

Memorandum

To:	Board of Trustees
From:	Elizabeth J Corwin, PE, AIPC; Planning Director
Date:	September 4, 2024
Re:	URSA 24-08 Consumers Energy Highland City Gate Applicant and Property Owner: Consumers Energy 1160 W. Livingston PIN 11-21-451-007

The project before you is a site plan review to renovate the existing Consumer's Energy "City Gate" at 1160 W Livingston. A review of aerial photographs indicates the site was established prior to 1963. The use of the site is considered "an essential service" and are permitted in any zoning district. The standard for essential services is conformance to the extent practicable but not in conflict with the nature of the components of the utility proposed (see Section 8.18)

Consumers Energy proposes to replace the structure, equipment and fencing at this site, expanding the gravel surfaced area within the fence and improving site circulation within the fenced area. The new footprint of the site will displace a neighbor's chicken coop and driveway that have been allowed license to use the site in exchange for lawn maintenance. Some encroachment will be allowed to remain, which has been negotiated with the neighbor.

The newly renovated site will feature concrete approaches at Livingston Road. Existing drainage patterns will be maintained. The site plan has already been reviewed by the Road Commission for Oakland County and the permit has been provided for your packet

The new building is a considerably larger steel building, 40 feet by 52 feet with 11 foot sidewalls and a 3/12 pitch steel roof. There is one doublewide equipment door on the east face of the building and man-doors on both the east and west face of the building. There are no windows, nor openings of any sort on the north and south faces of the building, which would be parallel to Livingston Road. The scale of the building is compatible with the residential neighborhood, and the placement of the building on the site respects required setbacks. You may wish to discuss finish and materials to satisfy yourselves that the building is compatible with its surroundings.

The fencing detail on the plan is not consistent with discussions between staff and Consumer's Energy. Staff has been told that the fence height will be limited to 6 feet with no barbed wire, consistent with the ordinance. The fence was placed deep in the site so as to avoid the ordinance limits of a 4 foot high decorative fence in the front yard. The fence detail should be discussed and addressed in any motion of approval.

Warm inside. Great outdoors.

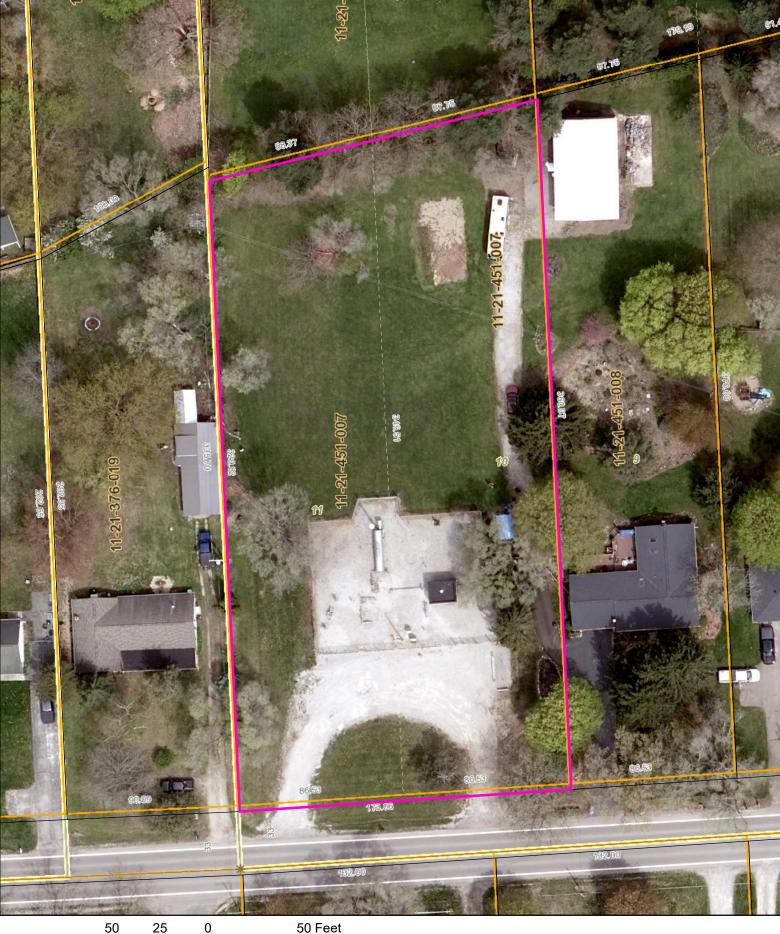


Lighting is not addressed on the plan. In discussion with staff, Consumers Energy representatives noted that they prefer the site to be dark, with temporary yard lighting provided only when necessary. That detail should be discussed and noted on any motion of approval.

Another detail that was discussed but is not adequately addressed on the site plan is what landscaping might be provided to soften the view of the fence from Livingston Road. While it is understandable that street trees may not be appropriate given the presence of the piping, there may be lower risk plantings such as ornamental grasses or perennials that could soften the look of the fence. Note also that mature trees will be removed from the site (sheet PMT-03) which will change the impact on neighboring properties. We understand that a low maintenance landscaping plan is essential for this site since it is not typically manned, but the ordinance would suggest some sort of buffer for the residential uses on either side. This issue should be discussed and addressed in any motion.

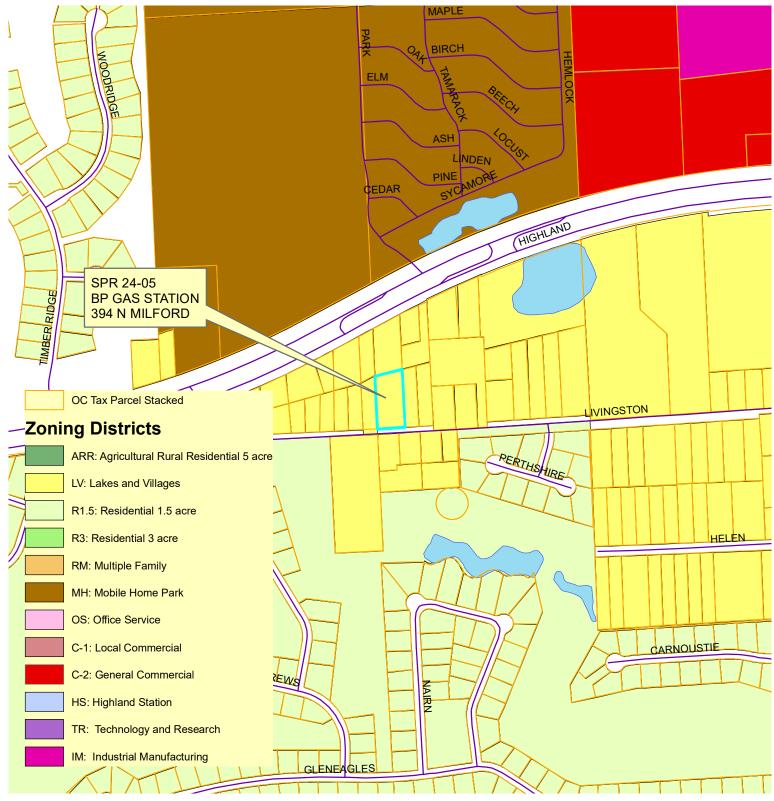


CONSUMERS ENERGY HIGHLAND CITY GATE SPR24-08 PIN 11-21-451-007



50 25

CHARTER TOWNSHIP OF HIGHLAND ZONING MAP



N ENACTED: November 18, 2010



October 23, 2024

Highland Township 205 North John Street Highland, MI 48357

- Attn: Ms. Beth Corwin, P.E. Planning & Development Director
- Re: Site Plan Review Highland City Gate – Consumers Energy 1160 W Livingston Road Sidwell No. 11-21-451-007

Dear Ms. Corwin:

As requested, this office has reviewed the plans for the above-mentioned project as prepared by Consumers Energy (dated August 27, 2024). The proposed improvements include upgrading the existing Consumers Energy Site on Livingston Road. We have the following comments:

Water Supply

1. The plans do not show a water supply for the proposed site improvements.

Wastewater Disposal

1. The plans do not show a wastewater disposal system.

Storm Water Management

- 1. All proposed storm sewer improvements will need to be designed in accordance with Highland Township Engineering Design Standards.
- 2. The existing site does not have a stormwater detention pond. The proposed improvements will cause a minimal change in the runoff of the site and all stormwater drainage will remain onsite. In the future, if additional impervious area is added then additional stormwater improvements may be needed.

Paving and Grading Improvements

- 1. The proposed paving and grading improvements will need to be designed in accordance with Highland Township Engineering Design Standards.
- 2. A permit from the Road Commission for Oakland County (RCOC) has been obtained for the proposed work within the W Livingston Road right-of-way.

105 W Grand River Avenue Howell, MI 48843

517-552-9199

www.hrcengr.com



Highland City Gate – Consumers Energy Site Plan Review October 23, 2024 Page 2 of 2

Soil Erosion Control

1. The Soil Erosion and sediment control plans may require the review and permitting of the Oakland County Water Resources Commission.

Summary

Based on the above, we do not have any objections to the proposed improvements and recommend that the construction plan review process be waived. If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.

JANGR ľÛ Michael P. Darga, P.E.

Michael F. Darya,

MPD/mpd

pc: Highland Township; R. Hamill HRC; R. Alix, File

Highland Township Planning Department, 205 N. John St, Hi		 Site Plan Review Rezoning Use Requiring Special Approval Land Division Land Division & Combination Road Profile Other 357 (248) 887-3791 Ext. 2
Date Filed: Fee: E	scrow:	Case Number:
BY SIGNING THIS APPLICATION, THE APPLICANT A ARE RESPONSIBLE FOR ALL APPLICATION AND CO THIS REQUEST THE OWNER ALSO AUTHORIZES TH NECESSARY, TO INFORM THE PUBLIC OF THE PEN	DNSULTANT FEES HE TOWNSHIP TO IDING MATTER BE COPIES OF PLA	OWLEDGE ONE OR THE OTHER OR BOTH THAT ARISE OUT OF THE REVIEW OF PLACE A SIGN ON THE PROPERTY, IF ING REQUESTED.
CONSULTANTS REVIEW OF APPROVED PLAN		AND ACCOUNT CONCERNMENTS & CONTRACT AND ACCOUNT
1. APPLICANT INFORMATION NAME: Amy Gilpin, permit agent ADDRESS: One Energy Plaza Jackson, MI 49201 PHONE: 517-745-1639 EMAIL: amy.gilpin@cmsenergy.com	Jackson, MI 49 PHONE:	ners Energy e Energy Plaza
2. PROPERTY INFORMATION ADDRESS OR ADJACENT STREETS: <u>1160 W Liv</u> LOT WIDTH: <u>173.37'</u> LOT DEPTI PARCEL IDENTIFICATION NUMBER(S): <u>H-11-21-</u>	H: <u>360.47'</u>	LOT AREA: <u>1.37 ac</u>
3. PROJECT INFORMATION PROJECT NAME: Highland City Gate Rebuild PRESENT ZONING: Lakes and Villages PRESENT USE: utility	PROPOSED Z	
APPLICANT SIGNATURE:	hose Public, pers going signature a instrument, executed the State Of Mic County Of Ja Notary Publi	ME: Joseph Lawson III day of <u>Splember</u> , <u>2024</u> before me, a Notary onally appeared the above named person whose ppears above, and who executed the foregoing and he/she acknowledged to me that he/she e same. higan ackson filotary Public, State of Michigan c:County of Newaygo My Commission Expires 10/25/2028

• If there are Co-Applicants and/or Co-Owners associated with this property(les) to be acted upon, please submit a Notarized Co-Applicant's and/or Co-owner's "Interest in Property Certificate" with this application. The person signing this cover sheet will be considered the official designee for the group and all correspondence will be addressed to this person.

• A notarized letter giving the Applicant authorization to represent the Owner is also permitted in lieu of a signature on this application. The person signing this cover sheet, however, will be considered the official designee for the Owner and all correspondence will be addressed to this person.

DRAWING LIST

401412C1412-CVR.01

401412C1412.SPL.01

401412C1412.SPL.02

401412C1412-SAD.01 401412C1412-SAD.02

401412C1412-SAD.03

401412C1412-SAD.04

401412C1412-SAD.05

401412C1412-PMT.01

401412C1412-PMT.02

401412C1412-PMT.03

401412C1412-PMT.04

COVER SHEET

SITE SURVEY SITE AND GRADING PLAN

MISCELLANEOUS MECHANICAL FOUNDATION DETAILS - PLACEHOLDER MISCELLANEOUS ELECTRICAL FOUNDATION DETAILS FILTER SEPARATOR FOUNDATION - PLACEHOLDER HEATER FOUNDATION - PLACEHOLDER SITE DETAILS

PERMIT COVER SHEET SITE GENERAL NOTES DEMOLITION AND SESC PLAN SITE AND GRADING PLAN

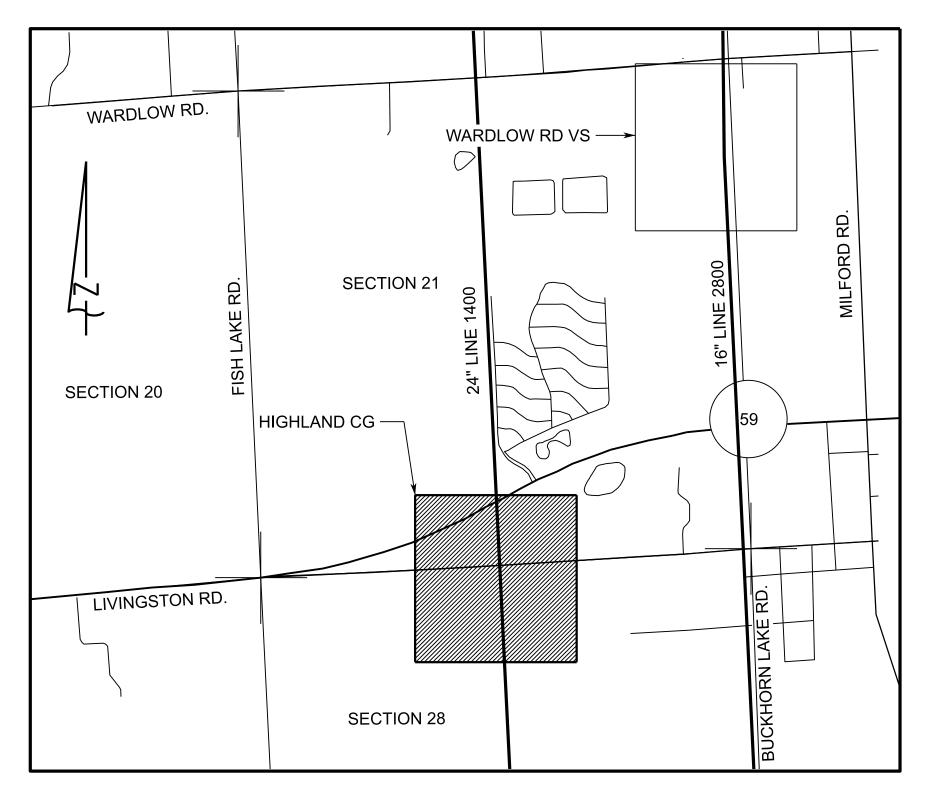
401412C1412-VEN.03BUILDING DRAWINGS SHEET 3 OF 6401412C1412-VEN.04BUILDING DRAWINGS SHEET 4 OF 6401412C1412-VEN.05BUILDING DRAWINGS SHEET 5 OF 6	401412C1412-VEN.01	BUILDING DRAWINGS SHEET 1 OF 6
401412C1412-VEN.04BUILDING DRAWINGS SHEET 4 OF 6401412C1412-VEN.05BUILDING DRAWINGS SHEET 5 OF 6	401412C1412-VEN.02	BUILDING DRAWINGS SHEET 2 OF 6
401412C1412-VEN.05 BUILDING DRAWINGS SHEET 5 OF 6		
401412C1412-VEN.06 BUILDING DRAWINGS SHEET 6 OF 6	401412C1412-VEN.05	
	401412C1412-VEN.06	BUILDING DRAWINGS SHEET 6 OF 6

ORIGINAL DRAWING

												DESIGNERS.GA	MACHE ſ	DATE <u>8/27/202</u>
Х U												ENGINEER	「	DATE
MIN												PEER REVD.DC	JLOWY I	DATE _ 8/27/202
DRA									 			DESIGN APPROVAL <u>R.MCE</u>		
201													<u>EACHERN</u> r	DATE <u>8/27/202</u>
IDAF												ENGINEER APPROVAL	1	DATE
STAN	REFERENCE DRAWINGS NUMBERS	REV.	PROJECT DATE	DESCRIPTION	DES	EER DES EV. APP	ENG.	REV. PROJE	TE	DESCRIPTION DES ENG	PEER DES.ENG REV. APP. APP	DRAWING FILES ARE THE INTE AND SHALL NOT BE DISTRIBUT	LLECTUAL PROPERTY	TY OF CONSUMERS ENER

H-2 HIGHLAND CG CITY GATE REBUILD GM-01056

WO#42712002 2025 CONSTRUCTION

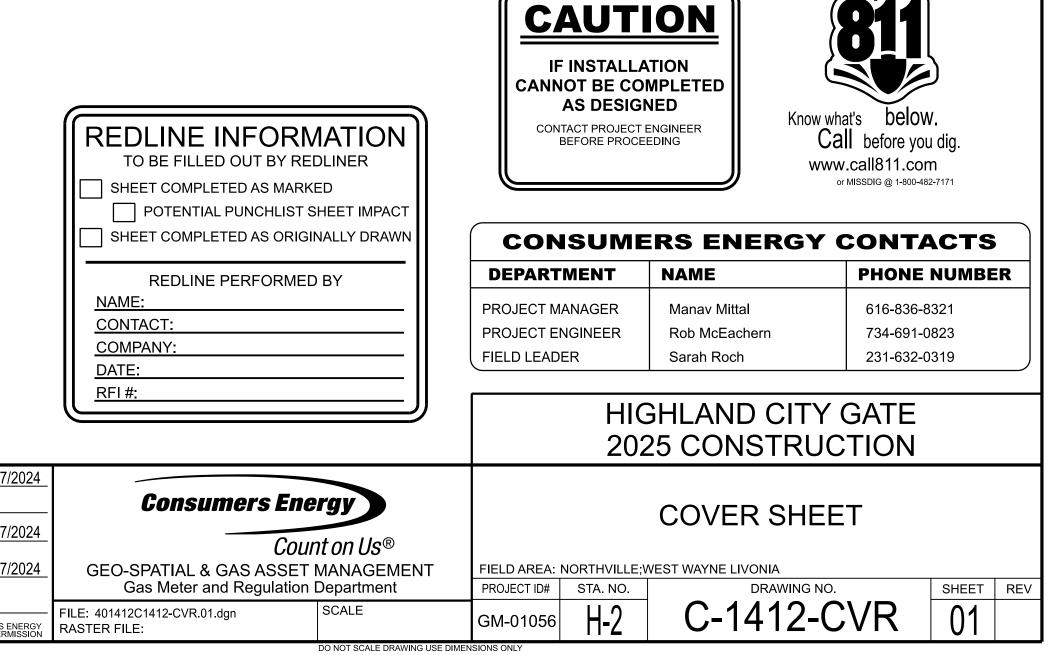


LOCATION MAP

SCALE: NONE

SECTION 21, R7E, T3N HIGHLAND TOWNSHIP, OAKLAND COUNTY

1160 W. LIVINGSTON RD. HIGHLAND, MI 48357 43.40525° N 84.13821° W



APPROVED

FOR 60% COMMENTS

DATE: 08/27/2024



	ORIGINAL DRAWING #											
										DESIGNER _	S.GAMACHE	DATE _ 8/27/20
Z ป										ENGINEER _		DATE
Ň										PEER REV	D.DOLOWY	DATE <u>8/27/20</u>
A A											.MCEACHERN	
											<u>.MCEACHERN</u>	DATE <u>8/27/20</u>
										ENGINEER		DATE
STAN	REFERENCE DRAWINGS NUMBERS	REV. PROJECT DATE	DESCRIPTION	DES ENG REV. APP. APP.	REV. PROJECT DA	TE	DESCRIPTION	DES	ENG PEER DES.ENG. REV. APP. APP.		THE INTELLECTUAL PROPER ISTRIBUTED EXTERNALLY WI	

	6"				5	burvey Co	ontrol		
Point ID	Ground Elevation	Ground Top of Elevation Pipe Elev. (Ft.) 1026.5 1028.9 1026.5 1029.1 1026.7 1029.1 1027.7 1028.9 1027.9	Pt. Number	Northing (ft.)	Easting (ft.)	Elevation (ft.)	Description	Field Book	Page
1255 1256 1257	1028.9 1028.9	1026.5 1026.9	I	415386.837	13320981.803	1031.58	Set 1/2" Bar ≰ Cap (PEA Trav. Pt.) 29' North of the centerline of Livingston Rd. and 18' East of West Drive to Consumers Property.	-	
1258 1259 1260	1029.1	1027.7	2	415502.302	13320945.309	1029.59	Set 1/2" Bar & Cap (PEA Trav. Pt.) 147 North of the centerline of Livingston Rd. and 43' Southwest of the Northwest Fence corner of Highland City Gate Regulator Station.		
Point ID	(Ft.)	Top of Pipe Elev. (Ft.)	3	415643.874	13321062.233	1027.98	Set 1/2" Bar & Cap (PEA Trav. Pt.) 281' North of the centerline of Livingston Rd. and 103 Northeast of the Northeast Fence corner of Highland City Gate Regulator Station.		
1280 1281 1282 1283 1284 1286	1030.4 1030.5 1029.5 1031.5 1031.8 1030.7	1024.4 1025.1 1025.5 1026.1 1026.3 1025.3	4	415426.053	332 0 .542	1028.76	Set 1/2" Bar & Cap (PEA Trav. Pt.) 60' North of the centerline of Livingston Rd. and 53' Southeast of the Southeast Fence corner of Highland City Gate Regulator Station.		

SURVEYOR'S REPORT

The subject property is part of the Southwest 1/4 of Section 21, Township 3 North, Range 7 East as which was conveyed to Consumers Energy Company in Warranty Deed recorded in Liber 3917, Page 502, on December 12,1958. In performing our field survey, we found:

- A. Found Brass Remon cap at the South 1/4 corner of Section 21#13623.
- B. Found 3/4 pipe in Mon Box at the Southeast corner of Section 21.
- C. Found 1/2" Iron Rod in concrete at Southwest corner of Consumers Property.
- D. Found 1/2" Iron Rod cap #44288 at Northwest corner of Consumers Property.
- E. Found 1/2" Iron Rod cap #44288 at Northeast corner of Consumers Property.
- F. Found 1/2" Iron Rod cap #29828 at Northeast corner of Consumers Property.

Found monumentation matched record geometry Per Drawing No. SE-20449. Held West line of property to match Found Iron Rod C and D. D was located within 0.06 feet South of the Northwest corner and held as line for the Northwest property corner. E was located at the Northeast corner and held as the Northeast property corner. F was located within 0.80 feet East and 0.47 feet South of Northeast corner. No monument was found at the Southeast property corner and an 1/2" iron bar will be set.

INSTRUMENTS

Consumers Power Co. Warranty Deed - Liber 3917, Page 502

Livingston County Register of Deeds Recorded: December 12, 1958

Lot 10 and 11 of Murray's Little Farms Subdivision, Being a subdivision of a part of the West half (W1/2) of the Southeast quarter (SE1/4) of Section Twenty-one (21), Township Three (3) North, Range seven (7) East.

BENCH MARK

BM # 300 Spike in East side of Power Pole, 141' Feet Southwest of Southwest Fence corner of Highland City Gate Regulator Station and 23' South of centerline of Livingston Rd. Elev: 1031.96'

BM # 301 Spike in East side of Power Pole, 49' Feet

Southwest of Northwest Fence corner of Highland City Gate Regulator Station and 159' North of centerline of Livingston Rd. Elev: 1031.38'





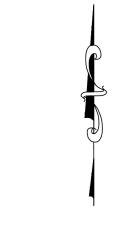


MISS DIG INFORMATION Ticket Number: B013140639-00B Submitted on November 10, 2021

Responses (As of December 20, 2021): onsumers Energy - Plans provided, facilities located. Comcast - Plans provided, as shown. Detroit Edison - Plans provided, as shown. Oakland County Drain - No response. Frontier/Verizon - No response.



		DETERMINED IN FIE TON MANAGER.	ELD BY JO
Survey Point #	Northing	Easting	Latitude
	MSPC Inte	rnational Feet	Decim
1528	415470.9140'	13320979.0870'	42.637
1529	415507.5380'	13320992.1360'	42.637
1530	415499.4840'	13320998.5490'	42.637
1531	415499.4430'	13320999.6190'	42.637
Notes from Su	rveyor:		



								dr. JSH	date 2-20-202		
								FLD. BK. #2021-0599 FLD. RQ	2- 0-202	Consumers Energy	
			В	7-28- 2023	As-built welds	RP	DN	CHKD. DN	12-20-2021	2430 Rochester Ct., Ste. 100	
			А	03/16 2022	Added detail for top of pipe elevations of pipe exposed with hydrovac excavation on 03-15-2022	JMF	PJN	APP.		P=A Troy, MI 48083-1872 t: 248.689.9090	SCALE
DESCRIPTION	ΒY	APP.	REV.	. DATE	DESCRIPTION	BY	APP.	APP.	IT HEAD	GROUP f: 248.689.1044 PEA Job No. 2021-0599	ConEn FII PEA Grou

PIPELINE INFORMATION Pipelines were located and depths of pipelines obtained by PEA

8"P-MP

nt ID Elevation | Pipe Ele

232 1029.2 1025.8

233 1029.0 1026.6

234 1029.4 1026.4

235 1029.6 1026.6

240 1029.2 1026.

241 1029.6 1027.

242 1029.8 1027. 243 1030.6 1028. 244 1031.0 1029.

245 1031.1 1028.

7 1030.8 1027.

1246 1030.7 1027

248 1030.8 1027

12491030.81027.412501030.51026.112511030.31025.9

1252 1030.2 1025.2

1253 1030.1 1025.

36 | 1029.4 | 1026.4

7 1029.0 1026.0

(Ft.) (Ft.) 231 1029.1 1026

Ground Top c

Ground Top

(Ft.) (Ft.)

Point ID Elevation Pipe Elev.

1263 1029.4 1025

6" S-MP

Point ID Elevation Pipe Ele

1298 1031.3 1027.

12991031.01027.013001031.21027.013011031.51028.0

1302 1031.6 1028.3

303 | 1031.7 | 102

8"S-MP

Point ID Elevation Pipe Ele

1270 1029.5 1026

279 | 1030.0 | 102

24''OD

(Ft.) Elev. (Ft.) 1219 1028.4 1024.0

1220 1028.0 1023.5

1222 1027.9 1023.5

1223 1027.9 1023.5

 1223
 1027.9
 1023.5

 1224
 1028.1
 1023.4

 1226
 1028.2
 1023.2

 1227
 1028.2
 1022.8

 1228
 1028.1
 1022.7

 1229
 1027.9
 1024.5

 1265
 1028.5
 1023.1

 1266
 1029.4
 1021.0

 1268
 1030.0
 1026.0

 1200
 1000.0
 1020.0

 1290
 1030.6
 1025.2

 1291
 1031.0
 1023.8

 1292
 1031.2
 1023.2

1293 1031.2 1023.8

 1294
 1031.0
 1025.6

 1295
 1031.1
 1024.7

1027.6 1023.5

Point ID Ground Flevation (Ft.)

Ground Top of

(Ft.) (Ft.)

Ground Top

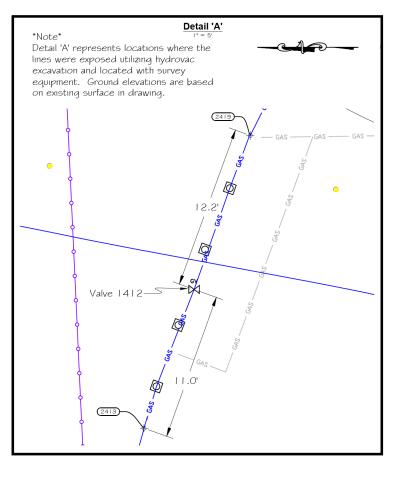
(Ft.) (Ft.)

Group using a VIVAX METROTECH Loc'2 Transmitter and vLoc2 Pro Depths are to the tracer wire and was assumed to be at the top of the pipeline to calculate the top of pipe elevations. The actual pipe was not exposed and located and no probing was done to confirm depths. Actual utility depth could vary.

BASIS OF BEARING

Michigan State Plane Coordinate System South Zone - NAD83 2011 - International Feet Referenced to the Michigan Spatial Reference Network Station MIPV Avg. Combined Scale Factor = 0.99987222 Ground Distances are shown

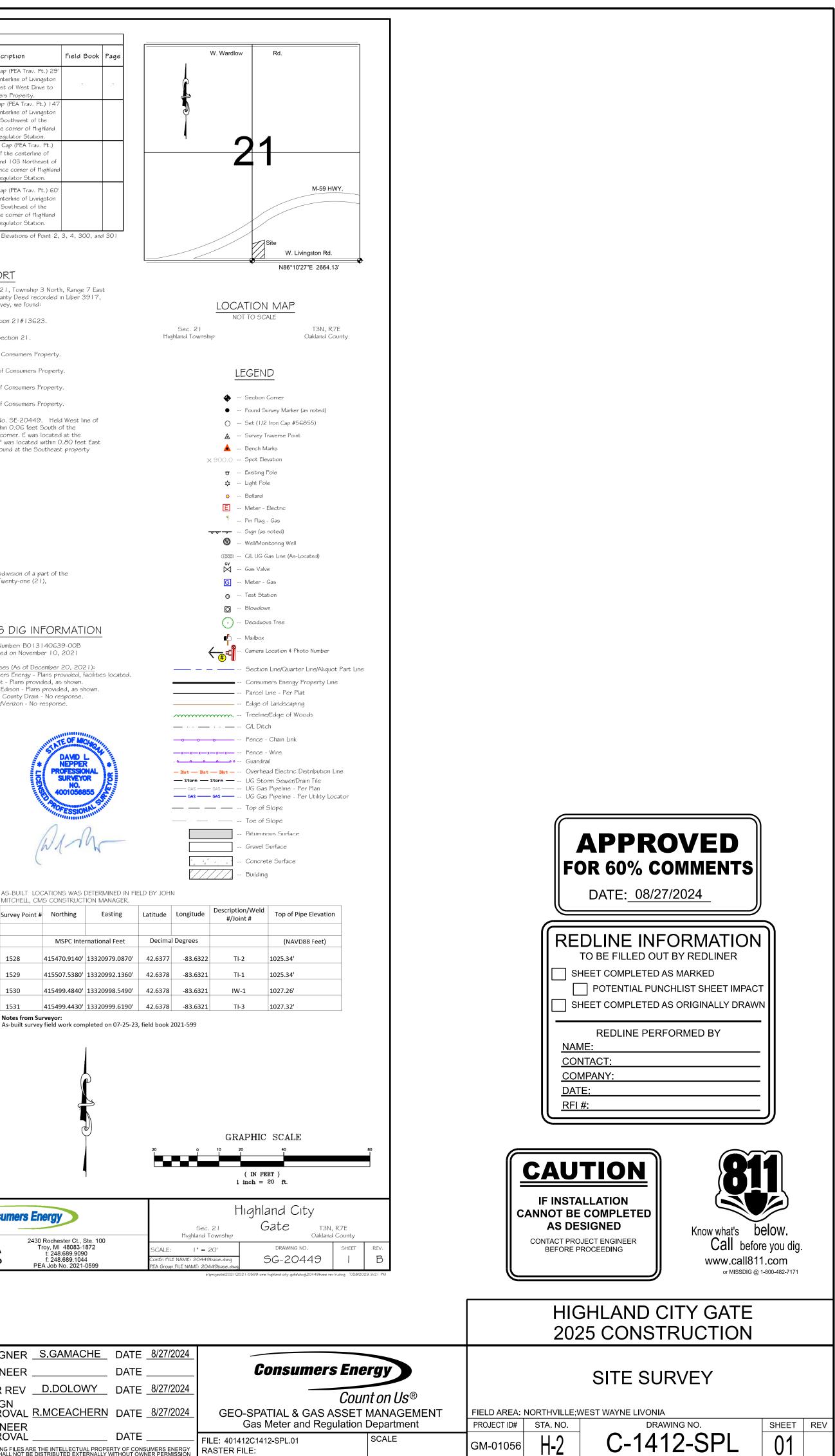
BASIS OF ELEVATION North American Vertical Datum of 1988 (GEOID12B) Michigan Spatial Reference Network Station MIPV ot contours are sh

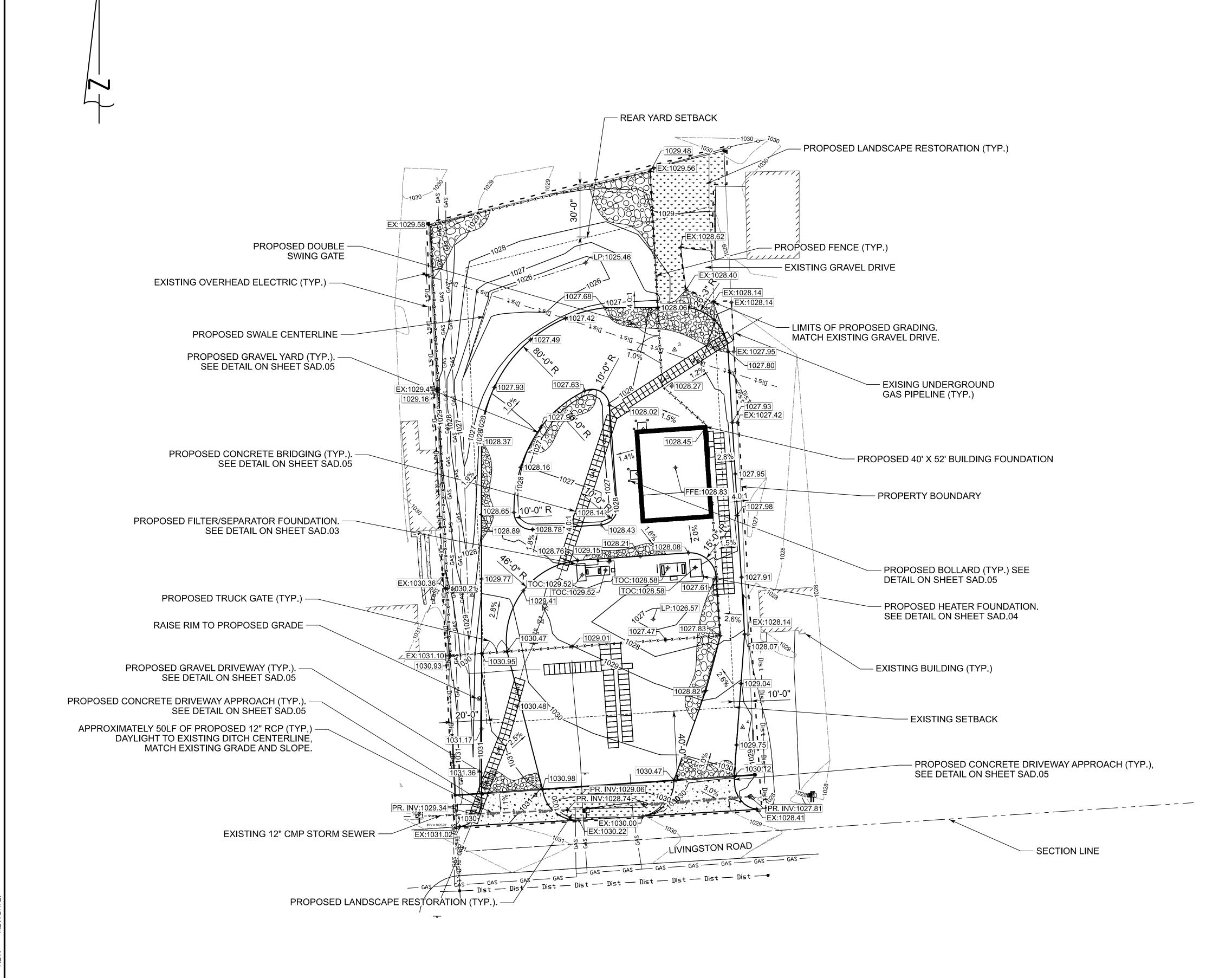


Located Gas Line Information Pipeline exposed with Hydrovac Excavation then Located by CE Employees utilizing survey equipment
 Point #
 Ground Elevation
 Top of Pipe (Measured)
 Depth of Cover

 2413
 1030.3
 1025.3
 5.0

 2419
 1029.9
 1025.3
 4.6





ORIGINAL DRAWING #	

	ORIGINAL DRAWING #										
										DESIGNER <u>S.GAMACHE</u> DATE <u>8/27/2024</u>	
й И										ENGINEER DATE	. Cor
NIN										PEER REV	
DRA										DESIGN APPROVAL <u>R.MCEACHERN</u> DATE <u>8/27/2024</u>	
RD											GEO-SPATI Gas Me
NDA										ENGINEER APPROVAL DATE	FILE: 401412C1412-S
STA	REFERENCE DRAWINGS NUMBERS	REV. PROJECT	DATE	DESCRIPTION	DES ENG REV. APP. APP.	REV.	DECT DATE	DESCRIPTION	DES ENG REV. APP. APP.	DRAWING FILES ARE THE INTELLECTUAL PROPERTY OF CONSUMERS ENERGY AND SHALL NOT BE DISTRIBUTED EXTERNALLY WITHOUT OWNER PERMISSION	RASTER FILE:

LEGEND

PROPERTY LINE -----—— GAS ——— GAS —— —— Dist —— Dist —— _0_ _____ _____ -----1030------____ _______ _____ _____1030_____ 3.0% + EX:1030.22 + 1027.91 + LP:1026.57 + PR. INV:1027.81 00008000080

 \bigcirc

—____X___X___X___

EXISTING SETBACK EXISTING UNDERGROUND GAS LINE **GPS CONTROL POINT** EXISTING OVERHEAD DISTRIBUTION LINE EXISTING SIGN EXISTING STORM SEWER **EXISTING DITCH CENTERLINE** EXISTING TOP OF BANK EXISTING TOE OF BANK EXISTING CONTOURS EXISTING BUILDING EXISTING FENCE PROPOSED CONCRETE BRIDGING PROPOSED SWALE CENTERLINE PROPOSED CONTOURS PROPOSED SLOPE PROPOSED EXISTING SPOT GRADE PROPOSED SPOT GRADE PROPOSED LOW POINT SPOT GRADE PROPOSED INVERT SPOT GRADE PROPOSED CONCRETE PROPOSED GRAVEL DRIVE PROPOSED GRAVEL YARD PROPOSED BOLLARD PROPOSED FENCE LIMITS OF PROPOSED GRADING



Know what's **below.** Call before you dig. www.call811.com or MISSDIG @ 1-800-482-7171



REDLINE INFORMATION

TO BE FILLED OUT BY REDLINER SHEET COMPLETED AS MARKED POTENTIAL PUNCHLIST SHEET IMPACT

SHEET COMPLETED AS ORIGINALLY DRAWN

REDLINE PERFORMED BY NAME:

CONTACT:

COMPANY:

DATE: RFI #:

HIGHLAND CITY GATE 2025 CONSTRUCTION

SITE AND GRADING PLAN

Consumers Energy 27/2024 Count on Us® 7/2024 GEO-SPATIAL & GAS ASSET MANAGEMENT

- FILE: 401412C1412-SPL.02.dgn

Gas Meter and Regulation Department

SCALE

1" = 30'-0"

DO NOT SCALE DRAWING USE DIMENSIONS OF

FIELD AREA: NORTHVILLE;WEST WAYNE LIVONIA PROJECT ID# STA. NO. DRAWING NO.

H-2 GM-01056

C-1412-SPL

02

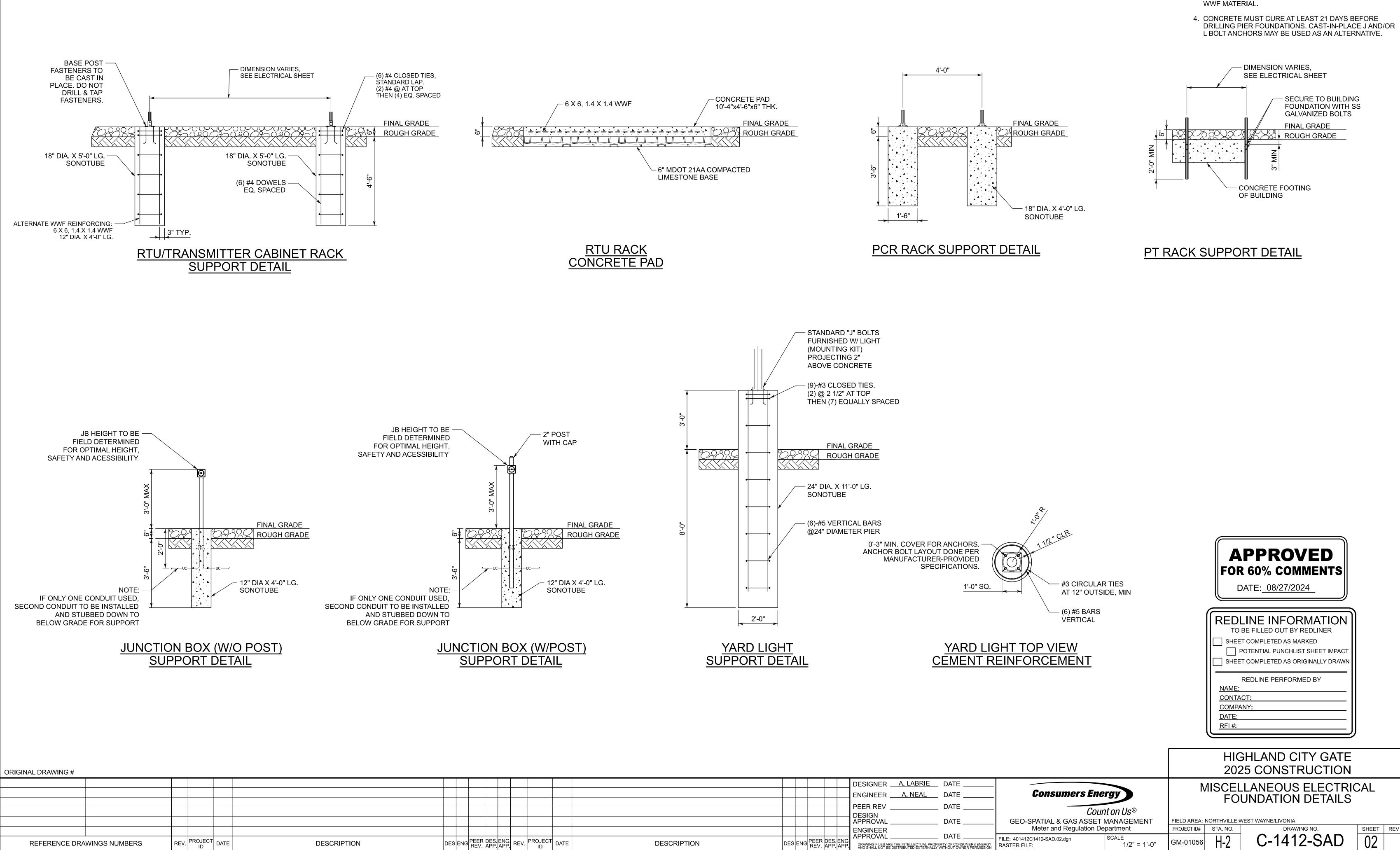
SHEET REV

ORIGINAL DRAWING

STAND	REFERENCE DRA	WINGS NUMBERS	REV.	PROJECT ID	DATE	DESCRIPTION	DES	ENG	PEER REV.
IDAF									
D D									
DRA									
NING									
SNC CNC									
	ORIGINAL DRAWING #								

PLACEHOLDER

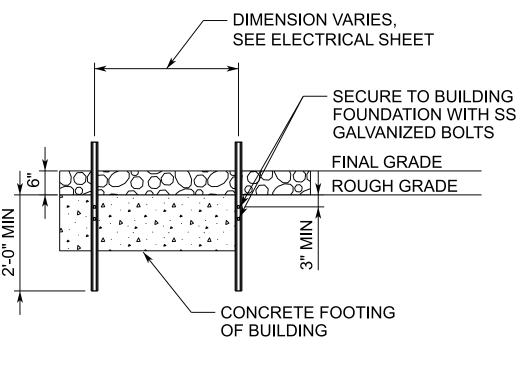
													ſ
											HIGH	HLAND CITY GATE	
											2025	5 CONSTRUCTION	
						DESIGNER	DATE			N/		ANEOUS MECHANI	
						ENGINEER	DATE	Consumers Ene	rgy	''		NDATION DETAILS	
							DATE	Cour	nt on Us®		100		
						– DESIGN APPROVAL	DATE	GEO-SPATIAL & GAS ASSET I			,	ST WAYNE/LIVONIA	
						ENGINEER		Meter and Regulation De	epartment	PROJECT ID#	STA. NO.	DRAWING NO.	SHEET REV
DES.ENG. APP.APP.	REV.	PROJECT ID	DATE	DESCRIPTION	DES ENG PEER DES.EN REV. APP.AP	G. DRAWING FILES ARE THE INTELLECTUAL PROP AND SHALL NOT BE DISTRIBUTED EXTERNALLY	DATE	FILE: 401412C1412-SAD.01.dgn RASTER FILE:	SCALE 1/2" = 1'-0"	GM-01056	H-2	C-1412-SAD	01



										DESIGNER <u>A. L</u>	ABRIE	DATE
										ENGINEER <u> </u>	NEAL	DATE
										PEER REV		DATE
										DESIGN APPROVAL		DATE
			_							ENGINEER APPROVAL		DATE
PP.A	NG PP: REV	PROJECT ID	DATE	DESCRIPTION	DES	ENG	PEER REV.	DES. APP.	ENG APP	DRAWING FILES ARE THE INTE AND SHALL NOT BE DISTRIBUT	LLECTUAL PROPE ED EXTERNALLY	ERTY OF CONSUMERS WITHOUT OWNER PER

NOTES:

- 1. PLACE CONCRETE ON UNDISTURBED SOIL OR CONTROLLED DENSITY BACKFILL.
- 2. ALL PIPING IN CONTACT WITH CONCRETE SHALL BE COATED AND DOUBLE WRAP WITH TAPECOAT OR NON-PERFORATED ROCKSHIELD.
- 3. CONTRACTOR TO FURNISH ALL SONOTUBE FORMS &



DO NOT SCALE DRAWING USE DIME

	ORIGINAL DRAWING #								
N N N									
NIN									
DRAV									
RD D									
IDAR									
STAN	REFERENCE DRA	WINGS NUMBERS	REV.	PROJECT ID	DATE	DESCRIPTION	DES	ENG	PEER REV.

PLACEHOLDER

										DESIGNER DA	TE <u>8/27</u>
										ENGINEER DA	TE <u>8/27</u>
										PEER REV DA	TE <u>8/27</u>
										DESIGN	
										APPROVAL DA	ATE <u>8/27</u>
										ENGINEER APPROVAL DA	ΛΤΕ
DES APP	ENG APP	REV.	DATE	DESCRIPTION	DES	ENG	PEER REV.	DES. APP.	ENG APP	DRAWING FILES ARE THE INTELLECTUAL PROPERTY OF	

				202	25 CONSTRUCTION		
27/2024 27/2024 27/2024		nt on Us®			EPARATOR FOUNDA	ATION	
27/2024	GEO-SPATIAL & GAS ASSET Meter and Regulation De		PROJECT ID#	STA. NO.	VEST WAYNE/LIVONIA DRAWING NO.	SHEET	REV
RS ENERGY PERMISSION	FILE: 401412C1412-SAD.03.dgn RASTER FILE:	SCALE AS SHOWN	GM-01056	H-2	C-1412-SAD	03	
		DO NOT SCALE DRAWING USE DIMEN	NSIONS ONLY				

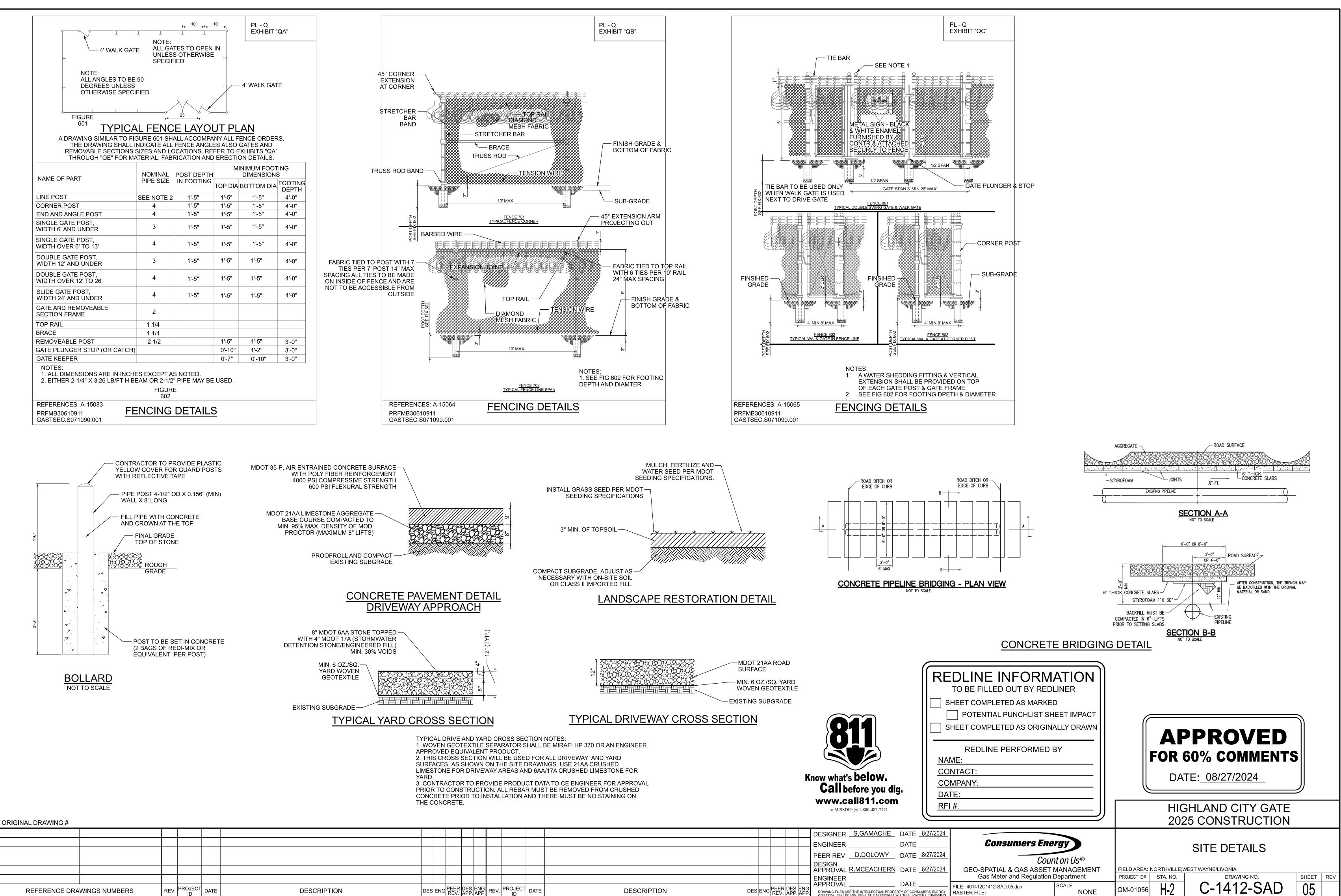
HIGHLAND CITY GATE

	ORIGINAL DRAWING #								
ON 5									
NING									
DRAV									
D D									
IDAF									
STAN	REFERENCE DRA	WINGS NUMBERS	REV.	PROJECT ID	DATE	DESCRIPTION	DES	ENG	PEER I REV.

PLACEHOLDER

								DESIGNER	_ DATE <u>8/27</u>
								_ ENGINEER	
									DATE _ 8/27
					_			DESIGN	_
									_ DATE <u>8/2</u> 7
					_			ENGINEER APPROVAL	DATE
DES EN	G REV	DATE	DESCRIPTION	DE	SENG	PEER	DES.EN APP.AP	G. P. DRAWING FILES ARE THE INTELLECTUAL PRO	

				-	GHLAND CITY GATE 25 CONSTRUCTION		
27/2024 27/2024	Consumers Ene	rgy		υс	ATER FOUNDATION		
27/2024	Cour	nt on Us®			ALER FOUNDATION		
27/2024	GEO-SPATIAL & GAS ASSET		FIELD AREA:	NORTHVILLE;V	WEST WAYNE/LIVONIA		
	Meter and Regulation De	epartment	PROJECT ID#	STA. NO.	DRAWING NO.	SHEET	REV
RS ENERGY PERMISSION	FILE: 401412C1412-SAD.04.dgn RASTER FILE:	SCALE AS SHOWN	GM-01056	H-2	C-1412-SAD	04	
		DO NOT SCALE DRAWING USE DIME	NSIONS ONLY				



DO NOT SCALE DRAWING USE DIM

REV. PROJECT DATE DES ENG REV. APP. APP. REV. PROJECT DATE DESCRIPTION

DRAWING LIST

401412C1412-PMT.01 401412C1412-PMT.02 401412C1412-PMT.03 401412C1412-PMT.04

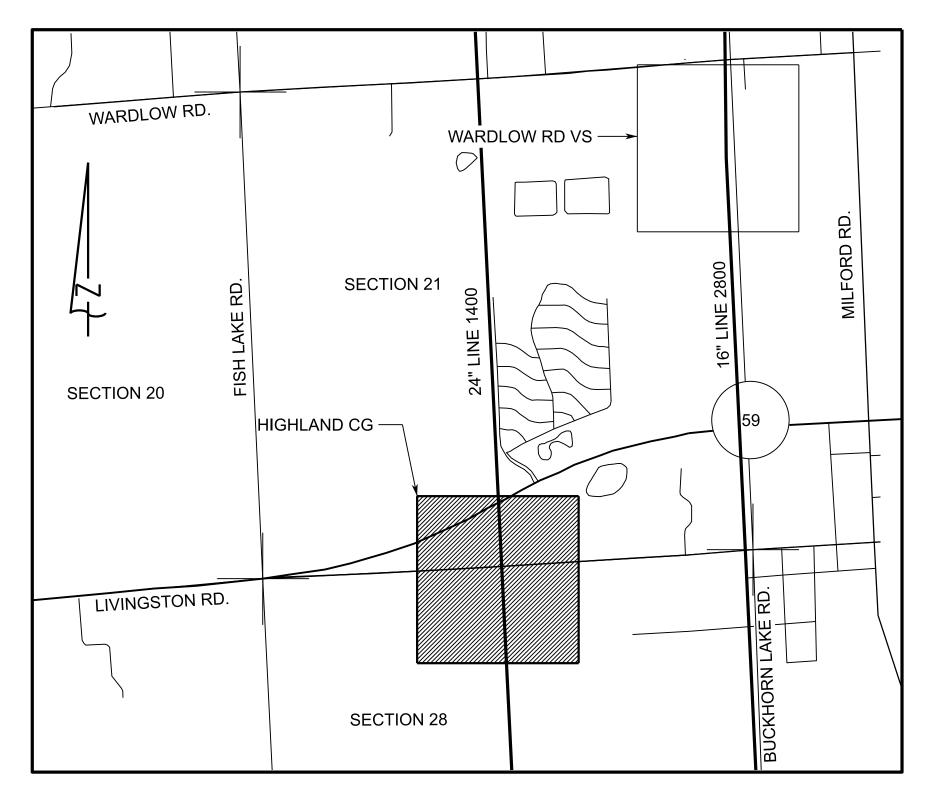
PERMIT COVER SHEET SITE GENERAL NOTES DEMOLITION AND SESC PLAN SITE AND GRADING PLAN

ORIGINAL DRAWING

													DESIGNE	R <u>S.GAMACHE</u>	DATE <u>8/27/20</u> 2
о И С														R	DATE
MIN														V D.DOLOWY	DATE <u>8/27/20</u> 2
RA															
D D													APPROV	AL <u>R.MCEACHERN</u>	DATE <u>8/27/20</u> 2
DAF													ENGINEE	R	DATE
STAN	REFERENCE DRA	WINGS NUMBERS	REV. PROJECT	DATE	DESCRIPTION	JES F	ENG PEER DES.E REV. APP.A	NG. PP	REV. PROJECT	DATE	DESCRIPTION DES	ENG PEER DES.EN	1GI	HL ES ARE THE INTELLECTUAL PROPE OT BE DISTRIBUTED EXTERNALLY V	

H-2 HIGHLAND CG CITY GATE REBUILD GM-01056

WO#42712002 2025 CONSTRUCTION

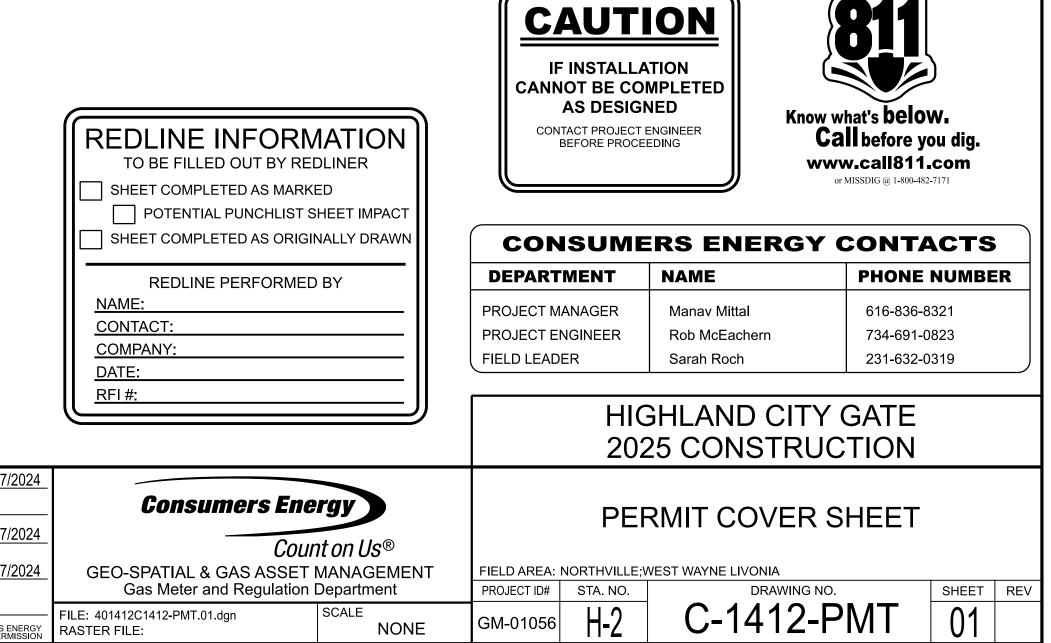


LOCATION MAP

SCALE: NONE

SECTION 21, R7E, T3N HIGHLAND TOWNSHIP, OAKLAND COUNTY

1160 W. LIVINGSTON RD. HIGHLAND, MI 48357 43.40525° N 84.13821° W



DO NOT SCALE DRAWING USE DIMENSIONS ONI

APPROVED

FOR 60% COMMENTS

DATE: 08/27/2024

TEMPORARY FACILITIES

THE CONTRACTOR SHALL CONSTRUCT THIS PROJECT IN COMPLIANCE WITH PART 91 OF ACT NO. 451 OF 1994, OF THE MICHIGAN COMPILED LAWS ENTITLED "SOIL EROSION AND SEDIMENTATION CONTROL" UNDER THE CONTROL OF THE LOCAL PERMIT AGENCY CHARGED WITH ADMINISTERING THE PROVISIONS OF THIS ACT. THE CONTRACTOR SHALL FOLLOW THE PROCEDURES DELINEATED BELOW AND IN THE PROJECT SPECIFICATIONS AND CONSTRUCT AND MAINTAIN THE FACILITIES SHOWN ON THE DRAWINGS TO CONTROL WATER AND WIND EROSION DURING CONSTRUCTION OF THIS PROJECT.

ALL DISTURBED SURFACE AREA (INCLUDING UTILITY TRENCHES) SHALL BE TEMPORARILY GRADED AND/OR DITCHED TO DIRECT ALL WATER RUNOFF FROM SUCH AREAS TO SEDIMENTATION CONTROL DEVICES WHICH WILL PREVENT WATER CARRYING ERODED SOIL FROM ENTERING A WATERCOURSE, SEWER, ADJACENT LANDS AND ROADWAYS. SUCH SEDIMENTATION CONTROL DEVICES SHALL INCLUDE, BUT NOT BE LIMITED TO, PROTECTIVE DITCHES, SEDIMENT TRAPS, SEDIMENT FILTERS, DITCH TRAPS, PIPE BARRIERS, AND FILTERS AS DETAILED AND REQUIRED AND WHERE INDICATED ON THE DRAWINGS. AFTER THE PROJECT WORK HAS BEEN COMPLETED, INSPECTED, AND APPROVED, THE CONTRACTOR SHALL REMOVE ALL SEDIMENTATION CONTROL DEVICES, MATERIAL, AND THEIR COLLECTED SILT AND DEBRIS AND RESTORE THE AREA IN ACCORDANCE WITH THE DRAWINGS.

TEMPORARY AGGREGATE SURFACING SHALL BE PLACED IN ROADWAY AREAS IMMEDIATELY AFTER THE BACKFILLING OPERATION HAS BEEN COMPLETED. POSITIVE DUST CONTROL MEASURES SHALL BE TAKEN AT ALL TIMES.

PERMANENT STABILIZATION SHALL BE COMPLETED WITHIN 5 DAYS OF FINAL EARTH CHANGE. FINAL CLEANUP AND RESTORATION WILL CONSIST OF FINAL GRADING, TOPSOILING, SEEDING AND MULCHING AND/OR SODDING OF ALL DISTURBED AREAS OF THE PROJECT.

IF SEASONAL CONDITIONS PREVENT FINAL CLEANING AND RESTORATION, THE CONTRACTOR SHALL PROCEED WITH TEMPORARY STABILIZATION OF THE DISTURBED AREA. TEMPORARY STABILIZATION SHALL CONSIST OF ROUGH GRADING THE DISTURBED AREA IN ACCORDANCE WITH THESE SPECIFICATIONS AND INSTALLING THE SPECIFIED SOIL EROSION AND SEDIMENTATION CONTROL DEVICES. TEMPORARY STABILIZATION MATERIALS SHALL BE REMOVED AND DISPOSED OF AND FINAL CLEANUP AND RESTORATION SHALL BE COMPLETED NOT LATER THAN 5 DAYS AFTER SEASONAL CONDITIONS ALLOW PERFORMANCE OF THE REQUIRED WORK.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

CONTRACTOR SHALL ENSURE THAT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES PROTECT AGAINST LOSS OF SOIL BY THE ACTION OF WATER, ICE, GRAVITY AND WIND.

SUMMARY OF BASIC PRINCIPLES

1. KEEP DISTURBED AREA AS SMALL AS POSSIBLE.

- 2. STABILIZE AND/OR PROTECT DISTURBED ARES AS SOON AS POSSIBLE.
- 3. KEEP STORM WATER RUNOFF VELOCITIES LOW.

4. RETAIN SEDIMENT WITHIN IMMEDIATE CONSTRUCTION AREA.

THE PURPOSE OF THIS PLAN IS TO SPECIFY METHODS FOR TEMPORARY EROSION CONTROL DURING CONSTRUCTION IT IS INTENDED THAT MEASURES CALLED FOR IN THE SPECIFICATIONS AND SHOWN ON THESE PLANS BE STRICTLY ADHERED TO. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT CONSTRUCTION PROCEDURES UNDERTAKEN ARE IN CONFORMANCE WITH PART 91 OF ACT 451 OF 1994 THE STATE OF MICHIGAN'S SOIL EROSION AND SEDIMENTATION CONTROL ACT.

ALL SOIL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE REGULARLY MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT. COLLECTED SILT AND SEDIMENTATION SHALL BE REMOVED PERIODICALLY TO MAINTAIN THE EFFECTIVENESS OF THE SILT TRAPS OR SEDIMENTATION CONTROL DEVICES. WHERE REQUIRED, THE CONTRACTOR SHALL REMOVE AND REPLACE FILTER MATERIALS WHICH HAVE BECOME INEFFECTIVE DUE TO CONTAMINATION OR PHYSICAL DETERIORATION.

ALL TEMPORARY EROSION CONTROL FACILITIES SHALL BE REMOVED BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION UNLESS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE. CARE SHALL BE TAKEN DURING REMOVAL TO MINIMIZE SILTATION IN NEARBY DRAINAGE COURSES.

SURFACE DISRUPTION IN ADVANCE OF CONSTRUCTION INCLUDING CLEARING, GRADING OR SIGNIFICANT SOD REMOVAL SHALL BE PROCEEDED BY INSTALLATION OF SOIL EROSION AND SEDIMENTATION CONTROL DEVICES AS FOLLOWS, UNLESS PERMISSION IS OTHERWISE OBTAINED FROM THE GOVERNING AGENCY

A. WET WEATHER SEASON (MARCH, APRIL, MAY) - 5 DAYS PRIOR TO BEGINNING ANY EARTH CHANGE ACTIVITY. B. DRY WEATHER SEASON (JUNE, JULY, AUGUST, SEPTEMBER, OCTOBER, NOVEMBER) - 10 DAYS PRIOR TO BEGINNING ANY EARTH CHANGE ACTIVITY. C. COLD WEATHER SEASON (DECEMBER, JANUARY, FEBRUARY) - 15 DAYS PRIOR TO BEGINNING ANY EARTH CHANGE

ACTIVITY.

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY THE CONTRACTOR.

MAINTENANCE NOTES:

THE CONTRACTOR SHALL INSPECT SOIL EROSION AND SEDIMENTATION CONTROL DEVICES WEEKLY AND WITHIN 24 HOURS OF A SIGNIFICANT RAIN EVENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE SOIL EROSION AND SEDIMENTATION CONTROL DEVICES.

MAINTENANCE INCLUDES ALL WORK NECESSARY FOR PROPER OPERATION OF THE DEVICES. DEVICES WHICH CAN NOT BE REPAIRED SHALL BE REPLACED. MAINTENANCE OF THE DEVICES SHALL BE PERFORMED WITHIN 24 HOURS OF INSPECTION.

SEDIMENT SHALL BE REMOVED AS NECESSARY TO MAINTAIN THE EFFECTIVENESS OF SOIL EROSION AND SEDIMENTATION CONTROL DEVICES.

SEDIMENT DEPOSITED ALONG SILT FENCE SHALL BE REMOVED WHEN IT REACHES 1/3 TO 1/2 THE HEIGHT OF THE FENCE AND PRIOR TO REMOVAL AT THE END OF THE PROJECT OR TIME OF FINAL REMOVAL.

TURF ESTABLISHMENT MEASURES SHALL BE MAINTAINED AS WOULD ANY OTHER DEVICES PRIOR TO ESTABLISHMENT OF PERMANENT TURF.

ALL MUD, DIRT AND DEBRIS TRACKED ONTO EXISTING ROADS FROM THIS SITE SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.

SOIL EROSION SEQUENCE OF CONSTRCTION:

1. INSTALL SILT FENCE, ESTIMATED DATE: 5/2025

2. DEMOLISH EXISTING FENCE, BUILDINGS, REMOVE EXISTING UTILITIES AND GRUB THE SITE PER THE PLANS. ESTIMATED DATE: 5/2025

3. CONSTRUCT ROW FEATURES PER THE PLANS INCLUDING DRIVEWAY APPROACH, UTILITY, GRADING AND RESTORATION. ESTIMATED DATE: 5/2025 - 8/2025

4. STABILIZE DISTURBED AREAS AS NOTED ON THE PLANS WITHIN 5 DAYS OF FINAL GRADING. ESTIMATED DATE: 8/2025

5. RESTORE ALL OFF-SITE AREAS TO PRE-CONSTRUCTION CONDITION FOLLOWING SITE CONSTRUCTION.

6. CLEAN PAVEMENT AND SEWERS AS NECESSARY (SCRAPE DAILY, SWEEP MIN. 1 PER WEEK). A CERTIFIED STORM WATER OPERATOR SHALL INSPEC ALL SESC MEASURES ON A WEEKLY BASIS AND AFTER SIGNIFICANT RAIN EVENTS TO ENSURE THE SESC MEASURES ARE ADEQUATE.

7. REMOVE ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS FOLLOWING SITE CONSTRUCTION, FINAL STABILIZATION OF WORK, AND FINAL INSPECTION. ESTIMATED DATE: 8/2025

ORIGINAL DRAWING

		ſ						
		ſ						
REFERENCE DRA	WINGS NUMBERS	REV.	PROJECT ID	DATE	DESCRIPTION	DES	ENG	PEER REV.

GENERAL

1. ALL EXPOSED S **REMOVED FROM** MEASURES.

2. THE CONTRACT TO INSPECT THE S AS REQUIRED BY **REVIEW UPON RE**

DEMOLITIO

1. TOPOGRAPHIC OF RECORD OR W

2. CONTRACTOR

3. PRIOR TO COMMENCING ANY WORK, CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY HIGHLAND TOWNSHIP, AND/OR OAKLAND COUNTY.

4. PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR SHALL PHOTOGRAPH OR VIDEOTAPE ALL EXISTING CONDITIONS OF NEARBY PUBLIC AND PRIVATE PROPERTY, INCLUDING STRUCTURES, ROADS, EASEMENTS, SIDEWALKS, ETC.

7. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, TRAFFIC CONTROL, ETC. CONFORMING TO BEST PRACTICES.

8. THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR, THE OWNER AND OWNER'S REPRESENTATIVE ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY, CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AND INFORMING OWNER OF ANY DEVIATIONS PRIOR TO BEGINNING DEMOLITION WORK

9. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL OF ALL STRUCTURES, PAVEMENTS, WALLS, EQUIPMENT. SIDEWALKS, AND SUBSURFACE STRUCTURES INCLUDING FOUNDATIONS, UTILITIES, ETC.

11. PROPERLY TERMINATE ALL EXISTING UTILITY CONNECTIONS PRIOR TO DEMOLISHING THE BUILDING, COORDINATE UTILITY TERMINATION AND DEMOLITION WITH UTILITY COMPANIES.

12. GAS SERVICE CONNECTIONS THAT ARE TO BE DEMOLISHED SHALL BE TERMINATED AND PLUGGED AT THE PROPERTY BOUNDARY AND/OR IN ACCORDANCE WITH HIGHLAND TOWNSHIP REQUIREMENTS.

13. SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE ANY EXISTING STRUCTURE AND/OR ITEM PROPOSED TO REMAIN ON PROJECT SITE OR ON ADJACENT PROPERTIES. THEN THE CONTRACTOR SHALL MAKE ALL NECESSARY REPAIRS AT THEIR OWN EXPENSE. ALL CONSTRUCTION MATERIALS SHALL BE OF EQUAL OR HIGHER QUALITY AND SHALL BE APPROVED BY OWNER'S REPRESENTATIVE

14. CROSS REFERENCE CIVIL DRAWINGS WITH MECHANICAL AND ELECTRICAL DRAWINGS FOR LIMITS OF UNDERGROUND DEMOLITION.

	SEE DETAIL BE
<u>NOTES:</u>	
SOIL STOCKPILES SHALL BE ENCLOSED IN SILT FENCING UNTIL I THE SITE OR PROVIDED WITH PERMANENT EROSION CONTROL	
CTOR SHALL PROVIDE A CERTIFIED STORMWATER OPERATOR (CSWO) SESC MEASURES AND MAINTAIN INSPECTION LOGS AND REPORTS A LAW. THE CSWO SHALL MAKE THE REPORTS AVAILABLE FOR EQUEST.	6 IN. ANCHOR TF
<u>ON NOTES:</u>	
C SURVEY WAS PROVIDED BY PEA GROUP ON MARCH 29, 2023. ALL EXISTING INFORMATION SHOWN IS FROM THIS SURVEY WAS SUPPLEMENTED BY INFORMATION FROM SITE VISITS AND/OR HISTORICAL DRAWINGS.	
TO FILED VERIFY ALL EXISTING SITE FEATURES AND UTILITIES BEFORE DEMOLITION	

5. PRIOR TO DEMOLITION, ALL REQUIRED SOIL EROSION AND SEDIMENT CONTROL DEVICES ARE TO BE INSTALLED.

6. CONTRACTOR SHALL MAINTAIN ALL EXISTING ROADS, SIDEWALKS, DRIVES, ETC. CLEAR AND FREE FROM ANY CONSTRUCTION ACTIVITY AND/OR MATERIAL TO ENSURE EASY AND SAFE PEDESTRIAN AND VEHICULAR TRAFFIC AT ALL TIMES.

10. ALL BUILDING STRUCTURES TO BE REMOVED SHALL BE BROUGHT TO GRADE WITH SUITABLE FILL PER SPECIFICATIONS.

MDOT 35-P, AIR ENTRAINED CONCRETE SURFACE -WITH POLY FIBER REINFORCEMENT 4000 PSI COMPRESSIVE STRENGTH 600 PSI FLEXURAL STRENGTH

MDOT 21AA LIMESTONE AGGREGATE BASE COURSE COMPACTED TO MIN. 95% MAX. DENSITY OF MOD. PROCTOR (MAXIMUM 6" LIFTS)

> PROOFROLL AND COMPACT **EXISTING SUBGRADE**

CONCRETE PAVEMENT DETAIL - DRIVEWAY APPROACH

MDOT 21AA ROAD

MIN. 6 OZ./SQ. YARD

WOVEN GEOTEXTILE

- EXISTING SUBGRADE

SURFACE

WITH 4" MDOT 17A (STORMWATER DETENTION STONE/ENGINEERED FILL)

MIN. 6 OZ./SQ. -YARD WOVEN GEOTEXTILE

EXISTING SUBGRADE

TYPICAL DRIVEWAY CROSS SECTION

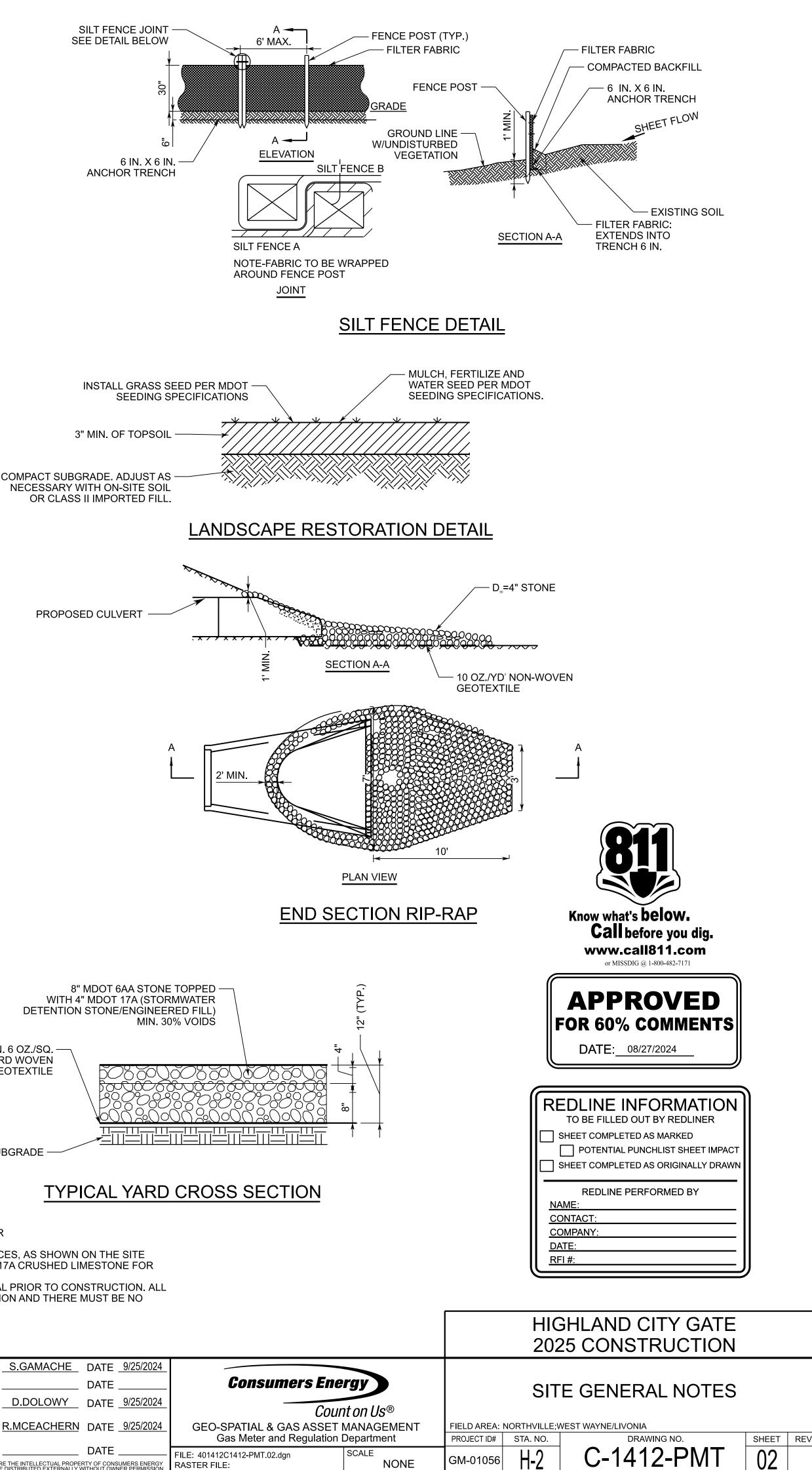
TYPICAL DRIVE AND YARD CROSS SECTION NOTES: 1. WOVEN GEOTEXTILE SEPARATOR SHALL BE MIRAFI HP 370 OR AN ENGINEER

APPROVED EQUIVALENT PRODUCT.

2. THIS CROSS SECTION WILL BE USED FOR ALL DRIVEWAY AND YARD SURFACES, AS SHOWN ON THE SITE DRAWINGS. USE 21AA CRUSHED LIMESTONE FOR DRIVEWAY AREAS AND 6AA/17A CRUSHED LIMESTONE FOR YARD

3. CONTRACTOR TO PROVIDE PRODUCT DATA TO CE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. ALL REBAR MUST BE REMOVED FROM CRUSHED CONCRETE PRIOR TO INSTALLATION AND THERE MUST BE NO STAINING ON THE CONCRETE.

												DESIGNER _	S.GAMACHE	DATE .	9/25/20
												ENGINEER _		DATE	
												PEER REV	D.DOLOWY	DATE	9/25/20
												DESIGN APPROVAL F	R.MCEACHERN	DATE	9/25/20
												ENGINEER APPROVAI		DATE	
R /.	DES APP	ENG APP	REV.	PROJECT ID	DATE	DESCRIPTION	DES	ENG	PEER REV.	DES. APP.	ENG. APP.		E THE INTELLECTUAL PROPER DISTRIBUTED EXTERNALLY W		umers ene Ier Permis



BOARD OF COUNTY ROAD COMMISSIONERS, OAKLAND COUNTY, MICHIGAN

		FOR R.C.O.C. USE ONLY
MAKE CHECK PAYABLE TO ROAD COMMISSION FOR	OAKLAND COUNTY	Application No. 24-1242 Date Received 08-06-24
ROAD COMMISSION FOR OAKLAND COUNTY RECEIVED		
Aug 06 2024		Permit E No. <u>65607</u> Date of Issuance 09-04-24
DEPARTMENT OF CUSTOMER SERVICES PERMITS		
APPLICANT: Consumers Energy APPLICATION for a permit to CONSTRUCT, OPERATE, US	SE and/or MAINTAIN or to TE	hereby make MPORARILY CLOSE A COUNTY ROAD within the part of the
right-of-way of road(s) Livingston Road and Highland		under the jurisdiction of the Board
underground, indicate depth below surface; if parallel to road	, indicate distance from inside e ED TO THE APPLICATION W s.	e provided below: (include size, length, type of facility; - edge of facility to edge of pavement, if crossing under roadbec /HEN APPLICABLE: 1. Plans, specifications and location of X YOLL WISH TO OBTAIN A PERMIT FOR:
	Public Utility (i.e. electric, gas, te	
Approach/Private Road Access	Sanitary/Storm Sewer	Watermain
Cable TV Pathway/Sidewalk	Sign/Subdivision Entrance Mark	er Other
Removal of existing gravel approach, removal of Removal of (2) existing 12" CMP below existing 12" RCP beneath proposed concrete approach		
City or Township Highland		Section No. 21
if said application is approved, the above named applicant ag be secured from the Board prior to the start of any co	prees to abide by the CONDITIC	tatements filed with the R.C.O.C. as part of this application, and DNS contained on the reverse side. Since a permit will have the arations proposed by this application, it is intended that the of the plans or specifications required for this proposed work
FOR R.C.O.C. USE ONLY		FOR R.C.O.C. USE ONLY
Design: Right-of-Way:	Application Fee: \$ 300.00	Permit Fee: \$ 500
		Deposit: \$ APA
Traffic: Maintenance:	Receipt No:	Estimated Inspection Fee: \$ 1,500 Paint Fee: \$
	Bond: \$ APA	Sign Fee: \$
Planning: Construction:	(RCOC Form 75)	Signal Fee: \$
		TOTAL FEES DUE
Subdivision:		AT TIME OF PERMIT ISSUANCE: \$ 2,000
Environmental Concerns: Permits: WRM	Proof of Insurance Required	
	Pollution Liability Required	Yes No
including but not limited to the Michigan Department of Natural Re APPROVAL OF THIS APPLICATION EXPIRES IN ONE	n meeting any applicable requi sources. YEAR IF A PERMIT HAS N APPLICATION IS REQUIRED	ontained on the reverse side of this application. irements or duties of law or other public bodies or agencie IOT BEEN ISSUED. RESUBMITTAL OF CURRENT PLANS IF APPROVAL OF THIS APPLICATION HAS EXPIRED ONSUMERS Energy
REFER ALL INQUIRIES TO (248) 858-4835	APPZICANT (PRINT OR T	
DEPARTMENT OF CUSTOMER SERVICES	SIGNATURE	DATE
PERMITS 2420 PONTIAC LAKE ROAD	Amy Gilpin, permit (PRINTED/TYPED SIGNAT	
WATERFORD, MI 48328	One Energy Plaz	a 517-745-1639
APPLICATION APPROVED:	APPLICANT'S ADDRESS Jackson, MI 4920	TELEPHONE NUMBER
By:	CITY	STATE ZIP CODE
By:Date:Date:D	amy.gilpin@cm	150110129.00111

AS A CONDITION OF THE APPROVAL OF THIS APPLICATION, THE APPLICANT AGREES TO THE FOLLOWING CONDITIONS:

- 1. The application agrees to secure, or cause to be secured, a permit from the Board prior to the commencement of construction or maintenance operations. If a contractor is to perform the construction or maintenance entailed in this application, the contractor shall secure the permit from the Board prior to the commencement of construction or maintenance operations and thereby assumes responsibility, along with the applicant, for any provisions of this application which apply to them.
- 2. Any and all construction proposed under this application will meet all requirements of the Board, together with the Supplemental Specifications as set forth below.
- 3. The applicant agrees to save harmless, indemnify, defend, and represent the Board and its employees against any and all claims for bodily injury or property damage, or any other claim arising out of or related to the creation, operation, use, or continuing existence of the structure or facility covered by the permit or for any other work done within county road right-of-way whether or not specifically authorized or in conformance with the description of activities for which the permit was issued . Applicant agrees and understands that the obligations set forth herein are binding upon their successors, transferors, assigns, sureties, and guarantors. The Applicant shall maintain insurance of a type and in an amount in conformance with the Board's established requirements and provide certificates of insurance in a type and amount which shall assure conformance with the Board's established requirements is currently in force for any and all facilities installed in the Board's right of way.
- 4. The applicant agrees to surrender the permit herein applied for; surrender all rights hereunder; cease operations; and remove, alter, relocate at applicant's own expense, the facilities for which this permit is granted whenever ordered to do so by the Board because of the need for the area covered by this permit for public uses or because of a default in the conditions of the permit. Upon failure to remove, alter, relocate or surrender the facilities pursuant to the order of the Board, the applicant agrees to reimburse the Board for its cost in doing same.
- 5. Nothing in this application shall be construed to grant any rights whatsoever to any public utilities whatsoever except as to the consent herein specifically given, nor to otherwise impair any existing rights granted in accordance with the constitution or laws of this State.
- 6. The obligation to construct, operate, use and/or maintain the facility to the satisfaction of the Board remains in force as long as the facility exists and is within the right-of-way under the jurisdiction of the Board. The applicant is obliged to repair any damage to the road and right of way which is a result of the facility and which occurs or appears after the permit licensee is released.
- 7. The necessary construction zone signing for the protection of traffic shall be in accordance with the most current edition of the Michigan Manual of Uniform Traffic Control Devices, Part 6. All such devices shall be furnished, installed and maintained by the Permit Holder. All construction signage shall have black lettering on a reflective florescent orange background, unless otherwise specified. The Permit Holder shall provide any additional signs, barricades and/or lights, at the Permit Holder's expense, required to protect the general motoring public and the work zone when requested by the Road Commission.
- 8. **ADDITIONAL CONDITIONS**: As will be identified in approved permit description.

SUPPLEMENTAL SPECIFICATIONS

- 1. EXCAVATION AND DISPOSAL OF EXCAVATED MATERIAL: The contractor and/or the utility company shall provide and place the necessary sheeting, shoring and bracing required to prevent caving, loss or settlement of foundation material supporting the pavement, or any other highway installation such as sewers, culverts, etc. The contractor and/or utility company shall assume the full responsibility for this protection. Excavated material shall be stocked in such locations that it does not obstruct vision on the traveled portion of the highway and in such a manner that it will not interfere with the flow of traffic. Sod and topsoil shall be stocked separately from other excavated material. The applicant shall dispose of all surplus and unsuitable material outside of the limits of the right-of-way unless the permit provides for, and with approval of abutting property owners, disposal at approved locations with the right-of-way. In the latter case, the material shall be leveled and trimmed in a manner approved by the Road Commission for Oakland County.
- 2. BACKFILLING AND COMPACTING BACKFILL: All trenches, holes, pits, and other excavations shall be filled with approved excavated earth or with MDOT Class II granular material if so provided, placed in successive layers not more than 9 inches in depth, loose measure, and each layer shall be thoroughly compacted by tamping and all backfill compaction will be subject to check by the Controlled Density Method (minimum 95%). Restoration shall be such that it will provide a condition equal to or better than the original condition and in accordance with current Road Commission for Oakland County standards. Any excavation within the right of way outside traveled portion of road must be maintained until all settlement has occurred and must be restored and seeded or sodded as directed. The permit will not be released until the Road Commission is satisfied that no further settlement will occur.
- 3. CROSSING ROADBED BY TUNNELING, DIRECTIONAL BORE, JACK CASING AND BORE: When the pipe is installed by tunneling without cutting the existing pavement, the tunnel shall be adequately sheeted or shored to prevent the sides and top from collapsing or the pavement from settling or cracking. Directional bore shall be at least 4 diameters under the pavement or 48 inches, whichever is greater. When the pipe is installed by boring and jacking, the leading edge of the pipe must always precede the auger. The tunnel backfill shall be made by tamping a dry mix of lean concrete into place so as to completely fill any voids remaining around the installation. The concrete shall be composed of one part of Portland cement and 10 parts of sand-gravel by volume. Tunnel and boring pits shall be at least 10 feet from the edge of the pavement unless otherwise approved.
- 4. CROSSING BY CUTTING GRAVEL ROADS: All trenches are to be backfilled with approved material to within 12 inches of surface within the limits of the roadbed. Backfill methods will be as described in paragraph 2 above. All surplus excavated material will be disposed of as described in paragraph 1. The top 12 inches within the roadbed will be backfilled with processed road gravel (MDOT 22A or 23A). Trenches outside of the roadbed will be backfilled in accordance with paragraph 2 above.
- 5. CROSSING BY CUTTING PAVEMENT AND TRENCHING: When this method is approved by the Road Commission, the pavement shall be cut so that the opening is a minimum of 5 feet wide and at least 1 foot wider on each side than the trench. In no case shall an open cut result in a remaining slab width of less than 5 feet from patch to an existing joint. The cut shall be made by sawing to a full pavement depth. Cuts in concrete residential and commercial drives shall be as above except that the patch width shall be a minimum of 3 feet and the remaining slab from patch to existing joint a minimum of 3 feet. Backfill shall be made with MDOT Class II granular material. After the backfill has been placed by control density method and thoroughly compacted, the pavement shall be replaced with a temporary surface of approved hot-mixed bituminous material and later replaced with new pavement of the original type and quality by the Permit Licensee unless other provisions are included in the permit.
- 6. **DEPTH OF COVER MATERIAL:** Pipes shall be placed to a depth that will provide not less than 4 feet of cover between the top of roadway surface and top of the pipe.
- 7. TREE TRIMMING OR REMOVAL: All trees that may be affected by the proposed construction shall be shown on the plans. The plan must clearly indicate which trees are proposed to be removed, trimmed and/or tunneled. This work, if approved, must be done in accordance with current Board standards, including advance notification of abutting property owners. Wood Disposal License Agreement(s) will be required for any tree work
- 8. DISPOSAL OF GROUND WATER: Roadside drainage systems open ditches, storm sewers, etc. shall not be used for the disposal of water pumped from below the surface of the ground unless specifically allowed by the Road Commission. Details such as volume and frequency of discharge, erosion control, duration of use, NPDES permit and other pertinent information as may be required must be submitted with the application for such permission.
- 9. Any proposed operation in the right of way not covered by the above specifications, submitted with this application, shall be done in accordance with any additional specifications deemed necessary by the Board or as outlined in the Permit Rules, Specifications and Guidelines.

BOARD OF COUNTY ROAD COMMISSIONER, OAKLAND COUNTY, MICHIGAN 2420 PONTIAC LAKE ROAD - WATERFORD, MI 48328

	REFER	ALL INQUIF	RIES TO DEPARTM	IENT	OF CUSTO	MER SERVICES	- PERMITS (24	18) 858-4835	
Const. Bond:	φ \$	500.00				Tł	is permit is is:	sued on the condi	tion that
Permit Fee:	\$	0.00				lin	cesees and any	persons working u	inder the
Deposit:	\$	1,500.00		24-	1242			ermit shall comply 53 of the P.A. of 1974.	
Est. Insp. Fee: Paint Fee:	\$	0.00	Application No:	65	607			DIG BEFORE YOU DI	
Sign Fee:	\$	0.00	Permit No:				PHONE	E: (248) 647-7344	
Signal Fee:	\$	0.00						09/04/2024	
Received of	CONS	UMERS ENE	RGY - JACKSON (1 E	NERC	BY PLAZA)			to be applied in acc	cordance
with the terms	s of below	v permit.				WISSIONERS, Oak	land County Mi	chigan	
			BUARD OF CO	UNTI	NOAD GOMM	modioneno, oan	and ocumy, inst		on Clork
		by:						_ Deputy Secret	
CCONSCIDENT 1 ENERGY F	BANKAR LAZA JA	CKSON, MI 492	everse side hereof a ran hereinafter referred PENERGYPLAZA 201 517-788-1529, ANS***	to as t	he Board, to:		hereina	after referred to as the	
REMOVE (2) AND 12" RCP ADDRESS. P	EXISTING CULVER ERFORM	GRAVEL DRIV	EWAY APPROACHES W ECTIONS ON THE NOR OR GRADING TO PROV	RTH SID	DE OF W LIVING	GSTON ROAD EAST	WITH (2) CONCRE OF HIGHLAND RO	TE APPROACHES IAD FOR #1160	
SUBCONTRA	CTORS	AND ANY OTH PROVIDED WIT	IER PARTIES WORKIN THACCESS TO RCOC "F	NG ON	I BEHALF OF TRULES, SPEC	THE PERMITTEE	SHALL BE MAD JIDELINES."	E AWARE OF THE	TERMS OF
		IALL BE NO	NEARER THAN 6 FE I.	ET FI	ROM BACK C	OF FINISHED CUR	B. REMOVE O	R RELOCATE EXIS	FING FIXED
			MINIMUM 9 INCHES SE, AS DETERMINED B			NCRETÉ, WITH EP	OXY COATED RE	BAR LANE AND CU	IRB TIES IF
PROPER SIG	URES SH	S REQUIRED HALL BE REST	BEFORE BEGINNING RICTED TO THE HOU	WORI JRS O	(WITHIN THI F 9 AM TO (E RIGHT-OF-WAY. 3 PM MONDAY TH	MAINTAIN TWO ROUGH FRIDAY,	-WAY TRAFFIC AT OR DURING DAYLIC	ALL TIMES GHT HOURS
NOTIFY INSF	ECTOR	OR PERMIT SUP	ERVISOR 48 HOURS P	RIOR T	O BEGINNING	WORK.			
			·,						
		accordance with th - JACKSON (1 E	ne attached approved plan NERGY PLAZA)	and ap	plication on file io	F			
as prepared by	CON	ISUMERS							
ALL CONSTRUC	CTION SH	ALL BE IN ACCO	pecifications as follows: RDANCE WITH THE APP SPECIFICATIONS, AND C	ROVED	PLAN AND APF	PLICATION ON FILE AN	ND WITH THE ROAD	COMMISSION	
This permit is gr						10	AND 21		
Commencing	09/04/20	024			BOARD OF COL	INTERNAL COMMISS	IONERS, Oakland C	ounty, Michigan	
and ending	06/30/20	025		Bv.	AX	Separtment of Custom	er gervices - Pernito		
In consideration set forth or inco	of the grar porated he	nting of this perminered by reference	t, the undersigned Licensee . (SEE APPLICATION AND	e hereby O REVE	agrees to abide	by and confrom with a CONDITIONS OF PER	of the terms and con	nditions herein	
09/04/2024	CONSUM	ERS ENERGY -	ACKSON (1 ENERGY PL)	AZA)		By: XU	my sig		

BOARD OF COUNTY ROAD COMMISSIONERS, OAKLAND COUNTY, MICHIGAN

PERMIT APPLICATION			FOR R.C.O.C. USE ONLY			
MAKE CHECK PAYABLE TO ROAD COMMISSION FOR	OAKLAND COUNTY		24-1242	a contration		
ROAD COMMISSION FOR OAKLAND COUNTY RECEIVED		-				
Aug 06 2024			105607			
DEPARTMENT OF CUSTOMER SERVICES PERMITS		Date of Issuance	9-4-24			
APPLICANT: Consumers Energy APPLICATION for a permit to CONSTRUCT, OPERATE, U	ISE and/or MAINTAIN or to	TEMPORARII Y CLOS	F A COUNTY BOAD within	hereby makes		
right-of-way of road(s) Livingston Road and Highland		unde		the Board		
a detailed description of the desired facility and/or act underground, indicate depth below surface; if parallel to road describe method). THE FOLLOWING MUST BE ATTACH facility. 2. Traffic plan and detour route in cases of street closure PLEASE CHECK THE APPROPRIATE BOX(ES) THAT Annual Community Event Approach/Private Road Access Landscaping/Grading Cable TV Pathway/Sidewalk	tivity is required in the span d, indicate distance from inside IED TO THE APPLICATION ass.	ace provided below: e edge of facility to ed WHEN APPLICABLE: RK YOU WISH TO OBT. e, telephone) Soil E Wate	(include size, length, type dge of pavement, if crossing : 1. Plans, specifications a AIN A PERMIT FOR: Boring/Monitoring Well ermain	of facility; - i under roadbed		
Removal of existing gravel approach, removal of	tree, proposed concrete a	approach, proposed	d regrading of existing c	litch		
Removal of (2) existing 12" CMP below existing 12" RCP beneath proposed concrete approach	driveway approach, add	ition of approxima	tely 50LF and 45 LF of	proposed		
City or Township Highland			Section No. 21			
The above activities will be carried out in accordance with pl	lans, specifications, maps and	statements filed with f		application, and		
if said application is approved, the above named applicant a						
be secured from the Board prior to the start of any consumpLEMENTAL SPECIFICATIONS, on the reverse side, a						
FOR R.C.O.C. USE ONLY		FOR R.C.O.C. U				
Design: Right-of-Way:	Application Fee: \$ 300.0	00 Permit Fee:	\$ 500			
	,	Deposit:	\$ APA			
Teoffici	Receipt No:	Estimated Ins Paint Fee:	spection Fee: \$ <u>1,500</u> \$			
Traffic: Maintenance:	Bond: \$ APA	Sign Fee:	\$			
· · · · · · · · · · · · · · · · · · ·	(RCOC Form 75)	Signal Fee:	\$			
Planning: Construction: Subdivision:		TOTAL FEES AT TIME OF PERM	DUE IIT ISSUANCE: \$ 2,000			
Environmental Concerns: Permits: WRM	Proof of Insurance Required	Yes	No			
	Pollution Liability Required					
This application is approved subject to CONDITIONS and SUPP	LEMENTAL SPECIFICATIONS	contained on the revers	se side of this application.			
Approval of this application does not relieve applicant from	m meeting any applicable re			es or agencies		
including but not limited to the Michigan Department of Natural Re		NOT DEEN IOOUED				
APPROVAL OF THIS APPLICATION EXPIRES IN ONE PERMIT APPLICATION REVIEW FEES AND PERMIT						
		Consumers Energ				
REFER ALL INQUIRIES TO (248) 858-4835	APPLICANT (PRINT OF		8/1/2024			
DEPARTMENT OF CUSTOMER SERVICES PERMITS	SIGNATURE	mit agent	DATE			
2420 PONTIAC LAKE ROAD	(PRINTED/TYPED SIGI	NATURE & TITLE)				
WATERFORD, MI 48328	One Energy Pl APPLICANT'S ADDRES		517-745-1639 TELEPHONE NUMBER			
APPLICATION APPROVED:	Jackson, MI 49	and the same of th	IELEPHONE NUMBER			
By: Date: 9-4-24	CITY	state cmsenergy.com	ZIP CODE			
Date	EMAIL ADDRESS					

1 190

H-2 HIGHLAND CITY GATE PROJECT DESCRIPTION GM-01056

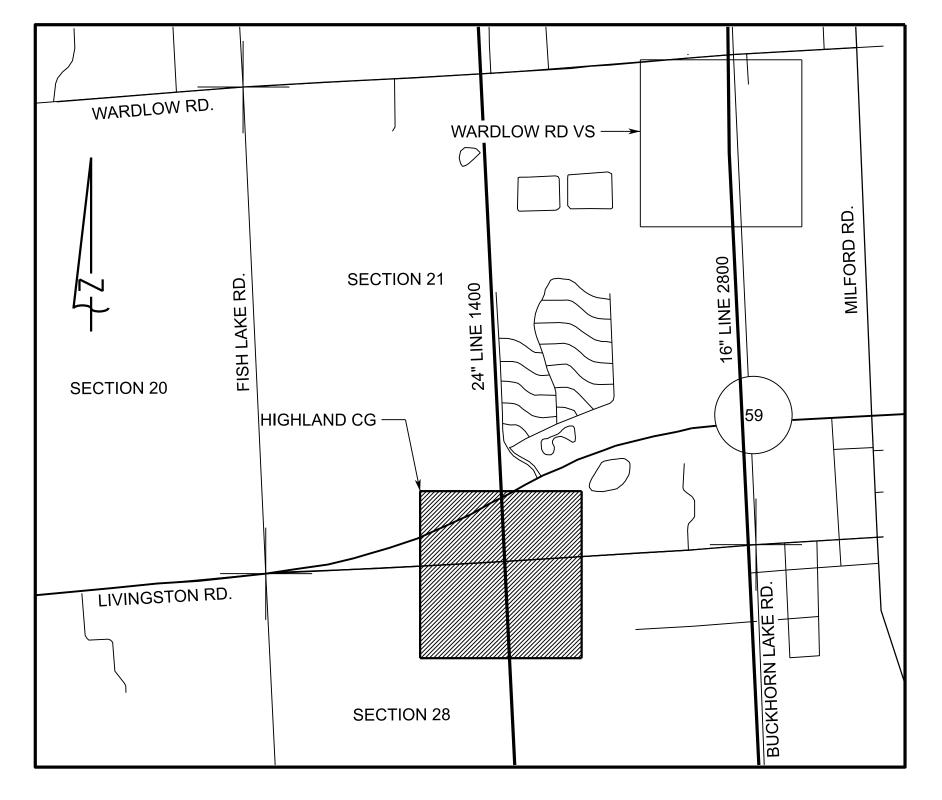
DRAWING LIST

401412C1412-PMT.01 401412C1412-PMT.02 401412C1412-PMT.03E 401412C1412-PMT.04E PERMIT COVER SHEET SITE GENERAL NOTES DEMOLITION AND SOIL EROSION AND SEDIMENT CONTROL PLAN - ROW **GRADING AND UTILITY PLAN - ROW**

ORIGINAL DRAWING

	ORIGINAL DRAWING #									
o.										ĺ
G NC										Ī
VIN										Ī
DRAV										I
ZD D										Ī
DAR										Ī
STAN	REFERENCE DRA	WINGS NUMBERS	REV.	PROJECT ID	DATE	DESCRIPTION	DES	ENG	PEER REV.	

WO#42712002 2025 CONSTRUCTION



LOCATION MAP

SCALE: NONE

SECTION 21, R7E, T3N HIGHLAND TOWNSHIP, OAKLAND COUNTY

1160 W. LIVINGSTON RD. HIGHLAND, MI 48357 43.40525° N 84.13821° W

DESIGNER <u>S.GAMACHE</u> DATE <u>9/25/2024</u> **ENGINEER** DATE PEER REV _____D.DOLOWY ____ DATE ___9/25/2024 DESIGN APPROVAL R.MCEACHERN DATE 9/25/2024 **ENGINEER** APPROVAL DATE _ R DES ENG APP APP REV. PROJECT DATE DES ENG PEER DES ENG DESCRIPTION DRAWING FILES ARE THE INTELLECTUAL PROPERTY OF CONSUMERS ENERGY AND SHALL NOT BE DISTRIBUTED EXTERNALLY WITHOUT OWNER PERMISSION RASTER FILE:

CALL INSPECTOR OR PERMIT SUPERVISOR BEFORE **BEGINNING ANY WORK** IN R.O.W

> **FLAG PERSONS** REQUIRED FOR TEMPORARY **ONE LANE ROADS**

KEEP ROADS CLEAN OF DIRT AND DEBRIS

FULL DEPTH SAWCUT AND/OR MILL A BUTT JOINT, WITH LOCATION/WIDTH AS DIRECTED BY **RCOC INSPECTOR**

WITHIN THE INFLUENCE **OF THE ROADBED & SIDEWALK** MDOT CLASS II, SAND, COMPACTED TO 95% MAX. UNIT **DENSITY IS REQUIRED**

REVISIONS 24-1242

ROAD COMMISSION FOR OAKLAND COUNTY RECEIVED Sep 25 2024 DEPARTMENT OF CUSTOMER SERVICES PERMITS

APPROVED FOR CONSTRUCTION PERMIT

ROAD COMMISSION FOR OAKLAND COUNTY PERMITS OFFICE

BY: Siman Yound

09/25/2024 10:58:07 AM

IS REQUIRED BEFORE ANY WORK IN R.O.W. **IS STARTED**

"PROPER SIGNING"

LANE CLOSURES **RESTRICTED TO** 9-3 MON - FRI



DATE: 09/25/2024

CAUTION

IF INSTALLATION CANNOT BE COMPLETED AS DESIGNED Know what's **below**. CONTACT PROJECT ENGINEER **REDLINE INFORMATION** Call before you dig. BEFORE PROCEEDING www.call811.com TO BE FILLED OUT BY REDLINER or MISSDIG @ 1-800-482-7171 SHEET COMPLETED AS MARKED POTENTIAL PUNCHLIST SHEET IMPACT SHEET COMPLETED AS ORIGINALLY DRAWN **CONSUMERS ENERGY CONTACTS** DEPARTMENT NAME **PHONE NUMBER** REDLINE PERFORMED BY NAME: **PROJECT MANAGER** 616-836-8321 Manav Mittal CONTACT: PROJECT ENGINEER Rob McEachern 734-691-0823 COMPANY FIELD LEADER 231-632-0319 Sarah Roch DATE: <u>RFI #:</u> HIGHLAND CITY GATE 2025 CONSTRUCTION Consumers Energy PERMIT COVER SHEET Count on Us® **GEO-SPATIAL & GAS ASSET MANAGEMENT** FIELD AREA: NORTHVILLE;WEST WAYNE LIVONIA Gas Meter and Regulation Department PROJECT ID# STA. NO. DRAWING NO. SHEET | REV C-1412-PMT 01 H-2 SCALE FILE: 401412C1412-PMT.01 1.dgn

GM-01056

NONE

TEMPORARY FACILITIES

THE CONTRACTOR SHALL CONSTRUCT THIS PROJECT IN COMPLIANCE WITH PART 91 OF ACT NO. 451 OF 1994, OF THE MICHIGAN COMPILED LAWS ENTITLED "SOIL EROSION AND SEDIMENTATION CONTROL" UNDER THE CONTROL OF THE LOCAL PERMIT AGENCY CHARGED WITH ADMINISTERING THE PROVISIONS OF THIS ACT. THE CONTRACTOR SHALL FOLLOW THE PROCEDURES DELINEATED BELOW AND IN THE PROJECT SPECIFICATIONS AND CONSTRUCT AND MAINTAIN THE FACILITIES SHOWN ON THE DRAWINGS TO CONTROL WATER AND WIND EROSION DURING CONSTRUCTION OF THIS PROJECT.

ALL DISTURBED SURFACE AREA (INCLUDING UTILITY TRENCHES) SHALL BE TEMPORARILY GRADED AND/OR DITCHED TO DIRECT ALL WATER RUNOFF FROM SUCH AREAS TO SEDIMENTATION CONTROL DEVICES WHICH WILL PREVENT WATER CARRYING ERODED SOIL FROM ENTERING A WATERCOURSE, SEWER, ADJACENT LANDS AND ROADWAYS. SUCH SEDIMENTATION CONTROL DEVICES SHALL INCLUDE, BUT NOT BE LIMITED TO, PROTECTIVE DITCHES, SEDIMENT TRAPS, SEDIMENT FILTERS, DITCH TRAPS, PIPE BARRIERS, AND FILTERS AS DETAILED AND REQUIRED AND WHERE INDICATED ON THE DRAWINGS. AFTER THE PROJECT WORK HAS BEEN COMPLETED, INSPECTED, AND APPROVED, THE CONTRACTOR SHALL REMOVE ALL SEDIMENTATION CONTROL DEVICES, MATERIAL, AND THEIR COLLECTED SILT AND DEBRIS AND RESTORE THE AREA IN ACCORDANCE WITH THE DRAWINGS.

TEMPORARY AGGREGATE SURFACING SHALL BE PLACED IN ROADWAY AREAS IMMEDIATELY AFTER THE BACKFILLING OPERATION HAS BEEN COMPLETED. POSITIVE DUST CONTROL MEASURES SHALL BE TAKEN AT ALL TIMES.

PERMANENT STABILIZATION SHALL BE COMPLETED WITHIN 5 DAYS OF FINAL EARTH CHANGE. FINAL CLEANUP AND RESTORATION WILL CONSIST OF FINAL GRADING, TOPSOILING, SEEDING AND MULCHING AND/OR SODDING OF ALL DISTURBED AREAS OF THE PROJECT.

IF SEASONAL CONDITIONS PREVENT FINAL CLEANING AND RESTORATION, THE CONTRACTOR SHALL PROCEED WITH TEMPORARY STABILIZATION OF THE DISTURBED AREA. TEMPORARY STABILIZATION SHALL CONSIST OF ROUGH GRADING THE DISTURBED AREA IN ACCORDANCE WITH THESE SPECIFICATIONS AND INSTALLING THE SPECIFIED SOIL EROSION AND SEDIMENTATION CONTROL DEVICES. TEMPORARY STABILIZATION MATERIALS SHALL BE REMOVED AND DISPOSED OF AND FINAL CLEANUP AND RESTORATION SHALL BE COMPLETED NOT LATER THAN 5 DAYS AFTER SEASONAL CONDITIONS ALLOW PERFORMANCE OF THE REQUIRED WORK.

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

CONTRACTOR SHALL ENSURE THAT SOIL EROSION AND SEDIMENTATION CONTROL MEASURES PROTECT AGAINST LOSS OF SOIL BY THE ACTION OF WATER, ICE, GRAVITY AND WIND.

SUMMARY OF BASIC PRINCIPLES

1. KEEP DISTURBED AREA AS SMALL AS POSSIBLE.

- 2. STABILIZE AND/OR PROTECT DISTURBED ARES AS SOON AS POSSIBLE.
- 3. KEEP STORM WATER RUNOFF VELOCITIES LOW. 4. RETAIN SEDIMENT WITHIN IMMEDIATE CONSTRUCTION AREA.

THE PURPOSE OF THIS PLAN IS TO SPECIFY METHODS FOR TEMPORARY EROSION CONTROL DURING CONSTRUCTION IT IS INTENDED THAT MEASURES CALLED FOR IN THE SPECIFICATIONS AND SHOWN ON THESE PLANS BE STRICTLY ADHERED TO. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT CONSTRUCTION PROCEDURES UNDERTAKEN ARE IN CONFORMANCE WITH PART 91 OF ACT 451 OF 1994 THE STATE OF MICHIGAN'S SOIL EROSION AND SEDIMENTATION CONTROL ACT.

ALL SOIL EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE REGULARLY MAINTAINED BY THE CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT. COLLECTED SILT AND SEDIMENTATION SHALL BE REMOVED PERIODICALLY TO MAINTAIN THE EFFECTIVENESS OF THE SILT TRAPS OR SEDIMENTATION CONTROL DEVICES. WHERE REQUIRED, THE CONTRACTOR SHALL REMOVE AND REPLACE FILTER MATERIALS WHICH HAVE BECOME INEFFECTIVE DUE TO CONTAMINATION OR PHYSICAL DETERIORATION.

ALL TEMPORARY EROSION CONTROL FACILITIES SHALL BE REMOVED BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION UNLESS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE. CARE SHALL BE TAKEN DURING REMOVAL TO MINIMIZE SILTATION IN NEARBY DRAINAGE COURSES.

SURFACE DISRUPTION IN ADVANCE OF CONSTRUCTION INCLUDING CLEARING, GRADING OR SIGNIFICANT SOD REMOVAL SHALL BE PROCEEDED BY INSTALLATION OF SOIL EROSION AND SEDIMENTATION CONTROL DEVICES AS FOLLOWS, UNLESS PERMISSION IS OTHERWISE OBTAINED FROM THE GOVERNING AGENCY

A. WET WEATHER SEASON (MARCH, APRIL, MAY) - 5 DAYS PRIOR TO BEGINNING ANY EARTH CHANGE ACTIVITY. B. DRY WEATHER SEASON (JUNE, JULY, AUGUST, SEPTEMBER, OCTOBER, NOVEMBER) - 10 DAYS PRIOR TO BEGINNING ANY EARTH CHANGE ACTIVITY. C. COLD WEATHER SEASON (DECEMBER, JANUARY, FEBRUARY) - 15 DAYS PRIOR TO BEGINNING ANY EARTH CHANGE

ACTIVITY.

THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY THE CONTRACTOR.

MAINTENANCE NOTES:

THE CONTRACTOR SHALL INSPECT SOIL EROSION AND SEDIMENTATION CONTROL DEVICES WEEKLY AND WITHIN 24 HOURS OF A SIGNIFICANT RAIN EVENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE SOIL EROSION AND SEDIMENTATION CONTROL DEVICES.

MAINTENANCE INCLUDES ALL WORK NECESSARY FOR PROPER OPERATION OF THE DEVICES. DEVICES WHICH CAN NOT BE REPAIRED SHALL BE REPLACED. MAINTENANCE OF THE DEVICES SHALL BE PERFORMED WITHIN 24 HOURS OF INSPECTION.

SEDIMENT SHALL BE REMOVED AS NECESSARY TO MAINTAIN THE EFFECTIVENESS OF SOIL EROSION AND SEDIMENTATION CONTROL DEVICES.

SEDIMENT DEPOSITED ALONG SILT FENCE SHALL BE REMOVED WHEN IT REACHES 1/3 TO 1/2 THE HEIGHT OF THE FENCE AND PRIOR TO REMOVAL AT THE END OF THE PROJECT OR TIME OF FINAL REMOVAL.

TURF ESTABLISHMENT MEASURES SHALL BE MAINTAINED AS WOULD ANY OTHER DEVICES PRIOR TO ESTABLISHMENT OF PERMANENT TURF.

ALL MUD, DIRT AND DEBRIS TRACKED ONTO EXISTING ROADS FROM THIS SITE SHALL BE PROMPTLY REMOVED BY THE CONTRACTOR.

SOIL EROSION SEQUENCE OF CONSTRCTION:

1. INSTALL SILT FENCE, ESTIMATED DATE: 5/2025

2. DEMOLISH EXISTING FENCE, BUILDINGS, REMOVE EXISTING UTILITIES AND GRUB THE SITE PER THE PLANS. ESTIMATED DATE: 5/2025

3. CONSTRUCT ROW FEATURES PER THE PLANS INCLUDING DRIVEWAY APPROACH, UTILITY, GRADING AND RESTORATION. ESTIMATED DATE: 5/2025 - 8/2025

4. STABILIZE DISTURBED AREAS AS NOTED ON THE PLANS WITHIN 5 DAYS OF FINAL GRADING. ESTIMATED DATE: 8/2025

5. RESTORE ALL OFF-SITE AREAS TO PRE-CONSTRUCTION CONDITION FOLLOWING SITE CONSTRUCTION.

6. CLEAN PAVEMENT AND SEWERS AS NECESSARY (SCRAPE DAILY, SWEEP MIN. 1 PER WEEK). A CERTIFIED STORM WATER OPERATOR SHALL INSPEC ALL SESC MEASURES ON A WEEKLY BASIS AND AFTER SIGNIFICANT RAIN EVENTS TO ENSURE THE SESC MEASURES ARE ADEQUATE.

7. REMOVE ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS FOLLOWING SITE CONSTRUCTION, FINAL STABILIZATION OF WORK, AND FINAL INSPECTION. ESTIMATED DATE: 8/2025

	DRIGINAL DRAWING #										
										DESIGNER _ S.GAMA	ACHE_ DATE _ 9/25/202
Х U										ENGINEER	DATE
ž L										PEER REV	OWY DATE 9/25/202
AN C											
										DESIGN APPROVAL <u>R.MCEAC</u>	<u> 2125/2020 OHERN</u> DATE
										ENGINEER APPROVAL	DATE
SIAN	REFERENCE DRAWINGS NUMBERS	REV. PROJECT ID DATE	E DESCRIPTION	DES ENG PEER DES.ENG. REV. APP. APP.	V. PROJECT DATE	DESCRIPTION	DESE	NG PEER D REV. A	ES. ENG. PP. APP.	DRAWING FILES ARE THE INTELLEC AND SHALL NOT BE DISTRIBUTED E	TUAL PROPERTY OF CONSUMERS ENER XTERNALLY WITHOUT OWNER PERMISS

GENERAL

1. ALL EXPOSED S **REMOVED FROM** MEASURES.

2. THE CONTRACT TO INSPECT THE S AS REQUIRED BY **REVIEW UPON RE**

DEMOLITIO

1. TOPOGRAPHIC OF RECORD OR W

2. CONTRACTOR

3. PRIOR TO COMMENCING ANY WORK, CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY HIGHLAND TOWNSHIP, AND/OR OAKLAND COUNTY.

4. PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR SHALL PHOTOGRAPH OR VIDEOTAPE ALL EXISTING CONDITIONS OF NEARBY PUBLIC AND PRIVATE PROPERTY, INCLUDING STRUCTURES, ROADS, EASEMENTS, SIDEWALKS, ETC.

8. THE LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR, THE OWNER AND OWNER'S REPRESENTATIVE ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY, CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AND INFORMING OWNER OF ANY DEVIATIONS PRIOR TO BEGINNING DEMOLITION WORK

10. ALL BUILDING STRUCTURES TO BE REMOVED SHALL BE BROUGHT TO GRADE WITH SUITABLE FILL PER SPECIFICATIONS.

12. GAS SERVICE CONNECTIONS THAT ARE TO BE DEMOLISHED SHALL BE TERMINATED AND PLUGGED AT THE PROPERTY BOUNDARY AND/OR IN ACCORDANCE WITH HIGHLAND TOWNSHIP REQUIREMENTS.

14. CROSS REFERENCE CIVIL DRAWINGS WITH MECHANICAL AND ELECTRICAL DRAWINGS FOR LIMITS OF UNDERGROUND DEMOLITION.

	SEE DETAIL BE
L NOTES:	
SOIL STOCKPILES SHALL BE ENCLOSED IN SILT FENCING UNTIL I THE SITE OR PROVIDED WITH PERMANENT EROSION CONTROL	
CTOR SHALL PROVIDE A CERTIFIED STORMWATER OPERATOR (CSWO) E SESC MEASURES AND MAINTAIN INSPECTION LOGS AND REPORTS Y LAW. THE CSWO SHALL MAKE THE REPORTS AVAILABLE FOR EQUEST.	6 IN. ANCHOR TF
ON NOTES:	
C SURVEY WAS PROVIDED BY PEA GROUP ON MARCH 29, 2023. ALL EXISTING INFORMATION SHOWN IS FROM THIS SURVEY WAS SUPPLEMENTED BY INFORMATION FROM SITE VISITS AND/OR HISTORICAL DRAWINGS.	
R TO FILED VERIFY ALL EXISTING SITE FEATURES AND UTILITIES BEFORE DEMOLITION	

5. PRIOR TO DEMOLITION, ALL REQUIRED SOIL EROSION AND SEDIMENT CONTROL DEVICES ARE TO BE INSTALLED.

6. CONTRACTOR SHALL MAINTAIN ALL EXISTING ROADS, SIDEWALKS, DRIVES, ETC. CLEAR AND FREE FROM ANY CONSTRUCTION ACTIVITY AND/OR MATERIAL TO ENSURE EASY AND SAFE PEDESTRIAN AND VEHICULAR TRAFFIC AT ALL TIMES.

7. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, TRAFFIC CONTROL, ETC. CONFORMING TO BEST PRACTICES.

9. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSAL OF ALL STRUCTURES, PAVEMENTS, WALLS, EQUIPMENT, SIDEWALKS, AND SUBSURFACE STRUCTURES INCLUDING FOUNDATIONS, UTILITIES, ETC.

11. PROPERLY TERMINATE ALL EXISTING UTILITY CONNECTIONS PRIOR TO DEMOLISHING THE BUILDING, COORDINATE UTILITY TERMINATION AND DEMOLITION WITH UTILITY COMPANIES.

13. SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE ANY EXISTING STRUCTURE AND/OR ITEM PROPOSED TO REMAIN ON PROJECT SITE OR ON ADJACENT PROPERTIES. THEN THE CONTRACTOR SHALL MAKE ALL NECESSARY REPAIRS AT THEIR OWN EXPENSE. ALL CONSTRUCTION MATERIALS SHALL BE OF EQUAL OR HIGHER QUALITY AND SHALL BE APPROVED BY OWNER'S REPRESENTATIVE

MDOT 21AA LIMESTONE AGGREGATE BASE COURSE COMPACTED TO MIN. 95% MAX. DENSITY OF MOD. PROCTOR (MAXIMUM 6" LIFTS)

EXISTING SUBGRADE

CONCRETE PAVEMENT DETAIL - DRIVEWAY APPROACH

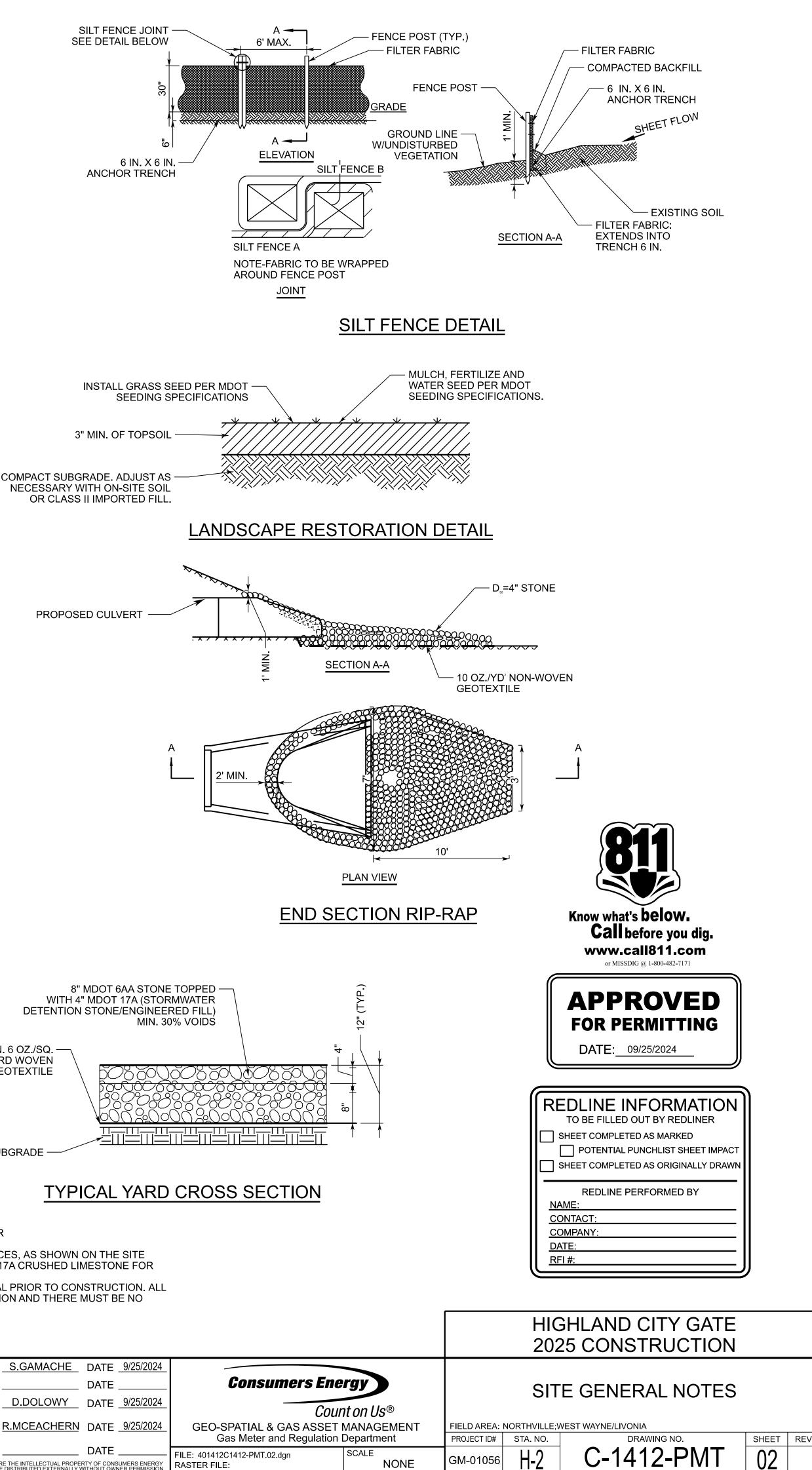
MDOT 21AA ROAD

MIN. 6 OZ./SQ. YARD

WOVEN GEOTEXTILE

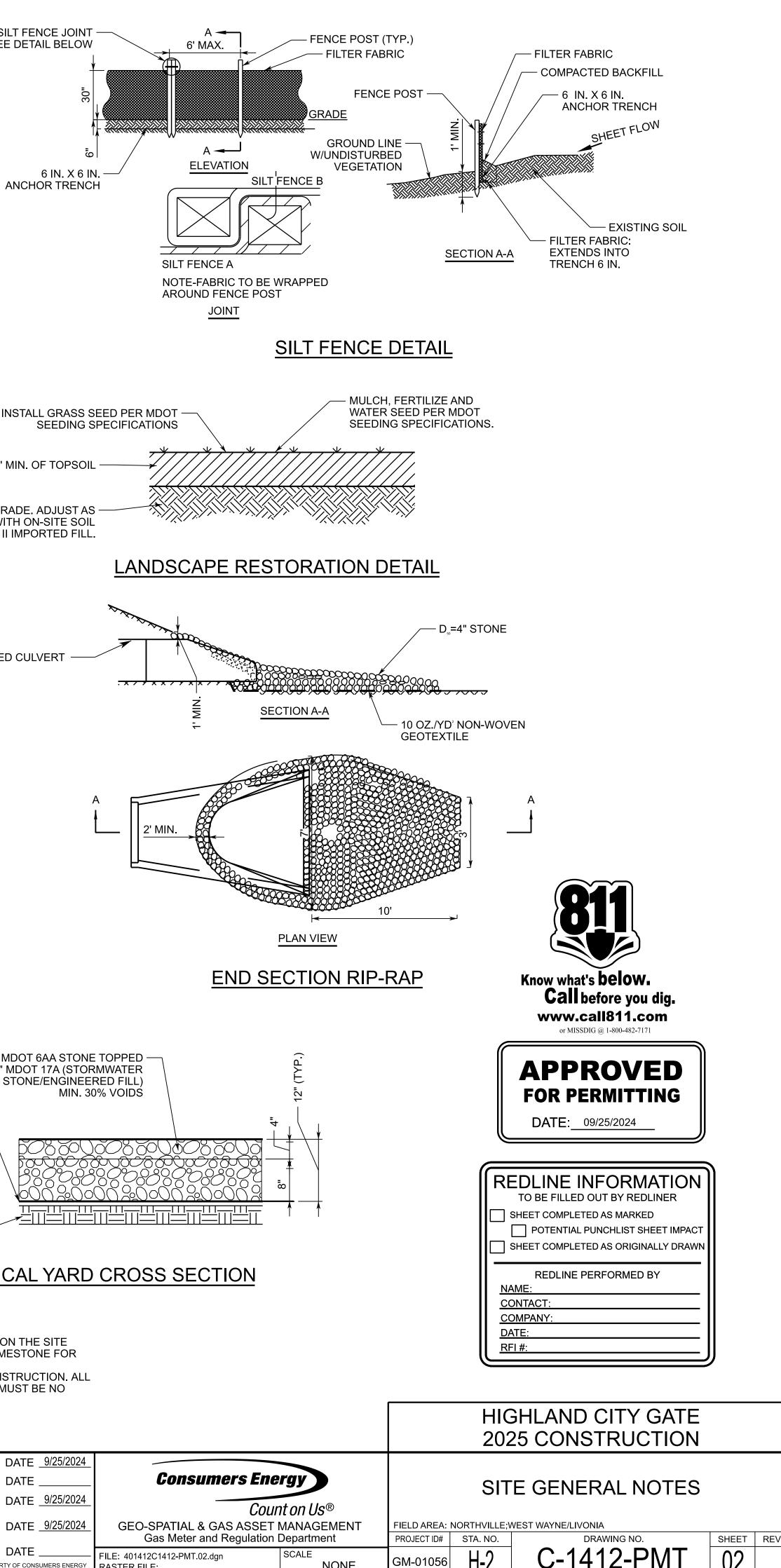
- EXISTING SUBGRADE

SURFACE



DO NOT SCALE DRAWING USE DIMENSIONS ON

MIN. 6 OZ./SQ. -YARD WOVEN GEOTEXTILE



EXISTING SUBGRADE

TYPICAL DRIVEWAY CROSS SECTION

TYPICAL DRIVE AND YARD CROSS SECTION NOTES: 1. WOVEN GEOTEXTILE SEPARATOR SHALL BE MIRAFI HP 370 OR AN ENGINEER

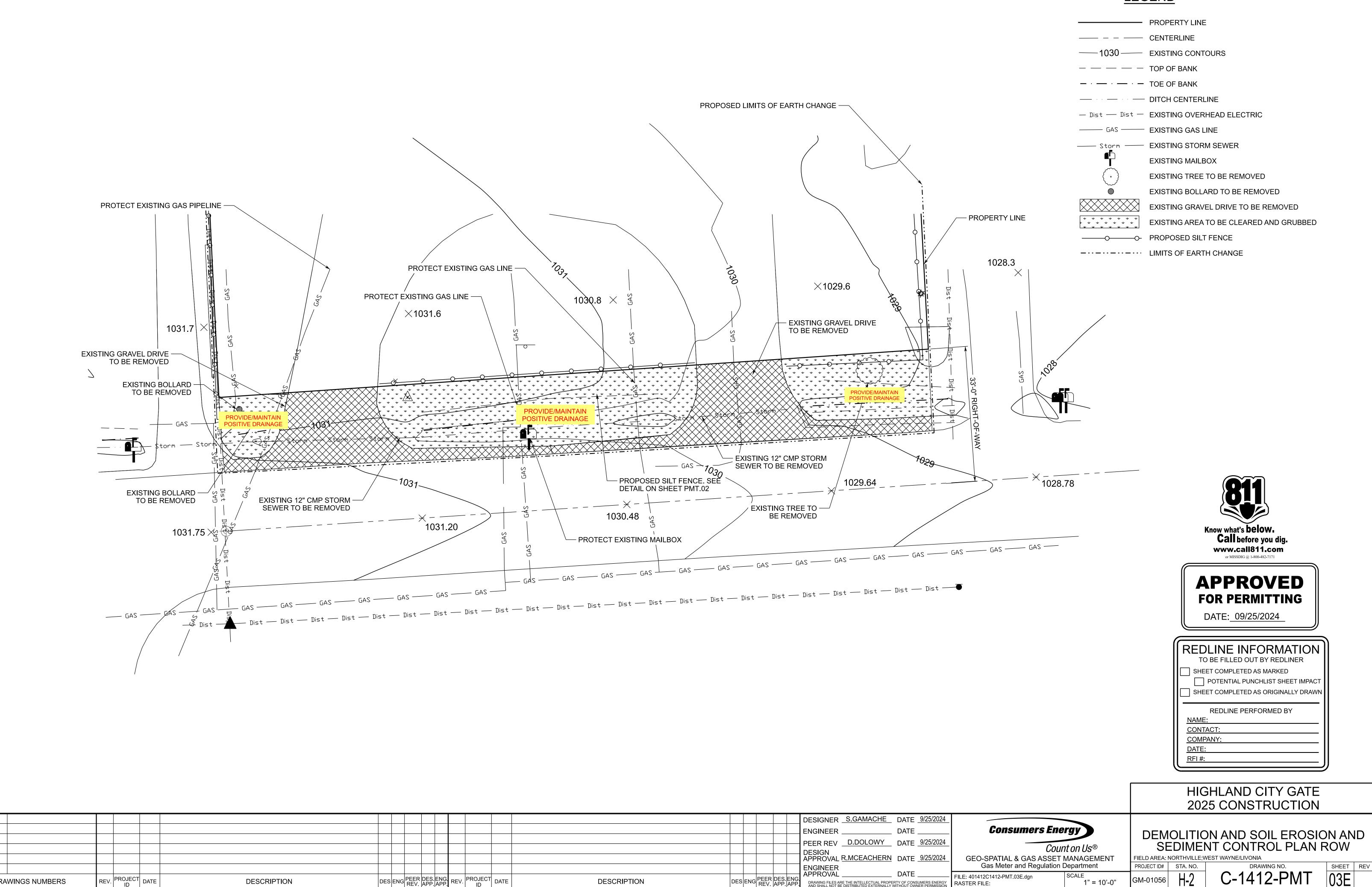
APPROVED EQUIVALENT PRODUCT.

2. THIS CROSS SECTION WILL BE USED FOR ALL DRIVEWAY AND YARD SURFACES, AS SHOWN ON THE SITE DRAWINGS. USE 21AA CRUSHED LIMESTONE FOR DRIVEWAY AREAS AND 6AA/17A CRUSHED LIMESTONE FOR YARD

3. CONTRACTOR TO PROVIDE PRODUCT DATA TO CE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION. ALL REBAR MUST BE REMOVED FROM CRUSHED CONCRETE PRIOR TO INSTALLATION AND THERE MUST BE NO STAINING ON THE CONCRETE.

MDOT 35-P, AIR ENTRAINED CONCRETE SURFACE -WITH POLY FIBER REINFORCEMENT 4000 PSI COMPRESSIVE STRENGTH 600 PSI FLEXURAL STRENGTH

PROOFROLL AND COMPACT



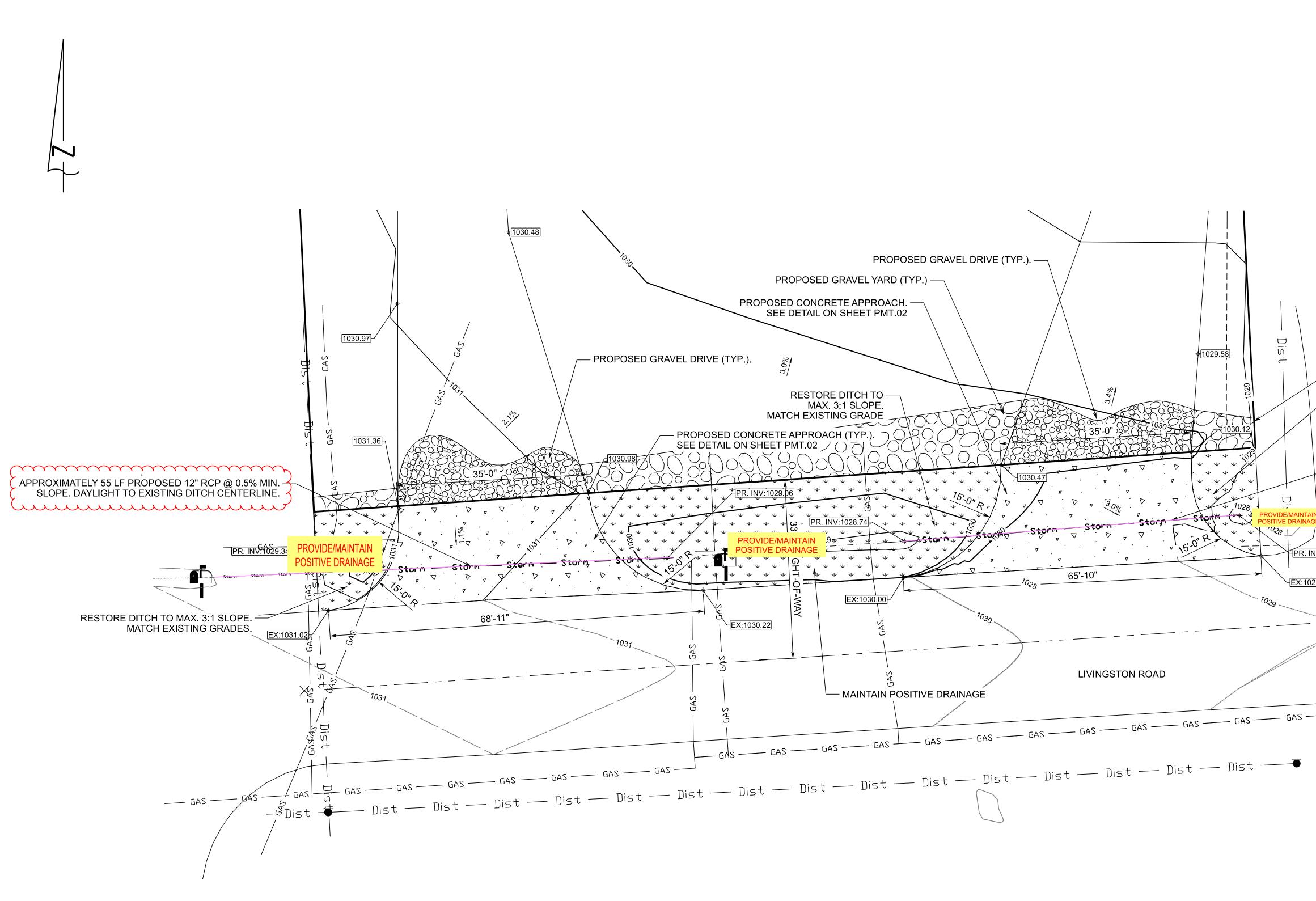
ORIGINAL DRAWING

	ORIGINAL DRAWING #								
NO 2									
VING									
RAV									
SD D									
DAR									
STAN	REFERENCE DRA	WINGS NUMBERS	REV.	PROJECT ID	DATE	DESCRIPTION	DES	ENG	PEER I REV.

									DESIGNER	S.GAMACHE	DATE <u>9/25/</u>
									ENGINEER _		DATE
									PEER REV	D.DOLOWY	DATE _9/25/
										MCEACHERN	
										MCEACHERN	DATE <u>9/25/</u>
									ENGINEER APPROVAL		DATE
DES APP	ENG.	REV.	DATE	DESCRIPTION	DES	ENG	PEER REV.	DES.E			-

<u>LEGEND</u>

DO NOT SCALE DRAWING USE DI

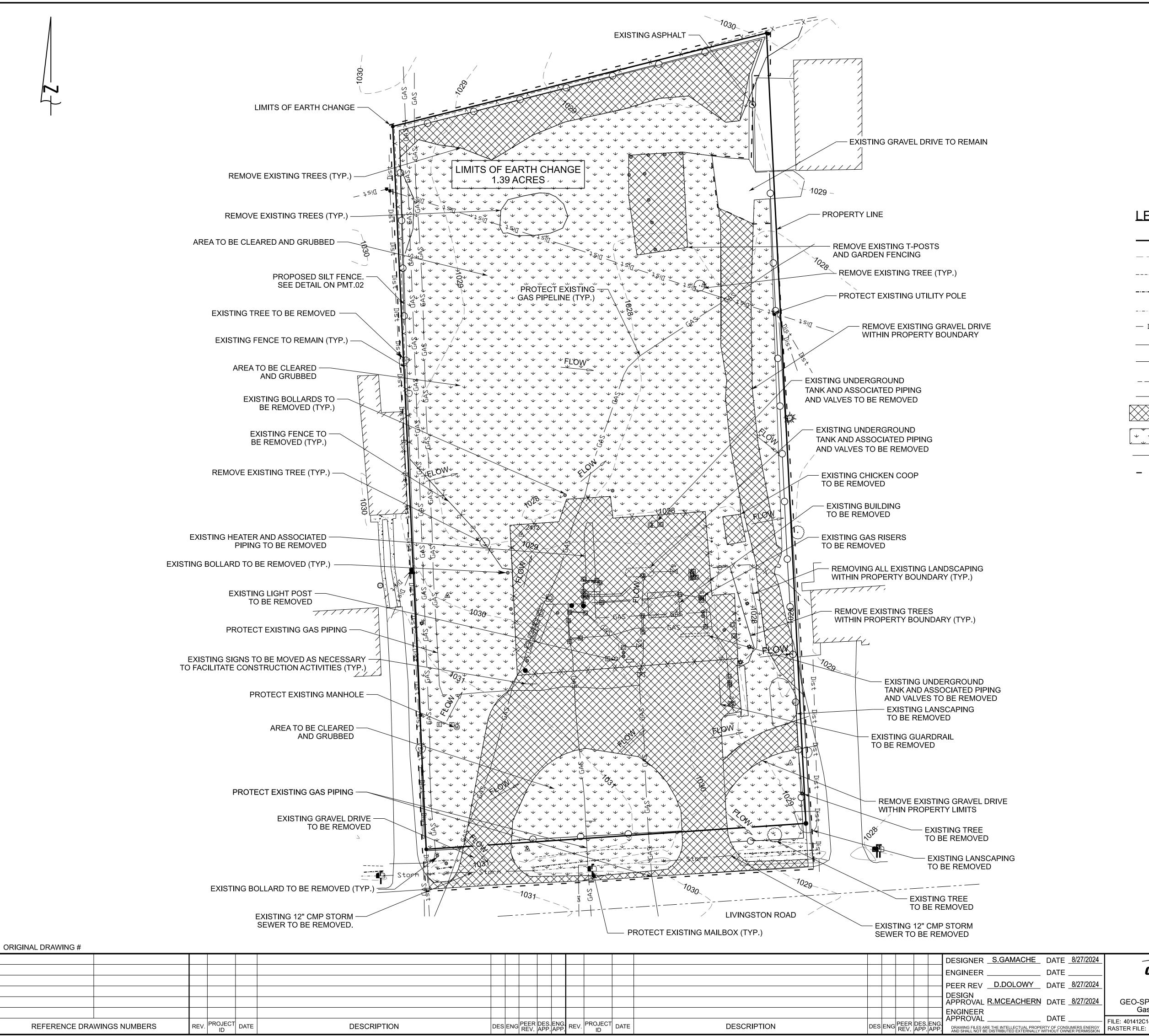


Ц С	
ХЦ С	

	ORIGINAL DRAWING #			
NO				
DRAWING				
IDARD				

REV. PROJECT DATE REFERENCE DRAWINGS NUMBERS DESCRIPTION

				LEGEND
				PROPERTY LINE
				EXISTING CONTOUR
				EXISTING TOP OF BANK EXISTING TOE OF BANK
				Dist EXISTING OVERHEAD ELECTRIC
\mathbf{N}	/			GAS EXISTING GAS PIPELINE
				EXISTING DITCH CENTERLINE
PROPOSED GRAVEL DRIVE (TYP.).				
PROPOSED GRAVEL YARD (TYP.)				PROPOSED GRAVEL DRIVE
PROPOSED CONCRETE APPROACH. SEE DETAIL ON SHEET PMT.02	\bigwedge			PROPOSED GRAVEL YARD
				$ \begin{array}{c} & & \\ & & \\ & & \\ & & \\ \end{array} \end{array} $ PROPOSED LANDSCAPE RESTORATION
PROPOSED GRAVEL DRIVE (TYP.).				
RESTORE DITCH TO	× × × × × × × × × × × × × × × × × × ×	1029	- RESTORE DITCH TO	♦ EX:1028.41 EXISTING SPOT GRADE
MAX. 3:1 SLOPE. MATCH EXISTING GRADE			MAX 3:1 SLOPE MATCH EXISTING	+ 1030.12 PROPOSED SPOT GRADE
PROPOSED CONCRETE APPROACH (TYP.).			GRADE	
			APPROXIMATELY 65LF PROPOSED 12" RCP @ 0.5% MIN.SLOPE. DAYLIGHT TO EXISTING DITCH CENTERLINE.	
$\begin{array}{c} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 $		∇ ψ	Kunhunn	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	m Storm Stor	PROVIDE/MAINTAIN POSITIVE DRAINAGE		
PROVIDE/MAINTAIN PROVIDE/MAINTAIN 9 - + + + + + + + + + + + + + + + + + +		15-0" R + +	7 81	
$\begin{array}{c} \begin{array}{c} & \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \\ \\ \end{array} $	<i>▼ ▼</i> 65'-10"			
v v v v v Q v v v v Q v v v v V Q v v v v		EX:1028.41		
EX:1030.22)	
				\sim $$
	LIVINGSTON ROAI	D		
MAINTAIN POSITIVE DRAINAGE				
G GAS GAS GAS	GAS GAS	GAS GAS GAS		Know what's below .
GAS —				Call before you dig. www.call811.com
GAS GAS GAS GAS GAS GAS Dist	ist — Dist —	Dist — Dist — •		or MISSDIG @ 1-800-482-7171
t — Dist — Dist — Dist				
				FOR PERMITTING DATE: 09/25/2024
				DATE: 00/20/2021
				REDLINE INFORMATION
				TO BE FILLED OUT BY REDLINER
				SHEET COMPLETED AS MARKED POTENTIAL PUNCHLIST SHEET IMPACT
				SHEET COMPLETED AS ORIGINALLY DRAWN
				REDLINE PERFORMED BY <u>NAME:</u>
				CONTACT: COMPANY:
				<u>DATE:</u> <u>RFI #:</u>
				HIGHLAND CITY GATE 2025 CONSTRUCTION
		SIGNER <u>S.GAMACHE</u> DATE <u>9/25/2024</u>		GRADING AND UTILITY
	PEI	GINEER DATE ER REVD.DOLOWYDATE9/25/2024		PLAN - ROW
		SIGN PROVAL <u>R.MCEACHERN</u> DATE <u>9/25/2024</u> IGINEER	GEO-SPATIAL & GAS ASSET MANAGEMENT Gas Meter and Regulation Department	FIELD AREA: NORTHVILLE;WEST WAYNE/LIVONIA PROJECT ID# STA. NO. DRAWING NO. SHEET
DES ENG REV. APP. APP. REV. PROJECT DATE DESCRIPTION	I I PEER IDES IENG	GINEER PROVAL DATE RAWING FILES ARE THE INTELLECTUAL PROPERTY OF CONSUMERS ENERGY DO SHALL NOT BE DISTRIBUTED EXTERNALLY WITHOUT OWNER PERMISSION	- FILE: 401412C1412-PMT.04E.dgn SCALE	GM-01056 H-2 C-1412-PMT 04E



REFERENCE DRA	WINGS NUMBERS	REV.	PROJECT ID	DATE	DESCRIPTION	DES	ENG	PEER I REV.

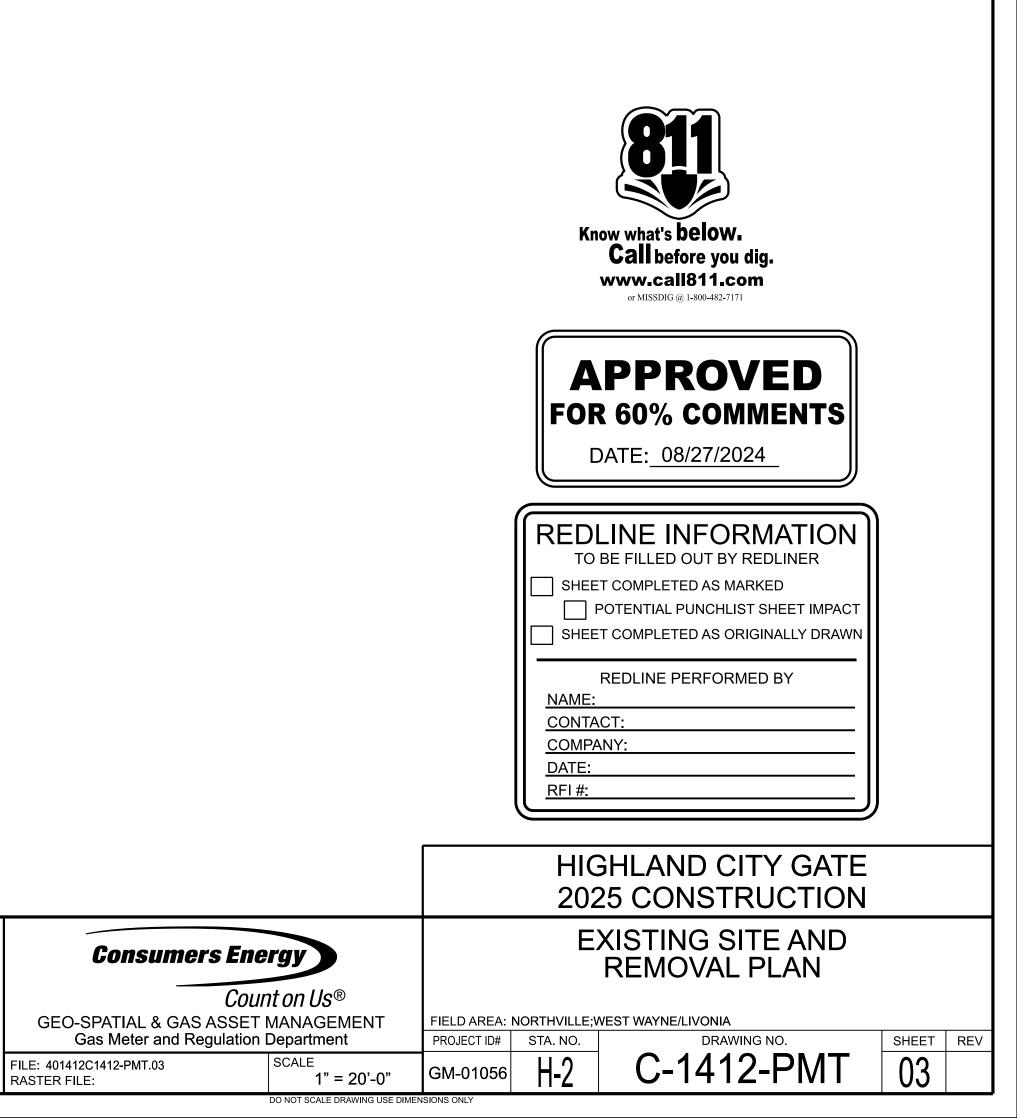
LEGEND

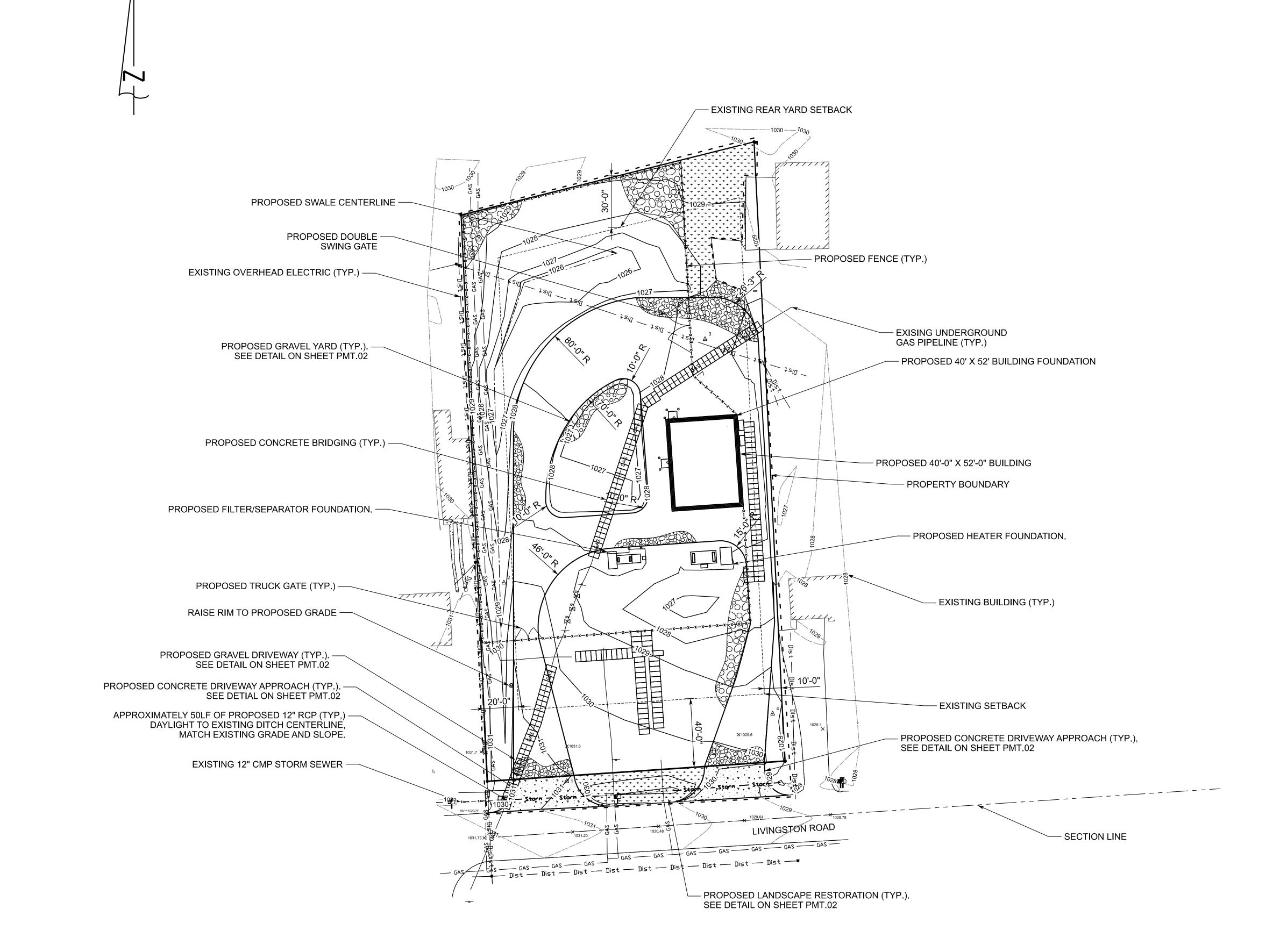
— — —1030— — —
— Dist — Dist —
GAS
Storm
xx
— X — X —
~
O

PROPERTY LINE **EXISTING CONTOURS** EXISTING TOP OF SLOPE EXISTING TOE OF SLOPE EXISTING DITCH CENTERLINE EXISTING OVERHEAD ELECTRIC EXISTING GAS PIPELINE TO REMAIN EXISTING STORM SEWER EXISTING FENCE TO REMAIN EXISTING FENCE TO BE REMOVED SITE FEATURES TO BE REMOVED AREA TO BE CLEARED AND GRUBBED

PROPOSED SILT FENCE

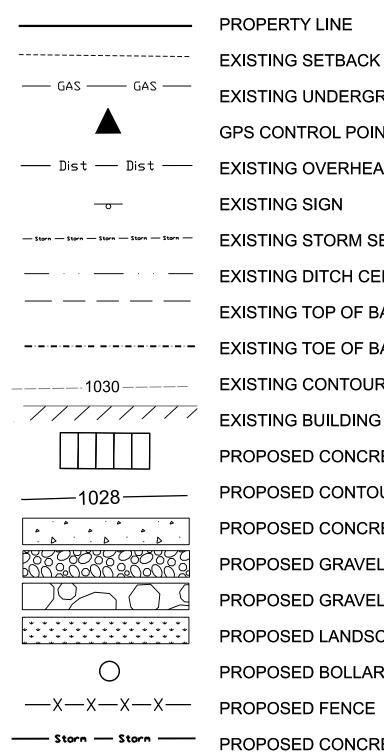
LIMITS OF EARTH CHANGE





ORIGINAL DRAWING #								
REFERENCE DRA	WINGS NUMBERS	REV.	PROJECT ID	DATE	DESCRIPTION	DES	ENG	PEER REV.

												DESIGNER <u>S.GAMACHE</u> DATE <u>8/27/2</u>
												ENGINEER DATE
												PEER REV D.DOLOWY DATE 8/27/2
												DESIGN
												APPROVAL R.MCEACHERN DATE 8/27/2
												ENGINEER
2		ENG		PROJECT					PEER		ENG	APPROVAL DATE
	APP.	APP.	REV.		DATE	DESCRIPTION	DES	ENG	PEER REV.	APP.	APP.	DRAWING FILES ARE THE INTELLECTUAL PROPERTY OF CONSUMERS EN AND SHALL NOT BE DISTRIBUTED EXTERNALLY WITHOUT OWNER PERMIS



LEGEND

PROPERTY LINE EXISTING SETBACK EXISTING UNDERGROUND GAS LINE GPS CONTROL POINT **EXISTING OVERHEAD DISTRIBUTION LINE** EXISTING SIGN EXISTING STORM SEWER EXISTING DITCH CENTERLINE EXISTING TOP OF BANK EXISTING TOE OF BANK **EXISTING CONTOURS** EXISTING BUILDING PROPOSED CONCRETE BRIDGING PROPOSED CONTOURS PROPOSED CONCRETE PROPOSED GRAVEL DRIVE PROPOSED GRAVEL YARD PROPOSED LANDSCAPE RESTORATION PROPOSED BOLLARD PROPOSED CONCRETE CULVERT

LIMITS OF PROPOSED GRADING



Know what's **below**. **Call** before you dig. www.call811.com or MISSDIG @ 1-800-482-7171



DATE: 08/27/2024

REDLINE INFORMATION

TO BE FILLED OUT BY REDLINER SHEET COMPLETED AS MARKED POTENTIAL PUNCHLIST SHEET IMPACT

SHEET COMPLETED AS ORIGINALLY DRAWN

REDLINE PERFORMED BY

NAME: CONTACT:

COMPANY:

DATE: <u>RFI #:</u>

HIGHLAND CITY GATE 2025 CONSTRUCTION

7/2024 **Consumers Energy** SITE PLAN 7/2024 Count on Us® GEO-SPATIAL & GAS ASSET MANAGEMENT 7/2024 FIELD AREA: NORTHVILLE;WEST WAYNE/LIVONIA Gas Meter and Regulation Department PROJECT ID# STA. NO. DRAWING NO. SHEET REV C-1412-PMT 04 H-2 FILE: 401412C1412-PMT.04.dgn SCALE GM-01056 1" = 30'-0" DO NOT SCALE DRAWING USE DIME

GENERAL NOTES 1. NOTIFY ENGINEER OF ANY MODIFICATIONS PRIOR TO FABRICATION AND ERECTION 2. STEEL DESIGN AND FABRICATION TO BE PERFORMED ACCORDING TO AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, LATEST REVISION AND CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES, LATEST EDITION. 3. WELDING TO BE PERFORMED ACCORDING TO AWS D1.1 3.1. WELD INSPECTION: 100% VISUAL ONLY 4. STRUCTURAL TUBE MEMBERS SHALL CONFORM TO THE FOLLOWING 4.1. TUBE STEEL SHALL BE ASTM A-500 GRADE "C" GALVANIZED ZINC COATED. ALL OTHER STEEL SHALL BE SHOP PRIMED UNLESS OTHERWISE NOTED. 4.2. TRUSS MEMBERS AND PERLINS 4.2.1. ALL BOTTOM CHORD MEMBERS: 2"X4" 14 GA 4.2.2. ALL TOP CHORD MEMBERS: 2"x4" 14 GA 4.2.3. ALL INFILL MEMBERS AND PERLINS: SINGLE 2"x 2" 14 GA UNLESS NOTED OTHERWISE 4.3. WALL PANELS AND GIRTS 4.3.1. ALL MEMBERS SINGLE 2" x 2" 14 GA 4.4. COATINGS: STRUCTURAL MEMBERS ARE TO BE GALVANIZED ZINC COATED OR SHOP COATED WITH ONE COAT RUST INHIBITIVE PRIMER, 2 MIL THICKNESS MEETING FEDERAL SPECIFICATION TT-P-664. 5. METAL PANELS 5.1. ROOF PANELS ARE TO BE 26GA STEEL OR GREATER ZINC-ALUMINUM COATED OR GALVANIZED WITH 1 MIL BAKED VINL OR ACRYLIC FACTORY PAINT COATING ON EXPOSED SURFACE, COLOR KYNAR 500 TUDOR BROWN SEMI-GLOSS ENAMEL EXPOSED FACE, WHITE INSIDE FACE. EXTERIOR ROOF PANELS ARE TO HAVE UL UPLIFT RATING NOT LESS THAN 90. 5.2. WALL PANELS ARE TO BE 26GA STEEL OR GREATER ZINC-ALUMINUM COATED OR GALVANIZED WITH 1 MIL BAKED VINL OR ACRYLIC FACTORY PAINT COATING ON EXTERIOR SURFACE, COLOR KYNAR 500 LIGHT STONE SEMI-GLOSS ENAMEL EXPOSED FACE, INTERIOR LINER PANELS ARE TO BE PAINTED WHITE. PANEL FASTENERS: ITW BUILDEX #12-14X1" SELF DRILLING SCREW WITH NEOPRENE WASHER AT SPACING PER METAL SIDING/ROOF MANUFACTURER'S RECOMMENDATIONS. 5.3. RIDGE VENT TO BE PLYCO CORP. MW-100 LOW PROFILE VENTILATOR, OR APPROVED EQUAL - RIDGE VENT TO MATCH ROOF COLOR 6. GUTTERS, DOWNSPOUTS, AND FLASHING 6.3. FURNISH AND INSTALL GUTTERS AND DOWNSPOUTS TO DRAIN WATER AWAY FROM BUILDING. 6.4. INSTALL CONCRETE SPLASH BLOCKS AT DOWNSPOUT LOCATIONS. 6.5. GUTTERS AND DOWNSPOUTS ARE TO BE 26 GA WITH COLOR MATCHING EXTERIOR ROOF PANEL 6.6. FLASHING IS TO BE 29 GA WITH COLOR MATCHING WALL AND ROOF PANELS, AS REQUIRED 7. DOORS, FRAMES, AND HARDWARE: 7.1. DOORS: 3'-0" X 7'-0" X $1\frac{3}{4}$ " AND 6'-0" X 7'-0" $1\frac{3}{4}$ " THICK OUTSWING W/ COLD ROLLED FACE SHEETS OF 18GA. 7.1.1. 4 ½" X 4 ½" US 32D NRP STAINLESS HINGES 7.1.2. DOOR CORE FILLED WITH RIGID URETHANE 7.1.3. NGP- A626A POLYAMIDE WEATHER STRIPPING 7.1.4. PROVIDE AN ASTRIGAL BETWEEN DOUBLE DOORS TO ALLOW FOR CLEAR OPENING 7.2. PAINT 7.2.1. FACTORY PRIME DOORS 7.2.2. BUILDING VENDOR TO PROVIDE INTERIOR AND EXTERIOR FINISH DOOR PAINT. EXTERIOR TO MATCH SIDING, INTERIOR TO BE WHITE. 7.2.3. GENERAL CONTRACTOR TO PAINT ALL DOORS AND FRAMES PER MANUFACTURE'S RECOMMENDATIONS. 7.3. FRAME 7.3.1. 16 GA. KD FRAME 7.4. HARDWARE 7.4.1. VON DUPRIN 22 RIM EXIT DEVICE WITH EXTERIOR LEVER EXCEPT ON PASSIVE DOUBLE DOOR WHERE NO EXIT DEVICE REQUIRED 7.4.2. 4111 LCN HEAVY DUTY- HOLD OPEN CLOSURE. FOR SINGLE AND BOTH DOUBLE DOORS. 7.4.3. 29 GA. 24"X24" FIXED LOUVER W/ INSECT SCREEN 7.4.4. FABRICATE DOORS TO RECEIVE OWNER SUPPLIED YALE MORTISE LOCK 1-1/8" LONG #1417 CYL 8. FACED INSULATION SHALL MEET THE FOLLOWING CRITERIA: 8.3. R VALUE 10 OR GREATER 8.4. FLAME SPREAD NO GREATER THAN 25 8.5. SMOKE DEVELOPMENT INDEX NO GREATER THAN 50 8.6. FACING SHALL BE WHITE, STANDARD DUTY PSK TYPE 8.7. CONFORM TO ASTM E84 9. CONTRACTOR RESPONSIBLE FOR TEMPORARY BRACING OF STRUCTURE DURING ERECTION AND ASSEMBLY. 10. CONSTRUCTION IS TO COMPLY WITH 2015 MICHIGAN BUILDING CODE. ALL DESIGN LOAD COMBINATIONS SHALL BE AS REQUIRED BY MBC 2015/ASCE 7-10. 10.4. RISK CATEGORY III, 10.5. EXPOSURE C 10.6. ROOF DEAD LOAD 10.6.1. ROOF STEEL: 1 PSF 10.6.2. FRAMING_TRUSS SELF WEIGHT: 5 PSF 10.6.3. THE ROOF FRAMING SHALL BE DESIGNED FOR AN ADDITIONAL LOAD OF 10 PSF TO ACCOMMODATE CONDUIT, RELIEF STACK PIPING, AND LIGHTING. 10.7. WIND LOADS 10.7.1. ULTIMATE DESIGN WIND (3 -SEC GUST): 115 MPH 10.7.2. FULLY ENCLOSED BUILDING, NO OVERHANGS 10.7.3. INFERNAL PRESSURE COEFFICIENT -0.18/+0.18 10.8. SNOW LOADS; 10.8.1. GROUND: 35 PSF 10.8.2. EXPOSURE FACTOR: 0.8 10.8.3. IMPORTANCE FACTOR: 1.1 10.8.4. THERMAL FACTOR: 1.1 10.9. SEISMIC LOADS

- 10.9.1. CLASS A
- 10.9.2. REF ASCE 7 SECTION 11.7_REF ASCE 7 SECTION 1.4.2
- 10.10. CONSTRUCTION TYPE: 2-B NON-COMBUSTIBLE WITHOUT AUTOMATIC SPRINKLERS 10.11. OCCUPANT LOAD: 0 PERSONS
- 10.12. THIS BUILDING IS NOT INTENDED FOR ADA ACCESSIBILITY PER MBC EXCEPTION 1103.2.5 "UTILITY BUILDINGS"



ORIGINAL DRAWING #

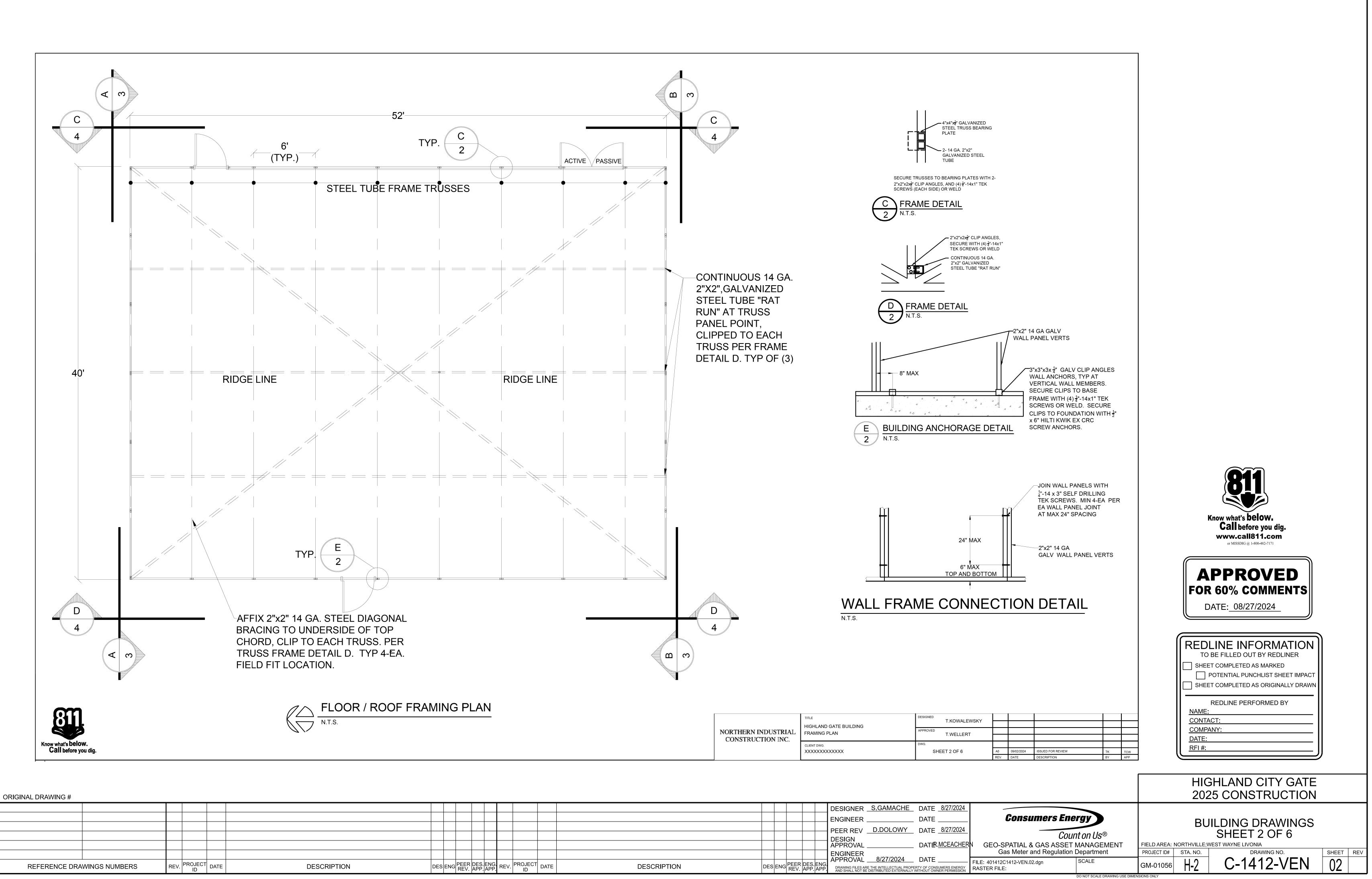
DES ENG REV. REV. PROJECT DATE REFERENCE DRAWINGS NUMBERS DESCRIPTION

NORTHERN INDUSTRIAL CONSTRUCTION INC.	TITLE HIGHLAND CITY GATE NOTES	DESIGNED	T.KC
construction inc.	CLIENT DWG.	DWG.	SHEET 1 (

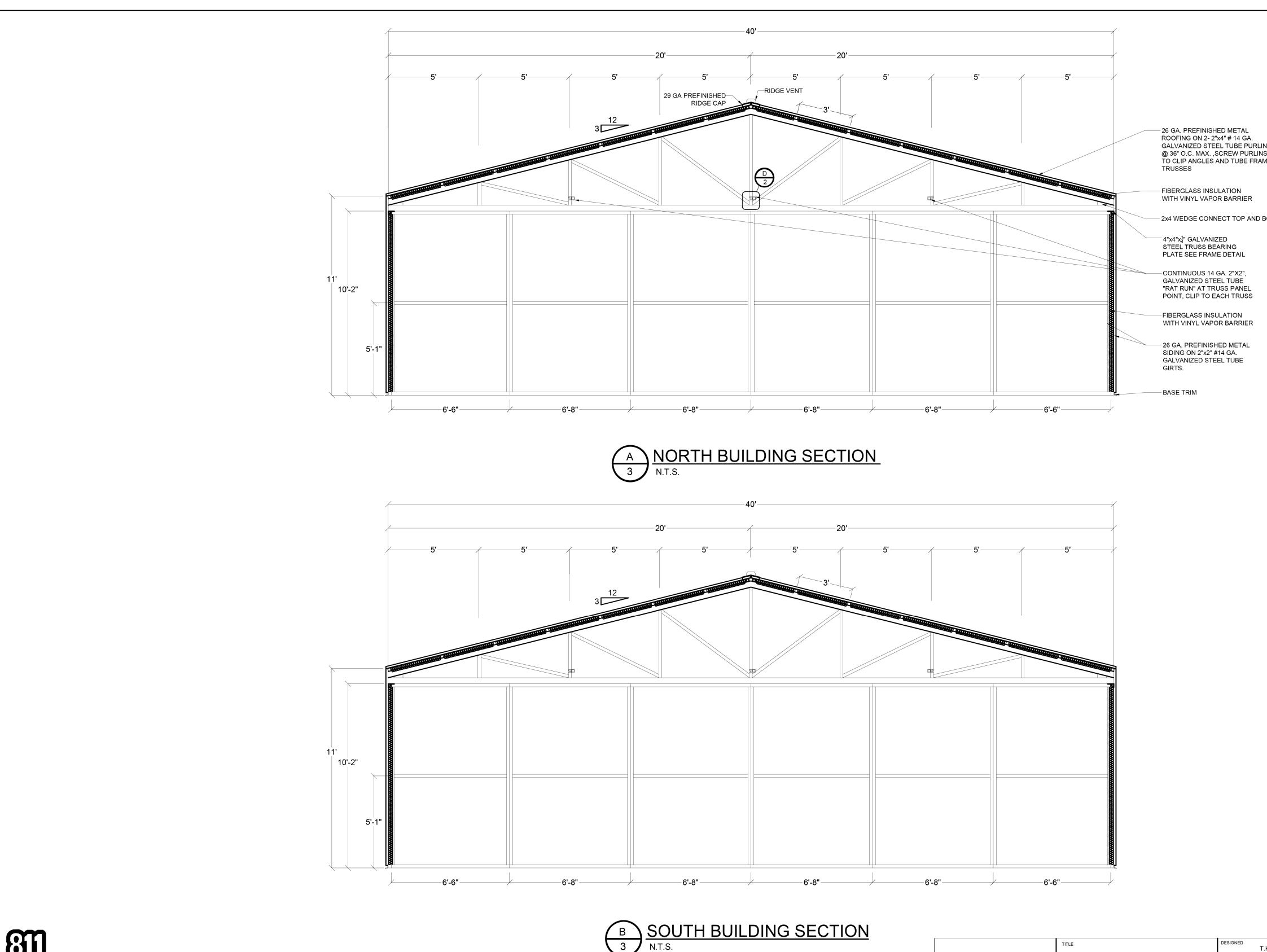
R [/. /	DES. APP.	ENG. APP.	REV.	PROJECT ID	DATE	DESCRIPTION	DES	R DES	6.ENG. P. APP.	ENGINEER APPROVAL DRAWING FILES AR AND SHALL NOT BE	E THE INTELLECTUAL PROPE	DATE	IERS EN
											R.MCEACHERN	DATE _8	3/27/2
										PEER REV	D.DOLOWY	DATE 8	217012
										ENGINEER		DATE	
										DESIGNER	S.GAMACHE	DATE _8	3/27/2

LATTICE

CONNECT	ION TYPE	WELD TYPE			JOINT DETAIL				
HSS TO H	SS LONGITUDINAL	FLARE V S	STITC	:H 6-24	4		Ļ		
HSS TO H	SS PERPENDICULAR	³ € FILLET :	2-SID	ES		Ĩ	4		
HSS TO H	SS DIAGONAL TRUSS	FLARE BE	EVEL 2	2-SIDES			ł		
ANGLE TC) HSS	3 16 FILLET	WELC) 2-SIDES	<u> </u>	_	ł		
CONNECT	ION WEDGE TRUSS	ਜ ਿ FILLET ' AROUND	WELD) ALL			ł		
CONNECT	ION BEARING PLATE	3/16 FILLET :	2-SID	ES		4	4		
HSS TO H	SS BUTT JOINT	SQUARE (} ROOT O			2		741		
									<image/> <text><text><text><text></text></text></text></text>
	DESIGNED T.KOWAL								NAME: CONTACT: COMPANY: DATE:
	DWG. SHEET 1 OF 6		A0 REV.	09/02/2024 DATE	ISSUED FOR REVIEW DESCRIPTION		ТК BY	TCW APP	
							-		HIGHLAND CITY GATE 2025 CONSTRUCTION
ACHE_	DATE <u>8/27/2024</u>	-		Ca					
OWY	DATE DATE <u>8/27/2024</u>	-		บบเเริ่น	mers Ene				BUILDING DRAWINGS
	DATE <u>8/27/2024</u>				GAS ASSET		EMEN	т	SHEET 1 OF 6 FIELD AREA: NORTHVILLE;WEST WAYNE LIVONIA
TUAL PROPE	DATE	- FILE: 4014 RASTER F	412C ²	1412-VEN.0 ²	Ind Regulation	Departme SCALE	ent		PROJECT ID#STA. NO.DRAWING NO.SHEETREVGM-01056H-2C-1412-VEN01



												DESIGNER _	S.GAMACHE	DATE <u>8/27/2</u>
												ENGINEER _		DATE
												PEER REV	D.DOLOWY	DATE <u>8/27/2</u>
												DESIGN APPROVAL _		DATER. <u>MCEA</u>
												ENGINEER APPROVAL _	8/27/2024	DATE
R /.	DES. APP	ENG. APP.	REV.	PROJECT ID	DATE	DESCRIPTION	DES	ENG	PEER REV.	DES. APP.	ENG APP	DRAWING FILES ARE AND SHALL NOT BE [THE INTELLECTUAL PROPE DISTRIBUTED EXTERNALLY	ERTY OF CONSUMERS EI WITHOUT OWNER PERM



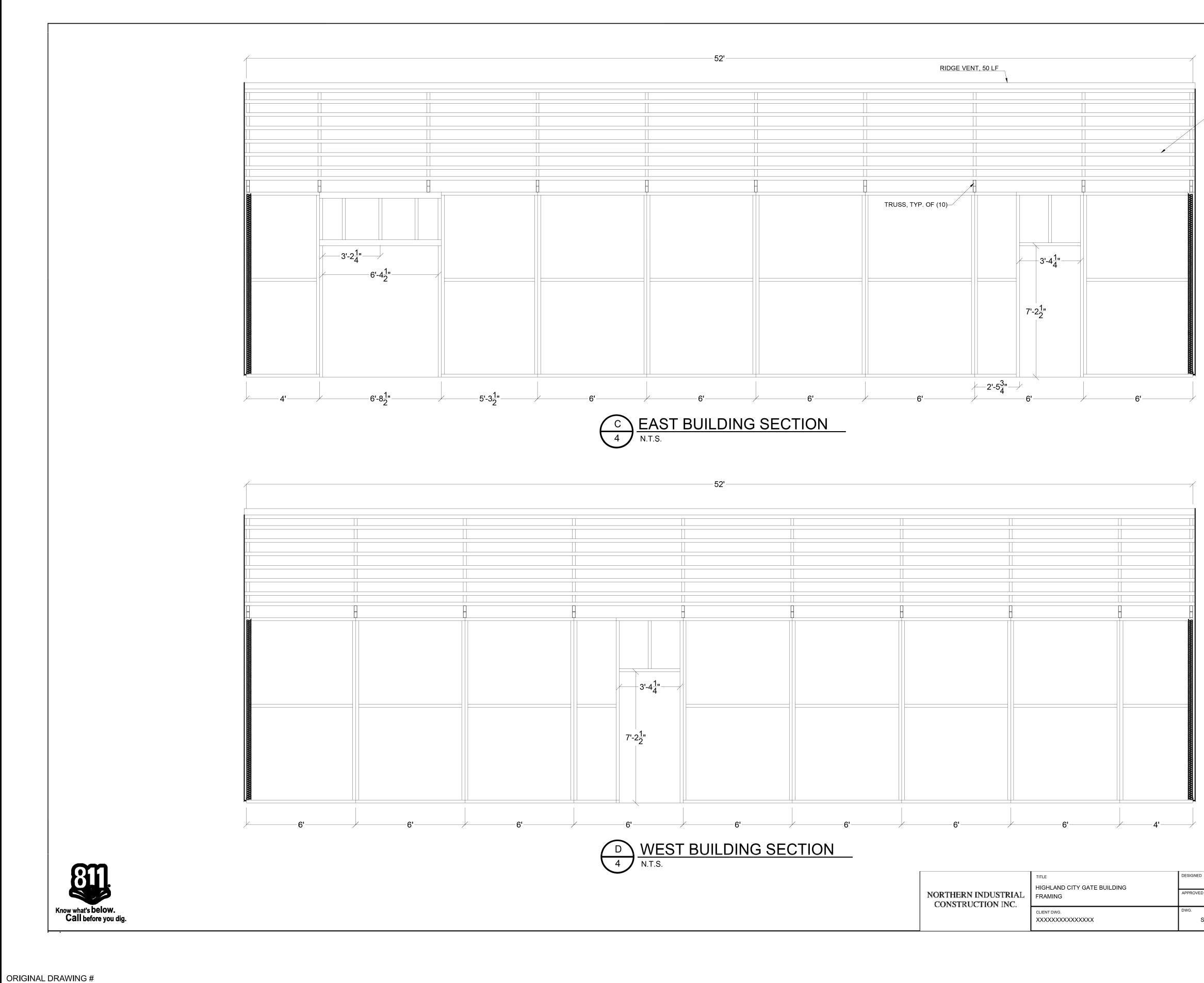


ORIGINAL DRAWING #

Ċ.									
N									
NING									
DRAV									
ZD D									
IDAF									
STAN	REFERENCE DRA	WINGS NUMBERS	REV.	PROJECT ID	DATE	DESCRIPTION	DES	ENG	PEER REV.

	TITLE HIGHLAND CITY GATE BUILDING	DESIGNED	T.KC
NORTHERN INDUSTRIAL CONSTRUCTION INC.	FRAMING	APPROVED	T.WE
	CLIENT DWG.	dwg. SHE	ET 3 O

40 5 20 5 20 5 20 5 5 20 5 5 5 5 5 5 5 5 5 5 5 5 5	5 29 OA PRETNISHED NETWO ROCHNIS UN 2 XW # 14 GA OA MARKET BETTE TIL UTE FIRME 30 OL P MARKE AND TUBE FRAME THERES 40 MEDIC TO PARTIE 40 MEDIC TOP AND BO TOM CHORGE 41 MEDIC AND THE FRAME THERE SAME THE TABLE DATA CONTINUOUS LEGATION 41 MEDIC CONTINUES LEGATION 41 M	
		Know what's below. Call before you dig. www.call811.com
		OF MISSDIG @ 1-800-482-7171 APPROVED FOR 60% COMMENTS DATE: 08/27/2024
<u>6'-8"</u> <u>6'-8"</u> <u>6'-8"</u>	6'-6"	REDLINE INFORMATION TO BE FILLED OUT BY REDLINER SHEET COMPLETED AS MARKED POTENTIAL PUNCHLIST SHEET IMPACT
B 3 N.T.S. NORTHERN IN CONSTRUCT	TITLE DESIGNED T.KOWALEWSKY Image: Comparison of the second of the secon	SHEET COMPLETED AS ORIGINALLY DRAWN REDLINE PERFORMED BY <u>NAME:</u> <u>CONTACT:</u> <u>COMPANY:</u> <u>DATE:</u> <u>RFI #:</u>
	DESIGNER <u>S.GAMACHE</u> DATE <u>8/27/2024</u>	HIGHLAND CITY GATE 2025 CONSTRUCTION
	Image: Second state in the second s	BUILDING DRAWINGS BUILDING DRAWINGS SHEET 3 OF 6 FIELD AREA: NORTHVILLE;WEST WAYNE LIVONIA PROJECT ID# STA. NO. DRAWING NO. SHEET REV
DES.ENG APP.APP.REV. PROJECT ID DATE DESCRIPTION		GM-01056 H-2 C-1412-VEN 03

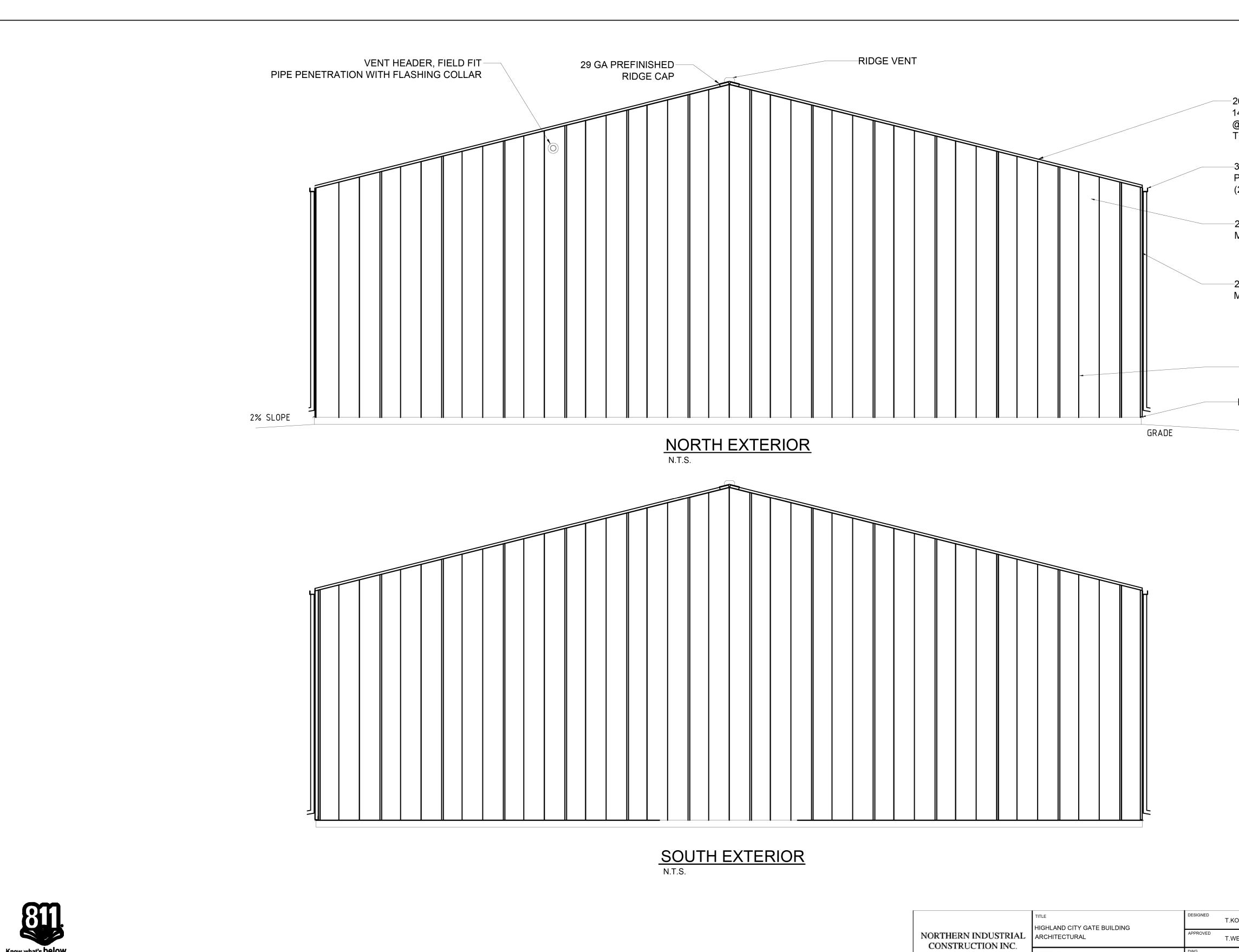


REV. PROJECT ID DATE DESCRIPTION REFERENCE DRAWINGS NUMBERS

NORTHERN INDUSTRIAL CONSTRUCTION INC.	TITLE HIGHLAND CITY GATE BUILDING FRAMING	DESIGNED T.KC
	CLIENT DWG.	DWG. SHEET 4 (

												DESIGNER _	S.GAMACHE	DATE _ 8/27/2
												ENGINEER		DATE
												PEER REV	D.DOLOWY	DATE <u>8/27/</u> 2
												-		
												APPROVAL I	R.MCEACHERN	DATE <u>8/27/2</u>
												ENGINEER		D 4 7 5
			S.ENG	REV	PROJECT	DATE	DESCRIPTION	DES	ENG REV		S.ENG			
	RE	V. APF	P. APP		ID		Decorar non		REV.	. API	P. APP.	AND SHALL NOT BE	E THE INTELLECTUAL PROPER DISTRIBUTED EXTERNALLY V	VITHOUT OWNER PERM

	GA PERLIN (16)	١,										
								81				
								Know what's be Call before	low.			
								or MISSDIG @ 1-8	11.com			
								PPRC R 60% CO		s		
								DATE: 08/27/	/2024			
							TO	LINE INFO BE FILLED OUT I	BY REDLINER MARKED			
								POTENTIAL PUNCH T COMPLETED AS REDLINE PERFC	ORIGINALLY DR			
T.KOWALE							<u>NAME:</u> <u>CONTA</u> <u>COMPA</u> DATE:	NCT:		=		
T 4 OF 6		A0 REV.	09/02/2024 DATE	ISSUED FOR REVIEW DESCRIPTION	TK TCW BY APP		<u></u>					
								GHLAND (25 CONS ⁻				
27/2024 27/2024			Consu	mers Ene	R		BU	ULDING D SHEET		GS		
27/2024 RS ENERGY TERMISSION		Ga:		GAS ASSET nd Regulation	MENT	FIELD AREA: N PROJECT ID# GM-01056	NORTHVILLE;V STA. NO. H-2	WEST WAYNE LIVON		N	sheet 04	REV

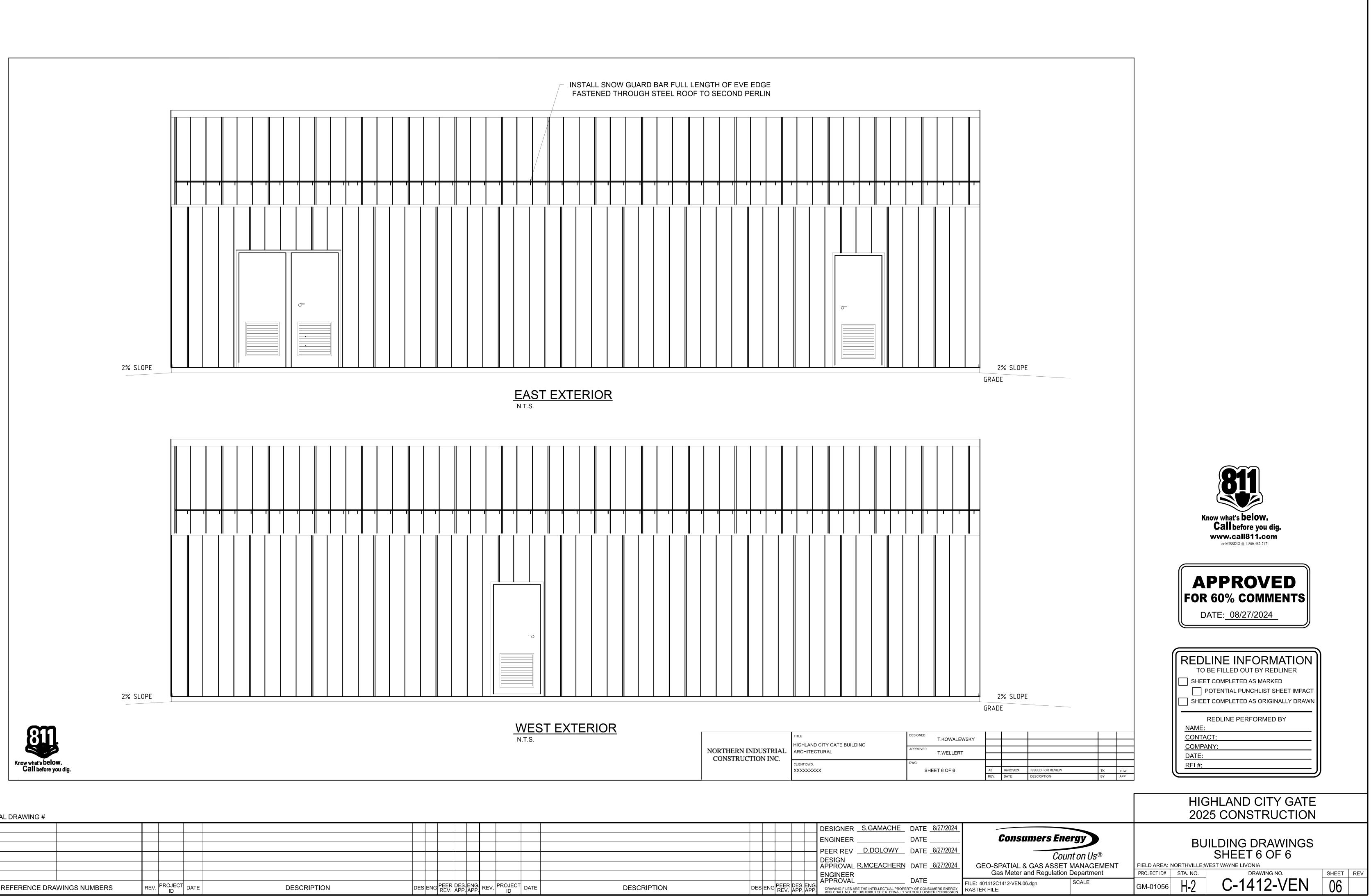




ORIGINAL DRAWING #

____ DES ENG REV. REV. PROJECT ID DATE REFERENCE DRAWINGS NUMBERS DESCRIPTION

9 GA PRE R		SHED E CAP		RIDGE VE	NT				
							14 GA @ 36' TO CI 3"X5" PER I (2)-E/ 26 G/ MET/ 26 G/ MET/ 29 G 24"x	A. PREFINISHED METAL ROOFING ON 2"x2" GALVANIZED STEEL TUBE PURLINS O.C. MAX., SCREW PURLINS IP ANGLES AND TUBE FRAME TRUSSES GUTTERS & DOWNSPOUTS MFG. STANDARD DETAIL A TYP. BOTH SIDES. A PREFINISHED A PREFINISHED A CORNER TRIM FA LOUVERS WITH INSECT SCREENS 24" E TRIM	
	I	NORTH	<u>HEXTERIOR</u>			GRADE		_	
									<image/> <text><text><text><text></text></text></text></text>
		SOUTH	EXTERIOR						TO BE FILLED OUT BY REDLINER SHEET COMPLETED AS MARKED POTENTIAL PUNCHLIST SHEET IMPACT SHEET COMPLETED AS ORIGINALLY DRAWN
					NORTHERN INDUSTRIAL CONSTRUCTION INC.	TITLE HIGHLAND CITY GATE BUILDING ARCHITECTURAL CLIENT DWG. XXXXXXXXXXX	DESIGNED APPROVED T.WELLERT DWG. SHEET 5 OF 6		HIGHLAND CITY GATE
DES.ENG. R	EV. P	ROJECT DATE		DESCRIPTION	DES ENG PEER REV	DESIGNER S.GAMACHE ENGINEER ENGINEER PEER REV D.DOLOWY DESIGN APPROVAL R DES.ENG PEER REV D.DOLOWY DESIGN APPROVAL R DES.ENG PEER REV D.DOLOWY DESIGN APPROVAL PRAVING FILES ARE THE INTELLECTUAL P	DATE DATE <u>8/27/2024</u> DATE <u>8/27/2024</u> DATE	Consumers Energy Count on Us® GEO-SPATIAL & GAS ASSET MANAGEMENT Gas Meter and Regulation Department FILE: 401412C1412-VEN.05.dgn RASTER FILE:	2025 CONSTRUCTION BUILDING DRAWINGS BUILDING DRAWINGS SHEET 5 OF 6 FIELD AREA: NORTHVILLE;WEST WAYNE LIVONIA PROJECT ID# STA. NO. DRAWING NO. SHEET F GM-01056 H-2 C-1412-VEN 05



ORIGINAL DRAWING #

DES ENG PEER I REV. PROJECT DATE REFERENCE DRAWINGS NUMBERS

Ι																
			D													

<u>WEST EXTERIOR</u>	[1
N.T.S.		TITLE HIGHLAND CITY GATE BUILDING	DESIGNED T.KC
	NTO DEPENDENT DE LO TROPPETER	ARCHITECTURAL	APPROVED T.WE
	construction inc.	CLIENT DWG. XXXXXXXXX	DWG. SHEET 6 C

									DESIGNER _	S.GAMACHE	DATE8/27
									ENGINEER _		DATE
									PFFR RFV	D.DOLOWY	DATE _ 8/27
									DESIGN		
									APPROVAL R	.MCEACHERN	DATE <u>8/27</u>
											DATE
REV	PROJECT	DATE	DESCRIPTION	DES	ENG	PEER REV.	DES. APP.	ENG APP		THE INTELLECTUAL PROPER	
	G. REV	G. REV. PROJECT	G. REV. PROJECT DATE	Grame PROJECT Image: Description	Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state Image: Second state	Image: Second state sta	Image: Second state sta	Image: Second state of the second s		Image: Strain of the second strain of the	Image: Second state in the second s