



Division of Industry Services  
 P.O. Box 2658  
 Madison, Wisconsin 53701

**Attachment 2:**

**SOIL AND SITE EVALUATION - STORM**

In accordance with SPS 382.365, 385, Wis. Adm. Code, and WDNR Standard 1002

Attach a complete site plan on paper not less than 8 1/2 x 11 inches in size. Plan must include, but not limited to: vertical and horizontal reference point (BM), direction and percent of slope, scale or dimensions, north arrow, and BM referenced to nearest road  Please print all information Personal information you provide may be used for secondary purposes [Privacy Law, s. 15.04(1)(m)]	County	Dane
	Parcel I.D.	251/0710-224-0308-5
	Reviewed by: Date:	

Property Owner City of Madison Fire Station #14	Property Location Govt. Lot NW 1/4 SE 1/4 S 22 T 7 N R 10 E
Property Owner's Mail Address 314 W Dayton St	Lot # Block# Subd. Name or CSM #
City State Zip Code Phone Number Madison WI 53703-2506	<input checked="" type="checkbox"/> City <input type="checkbox"/> Village <input type="checkbox"/> Town Nearest Road 3201 Dairy Dr
Drainage area _____ sq ft _____ acres Test site suitable for (check all that apply): <input type="checkbox"/> Bioretention; <input type="checkbox"/> Subsurface Dispersal System; <input type="checkbox"/> Reuse; <input type="checkbox"/> Irrigation; <input type="checkbox"/> Other _____	Hydraulic Application Test Method <input checked="" type="checkbox"/> Morphological Evaluation <input type="checkbox"/> Double Ring Infiltrometer <input type="checkbox"/> Other: (specify) _____
	Soil Moisture Date of soil borings: _____ USDA-NRCS WETS Value: <input type="checkbox"/> Dry = 1; <input type="checkbox"/> Normal = 2; <input type="checkbox"/> Wet = 3.

TP #1 #OBS.  Pit  Boring Ground surface elevation 860.2 ft. Elevation of limiting factor 859.3 ft. (Color/redox)  
856.8 ft. (Groundwater)

Horizon	Approx. Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines (P200)	Hydraulic App Rate Inches/Hr
1	0-11	10YR 2/1	none	L	1fgr	mfr	cs	<10		0.24
2	11-19	10YR 5/1	none	SL	1msbk	mfr	cs	<10		0.50
3	19-48	GLE Y 1 10Y 6/1	f2f 10YR 6/2	SiCL	0m	mvfi	gs	<5		0.04
4	48-72	10YR 6/3	c3f 10YR 6/1	S	0sg	ml	n/a	<10		3.60

Comments: Groundwater was encountered at a depth of 41 in. during excavating, and at 48 in. below the ground surface upon the completion of excavating. However, gray dominant color in Horizon 2, as well as gley dominant color and redox in Horizon 3, indicate the level of past saturation at a shallower depth, which is likely due to seasonally high groundwater.

TP #2 #OBS.  Pit  Boring Ground surface elevation 860.7 ft. Elevation of limiting factor 859.5 ft. (Color/redox)  
854.7 ft. (Groundwater)

Horizon	Approx. Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines (P200)	Hydraulic App Rate Inches/Hr
1	0-14	2.5Y 2.5/1	none	L	1fgr	mvfr	gs	<5		0.24
2	14-34	2.5Y 5/1	none	SiL + LS	variable		gs	<10		0.13 <sup>(1)</sup>
3	34-96	10YR 6/2	none	S	0sg	ml	n/a	5-15		3.60

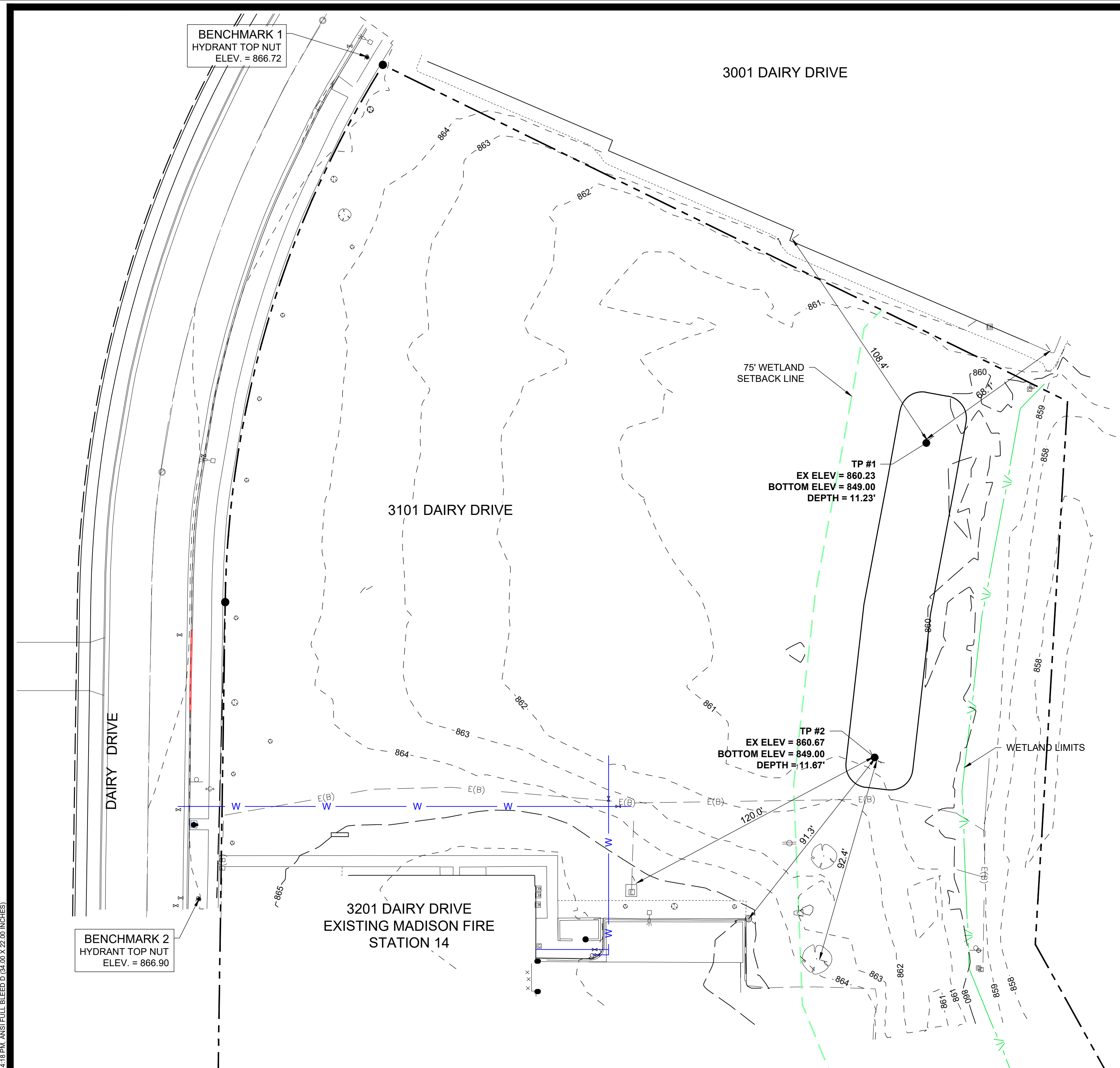
Comments: Groundwater was encountered at a depth of 7 ft during excavating, and at 6 ft below the ground surface upon the completion of excavating. However, gray dominant color in Horizons 2 and 3 indicate the level of past saturation at a shallower depth, which is likely due to seasonally high groundwater.

<sup>(1)</sup> Layer comprised of stratified silt loam and loamy sand, with the vertical infiltration rate expected to be controlled by silt loam.

Overall Site Comments: The on-site infiltration potential is expected to be very limited due to shallow groundwater/seasonal high groundwater and adjacent wetlands.

Name (Please Print)	Tim F. Gassenheimer	Signature		Credential Number	SP-011900004
Address	129 Milky Way, Madison, WI 53718	Date Evaluation Conducted	April 27, 2023	Telephone Number	(608) 288-4100

V:\Projects\2023\123\0461\_300\DD1\230461\_Plan.dwg | LOUIS OLSON, EXISTING SITE PLAN, 2023/04/13, 4:18 PM, ANSI FULL BLEED (0, 0, 0, 0) X (22, 0) INCHES



### UTILITY QUALITY SERVICE LEVELS

QUALITY LEVELS OF UTILITIES ARE SHOWN IN THE PARENTHESES WITH THE UTILITY TYPE AND WHEN APPLICABLE, SIZE.

QUALITY LEVEL (D) INFORMATION IS DERIVED FROM EXISTING UTILITY RECORDS OR ORAL RECOLLECTIONS.

QUALITY LEVEL (C) INFORMATION IS OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION WITH QUALITY D INFORMATION.

QUALITY LEVEL (B) INFORMATION IS OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES.

QUALITY LEVEL (A) IS HORIZONTAL AND VERTICAL POSITION OF UNDERGROUND UTILITIES OBTAINED BY ACTUAL EXPOSURE OR VERIFICATION OF PREVIOUSLY EXPOSED SUBSURFACE UTILITIES, AS WELL AS THE TYPE, SIZE, CONDITION, MATERIAL, AND OTHER CHARACTERISTICS.

### UTILITY WARNING

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR RECORDS OBTAINED. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN COMPRISE ALL SUCH ITEMS IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES OR SUBSURFACE FEATURES SHOWN ARE IN THE EXACT LOCATION INDICATED EXCEPT WHERE NOTED AS QUALITY LEVEL A.

### LEGEND

<b>FEATURES</b>	<b>FOUND</b>
Section Corner	●
1/2" Rebar, Cap # 11579 (Unless Otherwise Noted)	■
ROW Marker	■
ROW Rail	○
Control Point	○
Bench Mark	○
Platted Distance	P
Measured Bearing & Distance	M
Recorded As	R
Deed Distance	D
Calculated Distance	C
Minimum Protection Elevation	MPE
Centerline	—
Section Line	—
1/4 Section Line	—
1/4 1/4 Section Line	—
Easement Line	—
<b>FEATURES</b>	<b>EXISTING</b>
Spot Elevation	X 1225.25
Contour Elevation	—
Fence (Barbed, Field, Hog)	—
Fence (Chain Link)	—
Fence (Wood)	—
Fence (Silt)	—
Tree Line	—
Tree Stump	—
Deciduous Tree \ Shrub	—
Coniferous Tree \ Shrub	—
Communication	—
Overhead Communication	—
Fiber Optic	—
Underground Electric	—
Overhead Electric	—
Gas Main with Size	—
High Pressure Gas Main with Size	—
Water Main with Size	—
Sanitary Sewer with Size	—
Duct Bank	—
Test Hole Location for SUE w/ID	—
(*) Denotes the survey quality service level for utilities	
Sanitary Manhole	—
Storm Sewer with Size	—
Storm Manhole	—
Single Storm Sewer Intake	—
Double Storm Sewer Intake	—
Fire Hydrant	—
Fire Hydrant on Building	—
Water Main Valve	—
Water Service Valve	—
Well	—
Utility Pole	—
Guy Anchor	—
Utility Pole with Light	—
Utility Pole with Transformer	—
Street Light	—
Yard Light	—
Electric Box	—
Electric Transformer	—
Traffic Sign	—
Communication Pedestal	—
Communication Manhole	—
Communication Handhole	—
Fiber Optic Manhole	—
Fiber Optic Handhole	—
Gas Valve	—
Gas Manhole	—
Gas Apparatus	—
Fence Post or Guard Post	—
Underground Storage Tank	—
Above Ground Storage Tank	—
Sign	—
Satellite Dish	—
Mailbox	—
Sprinkler Head	—
Irrigation Control Valve	—

## FIRE STATION 14 TRAINING - PHASE 1

### EXISTING SITE PLAN

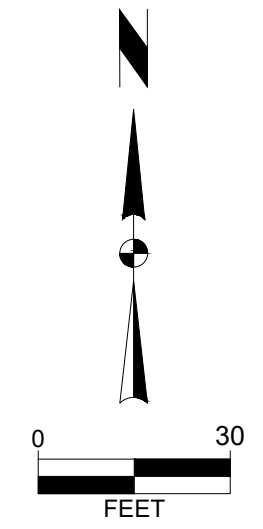
# SNYDER & ASSOCIATES, INC.



MADISON, WISCONSIN

5010 VOGES ROAD  
MADISON, WISCONSIN 53718  
608-838-0444 | www.snyder-associates.com

MARK	REVISION	DATE	BY
Engineer: SJA	Checked By: SJA	Scale: 1" = 30'	
Technician: MW	Date: 4-13-2023	T-R-S: TTN-RRW-SS	
Project No: 123.0461.30			Sheet C 200





Division of Industry Services  
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**SOIL AND SITE EVALUATION - STORM**

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Attach a complete site plan on paper not less than 8 1/2 x 11 inches in size. Plan must include, but not limited to: vertical and horizontal reference point (BM), direction and percent of slope, scale or dimensions, north arrow, and BM referenced to nearest road  Please print all information  Personal information you provide may be used for secondary purposes [Privacy Law, s. 15.04(1)(m)]	County <b>Dane</b>
	Parcel I.D. <b>251/0710-224-0308-5</b>
	Reviewed by: Date:

Property Owner City of Madison Fire Station #14	Property Location Govt. Lot <b>NW 1/4 SE 1/4 S 22 T 7 N R 10 E</b>	
Property Owner's Mail Address 314 W Dayton St	Lot #	Block#
City <b>Madison</b> State <b>WI</b> Zip Code <b>53703-2506</b> Phone Number	Subd. Name or CSM #	
	<input checked="" type="checkbox"/> City	<input type="checkbox"/> Village
	<input type="checkbox"/> Town	Nearest Road 3201 Dairy Dr
Drainage area _____ <input type="checkbox"/> sq ft <input type="checkbox"/> acres	Hydraulic Application Test Method	
Test site suitable for (check all that apply): <input type="checkbox"/> Site not suitable;	<input checked="" type="checkbox"/> Morphological Evaluation	Soil Moisture
<input type="checkbox"/> Bioretention; <input type="checkbox"/> Subsurface Dispersal System;	<input type="checkbox"/> Double Ring Infiltrometer	Date of soil borings: _____
<input type="checkbox"/> Reuse; <input type="checkbox"/> Irrigation; <input type="checkbox"/> Other _____	<input type="checkbox"/> Other: (specify) _____	USDA-NRCS WETS Value:
		<input type="checkbox"/> Dry = 1;
		<input type="checkbox"/> Normal = 2;
		<input type="checkbox"/> Wet = 3.

TP #3 #OBS.  Pit  Boring Ground surface elevation 861.0 ft. Elevation of limiting factor 859.1 ft. (Color/redox)  
855.0 ft. (Groundwater)

Horizon	Approx. Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines (P200)	Hydraulic App Rate Inches/Hr
1	0-23	10YR 2/1	none	SiL	2msbk	mfr	gs	<5		0.13
2	23-45	GLE Y 1 5GY 6/1	c2p 10YR 5/6	SiCL	0m	mvfi	gs	<5		0.04
3	45-72	GLE Y 1 5GY 6/1	f2d 10YR 6/6	SCL	0m	mfi	gs	<5		0.11
4	72-96	10YR 7/1	none	S	0sg	ml	n/a	<5		3.60

**Comments:** Groundwater was encountered at a depth of 7 ft during and upon the completion of excavating, and at 6 ft below the ground surface about 15 minutes after the completion of excavating. However, gley dominant color and redox in Horizons 2 and 3 indicate the level of past saturation at a shallower depth, which is likely due to seasonally high groundwater.

TP #4 #OBS.  Pit  Boring Ground surface elevation 861.5 ft. Elevation of limiting factor 859.8 ft. (Color/redox)  
854.5 ft. (Groundwater)

Horizon	Approx. Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines (P200)	Hydraulic App Rate Inches/Hr
1	0-21	10YR 2/1	none	SiL	2msbk	mfr	gs	<5		0.13
2	21-84	GLE Y 1 10Y 7/1	c2d 10YR 6/6	SiCL	0m	mvfi	gs	<5		0.04
3	84-96	10YR 7/1	none	S	0sg	ml	n/a	<5		3.60

**Comments:** Groundwater was encountered at a depth of 7 ft during and upon the completion of excavating. However, gley dominant color and redox in Horizon 2 indicate the level of past saturation at a shallower depth, which is likely due to seasonally high groundwater.

**Overall Site Comments:** The on-site infiltration potential is expected to be very limited due to shallow groundwater/seasonally high groundwater and adjacent wetlands.

Name (Please Print)	Tim F. Gassenheimer	Signature		Credential Number	SP-011900004
Address	129 Milky Way, Madison, WI 53718	Date Evaluation Conducted	July 14, 2023	Telephone Number	(608) 288-4100

V:\Projects\2023\123\0461\_300\DDI\1230461\_Plan.dwg | LOUIS OLSON, EXISTING SITE PLAN, 2023/04/13, 4:18 PM, ANSI FULL BLEED (0.50, 0.0 X 22.00 INCHES)

**BENCHMARK 1**  
HYDRANT TOP NUT  
ELEV. = 866.72

3001 DAIRY DRIVE

3101 DAIRY DRIVE

3201 DAIRY DRIVE  
EXISTING MADISON FIRE  
STATION 14

**BENCHMARK 2**  
HYDRANT TOP NUT  
ELEV. = 866.90

Existing Elev = 861.00  
Bottom of Storage Layer = 856.00  
(Assumes 1.5' basin depth, 1.5'  
Engineered soil and 2' of Stone  
Storage Layer)  
Ground Water Elev = 855.00  
Seasonal High Water Elev = 859.00

**TP #1**  
EX ELEV = 860.23  
BOTTOM ELEV = 849.00  
DEPTH = 11.23'

**TP #4**  
Existing Elev = 861.50  
Bottom of Storage Layer = 856.50  
(Assumes 1.5' basin depth, 1.5'  
Engineered soil and 2' of Stone  
Storage Layer)  
Ground Water Elev = 854.50  
Seasonal High Water Elev = 859.50

**TP #2**  
EX ELEV = 860.67  
BOTTOM ELEV = 849.00  
DEPTH = 11.67'

75' WETLAND  
SETBACK LINE

WETLAND LIMITS

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### LEGEND

<b>FEATURES</b>	<b>FOUND</b>
Section Corner	●
1/2" Rebar, Cap # 11579 (Unless Otherwise Noted)	○
ROW Marker	■
ROW Rail	—
Control Point	○ CP
Bench Mark	○ BM
Platted Distance	— P
Measured Bearing & Distance	— M
Recorded As	— R
Deed Distance	— D
Calculated Distance	— C
Minimum Protection Elevation	— MPE
Centerline	—
Section Line	—
1/4 Section Line	—
1/4 1/4 Section Line	—
Easement Line	—
<b>FEATURES</b>	<b>EXISTING</b>
Spot Elevation	1225.25
Contour Elevation	—
Fence (Barbed, Field, Hog)	—
Fence (Chain Link)	—
Fence (Wood)	—
Fence (Silt)	—
Tree Line	—
Tree Stump	—
Deciduous Tree \ Shrub	—
Coniferous Tree \ Shrub	—
Communication	—
Overhead Communication	—
Fiber Optic	—
Underground Electric	—
Overhead Electric	—
Gas Main with Size	—
High Pressure Gas Main with Size	— HPG
Water Main with Size	— W
Sanitary Sewer with Size	— S
Duct Bank	— DUCT
Test Hole Location for SUE w/ID	—
(*) Denotes the survey quality service level for utilities	
Sanitary Manhole	—
Storm Sewer with Size	— ST
Storm Manhole	—
Single Storm Sewer Intake	—
Double Storm Sewer Intake	—
Fire Hydrant	—
Fire Hydrant on Building	—
Water Main Valve	—
Water Service Valve	—
Well	—
Utility Pole	—
Guy Anchor	—
Utility Pole with Light	—
Utility Pole with Transformer	—
Street Light	—
Yard Light	—
Electric Box	—
Electric Transformer	—
Traffic Sign	—
Communication Pedestal	—
Communication Manhole	—
Communication Handhole	—
Fiber Optic Manhole	—
Fiber Optic Handhole	—
Gas Valve	—
Gas Manhole	—
Gas Apparatus	—
Fence Post or Guard Post	—
Underground Storage Tank	—
Above Ground Storage Tank	—
Sign	—
Satellite Dish	—
Mailbox	—
Sprinkler Head	—
Irrigation Control Valve	—

## FIRE STATION 14 TRAINING - PHASE 1

### EXISTING SITE PLAN



Project No: 123.0461.30  
Sheet C 200

MADISON, WISCONSIN

5010 VOGES ROAD  
MADISON, WISCONSIN 53718  
608-838-0444 | www.snyder-associates.com

# SNYDER & ASSOCIATES, INC.

MARK	REVISION	DATE	BY
Engineer: SJA	Checked By: SJA	Scale: 1" = 30'	
Technician: MW	Date: 4-13-2023	T-R-S: TTN-RRW-SS	
Project No: 123.0461.30			Sheet C 200

