

COMMERCIAL SHARE SPACE SITE PLAN

VACANT LAND ON 168TH AVENUE

GRAND HAVEN TOWNSHIP

OTTAWA COUNTY, MICHIGAN

DEVELOPER & CONTRACTOR

COPPERROCK CONSTRUCTION
 RYAN BROWN
 601 FIFTH STREET NW, SUITE 300
 GRAND RAPIDS, MI 49504
 616-401-2899

OWNER

DOYON PROPERTIES LLC
 KYLE DOYON
 13650 172ND AVENUE
 GRAND HAVEN, MI 49417
 (616) 638-9795

SURVEYOR & CIVIL ENGINEER

ABONMARCHE MILANOWSKI & ENGLERT
 11 NORTH 6TH ST
 GRAND HAVEN, MI 49417
 616-847-4070

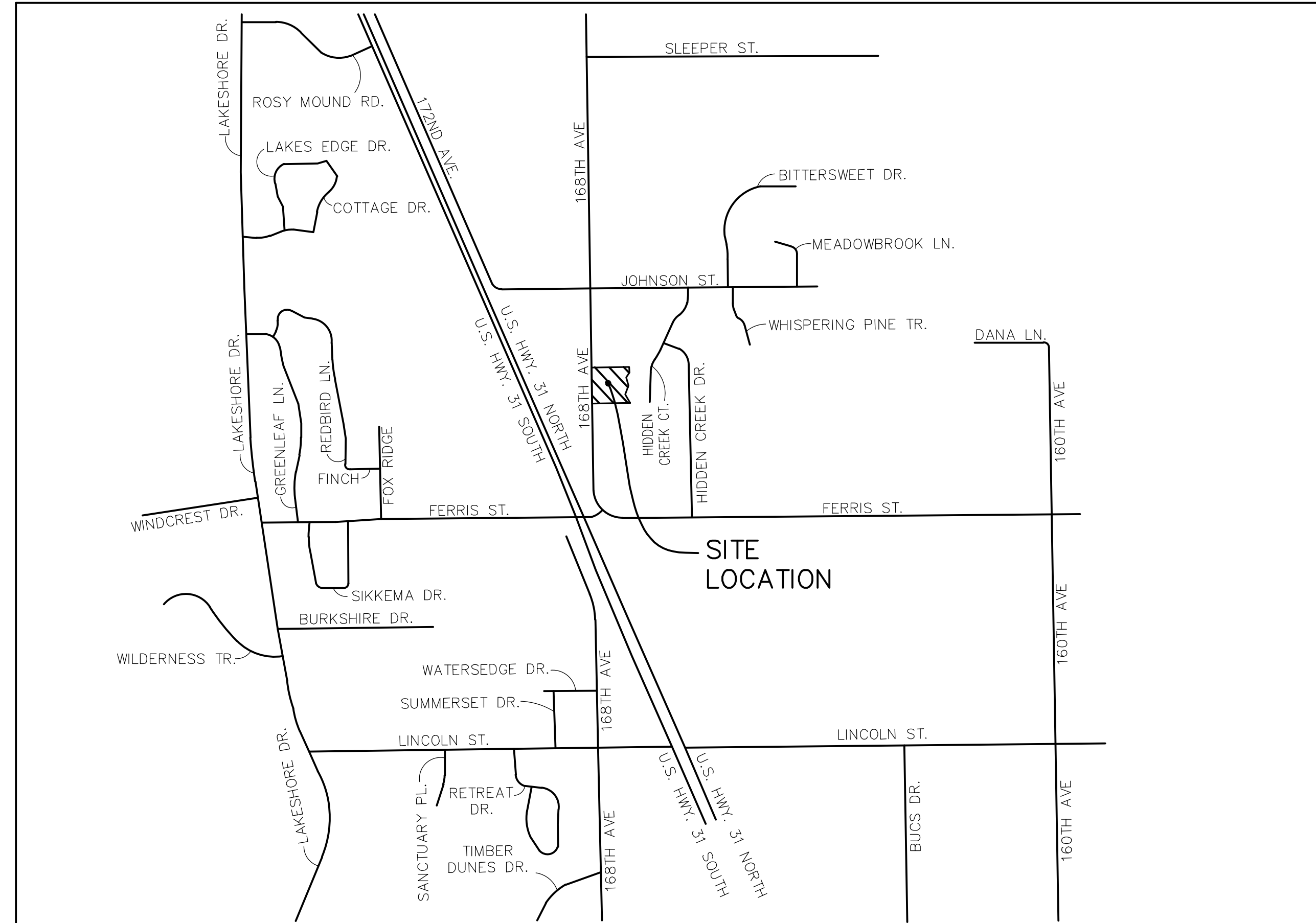
NOTES:

EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS AND SUPPLEMENTAL SPECIFICATIONS, ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2020 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION.



COUNTY KEY

NOT TO SCALE



PROJECT LOCATION MAP

NOT TO SCALE

INDEX OF SHEETS

| SHT NO. | DESCRIPTION |
|---------|---|
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| 4 | EXISTING CONDITIONS |
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UTILITY & GOVERNMENT CONTACTS

TELEPHONE:

AT&T
 245 EAST 24TH STREET
 HOLLAND, MI 49423
 RICK ARENSEN
 (616) 392-7017

CABLE:

CHARTER COMMUNICATIONS
 1433 FULTON STREET
 GRAND HAVEN, MI 49417
 BRAD KULICAMP
 (616) 607-2356

ELECTRIC:

CONSUMERS ENERGY
 17000 CROSWELL STREET
 WEST OLIVE, MI 49460
 (800) 477-5050

GAS:

MICHIGAN GAS
 1708 EATON DRIVE
 GRAND HAVEN, MI 49417
 TODD SUBKA
 (616) 844-7519

GRAND HAVEN TOWNSHIP:

DEPARTMENT OF PUBLIC WORKS
 ALANDO CHAPPELL
 13300 168TH AVENUE
 GRAND HAVEN, MI 49417
 (616) 604-6313

PLANNING & ZONING:

RORY THIBAUT
 13300 168TH AVENUE
 GRAND HAVEN, MI 49417
 BRAD KULICAMP
 (616) 604-6326

STORMWATER AND SESC:

OTTAWA COUNTY WATER
 RESOURCES COMMISSION
 JOE BUSH
 12220 FILLMORE STREET, ROOM 141
 WEST OLIVE, MI 49460
 (616) 994-4526

CALL MISS DIG

1-800-482-7171 OR 811

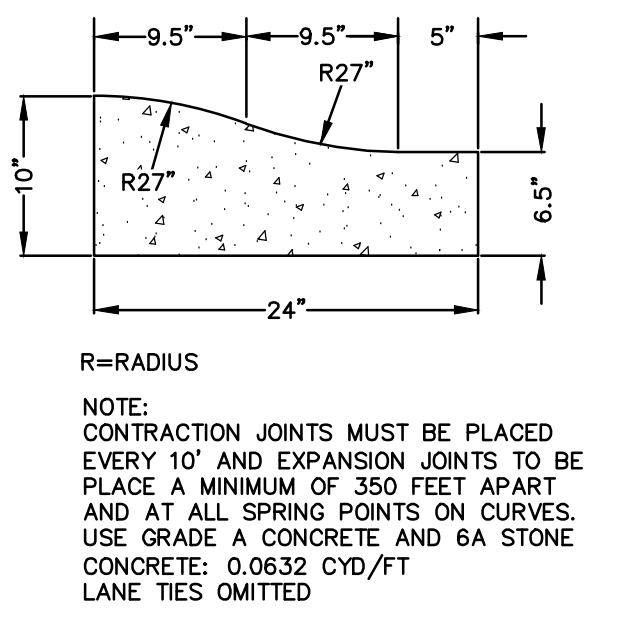
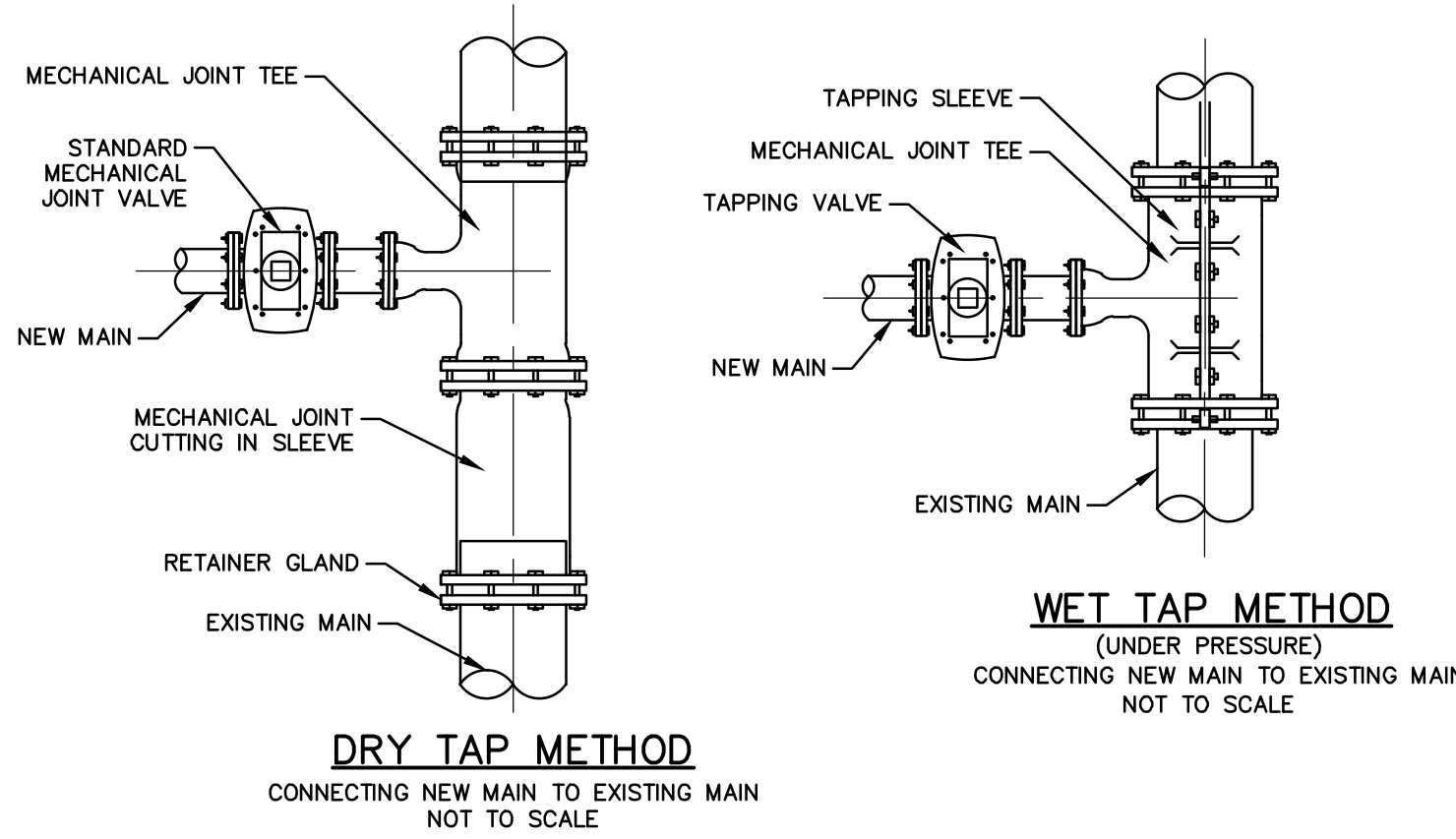
FOR PROTECTION OF THE UNDERGROUND UTILITIES, THE CONTRACTOR SHALL CALL MISS DIG A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING CONSTRUCTION OPERATIONS. MEMBERS WILL THUS BE ROUTINELY NOTIFIED. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE PART OF THE "MISS DIG" ALERT SYSTEM.



Know what's below.
 Call before you dig.



Engineering - Architecture - Land Surveying
 DATE: MAY 2024
 COPYRIGHT 2024 - ABONMARCHE CONSULTANTS, INC.



TRAFFIC GENERATION/CIRCULATION OF TRAFFIC

THE DEVELOPMENT TRIP GENERATION WILL OPERATE GENERALLY THE SAME FOR EACH OF THE TWO PROPOSED PARCELS. THE SITES EACH CONTAIN AROUND 10,675-SQ FT OF GROSS FLOOR AREA AND THE VOLUME OF TRAFFIC IS PROPOSED TO BE BASED UPON ITE'S TRIP GENERAL MANUAL 11TH EDITION FOR LAND USE 710: GENERAL OFFICE BUILDING AS FOLLOWS:

PER PARCEL TRIP SUMMARY FOR WEEKDAYS

| |
|---|
| 166 WEEKDAY TRIPS |
| 83 INCOMING |
| 83 OUTGOING |
| 24 AM PEAK HOUR (BETWEEN 7:00 AM - 9:00 AM) TRIPS |
| 22 INCOMING |
| 2 OUTGOING |
| 26 PM PEAK HOUR (BETWEEN 4:00 PM - 6:00 PM) TRIPS |
| 22 INCOMING |
| 4 OUTGOING |

TYPICAL HOURS WILL GENERALLY BE BETWEEN 8 AM AND 5 PM.

MDOT STANDARD PLANS - NOT PRINTED

- R-1-G DRAINAGE STRUCTURES
- R-7-F COVER B
- R-18-F COVER Q
- R-28-K CURB RAMP AND DETECTABLE WARNING DETAILS*
- R-29-J DRIVEWAY OPENINGS & APPROACHES AND CONCRETE SIDEWALKS*
- R-30-G CONCRETE CURB AND CONCRETE CURB & GUTTER
- R-83-C UTILITY TRENCHES
- R-96-E SOIL EROSION & SEDIMENTATION CONTROL MEASURES
- R-100-I SEEDING AND TREE PLANTING*
- WZD-100-A GROUND DRIVEN SIGN SUPPORTS FOR TEMP SIGNS*
- WZD-125-E TEMPORARY TRAFFIC CONTROL DEVICES*

*DENOTES SPECIAL DETAIL

STANDARD LEGEND

- CB = CURB CATCH BASIN
- FD = FIRE HYDRANT
- FI = FOUND CAPPED IRON
- GL = GAS LOCATION
- GM = GAS MARKER
- SMH = SANITARY MANHOLE
- SIR = SET IRON ROD
- STMH = STORM MANHOLE
- ULP = UTILITY POLE
- WV = WATER VALVE
- W = EXISTING WATER MAIN
- SS = EXISTING SANITARY SEWER
- SS = EXISTING STORM SEWER
- OC = OVERHEAD UTILITIES
- GM/LN = GAS MAIN/LINE
- T = BURIED TELEPHONE
- FOC = BURIED FIBER OPTIC
- E = ELECTRICAL
- BE = BURIED ELECTRICAL
- CLF = CHAINLINK FENCE
- PW = PROP WATER MAIN
- WS = PROP WATER SERVICE
- SS = PROP SANITARY SERVICE
- STS = PROP STORM SERVICE
- R/W = RIGHT OF WAY
- U = UTILITY REMOVAL

GENERAL NOTES:

- MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION SHALL PREVAIL, UNLESS INDICATED OTHERWISE.
- THREE WORKING DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL REQUEST THE LOCATIONS OF ALL UTILITIES BY CALLING MISS DIG. REGARDLESS OF DURATION, NO EXCAVATION WORK SHALL COMMENCE UNTIL SUCH TIME THAT THE MISS DIG REQUEST HAS CLEARED.
- A MINIMUM OF 18" VERTICAL CLEARANCE IS REQUIRED WHERE:
 - WATER MAIN AND SANITARY SEWER CROSS
 - WATER MAIN AND STORM SEWER CROSS
 - STORM AND SANITARY SEWER CROSS
 UNLESS OTHERWISE SPECIFIED.
- A MINIMUM OF 10' HORIZONTAL SEPARATION SHALL BE MAINTAINED WHERE WATER MAINS AND SEWERS RUN PARALLEL.
- ALL TRENCH AND BEDDING SPECIFIED SHALL BE PER MDOT STANDARD PLAN R-83-C, DETAIL B OR G.
- ANY EXCESS/UNSUITABLE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND THEY SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF THIS MATERIAL.
- DEWATERING, IF REQUIRED, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA PAYMENT SHALL BE MADE THEREFOR.
- THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH "AS-RECORDED" DRAWINGS OF THE SEWERS UPON COMPLETION OF THE PROJECT.
- TREES NOT DESIGNATED FOR REMOVAL SHALL BE PROTECTED BY THE CONTRACTOR. GROWN TREES SHALL BE EVALUATED AND RESTORED AT THE CONTRACTOR'S EXPENSE. ALL TREES DAMAGED BEYOND SAVING AS DETERMINED BY THE ENGINEER SHALL BE REMOVED AND REPLACED WITH A NURSERY DROWN TREE AS SPECIFIED BY THE ENGINEER.
- REMOVAL OF ABANDONED CONFLICTING UTILITIES SHALL BE CONSIDERED INCLUDED WITH THE ITEM BEING CONSTRUCTED, INCLUDING BULKHEADING ALL PIPES 12" DIA. OR LESS (PIPES IN EXCESS OF 12" DIA. SHALL BE PAID FOR AS A SEWER BULKHEAD).
- PAY ITEM "DR STRUCTURE, REM" SHALL INCLUDE REMOVAL OF MANHOLES FOR ANY TYPE OF UTILITY.
- FITTINGS, PIPE EXTENSIONS, AND APPURTENANCES NECESSARY TO CONNECT EXISTING PIPES TO PROPOSED MANHOLES, SHALL BE INCLUDED IN THE UNIT PRICE FOR THE PROPOSED STRUCTURE.
- WHERE CONCRETE SIDEWALK IS ADJACENT TO THE BACK OF CURB, A 1/2" EXPANSION JOINT SHALL BE PLACED BETWEEN THE CURB AND SIDEWALK. PAYMENT IS INCLUDED IN CONCRETE SIDEWALK.

SANITARY SEWER:

- THE CONTRACTOR SHALL GIVE 72 HOURS NOTICE TO THE TOWNSHIP TO REQUEST A SEWER TAP. THE TOWNSHIP SHALL DETERMINE THE TIME & DURATION OF THE SHUTOFF.
- SANITARY MANHOLE COVERS SHALL BE PAID AS DRAINAGE STRUCTURE COVER. MANHOLE CASTINGS SHALL DENOTE SANITARY SEWER.
- SANITARY LATERAL CONNECTIONS TO EXISTING OR ABANDONED SEWERS SHALL BE LOCATED BY THE CONTRACTOR AND CONNECTED TO THE SEWER AS DIRECTED BY THE ENGINEER. ANY LATERALS NOT SCHEDULED FOR REPLACEMENT OR RECONNECTION, DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- SANITARY MANHOLE COVERS SHALL BE MDOT COVER Q (WITH TOWNSHIP APPROVED LOGO, AS APPLICABLE) UNLESS NOTED OTHERWISE.
- EXTERIOR DROP CONNECTION SHALL BE UTILIZED WHEN DIFFERENCE BETWEEN SANITARY SEWER INVERTS IS 2' OR GREATER. THE ABOVE WORK WILL BE INCLUDED WITH SEWER CONSTRUCTION.
- PROPOSED SANITARY MANHOLES SHALL BE 4 FEET IN DIAMETER UNLESS NOTED OTHERWISE.
- SANITARY SERVICE CLEANOUTS SHALL BE INSTALLED WHERE NEW SERVICE LINES MEET EXISTING SERVICES AND AT BENDS/ GRADE CHANGES AS DIRECTED BY THE ENGINEER.
- NEW SANITARY SEWER SHALL BE SDR 26 PVC PIPE FOR ALL PIPES 8" DIA. AND LARGER. SDR 35 PVC PIPE SHALL BE UTILIZED FOR 6" SANITARY SERVICE LATERALS.

WATER MAIN:

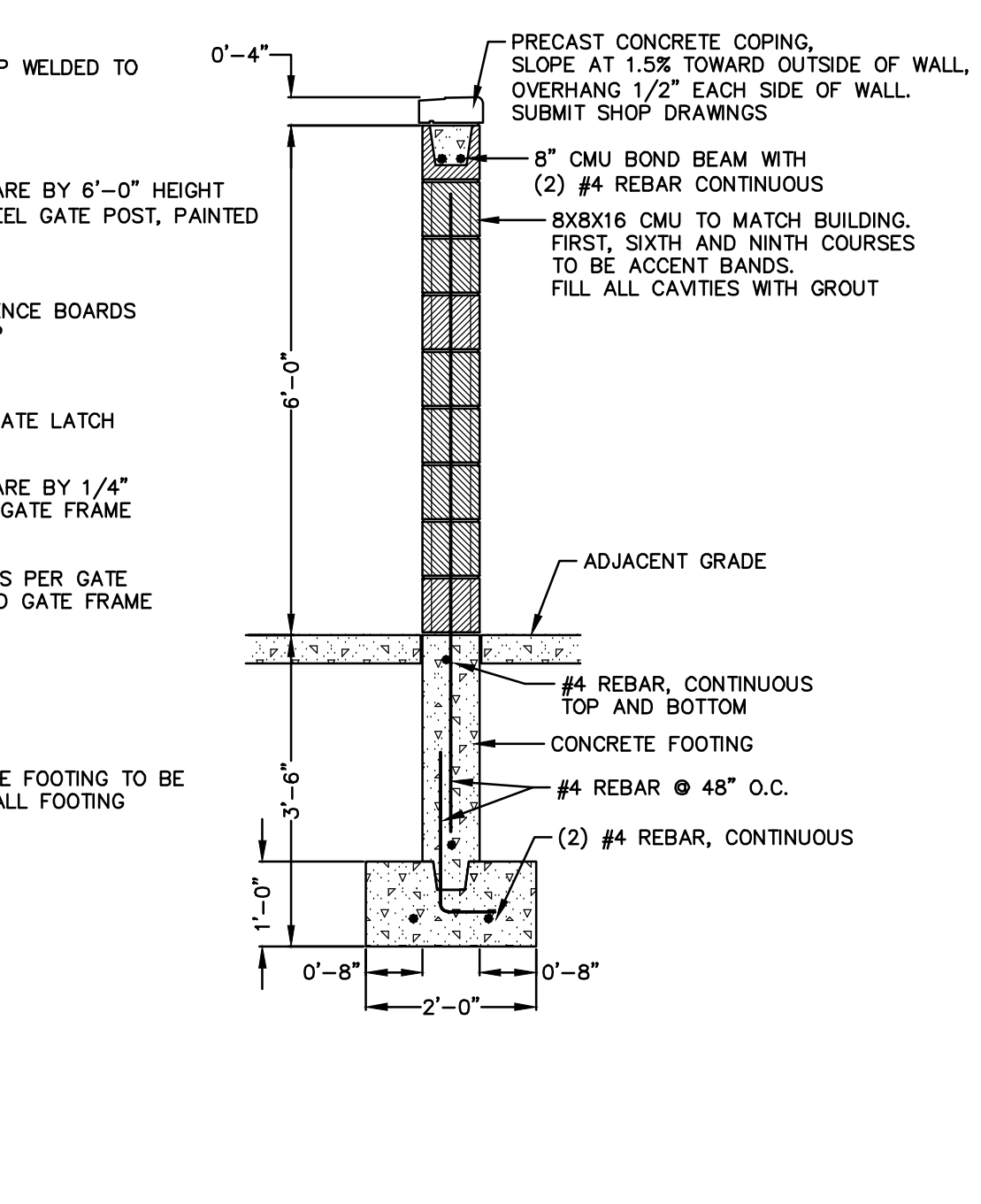
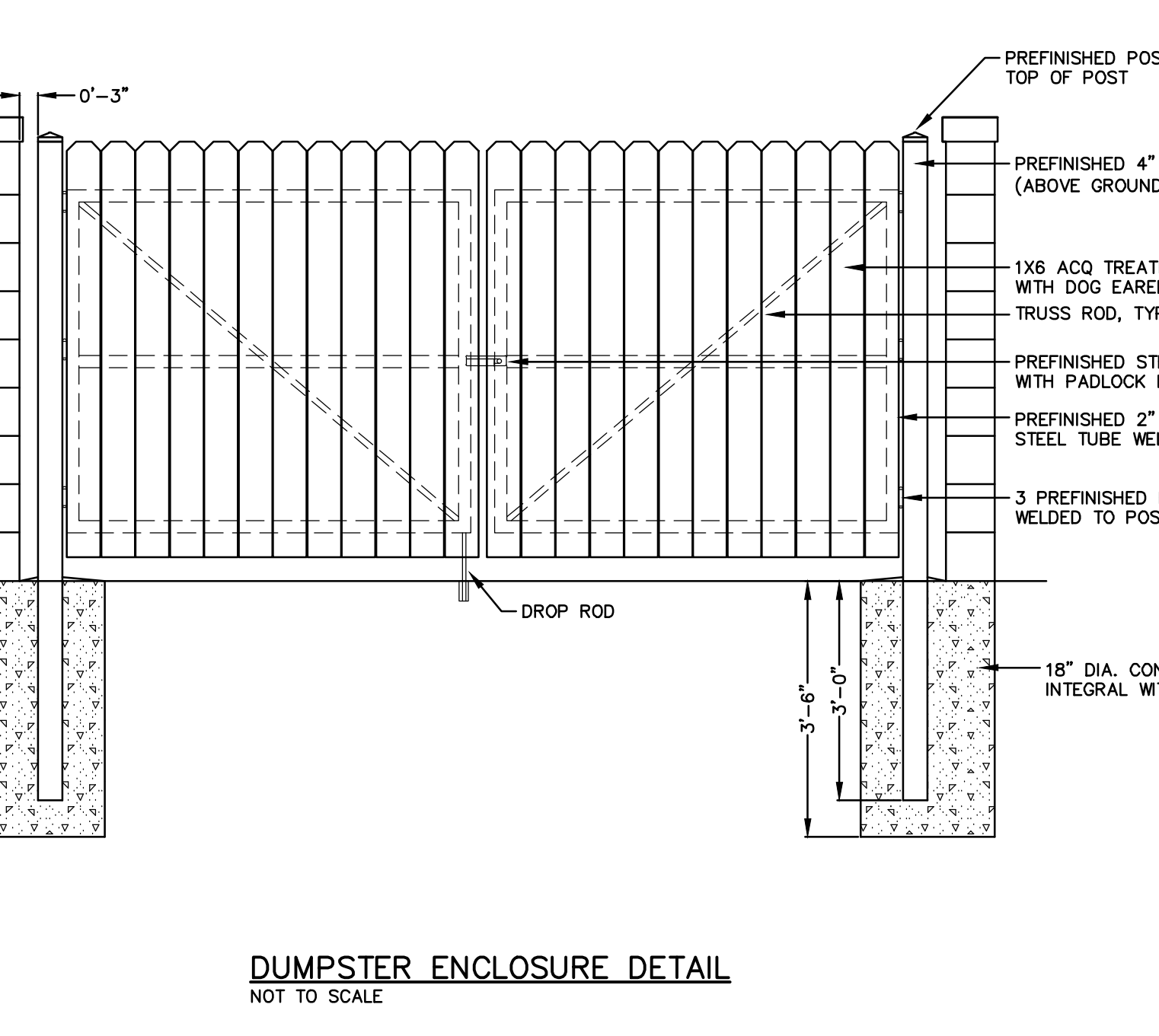
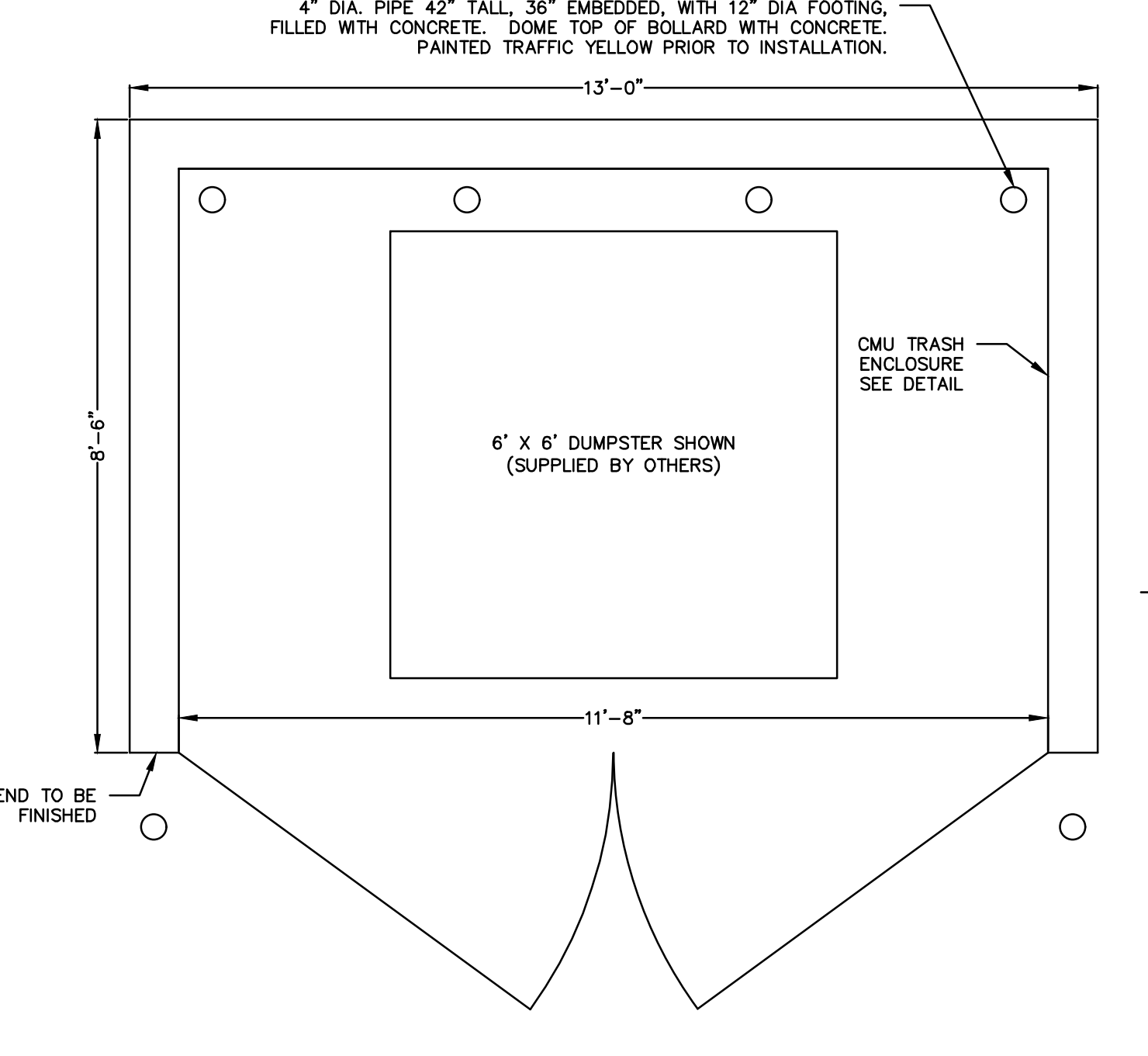
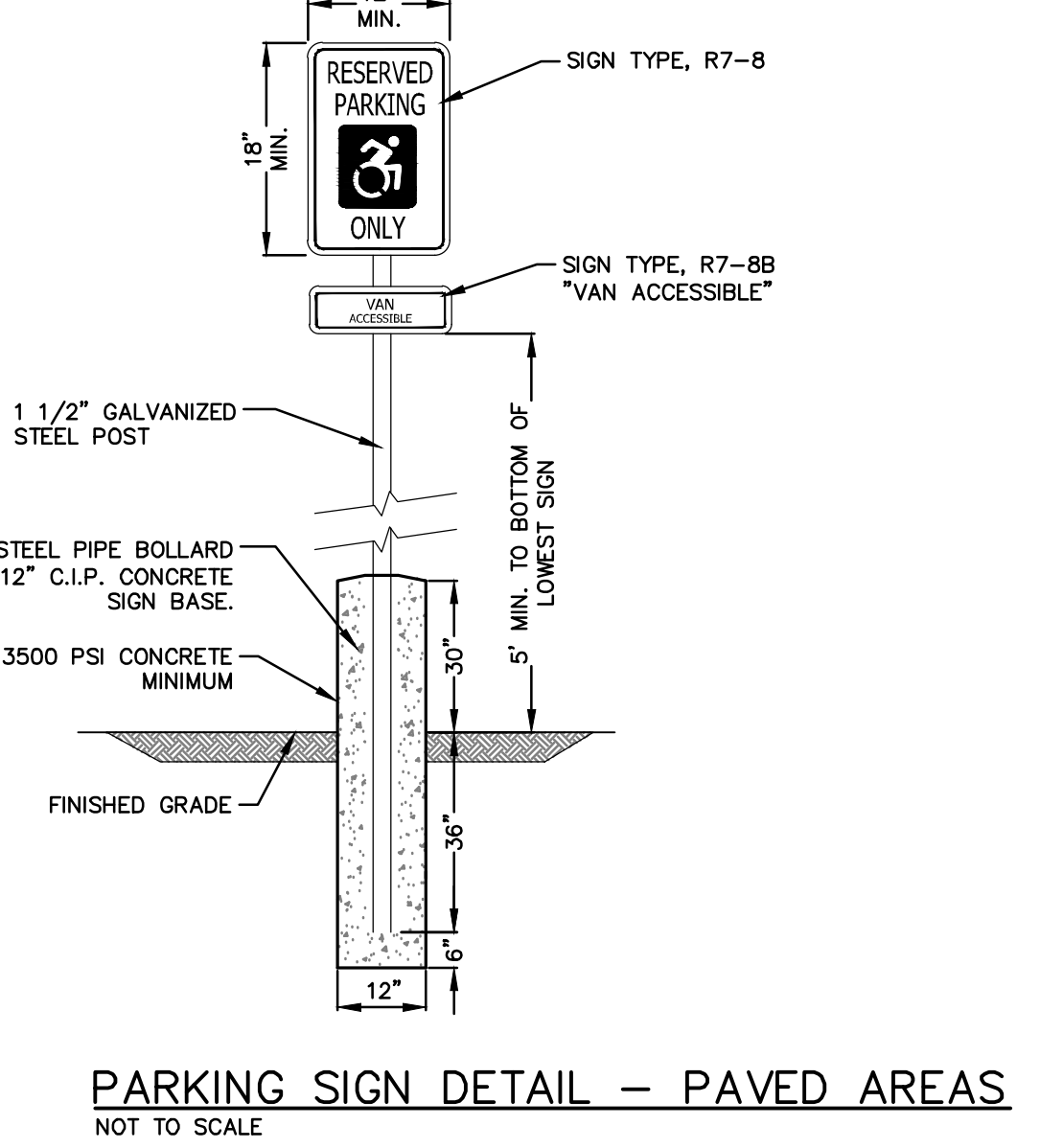
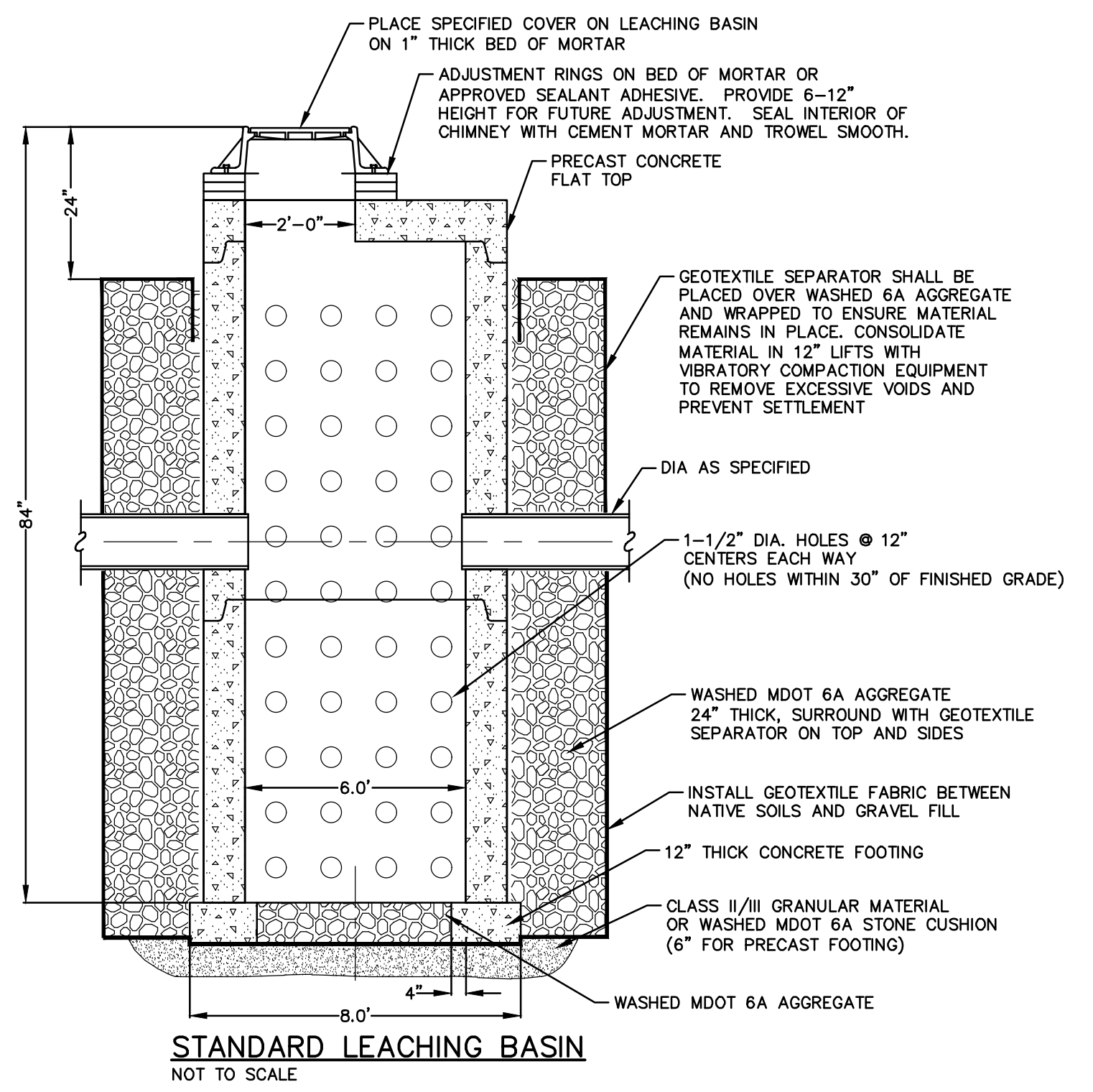
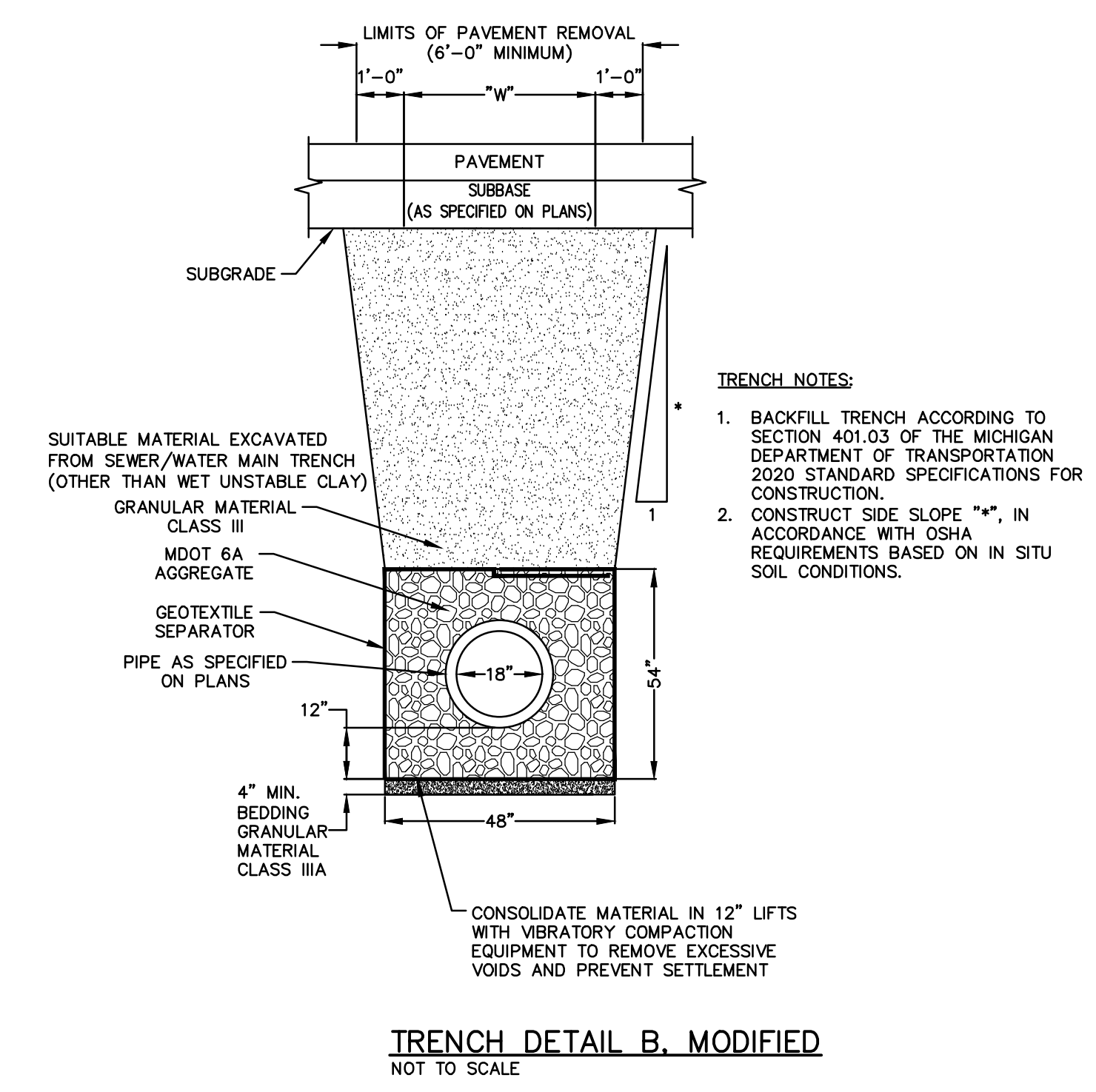
- ALL WATER MAINS AND SERVICES SHALL BE 5'-6" OF COVER FROM FINISH GRADE.
- WATER MAIN SHALL NOT BE PLACED INTO SERVICE UNTIL THE APPROPRIATE TESTING AND DISINFECTION IS APPROVED BY THE TOWNSHIP.
- THE CONTRACTOR SHALL GIVE 72 HOURS NOTICE TO THE TOWNSHIP TO REQUEST A WATER SERVICE SHUTOFF. THE TOWNSHIP SHALL DETERMINE THE TIME & DURATION OF THE SHUTOFF.
- NO EXISTING VALVE SHALL BE CLOSED WITHOUT TOWNSHIP APPROVAL.
- ABANDONING OF EXISTING WATER MAIN AND REMOVAL OF EXISTING HYDRANTS/ APPURTENANCES SHALL BE INCLUDED WITH NEW WATER MAIN ITEM. ABANDONING WATER MAIN SHALL INCLUDE REMOVAL OF EXISTING PIPE, BULKHEADING ENDS OF PIPE OR FILLING PIPE WITH FLOWABLE FILL.
- ALL PUBLIC WATERMAIN INSTALLATION SHALL BE OBSERVED AND CERTIFIED BY THE DESIGN ENGINEER.

STORM SEWER:

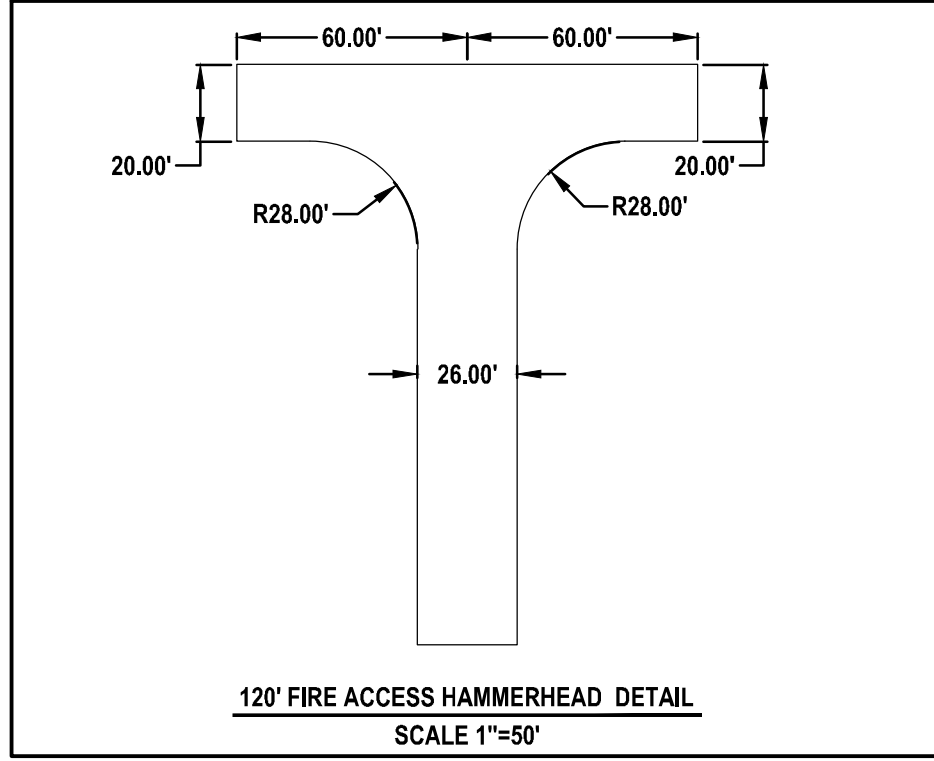
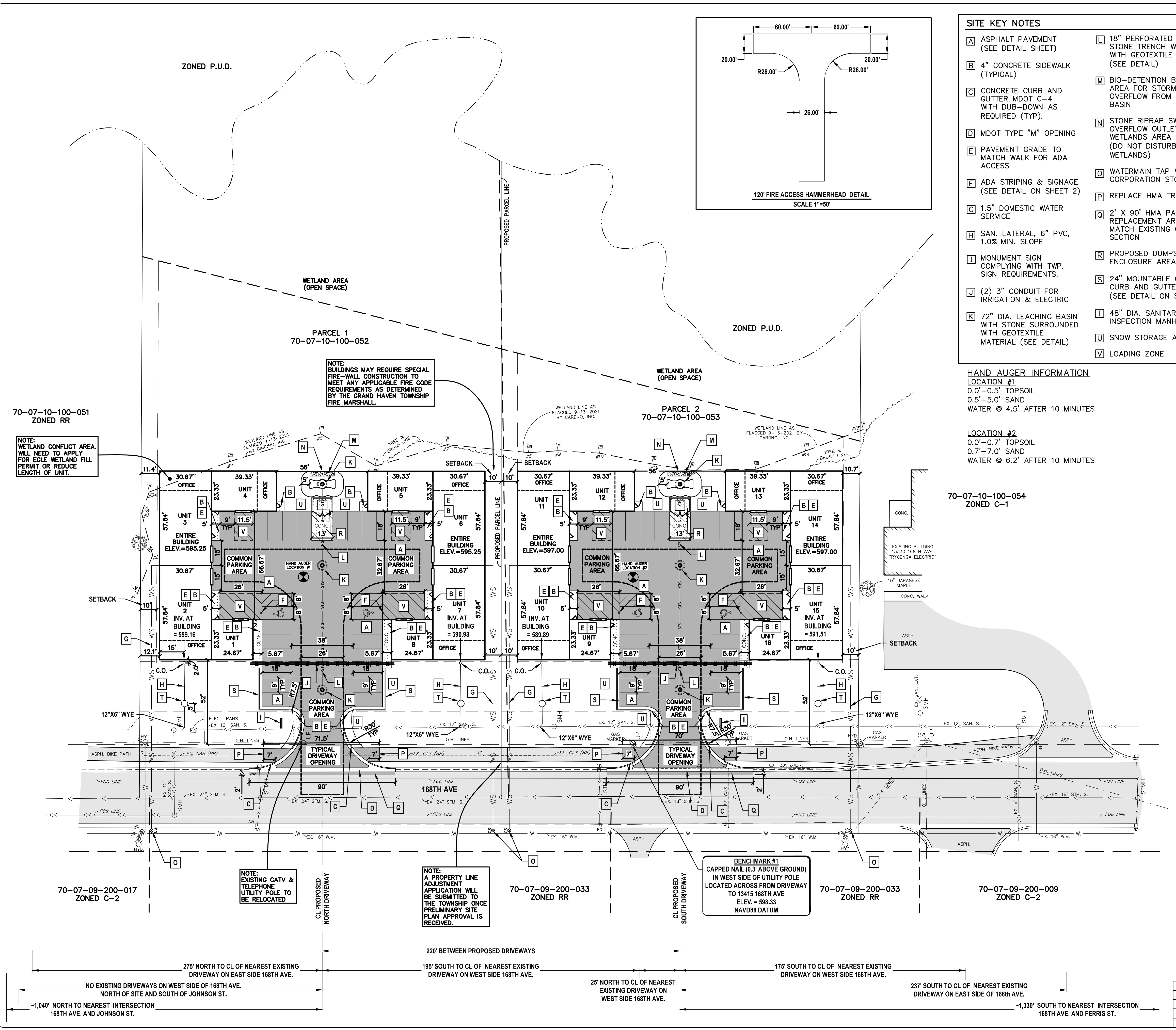
- DRAINAGE STRUCTURE COVERS SHALL BE PAID AS DRAINAGE STRUCTURE COVER. MANHOLE CASTINGS SHALL HAVE STORM SEWER CAST ON STRUCTURE COVER AS APPLICABLE.
- STORM MANHOLE COVERS SHALL BE MDOT COVER B (WITH TOWNSHIP APPROVED LOGO, AS APPLICABLE) AND CATCH BASIN COVERS SHALL BE MDOT COVER K UNLESS NOTED OTHERWISE.
- PROPOSED STORM MANHOLES SHALL BE 4 FEET IN DIAMETER UNLESS NOTED OTHERWISE.
- WHERE NEW SEWER IS TO REPLACE EXISTING SEWER IN THE SAME TRENCH REMOVAL OF EXISTING SEWER SHALL BE INCLUDED AS PART OF NEW SEWER ITEM.

ROADWAY:

- BACKFILL MATERIAL WITHIN THE ZONE OF INFLUENCE OF A ROADWAY SHALL BE CLASS II SAND COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY IN 12" MAXIMUM LIFTS.
- DRIVEWAY OPENINGS SHALL BE MDOT TYPE L OR M PER STANDARD PLAN R-29-L.
- PAVEMENT DESIGNATED FOR REMOVAL SHALL BE SAWCUT FULL DEPTH AT REMOVAL LIMITS PRIOR TO REMOVAL.



| | | | |
|-----|---------------------------|--------|----------|
| 4 | SITE PLAN RE-SUBMITTAL #4 | SC/TV | S/##/24 |
| 3 | SITE PLAN RE-SUBMITTAL #3 | TMV/SJ | 1/19/24 |
| 2 | SITE PLAN RE-SUBMITTAL #2 | TMV/SJ | 10/04/23 |
| 1 | SITE PLAN RE-SUBMITTAL #1 | TMV/SC | 07/03/23 |
| NO. | REVISION DESCRIPTION: | BY: | DATE: |



- ### SITE KEY NOTES
- A** ASPHALT PAVEMENT (SEE DETAIL SHEET)
 - B** 4" CONCRETE SIDEWALK (TYPICAL)
 - C** CONCRETE CURB AND GUTTER MDOT C-4 WITH DUB-DOWN AS REQUIRED (TYP).
 - D** MDOT TYPE "M" OPENING
 - E** PAVEMENT GRADE TO MATCH WALK FOR ADA ACCESS
 - F** ADA STRIPING & SIGNAGE (SEE DETAIL ON SHEET 2)
 - G** 1.5" DOMESTIC WATER SERVICE
 - H** SAN. LATERAL, 6" PVC, 1.0% MIN. SLOPE
 - I** MONUMENT SIGN COMPLYING WITH TWP. SIGN REQUIREMENTS.
 - J** (2) 3" CONDUIT FOR IRRIGATION & ELECTRIC
 - K** 72" DIA. LEACHING BASIN WITH STONE SURROUNDED WITH GEOTEXTILE MATERIAL (SEE DETAIL)
 - L** 18" PERFORATED HDPE IN STONE TRENCH WRAPPED WITH GEOTEXTILE MATERIAL (SEE DETAIL)
 - M** BIO-RETENTION BASIN AREA FOR STORMWATER OVERFLOW FROM LEACHING BASIN
 - N** STONE RIPRAP SWALE OVERFLOW OUTLET TO WETLANDS AREA (DO NOT DISTURB WETLANDS)
 - O** WATERMAIN TAP WITH CORPORATION STOP
 - P** REPLACE HMA TRAIL
 - Q** 2' X 90' HMA PAVEMENT REPLACEMENT AREA MATCH EXISTING CROSS SECTION
 - R** PROPOSED DUMPSTER ENCLOSURE AREA
 - S** 24" MOUNTABLE CONCRETE CURB AND GUTTER DETAIL (SEE DETAIL ON SHEET 2)
 - T** 48" DIA. SANITARY SEWER INSPECTION MANHOLE
 - U** SNOW STORAGE AREA
 - V** LOADING ZONE

- ### HAND AUGER INFORMATION
- LOCATION #1**
0.0'-0.5' TOPSOIL
0.5'-5.0' SAND
WATER @ 4.5' AFTER 10 MINUTES
- LOCATION #2**
0.0'-0.7' TOPSOIL
0.7'-7.0' SAND
WATER @ 6.2' AFTER 10 MINUTES

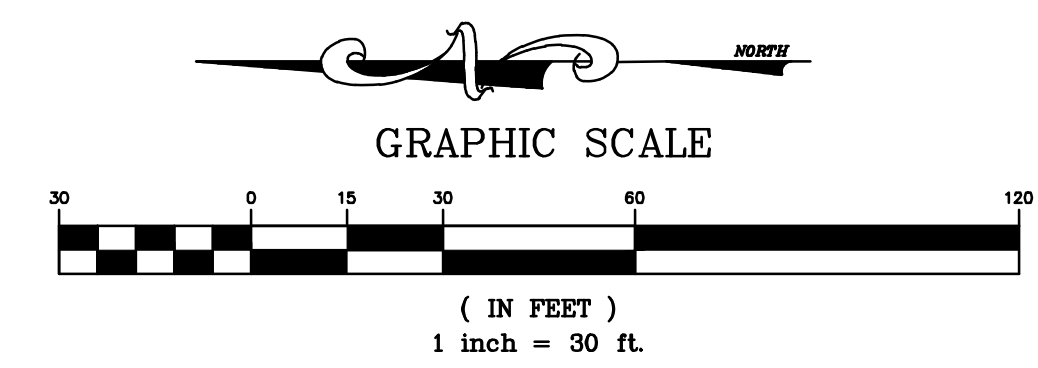
- ### SITE DEVELOPMENT NOTES
- A.) PROPERTY INFORMATION:
PARCEL: 70-07-10-100-052 (PARCEL 1)
ADDRESS: 0 168TH AVENUE (VACANT LAND)
EXISTING AREA = 95,738 SFT = 2.20 ACRES
ADJUSTED AREA = 95,088 SFT = 2.18 ACRES
- PARCEL: 70-07-10-100-053 (PARCEL 2)
ADDRESS: 0 168TH AVENUE (VACANT LAND)
EXISTING AREA = 69,890 SFT = 1.60 ACRES
ADJUSTED AREA = 70,540 SFT = 1.62 ACRES
- TOTAL AREA OF BOTH PARCELS = 165,628 SFT = 3.80 ACRES
- B.) DEVELOPER / AUTHORIZED AGENT:
DOYON PROPERTIES LLC
KYLE DOYON
13650 172ND AVENUE
GRAND HAVEN, MI 49417
(616) 638-9795
- C.) EXISTING ZONING:
THE EXISTING ZONING OF THE SUBJECT PROPERTY IS C-1, NEIGHBORHOOD COMMERCIAL. THE SUBJECT PROPERTY FALLS WITHIN THE US-31 OVERLAY DISTRICT. SEE SECTION 8.1 OF THE GRAND HAVEN TOWNSHIP ZONING ORDINANCE FOR ANY ADDITIONAL ZONING REQUIREMENTS.
- D.) THE EXISTING ZONING OF THE ADJACENT PROPERTIES IS AS FOLLOWS:
NORTH: RR, RURAL RESIDENTIAL
SOUTH: C-1, NEIGHBORHOOD COMMERCIAL
EAST: P.U.D. RESIDENTIAL DEVELOPMENT
WEST: DIRECTLY ACROSS FROM SUBJECT PROPERTY ARE TWO (2) PARCELS ZONED RR FLANKED BY PARCELS ZONED C-2, REGIONAL COMMERCIAL.
- E.) ZONING REGULATIONS WITHIN THE C-1, NEIGHBORHOOD COMMERCIAL DISTRICT ARE NOTED AS FOLLOWS:
1.) MINIMUM LOT AREA = 25,000 SFT
a.) PARCEL 1 = 60,187.54 SFT
b.) PARCEL 2 = 47,339.66 SFT
2.) MINIMUM LOT WIDTH = 100 FT*
*168TH AVENUE IS CLASSIFIED AS A "DOUBLE WIDTH ROAD" WHICH MAKES THE MINIMUM LOT WIDTH 200 FEET.
a.) PARCEL 1 = 222.53 FT WIDE
b.) PARCEL 2 = 219.47 FT WIDE
3.) MAXIMUM BUILDING HEIGHT = 35 FT. (2 1/2 STORIES)
a.) PARCEL 1 = 21.29 FT
b.) PARCEL 2 = 21.29 FT
4.) MAXIMUM LOT COVERAGE = 70% IMPERVIOUS SURFACE
a.) PARCEL 1 = 53% IMPERVIOUS SURFACE
b.) PARCEL 2 = 66.7% IMPERVIOUS SURFACE
IMPERVIOUS SURFACE COVERAGE ARE BASED ON THE PARCEL AREAS SHOWN ABOVE THAT EXCLUDE AREA WITHIN THE R/W AND AREA BETWEEN INTERMEDIATE TRAVERSE LINE AND THE APPROX. C/L OF THE VAN DORNE DRAIN.
5.) MINIMUM FRONT YARD SETBACK = 50 FT.
6.) MINIMUM SIDE YARD SETBACK = 10 FT.**
**SETBACKS ON SIDE YARDS FACING A PUBLIC OR PRIVATE STREET SHALL BE 25 FEET.
7.) MINIMUM REAR YARD SETBACK = 25 FT.
SETBACK LINES ARE SHOWN ON THE EXISTING CONDITIONS PLAN SHEET 4 OF 11.
- F.) REQUIRED PARKING:
SUBJECT TO REVIEW AND APPROVAL BY PLANNING COMMISSION. NUMBER OF SPACES REQUIRED IS BASED UPON THE PROPOSED USE. (SEE PARKING CALCULATION NOTE ON THIS SHEET).
- G.) SITE SIGNAGE:
ALL SIGNAGE SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE GRAND HAVEN TOWNSHIP ZONING ORDINANCE.
- H.) MUNICIPAL SANITARY SEWER AND WATER SERVICE:
MUNICIPAL SANITARY SEWER AND WATER IS AVAILABLE ALONG 168TH AVENUE TO SERVE THE DEVELOPMENT.
- I.) STORM WATER MANAGEMENT:
A STORM WATER MANAGEMENT SYSTEM UTILIZING ADS SUB-SURFACE STORAGE CHAMBERS LOCATED BENEATH EACH INTERIOR PARKING LOT IS PROPOSED. AT AN ONSITE MEETING JANUARY 19, 2023, THE OTTAWA COUNTY WATER RESOURCES COMMISSIONER AND STAFF REVIEWED THE SITE AND DRAINAGE PLAN, APPROVING THIS DRAINAGE CONFIGURATION. ALL COMPONENTS OF THE STORM WATER MANAGEMENT SYSTEM SHALL BE SUBJECT TO A FINAL REVIEW AND APPROVAL BY THE COMMISSIONER.
- J.) REGULATED WETLAND AREAS:
AT AN ONSITE, PRE-APPLICATION MEETING WITH EGE, JANUARY 19, 2023, EGE STAFF SAID A PERMIT FOR WETLAND IMPACT WILL BE REQUIRED UNDER PART 303 OF PA 451 FOR ANY MINOR IMPACT. A JOINT PERMIT APPLICATION IS BEING FILED CONCURRENTLY WITH THE TOWNSHIP'S SITE PLAN REVIEW.
- K.) LANDSCAPING:
THE LANDMARK TREE INVENTORY ALONG WITH ANY PLAN FOR THE REMOVAL AND REPLACEMENT OF LANDMARK TREES SHALL BE IN ACCORDANCE WITH THE LANDMARK TREE INVENTORY PLAN SHOWN ON SHEET 9 OF 11. THE LANDSCAPING SHALL BE IN ACCORDANCE WITH THE LANDSCAPE PLAN SHOWN ON SHEET 10 OF 11.

PARKING REQUIREMENT CALCULATION BASED ON EACH PARCEL SEPARATELY

PARKING REQUIREMENTS FOR UNSPECIFIED USES PER ORDINANCE:
1 SPACE PER 300 SFT OF GROSS FLOOR AREA OR AS DETERMINED BY PLANNING COMMISSION BASED ON PROPOSED USE.

| | |
|---|-------------------------------------|
| 2 UNITS 24.67'x23.33' | 576 SFT GROSS FLOOR AREA PER UNIT |
| 2 UNITS 39.33'x23.33' | 918 SFT GROSS FLOOR AREA PER UNIT |
| 4 UNITS 57.84'x30.67' | 1,774 SFT GROSS FLOOR AREA PER UNIT |
| TOTAL GROSS FLOOR AREA = 10,084 SFT | |
| 10,084 SFT / 300 SFT = 34 SPACES REQUIRED | |

36 TOTAL PROPOSED PARKING SPACES PROVIDED
22 STANDARD + 2 ADA + 12 INTERIOR* = 36
*2 INTERIOR SPACES PER UNIT FOR 39'x23' AND 57'x30' UNITS



| | | | |
|-----|---------------------------|--------|----------|
| 4 | SITE PLAN RE-SUBMITTAL #4 | SC/TV | 5/11/24 |
| 3 | SITE PLAN RE-SUBMITTAL #3 | TMV/SJ | 1/19/24 |
| 2 | SITE PLAN RE-SUBMITTAL #2 | TMV/SJ | 10/04/23 |
| 1 | SITE PLAN RE-SUBMITTAL #1 | TMV/SC | 07/03/23 |
| NO. | REVISION DESCRIPTION: | BY: | DATE: |

ABONMARCHÉ
Benton Harbor, MI
Portage, MI
South Bend, IN
Valparaiso, IN
Hobart, IN
Engineering - Architecture - Land Surveying

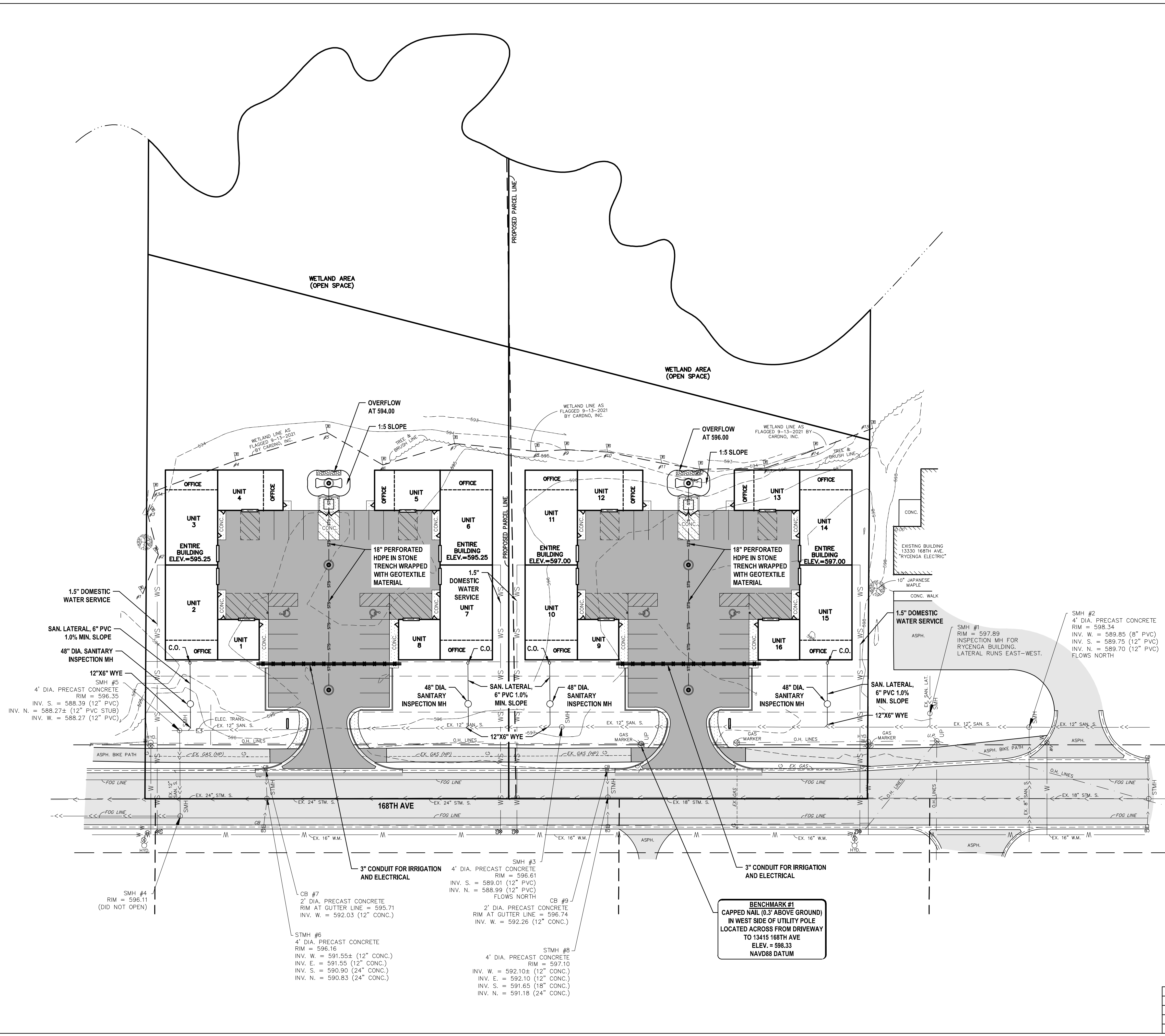
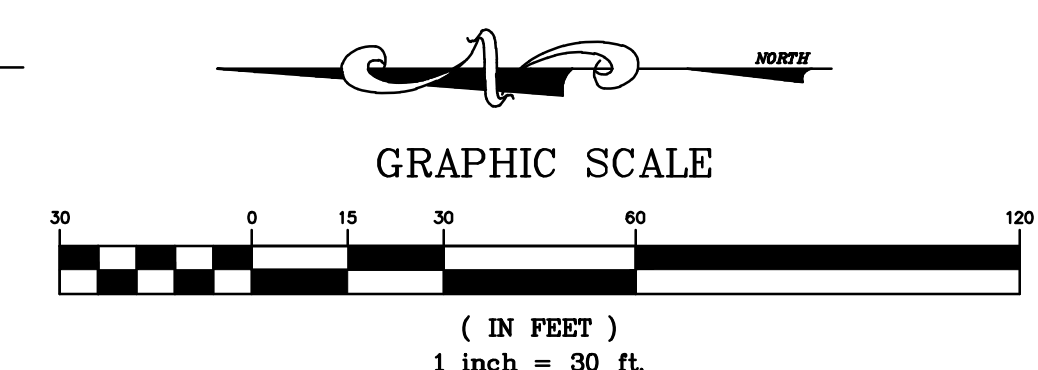
COMMERCIAL SHARE SPACE
VACANT LAND ON 168TH AVENUE
DOYON PROPERTIES LLC
SEC. 10, 17N, R.16W, GRAND HAVEN TWP.

PROPOSED SITE PLAN

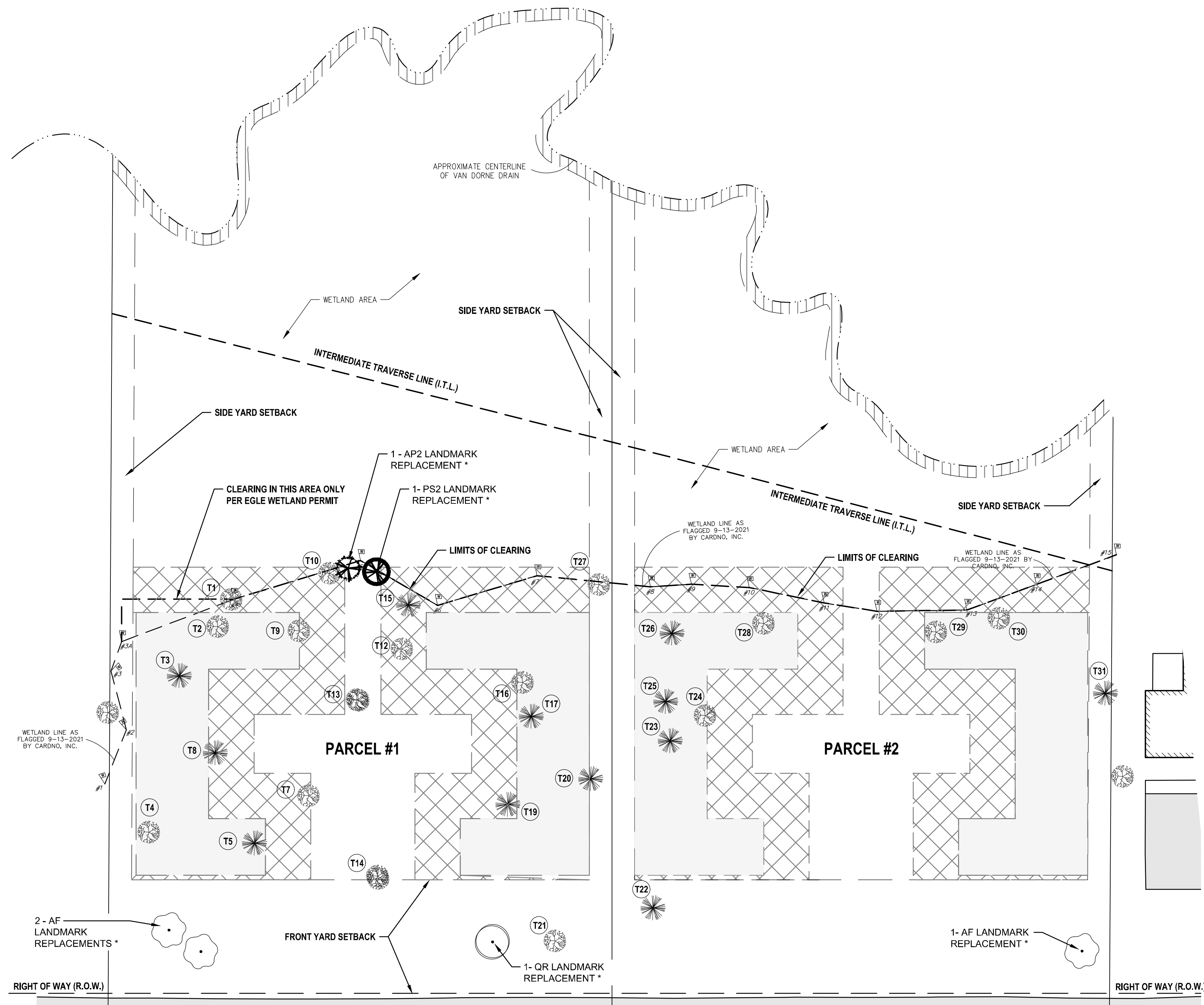
SHEET TITLE:
DRAWN BY: **TMV/DRB**
DESIGNED BY: **LNB**
PM REVIEW: **SJC**
QA/QC REVIEW: **TMV**
DATE: **MAY 2024**
SCALE:

SIGNATURE:
DATE:
SCALE:
HORIZ: 1"=30'
VERT: N/A
ACI JOB #
21-1706
SHEET NO.
6 of 11

| NO. | REVISION DESCRIPTION: | BY: | DATE: |
|-----|---------------------------|--------|----------|
| 4 | SITE PLAN RE-SUBMITTAL #4 | SC/TV | 5/19/24 |
| 3 | SITE PLAN RE-SUBMITTAL #3 | TMV/SJ | 1/19/24 |
| 2 | SITE PLAN RE-SUBMITTAL #2 | TMV/SJ | 10/04/23 |
| 1 | SITE PLAN RE-SUBMITTAL #1 | TMV/SC | 07/03/23 |



C:\Projects\2023\21-1706\1706-0000 - Notes - Utility Land, Grand Haven, Clinton Co., MI\CD - Civil\Drawings\1706\UTILITY.dwg, UTILITY, 1:32000, 12.29.24, 11:00 AM, 11:00 AM, 11



| TREE INVENTORY - PARCEL 1 All Trees > 3" D.B.H. East of R.O.W. | | | |
|---|----------------------------|---------------------------------------|-----------------------------------|
| LOCATION | PARCEL 1 TREES > 3" D.B.H. | PARCEL 1 TREES > 3" DBH TO BE REMOVED | PARCEL 1 TREES > 3" DBH TO REMAIN |
| WEST OF CLEARING LIMITS | 60 | 60 | 0 |
| WEST OF I.T.L. (See Legal Description) | 97 | 60 | 37 |
| WEST OF VAN DOORNE DRAIN (Entire Parcel 1) | 183 | 60 | 123 |

| TREE INVENTORY - PARCEL 2 All Trees > 3" D.B.H. East of R.O.W. | | | |
|---|----------------------------------|---------------------------------------|-----------------------------------|
| LOCATION | PARCEL 2 TOTAL TREES > 3" D.B.H. | PARCEL 2 TREES > 3" DBH TO BE REMOVED | PARCEL 2 TREES > 3" DBH TO REMAIN |
| WEST OF CLEARING LIMITS | 29 | 28 | 1 |
| WEST OF I.T.L. (See Legal Description) | 50 | 28 | 22 |
| WEST OF VAN DOORNE DRAIN (Entire Parcel 2) | 63 | 28 | 35 |

| TREE INVENTORY - COMBINED PARCELS All Trees > 3" D.B.H. East of R.O.W. | | | |
|---|-------------------------|------------------------------|----------------------|
| LOCATION | TOTAL TREES > 3" D.B.H. | TREES > 3" DBH TO BE REMOVED | TREES > 3" TO REMAIN |
| WEST OF CLEARING LIMITS | 89 | 88 | 1 |
| WEST OF I.T.L. (See Legal Description) | 147 | 88 | 59 |
| WEST OF VAN DOORNE DRAIN | 246 | 88 | 158 |

1. ALL EXISTING TREES GREATER THAN 3" DIAMETER AT BREAST HEIGHT (DBH) ON EACH PARCEL WERE INVENTORIED ON 11/03/2023.
2. THE NUMBER OF TREES TO BE REMOVED IS BASED ON SITE DEMOLITION AND CLEARING LIMITS.
3. THE NUMBER OF TREES TO REMAIN ARE CALCULATED.
4. SEE ADDITIONAL INFORMATION ON THIS SHEET FOR LANDMARK TREE INVENTORY AND SHEET 5 FOR CLEARING LIMITS

LANDMARK TREES INVENTORIED ON 1/26/2023 IN ALL BUILDABLE SITE AREAS. LANDMARK TREES WERE NOT IDENTIFIED IN AREAS NOT TO BE DISTURBED.

| LANDMARK TREE REMOVALS | | | | | |
|------------------------|--------------|-----|-------------------------|--------------|----------|
| KEY | NAME | DBH | ZONE | REPLACEMENTS | PARCEL |
| T1 | SASSAFRAS | 18" | BUILDING FOOTPRINT +20' | EXEMPT | 1 |
| T2 | MAPLE | 24" | BUILDING FOOTPRINT | EXEMPT | 1 |
| T3 | WHITE PINE | 22" | BUILDING FOOTPRINT | EXEMPT | 1 |
| T4 | MAPLE | 30" | BUILDING FOOTPRINT | EXEMPT | 1 |
| T5 | WHITE PINE | 30" | BUILDING FOOTPRINT | EXEMPT | 1 |
| T6 | NOT USED | | NOT USED | | NOT USED |
| T7 | CRABAPPLE | 12" | BUILDING FOOTPRINT +20' | EXEMPT | 1 |
| T8 | WHITE PINE | 44" | BUILDING FOOTPRINT +20' | EXEMPT | 1 |
| T9 | MAPLE | 24" | BUILDING FOOTPRINT | EXEMPT | 1 |
| T10 | MAPLE | 21" | BUILDING FOOTPRINT +20' | EXEMPT | 1 |
| T11 | NOT USED | | NOT USED | | NOT USED |
| T12 | CRABAPPLE | 12" | BUILDING FOOTPRINT +20 | EXEMPT | 1 |
| T13 | MAPLE | 27" | BUFFER | REPLACE | 1 |
| T14 | CHERRY | 21" | BUFFER | REPLACE | 1 |
| T15 | WHITE PINE | 19" | BUILDING FOOTPRINT +20' | EXEMPT | 1 |
| T16 | CRABAPPLE | 13" | BUILDING FOOTPRINT | EXEMPT | 1 |
| T17 | WHITE PINE | 33" | BUILDING FOOTPRINT | EXEMPT | 1 |
| T19 | WHITE PINE | 28" | BUILDING FOOTPRINT +20' | EXEMPT | 1 |
| T20 | WHITE PINE | 34" | BUFFER | REPLACE | 1 |
| T21 | RED OAK | 18" | BUFFER | REPLACE | 1 |
| T22 | WHITE PINE | 29" | BUFFER | REPLACE | 2 |
| T23 | WHITE PINE | 24" | BUILDING FOOTPRINT | EXEMPT | 2 |
| T24 | CHERRY | 18" | BUILDING FOOTPRINT | EXEMPT | 2 |
| T25 | WHITE PINE | 22" | BUILDING FOOTPRINT | EXEMPT | 2 |
| T26 | WHITE PINE | 24" | BUILDING FOOTPRINT | EXEMPT | 2 |
| T27 | MAPLE | 32" | BUFFER | REPLACE | 1 |
| T28 | YELLOW BIRCH | 24" | BUILDING FOOTPRINT | EXEMPT | 2 |
| T29 | YELLOW BIRCH | 22" | BUILDING FOOTPRINT | EXEMPT | 2 |
| T30 | YELLOW BIRCH | 19" | BUILDING FOOTPRINT | EXEMPT | 2 |
| T31 | RED CEDAR | 12" | BUFFER | PROTECT | 2 |

LANDMARK TREE REPLACEMENT REQUIREMENTS

SEVEN ELIGIBLE LANDMARK TREES REMOVED.
 PARCEL 1 - 5 TREES
 PARCEL 2 - 1 TREE
 MINIMUM OF SIX REPLACEMENTS REQUIRED PER SECTION 8.10(D)

* LOCATION OF REPLACEMENTS SHOWN ON THIS SHEET FOR INFORMATION ONLY

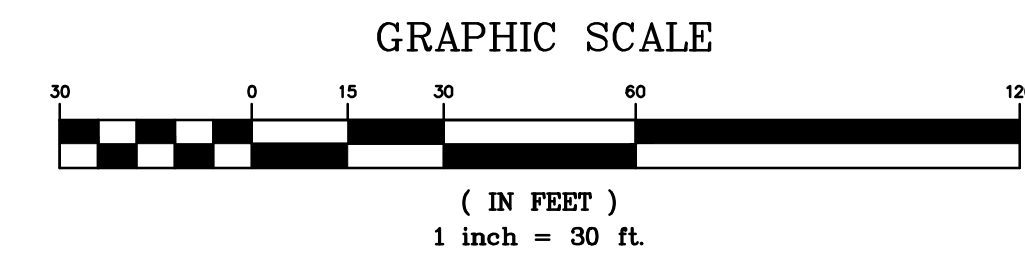
LANDMARK TREE ZONES

- RESTRICTION ZONE
NO TREE REMOVALS ALLOWED
- BUILDING FOOTPRINT
NO REPLACEMENTS
- TWENTY FEET BEYOND BUILDING FOOTPRINT
EXCEPTED AREA NO REPLACEMENTS
PER GHT ZONING ORDINANCE SECTION 8.10, FIGURE 8-5

ALL OTHER SITE AREA IS BUFFER ZONE
 * REPLACE REMOVED LANDMARK TREES

FOR SITE DEMOLITION AND CLEARING LIMITS
 SEE REMOVAL PLAN SHEET 5

* FOR REPLACEMENT TREE SIZES AND
 LOCATIONS SEE LANDSCAPE PLAN SHEET 10.



| NO. | REVISION DESCRIPTION | BY: | DATE: |
|-----|---------------------------|--------|----------|
| 4 | SITE PLAN RE-SUBMITTAL #4 | SC/TV | 5/11/24 |
| 3 | SITE PLAN RE-SUBMITTAL #3 | TMV/SJ | 1/19/24 |
| 2 | SITE PLAN RE-SUBMITTAL #2 | TMV/SJ | 10/04/23 |
| 1 | SITE PLAN RE-SUBMITTAL #1 | TMV/SC | 07/03/23 |

PLANT SCHEDULE NORTH - PARCEL ONE

| CODE | QTY | BOTANICAL NAME | COMMON NAME | SIZE |
|------------------------|-----|--|---------------------------------|-----------------|
| TREES | | | | |
| AF | 4 | Acer rubrum 'Franksred' | Red Sunset® Maple | 3" CAL B&B |
| BC | 2 | Betula nigra 'Cully Improved' | Heritage® Improved River Birch | 2.5" CAL B&B |
| BW | 7 | Betula populifolia 'Whitespire' | Whitespire Gray Birch | 2.5" CAL |
| CA | 1 | Carpinus caroliniana | American Hornbeam | 2.5" CAL B&B |
| CC | 2 | Cercis canadensis | Eastern Redbud | 2.5" CAL B&B |
| CF | 2 | Cornus florida 'Autumn Gold' | Autumn Gold Flowering Dogwood | 2.5" CAL |
| LL | 1 | Larix laricina | Tamarack | 2.5" CAL |
| NS | 2 | Nyssa sylvatica 'Wildfire' | Wildfire Tupelo | 2.5" CAL B&B |
| QR | 2 | Quercus rubra | Red Oak | 3" CAL B&B |
| EVERGREEN TREES | | | | |
| AP | 1 | Abies balsamea phanerolepis | Canaan Balsam Fir | 6-8' HT B&B |
| AP2 | 1 | Abies balsamea phanerolepis | Canaan Balsam Fir | 8' HT. MIN B&B |
| JVB | 3 | Juniperus virginiana 'Brodie' | Brodie Eastern Redcedar | 6-8' HT B&B |
| PS | 2 | Pinus strobus | White Pine | 6-8' HT B&B |
| PS2 | 1 | Pinus strobus | White Pine | 8' HT. MIN B&B |
| PSF | 9 | Pinus strobus 'Fastigiata' | Pyramidal White Pine | 6-8' HT B&B |
| SHRUBS | | | | |
| AA | 2 | Aronia arbutifolia 'Brilliantissima' | Brilliant Red Chokeberry | 30" Ht. minimum |
| CAC | 16 | Cornus sericea 'Alleman's Compact' | Dwarf Red Twig Dogwood | 30" Ht. minimum |
| CAP | 9 | Cornus alternifolia | Pagoda Dogwood | 48" HT |
| CH | 3 | Cornus racemosa x amomum 'J.N. Red Stem' | Irish Setter™ Dogwood | 30" Ht. minimum |
| CM | 4 | Cornus racemosa 'Muszam' | Muskingum® Gray Dogwood | 30" Ht. minimum |
| CNJ | 5 | Ceanothus americanus | New Jersey Tea | 30" Ht. minimum |
| HH | 3 | Hamelis virginiana 'Harvest Moon' | Harvest Moon Witch Hazel | 30" Ht. minimum |
| IF | 2 | Ilex verticillata 'FarrowMrP' | Mr. Poppins® Winterberry | 30" Ht. minimum |
| IV | 6 | Ilex verticillata 'Berry Poppins' | Berry Poppins Winterberry | 30" Ht. minimum |
| JF | 1 | Juniperus chinensis 'Sea Green' | Sea Green Juniper | 30" Ht. minimum |
| JO | 24 | Juniperus virginiana 'Grey Owl' | Grey Owl Eastern Redcedar | 30" Ht. minimum |
| LB | 2 | Lindera benzoin | Spicebush | 30" Ht. minimum |
| LBS | 5 | Larix laricina 'Blue Sparkler' | Blue Sparkler Tamarack | 30" Ht. minimum |
| PM2 | 19 | Potentilla fruticosa 'McKay's White' | McKay's White Bush Cinquefoil | 30" Ht. minimum |
| PN | 5 | Physocarpus opulifolius 'Snowfall' | Snowfall Ninebark | 30" Ht. minimum |
| PR | 17 | Potentilla fruticosa 'Red Ace' | Red Ace Bush Cinquefoil | 30" Ht. minimum |
| TD | 15 | Taxus x media 'Dark Green Spreader' | Dark Green Spreader Anglpop Yew | 30" Ht. minimum |
| VD | 10 | Viburnum dentatum 'Blue Muffin' | Blue Muffin Arrowwood Viburnum | 30" Ht. minimum |
| VL | 4 | Viburnum lentago | Nannyberry | 30" Ht. minimum |
| VO | 4 | Viburnum opulus 'Americianum Compactum' | European Cranberrybush | 30" Ht. minimum |
| VON | 7 | Viburnum opulus 'Nanum' | Dwarf European Cranberrybush | 30" Ht. minimum |
| VP | 5 | Viburnum prunifolium | Blackhaw Viburnum | 30" Ht. minimum |

| CODE | QTY | BOTANICAL NAME | COMMON NAME | SIZE | SPACING |
|----------------------|-----|----------------------------------|--------------------------|--------|----------|
| GROUND COVERS | | | | | |
| AR | 37 | Andropogon gerardi 'Red October' | Red October Big Bluestem | 6" Pot | 24" o.c. |
| SL | 142 | Schizachyrium scoparium | Little Bluestem | 4" | 20" o.c. |

PLANT SCHEDULE SOUTH - PARCEL TWO

| CODE | QTY | BOTANICAL NAME | COMMON NAME | SIZE |
|------------------------|-----|--|---------------------------------|-----------------|
| TREES | | | | |
| AF | 9 | Acer rubrum 'Franksred' | Red Sunset® Maple | 3" CAL B&B |
| BC | 2 | Betula nigra 'Cully Improved' | Heritage® Improved River Birch | 2.5" CAL B&B |
| BW | 7 | Betula populifolia 'Whitespire' | Whitespire Gray Birch | 2.5" CAL |
| CA | 1 | Carpinus caroliniana | American Hornbeam | 2.5" CAL B&B |
| CC | 1 | Cercis canadensis | Eastern Redbud | 2.5" CAL B&B |
| CF | 2 | Cornus florida 'Autumn Gold' | Autumn Gold Flowering Dogwood | 2.5" CAL |
| LL | 1 | Larix laricina | Tamarack | 2.5" CAL |
| NS | 5 | Nyssa sylvatica 'Wildfire' | Wildfire Tupelo | 2.5" CAL B&B |
| QR | 3 | Quercus rubra | Red Oak | 3" CAL B&B |
| EVERGREEN TREES | | | | |
| AP | 2 | Abies balsamea phanerolepis | Canaan Balsam Fir | 6-8' HT B&B |
| JVB | 3 | Juniperus virginiana 'Brodie' | Brodie Eastern Redcedar | 6-8' HT B&B |
| PS | 3 | Pinus strobus | White Pine | 6-8' HT B&B |
| PSF | 3 | Pinus strobus 'Fastigiata' | Pyramidal White Pine | 6-8' HT B&B |
| SHRUBS | | | | |
| AA | 2 | Aronia arbutifolia 'Brilliantissima' | Brilliant Red Chokeberry | 30" Ht. minimum |
| CAC | 16 | Cornus sericea 'Alleman's Compact' | Dwarf Red Twig Dogwood | 30" Ht. minimum |
| CAP | 6 | Cornus alternifolia | Pagoda Dogwood | 48" HT |
| CB | 3 | Cornus sericea 'Bailey' | Bailey's Red Twig Dogwood | 30" Ht. minimum |
| CH | 4 | Cornus racemosa x amomum 'J.N. Red Stem' | Irish Setter™ Dogwood | 30" Ht. minimum |
| CM | 3 | Cornus racemosa 'Muszam' | Muskingum® Gray Dogwood | 30" Ht. minimum |
| CNJ | 6 | Ceanothus americanus | New Jersey Tea | 30" Ht. minimum |
| HH | 3 | Hamelis virginiana 'Harvest Moon' | Harvest Moon Witch Hazel | 30" Ht. minimum |
| IF | 2 | Ilex verticillata 'FarrowMrP' | Mr. Poppins® Winterberry | 30" Ht. minimum |
| IV | 10 | Ilex verticillata 'Berry Poppins' | Berry Poppins Winterberry | 30" Ht. minimum |
| JF | 9 | Juniperus chinensis 'Sea Green' | Sea Green Juniper | 30" Ht. minimum |
| JO | 23 | Juniperus virginiana 'Grey Owl' | Grey Owl Eastern Redcedar | 30" Ht. minimum |
| LB | 2 | Lindera benzoin | Spicebush | 30" Ht. minimum |
| LBS | 5 | Larix laricina 'Blue Sparkler' | Blue Sparkler Tamarack | 30" Ht. minimum |
| PM2 | 12 | Potentilla fruticosa 'McKay's White' | McKay's White Bush Cinquefoil | 30" Ht. minimum |
| PN | 5 | Physocarpus opulifolius 'Snowfall' | Snowfall Ninebark | 30" Ht. minimum |
| PR | 17 | Potentilla fruticosa 'Red Ace' | Red Ace Bush Cinquefoil | 30" Ht. minimum |
| TD | 15 | Taxus x media 'Dark Green Spreader' | Dark Green Spreader Anglpop Yew | 30" Ht. minimum |
| VD | 10 | Viburnum dentatum 'Blue Muffin' | Blue Muffin Arrowwood Viburnum | 30" Ht. minimum |
| VL | 3 | Viburnum lentago | Nannyberry | 30" Ht. minimum |
| VO | 13 | Viburnum opulus 'Americianum Compactum' | European Cranberrybush | 30" Ht. minimum |
| VON | 7 | Viburnum opulus 'Nanum' | Dwarf European Cranberrybush | 30" Ht. minimum |
| VP | 5 | Viburnum prunifolium | Blackhaw Viburnum | 30" Ht. minimum |

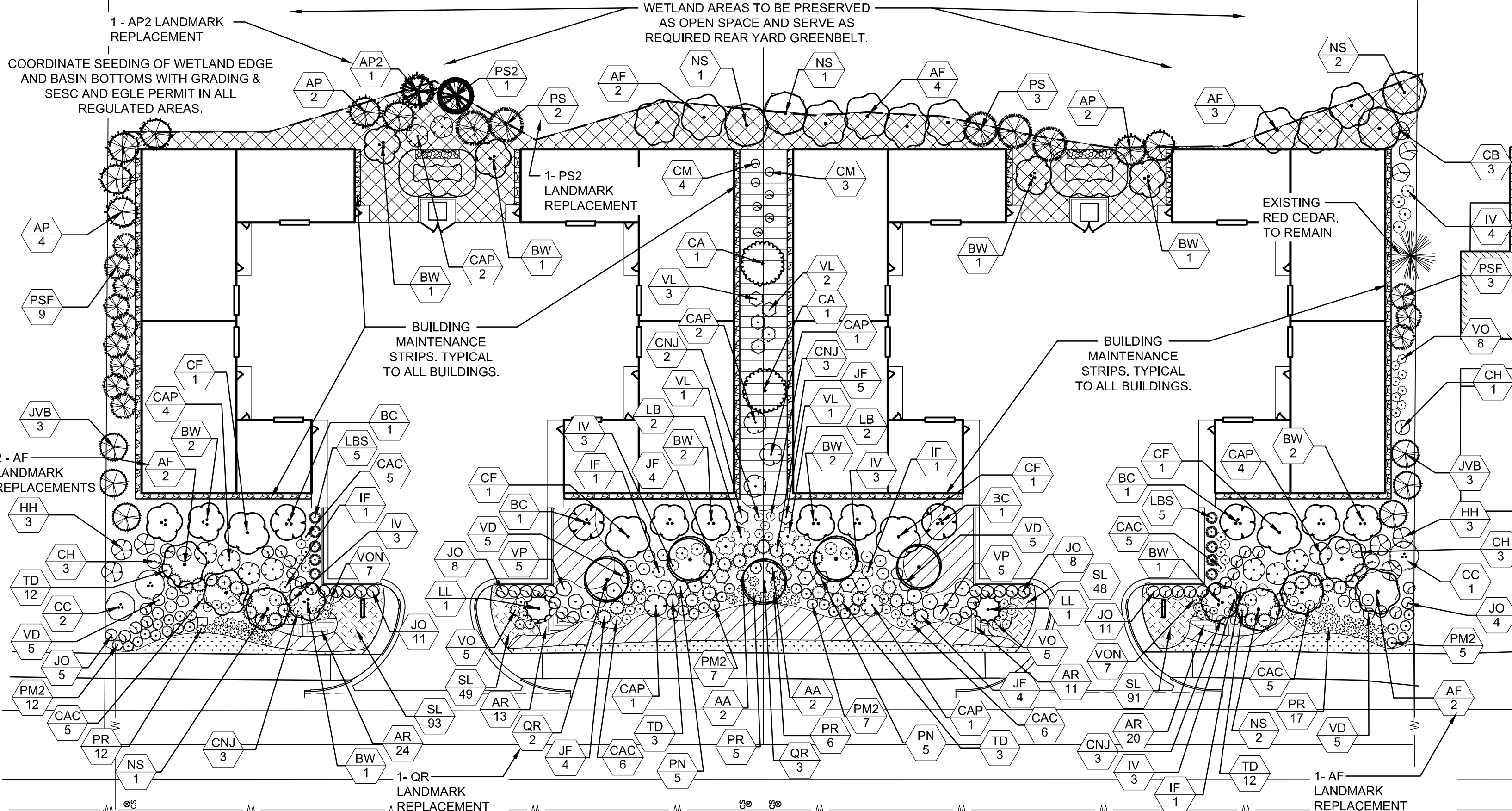
| CODE | QTY | BOTANICAL NAME | COMMON NAME | SIZE | SPACING |
|----------------------|-----|----------------------------------|--------------------------|--------|----------|
| GROUND COVERS | | | | | |
| AR | 37 | Andropogon gerardi 'Red October' | Red October Big Bluestem | 6" Pot | 24" o.c. |
| SL | 139 | Schizachyrium scoparium | Little Bluestem | 4" | 20" o.c. |

LANDSCAPE NOTES

- NO WORK SHALL OCCUR IN ANY REGULATED WETLAND AREA EXCEPT AS EXPLICITLY PERMITTED BY AN EGE PERMIT.
- LOCATE ALL UTILITIES PRIOR TO BEGINNING WORK. UTILITIES SHOWN ARE DIAGRAMMATIC AND MAY NOT INDICATE ALL UNDERGROUND IMPROVEMENTS.
- PROTECT ALL EXISTING PAVING, STRUCTURES, UTILITIES, AND PLANT MATERIAL INDICATED TO REMAIN. CONTRACTOR RESPONSIBLE FOR ANY DAMAGE TO EXISTING FEATURES AT NO EXPENSE TO THE OWNER.
- SOIL EROSION AND SEDIMENTATION CONTROL SHALL BE MAINTAINED IN PLACE THROUGHOUT CONSTRUCTION.
- PRIOR TO BEGINNING INSTALLATION, COORDINATE WITH EARTHWORK CONTRACTOR AS NEEDED TO ENSURE ALL AREAS HAVE POSITIVE DRAINAGE.
- LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR TOUCHING UP AND FINISH LEVELING OF TOPSOIL AS NECESSARY TO MAINTAIN SURFACE DRAINAGE AND PROVIDE A SMOOTH SURFACE FREE OF PONDING, CLUMPS, STICKS, HOLES, ETC. POSITIVE DRAINAGE SHALL BE RETAINED DURING AND AFTER LANDSCAPE CONSTRUCTION ACTIVITIES.
- REMOVE EXISTING GRASS, WEEDS, OR BRUSH SCRUB GROWTH WITHIN LIMITS OF PLANTING AREAS AND WITHIN A 5' DIAMETER CIRCLE AROUND BASE OF EACH TREE.
- RAKE TOPSOIL TO ELIMINATE UNEVEN AREAS AND REMOVE DEBRIS, ROOTS, BRANCHES, AND STONES IN EXCESS OF 1 INCH SIZE.
- PLANTS AND OTHER MATERIALS ARE QUANTIFIED AND SUMMARIZED FOR THE CONVENIENCE OF JURISDICTIONAL AGENCIES ONLY.
- CONFIRM AND INSTALL SUFFICIENT QUANTITIES TO COMPLETE THE WORK AS DRAWN ON THE PLANS. CONTRACTOR RESPONSIBLE FOR VERIFYING ALL QUANTITIES.
- ALL PLANTS SHALL MEET THE MINIMUM SIZE REQUIREMENTS INDICATED ON THE PLANT LIST.
- ALL PROPOSED PLANT SUBSTITUTIONS MUST BE APPROVED BY THE OWNER AND GRAND HAVEN TOWNSHIP.
- ALL PLANT MATERIAL SHALL COMPLY WITH ANSI Z601-2014 "AMERICAN STANDARD FOR NURSERY STOCK." PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS STOCK GROWN WITH GOOD HORTICULTURAL PRACTICE UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE OF THE PROJECT SITE.
- ALL PLANT MATERIAL MUST BE TAGGED BY THE NURSERY ORIGIN FOR PROPER IDENTIFICATION IN THE FIELD. TAGS ARE ONLY TO BE REMOVED AFTER ACCEPTANCE AND INSPECTION.
- INSTALL PLANT MATERIAL IN ACCORDANCE WITH ESTABLISHED METHODS TO MAXIMIZE PLANT HEALTH. AT A MINIMUM:
 - EXCAVATE PLANTING HOLE AT LEAST TWO TIMES WIDER THAN THE ROOT BALL OR CONTAINER, WITH SIDES SLOPED TO AN UNEXCAVATED OR FIRM BASE.
 - DIG HOLE TO A DEPTH SO THE COLLAR OR ROOT FLARE WILL BE AT FINISHED GRADE.
 - REMOVE ALL NON-BIODEGRADABLE TAGS, RIBBON, CONTAINERS AND TWINE FROM PLANTS UPON INSTALLATION. WIRE BASKETS AND BURLAP MAY REMAIN ON B&B MATERIAL.
 - PLACE PLANT IN HOLE, BACKFILL FIRMLY WITH EXISTING UNAMENDED SOIL, AND THOROUGHLY WATER.
- ALL TREES AND SHRUBS TO BE MULCHED WITH 3" DEPTH NATURAL SHREDDED HARDWOOD MULCH FREE OF FOREIGN MATTER. TREES OUTSIDE OF BED LINES TO BE MULCHED WITH A 5" DIAMETER MULCH RING. MULCH SHALL NOT BE PLACED WITHIN 3" OF TRUNKS.
- ALL PLANTING BED EDGES SHALL RECEIVE, AT MINIMUM, A SPADED EDGE.
- INSTALL BUILDING MAINTENANCE STRIP WITH STAKED ALUMINUM EDGING AND STONE.
- WETLAND EDGE AND STORMWATER OVERFLOW BASIN SEEDING TO BE INSTALLED AS FOLLOWS:
 - LAND EDGE STOCKPILED SITE WETLAND TOPSOIL TO A DEPTH OF AT LEAST 3" THICK
 - SPREAD SEED MIX EVENLY USING MECHANICAL SPREADER AT SPECIFIED SEEDING RATE.
 - INSTALL AND ANCHOR DEGRADABLE EROSION CONTROL BLANKET TO MANUFACTURER'S SPECIFICATIONS (SUCH AS FUTERRA - CSI GEOTUF) IMMEDIATELY UPON INSTALLATION
- TURFGRASS AND SEED LIMIT LINES ARE APPROXIMATE.
- ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE SEED OR OTHERWISE OCCUPIED WITH PLANTING BEDS, SPECIFIED SEEDING, OR SHREDDED BARK MULCH.
- INSTALL TURFGRASS SOD OR HYDROSEED. INSTALL TOP SOIL, SEED OR SOD, STRAW AND WATER AND MAINTAIN UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. AREAS TO RECEIVE SEED OR SOD SHALL BE CLEAN OF DEBRIS AND FREE OF WEEDS.
- IF STRAW IS USED AS MULCH, IT SHALL BE THRESHED STRAW OF HAY, OATS, WHEAT, BARLEY, OR RYE. SPREAD AT A RATE OF 2 1/2 TONS PER ACRE. STRAW NETTING, AND OTHER ANTI-EROSION MATERIALS TO BE REMOVED AFTER LAWN HAS BEEN ESTABLISHED.
- MAINTAIN EROSION CONTROL IN ALL SEEDED AREAS UNTIL SEED AND TURF IS ESTABLISHED, SEE SOIL EROSION AND SEDIMENTATION CONTROL PLAN.
- CLEAN ALL SURFACES OF SOIL, MULCH, OVERSPRAY, AND LANDSCAPE DEBRIS AT THE COMPLETION OF EACH DAY'S WORK.
- INSTALLATION OF ANY IRRIGATION SYSTEM TO BE COORDINATED THROUGH OWNER AND GENERAL CONTRACTOR.
- IRRIGATION SYSTEM (IF ANY) SHALL UTILIZE AN AUTOMATIC, PERMANENTLY INSTALLED CONTROL MECHANISM (SUCH AS HUNTER SOIL-CLIK, TORO PRECISION SENSOR, RAIN-BIRD SMART-TY OR EQUAL) TO PREVENT IRRIGATION DURING AND AFTER PRECIPITATION OR WHEN THE SOIL IS APPROPRIATELY MOIST.
- IRRIGATION CONTRACTOR RESPONSIBLE FOR ALL REPAIR AND RESTORATION TO ALL DAMAGE CAUSED BY IRRIGATION WORK SUBSEQUENT TO INSTALLATION OF EROSION CONTROLS, SEED, MULCH, PLANTS, OR ANY OTHER IMPROVEMENTS.
- ALL PLANT MATERIAL SHALL BE MAINTAINED AND WARRANTED FOR A MINIMUM OF ONE (1) FULL GROWING SEASON FROM THE DATE OF FINAL ACCEPTANCE.
 - MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER INSTALLATION AND SEEDING.
 - WATER REGULARLY TO KEEP SEEDED AREAS MOIST TO MAXIMIZE GERMINATION AND MAINTAIN OPTIMUM GROWTH AND SURVIVAL
 - ALL ERODED OR BARE AREAS SHALL BE REPAIRED, RESEED, WITH GROWTH FULLY ESTABLISHED PRIOR TO FINAL ACCEPTANCE.

SEED SCHEDULE

| SEED MIX A | | | SEED MIX B | | |
|----------------------------------|--------------------------------|--------------|----------------------------|-----------------------------|---------------|
| Botanical Name | Common Name | PLS Oz/Acre | Botanical Name | Common Name | PLS Oz/Acre |
| Permanent Grasses/Seeds | | | | | |
| Andropogon gerardi | Big Bluestem | 12.00 | Calamagrostis canadensis | Bluejoint Grass | 1.00 |
| Bouteloua curtipendula | Side Oats Grass | 16.00 | Carex crinita | Fringed Sedge | 1.00 |
| Carex spp. | Prairie Sedge Species | 3.00 | Carex frankii | Bristly Cattail Sedge | 3.00 |
| Elymus canadensis | Canada Wild Rye | 24.00 | Carex lupulina | Common Hop Sedge | 3.00 |
| Panicum virgatum | Switch Grass | 2.50 | Carex lasiocarpa | Battledore Sedge | 2.00 |
| Schizachyrium scoparium | Little Bluestem | 32.00 | Carex muskumensis | Swamp Oval Sedge | 1.00 |
| Sorghastrum nutans | Indian Grass | 12.00 | Carex squarrosa | Narrow Leaved Cattail Sedge | 1.00 |
| | | Total | Carex typhina | Common Cattail Sedge | 3.00 |
| | | | Carex vaginiflora | Brown Fox Sedge | 2.00 |
| | | | Cirsium arvense | Common Wood Reed | 9.50 |
| | | | Elymus virginicus | Virginia Wild Rye | 32.00 |
| | | | Glyceria striata | Four Nerve Grass | 2.00 |
| | | | Juncus effusus | Common Rush | 0.50 |
| | | | Rice Cut Grass | Rice Cut Grass | 2.00 |
| | | | Leersia oryzoides | Common Water Plantain | 1.00 |
| | | | Scirpus atrovirens | Dark Green Rush | 1.00 |
| | | | Spartina pectinata | Prairie Cord Grass | 1.00 |
| | | | | Total | 50.00 |
| Temporary Cover | | | | | |
| Avena sativa | Common Oat | 512.00 | | | |
| | | Total | | | 512.00 |
| Forbs | | | | | |
| Asclepias syriaca | Common Milkweed | 3.00 | | | |
| Asclepias tuberosa | Butterfly Weed | 1.00 | | | |
| Chamaecrista fasciculata | Partridge Pea | 10.00 | | | |
| Coreopsis lanceolata | Sand Conopsis | 6.00 | | | |
| Echinacea purpurea | Broad Leaved Purple Coneflower | 8.00 | | | |
| Helianthus scaberrimus | False Sunflower | 0.50 | | | |
| Mousetail | Wild Bergamot | 0.50 | | | |
| Pentstemon digitalis | Foxglove Beard Tongue | 2.00 | | | |
| Ratibida pinnata | Yellow Coneflower | 4.00 | | | |
| Rudbeckia hirta | Black Eyed Susan | 8.00 | | | |
| Solidago speciosa | Showy Goldenrod | 0.50 | | | |
| Symphoricarpos laevis | Smooth Blue Aster | 0.50 | | | |
| Symphoricarpos novae-angliae | New England Aster | 0.50 | | | |
| | | Total | | | 46.00 |
| SEED MIX C | | | | | |
| Botanical Name | Common Name | PLS Oz/Acre | Botanical Name | Common Name | PLS Oz/Acre |
| Permanent Native Species: | | | | | |
| Asclepias syriaca | Common Milkweed | 4.00 | Labella siphilitica | Great Blue Lobelia | 0.50 |
| Chamaecrista fasciculata | Partridge Pea | 10.00 | Lycopus americanus | Common Water Horehound | 1.00 |
| Coreopsis lanceolata | Sand Conopsis | 6.00 | Mimulus ringens | Monkey Flower | 0.50 |
| Diemantus illinoensis | Illinois Sensitive Plant | 12.00 | Pentstemon sedoides | Ditch Stonecrop | 0.50 |
| Echinacea purpurea | Broad Leaved Purple Coneflower | 12.00 | Pericallis spp. | Pinkweed Species | 2.00 |
| Lupinus perennis s. occidentalis | Wild Lupine | 4.00 | Rudbeckia laciniata | Wild Goldenrod | 2.00 |
| Monarda fistulosa | Wild Bergamot | 1.50 | Senecio abscarpus | Wild Senecio | 2.00 |
| Pentstemon digitalis | Foxglove Beard Tongue | 1.00 | Solidago patula | Swamp Goldenrod | 1.00 |
| Ratibida pinnata | Yellow Coneflower | 4.00 | Symphoricarpos lanceolatus | Pinkish Aster | 0.50 |
| Rudbeckia hirta | Black Eyed Susan | 10.00 | Symphoricarpos panicum | Bristly Aster | 0.50 |
| Solidago speciosa | Showy Goldenrod | 1.00 | Thalictrum dasycarpum | Purple Meadow Rue | 2.00 |
| Symphoricarpos laevis | Smooth Blue Aster | 0.50 | Verbesina alternifolia | Wingstem | 4.00 |
| | | Total | | | 74.00 |



LANDMARK TREE REPLACEMENT REQUIREMENTS

SEE SHEET 9 FOR LANDMARK TREE AND TREE INVENTORY INFORMATION.

SIX ELIGIBLE LANDMARK TREES TO BE REMOVED. MINIMUM OF SIX REPLACEMENTS REQUIRED PER SECTION 8.10(D).

NORTH PARCEL 1 - REQUIRES 5 REPLACEMENTS

NORTH PARCEL 1 - LM TREE REPLACEMENTS ARE (2) AF, (1) QR, (1) PS2, AND (1) AP2.

SOUTH PARCEL 2 - REQUIRES 1 REPLACEMENT.

SOUTH PARCEL 2 - LM TREE REPLACEMENT IS (1) AF.

LOT COVERAGE BREAKDOWN

1.) PARCEL AREAS INCLUDING THE AREA BETWEEN INTERMEDIATE TRAVERSE LINE AND THE C/L OF THE VAN DORNE DRAIN.

a.) NORTH PARCEL 1 = 87,600 SFT

b.) SOUTH PARCEL 2 = 63,240 SFT

2.) LOT COVERAGE

a.) NORTH PARCEL 1

i) 25,237 SFT IMPERVIOUS SURFACE

ii) 62,363 SFT PERVIOUS SURFACE

b.) SOUTH PARCEL 2

i) 25,232 SFT IMPERVIOUS SURFACE

ii) 38,008 SFT PERVIOUS SURFACE

TREE PLANTING REQUIREMENTS

NORTH PARCEL 1

125 TREES REQUIRED; 168 PROPOSED

45 TREES PROVIDED BY THIS PLAN

123 WILD TREES > 3" DBH TO REMAIN

SOUTH PARCEL 2

77 TREES REQUIRED; 77 PROPOSED

42 TREES PROVIDED BY THIS PLAN

35 WILD TREES > 3" DBH TO REMAIN

LANDSCAPE PLANTING AREA REQUIREMENTS

TOTAL PROJECT

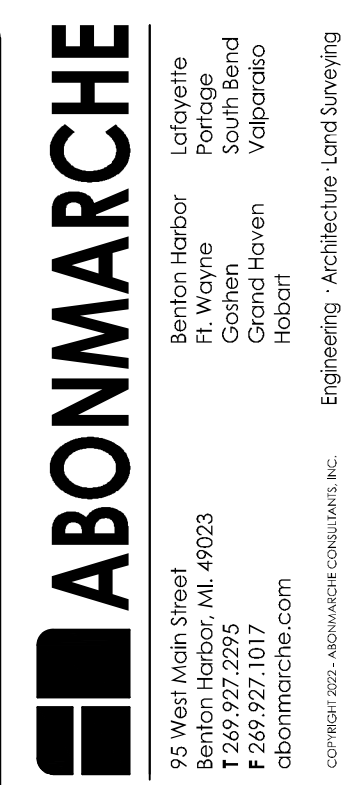
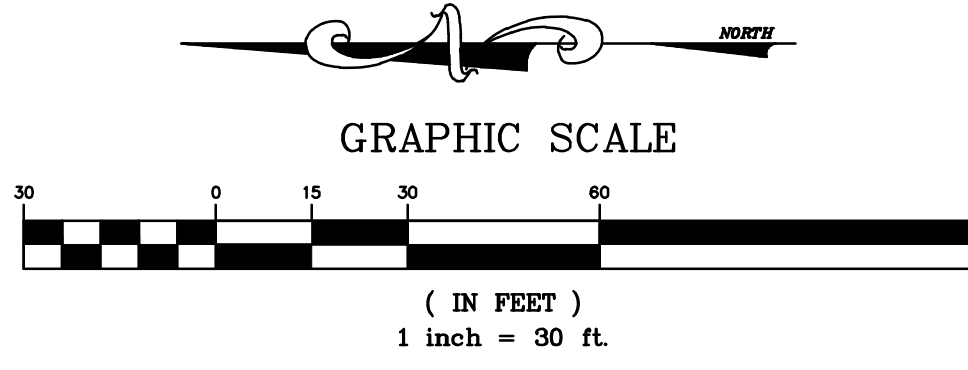
- FRONT YARD LS AREA REQUIRED FOR 442' FRONTAGE = 6,003 SQ FT (ROUNDED UP)
- LS AREA REQUIRED FOR 1420' OF WALLS VISIBLE FROM PUBLIC AREA BUFFER = 7,100 SQ FT
- ADDITIONAL LS PARKING SCREEN REQUIRED FOR 2-455' PERIMETER INTERIOR PARKING AREAS = 9,100 SQ FT
- ENTIRE PROJECT TOTAL LS REQUIRED = 22,133 SQ FT
- TOTAL PROJECT - TOTAL LANDSCAPE AREA PROPOSED THIS SHEET = 26,576 SQ FT

NORTH PARCEL 1

- FRONT YARD LS AREA REQUIRED FOR 223' FRONTAGE = 2,993 SQ FT
- LS AREA REQUIRED FOR 710' OF WALLS VISIBLE FROM PUBLIC AREA BUFFER = 3550 SQ FT
- ADDITIONAL LS PARKING SCREEN REQUIRED FOR 455' PERIMETER INTERIOR PARKING AREA = 4,550 SQ FT
- PARCEL 1 NORTH TOTAL LS REQUIRED = 11,093 SQ FT
- NORTH PARCEL 1 - TOTAL LANDSCAPE AREA PROPOSED THIS SHEET = 13,776 SQ FT

SOUTH PARCEL 2

- FRONT YARD LS AREA REQUIRED FOR 220' FRONTAGE = 2,940 SQ FT
- LS AREA REQUIRED FOR 710' OF WALLS VISIBLE FROM PUBLIC AREA BUFFER = 3550 SQ FT
- ADDITIONAL LS PARKING SCREEN REQUIRED FOR 455' PERIMETER INTERIOR PARKING AREA = 4,550 SQ FT
- PARCEL 2 SOUTH TOTAL LS REQUIRED = SF 11,040 SQ FT
- SOUTH PARCEL 2 - TOTAL LANDSCAPE AREA PROPOSED THIS SHEET = 12,800 SQ FT



COMMERCIAL SHARE SPACE
VACANT LAND ON 168TH AVENUE
DOYON PROPERTIES LLC
SEC. 10, 17N, R16W, GRAND HAVEN TWP.

LANDSCAPE PLANTING PLAN

DRAWN BY: TMV/DRB
DESIGNED BY: LNB
PM REVIEW: SJC
QA/QC REVIEW: TMV
DATE: MAY 2024



SIGNATURE: _____
DATE: _____
SCALE: HORIZ: 1" = 30'
VERT: N/A

ACI JOB # 21-1706

