
CHAPTER 58 – SIGNS
Draft: February 28, 2018

ARTICLE 1. INTENT AND PURPOSE

The purpose of this chapter is to provide a framework for the display of signs to accommodate the legitimate identification, advertising and informational needs of all persons, entities land uses and to ensure free speech rights guaranteed by the First Amendment to the U.S. Constitution, including the expression of personal, religious, political and ideological views. It is the purpose of this chapter to provide such signage needs and opportunities in a manner that is balanced with the desired stability and enhancement of residential and non-residential areas including property values, the safety of the City's road corridors, and the City's prevailing desired visual character. It is recognized that unrestricted or unregulated signage does not support the desired character of the City nor benefit either private enterprise or the community-at-large. Unrestricted signage encourages traffic safety hazards, visual clutter, confusion for vehicle drivers, visual blight, and decreased property values, and undermines the desired visual character of the City including its business centers and residential neighborhoods, and its economic development initiatives. This chapter recognizes that certain activities and uses of land are temporary in nature and though temporary, have reasonable signage needs, and this chapter is intended to permit temporary signage consistent with the regulatory framework described above.

This chapter shall apply to all persons, firms, partnerships, associations, and corporations owning, occupying or having control or management of any lot, parcel or any premises or portion thereof, located within the city. This Ordinance shall apply to all signs associated with existing and proposed land uses and improvements to property, irrespective of whether such land uses and improvements are subject to approvals under other chapters of the city code including zoning provisions addressing site plan and special land use application approvals.

The following signs are not regulated by this chapter:

- (1) Signs of governmental agencies and public utilities required in rendering essential services.
- (2) Signs erected in a public right-of-way, public park, or other public space where authorized by the zoning official according to administrative rules adopted by the city council, including in the case of signs in association with parades, holiday sales by civic groups, merchant sidewalk sales and similar temporary events.
- (3) Municipal signs required by law or otherwise determined necessary for public health, safety and welfare purposes including traffic control signs, directional signs, legal notices, railroad crossing signs, and "danger" and other emergency signs.
- (4) Municipal signs erected for way finding purposes including to minimize confusion and resulting hazards among pedestrians, motorists and other persons.
- (5) Historical and other markers issued and approved by the state, such as in the case of the State Historic Preservation Office, provided such markers do not exceed 18 square feet in area and 6 feet in height.
- (6) Signs that do not exceed two square feet in area except as follows:
 - a. Where multiple signs are displayed that are each no greater than two square feet in area but exceed two square feet in total cumulative area and are intended to be read or viewed together as a single or unified message or purpose, such multiple signs shall be considered a single regulated sign according to the requirements and standards of this chapter including Tables 58-127.1 and 58-128.1.
 - b. Where such a sign is erected within 20 feet of a public street or alley and intended to be viewed from the street or alley, such sign shall be considered a regulated sign according to the requirements and standards of this chapter including Tables 58-127.1 and 58-128.1, unless such sign is located within 10 feet of an intersection between a public street or alley and a driveway providing ingress

from such street or alley, such as an access way to a parking lot or drive-through facility, and no more than two such signs are erected at such intersection.

The following signs are exempt from the necessity for a sign permit prior to erection but such signs shall conform to all other regulations and standards of this chapter including area, height, and setbacks.

- (1) Signs erected by a governmental entity.
- (2) Indoor signs affixed to a window.
- (3) Temporary signs no greater than 10 square feet in area.
- (4) Permanent signs no greater than 4 square feet in area.
- (5) Alterations to an existing sign where the alterations pertain to the displayed information and/or message only and do not affect the sign's area, height, location, shape, setback or structural features.

As used in this Chapter, the following words and phrases shall have the following meanings.

(a) *Building Face*. The façade of a building, measured from building corner to building corner. Where a wall of the facade is oriented to a public street or other public space and setback more than twenty (20) feet from the nearest wall generally oriented in the same manner, such recessed building wall shall not be construed as the same building face as the balance of the façade, for the purposes of measuring available wall area for signage.

(b) *Business Center*. A grouping of two or more businesses on one (1) or more lots and in one (1) or more buildings, which may share parking and access and are linked architecturally or otherwise developed as a unified grouping of businesses.

(c) *Electronic Message Sign*. A sign that is capable of displaying words, symbols, figures or images that can be electronically or mechanically changed by remote or automatic means. An electronic message sign may be a free-standing sign or wall sign as defined herein.

(d) *Freestanding Sign*. A sign supported by uprights, braces, poles, columns or similar supports, or a base, placed and anchored into the ground and not attached to any building or other structure.

(e) *Illumination/Illuminate*. The act of highlighting the visual presence and/or impact of a sign by the use of artificially created light, such as through electrical devices.

- (1) "Internal illumination" refers to the incorporation of the light source behind the sign face intended to be highlighted and enclosed within the framing of the sign. For the purpose of this Article, an EMC sign shall be construed to be an internally illuminated sign.
- (2) "External illumination" refers to the placement of the light source in front, above, below and/or to the side of the sign face intended to be highlighted. External illumination is not enclosed within the framing of the sign but may be attached to the sign.

(f) *Permanent Sign*. A sign designed and/or intended to last indefinitely in the same location, structurally attached to the ground, or a wall or other structure, in such manner that the sign cannot be easily removed and/or relocated. A permanent sign shall be construed to be the same permanent sign despite modifications to the sign copy of such sign.

(g) *Projecting Sign*. A sign, other than a wall sign, that projects more than eighteen (18) inches from the building face upon which it is mounted or otherwise suspended from an overhang connected to such building face, irrespective of the direction from which the sign is intended to be viewed.

(h) *Roof Sign*. A sign that is located above, or projects above, the lowest point of the eave of a roof, the roof line on a gable end wall, or parapet wall of any building, marquee, canopy or portico, or which is painted on or fastened to a roof or onto any architectural feature intended to look like a roof.

(i) *Sign*. Any words, lettering, parts of letters, figures, numerals, phrases, sentences, emblems, devices, designs, banner, flag, pennant, trade names or marks, or other representation, or combination thereof, designed for the purpose of directing or attracting attention to, advertising, identifying, expressing or making known something.

Unless otherwise indicated, the definition of "sign" includes interior and exterior signs that are visible from any public street, sidewalk, alley, park, or public or private property.

(j) *Storefront tenant.* A tenant of a building that occupies a space on the ground floor of such building, where such space is a principal operational area of the tenant. A ground floor space used principally for access to an upper floor shall not be construed as a storefront tenant.

(k) *Temporary Sign.* A sign designed to be moved periodically or displayed for a limited and comparatively short period of time only, without a foundation, footing or similar permanent underground, wall or structural anchoring system, and may be constructed of non-structural and/or structural materials including cloth, canvas, fabric, wood, and/or metal, and may include signs mounted on wheeled trailers and/or other portable-like support systems designed to be moved from one location to another, as well as hot-air and gas filled balloons, banners, pennants, streamers, and devices commonly referred to as "A-frame", "T-frame", and inverted "T-frame" signs. A temporary sign shall be construed to be the same temporary sign despite modifications to the location of or image on such sign during the period the sign is displayed.

(l) *Wall Sign:* A sign that is attached directly to a building wall that is flat against or generally parallel to the building wall and not extending more than eighteen (18) inches from the face of the wall, including signs painted on a building wall and including signs on a marquee, canopy or awning-type structure. A wall sign shall not be construed to include a "roof sign" or "projecting sign" as defined herein.

(m) *Window Sign:* A sign placed inside a window or upon the window panes or glass, or within five feet of such window surface, and is intended to be viewed from the exterior of the window. Merchandise that is included in a window display, unattached to the window surface, shall not be considered as part of the area of a window sign.

ARTICLE II. ADMINISTRATION AND ENFORCEMENT

DIVISION 1. GENERAL

Sec. 58-35. Permit Required.

Unless provided otherwise by this chapter, it shall be unlawful to erect a sign prior to the issuance of a permit for such sign according to this chapter.

Sec. 58-36. Service of notices, orders.

Unless noted otherwise, the service of all notices and orders pursuant to this chapter shall be by first class mail addressed to the last known place of residence of the addressee. If any person to whom a notice or order is addressed cannot be found after diligent effort to do so, service may be had upon such person by posting a copy of the notice or order in or about the premises described in the notice or order, or by causing such notice or order to be published in a newspaper of general circulation in the city for three consecutive days.

Sec. 58-37. Failure to comply with chapter, notice, correction period.

(a) Whenever the zoning official determines that any premises or sign thereon fails to comply with the requirements set forth in this chapter or in applicable rules and regulations issued pursuant thereto, the zoning official shall issue a written notice setting forth the alleged failures and ordering that such failures to be corrected. The notice shall:

- (1) Set forth the alleged violations.
- (2) Describe the premises where the violations are alleged to exist or to have been committed.
- (3) Provide a reasonable time, not to exceed fifteen (15) days, for the correction of any violation alleged, provided that the zoning official may grant an extension of time such as may be necessary for good cause shown.
- (4) State that non-compliance with the order may result in the imposition of civil and/or criminal penalties provided by law.

(b) It is unlawful for any person given notice pursuant to this chapter to fail to either correct the noncompliance or appeal to the sign board of appeals within the time prescribed by this chapter. If appealed to the board of appeals, the violation must be corrected within 30 days of a denial of an appeal.

Sec. 58-38. Abatement of prohibited signs.

If any person fails to comply with an order issued pursuant to Sec. 58-37, the zoning official may cause removal of the sign in noncompliance at the expense of the property owner or person having the beneficial use of the property or sign and the cost of abating such nuisance may be assessed against the property in the manner provided by §11.9 of the city charter. These procedures are optional and shall not preclude exercising other legal remedies for enforcement of this chapter.

Sec. 58-39. Civil remedies.

Any sign or sign structure erected, used or maintained in violation of this chapter or in disobedience to any order validly issued by the zoning official pursuant to this chapter is declared to be a nuisance per se, and the person owning or maintaining such sign shall be responsible for a municipal civil infraction punishable as set forth in chapter 1 of this code.

**DIVISION 2.
PERMITS**

Sec. 58-61. Permit required.

Except as provided in section 58-3 and 58-4, it shall be unlawful for any person to erect, alter, relocate or replace within the city any sign without first obtaining a permit from the zoning official, and making payment of the fee as provided for in this division.

Sec. 58-62. Permit application.

(a) Applications for permits required under this division shall be made upon forms provided by the zoning official.

(b) Applications submitted under this division shall contain or have attached to the required application form the following minimum information:

- (1) Name, address and telephone number of the applicant in addition to, as available, a facsimile number and email address.
- (2) Location of the building, structure, or lot to which the sign is to be attached or erected.
- (3) Position of the sign in relation to nearby buildings, structures, parking lots, roads and access drives, and property lines.
- (4) Two sets of drawings comprising a site plan and presenting sign information and specifications including dimensions, materials, and height; ground clearance; total display area and calculations confirming the sign's area complies with the area standards of this chapter; method of attachment to the wall or ground; location of the sign on the building and, in the case of a ground sign, its location on the lot and in relation to nearby buildings, structures, and property lines; setbacks from lot lines, right-of-ways, and access drives; and in the case of an EMC sign, the manufacturer's sign brightness specifications according to nit level.
- (5) Certification by the manufacturer, or a licensed civil or structural engineer, that the sign complies with the Michigan Construction Code.
- (6) Name and address of the person, firm, corporation or association erecting the sign.
- (7) Evidence of liability insurance as required by section 58-63.
- (8) If the applicant is not the property owner, the signed letter by the property owner authorizing the applicant's submittal.

- (9) Such other information as the zoning official may determine necessary to demonstrate compliance with this chapter and other city code and state requirements.

Sec. 58-63. Liability Insurance.

Before a permit is issued for any sign, the applicant shall file with the zoning official satisfactory evidence that a policy of general liability insurance with a combined single limit of not less than \$1,000,000.00 per occurrence has been obtained to cover the permitted work. This liability insurance requirement shall not apply in the case of signs less than six feet in height above the ground surface below and less than 16 square feet in sign area.

Sec. 58-64. Permit Fees.

A permit fee shall be paid to the city treasurer for each permit required by this division according to the rate schedule established by city council resolution and which may be revised periodically as determined appropriate by the city council.

Sec. 58-65 – 58-85. Reserved.

**DIVISION 3.
SIGN BOARD of APPEALS (SBA)**

Sec. 58-86. Purpose.

The purpose of this division is to establish a Sign Board of Appeals (SBA) to ensure that the objectives of this Chapter are fully and equitably achieved.

Sec. 58-87. Creation, membership, organization and general procedures.

The zoning board of appeals established by section 94-361 shall serve as the sign board of appeals (SBA) for the purpose of this chapter. Except as otherwise regulated by this chapter, membership, terms of office, organization and general procedures shall be as provided by article XI of chapter 94 including rules of procedure and officers, meetings and quorums, minutes, records, legal counsel, decisions and effective dates, and deferment of decisions.

Sec. 58-88. Affirmation of previous decisions.

The decisions of the SBA in place prior to this amended chapter 58, providing for the zoning board of appeals established by section 94-361 to serve as the SBA, are unchanged and reaffirmed and shall continue in full effect.

Sec. 58-89. Jurisdiction.

The SBA shall act upon questions as they arise in the administration of this Chapter and take other actions as specified in this Chapter. The SBA shall not have the power to alter or change the terms or intent of this Chapter, but shall have the power to act on those matters so specified in this Chapter including interpretations of its provisions, the approval of variances from the requirements of this Chapter, and the review of an order, requirement, decision, or determination made by an administrative official or body charged with the administration or enforcement of this Chapter.

Sec. 58-90. Appeals for Administrative Reviews

(a) *Authority:* The SBA shall hear and decide appeals where it is alleged by the appellant that there is an error in any order, requirement, permit, or decision by the zoning official or by any other body or official in administering or enforcing the provisions of this Chapter. Within this capacity the SBA may reverse or affirm, wholly or partly, or may modify the order, requirement, decision, or determination of such body or official.

(b) *Standards:* The SBA shall reverse or otherwise modify the decision of such body or official from whom the appeal is taken only if it finds that the action or decision appealed meets one (1) or more of the following:

- (1) Was arbitrary or capricious.
- (2) Was based upon an erroneous finding of a material fact.
- (3) Constituted an abuse of discretion.
- (4) Was based upon erroneous interpretation of this Chapter or other portion of the city code.
- (5) Did not follow required procedures.

(c) *Procedures:*

(1) *Application Requirements:*

a. *Processing:* A written application for an administrative review shall be filed with the Community Development Director on a form established for such purpose, along with a fee as established by resolution of the city council. The application shall be submitted within twenty-one (21) days after the date of the meeting during which the meeting minutes addressing the decision being appealed was approved. The Director shall determine, pursuant to this Chapter, if the application is sufficiently complete including the required data and fee. If the application is determined to be incomplete, the Director shall return the application and fee to the applicant within seven days of receipt of the application, along with a written explanation of the application's deficiency. The Director shall forward complete applications to the SBA.

b. *Content and Copies:* Application for an administrative review shall specify, at a minimum, the name, address, and phone number of the applicant; the decision being appealed; the basis for the appeal; and any additional information as may be required on the application form. A minimum of ten copies of the application shall be submitted unless the Community Development Director approves a lesser number.

(2) *Stay:* An appeal of an administrative decision shall stay all proceedings in furtherance of the action appealed unless the officer or body from whom the appeal is taken certifies to the SBA, after the notice of appeal is filed, that by reason of facts stated in the certification, a stay would, in the opinion of the officer or body, cause imminent peril to life or property. If such a certification is filed, the proceedings shall only be stayed by a restraining order. A restraining order may be granted by the SBA or by the circuit court, on application, on satisfactory demonstration of due cause.

(3) *Record of Facts / Transmission of Record:* Upon receipt of an application for administrative review, the Community Development Director shall transmit to the SBA all papers constituting the record associated with the decision being appealed. In hearing and deciding administrative appeals, the SBA's review shall be based upon the record of the administrative decision being appealed.

a. The SBA shall not consider new information which had not been presented to the administrative

official or body that made the decision subject to the appeal except where the SBA first remands the matter back to the body that made the original administrative decision with an order to consider the new information and affirm or modify its original decision.

(4) *Hearing:* Upon receipt of an application, the chairperson of the SBA shall fix a reasonable time and date for a hearing, taking into account adequate time for members of the SBA to review the application prior to such hearing. Notice of the hearing shall comply with Sec. 94-101. Upon the hearing, any party may appear in person or by agent or attorney. See subsection (5) regarding participation at the hearing by a member of the SBA who is also a member of the Planning Commission or the City Council.

(5) *Decision:* The SBA shall render a decision in the form of a motion containing a full record of the findings and determination of the SBA and basis for such determination, and shall be made part of the meeting minutes. The concurring vote of a majority of the members of the SBA shall be necessary to reverse or otherwise modify the action subject to the appeal. A member of the SBA who is also a member of the body that participated in the decision subject to the appeal shall not participate in the SBA's public hearing, deliberation, or vote, on the decision being appealed. However, the member may consider and vote on other unrelated matters involving the same sign application.

Sec. 58–91. Interpretations

(a) *Authority:* The SBA shall hear and decide upon requests to interpret the provisions of this Ordinance when it is alleged that certain provisions are not clear or that they could have more than one meaning, including the application of a sign standard pertaining to height, area, setback and related standards, to a specific proposed sign.

(b) *Standards:* In deciding on an interpretation, the SBA shall be guided by the following:

(1) All interpretations shall take into account any relevant interpretations previously issued by the SBA and any relevant past administration practices.

(2) Prior to deciding a request for an interpretation, the SBA may confer with City staff and consultants to gain insight into the provision subject to interpretation and any consequences that may result from differing decisions.

(3) An interpretation shall be consistent with the intent and purpose of section 58-1 and the specific article in which the language in question is contained.

(4) An interpretation shall apply to the specific provision for which the interpretation is requested, and shall not extend to matters beyond such specific provision.

(c) *Procedures:*

(1) *Application Requirements:*

a. *Processing:* A written application for an interpretation shall be filed with the Community Development Director on a form established for such purpose, along with a fee as established by resolution of the city council. The Director shall determine, pursuant to this Article, if the application is sufficiently complete including the required data and fee. If the application is determined to be incomplete, the Director shall return the application and fee to the applicant within seven days of receipt of the application, along with a written explanation of the application's deficiency. The Director shall forward complete applications to the SBA.

b. *Content and Copies:* Application for an interpretation shall specify, at a minimum, the name, address, and phone number of the applicant; the standard, regulation or provision requiring an interpretation; a plot plan, site plan, or similar drawing illustrating the application or relevance of such interpretation; and any additional information as may be required on the application form. A minimum of ten copies of the application shall be submitted unless the Community Development Director approves a lesser number.

(2) *Hearing:* Upon receipt of an application, the chairperson of the SBA shall fix a reasonable time and

date for a hearing, taking into account adequate time for members of the SBA to review the application prior to such hearing. Notice of the hearing shall comply with Sec. 94-101. Upon the hearing, any party may appear in person or by agent or attorney.

(3) *Decision:* The SBA shall render a decision in the form of a motion containing a full record of the findings and determination of the SBA, and basis for such determination, and shall be made part of the meeting minutes. The concurring vote of a majority of the members of the SBA shall be necessary to make an interpretation. A decision on an interpretation may be accompanied by a recommendation to the Community Development Director for consideration of an amendment of the Chapter to address what the SBA may find is a problematic aspect of the Chapter.

Sec. 58-92. Variances

(a) *Authority:* The SBA shall have the power to authorize specific variances from specific standards and requirements of this Chapter, such as sign area, sign height, sign type, number of permitted signs and modifications to nonconforming signs.

(b) *Standards:* The SBA shall have the power to authorize variances from specific standards and requirements provided that all of the standards listed below are met and the record of proceedings of the SBA contains evidence supporting each conclusion.

(1) That there are practical difficulties that prevent carrying out the strict letter of this Chapter due to unique circumstances specific to the property such as conditions impacting the visibility of proposed signage and conditions interfering with reasonable alterations and/or replacement of nonconforming signs, that do not generally apply to other property or signage subject to the same standards and requirements, and shall not be recurrent in nature. These difficulties shall not be deemed economic, but shall be evaluated in terms of the legitimate identification, advertising and informational needs of the property in question.

(2) That the practical difficulty or special circumstance is not a result of the actions of the applicant.

(3) That the variance will relate only to property described in the variance application.

(4) That the variance will be in harmony with the purpose of Chapter 58, including the balancing of signage needs with community interests in traffic safety, minimizing visual clutter and blight, and decreased property values that can result from excess signage.

(5) That the variance will not cause a substantial adverse effect upon surrounding property including property values and the development, use and enjoyment of surrounding property.

(6) That strict compliance with the requirement in question would unreasonably prevent the owner from realizing legitimate signage needs.

(7) That the variance requested is the minimum amount necessary to overcome the inequality inherent in the particular property or mitigate the practical difficulty.

(c) *Procedures*

(1) *Application Requirements:*

a. *Processing:* A written application for a variance shall be filed with the Community Development Director on a form established for such purpose, along with a fee as established by resolution of the city council. The Director shall determine, pursuant to this Article, if the application is sufficiently complete including the required data and fee. If the application is determined to be incomplete, the Director shall return the application and fee to the applicant within seven days of receipt of the application, along with a written explanation of the application's deficiency. The Director shall forward complete applications to the SBA.

b. *Content and Copies:* Application for a variance shall specify, at a minimum, the name, address, and phone number of the applicant; the legal description for the lot subject to the variance; a specification of the Ordinance's standards for which a variance is sought and the specific variance being requested; and a plot plan, site plan, elevation drawing or similar drawing prepared by a

registered land surveyor or registered engineer that clearly illustrates property lines, property line bearings and dimensions, existing buildings and structures; the proposed sign or sign modifications for which the variance is requested; and any additional information as may be required on the application form. A minimum of ten copies of the application shall be submitted unless the Community Development Director approves a lesser number.

c. *Applicant's Responsibility:* It shall be the responsibility of the applicant to provide any information the applicant may find beneficial in demonstrating conformance with the standards of Sec. 58-92(b).

(2) *Hearing:* Upon receipt of an application, the chairperson of the SBA shall fix a reasonable time and date for a hearing, taking into account adequate time for members of the SBA to review the application prior to such hearing. Notice of the hearing shall comply with Sec. 94-101. Upon the hearing, any party may appear in person or by agent or attorney.

(3) *Decision:* The SBA shall render a decision in the form of a motion containing a full record of the findings and determination of the SBA, and basis for such determination, and shall be made part of the meeting minutes. The concurring vote of a majority of the members of the SBA shall be necessary to grant a variance.

a. *Conditions:* In granting a variance, the SBA may prescribe appropriate conditions to ensure compatibility with adjacent signage or uses of land, ensure public health, safety, and welfare, or otherwise support the intent and purpose of Chapter 58. All conditions shall be recorded in the record of the approval action and remain unchanged except upon the mutual consent of the SBA and the applicant. The SBA shall maintain a record of conditions that are changed. Conditions imposed shall meet all of the following requirements:

b. *Performance Guarantee:* The SBA may require that a performance guarantee be furnished as a condition of approval in granting a variance, in accordance with section 94-100.

(d) *Time Restriction/Voidance:* A variance shall become null and void unless the construction authorized by such variance has been commenced within one-hundred eighty (180) days after the granting of the variance, and there is a continuous good faith intention to continue construction to completion. The SBA may extend this time limit upon its finding that no substantial changes have occurred to the standards and requirements of Chapter 58, abutting properties, or other conditions that undermine the basis for the original issuance of the variance.

(e) *Resubmittal:* No application for a variance that has been acted upon shall be resubmitted for a period of one (1) year from the date of denial, except on the grounds of newly-discovered evidence or proof of changed conditions having bearing on the basis for the original denial, in the discretion of the SBA.

Section 58-93 – 58-125. Reserved.

ARTICLE III. STANDARDS AND OTHER REQUIREMENTS

Sec. 58–126. Signs prohibited.

The following signs are prohibited, whether temporary or permanent, except where expressly authorized elsewhere in this Chapter.

- (1) Signs that are not structurally safe and or inadequately anchored or stabilized to prohibit collapse or becoming airborne or otherwise constituting a hazard to safety or health including the potential for electrical shock.
- (2) Signs that obstruct free and clear vision of approaching, intersecting or merging traffic.
- (3) Signs that obstruct ingress or egress from a required door, window or other required point of ingress or egress.

- (4) Signs affixed to a parked vehicle, trailer or item designed for tow, with a cumulative sign area greater than 20 square feet on any one side of such vehicle, trailer or item designed for tow, that is being used principally for advertising purposes due to its regularly parked or stored location rather than its regular use for transportation purposes.
- (5) Signs placed in, upon, or over any public right-of-way, street, alley, sidewalk or other public place, except upon approval of the governmental entity having jurisdiction over such public place.
- (6) Signs that have any moving or flashing lights, signs that revolve or have any visible moving parts, revolving parts or visible mechanical movement of any type, or signs that have other apparent visible movement or sound irrespective of the cause of the movement or sound.
 - a. Signs comprised of banners, pennants, festoons, spinners, and/or streamers, and similar devices, that move due to wind or mechanical devices are prohibited except as otherwise expressly authorized in association with a temporary sign according to section 58-128. This limitation shall not be construed to prohibit electronic message signs that rely on light-emitting diodes (LEDs) provided such signs are in compliance with Section 58-128(6).
- (7) Any sign depicting or describing sexual intercourse, specified anatomical areas, or specified sexual activities as defined in section 94-173(h) of this code.
- (8) All other signs not expressly authorized by this chapter and/or otherwise unlawfully erected or maintained.

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Sec. 58–127. Permanent signs permitted by district.

(a) Table 58-127.1 identifies authorized permanent signs in each district according to the limitations specified in the Table regarding sign type, number, area, height and setbacks. The signs authorized by this section are permitted in addition to other signs authorized by this chapter, and the signs permitted by this section shall not be applied toward the permissible sign areas authorized by other sections of this chapter. See Sec. 58-128 regarding temporary signs.

Table 58-127.1

FS = Free-Standing Sign **WS** = Wall Sign **PS** = Projecting Sign **WS** = Window Sign

Districts	Authorized Signs and Number	Maximum Area of Signs	Maximum Sign Height	Minimum Freestanding Sign Lot Line Setback
AG, RS-1, RS-2, RS-3, MH, R2F, and RM	<p>FS: 1.</p> <p>WS: No number restriction.</p> <p>See “Special Provisions” for signs for dwellings.</p>	<p>FS: 34 sq. ft.</p> <p>WS: Not to exceed 5% of area of the building’s face on which the signage is attached, but not to exceed 200 sq. ft.</p>	<p>FS: 8 ft.</p> <p>WS: Top of wall, but no higher than the roof eave or 20 ft., whichever is less.</p>	1 ft. from front lot line and 5 ft. from side and rear lot lines, except 15 ft. from a lot in an AG or Residential District.
C-1, C-2, C-3, O-1 and O-2	<p>FS: 1.</p> <p>WS: No number restriction.</p> <p>PS: 1, permitted in C-1 District only.</p> <p>RS: 1, permitted in C-2 District only.</p>	<p>FS: 30 sq. ft.</p> <p>WS: Not to exceed 10% of area of the building’s face on which the signage is attached, but not to exceed 300 sq. ft.</p> <p>PS: 6 sq. ft.</p> <p>RS: 200 sq. ft., but not to exceed in length 25% of the length of the roof.</p>	<p>FS: 20 ft., except 10 ft. in C-1.</p> <p>WS: Top of wall, but no higher than the roof eave.</p> <p>PS: 14 ft., and no less than 8 ft.</p> <p>RS: 20 ft.</p>	1 ft. from front lot line and 5 ft. from side and rear lot lines, except 10 ft. from all lot lines if sign exceeds 20 ft. in height, and 15 ft. from a lot in an AG or Residential District.
M-1 and M-2	<p>FS: 1.</p> <p>WS: No number restriction.</p>	<p>FS: 42 sq. ft., except 24 sq. ft. if 10 ft. or greater in height.</p> <p>WS: Not to exceed 10% of area of the building’s face on which the signage is attached, but not to exceed 300 sq. ft.</p>	<p>FS: 20 ft.</p> <p>WS: Top of wall, but no higher than the roof eave.</p>	1 ft. from front lot line and 5 ft. from side and rear lot lines, except 10 ft. from all lot lines if sign exceeds 20 ft. in height, and 15 ft. from a lot in an AG or Residential District.
PUD	In the case of a PUD District, the sign standards applicable to each use shall comply with the district standards of this Table that the zoning official finds most similar to each of the respective uses contained in the PUD.			

See “Table 58-127.1 Special Provisions.”.

Table 58-127.1 –Special Provisions

(1) *Freestanding Signs on Double Frontage Lots.* In the case of a corner lot or through lot, one freestanding sign is permitted along each frontage provided the respective frontage meets a minimum of fifty percent of the District's required lot width dimension or otherwise provides public access into the lot by way of a driveway or similar means of access.

(2) *Signs for a Multiple-Tenant Building.*

a. Wall Signs.

1. In the case of a multiple-tenant building, the permissible sign area on that portion of a building wall housing a storefront tenant shall be ten percent of the area of that portion of the building wall.

2. In the case of a multiple-tenant building, the cumulative total signage upon a building face shall not exceed ten percent of the area of such building face, except as follows:

a. In the case of tenant spaces that are not storefronts, an additional three square feet of signage is permitted within 18 inches of an exterior entrance to such tenant space.

b. One sign, in addition to the signage permitted to occupy up to ten percent of the area of such building face, such as in the case of a development identification sign, shall be permitted provided such sign shall not exceed five percent of the area of the building face.

b. Other Signs. All other signs in association with a multiple-tenant building shall comply with Table 58-127.1. See also sign provisions for business centers in (3).

(3) *Signs for a Business Center.*

a. Freestanding signs.

1. A business center shall be permitted one free-standing sign according to the height, area and setback standards of Table 58-127.1. In the case of a business center that exceeds three hundred (300) linear feet of building length along a single street, one additional such sign is permitted.

2. In addition to the signage permitted by subsection (a), where the business center is comprised of multiple buildings and served by an internal road network, one freestanding sign shall be permitted for each building provided each sign is located in the immediate proximity of the building to which it pertains, does not exceed five feet in height and 20 square feet in area, and complies with the setback standards of Table 58-127.1.

b. Other Signs. All other signs in association with a business center shall comply with Table 58-127.1 except as may be provided in the case of a multiple-tenant building according to subsection (3).

(4) *Dwelling signs.* Permanent signs on a lot on which the principal use is one or more dwelling units shall comply with the following:

a. One wall sign and one freestanding sign may be erected for each dwelling unit on a lot where such lot is used for single-family or two-family dwelling purposes. A wall sign shall not exceed four square feet in area and eight feet in height. A freestanding sign shall not exceed three square feet in area, shall not exceed three feet in height, and shall be setback a minimum distance of five feet from all lot lines.

b. One sign may be erected within 10 feet of a building entrance within a multiple family dwelling development. Such sign shall not exceed six feet in height and six square feet in area, and shall comply with the setback standards of Table 58-127.1.

c. The limitations of subsections (a) and (b) shall not prohibit the display of an additional non-illuminated address identification sign, part of a mailbox or mailbox support, to facilitate identification of the property for postal and emergency vehicles. Such sign shall not exceed one square foot in area.

(5) *Driveway/entrance signs.* The following permanent signs are permitted, excluding on lots used for single and two-family dwelling purposes, which are regulated under subsection (4).

a. One sign is permitted at the intersection area of a public street and an access drive to a parking lot. Such

sign shall not exceed four square feet in area and four feet in height and shall be located within 10 feet of the edge of the driveway and street right-of-way.

b. One sign is permitted at an entrance to a residential or non-residential development consisting of a platted subdivision, condominium subdivision, multiple family development, manufactured housing community, or other unified development consisting of at least five dwelling units or at least three buildings used for commercial, industrial or other purposes. Such sign shall not exceed 40 square feet in area and six feet in height, and shall comply with the setback standards of Table 58-127.1. A second sign shall be permitted in the case where both signs are single sided provided the combined area of both signs shall not exceed 40 square feet

c. One sign is permitted at an exterior door of a building. Such sign shall have a maximum height of six feet and shall not exceed six square feet in area. The sign shall not be farther than ten feet from such door and shall comply with the setback standards of Table 58-127.1.

(6) *Drive-in/drive-through signs.* One sign, with a maximum height of eight feet and a maximum area of 32 square feet, is permitted per drive-through lane and/or drive-in station and shall be oriented to drivers within such lane or station. Such sign shall comply with the setback standards of Table 58-127.1 except that no such sign shall be located within 30 feet of a street right-of-way. If such sign is legible from a street right-of-way, the area of such sign shall be included in the computation of total permanent wall or freestanding sign area for the lot, as applicable.

(7) *Flags.*

a. In Agricultural and Residential Districts, no more than one flag shall be erected on a lot. Such flag shall not exceed 20 square feet in area and 20 feet in height, and shall be set back from all lot lines a minimum of 20 feet.

b. In districts other than Agricultural and Residential Districts, no more than one flag shall be erected on a lot. Such flag shall not exceed 35 square feet in area and 25 feet in height and shall be set back from all lot lines a minimum of 25 feet.

(8) *US-127 Signs.* Additional signage shall be permitted on lots in the C-2 General Commercial, M-1 Light Manufacturing and M-2 General Manufacturing zoning districts, subject to the following limitations.

a. Off-premise signs located within 900 feet of a US-127 interchange shall comply with the following:

1. Number. Not more than one addition sign shall be permitted on a lot, provided each such sign shall be spaced a minimum distance of 600 feet from another such sign on the same side of a street and shall be spaced a minimum distance of 300 feet from another such sign on the opposite side of a street. Sign spacing shall be measured along a line parallel to the right-of-way of said street.

2. Height and area. Such sign shall not exceed 25 feet in height and 300 square feet in area.

3. Placement. Such sign shall be setback at least 35 feet from a public or private street right-of-way and shall not be closer than 500 feet from the property line of a residentially zoned or used property.

b. Off-premise signs located more than 900 feet from a US-127 interchange shall comply with the following:

1. Number. Not more than one addition sign shall be permitted on a lot.

2. Height and area. Such sign shall not exceed 10 feet in height and 40 square feet in area.

3. Placement. Such sign shall be setback from lot lines as provided by section 58-127.

c. For the purpose of this section, distance to a US-127 interchange shall be measured by a straight line drawn from the nearest point of an on or off ramp right-of-way of such interchange to the farthest point of the sign.

d. Nothing contained in this section shall permit a sign or sign structure that is otherwise prohibited by the State Highway Advertising Act of 1972, 1972 PA 106, or shall require or cause the removal of lawfully erected signs or sign structures permitted under said act.

Sec. 58–128. Temporary signs permitted by district.

(a) In addition to all other signs authorized by this chapter, temporary signs are permitted according to the requirements and limitations of this section. Signs permitted by this section shall not be applied toward the permissible number and area of signs authorized by other sections of this chapter unless otherwise provided.

(b) Temporary signs shall comply with the standards of Table 58-128.1 regarding sign type, number, area, height and setbacks. The following additional limitations shall apply:

(1) *Duration.* There are no time restrictions on the display of temporary signs except where otherwise provided in this chapter.

(2) *Illumination.* A temporary sign shall not be illuminated within an Agricultural or Residential District, and shall not be illuminated from 11:00 p.m. to 6:00 a.m. in all other districts unless otherwise provided in this section.

(c) *Districts Not Referenced.* In the case where Table 58-128.1 does not address a district established under this Ordinance, the unaddressed district shall be subject to the same standards to which it is most similar based on the stated purpose of the district and/or the scope of permitted uses.

Table 58-128.1

See “Special Provisions” on following page.

Districts	Maximum Permitted Number of Temporary Signs, Corresponding Maximum Sign Area, and Display Duration	Maximum Sign Height	Minimum Sign Setback from Lot Lines
AG, RS-1, RS-2, RS-3, MH, R2F, and RM	1 sign not to exceed 3 sq. ft. 1 sign not to exceed 4 sq. ft. Except in the case of a single-family or two-family dwelling, 1 sign not to exceed 24 sq. ft. provided such sign is not displayed for more than 2 periods per calendar year and not exceeding 15 days in each period. In the AG District only, 1 additional sign when in or at the edge of a field under cultivation, with each sign not to exceed 6 sq. ft. and spaced a minimum of 60 ft. from any other such sign.	3 ft. 4 ft. 8 ft. 4 ft.	10 ft. 10 ft. 15 ft. 1 ft.
C-1, C-2, C-3, O-1 and O-2	1 sign not to exceed 6 sq. ft. 1 sign not to exceed 10 sq. ft. 1 sign not to exceed 40 sq. ft. provided such sign is not displayed for more than 2 periods per calendar year and not exceeding 30 days in each period.	5 ft. 6 ft. 10 ft.	For all signs, 10 ft. from all lot lines except 20' if the adjacent yard is in a district other than a commercial, office, or industrial district.
O-1 and O-2	2 signs not to exceed 6 sq. ft. 1 sign not to exceed 40 sq. ft. provided such sign is not displayed for more than 2 periods per calendar year and not exceeding 30 days in each period.	5 ft. 10 ft.	For all signs, 10 ft. from all lot lines except 20' if the adjacent yard is in a district other than a commercial, office, or industrial district.
M-1 and M-2	2 signs not to exceed 6 sq. ft. 1 sign not to exceed 40 sq. ft. provided such sign is not displayed for more than 2 periods per calendar year and not exceeding 30 days in each period.	5 ft. 10 ft.	For all signs, 10 ft. from all lot lines except 20' if the adjacent yard is in a district other than a commercial, office, or industrial district.
PUD	In the case of a PUD District, the sign standards applicable to each use shall comply with the district standards of this Table that the zoning official finds most similar to each of the respective uses and/or lots contained in the PUD.		

Table 58-128.1 Special Provisions

- (a) In addition to the temporary signs authorized by Table 58-128.1, in the case of a lot that is occupied by two or more dwelling units or two or more tenant spaces, one sign may be displayed by each dwelling or tenant provided such sign shall not exceed a height of three feet and an area of three square feet. Such temporary signs shall be set back from all lot lines a minimum distance of five feet.
- (b) In addition to the temporary signs authorized by Table 58-128.1 and these Special Provisions, additional temporary signs shall be permitted under the following conditions.
- (1) *Construction Sites.* Temporary signs are permitted on lots on which a building is being erected or altered and for which all necessary building permits have been granted, provided such signs do not exceed two (2) per road frontage, do not exceed a cumulative total of 48 square feet in area per road frontage, and do not exceed a maximum six feet in height. Such signs shall be erected no earlier than thirty (30) days prior to the commencement of construction and shall be removed no later than 30 days after a certificate of occupancy is issued or eighteen months, whichever occurs first.
- a) In the case of a sign in association with the construction of a single-family or two-family dwelling, no more than 20 square feet of signage is permitted per road frontage and no individual sign shall exceed four feet in height and six square feet in area.
- (2) *Public Vote.* Temporary signs may be displayed during the 60-day period prior to and the 15-day period after a public vote. The cumulative area of all such signs on a lot shall not exceed 72 square feet and no single sign shall exceed six feet in height and 12 square feet in area.
- (3) *Real Estate.*
- a) In the case of the sale or lease of a lot, building, building space, or residence, one temporary sign shall be permitted for each 300 feet of continuous road frontage or portion thereof. No sign shall exceed a height of six feet and an area of six square feet. Such sign shall be removed within five days of the sale or lease.
- b) A platted subdivision, site condominium, multiple family development, manufactured housing community, or other unified residential or non-residential development consisting of at least five dwelling units or tenant spaces, or at least three buildings used for commercial, industrial or institutional purposes, is permitted one temporary sign not exceeding six feet in height and 32 square feet in area. Such sign shall be removed after two years after initial erection or after the sale and/or lease of ninety percent (90%) of all lots, units, tenant spaces or buildings within said development, whichever occurs first.
- (c) In the case of the proposed use of a lot for other than a one-family or two-family dwelling purposes, and prior to the erection of a permanent sign, a temporary sign may be erected for a period not exceeding 60 days and shall be removed within 10 days after the use becomes operational, whichever occurs first. Such sign shall comply with the standards of Table 58-127.1, as if the temporary sign is a permanent sign.
- (d) In addition to the temporary signs authorized by Table 58-128.1 and these Special Provisions, wind-blown devices and inflatable devices are permitted subject to the following conditions.
- (1) *Wind-blown devices.* Wind-blown devices *such as pennants, spinners, streamers, and flags* shall be permitted in the C-1, C-2 and C-3 Districts only, for a period not to exceed seven days during any 30 consecutive day period.
- (2) *Balloons, and inflatable devices.* Balloons and other inflatable devices shall be permitted in the C-1, C-2 and C-3 Districts only, for a period not to exceed 14 days during any 90 consecutive day period.

Sec. 58–129. Design and placement standards.

Signs shall comply with the design and placement requirements of this section unless otherwise exempted in this chapter.

- (1) *Address numbers.* The street address number of the parcel shall be placed on the sign face or sign structure. The individual numbers indicating the address shall be uniform in style and size and shall be a minimum of three inches in height. The overall area of the street address number shall not count against the maximum allowable area of the sign, provided the street address number does not exceed two square feet.
- (2) *Materials, construction and maintenance.*
 - a. Signs shall be constructed and maintained in a manner consistent with building code provisions and maintained in good structural condition at all times, free of hazards to the general public. Signs shall not be constructed from materials that are remnants or manufactured for a different purpose. Signs shall be kept neatly painted, stained, sealed or preserved including all metal parts and supports. Signs shall be maintained free of peeling material, fading, rust, rot, insect infestation or other conditions reflective of a state of disrepair.
 - b. A sign shall be integrally designed so that its elements are of a unified character and shall not be comprised of an assemblage of different sign types and materials. Opposing sign faces of differing shapes and/or sizes, resulting in the back of one face not being fully obscured by the opposing face of the sign, are prohibited. No pole, column or similar support shall be used to accommodate more than one (1) sign serving the same business, tenant or occupant of a lot.
 - c. Permanent signs shall be designed so that the supporting framework, other than the supports for a freestanding sign, are contained within or behind the face of the sign or within the building to which it is attached so as to be totally screened from view.
 - d. Permanent freestanding sign with a height of ten feet or less shall also comply with the following standards:
 1. Support for the sign face shall be provided by a structure consisting of either a continuous base with a width equal to or greater than that of the sign face, or by two supports placed closer to the ends than the middle of the sign face. The use of a single pole to support the sign shall not be permitted.
 2. The overall width of the sign structure, as measured between the outermost extremes of the sign structure, shall not exceed the width of the sign face by more than 50 percent.
- (3) *Wall signs.* Wall signs shall comply with the following.
 - a. Depth and height. A wall sign shall not extend from a wall in excess of eighteen inches.
 - b. Vertical dimension. The maximum vertical dimension of a wall sign shall not exceed one third (1/3) of the building height.
 - c. Horizontal Dimension. The maximum horizontal dimension of any wall sign shall not exceed three-fourths (3/4) of the width of the building.
- (4) *Sidewalk signs.* Signs may be placed on a public sidewalk, referred to as sidewalk sign, subject to the following:
 - a. A sidewalk sign shall be of A-frame construction with a minimum base spread of two feet and a maximum height of four feet. A sidewalk sign may not exceed eight square feet per side.
 - b. One sidewalk sign is permitted per storefront tenant.
 - c. A sidewalk sign shall be placed in front of the storefront tenant to which the sign pertains.
 - d. A minimum of four feet of unobstructed sidewalk shall remain between the sidewalk sign and the building.
 - e. A sidewalk sign shall not be placed in any manner that obstructs pedestrian circulation, interferes with the opening of doors of parked vehicles, or interferes with snow removal operations.

- f. A sidewalk sign shall not be illuminated and shall not have any moving parts.
- g. A sidewalk sign shall only be in place during the business hours of the storefront tenant to which the sign pertains.
- h. The entity responsible for the sidewalk sign shall sign a document that indemnifies and holds the city harmless from any accidents, damages, or personal injuries involving the sign.

(5) Electronic message signs shall comply with both of the following:

- a. The sign shall not utilize any scrolling or moving text or images.
- b. A message or image shown on the sign shall remain fixed for a period of not less than 15 seconds.
- c. Any change or transition in the display of a message or image shall not exceed one second in duration.
- d. The sign shall not have any message or image changes during the hours from 6:00 p.m. to 7:00 a.m. when located in an Agricultural or Residential District.
- e. The sign shall be equipped with automatic dimming technology that automatically adjusts the sign's brightness in direct correlation with ambient light conditions. The sign shall not exceed a brightness level of 0.3 foot candles above ambient light as measured using a foot candle meter at a distance determined by the square root of the sign's square foot area multiplied by 100. An example of such a determination in the case of a 12 square feet sign is:

$$\sqrt{(12 \times 100)} = 34.6 \text{ feet measuring distance}$$

(6) *Lighting.*

- a. Authorized Lighting. Signs may be illuminated unless specified otherwise, and may be internally or externally illuminated unless specified otherwise.
- b. Moving Illumination. No sign shall include flashing, blinking, intermittent, moving or variable intensity illumination except as authorized in association with an electronic message center (EMC) sign.
- c. Exterior Illumination. Exterior illumination of a sign shall not result in reflected light that exceeds a brightness level of 0.3 foot candles above ambient light as measured according to the same specifications for electronic message signs. Use of glaring undiffused lights or bulbs is prohibited. Sign illumination shall not distract motorists or otherwise create a traffic hazard.
- d. Source and projection of illumination. The source of sign illumination shall be shielded from traffic and adjacent properties and shall not be visible beyond the property line of the lot on which the sign is located. All externally lit signs shall be illuminated by lights affixed to the sign and directed downward on the sign face only. This subsection shall not apply to neon lights and exposed bulbs, including marques signs, provided such lights and bulbs shall not exceed fifteen watts.

(7) *Clear vision area.* Freestanding signs shall comply with the clear vision area described in section 94-172(d)(3) of this code and figure 100-103 in chapter 100 of this code.

(8) *Measurements.*

- a. Sign area measurements. The area of a sign shall be computed by calculating the square footage of a sign face as measured by enclosing the most protruding points or edges of all sign faces of the sign within a parallelogram, rectangle, triangle, circle, cylinder, cone or combination thereof, including any framing.
 - 1. Where a sign has two or more similarly shaped faces placed back-to-back, and at no point are less than 18 inches apart from one another, the area of the sign shall be the area of one face. Where a sign has two or more similarly shaped faces placed back-to-back, and are greater than 18 inches apart from one another at any point, the area of the sign shall be the combined area of each face.
 - 2. In the case of a sign with three or more faces, the area of the sign shall be the area of all faces combined.

b. Sign setback measurements.

1. The distance between two signs shall be measured along a straight horizontal line that represents the shortest distance between the nearest parts of the two signs as viewed from above in plan or bird's eye view.
2. The distance between a sign and a property line, parking lot or building, shall be measured along a straight horizontal line that represents the shortest distance between the property line or outer edge of the parking lot or building, and the leading edge of the sign as viewed from above in plan or bird's eye view.

c. Sign height measurements. The height of a sign shall be measured from the highest point of the sign, including all frame and structural members of the sign, to the ground elevation directly below the sign face. The height of a sign placed upon a berm shall be measured from the base elevation of the berm.

Sec. 58-130. Nonconforming signs.

This ordinance is intended to encourage the eventual elimination over time of signs that do not comply with this chapter while avoiding any unreasonable invasion of established property rights. Where a lawful sign exists on the effective date of this chapter, or an amendment thereof, that is made no longer permissible under the requirements of this chapter, such sign may be continued so long as it remains otherwise lawful, subject to the following provisions:

- (1) The sign shall be maintained according to section 58-129(2).
- (2) A nonconforming sign shall not be enlarged, expanded or extended, so as to increase its nonconformity.
- (3) The sign shall not be replaced by another nonconforming sign or be structurally altered so as to prolong the life of the sign, but such sign may be structurally altered to remove its nonconforming status.
- (4) Should the sign be damaged by any means to an extent equivalent to more than 50 percent of the replacement cost at the time of damage, as determined by the zoning official, said sign shall be reconstructed only in conformance with the provisions of this chapter.



TO: Planning Commission

FROM: Elizabeth A. Hude, AICP - Community Development Director

SUBJECT: Text Amendment to O-1 and O-2 Office Districts

DATE: March 8, 2018

Staff is recommending a text amendment to both O-1 and O-2 Office Districts to add residential uses on the ground floor as follows:

Uses permitted by right:

(9) Residential use that meets the minimum floor area standards of the R2F Two-Family residential district.

Uses authorized by special use permit:

(8) Residential use that meets the minimum floor area standards of the RS-3 Single Family residential district.

Many properties in the O-1 and O-2 Office Districts are currently in use as a residence and have existed as residential since they were built. Under the current zoning, residential uses in and O-1 or O-2 are allowed to continue as pre-existing non-conforming, but cannot be expanded, nor can a building revert back to a residence once it has changed to a permitted Office District use. If a resident wanted to invest in their property, they would be limited to projects that did not increase the footprint of the residence. By allowing residential uses in an Office District, these pre-existing residential uses would revert to a conforming, by-right status.

There are approximately 62 properties zoned O-1 Office District and fourteen (14) properties zoned O-2 Office District. They are shown on the attached Figure 1. The Future Land Use Map shows the areas as Mixed-Use and Commercial. Several sections of our master plan suggest we consider opportunities to create housing in areas served by public utilities (Smart Growth), in areas that create density to support our commercial districts, and support the reuse of existing buildings. Adding residential uses to Office Districts provides for more market driven uses of the property and are consistent with mixed-use zoning. The proposed residential uses are consistent with zoning adjacent to the parcels zoned O-1 and O-2.

The text of our zoning ordinance for O-1 and O-2 Office Districts and with suggested changes from Chapter 94 and related tables from Chapter 100 are attached for further discussion.

MASON

Figure 1. Parcels Zoned as Office Districts
O1 - Green
O2 - Yellow

March 2018

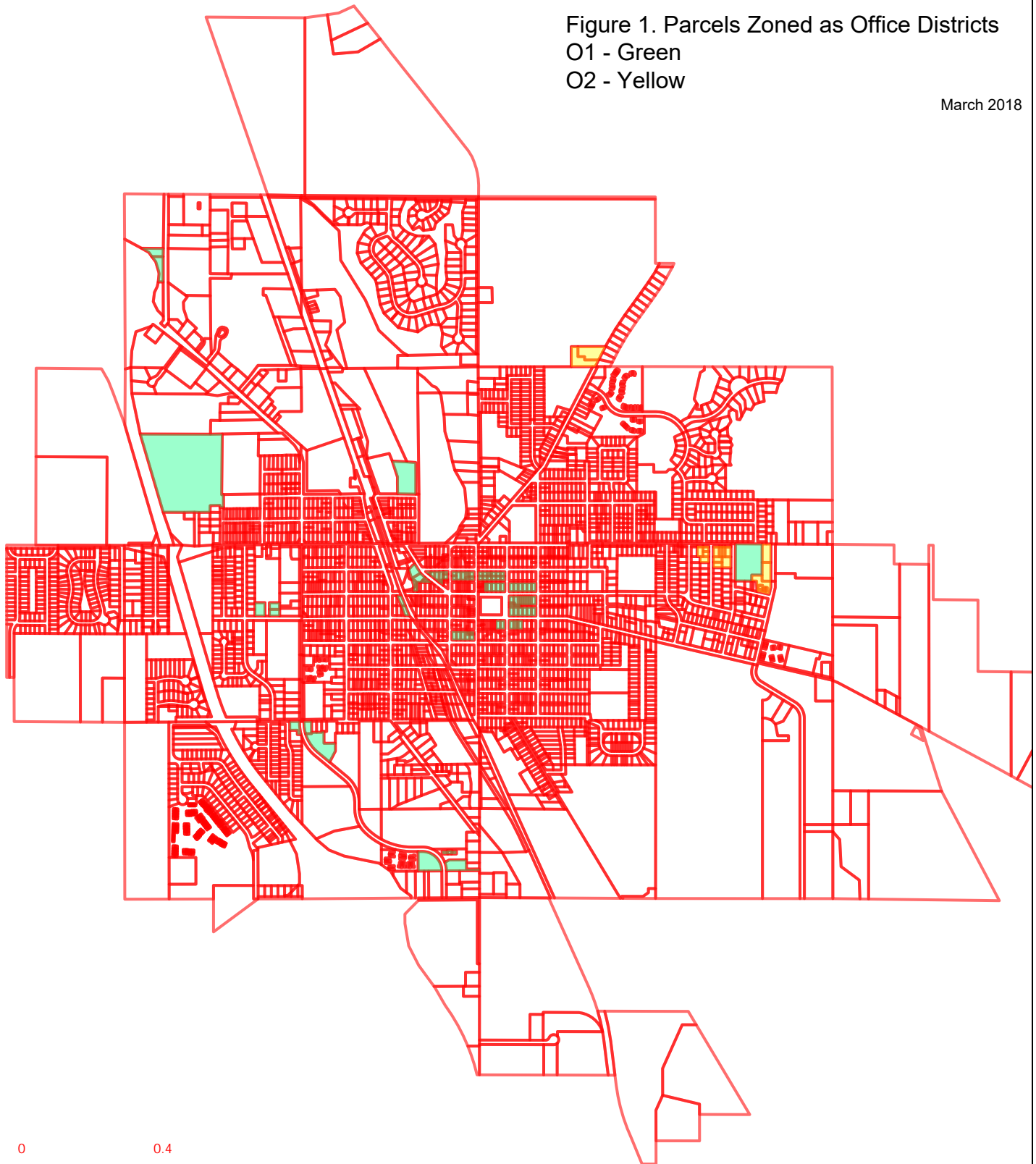


Table 100-1 Lot Dimensional Regulations								Table 100-2. Building Dimensional Regulations				
Zoning District and Ordinance Section	Minimum Lot Size (sq. feet)	Minimum Lot Width (feet)	Minimum Lot Area Per Principal Structure (sq. feet)	Minimum Front Yard Setback (feet)	Minimum Side Yard Setback (feet)	Minimum Rear Yard Setback (feet)	Maximum % of Lot Coverage by all Structures	Maximum Height Principal Structure (feet)	Maximum Height Accessory Structure (feet)	Minimum Floor Area Per Dwelling Unit (sq. feet)	Minimum Width Principal Structure (feet)	Minimum Internal Height Principal Structure (feet)
RS-1 Sec. 94-123	12,000	90	12,000	30	15	40	30	35	25 ₍₅₎	1,200 ₍₆₎	24	7.5
RS-2 Sec. 94-123	9,600	75	9,600	25	10	35	30	35	25 ₍₅₎	1,000 ₍₆₎	24	7.5
RS-3 Sec. 94-123	8,500	65	8,500	25	(1)	35	35	35	25 ₍₅₎	800 ₍₆₎	24	7.5
R2F Sec. 94-124	8,500	65	8,500	25	(1)	35	35	35	25 ₍₅₎	800 ₍₆₎	24	7.5
RM Sec. 94-125	8,500	65	8,500 ₍₂₎	25	15	35	35	35	15	(7)	-	-
O-1 Sec. 94-131	8,500	60	-	25	10 ₍₃₎	35	35	45	15	-	-	-
O-2 Sec. 94-132	12,000	90	-	60 ₍₁₁₎	15	40	30	15	15	-	-	-
C-1 Sec. 94-141	-	20	-	-	-	-	-	45	15	-	-	-
C-2 Sec. 94-142	20,000	100	-	50 ₍₁₁₎	10 ₍₃₎	10 ₍₃₎	50	45	15	-	-	-
C-3 Sec. 94-143	20,000	100	-	50 ₍₁₁₎	10 ₍₃₎	10 ₍₃₎	50	45	15	-	-	-

Footnotes to table 100-1 and table 100-2.

- 1 Ten percent of the actual lot width or ten feet, whichever is smaller.
- 2 Up to three dwelling units allowed per building on an 8,500 sq. ft. lot. Increase the required lot area per building by 4,000 sq. ft. per dwelling unit in excess of three dwelling units, or by 3,000 sq. ft. per dwelling unit in excess of three dwelling units located within a planned residential development or a planned unit development.
- 3 20 feet when adjacent to residentially used or zoned land.
- 4 Structures for agricultural operations, such as barns or silos, may be permitted up to a building height of 75 feet.
- 5 Accessory structures with a roof pitch flatter than one to two rise to run shall have a maximum height of 15 feet.
- 6 Exclusive of basement areas, attics, attached garages, breezeways, enclosed or unenclosed porches, and accessory structures.
- 7 Minimum gross floor area per dwelling unit:
 - (a) Efficiency unit: 400 sq. ft.
 - (b) One bedroom unit: 600 sq. ft.
 - (c) Two bedroom unit: 800 sq. ft.
 - (d) Three or more bedroom unit: 1,000 sq. ft.
- 8 May be increased if front, side, and rear yard setbacks are increased an equal amount.
- 9 The maximum height of an accessory structure in the PUD district shall be determined by the principle use associated with the accessory structure as follows:
 - (a) For single-family or two-family residential uses, the RS-1 maximum height shall apply.
 - (b) For manufacturing uses, the M-1 maximum height shall apply.
 - (c) For all other uses the maximum shall be 15 feet.
- 10 Lot area may be decreased up to 20% to a minimum of 4,400 square feet provided that for each square foot decrease an equal or greater amount of land shall be dedicated as open space. Said open space shall be in addition to any other required open space.
- 11 The site plan approving body may reduce the required front yard setback by a maximum of 50% upon finding that the reduced setback is in keeping with predominant development patterns in the immediate area and such reduction would encourage a more uniform, unified and orderly development pattern.
- 12 In addition to the required maximum lot coverage regulations, a minimum of 10% of the lot or parcel shall be dedicated to vegetated open space such as lawns, shrubs and tree plantings, and similar open space. This minimum 10% standard shall be met without the reliance on required setbacks, buffers, and landscaping.
- 13 In industrial parks in the M-1 and M-2 districts, the required minimum lot area shall be 20,000 square feet and the minimum lot width shall be 100 feet.

(Ord. No. 135, § 2(5.1), 5-21-2001; Ord. No. 152, 5-1-2006)

Table 100-4. Landscape Buffer Classification Matrix.

Subject Property Zoning	AG	RS (all)	R2F	RM	MH	O-1	O-2	C-1	C-2	C-3	M-1	M-2	PUD
RS (all)	na	na	na	na	na	na	na	na	na	na	na	na	na
R2F	na	na	na	na	na	na	na	na	na	na	na	na	na
RM	B	B	B	A	B	B	B	B	B	B	B	B	B
MH	C	C	C	C	A	C	C	C	C	C	C	C	C
O-1	B	B	B	B	B	A	A	A	A	A	A	A	B
O-2	B	B	B	B	B	A	A	A	A	A	A	A	B
C-1	na	na	na	na	na	na	na	na	na	na	na	na	na
C-2	B	B	B	B	B	A	A	A	A	A	A	A	B
C-3	B	B	B	B	B	A	A	A	A	A	A	A	B

Table 100-5. Parking Space Requirements.

<i>Land Use</i>	<i>Required Parking Spaces</i>
Single and Two-Family Dwelling	2 per dwelling unit
Multiple Family Dwelling	2 per dwelling unit
Rooming house	2 per dwelling unit, plus 1 per rooming unit
Professional Offices, Banks	1 per 200 sq. ft. UFA
Doctor, Dentist, other medical office	1 per 100 sq. ft. of waiting area, plus 1 per exam room or dentist chair
General Offices	1 per 200 sq. ft. UFA
Barber Shop, Hair Salon	2 per barber chair
Industrial, Warehouse, Wholesale	0.33 per 100 sq. ft. UFA
Self-serve Laundry	1 per 2 washing machines
Auto Repair, Auto Collision Repair	1 per 200 sq. ft. UFA

Table 100-6. Loading and Unloading Space Requirements.

<i>Use</i>	<i>Floor Area (sq. ft.)</i>	<i>Required Spaces</i>
Commercial uses (retail stores, personal services, amusement, automotive service)	First 1500 or fraction thereof: Next 20,000 or fraction thereof: Each additional 20,000 or fraction thereof	None 1 1
Hotels, Motels, Offices	First 1500 or fraction thereof: Next 50,000 or fraction thereof: Each additional 90,000 or fraction thereof	None 1 1
Uses not listed	First 20,000 or fraction thereof: Each additional 20,000 or fraction thereof:	None 1

(Ord. No. 152, 5-1-2006)

Sec. 94-131. 0-1: General office district

- (a) *Intent and purpose.* It is the primary purpose of this district to provide opportunities for business establishments that are predominantly comprised of professional offices, medical offices, administrative offices, and other businesses of a similar office character.
- (b) *Uses permitted by right.*
- (1) Offices for attorneys, accountants, architects, engineers, and similar professions.
 - (2) Offices for financial institutions, real estate offices, insurance offices, investment brokers, credit reporting agencies, business management and consulting, information technology services and consulting, and similar business offices.
 - (3) Photographic studios.
 - (4) Professional services establishments providing human health care on an outpatient basis.
 - (5) Medical, optical and dental offices and laboratories.
 - (6) Offices for non-profit organizations, professional associations, labor unions, civic-social-fraternal organizations, political organizations, and religious organizations.
 - (7) Music, dance, or performing arts studios.
 - (8) Personal service establishments.
 - (9) Residential use that meets the minimum floor area standards of the R2F Two-Family residential district.**
- (c) *Permitted accessory uses.*
- (1) Accessory uses and structures as defined in this chapter.
 - (2) Automatic teller machines (walk-up only).
- (d) *Uses authorized by special use permit.*
- (1) Religious institutions and structures for religious worship (refer to section [94-192\(8\)](#)).
 - (2) Day care facility or foster care facility providing care for more than six but not more than 12 individuals in a state licensed residential facility, except adult foster care facilities for care and treatment of persons released from or assigned to or at adult correctional facilities (refer to section [94-192\(8\)](#)).
 - (3) Public buildings including nonresidential governmental, utility, or public service use excluding storage yards, transformer stations, and substations (refer to section [94-192\(8\)](#)).
 - (4) Public or private educational structures or uses (refer to section [94-192\(8\)](#)).
 - (5) Mortuaries and funeral homes (not including crematories).
 - (6) Research, development, and prototype manufacturing.
 - (7) Any use permitted in this district involving one or more structures that occupy, either individually or collectively, more than 15,000 square feet of gross floor area.
 - (8) Residential use that meets the minimum floor area standards of the RS-3 Single Family residential district.**
- (e) *Development standards.* Any use of land or structures in this district shall comply with the general development standards of section [94-121\(c\)](#) of this chapter

Sec. 94-132. 0-2: Specialized office district.

- (a) *Intent and purpose.* It is the primary purpose of this district to provide in areas of a predominantly residential character, opportunities for office establishments which, because of the uses authorized and the required site development standards, are deemed compatible with such residential areas and which may be a benefit to such areas as a result of the services provided.
- (b) *Uses permitted by right.*

- (1) Offices for professional practitioners in the component fields of medicine, dentistry, psychiatry, and psychology including practitioners committed to ministering to individual and community health. These offices can include group or clinical practice and therapeutic paramedical services.
 - (2) Offices for the practice of law, professional services, business services, scientific endeavors, creative activities, and the operation of professional associations, societies, and institutes.
 - (3) Residential use that meets the minimum floor area standards of the R2F Two-Family residential district.**
- (c) *Permitted accessory uses.* Accessory uses and structures as defined in this chapter.
- (d) *Uses authorized by special use permit.*
- (1) Day care facility or foster care facility providing care for more than six but not more than 12 individuals in a state licensed residential facility, except adult foster care facilities for care and treatment of persons released from or assigned to or at adult correctional facilities (refer to section 94-192(8)).
 - (2) Owner occupied single-family residential use when attached to a permitted office use.
 - (3) Bed and breakfast (refer to section 94-192(7)).
 - (4) Any use permitted in this district involving one or more structures that occupy, either individually or collectively, more than 15,000 square feet of gross floor area.
 - (5) Residential use that meets the minimum floor area standards of the RS-3 Single Family residential district.**
- (e) Development standards. Any use of land or structures in this district shall comply with the general development standards of section 94-121(c) of this chapter.
- (f) *Uses specifically prohibited.* Consistent with the specialized purpose of this district, the following uses are specifically prohibited.
- (1) Veterinary clinics.
 - (2) Hospitals, sanitariums, nursing homes, adult foster care large group home (13 to 20 individuals), and adult foster care congregate facility (more than 20 individuals).
 - (3) Retail sales and services.
 - (4) Personal services such as hair, cosmetic, and body care.
 - (5) Materials processing such as photo labs, chemical and testing labs.
 - (6) Mortuaries and funeral homes.
 - (7) Any land use which produces noise, glare, vibration, or odor at the property line.
 - (8) Any land use which generates vehicular and/or pedestrian movement in excess of that which is normally prevailing in the district or adjoining districts.

Effective Date. This ordinance shall be published in a newspaper of general circulation in the City within 15 days after its adoption and mailed in accordance with the requirements of MCL 125.34.01. This ordinance shall take effect upon the expiration of 20 days after its adoption.

The foregoing Ordinance was moved for adoption by Council Member _____ and supported by Council Member _____, with a vote thereon being: YES () NO (), at a regular meeting of the City Council held pursuant to public notice in compliance with the Michigan Open Meetings Act, on the _____ day of _____, 2017. Ordinance No. **xxx** declared adopted this _____ day of _____, 2017.

CODE OF ORDINANCES CITY OF MASON, MICHIGAN

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Sec. 94-123. RS-1, RS-2, RS-3: Single-family residential districts.

(a) *Intent and purpose.* It is the primary purpose of these districts to provide opportunities for single-family residential development patterns and lifestyles of a more suburban and urban character than available in the AG district. The RS districts provide for varying lot sizes and development densities to allow for variation in housing preferences and market conditions and to provide the city with reasonable discretion in determining the most appropriate district under specific conditions including on-site and surrounding conditions. It is the intent of these districts that development ensure a stable and healthy residential environment with suitable open spaces and to prohibit uses that undermine this intent.

(b) *Uses permitted by right.*

(1) Single-family dwelling.

(2) Public or private park land of a non-commercial nature composed primarily of vegetated open space where the principal mode of travel to the site is non-motorized and the principal activities at the site are low-intensity uses such as nature conservation and interpretive areas, children's playgrounds, sled hills, and open lawn areas for non-structured play. Such park land is not to be interpreted to include skateboard parks, motorized activities, team sports including sports fields, and activities that are generally accompanied by public gatherings and spectators (refer to section 94-192(8)).

(3) A state licensed residential facility, except adult foster care facilities for care and treatment of persons released from or assigned to or at adult correctional facilities (refer to section 94-192(8)).

(c) *Permitted accessory uses.*

(1) Accessory uses and structures as defined by this chapter.

(2) Home occupations (refer to section 94-173(a)).

(3) A family day care home licensed under the provisions of MCL 722.111 in which one but fewer than seven minor children are received for care and supervision in a private home for periods of less than 24 hours a day, unattended by a parent or legal guardian, except children related to an adult member of the family by blood, marriage, or adoption.

(d) *Uses authorized by special use permit.*

(1) Religious institutions and structures for religious worship (refer to section 94-192(8)).

(2) Day care facility or foster care facility providing care for more than six but not more than 12 individuals in a state licensed residential facility, except adult foster care facilities for care and treatment of persons released from or assigned to or at adult correctional facilities (refer to section 94-192(8)).

(3) Public buildings including nonresidential governmental, utility, or public service use excluding storage yards, transformer stations, and substations (refer to section 94-192(8)).

- (4) Public or private educational structures or uses (refer to section 94-192(8)).
- (5) Planned residential developments (PRD) (refer to section 94-192(1)).
- (6) Bed and breakfast (refer to section 94-192(7)).

(7) Public or private recreation facilities including parks, playgrounds, ball fields, athletic fields, swimming pools, community centers, golf courses, and country clubs (refer to section 94-192(8)).

(e) *Development standards.* Any use of land or structures in this district shall comply with the general development standards of section 94-121(c) of this chapter. In addition, the following standards shall also apply to any use of land or structures in this district.

- (1) The roof pitch ratio of the principle structure shall be a minimum of four foot vertical rise to 12 foot horizontal run.
- (2) The principle structure shall be attached to a solid foundation.
- (3) A principle residential structure shall provide a minimum of 15% of the total living space area as non-living space available for storage.
- (4) A principle residential structure shall be constructed to be compatible in design and appearance with conventional onsite constructed structures.

(Ord. No. 152, 5-1-2006; Ord. No. 157, 11-6-2006)

Sec. 94-124. R2F: Two-family residential district.

(a) *Intent and purpose.* It is the primary purpose of this district to provide opportunities for two-family residential development patterns and lifestyles. It is the intent of this district that development ensure a stable and healthy residential environment with suitable open spaces and to prohibit uses that undermine this intent.

(b) *Uses permitted by right.*

- (1) Single-family dwelling.
- (2) Public or private park land of a non-commercial nature composed primarily of vegetated open space where the principal mode of travel to the site is non-motorized and the principal activities at the site are low-intensity uses such as nature conservation and interpretive areas, children's playgrounds, sled hills, and open lawn areas for non-structured play. Such park land is not to be interpreted to include skateboard parks, motorized activities, team sports including sports fields, and activities that are generally accompanied by public gatherings and spectators (refer to section 94-192(8)).
- (3) A state licensed residential facility, except adult foster care facilities for care and treatment of persons released from or assigned to or at adult correctional facilities (refer to section 94-192(8)).
- (4) Two-family dwelling.

(c) *Permitted accessory uses.*

- (1) Accessory uses and structures as defined by this chapter.
- (2) Home occupations (refer to section 94-173(a)).
- (3) Rooming houses but not to exceed two rooming units.
- (4) A family day care home licensed under the provisions of MCL 722.111 in which one but fewer than seven minor children are received for care and supervision in a private home for periods of less than 24 hours a day, unattended by a parent or legal guardian, except children related to an adult member of the family by blood, marriage, or adoption.

(d) *Uses authorized by special use permit.*

- (1) Religious institutions and structures for religious worship (refer to section 94-192(8)).
- (2) Day care facility or foster care facility providing care for more than six but not more than 12 individuals in a state licensed residential facility, except adult foster care facilities for care and treatment of persons released from or assigned to or at adult correctional facilities (refer to section 94-192(8)).
- (3) Public buildings including nonresidential governmental, utility, or public service use excluding storage yards, transformer stations, and substations (refer to section 94-192(8)).
- (4) Public or private educational structures or uses (refer to section 94-192(8)).
- (5) Planned residential developments (PRD) (refer to section 94-192(1)).
- (6) Bed and breakfast (refer to section 94-192(7)).

(7) Public or private recreation facilities including parks, playgrounds, ball fields, athletic fields, swimming pools, community centers, golf courses, and country clubs (refer to section 94-192(8)).

(e) *Development standards.* Any use of land or structures in this district shall comply with the general development standards of section 94-121(c) of this chapter. In addition, the following standards shall also apply to any use of land or structures in this district.

(1) The roof pitch ratio of the principle structure shall be a minimum of four foot vertical rise to 12 foot horizontal run.

(2) The principle structure shall be attached to a solid foundation.

(3) A principle residential structure shall provide a minimum of 15% of the total living space area as non-living space available for storage.

(4) A principle residential structure shall be constructed to be compatible in design and appearance with conventional onsite constructed structures.

(Ord. No. 152, 5-1-2006; Ord. No. 157, 11-6-2006)

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