



PROPOSED EXCESS STOCKPILE AREA
1"=30' SCALE

EROSION CONTROL LEGEND

- SILT FENCE (C6.2, #1, NCDOT 1605.01)
- TREE PROTECTION FENCE (C6.2, DETAIL 6)
- SILT FENCE OUTLET (C6.2, #4, NCDOT 1606.01)
- PIPE INLET PROTECTION (C6.2, DETAIL 2)
- DROP INLET PROTECTION (C6.2, #12, NCDOT 1632.03)
- SILT SACK INLET PROT (C6.2, DETAIL 13)
- RIPRAP PAD (C6.2, DETAILS 5 & 8)
- DISTURBED AREA (115,383 SF = 2.6 AC)
- TEMPORARY CONSTRUCTION ENTRANCE (C6.2, #3, NCDOT 1607.01)

IMPERVIOUS CALCULATIONS (JANUARY 8, 2015)

TOTAL PROJECT AREA: 94133 SF = 2.16 ACRES

EXISTING IMPERVIOUS AREA: 55,560 SF = 1.28 ACRES
 EXISTING PERVIOUS AREA: 38,573 SF = 0.88 ACRES
 EXISTING BUILT UPON AREA = 59.3%

PROPOSED IMPERVIOUS AREA: 80,784 SF = 1.85 ACRES
 PROPOSED PERVIOUS AREA: 13,349 SF = 0.30 ACRES
 PROPOSED BUILT UPON AREA = 85.7%

Storm Drainage Summary - Lumberton NCDOT Yard
Summary of Pipes - 8/23/2017

From	To	Rational C	Intensity (in/hr)	Area (ac)	Q ₁₀ (cfs)	Q (cfs)	Length (ft)	Diameter (inches)	calculated DIA. (inches)	Slope (%)	Invert (From)	Invert (To)	Structure	Type	Rational C	Intensity (in/hr)	Area (ac)	Q ₁₀ (cfs)	Reference Elevation (TOP)	Depth (ft)	
EX DI1	DI-1	0.70	8.09	0.39	3.4	5.3	15.7	15	RCP	15.8	0.50%	137.72	138.51	DI-1	Drop Inlet	0.70	8.09	0.39	3.4	141.10	2.6
DI-1	DI-2	0.70	8.09	0.34	1.9	1.9	73.7	15	RCP	10.8	0.50%	138.71	139.08	DI-2	Drop Inlet	0.70	8.09	0.34	1.9	142.00	2.9
END-1	END-2	0.60	8.09	0.87	4.2	4.2	48.7	15	RCP	14.6	0.50%	143.50	140.74	END-2	Pipe End	0.60	8.09	0.87	4.2	142.10	1.4
EX DI4	DS-1	0.90	8.09	0.02	0.1	1.3	135.5	12	HDPE	9.3	0.50%	137.30	138.04	DS-1	DS cleanout	0.90	8.09	0.02	0.1	142.50	4.5
DS-1	DS-2	0.90	8.09	0.04	0.3	1.1	30.3	12	HDPE	8.9	0.50%	138.24	138.39	DS-2	DS cleanout	0.90	8.09	0.04	0.3	142.50	4.1
DS-2	DS-3	0.90	8.09	0.04	0.3	0.8	42.3	8	HDPE	8.0	0.50%	138.59	138.80	DS-3	DS cleanout	0.90	8.09	0.04	0.3	142.50	3.7
DS-3	DS-4	0.90	8.09	0.04	0.3	0.5	38.7	8	HDPE	6.7	0.50%	139.00	139.19	DS-4	DS cleanout	0.90	8.09	0.04	0.3	142.50	3.3
DS-4	DS-5	0.90	8.09	0.03	0.2	0.2	41.3	6	HDPE	4.7	0.50%	139.39	139.60	DS-5	DS cleanout	0.90	8.09	0.03	0.2	142.50	2.9
EX DI1	DI-6	0.90	8.09	0.02	0.1	1.3	92.5	12	HDPE	9.3	0.50%	137.72	138.18	DI-6	DS cleanout	0.90	8.09	0.02	0.1	142.50	4.3
DI-6	DI-7	0.90	8.09	0.04	0.3	1.1	30.7	12	HDPE	8.9	0.50%	138.38	138.54	DI-7	DS cleanout	0.90	8.09	0.04	0.3	142.50	4.0
DI-7	DI-8	0.90	8.09	0.05	0.3	0.8	42.0	8	HDPE	7.9	0.50%	138.74	138.95	DI-8	DS cleanout	0.90	8.09	0.05	0.3	142.50	3.6
DI-8	DI-9	0.90	8.09	0.04	0.3	0.5	44.7	8	HDPE	6.5	0.50%	139.15	139.37	DI-9	DS cleanout	0.90	8.09	0.04	0.3	142.50	3.1
DI-9	DI-10	0.90	8.09	0.02	0.2	0.2	35.9	6	HDPE	4.4	0.50%	139.57	139.75	DI-10	DS cleanout	0.90	8.09	0.02	0.2	142.50	2.8

Storm Drainage Summary
Summary of Structures

Structure	Type	Rational C	Intensity (in/hr)	Area (ac)	Q ₁₀ (cfs)	Reference Elevation (TOP)	Depth (ft)
DI-1	Drop Inlet	0.70	8.09	0.39	3.4	141.10	2.6
DI-2	Drop Inlet	0.70	8.09	0.34	1.9	142.00	2.9
END-2	Pipe End	0.60	8.09	0.87	4.2	142.10	1.4
DS-1	DS cleanout	0.90	8.09	0.02	0.1	142.50	4.5
DS-2	DS cleanout	0.90	8.09	0.04	0.3	142.50	4.1
DS-3	DS cleanout	0.90	8.09	0.04	0.3	142.50	3.7
DS-4	DS cleanout	0.90	8.09	0.04	0.3	142.50	3.3
DS-5	DS cleanout	0.90	8.09	0.03	0.2	142.50	2.9
DI-6	DS cleanout	0.90	8.09	0.02	0.1	142.50	4.3
DI-7	DS cleanout	0.90	8.09	0.04	0.3	142.50	4.0
DI-8	DS cleanout	0.90	8.09	0.05	0.3	142.50	3.6
DI-9	DS cleanout	0.90	8.09	0.04	0.3	142.50	3.1
DI-10	DS cleanout	0.90	8.09	0.02	0.2	142.50	2.8

All pipe to be RCP or HDPE unless otherwise noted, driveway crossing pipe to be RCP Type III

Design Calculations for Velocity Dissipators
Lumberton NCDOT Yard - 8/23/2017

Invert (feet)	Di (feet)	Area (sq. ft.)	V=Q/A (fps)	Type of Stone	Miraf 140N Required?	Length of Pad (ft.)	Width of Pad (ft.)	Thickness of Pad (in)
END-1	4.2	1.25	1.2	Class A	Yes	5.0	2.5	20

Order Plans

BIDDING DOCUMENTS

DESIGNED BY:
 FACILITIES DESIGN
 ARCHITECTS & ENGINEERS
 FACILITIES MANAGEMENT DIVISION (FCSD)

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PROJECT TITLE / DESCRIPTION:
 PROPOSED GRADING
 AND EROSION CONTROL PLAN

PROJECT TITLE:
 LUMBERTON EQUIPMENT SHOP
 NCDOT HIGHWAY DIVISION 6

872, NC, 711, HIGHWAY
 LUMBERTON, NORTH CAROLINA 28350 (ROBESON COUNTY)

STATE CONSTRUCTION
 ID# 16-12916-01A

ASSET NUMBER:
 CO. # SITE # BLDG #
 78-06-00

REVISIONS
 NO. DATE

DATE ISSUED: 1/26/2018
 DRAWN BY: AF
 CHECKED BY: RJB

SHEET NO.
C3.1

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