

NOTE: PRIOR TO BEGINNING ANY SITE WORK & ORDERING OF MATERIALS, CONTRACTOR SHALL FIELD VERIFY ALL UTILITY & DRAINAGE CONNECTIONS TO EXISTING SYSTEMS BY POT HOLING AND SHALL NOTIFY ENGINEER OF NEEDED CHANGES: FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR BEING RESPONSIBLE FOR ALL REVISION COSTS AND DELAYS.

GENERAL NOTES:

- A. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.
- B. SITE CONDITIONS BASED UPON SURVEY SUBMITTED BY OWNER. FIELD VERIFY EXISTING CONDITIONS BY DETAILED SITE INSPECTION PRIOR TO SUBMITTING BID AND BEGINNING CONSTRUCTION.
- C. FIELD VERIFY SANITARY SEWER SERVICE CONNECTION INVERT PRIOR TO ESTABLISHING FINAL FINISH FLOOR ELEVATION.
- D. COORDINATE WORK WITH OTHER SITE RELATED DEVELOPMENT DRAWINGS.

SITE EXCAVATION REQUIREMENTS:

- 1. A GEOTECHNICAL ANALYSIS HAS BEEN PERFORMED ON THIS SITE. REFER TO PROJECT MANUAL FOLLOW GEOTECHNICAL ANALYSIS RECOMMENDATION FOR SITE EXCAVATION.
- 2. REFER TO STRUCTURAL DRAWINGS FOR BUILDING EXCAVATION REQUIREMENTS.

PIPE NOTES:

- 1. PIPE MATERIALS SHALL BE IN ACCORDANCE WITH AND AS APPROVED BY THE CITY OR APPLICABLE AUTHORITY. REINFORCED CONCRETE PIPE (RCP) AND HIGH DENSITY POLYETHYLENE (HDPE) MAY BE USED AS ALLOWED BY LOCAL GUIDELINES.
- 2. ALL PIPE IS TO BE INSTALLED PER THE MANUFACTURER'S REQUIREMENTS AND MEET COVER REQUIREMENTS PER THE MANUFACTURER.

FLOOD ZONE:

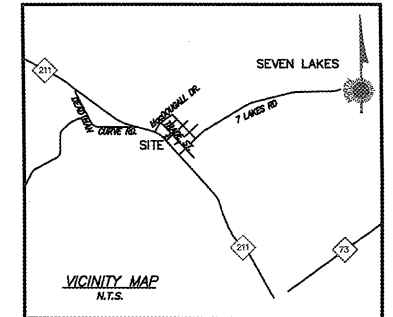
ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM), COMMUNITY PANEL NO. 37108525002J, EFFECTIVE DATE, OCTOBER 17, 2006. ENTIRE SUBJECT PROPERTY LIES WITHIN ZONE X. AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

WATER QUALITY RUNOFF SUMMARY:

TOTAL PROPERTY AREA = 1.215 ACRES
TOTAL DISTURBED AREA = 1.19 ACRES > 1.0 ACRES THEREFORE SEDIMENTATION AND EROSION CONTROL PLAN APPROVAL IS REQUIRED FROM NCDOT.
THE PROPOSED STORMWATER IS COLLECTED AND CONVEYED TO THE PROPOSED DRY DETENTION POND. THE DRY DETENTION POND WILL STORE THE WATER QUALITY VOLUME AND DISCHARGE PER NCDOT AND DOT REQUIREMENTS. REFER TO STORMWATER REPORT PREPARED BY ANDERSON ENGINEERING FOR MORE INFORMATION.

IMPERVIOUS SURFACE SUMMARY:

PROPERTY AREA = 52,935 SQFT = 1.215 ACRES
PROPOSED IMPERVIOUS SURFACE = 28,865 SQFT = 0.619 ACRES
PERCENT IMPERVIOUS = 50.9%
PARKING LOT = 19,512 SQFT = 0.448 ACRES
BUILDING = 7,453 SQFT = 0.171 ACRES
PROPOSED PERVIOUS SURFACE = 25,970 SQFT = 0.596 ACRES
PERCENT PERVIOUS = 49.1%
GRASS = 25,970 SQFT = 0.596 ACRES

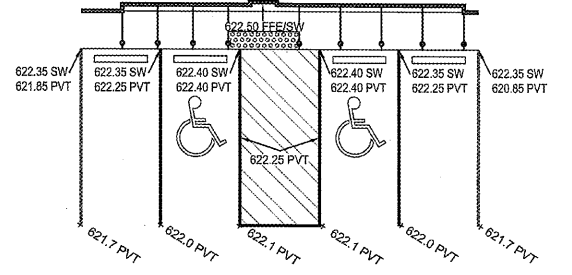


ANDERSON ENGINEERING
EMPLOYEE OWNED
ENGINEERS - SURVEYING, LABORATORS, DRILLING
2300 W. BRADY BLVD., SUITE 200
SPRINGFIELD, MISSOURI 65802
MO ANDERSON ENGINEERING
WWW.ANDERSONENGINEERING.COM
DWG BY: MRR PROJ # 10-17 DRAWING # WB-111-001

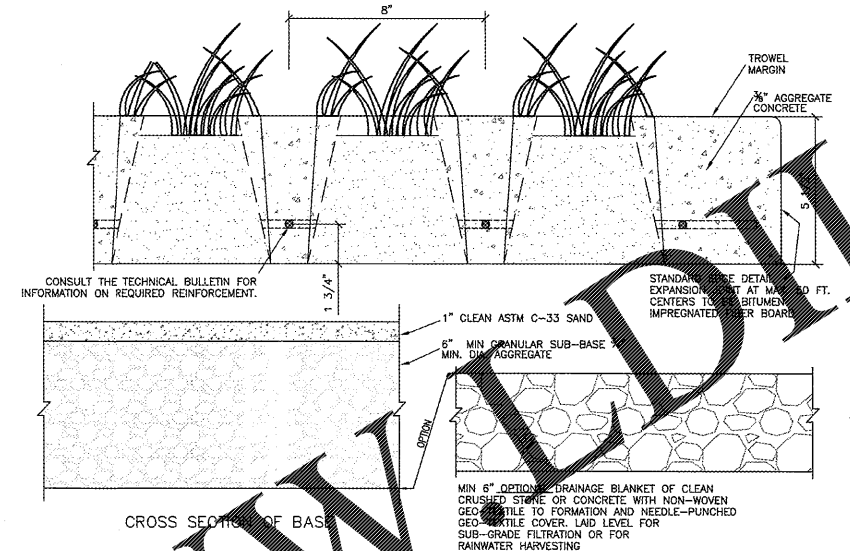
ANDERSON ENGINEERING
NORTH CAROLINA PROFESSIONAL SEAL
CRAIG A. SCHNEIDER, AIA
ARCHITECT
1736 East Sunshine, Suite 417
Springfield, Missouri 65804
417.862.2674
417.862.2675
e-mail: architect@esterstichitect.com

SPECIAL NOTE:
FIELD VERIFY SANITARY SEWER CONNECTION INVERT PRIOR TO ESTABLISHING FINAL FINISH FLOOR ELEVATION. REFER TO SITE UTILITIES PLAN.

SPECIAL NOTE:
CONTRACTOR SHALL FIELD VERIFY PROPOSED GRADES MATCH EXISTING PAVEMENT AT DRIVEWAY ENTRANCES. CONTRACTOR SHALL NOTIFY ENGINEER IF DISCREPANCY OCCURS.



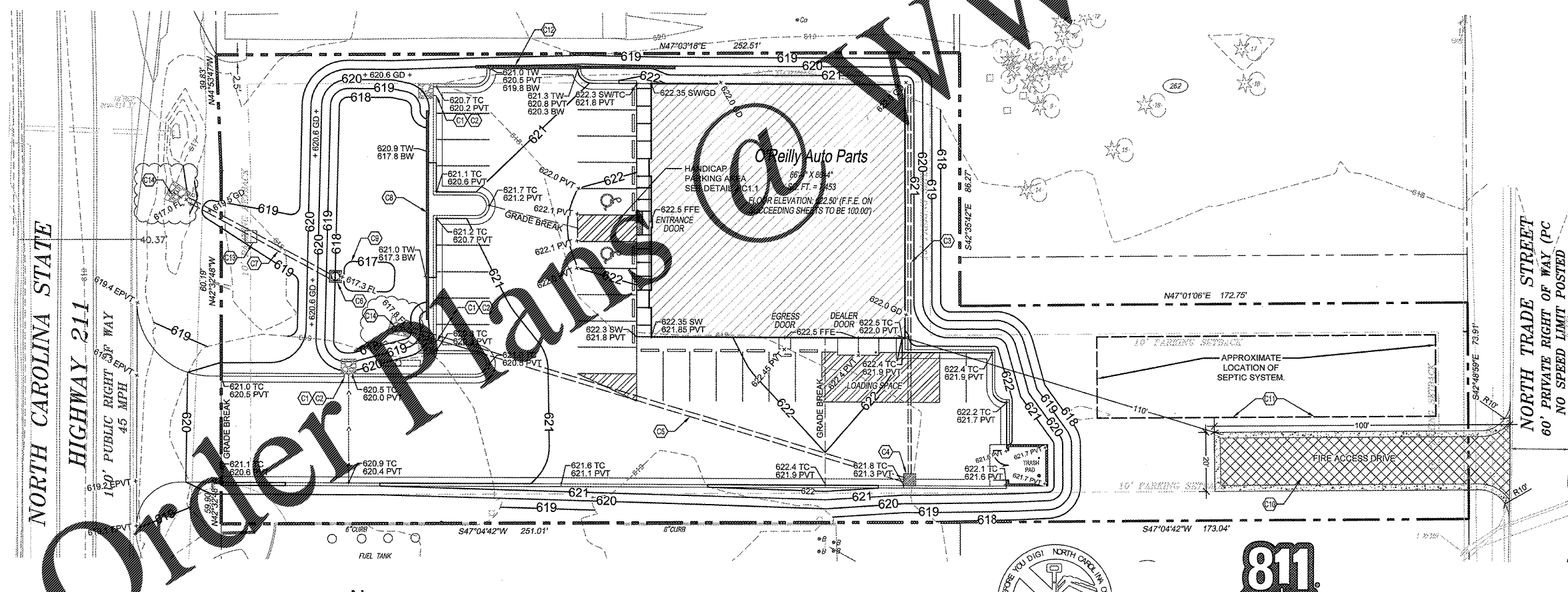
2 HANDICAP PARKING DETAIL
C1.1 SCALE: 1" = 10'



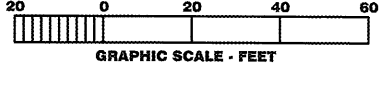
3 PARTIALLY CONCEALED GRASSCRETE PAVER
C1.1 SCALE: 1/2" = 1'-0"

KEY NOTES:

- C1.1 INSTALL 18" CURB CUT.
- C2.1 INSTALL 5' X 5' RIP RAP PAD (REFER TO RIP RAP DETAIL 4/C1.2)
- C3.1 INSTALL APPROX. 134 LF OF 12" DOWNSPOUT COLLECTOR PIPE. NORTH INV = 619.4' REFER TO PIPE NOTES AND DETAIL 1/C1.2
- C4.1 INSTALL 4' X 4' AREA INLET. RIM = 621.3' INV = 618.7' REFER TO DETAIL 2/C1.2
- C5.1 INSTALL APPROX. 176 LF OF 18" PIPE. DAYLIGHT PIPE IN DRY DETENTION POND AT INV = 617.8'. REFER TO PIPE NOTES.
- C6.1 INSTALL 5' X 4' DETENTION OUTLET STRUCTURE. RIM = 620.85' INV = 617.3' REFER TO DETAIL 3/C1.2
- C7.1 INSTALL 56 LF OF 18" OUTLET PIPE. DAYLIGHT PIPE AT INV = 617.0'. REFER TO PIPE NOTES.
- C8.1 INSTALL 72 LF OF RETAINING CURB. REFER TO DETAIL 5/C1.2
- C9.1 GRADE AREA TO PROVIDE PERMANENT POOL BELOW LOW FLOW ORIFICE OPENINGS PER NCDOT STORMWATER BMP MANUAL. TOP = 617.3' BOTTOM = 616.8'
- C10.1 INSTALL 1,650 SQ. FT. OF PARTIALLY CONCEALED GRASSCRETE PERVIOUS PAVERS OR APPROVED EQUAL PER COUNTY REQUIREMENTS. PAVERS TO BE RATED FOR EMERGENCY ACCESS. REFER TO DETAIL 3/C1.1 CONTRACTOR TO INSTALL 2' WIDE CONCRETE STRIP AT EDGE OF PAVERS. REFER TO SHEET C2.2 FOR CONCRETE PAVING DETAIL.
- C11.1 CONTRACTOR TO NOT GRADE, COMPACT, OR DISTURB WITHIN SEPTIC SYSTEM AREA PER APPROVED SEPTIC PERMIT. COORDINATE LOCATION AND LIMITS OF SEPTIC SYSTEM WITH SEPTIC CONTRACTOR. CONTACT ENGINEER IF ANY CONFLICTS ARE DETERMINED IN FIELD.
- C12.1 INSTALL 66 LF OF RETAINING CURB. REFER TO DETAIL 6/C1.2
- C13.1 FUTURE LOCATION OF NCDOT STRUCTURE 1427. TO BE CONSTRUCTED BY OTHERS. SHOWN FOR REFERENCE ONLY.
- C14.1 INSTALL 5' W1 X 7' W2 X 7' L RIP RAP OUTLET PROTECTION. REFER TO DETAIL 4/C1.2



1 SITE GRADING PLAN
C1.1 SCALE: 1" = 20'



SYMBOLS LEGEND	
REFER TO SURVEY (SV1) FOR EXISTING CONDITION SYMBOLS LEGEND AND SITE CONTROL.	
---	EXISTING GRADE LINES
---	PROPOSED NEW GRADE LINES
[Hatched Box]	NEW BUILDING CONSTRUCTION
[Dashed Box]	NEW SIGN
[Solid Box]	NEW CONCRETE PAVING BLOCK
[Arrow]	SURFACE FLOW ARROW
NEW SPOT ELEVATIONS LIST	
GRADE	NONE
SIDEWALK	SW
TOP OF WALL	TW
TOP OF CURB	TC
TOP OF PAVEMENT	PVT
NEW GRADE	GD
CONCRETE	CONC
EXISTING TOP OF CURB	ETC
EXISTING GRADE	EGD
EXISTING PAVEMENT	EPVT
EXISTING SIDEWALK	ESW
FLOW LINE	FL
TOP OF BERM	TOP
PROJECT BENCHMARK CROSS CUT "X" SET IN CONCRETE BASE OF SHELL STATION SIGN, SOUTHWEST CORNER OF SUBJECT PROPERTY. ELEVATION = 619.98	

PROJECT:
NEW O'REILLY AUTO PARTS STORE
NC STATE HWY 211
SEVEN LAKES, NC
SITE GRADING PLAN

O'Reilly AUTO PARTS
CORPORATE OFFICES
2333 SOUTH PATTERSON
SPRINGFIELD, MISSOURI 65802
(417) 862-2674 TELEPHONE

COMM #	4155
DATE:	3-23-18
REVISION	
DATE:	8-8-18
	8-29-18
	8-30-18