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ROSATI | SCHULTZ
JOPPICH | AMTSBUECHLER

April 18, 2024

Privileged and Confidential Correspondence from City Attorney

Mayor Fischer and City Council
City of Novi
45175 Ten Mile Road
Novi, MI 48375

RE: Request to Purchase part of Water Tower Park (Novi Road/Trans-X Drive)

Dear Mayor Fischer and Councilmembers:

When the City bought the former Rainbow Coatings Property and Novi Road and Trans-X Drive, it was known to be both contaminated and to have some minor encroachments on it, on the far east side of the parcel, as well as some easement for access and utilities. The City Council went ahead with the purchase given where it is and with the expectation that it wouldn't likely ever be more than a passive park for the area.

Now the property owner to the east, Novi Industrial, LLC (25425 Trans-X Road) wants to buy a portion of the property from the City. What has prompted the inquiry is the fact that its tenant, a business called Temperform, wants to place a sand silo on the area where the encroachment is. In fact, Temperform has already placed the base of the tower on the City's property under the belief that it was part of the leased parcel.

After meeting with the City and investigating options for relocating the tower to a location on the Temperform/Novi Industrial, LLC site, Temperform has determined that placement on the current Temperform site would require variances from the Zoning Board of Appeals. Temperform indicates that even with variances, however, the tower will not fit properly on its own site. So it has turned its attention to whether the City would be interested in selling some portion of the site to it.

Temperform has obtained an appraisal of the City-owned property which is attached. The appraised value of the portion Temperform wants to purchase is $68,000. Although the purchaser used an appraiser that the City typically uses for City right-of-way acquisition, the City may want to obtain an additional appraisal or have the appraisal reviewed to ensure the accuracy of the appraised value.

We are enclosing some information provided by the purchaser, including specifications/structural calculations for the tower, a simple drawing of where the tower would be located relative to the Temperform and remaining City property, and topographic survey of the Property. We are also attaching the City's original survey of the property from its purchase.

We aren't attaching Temperform's proposed purchase agreement or the appraisal it secured that puts the value of the area it want at $68,000—because the first question is whether the City is even interested in selling any part of the land. The City will ultimately have the following legal options with respect to the City property and the portion of tower that Temperform has already constructed:

1. Require Temperform to remove the base of its tower from the City's property, and it if fails to do so, issue a citation or file a lawsuit for trespassing.
2. Grant Temperform a permanent easement to construct, operate and maintain its tower on the City's property.
3. Grant Temperform a temporary license to construct, operate and maintain its tower on the City's property.
4. Sell the portion of the City's Property to Temperform's Lessor, as requested.

If the City were to sell the area in question it would still retain its interest in a large portion of the parcel to be used for City park purposes. The City's Community Development Department will also still require a site plan for the tower to be submitted if the City determines that it will sell the purchaser some form of interest in the property.

We look forward to discussing those legal options with Council in closed session.

Please feel free to contact me with any questions or concerns regarding this matter.

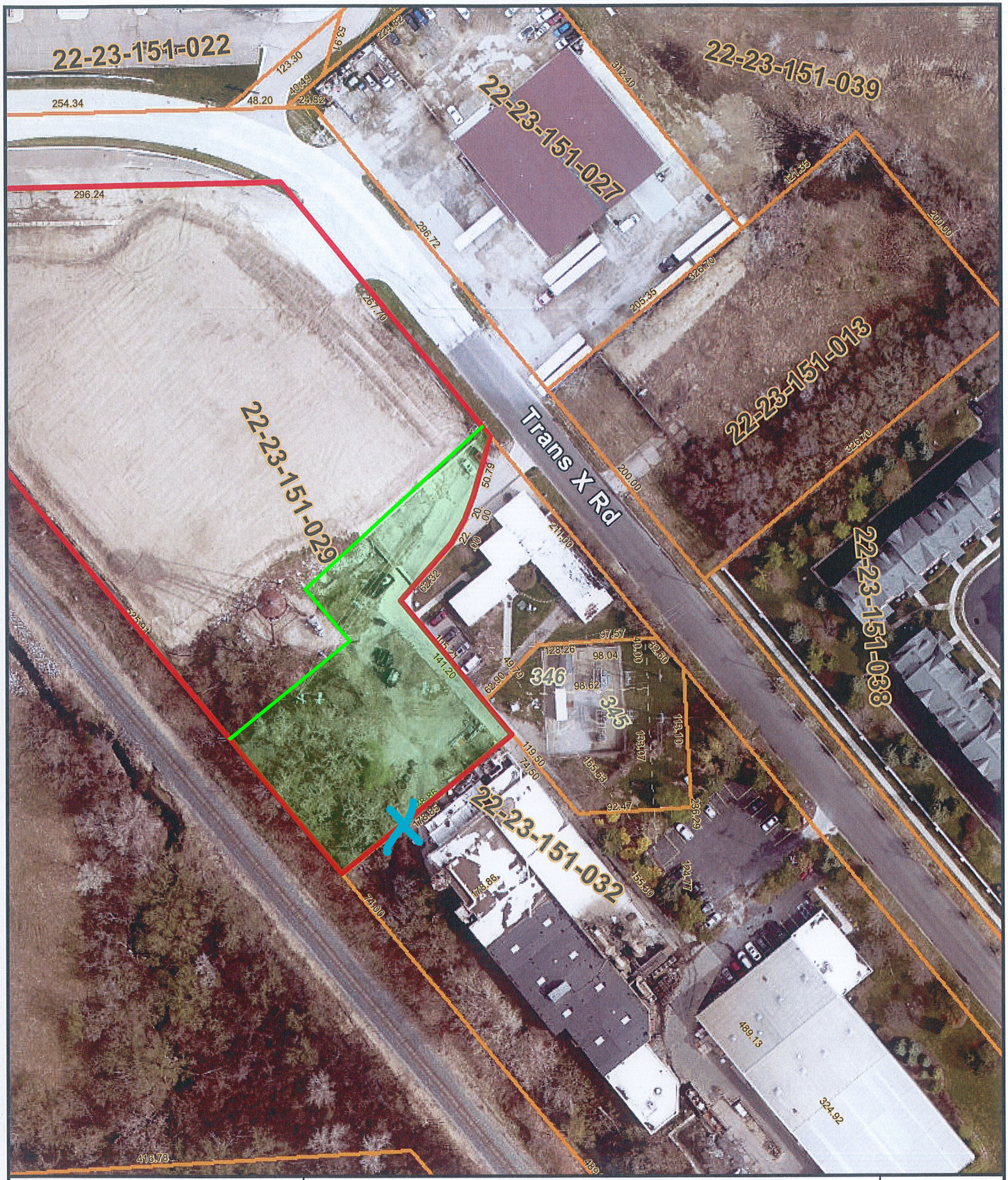
Very truly yours,

ROSATI SCHULTZ JOPPICH
& AMTSBUECHLER PC

Elizabeth Kudla Saarela

EKS
C: Victor Cardenas, City Manager
Cortney Hanson, Clerk
Charles Boulard, Community Development Director
Barb McBeth, Planner
Jeff Muck, Director of Parks & Recreation
Thomas R. Schultz, Esquire

Novi



2 Foot Contours	100 yr - FEMA Floodplain
5 Foot Contours	100 yr (detailed) - FEMA Floodplain
FEMA Base Flood Elevations	500 yr - FEMA Floodplain
FEMA Cross Sections	FLOODWAY - FEMA Floodplain

Disclaimer: The information provided herewith has been compiled from recorded deeds, plats, tax maps, surveys and other public records. It is not a legally recorded map or survey and is not intended to be used as one. Users should consult the information sources mentioned above when questions arise. FEMA Flooplain data may not always be present on the map.

OAKLAND COUNTY MICHIGAN
Economic Development & Community Affairs

David Coulter
Oakland County Executive

Date Created: 8/18/2023

NORTH

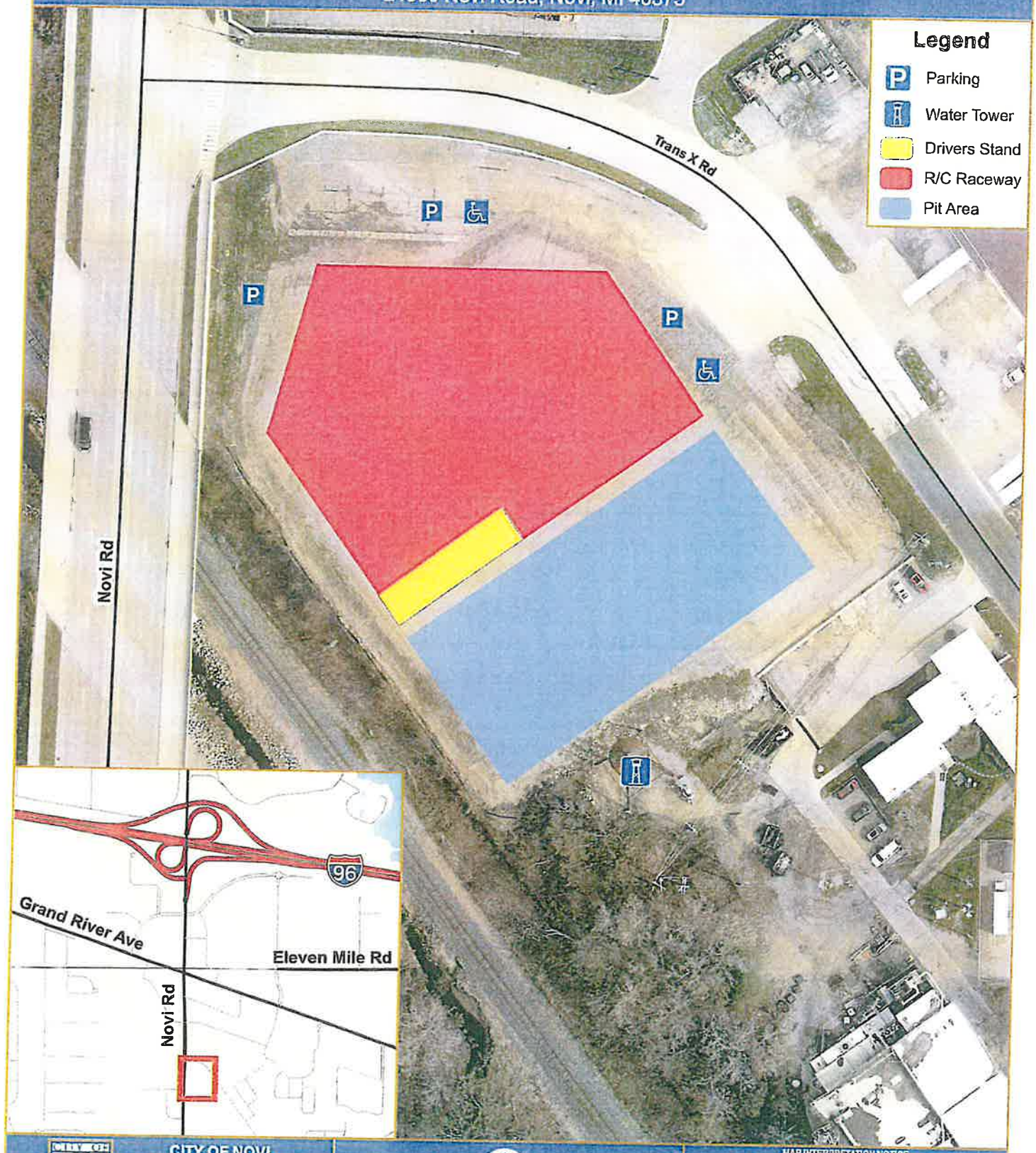
1 inch = 100 feet

Oakland County One Stop Shop 2100 Pontiac Lake Road Bldg. 41 West Waterford, MI 48328 Phone: 248-858-0721 Web: www.advantageoakland.com


DANGER
HIGH VOLTAGE
KEEP OUT

WATER TOWER PARK FACILITY LOCATION MAP

24560 Novi Road, Novi, MI 48375



CITY OF NOVI

PARKS, RECREATION & CULTURAL SERVICES
NOVI CITY HALL
45175 W. TEN MILE ROAD
NOVI, MI 48375
(248) 347-0400
CITYOFNOVI.ORG
MAP AUTHOR: JON GARTHA

0 37.5 75 150

FEET

1 INCH = 74 FEET

MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm sources and accuracy information related to this map.

STRUCTURAL CALCULATIONS FOR:

Analysis of Sand Silo Frame

PROJECT LOCATION:

TEMPERFORM
25425 TRANS-X ROAD
Novi, MI

PROJECT NUMBER:

__23-2004___

PREPARED DATE:

APR 12, 2023

PREPARED BY:

FAIRWAY ENGINEERIG LLC
28525 BECK ROAD, SUITE 114
WIXOM, MI 48393

TABLE OF CONTENTS:

1. Scope

Adequacy check of Sand Silo frame.

2. Design Criteria

The allowable stress design load combinations as per- ASCE7-10

1. D
2. D + L
3. D + (Lr or S or R)
4. D + 0.75L + 0.75(Lr or S or R)
5. D + (0.6W or 0.7E)
6a. D + 0.75L + 0.75(0.6W) + 0.75(Lr or S or R)
6b. D + 0.75L + 0.75(0.7E) + 0.75S
7. 0.6D + 0.6W
8. 0.6D + 0.7E

a) Seismic Load

Novi, MI, USA
Latitude, Longitude: 42.48059, -83.4754913
R= 3.25, Cd =3.25

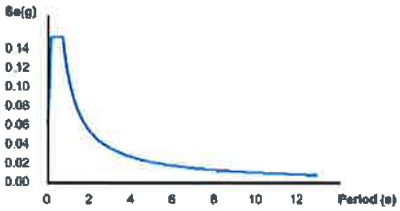
Seismic Force-Resisting System	ASCE 7 Section Where Detailing Requirements Are Specified	Response Modification Coefficient, R^a	Overstrength Factor, $\Omega_0{}^b$	Deflection Amplification Factor, $C_d{}^c$
A. BEARING WALL SYSTEMS				
1. Special reinforced concrete shear walls[g,h]	14.2	5	2½	5
2. Ordinary reinforced concrete shear walls[g]	14.2	4	2½	4
3. Detailed plain concrete shear walls[g]	14.2	2	2½	2
4. Ordinary plain concrete shear walls[g]	14.2	1½	2½	1½
5. Intermediate precast shear walls[g]	14.2	4	2½	4
6. Ordinary precast shear walls[g]	14.2	3	2½	3
7. Special reinforced masonry shear walls	14.4	5	2½	3½
8. Intermediate reinforced masonry shear walls	14.4	3½	2½	2¼
9. Ordinary reinforced masonry shear walls	14.4	2	2½	1¾
10. Detailed plain masonry shear walls	14.4	2	2½	1¾
11. Ordinary plain masonry shear walls	14.4	1½	2½	1¼
12. Prestressed masonry shear walls	14.4	1½	2½	1¾
13. Ordinary reinforced AAC masonry shear walls	14.4	2	2½	2
14. Ordinary plain AAC masonry shear walls	14.4	1½	2½	1½
15. Light-frame (wood) walls sheathed with wood structural panels rated for shear resistance	14.5	6½	3	4
16. Light-frame (cold-formed steel) walls sheathed with wood structural panels rated for shear resistance or steel sheets	14.1	6½	3	4
17. Light-frame walls with shear panels of all other materials	14.1 and 14.5	2	2½	2
18. Light-frame (cold-formed steel) wall systems using flat strap bracing	14.1	4	2	3½
B. BUILDING FRAME SYSTEMS				
1. Steel eccentrically braced frames	14.1	8	2	4
2. Steel special concentrically braced frames	14.1	6	2	5
3. Steel ordinary concentrically braced frames	14.1	3½	2	3¼
4. Special reinforced concrete shear walls[g,h]	14.2	6	2½	5
5. Ordinary reinforced concrete shear walls[g]	14.2	5	2½	4½
6. Detailed plain concrete shear walls[g]	14.2 and 14.2.2.7	2	2½	2

ATC Hazards by Location

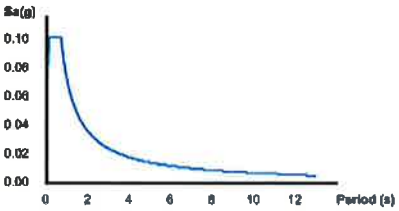
Search Information

Address:	Novi, MI, USA
Coordinates:	42.48089, -83.4754913
Elevation:	908 ft
Timestamp:	2023-04-11T11:19:49.639Z
Hazard Type:	Seismic
Reference Document:	ASCE7-16
Risk Category:	II
Site Class:	D-default

MCER Horizontal Response Spectrum



Design Horizontal Response Spectrum



Basic Parameters

Name	Value	Description
S_S	0.096	MCE_R ground motion (period=0.2s)
S_1	0.045	MCE_R ground motion (period=1.0s)
S_{MS}	0.153	Site-modified spectral acceleration value
S_{M1}	0.109	Site-modified spectral acceleration value
S_{DS}	0.102	Numeric seismic design value at 0.2s SA
S_{D1}	0.073	Numeric seismic design value at 1.0s SA

Additional Information

Name	Value	Description
SDC	B	Seismic design category
F_a	1.6	Site amplification factor at 0.2s
F_v	2.4	Site amplification factor at 1.0s
CR_S	0.939	Coefficient of risk (0.2s)
CR_1	0.904	Coefficient of risk (1.0s)
PGA	0.047	MCE_G peak ground acceleration
F_{PGA}	1.6	Site amplification factor at PGA
PGA_M	0.076	Site modified peak ground acceleration
T_L	12	Long-period transition period (s)
SsRT	0.096	Probabilistic risk-targeted ground motion (0.2s)
SsUH	0.102	Factored uniform-hazard spectral acceleration (2% probability of exceedance in 50 years)
SsD	1.5	Factored deterministic acceleration value (0.2s)
S1RT	0.045	Probabilistic risk-targeted ground motion (1.0s)
S1UH	0.05	Factored uniform-hazard spectral acceleration (2% probability of exceedance in 50 years)
S1D	0.6	Factored deterministic acceleration value (1.0s)
PGAd	0.5	Factored deterministic acceleration value (PGA)

3. WEIGHT OF COMPONENTS

Weight of sand:

Capacity of silo = 91 ton =200.62 kips

Assume thickness of silo ½"

1. Weight of cylinder

Area = $2\pi rh + 2\pi r^2$

= 2π x 4.5x30 +2π x 4.5^2

= 976 ft^2

Weight =976x490x (0.5/12)

=19927 lbs

2. Weight of cylinder

Area = $2\pi rh + 2\pi r^2$

= 14.7 ft^2

Weight =14.7x490x (0.5/12)

=301 lbs

3. Weight of cylinder

Area = $2\pi rh + 2\pi r^2$

= 13.3 ft^2

Weight =13.3x490x (0.5/12)

=269 lbs

4. Weight of Cone

Area = $\pi r (r+\sqrt{(h^2+ r^2)})$

= 131 ft^2

Weight =131x490x (0.5/12)

=2675 lbs

5. Weight of Cone

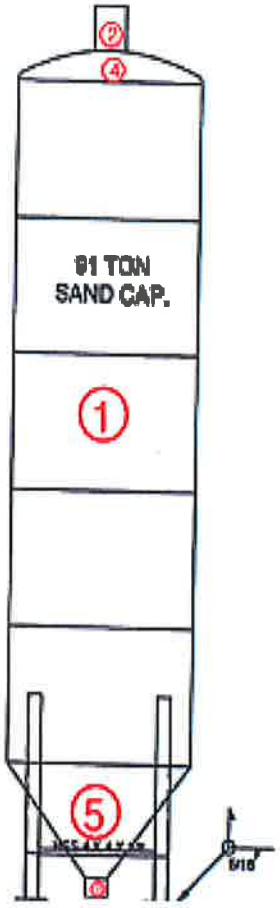
Area = $\pi r (r+\sqrt{(h^2+ r^2)})$

= 159 ft^2

Weight =159x490x (0.5/12)

=3247 lbs

Total weight of silo =19927+301+269+2675+3247 =26419 say 26.5 kips


91 TON
SAND CAP.
1
5

SEISMIC LOAD

S_{DS} = 0.102 (From ATC Hazard Report)

C_S = S_{DS} / (R/I_e)
= 0.7 x 0.102 / (3.25 /1) = 0.022

BASE SHEAR AT EMPTY CONDITION

V = C_S x W = 0.022 x 26500 = 583 lbs

Base shear on each column =583/4 = 146 lbs

Moment due to silo:

Assume seismic load acts at c.g. of silo i.e. 20.8 ft.
Moment = 583x20.8 = 12127 ft-lbs
Moment on each column = 12127/4 = 3032 ft-lbs =3.03 kip-ft

BASE SHEAR AT FULL CONDITION

V = C_S x W = 0.022 x (200.6 +26.5) = 4996 lbs

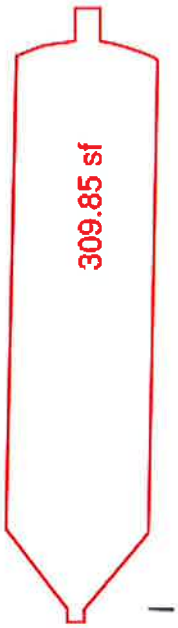
Base shear on each column =4996/4 = 1250 lbs

Moment due to silo:

Assume seismic load acts at c.g. of silo i.e. 20.8 ft.
Moment = 4996x20.8 = 103916 ft-lbs
Moment on each column = 103916/4 = 25980 ft-lbs =26 kip-ft

WIND LOAD

Assumed Exposure C.
Assumed Design wind pressure on Silo 30 psf



Surface area of Silo = 310 sf

Shear due to wind load = 310x30= 9300 lbs
Shear on each column =9300/4 = 2325 lbs

Moment due to silo:

Assume Wind load acts at c.g. of silo i.e. 20.8 ft.
Moment = 9300x20.8 = 193440 ft-lbs
Moment on each column = 193440/4 = 48360 ft-lbs =48.36 kip-ft

All framing Members are adequate for wind and seismic loading.

DRIFT CALCULATION:

WIND LOAD

Max. Deflection =0.082 in

Allowable Deflection = H/500=16x12/500 = 0.384 in > 0.082 **OK**

SEISMIC LOAD

Max. Deflection =0.045 in

$$\delta_x = \frac{C_d \delta_{xe}}{I_e} \qquad (12.8\text{-}15)$$

where

C_d = deflection amplification factor in Table 12.2-1;
δ_{xe} = deflection at the location required by this section determined by an elastic analysis; and
I_e = Importance Factor determined in accordance with Section 11.5.1.

= 3.25x0.045/1= 0.145 in

Table 12.12-1 Allowable Story Drift, Δ_a[a,b]

Structure	Risk Category I or II	Risk Category III	Risk Category IV
Structures, other than masonry shear wall structures, four stories or less above the base as defined in Section 11.2, with interior walls, partitions, ceilings, and exterior wall systems that have been designed to accommodate the story drifts	$0.025h_{sx}$[c]	$0.020h_{sx}$	$0.015h_{sx}$
Masonry cantilever shear wall structures[d]	$0.010h_{sx}$	$0.010h_{sx}$	$0.010h_{sx}$
Other masonry shear wall structures	$0.007h_{sx}$	$0.007h_{sx}$	$0.007h_{sx}$
All other structures	$0.020h_{sx}$	$0.015h_{sx}$	$0.010h_{sx}$

Allowable Deflection = 0.020 h =0.020x16x12 =3.84 in > 0.145 in **OK**

Job Information

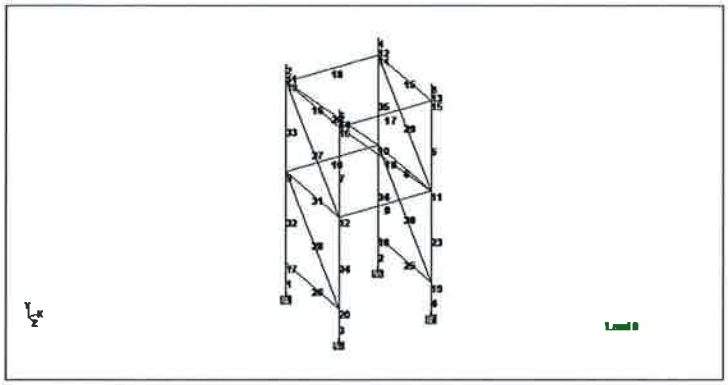
Structure Type SPACE FRAME

Number of Nodes	20	Highest Node	20
Number of Elements	32	Highest Beam	35

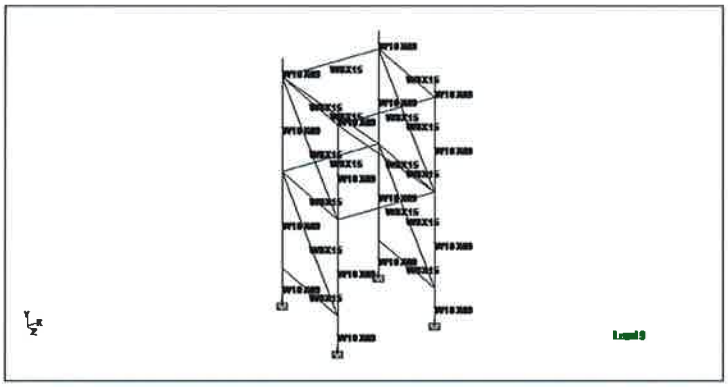
Number of Basic Load Cases	8
Number of Combination Load Cases	16

Included in this printout are data for:
All The Whole Structure

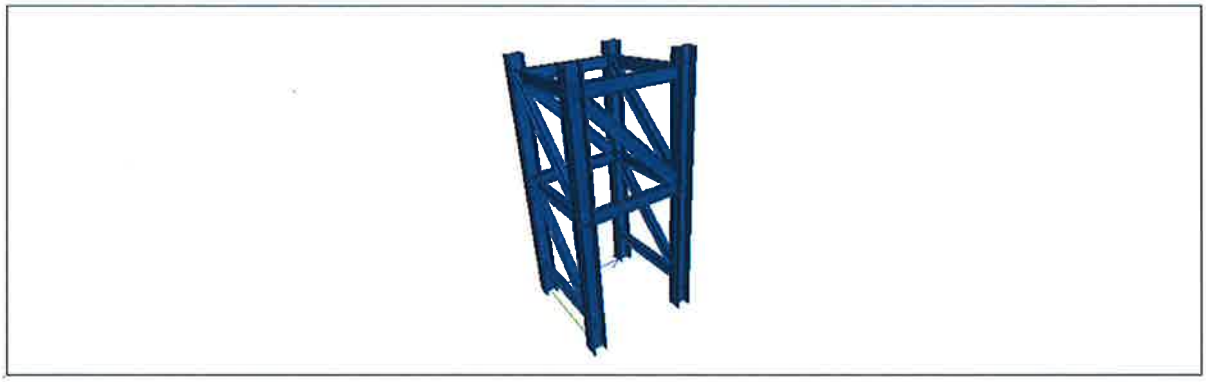
Type	L/C	Name
Primary	1	DL
Primary	2	SIDL
Primary	3	SEISMIC-FULL-XX
Primary	4	SEISMIC-EMPTY-XX
Primary	5	WIND-XX
Primary	6	SEISMIC-FULL-ZZ
Primary	7	SEISMIC-EMPTY-ZZ
Primary	8	WIND-ZZ
Combination	9	DL+ 0.6 W-WIND EMPTY-XX
Combination	10	DL+0.6W-WIND FULL-XX
Combination	11	DL+0.7E-SEISMIC EMPTY-XX
Combination	12	DL+0.7E-SEISMIC FULL-XX
Combination	13	DL+ 0.6 W-WIND EMPTY-ZZ
Combination	14	DL+0.6W-WIND FULL-ZZ
Combination	15	DL+0.7E-SEISMIC EMPTY-ZZ
Combination	16	DL+0.7E-SEISMIC FULL-ZZ
Combination	17	0.6 DL+ 0.6 W-WIND EMPTY-XX
Combination	18	0.6 DL+0.6W-WIND FULL-XX
Combination	19	0.6 DL+0.7E-SEISMIC EMPTY-XX
Combination	20	0.6 DL+0.7E-SEISMIC FULL-XX
Combination	21	0.6 DL+ 0.6 W-WIND EMPTY-ZZ
Combination	22	0.6 DL+0.6W-WIND FULL-ZZ
Combination	23	0.6 DL+0.7E-SEISMIC EMPTY-ZZ
Combination	24	0.6 DL+0.7E-SEISMIC FULL-ZZ



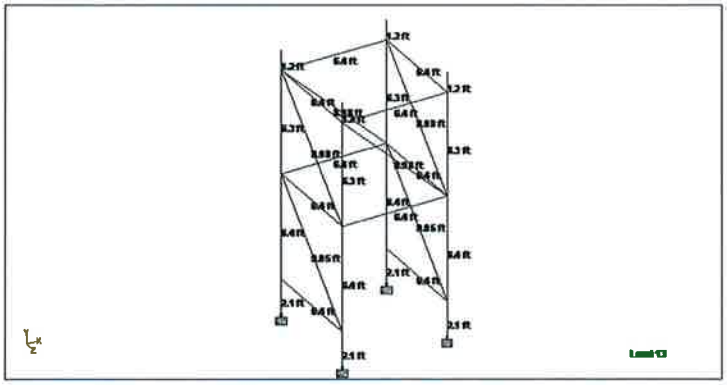
Beam No.& Node No.



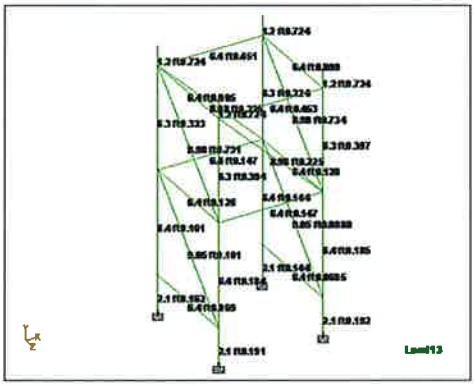
Beam & Column Properties



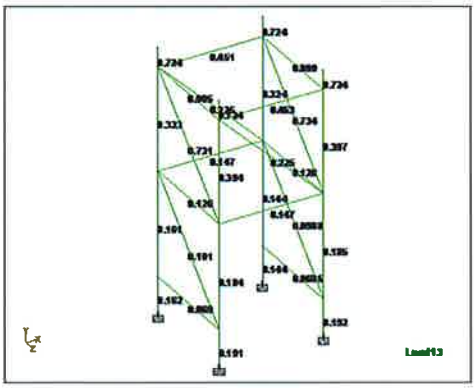
3D Rendered View



Dimensions



Unity Check Ratio



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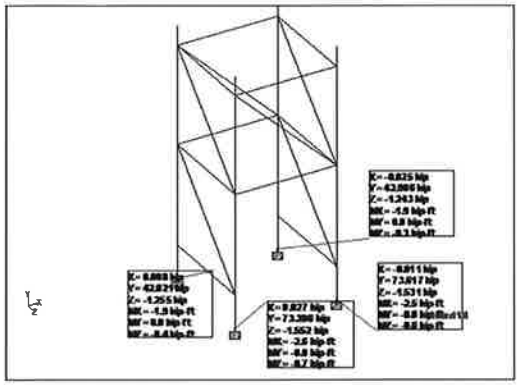


Reactions

Nodes

Node	X (ft)	Y (ft)	Z (ft)
1	0.000	0.000	0.000
2	0.000	16.000	0.000
3	6.400	0.000	0.000
4	6.400	16.000	0.000
5	0.000	0.000	6.400
6	0.000	16.000	6.400
7	6.400	0.000	6.400
8	6.400	16.000	6.400
9	0.000	8.500	0.000
10	6.400	8.500	0.000
11	6.400	8.500	6.400
12	0.000	8.500	6.400
13	0.000	14.800	0.000
14	6.400	14.800	0.000
15	6.400	14.800	6.400
16	0.000	14.800	6.400
17	0.000	2.100	0.000
18	6.400	2.100	0.000
19	6.400	2.100	6.400
20	0.000	2.100	6.400

Section Properties

Prop	Section	Area (in^2)	I_{yy} (in^4)	I_{zz} (in^4)	J (in^4)	Material
1	W10X49	14.400	93.400	272.000	1.294	STEEL
2	W8X15	4.440	3.410	48.000	0.122	STEEL

Materials

Mat	Name	E (kip/in^2)	ν	Density (kip/in^3)	α (/°F)
3	STEEL	29E 3	0.300	0.000	6E -6
4	STAINLESSSTEEL	28E 3	0.300	0.000	10E -6
5	ALUMINUM	10E 3	0.330	0.000	13E -6
6	CONCRETE	3.15E 3	0.170	0.000	5E -6

Supports

Node	X (kip/ft)	Y (kip/ft)	Z (kip/ft)	rX (kip-ft/deg)	rY (kip-ft/deg)	rZ (kip-ft/deg)
1	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
3	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
5	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
7	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed

Primary Load Cases

Number	Name	Type
1	DL	Dead
2	SIDL	Dead
3	SEISMIC-FULL-XX	Seismic
4	SEISMIC-EMPTY-XX	Seismic
5	WIND-XX	Wind
6	SEISMIC-FULL-ZZ	Seismic
7	SEISMIC-EMPTY-ZZ	Seismic
8	WIND-ZZ	Wind

Combination Load Cases

Comb.	Combination L/C Name	Primary	Primary L/C Name	Factor
9	DL+ 0.6 W-WIND EMPTY-XX	1	DL	1.00
		5	WIND-XX	0.60
10	DL+0.6W-WIND FULL-XX	1	DL	1.00
		2	SIDL	1.00
		5	WIND-XX	0.60
11	DL+0.7E-SEISMIC EMPTY-XX	1	DL	1.00
		4	SEISMIC-EMPTY-XX	0.70
12	DL+0.7E-SEISMIC FULL-XX	1	DL	1.00
		2	SIDL	1.00
		3	SEISMIC-FULL-XX	0.70
13	DL+ 0.6 W-WIND EMPTY-ZZ	1	DL	1.00
		8	WIND-ZZ	0.60
14	DL+0.6W-WIND FULL-ZZ	1	DL	1.00

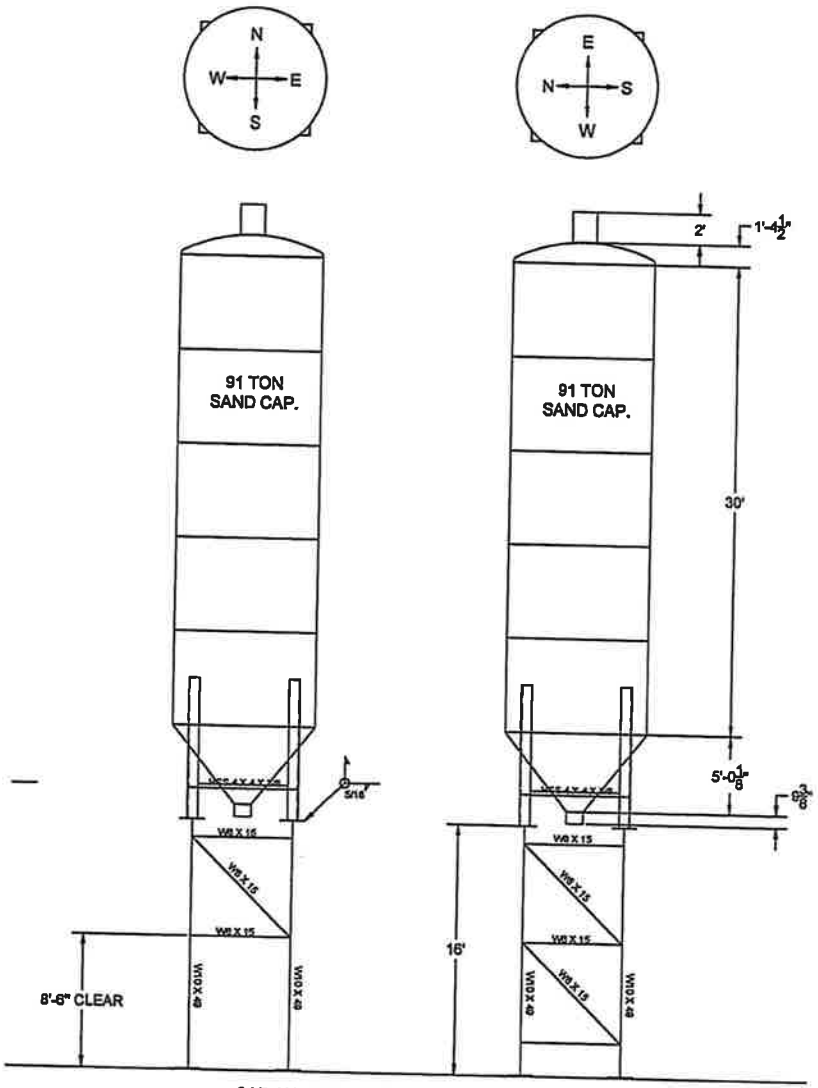
		2	SIDL	1.00
		8	WIND-ZZ	0.60
15	DL+0.7E-SEISMIC EMPTY-ZZ	1	DL	1.00
		7	SEISMIC-EMPTY-ZZ	0.70
16	DL+0.7E-SEISMIC FULL-ZZ	1	DL	1.00
		2	SIDL	1.00
		6	SEISMIC-FULL-ZZ	0.70
17	0.6 DL+ 0.6 W-WIND EMPTY-XX	1	DL	0.60
		5	WIND-XX	0.60
18	0.6 DL+0.6W-WIND FULL-XX	1	DL	0.60
		2	SIDL	1.00
		5	WIND-XX	0.60
19	0.6 DL+0.7E-SEISMIC EMPTY-	1	DL	0.60
		4	SEISMIC-EMPTY-XX	0.70
20	0.6 DL+0.7E-SEISMIC FULL-XX	1	DL	0.60
		2	SIDL	1.00
		3	SEISMIC-FULL-XX	0.70
21	0.6 DL+ 0.6 W-WIND EMPTY-ZZ	1	DL	0.60
		8	WIND-ZZ	0.60
22	0.6 DL+0.6W-WIND FULL-ZZ	1	DL	0.60
		2	SIDL	1.00
		8	WIND-ZZ	0.60
23	0.6 DL+0.7E-SEISMIC EMPTY-ZZ	1	DL	0.60
		7	SEISMIC-EMPTY-ZZ	0.70
24	0.6 DL+0.7E-SEISMIC FULL-ZZ	1	DL	0.60
		2	SIDL	1.00
		6	SEISMIC-FULL-ZZ	0.70

Reaction Summary

	Node	L/C	Horizontal FX (kip)	Vertical FY (kip)	Horizontal FZ (kip)	Moment MX (kip-ft)	MY (kip-ft)	MZ (kip-ft)
Max	5	14:DL+0.6W-WIND	**0.027**	73.286	-1.552	-2.6	-0.0	-0.7
Min FX	5	5:WIND-XX	**-2.414**	7.473	-0.007	0.1	0.0	13.0
Max	7	14:DL+0.6W-WIND	-0.011	**73.617**	-1.531	-2.5	-0.0	-0.6
Min FY	3	8:WIND-ZZ	-0.008	-	-2.257	-4.2	0.0	0.3
Max	1	10:DL+0.6W-WIND	-1.426	62.209	**0.117**	0.6	-0.0	7.2
Min	5	8:WIND-ZZ	0.013	25.295	**-2.400**	-5.0	0.0	-0.1
Max	1	10:DL+0.6W-WIND	-1.426	62.209	0.117	**0.6**	-0.0	7.2
Min	5	8:WIND-ZZ	0.013	25.295	-2.400	**-5.0**	0.0	-0.1
Max	5	5:WIND-XX	-2.414	7.473	-0.007	0.1	**0.0**	13.0
Min	3	5:WIND-XX	-2.237	-7.395	-0.017	-0.1	**-0.0**	12.4
Max	5	5:WIND-XX	-2.414	7.473	-0.007	0.1	0.0	**13.0**
Min	5	14:DL+0.6W-WIND	0.027	73.286	-1.552	-2.6	-0.0	**-0.7**

Utilization Ratio

Beam	Analysis Property	Design Property	Actual Ratio	Allowable Ratio	Ratio (Act./Allow.)	Clause	L/C
1	W10X49	W10X49	0.162	1.000	0.162	Sec. E1	10
2	W10X49	W10X49	0.144	1.000	0.144	Sec. E1	12
3	W10X49	W10X49	0.191	1.000	0.191	Sec. E1	14
4	W10X49	W10X49	0.192	1.000	0.192	Sec. E1	14
5	W10X49	W10X49	0.397	1.000	0.397	Eq. H1-1b	8
6	W8X15	W8X15	0.128	1.000	0.128	Eq. H1-1b	8
7	W10X49	W10X49	0.394	1.000	0.394	Eq. H1-1b	8
9	W8X15	W8X15	0.147	1.000	0.147	Eq. H1-1b	5
10	W8X15	W8X15	0.147	1.000	0.147	Eq. H1-1b	5
11	W10X49	W10X49	0.724	1.000	0.724	Eq. H1-1b	8
12	W10X49	W10X49	0.724	1.000	0.724	Eq. H1-1b	8
13	W10X49	W10X49	0.724	1.000	0.724	Eq. H1-1b	8
14	W10X49	W10X49	0.724	1.000	0.724	Eq. H1-1b	8
15	W8X15	W8X15	0.899	1.000	0.899	Eq. H1-1b	8
16	W8X15	W8X15	0.905	1.000	0.905	Eq. H1-1b	8
17	W8X15	W8X15	0.453	1.000	0.453	Eq. H1-1b	5
18	W8X15	W8X15	0.451	1.000	0.451	Eq. H1-1b	5
19	W8X15	W8X15	0.225	1.000	0.225	Eq. H1-1b	5
20	W8X15	W8X15	0.225	1.000	0.225	Eq. H1-1b	5
23	W10X49	W10X49	0.185	1.000	0.185	Sec. E1	14
24	W10X49	W10X49	0.184	1.000	0.184	Sec. E1	14
25	W8X15	W8X15	0.068	1.000	0.068	Eq. H1-1b	8
26	W8X15	W8X15	0.069	1.000	0.069	Eq. H1-1b	8
27	W8X15	W8X15	0.731	1.000	0.731	Eq. H1-2	8
28	W8X15	W8X15	0.101	1.000	0.101	Sec. E1	8
29	W8X15	W8X15	0.734	1.000	0.734	Eq. H1-2	8
30	W8X15	W8X15	0.099	1.000	0.099	Sec. E1	8
31	W8X15	W8X15	0.126	1.000	0.126	Eq. H1-1b	8
32	W10X49	W10X49	0.161	1.000	0.161	Sec. E1	10
33	W10X49	W10X49	0.323	1.000	0.323	Eq. H1-1b	8
34	W10X49	W10X49	0.144	1.000	0.144	Sec. E1	12
35	W10X49	W10X49	0.324	1.000	0.324	Eq. H1-1b	8



CAP AND BASE PLATE = 1-1/4" 18" X 18"

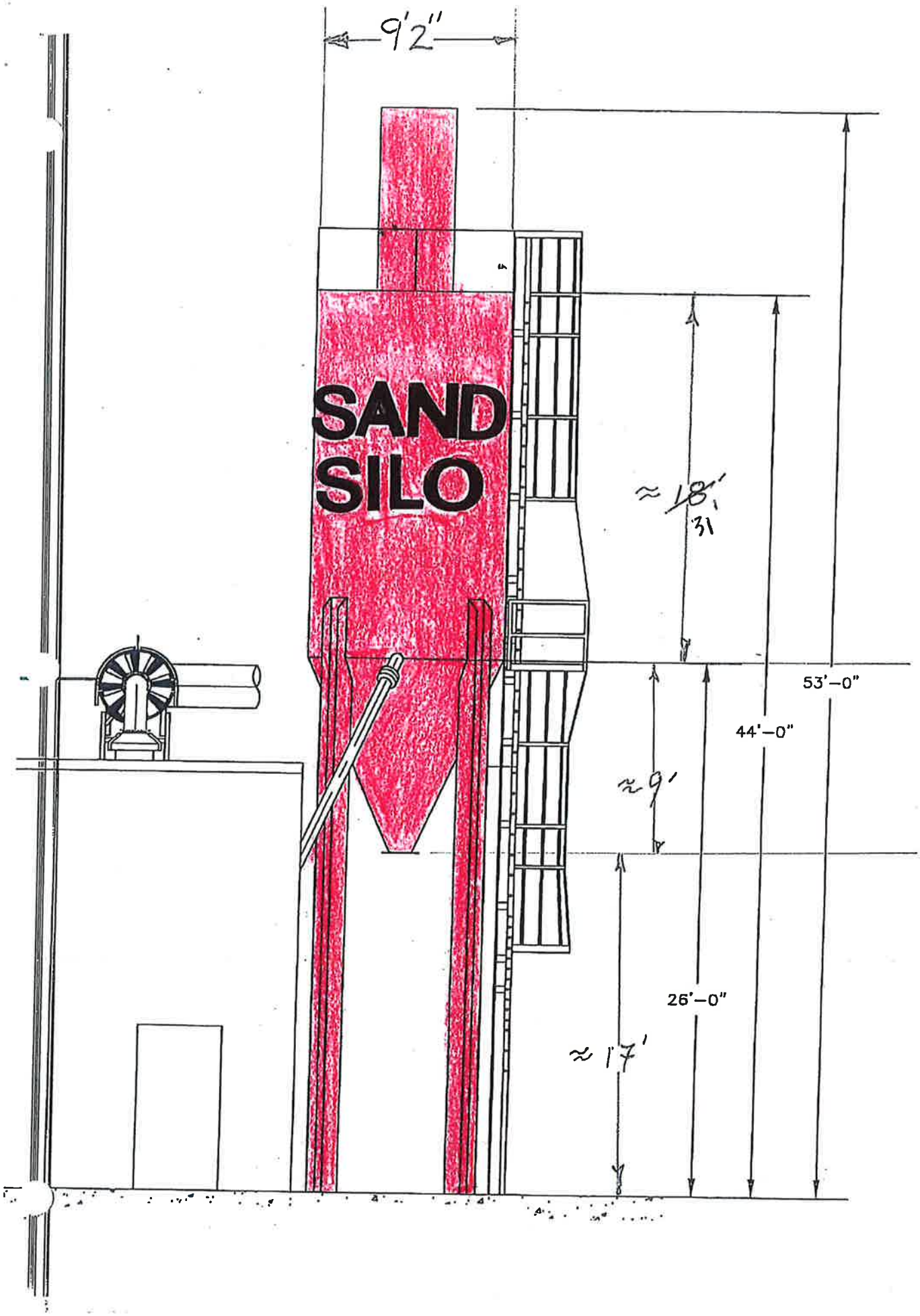
ONTARIO MECHANICAL LLC
INDUSTRIAL FABRICATORS AND ERECTORS
2580 Park Ave West * Mansfield, OH 44906
P.O. Box 134 * Ontario, OH, 44862
Phone (419) 529-2578 * Fax (419) 529-2287

SAND SILO PROJECT (PRELIMINARY)

TEMPERFORM

SCALE: NTS	DATE:	DEPT. CHG.	JOB NO. XX-XXX
DRAWN: RVB	3/28/23	CUST. NO.	
CHECKED: XXX		DWG. NO. XXXXXX	SHEET A / REV. 1
APPRD:			

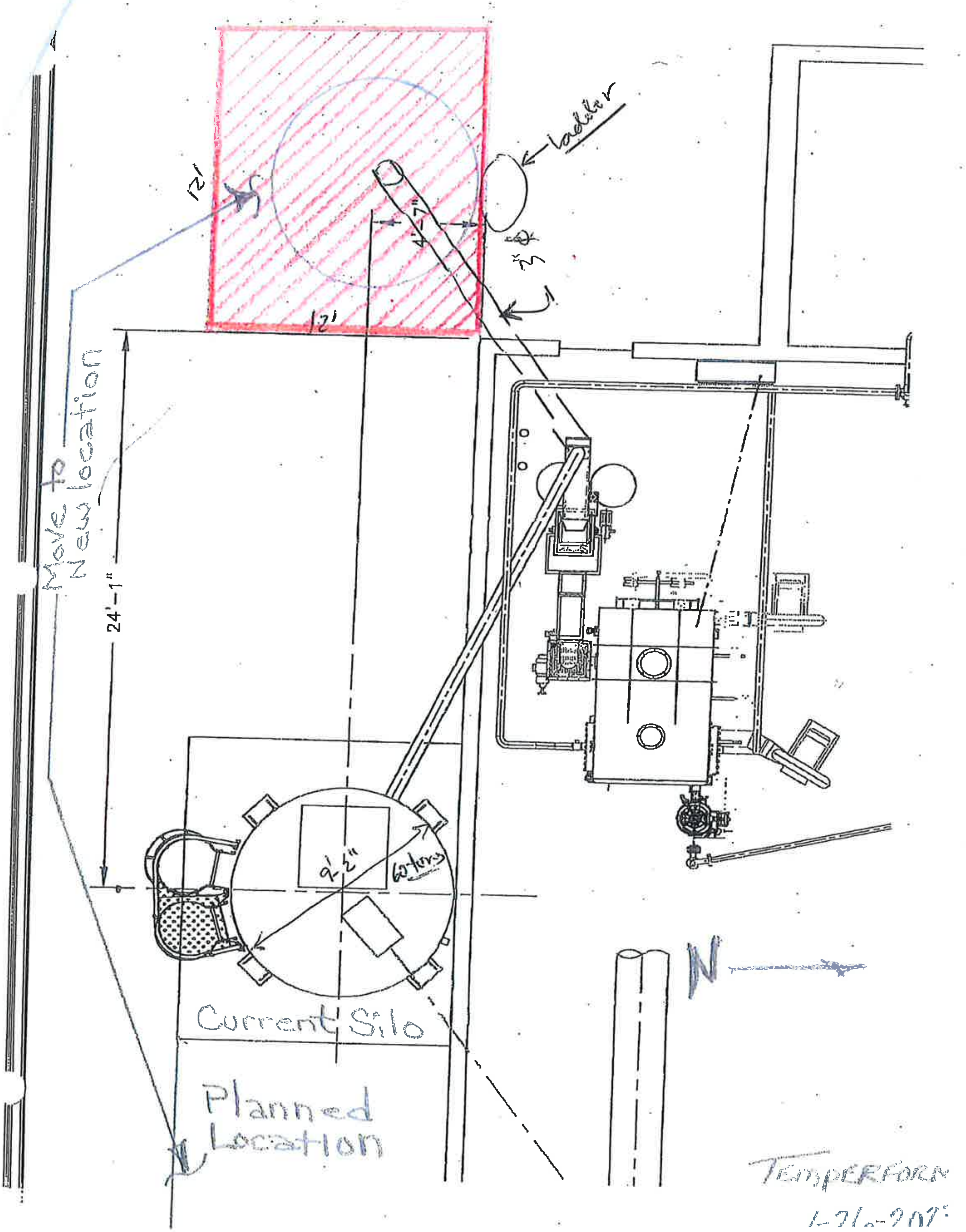
REV	DESCRIPTION
X	XXX

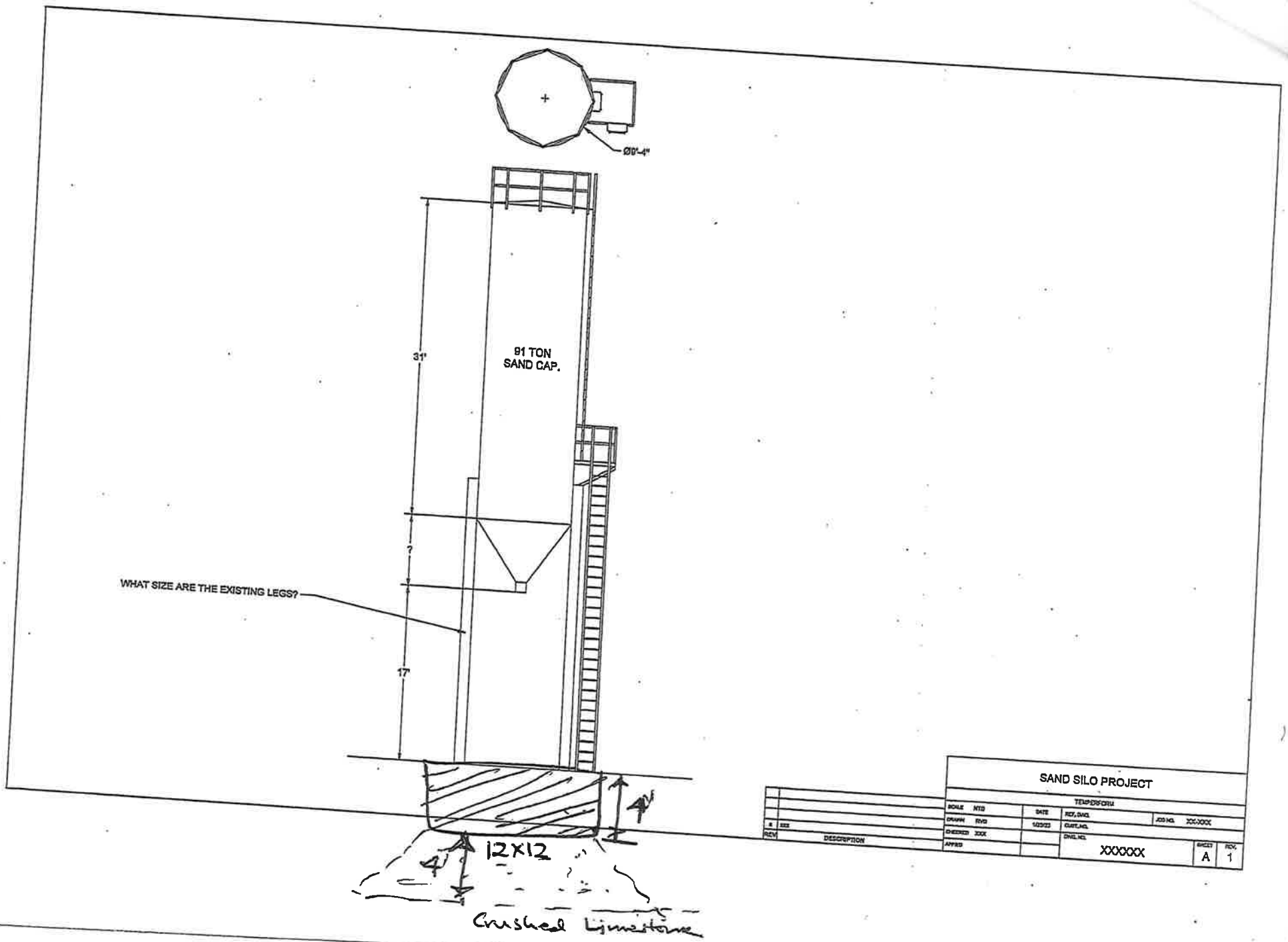

9'2"
SAND
SILO
≈ 18'
31
53'–0"
44'–0"
≈ 9'
26'–0"
≈ 17'

2 10:56a

25425 Trans-X. Rd
Novi, Mi.

P. 3





SAND SILO PROJECT

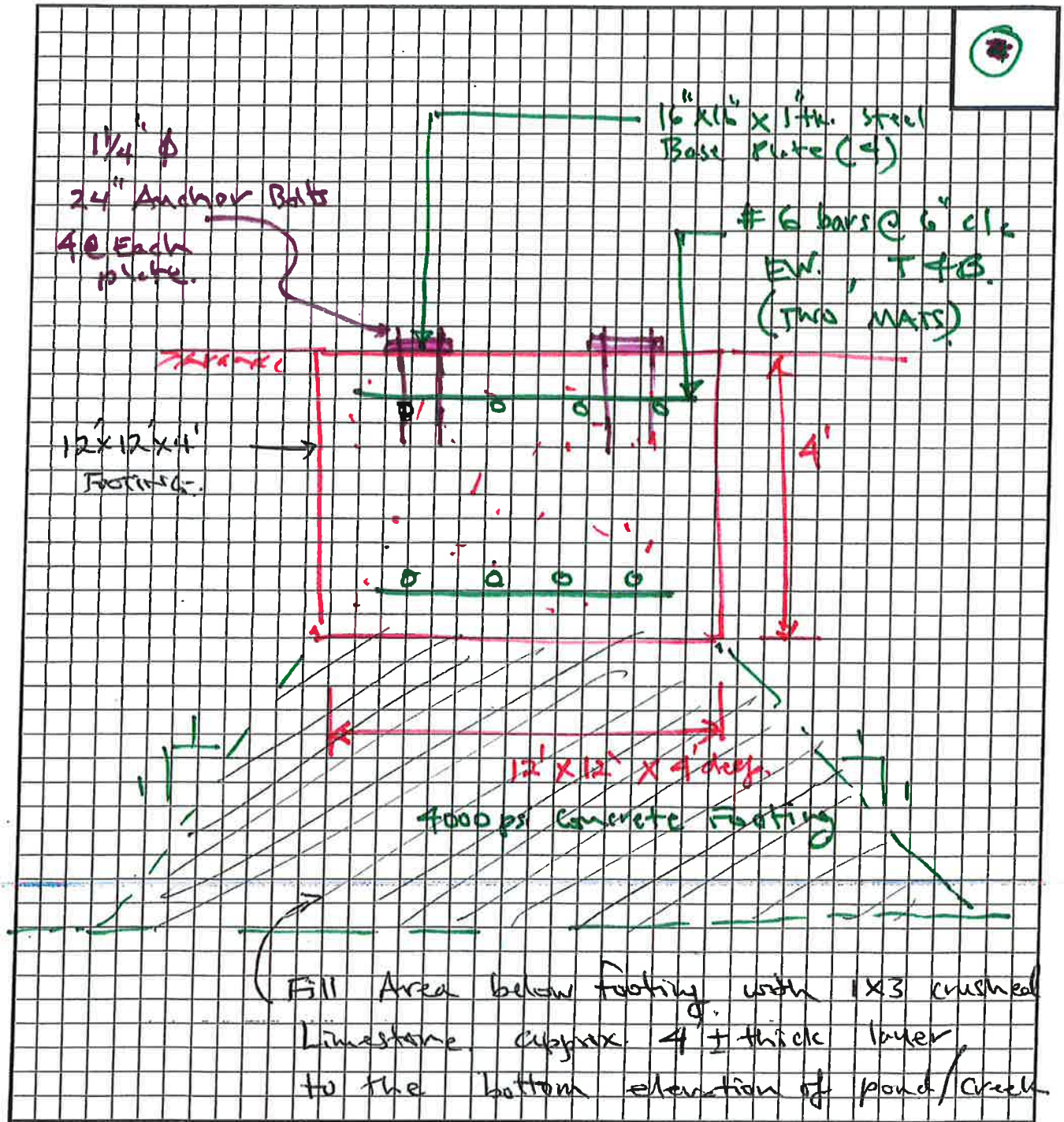
TEMPERFORM

SCALE N10	DATE	REF. DWG.	JOB NO. XX-XXX	
DRAWN RVG	1/23/23	CUST. NO.		
CHECKED XXX		DWG. NO.	SHEET	REV.
APPRD		XXXXXX	A	1

REV	DESCRIPTION
X	XXX

FAIRWAY ENGINEERING, LLC
LAND DEVELOPMENT ◆ STRUCTURAL ◆ GEOTECHNICAL
28525 BECK ROAD, SUITE 124
WIXOM, MI 48393
OFFICE: (248)938-4902 ◆ CELL: (248)214-5913

PROJECT NAME: Tempterform Tank Footing.
PROJECT No.: DATE:
DESCRIPTION: Novi



Notes: