2. THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES SHALL OCCUR PRIOR TO OR CONCURRENT WITH LAND DISTURBING ACTIVITIES.

3. THE ONLY MATERIAL TO BE BURIED ON-SITE IS VEGETATIVE MATERIAL, PROVIDED IT IS NOT BURIED WITHIN 100' OF ANY PROPERTY LINE OR ENCLOSED STRUCTURE. CONSTRUCTION WASTE MAY NEITHER BE BURNED NOR BURIED AND MUST BE TAKEN TO A STATE APPROVED LANDFILL.

4. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL AND LOCAL CODES.

5. ALL MATERIALS AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH THE FAYETTE COUNTY STANDARDS AND THE GEORGIA DEPARTMENT OF TRANSPORTATION, AS APPLICABLE.

6. DEVIATION FROM THESE PLANS AND SPECIFICATIONS WITHOUT THE PRIOR WRITTEN CONSENT OF THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.

7. CONTRACTOR IS RESPONSIBLE FOR NOTIFICATIONS AND LIAISON WITH UTILITY COMPANIES IN THE PROCESS OF LOCATING, RELOCATION AND TIE-IN TO PUBLIC UTILITIES. ALSO, CONTRACTOR IS RESPONSIBLE FOR NOTIFYING ALL INSPECTORS, INCLUDING COUNTY AND CITY INSPECTORS PRIOR TO BEGINNING SITE CONSTRUCTION.

B. THERE MAY BE ADDITIONAL UTILITIES THAN THOSE SHOWN ON THESE PLANS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR LOCATIONS SHOWN AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATIONS AND NECESSARY INVERTS OF ALL UTILITIES WITHIN THE LIMITS OF CONSTRUCTION. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE DEPARTMENT OF THE UTILITY COMPANIES. THE CONTRACTOR IS RESPONSIBLE FOR THE NOTIFICATIONS AND LIAISON WITH UTILITY COMPANIES IN THE PROCESS OF LOCATING, RELOCATING AND TIE-IN TO THE PUBLIC UTILITIES.

9. IF CONTRACTOR DAMAGES ANY EXISTING UTILITIES DURING CONSTRUCTION, HE SHALL, AT HIS OWN EXPENSE, REPLACE OR REPAIR THE UTILITIES TO ORIGINAL CONDITION AND QUALITY. AS APPROVED BY THE ENGINEER AND REPRESENTATIVE OF THE APPROPRIATE UTILITY COMPANY.

10. LAND DISTURBANCE PERMIT TO BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION.

11. CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IN RIGHT-OF-WAY AND MUST BE STORED WITHIN SITE.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A MARKED-UP SET OF DESIGN DRAWINGS SHOWING ALL "AS-BUILT ' CONDITIONS. THESE "RECORD DRAWINGS" SHALL BE MADE AVAILABLE TO THE DESIGNER AND/OR THE COUNTY INSPECTOR UPON REQUEST. THE MARK-UPS SHALL BE AT THE SITE AT ALL TIMES AND SHALL BE UTILIZED BY THE CONTRACTOR TO DEVELOP FINAL RECORD DRAWINGS.

13. STUMPS AND CONSTRUCTION DEBRIS SHALL BE DEPOSITED IN A PROPERLY PERMITTED LANDFILL.

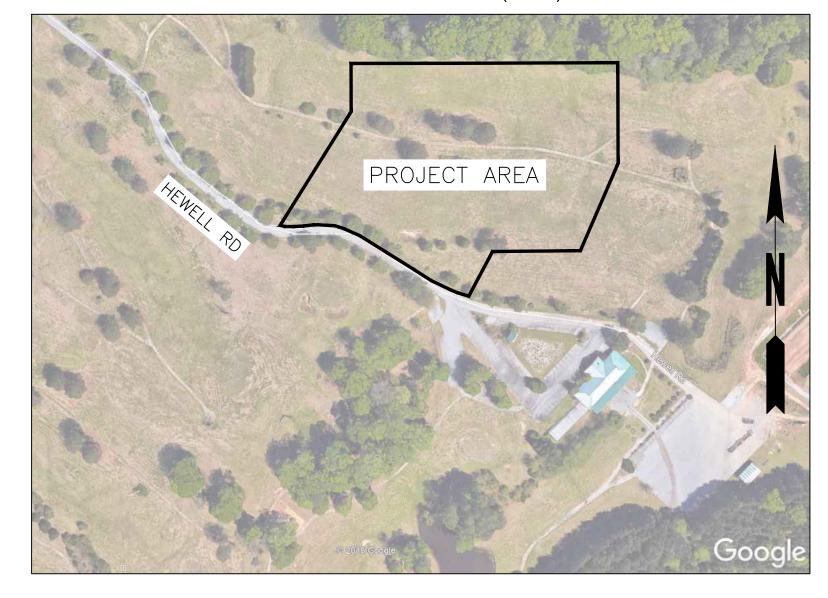
14. THIS PROPERTY IS NOT LOCATED IN A 100 YEAR FLOOD HAZARD AREA BASED ON THE FLOOD INSURANCE RATE MAP FOR THIS AREA. THE MAP NUMBER FOR THIS AREA IS 13113C0107E, AND THE DATE OF SAID MAP IS SEPTEMBER 26, 2008. THIS DETERMINATION WAS MADE BY GRAPHICALLY DETERMINING THE POSITION OF THIS SITE ON SAID FIRM MAP UNLESS NOTED OTHERWISE.

15. THE CONTRACTOR SHALL TELEPHONE TOLL FREE 1-800-282-7411 A MINIMUM OF 48 HOURS PRIOR TO THE START OF ANY EXCAVATION AS SHOWN AND NOTED ON THE PLANS FOR A UTILITY LOCATION SERVICE.

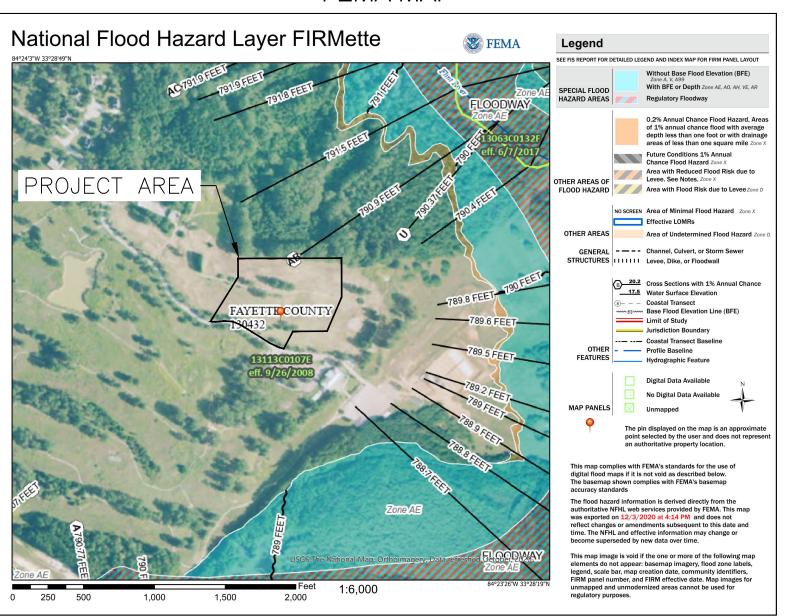
16. ALL APPROPRIATE SITE WORK SHALL CONFORM TO ADA STANDARDS.

APPROVAL REVIEW STAMPS

LOCATION MAP (NTS)



FEMA MAP



FEMA STATEMENT

IHIS PROPERTY IS NOT LOCATED IN A 100 YEAR FLOOD HAZARD AREA BASED ON THE FLOOD INSURANCE RATE MAP FOR THIS AREA. THE MAP NUMBER FOR THIS AREA IS 13113C0107E AND THE DATE OF SAID MAP IS SEPTEMBER 26, 2008.

REQUIRED ENGINEER'S INSPECTION

AS PER THE GEORGIA DEPARTMENT OF NATURAL RESOURCES ENVIRONMENTAL PROTECTION DIVISION, NPDES GENERAL PERMITS FOR CONSTRUCTION ACTIVITY GAR100001, GAR100002, & GAR100003; PART IV, A., 7 REQUIRES THE EROSION CONTROL PLAN DESIGN PROFESSIONAL TO MAKE A SITE INSPECTION. FOR STAND ALONE PROJECTS THAT BEGIN CONSTRUCTION ACTIVITY AFTER THE EFFECTIVE DATE OF THIS PERMIT, THE PRIMARY PERMITEE MUST RETAIN THE DESIGN PROFESSIONAL WHO PREPARED THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN, EXCEPT WHEN THE PRIMARY PERMITEE HAS REQUESTED IN WRITING AND EPD HAS AGREED TO AN ALTERNATE DESIGN PROFESSIONAL, TO INSPECT THE INSTALLATION OF THE CONTROL MEASURES (BMP'S) WHICH THE DESIGN PROFESSIONAL DESIGNED WITHIN SEVEN (7) DAYS AFTER THE INITIAL CONSTRUCTION ACTIVITIES COMMENCE. FOR CONSTRUCTION ACTIVITIES WHERE CONSTRUCTION BEGAN ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THE INSPECTION IS TO OCCUR WITHIN SEVEN (7) DAYS AFTER THE PLAN HAS BEEN IMPLEMENTED. THE DESIGN PROFESSIONAL SHALL DETERMINE IF THESE BMP'S HAVE BEEN INSTALLED AND ARE BÈING MAINTAINED AS DESIGNED. THE DESIGN PROFESSIONAL SHALL REPORT THE RESULTS OF THE INSPECTION TO THE PRIMARY PERMITTEE WITHIN SEVEN (7) DAYS AND THE PERMITEE MUST CORRECT ALL DEFICIENCIES WITHIN TWO (2) BUSINESS DAYS OF RECEIPT OF THE INSPECTION REPORT FROM THE DESIGN PROFESSIONAL UNLESS WEATHER RELATED SITE CONDITIONS ARE SUCH THAT ADDITIONAL TIME IS REQUIRED



24 HOUR CONTACT: JEFFREY HILL TEL: (404) 569-8701

PROJECT INFORMATION

FAYETTE COUNTY FIRE & EMS TRAINING FACILITY

SHEET INDEX

SHEET NAME

COVER SHEET

SITE PLAN

SITE PLAN

PAVING PLAN

UTILITY PLAN

DRAINAGE PROFILES

DRAINAGE PROFILES

SEPTIC FIELD PLAN

CONSTRUCTION DETAILS

CONSTRUCTION DETAILS

CONSTRUCTION DETAILS

CONSTRUCTION DETAILS

CONSTRUCTION DETAILS

CONSTRUCTION DETAILS

EROSION CONTROL NOTES

EROSION CONTROL DETAILS

EROSION CONTROL DETAILS

EROSION CONTROL COVER SHEET

EROSION CONTROL PLAN - INITIAL PHASE

EROSION CONTROL PLAN - FINAL PASE

EROSION CONTROL PLAN - INTERMEDIATE PHASE

EXISTING CONDITIONS

GRADING AND DRAINAGE PLAN

GRADING AND DRAINAGE PLAN

STORMWATER MANAGEMENT PLAN

ADDRESS: 340 HEWELL ROAD JONESBORO, GA 30238 LAND LOTS 172 OF THE 01 DISTRICT FAYETTE COUNTY, GEORGIA

TOTAL AREA: 23.94 ACRES DISTURBED AREA: 8.3 ACRES

OWNER:

NAME: FAYETTE COUNTY ADDRESS: 155 JOHNSON AVENUE FAYETTEVILLE, GA 30214

CONTACT: JEFFREY HILL PHONE: (404)- 569- 8701

SHEET DRAWING NAME

7

10

11

13

15

17

21

23

25

C-000

C-100

C-200

C-201

C-202

C-300

C-301

C-302

C-303

C-304

C-400

C-401

C-500

C-501

C-502

C-503

C-504

C-505

ER-000

ER-100

ER-200

ER-300

ER-400

ER-401

NO.	REVISION REF	FERENCE	DATE
	GSWCC CE	WCW	081
	EET TITLE OVER SHE	ET	
	DRAWN BY ORG	CHECKEI SMI	
	SCALE	ISSUE D.	ATE

10/28/2022

PROJECT NUMBER 1866.031

PLAN DATE LAST REVISED

10/28/2022

10/28/2022

10/28/2022

10/28/2022

10/28/2022

10/28/2022

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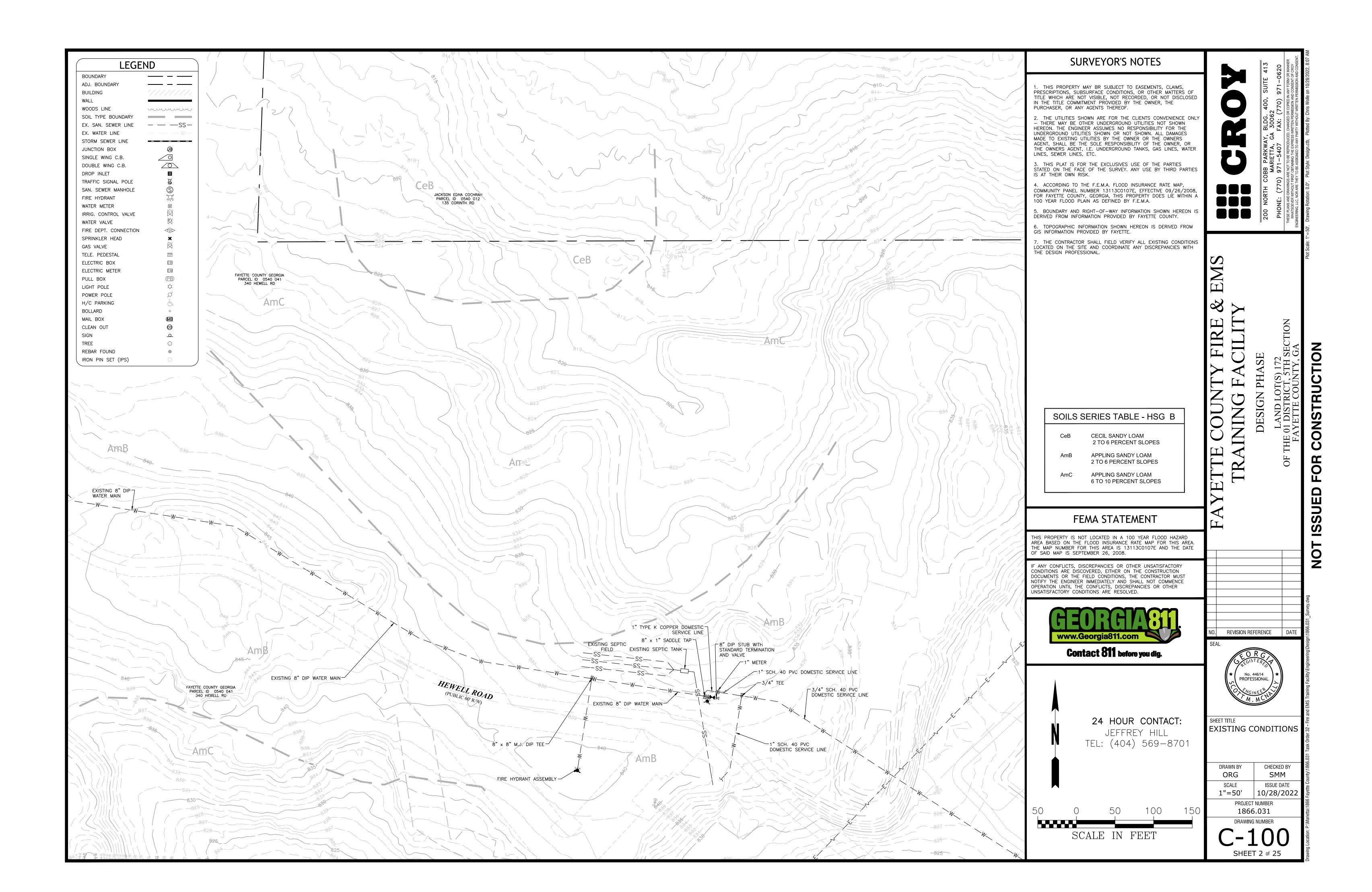
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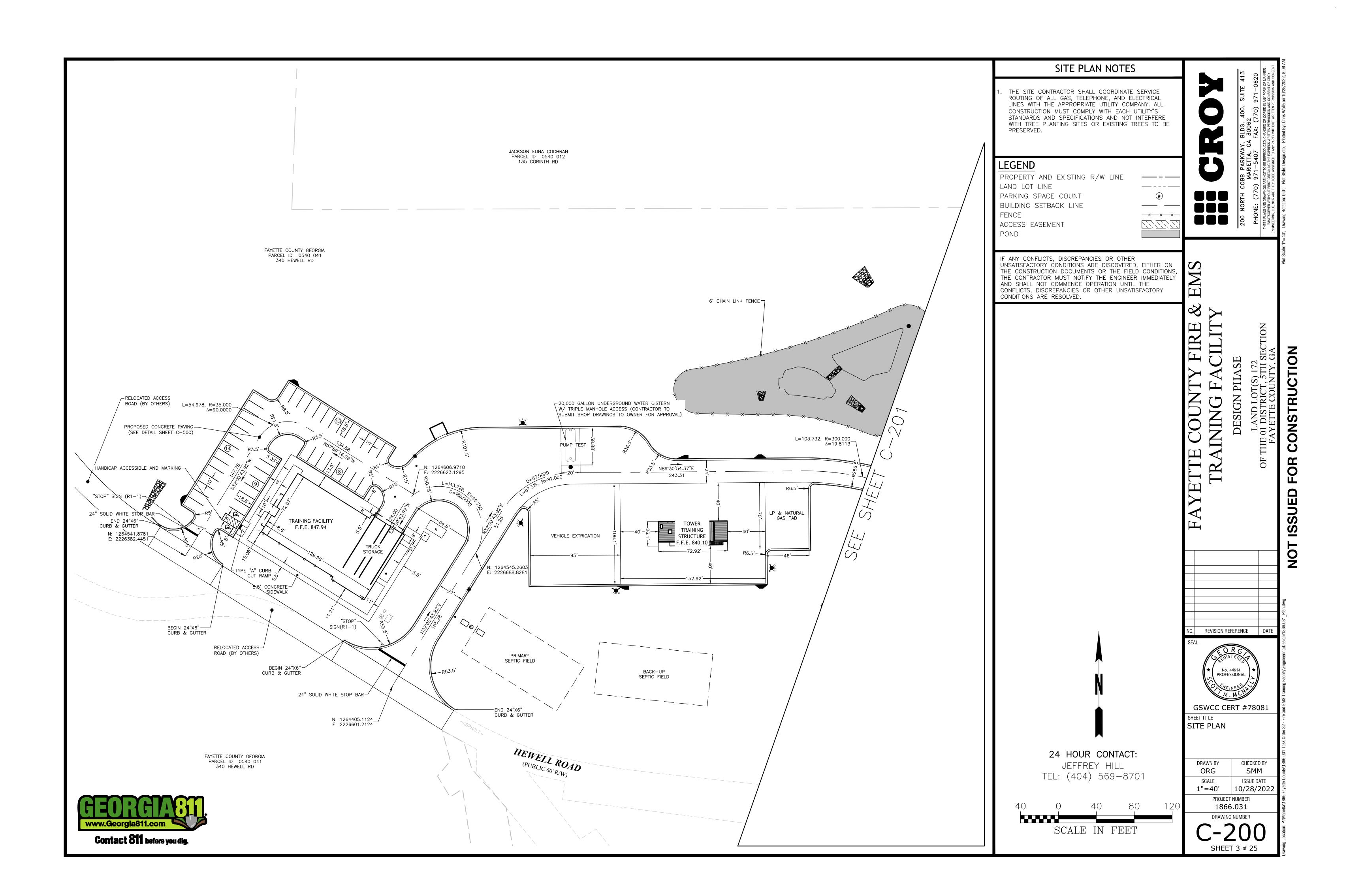
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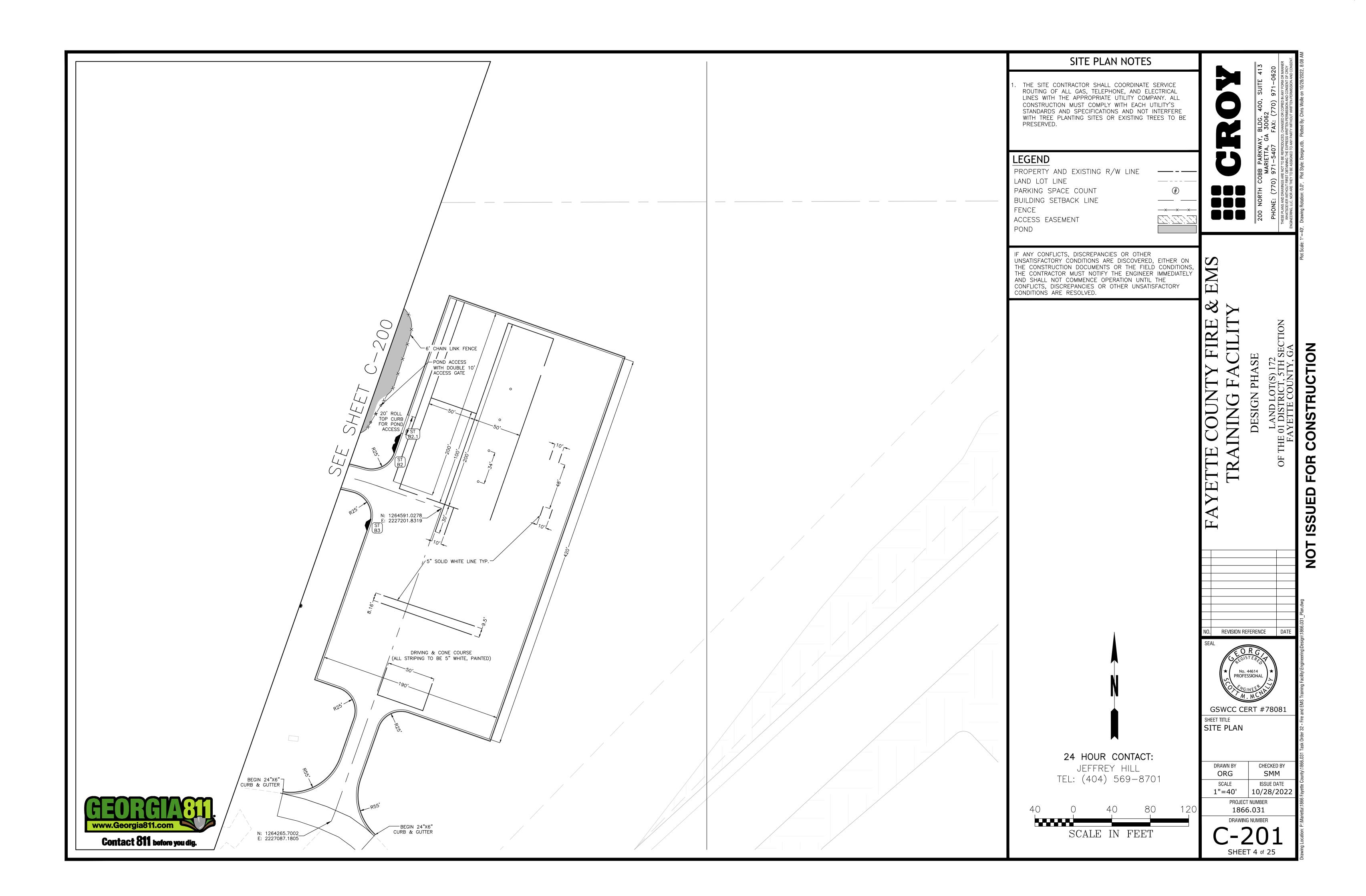
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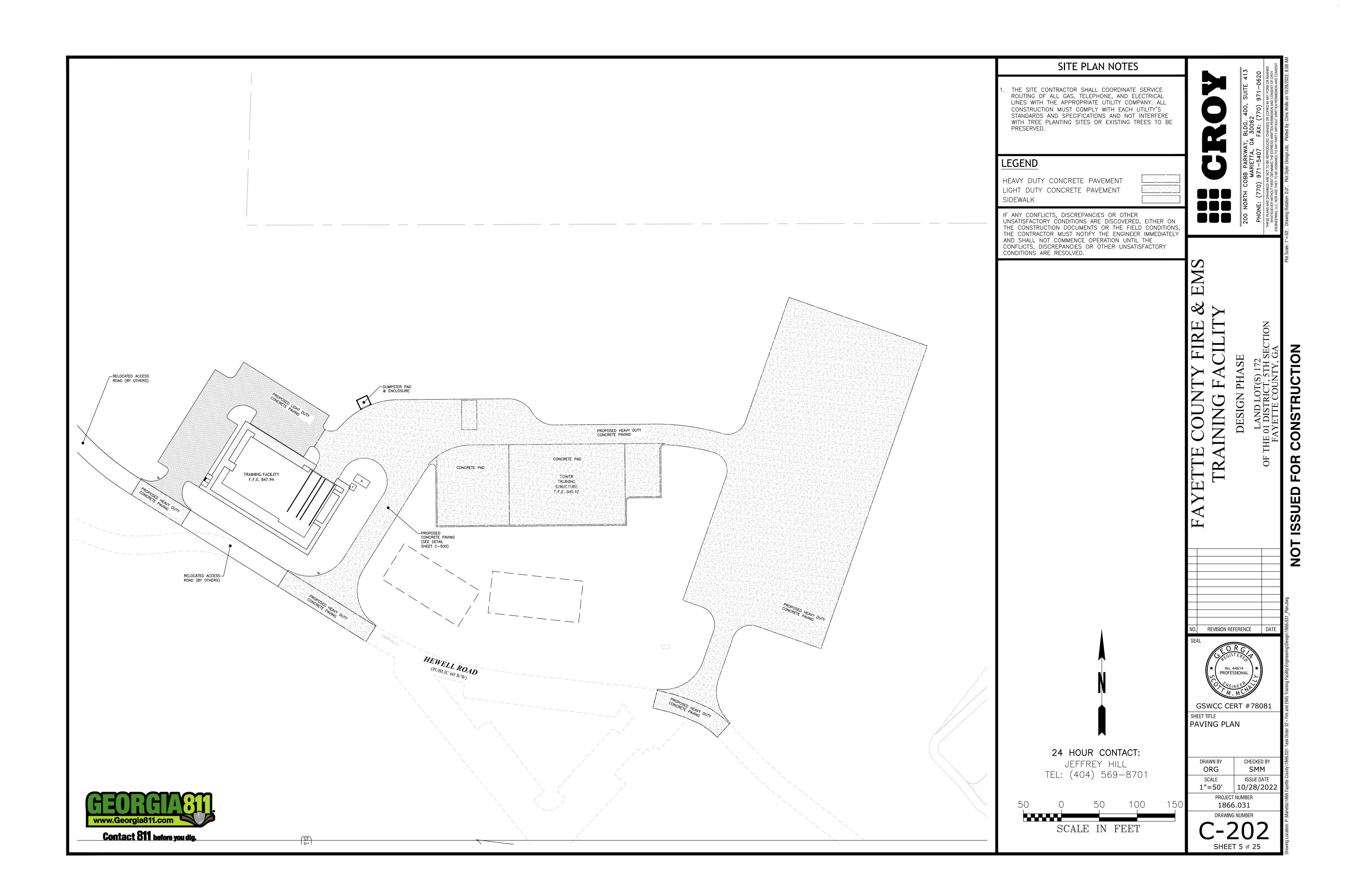
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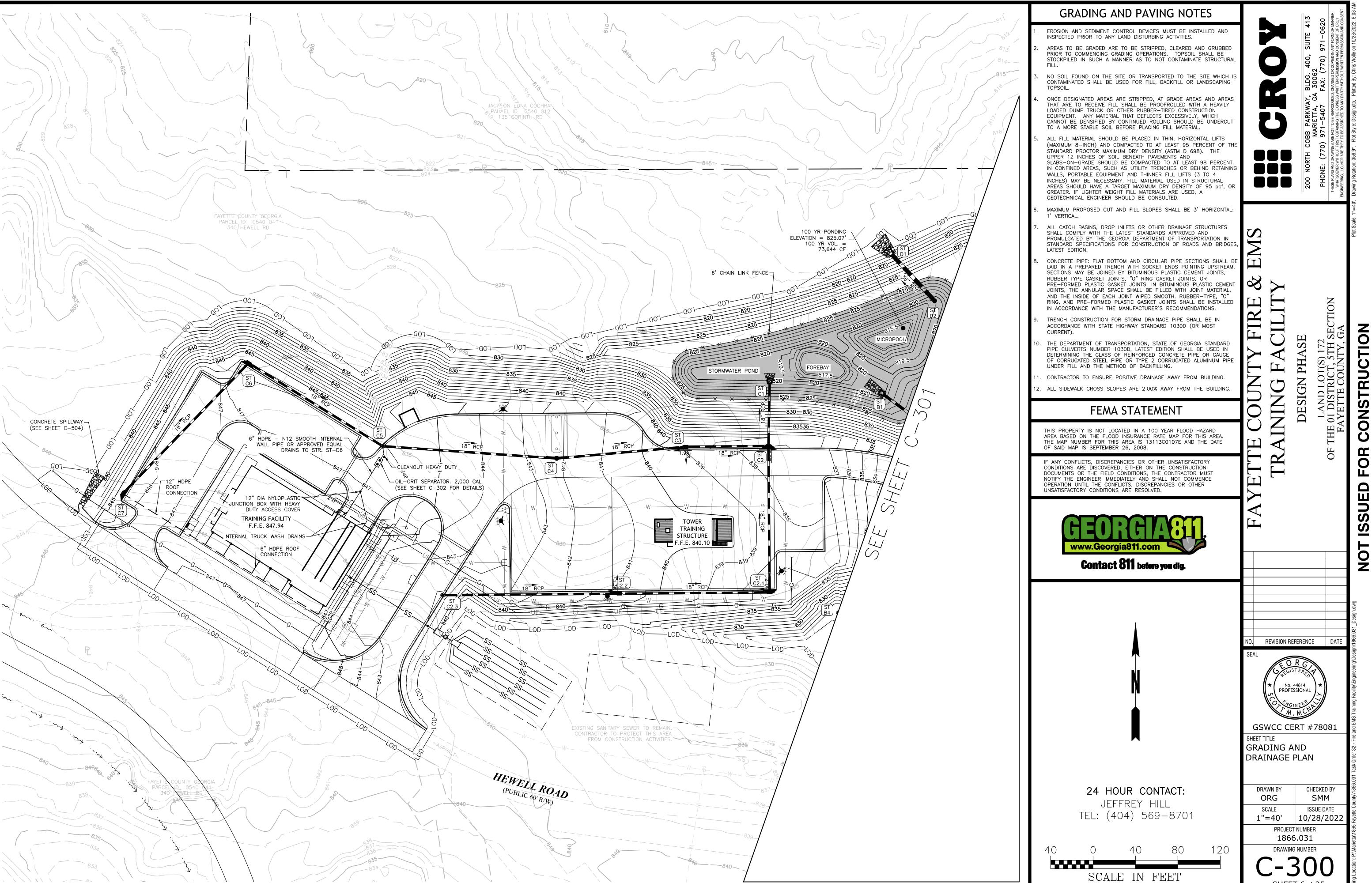
10/28/2022





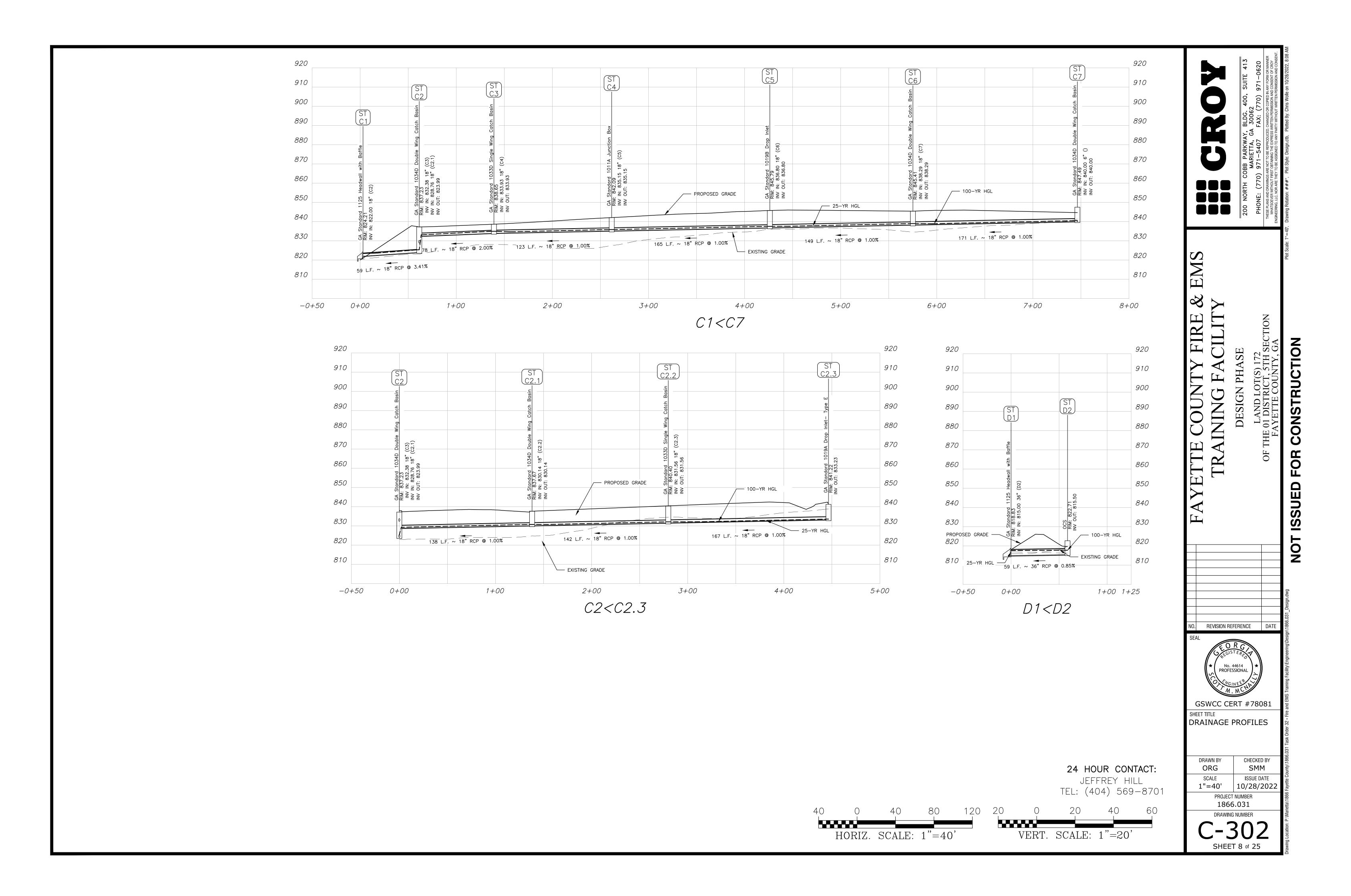






SHEET 6 of 25





												25 YEAR ST	ORM										
line	Toline I	inelength	Incr Area	TotalArea	RunoffCoeff.	IncrC v A	TotalC v A	InletTime	TimeConc	Rnfallnt	TotalRunoff	AdplFlow	TotalFlow	CanacEull	Veloc	PipeSize Pipe	eSlone Invi	ElevDn Inv ElevU	HGIDn	HGIIIn	Grnd/RimDn	Grnd/RimUn	Line ID
	Outfall	58.516	0.41	1.69	0.98	0.4	1.66	5.0	14.8	6.1	10.05	0.00	10.05	19.37	6.25	- _	-	2.00 823.99	823.36	•	824.21	837.23	C1 <c2< td=""></c2<>
2	1	77.731	0.47	0.89	0.98	0.46	0.87	5.0	12.6	6.5	5.63	0.00	5.63	14.83	6.40			2.38 833.93	833.02	834.84	837.23	838.65	C2 <c3< td=""></c3<>
3	2	122.519	0.00	0.42	0.98	0	0.41	5.0	11.4	6.7	2.75	0.00	2.75	10.48	3.18			33.93 835.15	834.84	835.78	838.65	842.09	C3 <c4< td=""></c4<>
4	3	164.557	0.05	0.42	0.98	0.05	0.41	5.0	9.9	7.0	2.88	0.00	2.88	10.52	4.04	18		5.15 836.80	835.78	837.44	842.09	845.79	C4 <c5< td=""></c5<>
5	4	148.880	0.19	0.37	0.98	0.19	0.36	5.0	8.4	7.4	2.67	0.00	2.67	10.51	3.78	18	1.00 83	6.80 838.29	837.44	838.91	845.79	845.41	C5 <c6< td=""></c6<>
6	5	171.135	0.18	0.18	0.98	0.18	0.18	5.0	5.0	8.4	1.48	0.00	1.48	10.50	2.70	18	1.00 83	8.29 840.00	838.91	840.46	845.41	847.49	C6 <c7< td=""></c7<>
7	1	138.106	0.09	0.39	0.98	0.09	0.38	5.0	13.4	6.3	2.41	0.00	2.41	10.50	4.29	18	1.00 82	830.14	829.25	830.73	837.23	837.67	C2 <c2.1< td=""></c2.1<>
8	7	141.750	0.21	0.30	0.98	0.21	0.29	5.0	11.6	6.6	1.95	0.00	1.95	10.51	3.29	18	1.00 83	80.14 831.56	830.73	832.09	837.67	840.40	C2.1 <c2.2< td=""></c2.2<>
9	8	166.707	0.09	0.09	0.98	0.09	0.09	5.0	5.0	8.4	0.74	0.00	0.74	10.51	2.01	18	1.00 83	1.56 833.23	832.09	833.55	840.40	841.22	C2.2 <c2.3< td=""></c2.3<>
10 (Outfall	67.585	0.95	2.91	0.98	0.93	2.29	5.0	7.3	7.7	17.57	0.00	17.57	22.69	6.46	24	1.01 81	9.09 819.77	820.84	821.28	821.30	830.67	B1 <b2< td=""></b2<>
11	10	85.330	0.41	1.41	0.98	0.4	0.82	5.0	6.6	7.9	6.46	0.00	6.46	22.57	3.63	24	1.00 81	.9.77 820.62	821.28	821.52	830.67	830.62	B2 <b3< td=""></b3<>
12	11	109.620	1.00	1.00	0.42	0.42	0.42	5.0	5.0	8.4	3.52	0.00	3.52	22.55	3.25	24 (0.99 82	0.62 821.71	821.52	822.37	830.62	825.39	B3 <b4< td=""></b4<>
13	10	8.000	0.55	0.55	0.98	0.54	0.54	5.0	5.0	8.4	4.52	0.00	4.52	22.61	3.00	24 :	1.00 81	.9.77 819.85	821.28	820.60	830.67	830.67	B2 < B2.1
14 (Outfall	58.757	0.00	0.00	0.00	0	0	5.0	5.0	0.0	0.00	6.70	6.70	61.52	2.87	36 (0.85 81	.5.00 815.50	816.91	816.31	818.83	822.71	D1 <d2< td=""></d2<>
											1	LOO YEAR ST	гогм										
Line	ToLine	LineLength	Incr.Area	TotalArea	RunoffCoeff.	IncrC x A	TotalC x A	InletTime	TimeConc	Rnfallnt	TotalRunoff	AdnIFlow	TotalFlow	CapacFull	Veloc	PipeSize Pip	eSlope Inv I	ElevDn Inv ElevU	HGLDn	HGLUp	Grnd/RimDn	Grnd/RimUp	Line ID
		(ft)	(ac)	(ac)	(C)			(min)	(min)	(in/hr)	(cfs)	(cfs)	(cfs)	(cfs)	(ft/s)		-	(ft) (ft)	(ft)	(ft)	(ft)	(ft)	
1 (Outfall	58.516	0.41	1.69	0.98	0.4	1.66	5.0	13.2	7.6	12.65	0.00	12.65	19.37	7.46	18	3.40 82	2.00 823.99	823.42	825.33	824.21	837.23	C1 <c2< td=""></c2<>
2	1	77.731	0.47	0.89	0.98	0.46	0.87	5.0	11.4	8.0	7.02	0.00	7.02	14.83	6.86	18	1.99 83	2.38 833.93	833.11	834.95	837.23	838.65	C2 <c3< td=""></c3<>
3	2	122.519	0.00	0.42	0.98	0	0.41	5.0	10.4	8.3	3.41	0.00	3.41	10.48	3.42	18	1.00 83	33.93 835.15	834.95	835.85	838.65	842.09	C3 <c4< td=""></c4<>
4	3	164.557	0.05	0.42	0.98	0.05	0.41	5.0	9.1	8.6	3.54	0.00	3.54	10.52	4.30	18	1.00 83	85.15 836.80	835.85	837.52	842.09	845.79	C4 <c5< td=""></c5<>
5	4	148.880	0.19	0.37	0.98	0.19	0.36	5.0	7.9	9.0	3.25	0.00	3.25	10.51	4.01	18	1.00 83	6.80 838.29	837.52	838.98	845.79	845.41	C5 <c6< td=""></c6<>
6	5	171.135	0.18	0.18	0.98	0.18	0.18	5.0	5.0	9.9	1.75	0.00	1.75	10.50	2.82	18	1.00 83	8.29 840.00	838.98	840.50	845.41	847.49	C6 <c7< td=""></c7<>
7	1	138.106	0.09	0.39	0.98	0.09	0.38	5.0	12.1	7.9	3.01	0.00	3.01	10.50	4.58	18	1.00 82	8.76 830.14	829.31	830.80	837.23	837.67	C2 <c2.1< td=""></c2.1<>
8	7	141.750	0.21	0.30	0.98	0.21	0.29	5.0	10.6	8.2	2.42	0.00	2.42	10.51	3.50	18	1.00 83	80.14 831.56	830.80	832.15	837.67	840.40	C2.1 <c2.2< td=""></c2.2<>
9	8	166.707	0.09	0.09	0.98	0.09	0.09	5.0	5.0	9.9	0.88	0.00	0.88	10.51	2.09	18 :	1.00 83	1.56 833.23	832.15	833.58	840.40	841.22	C2.2 <c2.3< td=""></c2.3<>
10	Outfall	67.585	0.95	2.91	0.98	0.93	2.29	5.0	6.9	9.3	21.23	0.00	21.23	22.69	7.36	24	1.01 81	9.09 819.77	820.91	821.42	821.30	830.67	B1 <b2< td=""></b2<>
11	10	85.330	0.41	1.41	0.98	0.4	0.82	5.0	6.4	9.5	7.77	0.00	7.77	22.57	3.90	24	1.00 81	9.77 820.62	821.42	821.61	830.67	830.62	B2 <b3< td=""></b3<>
12	11	109.620	1.00	1.00	0.42	0.42	0.42	5.0	5.0	9.9	4.18	0.00	4.18	22.55	3.41	24 (0.99 82	20.62 821.71	821.61	822.43	830.62	825.39	B3 <b4< td=""></b4<>
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14 Outfall 58.757 0.00

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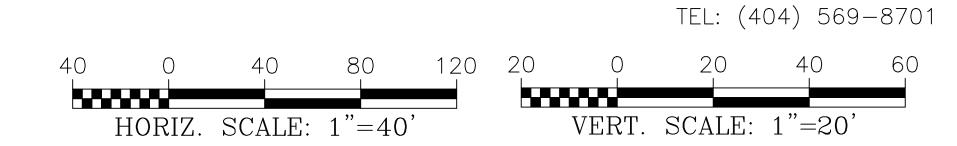
5.0

0.0

0.00

61.52 8.03 36

0.85



822.71

D1<D2

24 HOUR CONTACT:

JEFFREY HILL

815.00 815.50 817.64 817.79 818.83

FAYETTE COUNTY FIRE & EMS TRAINING FACILITY

 NOT ISSUED

DRAWN BY
ORG
SMM

SCALE
1"=40'

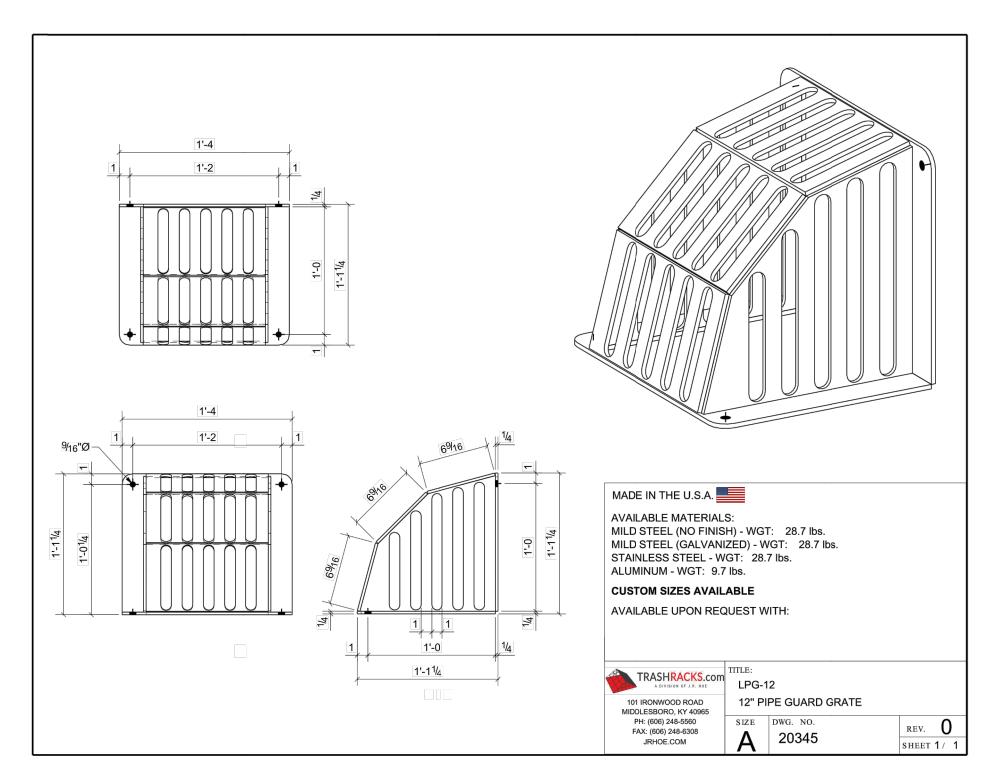
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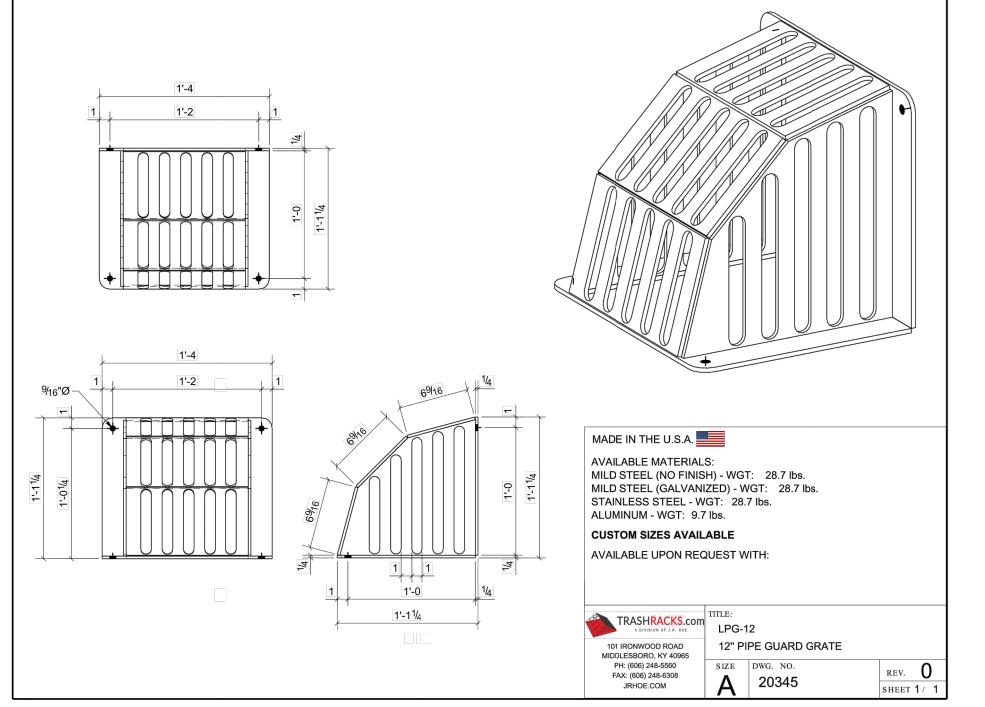
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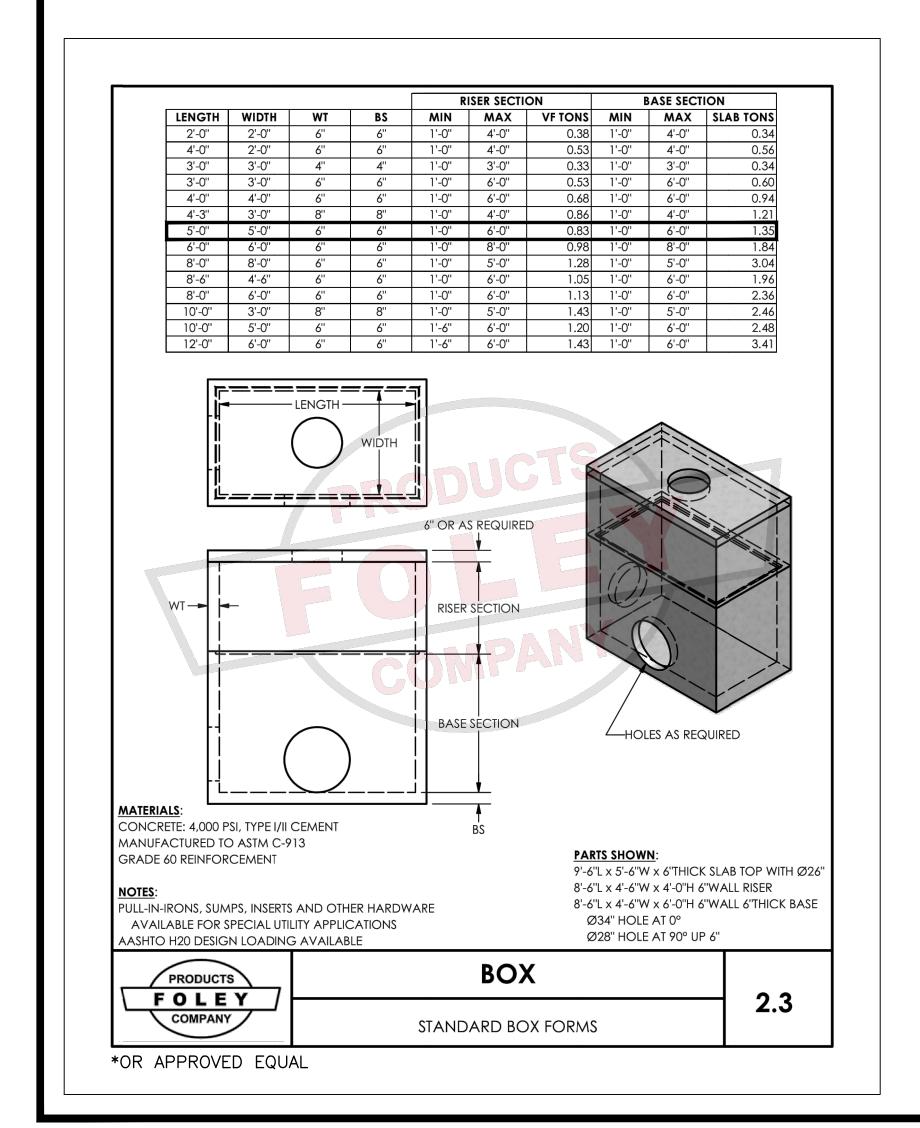
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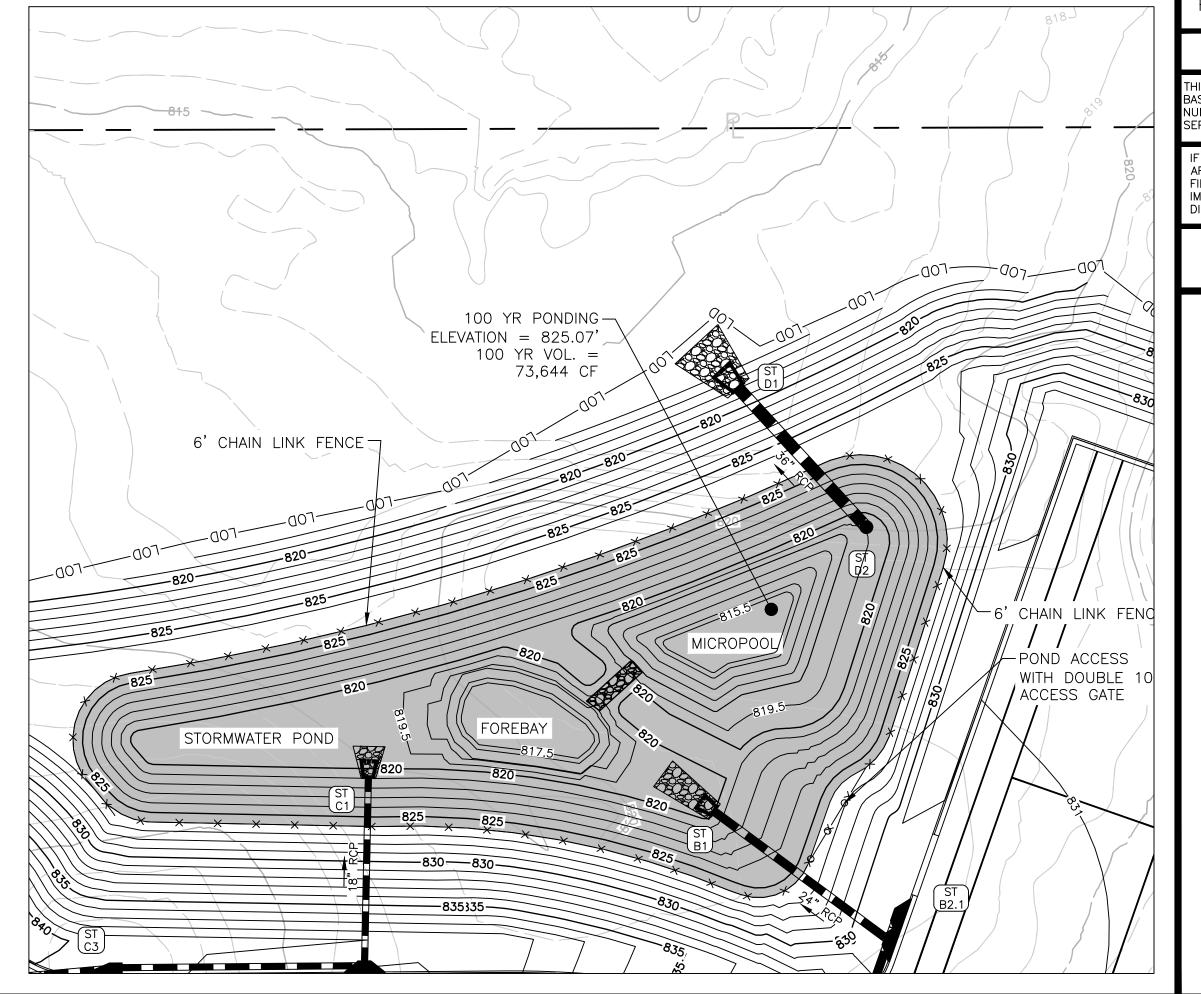
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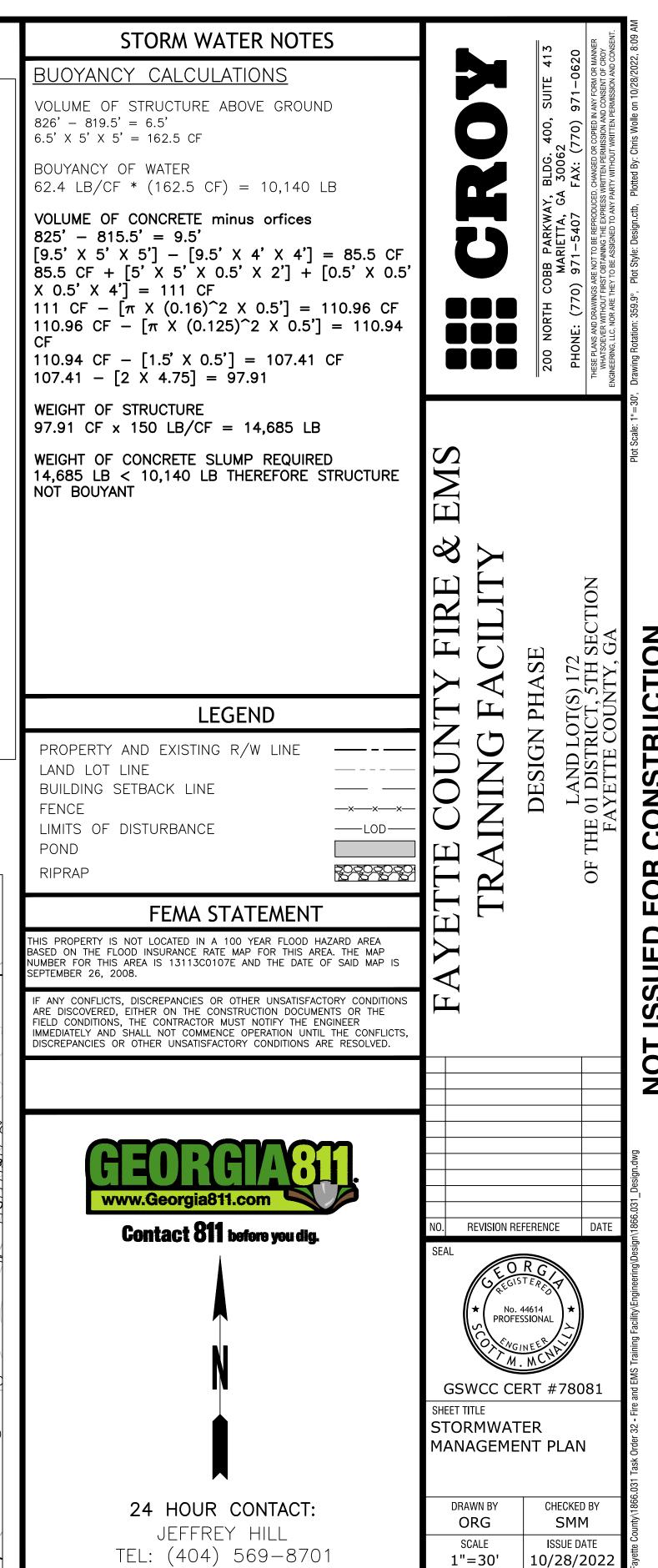
OUTLET CONTROL STRUCTURE D1 (RECTANGULAR BOX)







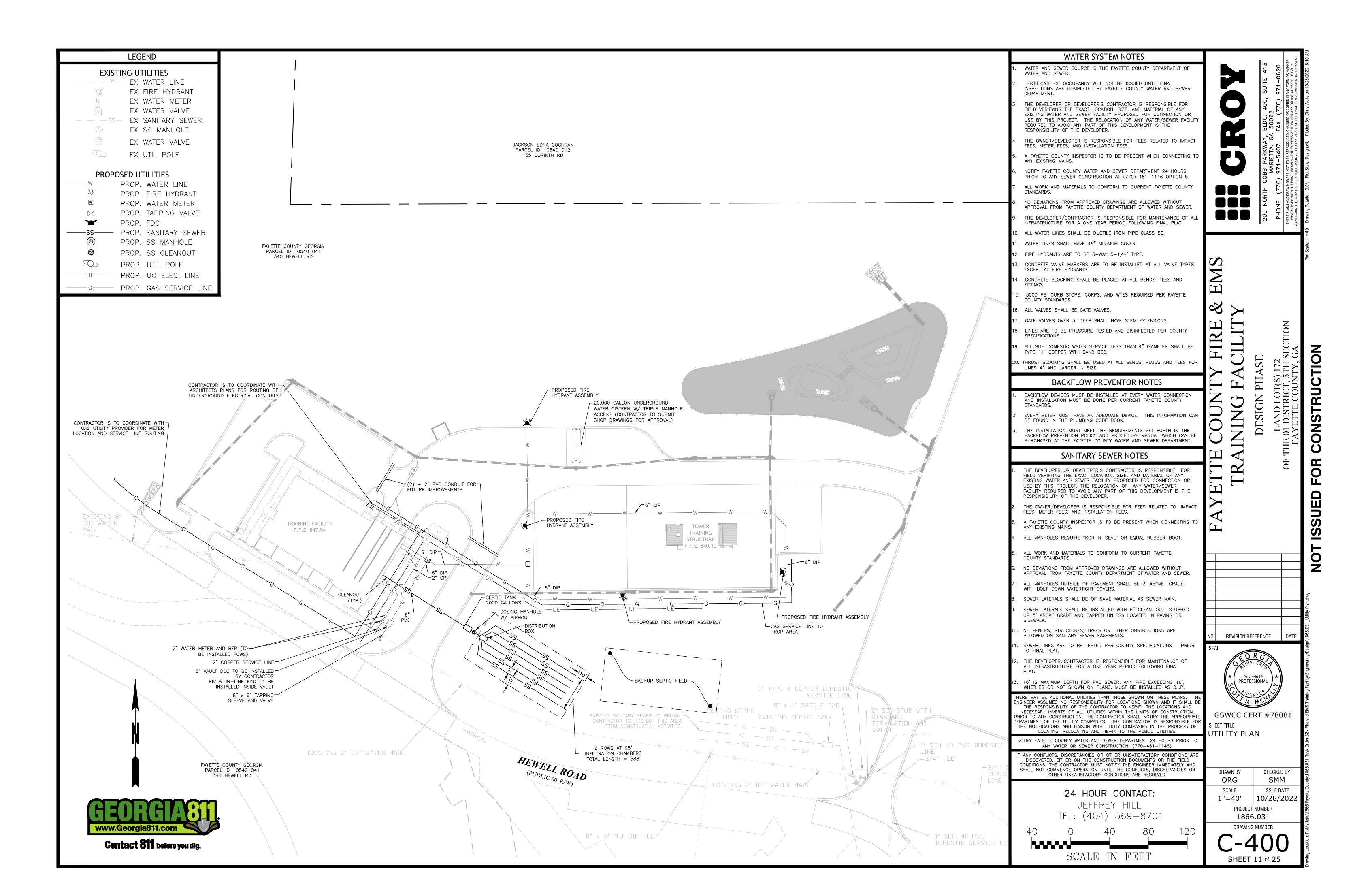




SCALE IN FEET

1866.031

SHEET 10 of 25





CALCULATIONS

Fire & EMS Training Facility

1. Flow and Absorption Field

Sewerage Flow Rate:

+25 GPD/person +10 GPD/instructor (shower access)

60 people daily + 3 instructors

 Use approximately: Sewage Flow: (25)*(60) + (3*(25+10) = 1,605 GDP

Length of Line

Using Fayetteville County Minimum Percolation Rate of 70 minutes per inch from table DT-1 the factor is 1.673 sq.ft./gal assuming a trench width of three (3) feet. The total length of line is

L = (1.673)(Flow gpd)/3• L = (1.673)(1605)/3

L = 895.06 L.F. Use L = 896 L.F. for conventional System

 According to the Department of Public Health's Manual for On-Site Sewage Management System a 35% reduction in the absorption trench length for Non-Conventional On-Site Sewage Management Systems. Therefore, use the L = 583 L.F. for the chambered system.

Septic Tank

The design of the septic tank shall be based on a capacity equal to a 24 hour retention, but not less than 750 gallon minimum. Based on a daily flow rate of 1,605 GPD, we recommend using a 2,000 gallon septic tank.

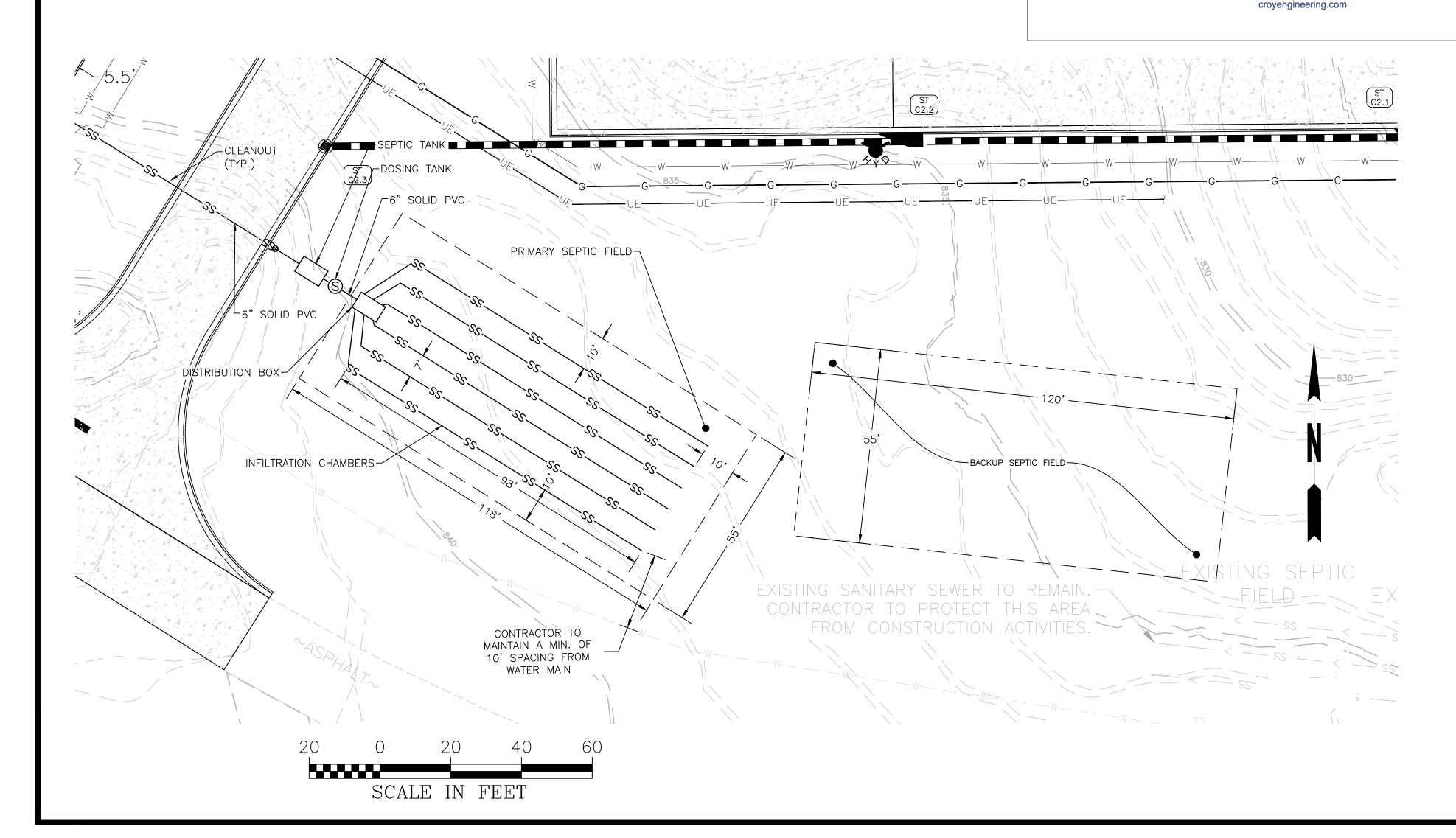
Dosing Tank Calculations According to the Department of Public Health's Manual for On-Site Sewage Management System, Dosing Volume (DV) is equal to 75% of interior volume of absorption lines to be dosed. For a 4" conventional system the operating volume is equal to 0.5 gal/LF of line; LF of line = 896 LF. Therefore,

896 LF x 0.5 gal/LF = 448 Gallons; DV = 448 Gallons.
Using Figure EF-2 (provided this sheet) and a 4-6" carrier pipe, the dimensions of the sewage siphon inside the dosing tank are provided in the Table ET-1. For a 4" Siphon, the Average Discharge Rate is 165 GPM. 448 Gallons x min. / 165 Gallons = 2.72 minutes ~ 3 minutes. According to the Figure and Table,

the dosing volume can be dosed and discharged in 3 minutes.

4. Infiltration Chambered system shall be installed per manufacturer's standards.

200 Cobb Parkway North | Building 400, Suite 413 | Marietta, Georgia 30062 | 770.971.5407





REVISION REFERENCE PROFESSIONAL

GSWCC CFRT #78081	ı

SEPTIC FIELD PLAN

THERE MAY BE ADDITIONAL UTILITIES THAN THOSE SHOW
ON THESE PLANS. THE ENGINEER ASSUMES NO
RESPONSIBILITY FOR LOCATIONS SHOWN AND IT SHALL E
THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY TH
LOCATIONS AND NECESSARY INVERTS OF ALL UTILITIES
WITHIN THE LIMITS OF CONSTRUCTION. PRIOR TO ANY
CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE
APPROPRIATE DEPARTMENT OF THE UTILITY COMPANIES.
THE CONTRACTOR IS RESPONSIBLE FOR THE
NOTIFICATIONS AND LIAISON WITH UTILITY COMPANIES IN
THE PROCESS OF LOCATING, RELOCATING AND TIE-IN TO
THE PUBLIC UTILITIES.

Contact 811 before you dig.

NOTIFY FAYETTE COUNTY WATER AND SEWER DEPARTMENT 24 HOURS PRIOR TO ANY WATER OR SEWER CONSTRUCTION: (770–461–1146)5.

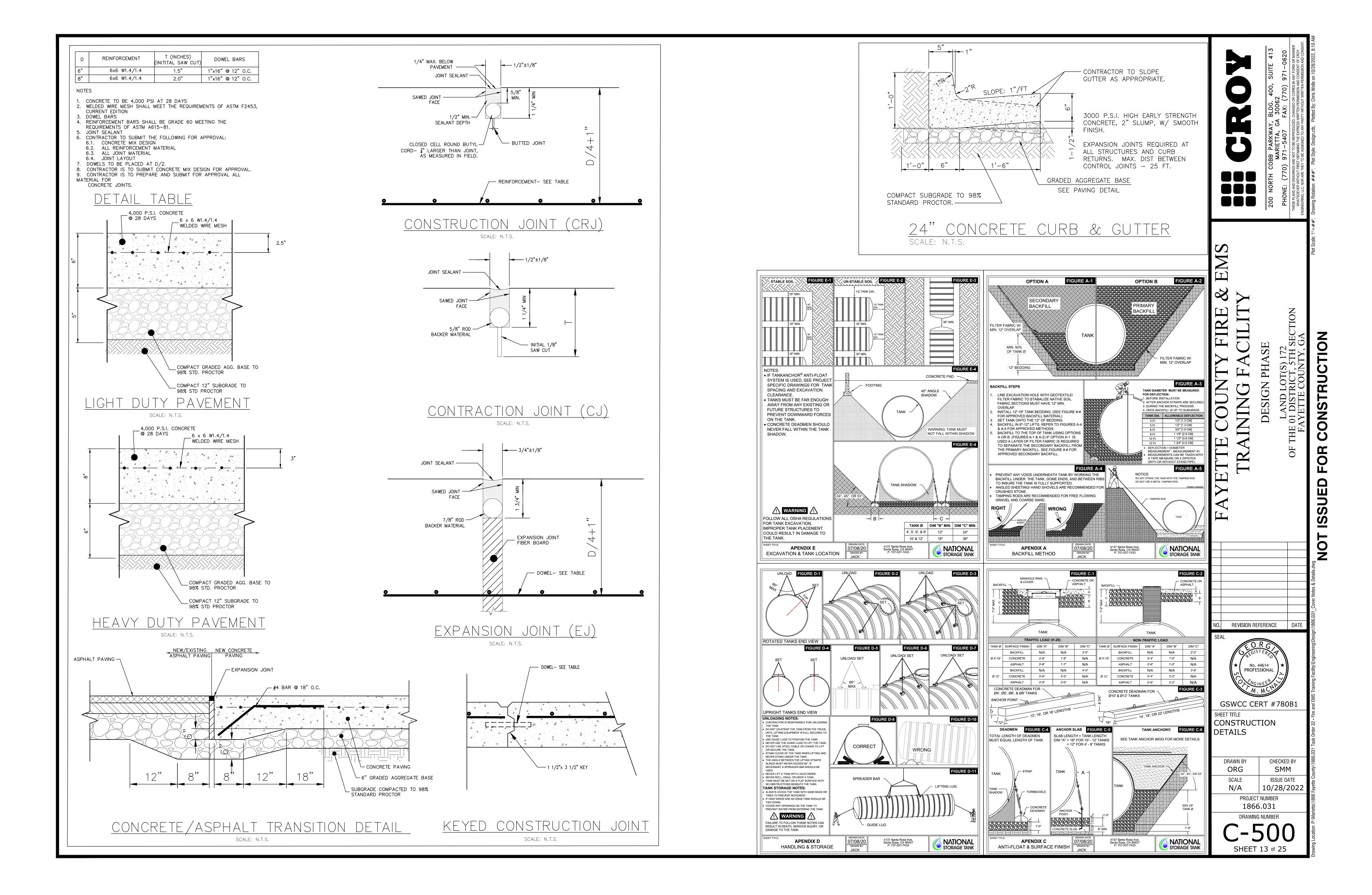
IF ANY CONFLICTS, DISCREPANCIES OR OTHER UNSATISFACTORY CONDITIONS ARE DISCOVERED, EITHER ON THE CONSTRUCTION DOCUMENTS OR THE FIELD CONDITIONS, THE CONTRACTOR MUST NOTIFY THE ENGINEER IMMEDIATELY AND SHALL NOT COMMENCE OPERATION UNTIL THE CONFLICTS, DISCREPANCIES OR OTHER UNSATISFACTORY CONDITIONS ARE RESOLVED.

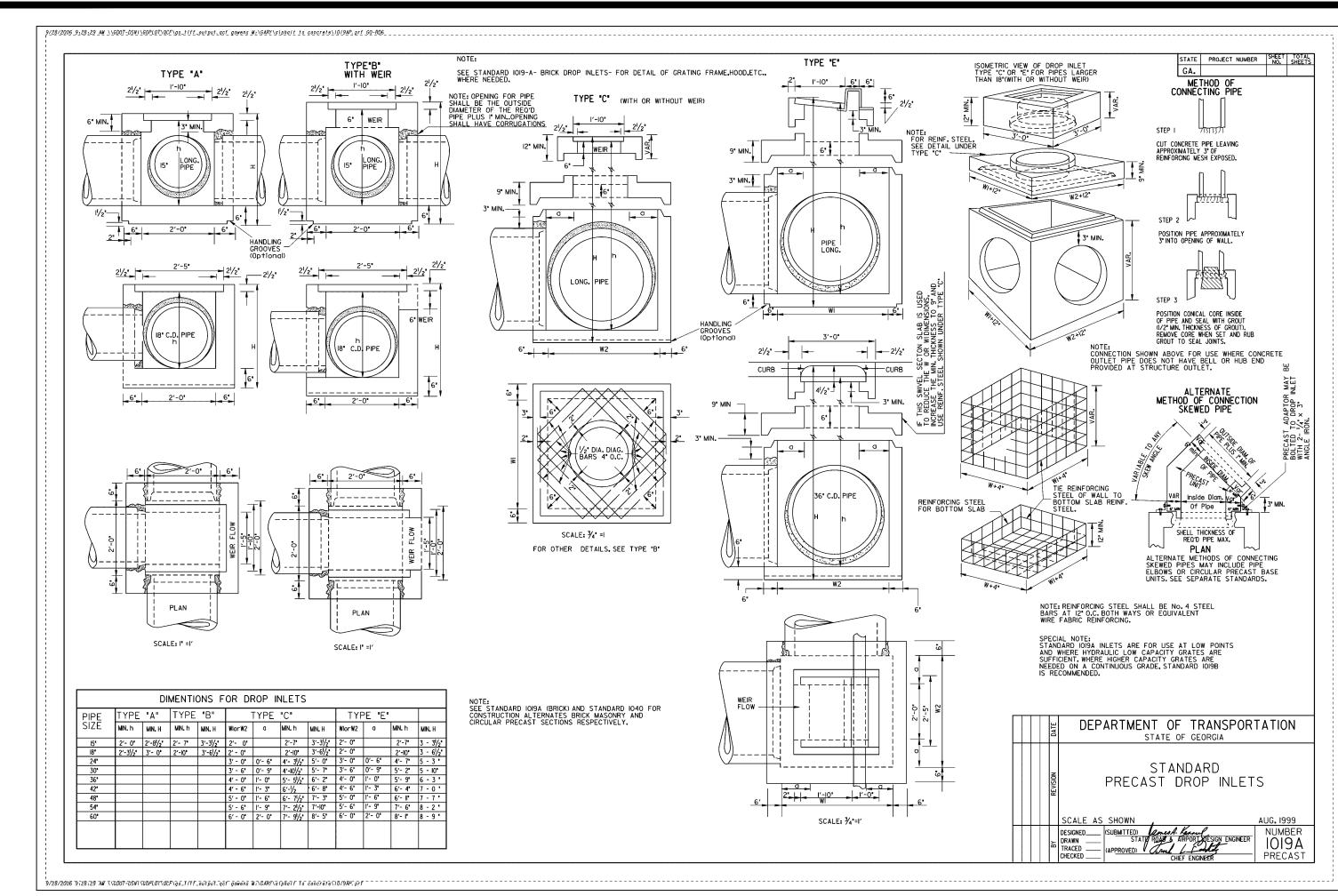
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ORG	SMM

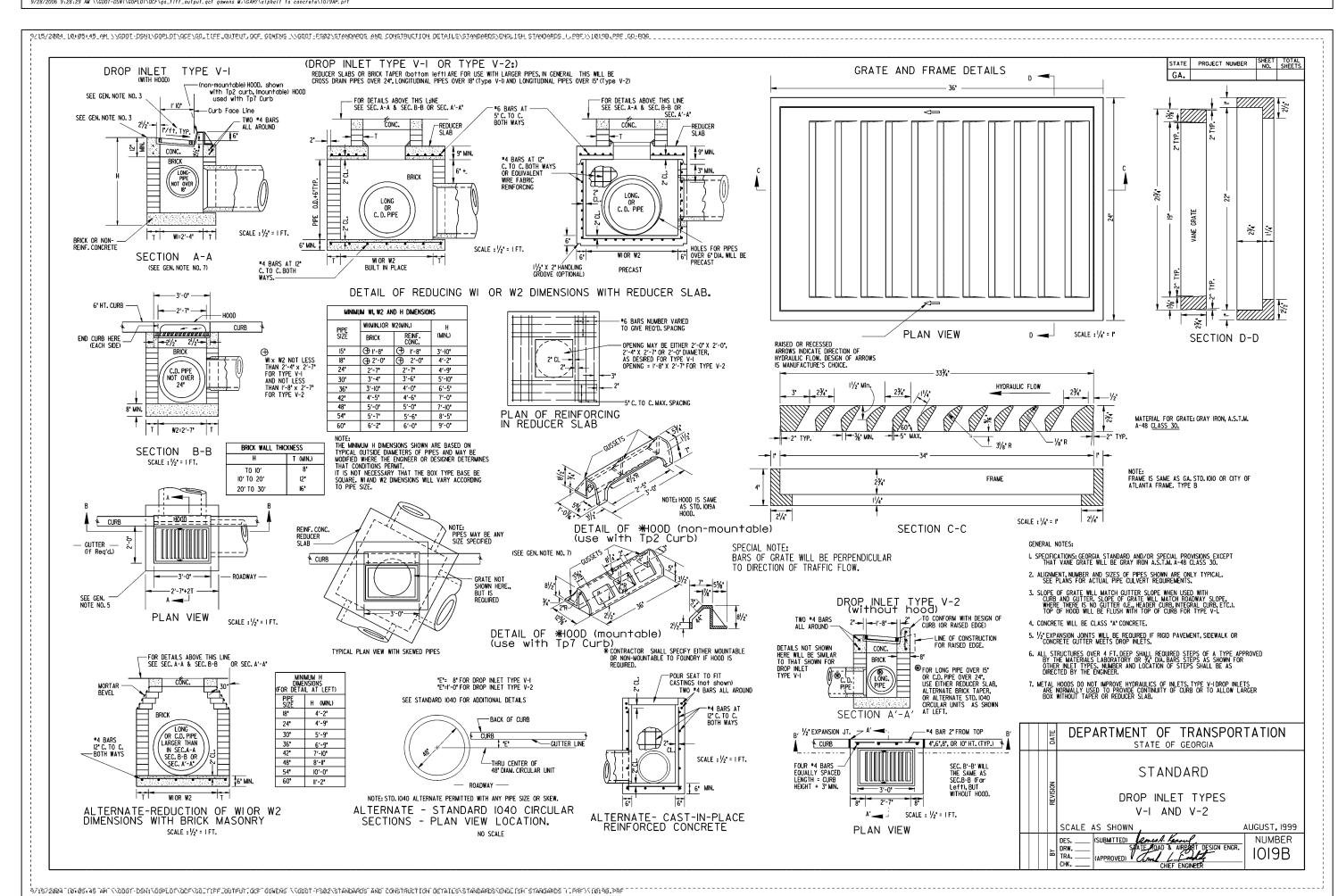
ISSUE DATE 1"=20' 10/28/2022 PROJECT NUMBER 1866.031

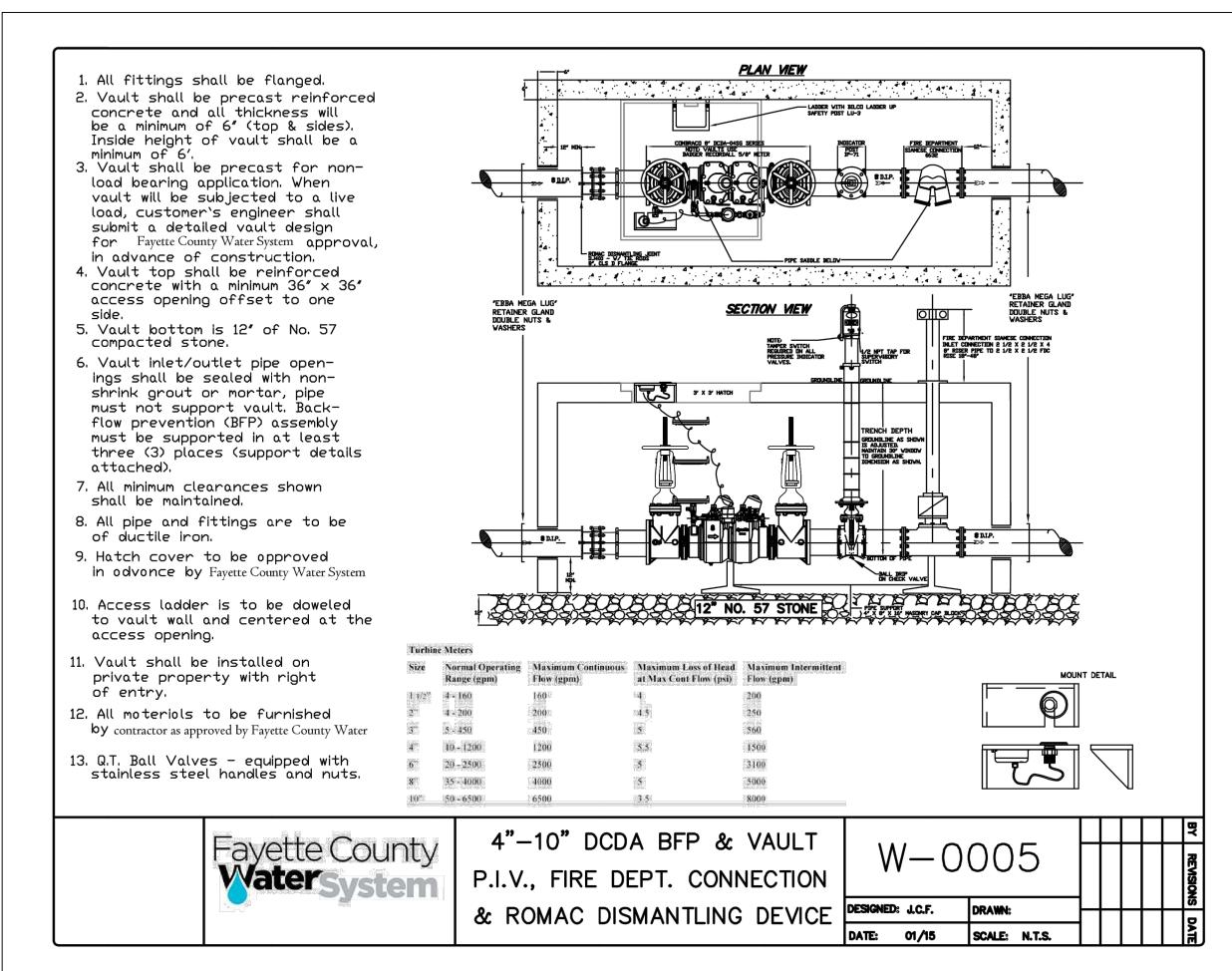
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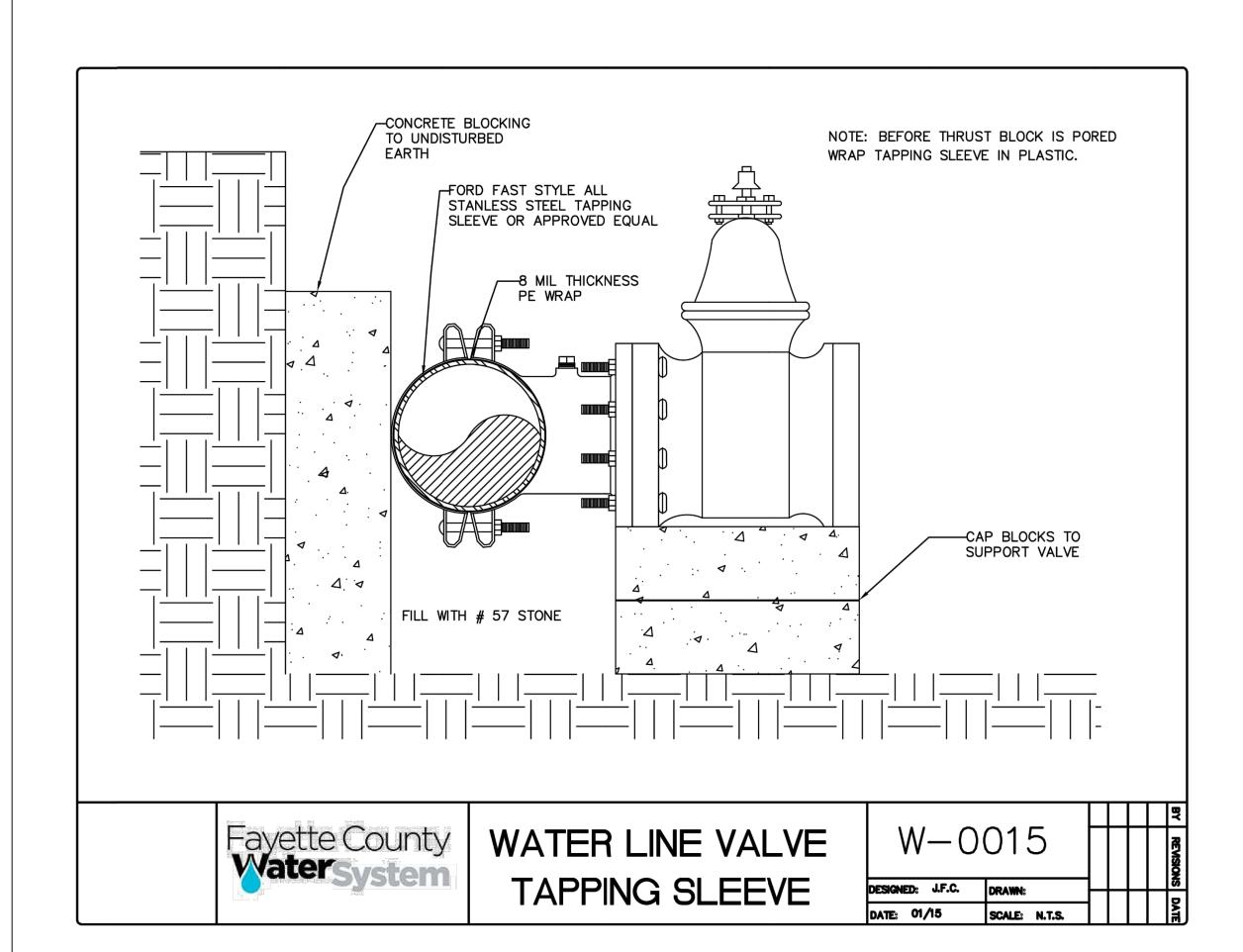
SHEET 12 of 25













NO. REVISION REFERENCE DATE

SEAL

GSWCC CERT #78081

SHEET TITLE

CONSTRUCTION

DETAILS

DRAWN BY

ORG

SCALE

N/A

ISSUE DATE

10/28/2022

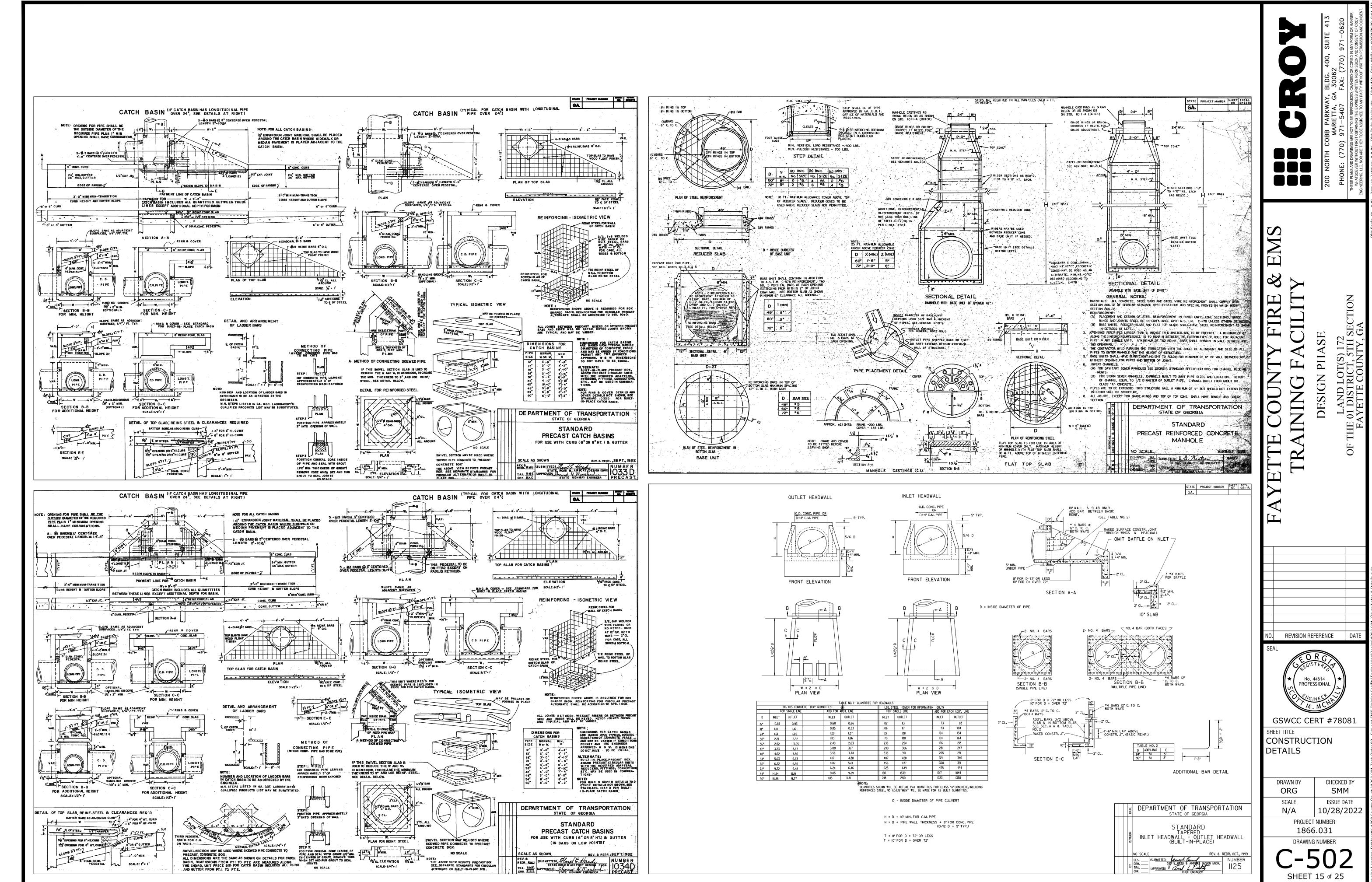
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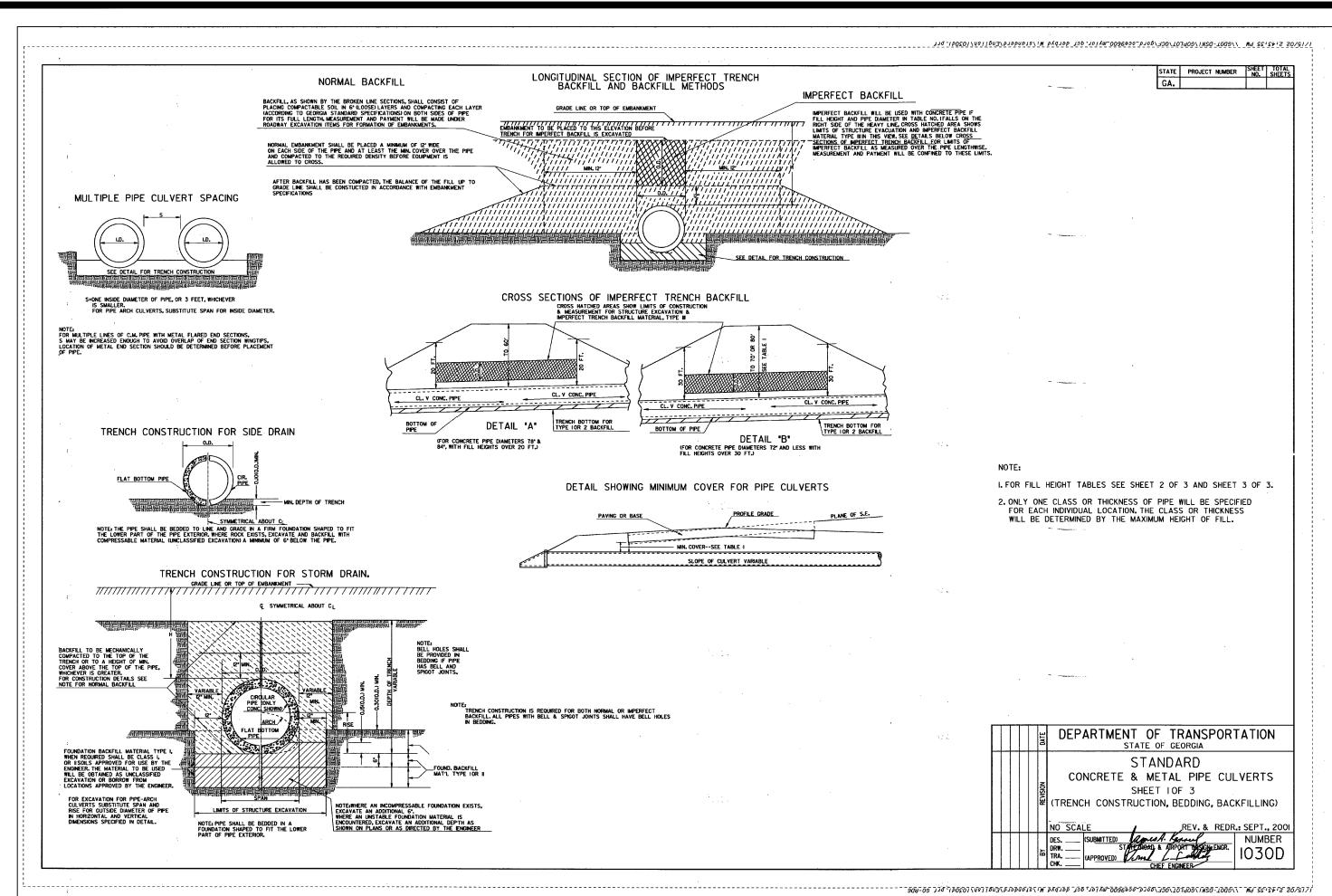
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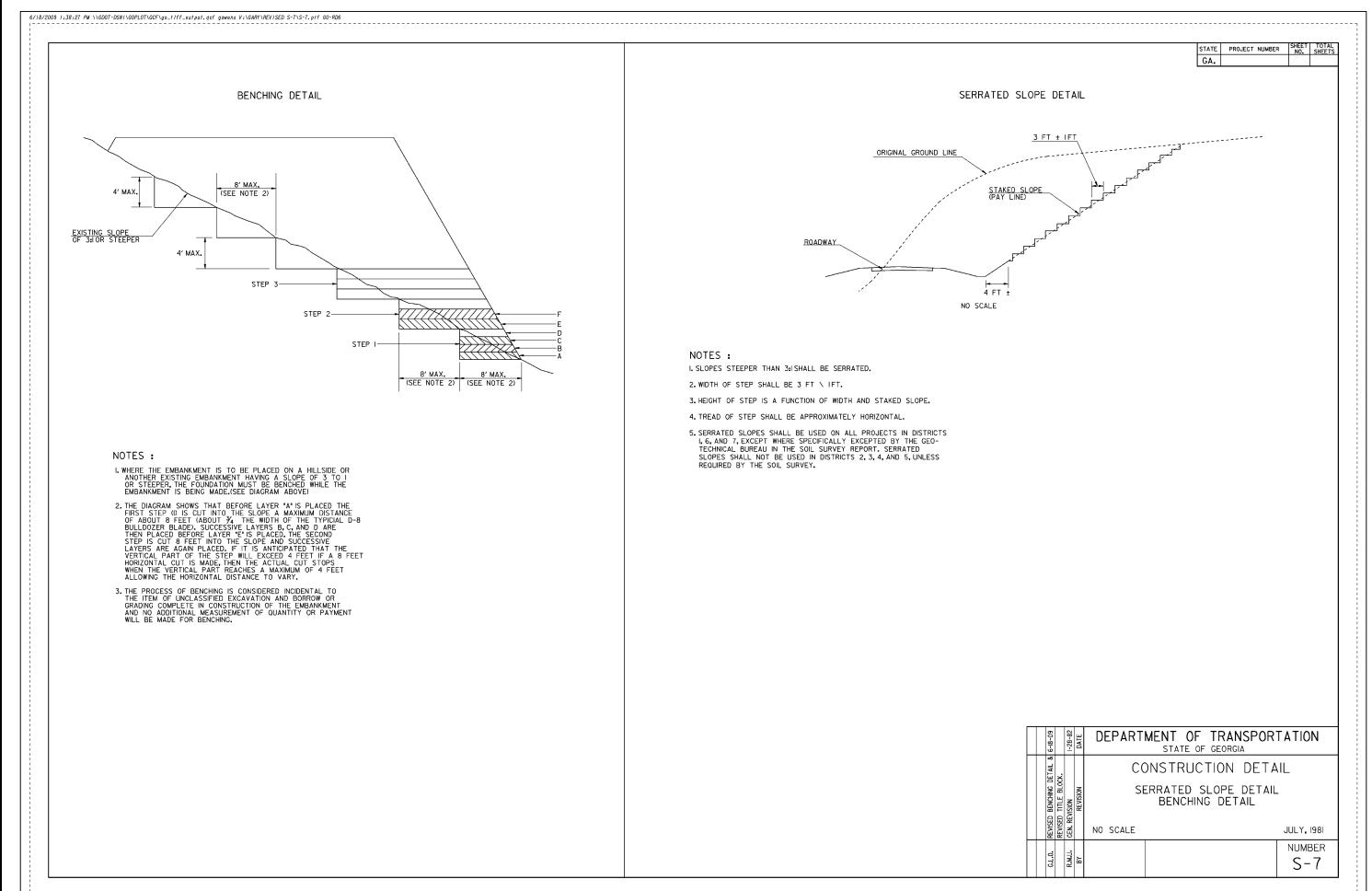
SHEET 14 of 25

INCITOTION OF ADITION FOR



NOT ISSUED FOR CONSTRUCTION





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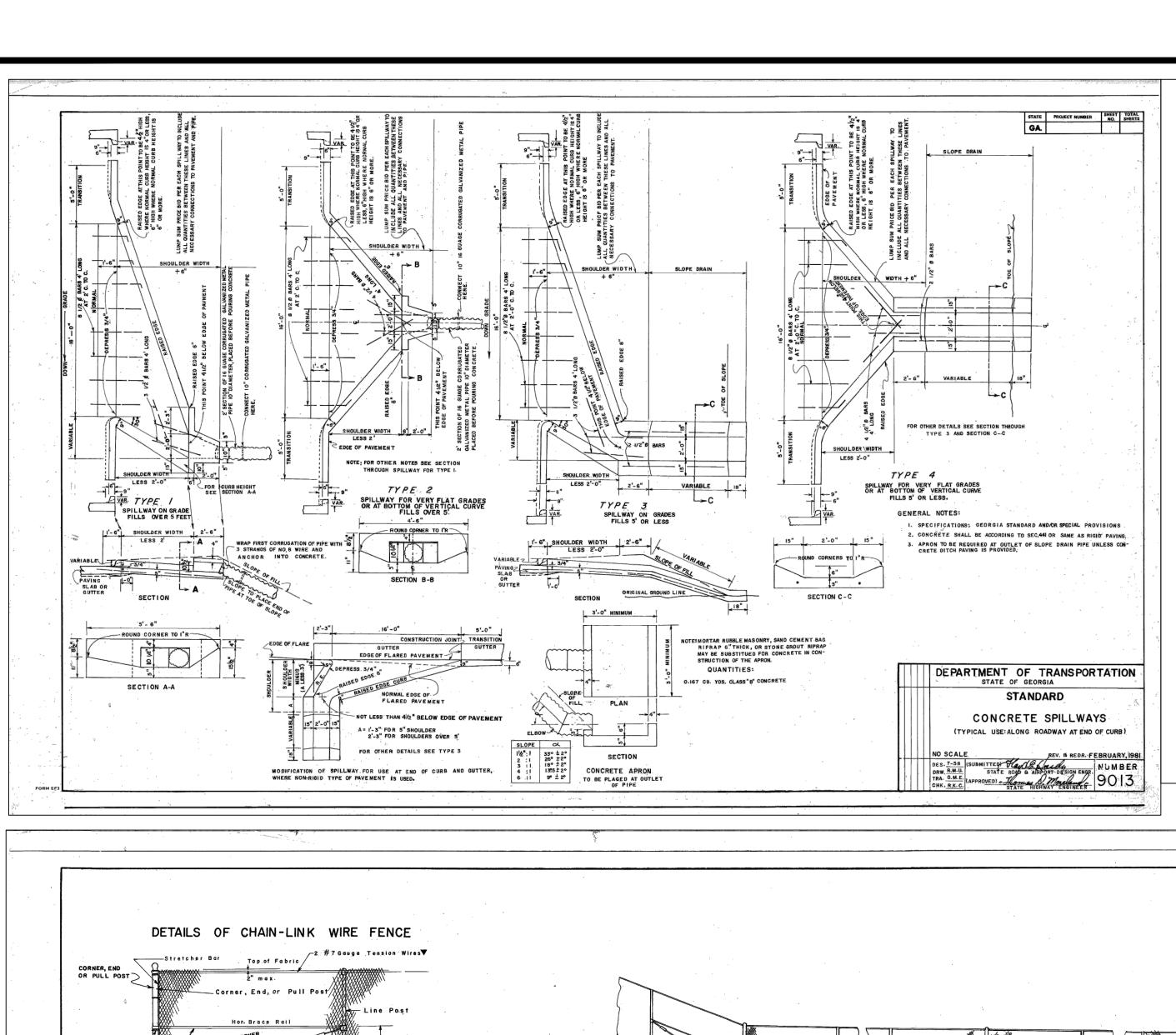
PIPE DIAMETER (INCHES)	TYPE	MINIMUM COVER (INCHES)	1-10	10 - 15	15 - 20	HEIGHT 0 20 - 25		30 - 35			50 - 60	60 - 70	70 - 80	80 - 90	PIPE DIAMETE (INCHES)
12	CONCRETE STEEL I ALUM I	12 12 12	.064 .060	.064 .060	.064 .060	.064 .060	.064 .075	.064 .075	.064 .075	V .064 .075	.064 .075	.064 .075	.064 .075	.064	12
15	STEEL I ALUM I	2 12 12	.064 .060	.064	.064 .060	.064 .060	.064 .075	.064 .075	.064 .075	.064 .075	.064 .075	.064 .075	.064 .075	.064 .105	15
18	CONCRETE STEEL I ALUM I	12 12 12	.064 .060	.064	.064 .060	.064 .060	.064	.064 .075	.064 .075	.064 .075	.064 .105	.064 .105	.064 .105	.064 .105	18
24	CONCRETE STEEL I ALUM I CONCRETE	2 12 12	.064	.064	.064 .060	.064 .075	.064 .075	.064 .075	.064 .075	.064 .105	.064 .105	.064 .105	.079 .105	.079	24
30	STEEL I ALUM I CONCRETE	2 12 12 12	.064 .075	.064 .075	.064 .075	.064 .075	.064 .075	.064 .105	.064 .105	.064 .105 V	.079 .135	.079 .135	.109 V	.109	30
36	STEEL 1 STEEL 2 ALUM 1	12 12 12	.064 .064	.064 .064	.064 .064 .105	.064 .064 .105	.064 .064 .105	.064 .064 .105	.064 .064	.079 .064 .135	.079 .079 .135	.109 .079 .135	.109	.138	36
42	ALUM 2 CONCRETE STEEL 1 STEEL 2	2 12 12 12	.060 .064 .064	.060 III .064 .064	.060 IV .064 .064	.060 V .064	.075 V .064	.075 V .064	.105 V .064	.105 V .079	.105 V .109	.135 V .109	V .138	.138	40
	ALUM 1 ALUM 2 CONCRETE	12 12 12	.105 .060	.060 .060	.064 .135 .060	.004 .135 .075	.084 .164 .075	.164 .105	.004 .105	.019 .105	.135	.103 .135	.10 9 V	٥٥١٥	42
48	STEEL I STEEL 2 ALUM I	2 12 12	.064 .064 .105	.064 .064	.064 .064	.064 .064	.064 .064	.064 .064 .164	.079 .064	.109 .079	.109	.138	.138 .138	.168 .138	48
	ALUM 2 CONCRETE STEEL I	12 12 12	.060 III .079	.060 III .079	.060 IV .079	.075 V .079	.075 V .079	.105 V .079	.105 V .079	.135 V .109	.135 V .138	.164 V .138	.164 V .168		
54	STEEL 2 ALUM I ALUM 2	12 15 15	.064 .105 .060	.064 .105 .060	.064 .135 .060	.064 .164	.064 .164 .075	.064 .164 .105	.079	.109 .135	.109	.138	.138	.168	54
60	CONCRETE STEEL 1 STEEL 2 ALUM 1	12 12 12	.109	.109	.109 .064	.064 .164	.109 .064	.109 .079	.079	V .109 .109	.138	.168	.168	.168	60
	ALUM 2 CONCRETE STEEL I	15 15 12 12	.135 .060 III .138	.135 .060 III	.164 .075 IV .138	.104 .105 V	.164 .105 V	.164 .135 V	.135 V .138	.164 V .138	.164 V	V .168			
66	STEEL 2 ALUM I ALUM 2	12 18 18	.064 .164	.064 .164	.064 .164	.064 .164	.064 .164	.079	.109	.109	.138	.168	.168		66
72	CONCRETE STEEL I STEEL 2	12 12 12	 . 38 .064	.138 .064	.138	V .138 .064	V .138 .079	V .138 .109	V .138 .109	V .138 .138	V .168 .138	V .168			72
	ALUM 1 ALUM 2 CONCRETE	18 18 12	.164 .075	.164 .075	.164 .105	.164 .105 V	.164 .135 V	.164 V	.164 V	.164 V	V				
78	STEEL 1 STEEL 2 ALUM 2	15 15 21 12	.168 .064 .075	.168 .064 .075	.168 .064 .105	.168 .064 .105	.168 .079 .135	.168 .109 .164	.168 .109 .164	.168	.168	.168			78
84	CONCRETE STEEL 1 STEEL 2 ALUM 2	15 15 21	.168 .064 .105	.168 .064	.168 .064	.079	.168 .079	.168 .109	.168 .109	V .168 .138	.168				84
90	CONCRETE STEEL 2 ALUM 2	12 18 24	.064	.064	.064	.079	.109	.109	.138	.138	.168				90
96	CONCRETE STEEL 2 ALUM 2	12 18 24	 .079 .105	.079 .105	.079 .135	.079	.109	.109	.138	.168					96
102	CONCRETE STEEL 2 ALUM 2	12 24 24	.079 .135	.079 .164	.079 .164	.109	.109	.138	.138	.168					102
108	CONCRETE STEEL 2 ALUM 2	12 24 24	 .109 .135	.109 .164	.109	.109	.109	.138	.138	.168					108
114	CONCRETE STEEL 2 ALUM 2 CONCRETE	24 24	.109 .164	.109 .164	.109	.109	.109	.138	.168						
120	STEEL 2 ALUM 2	24	.109	.109	.109	.109	.138	.138	.168						120
		N(Sh		RED FOR (THE LEFT	CONDTIONS SIDE OF	THE HE PIPE RE	INDITIONS AVY LINE, EQUIRES IM DING TO DE	CLASS V PERFECT E	CONCRETE BACKFILL					NO.3-(INFORMATIO AL THICKNESS EQU .064 0.079	
GJP ADI	GEN.REV.NOTES DED SEAM CONST.NO REVISION	9-26-01 B	ACKFILL.			SHEET							STEEL	0.109 0.138 0.168 0.060	12 10 8
NO SCA DES DRW TRA	CC	DEP				S CORRUG <i>a</i> Otes corf			3" X 1/2" ' X 1" (0R	8 5" X I" F	OR STEEL	PIPE ONL'	AL UMINL	0.075 0.105 0.135 0.164	14 12 10 8
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STATE FOR	SHEE HEIGHT	ENT OF STATE OF	GREATEF	R AND IS	THE RESP	ONSIBILITY	OF THE (CONTRACTO						S MINT DE	
CHIEF ENGINE	SHEET 2 OF 3 (FILL HEIGHTS FOR CONCRETE & CORRUGATED METAL PIPE)	OF TRA	FOR CON	NDITIONS '	TO RIGHT				E REQUIRE:						GA.
OC PRINCIPAL PAIN	PIPE (: 3 : CONCRU	ANSPO	ALCLAD	ALLOY 3	004-H34 I	HAVING MIN	NIMUM YIEL	D STRENG	UMINUM SF TH, fy=24, .IALLOWAE	000 PSI.I	F ALUMINU	JM PIPE IS	OTHERWIS	SΕ	
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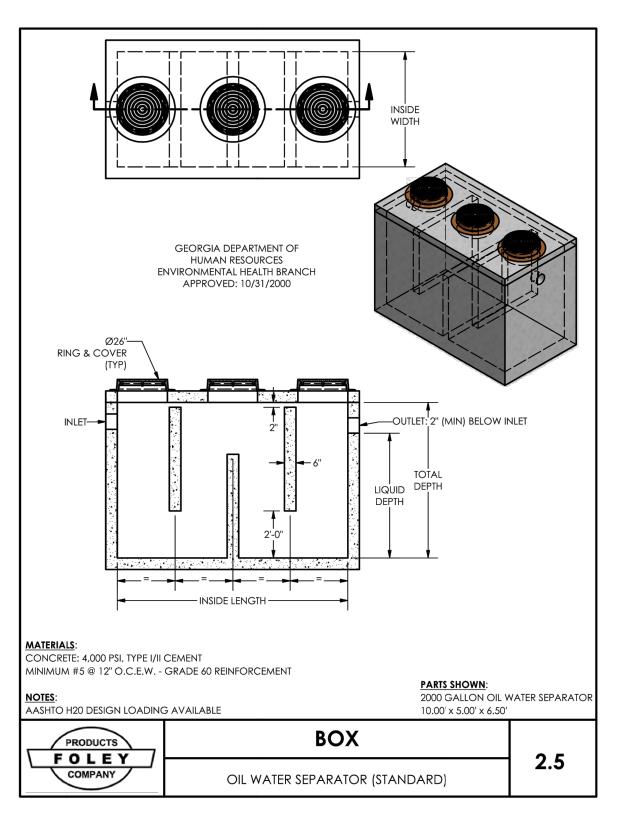
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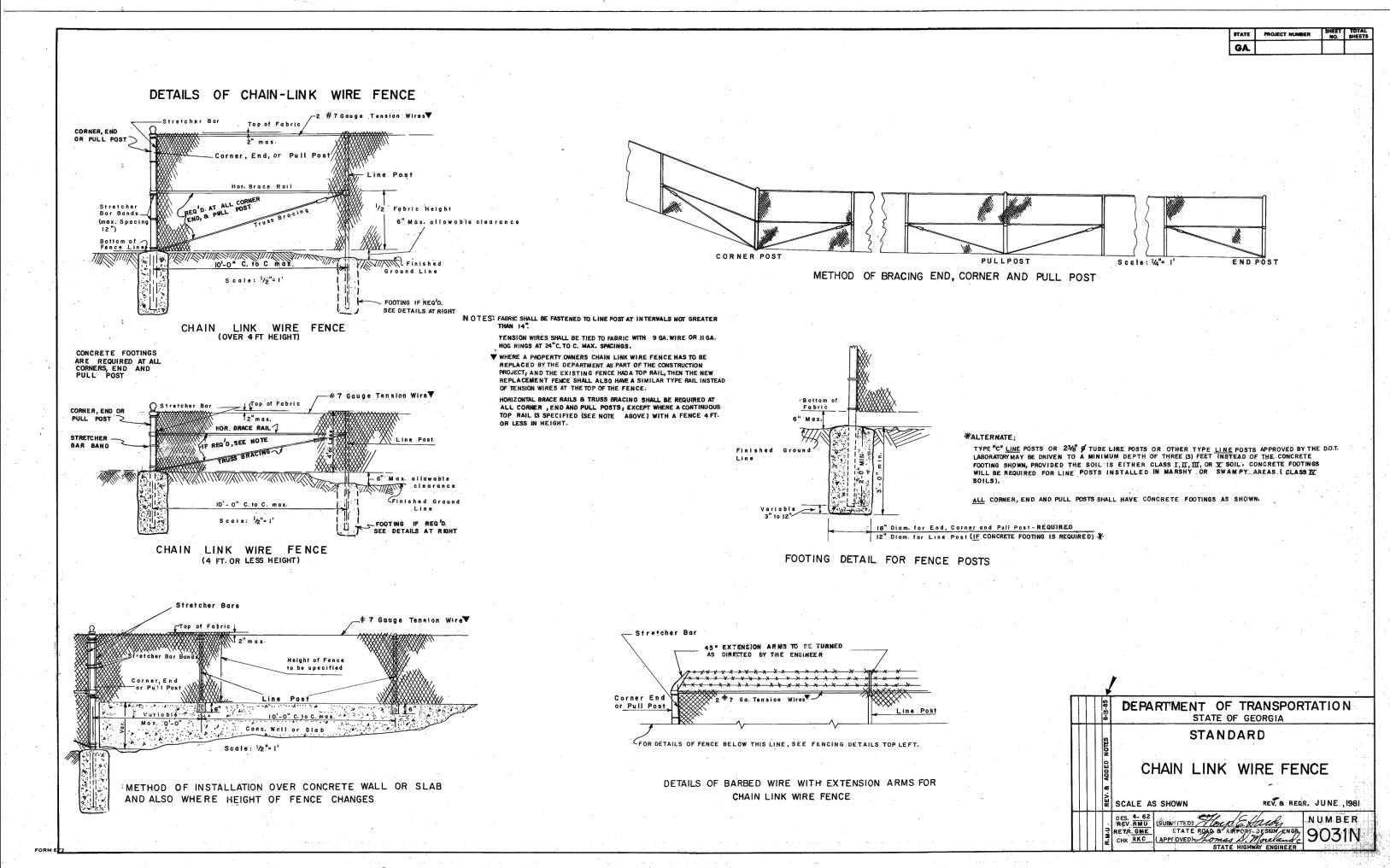
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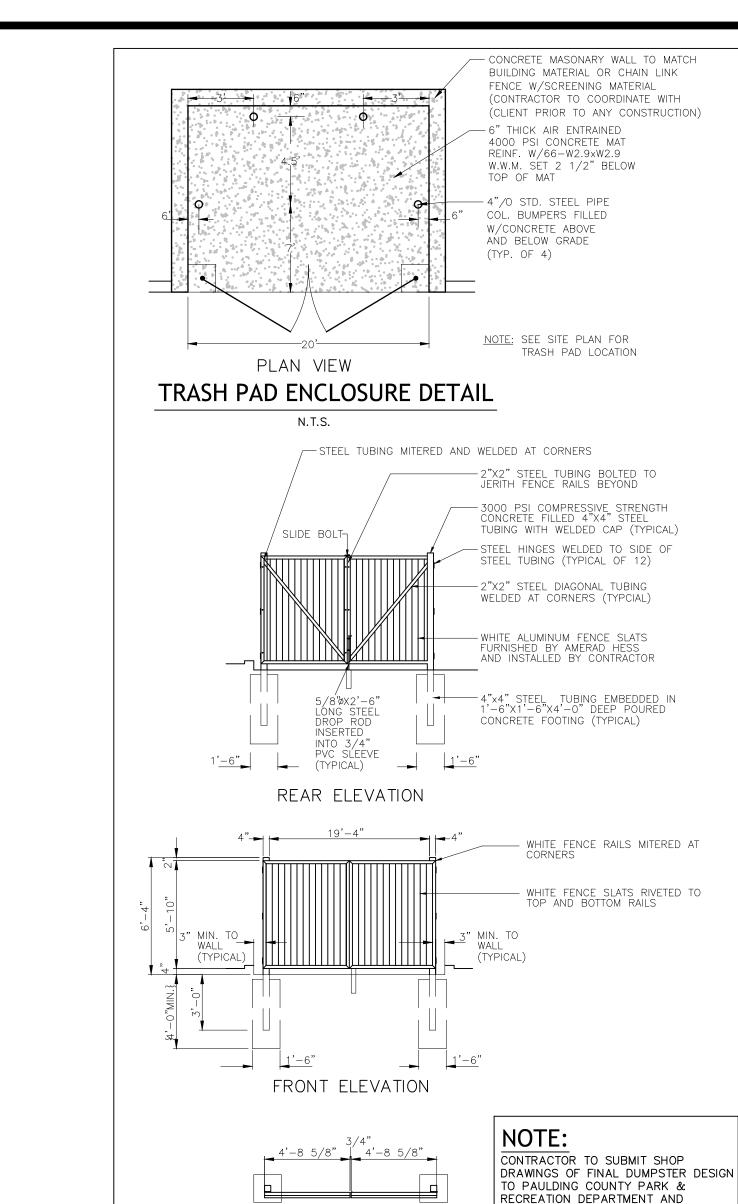
CONSTRUCTION DETAILS

DRAWN BY CHECKED BY SMM SCALE **ISSUE DATE** 10/28/2022 N/A PROJECT NUMBER 1866.031



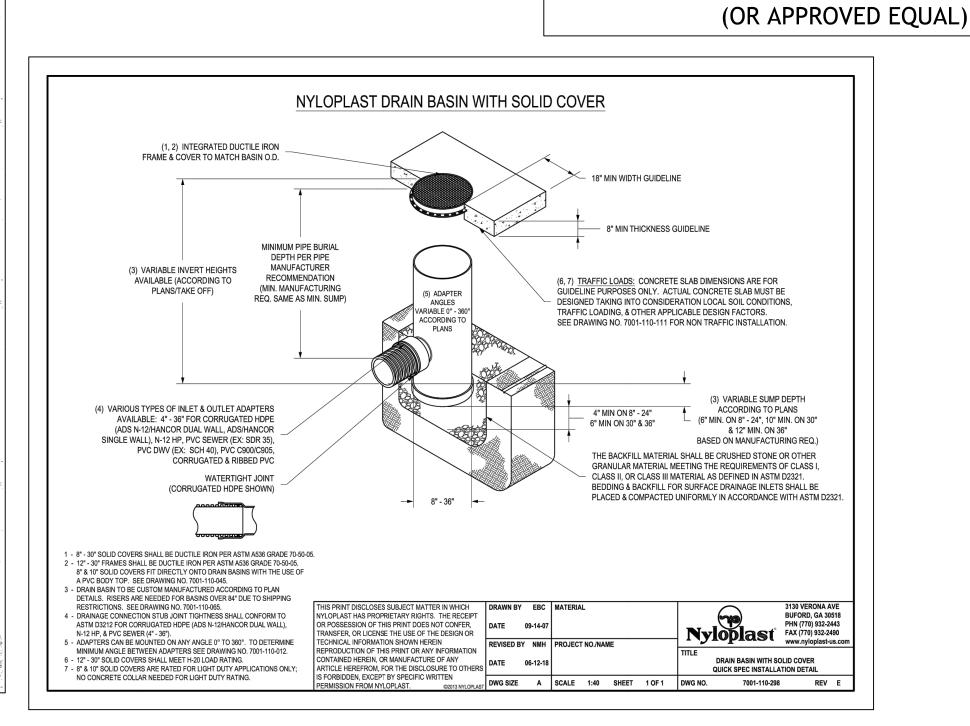






PLAN VIEW

DUMPSTER -ALUMINUM GATE DETAIL





PROJECT ENGINEER, FOR APPROVAL,

PRIOR TO ANY CONSTRUCTION.

NO. REVISION REFERENCE DATE

SEAL

GSWCC CERT #78081

SHEET TITLE

CONSTRUCTION

DETAILS

DRAWN BY

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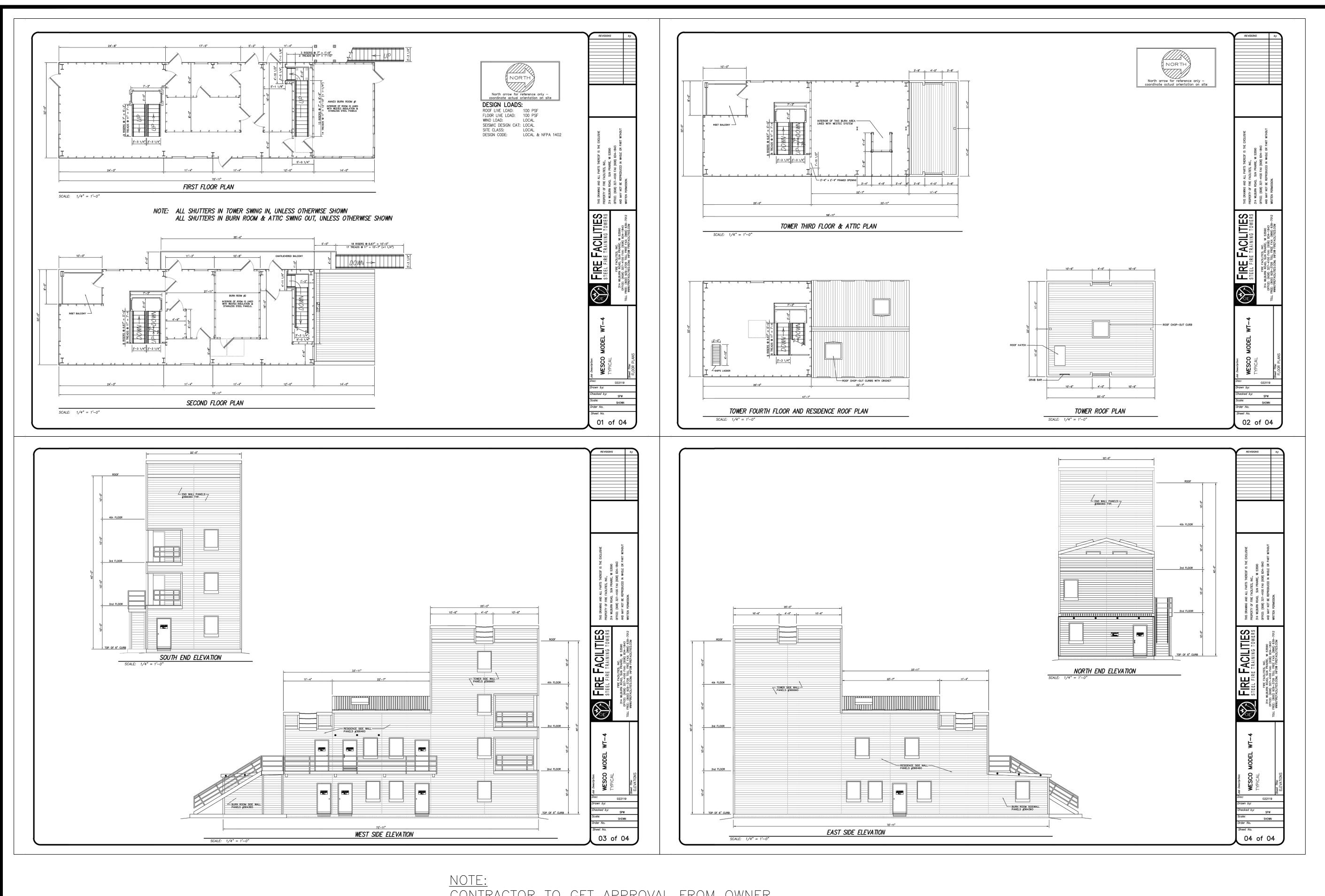
10/28/2022

PROJECT NUMBER

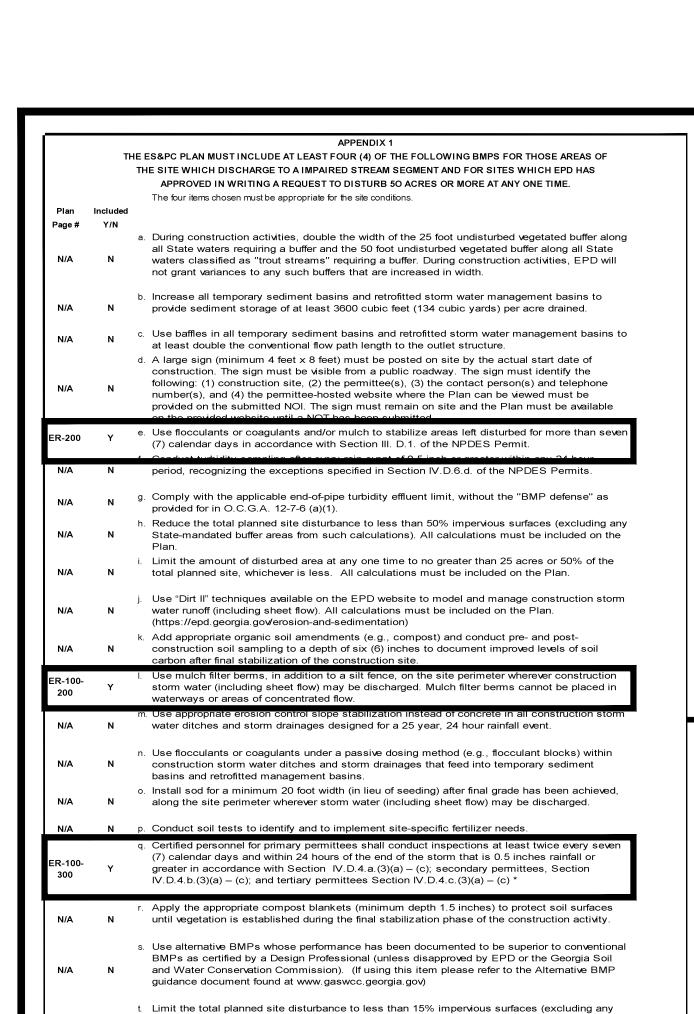
1866.031

DRAWING NUMBER

NOT ISSUED FOR CONSTRUCTION



NOTE: CONTRACTOR TO GET APPROVAL FROM OWNER BEFORE CONSTRUCTION BEGINS. DAND LOT(S) 172
OF THE 01 DISTRICT, 5TH SECTION
FAYETTE COUNTY, GA



state mandated buffer areas from such calculations). All calculations must be included in the

u. Conduct inspections during the intermediate grading and drainage BMP phase and during the

Plan to conduct inspections during the intermediate grading and drainage BMP phase and during the final BMP

. Install Post Construction BMPs (e.g., runoff reduction BMPs) which remove 80% TSS as

outlined in the Georgia Stormwater Management Manual known as the Blue Book or an

with Section IV.A.5 of the permit.

final BMP phase of the project by the design professional who prepared the Plan in accordance

he Plan must include a statement that the primary permittee must retain the design professional who prepared the

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AkA	Altavista sandy loam, 0 to 3 percent slopes	1.0	1.6%
AmB	Appling sandy loam, 2 to 6 percent slopes	37.4	57.4%
AmC	Appling sandy loam, 6 to 10 percent slopes	21.6	33.1%
CeB	Cecil sandy loam, 2 to 6 percent slopes	4.2	6.5%
PaE	Pacolet sandy loam, 10 to 25 percent slopes	0.2	0.3%
W	Water	0.7	1.1%
WH	Wehadkee soils, 0 to 2 percent slopes, frequently flooded	0.1	0.1%
Totals for Area of Interest		65.1	100.0%

EROSION, SEDIMENTATION, & POLLUTION CONTROL PLANS FOR CONSTRUCTION OF

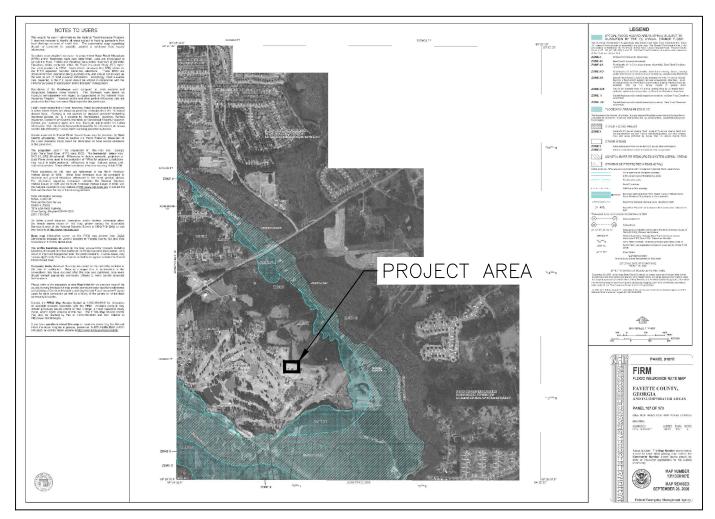
FAYETTE COUNTY FIRE & EMS TRAINING FACILITY

CITY OF FAYETTEVILLE, GEORGIA

CROY ENGINEERING PROJECT NO. 1866.033 MAY, 2022



LOCATION MAP
(NTS)



FEMA MAP

FEMA STATEMENT

A PORTION OF THIS PROPERTY MAY LIE WITHIN THE 100 YEAR FLOOD HAZARD AREA BASED ON THE FLOOD INSURANCE RATE MAP FOR THIS AREA. THE MAP NUMBER FOR THIS AREA IS 13113C0107E AND THE DATE OF SAID MAP IS SEPTEMBER 26, 2008.

GEORGIA811
www.Georgia811.com
Contact 811 before you dig.

24 HOUR CONTACT:

JEFFREY HILL

TEL: (404) 569-8701

EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST STAND ALONE CONSTRUCTION PROJECTS SWCD:_____PAULDING Project Name: FAYETTE COUNTY FIRE & EMS TRAINING Address: 340 HEWELL ROAD City/County:__FAYETTE SCOTT MCNALLY (SMCNALLY@CROYENG.COM) Name & email of person filling out checklist:_ TO BE SHOWN ON ES&PC PLAN The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted. (The completed Checklist must be submitted with the ES&PC Plan or the Plan will not be reviewed) 2 Level II certification number issued by the Commission, signature and seal of the certified design professional. (Signature, seal and Level II number must be on each sheet pertaining to ES&PC plan or the Plan will not be 3 Limits of disturbance shall be no greater than 50 acres at any one time without prior written authorization from the EPD District Office. If EPD approves the request to disturb 50 acres or more at any one time, the Plan must include at least 4 of the BMPs listed in Appendix 1 of this checklist. * (A copy of the written approval by EPD must be attached to the plan for the Plan to be reviewed.) 4 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls Provide the name, address, email address, and phone number of primary permittee. Note total and disturbed acreage of the project or phase under construction Provide the GPS location of the construction exit for the site. Give the Latitude and Longitude in decimal degrees. Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions. Description of the nature of construction activity. Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary. Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected. Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on Part IV page 19 of the permit Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on Part IV page 19 of the permit Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within 7 days after installation." in accordance with Part IV.A.5 page 25 of the permit * 15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary 16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required. Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional." * Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a Section 404 permit." * 9 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities." 20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source." 1 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be 2 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Biota Impaired Stream Segment must comply with Part III. C. of the permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment. * 23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in Item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan. * 24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited. * 25 Provide BMPs for the remediation of all petroleum spills and leaks Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed. * Description of practices to provide cover for building materials and building products on site. * 28 Description of the practices that will be used to reduce the pollutants in storm water discharges. * Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization). 30 Provide complete requirements of inspections and record keeping by the primary permittee. 31 Provide complete requirements of sampling frequency and reporting of sampling results. * Provide complete details for retention of records as per Part IV.F. of the permit. * Description of analytical methods to be used to collect and analyze the samples from each location. Appendix B rationale for NTU values at all outfall sampling points where applicable. * 5 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged. * R-001 Y 36 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the Plan may combine all of the BMPs into a single phase. 7 Graphic scale and North arrow. Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following: Rolling 2 - 8% 1 or 2 ER-200 39 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition. * N/A N/A 41 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to state waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact 2 Delineation of on-site wetlands and all state waters located on and within 200 feet of the project site. 43 Delineation and acreage of contributing drainage basins on the project site. 44 Provide hydrology study and maps of drainage basins for both the pre- and post-developed conditions. * 45 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are 46 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points. 7 Soil series for the project site and their delineation 8 The limits of disturbance for each phase of construction. R-200 Y 49 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the Plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual included for structural BMPs and all calculations used by the storage design professional to obtain the required sediment when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the Plan. Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.

Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting

of the year that seeding will take place and for the appropriate geographic region of Georgia.

* If using this checklist for a project that is less than 1 acre and not part of a common development

but within 200 ft of a perennial stream, the * checklist items would be N/A.

dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time

Effective APRIL 1, 2022

REVISION REFERENCE

PROFESSIONAL

GSWCC CERT #78081

1866.031

CHECKED BY

ISSUE DATE

10/28/2022

EROSION CONTROL

COVER SHEET

- THE APPLICABLE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN CHECKLIST IS LOCATED
- LEVEL II CERTIFICATION NUMBER ISSUED BY THE COMMISSION, SIGNATURE, AND SEAL OF THE CERTIFIED DESIGN PROFESSIONAL IS LOCATED ON ER-000.
- LIMITS OF DISTURBANCE SHALL BE NO GREATER THAN 50 ACRES AT ANY ONE TIME WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE EPD DISTRICT OFFICE. IF EPD APPROVES THE REQUEST TO DISTURB 50 ACRES OR MORE AT ANY ONE TIME, THE PLAN MUST INCLUDE AT LEAST 4 OF THE BMPS LISTED IN APPENDIX 1 OF THIS CHECKLIST.
- 24 HOUR LOCAL CONTACT INFORMATION (TO BE DETERMINED AT AWARD OF CONTRACT): NAME:JEFFREY HILL
- PHONE: (404) 569-8701 PRIMARY PERMITTEE CONTACT INFORMATION:

NAME:JEFFREY HILL EMAIL ADDRESS: PHONE:(404) 569-8701

TOTAL SITE AREA = 23.94 AC.

TOTAL DISTURBED AREA = 8.3 AC.

- 7. THE GPS LOCATION OF THE CONSTRUCTION EXIT FOR THE SITE IS LOCATED ON 33.47585'N, 84.39517'W.
- SEE REVISION REFERENCE LOCATED ON ER-000 FOR DATES OF ANY REVISIONS MADE TO THE PLAN INCLUDING THE ENTITY WHO REQUESTED THE REVISIONS.

PROJECT NARRATIVE

THE NATURE OF CONSTRUCTION ACTIVITY IS THE CONSTRUCTION OF A FIRE/EMS TRAINING FACILITY CONSISTING OF A DRIVING COURSE, VEHICLE EXTRICATION, TOWER TRAINING BUILDING, PUMP TEST AREA, SEPTIC DRAIN FIELDS, MICROPOND, FOREBAYS AND DETENTION POND.

- 10. VICINITY MAP SHOWING SITE'S RELATION TO SURROUNDING AREAS IS LOCATED ON ER-000. SURROUNDED BY UNDEVELOPED OPEN SPACE.
- THE RECEIVING WATERS FROM THIS CONSTRUCTION PLAN IS FLINT RIVER WHICH IS APART OF THE GREATER FLINT
- 12. "I CERTIFY UNDER PENALTY OF LAW THAT THIS PLAN WAS PREPARED AFTER A SITE VISIT TO THE LOCATIONS DESCRIBED HEREIN BY MYSELF OR MY AUTHORIZED AGENT, UNDER MY SUPERVISION."
- "I CERTIFY THAT THE PERMITTEE'S EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN PROVIDES FOR AN APPROPRIATE AND COMPREHENSIVE SYSTEM OF BEST MANAGEMENT PRACTICES REQUIRED BY THE GEORGIA WATER QUALITY CONTROL ACT AND THE DOCUMENT "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" (MANUAL) PUBLISHED BY THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION AS OF JANUARY 1 OF THE YEAR IN WHICH THE LAND-DISTURBING ACTIVITY WAS PERMITTED, PROVIDES FOR THE SAMPLING OF THE RECEIVING WATER(S) OR THE SAMPLING OF THE STORMWATER OUTFALLS AND THAT THE DESIGNED SYSTEM OF BEST MANAGEMENT PRACTICES AND SAMPLING METHODS IS EXPECTED TO MEET THE REQUIREMENTS CONTAINED IN THE GENERAL NPDES PERMIT NO. GAR100001."

- 14. THE DESIGN PROFESSIONAL WHO PREPARED THE ES&PC PLAN IS TO INSPECT THE INSTALLATION OF THE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMP'S WITHIN 7 DAYS AFTER INSTALLATION. IN ACCORDANCE WITH PART IV.A.5 PAGE 25 OF THIS PERMIT.
- 15. NON-EXEMPT ACTIVITIES SHALL NOT BE CONDUCTED WITHIN THE 25 OR 50-FOOT UNDISTURBED STREAM BUFFERS AS MEASURED FROM THE POINT OF WRESTED VEGETATION OR WITHIN 25-FEET OF THE COASTAL MARSHLAND BUFFER AS MEASURED FROM THE JURISDICTIONAL DETERMINATION LINE WITHOUT FIRST ACQUIRING THE NECESSARY VARIANCES AND PERMITS.
- 16. PROVIDE A DESCRIPTION OF ANY BUFFER ENCROACHMENTS AND INDICATE WHETHER A BUFFER VARIANCE IS REQUIRED. NO BUFFER VARIANCE IS REQUIRED.
- AMENDMENTS/REVISIONS TO THE ES&PC PLAN, WHICH HAVE A SIGNIFICANT EFFECT ON BMPS WITH A HYDRAULIC COMPONENT MUST BE CERTIFIED BY A DESIGN PROFESSIONAL.
- WASTE MATERIALS SHALL NOT BE DISCHARGED TO WATERS OF THE STATE, EXCEPT AS AUTHORIZED BY A SECTION 404 PERMIT.
- 19. THE ESCAPE OF SEDIMENT FROM THE SITE SHOULD BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES TO LAND DISTURBING ACTIVITIES.
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES, IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE
- ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING
- ANY CONSTRUCTION ACTIVITY WHICH DISCHARGES STORM WATER INTO AN IMPAIRED STREAM SEGMENT. OR WITHIN 1 LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF AN BIOTA IMPAIRED STREAM SEGMENT MUST COMPLY WITH PART III, C. OF THE PERMIT, INCLUDE THE COMPLETED APPENDIX 1 LISTING ALL THE BMPS THAT WILL BE USED FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO THE IMPAIRED STREAM SEGMENT.
- 23. A TMDL PLAN FOR SEDIMENT DOES NOT APPLY TO THE RECEIVING WATERS.

24. READY MIX CHUTE WASH—DOWN THE WASHING OF READY-MIX CONCRETE DRUMS AND DUMP TRUCK BODIES USED IN THE DELIVERY OF PORTLAND CEMENT CONCRETE IS PROHIBITED ON THIS SITE. IN ACCORDANCE WITH STANDARD SPECIFICATION 107 - LEGAL REGULATIONS AND

RESPONSIBILITY TO THE PUBLIC, ONLY THE DISCHARGE "CHUTE" UTILIZED IN PORTLAND CEMENT CONCRETE DELIVERY MAY BE RINSED FREE OF FRESH CONCRETE REMAINS. THE CONTRACTOR SHALL EXCAVATE A PIT OUTSIDE OF STATE WATER BUFFERS, AT LEAST 25 FEET FROM ANY STORM DRAIN AND OUTSIDE OF THE TRAVEL WAY, INCLUDING SHOULDERS, FOR A WASH/PIT AREA. THE PIT SHALL BE LARGE ENOUGH TO STORE ALL WASH-DOWN WATER WITHOUT OVERTOPPING THE PIT. IMMEDIATELY AFTER THE WASH-DOWN OPERATIONS ARE COMPLETED AND AFTER THE WASH-DOWN WATER HAS SOAKED INTO THE GROUND. THE PIT SHALL BE FILLED IN. AND THE GROUND ABOVE SHALL BE GRADED TO MATCH THE ELEVATION OF THE SURROUNDING AREAS SMOOTHED OUT. ALTERNATE WASH DOWN PLANS MUST BE APPROVED BY THE PROJECT WASH-DOWN PLANS DESCRIBE PROCEDURES THAT PREVENT WASH DOWN WATER FROM ENTERING STREAMS AND RIVERS. NEVER DISPOSE OF WASH-DOWN WATER DOWN A STORM DRAIN. ESTABLISH A WASH-DOWN WATER PIT LOCATION THAT INCLUDES THE FOLLOWING: (1) THE PIT IS LOCATED AWAY FROM A STORM DRAIN. STREAM OR RIVER. (2) THE PIT IS ACCESSIBLE TO THE VEHICLE BEING USED FOR WASH-DOWN. (3) THE PIT HAS ENOUGH VOLUME FOR WASH-DOWN WATER AND (4) MAKE SURE YOU HAVE PERMISSION TO USE THE AREA FOR WASH-DOWN, ON SOME SITES, YOU MAY NOT HAVE PERMISSION OR ACCESS TO A LOCATION WHICH ALLOWS FOR A WASH-DOWN PIT. IN THOSE CASES. THE CONTRACTOR MAY HAVE TO WASH-DOWN INTO A WHEELBARROW OR OTHER CONTAINER AND CARRY THE CONTAINER FOR TRANSPORT TO A PROPER DISPOSAL SITE. FOR ADDITIONAL INFORMATION, REFER TO THE GEORGIA SMALL BUSINESS ENVIRONMENTAL ASSISTANCE PROGRAM'S "A GUIDE FOR READY MIX CHUTE/HOPPER WASH-DOWN".

SILT FENCE INSTALLATIONS WITH J-HOOKS AND SPURS

SILT FENCE SHOULD NEVER RUN CONTINUOUS WITHOUT J-HOOKS OR SPURS. THE SILT FENCE SHOULD TURN BACK INTO THE FILL OR SLOPE TO CREATE SMALL POCKETS THAT TRAP SILT AND FORCE STORMWATER TO FLOW THROUGH THE SILT FENCE. THIS TECHNIQUE OR CONFIGURATION IS COMMONLY REFERRED TO AS J-HOOKS OR SPURS. THE J-HOOKS OR SPURS SHALL BE INSTALLED ON ALL SILT FENCES THAT ARE LOCATED AROUND THE PERIMETER OF THE PROJECT AND ALONG THE TOE OF EMBANKMENTS OR SLOPES. THE J-HOOKS AND SPURS SHALL BE SPACED IN ACCORDANCE WITH THE TYPICAL LOCATION DETAILS FOR SILT FENCES / BALED STRAW. SPACING FOR J- HOOKS OR SPURS SHALL NOT BE LESS THAN 50 FEET EXCEPT AS NOTED. SILT FENCES THAT ARE NEAR THE OUTLET OF CULVERTS, CROSS DRAINS, AND STORM DRAINS SHALL HAVE A MINIMUM OF 3 J-HOOKS OR SPURS ON BOTH SIDES OF THE STRUCTURE AT SPACING NOT TO EXCEED 30 FEET. J-HOOKS OR SPURS SHALL BE PAID FOR AS SILT FENCE ITEMS PER FOOT. ALL COSTS AND OTHER INCIDENTAL ITEMS ARE INCLUDED IN COST OF INSTALLING AND MAINTAINING THE SILT FENCE.

25. SPILL CLEANUP AND CONTROL PRACTICES

- LOCAL, STATE AND MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND PROCEDURES WILL BE AVAILABLE TO SITE PERSONNEL. MATERIAL AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREAS. TYPICAL MATERIALS AND EQUIPMENT INCLUDES. BUT IS NOT LIMITED TO, BROOMS, DUSTPANS, MOPS, RAGS.
- GLOVES, GOGGLES, CAT LITTER, SAND, SAWDUST AND PROPERLY LABELED PLASTIC AND METAL WASTE CONTAINERS SPILL PREVENTION PRACTICES AND PROCEDURES WILL BE REVIEWED AFTER A SPILL AND ADJUSTED AS NECESSARY
- ALL SPILLS WILL BE CLEANED UP IMMEDIATELY UPON DISCOVERY. ALL SPILLS WILL BE REPORTED AS REQUIRED BY LOCAL, STATE AND FEDERAL REGULATIONS
- 5. FOR SPILLS THAT IMPACT SURFACE WATER (LEAVE A SHEEN ON SURFACE WATER), THE NATIONAL RESPONSE CENTER (NRC) WILL BE CONTACTED WITHIN 24 HOURS AT 1-800-426-2675.
- FOR SPILLS OF AN UNKNOWN AMOUNT, THE NATIONAL RESPONSE CENTER WILL BE CONTACTED WITHIN 24 HOURS T 1-800-426-2675. FOR SPILLS GREATER THAN 25 GALLONS AND NO SURFACE WATER IMPACTS OCCUR, THE GEORGIA EPD WILL BE
- 8. FOR SPILLS LESS THAT 25 GALLONS AND NO SURFACE WATER IMPACTS OCCUR, THE SPILL WILL BE CLEANED UP AND LOCAL AGENCIES WILL BE CONTACTED AS REQUIRED

THE CONTRACTOR SHALL NOTIFY THE LICENSED PROFESSIONAL WHO PREPARED THIS PLAN IF MORE THAN 1320 GALLONS OF PETROLEUM IS STORED ONSITE (THIS INCLUDES CAPACITIES OF EQUIPMENT) OR IF ANY ONE PIECE OF EQUIPMENT HAS THE CAPACITY OF GREATER THAN 650 GALLONS. THE CONTRACTOR WILL NEED A SPILL PREVENTION CONTAINMENT AND COUNTERMEASURES PLAN PREPARED BY THAT LICENSED PROFESSIONAL THIS CONSTRUCTION PROJECT DISCHARGES INTO, OR WITHIN ONE LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT

26. POST—CONSTRUCTION BMPS

ALL PERMANENT. POST-CONSTRUCTION BMPS ARE SHOWN IN THE CONSTRUCTION PLANS AND IN THE ESPCP PLAN. THE POST-CONSTRUCTION BMPS FOR THIS PROJECT CONSISTS OF PERMANENT MULCHING, SLOPE STABILIZATION AND STORM DRAIN OUTLET PROTECTION. THE POST-CONSTRUCTION BMPS WILL PROVIDE PERMANENT STABILIZATION OF THE SITE AND PREVENT ACCELERATED TRANSPORTATION OF SEDIMENT AND POLLUTANTS INTO RECEIVING WATERS.

27. OTHER CONTROLS THE ES&PC PLAN SHALL BE IN COMPLIANCE WITH WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC TANK REGULATIONS DURING AND AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.

THE CONTRACTOR SHALL CONTROL DUST FROM THE SITE IN ACCORDANCE WITH CURRENT EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".

FOR BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS PRESENT ON THE SITE, PROVIDE COVER (E.G. PLASTIC SHEETING, TEMPORARY ROOFS) TO MINIMIZE THE EXPOSURE OF THESE PRODUCTS TO PRECIPITATION AND TO STORMWATER, OR A SIMILARLY EFFECTIVE MEANS TO DESIGNED TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THESE AREAS. MINIMIZATION OF EXPOSURE IS NOT REQUIRED IN CASES WHERE EXPOSURE TO PRECIPITATION AND TO STORMWATER WILL NOT RESULT IN A DISCHARGE OF POLLUTANTS. OR WHERE EXPOSURE OF A SPECIFIC MATERIAL OR PRODUCT POSES LITTLE RISK TO STORMWATER CONTAMINATION (SUCH AS FINAL PRODUCTS AND MATERIALS INTENDED FOR OUTDOOR USE).

PRODUCT SPECIFIC PRACTICES

CONCRETE OR DRUM WASH WATER ONSITE.

- PETROLEUM BASED PRODUCTS CONTAINERS FOR PRODUCTS SUCH AS FUELS, LUBRICANTS, AND TARS WILL BE NSPECTED DAILY FOR LEAKS AND SPILLS. THIS INCLUDES ONSITE VEHICLES AND MACHINERY DAILY INSPECTIONS AND REGULAR PREVENTATIVE MAINTENANCE OF SUCH EQUIPMENT. EQUIPMENT MAINTENANCE AREAS WILL BE LOCATED AWAY FROM STATE WATERS,, NATURAL DRAINS, AND STORM WATER DRAINAGE INLETS. IN ADDITION, TEMPORARY FUELING TANKS SHALL HAVE A SECONDARY CONTAINMENT LINER TO PREVENT/MINIMIZE SITE. CONTAMINATION. DISCHARGE OF OILS, FUELS, AND LUBRICANTS IS PROHIBITED. PROPER DISPOSAL METHODS WILL
- INCLUDE COLLECTION IN A SUITABLE CONTAINER AND DISPOSAL IS REQUIRED BY LOCAL AND STATE REGULATIONS PAINT/FINISHES/SOLVENTS — ALL PRODUCTS WILL BE STORED IN TIGHTLY SEALED ORIGINAL CONTAINERS WHEN NOT IN USE. EXCESS PRODUCT WILL NOT BE DISCHARGED INTO THE STORM WATER COLLECTION SYSTEM. EXCESS PRODUCT, MATERIALS USED WITH THESE PRODUCTS, AND PRODUCT CONTAINERS WILL BE DISPOSED OF ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS. CONCRETE TRUCK WASHING - NO CONCRETE TRUCKS WILL BE ALLOWED TO WASHOUT OR DISCHARGE SURPLUS
- FERTILIZER/HERBICIDES THESE PRODUCTS WILL BE APPLIED AT RATES THAT DO NOT EXCEED MANUFACTURER'S SPECIFICATIONS OR ABOVE THE GUIDELINES SET FORTH IN THE CROP ESTABLISHMENT OR ON THE GSWCC MANUAL FOR EROSION AND SEDIMENTATION CONTROL IN GEORGIA. ANY STORAGE OF THESE MATERIALS WILL BE UNDER ROOF IN SEALED CONTAINERS BUILDING MATERIALS — NO BUILDING OR CONSTRUCTION MATERIALS WILL BE BURIED OR DISPOSED OF ONSITE. ALL SUCH MATERIAL WILL BE DISPOSED OF IN PROPER WASTE DISPOSAL PROCEDURES.

WASTE DISPOSAL

LOCATE WASTE COLLECTION AREAS AWAY FROM STREETS, GUTTERS, WATERCOURSES AND STORM DRAINS. WASTE COLLECTION AREAS. SUCH AS DUMPSTERS. ARE OFTEN BEST LOCATED NEAR CONSTRUCTION SITE ENTRANCES TO MINIMIZE TRAFFIC ON DISTURBED SOILS. THE PLAN SHOULD INCLUDE SECONDARY CONTAINMENT AROUND LIQUID WASTE COLLECTION AREAS TO FURTHER MINIMIZE THE LIKELIHOOD OF CONTAINMENT DISCHARGES. SOLID MATERIALS, INCLUDING BUILDING MATERIALS, SHALL NOT BE DISCHARGED TO WASTERS OF THE STATE, EXCEPT AS AUTHORIZED BY SECTION 404 PERMIT.

- 28. THIS ES&PC PLAN EMPLOYS SEVERAL PRACTICES THAT ARE USED TO REDUCE THE POLLUTANTS IN STORM WATER DISCHARGES. SEVERAL EROSION CONTROL BMP'S ARE USED TO REDUCE THE AMOUNT OF SEDIMENT RUNNING OFF SITE, INCLUDING SLOPE STABILIZATION, CHECK DAM, RETROFIT, SEDIMENT BARRIER WITH MULCH, INLET SEDIMENT TRAPS WITH EXCAVATED INLET, INLET SEDIMENT TRAP, AND STORM DRAIN OUTLET PROTECTION.
- SEQUENCE OF LAND DISTURBANCE ACTIVITIES START MAY, 2022

STOP AUGUST, 2022

ANTICIPATED CONSTRU	JCTI	ON .	ACTI	VITY	SCI	HED	JLE	
CONSTRUCTION ACTIVITY	м	AY	JU	NE	JU	ILY	AUG	UST
INSTALL CONSTRUCTION EXIT								
INSTALL SEDIMENT CONTROLS								
MAINTAIN EROSION CONTROL DEVICES								
CLEARING AND GRADING								
INSTALL & MAINTAIN TEMPORARY VEGETATION & MULCH								
PERM. LANDSCAPING & STABILIZE Ds3								
CLEANUP SITE & REMOVE TEMPORARY BMP's								

EACH DAY WHEN ANY TYPE OF CONSTRUCTION ACTIVITY HAS TAKEN PLACE AT A PRIMARY PERMITTEE'S SITE, CERTIFIED PERSONNEL PROVIDED BY THE PRIMARY PERMITTEE SHALL INSPECT: (a) ALL AREAS AT THE PRIMARY PERMITTEE'S SITE WHERE PETROLEUM PRODUCTS ARE STORED. USED, OR HANDLED FOR SPILLS AND LEAKS FROM VEHICLES AND EQUIPMENT AND (b) ALL LOCATIONS AT THE PRIMARY PERMITTEE'S SITE WHERE VEHICLES ENTER OR

EXIT THE SITE FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED MEASURE AND RECORD RAINEAU WITHIN DISTURBED AREAS OF THE SITE THAT HAVE NOT MET FINAL STABILIZATION ONCE EVERY 24 HOURS EXCEPT ANY NON-WORKING SATURDAY. NON-WORKING SUNDAY AND NON-WORKING FEDERAL HOLIDAY. THE DATA COLLECTED FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY. MEASUREMENT OF RAINFALL MAY BE SUSPENDED IF ALL AREAS OF THE SITE HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A

- SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT THE FOLLOWING AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM THAT IS 0.5 INCHES RAINFALL OR GREATER (UNIESS SUCH STORM ENDS AFTER 5:00 PM ON ANY FRIDAY OR ON ANY NON-WORKING SATURDAY, NON-WORKING SUNDAY OR ANY NON-WORKING FEDERAL HOLIDAY IN WHICH CASE THE INSPECTION SHALL BE COMPLETED BY THE END OF THE NEXT BUSINESS DAY AND/OR WORKING DAY. WHICHEVER OCCURS FIRST): (a) DISTURBED AREAS OF THE PRIMARY PERMITTEE'S CONSTRUCTION SITE; (b) AREAS USED BY THE PRIMARY PERMITTEE FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION: AND (c) STRUCTURAL CONTROL MEASURES. EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN APPLICABLE TO THE PRIMARY PERMITTEE'S SITE SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE, THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATER(S). FOR AREAS OF A SITE THAT HAVE LINDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THE PERMITTEE MUST COMPLY WITH PART
- IV.D.4.a(4). THESE INSPECTIONS MUST BE CONDUCTED UNTIL A NOTICE OF TERMINATION IS SUBMITTED. CERTIFIED PERSONNEL (PROVIDED BY THE PRIMARY PERMITTEE) SHALL INSPECT AT LEAST ONCE PER MONTH DURING THE TERM OF THE PERMIT (i.e., UNTIL AT NOTICE OF TERMINATION HAS BEEN SUBMITTED) THE AREAS OF THE THE SITE THAT HAVE UNDERGONE FINAL STABILIZATION OR ESTABLISHED A CROP OF ANNUAL VEGETATION AND A SEEDING OF TARGET PERENNIALS APPROPRIATE FOR THE REGION. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF. OR THE POTENTIAL FOR POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND THE RECEIVING WATER(S). EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY. WHERE DISCHARGE LOCATIONS OR POINTS ARE ACCESSIBLE. THEY SHALL BE INSPECTED TO ASCERTAIN WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT
- IMPACTS TO RECEIVING WATER(S). BASED ON THE RESULTS OF EACH INSPECTION, THE SITE DESCRIPTION AND THE POLLUTION PREVENTION AND CONTROL MEASURES IDENTIFIED IN THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN, THE PLAN SHALL BE REVISED AS APPROPRIATE NOT LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION. IMPLEMENTATION OF SUCH CHANGES SHALL BE MADE AS SOON AS PRACTICAL BUT IN NO CASE LATER THAN SEVEN (7) CALENDAR DAYS FOLLOWING EACH INSPECTION.
- A REPORT OF EACH INSPECTION THAT INCLUDES THE NAME(S) OF CERTIFIED PERSONNEL MAKING EACH INSPECTION, THE DATE(S) OF EACH INSPECTION, CONSTRUCTION PHASE (i.e., INITIAL, INTERMEDIATE OR FINAL), MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. AND ACTIONS TAKEN IN ACCORDANCE WITH PART IV.D.4.g.(5), OF THE PERMIT SHALL BE MADE AND RETAINED AT THE SITE OR BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION UNTIL THE ENTIRE SITE OR THAT PORTION OF A CONSTRUCTION SITE THAT HAS BEEN PHASED HAS UNDERGONE FINAL STABILIZATION AND A NOTICE OF TERMINATION IS SUBMITTED TO EPD. SUCH REPORTS SHALL BE READILY AVAILABLE BY THE END OF THE SECOND BUSINESS DAY AND/OR WORKING DAY AND SHALL IDENTIFY ALL INCIDENTS OF BEST MANAGEMENT PRACTICES THAT HAVE NOT BEEN PROPERLY INSTALLED AND/OR MAINTAINED AS DESCRIBED IN THE PLAN. WHERE THE REPORT DOES NOT IDENTIFY ANY INCIDENTS. THE INSPECTION REPORT SHALL CONTAIN A CERTIFICATION THAT THE BEST MANAGEMENT PRACTICES ARE IN COMPLIANCE WITH THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN. THE REPORT SHALL BE SIGNED IN ACCORDANCE WITH PART V.G.2. OF THIS PERMIT.

31. SAMPLING FREQUENCY

- THE PRIMARY PERMITTEE MUST SAMPLE IN ACCORDANCE WITH THE PLAN AT LEAST ONCE FOR EACH RAINFALL EVENT DESCRIBED BELOW. FOR A QUALIFYING EVENT, THE PERMITTEE SHALL SAMPLE AT THE BEGINNING OF ANY STORMWATER DISCHARGE TO A MONITORED RECEIVING WATER AND/OR FROM A MONITORED OUTFALL LOCATION WITHIN FORTY-FIVE (45) MINUTES OR AS SOON AS POSSIBLE
- HOWEVER, WHERE MANUAL AND AUTOMATIC SAMPLING ARE IMPOSSIBLE (AS DEFINED IN THIS PERMIT), OR ARE BEYOND THE PERMITTEE'S CONTROL, THE PERMITTEE SHALL TAKE SAMPLES AS SOON AS POSSIBLE, BUT IN NO CASE MORE THAN TWELVE (12) HOURS AFTER THE BEGINNING OF THE STORM WATER DISCHARGE.
- SAMPLING BY THE PERMITTEE SHALL OCCUR FOR THE FOLLOWING QUALIFYING EVENTS: FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORMWATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT. AFTER ALL CLEARING AND GRUBBING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO COMPLETION OF MASS GRADING OPERATIONS, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE REPRESENTATIVE SAMPLING LOCATION;
- B. IN ADDITION TO (A) ABOVE, FOR EACH AREA OF THE SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL, THE FIRST RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH WITH A STORMWATER DISCHARGE THAT OCCURS DURING NORMAL BUSINESS HOURS AS DEFINED IN THIS PERMIT EITHER 90 DAYS AFTER THE FIRST SAMPLING EVENT OR AFTER ALL MASS GRADING OPERATIONS HAVE BEEN COMPLETED, BUT PRIOR TO THE SUBMITTAL OF A NOT, IN THE DRAINAGE AREA OF THE LOCATION SELECTED AS THE
- REPRESENTATIVE SAMPLING LOCATION, WHICHEVER COMES FIRST; C. AT THE TIME OF SAMPLING PERFORMED PURSUANT TO (A) AND (B) ABOVE, IF BMPS IN ANY AREA OF THE

SITE THAT DISCHARGES TO A RECEIVING WATER OR FROM AN OUTFALL ARE NOT PROPERLY DESIGNED INSTALLED AND MAINTAINED, CORRECTIVE ACTION SHALL BE DEFINED AND IMPLEMENTED WITHIN TWO (2) BUSINESS DAYS. AND TURBIDITY SAMPLES SHALL BE TAKEN FROM DISCHARGES FROM THAT AREA OF THE SITE FOR EACH SUBSEQUENT RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH DURING NORMAL BUSINESS HOURS* UNTIL THE SELECTED TURBIDITY STANDARD IS ATTAINED. OR UNTIL POST-STORM EVENT

- INSPECTIONS DETERMINE THAT BMPS ARE PROPERLY DESIGNED, INSTALLED AND MAINTAINED; D. WHERE SAMPLING PURSUANT TO (A), (B) OR (C) ABOVE IS REQUIRED BUT NOT POSSIBLE (OR NOT REQUIRED BECAUSE THERE WAS NO DISCHARGE), THE PERMITTEE, IN ACCORDANCE WITH PART IV.D.4.A.(6), MUST INCLUDE A WRITTEN JUSTIFICATION IN THE INSPECTION REPORT OF WHY SAMPLING WAS NOT PERFORMED. PROVIDING THIS JUSTIFICATION DOES NOT RELIEVE THE PERMITTEE OF ANY SUBSEQUENT SAMPLING OBLIGATIONS UNDER (A), (B) OR (C) ABOVE; AND
- E. EXISTING CONSTRUCTION ACTIVITIES, I.E., THOSE THAT ARE OCCURRING ON OR BEFORE THE EFFECTIVE DATE OF THIS PERMIT, THAT HAVE MET THE SAMPLING REQUIRED BY (A) ABOVE SHALL SAMPLE IN ACCORDANCE WITH (B). THOSE EXISTING CONSTRUCTION ACTIVITIES THAT HAVE MET THE SAMPLING REQUIRED BY (B) ABOVE SHALL NOT BE REQUIRED TO CONDUCT ADDITIONAL SAMPLING OTHER THAN AS REQUIRED BY (C)

*NOTE THAT THE PERMITTEE MAY CHOOSE TO MEET THE REQUIREMENTS OF (A) AND (B) ABOVE BY COLLECTING TURBIDITY SAMPLES FROM ANY RAIN EVENT THAT REACHES OR EXCEEDS 0.5 INCH AND ALLOWS FOR SAMPLING AT ANY TIME OF THE DAY OR WEEK.

- 1. THE APPLICABLE PERMITTEES ARE REQUIRED TO SUBMIT THE SAMPLING RESULTS TO THE EPD AT THE ADDRESS SHOWN IN PART II.C. BY THE FIFTEENTH DAY OF THE MONTH FOLLOWING THE REPORTING PERIOD. REPORTING PERIODS ARE MONTHS DURING WHICH SAMPLES ARE TAKEN IN ACCORDANCE WITH THIS PERMIT. SAMPLING RESULTS SHALL BE IN A CLEARLY LEGIBLE FORMAT. UPON WRITTEN NOTIFICATION, EPD MAY REQUIRE THE APPLICABLE PERMITTEE TO SUBMIT THE SAMPLING RESULTS ON A MORE FREQUENT BASIS. SAMPLING AND ANALYSIS OF AN STORMWATER DISCHARGE(S) OR THE RECEIVING WATER(S) BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED IN A SIMILAR MANNER TO THE EPD. THE SAMPLING REPORTS MUST BE SIGNED IN ACCORDANCE WITH PART V.G.2. SAMPLING REPORTS MUST BE SUBMITTED TO EPD UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART VI.
- ALL SAMPLING REPORTS SHALL INCLUDE THE FOLLOWING INFORMATION: A. THE RAINFALL AMOUNT, DATE, EXACT PLACE AND TIME OF SAMPLING OR MEASUREMENTS;
- THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE SAMPLING AND MEASUREMENTS; THE DATE(S) ANALYSES WERE PERFORMED;
- D. THE TIME(S) ANALYSES WERE INITIATED:
- THE NAME(S) OF THE CERTIFIED PERSONNEL WHO PERFORMED THE ANALYSES; F. REFERENCES AND WRITTEN PROCEDURES, WHEN AVAILABLE, FOR THE ANALYTICAL TECHNIQUES OR METHODS 34
- G. THE RESULTS OF SUCH ANALYSES, INCLUDING THE BENCH SHEETS, INSTRUMENT READOUTS, COMPUTER DISKS OR TAPES, ETC., USED TO DETERMINE THESE RESULTS;
- H. RESULTS WHICH EXCEED 1000 NTU SHALL BE REPORTED AS "EXCEEDS 1000 NTU;" AND CERTIFICATION STATEMENT THAT SAMPLING WAS CONDUCTED AS PER THE PLAN
- ALL WRITTEN CORRESPONDENCE REQUIRED BY THIS PERMIT SHALL BE SUBMITTED BY RETURN RECEIPT CERTIFIED MAIL (OR SIMILAR SERVICE) TO THE APPROPRIATE DISTRICT OFFICE OF THE EPD ACCORDING TO THE SCHEDULE IN APPENDIX A OF THIS PERMIT. THE PERMITTEE SHALL RETAIN A COPY OF THE PROOF OF SUBMITTAL AT THE CONSTRUCTION SITE OR THE PROOF OF SUBMITTAL SHALL BE READILY AVAILABLE AT A DESIGNATED LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT IS SUBMITTED IN ACCORDANCE WITH PART

32. RETENTION OF RECORDS

- THE PRIMARY PERMITTEE SHALL RETAIN THE FOLLOWING RECORDS AT THE CONSTRUCTION SITE OR THE RECORDS SHALL BE READILY AVAILABLE AT A DESIGNATED ALTERNATE LOCATION FROM COMMENCEMENT OF CONSTRUCTION UNTIL SUCH TIME AS A NOT SUBMITTED IN ACCORDANCE WITH PART VI: A. A COPY OF ALL NOTICES OF INTENT SUBMITTED TO EPD;
- A COPY OF THE EROSION, SEDIMENTATION AND POLLUTION CONTROL PLAN REQUIRED BY THIS PERMIT; THE DESIGN PROFESSIONAL'S REPORT OF THE RESULTS OF THE INSPECTION CONDUCTED IN ACCORDANCE WITH PART IV.A.5. OF THIS PERMIT;
- D. A COPY OF ALL SAMPLING INFORMATION, RESULTS, AND REPORTS REQUIRED BY THIS PERMIT;
- E. A COPY OF ALL INSPECTION REPORTS GENERATED IN ACCORDANCE WITH PART IV.D.4.A. OF THIS PERMIT; A COPY OF ALL VIOLATION SUMMARIES AND VIOLATION SUMMARY REPORTS GENERATED IN ACCORDANCE WITH PART III.D.2. OF THIS PERMIT; AND G. DAILY RAINFALL INFORMATION COLLECTED IN ACCORDANCE WITH PART IV.D.4.A.(2) OF THIS PERMIT.
- COPIES OF ALL NOTICES OF INTENT, NOTICES OF TERMINATION, INSPECTION REPORTS, SAMPLING REPORTS (INCLUDING ALL CALIBRATION AND MAINTENANCE RECORDS AND ALL ORIGINAL STRIP CHART RECORDINGS FOR CONTINUOUS MONITORING INSTRUMENTATION), OR OTHER REPORTS REQUESTED BY THE EPD, EROSION. SEDIMENTATION AND POLLUTION CONTROL PLANS. RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT TO BE COVERED BY THIS PERMIT AND ALL OTHER RECORDS REQUIRED BY THIS PERMIT SHALL BE RETAINED BY THE PERMITTEE WHO EITHER PRODUCED OR USED IT FOR A PERIOD OF AT LEAST THREE YEARS FROM THE DATE THAT THE THE NOT IS SUBMITTED IN ACCORDANCE WITH PART VI OF THIS PERMIT. THESE RECORDS MUST BE MAINTAINED AT THE PERMITTEE'S PRIMARY PLACE OF BUSINESS OR AT A DESIGNATE ALTERNATIVE LOCATION ONCE THE CONSTRUCTION ACTIVITY HAS CEASED AT THE PERMITTED SITE. THIS PERIOD MAY BE EXTENDED BY REQUEST OF THE EPD AT ANY TIME UPON WRITTEN NOTIFICATION TO THE PERMITTEE.

33. SAMPLING TYPE

ALL SAMPLING SHALL BE COLLECTED BY "GRAB SAMPLES" AND THE ANALYSIS OF THESE SAMPLES MUST BE CONDUCTED 42. SEE PLAN SHEETS FOR DELINEATION OF ON-SITE WETLANDS AND ALL STATE WATERS LOCATED ON AND WITHIN 200 IN ACCORDANCE WITH METHODOLOGY AND TEST PROCEDURES ESTABLISHED BY 40 CFR PART 1.36 (UNLESS OTHER TEST PROCEDURES HAVE BEEN APPROVED); THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE EPD.

- SAMPLE CONTAINERS SHOULD BE LABELED PRIOR TO COLLECTING THE SAMPLES.
- SAMPLES SHOULD BE WELL MIXED BEFORE TRANSFERRING TO A SECONDARY CONTAINER. LARGE MOUTH, CLEAN AND RINSED GLASS OR PLASTIC JARS SHOULD BE USED FOR COLLECTING SAMPLES. THE JARS SHOULD BE CLEANED THOROUGHLY TO AVOID CONTAMINATION. MANUAL, AUTOMATIC OR RISING STAGE SAMPLING MAY BE UTILIZED. SAMPLES REQUIRED BY THIS PERMIT SHOULD
- BE ANALYZED IMMEDIATELY, BUT IN NO CASE LATER THAN 48 HOURS AFTER COLLECTION. HOWEVER, SAMPLES FROM AUTOMATIC SAMPLERS MUST BE COLLECTED NO LATER THAN THE NEXT BUSINESS DAY AFTER THEIR ACCUMULATION, UNLESS FLOW THROUGH AUTOMATED ANALYSIS IS UTILIZED. IF AUTOMATIC SAMPLING IS UTILIZED. AND THE AUTOMATIC SAMPLER IS NOT ACTIVATED DURING THE QUALIFYING EVENT. THE PERMITTEE MUST UTILIZE MANUAL SAMPLING OR RISING STAGE SAMPLING DURING THE NEXT QUALIFYING EVENT, DILUTION OF SAMPLES IS NOT REQUIRED. SAMPLES MAY BE ANALYZED DIRECTLY WITH A PROPERLY CALIBRATED TURBIDMETER. SAMPLES ARE
- SAMPLING AND ANALYSIS OF THE RECEIVING WATER(S) OR OUTFALLS BEYOND THE MINIMUM FREQUENCY STATED IN THIS PERMIT MUST BE REPORTED TO EPD AS SPECIFIED IN PART IV.E.

SAMPLING POINTS

- FOR CONSTRUCTION ACTIVITIES THE PRIMARY PERMITTEE MUST SAMPLE ALL RECEIVING WATER(S). OR ALL OUTFALL(S), OR A COMBINATION OF RECEIVING WATER(S) AND OUTFALL(S). SAMPLES TAKEN FOR THE PURPOSE OF COMPLIANCE WITH THIS PERMIT SHALL BE REPRESENTATIVE OF THE MONITORED ACTIVITY AND REPRESENTATIVE OF THE WATER QUALITY OF THE RECEIVING WATER(S) AND/OR THE STORM WATER OUTFALLS USING THE FOLLOWING MINIMUM GUIDELINES:
- A. THE UPSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORMWATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST UPSTREAM AT THE SITE) BUT DOWNSTREAM OF ANY OTHER STORMWATER DISCHARGES NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL UPSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE UPSTREAM TURBIDITY VALUE.
- B. THE DOWNSTREAM SAMPLE FOR EACH RECEIVING WATER(S) MUST BE TAKEN DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORMWATER DISCHARGE FROM THE PERMITTED ACTIVITY (I.E., THE DISCHARGE FARTHEST DOWNSTREAM AT THE SITE) BUT UPSTREAM OF ANY OTHER STORMWATER DISCHARGE NOT ASSOCIATED WITH THE PERMITTED ACTIVITY. WHERE APPROPRIATE, SEVERAL DOWNSTREAM SAMPLES FROM ACROSS THE RECEIVING WATER(S) MAY NEED TO BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES USED FOR THE DOWNSTREAM TURBIDITY VALUE.
- C. IDEALLY THE SAMPLES SHOULD BE TAKEN FROM THE HORIZONTAL AND VERTICAL CENTER OF THE RECEIVING WATER(S) OR THE STORM OUTFALL CHANNEL(S). D. CARE SHOULD BE TAKEN TO AVOID STIRRING THE BOTTOM SEDIMENTS IN THE RECEIVING WATER(S) OR IN THE OUTFALL STORMWATER CHANNEL. THE SAMPLING CONTAINER SHOULD BE HELD SO THAT THE OPENING FACES UPSTREAM.
- THE SAMPLES SHOULD BE KEPT FREE FROM FLOATING DEBRIS. PERMITTEES DO NOT HAVE TO SAMPLE SHEETFLOW THAT FLOWS ONTO UNDISTURBED NATURAL AREAS OR AREAS STABILIZED BY THE PROJECT. FOR PURPOSES OF THIS SECTION. STABILIZED SHALL MEAN. FOR UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES. AND AREAS LOCATED OUTSIDE THE WASTE DISPOSAL LIMITS OF A LANDFILL CELL THAT HAS BEEN CERTIFIED BY EPD FOR WASTE DISPOSAL, 100% OF THE SOIL SURFACE IS UNIFORMLY COVERED IN PERMANENT VEGETATION WITH A DENSITY OF 70% OR GREATER, OR LANDSCAPED ACCORDING TO THE PLAN (UNIFORMLY COVERED WITH LANDSCAPING MATERIALS IN PLANNED LANDSCAPED AREAS). OR EQUIVALENT PERMANENT STABILIZATION MEASURES AS DEFINED IN THE MANUAL (EXCLUDING A CROP OF ANNUAL VEGETATION AND A SEEDING OF

TARGET CROP PERENNIALS APPROPRIATE FOR THE REGION)

H. ALL SAMPLING PURSUANT TO THIS PERMIT MUST BE DONE IN SUCH A WAY (INCLUDING GENERALLY ACCEPTED SAMPLING METHODS, LOCATIONS, TIMING, AND FREQUENCY) AS TO ACCURATELY REFLECT WHETHER STORM WATER RUNOFF FROM THE CONSTRUCTION SITE IS IN COMPLIANCE WITH THE STANDARD SET FORTH IN PARTS III.D.3. OR III.D.4., WHICHEVER IS APPLICABLE.

OUTFALL SAMPLING

- MANUAL SAMPLING GRAB SAMPLES WILL BE TAKEN AT THE APPROPRIATE TIME AS STATED IN PART IV.D.6.D. THE PERMIT. SAMPLING WILL OCCUR AT THE DESIGNATED REPRESENTATIVE OUTFALL. THE SAMPLE WILL BE TAKEN IN THE CENTER OF THE OUTFALL CHANNEL, A LARGE MOUTH, CLEAN, GLASS OR PLASTIC JAR/BOTTLE. LABELED WITH PROJECT NUMBER AND LOCATION WILL BE USED TO COLLECT THE SAMPLE. THE SAMPLE CONTAINER WILL BE HELD SLICH THAT THE OPENING FACES LIPSTREAM ONCE THE SAMPLE JAR/BOTTLE IS FULL AND CAPPED. IT WILL BE TRANSPORTED TO THE LOCATION WHERE THE TURBIDITY TESTING WILL B CONDUCTED. SAMPLES MAY BE ANALYZED AT THE SITE WITH PROPERLY CALIBRATED PORTABLE TURBIDIMETERS ALL TURBIDITY TESTS WILL BE CONDUCTED IMMEDIATELY BUT IN NO CASE, LATER THAN 48 HOURS AFTER THE
- TIME THE SAMPLE WAS OBTAINED. AUTOMATIC SAMPLING - GRAB SAMPLES WILL BE TAKEN AT THE APPROPRIATE TIMES AS SPECIFIED IN PART V.D.6.D. OF THE PERMIT. AUTOMATIC SAMPLING CAN BE ACCOMPLISHED BY USING A SAMPLING DEVICE SIMILAR TO THE ISCO MODEL 3700 OR 6700, THE PROBE FOR THE AUTOMATIC SAMPLER WILL BE PLACED IN THE CENTER OF THE CHANNEL. SAMPLES WILL REMAIN IN THE AUTOMATIC SAMPLER UNTIL THE NEXT BUSINESS DAY, WHEN THEY WILL BE COLLECTED AND TESTED.

TESTING - ALL TURBIDITY TESTS SHALL BE DONE IN ACCORDANCE WITH 40 CFR PART 136 (UNLESS OTHER

GUIDANCE DOCUMENT, EPA 833-B-92-001" AND GUIDANCE DOCUMENTS THAT MAY BE PREPARED BY THE

EPD. TURBIDITY RESULTS WILL BE RECORDED AND REPORTED TO EPD AND THE LIA, IF APPLICABLE, IN

TEST PROCEDURES HAVE BEEN APPROVED); THE GUIDANCE DOCUMENT TITLED "NPDES STORM WATER SAMPLING

RECEIVING WATER SAMPLING

MANUAL SAMPLING - SAMPLES WILL BE TAKEN AT THE APPROPRIATE TIME AS STATED IN PART IV.D. 5. D. OF . SAMPLING WILL BEGIN AT THE DESIGNATED REPRESENTATIVE RECEIVING WATER AT THE DOWNSTREAM LOCATION FIRST. THE SAMPLE WILL BE TAKEN AS FAR DOWNSTREAM (WITHIN THE PROJECT LIMITS ONSITE) OF THE CONFLUENCE OF THE LAST STORM WATER DISCHARGE POINT. AND UPSTREAM OF ANY ADDITIONAL DISCHARGES NOT ASSOCIATED WITH THE PROJECT. THE SAMPLE WILL BE TAKEN IN THE CENTER OF THE RECEIVING WATER AT A POINT WHERE MIXING OF THE RECEIVING WATERS AND THE PROJECT OUTFALL HAS OCCURRED AND PRODUCED A HOMOGENOUS SAMPLE. ON RECEIVING WATERS WHERE ACCESS TO THE CENTER OF THE RECEIVING WATERS IS NOT PRACTICAL, SEVERAL SAMPLES FROM ACROSS THE RECEIVING WATERS WILL BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES WILL BE USED FOR THE UPSTREAM VALUE. A LARGE MOUTH, CLEAN, GLASS OR PLASTIC JAR/BOTTLE, LABELED WITH PROJECT NUMBER AND LOCATION WILL BE USED TO COLLECT THE SAMPLE. THE SAMPLE CONTAINER WILL BE HELD SUCH THAT THE OPENING FACES UPSTREAM ONCE THE SAMPLE JAR/BOTTLE IS FULL AND CAPPED, IT WILL BE TRANSPORTED TO THE LOCATION WHERE THE TURBIDITY TESTING WILL BE CONDUCTED. SAMPLES MAY BE ANALYZED AT THE SITE WITH PROPERLY CALIBRATED PORTABLE TURBIDIMETERS. ALL TURBIDITY TESTS WILL BE CONDUCTED IMMEDIATELY BUT IN NO CASE, LATER THAN 48 HOURS AFTER THE TIME THE SAMPLE WAS OBTAINED.

- 2. UPSTREAM SAMPLES WILL BE TAKEN AFTER DOWNSTREAM SAMPLES HAVE BEEN ACQUIRED. THE SAMPLE WILL BE TAKEN IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE FROM THE PROJECT (WITHIN THE PROJECT LIMITS ONSITE). THE SAMPLE WILL BE TAKEN IN THE CENTER OF THE RECEIVING WATER. ON RECEIVING WATERS WHERE ACCESS TO THE CENTER OF THE RECEIVING WATERS IS NOT PRACTICAL, SEVERAL SAMPLES FROM ACROSS THE RECEIVING WATERS WILL BE TAKEN AND THE ARITHMETIC AVERAGE OF THE TURBIDITY OF THESE SAMPLES WILL BE USED FOR THE UPSTREAM VALUE. A LARGE MOUTH, CLEAN, GLASS OR PLASTIC JAR, LABELED WITH PROJECT NUMBER AND LOCATION WILL BE USED TO COLLECT THE SAMPLE. THE SAMPLE CONTAINER WILL BE HELD SUCH THAT THE OPENING FACES UPSTREAM. ONCE THE SAMPLE JAR/BOTTLE IS FULL AND CAPPED, IT WILL BE TRANSPORTED TO THE LOCATION WHERE THE TURBIDITY TESTING WILL BE CONDUCTED. ALL TURBIDITY TESTS WILL BE CONDUCTED IMMEDIATELY BUT IN NO CASE, LATER THAN 48 HOURS AFTER THE TIME THE SAMPLE WAS OBTAINED. AUTOMATIC SAMPLING - SAMPLES WILL BE TAKEN AT THE APPROPRIATE TIMES AS SPECIFIED IN PART IV.D.5.D. OF
- HE PERMIT. AUTOMATIC SAMPLING CAN BE ACCOMPLISHED AT BOTH UPSTREAM AND DOWNSTREAM SIMULTANEOUSLY BY USING A SAMPLING DEVICE SIMILAR TO THE ISCO MODEL 3700 OR 6700. THESE DEVICES CAN BE TRIGGERED BY FLOW METERS OR RAIN GAGES TO OBTAIN THE REQUIRED SAMPLES. THIS DETERMINATION WILL BE MADE ON A PROJECT BY PROJECT BASIS. THE PROBE FOR THE AUTOMATIC SAMPLER WILL BE PLACED IN THE CENTER OF THE RECEIVING WATER AT A POINT AS FAR DOWNSTREAM OF THE CONFLUENCE OF THE LAST STORM WATER DISCHARGE POINT AND UPSTREAM OF ANY ADDITIONAL DISCHARGES NOT ASSOCIATED WITH THE PROJECT. SAMPLES WILL REMAIN IN THE AUTOMATIC SAMPLER UNTIL THE NEXT BUSINESS DAY, WHEN THEY WILL BE COLLECTED AND TESTED.

THE PROBE FOR UPSTREAM SAMPLING WILL BE POSITIONED IMMEDIATELY UPSTREAM OF THE CONFLUENCE OF THE FIRST STORM WATER DISCHARGE POINT FROM THE PROJECT. THE PROBE WILL BE PLACED IN THE CENTER OF THE RECEIVING WATER. SAMPLES WILL REMAIN IN THE AUTOMATIC SAMPLER UNTIL THE NEXT BUSINESS DAY, WHEN THEY WILL BE COLLECTED AND TESTED.

54.	SAMPLING S	SITE DATA FOR	R OUTFALLS			
	SAMPLING OUFALL ID	TOTAL SITE AREA (AC)	DRAINAGE AREA (AC)	DRAINAGE AREA (SQ MI)	STREAM TYPE (WARM/COLD)	NTU LIMIT
	Α	23.94	23.94	0.04	WARM	50*

* SEE "APPENDIX B" RATIONALE FOR OUTFALL SAMPLING POINTS IN NPDES PERMIT NO. GAR100001.

- SEE PLAN SHEETS FOR DELINEATION OF ALL SAMPLING LOCATIONS, PERENNIAL AND INTERMITTENT STREAMS AND OTHER WATER BODIES INTO WHICH STORM WATER IS DISCHARGED.
- 36. A DESCRIPTION OF APPROPRIATE CONTROLS AND MEASURES THAT WILL BE IMPLEMENTED AT THE CONSTRUCTION SITE INITIAL SEDIMENT STORAGE REQUIREMENTS AND PERIMETER CONTROL BMPS: COSTRUCTION EXIT, DOUBLE ROW SILT FENCE WITH LOOSE STRAW BETWEEN. INTERMEDIATE GRADING AND DRAINAGE BMPS: CONSTRUCTION EXIT, DOUBLE ROW SILT FENCE-TYPE SENSITIVE WITH LOOSE STRAW BETWEEN, INLET SEDIMENT TRAP-FILTER FABRIC WITH SUPPORTIVE FRAME, DISTURBED AREA STABILIZATION (WITH MULCHING ONLY), DISTURBED ARE STABILIZATION (WITH TEMPORARY SEEDING), SLOPE
- 3. FINAL BMPS: DISTURBED AREA STABILIZATION (WITH PERMANENT SEEDING), SLOPE STABILIZATION.
- THE GRAPHIC SCALE AND NORTH ARROW ARE SHOWN ON ALL PLAN SHEETS.
- 38. EXISTING AND PROPOSED CONTOUR LINES ARE DRAWN ON THE PLAN SHEETS.
- 39. USE OF ALTERNATIVE BMPS WHOSE PERFORMANCE HAS BEEN DOCUMENTED TO BE EQUIVALENT TO OR SUPERIOR TO CONVENTIONAL BMPS AS CERTIFIED BY A DESIGN PROFESSIONAL (UNLESS DISAPPROVED BY EPD OR THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION). PLEASE REFER TO THE ALTERNATIVE BMP GUIDANCE DOCUMENT FOUND AT www.gaswcc.org.
- USE OF ALTERNATIVE BMP FOR APPLICATION TO THE EQUIVALENT BMP LIST. PLEASE REFER TO APPENDIX A-2 OF THE MANUAL FOR EROSION & SEDIMENT CONTROL IN GEORGIA 2016 EDITION.
- SEE PLAN SHEETS FOR DELINEATION OF THE APPLICABLE 25-FOOT OR 50-FOOT UNDISTURBED BUFFERS ADJACENT TO STATE WATERS AND ANY ADDITIONAL BUFFERS REQUIRED BY THE LOCAL ISSUING AUTHORITY. CLEARLY NOTE AND DELINEATE ALL AREAS OF IMPACT.
- FEET OF THE PROJECT SITE.
- 43. SEE PLAN SHEETS FOR DELINEATION AND ACREAGE OF CONTRIBUTING DRAINAGE BASINS ON THE PROJECT SITE.
- 44. PRE- AND POST-DRAINING MAPS ARE INCLUDED IN THE HYDROLOGY STUDY. THE PRE-CONSTRUCTION SITE SCS CURVE NUMBER = _63_ AND THE POST-CONSTRUCTION SITE SCS CURVE NUMBER
- SEE ST CHART ON PLAN SHEETS FOR STORM DRAIN PIPE VELOCITIES.

SOIL SERIES INFORMATION FOR A SUMMARY OF THE SOILS THAT ARE EXPECTED TO BE FOUND ON THE PROJECT SITE BASED ON NRCS SOILS MAPS: SEE SHEET ER-000 FOR SOIL SERIES DELINEATION AND THE TABLE BELOW FOR SOIL DESCRIPTIONS.

UILS SERIES TABLE		
ALTAVISTA SANDY LOAM	AkA	0 TO 3 PERCENT SLOPES
APPLING SANDY LOAM	AmB	2 TO 6 PERCENT SLOPES
APPLING SANDY LOAM	AmC	6 TO 10 PERCENT SLOPES
CECIL SANDY LOAM	CeB	2 TO 6 PERCENT SLOPES
PACOLET SANDY LOAM	PaE	10 TO 25 PERCENT SLOPES
WATER	W	
WEHADKEE SOILS	WH	0 TO 2 PERCENT SLOPES, FREQUENTLY FLOODED

- 48. LIMITS OF DISTURBANCE
- INITIAL PHASE: 2.27 ACRE
- INTERMEDIATE PHASE: 8.07 ACRE

FINAL PHASE: 8.07 ACRE PROVIDE A MINIMUM OF 67 CUBIC YARDS OF SEDIMENT STORAGE PER ACRE DRAINED USING A TEMPORARY SEDIMENT BASIN, RETROFITTED DETENTION POND, AND/OR EXCAVATED INLET SEDIMENT TRAPS FOR EACH COMMON DRAINAGE LOCATION. SEDIMENT STORAGE VOLUME MUST BE IN PLACE PRIOR TO AND DURING ALL LAND DISTURBANCE ACTIVITIES

CALCULATIONS ARE PROVIDED ON THE PLAN SHEETS.

UNTIL FINAL STABILIZATION OF THE SITE HAS BEEN ACHIEVED.

50. LOCATION OF BEST MANAGEMENT PRACTICES THAT ARE CONSISTENT WITH AND NO LESS STRINGENT THAN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA. USE UNIFORM CODING SYMBOLS FROM THE MANUAL, CHAPTER 6, WITH

SEE SHEET ER-100-300

PROVIDE DETAILED DRAWINGS FOR ALL STRUCTURAL PRACTICES. SPECIFICATIONS MUST, AT A MINIMUM, MEET THE GUIDELINES SET FORTH IN THE MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA.

PROVIDE VEGETATIVE PLAN, NOTING ALL TEMPORARY AND PERMANENT VEGETATIVE PRACTICES. INCLUDE SPECIES, PLANTING DATES AND SEEDING, FERTILIZER, LIME AND MULCHING RATES. VEGETATIVE PLAN SHALL BE SITE SPECIFIC FOR APPROPRIATE TIME OF THE YEAR THAT SEEDING WILL TAKE PLACE AND FOR THE APPROPRIATE GEOGRAPHIC REGION OF

SEE SHEET ER-100-300

S

REVISION REFERENCE No. 44614 PROFESSIONAL GSWCC CERT #78081 EROSION CONTROL NOTES

DRAWING NUMBER SHEET 20 of 25

PROJECT NUMBER

1866.031

DRAWN BY

SCALE

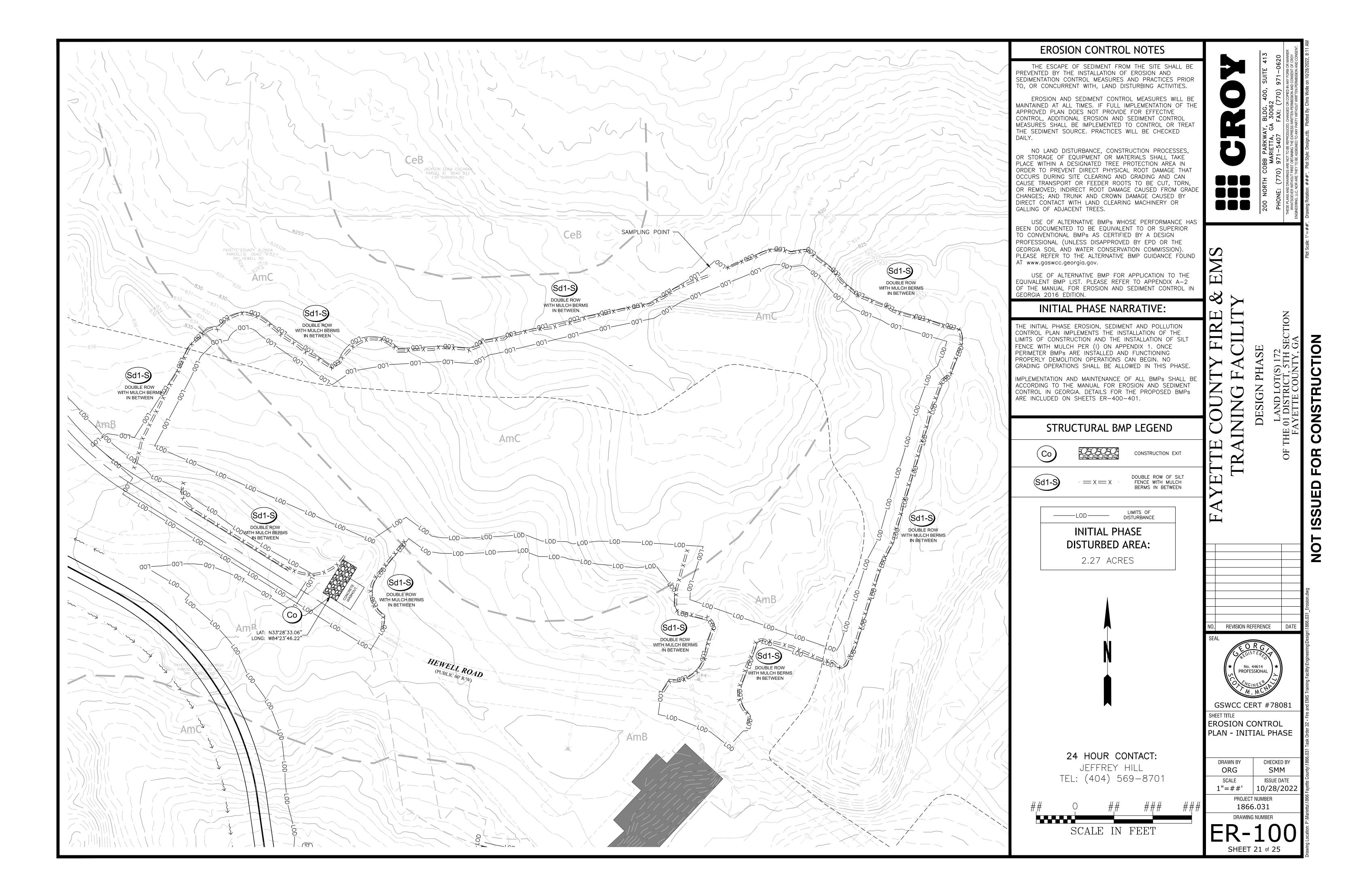
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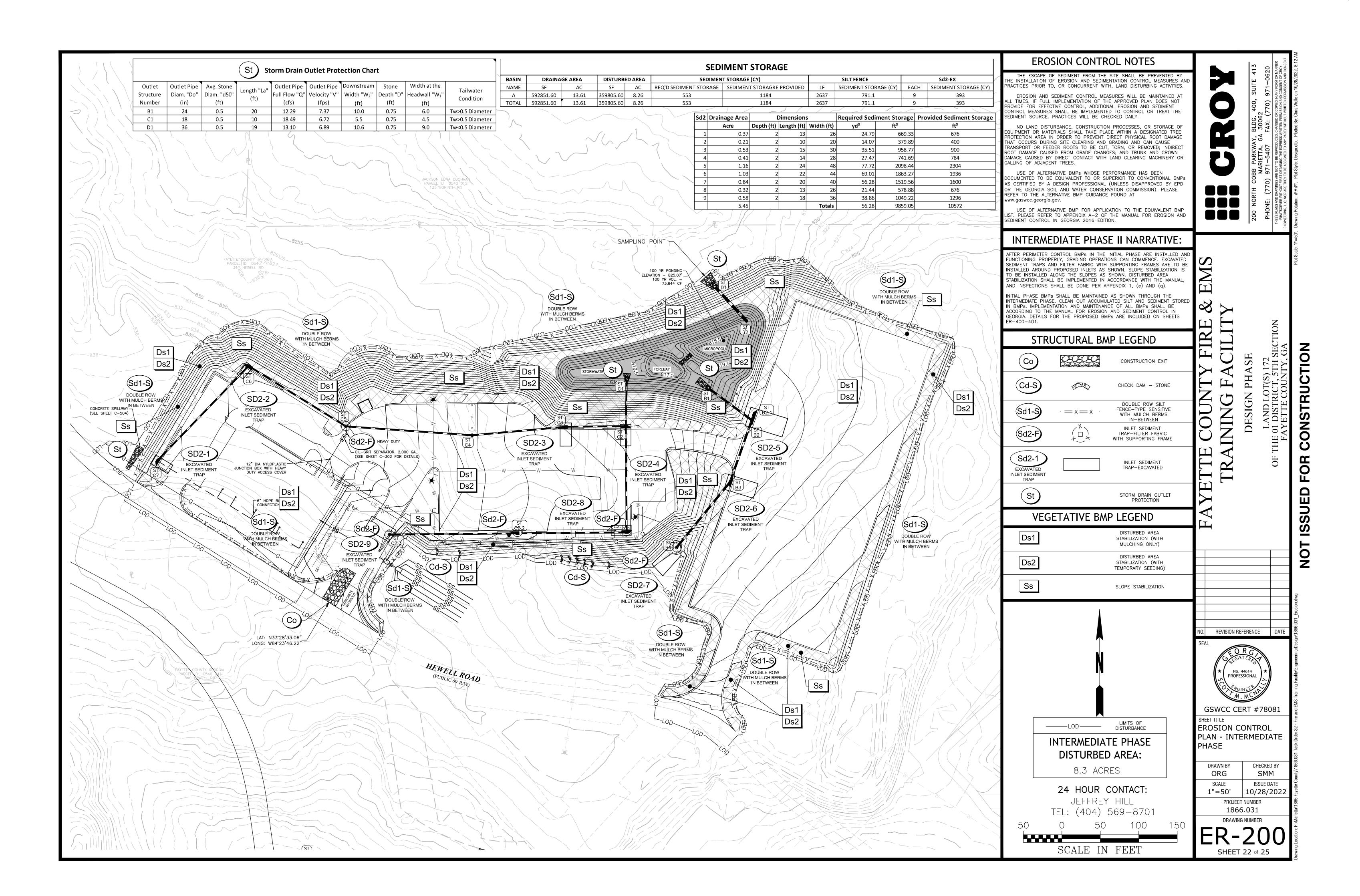
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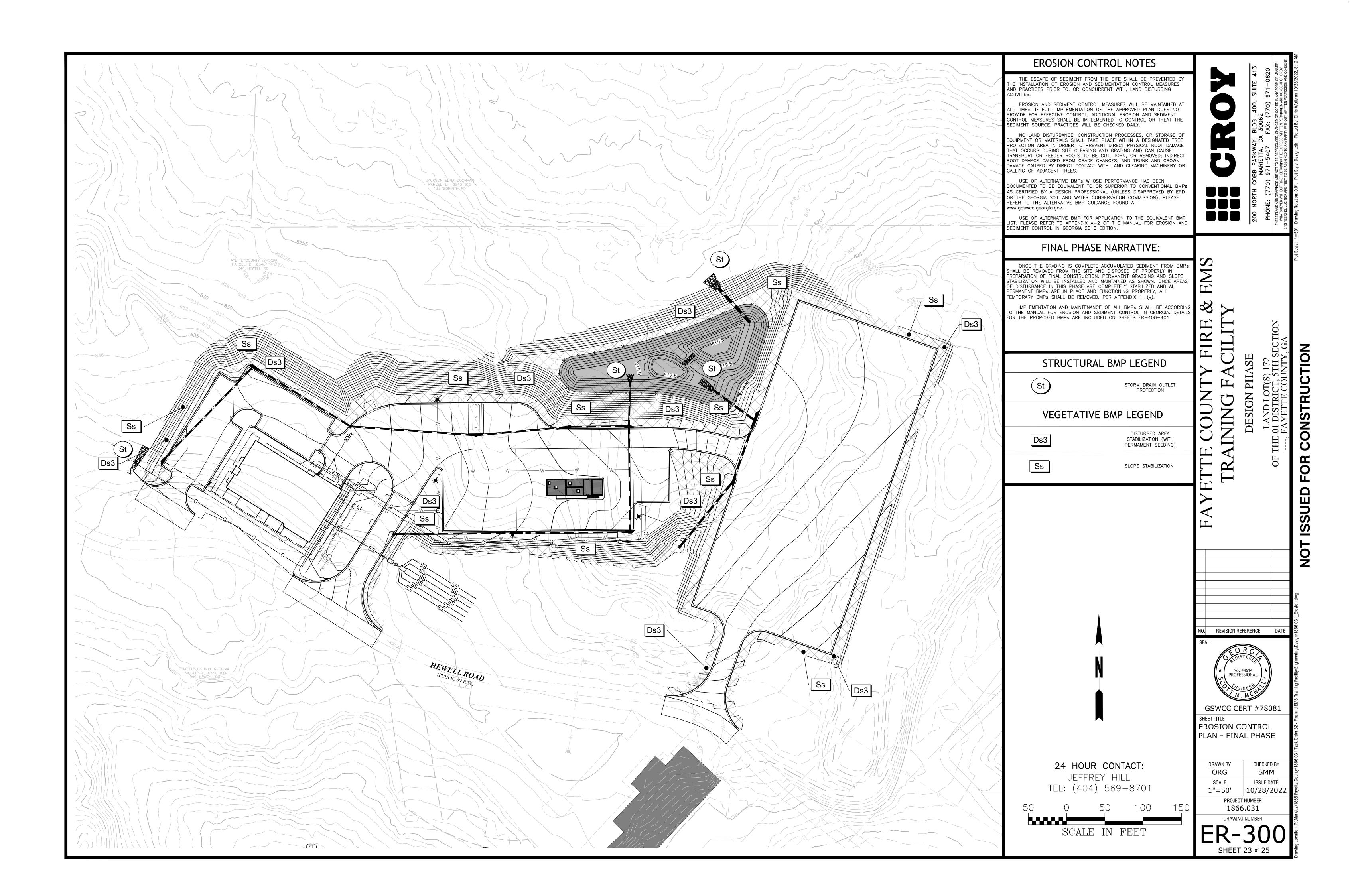
ISSUE DATE

10/28/2022

 SMM







USE 3" OVERLAPS AND STAKE AT 5' INTERVALS ALONG THE

6. USE 3' OVERLAPS AND SHINGLE DOWNSTREAM TO CONNECT THE

Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

SPECIFICATIONS

This standard applied to grades or cleared areas where seedings may not have a suitable growing season to produce an erosion retardant cover, but can be stabilized with a mulch cover.

1. Grade to permit the use of equipment for applying and anchoring mulch. Install needed erosion control measures as required such as dikes, diversions, berms, terraces and sediment barriers.

Loosen compact soil to a minimum depth of 3 inches.

Select one of the following materials and apply at the depth indicated: 1. Dry straw or hay shall be applied at a depth of 2 to 4 inches providing complete soil coverage.

One advantage of this material is easy application. Wood waste (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain on site, be chipped, and applied as mulch. This method of mulching can greatly reduce erosion control costs.

Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and reused.

When mulch is used without seeding, mulch shall be applied to provide full coverage of the exposed

1. Dry straw or hay mulch and wood chips shall be applied uniformly by hand or by mechanical If the area will eventually be covered with perennial vegetation, 20-30 pounds of nitrogen per acre in addition to the normal amount shall be applied to offset the uptake of nitrogen caused by the

decomposition of the organic mulches. Apply polyethylene film on exposed areas.

1. Straw or hay mulch can be pressed into the soil with a disk harrow with the disk set straight or with a special 'packer disk'. Disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but to press it into the soil leaving much of it in an erect position. Straw or hay mulch shall be anchored immediately after application.

Straw or hay mulch spread with special blower-type equipment may be anchored. Tackifiers, binders and hydraulic mulch with tackifier specifically designed for taking straw can be substituted for emulsified asphalt. Please refer to specification Tackifiers and binders. Plastic mesh or netting with mesh no larger than one inch by one inch shall be installed according to manufacturer's specifications.

Netting of the appropriate size shall be used to anchor wood waste. Openings of the netting shall not be larger than the average size of the wood waste chips. Polyethylene film shall be anchor trenched at the top as well as incrementally as necessary.

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

SPECIFICATIONS

Grading and Shaping

Excessive water run-off shall be reduced by properly designed and installed erosion control practices such as closed drains, ditches, dikes, diversions, sediment barriers and others. No shaping or grading is required if slopes can be stabilized by hand-seeded vegetation or if hydraulic seeding equipment is to be used.

Seedbed Preparation

When a hydraulic seeder is used, seedbed preparation is not required. When using conventional or hand-seeding, seedbed preparation is not required if the soil material is loose and not sealed by rainfall.

When soil has been sealed by rainfall or consists of smooth cut slopes, the soil shall be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate.

Lime and Fertilizer

Agricultural lime is required unless soil tests indicate otherwise. Apply agricultural lime at determined by soil test for pH. Quick acting lime should be incorporated to modify pH during the germination period. Bio stimulants should also be considered when there is less than 3% organic matter in the soil. Graded areas require lime application. Soils must be tested to determine required amounts of fertilizer and amendments. Fertilizer should be applied before land preparation and incorporated with a disk, ripper, or chisel. On slopes too steep for, or inaccessible to equipment, fertilizer shall be hydraulically applied, preferably in the first pass with seed and some hydraulic mulch, then topped with the remaining required application rate.

Select a grass or grass-legume mixture suitable to the area and season of the year. Seed shall be applied uniformly by hand, cyclone seeder, drill, cultipacker-seeder, or hydraulic seeder (slurry including seed and fertilizer). Drill or cultipacker seeders should normally place seed one-quarter to one-half inch deep. Appropriate depth of planting is ten times the seed diameter. Soil should be "raked" lightly to cover seed with soil if seeded by hand. See table below.

Mulching

Temporary vegetation can, in most cases, be established without the use of mulch provided there is little to no erosion potential. However, the use of mulch can often accelerate and enhance germination and vegetation establishment. Mulch without seeding should be considered for short term protection. Refer to Ds1 - Disturbed Area Stabilization (With Mulching Only).

During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to a depth that will insure germination of the seed. Subsequent applications should be made when needed.

PLANT, PLANTING RATES, AND PLANTING DATES FOR TEMPORARY COVER OR COMPANION CROPS

SPECIES	BROADCAST PLANTING DATES RATES FOR SOUTHERN PER PER PIEDMONT REGION							ī		REMARKS					
	PER ACRE	1000 SQ. FT.	J							D					
BARLEY (Horduem vulgare) alone	144 lbs.	3.3 lbs.													14,000 seed per pound Winterhardy. Use on
in mixture	24 lbs.	0.6 lb.	J	F	M	A	M	J	J	A	s	o	N	D	productive soils.
LESPEDEZA,ANNUAL (Lespedeza striata) alone in mixture	40 lbs. 10 lbs.	0.9 lb. 0.2 lb.	J	F	M	A	M	J	J	A	s	О	N	D	200,000 seed per poun May volunteer for several years. Use inoculant EL.
LOVEGRASS, WEEPING (Horduem vulgare) alone in mixture	4 lbs. 2 lbs.	0.1 lb. 0.05 lb.	J	F	M	A	М	J	J	A	s	o	N	D	1,500,000 seed per pound. May last for several years. Mix wit Sericea lespedeza.
MILLET, BROWNTOP (Panicum fascicalatum) alone in mixture	40 lbs. 10 lbs.	0.9 lb. 0.2 lb.	J	F	М	A	М	J	J	A	s	О	N	D	137,000 seed per pound. Quick dense cover. Will provide too much competition in mixtures i seeded at high rates.
MILLET, PEARL (Pennesetum glaucum) alone	50 lbs.	1.1 lb.	J	F	M	A	М	J	J	A	s	o	N	D	88,000 seed per pound. Quick dense cover. May reach 5 feet in height. No recommended for mixture
OATS (Avena sativa) alone in mixture	128 lbs. 32 lbs.	2.9 lbs. 0.7 lb.	J	F	М	A	М	J	J	A	S	О	N	D	13,000 seed per pound Use on productive soil Not as winterhardy as rye or barley.
RYE (Secale cereale) alone in mixture	168 lbs. 28 lbs.	3.9 lbs. 0.6 lb.	J	F	М	A	М	J	J	A	s	О	N	D	18,000 seed per pound Quick cover. Drought tolerant and winterhardy.
RYEGRASS, ANNUAL (Lolium temulentum) alone	40 lbs.	0.9 lb.	J	F	M	A	М	J	J	A	s	О	N	D	227,000 seed per pound Dense cover. Very competitive and is <u>not</u> be used in mixtures.
SUDANGRASS (Sorghum Sudanese) alone	60 lbs.	1.4 lb.	J	F	М	A	M	J	J	A	s	О	N	D	55,000 seed per pound Good on droughty site: Not recommended for mixtures.
WHEAT (Triticum Aestivum) alone in mixture	180 lbs. 30 lbs.	4.1 lbs. 0.7 lb.	J	F	М	A	М	J	J	A	s	0	N	D	15,000 seed per pound

DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

ecommended for any seeding process, when possible). When conventional seeding is to be used, seedbed preparation

Broadcast Plantings

1. Tillage, at a minimum, shall adequately loosen the soil to a depth of 4 to 6 inches; alleviate compaction; incorporate lime and fertilizer; smooth and firm the soil; allow for the proper placement of seed, sprigs, or plants; and allow for the anchoring of straw or hay mulch if a disk is to be used.

2. Tillage may be done with any suitable equipment.

3. Tillage should be done on the contour where feasible.

4. On slopes too steep for the safe operation of tillage equipment, the soil surface shall be pitted or trenched across the slope with appropriate hand tools to provide two places 6 to 8 inches apart in which seed may lodge and germinate. hydraulic seeding may also be used.

Individual Plants

5. Where individual plants are to be set, the soil shall be prepared by excavating holes, opening furrows, or dibble planting.

planting.

For nursery stock plants, holes shall be large enough to accommodate roots without crowding.

Where pine seedlings are to be planted, subsoil under the row 36 inches deep on the contour four to six months prior to planting. Subsoiling should be done when the soil is dry, preferably in August or September.

All legume seed shall be inoculated with appropriate nitrogen-fixing bacteria, the innoculant shall be a pure culture prepared specifically for the seed species and used within the dates on the container A mixing medium recommended by the manufacturer shall be used to bond the innoculant to the seed, for conventional seeding, use twice the amount of innoculant recommended by the manufacturer. For hydraulic seeding, four times the amount of innoculant recommended by the manufacturer shall be used.

All inoculated seed shall be protected from the sun and high temperatures and shall be planted the same day inoculated. No inoculated seed shall remain in the hydroseeder longer than one hour.

sturry uniformly over the area to be treated. Apply within one not after the inxture is made. Conventional Seeding
Seeding will be done on a freshly prepared and firmed seedbed. For broadcast planting, use a culti-packer-seeder, drill,
rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover
the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a cultipacker or other the seed lightly with 1/8 to 1/4 inen of soil for small seed and 1/2 to 1 linen for large seed when using a cultipacker or other suitable equipment.

No-Till Seeding

No-till seeding is permissible into annual cover crops when planting is done following maturity of the cover crop or if the

temporary cover stand is sparse enough to allow adequate growth of the permanent (perennial) species. No-till seeding shall be done with appropriate no-till seeding equipment, the seed must be uniformly distributed and planted at the proper depth. Individual Plants

Shrubs, vines and sprigs may be planted with appropriate planters or hand tools, pine trees shall be planted manually in the subsoil furrow. Each plant shall be set in a manner that will avoid crowding the roots.

Nursery stock plants shall be planted at the same depth or slightly deeper than they grew at the nursery. The tips of vines and sprigs must be at or slightly above the ground surface.

Where individual holes are dug, fertilizer shall be placed in the bottom of the hole, two inches of soil shall be added and the plant shell be set in the best of the base.

indicated:

Dry straw or dry hay of good quality and free of weed seeds can be used. dry straw shall be applied at the rate of 2 tons

Dry strike or try hay to good quarty and rice of these section and the per acre. Dry hay shall be applied at a rate of 2 1/2 tons per acre.

Wood cellulose mulch or wood pulp fiber shall be used with hydraulic seeding. It shall be applied at the rate of 500 pounds per acre. Dry straw or dry hay shall be applied at the rate indicated above) after hydraulic seeding.

One thousand pounds of wood cellulose or wood pulp fiber, which includes a tackifier, shall be used with hydraulic seeding on slopes 3/4:10 rsteeper.

Sericea Lespedeza hay containing mature seed shall be applied at a rate of three tons per acre. 5. Pine straw or pine bark shall be applied at a thickness of 3 inches for bedding purposes, other suitable materials in sufficient quantity may be used where ornamentals or other ground covers are planted. This is <u>NOT</u> appropriate for a posted of the property of th 6. When using temporary crossion control bankers or block sod, mulen is not required.
7. Bituminous treated roving may be applied on planted areas, slopes, in ditches or dry water-ways to prevent erosion.
Bituminous treated roving shall be applied on planted areas, slopes, in ditches or dry water-ways to prevent erosion.
Bituminous treated roving shall be applied within 24 hours after an area has been planted. Application rates and materials must meet Georgia Department of Transportation specifications.
Wood cellulose and wood pulp fibers shall not contain germination or growth inhibiting factors. They shall be evenly dispersed when agitated in water. The fibers shall contain a dye to allow visual metering and aid in uniform application devices could be applied.

Applying Mulch
Straw or hay mulch will be spread uniformly within 24 hours after seeding and/or planting the mulch may be spread by blower-type spreading equipment, other spreading equipment or by hand. Mulch shall be applied to cover 75% of the soil surface. Wood cellulose or wood fiber mulch shall be applied uniformly with hydraulic seeding equipment.

Anchor straw or hay mulch immediately after application by one of the following methods:

1. Hay and straw mulch shall be pressed into the soil immediately after the mulch is spread. A special "packer disk" or disk harrow with the disks set straight may be used. The disks may be smooth or serrated and should be 20 inches or more in dismeter and disk harrow with the disks set straight may be used. The disks may be smooth or serrated and should be 20 inches or more in diameter and

2. 8 to 12 inches apart. The edges of the disks shall be dull enough to press the mulch into the ground without cutting it, leaving much of it in an erect position. Mulch shall not be plowed into the soil.

3. Synthetic tackifiers, binders or hydraulic mulch specifically designed to tack straw, shall be applied in conjunction with or immediately after the mulch is spread. Synthetic tackifiers shall be mixed and applied according to manufacturer's specifications. All tackifiers, binders or hydraulic mulch specifically designed to tack straw should be verified nontoxic through EPA 2021.0 testing. Refer to Tackifiers-Tac

4. Rive or wheat can be included with fall and winter plantines to stabilize the mulch. They shall be applied at a rate of 4. Rye or wheat can be included with fall and winter plantings to stabilize the mulch. They shall be applied at a rate of one-quarter to one-half bushel per acre.

5. Plastic mesh or netting with mesh no larger than one inch by one inch may be needed to anchor straw or hay mulch on unstable soils and concentrated flow areas. These materials shall be installed and anchored according to manufacturer's

 Material
 Depth

 Grain Straw
 4" TO 6"

 Grass Hay
 4" TO 6"

 Pine Needles
 3" TO 5"

 Wood Waste
 4" TO 6"

rrigation

Irrigation will be applied at a rate that will not cause runoff.

Use And Management

Mow Sericea Lespedeza only after frost to ensure that the seeds are mature, mow between November and march. Bermudagrass, Bahia grass and Tall Fescue may be mowed as desired. Maintain at least 6 inches of top growth under any use and management. Moderate use of top growth is beneficial after establishment. Exclude traffic until the plants are well established. Because of the quail nesting season, mowing should not take place

Exclude traffic until the plants are well established. Because of the quail nesting season, mowing should not take place between may and September. FERTILIZER REQUIREMENTS											
Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 30 lbs./ac.							
Cool season grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	0-50 lbs./ac.							
Ground covers	First Second Maintenance	10-10-10 10-10-10 10-10-10	1300 lbs./ac. 1300 lbs./ac. 1100 lbs./ac.	 							
Pine seedlings	First	20-10-5	one 21-gram pellet per seedling placed in the closing hole								
Shrub Lespedeza	First Maintenance	0-10-10 0-10-10	700 lbs./ac. 700 lbs./ac.								
Temporary cover crops seeded alone	First	10-10-10	500 lbs./ac.	30 lbs./ac.							
Warm season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 800 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 50-100 lbs./ac. 30 lbs./ac.							
Warm season grasses and legumes	First Second Maintenance	6-12-12 0-10-10 0-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50 lbs./ac.							

SPECIES	BROADCAST RATES PER PER 1000		PLANTING DATES FOR SOUTHERN PIEDMONT REGION										REMARKS			
	ACRE	SQ. FT.	J	F	M	A	M	J	J	A	s	0	N	D		
BAHIA, PENSACOLA (Paspalum notatum) alone or w/ temp. cover with other perennials	60 lbs. 30 lbs.	1.4 lb. 0.7 lb.	J	F	м	A	М	J	J	A	s	 o	 _N	D	Will spread into berm pastures and lawns. M with Sericea lespedeza weeping lovegrass.	
BAHIA, WILMINGTON (Paspalum notatum) alone or w/ temp. cover with other perennials	60 lbs. 30 lbs.	1.4 lb. 0.7 lb.	J	F	М	A	М	J	J	A	s	0	l _N	D		
BERMUDA, COMMON (Cynodon dactylon) alone with other perennials	10 lbs. 6 lbs.	0.2 lb. 0.1 lb.	J		М		М	J		A		0			1,787,000 seed per por Quick cover. Low grov and sod forming. Full Good for athletic fiel	
BERMUDA, COMMON (Cynodon dactylon) with temporary cover with other perennials	10 lbs. 6 lbs.	0.2 lb. 0.1 lb.	J	F	М	A	М	J	J	A	s	О	N	D	Plant with winte annuals. Plant with tall fesc	
BERMUDA SPRIGS (Cynodon dactylon) Coastal, Common, or Tift 44	40 cu. ft.	0.9 cu. ft.	J		M	A	M	J	J	A		o	N	D	A cubic foot contain approximately 650 sprig bushel contains 1.25 curve feet or approximately sprigs. Drought tolerant. Full sun or p.	
CENTIPEDE (Eremochloa ophiuroides)	Block	od only	J	F	М	A	М	J	J	A	s	o	N	D	shade. Effective adjacent to cor, and in concentrated flow are Irrigation is needed until ful established. Do not plant near pa Winterhardy as far north as Athe Atlanta.	
CROWNVETECH (Coronilla varia) with winter annuals or cool season grasses	15 lbs.	0.3 lb.	J	F	М	A	М	J	J	A	s	o	N	D	100,000 seed per pound. Dense g Drought tolerant and fire resis Attractive rose, pink, and wh blossoms spring to late fall. Mis 30 pounds of Tall fescue or 15 p or rye. Inoculate seed with M inc	
FESCUE, TALL (Festuca arundinacea) alone with other perennials	50 lbs. 30 lbs.	1.1 lb. 0.7 lb.	J				М	J	J	A	s	О	N	D	227,000 seed per pound. Use a only on better sites. Not for dro soils. Mix with perennial lesped crownvetch. Apply topdressin spring following fall plantings. It heavy use areas or athletic fice	
LESPEDEZA, SERICA (Lespedeza cuneata) scarified unscarified seed-bearing hay	60 lbs. 75 lbs. 3 tons	1.4 lbs. 1.7 lbs. 138 lbs.	J	F	M	A	М	J	J	A	s	0	N	D	350,000 seed per pound. W adapted. Low maintenance. with weeping lovegrass, co bermuda, bahia, or tall fes Takes 2 to 3 years to becc fully established. Excellen roadbanks. Inoculate seed EL inoculant.	
LESPEDEZA (Lespedeza virgata DC) or (Lespedeza cuneata G. Don scarified unscarified	60 lbs. 75 lbs.	1.4 lbs. 1.7 lbs.	J	F	М	A	м	J	J	A	s	О	N	D	300,000 seed per pound. Heigi growth is 18 to 24 inches. Advantageous in urban ares Spreading-type growth has bo coloration. Mix with Weepi lovegrass, Common bermuda, I tall fescue or winter annuals. D mix with Sericea lespedeza. Sł develop solid stands. Inoculate with EL inoculata	
LESPEDEZA, SHRUB (Lespedeza bicolor) (Lespedeza thumbergii) plants	3'	: 3'	J	F	M	A	м			A		0	N	D	Provide wildlife fo and cover.	
LOVEGRASS, WEEPING		-	ť	r	171	^	171	Ļ	ľ	A.	.3	ř	1	۲	1,500,000 seed per por Ouick cover. Droug	

DURABLE SHRUBS AND GROUND COVERS FOR PERMANENT COVER

Grows similar to tall

Common Name	Scientific Name	Mature Height	Plant Spacing	Comments				
Albelia	Abelia grandiflora	3-4 ft.	5 ft.	Also a prostrate form 2 feet high. Sun, semi-shade. Semi-evergreen.				
darolina Yellow Gelsemium sempervirens		low	3 ft.	Vine. Yellow, trumpet-like flowers. Hardy, one of best vines. Evergreen. Native to Georgia.				
Carpet Blue	Ajuga reptans	2-4 in. 3 ft.		Needs good drainage, partial shade. B or white flowers. Evergreen.				
Bearberry Cotoneaster	Cotoneaster dammeri	2-4 in.	5 ft.	White flowers, red fruit. Sun. Evergre				
Ground Cover Cotoneaster	Cotoneaster salicifoluis 'Repens'	1-2 ft.	5 ft.	White flowers, red fruit. Sun. Evergre				
Rock Cotoneaster	Cotoneaster horizontalis	1 - 2 ft.	5 ft.	Semi-evergreen. Sun.				
Virginia Creeper	Parthenocissue quinquefolia	low	3 ft.	Red in fall. Vine. Deciduous. Native to Georgia.				
Daylilly	Hemerocallis spp.	2-3 ft.	2 ft.	Many flower colors. Full sun. Very Ha				
English Ivy	Hedera helix	low	3 ft.	Shade only. Climbs.				
Compacta Holly	Ilex crenata 'Compacta'	3-4 ft.	5 ft.	Sun, semi-shade.				
Chinese Holly	Ilex cornuta 'Rotunda'	3-4 ft.	5 ft.	Very durable. Sun, semi-shade.				
Dwarf Burford Holly	Ilex burfordii 'Nana'	5-8 ft.	8 ft.					
Dwarf Yaupon Holly	Ilex vomitoria 'Nana'	3-4 ft.	5 ft.	Very durable, sun, semi-shade.				
Repandens Holly	Ilex crenata 'Repandens'	2-3 ft.	5 ft.	Sun, semi-shade.				
Andorra Juniper	Juniperus horizontalis 'Plumosa'	2-3 ft.	5 ft.	Excellent for slopes. Sun.				
Andorra Compacta Juniper	Juniperus horizontalis 'Plumosa compacta'	1-2 ft.	5 ft.	More compact than andora.				
Blue Chip Juniper	Juniperus horizontalis 'Blue Chip'	8-10 in.	4 ft.					
Blue Rug Juniper	Juniperus horizontalis 'Wiltonii'	4-6 in.	3 ft.	Very low. Sun.				
Parsons Juniper	Juniperus davurica 'Expansa' (Squamata Parsoni)	18-24 in.	5 ft.	One of the best, good winter cover.				
Pfitzer Juniper	Juniperus chinensis 'Pfitzerana'	6-8 ft.	6 ft.	Needs room.				
Prince of Wales Juniper	Juniperus horizontalis 'Prince of Wales'	8-10 in.	4 ft.	Feathery appearance.				
Sargent Juniper	Juniperus chinensis 'Sargentii'	1-2 ft.	5 ft.	Full sun. Needs good drainage. Good winter color.				
Shore Juniper	Juniperus conferta	2-3 ft.	5 ft.	Emerald Sea or Blue Pacific cultivars good.				
Liriope	Liriope muscari	8-10 in.	3 ft.					
Creeping Liriope	Liriope spicata	10-12 in.	1 ft.	Spreads by runners.				
Big Leaf Periwinkle	Vinca major	12-15 in.	4 ft.	Lilac flowers in spring. Semi-shade.				
Common Periwinkle	Vinca minor	5-6 in.	4 ft.	Lavender-blue flowers in spring. Semi-shade.				
Cherokee Rose	Rosa laevigata	2 ft.	5 ft.	Rampant grower. Not for restricted sp				
Memoria Rose	Rosa weuchuriana	2 ft.	5 ft.	Rampant grower.				
St. Johnswort	Hypericum calycenum	8-12 in.	3 ft.	Semi-shade.				
Anthony Waterer	Spirae humelde	2.4.6	5.0	I Com				



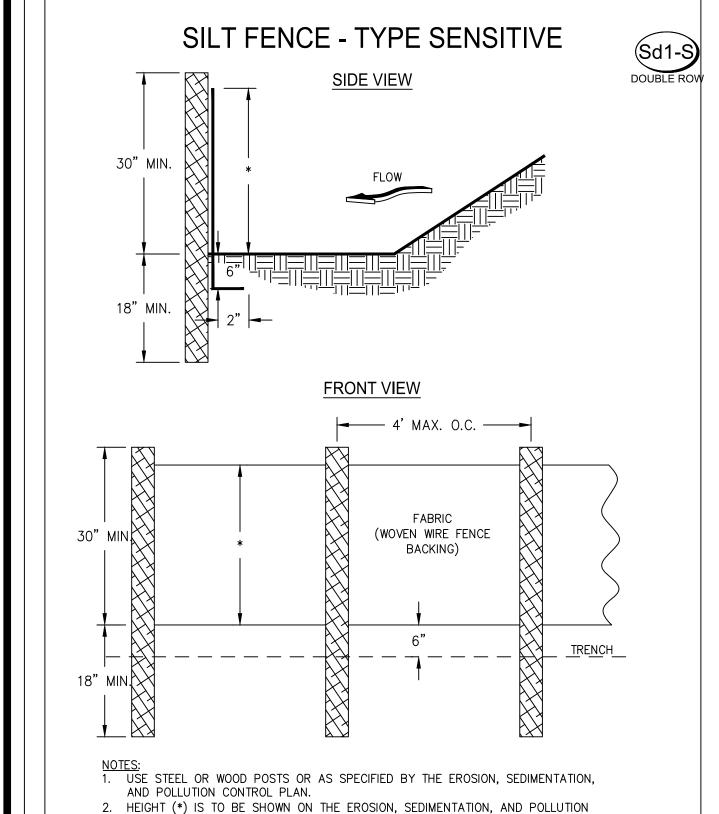
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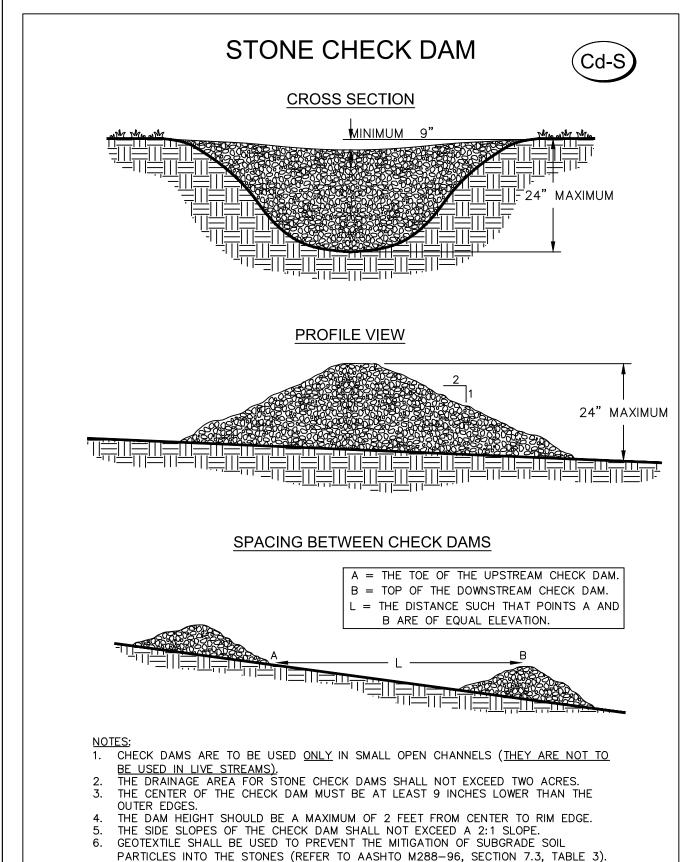
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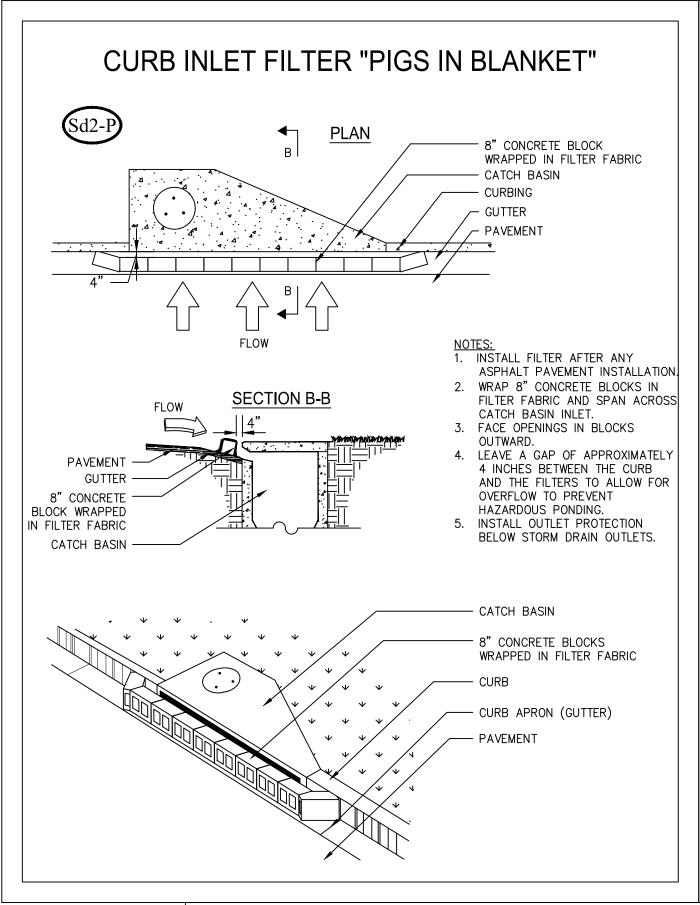
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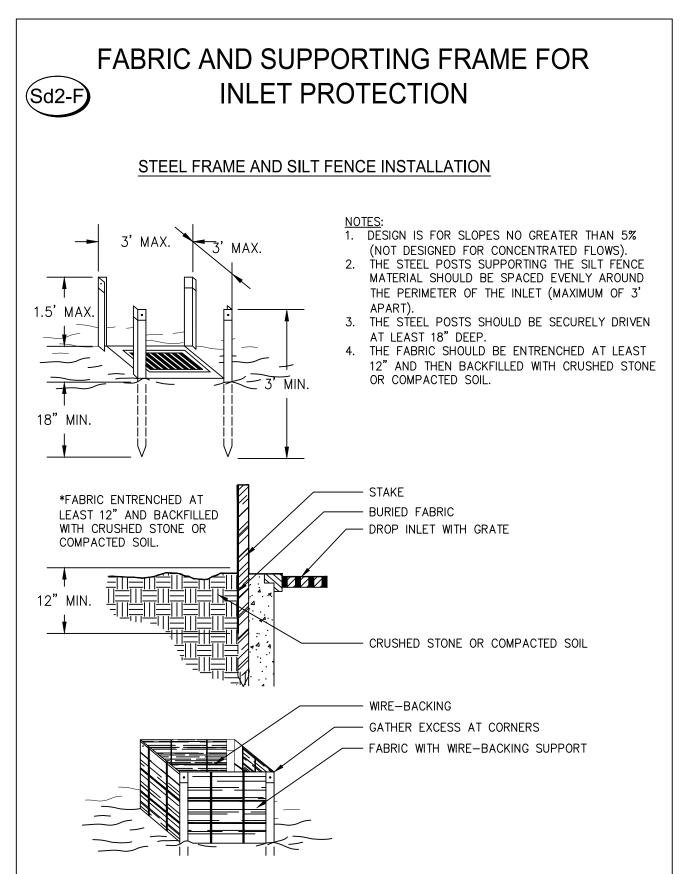
CHECKED BY SMM ISSUE DATE N/A 10/28/2022 PROJECT NUMBER 1866.031

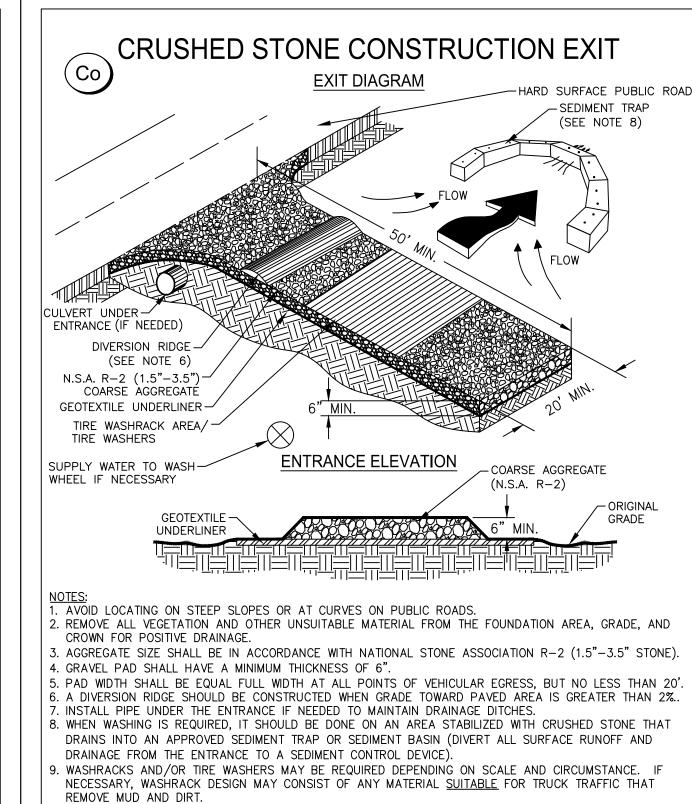
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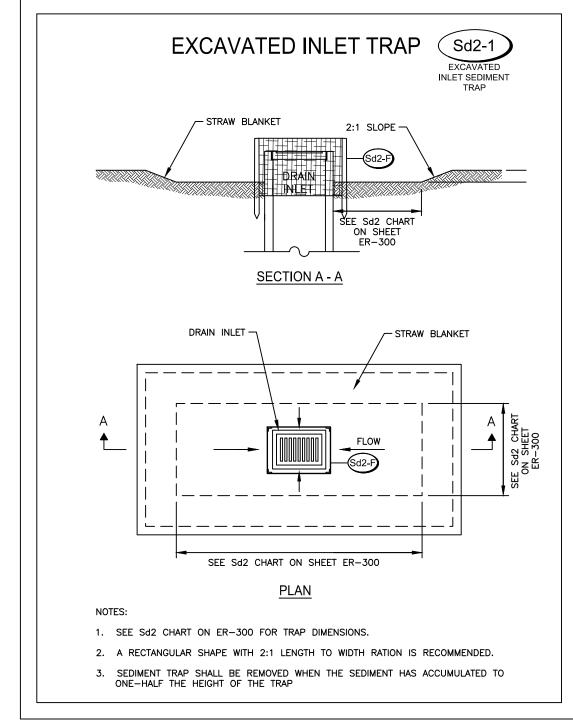


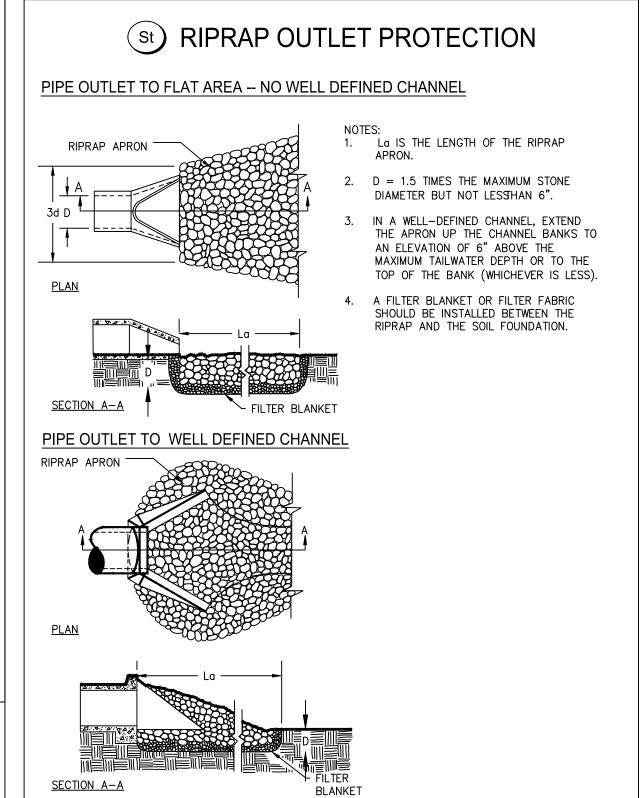


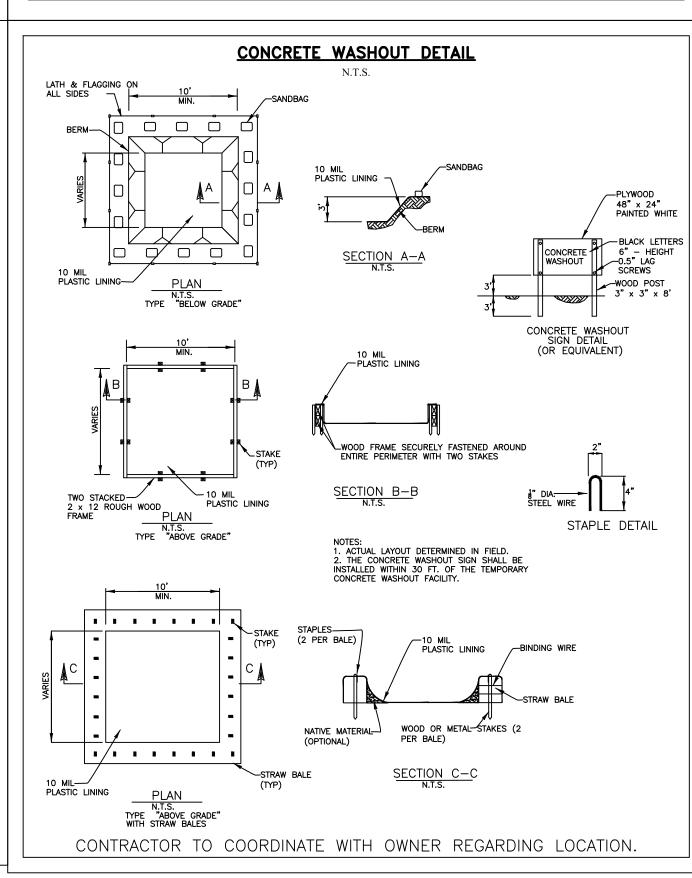
10.MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC

USED TO TRAP SEDIMENT.

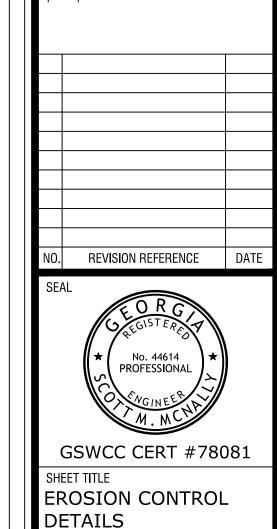
RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES











ORG SMM

SCALE ISSUE DATE

N/A 10/28/2022

PROJECT NUMBER

1866.031

DRAWING NUMBER

CHECKED BY

ER-40
SHEET 25 of 25