

# THE CHEMOURS COMPANY FC, LLC TRAIL RIDGE SOUTH MINE PLANT SITE PLAN CLAY COUNTY, FLORIDA APPENDIX E



3200 GATEWAY CENTRE BLVD., SUITE 100  
MORRISVILLE, NC 27560  
PHONE: 919-755-5011  
FL LICENSE # 4793

**EXISTING INFORMATION:**

EXISTING GROUND ELEVATION SOURCE:  
TOPOGRAPHIC SURVEY (BY: McKIM & CREED, INC.)  
DATED AUGUST 13, 2019, SUPPLEMENTED BY  
USGS NATIONAL ELEVATION DATASET (NED) AND  
LIDAR DATA COLLECTED IN 2011-2012 BY MAPPING  
RESOURCE GROUP.

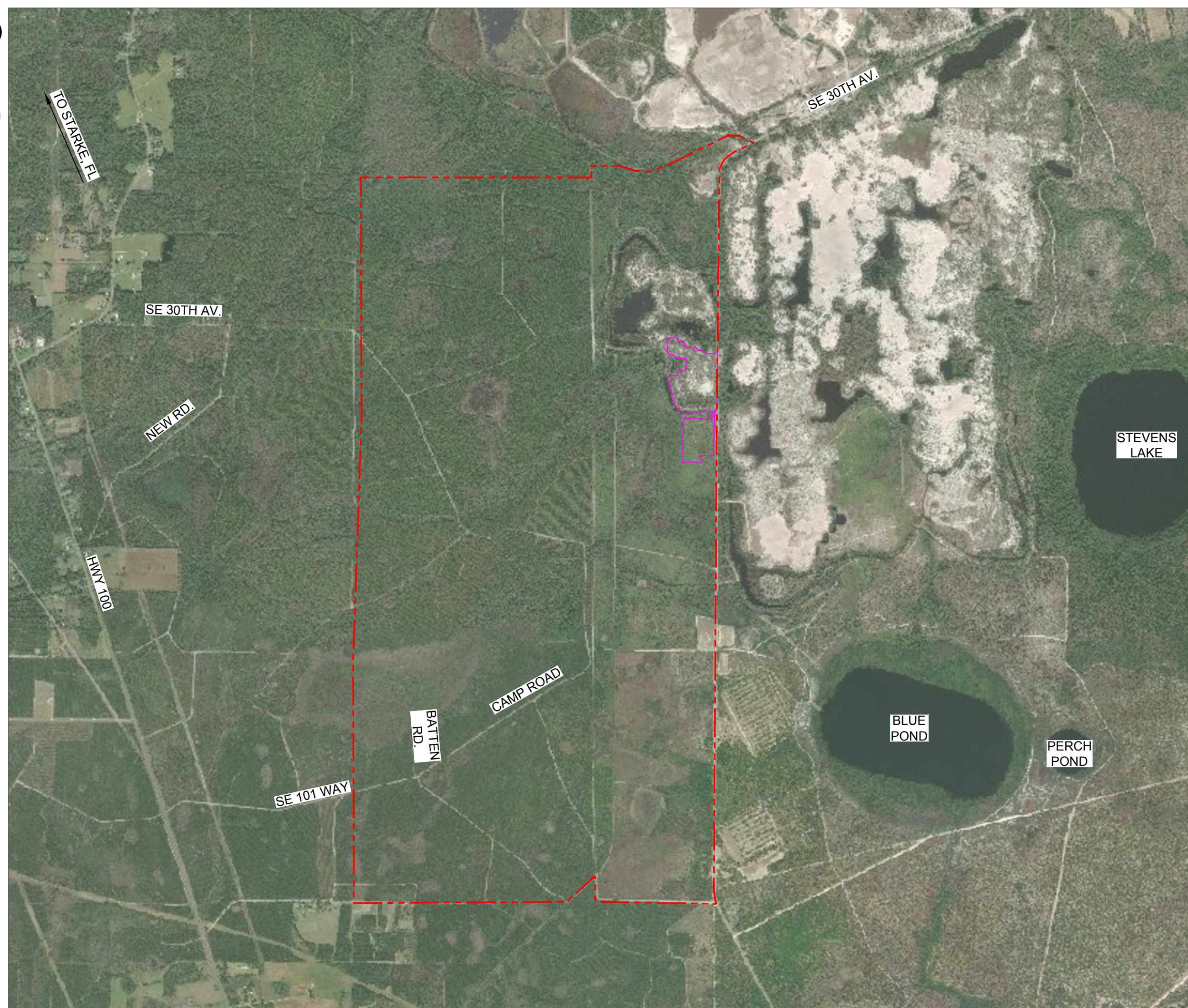
CONTROL DATUM:  
VERTICAL - NAVD 88, FEET  
HORIZONTAL - NAD 83, FL STATE PLANE NORTH  
ZONE, FEET

NATIONAL GEODETIC SURVEY CONTROL POINT  
(NEAREST):  
DESIGNATION - V443  
PID - AC9617  
LAT: N29° 56' 36" LONG: W82° 00' 58"  
ELEV. 242.58 FT NAVD  
REFERENCE: SURVEY ISSUED AUGUST 13, 2019

**OPERATIONS PHASE INFORMATION:**

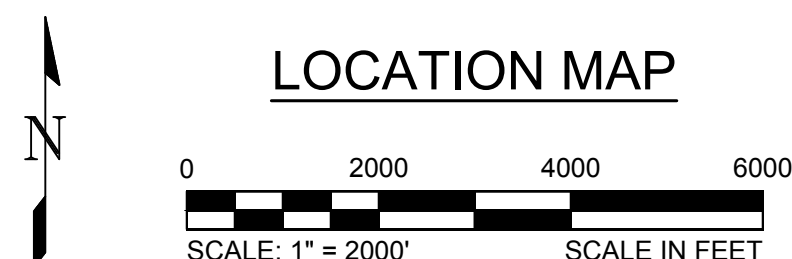
25-YEAR, 24-HOUR RAINFALL SOURCE: ST.  
JOHNS RIVER WATER MANAGEMENT DISTRICT  
(SJRWMD, 2013)

RAINFALL	
STORM	DEPTH (IN)
25-YR, 24-HR	7.75



**LEGEND:**

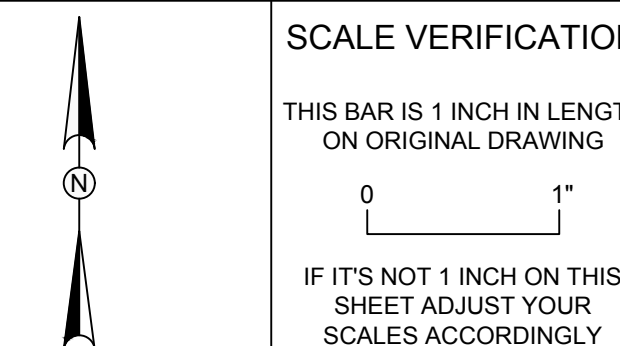
- - - - MINING PERMIT BOUNDARY (± 2,884.4 AC.)  
APPLICATION No. MMR\_137482-018
- PLANT SITE PERMIT BOUNDARY (± 44.1 AC.)



SHEET INDEX	
SHEET NO.	DESCRIPTION
1	COVER
2	PRE-CONSTRUCTION CONDITIONS
3	DURING OPERATIONS PLANT SITE PLAN
4	POND 1 GRADING PLAN
5	POND 2 GRADING PLAN
6	DETAILS
7	DETAILS
8	DETAILS

REVISIONS				
REV	DESCRIPTION	DSN DWN	CHK APP	DATE
1	FDEP COMMENTS	MDD	EBB	11/8/2019
2	FDEP COMMENTS	MDD	RAP	
2	FDEP COMMENTS	KMC	EBB	2/28/2020
		TLB	EBB	
3	POND GRADING PLANS AND PROCESS AREA CROSS SECTION ADDED	MDD	EBB	5/7/2020
		MDD	EBB	

**ISSUED FOR PERMITTING**



ORIGINAL DRAWING SIZE IS 22 x 34

**COVER**

TRAIL RIDGE SOUTH - PLANT SITE  
5222 TREAT ROAD  
STARKE, FL 32091

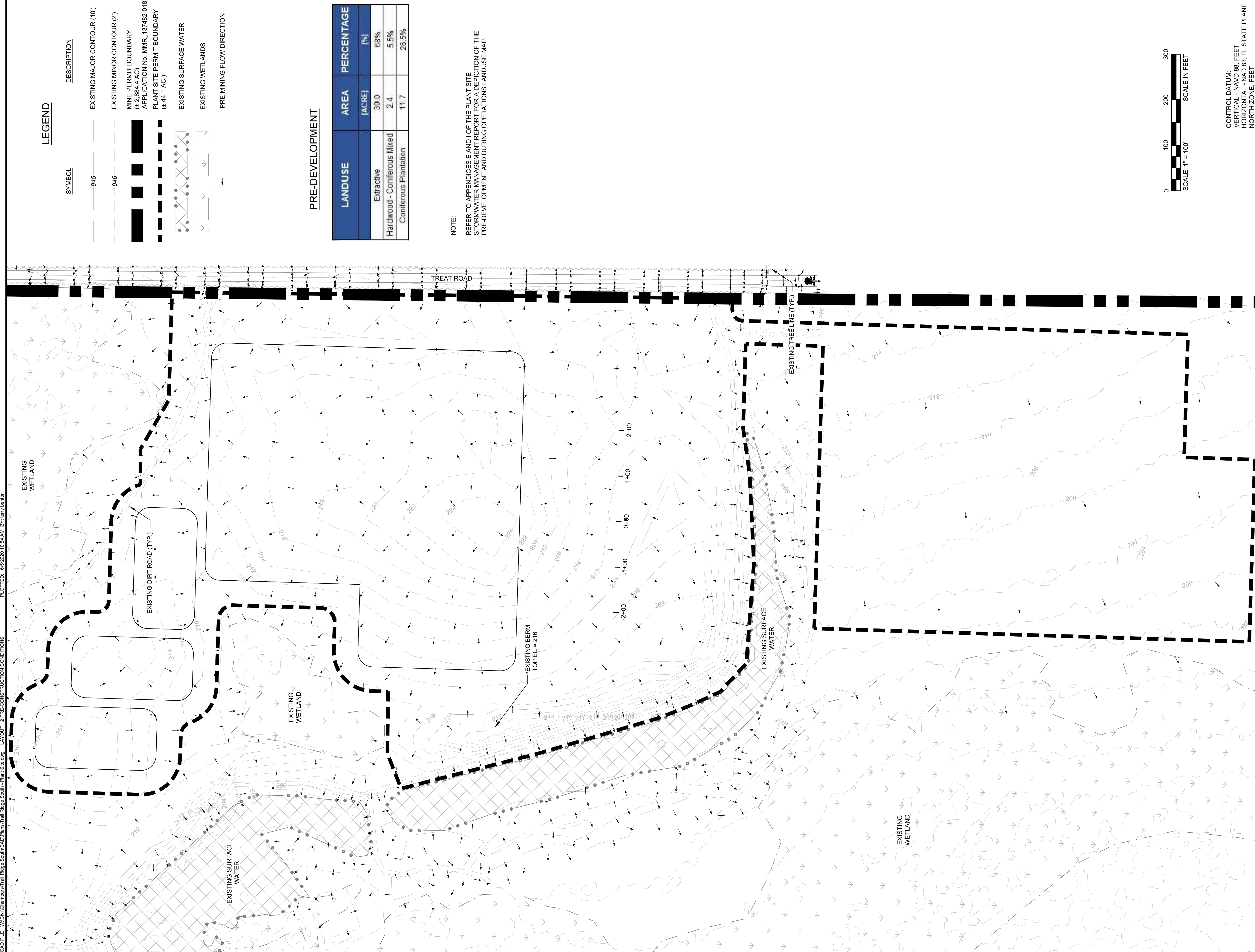


THE CHEMOURS COMPANY  
P.O. BOX 753  
STARKE, FL 32091

**ISSUED FOR PERMIT**

PROJECT NO.	00129491.003A	<b>1</b>
ISSUE DATE	5/7/2020	
CURRENT REVISION	3	
DESIGNED BY	MDD	
DRAWN BY	MDD	
CHECKED BY	EBB	
APPROVED BY	EBB	SHEET

CAD FILE: \\K:\Chemours\Trail Ridge South\CAD\Plans\Trail Ridge South - Plant Site.dwg LAYOUT: 2 PRE-CONSTRUCTION CONDITIONS PLOTTED: 06/20/20 10:54 AM BY: Jerry Barton



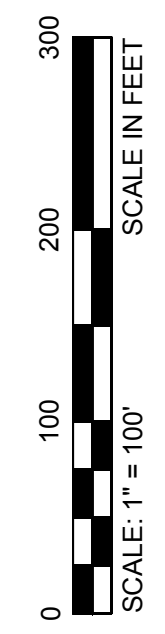
**LEGEND**

SYMBOL	DESCRIPTION
945	EXISTING MAJOR CONTOUR (10')
946	EXISTING MINOR CONTOUR (2')
[Thick Dashed Line]	MINE PERMIT BOUNDARY (±2,884.4 AC)
[Thin Dashed Line]	APPLICATION No. MMR 137482-018 PLANT SITE PERMIT BOUNDARY (±44.1 AC.)
[Cross-hatched Area]	EXISTING SURFACE WATER
[Wavy Line Area]	EXISTING WETLANDS
[Arrow]	PRE-MINING FLOW DIRECTION

**PRE-DEVELOPMENT**

LANDUSE	AREA [ACRE]	PERCENTAGE [%]
Extractive	30.0	68%
Hardwood - Coniferous Mixed	2.4	5.5%
Coniferous Plantation	11.7	26.5%

**NOTE:**  
REFER TO APPENDICES E AND I OF THE PLANT SITE  
STORMWATER MANAGEMENT REPORT FOR A DEPICTION OF THE  
PRE-DEVELOPMENT AND DURING OPERATIONS LANDUSE MAP.



CONTROL DATUM:  
VERTICAL - NAVD 88; FEET  
HORIZONTAL - NAD 83; FL STATE PLANE  
NORTH ZONE; FEET

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PHONE: 919-755-5011  
FL LICENSE # 4793

REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE
1	FDEP COMMENTS	MDD	EBB	11/8/2019
2	FDEP COMMENTS	KMC	EBB	2/28/2020
3	POND GRADING PLANS AND PROCESS AREA CROSS SECTION ADDED	TLB	EBB	5/7/2020

**ISSUED FOR PERMITTING**

SCALE VERIFICATION

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

**PRE-CONSTRUCTION CONDITIONS**

TRAIL RIDGE SOUTH - PLANT SITE  
5222 TREAT ROAD  
STARKE, FL 32091

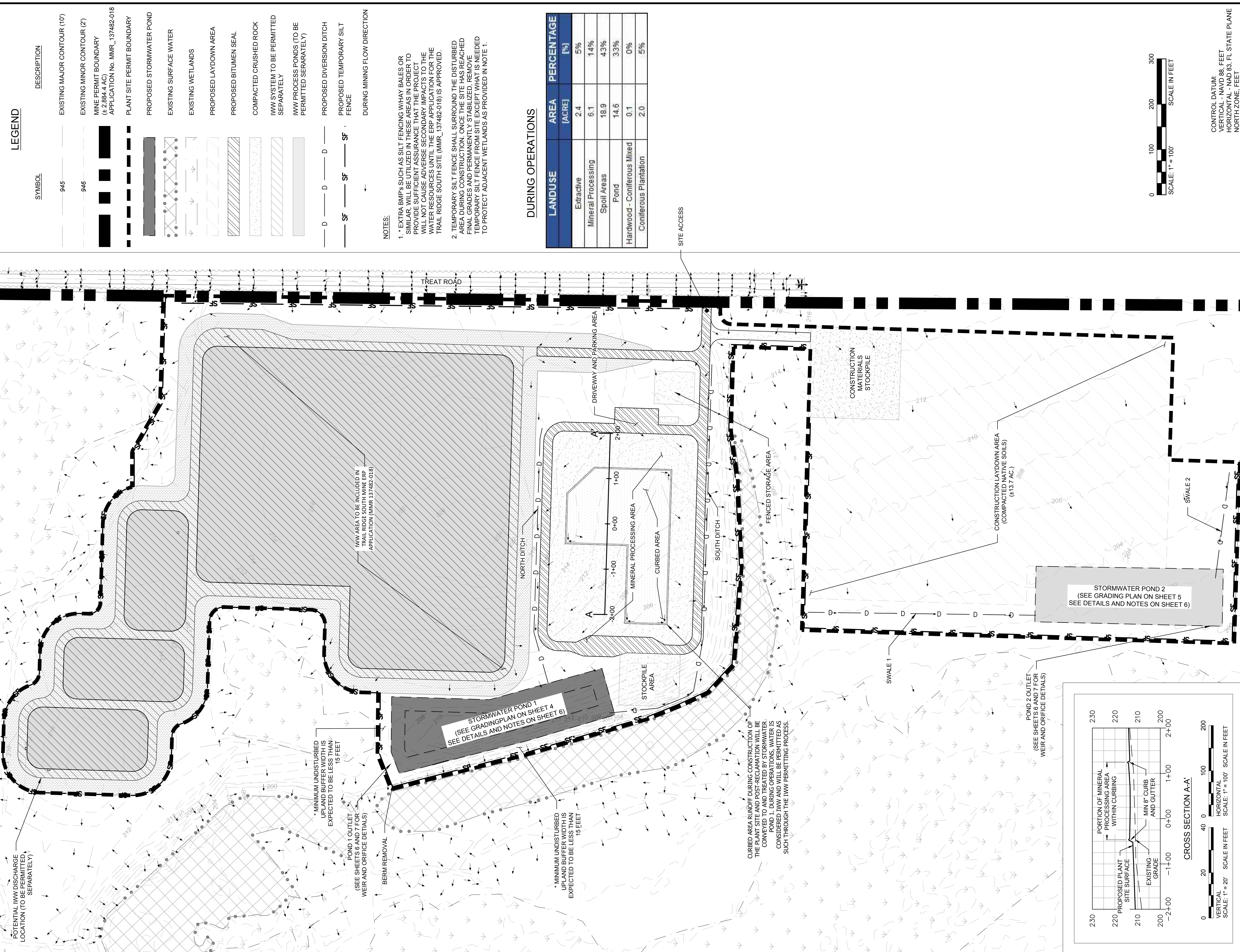
THE CHEMOURS COMPANY  
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APPROVED BY	EBB

SHEET 2 of 8

CAD FILE: \\K:\Chemours\Trail Ridge South\CAD\Plant\Trail Ridge South - Plant Site.dwg LAYOUT: 3 DURING OPERATIONS PLANT SITE PLAN PLOTTED: 05/20/20 10:55 AM BY: Jerry Denton



**LEGEND**

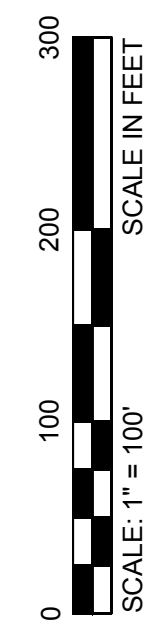
SYMBOL	DESCRIPTION
945	EXISTING MAJOR CONTOUR (10')
946	EXISTING MINOR CONTOUR (2')
(Thick dashed line)	MINE PERMIT BOUNDARY (± 2,884.4 AC) APPLICATION No. MMR_137482-018
(Thin dashed line)	PLANT SITE PERMIT BOUNDARY
(Grey shaded area)	PROPOSED STORMWATER POND
(Dotted pattern)	EXISTING SURFACE WATER
(Wavy pattern)	EXISTING WETLANDS
(Diagonal lines)	PROPOSED LAYDOWN AREA
(Stippled pattern)	PROPOSED BITUMEN SEAL
(Cross-hatched pattern)	COMPACTED CRUSHED ROCK
(Diagonal lines)	IWW SYSTEM TO BE PERMITTED SEPARATELY
(Diagonal lines)	IWW PROCESS PONDS (TO BE PERMITTED SEPARATELY)
(Dashed line with 'D')	PROPOSED DIVERSION DITCH
(Dashed line with 'SF')	PROPOSED TEMPORARY SILT FENCE
(Arrow)	DURING MINING FLOW DIRECTION

**NOTES:**

- EXTRA BMPs SUCH AS SILT FENCING/WHAY BALES OR SIMILAR BE UTILIZED IN THESE AREAS IN ORDER TO PREVENT SILT FROM ENTERING THE IWW SYSTEMS. THIS WILL NOT CAUSE ADVERSE SECONDARY IMPACTS TO THE WATER RESOURCES UNTIL THE ERP APPLICATION FOR THE TRAIL RIDGE SOUTH SITE (MMR\_137482-018) IS APPROVED.
- TEMPORARY SILT FENCE SHALL SURROUND THE DISTURBED AREA DURING CONSTRUCTION. ONCE THE SITE HAS REACHED FINAL GRADES AND PERMANENTLY STABILIZED, REMOVE TEMPORARY SILT FENCE FROM SITE EXCEPT WHAT IS NEEDED TO PROTECT ADJACENT WETLANDS AS PROVIDED IN NOTE 1.

**DURING OPERATIONS**

LANDUSE	AREA [ACRE]	PERCENTAGE [%]
Extractive	2.4	5%
Mineral Processing	6.1	14%
Spill Areas	18.9	43%
Pond	14.6	33%
Hardwood - Coniferous Mixed	0.1	0%
Coniferous Plantation	2.0	5%



CONTROL DATUM:  
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HORIZONTAL - NAD 83, FL STATE PLANE  
NORTH ZONE - FEET

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FL LICENSE # 4793

**REVISIONS**

REV	DESCRIPTION	DSN DWN	CHK APP	DATE
1	FDEP COMMENTS	MDD	EBB	11/8/2019
2	FDEP COMMENTS	KMC	EBB	2/28/2020
3	POND GRADING PLANS AND PROCESS AREA CROSS SECTION ADDED	TLB	EBB	5/7/2020
		MDD	EBB	

**ISSUED FOR PERMITTING**

**SCALE VERIFICATION**

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ORIGINAL DRAWING SIZE IS 22 x 34

**DURING OPERATIONS PLANT SITE PLAN**

TRAIL RIDGE SOUTH - PLANT SITE  
5222 TREAT ROAD  
STARKE, FL 32091

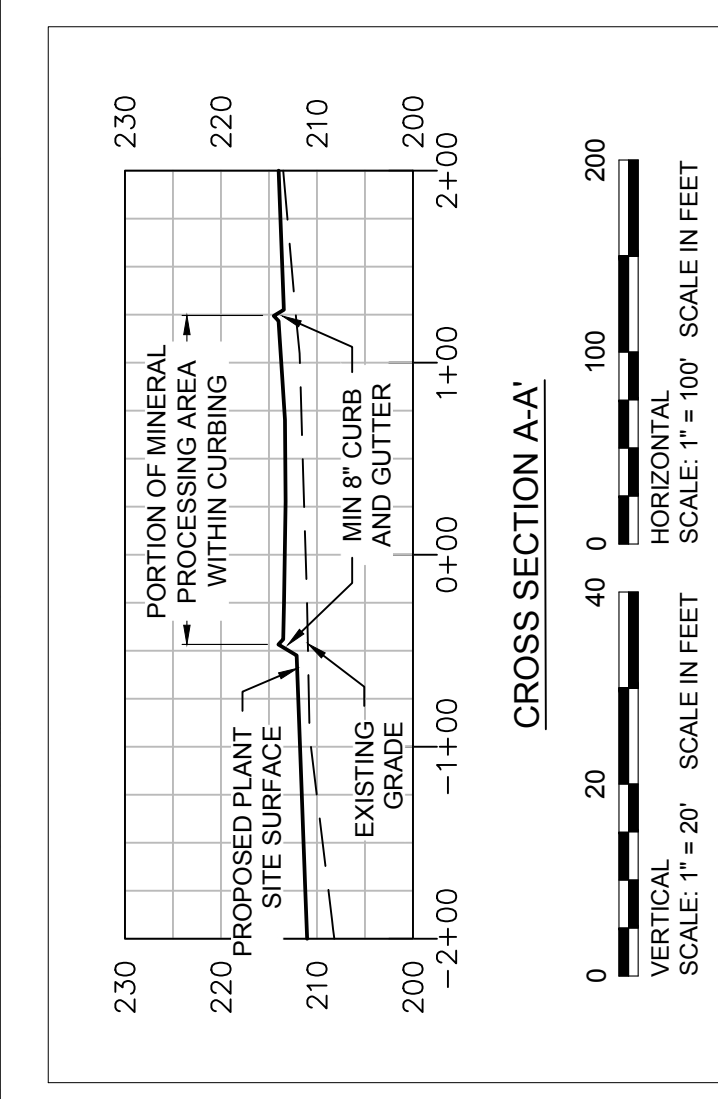
**Chemours**

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P.O. BOX 753  
STARKE, FL 32091

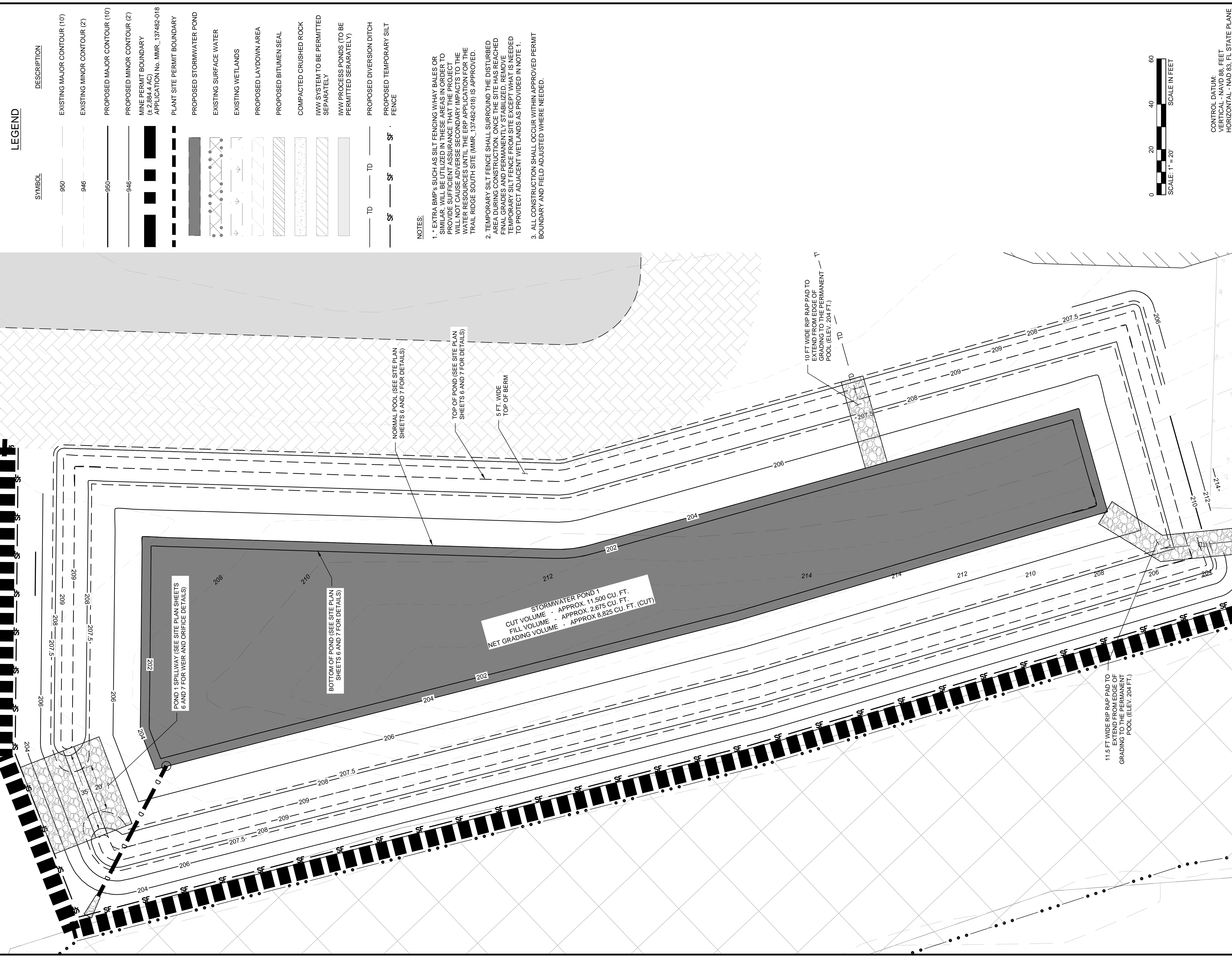
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PROJECT NO.	00129491.003A
ISSUE DATE	5/7/2020
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APPROVED BY	EBB

SHEET 3 of 8



CAD FILE: W:\Chems\Trail Ridge South\CAD\Drawn\Trail Ridge South - Grading Plan.dwg LAYOUT: 4 POND 1 GRADING PLAN PLOTTED: 5/7/2020 5:18 PM BY: matthew.daniels

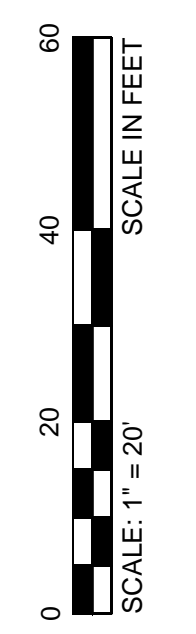


### LEGEND

SYMBOL	DESCRIPTION
960	EXISTING MAJOR CONTOUR (10')
946	EXISTING MINOR CONTOUR (2')
960	PROPOSED MAJOR CONTOUR (10')
946	PROPOSED MINOR CONTOUR (2')
[Thick solid line]	MINE PERMIT BOUNDARY (± 2,884.4 AC) APPLICATION No. MMR_137482-018
[Dashed line]	PLANT SITE PERMIT BOUNDARY
[Hatched pattern]	PROPOSED STORMWATER POND
[Dotted pattern]	EXISTING SURFACE WATER
[Wavy pattern]	EXISTING WETLANDS
[Diagonal lines]	PROPOSED LAYDOWN AREA
[Diagonal lines]	PROPOSED BITUMEN SEAL
[Stippled pattern]	COMPACTED CRUSHED ROCK
[Diagonal lines]	IWW SYSTEM TO BE PERMITTED SEPARATELY
[Diagonal lines]	IWW PROCESS PONDS (TO BE PERMITTED SEPARATELY)
[Dashed line]	PROPOSED DIVERSION DITCH
[Dashed line]	PROPOSED TEMPORARY SILT FENCE

**NOTES:**

- EXTRA BMP'S SUCH AS SILT FENCING WHAY BALES OR SIMILAR, WILL BE UTILIZED IN THESE AREAS IN ORDER TO PROVIDE SUFFICIENT ASSURANCE THAT THE PROJECT WILL NOT CAUSE ADVERSE SECONDARY IMPACTS TO THE WATER RESOURCES UNTIL THE ERP APPLICATION FOR THE TRAIL RIDGE SOUTH SITE (MMR\_137482-018) IS APPROVED.
- TEMPORARY SILT FENCE SHALL SURROUND THE DISTURBED AREA. IWW CONSTRUCTION SHALL BE PERMITTED IN FINISHED CONCRETE PERMANENT LAGOONS. PERMANENT TEMPORARY SILT FENCE FROM SITE EXCEPT WHAT IS NEEDED TO PROTECT ADJACENT WETLANDS AS PROVIDED IN NOTE 1.
- ALL CONSTRUCTION SHALL OCCUR WITHIN APPROVED PERMIT BOUNDARY AND FIELD ADJUSTED WHERE NEEDED.



CONTROL DATUM:  
 VERTICAL - NAVD 88, FEET  
 HORIZONTAL - NAD 83, FL STATE PLANE  
 NORTH ZONE - FEET

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1	FDEP COMMENTS	MDD	EBB	11/8/2019
2	FDEP COMMENTS	KMC	EBB	2/28/2020
3	POND GRADING PLANS AND PROCESS AREA CROSS SECTION ADDED	TLB	EBB	5/7/2020
		MDD	EBB	

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**SCALE VERIFICATION**

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ORIGINAL DRAWING SIZE IS 22 x 34

**POND 1 GRADING PLAN**

TRAIL RIDGE SOUTH - PLANT SITE  
 5222 TREAT ROAD  
 STARKE, FL 32091

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SHEET 4 of 8

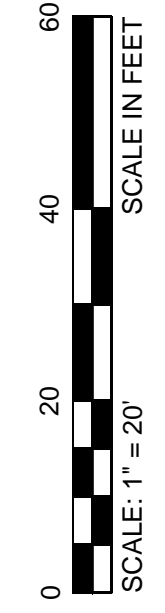
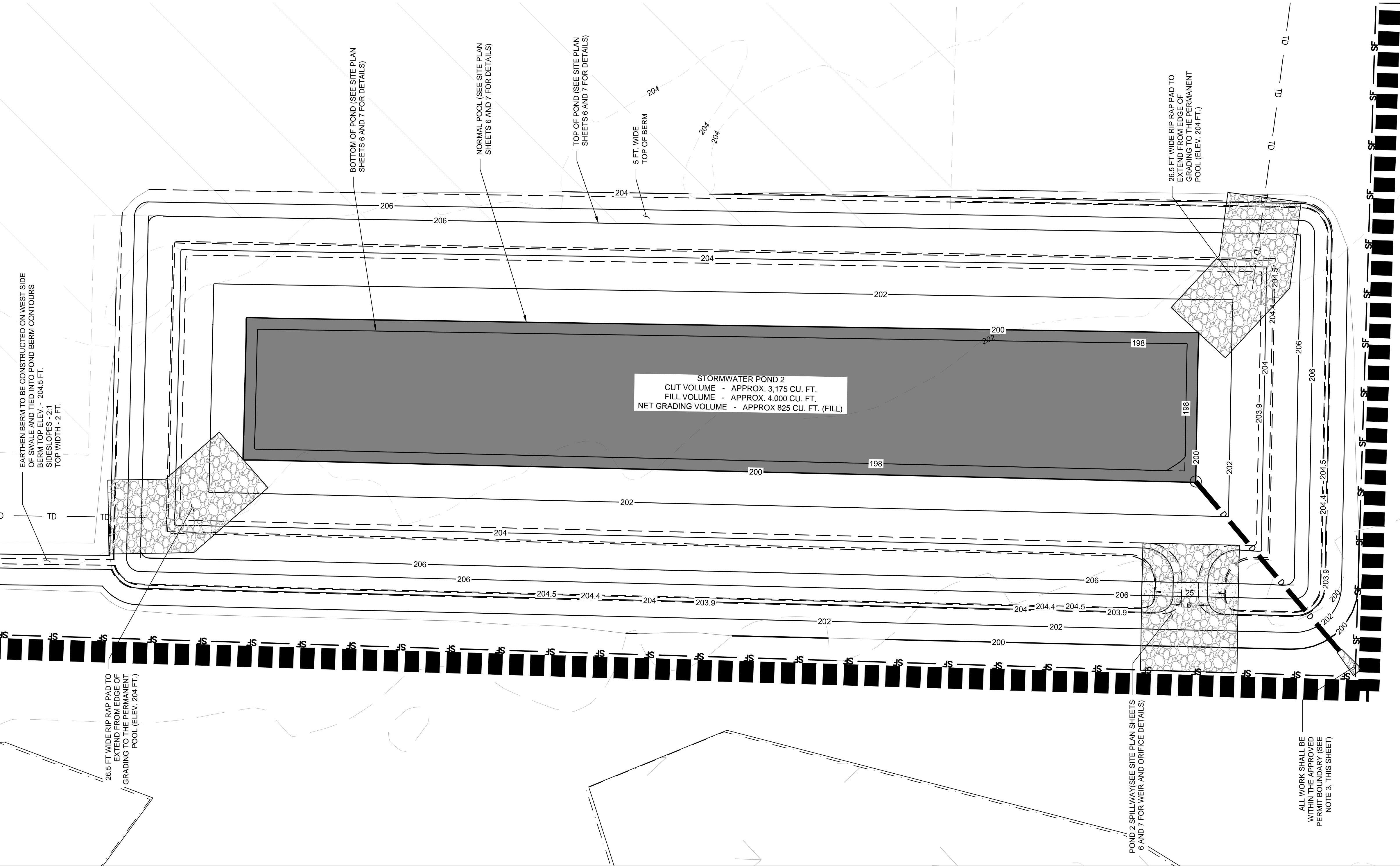
CAD FILE: \\Chems\Chemo\CAD\Plant\Trail Ridge\_South\_Gradino Plant.dwg PLOTTED: 5/7/2020 5:10 PM BY: matthew.danids

### LEGEND

SYMBOL	DESCRIPTION
950	EXISTING MAJOR CONTOUR (10')
946	EXISTING MINOR CONTOUR (2')
950	PROPOSED MAJOR CONTOUR (10')
946	PROPOSED MINOR CONTOUR (2')
(Thick solid line)	MINE PERMIT BOUNDARY (± 2,884.4 AC) APPLICATION NO. MMR-137482-018
(Dashed line)	PLANT SITE PERMIT BOUNDARY
(Stippled area)	PROPOSED STORMWATER POND
(Cross-hatched area)	EXISTING SURFACE WATER
(Wavy lines)	EXISTING WETLANDS
(Diagonal lines)	PROPOSED LAYDOWN AREA
(Diagonal lines)	PROPOSED BITUMEN SEAL
(Stippled area)	COMPACTED CRUSHED ROCK
(Diagonal lines)	IWW SYSTEM TO BE PERMITTED SEPARATELY
(Diagonal lines)	IWW PROCESS PONDS (TO BE PERMITTED SEPARATELY)
(Dashed line)	PROPOSED DIVERSION DITCH
(Thick dashed line)	PROPOSED TEMPORARY SILT FENCE

**NOTES:**

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- TEMPORARY SILT FENCE SHALL SURROUND THE DISTURBED AREA AND BE CONSTRUCTED WITH THE SITE REACHED FINAL CONDS (PERMANENTLY). A 24" HIGH RIGID TEMPORARY SILT FENCE FROM SITE EXCEPT WHAT IS NEEDED TO PROTECT ADJACENT WETLANDS AS PROVIDED IN NOTE 1.
- ALL CONSTRUCTION SHALL OCCUR WITHIN APPROVED PERMIT BOUNDARY AND FIELD ADJUSTED WHERE NEEDED.



CONTROL DATUM:  
VERTICAL - NAVD 88; FEET  
HORIZONTAL - NAD 83; FL STATE PLANE  
NORTH ZONE; FEET

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PHONE: 919-755-9011  
FL LICENSE # 4793

### REVISIONS

REV	DESCRIPTION	DSN DWN	CHK APP	DATE
1	FDEP COMMENTS	MDD	EBB	11/8/2019
2	FDEP COMMENTS	KMC	EBB	2/28/2020
3	POND GRADING PLANS AND PROCESS AREA CROSS SECTION ADDED	MDD	EBB	5/7/2020

**ISSUED FOR PERMITTING**

### SCALE VERIFICATION

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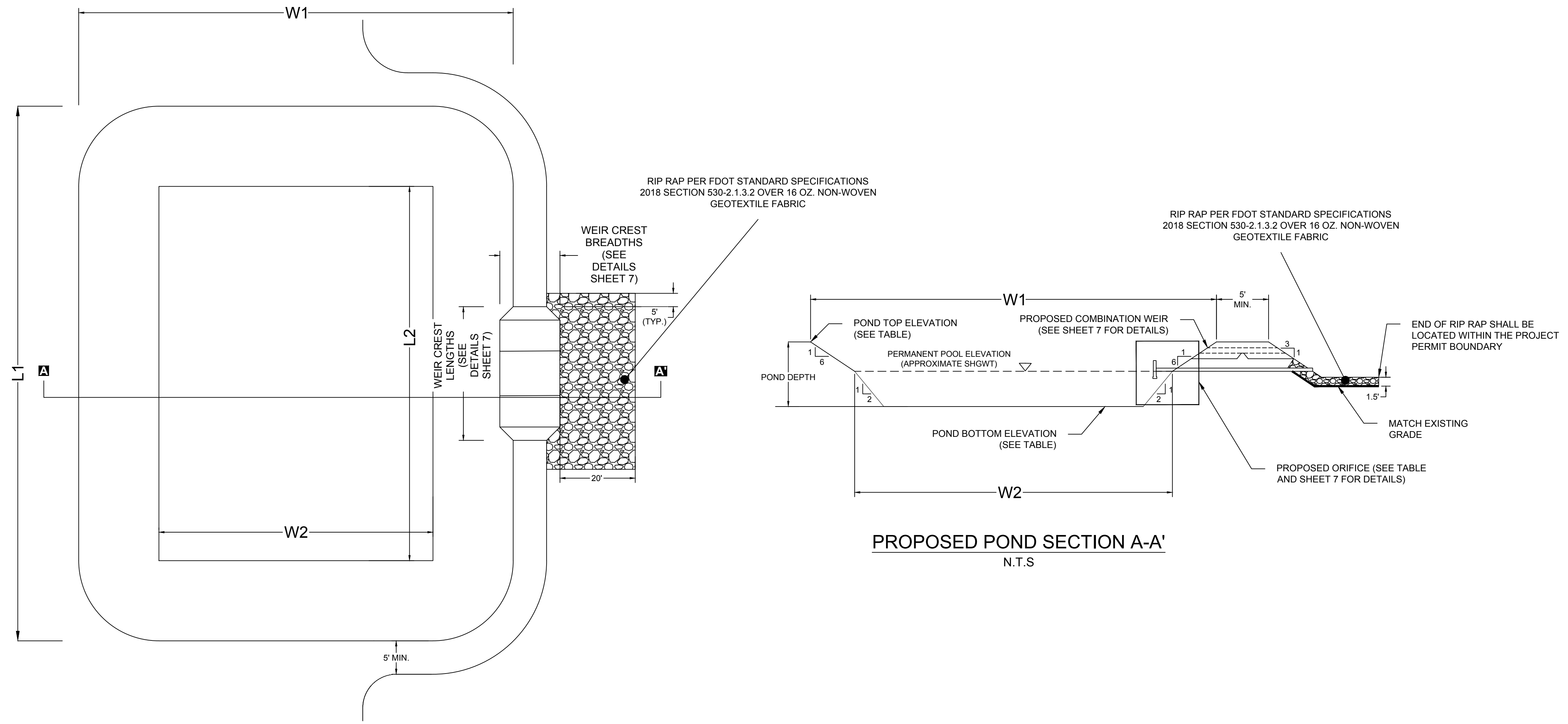
ORIGINAL DRAWING SIZE IS 22 x 34  
**POND 2 GRADING PLAN**  
TRAIL RIDGE SOUTH - PLANT SITE  
5222 TREAT ROAD  
STARKE, FL 32091

THE CHEMOOURS COMPANY  
P.O. BOX 753  
STARKE, FL 32091

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DESIGNED BY	MDD
DRAWN BY	MDD
CHECKED BY	EBB
APPROVED BY	EBB

SHEET 5 of 8



**PROPOSED STORMWATER POND PLAN VIEW**  
N.T.S.

**GENERAL NOTES**

- POND SHALL NOT BE PLACED IN WATERS OF THE STATE OR USGS BLUE-LINE STREAMS (UNLESS APPROVED BY FEDERAL AUTHORITIES).
- POND SIDE SLOPES SHALL BE SEEDED AND, WHEN NECESSARY, STABILIZED WITH VEGETATIVE OR SYNTHETIC MATTING TO PREVENT THE FORMATION OF RILLS AND GULLIES.
- STORMWATER RUNOFF ENTERING THE POND MUST BE DIRECTED INTO PROPER BMPs TO PREVENT EROSION ALONG SIDE SLOPES AND TO PREVENT SCOUR AT THE BASIN'S INLETS.
- THE ELEVATION OF THE EMERGENCY SPILLWAY SHOULD BE AT LEAST 1 FOOT BELOW THE TOP OF THE EMBANKMENT. THE EMERGENCY SPILLWAY SHOULD NOT BE LOCATED ON FILL MATERIAL, WHEN POSSIBLE. RIPRAP AND GEOTEXTILE LINER SHOULD BE PLACED ON ALL SPILLWAYS THAT MUST BE LOCATED ON FILL MATERIAL.

**MAINTENANCE:**

INSPECT PONDS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR ANY DAMAGES IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN IT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. PLACE THE REMOVED SEDIMENT IN AN AREA WITH SEDIMENT CONTROLS. REPAIR OR RE-ANCHOR ANY MATTING OR GEOTEXTILE FABRIC AS NECESSARY.

CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE POOL AREA.

POND NAME	SHGWT ELEV (ft)	POND BOTTOM ELEV (ft)	POND TOP ELEV (ft)	POND TOP LENGTH / L1 (ft)	POND TOP WIDTH / W1 (ft)	PERMANENT POOL DEPTH (ft)	TEMPORARY POOL DEPTH (ft)	PERMANENT POOL LENGTH / L2 (ft)	PERMANENT POOL WIDTH / W2 (ft)	POND SHAPE	PERMANENT POOL SURFACE AREA (acres)	TOP SURFACE AREA (acres)	STORAGE VOLUME PROVIDED (AC-FT)
Pond 1	204	202	209	Irregular	Irregular	2	5	Irregular	Irregular	Irregular	0.602	1.380	4.82
Pond 2	200	198	206	400	125	2	6	328	53	Prism	0.399	1.148	4.64

**REVISIONS**

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**DETAILS**

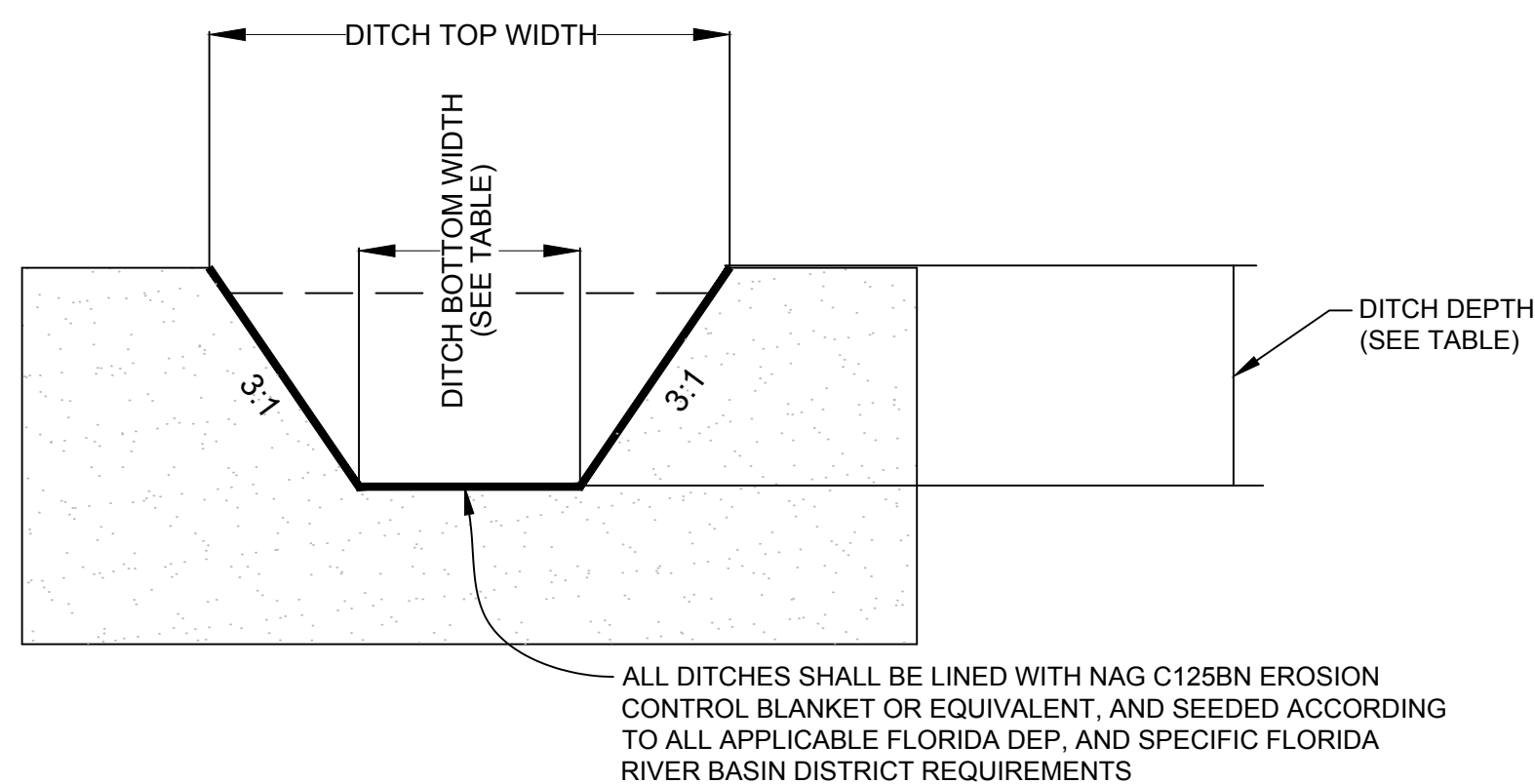
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DITCH NAME	UPPER INVERT	LOWER INVERT	DITCH BOTTOM WIDTH (ft)	DEPTH (ft)	DITCH TOP WIDTH (ft)	LENGTH (ft)	SLOPE (ft/ft)
North Ditch	216.0	206.0	4.0	1	10.0	578	0.0173
South Ditch	214.0	205.0	5.5	1	11.5	936	0.0096
Swale 1	204.0	200	20.5	1	26.5	500	0.008
Swale 2	204.5	200	20.5	1	26.5	235	0.0191

**NOTES:**

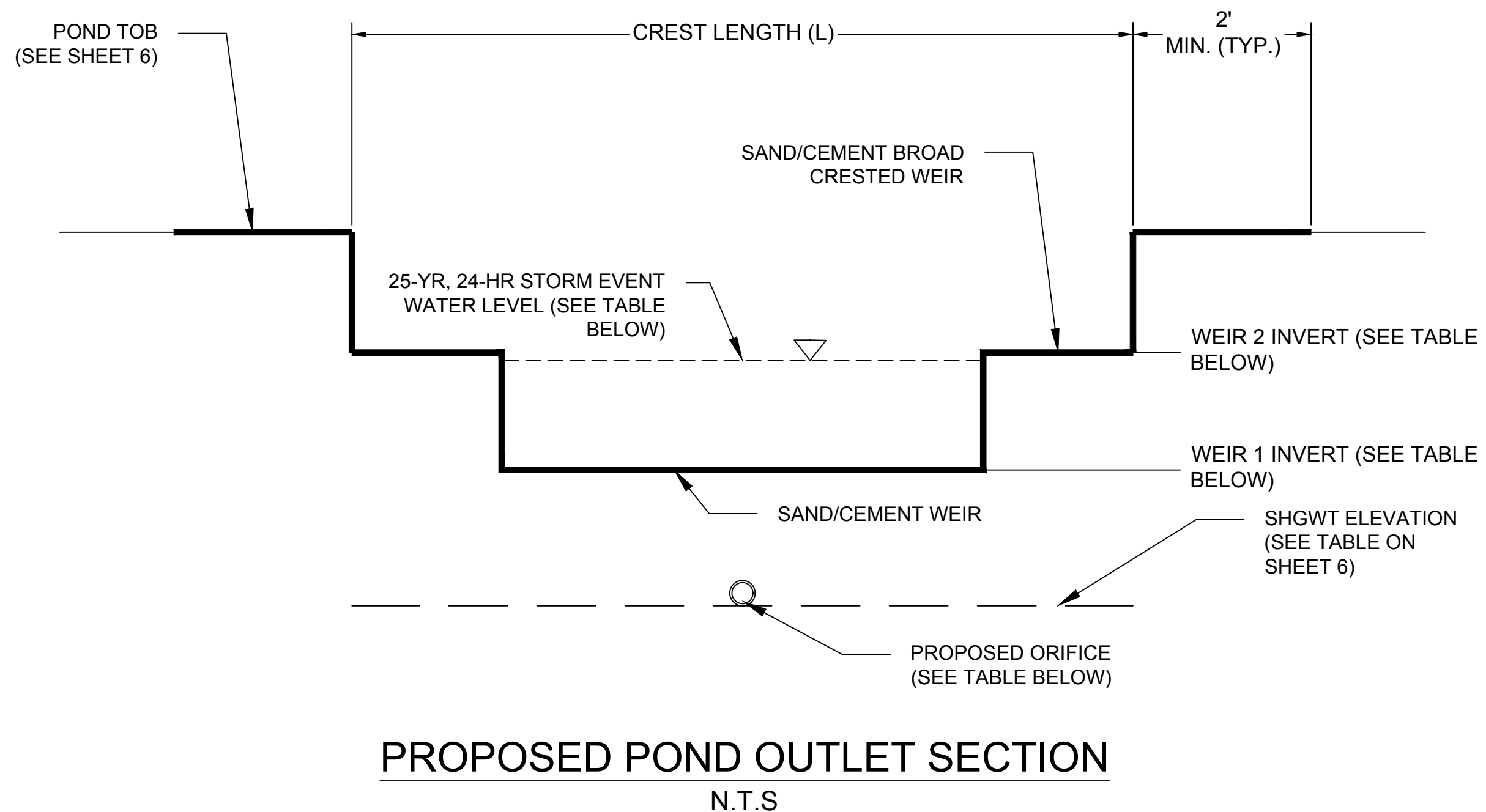
1. REMOVE AND PROPERLY DISPOSE OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.
2. ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DESIGN REQUIREMENTS.
3. PROVIDE SUFFICIENT ROOM AROUND DIVERSIONS TO PERMIT MACHINE REGRADING AND CLEANOUT.
4. DITCHES TO REMAIN AS LONG AS THE PLANT IS IN OPERATION, AND UNTIL THE SITE HAS BEEN PERMANENTLY STABILIZED DURING THE MINE RESTORATION PHASE.
5. STABILIZE OUTLET TO PONDS WITH RIP RAP OVER GEOTEXTILE FROM TOP OF BANK TO BOTTOM OF POND.

**MAINTENANCE:**

INSPECT DITCHES AT LEAST WEEKLY AND AFTER EVERY RAINFALL EVENT > 3". IMMEDIATELY REMOVE ACCUMULATED SEDIMENT FROM THE FLOW AREA AND REPAIR THE DITCH. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED.

**PROPOSED DITCHES/SWALES**

N.T.S



**ROLLMAX™**  
ROLLED EROSION CONTROL

Specification Sheet - BioNet® C125BN™ Erosion Control Blanket

**DESCRIPTION**  
The long-term double net erosion control blanket shall be a machine-produced mat of 100% coconut fiber with a functional longevity of up to 24 months. (NOTE: functional longevity may vary depending upon climatic conditions, soil, geographical location, and elevation). The blanket shall be of consistent thickness with the coconut evenly distributed over the entire area of the mat. The blanket shall be covered on the top and bottom sides with 100% biodegradable woven natural organic fiber netting. The netting shall consist of machine directional strands formed from two intertwined yarns with cross directional strands interwoven through the twisted machine strands (commonly referred to as Leno weave) to form an approximately 0.50 x 1.0 (1/2" x 2.54 cm) mesh. The blanket shall be sewn together on 1.50 inch (3.81 cm) centers with degradable thread. The blanket shall be manufactured with a colored thread 15 inches along both outer edges (approximately 2.5 inches [6.35 cm] from the edge) as an overlap guide for adjacent mats.

The C125BN shall meet Type 4 specification requirements established by the Erosion Control Technology Council (ECTC) and Federal Highway Administration's (FHWA) FPL-03 Section 713.17

Index Property	Test Method	Typical
Thickness	ASTM D6525	0.23 in (5.84 mm)
Resiliency	ECTC Guidelines	80%
Water Absorbency	ASTM D1012	300%
Mass/Unit Area	ASTM D475	0.79 oz/sy (233 g/sqm)
Swirl	ECTC Guidelines	40%
Smolder Resistance	ECTC Guidelines	Yes
Stiffness	ASTM D1388	0.11 oz-in
Light Penetration	ASTM D8567	96.2%
Tensile Strength - MD	ASTM D6878	206.4 lb/ft (3.06 kN/m)
Elongation - MD	ASTM D6878	75.3%
Tensile Strength - TD	ASTM D6878	165.2 lb/ft (2.15 kN/m)
Elongation - TD	ASTM D6878	12.9%
Bioassay Improvement	ASTM 7922	50.0%

Design Permissible Shear Stress	
Unvegetated Shear Stress	2.35 psf (112 Pa)
Unvegetated Velocity	10.0 fpm (3.05 m/s)

Slope Design Data: C Factors	
Slope Length (L)	< 3' ± 2.1
3' - 20' (0.91 - 6.10 m)	0.001
20 - 50' (6.10 - 15.24 m)	0.003
> 50' (15.24 m)	0.007

Slope Gradients (G)	
< 3%	0.001
3% - 10%	0.003
10% - 20%	0.005
> 20%	0.010

Roughness Coefficients - Unveg.	
Flow Depth	Manning's n
< 0.50 ft (0.15 m)	0.022
0.50 - 2.0 ft (0.15 - 0.61 m)	0.022 - 0.034
> 2.0 ft (0.61 m)	0.034

**Material Content**

Matrix	100% Coconut Fiber (0.27 kg/sqm)
Netting	100% Biodegradable jute (3.76 kg/1000 sqm)
Thread	Biodegradable

**Standard Roll Sizes**

Width	8.0 ft (2.4 m)
Length	112 ft (34.14 m)
Weight ± 10%	65.25 lbs (29.61 kg)
Area	80 sq yd (86.3 sqm)
	Leno weave top only
	Leno weave top and bottom

**Tensor**  
NORTH AMERICAN GREEN™

Tensor International Corporation  
2500 Normwood Parkway  
Alpharetta, GA 30009  
800-703-6461  
tensorcorp.com

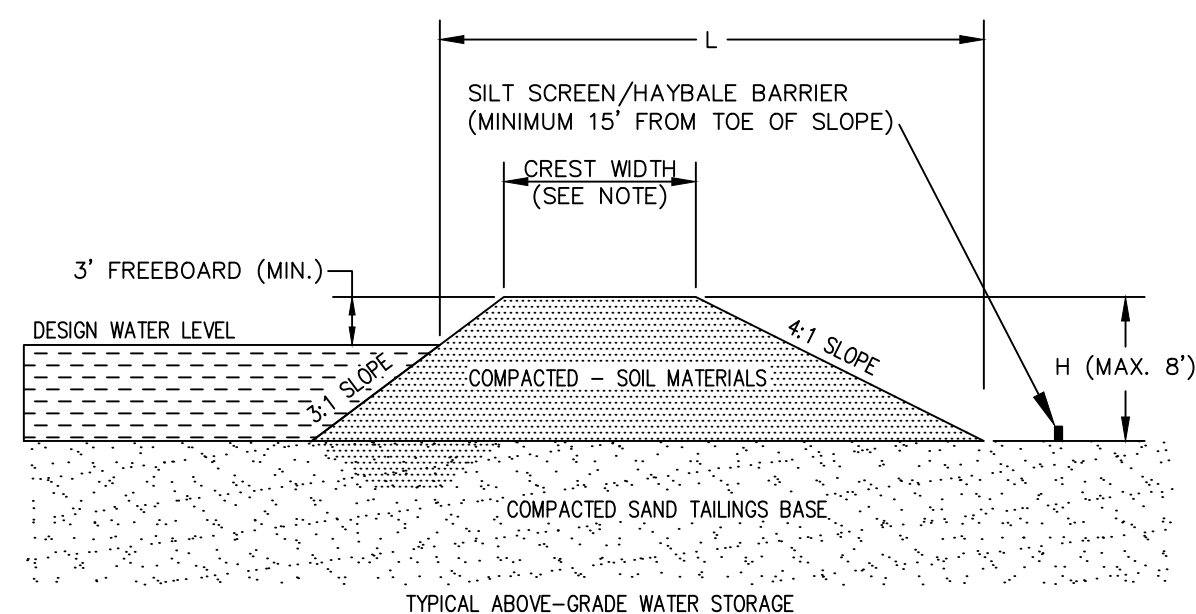
Tensor International Corporation warrants that at the time of delivery the product furnished hereunder shall conform to the specification stated herein. Any other warranty including manufacturer's warranties for component parts or materials included in this product shall be null and void. This warranty is void where prohibited by law. This product specification supersedes all other specifications for the product and shall be the final specification for the product. Products shipped prior to January 1, 2005, are not covered by this warranty.  
IC: RAVL\_MF016\_MFC125BN\_S13  
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**MAINTENANCE:**

- INSPECT ROLLED EROSION CONTROL PRODUCTS (RECP) AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY.
- GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED, AND EROSION MUST NOT OCCUR BENEATH THE RECP.
- ANY AREAS OF THE RECP THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED.
- IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND THE ERODED AREA PROTECTED.
- MONITOR AND REPAIR THE RECP AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED.

**NAG C125BN EROSION CONTROL BLANKET**

NO SCALE

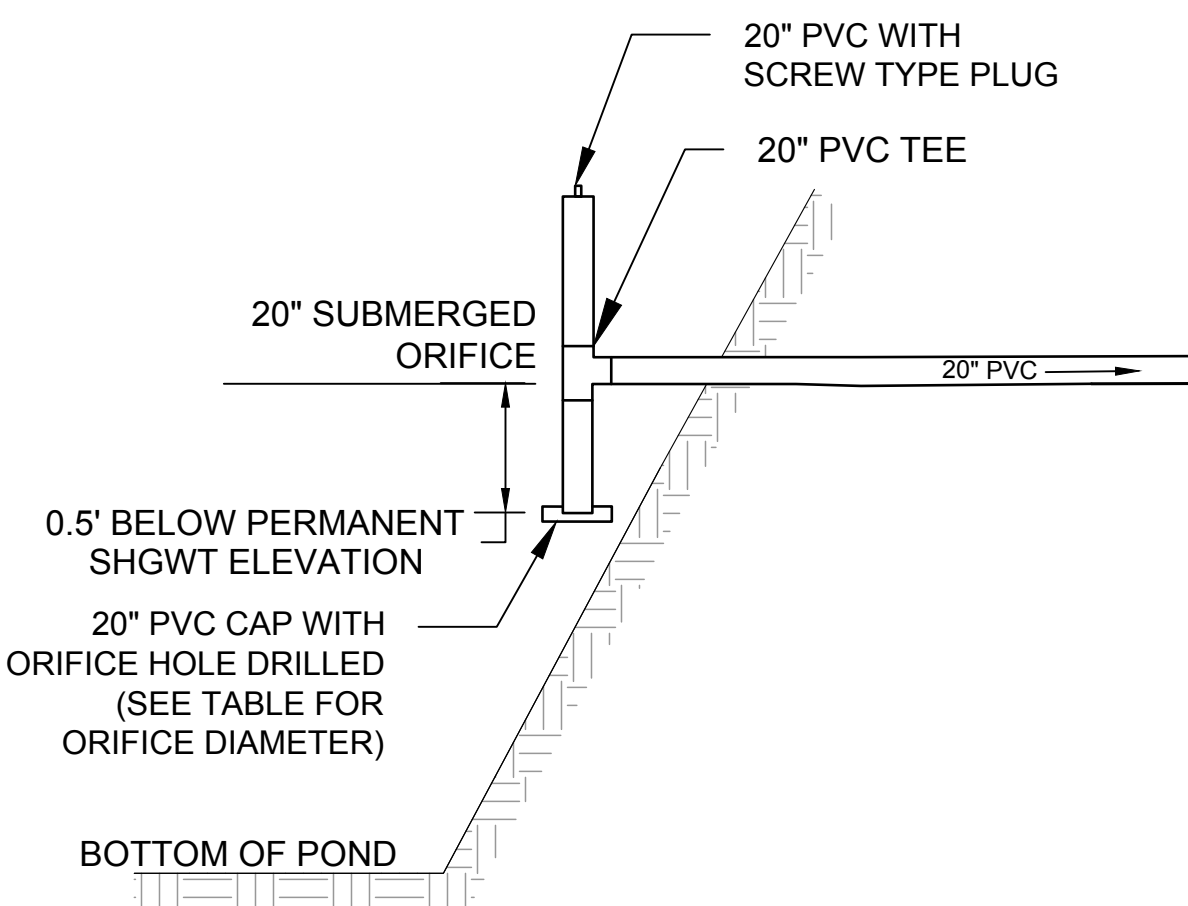


- NOTES:**
1. H = HEAD DIFFERENCE BETWEEN POND WATER LEVEL AND LOWEST ELEVATION OF OUTSIDE TOE OF BERM (MAXIMUM 8 FT)
  2. L = HORIZONTAL DISTANCE BETWEEN EDGE OF MAXIMUM WATER SURFACE AND OUTSIDE TOE OF BERM
  3. SET CREST WIDTH (MINIMUM 15FT) SO THAT THE RATIO OF H / L IS LESS THAN OR EQUAL TO 0.10
  4. ALL BERMS TO BE DESIGNED AND CONSTRUCTED PER "RECOMMENDED BEST MANAGEMENT PRACTICES (BMP'S) FOR DESIGN AND CONSTRUCTION OF STORAGE PONDS" (ARDAMAN & ASSOCIATES, INC. APRIL 2003)

**TYPICAL BERM CROSS SECTION**

NO SCALE

- ALL PONDS ASSOCIATED WITH IWW TREATMENT WILL BE PERMITTED SEPARATELY.



**NOTES:**

1. ORIFICE SHOULD BE INSPECTED AT LEAST WEEKLY AND AFTER EVERY RAINFALL EVENT OF 1/2 INCH OR GREATER TO ENSURE IT IS PROPERLY FUNCTIONING AND IS NOT CLOGGED.
2. ANY DEBRIS OR MATERIAL FOUND CLOGGING THE INLET SHOULD BE REMOVED.

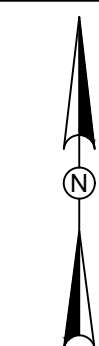
POND NAME	WEIR 1 INVERT (ft)	WEIR 2 INVERT (ft)	WEIR 1 CREST LENGTH (ft)	WEIR 2 CREST LENGTH (ft)	WEIR 2 CREST BREADTH (ft)	ORIFICE INVERT (ft)	DIAMETER OF ORIFICE, D (in)	25-YEAR, 24-HOUR PEAK ELEVATION (ft)
Pond 1	207.5	208	20.0	35.0	5.0	204.0	5.0	208
Pond 2	203.9	204.4	6.0	25.0	5.0	200	6.0	204.3

3200 GATEWAY CENTRE BLVD., SUITE 100  
MORRISVILLE, NC 27560  
PHONE: 919-755-5011  
FL LICENSE # 4793

**REVISIONS**

REV	DESCRIPTION	DSN DWN	CHK APP	DATE
1	FDEP COMMENTS	MDD	EBB	11/8/2019
2	FDEP COMMENTS	MDD	EBB	2/28/2020
3	POND GRADING PLANS AND PROCESS AREA CROSS SECTION ADDED	MDD	EBB	5/7/2020

**ISSUED FOR PERMITTING**



**SCALE VERIFICATION**

THIS BAR IS 1 INCH IN LENGTH ON ORIGINAL DRAWING

IF IT'S NOT 1 INCH ON THIS SHEET ADJUST YOUR SCALES ACCORDINGLY

ORIGINAL DRAWING SIZE IS 22 x 34

**DETAILS**

TRAIL RIDGE SOUTH - PLANT SITE  
5222 TREAT ROAD  
STARKE, FL 32091



THE CHEMOURS COMPANY  
P.O. BOX 753  
STARKE, FL 32091

**ISSUED FOR PERMIT**

PROJECT NO.	00129491.003A
ISSUE DATE	5/7/2020
CURRENT REVISION	3
DESIGNED BY	MDD
DRAWN BY	MDD
CHECKED BY	EBB
APPROVED BY	EBB

7

2.01 PERMANENT GRASS SEED:

- Provide fresh, clean, new crop seed complying with tolerance for purity and germination established by Official Seed Analysts of North America and as required below.
- Seed shall be labeled according to the U.S. Department of Agriculture Federal Seed Act and shall be furnished in containers with tags showing seed mixture, purity, germination, weed content, name of seller, and date on which seed was tested.
  - Seed Mixtures: Meet the following minimum weight of pure live seed per acre:

Seed Name	Pounds Pure Live Seed
Argentine Bahia	41
Bermudagrass	14
Brown Top Millet	21

NOTE: Pure live seed (PLS) is determined by multiplying the % pure seed by the % germination. Therefore, if the pure seed is 80% and the germination is 70% the PLS is .80 X .70 or 56%. At 56% it would take 53.5 pounds to equal 30 pounds of PLS.

- Moldy seed or seed that has been damaged in storage will not be accepted.
- When seasonal conditions mandate, substitute a winter grass such as rye grass for the brown top millet.

2.02 PERMANENT GROUND COVER SEED:

- Provide fresh, clean, new crop seed complying with tolerance for purity and germination established by Official Seed Analysts of North America and as required below.
- Seed shall be labeled according to the U.S. Department of Agriculture Federal Seed Act and shall be furnished in containers with tags showing seed mixture, purity, germination, weed content, name of seller, and date on which seed was tested.
  - Seed Mixtures: Meet the following minimum weight of pure live seed per acre:

Seed Name	Pounds Pure Live Seed
Juncus effusus	8
Paspalum floridanum	3
Panicum rigidulum (Coleoantena rigidula)	3
Panicum longifolium (Coleoantena longifolia)	3
Chasmanthium latifolium	2
Eupatorium perfoliatum	0.5
Vernonia gigantea	0.5
Brown Top Millet	10

NOTE: Pure live seed (PLS) is determined by multiplying the % pure seed by the % germination. Therefore, if the pure seed is 80% and the germination is 70% the PLS is .80 X .70 or 56%. At 56% it would take 53.5 pounds to equal 30 pounds of PLS.

- Moldy seed or seed that has been damaged in storage will not be accepted.
- When seasonal conditions mandate, substitute a winter grass such as rye grass for the brown top millet.
- Seed mix is to prioritize inclusion of Florida ecotypes when available. If Florida ecotypes are unavailable substitutions with other southeastern U.S. coastal plain ecotypes may be acceptable with DISTRICT'S permission. Species substitutions or quantity shifts may be acceptable if availability is limited. CONTRACTOR must submit written request of any non-Florida ecotypes, species substitutions, or quantity adjustments for DISTRICT'S approval prior to ordering or installing the seed mix.

TEMPORARY SEEDING AND MULCHING WILL BE USED FOR TEMPORARY STABILIZATION PRACTICES AND PERMANENT SOD AND SEEDING AND MULCHING WILL BE USED FOR PERMANENT STABILIZATION PRACTICES AS REQUIRED FOR AREAS WHERE NATURAL RE-VEGETATION DOES NOT BEGIN WITHIN 7 DAYS AFTER CONSTRUCTION ACTIVITIES CEASE. (AS REQUIRED)

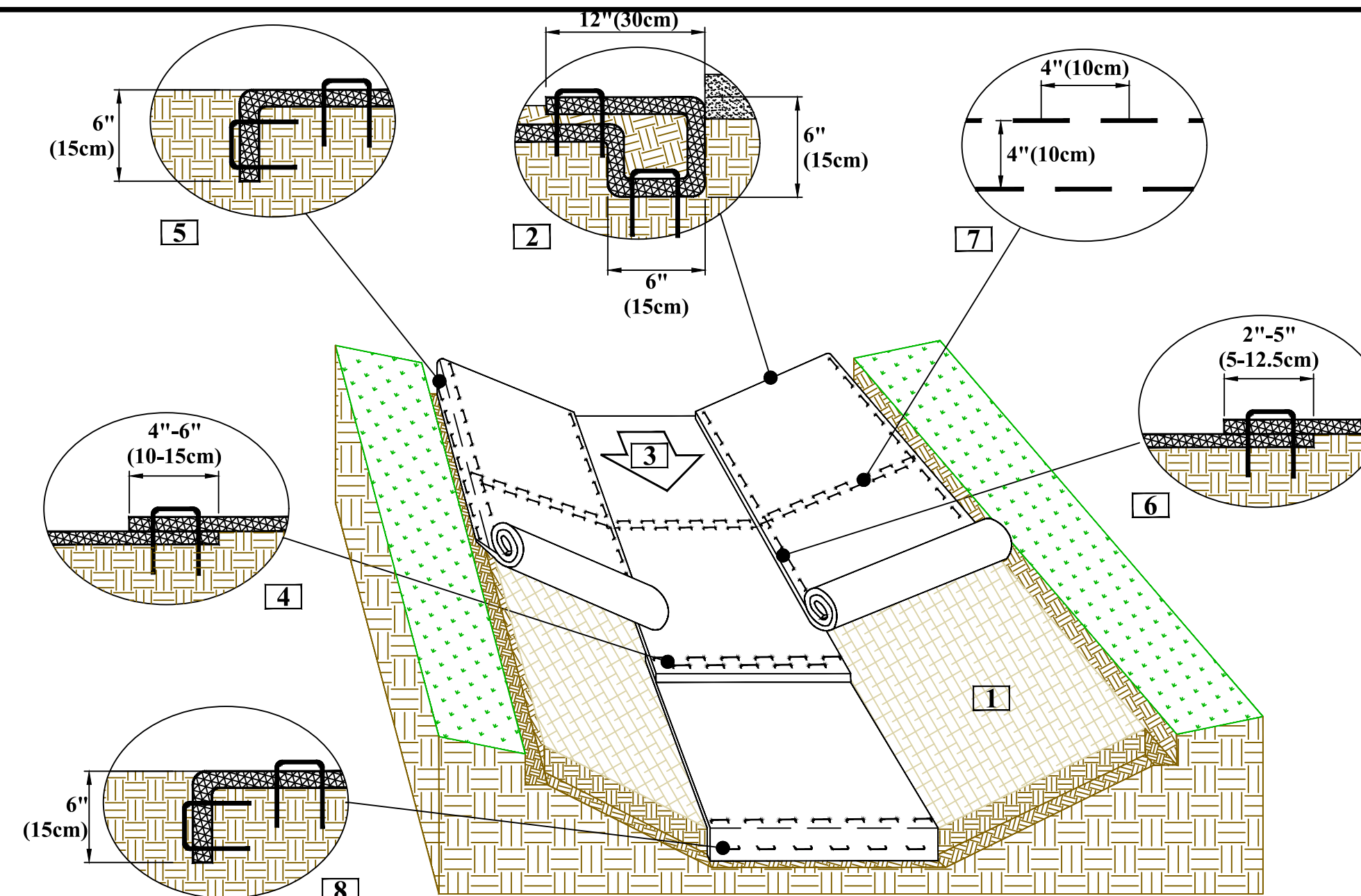
STABILIZATION MEASURES SHALL BE INITIATED IMMEDIATELY IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED FOR 7 CALENDAR DAYS OR LONGER. STABILIZE BY COVERING WITH ADEQUATE AMOUNTS OF MULCH OVER SEED AND PERIODICALLY WATER TO PROMOTE AND MAINTAIN GROWTH OF THE TEMPORARY GROUND COVER OR BY THE USE OF AN APPROPRIATE ALTERNATIVE BMP.

PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES OR ANY DISTURBED LAND AREAS SHALL BE COMPLETED IMMEDIATELY AFTER FINAL GRADING. WHEN IT IS NOT POSSIBLE TO PERMANENTLY PROTECT A DISTURBED AREA IMMEDIATELY AFTER GRADING OPERATION, TEMPORARY EROSION CONTROL MEASURES SHALL BE INSTALLED. ALL TEMPORARY PROTECTION SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE IN PLACE AND ESTABLISHED.

ALL GRASS SLOPES CONSTRUCTED STEEPER THAN 4H:1V SHALL BE PERMANENTLY STABILIZED IMMEDIATELY AFTER FINAL GRADE IS ESTABLISHED.

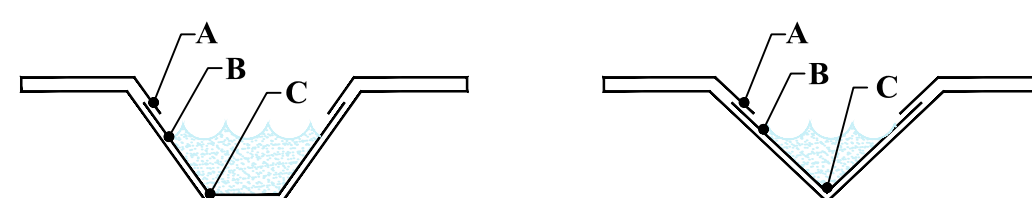
GENERAL SEEDING AND STABILIZATION NOTES

NO SCALE



CRITICAL POINTS

- Overlaps and Seams
- Projected Water Line
- Channel Bottom/Side Slope Vertices



NOTES:

\*Horizontal staple spacing should be altered if necessary to allow staples to secure the critical points along the channel surface.

\*\*In loose soil conditions, the use of staple or stake lengths greater than 6\"/>

EROSION CONTROL BLANKET INSTALLATION - CHANNEL

NO SCALE

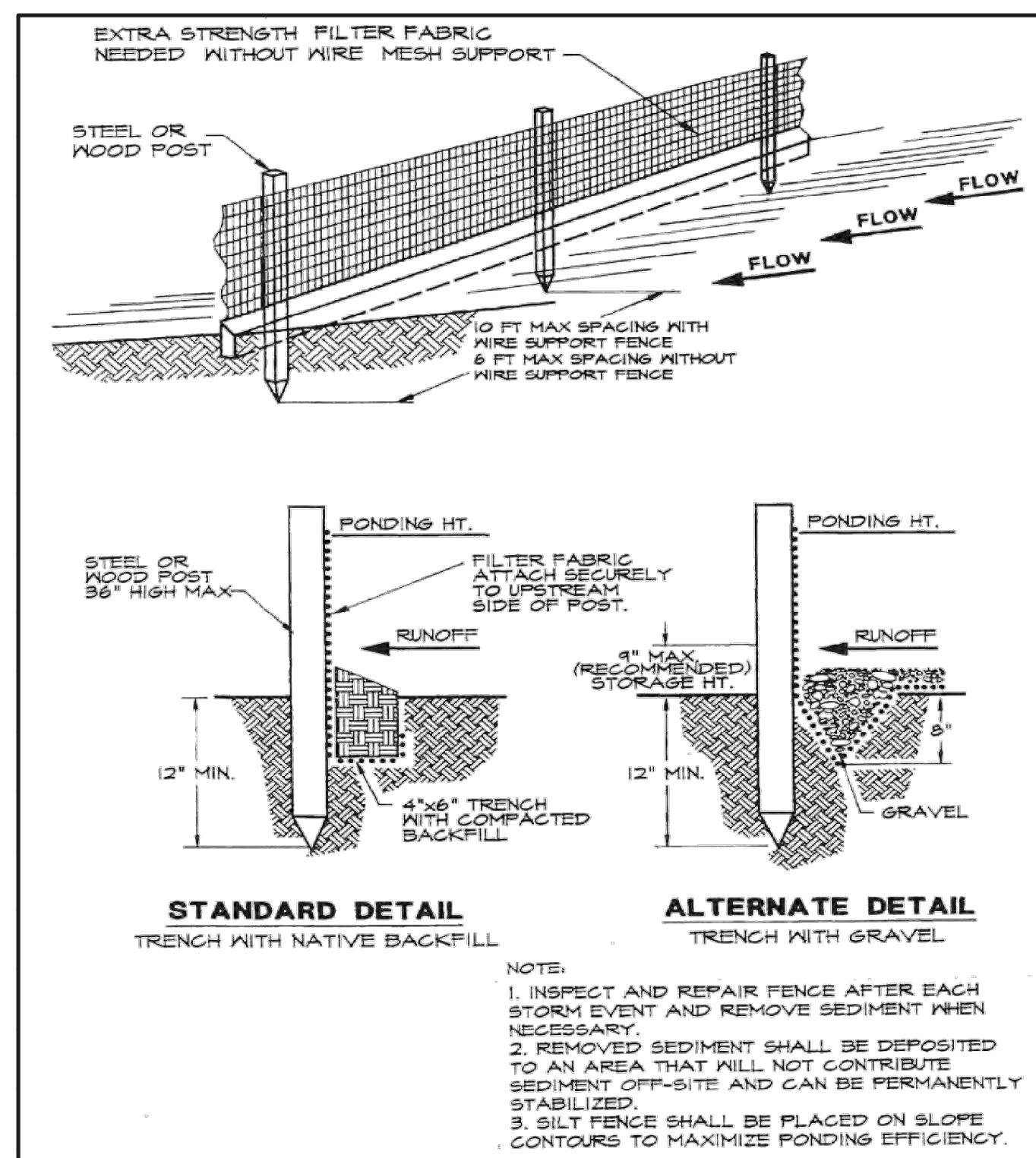


Figure 3.4a. Silt fence

NOTES:

- SILT FENCE POST EMBEDMENT DEPTH SHALL BE 12\"/>

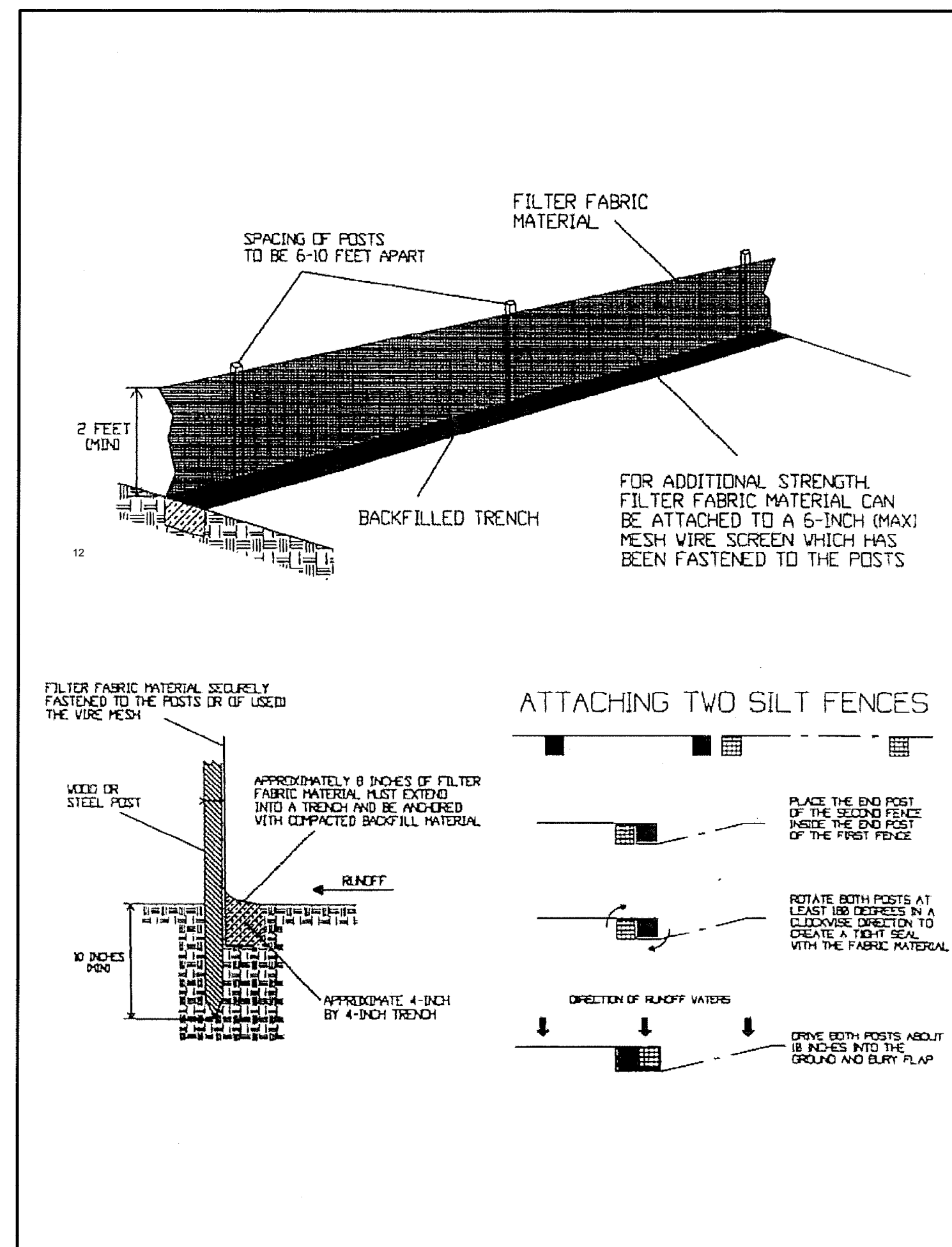
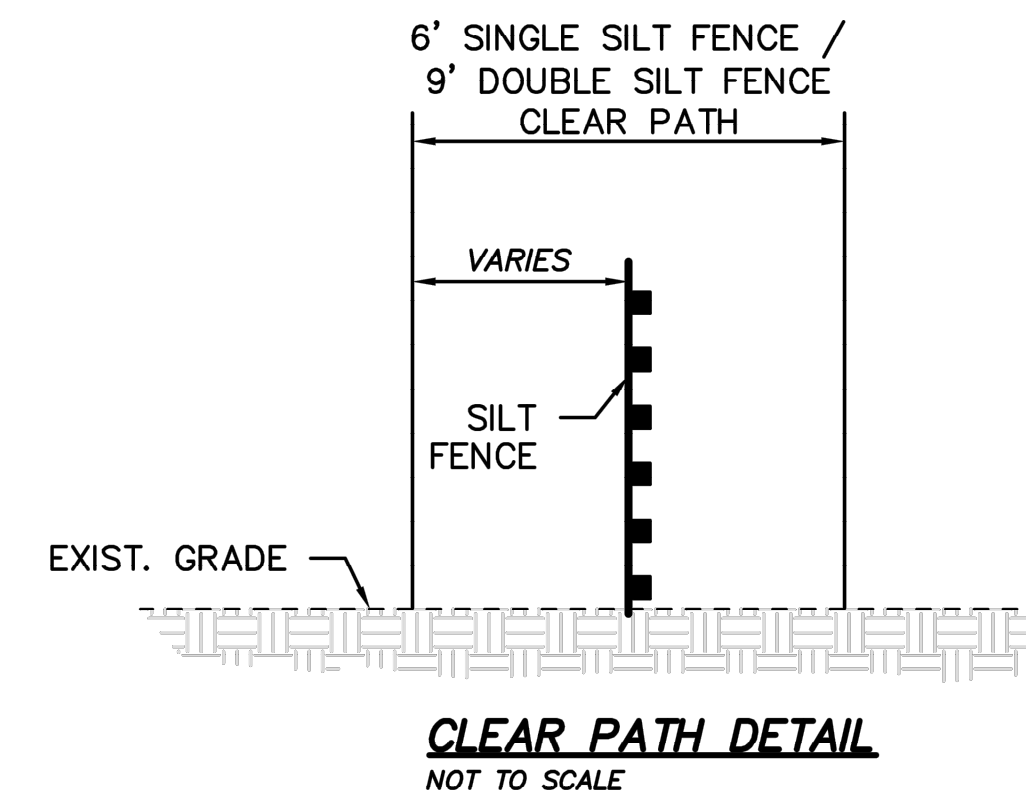


Figure 3.4b. Installing a filter fabric silt fence

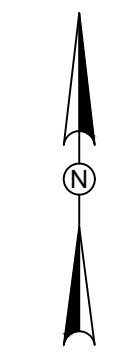


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CAD FILE: W:\Civil\Chemours\Trail Ridge South\CAD\Plans\Trail Ridge South - Plant Site.dwg LAYOUT: 8 DETAILS  
 PLOTTED: 6/8/2020 10:56 AM BY: Irvy Hendon