GENERAL NOTES:

A. ENGINEER CONTACT INFORMATION: CHAD UNDERWOOD, P.E., ENGINEERING PARTNERS INTERNATIONAL LLC, (612) 751-8648 OR (612) 886-3730.

B. THE SCOPE OF WORK COVERED BY THESE DRAWINGS INCLUDES THE DESIGNS OF TEMPORARY EXCAVATION SUPPORT SYSTEMS. IT IS BEYOND ENGINEERING PARTNERS SCOPE OF SERVICES TO CONDUCT A PRE-CONSTRUCTION CONDITION SURVEY, MONITOR VIBRATIONS DURING CONSTRUCTION, OR EVALUATE POTENTIAL IMPACTS ON ADJACENT STRUCTURES DUE TO CONSTRUCTION.

C. ENGINEERING PARTNERS INTERNATIONAL, LLC (ENGINEER) IS NOT RESPONSIBLE FOR ANY DAMAGE DUE TO THE INSTALLATION OF THE TEMPORARY EXCAVATION SUPPORT SYSTEMS AT THE SITES.

D. THE ENGINEER DOES NOT CONTROL THE MEANS AND METHODS OF CONSTRUCTION.

A. THE EXCAVATION SUPPORT SYSTEM DESIGNS ARE BASED ON THE FOLLOWING PROJECT DOCUMENTS:

- i. PROJECT DRAWINGS PREPARED BY HR GREEN AND DATED 01/06/21.
- ii. GEOTECHNICAL ENGINEERING REPORTS PREPARED BY AMERICAN ENGINEERING TESTING AND DATED 03/19/20
- B. THE EXCAVATION SUPPORT SYSTEM DESIGNS ARE BASED ON THE SOIL AND GROUNDWATER CONDITIONS SUMMARIZED ON THE DRAWINGS.
- C. THE EXCAVATION SUPPORT SYSTEMS ARE DESIGNED FOR THE SLOPES, GRADES AND MAXIMUM EXCAVATION
- D. THE EXCAVATION SUPPORT SYSTEMS ARE DESIGNED FOR THE SURCHARGE LOADS SUMMARIZED ON THE E, ANY SOIL STOCKPILING MUST OCCUR AT LEAST 20 FEET AWAY FROM THE TOP OF EXCAVATION SLOPE OR
- EXCAVATION SUPPORT SYSTEM.

  F. ANY ADDITIONAL SURCHARGE OR MATERIALS STORAGE WITHIN 20 FEET OF THE TOP OF SLOPE OR THE BACK OF THE TEMPORARY EXCAVATION SUPPORT SYSTEM AND/OR EQUIPMENT SURCHARGE LOADING GREATER THAN THE ASSUMED SURCHARGE LOADING MUST BE EVALUATED BY ENGINEERING PARTNERS.

## 3. CODES AND STANDARDS

A. OSHA 29 CFR, PART 1926, SUBPART P, "EXCAVATIONS, AND TRENCHES."

### 4. FIELD CONDITIONS

A. VERIFY DEPTH AND LIMITS OF EXCAVATION PRIOR TO START OF WORK.

- B. CONTACT ENGINEERING PARTNERS IF SOIL AND / OR GROUNDWATER CONDITIONS ENCOUNTERED IN THE FIELD DIFFER FROM THOSE USED FOR DESIGN, THOSE DISCUSSED IN THE GEOTECHNICAL REPORT AND THOSE DEPICTED ON THE PROJECT SOIL BORING LOGS.
- C. VERIFY UNDERGROUND UTILITY LOCATIONS AND ANY OTHER BURIED OBSTRUCTIONS BEFORE COMMENCING ANY WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE ALL UTILITIES HAVE BEEN PROPERLY LOCATED. NOTIFY ENGINEERING PARTNERS OF CONFLICTS.

### 5. DRAINAGE

A. PROVIDE BERMS AND ANY OTHER DRAINAGE CONTROL AROUND THE SITE TO REDUCE THE AMOUNT OF SURFACE DRAINAGE FROM RUNNING ON THE SITE AND SATURATING THE SOIL BEHIND THE EXCAVATION

- A. THE ENGINEER AND THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION SAFETY.
- B. CONTRACTOR INSTALLER IS RESPONSIBLE FOR INSTALLING AND MAINTAINING OSHA FALL PROTECTION AT THE TOP OF THE EXCAVATION SUPPORT SYSTEM.

# 7. USE OF DOCUMENTS

A. USE OF THESE DOCUMENTS IS PROHIBITED FOR OTHER PROJECTS, ADDITIONS TO OR EXTENSIONS OF THIS PROJECT OR FOR THE COMPLETION OF THE PROJECT BY OTHERS EXCEPT WITH THE WRITTEN PERMISSION OF ENGINEERING PARTNERS INTERNATIONAL, LLC.

### SLIDE RAIL NOTES:

1. EXCAVATION

A EXCAVATE TO THE LINES AND GRADES SHOWN ON THE DRAWINGS

B. FIELD LOCATE BURIED UTILITIES AND PROVIDE UTILITY PROTECTION / SUPPORT, AS NEEDED,

- A. SLIDE RAIL SYSTEM TO ACCOMMODATE THE MAXIMUM RETAINED SOIL HEIGHT AND THE OVERALL INSIDE DIMENSIONS SHOWN ON THE DRAWINGS.
- B. SLIDE RAIL PANELS TO BE RATED FOR THE MINIMUM LATERAL EARTH PRESSURES SHOWN IN THE SLIDE RAIL
- C. CORNER POST/CORNER RAIL AND SPREADER POST/LINEAR RAIL (IF USED) SHALL BE AS SHOWN IN THE SLIDE RAIL SCHEDULE.
- D. PROVIDE STRUT CARTS AT EACH SET OF SPREADER POSTS/LINEAR RAILS (IF APPLICABLE); STRUT CART CLEARANCE HEIGHTS SHALL BE AS SHOWN ON THE DRAWINGS
- A. THE EXCAVATION SUPPORT SYSTEM COMPONENTS SHALL BE INSTALLED AT THE LOCATIONS AND TO THE
- A. THE EXCAVATION SUPPORT SYSTEM COMPONENTS SHALL BE INSTALLED AT THE LOCATIONS AND TO THE ELEVATIONS SHOWN ON THE DRAWINGS.

  B. THE METHOD OF INSTALLATION OF THE EXCAVATION SUPPORT SYSTEM SHALL BE AT THE DISCRETION OF THE CONTRACTOR INSTALLER. HOWEVER, CARE SHOULD BE GIVEN TO NOT DAMAGE ANY COMPONENTS DURING THE INSTALLATION PROCESS. IF, IN THE OPINION OF ENGINEERING PARTNERS, A COMPONENT IS DAMAGED TO THE EXTENT IT WILL NOT SERVE THE INTENDED PURPOSE IN THE TEMPORARY STRUCTURE, IT SHALL BE REMOVED AND A REPLACEMENT COMPONENT INSTALLED.
- C. IMMEDIATELY BACKFILL ANY VOIDS BEHIND THE EXCAVATION SUPPORT SYSTEM TO REDUCE THE POTENTIAL FOR EXCESSIVE SETTLEMENT OUTSIDE THE EXCAVATION SUPPORT SYSTEM.

A. MONITOR FOR ANY HORIZONTAL OR VERTICAL DEFLECTION OF THE SLIDE RAIL PANELS WEEKLY DURING CONSTRUCTION UNTIL BACKFILLING IS COMPLETED. NOTIFY ENGINEERING PARTNERS IF HORIZONTAL MOVEMENT OR VERTICAL DEFLECTION EXCEEDS 3/4 INCH.

# SHEET INDEX

TITLE, NOTES & SHEET INDEX

1-2 THRU 1-3 PLAN, SECTION, DETAIL AND SCHEDULES MHA PUMP PIT

1-4 THRU 1-6 PLAN, SECTIONS, DETAILS AND SCHEDULES

PLAN, SECTION AND SCHEDULES 1-7 THRU 1-8

DESCRIPTION OF REVISION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

REG. NO. \_\_\_43026

CHILL CHAD A. UNDERWOOD DATE: 06/21/22

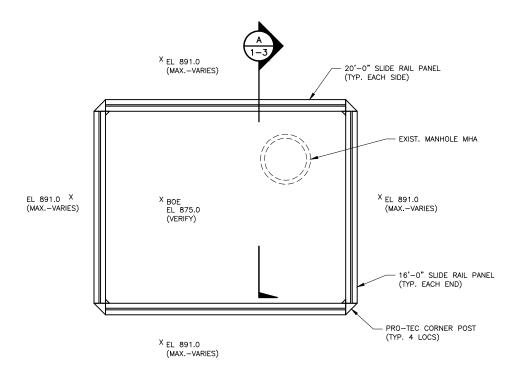


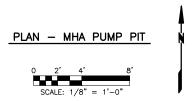
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DRAWN	CSO	L
CHECKED	CAU	ł
PEER REVIEWED	GTG	ľ
PROJECT MANAGER	CAU	
DATE 06/21	/22	

MINGER CONSTRUCTION CO., INC.

BROOKLYN PARK & OSSEO INTERCEPTOR REHAB. BROOKLYN PARK/OSSEO, MN TEMPORARY EXCAVATION SUPPORT

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REG. NO. <u>43026</u>



TJR	MINGER CONSTRUCTION CO., INC.
DRAWN CSC	MINGER CONSTRUCTION CO., INC.
CHECKED	BROOKLYN PARK & OSSEO INTERCEPTOR REHA
PEER REVIEWED GTG	
PROJECT MANAGER CAU DATE 06/21/22	TEMPORARY FYCAVÁTIONI SLIPPORT

HAB. PROJECT 22.140-1
SHEET NO.
1-2

SLIDE RAIL SCHEDULE - MHA PUMP PIT					
	PANEL	TOP OF PANEL	BOT. OF PANEL	MIN. LATERAL	RECOMMENDED
	HEIGHT	ELEVATION	ELEVATION	PRESSURE RATING	SLIDE RAIL PANELS
PANEL LOCATION	(FT)	(FEET)	(FEET)	(PSF)	(1) (2)
UPPER OUTSIDE PANEL	8	891.0	883.0	800	PS-P-816-KE
OFFER OUTSIDE PANEL	0				PS-P-820-KE
INSIDE PANEL	8	883.0	875.0	1200	PS-P-816-KE
INSIDE PANEL	0	663.0			PS-P-820-KE
CORNER POST/CORNER RAIL (1)	PS-DCP-216				

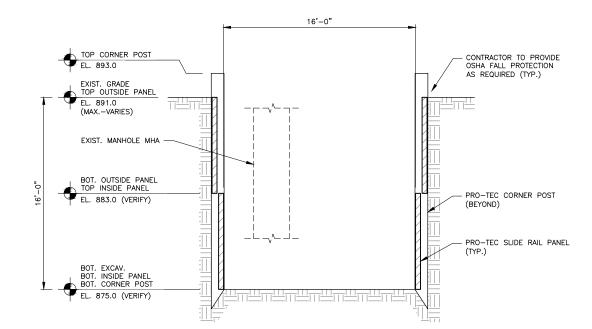
## FOOTNOTES:

(1) SLIDE RAIL PANELS AND COMPONENTS BY PRO-TEC.

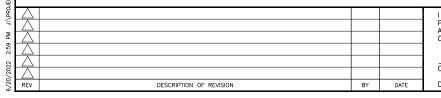
(2) ALTERNATE SLIDE RAIL PANELS AND PANEL HEIGHTS MAY BE USED AS LONG AS THE PANELS MEET THE MINIMUM LATERAL PRESSURE RATINGS SHOWN IN THE SLIDE RAIL SCHEDULE.

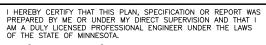
SUMMARY OF ALLOWABLE CONDITIONS FOR APPLICATION OF EXCAVATION DESIGN - MHA PUMP PIT				
SOIL	GENERALLY FILL ABOVE MEDIUM DENSE TO DENSE COARSE GRAINED (SAND) SOILS, PER GEOTECHNICAL ENGINEERING REPORTS PREPARED BY AMERICAN ENGINEERING TESTING DATED 03/19/20 AND 10/06/20. ACTUAL SOIL CONDITIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR'S "COMPETENT PERSON". CONTACT ENGINEERING PARTNERS IF SOIL CONDITIONS DIFFER FROM THOSE USED FOR DESIGN.			
EXCAVATION DEPTH	16'-0" +/- MAX. RETAINED			
EXCAVATION DEPTH	16'-0" +/- MAX. TOTAL EXCAVATION DEPTH			
CONSTRUCTION/TRAFFIC SURCHARGE	500 PSF CONSTRUCTION EQUIPMENT SURCHARGE STARTING 3 FEET BACK OF TEMPORARY EXCAVATION SUPPORT SYSTEM (OR TOP OF SLOPE) AND EXTENDING 20 FEET.			
ADJACENT STRUCTURES	NONE (ASSUMED)			
GROUNDWATER	GROUNDWATER IS ASSUMED TO BE AT OR BELOW THE BOTTOM OF EXCAVATION ELEVATION. DEWATERING MAY BE REQUIRED TO PROVIDE A "DRY" EXCAVATION. THE EXCAVATION SUPPORT SYSTEM IS NOT DESIGNED FOR HYDROSTATIC GROUNDWATER CONDITIONS. CONTACT ENGINEERING PARTNERS IF GROUNDWATER CONDITIONS DIFFER FROM THOSE USED FOR DESIGN.			

NOTE: ANY EXCAVATION OUTSIDE THE CONDITIONS DESCRIBED ABOVE MUST BE EVALUATED BY ENGINEERING PARTNERS.









CHAD A. UNDERWOOD

DATE: 06/21/22 REG. NO. 43026



SIGNED	TJR	MINGER CONSTRUCTION CO., INC.	REVISION
RAWN	cso	MINGER CONSTRUCTION CO., INC.	
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ER REVIEWED	GTG		SHEET NO.
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