

HAWTHORNE COMMONS FITNESS CENTER ADDITION

CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

DEVELOPER:

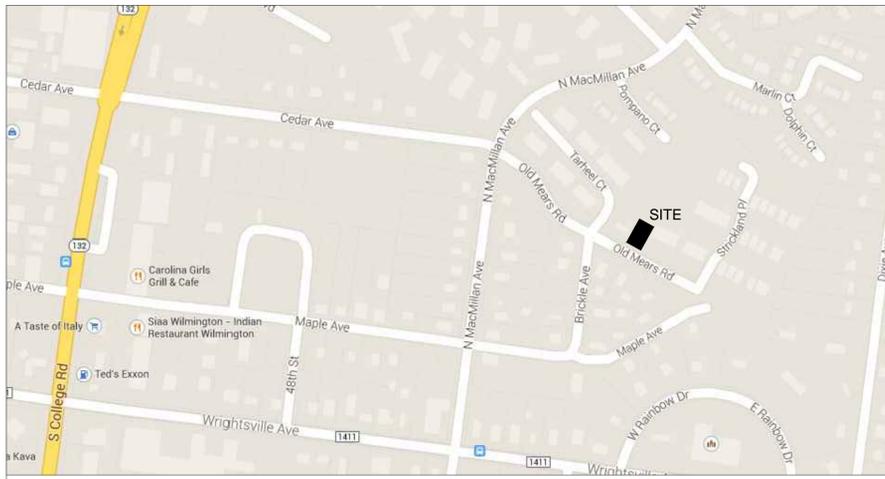
HAWTHORNE RESIDENTIAL PARTNERS
806 GREEN VALLEY ROAD, SUITE 311
GREENSBORO, NC 27408
336.275.9512
CONTACT: MS. BEVERLY GREER

CIVIL ENGINEER

SHIPMAN ENGINEERING GROUP, PLLC
1076 CLASSIC ROAD
APEX, NC 27539
919.629.8204
CONTACT: MR. ZAK SHIPMAN, PE

ARCHITECT:

PLANWORX ARCHITECTURE
5711 SIX FORKS ROAD, SUITE 100
RALEIGH, NC 27609
919.846.8100
CONTACT: MR. ROBERT CLIFFORD



VICINITY MAP
NOT TO SCALE

ALL CONSTRUCTION SHALL COMPLY WITH CITY OF WILMINGTON STANDARDS AND SPECIFICATIONS.

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TOTAL NUMBER OF DRAWINGS:	13

APPROVED CONSTRUCTION PLAN

	NAME	DATE
PLANNING		
TRAFFIC		
FIRE		



LEGEND

WATER	SITE DEVELOPMENT	MISCELLANEOUS UTILITIES
—W—	EX. STORM SEWER PIPE	○◇
—W—	PROPOSED STORM SEWER	□◇
⊕	EX. STORM STRUCTURE	□◇□◇
⊕	CATCH BASIN	○◇
⊕	DROP INLET	○◇
⊕	EX. STORM SEWER MANHOLE	○◇
⊕	EX. STORM SEWER MANHOLE	○◇
⊕	EX. ROOF DRAIN LEADER	○◇
⊕	ROOF DRAIN LEADER	○◇
⊕	EX. ROOF DRAIN DOWNSPOUT	○◇
⊕	ROOF DRAIN DOWNSPOUT	○◇
⊕	EX. CURB AND GUTTER	○◇
⊕	CURB AND GUTTER	○◇
⊕	EXISTING PROPERTY LINE	○◇
⊕	PROPERTY LINE	○◇
⊕	BENCHMARK AND/OR SURVEY CONTROL MARKER	○◇
⊕	SOIL BORING LOCATION	○◇
⊕	LIMITS OF DISTURBANCE	○◇
⊕	EX. TREE	○◇
⊕	EX. SHRUB	○◇
⊕	EX. FENCE	○◇
⊕	PROPOSED FENCE	○◇
⊕	EX. TOPOGRAPHIC CONTOUR	○◇
⊕	PROPOSED TOPOGRAPHIC CONTOUR	○◇
⊕	EX. SPOT ELEVATION	○◇
⊕	EX. SIGN	○◇
⊕	EX. GAS VALVE	○◇
⊕	EX. GAS METER	○◇
⊕	EX. LIGHT POLE	○◇
⊕	EX. LIGHT (WALL PACK)	○◇
⊕	PROPOSED LIGHT POLE	○◇
⊕	EX. UTILITY POLE	○◇
⊕	UTILITY POLE	○◇
⊕	EX. GUY WIRE	○◇
⊕	EX. ELECTRICAL METER	○◇
⊕	EX. OVERHEAD ELECTRIC LINE	○◇
⊕	PROPOSED OVERHEAD ELECTRIC LINE	○◇
⊕	EX. UNDERGROUND ELECTRIC LINE	○◇
⊕	PROPOSED UNDERGROUND ELECTRIC LINE	○◇
⊕	EX. TELEPHONE PEDESTAL	○◇
⊕	TELEPHONE PEDESTAL	○◇
⊕	EX. TELEPHONE MANHOLE	○◇
⊕	OVERHEAD TELEPHONE LINE	○◇
⊕	EX. OVERHEAD FIBER LINE	○◇
⊕	OVERHEAD FIBER LINE	○◇
⊕	EX. CABLE PEDESTAL	○◇
⊕	EX. OVERHEAD COMMUNICATIONS LINE	○◇
⊕	OVERHEAD COMMUNICATIONS LINE	○◇
⊕	EX. UNDERGROUND COMMUNICATIONS LINE	○◇
⊕	UNDERGROUND COMMUNICATIONS LINE	○◇
⊕	EX. OVERHEAD UTILITY LINE-MULTIPLE UTILITIES	○◇
⊕	BOLLARD	○◇
⊕	PROPERTY MARKER/IRON PIPE	○◇
⊕	EX. SURVEY MONUMENT	○◇

CIVIL SERIES DRAWING ABBREVIATIONS:

@/AT	DS-DOWNSPOUT	MECH-MECHANICAL	R/W-RIGHT OF WAY
AC-ACRE	E/E-EACH	MH-MANHOLE	REQD-REQUIRED
AFG-ABOVE FINISHED GRADE	EIP-EXISTING IRON PIPE	MIN-MINIMUM	RCP-REINFORCED CONCRETE PIPE
APPR-APPROXIMATE	ELEC-ELECTRICAL	MJ-MECHANICAL JOINT	SAN-SANITARY SEWER
ASSY-ASSEMBLY	E/P-EDGE OF PAVEMENT	NIC-NOT IN CONTRACT	SDWK-SIDEWALK
B/C-BOTTOM OF CURB	EX-EXISTING	OHE-OVERHEAD ELECTRIC	SF-SQUARE FOOT
BOC-BACK OF CURB	F/C-FACE OF CURB	OHP-OVERHEAD POWER	SPT-SPOT GRADE
B/L-BASE LINE	FDC-FIRE DEPARTMENT CONNECTION	OHT-OVERHEAD TELEPHONE	SS-SANITARY SEWER
BM-BOOK OF MAPS	FFE-FINISHED FLOOR ELEVATION	PB-PLAT BOOK	STA-STATION
BMP-BEST MANAGEMENT PRACTICE	FG-FINISHED GRADE	PC-POINT OF CURVATURE	STD-STANDARD
B/W-BOTTOM OF WALL	FH-FIRE HYDRANT	PED-PEDESTRIAN	STM-STORM
CB-CATCH BASIN	FL-FLOW LINE	PG-PAGE	STMH-STORM SEWER MANHOLE
C&G-CURB AND GUTTER	FM-FORCE MAIN	PH-PHASE	SWM-STORMWATER MANAGEMENT
C/L-CENTERLINE	FT-FOOT	PI-POINT OF INTERSECTION	T-TELEPHONE
CL-CLASS	G-GAS	PIV-POST INDICATOR VALVE	T/C-TOP OF CURB
CMP-CORRUGATED METAL PIPE	GND-GROUND	PKG-PARKING	TCM-TELEPHONE MANHOLE
CO-CLEANOUT	GV-GATE VALVE	P/L-PROPERTY LINE	TS&V-TAPPING SLEEVE AND VALVE
COMM-COMMUNICATIONS	HDPE-HIGH DENSITY POLYETHYLENE	PS-PUMP STATION	UGE-UNDERGROUND ELECTRIC
CONC-CONCRETE	HORIZ-HORIZONTAL	PT-POINT OF TANGENCY	UNK-UNKNOWN
CONN-CONNECTION	IN-INCHES	PP-POWER POLE	UP-UTILITY POLE
CY-CUBIC YARD	INV-INVERT	PVC-POLYVINYL CHLORIDE	VAR-VARIABLE
DB-DEED BOOK	IP-IRON PIPE	PVMT-PAVEMENT	VERT-VERTICAL
DCV-DOUBLE CHECK VALVE	IPS-IRON PIPE SET	PWR-POWER	W-WITH
DDCV-DOUBLE DETECTOR CHECK VALVE	L-LENGTH	R-RADIUS	WM-WATER METER
DI-DROP INLET	LF-LINEAR FOOT	RD-ROOF DRAIN	W/O-WITHOUT
DIP-DUCTILE IRON PIPE	LP-LIGHT POLE	RJ-RESTRAINED JOINT	W/L-WATERLINE
DR-DRIVEWAY	LS-LIFT STATION	RPZ-REDUCED PRESSURE ZONE	WSEL-WATER SERVICE ELEVATION
			WV-WATER VALVE

SURVEY DATUM INFORMATION:

HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NAVD88



100% CONSTRUCTION DRAWING SET-ISSUED FOR REGULATORY REVIEW



REVISIONS	DATE	SYMBOL	PER CITY OF WILMINGTON COMMENT
	3-30-15	1	

SHIPMAN
ENGINEERING GROUP
NCBELS LICENSE P-1274
WWW.SHIPMANENGINEERINGGROUP.COM

DESIGNED BY: Z. SHIPMAN
DRAWN BY: Z. SHIPMAN
CHECKED BY: Z. SHIPMAN
DRAWING DATE: 2-3-15
SEG PROJECT #: 150128

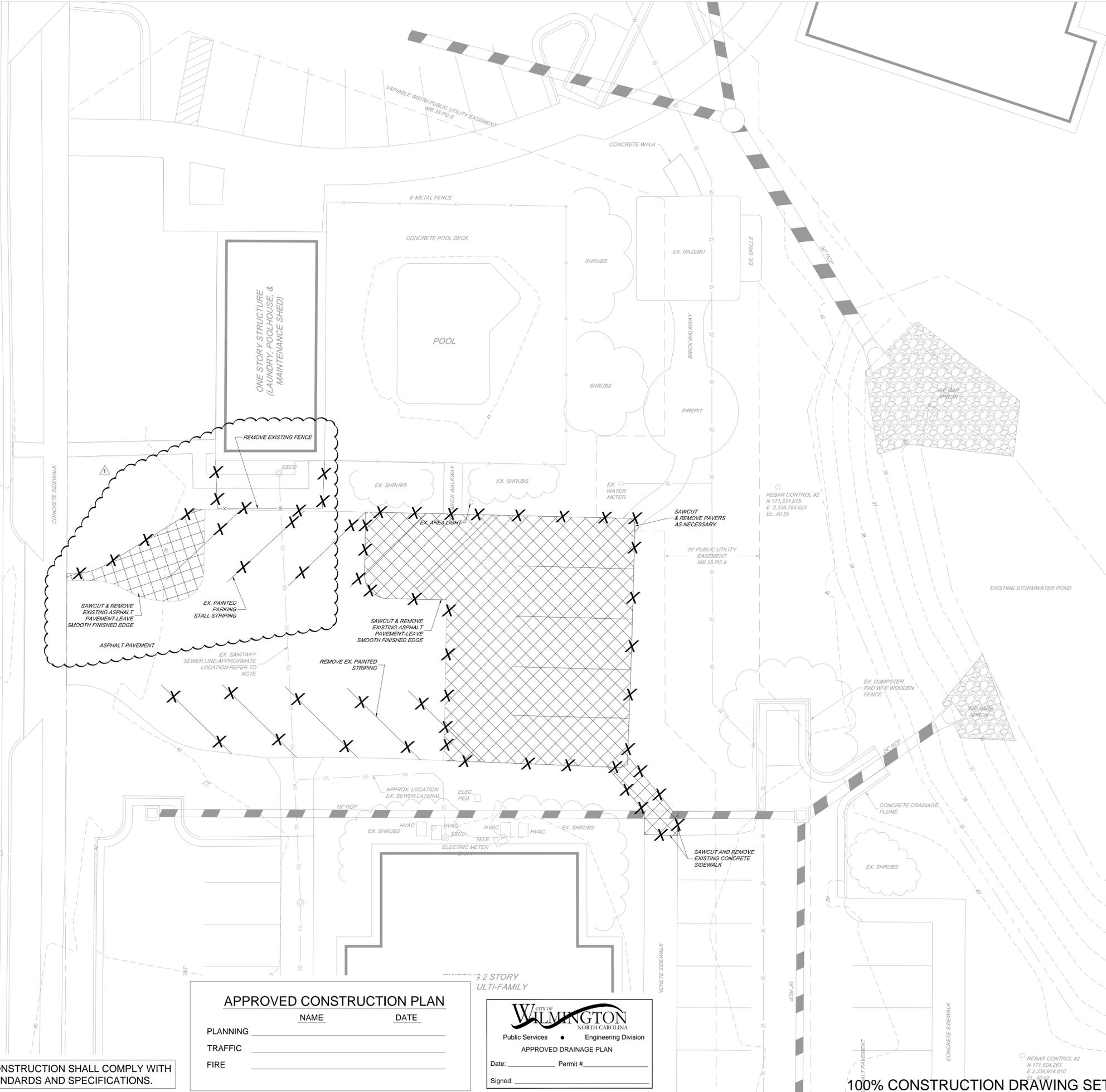
HAWTHORNE COMMONS FITNESS CENTER
4907 OLD MEARS ROAD
CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

COVER SHEET

SHEET NUMBER: C-000

THESE PLANS AND ASSOCIATED DOCUMENTS ARE THE EXCLUSIVE PROPERTY OF SHIPMAN ENGINEERING GROUP, P.L.L.C. AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART. THESE DOCUMENTS SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION, REPAIR, MAINTENANCE, OR CONSTRUCTION OF ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF SHIPMAN ENGINEERING GROUP, P.L.L.C.

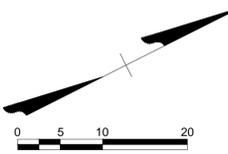
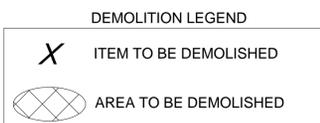
OLD MEARES ROAD
60' PUBLIC R/W



- GENERAL SURVEY NOTES:**
- EXISTING CONDITIONS AND TOPOGRAPHICAL DATA OF THE SUBJECT PARCEL ARE COMPILED FROM A FIELD SURVEY OF THE PROPERTY BY STROUD ENGINEERING, P.A. DATED NOVEMBER 6, 2014, AND IS NOT THE RESULT OF A FIELD SURVEY BY SHIPMAN ENGINEERING GROUP, P.L.L.C. ADDITIONAL EXISTING CONDITIONS DATA PROVIDED BY SUPPLEMENTAL DATA INCLUDING AERIAL PHOTOGRAPHY, NEW HANOVER COUNTY GIS DATA, AND OTHER DATA SOURCES AS REQUIRED.
 - REFER TO EROSION AND SEDIMENT CONTROL PLAN AND CONSTRUCTION SEQUENCE BEFORE PERFORMING ANY CLEARING, GRUBBING, OR DEMOLITION OPERATIONS.
 - NO TITLE OPINION ON THIS PROPERTY HAS BEEN FURNISHED.
 - AREAS COMPUTED BY THE COORDINATE METHOD.
 - THE PROPERTY SHOWN HEREON IS SUBJECT TO ALL RIGHTS-OF-WAY, EASEMENTS, COVENANTS, AND RESTRICTIONS OF RECORD.
 - ALL DISTANCES SHOWN ON THE SURVEY ARE HORIZONTAL GROUND DISTANCES.
 - THE PROPERTY SHOWN IS LOCATED IN FLOOD ZONE "X", AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE AND FUTURE CONDITIONS 1% ANNUAL CHANCE FLOODPLANE PER FEMA FIRM MAP NUMBER 3720313700J (PANEL 5137) DATED 04/03/06.
 - VERTICAL DATUM: NAVD83
HORIZONTAL DATUM: NAD83

- DEMOLITION NOTES:**
- REMOVE/DEMOLISH/ABANDON EXISTING FEATURES AFTER EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND AFTER THE APPROVAL OF THE ENGINEER.
 - DO NOT INTERRUPT EXISTING UTILITY SERVICES FOR FACILITIES OCCUPIED BY THE OWNER OR OTHERS EXCEPT WHEN PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE ACCEPTABLE TEMPORARY UTILITY SERVICES.
 - (1) NOTIFY ENGINEER NOT LESS THAN 72 HOURS IN ADVANCE OF PROPOSED UTILITY SERVICE INTERRUPTIONS.
 - (2) DO NOT PROCEED WITH UTILITY INTERRUPTIONS WITHOUT RECEIVING WRITTEN PERMISSION FROM THE DESIGN ENGINEER.
 - SUBSURFACE UTILITIES AND FEATURES DENOTED ON THIS PLAN SHOULD BE CONSIDERED APPROXIMATE IN NATURE AND HAVE NOT BEEN FIELD VERIFIED WITH TRADITIONAL SUE OR UNDERGROUND UTILITY LOCATION OR MARKING METHODS. CONTRACTOR IS RESPONSIBLE FOR SUBSURFACE UTILITY EXPLORATION, INCLUDING UTILITY "POTHOLING" OR BY THE EXCAVATION OF TEST PITS AS NECESSARY TO DETERMINE THE UTILITY LOCATION, DEPTHS, AND MATERIALS.
 - VERIFY LOCATIONS AND SIZES OF ALL EXISTING FEATURES PRIOR TO COMMENCEMENT OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR DOCUMENTATION OF EXISTING FEATURES THROUGH THE USE OF PHOTOGRAPHY, VIDEO, OR OTHER RECORDS PRIOR TO DISTURBANCE ON SITE.
 - LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION, AND REPAIR ANY DAMAGES TO EXISTING UTILITIES RESULTING FROM CONSTRUCTION.
 - REMOVE ALL EXISTING ON-SITE TRASH AND DEBRIS. TRASH SHALL BE REMOVED AND DISPOSED OF IN A LEGAL MANNER. NOTIFY OWNER AND ENGINEER IF ANY HAZARDOUS MATERIALS (ASBESTOS, LEAD PAINT, ETC.) ARE ENCOUNTERED.
 - REMOVE SIDEWALK, CURB AND GUTTER, AND OTHER CONCRETE SECTIONS BY SAWCUTTING THE NEAREST CONTROL JOINT AWAY FROM THE AREA DESIGNATED TO BE REMOVED ON THE DEMOLITION PLAN.
 - SAWCUT PAVEMENT IN ALL LOCATIONS WHERE ABUTTING SIDEWALK OR NEW PAVEMENT IS EXISTING.
 - DRAWINGS DO NOT SHOW ALL EXISTING UTILITIES. EXISTING UTILITIES SHALL BE VERIFIED IN THE FIELD PRIOR TO INSTALLATION OF ANY NEW UTILITY SERVICES OR LINES. THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OBTAINED THROUGH VARIOUS DATA SOURCES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. CALL THE APPROPRIATE UTILITY COMPANIES 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITY SERVICES OR LINES.
 - NOTIFY AND COORDINATE ANY REQUIRED RELOCATION AND/OR REMOVAL OF EXISTING UNDERGROUND UTILITIES, POLES, METERS, OR OTHER ABOVE GROUND APPLIANCES WITH THE APPROPRIATE UTILITY PROVIDER (I.E. POWER, TELEPHONE, CABLE, AND NATURAL GAS/PROPANE) PRIOR TO THE START OF SELECTIVE DEMOLITION WORK.
 - ARRANGE SELECTIVE DEMOLITION SCHEDULE SO AS NOT TO INTERFERE WITH OWNER'S USE OF THE PROPERTY.
 - SHOULD UNCHARTED OR INCORRECTLY CHARTED EXISTING UTILITIES BE IDENTIFIED, CONTACT THE ENGINEER IMMEDIATELY FOR INSTRUCTIONS. PROVIDE A SCALED DRAWING OF THE UNCHARTED OR INCORRECTLY CHARTED UTILITY FOR USE BY THE ENGINEER IN PREPARING ADDITIONAL DIRECTIONS.
 - CONTRACTOR SHALL MAINTAIN A CLEAN WORK SITE, FREE OF DEBRIS, TRASH, OR OTHER CONSTRUCTION MATERIALS. AREAS SUBJECT TO SITE CONSTRUCTION ADJACENT TO THE PUBLIC RIGHT OF WAY AND PEDESTRIAN SIDEWALKS SHALL BE LEFT "BROOM CLEAN" AT THE END OF EACH WORK DAY.
 - CONTRACTOR SHALL VERIFY AND CONFIRM LOCATION OF STAGING AND LAYDOWN AREA, MATERIALS STORAGE AREA, AND SUBCONTRACTOR PARKING WITH THE PROPERTY OWNER AND/OR PROPERTY MANAGEMENT PRIOR TO BEGINNING WORK ON SITE.

- DEMOLITION SEQUENCE:**
- INSTALL TREE PROTECTION FENCING IF REQUIRED, ACCORDING TO THE DRAWINGS.
 - INSTALL THE NECESSARY EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
 - REMOVE AND/OR DEMOLISH EXISTING UNDERGROUND POWER AND OTHER UTILITIES WITHIN THE PROJECT AREA. COORDINATE WITH ALL APPROPRIATE UTILITY PROVIDERS PRIOR TO REMOVAL.
 - REMOVE EXISTING TREES THAT ARE APPROVED FOR REMOVAL.
 - REMOVE EXISTING ASPHALT, CONCRETE, GRAVEL, AND OTHER SURFACES AS SHOWN.
 - REMOVE EXISTING ROOT MAT, TOPSOIL, AND OTHER ORGANIC MATERIALS FROM THE CONSTRUCTION AREA AS REQUIRED.
 - REMOVE ANY ADDITIONAL EXISTING FEATURES AS SHOWN ON THIS PLAN.



APPROVED CONSTRUCTION PLAN

NAME	DATE
PLANNING _____	_____
TRAFFIC _____	_____
FIRE _____	_____

CITY OF WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division

APPROVED DRAINAGE PLAN

Date: _____ Permit # _____

Signed: _____

IMPORTANT NOTE: ALL CONSTRUCTION SHALL COMPLY WITH CITY OF WILMINGTON STANDARDS AND SPECIFICATIONS.

100% CONSTRUCTION DRAWING SET-ISSUED FOR REGULATORY REVIEW



SHIPMAN ENGINEERING GROUP

NCBELS LICENSE P-1274
WWW.SHIPMANENGINEERINGGROUP.COM

1076 CLASSIC ROAD | APEX, NC 27539
919.629.8204

SYMBOL	DATE	REVISIONS
1	3-30-15	PER CITY OF WILMINGTON COMMENT

HAWTHORNE COMMONS FITNESS CENTER
4907 OLD MEARES ROAD
CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

DEMOLITION PLAN

DESIGNED BY: Z. SHIPMAN
DRAWN BY: Z. SHIPMAN
CHECKED BY: Z. SHIPMAN
DRAWING DATE: 2-3-15
SEG PROJECT #: 150128

811
Know what's below.
Call before you dig.

C-101



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APPROVED CONSTRUCTION PLAN

NAME	DATE
PLANNING _____	_____
TRAFFIC _____	_____
FIRE _____	_____

CITY OF WILMINGTON

 NORTH CAROLINA

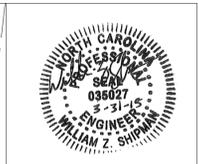
 Public Services • Engineering Division

 APPROVED DRAINAGE PLAN

 Date: _____ Permit # _____

 Signed: _____

IMPORTANT NOTE: ALL CONSTRUCTION SHALL COMPLY WITH CITY OF WILMINGTON STANDARDS AND SPECIFICATIONS.



SYMBOL	DATE	REVISIONS
1	3-30-15	PER CITY OF WILMINGTON COMMENT

SHIPMAN

 ENGINEERING GROUP

 NCBELS LICENSE P-1274

 WWW.SHIPMANENGINEERINGGROUP.COM

 1076 CLASSIC ROAD | APEX, NC 27539

 919.629.8204

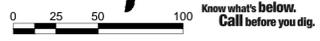
DESIGNED BY:	Z. SHIPMAN
DRAWN BY:	Z. SHIPMAN
CHECKED BY:	Z. SHIPMAN
DRAWING DATE:	2-3-15
SEG PROJECT #:	150128

HAWTHORNE COMMONS FITNESS CENTER

 4907 OLD MEARS ROAD

 CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

DEMOLITION PLAN



100% CONSTRUCTION DRAWING SET-ISSUED FOR REGULATORY REVIEW

GENERAL NOTES:

- EXISTING CONDITIONS AND TOPOGRAPHICAL DATA OF THE SUBJECT PARCEL ARE COMPILED FROM A FIELD SURVEY OF THE PROPERTY BY STROUD ENGINEERING, PA, DATED NOVEMBER 6, 2014, AND IS NOT THE RESULT OF A FIELD SURVEY BY SHIPMAN ENGINEERING GROUP, PLLC. ADDITIONAL EXISTING CONDITIONS DATA PROVIDED BY SUPPLEMENTAL DATA INCLUDING AERIAL PHOTOGRAPHY, NEW HANOVER COUNTY GIS DATA, AND OTHER DATA SOURCES AS REQUIRED.
- REFER TO EROSION AND SEDIMENT CONTROL PLAN AND CONSTRUCTION SEQUENCE BEFORE PERFORMING ANY CLEARING, GRUBBING, OR DEMOLITION OPERATIONS.
- NO TITLE OPINION ON THIS PROPERTY HAS BEEN FURNISHED.
- AREAS COMPUTED BY THE COORDINATE METHOD.
- THE PROPERTY SHOWN HEREON IS SUBJECT TO ALL RIGHTS-OF-WAY, EASEMENTS, COVENANTS, AND RESTRICTIONS OF RECORD.
- ALL DISTANCES SHOWN ON THE SURVEY ARE HORIZONTAL GROUND DISTANCES.
- THE PROPERTY SHOWN IS LOCATED IN FLOOD ZONE "X"; AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE AND FUTURE CONDITIONS 1% ANNUAL CHANCE FLOODPLANE PER FEMA FIRM MAP NUMBER 3720313700J (PANEL 3137) DATED 04/03/06.
- VERTICAL DATUM: NAVD83
- ALL PROPOSED VEGETATION WITHIN SITE DISTANCE TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SITE LINES FROM 30' TO 10'.
- PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.

STREET TREES NOTE: 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.

SITE DATA TABLE

PROJECT NAME:	HAWTHORNE COMMONS FITNESS CENTER ADDITION	
PROPERTY OWNER:	MCMILLAN WILMINGTON, LLC	
PHYSICAL ADDRESS:	4907 OLD MEARS ROAD	
PROPERTY PIN:	R05519-004-001-000	
PROJECT AREA:	0.18 ACRES	
PROPERTY AREA:	8.82 ACRES	
ZONING DISTRICT:	MF-M	
OVERLAY DISTRICT:	N/A	
BUILDING SETBACKS:	REQUIRED MIN.:	APPROXIMATE ACTUAL:
	FRONT: 35'	FRONT: 87.77'
	SIDE: 20'	REAR: 149.98'
	REAR: 25'	SIDE (TO ADJACENT BLDGS): 37.53' (WEST) 20.13' (EAST)
BUILDING SIZE:	1,477 SF	
BUILDING LOT COVERAGE:	EX. RESIDENTIAL BUILDINGS: 75,000 SF (FROM RECORDS) EX. LAUNDRY/POOL/HOUSE MAINTENANCE: 1120 SF PROPOSED FITNESS CENTER: 1,477 SF	
	TOTAL BUILDING AREA: 77,657 SF BLC % = 77,657 SF / (8.82 AC * 43560) = 20.21%	
BUILDING HEIGHT:	19'-5"	
NUMBER OF STORIES:	1	
IMPERVIOUS AREAS:	EXISTING BUILDINGS: 76,172 SF PROPOSED BUILDINGS: 77,681 SF EXISTING ASPHALT & CURB: 115,158 SF PROPOSED ASPHALT & CURB: 112,610 SF EXISTING CONCRETE: 37,678 SF PROPOSED CONCRETE: 38,577 SF	
	EXISTING, TOTAL SITE: 229,008 SF PROPOSED, TOTAL SITE: 228,848 SF	
CAMA LAND USE CLASSIFICATION:	DEVELOPED	

APPROVED CONSTRUCTION PLAN

PLANNING	NAME	DATE
TRAFFIC		
FIRE		

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED DRAINAGE PLAN
Date: _____ Permit # _____
Signed: _____

PARKING CALCULATIONS:

EXISTING RESIDENTIAL UNIT COUNT:	# OF 1 BEDROOM UNITS: 78
	# OF 2 BEDROOM UNITS: 80
	PROPOSED FITNESS CENTER ADDITION: 1,477 SF
CITY OF WILMINGTON REQUIRED PARKING CRITERIA:	
	1 BEDROOM RESIDENTIAL: 1.5 SPACES PER UNIT
	2 BEDROOM RESIDENTIAL: 2 SPACES PER UNIT
	FITNESS CENTER: 1 SPACE PER 400 SF MIN 1 SPACE PER 200 SF MAX
REQUIRED PARKING:	
	1 BEDROOM RESIDENTIAL: 117 SPACES
	2 BEDROOM RESIDENTIAL: 160 SPACES
	FITNESS CENTER: 4 SPACES MINIMUM 8 SPACES MAXIMUM
	TOTAL MINIMUM REQUIRED: 281 SPACES
PROVIDED PARKING:	
	EX. PARKING SPACES-MAIN BLDGS: 276
	EX. PARKING SPACES-STORAGE LOT: 13
	TOTAL EXISTING: 289
PROPOSED FINAL PARKING:	
	EX. PARKING SPACES-MAIN BLDGS TO REMAIN: 276
	PROPOSED SPACES IN FITNESS CENTER LOT: 6
	TOTAL PARKING SPACES: 282
	NEW ACCESSIBLE PARKING REQ'D: 5 SPACES (1 RACK) NEW ACCESSIBLE PARKING PROVIDED: 5 SPACES (1 RACK)
	NEW BICYCLE PARKING REQ'D: 5 SPACES (1 RACK) NEW BICYCLE PARKING PROVIDED: 5 SPACES (1 RACK)

CITY OF WILMINGTON STANDARD NOTES:

- PRIOR TO CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING SHALL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
- 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.
- 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 INSTRUCTION ON TREE PROTECTION METHODS.
- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
- ONCE STREETS ARE OPEN TO TRAFFIC, CONTACT TRAFFIC ENGINEERING REGARDING THE INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
- 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.
- CONTACT TRAFFIC ENGINEERING AT 910-341-7888 TO ENSURE THAT ALL TRAFFIC SIGNAL FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN.
- CALL TRAFFIC ENGINEERING AT 910-341-7888 FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
- TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKINGS PRIOR TO ACTUAL STRIPING.
- ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREA SHALL BE WHITE.
- ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER.
- STOP SIGNS AND STREET SIGNS TO REMAIN IN PLACE DURING CONSTRUCTION.
- TACTILE WARNING MATS WILL BE INSTALLED ON ALL WHEELCHAIR RAMPS.
- A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET.
- ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS, AND CURBING WILL BE REPLACED.
- CONTACT KAREN DIXON AT 910-341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
- WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) DETAILS AND SPECIFICATIONS.
- PROJECT SHALL COMPLY WITH CFPUA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METERS CANNOT BE INSTALLED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL. CALL 910-343-3910 FOR INFORMATION.
- 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.
- ANY IRRIGATION SYSTEM SUPPLIED BY CFPUA WATER SHALL COMPLY WITH THE CFPUA CROSS CONNECTION CONTROL REGULATIONS. CALL 910-343-3910 FOR INFORMATION.
- ANY IRRIGATION SYSTEMS SHALL BE EQUIPPED WITH A RAIN AND FREEZE SENSOR.
- ANY BACKFLOW PREVENTION DEVICES REQUIRED BY CFPUA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USCFCOHR OR ASSE.
- CONTRACTOR TO FIELD VERIFY EXISTING WATER AND SEWER SERVICE LOCATIONS, SIZES, AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF ANY CONFLICTS.
- CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- UNDERGROUND FIRE LINES 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 910-341-9686.
- NO OBSTRUCTIONS ARE PERMITTED IN THE SPACE BETWEEN THIRTY (30) INCHES AND TEN (10) FEET ABOVE THE GROUND WITHIN THE TRIANGULAR SITE DISTANCE.
- CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4849 PRIOR TO DOING ANY DIGGING, CLEARING, OR GRADING.

OLD MEARES ROAD
60' PUBLIC R/W

IMPORTANT NOTE: ALL CONSTRUCTION SHALL COMPLY WITH CITY OF WILMINGTON STANDARDS AND SPECIFICATIONS.

100% CONSTRUCTION DRAWING SET-ISSUED FOR REGULATORY REVIEW



REVISIONS

DATE	REVISIONS
3-30-15 <td>PER CITY OF WILMINGTON COMMENT</td>	PER CITY OF WILMINGTON COMMENT

SYMBOL 1

SHIPMAN ENGINEERING GROUP

NCBELS LICENSE P-1274
WWW.SHIPMANENGINEERINGGROUP.COM

1076 CLASSIC ROAD | APEX, NC 27539
919.629.8204

DESIGNED BY: Z. SHIPMAN
DRAWN BY: Z. SHIPMAN
CHECKED BY: Z. SHIPMAN
DRAWING DATE: 2-3-15
SEG PROJECT #: 150128

HAWTHORNE COMMONS FITNESS CENTER
4907 OLD MEARS ROAD
CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

SITE LAYOUT PLAN

SHEET NUMBER: **C-200**

WATER AND SEWER CAPACITY NEEDS

WATER:	41,920	GPD (CURRENT USE)
WATER:	42,658	GPD (PROPOSED USE)
SEWER:	41,920	GPD (CURRENT USE)
SEWER:	42,658	GPD (PROPOSED USE)



THESE PLANS AND ASSOCIATED DOCUMENTS ARE THE EXCLUSIVE PROPERTY OF SHIPMAN ENGINEERING GROUP, PLLC AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART. THESE DOCUMENTS SHALL NOT BE USED FOR ANY PURPOSE WHATSOEVER, INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION, ENGINEERING, ARCHITECTURE, OR ANY OTHER PROFESSIONAL SERVICE WITHOUT THE EXPRESS WRITTEN CONSENT OF SHIPMAN ENGINEERING GROUP, PLLC.

APPROVED CONSTRUCTION PLAN

NAME _____ DATE _____

PLANNING _____
 TRAFFIC _____
 FIRE _____



Public Services • Engineering Division

APPROVED DRAINAGE PLAN

Date: _____ Permit # _____

Signed: _____

GENERAL NOTES:

- EXISTING CONDITIONS AND TOPOGRAPHICAL DATA OF THE SUBJECT PARCEL ARE COMPILED FROM A FIELD SURVEY OF THE PROPERTY BY STROUD ENGINEERING PA, DATED NOVEMBER 6, 2014, AND IS NOT THE RESULT OF A FIELD SURVEY BY SHIPMAN ENGINEERING GROUP, PLLC. ADDITIONAL EXISTING CONDITION DATA PROVIDED BY SUPPLEMENTAL DATA INCLUDING AERIAL PHOTOGRAPHY, NEW HANOVER COUNTY GIS DATA, AND OTHER DATA SOURCES AS REQUIRED.
- COMPLY WITH LOCAL SPECIFICATIONS WITH REGARDS TO MATERIALS, INSTALLATION, AND TESTING OF THE WATER AND SEWER LINES. IN THE EVENT OF A CONFLICT BETWEEN ANY OF THESE STANDARDS, SPECIFICATIONS, OR PLANS, THE MOST STRINGENT SHALL GOVERN UNLESS OTHERWISE NOTED ON THE PLANS.
- COORDINATE WITH ALL APPROPRIATE UTILITY PROVIDERS FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. WATER AND SEWER INSTALLATION SHALL BE IN ACCORDANCE WITH CAPE FEAR PUBLIC UTILITY AUTHORITY (CPFA) STANDARDS AND SPECIFICATIONS.
- ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS AND/OR TESTING REQUIRED BY CODES OR UTILITY SERVICE PROVIDERS SHALL BE PERFORMED PRIOR TO THE FINAL CONNECTION OF SERVICE.
- CONTRACTOR SHALL NOTIFY CPFA INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
- CONTRACTOR SHALL MAINTAIN MINIMUM COVER REQUIREMENTS ON ALL WATER AND SEWER LINES AT ALL TIMES DURING CONSTRUCTION.
- UNDERGROUND UTILITY LINES SHALL BE INSTALLED, INSPECTED, AND APPROVED PRIOR TO BACKFILLING.
- EXISTING UNDERGROUND UTILITY LINES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN NATURE AND FIELD VERIFIED PRIOR TO CONSTRUCTION ACTIVITY.

IMPORTANT NOTE: EXISTING SEWER LINES SHOWN ARE LOCATED FROM ABOVE GROUND EVIDENCE AND AVAILABLE HISTORICAL RECORDS. PIPE DIAMETERS, DEPTHS, AND MATERIALS WERE UNABLE TO BE DETERMINED VIA TRADITIONAL SURVEY METHODS AND SHOULD BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. NOTIFY THE DESIGN ENGINEER IMMEDIATELY IF DISCREPANCIES ARE NOTED.

LOCATION OF SANITARY SEWERS IN RELATION TO WATER AND STORM SEWERS:

- SEWERS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A 10 FOOT SEPARATION, THE APPROPRIATE REVIEWING AGENCY (DEH OR DENR) MAY ALLOW DEVIATION ON A CASE BY CASE BASIS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVIATION MAY ALLOW INSTALLATION OF THE SEWER CLOSER TO A WATER MAIN, PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELVE LOCATED ON ONE SIDE OF THE SEWER AND AT AN ELEVATION SO THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.
 - IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED ABOVE OR ANYTIME THE SEWER IS OVER THE WATER MAIN, BOTH WATER MAIN AND SEWER MUST BE CONSTRUCTED OF FERROUS PIPE COMPLYING WITH PUBLIC WATER SUPPLY DESIGN STANDARDS AND BE PRESSURE TESTED TO 150 PSI TO ASSURE WATERTIGHTNESS BEFORE BACKFILLING.
 - A 24 INCH VERTICAL SEPARATION SHALL BE PROVIDED BETWEEN STORM SEWER AND SANITARY SEWER LINES OR FERROUS PIPE SPECIFIED.
- CROSSINGS:**
- SEWERS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER MAIN JOINTS.
 - WHEN IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS STIPULATED ABOVE, ONE OF THE FOLLOWING METHODS MUST BE SPECIFIED
 - THE SEWER SHALL BE DESIGNED AND CONSTRUCTED OF FERROUS PIPE AND SHALL BE PRESSURE TESTED AT 150 PSI TO ASSURE WATERTIGHTNESS PRIOR TO BACKFILLING, OR
 - EITHER THE WATER MAIN OR THE SEWER LINE MAY BE ENCASED IN A WATERTIGHT CARRIER PIPE WHICH EXTENDS 10 FEET ON BOTH SIDES OF THE CROSSING, MEASURED PERPENDICULAR TO THE WATER MAIN. THE CARRIER PIPE SHALL BE OF MATERIALS APPROVED BY THE REGULATORY AGENCY OF USE IN WATER MAIN CONSTRUCTION.

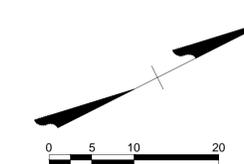
NCAC 21 WASTEWATER FLOW RATE CALCULATION:

FITNESS CENTER, EXERCISE CENTER: 50 GALLONS/100 SF
 PROPOSED SEWER DEMAND: 721 GALLONS PER DAY
 PROPOSED WATER DEMAND: 721 GALLONS PER DAY

NOTE: WATER AND SANITARY SEWER SERVICE LATERALS TO BE PRIVATELY OWNED AND MAINTAINED.

UTILITY KEYNOTES

- 40 LF 4" PVC PRIVATE SANITARY SEWER LATERAL-MIN. SLOPE 1/8" PER FOOT (1.00%)-REFER TO NOTE THIS SHEET
- SANITARY SEWER CLEANOUT ON EXISTING LINE-INSTALL TRAFFIC RATED IRON CLEANOUT COVER BOX-ESTIMATED INVERT 37.81
- SANITARY SEWER CLEANOUT
- EXISTING SANITARY SEWER LINE-DEPTH AND MATERIAL UNKNOWN REFER TO NOTE
- TIE TO EXISTING BUILDING WASTE SYSTEM-INV. 38.80
- 31 LF 1" CTS-PE WATER SERVICE TUBING-SDR 9 ASTM 2737 (PRIVATE)
- 1" RPZ BACKFLOW PREVENTION DEVICE IN ABOVE-GROUND HEATED ENCLOSURE
- 1" WATER METER IN BELOW GRADE CARSON 1015-12 BLACK BOX
- 1" x 6" SERVICE SADDLE WITH MCDONALD MODEL 74701B-22 CORPORATION STOP AND STAINLESS STEEL STIFFENERS
- EXISTING 6" PVC WATERLINE-DEPTH UNKNOWN
- OPEN CUT EXISTING PAVEMENT AND INSTALL PERMANENT PATCH



IMPORTANT NOTE: ALL CONSTRUCTION SHALL COMPLY WITH CITY OF WILMINGTON STANDARDS AND SPECIFICATIONS.

100% CONSTRUCTION DRAWING SET-ISSUED FOR REGULATORY REVIEW



SYMBOL	DATE	REVISIONS
1	3-30-15	PER CITY OF WILMINGTON COMMENT

SHIPMAN ENGINEERING GROUP
 1076 CLASSIC ROAD | APEX, NC 27539
 919.629.8204
 www.shipmanengineeringgroup.com
 NCBELS LICENSE P-1274

DESIGNED BY: Z. SHIPMAN
 DRAWN BY: Z. SHIPMAN
 CHECKED BY: Z. SHIPMAN
 DRAWING DATE: 2-3-15
 SEG PROJECT #: 150128

HAWTHORNE COMMONS FITNESS CENTER
 4907 OLD MEARS ROAD
 CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
SITE UTILITY PLAN

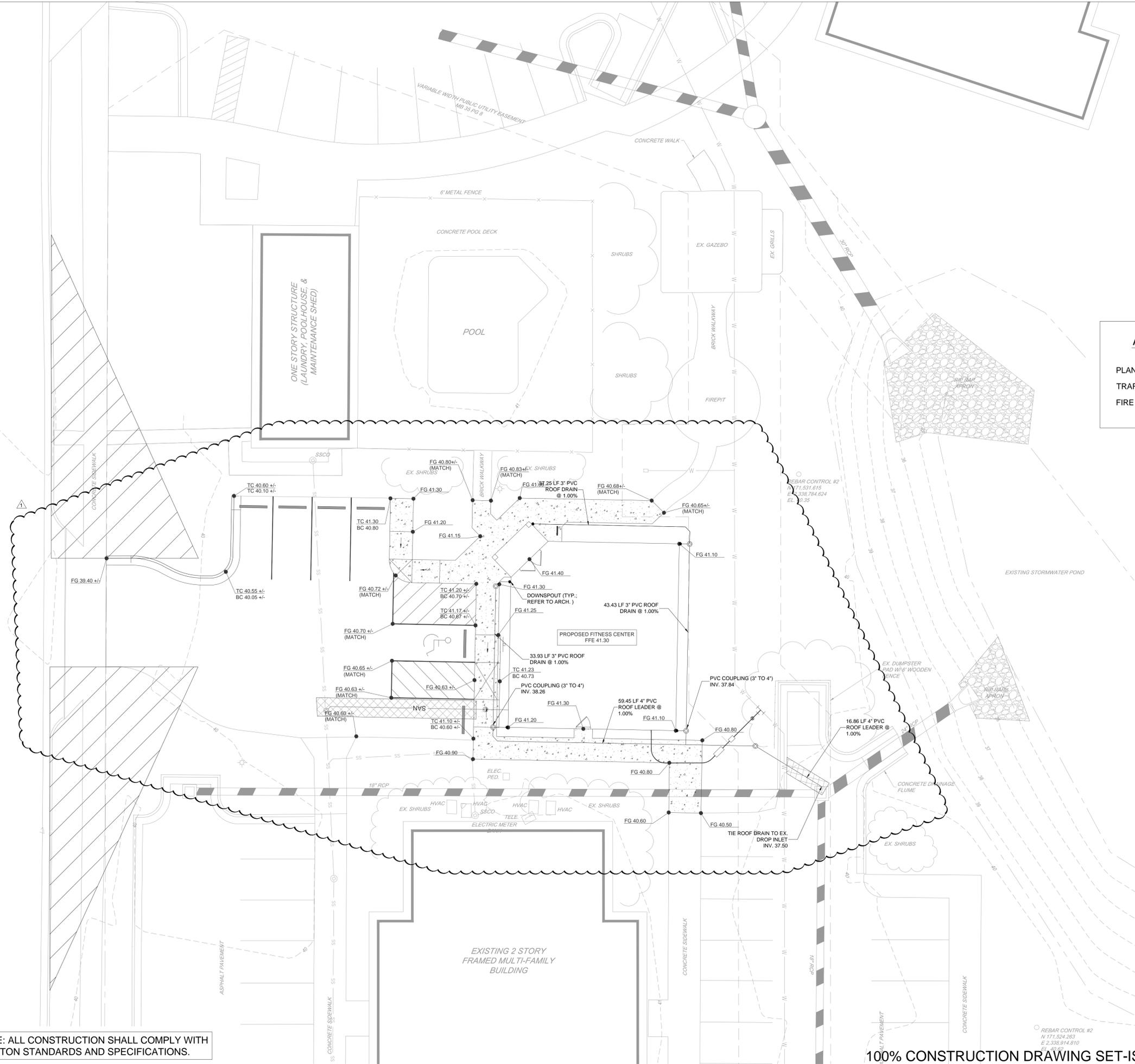
SHEET NUMBER: **C-201**

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**OLD MEARES ROAD
60' PUBLIC RW**

IMPORTANT NOTE: ALL CONSTRUCTION SHALL COMPLY WITH CITY OF WILMINGTON STANDARDS AND SPECIFICATIONS.



GENERAL NOTES:

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- EXISTING UNDERGROUND UTILITY LINES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN NATURE AND FIELD VERIFIED PRIOR TO CONSTRUCTION ACTIVITY.
- ACCESSIBLE PARKING SPACES SHALL CONFORM WITH ADAAG REGULATIONS AND NC BUILDING CODE. THE MAXIMUM SLOPE IN ANY ACCESSIBLE PARKING AREA IS 2% IN ANY DIRECTION. THE MAXIMUM LONGITUDINAL SLOPE OF ANY ACCESSIBLE ROUTE SHALL BE 5% AND THE MAXIMUM CROSS SLOPE OF ANY ACCESSIBLE ROUTE SHALL BE 2%. CONCRETE FLATWORK AREAS ALONG THE ACCESSIBLE ROUTE WHICH DO NOT COMPLY WITH APPLICABLE ADAAG REGULATIONS SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

APPROVED CONSTRUCTION PLAN

	NAME	DATE
PLANNING	_____	_____
TRAFFIC	_____	_____
FIRE	_____	_____

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

Date: _____ Permit # _____
Signed: _____

811
Know what's below.
Call before you dig.

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REBAR CONTROL #2
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100% CONSTRUCTION DRAWING SET-ISSUED FOR REGULATORY REVIEW



SHIPMAN ENGINEERING GROUP

NCBELS LICENSE P-1274
WWW.SHIPMANENGINEERINGGROUP.COM

SYMBOL	DATE	REVISIONS	PER CITY OF WILMINGTON COMMENT
1	3-30-15		

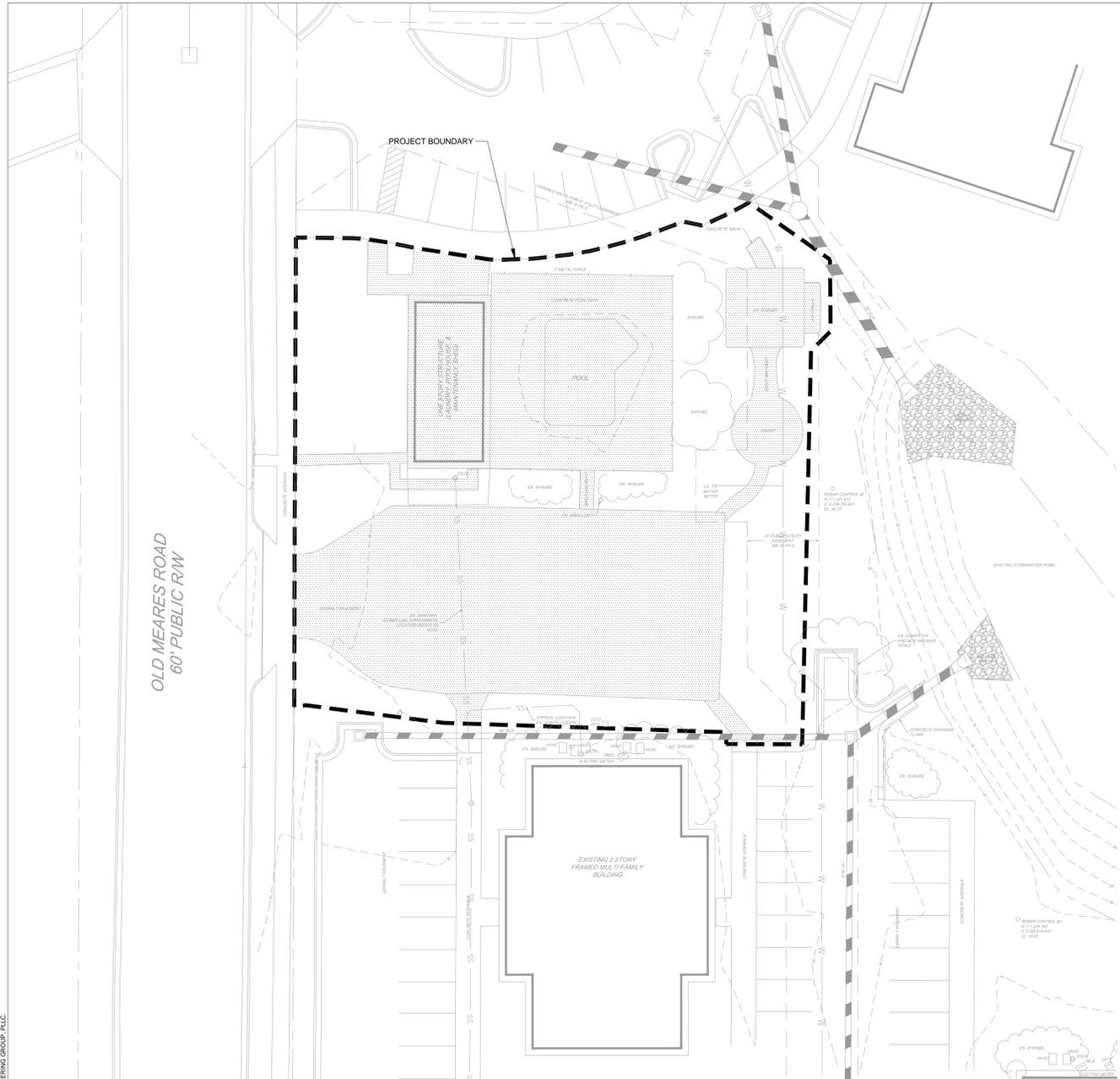
DESIGNED BY: Z. SHIPMAN
DRAWN BY: Z. SHIPMAN
CHECKED BY: Z. SHIPMAN
DRAWING DATE: 2-3-15
SEG PROJECT #: 150128

HAWTHORNE COMMONS FITNESS CENTER
4907 OLD MEARES ROAD
CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

SITE GRADING & DRAINAGE PLAN

C-202

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PRE-DEVELOPMENT DRAINAGE AREA AND IMPERVIOUS AREAS
SCALE: 1"=20'



POST-DEVELOPMENT DRAINAGE AREA AND IMPERVIOUS AREAS
SCALE: 1"=20'

SITE HYDROLOGY ANALYSIS

TOTAL SITE AREA: 19,495 SF (0.448 AC.)
 PRE-DEVELOPMENT IMPERVIOUS AREA: 11,462 SF (0.26 AC.)
 POST DEVELOPMENT IMPERVIOUS AREA: 11,322 SF (0.26 AC.)
 IMPERVIOUS INCREASE: -140 SF TOTAL
 NEWLY CONSTRUCTED IMPERVIOUS: 3,521 SF

OVERALL SITE IMPERVIOUS CALCULATIONS:

EXISTING BUILDINGS:	76,172 SF	PROPOSED BUILDINGS:	77,681 SF
EXISTING ASPHALT & CURB:	115,158 SF	PROPOSED ASPHALT & CURB:	112,610 SF
EXISTING CONCRETE:	37,678 SF	PROPOSED CONCRETE:	36,577 SF
EXISTING, TOTAL SITE:	229,008 SF	PROPOSED, TOTAL SITE:	228,848 SF

IMPERVIOUS AREA NOTE: THERE IS NO NET INCREASE IN IMPERVIOUS SURFACES ASSOCIATED WITH THE PROPOSED IMPROVEMENTS.



NCDENR STORMWATER PERMIT INFORMATION

THIS SITE IS COVERED UNDER EXISTING NCDENR DIVISION OF WATER QUALITY PERMIT 920613, ISSUED OCTOBER 5, 1992.

THE PERMIT ALLOCATED 14,400 SQUARE FEET OF FUTURE IMPERVIOUS AREA DENOTED AS "TENNIS COURTS OR RECREATIONAL AREA".

RECEIVING WATER BODY: BURNT MILL CREEK
 WATERSHED CLASSIFICATION: SC-HQW

IMPORTANT NOTE: ALL CONSTRUCTION SHALL COMPLY WITH CITY OF WILMINGTON STANDARDS AND SPECIFICATIONS.

APPROVED CONSTRUCTION PLAN

	NAME	DATE
PLANNING	_____	_____
TRAFFIC	_____	_____
FIRE	_____	_____

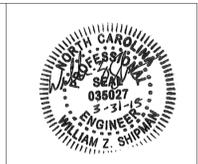
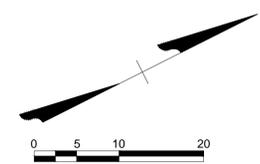
CITY OF WILMINGTON NORTH CAROLINA
 Public Services • Engineering Division

APPROVED DRAINAGE PLAN

Date: _____ Permit # _____
 Signed: _____

GENERAL NOTES:

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- COORDINATE WITH ALL APPROPRIATE UTILITY PROVIDERS FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. WATER AND SEWER INSTALLATION SHALL BE IN ACCORDANCE WITH OLD NORTH UTILITY SERVICES STANDARDS AND SPECIFICATIONS.
- ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS AND/OR TESTING REQUIRED BY CODES OR UTILITY SERVICE PROVIDERS SHALL BE PERFORMED PRIOR TO THE FINAL CONNECTION OF SERVICE.
- CONTRACTOR SHALL NOTIFY OLD NORTH UTILITY SERVICE INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
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SYMBOL	DATE	REVISIONS
1	3-30-15	PER CITY OF WILMINGTON COMMENT

SHIPMAN ENGINEERING GROUP

1076 CLASSIC ROAD | APEX, NC 27539
 919.629.8204

NCBELS LICENSE P-1274
 WWW.SHIPMANENGINEERINGGROUP.COM

DESIGNED BY: Z. SHIPMAN
 DRAWN BY: Z. SHIPMAN
 CHECKED BY: Z. SHIPMAN
 DRAWING DATE: 2-3-15
 SEG PROJECT #: 150128

HAWTHORNE COMMONS FITNESS CENTER
 4907 OLD MEARS ROAD
 CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

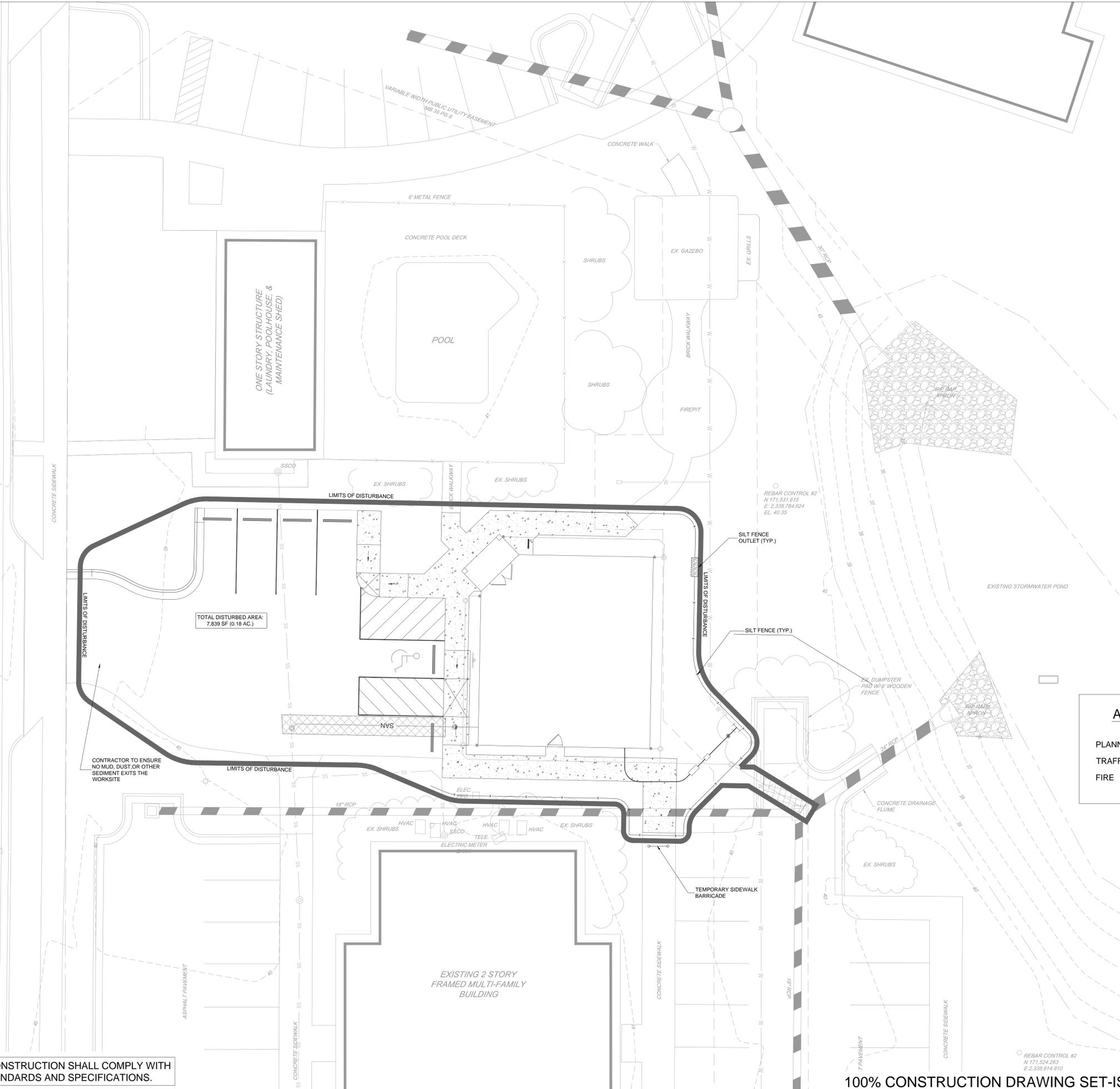
SITE HYDROLOGY PLAN

SHEET NUMBER: C-203

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OLD MEARES ROAD
60' PUBLIC R/W

IMPORTANT NOTE: ALL CONSTRUCTION SHALL COMPLY WITH CITY OF WILMINGTON STANDARDS AND SPECIFICATIONS.



TOTAL DISTURBED AREA:
7,839 SF (0.18 AC)

GENERAL NOTES:

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- EXISTING UNDERGROUND UTILITY LINES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN NATURE AND FIELD VERIFIED PRIOR TO CONSTRUCTION ACTIVITY.

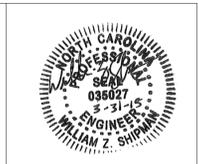
EROSION CONTROL CONSTRUCTION SEQUENCE:

- A LAND DISTURBANCE PRECONSTRUCTION CONFERENCE IS REQUIRED PRIOR TO ANY DISTURBANCE ON SITE. THIS PRECONSTRUCTION CONFERENCE MAY BE COMBINED WITH OTHER PRECONSTRUCTION MEETINGS AS NECESSARY. THE MEETING SHALL BE BETWEEN THE OWNER, NEW HANOVER COUNTY INSPECTIONS STAFF (IF REQUIRED), THE ENGINEER, AND GENERAL CONTRACTOR. THE CONTRACTOR SHALL SCHEDULE THE MEETING TO OCCUR AT LEAST 48 HOURS PRIOR TO ANY DISTURBANCE ON SITE.
- INSTALL SILT FENCE AROUND THE PERIMETER OF THE WORK SITE, DISTURBING ONLY THOSE AREAS NECESSARY TO INSTALL THE FENCE. REMOVE EXISTING FEATURES AS NEEDED TO INSTALL THE FENCE, AS OUTLINED ON THE DEMOLITION PLAN.
- PLACE PEDESTRIAN BARRICADES ON SIDEWALKS AS SHOWN ON THE DEMOLITION PLAN AND EROSION CONTROL PLAN.
- ONCE SILT FENCE IS INSTALLED, BEGIN CLEARING, GRUBBING, AND STRIPING OF THE SITE. STRIP AND STOCKPILE TOPSOIL FOR SIFTING, DRYING, AND TESTING.
- SAWCUT AND REMOVE EXISTING ASPHALT PAVEMENT AND SIDEWALK AS SHOWN ON THE DEMOLITION PLAN. DISPOSE OF CONSTRUCTION DEBRIS IN AN APPROVED LANDFILL.
- BEGIN ROUGH GRADING THE SITE TO CREATE A BUILDING PAD AS NEEDED. PLACE FILL MATERIAL UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER.
- BEGIN CONSTRUCTION OF NEW BUILDING FACILITY.
- INSTALL ROOF DRAINAGE LEADERS, DRAIN TILE, AND OTHER STORMWATER PIPING.
- INSTALL CONCRETE FLATWORK AND SIDEWALK AREAS. COMPLETE FINE GRADING OF ANY DISTURBED AREAS.
- RESTRIPE PARKING LOT AND INSTALL FINAL SITE IMPROVEMENTS (BOLLARDS, WHEEL STOPS, ETC.).
- INSTALL LANDSCAPING SHRUBS, TREES, AND GROUND COVER. STABILIZE ALL REMAINING DISTURBED AREAS WITH PERMANENT SEEDING OR SOD AS SHOWN ON THE LANDSCAPING PLANS.
- ONCE SITE IS PERMANENTLY STABILIZED, REMOVE ALL SILT FENCE AND OTHER TEMPORARY EROSION CONTROL MEASURES. STABILIZE REMAINING FINAL AREAS ALTERED DURING THE REMOVAL OF EROSION CONTROL MEASURES.


 Public Services • Engineering Division
APPROVED DRAINAGE PLAN
 Date: _____ Permit # _____
 Signed: _____

APPROVED CONSTRUCTION PLAN

NAME	DATE
PLANNING _____	_____
TRAFFIC _____	_____
FIRE _____	_____



SYMBOL	DATE	REVISONS	PER CITY OF WILMINGTON COMMENT
1	3-30-15		

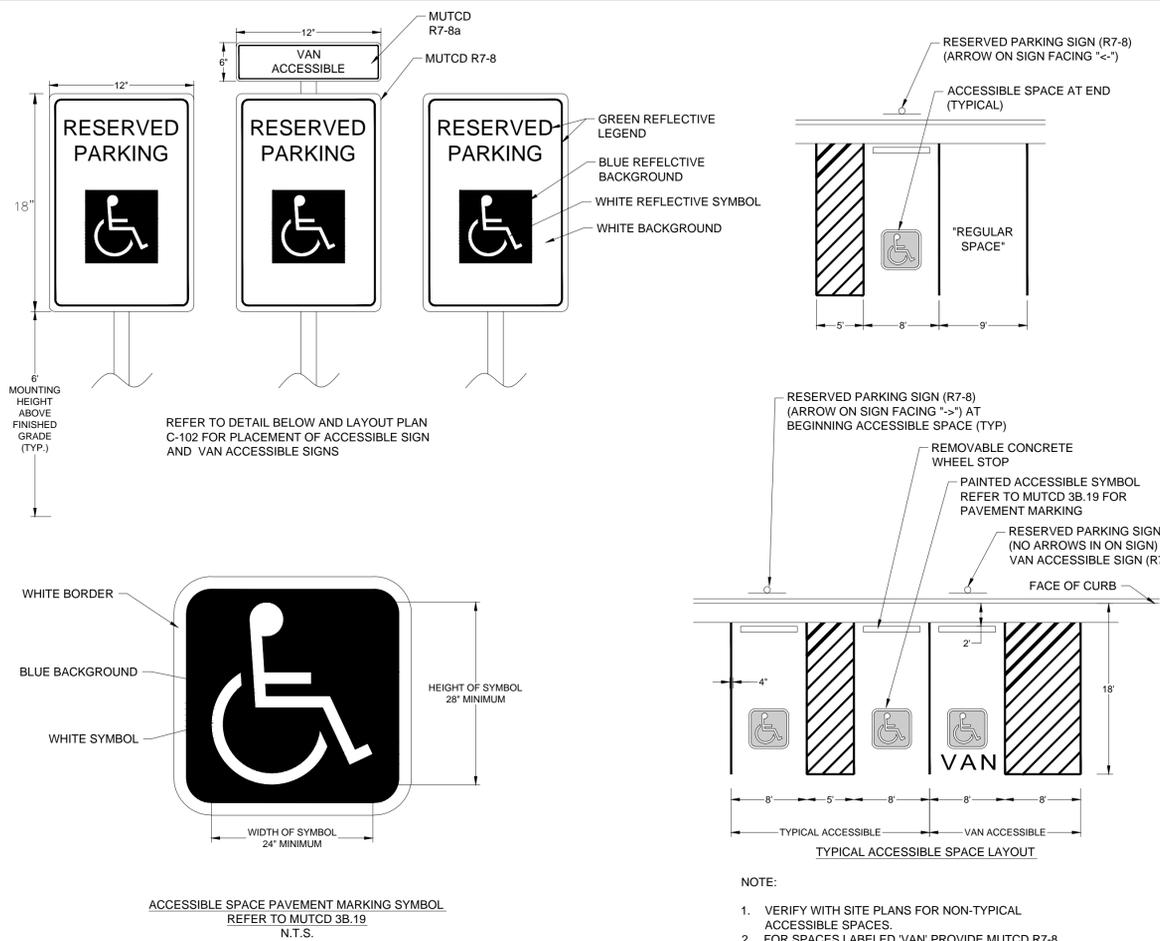
SHIPMAN ENGINEERING GROUP
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DESIGNED BY: Z. SHIPMAN
DRAWN BY: Z. SHIPMAN
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DRAWING DATE: 2-3-15
SEG PROJECT #: 150128

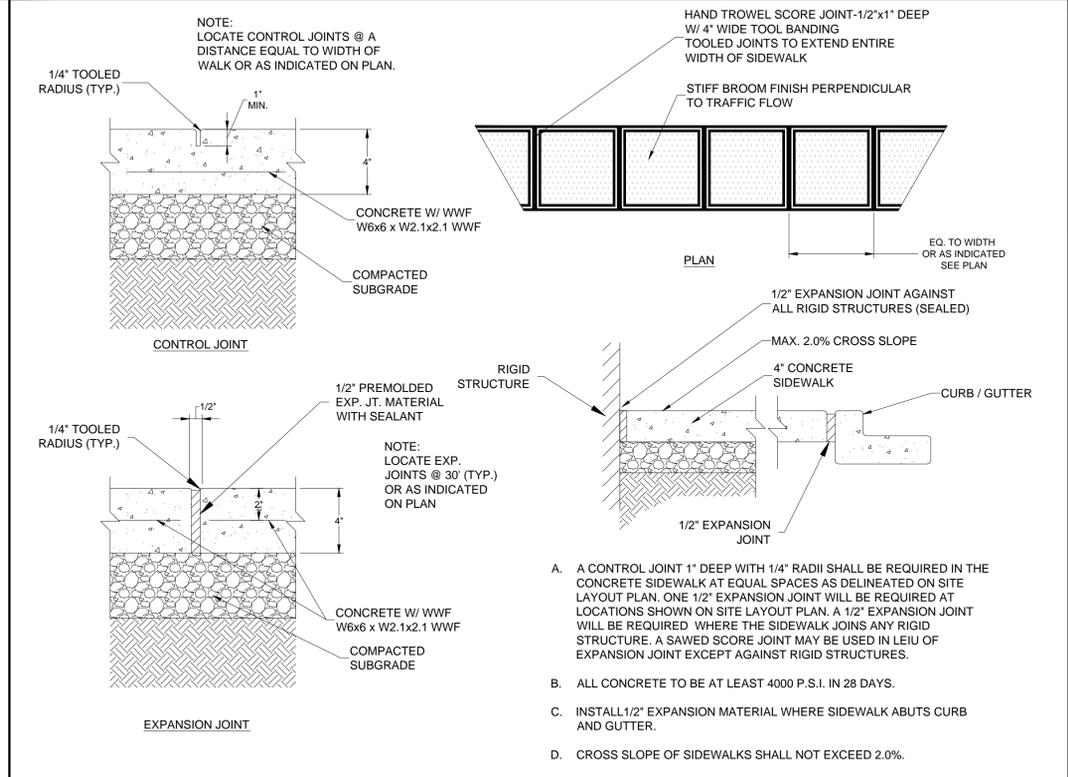
HAWTHORNE COMMONS FITNESS CENTER
 4907 OLD MEARS ROAD
 CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
EROSION CONTROL PLAN

SHEET NUMBER:
C-204

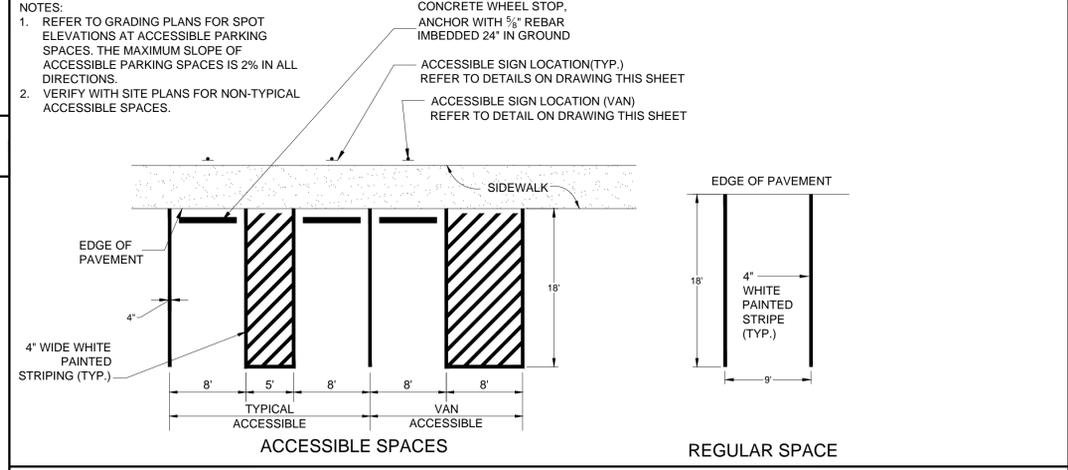
100% CONSTRUCTION DRAWING SET-ISSUED FOR REGULATORY REVIEW



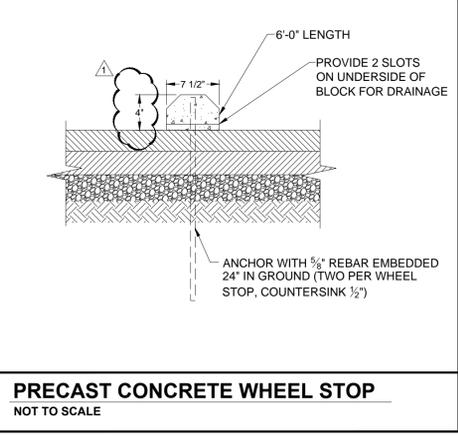
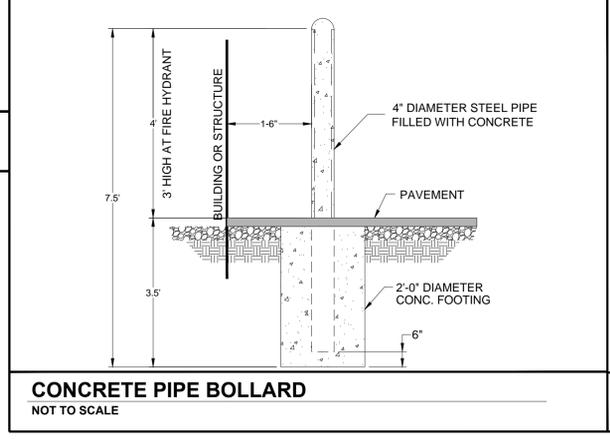
ACCESSIBLE PARKING SPACE MARKING AND SIGNAGE
 NOT TO SCALE



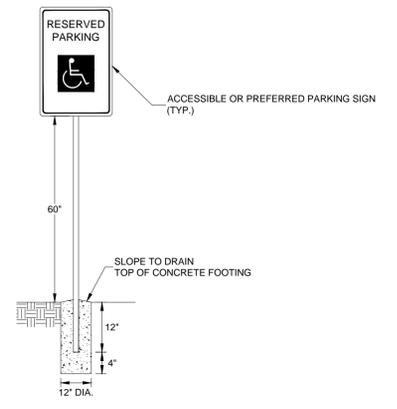
CONCRETE SIDEWALK
 NOT TO SCALE



PARKING SPACE STRIPING
 NOT TO SCALE



ACCESSIBLE & PREFERRED PARKING SIGN FOUNDATION
 NOT TO SCALE



APPROVED CONSTRUCTION PLAN

NAME _____ DATE _____

PLANNING _____

TRAFFIC _____

FIRE _____



REVISIONS	DATE	PER CITY OF WILMINGTON COMMENT
1	3-30-15	

SHIPMAN ENGINEERING GROUP

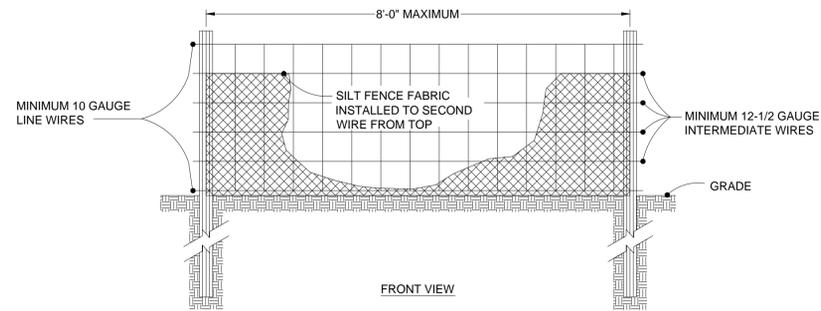
1076 CLASSIC ROAD | APEX, NC 27539
 919.629.8204

DESIGNED BY: Z. SHIPMAN
 DRAWN BY: Z. SHIPMAN
 CHECKED BY: Z. SHIPMAN
 DRAWING DATE: 2-3-15
 SEG PROJECT #: 150128

HAWTHORNE COMMONS FITNESS CENTER
 4907 OLD MEARS ROAD
 CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

NOTES AND DETAILS

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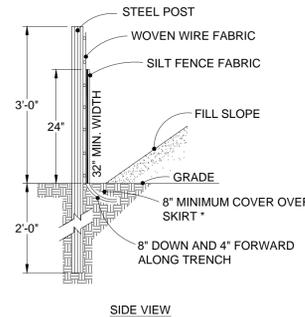
NOTE:
USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW.

MAINTENANCE
INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.

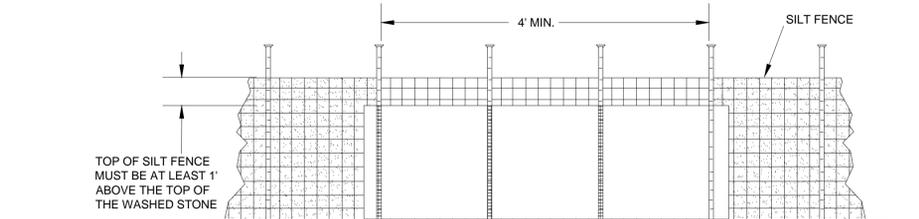
SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.

REMOVE SEDIMENT DEPOSITS WHEN DEPTH OF SEDIMENT REACHES 12" TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.

REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.



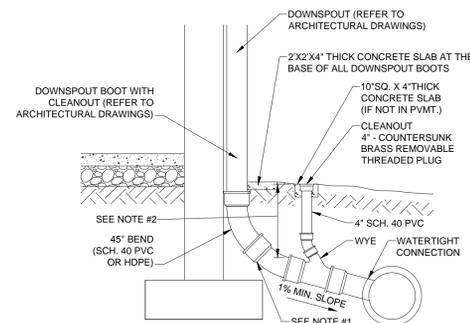
SILT FENCE (NCDENR 6.62)
NOT TO SCALE



NOTES:
1. REMOVE SEDIMENT WHEN HALF OF STONE OUTLET IS COVERED.
2. REPLACE STONE AS NEEDED TO ENSURE DEWATERING.

MAINTENANCE
SEE SILT FENCE THIS SHEET FOR MAINTENANCE INFORMATION.

SILT FENCE OUTLET (NCDENR 6.62)
NOT TO SCALE



NOTES:
1. MAINTAIN A WATERTIGHT CONNECTION AT ALL PIPE CONNECTIONS BELOW GRADE.
2. MINIMUM DEPTH OF COVER IS ONE (1) FOOT. FOR ALL DEPTHS OF COVER LESS THAN TWO (2) FEET, PIPE MUST BE SCHEDULE 40 PVC. FOR DEPTHS OF COVER GREATER THAN TWO (2) FEET, FLEXIBLE PIPE OR HDPE MAY BE USED. REFER TO SPECIFICATIONS FOR ALLOWABLE PIPE TYPES.

DOWNSPOUT COLLECTOR
NOT TO SCALE

TS TEMPORARY SEEDING

SEEDING MIXTURE
COOL SEASON SEPTEMBER 1 - FEBRUARY 28
SPECIES RATE (lb/ACRE)
SOFT RED WINTER WHEAT 120
WARM SEASON MARCH 1 - AUGUST 31
SPECIES RATE (lb/ACRE)
GERMAN BROWN TOP, OR FOX TAIL MILLET 65

SOIL AMENDMENTS
TILL SOIL TO A DEPTH OF 4". APPLY LIME AT A RATE OF 70 LB PER 100 SF. OR 1.5 TONS PER ACRE. APPLY 10-20-20 FERTILIZER AT A RATE OF 20 LBS PER 1000 SF OR 850 LBS PER ACRE. THE FERTILIZER SHOULD BE EITHER SLOW TIME RELEASE OR APPLIED IN TWO APPLICATIONS, HALF AT TIME OF PLANTING AND THE SECOND HALF AFTER PERMANENT SEED GERMINATES.

MULCH
APPLY 4,000 lb/ACRE STRAW. THE GROUND SHOULD BE COMPLETELY COVERED WITH NO BARE SPOT LARGER THAN A QUARTER, THEN TACKED WITH EMULSIFIED ASPHALT. EMULSIFIED ASPHALT SHALL BE APPLIED AT A RATE HEAVY ENOUGH THAT THE ENTIRE AREA APPEARS BLACK IN COLOR.

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

EROSION CONTROL MATTING SHALL BE PROVIDED ON ALL SLOPES 3:1 AND GREATER.

PS PERMANENT SEEDING

PERMANENT SODDING:
PROVIDE BERMUDA SOD IN ACCORDANCE WITH LANDSCAPE DRAWINGS REFER TO MAINTENANCE SPECIFICATIONS AND REQUIREMENTS FOR PERMANENT SODDING.
PREPARE SEEDBED BY RIPPING, CHISELING, HARROWING, OR PLOWING TO DEPTH OF SIX INCHES SO AS TO PRODUCE A LOOSE, FRIABLE SURFACE. REMOVE ALL STONES, BOULDERS, STUMPS, OR DEBRIS FROM THE SURFACE WHICH WOULD PROHIBIT GERMINATION OR PLANT GROWTH.

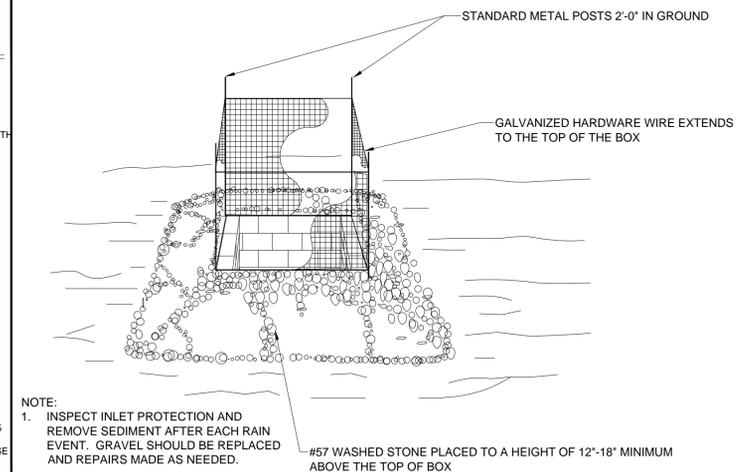
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TEST, OR APPLY 300 LB/ACRE 10-10-10 FERTILIZER.

PERMANENT SEEDINGS:
COOL SEASON SEPTEMBER 1 - FEBRUARY 28
SPECIES RATE (LB/ACRE)
SOFT RED WINTER WHEAT 50
COMMON BERMUDA (HULLED) 25
COMMON BERMUDA (UNHULLED) 25
WARM SEASON MARCH 1 - AUGUST 31
SPECIES RATE (LB/ACRE)
GERMAN BROWN TOP, OR FOX TAIL MILLET 50
COMMON BERMUDA (HULLED) 50

SOIL AMENDMENTS
TILL SOIL TO A DEPTH OF 4". APPLY LIME AT A RATE OF 70 LB PER 100 SF. OR 1.5 TONS PER ACRE. APPLY 10-20-20 FERTILIZER AT A RATE OF 20 LBS PER 1000 SF OR 850 LBS PER ACRE. THE FERTILIZER SHOULD BE EITHER SLOW TIME RELEASE OR APPLIED IN TWO APPLICATIONS, HALF AT TIME OF PLANTING AND THE SECOND HALF AFTER PERMANENT SEED GERMINATES.

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



NOTE:
1. INSPECT INLET PROTECTION AND REMOVE SEDIMENT AFTER EACH RAIN EVENT. GRAVEL SHOULD BE REPLACED AND REPAIRS MADE AS NEEDED.

HARDWARE CLOTH AND GRAVEL INLET PROTECTION
NOT TO SCALE

APPROVED CONSTRUCTION PLAN

NAME _____ DATE _____
PLANNING _____
TRAFFIC _____
FIRE _____



REVISIONS	DATE	SYMBOL	PER CITY OF WILMINGTON COMMENT
1	3-30-15		

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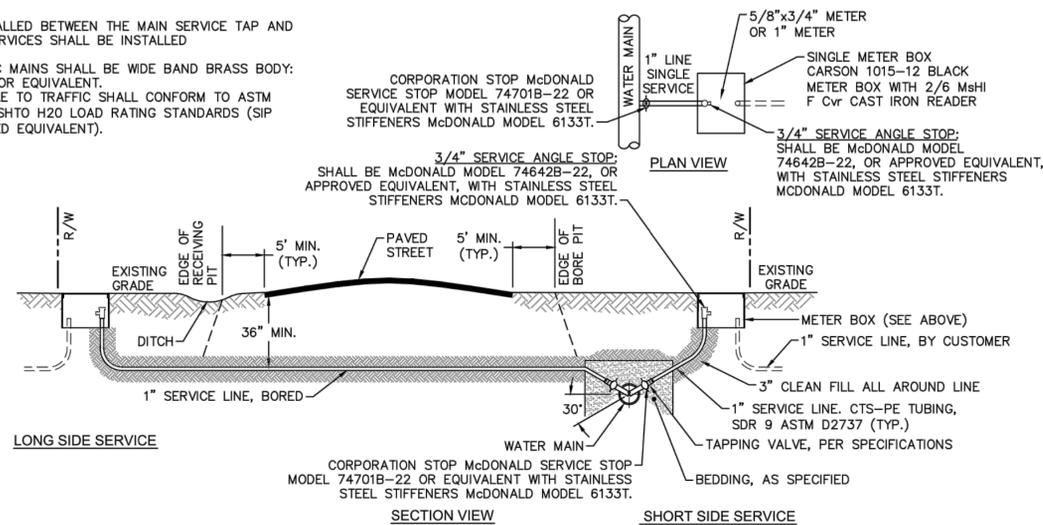
DESIGNED BY: Z. SHIPMAN
DRAWN BY: Z. SHIPMAN
CHECKED BY: Z. SHIPMAN
DRAWING DATE: 2-3-15
SEG PROJECT #: 150128

HAWTHORNE COMMONS FITNESS CENTER
4907 OLD MEARS ROAD
CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA
NOTES AND DETAILS

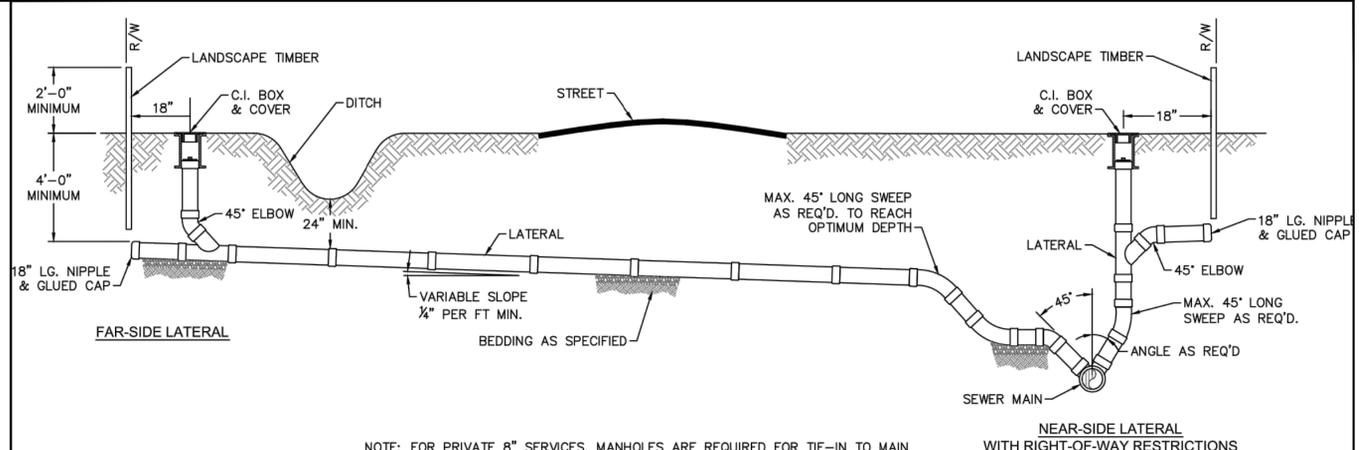
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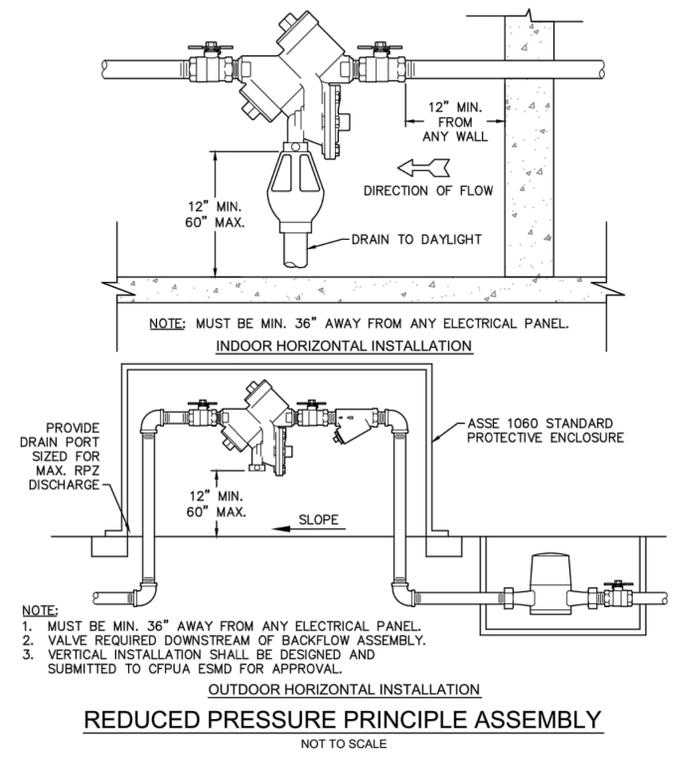
- NOTES:**
- NO JOINT SHALL BE INSTALLED BETWEEN THE MAIN SERVICE TAP AND THE METER STOP. ALL SERVICES SHALL BE INSTALLED PERPENDICULAR TO MAIN.
 - SERVICE SADDLES ON PVC MAINS SHALL BE WIDE BAND BRASS BODY; SADDLE McDONALD 3801 OR EQUIVALENT.
 - METER BOXES SUSCEPTIBLE TO TRAFFIC SHALL CONFORM TO ASTM A48, CLASS 30B AND AASHTO H20 LOAD RATING STANDARDS (SIP MODEL 4240 OR APPROVED EQUIVALENT).



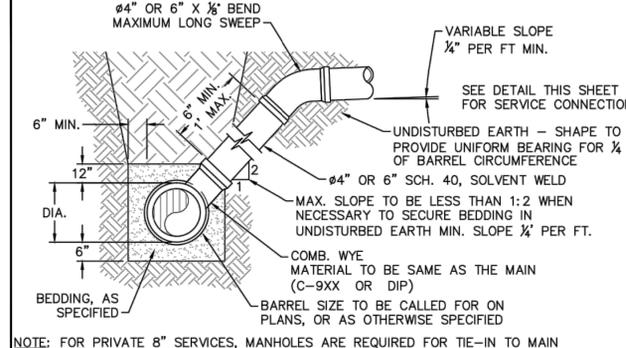
SINGLE SERVICE CONNECTION
NOT TO SCALE



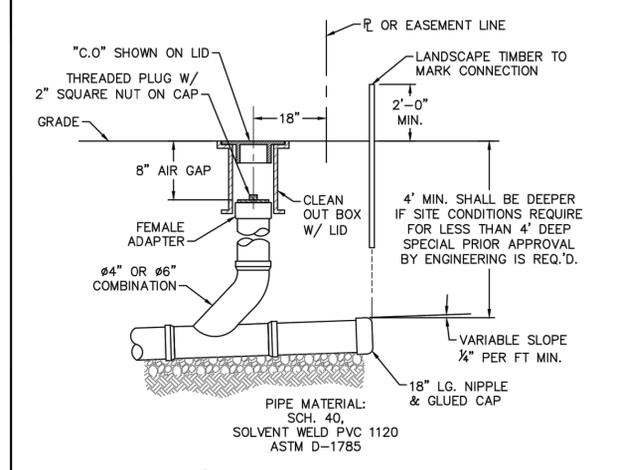
STANDARD SERVICE CONNECTION TO SANITARY SEWER
NOT TO SCALE



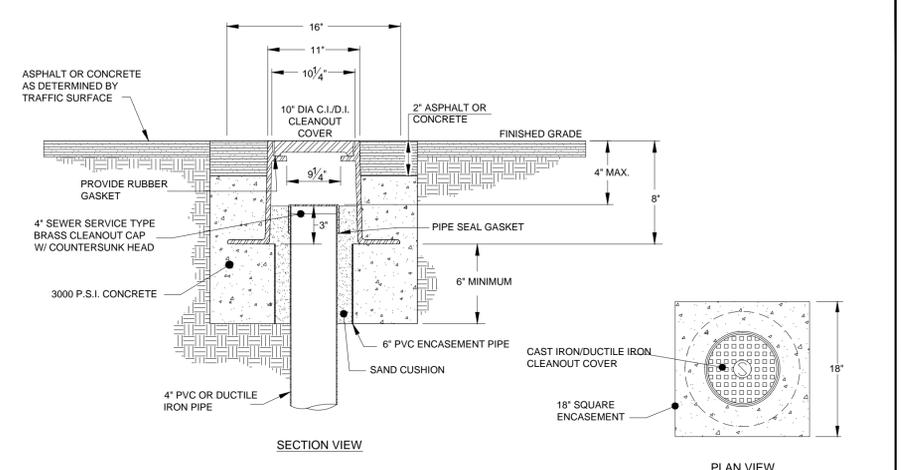
REDUCED PRESSURE PRINCIPLE ASSEMBLY
NOT TO SCALE



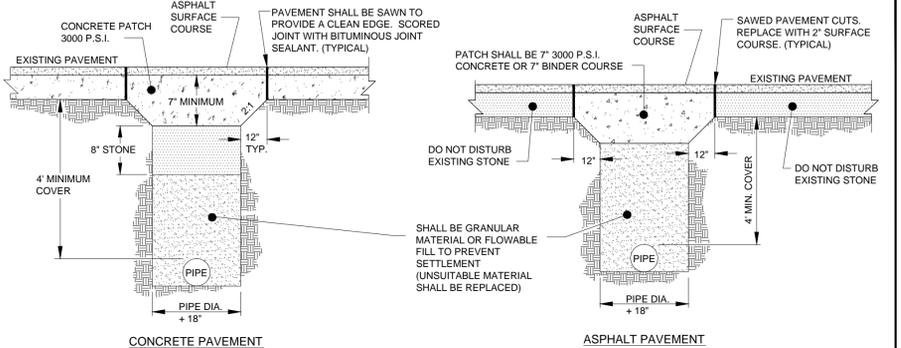
STANDARD SERVICE LATERAL
NOT TO SCALE



SERVICE CONNECTION & CLEAN-OUT
NOT TO SCALE



SEWER SERVICE CLEANOUT COVER ASSEMBLY IN TRAFFIC AREAS
NOT TO SCALE



- NOTES:**
- ALL PAVEMENT CUTS SHALL BE REPAIRED WITHIN A MAXIMUM OF THREE (3) DAYS FROM THE DATE THE CUT IS MADE. IF CONDITIONS DO NOT PERMIT A PERMANENT REPAIR WITHIN THE GIVEN TIME LIMIT, PERMISSION TO MAKE A TEMPORARY REPAIR MUST BE OBTAINED FROM THE TOWN ENGINEER.
 - CONCRETE TRENCH CAP ON ASPHALT STREETS SHALL BE USED ONLY DURING INCLEMENT WEATHER WHEN ASPHALT PLANTS ARE NOT OPERATING.
 - IN ALL OPEN TRENCHES, BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING COMPACTION REQUIREMENTS BY SOILS TESTING CERTIFIED BY A LICENSED PROFESSIONAL GEOTECHNICAL ENGINEER.
 - BACKFILL WITH A HIGH CLAY CONTENT, HIGH SHRINK-SWELL POTENTIAL, OR HIGH MOISTURE CONTENT THAT CANNOT MEET COMPACTION REQUIREMENTS SHALL BE DEEMED UNSUITABLE AND SHALL BE REPLACED WITH SUITABLE BACKFILL MATERIAL.
 - ALL PAVEMENT PATCHES SHALL PROVIDE A UNIFORM AND SMOOTH DRIVING SURFACE.

STANDARD TRENCH AND PAVEMENT REPAIR SECTIONS
NOT TO SCALE

APPROVED CONSTRUCTION PLAN

NAME _____ DATE _____

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1	3-30-15	PER CITY OF WILMINGTON COMMENT

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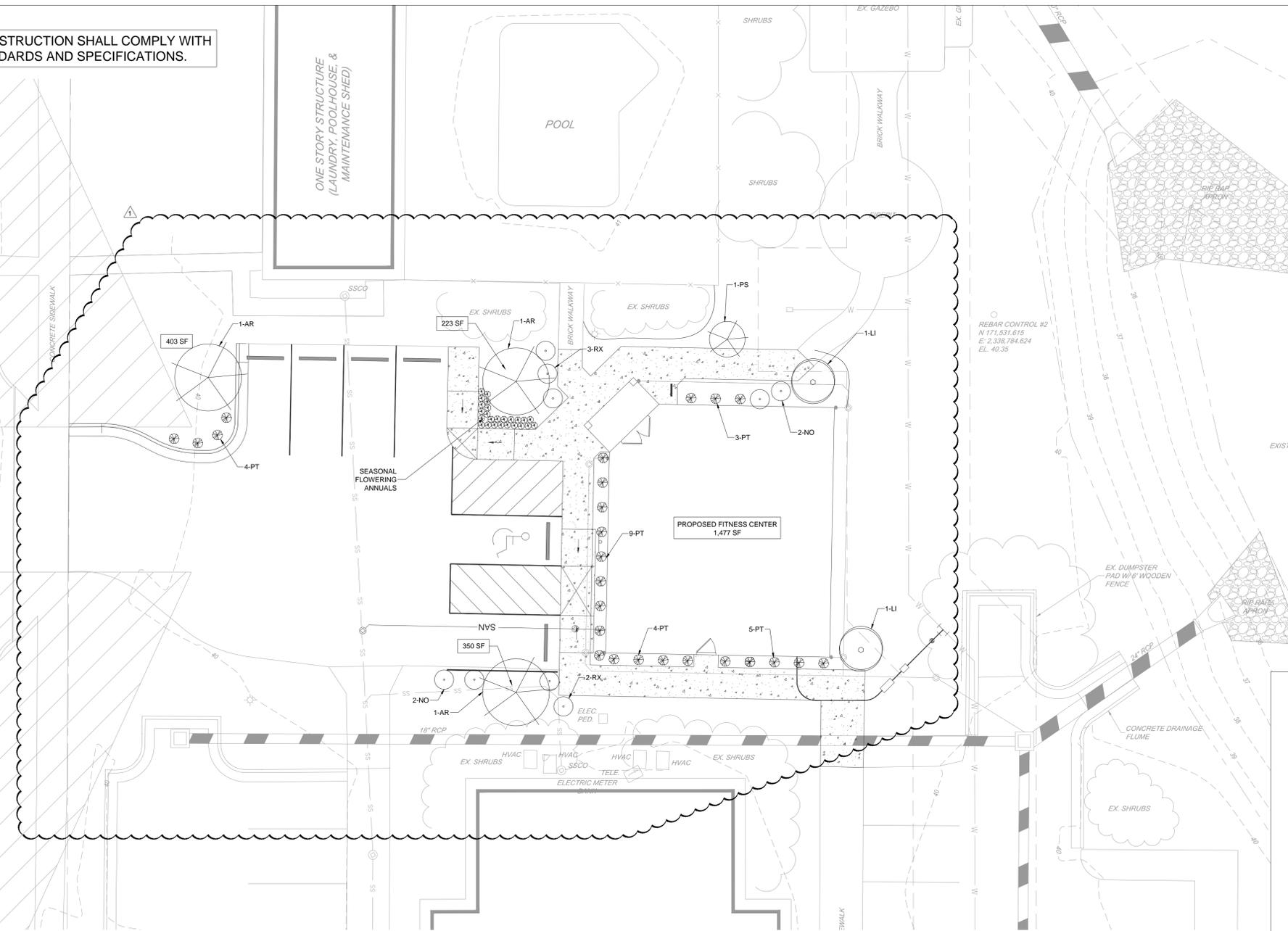
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CHECKED BY: Z. SHIPMAN
DRAWING DATE: 2-3-15
SEG PROJECT #: 150128

HAWTHORNE COMMONS FITNESS CENTER
4907 OLD MEARS ROAD
CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

NOTES AND DETAILS

IMPORTANT NOTE: ALL CONSTRUCTION SHALL COMPLY WITH CITY OF WILMINGTON STANDARDS AND SPECIFICATIONS.

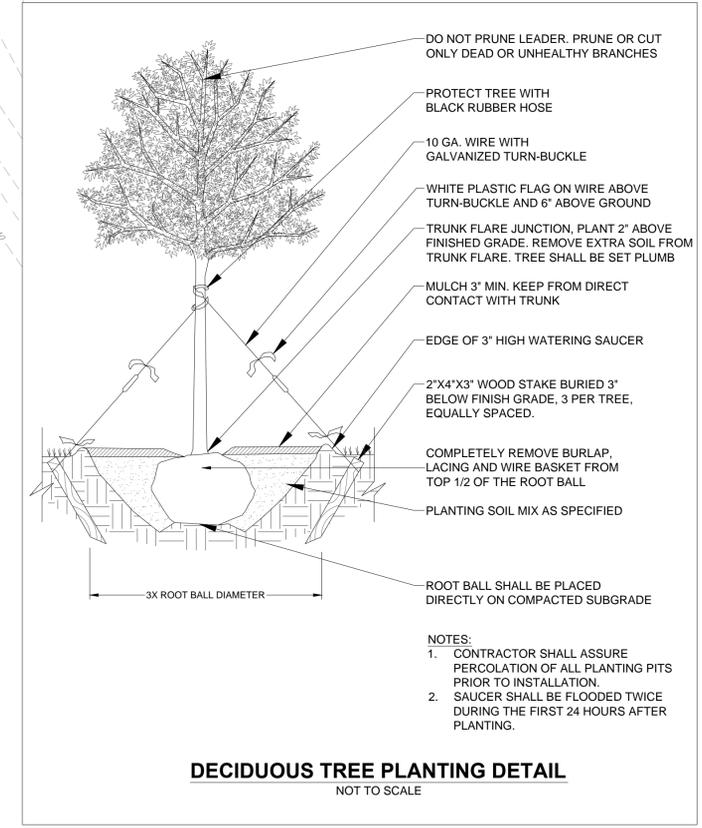
**OLD MEARES ROAD
60' PUBLIC RW**



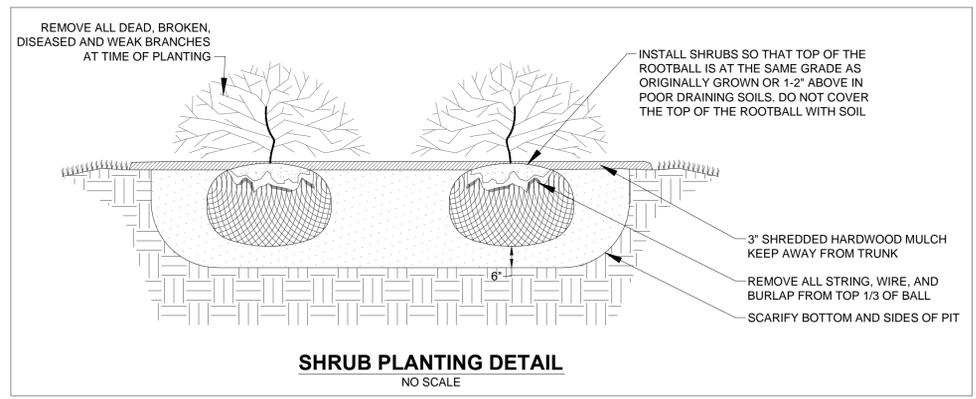
- GENERAL NOTES:**
- EXISTING CONDITIONS AND TOPOGRAPHICAL DATA OF THE SUBJECT PARCEL ARE COMPILED FROM A FIELD SURVEY OF THE PROPERTY BY STROUD ENGINEERING PA, DATED NOVEMBER 6, 2014, AND IS NOT THE RESULT OF A FIELD SURVEY BY SHIPMAN ENGINEERING GROUP, PLLC. ADDITIONAL EXISTING CONDITION DATA PROVIDED BY SUPPLEMENTAL DATA INCLUDING AERIAL PHOTOGRAPHY, NEW HANOVER COUNTY GIS DATA, AND OTHER DATA SOURCES AS REQUIRED.
 - PRIOR TO THE COMMENCEMENT OF ANY ACTIVITIES REQUIRING A BUILDING OR ZONING PERMIT AN ON-SITE PRECONSTRUCTION MEETING IS REQUIRED BETWEEN THE DEVELOPER AND CITY OF WILMINGTON INSPECTION STAFF TO REVIEW PROCEDURES FOR THE PROTECTION AND MANAGEMENT OF ALL LANDSCAPE ELEMENTS THAT ARE TO REMAIN AS IDENTIFIED ON THE LANDSCAPING PLANS.
 - CONTACT THE NC ONE CALL CENTER (811) FOR LOCATIONS OF ALL UTILITY LINES. TREES SHALL BE LOCATED A MINIMUM OF FIVE FEET FROM WATER AND SEWER CONNECTIONS. NOTIFY THE ENGINEER IF ANY CONFLICTS OR DISCREPANCIES ARE NOTED.
 - VERIFY ALL PLANT MATERIAL QUANTITIES ON THE PLAN PRIOR TO BIDDING; PLANT LIST TOTALS ARE SHOWN FOR CONVENIENCE ONLY AND SHALL BE CONFIRMED PRIOR TO SUBMITTING BIDS.
 - PROVIDE PLANT MATERIALS OF QUANTITY, SIZE, GENUS, SPECIES, AND VARIETY INDICATED ON THE PLANS. UNLESS EXPRESS WRITTEN PERMISSION IS ISSUED FROM THE OWNER OR THE ENGINEER INDICATING OTHERWISE, FINAL PLANT SELECTION MAY BE SUBJECT TO SEASONAL AVAILABILITY AND MAY BE ALTERED OR MODIFIED BY THE OWNER AS DESIRED.
 - ALL PLANT MATERIALS AND INSTALLATION SHALL COMPLY WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK". IF SPECIFIED PLANT MATERIAL IS NOT AVAILABLE, SUBMIT PROOF OF NON-AVAILABILITY TO THE ENGINEER, TOGETHER WITH PROPOSAL FOR THE USE OF EQUIVALENT MATERIAL, VARIETIES, OR CULTIVARS.
 - PROVIDE AND INSTALL ALL PLANTS AS IN ACCORDANCE WITH DETAILS AND CONTRACT SPECIFICATIONS.

- CONSTRUCTION/INSTALLATION:**
- THE OWNER AND/OR ENGINEER RESERVES THE RIGHT TO REJECT ANY PLANTS AND MATERIALS THAT ARE IN AN UNHEALTHY OR UNSIGHTLY CONDITION, AS WELL AS PLANTS AND MATERIALS THAT DO NOT CONFORM TO ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK".
 - LABEL AT LEAST ONE TREE AND SHRUB OF EACH VARIETY AND CALIPER WITH A SECURELY ATTACHED, WATERPROOF TAG BEARING THE DESIGNATION OF BOTANICAL AND COMMON NAME.
 - INSTALL LANDSCAPE PLANTINGS AT ENTRANCES/EXITS AND PARKING AREAS ACCORDING TO PLANS SO THAT MATERIALS WILL NOT INTERFERE WITH SIGHT DISTANCES.
 - CONTRACTOR IS RESPONSIBLE FOR WATERING ALL PLANT MATERIAL DURING INSTALLATION AND UNTIL FINAL INSPECTION AND ACCEPTANCE BY OWNER. CONTRACTOR SHALL NOTIFY THE OWNER OF CONDITIONS WHICH AFFECTS THE GUARANTEE.

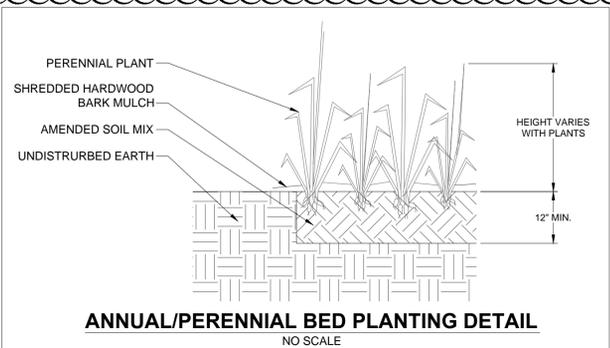
- INSPECTIONS/GUARANTEE:**
- UPON COMPLETION OF LANDSCAPE INSTALLATION, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR WHO WILL VERIFY THE COMPLETENESS, INCLUDING THE REPLACEMENT OF ALL DEAD PLANT MATERIAL. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A FINAL INSPECTION BY THE ENGINEER.
 - ALL EXTERIOR PLANT MATERIALS SHALL BE GUARANTEED FOR ONE FULL YEAR AFTER DATE OF FINAL INSPECTION AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH. DEFECTS RESULTING FROM NEGLIGENCE BY THE OWNER, ABUSE OR DAMAGE BY OTHERS, OR UNUSUAL PHENOMENA OR INCIDENTS WHICH ARE BEYOND THE CONTRACTORS CONTROL ARE NOT THE RESPONSIBILITY OF THE CONTRACTOR.
 - PLANT MATERIAL QUANTITIES AND SIZES WILL BE INSPECTED FOR COMPLIANCE WITH APPROVED PLANS BY A SITE PLAN REVIEW AGENT OF THE PLANNING DEPARTMENT PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY.
 - REMOVE ALL GUY WIRES AND STAKES 12 MONTHS AFTER INSTALLATION.



DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



SHRUB PLANTING DETAIL
NO SCALE



ANNUAL/PERENNIAL BED PLANTING DETAIL
NO SCALE

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	MIN. INSTALLED SIZE	ROOT TYPE	COMMENTS
TREES						
AR	3	ACER RUBRUM	RED MAPLE	2.5" CALIPER	B&B	SINGLE STEM ONLY
LI	2	LAGERSTROEMIA INDICA 'MUSKOGEE'	MUSKOGEE CRAPE MYRTLE	1.5" CALIPER	B&B	SINGLE STEM ONLY
SHRUBS						
NO	4	NERIUM OLEANDER	OLEANDER	24" SPREAD	CONT.	24" MIN. HEIGHT, SELECT DENSE/FULL PLANTS
PT	25	PITTSOPORUM TOBIRA	JAPANESE PITTSOPORUM	24" SPREAD	CONT.	SELECT DENSE/FULL PLANTS
RX	5	ROSA X 'KNOCKOUT'	KNOCKOUT ROSE	24" SPREAD	CONT.	24" MIN. HEIGHT, SELECT DENSE/FULL PLANTS

APPROVED CONSTRUCTION PLAN

NAME _____ DATE _____

PLANNING _____

TRAFFIC _____

FIRE _____

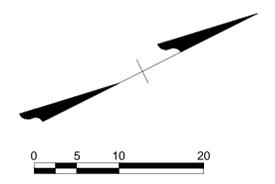
CITY OF WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division

APPROVED DRAINAGE PLAN

Date: _____ Permit # _____

Signed: _____



100% CONSTRUCTION DRAWING SET-ISSUED FOR REGULATORY REVIEW



SYMBOL	DATE	REVISIONS
1	3-30-15	PER CITY OF WILMINGTON COMMENT

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DRAWN BY: Z. SHIPMAN
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SEG PROJECT #: 150128

HAWTHORNE COMMONS FITNESS CENTER
4907 OLD MEARES ROAD
CITY OF WILMINGTON, NEW HANOVER COUNTY, NORTH CAROLINA

LANDSCAPING PLAN

SHEET NUMBER: L-101

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