

Horace Planning & Zoning Commission Meeting Agenda

Tuesday, April 12, 2022 – 6:00 pm Fire Hall Event Center – 413 Main Street, Horace, North Dakota

- 1. Declare Quorum
- 2. Regular Agenda
- 3. Approve the March 8, 2022, Planning & Zoning Commission Meeting Minutes
- 4. Approve the March 22, 2022, Planning & Zoning Commission Meeting Minutes
- 5. Terra Gardens PUD Agreement Amendment | Lukas Croaker, City Attorney i. Discussion & Action
- 6. Cub Creek Second Addition Rezone & Plat | Brent Moore, Interstate Engineering
 - i. Public Hearing
 - ii. Discussion & Action
- 7. 6851 Sunnyside Dr. Variance | Brent Moore, Interstate Engineering
 - i. Public Hearing
 - ii. Discussion & Action
- 9748 Industrial Drive Design Review | Brenton Holper, City Administrator

 Discussion & Action
- 9. 9754 Industrial Drive Design Review | Brenton Holper, City Administrator i. Discussion & Action
- 10. Lakeview Heights Apartments Preliminary PUD Discussion | Jace Hellman, Community Development Director
 - i. Discussion & Action
- 11. Zoning Ordinance | Giffels Webster and City Staff i. Update & Discussion
- 12. Adjournment



HORACE PLANNING and ZONING COMMISSION MEETING MINUTES

March 8, 2022 | 6 p.m.

Horace Fire Hall Event Center | 413 Main Street, Horace ND 58047

Present: Russell Sahr, Amy Beaton, and Julie Hochhalter

Chair Sahr called the meeting to order at 6:00 p.m.

Agenda Item 1: Declare Quorum

Agenda Item 2: Regular Agenda

Commissioner Hochhalter motioned to approve. Seconded by Commissioner Sahr. All in favor, none opposed. Motion carried.

Agenda Item 3: Approve the February 8, 2022 Planning and Zoning Commission Meeting Minutes

A motion was made to remove the reference to Agenda Item 10.

Commissioner Sahr motioned to approve the minutes from February 8, 2022. Seconded by Commissioner Hochhalter. All in favor, none opposed. Motion carried.

Agenda Item 4: Southdale Farms Fifth Addition | Brenton Holper, City Administrator

Brenton Holper, City Administrator, presented information regarding the plat for Southdale Farms Fifth Addition. The item was tabled at the last Planning Commission meeting in order for the developer to increase the lot size on the lots adjacent to previous additions of Southdale Farms. A public hearing was held from 6:05 p.m. to 6:06 p.m.

Commissioner Hochhalter motioned to approve. Seconded by Commissioner Beaton. All in favor, none opposed. Motion carried.

Agenda Item 5: 7884 and 7880 Cottonwood Blvd | Lukas Croaker, City Attorney

Lukas Croaker, City Attorney, presented the variance application for Lot 24, in which the house was built over the property line. The variance request was due to non-compliant side yard setbacks. A public hearing was held from 6:10 p.m. to 6:15 p.m.

Commissioner Beaton motioned to deny. Seconded by Commissioner Hochhalter. All in favor, none opposed. Motion carried.

Agenda Item 6: Altenburg Acres Second Addition | Brent Moore, Interstate Engineering

Brent Moore, Interstate Engineering, presented information regarding the Altenburg Acres Second Addition plat. A public hearing was held from 6:33 p.m. to 6:58 p.m. Concerns from residents during the public hearing were in regards to increased traffic on 64th Ave. and near the Greyhawk subdivision, vacation of right of way on the eastern boundary of the proposed plat, and costs of special assessments that may impact the Greyhawk subdivision. Staff brought forth concerns for the planning commission to consider regarding if the streets in the subdivision can be done privately with easements and vacation of right of way, consistency with the future land use map which would require an amendment, and for the rezone to be brought forth at the same time as the plat in early April.

Commissioner Sahr motioned to table Agenda Item 6. Seconded by Commissioner Hochhalter. All in favor, none opposed. Motion carried.

Agenda Item 7: Cub Creek Second Addition | Brent Moore, Interstate Engineering

Brent Moore, Interstate Engineering, presented information regarding the Cub Creek Second Addition plat. A public hearing was held from 7:17 p.m. to 7:18 p.m. Concerns were brought forth in regards to



block length needing to be revisited and for the rezone to be brought forth at the same time as the plat.

Commissioner Sahr motioned to table the item. Seconded by Commissioner Hochhalter. All in favor, none opposed. Motion carried.

Agenda Item 8: River's Edge Second Addition | Brent Moore, Interstate Engineering

Brent Moore, Interstate Engineering, presented information regarding the Cub Creek Second Addition plat. A public hearing was held from 7:26 p.m. to 8:03 p.m. Concerns were brought forth in regards to traffic flow and control, the need for the collector road to be installed and for construction traffic to take the collector road, drainage, and rear-facing lots. In addition, staff brought forth the need for the plat to be considered at the same time the rezone would be brought forth in early April.

Commissioner Beaton motioned to table the item. Seconded by Commissioner Hochhalter. All in favor, none opposed. Motion carried.

Agenda Item 9: Design Review - 512 Investments | Brenton Holper, City Administrator

Brenton Holper, City Administrator, presented information regarding 9800 Industrial Drive.

Commissioner Hochhalter motioned to approve. Seconded by Commissioner Sahr. All in favor, none opposed. Motion carried.

Agenda Item 10: Adjournment at 8:13 p.m.

The next Planning and Zoning Commission meeting is scheduled for March 22, 2022 at 6 p.m.



HORACE PLANNING and ZONING COMMISSION MEETING MINUTES

March 22, 2022 | 6 p.m. Horace Fire Hall Event Center | 413 Main Street, Horace ND 58047

Present: Russell Sahr, Julie Hochhalter, Doug Wendel

Not Present: Amy Beaton

Chair Sahr called the meeting to order at 6:02 p.m.

Agenda Item 1: Declare Quorum

Agenda Item 2: Regular Agenda

Commissioner Hochhalter motioned to approve. Seconded by Commissioner Wendel. All in favor, none opposed. Motion carried.

Agenda Item 3: Approve the March 22, 2022 Planning and Zoning Commission Meeting Minutes

A motion was made to amend Agenda Items 7 and 8 to reflect that Commissioner Hochhalter seconded those items.

Commissioner Wendel motioned to approve the amended minutes from March 22, 2022. Seconded by Commissioner Hochhalter. All in favor, none opposed. Motion carried.

Agenda Item 4: Zoning Ordinance | Rod Arroyo, Giffels Webster

Rod Arroyo of Giffels Webster provided information regarding the schedule of the Land Use Code.

Agenda Item 5: Terra Gardens PUD Amendment | Lukas Croaker, City Attorney

Lukas Croaker, City Attorney, presented a summary of requested changes to the Terra Gardens 2nd Addition PUD Agreement (timeline to complete the development and building footprint for three buildings).

Commissioner Hochhalter motioned to table the item. Seconded by Commissioner Wendel. All in favor, none opposed. Motion carried.

Agenda Item 6: Adjournment at 6:23 p.m.

The next Planning and Zoning Commission meeting is scheduled for April 12, 2022 at 6 p.m.

TERRA GARDENS PLANNED UNIT DEVELOPMENT AGREEMENT AMENDMENT NO. 1

THIS AMENDMENT NO. 1 TO THE TERRA GARDENS PUD AGREEMENT (this "Amendment") is made and entered into this _____ day of _____, 2022 (the "Effective Date"), by and between HS Investments, LLC, a North Dakota limited liability company (the "Developer"), and the City of Horace, a North Dakota political subdivision (the "City").

RECITALS

WHEREAS, on October 1, 2019, the parties entered into the Terra Gardens Planned Unit Development Agreement (the "Agreement") whereby the Developer agreed to develop property into a planned unit development and the City agreed that the proposal was unique to the site, the area, and the City of Horace, and meets the standards set forth under the City's ordinances and the Comprehensive Plan; and

WHEREAS, the Developer is the fee simple title holder of the property situated in the City of Horace, Cass County, North Dakota, as described in the Agreement; and

WHEREAS, the Developer provided a proposed development plan consisting of the Terra Gardens PUD Site Plan (Sheet C-2), Terra Gardens PUD Roadway Improvements (Sheet C-3), Terra Gardens PUD Typical Section Plan (Sheet C-4), Terra Gardens PUD Utility and Drainage Improvements (Sheet C-5), and Terra Gardens PUD Utility and Drainage Improvements (Sheet C-5), and Terra Gardens PUD Utility and Drainage Improvements (Sheet C-6) (collectively, the "Development Plan"), attached as **Exhibit A**; and

WHEREAS, the Developer desires to amend the site plan by changing the building footprint of three (3) duplexes on the west side of the property; and

WHEREAS, under Section 13 of the Agreement, "[a]ny change or amendment to this Agreement must be made in writing signed by the party or parties to be bound, or a duly authorized representative thereof, and specifying with particularity the extent and nature of such amendment, modification, or waiver;" and

WHEREAS, in addition to the site plan amendment, Section 17.5.14(8)(i) of the Revised Ordinances of 2003 of the City of Horace provides, "[i]f the developer fails to develop the PUD District as planned, the PUD District automatically terminates two (2) years after the approval of the PUD District by the City Council, unless [it is] renewed for another two (2) years by affirmative vote of the City Council;" and

WHEREAS, due to the amendment of the site plan and because the site plan has not been developed within two (2) years after approval of the Agreement, the Agreement requires that the parties enter into this Amendment to renew the term for an additional two (2) years.

NOW, THEREFORE, in consideration of the mutual promises and agreements contained herein, and other good and valuable consideration, the parties agree as follows:

AMENDMENT

- 1. <u>Site Plan</u>. The site plan is hereby amended in accordance with the TERRA GARDENS PUD REVISED SITE PLAN, attached as <u>Exhibit B</u>.
- 2. <u>Renewal Term</u>. The term of the Agreement is hereby renewed for an additional two (2) years commencing on the Effective Date of this Amendment.
- 3. <u>Change or Amendment</u>. There must, at all times, be a strict adherence to the provisions of this Amendment and the Agreement. Any change or amendment to this Amendment or the Agreement must be made in writing signed by the party or parties to be bound, or a duly authorized representative thereof, and specifying with particularity the extent and nature of such amendment, modification, or waiver.
- 4. <u>Entire Agreement</u>. This Amendment, along with the Agreement, constitute the entire and complete agreement between the parties and supersedes any prior oral or written agreements between the parties with respect to the PUD property.
- 5. <u>Severability</u>. If any court of competent jurisdiction finds any provision or part of this Amendment is invalid, illegal, or unenforceable, that provision or part will be deemed severed from this Amendment, and all remaining provisions and parts of this Amendment will remain binding and enforceable; however, the parties agree that this Amendment will be reformed to replace any invalid, illegal, or unenforceable provision or portion of this Amendment with an alternative provision that is enforceable and bears as close resemblance as possible to any provision determined to be invalid, illegal, or unenforceable.
- 6. <u>**Representation.**</u> The parties, having been represented by counsel or having waived the right to counsel, have carefully read and understand the contents of this Amendment, and agree they have not been influenced by any representations or statements made by any other parties.
- 7. <u>Governing Law</u>. This Amendment has been made and entered into under the laws of the State of North Dakota, and said laws will control its interpretation.

- 8. <u>Rules of Construction</u>. The parties acknowledge that they have had the opportunity to review this Amendment, and that they have an equal bargaining position in this transaction. No rule of construction that would cause any ambiguity in any provision to be construed against the drafter of this document will be operative against any party to this Amendment.
- 9. <u>Counterparts</u>. This Amendment may be signed in counterparts, meaning that the Amendment is valid if signed by both parties even if the signatures of the parties appear on separate copies of the same agreement rather than on a single document.
- 10. <u>Recording</u>. The parties agree that this Amendment will be recorded on the PUD property at the Cass County Recorder's office and will run with the land and be binding upon any successors or assigns.
- 11. <u>Effective Date</u>. This Amendment becomes effective upon the date of the last signature appearing below.

IN WITNESS WHEREOF, the parties have signed this Amendment on the dates written below.

CITY OF HORACE

Date:, 2022	Kory Peterson, Mayor
	ATTEST:
Date:, 2022	Brenton Holper, City Auditor
STATE OF NORTH DAKOTA)	
COUNTY OF CASS)	

On this _____ day of ______, 2022, before me, a Notary Public, in and for said County and State, personally appeared Kory Peterson and Brenton Holper, known to me to be the Mayor and City Auditor, respectively, of the City of Horace and who executed the within and foregoing instrument, and acknowledged to me that they executed the same on behalf of the City of Horace.

Notary Public, Cass County, ND

(SEAL)

HS Investments, LLC

Date:	, 2022	By:
		Its:
STATE OF NORTH D	AKOTA)	
COUNTY OF CASS)	
On this da County and State, perso of, to me that s/he executed	ay of onally appeared and who executed the same on behal:	, 2022, before me, a Notary Public, in and for said , known to me to be the, the within and foregoing instrument, and acknowledged f of

Notary Public, Cass County, ND

(SEAL)

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EXHIBIT A

TERRA GARDENS PUD DEVELOPMENT PLAN

(5 pages attached)











EXHIBIT B

TERRA GARDENS PUD REVISED SITE PLAN

(1 page attached)





MBN ENGINEERING
MECHANICAL * ELECTRICAL * CIVIL 503 7TH ST. N , SUITE 200 FARGO, ND 58102 PHONE: 701.478.6336 FAX: 701.478.6340
No. Description Date 1
BROOKSTONE PROPERTY TERRA GARDENS HOUSING
HORACE, NORTH DAKOTA
PE-6864 MORTH DAKOTA
MBN JOB #: <u>19-162</u> DATE: <u>6-15-20</u>





City of Horace City Council Staff Report							
Entitlements Requested:	Subdivision	Zone Change	Design Review	Conditional Use	Variance	Lot Spilt	Other
Title:	Cub Creek Second Addition		C	Date:	01/18/202	22	
Parcel Number:	15330001630000; 15330001620000; and 15000001640030		Staff	Contact:	Brent Moo Hellman	ore, Jace	
Owner(s)/Applicant:	Don Dabbert		Applica	nt Contact	don@dabl	berthome	es.com

Purpose

The applicant intends to complete a subdivision of a total of 237 residential lots for Cub Creek Second Addition. The applicant is requesting rezoning to R-6, R-4 and PF.

Statement of Fact	
Future Land Use Map	To the West of Drain 27, the future land use map designates the area as
Classification	Compact Development. To the East of Drain 27, the land is designated as
	Suburban in the Future Land Use Map. The strip of land surrounding
	Drain 27 is designated as Greenway.
Existing Land Use	Parcel 15330001620000 is currently part of Cub Creek First Addition as a
	PF Public Facilities space. The rest of Cub Creek Second Addition is
	Agricultural and not developed.
Current Zoning	Parcel 15330001620000 is currently designated as PF Public Facilities and
	the rest of Cub Creek Second Addition is A Agricultural.
Proposed Zoning	R-6, R-4, and PF.
Area Size	158.46 acres
Adjacent Zoning Districts	North: A Agricultural; East: PF Public Facilities and A Agricultural; South:
	A Agricultural; West: R-6 High Density Residential and A Agricultural
Adjacent Street(s)	North: 76 th Ave South; East: Veterans Blvd; South: 88 th Ave S; West: 63 rd
	St S; Within Cub Creek 2 nd Add: 83 rd Ave South moving East and West
Adjacent Bike/Pedestrian	Drain No 27 running North and South through Cub Creek 1 st and 2 nd
Facilities	Addition.
Adjacent Parks	North: None; East: Block 6, Lot 48 of Cub Creek 1 st Addition; South: None;
	West: Cub Creek 1 st Addition
Land Dedication Requirements	See Parks District Letter

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P.O. Box 667 • 1999 Fourth Street N, Suite A • Wahpeton, ND 58074-0667 • P: 701-642-5521 • F: 701-642-5215 • <u>www.interstateeng.com</u>

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Consistency with Comprehensive Plan and Future Land Use Map

The proposed application is consistent with the Comprehensive Plan. To the West of Drain 27, the future land use map designates the area as Compact Development. To the East of Drain 27, the land is designated as Suburban in the Future Land Use Map. The strip of land surrounding Drain 27 is designated as Greenway. The Comprehensive Plan finds compatibility between R-6 zoning and compact development, so all R-6 zones on the west side of Drain 27 are compatible with the comprehensive plan. All R-4 zoning lots on the east side are compatible with future land use map, Suburban. The public park spaces as zoned PF before they are compatible with the comprehensive plan and Future Land Use Map.

Discussion and Observation

The project as designed complies with the Comprehensive Plan and Land Use Ordinance. One item of discussion with the applicant was providing access to Drain 27. The current plat as submitted does not include suggested access, and a condition of approval is recommended to address this issue. The City has plans for substantial park areas to the east of Drain 27. Providing future access to these community facilities will be important for residents of this planned development.

Recommendation

To accept the findings and recommendations of the staff report and approve with conditions the proposed Cub Creek Second Rezoning and Plat Application:

1. An additional pedestrian access way shall be provided between lots 21 to 22 in block 5 or somewhere near to that location.

Attachments

- 1. Rezoning Application
- 2. Rezoning Exhibit
- 3. Subdivision Application
- 4. Plat Drawing
- 5. Master Plan
- 6. Drainage Plan
- 7. Parks Letter



COMMUNITY DEVELOPMENT DEPARTMENT **215 PARK DRIVE EAST** HORACE, NORTH DAKOTA 58047 PHONE: 701.492-2972 E-MAIL: bvoigt@cityofhorace.com

ZONE CHANGE APPLICATION

APPLICATION DATE

(mo/day/year) 03/03/2022

1 **PROPERTY OWNER INFORMATION**

NAME (PRINTED): Cub Creek Development, LLC

ADDRESS: 5522 36th St S, Fargo ND 58104

PRIMARY PHONE: 701-219-1596

ALTERNATIVE PHONE: 701-205-4979

EMAIL: don@dabberthomes.com

REPRESENTATIVE INFORMATION (DEVELOPER, SURVEYOR, ENGINEER) 2

NAME (PRINTED): Don Dabbert Jr.

ADDRESS: 5522 36th St S, Fargo ND 58104

PRIMARY PHONE: 701-219-1596

ALTERNATIVE PHONE: 701-205-4979

EMAIL: don@dabberthomes.com

PROPERTY DETAILS 3

LEGAL DESCRIPTION: Cub Creek Second Addition

ADDRESS: Section 17, T-138-N, R-49-W

CURRENT ZONING: Agricultural

PROPOSED ZONING: R-6, High Density; R-4, Intermediate Density; & PF, Public Facilities (see attached)

4 BRIEF NARRATIVE DESCRIPTION OF REASON(S) FOR APPLICATION

Continued development of the Cub Creek Residential Subdivision to create more inventory to meet the demands of the current housing market.

SIGNATURE

OWN R SIG / TURE

REPRESENTATIVE SIGNATUP

DATE

March 3, 2022

March 3, 2022

DATE

ZONING CHANGE FEE SCHEDULE

ZONING CHANGE FEE—\$325.00

NOTE: A NONREFUNDA-BLE FILING FEE MUST BE ACCOMPANIED WITH THE APPLICATION AT TIME OF SUBMITTAL MADE PAYABLE TO THE CITY OF HORACE.

DATE FEE PAID:

ACKNOWLEDGEMENT: WE HEREBY ACKNOWLEDGE THAT THAT THE ABOVE INFORMATION IS TRUE AND COMPLETE TO THE BEST OF OUR KNOWLEDGE AND THAT THE PRIMARY CONTACT NAMED ABOVE WILL BE CONTACTED IF ANY QUESTIONS ARISE AND WHEN THE PLAT HAS BEEN APPROVED AND APPROPRIATE COPIES ARE READY FOR RECORDING.



FILE LOCATION: R:\Projects\22000\22230\SURVEY\DRAWINGS\22230 AREA PLAN 2.dwg



COMMUNITY DEVELOPMENT DEPARTMENT 215 PARK DRIVE EAST HORACE, NORTH DAKOTA 58047 PHONE: 701.492-2972 E-MAIL: bvoigt@cityofhorace.com www.cityofhorace.com



SUBDIVISION APPLICATION

1 PROPERTY OWNER INFORMATION

NAME (PRINTED): Don Dabbert Jr. ADDRESS: 5522 36m St S, Fargo ND 58104 PRIMARY PHONE: (701) 219 - 1596 ALTERNATIVE PHONE: (701) 205 - 4979

EMAIL: don@ dabberthomes.com

2 REPRESENTATIVE INFORMATION (DEVELOPER, SURVEYOR, ENGINEER)

NAME (PRINTED): Don Dabbert Jr. ADDRESS: 5522 36th St S, Fargo ND 58104 PRIMARY PHONE: (701)219-1596 ALTERNATIVE PHONE: (701) 205-4979 EMAIL: don @ dabberthomes.com

3 PROPOSED SUBDIVISION DETAILS

subdivision: Wb Creek Second Addition section, Township, Range: Section 17, T-138-N, R-49-W TOTAL ACRES: 158.46 NUMBER OF LOTS: 237 PROPOSED LAND USE AND ZONING: Residential, R-6





Development of Residential Subdivision

5 EXISTING OR PROPOSED INFRASTRUCTURE TYPE

ROADS:	DUBLIC	PRIVATE	PAVED	GRAVEL
WATER SUPPLY:	PUBLIC	PRIVATE	RURAL WATER	SHARED WELLS
WASTE WATER TREATMENT	M PUBLIC	ON-SITE SEPTIC		
STORM SEWER:	DITCHES	STORM SEWER	SYSTEM	
OWNERSHIP AND MAINTENA	NCE RESPONSIBILITY	Y OF THE SUBDIVISION:	PUBLIC	PRIVATE
6 HIGHWAY A	CCESS PERN	/IITTING		
DOES PROPOSED SUBD IF YES, PLEASE SECURI SUBMIT SUBDIVISION A TY ENGINEER OFFICE AT	IVISION ACCESS (E HIGHWAY ACC APPLICATION. FC 701-298-2378 OF	COUNTY HIGHWAY CESS PERMIT WITH OR MORE INFORMA R BUSTAB@CASSCO	PYES VES COUNTY ENGIN CASS COUNTY ENGIN TION, PLEASE CONTAC UNTYND.GOV.	NO NEER BEFORE YOU T THE CASS COUN-
CASS COUNTY ENGINE	ER TECHNICIAN	DATE		
				PAGE 2 OF 3

7	SUPPLEMENTAL DOCUMENTS TO BE SUBMI	TTED	
	TITLE OPINION DOCUMENT VERIFICATION OF TAXES PAID (https://proptax.casscountynd.gov PARK BOARD RECOMMENDATION LETTER (PLEASE CONTACT WA 2849 OR WFRANK@CITYOFHORACE.COM) MASTER PLAN DOCUMENT THAT COVERS ENTIRE CONTIGOUS AN THE SUBDIVIDER UP TO 80 ACRES DRAFT PLAT DOCUMENT DRAINAGE PLAN TABLE SHOWING BREAKDOWN OF LAND USE ACREAGE AND LAN MEET CITY ORDINANCE LAND DEDICATION REQUIREMENTS OF T FORMAT PREFERRED)	U/#Search) ADE FRANK AT EITHER 218-790- REA OWNED OR CONTROLLED BY ID DEDICATION PROPOSED TO ITLE IV SECTION 17.8.10 (EXCEL	
8 OWN	SIGNATURE NER SIGNATURE 01/18/22 DATE 01/18/22		
REPF	ESENTATIVE SIGNATURE DATE		
	SUBDIVISION FEE SCHEDULE	NOTE: A NONREFUNDA-	
 SUBDIVISION (1-4 LOTS): \$350.00 BASE FEE + \$20 PER LOT SUBDIVISION (5 OR MORE): \$600.00 BASE FEE + \$20 PER LOT BLE FILING FEE MUST BE ACCOMPANIED WI THE APPLICATION AT TIME OF SUBMITTAL MADE PAYABLE TO TH CITY OF HODACE 		BLE FILING FEE MUST BE ACCOMPANIED WITH THE APPLICATION AT TIME OF SUBMITTAL MADE PAYABLE TO THE	
DATE FEE PAID: 01/18/22. ACKNOWLEDGEMENT: WE HEREBY ACKNOWLEDGE THAT THAT THE ABOVE INFORMATION IS TRUE AND COMPLETE TO THE BEST OF OUR KNOWLEDGE AND THAT THE PRIMARY CONTACT NAMED ABOVE WILL BE CONTACTED IF ANY QUESTIONS ARISE AND WHEN THE PLAT HAS BEEN APPROVED			



CUB CREEK SECOND ADDITION TO THE CITY OF HORACE, A REPLAT OF LOTS 49 & 50, BLOCK 6 OF CUB CREEK FIRST ADDITION, AND A PART OF THE EAST HALF OF SECTION 17, TOWNSHIP 138 NORTH, RANGE 49 WEST, CASS COUNTY, NORTH DAKOTA

	Curv	e Table	
Curve #	Length	Radius	Delta
C1	328.71'	1053.43'	17°52'42"
C2	50.00'	1053.43'	2°43'11"
C3	111.67'	1053.43'	6°04'26"
C4	78.31'	1053.43'	4°15'33"
C5	78.41'	1053.43'	4°15'53"
C6	80.29'	1053.43'	4°22'00"
C7	11.25'	184.96'	3°29'11"
C8	21.03'	184.96'	6°30'49"
C9	80.42'	89.47'	51°30'14"
C10	111.83'	60.00'	106°47'15"
C11	97.96'	60.00'	93*32'46"
C12	11.33'	60.00'	10°49'25"
C13	52.40'	159.47'	18°49'42"
C14	77.80'	159.47'	27°57'16"
C15	13.14'	159.47'	4°43'16"
C16	44.50'	254.96'	10°00'00"
C17	58.65'	960.00'	3°30'02"
C18	57.13'	960.00'	3°24'36"
C19	15.26'	1000.00'	0*52'28"
C20	36.62'	444.47'	4°43'16"
C21	216.85'	444.47'	27°57'16"
C22	146.06'	444.47'	18°49'42"
C23	277.62'	1000.00'	15°54'23"
C24	70.01'	1000.00'	4°00'41"
C25	54.26'	890.00'	3°29'35"
C26	53.08'	890.00'	3°25'03"
C27	70.02'	900.00'	4°27'27"
C28	10.24'	900.00'	0°39'06"
C28	230.02'	900.00'	14°38'36"
C29	15.17'	105.00'	8°16'44"
C30	50.63'	105.00'	27°37'36"
C31	54.22'	105.00'	29*35'08"
C32	47.55'	60.00'	45°24'25"
C33	61.09'	60.00'	58°20'15"
C34	41.80'	60.00'	39°54'52"
C35	48.03'	60.00'	45°51'46"
C36	41.84'	60.00'	39°57'31"
C37	61.94'	60.00'	59°08'55"
C38	40.01'	35.00'	65°29'27"
C39	21.63'	442.26'	2°48'07"
C40	38.21'	442.26'	4°57'03"
C41	35.27'	442.26'	4°34'12"
C42	38.21'	442.26'	4°57'03"
C43	41.15'	442.26'	5°19'54"
C44	41.15'	442.26'	5°19'54"
C45	.32 .3.3'	442.26'	4°11'21"
- C46	35.27'	442.26'	4°34'12"
C47	38.21'	442.26'	4°57'0.3"
C48	15.59'	442.26'	2°01'11"
C49	128.27'	253.48'	28°59'39"
C50	151.01'	253.48'	34°07'58"
C51	14.92'	253.48'	3°22'22"
C52	24.31'	319.48'	 4°21'.34"
C53	38.06'	319 48'	6°49'36"
C54	38.06'	319 48'	6°49'.36"
C55	70.59'	319 48'	12:39'34"
C56	68 44'	319 48'	12°16'24"
C57	75 88'	.319 4 R'	1.3°36'30"
C58	10.85'	319 4 R'	1.56'46"
C.59	9 20'	629 18'	∩°54'∩1"
C60	75 00'	629 1 R'	6°10'36"
 	75 00'	629 18'	6°10'76"
C62	17.00	620 10'	0 +3 00 1°01'z 1"
002	47.90	029.40 245.00'	4 ZI 34
C64	23.03	245.00	0 00 00
004	00.00	245.00	140154
0 G F	E0 00'		140154
C65	60.00'	245.00	1 / * 0 1 ' = 4 "
C65 C66	60.00' 60.00'	245.00'	14°01'54"
C65 C66 C67	60.00' 60.00' 60.00'	245.00 ['] 245.00 [']	14°01'54" 14°01'54"
C65 C66 C67 C68	60.00' 60.00' 60.00' 14.67'	245.00' 245.00' 245.00'	14°01'54" 14°01'54" 3°25'48"

	Curv	e Table	
Curve #	Length	Radius	Delta
C70	65.00'	752.26'	4°57'03"
C71	60.00'	752.26'	4*34'12"
C72	55.00'	752.26'	4°11'21"
C73	70.00'	752.26'	5°19'54"
C74	70.00'	752.26'	5°19'54"
C75	65.00'	752.26'	4°57'03"
C76	60.00'	752.26'	4°34'12"
C77	65.00'	752.26'	4°57'03"
C78	51.51'	752.26'	3°55'23"
C78	318.68'	3450.00'	5°17'33"
C79	71.27'	3450.00'	1°11'01"
C80	64.00'	822.26'	4°27'.34"
C81	65.00'	822.26'	4.31'45"
 C82	65.00'	822.26'	4°31'45"
 	55.00'	822.20	3°40'57"
000	54.00'	022.20	34937
005	54.00	822.26	3 45 46
085	52.00	822.26	3'3/24
C86	54.00′	822.26′	3°45′46″
C87	60.00'	822.26'	4°10'51"
C88	65.00'	822.26'	4°31'45"
C89	55.00'	822.26'	3°49'57"
C90	39.77'	822.26'	2*46'16"
C91	21.42'	175.00'	7°00'45"
C92	65.00'	175.00'	21°16'53"
C93	75.00'	175.00'	24°33'19"
C94	41.69'	175.00'	13°39'03"
C95	15.89'	699.48'	1°18'06"
C96	55.00'	699.48'	4°30'19"
C97	54.00'	699.48'	4°25'24"
C98	52.00'	699.48'	4°15'34"
C99	54.00'	699.48'	4°25'24"
C100	58.00'	974.48'	3°24'37"
C101	59.00'	974.48'	3°28'08"
C102	59.00'	974 48'	3°28'08"
C103	59.00'	974 48'	3*28'08"
C104	65.00'	074.40	32000
C104	70.14	974.40	3 49 10
C105	30.14	974.48	140 20
0105	34.86	420.00	4 45 18
	55.00	420.00	7.30.11
C108	55.00′	420.00	7*30′11″
C109	55.00′	420.00'	7*30′11″
C110	60.00'	420.00'	8°11'06"
C111	55.00'	420.00'	7°30'11"
C112	55.00'	420.00'	7°30'11"
C113	55.26'	420.00'	7°32'21"
C114	8.16'	420.00'	1°06'47"
C115	62.59'	1097.26'	3°16'06"
C116	70.00'	1097.26'	3°39'19"
C117	55.00'	1097.26'	2°52'19"
C118	55.00'	1097.26'	2°52'19"
C119	55.00'	1097.26'	2°52'19"
C120	60.00'	1097.26'	3°07'59"
C121	60.00'	1097.26'	3°07'59"
C122	58.00'	1097.26'	3°01'43"
C123	58.00'	1097.26'	3°01'43"
C124	53.00'	1097.26'	2°46'03"
C125	65.47'	1097.26'	3°25'08"
C126	132.13'	3450.00'	2°11'40"
C127	144.69'	3450.00'	2°24'11"
C128	70.07'	3450 00'	1.09.50"
C129	150 02'	3450.00'	2°20'20"
C130	70.02	1167.00'	2 2 J 2 J Z°26'10"
01.74	/U.UU	1107.20	JZO IU Z*1 4'07"
0170	00.00	1107.26	31423
0132	66.00'	1167.26'	51423"
C133	66.00'	1167.26'	3°14'23"
C134	66.00'	1167.26'	3°14'23"
C135	87.00'	1167.26'	4°16'14"
C136	210.51'	1167.26'	10°19'58"
C137	70.80'	165.00'	24°35'07"
C138	74.48'	1317.26'	3°14'23"

Curve # C139 C140 C141 C142 C143 C144 C144 C145 C146 C147 C148 C149 C150 C151 C152 C153 C154 C155 C156 C157 C158 C159 C160 C161

	Curv	e Table	
ļ	Length	Radius	Delta
	74.48'	1317.26'	3°14'23"
	74.48'	1317.26'	3°14'23"
	74.48'	1317.26'	3°14'23"
	74.48'	1317.26'	3°14'23"
	77.15'	1317.26'	3°21'21"
	170.79'	3450.00'	2*50'11"
	16.24'	3450.00'	0°16'11"
	46.92'	440.00'	6°06'37"
	13.29'	235.00'	3°14'28"
	50.00'	235.00'	12*11'24"
	54.53'	235.00'	13°17'38"
	179.93'	350.00'	29°27'19"
	136.03'	350.00'	22*16'09"
	135.86'	560.00'	13°54'03"
	70.93'	560.00'	7°15'26"
	138.86'	1044.48'	7°37'01"
	135.80'	1044.48'	7*26'57"
	122.20'	540.00'	12*57'59"
	48.53'	560.00'	4*57'54"
	1.97'	540.00'	0°12'31"
	24.82'	560.00'	2°32'23"
	6.77 '	560.00'	0°41'33"
	51.25'	1050.00'	2*47'48"



Scale in Feet BASIS OF BEARINGS: BEARINGS ARE BASED ON THE PLAT OF CUB CREEK FIRST ADDITION

<u>LEGEND</u>

•	IRON MONUMENT FOUND
0	SET 5/8"X18" REBAR WITH YELLOW PLASTIC CAP #6153
(31,963)	LOT AREAS IN SQ. FT.
L	ARC LENGTH
R	RADIUS LENGTH
Δ	CENTRAL ANGLE
CH. BRG.	CHORD BEARING
CH.	CHORD LENGTH
P.O.B.	POINT OF BEGINNING
P.R.C.	POINT OF REVERSE CURVATURE
	PLAT BOUNDARY LINE
	LOT LINE
	— $$ EXISTING EASEMENT LINE

EXISTING LOT LINE

<u>NOTES</u>:

- 1. UTILITY EASEMENTS ARE 10' WIDE ALONG AND ADJACENT TO ALL STREET RIGHTS-OF-WAY AS SHOWN UNLESS OTHERWISE NOTED.
- 2. STORM SEWER/DRAINAGE EASEMENTS ARE 10' WIDE LYING 5' ON EACH SIDE OF SIDE PROPERTY LINES AS SHOWN UNLESS OTHERWISE NOTED.
- 3. GROUND DISTANCES ARE SHOWN AND ARE IN TERMS OF U.S. SURVEY FEET

BENCHMARK

PROJECT BENCHMARK: "FMM 09" (ALUMINUM ROD INSIDE SLEEVE) 720'± NORTH OF INTERSECTION OF CO. RD 17 AND 76TH AVE. S., ON WEST SIDE OF CO. RD 17. ELEVATION = 908.75 (NAVD 88 DATUM)

PRELIMINARY 04-07-22

SHEET 1 OF 4 PROJ. NO. 22230





Scale in Feet BASIS OF BEARINGS: BEARINGS ARE BASED ON THE PLAT OF CUB CREEK FIRST ADDITION

LEGEND

•	IRON MONUMENT FOUND
0	SET 5/8"X18" REBAR WITH YELLOW PLASTIC CAP #6153
(31,963)	LOT AREAS IN SQ. FT.
L	ARC LENGTH
R	RADIUS LENGTH
Δ	CENTRAL ANGLE
CH. BRG.	CHORD BEARING
CH.	CHORD LENGTH
P.O.B.	POINT OF BEGINNING
P.R.C.	POINT OF REVERSE CURVATURE
	PLAT BOUNDARY LINE
	LOT LINE
	EXISTING EASEMENT LINE
	EXISTING LOT LINE

<u>NOTES</u>:

- 1. UTILITY EASEMENTS ARE 10' WIDE ALONG AND ADJACENT TO ALL STREET RIGHTS-OF-WAY AS SHOWN UNLESS OTHERWISE NOTED.
- 2. STORM SEWER/DRAINAGE EASEMENTS ARE 10' WIDE LYING 5' ON EACH SIDE OF SIDE PROPERTY LINES AS SHOWN UNLESS OTHERWISE NOTED.
- 3. GROUND DISTANCES ARE SHOWN AND ARE IN TERMS OF U.S. SURVEY FEET

BENCHMARK

PROJECT BENCHMARK: "FMM 09" (ALUMINUM ROD INSIDE SLEEVE) 720'± NORTH OF INTERSECTION OF CO. RD 17 AND 76TH ÁVE. S., ON WEST SIDE OF CO. RD 17. ELEVATION = 908.75 (NAVD 88 DATUM)

PRELIMINARY 04-07-22

SHEET 2 OF 4 PROJ. NO. 22230





BASIS OF BEARINGS: BEARINGS ARE BASED ON THE PLAT OF CUB CREEK FIRST ADDITION

LEGEND

•	IRON MONUMENT FOUND			
0	SET 5/8"X18" REBAR WITH YELLOW PLASTIC CAP #6153			
(31,963)	LOT AREAS IN SQ. FT.			
L	ARC LENGTH			
R	RADIUS LENGTH			
Δ	CENTRAL ANGLE			
CH. BRG.	CHORD BEARING			
CH.	CHORD LENGTH			
P.O.B.	POINT OF BEGINNING			
P.R.C.	POINT OF REVERSE CURVATURE			
	PLAT BOUNDARY LINE			
	LOT LINE			
	EXISTING EASEMENT LINE			
	EXISTING LOT LINE			

NOTES:

- 1. UTILITY EASEMENTS ARE 10' WIDE ALONG AND ADJACENT TO ALL STREET RIGHTS-OF-WAY AS SHOWN UNLESS OTHERWISE NOTED.
- 2. STORM SEWER/DRAINAGE EASEMENTS ARE 10' WIDE LYING 5' ON EACH SIDE OF SIDE PROPERTY LINES AS SHOWN UNLESS OTHERWISE NOTED.
- 3. GROUND DISTANCES ARE SHOWN AND ARE IN TERMS OF U.S. SURVEY FEET

BENCHMARK

PROJECT BENCHMARK: "FMM 09" (ALUMINUM ROD INSIDE SLEEVE) 720'± NORTH OF INTERSECTION OF CO. RD 17 AND 76TH ÁVE. S., ON WEST SIDE OF CO. RD 17. ELEVATION = 908.75 (NAVD 88 DATUM)

PRELIMINARY 04-07-22

SHEET 3 OF 4 PROJ. NO. 22230

CUB CREEK SECOND ADDITION TO THE CITY OF HORACE, A REPLAT OF LOTS 49 & 50, BLOCK 6 OF CUB CREEK FIRST ADDITION, AND A PART OF THE EAST HALF OF SECTION 17, TOWNSHIP 138 NORTH, RANGE 49 WEST, CASS COUNTY, NORTH DAKOTA

AARON SKATTUM, BEING DULY SWORN, DEPOSES AND SAYS THAT HE IS THE REGISTERED LAND SURVEYOR WHO PREPARED AND MADE THE ATTACHED PLAT OF "CUB CREEK SECOND ADDITION" TO THE CITY OF HORACE, A PART OF THE EAST HALF OF SECTION 17, TOWNSHIP 138 NORTH, RANGE 49 WEST, CASS COUNTY, NORTH DAKOTA; THAT SAID PLAT IS A TRUE AND CORRECT REPRESENTATION OF SAID SURVEY; THAT ALL DISTANCES ARE CORRECTLY SHOWN ON SAID PLAT; THAT MONUMENTS HAVE BEEN PLACED IN THE GROUND AS INDICATED FOR THE GUIDANCE OF FUTURE SURVEYS AND THAT THE EXTERIOR BOUNDARY LINES OF SAID ADDITION ARE DESCRIBED AS FOLLOWS, TO WIT:

ALL OF LOTS 49 AND 50, BLOCK 6 OF CUB CREEK FIRST ADDITION TO THE CITY OF HORACE, CASS COUNTY, NORTH DAKOTA, ACCORDING TO THE RECORD PLAT THEREOF;

AND

THAT PART OF THE EAST HALF OF SECTION 17, TOWNSHIP 138 NORTH, RANGE 49 WEST OF THE FIFTH PRINCIPAL MERIDIAN, CASS COUNTY, NORTH DAKOTA, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF THE EAST HALF OF SAID SECTION 17: THENCE NORTH 01 DEGREE 42 MINUTES 04 SECONDS WEST ALONG THE WEST LINE OF THE EAST HALF OF SAID SECTION 17 A DISTANCE OF 2,261.01 FEET TO A POINT ON THE SOUTHERLY RIGHT-OF-WAY LINE OF 83RD AVENUE SOUTH, AS SHOWN ON SAID PLAT OF CUB CREEK FIRST ADDITION; THENCE NORTH 84 DEGREES 52 MINUTES 21 SECONDS EAST ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE A DISTANCE OF 68.93 FEET; THENCE NORTHEASTERLY 1,073.90 FEET ALONG SAID SOUTHERLY RIGHT-OF-WAY LINE, AND ALONG A TANGENTIAL CURVE, CONCAVE NORTHERLY, HAVING A RADIUS OF 3,450.00 FEET AND A CENTRAL ANGLE OF 17 DEGREES 50 MINUTES 05 SECONDS TO A POINT ON THE WESTERLY LINE OF LOT 47, BLOCK 6 OF SAID CUB CREEK FIRST ADDITION; THENCE SOUTH 06 DEGREES 53 MINUTES 18 SECONDS EAST ALONG THE WESTERLY LINE OF SAID LOT 47 A DISTANCE OF 88.70 FEET; THENCE SOUTHEASTERLY 337.05 FEET CONTINUING ALONG THE WESTERLY LINE OF SAID LOT 47, AND ALONG A TANGENTIAL CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 442.26 FEET AND A CENTRAL ANGLE OF 43 DEGREES 39 MINUTES 58 SECONDS; THENCE SOUTH 50 DEGREES 33 MINUTES 16 SECONDS EAST CONTINUING ALONG THE WESTERLY LINE OF SAID LOT 47 A DISTANCE OF 336.50 FEET; THENCE SOUTHERLY 294.20 FEET CONTINUING ALONG THE WESTERLY LINE OF SAID LOT 47, AND ALONG A TANGENTIAL CURVE, CONCAVE WESTERLY, HAVING A RADIUS OF 253.48 FEET AND A CENTRAL ANGLE OF 66 DEGREES 30 MINUTES 00 SECONDS; THENCE SOUTH 15 DEGREES 56 MINUTES 44 SECONDS WEST CONTINUING ALONG THE WESTERLY LINE OF SAID LOT 47 A DISTANCE OF 535.10 FEET; THENCE SOUTHEASTERLY 326.19 FEET CONTINUING ALONG THE WESTERLY LINE OF SAID LOT 47, AND ALONG A TANGENTIAL CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 319.48 FEET AND A CENTRAL ANGLE OF 58 DEGREES 30 MINUTES 00 SECONDS; THENCE SOUTH 42 DEGREES 33 MINUTES 16 SECONDS EAST CONTINUING ALONG THE WESTERLY LINE OF SAID LOT 47 A DISTANCE OF 266.70 FEET; THENCE SOUTHEASTERLY 191.74 FEET CONTINUING ALONG THE WESTERLY LINE OF SAID LOT 47, AND ALONG A TANGENTIAL CURVE, CONCAVE SOUTHWESTERLY, HAVING A RADIUS OF 253.48 FEET AND A CENTRAL ANGLE OF 43 DEGREES 20 MINUTES 24 SECONDS; THENCE SOUTH 00 DEGREES 47 MINUTES 08 SECONDS WEST ALONG THE WESTERLY LINE OF SAID LOT 47 A DISTANCE OF 391.36 FEET TO A POINT ON THE SOUTH LINE OF THE EAST HALF OF SAID SECTION 17; THENCE SOUTH 87 DEGREES 01 MINUTE 58 SECONDS WEST ALONG THE SOUTH LINE OF THE EAST HALF OF SAID SECTION 17 A DISTANCE OF 149.72 FEET; THENCE NORTH 02 DEGREES 58 MINUTES 02 SECONDS WEST A DISTANCE OF 606.03 FEET; THENCE SOUTH 87 DEGREES 01 MINUTE 58 SECONDS WEST A DISTANCE OF 606.38 FEET; THENCE SOUTH 02 DEGREES 58 MINUTES 02 SECONDS EAST A DISTANCE OF 606.03 FEET TO A POINT ON THE SOUTH LINE OF THE EAST HALF OF SAID SECTION 17; THENCE SOUTH 87 DEGREES 01 MINUTE 58 SECONDS WEST ALONG THE SOUTH LINE OF THE EAST HALF OF SAID SECTION 17 A DISTANCE OF 963.13 FEET TO THE POINT OF BEGINNING.

AND

THAT PART OF THE EAST HALF OF SAID SECTION 17 DESCRIBED AS FOLLOWS:

COMMENCING AT THE MOST NORTHERLY CORNER OF SAID LOT 49; THENCE SOUTH 43 DEGREES 23 MINUTES 04 SECONDS EAST ALONG THE EASTERLY LINE OF SAID LOT 49 A DISTANCE OF 150.00 FEET; THENCE SOUTHERLY 727.39 FEET CONTINUING ALONG THE EASTERLY LINE OF SAID LOT 49, AND ALONG A NON-TANGENTIAL CURVE, CONCAVE EASTERLY, HAVING A RADIUS OF 1,053.43 FEET, AND A CENTRAL ANGLE OF 39 DEGREES 33 MINUTES 46 SECONDS, THE CHORD OF SAID CURVE BEARS SOUTH 04 DEGREES 56 MINUTES 00 SECONDS EAST WITH A CHORD LENGTH OF 713.03; THENCE NORTH 72 DEGREES 49 MINUTES 43 SECONDS EAST CONTINUING ALONG THE EASTERLY LINE OF SAID LOT 49, AND THE NORTHEASTERLY EXTENSION THEREOF, A DISTANCE OF 137.76 FEET TO AN ANGLE POINT ON THE EASTERLY LINE OF LOT 48, BLOCK 6 OF SAID CUB CREEK FIRST ADDITION, THE POINT OF BEGINNING; THENCE NORTH 72 DEGREES 49 MINUTES 43 SECONDS EAST CONTINUING ALONG THE EASTERLY LINE OF SAID LOT 48, A DISTANCE OF 165.82 FEET TO AN ANGLE POINT ON THE EASTERLY LINE OF SAID LOT 48; THENCE SOUTHEASTERLY TO.06 FEET ALONG A NON-TANGENTIAL CURVE, CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 1,053.43 FEET AND A CENTRAL ANGLE OF 03 DEGREES 48 MINUTES 39 SECONDS, THE CHORD OF SAID CURVE BEARS SOUTH 14 DEGREES 58 MINUTES 35 SECONDS EAST CONTINUING ALONG THE EASTERLY LINE OF TO.05 FEET TO AN ANGLE POINT ON THE EASTERLY LINE OF SAID LOT 48; THENCE SOUTH AND A CENTRAL ANGLE OF 03 DEGREES 48 MINUTES 39 SECONDS, THE CHORD OF SAID CURVE BEARS SOUTH 14 DEGREES 58 MINUTES 35 SECONDS EAST AND CHORD LENGTH OF 70.05 FEET TO AN ANGLE POINT ON THE EASTERLY LINE OF SAID LOT 48; THENCE SOUTH 72 DEGREES 49 MINUTES 43 SECONDS WEST ALONG THE EASTERLY LINE OF SAID LOT 48 A DISTANCE OF 163.14 FEET TO AN ANGLE POINT ON THE EASTERLY LINE OF SAID LOT 48; THENCE SOUTH 72 DEGREES 49 MINUTES 43 SECONDS WEST ALONG THE EASTERLY LINE OF SAID LOT 48 A DISTANCE OF 163.14 FEET TO AN ANGLE POINT ON THE EASTERLY LINE OF SAID LOT 48; THENCE NORTH 17 DEGREES 10 MINUTES 17 SECONDS WEST CONTINUING ALONG THE EASTERLY LINE OF SAID LOT 48 A DISTANCE OF 70.00 FEET TO THE POINT OF BEGINNING.

THE ABOVE-DESCRIBED TRACTS CONTAIN A COMBINED 101.23 ACRES, AND ARE SUBJECT TO EASEMENTS, RESERVATIONS, RESTRICTIONS, AND RIGHTS-OF-WAY RECORDED AND UNRECORDED.

				EDLAND
AARON SKATTUM			/	
REGISTERED LAND SURVEYOR				S/ AARON M
REG. NO. LS-6153				LS-6153
STATE OF MINNESOTA))SS		\	NORTHDAKOTP
COUNTY OF BELTRAMI)			

ON THIS ______ DAY OF ______, 2022, BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED AARON SKATTUM, REGISTERED LAND SURVEYOR, KNOWN TO ME TO BE THE PERSON DESCRIBED IN AND WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME AS HIS FREE ACT AND DEED.

NOTARY PUBLIC, BELTRAMI COUNTY, MINNESOTA

DEDICATION WE, THE UNDERSIGNED, DO HEREBY CERTIFY THAT SECOND ADDITION TO THE CITY OF HORACE, A PAR WEST, CASS COUNTY, NORTH DAKOTA; THAT WE HA PLAT AND CERTIFICATE OF AARON SKATTUM, REGIS	HORACE CITY COUNCIL A THIS PLAT IN THE CITY OF H		
BLOCK 9; LOT 14, BLOCK 10; LOT 36, BLOCK 11; UTILITY, SANITARY SEWER, AND STORM SEWER/DRA	IS CORRECT. WE HEREBY DEDICATE LOT 1, BLOCK 1; LOT 6, BLOCK 2; LOT 1, AND LOT 17, BLOCK 11 AS PUBLIC PARKS AND ALL STREETS, AVENUES, INAGE EASEMENTS SHOWN ON SAID PLAT TO THE USE OF THE PUBLIC.	KORY PETERSON, MAYOR	
OWNER: CUB CREEK DEVELOPMENT, LLC	MORTGAGEE: BLACKRIDGE BANK	STATE OF NORTH DAKOTA	
		COUNTY OF CASS	
DONALD A. DABBERT, JR., MANAGING MEMBER MANAGER	MARC KNUTSON, VICE PRESIDENT-BUSINESS BANKING	ON THIS DAY OF STATE, PERSONALLY APPEAR THE PERSONS DESCRIBED IN EXECUTED THE SAME ON BEH	
STATE OF NORTH DAKOTA))SS			
ON THIS DAY OF COUNTY AND STATE, PERSONALLY APPEARED DONA CREEK DEVELOPMENT, LLC, THAT IS DESCRIBED IN THAT HE EXECUTED THE SAME IN THE NAME OF CU	, 2022, BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID ALD A. DABBERT, JR., KNOWN TO ME TO BE THE MANAGING MEMBER OF CUB AND WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME JB CREEK DEVELOPMENT, LLC.	NOTARY PUBLIC, CASS COUN	
		HORACE PLANNING COMI THIS PLAT IN THE CITY OF F	
NOTARY PUBLIC, CASS COUNTY, NORTH DAKOTA	-		
STATE OF NORTH DAKOTA)		RUSSELL SAHR, CHAIRMAN	
COUNTY OF CASS)		STATE OF NORTH DAKOTA	
ON THIS DAY OF COUNTY AND STATE, PERSONALLY APPEARED MARC MANAGER OF BLACKRIDGE BANK, THAT IS DESCRIBE TO ME THAT HE EXECUTED THE SAME IN THE NAME	COUNTY OF CASS ON THIS DAY OF STATE, PERSONALLY APPEAR PERSON DESCRIBED IN AND V SAME ON BEHALF OF THE HO		
NOTARY PUBLIC, CASS COUNTY, NORTH DAKOTA	-		
		NOTARY PUBLIC, CASS COUN	
CITY ENGINEER'S APPROVAL THIS PLAT IN THE CITY OF HORACE IS HEREBY APP	PROVED THIS DAY OF, 2022.	HORACE CITY ATTORNEY	
		EXECUTION THIS	
DAMON K. DeVILLERS, CITY ENGINEER	-		
STATE OF NORTH DAKOTA)		LUKAS W. CROAKER, CITY AT	
COUNTY OF RICHLAND)		STATE OF NORTH DAKOTA	
ON THIS DAY OF	, 2022, BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND RS, CITY ENGINEER, KNOWN TO ME TO BE THE PERSON DESCRIBED IN AND	COUNTY OF CASS	
WHO EXECUTED THE FOREGOING INSTRUMENT AND	ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME AS CITY ENGINEER.	ON THIS DAY OF STATE, PERSONALLY APPEAR EXECUTED THE FOREGOING IN	

NOTARY PUBLIC, RICHLAND COUNTY, NORTH DAKOTA

APPROVAL HORACE IS HEREBY APPROVED THIS _____ DAY OF _____, 2022. BRENTON HOLPER, INTERIM CITY AUDITOR)SS _, 2022, BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND RED KORY PETERSON, MAYOR, AND BRENTON HOLPER, INTERIM CITY AUDITOR, KNOWN TO ME TO BE AND WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT THEY HALF OF THE CITY OF HORACE. ITY. NORTH DAKOTA <u>MISSION APPROVAL</u> HORACE IS HEREBY APPROVED THIS _____ DAY OF _____, 2022.)SS _, 2022, BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND RED RUSSELL SAHR, CHAIRMAN OF THE HORACE PLANNING COMMISSION, KNOWN TO ME TO BE THE WHO EXECUTED THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE ORACE PLANNING COMMISSION. ITY. NORTH DAKOTA APPROVAL OPER EVIDENCE OF TITLE HAS BEEN EXAMINED BY ME AND I APPROVE THE PLAT AS TO FORM AND DAY OF _____, 2022. TORNEY)SS _, 2022, BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND RED LUKAS W. CROAKER, CITY ATTORNEY, KNOWN TO ME TO BE THE PERSON DESCRIBED IN AND WHO INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME AS THE CITY ATTORNEY. NOTARY PUBLIC, CASS COUNTY, NORTH DAKOTA

PRELIMINARY 04-07-22







FILE LOCATION: R:\Projects\22000\22200\22230\CIVIL\PRESENTATION\Prelim Infrastructure\22230-PRELIM INFRASTRUCTURE.dwg



FILE LOCATION: R:\Projects\22000\22200\22230\CIVIL\PRESENTATION\Prelim Infrastructure\22230-PRELIM INFRASTRUCTURE.dwg



925 10th Avenue East Suite 1 West Fargo, ND 58078 P: 701.282.4692 F: 701.282.4530



February 15, 2022

Brent Holper, City Administrator City of Horace 215 Park Dr E Horace, ND 58047

Re: Dabbert Developments Cub Creek, River's Edge, & Altenburg Acres Horace, ND

Mr. Holper

Don Dabbert and I were able to connect with representatives of the Horace Park District on Friday, February 11, 2022. We reviewed Master Plans for each of the three developments: Cub Creek, River's Edge and Altenburg Acres. The representatives, Wade Frank and Justin Germundson, were both generally pleased with the layouts and their comments have been incorporated into the exhibits we have provided. We will be presenting these updated exhibits to their Park Board on February 28th, and are anticipating approval based on our discussions.

If you have any questions or need any further information, please let me know.

Best Regards,

Will

Matthew Welle, PE Senior Project Manager

CC: Don Dabbert, Developer



This recommendation letter serves as formal notice from the Horace Park District to the City Council of the City of Horace, North Dakota, that the Developer, *Cub Creek Development, LLC*, for *Cub Creek Second Addition* to the City of Horace, North Dakota, has met the requirements set forth in Section 17.8.10 of the Revised Ordinances of 2003 of the City of Horace, North Dakota, regarding park land dedication or payment in-lieu-of park land dedication for the *Cub Creek Second Addition* development.

The Horace Park District has requested *land dedication* and *payment in-lieu-of park land dedication* for the *Cub Creek Second Addition Development*. The proposed *acreage* for *Cub Creek Second Addition* is 4.15 acres and is identified as Lot 1 of Block 1 (2.34 acres), Lot 5 of Block 2 (1.65 acres), and a strip parcel near the center of Block 5 (0.16 acres) on the preliminary plat of *Cub Creek Second Addition*. The proposed *dollar amount* for *Cub Creek Second Addition* is *Two-hundred fifty-seven Thousand Seven Hundred Dollars and 96/100 (\$257,700.96)*. The Horace Park District respectfully requests that the City Council approve this recommendation for the purpose of providing public uses and facilities for existing and future residents of the community.

Dated: <u>March 9</u> , 2022.

Horace Park District

Wede Fm

Wade Frank, President of the Horace Park District

*Additional information: *Fee in-lieu will be used for park improvements in Cub Creek First and Second Additions.*



CITY OF HORACE: PLANNING COMMISSION STAFF REPORT

City of Horace Commission Staff Report							
Entitlements Requested:	Subdivision	Zone Change	Design Review	Conditional Use	<mark>Variance</mark>	Lot Spilt	Other
Title:	6851 Sunnyside Dr Variance		Date:		04/12/2022		
Parcel Number:	15028500210000		Staff Contact:		Jace Hellman		
Owner(s)/Applicant:	Miles & Lynette Orth		Applicant Contact		Ltastad@yahoo.com		

Purpose

The applicant requests a variance from the side yard setback requirement of the Residential Estate (R-E) Zoning District in order to construct a twelve (12) foot wide 3rd stall addition to the existing garage in an effort to make the property consistent with existing neighbors.

Statement of Fact	
Future Land Use Map Classification	The property is currently designated as Suburban
Existing Land Use	Single-Family Home
Current Zoning	Residential Estate (R-E)
Area Size	0.86 acres
Adjacent Zoning Districts	North: R-E (Residential Estate); East: R-E (Residential Estate); South: R-
	E (Residential Estate); West: R-E (Residential Estate)
Land Dedication Requirements	None

Consistency with Comprehensive Plan and Future Land Use Map

The proposed application is consistent with the Comprehensive Plan. There are no requests to rezone 6851 Sunnyside Dr. The current zone of the property is Residential Estate, which is compliant with the Future Land Use Map designation of Suburban.

Discussion and Observation

The applicant submitted a building permit to the City of Horace Building Department; however, it was denied because the 3rd stall addition would encroach into the side yard setback. If the variance is granted, the remaining setback on the west side of the property would be approximately 7.1 feet. The current residence is located approximately nineteen (19) feet from the west property line. The R-E zoning district classification requires a minimum lot area of one (1) acre, front and rear setbacks of fifty (50) feet and side yard setbacks of twenty-five (25) feet. The property as it exists today is not able to meet the minimum lots size of the R-E zone and due to the placement of the house, is unable to meet the minimum side yard setback on the west side of the property.

Staff would conclude that this property and residence existed prior to being annexed into the City of Horace. The zoning applied to the property following annexation has made it impossible for the property to achieve lot and yard requirements as it currently exists today without the proposed addition. In a situation where a hardship must be found to grant a variance, staff could support the granting of this variance. The hardship was created at no fault of the property owner and could be considered as a result of the zoning district assigned following annexation, which rendered the parcel non-conforming.

Recommendation

To accept the findings and recommendations of the staff report and recommend approval of the 6851 Sunnyside Dr. Variance to the City Council.

Attachments

- 1. Variance Application
- 2. Subdivision Application
- 3. Aerial Map
- 4. Conformance Exhibit
- 5. Area Photos
- 6. Site/Building Plans


COMMUNITY DEVELOPMENT DEPARTMEN 215 PARK DRIVE EAST HORACE, NORTH DAKOTA 58047 PHONE: 701.492-2972 E-MAIL: bvoigt@cityofhorace.com www.cityofhorace.com

APPLICATION DATE

(mo/day/year)

VARIANCE APPLICATION

1 PROPERTY OWNER INFORMATION

NAME (PRINTED)	: M	iles	and	QADE	t l	-yneete	onth
ADDRESS: 68	51	Sunny	side	Drin	C	Horace	
PRIMARY PHONE	:	miles	Ce	11	701-	306-5	403
ALTERNATIVE PH	ONE:	Lynee	te's c	ell	701-	429-3	913
EMAIL:	600	Lta	stac	d Q	yah	oo.Com	

2 REPRESENTATIVE INFORMATION (DEVELOPER, SURVEYOR, ENGINEER)



3 PROPERTY DETAILS

LEGAL DESCRIPTION:	Annexed 2005 #FRM 64-1300-00230-000
ADDRESS:	Lot 13 Block 2 Holmens 3rd
CURRENT ZONING:	R-E
PROPOSED LAND USE	:

6 PLEASE EXPLAIN THE FOLLOWING: How the special conditions and circumstances have not resulted from actions of the applicant.

permit Denied Because of Pixsistry Sideyard Setbacks Want to add onto House with 2nd stop Addition and 3nd Garage, The 3nd stell does not follow exsisting Coverneits

PLEASE EXPLAIN THE FOLLOWING: How the granting the variance requested will not confer upon the applicant any special privileges that are denied by this ordinance to other premises.

Decapables Be able to add a 3rd stall to exsisting heighting

(10) PLEASE EXPLAIN THE FOLLOWING: How there is practical difficulty or unnecessary hardship in use of the premises if the strict application of the regulations are to be carried out.

The pulses were not entorcal when the properties in this 5mbdivision from the start. There are anditple properties that are built under set back. DR'OCSAN Physical Hardship.

A SIGNATURE

WNER SIGNATURE TCO

2/24/22

DATE

2-24-12

DATE

NOTE: A NONREFUNDA-BLE FILING FEE MUST **BE ACCOMPANIED WITH** THE APPLICATION AT TIME OF SUBMITTAL MADE PAYABLE TO THE CITY OF HORACE.

REPRESENTATIVE SIGNATURE

VARIANCE FEE --- \$325.00

VARIANCE FEE SCHEDULE

DATE FEE PAID:

ACKNOWLEDGEMENT: WE HEREBY ACKNOWLEDGE THAT THAT THE ABOVE INFORMATION IS TRUE AND COMPLETE TO THE BEST OF OUR KNOWLEDGE AND THAT THE PRIMARY CONTACT NAMED ABOVE WILL BE CONTACTED IF ANY QUESTIONS ARISE AND WHEN THE PLAT HAS BEEN APPROVED AND APPROPRIATE COPIES ARE READY FOR RECORDING.

From: Rukl Modern rukimodern@gmail.com @ Subject:

Date: February 17, 2022 at 5:57 PM

To: Randy Thune rmthunellc@gmail.com

Randy,

I was thinking about the "hardship",

I think it should be presented as a combination of factors

1. The house was originally arranged in such a way as to offer only one option for adding a garage. Adding a single stall can only be done on the east side of the building.

2. Access to an accessory building would require complete demolition and relocation of the septic system. If the west Side, 3. Enforcement of the covenants has not been done in the past. Current attempts at enforcement limits the clients' ability to upgrade their home to standards of quality and appearance that occur elsewhere in the neighborhood.

The solution offered only has a narrow single garage space added to the original footprint. Additional living space does not exceed the current footprint of the building. In effect, this is an accessory space that has been added to the property, but rather than adding a significant amount of paving to access an accessory building in the back of the property (which is not possible anyway), this solution will not add nearly as much impervious surface.

The quality of this new accessory space will be constructed using the same upgraded methods as the rest of the house and will provide the least disruption to the neighborhood aesthetic.

Hope this helps

Thanks

Brent

Brent Behm Ruki Modern LLC 701.730.0060



non-conforming maps.pdf







2 Houses to the West of oth's







13, Block

.









8 1 1	100	1997 (Sec.)	S. 19 1





2021.020 Orth Residence



Orth Residence 6851 Sunnyside Dr 4851 Sunnyside Dr Horace, ND 58047 Lot 13, Block 2 Holmens 3rd



C 0.11



FOUNDATION PLAN PLANNED SCALE: 1/4" = 140"









MAIN FLOOR PLAN EXISTING







C QIV



MAIN FLOOR PLANNED SCALE: 1/4" = 1'-0"

2021.020 Orth Residence









UPPER FLOOR PLAN PLANNED SCALE: 1/4" = 1'-0"



Orth Residence 6851 Sunnyside Dr Horace, ND 58047 Lot 13, Block 2 Holmens 3rd 6851 project ID 2021.020



C Q.11







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



+6'-0" 2 UPPER FLOOR

±0" 1 MAIN FLOOR

-9'-0" -1 FOUNDATIONS

+6'-0" 2 UPPER FLOOR

Orth Residence 6851 Sunnyside Dr Horace, ND 58047 Lot 13, Block 2 Holmens 3rd project ID-2021.020

drawing dele 12/31/2021 ELEVATIONS **O.8**



RIGHT ELEVATION EXISTING SCALE: 1/4" = 11-0"

LEFT ELEVATION EXISTING SGALE: 1/4" = 1°-0"









• •

SECTION B - EXISTING



SECTION B - PLANNED









SECTION C - EXISTING SCALE: 1/4" = 1'-0"











SECTION C - EXISTING SCALE: 1/4" = 1'-0"











JAYE VISTO | 9748 INDUSTRIAL DRIVE

THOR BUILDINGS



FARGO, NORTH DAKOTA

04/08/22 C 2021 YHR PARTNERS, LTD.



JAYE VISTO | 9748 INDUSTRIAL DRIVE

THOR BUILDINGS

FUTURE BUILDING



FARGO, NORTH DAKOTA

04/08/22 C 2021 YHR PARTNERS, LTD.



THOR BUILDINGS



6'-0" 5'-10 1/2

14 I	15		JAYE VISTO 60' X 150' 9748 INDUSTRIAL DRIVE
		L	THOR BUILDINGS
			FARGO, NORTH DAKOTA
		_	
			KEYNOTES: GENERAL NOTES:
		к	- COUPANCY - S-1 (SECTION 311.2) - CONSTRUCTION TYPE VB (TABLE 606.2)
			- BUILDING IS NOT SPRINKLED
			- BUILDING DOES NOT HAVE FIRE ALARM
		_	- WOOD POLE BUILDING CONSTRUCTION WITH METAL SIDING AND ROOF. BUIDING WILL BE USED FOR STORAGE AND INDIVIDUAL WORKSHOP SPACE. NO COMMERCIAL
			- CONCRETE SLAB OVER GRAVEL
		J	- ALLOWABLE SQUARE FOOTAGE - 9,000 (TABLE 506.2)
			- INCREASE FOR OPEN AREA = 37% = 3,300 S.F. (506.3.3)
			- ACTUAL S.F. = 9.000 S.F.
		_	- NO TRAVEL DISTANCE OVER 100'-0"
			- SPECIAL INSPECTIONS NOT REQUIRED
		ц	- FIRE EXTINGUISHERS TO BE PLACED SO NO MORE THAN 75'-0" FROM ANY POINT TO EXTINGUISHER
		п	- DRAFT STOPS TO BE PROVIDED AT MAXIMUN OF 3000 S.F. OF
			- BUILDING IS HEATED - DESIGN RI III D BY OWNER
		_	- ELECTICAL DESIGN BUILD BY OWNER
			- SPECIAL INSPECTIONS NOT REQUIRED AS TRUSSES DO NOT
			SPAN UVER 60'-0". - SIGNED ENGINEER TRUSS DRAWINGS WILL RE SURMITTED
		G	UNDER SEPARATE COVER
		_	
		F	
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		_	
			GENERAL NUTES
		D	
		_	
		~	
		U	
			I nereby certity that this drawing, specification or report was prepared by me or under my direct supervision and that I am a duly registered Architect under the laws of the State of North Dakota.
		-	Dated: OCTORER 2021 Deat No. 1402
			Hegi. NO. 1423
		R	Signed:
		ø	
			YIIN
			V PARTNERS Architecture Planning
			420 Main Avenue Moorhead, MN 56560
			Fx: 218-233-7988 PH: 218-233-4422
		A	Project Number: 202015-1 L:\2020_Clients\202016 Thor Buildings\202016-8 Jave Visto 60 X
			File Name: 150\CAD\5_Const_Dwgs\Luxsun Jaye Visto Revised.rvt
			CO 2021 YHR PARTNERS I TD Δ_1
14 1	15		



GENERAL STRUCTURAL NOTES:

1

THE GOVERNING BUILDING CODE IS THE INTERNATIONAL BUILDING CODE (IBC) 2018 EDITION AS APPROVED AND AMENDED BY THE CITY OF HORACE, ND.

2

3

- CONTRACT DOCUMENTS INCLUDE THE STRUCTURAL DRAWINGS AND SPECIFICATIONS, BUT DO NOT INCLUDE SHOP DRAWINGS, VENDOR DRAWINGS, OR OTHER SUBMITTALS BY THE CONTRACTOR.
- CONTRACTOR SHALL CROSS VERIFY ALL CONTRACT DOCUMENTS, ELEVATIONS, DIMENSIONS, AND EXISTING CONDITIONS PRIOR TO STARTING WORK. DISCREPANCIES OR CONFLICTS SHALL BE NOTED TO THE EOR IMMEDIATELY FOR REMEDIATION. SPECIFIC NOTES AND DETAILS SHALL PRESIDE OVER GENERAL NOTES AND SPECIFICATIONS.
- THE DIMENSIONS, LOCATIONS, AND DETAILS SHOWN ON THE DRAWINGS ARE BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF THE DRAWINGS BEING ISSUED. DEVIATIONS WHICH ARE NECESSARY OR WHICH CONFLICT SHALL BE REPORTED TO THE EOR. CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR DEVIATIONS NOT APPROVED BY THE EOR.
- COSTS OF ADDITIONAL DESIGN WORK DUE TO THE SELECTION OF AN OPTION OR DUE TO ERRORS OR OMISSION IN CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION. THE STRUCTURAL DRAWINGS REFLECT THE COMPLETED STRUCTURE. BRACING, SHORING, AND PROTECTION DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. THE STRUCTURE SHALL NOT BE LOADED WITH CONSTRUCTION MATERIALS AND EQUIPMENT THAT EXCEEDS THE DESIGN LOADS.
- PENETRATIONS NOT SHOWN ON THE DRAWINGS MUST BE APPROVED BY THE EOR BEFORE PLACING THROUGH STRUCTURAL ELEMENTS. CONTRACTOR SHALL PROVIDE A CAST-IN SLEEVE FOR ALL HORIZONTAL ELEMENTS THAT EXTEND THROUGH FOOTING AND FOUNDATION WALL, SUCH AS DRAIN TILE, CONDUIT, PIPING, ETC. COORDINATE SLEEVES WITH EOR. SEE MECHANICAL, ELECTRICAL, AND ARCHITECTURAL DRAWINGS FOR ALL PENETRATIONS AND EMBEDDED ITEMS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- CONTRACTOR TO VERIFY ALL WEIGHTS, LOCATIONS & DIMENSIONS OF MECH. EQUIPMENT SHOWN AND NOTIFY THE EOR OF ANY DISCREPANCIES. COORDINATE THIS INFORMATION WITH ALL NECESSARY INDIVIDUALS.
- PERIODIC SITE OBSERVATION BY REPRESENTATIVES OF SANDMAN STRUCTURAL ENGINEERS IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN GENERAL ACCORDANCE WITH THE STRUCTURAL CONTRACT DRAWINGS. A LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OR QUANTITY OF THE WORK, BUT RATHER PERIODIC IN AN EFFORT TO GUARD THE OWNER AGAINST DEFECTS OR DEFICIENCIES IN THE WORK OF THE CONTRACTOR. ALL MATERIALS AND WORKMANSHIP ARE SUBJECT TO THE REVIEW OF THE EOR.
- 10. SEE THE FOLLOWING DETAILS FOR STANDARD DETAILS:

CIP CONCRETE & FOUNDATION: 1/S301

SHOP DRAWING & DEFERRED DESIGN SUBMITTAL NOTES:

- CONTRACTOR TO FURNISH COMPLETE AND DETAILED SHOP DRAWING & SUBMITTALS FOR REVIEW AND APPROVAL BY THE EOR. THE FOLLOWING ARE REQUIRED FOR THIS PROJECT. SHOP DRAWING OR SUBMITTAL NOTES/COMMENTS CONCRETE MIX DESIGNS BY 3RD PARTY TESTING AGENCY CONCRETE REINFORCEMENT LUMBER MATERIAL GRADE & DOWEL-TYPE FASTENERS METAL PLATE CONNECTED WOOD TRUSSES DEFERRED SUBMITTAL: SEE NOTE #4
- CONTRACT DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS. ALL SHOP DRAWINGS MUST BEAR THE REVIEW STAMP OF THE CONTRACTOR BEFORE THEY ARE REVIEWED BY THE EOR.
- SHOP DRAWINGS SHALL SHOW ALL FIELD DETAILS AND ADDITIONAL INFORMATION NEEDED FOR THE CONTRACTOR TO CONSTRUCT THE BUILDING PER THE CONTRACT DOCUMENTS.
- . STRUCTURAL COMPONENTS/SYSTEMS DESIGNATED AS A "DEFERRED SUBMITTAL" OR AS "DELEGATED DESIGN", "DESIGNED BY OTHERS", OR "PRE-ENGINEERED" MUST INCLUDE A CALCULATION PACKAGE THAT IS STAMPED AND SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, LICENSED IN THE STATE THE PROJECT WILL BE CONSTRUCTED, PRIOR TO SUBMITTAL FOR APPROVAL TO THE EOR.
- SHOP DRAWINGS SHALL BE AVAILABLE ON THE JOB SITE DURING TIMES OF INSPECTION AND SHALL BE CLEARLY INDICATED THAT THEY HAVE BEEN REVIEWED AND APPROVED BY THE EOR.
- REVIEW OF SUBMITTALS AND SHOP DRAWINGS BY THE EOR DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW AND CHECK ALL SUBMITTALS AND SHOP DRAWINGS BEFORE SUBMITTING TO THE STRUCTURAL ENGINEER. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR THE ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS.

DESIGN CRITERIA/DESIGN LOADS:

4

	SNOW LO	DAD DESIGN CR	ITERIA
GROUND SNOW LOAD	Pg	50 PSF	-
SNOW IMPORTANCE FACTOR	ls	1.0	-
EXPOSURE FACTOR	Ce	1.0	-
THERMAL FACTOR	Ct	1.1	TYPICAL
SLOPED ROOF FACTOR	Cs	0.86	TYPICAL
	ROC	F DESIGN LOAD	DS
LOAD TYPE	NOTATION	LOAD	NOTES
SNOW LOAD	S	33.1 PSF	TYPICAL (Pf or Ps)
LIVE LOAD	RLL	20 PSF	-
DEAD LOAD	D	10 PSF	D TC = 4 PSF / D BC = 6 PSF
NOTED ALL DOOF COMPONENTS			

5

6

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11

I NOTES: ALL ROOF COMPONENTS SHALL BE DESIGNED FOR DRIFT LOADS AND BALANCED & UNBALANCED SNO LOADING PER ASCE 7. SEE PLAN FOR SNOW DRIFT LOADS

WIND LOAD DESIGN CRITERIA					
ULT. DESIGN WIND SPEED	V-ult	111 MPH	-		
RISK CATEGORY	-	I	-		
EXPOSURE CATEGORY	-	С	-		
INTERNAL PRESSURE COEFFICIENT	GCpi	+/- 0.18	-		
C & C BASE PRESSURE	qh - ult	25.8 PSF	-		

	RAIN LO	AD DESIGN CRI	TERIA
RAIN INTENSITY	i	3.2"/hr	PER LOCAL JURISDICTION
DRAIN TRIB. AREA	A	4800 SF	-
MAIN/SECONDARY DRAIN	-	-	0" DIA/0" DIA
RAIN DEPTHS	ds/dh	0"/0"	

SEISMIC DESIGN CI		
RISK CATEGORY	I	-
IMPORTANCE FACTOR (le)	1.0	-
SITE CLASS	D	ASSUMED
MAPPED SPECTRAL RESPONSE (Ss)	0.060	-
MAPPED SPECTRAL RESPONSE (S1)	0.019	-
SPECTRAL RESPONSE COEFFICIENT (SDS)	0.064	-
SPECTRAL RESPONSE COEFFICIENT (SD1)	0.031	-
SEISMIC DESIGN CATEGORY	A	-
BASIC SEISMIC FORCE-RESISTING SYSTEM	R=1.5	TIMBER FRAMES
DESIGN BASE SHEAR (V)	0.040 W	-
SEISMIC RESPONSE COEFFICIENT (Cs)	0.040	-
ANALYSIS PROCEDURE USED	-	EQUIVALENT LATERAL FORCE

FOUNDATION NOTES:

- 1. FOOTINGS ARE DESIGNED FOR AN ASSUMBED NET ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF FO STRIP FOOTINGS AND 1500 FOR PAD FOTINGS. THE ASSUMED ALLOWABLE SOIL BEARING PRESSURE SHA BE VERIFIED BY A LICENSED GEOTECHNICAL ENGINEER AT TIME OF CONSTRUCITON.
- PROTECT FOOTING EXCAVATIONS FROM WATER, MOISTURE, OR FROST INFILTRATION, PRIOR TO PLACEMENT OF FOOTING CONCRETE, CLEAN FOOTING EXCAVATIONS OF SNOW, WATER, MUD, DIRT, AND DEBRIS. DO NOT PLACE FOOTINGS OR BACKFILL ON FROZEN SUB GRADE.
- FROST COVER FOR FOOTINGS SHALL BE PER RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. SEE PLAN FOR TOP OF FOOTING ELEVATIONS AND DETAILS FOR FOOTING STEP REQUIREMENTS.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE EOR IMMEDIATELY OF ANY SPECIAL SOIL WATER CONDITIONS THAT EXIST ON SITE.
- BACKFILL & COMPACTION SHALL BE INSPECTED AND TESTED BY A LICENSED GEOTECHNICAL ENGINEER QUALIFIED FIELD TECH. THE SUBMITTAL OF TESTING REPORTS SHALL BE PER SPECIAL INSPECTION REQUIREMENTS.
- BACKFILL SHALL BE COMPACTED BY MECHANICAL MEANS. WATER INFILTRATION SHALL NOT BE ALLOWEI BACKFILL SHALL BE PLACED IN ALTERNATING LIFTS ON EACH SIDE OF THE FDN WALLS FOR STABILITY.
- 7. UNLESS SPECIFICALLY PRESCRIBED IN A GEOTECHNICAL REPORT, BACKFILL SHALL BE PLACED AND COMPACTED IN LOOSE LIFTS WITH THICKNESS OF 6" OR LESS. MOISTURE CONTENT AT THE TIME OF COMPACTION SHOULD BE +/- 3% OF OPTIMUM MOISTURE AND IT IS RECOMMENDED ALL ENGINEERED FILI BELOW FOOTINGS BE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR MAX DENSITY (AV D698-00a)
- 8. WALL FOOTINGS ARE TO BE CENTERED ON WALLS UNO PAD FOOTINGS ARE TO BE CENTERED ON COLUM UNO
- CONTRACTOR TO COORDINATE INTERIOR & EXTERIOR TOP OF FOOTINGS WITH MEP CONTRACTORS, PRIC TO START OF CONSTRUCTION. PLUMBING TO BE ROUTED ABOVE FOOTINGS UNLESS APPROVED BY EOR. FOOTINGS MAY NEED TO BE LOCALLY LOWERED TO ACCOUNT FOR ADJACENT PLUMBING LINES OR BASIN THAT COULD UNDERMINE SUPPORTING SOIL ALONGSIDE OR BELOW FOOTINGS.
- 10. IF SHOWN ON FOUNDATION PLAN, DRAINTILE IS FOR GRAPHICAL REPRESENTATION ONLY. SIZE AND LAYC TO BE CONFIRMED WITH MEP CONTRACTOR AND CIVIL DRAWINGS.

POST INSTALLED ANCHOR NOTES:

- 1. POST INSTALLED ANCHORS NOTED ON PLAN AND/OR DETAILS NOTED SHALL BE AS FOLLOWS (UNO). IF ALTERNATIVE ANCHORS ARE DESIRED, CONTRACTOR MUST SUBMIT PRODUCT DATA FOR APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO ORDERING OF MATERIALS. ANCHORS USED TO TRANSFER STRUCTURAL LOADS MUST HAVE BEEN APPROVED BY METHODS OF ACI 318 APPENDIX D FOR MECHANICAL ANCHORS AND ICC-ES AC308 FOR ADHESIVE AND TORQUE-CONTROLLED ANCHORS. ADHESIVES USED IN COLD WEATHER MUST MEET ALL WEATHER REQUIREMENTS AND CODE REQUIREMENTS STATED ABOVE.
- INJECTION ADHESIVE ANCHORS: SIMPSON SET-3G ADHESIVE. THREADED RODS TO BE A193 GRADE I WITH EMBEDDED END CUT @ 45° ANGLE.
- SIMPSON STRONG BOLT 2 EXPANSION ANCHORS:
- SCREW ANCHORS: SIMPSON TITEN HD
- POWDER ACTUATED FASTENERS (PAF): 0.157"Ø STEEL-TO-STEEL, THRU BASE METAL, 1/2" MIN. EDGE DISTANCE. 0.157"Øx11/4" STEEL TO CONCRETE & MASONRY. 3" MIN. CONCRETE EDGE DISTANCE (UNO).
- 2. POST INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE DRAWINGS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE STRUCTURAL ENGINEER PRIOR TO USING POST INSTALLED ANCHORS FOR MISSING OR MISPLACED CIP ANCHORS. CARE SHALL BE TAKEN TO AVOID CONFLICTS WITH EXISTING REINFORCING BARS. HOLES SHALL BE DRILLED AND CLEANED PER ANCHOR MANUFACTURER'S SPECIFICATIONS. ANCHORS AND ADHESIVE TO BE INSTALLED PER
- MANUFACTURER'S SPECIFICATIONS.

	<u>CC</u>	DNCRETE AND STEEL REINFORCEMENT NOTES:	WOOD	FRAMING NOT	TES:						
	1.	CONCRETE AND STEEL REINFORCEMENT SHALL CONFORM TO AMERICAN CONCRETE INSTITUTION (ACI) CODES AND SPECIFICATIONS, LATEST EDITION.	1. WOO CONS	D AND TIMBER CON STRUCTION (AITC) S	ISTRUCTION SHALI	L COMPLY CATIONS.	WITH THE A	AMERICAN	INSTITUTE	OF TIMBER	
	2.	ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" ACI 315 "DETAILS & DETAILING OF CONCRETE REINFORCEMENT" ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" ACI 306R "COLD WEATHER CONCRETING" CAST-IN-PLACE CONCRETE COMPRESSIVE STRENGTHS REQUIRED (28 DAY):	2. WOO & 230 DRAV STRU DESI0 DO N	D CONSTRUCTION (6) OF THE 2015 IBC WINGS. FOR MINIMI JCTURAL DESIGN O GN" METHOD. PRO OT APPLY TO THIS	SHALL CONFORM 1 FOR MINIMUM REC JM FASTENING REI F THIS STRUCTURE VISIONS WITHIN SE STRUCTURE.	TO CHAPTE QUIREMENT FER TO TAL E HAS BEEN CTION 230	ER 23 (SECT IS UNLESS BLE IBC 230 N IN ACCOF 8 "CONVEN	FIONS 2301, OTHERWIS)4.9.1. PER S RDANCE WI ITIONAL LIC	, 2302, 2303 SE SPECIFI SECTION 2 ITH THE "AL GHT-FRAME	3, 2304, 2305, ED ON THE 2301.2, THE LLOWABLE STRE E CONSTRUCTIO	ESS IN"
		FOOTINGS 3000 PSI PIERS / COLUMNS 3000 PSI FOUNDATION WALLS 3000 PSI EXTERIOR SI ABS 4500 PSI	3. ALL F "S-DF	RAMING LUMBER S	HALL BE INSTALLE STAMP.	D WITH MC)ISTURE CO	ONTENT OF	⁻ 19% or Le	ESS INDICATING	
	3.	INTERIOR SLAB 4000 PSI (AIR ENTRAINED 5%-7% / SEE SPECS) SUBMIT CONCRETE MIX DESIGN & STRENGTH DATA TO EOR FOR APPROVAL. ALL ADMIXTURES ARE THE	4. ALL L TREA	UMBER IN CONTAC	T WITH CONCRETE ROOFING TREATM	E, MASONR ENT, 28% N	Y OR EXPO MAX. MOIST	ISED TO WE	EATHER SH TENT.	HALL BE PRESSU	JRE
	4.	CAST-IN-PLACE CONCRETE SHALL BE SUBJECT TO TESTING BY AN INDEPENDENT TESTING LABORATORY, SEE	5. ALL S COAT	SIMPSON STRONG-T	TE CONNECTORS U OR REQUIRED COA	JSED WITH		E TREATED	CLUMBER S	SHALL BE "Z-MA) URFACE TES AND HOLD I	<" 000000
N	5.	SPECS AND SPECIAL INSPECTION REQUIREMENTS. ALL CONCRETE SHALL BE PLACED PER ACI & THOROUGHLY CONSOLIDATED BY MEANS OF A VIBRATOR, PARTICULARLY AROUND REINFORCEMENT STEEL AND CORNERS OF FORM WORK.	6. LUME FOR	BER SHALL COMPLY MINIMUM ALLOWAB	WITH NATIONAL D	ESIGN SPE S VALUES I	ECIFICATION FOR LUMBE	N (NDS), LA ER GRADES	ATEST EDIT S SHOWN B	I'ES AND HOLD-I I'ON SUPPLEMEN BELOW. ALL LUM	NT IBER
	6.	REINFORCING STEEL SHALL BE GRADE 60 DEFORMED, BILLET-STEEL, ASTM A615, UNO.		MINIMUM LUM	BER DESIGN VALU	ES, UNO O	N PLAN OR	DETAILS (F	PSI). DESIG	IN VALUES	
	7.	WELDED REINFORCING STEEL SHALL BE GRADE 60, LOW CARBON, ASTM A706, WHICH IS SPECIALLY MANUFACTURED TO BE WELDABLE.	Ş	SPECIES & GRADE	Fb	Ft	Fv	FcP	Fc	E	
_	8.	WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A82 AND A185 STANDARDS AND SHALL BE PLACED IN THE CENTER OF THE SLAB, UNO. LAP JOINTS A MINIMUM OF 6". EXTEND FABRIC TO BE WITHIN 1" OF SLAB EDGES.		SPF #1/#2	LO 875	AD BEARIN 450	IG WALL ST 135	UDS 425	1150	1,400,000	0
	9.	PROVIDE ADEQUATE BOLSTERS, HIGH CHAIRS, SUPPORT BARS, ETC TO MAINTAIN THE SPECIFIED CLEARANCES FOR THE ENTIRE LENGTH OF ALL REINFORCING STEEL AND WELDED WIRE FABRIC.		HEM FIR #2	H	IEADERS/B 525	EAMS/JOIS	5TS 405	1300	1,300,000	0
	10.	PROVIDE EXTRA REINFORCEMENT AROUND ALL OPENINGS GREATER THAN 8" SQUARE OR ROUND. PROVIDE (2) #5 BARS @ 3" OC FOR EACH MAT OF BARS, AT EACH SIDE AND CORNER OF OPENING EXTENDING MINIMUM 18" PAST CORNER OF THE OPENING. PLACE 2" CLEAR FROM OPENING.	S	OUTHERN PINE #1		IREATED B	EAMS/JOIS 175	TS 565	1400	1,600,000	0
	11.	SEE DETAILS FOR REINFORCING LAP SPLICE SCHEDULE, UNO ON PLAN OR DETAILS.		SPF #1/#2	875	450		425	1150	1,400,000	0
	12.	CAST DOWELS, WITH STD 90 DEGREE HOOK, IN FOOTINGS FOR CONCRETE PIERS AND WALLS ABOVE. DOWELS SHALL BE THE SAME SIZE AND QTY AS THE VERTICAL REINFORCING (UNO)	S	OUTHERN PINE #2	1000	600	175	565	1400	1,400,000	0
	13.	SUPPLY 50 FEET EXTRA OF #5 REBAR FOR MISC. PLACEMENT AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL INCLUDE LABOR ALLOWANCE FOR PLACEMENT.	S	OUTHERN PINE #2	850	TREATE	D POSTS	375	525	1,200,000	0
	14.	EXTERIOR SLABS SHALL DRAIN FREELY AWAY FROM THE BUILDING. SEE CIVIL AND ARCH. DRAWINGS FOR ELEVATIONS AND SLOPES.		DOUG FIR #2	750	NON-TREA	ATED POST	S 625	700	1,300,000	0
	15.	CONTROL SAWCUT JOINTS ARE TO BE EXECUTED AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT AGGREGATE FROM DISLODGING BY SAW AND PRIOR TO SHRINKAGE STRESS CRACKING. SEE DETAIL		SPF #1/#2	FL0 875	OOR TRUS 450	S END RIBB 135	30NS 425	1150	1,400,000	0
		1/S301 FOR SLAB CONSTRUCTION JOINTS (CCJ) AND FOR SLAB CONTROL JOINTS (CJ). CONTRACTOR SHALL SUBMIT A PROPOSED JOINT LAYOUT TO ARCH/ENG FOR APPROVAL PRIOR TO SLAB PLACEMENT.	IF AL REQI MATE	TERNATIVE GRADE UIREMENTS; CONTF ERIAL. SPF-S #2 IS \$	OR SPECIES OF LL RACTOR TO SUBMI SPRUCE-PINE-FIR S	JMBER IS D T REQUEST SOUTH & IS	DESIRED TH T TO ENGIN NOT EQUIN	IAT IS EQUA IEER FOR A VALENT TO	AL OR GRE APPROVAL) SPF #1/#2	EATER THAN THE PRIOR TO ORDE	: Above :Ring of
		 CONSTRUCTION JOINTS STALL BE ON COLOMIN TIMES AND WILLENTRANT CONNERS TO THE GREATEST EXTENT POSSIBLE WITH SPACING LESS THAN 12'-6" OC BETWEEN. B. CONSTRUCTION JOINTS SHALL BE LOCATED SO AS NOT TO ALLOW A SINGLE SLAB POUR TO EXCEED 4000 SQUARE FEET UNLESS ALTERNATE MEASURES ARE TAKEN TO CONTROL SLAB CURLING & SHRINKAGE. C. PROVIDE CJ OR CCJ JOINTS SO AS NOT TO EXCEED A SLAB UNIT ASPECT RATIO OF 1.5:1. 	7. Anci Uno Minin Than A.	HOR TREATED SILL ON PLAN. HOOKEE MUM OF (2) ANCHOF V 4" FROM END OF E 1/2"x5" SIMPSON	PLATES TO CONCF) ROD WITH MINIMU RS PER PIECE OF S EACH SILL PLATE P TITEN HD (GALV) N	RETE/MASC JM EMBED SILL PLATE IECE. /IAY BE DIR	DNRY WITH = 7"; SEE S W/ (1) BOLT ECTLY SUE	1/2"Ø GAL\ TANDARD I T LOCATED BSTITUTED	V A.R.'S 4'-(DETAILS. T NO MORE FOR CIP S	0" OC MINIMUM, 'HERE SHALL BE THAN 12" OR LE ILL PLATE ANCH	A :SS IORS.
	16.	SYNTHETIC FIBER REINFORCEMENT, WHERE SPECIFIED ON PLAN FOR SLABS-ON-GRADE, TOPPINGS, AND/OR SLABS ON DECK, SHOULD BE MACROSYNTHETIC AND SHALL CONFORM TO ASTM C 1116/C (TYPE III) AND ACI 544 DOCUMENTS. DOSAGE RATE TO BE SPECIFIED BY THE CONCRETE MIX DESIGNER TO COMPLY WITH THE FOLLOWING REQUIREMENTS: FIBER DOSAGE TO BE EQUIVALENT TO THE DISTRIBUTED STEEL REINFORCEMENT OF ACI 318 FOR MINIMUM SHRINKAGE AND TEMPERATURE REINFORCEMENT RATIO OF 0.0018 (UNO). RESIDUAL STRENGTH AFTER FIRST CRACK SHALL BE BETWEEN 20% AND 25%. DOSAGE OF FIBER FOR SLABS ON COMPOSITE STEEL DECKING SHALL NOT BE LESS THAN 4 LB/CUBIC YARD, AS RECOMMENDED IN ANSI/SDI C - 2011. MIX DESIGN SUBMITTAL TO INCLUDE DOSAGE RATES. ENGINEERING DATA. AND HISTORICAL	 8. DIME 9. PROV 48 HO 10. NOTO FROM 	ENSIONAL LUMBER (VIDE STD CUT WAS) DURS AFTER FIRST CHING OR CUTTING M ENGINEER. HOLE	JSED FOR HEADER HERS PER STRUCT TIGHTENING. SEE OF STRUCTURAL V IS BORED IN WALL	RS SHALL H TURAL DET, DRAWINGS WOOD MEN STUDS OR	IAVE NO SP AILS FOR A FOR LOCA IBERS IS P JOISTS SH	'LITS OR CH ILL BOLTS II ATIONS OF 'ROHIBITED IOULD BE II	HECKS. IN WOOD M SQ. PLATE) WITHOUT N THE CEN	IEMBERS. RE-TO WASHERS. PRIOR APPROV. TER HALF OF TH	RQUE NUT
R L		PERFORMANCE DATA FROM THE FIBER MANUFACTURER/SUPPLIER.	MEM NOTO	BER AND SHALL NC CHING, AND BORED	T BE LARGER THA HOLE PROVISIONS	n 1/4 of th S of IBC se	HE DEPTH C ECTION 230	OF THE MEN 8 DO NOT A	MBER. ALL APPLY TO 1	OWABLE CUTTIN	NG, E.
	<u>17.</u>	SEE ARCH DRAWINGS FOR DIMENSIONS OF STOOPS, FOUNDATION WALL HOLDOUTS, SLAB RECESSES, SLOPED SLABS & FOUNDATION WALL INSULATION. ETAL PLATE CONNECTED WOOD TRUSS NOTES:	11. LOAE 12. EXTE SHAI	D BEARING STUD W RIOR WALLS AND L L OVERLAP AT COR	ALLS TO BE 2x4 @ .OAD BEARING WAI	1'-4" OC UN LLS SHALL ERSECTION	IO. SEE TAE BE CAPPEI NS WITH OT	3LE ABOVE D WITH DOI THER LOAD	E FOR SPEC	CIES & GRADE. PLATES. THE PL WALLS. SEE ST	ATES ANDARD
0.0	1.	METAL PLATE CONNECTED WOOD TRUSSES SHALL BE ENGINEERED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF THE PROJECT. A SEALED COVER SHEET SHALL BE SUBMITTED WITH THE SHOP DRAWINGS AT THE TIME OF SUBMITTAL. SHOP DRAWING DESIGN SUBMITTAL TO COMPLY WITH IBC SECTION 2303.4.	DETA 13. POST FOUN	AILS. TS AND BEARING ST NDATION LEVEL. PF	TUDS (JACKS/KINGS ROVIDE SQUASH BI	S) FOR BEA LOCKING B	MS AND HE	EADERS SH LOOR LEVE	HALL BE CO ELS TO MAT	ONTINUOUS TO T TCH THE WIDTH	INUOUS TO THE THE WIDTH OF
OR DR	2.	WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", AFPA, AND "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION."	14. TOP BRID SUPF	FLANGE OF ALL RAI GING FOR TOP FLA PORTED PLYWOOD	FTERS, JOISTS ANI NGE AS REQUIRED DECKING.	D BEAMS TO TO NEARE	O BE LATEF EST FRAMIN	RALLY SUPI	PORTED @ R OR PROV) 24" oc min. Pr /Ide adequatei	lovide Ly
	3.	TRUSSES TO BE DESIGNED TO SATISFY THE FOLLOWING DEFLECTION REQUIREMENTS. TRUSS SUPPLIER TO PROVIDE CAMBER AS NECESSARY TO COUNTER DEFLECTIONS.	15. PRO	VIDE SOLID BLOCKI	NG AT BEARING PC	DINTS OF A	LL 2x JOIST	S.			
		PER TPI DEFLECTION TOTAL LOAD (TL) = KxDL+LL.	16. META THAT INST	AL FRAMING ANCHO I IS EQUAL OR GREA ALLATION. INSTALL	ORS AND HARDWAF ATER IN CAPACITY PER MANUFACTUI	re should Must be s Rer's spe) BE AS NO SUBMITTED CIFICATION	TED IN DET) TO ENGINI IS.	TAILS. ALTE EER FOR A	ERNATIVE HARD\ APPROVAL PRIOF	NARE R TO
ТМ		[NOTE:"LL" TO BE ETHER SNOW, RAIN,WIND, OR LIVE]. PER TPI CREEP FACTOR (K) TO BE 1.0 (NON-WOOD FRAMING), 1.5 (SOLID SAWN OR SCL WOOD, DRY USE), OR 2.0 (METAL PLATE CONNECTED WOOD TRUSSES, DRY USE). PARTITION WALLS BELOW TRUSSES TO BE FRAMED TO ALLOW FOR THIS EXPECTED DEFLECTION.	17. FAST GALV SCRE	TENERS IN CONTAC /ANIZED STEEL OR EWS, THRU BOLTS,	T WITH PRESERVA STAINLESS STEEL. AND LAG SCREWS	TIVE-TREA THIS INCLI	TED WOOD UDES NAILS) Shall be S, Timber F	OF HOT-DI RIVETS, SIL	IPPED ZINC-COA LL ANCHORS, W	.TED OOD
NS	4.	TRUSS SUPPLIER TO MAKE EVERY EFFORT TO FOLLOW FRAMING SCHEME AS THE LOADS HAVE BEEN DISTRIBUTED TO THE FOUNDATION ACCORDINGLY. IF REVISED FRAMING DIRECTIONS ARE DESIRED BY SUPPLIER, PLAN MUST BE SUBMITTED FOR APPROVAL PRIOR TO FOUNDATION CONSTRUCTION.	18. STRU DRAV TO U	JCTURAL LOAD BEA WINGS FOR PARTIT NDERSIDE OF FLOO	RING OR LATERAL ION WALLS, PROVII DR AND ROOF FRAI	LOAD RES DE NECESS MING TO AG	SISTING WA SARY CONN CCOUNT FO	LLS ARE SH VECTION/AL OR FRAMIN	Hown on ⁻ Llowance Ig deflec ⁻	The plan. See of partition tion.	ARCH WALLS
R	5.	UNO ON DRAWINGS, EOR HAS <u>NOT</u> PROVIDED STRUCTURAL SHEATHING BENEATH THE BOTTOM CHORD OF ROOF OR FLOOR TRUSSES FOR BRACING.	19. DRILI REPA	L BOLT/ANCHOR HO AIR OVERSIZED HOL	DLES IN WOOD 1/16 ES WITH BEARING	" LARGER ⁻ PLATE WA	THAN THE N SHERS.	Nominal di	DIAMETER C	OF THE BOLT.	
5	6.	ALL HARDWARE (BOLTS, HANGERS, STRAPS, ETC) REQUIRED FOR CONNECTIONS BETWEEN TRUSSES SHALL BE DESIGNED AND SUPPLIED BY THE TRUSS ENGINEER AND SUPPLIER.	20. ALL J	IOISTS, TRUSSES, H	IEADERS, AND BEA	MS SHALL	HAVE FULL	BEARING	UNO NOTE	D ON THE DETA	ILS.
UT	7.	UNO, ROOF TRUSSES SHALL BE ATTACHED TO THE TOP PLATE AT ALL BEARING CONDITIONS WITH SIMPSON H2.5T CLIPS INSTALLED PER MANUFACTURER'S INSTRUCTIONS. GIRDERS AND ROOF BEAMS SHOULD BE ATTACHED TO BEARING SUPPORTS WITH (2) H2.5T CLIPS. TRUSS SUPPLIER TO PROVIDE BEARING BLOCKS AS		MINIMUM DESIGN V MATERIA L	ALUES FOR ENGIN AL AND FUNCTION VL BEAMS	EERED WC	OD MATER	The second secon	ON PLAN O FcII N/A	OR DETAILS (PSI) E 2,000,000	0
	R	REQUIRED BY DESIGN.		L	SL BEAMS SL BEAMS			2325 2900	N/A N/A	1,550,000	0 0
	9.	LAYOUT AND SPACING GUIDELINES ON PLAN ARE FOR REFERENCE ONLY UNLESS SPECIFICALLY		PS	L COLUMNS			N/A	2500	1,800,000	0
	10.	GIRDER TRUSSES SHALL BE SUPPORTED BY SAME NUMBER OF STUDS AS TRUSS PLIES (MIN OF 2 STUDS) WITH CONTINUOUS SOLID BEARING TO THE FOUNDATION. AVOID BEARING GIRDER TRUSSES OVER	FAS		IMENSIONS OF FAS	STENERS, H	UNO [NDS A	APPENDIX L STENER TYF	L] UNITS = I PE	INCHES	H
	11.	WALL OPEININGS, UNLESS OF MERVISE DIMENSIONED ON PLAN. THE GUIDELINES SET FORTH BY THE TRUSS PLATE INSTITUTE (TPI) & SCBA PUBLICATION BSCI "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING, AND BRACING OF METAL PLATE CONNECTED		NAIL: 8d	2 1/2 0.131 3 0.148	0.281	#61	NAIL: 30d TYPE S OR WALL SCR	W EW	4 1/2 0.207 1 7/8" N/A	0.438
87	12.	THE METAL PLATE CONNECTED WOOD TRUSS SUPPLIER SHALL SUPPLY THE CURRENT BCSI B-SERIES SUMMARY SHEETS WITH THE TRUSS ERECTION DRAWINGS OUTLINING THE PROPER HANDLING, ERECTING, AND	L = LEN	GTH, D = DIAMETER	, H = HEAD DIAMET	ER			ST		
	13.	ERECTION BRACING OF WOOD TRUSSES IS THE RESPONSIBILITY OF THE TRUSS INSTALLER. THE TRUSS		Sheet Number		Shee	et Name			C	omments
		INSTALLER SHALL PROVIDE TEMPORARY DIAGONAL, LATERAL, & CROSS BRACING (PER BSCI GUIDE) UNTIL ROOF SHEATHING, CEILING & PERMANENT BRACING CAN BE APPLIED & SHEARWALLS COMPLETED.		S001 S002 S101		STRUCTU SPECIAL II FOUNDA	JKAL NOTES NSPECTION ATION PLAN	5 15 1			- - -
	14.	PERMANENT BRACING OF WOOD TRUSSES SHALL BE INSTALLED BY THE TRUSS INSTALLER, WHERE INDICATED BY THE TRUSS ERECTION DRAWINGS. MINIMUM BRACING REQUIREMENTS FOR TOP CHORD. BOTTOM CHORD. &		S201		ROOF FR.	AMING PLAI	N			-

15. SEE METAL PLATE CONNECTED WOOD TRUSS SHOP DRAWINGS FOR PERMANENT WEB AND CHORD BRACING LOCATIONS AND REQUIREMENTS.

WEB MEMBER PLANES SHALL BE IN ACCORDANCE WITH BSCI GUIDE UNLESS REQUIREMENTS NOTED ON THE

PLAN ARE MORE STRICT.

MINIMUM DESIGN VALUES FOR ENGINEERED WOOD MATERIALS UNO ON PLAN OR DETAILS (PSI)						
MATERIAL AND FUNCTION	Fb	Fcll	E			
LVL BEAMS	2600	N/A	2,000,000			
LSL BEAMS	2325	N/A	1,550,000			
PSL BEAMS	2900	N/A	2,000,000			
PSL COLUMNS	N/A	2500	1,800,000			

MINIMUM	DIMENSIO	NS OF FAS	STENERS,	UN	O [NDS APPENDIX L] UNITS	= INCHES		
FASTENER TYPE	L	D	Н		FASTENER TYPE	L	D	Н
NAIL: 6d	2	0.113	0.266		NAIL: 16d	3 1/2	0.162	0.344
NAIL: 8d	2 1/2	0.131	0.281		NAIL: 30d	4 1/2	0.207	0.438
NAIL: 10d	3	0.148	0.312		#6 TYPE S OR W DRYWALL SCREW	1 7/8"	N/A	N/A

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Sheet Number	Sheet Name	Comments
S001	STRUCTURAL NOTES	-
S002	SPECIAL INSPECTIONS	-
S101	FOUNDATION PLAN	-
S201	ROOF FRAMING PLAN	-
S301	FOUNDATION DETAILS	-
S401	FRAMING DETAILS	-

11

12

MEP

PLF

TOJ TOW

14

15

15

	TIONS AND SYMBOLS:
ALT ALUM.	
ARCH BLK'G	ARCHITECT BLOCKING
BO BRG	BOTTOM OF BEARING
CIP	CAST IN PLACE
CJP	COMPLETE JOINT PENETRATION
CLR	CLEAR
CMU CONC	CONCRETE MASONRY UNIT CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
COORD	COORDINATION COLD ROLLED CHANNEL
DBE DBL	DECK BEARING ELEVATION DOUBLE
DEG	
DIAG	DIAGONAL
DIM DL	DIMENSION DEAD LOAD
DT DWG	DOUBLE TEE DRAWING
EA	EACH ELEVATION
EOR	ENGINEER OF RECORD
EQ (E)	EQUAL EXISTING
EXP EXT	EXPANSION EXTERIOR
E.W.	
FT	FOOT
GALV	GALVANIZE
GA G.C.	GAUGE GENERAL CONTRACTOR
HC	HOLLOW CORE
HORZ	HORIZONTAL
HSS ID	INSIDE DIAMETER
IF INT	INSIDE FACE INTERIOR
IT JBE	INVERTED TEE
K	KIPS
KLF KSF	KIPS PER LINEAR FOOT KIPS PER SQUARE FOOT
KSI LL	KIPS PER SQUARE INCH LIVE LOAD
LLH LSH	LONG LEG HORIZONTAL LONG SIDE HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	
MAS	MASONRY
MAX	MAXIMUM
MECH	MECHANICAL MECH/ELECTRICAL/PLUMBING
MFR MIN	MANUFACTURER MINIMUM
MISC MO	MISCELLANEOUS MASONRY OPENING
NOM NTS	NOMINAL NOT TO SCALE
NS	NON-SHRINK
OD	OUTSIDE DIAMETER
OF OH	OUTSIDE FACE OVERHEAD
opp opn'g	OPPOSITE OPENING
PAF	POWDER ACTUATED FASTENER
PLF	POUNDS PER LINEAR FOOT
PSF PSI	POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH
RAD REF	RADIUS REFERENCE
REINF REO'D	REINFORCING / REINFORCE
RET	RETURN
R/W	REINFORCE WITH
SC S.D.	SLIP CRITICAL SEE DETAIL
SF SIM	SQUARE FOOTAGE SIMILAR
SOG SPA	SLAB ON GRADE
SPECS	SPECIFICATIONS
SQ SS	SQUARE STAINLESS STEEL
STD TEMP	STANDARD TEMPORARY
T & G THK	TONGUE & GROOVE THICK / THICKENED
TO	TOP OF
TOF	TOP OF FOOTING
TOJ TOW	TOP OF JOIST
TOS TRANS	TOP OF STEEL TRANSVERSE
TYP UII T	TYPICAL LII TIMATE
UNO	
VERT	VERTICAL
w/ W/O	WITH WITHOUT
WP WWF	WORK POINT WELDED WIRE FABRIC
ل ل	
r_ ⊭	SQUARE
ש ±	PLUS OR MINUS
@	A I ELEVATION
$\mathbf{\Psi}$	

JAYE VISTO 9748 INDUSTRIAL DRIVE

THOR BUILDINGS

HORACE, NORTH DAKOTA

KEYNOTES:



C) 2020 YHR PARTNERS, LTD.

BEARING CAST IN PLACE CONTROL JOINT	1. THE SPECIAL INSPECTION AND TESTING PROGRAM IS A QUALITY ASSURANCE PROGRAM INTENDED TO		<u>SPE</u> CIA	AL INSPECTIONS - SOILS AND FOUND	ATIONS		
COMPLETE JOINT PENETRATION CONSTRUCTION CONTROL JOINT CLEAR CONCRETE MASONRY UNIT	 ENSURE THAT THE WORK IS PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. 2. THE SPECIAL INSPECTION PROGRAM DOES NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITY TO COMPLY WITH THE OFFICIAL CONTRACT DOCUMENTS. THE CONTRACTOR HAS THE SOLE 	VERIFICATION AND INSPECTION		SCOPE	REFERENCED STANDARD	FREQUENCY OF	REQUIRED ON
CONCRETE CONNECTION CONTINUOUS CONSTRUCTION	RESPONSIBILITY FOR ANY DEVIATIONS FROM THE OFFICIAL CONTRACT DRAWINGS. THE SPECIAL INSPECTOR DOES NOT REPLACE THE DUTIES OF THE BUILDING OFFICIAL NOR THE QUALITY CONTROL RESPONSIBILITIES AND PERSONNEL OF THE CONTRACTOR. JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.	1. Shallow Foundations	ICC-SSI PE-GEOTECH.	Inspect Soils below footings for adequate bearing capacity and consistency with geotechnical report.	N/A	Periodic testing to verify compliance with project	YES
COORDINATION COLD ROLLED CHANNEL DECK BEARING ELEVATION DOUBLE	3. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS SPECIFIED IN THE IBC SECTION 110 AND SPECIFIC STRUCTURAL OBSERVATION AS MAY BE REQUIRED BY THE CODE.	2. Controlled Structural Fill		Perform applicable sieve tests and modified Proctor	Applicable ASTM Specs	specifications & geotechnical report.	YES
DEGREE DETAIL DIAGONAL DIMENSION	 THOUGH NOT REQUIRED BY CODE, SPECIAL INSPECTORS AND/OR INSPECTION AGENCIES CAN DOCUMENT ACCEPTANCE OF THEIR RESPONSIBILITIES AND SCOPE OF WORK FOR A PROJECT BY SIGNING AN AGREEMENT THAT INCLUDES A DETAILED SCHEDULE OF SERVICES, COMMONLY KNOWN AS THE SPECIAL INSPECTION AND TESTING AGREEMENT AND THE SPECIAL INSPECTION AND TESTING SCHEDULE. THIS DOCUMENT MAX REFERENCE THIS SHEET AS THE "STATEMENT OF SPECIAL INSPECTIONS" (SSI) 	3. Deep Foundation: Driven Piles	PE-GEOTECH.	thickness, and compaction. Test density of each lift. Verify extent and slope of fill placement.		specifications & geotechnical report.	NO
DEAD LOAD DOUBLE TEE DRAWING EACH	 THE STRUCTURAL DESIGN METHODS AND/OR ASSUMPTIONS UTILIZED ARE BASED UPON THE SPECIAL INSPECTIONS REQUIRED WITHIN THE CONTRACT DOCUMENTS. 			driving resistance and verify compliance with driving criteria. Inspect piles for damage from driving and plumbness. Verify pile size, length and accessories.			
ELEVATION ENGINEER OF RECORD EQUAL EXISTING EXPANSION	 CONTRACTOR RESPONSIBILITIES AND DUTIES: 1. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND PROVIDING ADEQUATE NOTICE TO THE SPECIAL INSPECTORS FOR ALL INSPECTIONS. THE CONTRACTOR SHALL REQUEST SPECIAL INSPECTION OF THE 	4. Deep Foundations: Drilled Pier Foundations	PE-GEOTECH.	Inspect installation and maintain complete records for each pier. Verify pier diameter, bell diameter, lengths, embedment into bedrock and suitable of each bearing strata.	-	Continuous	NO
EXPANSION EXTERIOR EACH WAY FOUNDATION	 REQUIRED ITEMS PRIOR TO THOSE ITEMS BECOMING INACCESSIBLE AND UNOBSERVABLE DUE TO PROGRESSION OF WORK. 2. THE CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR ACCESS TO THE APPROVED CONTRACT 						
FOOT FOOTING GALVANIZE GAUGE	DOCUMENTS. THESE DOCUMENTS INCLUDE SEALED DRAWINGS AND SPECIFICATIONS, ADDENDA, CHANGE ORDERS, APPROVED SHOP DRAWINGS, ISSUED SKETCHES AND REVISION DRAWINGS, AND ALL DIRECTIVES ISSUED BY THE ARCHITECT/ENGINEER. THIS CURRENT SET OF DOCUMENTS SHALL BE AVAILABLE AT THE JOB SITE.		<u>SP</u>	ECIAL INSPECTION - WOOD CONSTR			
GENERAL CONTRACTOR HOLLOW CORE HEADED STUD ANCHOR HORIZONTAL	3. THE CONTRACTOR IS TO CORRECT DISCREPANCIES AND DEVIATIONS AS DETERMINED BY SPECIAL INSPECTOR. ALL DISCREPANCIES AND DEVIATIONS OBSERVED SHALL BE RE-INSPECTED UNTIL THE SPECIAL INSPECTOR DEEMS CONSTRUCTION TO BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.	VERIFICATION AND INSPECTION 1. Fabricator Certification/ Quality Control	QUALIFICATION	SCOPE Fabricated to be enrolled in a nationally accepted	STANDARD	INSPECTION N/A	PROJECT
HOLLOW STRUCTURAL SECTION INSIDE DIAMETER INSIDE FACE INTERIOR	 THE CONTRACTOR IS TO RETAIN SPECIAL INSPECTION RECORDS COMPLETED BY THE SPECIAL INSPECTORS AT THE JOB SITE. 	Procedures		inspection program acceptable to the Structural drawings and specifications. The approved fabricator to submit a certification of compliance to a the building official.			
INVERTED TEE JOIST BEARING ELEVATION KIPS PER LINEAR FOOT	 SPECIAL INSPECTOR QUALIFICATIONS AND RESPONSIBILITIES: THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL FOR INSPECTION OF THE BARTION AND TYPE OF 	2. Material Grading	-	Review sheathing, framing members, wall studs, plates for proper species and grade	Applicable APA & AITC Specs	Prior to Construction & Periodic during construction	YES
KIPS PER SQUARE FOOT KIPS PER SQUARE INCH LIVE LOAD LONG LEG HORIZONTAL	 SPECIAL INSPECTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. SPECIAL INSPECTORS SHALL NOTIFY CONTRACTOR PERSONNEL OF THEIR PRESENCE AND RESPONSIBILITIES 	3. Connections	-	Inspect connection of framing members. Including nail and bolts for size and spacing. Verify metal hardware connectors for type and proper installation	ANSI/AF&PA & Supplier's Specs	Periodic	YES
LONG SIDE HORIZONTAL LONG LEG VERTICAL LONG SIDE VERTICAL LOCATION	AT THE JOBSITE. 3. THE SPECIAL INSPECTOR/TESTING AGENCY SHALL BE INDEPENDENT OF THE CONTRACTOR TO AVOID CONFLICT OF INTEREST.	4. Framing and Details	-	Inspect framing for plumbness, spacing, bearing length, and size. Verify bracing is installed as required.	ANSI/AF&PA	Periodic	YES
LONGITUDINAL MASONRY MAXIMUM MECHANICAL	4. THE SPECIAL INSPECTOR IS OBLIGATED TO BOTH THE OWNER AND THE BUILDING OFFICIAL FOR OBSERVING THAT THE WORK IS EXECUTED IN ACCORDANCE WITH THE OFFICIAL CONTRACT DOCUMENTS. THESE DOCUMENTS INCLUDE SEALED DRAWINGS AND SPECIFICATIONS, ADDENDA, CHANGE ORDERS, APPROVED SHOP DRAWINGS, ISSUED SKETCHES AND REVISION DRAWINGS, AND ALL DIRECTIVES ISSUED BY THE	5. Diaphragms and Shearwalls	-	Inspect size, configuration, blocking and fastening of shearwalls and diaphragms. Verify panel grade and thickness. Verify size and installation of hold-downs and strans	ANSI/AF&PA & Supplier's Specs	Periodic	YES
MECH/ELECTRICAL/PLUMBING MANUFACTURER MINIMUM MISCELLANEOUS	 5. SPECIAL INSPECTORS SHALL KEEP ORGANIZED RECORDS OF INSPECTIONS AND SUBMIT INSPECTION REPORTS WITH A MINIMUM WEEKLY FREQUENCY TO THE CONTRACTOR, BUILDING OFFICIAL 	6. Prefabricated Wood Trusses & I-Joists	-	See Item #1. Inspect installation for location, spacing, bearing length, connectors, and permanent bracing.	ANSI/AF&PA & Supplier's Specs	Periodic	YES
MASONRY OPENING NOMINAL NOT TO SCALE NON-SHRINK	ENGINEERS, AND ARCHITECTS INDIVIDUALLY. REPORTS SHOULD INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION TO THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED. THEY SHOULD BE REPORTED TO THE BUILDING OFFICIAL AND TO					1	
ON CENTER OUTSIDE DIAMETER OUTSIDE FACE	 THE ENGINEER OF RECORD. 6. A FINAL SIGNED REPORT IS TO BE SUBMITTED AT THE END OF THE PROJECT DOCUMENTING REQUIRED 						
OVERHEAD OPPOSITE OPENING POWDER ACTUATED FASTENER PRECAST	SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES. THIS REPORT SHOULD STATE THAT ALL ITEMS REQUIRING SPECIAL INSPECTION AND TESTING WERE FULFILLED AND REPORTED TO THE BEST OF THEIR KNOWLEDGE IN CONFORMANCE WITH THE APPROVED PLANS, SPECIFICATIONS, AND THE APPLICABLE PROVISIONS OF THE IBC. ITEMS NOT IN CONFORMANCE, UNRESOLVED ITEMS, OR ANY DISCREPANCIES IN INSPECTION COVERAGE SHOULD BE SPECIFICALLY ITEMIZED						
POUNDS PER LINEAR FOOT POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH	 THE FOLLOWING ARE THE QUALIFICATIONS FOR INDIVIDUALS PERFORMING SPECIFIC INSPECTIONS OR TESTS INCLUDING IN THIS PROJECT'S SSI. 						
REFERENCE REINFORCING / REINFORCE REQUIRED RETURN	A. AMERICAN CONCRETE INSTITUTE (ACI): CONCRETE FIELD TESTING TECHNICIAN - GRADE 1 (ACI-CFTT) CONCRETE CONSTRUCTION INSPECTOR (ACI-CCI) LABORATORY TESTING TECHNICIAN - GRADE 1 OR 2 (ACI-I TT)						
ROOF TOP UNIT REINFORCE WITH SLIP CRITICAL SEE DETAIL	B. AMERICAN WELDING SOCIETY (AWS):						
SQUARE FOOTAGE SIMILAR SLAB ON GRADE	CERTIFIED STRUCTURAL STEEL INSPECTION (AWS/AISC-SSI) C. AMERICAN SOCIETY OF NON-DESTRUCTIVE TESTING (ASNT)						
SPACING / SPACES SPECIFICATIONS SQUARE STAINLESS STEEL	D. INTERNATIONAL CODE COUNCIL (ICC): STRUCTURAL MASONRY SPECIAL INSPECTOR (ICC-SMSI)						
STANDARD TEMPORARY TONGUE & GROOVE THICK / THICKENED TOP OF	STRUCTURAL STEEL AND BOLTING SPECIAL INSPECTOR (ICC-SSSI) STRUCTURAL WELDING SPECIAL INSPECTOR (ICC-SWI) PRESTRESSED CONCRETE SPECIAL INSPECTOR (ICC-PCSI) REINFORCED CONCRETE SPECIAL INSPECTOR (ICC-RCSI) SOILS SPECIAL INSPECTOR (ICC-SSI)						
TOP OF BEAM TOP OF FOOTING TOP OF JOIST	E. PROFESSIONAL STATE LICENSING: PROFESSIONAL ENGINEER (PE)						
TOP OF WALL TOP OF STEEL TRANSVERSE TYPICAL UI TIMATE	STATEMENT OF SPECIAL INSPECTIONS (SSI): THE FOLLOWING TABLES INDICATED THE MINIMUM SPECIFIC SPECIAL INSPECTION AND TESTING TO BE PERFORMED ON THIS PROJECT AND THE QUALIFICATIONS OF THE INDIVIDUAL INSPECTORS AND TESTING TECHNICIANS						
UNLESS NOTED OTHERWISE VERIFY VERTICAL	DEFINITIONS: 1. CONTINUOUS SPECIAL INSPECTION: THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL						
WITH WITHOUT WORK POINT WELDED WIRE FABRIC	INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. 100% OF THE WORK MUST BE INSPECTED AND IT MUST BE INSPECTED AS THE WORK IS BEING PERFORMED.						
PLATE SQUARE DIAMETER	 <u>PERIODIC SPECIAL INSPECTION</u>: THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN, OR IS BEING, PERFORMED AND AT THE COMPLETION OF WORK. 						
PLUS OR MINUS AT ELEVATION	 <u>YES</u>: THIS INSPECTION AND/OR TESTING IS REQUIRED BY THE BUILDING CODE AND MUST BE PERFORMED. <u>NO</u>: THIS INSPECTION AND/OR TESTING IS NOT APPLICABLE TO THE PROJECT, AND NEED NOT BE DEPEORMED 						
	 <u>SUGGESTED</u>: THIS INSPECTION AND/OR TESTING IS NOT REQUIRED BY THE BUILDING CODE. HOWEVER, THE ENGINEER OF RECORD RECOMMENDS IMPLEMENTING THEM FOR QUALITY ASSURANCE. A POTENTIAL EXISTS FOR THESE MEASURES TO BE A VALUE ADDED SERVICE FOR THE OWNER TO ENSURE PROPER PROJECT 						
	COMPLETION.						

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					1587 30th Avenue South - Moorhead, MN 56560 218.227.0022 www.SandmanSE.com Project #:2101-139 © Convright 2021 for SS5
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					VITK CONSULTING
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					420 Main Avenue Moorhead, Minnesota 56560 Telephone: (218)233-4422
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S101 1/8" = 1'-0"

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FOUNDATION PLAN NOTES:

- 1. TYPICAL INTERIOR SLAB ON GRADE, UNO THICKNESS = 5"
- REINFORCEMENT = #4 @ 24" O.C. BASE = MIN OF 6" COMPACTED GRANULAR FILL, UNO BY GEOTECHNICAL REPORT
- VAPOR RETARDER/BARRIER = 10 MIL POLY T.O. SLAB ELEVATION = 100'-0" SEE ARCH FOR SLOPES AND RECESSES
- 2. CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY OWNER/ENGINEER IF ANY DISCREPANCIES EXIST.
- 3. LOOSE MATERIAL SHALL BE REMOVED FROM HOLE OR MANUALLY COMPACTED
- 4. SEE ARCH FOR DIMENSIONING OF SLAB RECESS LOCATIONS AND SLOPED SLAB AREAS.
- 5. SSE IS NOT RESPONSIBLE FOR WALK DOOR STOOPS. IT IS THE OWNERS RESPONSIBILITY FOR THE PERFORMANCE OF EXTERIOR GRADE AND CONCRETE AT THE WALK DOOR LOCATIONS.
- 6. CONTRACTOR TO REFER TO SHEET S001 FOR OVER-EXCAVATION & STRUCTURAL BACKFILL PROCEDURES.
- 7. SEE ARCH FOR PERIMETER INSULATION REQUIREMENTS FOR FROST PROTECTION OF SLAB

PIER SCHEDULE

MARK	DETAIL	NOTES/COMMENTS
P1	2/S301	-
P2	3/S301	-
P3	4/S301	-

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JAYE VISTO 9748 INDUSTRIAL DRIVE

THOR BUILDINGS

HORACE, NORTH DAKOTA

KEYNOTES:



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						JAYE VISTO 9748 INDUSTRIAL DRIVE
ROC	OF FRAMING PLAN NO	DTES:				L THOR BUILDINGS
1. 2	ROOF TRUSS BEARING ELE	EVATION = 116'-4" UNO 4 1650Fb-1 5F MSR SPA	CED @ 2'-0" O C			HORACE, NORTH DAKOTA
۲.	U.N.O. FASTEN W/ (2) 20d R SPAN MIN	ING SHANK NAILS. WAI	L GIRTS TO BE 2-			KEYNOTES:
3.	ROOF AND WALL PANEL TO	D BE 26 GA PRO-PANEL	II.			
	LOCATED IN THE FLATS @	12" O.C. IN THE FIELD A	ND 6" O.C. ON END.			κ
	PLACED ON THE FLATS NEX AND SPLASH PLANK	XT TO MAJOR RIBS @ E	EVERY WALL GIRT			
	- THE RIDGE CAP TO BE FA WOODGRIP SCREWS THRC	STENED TO THE PURL DUGH EVERY MAJOR R	NS W/ 2" LONG B.			
4.	TREATED 2X8 SPLASH PLAI COLUMN W/ (3) 1/4" X 3 1/2"	NKING SHALL BE FASTI SCREWS	ENED TO EA			
5.	SEE S001 SHEATHING NOT	ES FOR GENERAL REQ	UIREMENTS			
6.	ALL FASTENERS AND META LUMBER TO HAVE REQUIRE CORROSION	AL HARDWARE IN CONT ED COATING TO PROTE	ACT WITH TREATED ECT FOR			J
7.	PROVIDE TYPICAL 2X6 INFI	LL FRAMING @ DOORS	& WINDOWS			
8.	ROOF SLOPE TO BE 4/12 SL	LOPE. SEE ARCH FOR 1	RUSS PROFILE			_
		KEYNOT	ES			
LABE 1	ROOF TRUSSES @	NC EA POST BY TRU	SS SUPPLIER			н
2	2X4 ROOF PURLINS FOR SPACING. SEE PURLINS TO BE 2-S	S. GRADE TO BE 2 E DETAIL 3/S401 F SPAN MINIMUN	400Fb-1.8E MSR LUI OR CONNECTION AI	MBER. SEE PLAN ND SPLICE.		
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	COL	UMNS TO BE SOL				
MARK	K SIZE	BASE PLATE	ANCHOR ROD TYPE	COMMENTS		
C1 C2	(3) 2X8 (5) 2X8	-	-	-		G
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						Moorhead, Minnesota 56560 Telephone: (218)233-4422
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SITE INFORMATION				
PARKING				
STALL TYPE		NUMBER		
9X20 STANDARD STALLS		14		
9X20 ADA STALLS		2		
TOTAL PROVIDED		16		
TOTAL REQUIRED		16		
ZONING INFORMATION				
CURRENT ZONE:		I-1, LIGHT INDUSTRIAL		
DIMENSIO	DIMENSIONAL STANDARDS			
BUILDING SETBACKS				
FRONT YARD		20' MINIMUM		
INTERIOR SIDE YARD		10' MINIMUM		
STREET SIDE YARD		10' MINIMUM		
REAR YARD		20' MINIMUM		
SURVEY	INFORMATION			
DATE OF SURVEY		10/6/2021		
COORDINATE SYSTEM	CITY OF FARGC	COORDINATE SYSTEM		
DATUM		NAVD 88		



BENCHMARK #1: TOP NUT OF EXISTING HYDRANT LOCATED APPROXIMATELY 77 FEET SOUTH OF THE SOUTHEAST CORNER OF THE PROPOSED NEW WEST BUILDING. ELEVATION: 918.35 (NAVD 88)

BENCHMARK #2: TOP NUT OF EXISTING HYDRANT LOCATED APPROXIMATELY 59 FEET SOUTHWEST OF THE SOUTHEAST CORNER OF THE SUBJECT PROPERTY. ELEVATION: 915.53 (NAVD 88)

BASIS OF BEARING: CITY OF FARGO COORDINATE SYSTEM



VISTO'S SHOP BUILDINGS 9748 INDUSTRIAL DRIVE

HORACE, NORTH DAKOTA

OWNER JAYE VISTO PO BOX 2 HORACE, ND 58047 PH: 701-361-6543 EMAIL: jayevisto@yahoo.com



CIVIL ENGINEER LOWRY ENGINEERING ANDREW THILL, P.E. 5306 51ST AVENUE SOUTH, SUITE A FARGO, ND 58104 PH: 701-235-0199 EMAIL: athill@lowryeng.com

SHEET INDEX					
C-1	COVER SHEET				
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C-4	OVERALL SITE PLAN				
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C-7	EROSION & SEDIMENT CONTROL PLAN				
C-8	TYPICAL DETAILS				
C-9	TYPICAL DETAILS				
L-1	LANDSCAPING PLAN				



ECONPERING 5306 51ST AVENUE SOUTH, SUITE FARGO, NORTH DAKOTA 58104									
REVISIONS									
	VISTO'S SHOP BUILDINGS 9748 INDUSTRIAL DRIVE HORACE, NORTH DAKOTA								
LE JOB # PROFESS/04 PE-9148									
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GENERAL NOTES

- L. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES ON THE DRAWINGS, OR IN THE FIELD PRIOR TO BEGINNING WORK OR DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER & ENGINEER.
- 2. A COMPLETE SET OF APPROVED DRAWINGS MUST BE MAINTAINED ON SITE AT ALL TIMES BY THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS.
- 3. CHANGES TO APPROVED PLANS SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE OWNER AND ENGINEER
- 4. CHANGES TO APPROVED PLANS ON PUBLIC PROPERTY SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL FROM THE CITY OF HORACE.
- 5. ALL SITE CONSTRUCTION SHALL MEET CITY OF FARGO STANDARD SPECIFICATIONS LATEST REVISION. IN THE CASE OF A DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS, THE PLANS SHALL GOVERN
- 6. ALL RIGHT-OF-WAY CONSTRUCTION SHALL MEET CITY OF HORACE STANDARD SPECIFICATIONS LATEST REVISION. IN THE CASE OF A DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS, THE PLANS SHALL GOVERN.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING & VERIFYING ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION & IS RESPONSIBLE FOR ANY DAMAGE TO THEM DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT THE LOCAL ONE-CALL SYSTEM AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- 8. ANY WORK ON EXISTING CITY OWNED UTILITIES SHALL REQUIRE NOTIFICATION TO THE CITY OF HORACE BY THE CONTRACTOR 24 HOURS PRIOR TO COMMENCING WORK. 9. THE CONTRACTOR SHALL COMPLY WITH ALL RULES & REGULATIONS OF FEDERAL, STATE, COUNTY, &
- LOCAL AUTHORITIES 10. THE CONTRACTOR IS REQUIRED TO MEET ALL APPLICABLE FEDERAL, OSHA, STATE, AND LOCAL
- REGULATIONS CONCERNING PROJECT SAFETY AND ASSUMES FULL RESPONSIBILITY FOR SAFETY ON THE PROJECT. 11. CONTRACTOR SHALL VERIFY THAT ALL NECESSARY PERMITS FOR CONSTRUCTION HAVE BEEN
- OBTAINED, ALL BONDS ARE POSTED, ALL FEES ARE PAID AND PROOF OF INSURANCE IS PROVIDED PRIOR TO THE START OF THE PROJECT.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURVEY AND RELATED COSTS.
- 13. CONTRACTOR SHALL BE RESPONSIBLE FOR HIS/HER OWN MEASUREMENTS AND QUANTITIES.
- ENGINEER QUANTITIES ARE ESTIMATES ONLY. 14. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION OF UNDERGROUND UTILITIES BY THE APPROPRIATE UTILITY ENTITY. PROPER COORDINATION WITH THE RESPECTIVE UTILITY ENTITIES SHALL BE PERFORMED BY THE CONTRACTOR TO INSURE THAT ALL UTILITY ENTITY STANDARDS FOR MATERIAL AND METHODS ARE MET. THE GENERAL CONTRACTOR SHALL OVERSEE INSTALLATION OF UTILITIES AND COORDINATE WITH ALL SUBCONTRACTORS TO AVOID CONFLICTS.
- 15. THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE OWNER FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITIES
- 16. THE CONTRACTOR SHALL PROVIDE TESTING, INSPECTIONS, AS-BUILT DRAWINGS, CERTIFICATIONS AND ANY OTHER PROCEDURES OR DOCUMENTATION REQUIRED BY THE GOVERNING AGENCIES TO CLOSE OUT THE PROJECT
- 17. THE CONTRACTOR SHALL RESTORE ANY STRUCTURES, PIPE, UTILITY, PAVEMENT, CURBS SIDEWALKS, LANDSCAPED ARES, ETC. WITHIN THE SITE OR ADJOINING PROPERTIES DISTURBED DURING DEMOLITION OR CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AND TO THE SATISFACTION OF THE OWNER/JURISDICTIONAL AUTHORITY.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL STRIPPING, RUBBISH, TRASH, DEBRIS, ORGANIC, AND EXCESS EXCAVATED MATERIAL IN A LAWFUL MANNER.
- 19. FOR THE PURPOSES OF CONSTRUCTION SURVEY, ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH STRUCTURAL AND ARCHITECTURAL PLANS.
- 20. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING SHOP DRAWINGS TO THE ENGINEER FOR REVIEW OF ALL APPLICABLE PRODUCTS AND MATERIALS BEING USED FOR CONSTRUCTION.

GRADING NOTES

- LOCATION AND TOP ELEVATIONS OF INLETS AND STRUCTURES MAY NEED TO BE ADJUSTED IN THE FIELD BY THE CONTRACTOR WHERE NECESSARY AND SHALL BE APPROVED BY THE ENGINEER. CONTRACTOR SHALL NOTE ANY CHANGES IN AS-BUILT DRAWINGS.
- 2. IF UNSUITABLE SUBGRADE MATERIALS ARE ENCOUNTERED, THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT (FROM OFF-SITE BORROW MATERIAL) OF ALL UNSUITABLE MATERIAL TO CLASSIFIED AS MH, CH, OH, OL AND PEAT IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM, UNLESS APPROVED IN WRITING BY THE PROJECT GEOTECHNICAL ENGINEER. THE SITE ENGINEER SHALL BE NOTIFIED IMMEDIATELY UPON ENCOUNTERING UNSUITABLE SUBGRADE MATERIAL.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATIONS AND GRADING INCLUDING FURNISHING OFF-SITE BORROW AND DISPOSING OF EXCESS MATERIAL AS REQUIRED TO MEET PLAN GRADES. OFF SITE BORROW SHALL MEET ALL REQUIREMENTS OF CITY OF FARGO STANDARD SPECIFICATIONS. COMPACTION LIFTS AND TESTING SHALL BE PER CITY OF FARGO REQUIREMENTS IN TRENCHING
- SUB-BASE, BASE, AND PAVING MATERIALS. SUB-BASE LIFTS SHALL NOT EXCEED 12". BASE LIFTS SHALL NOT EXCEED 6".

PAVING NOTES:

- 1. ALL PAVEMENT SECTION MATERIALS AND INSTALLATION SHALL MEET THE REQUIREMENTS OF THE CITY OF FARGO.
- 2. AGGREGATE BASE COURSE SHALL MEET THE REQUIREMENTS OF THE CITY OF FARGO. 3. CONCRETE FOR FLAT WORK SHALL BE A BATCH PLANT MIX MEETING THE REQUIREMENTS OF THE CITY OF FARGO STANDARD SPECIFICATIONS. (MINIMUM 4,000 PSI)
- 4. PAINTED PARKING STRIPING SHALL BE WATER BASED 4" IN WIDTH YELLOW STRIPES AND BE LOCATED AS SHOWN ON THE PLANS. ACCESSIBLE PARKING STRIPING SHALL BE BLUE AND PER ADA REQUIREMENTS. GORE AREA LINES SHALL BE PAINTED AT 45 DEGREES AND SHALL HAVE A SPACING OF 3'. CURE COMPOUND SHALL BE REMOVED BY SANDBLASTING, GRINDING, OR OTHER APPROVED METHOD BEFORE INSTALLATION OF PAVEMENT MARKINGS ON CONCRETE TO ENSURE PROPER ADHESION OF THE PAINT. ALL WORK SHALL BE IN ACCORDANCE WITH THE NDDOT REQUIREMENTS.
- THE CONTRACTOR SHALL SUBMIT A JOINTING PLAN FOR CONCRETE PAVEMENT TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. IF NO JOINTING PLAN IS SUBMITTED, THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR JOINTING LAYOUT.

STORM SEWER & DRAINAGE NOTES:

- INVERTS SHOWN ON PLAN DRAWINGS ARE PIPE INVERTS UNLESS NOTED OTHERWISE. ANY SUBSTITUTION FOR MATERIALS OR PROCEDURES MUST HAVE PRIOR WRITTEN APPROVAL OF THE CITY OF HORACE AND THE PROJECT ENGINEER.
- GRADE TO ENSURE POSITIVE DRAINAGE. ALL FINISHED SURFACES SHALL BE FREE FROM SURFACE IRREGULARITIES.

SANITARY SEWER NOTES:

- LOCATIONS AND TOP ELEVATIONS OF STRUCTURES MAY NEED TO BE ADJUSTED IN THE FIELD BY THE CONTRACTOR WHERE NECESSARY AND SHALL BE APPROVED BY THE ENGINEER. CONTRACTOR SHALL NOTE ALL CHANGES ON AS-BUILT DRAWINGS.
- CONSTRUCTION OF THE SANITARY SEWER SYSTEM AND CONNECTION TO THE EXISTING SEWER SYSTEM SHALL MEET THE REQUIREMENTS OF AND SHALL BE INSTALLED UNDER THE DIRECTION OF THE CITY OF HORACE.
- CONTRACTOR SHALL CONFIRM LOCATION AND INVERT ELEVATION OF SEWER TIE-IN POINT PRIOR TO ANY SITE OR BUILDING CONSTRUCTION.
- ROOF DRAINS, FOUNDATION DRAINS OR OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

WATER NOTES:

- CONSTRUCTION OF THE WATER SYSTEM AND CONNECTION TO THE EXISTING WATER SYSTEM SHALL MEET THE REQUIREMENTS OF AND SHALL BE INSTALLED UNDER THE DIRECTION OF THE CITY OF HORACE.
- PVC WATER PIPE AND FITTINGS LESS THAN 4" SHALL BE CLASS 200.
- ALL WATER LINES SHALL BE BELOW THE FROST LINE 7.5' FROM FINISH GRADE TO TOP OF PIPE. WATER METERS, BOXES, VAULTS AND BFP'S SHALL MEET ALL REQUIREMENTS OF THE UTILITY COMPANY. CONTRACTOR SHALL CONFIRM ALL ITEMS AGAINST CURRENT LIST OF APPROVED DEVICES PRIOR TO ORDERING.
- ALL PIPE AND APPURTENANCES INSTALLED ON A DEPRESSURIZED WATER MAIN ARE TO BE WIPED CLEAN AND ALL INTERIOR SURFACES SATURATED WITH A MINIMUM 1% CHLORINE SOLUTION.

- 6. CHLORINATED DISINFECTION WATER SHALL NOT BE DISCHARGED DIRECTLY INTO A STORM DRAINAGE SYSTEM OR SURFACE WATERS WITHOUT THE PRIOR USE OF APPROPRIATE DE-CHLORINATION METHODS.
- 7. A MINIMUM OF 5 FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN UTILITY
- 8. WATER LINE CROSSING ANY AND ALL SEWERS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 18" BETWEEN THE OUTSIDE OF THE WATER MAIN PIPE AND THE SEWER PIPE. ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SUCH THAT BOTH JOINTS WILL
- SANITARY SEWERS, THE SEWER MUST BE WATER MAIN MATERIAL FOR THE SPAN. 9. SITE CONTRACTOR IS RESPONSIBLE FOR MAKING TIE-IN TO WATER AND SANITARY SEWER CONNECTIONS AT BUILDING. SEE ARCHITECTURAL AND MECHANICAL PLANS FOR EXACT LOCATIONS FOR BUILDING STUB OUTS AND FLOOR DRAINS.

- DEMOLITION NOTES 1. LIMITS OF STREET PATCHING AND PATCHING REQUIREMENTS SHALL BE VERIFIED WITH THE CITY OF HORACE.
- EROSION & SEDIMENT CONTROL / SWPPP NOTES
- IF THE LAND BOUNDARY DENOTED ON THE PLANS ENCOMPASSES MORE THAN 1 ACRE, A NOTICE OF INTENT TO OBTAIN A STORM WATER POLLUTION CONTROL PERMIT SHALL BE ACQUIRED BY THE CONTRACTOR AND OWNER FROM THE NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY 7 DAYS PRIOR TO CONSTRUCTION. THIS NOTICE OF INTENT SHALL BE PROVIDED WITH THE BUILDING PERMIT APPLICATION. CONTRACTOR IS RESPONSIBLE FOR NOI SUBMITTAL
- 2. COPY OF NOI, COVERAGE LETTER FROM THE DOH AS WELL AS ALL MAINTENANCE AND INSPECTION RECORDS TO BE KEPT ON SITE AND AVAILABLE FOR REVIEW BY CITY, STATE OR FEDERAL OFFICIALS UPON REQUEST.
- THIS DOCUMENT SHALL BE AVAILABLE FOR REVIEW BY CITY, STATE OR FEDERAL OFFICIALS UPON REQUEST. THE SWPPP SHALL BE IN ACCORDANCE WITH THE NORTH DAKOTA GENERAL PERMIT NO. NDR10-0000 AND THE PLANS. THE ESC PLAN IS THE ENGINEER'S RECOMMENDATION FOR EROSION AND SEDIMENT CONTROL BASED ON THE DESIGN OF THE PROPOSED SITE. THIS DESIGN DOES NOT TAKE INTO EFFECT CONTRACTOR MEANS AND METHODS, CONSTRUCTION SCHEDULE, OR ORDER OF OPERATIONS. CONTRACTOR IS EXPECTED TO ADJUST DESIGN AS IS NECESSARY TO MEET THE REQUIREMENTS OF THE GENERAL PERMIT.
- 4. CONTRACTOR IS RESPONSIBLE FOR ALL EROSION AND SEDIMENT CONTROL ON THE SITE. THIS INCLUDES BUT IS NOT LIMITED TO STORM WATER EROSION, EROSION FROM PUMPING OPERATIONS, OFF SITE TRACKING, DUST CONTROL AND CONTROL OF ANY CONCRETE GRINDINGS OR SAW CUT DUST. CONTRACTOR IS ALSO RESPONSIBLE FOR ALL OTHER ITEMS AS REQUIRED IN THE GENERAL PFRMIT
- 5. INSPECTIONS SHALL BE COMPLETED AND DOCUMENTED BY THE CONTRACTOR AT LEAST ONCE EVERY 14 DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER
- 6. SITE SHALL BE STABILIZED WITHIN 14 DAYS OF COMPLETION OF WORK OR WITHIN 14 DAYS OF SUSPENSION OF WORK PER THE GENERAL PERMIT.
- 7. ALL EROSION AND SEDIMENT RELATED CONTROL AND ITEMS NEED TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS UNLESS OTHERWISE DICTATED IN THE PLANS.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL EXCESS TOPSOIL, EXCAVATED MATERIAL, RUBBISH, TRASH, DEBRIS, AND ORGANIC MATERIAL CONSISTENT WITH LOCAL LAW AND WITH THE GENERAL PERMIT.
- CONTRACTOR IS RESPONSIBLE FOR ALL DE-WATERING AS NECESSARY TO MEET REQUIRED EXCAVATIONS AND GRADES. MUDDY WATER TO BE PUMPED FROM EXCAVATION AND WORK AREAS MUST BE HELD IN SETTLING BASINS OR FILTERED PRIOR TO ITS DISCHARGE INTO SURFACE WATERS OR STORM DRAINAGE SYSTEMS. WATER MUST BE DISCHARGED THROUGH A PIPE, WELL GRASSED OR LINED CHANNEL, OR OTHER EQUIVALENT MEANS SUCH THAT DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENTATION. THIS INCLUDES DE-WATERING OF RAINWATER, GROUND WATER, OR ANY OTHER WATER ON SITE CAUSING IMPACTS TO SITE CONSTRUCTION. 10. ALL DISTURBED AREAS SHALL BE SEEDED AND HYDROMULCHED UNLESS SHOWN OTHERWISE IN THE
- PLANS.
- ALL STOCKPILES SHALL BE SURROUNDED WITH SILT FENCE. 12. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, SEDIMENT
- REMOVAL/CLEANING, AND REPLACEMENT AS REQUIRED FOR ALL EROSION AND SEDIMENT CONTROL
- ITEMS 13. CONTRACTOR IS RESPONSIBLE FOR SWEEPING AND CLEANING ANY SEDIMENT TRACKED ONTO
- 14. EROSION CONTROL BLANKET SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS FOR LAYDOWN PATTERN, REQUIRED OVERLAP WIDTH, TRENCHING, STAPLE PATTERN, ETC.
- CHEMICAL STORAGE ONSITE SHALL BE IN COMPLIANCE WITH THE GENERAL PERMIT. 16. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF INLET PROTECTION THROUGHOUT THE DIFFERENT PHASES OF CONSTRUCTION REGARDLESS OF THE TYPE OF PROTECTION. THE QUANTITY FOR ONE (1) INLET PROTECTION SHALL COVER INSTALLATION, CLEANING, REPLACEMENT, ETC. FROM THE TIME THE MANHOLE IS SET UNTIL FINAL STABILIZATION OF THE ENTIRE AREA DRAINING TO THE INLET. FOR EXAMPLE: ONE (1) INLET PROTECTION QUANTITY MAY COVER BUT IS NOT LIMITED TO: SILT FENCE AROUND MANHOLE PRIOR TO LID AND CASTING BEING INSTALLED, REMOVAL OF SILT FENCE AROUND MANHOLE AFTER CASTING HAS BEEN INSTALLED, INSTALLATION OF DEVICE SUCH AS DANDY SACK INSIDE CASTING, REMOVAL OF SEDIMENT FROM DANDY SACK, REMOVAL OF DANDY SACK FROM CASTING AFTER ALL UPSTREAM AREAS ARE STABILIZED.
- 17. OWNER SHALL REFER TO THE STORMWATER MANAGEMENT PLAN FOR MAINTENANCE REQUIREMENTS OF THE PERMANENT STORMWATER QUANTITY/QUALITY CONTROL MEASURES.

SEEDING NOTES:

- 1. ALL SEEDING MIX SHALL CONSIST OF THE FOLLOWING: -KENTUCKY BLUEGRASS = 4 LBS OF LIVE SEED PER ACRE -PERENNIAL RYEGRASS = 5.4 LBS OF LIVE SEED PER ACRE -BLUE GAMMA = 2.4 LBS OF LIVE SEED PER ACRE -SIDEOATS GRAMA = 7.2 LBS OF LIVE SEED PER ACRE -TOTAL LBS PER ACRE = 19
- -FERTILIZER TYPE = 20 LBS NITROGEN AND 20 LBS PHOSPHOROUS PER ACRE 2. CULTIVATE OR DISK TOPSOIL TO A DEPTH OF APPROXIMATELY 3".
- 3. REMOVE MATERIALS GREATER THAN 1" IN DIAMETER THAT CANNOT BE BROKEN UP.
- 4. PLANT SEEDS TO A DEPTH BETWEEN $\frac{1}{4}$ " AND $\frac{3}{4}$ ". 5. SEED ONLY WHEN WIND IS LESS THAN 15 MPH WHEN NOT USING A GRASS DRILL.
- 6. MULCHING SHALL BE USED IMMEDIATELY AFTER SEEDING TO PREVENT EROSION AND PROMOTE
- EARLIER VEGETATION COVER.

TEMPORARY TRAFFIC CONTROL NOTES

- 1. UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AN ATSSA CERTIFIED TRAFFIC CONTROL SUPERVISOR (TCS) AND ANY NECESSARY TEMPORARY TRAFFIC CONTROL DEVICES ON AND OFF-SITE INCLUDING OBTAINING ANY APPLICABLE PERMITS. THE CONTRACTOR SHALL IDENTIFY THE TCS AND PROVIDE PROOF OF CERTIFICATION AT A PRECONSTRUCTION MEETING.
- 2. UNLESS A TEMPORARY TRAFFIC CONTROL PLAN IS INCLUDED WITH THE DESIGN DOCUMENTS, CONTRACTOR SHALL SUBMIT A COPY OF THE APPROVED TRAFFIC CONTROL PLAN TO THE ENGINEER FOR REVIEW.
- 3. CONTRACTOR IS RESPONSIBLE TO INSTALL, INSPECT, MAINTAIN, AND REMOVE TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE LATEST STANDARDS AND REQUIREMENTS OF THE MUTCD, STANDARD HIGHWAY SIGNS AND MARKINGS BOOK PUBLISHED BY THE FHWA, AND LOCAL **REGULATIONS.**
- 4. CHANGES TO THE TEMPORARY TRAFFIC CONTROL PLAN SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE OWNER, ENGINEER, AND PERMITTING AUTHORITY IF APPLICABLE

CONDUIT CROSSOVER AND WATER LINE APPURTENANCES, I.E., HYDRANTS, VALVES, TEES, ETC. BE EQUAL DISTANCE AND AS FAR FROM THE SEWER AS POSSIBLE, IF WATER CROSSES BELOW

CONTRACTOR SHALL HAVE AN UPDATED SWPPP AVAILABLE ON SITE ANYTIME WORK IS BEING DONE

THAN ¼" IN 24 HOURS. A RAIN GAUGE SHALL BE ONSITE AND USED TO MAKE THIS DETERMINATION.

11. TOP SOIL OR OTHER SOIL/CLAY STOCKPILES ARE NOT TO BE LOCATED WITHIN FLOW PATHS, BASES OF

ADJACENT ROADWAYS DURING CONSTRUCTION AS NEEDED TO KEEP STREETS CLEAR OF SEDIMENT.

7. CONTRACTOR IS RESPONSIBLE FOR WATERING TO ESTABLISH GRASS GROWTH TO A HEIGHT OF 3".



ADJ

ALT

ARCH

ACP

BLDG

ΒM

B.O.

BV

B.O.P

BVCE

BVCS

B.P

CIP

CU

CJ

CF

CS

C.O.

CNTR

CONST

CONTR

DEMO

CY

DIA

DIP

DTL

DIM

D.S.

DWG

DWL

EΑ ELEC

DOM

CMP

CONC

BIT

ABBREVIATIONS

LEGEND

ADJACENT ALTERNATE ARCHITECT ASBESTOS CEMENT PIPE BITUMINOUS BUILDING BENCHMARK BY OWNER/BY OTHERS BEGINNING OF PROJECT BUTTERFLY VALVE BEGINNING VERTICAL CURVE ELEVATION BEGINNING VERTICAL CURVE STATION CIVIL CAST IRON CAST IRON PIPE COPPER CORRUGATED METAL PIPE CONTROL JOINT CONCRETE CUBIC FEET CUBIC FEET CURB STOP CLEAN OUT CENTER CONSTRUCTION CONTRACTOR CUBIC YARD DIAMETER DUCTILE IRON PIPE DEMOLITION DETAIL DIMENSION DOMESTIC DOWN SPOUT DRAWING DOWEL EACH	ELEV ENCL E.O.P. E.J. EX. EX.A. EVCE EVCS FD FFE FO FTG G.C. GALV GAL GRAN GV HDPE HORZ HB HDCP HYD I K M MH MAX MIN MJ. MISC. NC NOM NIC NTS OD OCEW OC OHE P.C	ELEVATION ENCLOSURE END OF PROJECT EXPANSION JOINT EXISTING EACH WAY END VERTICAL CURVE ELEVATION END VERTICAL CURVE STATION FINE DEPARTMENT FIRST FLOOR ELEVATION FIBER OPTICS FOOTING GENERAL CONTRACTOR GALVANIZED GALLON GRANULAR GATE VALVE HIGH DENSITY POLYETHYLENE HORIZONTAL HOSE BIB HANDICAPPED HYDRANT INLET CURVATURE VALUE MECHANICAL MANHOLE MAXIMUM MINIMUM MECHANICAL JOINT MISCELLANEOUS NON-CORROSIVE NOMINAL NOT IN CONTRACT NOT TO SCALE OUTSIDE DIMENSION ON CENTER OVERHEAD ELECTRIC DRECAST CONCEFTE
ELECTRIC	P.C.	PRECAST CONCRETE

D		EX. BUILDING FOOTPRINT NEW BUILDING FOOTPRINT
	——————————————————————————————————————	EX. FIBER OPTIC
	GAS	EX. GAS LINE
	GAS ———	NEW GAS LINE
		EX. ELECTRIC
	UGE ———	NEW ELECTRIC
	OHE	EX. OVERHEAD ELECTRIC
	CATV	EX. CABLE TV
	TT	EX. TELEPHONE
	— — — —1111— — —	EX. CONTOUR
		NEW CONTOUR
		GRADE BREAK/FLOW PATH
		CENTER LINE/SECTION LINE
	╔┫╡┫╡┫╧┫╧	· NEW TRACKS
		EX. TRACKS
NE		EX. ASPHALT PAVEMENT
NE		NEW ASPHALT PAVEMENT
		EX. CONCRETE PAVEMENT
		NEW CONCRETE PAVEMENT
		EX. GRAVEL SURFACE

 $\Box \cdot \text{NEW TRACKS}$ EX. TRACKS EX. ASPHALT PAVEMENT NEW ASPHALT PAVEMENT EX. CONCRETE PAVEMENT NEW CONCRETE PAVEMENT EX. GRAVEL SURFACE NEW GRAVEL SURFACE EX. SIDEWALK/FLATWORK a a a a a a a NEW SIDEWALK/FLATWORK ACCESSIBLE (ADA) RAMP WITH TRUNCATED DOME PANEL STRIPING CROSSWALK STRIPING ADA ACCESSIBLE

STRIPING TURN ARROWS

SEEDING & HYDROMULCH **SEEDING & EROSION** CONTROL BLANKET

PVIE	POINT OF VERTICAL INTERSECTION
PV15	
PRFFAB	PREFABRICATED
PSI	POUNDS PER SOUARE INCH
PVC	POLYVINYL CHLORIDE PIPE
PP	POWER POLE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REQ'D	REQUIRED
RIM	RIM OF INLET OR CASTING
ROW	RIGHT OF WAY
SAN	SANITARY
SS	SANITARY SEWER
ST	STORM
STD	STANDARD
SB	SOIL BORING
STRUCT	STRUCTURAL
SF	SQUARE FEET
SCH	SCHEDULE
SW	SIDEWALK
Т	TELEPHONE
ТҮР	TYPICAL
UNEX	UN-EXCAVATED
UE	UTILITY EASEMENT
UGE	UNDERGROUND ELECTRIC
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
V	VERIFY
VCL	VERTICAL CURVE LENGTH
VOL	VOLUME
VCP	VITRIFIED CLAY PIPE
W/	WITH
W/O	WITH OUT
WTH	WIDTH
W	WATER

 \bigcirc \square $\boldsymbol{\gamma}$ $\mathbf{\mathcal{L}}$ \bigcirc \frown \bigcirc \sim T \bigcirc > 6LE JOB # 21128 PROJECT DATE: 10/20/2021 CHECKED BY: SAS DRAWN BY: SAS APPROVED BY: GENERAL NOTES & LEGEND C-2



DEMOLITION CALLOUTS			
ITEM	QUANTITY	UNIT	
REMOVE AND PATCH EX. GRAVEL ROADWAY	170	SY	
REMOVE AND RESET EX. FES	2	EA	

NOTE:

1. ALL ROAD PATCHING SHALL HAVE THE SAME CROSS SECTION AS THE EXISTING ROAD.

2. ALL ROAD PATCHING SHALL BE PER CITY OF HORACE STANDARDS.



- REMOVAL AREAS

BENCHMARK #1: TOP NUT OF EXISTING HYDRANT LOCATED APPROXIMATELY 77 FEET SOUTH OF THE SOUTHEAST CORNER OF THE PROPOSED NEW WEST BUILDING. ELEVATION: 918.35 (NAVD 88)

BENCHMARK #2: TOP NUT OF EXISTING HYDRANT LOCATED APPROXIMATELY 59 FEET SOUTHWEST OF THE SOUTHEAST CORNER OF THE SUBJECT PROPERTY. ELEVATION: 915.53 (NAVD 88)

(N)

NORTH DAKOTA

BASIS OF BEARING: CITY OF FARGO COORDINATE SYSTEM





ITEM	QUANTITY	UNIT
6" CONCRETE PAVEMENT	3,308	SY
SUBGRADE PREP	3,778	SY
GEOSYNTHETIC FABRIC TYPE R1	3,778	SY
NDDOT CLASS 5 GRAVEL	675	CY
ADA PARKING SIGN	2	EA
PAVEMENT MARKINGS - ADA MESSAGE	2	EA
PAVEMENT MARKINGS - 4" PAINTED LINE	700	EA

NOTES: 1. GRAVEL ROADWAY PATCHING EXCLUDED FROM ABOVE SITE QUANTITIES.



NORTH DAKOTA



ESTIMATED WATER QUANTITIES			
ITEM	QUANTITY	UNIT	
LIVE TAP EX. WATER MAIN	2	EA	
1.5" POLY CLASS 200 WATER SERVICE	196	LF	
2" POLY CLASS 200 WATER SERVICE	164	LF	
1.5" CURB STOP	3	EA	
2" CURB STOP	1	EA	

ESTIMATED SANITARY QUANTITIES			
ITEM	QUANTITY	UNIT	
CONNECT TO EX. SANITARY MAIN	2	EA	
6" SCHD 40 SANITARY SERVICE	385	LF	
6" SANITARY CLEANOUT	8	EA	

ESTIMATED STORM QUANTITIES			
ITEM	QUANTITY	UNIT	
12" HDPE STORM PIPE	46	LF	
12" FES	2	EA	
CONNECT TO EX. CMP STORM CULVERT	2	EA	
12" CMP STORM PIPE	13	LF	

NOTES

1. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF SANITARY SEWER AND WATER MAIN. IF DEPTH OF SANITARY SEWER DIFFERS FROM THAT ON PLANS, CONTRACTOR TO CONTACT THE ENGINEER IMMEDIATELY.

2. AS-BUILT INFORMATION FROM CITY OF HORACE ON INDUSTRIAL DRIVE UTILITIES WAS NOT RECEIVED. CONTRACTOR TO BUDGET FOR ADDITIONAL TIME AND MATERIALS TO FIND EXISTING UTILITIES IN INDUSTRIAL DRIVE.

LOWER WATER MAIN/WATER SERVICE PER DETAIL

NORTH DAKOTA

UTILITIES UNDERGROUND LOCATION SERVICE 1-800-795-0555



C-5


FG	
FL	
HP	
INV	
LP	
MC	
ME	
PC	
RIM	
TC	
TOC	
TW	
TOW	
BOW	

NEW CURB(IN-FLOW) NEW CURB(OUT-FLOW) GRADE BREAK: HIGH POINT FINISH GROUND FLOWLINE HIGH POINT STRUCTURE INVERT ELEVATION LOW POINT MIDPOINT OF CURVE MATCH EXISTING GROUND POINT OF CURVATURE STRUCTURE RIM ELEVATION TOP OF CURB/THICKENED EDGE TOP OF CONCRETE TOP OF WALK TOP OF WALL BOTTOM OF WALL





EROS	EROSION CONTROL LEGEND					
SF	SILT FENCE	722	LF			
	FIBER ROLL PROTECTION (STRAW WATTLE)	75	LF			
	SEEDING & HYDROMULCH	ХХ	SY			
	SEEDING WITH EROSION CONTROL BLANKET; NDDOT ECB-1	ХХ	SY			
000000000000000000000000000000000000000	VEHICLE TRACKING PAD	2	EA			
	CONCRETE WASHOUT	1	EA			

NOTES:

- 1. CONTRACTOR SHALL FOLLOW NDDEQ STORMWATER POLLUTION PREVENTION STANDARDS FOR ALL EROSION CONTROL DURING CONSTRUCTION.
- A FODS TRACKOUT CONTROL MAT MAY BE USED AS AN APPROVED EQUAL TO THE VEHICLE TRACKING PAD. CONTRACTOR SHALL SUBMIT PROPOSED MAT LAYOUT TO ENGINEER FOR REVIEW PRIOR TO INSTALLING.
 CONTRACTOR MAY CHOOSE LOCATION OF CONCRETE WASHOUT, COORDINATE
- 3. CONTRACTOR MAY CHOOSE LOCATION OF CONCRETE WASHOUT. COORDINATE WITH CITY AND ENGINEER ON LOCATION.

						ENGINEERING		FARGO, NORTH DAKOTA 58104	
REVISIONS									
			VISTO'S SHOP BUILDINGS	0748 INDUCTRIAL DRIVE	TANG TWILCOGNI 04/C	HORACE, NORTH DAKOTA			
		944 n 38 1	PR(F DATE: OP)	AND TH	SS / REW ILL / 20/		LEVELER L		,
PF CH DF	ROJE	ECT KED N B	DA BY Y: D B	TE: : Y:		1	: 0/20	2112 //202 SA SA	28 21 .S .S
		SEI					ROL		





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NTS



/N.T.S.







REMOVE EXISTING WATER MAIN AS NECESSARY

CAST IRON COUPLING

WITH STAINLESS STEEL

BOLTS

SANITARY -

SEWER

CL OF WATER MAIN



HDPE/CMP STORM SEWER NTS

- 3. LAST 3' OF PIPE, MEASURED FROM BACK OF FLARED END SECTION, IS TO B CLAY AND NOT CLASS 5 OR CLASS 3 TO PROVIDE SCOUR PROTECTION. 4. IF RCP PIPE IS USED, BEDDING ONLY REQUIRED TO SPRING LINE OF PIPE.
- ALL LIFTING HOLES TO BE PLUGGED & MORTARED WATER TIGHT.
 THE MOISTURE CONTENT OF THE AGGREGATE AT THE TIME OF COMPACTIO NOT LESS THAN 2.0 PERCENTAGE POINTS BELOW, NOR MORE THAN 3.0 PER POINTS ABOVE THE OPTIMUM MOISTURE CONTENT.



	EDONRY ENGINEERING 5306 51ST AVENUE SOUTH, SUITE A FARGO, NORTH DAKOTA 58104
5 PIPE DIN 6" TED D T-99.	REVISIONS
IN SHALL BE REENTAGE BEDDED IN	VISTO'S SHOP BUILDINGS 9748 INDUSTRIAL DRIVE HORACE, NORTH DAKOTA
	LE JOB # PROJECT DATE: 10/20/2021 VOR TH DAKOTH 21128 PROJECT DATE: 10/20/2021 CHECKED BY: SAS DRAWN BY: SAS APPROVED BY: AJT
	DETAILS
	C-9





	LANDSCAPING LEGEND					
)L	TYPE OF PLANT MATERIAL	PLANTING SIZE	#PLANTS EACH			
	LARGE DECIDUOUS TREE	1.5 TO 3-INCH CALIPER AT TIME OF PLANTING >30 FOOT MATURE HEIGHT	18			

LANDSCAPING REQUIREMENTS					
STREET TREE REQUIREMENTS					
Y REQUIREMENTS	SITE REQUIREMENTS	PROVIDED			
TREE PER 35 LF	655/35 = 18 TREES	18 STREET TREES			

1. THE CONTRACTOR SHALL FOLLOW ALL CITY OF HORACE LANDSCAPING STANDARDS. 2. ALL STREET TREES SHALL HAVE A MINIMUM 3' RADIUS MULCH RINGS INSTALLED AT THE TIME OF PLANTING. THIS SHALL NOT APPLY TO TREES WITHIN THE SITE.

3. THE LOWEST BRANCH OF ALL STREET TREES MUST BE 9.5' FROM GROUND.

4. THE CONTRACTOR SHALL PROVIDE A 1 YEAR WARRANTY ON ALL LANDSCAPE MATERIAL TO INCLUDE WORKMANSHIP FOR INSTALLATION FROM DATE OF FINAL ACCEPTANCE. 5. CONTRACTOR TO COORDINATE WITH MECHANICAL REGARDING LANDSCAPING IN AND AROUND AIR INTAKE OR EXHAUST UNITS.

6. CONTRACTOR TO ALLOW 5' CLEARANCE FROM UNDERGROUND UTILITY PIPING TO PLANTINGS. ALL OTHER PLANTING / LANDSCAPE REQUIREMENTS PER FRANCHISE REQUIREMENTS.
 ALL TREES SHALL BE APPROVED BY CITY FORESTER.





	-		
4	ı 15		JAYE VISTO 60' X 150' 9748 INDUSTRIAL DRIVE
		L	THOR BUILDINGS
			FARGO, NORTH DAKOTA
		_	KEVNOTES
			GENERAL NOTES: - IBC 2018
		K	- OCCUPANCY - S-1 (SECTION 311.2)
		ĸ	- CONSTRUCTION TYPE VB (TABLE 606.2)
			- BUILDING IS NOT SPRINKLED
		_	
			AND ROOF. BUIDING WILL BE USED FOR STORAGE AND INDIVIDUAL WORKSHOP SPACE. NO COMMERCIAL
			- CONCRETE SLAB OVER GRAVEL
		J	- ALLOWABLE SQUARE FOOTAGE - 9,000 (TABLE 506.2)
			- INCREASE FOR OPEN AREA = 37% = 3,300 S.F. (306.3.3) - ALLOWABLE AREA = 12.330 S.F.
			- ACTUAL S.F. = 9,000 S.F.
		_	- NO TRAVEL DISTANCE OVER 100'-0"
			- SPECIAL INSPECTIONS NOT REQUIRED
		н	- FIRE EXTINGUISHERS TO BE PLACED SO NO MORE THAN 75'-0" FROM ANY POINT TO EXTINGUISHER
			- DRAFT STOPS TO BE PROVIDED AT MAXIMUN OF 3000 S.F. OF HORIZONTAL ATTIC SPACE
			- BUILDING IS HEATED - DESIGN BUILD BY OWNER
			SPAN OVER 60'-0".
		G	- SIGNED ENGINEER TRUSS DRAWINGS WILL BE SUBMITTED UNDER SEPARATE COVER
		_	
		F	
		Е	
			GENERAL NOTES
		D	
		_	
		C	
			I hereby certify that this drawing specification or report was propored
			by me or under my direct supervision and that I am a duly registered Architect under the laws of the State of North Dakota.
		_	
			Dated: OCTOBER 2021 Regt. No. 1423
			Signed:
		В	
			DADTNIEDC
			V FARINERS ARCHITECTURE PLANNING
			420 Main Avenue Moorhead, MN 56560 Fx: 218-233-7988 Ph: 218-233-4422
			Project Number: 202015-1
		Α	L:\2020_Clients\202016 Thor Buildings\202016-8 Jaye Visto 60 X File Name: 150\CAD\5_Const_Dwgs\Luxsun Jaye Visto Revised.rvt
			Sheet No.
	I 15		© 2021 YHR PARTNERS, LTD. A-1



SITE IN	FORMATION	
P	ARKING	
STALL TYPE		NUMBER
9X20 STANDARD STALLS		20
9X20 ADA STALLS		3
TOTAL PROVIDED		23
TOTAL REQUIRED (PER CODE SECTION	17.6.5.1.f)	21
ZONING	INFORMATION	
CURRENT ZONE:		I-1, LIGHT INDUSTRIAL
DIMENSIO	NAL STANDARDS	
BUILDING SETBACKS		
FRONT YARD		20' MINIMUM
INTERIOR SIDE YARD		10' MINIMUM
STREET SIDE YARD		10' MINIMUM
REAR YARD		20' MINIMUM
SURVEY INFORMATION		
DATE OF SURVEY		10/6/2021
COORDINATE SYSTEM	CITY OF FARGC	COORDINATE SYSTEM
DATUM		NAVD 88

 $\sim\!\!\sim\!\!\sim\!\!\sim\!\!\sim\!\!\sim\!\!\sim\!\!\sim\!\!\sim$ SITE STATISTICS REVISED TO REFERENCE CITY PARKING REQUIREMENTS
 PARKING COUNT REVISED 1



BENCHMARK #1: TOP NUT OF EXISTING HYDRANT LOCATED APPROXIMATELY 77 FEET SOUTH OF THE SOUTHEAST CORNER OF THE PROPOSED NEW WEST BUILDING. ELEVATION: 918.35 (NAVD 88)

BENCHMARK #2: TOP NUT OF EXISTING HYDRANT LOCATED APPROXIMATELY 59 FEET SOUTHWEST OF THE SOUTHEAST CORNER OF THE SUBJECT PROPERTY. ELEVATION: 915.53 (NAVD 88)

BASIS OF BEARING: CITY OF FARGO COORDINATE SYSTEM



VISTO'S SHOP BUILDINGS 9748 INDUSTRIAL DRIVE

HORACE, NORTH DAKOTA

OWNER JAYE VISTO PO BOX 2 HORACE, ND 58047 PH: 701-361-6543 EMAIL: jayevisto@yahoo.com



CIVIL ENGINEER LOWRY ENGINEERING ANDREW THILL, P.E. 5306 51ST AVENUE SOUTH, SUITE A FARGO, ND 58104 PH: 701-235-0199 EMAIL: athill@lowryeng.com

SHEET INDEX			
C-1	COVER SHEET		
C-2	GENERAL NOTES & LEGEND		
C-3	SURVEY OVERLAY & DEMOLITION PLAN		
C-4	OVERALL SITE PLAN		
C-5	UTILITY PLAN		
C-6	GRADING PLAN		
C-7	EROSION & SEDIMENT CONTROL PLAN		
C-8	TYPICAL DETAILS		
C-9	TYPICAL DETAILS		
L-1	LANDSCAPING PLAN		



UTILITIES UNDERGROUND LOCATION SERVICE 1-800-795-0555



GENERAL NOTES

- L. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES ON THE DRAWINGS, OR IN THE FIELD PRIOR TO BEGINNING WORK OR DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER & ENGINEER.
- 2. A COMPLETE SET OF APPROVED DRAWINGS MUST BE MAINTAINED ON SITE AT ALL TIMES BY THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS.
- 3. CHANGES TO APPROVED PLANS SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE OWNER AND ENGINEER
- 4. CHANGES TO APPROVED PLANS ON PUBLIC PROPERTY SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL FROM THE CITY OF HORACE.
- 5. ALL SITE CONSTRUCTION SHALL MEET CITY OF FARGO STANDARD SPECIFICATIONS LATEST REVISION. IN THE CASE OF A DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS, THE PLANS SHALL GOVERN
- 6. ALL RIGHT-OF-WAY CONSTRUCTION SHALL MEET CITY OF HORACE STANDARD SPECIFICATIONS LATEST REVISION. IN THE CASE OF A DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS, THE PLANS SHALL GOVERN.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING & VERIFYING ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION & IS RESPONSIBLE FOR ANY DAMAGE TO THEM DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT THE LOCAL ONE-CALL SYSTEM AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- 8. ANY WORK ON EXISTING CITY OWNED UTILITIES SHALL REQUIRE NOTIFICATION TO THE CITY OF HORACE BY THE CONTRACTOR 24 HOURS PRIOR TO COMMENCING WORK. 9. THE CONTRACTOR SHALL COMPLY WITH ALL RULES & REGULATIONS OF FEDERAL, STATE, COUNTY, &
- LOCAL AUTHORITIES 10. THE CONTRACTOR IS REQUIRED TO MEET ALL APPLICABLE FEDERAL, OSHA, STATE, AND LOCAL
- REGULATIONS CONCERNING PROJECT SAFETY AND ASSUMES FULL RESPONSIBILITY FOR SAFETY ON THE PROJECT 11. CONTRACTOR SHALL VERIFY THAT ALL NECESSARY PERMITS FOR CONSTRUCTION HAVE BEEN
- OBTAINED, ALL BONDS ARE POSTED, ALL FEES ARE PAID AND PROOF OF INSURANCE IS PROVIDED PRIOR TO THE START OF THE PROJECT.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURVEY AND RELATED COSTS.
- 13. CONTRACTOR SHALL BE RESPONSIBLE FOR HIS/HER OWN MEASUREMENTS AND QUANTITIES.
- ENGINEER QUANTITIES ARE ESTIMATES ONLY. 14. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION OF UNDERGROUND UTILITIES BY THE APPROPRIATE UTILITY ENTITY. PROPER COORDINATION WITH THE RESPECTIVE UTILITY ENTITIES SHALL BE PERFORMED BY THE CONTRACTOR TO INSURE THAT ALL UTILITY ENTITY STANDARDS FOR MATERIAL AND METHODS ARE MET. THE GENERAL CONTRACTOR SHALL OVERSEE INSTALLATION OF UTILITIES AND COORDINATE WITH ALL SUBCONTRACTORS TO AVOID CONFLICTS.
- 15. THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE OWNER FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITIES
- 16. THE CONTRACTOR SHALL PROVIDE TESTING, INSPECTIONS, AS-BUILT DRAWINGS, CERTIFICATIONS AND ANY OTHER PROCEDURES OR DOCUMENTATION REQUIRED BY THE GOVERNING AGENCIES TO CLOSE OUT THE PROJECT
- 17. THE CONTRACTOR SHALL RESTORE ANY STRUCTURES, PIPE, UTILITY, PAVEMENT, CURBS SIDEWALKS, LANDSCAPED ARES, ETC. WITHIN THE SITE OR ADJOINING PROPERTIES DISTURBED DURING DEMOLITION OR CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AND TO THE SATISFACTION OF THE OWNER/JURISDICTIONAL AUTHORITY.
- THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL STRIPPING, RUBBISH, TRASH, DEBRIS, ORGANIC, AND EXCESS EXCAVATED MATERIAL IN A LAWFUL MANNER.
- 19. FOR THE PURPOSES OF CONSTRUCTION SURVEY, ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH STRUCTURAL AND ARCHITECTURAL PLANS.
- 20. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING SHOP DRAWINGS TO THE ENGINEER FOR REVIEW OF ALL APPLICABLE PRODUCTS AND MATERIALS BEING USED FOR CONSTRUCTION.

GRADING NOTES

- LOCATION AND TOP ELEVATIONS OF INLETS AND STRUCTURES MAY NEED TO BE ADJUSTED IN THE FIELD BY THE CONTRACTOR WHERE NECESSARY AND SHALL BE APPROVED BY THE ENGINEER. CONTRACTOR SHALL NOTE ANY CHANGES IN AS-BUILT DRAWINGS.
- 2. IF UNSUITABLE SUBGRADE MATERIALS ARE ENCOUNTERED, THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT (FROM OFF-SITE BORROW MATERIAL) OF ALL UNSUITABLE MATERIAL TO CLASSIFIED AS MH, CH, OH, OL AND PEAT IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM, UNLESS APPROVED IN WRITING BY THE PROJECT GEOTECHNICAL ENGINEER. THE SITE ENGINEER SHALL BE NOTIFIED IMMEDIATELY UPON ENCOUNTERING UNSUITABLE SUBGRADE MATERIAL.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATIONS AND GRADING INCLUDING FURNISHING OFF-SITE BORROW AND DISPOSING OF EXCESS MATERIAL AS REQUIRED TO MEET PLAN GRADES. OFF SITE BORROW SHALL MEET ALL REQUIREMENTS OF CITY OF FARGO STANDARD SPECIFICATIONS. COMPACTION LIFTS AND TESTING SHALL BE PER CITY OF FARGO REQUIREMENTS IN TRENCHING
- SUB-BASE, BASE, AND PAVING MATERIALS. SUB-BASE LIFTS SHALL NOT EXCEED 12". BASE LIFTS SHALL NOT EXCEED 6".

PAVING NOTES:

- 1. ALL PAVEMENT SECTION MATERIALS AND INSTALLATION SHALL MEET THE REQUIREMENTS OF THE CITY OF FARGO.
- 2. AGGREGATE BASE COURSE SHALL MEET THE REQUIREMENTS OF THE CITY OF FARGO. 3. CONCRETE FOR FLAT WORK SHALL BE A BATCH PLANT MIX MEETING THE REQUIREMENTS OF THE CITY OF FARGO STANDARD SPECIFICATIONS. (MINIMUM 4,000 PSI)
- 4. PAINTED PARKING STRIPING SHALL BE WATER BASED 4" IN WIDTH YELLOW STRIPES AND BE LOCATED AS SHOWN ON THE PLANS. ACCESSIBLE PARKING STRIPING SHALL BE BLUE AND PER ADA REQUIREMENTS. GORE AREA LINES SHALL BE PAINTED AT 45 DEGREES AND SHALL HAVE A SPACING OF 3'. CURE COMPOUND SHALL BE REMOVED BY SANDBLASTING, GRINDING, OR OTHER APPROVED METHOD BEFORE INSTALLATION OF PAVEMENT MARKINGS ON CONCRETE TO ENSURE PROPER ADHESION OF THE PAINT. ALL WORK SHALL BE IN ACCORDANCE WITH THE NDDOT REQUIREMENTS.
- THE CONTRACTOR SHALL SUBMIT A JOINTING PLAN FOR CONCRETE PAVEMENT TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. IF NO JOINTING PLAN IS SUBMITTED, THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR JOINTING LAYOUT.

STORM SEWER & DRAINAGE NOTES:

- INVERTS SHOWN ON PLAN DRAWINGS ARE PIPE INVERTS UNLESS NOTED OTHERWISE. ANY SUBSTITUTION FOR MATERIALS OR PROCEDURES MUST HAVE PRIOR WRITTEN APPROVAL OF THE CITY OF HORACE AND THE PROJECT ENGINEER.
- GRADE TO ENSURE POSITIVE DRAINAGE. ALL FINISHED SURFACES SHALL BE FREE FROM SURFACE IRREGULARITIES.

SANITARY SEWER NOTES:

- LOCATIONS AND TOP ELEVATIONS OF STRUCTURES MAY NEED TO BE ADJUSTED IN THE FIELD BY THE CONTRACTOR WHERE NECESSARY AND SHALL BE APPROVED BY THE ENGINEER. CONTRACTOR SHALL NOTE ALL CHANGES ON AS-BUILT DRAWINGS.
- CONSTRUCTION OF THE SANITARY SEWER SYSTEM AND CONNECTION TO THE EXISTING SEWER SYSTEM SHALL MEET THE REQUIREMENTS OF AND SHALL BE INSTALLED UNDER THE DIRECTION OF THE CITY OF HORACE.
- CONTRACTOR SHALL CONFIRM LOCATION AND INVERT ELEVATION OF SEWER TIE-IN POINT PRIOR TO ANY SITE OR BUILDING CONSTRUCTION.
- ROOF DRAINS, FOUNDATION DRAINS OR OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

WATER NOTES:

- CONSTRUCTION OF THE WATER SYSTEM AND CONNECTION TO THE EXISTING WATER SYSTEM SHALL MEET THE REQUIREMENTS OF AND SHALL BE INSTALLED UNDER THE DIRECTION OF THE CITY OF HORACE.
- PVC WATER PIPE AND FITTINGS LESS THAN 4" SHALL BE CLASS 200.
- ALL WATER LINES SHALL BE BELOW THE FROST LINE 7.5' FROM FINISH GRADE TO TOP OF PIPE. WATER METERS, BOXES, VAULTS AND BFP'S SHALL MEET ALL REQUIREMENTS OF THE UTILITY COMPANY. CONTRACTOR SHALL CONFIRM ALL ITEMS AGAINST CURRENT LIST OF APPROVED DEVICES PRIOR TO ORDERING.
- ALL PIPE AND APPURTENANCES INSTALLED ON A DEPRESSURIZED WATER MAIN ARE TO BE WIPED CLEAN AND ALL INTERIOR SURFACES SATURATED WITH A MINIMUM 1% CHLORINE SOLUTION.

- 6. CHLORINATED DISINFECTION WATER SHALL NOT BE DISCHARGED DIRECTLY INTO A STORM DRAINAGE SYSTEM OR SURFACE WATERS WITHOUT THE PRIOR USE OF APPROPRIATE DE-CHLORINATION METHODS.
- 7. A MINIMUM OF 5 FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN UTILITY
- 8. WATER LINE CROSSING ANY AND ALL SEWERS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 18" BETWEEN THE OUTSIDE OF THE WATER MAIN PIPE AND THE SEWER PIPE. ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SUCH THAT BOTH JOINTS WILL
- SANITARY SEWERS, THE SEWER MUST BE WATER MAIN MATERIAL FOR THE SPAN. 9. SITE CONTRACTOR IS RESPONSIBLE FOR MAKING TIE-IN TO WATER AND SANITARY SEWER CONNECTIONS AT BUILDING. SEE ARCHITECTURAL AND MECHANICAL PLANS FOR EXACT LOCATIONS FOR BUILDING STUB OUTS AND FLOOR DRAINS.

- DEMOLITION NOTES 1. LIMITS OF STREET PATCHING AND PATCHING REQUIREMENTS SHALL BE VERIFIED WITH THE CITY OF HORACE.
- EROSION & SEDIMENT CONTROL / SWPPP NOTES
- IF THE LAND BOUNDARY DENOTED ON THE PLANS ENCOMPASSES MORE THAN 1 ACRE, A NOTICE OF INTENT TO OBTAIN A STORM WATER POLLUTION CONTROL PERMIT SHALL BE ACQUIRED BY THE CONTRACTOR AND OWNER FROM THE NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY 7 DAYS PRIOR TO CONSTRUCTION. THIS NOTICE OF INTENT SHALL BE PROVIDED WITH THE BUILDING PERMIT APPLICATION. CONTRACTOR IS RESPONSIBLE FOR NOI SUBMITTAL
- 2. COPY OF NOI, COVERAGE LETTER FROM THE DOH AS WELL AS ALL MAINTENANCE AND INSPECTION RECORDS TO BE KEPT ON SITE AND AVAILABLE FOR REVIEW BY CITY, STATE OR FEDERAL OFFICIALS UPON REQUEST.
- THIS DOCUMENT SHALL BE AVAILABLE FOR REVIEW BY CITY, STATE OR FEDERAL OFFICIALS UPON REQUEST. THE SWPPP SHALL BE IN ACCORDANCE WITH THE NORTH DAKOTA GENERAL PERMIT NO. NDR10-0000 AND THE PLANS. THE ESC PLAN IS THE ENGINEER'S RECOMMENDATION FOR EROSION AND SEDIMENT CONTROL BASED ON THE DESIGN OF THE PROPOSED SITE. THIS DESIGN DOES NOT TAKE INTO EFFECT CONTRACTOR MEANS AND METHODS, CONSTRUCTION SCHEDULE, OR ORDER OF OPERATIONS. CONTRACTOR IS EXPECTED TO ADJUST DESIGN AS IS NECESSARY TO MEET THE REQUIREMENTS OF THE GENERAL PERMIT.
- 4. CONTRACTOR IS RESPONSIBLE FOR ALL EROSION AND SEDIMENT CONTROL ON THE SITE. THIS INCLUDES BUT IS NOT LIMITED TO STORM WATER EROSION, EROSION FROM PUMPING OPERATIONS, OFF SITE TRACKING, DUST CONTROL AND CONTROL OF ANY CONCRETE GRINDINGS OR SAW CUT DUST. CONTRACTOR IS ALSO RESPONSIBLE FOR ALL OTHER ITEMS AS REQUIRED IN THE GENERAL PFRMIT
- 5. INSPECTIONS SHALL BE COMPLETED AND DOCUMENTED BY THE CONTRACTOR AT LEAST ONCE EVERY 14 DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER
- 6. SITE SHALL BE STABILIZED WITHIN 14 DAYS OF COMPLETION OF WORK OR WITHIN 14 DAYS OF SUSPENSION OF WORK PER THE GENERAL PERMIT.
- 7. ALL EROSION AND SEDIMENT RELATED CONTROL AND ITEMS NEED TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS UNLESS OTHERWISE DICTATED IN THE PLANS.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL EXCESS TOPSOIL, EXCAVATED MATERIAL, RUBBISH, TRASH, DEBRIS, AND ORGANIC MATERIAL CONSISTENT WITH LOCAL LAW AND WITH THE GENERAL PERMIT.
- CONTRACTOR IS RESPONSIBLE FOR ALL DE-WATERING AS NECESSARY TO MEET REQUIRED EXCAVATIONS AND GRADES. MUDDY WATER TO BE PUMPED FROM EXCAVATION AND WORK AREAS MUST BE HELD IN SETTLING BASINS OR FILTERED PRIOR TO ITS DISCHARGE INTO SURFACE WATERS OR STORM DRAINAGE SYSTEMS. WATER MUST BE DISCHARGED THROUGH A PIPE, WELL GRASSED OR LINED CHANNEL, OR OTHER EQUIVALENT MEANS SUCH THAT DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENTATION. THIS INCLUDES DE-WATERING OF RAINWATER, GROUND WATER, OR ANY OTHER WATER ON SITE CAUSING IMPACTS TO SITE CONSTRUCTION. 10. ALL DISTURBED AREAS SHALL BE SEEDED AND HYDROMULCHED UNLESS SHOWN OTHERWISE IN THE
- PLANS.
- ALL STOCKPILES SHALL BE SURROUNDED WITH SILT FENCE. 12. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, SEDIMENT
- REMOVAL/CLEANING, AND REPLACEMENT AS REQUIRED FOR ALL EROSION AND SEDIMENT CONTROL
- ITEMS 13. CONTRACTOR IS RESPONSIBLE FOR SWEEPING AND CLEANING ANY SEDIMENT TRACKED ONTO
- 14. EROSION CONTROL BLANKET SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS FOR LAYDOWN PATTERN, REQUIRED OVERLAP WIDTH, TRENCHING, STAPLE PATTERN, ETC.
- CHEMICAL STORAGE ONSITE SHALL BE IN COMPLIANCE WITH THE GENERAL PERMIT. 16. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF INLET PROTECTION THROUGHOUT THE DIFFERENT PHASES OF CONSTRUCTION REGARDLESS OF THE TYPE OF PROTECTION. THE QUANTITY FOR ONE (1) INLET PROTECTION SHALL COVER INSTALLATION, CLEANING, REPLACEMENT, ETC. FROM THE TIME THE MANHOLE IS SET UNTIL FINAL STABILIZATION OF THE ENTIRE AREA DRAINING TO THE INLET. FOR EXAMPLE: ONE (1) INLET PROTECTION QUANTITY MAY COVER BUT IS NOT LIMITED TO: SILT FENCE AROUND MANHOLE PRIOR TO LID AND CASTING BEING INSTALLED, REMOVAL OF SILT FENCE AROUND MANHOLE AFTER CASTING HAS BEEN INSTALLED, INSTALLATION OF DEVICE SUCH AS DANDY SACK INSIDE CASTING, REMOVAL OF SEDIMENT FROM DANDY SACK, REMOVAL OF DANDY SACK FROM CASTING AFTER ALL UPSTREAM AREAS ARE STABILIZED.
- 17. OWNER SHALL REFER TO THE STORMWATER MANAGEMENT PLAN FOR MAINTENANCE REQUIREMENTS OF THE PERMANENT STORMWATER QUANTITY/QUALITY CONTROL MEASURES.

SEEDING NOTES:

- 1. ALL SEEDING MIX SHALL CONSIST OF THE FOLLOWING: -KENTUCKY BLUEGRASS = 4 LBS OF LIVE SEED PER ACRE -PERENNIAL RYEGRASS = 5.4 LBS OF LIVE SEED PER ACRE -BLUE GAMMA = 2.4 LBS OF LIVE SEED PER ACRE -SIDEOATS GRAMA = 7.2 LBS OF LIVE SEED PER ACRE -TOTAL LBS PER ACRE = 19
- -FERTILIZER TYPE = 20 LBS NITROGEN AND 20 LBS PHOSPHOROUS PER ACRE 2. CULTIVATE OR DISK TOPSOIL TO A DEPTH OF APPROXIMATELY 3".
- 3. REMOVE MATERIALS GREATER THAN 1" IN DIAMETER THAT CANNOT BE BROKEN UP.
- 4. PLANT SEEDS TO A DEPTH BETWEEN $\frac{1}{4}$ " AND $\frac{3}{4}$ ". 5. SEED ONLY WHEN WIND IS LESS THAN 15 MPH WHEN NOT USING A GRASS DRILL.
- 6. MULCHING SHALL BE USED IMMEDIATELY AFTER SEEDING TO PREVENT EROSION AND PROMOTE
- EARLIER VEGETATION COVER.

TEMPORARY TRAFFIC CONTROL NOTES

- 1. UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AN ATSSA CERTIFIED TRAFFIC CONTROL SUPERVISOR (TCS) AND ANY NECESSARY TEMPORARY TRAFFIC CONTROL DEVICES ON AND OFF-SITE INCLUDING OBTAINING ANY APPLICABLE PERMITS. THE CONTRACTOR SHALL IDENTIFY THE TCS AND PROVIDE PROOF OF CERTIFICATION AT A PRECONSTRUCTION MEETING.
- 2. UNLESS A TEMPORARY TRAFFIC CONTROL PLAN IS INCLUDED WITH THE DESIGN DOCUMENTS, CONTRACTOR SHALL SUBMIT A COPY OF THE APPROVED TRAFFIC CONTROL PLAN TO THE ENGINEER FOR REVIEW.
- 3. CONTRACTOR IS RESPONSIBLE TO INSTALL, INSPECT, MAINTAIN, AND REMOVE TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE LATEST STANDARDS AND REQUIREMENTS OF THE MUTCD, STANDARD HIGHWAY SIGNS AND MARKINGS BOOK PUBLISHED BY THE FHWA, AND LOCAL **REGULATIONS.**
- 4. CHANGES TO THE TEMPORARY TRAFFIC CONTROL PLAN SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE OWNER, ENGINEER, AND PERMITTING AUTHORITY IF APPLICABLE

CONDUIT CROSSOVER AND WATER LINE APPURTENANCES, I.E., HYDRANTS, VALVES, TEES, ETC. BE EQUAL DISTANCE AND AS FAR FROM THE SEWER AS POSSIBLE, IF WATER CROSSES BELOW

CONTRACTOR SHALL HAVE AN UPDATED SWPPP AVAILABLE ON SITE ANYTIME WORK IS BEING DONE

THAN ¼" IN 24 HOURS. A RAIN GAUGE SHALL BE ONSITE AND USED TO MAKE THIS DETERMINATION.

11. TOP SOIL OR OTHER SOIL/CLAY STOCKPILES ARE NOT TO BE LOCATED WITHIN FLOW PATHS, BASES OF

ADJACENT ROADWAYS DURING CONSTRUCTION AS NEEDED TO KEEP STREETS CLEAR OF SEDIMENT.

7. CONTRACTOR IS RESPONSIBLE FOR WATERING TO ESTABLISH GRASS GROWTH TO A HEIGHT OF 3".



ADJ

ALT

ARCH

ACP

BLDG

ΒM

B.O.

BV

B.O.P

BVCE

BVCS

B.P

CIP

CU

CJ

CF

CS

C.O.

CNTR

CONST

CONTR

DEMO

CY

DIA

DIP

DTL

DIM

D.S.

DWG

DWL

EΑ ELEC

DOM

CMP

CONC

BIT

ABBREVIATIONS

LEGEND

ADJACENT ALTERNATE ARCHITECT ASBESTOS CEMENT PIPE BITUMINOUS BUILDING BENCHMARK BY OWNER/BY OTHERS BEGINNING OF PROJECT BUTTERFLY VALVE BEGINNING VERTICAL CURVE ELEVATION BEGINNING VERTICAL CURVE STATION CIVIL CAST IRON CAST IRON PIPE COPPER CORRUGATED METAL PIPE CONTROL JOINT CONCRETE CUBIC FEET CUBIC FEET CURB STOP CLEAN OUT CENTER CONSTRUCTION CONTRACTOR CUBIC YARD DIAMETER DUCTILE IRON PIPE DEMOLITION DETAIL DIMENSION DOMESTIC DOWN SPOUT DRAWING DOWEL EACH	ELEV ENCL E.O.P. E.J. EX. EX.A. EVCE EVCS FD FFE FO FTG G.C. GALV GAL GRAN GV HDPE HORZ HB HDCP HYD I K M MH MAX MIN MJ. MISC. NC NOM NIC NTS OD OCEW OC OHE P.C	ELEVATION ENCLOSURE END OF PROJECT EXPANSION JOINT EXISTING EACH WAY END VERTICAL CURVE ELEVATION END VERTICAL CURVE STATION FINE DEPARTMENT FIRST FLOOR ELEVATION FIBER OPTICS FOOTING GENERAL CONTRACTOR GALVANIZED GALLON GRANULAR GATE VALVE HIGH DENSITY POLYETHYLENE HORIZONTAL HOSE BIB HANDICAPPED HYDRANT INLET CURVATURE VALUE MECHANICAL MANHOLE MAXIMUM MINIMUM MECHANICAL JOINT MISCELLANEOUS NON-CORROSIVE NOMINAL NOT IN CONTRACT NOT TO SCALE OUTSIDE DIMENSION ON CENTER OVERHEAD ELECTRIC DRECAST CONCEFTE
ELECTRIC	P.C.	PRECAST CONCRETE

D		EX. BUILDING FOOTPRINT NEW BUILDING FOOTPRINT
	——————————————————————————————————————	EX. FIBER OPTIC
	GAS	EX. GAS LINE
	GAS ———	NEW GAS LINE
		EX. ELECTRIC
	UGE ———	NEW ELECTRIC
	OHE	EX. OVERHEAD ELECTRIC
	CATV	EX. CABLE TV
	TT	EX. TELEPHONE
	— — — — 1111— — —	EX. CONTOUR
		NEW CONTOUR
		GRADE BREAK/FLOW PATH
		CENTER LINE/SECTION LINE
	╔┫┥┫╡┫╴╝	· NEW TRACKS
		EX. TRACKS
NE		EX. ASPHALT PAVEMENT
NE		NEW ASPHALT PAVEMENT
		EX. CONCRETE PAVEMENT
		NEW CONCRETE PAVEMENT
		EX. GRAVEL SURFACE

 $\Box \cdot \text{NEW TRACKS}$ EX. TRACKS EX. ASPHALT PAVEMENT NEW ASPHALT PAVEMENT EX. CONCRETE PAVEMENT NEW CONCRETE PAVEMENT EX. GRAVEL SURFACE NEW GRAVEL SURFACE EX. SIDEWALK/FLATWORK a a a a a a a NEW SIDEWALK/FLATWORK ACCESSIBLE (ADA) RAMP WITH TRUNCATED DOME PANEL STRIPING CROSSWALK STRIPING ADA ACCESSIBLE

STRIPING TURN ARROWS

SEEDING & HYDROMULCH **SEEDING & EROSION** CONTROL BLANKET

PVIE	POINT OF VERTICAL INTERSECTION
PV15	
PRFFAB	PREFABRICATED
PSI	POUNDS PER SOUARE INCH
PVC	POLYVINYL CHLORIDE PIPE
PP	POWER POLE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REQ'D	REQUIRED
RIM	RIM OF INLET OR CASTING
ROW	RIGHT OF WAY
SAN	SANITARY
SS	SANITARY SEWER
ST	STORM
STD	STANDARD
SB	SOIL BORING
STRUCT	STRUCTURAL
SF	SQUARE FEET
SCH	SCHEDULE
SW	SIDEWALK
Т	TELEPHONE
ТҮР	TYPICAL
UNEX	UN-EXCAVATED
UE	UTILITY EASEMENT
UGE	UNDERGROUND ELECTRIC
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
V	VERIFY
VCL	VERTICAL CURVE LENGTH
VOL	VOLUME
VCP	VITRIFIED CLAY PIPE
W/	WITH
W/O	WITH OUT
WTH	WIDTH
W	WATER

 \bigcirc \square $\boldsymbol{\sim}$ $\mathbf{\mathcal{L}}$ \bigcirc \frown \bigcirc \sim T \bigcirc > 6LE JOB # 21128 PROJECT DATE: 10/20/2021 CHECKED BY: SAS DRAWN BY: SAS APPROVED BY: GENERAL NOTES & LEGEND C-2



DEMOLITION CALLOUTS			
ITEM	QUANTITY	UNIT	
REMOVE AND PATCH EX. GRAVEL ROADWAY	170	SY	
REMOVE AND RESET EX. FES	2	EA	

NOTE:

1. ALL ROAD PATCHING SHALL HAVE THE SAME CROSS SECTION AS THE EXISTING ROAD.

2. ALL ROAD PATCHING SHALL BE PER CITY OF HORACE STANDARDS.



- REMOVAL AREAS

BENCHMARK #1: TOP NUT OF EXISTING HYDRANT LOCATED APPROXIMATELY 77 FEET SOUTH OF THE SOUTHEAST CORNER OF THE PROPOSED NEW WEST BUILDING. ELEVATION: 918.35 (NAVD 88)

BENCHMARK #2: TOP NUT OF EXISTING HYDRANT LOCATED APPROXIMATELY 59 FEET SOUTHWEST OF THE SOUTHEAST CORNER OF THE SUBJECT PROPERTY. ELEVATION: 915.53 (NAVD 88)

BASIS OF BEARING: CITY OF FARGO COORDINATE SYSTEM

ITION CALLOUTS QUANTITY UNIT ROADWAY 170 SY 2 EA	ECONDERING 5306 51ST AVENUE SOUTH, SUITE A FARGO, NORTH DAKOTA 58104
REAS ING HYDRANT LOCATED APPROXIMATELY 77 FEET OF THE PROPOSED NEW WEST BUILDING. ING HYDRANT LOCATED APPROXIMATELY 59 FEET PRNER OF THE SUBJECT PROPERTY. COORDINATE SYSTEM	REVISIONS
	VISTO'S SHOP BUILDINGS 9748 INDUSTRIAL DRIVE HORACE, NORTH DAKOTA
	PROFESSION ANDREW PE-9148 W DATE: 10/20/21
	LE JOB # 21128 PROJECT DATE: 10/20/2021 CHECKED BY: SAS DRAWN BY: SAS APPROVED BY: AJT
CALL BEFORE YOU DIG	SURVEY OVERLAY & DEMOLITION PLAN
NORTH DAKOTA UTILITIES UNDERGROUND LOCATION SERVICE 1-800-795-0555	C-3



ESTIMATED SITE QUANTITIES

ITEM	QUANTITY	UNIT
6" CONCRETE PAVEMENT	3,356	SY
SUBGRADE PREP	3,830	SY
GEOSYNTHETIC FABRIC TYPE R1	3,830	SY
NDDOT CLASS 5 GRAVEL	680	СҮ
ADA PARKING SIGN	3	EA
PAVEMENT MARKINGS - ADA MESSAGE	3	EA
PAVEMENT MARKINGS - 4" PAINTED LINE	945	EA

NOTES:

1. **GRAVEL ROADWAY PATCHING EXCLUDED FROM ABOVE SITE QUANTITIES.**

NORTH DAKOTA

UTILITIES UNDERGROUND LOCATION SERVICE 1-800-795-0555

 $\sim\sim\sim\sim\sim$ OFF STREET LOADING SPACES ADDED. - ADDITIONAL PARKING ADDED. 1- ALL SITE QUANTITIES UPDATED





ESTIMATED WATER QUANTITIES			
ITEM	QUANTITY	UNIT	
LIVE TAP EX. WATER MAIN	2	EA	
1.5" POLY CLASS 200 WATER SERVICE	196	LF	
2" POLY CLASS 200 WATER SERVICE	164	LF	
1.5" CURB STOP	3	EA	
2" CURB STOP	1	EA	

ESTIMATED SANITARY QUANTITIES			
ITEM	QUANTITY	UNIT	
CONNECT TO EX. SANITARY MAIN	2	EA	
6" SCHD 40 SANITARY SERVICE	385	LF	
6" SANITARY CLEANOUT	8	EA	

ESTIMATED STORM QUANTITIES			
ITEM	QUANTITY	UNIT	
12" HDPE STORM PIPE	46	LF	
12" FES	2	EA	
CONNECT TO EX. CMP STORM CULVERT	2	EA	
12" CMP STORM PIPE	13	LF	

NOTES

1. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF SANITARY SEWER AND WATER MAIN. IF DEPTH OF SANITARY SEWER DIFFERS FROM THAT ON PLANS, CONTRACTOR TO CONTACT THE ENGINEER IMMEDIATELY.

2. AS-BUILT INFORMATION FROM CITY OF HORACE ON INDUSTRIAL DRIVE UTILITIES WAS NOT RECEIVED. CONTRACTOR TO BUDGET FOR ADDITIONAL TIME AND MATERIALS TO FIND EXISTING UTILITIES IN INDUSTRIAL DRIVE.

LOWER WATER MAIN/WATER SERVICE PER DETAIL

NORTH DAKOTA

UTILITIES UNDERGROUND LOCATION SERVICE 1-800-795-0555



C-5



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EROSION CONTROL LEGEND					
SF	SILT FENCE	722	LF		
	FIBER ROLL PROTECTION (STRAW WATTLE)	75	LF		
	SEEDING & HYDROMULCH	хх	SY		
	SEEDING WITH EROSION CONTROL BLANKET; NDDOT ECB-1	ХХ	SY		
000000000000000000000000000000000000000	VEHICLE TRACKING PAD	2	EA		
	CONCRETE WASHOUT	1	EA		

NOTES:

- 1. CONTRACTOR SHALL FOLLOW NDDEQ STORMWATER POLLUTION PREVENTION STANDARDS FOR ALL EROSION CONTROL DURING CONSTRUCTION. 2. A FODS TRACKOUT CONTROL MAT MAY BE USED AS AN APPROVED EQUAL TO THE
- VEHICLE TRACKING PAD. CONTRACTOR SHALL SUBMIT PROPOSED MAT LAYOUT TO ENGINEER FOR REVIEW PRIOR TO INSTALLING. 3. CONTRACTOR MAY CHOOSE LOCATION OF CONCRETE WASHOUT. COORDINATE

WITH CITY AND ENGINEER ON LOCATION.



CONTROL LEGEND FENCE ROLL PROTECTION AW WATTLE) ING & HYDROMULCH ING WITH EROSION TROL BLANKET; NDDOT ECB-1	722 75 XX XX	LF LF SY SY	ENGINE SOUTH, SUITE A FARGO, NORTH DAKOTA 58104
CLE TRACKING PAD	2	EA	
CRETE WASHOUT	1	EA	
IDDEQ STORMWATER POLLUTIO CONTROL DURING CONSTRUCTIO AT MAY BE USED AS AN APPRON ACTOR SHALL SUBMIT PROPOSI TO INSTALLING. CATION OF CONCRETE WASHOU OCATION.	IN PREVENTIO ON. VED EQUAL T ED MAT LAYO	ON O THE DUT TO ATE	REVISIONS PER CITY - 02/22/2022
			VISTO'S SHOP BUILDINGS 9748 INDUSTRIAL DRIVE HORACE, NORTH DAKOTA
			PROFESSION ANDREW PE-9148 W DATE:02/22/22 NORTH DAKOTH
			LE JOB # 21128
			PROJECT DATE: 02/22/2022
			DRAWN BY:
Å			SAS APPROVED BY:
			EROSION & SEDIMENT CONTROL PLAN
UTILITIES UNDERGROUND 1-800-795-0	AKOTA LOCATION 0555	A SERVICI	с-7



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NTS



/N.T.S.







REMOVE EXISTING WATER MAIN AS NECESSARY

CAST IRON COUPLING

WITH STAINLESS STEEL

BOLTS

SANITARY -

SEWER

CL OF WATER MAIN



HDPE/CMP STORM SEWER NTS

- 3. LAST 3' OF PIPE, MEASURED FROM BACK OF FLARED END SECTION, IS TO B CLAY AND NOT CLASS 5 OR CLASS 3 TO PROVIDE SCOUR PROTECTION. 4. IF RCP PIPE IS USED, BEDDING ONLY REQUIRED TO SPRING LINE OF PIPE.
- ALL LIFTING HOLES TO BE PLUGGED & MORTARED WATER TIGHT.
 THE MOISTURE CONTENT OF THE AGGREGATE AT THE TIME OF COMPACTIO NOT LESS THAN 2.0 PERCENTAGE POINTS BELOW, NOR MORE THAN 3.0 PER POINTS ABOVE THE OPTIMUM MOISTURE CONTENT.



	EDONRY ENGINEERING 5306 51ST AVENUE SOUTH, SUITE A FARGO, NORTH DAKOTA 58104
5 PIPE DIN 6" TED D T-99.	REVISIONS
IN SHALL BE REENTAGE BEDDED IN	VISTO'S SHOP BUILDINGS 9748 INDUSTRIAL DRIVE HORACE, NORTH DAKOTA
	LE JOB # PROJECT DATE: 10/20/2021 VOR TH DAKOTH 21128 PROJECT DATE: 10/20/2021 CHECKED BY: SAS DRAWN BY: SAS APPROVED BY: AJT
	DETAILS
	C-9



	LANDSCAPING LEGEND					
)L	L TYPE OF PLANT PLANTING MATERIAL		#PLANTS EACH			
	LARGE DECIDUOUS TREE	1.5 TO 3-INCH CALIPER AT TIME OF PLANTING >30 FOOT MATURE HEIGHT	20			

LANDSCAPING REQUIREMENTS					
STREET TREE REQUIREMENTS					
CITY REQUIREMENTS	SITE REQUIREMENTS	PROVIDED			
1 TREE PER 35 LF	655/35 = 18 TREES	18 STREET TREES			
INTERIOR PARKING	G LOT LANDSCAPING				
CITY REQUIRMENTS	SITE REQUIREMENTS	PROVIDED			
LOTS CONTAINING MORE THAN 2,000 SF CULAR MOVEMENT SPACE SHALL HAVE ERIOR PARKING LOT LANDSCAPING	INTERIOR PARKING LOT LANDSCAPING REQ.	2,518 SF OF INTERIOR PARKING LOT LANDSCAPING			
LOADING AREA SCRE	ENING REQUIREMEN	ITS			
CITY REQUIREMENTS	SITE REQUIRMENTS	PROVIDED			
NG AND DELIVERY AREAS SHALL BE ED FROM PUBLIC STREET FRONTAGE DUGH THE USE OF LANDSCAPING/ HITECTURAL BUILDING ELEMENTS	LOADING AREA TO BE SCREEN FROM VIEW FROM INDUSTRIAL DRIVE	2 LARGE DECIDUOUS TREES			

1. THE CONTRACTOR SHALL FOLLOW ALL CITY OF HORACE LANDSCAPING STANDARDS. 2. ALL STREET TREES SHALL HAVE A MINIMUM 3' RADIUS MULCH RINGS INSTALLED AT THE TIM OF PLANTING. THIS SHALL NOT APPLY TO TREES WITHIN THE SITE.

3. THE LOWEST BRANCH OF ALL STREET TREES MUST BE 9.5' FROM GROUND.

4. THE CONTRACTOR SHALL PROVIDE A 1 YEAR WARRANTY ON ALL LANDSCAPE MATERIAL TO INCLUDE WORKMANSHIP FOR INSTALLATION FROM DATE OF FINAL ACCEPTANCE.

5. CONTRACTOR TO COORDINATE WITH MECHANICAL REGARDING LANDSCAPING IN AND ARC AIR INTAKE OR EXHAUST UNITS. 6. CONTRACTOR TO ALLOW 5' CLEARANCE FROM UNDERGROUND UTILITY PIPING TO PLANTIN 7. ALL OTHER PLANTING / LANDSCAPE REQUIREMENTS PER FRANCHISE REQUIREMENTS.

CALL BEFORE YOU DIG

NORTH DAKOTA

UTILITIES UNDERGROUND LOCATION SERVICE 1-800-795-0555

8. ALL TREES SHALL BE APPROVED BY CITY FORESTER.

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(-	INTERIOR PARKING LOT LANDSCAPING	Į
(\wedge		REQUIREMENTS ADDED	
	$\underline{1}$	-	2,518 SF OF INTERIOR PARKING LOT LANDSCAPING	•
(ADDED	
		-	LOADING ARE SCREENING REQUIREMENTS ADDED	•
(-	TREE QUANTITY REVISED	
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		-		

				Ð					FARGO, NORTH DAKOTA 58104	
REES	REVISIONS	7 REVISIONS PER CITY - 02/22/2022								
TIME D ROUND NGS.				VISIOS SHOP BUILDINGS	0748 INDUSTRIAL DRIVE	7 1 40 TINDODINUT DIVID	HORACE NORTH DAKOTA			
	(RECURPTS	PR P Date: Op	AND AND DE - 2 D2/ TH	SS, REW JILL 22/ DAV	10N 8 122 10	ET ET EP	CINE	
	LE PF CH AF	JOP ROJE HECH RAW	3 # ECT KED N B	DA) BY Y: D B	TE: : Y:		0	2/22	2112 2/202 SA SA	28 22 33 35 35 35 35 35 35 35 35 35 35 35 35
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L-1



ERWIN VISTO BUILDINGS

THOR BUILDINGS

FARGO, NORTH DAKOTA



03/08/22



SITE INFORMATION					
Р	ARKING				
STALL TYPE		NUMBER			
9X20 STANDARD STALLS		8			
9X20 ADA STALLS		1			
TOTAL PROVIDED		9			
TOTAL REQUIRED		5			
ZONING INFORMATION					
CURRENT ZONE:	NT ZONE: I-1, LIGHT INDUSTRIAI				
DIMENSIO	DIMENSIONAL STANDARDS				
BUILDING SETBACKS					
FRONT YARD		20' MINIMUM			
INTERIOR SIDE YARD		10' MINIMUM			
STREET SIDE YARD		10' MINIMUM			
REAR YARD		20' MINIMUM			
SURVEY	SURVEY INFORMATION				
DATE OF SURVEY		10/6/2021			
COORDINATE SYSTEM	CITY OF FARGO	COORDINATE SYSTEM			
DATUM		NAVD 88			

BENCHMARK #1: TOP NUT OF EXISTING HYDRANT LOCATED APPROXIMATELY 77 FEET SOUTH OF THE SOUTHEAST CORNER OF THE PROPOSED NEW WEST BUILDING. ELEVATION: 918.35 (NAVD 88)

BENCHMARK #2: TOP NUT OF EXISTING HYDRANT LOCATED APPROXIMATELY 59 FEET SOUTHWEST OF THE SOUTHEAST CORNER OF THE SUBJECT PROPERTY. ELEVATION: 915.53 (NAVD 88)

BASIS OF BEARING: CITY OF FARGO COORDINATE SYSTEM

ERWIN VISTO'S SHOP BUILDING

9754 INDUSTRIAL DRIVE HORACE, NORTH DAKOTA

VICINITY MAP

CIVIL ENGINEER LOWRY ENGINEERING ANDREW THILL, P.E. 5306 51ST AVENUE SOUTH, SUITE A FARGO, ND 58104 PH: 701-235-0199 EMAIL: athill@lowryeng.com

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C-8	TYPICAL DETAILS			
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			C			ENGINEERING		FARGO, NORTH DAKOTA 58104	
REVISIONS									
		ERWIN VISTO'S SHOP		BUILDING	9754 INDUSTRIAL DRIVE		HORACE, NORTH DAKOTA		
	+ - - -	Ster all	PR	AND EE-10/	SS, REW J14 21/ DAY		ELEVEER X		,
LE PR CH DF		B # ECT KED N B	DA BY Y: D B	TE: : Y:		1	2	2112 /202 SA S/	29 21 AS
				CO SHI	VER EET				
			(<u><u> </u></u>	-1				

GENERAL NOTES

- 1. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES ON THE DRAWINGS, OR IN THE FIELD PRIOR TO BEGINNING WORK OR DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER & ENGINEER.
- 2. A COMPLETE SET OF APPROVED DRAWINGS MUST BE MAINTAINED ON SITE AT ALL TIMES BY THE
- GENERAL CONTRACTOR AND ALL SUBCONTRACTORS.
- 3. CHANGES TO APPROVED PLANS SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE OWNER AND ENGINEER.
- 4. CHANGES TO APPROVED PLANS ON PUBLIC PROPERTY SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL FROM THE CITY OF HORACE.
- 5. ALL SITE CONSTRUCTION SHALL MEET CITY OF FARGO STANDARD SPECIFICATIONS LATEST REVISION. IN THE CASE OF A DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS, THE PLANS SHALL GOVERN.
- 6. ALL RIGHT-OF-WAY CONSTRUCTION SHALL MEET CITY OF HORACE STANDARD SPECIFICATIONS LATEST REVISION. IN THE CASE OF A DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS, THE PLANS SHALL GOVERN.
- 7. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING & VERIFYING ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION & IS RESPONSIBLE FOR ANY DAMAGE TO THEM DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT THE LOCAL ONE-CALL SYSTEM AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- 8. ANY WORK ON EXISTING CITY OWNED UTILITIES SHALL REQUIRE NOTIFICATION TO THE CITY OF HORACE BY THE CONTRACTOR 24 HOURS PRIOR TO COMMENCING WORK.
- 9. THE CONTRACTOR SHALL COMPLY WITH ALL RULES & REGULATIONS OF FEDERAL, STATE, COUNTY, & LOCAL AUTHORITIES.
- 10. THE CONTRACTOR IS REQUIRED TO MEET ALL APPLICABLE FEDERAL, OSHA, STATE, AND LOCAL REGULATIONS CONCERNING PROJECT SAFETY AND ASSUMES FULL RESPONSIBILITY FOR SAFETY ON THE PROJECT
- 11. CONTRACTOR SHALL VERIFY THAT ALL NECESSARY PERMITS FOR CONSTRUCTION HAVE BEEN OBTAINED, ALL BONDS ARE POSTED, ALL FEES ARE PAID AND PROOF OF INSURANCE IS PROVIDED PRIOR TO THE START OF THE PROJECT.
- 12. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL HORIZONTAL AND VERTICAL CONTROLS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SURVEY AND RELATED COSTS.
- 13. CONTRACTOR SHALL BE RESPONSIBLE FOR HIS/HER OWN MEASUREMENTS AND QUANTITIES. ENGINEER QUANTITIES ARE ESTIMATES ONLY.
- 14. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION OF UNDERGROUND UTILITIES BY THE APPROPRIATE UTILITY ENTITY. PROPER COORDINATION WITH THE RESPECTIVE UTILITY ENTITIES SHALL BE PERFORMED BY THE CONTRACTOR TO INSURE THAT ALL UTILITY ENTITY STANDARDS FOR MATERIAL AND METHODS ARE MET. THE GENERAL CONTRACTOR SHALL OVERSEE INSTALLATION OF UTILITIES AND COORDINATE WITH ALL SUBCONTRACTORS TO AVOID CONFLICTS.
- 15. THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE OWNER FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITIES
- 16. THE CONTRACTOR SHALL PROVIDE TESTING, INSPECTIONS, AS-BUILT DRAWINGS, CERTIFICATIONS AND ANY OTHER PROCEDURES OR DOCUMENTATION REQUIRED BY THE GOVERNING AGENCIES TO CLOSE OUT THE PROJECT.
- 17. THE CONTRACTOR SHALL RESTORE ANY STRUCTURES, PIPE, UTILITY, PAVEMENT, CURBS SIDEWALKS, LANDSCAPED ARES, ETC. WITHIN THE SITE OR ADJOINING PROPERTIES DISTURBED DURING DEMOLITION OR CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AND TO THE SATISFACTION OF THE OWNER/JURISDICTIONAL AUTHORITY.
- 18. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL STRIPPING, RUBBISH, TRASH, DEBRIS, ORGANIC, AND EXCESS EXCAVATED MATERIAL IN A LAWFUL MANNER.
- 19. FOR THE PURPOSES OF CONSTRUCTION SURVEY, ALL BUILDING DIMENSIONS SHALL BE VERIFIED WITH STRUCTURAL AND ARCHITECTURAL PLANS.
- 20. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING SHOP DRAWINGS TO THE ENGINEER FOR REVIEW OF ALL APPLICABLE PRODUCTS AND MATERIALS BEING USED FOR CONSTRUCTION.

GRADING NOTES

- 1. LOCATION AND TOP ELEVATIONS OF INLETS AND STRUCTURES MAY NEED TO BE ADJUSTED IN THE FIELD BY THE CONTRACTOR WHERE NECESSARY AND SHALL BE APPROVED BY THE ENGINEER. CONTRACTOR SHALL NOTE ANY CHANGES IN AS-BUILT DRAWINGS.
- 2. IF UNSUITABLE SUBGRADE MATERIALS ARE ENCOUNTERED, THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND REPLACEMENT (FROM OFF-SITE BORROW MATERIAL) OF ALL UNSUITABLE MATERIAL TO CLASSIFIED AS MH, CH, OH, OL AND PEAT IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM, UNLESS APPROVED IN WRITING BY THE PROJECT GEOTECHNICAL ENGINEER. THE SITE ENGINEER SHALL BE NOTIFIED IMMEDIATELY UPON ENCOUNTERING UNSUITABLE SUBGRADE MATERIAL.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATIONS AND GRADING INCLUDING FURNISHING OFF-SITE BORROW AND DISPOSING OF EXCESS MATERIAL AS REQUIRED TO MEET PLAN GRADES. OFF E BORROW SHALL MEET ALL REQUIREMENTS OF CITY OF FARGO STANDARD SPECIFICATIONS
- 4. COMPACTION LIFTS AND TESTING SHALL BE PER CITY OF FARGO REQUIREMENTS IN TRENCHING, SUB-BASE, BASE, AND PAVING MATERIALS. SUB-BASE LIFTS SHALL NOT EXCEED 12". BASE LIFTS SHALL NOT EXCEED 6".

PAVING NOTES:

- 1. ALL PAVEMENT SECTION MATERIALS AND INSTALLATION SHALL MEET THE REQUIREMENTS OF THE CITY OF FARGO.
- 2. AGGREGATE BASE COURSE SHALL MEET THE REQUIREMENTS OF THE CITY OF FARGO. 3. CONCRETE FOR FLAT WORK SHALL BE A BATCH PLANT MIX MEETING THE REQUIREMENTS OF THE CITY OF FARGO STANDARD SPECIFICATIONS. (MINIMUM 4,000 PSI)
- 4. PAINTED PARKING STRIPING SHALL BE WATER BASED 4" IN WIDTH YELLOW STRIPES AND BE LOCATED AS SHOWN ON THE PLANS. ACCESSIBLE PARKING STRIPING SHALL BE BLUE AND PER ADA REQUIREMENTS. GORE AREA LINES SHALL BE PAINTED AT 45 DEGREES AND SHALL HAVE A SPACING OF 3'. CURE COMPOUND SHALL BE REMOVED BY SANDBLASTING, GRINDING, OR OTHER APPROVED METHOD BEFORE INSTALLATION OF PAVEMENT MARKINGS ON CONCRETE TO ENSURE PROPER
- ADHESION OF THE PAINT. ALL WORK SHALL BE IN ACCORDANCE WITH THE NDDOT REQUIREMENTS. 5. THE CONTRACTOR SHALL SUBMIT A JOINTING PLAN FOR CONCRETE PAVEMENT TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. IF NO JOINTING PLAN IS SUBMITTED. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR JOINTING LAYOUT.

STORM SEWER & DRAINAGE NOTES:

- 1. INVERTS SHOWN ON PLAN DRAWINGS ARE PIPE INVERTS UNLESS NOTED OTHERWISE.
- 2. ANY SUBSTITUTION FOR MATERIALS OR PROCEDURES MUST HAVE PRIOR WRITTEN APPROVAL OF
- THE CITY OF HORACE AND THE PROJECT ENGINEER. 3. GRADE TO ENSURE POSITIVE DRAINAGE. ALL FINISHED SURFACES SHALL BE FREE FROM SURFACE IRREGULARITIES.

SANITARY SEWER NOTES:

- 1. LOCATIONS AND TOP ELEVATIONS OF STRUCTURES MAY NEED TO BE ADJUSTED IN THE FIELD BY THE CONTRACTOR WHERE NECESSARY AND SHALL BE APPROVED BY THE ENGINEER. CONTRACTOR SHALL NOTE ALL CHANGES ON AS-BUILT DRAWINGS.
- 2. CONSTRUCTION OF THE SANITARY SEWER SYSTEM AND CONNECTION TO THE EXISTING SEWER SYSTEM SHALL MEET THE REQUIREMENTS OF AND SHALL BE INSTALLED UNDER THE DIRECTION OF THE CITY OF HORACE.
- 3. CONTRACTOR SHALL CONFIRM LOCATION AND INVERT ELEVATION OF SEWER TIE-IN POINT PRIOR TO ANY SITE OR BUILDING CONSTRUCTION.
- 4. ROOF DRAINS, FOUNDATION DRAINS OR OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

WATER NOTES:

- 1. CONSTRUCTION OF THE WATER SYSTEM AND CONNECTION TO THE EXISTING WATER SYSTEM SHALL MEET THE REQUIREMENTS OF AND SHALL BE INSTALLED UNDER THE DIRECTION OF THE CITY OF HORACE
- 2. PVC WATER PIPE AND FITTINGS LESS THAN 4" SHALL BE CLASS 200.
- ALL WATER LINES SHALL BE BELOW THE FROST LINE 7.5' FROM FINISH GRADE TO TOP OF PIPE. 4. WATER METERS, BOXES, VAULTS AND BFP'S SHALL MEET ALL REQUIREMENTS OF THE UTILITY COMPANY. CONTRACTOR SHALL CONFIRM ALL ITEMS AGAINST CURRENT LIST OF APPROVED DEVICES PRIOR TO ORDERING.
- 5. ALL PIPE AND APPURTENANCES INSTALLED ON A DEPRESSURIZED WATER MAIN ARE TO BE WIPED CLEAN AND ALL INTERIOR SURFACES SATURATED WITH A MINIMUM 1% CHLORINE SOLUTION.

- 6. CHLORINATED DISINFECTION WATER SHALL NOT BE DISCHARGED DIRECTLY INTO A STORM DRAINAGE SYSTEM OR SURFACE WATERS WITHOUT THE PRIOR USE OF APPROPRIATE DE-CHLORINATION METHODS.
- 7. A MINIMUM OF 5 FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN UTILITY CONDUIT CROSSOVER AND WATER LINE APPURTENANCES, I.E., HYDRANTS, VALVES, TEES, ETC.
- 8. WATER LINE CROSSING ANY AND ALL SEWERS SHALL HAVE A MINIMUM VERTICAL SEPARATION OF 18" BETWEEN THE OUTSIDE OF THE WATER MAIN PIPE AND THE SEWER PIPE. ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SUCH THAT BOTH JOINTS WILL BE EQUAL DISTANCE AND AS FAR FROM THE SEWER AS POSSIBLE, IF WATER CROSSES BELOW SANITARY SEWERS, THE SEWER MUST BE WATER MAIN MATERIAL FOR THE SPAN.
- 9. SITE CONTRACTOR IS RESPONSIBLE FOR MAKING TIE-IN TO WATER AND SANITARY SEWER FOR BUILDING STUB OUTS AND FLOOR DRAINS.
- DEMOLITION NOTES 1. LIMITS OF STREET PATCHING AND PATCHING REQUIREMENTS SHALL BE VERIFIED WITH THE CITY OF HORACE.

EROSION & SEDIMENT CONTROL / SWPPP NOTES

- INTENT TO OBTAIN A STORM WATER POLLUTION CONTROL PERMIT SHALL BE ACQUIRED BY THE PERMIT APPLICATION. CONTRACTOR IS RESPONSIBLE FOR NOI SUBMITTAL
- 2. COPY OF NOI, COVERAGE LETTER FROM THE DOH AS WELL AS ALL MAINTENANCE AND INSPECTION RECORDS TO BE KEPT ON SITE AND AVAILABLE FOR REVIEW BY CITY, STATE OR FEDERAL OFFICIALS UPON REQUEST
- 3. CONTRACTOR SHALL HAVE AN UPDATED SWPPP AVAILABLE ON SITE ANYTIME WORK IS BEING DONE. THIS DOCUMENT SHALL BE AVAILABLE FOR REVIEW BY CITY, STATE OR FEDERAL OFFICIALS UPON REQUEST. THE SWPPP SHALL BE IN ACCORDANCE WITH THE NORTH DAKOTA GENERAL PERMIT NO. NDR10-0000 AND THE PLANS. THE ESC PLAN IS THE ENGINEER'S RECOMMENDATION FOR EROSION AND SEDIMENT CONTROL BASED ON THE DESIGN OF THE PROPOSED SITE. THIS DESIGN DOES NOT OPERATIONS. CONTRACTOR IS EXPECTED TO ADJUST DESIGN AS IS NECESSARY TO MEET THE REQUIREMENTS OF THE GENERAL PERMIT.
- 4. CONTRACTOR IS RESPONSIBLE FOR ALL EROSION AND SEDIMENT CONTROL ON THE SITE. THIS OFF SITE TRACKING, DUST CONTROL AND CONTROL OF ANY CONCRETE GRINDINGS OR SAW CUT DUST. CONTRACTOR IS ALSO RESPONSIBLE FOR ALL OTHER ITEMS AS REQUIRED IN THE GENERAL PFRMIT
- 5. INSPECTIONS SHALL BE COMPLETED AND DOCUMENTED BY THE CONTRACTOR AT LEAST ONCE EVERY
- 6. SITE SHALL BE STABILIZED WITHIN 14 DAYS OF COMPLETION OF WORK OR WITHIN 14 DAYS OF
- SUSPENSION OF WORK PER THE GENERAL PERMIT. 7. ALL EROSION AND SEDIMENT RELATED CONTROL AND ITEMS NEED TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS UNLESS OTHERWISE
- DICTATED IN THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL EXCESS TOPSOIL,
- LAW AND WITH THE GENERAL PERMIT. 9. CONTRACTOR IS RESPONSIBLE FOR ALL DE-WATERING AS NECESSARY TO MEET REQUIRED EXCAVATIONS AND GRADES. MUDDY WATER TO BE PUMPED FROM EXCAVATION AND WORK AREAS MUST BE HELD IN SETTLING BASINS OR FILTERED PRIOR TO ITS DISCHARGE INTO SURFACE WATERS OR STORM DRAINAGE SYSTEMS. WATER MUST BE DISCHARGED THROUGH A PIPE, WELL GRASSED OR LINED CHANNEL, OR OTHER EQUIVALENT MEANS SUCH THAT DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENTATION. THIS INCLUDES DE-WATERING OF RAINWATER, GROUND WATER, OR ANY OTHER WATER ON SITE CAUSING IMPACTS TO SITE CONSTRUCTION.
- 10. ALL DISTURBED AREAS SHALL BE SEEDED AND HYDROMULCHED UNLESS SHOWN OTHERWISE IN THE PLANS. 11. TOP SOIL OR OTHER SOIL/CLAY STOCKPILES ARE NOT TO BE LOCATED WITHIN FLOW PATHS, BASES OF
- ALL STOCKPILES SHALL BE SURROUNDED WITH SILT FENCE. 12. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, SEDIMENT
- ITEMS. 13. CONTRACTOR IS RESPONSIBLE FOR SWEEPING AND CLEANING ANY SEDIMENT TRACKED ONTO
- ADJACENT ROADWAYS DURING CONSTRUCTION AS NEEDED TO KEEP STREETS CLEAR OF SEDIMENT 14. EROSION CONTROL BLANKET SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS FOR LAYDOWN PATTERN, REQUIRED OVERLAP WIDTH, TRENCHING, STAPLE PATTERN, ETC.
- 15. CHEMICAL STORAGE ONSITE SHALL BE IN COMPLIANCE WITH THE GENERAL PERMIT. 16. CONTRACTOR IS RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF INLET PROTECTION THROUGHOUT THE DIFFERENT PHASES OF CONSTRUCTION REGARDLESS OF THE TYPE OF PROTECTION. THE QUANTITY FOR ONE (1) INLET PROTECTION SHALL COVER INSTALLATION, CLEANING, REPLACEMENT, ETC. FROM THE TIME THE MANHOLE IS SET UNTIL FINAL STABILIZATION OF THE ENTIRE AREA DRAINING TO THE INLET. FOR EXAMPLE: ONE (1) INLET PROTECTION QUANTITY MAY COVER BUT IS NOT LIMITED TO: SILT FENCE AROUND MANHOLE PRIOR TO LID AND CASTING BEING INSTALLED, REMOVAL OF SILT FENCE AROUND MANHOLE AFTER CASTING HAS BEEN INSTALLED, INSTALLATION OF DEVICE SUCH AS DANDY SACK INSIDE CASTING, REMOVAL OF SEDIMENT FROM DANDY SACK, REMOVAL OF DANDY SACK FROM CASTING AFTER ALL UPSTREAM
- AREAS ARE STABILIZED. 17. OWNER SHALL REFER TO THE STORMWATER MANAGEMENT PLAN FOR MAINTENANCE REQUIREMENTS OF THE PERMANENT STORMWATER QUANTITY/QUALITY CONTROL MEASURES.

SEEDING NOTES:

- 1. ALL SEEDING MIX SHALL CONSIST OF THE FOLLOWING: -KENTUCKY BLUEGRASS = 4 LBS OF LIVE SEED PER ACRE -PERENNIAL RYEGRASS = 5.4 LBS OF LIVE SEED PER ACRE -BLUE GAMMA = 2.4 LBS OF LIVE SEED PER ACRE -SIDEOATS GRAMA = 7.2 LBS OF LIVE SEED PER ACRE -TOTAL LBS PER ACRE = 19
- -FERTILIZER TYPE = 20 LBS NITROGEN AND 20 LBS PHOSPHOROUS PER ACRE CULTIVATE OR DISK TOPSOIL TO A DEPTH OF APPROXIMATELY 3".
- REMOVE MATERIALS GREATER THAN 1" IN DIAMETER THAT CANNOT BE BROKEN UP.
- 4. PLANT SEEDS TO A DEPTH BETWEEN $\frac{1}{4}$ " AND $\frac{3}{4}$ ".
- SEED ONLY WHEN WIND IS LESS THAN 15 MPH WHEN NOT USING A GRASS DRILL.
- EARLIER VEGETATION COVER.

- **TEMPORARY TRAFFIC CONTROL NOTES:** UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AN ATSSA CERTIFIED TRAFFIC CONTROL SUPERVISOR (TCS) AND ANY NECESSARY TEMPORARY TRAFFIC CONTROL DEVICES ON AND OFF-SITE INCLUDING OBTAINING ANY APPLICABLE PERMITS. THE CONTRACTOR SHALL IDENTIFY THE TCS AND PROVIDE PROOF OF CERTIFICATION AT A PRECONSTRUCTION MEETING.
- 2. UNLESS A TEMPORARY TRAFFIC CONTROL PLAN IS INCLUDED WITH THE DESIGN DOCUMENTS, CONTRACTOR SHALL SUBMIT A COPY OF THE APPROVED TRAFFIC CONTROL PLAN TO THE ENGINEER FOR REVIEW.
- 3. CONTRACTOR IS RESPONSIBLE TO INSTALL, INSPECT, MAINTAIN, AND REMOVE TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE LATEST STANDARDS AND REQUIREMENTS OF THE MUTCD, STANDARD HIGHWAY SIGNS AND MARKINGS BOOK PUBLISHED BY THE FHWA, AND LOCAL **REGULATIONS.**
- 4. CHANGES TO THE TEMPORARY TRAFFIC CONTROL PLAN SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF THE OWNER, ENGINEER, AND PERMITTING AUTHORITY IF APPLICABLE.

CONNECTIONS AT BUILDING. SEE ARCHITECTURAL AND MECHANICAL PLANS FOR EXACT LOCATIONS

.. IF THE LAND BOUNDARY DENOTED ON THE PLANS ENCOMPASSES MORE THAN 1 ACRE, A NOTICE OF CONTRACTOR AND OWNER FROM THE NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY 7 DAYS PRIOR TO CONSTRUCTION. THIS NOTICE OF INTENT SHALL BE PROVIDED WITH THE BUILDING

TAKE INTO EFFECT CONTRACTOR MEANS AND METHODS, CONSTRUCTION SCHEDULE, OR ORDER OF

INCLUDES BUT IS NOT LIMITED TO STORM WATER EROSION, EROSION FROM PUMPING OPERATIONS,

14 DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN ¼" IN 24 HOURS. A RAIN GAUGE SHALL BE ONSITE AND USED TO MAKE THIS DETERMINATION.

EXCAVATED MATERIAL, RUBBISH, TRASH, DEBRIS, AND ORGANIC MATERIAL CONSISTENT WITH LOCAL

REMOVAL/CLEANING, AND REPLACEMENT AS REQUIRED FOR ALL EROSION AND SEDIMENT CONTROL

. MULCHING SHALL BE USED IMMEDIATELY AFTER SEEDING TO PREVENT EROSION AND PROMOTE

7. CONTRACTOR IS RESPONSIBLE FOR WATERING TO ESTABLISH GRASS GROWTH TO A HEIGHT OF 3".

-0:-	EX. LIGHT POLE	•	NEW PROPERTY PIN SET
÷.	NEW LIGHT POLE	\boxtimes	RIGHT OF WAY MARKER
	EX. POWER POLE	\bullet	PROJECT BENCHMARK
)	EX. GUY-LINE	• #	BORING LOCATION
	EX. CLEAN OUT		HIGH WATER LINE
		—	
\bigcirc	EX. SANITARY MANHOLE	#	
	NEW SANITARY MANHOLE	DS	DOWN SPOUL
\bigcirc	EX. STORM MANHOLE	\bullet	BOLLARD
	NEW STORM MANHOLE	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
	EX. STORM CATCH BASIN	xx	
	NEW STORM CATCH BASIN		- EX. GUARDRAIL
\triangleright	EX. CULVERT FLARED END	· · · · ·	- SET BACK
\triangleright	NEW CULVERT FLARED END		– EX. EASEMENT
	DRAINAGE FLOW DIRECTION		– NEW EASEMENT
¢	EX. GATE VALVE		– EX. PROPERTY LINE
•	NEW GATE VALVE		 NEW ROW/PROPERTY LII
	Structure And Active		 PROPERTY BOUNDARY LI
	NEW WATERLINE FITTINGS		🗄 EX. CURB
X .	NEW TAPPING SLEEVE & VALVE		NEW CURB(INFLOW)
	EX. HYDRANT		NEW CURB(OUTFLOW)
- ● ●	NEW HYDRANT & VALVE		- EX. RETAINING WALL
			 NEW RETAINING WALL
		SS	EX. SANITARY SEWER
	EX. SIGN	ss	- NEW SANITARY SEWER
•	NEW SIGN	SFM	– EX. SANITARY FORCE MA
- A A A A A A A A A A A A A A A A A A A	EX. STUMP	SFM	- NEW SANITARY FORCE N
0	EX. SHRUB	WW	– EX. WATER
~~~~~			NEW WATER
er e	EX. DECIDUOUS TREE	STST	– EX. STORM SEWER
		STST	<ul> <li>NEW STORM SEWER</li> </ul>
$\ast$	EX. CONIFEROUS TREE	DTDT	– EX. DRAIN TILE
_		DTDT	NEW DRAIN TILE
	EX. ELECTRICAL TRANSFORMER	STFM	- EX. STORM FORCE MAIN
	EX. UTILITY PEDISTAL	STFM	<ul> <li>NEW STORM FORCE MAI</li> </ul>
E	ELEC MANHOLE EXIST	SF SF SF	SILT FENCE

ADJ

ALT

ARCH

ACP

BLDG

ΒM

B.O.

BV

B.O.P.

BVCE

BVCS

B.P

CIP

CU

CJ

CF

CS

C.O.

CNTR

CONST

CONTR

DEMO

CY

DIA

DIP

DTL

DIM

DOM

DWG

DWL

ELEC

EΑ

D.S.

CMP

CONC

BIT

## ABBREVIATIONS

LEGEND

DUCTILE IRON PIPEMISC.MISCELLANEOUSDEMOLITIONNCNON-CORROSIVEDETAILNOMNOMINALDIMENSIONNICNOT IN CONTRACTDOMESTICNTSNOT TO SCALEDOWN SPOUTODOUTSIDE DIMENSIODRAWINGOCON CENTER EACH WDOWELOCON CENTEREACHOHEOVERHEAD ELECTRI	)N VAY IC
ACH OHE OVERHEAD ELECTRI ELECTRIC P.C. PRECAST CONCRETE	IC E

D		EX. BUILDING FOOTPRINT
	FOFO	EX. FIBER OPTIC
	GAS	EX. GAS LINE
	GAS —	NEW GAS LINE
		EX. ELECTRIC
	UGE	
	OHE	EX. OVERHEAD ELECTRIC
	CATV	EX. CABLE TV
	TT	EX. TELEPHONE
	— — — <u> </u>	EX. CONTOUR
	1111	NEW CONTOUR
		GRADE BREAK/FLOW PATH
		CENTER LINE/SECTION LINE
		NEW TRACKS
		EX. TRACKS
NE		EX. ASPHALT PAVEMENT
INE		NEW ASPHALT PAVEMENT
		EX. CONCRETE PAVEMENT
		NEW CONCRETE PAVEMENT
		EX. GRAVEL SURFACE

E MAIN CE MAIN

1AIN MAIN — EX. FIBER OPTIC — EX. GAS LINE — NEW GAS LINE — EX. ELECTRIC - NEW ELECTRIC — EX. OVERHEAD ELECTRIC — EX. CABLE TV — EX. TELEPHONE — EX. CONTOUR — NEW CONTOUR GRADE BREAK/FLOW PATH — CENTER LINE/SECTION LINE ID · NEW TRACKS EX. TRACKS EX. ASPHALT PAVEMENT NEW ASPHALT PAVEMENT EX. CONCRETE PAVEMENT NEW CONCRETE PAVEMENT EX. GRAVEL SURFACE NEW GRAVEL SURFACE EX. SIDEWALK/FLATWORK NEW SIDEWALK/FLATWORK ACCESSIBLE (ADA) RAMP WITH TRUNCATED DOME PANEL STRIPING CROSSWALK STRIPING ADA ACCESSIBLE

STRIPING TURN ARROWS

SEEDING & HYDROMULCH **SEEDING & EROSION** CONTROL BLANKET

PVIE	POINT OF VERTICAL INTERSECTION
D) // C	
PVIS	POINT OF VERTICAL INTERSECTION
PRFFAR	PREFABRICATED
PSI	POLINDS PER SOLIARE INCH
PVC	
PP	
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REO'D	REQUIRED
RIM	RIM OF INLET OR CASTING
ROW	RIGHT OF WAY
SAN	SANITARY
SS	SANITARY SEWER
ST	STORM
STD	STANDARD
SB	SOIL BORING
STRUCT	STRUCTURAL
SF	SQUARE FEET
SCH	SCHEDULE
SW	SIDEWALK
Т	TELEPHONE
ТҮР	TYPICAL
UNEX	UN-EXCAVATED
UE	UTILITY EASEMENT
UGE	UNDERGROUND ELECTRIC
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
V	VERIFY
VCL	VERTICAL CURVE LENGTH
VOL	VOLUME
VCP	VITRIFIED CLAY PIPE
W/	WITH
W/O	WITH OUT
WTH	WIDTH
W	WATER

![](_page_93_Figure_118.jpeg)

![](_page_94_Picture_0.jpeg)

DEMOLITION CALLOUTS						
ITEM	QUANTITY	UNIT				
REMOVE AND RESET EX. FES	2	EA				
REMOVE AND PATCH EX. GRAVEL ROADWAY	84	SY				

![](_page_95_Figure_0.jpeg)

ESTIMATED SITE QUANTITIES					
ITEM	QUANTITY	UNIT			
6" CONCRETE PAVEMENT	1,846	SY			
SUBGRADE PREP	1,876	SY			
GEOSYNTHETIC FABRIC TYPE R1	1,876	SY			
NDDOT CLASS 5 GRAVEL	315	CY			
ADA PARKING SIGN	1	EA			
PAVEMENT MARKINGS - ADA MESSAGE	1	EA			
PAVEMENT MARKINGS - 4" PAINTED LINE	880	LF			

NOTES: 1. GRAVEL ROADWAY PATCHING EXCLUDED FROM ABOVE SITE QUANTITIES.

NORTH DAKOTA

![](_page_95_Picture_4.jpeg)

![](_page_96_Figure_0.jpeg)

ESTIMATED WATER QUANTITIES					
ITEM	QUANTITY	UNIT			
LIVE TAP EX. WATER MAIN	1	EA			
1.5" POLY CLASS 200 WATER SERVICE	147	LF			
1.5" CURB STOP	1	EA			

ESTIMATED SANITARY QUANTITIES				
ITEM	QUANTITY	UNIT		
CONNECT TO EX. SANITARY MAIN	1	EA		
6" SCHD 40 SANITARY SERVICE	136	LF		
6" SANITARY CLEANOUT	2	EA		

ESTIMATED STORM QUANTITIES						
ITEM	QUANTITY	UNIT				
CONNECT TO EX. CMP STORM CULVERT	2	EA				
12" CMP STORM PIPE	10	LF				

## NOTES

- .. CONTRACTOR TO FIELD VERIFY LOCATION AND DEPTH OF SANITARY SEWER ANI WATER MAIN. IF DEPTH OF SANITARY SEWER DIFFERS FROM THAT ON PLANS, CONTRACTOR TO CONTACT THE ENGINEER IMMEDIATELY.
- 2. AS-BUILT INFORMATION FROM CITY OF HORACE ON INDUSTRIAL DRIVE UTILITIES WAS NOT RECEIVED. CONTRACTOR TO BUDGET FOR ADDITIONAL TIME AND MATERIALS TO FIND EXISTING UTILITIES IN INDUSTRIAL DRIVE.

LOWER WATER MAIN/WATER SERVICE PER DETAIL

NORTH DAKOTA

UTILITIES UNDERGROUND LOCATION SERVICE 1-800-795-0555

INSULATE SANITARY SERVICE PER DETAIL

WATER QUANT	TIES QUANTITY 1 147 1 TITIES QUANTITY	UNIT EA LF EA UNIT	EARGO, NORTH DAKOTA 58104
O STORM QUANT	1 136 2 TIES QUANTITY 2 10 SANITARY SEW DM THAT ON PL	EA LF EA UNIT EA LF ER AND ANS,	REVISIONS
A CITY OF HORACE ON INDU CONTRACTOR TO BUDGET D EXISTING UTILITIES IN IND	JSTRIAL DRIVE FOR ADDITION/ DUSTRIAL DRIVE.	AL	ERWIN VISTO'S SHOP BUILDING 9754 INDUSTRIAL DRIVE HORACE, NORTH DAKOTA
			PROFESS/04         ANDREW         PE-9148         DATE:10/21/21         DATE:10/21/21         DATE:10/21/21         PE-9148         DATE:10/21/21         PE-9148         DATE:10/21/21         PE-9148         DATE:10/21/21         PE-9148         DATE:10/21/201         CHECKED BY:         SAS         DRAWN BY:         SAS         APPROVED BY:         AJT
CALL BEFO	N 20 10" RE YOI	⁴⁰ J <b>DIG</b>	UTILITY PLAN

**C-5** 

![](_page_97_Figure_0.jpeg)

FG	
FL	
HP	
INV	
LP	
MC	
ME	
PC	
RIM	
тс	
тос	
TW	
TOW	
BOW	

NEW CURB(IN-FLOW) NEW CURB(OUT-FLOW) GRADE BREAK: HIGH POINT FINISH GROUND FLOWLINE HIGH POINT STRUCTURE INVERT ELEVATION LOW POINT MIDPOINT OF CURVE MATCH EXISTING GROUND POINT OF CURVATURE STRUCTURE RIM ELEVATION TOP OF CURB/THICKENED EDGE TOP OF CONCRETE TOP OF WALK TOP OF WALL BOTTOM OF WALL

![](_page_97_Picture_4.jpeg)

![](_page_98_Figure_0.jpeg)

EROS	EROSION CONTROL LEGEND									
SF	SILT FENCE	62	LF							
	FIBER ROLL PROTECTION (STRAW WATTLE)	25	LF							
	SEEDING & HYDROMULCH	1,988	SY							
	SEEDING WITH EROSION CONTROL BLANKET; NDDOT ECB-1	2,018	SY							
000000000000000000000000000000000000000	VEHICLE TRACKING PAD	1	EA							
	CONCRETE WASHOUT	1	EA							

## NOTES:

- 1. CONTRACTOR SHALL FOLLOW NDDEQ STORMWATER POLLUTION PREVENTION STANDARDS FOR ALL EROSION CONTROL DURING CONSTRUCTION.
- 2. A FODS TRACKOUT CONTROL MAT MAY BE USED AS AN APPROVED EQUAL TO THE VEHICLE TRACKING PAD. CONTRACTOR SHALL SUBMIT PROPOSED MAT LAYOUT TO ENGINEER FOR REVIEW PRIOR TO INSTALLING.

UTILITIES UNDERGROUND LOCATION SERVICE 1-800-795-0555

3. CONTRACTOR MAY CHOOSE LOCATION OF CONCRETE WASHOUT. COORDINATE WITH CITY AND ENGINEER ON LOCATION.

					,			5UILE A 58104
CONTROL LEGEND						$\overline{\mathbf{A}}$	U Z	DTA (
ROLL PROTECTION	62 25	LF	I		Ð	ΥF	NEERI	TH DAK
ING & HYDROMULCH	1,988	SY			<b>/</b> (		ENG	ISI AVEL GO, NOR
ING WITH EROSION TROL BLANKET; NDDOT ECB-1	2,018	SY			_			5306 5 FAR(
CLE TRACKING PAD	1	EA						
CRETE WASHOUT	1	EA						
IDDEQ STORMWATER POLLUTIO CONTROL DURING CONSTRUCTIO IAT MAY BE USED AS AN APPROV ACTOR SHALL SUBMIT PROPOSI 'O INSTALLING. CATION OF CONCRETE WASHOU OCATION.	N PREVENTIO ON. /ED EQUAL T ED MAT LAYO T. COORDIN.	ON O THE DUT TO ATE	REVISIONS	ERWIN VISTO'S SHOP	BUILDING	9754 INDUSTRIAL DRIVE	HORACE. NORTH DAKOTA	
			LE	JOB #	PROFE PANI PE- DATE: 10 ORTH	SS/0 PREW 9148 21/2 DAKO	NA EN LICED	
			PR	OJECT	DATE:		10/21	21129
					) BY: Y:			SAS
			API	PROVE	D BY:			SAS A.IT
	4	0		SEI	ERC DIMEN ⁻ PI	DSION & T CON ⁻ _AN	TROL	
CALL BEFORE NORTH DA	E YOU AKOTA	DIG A			С	-7		

![](_page_99_Figure_0.jpeg)

![](_page_99_Figure_2.jpeg)

![](_page_99_Figure_3.jpeg)

![](_page_99_Figure_4.jpeg)

![](_page_99_Picture_5.jpeg)

![](_page_99_Picture_6.jpeg)

![](_page_99_Picture_8.jpeg)

![](_page_99_Picture_11.jpeg)

## CURB BOX LID WITH-CAST IRON PLUG SET FLUSH W/ FINISH GRADE

THREADED

COUPLER &

EXTENSION

CURB -

STOP

NOTE

# CONCRETE WASHOUT

1. CONCRETE WASH OUT IS NOT REQUIRED IF CONTRACTOR IS PERFORMING WASHOUT ACTIVITIES OFF-SITE IN A LEGAL AND APPROPRIATE MANNER.

> TELESCOPE PULLED OUT 6 RAISED TO FINAL GRADE BY -

> > ✓ SERVICE SIZE AND

MATERIAL PER

PLAN

THREADED EXTENSION

BARRIER

FENCE

MAY BE UP TO 4' DEEP

EXISTING ~

GROUND

![](_page_99_Figure_25.jpeg)

9" FIBER ROLL

BACK OF CURB

![](_page_99_Figure_26.jpeg)

![](_page_99_Figure_29.jpeg)

![](_page_99_Figure_37.jpeg)

![](_page_99_Figure_38.jpeg)

![](_page_100_Figure_0.jpeg)

![](_page_100_Figure_1.jpeg)

![](_page_100_Picture_5.jpeg)

# CMP STORM SEWER

- 3. LAST 3' OF PIPE, MEASURED FROM BACK OF FLARED END SECTION, IS TO BE BEDDED IN CLAY AND NOT CLASS 5 OR CLASS 3 TO PROVIDE SCOUR PROTECTION. 4. IF RCP PIPE IS USED, BEDDING ONLY REQUIRED TO SPRING LINE OF PIPE.
- NOTES: 1. ALL LIFTING HOLES TO BE PLUGGED & MORTARED WATER TIGHT. 2. THE MOISTURE CONTENT OF THE AGGREGATE AT THE TIME OF COMPACTION SHALL BE NOT LESS THAN 2.0 PERCENTAGE POINTS BELOW, NOR MORE THAN 3.0 PERCENTAGE POINTS ABOVE THE OPTIMUM MOISTURE CONTENT.

![](_page_100_Figure_9.jpeg)

![](_page_100_Figure_10.jpeg)

# 3 INSULATION DETAIL FOR SANITARY SEWER

			Ð			ENGINEERING		FARGO, NORTH DAKOTA 58104	,
REVISIONS									
ERWIN VISTO'S SHOP BUILDING 9754 INDUSTRIAL DRIVE HORACE, NORTH DAKOTA									
PROFESSION ANDREW HANDREW PE-9148 DATE:10/21/21									
LE PR CH	JOI ROJE RAW	B # ECT KED	DA BY Y: D B	TE: : 		1	2	2112 /202 SA SA	29 21 .S .S
					AILS	3			

## **GENERAL STRUCTURAL NOTES**

1

THE GOVERNING BUILDING CODE IS THE INTERNATIONAL BUILDING CODE (IBC) 2018 EDITION AS APPROVED AND AMENDED BY THE CITY OF HORACE, ND.

2

3

- CONTRACT DOCUMENTS INCLUDE THE STRUCTURAL DRAWINGS AND SPECIFICATIONS, BUT DO NOT INCLUDE SHOP DRAWINGS, VENDOR DRAWINGS, OR OTHER SUBMITTALS BY THE CONTRACTOR.
- CONTRACTOR SHALL CROSS VERIFY ALL CONTRACT DOCUMENTS, ELEVATIONS, DIMENSIONS, AND EXISTING CONDITIONS PRIOR TO STARTING WORK. DISCREPANCIES OR CONFLICTS SHALL BE NOTED TO THE EOR IMMEDIATELY FOR REMEDIATION. SPECIFIC NOTES AND DETAILS SHALL PRESIDE OVER GENERAL NOTES AND SPECIFICATIONS.
- THE DIMENSIONS, LOCATIONS, AND DETAILS SHOWN ON THE DRAWINGS ARE BASED ON THE BEST AVAILABLE INFORMATION AT THE TIME OF THE DRAWINGS BEING ISSUED. DEVIATIONS WHICH ARE NECESSARY OR WHICH CONFLICT SHALL BE REPORTED TO THE EOR. CONTRACTOR SHALL HAVE FULL RESPONSIBILITY FOR DEVIATIONS NOT APPROVED BY THE EOR.
- COSTS OF ADDITIONAL DESIGN WORK DUE TO THE SELECTION OF AN OPTION OR DUE TO ERRORS OR OMISSION IN CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION. THE STRUCTURAL DRAWINGS REFLECT THE COMPLETED STRUCTURE. BRACING, SHORING, AND PROTECTION DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. THE STRUCTURE SHALL NOT BE LOADED WITH CONSTRUCTION MATERIALS AND EQUIPMENT THAT EXCEEDS THE DESIGN LOADS.
- PENETRATIONS NOT SHOWN ON THE DRAWINGS MUST BE APPROVED BY THE EOR BEFORE PLACING THROUGH STRUCTURAL ELEMENTS. CONTRACTOR SHALL PROVIDE A CAST-IN SLEEVE FOR ALL HORIZONTAL ELEMENTS THAT EXTEND THROUGH FOOTING AND FOUNDATION WALL, SUCH AS DRAIN TILE, CONDUIT, PIPING, ETC. COORDINATE SLEEVES WITH EOR. SEE MECHANICAL, ELECTRICAL, AND ARCHITECTURAL DRAWINGS FOR ALL PENETRATIONS AND EMBEDDED ITEMS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- CONTRACTOR TO VERIFY ALL WEIGHTS, LOCATIONS & DIMENSIONS OF MECH. EQUIPMENT SHOWN AND NOTIFY THE EOR OF ANY DISCREPANCIES. COORDINATE THIS INFORMATION WITH ALL NECESSARY INDIVIDUALS.
- PERIODIC SITE OBSERVATION BY REPRESENTATIVES OF SANDMAN STRUCTURAL ENGINEERS IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN GENERAL ACCORDANCE WITH THE STRUCTURAL CONTRACT DRAWINGS. A LIMITED SITE OBSERVATION SHOULD NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY OR QUANTITY OF THE WORK, BUT RATHER PERIODIC IN AN EFFORT TO GUARD THE OWNER AGAINST DEFECTS OR DEFICIENCIES IN THE WORK OF THE CONTRACTOR. ALL MATERIALS AND WORKMANSHIP ARE SUBJECT TO THE REVIEW OF THE EOR.
- 10. SEE THE FOLLOWING DETAILS FOR STANDARD DETAILS:

CIP CONCRETE & FOUNDATION: 1/S301

## <u>SHOP DRAWING & DEFERRED DESIGN SUBMITTAL NOTES:</u>

- CONTRACTOR TO FURNISH COMPLETE AND DETAILED SHOP DRAWING & SUBMITTALS FOR REVIEW AND APPROVAL BY THE EOR. THE FOLLOWING ARE REQUIRED FOR THIS PROJECT. SHOP DRAWING OR SUBMITTAL NOTES/COMMENTS CONCRETE MIX DESIGNS BY 3RD PARTY TESTING AGENCY CONCRETE REINFORCEMENT LUMBER MATERIAL GRADE & DOWEL-TYPE FASTENERS METAL PLATE CONNECTED WOOD TRUSSES DEFERRED SUBMITTAL: SEE NOTE #4
- CONTRACT DRAWINGS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS. ALL SHOP DRAWINGS MUST BEAR THE REVIEW STAMP OF THE CONTRACTOR BEFORE THEY ARE REVIEWED BY THE EOR.
- SHOP DRAWINGS SHALL SHOW ALL FIELD DETAILS AND ADDITIONAL INFORMATION NEEDED FOR THE CONTRACTOR TO CONSTRUCT THE BUILDING PER THE CONTRACT DOCUMENTS.
- STRUCTURAL COMPONENTS/SYSTEMS DESIGNATED AS A "DEFERRED SUBMITTAL" OR AS "DELEGATED DESIGN", "DESIGNED BY OTHERS", OR "PRE-ENGINEERED" MUST INCLUDE A CALCULATION PACKAGE THAT IS STAMPED AND SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, LICENSED IN THE STATE THE PROJECT WILL BE CONSTRUCTED, PRIOR TO SUBMITTAL FOR APPROVAL TO THE EOR.
- SHOP DRAWINGS SHALL BE AVAILABLE ON THE JOB SITE DURING TIMES OF INSPECTION AND SHALL BE CLEARLY INDICATED THAT THEY HAVE BEEN REVIEWED AND APPROVED BY THE EOR.
- REVIEW OF SUBMITTALS AND SHOP DRAWINGS BY THE EOR DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW AND CHECK ALL SUBMITTALS AND SHOP DRAWINGS BEFORE SUBMITTING TO THE STRUCTURAL ENGINEER. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR THE ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS.

## **DESIGN CRITERIA/DESIGN LOADS:**

4

SNOW LOAD DESIGN CRITERIA								
GROUND SNOW LOAD	Pg	50 PSF	-					
SNOW IMPORTANCE FACTOR	ls	1.0	-					
EXPOSURE FACTOR	Ce	1.0	-					
THERMAL FACTOR	Ct	1.1	TYPICAL					
SLOPED ROOF FACTOR	Cs	0.86	TYPICAL					
	ROC	F DESIGN LOAD	DS					
LOAD TYPE	NOTATION	LOAD	NOTES					
SNOW LOAD	S	33.1 PSF	TYPICAL (Pf or Ps)					
LIVE LOAD	RLL	20 PSF	-					
DEAD LOAD	D	10 PSF	D TC = 4 PSF / D BC = 6 PSF					
NOTED ALL DOOF COMPONENTS								

5

6

7

8

9

10

11

| NOTES: ALL ROOF COMPONENTS SHALL BE DESIGNED FOR DRIFT LOADS AND BALANCED & UNBALANCED SNOT LOADING PER ASCE 7. SEE PLAN FOR SNOW DRIFT LOADS

WIND LOAD DESIGN CRITERIA							
ULT. DESIGN WIND SPEED	V-ult	111 MPH	-				
RISK CATEGORY	-	I	-				
EXPOSURE CATEGORY	-	С	-				
INTERNAL PRESSURE COEFFICIENT	GCpi	+/- 0.18	-				
C & C BASE PRESSURE	qh - ult	25.8 PSF	-				

RAIN LOAD DESIGN CRITERIA									
RAIN INTENSITY	i	3.2"/hr	PER LOCAL JURISDICTION						
DRAIN TRIB. AREA	A	4800 SF	-						
MAIN/SECONDARY DRAIN	-	-	0" DIA/0" DIA						
RAIN DEPTHS	ds/dh	0"/0"							

SEISMIC DESIGN CI	RITERIA	
RISK CATEGORY	I	-
IMPORTANCE FACTOR (le)	1.0	-
SITE CLASS	D	ASSUMED
MAPPED SPECTRAL RESPONSE (Ss)	0.060	-
MAPPED SPECTRAL RESPONSE (S1)	0.019	-
SPECTRAL RESPONSE COEFFICIENT (SDS)	0.064	-
SPECTRAL RESPONSE COEFFICIENT (SD1)	0.031	-
SEISMIC DESIGN CATEGORY	A	-
BASIC SEISMIC FORCE-RESISTING SYSTEM	R=1.5	TIMBER FRAMES
DESIGN BASE SHEAR (V)	0.040 W	-
SEISMIC RESPONSE COEFFICIENT (Cs)	0.040	-
ANALYSIS PROCEDURE USED	-	EQUIVALENT LATERAL FORCE

## FOUNDATION NOTES:

- FOOTINGS ARE DESIGNED FOR AN ASSUMBED NET ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF FOR STRIP FOOTINGS AND 1500 FOR PAD FOTINGS. THE ASSUMED ALLOWABLE SOIL BEARING PRESSURE SHA BE VERIFIED BY A LICENSED GEOTECHNICAL ENGINEER AT TIME OF CONSTRUCITON.
- PROTECT FOOTING EXCAVATIONS FROM WATER, MOISTURE, OR FROST INFILTRATION. PRIOR TO PLACEMENT OF FOOTING CONCRETE, CLEAN FOOTING EXCAVATIONS OF SNOW, WATER, MUD, DIRT, AND DEBRIS. DO NOT PLACE FOOTINGS OR BACKFILL ON FROZEN SUB GRADE.
- FROST COVER FOR FOOTINGS SHALL BE PER RECOMMENDATIONS OF THE GEOTECHNICAL REPORT. SEE PLAN FOR TOP OF FOOTING ELEVATIONS AND DETAILS FOR FOOTING STEP REQUIREMENTS.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE EOR IMMEDIATELY OF ANY SPECIAL SOIL WATER CONDITIONS THAT EXIST ON SITE.
- BACKFILL & COMPACTION SHALL BE INSPECTED AND TESTED BY A LICENSED GEOTECHNICAL ENGINEER QUALIFIED FIELD TECH. THE SUBMITTAL OF TESTING REPORTS SHALL BE PER SPECIAL INSPECTION REQUIREMENTS.
- BACKFILL SHALL BE COMPACTED BY MECHANICAL MEANS. WATER INFILTRATION SHALL NOT BE ALLOWE BACKFILL SHALL BE PLACED IN ALTERNATING LIFTS ON EACH SIDE OF THE FDN WALLS FOR STABILITY.
- 7. UNLESS SPECIFICALLY PRESCRIBED IN A GEOTECHNICAL REPORT, BACKFILL SHALL BE PLACED AND COMPACTED IN LOOSE LIFTS WITH THICKNESS OF 6" OR LESS. MOISTURE CONTENT AT THE TIME OF COMPACTION SHOULD BE +/- 3% OF OPTIMUM MOISTURE AND IT IS RECOMMENDED ALL ENGINEERED FILI BELOW FOOTINGS BE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR MAX DENSITY (A D698-00a)
- 8. WALL FOOTINGS ARE TO BE CENTERED ON WALLS UNO PAD FOOTINGS ARE TO BE CENTERED ON COLUM UNO
- CONTRACTOR TO COORDINATE INTERIOR & EXTERIOR TOP OF FOOTINGS WITH MEP CONTRACTORS, PRIV TO START OF CONSTRUCTION. PLUMBING TO BE ROUTED ABOVE FOOTINGS UNLESS APPROVED BY EOR. FOOTINGS MAY NEED TO BE LOCALLY LOWERED TO ACCOUNT FOR ADJACENT PLUMBING LINES OR BASIN THAT COULD UNDERMINE SUPPORTING SOIL ALONGSIDE OR BELOW FOOTINGS.
- 10. IF SHOWN ON FOUNDATION PLAN, DRAINTILE IS FOR GRAPHICAL REPRESENTATION ONLY. SIZE AND LAYC TO BE CONFIRMED WITH MEP CONTRACTOR AND CIVIL DRAWINGS.

## **POST INSTALLED ANCHOR NOTES:**

- 1. POST INSTALLED ANCHORS NOTED ON PLAN AND/OR DETAILS NOTED SHALL BE AS FOLLOWS (UNO). IF ALTERNATIVE ANCHORS ARE DESIRED, CONTRACTOR MUST SUBMIT PRODUCT DATA FOR APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO ORDERING OF MATERIALS. ANCHORS USED TO TRANSFER STRUCTURAL LOADS MUST HAVE BEEN APPROVED BY METHODS OF ACI 318 APPENDIX D FOR MECHANICAL ANCHORS AND ICC-ES AC308 FOR ADHESIVE AND TORQUE-CONTROLLED ANCHORS. ADHESIVES USED IN COLD WEATHER MUST MEET ALL WEATHER REQUIREMENTS AND CODE REQUIREMENTS STATED ABOVE.
- INJECTION ADHESIVE ANCHORS: SIMPSON SET-3G ADHESIVE. THREADED RODS TO BE A193 GRADE I WITH EMBEDDED END CUT @ 45° ANGLE.
- SIMPSON STRONG BOLT 2 EXPANSION ANCHORS:
- SCREW ANCHORS: SIMPSON TITEN HD
- POWDER ACTUATED FASTENERS (PAF): 0.157"Ø STEEL-TO-STEEL, THRU BASE METAL, 1/2" MIN. EDGE DISTANCE. 0.157"Øx11/4" STEEL TO CONCRETE & MASONRY. 3" MIN. CONCRETE EDGE DISTANCE (UNO).
- 2. POST INSTALLED ANCHORS SHALL ONLY BE USED WHERE SPECIFIED ON THE DRAWINGS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE STRUCTURAL ENGINEER PRIOR TO USING POST INSTALLED ANCHORS FOR MISSING OR MISPLACED CIP ANCHORS. CARE SHALL BE TAKEN TO AVOID CONFLICTS WITH EXISTING REINFORCING BARS. HOLES SHALL BE DRILLED AND CLEANED PER ANCHOR MANUFACTURER'S SPECIFICATIONS. ANCHORS AND ADHESIVE TO BE INSTALLED PER
- MANUFACTURER'S SPECIFICATIONS.

	<u>CC</u>	DNCRETE AND STEEL REINFORCEMENT NOTES:	<u>W00</u>	D FRAMING NO	TES:						
	1.	CONCRETE AND STEEL REINFORCEMENT SHALL CONFORM TO AMERICAN CONCRETE INSTITUTION (ACI) CODES AND SPECIFICATIONS, LATEST EDITION.	1. WC CO	OOD AND TIMBER CON NSTRUCTION (AITC) \$	NSTRUCTION SHAL	L COMPLY W ICATIONS.	VITH THE AME	RICAN INSTITU	ITE OF TIME	BER	
	0	ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE" ACI 315 "DETAILS & DETAILING OF CONCRETE REINFORCEMENT" ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" ACI 306R "COLD WEATHER CONCRETING"	2. WC & 2 DR STI DE DO	OOD CONSTRUCTION 306) OF THE 2015 IBC AWINGS. FOR MINIM RUCTURAL DESIGN C SIGN" METHOD. PRO NOT APPLY TO THIS	SHALL CONFORM T FOR MINIMUM REC UM FASTENING REI OF THIS STRUCTURI IVISIONS WITHIN SE STRUCTURE.	TO CHAPTEF QUIREMENTS FER TO TAB E HAS BEEN ECTION 2308	R 23 (SECTIONS S UNLESS OTH LE IBC 2304.9.1 IN ACCORDAN "CONVENTION	S 2301, 2302, 2 ERWISE SPEC . PER SECTIO ICE WITH THE IAL LIGHT-FRA	303, 2304, 2 Cified on T N 2301.2, T "Allowae Ame Const	305, HE HE LE STRES RUCTION"	¦S "
	Ζ.	FOOTINGS 3000 PSI PIERS / COLUMNS 3000 PSI	3. ALI "S-	FRAMING LUMBER S	SHALL BE INSTALLE	D WITH MOI	STURE CONTE	NT OF 19% OI	R LESS IND	CATING	
	3.	FOUNDATION WALLS       3000 PSI       EXTERIOR SLABS       4500 PSI         INTERIOR SLAB       4000 PSI       (AIR ENTRAINED 5%-7% / SEE SPECS)         SUBMIT CONCRETE MIX DESIGN & STRENGTH DATA TO EOR FOR APPROVAL. ALL ADMIXTURES ARE THE	4. ALI TR	LUMBER IN CONTAC	CT WITH CONCRETE PROOFING TREATM	e, Masonry Ient, 28% M	' or exposed AX. Moisture	TO WEATHEF CONTENT.	R SHALL BE	PRESSUR	ξE
	4.	RESPONSIBILITY OF THE CONCRETE SUPPLIER'S ENGINEER.	5. ALI CO	_ SIMPSON STRONG- ATED AS A MINIMUM	TIE CONNECTORS ( OR REQUIRED COA	USED WITH I ATING TO PR	PRESSURE TR	EATED LUMBE	ER SHALL B /I SURFACE	E "Z-MAX"	
W	5.	SPECS AND SPECIAL INSPECTION REQUIREMENTS. ALL CONCRETE SHALL BE PLACED PER ACI & THOROUGHLY CONSOLIDATED BY MEANS OF A VIBRATOR, PARTICULARLY AROUND REINFORCEMENT STEEL AND CORNERS OF FORM WORK	CH 6. LUI FO	EMICALS. PROVIDE A MBER SHALL COMPLY R MINIMUM ALLOWAE	A PRESERVATIVE-T Y WITH NATIONAL D BLE DESIGN STRES	REATED BAI DESIGN SPEC S VALUES FO	RRIER BETWEE CIFICATION (NE OR LUMBER GI	EN TREATED F DS), LATEST E RADES SHOW	PLATES ANI DITION SUF N BELOW. 1	) HOLD-DO PLEMENT ALL LUMBE	)WNS. ER
	6.	REINFORCING STEEL SHALL BE GRADE 60 DEFORMED, BILLET-STEEL, ASTM A615, UNO.	FR.	AMING SHALL BE MAR	RKED WITH A GRAD	DE STAMP.	PLAN OR DET	AILS (PSI), DE	SIGN VALU	=s	]
	7.	WELDED REINFORCING STEEL SHALL BE GRADE 60, LOW CARBON, ASTM A706, WHICH IS SPECIALLY MANUFACTURED TO BE WELDABLE.		SPECIES & GRADE	TAKEN FROM ND	S SUPPLEM	ENT: TABLES 4	IA, 4B, & 4D		 F	
	8.	WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A82 AND A185 STANDARDS AND SHALL BE PLACED IN THE CENTER OF THE SLAB. UNO. LAP JOINTS A MINIMUM OF 6". EXTEND FABRIC TO BE WITHIN 1" OF SLAB EDGES.		SPF #1/#2	LO 875	AD BEARING	G WALL STUDS	1150		1 400 000	
	9.	PROVIDE ADEQUATE BOLSTERS, HIGH CHAIRS, SUPPORT BARS, ETC TO MAINTAIN THE SPECIFIED CLEARANCES				HEADERS/BE	EAMS/JOISTS	1130		1,400,000	
	10.	PROVIDE EXTRA REINFORCEMENT AROUND ALL OPENINGS GREATER THAN 8" SQUARE OR ROUND. PROVIDE (2)		HEM FIR #2	850	525 TREATED BE	150 405 AMS/JOISTS	1300		1,300,000	
		#5 BARS @ 3" OC FOR EACH MAT OF BARS, AT EACH SIDE AND CORNER OF OPENING EXTENDING MINIMUM 18" PAST CORNER OF THE OPENING. PLACE 2" CLEAR FROM OPENING.		SOUTHERN PINE #1	1000 TOP PL/HE	650 EADER PL/AE	175 565 30VE GROUND	SILL PL		1,600,000	
	11.	SEE DETAILS FOR REINFORCING LAP SPLICE SCHEDULE, UNO ON PLAN OR DETAILS.		SPF #1/#2	875	450 TREATEI	135 425 D SILL PL	1150		1,400,000	
	12.	CAST DOWELS, WITH STD 90 DEGREE HOOK, IN FOOTINGS FOR CONCRETE PIERS AND WALLS ABOVE. DOWELS SHALL BE THE SAME SIZE AND QTY AS THE VERTICAL REINFORCING (UNO)		SOUTHERN PINE #2	1000	600 TREATEI	175 565 D POSTS	1400		1,400,000	
	13.	SUPPLY 50 FEET EXTRA OF #5 REBAR FOR MISC. PLACEMENT AS DIRECTED BY THE ENGINEER. CONTRACTOR SHALL INCLUDE LABOR ALLOWANCE FOR PLACEMENT.		SOUTHERN PINE #2	850	550	165 375	525		1,200,000	
	14.	EXTERIOR SLABS SHALL DRAIN FREELY AWAY FROM THE BUILDING. SEE CIVIL AND ARCH. DRAWINGS FOR ELEVATIONS AND SLOPES.		DOUG FIR #2	750	475	170 625	700		1,300,000	
	15.	CONTROL SAWCUT JOINTS ARE TO BE EXECUTED AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT AGGREGATE FROM DISLODGING BY SAW AND PRIOR TO SHRINKAGE STRESS CRACKING. SEE DETAIL		SPF #1/#2	875	450	135 425	1150		1,400,000	
		1/S301 FOR SLAB CONSTRUCTION JOINTS (CCJ) AND FOR SLAB CONTROL JOINTS (CJ). CONTRACTOR SHALL SUBMIT A PROPOSED JOINT LAYOUT TO ARCH/ENG FOR APPROVAL PRIOR TO SLAB PLACEMENT.	IF / RE MA	ALTERNATIVE GRADE QUIREMENTS; CONTI ,TERIAL. SPF-S #2 IS	OR SPECIES OF LU RACTOR TO SUBMI SPRUCE-PINE-FIR S	umber IS de T request South & IS I	ESIRED THAT IS TO ENGINEER NOT EQUIVALE	S EQUAL OR ( FOR APPROV NT TO SPF #1	Greater T AL Prior 1 /#2	HAN THE A	ABOVE ING OF
		<ul> <li>A. CONTROL JOINTS SHALL BE ON COLUMN LINES AND @ RE-ENTRANT CORNERS TO THE GREATEST EXTENT POSSIBLE WITH SPACING LESS THAN 12'-6" OC BETWEEN.</li> <li>B. CONSTRUCTION JOINTS SHALL BE LOCATED SO AS NOT TO ALLOW A SINGLE SLAB POUR TO EXCEED 4000 SQUARE FEET UNLESS ALTERNATE MEASURES ARE TAKEN TO CONTROL SLAB CURLING &amp; SHRINKAGE.</li> <li>C. PROVIDE CJ OR CCJ JOINTS SO AS NOT TO EXCEED A SLAB UNIT ASPECT RATIO OF 1.5:1.</li> </ul>	7. AN UN MII TH	CHOR TREATED SILL O ON PLAN. HOOKEI NIMUM OF (2) ANCHO AN 4" FROM END OF I	PLATES TO CONCE D ROD WITH MINIMU RS PER PIECE OF S EACH SILL PLATE P	RETE/MASON Um Embed = Sill plate v Piece.	NRY WITH 1/2"\$ = 7"; SEE STANI V/ (1) BOLT LOC	Ø GALV A.R.'S DARD DETAILS CATED NO MO	4'-0" OC MI 6. THERE S RE THAN 1.	NIMUM, HALL BE A 2" OR LESS	Ś
	16.	SYNTHETIC FIBER REINFORCEMENT, WHERE SPECIFIED ON PLAN FOR SLABS-ON-GRADE, TOPPINGS, AND/OR SLABS ON DECK, SHOULD BE MACROSYNTHETIC AND SHALL CONFORM TO ASTM C 1116/C (TYPE III) AND ACI 544 DOCUMENTS. DOSAGE RATE TO BE SPECIFIED BY THE CONCRETE MIX DESIGNER TO COMPLY WITH THE FOLLOWING REQUIREMENTS: FIBER DOSAGE TO BE EQUIVALENT TO THE DISTRIBUTED STEEL REINFORCEMENT OF ACI 318 FOR MINIMUM SHRINKAGE AND TEMPERATURE REINFORCEMENT RATIO OF 0.0018 (UNO). RESIDUAL STRENGTH AFTER FIRST CRACK SHALL BE BETWEEN 20% AND 25%. DOSAGE OF FIBER FOR SLABS ON COMPOSITE STEEL DECKING SHALL NOT BE LESS THAN 4 LB/CUBIC YARD, AS RECOMMENDED IN ANSI/SDI C - 2011 MIX DESIGN SUBMITTAL TO INCLUDE DOSAGE RATES. ENGINEERING DATA AND HISTORICAL	<ol> <li>DIMENSIONAL LUMBER USED FOR HEADERS SHALL HAVE NO SPLITS OR CHECKS.</li> <li>PROVIDE STD CUT WASHERS PER STRUCTURAL DETAILS FOR ALL BOLTS IN WOOD MEMBERS. RE-TORQUE 48 HOURS AFTER FIRST TIGHTENING. SEE DRAWINGS FOR LOCATIONS OF SQ. PLATE WASHERS.</li> <li>NOTCHING OR CUTTING OF STRUCTURAL WOOD MEMBERS IS PROHIBITED WITHOUT PRIOR APPROVAL FROM ENGINEER. HOLES BORED IN WALL STUDS OR JOISTS SHOLLD BE IN THE CENTER HALE OF THE</li> </ol>						QUE NUTS		
)r Ll		PERFORMANCE DATA FROM THE FIBER MANUFACTURER/SUPPLIER.	ME NC	MBER AND SHALL NO TCHING, AND BORED	DT BE LARGER THA HOLE PROVISIONS	N 1/4 OF THI S OF IBC SEC	E DEPTH OF TH CTION 2308 DO	ie member. Not apply t	ALLOWABL O THIS STF	e cutting Ructure.	Э,
	17. <u>Me</u>	SEE ARCH DRAWINGS FOR DIMENSIONS OF STOOPS, FOUNDATION WALL HOLDOUTS, SLAB RECESSES, SLOPED SLABS & FOUNDATION WALL INSULATION. ETAL PLATE CONNECTED WOOD TRUSS NOTES:	<ol> <li>LOAD BEARING STUD WALLS TO BE 2x4 @ 1'-4" OC UNO. SEE TABLE ABOVE FOR SPECIES &amp; GRADE.</li> <li>EXTERIOR WALLS AND LOAD BEARING WALLS SHALL BE CAPPED WITH DOUBLE TOP PLATES. THE PLATER SHALL OVERLAR AT CORNERS AND AT INTERSECTIONS WITH OTHER LOAD BEARING WALLS. SEE STATEMENT IN THE PLATE SHALL OVERLAR AT CORNERS AND AT INTERSECTIONS WITH OTHER LOAD BEARING WALLS. SEE STATEMENT IN THE PLATE SHALL OVERLAR AT CORNERS AND AT INTERSECTIONS WITH OTHER LOAD BEARING WALLS.</li> </ol>					TES NDARD			
-	1.	METAL PLATE CONNECTED WOOD TRUSSES SHALL BE ENGINEERED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF THE PROJECT. A SEALED COVER SHEET SHALL BE SUBMITTED WITH THE SHOP DRAWINGS AT THE TIME OF SUBMITTAL. SHOP DRAWING DESIGN SUBMITTAL TO COMPLY WITH IBC SECTION 2303.4.	DE 13. PO FO	TAILS. ISTS AND BEARING S UNDATION LEVEL. PI	TUDS (JACKS/KING) ROVIDE SQUASH BI	S) FOR BEAN LOCKING BE	MS AND HEADE	ERS SHALL BE R LEVELS TO I	CONTINUC MATCH THE	OUS TO TH WIDTH OI	IE F
DR DR	2.	WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION", AFPA, AND "NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION."	14. TO BR SU	P FLANGE OF ALL RA IDGING FOR TOP FLA PPORTED PLYWOOD	IFTERS, JOISTS ANI INGE AS REQUIRED I DECKING.	D BEAMS TO TO NEARES	BE LATERALL ST FRAMING M	Y SUPPORTEI EMBER OR PF	) @ 24" OC Rovide Adi	min. Pro Equately	VIDE ′
	3.	TRUSSES TO BE DESIGNED TO SATISFY THE FOLLOWING DEFLECTION REQUIREMENTS. TRUSS SUPPLIER TO PROVIDE CAMBER AS NECESSARY TO COUNTER DEFLECTIONS.	15. PR	OVIDE SOLID BLOCKI	ING AT BEARING PC	DINTS OF AL	L 2x JOISTS.				
D.		PER TPI DEFLECTION TOTAL LOAD (TL) = KxDL+LL.	16. Me TH IN	TAL FRAMING ANCHO AT IS EQUAL OR GRE STALLATION. INSTALL	ORS AND HARDWAR ATER IN CAPACITY L PER MANUFACTU	RE SHOULD ' MUST BE SI RER'S SPEC	BE AS NOTED UBMITTED TO I IFICATIONS.	IN DETAILS. A ENGINEER FO	LTERNATIV R APPROV	E HARDW/ Al Prior 1	ARE TO
- STM		INO I E:"LL" TO BE EITHER SNOW, RAIN,WIND, OR LIVE]. PER TPI CREEP FACTOR (K) TO BE 1.0 (NON-WOOD FRAMING), 1.5 (SOLID SAWN OR SCL WOOD, DRY USE), OR 2.0 (METAL PLATE CONNECTED WOOD TRUSSES, DRY USE). PARTITION WALLS BELOW TRUSSES TO BE FRAMED TO ALLOW FOR THIS EXPECTED DEFLECTION.	17. FASTENERS IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATI GALVANIZED STEEL OR STAINLESS STEEL. THIS INCLUDES NAILS, TIMBER RIVETS, SILL ANCHORS, WO SCREWS, THRU BOLTS, AND LAG SCREWS.				NC-COATE ORS, WOO	ED OD			
INS	4.	TRUSS SUPPLIER TO MAKE EVERY EFFORT TO FOLLOW FRAMING SCHEME AS THE LOADS HAVE BEEN DISTRIBUTED TO THE FOUNDATION ACCORDINGLY. IF REVISED FRAMING DIRECTIONS ARE DESIRED BY SUPPLIER, PLAN MUST BE SUBMITTED FOR APPROVAL PRIOR TO FOUNDATION CONSTRUCTION.	18. STRUCTURAL LOAD BEARING OR LATERAL LOAD RESISTING WALLS ARE SHOWN ON THE PLAN. SEE ARCH DRAWINGS FOR PARTITION WALLS, PROVIDE NECESSARY CONNECTION/ALLOWANCE OF PARTITION WALLS TO UNDERSIDE OF FLOOR AND ROOF FRAMING TO ACCOUNT FOR FRAMING DEFLECTION.					RCH ALLS			
OR	5.	UNO ON DRAWINGS, EOR HAS <u>NOT</u> PROVIDED STRUCTURAL SHEATHING BENEATH THE BOTTOM CHORD OF ROOF OR FLOOR TRUSSES FOR BRACING.	19. DR RE	ILL BOLT/ANCHOR HO PAIR OVERSIZED HO	OLES IN WOOD 1/16 LES WITH BEARING	5" LARGER TI S PLATE WAS	HAN THE NOM SHERS.	NAL DIAMETE	R OF THE E	BOLT.	
NS	6.	ALL HARDWARE (BOLTS, HANGERS, STRAPS, ETC) REQUIRED FOR CONNECTIONS BETWEEN TRUSSES SHALL BE DESIGNED AND SUPPLIED BY THE TRUSS ENGINEER AND SUPPLIER.	20. ALL JOISTS, TRUSSES, HEADERS, AND BEAMS SHALL HAVE FULL BEARING UNO NOTED ON THE DETA					S.			
DUT	7.	UNO, ROOF TRUSSES SHALL BE ATTACHED TO THE TOP PLATE AT ALL BEARING CONDITIONS WITH SIMPSON H2.5T CLIPS INSTALLED PER MANUFACTURER'S INSTRUCTIONS. GIRDERS AND ROOF BEAMS SHOULD BE ATTACHED TO BEARING SUPPORTS WITH (2) H2.5T CLIPS, TRUSS SUPPLIER TO PROVIDE BEARING, BLOCKS AS	MINIMUM DESIGN VALUES FOR ENGINEERED WOOD MATERIALS UNO ON PLAN OR DETAILS         MATERIAL AND FUNCTION       Fb       FcII         LV/L REAMS       2000       NVA       200			E 2,000.000					
	-	REQUIRED BY DESIGN.		L	-SL BEAMS		232	5 N/A		1,550,000	
	8. 9.	DO NOT CUT OR REMOVE TRUSS MEMBERS OR MAKE FIELD ALTERATIONS TO THE TRUSSES.		PS	SL COLUMNS		290 N/A	2500		2,000,000 1,800,000	
	10	DIMENSIONED OR DETAILED.			DIMENSIONS OF FA	STENERS, U	NO [NDS APPE		= INCHES		]
	IU.	WITH CONTINUOUS SOLID BEARING TO THE FOUNDATION. AVOID BEARING GIRDER TRUSSES OVER WALL OPENINGS, UNLESS OTHERWISE DIMENSIONED ON PLAN.	FA	NAIL: 6d	L D 2 0.113 2 1/2 0.131	H 0.266 0.281	FASTEN NAIL	EK TYPE : 16d : 30d	L 3 1/2 4 1/2	D 0.162 0.207	H 0.344 0.438
B7	11.	I HE GUIDELINES SET FORTH BY THE TRUSS PLATE INSTITUTE (TPI) & SCBA PUBLICATION BSCI "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING, AND BRACING OF METAL PLATE CONNECTED WOOD TRUSSES" SHALL BE FOLLOWED BY THE TRUSS INSTALLER.		NAIL: 10d	3 0.148	0.312	#6 TYPE DRYWAL	S OR W L SCREW	1 7/8"	N/A	N/A
	12.	THE METAL PLATE CONNECTED WOOD TRUSS SUPPLIER SHALL SUPPLY THE CURRENT BCSI B-SERIES SUMMARY SHEETS WITH THE TRUSS ERECTION DRAWINGS OUTLINING THE PROPER HANDLING, ERECTING, AND BRACING OF TRUSSES.	L = LE	NGTH, D = DIAMETEF	R, H = HEAD DIAMET	TER S	HEET	LIST			
	13.	ERECTION BRACING OF WOOD TRUSSES IS THE RESPONSIBILITY OF THE TRUSS INSTALLER. THE TRUSS INSTALLER SHALL PROVIDE TEMPORARY DIAGONAL, LATERAL, & CROSS BRACING (PER BSCI GUIDE) UNTIL		Sheet Number S001		Sheet STRUCTU	Name RAL NOTES			Con	nments
	4.4	ROOF SHEATHING, CEILING & PERMANENT BRACING CAN BE APPLIED & SHEARWALLS COMPLETED.		S002 S101		SPECIAL IN FOUNDAT	SPECTIONS				•
	14.	PERMANENT BRACING OF WOOD TRUSSES SHALL BE INSTALLED BY THE TRUSS INSTALLER, WHERE INDICATED BY THE TRUSS EDECTION DRAWINGS, MINIMUM REACING REQUIREMENTS FOR TOP CHORD, BOTTOM CHORD, &		S201		ROOF FRA	MING PLAN				-

15. SEE METAL PLATE CONNECTED WOOD TRUSS SHOP DRAWINGS FOR PERMANENT WEB AND CHORD BRACING LOCATIONS AND REQUIREMENTS.

WEB MEMBER PLANES SHALL BE IN ACCORDANCE WITH BSCI GUIDE UNLESS REQUIREMENTS NOTED ON THE

PLAN ARE MORE STRICT.

MINIMUM DESIGN VALUES FOR ENGINEERED WOOD MATERIALS UNO ON PLAN OR DETAILS (PSI)							
MATERIAL AND FUNCTION	Fb	Fcll	E				
LVL BEAMS	2600	N/A	2,000,000				
LSL BEAMS	2325	N/A	1,550,000				
PSL BEAMS	2900	N/A	2,000,000				
PSL COLUMNS	N/A	2500	1,800,000				

MINIMUM	MINIMUM DIMENSIONS OF FASTENERS, UNO [NDS APPENDIX L] UNITS = INCHES							
FASTENER TYPE	L	D	Н		FASTENER TYPE	L	D	Н
NAIL: 6d	2	0.113	0.266		NAIL: 16d	3 1/2	0.162	0.344
NAIL: 8d	2 1/2	0.131	0.281		NAIL: 30d	4 1/2	0.207	0.438
NAIL: 10d	3	0.148	0.312		#6 TYPE S OR W DRYWALL SCREW	1 7/8"	N/A	N/A

Sheet Number	Sheet Name	Comments
S001	STRUCTURAL NOTES	-
S002	SPECIAL INSPECTIONS	-
S101	FOUNDATION PLAN	-
S201	ROOF FRAMING PLAN	-
S301	FOUNDATION DETAILS	-
S401	FRAMING DETAILS	-

11

12

15

14

ALT

BO

BRG

CJP

CCJ

CLR

CMU

CRC

DBE

DBL

DEG

DF1

DIAC

DWG

EOR

EQ

FXT

F.W

FDN

FTG

GA

G.C

HSA

HSS

KLF

KSF

KSI

LLH

LSH

LLV

LSV

LOC

MAS

MEP

MFR

MIN

MO

NOM

NTS

NS

OD

OH

OPP

PAF

P/C

PLF

PSF

PSI

RAD

REF

RET

RTU

R/W

S.D.

SIM

SOG

SPA

SQ

STD

THK

TO

TOB

TOF

TOJ

TYP

UNO

(V)

W/

W/O

14

SQUARE

DIAMETER

ELEVATION

PLUS OR MINUS

15

WP

ULT

SS

MISC

DIM

### ABBREVIATIONS AND SYMBOLS: ALTERNATE ALUMINUM ALUM. ARCH ARCHITECT BLK'G BLOCKING BOTTOM OF BEARING CAST IN PLACE CONTROL JOINT COMPLETE JOINT PENETRATION CONSTRUCTION CONTROL JOINT CI FAR CONCRETE MASONRY UNIT CONC CONCRETE CONN CONNECTION CONT CONTINUOUS CONST CONSTRUCTION COORD COORDINATION COLD ROLLED CHANNEL DECK BEARING ELEVATION DOUBLE DEGREE DETAIL DIAGONAL DIMENSION DEAD LOAD DOUBLE TEE DRAWING EACH ELEVATION ENGINEER OF RECORD EQUAL FXISTING EXPANSION EXTERIOR EACH WAY FOUNDATION FOOT FOOTING GALV GALVANIZE GAUGE GENERAL CONTRACTOR HOLLOW CORE HEADED STUD ANCHOR HORZ HORIZONTAL HOLLOW STRUCTURAL SECTION INSIDE DIAMETER INSIDE FACE INTERIOR INVERTED TEE JOIST BEARING ELEVATION KIPS **KIPS PER LINEAR FOOT** KIPS PER SQUARE FOOT KIPS PER SQUARE INCH LIVE LOAD LONG LEG HORIZONTAL LONG SIDE HORIZONTAL LONG LEG VERTICAL LONG SIDE VERTICAL LOCATION LONG LONGITUDINAL MASONRY MAX MAXIMUM MECH MECHANICAL MECH/ELECTRICAL/PLUMBING MANUFACTURER MINIMUM MISCELLANEOUS MASONRY OPENING NOMINA NOT TO SCALE NON-SHRINK ON CENTER OUTSIDE DIAMETER OUTSIDE FACE OVERHEAD OPPOSITE OPN'G OPENING POWDER ACTUATED FASTENER PRECAST POUNDS PER LINEAR FOOT POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH RADIUS REFERENCE REINF **REINFORCING / REINFORCE** REQ'D REQUIRED RETURN ROOF TOP UNIT **REINFORCE WITH** SLIP CRITICAL SEE DETAIL SQUARE FOOTAGE SIMILAR SLAB ON GRADE SPACING / SPACES SPECS SPECIFICATIONS SQUARE STAINLESS STEEL STANDARD TEMP TEMPORARY T & G **TONGUE & GROOVE** THICK / THICKENED TOP OF TOP OF BEAM TOP OF FOOTING TOP OF JOIST TOW TOP OF WALL TOS TOP OF STEEL TRANS TRANSVERSE TYPICAL ULTIMATE UNLESS NOTED OTHERWISE VERIFY VÉRT VERTICAL WITH WITHOUT WORK POINT WELDED WIRE FABRIC WWF CENTER LINE PLATE

## **ERWIN VISTO 9748 INDUSTRIAL** DRIVE

## THOR BUILDINGS

HORACE, NORTH DAKOTA

**KEYNOTES:** 

CONSULTIN ARCHITECTURE | PLANNING 420 Main Avenue Moorhead, Minnesota 56560 Telephone: (218)233-4422 PROJECT NUMBER: **#2101-141** STRUCTURAL NOTES C 2020 YHR PARTNERS, LTD.

Structural Engineer

1587 30th Avenue South - Moorhead, MN 56560

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JUSTIN

SCHOENBERG

PE-9144

DATE: 07-30-20

**GENERAL NOTES** 

1	3

BEARING CAST IN PLACE CONTROL JOINT	THE SPECIAL INSPECTION AND TESTING PROGRAM IS A QUALITY ASSURANCE PROGRAM INTENDED TO     ENSURE THAT THE WORK IS DEPENDED IN ACCORDINATE WITH THE CONTRACT PROGRAM INTENDED TO		SPECI	AL INSPECTIONS - SOILS AND FOUND	DATIONS				
COMPLETE JOINT PENETRATION CONSTRUCTION CONTROL JOINT CLEAR CONCRETE MASONRY LINIT	<ol> <li>THE SPECIAL INSPECTION PROGRAM DOES NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITY TO COMPLY WITH THE OFFICIAL CONTRACT DOCUMENTS. THE CONTRACTOR HAS THE SOLE</li> </ol>	VERIFICATION AND INSPECTION		SCOPE	REFERENCED		REQUIRED ON		
CONCRETE CONNECTION CONTINUOUS CONSTRUCTION	RESPONSIBILITY FOR ANY DEVIATIONS FROM THE OFFICIAL CONTRACT DRAWINGS. THE SPECIAL INSPECTOR DOES NOT REPLACE THE DUTIES OF THE BUILDING OFFICIAL NOR THE QUALITY CONTROL RESPONSIBILITIES AND PERSONNEL OF THE CONTRACTOR. JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.	1. Shallow Foundations	ICC-SSI PE-GEOTECH.	Inspect Soils below footings for adequate bearing capacity and consistency with geotechnical report.	N/A	Periodic testing to verify compliance with project	YES		
COORDINATION COLD ROLLED CHANNEL DECK BEARING ELEVATION DOUBLE	<ol> <li>THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS SPECIFIED IN THE IBC SECTION 110 AND SPECIFIC STRUCTURAL OBSERVATION AS MAY BE REQUIRED BY THE CODE.</li> <li>THOUGH NOT REQUIRED BY CODE. SPECIAL INSPECTORS AND/OR INSPECTION AGENCIES CAN DOCUMENT.</li> </ol>	2. Controlled Structural Fill	ICC-SSI PE-GEOTECH.	Perform applicable sieve tests and modified Proctor tests of each source of fill. Inspect placement, lift	Applicable ASTM Specs	Periodic testing to verify compliance with project	YES		
DEGREE DETAIL DIAGONAL DIMENSION DEAD LOAD	ACCEPTANCE OF THEIR RESPONSIBILITIES AND SCOPE OF WORK FOR A PROJECT BY SIGNING AN AGREEMENT THAT INCLUDES A DETAILED SCHEDULE OF SERVICES, COMMONLY KNOWN AS THE SPECIAL INSPECTION AND TESTING AGREEMENT AND THE SPECIAL INSPECTION AND TESTING SCHEDULE. THIS DOCUMENT MAY REFERENCE THIS SHEET AS THE "STATEMENT OF SPECIAL INSPECTIONS," (SSI).	3. Deep Foundation: Driven Piles	PE-GEOTECH.	thickness, and compaction. Test density of each lift. Verify extent and slope of fill placement. Inspect and log pile driving operations. Record pile	-	specifications & geotechnical report. Continuous	NO		
DOUBLE TEE DRAWING EACH EI EVATION	5. THE STRUCTURAL DESIGN METHODS AND/OR ASSUMPTIONS UTILIZED ARE BASED UPON THE SPECIAL INSPECTIONS REQUIRED WITHIN THE CONTRACT DOCUMENTS.	4. Doop Foundations: Drillod Diar Foundations		driving resistance and verify compliance with driving criteria. Inspect piles for damage from driving and plumbness. Verify pile size, length and accessories.		Continuous	NO		
ENGINEER OF RECORD EQUAL EXISTING EXPANSION	<ul> <li>CONTRACTOR RESPONSIBILITIES AND DUTIES:</li> <li>THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND PROVIDING ADEQUATE NOTICE TO THE SPECIAL INSPECTORS FOR ALL INSPECTIONS. THE CONTRACTOR SHALL REQUEST SPECIAL INSPECTION OF THE REQUIRED ITEMS PRIOR TO THOSE ITEMS BECOMING INACCESSIBLE AND UNORSERVABLE DUE TO</li> </ul>			for each pier. Verify pier diameter, bell diameter, lengths, embedment into bedrock and suitable of each bearing strata.		Continuous			
EXTERIOR EACH WAY FOUNDATION FOOT	<ol> <li>THE CONTRACTOR SHALL PROVIDE THE SPECIAL INSPECTOR ACCESS TO THE APPROVED CONTRACT</li> </ol>								
FOOTING GALVANIZE GAUGE	DOCUMENTS. THESE DOCUMENTS INCLUDE SEALED DRAWINGS AND SPECIFICATIONS, ADDENDA, CHANGE ORDERS, APPROVED SHOP DRAWINGS, ISSUED SKETCHES AND REVISION DRAWINGS, AND ALL DIRECTIVES ISSUED BY THE ARCHITECT/ENGINEER. THIS CURRENT SET OF DOCUMENTS SHALL BE AVAILABLE AT THE JOB SITE.		AGENCY	PECIAL INSPECTION - WOOD CONSTR		FREQUENCY OF	REQUIRED ON		
HOLLOW CORE HEADED STUD ANCHOR HORIZONTAL	3. THE CONTRACTOR IS TO CORRECT DISCREPANCIES AND DEVIATIONS AS DETERMINED BY SPECIAL INSPECTOR. ALL DISCREPANCIES AND DEVIATIONS OBSERVED SHALL BE RE-INSPECTED UNTIL THE SPECIAL INSPECTOR DEEMS CONSTRUCTION TO BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS	VERIFICATION AND INSPECTION     1. Eabricator Certification/ Quality Control	QUALIFICATION	Eabricated to be enrolled in a nationally accepted	STANDARD	INSPECTION	PROJECT		
HOLLOW STRUCTURAL SECTION INSIDE DIAMETER INSIDE FACE INTERIOR	<ol> <li>THE CONTRACTOR IS TO RETAIN SPECIAL INSPECTION RECORDS COMPLETED BY THE SPECIAL INSPECTORS AT THE JOB SITE.</li> </ol>	Procedures	-	inspection program acceptable to the Structural drawings and specifications. The approved fabricator to submit a certification of compliance to a the building official.		N/A			
INVERTED THE JOIST BEARING ELEVATION KIPS KIPS PER LINEAR FOOT	<b>SPECIAL INSPECTOR QUALIFICATIONS AND RESPONSIBILITIES:</b> <ol> <li>THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO</li> </ol>	2. Material Grading	-	Review sheathing, framing members, wall studs, plates for proper species and grade	Applicable APA & AITC Specs	Prior to Construction & Periodic during construction	YES		
KIPS PER SQUARE FOOT KIPS PER SQUARE INCH LIVE LOAD	THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. 2. SPECIAL INSPECTORS SHALL NOTIFY CONTRACTOR PERSONNEL OF THEIR PRESENCE AND RESPONSIBILITIES	3. Connections	-	Inspect connection of framing members. Including nail and bolts for size and spacing. Verify metal hardware connectors for type and proper installation	ANSI/AF&PA & Supplier's Specs	Periodic	YES		
LONG LEG HORIZONTAL LONG SIDE HORIZONTAL LONG LEG VERTICAL LONG SIDE VERTICAL LOCATION	AT THE JOBSITE. 3. THE SPECIAL INSPECTOR/TESTING AGENCY SHALL BE INDEPENDENT OF THE CONTRACTOR TO AVOID CONFLICT OF INTEREST.	4. Framing and Details		Inspect framing for plumbness, spacing, bearing length, and size. Verify bracing is installed as required.	ANSI/AF&PA	Periodic	YES		
LONGITUDINAL MASONRY MAXIMUM MECHANICAL	4. THE SPECIAL INSPECTOR IS OBLIGATED TO BOTH THE OWNER AND THE BUILDING OFFICIAL FOR OBSERVING THAT THE WORK IS EXECUTED IN ACCORDANCE WITH THE OFFICIAL CONTRACT DOCUMENTS. THESE DOCUMENTS INCLUDE SEALED DRAWINGS AND SPECIFICATIONS, ADDENDA, CHANGE ORDERS, APPROVED SHOP DRAWINGS ISSUED SKETCHES AND REVISION DRAWINGS AND ALL DIRECTIVES ISSUED BY THE	5. Diaphragms and Shearwalls	-	Inspect size, configuration, blocking and fastening of shearwalls and diaphragms. Verify panel grade and thickness. Verify size and installation of hold-downs and straps.	ANSI/AF&PA & Supplier's Specs	Periodic	YES		
MECH/ELECTRICAL/PLUMBING MANUFACTURER MINIMUM	<ul> <li>ARCHITECT/ENGINEER.</li> <li>SPECIAL INSPECTORS SHALL KEEP ORGANIZED RECORDS OF INSPECTIONS AND SUBMIT INSPECTION</li> </ul>	6. Prefabricated Wood Trusses & I-Joists	-	See Item #1. Inspect installation for location, spacing, bearing length, connectors, and permanent	ANSI/AF&PA & Supplier's Specs	Periodic	YES		
MISCELLANEOUS MASONRY OPENING NOMINAL NOT TO SCALE NON-SHRINK ON CENTER	REPORTS WITH A MINIMUM WEEKLY FREQUENCY TO THE CONTRACTOR, BUILDING OFFICIAL, ENGINEERS, AND ARCHITECTS INDIVIDUALLY. REPORTS SHOULD INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION TO THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THEY SHOULD BE REPORTED TO THE BUILDING OFFICIAL AND TO THE ENGINEER OF RECORD.								
OUTSIDE DIAMETER OUTSIDE FACE OVERHEAD OPPOSITE OPENING POWDER ACTUATED FASTENER	6. A FINAL SIGNED REPORT IS TO BE SUBMITTED AT THE END OF THE PROJECT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES. THIS REPORT SHOULD STATE THAT ALL ITEMS REQUIRING SPECIAL INSPECTION AND TESTING WERE FULFILLED AND REPORTED TO THE BEST OF THEIR KNOWLEDGE IN CONFORMANCE WITH THE APPROVED PLANS, SPECIFICATIONS, AND THE APPLICABLE PROVISIONS OF THE IBC. ITEMS NOT IN CONFORMANCE UNRESOLVED ITEMS. OR ANY DISCREPANCIES IN								
PRECAST POUNDS PER LINEAR FOOT POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH	<ol> <li>THE FOLLOWING ARE THE QUALIFICATIONS FOR INDIVIDUALS PERFORMING SPECIFIC INSPECTIONS</li> <li>THE FOLLOWING ARE THE QUALIFICATIONS FOR INDIVIDUALS PERFORMING SPECIFIC INSPECTIONS</li> </ol>								
RADIUS REFERENCE REINFORCING / REINFORCE REQUIRED RETURN	A. AMERICAN CONCRETE INSTITUTE (ACI): CONCRETE FIELD TESTING TECHNICIAN - GRADE 1 (ACI-CFTT) CONCRETE CONSTRUCTION INSPECTOR (ACI-CCI) LABORATORY TESTING TECHNICIAN - GRADE 1 OR 2 (ACI-I TT)								
ROOF TOP UNIT REINFORCE WITH SLIP CRITICAL SEE DETAIL	B. AMERICAN WELDING SOCIETY (AWS): CERTIFIED WELDING INSPECTOR (AWS-CWI)								
SIMILAR SLAB ON GRADE SPACING / SPACES	C. AMERICAN SOCIETY OF NON-DESTRUCTIVE TESTING (ASNT) NON-DESTRUCTIVE TESTING TECHNICIAN - LEVEL II OR III (ASNT)								
SPECIFICATIONS SQUARE STAINLESS STEEL STANDARD TEMPORARY TONGUE & GROOVE THICK / THICKENED	D. INTERNATIONAL CODE COUNCIL (ICC): STRUCTURAL MASONRY SPECIAL INSPECTOR (ICC-SMSI) STRUCTURAL STEEL AND BOLTING SPECIAL INSPECTOR (ICC-SSSI) STRUCTURAL WELDING SPECIAL INSPECTOR (ICC-SWI) PRESTRESSED CONCRETE SPECIAL INSPECTOR (ICC-PCSI) REINFORCED CONCRETE SPECIAL INSPECTOR (ICC-RCSI)								
TOP OF TOP OF BEAM TOP OF FOOTING TOP OF JOIST	SOILS SPECIAL INSPECTOR (ICC-SSI) E. PROFESSIONAL STATE LICENSING: PROFESSIONAL ENGINEER (PE)								
TOP OF WALL TOP OF STEEL TRANSVERSE TYPICAL ULTIMATE UNI ESS NOTED OTHERWISE	<b>STATEMENT OF SPECIAL INSPECTIONS (SSI):</b> THE FOLLOWING TABLES INDICATED THE MINIMUM SPECIFIC SPECIAL INSPECTION AND TESTING TO BE PERFORMED ON THIS PROJECT AND THE QUALIFICATIONS OF THE INDIVIDUAL INSPECTORS AND TESTING TECHNICIANS.								
VERIFY VERTICAL WITH WITHOUT WORK POINT	<ol> <li><u>DEFINITIONS:</u></li> <li><u>CONTINUOUS SPECIAL INSPECTION</u>: THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. 100% OF THE WORK MUST BE INSPECTED AND IT MUST BE INSPECTED AS THE WORK IS BEING PERFORMED.</li> </ol>								
WELDED WIRE FABRIC CENTER LINE PLATE SQUARE DIAMETER	<ol> <li><u>PERIODIC SPECIAL INSPECTION</u>: THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN, OR IS BEING, PERFORMED AND AT THE COMPLETION OF WORK.</li> </ol>								
PLUS OR MINUS AT ELEVATION	<ol> <li><u>YES</u>: THIS INSPECTION AND/OR TESTING IS REQUIRED BY THE BUILDING CODE AND MUST BE PERFORMED.</li> <li><u>NO</u>: THIS INSPECTION AND/OR TESTING IS NOT APPLICABLE TO THE PROJECT, AND NEED NOT BE PERFORMED.</li> </ol>								
	<ol> <li><u>SUGGESTED</u>: THIS INSPECTION AND/OR TESTING IS NOT REQUIRED BY THE BUILDING CODE. HOWEVER, THE ENGINEER OF RECORD RECOMMENDS IMPLEMENTING THEM FOR QUALITY ASSURANCE. A POTENTIAL EXISTS FOR THESE MEASURES TO BE A VALUE ADDED SERVICE FOR THE OWNER TO ENSURE PROPER PROJECT COMPLETION.</li> </ol>								

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11	12	13	14	15	ERWIN VISTO 9748 INDUSTRIAL DRIVE
				L	THOR BUILDINGS
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				c	Structural Engineers 1587 30th Avenue South - Moorhead, MN 56560 218.227.0022 www.SandmanSE.com Project #:2101-141 © Convrigent 2021 for SSE
					CONSULTING
				В	ARCHITECTURE   PLANNING 420 Main Avenue Moorhead, Minnesota 56560
					Telephone: (218)233-4422 PROJECT NUMBER: #2101-141
				-	
				Α	SPECIAL INSPECTIONS
11	12	13 '	14	15	© 2020 YHR PARTNERS, LTD.
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![](_page_103_Figure_0.jpeg)

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` `	5'-10 1/2"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-3 3/4"	14'-0"	3'-8 1/4'	"6'-0"	6'-0"	6'-0"	3'-8 1/4"	14'-0"	6'-3 3/4"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	5'-10 1/2"	
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## **ERWIN VISTO 9748 INDUSTRIAL** DRIVE

FOUNDATION PLAN NOTES:

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- 1. TYPICAL INTERIOR SLAB ON GRADE, UNO THICKNESS = 5"
- REINFORCEMENT = #4 @ 24" O.C. BASE = MIN OF 6" COMPACTED GRANULAR FILL, UNO BY GEOTECHNICAL REPORT VAPOR RETARDER/BARRIER = 10 MIL POLY
- T.O. SLAB ELEVATION = 100'-0" SEE ARCH FOR SLOPES AND RECESSES
- 2. CONTRACTOR TO VERIFY ALL DIMENSIONS AND NOTIFY OWNER/ENGINEER IF ANY DISCREPANCIES EXIST.
- 3. LOOSE MATERIAL SHALL BE REMOVED FROM HOLE OR MANUALLY COMPACTED
- 4. SEE ARCH FOR DIMENSIONING OF SLAB RECESS LOCATIONS AND SLOPED SLAB AREAS.
- SSE IS NOT RESPONSIBLE FOR WALK DOOR STOOPS. IT IS THE OWNERS RESPONSIBILITY FOR THE PERFORMANCE OF EXTERIOR GRADE AND CONCRETE AT THE WALK DOOR LOCATIONS.
- 6. CONTRACTOR TO REFER TO SHEET S001 FOR OVER-EXCAVATION & STRUCTURAL BACKFILL PROCEDURES.
- 7. SEE ARCH FOR PERIMETER INSULATION REQUIREMENTS FOR FROST PROTECTION OF SLAB

	PIER SCHEDULE								
MARK	DETAIL	NOTES/COMMENTS							
P1	2/S301	-							
P2	3/S301	-							
P3	4/S301	-							

![](_page_103_Figure_18.jpeg)

![](_page_103_Figure_19.jpeg)

![](_page_104_Figure_0.jpeg)

13	14	15	ERWIN VISTO 9748 INDUSTRIAL
116'-4" UNO			
.5E MSR SPACED @ 2'-0" O.C. K NAILS. WALL GIRTS TO BE 2-		-	THOR BUILDINGS
PRO-PANEL II.			HORACE, NORTH DAKOTA
ROOF PURLINS W/ #10 SCREWS THE FIELD AND 6" O.C. ON END.		_	KEYNOTES:
LONG WOODGRIP SCREWS IOR RIBS @ EVERY WALL GIRT			
O THE PURLINS W/ 2" LONG RY MAJOR RIB		к	
ALL BE FASTENED TO EA			
ENERAL REQUIREMENTS		_	
ARE IN CONTACT WITH TREATED IG TO PROTECT FOR			
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ARCH FOR TRUSS PROFILE.			
<u> </u>			
NOTE			
T BY TRUSS SUPPLIER E TO BE 2400Fb-1.8E MSR L 3/S401 FOR CONNECTION	UMBER. SEE PLAN AND SPLICE	н	
NIMUN DIST BEARING ELEVATION =	= 108'-0"		
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<b>MN SCHEDULE</b>			
O BE SOUTHERN PINE No.1		G	OFESSIO
E PLATE ANCHOR ROD TYPE TYPE 	COMMENTS -		SED PROVICESION PROVICESION
	-	_	SCHOENBERG PE-9144
SCHEDULE			DATE: 07-30-2021
JACK KING STUD STUDS	COMMENTS	-	CHARLE AND
2/S401         2/S401           (1) 2X4         (1) 2X4	-	F	
			No. Description Date
			1 Revision 1 8-27-2021
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9 S401	11		218.227.0022 www.SandmanSE.com Project #:2101-141 © Copyright 2021 for SSE
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$\langle 3 \rangle$		В	<b>V</b> ARCHITECTURE   PLANNING
8			420 Main Avenue Moorhead, Minnesota 56560 Telephone: (218)233-4422
	-   +		PROJECT NUMBER: #2101-141
		Δ	ROOF FRAMING PLAN
ZZANINE FRAMING P = 1'-0"	LAN		0001
   13		15	© 2020 YHR PARTNERS, LTD.
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![](_page_105_Figure_0.jpeg)

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				HORACE, NORTH DAKOTA
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				© Copyright 2021 for SSE
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			в	<b>U</b> CONSULTING ARCHITECTURE   PLANNING
				420 Main Avenue Moorhead, Minnesota 56560 Telephone (218)233-4422
				PROJECT NUMBER: #2101-141
			A	FOUNDATION DETAILS
				S301
13	14	15		(C)2020 YHR PARTNERS, LTD.

![](_page_106_Figure_0.jpeg)

![](_page_107_Figure_0.jpeg)










## MEMO

**To:** City of Horace Planning and Zoning Commission

From: Jace Hellman, Community Development Director

Date: April 12, 2022

**RE:** Lakeview Heights Apartments PUD

Christianson Companies has filed a complete application for a Planned Unit Development (PUD) for what is proposed to be lot 2 of Block 1 of Lakeview Heights Fifth Addition. Horace City Code (HCC) 17.5.14.8c requires all Planned Unit Developments, upon complete application submittal, to be forwarded to Planning Commission and its Staff for review. Following the Commission's review of the attached PUD documentation, the Commission may provide preliminary agreement to the concept of the proposed PUD District, request additional information from the developer and/or propose modifications to the proposed PUD District plan. It should be noted that agreement to PUD District by the Commission does not constitute an approval, or recommendation of approval of the PUD application, or any accompanying application.

If the Commission preliminarily agrees to the PUD concept, City staff will work to develop a PUD District Agreement, which will contain the terms, provisions and conditions that apply specifically to the PUD District. Following completion of the initial PUD District agreement, this application along with any accompanying applications will brought back to the Commission for public hearing and recommendation to City Council.

If you have any questions regarding this information, please contact me at (701) 552-1608 or by e-mail at <u>JHellman@CityofHorace.com</u>.



## Christianson Companies Land development | Construction Management

New Horizon Homes is proposing a 9.32 acre multi-family development. It will consist of 5-36 plex 3 story apartment buildings with lofts on the 3rd story 3 bed room units.

The developer is asking to apply for a PUD for this project. The reason for PUD is the current R5 zoning only allows 14 units per acre with the proposed project we will need to revise it to allow 20 units per acre. We are also asking to change the current 45ft height limit to 54'. We are also asking to encroach into the 30' minimum front setback along 81st ave. The reason for the encroachment is to provide access to the building with a ladder truck. The future city ordinance will have a 10' maximum front setback in is zoning district.

The current proposal fits the 17/76 core area design standards from the current comprehensive plan as Multi-Family. With the approval of this apartment project it will help promote additional retail and commercial development in the Lakeview Heights area. This PUD development will also fit within the current future land use map and the future ordinance that will be approved later this year.

We plan on submitting for the permit early to mid-May with the construction starting early July 2022 and completing all 5 building November 2023.

The 10 year economic impact will be approximately 21,000,000 million with the 180 units proposed.

The current infrastructure along 81st avenue and Lakeview Drive will support this proposed development.

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## LAKEVIEW HEIGHTS FIFTH ADDITION A REPLAT OF LOTS 1 & 2, BLOCK 1, LAKEVIEW HEIGHTS THIRD ADDITION TO THE CITY OF HORACE, CASS COUNTY, NORTH DAKOTA 111 WEST FARGO SCHOOL BLOOK A 1012 70 N 01°22'01" W 1414.98 Existing 40.00 Foot Wide Ingress/Egress Easement (20 Feet Each Side) Per Doc#1590690 15' ing 10 Foot Wide Utility Easement R-5 Base zoning SETBACK Per Doc#151873 with PUD SFTBACK 1 HHIHY LOT 2 SETBACK 406,864 SF 9.340 AC K 0 C B SETBACK S 01°22'01" E 242.20 LOTO BLOCK xisting 50.00 Foot Wide Ingress/Egress and Utility Easement NEW HORIZON HOMES LLC Per Doc#1590690 1 ADJOINING OWN .____+ – S 01°22'01" E 1619.02-ALYSSA MAE HORIZON HOMES LLC PROPERTIES 20.00 -LOT 5 | | - - | / , | / , - - -+ + + - | | - + + / _ | | L - | / / | | | JOINHAG OWN. NEW HORIZON ADJQINING OWNE NEW, HORIZON JOMES LLC PRELIMINARY 90 100





SHEET 1 OF 2



Please click here for the Land Use Ordinance

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