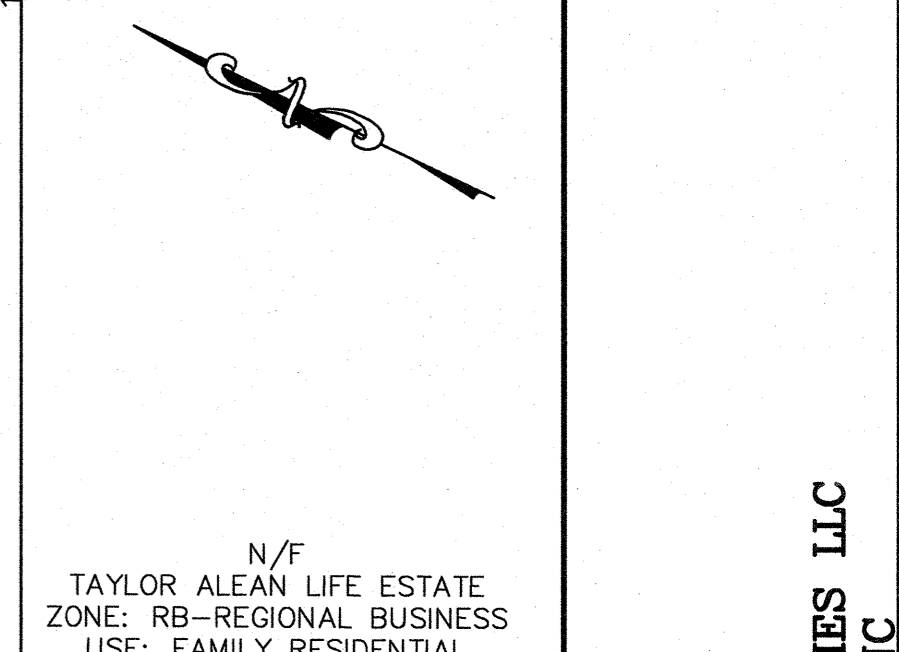


REVISIONS		
No./Date	Description	By
02-13-19	ADDED FIRE LINE	EJW
02-18-19	ADDED CONCRETE COLLAR	EJW
02-21-19	ADDED SW IN ISLAND	EJW
02-25-19	SHIFTED LOD AND 18\"/>	



N/F TAYLOR ALEAN LIFE ESTATE
 ZONE: RB-REGIONAL BUSINESS
 USE: FAMILY RESIDENTIAL

N/F CARMAR PARK ASSOCIATION (HOA)
 ZONE: RB-REGIONAL BUSINESS
 USE: RETAIL AUTO

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

Approved Construction Plan
 Name _____ Date _____

Planning _____
 Traffic _____
 Fire _____

City of WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

SITE DATA:

PROPERTY OWNER	WILMINGTON AUTO GROUP PROPERTIES LLC
PROJECT ADDRESS	5820 MARKET ST
PIN NUMBER	R05010-001-003-000
AREA NOT IN A FEMA 100-YEAR FLOOD ZONE.	
ZONING DISTRICT	RB-REGIONAL BUSINESS
DISTURBED AREA:	3.47 AC.
SETBACKS REQUIRED	FRONT: 25' REAR: 15' INTERIOR SIDE: 0' CORNER LOT SIDE: 25'
PROPOSED BUILDING SETBACKS	FRONT: 101' REAR: 464' SIDE: 42' CORNER LOT SIDE: N/A
TRACT AREA	151,429 SF (3.47 AC)
BUILDING USE	AUTOMOBILE DEALER
BUILDING TYPE	IB
PROPOSED BUILDING AREA (GROSS)	17,500 SF
BUILDING LOT COVERAGE (15,850/151,429)	10%
NUMBER OF UNITS	1
NUMBER OF BUILDINGS	1
BUILDING HEIGHT	22'
NUMBER OF STORIES	2
SF PER FLOOR 1ST FLOOR (GROSS)	15,850 SF
SF PER FLOOR 2ND FLOOR (GROSS)	1,650 SF

SITE DATA: (CONT'D)

EXISTING ON-SITE IMPERVIOUS AREAS:	
EXISTING BUILDINGS	48,507 SF
EXISTING ASPHALT	0 SF
EXISTING CONCRETE	0 SF
TOTAL EXISTING IMPERVIOUS AREA	48,507 SF (32%)
EXISTING ON-SITE IMPERVIOUS TO BE REMOVED	-48,507 SF
PROPOSED ON-SITE IMPERVIOUS AREAS:	
PROPOSED BUILDING	17,265 SF
PROPOSED ASPHALT	73,669 SF
PROPOSED CONCRETE	1,369 SF
TOTAL PROPOSED IMPERVIOUS AREA	92,303 SF (60.95%)
EXISTING IMPERVIOUS TO REMAIN	0 SF
TRUE GRID 21,663 S.F. 100% PERVIOUS	0 SF
FUTURE	17,008 SF
PROPOSED+EXISTING IMPERVIOUS	109,311 SF (72.2%)
PARKING REQUIRED: (AUTOMOBILE DEALER)	17,265 SF
MAXIMUM:	53
MINIMUM: 1/500 SF (17,265/500)	35
TOTAL PARKING PROVIDED:	216
CAMA LAND USE:	URBAN
PUBLIC WATER AND SEWER BY CPPIA	
EXISTING WATER FLOW:	0 GPD
EXISTING SEWER FLOW:	0 GPD
PROPOSED WATER FLOW:	600 GPD
PROPOSED SEWER FLOW:	500 GPD
HANDICAP SPACES REQUIRED (1-25 SPACES= 1 HANDICAP SPACE)	PROPOSED 2
35 SPACES/25=1.4	
BICYCLE PARKING REQUIRED: (35 PARKS)	10 SPACES
BICYCLE PARKING PROPOSED:	10 SPACES

NOTES:

ZONING

- 1) TOPOGRAPHY AND TREE SURVEY COMPLETED BY ATLANTIC COAST SURVEY, PLLC.
- 2) PERMITTING OF BUSINESS IDENTIFICATION SIGNAGE IS A SEPARATE PROCESS. CITY OF WILMINGTON WILL NOT ALLOW OBSTRUCTIONS WITHIN THE RIGHT-OF-WAY.
- 3) CONTRACTOR SHALL FIELD VERIFY SIZE, MATERIAL, INVERTS AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PROPOSED CONNECTIONS.
- 4) EXISTING EASEMENTS AS SHOWN.
- 5) CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- 6) UNDERGROUND FIRE LINE(S) 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 910-341-0898.
- 7) UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT (910)341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
- 8) A LANDSCAPING 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. (SD 15-14 CofW TECH STDS)

SOLID WASTE

- 1) SITE TO USE ON-SITE DUMPSTER.

TRAFFIC

- 1) ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS. (DETAIL SD-13 CofW TECH STDS)
- 2) ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS. (DETAIL SD-13 CofW TECH STDS)
- 3) CONTRACT TRAFFIC ENGINEERING AT 341-7888 TO ENSURE THAT ALL TRAFFIC SIGNALS FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN.
- 4) CALL TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
- 5) ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
- 6) CONTRACT TRAFFIC ENGINEERING AT 741-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- 7) ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- 8) NO ROWS TO BE CLOSED.
- 9) NO STREETS PROPOSED.
- 10) NO OFF SITE PARKING PROPOSED.
- 11) NO PROPOSED DRIVEWAY.
- 12) TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING PRIOR TO ACTUAL STRIPING.
- 13) ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- 14) STOP SIGNS AND STREET SIGNS TO REMAIN IN PLACE DURING CONSTRUCTION.
- 15) TACTILE WARNING MATS WILL BE INSTALLED ON ALL WHEELCHAIR RAMPS.
- 16) 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.
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FIRE AND LIFE SAFETY

- 1) CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION
- 2) NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE
- 3) HYDRANT MUST BE WITHIN 150' OF THE FDC (MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE)
- 4) FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT
- 5) LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC
- 6) ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
- 7) PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE UNDERGROUND FIRE LINE PERMIT FROM THE WILMINGTON FIRE AND LIFE SAFETY DIVISION 910-343-0898
- 8) ALL ISOLATION VALVES WITHIN THE "HOT BOX" SHALL BE ELECTRICALLY SUPERVISED. PLEASE WORK CLOSELY WITH YOUR FIRE SPRINKLER AND ALARM INSTALLER IN REGARDS TO RUNNING WIRE FOR TAMPER SWITCH.
- 9) DUE TO THE SIZE OF THE BUILDING AND TYPE OF CONSTRUCTION AN 800MHz RADIO SIGNAL SITE TEST MUST BE PERFORMED TO DETERMINE IF A RADIO AMPLIFIER IS NEEDED PER THE 2018 NC FIRE CODE SECTION 510. PLEASE WORK CLOSELY WITH YOUR ARCHITECT AND DESIGN TEAM TO ENSURE THERE IS ADEQUATE RADIO COVERAGE INSIDE THE BUILDING(S).

NOTES: (CONT'D)

LANDSCAPING

- 1) 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.
- 2) ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING, GRADING OR STAGING OF MATERIALS WILL OCCUR IN THOSE AREAS.
- 3) NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING IS INSTALLED AND APPROVED. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTIONS ON TREE PROTECTION METHODS.
- 4) ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30"-10'.

CPPIA

- 1) WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CPPIA) DETAILS AND SPECIFICATIONS.
- 2) PROJECT SHALL COMPLY WITH THE CPPIA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL.
- 3) IF THE CONTRACTOR DESIRES CPPIA 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.
- 4) ANY IRRIGATION SYSTEM SUPPLIED BY CPPIA WATER SHALL COMPLY WITH THE CPPIA'S CONNECTION CONTROL REGULATION. CALL 332-8419 FOR INFORMATION.
- 5) ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CPPIA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES FOR USDFLOOR OR ASSE.
- 6) PUBLIC WATER AND SEWER EXIST ON MARKET STREET.
- 7) CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4949 PRIOR TO DOING ANY DIGGING, CLEARING OR GRADING.
- 8) ANY IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN AND FREEZER SENSOR.
- 9) CONTRACTOR TO FIELD VERIFY EXISTING WATER AND SEWER SERVICE LOCATIONS, SIZES AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF ANY CONFLICTS.

DRAINAGE

- 1) SITE TO DRAIN TO A PERMITTED OFFSITE STORMWATER POND. NCDOT PERMIT NO. SW8 000647 & SW8 120617 CITY OF WILMINGTON PERMIT NO. 2004022 & 2012023

KEY LEGEND

1. LIGHT GRAY CONCRETE, FINISH SHALL HAVE A BRUSHED PATTERN ON ALL O.C. EA. WAY
2. DARK GRAY CONCRETE, FINISH SHALL HAVE A BRUSHED PATTERN ON ALL VISIBLE SURFACES.
3. LIGHT GRAY CONCRETE, SMOOTH, SAND BLASTED FINISH WITH REVEALS AT 30" O.C. EA. WAY
4. BROWN STAINED CONCRETE WITH STAMPED WOOD DECK PATTERN
5. LIGHT GRAY PAVEMENT TO MATCH CONCRETE (CELLULAR GRASS PAVEMENT SYSTEM)
6. WHITE ASPHALT GRAPHICS IN VOLVO BROAD FONT, TYP.
7. PARKING STRIPING PER LOCAL CODES & REQUIREMENTS.
8. CONCRETE EXPANSION JOINTS, TYP.
9. PLAZA WALL IN LIGHT GRAY CONCRETE, SMOOTH FINISH, THE WALL SHOULD NOT OBSTRUCT THE VIEW FROM OFF PROPERTY INTO THE PLAZA.
10. C.P.O. WALL: WHITE STUCCO, SMOOTH FINISH, WITH ILLUMINATED VOLVO C.P.O. LETTER SIGNAGE (BY VENDOR OF RECORD).
11. PLOW SIGN BY VENDOR OF RECORD.
12. BOLLARD LIGHT
13. FEATURE DISPAY PAD W/ RECESSED LIGHTING
14. LOW LYING PLANTS: PLANTING SHALL MAKE USE OF LOCAL PLANTS AND NOT OBSTRUCT THE VIEW FROM OFF PROPERTY INTO THE PLAZA.
15. PLAZA BENCH (TEMPORARY/MOVABLE)
16. ENTRY MAT LOCATION
17. ELECTRIC VEHICLE CHARGING STATION

INVENTORY OF TREES TO BE REMOVED

TREE TYPE	TREE SIZE	QUANTITY
PINE	11"	2
PINE	12"	14
PINE	13"	6
PINE	14"	4
PINE	15"	3
PINE	16"	3
PINE	17"	3
PINE	19"	1
OAK	6"	1
OAK	8"	1
OAK	10"	1
OAK	12"	2

LEGEND

- PROPERTY BOUNDARY
- EXISTING TREE TO BE REMOVED
- TREE PROTECTION
- TRUE GRID
- REQUIRED PARKING
- SS --- SEWER
- W --- WATER
- SD --- STORM WATER
- LIMITS OF DISTURBANCE
- X --- TSF --- TEMPORARY SILT FENCE
- 8' FENCE

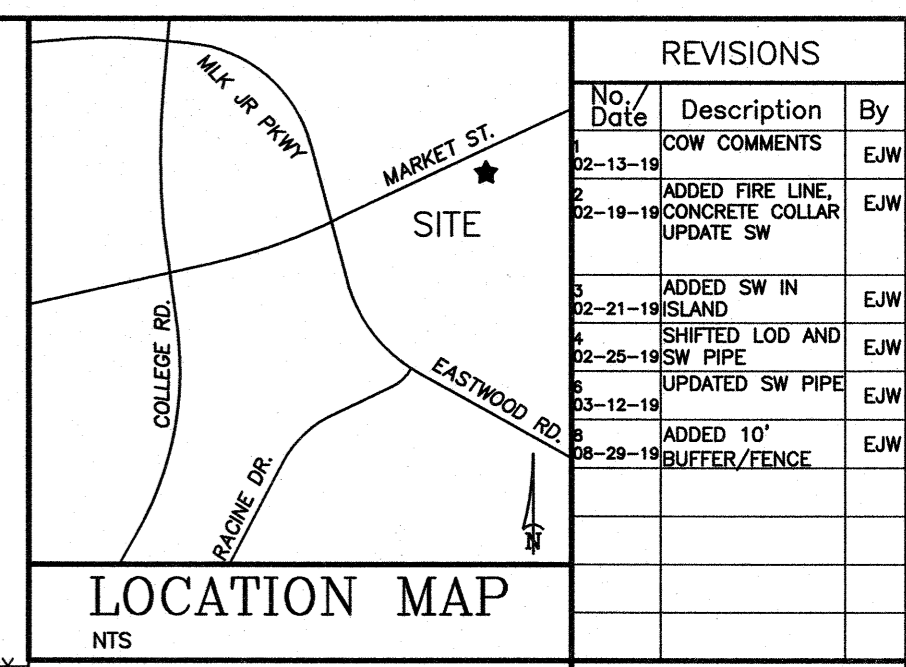
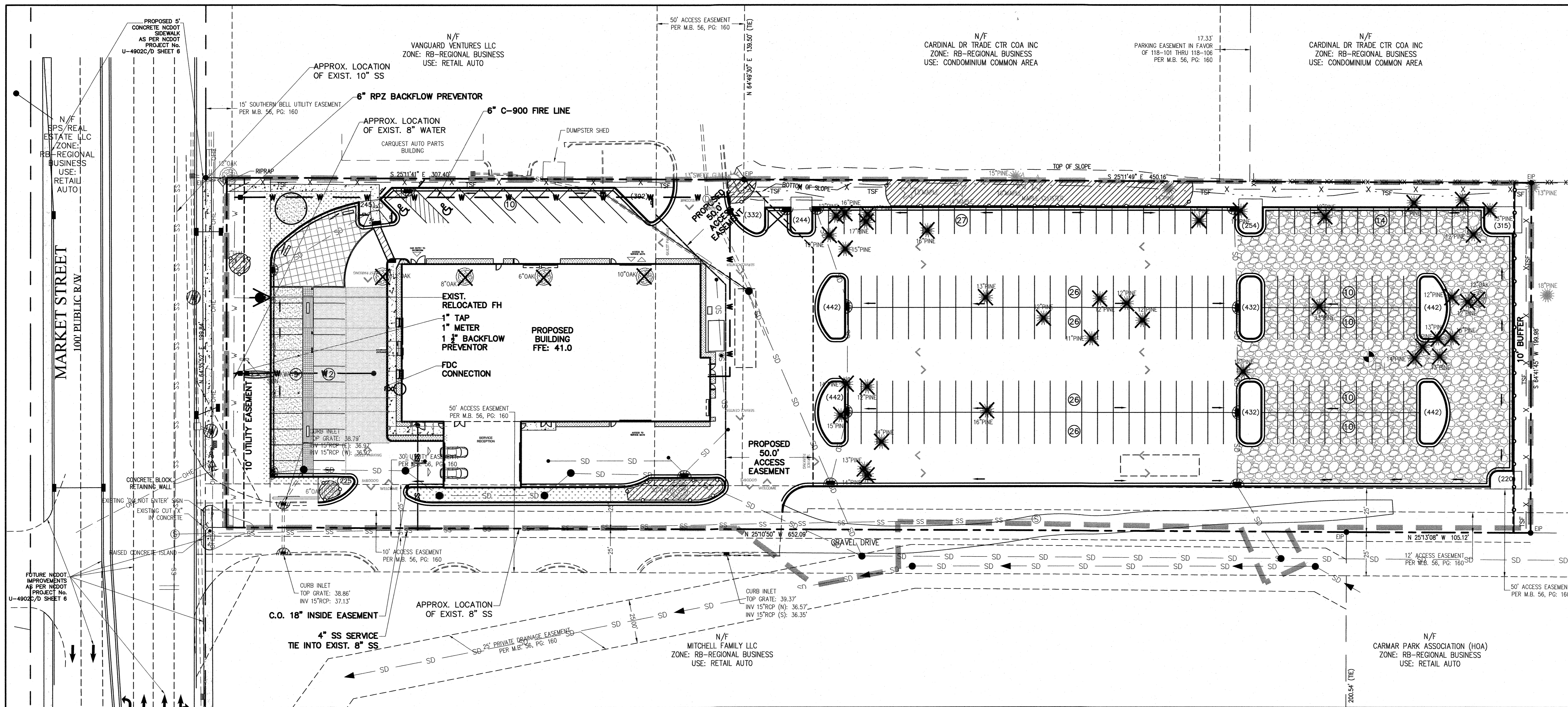
SITE PLAN
 BAR SCALE 1"=30'

DATE 01-23-19
 DESIGN PGT
 DRAWN EJW

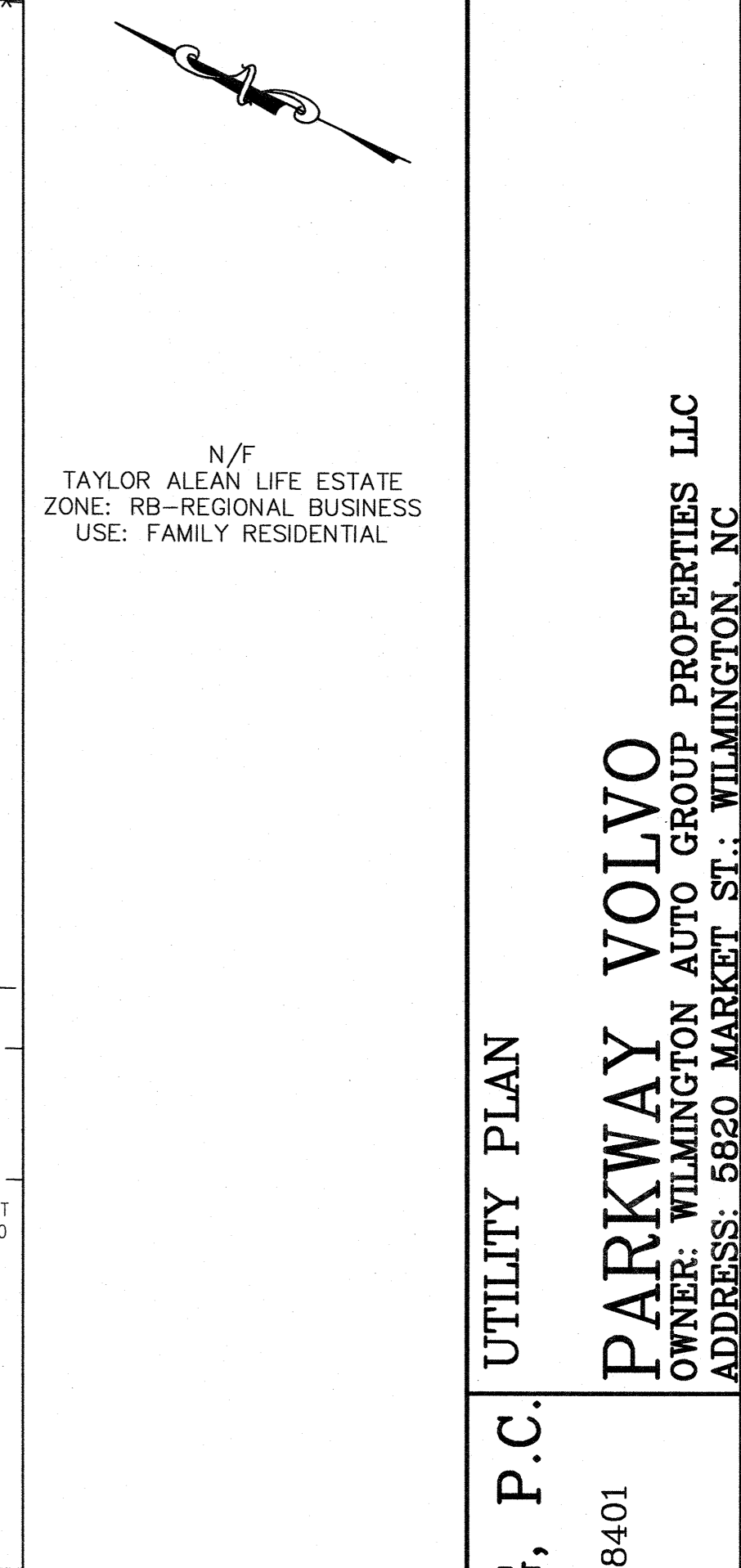
TRIPP ENGINEERING, P.C.
 419 Chestnut Street
 Wilmington, North Carolina 28401
 Phone 910-763-5100
 Fax 910-763-5631
 © 2018 TRIPP ENGINEERING, P.C.

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 WILLIAM GREGORY TRIPP
 17374

SHEET 2 OF 6
 17069



REVISIONS		
No./Date	Description	By
02-13-19	ADD COMMENTS	EJW
02-13-19	ADD FIRE LINE CONCRETE COLLAR UPDATE SW	EJW
02-21-19	ADDED SW IN ISLAND	EJW
02-25-19	SHIFTED LOD AND UPDATED SW PIPE	EJW
03-12-19	UPDATED SW PIPE	EJW
08-29-19	ADDED 10' BUFFER/FENCE	EJW



UTILITY PLAN
TRIPP ENGINEERING, P.C.
 419 Chestnut Street
 Wilmington, North Carolina 28401
 Phone 910-763-5100
 Fax 910-763-5631
 © 2019 TRIPP ENGINEERING, P.C.

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

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

City of Wilmington
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

SITE DATA:

PROPERTY OWNER	WILMINGTON AUTO GROUP PROPERTIES LLC
PROJECT ADDRESS	5820 MARKET ST
PIN NUMBER	R05010-001-003-000
AREA NOT IN A FEMA 100-YEAR FLOOD ZONE.	
ZONING DISTRICT	RB-REGIONAL BUSINESS
DISTURBED AREA:	3.47 Ac.
SETBACKS REQUIRED	FRONT: 25' REAR: 15' INTERIOR SIDE: 0' CORNER LOT SIDE: 25'
PROPOSED BUILDING SETBACKS	FRONT: 101' REAR: 464' SIDE: 42' CORNER LOT SIDE: N/A
TRACT AREA	151,429 SF (3.47 AC)
BUILDING USE	AUTOMOBILE DEALER
BUILDING TYPE	IB
PROPOSED BUILDING AREA (GROSS)	17,265 SF
BUILDING LOT COVERAGE (15,850/151,429)	10%
NUMBER OF UNITS	1
NUMBER OF BUILDINGS	1
BUILDING HEIGHT	22'
NUMBER OF STORIES	2
SF PER FLOOR 1ST FLOOR (GROSS)	15,850 SF
SF PER FLOOR 2ND FLOOR (GROSS)	1,415 SF

SITE DATA: (CONT'D)

EXISTING ON-SITE IMPERVIOUS AREAS:	-
EXISTING BUILDINGS	48,507 SF
EXISTING ASPHALT	-
EXISTING CONCRETE	-
TOTAL EXISTING IMPERVIOUS AREA	48,507 SF (32%)
EXISTING ON-SITE IMPERVIOUS TO BE REMOVED	-48,507 SF
PROPOSED ON-SITE IMPERVIOUS AREAS:	-
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PARKING REQUIRED: (AUTOMOBILE DEALER)	17,265 SF
MAXIMUM:	53
MINIMUM: 1/500 SF (17,265/500)	35
TOTAL PARKING PROVIDED:	216
CAMA LAND USE:	URBAN
PUBLIC WATER AND SEWER BY CFPUA	-
EXISTING WATER FLOW:	0 GPD
EXISTING SEWER FLOW:	0 GPD
PROPOSED WATER FLOW:	600 GPD
PROPOSED SEWER FLOW:	500 GPD
HANDICAP SPACES REQUIRED (1-25 SPACES = 1 HANDICAP SPACE)	PROPOSED
35 SPACES/25=1.4	2 HANDICAP SPACES
BICYCLE PARKING REQUIRED: (35 PARKS)	10 SPACES
BICYCLE PARKING PROVIDED:	10 SPACES

NOTES:

ZONING

- 1) TOPOGRAPHY AND TREE SURVEY COMPLETED BY ATLANTIC COAST SURVEY, PLLC.
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SOLID WASTE

- 1) SITE TO USE ON-SITE DUMPSTER.

TRAFFIC

- 1) ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NC DOT STANDARDS. (DETAIL SD-13 CoW TECH STDS)
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- 1) CONTRACTOR SHALL MAINTAIN AN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION
- 2) NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE
- 3) HYDRANT MUST BE WITHIN 150' OF THE FDC (MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE)
- 4) FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT
- 5) LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC
- 6) ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
- 7) PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE UNDERGROUND FIRE LINE PERMIT FROM THE WILMINGTON FIRE AND LIFE SAFETY DIVISION 910-343-0686
- 8) ALL ISOLATION VALVES WITHIN THE "HOT BOX" SHALL BE ELECTRICALLY SUPERVISED. PLEASE WORK CLOSELY WITH YOUR FIRE SPRINKLER AND ALARM INSTALLER IN REGARDS TO RUNNING WIRE FOR TAMPER SWITCH.
- 9) DUE TO THE SIZE OF THE BUILDING AND TYPE OF CONSTRUCTION AN 800MHz RADIO SIGNAL SITE TEST MUST BE PERFORMED TO DETERMINE IF A RADIO AMPLIFIER IS NEEDED PER THE 2018 NC FIRE CODE SECTION 910. PLEASE WORK CLOSELY WITH YOUR ARCHITECT AND DESIGN TEAM TO ENSURE THERE IS ADEQUATE RADIO COVERAGE INSIDE THE BUILDING(S).

NOTES: (CONT'D)

LANDSCAPING

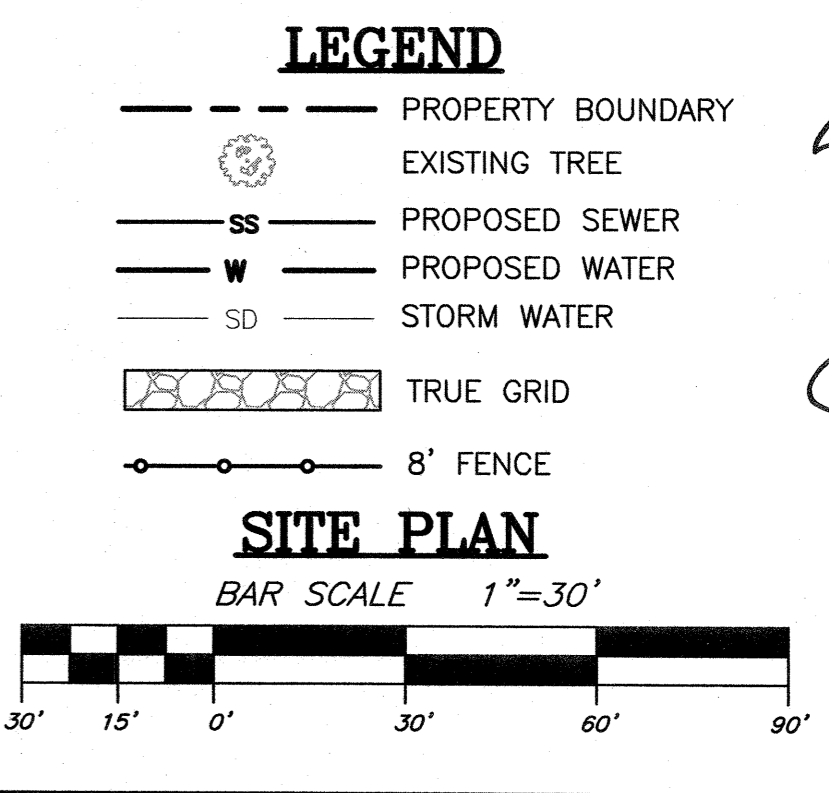
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CFPUA

- 1) WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) DETAILS AND SPECIFICATIONS.
- 2) PROJECT SHALL COMPLY WITH THE CFPUA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL.
- 3) IF THE CONTRACTOR DESIRES CFPUA WATER FOR CONSTRUCTION, HE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPERS SIDE OF THE WATER METER BOX.
- 4) ANY IRRIGATION SYSTEM SUPPLIED BY CFPUA WATER SHALL COMPLY WITH THE CFPUA'S CONNECTION CONTROL REGULATION. CALL 332-6419 FOR INFORMATION.
- 5) ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPUA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES FOR USFCOCHR OR ASSE.
- 6) PUBLIC WATER AND SEWER EXIST ON MARKET STREET.
- 7) CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4949 PRIOR TO DOING ANY DIGGING, CLEARING OR GRADING.
- 8) ANY IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN AND FREEZER SENSOR.
- 9) CONTRACTOR TO FIELD VERIFY EXISTING WATER AND SEWER SERVICE LOCATIONS, SIZES AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF ANY CONFLICTS.

DRAINAGE

- 1) SITE TO DRAIN TO A PERMITTED OFFSITE STORMWATER POND. NCDEQ PERMIT NO. SWB 000647 & SWB 120617 CITY OF WILMINGTON PERMIT NO. 2004022 & 2012023.

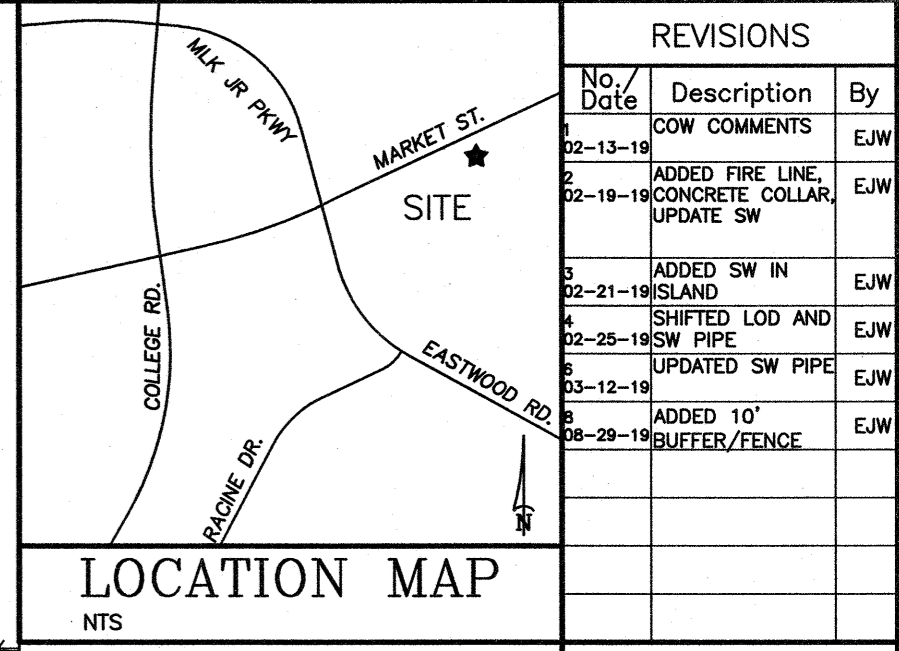
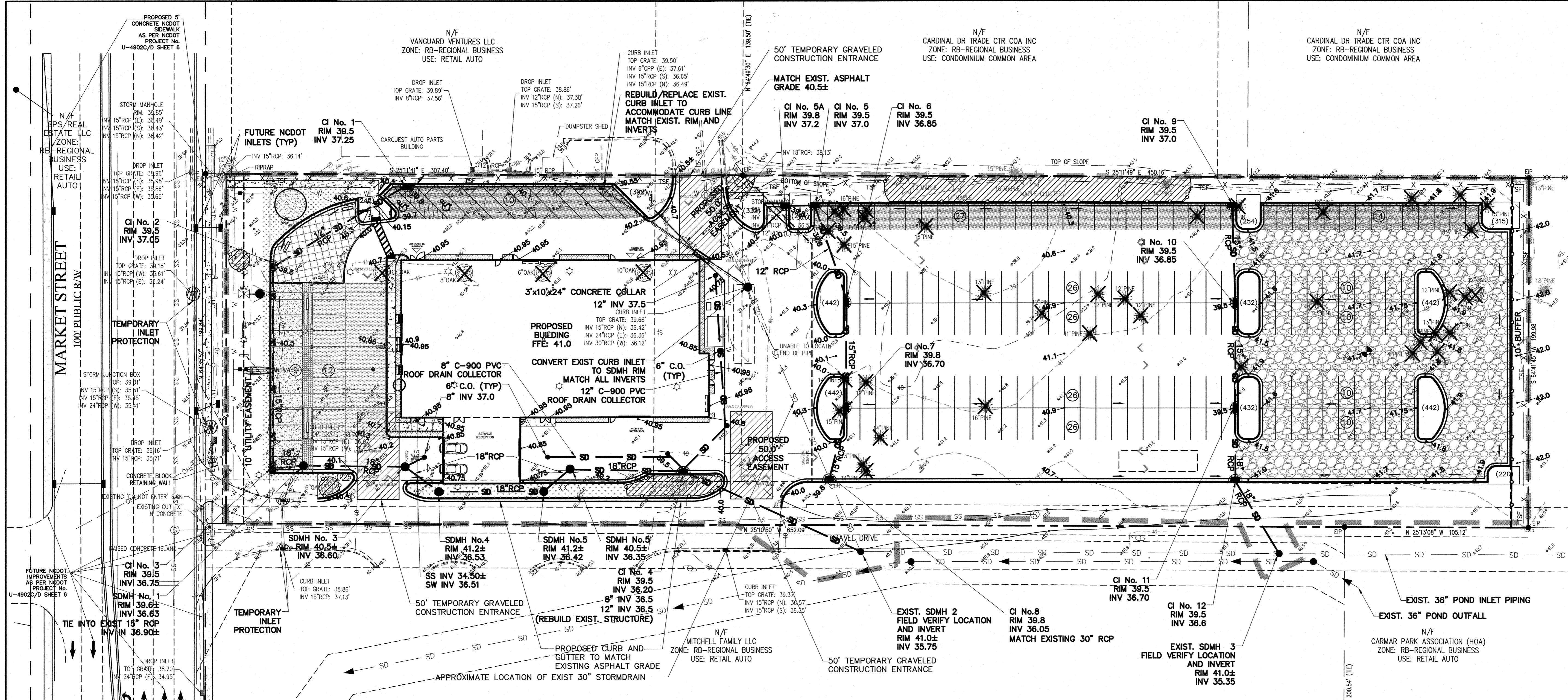


TRIPP ENGINEERING, P.C.
 419 Chestnut Street
 Wilmington, North Carolina 28401
 Phone 910-763-5100
 Fax 910-763-5631
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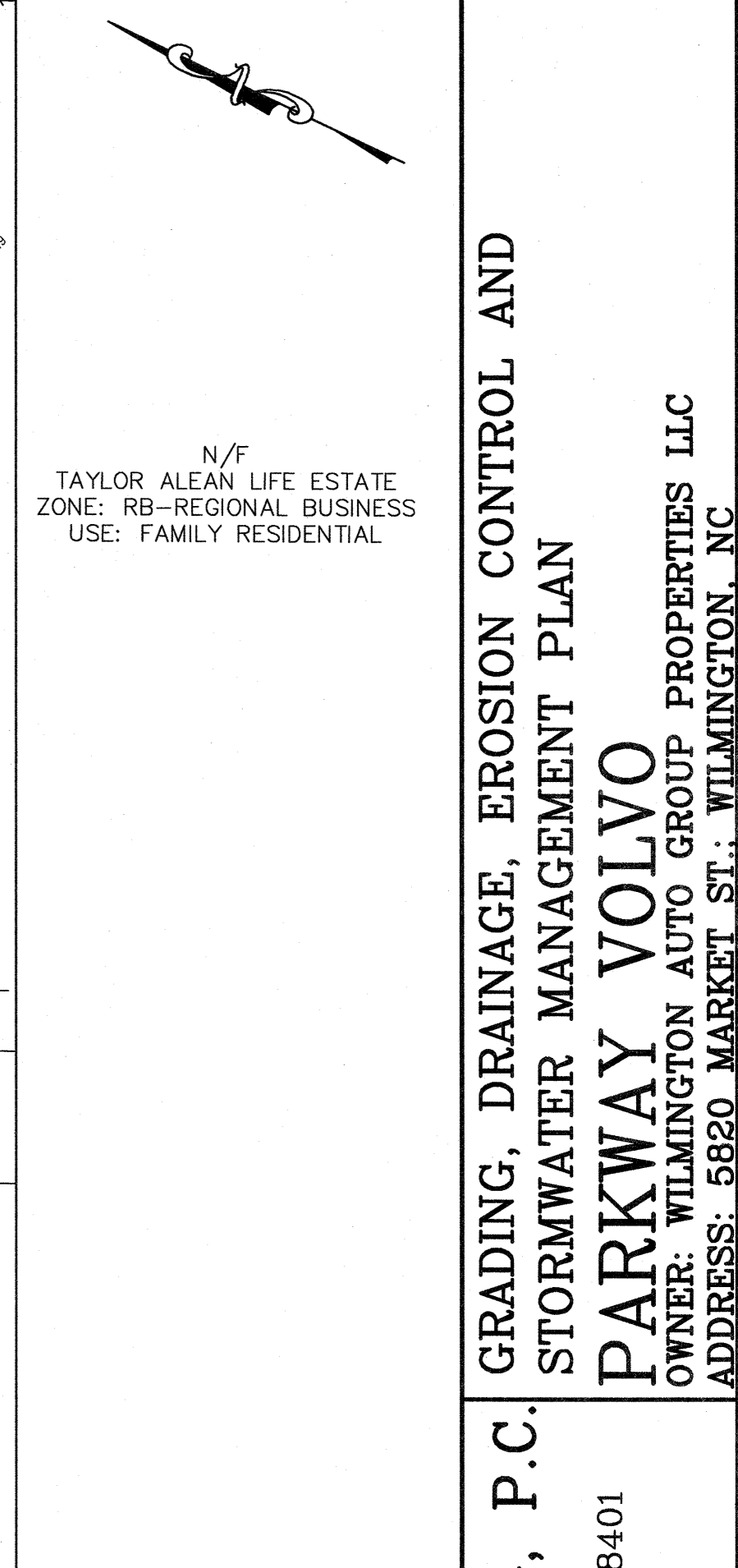
Professional Engineer Seal
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL
 17374
 WILMINGTON
 TRIPP ENGINEERING, P.C.
 WILMINGTON, NC

DATE 01-23-19
 DESIGN PGT
 DRAWN EJW

C3
 SHEET 3 OF 6
 17069



REVISIONS		
No./Date	Description	By
02-13-19	ADDED FIRE LINE CONCRETE COLLAR UPDATE SW	EJW
02-18-19	ADDED SW IN ISLAND	EJW
02-21-19	SHIFTED LOD AND 22-25-18SW PIPE	EJW
03-12-19	UPDATED SW PIPE	EJW
03-29-19	ADDED 10' BUFFER/FENCE	EJW



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

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

SITE DATA:

PROPERTY OWNER	WILMINGTON AUTO GROUP PROPERTIES LLC
PROJECT ADDRESS	5820 MARKET ST
PIN NUMBER	R05010-001-003-000
AREA NOT IN A FEMA 100-YEAR FLOOD ZONE.	
ZONING DISTRICT	RB-REGIONAL BUSINESS
DISTURBED AREA:	3.47 Ac.
SETBACKS REQUIRED	FRONT: 25' REAR: 15' INTERIOR SIDE: 0' CORNER LOT SIDE: 25'
PROPOSED BUILDING SETBACKS	FRONT: 101' REAR: 464' SIDE: 42' CORNER LOT SIDE: N/A
TRACT AREA	151,429 SF (3.47 AC)
BUILDING USE	AUTOMOBILE DEALER
BUILDING TYPE	IB
PROPOSED BUILDING AREA (GROSS)	17,500 SF
BUILDING LOT COVERAGE (15,850/151,429)	10%
NUMBER OF UNITS	1
NUMBER OF BUILDINGS	1
BUILDING HEIGHT	22'
NUMBER OF STORIES	2
SF PER FLOOR 1ST FLOOR (GROSS)	15,850 SF
SF PER FLOOR 2ND FLOOR (GROSS)	1,650 SF

SITE DATA: (CONT'D)

EXISTING ON-SITE IMPERVIOUS AREAS:	
EXISTING BUILDINGS	48,507 SF
EXISTING ASPHALT	48,507 SF (32%)
EXISTING CONCRETE	48,507 SF
TOTAL EXISTING IMPERVIOUS AREA	48,507 SF
EXISTING ON-SITE IMPERVIOUS TO BE REMOVED	-48,507 SF
PROPOSED ON-SITE IMPERVIOUS AREAS:	
PROPOSED BUILDING	17,265 SF
PROPOSED ASPHALT	73,669 SF
PROPOSED CONCRETE	1,369 SF
TOTAL PROPOSED IMPERVIOUS AREA	92,303 SF (60.95%)
EXISTING IMPERVIOUS TO REMAIN	0 SF
TRUE GRID 21,663 SF 100% PERVIOUS	17,008 SF
PROPOSED+EXISTING IMPERVIOUS	109,311 SF (72.2%)
PARKING REQUIRED: (AUTOMOBILE DEALER)	17,265 SF
MAXIMUM:	53
MINIMUM: 1/500 SF (17,265/500)	33
TOTAL PARKING PROVIDED:	216
CAMA LAND USE:	URBAN
PUBLIC WATER AND SEWER BY CFPWA	
EXISTING WATER FLOW:	0 GPD
EXISTING SEWER FLOW:	0 GPD
PROPOSED WATER FLOW:	600 GPD
PROPOSED SEWER FLOW:	500 GPD
HANDICAP SPACES REQUIRED (1-25 SPACES= 1 HANDICAP SPACE)	PROPOSED
35 SPACES/25=1.4	2 HANDICAP SPACES
BICYCLE PARKING REQUIRED: (35 PARKS)	10 SPACES
BICYCLE PARKING PROVIDED:	10 SPACES

NOTES:

ZONING

- 1) TOPOGRAPHY AND TREE SURVEY COMPLETED BY ATLANTIC COAST SURVEY, PLLC.
- 2) PERMITTING OF BUSINESS IDENTIFICATION SIGNAGE IS A SEPARATE PROCESS. CITY OF WILMINGTON WILL NOT ALLOW OBSTRUCTIONS WITHIN THE RIGHT-OF-WAY.
- 3) CONTRACTOR SHALL FIELD VERIFY SIZE, MATERIAL, INVERTS AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF PROPOSED CONNECTIONS.
- 4) EXISTING EASEMENTS AS SHOWN.
- 5) CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- 6) UNDERGROUND FIRE LINE(S) 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 910-341-0696.
- 7) A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT (910)341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
- 8) A LANDSCAPING 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 PLAT. (SD 15-14 COW TECH STDS)

SOLID WASTE

- 1) SITE TO USE ON-SITE DUMPSTER.

TRAFFIC

- 1) ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS. (DETAIL SD-13 COW TECH STDS)
- 2) ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS. (DETAIL SD-13 COW TECH STDS)
- 3) CONTRACT TRAFFIC ENGINEERING AT 341-7888 TO ENSURE THAT ALL TRAFFIC SIGNALS FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN.
- 4) CALL TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
- 5) IF ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
- 6) CONTRACT TRAFFIC ENGINEERING AT 741-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- 7) ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
- 8) NO ROWS TO BE CLOSED.
- 9) NO STREETS PROPOSED.
- 10) NO OFF SITE PARKING PROPOSED.
- 11) NO PROPOSED DRIVEWAY.
- 12) TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING PRIOR TO ACTUAL STRIPING.
- 13) ALL PARKING SHALL MARKINGS AND LINE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
- 14) STOP SIGNS AND STREET SIGNS TO REMAIN IN PLACE DURING CONSTRUCTION.
- 15) WHEEL WARNING MATS WILL BE INSTALLED ON ALL WHEELCHAIR RAMPS.
- 16) 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.
- 17) A LANDSCAPING 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 PLAT. (SD 15-14 COW TECH STDS)

FIRE AND LIFE SAFETY

- 1) CONTRACTOR SHALL MAINTAIN AN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- 2) NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE.
- 3) HYDRANT MUST BE WITHIN 150' OF THE FDC (MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE).
- 4) FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
- 5) LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC.
- 6) ADDITIONAL FIRE PROTECTION REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
- 7) PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE UNDERGROUND FIRE LINE PERMIT FROM THE WILMINGTON FIRE AND LIFE SAFETY DIVISION 910-341-0696.
- 8) ALL ISOLATION VALVES WITHIN THE "HOT BOX" SHALL BE ELECTRICALLY SUPERVISED. PLEASE WORK CLOSELY WITH YOUR FIRE SPRINKLER AND ALARM INSTALLER IN REGARDS TO TAMPERS SWITCH.
- 9) DUE TO THE SIZE OF THE BUILDING AND TYPE OF CONSTRUCTION AN 800MHz RADIO SIGNAL SITE TEST MUST BE PERFORMED TO DETERMINE IF A RADIO AMPLIFIER IS NEEDED PER THE 2018 NC FIRE CODE SECTION 510. PLEASE WORK CLOSELY WITH YOUR ARCHITECT AND DESIGN TEAM TO ENSURE THERE IS ADEQUATE RADIO COVERAGE INSIDE THE BUILDING(S).

NOTES: (CONT'D)

LANDSCAPING

- 1) 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.
- 2) ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO INSURE THAT NO CLEARING, GRADING OR STAGING OF MATERIALS WILL OCCUR IN THOSE AREAS.
- 3) NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING IS INSTALLED AND APPROVED. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT AND CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTIONS ON TREE PROTECTION METHODS.
- 4) ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINES FROM 30'-10'.

CFPWA

- 1) WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPWA) DETAILS AND SPECIFICATIONS.
- 2) PROJECT SHALL COMPLY WITH THE CFPWA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL.
- 3) 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 DEVELOPERS SIDE OF THE WATER METER BOX.
- 4) ANY IRRIGATION SYSTEM SUPPLIED BY CFPWA WATER SHALL COMPLY WITH THE CFPWA'S CONNECTION CONTROL REGULATION. CALL 332-6419 FOR INFORMATION.
- 5) ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPWA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES FOR USFCOORR OR ASSE.
- 6) PUBLIC WATER AND SEWER EXIST ON MARKET STREET.
- 7) CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4849 PRIOR TO DOING ANY DIGGING, CLEARING OR GRADING.
- 8) ANY IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN AND FREEZER SENSOR.
- 9) CONTRACTOR TO FIELD VERIFY EXISTING WATER AND SEWER SERVICE LOCATIONS, SIZES AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF ANY CONFLICTS.

DRAINAGE

- 1) SITE TO DRAIN TO A PERMITTED OFFSITE STORMWATER POND. NCDOT PERMIT NO. SW8 000647 & SW8 120617 CITY OF WILMINGTON PERMIT NO. 2004022 & 2012023

LEGEND

- PROPERTY BOUNDARY
- ✱ EXISTING TREE TO BE REMOVED
- ☐ TREE PROTECTION
- SS SEWER
- W WATER
- SD PROPOSED STORM WATER
- EXISTING SPOT ELEVATION
- 8' FENCE

SITE PLAN

BAR SCALE 1"=30'

TRIPP ENGINEERING, P.C.
419 Chestnut Street
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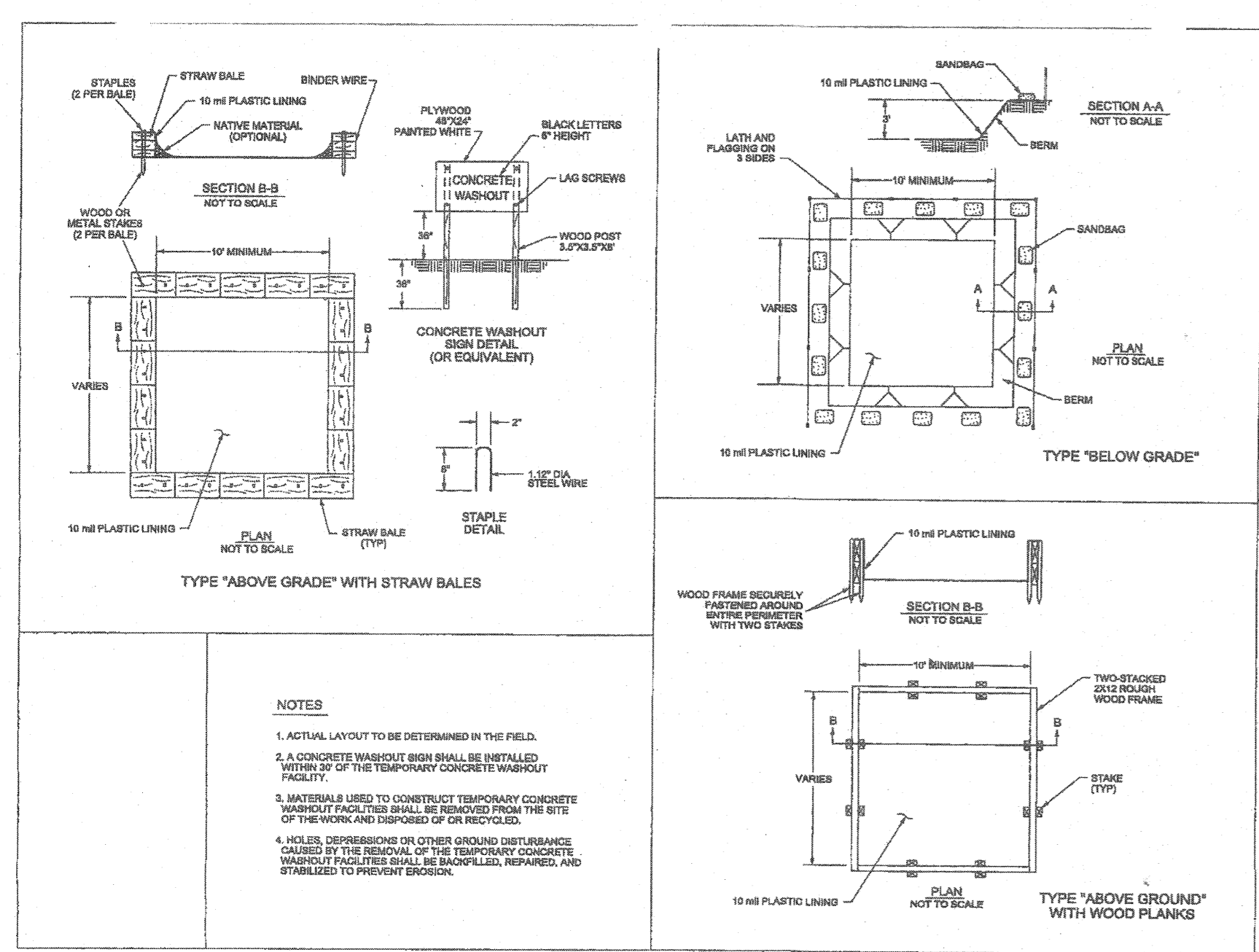
GRADING, DRAINAGE, EROSION CONTROL AND STORMWATER MANAGEMENT PLAN

PARKWAY VOLVO
OWNER: WILMINGTON AUTO GROUP PROPERTIES LLC
ADDRESS: 5820 MARKET ST., WILMINGTON, NC

DATE 01-23-19
DESIGN PGT
DRAWN EJW

C4

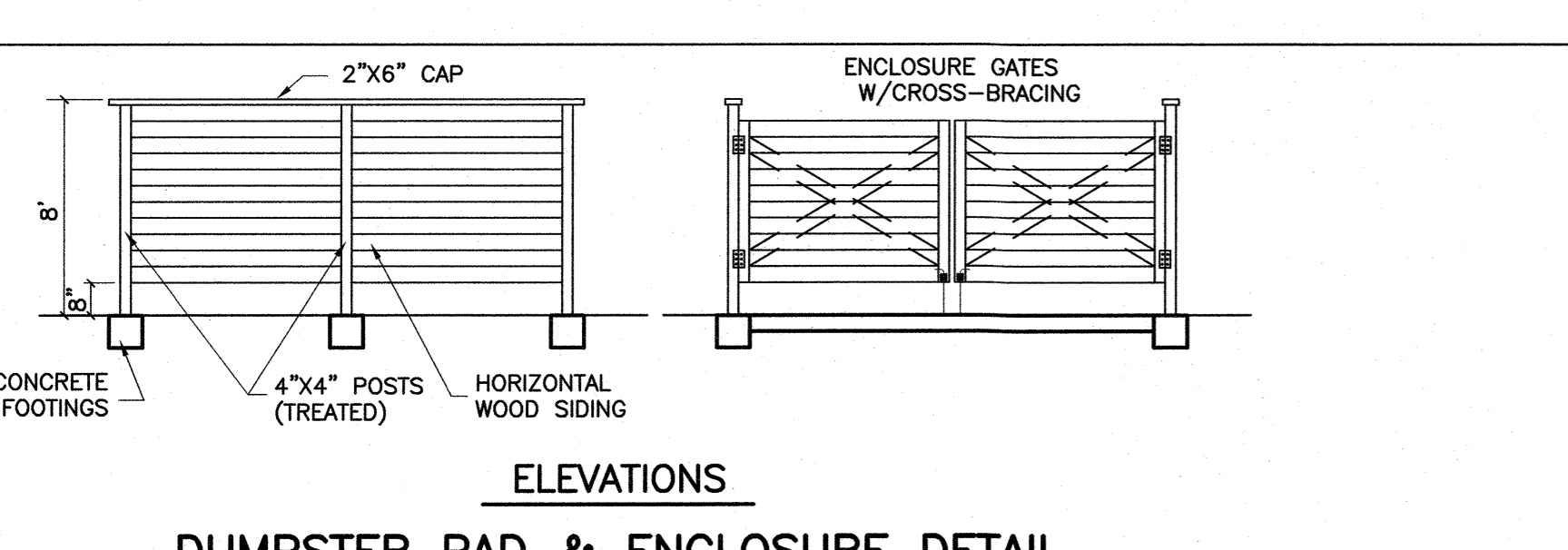
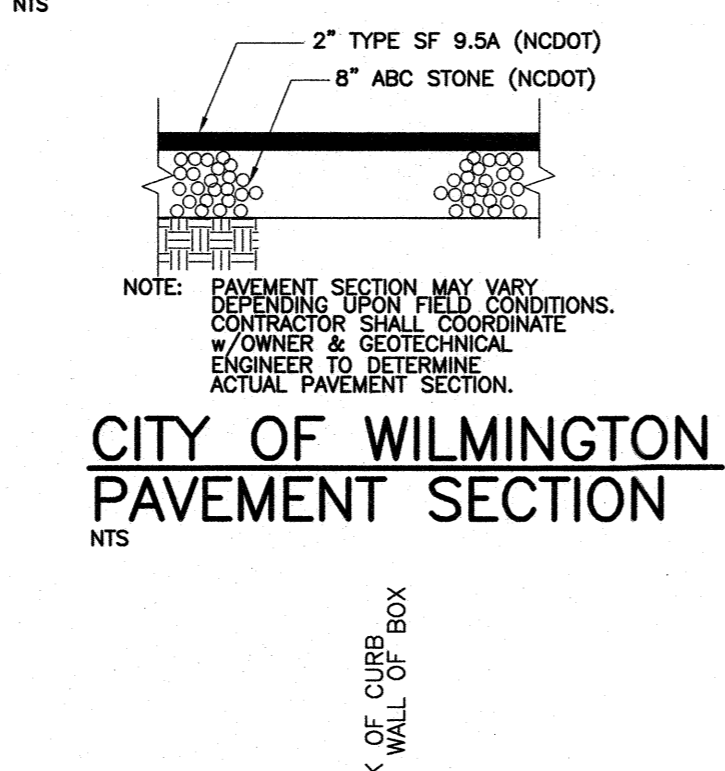
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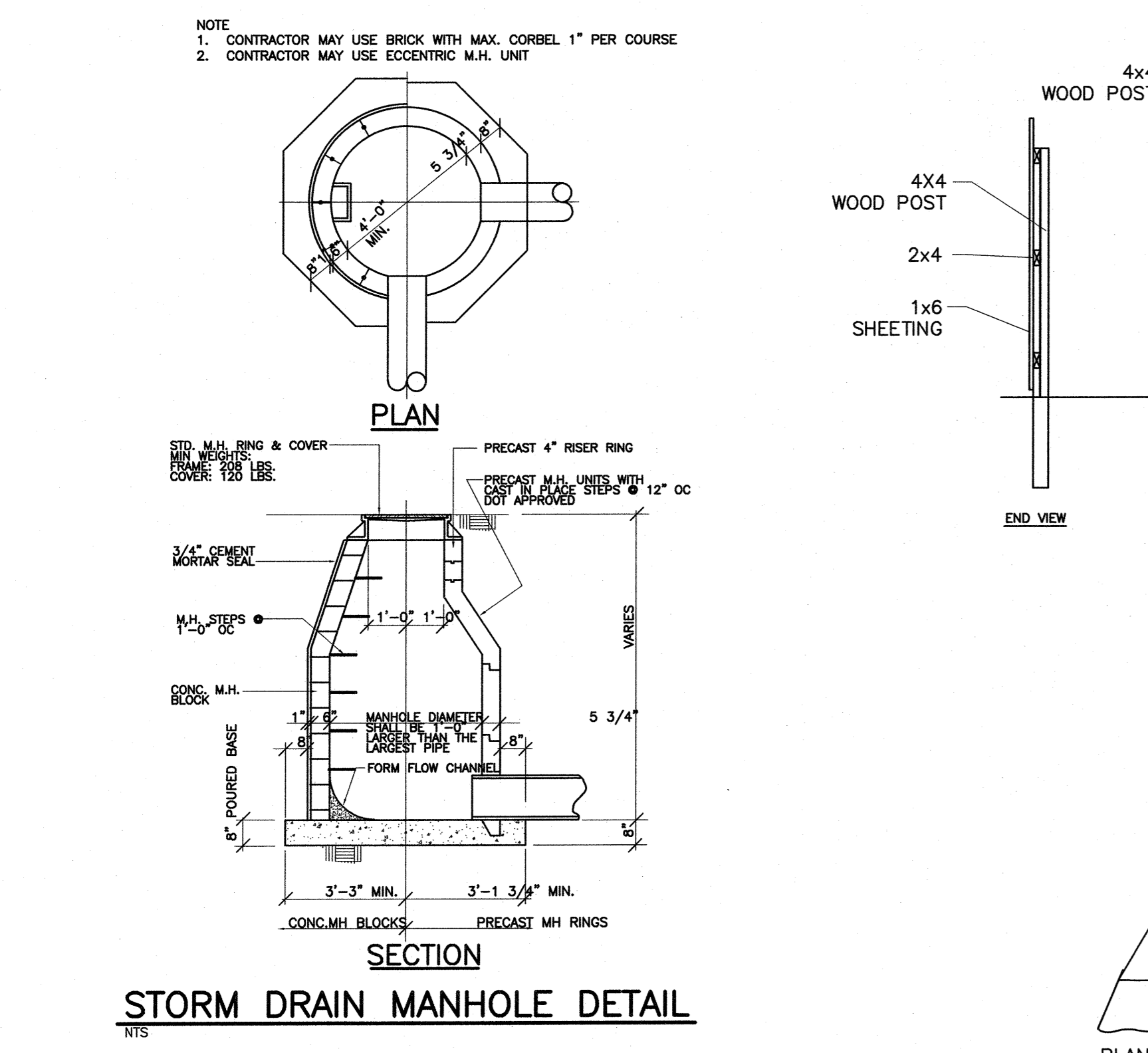
MAINTENANCE

1. CONCRETE WASHOUTS SHOULD BE INSPECTED DAILY AND AFTER HEAVY RAINS. DAMAGES SHOULD BE REPAIRED PROMPTLY. IF FILLED TO BE OVER 75% CAPACITY WITH RAIN WATER IT SHOULD BE VACUUMED OR ALLOWED TO EVAPORATE TO AVOID OVERFLOWS. BEFORE HEAVY RAINS THE CONTAINERS LIQUID LEVEL SHOULD BE LOWERED OR THE CONTAINER COVERED TO AVOID AN OVERFLOW DURING RAIN. WHEN SOLIDS HAVE HARDENED THEY SHOULD BE REMOVED AND RECYCLED.

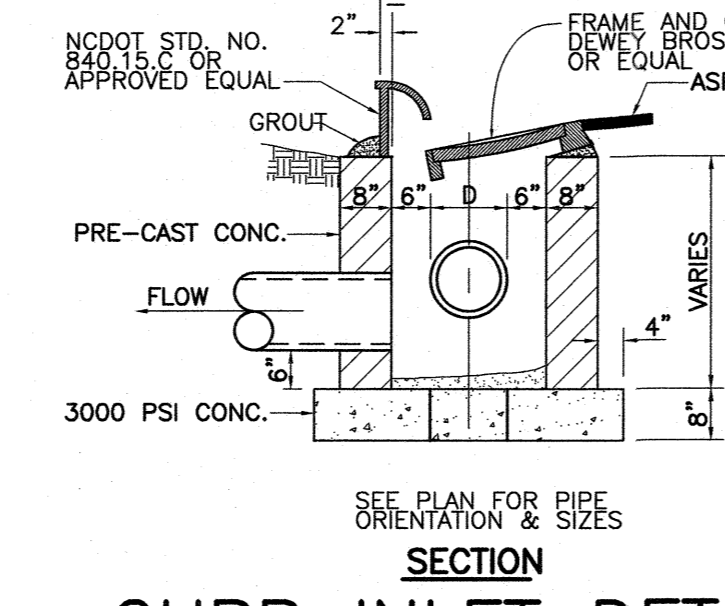
CONCRETE WASHOUT DETAIL



DUMPSTER PAD & ENCLOSURE DETAIL



STORM DRAIN MANHOLE DETAIL



CITY OF WILMINGTON PAVEMENT SECTION

BUILDING WASTE HANDLING

1. NO PAINT OR LIQUID WASTES IN STREAMS OR STORM DRAINS.
 2. DEDICATED AREAS FOR DEMOLITION, CONSTRUCTION AND OTHER WASTES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
 3. EARTHEN-MATERIALS STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO REASONABLE ALTERNATIVES AVAILABLE.
 4. CONCRETE MATERIALS MUST BE CONTROLLED TO AVOID CONTACT WITH SURFACE WATERS, WETLANDS OR BUFFERS.

INSPECTIONS

1. SAME WEEKLY INSPECTION REQUIREMENTS.
 2. SAME RAIN GAUGE AND INSPECTIONS AFTER 0.5" RAIN EVENT.
 3. INSPECTIONS ARE ONLY REQUIRED DURING "NORMAL BUSINESS HOURS".
 4. INSPECTION REPORTS MUST BE AVAILABLE ON-SITE DURING BUSINESS HOURS UNLESS A SITE-SPECIFIC EXEMPTION IS APPROVED.
 5. RECORDS MUST BE KEPT FOR 3 YEARS AND AVAILABLE UPON REQUEST.
 6. ELECTRONICALLY AVAILABLE RECORDS MAY BE SUBSTITUTED UNDER CERTAIN CONDITIONS.

SEDIMENT BASINS

1. OUTLET STRUCTURES MUST WITHDRAW FROM BASIN SURFACE UNLESS DRAINAGE AREA IS LESS THAN 1 ACRE.
 2. USE ONLY DWQ-APPROVED FLOCCULENTS.

NPDES-SPECIFIC PLAN SHEETS NOTES

1. THIS PAGE IS SUBMITTED TO COMPLY WITH NPDES GENERAL STORMWATER PERMIT NCG010000.
 2. THIS PAGE CAN BE APPROVED BY THE COUNTY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000 ONLY.
 3. THIS PAGE OF THE APPROVED PLANS IS ENFORCEABLE EXCLUSIVELY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000.
 4. THE COUNTY IS NOT AUTHORIZED TO ENFORCE THIS PAGE OF THE PLANS AND IT IS NOT A PART OF THE APPROVED PLANS FOR THE PURPOSES OF ENFORCEMENT ACTION UNDER THE COUNTY CODE.

REVISIONS

No./	Description	By
08-29-19	ADDED BUFFER DETAIL	EWJ

TEMPORARY SEEDING SPECIFICATION

SEEDING MIXTURE SPECIES	RATE (lb./acre)
LATE SPRING & EARLY SPRING Kobe in Piedmont and Coastal Plain, Koron in Mountains	120
SUMMER In the Piedmont and mountains, a small-seeded species may be substituted at a rate of 50 lb./acre	50
FALL German Millet	40

CONSTRUCTION SEQUENCE

- NO CUT SLOPE OR FILL SLOPE SHALL EXCEED A RISE OR FALL OF ONE FOOT FOR EVERY RUN OF 3 FEET (1 VERTICAL TO 3 HORIZONTAL).
- NO SEDIMENT WILL BE ALLOWED TO ACCUMULATE ON SLOPES DURING AND AFTER CONSTRUCTION.
- INSTALL PRIMARY EROSION CONTROL MEASURES BEFORE BEGINNING CONSTRUCTION INCLUDING BUT NOT LIMITED TO GRAVELLED CONSTRUCTION ENTRANCE, SILT FENCE, CHECK DAMS, ETC. INSTALL ALL SECONDARY EROSION CONTROL MEASURES AS SOON AS POSSIBLE AFTER BEGINNING CONSTRUCTION.
- ALL EROSION CONTROL MEASURES TO BE INSPECTED AFTER EACH RAIN. SILT FENCE AND INLET PROTECTION ARE TO BE CLEANED WHEN 0.5 FEET OF SEDIMENT HAVE ACCUMULATED IN FRONT OF THE DEVICE OR WHEN THEY LEAK OR FAIL. SEDIMENT TRAPS ARE CLEANED OUT AS STATED OR WHEN HALF FULL.
- IF APPLICABLE, CONSTRUCT PROPOSED RETENTION POND TO ACT AS A SEDIMENT BASIN DURING CONSTRUCTION. REMOVE ACCUMULATION OF SILT AS REQUIRED TO ALLOW PROPER FUNCTIONING. RESTORE POND TO DESIGN LEVELS AT THE COMPLETION OF CONSTRUCTION.
- IF APPLICABLE, INSTALL DROP INLETS WITH INLET PROTECTION TO ACT AS SILT TRAPS DURING CONSTRUCTION. REMOVE ACCUMULATED SILT AS NEEDED TO PREVENT SILT FROM ENTERING STORM DRAIN PIPING.
- A 4" LAYER OF TOPSOIL SHALL BE APPLIED TO ALL NEW AREAS TO BE GRASSED.
- MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PROJECT IS COMPLETE.
- MORE PLANTING MEASURES MAY BE REQUIRED TO HALT EROSION IF THOSE ON THIS PLAN PROVE TO BE LESS EFFECTIVE.
- REMOVE ALL TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF CONSTRUCTION. ALL PERMANENT MEASURES SHALL BE WELL ESTABLISHED PRIOR TO PROJECT COMPLETION.

PERMANENT GRASSING DETAIL

SEEDING MIXTURE SPECIES	RATE (lb./acre)
LATE SPRING & EARLY SPRING Kobe in Piedmont and Coastal Plain, Koron in Mountains	120
SUMMER In the Piedmont and mountains, a small-seeded species may be substituted at a rate of 50 lb./acre	50
FALL German Millet	40

SOIL AMENDMENTS

1. FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB./ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB./ACRE 10-10-10 FERTILIZER.

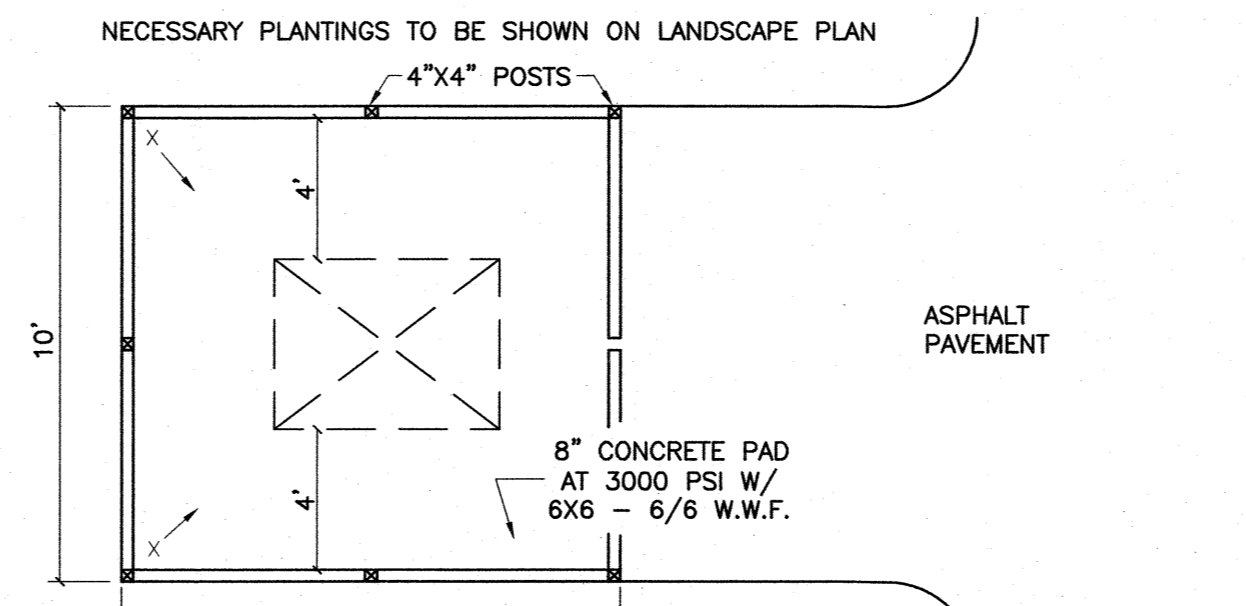
MULCH

APPLY 4,000 LB./ACRE STRAW, ANCHOR STRAW BY TACKLING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

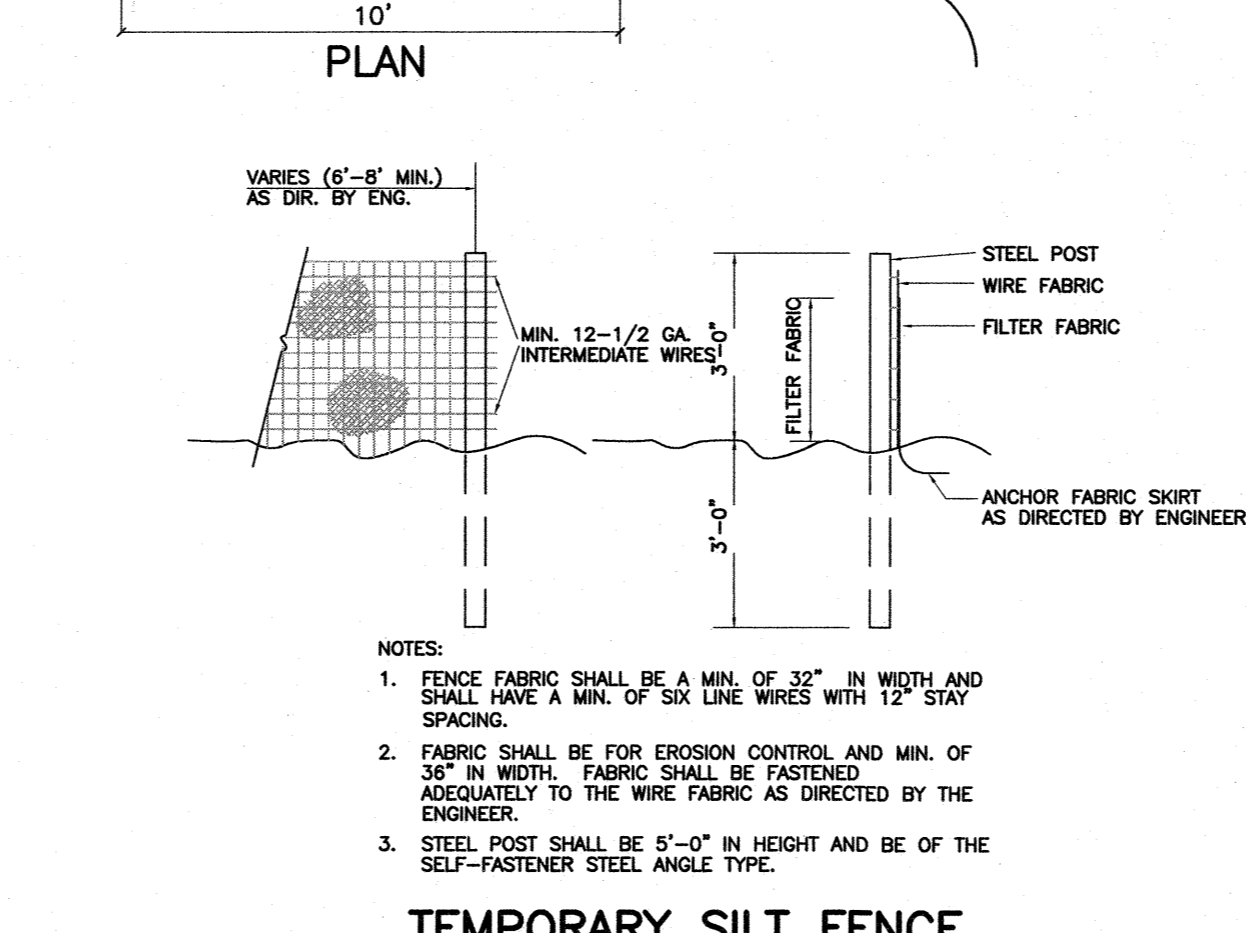
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

TEMPORARY SILT FENCE

1. FENCE FABRIC SHALL BE A MIN. OF 36" IN WIDTH AND SHALL HAVE A MIN. OF SIX LINE WIRES WITH 12" SPACING.
 2. FABRIC SHALL BE FOR EROSION CONTROL AND MIN. OF 12" IN WIDTH. FABRIC SHALL BE FASTENED ADEQUATELY TO THE WIRE FABRIC AS DIRECTED BY THE ENGINEER.
 3. STEEL POST SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER STEEL ANGLE TYPE.



TYPICAL SIDEWALK AND WHEEL CHAIR RAMP DETAIL



HARDWARE CLOTH AND GRAVEL INLET PROTECTION

VERTICAL WOOD FENCE

1. FENCE FABRIC SHALL BE A MIN. OF 36" IN WIDTH AND SHALL HAVE A MIN. OF SIX LINE WIRES WITH 12" SPACING.
 2. FABRIC SHALL BE FOR EROSION CONTROL AND MIN. OF 12" IN WIDTH. FABRIC SHALL BE FASTENED ADEQUATELY TO THE WIRE FABRIC AS DIRECTED BY THE ENGINEER.
 3. STEEL POST SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER STEEL ANGLE TYPE.

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan

Name _____ Date _____

Planning _____
 Traffic _____
 Fire _____

TRIPP ENGINEERING, P.C.
 419 Chestnut Street
 Wilmington, North Carolina 28401
 Phone 910-763-5100
 Fax 910-763-5631

NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL
 17374
GREGORY TRIPP

DATE 01-23-19
 DESIGN PGT
 DRAWN EWJ

C5
 SHEET 5 OF 6
 17069

DETAILS AND NOTES
 PARKWAY VOLVO
 OWNER: WILMINGTON AUTO GROUP PROPERTIES LLC
 ADDRESS: 5820 MARKET ST., WILMINGTON, NC

NO.	DATE	DESCRIPTION
V2	2/19/19	REVISED PER CITY COMMENTS
V3	3/07/19	REVISED PER CITY COMMENTS
V4	9/26/19	ADDED REAR BUFFER YARD

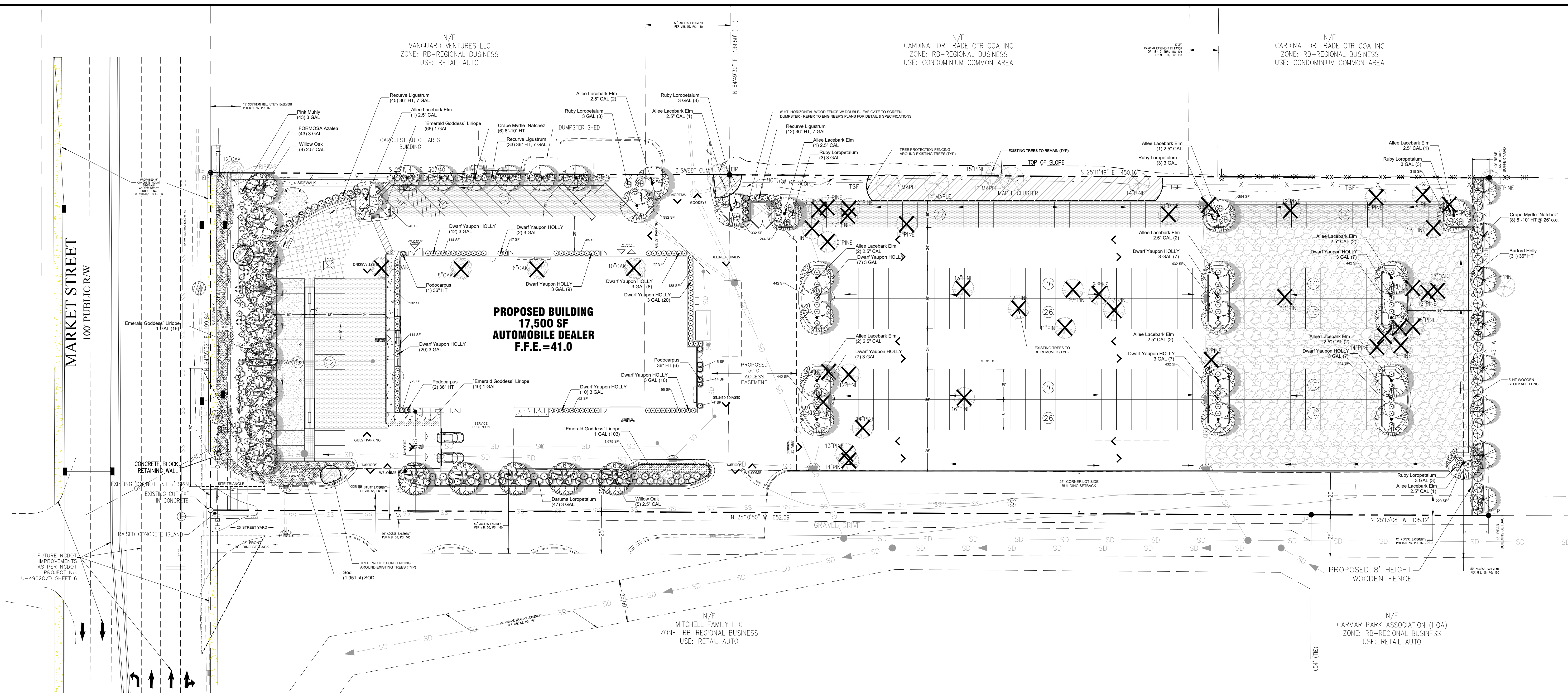
OWNER:
WILMINGTON AUTO GROUP PROPERTIES LLC
 5920 MARKET STREET
 WILMINGTON, NC 28405
 Phone: 1-877-835-8274 Fax: 1-910-791-6121

PROJECT:
PARKWAY VOLVO
 5820 MARKET STREET
 WILMINGTON, NC 28405
 LANDSCAPE PLAN

SHEET INFO

LANDSCAPE PLANTING PLAN	DATE: 2018.04.20
DESIGNED BY: MC/PF	DRAWN BY: GD3
CHECKED BY: MC	SHEET: L1.1
1 OF 1	

WBL PLAN CONTROL: v1 2018.12.03, v2 2019.02.19, v3 2019.03.07, v4 2019.09.26



PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	SPACING	QTY
	LAGERSTROEMIA X 'NATCHEZ' / CRAPE MYRTLE 'NATCHEZ'	8'-10' HT	20' o.c. (26' o.c. @ REAR BUFFER)	13
	QUERCUS PHELLOS / WILLOW OAK	2.5" CAL	AS SHOWN ON PLAN	14
	ULMUS PARVIFOLIA 'ALLEE' / ALLEE LACEBARK ELM	2.5" CAL	AS SHOWN ON PLAN	20
SHRUBS	BOTANICAL / COMMON NAME	CONT	SPACING	QTY
	AZALEA FORMOSA / FORMOSA AZALEA	3 GAL	48" o.c.	43
	ILEX CORNUTA 'BURFORDII' / BURFORD HOLLY	36" HT	72" o.c.	31
	ILEX VOMITORIA 'NANA' / DWARF YAUPON HOLLY	3 GAL	36" o.c.	133
	LIGUSTRUM JAPONICUM 'RECURVIFOLIUM' / RECURVE LIGUSTRUM	36" HT, 7 GAL	48" o.c.	90
	LOROPETALUM CHINENSE 'DARUMA' / DARUMA LOROPETALUM	3 GAL	54" o.c.	47
	LOROPETALUM CHINENSE 'RUBY' / RUBY LOROPETALUM	3 GAL	48" o.c.	18
	MUHLENBERGIA CAPILLARIS / PINK MUHLY	3 GAL	48" o.c.	43
	PODOCARPUS MACROPHYLLUS / PODOCARPUS	36" HT	42" o.c.	9
GROUND COVERS	BOTANICAL / COMMON NAME	CONT	SPACING	QTY
	LIRIOPE MUSCARI 'EMERALD GODDESS' / 'EMERALD GODDESS' LIRIOPE	1 GAL	19" o.c.	225
	SOD TBD / SOD	SOD		1,951 SF

LANDSCAPE REQUIREMENT CALCULATIONS

PARKING LOT INTERIOR LANDSCAPING:

TOTAL DRIVE ISLE / PARKING AREA: 73,669 SF

REQUIRED: 73,669 SF (IMPERVIOUS) x 20% = 14,734 SF SHADING
 14,734 / 707 SF = 21 TREES REQUIRED

PROVIDED: 14,734 SF TOTAL SHADING
 25 TREES PROVIDED

STREET YARD LANDSCAPING:

MULTIPLIER: 25 (FOR RB ZONING)
 200 LF - 4 (SIDEWALK) - 14.6 (ROAD) = 181.4 LF

181.4 LF * 25 = 4,535 SF REQUIRED

4,535 SF PROVIDED

REQUIRED PLANTING: 4,535 / 600 = 8 CANOPY SHADE TREES REQUIRED
 46 SHRUBS REQUIRED

9 PROVIDED
 86 PROVIDED

100 SF (SIDEWALK) + 453 SF (ROAD) = 553 SF IMPERVIOUS INSIDE STREET YARD
 553 SF / 4,995 SF = 11% IMPERVIOUS INSIDE STREET YARD

FOUNDATION PLANTINGS:

FOUNDATION PLANTINGS: (NORTH) 253 SF REQUIRED (96"22"12%)
 291 SF PROVIDED

FOUNDATION PLANTINGS: (SOUTH) 164 SF REQUIRED (62"22"12%)
 186 SF PROVIDED

FOUNDATION PLANTINGS: (EAST) 182 SF REQUIRED (69"22"12%)
 224 SF PROVIDED

FOUNDATION PLANTINGS: (WEST) 217 SF REQUIRED (82"22"12%)
 246 SF PROVIDED

PERIMETER LANDSCAPE:

REQUIRED 128LF / 27LF = 5 TREES PROVIDED 6 TREES

10' REAR LANDSCAPE BUFFER YARD
 W/ 8' HT STOCKADE FENCE

NOTES:

REFER TO ENGINEER'S PLANS FOR ADDITIONAL SITE DATA & ALL OTHER INFORMATION REGARDING TREE MITIGATION, GRADING & DRAINAGE, STORMWATER, UTILITIES, PAVING & ROADWAY IMPROVEMENTS

ALL MULCH TO BE: PINE STRAW & HARDWOOD

* ALL REQUIRED TREES SHALL BE A MINIMUM OF 2.5" CAL AND MEET THE AMERICAN NURSERYMEN ASSOCIATION STANDARDS

TREE PRESERVATION

TREE	DBH	CREDITS
PINE	14"	3
OAK	30"	5
OAK	6"	2
MAPLE	14"	3
MAPLE	13"	3
MAPLE	10"	2
SWEET GUM	13"	13
ELM	6"	2
OAK	12"	3
PINE	13"	3
MAPLE CLUSTER		
TOTAL CREDITS		39

Approved Construction Plan

Name	Date
Planning	
Public Utilities	
Traffic	
Fire	

STORMWATER MANAGEMENT PLAN

APPROVED

CITY OF WILMINGTON
 ENGINEERING DEPARTMENT

DATE _____ PERMIT # _____

SIGNED _____

WRIGHTSVILLE BEACH LANDSCAPING INC.
 NCLC License #CL0083

NOTE:
 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.

