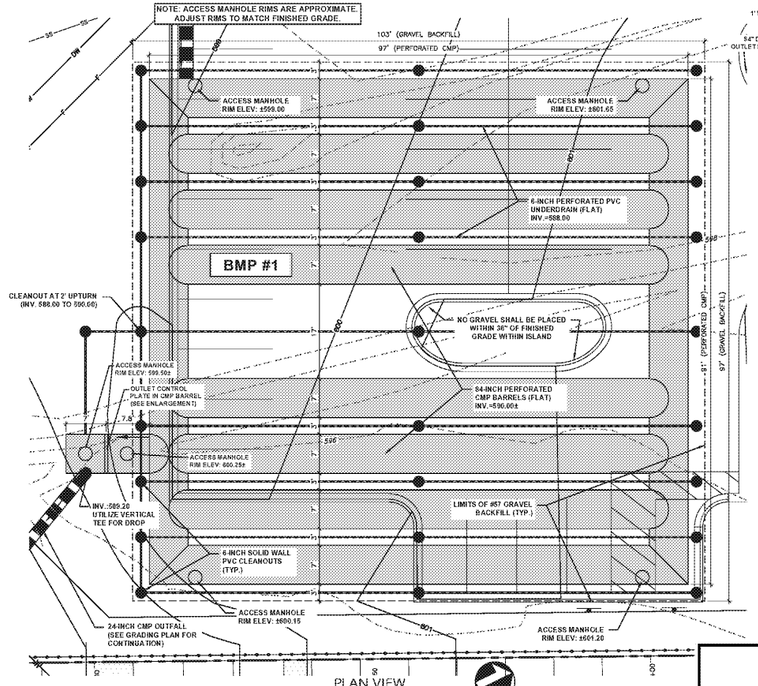
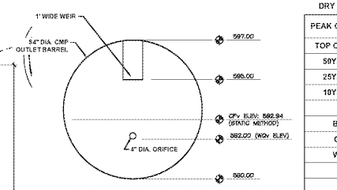




OUTLET CONTROL PLATE ENLARGEMENT
SCALE N.T.S.

CORRUGATED METAL PIPE DETAILS:

1. DIAMETER: 84"
2. CORRUGATION: 5"x1"
3. METAL GAGE: 14
4. COATING: ALUMINIZED STEEL TYPE 2
5. WALL TYPE: PERFORATED
6. BARREL SPACING: SEE PLAN
7. GRAVEL BACKFILL DETAILS:
   - 7.1. WIDTH AT ENDS: 36"
   - 7.2. ABOVE PIPE: 12"
   - 7.3. WIDTH AT SIDES: 36"
   - 7.4. BELOW PIPE: 24"
8. ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS ARE APPROXIMATE AND SHALL BE ADJUSTED AS FINISHED GRADE IS ESTABLISHED. SUBMIT SHOP DRAWINGS FOR FINAL APPROVAL BY THE ENGINEER.
9. ALL RISERS AND STUBS ARE 2-2/3" X 1/2" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED
10. QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. IF ADDITIONAL PIPE IS NEEDED, IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
11. PIPE LENGTHS SHOWN ARE THE ENGINEER'S ESTIMATE USED TO COMPUTE PIPE SLOPES AND INVERTS AND SHALL NOT BE CONSTRUED BY THE CONTRACTOR TO REPRESENT THE ACTUAL QUANTITY OF PIPE REQUIRED.

* NOTE THAT A BUA AS-BUILT SURVEY SHALL BE PROVIDED IN ACCORDANCE WITH APPENDIX 10-1 OF THE MECKLENBURG COUNTY POST-CONSTRUCTION ADMINISTRATIVE MANUAL PRIOR TO THE ISSUANCE OF BMP AS-BUILT APPROVAL.

DRY WELL BMP #2 SUMMARY CHART

PEAK CONTROL	PRE-DEVELOPED (DA-1)	POST-DEVELOPED (DA-1)	BMP#1 ROUTED	BMP #1 STAGE	ON-SITE UNDETAINED	ON-SITE POST TO OUTFALL	RIGHT-OF-WAY TO OUTFALL*	TOTAL POST TO 24" RCP OUTFALL	24" RCP OUTFALL MAX CAPACITY*
TOP OF UGDS				598.00					
50YR-6HR	19.89 CFS	39.63 CFS	8.50 CFS	596.86	3.38 CFS	9.41 CFS	6.31 CFS	16.65 CFS	17.22 CFS
25YR-6HR	15.87 CFS	34.96 CFS	5.19 CFS	596.28	2.68 CFS	5.73 CFS	N/A	N/A	
10YR-6HR	11.85 CFS	30.48 CFS	2.31 CFS	595.64	2.16 CFS	2.53 CFS	N/A	N/A	

BMP	REQUIRED	PROVIDED	ELEVATION
CPv	25,642.82 CF	25,642.82 CF	592.15
WQv	14,465.36 CF	18,131.52 CF	592.94
	TOTAL BUA TO DRY WELL PER DESIGN***		181,007 SF

* NOTE: RIGHT-OF-WAY RUNOFF TO EX. 24" RCP INCLUDED FOR 50-YR STORM ONLY WITH A 10-MIN TIME OF CONCENTRATION.
** NOTE: OUTFALL MAX CAPACITY FOR EXISTING 24-INCH RCP CALCULATION ASSUMES FULL FLOW IN PIPE AT 0.58% SLOPE (PER SURVEY) AND MANNING'S N = 0.013.
*** NOTE: TOTAL BUA TO DRY WELL INCLUDES 41,750 SF OF EXISTING BUA TO REMAIN.

BMP #1 BUA SUMMARY CHART

BMP DRAINAGE AREA	213,546 SF
ROADS & PARKING	95,321 SF
CURB & GUTTER	4,486 SF
SIDEWALK/CONCRETE PADS	5,228 SF
BUILDINGS	±73,971 SF*
FUTURE	N/A
TOTAL BUA to BMP	±84.8% / ±181,007 SF

* NOTE: INCLUDES APPROXIMATELY 41,750 SF OF EXISTING BUILDING TO REMAIN.
** NOTE THAT A BUA AS-BUILT SURVEY SHALL BE PROVIDED TO THE ENGINEER PRIOR TO THE ISSUANCE OF BMP AS-BUILT APPROVAL. SURVEY SHALL BE PREPARED BY A REGISTERED LAND SURVEYOR HIRED BY THE GENERAL CONTRACTOR.

ONE YEAR CONTINUED MAINTENANCE AGREEMENT

THE INFORMATION BELOW SHALL BE INCLUDED IN THE CONTRACT BY THE CONTRACTOR AS REQUIRED IN THE CONTINUED ONE YEAR MAINTENANCE AGREEMENT WITH THE OWNER.

MAINTENANCE INSPECTION REPORTS

AS INDICATED IN THE POST-CONSTRUCTION STORM WATER ORDINANCE, ANNUAL MAINTENANCE INSPECTION REPORTS SHALL BE SUBMITTED TO THE STORM WATER ADMINISTRATOR. THE FIRST REPORT SHALL BE SUBMITTED ONE YEAR FOLLOWING THE FINAL APPROVAL DATE OF THE BMP PER THIS CONTRACT. SUBSEQUENT REPORTS WILL THEN BE THE RESPONSIBILITY OF THE OWNER EACH YEAR THEREAFTER ON OR BEFORE THE APPROVAL ANNIVERSARY DATE. ALL MAINTENANCE ACTIVITIES AND INSPECTION REPORTS SHALL BE DOCUMENTED USING THE FORMS CONTAINED IN THE ADMINISTRATIVE MANUAL. ANNUAL MAINTENANCE INSPECTION REPORTS SHALL BE SEALED BY A REGISTERED NORTH CAROLINA PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT. THESE INSPECTIONS SHALL BE DISCONTINUED ONLY © THE BMPS ARE ACCEPTED FOR MAINTENANCE BY THE APPLICABLE JURISDICTION

NOTE: THE MAINTENANCE AGREEMENT SHALL BEGIN UPON FULL ACCEPTANCE OF THE BMP, NOT NECESSARILY AT SUBSTANTIAL COMPLETION OF THE PROJECT. THE FIRST REPORT BY THE CONTRACTOR SHALL BE PROVIDED AT THE 11 MONTH IN THE 12 MONTH AGREEMENT.

ROUTINE MAINTENANCE TASKS AND SCHEDULE (PER POND OUTFALLS AND NOTES INCLUDED IN THIS SET OF PLANS AND PER SAND FILTER BASIN REQUIREMENTS IN THE STORM WATER BMP MANUAL)

NOTE: WHERE MAINTENANCE IS INDICATED IN THE TABLE AS "ANNUAL", THE TASK SHALL BE PERFORMED AT THE 11 MONTH MARK IN THE 12 MONTH CONTRACT.

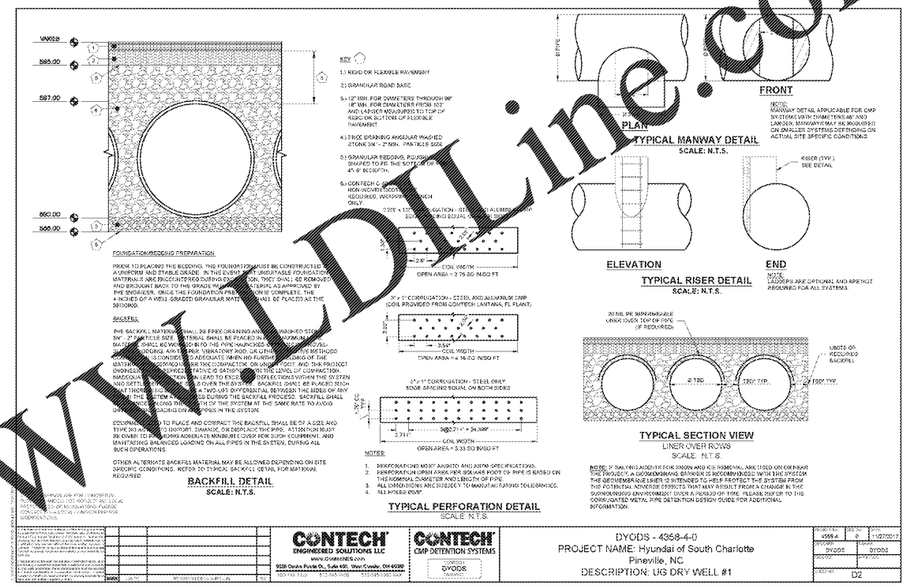
BMP CONSTRUCTION SEQUENCE NOTES:

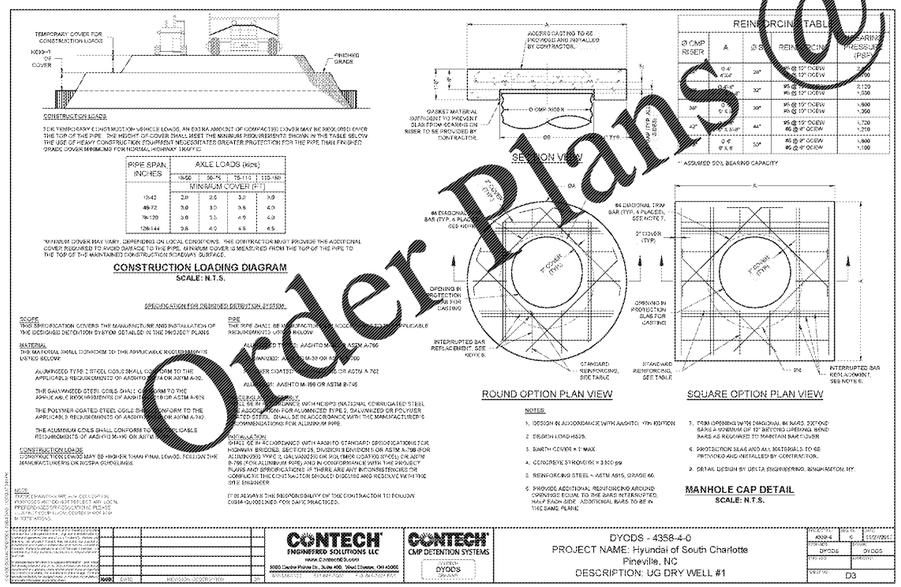
1. CALL THE WATER QUALITY INSPECTOR TO SET UP A BMP PRE-CONSTRUCTION MEETING PRIOR TO STARTING ANY WORK ON BMPS. THE MEETING SHOULD TAKE PLACE AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION ON ANY BMP AND SHALL INCLUDE THE DESIGN ENGINEER TO ENSURE ENGINEER INSPECTIONS ARE PERFORMED AT KEY BMP INSTALLATION PHASES.
2. THE DESIGN ENGINEER MUST VERIFY AND CERTIFY THE DRAINAGE AREA IS PROPERLY STABILIZED, MEASURES ARE IN PLACE TO PREVENT SEDIMENTATION INTO THE BMP, THE STORM DRAINS, INLETS AND PAVEMENT HAVE BEEN PROPERLY CLEANED PRIOR TO COMMENCEMENT OF BMP CONSTRUCTION.
3. ADDITIONAL MEASURES TO ENSURE PROPER CONSTRUCTION AND OPERATION OF THE BMP MAY BE REQUIRED BY THE WATER QUALITY INSPECTOR.
4. A DOUBLE-RINGED INFILTROMETER TEST (ASTM D 3385), OF THE BOTTOM OF THE BMP, MUST BE SUBMITTED TO THE WATER QUALITY INSPECTOR PRIOR TO INSTALLATION OF THE UNDERDRAIN SYSTEM.
5. THE RESULTS OF THE DOUBLE-RINGED INFILTROMETER TEST MUST SHOW INFILTRATION CAPABILITIES, CONFIRMED BY THE DESIGN ENGINEER, AND SUBMITTED FOR BMP AS-BUILT APPROVAL.

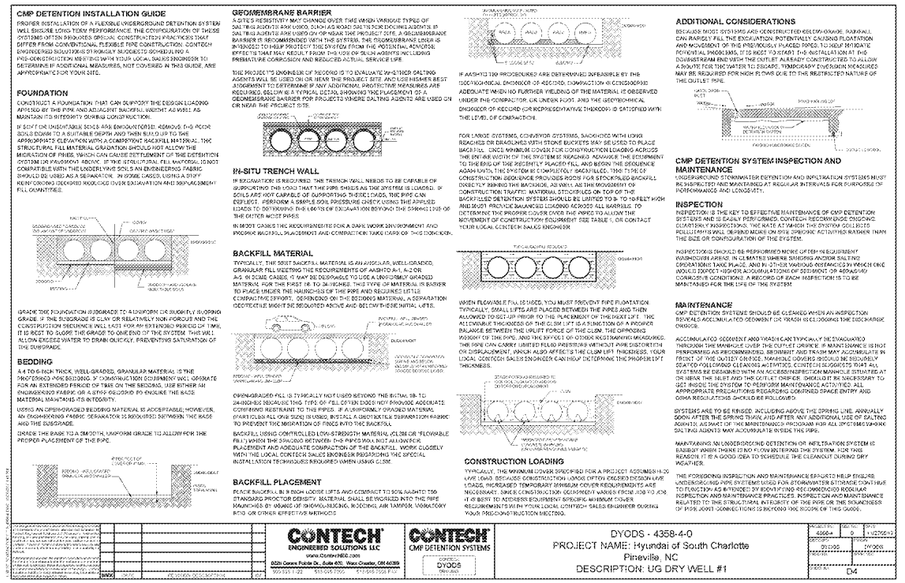
NOTE: CLEANOUTS OF SOLID PVC MUST BE PROVIDED FOR EVERY 50-LF OF UNDERDRAIN, AT ALL BENDS, AND ENDS OF THE SYSTEM FOR MAINTENANCE PURPOSES. THE TOP OF THE CLEANOUTS SHOULD EXTEND 6-INCHES ABOVE THE TOP OF THE FILTER AND HAVE A WATER-TIGHT, VANDAL-PROOF CAP. AT LEAST ONE CLEANOUT SHALL BE INSTALLED AS AN EMERGENCY DRAIN THAT IS FLUSH WITH THE TOP OF FILTER AND HAVE A 6-INCH THREADED EXTENSION PIPE. THE FURTHEST CLEANOUT FROM THE OUTLET MUST HAVE THE MINIMUM REQUIRED FILTER MEDIA DEPTH.

BMP Inset Table
Dry Well #1

Project Name:	Hyundai of South Charlotte
Sequence ID:	1
Surface Area (sq. ft.):	9,991
Drainage Area (acres):	4.9
Land Use/Development Type:	Commercial - Heavy
Percent Built-Upon Area:	84.8
Well Length (ft.):	103
Well Height (ft.):	10
Well Width (ft.):	97
Flow Diverter Present (Y/N):	N
Regulated By:	Post Construction Ordinance
Treatment Effectiveness:	85
NC State Plane X (easting):	5,057,[illegible]
NC State Plane Y (northing):	5,112,30[illegible]







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Hyundai of South Charlotte
10518 Cadillac Street
Pineville, North Carolina

Project No: 17000070.02
Date: 03.04.2020
Revisions:

Sheet Title:
BMP #1 Details

Sheet No:
C504