

SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	
		© 2017 NORRIS & TUNSTALL	

INVENTORY SITE PLAN
BAKER BMW OF WILMINGTON
4900 NEW CENTER DRIVE
WILMINGTON, N. C.

DEVELOPER
 BAKER MOTOR COMPANY, LLC
 4900 NEW CENTER DRIVE
 WILMINGTON, NC 28403
 910 624-6060

NORRIS & TUNSTALL
 CONSULTING ENGINEERS P.C.
 1429 ASH-LITTLE RIVER RD. NW
 WILMINGTON, NC 28401
 PHONE: (910) 343-9653

902 MARKET STREET
 WILMINGTON, NC 28401
 PHONE: (910) 343-9653

- SURVEY LEGEND**
- E.I.P. = EXISTING IRON PIPE
 - E.I. = EXISTING IRON
 - E.C.M. = EXISTING CONCRETE MONUMENT
 - R/W = RIGHT OF WAY
 - C.P. = COMPUTED POINT
 - C/S = CLEAN OUT
 - P/P = POWER POLE
 - INV. = INVERT
 - BFP = BACK FLOW PREVENTER
 - W/M = WATER METER
 - C/O = CLEAN OUT
 - O/H = OVERHEAD
 - U/G = UNDERGROUND
 - FENCE
 - STORM INLET
 - LIGHT POLE
 - PROPERTY LINE
 - BUILDING SETBACK
 - CENTERLINE
 - EASEMENT
 - COMPUTED PROPERTY LINE

TREE TABLE

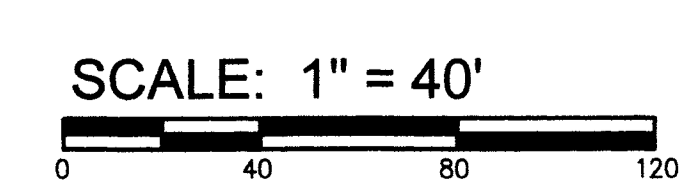
T1	- 21" OAK
T2	- TRIPLE 12" OAK
T3	- TWIN 13"/17" OAK
T4	- 11" OAK
T5	- 8" OAK
T6	- 7" OAK
T7	- 8" OAK
T8	- 7" OAK
T9	- 7" OAK
T10	- 7" OAK
T11	- TWIN 7"/10" OAK
T12	- 15" PINE
T13	- 12" PINE
T14	- 12" HARDWOOD
T15	- 15" PINE
T16	- 12" PINE
T17	- 9" OAK
T18	- 7" OAK
T19	- 8" OAK
T20	- 13" OAK
T21	- 12" PINE
T22	- 9" OAK
T23	- 8" OAK
T24	- 10" OAK
T25	- 8" OAK

INVENTORY SITE DATA

EXISTING PARCEL ID#:	R04915-003-003-001
EXISTING PARCEL PIN#:	313820.80.5964.000
PARCEL ADDRESS:	4920 NEW CENTER DRIVE
PARCEL OWNER:	JASPER BOULEVARD LLC
EXISTING PARCEL AREA:	9.67 AC
NEW PARCEL A:	3.70 AC (161,272 SF)
ADDRESS:	4900 NEW CENTRE DRIVE
NEW PARCEL B:	5.97 AC (259,874 SF)
ADDRESS:	4920 NEW CENTRE DRIVE
EXISTING PARCEL USE:	AUTOMOBILE DEALER
PROPOSED PARCEL USE:	AUTOMOBILE DEALER
CURRENT ZONING:	RB-REGIONAL BUSINESS
CAMA LAND CLASSIFICATION:	URBAN
SOIL TYPE:	MU
SITE DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD AREA	
NO CAMA AREAS OF CONCERN OR ASSOCIATED SETBACKS	
HISTORICAL/ARCHAEOLOGICAL SITE:	NONE
CEMETERY:	NONE
FORESTED AREA:	SEE PLAN FOR TREE SURVEY
WETLANDS:	NONE EXIST WITHIN SITE AREA
ENDANGERED SPECIES/HABITAT:	NONE REPORTED

- SURVEYOR NOTES:**
- AREA COMPUTED BY COORDINATE METHOD.
 - ALL DISTANCES ARE HORIZONTAL GROUND.
 - THIS SURVEY IS NOT FOR RECORDATION, IT DOES NOT MEET ALL REQUIREMENTS OF G.S. 47-30.
 - THE UNDERGROUND UTILITIES SHOWN ON THIS SURVEY ARE LOCATED FROM FIELD SURVEY INFORMATION, AND EXISTING AS-BUILT DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THE UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.
 - FOR REFERENCE SEE DEED BOOK 1466 PAGE 338 & DEED BOOK 2124 PAGE 57.
 - THIS TRACT IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM 37203138J, EFFECTIVE DATE APRIL 3, 2006.
 - VERTICAL DATUM NAVD 88
 - NO OBSERVED EVIDENCE OF RECENT EARTH MOVING ACTIVITY.
 - NO OBSERVED EVIDENCE OF A SOLID WASTE DUMP BASED ON RECENT SURVEY AND OBSERVED EVIDENCE NO WETLANDS.

SURVEY NOTE:
 SURVEY DATA PROVIDED BY HANOVER DESIGN SERVICES, P.A.
 1123 FLORAL PARKWAY, WILMINGTON, NC 28403
 PHONE: (910) 343-8002.
 SURVEY DATED DECEMBER 8, 2015.



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

City of WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: 8/1/17 Permit: 9903224
 Signed: [Signature]
Approved Construction Plan
 Name: [Name] Date: [Date]
 Planning: [Signature] 8/1/17
 Traffic: [Signature] 8-2-17
 Fire: [Signature] 8-2-17

NC DENR PWSS WATER PERMIT # _____ GPD
 WATER CAPACITY: _____ GPD
 DWD SEWER PERMIT # _____ GPD
 SEWER CAPACITY: _____ GPD
 SEWER SHED # AND PLANT: _____
 SEWER TO FLOW THROUGH NEI: YES or NO (CIRCLE ONE)

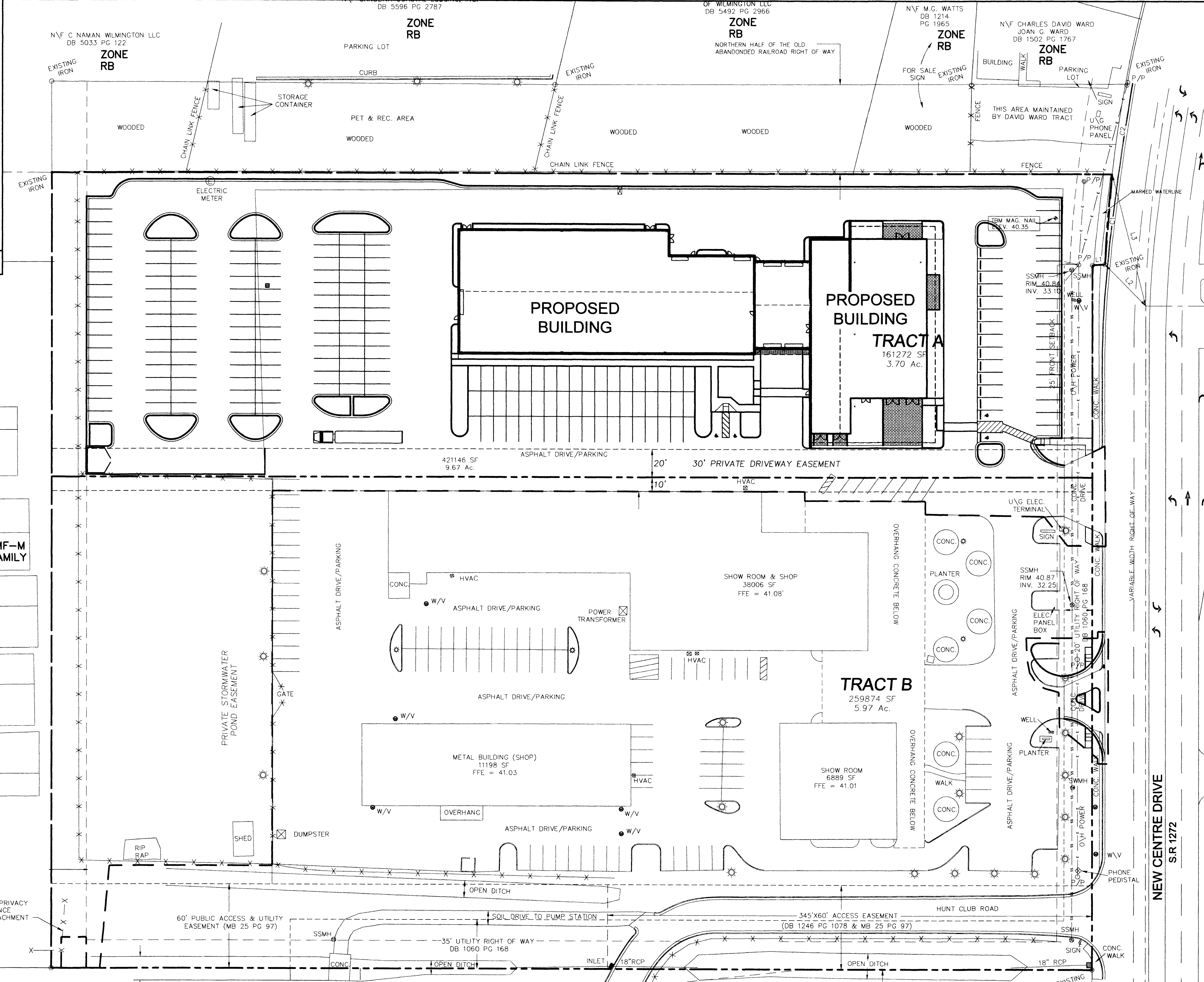
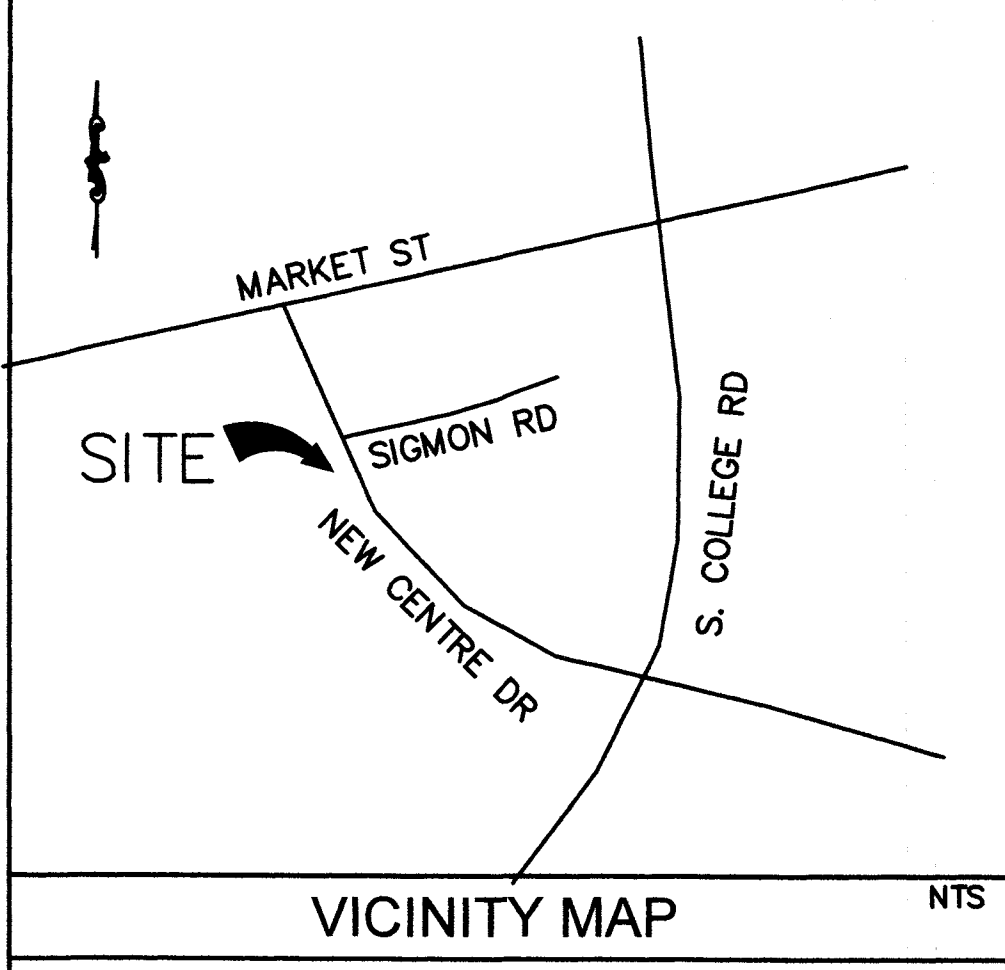
Licence #C-3641

16038

DES. JST
 CDR. JPN
 DRWL. NKS

DATE 2/1/17

11



LEGEND

	PROPERTY LINE
	DISTURBED AREA LIMITS
	PROPOSED CONTOUR
	TEMPORARY SILT FENCE
	PROPOSED STORMDRAIN PIPE
	PROPOSED WATERLINE
	PROPOSED SANITARY SEWER
	PROPOSED FINISH GRADE SPOT ELEVATION
	FLARED END SECTION WITH RIP-RAP ENERGY DISSIPATOR
	DROP INLET WITH INLET PROTECTION (DI)
	CURB INLET WITH INLET PROTECTION (CI)
	JUNCTION BOX WITH INLET PROTECTION (JB)
	PROPOSED FIRE HYDRANT

	EXISTING CONTOUR
	EXISTING TREE TO BE SAVED
	EXISTING TREE TO BE REMOVED
	TREE PROTECTION FENCING
	LIGHT ASPHALT
	HEAVY ASPHALT
	CONCRETE
	INTERIOR LANDSCAPING

SITE DATA TABLE

NEW PARCEL A ID#:	R04915-003-054-000
NEW PARCEL A PIN#:	313820.81.4241.000
SITE ADDRESS:	4900 NEW CENTER DRIVE
PARCEL OWNER:	JASPER BOULEVARD LLC
NEW PARCEL A AREA:	3.70 AC (161,272 SF)
NEW PARCEL B ID#:	R04915-003-003-001
NEW PARCEL B PIN#:	313820.80.5964.000
SITE ADDRESS:	4920 NEW CENTER DRIVE
PARCEL OWNER:	JASPER BOULEVARD LLC
NEW PARCEL B AREA:	5.97 AC (259,874 SF)
PROPOSED PARCEL USE:	AUTOMOBILE DEALER PARKING
CURRENT ZONING:	RB-REGIONAL BUSINESS
CAMA LAND CLASSIFICATION:	URBAN
SOIL TYPE:	MU
BUILDING SETBACKS RB:	FRONT SETBACK: 25' INTERIOR SIDE SETBACK: 0' CORNER SIDE SETBACK: 25' REAR SETBACKS: 15'/25'
BUILDING SETBACKS PROPOSED:	FRONT SETBACK: 112'± SIDE SETBACK SE: 24'± SIDE SETBACK NW: 54'± REAR SETBACKS: 290'±
BUILDING AREA (FOOTPRINT):	10,208 SF SALES AREA 2,413 SF SERVICE DRIVE 17,617 SF SERVICE SHOP 30,238 SF TOTAL
DISTURBED AREA:	214,399 SF = 4.92 AC
MAX. LOT COVERAGE RB:	40%
PROPOSED LOT COVERAGE:	18.75%
MAX. BUILDING HEIGHT RB:	35'
BUILDING HEIGHT:	VARIES 27'-31'
BUILDING CONSTRUCTION TYPE:	
IMPERVIOUS AREA PARCEL A:	
EXISTING IMPERVIOUS AREA:	117,362 SF
EXISTING IMPERVIOUS AREA REMOVED:	116,807 SF
EXISTING IMPERVIOUS AREA TO REMAIN:	555 SF
PROPOSED IMPERVIOUS AREA:	
BUILDING AREA:	30,238 SF
SIDEWALK AREA:	5,990 SF
ASPHALT, CONCRETE, CURB & GUTTER, APRON AREA:	97,431 SF
TOTAL NEW IMPERVIOUS AREA:	134,547 SF
PERCENT IMPERVIOUS AREA:	83.42%
TOTAL PARCEL A IMP. AREA (NEW & EXISTING)	135,102 SF
PERCENT IMPERVIOUS AREA:	83.77%
IMPERVIOUS AREA PARCEL B:	
EXISTING IMPERVIOUS AREA:	159,202 SF
EXISTING IMPERVIOUS AREA REMOVED:	7,017 SF
EXISTING IMPERVIOUS AREA TO REMAIN:	152,185 SF
PROPOSED IMPERVIOUS AREA:	
ASPHALT, CONCRETE, CURB & GUTTER AREA:	7,017 SF
TOTAL NEW IMPERVIOUS AREA:	7,017 SF
TOTAL SITE PARCEL B IMPERVIOUS AREA:	159,202 SF
PERCENT IMPERVIOUS AREA:	61.26%
PARKING REQUIREMENT (SEE SITE PLAN KEY NOTES SHEET C4)	
PARKING REQ'D: AUTOMOBILE DEALER NO MAX, 1/500 SF GFA MIN.	
TOTAL PARKING REQUIRED:	60 MIN.
TOTAL PARKING PROVIDED:	203 TOTAL
EMPLOYEE AND CUSTOMER PARKING:	60 SPACES
VEHICLE DISPLAY:	143 SPACES
HC ACCESSIBLE REQUIRED:	3 PROPOSED: 4
BICYCLE PARKING REQUIRED:	5 PROPOSED: 5
LANDSCAPING REQUIREMENTS (REFER TO LANDSCAPE PLAN)	
15 TREES PER DISTURBED ACRE REQUIRED	
STREETYARD LANDSCAPING: 25 MULTIPLIER	
216-18 (25) = 4,950 SF REQUIRED	5,086 SF PROPOSED
FOUNDATION PLANTINGS: 12% BUILDING HEIGHT X LENGTH	
PARKING AREA SCREENING ALONG ROW: BUFFER 3' HIGH BY 5' WIDE	SEE LANDSCAPE PLANS
TRASH REMOVAL: DUMPSTER SERVICE	
WATER AND SEWER CAPACITY NEEDS	
48 EMPLOYEES @ 25 GAL/EMPLOYEE/DAY=1,200 GPD	
12 VISITORS @ 25 GAL/EMPLOYEE/DAY=300 GPD	
TOTAL: 1,500 GPD	

SCALE: 1" = 40'

NCDENR PWSS WATER PERMIT #	
WATER CAPACITY:	GPD
DWQ SEWER PERMIT #	
SEWER CAPACITY:	GPD
SEWER SHED # AND PLANT:	
SEWER TO FLOW THROUGH NEI:	YES OR NO (CIRCLE ONE)

Approved Construction Plan

Name: *[Signature]* Date: *[Date]*

Planning: *[Signature]* Traffic: *[Signature]* Fire: *[Signature]*

City of WILMINGTON NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: *[Date]* Permit #: *[Permit #]*

Signature: *[Signature]*

OVERALL SITE PLAN

BAKER MOTOR COMPANY, LLC

4920 NEW CENTER DRIVE

WILMINGTON, NC 28403

910 624-6660

DEVELOPER

NORRIS & TUNSTALL

CONSULTING ENGINEERS P.C.

1429 ASH-LITTLE RIVER RD. NW

WILMINGTON, NC 28403

PHONE: (910) 343-9633

1429 ASH-LITTLE RIVER RD. NW

WILMINGTON, NC 28403

PHONE: (910) 287-5900

16038

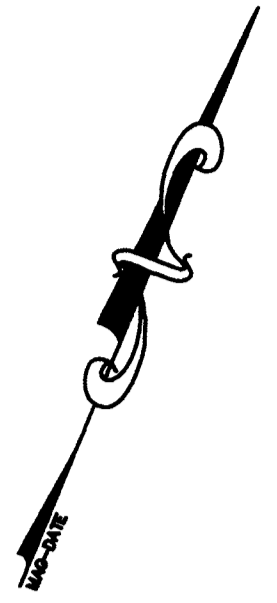
DES: JST

DRN: JPN

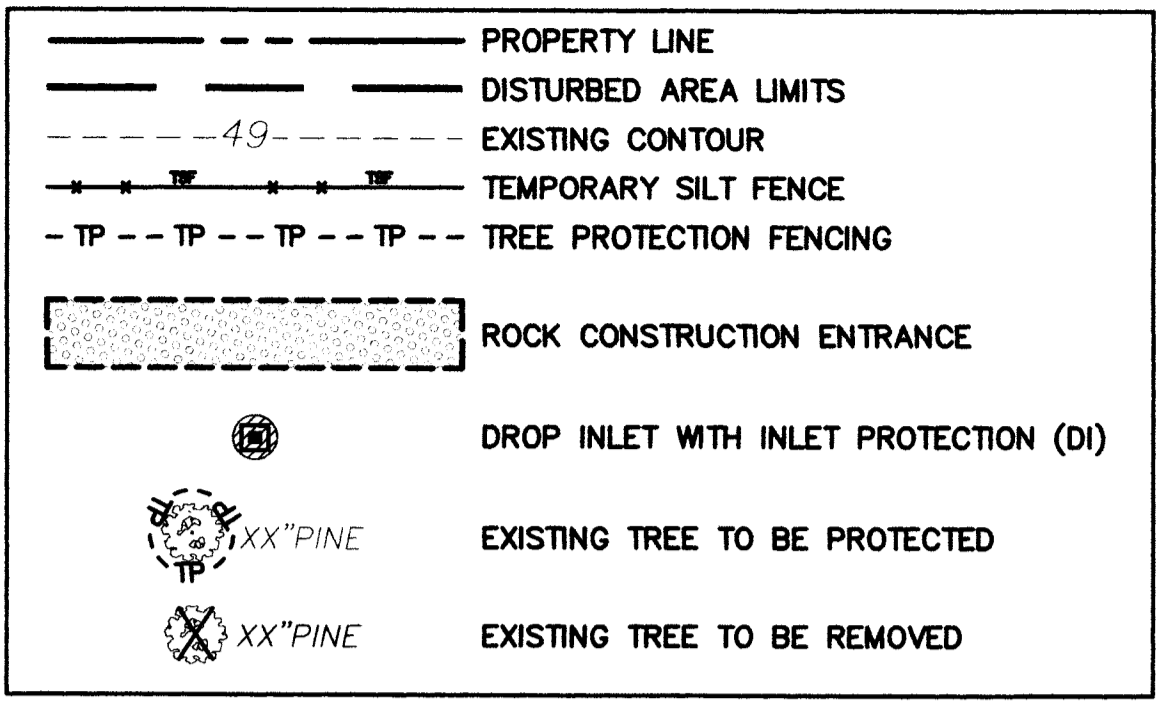
DATE: 2/1/17

Seal: NORTH CAROLINA PROFESSIONAL ENGINEERS SEAL 19851

CO



LEGEND

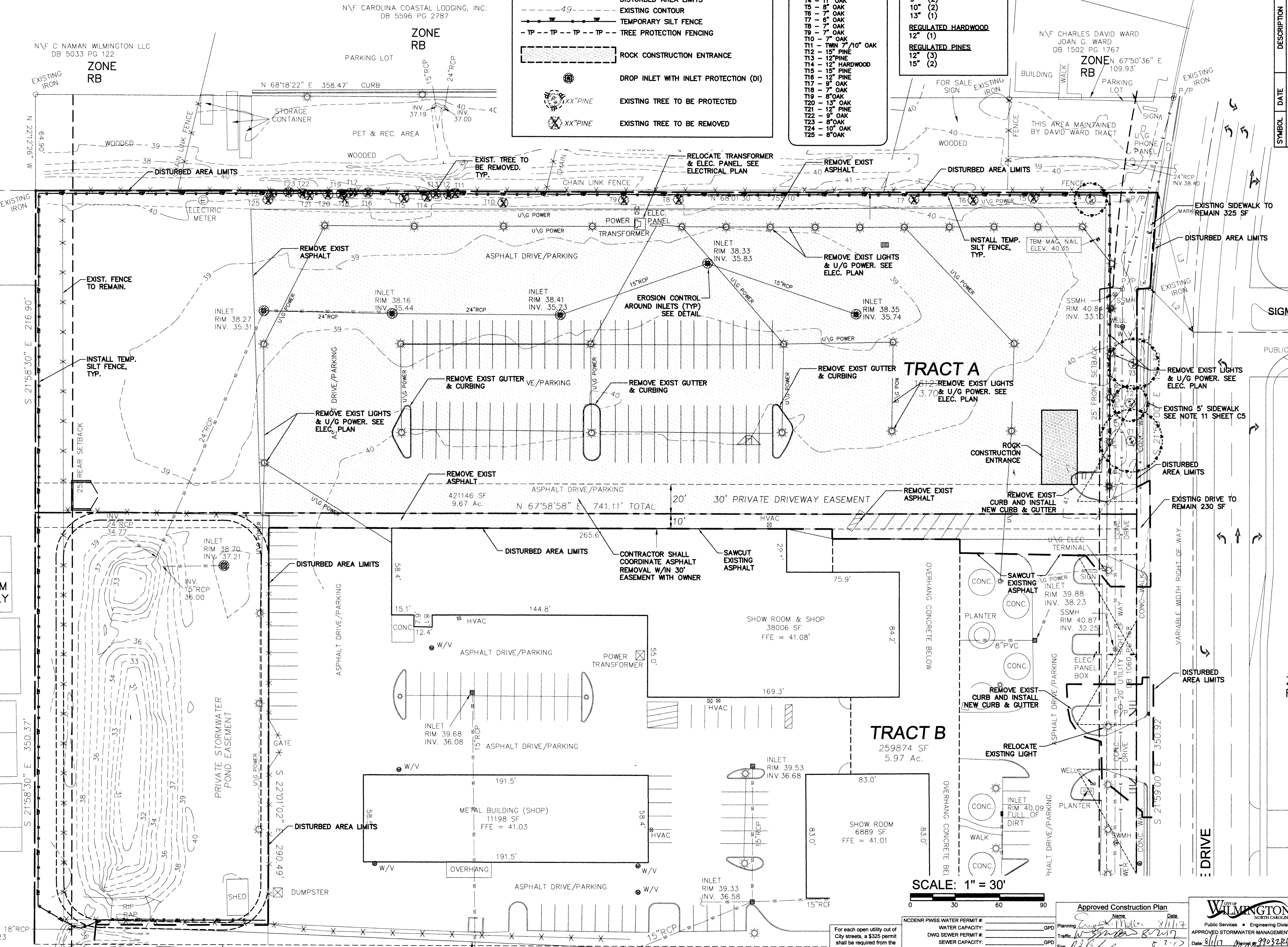


EXISTING TREE TABLE

T1	- 21" OAK
T2	- TRIPLE 12" OAK
T3	- TWIN 13" / 17" OAK
T4	- 11" OAK
T5	- 8" OAK
T6	- 7" OAK
T7	- 6" OAK
T8	- 7" OAK
T9	- 7" OAK
T10	- 7" OAK
T11	- TWIN 7" / 10" OAK
T12	- 15" PINE
T13	- 12" PINE
T14	- 12" HARDWOOD
T15	- 15" PINE
T16	- 12" PINE
T17	- 9" OAK
T18	- 8" OAK
T19	- 8" OAK
T20	- 13" OAK
T21	- 12" PINE
T22	- 9" OAK
T23	- 8" OAK
T24	- 10" OAK
T25	- 8" OAK

TREE REMOVAL TABLE

REGULATED OAKS	
8"	(4)
9"	(2)
10"	(2)
13"	(1)
REGULATED HARDWOOD	
12"	(1)
REGULATED PINES	
12"	(3)
15"	(2)



SYMBOL	DATE	DESCRIPTION	BY
	2017	REVISIONS	
		2017 NORRIS & TUNSTALL	

DEMOLITION & TREE REMOVAL PLAN
BAKER BMW OF WILMINGTON
4900 NEW CENTER DRIVE
WILMINGTON, N. C.

DEVELOPER
BAKER MOTOR COMPANY, LLC
 4920 NEW CENTRE DRIVE
 WILMINGTON, NC 28403
 910-624-6060

NORRIS & TUNSTALL
 CONSULTING ENGINEERS P.C.
 902 MARKET STREET
 WILMINGTON, NC 28401
 PHONE (910) 343-9653
 1429 ASHLITTLE RIVER RD. NW
 ASH, NC 28420
 PHONE (910) 287-5900

Licence #C-3641
16038
 DES: JST
 CIB: JPN
 DRAWN: NKS
 DATE: 2/1/17

APPROVED CONSTRUCTION PLAN
 Name: *[Signature]* Date: 2/1/17
 Planning: *[Signature]* Date: 2/1/17
 Traffic: *[Signature]* Date: 2/1/17
 Fire: *[Signature]* Date: 2/1/17
 Signed: *[Signature]*

Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: 2/1/17 Permit # 9903281
 Signed: *[Signature]*

C1

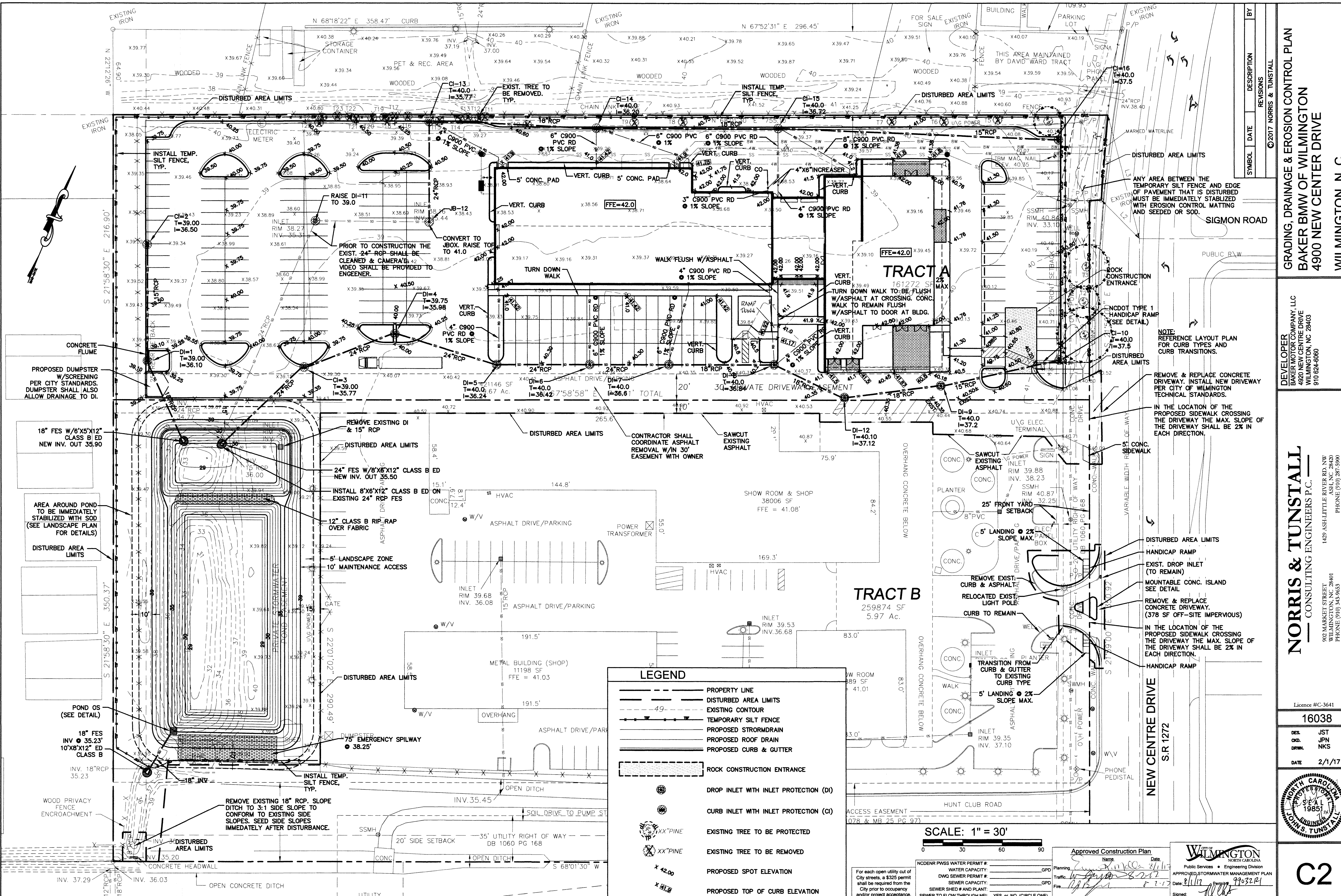
ILLAGE HOA, INC PG 910

F:\Projects\2016\16038 Baker BMW of Wilmington\16038 Baker BMW of Wilmington\16038 master.dwg (Layout) Printed on: Jul 31, 2017 - 1:55pm by caduser

SCALE: 1" = 30'



NCDENR PWSS WATER PERMIT #:	GPD
WATER CAPACITY:	
DWO SEWER PERMIT #:	GPD
SEWER CAPACITY:	
SEWER SHED # AND PLANT:	
SEWER TO FLOW THROUGH NEI: YES OR NO (CIRCLE ONE)	



SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	

GRADING, DRAINAGE & EROSION CONTROL PLAN
BAKER BMW OF WILMINGTON
4900 NEW CENTER DRIVE
WILMINGTON, N. C.

DEVELOPER
 BAKER MOTOR COMPANY, LLC
 4900 NEW CENTER DRIVE
 WILMINGTON, NC 28403
 910.624.6060

NORRIS & TUNSTALL
 CONSULTING ENGINEERS P.C.
 1429 ASHLITTLE RIVER RD NW
 WILMINGTON, NC 28401
 PHONE (910) 343-9653

License #C-3641

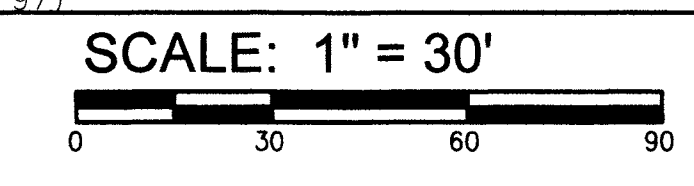
16038

DATE: 2/1/17

C2

LEGEND

- PROPERTY LINE
- DISTURBED AREA LIMITS
- EXISTING CONTOUR
- TEMPORARY SILT FENCE
- PROPOSED STORMDRAIN
- PROPOSED ROOF DRAIN
- PROPOSED CURB & GUTTER
- ROCK CONSTRUCTION ENTRANCE
- DROP INLET WITH INLET PROTECTION (DI)
- CURB INLET WITH INLET PROTECTION (CI)
- EXISTING TREE TO BE PROTECTED
- EXISTING TREE TO BE REMOVED
- PROPOSED SPOT ELEVATION
- PROPOSED TOP OF CURB ELEVATION



Approved Construction Plan

Name: _____ Date: _____

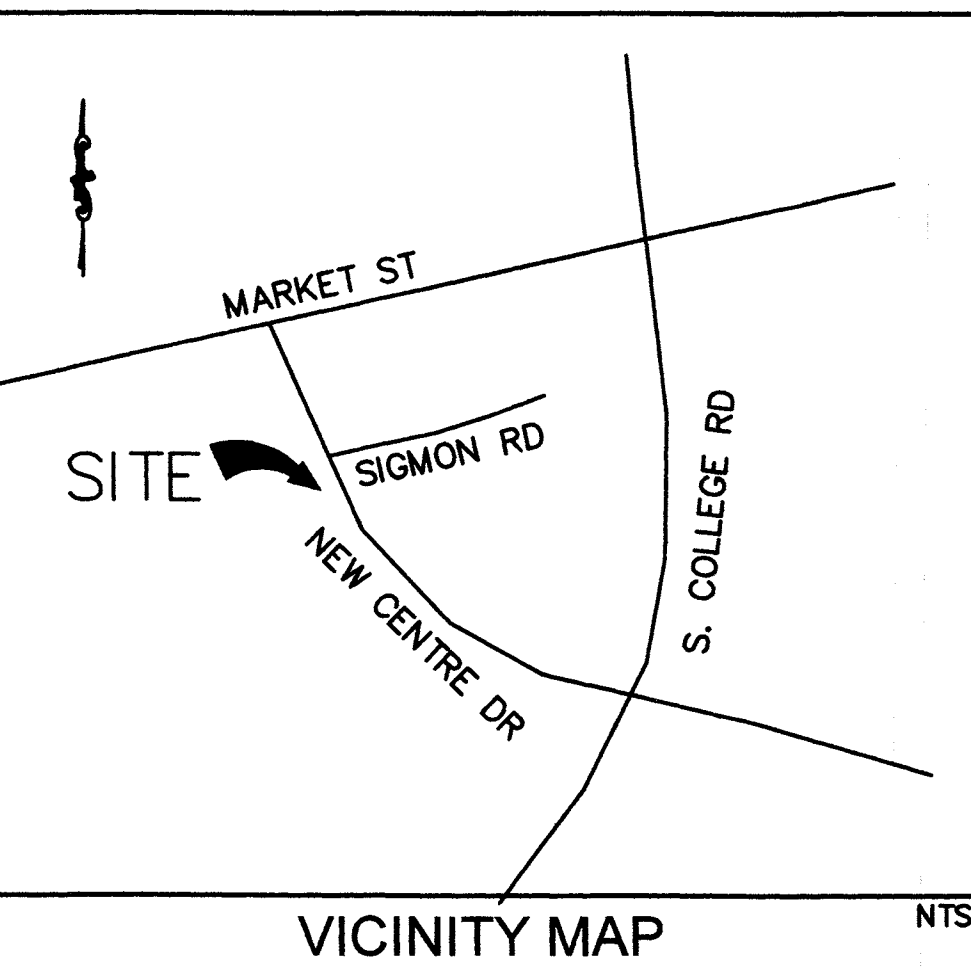
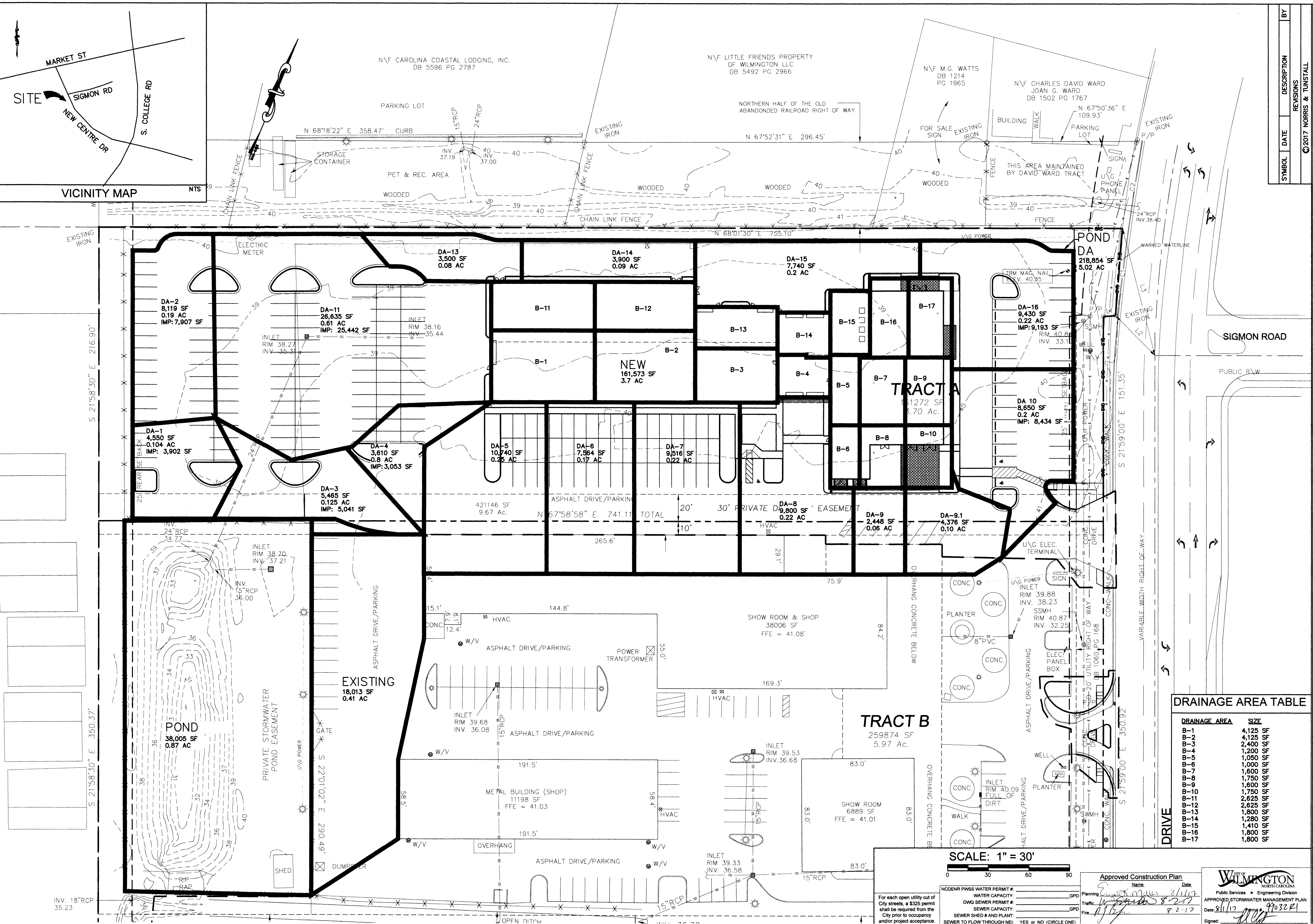
City of WILMINGTON
 Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

NCDENR PWSS WATER PERMIT # _____
 WATER CAPACITY: _____ GPD
 DWQ SEWER PERMIT # _____
 SEWER CAPACITY: _____ GPD
 SEWER SHED # AND PLANT: _____
 SEWER TO FLOW THROUGH NEI: YES OR NO (CIRCLE ONE)

Planning: _____
 Traffic: _____
 Fire: _____
 Date: 8/1/17 Permit: 9903221
 Signed: _____

E:\Projects\16038\16038 - Baker BMW of Wilmington\16038 - Baker BMW of Wilmington.dwg (copy) Printed on: 2/1/2017 1:58pm by: cadwin



SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	
		©2017 NORRIS & TUNSTALL	

DRAINAGE AREA PLAN
BAKER BMW OF WILMINGTON
4900 NEW CENTER DRIVE
WILMINGTON, N. C.

DEVELOPER
BAKER MOTOR COMPANY, LLC
 4920 NEW CENTRE DRIVE
 WILMINGTON, NC 28403
 910.624.6060

NORRIS & TUNSTALL
 CONSULTING ENGINEERS P.C.
 902 MARKET STREET
 WILMINGTON, NC 28401
 PHONE (910) 343-9653

Licence #C-3641
16038
 DES: JST
 C.D.: JPN
 DRW: NKS
 DATE: 2/1/17

C2.1

DRAINAGE AREA	SIZE
B-1	4,125 SF
B-2	4,125 SF
B-3	2,400 SF
B-4	1,200 SF
B-5	1,050 SF
B-6	1,000 SF
B-7	1,600 SF
B-8	1,750 SF
B-9	1,600 SF
B-10	1,750 SF
B-11	2,625 SF
B-12	2,625 SF
B-13	1,800 SF
B-14	1,280 SF
B-15	1,410 SF
B-16	1,800 SF
B-17	1,800 SF

SCALE: 1" = 30'

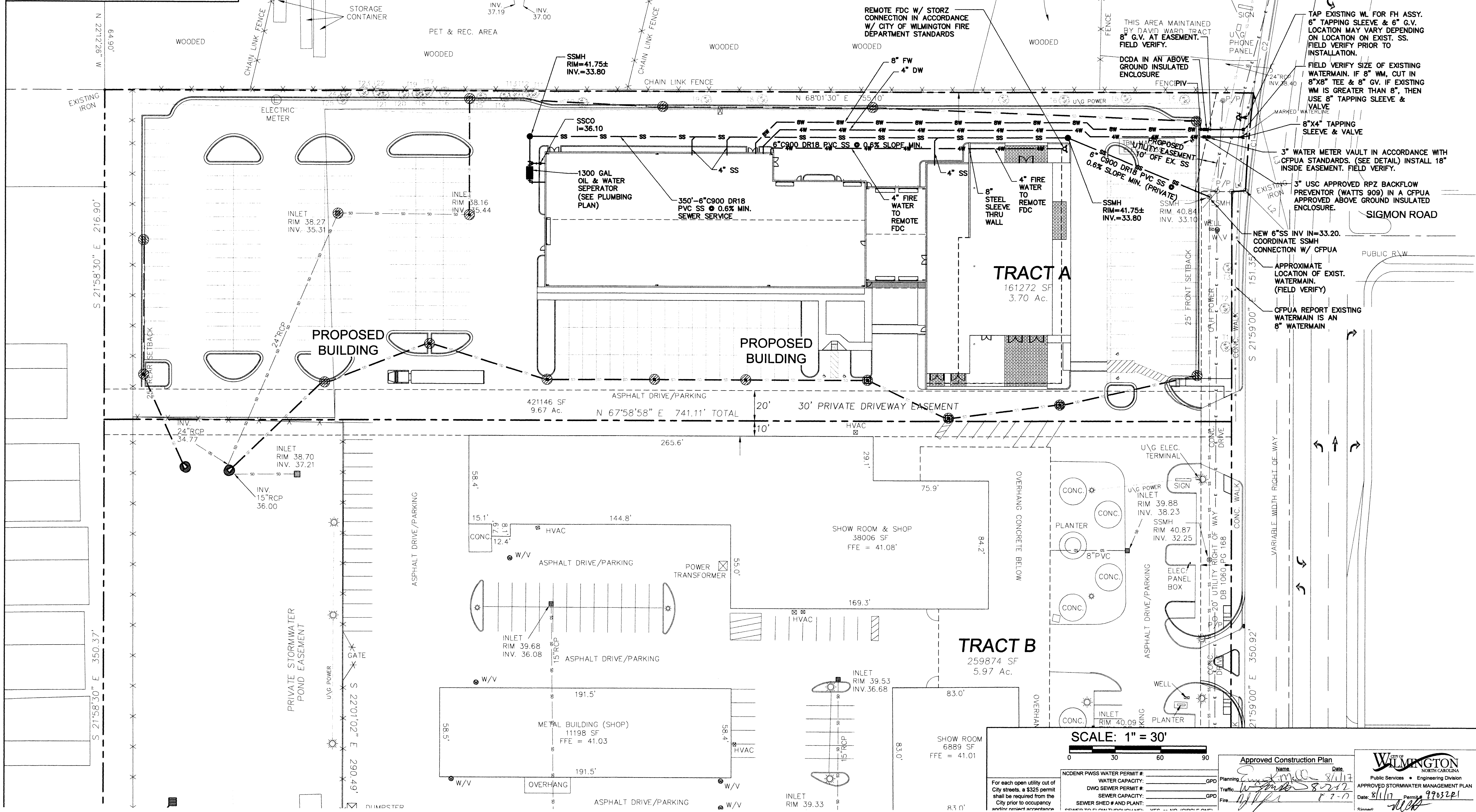
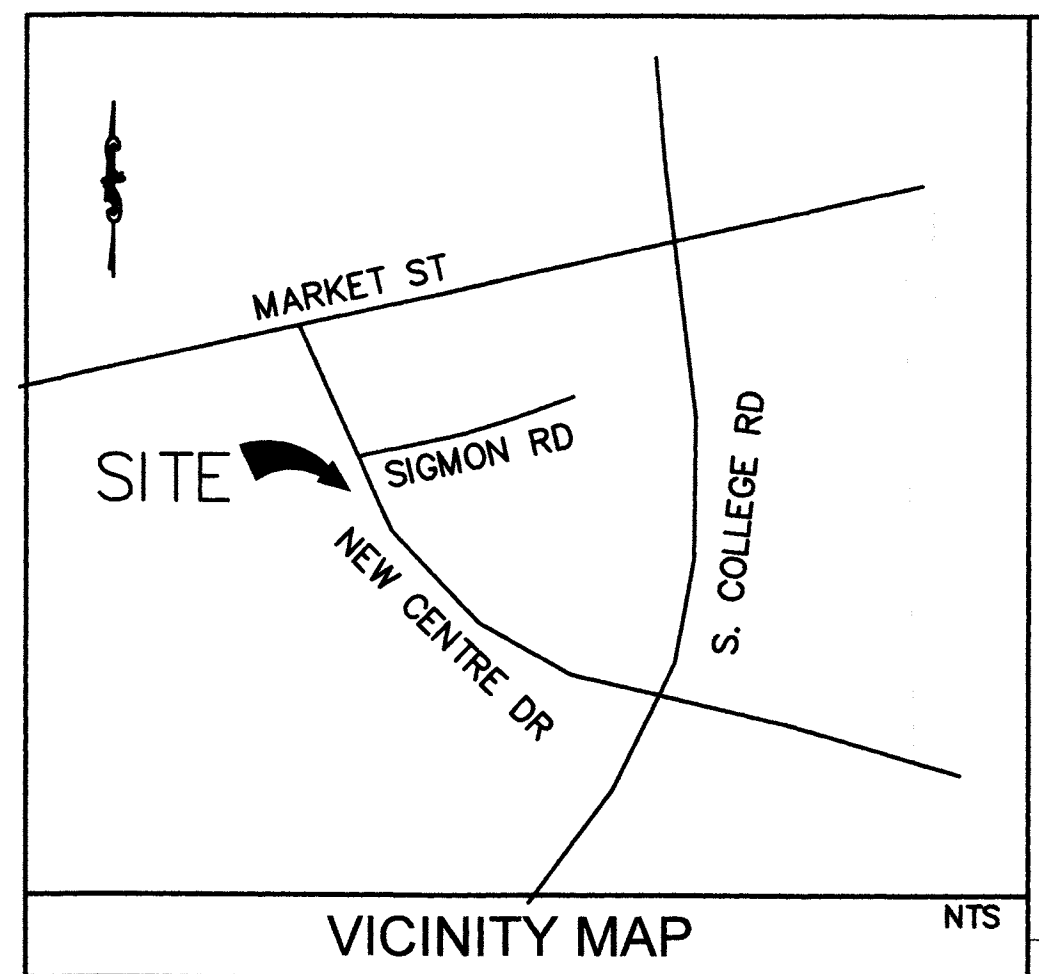
Approved Construction Plan

For each open utility out of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

NCDENR PWSS WATER PERMIT # _____ GPD
 WATER CAPACITY: _____ GPD
 DWQ SEWER PERMIT # _____ GPD
 SEWER CAPACITY: _____ GPD
 SEWER SHED # AND PLAN: _____
 SEWER TO FLOW THROUGH NEI: YES OR NO (CIRCLE ONE)

Planning: _____ Date: 8/1/17
 Traffic: _____ Date: 8/2/17
 File: _____ Date: 8/2/17

City of Wilmington
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: 2/1/17
 Signature: _____



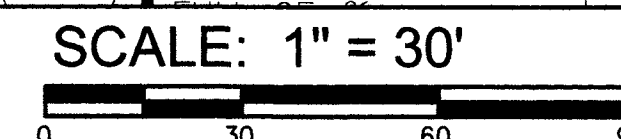
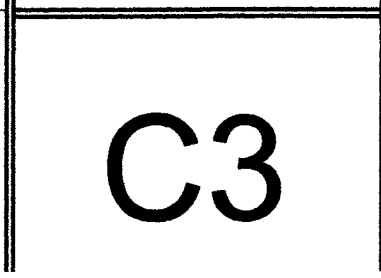
BY	DATE	DESCRIPTION
		REVISIONS

UTILITY PLAN
BAKER BMW OF WILMINGTON
4920 NEW CENTER DRIVE
WILMINGTON, N. C.

DEVELOPER
 BAKER MOTOR COMPANY, LLC
 4920 NEW CENTER DRIVE
 WILMINGTON, NC 28403
 910 624-6060

NORRIS & TUNSTALL
 CONSULTING ENGINEERS P.C.
 1429 ASH-LITTLE RIVER RD. NW
 ASH, NC 28420
 PHONE (910) 287-5900

License #C-3641
16038
 DES. JST
 CD. JPN
 DRW. NKS
 DATE 4/13/17



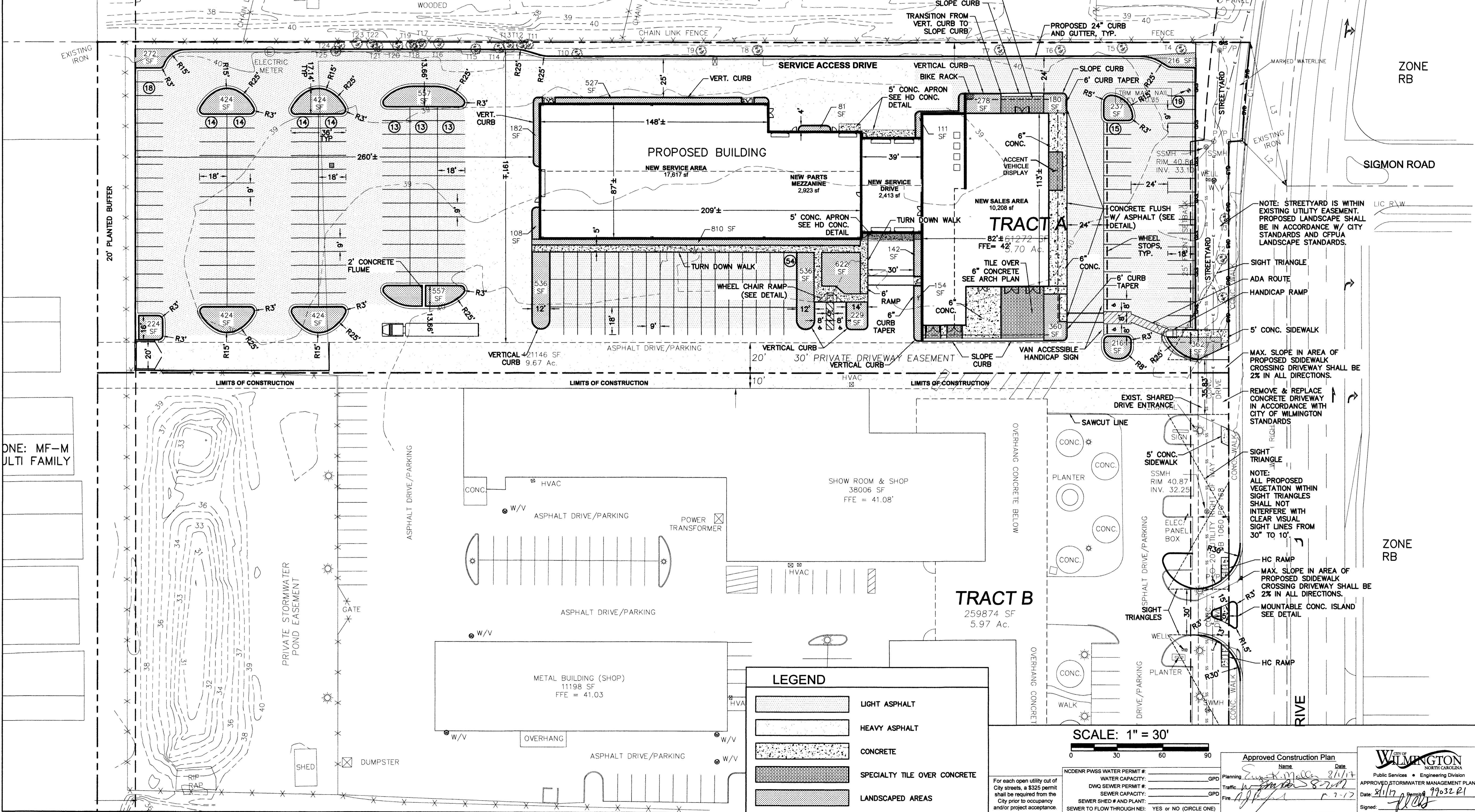
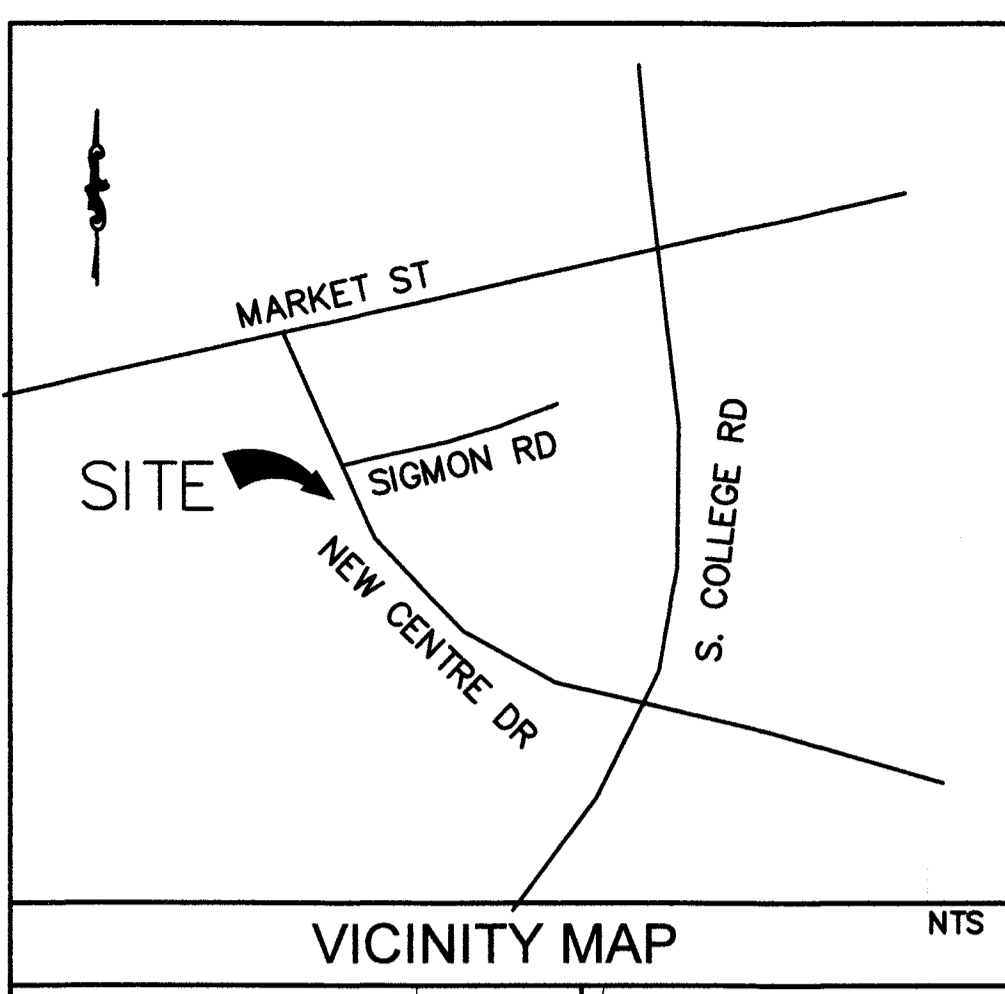
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or road appearance.

Approved Construction Plan
 Name: *[Signature]* Date: *3/11/17*
 Planning: *[Signature]* Date: *3/11/17*
 Traffic: *[Signature]* Date: *3/11/17*
 Fire: *[Signature]* Date: *3/11/17*

NC DENR PWSS WATER PERMIT # _____ GPD
 WATER CAPACITY: _____ GPD
 DWQ SEWER PERMIT # _____ GPD
 SEWER CAPACITY: _____ GPD
 SEWER SHED # AND PLANT: _____

City of WILMINGTON
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: *3/11/17* Permit: *9903221*
 Signer: *[Signature]*

C3



ONE: MF-M
ULTI FAMILY

F:\Projects\2016\16038 Baker, Borer, Borer of Wilmington\16038 Plans\16038-master.dwg (Layout) Plotted on: Jul 31, 2017 - 2:08pm by Colander

N\F CAROLINA COASTAL LODGING, INC.
DB 5596 PG 2787

N\F LITTLE FRIENDS PROPERTY
OF WILMINGTON LLC
DB 5492 PG 2966

N\F M.G. WATTS
DB 1214
PG 1965

N\F CHARLES DAVID WARD
JOAN C. WARD
DB 1502 PG 1767

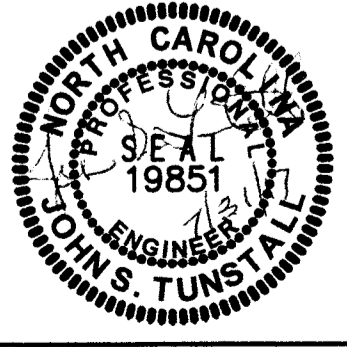
SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	

LAYOUT PLAN
BAKER BMW OF WILMINGTON
4900 NEW CENTER DRIVE
WILMINGTON, N. C.

DEVELOPER
BAKER MOTOR COMPANY, LLC
4920 NEW CENTRE DRIVE
WILMINGTON, NC 28403
910 624-6060

NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
902 MARKET STREET
WILMINGTON, NC 28401
PHONE (910) 343-9653
1429 ASH LITTLE RIVER RD NW
ASH, NC 28420
PHONE (910) 287-5900

Licence #C-3641
16038
DES: JST
CHK: JFN
DRWN: NKS
DATE: 2/1/17



C4

LEGEND

[Pattern]	LIGHT ASPHALT
[Pattern]	HEAVY ASPHALT
[Pattern]	CONCRETE
[Pattern]	SPECIALTY TILE OVER CONCRETE
[Pattern]	LANDSCAPED AREAS

SCALE: 1" = 30'

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

NC DENR PW58 WATER PERMIT # _____
WATER CAPACITY: _____ GPD
DWO SEWER PERMIT # _____
SEWER CAPACITY: _____ GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES OR NO (CIRCLE ONE)

Approved Construction Plan
Name: S. Tunstall Date: 8/1/17
Signature: [Signature]
Title: Professional Engineer
Date: 8/1/17 Permit: 99032 P1
City of Wilmington
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Signed: [Signature]

NOTE: STREETYARD IS WITHIN EXISTING UTILITY EASEMENT. PROPOSED LANDSCAPE SHALL BE IN ACCORDANCE W/ CITY STANDARDS AND CFPUA LANDSCAPE STANDARDS.

SIGHT TRIANGLE
ADA ROUTE
HANDICAP RAMP
5' CONC. SIDEWALK

MAX. SLOPE IN AREA OF PROPOSED SIDEWALK CROSSING DRIVEWAY SHALL BE 2% IN ALL DIRECTIONS.

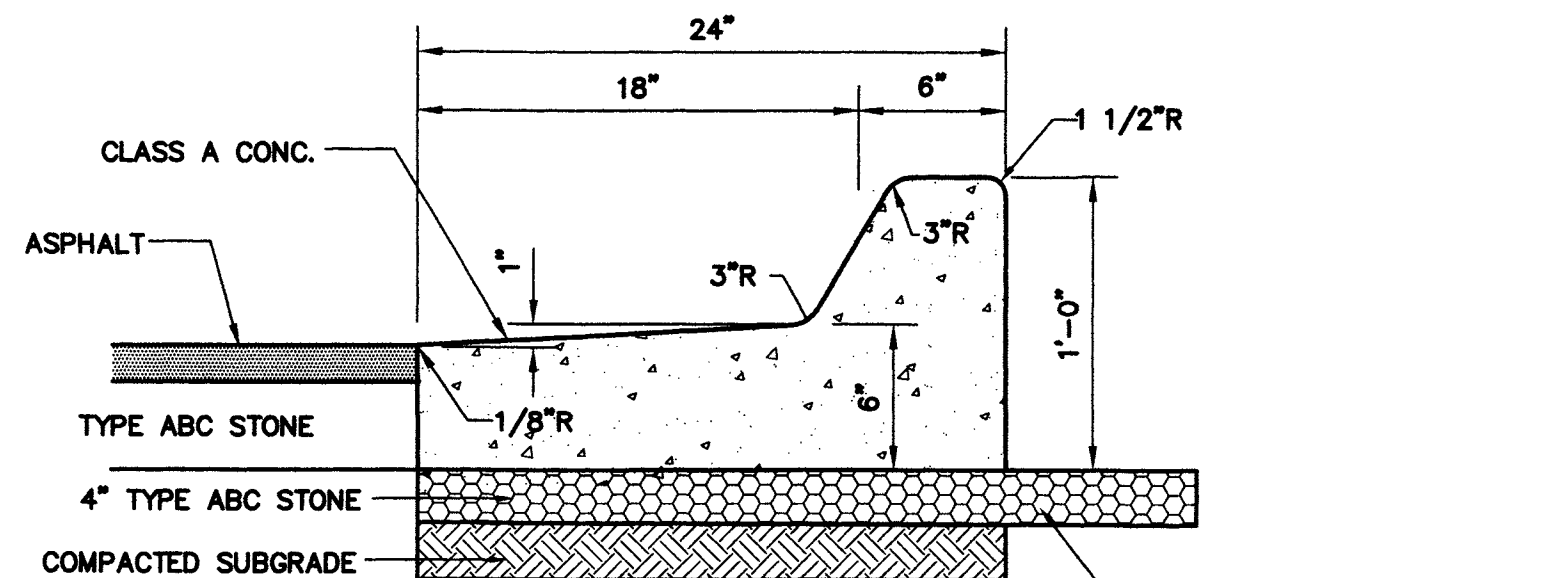
REMOVE & REPLACE CONCRETE DRIVEWAY IN ACCORDANCE WITH CITY OF WILMINGTON STANDARDS

SIGHT TRIANGLE
NOTE: ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30' TO 10'.

HC RAMP
MAX. SLOPE IN AREA OF PROPOSED SIDEWALK CROSSING DRIVEWAY SHALL BE 2% IN ALL DIRECTIONS.

MOUNTABLE CONC. ISLAND
SEE DETAIL

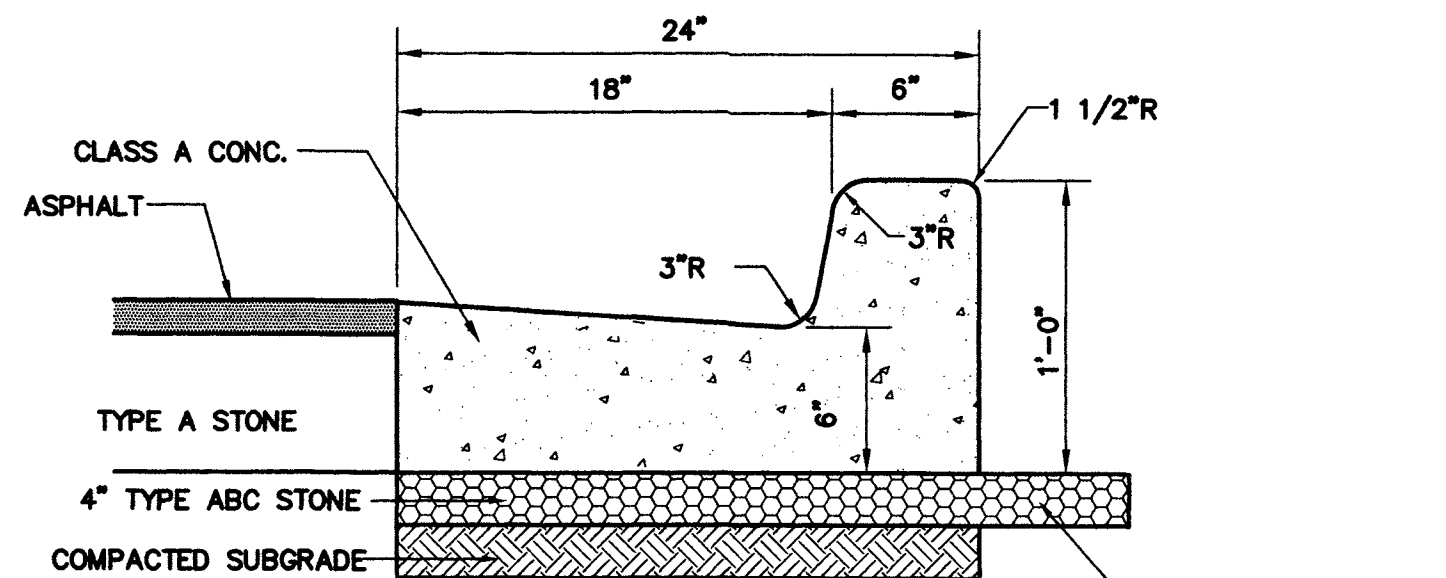
NOTE: INSTALLATION OF NEW 24" CURB AND GUTTER ALONG ANY COW OR NCDOT STREET SHALL REQUIRE A 6" ABC STONE BASE.



NOTE: CURB TYPE DEPENDS ON GRADES SHOWN ON GRADING PLAN. GRADES INDICATING FALL AWAY FROM CURB SHALL BE SPILL OFF TYPE CURB. GRADES INDICATING CURB ACCEPTING FLOW SHALL BE FLOW LINE TYPE.

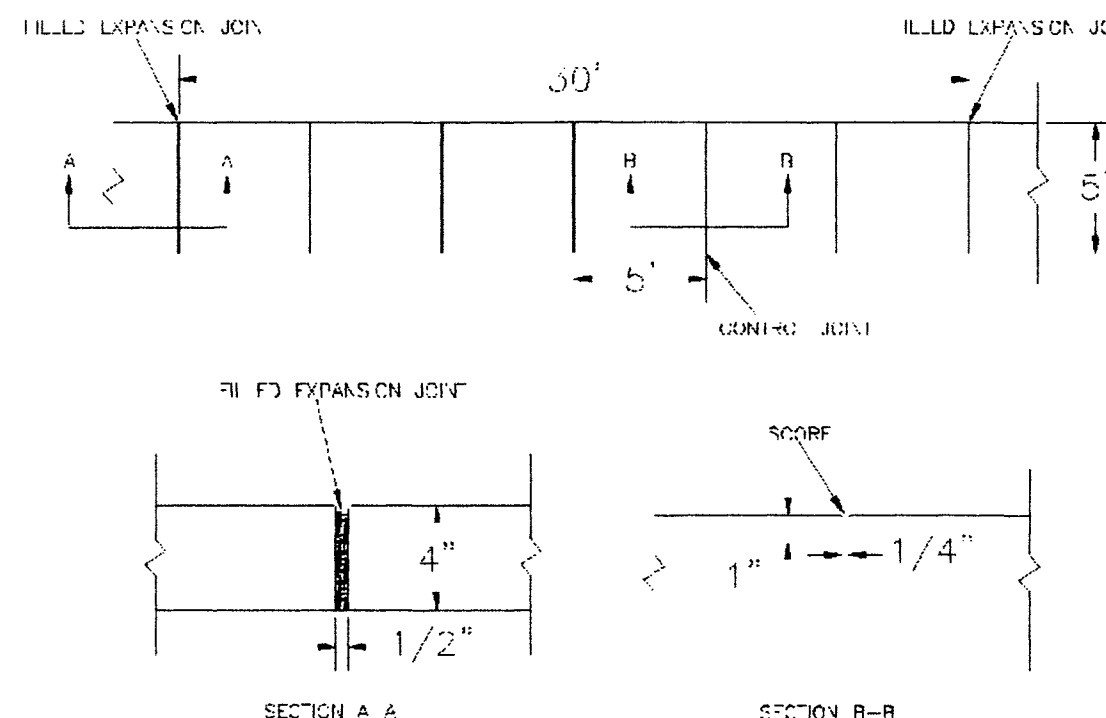
NOT TO SCALE

NOTE: INSTALLATION OF NEW 24" CURB AND GUTTER ALONG ANY COW OR NCDOT STREET SHALL REQUIRE A 6" ABC STONE BASE.



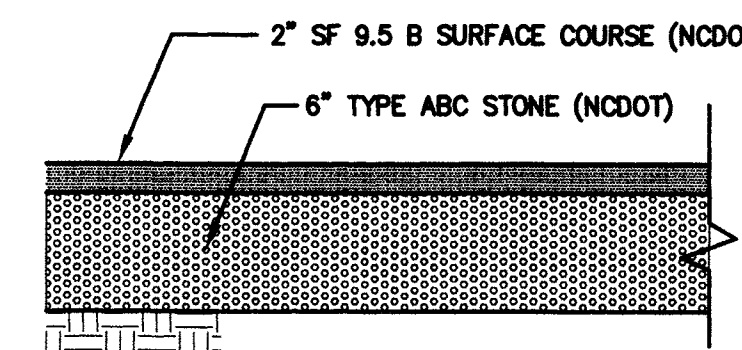
NOTE: CURB TYPE DEPENDS ON GRADES SHOWN ON GRADING PLAN. GRADES INDICATING FALL AWAY FROM CURB SHALL BE SPILL OFF TYPE CURB. GRADES INDICATING CURB ACCEPTING FLOW SHALL BE FLOW LINE TYPE.

NOT TO SCALE



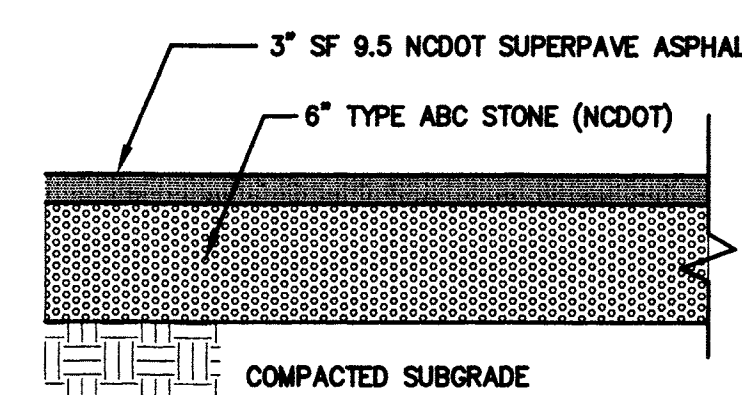
- NOTES:
- JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS.
 - SANITARY SEWER CLEAN OUTS, WATER METERS, MATH-FILES, AND VALVE JOBS TO BE LOCATED OUTSIDE SIDEWALKS WHERE FEASIBLE.
 - MINIMUM SIDEWALK WIDTH - 0.80 M MINIMUM - LOCATED AT BACK OF CURB.
 - CONCRETE FOR ALL SIDEWALKS (EXCEPT ANY PORTION CONTAINING A DRIVEWAY APPROX. 8" TO 12" WIDE) SHALL BE 3000 PSI.
 - MINIMUM REINFORCING - 0.80 M MINIMUM - 5 #4 @ 5' (MIN).
 - 4" STONE BASE MAY BE REQUIRED FOR POOR SOIL CONDITIONS.
 - MINIMUM CURB HEIGHT FOR TYPICAL SLOPE SHALL BE 12" TO 14".
 - MAX ADJACENT GROUND SLOPE WITHOUT TALL CURB IS 2:1.
 - MIN GRADE FOR PROPER DRAINAGE IS 1% IN AT LEAST 1' DIRECTION. MAX GROUND SLOPE IS 2% MAX (CONST. SLOPE) OR 5% SLOPE (VAR. SLOPE) BY PORTLAND CONCRETE. MIN. SLOPE OF EXISTING ADJACENT ROAD.

3 STANDARD SIDEWALK DETAIL: SD 3-10 NOT TO SCALE



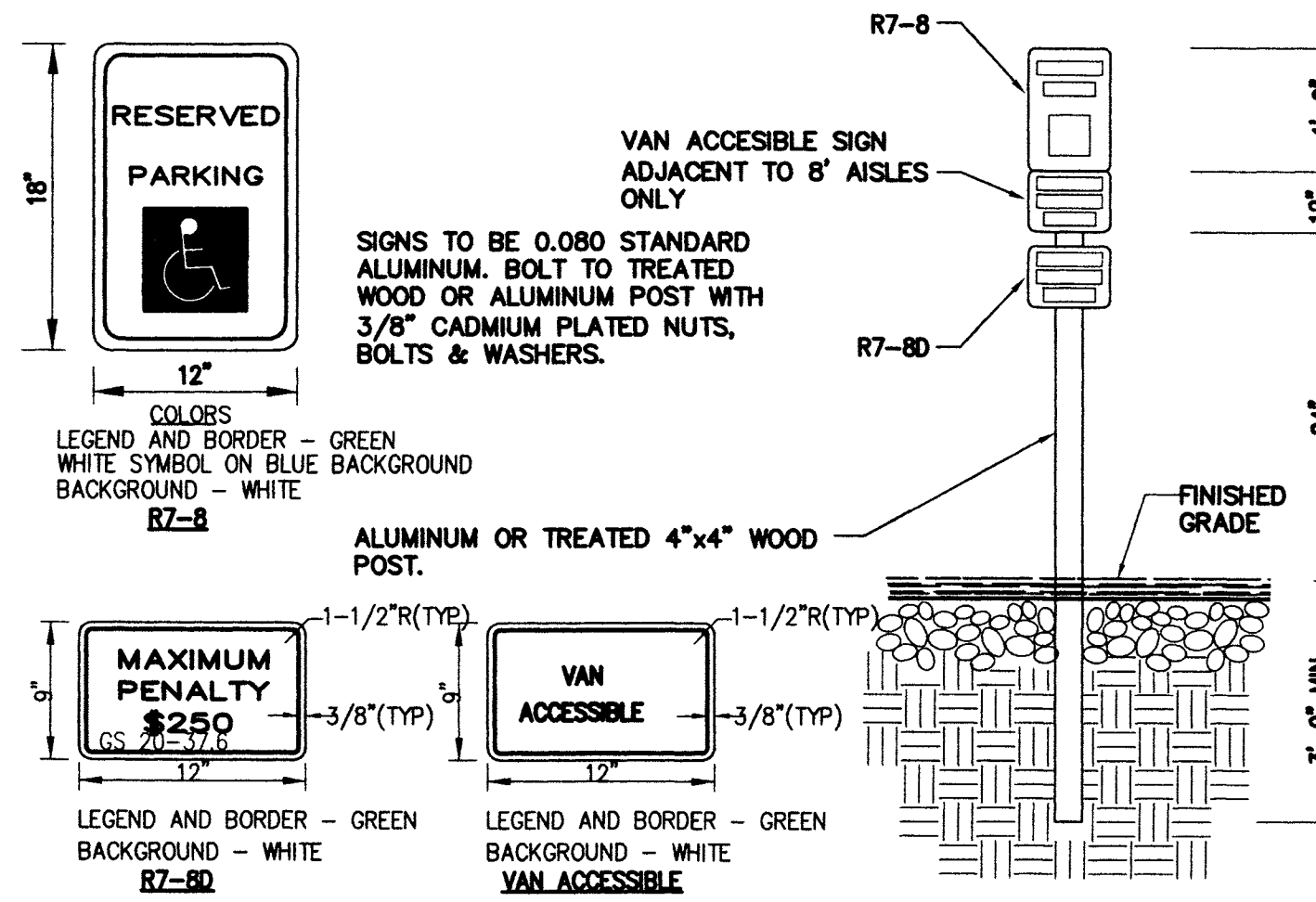
NOTE: PAVEMENT SECTION MAY VARY DEPENDING UPON FIELD CONDITIONS. CONTRACTOR SHALL COORDINATE w/OWNER & GEOTECHNICAL ENGINEER TO DETERMINE ACTUAL PAVEMENT SECTION.

NOT TO SCALE



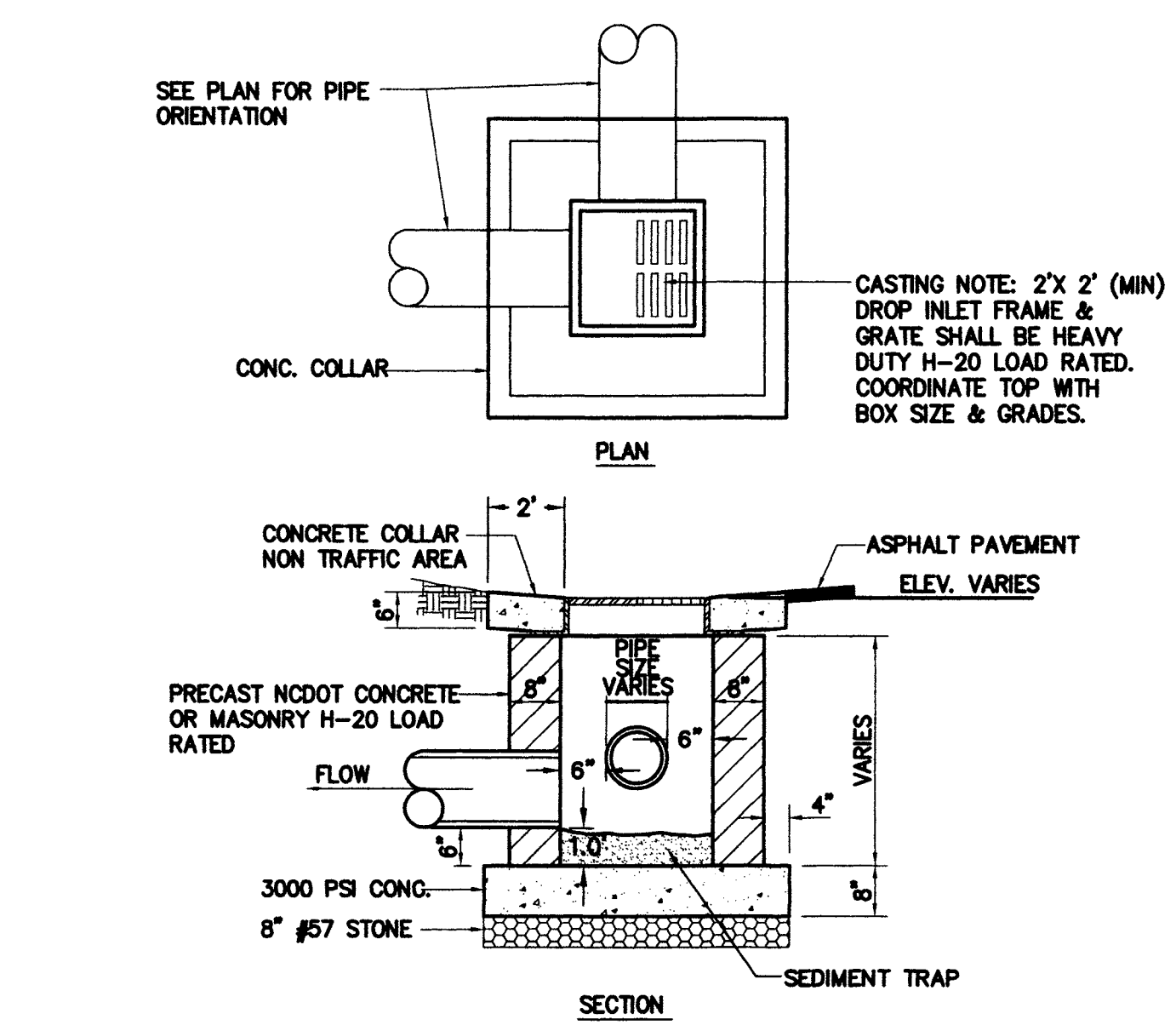
NOTE: PAVEMENT SECTION MAY VARY DEPENDING UPON FIELD CONDITIONS. CONTRACTOR SHALL COORDINATE w/OWNER & GEOTECHNICAL ENGINEER TO DETERMINE ACTUAL PAVEMENT SECTION.

NOT TO SCALE



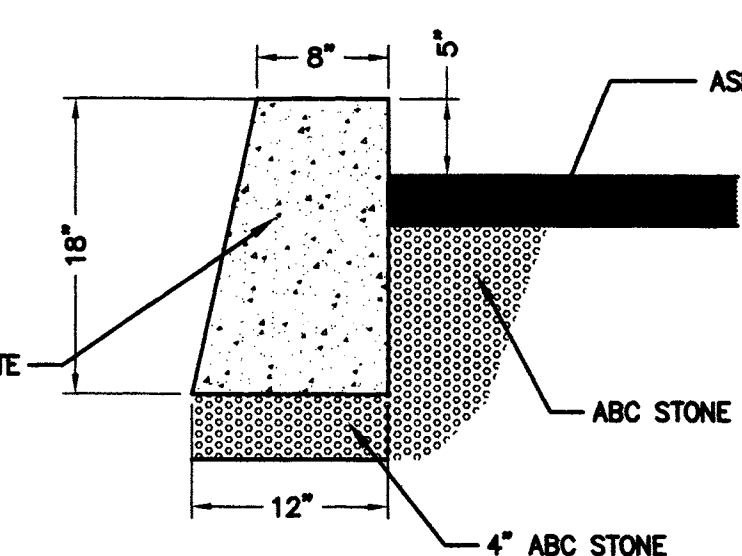
NOTE: HANDICAP SPACES SHALL CONFORM TO ADA REGULATIONS & SLOPE MUST NOT EXCEED 2% IN EACH DIRECTION

NOT TO SCALE

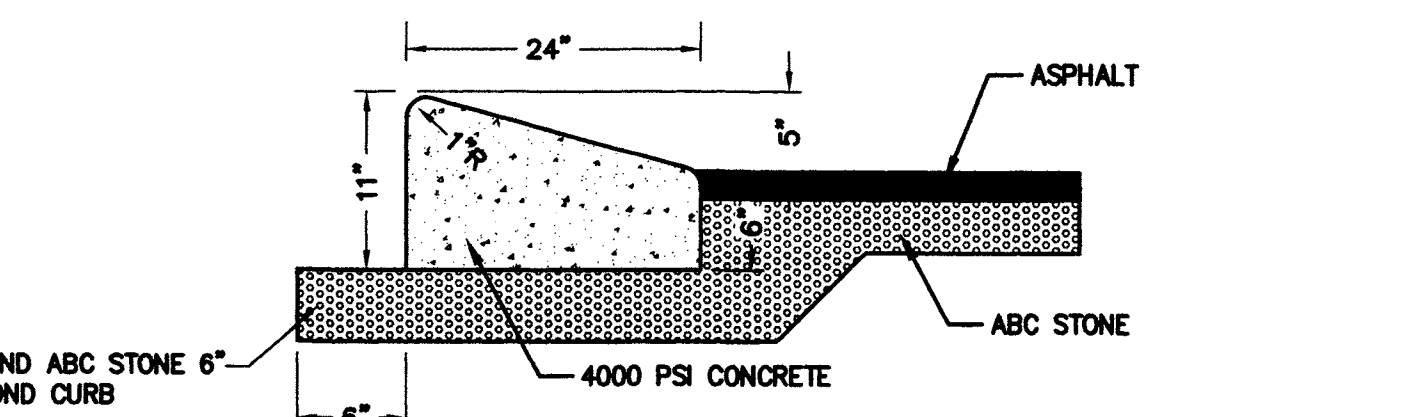


MUST COMPLY WITH CITY OF WILMINGTON STANDARDS NOT TO SCALE

6 DROP INLET DETAIL NOT TO SCALE

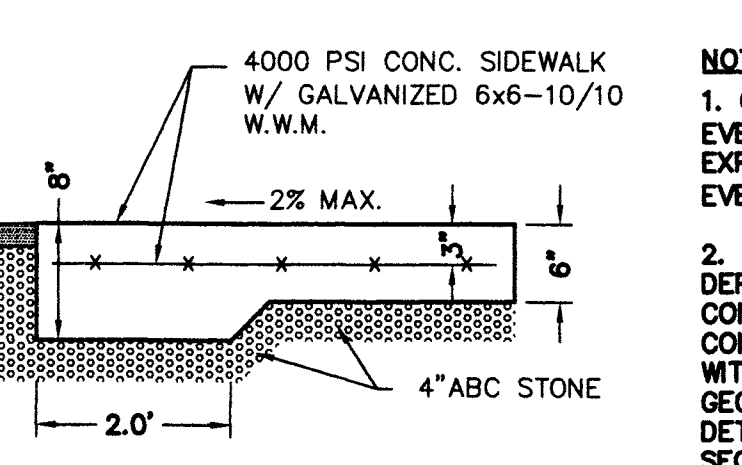


NOT TO SCALE



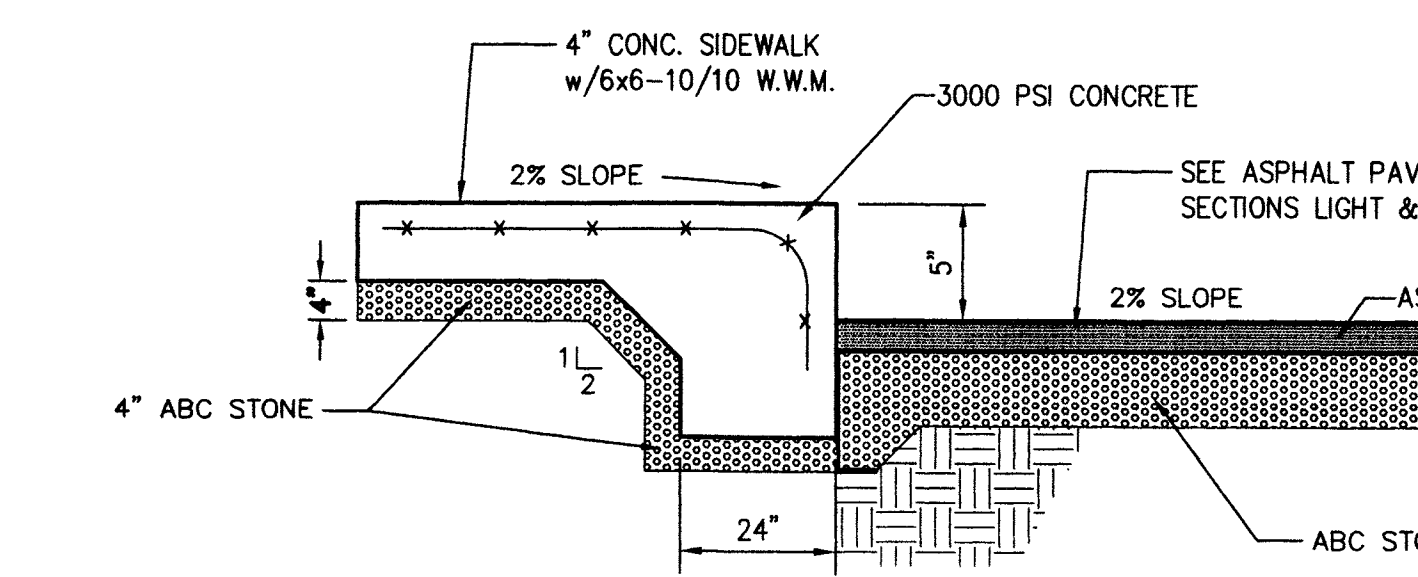
NOT TO SCALE

8 SLOPE CURB SECTION NOT TO SCALE



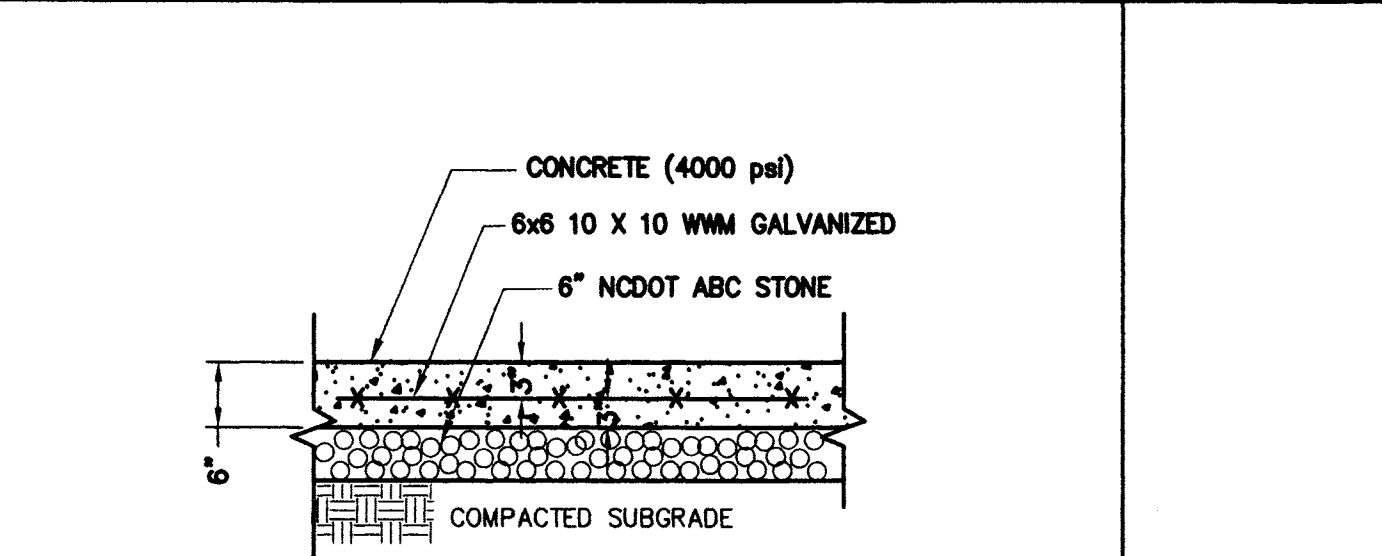
NOTES:
1. CONTROL JOINTS SHALL BE EVERY 15 FT. (MAX.) AND EXPANSION JOINTS SHALL BE EVERY 50 FT. (MAX).
2. PAVEMENT SECTION MAY VARY DEPENDING UPON FIELD CONDITIONS. THE PAVING CONTRACTOR SHALL COORDINATE WITH OWNER REPRESENTATIVE AND GEOTECHNICAL ENGINEER TO DETERMINE ACTUAL PAVEMENT SECTION.

NOT TO SCALE



NOT TO SCALE

9 TURN DOWN CURB SECTION NOT TO SCALE



NOTES:
1. CONTROL JOINTS SHALL BE EVERY 15 FT. (MAX.) AND EXPANSION JOINTS SHALL BE EVERY 50 FT. (MAX).
2. PAVEMENT SECTION MAY VARY DEPENDING UPON FIELD CONDITIONS. THE PAVING CONTRACTOR SHALL COORDINATE WITH OWNER REPRESENTATIVE AND GEOTECHNICAL ENGINEER TO DETERMINE ACTUAL PAVEMENT SECTION.

10 HEAVY DUTY CONCRETE PAVEMENT SECTION NOT TO SCALE

CITY OF WILMINGTON STANDARD NOTES:

- CONTACT THE NORTH CAROLINA ONE CALL CENTER PRIOR TO DOING ANY DIGGING AT 1-800-632-4949.
- PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES AND NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
- ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
- ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
- IT SHALL BE THE RESPONSIBILITY OF THE SUBDIVIDER TO ERECT OFFICIAL STREET NAME SIGNS AT ALL INTERSECTIONS ASSOCIATED WITH THE SUBDIVISION IN ACCORDANCE WITH THE TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL. THE SUBDIVIDER MAY ACQUIRE AND ERECT OFFICIAL STREET NAME SIGNS OR MAY CHOOSE TO CONTRACT WITH THE CITY TO INSTALL THE STREET SIGNS AND THE SUBDIVIDER SHALL PAY THE COST OF SUCH INSTALLATION. CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. POSTED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
- CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
- A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT 341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
- ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS, AND CURBING WILL BE REPLACED.
- CONTACT TRAFFIC ENGINEERING AT 341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- PROJECT SHALL COMPLY WITH CFPWA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL. CALL 343-3910 FOR INFORMATION.
- IF THE CONTRACTOR DESIRES CFPWA WATER FOR CONSTRUCTION HE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.
- ANY IRRIGATION SYSTEM SUPPLIED BY CFPWA WATER SHALL COMPLY WITH CFPWA CROSS CONNECTION CONTROL REGULATIONS. CALL 332-6558 FOR INFORMATION.
- ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPWA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USCFCOCHR OR ASSE.
- WHEN PVC WATER MAINS AND/OR POLYETHYLENE SERVICES ARE PROPOSED, THE PIPES ARE TO BE MARKED WITH NO. 10 INSULATED SINGLE STRAND COPPER WIRE INSTALLED THE ENTIRE LENGTH AND SECURED TO ALL VALVES. THIS WIRE IS TO BE ACCESSIBLE AT ALL FIRE HYDRANTS AND WATER METER BOXES TO AID IN FUTURE LOCATION OF FACILITIES.
- THE NUMBER AND SPACING OF DRIVEWAYS FOR ALL INTERCONNECTED SITES WILL BE DETERMINED BY THE COMBINED FRONTAGE OF THE INTERCONNECTED PROPERTIES.
- UNDERGROUND FIRE LINE MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC ROW TO THE BUILDING DEPARTMENT THE WILMINGTON DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-343-0696 FOR ADDITIONAL INFORMATION.
- A LANDSCAPE PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAN.
- IF AN IRRIGATION SYSTEM IS PLANNED FOR THE SITE, UTILIZE MOISTURE SENSORS.
- ALL PROPOSED VEGETATION WITHIN THE SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30"-10'.
- PLEASE CONSIDER INCORPORATING XERIC LANDSCAPING FOR ALL NEW LANDSCAPING.

UTILITY NOTES FOR FIRE HYDRANTS:

- FIRE HYDRANTS MUST BE WITHIN 150' OF THE FIRE DEPARTMENT CONNECTION.
- THE FIRE DEPARTMENT CONNECTION MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
- LANDSCAPING AND PARKING CANNOT BLOCK OR IMPEDE THE FIRE DEPARTMENT CONNECTIONS OR FIRE HYDRANTS. A 3' CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE FIRE HYDRANT CONNECTION AND THE FIRE HYDRANT.
- FIRE HYDRANTS MUST BE LOCATED WITHIN 8' OF THE CURB.
- NEW HYDRANTS MUST BE AVAILABLE FOR USE PRIOR TO CONSTRUCTION OF THE BUILDINGS.
- NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS BEING DELIVERED TO THE JOB SITE.
- THE CONTRACTOR SHALL MAINTAIN AN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- TEMPORARY STREET SIGNS SHALL BE INSTALLED AT EACH STREET INTERSECTION WHEN CONSTRUCTION OF NEW ROADWAYS ALLOWS PASSAGE BY VEHICLES.
- UNDERGROUND FIRE LINE AND PRIVATE WATER MAINS MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC RIGHT-OF-WAY TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-343-0696 FOR ADDITIONAL INFORMATION.
- A MINIMUM OF 5' SHALL SEPARATE UNDERGROUND FIRE LINES OR PRIVATE WATER MAINS FROM OTHER UNDERGROUND UTILITIES.
- HYDRANTS SHALL BE OF SUFFICIENT NUMBERS TO ACCOMMODATE BASE FIRE FLOW REQUIREMENTS OF THE STRUCTURE.
- BUILDING CONSTRUCTION TYPE: VB

NOTES AND DETAILS
BAKER BMW OF WILMINGTON
4900 NEW CENTER DRIVE
WILMINGTON, N. C.

DEVELOPER
BAKER MOTOR COMPANY, LLC
4900 NEW CENTER DRIVE
WILMINGTON, NC 28403
910 624-6080

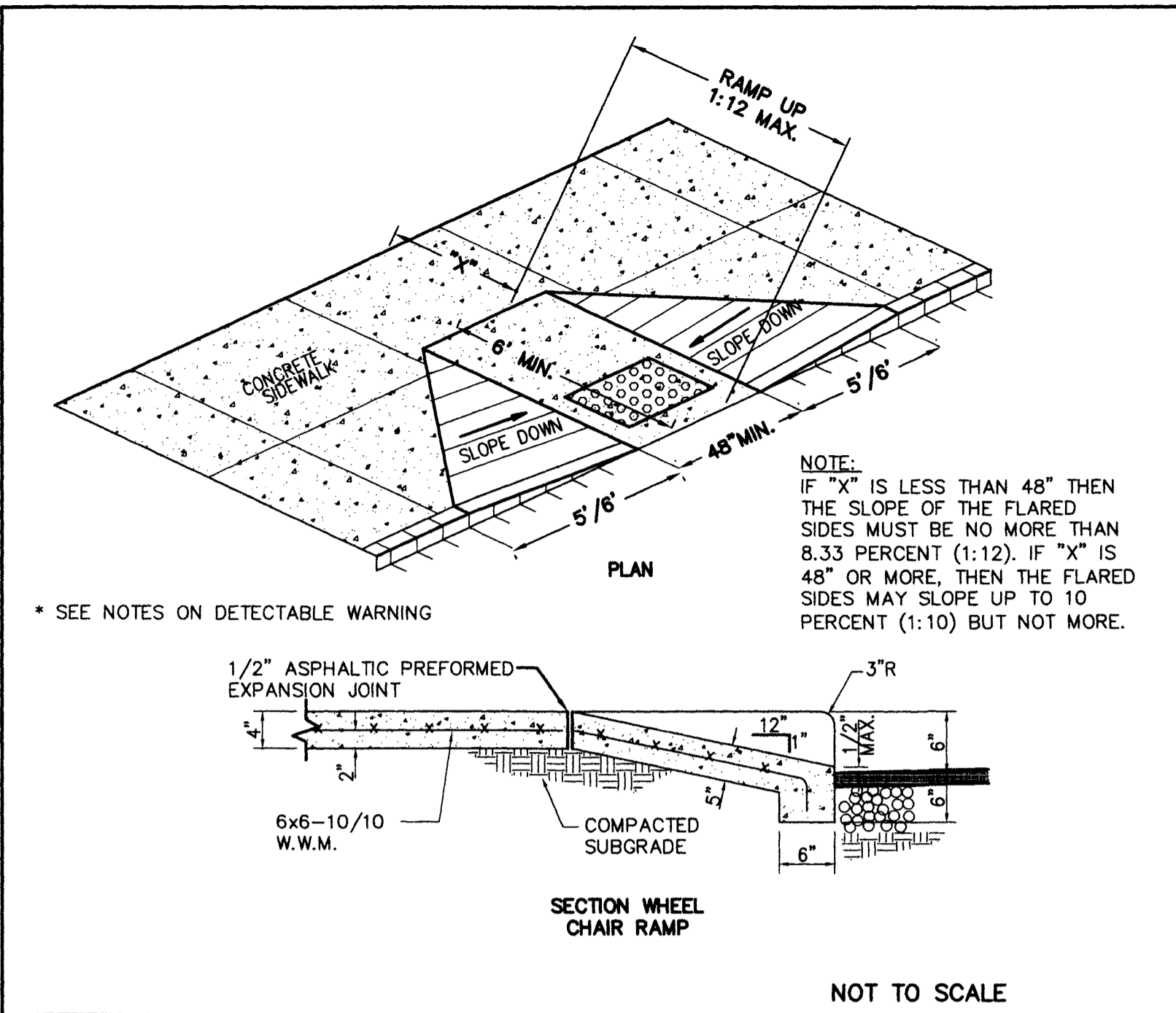
NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
1429 ASH-LITTLE RIVER RD. NW
WILMINGTON, NC 28401
PHONE: (910) 287-5900

License #C-3641
16038
DES. JST
CON. JFN
DRAW. NKS
DATE 2/1/17

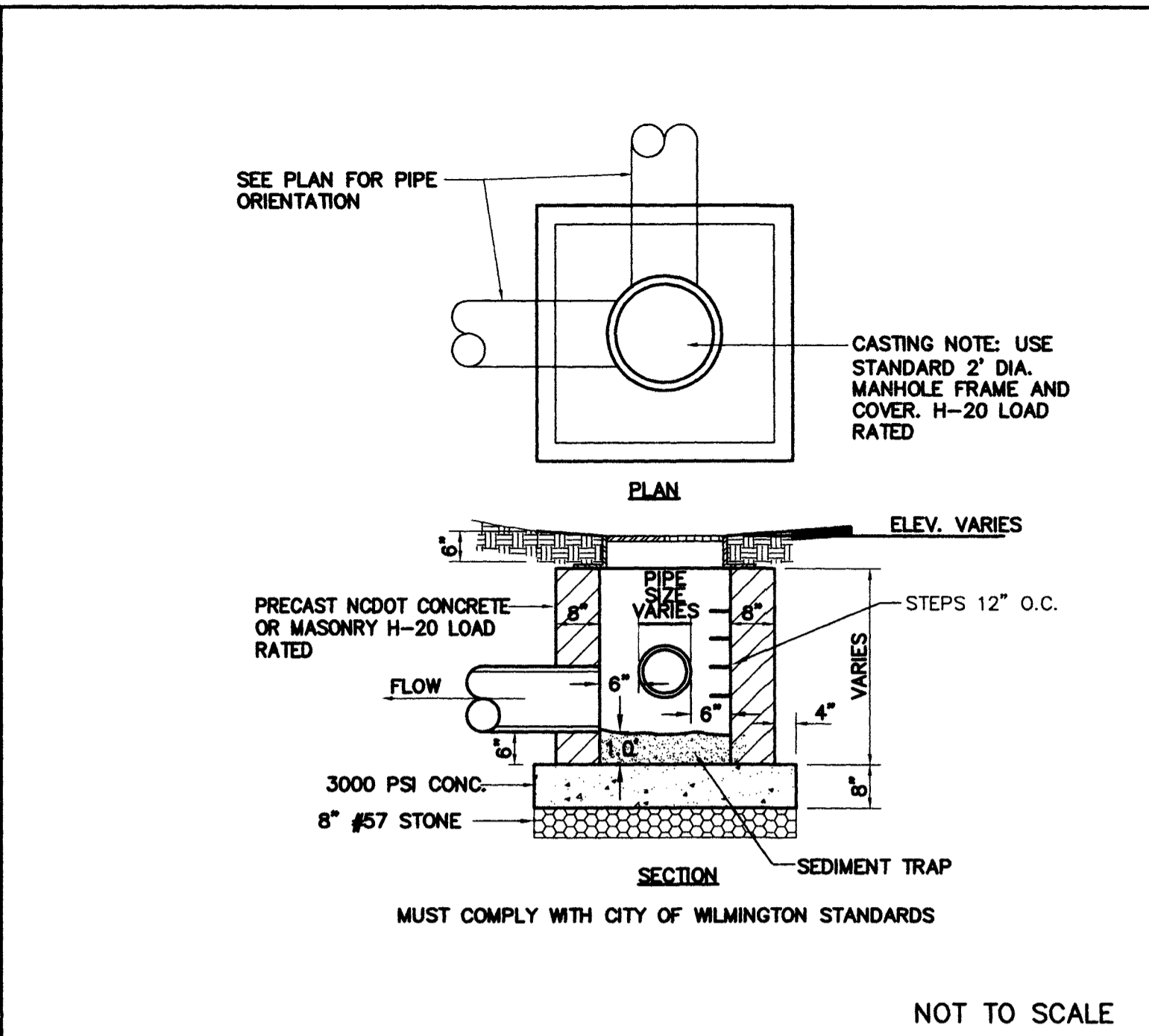
©2015 NORRIS & TUNSTALL

SYMBOL	DATE	DESCRIPTION	BY
REVISIONS			

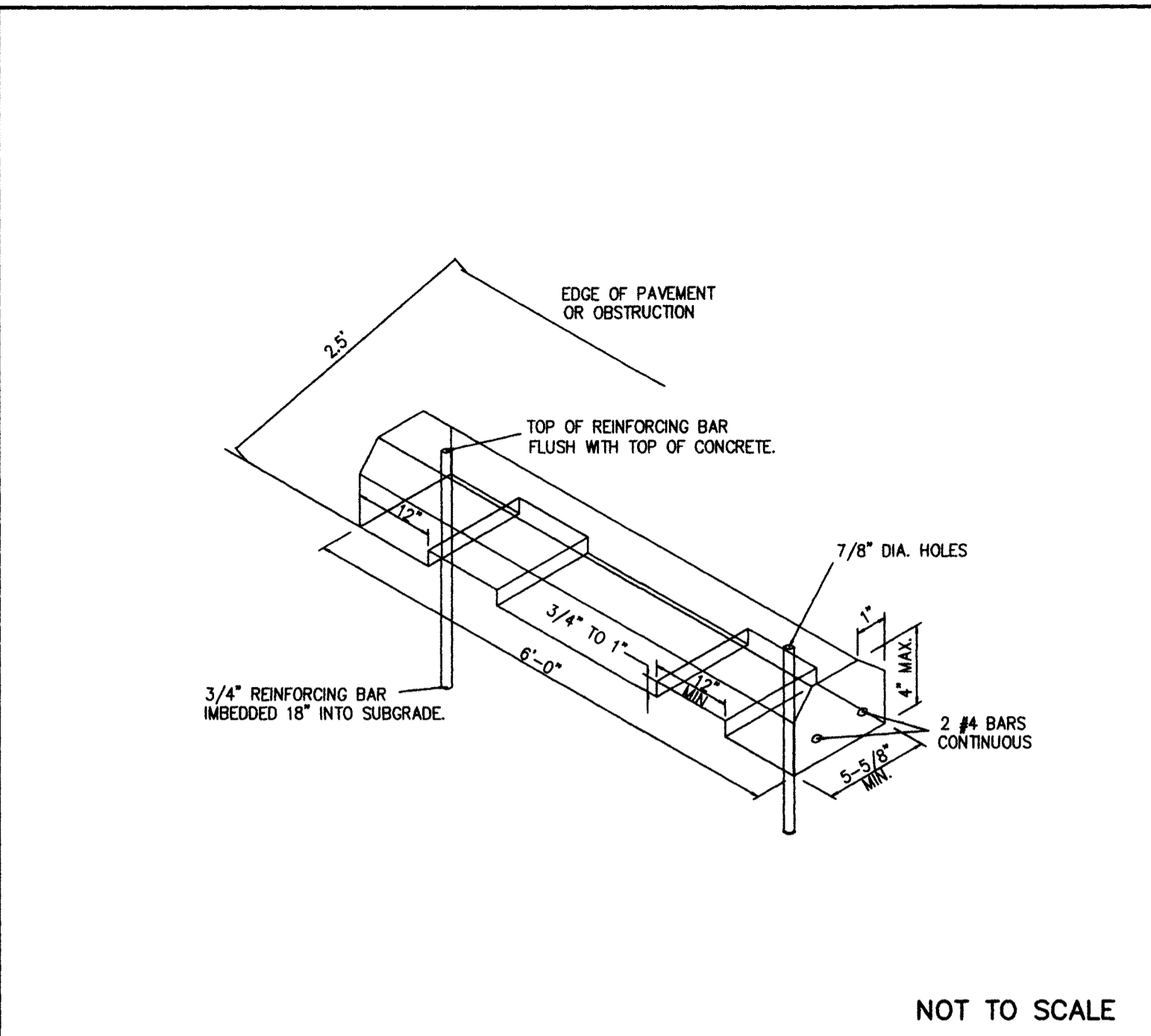
F:\Projects\2016\16038 Baker BMW of Wilmington\16038 Plans\Notes\16038master.dwg (Lynna1) Plotted on: Jul 31, 2017 - 2:10pm by Cadbur



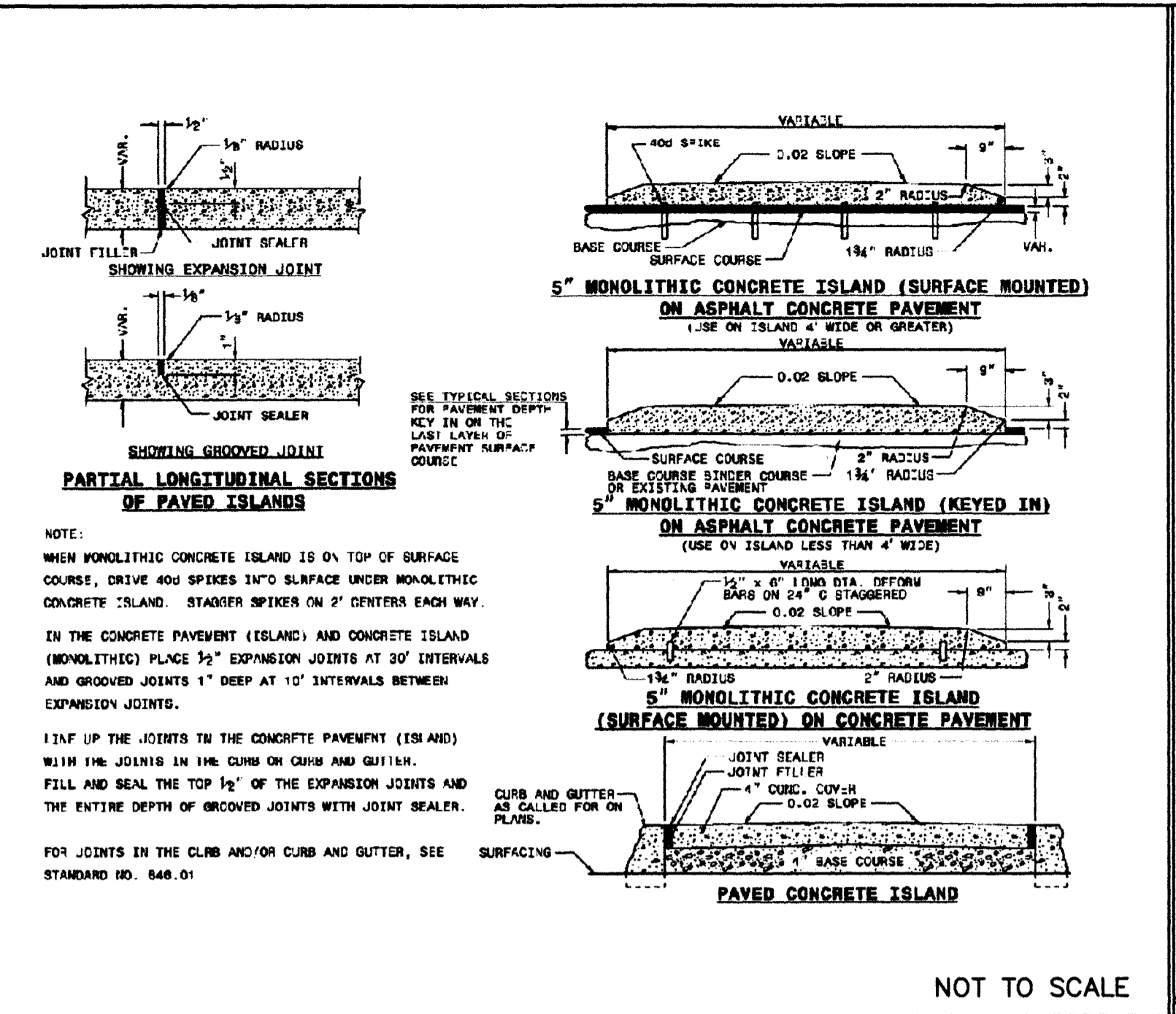
1 SIDEWALK, CURB CUT AND WHEEL CHAIR RAMP DETAIL



2 JUNCTION BOX DETAIL



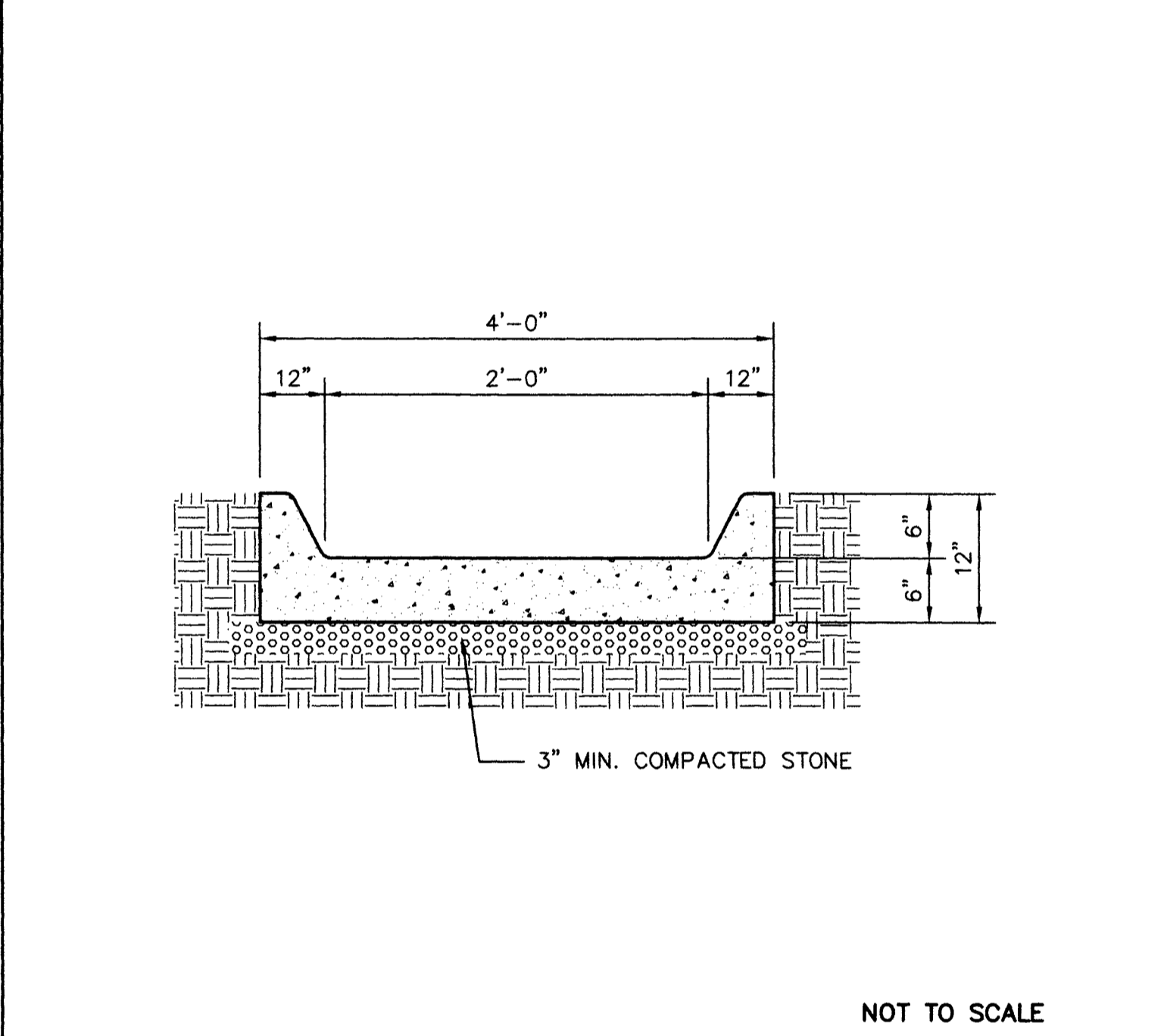
3 CONCRETE WHEEL STOPS



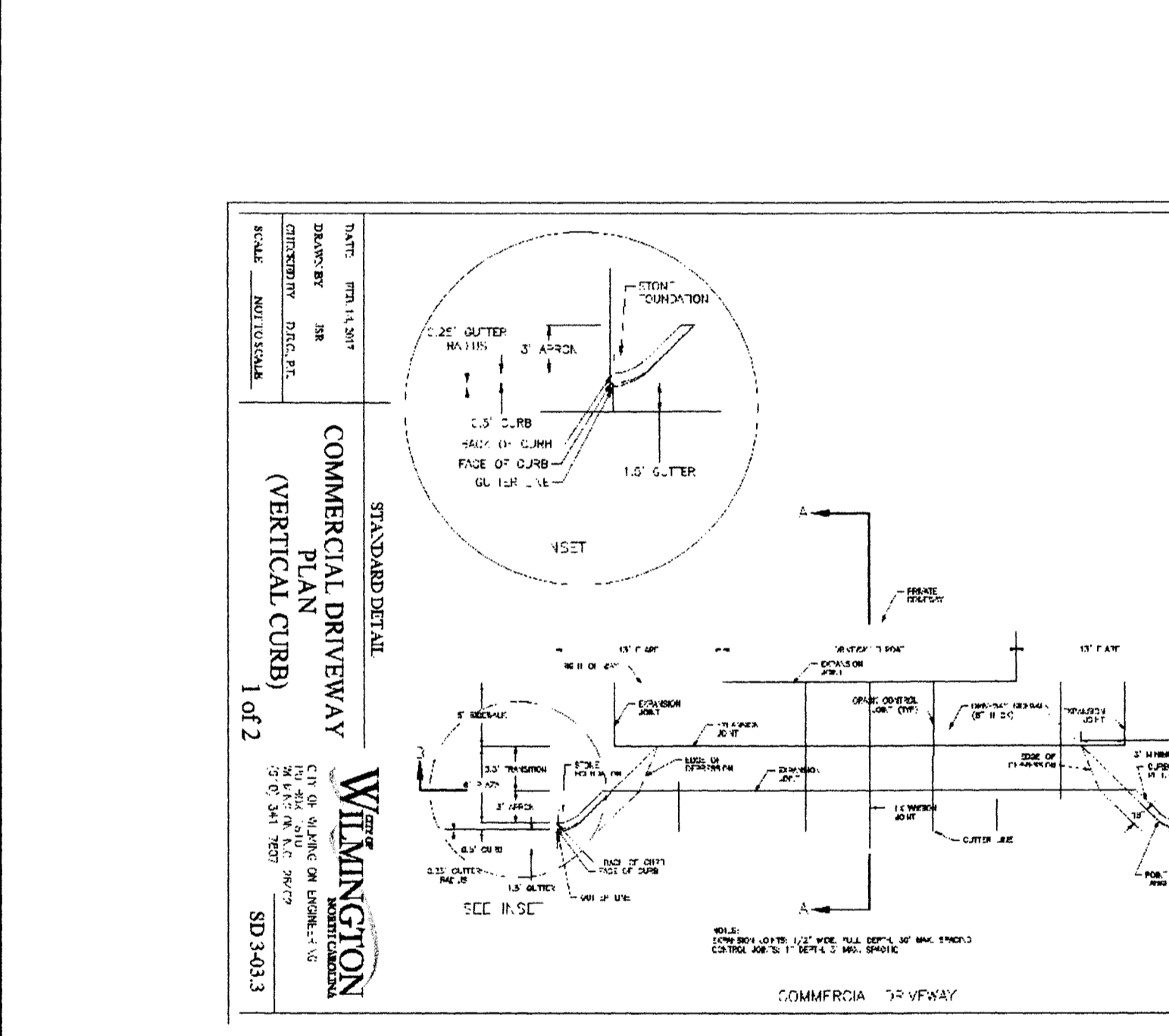
4 NCDOT CONCRETE ISLAND DETAIL

NOTE:
 1. RAMP SHALL HAVE A DETECTABLE WARNING COMPLYING WITH ADA GUIDELINES.
 2. THE DETECTABLE WARNINGS AT CURB RAMPS SHALL BE 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.
 3. MARKED CROSSINGS THAT ARE RAISED TO THE SAME LEVEL AS THE ADJOINING SIDEWALK SHALL BE PRECEDED BY A 24 INCH DEEP DETECTABLE WARNING EXTENDING THE FULL WIDTH OF THE MARKED CROSSING.
 4. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN (23 MM), A HEIGHT OF NOMINAL 0.2 IN (5 MM) AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 IN (60 MM) AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHOULD CONTRAST BY AT LEAST 70% - REFER TO ADA GUIDELINES FOR DEFINITION OF "CONTRAST".
 5. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. DETECTABLE WARNINGS USED ON INTERIOR SURFACES SHALL DIFFER FROM ADJOINING WALKING SURFACES IN RESILIENCY OR SOUND-ON-CANE CONTACT.

5 NOTES ON DETECTABLE WARNING FOR WHEEL CHAIR RAMPS



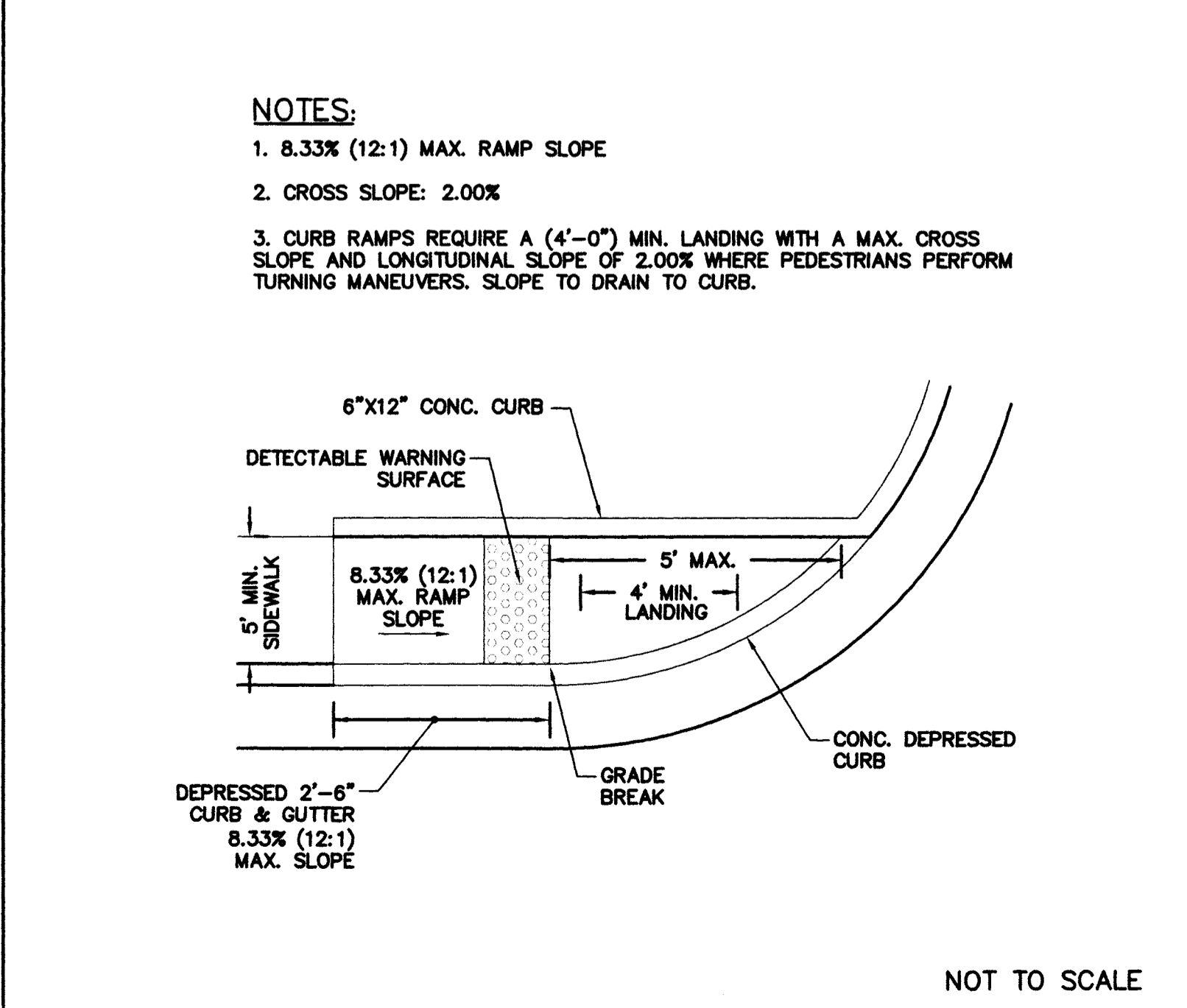
6 CONCRETE FLUME SECTION



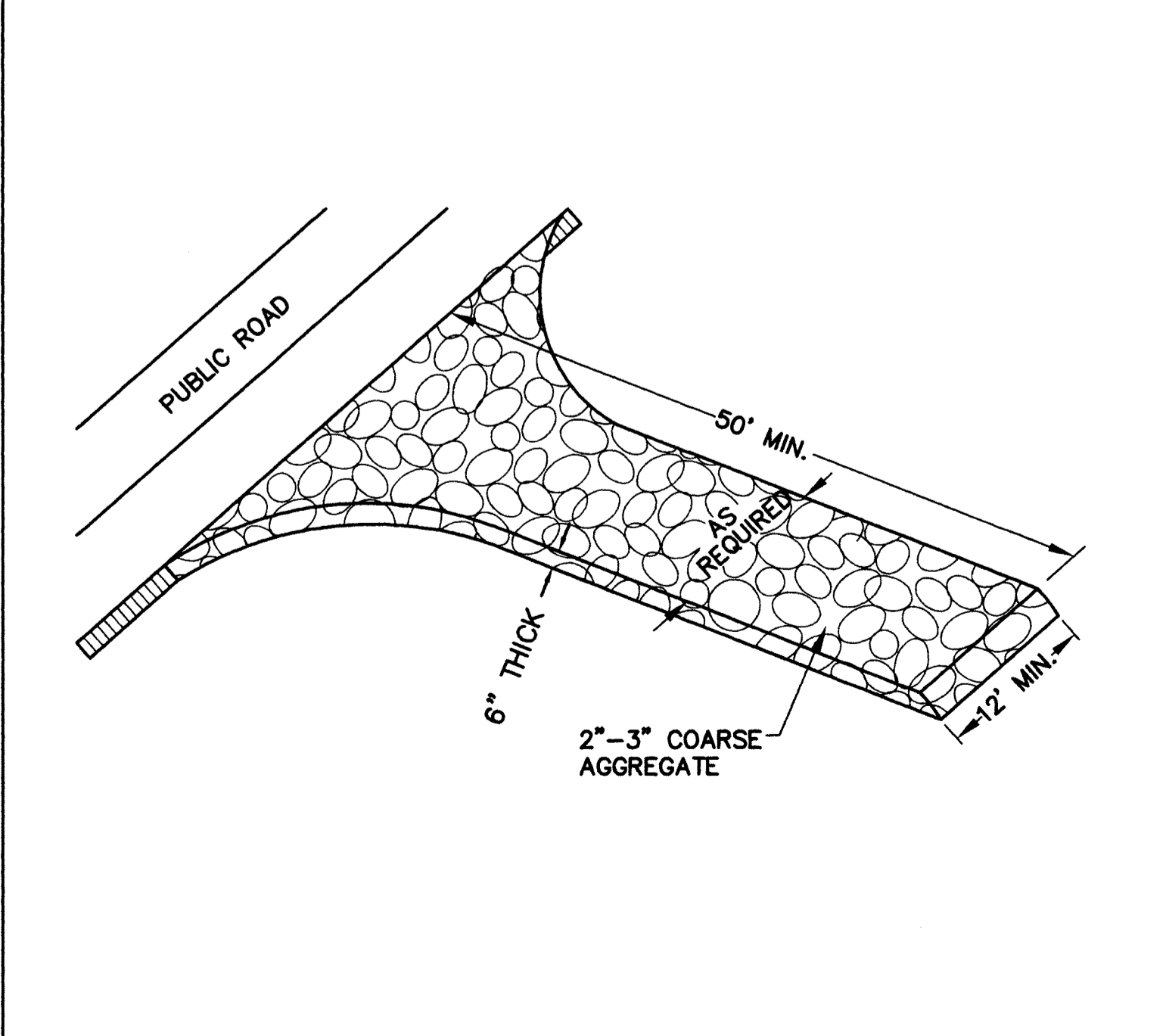
7 NCDOT TYPE 1 CURB RAMP



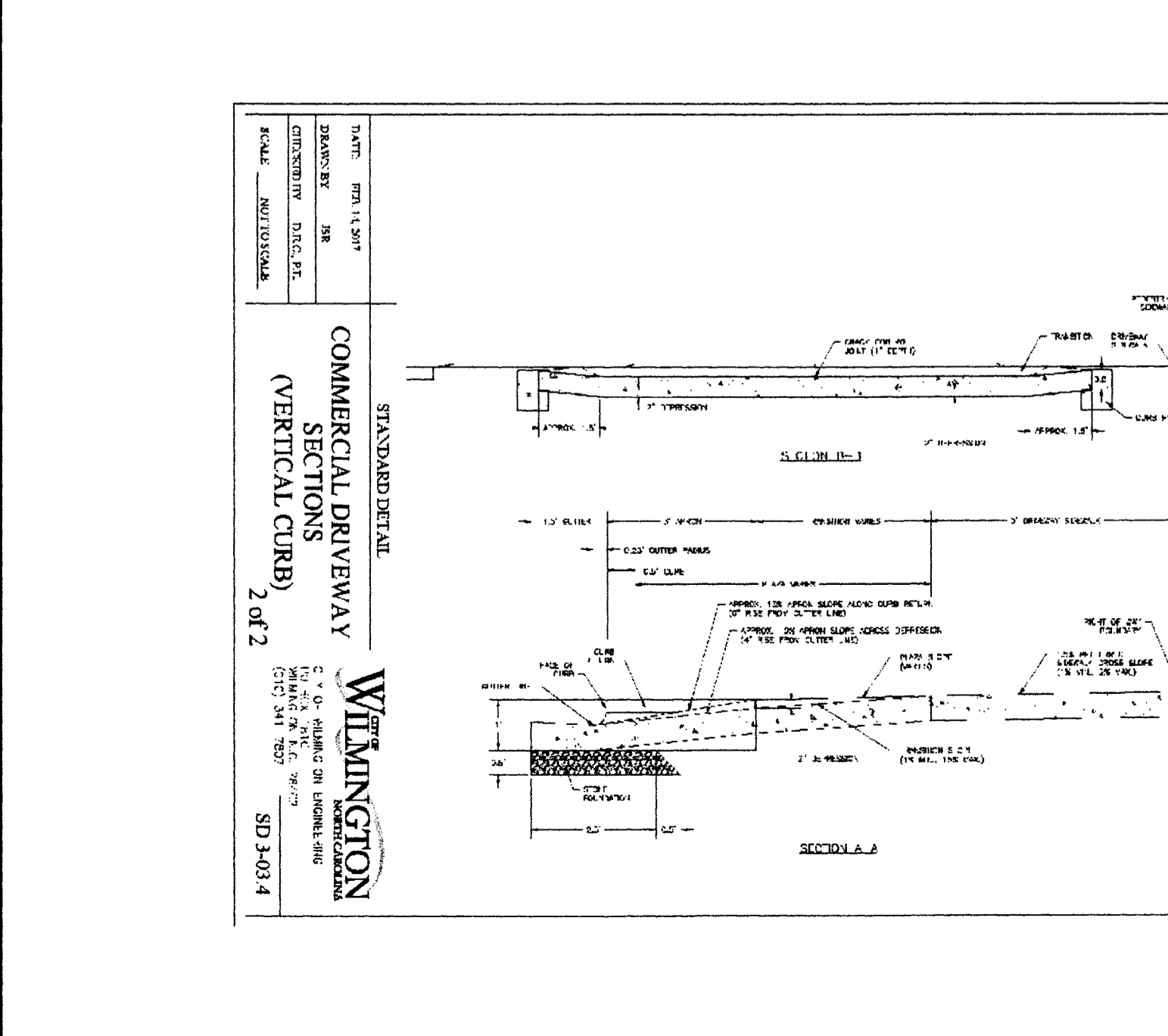
8 TEMPORARY GRAVELLED CONSTRUCTION ENTRANCE



7 NCDOT TYPE 1 CURB RAMP



8 TEMPORARY GRAVELLED CONSTRUCTION ENTRANCE



7 NCDOT TYPE 1 CURB RAMP

CALL 811 (3) WORKING DAYS BEFORE YOU DIG.

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

City of Wilmington, North Carolina
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: 8/1/17 Permit # 9903221
 Signed: [Signature]

Approved Construction Plan
 Name: [Name] Date: 8/1/17
 Planning: [Signature] 8/1/17
 Traffic: [Signature] 8/2/17
 Fire: [Signature] 8/2/17

902 MARKET STREET WILMINGTON, NC 28401
 910 343-9653

SYMBOL	DATE	DESCRIPTION	BY
REVISIONS			
©2018 NORRIS & TUNSTALL			

NOTES AND DETAILS
 BAKER MOTOR COMPANY, LLC
 4920 NEW CENTRE DRIVE
 WILMINGTON, NC 28403
 910 624-6060

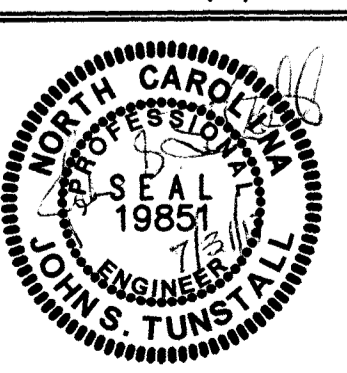
DEVELOPER
 BAKER MOTOR COMPANY, LLC
 4920 NEW CENTRE DRIVE
 WILMINGTON, NC 28403
 910 624-6060

NORRIS & TUNSTALL
 CONSULTING ENGINEERS P.C.
 1429 ASH-LITTLE RIVER RD, NW
 WILMINGTON, NC 28420
 PHONE (910) 287-5900

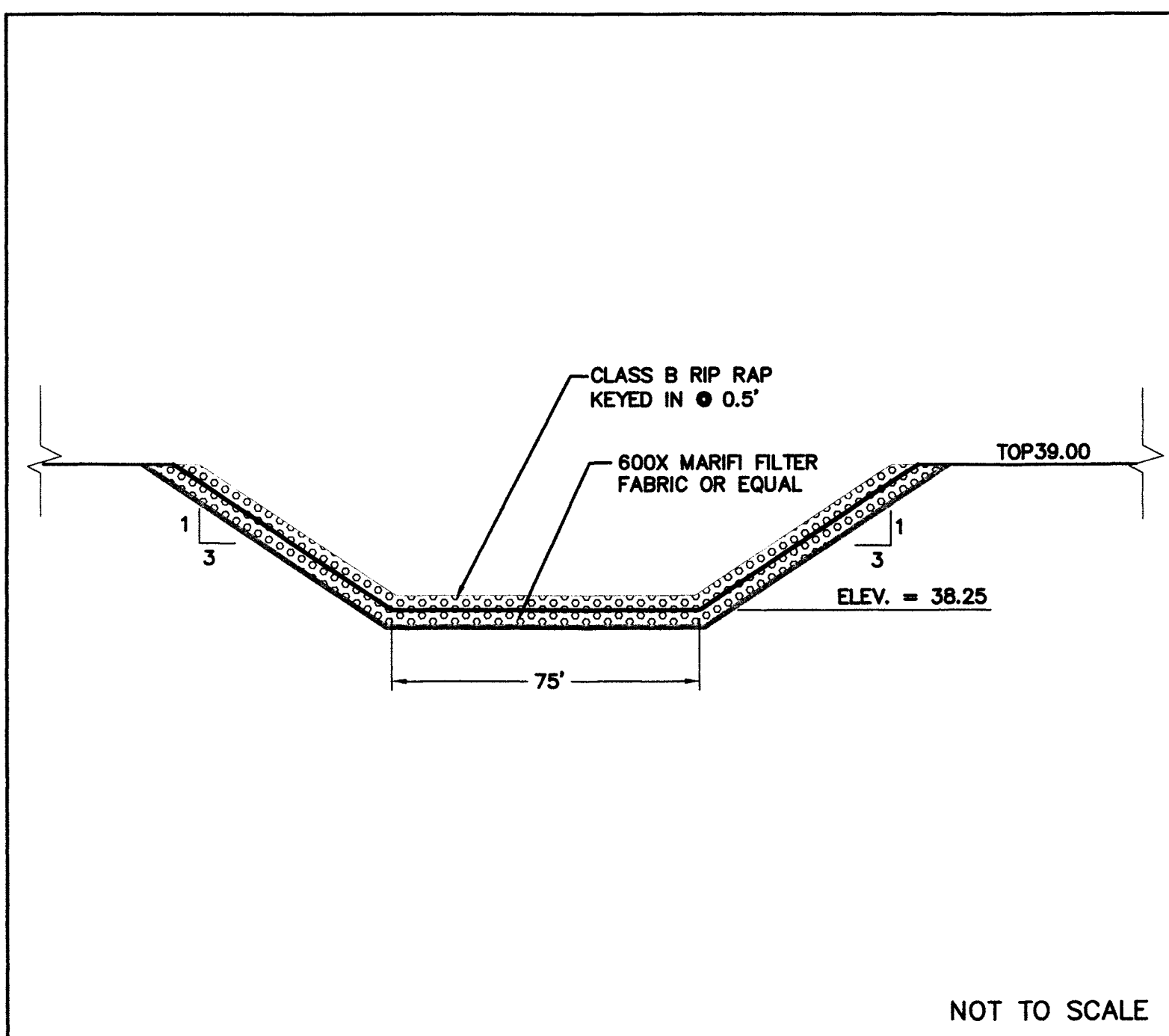
902 MARKET STREET WILMINGTON, NC 28401
 910 343-9653

16038

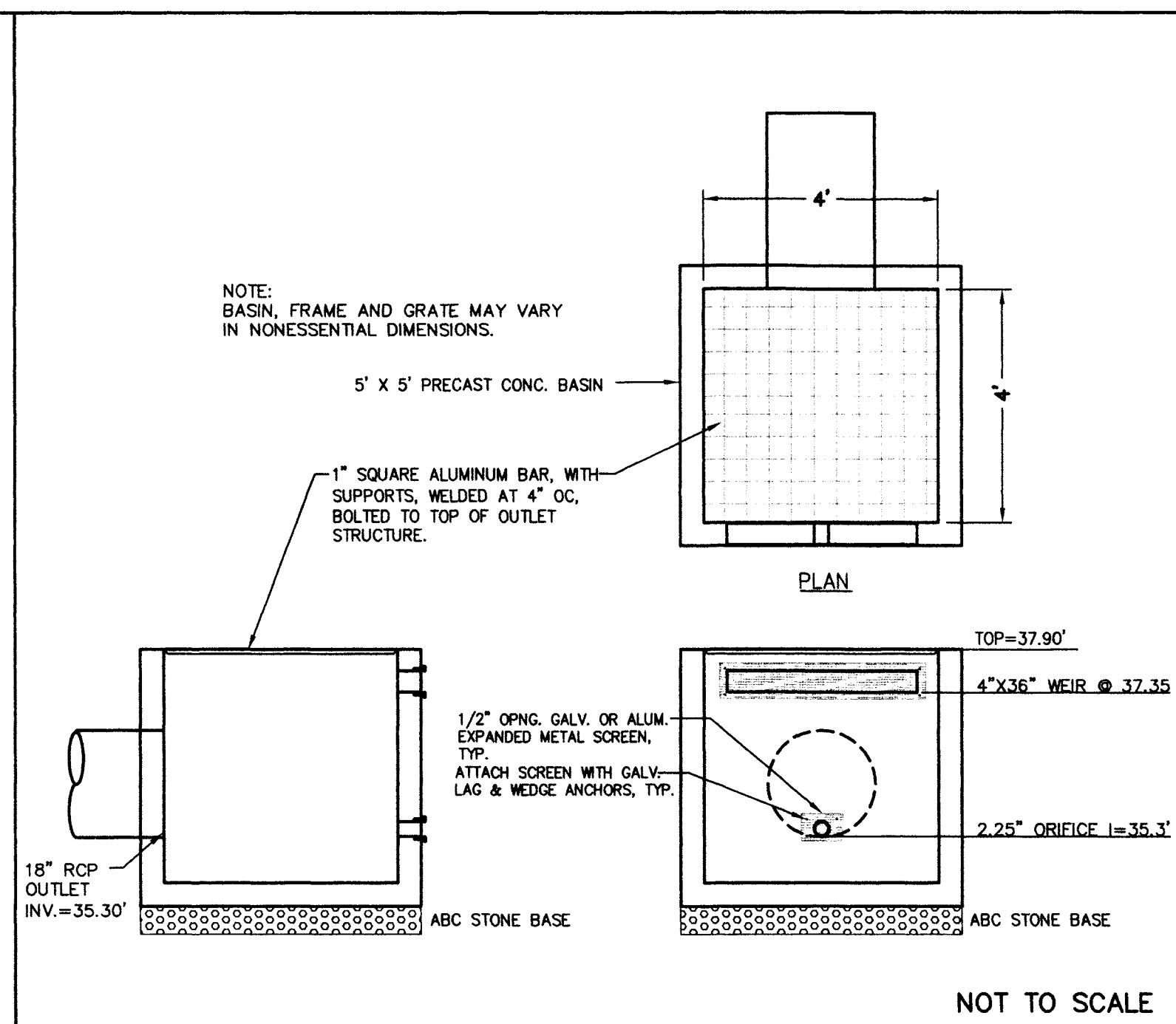
DES. JST
 CKD. JPN
 DRWN. NKS
 DATE 2/1/17



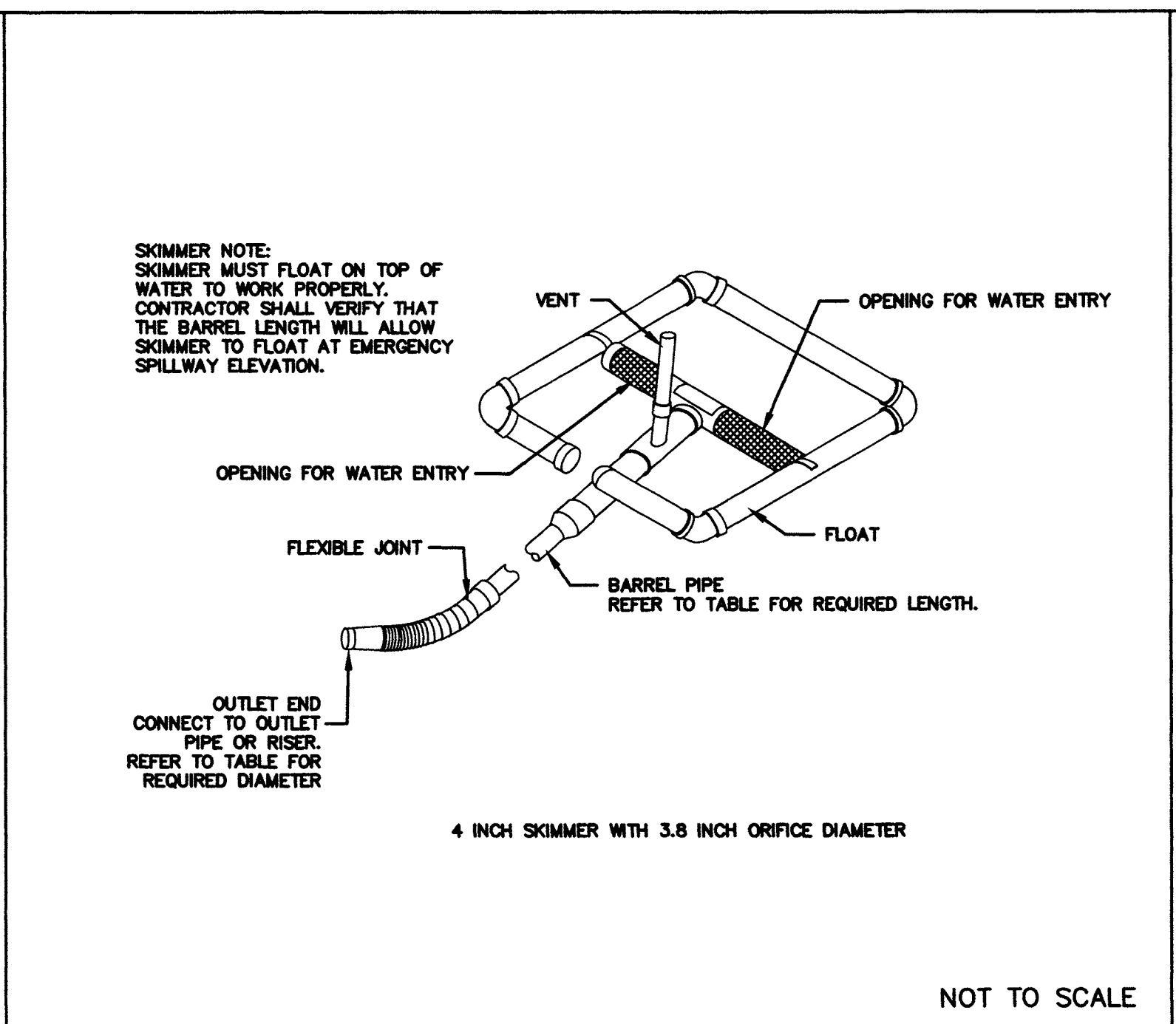
C7



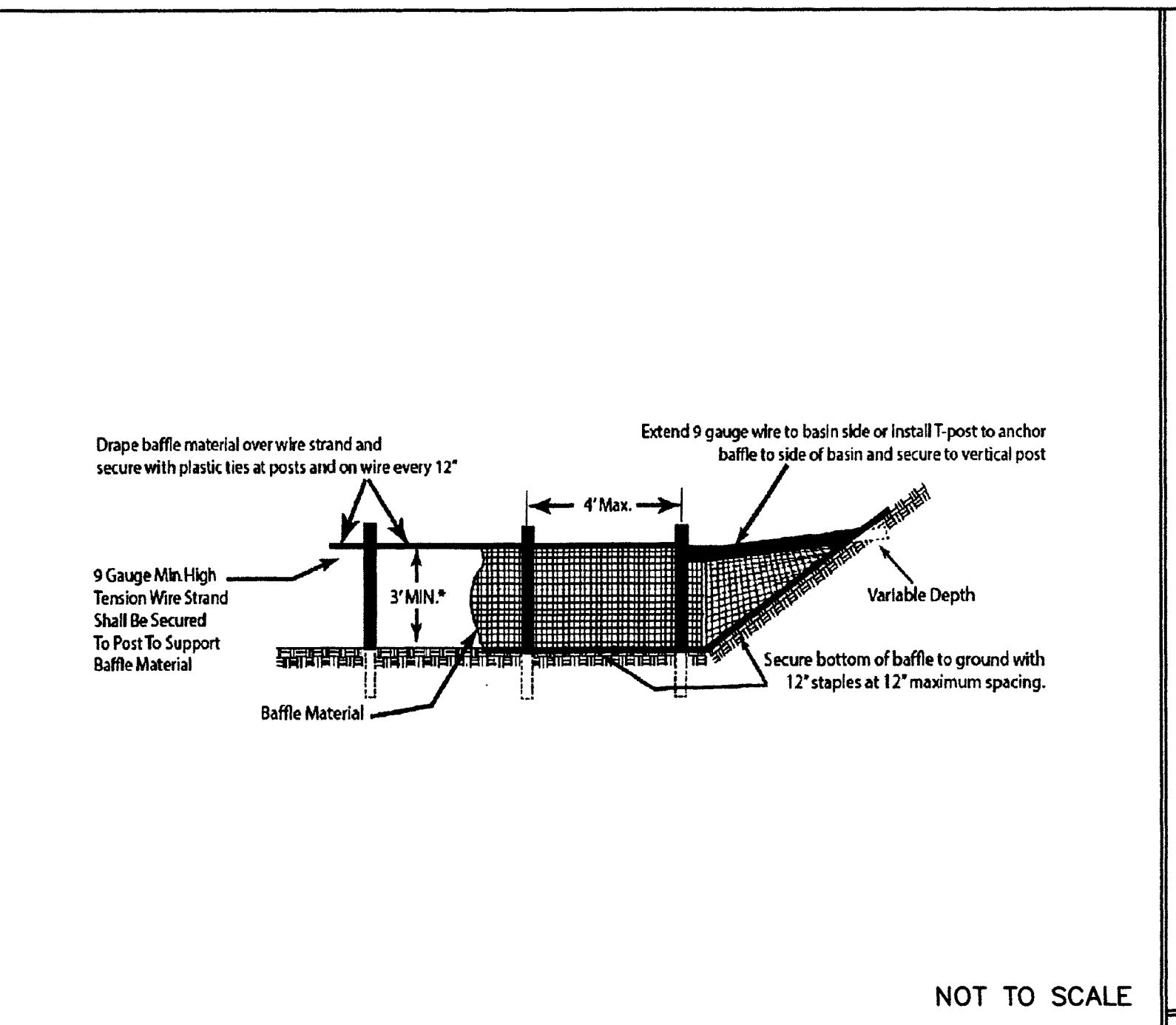
NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



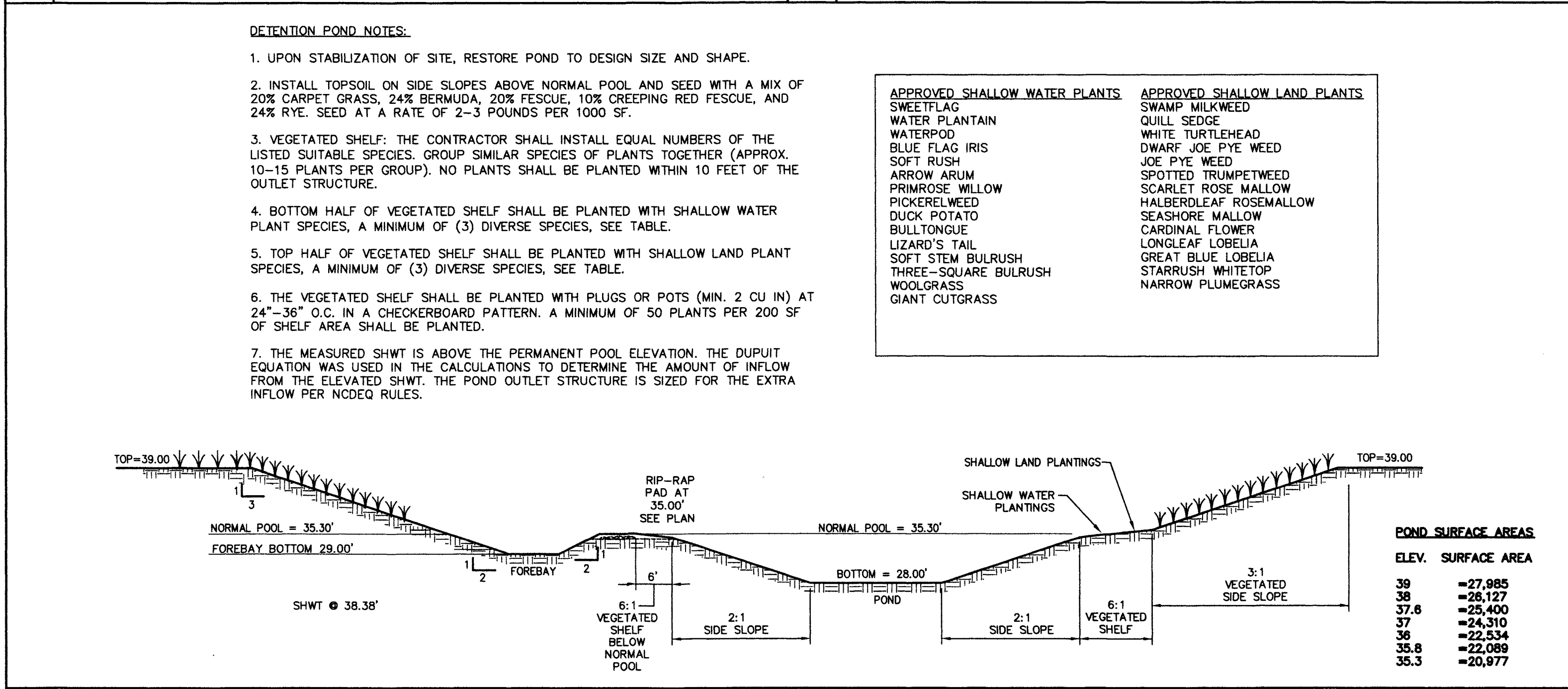
NOT TO SCALE

1 EMERGENCY SPILLWAY DETAIL

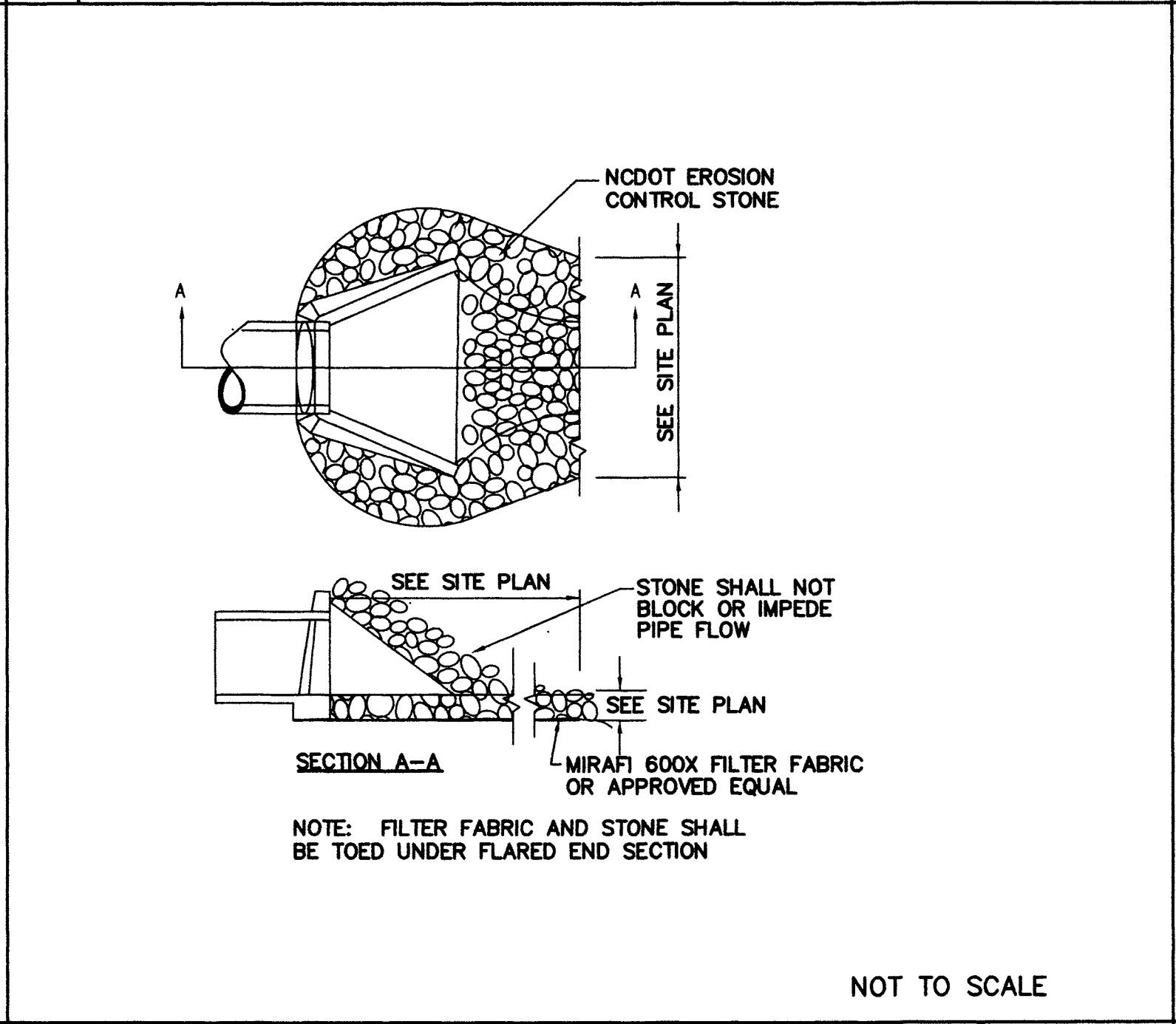
2 DETENTION POND OUTLET STRUCTURE

3 STANDARD SKIMMER DETAIL (FAIRCLOTH)

4 BAFFLE STAKE SPACING DETAIL

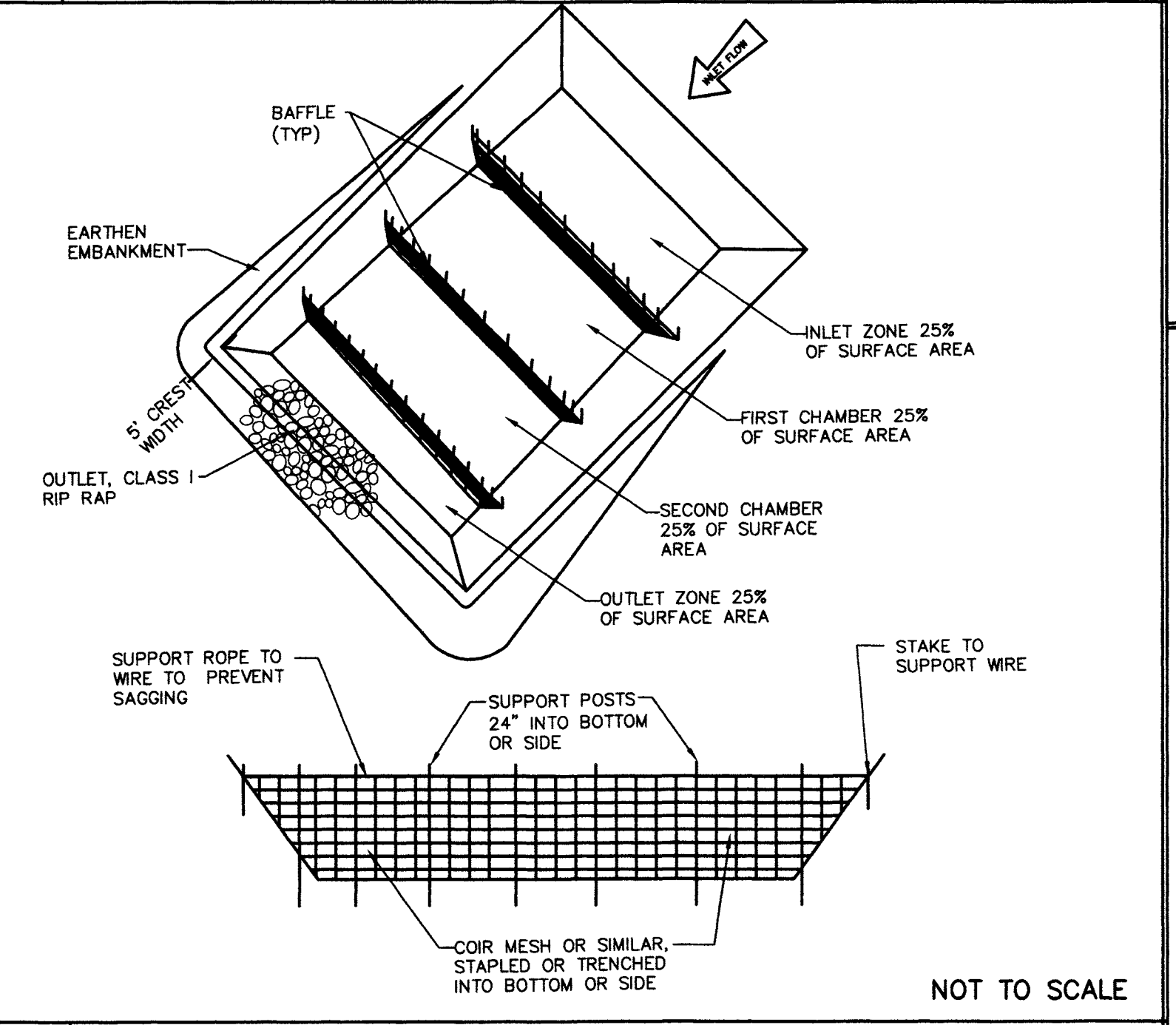


5 POND #4 CROSS SECTION



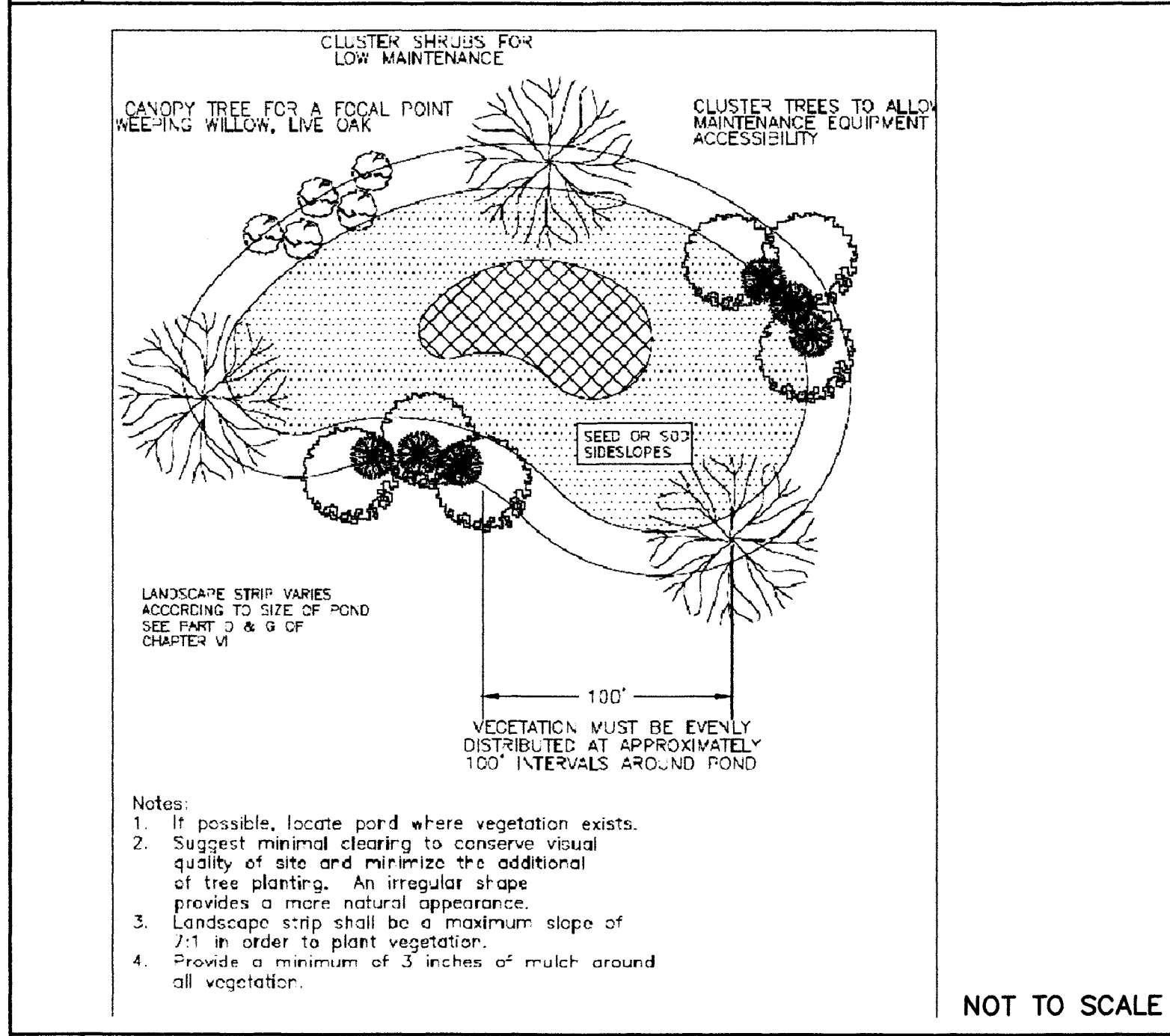
NOT TO SCALE

6 ENERGY DISSIPATOR



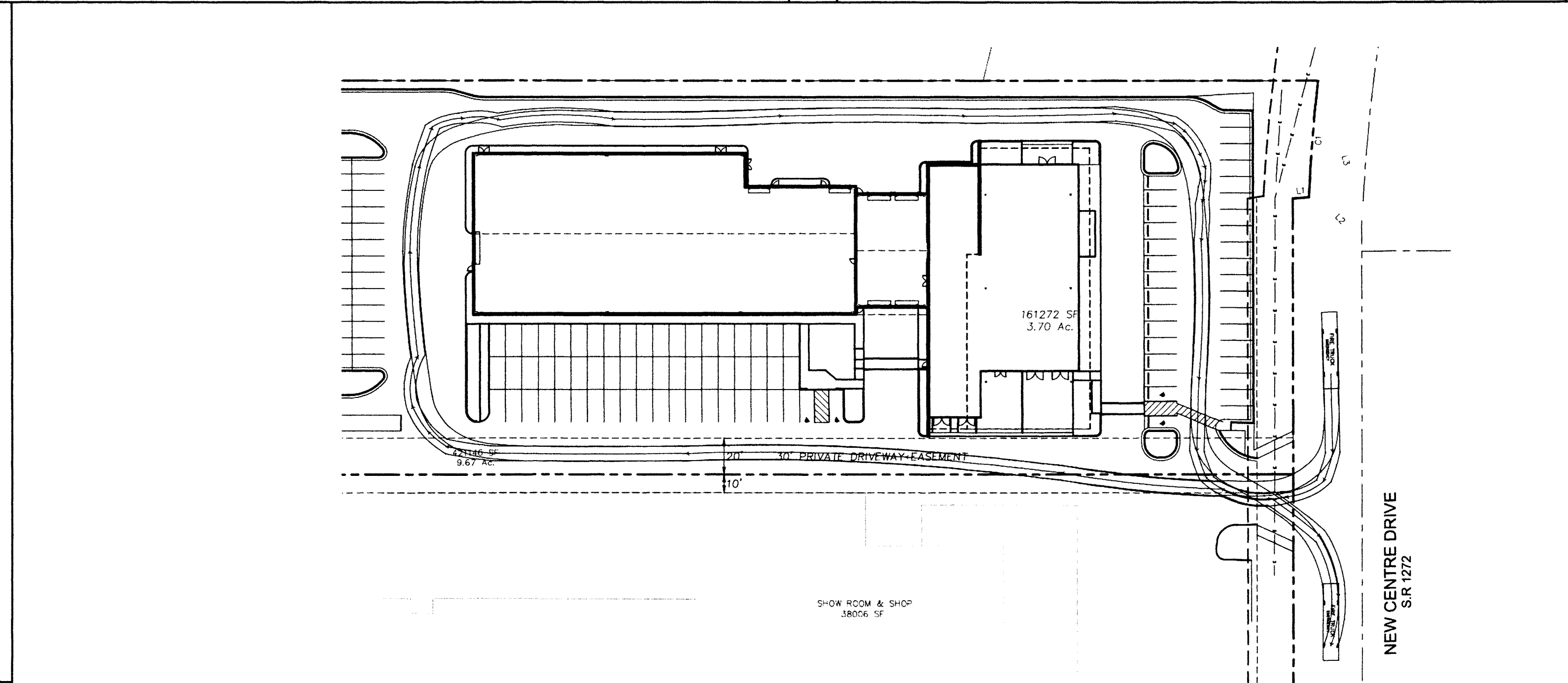
NOT TO SCALE

7 BAFFLE DETAIL



NOT TO SCALE

8 TYP. STORMWATER FACILITY LANDSCAPING PLAN



FIRE TRUCK ACCESS DETAIL
NOT TO SCALE

NOTES AND DETAILS
BAKER BMW OF WILMINGTON
4900 NEW CENTER DRIVE
WILMINGTON, N. C.

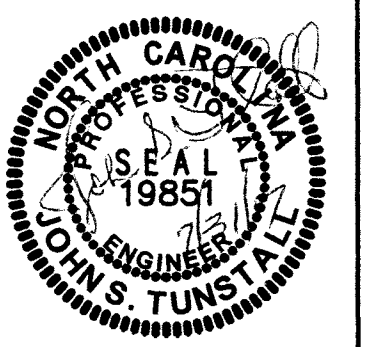
DEVELOPER
BAKER MOTOR COMPANY, LLC
4900 NEW CENTER DRIVE
WILMINGTON, NC 28403
910 624-6060

NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
1429 ASH-LITTLE RIVER RD. NW
KASH, N.C. 28420
PHONE: (910) 343-9633

16038

DES. JST
ORD. JPN
DRWL. NKS

DATE 3/14/17



C8

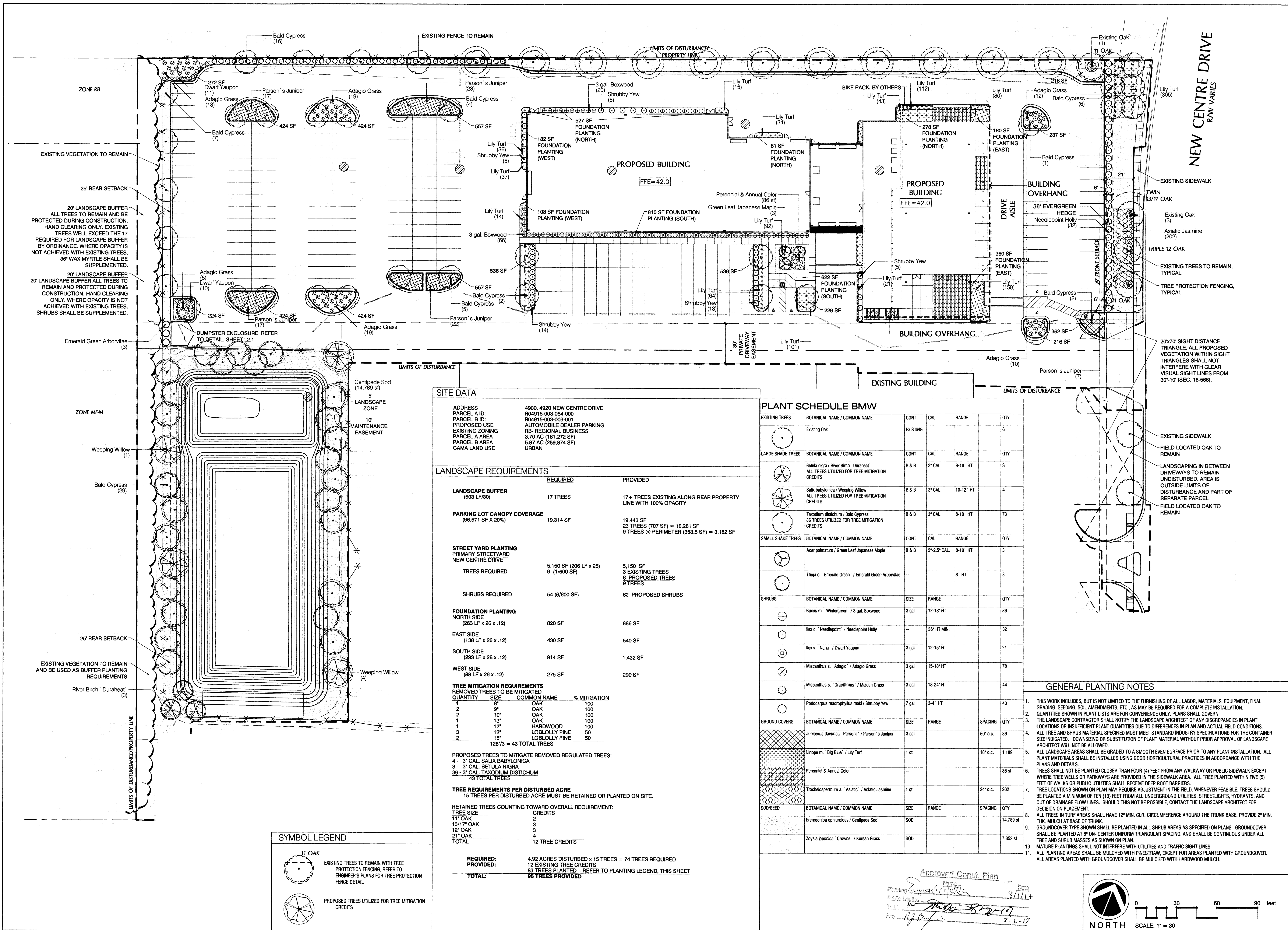
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 8/1/17 Permit # 99032 R1
Signed: [Signature]

Approved Construction Plan
Name: [Name] Date: [Date]
Planning: [Signature] 8/1/17
Traffic: [Signature] 8-2-17
Fire: [Signature] 8-2-17

SYMBOL	DATE	DESCRIPTION	BY
REVISIONS			
© 2015 NORRIS & TUNSTALL			

F:\Projects\2016\16038 Baker BMW of Wilmington\16038 Plans\Eng\16038 master.dwg (Layout1) Plotted on: Jul 31, 2017 - 2:21pm by Colleen



SITE DATA

ADDRESS	4900, 4920 NEW CENTRE DRIVE
PARCEL A ID:	R04915-003-054-000
PARCEL B ID:	R04915-003-003-001
PROPOSED USE	AUTOMOBILE DEALER PARKING
EXISTING ZONING	RB- REGIONAL BUSINESS
PARCEL A AREA	3.70 AC (161,272 SF)
PARCEL B AREA	5.97 AC (259,874 SF)
CAMA LAND USE	URBAN

LANDSCAPE REQUIREMENTS

	REQUIRED	PROVIDED
LANDSCAPE BUFFER (503 LF/30)	17 TREES	17+ TREES EXISTING ALONG REAR PROPERTY LINE WITH 100% OPACITY
PARKING LOT CANOPY COVERAGE (96,571 SF X 20%)	19,314 SF	19,443 SF 23 TREES (707 SF) = 16,261 SF 9 TREES @ PERIMETER (353.5 SF) = 3,182 SF
STREET YARD PLANTING PRIMARY STREET YARD NEW CENTRE DRIVE		
TREES REQUIRED	5,150 SF (206 LF x 25) 9 (1/600 SF)	5,150 SF 3 EXISTING TREES 6 PROPOSED TREES 9 TREES
SHRUBS REQUIRED	54 (6/600 SF)	62 PROPOSED SHRUBS
FOUNDATION PLANTING NORTH SIDE (293 LF x 26 x .12)	820 SF	886 SF
EAST SIDE (138 LF x 26 x .12)	430 SF	540 SF
SOUTH SIDE (293 LF x 26 x .12)	914 SF	1,432 SF
WEST SIDE (88 LF x 26 x .12)	275 SF	290 SF

TREE MITIGATION REQUIREMENTS

QUANTITY	SIZE	COMMON NAME	% MITIGATION
4	8"	OAK	100
2	9"	OAK	100
2	10"	OAK	100
1	13"	OAK	100
1	12"	HARDWOOD	100
3	12"	LOBLOLLY PINE	50
2	15"	LOBLOLLY PINE	50
1287/3 = 43 TOTAL TREES			

PROPOSED TREES TO MITIGATE REMOVED REGULATED TREES:
 4 - 3" CAL. SALIX BABYLONICA
 3 - 3" CAL. BETULA NIGRA
 36 - 3" CAL. TAXODIUM DISTICHUM
 43 TOTAL TREES

TREE REQUIREMENTS PER DISTURBED ACRE

TREE SIZE	CREDITS
11" OAK	2
13/17" OAK	3
12" OAK	3
21" OAK	4
TOTAL	12 TREE CREDITS

RETAINED TREES COUNTING TOWARD OVERALL REQUIREMENT:

TREE SIZE	CREDITS
11" OAK	2
13/17" OAK	3
12" OAK	3
21" OAK	4
TOTAL	12 TREE CREDITS

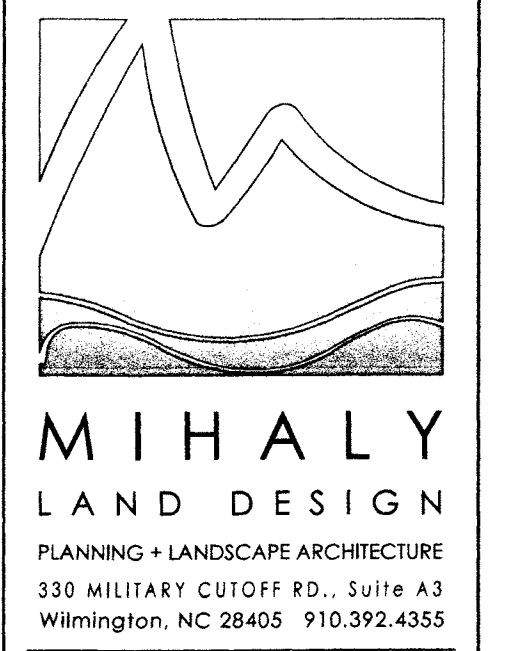
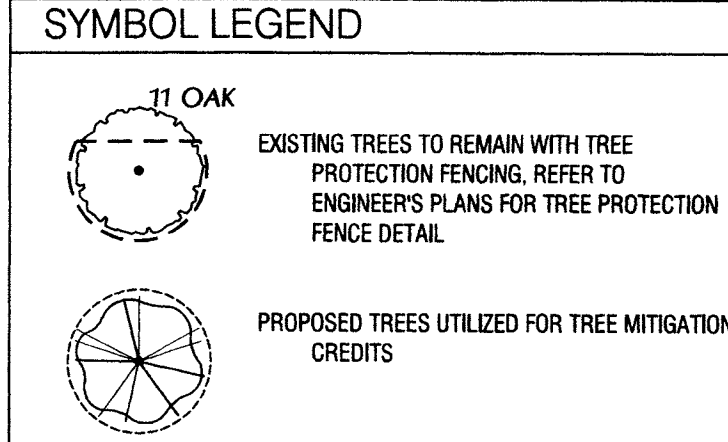
REQUIRED: 4.92 ACRES DISTURBED x 15 TREES = 74 TREES REQUIRED
PROVIDED: 12 EXISTING TREE CREDITS
TOTAL: 83 TREES PLANTED - REFER TO PLANTING LEGEND, THIS SHEET
95 TREES PROVIDED

PLANT SCHEDULE BMW

EXISTING TREES	BOTANICAL NAME / COMMON NAME	CONT	CAL	RANGE	QTY
Existing Oak		EXISTING			6
LARGE SHADE TREES	BOTANICAL NAME / COMMON NAME	CONT	CAL	RANGE	QTY
	Betula nigra / River Birch "Duraheat"	B & B	3" CAL	8-10' HT	3
	Salix babylonica / Weeping Willow	B & B	3" CAL	10-12' HT	4
	Taxodium distichum / Bald Cypress	B & B	3" CAL	8-10' HT	73
SMALL SHADE TREES	BOTANICAL NAME / COMMON NAME	CONT	CAL	RANGE	QTY
	Acer palmatum / Green Leaf Japanese Maple	B & B	2"-2.5" CAL	8-10' HT	3
	Thuja o. Emerald Green / Emerald Green Arborvitae			8' HT	3
SHRUBS	BOTANICAL NAME / COMMON NAME	SIZE	RANGE	QTY	
	Buxus m. Wintergreen / 3 gal. Boxwood	3 gal	12-18" HT	86	
	Ilex c. 'Needlepoint' / Needlepoint Holly		36" HT MIN.	32	
	Ilex v. Nana / Dwarf Yaupon	3 gal	12-15" HT	21	
	Miscanthus s. Adagio / Adagio Grass	3 gal	15-18" HT	78	
	Miscanthus s. 'Gracillimus' / Maiden Grass	3 gal	18-24" HT	44	
	Podocarpus macrophyllus makii / Shrubby Yew	7 gal	3-4' HT	40	
GROUND COVERS	BOTANICAL NAME / COMMON NAME	SIZE	RANGE	SPACING	QTY
	Juniperus davurica 'Parsonii' / Parson's Juniper	3 gal		60" o.c.	86
	Liriodendron 'Big Blue' / Lily Turf	1 qt		18" o.c.	1,189
	Perennial & Annual Color				86 sf
	Trachelospermum a. Asiatic / Asiatic Jasmine	1 qt		24" o.c.	202
SOD/SEED	BOTANICAL NAME / COMMON NAME	SIZE	RANGE	SPACING	QTY
	Eriochloa ophiuroides / Centipede Sod	SOD			14,789 sf
	Zoysia japonica 'Crown' / Korean Grass	SOD			7,352 sf

GENERAL PLANTING NOTES

- THIS WORK INCLUDES, BUT IS NOT LIMITED TO THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT, FINAL GRADING, SEEDING, SOIL AMENDMENTS, ETC. AS MAY BE REQUIRED FOR A COMPLETE INSTALLATION.
- QUANTITIES SHOWN IN PLANT LISTS ARE FOR CONVENIENCE ONLY. PLANS SHALL GOVERN.
- THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES IN PLANT LOCATIONS OR INSUFFICIENT PLANT QUANTITIES DUE TO DIFFERENCES IN PLAN AND ACTUAL FIELD CONDITIONS.
- ALL TREE AND SHRUB MATERIAL SPECIFIED MUST MEET STANDARD INDUSTRY SPECIFICATIONS FOR THE CONTAINER SIZE INDICATED. DOWNIZING OR SUBSTITUTION OF PLANT MATERIAL WITHOUT PRIOR APPROVAL OF LANDSCAPE ARCHITECT WILL NOT BE ALLOWED.
- ALL LANDSCAPE AREAS SHALL BE GRADED TO A SMOOTH EVEN SURFACE PRIOR TO ANY PLANT INSTALLATION. ALL PLANT MATERIALS SHALL BE INSTALLED USING GOOD HORTICULTURAL PRACTICES IN ACCORDANCE WITH THE PLANS AND DETAILS.
- TREES SHALL NOT BE PLANTED CLOSER THAN FOUR (4) FEET FROM ANY WALKWAY OR PUBLIC SIDEWALK EXCEPT WHERE TREE WELLS OR PARWAYS ARE PROVIDED IN THE SIDEWALK AREA. ALL TREE PLANTED WITHIN FIVE (5) FEET OF WALKS OR PUBLIC UTILITIES SHALL RECEIVE DEEP ROOT BARRIERS.
- TREE LOCATIONS SHOWN ON PLAN MAY REQUIRE ADJUSTMENT IN THE FIELD. WHENEVER FEASIBLE, TREES SHOULD BE PLANTED A MINIMUM OF TEN (10) FEET FROM ALL UNDERGROUND UTILITIES, STREETLIGHTS, HYDRANTS, AND OUT OF DRAINAGE FLOW LINES. SHOULD THIS NOT BE POSSIBLE, CONTACT THE LANDSCAPE ARCHITECT FOR DECISION ON PLACEMENT.
- ALL TREES IN TURF AREAS SHALL HAVE 12" MIN. CIR. CIRCUMFERENCE AROUND THE TRUNK BASE. PROVIDE 2" MIN. THK. MULCH AT BASE OF TRUNK.
- GROUNDCOVER TYPE SHOWN SHALL BE PLANTED IN ALL SHRUB AREAS AS SPECIFIED ON PLANS. GROUNDCOVER SHALL BE PLANTED AT 8" ON-CENTER UNIFORM TRIANGULAR SPACING, AND SHALL BE CONTINUOUS UNDER ALL TREE AND SHRUB MASSES AS SHOWN ON PLAN.
- MATURE PLANTINGS SHALL NOT INTERFERE WITH UTILITIES AND TRAFFIC SIGHT LINES.
- ALL PLANTING AREAS SHALL BE MULCHED WITH PINESTRAW, EXCEPT FOR AREAS PLANTED WITH GROUNDCOVER. ALL AREAS PLANTED WITH GROUNDCOVER SHALL BE MULCHED WITH HARDWOOD MULCH.



Revisions

- 2017-06-13: UPDATED LANDSCAPE PLAN PER SITE PLAN CHANGES
- 2017-06-14: REVISED TREE REMOVAL/MITIGATION INFORMATION
- 2017-07-07: REVISED PLAN TO ADDRESS TRC COMMENTS, ADDED DUMPSTER ENCLOSURE
- 2017-07-25: REVISED FOUNDATION PLANTING, ADDED BUFFER NOTE, ADDED EVERGREEN HEDGE AT NEW CENTRE DRIVE PER CITY COMMENTS
- 2017-07-31: REVISED DRIVEWAY PER ENG. PLANS

CLIENT
BAKER MOTOR COMPANY, LLC
 4920 NEW CENTRE DRIVE
 WILMINGTON, NC 28403
 LANDSCAPE PLANS

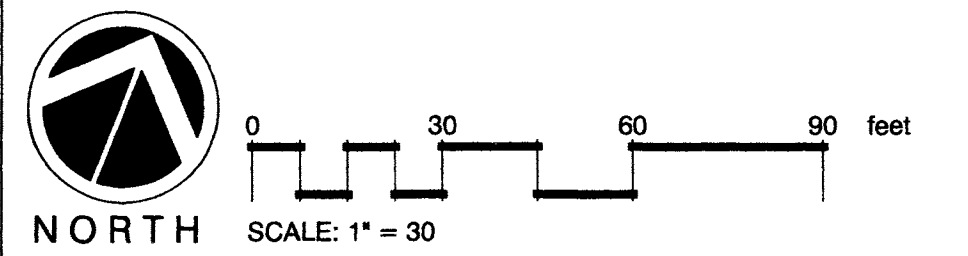
PROJECT
NORRIS & TUNSTALL ENGINEERS
 902 MARKET STREET
 WILMINGTON, NC 28401
 (910) 343-9653

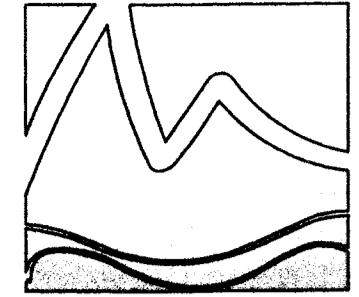
CONSTRUCTION SET

Date: 05/15/2017
 Phase:
 Job Number: 680-05
 Designed by: MLD
 Drawn by: ALM
 Checked by: JWM
 Sheet Title: LANDSCAPE PLAN

Sheet Number:
L1.1
 of 1 sheets

Approved Const. Plan
 Planning: [Signature]
 Public Use: [Signature]
 Title: [Signature]
 Date: 8/1/17
 File: [Signature]
 8-2-17





MIHALY
LAND DESIGN
PLANNING + LANDSCAPE ARCHITECTURE
330 Military Cutoff Rd. Suite A3
Wilmington, NC 28403 910.392.4355



PROJECT
NORRIS & TUNSTALL ENGINEERS
902 MARKET STREET
Wilmington, NC
(910) 343-9653

PROJECT
BAKER BMW
4920 NEW CENTRE DRIVE
Wilmington, NC
Dumpster Enclosure Detail

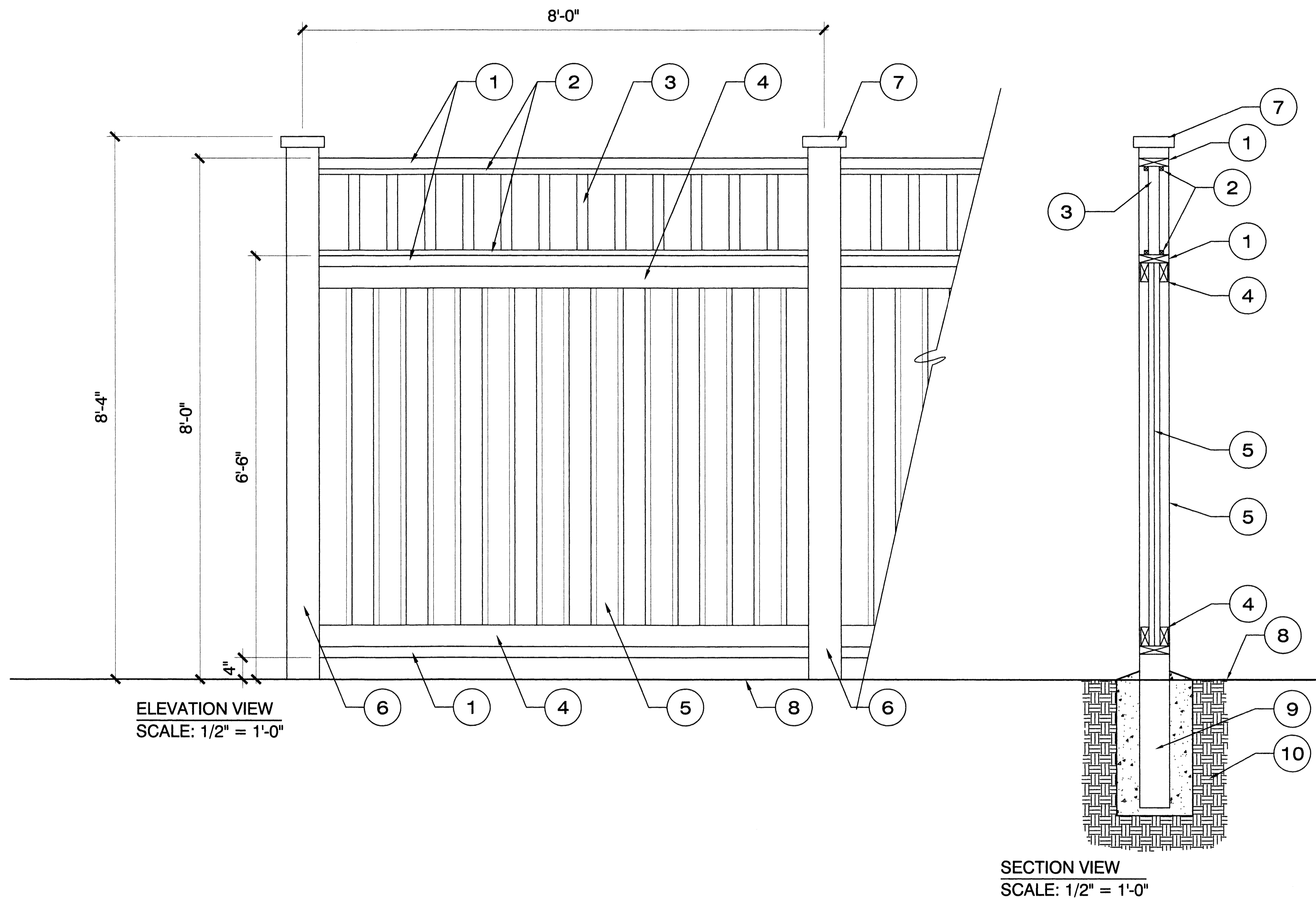
Date: 07-07-2017
Phase: 000
Job Number: 680-05
Designed by: MLD
Drawn by: ALM
Checked by: JWV

Sheet Title:
**CONSTRUCTION
DETAIL -
LANDSCAPE**

Sheet Number

L2.1

of 1 sheets



LEGEND

1. 2 x 6 CAP
2. 1 x 1 NAILER
3. 2 x 2 PICKET
4. 2 x 4 STRINGER
5. 1 x 6 VERTICAL BOARDS - 1" OVERLAP
6. 6 x 6 POSTS AT 8'-0" O.C.
7. DECORATIVE POST CAP
8. FINISH GRADE
9. CONCRETE FOOTING
10. COMPACTED SUBGRADE

NOTES:

- PAINT COLOR: TO BE SELECTED
- TREAT ALL EXPOSED SURFACES WITH (2) TWO COATS MOISTURE-PROOF PRIMER AND (2) COATS ENAMEL.
- ALL CONNECTORS, FASTENERS AND OTHER HARDWARE SHALL BE HOT DIPPED GALVANIZED

Approved Const. Plan
 Planning: *[Signature]* Date: 8/1/17
 Public Utilities: *[Signature]*
 Traffic: *[Signature]* 8-2-17
 Fire: *[Signature]* 8-2-17