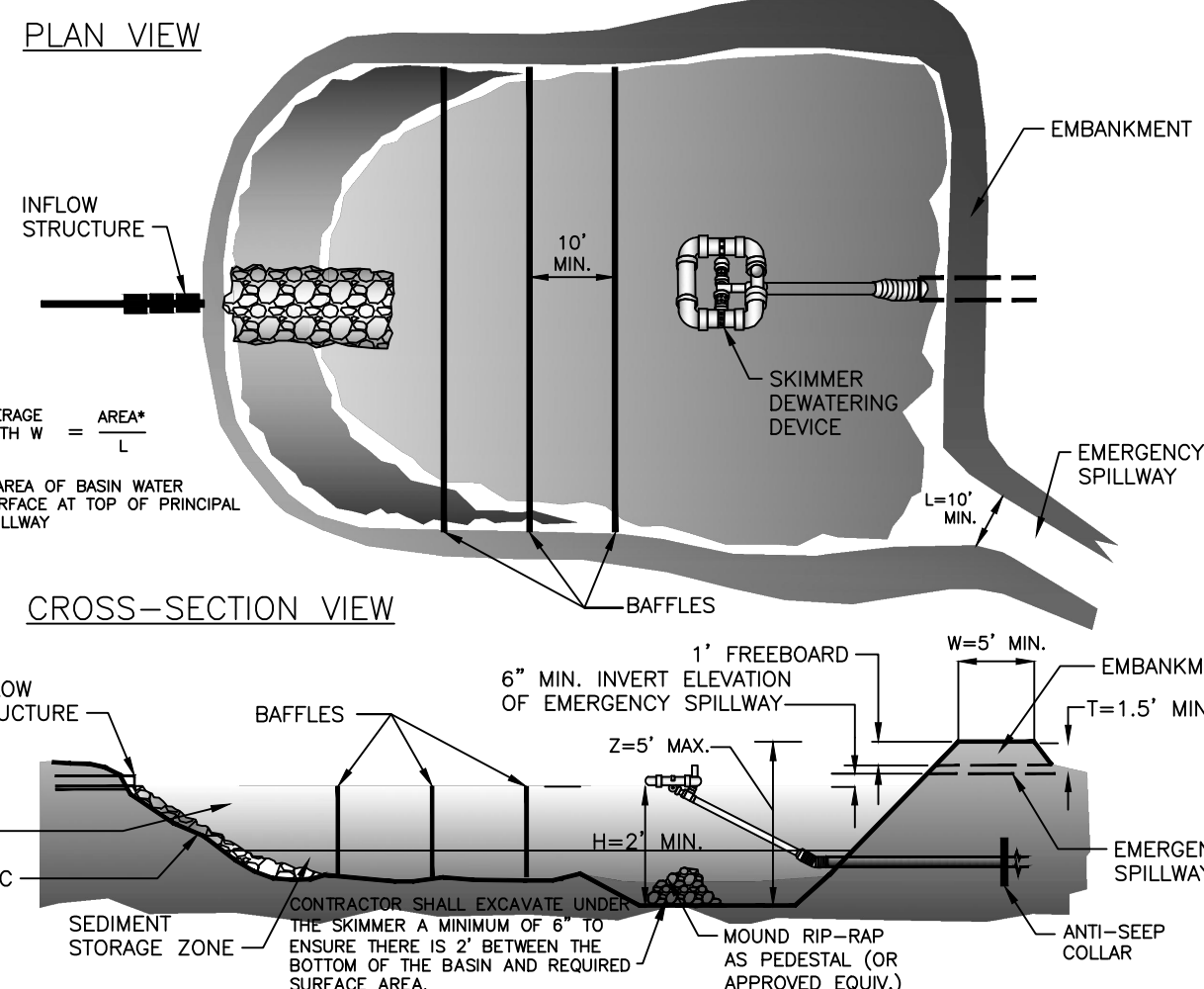


1
C9.4

BAFFLE INSTALLATION
-NTS-

SKIMMER SEDIMENT BASIN DESIGN CRITERIA	
Drainage Area (Acres)	< 10 AC.
MIN. LENGTH TO WIDTH RATIO	2:1
MAX. LENGTH TO WIDTH RATIO	6:1
MIN. VOLUME REQUIRED (CU. FT. PER AC. DISTURBED)	1800
SURFACE AREA REQUIRED (SQ. FT. PER CFS @ 10')	325



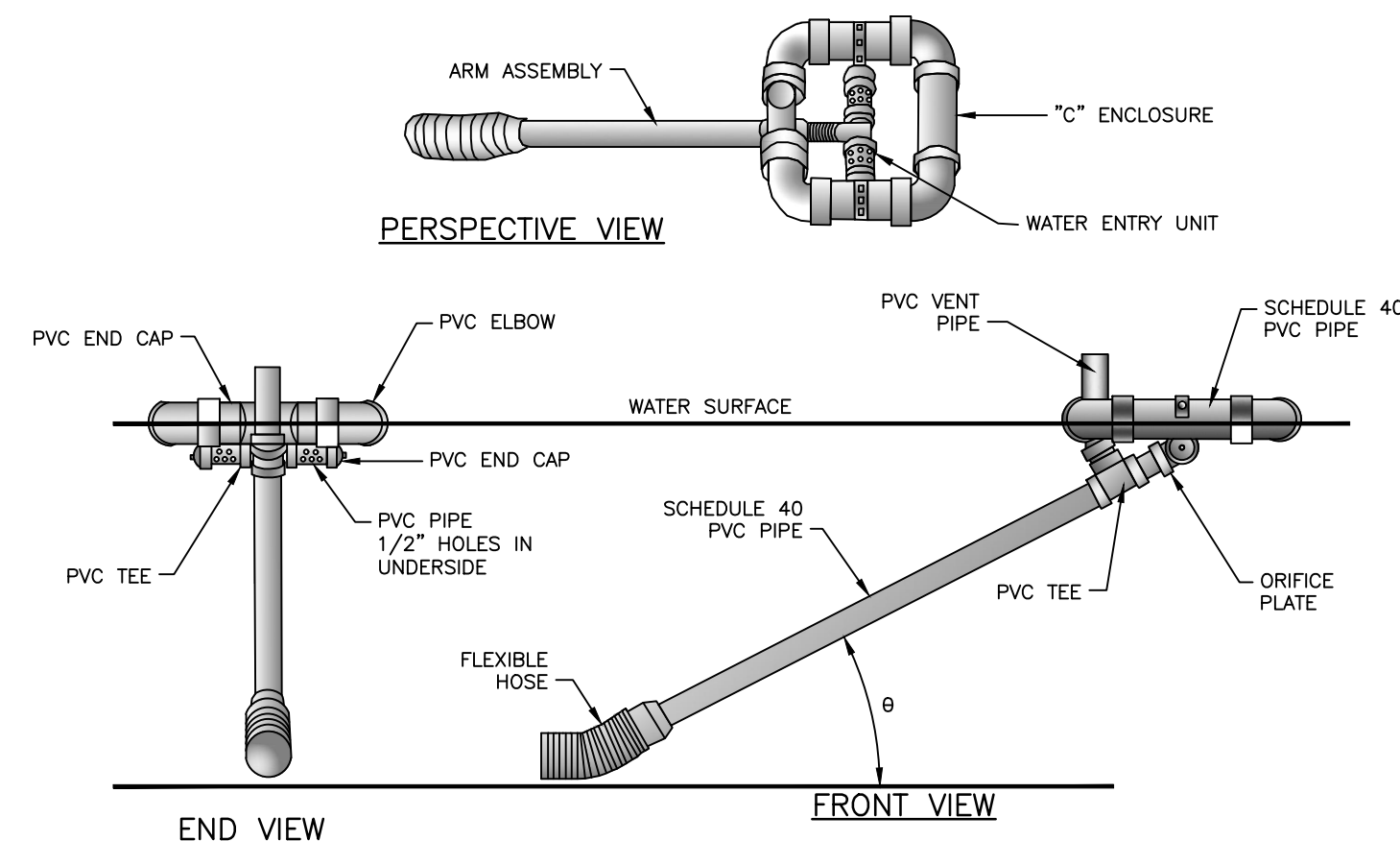
Basin	Drainage Area	Disturbed Area	Discharge 10 Year	Basin Volume Required	Basin Volume Provided	Basin Surface Area Required	Basin Surface Area Provided	Clearout Depth	H	Z	L	W	Skimmer Pipe Diameter	Skimmer Orifice	Top of Basin	Bottom of Basin	Spillway
	Acres	Acres	Cfs	Cu. Ft.	Cu. Ft.	Sq. Ft.	Sq. Ft.	H2	R	R	R	R	R	R	R	R	R
TSSB#1 (PRE-DEV)	0.82	0.76	2.81	1368	1648	849	1550	1.50	3.00	5.00	14.00	5.00	4.00	0.50	555.00	551.50	553.00
TSSB#2 (POST DEV)	0.82	0.76	4.39	1368	1648	1427	1550	1.50	3.00	5.00	14.00	5.00	4.00	0.50	555.00	551.50	553.00

2
C9.4

SKIMMER SEDIMENT BASIN
-NTS-

3
C9.4

SKIMMER
-NTS-



SCHEMATIC OF SKIMMER TAKEN FROM PENNSYLVANIA EROSION AND SEDIMENT POLLUTION CONTROL MANUAL, MARCH 2000.

MAINTENANCE:

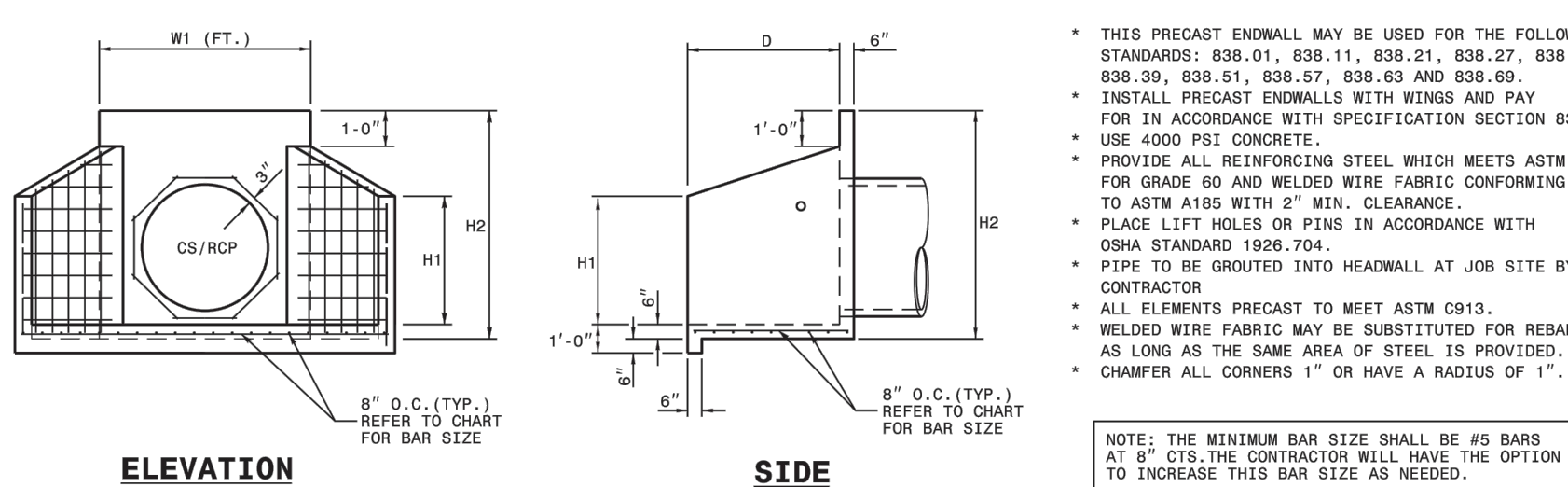
INSPECT SKIMMER SEDIMENT BASINS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN IT ACCUMULATES TO ONE-HALF THE HEIGHT OF THE FIRST BAFFLE. PULL THE SKIMMER TO ONE SIDE SO THAT THE SEDIMENT UNDERNEATH IT CAN BE EXCAVATED. EXCAVATE THE SEDIMENT FROM THE ENTIRE BASIN, NOT JUST AROUND THE SKIMMER OR THE FIRST CELL. MAKE SURE VEGETATION GROWING IN THE BOTTOM OF THE BASIN DOES NOT HOLD DOWN THE SKIMMER. REPAIR THE BAFFLES IF THEY ARE DAMAGED. RE-ANCHOR THE BAFFLES IF WATER IS FLOWING UNDERNEATH OR AROUND THEM.

IF THE SKIMMER IS CLOGGED WITH TRASH AND THERE IS WATER IN THE BASIN, USUALLY JERKING ON THE ROPE WILL MAKE THE SKIMMER BOB UP AND DOWN AND DISLODGE THE DEBRIS AND RESTORE FLOW. IF THIS DOES NOT WORK, PULL THE SKIMMER OVER TO THE SIDE OF THE BASIN AND REMOVE THE DEBRIS. ALSO CHECK THE ORIFICE INSIDE THE SKIMMER TO SEE IF IT IS CLOGGED. IF SO REMOVE THE DEBRIS.

IF THE SKIMMER ARM OR BARREL PIPE IS CLOGGED, THE ORIFICE CAN BE REMOVED AND THE OBSTRUCTION CLEARED WITH A PLUMBER'S SNAKE OR BY FLUSHING WITH WATER. BE SURE AND REPLACE THE ORIFICE BEFORE REPOSITIONING THE SKIMMER.

CHECK THE FABRIC LINED SPILLWAY FOR DAMAGE AND MAKE ANY REQUIRED REPAIRS WITH FABRIC THAT SPANS THE FULL WIDTH OF THE SPILLWAY. CHECK THE EMBANKMENT SPILLWAYS AND OUTLET FOR EROSION DAMAGE AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. MAKE ALL NECESSARY REPAIRS IMMEDIATELY. REMOVE ALL TRASH AND OTHER DEBRIS FROM THE ROSE AND POOL AREA.

FREEZING WEATHER CAN RESULT IN ICE FORMING IN THE BASIN. SOME SPECIAL PRECAUTIONS SHOULD BE TAKEN IN THE WINTER TO PREVENT THE SKIMMER FROM PLUGGING WITH ICE.

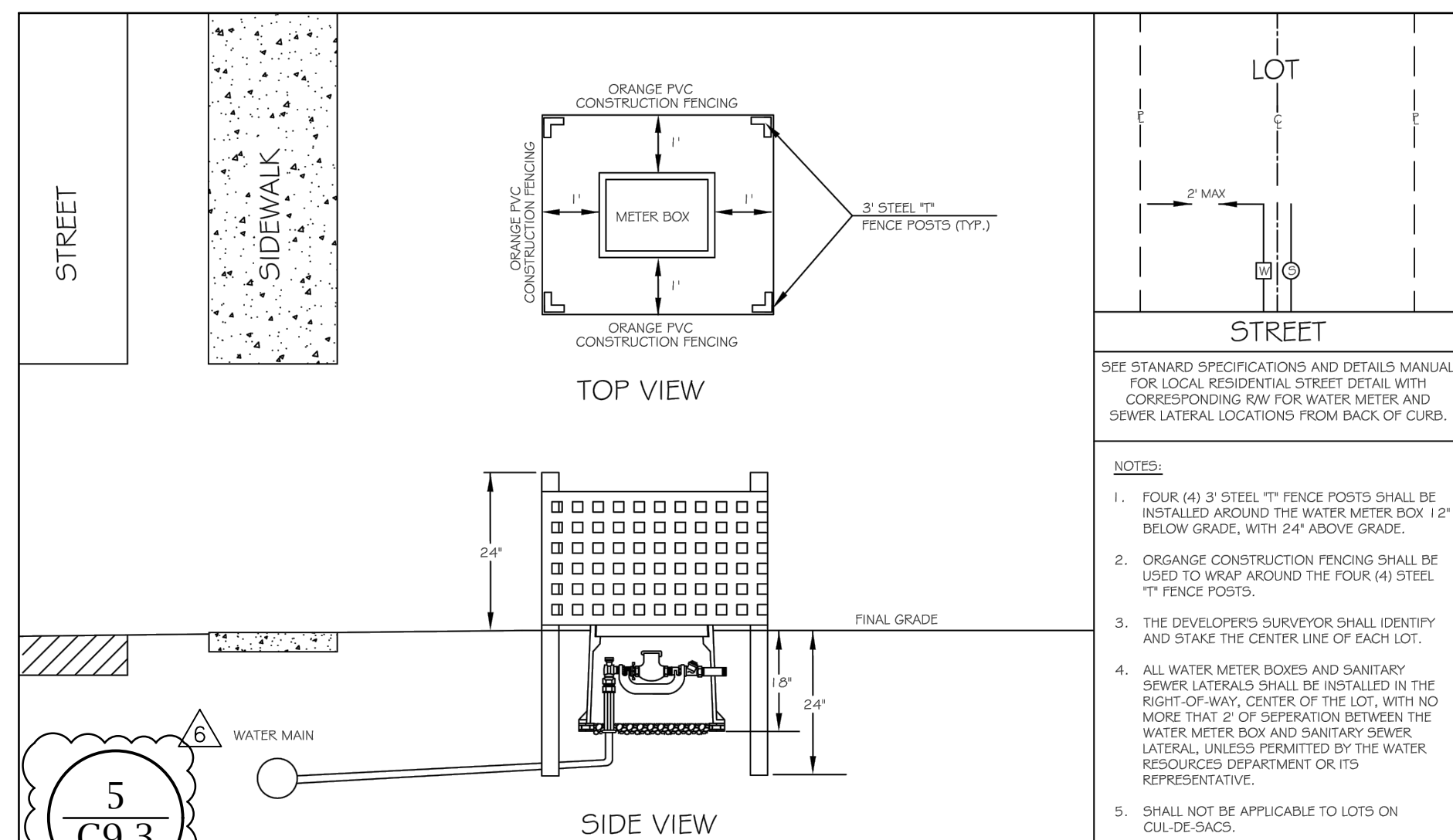


ENDWALL DIMENSIONS						
FT.	MINIMUM	MIN./MAX.	MIN./MAX.	MIN./MAX.	MIN./MAX.	MIN./MAX.
PIPE DIA.	BAR SIZE	H1 (FT.)	H2 (FT.)	D (FT.)	W1	W2
1.0	#5 @ 8"	1.25/2.00	2.00/3.75	1.25/1.75	3.00/3.75	5.50/6.00
1.25	#5 @ 8"	1.25/2.00	3.00/3.75	1.25/2.00	3.50/3.75	6.50/6.75
1.50	#5 @ 8"	1.25/2.00	3.00/4.25	1.50/2.50	3.50/3.75	6.50/6.75
2.0	#5 @ 8"	1.50/2.50	4.00/4.75	1.75/2.50	4.00/4.25	7.50/8.25
2.5	#5 @ 8"	2.50/3.50	4.00/6.00	2.00/3.00	4.50/5.50	10.00/11.50
3.0	#5 @ 8"	3.00/3.50	5.00/6.00	2.75/3.50	5.25/5.75	11.50/11.75
3.5	#5 @ 8"	3.25/4.50	6.00/6.75	3.25/3.50	6.00/6.75	12.00/13.25
4.0	#5 @ 8"	3.50/4.50	6.50/7.00	3.25/3.50	6.50/6.75	13.00/13.25
4.5	#5 @ 8"	4.00/5.00	6.50/8.50	3.25/4.00	7.00/9.25	13.50/15.75
5.0	#5 @ 8"	4.50/5.00	7.00/8.50	3.25/4.00	7.25/9.25	13.75/15.75
5.5	#5 @ 8"	4.50/5.00	7.50/8.50	3.25/4.00	7.25/9.25	14.00/15.75
6.0	#5 @ 8"	4.50/5.00	7.50/8.50	3.25/4.00	7.75/9.25	14.75/16.75

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
PRECAST CONCRETE ENDWALL
FOR SINGLE 12" THRU 72" PIPE - 90° SKEW

SHEET 1 OF 1
838.80



#	REVISED	DATE:	SCALE:	APPROVED BY:
1	4/11/2008	3/15/08	NONE	RKS
2	10/29/2015			D5W
3	1/26/2017			RKS

STANDARD DETAIL
3/4" AND 1" METER PROTECTION DETAIL

WATER RESOURCES DEPARTMENT
CITY OF MONROE, NC

FILE NO. 10.08.01
REV. NO. 10

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C9.3

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CHARLOTTE, NC 28262
PHONE 704.510.9797

PROFESSIONAL ENGINEER
D. MCLUSKEY
29606
1/2/24

PROFESSIONAL SEAL
C-2630
M² ENGINEERING, INC.
ENGINEERING

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AY CARAMBA
FAMILY RESTAURANT
2525 CUTHBERTSON ROAD
WAXHAW, NC 28173

SITE DETAILS

REVISIONS	
4	2/21/23 MONROE STORMWATER
5	4/17/23 MONROE STORMWATER
6	1/2/24 OWNER COMMENTS

CAD FILE: 22-008 BASE.DWG
PROJECT NO.: 22-008
DESIGNED BY: JDM
REVIEWED BY: JDM
DATE: JUNE 29, 2022

C9.4