

Project: Veterans Village
Addendum 1 Issue Date: March 9, 2026
Bid Date: March 19, 2026 at 5:00 pm
Architect of Record: Creative Housing Solutions LLC

Attachments:

1. Project Schedule.
2. Revised Civil Drawings dated March 6, 2026.

General:

1. Project is subject to BABA. **All materials must be sourced from the USA.**
2. All MEP trade permits have been secured by the owner. Plumbing, HVAC, and Electric shall exclude their trade permits.
3. **BP 4 Masonry** shall include a brick allowance of \$600/M.

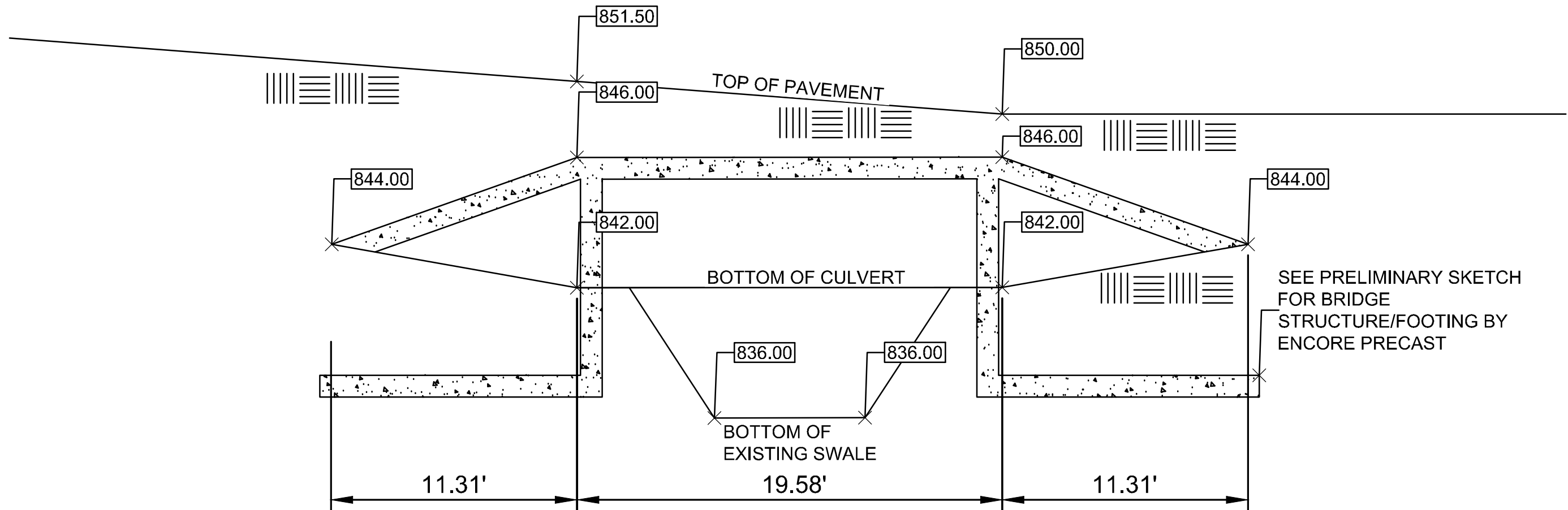
Bidders shall Provide the following Alternates:

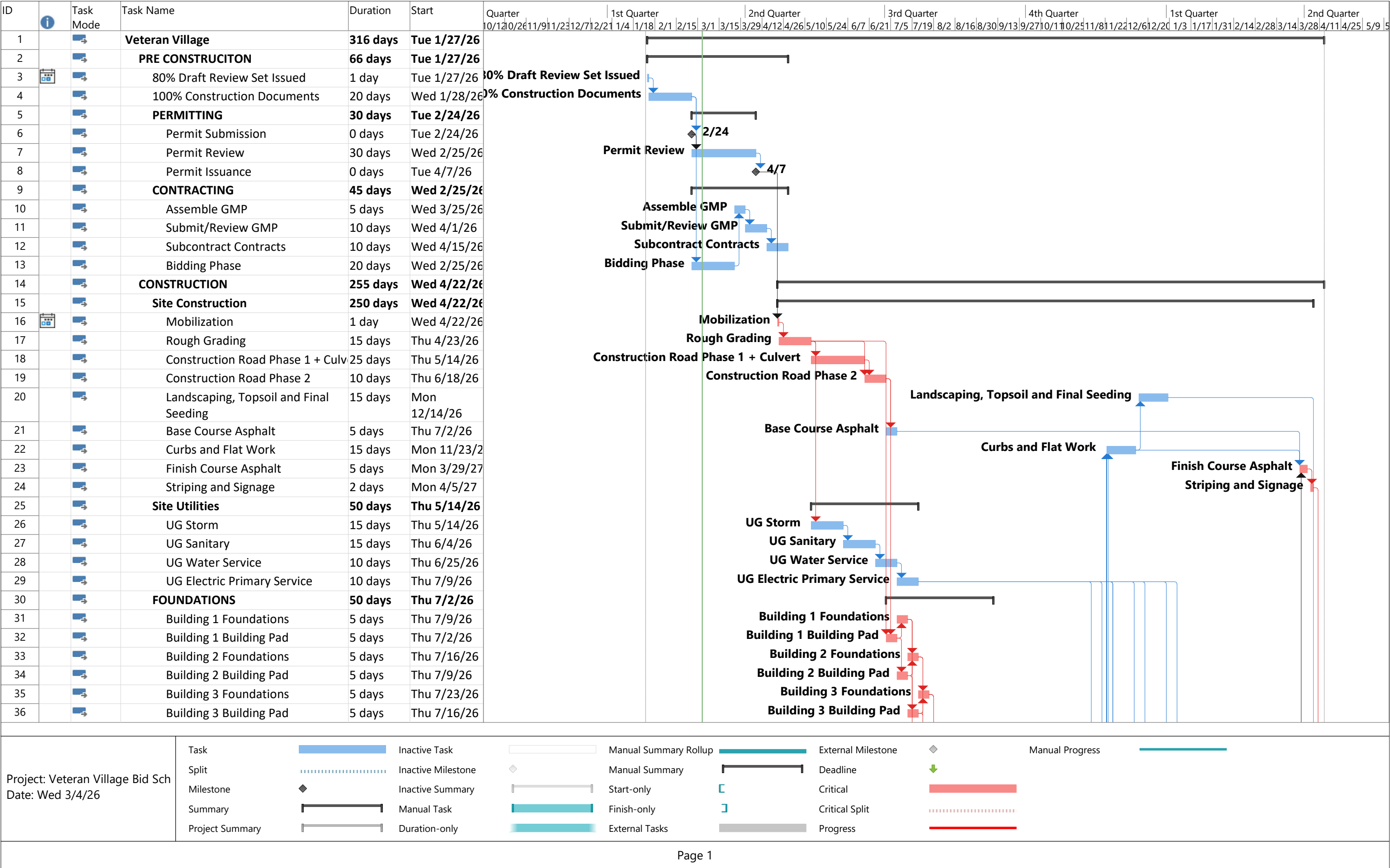
1. **BP 6A Rough Carpentry** shall provide a deduct alternate to use OSB roof sheathing in lieu of plywood.
2. **BP 6B Finished Carpentry** shall provide a deduct alternate for hollow core pre-hung doors in lieu of solid core doors.
3. **BP 6B Finished Carpentry** shall provide a deduct alternate for PVC windowsills in lieu of solid surface windowsills.
4. **BP 7 Roofing** shall provide a deduct alternate to delete the valley metal.
5. **BP 8B Windows** shall provide a deduct alternate to provide Energy Star vinyl windows.
6. **BP 9B Flooring** shall provide a deduct alternate for 12 mil LVT in lieu of 20 mil at the Units.
7. **BP12A Cabinets & Tops** shall provide a deduct alternate to provide standard cabinets in lieu of plywood cabinets.
8. **BP 23 Plumbing** shall provide an added cost for Sterling tub surrounds with grab bars.
9. **BP 31 Site Work** shall provide a deduct alternate to delete the concrete collars around storm structures.
10. **BP 33 Asphalt Paving** shall provide a deduct alternate for light duty asphalt at the parking spaces.

Questions and Answers:

1. Please provide the following information for the box culvert.
 - a. Load rating required for the box culvert.
 - b. Need a section cut of the culvert showing the elevation of the footings and box culvert.
 - i. Answer – See attached cross section sketch. Load rating shall be HL-93
2. Will there be light duty asphalt at the parking stalls? We only see a profile for heavy duty.
 - a. Answer – The base bid asphalt shall be heavy duty. Provide an alternate price to change the asphalt at the parking spaces to light duty asphalt (8" of gravel, 2.5" base course, and 1.5" of surface.

3. Are barrier curbs required at the perimeter of the asphalt drives? If so, please provide a detail of the barrier curbs.
 - a. Answer – Yes, 6" x 18" ODOT Type 3 curbs shall be included at all areas except where there is integral turndown curb.
4. Do the prehung doors get painted in the field or are they prefinished per spec 081416?
 - a. Answer – Prehung doors at the Units shall be factory primed and painted in the field. Commercial doors at the Clubhouse shall be prefinished doors with hollow metal frames.
5. Window blinds are not mentioned on the drawings. Will there be any on the project?
 - a. Answer – See spec 085413 for the spec. Window Treatments shall be 2" no-sag vinyl slat min-blinds. Cordless lift with wand tilt, slat valance, no holes at slats. Lead-free.
6. The electrical single line diagrams call out ground mounted transformers. We cannot find the location of the transformers anywhere. We will need the location to calculate the secondary lengths. The primary service is not shown either. Is the primary all overhead by Duke?
 - a. Answer –
7. What is the top of wall elevation for the segmental retaining wall?
 - a. Answer – See revised civil drawings.
8. On HVAC page M104, I cannot read what Keyed Note 8 says. It seems to be blocked by the symbols page. Would you please relay what that note is?
 - a. Answer – Keyed Note 8 says "Mechanical Contractor to provide and install guard box over thermostat."
9. Note 5 Sheet M104 - It calls out for a duct mounted Co2 sensor that is (adjustable). For us to make that happen with a duct mounted Co2 sensor we would need to install a BAS controls system that would be not only expensive, but unnecessary with this only having a couple residential split systems. We propose using a wall mounted (adjustable) Co2 sensor to be placed in the community room close to the return. I can provide them a brochure and a wiring schematic to show how it will
 - a. Answer – We do not have a problem with installing a wall mounted (adjustable) Co2 sensor near the return in the community room. If all other instructions stated on the drawings are followed, installing a wall mounted sensor rather than duct mounted is acceptable.
10. Pickleball courts are generally 30'x60'. Just want to make sure the 20'x44' is what he should quote off.
 - a. Answer – See revised civil drawings. Pickleball concrete pad shall be increased to 30' x 60'. The court striping shall be 20' x 44'.





[illegible]

ID		Task Mode	Task Name	Duration	Start	Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter
74			Final Paint	5 days	Thu 12/17/26							
75			Install Specialties	5 days	Fri 12/4/26							
76			Punch Out	10 days	Thu 12/31/26							
77			Final Clean	5 days	Thu 1/14/27							
78			Final Testing and Balancing	5 days	Thu 1/21/27							
79			Building TCO	2 days	Thu 1/28/27							
80			Owner Move in Building 1	0 days	Fri 1/29/27							
81			BUILDING 2	148 days	Thu 7/23/26							
82			Building 2 Core and Shell	52 days	Thu 7/23/26							
83			Under Slab Plumbing	7 days	Thu 7/23/26							
84			Under Slab Electrical	5 days	Mon 8/3/26							
85			Building 2 SOG	5 days	Mon 8/10/26							
86			Wood Framing/Sheathing	15 days	Mon 8/17/26							
87			Roofing	5 days	Mon 9/7/26							
88			Windows	5 days	Mon 9/14/26							
89			Exterior Skin	10 days	Mon 9/21/26							
90			Building 2 Interior Construction	124 days	Wed 8/26/26							
91			Plumbing Rough	7 days	Wed 8/26/26							
92			HVAC Rough	10 days	Fri 9/4/26							
93			Electrical Rough	10 days	Fri 9/18/26							
94			Inwall MEP Inspection	0 days	Thu 10/1/26							
95			Insulation Install	5 days	Fri 10/2/26							
96			Framing Inspection	0 days	Thu 10/8/26							
97			Hang Drywall	10 days	Fri 10/9/26							
98			Finish Drywall	15 days	Fri 10/23/26							
99			Prime and First Coat Paint	5 days	Fri 11/13/26							
100			Install Flooring	5 days	Fri 11/20/26							
101			Install Casework	5 days	Fri 11/27/26							
102			Install Light Fixtures/Devices	7 days	Fri 11/20/26							
103			Install Plumbing Fixtures	5 days	Fri 12/4/26							
104			Install Doors	5 days	Fri 12/4/26							
105			Install HVAC Finishes	5 days	Thu 12/31/26							
106			Install Door Casing and Base Board	7 days	Fri 12/11/26							
107			Drywall Touch Up	2 days	Tue 12/22/26							
108			Final Paint	5 days	Thu 12/24/26							
109			Install Specialties	5 days	Fri 12/11/26							
110			Punch Out	10 days	Thu 1/7/27							
		<div><div>Project: Veteran Village Bid Sch Date: Wed 3/4/26</div><div><div><div>Task</div><div>Split</div><div>Milestone</div><div>Summary</div><div>Project Summary</div></div><div><div><div><div></div><div></div><div></div><div></div><div></div></div><div>Inactive Task</div><div>Inactive Milestone</div><div>Inactive Summary</div><div>Manual Task</div><div>Duration-only</div></div><div><div><div><div></div><div></div><div></div><div></div><div></div></div><div>Manual Summary Rollup</div><div>Manual Summary</div><div>Start-only</div><div>Finish-only</div><div>External Tasks</div></div><div><div><div><div></div><div></div><div></div><div></div><div></div></div><div>External Milestone</div><div>Deadline</div><div>Critical</div><div>Critical Split</div><div>Progress</div></div><div><div><div><div></div><div></div><div></div><div></div><div></div></div><div>Manual Progress</div></div></div></div></div></div></div></div>										
Page 3												

ID		Task Mode	Task Name	Duration	Start	Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter
111			Final Clean	5 days	Thu 1/21/27							
112			Final Testing and Balancing	5 days	Thu 1/28/27							
113			Building TCO	2 days	Thu 2/4/27							
114			Owner Move in Building 2	0 days	Fri 2/5/27							
115			BUILDING 3	142 days	Thu 7/30/26							
116			Building 3 Core and Shell	52 days	Thu 7/30/26							
117			Under Slab Plumbing	7 days	Thu 7/30/26							
118			Under Slab Electrical	5 days	Mon 8/10/26							
119			Building 3 SOG	5 days	Mon 8/17/26							
120			Wood Framing/Sheathing	15 days	Mon 8/24/26							
121			Roofing	5 days	Mon 9/14/26							
122			Windows	5 days	Mon 9/21/26							
123			Exterior Skin	10 days	Mon 9/28/26							
124			Building 3 Interior Construction	118 days	Wed 9/2/26							
125			Plumbing Rough	7 days	Wed 9/2/26							
126			HVAC Rough	10 days	Fri 9/11/26							
127			Electrical Rough	10 days	Fri 9/25/26							
128			Inwall MEP Inspection	0 days	Thu 10/8/26							
129			Insulation Install	5 days	Fri 10/9/26							
130			Framing Inspection	0 days	Thu 10/15/26							
131			Hang Drywall	10 days	Fri 10/16/26							
132			Finish Drywall	15 days	Fri 10/30/26							
133			Prime and First Coat Paint	5 days	Fri 11/20/26							
134			Install Flooring	5 days	Fri 11/27/26							
135			Install Casework	5 days	Fri 12/4/26							
136			Install Light Fixtures/Devices	7 days	Fri 11/27/26							
137			Install Plumbing Fixtures	5 days	Fri 12/11/26							
138			Install Doors	5 days	Fri 12/11/26							
139			Install HVAC Finishes	5 days	Thu 1/7/27							
140			Install Door Casing and Base Board	7 days	Fri 12/18/26							
141			Drywall Touch Up	2 days	Tue 12/29/26							
142			Final Paint	5 days	Thu 12/31/26							
143			Install Specialties	5 days	Fri 12/18/26							
144			Punch Out	10 days	Thu 1/14/27							
145			Final Clean	5 days	Thu 1/28/27							
146			Final Testing and Balancing	5 days	Thu 2/4/27							
147			Building TCO	2 days	Thu 2/11/27							

Project: Veteran Village Bid Sch
Date: Wed 3/4/26

Task

Split

Milestone

Summary

Project Summary

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

Deadline

Critical

Critical Split

Progress

Manual Progress

Under Slab Plumbing

Under Slab Electrical

Building 3 SOG

Wood Framing/Sheathing

Roofing

Windows

Exterior Skin

Plumbing Rough

HVAC Rough

Electrical Rough

Insulation Install

Hang Drywall

Finish Drywall

Prime and First Coat Paint

Install Flooring

Install Casework

Install Light Fixtures/Devices

Install Plumbing Fixtures

Install Doors

Install HVAC Finishes

Install Door Casing and Base Board

Drywall Touch Up

Final Paint

Install Specialties

Punch Out

Final Clean

Final Testing and Balancing

Building TCO

Final Clean

Final Testing and Balancing

Building TCO

2/15

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ID		Task Mode	Task Name	Duration	Start	Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter
						10/12/2611/9/2612/7/261/4/271/18/272/15/273/13/273/29/274/12/274/26/275/10/275/24/276/7/276/21/277/5/277/19/278/2/278/16/278/30/279/13/279/27/2710/11/2710/25/2711/8/2711/22/2712/6/2712/20/271/3/281/17/281/31/282/14/282/28/283/14/283/28/284/11/284/25/285/9/28						
148			Owner Move in Building 3	0 days	Fri 2/12/27							
149			BUILDING 4	162 days	Thu 8/6/26							
150			Building 4 Core and Shell	52 days	Thu 8/6/26							
151			Under Slab Plumbing	7 days	Thu 8/6/26							
152			Under Slab Electrical	5 days	Mon 8/17/26							
153			Building 4 SOG	5 days	Mon 8/24/26							
154			Wood Framing/Sheathing	15 days	Mon 8/31/26							
155			Roofing	5 days	Mon 9/21/26							
156			Windows	5 days	Mon 9/28/26							
157			Exterior Skin	10 days	Mon 10/5/26							
158			Building 4 Interior Construction	143 days	Wed 9/2/26							
159			Plumbing Rough	7 days	Wed 9/2/26							
160			HVAC Rough	10 days	Fri 9/11/26							
161			Electrical Rough	10 days	Fri 9/25/26							
162			Inwall MEP Inspection	0 days	Thu 10/8/26							
163			Insulation Install	5 days	Fri 10/9/26							
164			Framing Inspection	0 days	Thu 10/15/26							
165			Hang Drywall	10 days	Fri 10/16/26							
166			Finish Drywall	15 days	Fri 10/30/26							
167			Prime and First Coat Paint	5 days	Fri 11/20/26							
168			Install Flooring	5 days	Fri 11/27/26							
169			Install Casework	5 days	Fri 12/4/26							
170			Install Light Fixtures/Devices	11 days	Fri 11/27/26							
171			Install Plumbing Fixtures	5 days	Fri 12/11/26							
172			Install Doors	5 days	Fri 12/11/26							
173			Install HVAC Finishes	5 days	Thu 1/7/27							
174			Install Door Casing and Base Board	7 days	Fri 12/18/26							
175			Drywall Touch Up	2 days	Tue 12/29/26							
176			Final Paint	5 days	Thu 12/31/26							
177			Install Specialties	5 days	Fri 12/18/26							
178			Punch Out	10 days	Thu 1/14/27							
179			Final Clean	5 days	Thu 1/28/27							
180			Final Testing and Balancing	5 days	Thu 2/4/27							
181			Building TCO	2 days	Thu 3/18/27							
182			Owner Move in Building 4	0 days	Fri 3/19/27							
183			BUILDING 5	161 days	Thu 8/13/26							
184			Building 5 Core and Shell	161 days	Thu 8/13/26							

Project: Veteran Village Bid Sch
Date: Wed 3/4/26

Task

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Manual Summary Rollup

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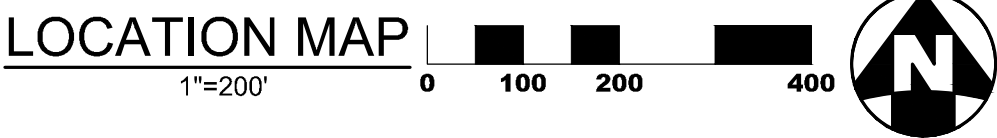
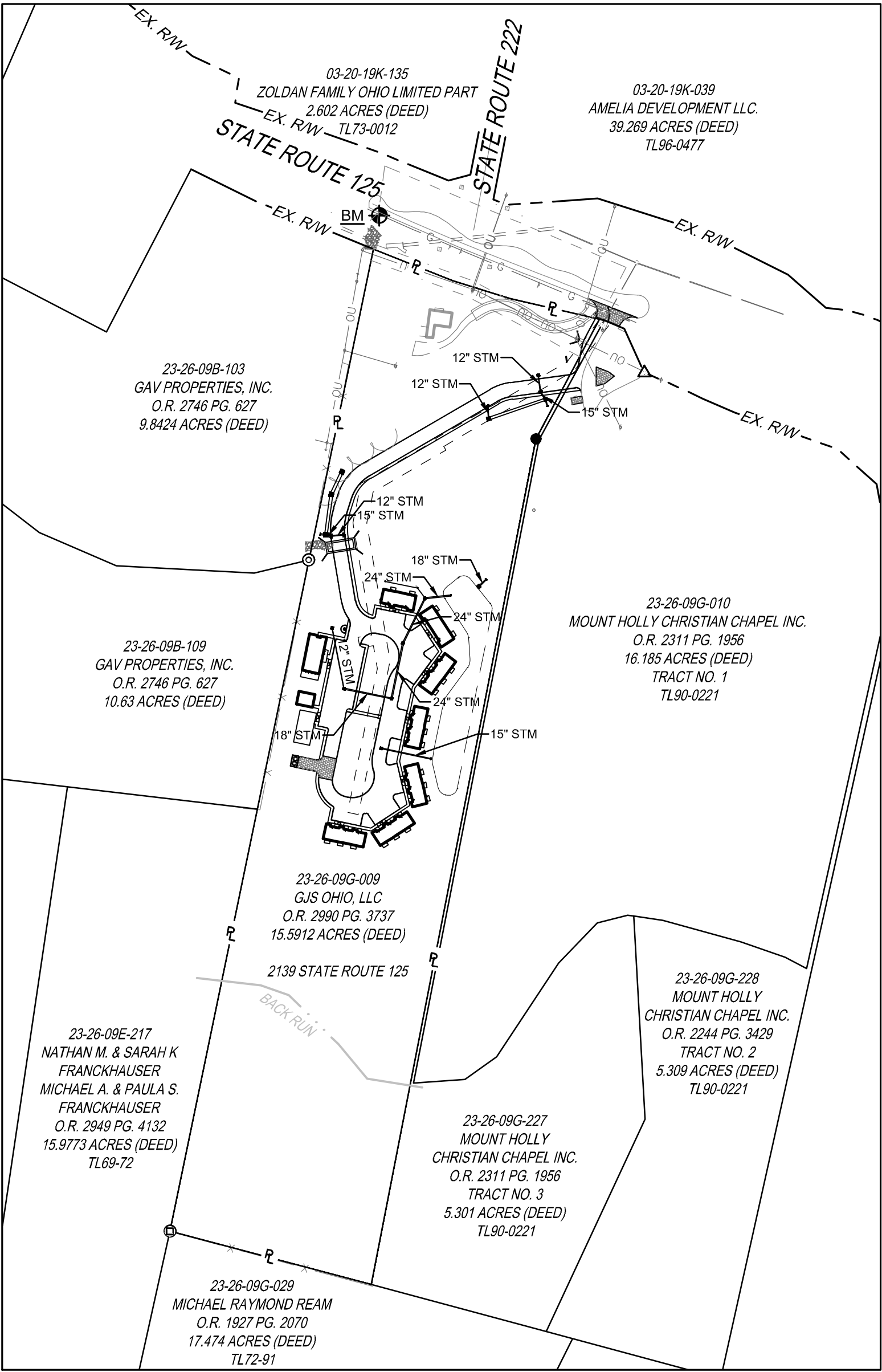
ID		Task Mode	Task Name	Duration	Start	Quarter	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	1st Quarter	2nd Quarter
222			Wood Framing/Sheathing	15 days	Mon 9/14/26							
223			Roofing	5 days	Mon 10/5/26							
224			Windows	5 days	Mon 10/12/26							
225			Exterior Skin	10 days	Mon 10/19/26							
226			Building 6 Interior Construction	118 days	Wed 9/23/26							
227			Plumbing Rough	7 days	Wed 9/23/26							
228			HVAC Rough	10 days	Fri 10/2/26							
229			Electrical Rough	10 days	Fri 10/16/26							
230			Inwall MEP Inspection	0 days	Thu 10/29/26							
231			Insulation Install	5 days	Fri 10/30/26							
232			Framing Inspection	0 days	Thu 11/5/26							
233			Hang Drywall	10 days	Fri 11/6/26							
234			Finish Drywall	15 days	Fri 11/20/26							
235			Prime and First Coat Paint	5 days	Fri 12/11/26							
236			Install Flooring	5 days	Fri 12/18/26							
237			Install Casework	5 days	Fri 12/25/26							
238			Install Light Fixtures/Devices	7 days	Fri 12/18/26							
239			Install Plumbing Fixtures	5 days	Fri 1/1/27							
240			Install Doors	5 days	Fri 1/1/27							
241			Install HVAC Finishes	5 days	Thu 1/28/27							
242			Install Door Casing and Base Board	7 days	Fri 1/8/27							
243			Drywall Touch Up	2 days	Tue 1/19/27							
244			Final Paint	5 days	Thu 1/21/27							
245			Install Specialties	8 days	Fri 1/8/27							
246			Punch Out	10 days	Thu 2/4/27							
247			Final Clean	5 days	Thu 2/18/27							
248			Final Testing and Balancing	5 days	Thu 2/25/27							
249			Building TCO	2 days	Thu 3/4/27							
250			Owner Move in Building 6	0 days	Fri 3/5/27							
251			BUILDING 7	142 days	Thu 9/3/26							
252			Building 7 Core and Shell	52 days	Thu 9/3/26							
253			Under Slab Plumbing	7 days	Thu 9/3/26							
254			Under Slab Electrical	5 days	Mon 9/14/26							
255			Building 7 SOG	5 days	Mon 9/21/26							
256			Wood Framing/Sheathing	15 days	Mon 9/28/26							
257			Roofing	5 days	Mon 10/19/26							
258			Windows	5 days	Mon 10/26/26							
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VETERAN'S VILLAGE

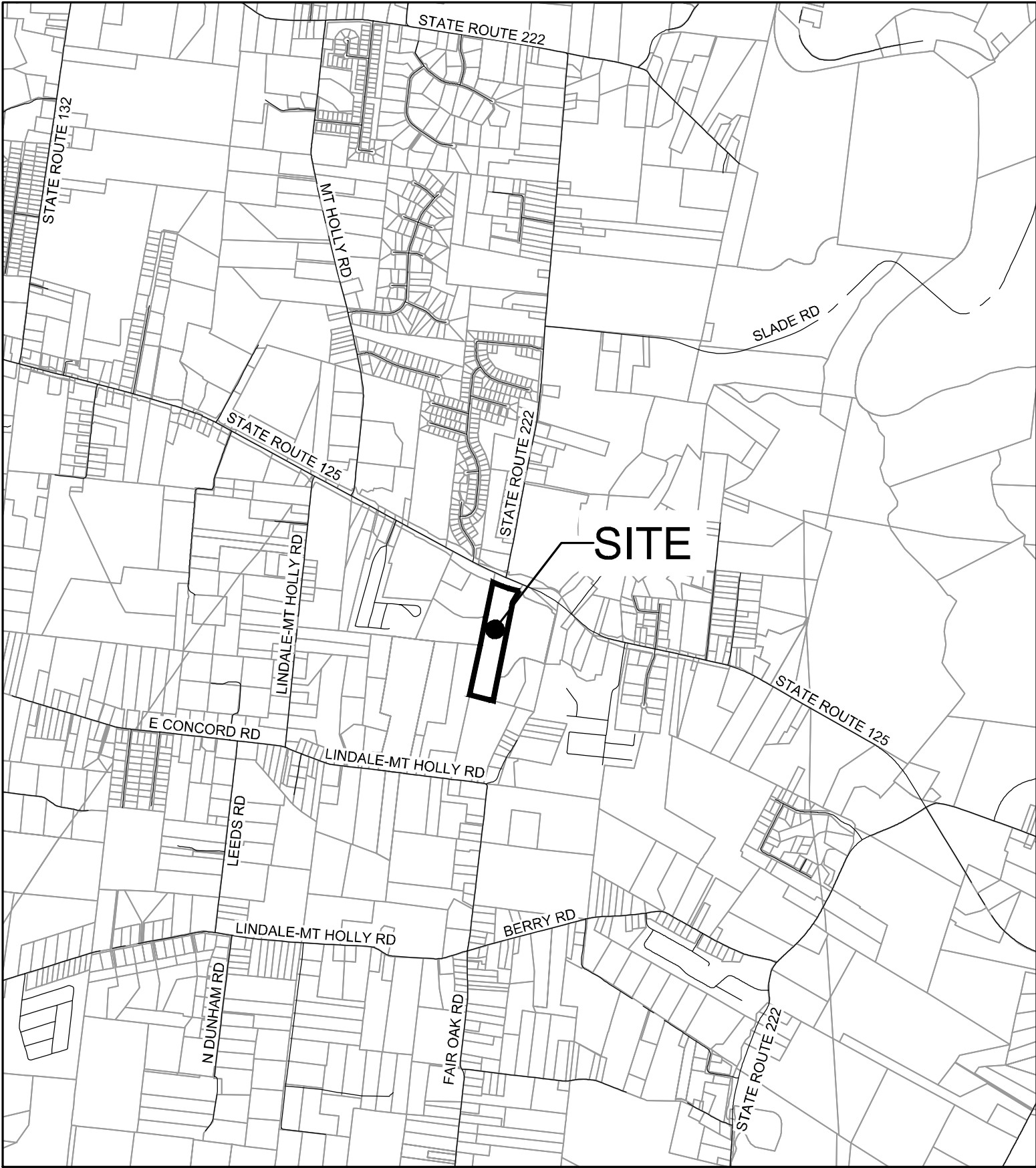
MONROE TOWNSHIP

CLERMONT COUNTY, OHIO



SHEET INDEX

TITLE SHEET	C100
GENERAL NOTES AND DETAILS	C101
EXISTING CONDITIONS AND DEMOLITION PLAN	C102
SITE PLAN	C103
UTILITY PLAN	C104
STORM PROFILES	C105
SANITARY PROFILES	C106
GRADING PLAN	C107
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EROSION CONTROL NOTES AND DETAILS	C109
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PLANTING SPECIFICATIONS	L200
PLANTING SPECIFICATIONS	L201



VICINITY MAP
N.T.S.

DESCRIPTION

THIS PROJECT IS TO INCLUDE SEVEN (7) RESIDENTIAL BUILDINGS HOUSING 19 UNITS WITH A CLUB HOUSE IN MONROE TOWNSHIP, WITH ASSOCIATED PARKING, DRIVES, UTILITIES AND STORMWATER MANAGEMENT.

BENCHMARKS

BEARINGS SHOWN HEREON ARE BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM, SOUTH ZONE, AND NORTH AMERICAN DATUM OF 1983 (2011) AS ESTABLISHED FROM A GPS SURVEY ORIGINATING ON ODOT CORS STATION "GRTN". PROJECT COORDINATES ARE BASED ON THE OHIO STATE PLANE COORDINATE SYSTEM AND HAVE BEEN SCALED TO GROUND BY USING A PROJECT ADJUSTMENT FACTOR OF 1.00007847476 APPLIED AT A BASE POINT OF N: 371,383.03 E: 1,493,138.65. GRID AND GROUND COORDINATES ARE IDENTICAL AT THE BASE POINT. ALL ELEVATIONS ARE ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD '88) AS ESTABLISHED FROM A GPS SURVEY ORIGINATING ON ODOT CORS STATION "GRTN" USING GEOID CONUS 18 WITH REFERENCE TO THE FOLLOWING CONTROL MONUMENT(S) CLERMONT COUNTY #107.

BENCHMARK

IRON PIN
N: 372,256.47
E: 1,492,930.57
ELEV = 838.73 (NAVD88)

FEMA NOTES:
1. THIS SITE IS LOCATED IN ZONE X - FIRM MAP 39025C0245G, EFFECTIVE 06/18/2010
2. NO FILL WILL BE ADDED TO THE 100-YEAR FLOODPLAIN



SEAL:



NO	DATE	DESCRIPTION
01	02/20/2026	PERMIT SET
02	03/06/2026	REVISION 1

VETERAN'S VILLAGE
2139 STATE ROUTE 125
MONROE TOWNSHIP
CLERMONT COUNTY, OHIO

PROJECT NO: 250235.001

DATE: 01.30.2026

SCALE:

AS SHOWN

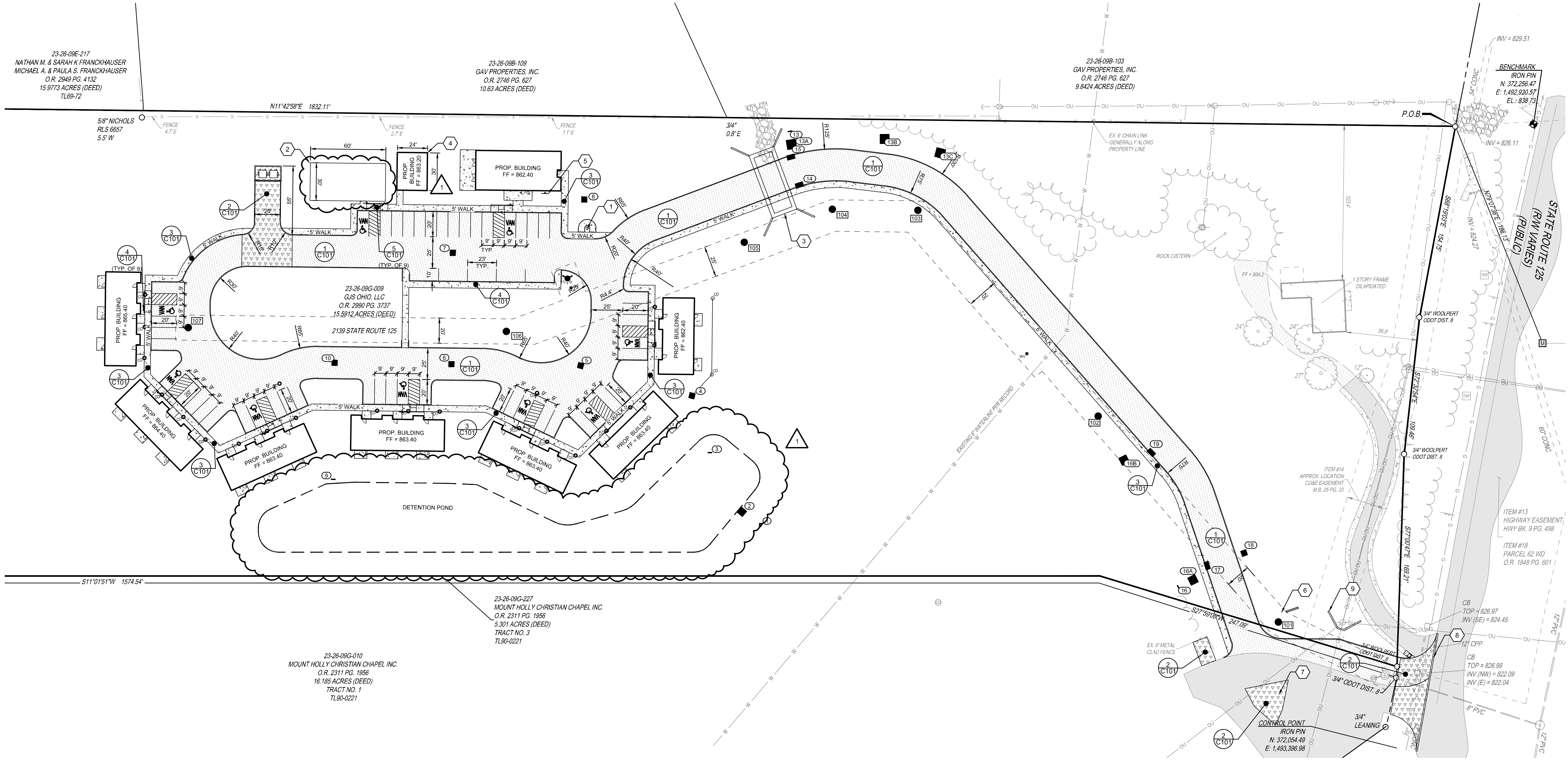
SHEET NAME:

TITLE SHEET

SHEET NO.

C100





CODING NOTES

- 1 25' ALUMINUM FLAG POLE
- 2 PROPOSED PICKLEBALL COURT CONTRACTOR TO PROVIDE STRIPING AND NET
- 3 CONCRETE CULVERT (BY OTHERS)
- 4 24'X30' PROPOSED PREENGINEERED PICNIC SHELTER
- 5 PROPOSED OFFICE SIGN
- 6 MONUMENT SIGN, REFER TO ARCHITECTURAL PLAN FOR DETAILS
- 7 REPAIR EXISTING FAILED ASPHALT APPROXIMATE EXTENTS
- 8 SAW CUT 1.0' INTO EXISTING ROADWAY AND REPLACE "IN-KIND"
- 9 PROPOSED RETAINING WALL SEE GRADING PLAN FOR DETAILS

PROPOSED LEGEND

- ASPHALT PAVEMENT
- CONCRETE WALK
- HEAVY DUTY CONCRETE
- CATCH BASIN
- CURB INLET
- HEADWALL
- SANITARY MANHOLE
- CLEAN OUT
- WATER VALVE
- FIRE HYDRANT

THE KLEINGERS GROUP
CIVIL ENGINEERING SURVEYING LANDSCAPE ARCHITECTURE
www.kleingers.com
350 Worthington Rd
Suite H
Westerville, OH 43082
614.882.4311



SEAL:



NO	DATE	DESCRIPTION
01	02/20/2026	PERMIT SET
02	03/06/2026	REVISION 1

VETERAN'S VILLAGE
2139 STATE ROUTE 125
MONROE TOWNSHIP
CLERMONT COUNTY, OHIO

PROJECT NO: 250235.001

DATE: 01.30.2026

SCALE:



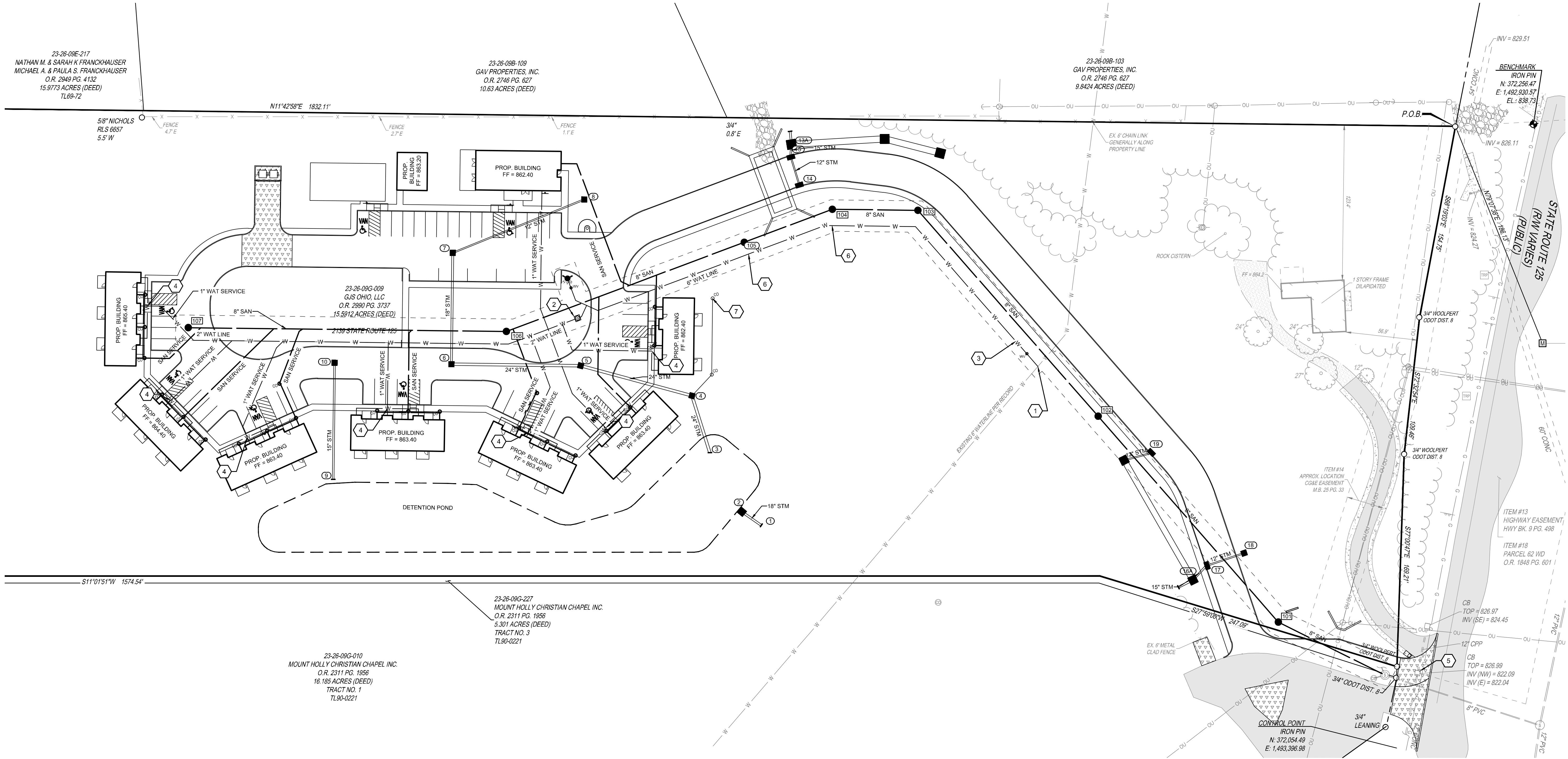
SHEET NAME:

SITE PLAN

SHEET NO.

C103





PROPOSED LEGEND

- STM STORM PIPE
- CATCH BASIN
- CURB INLET
- HEADWALL
- SAN SANITARY PIPE
- SANITARY MANHOLE
- WATER VALVE
- FIRE HYDRANT

CODED NOTES

- 1 CONNECT TO EXISTING 6" WATER WITH 6" X 6" TEE. CONTRACTOR FIELD VERIFY LOCATION OF EXISTING LINE
- 2 PROPOSED 2" MASTER WATER METER AND BACKFLOW PREVENTION DEVICE
- 3 PROPOSED 6" DOMESTIC WATER SERVICE CONTRACTOR TO MAINTAIN 4.5' OF DEPTH
- 4 WHERE WATER SERVICE SPLITS TO SERVE UNITS WATERLINE WILL BE 3/4"
- 5 RAISE EXISTING STORM GRATE TO PROPOSED GRADE. SEE GRADING PLAN FOR DETAILS
- 6 BEGIN/END WATERLINE BORE UNDER CREEK
- 7 6" STORM DOWNSPOUT LINE AT 0.5%



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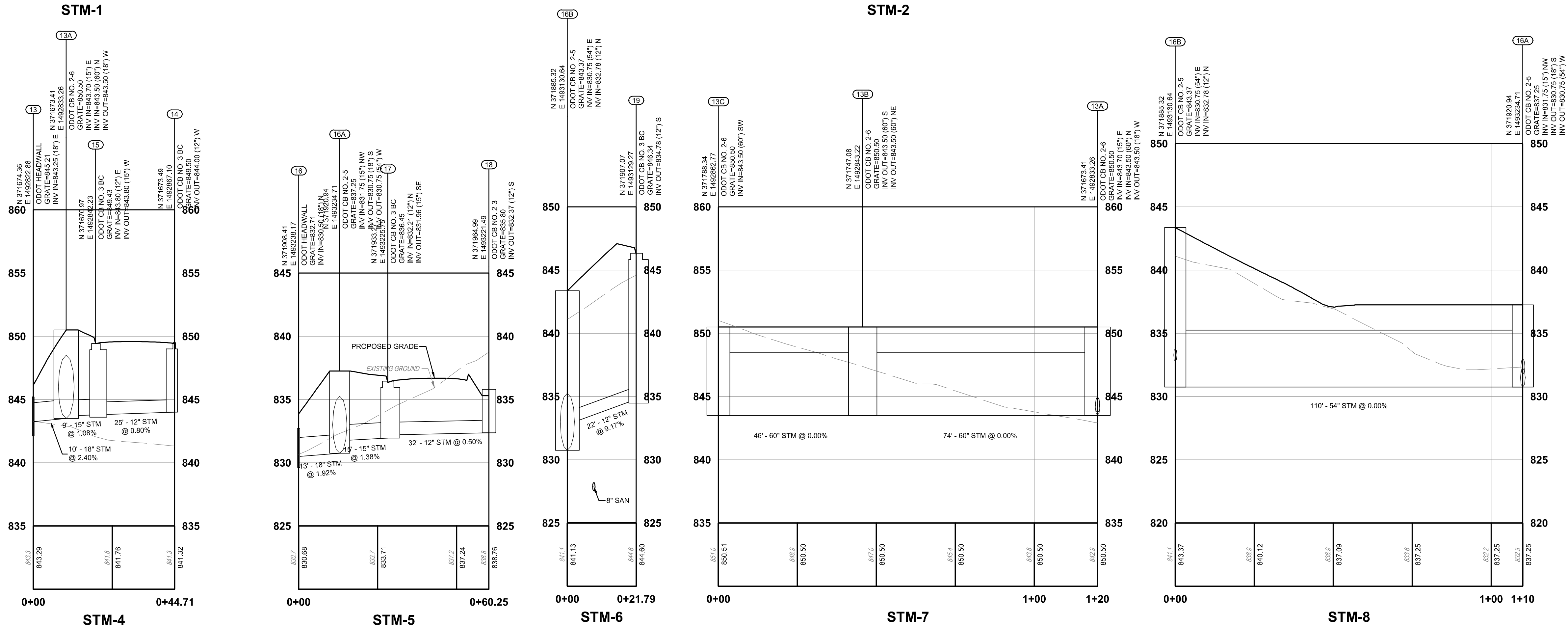
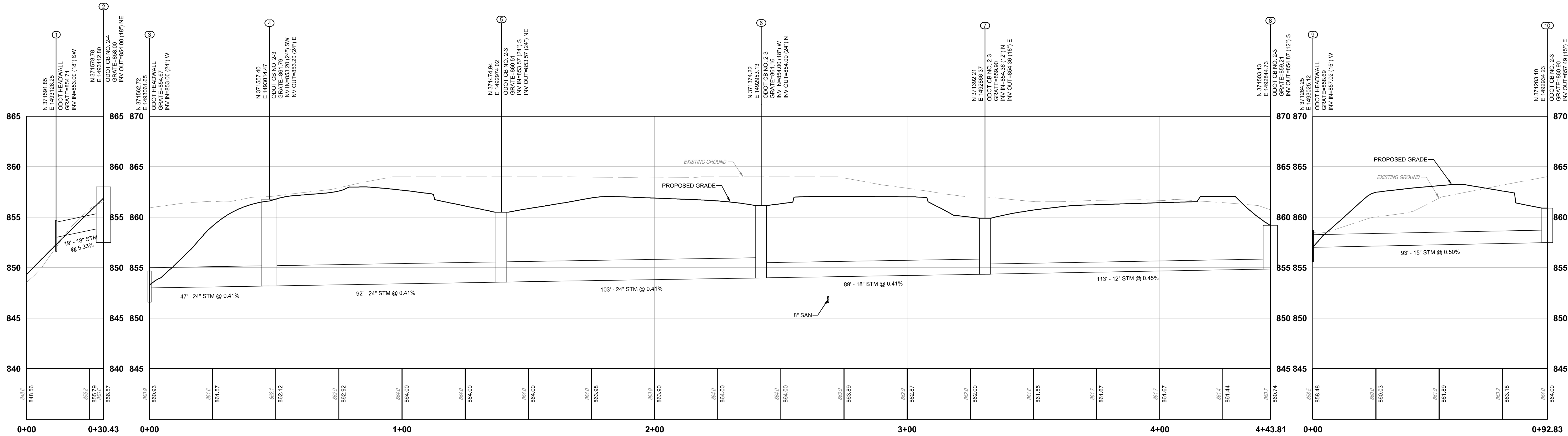
CREATIVE HOUSING SOLUTIONS

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NO. DATE DESCRIPTION
01 02/20/2026 PERMIT SET
02 03/06/2026 REVISION 1

VETERAN'S VILLAGE
2139 STATE ROUTE 125
MONROE TOWNSHIP
CLERMONT COUNTY, OHIO

PROJECT NO: 250235.001
DATE: 01.30.2026
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0 20 40 80
SHEET NAME:
UTILITY PLAN
SHEET NO:
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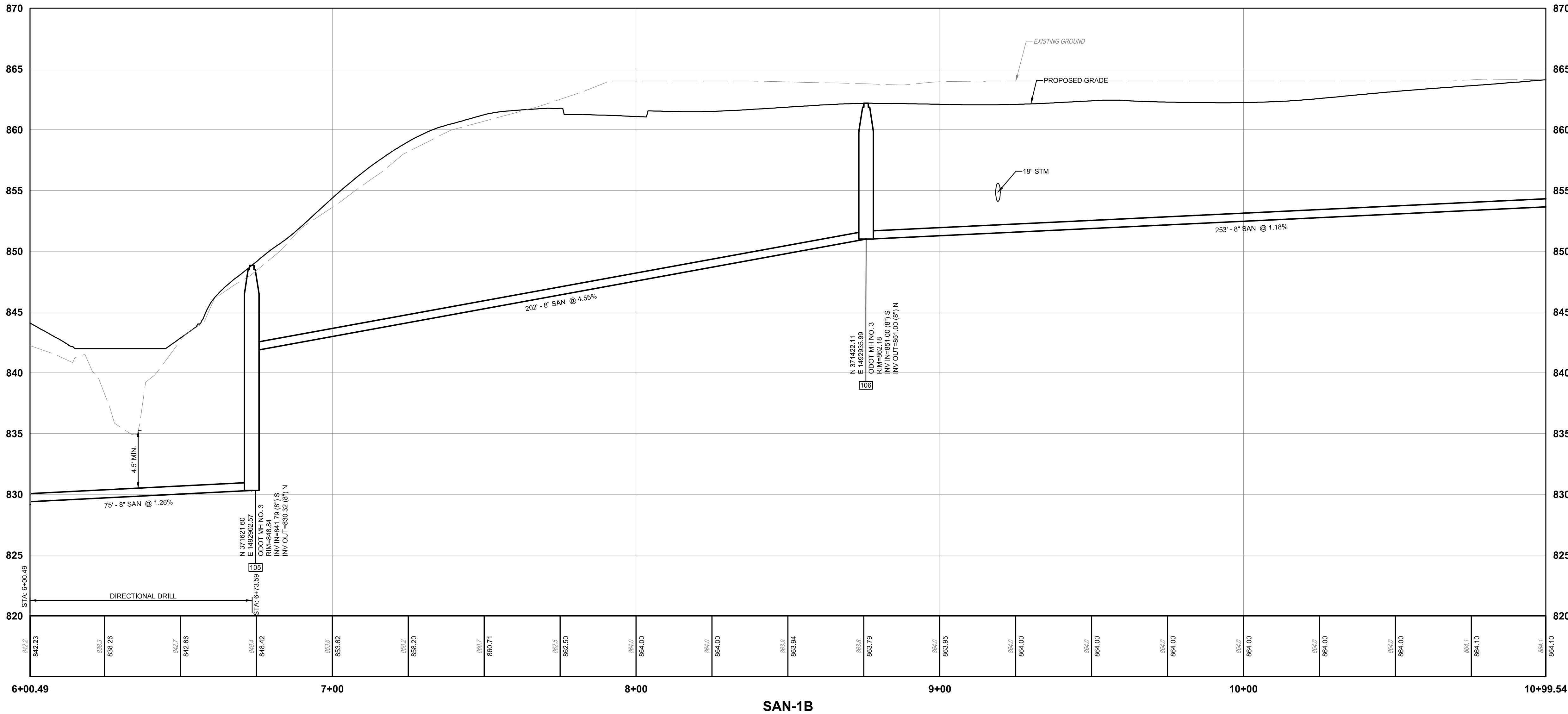
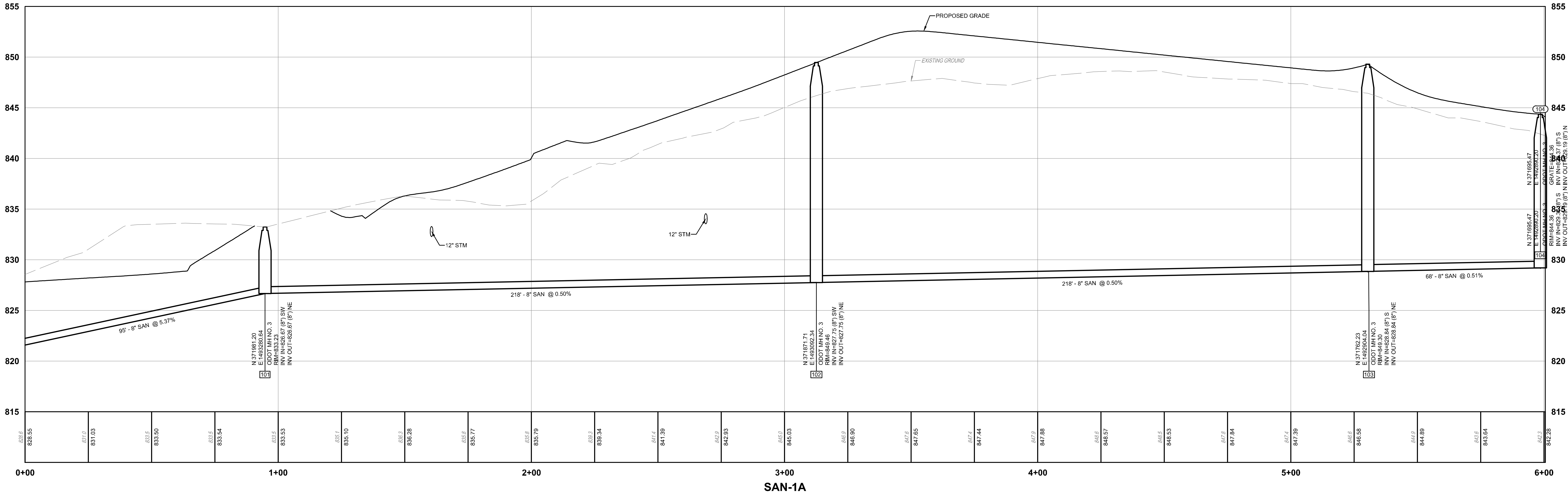
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VETERAN'S VILLAGE
2139 STATE ROUTE 125
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CLERMONT COUNTY, OHIO

PROJECT NO: 250235.001
DATE: 01.30.2026
SCALE:
V 0 2.5 5 10
H 0 10 20 40
SHEET NAME:
STORM PROFILES
SHEET NO:
C105



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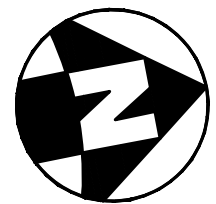
VETERAN'S VILLAGE
2139 STATE ROUTE 125
MONROE TOWNSHIP
CLERMONT COUNTY, OHIO

PROJECT NO: 250235.001
DATE: 01.30.2026
SCALE:
V 0 2.5 5 10
H 0 20 40 80

SHEET NAME:
SANITARY PROFILES

SHEET NO.
C106

— 860 — EXISTING MAJOR CONTOUR
— 859 — EXISTING MINOR CONTOUR
— 860 — PROPOSED MAJOR CONTOUR
— 859 — PROPOSED MINOR CONTOUR



NO.	DATE	DESCRIPTION
01	02/20/2026	PERMIT SET
02	03/06/2026	REVISION 1

**2139 STATE ROUTE 125
MONROE TOWNSHIP
CLERMONT COUNTY, OHIO**

GRADING PLAN

C107

PROJECT DATA

PROJECT DESCRIPTION
THIS PROJECT IS TO INCLUDE SEVEN (7) RESIDENTIAL BUILDINGS HOUSING 19 UNITS WITH A COMMUNITY CENTER, ASSOCIATED PARKING, DRIVES, UTILITIES AND STORMWATER MANAGEMENT.

LATITUDE:	N 39°00'34.1"N
LONGITUDE:	W 84°10'22.6"W"
ESTIMATED CONSTRUCTION DATES:	xx/xx/2026 - xx/xx/2027
TOTAL SITE AREA:	15.59 ACRES
TOTAL DISTURBED AREA:	4.80 ACRES
EXISTING IMPERVIOUS AREA:	0.20 ACRES
PROPOSED IMPERVIOUS AREA:	1.97 ACRES
TOTAL IMPERVIOUS AREA AFTER CONSTRUCTION:	2.17 ACRES
INCREASE IN IMPERVIOUS AREA:	985%
PRE-CONSTRUCTION RUNOFF COEFFICIENT :	C=0.41
POST-CONSTRUCTION RUNOFF COEFFICIENT:	C=0.48
IMMEDIATE RECEIVING WATER/MS4:	BACK RUN TO WILLIAM H HARSHA LAKE
ULTIMATE RECEIVING STREAM:	OHIO RIVER
EXISTING LAND USE:	RESIDENTIAL
SOILS:	CnC2, EbE2, JoR1B1, JoRU1B, UCnC2, UEeb2, UuXUF.

CONSTRUCTION SEQUENCE

TO COMPLETE THE EXCAVATION AND CONSTRUCTION OF THE PROPOSED JOB IMPROVEMENTS, COORDINATION OF THE CONTRACTOR'S WORK CREWS WILL BE REQUIRED, THE EXISTING DITCHES WILL PERFORM TEMPORARY SEDIMENT CONTROL AND STORAGE DURING THE PROPOSED CONSTRUCTION. WORK WILL GENERALLY PROCEED FROM DOWNSTREAM TO UPSTREAM IN THESE WORK AREAS. THE GENERAL CONSTRUCTION SEQUENCE IS AS FOLLOWS:

- A) INSTALL EROSION CONTROL ITEMS.
- B) STRIP TOPSOIL AND ANY UNSUITABLE MATERIAL THROUGH THE INCREMENTAL WORK AREA.
- C) INSTALL TEMPORARY DITCH CHECKS IN DOWNSTREAM END OF EXISTING DITCH WITHIN 24 HOURS FOLLOWING THE STRIPPING OPERATION.
- D) IF U/G PIPE IS CALLED FOR IN THIS PORTION OF WORK AREA, PIPE CREW WILL INSTALL PIPE AS WELL AS MANHOLES.
- E) AS PIPE INSTALLATION PROGRESSES, REPAIR OF THE ROADWAY WILL PROCEED BEHIND IT.
- F) ANY DISTURBED OR EXPOSED AREAS SHALL BE STABILIZED PER OEPA TEMPORARY AND PERMANENT STABILIZATION REGULATIONS INCLUDING:

1. SEEDING

2. DITCH MATTING

3. INLET PROTECTION

4. MULCHING

5. WATERING

EMERGENCY ACTION & SPILL PREVENTION PLAN

THE SCOPE OF WORK COVERED BY THIS PLAN INCLUDES EMERGENCY RESPONSE TO SPILLS, CONTAINMENT OF SPILLED LIQUIDS, EMERGENCY NOTIFICATION NUMBERS, AND SOIL EXCAVATION FOR SPILL CLEAN-UP.

IN THE EVENT OF A SPILL EVENT THE EMPLOYEE SHALL ASSESS THE SPILL AND IMMEDIATELY NOTIFY THE SAFETY OFFICER AND SUPERVISOR IN CHARGE, OR OTHER INDIVIDUALS AS LISTED BELOW.

TITLE	NAME	PHONE NUMBER
SITE SUPERINTENDENT		
PROJECT ENGINEER		

IMMEDIATELY AFTER NOTIFICATION, THE EMPLOYEE WILL BE DIRECTED BY THE SAFETY OFFICER, OR RESPONSIBLE PARTY TO START CONTAINMENT PROCEDURES TO PREVENT THE MATERIAL FROM REACHING THE STORM SEWERS, DRAINAGE DITCH, AND OTHER OUTLETS USING THE FOLLOWING ACTIONS OR ANY OTHER MEANS NECESSARY WITHOUT COMPROMISING WORKER SAFETY:

- 1) CLEAR PERSONNEL FROM THE SPILL AREA AND ROPE OFF AREA.
- 2) STOP THE SPILL.
- 3) USE SORBENT MATERIALS, PLUG PUTTY, OR HOLE PUTTY AS NECESSARY TO CONTROL THE SPILL AT THE SOURCE.
- 4) CONSTRUCT A TEMPORARY CONTAINMENT DIKE OF SORBENT MATERIALS OR DIRT TO CONTAIN SPILL.

SPILL KITS WILL BE LOCATED ON THE PROJECT AS DESIGNATED ON THE SWPPP PLAN.

UPON COMPLETION OF CONTAINMENT OPERATIONS, PROPER CLEAN-UP PROCEDURES WILL BE IMPLEMENTED IN ACCORDANCE WITH REGULATORY PROCEDURES.

IF THE SPILL EXCEEDS 25 GALLONS, THE FOLLOWING ORGANIZATIONS SHALL BE CONTACTED WITHIN 30 MINUTES OF THE INCIDENT:

EMERGENCY CONTACTS:	
OHIO EPA EMERGENCY RESPONSE CENTER	800-282-9378 (24-HOUR PHONE NO.)

GENERAL NOTES

THE CONTRACTOR IS HEREBY ADVISED THAT STRICTER POLLUTION CONTROL STANDARDS AND ENFORCEMENT HAVE BEEN IMPOSED BY THE OHIO EPA SINCE MARCH 10, 2003 AND WITH REVISIONS IN APRIL 2018 AND IN APRIL 2023. ALSO, MANY PRIVATE CITIZEN ENVIRONMENTAL GROUPS, WHO HAVE BEEN KNOWN TO FILE CIVIL LEGAL ACTIONS, ARE PRESENT IN THE AREA AND OBSERVE ALL CONSTRUCTION OPERATIONS.

THE CONTRACTOR SHALL INFORM ALL SUBCONTRACTORS OF THE REQUIREMENTS AND RESPONSIBILITIES OF THE SWPPP AND SHALL DOCUMENT ALL SUCH NOTIFICATIONS AND/OR DISCUSSIONS.

THE CONTRACTOR WILL BE REQUIRED TO PARTICIPATE IN SEDIMENT AND EROSION CONTROL INSPECTIONS ON A WEEKLY BASIS AND SIGN AN APPROVED INSPECTION SHEET THAT SHALL BE KEPT ON FILE AT THE JOB SITE.

UNLESS OTHERWISE NOTED, STANDARDS AND SPECIFICATIONS ESTABLISHED IN THE LATEST EDITION OF THE OEPA "RAINWATER AND LAND DEVELOPMENT" HANDBOOK SHALL GOVERN THE EROSION AND SEDIMENT CONTROL INSTALLATIONS SPECIFIED ON THIS PLAN.

THIS PROJECT WILL INVOLVE SEVERAL CONSTRUCTION PHASES AND SEQUENCING THROUGHOUT ITS LIFETIME. IT IS VERY IMPORTANT THAT ALL TEMPORARY SEDIMENT AND EROSION CONTROL (S&EC) FIELD METHODS ALONG WITH THIS PLAN, ARE UPDATED TO REFLECT THE ACTUAL FIELD CONDITIONS, CURRENT WEATHER CONDITIONS AND SITE GRADE CHANGES. THE ENGINEER OR THE OHIO EPA CAN AND WILL MODIFY THIS PLAN AS NECESSARY.

THE CONTRACTOR WILL VOLUNTARILY SELF REPORT ANY POTENTIAL VIOLATIONS OF THE OEPA NPDES PERMIT TO THE ENGINEER AND THE OEPA.

THE CONTRACTOR SHALL REMOVE EXISTING GROUND COVER ONLY AS NECESSARY FOR THE PROJECT PHASE CURRENTLY UNDER CONSTRUCTION.

CONSTRUCTION AND DEMOLITION DEBRIS SHALL BE PROPERLY DISPOSED OF ACCORDING TO OHIO EPA REQUIREMENTS.

THE CONTRACTOR WILL BE REQUIRED TO BUILD SEDIMENT BASINS OR SEDIMENT TRAPS OR USE EQUAL METHODS TO DETAIN AND CLEAN WATER TO ACCEPTABLE EPA STANDARDS BEFORE RELEASING THE WATER BACK INTO THE STREAM.

THERE SHALL BE NO TURBID DISCHARGES TO SURFACE WATERS, RESULTING FROM DEWATERING ACTIVITIES. SEDIMENT-LADEN WATER MUST PASS THROUGH A SETTLING POND, FILTER BAG, OR OTHER COMPARABLE PRACTICE, PRIOR TO DISCHARGE.

NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF.

ALL PROCESS WASTEWATER (EQUIPMENT WASHING, LEACHATE FROM ON-SITE WASTE DISPOSAL, ETC.) SHALL BE COLLECTED AND DISPOSED OF AT A PUBLICLY OWNED TREATMENT WORKS.

ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH ALL LOCAL EROSION/SEDIMENT CONTROL, WASTE DISPOSAL, SANITARY AND HEALTH REGULATIONS.

OTHER EROSION CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND IMPLEMENTATION OF ADDITIONAL EROSION CONTROL ITEMS, AT THE ENGINEER'S DISCRETION.

NO SOIL, ROCK, DEBRIS OR OTHER MATERIAL SHALL BE DUMPED OR PLACED IN ANY AREAS NOT ADEQUATELY PROTECTED BY EROSION CONTROL INSTALLATIONS.

IT IS PREFERRED TO USE PERMANENT EROSION CONTROL ITEMS AS SHOWN IN THE PLANS TO CONTROL CONSTRUCTION POLLUTION WHEN POSSIBLE. OTHERWISE, THE TEMPORARY POLLUTION PREVENTION ITEMS ARE TO BE USED.

MOST TEMPORARY S&EC METHODS, INCLUDING BUT NOT LIMITED TO, SILT FENCE AND DITCH CHECKS MAY ALL HAVE TO BE PERIODICALLY REMOVED AND REPLACED, OR MOVED FROM THE EXISTING ROAD DITCH OR STRIPPED AREAS AS WORK PROGRESSES. ANY CHANGES SHALL BE NOTED IN THE PLAN BY RED LINE AND DATED ON A CORRECTIVE ACTION LOG.

ALL TEMPORARY SEDIMENT CONTROLS AND STORM WATER QUALITY METHODS WILL BE BUILT/INSTALLED AS THE PROJECT PROGRESSES TO ELIMINATE UNNECESSARY DISTURBANCE AND REDUNDANCY. ALL TEMPORARY CONTROLS SHALL BE IN PLACE AND FUNCTIONING PROPERLY WHEN THREATENING WEATHER IS IMMINENT.

"TEMPORARY STABILIZATION" MEANS THE ESTABLISHMENT OF TEMPORARY VEGETATION, MULCHING, GEOTEXTILES, SOD, PRESERVATION OF EXISTING VEGETATION AND OTHER TECHNIQUES CAPABLE OF QUICKLY ESTABLISHING COVER OVER DISTURBED AREAS TO PROVIDE EROSION CONTROL BETWEEN CONSTRUCTION OPERATIONS.

"PERMANENT STABILIZATION" MEANS THE ESTABLISHMENT OF PERMANENT VEGETATION, DECORATIVE LANDSCAPE MULCHING, MATTING, SOD, RIP RAP AND LANDSCAPING TECHNIQUES TO PROVIDE PERMANENT EROSION CONTROL ON AREAS WHERE CONSTRUCTION OPERATIONS ARE COMPLETE OR WHERE NO FURTHER DISTURBANCE IS EXPECTED FOR AT LEAST A YEAR.

OFF-SITE TRACKING OF SEDIMENTS SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. ALL PAVED STREETS ADJACENT TO THE SITE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARP.

STABILIZATION PRACTICES

PERMANENT SEEDING AND MULCHING STABILIZATION SHALL BE PROVIDED PER OEPA GUIDELINES AS SET FORTH IN PART II.B OF OHIO EPA PERMIT NO.: OHC000006. (SEE TABLE 1)

TABLE 1: PERMANENT STABILIZATION	
AREA REQUIRING PERMANENT STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY AREAS THAT WILL LIE DORMANT FOR ONE YEAR OR MORE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE
ANY AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND AT FINAL GRADE	WITHIN TWO DAYS OF REACHING FINAL GRADE
ANY OTHER AREAS AT FINAL GRADE	WITHIN SEVEN DAYS OF REACHING FINAL GRADE WITHIN THAT AREA

TEMPORARY SEEDING AND MULCHING STABILIZATION SHALL BE PROVIDED PER OEPA GUIDELINES AS SET FORTH IN PART II.B OF OHIO EPA PERMIT NO.: OHC000006. (SEE TABLE 2)

TABLE 2: TEMPORARY STABILIZATION	
AREA REQUIRING TEMPORARY STABILIZATION	TIME FRAME TO APPLY EROSION CONTROLS
ANY DISTURBED AREAS WITH 50 FEET OF A SURFACE WATER OF THE STATE AND NOT AT FINAL GRADE	WITHIN TWO DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS
FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE	WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA
	FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOT(S).
DISTURBED AREAS THAT WILL BE IDLE OVER WINTER	PRIOR TO THE ONSET OF WINTER WEATHER

ALL TEMPORARY EROSION AND SEDIMENT CONTROL INSTALLATIONS SHALL BE REMOVED WHEN 70% VEGETATION HAS BEEN REACHED.

SEEDING & MULCHING

MULCH AND/OR OTHER APPROPRIATE VEGETATIVE PRACTICES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 7 DAYS OF GRADING IF THE AREA IS TO REMAIN DORMANT (UNDISTURBED) FOR MORE THAN 14 DAYS OR ON AREAS AND PORTIONS OF THE SITE WHICH CAN BE BROUGHT TO FINAL GRADE.

MULCH SHALL CONSIST OF UNROTTED SMALL GRAIN STRAW APPLIED AT THE RATE OF 2 TONS/AC. OR 90 LB./1000 SQ. FT. (TWO TO THREE BALES). THE STRAW MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1000-SQ.-FT. SECTIONS AND PLACE TWO 45-LB. BALES OF STRAW IN EACH SECTION.

MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR RUNOFF. THE FOLLOWING ARE ACCEPTABLE METHODS FOR ANCHORING MULCH:

- 1) MECHANICAL-USE A DISK, CRIMPER, OR SIMILAR TYPE TOOL SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT BE LEFT GENERALLY LONGER THAN 6 IN.
- 2) MULCH NETTINGS-USE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, FOLLOWING ALL PLACEMENT AND ANCHORING SUGGESTIONS. USE IN AREAS OF WATER CONCENTRATION AND STEEP SLOPES TO HOLD MULCH IN PLACE.
- 3) SYNTHETIC BINDERS-FOR STRAW MULCH, SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER. ALL APPLICATIONS OF SYNTHETIC BINDERS MUST BE CONDUCTED IN SUCH A MANNER WHERE THERE IS NO CONTACT WITH WATERS OF THE STATE.
- 4) WOOD CELLULOSE FIBER - WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. THE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 LB./ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB./100 GAL. OF WOOD CELLULOSE FIBER.

TEMPORARY SEEDING & MULCHING FOR EROSION CONTROL		
SEED TYPE	PER 1,000 SQ.FT	PER ACRE
PERENNIAL RYEGRASS	1 POUND	40 POUNDS
TALL FESCUE	1 POUND	40 POUNDS
ANNUAL RYEGRASS	1 POUND	40 POUNDS
SMALL GRAIN STRAW	90 POUNDS	2 TONS
FERTILIZER	6 POUNDS OF 10-10-10 OR 12-12-12	250 POUNDS OF 10-10-10 OR 12-12-12

NOTE: OTHER APPROVED SPECIES MAY BE SUBSTITUTED

STOCKPILE

SILT FENCING SHALL BE INSTALLED AROUND TEMPORARY SPOIL STOCKPILES. THESE STOCKPILES SHALL BE STRAW MULCHED AND/OR TEMPORARILY SEEDED WITHIN 7 WORKING DAYS IF LEFT DORMANT FOR 14 DAYS OR LONGER.

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, CONSTRUCTION ENTRANCE(S) AND SILT FENCE WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. SEDIMENT CONTROL DEVICES SHALL BE IMPLEMENTED FOR ALL AREAS REMAINING DISTURBED LONGER THAN 14 DAYS AND/OR WITHIN 7 DAYS OF ANY GRUBBING ACTIVITIES. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 14 DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN 2 DAYS OF THE LAST DISTURBANCE IF THE AREA IS WITHIN 50 FEET OF A STREAM, AND WITHIN 7 DAYS OF THE LAST DISTURBANCE IF THE AREA IS MORE THAN 50 FEET AWAY FROM A STREAM. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE BASIN.

STABILIZATION TYPE	J	F	M	A	M	J	J	A	S	O	N	D	
PERMANENT SEEDING				•	•	•	*	*	*	•	•		* IRRIGATION NEEDED
DORMANT SEEDING	•	•	•							•	•		** IRRIGATION NEEDED FOR 2-3 WEEKS AFTER SOD IS APPLIED
TEMPORARY SEEDING				•	•	•	*	*	*	•	•		
SODDING			**	**	**	**	**	**	**	**	**		
MULCHING	•	•	•	•	•	•	•	•	•	•	•	•	

INSPECTIONS

ALL BMPS ON THIS SITE SHALL BE INSPECTED BY "QUALIFIED INSPECTION PERSONNEL" ASSIGNED BY THE CONTRACTOR OR DESIGNATED REPRESENTATIVE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND BY THE END OF THE NEXT CALENDAR DAY, EXCLUDING WEEKENDS AND HOLIDAYS UNLESS WORK IS SCHEDULED, AFTER A RAIN EVENT OF 0.5 INCHES PER 24 HOUR PERIOD. A RECORD OF THESE INSPECTIONS SHALL BE MAINTAINED IN THE CONSTRUCTION OFFICE WITH THE SWPPP FOR PUBLIC VIEWING. ANY VIOLATIONS WILL BE REPORTED THROUGH THE PROJECT PERSONNEL. A RAIN GAUGE WILL BE LOCATED WITHIN THE PROJECT LIMITS.

FOLLOWING EACH INSPECTION, A CHECKLIST MUST BE COMPLETED AND SIGNED BY THE QUALIFIED INSPECTION PERSONNEL REPRESENTATIVE. AT A MINIMUM, THE INSPECTION REPORT SHALL INCLUDE:

1. THE INSPECTION DATE;
2. NAMES, TITLES, AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION;
3. WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION (OR SINCE COMMENCEMENT OF CONSTRUCTION ACTIVITY IF THE FIRST INSPECTION) INCLUDING A BEST ESTIMATE OF THE BEGINNING OF EACH STORM EVENT, DURATION OF EACH STORM EVENT, APPROXIMATE AMOUNT OF RAINFALL FOR EACH STORM EVENT (IN INCHES), AND WHETHER ANY DISCHARGES OCCURRED;
4. WEATHER INFORMATION AND A DESCRIPTION OF ANY DISCHARGES OCCURRING AT THE TIME OF THE INSPECTION;
5. LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE;
6. LOCATION(S) OF BMPS THAT NEED TO BE MAINTAINED;
7. LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION;
8. LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION; AND
9. CORRECTIVE ACTION REQUIRED INCLUDING ANY CHANGES TO THE SWP3 NECESSARY AND IMPLEMENTATION DATES.

MAINTENANCE

THE CONTRACTOR SHALL MAINTAIN, REPAIR, OR REPLACE ALL EROSION CONTROL INSTALLATIONS AS NEEDED TO ENSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL REPAIRS TO BMPS SHALL BE MADE WITHIN 3 DAYS (OR SOONER IF POSSIBLE) OF NOTIFICATION OF DEFICIENCIES. IF THE CORRECTIONS ARE NOT MADE WITHIN THE 3 DAY PERIOD, LIQUIDATED DAMAGES MAY BE ASSESSED AS PER THE ODOT CMS SECTION 108.07.

ONGOING INSPECTION OF INSTALLATIONS WILL BE PERFORMED BY THE CONTRACTOR OR DESIGNATED REPRESENTATIVE.

ANY TRAPPED SEDIMENT OR DEBRIS REMOVED DURING CLEANING OF OR REMOVAL OF BMP INSTALLATIONS SHALL BE PLACED IN AREAS NOT SUBJECT TO EROSION AND PERMANENTLY STABILIZED.

DUST CONTROL

DUST CONTROL INVOLVES PREVENTING OR REDUCING DUST FROM EXPOSED SOILS OR OTHER SOURCES DURING LAND DISTURBING, DEMOLITION AND CONSTRUCTION ACTIVITIES TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE.

THE FOLLOWING SPECIFICATIONS FOR DUST CONTROL SHALL BE FOLLOWED ONSITE:

1. VEGETATIVE COVER AND/MULCH - APPLY TEMPORARY OR PERMANENT SEEDING AND MULCH TO AREAS THAT WILL REMAIN IDLE FOR OVER 14 DAYS. SAVING EXISTING TREES AND LARGE SHRUBS WILL ALSO REDUCE SOIL AND AIR MOVEMENT ACROSS DISTURBED AREAS. SEE TEMPORARY SEEDING; PERMANENT SEEDING; MULCHING PRACTICES; AND TREE AND NATURAL AREA PROTECTION PRACTICES.
2. WATERING - SPRAY SITE WITH WATER UNTIL THE SURFACE IS WET BEFORE AND DURING GRADING AND REPEAT AS NEEDED, ESPECIALLY ON HAUL ROADS AND OTHER HEAVY TRAFFIC ROUTES. WATERING SHALL BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION. WETTING AGENTS SHALL BE UTILIZED ACCORDING TO MANUFACTURERS INSTRUCTIONS.
3. SPRAY-ON ADHESIVES - APPLY ADHESIVE ACCORDING TO THE FOLLOWING TABLE OR MANUFACTURERS' INSTRUCTIONS.

ADHESIVE	WATER DILUTION (ADHESIVE: WATER)	NOZZLE TYPE	APPLICATION RATE (GAL/AC)
LATEX EMULSION	12.5:1	FINE	235
RESIN IN WATER ACRYLIC EMULSION (NO TRAFFIC)	4:1	FINE	300
ACRYLIC EMULSION (NO TRAFFIC)	7:1	COARSE	450
ACRYLIC EMULSION (TRAFFIC)	3.5:1	COARSE	350


PERMITTEE

NAME
ADDRESS1
ADDRESS2
PHONE:
FAX:
CONTACT:
EMAIL:

GENERAL PERMIT: OHC0000006

NPDES PERMIT: XXXXXXXXX


DATE OF ISSUE: XX/XX/XXXX




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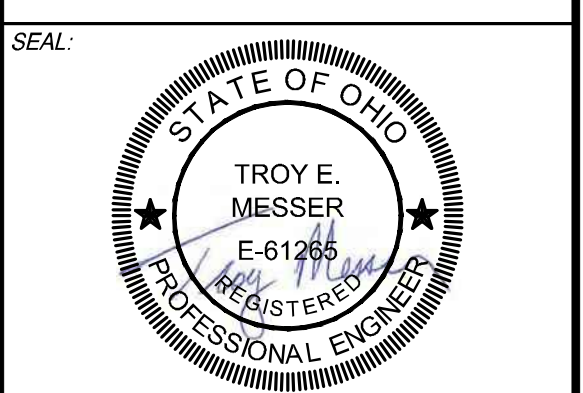


Clermont Metropolitan Housing Authority
CMHA
1961



CREATIVE HOUSING
SOLUTIONS

SEAL:



TROY E.
MESSER
E-61265
REGISTERED
PROFESSIONAL ENGINEER

NO.	DATE	DESCRIPTION
01	02/20/2026	PERMIT SET
02	03/06/2026	REVISION 1

VETERAN'S VILLAGE

2139 STATE ROUTE 125
MONROE TOWNSHIP
CLERMONT COUNTY, OHIO

PROJECT NO: 250235.001

DATE: 01.30.2026

SCALE: NOT TO SCALE

SHEET NAME: EROSION CONTROL NOTES

SHEET NO. C108

SPILL PREVENTION

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

GOOD HOUSEKEEPING:

- 1. AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
- 2. ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
- 3. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
- 4. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- 5. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
- 6. MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.
- 7. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.

HAZARDOUS PRODUCTS:

- 1. PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
- 2. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
- 3. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

- 1. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
- 2. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
- 3. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- 4. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE. SPILLS OF 25 OR MORE GALLONS OF PETROLEUM WASTE MUST BE REPORTED TO OHIO EPA (1-800-282-9378), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MINUTES OF THE SPILL. ALL SPILLS, WHICH RESULT IN CONTACT WITH WATERS OF THE STATE, MUST BE REPORTED TO THE OHIO EPA'S HOTLINE.
- 5. SOILS CONTAMINATED BY PETROLEUM OR OTHER CHEMICAL SPILLS MUST BE TREATED/DISPOSED AT AN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITY OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITY (TSDF).
- 6. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.
- 7. THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE.

PRODUCT SPECIFIC PRACTICES

PETROLEUM PRODUCTS

ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURERS' RECOMMENDATIONS.

FUEL STORAGE TANKS SHALL BE LOCATED AWAY FROM SURFACE WATERS AND STORM SEWER SYSTEM INLETS. FUEL TANKS SHALL BE STORED IN A DIKED AREA CAPABLE OF HOLDING 150% OF THE TANK CAPACITY.

FERTILIZERS

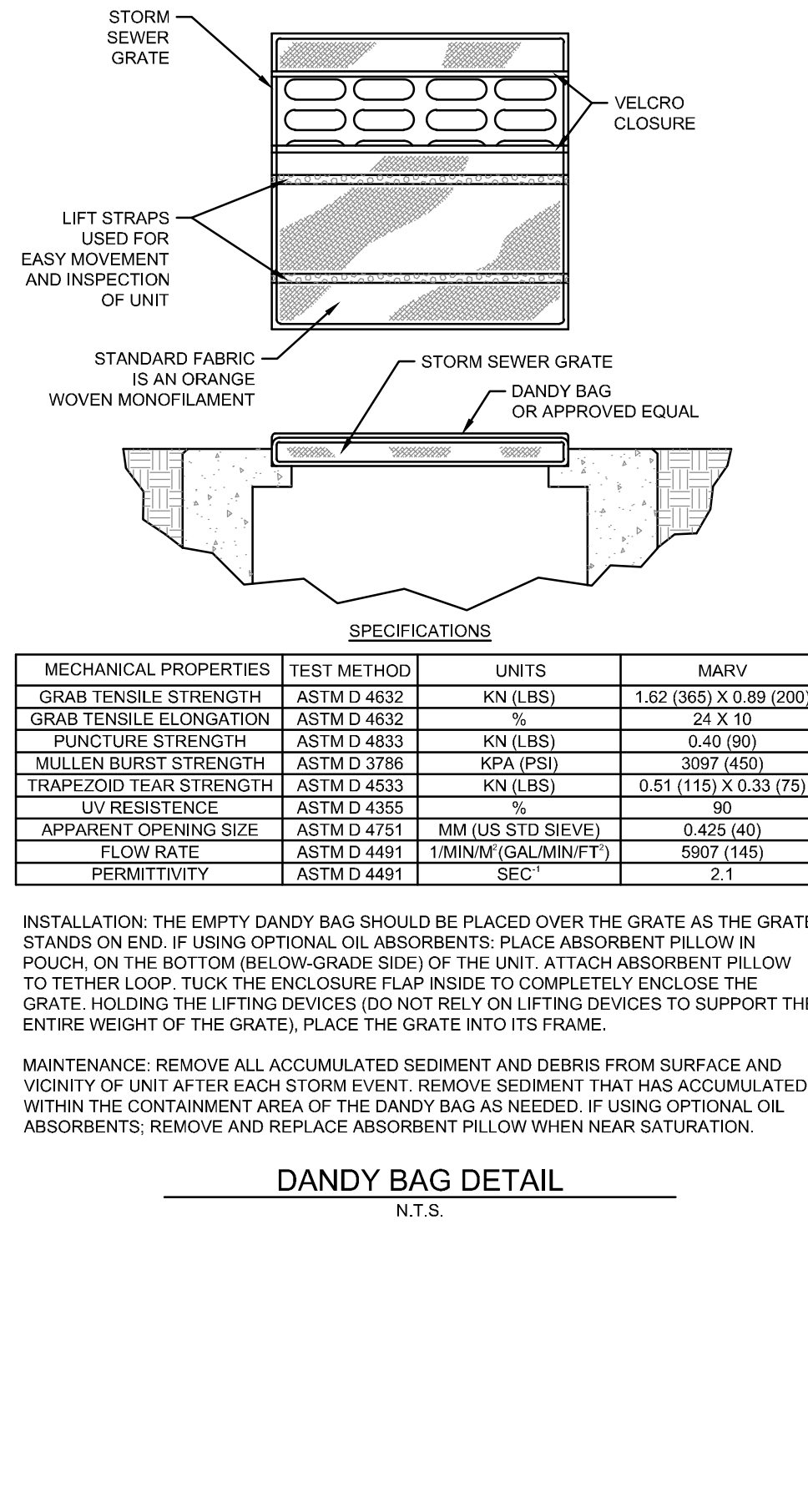
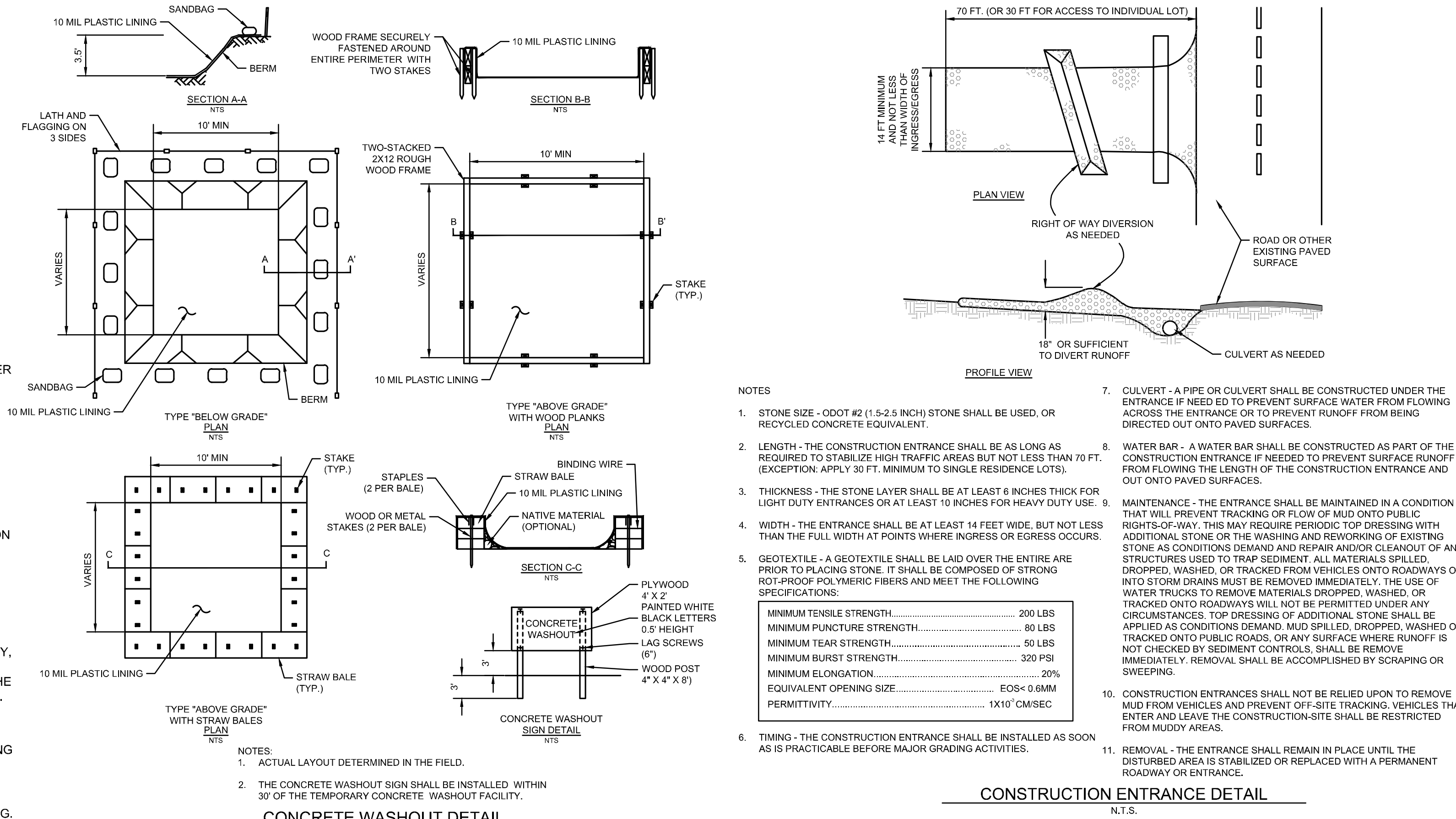
FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER, ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS

ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE, EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE WASH WATER/WASH OUTS

CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW TO STREAMS, DITCHES, STORM DRAINS, OR ANY OTHER WATER CONVEYANCE. A SUMP OR PIT WITH NO POTENTIAL FOR DISCHARGE SHALL BE CONSTRUCTED IF NEEDED TO CONTAIN CONCRETE WASH WATER. FIELD TILE OR OTHER SUBSURFACE DRAINAGE STRUCTURES WITHIN 10 FT. OF THE SUMP SHALL BE CUT AND PLUGGED. FOR SMALL PROJECTS, TRUCK CHUTES MAY BE RINSED ON THE LOT AWAY FROM ANY WATER CONVEYANCES.



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Clermont Metropolitan Housing Authority

1967

CREATIVE HOUSING SOLUTIONS

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NO. DATE DESCRIPTION
01 02/20/2026 PERMIT SET
02 03/06/2026 REVISION 1

VETERAN'S VILLAGE

2139 STATE ROUTE 125
MONROE TOWNSHIP
CLERMONT COUNTY, OHIO

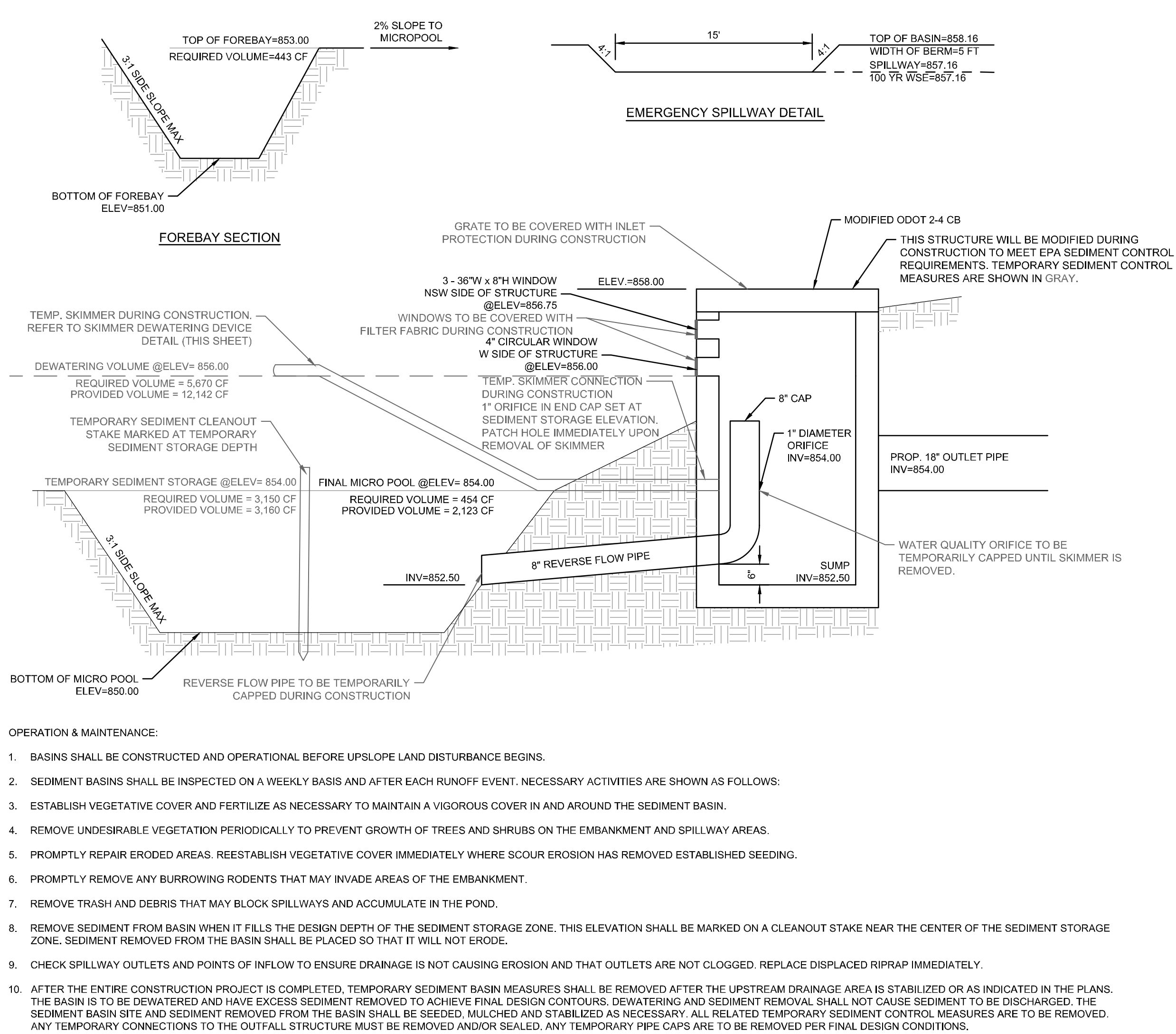
PROJECT NO: 250235.001

DATE: 01.30.2026

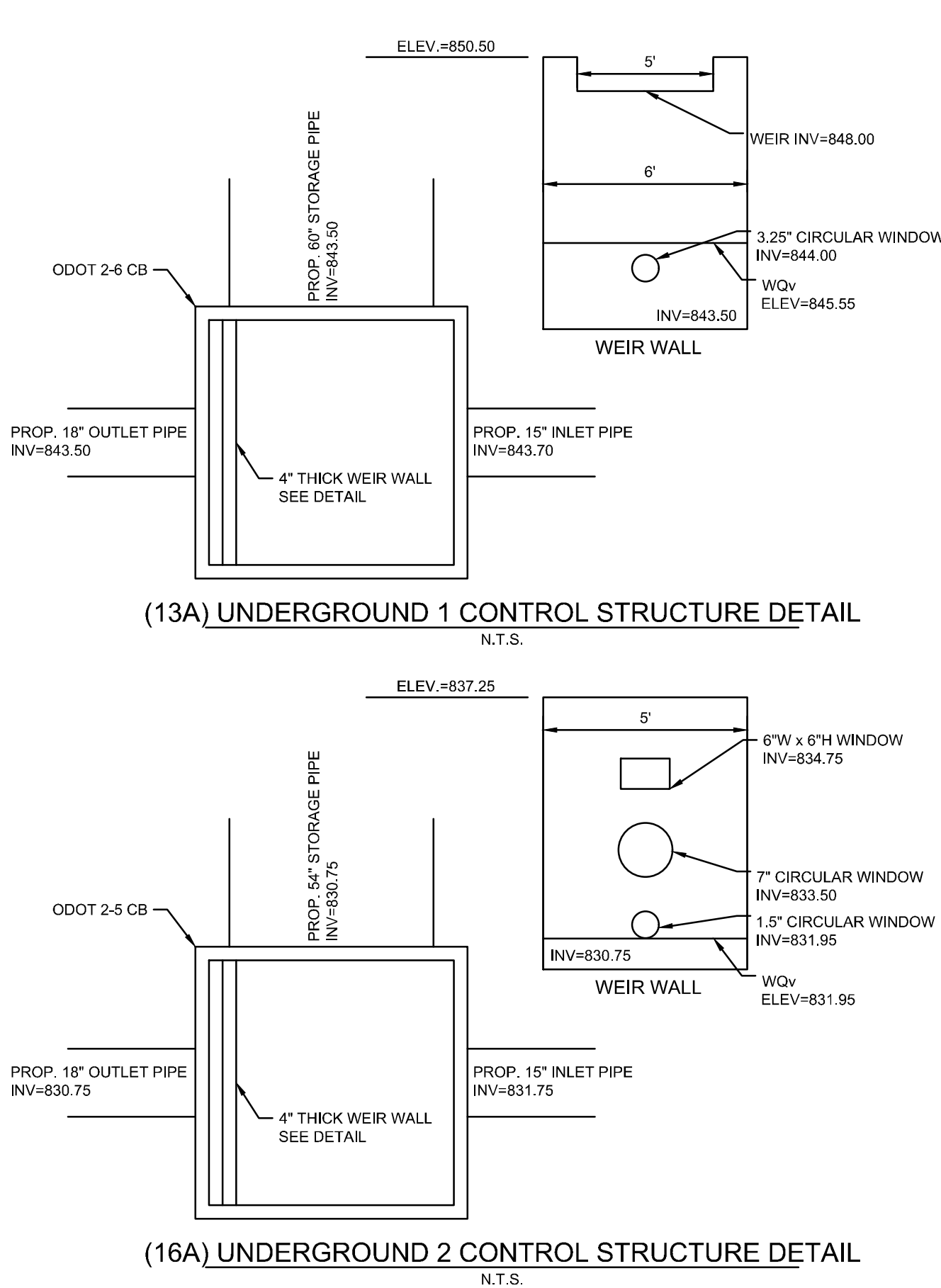
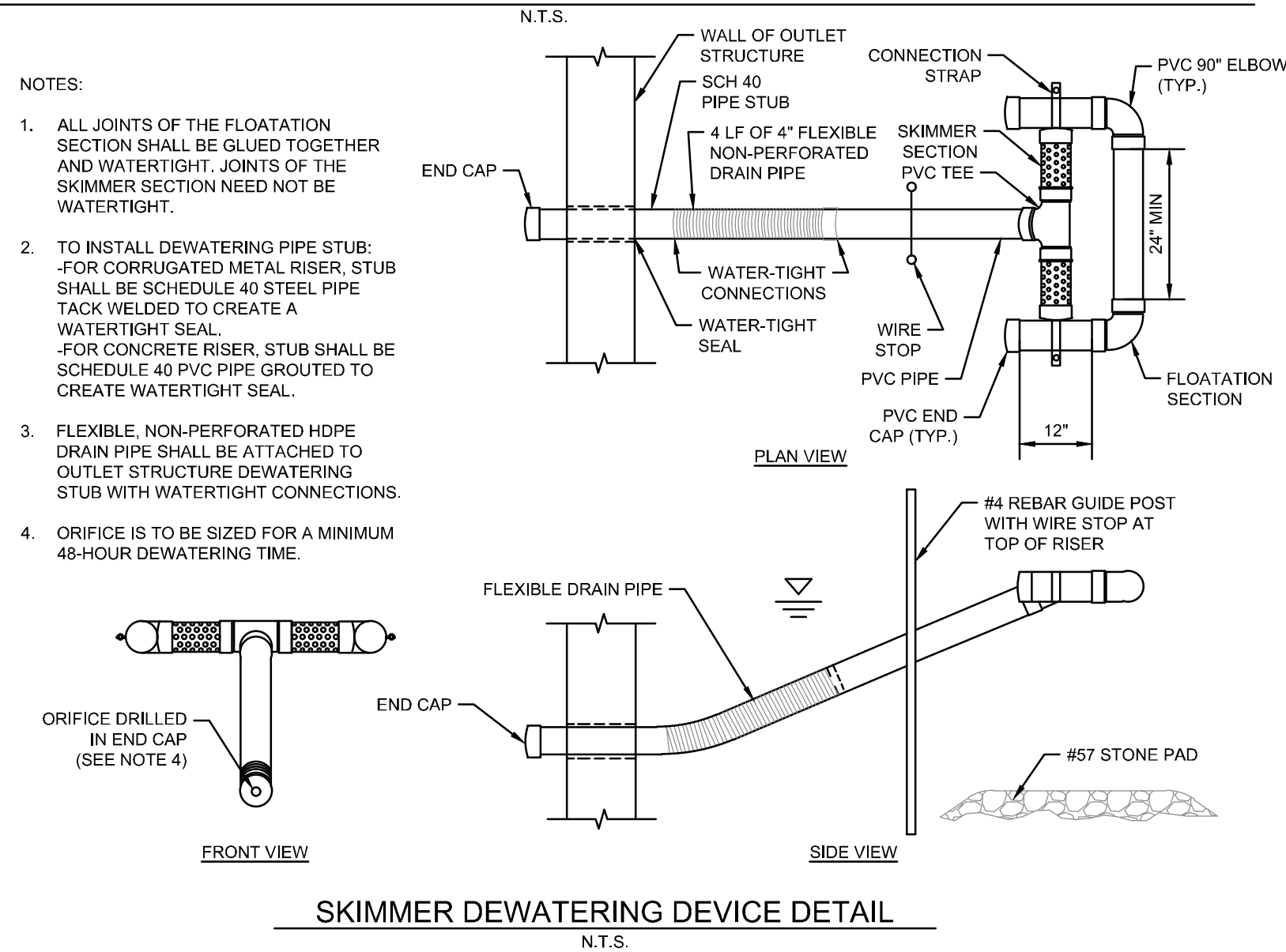
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SHEET NAME: EROSION CONTROL NOTES AND DETAILS

SHEET NO. C109



(2) DETENTION & WATER QUALITY OUTFALL / TEMPORARY SEDIMENT BASIN STRUCTURE DETAIL



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VETERAN'S VILLAGE

2139 STATE ROUTE 125
MONROE TOWNSHIP
CLERMONT COUNTY, OHIO

PROJECT NO: 250235.001

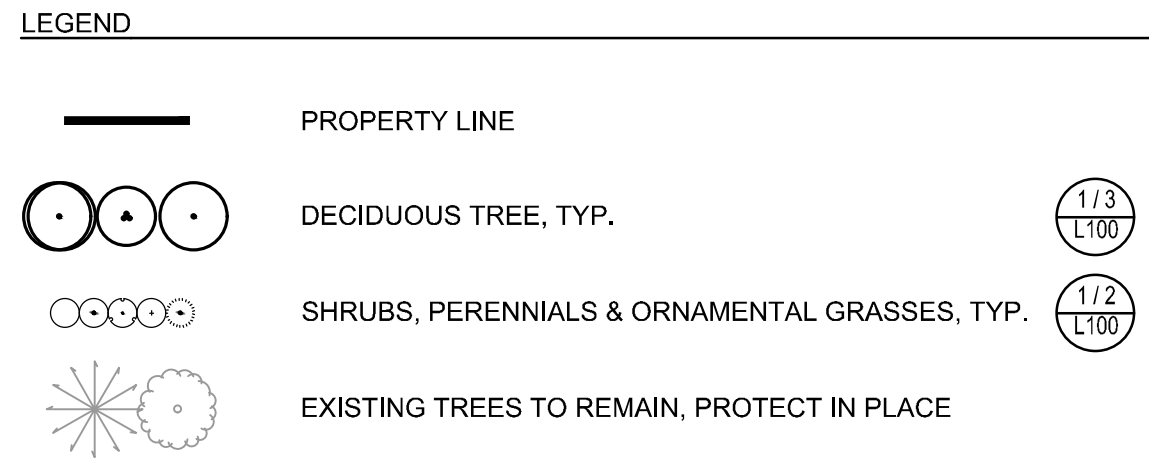
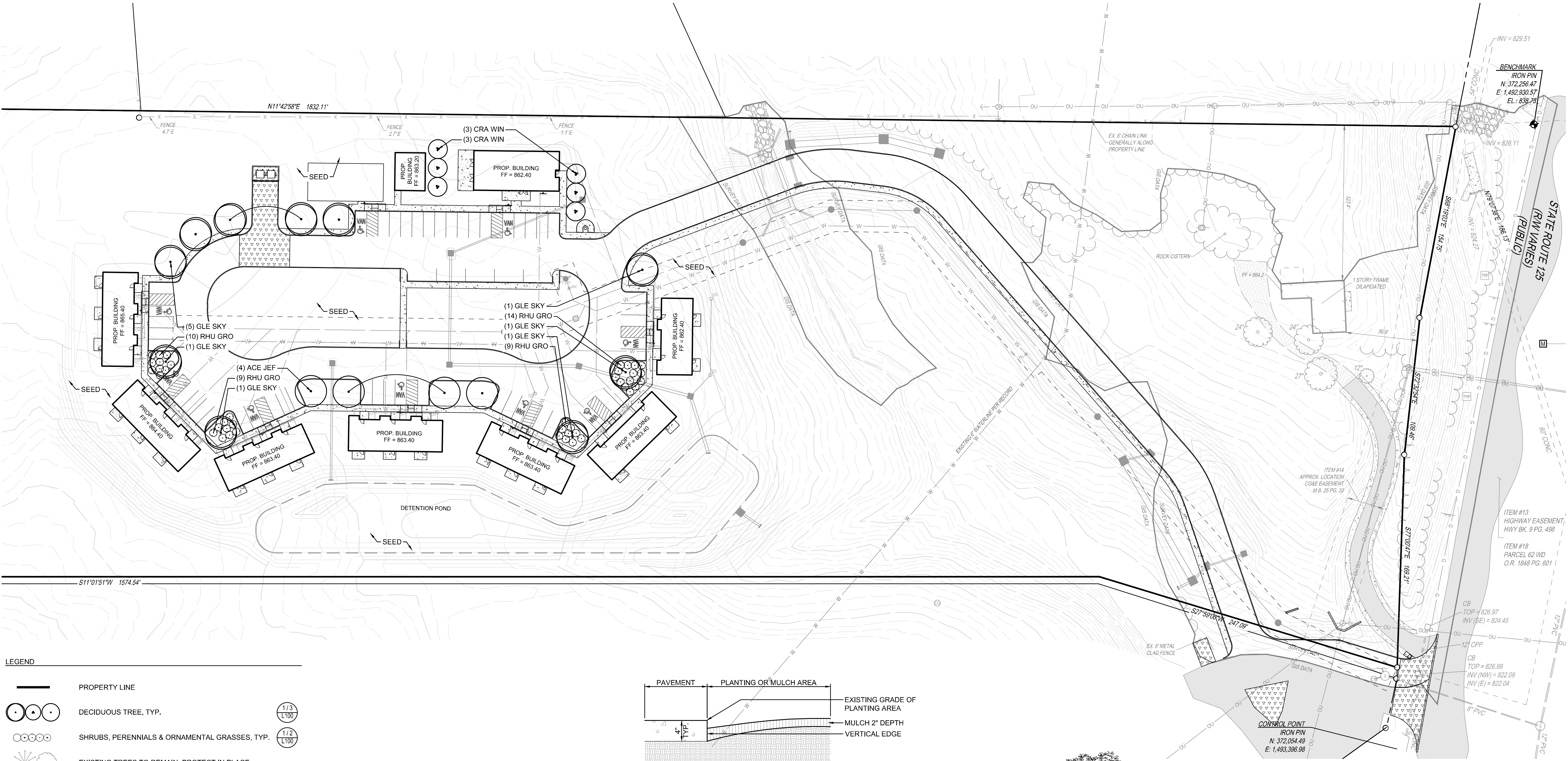
DATE: 01.30.2026

SCALE: NOT TO SCALE

SHEET NAME: DETENTION OUTFALL DETAILS

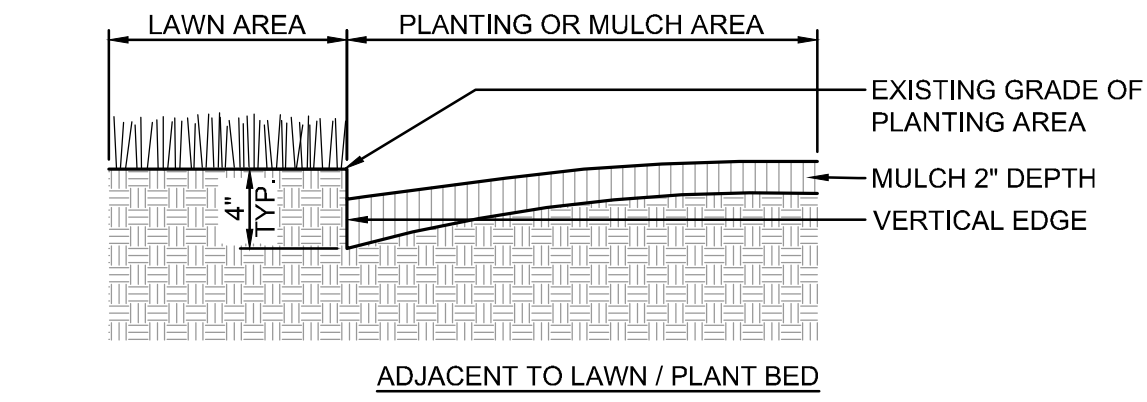
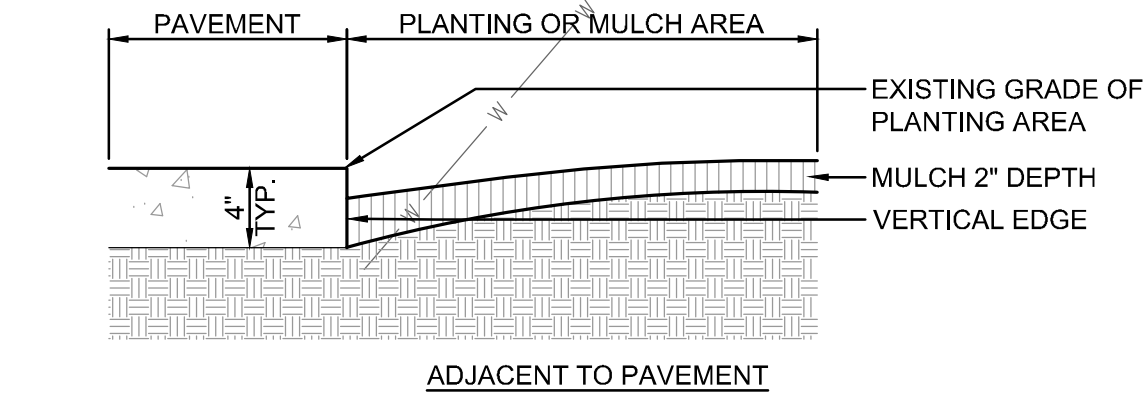
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Before You Dig

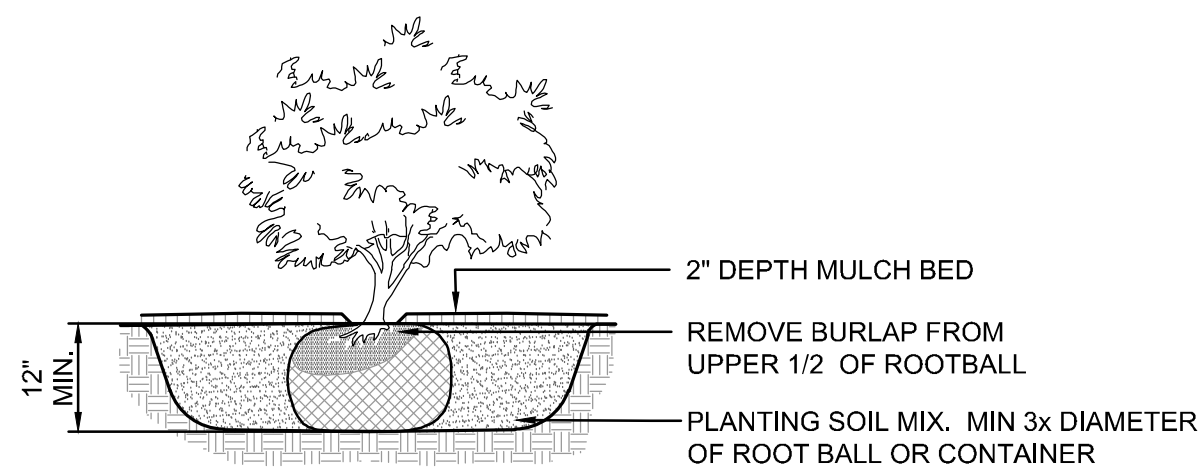


- PLANTING NOTES
- EACH CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES.
 - CONTRACTOR SHALL VERIFY ALL PLANTING CONDITIONS FOR OBSTRUCTIONS, EXISTING TREE CANOPY COVERAGE, AND OVERHEAD ELECTRICAL POWER LINES PRIOR TO PLANTING. IF ADVERSE PLANTING CONDITIONS ARE OBSERVED, CONTACT THE OWNERS REPRESENTATIVE IMMEDIATELY.
 - ALL SHRUB MASSES TO BE INCORPORATED BY A CONTINUOUS MULCH BED TO LIMITS SHOWN AND AS SPECIFIED. MULCH BEDS TO HAVE A NEAT, EDGED APPEARANCE.
 - SUBSURFACE IMPROVEMENTS SHALL BE OBSERVED. THE CONTRACTOR SHALL CONTACT THE OHIO UTILITIES PROTECTION SERVICE (OUPS) 48 HOURS PRIOR TO ANY EXCAVATION OR DIGGING TO ENSURE THE LOCATION OF UNDERGROUND UTILITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT SUCH UNDERGROUND UTILITIES.
 - ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE FINE GRADED AND SEEDED.
 - ALL TREES WITHIN A SPECIES SHALL HAVE MATCHING FORM.
 - THE CONTRACTOR SHALL ENSURE THAT ALL NEWLY PLANTED TREES ARE PERFECTLY ALIGNED AND SET PLUMB WITH PROPER RELATIONSHIP TO THE SURROUNDING GRADE. CONFIRM FINISHED GRADE PRIOR TO PLANTING.
 - ALL PLANT MATERIAL SHALL BE OF THE SIZE AND TYPE SPECIFIED. IF SUBSTITUTIONS ARE APPROVED BY THE OWNER'S REPRESENTATIVE, THE SIZE AND GRADING STANDARDS SHALL CONFORM TO THOSE OF AMERICANHORT.
 - PRIOR TO ORDERING PLANT MATERIAL, THE CONTRACTOR SHALL VERIFY ALL PLANT QUANTITIES AND NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES BETWEEN THE PLAN, LABELS, AND PLANT SCHEDULE.

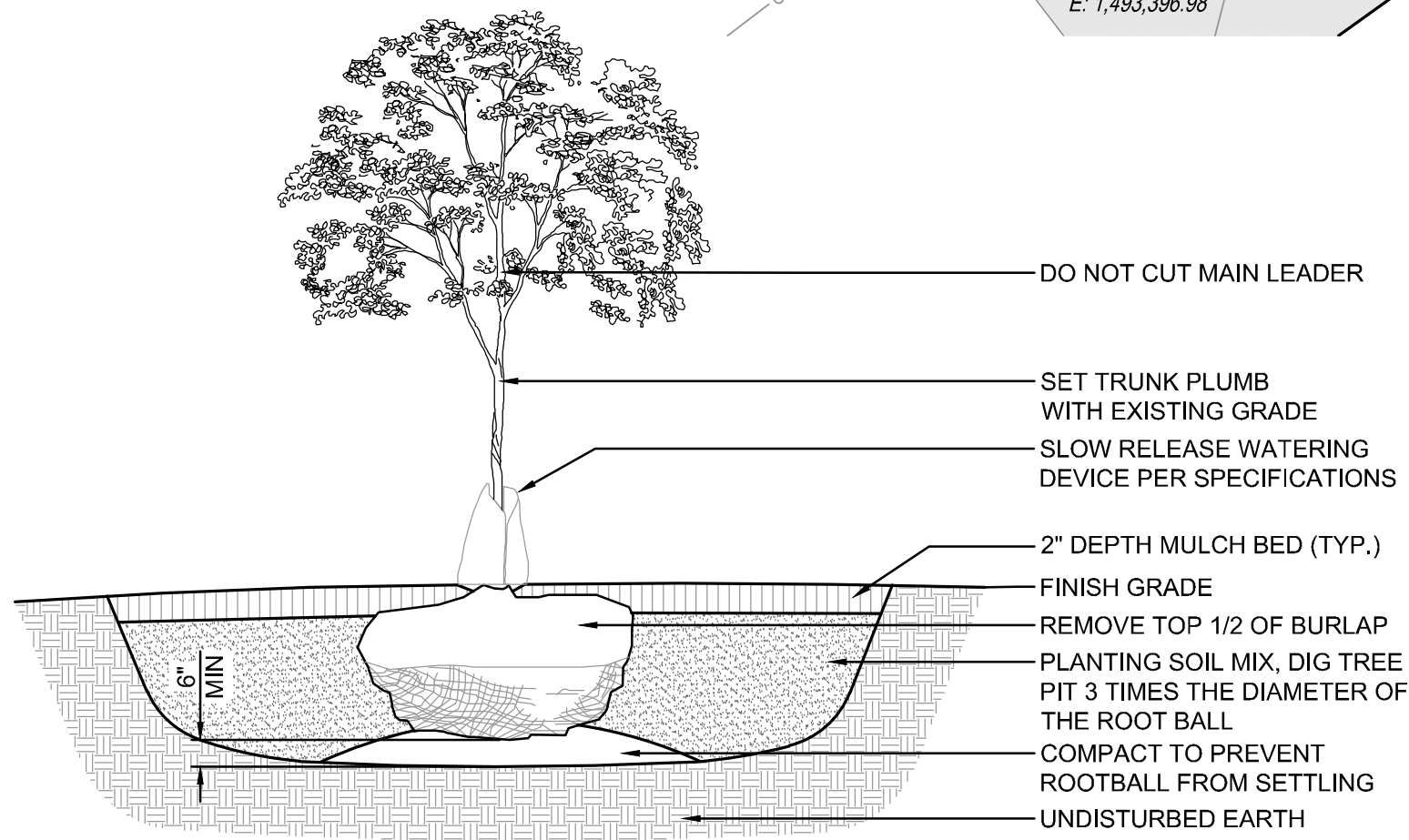
PLANT SCHEDULE					
KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	REMARKS
DECIDUOUS TREES:					
ACE JEF	ACER x FREEMANII 'JEFFERSRED'	AUTUMN BLAZE MAPLE	2.5" CAL. MIN.	B&B	
GLE SKY	GLEDTISIA TRIACANTHOS INERMIS 'SKYLINE'	SKYLINE HONEYLOCUST	2.5" CAL. MIN.	B&B	
ORNAMENTAL TREES:					
CRA WIN	CRATAEGUS VIRIDIS 'WINTER KING'	WINTER KING HAWTHORN	7' HT. MIN.	B&B	MULTI-STEM
SHRUBS:					
RHU GRO	RHUS AROMATICA 'GRO-LOW'	GRO-LOW SUMAC	18" HT. MIN.	CONT.	PLANT 5' O.C.
TURFGRASS SEED: SEE SPECIFICATIONS					



1 PLANTING BED / TREE PIT EDGING DETAIL N.T.S.



2 SHRUB PLANTING N.T.S.



- NOTES:
- TOP OF ROOT BALL TO BE 2"-3" ABOVE ADJACENT FINISHED GRADE.
 - REMOVE ALL LABELS, TAGS, OR OTHER FOREIGN MATERIALS FROM LIMBS.
 - THE AMOUNT OF PRUNING SHALL BE LIMITED TO THE MINIMUM NECESSARY TO REMOVE DEAD OR INJURED TWIGS AND BRANCHES AND TO COMPENSATE FOR THE LOSS OF ROOTS DURING TRANSPLANTING. RETAIN NORMAL SHAPE OF TREE. OWNER'S REPRESENTATIVE WILL DETERMINE AMOUNT OF PRUNING NECESSARY. PLANT TREES AT SAME GRADE AS GROWN IN THE NURSERY.
 - DO NOT STAKE AND GUY TREES UNLESS NEEDED FOR STABILITY BASED ON SITE CONDITIONS OR A DIRECTED BY OWNER'S REPRESENTATIVE.
 - PROVIDE SLOW RELEASE WATERING DEVICE. ONE PER TREE. REFER TO SPECIFICATIONS.
- 3 DECIDUOUS TREE PLANTING WITH WATERING DEVICE N.T.S.



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SEAL:

TROY E. MESSER
E-61265
REGISTERED PROFESSIONAL ENGINEER

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01	02/20/2026	PERMIT SET
02	03/06/2026	REVISION 1

VETERAN'S VILLAGE

2139 STATE ROUTE 125
MONROE TOWNSHIP
CLERMONT COUNTY, OHIO

PROJECT NO: 250235.001

DATE: 01.30.2026

SCALE:

0 20 40 80

SHEET NAME:

PLANTING PLAN

SHEET NO.

L100

PLANTING SOIL SPECIFICATION

THE WORK OF THIS SECTION CONSISTS OF PROVIDING ALL LABOR, EQUIPMENT, MATERIALS, INCIDENTAL WORK, AND CONSTRUCTION METHODS NECESSARY TO PROVIDE AND PLACE PLANTING SOILS AS INDICATED ON THE CONTRACT DOCUMENTS AND AS SPECIFIED IN THIS SECTION. THE INSTALLATION OF ALL NEW MATERIALS SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTION, AND IN ACCORDANCE WITH ALL APPROVED SHOP DRAWINGS.

1. MIXING, AMENDING AND MANUFACTURING PLANTING SOILS FROM BASE COMPONENTS.
2. SOIL TESTING.
3. PLACING, SPREADING AND GRADING OF PLANTING SOIL.

THE ENGINEER SHALL BE NOTIFIED PRIOR TO BEGINNING PLANTING OPERATIONS.

REFER TO THE OHIO DEPARTMENT OF TRANSPORTATION CONSTRUCTION AND MATERIAL SPECIFICATIONS (CURRENT EDITION) AND ALL CONSTRUCTION WORK SHALL BE DONE ACCORDING TO SAID SPECIFICATIONS AND IN ACCORDANCE WITH APPLICABLE STANDARDS OF THE GOVERNING AGENCIES. WHEN IN CONFLICT, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.

GENERAL: THE CONTRACTOR IS RESPONSIBLE FOR BALANCING THE SITE EARTHWORK BY IMPORTING, EXPORTING, OR AMENDING ONSITE TOPSOIL AS NECESSARY TO ACHIEVE DESIGN GRADES AND SPECIFICATIONS.

SOIL-TESTING LABORATORY QUALIFICATIONS:
AN INDEPENDENT LABORATORY OR UNIVERSITY LABORATORY, RECOGNIZED BY THE STATE DEPARTMENT OF AGRICULTURE, WITH THE EXPERIENCE AND CAPABILITY TO CONDUCT THE TESTING INDICATED AND THAT SPECIALIZES IN TYPES OF TESTS TO BE PERFORMED.

SOIL ANALYSIS:
FOR EACH UNAMENDED SOIL TYPE, FURNISH SOIL ANALYSIS AND A WRITTEN REPORT BY A QUALIFIED SOIL-TESTING LABORATORY STATING PERCENTAGES OF ORGANIC MATTER; GRADATION OF SAND, SILT, AND CLAY CONTENT; CATION EXCHANGE CAPACITY; DELETERIOUS MATERIAL; PH; AND MINERAL AND PLANT-NUTRIENT CONTENT OF THE SOIL. TESTING METHODS AND WRITTEN RECOMMENDATIONS SHALL COMPLY WITH USDA'S HANDBOOK NO. 60. THE SOIL-TESTING LABORATORY SHALL OVERSEE SOIL SAMPLING, WITH DEPTH, LOCATION, AND NUMBER OF SAMPLES TO BE TAKEN PER INSTRUCTIONS FROM ARCHITECT. A MINIMUM OF THREE REPRESENTATIVE SAMPLES SHALL BE TAKEN FROM VARIED LOCATIONS FOR EACH SOIL TO BE USED OR AMENDED FOR PLANTING PURPOSES. REPORT SUITABILITY OF TESTED SOIL FOR PLANT AND TURF GROWTH SPECIFIC TO THIS PROJECT. BASED ON THE TEST RESULTS, STATE RECOMMENDATIONS FOR SOIL TREATMENTS AND SOIL AMENDMENTS TO BE INCORPORATED. STATE RECOMMENDATIONS IN WEIGHT PER 1000 SQ. FT. OR VOLUME PER CU. YD. FOR NITROGEN, PHOSPHORUS, AND POTASH NUTRIENTS AND SOIL AMENDMENTS TO BE ADDED TO PRODUCE SATISFACTORY PLANTING SOIL SUITABLE FOR HEALTHY, VIABLE PLANTS. REPORT PRESENCE OF PROBLEM SALTS, MINERALS, OR HEAVY METALS, INCLUDING ALUMINUM, ARSENIC, BARIUM, CADMIUM, CHROMIUM, COBALT, LEAD, LITHIUM, AND VANADIUM. IF SUCH PROBLEM MATERIALS ARE PRESENT, PROVIDE ADDITIONAL RECOMMENDATIONS FOR CORRECTIVE ACTION

PLANTING SOIL:
TOPSOIL STOCKPILED FROM ON-SITE STRIPPING SHALL BE UTILIZED FOR REUSE. AMEND ALL TOPSOIL ON-SITE BY MIXING WITH SAND AND COMPOST TO MANUFACTURE SPECIFIED SOIL MIX. IN THE EVENT THAT THERE IS AN INSUFFICIENT AMOUNT OF ON-SITE TOPSOIL TO COMPLETE THE PROJECT, ADDITIONAL TOPSOIL FROM OFF-SITE SOURCES SHALL BE PROVIDED FOR MIXING WITH SAND AND COMPOST TO MANUFACTURE THE SPECIFIED SOIL MIX. ANY AMENDMENTS USED TO MANUFACTURE A SOIL TO BE IMPORTED SHALL MEET THE SPECIFICATIONS DEFINED BELOW.

AMENDED TOPSOIL:
THE ON-SITE SOIL OR ANY IMPORTED TOPSOIL SHALL BE AMENDED WITH THE SPECIFIED SAND OR COMPOST TO PRODUCE A SOIL MEETING THE FOLLOWING CRITERION, AS DETERMINED BY ASTM F1632 OR D422:

1. SAND: (0.05 TO 2.0 MM) 65% - 75% WITH AT LEAST 50% OF THE TOTAL SAND FALLING INTO THE MEDIUM AND COARSE SAND FRACTIONS AND NO MORE THAN 25% OF THE TOTAL SAND IN THE FIN AND VERY FINE SAND FRACTIONS.
2. SILT: (0.002 TO 0.05 MM) 15% - 25%
3. CLAY: (<0.002 MM) 5% - 15%
4. GRAVEL: (>2.0 MM) <15% MAXIMUM SIZE SHALL BE THREE EIGHTS (3/8") INCHES LARGEST DIAMETER

THE AMENDED SOIL SHALL HAVE AN ORGANIC MATTER CONTENT OF 5 TO 6% (BY WEIGHT) AS DETERMINED BY ASTM F1647. FOR BIDDING PURPOSES, THE AMOUNT OF COMPOST REQUIRED TO INCREASE THE ORGANIC MATTER CONTENT TO MEET THE SPECIFICATIONS CAN RANGE FROM 30 TO 50% BY VOLUME, DEPENDING ON THE QUALITY OF THE COMPOST.

RATIO OF THE PARTICLE SIZE FOR 80% PASSING (D80) TO THE PARTICLE SIZE FOR 30% PASSING (D30) SHALL BE 5.5 OR LESS (D80/D30 <8).

THE AMENDED SOIL SHALL HAVE A MINIMUM PERCOLATION RATE OF 0.50-INCH PER HOUR WITH THE SOIL COMPACTED TO 88% OF MAXIMUM STANDARD PROCTOR DENSITY (ASTM D698).

THE PLANTING SOIL MEETING THIS SPECIFICATION SHALL SERVE AS THE BASELINE FOR SUBSEQUENT QUALITY CONTROL TESTING. SAMPLES SHALL BE TAKEN EVERY 1000 YARDS FOR CONFORMITY TO THE SPECIFICATIONS. QUALITY CONTROL TESTING SHALL INCLUDE ORGANIC MATTER CONTENT AND PARTICLE SIZE ANALYSIS.

THE FINAL SOIL MIX SHALL BE SUBMITTED TO TESTING AGENCY TO DETERMINE THE FERTILITY STATUS OF THE SOIL.

SAND:
SAND SHALL BE BLENDED INTO THE TOPSOIL IN THE PROPER AMOUNT TO ACHIEVE THE PARTICLE SIZE DISTRIBUTION DESCRIBED IN THESE SPECIFICATIONS. SAND FOR USE AS A SOIL AMENDMENT SHALL BE WASHED NATURAL OR CLASSIFIED SAND MEETING THE FOLLOWING PARTICLE SIZE DISTRIBUTION AS DETERMINED BY ASTM C-136 OR F1632. IN ADDITION, THE SAND SHALL HAVE A COEFFICIENT OF UNIFORMITY (D60/D10) OF LESS THAN 4.0.

	SIEVE	SIEVE SIZE	% PASSING
NO. 4		4.75 MM	100%
NO. 8		2.38 MM	90 - 100%
NO. 16		1.19 MM	80 - 100%
NO. 30		0.60 MM	25 - 60%
NO. 50		0.30 MM	0 - 25%
NO. 100		0.15 MM	0 - 5%
NO.270		0.075 MM	0 - 3%

PLANTING SOIL MAY BE ALTERED, UPON APPROVAL OF THE ENGINEER, BY ADDING APPROVED CONDITIONERS. CONDITIONERS SHALL CONFORM TO ODOT ITEM 653 AS DETERMINED BY THE ENGINEER.

MIXING PLANTING SOIL: SOIL ADDITIVES SHALL BE THOROUGHLY INCORPORATED INTO PLANTING SOIL BY HARROWING OR OTHER METHODS STANDARD TO THE INDUSTRY. CORRECT DEFICIENCIES IN SOIL AS DIRECTED BY HORTICULTURAL SOIL TEST RESULTS. THOROUGHLY INCORPORATE AMENDMENTS INTO PLANTING MIXTURE TO ENSURE EVEN DISTRIBUTION.

PREPARATION OF THE SUBGRADE IN LANDSCAPE AREAS:
PRIOR TO THE PLACEMENT OF PLANTING SOIL AND THE ESTABLISHMENT OF THE FINISHED GRADE, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO INSPECT THE SUBGRADE FOR SUITABILITY FOR PLANTING. IF SUBSURFACE BEDROCK, SHALE, OR OTHER OBSTRUCTIONS ARE ENCOUNTERED IN THE SUBGRADE, THE ENGINEER MAY SELECT ALTERNATE LOCATIONS FOR PLANT PLACEMENTS. WHERE LOCATIONS CANNOT BE CHANGED, THE UNSUITABLE MATERIAL OR OBSTRUCTION SHALL BE REMOVED TO A DEPTH, NO LESS, THAN 6" BELOW BOTTOM OF THE ROOT BALL WHEN THE PLANT IS PROPERLY SET AT THE REQUIRED GRADE. THE ADDITIONAL EXCAVATION SHALL BE FILLED WITH A SUITABLE CLEAN SOIL MATERIAL FREE OF ROCK AND CONSTRUCTION DEBRIS AND SUITABLE FOR THE PLANTING SUBGRADE AS DETERMINED BY THE ENGINEER.

PLANTING SOIL PLACEMENT: PLACE PLANTING SOIL IN TWO LIFTS. PLACE THE FIRST LIFT TO A DEPTH OF 2 INCHES AND HARROW OR TILL THE LOAM INTO THE UNDERLYING SUBSOIL TO A DEPTH OF 2 INCHES, CREATING A BLENDED INTERFACE OF LOAM AND SUBSOIL APPROXIMATELY 4 INCHES DEEP. THE CONTRACTOR SHALL INSTALL PLANTING SOIL IN SUCCESSIVE HORIZONTAL LIFTS NO THICKER THAN 6 INCHES IN TURF AREAS AND 12 INCHES IN PLANT BED AREAS TO THE DESIRE COMPACTION AS DESCRIBED HEREIN. THE CONTRACTOR SHALL INSTALL THE SOIL AT A HIGHER LEVEL TO ANTICIPATE ANY REDUCTION OF PLANTING SOIL VOLUME DUE TO COMPACTION, SETTLING, EROSION, DECOMPOSITION, AND OTHER SIMILAR PROCESSES DURING THE WARRANTY PERIOD.

PLANTING SOIL DEPTHS:
1. PLANTING SOIL DEPTH FOR TREE PITS SHALL BE 30 INCHES BY THREE TIMES THE DIAMETER OF THE ROOT BALL MINIMUM.
2. PLANTING SOIL DEPTH IN ALL PLANTING BEDS CONTAINING SHRUBS, PERENNIALS, ORNAMENTAL GRASSES AND GROUNDCOVER SHALL BE 12 INCHES MINIMUM.
3. PLANTING SOIL DEPTH IN ALL TURF GRASS AREAS SHALL BE 6 INCHES MINIMUM.

PREPARATION OF FINISHED GRADE:
THE PREPARATION OF PLANTING AREAS MAY BEGIN PRIOR TO THE SPECIFIED PLANTING SEASON PROVIDED THE FINISHED GRADE HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER, AND PROVIDED THAT IN THE JUDGEMENT OF THE ENGINEER, THE GENERAL CONSTRUCTION WORK IS SUFFICIENTLY ADVANCED.

TURF AND GRASSES SPECIFICATION

THE WORK OF THIS SECTION CONSISTS OF PROVIDING ALL LABOR, EQUIPMENT, MATERIALS, INCIDENTAL WORK, AND CONSTRUCTION METHODS NECESSARY TO PROVIDE AND PLACE TURF AND MEADOW SEEDING AS INDICATED ON THE CONTRACT DOCUMENTS AND AS SPECIFIED IN THIS SECTION. THE INSTALLATION OF ALL NEW MATERIALS SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTION, AND IN ACCORDANCE WITH ALL APPROVED SHOP DRAWINGS.

1. SEEDING.
2. SODDING.
3. HYDROSEEDING.
4. TURF RENOVATION.
5. EROSION-CONTROL MATERIAL(S).

DEFINITIONS

1. FINISH GRADE: ELEVATION OF FINISHED SURFACE OF PLANTING SOIL.
2. PESTICIDE: A SUBSTANCE OR MIXTURE INTENDED FOR PREVENTING, DESTROYING, REPELLING, OR MITIGATING A PEST. PESTICIDES INCLUDE INSECTICIDES, MITICIDES, HERBICIDES, FUNGICIDES, RODENTICIDES, AND MOLLUSCICIDES. THEY ALSO INCLUDES SUBSTANCES OR MIXTURES INTENDED FOR USE AS A PLANT REGULATOR, DEFOLIANT, OR DESICCANT.
3. PESTS: LIVING ORGANISMS THAT OCCUR WHERE THEY ARE NOT DESIRED OR THAT CAUSE DAMAGE TO PLANTS, ANIMALS, OR PEOPLE. PESTS INCLUDE INSECTS, MITES, GRUBS, MOLLUSKS (SNAILS AND SLUGS), RODENTS (GOPHERS, MOLES, AND MICE), UNWANTED PLANTS (WEEDS), FUNGI, BACTERIA, AND VIRUSES.
4. PLANTING SOIL: EXISTING, ON-SITE SOIL; IMPORTED SOIL; OR MANUFACTURED SOIL THAT HAS BEEN MODIFIED WITH SOIL AMENDMENTS AND PERHAPS FERTILIZERS TO PRODUCE A SOIL MIXTURE BEST FOR PLANT GROWTH. SEE "PLANTING SOIL" SPECIFICATION.
5. SUBGRADE: THE SURFACE OR ELEVATION OF SUBSOIL REMAINING AFTER EXCAVATION IS COMPLETE, OR THE TOP SURFACE OF A FILL OR BACKFILL BEFORE PLANTING SOIL IS PLACED.

PREINSTALLATION MEETINGS: PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE.

SUBMITTALS

1. QUALIFICATION DATA: FOR LANDSCAPE INSTALLER.
2. CERTIFICATION OF GRASS SEED: FROM SEED VENDOR FOR EACH GRASS-SEED MONOSTAND OR MIXTURE, STATING THE BOTANICAL AND COMMON NAME, PERCENTAGE BY WEIGHT OF EACH SPECIES AND VARIETY, AND PERCENTAGE OF PURITY, GERMINATION, AND WEED SEED. INCLUDE THE YEAR OF PRODUCTION AND DATE OF PACKAGING.
3. CERTIFICATION OF EACH SEED MIXTURE FOR TURFGRASS SOD. INCLUDE IDENTIFICATION OF SOURCE AND NAME AND TELEPHONE NUMBER OF SUPPLIER.
4. PRODUCT CERTIFICATES: FOR FERTILIZERS, FROM MANUFACTURER.
5. PESTICIDES AND HERBICIDES: PRODUCT LABEL AND MANUFACTURER'S APPLICATION INSTRUCTIONS SPECIFIC TO PRODUCT.
6. MAINTENANCE DATA: RECOMMENDED PROCEDURES TO BE ESTABLISHED BY OWNER FOR MAINTENANCE OF TURF DURING A CALENDAR YEAR. SUBMIT BEFORE EXPIRATION OF REQUIRED MAINTENANCE PERIODS.

QUALITY ASSURANCE

INSTALLER QUALIFICATIONS: A QUALIFIED LANDSCAPE INSTALLER WHOSE WORK HAS RESULTED IN SUCCESSFUL TURF ESTABLISHMENT.

1. PROFESSIONAL MEMBERSHIP: INSTALLER SHALL BE A MEMBER IN GOOD STANDING OF EITHER THE PROFESSIONAL LANDSCARE NETWORK OR THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
2. EXPERIENCE: FIVE YEARS' EXPERIENCE IN TURF INSTALLATION.
3. INSTALLER'S FIELD SUPERVISOR: REQUIRE INSTALLER TO MAINTAIN AN EXPERIENCED FULL-TIME SUPERVISOR ON PROJECT SITS WHEN WORK IS IN PROGRESS.
4. PERSONNEL CERTIFICATIONS: INSTALLER'S FIELD SUPERVISOR SHALL HAVE CERTIFICATION IN ALL OF THE FOLLOWING CATEGORIES FROM THE PROFESSIONAL LANDSCARE NETWORK:
 - a. LANDSCAPE INDUSTRY CERTIFIED TECHNICIAN - EXTERIOR.
 - b. LANDSCAPE INDUSTRY CERTIFIED LAWNCARE MANAGER.
 - c. LANDSCAPE INDUSTRY CERTIFIED LAWNCARE TECHNICIAN.

5. PESTICIDE APPLICATOR: STATE LICENSED, COMMERCIAL.

DELIVERY, STORAGE, AND HANDLING

SEED AND OTHER PACKAGED MATERIALS: DELIVER PACKAGED MATERIALS IN ORIGINAL, UNOPENED CONTAINERS SHOWING WEIGHT, CERTIFIED ANALYSIS, NAME AND ADDRESS OF MANUFACTURER, AND INDICATION OF COMPLIANCE WITH STATE AND FEDERAL LAWS, AS APPLICABLE.

SOD: HARVEST, DELIVER, STORE, AND HANDLE SOD ACCORDING TO REQUIREMENTS IN "SPECIFICATIONS FOR TURFGRASS SOD MATERIALS" AND "SPECIFICATIONS FOR TURFGRASS SOD TRANSPLANTING AND INSTALLATION" SECTIONS IN TP13 "GUIDELINE SPECIFICATIONS TO TURFGRASS SODDING." DELIVER SOD WITHIN 24 HOURS OF HARVESTING AND IN TIME FOR PLANTING PROMPTLY. PROTECT SOD FROM BREAKAGE AND DRYING.

BULK MATERIALS:

1. DO NOT DUMP OR STORE BULK MATERIALS NEAR STRUCTURES, UTILITIES, WALKWAYS AND PAVEMENTS, OR ON EXISTING TURF AREAS OR PLANTS.
2. PROVIDE EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF BULK MATERIALS; DISCHARGE OF SOIL-BEARING WATER RUNOFF; AND AIRBORNE DUST REACHING ADJACENT PROPERTIES, WATER CONVEYANCE SYSTEMS, OR WALKWAYS.
3. ACCOMPANY EACH DELIVERY OF BULK MATERIALS WITH APPROPRIATE CERTIFICATES.

FIELD CONDITIONS

PLANTING RESTRICTIONS: PLANT DURING ONE OF THE FOLLOWING PERIODS. COORDINATE PLANTING PERIODS WITH INITIAL MAINTENANCE PERIODS TO PROVIDE REQUIRED MAINTENANCE FROM DATE OF SUBSTANTIAL COMPLETION.

1. SPRING PLANTING: MARCH 15 TO JUNE 1.
2. FALL PLANTING: AUGUST 15 TO OCTOBER 15.

WEATHER LIMITATIONS: PROCEED WITH PLANTING ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT PLANTING TO BE PERFORMED WHEN BENEFICIAL AND OPTIMUM RESULTS MAY BE OBTAINED. APPLY PRODUCTS DURING FAVORABLE WEATHER CONDITIONS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

SEED

GRASS SEED: FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH AOSA'S "RULES FOR TESTING SEEDS" FOR PURITY AND GERMINATION TOLERANCES.

SEED MIX: SEED OF GRASS SPECIES AS FOLLOWS, WITH NOT LESS THAN 85 PERCENT GERMINATION, NOT LESS THAN 98 PERCENT PURE SEED, AND COMPLETELY FREE OF NOXIOUS WEEDS AND GRASSES. THE MIXTURE SHALL BE AS FOLLOWS OR AN APPROVED EQUAL: (MIXTURE SHALL RATE IN NTEP'S TOP TEN. CONTRACTOR TO PROVIDE INFORMATION ON GRASS SEED STATING IT MEETS NTEP'S TOP TEN LIST)

1. 80-90 PERCENT TURF-TYPE TALL FESCUE, MINIMUM 3 VARIETIES (15 PERCENT MINIMUM FOR ANY VARIETY).
2. 5-10 PERCENT PERENNIAL RYEGRASS.
3. 5-10 PERCENT KENTUCKY BLUEGRASS.

TURFGRASS SOD

TURFGRASS SOD: CERTIFIED, COMPLYING WITH "SPECIFICATIONS FOR TURFGRASS SOD MATERIALS" IN TP13 "GUIDELINE SPECIFICATIONS TO TURFGRASS SODDING." FURNISH VIABLE SOD OF UNIFORM DENSITY, COLOR, AND TEXTURE THAT IS STRONGLY ROOTED AND CAPABLE OF VIGOROUS GROWTH AND DEVELOPMENT WHEN PLANTED.

TURFGRASS SPECIES: SEED OF GRASS SPECIES AS FOLLOWS, WITH NOT LESS THAN 85 PERCENT GERMINATION, NOT LESS THAN 98 PERCENT PURE SEED, AND COMPLETELY FREE OF NOXIOUS WEEDS AND GRASSES. THE MIXTURE SHALL BE AS FOLLOWS OR AN APPROVED EQUAL: (MIXTURE SHALL RATE IN NTEP'S TOP TEN. CONTRACTOR TO PROVIDE INFORMATION ON GRASS SEED STATING IT MEETS NTEP'S TOP TEN LIST)

1. 80-90 PERCENT TURF-TYPE TALL FESCUE, MINIMUM 3 VARIETIES (15 PERCENT MINIMUM FOR ANY VARIETY).
2. 10-20 PERCENT KENTUCKY BLUEGRASS.

FERTILIZERS

1. COMMERCIAL FERTILIZER: COMMERCIAL-GRADE COMPLETE FERTILIZER OF NEUTRAL CHARACTER, CONSISTING OF QUICK RELEASE NITROGEN SOURCE, PHOSPHATE, AND POTASH. APPLY NITROGEN, PHOSPHATE AND POTASH IN THE AMOUNTS RECOMMENDED IN THE SOIL REPORTS FROM A QUALIFIED TESTING AGENCY.

2. SLOW-RELEASE FERTILIZER: GRANULAR FERTILIZER CONSISTING OF A MINIMUM OF 50 PERCENT WATER-INSOLUBLE NITROGEN OR COATED NITROGEN SOURCE, PHOSPHATE, AND POTASH. APPLY NITROGEN, PHOSPHATE AND POTASH IN THE AMOUNTS RECOMMENDED IN THE SOIL REPORTS FROM A QUALIFIED TESTING AGENCY.

MULCHES

1. STRAW MULCH: PROVIDE AIR-DRY, CLEAN, MILDEW- AND SEED-FREE, SALT HAY OR THRESHED STRAW OF WHEAT, RYE, OATS, OR BARLEY.
2. FIBER MULCH: BIODEGRADABLE, DYED-WOOD, CELLULOSE-FIBER MULCH; NONTOXIC AND FREE OF PLANT-GROWTH OR GERMINATION INHIBITORS; WITH A MAXIMUM MOISTURE CONTENT OF 15 PERCENT AND A PH RANGE OF 4.5 TO 6.5.
3. NONASPHALTIC TACKIFIER, COLLOIDAL TACKIFIER RECOMMENDED BY FIBER-MULCH MANUFACTURER FOR SLURRY APPLICATION; NONTOXIC AND FREE OF PLANT-GROWTH OR GERMINATION INHIBITORS.

PESTICIDES

GENERAL: PESTICIDE, REGISTERED AND APPROVED BY THE EPA, ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND OF TYPE RECOMMENDED BY MANUFACTURER FOR EACH SPECIFIC PROBLEM AND AS REQUIRED FOR PROJECT CONDITIONS AND APPLICATION. DO NOT USE RESTRICTED PESTICIDES UNLESS AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION.

1. PRE-EMERGENT HERBICIDE (SELECTIVE AND NONSELECTIVE): EFFECTIVE FOR CONTROLLING THE GERMINATION OR GROWTH OF WEEDS WITHIN PLANTED AREAS AT THE SOIL LEVEL DIRECTLY BELOW THE MULCH LAYER.
2. POST-EMERGENT HERBICIDE (SELECTIVE AND NONSELECTIVE): EFFECTIVE FOR CONTROLLING WEED GROWTH THAT HAS ALREADY GERMINATED.

EROSION-CONTROL MATERIALS

1. EROSION-CONTROL BLANKETS: BIODEGRADABLE WOOD, EXCELSIOR, STRAW, OR COCONUT-FIBER MAT ENCLOSED IN A PHOTODEGRADABLE PLASTIC MESH. INCLUDE MANUFACTURER'S RECOMMENDED STEEL WIRE STAPLES, 6 INCHES LONG.
2. EROSION-CONTROL FIBER MESH: BIODEGRADABLE BURLAP OR SPUN-COIR MESH, A MINIMUM OF 0.92 LBS/SQ. YD., WITH 50 TO 65 PERCENT OPEN AREA. INCLUDE MANUFACTURER'S RECOMMENDED STEEL WIRE STAPLES, 6 INCHES LONG.

EXAMINATION

EXAMINE AREAS TO BE PLANTED FOR COMPLIANCE WITH REQUIREMENTS AND OTHER CONDITIONS AFFECTING INSTALLATION AND PERFORMANCE OF THE WORK.

1. VERIFY THAT NO FOREIGN OR DELETERIOUS MATERIAL OR LIQUID SUCH AS PAINT, PAINT WASHOUT, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, OR ACID HAS BEEN DEPOSITED IN SOIL WITHIN A PLANTING AREA.
2. SUSPEND PLANTING OPERATIONS DURING PERIODS OF EXCESSIVE SOIL MOISTURE UNTIL THE MOISTURE CONTENT REACHES ACCEPTABLE LEVELS TO ATTAIN THE REQUIRED RESULTS.
3. UNIFORMLY MOISTEN EXCESSIVELY DRY SOIL THAT IS NOT WORKABLE OR WHICH IS DUSTY.
4. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
5. IF CONTAMINATION BY FOREIGN OR DELETERIOUS MATERIAL OR LIQUID IS PRESENT IN SOIL WITHIN A PLANTING AREA, REMOVE THE SOIL AND CONTAMINATION AS DIRECTED BY ARCHITECT AND REPLACE WITH NEW PLANTING SOIL.

PREPARATION

1. PROTECT STRUCTURES; UTILITIES; SIDEWALKS; PAVEMENTS; AND OTHER FACILITIES, TREES, SHRUBS, AND PLANTINGS FROM DAMAGE CAUSED BY PLANTING OPERATIONS.
2. PROTECT ADJACENT AND ADJOINING AREAS FROM HYDROSEEDING AND HYDROMULCHING OVERSPRAY.
3. PROTECT GRADE STAKES SET BY OTHERS UNTIL DIRECTED TO REMOVE THEM.
4. INSTALL EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.

TURF AREA PREPARATION

GENERAL: PREPARE PLANTING AREA FOR SOIL PLACEMENT AND MIX PLANTING SOIL PER "PLANTING SOIL" SPECIFICATION.

1. PLACING PLANTING SOIL: PLACE AND MIX PLANTING SOIL PER "PLANTING SOIL" SPECIFICATION.
 - a. REDUCE ELEVATION OF PLANTING SOIL TO ALLOW FOR SOIL THICKNESS OF SOD.
2. GRADE PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE PLANE WITH LOOSE, UNIFORMLY FINE TEXTURE. GRADE TO WITHIN PLUS OR MINUS 1/2 INCH OF FINISH ELEVATION. ROLL AND RAKE, REMOVE RIDGES, AND FILL DEPRESSIONS TO MEET FINISH GRADES. LIMIT FINISH GRADING TO AREAS THAT CAN BE PLANTED IN THE IMMEDIATE FUTURE. MOISTEN PREPARED AREA BEFORE PLANTING IF SOIL IS DRY. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE PLANTING. DO NOT CREATE MUDDY SOIL. BEFORE PLANTING, OBTAIN FIELD ENGINEER'S ACCEPTANCE OF FINISH GRADING; RESTORE PLANTING AREAS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING.
3. BEFORE PLANTING, OBTAIN ARCHITECT'S ACCEPTANCE OF FINISH GRADING; RESTORE PLANTING AREAS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING.

PREPARATION FOR EROSION-CONTROL MATERIALS

1. PREPARE AREA AS SPECIFIED ABOVE.
2. FOR EROSION-CONTROL BLANKET OR MESH, INSTALL FROM TOP OF SLOPE, WORKING DOWNWARD, AND AS RECOMMENDED BY MATERIAL MANUFACTURER FOR SITE CONDITIONS, FASTEN AS RECOMMENDED BY MATERIAL MANUFACTURER.
3. MOISTEN PREPARED AREA BEFORE PLANTING IF SURFACE IS DRY. WATER THOROUGHLY AND ALLOW SURFACE TO DRY BEFORE PLANTING. DO NOT CREATE MUDDY SOIL.

SEEDING

1. SOW SEED WITH SPREADER OR SEEDING MACHINE. DO NOT BROADCAST OR DROP SEED WHEN WIND VELOCITY EXCEEDS 5 MPH.
 - a. EVENLY DISTRIBUTE SEED BY SOWING EQUAL QUANTITIES IN TWO DIRECTIONS AT RIGHT ANGLES TO EACH OTHER.
 - b. DO NOT USE WET SEED OR SEED THAT IS MOLDY OR OTHERWISE DAMAGED.
 - c. DO NOT SEED AGAINST EXISTING TREES. LIMIT EXTENT OF SEED TO OUTSIDE EDGE OF PLANTING SAUCER.

2. SOW SEED AT A TOTAL RATE OF 6 TO 8 LB/1000 SQ. FT..
3. RAKE SEED LIGHTLY INTO TOP 1/8 INCH OF SOIL, ROLL LIGHTLY, AND WATER WITH FINE SPRAY.
4. PROTECT SEEDED AREAS WITH SLOPES EXCEEDING 1:4 WITH EROSION-CONTROL BLANKETS AND 1:6 WITH EROSION-CONTROL FIBER MESH INSTALLED AND STAPLED ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
5. PROTECT SEEDED AREAS WITH SLOPES NOT EXCEEDING 1:6 BY SPREADING STRAW MULCH. SPREAD UNIFORMLY AT A MINIMUM RATE OF 10 LB/1000 SQ. FT. TO FORM A CONTINUOUS BLANKET 1-12 INCHES IN THICKNESS OVER SEEDED AREAS. SPREAD BY HAND, BLOWER, OR OTHER SUITABLE EQUIPMENT.
 - a. ANCHOR STRAW MULCH BY CRIMPING INTO SOIL WITH SUITABLE MECHANICAL EQUIPMENT.

6. OVERSEED TURF AREA EIGHT (8) WEEKS AFTER INITIAL SEEDING OPERATION AT A RATE OF 5 LBS/1000 SQ. FT., IF INITIAL SEEDING HAS NOT PROVIDED A MINIMUM OF 90% COVERAGE OVER ANY 10 SQ. FT., OR IF BARE AREAS GREATER THE 5 BY 5 INCHES ARE PRESENT.

HYDROSEEDING: MIX SPECIFIED SEED, COMMERCIAL FERTILIZER, AND FIBER MULCH IN WATER, USING EQUIPMENT SPECIFICALLY DESIGNED FOR HYDROSEED APPLICATION. CONTINUE MIXING UNTIL UNIFORMLY BLENDED INTO HOMOGENEOUS SLURRY SUITABLE FOR HYDRAULIC APPLICATION.

1. MIX SLURRY WITH NONASPHALTIC TACKIFIER.
2. SPRAY-APPLY SLURRY UNIFORMLY TO ALL AREAS TO BE SEEDDED IN A TWO-STEP PROCESS. APPLY FIRST SLURRY COAT AT A RATE SO THAT MULCH COMPONENT IS DEPOSITED AT NOT LESS THAN 500-LB/ACRE DRY WEIGHT, AND SEED COMPONENT IS DEPOSITED AT NOT LESS THAN THE SPECIFIED SEED-SOWING RATE. APPLY SLURRY COVER COAT OF FIBER MULCH (HYDROMULCHING) AT A RATE OF 1000 LB/ACRE.

SODDING

1. LAY SOD WITHIN 24 HOURS OF HARVESTING. DO NOT LAY SOD IF DORMANT OR IF GROUND IS FROZEN OR MUDDY.
2. LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. BUTT ENDS AND SIDES OF SOD; DO NOT STRETCH OR OVERLAP. STAGGER SOD STRIPS OR PADS TO OFFSET JOINTS IN ADJACENT COURSES. AVOID DAMAGE TO SOIL OR SOD DURING INSTALLATION. TAMP AND ROLL LIGHTLY TO ENSURE CONTACT WITH SOIL, ELIMINATE AIR POCKETS, AND FORM A SMOOTH SURFACE. WORK SIFTED SOIL OR FINE SAND INTO MINOR CRACKS BETWEEN PIECES OF SOD; REMOVE EXCESS TO AVOID SMOTHERING SOD AND ADJACENT GRASS.
 - a. LAY SOD ACROSS SLOPES EXCEEDING 1:3.

- b. ANCHOR SOD ON SLOPES EXCEEDING 1:6 WITH WOOD PEGS[OR STEEL STAPLES] SPACED AS RECOMMENDED BY SOD MANUFACTURER BUT NOT LESS THAN TWO ANCHORS PER SOD STRIP TO PREVENT SLIPPAGE.
3. SATURATE SOD WITH FINE WATER SPRAY WITHIN TWO HOURS OF PLANTING. DURING FIRST WEEK AFTER PLANTING, WATER DAILY OR MORE FREQUENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A MINIMUM DEPTH OF 1-1/2 INCHES BELOW SOD.

TURF RENOVATION

1. RENOVATE EXISTING TURF WHERE INDICATED.
2. RENOVATE TURF DAMAGED BY CONTRACTOR'S OPERATIONS, SUCH AS STORAGE OF MATERIALS OR EQUIPMENT AND MOVEMENT OF VEHICLES.
 - a. REESTABLISH TURF WHERE SETTLEMENT OR WASHOUTS OCCUR OR WHERE MINOR REGRADING IS REQUIRED.
 - b. INSTALL NEW PLANTING SOIL AS REQUIRED.

3. REMOVE SOD AND VEGETATION FROM DISEASED OR UNSATISFACTORY TURF AREAS; DO NOT BURY IN SOIL.
4. REMOVE TOPSOIL CONTAINING FOREIGN MATERIALS, SUCH AS OIL DRIPPINGS, FUEL SPILLS, STONES, GRAVEL, AND OTHER CONSTRUCTION MATERIALS RESULTING FROM CONTRACTOR'S OPERATIONS, AND REPLACE WITH NEW PLANTING SOIL.
5. MOW, DETATCH, CORE AERATE, AND RAKE EXISTING TURF.
6. REMOVE WEEDS BEFORE SEEDING. WHERE WEEDS ARE EXTENSIVE, APPLY SELECTIVE HERBICIDES AS REQUIRED. DO NOT USE PRE-EMERGENCE HERBICIDES.
7. REMOVE WASTE AND FOREIGN MATERIALS, INCLUDING WEEDS, SOIL CORES, GRASS, VEGETATION, AND TURF, AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.
8. TILL STRIPPED, BARE, AND COMPACTED AREAS THOROUGHLY TO A SOIL DEPTH OF 6 INCHES.
9. APPLY INITIAL FERTILIZER REQUIRED FOR ESTABLISHING NEW TURF AND MIX THOROUGHLY INTO TOP 4 INCHES OF EXISTING SOIL. INSTALL NEW PLANTING SOIL TO FILL LOW SPOTS AND MEET FINISH GRADES.
 - a. INITIAL FERTILIZER: COMMERCIAL FERTILIZER APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

10. APPLY [SEED AND PROTECT WITH STRAW MULCH] [SOD] AS REQUIRED FOR NEW TURF.
11. WATER NEWLY PLANTED AREAS AND KEEP MOIST UNTIL NEW TURF IS ESTABLISHED.

TURF MAINTENANCE

GENERAL: MAINTAIN AND ESTABLISH TURF BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, REPLANTING, AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE TURF. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS AND REMULCH TO PRODUCE A UNIFORMLY SMOOTH TURF. PROVIDE MATERIALS AND INSTALLATION THE SAME AS THOSE USED IN THE ORIGINAL INSTALLATION.

1. FILL IN AS NECESSARY SOIL SUBSIDENCE THAT MAY OCCUR BECAUSE OF SETTLING OR OTHER PROCESSES. REPLACE MATERIALS AND TURF DAMAGED OR LOST IN AREAS OF SUBSIDENCE.
2. IN AREAS WHERE MULCH HAS BEEN DISTURBED BY WIND OR MAINTENANCE OPERATIONS, ADD NEW MULCH AND ANCHOR AS REQUIRED TO PREVENT DISPLACEMENT.
3. APPLY TREATMENTS AS REQUIRED TO KEEP TURF AND SOIL FREE OF PESTS AND PATHOGENS OR DISEASE. USE INTEGRATED PEST MANAGEMENT PRACTICES WHENEVER POSSIBLE TO MINIMIZE THE USE OF PESTICIDES AND REDUCE HAZARDS.

WATERING: INSTALL AND MAINTAIN TEMPORARY PIPING, HOSES, AND TURF-WATERING EQUIPMENT TO CONVEY WATER FROM SOURCES AND TO KEEP TURF UNIFORMLY MOIST TO A DEPTH OF 4 INCHES.

1. SCHEDULE WATERING TO PREVENT WILTING, PUDDLING, EROSION, AND DISPLACEMENT OF SEED OR MULCH. LAY OUT TEMPORARY WATERING SYSTEM TO AVOID WALKING OVER MUDDY OR NEWLY PLANTED AREAS.
2. WATER TURF WITH FINE SPRAY AT A MINIMUM RATE OF 1 INCH PER WEEK UNLESS RAINFALL PRECIPITATION IS ADEQUATE.

MOW TURF AS SOON AS TOP GROWTH IS TALL ENOUGH TO CUT. REPEAT MOWING TO MAINTAIN SPECIFIED HEIGHT WITHOUT CUTTING MORE THAN ONE-THIRD OF GRASS HEIGHT. REMOVE NO MORE THAN ONE-THIRD OF GRASS-LEAF GROWTH IN INITIAL OR SUBSEQUENT MOWINGS. DO NOT DELAY MOWING UNTIL GRASS BLADES BEND OVER AND BECOME MATTED. DO NOT MOW WHEN GRASS IS WET. SCHEDULE INITIAL AND SUBSEQUENT MOWINGS TO MAINTAIN THE FOLLOWING GRASS HEIGHT:
1. MOW TURF TO A HEIGHT OF 2 TO 3 INCHES.

TURF POST-FERTILIZATION: APPLY FERTILIZER AFTER INITIAL MOWING AND WHEN GRASS IS DRY.

1. USE FERTILIZER THAT PROVIDES ACTUAL NITROGEN OF 1 LB/1000 SQ. FT. TO TURF AREA.
2. SECOND APPLICATION FERTILIZER: APPLY SIX (6) WEEKS AFTER SEEDING OPERATIONS. PROVIDE A HIGH NITROGEN SLOW RELEASE FERTILIZER WITH AN ANALYSIS OF 30-3-10 OR SIMILAR. APPLY AT A RATE TO PROVIDE ACTUAL NITROGEN OF 1 LB/1000 SQ. FT. TO TURF AREA.

SATISFACTORY TURF

TURF INSTALLATIONS SHALL MEET THE FOLLOWING CRITERIA AS DETERMINED BY ARCHITECT:

1. SATISFACTORY SEEDED TURF: AT END OF MAINTENANCE PERIOD, A HEALTHY, UNIFORM, CLOSE STAND OF GRASS HAS BEEN ESTABLISHED. FREE OF WEEDS AND SURFACE IRREGULARITIES, WITH COVERAGE EXCEEDING 90 PERCENT OVER ANY 10 SQ. FT. AND BARE SPOTS NOT EXCEEDING 5 BY 5 INCHES.
2. SATISFACTORY SODDED TURF: AT END OF MAINTENANCE PERIOD, A HEALTHY, WELL-ROOTED, EVEN-COLORED, VIABLE TURF HAS BEEN ESTABLISHED, FREE OF WEEDS, OPEN JOINTS, BARE AREAS, AND SURFACE IRREGULARITIES.

USE SPECIFIED MATERIALS TO REESTABLISH TURF THAT DOES NOT COMPLY WITH REQUIREMENTS, AND CONTINUE MAINTENANCE UNTIL TURF IS SATISFACTORY.

PLANT SPECIFICATION

THE WORK OF THIS SECTION CONSISTS OF PROVIDING ALL LABOR, EQUIPMENT, MATERIALS, INCIDENTAL WORK, AND CONSTRUCTION METHODS NECESSARY TO PROVIDE AND PLACE PLANT MATERIAL AS INDICATED ON THE CONTRACT DOCUMENTS AND AS SPECIFIED IN THIS SECTION. THE INSTALLATION OF ALL NEW MATERIALS SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTION, AND IN ACCORDANCE WITH ALL APPROVED SHOP DRAWINGS.

1. PLANT MATERIAL.

2. SLOW-RELEASE TREE WATERING DEVICES.

3. MULCH.

DEFINITIONS

1. BACKFILL: THE EARTH USED TO REPLACE OR THE ACT OF REPLACING EARTH IN AN EXCAVATION.

2. BALLED AND BURLAPPED STOCK: PLANTS DUG WITH FIRM, NATURAL BALLS OF EARTH IN WHICH THEY WERE GROWN, WITH A BALL SIZE NOT LESS THAN DIAMETER AND DEPTH RECOMMENDED BY ANSI Z60.1 FOR TYPE AND SIZE OF PLANT REQUIRED; WRAPPED WITH BURLAP, TIED, RIGIDLY SUPPORTED, AND DRUM LACED WITH TWINE WITH THE ROOT FLARE VISIBLE AT THE SURFACE OF THE BALL AS RECOMMENDED BY ANSI Z60.1.

3. CONTAINER-GROWN STOCK: HEALTHY, VIGOROUS, WELL-ROOTED PLANTS GROWN IN A CONTAINER, WITH A WELL-ESTABLISHED ROOT SYSTEM REACHING SIDES OF CONTAINER AND MAINTAINING A FIRM BALL WHEN REMOVED FROM CONTAINER. CONTAINER SHALL BE RIGID ENOUGH TO HOLD BALL SHAPE AND PROTECT ROOT MASS DURING SHIPPING AND BE SIZED ACCORDING TO ANSI Z60.1 FOR TYPE AND SIZE OF PLANT REQUIRED.

4. FINISH GRADE: ELEVATION OF FINISHED SURFACE OF PLANTING SOIL.

5. PESTICIDE: A SUBSTANCE OR MIXTURE INTENDED FOR PREVENTING, DESTROYING, REPELLING, OR MITIGATING A PEST. PESTICIDES INCLUDE INSECTICIDES, MITICIDES, HERBICIDES, FUNGICIDES, RODENTICIDES, AND MOLLUSCICIDES. THEY ALSO INCLUDE SUBSTANCES OR MIXTURES INTENDED FOR USE AS A PLANT REGULATOR, DEFOLIANT, OR DESICCANT. SOME SOURCES CLASSIFY HERBICIDES SEPARATELY FROM PESTICIDES.

6. PESTS: LIVING ORGANISMS THAT OCCUR WHERE THEY ARE NOT DESIRED OR THAT CAUSE DAMAGE TO PLANTS, ANIMALS, OR PEOPLE. PESTS INCLUDE INSECTS, MITES, GRUBS, MOLLUSKS (SNAILS AND SLUGS), RODENTS (GOPHERS, MOLES, AND MICE), UNWANTED PLANTS (WEEDS), FUNGI, BACTERIA, AND VIRUSES.

7. PLANTING AREA: AREAS TO BE PLANTED.

8. PLANTING SOIL: EXISTING, ON-SITE SOIL; IMPORTED SOIL; OR MANUFACTURED SOIL THAT HAS BEEN MODIFIED WITH SOIL AMENDMENTS AND PERHAPS FERTILIZERS TO PRODUCE A SOIL MIXTURE BEST FOR PLANT GROWTH.

9. PLANT; PLANTS; PLANT MATERIAL: THESE TERMS REFER TO VEGETATION IN GENERAL, INCLUDING TREES, SHRUBS, VINES, GROUND COVERS, ORNAMENTAL GRASSES, BULBS, CORMS, TUBERS, OR HERBACEOUS VEGETATION.

10. ROOT FLARE: ALSO CALLED "TRUNK FLARE." THE AREA AT THE BASE OF THE PLANT'S STEM OR TRUNK WHERE THE STEM OR TRUNK COMMENCES TO FORM ROOTS; THE AREA OF TRANSITION BETWEEN THE ROOT SYSTEM AND THE STEM OR TRUNK.

11. STEM GIRDLING ROOTS: ROOTS THAT ENCIRCLE THE STEMS (TRUNKS) OF TREES BELOW THE SOIL SURFACE.

12. SUBGRADE: THE SURFACE OR ELEVATION OF SUBSOIL REMAINING AFTER EXCAVATION IS COMPLETE, OR THE TOP SURFACE OF A FILL OR BACKFILL BEFORE PLANTING SOIL IS PLACED.

COORDINATION

COORDINATION WITH TURF AREAS (LAWNS): PLANT TREES, SHRUBS, AND OTHER PLANTS AFTER FINISH GRADES ARE ESTABLISHED AND BEFORE PLANTING TURF AREAS UNLESS OTHERWISE INDICATED.

1. WHEN PLANTING TREES, SHRUBS, AND OTHER PLANTS AFTER PLANTING TURF AREAS, PROTECT TURF AREAS, AND PROMPTLY REPAIR DAMAGE CAUSED BY PLANTING OPERATIONS.

PREINSTALLATION CONFERENCE: CONDUCT CONFERENCE AT PROJECT SITE.

ACTION SUBMITTALS

PRODUCT DATA: FOR EACH TYPE OF PRODUCT.

1. PLANT PHOTOGRAPHS: INCLUDE COLOR PHOTOGRAPHS IN DIGITAL FORMAT OF EACH REQUIRED SPECIES AND SIZE OF PLANT MATERIAL AS IT WILL BE FURNISHED TO PROJECT. TAKE PHOTOGRAPHS FROM AN ANGLE DEPICTING TRUE SIZE AND CONDITION OF THE TYPICAL PLANT TO BE FURNISHED. INCLUDE A SCALE ROD OR OTHER MEASURING DEVICE IN EACH PHOTOGRAPH. FOR SPECIES WHERE MORE THAN 20 PLANTS ARE REQUIRED, INCLUDE A MINIMUM OF THREE PHOTOGRAPHS SHOWING THE AVERAGE PLANT, THE BEST QUALITY PLANT, AND THE WORST QUALITY PLANT TO BE FURNISHED. IDENTIFY EACH PHOTOGRAPH WITH THE FULL SCIENTIFIC NAME OF THE PLANT, PLANT SIZE, AND NAME OF THE GROWING NURSERY.

2. SAMPLES FOR VERIFICATION: FOR EACH OF THE FOLLOWING:

a. ORGANIC MULCH: 1-QUART VOLUME OF EACH ORGANIC MULCH REQUIRED; IN SEALED PLASTIC BAGS LABELED WITH COMPOSITION OF MATERIALS BY PERCENTAGE OF WEIGHT AND SOURCE OF MULCH. EACH SAMPLE SHALL BE TYPICAL OF THE LOT OF MATERIAL TO BE FURNISHED; PROVIDE AN ACCURATE REPRESENTATION OF COLOR, TEXTURE, AND ORGANIC MAKEUP.

b. SLOW-RELEASE, TREE-WATERING DEVICE: ONE UNIT OF EACH SIZE REQUIRED.

INFORMATIONAL SUBMITTALS

1. QUALIFICATION DATA: FOR LANDSCAPE INSTALLER. INCLUDE LIST OF SIMILAR PROJECTS COMPLETED BY INSTALLER DEMONSTRATING INSTALLER'S CAPABILITIES AND EXPERIENCE. INCLUDE PROJECT NAMES, ADDRESSES, AND YEAR COMPLETED, AND INCLUDE NAMES AND ADDRESSES OF OWNERS' CONTACT PERSONS.

2. PRODUCT CERTIFICATES: FOR EACH TYPE OF MANUFACTURED PRODUCT, FROM MANUFACTURER, AND COMPLYING WITH THE FOLLOWING:

a. MANUFACTURER'S CERTIFIED ANALYSIS OF STANDARD PRODUCTS.

b. ANALYSIS OF OTHER MATERIALS BY A RECOGNIZED LABORATORY MADE ACCORDING TO METHODS ESTABLISHED BY THE ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS, WHERE APPLICABLE.

2. PESTICIDES AND HERBICIDES: PRODUCT LABEL AND MANUFACTURER'S APPLICATION INSTRUCTIONS SPECIFIC TO PROJECT.

3. SAMPLE WARRANTY: FOR SPECIAL WARRANTY.

CLOSEOUT SUBMITTALS

1. MAINTENANCE DATA: RECOMMENDED PROCEDURES TO BE ESTABLISHED BY OWNER FOR MAINTENANCE OF PLANTS DURING A CALENDAR YEAR. SUBMIT BEFORE EXPIRATION OF REQUIRED MAINTENANCE PERIODS.

QUALITY ASSURANCE

INSTALLER QUALIFICATIONS: A QUALIFIED LANDSCAPE INSTALLER WHOSE WORK HAS RESULTED IN SUCCESSFUL ESTABLISHMENT OF PLANTS.

1. PROFESSIONAL MEMBERSHIP: INSTALLER SHALL BE A MEMBER IN GOOD STANDING OF EITHER THE PROFESSIONAL LANDSCAPE NETWORK OR THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.

2. EXPERIENCE: FIVE YEARS' EXPERIENCE IN LANDSCAPE INSTALLATION IN ADDITION TO REQUIREMENTS IN SECTION 014000 "QUALITY REQUIREMENTS."

3. INSTALLER'S FIELD SUPERVISION: REQUIRE INSTALLER TO MAINTAIN AN EXPERIENCED FULL-TIME SUPERVISOR ON PROJECT SITE WHEN WORK IS IN PROGRESS.

4. PERSONNEL CERTIFICATIONS: INSTALLER'S FIELD SUPERVISOR SHALL HAVE CERTIFICATION IN ALL OF THE FOLLOWING CATEGORIES FROM THE PROFESSIONAL LANDSCAPE NETWORK:

a. LANDSCAPE INDUSTRY CERTIFIED TECHNICIAN - EXTERIOR.

b. LANDSCAPE INDUSTRY CERTIFIED HORTICULTURAL TECHNICIAN.

5. PESTICIDE APPLICATOR: STATE LICENSED, COMMERCIAL.

PROVIDE QUALITY, SIZE, GENUS, SPECIES, AND VARIETY OF PLANTS INDICATED, COMPLYING WITH APPLICABLE REQUIREMENTS IN ANSI Z60.1.

MEASUREMENTS: MEASURE ACCORDING TO ANSI Z60.1. DO NOT PRUNE TO OBTAIN REQUIRED SIZES.

1. TREES AND SHRUBS: MEASURE WITH BRANCHES AND TRUNKS OR CANES IN THEIR NORMAL POSITION. TAKE HEIGHT MEASUREMENTS FROM OR NEAR THE TOP OF THE ROOT FLARE FOR FIELD-GROWN STOCK AND CONTAINER-GROWN STOCK. MEASURE MAIN BODY OF TREE OR SHRUB FOR HEIGHT AND SPREAD. DO NOT MEASURE BRANCHES OR ROOTS TIP TO TIP. TAKE CALIPER MEASUREMENTS 6 INCHES ABOVE THE ROOT FLARE FOR TREES UP TO 4-INCH CALIPER SIZE, AND 12 INCHES ABOVE THE ROOT FLARE FOR LARGER SIZES.

2. OTHER PLANTS: MEASURE WITH STEMS, PETIOLES, AND FOLIAGE IN THEIR NORMAL POSITION.

PLANT MATERIAL OBSERVATION: ARCHITECT MAY OBSERVE PLANT MATERIAL EITHER AT PLACE OF GROWTH OR AT SITE BEFORE PLANTING FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, CULTIVAR, SIZE, AND QUALITY. ARCHITECT MAY ALSO OBSERVE TREES AND SHRUBS FURTHER FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEMS, PESTS, DISEASE SYMPTOMS, INJURIES, AND LATENT DEFECTS AND MAY REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. REMOVE REJECTED TREES OR SHRUBS IMMEDIATELY FROM PROJECT SITE.

1. NOTIFY ARCHITECT OF SOURCES OF PLANTING MATERIALS SEVEN DAYS IN ADVANCE OF DELIVERY TO SITE.

DELIVERY, STORAGE, AND HANDLING

PACKAGED MATERIALS: DELIVER PACKAGED MATERIALS IN ORIGINAL, UNOPENED CONTAINERS SHOWING WEIGHT, CERTIFIED ANALYSIS, NAME AND ADDRESS OF MANUFACTURER, AND INDICATION OF COMPLIANCE WITH STATE AND FEDERAL LAWS IF APPLICABLE.

BULK MATERIALS:

1. DO NOT DUMP OR STORE BULK MATERIALS NEAR STRUCTURES, UTILITIES, WALKWAYS AND PAVEMENTS, OR ON EXISTING TURF AREAS OR PLANTS.

2. PROVIDE EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF BULK MATERIALS; DISCHARGE OF SOIL-BEARING WATER RUNOFF; AND AIRBORNE DUST REACHING ADJACENT PROPERTIES, WATER CONVEYANCE SYSTEMS, OR WALKWAYS.

3. ACCOMPANY EACH DELIVERY OF BULK MATERIALS WITH APPROPRIATE CERTIFICATES.

DO NOT PRUNE TREES AND SHRUBS BEFORE DELIVERY. PROTECT BARK, BRANCHES, AND ROOT SYSTEMS FROM SUN SCALD, DRYING, WIND BURN, SWEATING, WHIPPING, AND OTHER HANDLING AND TYING DAMAGE. DO NOT BEND OR BIND-TIE TREES OR SHRUBS IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE. PROVIDE PROTECTIVE COVERING OF PLANTS DURING SHIPPING AND DELIVERY. DO NOT DROP PLANTS DURING DELIVERY AND HANDLING.

HANDLE PLANTING STOCK BY ROOT BALL.

WRAP TREES AND SHRUBS WITH BURLAP FABRIC OVER TRUNKS, BRANCHES, STEMS, TWIGS, AND FOLIAGE TO PROTECT FROM WIND AND OTHER DAMAGE DURING DIGGING, HANDLING, AND TRANSPORTATION.

DELIVER PLANTS AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED, AND INSTALL IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX HOURS AFTER DELIVERY, SET PLANTS AND TREES IN THEIR APPROPRIATE ASPECT (SUN, FILTERED SUN, OR SHADE), PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST.

1. SET BALLED STOCK ON GROUND AND COVER BALL WITH SOIL, PEAT MOSS, SAWDUST, OR OTHER ACCEPTABLE MATERIAL.

2. DO NOT REMOVE CONTAINER-GROWN STOCK FROM CONTAINERS BEFORE TIME OF PLANTING.

3. WATER ROOT SYSTEMS OF PLANTS STORED ON-SITE DEEPLY AND THOROUGHLY WITH A FINE-MIST SPRAY. WATER AS OFTEN AS NECESSARY TO MAINTAIN ROOT SYSTEMS IN A MOIST, BUT NOT OVERLY WET CONDITION.

FIELD CONDITIONS

FIELD MEASUREMENTS: VERIFY ACTUAL GRADE ELEVATIONS, SERVICE AND UTILITY LOCATIONS, IRRIGATION SYSTEM COMPONENTS, AND DIMENSIONS OF PLANTINGS AND CONSTRUCTION CONTIGUOUS WITH NEW PLANTINGS BY FIELD MEASUREMENTS BEFORE PROCEEDING WITH PLANTING WORK.

PLANTING RESTRICTIONS: PLANT DURING ONE OF THE FOLLOWING PERIODS. COORDINATE PLANTING PERIODS WITH MAINTENANCE PERIODS TO PROVIDE REQUIRED MAINTENANCE FROM DATE OF SUBSTANTIAL COMPLETION.

1. SPRING PLANTING: MARCH 15 TO JUNE 1.

2. FALL PLANTING: SEPTEMBER 1 TO NOVEMBER 1.

WEATHER LIMITATIONS: PROCEED WITH PLANTING ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT PLANTING TO BE PERFORMED WHEN BENEFICIAL AND OPTIMUM RESULTS MAY BE OBTAINED. APPLY PRODUCTS DURING FAVORABLE WEATHER CONDITIONS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND WARRANTY REQUIREMENTS.

WARRANTY

SPECIAL WARRANTY: INSTALLER AGREES TO REPAIR OR REPLACE PLANTINGS AND ACCESSORIES THAT FAIL IN MATERIALS, WORKMANSHIP, OR GROWTH WITHIN SPECIFIED WARRANTY PERIOD.

1. FAILURES INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

a. DEATH AND UNSATISFACTORY GROWTH, EXCEPT FOR DEFECTS RESULTING FROM ABUSE, LACK OF ADEQUATE MAINTENANCE, OR NEGLECT BY OWNER.

b. STRUCTURAL FAILURES INCLUDING PLANTINGS FALLING OR BLOWING OVER.

c. FAULTY PERFORMANCE OF TREE STABILIZATION.

d. DETEIORATION OF METALS, METAL FINISHES, AND OTHER MATERIALS BEYOND NORMAL WEATHERING.

2. WARRANTY PERIODS: FROM DATE OF SUBSTANTIAL COMPLETION.

a. TREES, SHRUBS, VINES, AND ORNAMENTAL GRASSES: 12 MONTHS.

b. GROUND COVERS, BIENNIALS, PERENNIALS, AND OTHER PLANTS: 12 MONTHS.

c. ANNUALS: THREE MONTHS.

3. INCLUDE THE FOLLOWING REMEDIAL ACTIONS AS A MINIMUM:

a. IMMEDIATELY REMOVE DEAD PLANTS AND REPLACE UNLESS REQUIRED TO PLANT IN THE SUCCEEDING PLANTING SEASON.

b. REPLACE PLANTS THAT ARE MORE THAN 25 PERCENT DEAD OR IN AN UNHEALTHY CONDITION AT END OF WARRANTY PERIOD.

c. A LIMIT OF ONE REPLACEMENT OF EACH PLANT IS REQUIRED EXCEPT FOR LOSSES OR REPLACEMENTS DUE TO FAILURE TO COMPLY WITH REQUIREMENTS.

d. PROVIDE EXTENDED WARRANTY FOR PERIOD EQUAL TO ORIGINAL WARRANTY PERIOD, FOR REPLACED PLANT MATERIAL.

PLANT MATERIAL

GENERAL: FURNISH NURSERY-GROWN PLANTS TRUE TO GENUS, SPECIES, VARIETY, CULTIVAR, STEM FORM, SHEARING, AND OTHER FEATURES INDICATED IN PLANT LIST, PLANT SCHEDULE, OR PLANT LEGEND INDICATED ON DRAWINGS AND COMPLYING WITH ANSI Z60.1, AND WITH HEALTHY ROOT SYSTEMS DEVELOPED BY TRANSPLANTING OR ROOT PRUNING. PROVIDE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK, DENSELY FOLIATED WHEN IN LEAF AND FREE OF DISEASE, PESTS, EGGS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT.

1. TREES WITH DAMAGED, CROOKED, OR MULTIPLE LEADERS; TIGHT VERTICAL BRANCHES WHERE BARK IS SQUEEZED BETWEEN TWO BRANCHES OR BETWEEN BRANCH AND TRUNK ("INCLUDED BARK"); CROSSING TRUNKS; CUT-OFF LIMBS MORE THAN 3/4 INCH IN DIAMETER; OR WITH STEM GIRDLING ROOTS ARE UNACCEPTABLE.

2. COLLECTED STOCK: DO NOT USE PLANTS HARVESTED FROM THE WILD, FROM NATIVE STANDS, FROM AN ESTABLISHED LANDSCAPE PLANTING, OR NOT GROWN IN A NURSERY UNLESS OTHERWISE INDICATED.

PROVIDE PLANTS OF SIZES, GRADES, AND BALL OR CONTAINER SIZES COMPLYING WITH ANSI Z60.1 FOR TYPES AND FORM OF PLANTS REQUIRED. PLANTS OF A LARGER SIZE MAY BE USED IF ACCEPTABLE TO ARCHITECT, WITH A PROPORTIONATE INCREASE IN SIZE OF ROOTS OR BALLS.

ROOT-BALL DEPTH: FURNISH TREES AND SHRUBS WITH ROOT BALLS MEASURED FROM TOP OF ROOT BALL, WHICH BEGINS AT ROOT FLARE ACCORDING TO ANSI Z60.1. ROOT FLARE SHALL BE VISIBLE BEFORE PLANTING.

LABELING: LABEL EACH PLANT OF EACH VARIETY, SIZE, AND CALIPER WITH A SECURELY ATTACHED, WATERPROOF TAG BEARING LEGIBLE DESIGNATION OF COMMON NAME AND FULL SCIENTIFIC NAME, INCLUDING GENUS AND SPECIES. INCLUDE NOMENCLATURE FOR HYBRID, VARIETY, OR CULTIVAR, IF APPLICABLE FOR THE PLANT.

IF FORMAL ARRANGEMENTS OR CONSECUTIVE ORDER OF PLANTS IS INDICATED ON DRAWINGS, SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD, AND NUMBER THE LABELS TO ASSURE SYMMETRY IN PLANTING.

FERTILIZERS: REFER TO PLANTING SOIL SPECIFICATION.

MULCHES

ORGANIC MULCH: FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING OF TREES AND SHRUBS, CONSISTING OF ONE OF THE FOLLOWING:

1. TYPE: DOUBLE-SHREDDED HARDWOOD.

2. SIZE RANGE: 3 INCHES MAXIMUM, 1/2 INCH MINIMUM.

3. COLOR: NATURAL.

PESTICIDES

GENERAL: PESTICIDE REGISTERED AND APPROVED BY THE EPA, ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND OF TYPE RECOMMENDED BY MANUFACTURER FOR EACH SPECIFIC PROBLEM AND AS REQUIRED FOR PROJECT CONDITIONS AND APPLICATION. DO NOT USE RESTRICTED PESTICIDES UNLESS AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION.

PRE-EMERGENT HERBICIDE (SELECTIVE AND NONSELECTIVE): EFFECTIVE FOR CONTROLLING THE GERMINATION OR GROWTH OF WEEDS WITHIN PLANTED AREAS AT THE SOIL LEVEL DIRECTLY BELOW THE MULCH LAYER.

POST-EMERGENT HERBICIDE (SELECTIVE AND NONSELECTIVE): EFFECTIVE FOR CONTROLLING WEED GROWTH THAT HAS ALREADY GERMINATED.

SLOW-RELEASE WATERING DEVICE: STANDARD PRODUCT MANUFACTURED FOR DRIP IRRIGATION OF PLANTS AND EMPLOYING ITS WATER CONTENTS OVER AN EXTENDED TIME PERIOD; MANUFACTURED FROM UV-LIGHT-STABILIZED NYLON-REINFORCED POLYETHYLENE SHEET, PVC, OR HDPE PLASTIC.

1. PRODUCT: TREEGATOR ORIGINAL SLOW RELEASE WATERING BAG

a. COLOR: GREEN.

MISCELLANEOUS PRODUCTS

BURLAP: NON-SYNTHETIC, BIODEGRADABLE.

EXAMINATION

EXAMINE AREAS TO RECEIVE PLANTS, WITH INSTALLER PRESENT, FOR COMPLIANCE WITH REQUIREMENTS AND CONDITIONS AFFECTING INSTALLATION AND PERFORMANCE OF THE WORK.

1. VERIFY THAT NO FOREIGN OR DELETERIOUS MATERIAL OR LIQUID SUCH AS PAINT, PAINT WASHOUT, CONCRETE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, OR ACID HAS BEEN DEPOSITED IN SOIL WITHIN A PLANTING AREA.

2. VERIFY THAT PLANTS AND VEHICLES LOADED WITH PLANTS CAN TRAVEL TO PLANTING LOCATIONS WITH ADEQUATE OVERHEAD CLEARANCE.

3. SUSPEND PLANTING OPERATIONS DURING PERIODS OF EXCESSIVE SOIL MOISTURE UNTIL THE MOISTURE CONTENT REACHES ACCEPTABLE LEVELS TO ATTAIN THE REQUIRED RESULTS.

4. UNIFORMLY MOISTEN EXCESSIVELY DRY SOIL THAT IS NOT WORKABLE OR WHICH IS DUSTY.

IF CONTAMINATION BY FOREIGN OR DELETERIOUS MATERIAL OR LIQUID IS PRESENT IN SOIL WITHIN A PLANTING AREA, REMOVE THE SOIL AND CONTAMINATION AS DIRECTED BY ARCHITECT AND REPLACE WITH NEW PLANTING SOIL.

PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

PREPARATION

PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES AND TURF AREAS AND EXISTING PLANTS FROM DAMAGE CAUSED BY PLANTING OPERATIONS.

INSTALL EROSION-CONTROL MEASURES TO PREVENT EROSION OR DISPLACEMENT OF SOILS AND DISCHARGE OF SOIL-BEARING WATER RUNOFF OR AIRBORNE DUST TO ADJACENT PROPERTIES AND WALKWAYS.

PLANTING AREA ESTABLISHMENT

GENERAL: PREPARE PLANTING AREA FOR SOIL PLACEMENT AND MIX PLANTING SOIL ACCORDING TO PLANTING SOIL SPECIFICATIONS.

PLACING PLANTING SOIL: PLACE AND MIX PLANTING SOIL ACCORDING TO PLANTING SOIL SPECIFICATION

BEFORE PLANTING, OBTAIN ARCHITECT'S ACCEPTANCE OF FINISH GRADING; RESTORE PLANTING AREAS IF ERODED OR OTHERWISE DISTURBED AFTER FINISH GRADING.

EXCAVATION FOR TREES AND SHRUBS

PLANTING PITS AND TRENCHES: EXCAVATE CIRCULAR PLANTING PITS.

1. EXCAVATE PLANTING PITS WITH SIDES SLOPING INWARD AT A 45-DEGREE ANGLE. EXCAVATIONS WITH VERTICAL SIDES ARE UNACCEPTABLE. TRIM PERIMETER OF BOTTOM LEAVING CENTER AREA OF BOTTOM RAISED SLIGHTLY TO SUPPORT ROOT BALL AND ASSIST IN DRAINAGE AWAY FROM CENTER. DO NOT FURTHER DISTURB BASE. ENSURE THAT ROOT BALL WILL SIT ON UNDISTURBED BASE SOIL TO PREVENT SETTLING. SCARIFY SIDES OF PLANTING PIT SMEARED OR SMOOTHED DURING EXCAVATION.

2. EXCAVATE APPROXIMATELY THREE TIMES AS WIDE AS BALL DIAMETER FOR BALLED AND BURLAPPED AND CONTAINER-GROWN STOCK.

3. DO NOT EXCAVATE DEEPER THAN DEPTH OF THE ROOT BALL, MEASURED FROM THE ROOT FLARE TO THE BOTTOM OF THE ROOT BALL.

4. IF AREA UNDER THE PLANT WAS INITIALLY DUG TOO DEEP, ADD SOIL TO RAISE IT TO THE CORRECT LEVEL AND THOROUGHLY TAMP THE ADDED SOIL TO PREVENT SETTLING.

5. MAINTAIN ANGLES OF REPOSE OF ADJACENT MATERIALS TO ENSURE STABILITY. DO NOT EXCAVATE SUBGRADES OF ADJACENT PAVING, STRUCTURES, HARDSCAPES, OR OTHER NEW OR EXISTING IMPROVEMENTS.

6. MAINTAIN SUPERVISION OF EXCAVATIONS DURING WORKING HOURS.

7. KEEP EXCAVATIONS COVERED OR OTHERWISE PROTECTED WHEN UNATTENDED BY INSTALLER'S PERSONNEL.

BACKFILL SOIL: SUBSOIL AND TOPSOIL REMOVED FROM EXCAVATIONS MAY NOT BE USED AS BACKFILL SOIL UNLESS OTHERWISE INDICATED.

OBSTRUCTIONS: NOTIFY ARCHITECT IF UNEXPECTED ROCK OR OBSTRUCTIONS DETRIMENTAL TO TREES OR SHRUBS ARE ENCOUNTERED IN EXCAVATIONS.

1. HARDPAN LAYER, DRILL 6-INCH-DIAMETER HOLES, 24 INCHES APART, INTO FREE-DRAINING STRATA OR TO A DEPTH OF 10 FEET, WHICHEVER IS LESS, AND BACKFILL WITH FREE-DRAINING MATERIAL.

DRAINAGE: NOTIFY ARCHITECT IF SUBSOIL CONDITIONS EVIDENCE UNEXPECTED WATER SEEPAGE OR RETENTION IN TREE OR SHRUB PLANTING PITS.

TREE, SHRUB, AND VINE PLANTING

INSPECTION: AT TIME OF PLANTING, VERIFY THAT ROOT FLARE IS VISIBLE AT TOP OF ROOT BALL, ACCORDING TO ANSI Z60.1. IF ROOT FLARE IS NOT VISIBLE, REMOVE SOIL IN A LEVEL MANNER FROM THE ROOT BALL TO WHERE THE TOP-MOST ROOT EMERGES FROM THE TRUNK, AFTER SOIL REMOVAL TO EXPOSE THE ROOT FLARE, VERIFY THAT ROOT BALL STILL MEETS SIZE REQUIREMENTS.

REMOVE STEM GIRDLING ROOTS AND KINKED ROOTS. REMOVE INJURED ROOTS BY CUTTING CLEANLY; DO NOT BREAK.

BALLED AND BURLAPPED STOCK: SET EACH PLANT PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 1 INCH ABOVE ADJACENT FINISH GRADES.

1. BACKFILL: PLANTING SOIL PER PLANTING SOILS SPECIFICATION.

2. AFTER PLACING SOME BACKFILL AROUND ROOT BALL TO STABILIZE PLANT, CAREFULLY CUT AND REMOVE BURLAP, ROPE, AND WIRE BASKETS FROM TOPS OF ROOT BALLS AND FROM SIDES, BUT DO NOT REMOVE FROM UNDER ROOT BALLS. REMOVE PALLET'S, IF ANY, BEFORE SETTING. DO NOT USE PLANTING STOCK IF ROOT BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATION.

3. BACKFILL AROUND ROOT BALL IN LAYERS, TAMPING TO SETTLE SOIL AND ELIMINATE VOIDS AND AIR POCKETS, WHEN PLANTING PIT IS APPROXIMATELY ONE-HALF FILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE WATER IS ABSORBED.

4. CONTINUE BACKFILLING PROCESS. WATER AGAIN AFTER PLACING AND TAMPING FINAL LAYER OF SOIL.

CONTAINER-GROWN STOCK: SET EACH PLANT PLUMB AND IN CENTER OF PLANTING PIT OR TRENCH WITH ROOT FLARE 1 INCH ABOVE ADJACENT FINISH GRADES.

1. BACKFILL: PLANTING SOIL PER PLANTING SOILS SPECIFICATION.

2. CAREFULLY REMOVE ROOT BALL FROM CONTAINER WITHOUT DAMAGING ROOT BALL OR PLANT.

3. BACKFILL AROUND ROOT BALL IN LAYERS, TAMPING TO SETTLE SOIL AND ELIMINATE VOIDS AND AIR POCKETS, WHEN PLANTING PIT IS APPROXIMATELY ONE-HALF FILLED, WATER THOROUGHLY BEFORE PLACING REMAINDER OF BACKFILL. REPEAT WATERING UNTIL NO MORE WATER IS ABSORBED.

4. CONTINUE BACKFILLING PROCESS. WATER AGAIN AFTER PLACING AND TAMPING FINAL LAYER OF SOIL.

WHEN PLANTING ON SLOPES, SET THE PLANT SO THE ROOT FLARE ON THE UPHILL SIDE IS FLUSH WITH THE SURROUNDING SOIL ON THE SLOPE; THE EDGE OF THE ROOT BALL ON THE DOWNHILL SIDE WILL BE ABOVE THE SURROUNDING SOIL. APPLY ENOUGH SOIL TO COVER THE DOWNHILL SIDE OF THE ROOT BALL.

MECHANIZED TREE-SPADE PLANTING

1. TREES MAY BE PLANTED WITH AN APPROVED MECHANIZED TREE SPADE AT THE DESIGNATED LOCATIONS. DO NOT USE TREE SPADE TO MOVE TREES LARGER THAN THE MAXIMUM SIZE ALLOWED FOR A SIMILAR FIELD-GROWN, BALLED-AND-BURLAPPED ROOT-BALL DIAMETER ACCORDING TO ANSI Z60.1, OR LARGER THAN MANUFACTURER'S MAXIMUM SIZE RECOMMENDATION FOR THE TREE SPADE BEING USED, WHICHEVER IS SMALLER.

2. USE THE SAME TREE SPADE TO EXCAVATE THE PLANTING HOLE AS WILL BE USED TO EXTRACT AND TRANSPORT THE TREE.

3. WHEN EXTRACTING THE TREE, CENTER THE TRUNK WITHIN THE TREE SPADE AND MOVE TREE WITH A SOLID BALL OF EARTH.

4. CUT EXPOSED ROOTS CLEANLY DURING TRANSPLANTING OPERATIONS.

5. PLANT TREES FOLLOWING PROCEDURES IN "TREE, SHRUB, AND VINE PLANTING" ARTICLE.

6. WHERE POSSIBLE, ORIENT THE TREE IN THE SAME DIRECTION AS IN ITS ORIGINAL LOCATION.

TREE, SHRUB, AND VINE PRUNING

1. REMOVE ONLY DEAD, DYING, OR BROKEN BRANCHES. DO NOT PRUNE FOR SHAPE.

2. DO NOT APPLY PRUNING PAINT TO WOUNDS.

GROUND COVER AND PLANT PLANTING

1. SET OUT AND SPACE GROUND COVER AND PLANTS OTHER THAN TREES, SHRUBS, AND VINES AS INDICATED ON DRAWINGS IN EVEN ROWS WITH TRIANGULAR SPACING.

2. USE PLANTING SOIL PER PLANTING SOIL SPECIFICATION FOR BACKFILL.

3. DIG HOLES LARGE ENOUGH TO ALLOW SPREADING OF ROOTS.

4. FOR ROOTED CUTTING PLANTS SUPPLIED IN FLATS, PLANT EACH IN A MANNER THAT MINIMALLY DISTURBS THE ROOT SYSTEM BUT TO A DEPTH NOT LESS THAN TWO NODES.

5. WORK SOIL AROUND ROOTS TO ELIMINATE AIR POCKETS AND LEAVE A SLIGHT SAUCER INDENTATION AROUND PLANTS TO HOLD WATER.

6. WATER THOROUGHLY AFTER PLANTING, TAKING CARE NOT TO COVER PLANT CROWNS WITH WET SOIL.

7. PROTECT PLANTS FROM HOT SUN AND WIND; REMOVE PROTECTION IF PLANTS SHOW EVIDENCE OF RECOVERY FROM TRANSPLANTING SHOCK.

PLANTING AREA MULCHING

MULCH BACKFILLED SURFACES OF PLANTING AREAS AND OTHER AREAS INDICATED.

1. TREES IN TURF AREAS: APPLY [ORGANIC] [AGGREGATE] MULCH RING OF 2-INCH AVERAGE THICKNESS, WITH 18-INCH RADIUS AROUND TRUNKS OR STEMS. DO NOT PLACE MULCH WITHIN 3 INCHES OF TRUNKS OR STEMS.

2. ORGANIC MULCH IN PLANTING AREAS: APPLY 2-INCH AVERAGE THICKNESS OF ORGANIC MULCH OVER WHOLE SURFACE OF PLANTING AREA, AND FINISH LEVEL WITH ADJACENT FINISH GRADES. DO NOT PLACE MULCH WITHIN 3 INCHES OF TRUNKS OR STEMS.

EDGING INSTALLATION

SHOVEL-CUT EDGING: SEPARATE MULCHED AREAS FROM TURF AREAS, CURBS, AND PAVING WITH A 45-DEGREE, 4- TO 6-INCH-DEEP, SHOVEL-CUT EDGE.

INSTALLING SLOW-RELEASE WATERING DEVICE

1. PROVIDE ONE DEVICE FOR EACH TREE.

2. PLACE DEVICE ON TOP OF THE MULCH AT BASE OF TREE STEM AND FIL WITH WATER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

PLANT MAINTENANCE

1. MAINTAIN PLANTINGS BY PRUNING, CULTIVATING, WATERING, WEEDING, FERTILIZING, MULCHING, RESTORING PLANTING SAUCERS, ADJUSTING AND REPAIRING TREE-STABILIZATION DEVICES, RESETTling TO PROPER GRADES OR VERTICAL POSITION, AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE PLANTINGS.

2. FILL IN, AS NECESSARY, SOIL SUBSIDENCE THAT MAY OCCUR BECAUSE OF SETTLING OR OTHER PROCESSES. REPLACE MULCH MATERIALS DAMAGED OR LOST IN AREAS OF SUBSIDENCE.

3. APPLY TREATMENTS AS REQUIRED TO KEEP PLANT MATERIALS, PLANTED AREAS, AND SOILS FREE OF PESTS AND PATHOGENS OR DISEASE. USE INTEGRATED PEST MANAGEMENT PRACTICES WHEN POSSIBLE TO MINIMIZE USE OF PESTICIDES AND REDUCE HAZARDS. TREATMENTS INCLUDE PHYSICAL CONTROLS SUCH AS HOISING OFF FOLIAGE, MECHANICAL CONTROLS SUCH AS TRAPS, AND BIOLOGICAL CONTROL AGENTS.

PESTICIDE APPLICATION

1. APPLY PESTICIDES AND OTHER CHEMICAL PRODUCTS AND BIOLOGICAL CONTROL AGENTS ACCORDING TO AUTHORITIES HAVING JURISDICTION AND MANUFACTURER'S WRITTEN RECOMMENDATIONS. COORDINATE APPLICATIONS WITH OWNER'S OPERATIONS AND OTHERS IN PROXIMITY TO THE WORK. NOTIFY OWNER BEFORE EACH APPLICATION IS PERFORMED.

2. PRE-EMERGENT HERBICIDES (SELECTIVE AND NONSELECTIVE): APPLY TO TREE, SHRUB, AND GROUND-COVER AREAS ACCORDING TO MANUFACTURER'S WRITTEN RECOMMENDATIONS. DO NOT APPLY TO SEEDED AREAS.

3. POST-EMERGENT HERBICIDES (SELECTIVE AND NONSELECTIVE): APPLY ONLY AS NECESSARY TO TREAT ALREADY-GERMINATED WEEDS AND ACCORDING TO MANUFACTURER'S WRITTEN RECOMMENDATIONS.

REPAIR AND REPLACEMENT

GENERAL: REPAIR OR REPLACE EXISTING OR NEW TREES AND OTHER PLANTS THAT ARE DAMAGED BY CONSTRUCTION OPERATIONS, IN A MANNER APPROVED BY ARCHITECT.

1. SUBMIT DETAILS OF PROPOSED PRUNING AND REPAIRS.

2. PERFORM REPAIRS OF DAMAGED TRUNKS, BRANCHES, AND ROOTS WITHIN 24 HOURS, IF APPROVED.

3. REPLACE TREES AND OTHER PLANTS THAT CANNOT BE REPAIRED AND RESTORED TO FULL-GROWTH STATUS, AS DETERMINED BY ARCHITECT.

REMOVE AND REPLACE TREES THAT ARE MORE THAN 25 PERCENT DEAD OR IN AN UNHEALTHY CONDITION BEFORE THE END OF THE CORRECTIONS PERIOD OR ARE DAMAGED DURING CONSTRUCTION OPERATIONS THAT ARCHITECT DETERMINES ARE INCAPABLE OF RESTORING TO NORMAL GROWTH PATTERN.

1. PROVIDE NEW PLANTS OF SAME SIZE AND SPECIES AS THOSE BEING REPLACED.

CLEANING AND PROTECTION

1. DURING PLANTING, KEEP ADJACENT PAVING AND CONSTRUCTION CLEAN AND WORK AREA IN AN ORDERLY CONDITION. CLEAN WHEELS OF VEHICLES BEFORE LEAVING SITE TO AVOID TRACKING SOIL ONTO ROADS, WALKS, OR OTHER PAVED AREAS.

2. REMOVE SURPLUS SOIL AND WASTE MATERIAL INCLUDING EXCESS SUBSOIL, UNSUITABLE SOIL, TRASH, AND DEBRIS AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY.

3. PROTECT PLANTS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND OPERATIONS OF OTHER CONTRACTORS AND TRADES. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR, OR REPLACE DAMAGED PLANTINGS.

4. AFTER INSTALLATION AND BEFORE PROJECT COMPLETION, REMOVE NURSERY TAGS, NURSERY STAKES, TIE TAPE, LABELS, WIRE, BURLAP, AND OTHER DEBRIS FROM PLANT MATERIAL, PLANTING AREAS, AND PROJECT SITE.

5. AT TIME OF SUBSTANTIAL COMPLETION, VERIFY THAT TREE-WATERING DEVICES ARE IN GOOD WORKING ORDER AND LEAVE THEM IN PLACE. REPLACE IMPROPERLY FUNCTIONING DEVICES.

MAINTENANCE SERVICE

MAINTENANCE SERVICE FOR PLANTS: PROVIDE MAINTENANCE BY SKILLED EMPLOYEES OF LANDSCAPE INSTALLER. MAINTAIN AS REQUIRED IN "PLANT MAINTENANCE" ARTICLE. BEGIN MAINTENANCE IMMEDIATELY AFTER PLANTS ARE INSTALLED AND CONTINUE UNTIL PLANTINGS ARE ACCEPTABLY HEALTHY AND WELL ESTABLISHED, BUT FOR NOT LESS THAN MAINTENANCE PERIOD BELOW.


1. MAINTENANCE PERIOD: 12 MONTHS FROM DATE OF SUBSTANTIAL COMPLETION.



THE KLEINGERS GROUP

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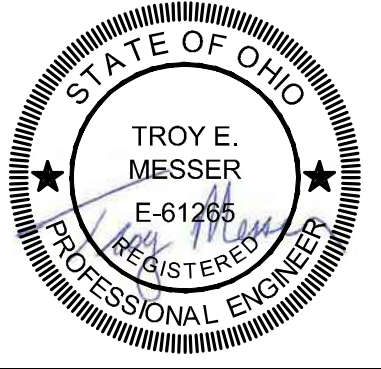


CMHA

1967

CREATIVE HOUSING SOLUTIONS

SEAL:



NO. DATE DESCRIPTION
01 02/20/2026 PERMIT SET
02 03/06/2026 REVISION 1

VETERAN'S VILLAGE

2139 STATE ROUTE 125
MONROE TOWNSHIP
CLERMONT COUNTY, OHIO

PROJECT NO: 250235.001

DATE: 01.30.2026

SCALE:

SHEET NAME:

PLANTING SPECIFICATIONS

SHEET NO:

L201