BOARD OF ZONING APPEALS
STAFF REPORT

To:	Members of the Board of Zoning Appeals
From:	Tom Vander Woude, Planning Director
Meeting Date:	July 13, 2021
Agenda Item:	BZA Docket No. 20-012
Hearing:	**PUBLIC HEARING (CONTINUED)**
Summary:	BCORE Corridor Chicago LLC represented by Kimley-Horn requesting approval of developmental standards variances from Table 26-6.405.A-7 of the Munster zoning ordinance to expand a driveway beyond the maximum permitted width, to permit off-street parking in the first lot layer, to permit off-street loading in the first lot layer, and to waive the required screening for loading areas and from Table 26-6.405.O-3 to waive the minimum dimensions for a parking area.

Applicant:	BCORE Corridor Chicago LLC represented by Kimley-Horn
Property Address:	475 Superior Avenue
Current Zoning:	CD-4.B General Urban B Character District
Adjacent Zoning:	North: CD-4.B South: CD-4.B East: SD-PUD West: CZ – Civic Zone
Action Requested:	Approval of Variances
Additional Actions Required:	Approve findings of fact
Staff Recommendation:	**<u>Approval</u>**
Attachments:	Slide deck prepared by GE GE Driveway Improvement plan set prepared by Kimley-Horn dated 10.07.2020 BZA 20-012 variance application

BACKGROUND

Kimley-Horn, on behalf of BCORE Corridor Chicago LLC and its tenant GE Appliances, has submitted plans to expand the driveway at the GE Appliance distribution center at 475 Superior Avenue. The project includes expanding the driveway from 41 feet to 60 feet wide, with a 75-foot-wide apron at the front property line. The widened driveway will serve as additional truck queuing area to prevent the stacking of semi-trucks on Superior Avenue. To make room for the widened driveway, two parking spaces will be eliminated on the east side of the employee parking lot that is located south of the building. The employee parking lot will be expanded to the west to replace the parking spaces and landscaping will be updated to comply with the Town's screening requirements.

The project requires multiple variances:

Code Section	Standard	Permitted	Proposed
Table 26-6.405.A-7	Driveway/Vehicular Entrance Maximum Width	24 ft. maximum in 1st lot layer	60 feet wide
Table 26-6.405.A-7	Off-Street Parking Location	In 3rd lot layer only	In 1st lot layer
Table 26-6.405.A-7	Off-Street Loading	In 3rd lot layer only	In 1st lot layer
Table 26-6.405.A-7	Screens: Loading Areas	Screening shall be by Building or opaque Wall Screen, Hedge Screen, or Fence Screen	No screening of loading area within driveway
Table 26-6.405.O-3	Off-Street Vehicular Parking Space Dimensions: 90 degree	Stall Width: 9'0" Minimum Stall Length: 18'0" Aisle Width: 21'0"	Stall Width: 9'0" Minimum Stall Length: 16'0" Aisle Width: 23'0

In general, these variances are required because the project proposes to use the driveway as an extension of the loading area. Loading areas are not permitted in the front yard/1st lot layer and commercial driveways are limited in width because they are not intended to be used for queuing and loading.

The current parking lot is only 55' from curb to curb and the stalls are only 16' in length, which does not meet current code standards. The two new spaces on the west side of the parking lot are proposed to be identical in length to the existing spaces which necessitates a variance.

Modifications to the parking lot and loading area require the installation of screening. The parking lot will be screened with a fence, hedge, and shade trees in compliance with code standards. The loading area to

the east of the building, currently screened with a chain link fence, will be screened with a solid wood fence along the frontage.

The proposed widening of the driveway will create space for a total of six trucks to be parked off-street as they wait to enter the loading area. The owners and operators of the GE Appliance Distribution Center are seeking to solve the problem of trucks stacking on Superior Ave. The lack of space within the yard leads trucks to idle in the west bound lane of Superior Ave., blocking westbound movements, reducing Superior to a single lane roadway, and preventing access into and out of adjacent businesses.

PROJECT HISTORY

November 2020 public hearing
The petition was presented to the Munster Board of Zoning Appeals at a public hearing in November. The BZA tabled the petition and requested that the applicant explore options for off-peak deliveries and additional loading space.

December 2020 continued public hearing
In December 2020, Jonathan Gocke of GE Appliances submitted correspondence indicating that GE is implementing off-peak deliveries and asked that the project be tabled. The BZA tabled the project.

January 2021 continued public hearing
The petition was tabled again at the request of the applicant.

Since the January meeting, in light of increasing truck congestion in the adjacent streets, the Munster Police Department contacted GE Appliance and GE arranged to move empty trailers to an off-site storage yard.

The plans have not been modified since the November hearing.

February 2021 continued public hearing
The petition was tabled again and the Board of Zoning Appeals asked the representatives of GE to consider the comments they have made and return with a demonstration that they are capable of managing their facility in such a way that does not cause problems for the Town of Munster and to provide a report on truck traffic for their review at the next meeting.

After the meeting, staff spoke with Jonathan Goecke of GE Appliance. He requested that the Board table the petition again to allow time to collect data to confirm that the measures they have taken, including shifting a significant portion of their deliveries from Munster to Louisville and relocating empty trailers to Lansing, have reduced the truck traffic at their facility.

March 2021 – June 2021
At the BZA meetings between March and June of 2021, the applicants requested that the petition be tabled. The BZA tabled the petition, but in June stated in their motion to table that they would take a final vote at the July 2021 meeting.

The applicant has provided a slide deck that shows the monthly truck traffic at the subject property and a comparison of the driveway configuration among GE distribution centers throughout the United States.

Staff believes that the applicant has met the standards for a variance and recommends approval.

VARIANCE STANDARDS

The variance process is established to provide relief to a property owner when, due to unique circumstances, compliance with the zoning code imposes a hardship or practical difficulty on a property owner. The BZA is under no obligation to grant a variance. It is the petitioner's responsibility to prove a hardship or practical difficulty. The BZA should ask the petition to address the criteria listed below.

Sec. 26-6.804.I of the Munster Zoning Code states that the basis for a variance is as follows:

g. General Standards.
A Variance may be granted only if the Decision-Making Authority has made the following determinations for such Variance:

i. the practical difficulties or unnecessary hardships that would be incurred by strict application of the Use or Development standard, as applicable, are unique and not shared by all properties in the vicinity and are not self-imposed;
ii. such Variance is the minimum Variance that will relieve such practical difficulties or unnecessary hardships, as applicable;
iii. such Variance is in the spirit of the general purposes and intent of this Article as stated in Division 1; and
iv. such Variance is so designed as to provide reasonable consideration to, among other things, the character of the neighborhood, District, or Civic Zone, the conservation of property values in the vicinity, and the guidance of Development in accordance with the Comprehensive Plan.

h. Specific to Development standards Variances:
A Variance from Development Standards may be approved or approved with conditions only if:

i. it will not be injurious to the public health, safety, morals, and general welfare of the community;
ii. the use and value of the area Adjacent to the property included in the Variance will not be affected in a substantially adverse manner; and
iii. the strict application of the Development standards will result in practical difficulties in the use of the property.

The applicant has addressed these criteria in the attached application.

RECOMMENDATION

Staff recommends approval of the variances.

The Board of Zoning Appeals may wish to consider the following motion:

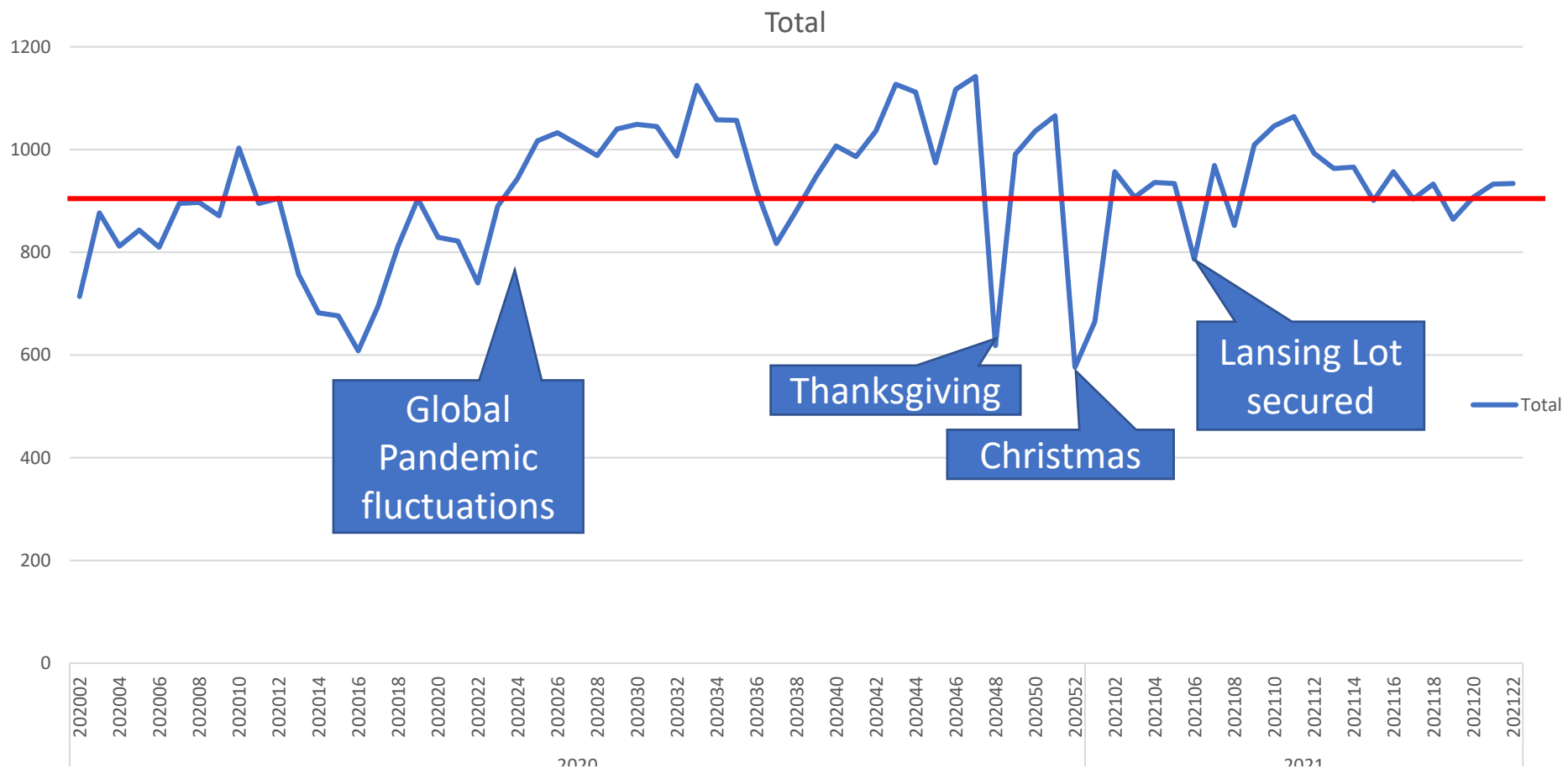
Approve BZA Docket No. 20-012 granting developmental standards variances from Table 26-6.405.A-7 of the Munster zoning ordinance to expand a driveway beyond the maximum permitted width, to permit off-street parking in the first lot layer, to permit off-street loading in the first lot layer, and to waive the required screening for loading areas and from Table 26-6.405.O-3 to waive the minimum dimensions for a parking area for the GE Appliance Distribution Center at 475 Superior Avenue.

With the following condition:

Plan Commission approval of the development plan submitted under PC Docket 20-008.

Munster ADC Truck Traffic Jan 2020 – May 2021

"Arrivals and Departures"



2020 AVG – 915
2021 YTD AVG – 926
TTL AVG - 918

There is no significant increase/decrease in truck traffic over 17 months of data

GE Appliances Entrance Comparison

ADC	Year Opened	SQFT	Entrance Width
Munster	1988	456,000	23.62
Perryville	2003	1,000,000	57.71
Commerce	2019	1,100,000	49.79
LA	1989	1,300,000	51.37
Denver	2019	352,000	52.96
Dallas	2018	700,000	63.35
Jacksonville	2019	812,000	63.53
Lansing Lot			52.70

Average Width	51.76
Average Width w/o Munster	56.45
Munster	**23.62**

- Munster ADC entrance is ½ as wide as the average (41’ is listed but that’s at street entrance, at guard house it narrows to 23’)
- Proposed Driveway would be 60’ bringing it inline with our other facilities

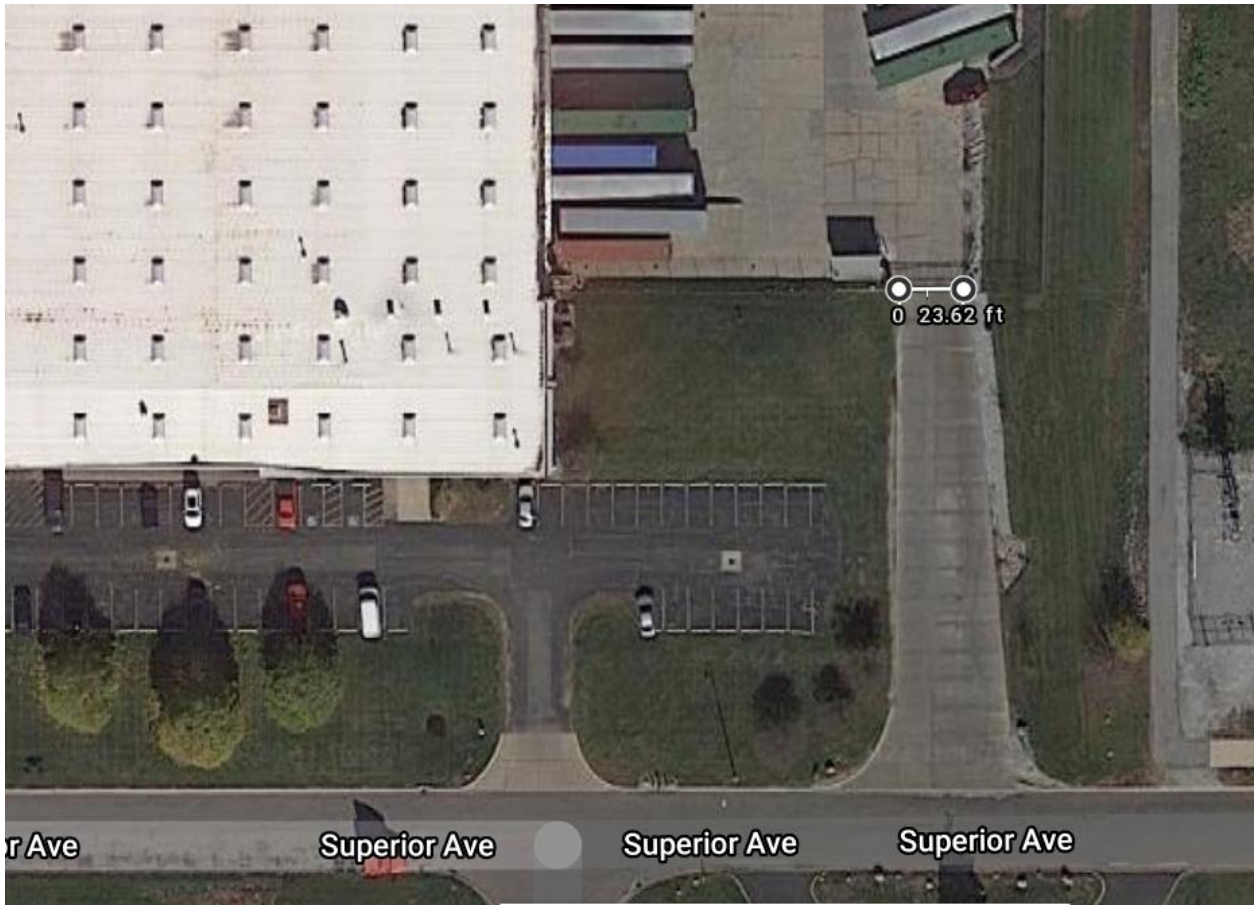
Appendix

Side-by-side entrance comparisons

Munster ADC Truck Entrance Comparison

Munster ADC (Opened 1988)
23.62’ wide at guard house
Old Bldg, Short driveway, no clear in/out lanes

Perryville ADC (Opened 2003)
57.71’ wide at guard house
1 clear lane for IB/OB



Munster ADC Truck Entrance Comparison

Munster ADC (Opened 1988)
23.62’ wide at guard house
Old Bldg, Short driveway, no clear IB/OB lanes

Commerce ADC (Opened 2019)
49.79’ wide at guard house
Serpentine Driveway, 2 lanes IB, 1 OB

Munster ADC Truck Entrance Comparison

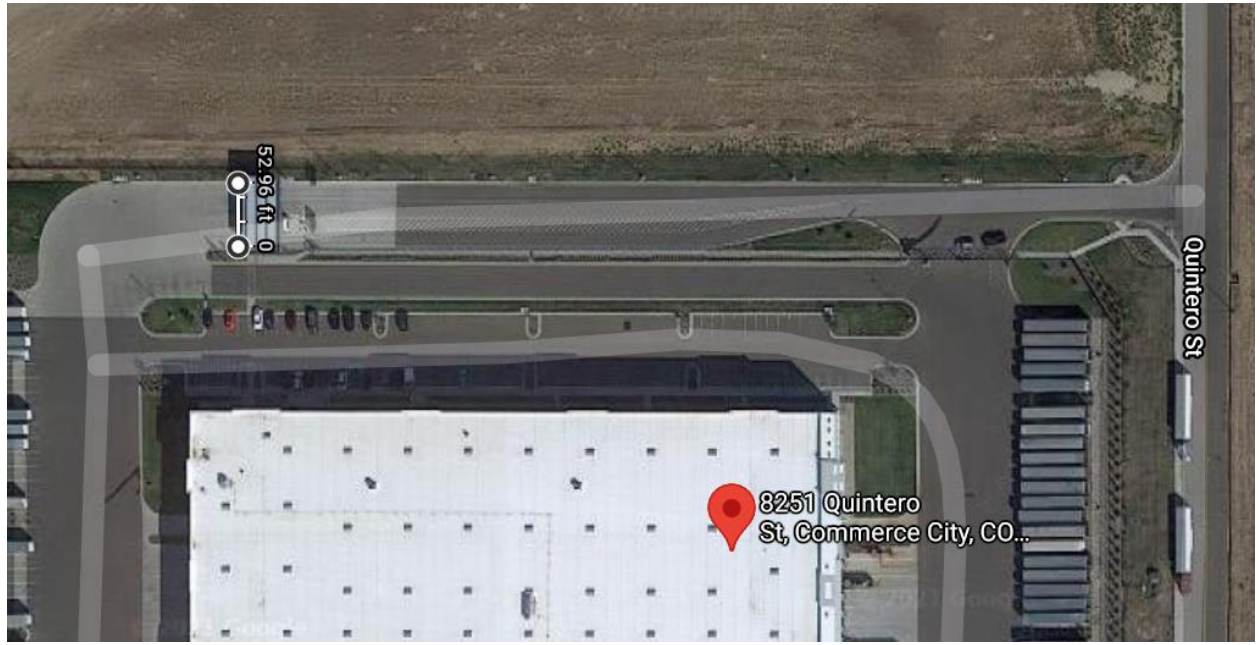
Munster ADC (Opened 1988)
23.62’ wide at guard house
Old Bldg, Short driveway, no clear IB/OB lanes

Los Angeles ADC (Opened 1989)
51.37’ wide at guard house
2 lanes IB, 1 OB

Munster ADC Truck Entrance Comparison

Munster ADC (Opened 1988)
23.62’ wide at guard house
Old Bldg, Short driveway, no clear IB/OB lanes

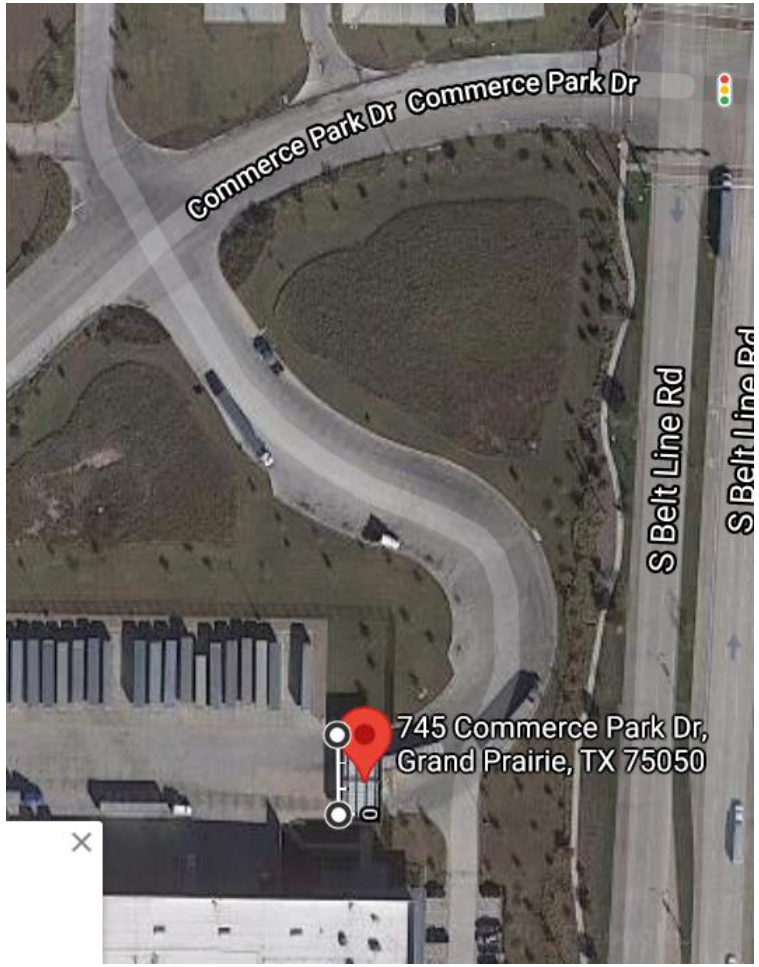
Denver ADC (Opened 2019)
52.96’ wide at guard house
Long driveway, 2 lanes IB, 1 OB



Munster ADC Truck Entrance Comparison

Munster ADC (Opened 1988)
23.62’ wide at guard house
Old Bldg, Short driveway, no clear IB/OB lanes

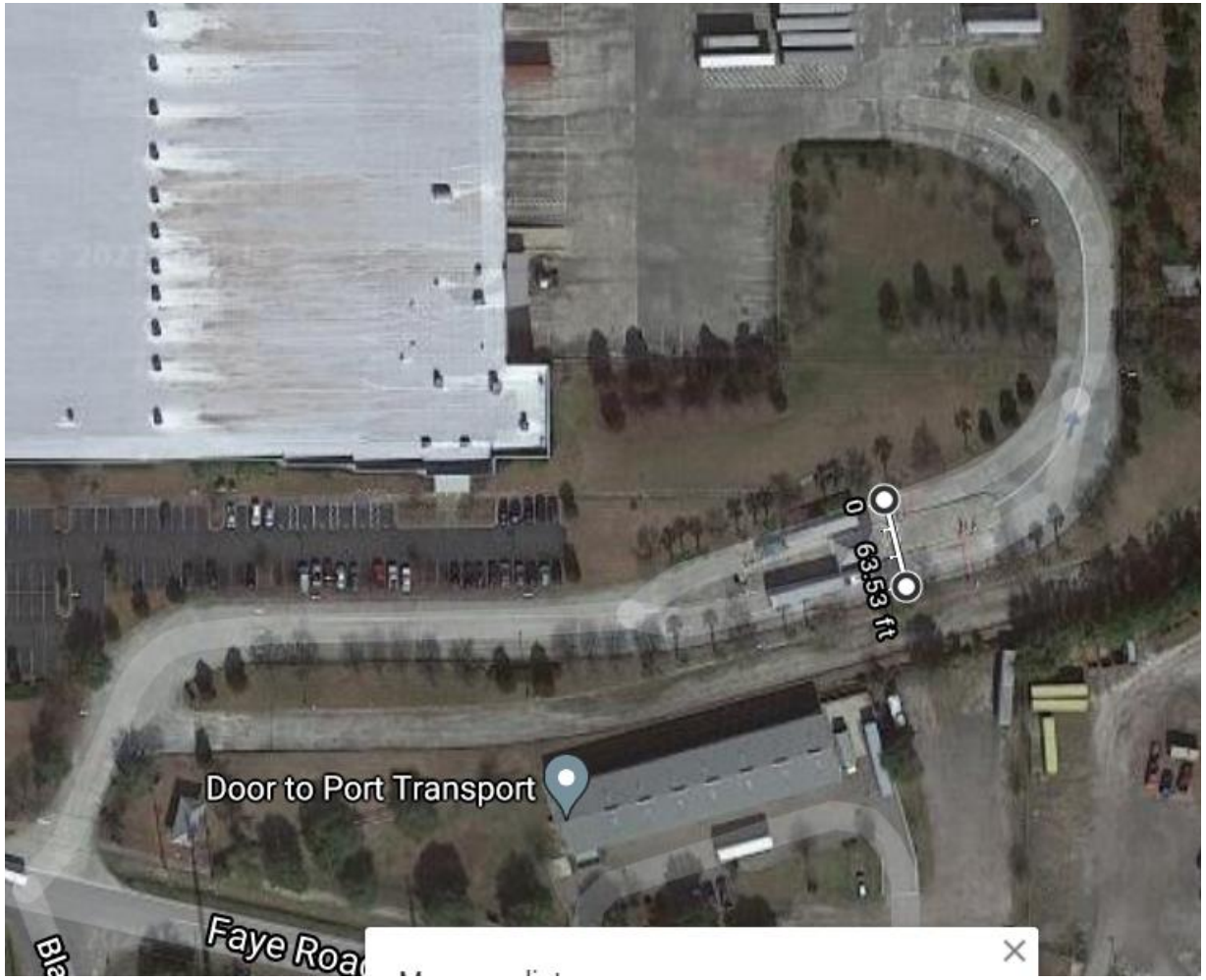
Dallas ADC (Opened 2018)
63.35’ wide at guard house
Serpentine driveway, 2 lanes IB, 1 OB



Munster ADC Truck Entrance Comparison

Munster ADC (Opened 1988)
23.62’ wide at guard house
Old Bldg, Short driveway, no clear IB/OB lanes

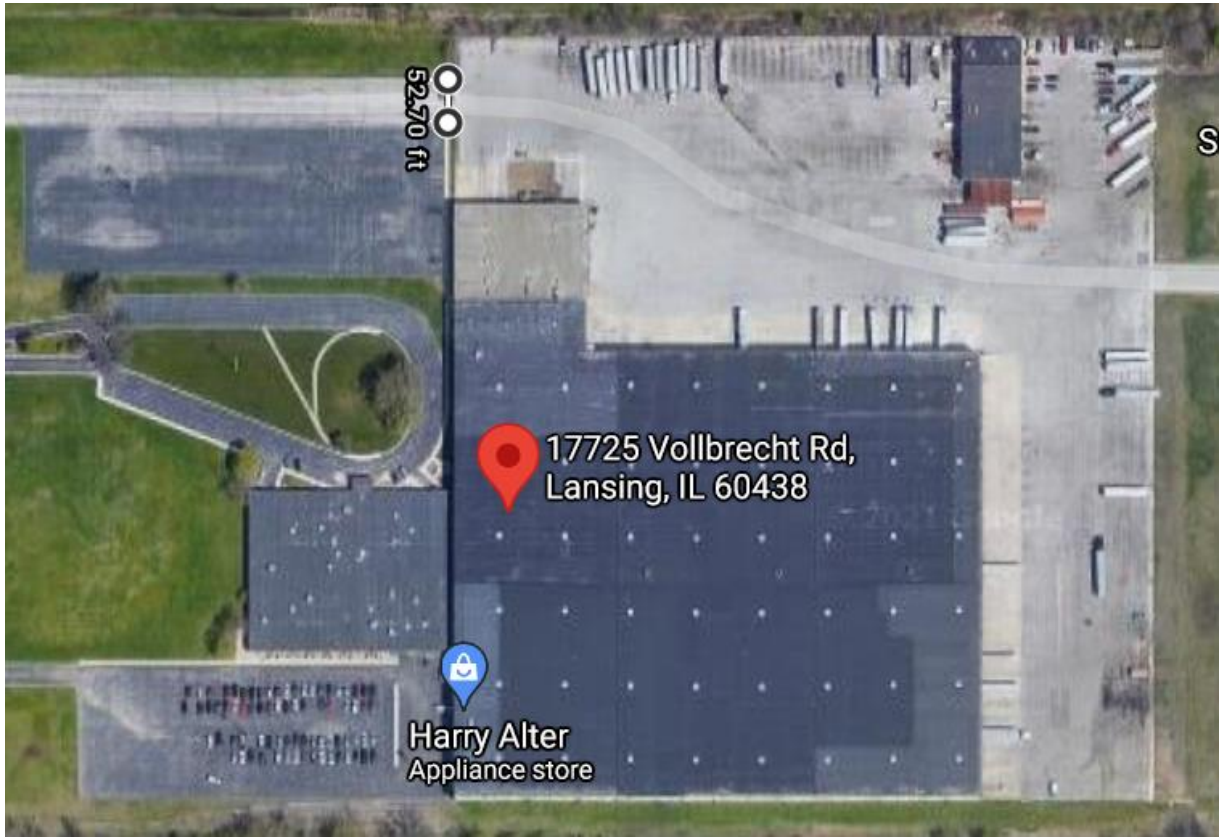
Jacksonville ADC (Moved in 2019)
63.53’ wide at guard house
Serpentine driveway, 2 lanes IB, 1 OB



Munster ADC Truck Entrance Comparison

Munster ADC (Opened 1988)
23.62’ wide at guard house
Old Bldg, Short driveway, no clear IB/OB lanes

Lansing Lot
52.70’ wide



FINAL ENGINEERING PLANS

GE DRIVEWAY IMPROVEMENTS

475 SUPERIOR AVENUE
MUNSTER, IN 46321

UTILITY AND GOVERNING AGENCY CONTACTS

ENGINEERING DEPARTMENT
SEH OF INDIANA, LLC
9200 CALUMET AVENUE, SUITE N300
MUNSTER, IN 46321
TEL: (219) 688-0497
CONTACT: JILL E. DITOMMASO, P.E.

STORM SEWER SERVICE
MUNSTER PUBLIC WORKS DEPARTMENT
1005 RIDGE ROAD
MUNSTER, IN 46321
TEL: (219) 836-6900
CONTACT: TONY PETRASHEVICH

SANITARY SEWER SERVICE
MUNSTER PUBLIC WORKS DEPARTMENT
1005 RIDGE ROAD
MUNSTER, IN 46321
TEL: (219) 836-6900
CONTACT: TONY PETRASHEVICH

WATER SERVICE
MUNSTER PUBLIC WORKS DEPARTMENT
1005 RIDGE ROAD
MUNSTER, IN 46321
TEL: (219) 836-6900
CONTACT: TONY PETRASHEVICH

PLANNING DEPARTMENT
TOWN OF MUNSTER
1005 RIDGE ROAD
MUNSTER, IN 46321
TEL: (219) 836-6995
CONTACT: THOMAS VANDER WOUDE, AICP

POWER COMPANY
NORTHERN INDIANA PUBLIC SERVICE COMPANY
801 E. 86TH AVE
MERRILLVILLE, IN 46410
TEL: (800) 426-6619

NATURAL GAS COMPANY
NORTHERN INDIANA PUBLIC SERVICE COMPANY
801 E. 86TH AVE
MERRILLVILLE, IN 46410
TEL: (800) 426-6619

TELEPHONE
COMCAST
844 169TH STREET
HAMMOND, IN 46324
TEL: (219) 852-4700

PROJECT TEAM

OWNER
GE APPLIANCES, A HAIER COMPANY
475 SUPERIOR STREET
MUNSTER, IN 46321
TEL: (XXX) XXX-XXXX
CONTACT: JONATHAN GOCKE

GEOTECH
COMPANY NAME
STREET ADDRESS
CITY, STATE ZIP-CODE
TEL: (XXX) XXX-XXXX
CONTACT: FIRST LAST NAME

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE RD, SUITE 350
LISLE, IL 60532
TEL: (630) 487-5550
EMAIL: NATE.GROFF@KIMLEY-HORN.COM
CONTACT: NATHAN GROFF, PE

LANDSCAPE ARCHITECT
KIMLEY-HORN AND ASSOCIATES, INC.
1001 WARRENVILLE RD, SUITE 350
LISLE, IL 60532
TEL: (630) 487-5550
EMAIL: DANIEL.GROVE@KIMLEY-HORN.COM
CONTACT: DANIEL GROVE, PLA

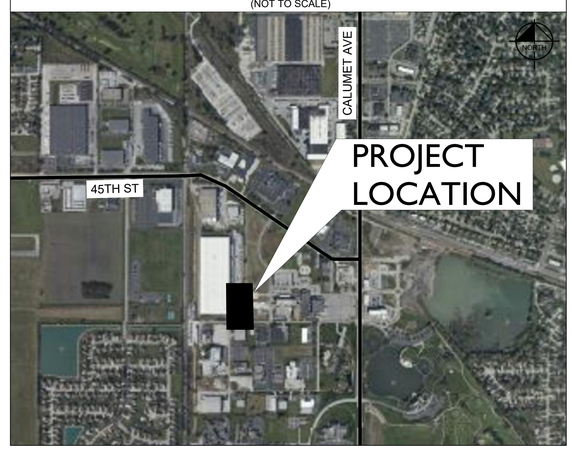
SURVEYOR
TORRENGA SURVEYING, LLC
907 RIDGE ROAD
MUNSTER, IN 46321
TEL: (219) 836-8918
CONTACT: JOHN STUART ALLEN

LEGAL DESCRIPTION

LOT 1 IN MIDWEST CENTRAL BUSINESS PARK, UNIT 4, AS PER PLAT THEREOF, RECORDED IN PLAT BOOK 06, PAGE 25, IN THE OFFICE OF THE RECORDER OF LAKE COUNTY, INDIANA.

LOCATION MAP

(NOT TO SCALE)



Sheet List Table	
Sheet Number	Sheet Title
C0.0	COVER SHEET
V0.0	TOPOGRAPHIC SURVEY (BY OTHERS)
C1.0	GENERAL NOTES
C2.0	EXISTING CONDITIONS AND DEMOLITION PLAN
C3.0	SITE PLAN
C4.0	GRADING AND EROSION CONTROL
C5.0	CONSTRUCTION DETAILS
L1.0	LANDSCAPE PLAN
L2.0	LANDSCAPE NOTES AND DETAILS

PROFESSIONAL ENGINEER'S CERTIFICATION

I, NATHAN GROFF, A LICENSED PROFESSIONAL ENGINEER OF INDIANA, HEREBY CERTIFY THAT THIS SUBMISSION, PERTAINING ONLY TO THE "C" SERIES CIVIL SHEETS LISTED ABOVE BUT EXCLUDING DETAILS PREPARED BY OTHERS, WAS PREPARED ON BEHALF OF GE APPLIANCES, A HAIER COMPANY BY KIMLEY-HORN AND ASSOCIATES, INC. UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.

DATED THIS 7 DAY OF OCTOBER , A.D., 2020.

Nathan J. Groff
_____
INDIANA LICENSED PROFESSIONAL ENGINEER 11300064
MY LICENSE EXPIRES ON JULY 31, 2022
DESIGN FIRM REGISTRATION NUMBER: 184002012-0006

Know what's below. Call before you dig.

No.	REVISIONS	DATE	BY
1	REVISED PER TOWN COMMENTS	10/7/2020	NAG

Kimley»Horn
© 2020 KIMLEY-HORN AND ASSOCIATES, INC.
4201 WINFIELD ROAD, SUITE 600
WARRENVILLE, IL 60555
PHONE: 630-487-5550
WWW.KIMLEY-HORN.COM

SCALE: AS NOTED
DESIGNED BY: JPB
DRAWN BY: JPB
CHECKED BY: NJG

GE APPLIANCES a Haier company

COVER SHEET

GE DRIVEWAY IMPROVEMENTS
475 SUPERIOR AVENUE
MUNSTER, IN 46321

ORIGINAL ISSUE: 9/24/2020
KHA PROJECT NO. 168919000
SHEET NUMBER
C0.0

Drawing name: K:\CHS_LDEV\168919000_GE_Munster_JN\2 Design\CAD\PlanSheets\C0.0 - COVER SHEET.dwg Layout1 Oct 07, 2020 4:00pm by: ChristinaMorelli
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

TOPOGRAPHICAL SURVEY

CAUTION: THIS REPORT IS INTENDED FOR USE ONLY BY TITLE INSURANCE COMPANIES AND LENDERS, OR OTHER PARTIES SPECIFICALLY NAMED HEREON. THIS REPORT IS NOT A PROPERTY SURVEY AND NO PROPERTY CORNER MARKERS WERE SET. NO LIABILITY WILL BE ASSUMED FOR THE USE OF ANY DATA HEREIN FOR CONSTRUCTION OF NEW IMPROVEMENTS OR FENCES. NOTE: ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMAL PARTS THEREOF. NO DIMENSIONS SHOULD BE ASSUMED BY SCALE MEASUREMENTS UPON THIS REPORT! IN ACCORDANCE WITH 865 IAC 1-12 SECTION 27A, THIS SURVEYOR LOCATION REPORT IS DESIGNED FOR USE BY A TITLE INSURANCE COMPANY WITH LOAN POLICIES ON SMALL TRACTS CONTAINING A ONE (1) TO FOUR (4) FAMILY HOUSE EVEN IF NOW USED FOR COMMERCIAL PURPOSES. A SURVEYOR LOCATION REPORT SHALL NOT BE USED FOR NONRESIDENTIAL TRACTS GREATER THAN TWE (2) ACRES. THEREFORE, THE ABOVE NAMED CLIENT IS HEREBY NOTIFIED OF THE INTENDED DESIGN AND PURPOSE OF THIS SURVEYOR LOCATION REPORT.

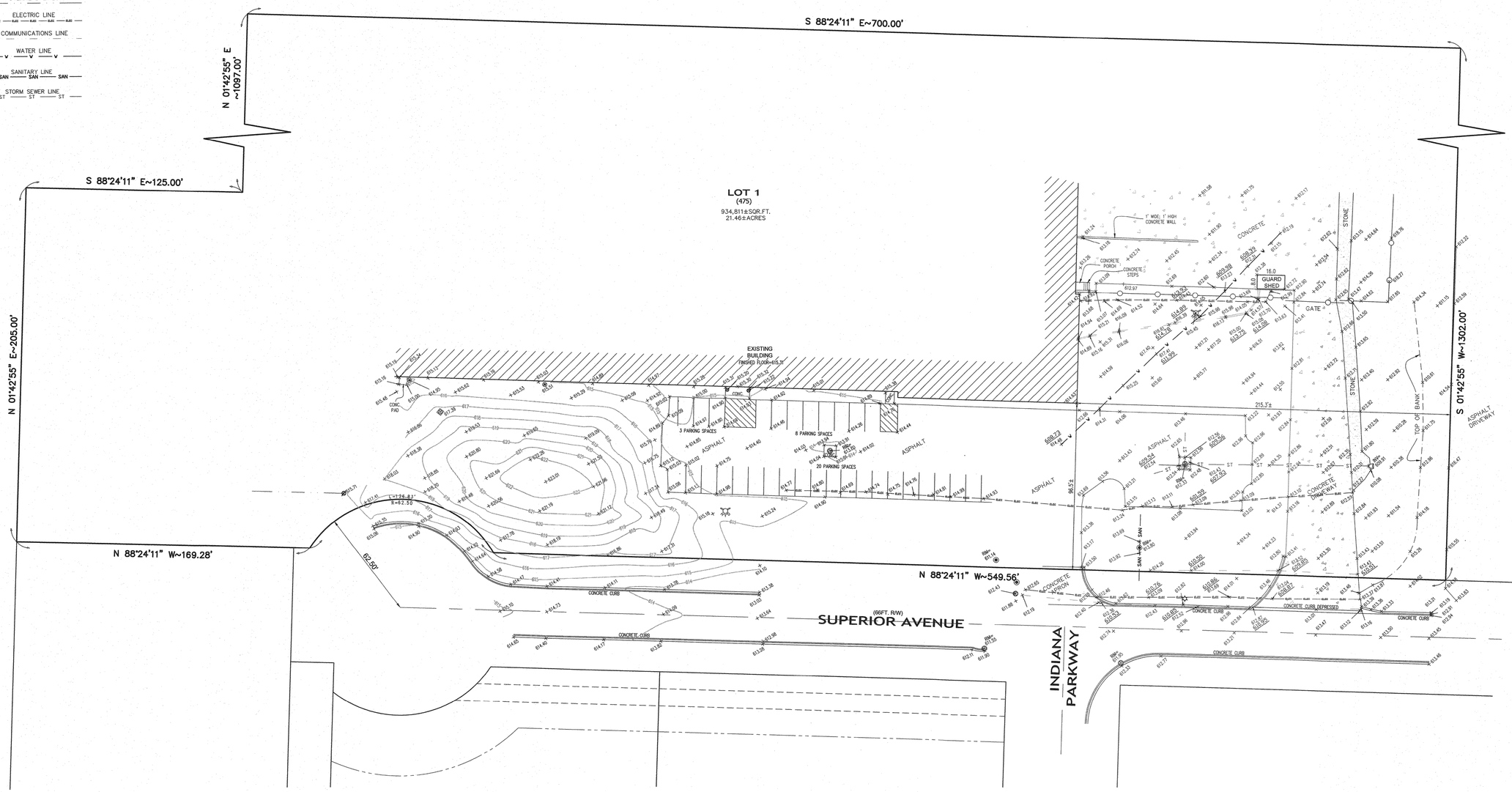
LEGAL DESCRIPTION:

Lot 1 in Midwest Central Business Park, Unit 4, as per plat thereof, recorded in Plat Book 06, Page 25, in the Office of the Recorder of Lake County, Indiana.

THIS PROPERTY IS LOCATED IN FLOOD ZONE(S) X (SHADED) AS DETERMINED BY USING SCALE MEASUREMENT FOR LOCATION UPON THE APPLICABLE FLOOD INSURANCE RATE MAP FOR TOWN OF MUNSTER , LAKE COUNTY, INDIANA AS SHOWN IN COMMUNITY PANEL(S) 18089C0117E EFFECTIVE JANUARY 18, 2012 . TRACTS OF LAND LOCATED IN FLOOD ZONE X (SHADED) ARE AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1 % ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1 % ANNUAL CHANCE FLOOD.

LEGEND:

- CATCH BASIN/INLET
- FIRE HYDRANT
- MANHOLE
- LIGHT POLE
- END SECTION
- +100.00 EXST. GRADE/SPOT ELEVATION
- 100.00 ELEVATION OF UNDERGROUND UTILITY
- POWER POLE
- STEEL BOLLARD
- DRAIN
- IRRIGATION CONTROL VALVE
- FIBER OPTIC MANHOLE
- 600 EXISTING CONTOURS
- 7' CHAINLINK FENCE
- OVERHEAD LINES
- ELECTRIC LINE
- COMMUNICATIONS LINE
- WATER LINE
- SANITARY LINE
- STORM SEWER LINE



NORTH

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 INCH = 30FT.

STATE OF INDIANA
COUNTY OF LAKE } §

THIS IS NOT A BOUNDARY SURVEY
This drawing is not intended to be represented as a retracement or original boundary survey, a route survey, or a Surveyor Location Report.

JOHN STUART ALLEN - Registered Land Surveyor No. LS29900011

JOHN STUART ALLEN REGISTERED No. LS29900011 STATE OF INDIANA LAND SURVEYOR

TORRENGA SURVEYING, LLC
PROFESSIONAL LAND SURVEYORS
907 RIDGE ROAD, MUNSTER, INDIANA 46321
TEL. NO.: (219) 836-8918
WEBSITE: WWW.TORRENGA.COM

TOPOGRAPHICAL SURVEY
LOT 1 IN MIDWEST CENTRAL BUSINESS PARK UNIT 4
475 SUPERIOR DRIVE
IN THE TOWN OF MUNSTER
LAKE COUNTY, INDIANA

DATE: SEPTEMBER 9, 2020

CLIENT: KIMLEY-HORN AND ASSOCIATES
JOB NO: 2020-0817
DRAWN: QP
SCALE: 1"=30'
Z:\Midwest Central Business Part Unit 4\dwg\2020-0817.dwg 9/9/2020 10:41 PM CDT

SHEET 1 OF 1

GENERAL NOTES

1. THE MUNICIPALITY REQUIREMENTS AND THE LATEST INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) STANDARD SPECIFICATIONS INCLUDING CHANGES SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THIS PLAN UNLESS OTHERWISE NOTED. WHEN CONFLICTS ARISE BETWEEN ABOVE LISTED SPECIFICATIONS, THE MORE STRINGENT SHALL TAKE PRECEDENCE.

2. STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND RECURRING SPECIAL PROVISIONS, CONSTRUCTION PLANS, AND SUBSEQUENT DETAILS ARE ALL TO BE CONSIDERED AS PART OF THE CONTRACT. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED, BUT ARE CONSIDERED A PART OF THIS CONTRACT.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION AND SHALL ALSO BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. THE ENGINEER DOES NOT WARRANT THE LOCATION OF ANY EXISTING UTILITIES SHOWN ON THE PLAN. THE CONTRACTOR SHALL CALL INDIANA UTILITIES PROTECTION SERVICE (811 OR 1.800.362.2764) AND THE MUNICIPALITY FOR UTILITY LOCATIONS.

4. NO CONSTRUCTION PLANS SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED "FOR CONSTRUCTION" PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THE WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE SURVEYOR'S LINE AND GRADE STAKES. IF THERE ARE ANY DISCREPANCIES WITH WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE/SHE MUST IMMEDIATELY REPORT THEM TO THE SURVEYOR OR ENGINEER BEFORE DOING ANY WORK. OTHERWISE, THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, SPECIFICATIONS, AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT THE CONTRACTOR'S OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTIONS ARISING WITH REFERENCE TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.

5. NOTIFICATION OF COMMENCING CONSTRUCTION:

5.1. THE CONTRACTOR SHALL NOTIFY AFFECTED GOVERNMENTAL AGENCIES IN WRITING AT LEAST THREE FULL WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. IN ADDITION, THE CONTRACTOR SHALL NOTIFY, AS NECESSARY, ALL TESTING AGENCIES, THE MUNICIPALITY, AND THE OWNER SUFFICIENTLY IN ADVANCE OF CONSTRUCTION.

5.2. FAILURE OF THE CONTRACTOR TO ALLOW PROPER NOTIFICATION TIME WHICH RESULTS IN THE TESTING COMPANIES TO BE UNABLE TO VISIT THE SITE AND PERFORM TESTING WILL CAUSE THE CONTRACTOR TO SUSPEND THE OPERATION TO BE TESTED UNTIL THE TESTING AGENCY CAN SCHEDULE TESTING OPERATIONS. COST OF SUSPENSION OF WORK SHALL BE BORNE BY THE CONTRACTOR.

6. ALL CONTRACTORS SHALL KEEP ACCESS AVAILABLE AT ALL TIMES FOR ALL EMERGENCY TRAFFIC, AS DIRECTED BY THE MUNICIPALITY.

7. ALL PROPOSED GRADES SHOWN ON PLANS ARE FINISHED SURFACE ELEVATIONS, UNLESS NOTED OTHERWISE.

8. THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED. ANY STAKES DESTROYED OR DISTURBED BY THE CONTRACTOR PRIOR TO THEIR USE SHALL BE RESET BY THE SURVEYOR AT THE CONTRACTOR'S EXPENSE.

9. ALL FRAMES AND LIDS FOR STORM AND SANITARY SEWERS, VALVE VAULT COVERS, FIRE HYDRANTS, AND B-BOXES ARE TO BE ADJUSTED TO MEET FINISHED GRADE. THIS ADJUSTMENT IS TO BE MADE BY THE SEWER AND WATER CONTRACTOR, AND THE COST IS TO BE CONSIDERED INCIDENTAL. THESE ADJUSTMENTS TO FINISHED GRADE WILL NOT ALLEVIATE THE CONTRACTOR FROM ANY ADDITIONAL ADJUSTMENTS AS REQUIRED BY THE MUNICIPALITY UPON FINAL INSPECTION OF THE PROJECT. FINAL GRADES MAY BE DETERMINED BY THE MUNICIPALITY AND MAY VARY FROM PLAN GRADE.

10. ANY EXISTING SIGNS, LIGHT STANDARDS, AND UTILITY POLES THAT INTERFERE WITH CONSTRUCTION OPERATIONS AND ARE NOT NOTED ON THE PLANS FOR DISPOSAL SHALL BE REMOVED AND RESET BY THE CONTRACTOR AT HIS/HER OWN EXPENSE, AS DIRECTED BY THE ENGINEER. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE TO THE SATISFACTION OF THE OWNER. ANY SIGNS NOT REQUIRED TO BE RESET SHALL BE DELIVERED TO THE RESPECTIVE OWNERS.

11. REMOVAL OF SPECIFIED ITEMS, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB, CURB AND GUTTER, CULVERTS, ETC., SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT THE CONTRACTOR'S OWN EXPENSE. THE CONTRACTOR IS RESPONSIBLE FOR ANY PERMITS REQUIRED FOR SUCH DISPOSAL.

12. ANY FIELD TILES ENCOUNTERED SHALL BE INSPECTED BY THE MUNICIPALITY. THE DRAIN TILE SHALL BE CONNECTED TO THE STORM SEWER SYSTEM AND A RECORD KEPT BY THE CONTRACTOR OF THE LOCATIONS AND TURNED OVER TO THE MUNICIPALITY UPON COMPLETION OF THE PROJECT. THE COST OF THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

13. BEFORE ACCEPTANCE, ALL WORK SHALL BE INSPECTED BY THE MUNICIPALITY, AS NECESSARY.

14. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHT-OF-WAYS ARE SHOWN ON THE PLANS ACCORDING TO AVAILABLE RECORDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF THESE UTILITY LINES AND THEIR PROTECTION FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS. IF EXISTING UTILITY LINES OF ANY NATURE ARE ENCOUNTERED WHICH CONFLICT WITH LOCATIONS OF THE NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.

15. OWNER SHALL OBTAIN EASEMENTS AND APPROVAL OF PERMITS NECESSARY TO FACILITATE CONSTRUCTION OF THE PROPOSED UTILITIES. THE CONTRACTOR, HOWEVER, SHALL FURNISH ALL REQUIRED BONDS AND EVIDENCE OF INSURANCE NECESSARY TO SECURE THESE PERMITS AND EASEMENTS.

16. THE CONTRACTORS SHALL PLAN THEIR WORK BASED ON THEIR OWN BORINGS, EXPLORATIONS, AND OBSERVATIONS TO DETERMINE SOIL CONDITIONS AT THE LOCATION OF THE PROPOSED WORK.

17. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON THE JOB PER OSHA REGULATIONS.

18. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROVIDE PROPER BARRICADING, WARNING DEVICES, AND THE SAFE MANAGEMENT OF TRAFFIC WITHIN THE AREA OF CONSTRUCTION. ALL SUCH DEVICES AND THEIR INSTALLATION SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS, LATEST EDITION, AND IN ACCORDANCE WITH THE MUNICIPAL ORDINANCES.

19. THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE, MACHINERY, TOOLS, AND OTHER MISCELLANEOUS ITEMS WHICH WERE NOT PRESENT PRIOR TO PROJECT COMMENCEMENT AT NO ADDITIONAL EXPENSE TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ANY AND ALL PERMITS NECESSARY FOR THE HAULING AND DISPOSAL REQUIRED FOR CLEANUP, AS DIRECTED BY THE ENGINEER OR OWNER. BURNING ON THE SITE IS NOT PERMITTED.

20. NO UNDERGROUND WORK SHALL BE COVERED UNTIL IT HAS BEEN APPROVED BY THE MUNICIPALITY. APPROVAL TO PROCEED MUST BE OBTAINED FROM THE MUNICIPALITY PRIOR TO INSTALLING PAVEMENT BASE, BINDER, AND SURFACE, AND PRIOR TO POURING ANY CONCRETE AFTER FORMS HAVE BEEN SET, AS NECESSARY.

21. ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT, AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNLESS A PAY ITEM IS LISTED ON THE BID LIST.

22. AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS.

23. TREES NOT MARKED FOR REMOVAL SHALL BE CONSIDERED AS DESIGNATED TO BE SAVED AND SHALL BE PROTECTED, AS PER MUNICIPAL STANDARDS.

24. LIMB PRUNING SHALL BE PERFORMED UNDER THE SUPERVISION OF AN APPROVED LANDSCAPE ARCHITECT, FORESTER, OR ARBORIST AND SHALL BE UNDERTAKEN IN A TIMELY FASHION SO AS NOT TO INTERFERE WITH CONSTRUCTION. ALL LIMBS, BRANCHES, AND OTHER DEBRIS RESULTING FROM THIS WORK SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR AT HIS/HER OWN EXPENSE. ALL CUTS OVER ONE (1) INCH IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT.

25. WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, EXISTING DRAINAGE STRUCTURES AND PIPE SHALL BE CLEANED OF DEBRIS AND PATCHED AS NECESSARY TO ASSURE INTEGRITY OF THE STRUCTURE. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE MERGED INTO THE CONTRACT UNIT PRICE EACH FOR STRUCTURES AND CONTRACT UNIT PRICE PER LINEAL FOOT FOR STORM SEWERS, WHICH SHALL BE PAYMENT IN FULL FOR CLEANING, PATCHING, REMOVAL, AND DISPOSAL OF DEBRIS AND DIRT. DRAINAGE STRUCTURES AND STORM SEWERS CONSTRUCTED AS PART OF THIS PROJECT SHALL BE MAINTAINED BY THE CONTRACTOR AT HIS EXPENSE. NO EXTRA PAYMENT WILL BE MADE FOR CLEANING STRUCTURES OR STORM SEWERS CONSTRUCTED AS PART OF THIS PROJECT.

26. HYDRANTS SHALL NOT BE FLUSHED DIRECTLY ONTO THE ROAD SUBGRADES. WHENEVER POSSIBLE, HOSES SHALL BE USED TO DIRECT THE WATER INTO LOT AREAS OR THE STORM SEWER SYSTEM, IF AVAILABLE. DAMAGE TO THE ROAD SUBGRADE OR LOT GRADING DUE TO EXCESSIVE WATER SATURATION AND/OR EROSION FROM HYDRANT FLUSHING, OR FROM LEAKS IN THE WATER DISTRIBUTION SYSTEM, WILL BE REPAIRED BY THE CONTRACTOR FLUSHING OR USING THE HYDRANT AT THE CONTRACTOR'S OWN EXPENSE. LEAKS IN THE WATER DISTRIBUTION SYSTEM SHALL BE THE RESPONSIBILITY OF THE WATER MAIN CONTRACTOR AND SHALL BE REPAIRED AT HIS EXPENSE.

27. AFTER THE STORM SEWER SYSTEM HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL PLACE EROSION CONTROL AT LOCATIONS INDICATED BY THE ENGINEER. THE PURPOSE OF THE EROSION CONTROL WILL BE TO MINIMIZE THE AMOUNT OF SILTATION THAT NORMALLY WOULD ENTER THE STORM SEWER SYSTEM FROM ADJACENT AND/OR UPSTREAM DRAINAGE AREAS.

28. THE TRENCHES FOR PIPE INSTALLATION SHALL BE KEPT DRY AT ALL TIMES DURING PIPE PLACEMENT. APPROPRIATE FACILITIES TO MAINTAIN THE DRY TRENCH SHALL BE PROVIDED BY THE CONTRACTOR, AND THE COST OF SUCH SHALL BE INCIDENTAL TO THE UNIT PRICE BID FOR THE ITEM. PLANS FOR THE SITE DEWATERING, IF EMPLOYED, SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR DEWATERING DURING CONSTRUCTION UNLESS APPROVED IN WRITING BY THE OWNER.

29. EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH OEPA REGULATIONS AND STANDARDS FOR SOIL EROSION AND SEDIMENTATION CONTROL AND SHALL BE MAINTAINED BY THE CONTRACTOR AND REMAIN IN PLACE UNTIL A SUITABLE GROWTH OF GRASS, ACCEPTABLE TO THE ENGINEER, HAS DEVELOPED.

PAVING NOTES

1. GENERAL

1.1. PAVING WORK INCLUDES FINAL SUBGRADE SHAPING, PREPARATION, AND COMPACTION; PLACEMENT OF SUBBASE OR BASE COURSE MATERIALS; BITUMINOUS INTERMEDIATE AND/OR SURFACE COURSES; FORMING, FINISHING, AND CURING CONCRETE PAVEMENT, CURBS, AND WALKS; AND FINAL CLEAN-UP AND ALL RELATED WORK.

2. SUBGRADE PREPARATION

2.1. EARTHWORK FOR PROPOSED PAVEMENT SUBGRADE SHALL BE FINISHED TO WITHIN 0.1 FOOT, PLUS OR MINUS, OF PLAN ELEVATION. THE CONTRACTOR SHALL SATISFY HIMSELF THAT THE SUBGRADE HAS BEEN PROPERLY PREPARED AND THAT THE FINISH TOP SUBGRADE ELEVATION HAS BEEN GRADED WITHIN TOLERANCES ALLOWED IN THESE SPECIFICATIONS, UNLESS THE CONTRACTOR ADVISES THE ENGINEER IN WRITING PRIOR TO FINE GRADING FOR BASE COURSE CONSTRUCTION. IT IS UNDERSTOOD THAT HE/SHE HAS APPROVED AND ACCEPTS THE RESPONSIBILITY FOR THE SUBGRADE.

2.2. AFTER STRIPPING TO THE PROPOSED SUBGRADE LEVEL, THE BUILDING AND PARKING AREA SHOULD BE PROOF-ROLLED WITH A TANDEM AXLE DUMP TRUCK OR SIMILAR HEAVY RUBBER TIRED VEHICLE TYPICALLY WITH AN AXIAL LOAD GREATER THAN NINE (9) TONS OR MEETING SPECIFICATIONS OUTLINED IN INDOT CMS ITEM 204 FOR ROADWAY SUBGRADE COMPACTION AND PROOF-ROLLING.

2.3. MAXIMUM DEFLECTION ALLOWED IN ISOLATED AREAS MAY BE ONE (1) INCH IF NO DEFLECTION OCCURS OVER THE MAJORITY OF THE AREA.

2.4. PRIOR TO THE CONSTRUCTION OF THE CURB AND GUTTER AND THE PLACEMENT OF THE BASE MATERIAL, THE PAVEMENT AREA SHALL BE FINE-GRADED TO WITHIN 0.04 FEET (1/2 INCH) OF FINAL SUBGRADE ELEVATION, TO A POINT TWO (2) FEET BEYOND THE BACK OF THE CURB, SO AS TO ENSURE THE PROPER THICKNESS OF PAVEMENT COURSES. NO CLAIMS FOR EXCESS QUANTITY OF BASE MATERIALS DUE TO IMPROPER SUBGRADE PREPARATION WILL BE HONORED.

2.5. PRIOR TO PLACEMENT OF THE BASE COURSE, THE SUBGRADE SHALL BE APPROVED BY THE TESTING ENGINEER.

3. CONCRETE WORK

3.1. ALL EXTERIOR CONCRETE SHALL BE PORTLAND CEMENT CONCRETE CLASS S1 OR PV. CONCRETE SHALL BE A MINIMUM OF SIX (6) BAG MIX AND SHALL DEVELOP A MINIMUM OF 4,000 PSI COMPRESSIVE STRENGTH AT TWENTY-EIGHT (28) DAYS. ALL CONCRETE SHALL BE BROOM-FINISHED PERPENDICULAR TO THE DIRECTION OF TRAVEL.

3.2. CONCRETE CURB AND/OR COMBINATION CURB AND GUTTER SHALL BE OF THE TYPE SHOWN ON THE PLANS. THE CONTRACTOR IS CAUTIONED TO REFER TO THE CONSTRUCTION STANDARDS AND THE PAVEMENT CROSS SECTION TO DETERMINE THE GUTTER FLAG THICKNESS AND THE AGGREGATE BASE COURSE THICKNESS BENEATH THE CURB AND GUTTER. PRE-MOLDED FIBER EXPANSION JOINTS, WITH TWO 3/4-INCH BY 18-INCH EPOXY-COATED STEEL DOWEL BARS, SHALL BE GREASED AND FITTED WITH METAL EXPANSION TUBES. SAWED OR FORMED CONTRACTION JOINTS SHALL BE PROVIDED AT NO GREATER THAN TEN TO TWENTY-FIVE FOOT INTERVALS BETWEEN EXPANSION JOINTS. NO HONEY-COMBING OF THE CURB AND GUTTER WILL BE ACCEPTED.

3.3. CURBS SHALL BE DEPRESSED AT LOCATIONS WHERE PUBLIC WALKS INTERSECT CURB LINES AND OTHER LOCATIONS, AS DIRECTED, FOR THE PURPOSE OF PROVIDING ACCESSIBILITY.

3.4. THE CURBS SHALL BE BACKFILLED AFTER THEIR CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE.

3.5. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. PROVIDE SCORED JOINTS AT MAXIMUM 6-FOOT INTERVALS AND 1/2-INCH PRE-MOLDED FIBER EXPANSION JOINTS AT 50-FOOT MAXIMUM INTERVALS AND ADJACENT TO CONCRETE CURBS, DRIVEWAYS, FOUNDATIONS, AND OTHER STRUCTURES.

3.6. CONCRETE DRIVEWAY APRONS SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. PROVIDE 6-INCH BY 6-INCH NO. 6 WELDED WIRE MESH IN ALL DRIVEWAYS. PROVIDE 1/2-INCH PRE-MOLDED FIBER EXPANSION JOINT ADJACENT TO CURBS AND CONCRETE SIDEWALKS. PROVIDE SAWED OR FORMED CONTRACTIONS JOINT AT MID-POINT AND 15-FOOT MAXIMUM.

3.7. STANDARD REINFORCED CONCRETE PAVEMENT SHALL BE IN ACCORDANCE WITH THE ABOVE AND THE PLANS. SAWED OR FORMED CONTRACTION EXPANSION JOINTS SHALL BE AS SHOWN ON THE PLANS.

3.8. CONCRETE CURING AND PROTECTION SHALL BE PER INDOT STANDARDS. TWO (2) COATS OF INDOT APPROVED CURING AGENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES.

3.9. THE COST OF AGGREGATE BASE OR SUBBASE UNDER CONCRETE WORK SHALL BE INCLUDED IN THE COST OF THE RESPECTIVE CONCRETE ITEM.

4. FLEXIBLE PAVEMENT

4.1. THE PAVEMENT MATERIALS FOR BITUMINOUS STREETS, PARKING LOTS, AND DRIVE AISLES SHALL BE AS DETAILED ON THE PLANS. UNLESS OTHERWISE SHOWN ON THE PLANS, THE FLEXIBLE PAVEMENTS SHALL CONSIST OF AGGREGATE BASE, ASPHALT INTERMEDIATE COURSE TYPE 2, AND ASPHALT SURFACE COURSE TYPE 1, OF THE THICKNESS AND MATERIALS SPECIFIED ON THE PLANS. THICKNESSES SPECIFIED SHALL BE CONSIDERED TO BE THE MINIMUM COMPACTED THICKNESS.

4.2. ALL TRAFFIC SHALL BE KEPT OFF THE COMPLETED AGGREGATE BASE UNTIL THE INTERMEDIATE COURSE IS LAID. THE AGGREGATE BASE SHALL BE UNIFORMLY PRIME COATED AT A RATE OF 0.4 TO 0.5 GALLONS PER SQUARE YARD PRIOR TO PLACING THE INTERMEDIATE COURSE. PRIME COAT MATERIALS SHALL BE INDOT APPROVED.

4.3. PRIOR TO PLACEMENT OF THE SURFACE COURSE, THE INTERMEDIATE COURSE SHALL BE CLEANED AND TACK-COATED IF DUSTY OR DIRTY. ALL DAMAGED AREAS IN THE INTERMEDIATE COURSE, BASE, OR CURB SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER PRIOR TO LAYING THE SURFACE COURSE. THE CONTRACTOR SHALL PROVIDE WHATEVER EQUIPMENT AND STAFF NECESSARY, INCLUDING THE USE OF POWER BROOMS IF REQUIRED BY THE OWNER, TO PREPARE THE PAVEMENT FOR APPLICATION OF THE SURFACE COURSE. THE TACK COAT SHALL BE UNIFORMLY APPLIED TO THE BINDER COURSE AT A RATE OF 0.05 TO 0.10 GALLONS PER SQUARE YARD. TACK COAT SHALL BE AS PER INDOT STANDARDS.

4.4. SEAMS IN SURFACE AND BASE COURSES SHALL BE STAGGERED A MINIMUM OF 6 INCHES.

5. TESTING AND FINAL ACCEPTANCE.

5.1. THE CONTRACTOR SHALL FOLLOW THE QUALITY CONTROL TESTING PROGRAM FOR CONCRETE AND PAVEMENT MATERIALS ESTABLISHED BY THE ENGINEER.

5.2. PRIOR TO PLACEMENT OF THE BITUMINOUS CONCRETE SURFACE COURSE, THE CONTRACTOR, WHEN REQUIRED BY THE TOWN OF MUNSTER, SHALL OBTAIN SPECIMENS OF THE INTERMEDIATE COURSE WITH A CORE DRILL WHERE DIRECTED, FOR THE PURPOSE OF THICKNESS VERIFICATION.

5.3. WHEN REQUIRED BY THE TOWN OF MUNSTER, THE CONTRACTOR SHALL OBTAIN SPECIMENS OF THE FULL DEPTH BITUMINOUS CONCRETE PAVEMENT STRUCTURE WITH A CORE DRILL WHERE DIRECTED IN ORDER TO CONFIRM THE PLAN THICKNESS. DEFICIENCIES IN THICKNESS SHALL BE ADJUSTED FOR BY THE METHOD REQUIRED BY INDOT STANDARDS.

5.4. FINAL ACCEPTANCE OF THE TOTAL PAVEMENT INSTALLATION SHALL BE SUBJECT TO THE TESTING AND CHECKING REQUIREMENTS CITED ABOVE.

5.5. ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE TOWN OF MUNSTER CITY CODE. WHEN CONFLICTS ARISE BETWEEN TOWN OF MUNSTER CODE, AND GENERAL NOTES, THE MORE STRINGENT SHALL TAKE PRECEDENCE.

SIGNING AND PAVEMENT MARKING NOTES

1. ALL SIGNING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) STANDARDS.

2. SIGNS: SIGNS SHALL BE CONSTRUCTED OF 0.080-INCH THICK FLAT ALUMINUM PANELS WITH REFLECTORIZED LEGEND ON THE FACE. LEGEND SHALL BE IN ACCORDANCE WITH THE MUTCD.

3. POSTS: SIGN POSTS SHALL BE NEW GALVANIZED STEEL PIPE IN ACCORDANCE WITH ASTM A 53 OR ASTM F 1083. USE STANDARD WEIGHT, SCHEDULE 40 PIPE PER THE INDOT STANDARDS.

4. SIGNS AND POSTS SHALL BE INSTALLED IN ACCORDANCE WITH INDOT STANDARDS.

5. PAVEMENT MARKINGS: ALL PAVEMENT MARKINGS IN THE ROADWAY LIMITS, SUCH AS STOP LINES, CENTERLINES, CROSSWALKS, AND DIRECTIONAL ARROWS, SHALL BE REFLECTORIZED THERMOPLASTIC HOT ROLLED INTO PAVEMENT OR PAINT PER INDOT STANDARDS.

6. PAVEMENT MARKINGS ON BIKE PATHS, PARKING LOT STALLS, AND SIMILAR "LOW-WEAR" APPLICATIONS, SHALL BE PAINT IN ACCORDANCE WITH INDOT STANDARDS.

7. COLOR, WIDTH, STYLE, AND SIZE OF ALL MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD AND TOWN OF MUNSTER CODE.

8. THERMOPLASTIC MARKINGS SHALL BE INSTALLED WHEN THE PAVEMENT TEMPERATURE IS 55 DEGREES FAHRENHEIT AND RISING. PAINT MARKINGS MAY BE INSTALLED WHEN THE AIR TEMPERATURE IS 50 DEGREES FAHRENHEIT AND RISING.

EARTHWORK NOTES

1. GENERAL

1.1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE.

1.2. ANY QUANTITIES IN THE BID PROPOSAL ARE INTENDED AS A GUIDE FOR THE CONTRACTOR'S USE IN DETERMINING THE SCOPE OF THE COMPLETED PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ALL MATERIAL QUANTITIES AND APPRISE HIMSELF/HERSELF OF ALL SITE CONDITIONS. THE CONTRACT PRICE SUBMITTED BY THE CONTRACTOR SHALL BE CONSIDERED AS LUMP SUM FOR THE COMPLETE PROJECT. NO CLAIMS FOR EXTRA WORK WILL BE RECOGNIZED.

1.3. THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE AND SUBGRADE ELEVATIONS (AS NOTED) AND THAT PAVEMENT THICKNESS, TOPSOIL, ETC., MUST BE ACCOUNTED FOR.

1.4. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. THE FAILURE TO PROVIDE PROPER DRAINAGE WILL NEGATE ANY POSSIBLE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION, AND TRAFFIC.

1.5. PLANS FOR THE SITE DEWATERING, IF EMPLOYED, SHALL BE SUBMITTED AND APPROVED PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR DEWATERING DURING CONSTRUCTION.

1.6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE SOIL EROSION AND SEDIMENTATION CONTROL MEASURES. THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF SILT AND FILTER FENCING, ETC., TO PROTECT ADJACENT PROPERTIES, SHALL OCCUR BEFORE GRADING BEGINS.

1.7. PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, THE CONTRACTOR SHALL ERECT A CONSTRUCTION FENCE AROUND ANY TREE DESIGNATED TO BE PRESERVED. SAID FENCE SHALL BE PLACED IN A CIRCLE CENTERED AROUND THE TREE. THE DIAMETER OF WHICH SHALL BE SUCH THAT THE ENTIRE DRIP ZONE (EXTENT OF FURTHEST EXTENDING BRANCHES) SHALL BE WITHIN THE FENCE LIMITS. THE EXISTING GRADE WITHIN THE FENCED AREA SHALL NOT BE DISTURBED.

2. TOPSOIL EXCAVATION INCLUDES:

2.1. EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS WITHIN THOSE AREAS THAT WILL REQUIRE EARTH EXCAVATION OR COMPACTED EARTH FILL MATERIAL. EXISTING VEGETATION SHALL BE REMOVED PRIOR TO STRIPPING TOPSOIL OR FILLING AREAS.

2.2. PLACEMENT OF EXCAVATED MATERIAL IN OWNER-DESIGNATED AREAS FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED AND THOSE AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL. PROVIDE NECESSARY EROSION CONTROL MEASURES FOR STOCKPILE.

2.3. TOPSOIL STOCKPILED FOR RESPREAD SHALL BE FREE OF CLAY AND SHALL NOT CONTAIN ANY OF THE TRANSITIONAL MATERIAL BETWEEN THE TOPSOIL AND CLAY. THE TRANSITIONAL MATERIAL SHALL BE USED IN NON-STRUCTURAL FILL AREAS OR DISPOSED OF OFF-SITE.

2.4. TOPSOIL RESPREAD SHALL INCLUDE HAULING AND SPREADING OF TOPSOIL DIRECTLY OVER AREAS TO BE LANDSCAPED WHERE SHOWN ON THE PLANS OR AS DIRECTED BY THE OWNER.

3. EARTH EXCAVATION INCLUDES:

3.1. EXCAVATION OF SUBSURFACE MATERIALS WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL. THE EXCAVATION SHALL BE TO WITHIN A TOLERANCE OF 0.1 FEET OF THE PLAN SUBGRADE ELEVATIONS WHILE MAINTAINING PROPER DRAINAGE. THE TOLERANCE WITHIN PAVEMENT AREAS SHALL BE SUCH THAT THE EARTH MATERIALS SHALL "BALANCE" DURING THE FINE GRADING OPERATION.

3.2. PLACEMENT OF SUITABLE MATERIALS SHALL BE WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS TO WITHIN A TOLERANCE OF 0.1 FEET. THE FILL MATERIALS SHALL BE PLACED IN LOOSE LIFTS THAT SHALL NOT EXCEED EIGHT (8) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED COMPACTION.

3.3. STRUCTURAL FILL MATERIAL MAY BE PLACED WITHIN THOSE PORTIONS OF THE SITE NOT REQUIRING STRUCTURAL FILL, WITHIN SIX (6) INCHES OF THE PLAN FINISHED GRADE ELEVATION. IN AREAS REQUIRING STRUCTURAL FILL, HOWEVER, THIS MATERIAL SHALL NOT BE PLACED OVER TOPSOIL OR OTHER UNSUITABLE MATERIALS UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCURRENCE OF THE OWNER.

3.4. COMPACTION OF SUITABLE MATERIALS SHALL BE TO AT LEAST 93% OF THE MODIFIED PROCTOR DRY DENSITY WITHIN PROPOSED PAVEMENT AREAS, SIDEWALK, ETC. COMPACTION SHALL BE AT LEAST 95% OF THE MODIFIED PROCTOR WITHIN PROPOSED BUILDING PAD AREAS.

4. UNSUITABLE MATERIAL: UNSUITABLE MATERIALS SHALL BE CONSIDERED MATERIAL THAT IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SAID MATERIAL AND TO WHAT EXTENT SHALL BE MADE BY THE GEOTECHNICAL ENGINEER OR SOILS TESTING AGENCY WITH THE CONCURRENCE OF THE OWNER.

5. MISCELLANEOUS. THE CONTRACTOR SHALL:

5.1. SPREAD AND COMPACT UNIFORMLY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPOIL AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.

5.2. SCARIFY, DISC, AERATE, AND COMPACT, TO THE DEGREE SPECIFIED, THE UPPER TWELVE (12) INCHES OF THE SUITABLE SUBGRADE MATERIAL IN ALL AREAS THAT MAY BE SOFT DUE TO EXCESS MOISTURE CONTENT. THIS APPLIES TO CUT AREAS AS WELL AS FILL AREAS.

5.3. PROVIDE WATER TO ADD TO DRY MATERIAL IN ORDER TO ADJUST THE MOISTURE CONTENT FOR THE PURPOSE OF ACHIEVING THE SPECIFIED COMPACTION.

5.4. BACKFILL THE CURB AND GUTTER AFTER ITS CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE MATERIAL.

6. TESTING AND FINAL ACCEPTANCE

6.1. THE CONTRACTOR SHALL PROVIDE AS A MINIMUM A FULLY LOADED SIX-WHEEL TANDEM AXLE TRUCK FO

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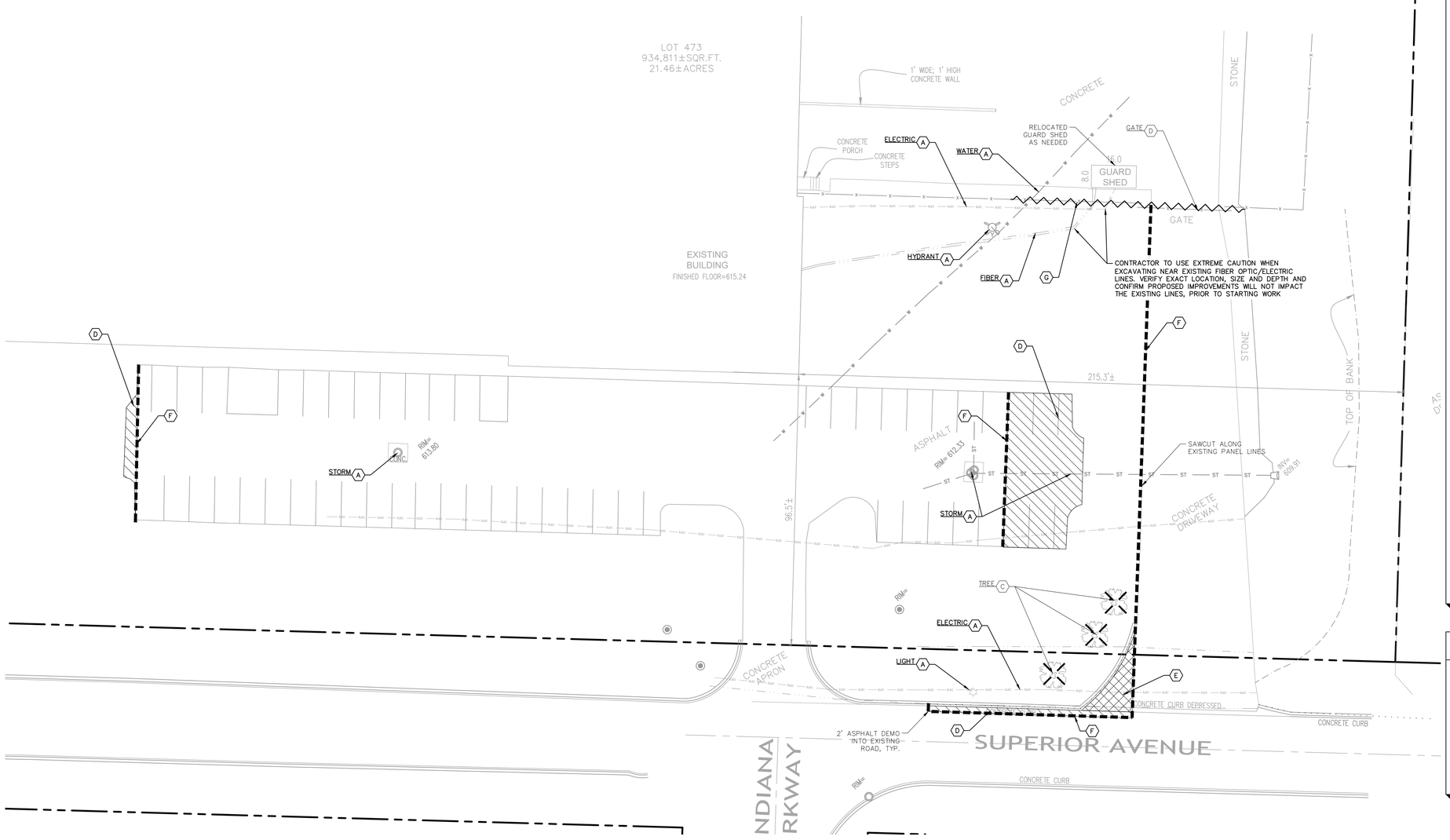

WARNING: CONTRACTOR TO VERIFY PRESENCE AND EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. SEE UTILITY LOCATE REPORT DATED 8-25-2020 FOR MORE INFORMATION

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NORTH

DEMOLITION NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF THE EXISTING STRUCTURES, RELATED UTILITIES, PAVING, AND ANY OTHER EXISTING IMPROVEMENTS AS NOTED.
2. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.
3. THE GENERAL CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO AVOID PROPERTY DAMAGE TO ADJACENT PROPERTIES DURING THE CONSTRUCTION PHASES OF THIS PROJECT. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR ANY DAMAGES TO THE ADJACENT PROPERTIES OCCURRING DURING THE CONSTRUCTION PHASES OF THIS PROJECT. CONTRACTOR SHALL NOT DEMOLISH ANYTHING OUTSIDE THE OWNERS LEASE/PROPERTY LINE UNLESS SPECIFICALLY MENTIONED ON THIS SHEET.
4. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
5. IF DEMOLITION OR CONSTRUCTION ON SITE WILL INTERFERE WITH THE ADJACENT PROPERTY OWNER'S TRAFFIC FLOW, THE CONTRACTOR SHALL COORDINATE WITH ADJACENT PROPERTY OWNER, TO MINIMIZE THE IMPACT ON TRAFFIC FLOW. TEMPORARY RE-ROUTING OF TRAFFIC IS TO BE ACCOMPLISHED BY USING INDOT APPROVED TRAFFIC BARRICADES, BARRELS, AND/OR CONES. TEMPORARY SIGNAGE AND FLAGMEN MAY BE ALSO NECESSARY.
6. QUANTITIES DEPICTED ON THIS SHEET SHALL SERVE AS A GUIDE ONLY. CONTRACTOR TO VERIFY ALL DEMOLITION QUANTITIES.
7. REFER TO GEOTECHNICAL REPORT PROVIDED BY OTHERS FOR ALL SUBSURFACE INFORMATION.
8. CONTRACTOR SHALL BEGIN CONSTRUCTION OF ANY LIGHT POLE BASES FOR RELOCATED LIGHT FIXTURES AND RELOCATION OF ELECTRICAL SYSTEM AS SOON AS DEMOLITION BEGINS. CONTRACTOR SHALL BE AWARE THAT INTERRUPTION OF POWER TO ANY LIGHT POLES OR SIGNS SHALL NOT EXCEED 24 HOURS.
9. EROSION CONTROL MUST BE ESTABLISHED PRIOR TO ANY WORK ON SITE INCLUDING DEMOLITION.
10. THE EXTENT OF SITE DEMOLITION WORK IS AS SHOWN ON THE CONTRACT DOCUMENTS AND AS SPECIFIED HEREIN.
11. CONTRACTOR MUST RECEIVE APPROVAL FROM CIVIL ENGINEER AND GEOTECHNICAL ENGINEER FOR THE MATERIAL TYPE AND USE IF CONTRACTOR DESIRES TO REUSE DEMOLISHED SITE PAVEMENT AS STRUCTURAL FILL.
12. EXISTING UTILITIES, WHICH DO NOT SERVICE STRUCTURES BEING DEMOLISHED, ARE TO BE KEPT IN SERVICE AND PROTECTED AGAINST DAMAGE DURING DEMOLITION OPERATIONS. CONTRACTOR SHALL ARRANGE FOR SHUT-OFF OF UTILITIES SERVING STRUCTURES TO BE DEMOLISHED. CONTRACTOR IS RESPONSIBLE FOR TURNING OFF, DISCONNECTING, AND SEALING INDICATED UTILITIES BEFORE STARTING DEMOLITION OPERATIONS. EXISTING UTILITIES TO BE ABANDONED ARE TO BE CAPPED AT BOTH ENDS AND FILLED WITH FA-1 OR APPROVED EQUAL. ALL UNDERGROUND UTILITIES TO BE REMOVED ARE TO BE BACKFILLED WITH ENGINEERED FILL OR SELECT EXCAVATED MATERIAL, AS APPROVED BY THE GEOTECHNICAL ENGINEER, TO 95% OF MODIFIED PROCTOR DENSITY WITHIN PAVED AREAS AND TO 90% OF MODIFIED PROCTOR DENSITY FOR GREEN SPACE AREAS, IN ACCORDANCE WITH THE EARTHWORK SPECIFICATIONS. ALL PRIVATE UTILITIES (ELECTRIC, CABLE, TELEPHONE, FIBER OPTIC, GAS) SHALL BE REMOVED AND RELOCATED PER THE UTILITY OWNER AND THE LOCAL MUNICIPALITY'S REQUIREMENTS.
13. UNDERGROUND UTILITIES SHOWN ARE BASED ON ATLASES AND AVAILABLE INFORMATION PRESENTED AT THE TIME OF SURVEY. CONTRACTOR SHOULD CALL INDIANA 811 TO COORDINATE FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE ORDERING MATERIALS OR COMMENCING CONSTRUCTION. NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY. CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UNDERGROUND AND OVERHEAD UTILITIES DURING CONSTRUCTION. UTILITY PROTECTION SHALL BE COORDINATED WITH THE RESPECTIVE UTILITY OWNER AND AS DIRECTED BY THE GOVERNING MUNICIPALITY. DAMAGED CABLES/CONDUITS SHALL BE REPLACED IMMEDIATELY. ALL EXISTING STRUCTURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PROCESS. ALL DAMAGED STRUCTURES SHALL BE REPLACED IN-KIND AND THEIR REPLACEMENT COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. PROPER NOTIFICATION TO THE OWNERS OF THE EXISTING UTILITIES SHALL BE MADE AT LEAST 48 HOURS BEFORE CONSTRUCTION COMMENCES.
14. USE WATER SPRINKLING, TEMPORARY ENCLOSURES, AND OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT RISING AND SCATTERING IN THE AIR TO THE LOWEST LEVEL. COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION. SEE EROSION CONTROL SHEETS FOR FURTHER EROSION CONTROL REQUIREMENTS.
15. COMPLETELY FILL BELOW-GRADE AREAS AND VOIDS RESULTING FROM DEMOLITION OF STRUCTURES TO THE FINAL LINES AND GRADES SHOWN ON THE CONTRACT DOCUMENTS. BACKFILL MATERIAL SHALL BE IDOT APPROVED CRUSHED LIMESTONE (CA-6) OR APPROVED EQUAL. USE SATISFACTORY SOIL MATERIALS CONSISTING OF STONE, GRAVEL AND SAND, FREE FROM DEBRIS, TRASH, FROZEN MATERIALS, ROOTS AND OTHER ORGANIC MATTER. PRIOR TO PLACEMENT OF FILL MATERIALS, ENSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROST, FROZEN MATERIAL, TRASH AND DEBRIS. PLACE FILL MATERIALS IN HORIZONTAL LAYERS NOT EXCEEDING 9" IN LOOSE DEPTH. COMPACT EACH LAYER AT OPTIMUM MOISTURE CONTENT OF FILL MATERIAL TO 95% OF MODIFIED PROCTOR DENSITY UNLESS SUBSEQUENT EXCAVATION FOR NEW WORK IS REQUIRED.

DEMOLITION LEGEND

- (A) ITEM TO REMAIN, PROTECT DURING CONSTRUCTION
- (B) CURB REMOVAL
- (C) ITEM TO BE REMOVED
- (D) FULL-DEPTH ASPHALT PAVEMENT REMOVAL
- (E) CONCRETE REMOVAL
- (F) SAWCUT LINE
- (G) FENCE REMOVAL

No.	REVISIONS	DATE	BY
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SCALE: AS NOTED
DESIGNED BY: JPB
DRAWN BY: JPB
CHECKED BY: NJG

STATE OF INDIANA — NICHOLAS J. GRUCZ — REGISTERED PROFESSIONAL ENGINEER

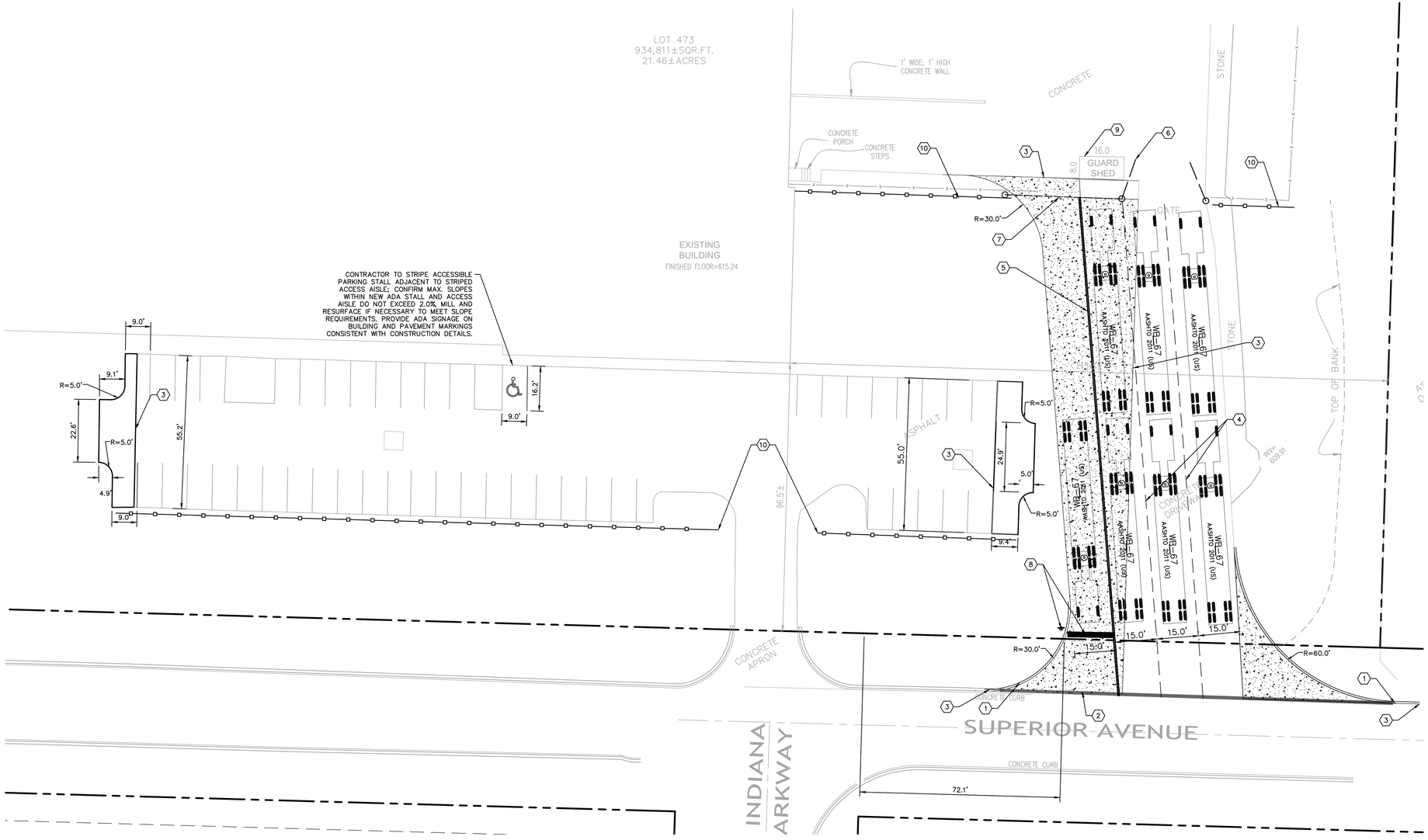
GE APPLIANCES a Haier company

EXISTING CONDITIONS AND DEMOLITION PLAN

GE DRIVEWAY IMPROVEMENTS

475 SUPERIOR AVENUE
MUNSTER, IN 46321

ORIGINAL ISSUE: 9/24/2020
KHA PROJECT NO. 168919000
SHEET NUMBER
C2.0



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NORTH

GENERAL NOTES

1. ALL DIMENSIONS REFER TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
2. BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
3. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS TO VERIFY ALL BUILDING DIMENSIONS.
4. RADII ADJACENT TO PARKING STALL AND NOT DIMENSIONED ON THIS PLAN SHALL BE 3-FEET, TYPICAL.
5. REFER TO ARCHITECTURAL PLANS FOR MONUMENT SIGN DETAILS. SEE MEP PLANS FOR SITE ELECTRICAL DRAWINGS.
6. ALL PROPOSED ON-SITE STRIPING SHALL BE PAINTED UNLESS OTHERWISE NOTED.

KEY NOTES

1. VALLEY GUTTER TO MATCH EXISTING
2. B6.12 DEPRESSED CURB AND GUTTER
3. CONNECT TO EXISTING PAVEMENT, SIDEWALK, CURB, TYP.
4. 6" WHITE DASHED STRIPE
5. 6" DOUBLE YELLOW STRIPE
6. INSTALL SWING GATE
7. RELOCATED EXISTING SLIDE GATE
8. 24" WIDE STOP BAR AND STOP SIGN, TYP. (SEE DETAILS)
9. EXISTING GUARD SHACK TO REMAIN
10. PROPOSED FENCING, SEE LANDSCAPE PLAN AND DETAILS

PAVING AND CURB LEGEND

STANDARD DUTY ASPHALT PAVEMENT
SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION

HEAVY DUTY CONCRETE PAVEMENT
SEE CONSTRUCTION DETAILS FOR PAVEMENT SECTION

STANDARD PITCH CONCRETE CURB AND GUTTER

CONCRETE DEPRESSED CURB AND GUTTER

PARKING SUMMARY

PARKING SPACES REQUIRED (CITY STANDARD)	=	46 SPACES
PARKING SPACES PROVIDED	=	53 SPACES
ACCESSIBLE PARKING SPACES REQUIRED	=	3 SPACES
ACCESSIBLE PARKING SPACES PROVIDED	=	3 SPACES
TOTAL PARKING SPACES PROVIDED	=	53 SPACES

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GE APPLIANCES a Haier company

SITE PLAN

GE DRIVEWAY IMPROVEMENTS

475 SUPERIOR AVENUE
MUNSTER, IN 46321

ORIGINAL ISSUE: 9/24/2020
KHA PROJECT NO. 168919000
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Drawing name: K:\CHS_LDEV\168919000_GE_Munster_IN\2 Design\CAD\PlanSheets\C3.0 SITE PLAN.dwg Layout1 Oct 07, 2020 4:01pm by: Christina.Morelli
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EROSION CONTROL LEGEND

- TS — TEMPORARY SEEDING (SEE EROSION CONTROL DETAILS)
- CE — CONSTRUCTION ENTRANCE (SEE EROSION CONTROL DETAILS)
- SF — SILT FENCE (SEE EROSION CONTROL DETAILS)
- IP — INLET PROTECTION (SEE EROSION CONTROL DETAILS)
- LD — LIMITS OF DISTURBANCE
- CW — CONCRETE WASHOUT (SEE DETAILS)

EROSION CONTROL SCHEDULE AND SEQUENCING:

I. ROUGH GRADING	*CONSTRUCTION ENTRANCE/EXIT, SILT FENCE PROTECTION, CONCRETE WASHOUT AREA AND TREE PROTECTION SHALL BE INSTALLED PRIOR TO THE INITIATION OF ROUGH GRADING, AS NEEDED. TEMPORARY EROSION CONTROL MEASURES TO BE INSTALLED UPON COMPLETION OF ROUGH GRADING AND AS NECESSARY THROUGHOUT CONSTRUCTION.*
II. UTILITY INSTALLATION	*ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING UTILITY INSTALLATION. STORM STRUCTURE INLET PROTECTION SHALL BE INSTALLED AS STORM DRAINAGE SYSTEM IS CONSTRUCTED.*
III. PAVING	*ALL PRIOR EROSION CONTROL MEASURES INSTALLED ABOVE TO BE MAINTAINED AS NECESSARY DURING PAVING AND THROUGHOUT THE REMAINDER OF THE PROJECT.*
IV. FINAL GRADING/SOIL STABILIZATION/ LANDSCAPING	*ALL TEMPORARY EROSION CONTROL MEASURES TO BE REMOVED AT THE CONCLUSION OF THE PROJECT AS DIRECTED BY THE LOCAL MUNICIPALITY.*

SITE DATA TABLE

EXISTING IMPERVIOUS AREA	17.6 AC
PROPOSED IMPERVIOUS AREA	17.7 AC

GRADING LEGEND

- EP = EDGE OF PAVEMENT
- TC = TOP OF CURB
- ME = MATCH ELEVATION
- R = RIM ELEVATION
- FG = FINISHED GRADE
- XXX — PROPOSED CONTOUR
- XXX — EXISTING CONTOUR
- RIDGE — RIDGE LINE
- X.XX% — SLOPE AND FLOW DIRECTION

GRADING NOTES

1. CONTRACTOR TO VERIFY ALL EXISTING TOPOGRAPHY AND STRUCTURES ON THE SITE AND IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING WORK.
2. ALL PAVEMENT SPOT GRADE ELEVATIONS AND RIM ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO FLOW LINE ELEVATIONS UNLESS OTHERWISE NOTED.
3. ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. GENERAL CONTRACTOR TO COORDINATE WITH EXCAVATION, LANDSCAPE AND PAVING SUBCONTRACTORS REGARDING TOPSOIL THICKNESS FOR LANDSCAPE AREAS AND PAVEMENT SECTION THICKNESS FOR PAVED AREAS TO PROPERLY ENSURE ADEQUATE CUT TO ESTABLISH SUBGRADE ELEVATIONS.
4. NO EARTHEN SLOPE SHALL BE GREATER THAN 3:1, UNLESS OTHERWISE NOTED.
5. MAXIMUM SLOPE IN ACCESSIBLE PARKING SPACES AND LOADING ZONES SHALL NOT EXCEED 2.0% IN ALL DIRECTIONS.
6. MAXIMUM RUNNING SLOPE SHALL NOT EXCEED 5% AND CROSS SLOPE SHALL NOT EXCEED 2% ON ALL SIDEWALKS AND ACCESSIBLE ROUTES.
7. WHEN NATURAL FLOW OF DRAINAGE IS AWAY FROM CURB, CONTRACTOR TO INSTALL REVERSE GUTTER PITCH.
8. MATCH EXISTING ELEVATIONS AT THE PROPERTY LIMITS.

Indiana 811 — Know what's below. Call before you dig.

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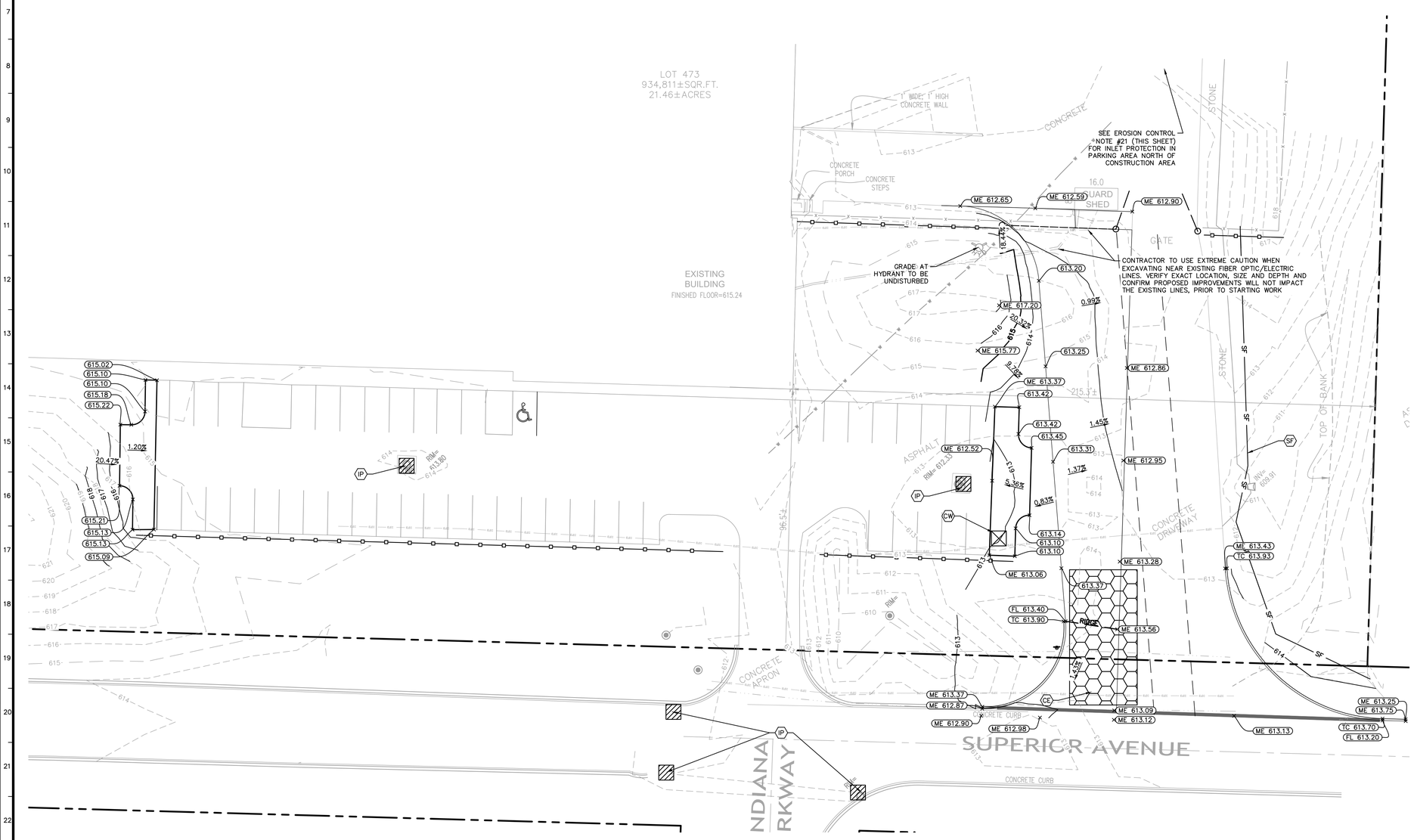

EROSION CONTROL NOTES

1. CONSTRUCTION ENTRANCE SHALL BE LOCATED SO AS TO PROVIDE THE LEAST AMOUNT OF DISTURBANCE TO THE FLOW OF TRAFFIC IN AND OUT OF THE SITE. ADDITIONALLY, CONSTRUCTION ENTRANCE SHALL BE LOCATED TO COINCIDE WITH THE PHASING OF THE PAVEMENT REPLACEMENT.
2. POST CONSTRUCTION STORM WATER POLLUTION CONTROL MEASURES INCLUDE STABILIZATION BY PERMANENT PAVING, DRAINAGE SYSTEM STRUCTURE, OR LANDSCAPING.
3. TEMPORARY AND PERMANENT STABILIZATION PRACTICES AND BMP'S SHALL BE INSTALLED AT THE EARLIEST POSSIBLE TIME DURING THE CONSTRUCTION SEQUENCE. AS AN EXAMPLE, PERIMETER SILT FENCE SHALL BE INSTALLED BEFORE COMMENCEMENT OF ANY GRADING ACTIVITIES. OTHER BMP'S SHALL BE INSTALLED AS SOON AS PRACTICABLE AND SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION IS ATTAINED. CONTRACTOR SHALL ALSO REFERENCE CIVIL AND LANDSCAPE PLANS SINCE PERMANENT STABILIZATION IS PROVIDED BY LANDSCAPING, THE BUILDING(S), AND SITE PAVING.
4. BMP'S HAVE BEEN LOCATED AS INDICATED ON THIS PLAN IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN ORDER TO MINIMIZE SEDIMENT TRANSFER. FOR EXAMPLE: SILT FENCES LOCATED AT TOE OF SLOPE AND INLET PROTECTION FOR INLETS RECEIVING SEDIMENT FROM SITE RUN-OFF.
5. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
6. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST, OR ARBORIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY THE PLANNING AND DEVELOPMENT DEPARTMENT AND THE DRAINAGE UTILITY DEPARTMENT. MINOR CHANGES OR ADDITIONAL CONTROL MEASURES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES AT NO ADDITIONAL COST TO THE OWNER.
7. CONTRACTOR SHALL PLACE EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S150BN OR APPROVED EQUAL) ON ALL SITE AREAS WITH SLOPES GREATER THAN 4:1, AND IN THE BOTTOM AND SIDE SLOPES OF ALL SWALES.
8. PRIOR TO FINAL ACCEPTANCE, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.
9. PERMANENT, FINAL PLANT COVERING OR STRUCTURES SHALL BE INSTALLED PRIOR TO FINAL ACCEPTANCE.
10. ALL CONTROL DEVICES THAT FUNCTION SIMILARLY TO SILT FENCE OR FIBER ROLLS MUST BE REPAIRED, REPLACED OR SUPPLEMENTED WITH EFFECTIVE CONTROLS WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES ONE-THIRD THE HEIGHT OF THE DEVICE. THESE REPAIRS MUST BE MADE WITHIN 24 HOURS OF THE RAINFALL EVENT OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
11. ALL SEDIMENT DELTAS AND DEPOSITS MUST BE REMOVED FROM SURFACE WATERS, DRAINAGE WAYS, CATCH BASINS AND OTHER DRAINAGE SYSTEMS. ALL AREAS WHERE SEDIMENT REMOVAL RESULTED IN EXPOSED SOIL MUST BE RESTABILIZED. THE REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS AFTER THE RAINFALL EVENT UNLESS PRECLUDED BY LEGAL, REGULATORY OR PHYSICAL ACCESS CONSTRAINTS. ALL REASONABLE EFFORTS MUST BE USED TO OBTAIN ACCESS. ONCE ACCESS IS OBTAINED, REMOVAL AND STABILIZATION MUST TAKE PLACE IMMEDIATELY, BUT NO MORE THAN 7 DAYS LATER. CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL APPROPRIATE AUTHORITIES AND RECEIVING THE APPLICABLE PERMITS PRIOR TO CONDUCTING ANY WORK.
12. ACCUMULATIONS OF TRACKED AND DEPOSITED SEDIMENT MUST BE REMOVED FROM OFF-SITE PAVED SURFACES WITHIN 24 HOURS OR SOONER IF REQUIRED. SEDIMENT TRACKING MUST BE MINIMIZED BY THE APPROPRIATE MANAGEMENT PRACTICE, LIKE A DEDICATED SITE EXIT WITH AN AGGREGATE SURFACE OR DESIGNATED OFFSITE PARKING AREA. CONTRACTOR IS RESPONSIBLE FOR STREET SWEEPING AND/OR SCRAPING IF YOUR PRACTICES ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED FROM THE SITE.
13. SURFACE WATERS, DRAINAGE DITCHES AND CONVEYANCE SYSTEMS MUST BE INSPECTED FOR SEDIMENT DEPOSITS.
14. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL MEASURES AS INDICATED ON THIS SHEET IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED BY KIMLEY-HORN AND ASSOCIATES, INC. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING THE PROVISIONS INDICATED IN THE SWPPP, INCLUDING EROSION CONTROL MEASURES AND INSPECTION FREQUENCY, AS REQUIRED BY THE IEPA NPDES PHASE II PERMIT PROGRAM REQUIREMENTS.
15. PUMPING SEDIMENT LADEN WATER INTO ANY STORMWATER FACILITY THAT IS NOT DESIGNATED TO BE A SEDIMENT TRAP, DRAINAGEWAY, OR OFFSITE AREA EITHER DIRECTLY OR INDIRECTLY WITHOUT FILTRATION IS PROHIBITED.
16. SOIL STOCKPILES SHALL NOT BE LOCATED IN A DRAINAGEWAY, FLOOD PLAIN AREA OR A DESIGNATED BUFFER, UNLESS OTHERWISE APPROVED, UNDER SPECIFIC CONDITIONS TO BE ESTABLISHED BY THE DIRECTOR OR ADMINISTRATOR.
17. STOCKPILES TO REMAIN IN PLACE FOR MORE THAN THREE DAYS SHALL BE PROVIDED WITH SESC MEASURES. MATERIAL IS TO BE HAULED OFF IMMEDIATELY AND LEGALLY IF NO STOCKPILE IS TO REMAIN IN PLACE.
18. ALL TEMPORARY SESC MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED.TRAPPED SEDIMENT AND OTHER DISTURBED SOILS RESULTING FROM TEMPORARY MEASURES SHALL BE PROPERLY DISPOSED OF PRIOR TO PERMANENT STABILIZATION.
19. WATER REMOVED FROM TRAPS, BASINS, AND OTHER WATER HOLDING DEPRESSIONS OR EXCAVATIONS MUST FIRST PASS THROUGH A SEDIMENT CONTROL AND/OR FILTRATION DEVICE. WHEN DEWATERING DEVICES ARE USED, DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION.
20. SITE STABILIZATION REQUIREMENTS ARE AS FOLLOWS:
    - 20.1. WHERE THE INITIATION OF STABILIZATION MEASURE BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASES ON A PORTION OF THE SITE IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURE SHALL BE INITIATED AS SOON AS PRACTICABLE.
    - 20.2. WHERE CONSTRUCTION ACTIVITY WILL RESUME ON A PORTION OF THE SITE WITHIN 14 DAYS FROM WHEN ACTIVITIES CEASED, (E.G. THE TOTAL TIME PERIOD THAT CONSTRUCTION ACTIVITY IS TEMPORARILY CEASED IS LESS THAN 14 DAYS) THEN STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE BY THE 7TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARILY CEASED.
21. PROVIDE ADDITIONAL INLET PROTECTION FOR INLETS IN PARKING AREA NOT SHOWN.
22. CONCRETE WASH WATER SHALL NOT BE DISCHARGED INTO GROUND OR SEWERS.

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GE APPLIANCES a Haier company

GRADING AND EROSION CONTROL

GE DRIVEWAY IMPROVEMENTS

475 SUPERIOR AVENUE
MUNSTER, IN 46321

ORIGINAL ISSUE: 9/24/2020

KHA PROJECT NO. 168919000

SHEET NUMBER

C4.0

Drawing name: K:\CHS_LDEV\168919000_GE_Munster_IN\2 Design\CAD\PlanSheets\C4.0 GRADING AND EC.dwg Layout1 Oct 07, 2020 4:02pm by: ChristinaMorelli
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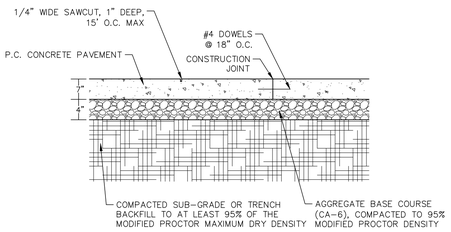

HEAVY DUTY CONCRETE PAVEMENT SECTION

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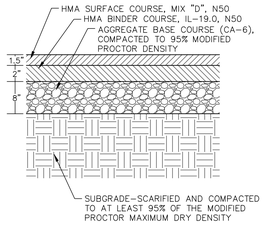

STANDARD DUTY ASPHALTIC PAVEMENT SECTION

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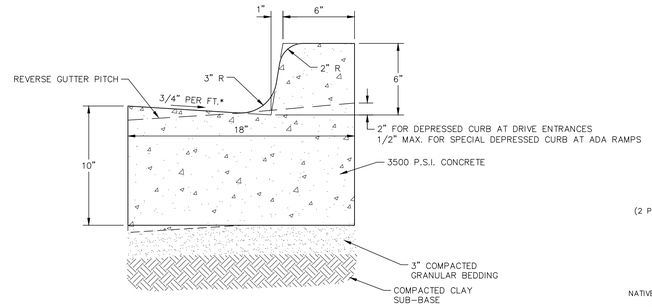
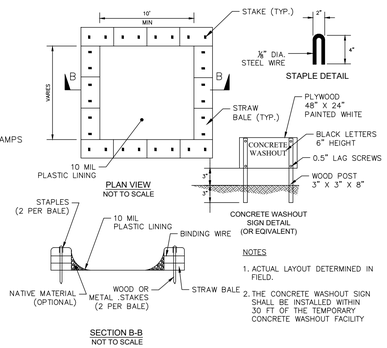


NOTES: USE TWO – #5 REBARS FOR 10 L.F. ON EITHER SIDE OF ALL UTILITY TRENCHES. INSTALL EXPANSION JOINTS EVERY 50 FT. AND SAW-CUT CONSTRUCTION JOINTS EVERY 25 FT.

* MAXIMUM GUTTER SLOPE AT ADA RAMPS TO BE 5.0%

B6.12 CURB & GUTTER

N.T.S.

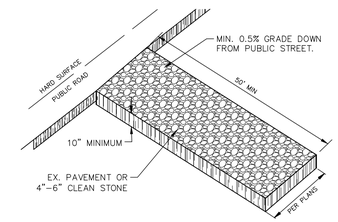


NOTES

1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT OF THE TEMPORARY CONCRETE WASHOUT FACILITY

CONCRETE WASHOUT

N.T.S.



CONSTRUCTION ENTRANCE

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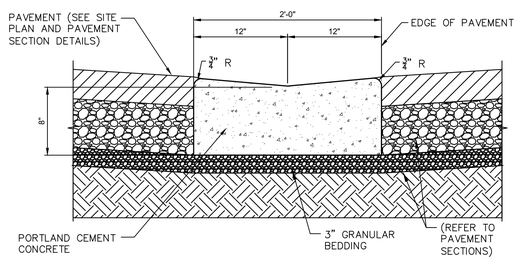
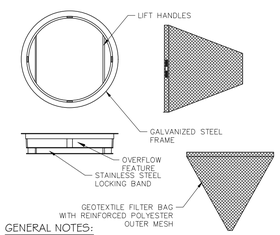


NOTE: THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT.

24" CONCRETE VALLEY GUTTER

N.T.S.



GENERAL NOTES:

ALL PRODUCTS MANUFACTURED BY INLET AND PIPE PROTECTION, INC OR APPROVED EQUAL.

NOTE: INLET FILTERS ARE SLIGHTLY SMALLER THAN THE INLET GRATE SIZES. WHEN IDENTIFYING OR SPECIFYING FILTERS/CASTINGS PLEASE REFER TO THE DIAMETER "D" OR WIDTH "W" AND HEIGHT "H" OF FILTER FRAMES OR CASTING GRATES. YOU MAY ALSO REFER TO OUR CASTING CROSS REFERENCE GUIDE FOR IDOT STANDARDS

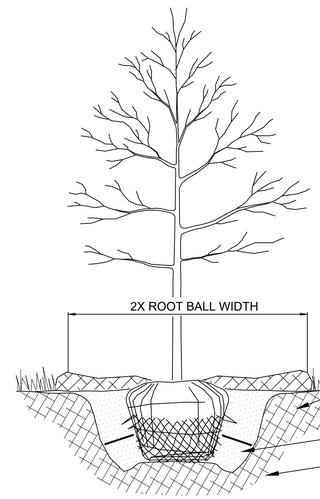
IDOT TYPE 1 ROUND INLET FILTER DEPICTED

NOTE: ROUND AND SQUARE INLET FILTERS AVAILABLE FOR MOST NEENAH AND EAST JORDAN BEEHIVE, ROLL CURB AND CURB BOX FRAME TYPES

ALL IPP INLET FILTERS TO CONFORM TO IDOT SPECIFICATIONS AS OUTLINED IN ARTICLE 1081.15 OF IDOT'S STANDARD SPECIFICATIONS GUIDE.

INLET PROTECTION

N.T.S.

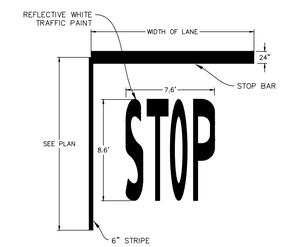


NOTES:

1. INSPECT TREE FOR DAMAGED BRANCHES, APPLY CORRECTIVE PRUNING.
2. SET ROOT BALL ON UNEXCAVATED OR TAMPED SOIL. TOP OF ROOTBALL SHALL BE TWO INCHES ABOVE SURROUNDING GRADE WITH BURLAP AND WIRE BASKET INTACT.
3. REMOVE WIRE BASKET AND BURLAP DOWN FOUR TO SIX INCHES BELOW TOP OF ROOT BALL. REMOVE ALL TWINE AND (IF USED), SYNTHETIC MATERIAL. REMOVE OR CORRECT GIRDLING ROOTS.
4. TAMP EXCAVATED SOIL AROUND BASE OF ROOTBALL.
5. BACKFILL REMAINDER EXCAVATED SOIL TAMPED LIGHTLY. HIGH CLAY OR POOR SOIL SHALL RECEIVE SOIL AMENDMENT PER LANDSCAPE NOTES.
6. WATER THOROUGHLY WITHIN TWO HOURS USING 10 TO 15 GALLONS OF WATER.
7. APPLY MULCH IN EVEN LAYER, KEEPING AWAY FROM ROOT FLARE.
8. FINAL LOCATION OF TREE TO BE APPROVED BY OWNER.

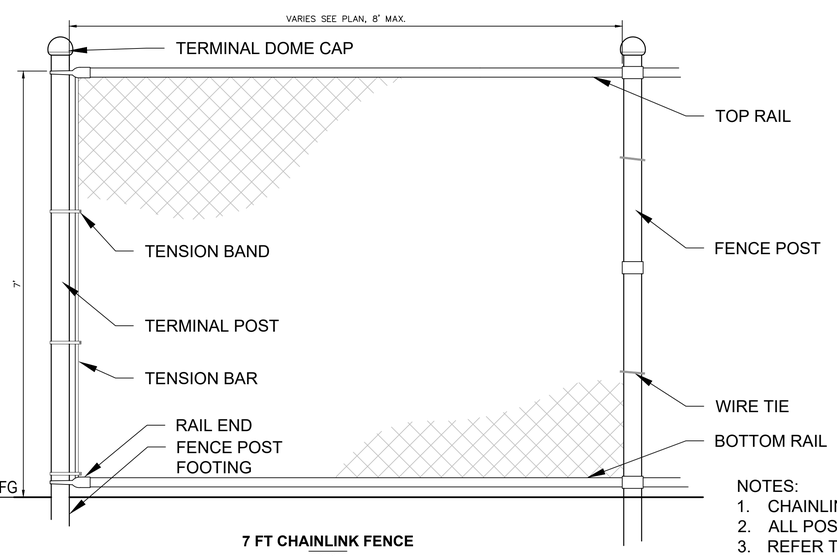
TREE PLANTING

N.T.S.



STOP BAR

N.T.S.

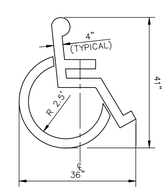


7 FT CHAINLINK FENCE

N.T.S.

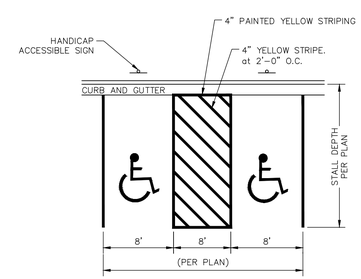
NOTES:

1. CHAINLINK FABRIC SHALL BE BLACK VINYL COATED STEEL.
2. ALL POSTS, RAILS, AND FITTINGS SHALL BE STEEL.
3. REFER TO MANUFACTURERS SPECIFICATIONS FOR DETAILS.
4. SEE PLANS FOR GATE LOCATIONS



ACCESSIBLE PARKING SYMBOL

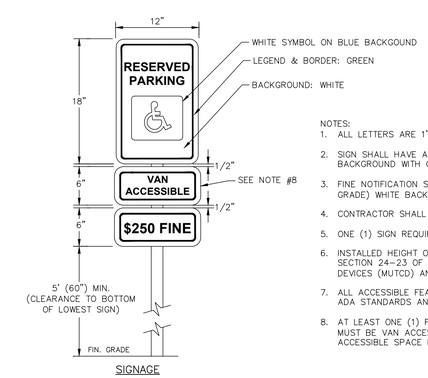
N.T.S.



NOTE: REFER TO PLAN FOR DETAILED LAYOUT AND DIMENSIONS

TYPICAL HANDICAP STRIPING

N.T.S.



NOTES:

1. ALL LETTERS ARE 1" SERIES "C" PER MUTCD.
2. SIGN SHALL HAVE A REFLECTIVE (ENGINEERING GRADE) WHITE BACKGROUND WITH GREEN REFLECTIVE LEGEND AND BORDER.
3. FINE NOTIFICATION SIGN SHALL HAVE A REFLECTIVE (ENGINEERING GRADE) WHITE BACKGROUND WITH GREEN LEGEND AND BORDER.
4. CONTRACTOR SHALL VERIFY FINE AMOUNT.
5. ONE (1) SIGN REQUIRED FOR EACH PARKING SPACE.
6. INSTALLED HEIGHT OF SIGN SHALL BE IN ACCORDANCE WITH SECTION 24-23 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LOCAL ADA CODE.
7. ALL ACCESSIBLE FEATURES TO BE IN STRICT ACCORDANCE WITH ADA STANDARDS AND LOCAL LAWS.
8. AT LEAST ONE (1) FOR EVERY SIX (6) ACCESSIBLE SPACES MUST BE VAN ACCESSIBLE, WITH A MINIMUM OF ONE (1) VAN ACCESSIBLE SPACE PER SITE.

ACCESSIBLE PARKING SIGNAGE

N.T.S.

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SCALE: AS NOTED
DESIGNED BY: JPB
DRAWN BY: JPB
CHECKED BY: NJG

STATE OF ILLINOIS NICHOLAS J. GIANNELLI No. 062-073004 PROFESSIONAL ENGINEER

GE APPLIANCES a Haier company

CONSTRUCTION DETAILS

GE DRIVEWAY IMPROVEMENTS

475 SUPERIOR AVENUE
MUNSTER, IN 46321

ORIGINAL ISSUE: 9/24/2020
KHA PROJECT NO. 168919000
SHEET NUMBER
C5.0

Drawing name: K:\CHS_LDD\C\168919000_GE_Munster_IN\3 Design\CAD\PlanSheets\C5.0 CONSTRUCTION DETAILSheet.dwg Layout1 Oct 07, 2020 4:02pm by: Christina.Morelli
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MUNSTER, IN LANDSCAPE CODE		
ZONING ORDINANCE	**REQUIREMENT**	**PROVIDED**
DIVISION 4 - SECTION 26-6.405 BUILDING AND LOT STANDARDS - A: DISTRICT BUILDINGS AND LOTS - SCREENS		
PARKING AREAS SHALL BE SCREENED FROM FRONTAGE AND CIVIC SPACE BY A STREETSCREEN. THE FENCE SCREEN OR STREETSCREEN SHALL BE CONSTRUCTED FROM WOOD.	A 6 FT. OPAQUE FENCE IS REQUIRED ALONG THE PERIMETER OF THE LOADING DOCK	A 6' OPAQUE FENCE IS PROVDED ALONG THE PERIMETER OF THE LOADING DOCK
DIVISION 4 - SECTION 26-6.405 BUILDING AND LOT STANDARDS - O.2: VEHICULAR AND BICYCLE PARKING, LOADING SPACE AND TRASH RECEPTACLES - SIGNIFICANT TREES		
TREES BETWEEN 10 IN. AND 16 IN. DBH THAT ARE REMOVED FOR DEVELOPMENT SHALL BE REPLACED AT A 1 TO 1 RATIO.	3 TREES REMOVED ALONG THE SOUTH EDGE OF THE SITE	3 REPLACEMENT TREES ARE LOCATED ON THE SOUTH SIDE OF THE SITE
COMMERCIAL LANDSCAPE REQUIREMENTS - SECTION 3 - PARKING AREA SCREEN		
A MINIMUM 7 FT. WIDE PERIMETER PLANTING STRIP SHALL BE PLANTED ADJACENT TO THE PUBLIC RIGHT-OF-WAY. THIS PLANTING STRIP SHALL CONTAIN A CONTINUOUS HEDGE SCREEN, AN ORNAMENTAL FENCE SCREEN AND ONE SHADE TREE PLANTED FOR EVERY 30 FT. OF LINEAR FRONTAGE.	LINEAR FRONTAGE OF PARKING: 243.3 FT. 243.3 FT. / 30 FT. = 8.1 **8 SHADE TREES REQUIRED**	A 7' PLANTING STRIP, A 3' ORNAMENTAL FENCE AND 8 SHADE TREES ARE PROVIDED ADJACENT TO THE PUBLIC RIGHT-OF-WAY

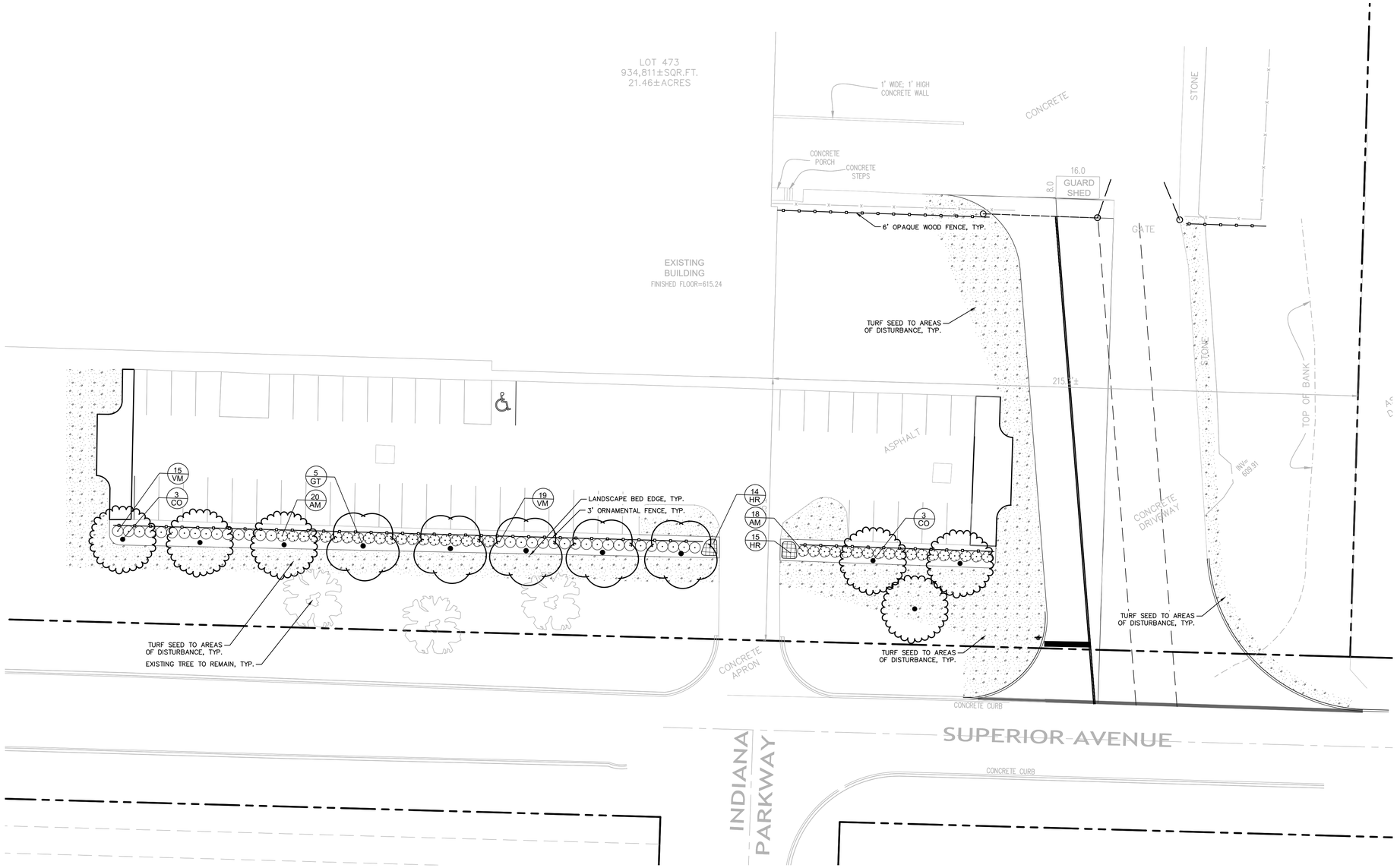
PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	CAL	SIZE
	CO	6	CELTIS OCCIDENTALIS	COMMON HACKBERRY	B & B	2.5" CAL MIN	
	GT	5	GLEDITSIA TRIACANTHOS	HONEY LOCUST	B & B	2.5" CAL MIN	

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT	SPACING	SIZE
	AM	38	ARONIA MELANOCARPA	BLACK CHOKEBERRY	-		36" HT MIN
	VM	34	VIBURNUM DENTATUM `BLUE MUFFIN`	SOUTHERN ARROWWOOD	-		36" HT MIN

PERENNIALS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SPACING
	HR	29	HEMEROCALLIS X `ROSY RETURNS`	DAYLILY	18" o.c.

GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SPACING
				TURF SEED	



GRAPHIC SCALE IN FEET
0 10 20 40

NORTH

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1	REVISED PER TOWN COMMENTS	10/7/2020	NAG

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LANDSCAPE PLAN

GE DRIVEWAY IMPROVEMENTS

475 SUPERIOR AVENUE
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Drawing name: K:\CHS_LDEV\168919000_GE_Munster_IN\2 Design\CAD\PlanSheets\L1.0 LANDSCAPE PLAN.dwg L1.0 LANDSCAPE PLAN Oct 07, 2020 4:02pm by: Christina.Morelli
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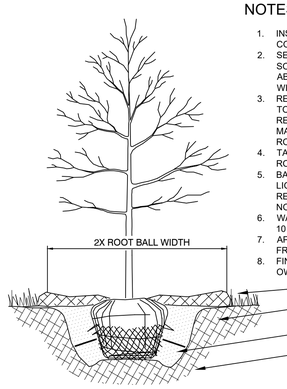
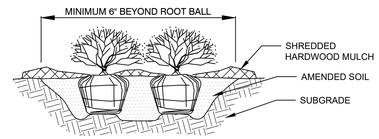


NOTES:

1. INSPECT TREE FOR DAMAGED BRANCHES, APPLY CORRECTIVE PRUNING.
2. SET ROOT BALL ON UNEXCAVATED OR TAMPED SOIL. TOP OF ROOTBALL SHALL BE TWO INCHES ABOVE SURROUNDING GRADE WITH BURLAP AND WIRE BASKET INTACT.
3. REMOVE WIRE BASKET AND BURLAP DOWN FOUR TO SIX INCHES BELOW TOP OF ROOT BALL. REMOVE ALL TWINE AND (IF USED), SYNTHETIC MATERIAL. REMOVE OR CORRECT GIRDLING ROOTS.
4. TAMP EXCAVATED SOIL AROUND BASE OF ROOTBALL.
5. BACKFILL REMAINDER EXCAVATED SOIL TAMPED LIGHTLY. HIGH CLAY OR POOR SOIL SHALL RECEIVE SOIL AMENDMENT PER LANDSCAPE NOTES.
6. WATER THOROUGHLY WITHIN TWO HOURS USING 10 TO 15 GALLONS OF WATER.
7. APPLY MULCH IN EVEN LAYER, KEEPING AWAY FROM ROOT FLARE.
8. FINAL LOCATION OF TREE TO BE APPROVED BY OWNER.

1 TREE PLANTING

NTS



NOTES:

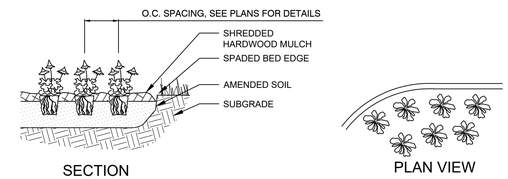
1. APPLY CORRECTIVE PRUNING.
2. SET ROOT BALL OR CONTAINER ON UNEXCAVATED OR TAMPED SOIL. TOP OF ROOTBALL (CONTAINER) SHALL BE ONE INCH ABOVE SURROUNDING GRADE. FOR LARGER SHRUBS WITHIN PLANTING BED DIG A DEEPER PIT ONLY FOR THOSE SHRUBS.
3. REMOVE BURLAP FROM TOP HALF THE LENGTH OF ROOTBALL. TWINE AND (IF USED) SYNTHETIC MATERIAL SHALL BE REMOVED FROM PLANTING BED. FOR CONTAINER GROWN SHRUBS, REMOVE CONTAINER AND LOOSEN ROOTS PRIOR TO INSTALLATION.
4. REMOVE OR CORRECT GIRDLING ROOTS.
5. PLUMB AND BACKFILL WITH AMENDED SOIL PER LANDSCAPE NOTES. WATER THOROUGHLY WITHIN TWO HOURS.
6. APPLY MULCH IN EVEN LAYER, KEEPING AWAY FROM ROOT FLARE. MULCH LIMITS FOR SHRUBS EXTEND TO ALL LIMITS OF PLANTING BED, SEE PLANS FOR BED LAYOUTS.

2 SHRUB PLANTING

NTS

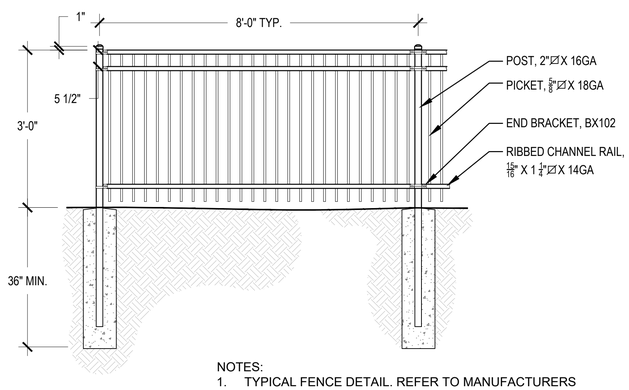
NOTES:

1. EXCAVATE PLANTING BED.
2. BED HEIGHT IS TO BE 2" ABOVE FINISH GRADE AND WELL DRAINED.
3. REMOVE CONTAINER, SCORE SOIL MASS TO REDIRECT AND PREVENT CIRCLING ROOTS. CORRECT GIRDLING ROOTS.
2. PLANT MATERIAL SHALL BE LAID OUT BY FOLLOWING THE BED EDGE, WORKING TOWARDS THE CENTER OF THE BED USING TRIANGULAR (STAGGERED) SPACING AS PLAUSIBLE.
3. PLUMB AND BACKFILL WITH PLANTING MIX AS SPECIFIED IN LANDSCAPE NOTES.
4. APPLY MULCH IN EVEN LAYER, KEEPING AWAY FROM ROOT FLARE. MULCH LIMITS FOR PERENNIALS/GROUNDCOVER EXTEND TO ALL LIMITS OF PLANTING BED, SEE PLANS FOR BED LAYOUTS.
5. SPACING TO BE AS SPECIFIED IN THE PLANT LIST. PERENNIALS SHALL BE PLACED WITH THEIR CENTER 24" FROM EDGE OF BED.



3 PERENNIAL PLANTING

NTS

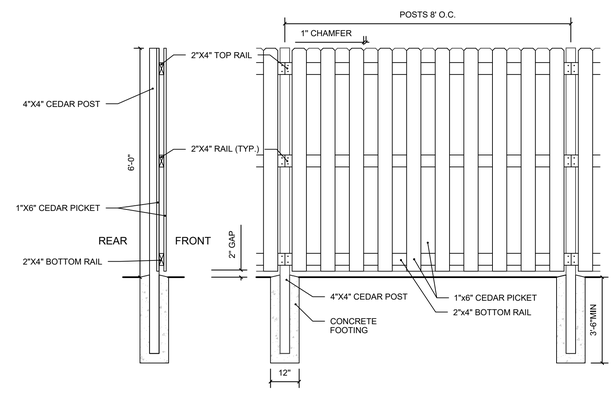


NOTES:

1. TYPICAL FENCE DETAIL. REFER TO MANUFACTURERS SPECIFICATIONS.
2. POST SIZE VARIES BY FENCE HEIGHT AND WIND LOAD.
3. CONCRETE FOOTING VARIES BASED ON LOCAL SOIL CONDITIONS.

4 3' ORNAMENTAL METAL FENCE

NTS



5 6' BOARD-ON-BOARD SCREEN FENCE

1/2" = 1'-0"

LANDSCAPE NOTES

1. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING MATERIALS AND PLANTS SHOWN ON THE LANDSCAPE PLAN. THE CONTRACTOR IS RESPONSIBLE FOR THE COST TO REPAIR UTILITIES, ADJACENT LANDSCAPE, PUBLIC AND PRIVATE PROPERTY THAT IS DAMAGED BY THE CONTRACTOR OR THEIR SUBCONTRACTOR'S OPERATIONS DURING INSTALLATION OR DURING THE SPECIFIED MAINTENANCE PERIOD. CALL FOR UTILITY LOCATIONS PRIOR TO ANY EXCAVATION.
2. THE CONTRACTOR SHALL REPORT ANY DISCREPANCY IN PLAN VS. FIELD CONDITIONS IMMEDIATELY TO THE LANDSCAPE ARCHITECT, PRIOR TO CONTINUING WITH THAT PORTION OF WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY OF THEIR TRENCHES OR EXCAVATIONS THAT SETTLE.
4. ALL NURSERY STOCK SHALL BE WELL BRANCHED, HEALTHY, FULL, PRE-INOCULATED AND FERTILIZED. DECIDUOUS TREES SHALL BE FREE OF FRESH SCARS. TRUNKS WILL BE WRAPPED IF NECESSARY TO PREVENT SUN SCALD AND INSECT DAMAGE. THE LANDSCAPE CONTRACTOR SHALL REMOVE THE WRAP AT THE PROPER TIME AS A PART OF THIS CONTRACT.
5. ALL NURSERY STOCK SHALL BE GUARANTEED, BY THE CONTRACTOR, FOR ONE YEAR FROM DATE OF FINAL INSPECTION.
6. AMENDED SOIL SHALL BE PROVIDED AND GRADED BY THE GENERAL CONTRACTOR UP TO 6 INCHES BELOW FINISHED GRADE IN TURF AREAS AND 18 INCHES IN PLANTING AREAS.
7. PLANTING AREA SOIL SHALL BE AMENDED WITH 25% SPHANGUM PEATMOSS, 5% HUMUS AND 65% PULVERIZED SOIL FOR ALL SHRUB, ORNAMENTAL GRASS, PERENNIAL AND ANNUAL BEDS. AMENDED TURF AREA SOIL SHALL BE STANDARD TOPSOIL.
8. SEED/SOD LIMIT LINES ARE APPROXIMATE. CONTRACTOR SHALL SEED/SOD ALL AREAS WHICH ARE DISTURBED BY GRADING WITH THE SPECIFIED SEED/SOD MIXES.
9. CONTRACTOR SHALL INSTALL SHREDDED HARDWOOD MULCH AT A 3" DEPTH TO ALL TREES, SHRUB, PERENNIAL, AND GROUNDCOVER AREAS. TREES PLACED IN AREA COVERED BY TURF SHALL RECEIVE A 4 FT WIDE MAXIMUM TREE RING WITH 3" DEPTH SHREDDED HARDWOOD MULCH. A SPADED BED EDGE SHALL SEPARATE MULCH BEDS FROM TURF OR SEEDED AREAS. A SPADED EDGE IS NOT REQUIRED ALONG CURBED EDGES.
10. WEED FABRIC SHALL ONLY BE APPLIED UNDER DECORATIVE STONE APPLICATIONS.
11. INSTALLATION OF TREES WITHIN PARKWAYS SHALL BE COORDINATED IN THE FIELD WITH LOCATIONS OF UNDERGROUND UTILITIES. TREES SHALL NOT BE LOCATED CLOSER THAN 5' FROM UNDERGROUND UTILITY LINES AND NO CLOSER THAN 10' FROM UTILITY STRUCTURES.
12. DO NOT DISTURB THE EXISTING PAVING, LIGHTING, OR LANDSCAPING THAT EXISTS ADJACENT TO THE SITE UNLESS OTHERWISE NOTED ON PLAN.
13. PLANT QUANTITIES SHOWN ARE FOR THE CONVENIENCE OF THE OWNER AND JURISDICTIONAL REVIEW AGENCIES. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL PLANT QUANTITIES AS DRAWN.
14. THE OWNER'S REPRESENTATIVE MAY REJECT ANY PLANT MATERIALS THAT ARE DISEASED, DEFORMED, OR OTHERWISE NOT EXHIBITING SUPERIOR QUALITY.
15. THE CONTINUED MAINTENANCE OF ALL REQUIRED LANDSCAPING SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY ON WHICH SAID MATERIALS ARE REQUIRED. ALL PLANT MATERIALS REQUIRED BY THIS SECTION SHALL BE MAINTAINED AS LIVING VEGETATION AND SHALL BE PROMPTLY REPLACED IF THE PLANT MATERIAL HAS DIED PRIOR TO FINAL ACCEPTANCE. PLANTING AREAS SHALL BE KEPT FREE OF TRASH, LITTER, AND WEEDS AT ALL TIMES.

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Drawing name: K:\CHS_LDEV\168919000_GE_Munster_IN\2 Design\CAD\PlanSheets\L1.0 LANDSCAPE PLAN.dwg L2.0 LANDSCAPE NOTES AND DETAILS Oct 07, 2020 4:02pm by: Christina.Morelli
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